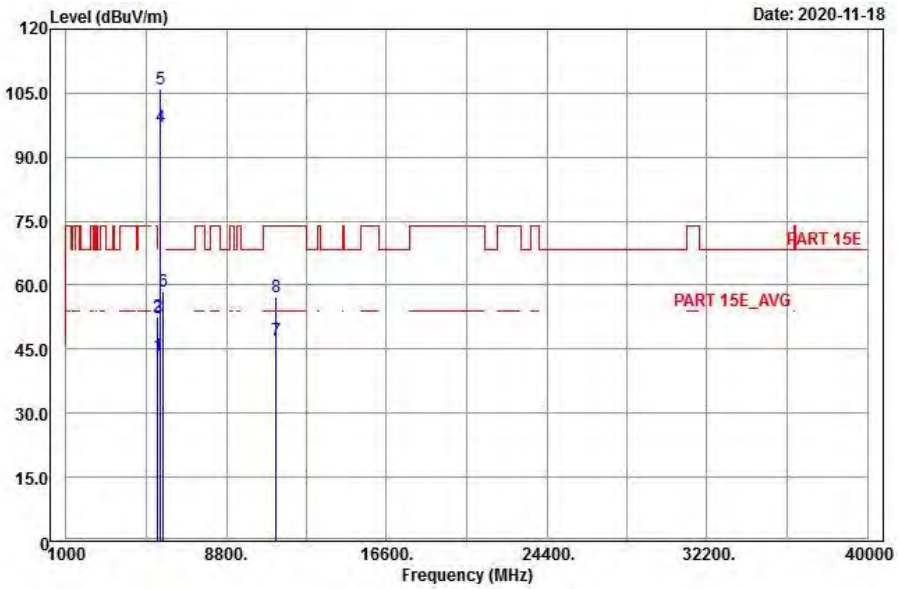
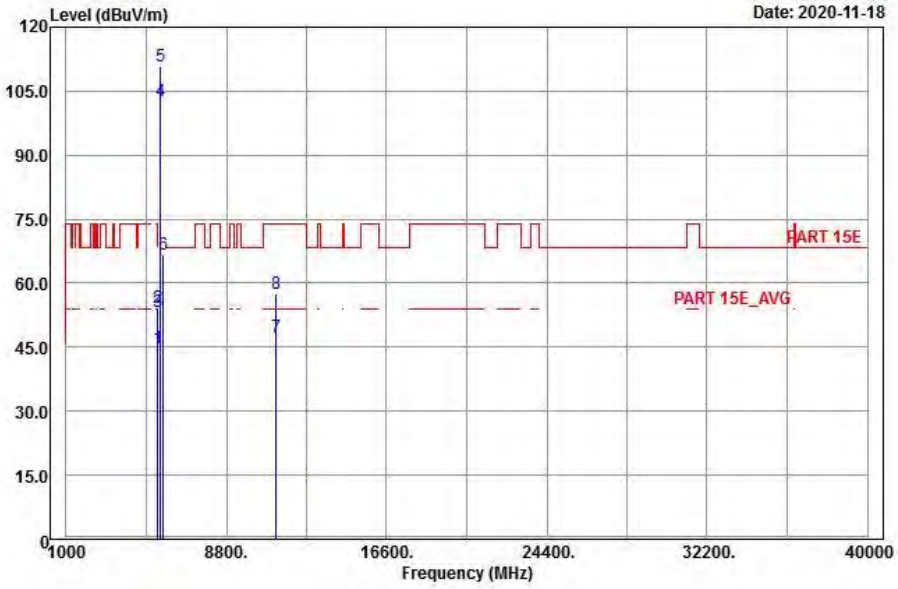
EUT Test Condition		Measurement Detail	
Channel	Channel 122 (484,66)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

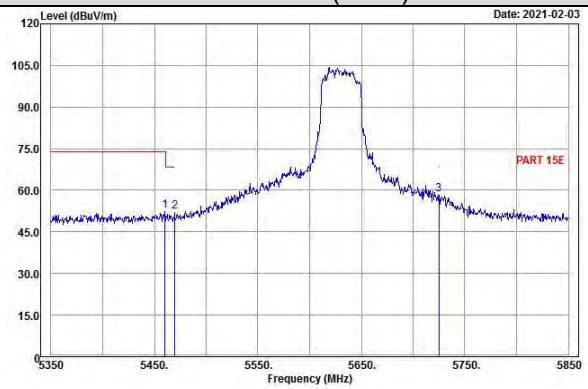
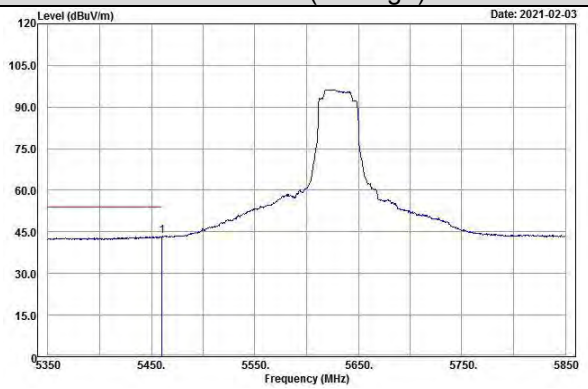
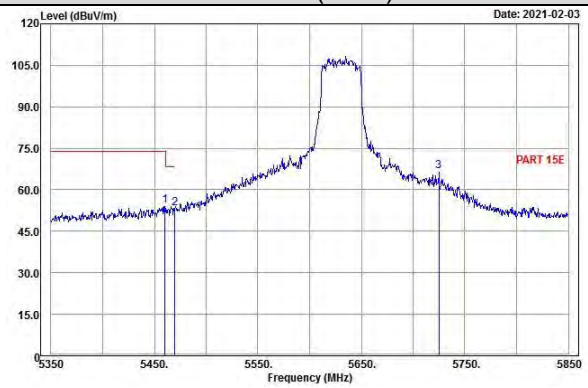
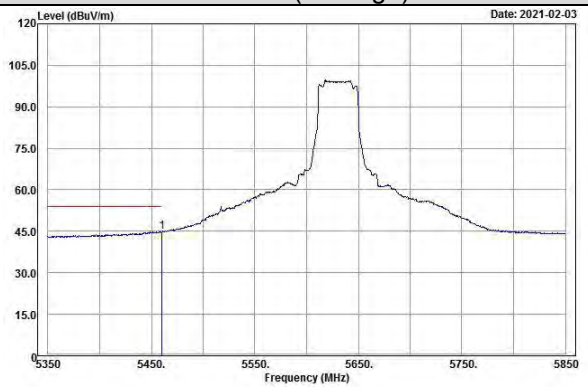


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	43.42	32.91	10.51	54	-10.58	105	20	Average
5460	52.77	42.26	10.51	74	-21.23	105	20	Peak
*5470	52.34	41.81	10.53	68.2	-15.86	105	20	Peak
5610	96.97	86.2	10.77			105	20	Average
5610	106.07	95.3	10.77			105	20	Peak
*5725	58.46	47.54	10.92	68.2	-9.74	114	22	Peak
11220	47.14	30.72	16.42	54	-6.86	155	294	Average
11220	57.26	40.84	16.42	74	-16.74	155	294	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	44.94	34.43	10.51	54	-9.06	228	25	Average
5460	54.29	43.78	10.51	74	-19.71	228	25	Peak
*5470	53.22	42.69	10.53	68.2	-14.98	228	25	Peak
5610	102.61	91.84	10.77			232	19	Average
5610	110.68	99.91	10.77			232	19	Peak
*5725	66.58	55.66	10.92	68.2	-1.62	247	17	Peak
11220	47.26	30.84	16.42	54	-6.74	187	121	Average
11220	57.43	41.01	16.42	74	-16.57	187	121	Peak

Remarks:

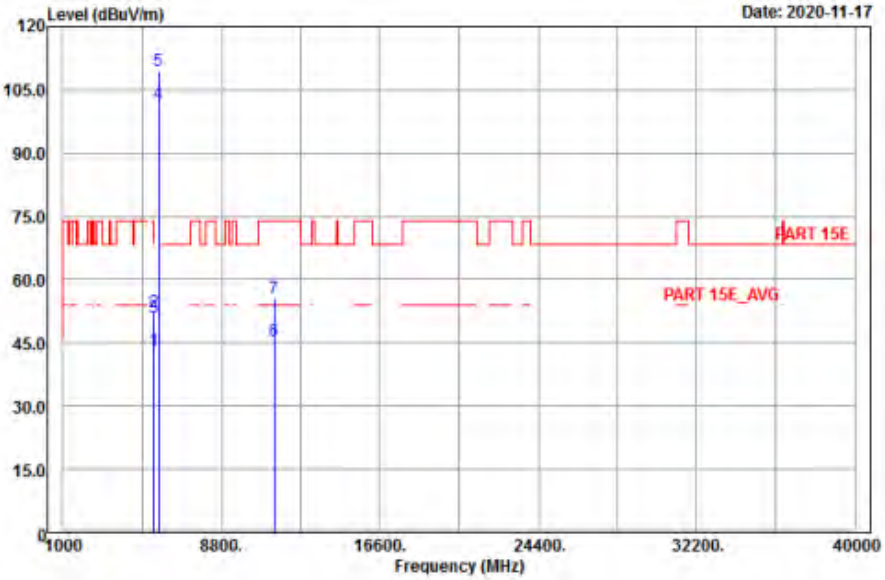
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5610 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

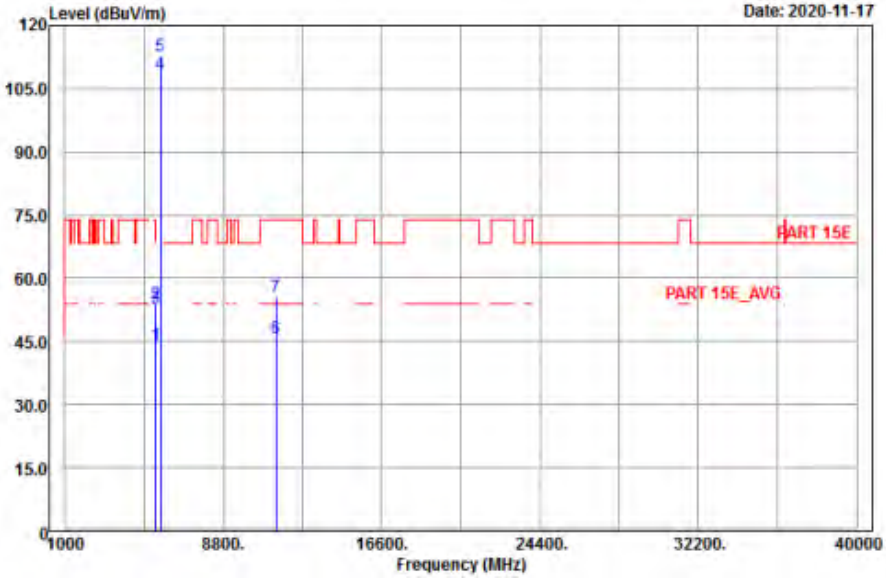
Channel 122 (484, 66)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 138 (242,61)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

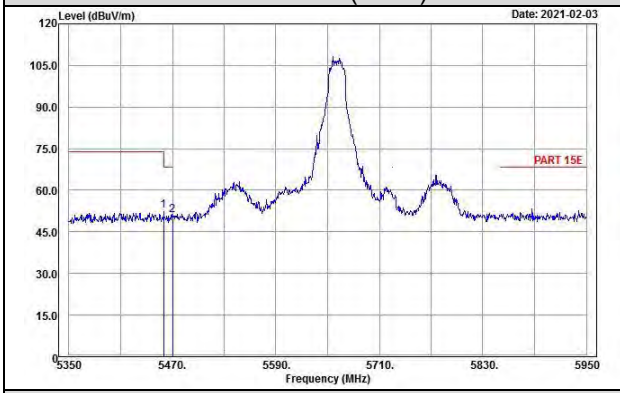
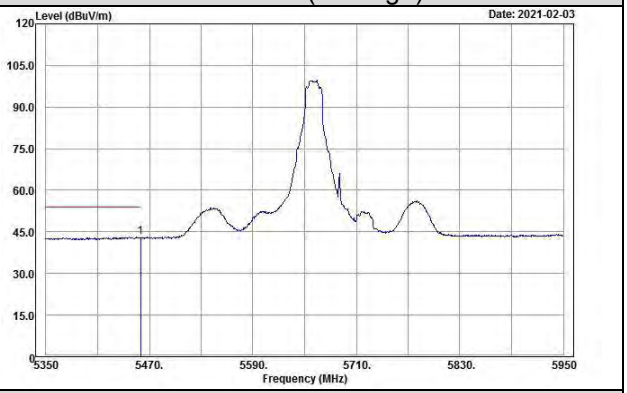
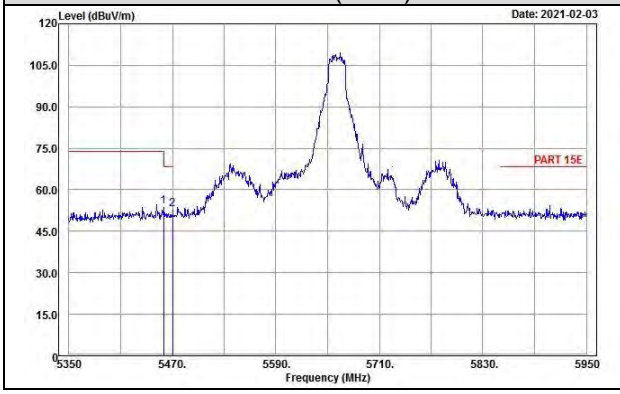
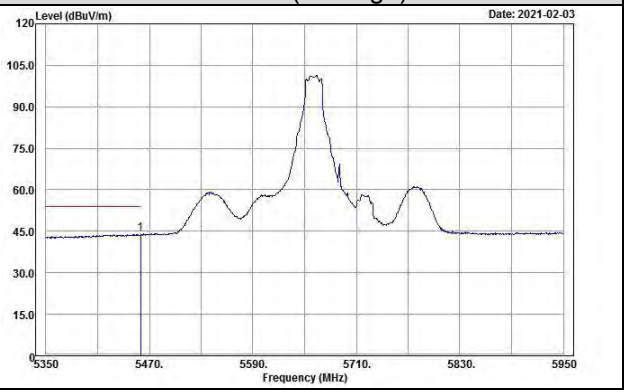


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	43.09	32.58	10.51	54	-10.91	136	20	Average
5460	52.48	41.97	10.51	74	-21.52	136	20	Peak
*5470	51.15	40.62	10.53	68.2	-17.05	136	20	Peak
5690	101.75	90.82	10.93			136	20	Average
5690	109.64	98.71	10.93			136	20	Peak
11380	45.46	29.19	16.27	54	-8.54	257	115	Average
11380	55.58	39.31	16.27	74	-18.42	257	115	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	43.98	33.47	10.51	54	-10.02	232	17	Average
5460	53.85	43.34	10.51	74	-20.15	232	17	Peak
*5470	52.9	42.37	10.53	68.2	-15.3	232	17	Peak
5690	108.51	97.58	10.93			232	17	Average
5690	112.74	101.81	10.93			232	17	Peak
11380	45.84	29.57	16.27	54	-8.16	135	107	Average
11380	55.71	39.44	16.27	74	-18.29	135	107	Peak

Remarks:

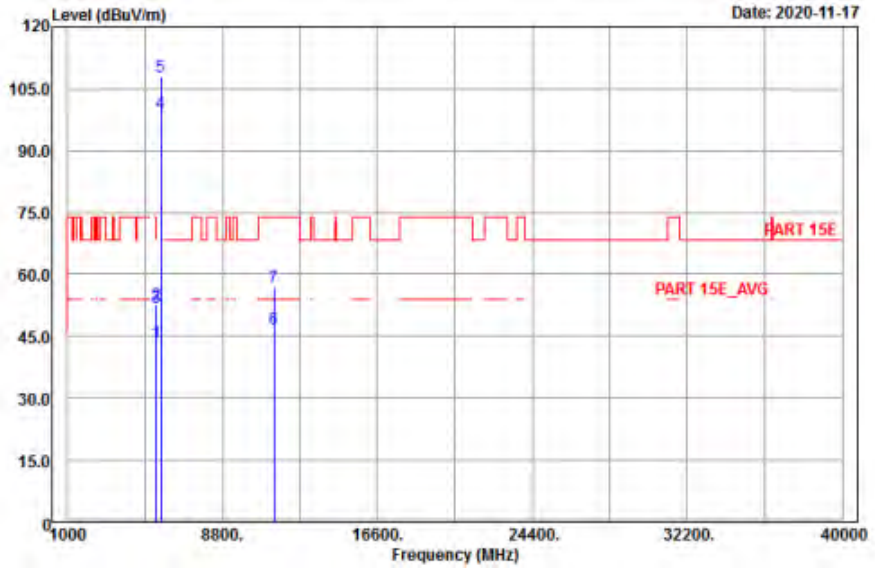
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5690 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

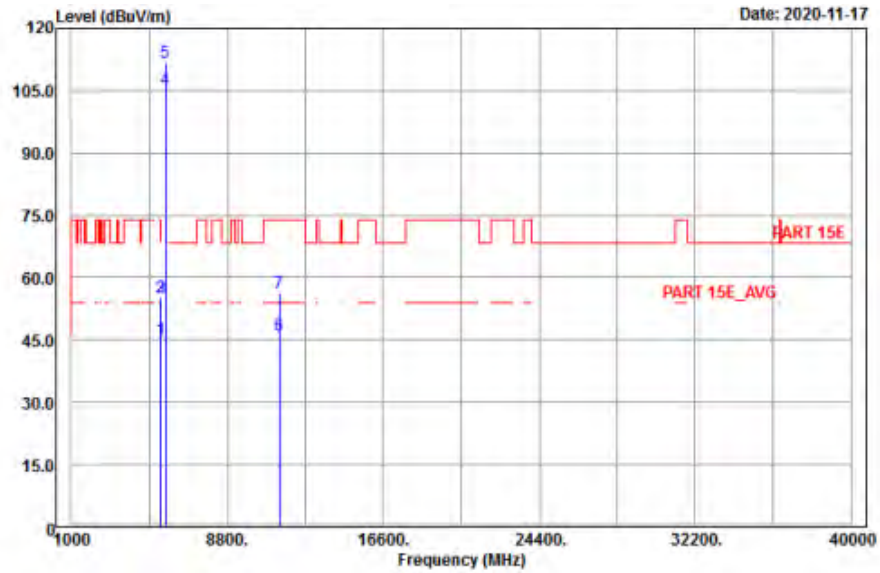
Channel 138 (242, 61)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 138 (484,65)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

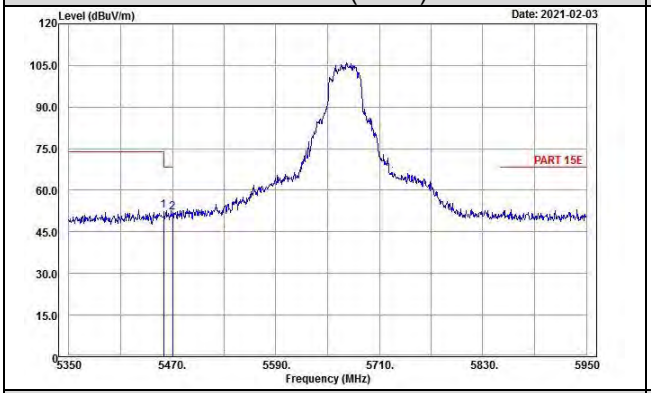
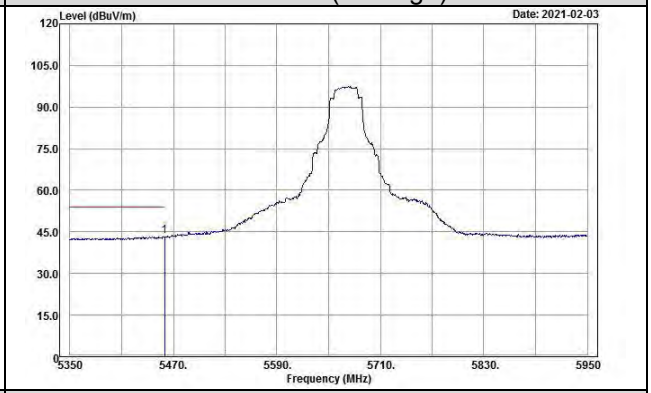
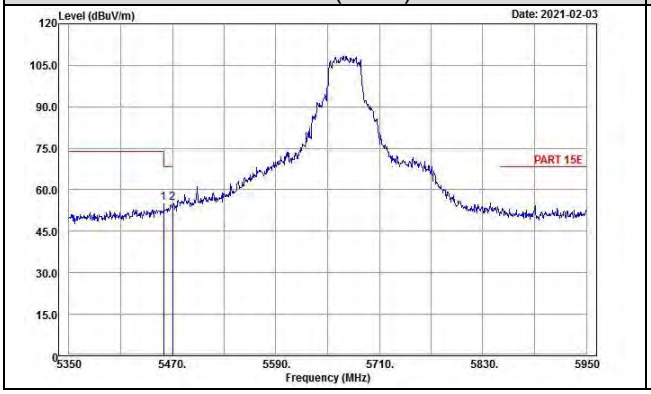
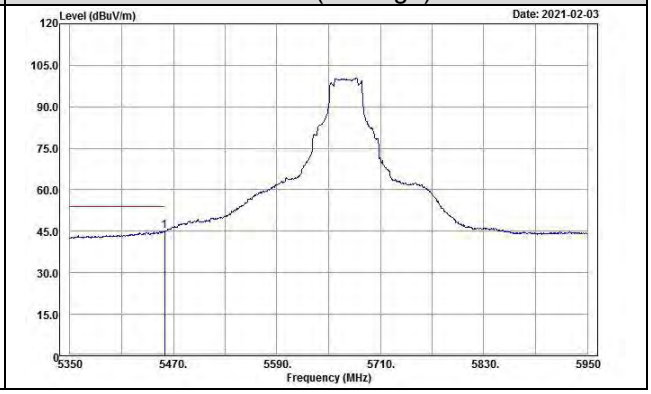


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	43.36	32.85	10.51	54	-10.64	136	20	Average
5460	52.61	42.1	10.51	74	-21.39	136	20	Peak
*5470	52.01	41.48	10.53	68.2	-16.19	136	20	Peak
5690	99.06	88.13	10.93			136	20	Average
5690	107.82	96.89	10.93			136	20	Peak
11380	46.92	30.65	16.27	54	-7.08	128	143	Average
11380	56.82	40.55	16.27	74	-17.18	128	143	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	45.28	34.77	10.51	54	-8.72	232	17	Average
5460	55.3	44.79	10.51	74	-18.7	232	17	Peak
*5470	55.37	44.84	10.53	68.2	-12.83	232	17	Peak
5690	105.29	94.36	10.93			232	17	Average
5690	111.87	100.94	10.93			232	17	Peak
11380	46.18	29.91	16.27	54	-7.82	204	129	Average
11380	56.21	39.94	16.27	74	-17.79	204	129	Peak

Remarks:

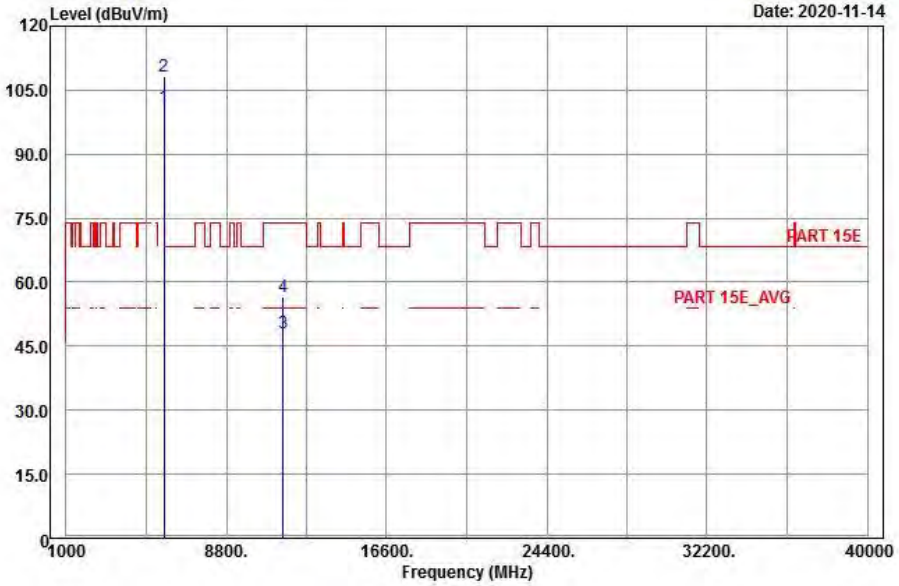
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5690 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

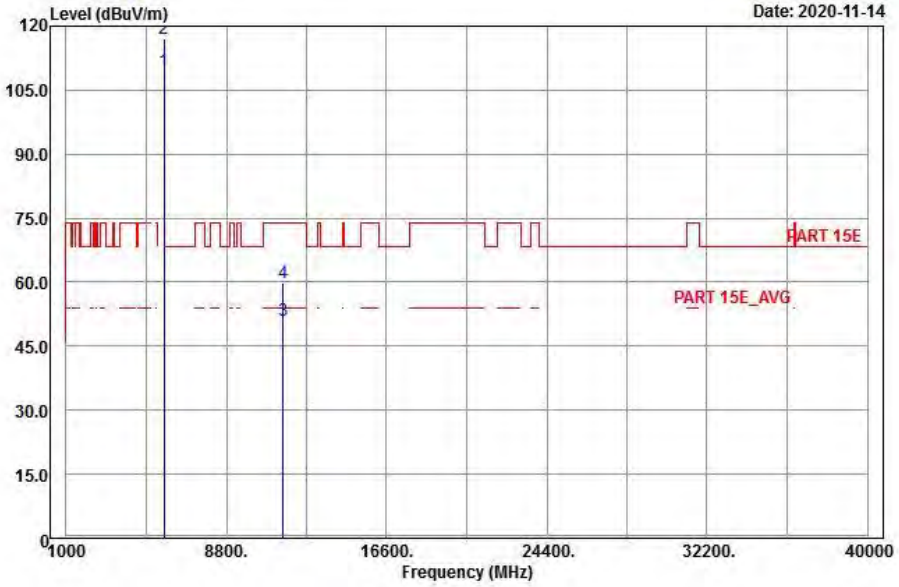
Channel 138 (484, 65)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 155 (242,61)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

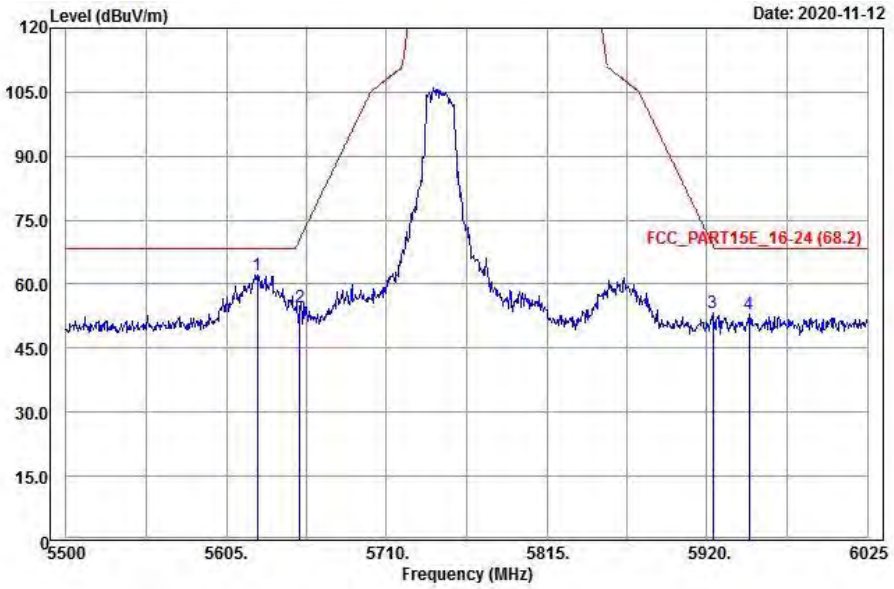
<Spurious Emission>
Horizontal



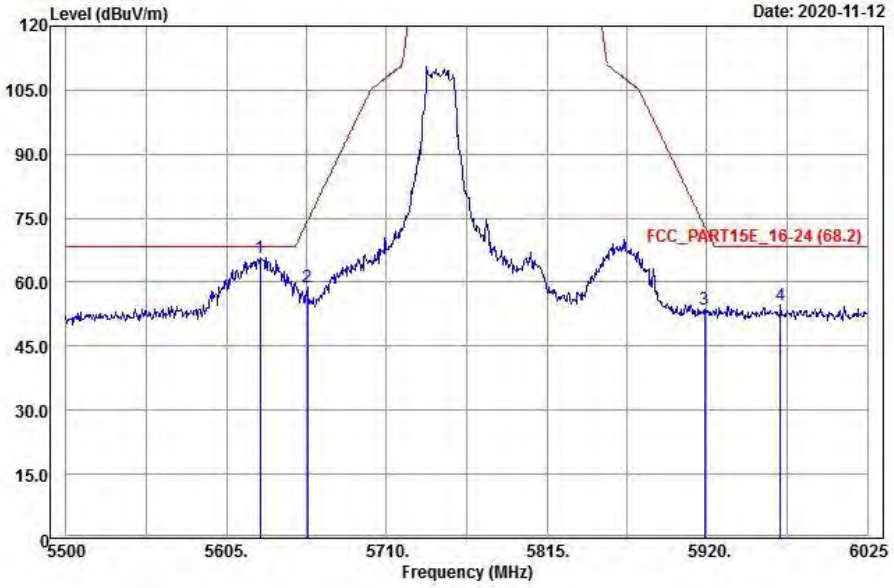
Vertical



<Out of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	101.11	90.24	10.87			135	19	Average
5775	108.39	97.52	10.87			135	19	Peak
11550	47.92	31.42	16.5	54	-6.08	118	247	Average
11550	56.5	40	16.5	74	-17.5	118	247	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	109.57	98.7	10.87			233	39	Average
5775	116.93	106.06	10.87			233	39	Peak
11550	50.99	34.49	16.5	54	-3.01	200	60	Average
11550	59.96	43.46	16.5	74	-14.04	200	60	Peak

<Out of Band Emission (OOBE)>

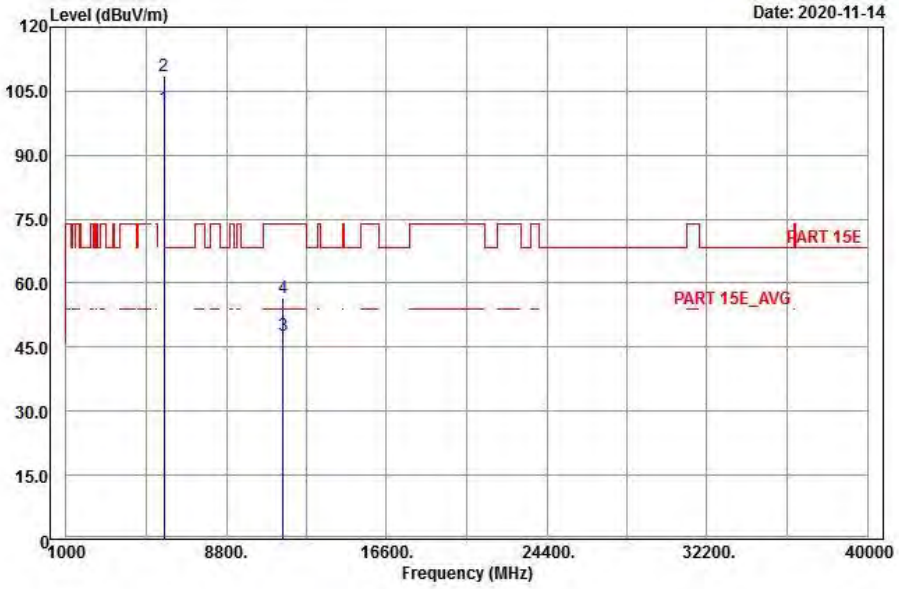
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5625.475	62.23	51.44	10.79	68.2	-5.97	135	19	Peak
5653.3	54.64	43.77	10.87	70.64	-16	135	19	Peak
5923.675	53.32	42.21	11.11	69.18	-15.86	135	19	Peak
*5947.825	53.11	41.93	11.18	68.2	-15.09	135	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5627.05	65.77	54.98	10.79	68.2	-2.43	233	39	Peak
5658.025	58.89	48.02	10.87	74.14	-15.25	233	39	Peak
5918.425	53.47	42.38	11.09	73.07	-19.6	233	39	Peak
*5968.3	54.49	43.26	11.23	68.2	-13.71	233	39	Peak

Remarks:

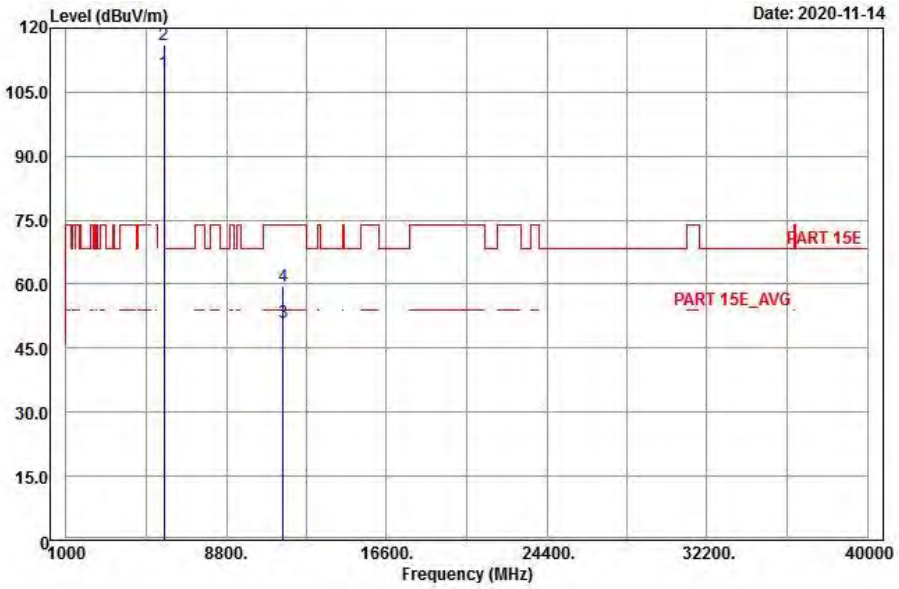
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 155 (242,64)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

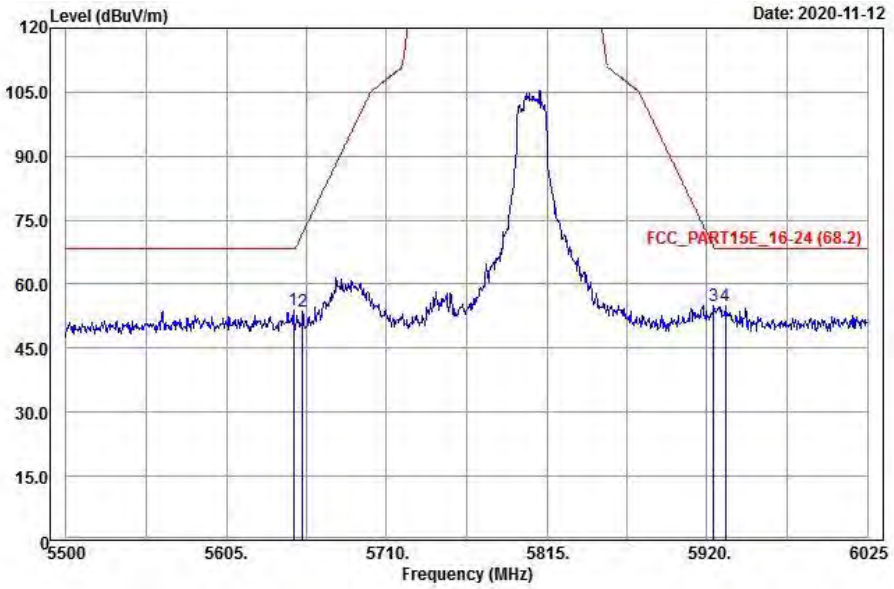
<Spurious Emission>
Horizontal



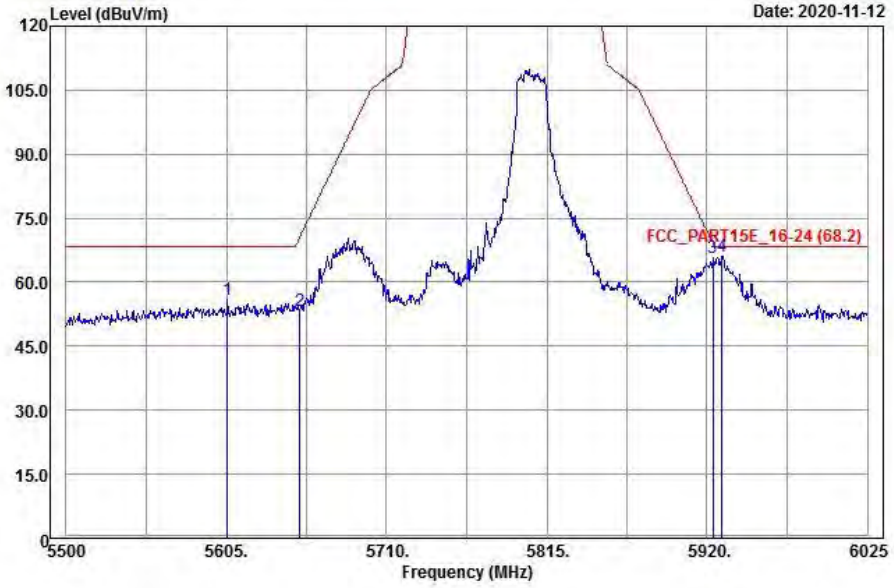
Vertical



<Out of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	101.14	90.27	10.87			135	19	Average
5775	108.53	97.66	10.87			135	19	Peak
11550	47.75	31.25	16.5	54	-6.25	165	35	Average
11550	56.49	39.99	16.5	74	-17.51	165	35	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	109.67	98.8	10.87			233	39	Average
5775	116.17	105.3	10.87			233	39	Peak
11550	50.94	34.44	16.5	54	-3.06	200	60	Average
11550	59.64	43.14	16.5	74	-14.36	200	60	Peak

<Out of Band Emission (OOBE)>

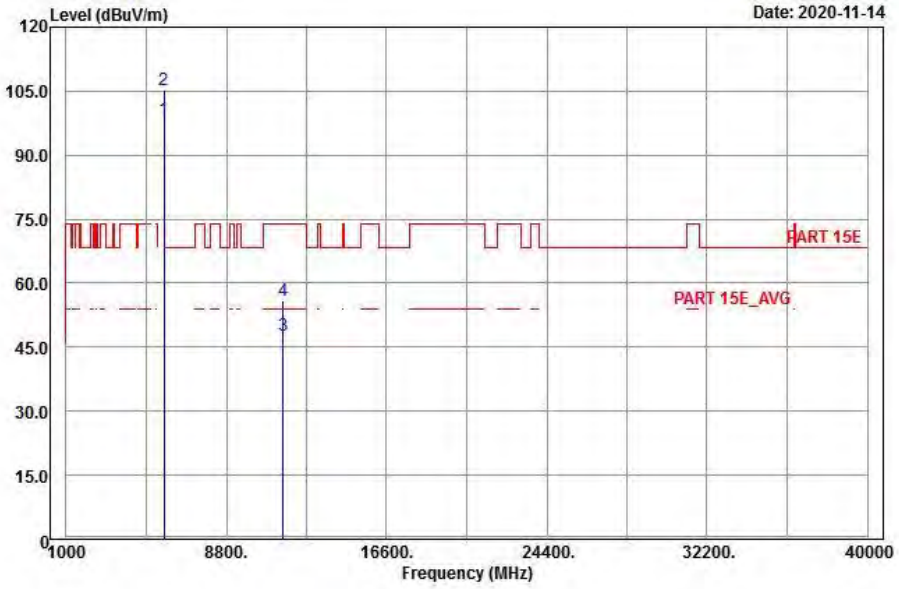
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5649.1	53.89	43.04	10.85	68.2	-14.31	135	19	Peak
5654.875	53.59	42.72	10.87	71.81	-18.22	135	19	Peak
5924.2	54.8	43.69	11.11	68.79	-13.99	135	19	Peak
*5932.075	55.09	43.98	11.11	68.2	-13.11	135	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5605.525	55.98	45.23	10.75	68.2	-12.22	233	39	Peak
5653.3	53.22	42.35	10.87	70.64	-17.42	233	39	Peak
5923.675	65.56	54.45	11.11	69.18	-3.62	233	39	Peak
*5929.975	66.12	55.01	11.11	68.2	-2.08	233	39	Peak

Remarks:

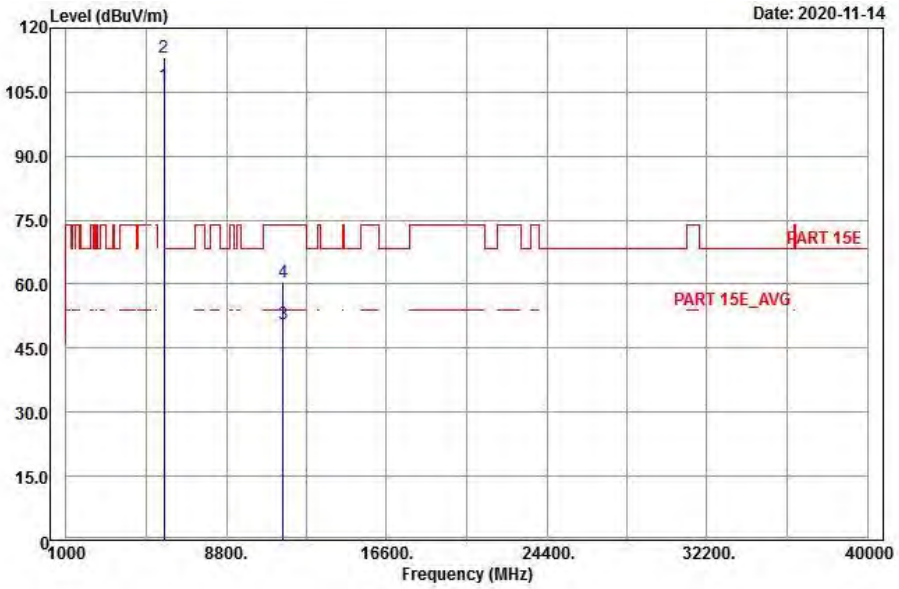
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 155 (484,65)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

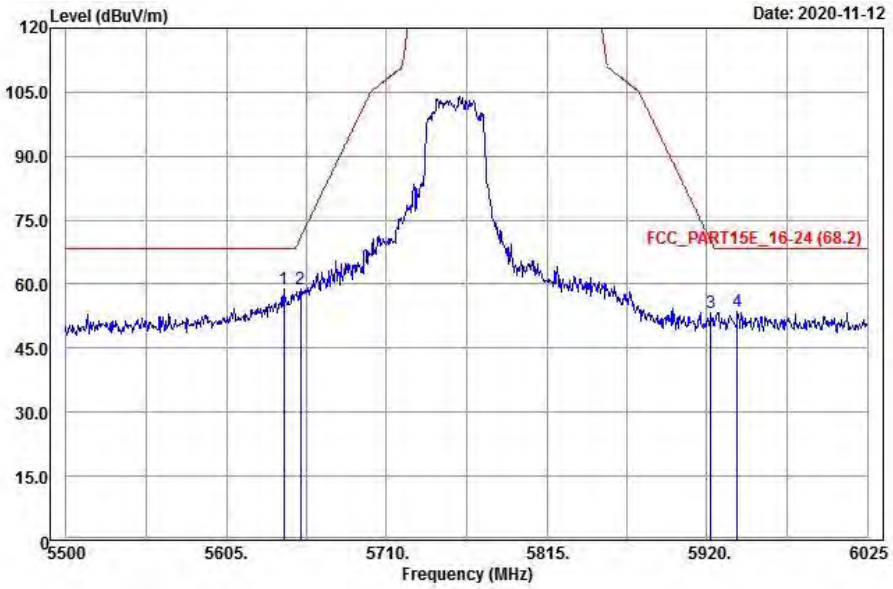
<Spurious Emission>
Horizontal



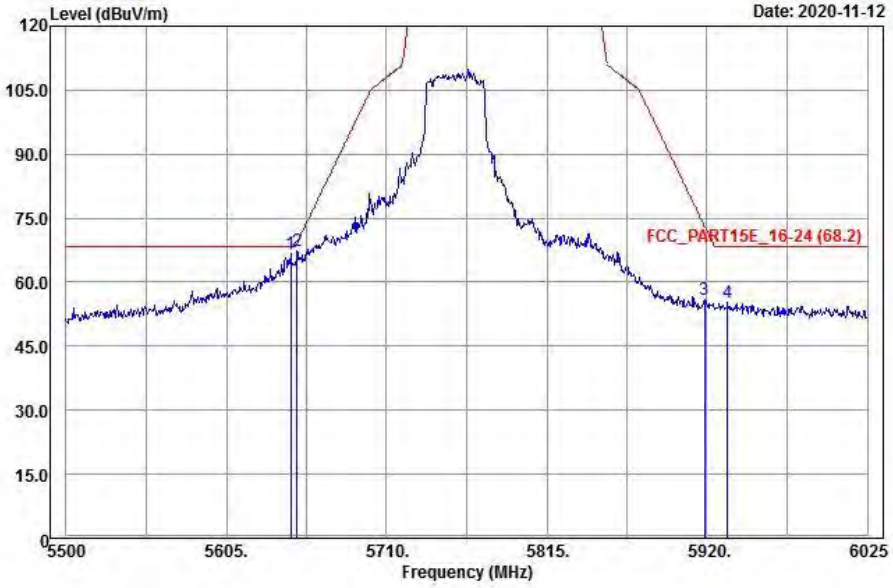
Vertical



<Out of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	98.56	87.69	10.87			135	19	Average
5775	105.43	94.56	10.87			135	19	Peak
11550	47.83	31.33	16.5	54	-6.17	197	45	Average
11550	55.85	39.35	16.5	74	-18.15	197	45	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	106.48	95.61	10.87			233	39	Average
5775	113.1	102.23	10.87			233	39	Peak
11550	50.84	34.34	16.5	54	-3.16	200	60	Average
11550	60.56	44.06	16.5	74	-13.44	200	60	Peak

<Out of Band Emission (OOBE)>

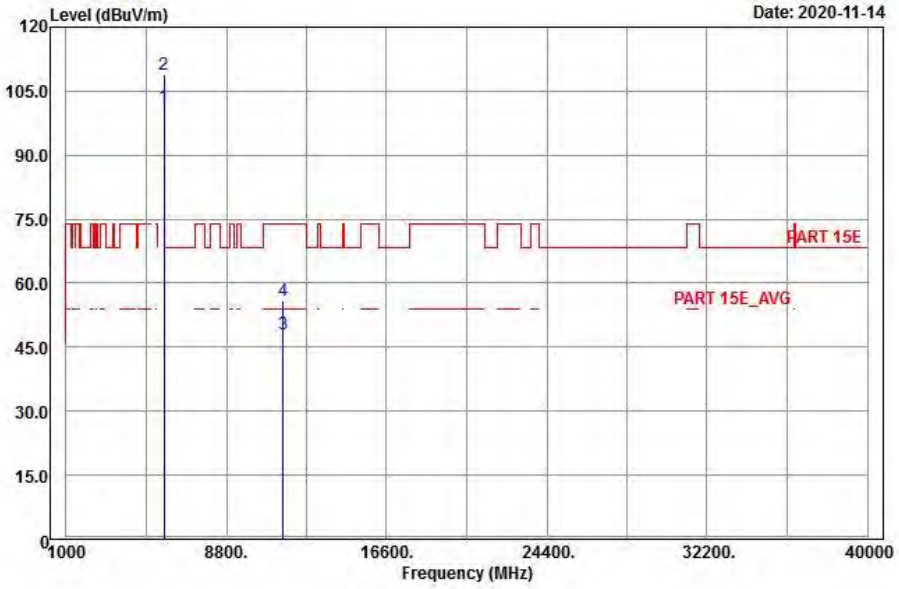
Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5642.8	58.91	48.08	10.83	68.2	-9.29	135	19	Peak
5653.825	58.69	47.82	10.87	71.03	-12.34	135	19	Peak
5922.625	53.14	42.03	11.11	69.96	-16.82	135	19	Peak
*5939.95	53.64	42.46	11.18	68.2	-14.56	135	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5647	66.57	55.72	10.85	68.2	-1.63	233	39	Peak
5651.2	67.33	56.46	10.87	69.09	-1.76	233	39	Peak
5918.425	55.8	44.71	11.09	73.07	-17.27	233	39	Peak
*5933.65	55.27	44.14	11.13	68.2	-12.93	233	39	Peak

Remarks:

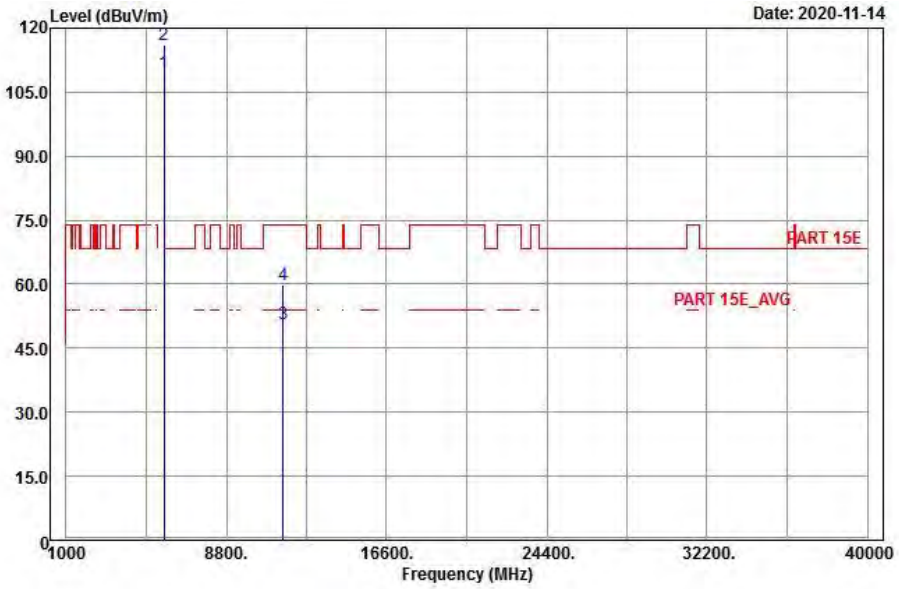
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

EUT Test Condition		Measurement Detail	
Channel	Channel 155 (484,66)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

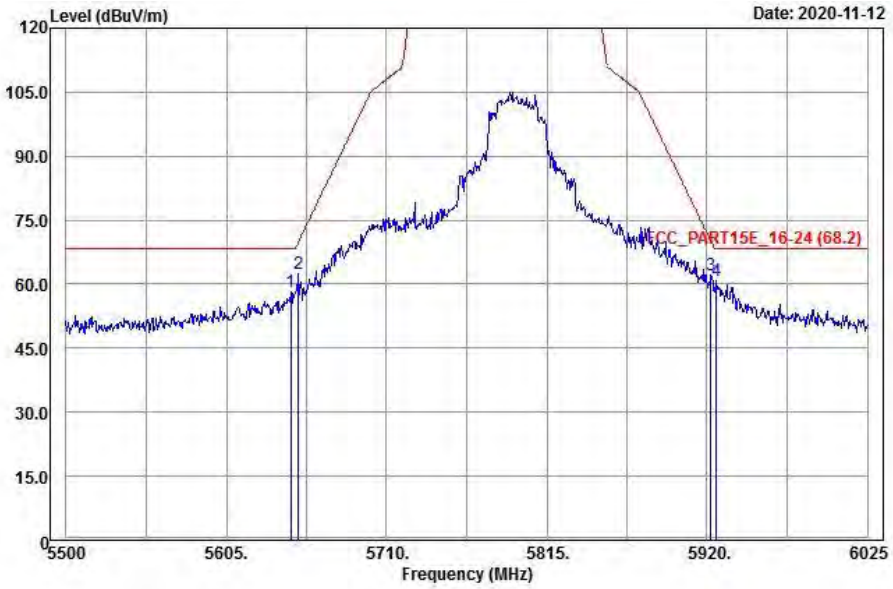
<Spurious Emission>
Horizontal



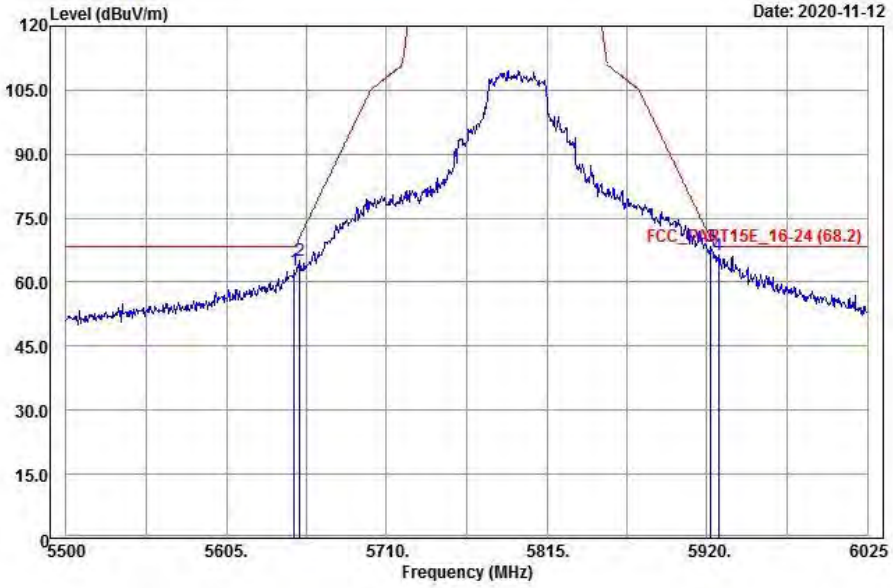
Vertical



<Out of Band Emission (OOBE)>
Horizontal



Vertical



<Spurious Emission>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	101.48	90.61	10.87			135	19	Average
5775	108.89	98.02	10.87			135	19	Peak
11550	47.91	31.41	16.5	54	-6.09	199	50	Average
11550	55.84	39.34	16.5	74	-18.16	199	50	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5775	109.55	98.68	10.87			233	39	Average
5775	116.16	105.29	10.87			233	39	Peak
11550	50.76	34.26	16.5	54	-3.24	20	60	Average
11550	59.99	43.49	16.5	74	-14.01	20	60	Peak

<Out of Band Emission (OOBE)>

Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5647	58.06	47.21	10.85	68.2	-10.14	135	19	Peak
5652.25	62.39	51.52	10.87	69.86	-7.47	135	19	Peak
5922.625	62.05	50.94	11.11	69.96	-7.91	135	19	Peak
*5926.3	60.8	49.69	11.11	68.2	-7.4	135	19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
*5649.625	62.7	51.83	10.87	68.2	-5.5	233	39	Peak
5653.3	65.13	54.26	10.87	70.64	-5.51	233	39	Peak
5922.625	68.29	57.18	11.11	69.96	-1.67	233	39	Peak
*5927.35	66.48	55.37	11.11	68.2	-1.72	233	39	Peak

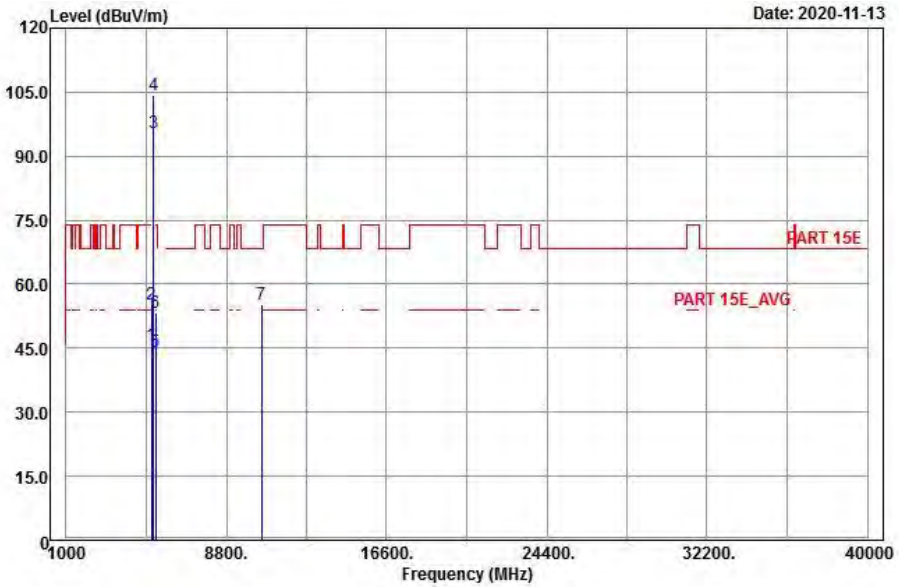
Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. 5775 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

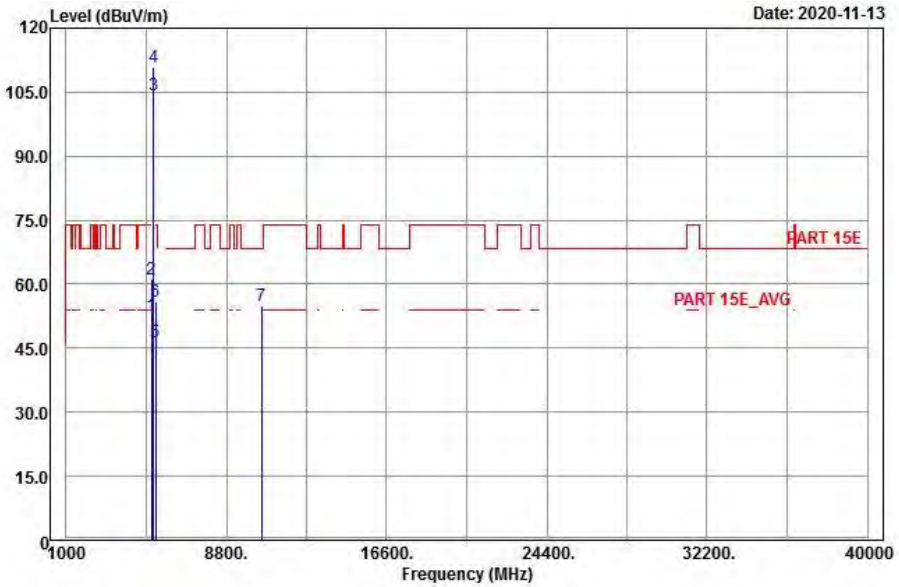
802.11ax (HE160)

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (242,61)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

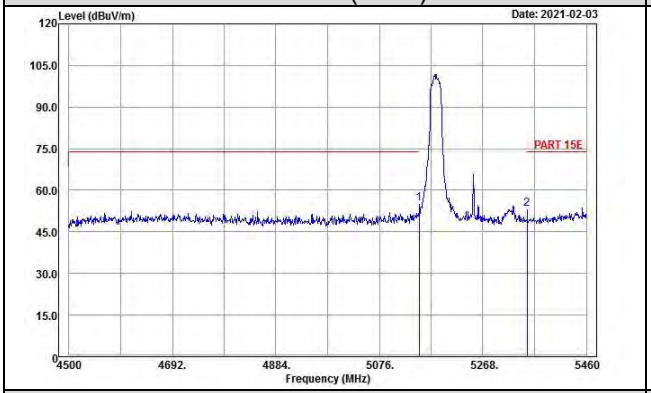
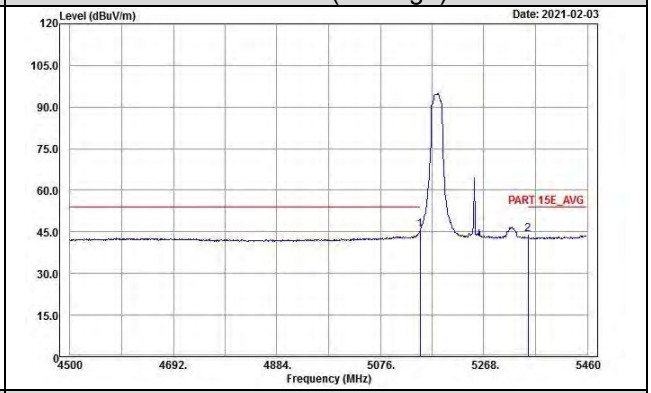
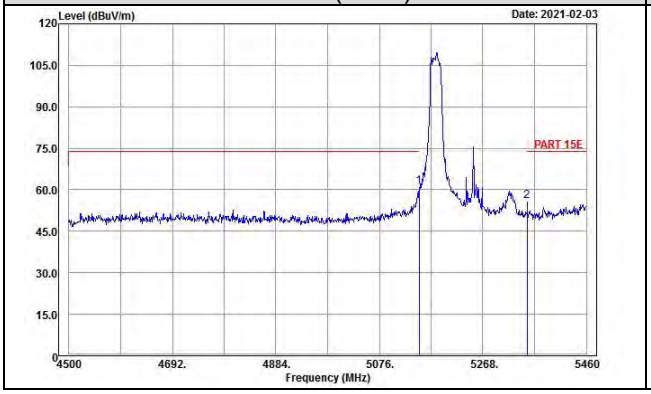
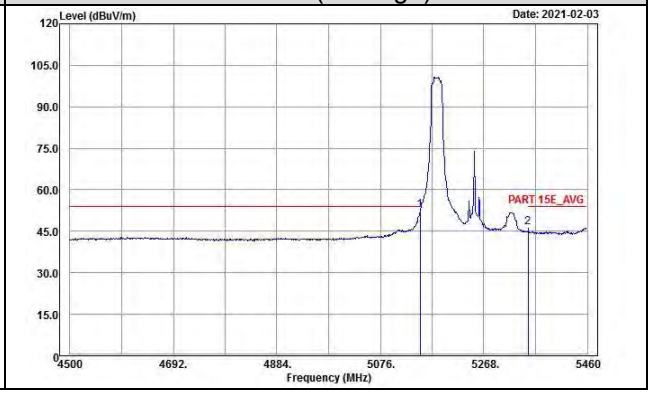


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.69	35.64	10.05	54	-8.31	121	259	Average
5150	55.11	45.06	10.05	74	-18.89	121	259	Peak
5250	95.31	85.21	10.1			113	276	Average
5250	104.31	94.21	10.1			113	276	Peak
5350	44.03	33.8	10.23	54	-9.97	106	265	Average
5350	53.2	42.97	10.23	74	-20.8	106	265	Peak
*10500	55.16	39.33	15.83	68.2	-13.04	149	64	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	52.5	42.45	10.05	54	-1.5	214	18	Average
5150	61.3	51.25	10.05	74	-12.7	214	18	Peak
5250	104.28	94.18	10.1			210	20	Average
5250	110.69	100.59	10.1			210	20	Peak
5350	46.5	36.27	10.23	54	-7.5	226	20	Average
5350	55.88	45.65	10.23	74	-18.12	226	20	Peak
*10500	54.97	39.14	15.83	68.2	-13.23	145	162	Peak

Remarks:

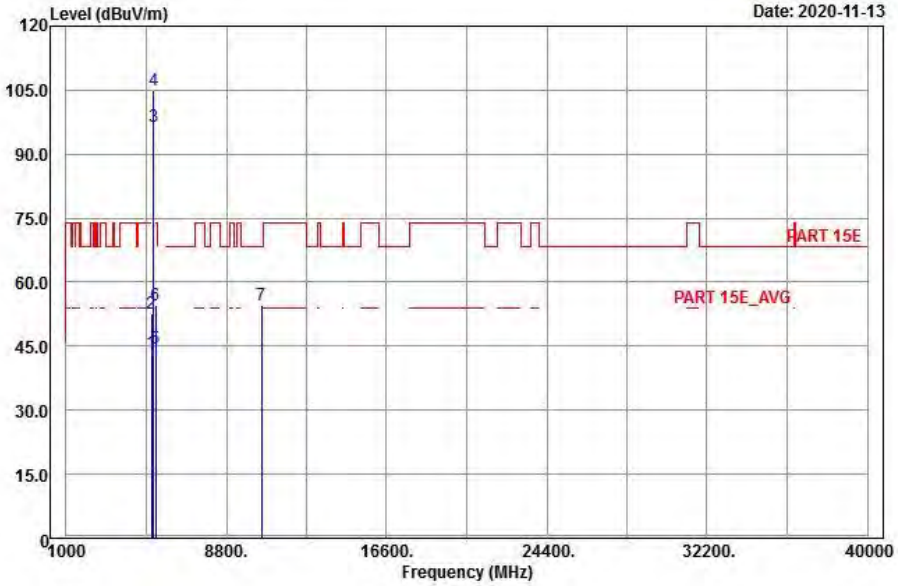
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

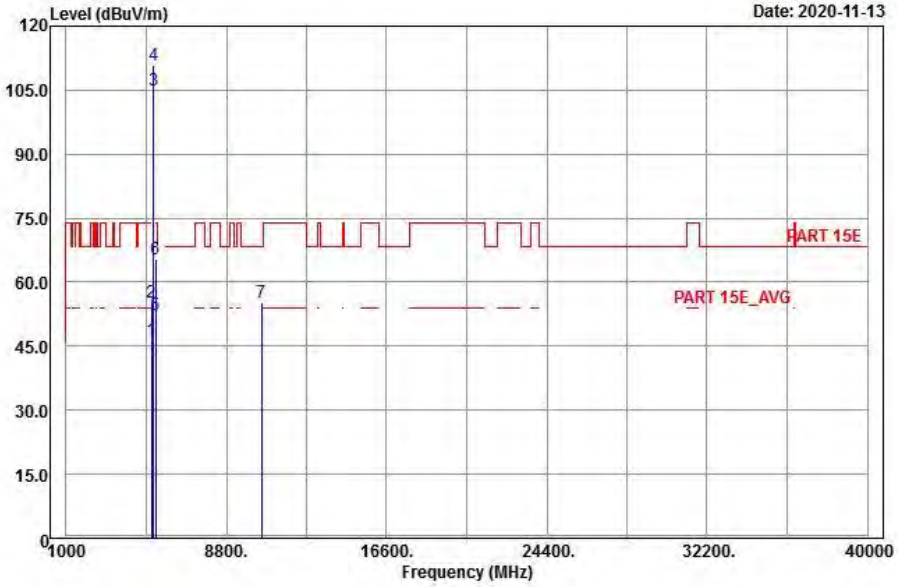
Channel 50 (242, 61)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (242,S64)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

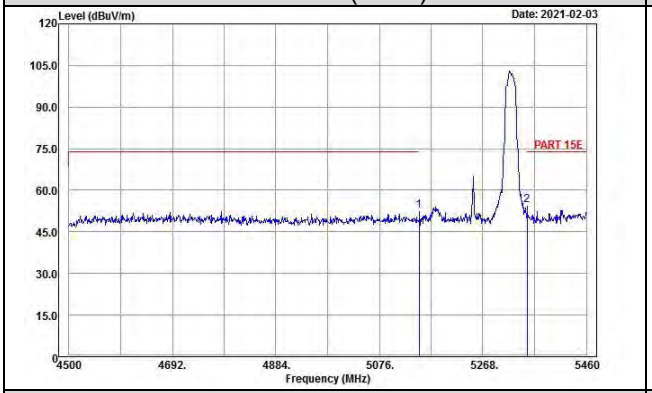
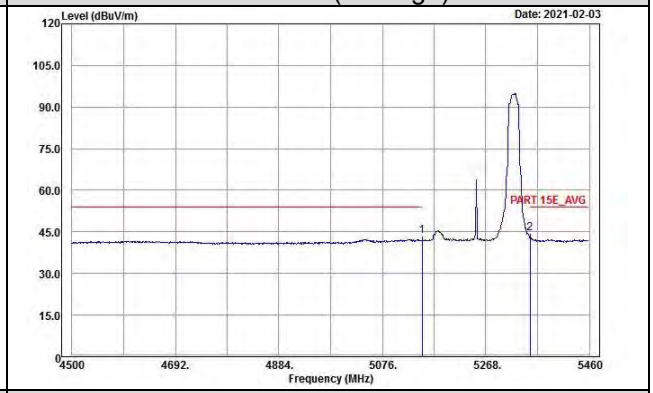
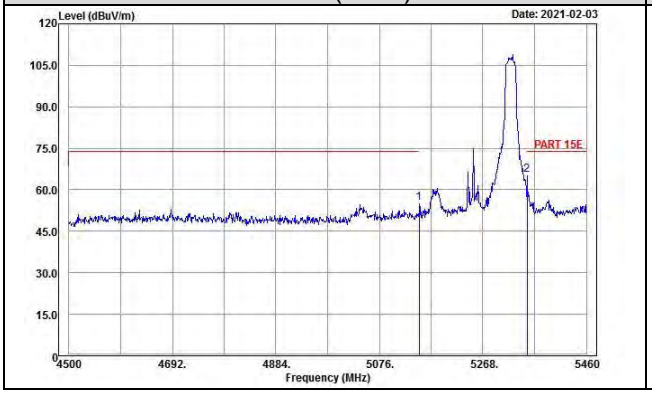
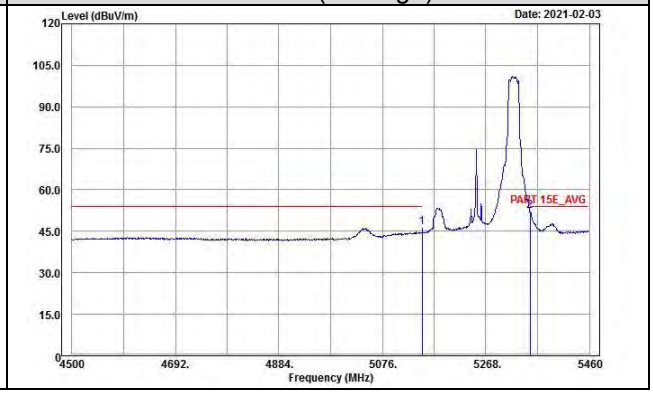


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	43.4	33.35	10.05	54	-10.6	113	281	Average
5150	52.7	42.65	10.05	74	-21.3	113	281	Peak
5250	96.34	86.24	10.1			113	270	Average
5250	105.06	94.96	10.1			113	270	Peak
5350	44.32	34.09	10.23	54	-9.68	129	253	Average
5350	54.56	44.33	10.23	74	-19.44	129	253	Peak
*10500	54.66	38.83	15.83	68.2	-13.54	186	217	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	46.27	36.22	10.05	54	-7.73	231	14	Average
5150	55.4	45.35	10.05	74	-18.6	231	14	Peak
5250	104.99	94.89	10.1			210	20	Average
5250	110.69	100.59	10.1			210	20	Peak
5350	52.21	41.98	10.23	54	-1.79	217	26	Average
5350	65.36	55.13	10.23	74	-8.64	217	26	Peak
*10500	55.1	39.27	15.83	68.2	-13.1	145	108	Peak

Remarks:

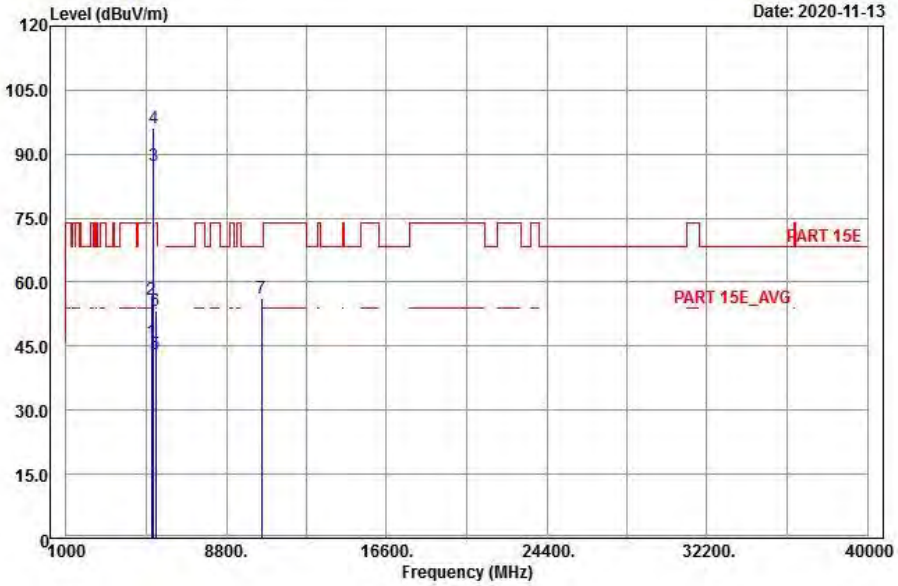
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

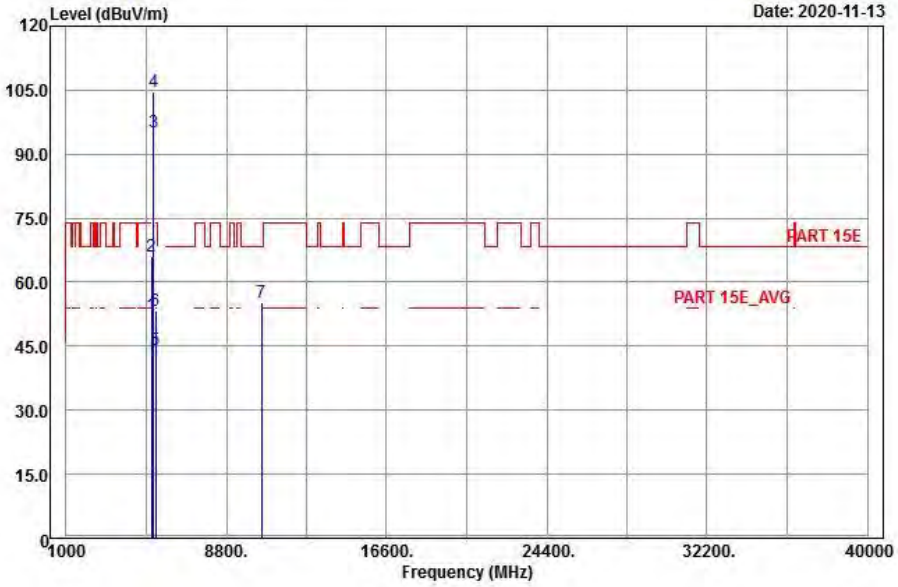
Channel 50 (242, S64)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (484,65)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

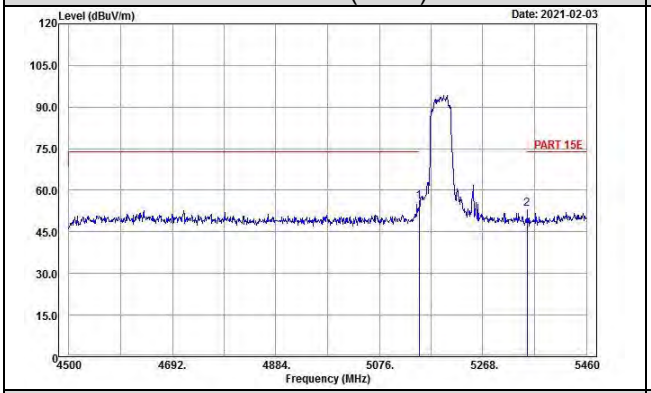
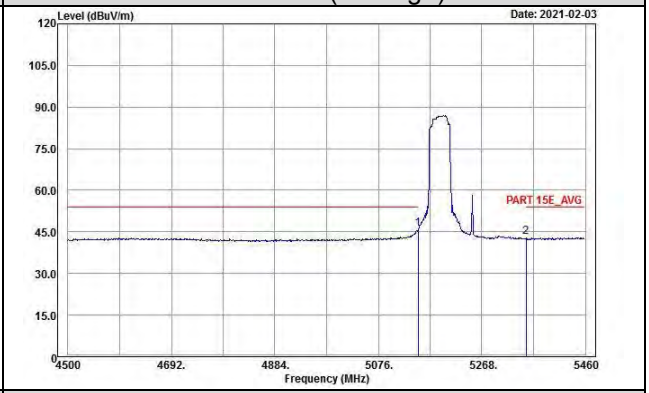
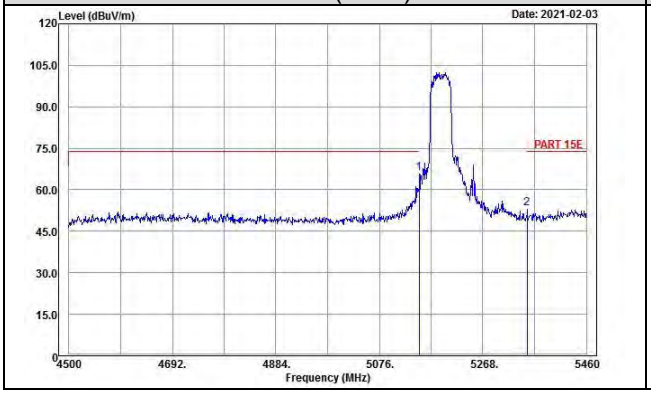
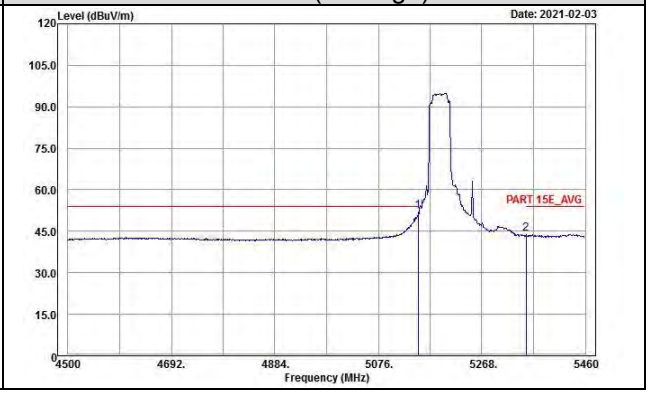


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.96	35.91	10.05	54	-8.04	104	254	Average
5150	55.96	45.91	10.05	74	-18.04	104	254	Peak
5250	87.24	77.14	10.1			113	276	Average
5250	96.03	85.93	10.1			113	276	Peak
5350	43.07	32.84	10.23	54	-10.93	113	280	Average
5350	53.19	42.96	10.23	74	-20.81	113	280	Peak
*10500	56.34	40.51	15.83	68.2	-11.86	116	94	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	52.2	42.15	10.05	54	-1.8	213	18	Average
5150	65.99	55.94	10.05	74	-8.01	213	18	Peak
5250	95.29	85.19	10.1			210	20	Average
5250	104.74	94.64	10.1			210	20	Peak
5350	44.08	33.85	10.23	54	-9.92	210	20	Average
5350	53.38	43.15	10.23	74	-20.62	210	20	Peak
*10500	55.2	39.37	15.83	68.2	-13	129	81	Peak

Remarks:

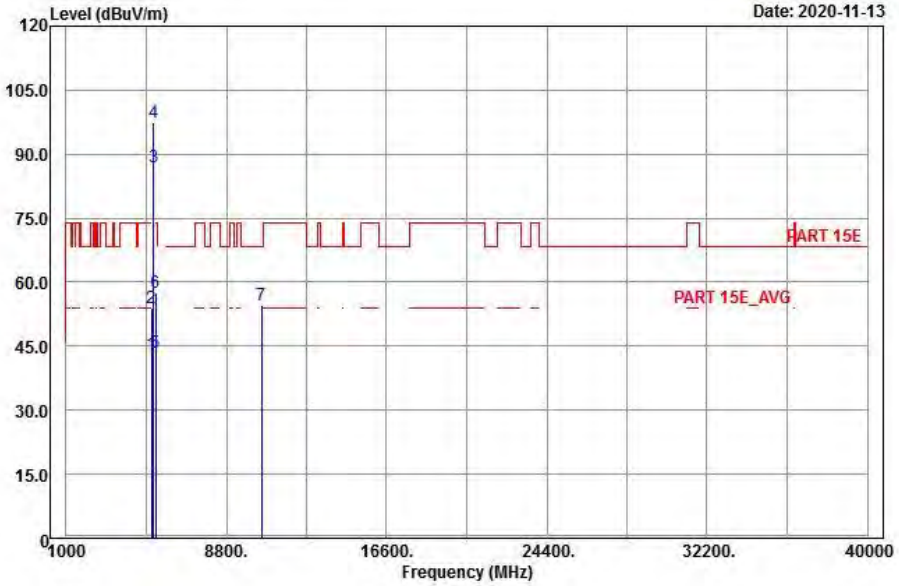
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

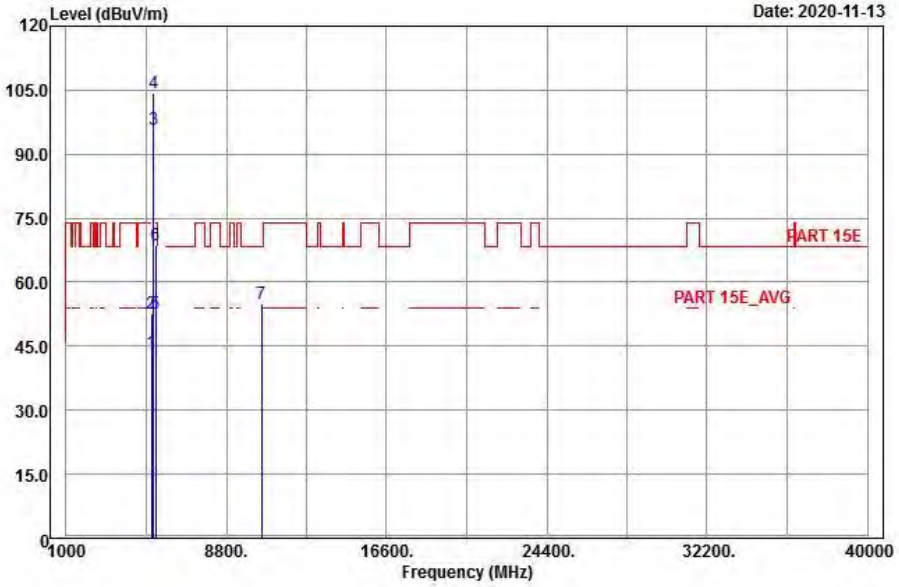
Channel 50 (484, 65)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (484,S66)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

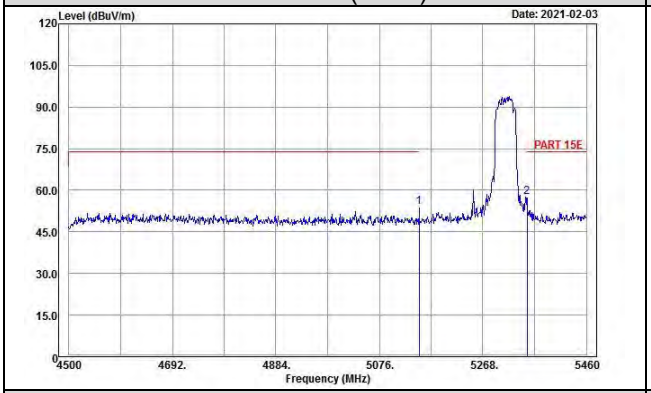
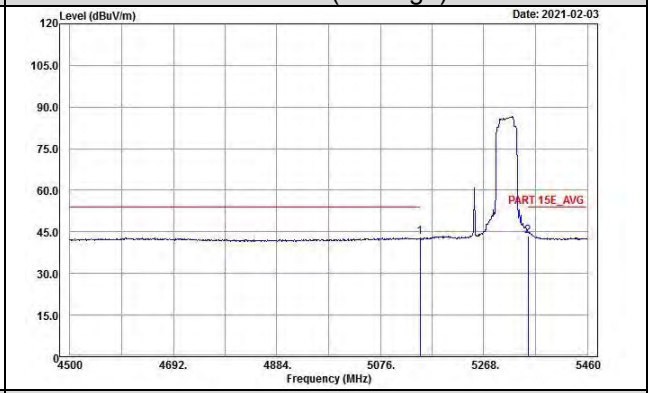
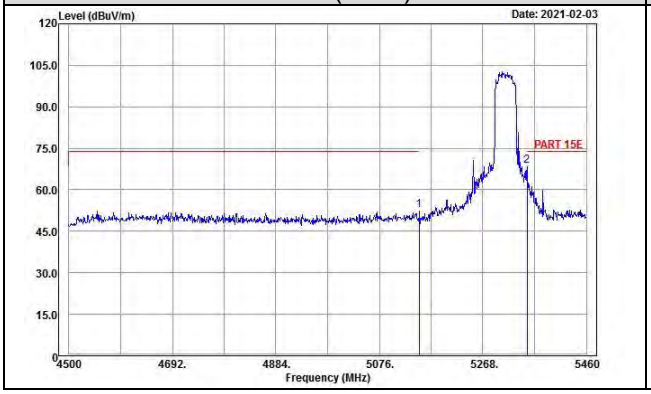
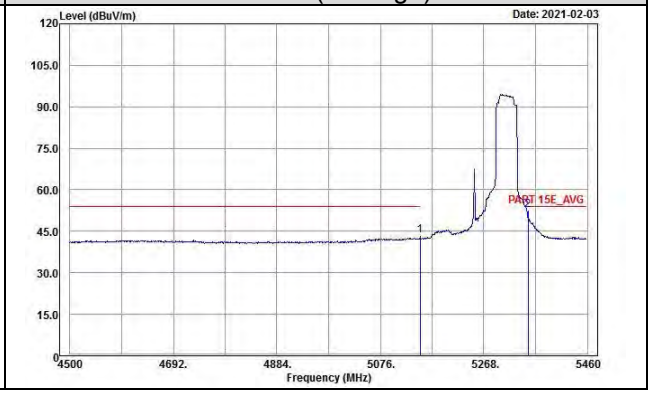


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	43.04	32.99	10.05	54	-10.96	113	270	Average
5150	53.83	43.78	10.05	74	-20.17	113	270	Peak
5250	86.9	76.8	10.1			113	270	Average
5250	97.54	87.44	10.1			113	270	Peak
5350	43.59	33.36	10.23	54	-10.41	113	265	Average
5350	57.39	47.16	10.23	74	-16.61	113	265	Peak
*10500	54.65	38.82	15.83	68.2	-13.55	236	139	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	43.5	33.45	10.05	54	-10.5	210	20	Average
5150	52.51	42.46	10.05	74	-21.49	210	20	Peak
5250	95.83	85.73	10.1			210	20	Average
5250	104.41	94.31	10.1			210	20	Peak
5350	52.48	42.25	10.23	54	-1.52	207	34	Average
5350	68.75	58.52	10.23	74	-5.25	207	34	Peak
*10500	54.87	39.04	15.83	68.2	-13.33	156	274	Peak

Remarks:

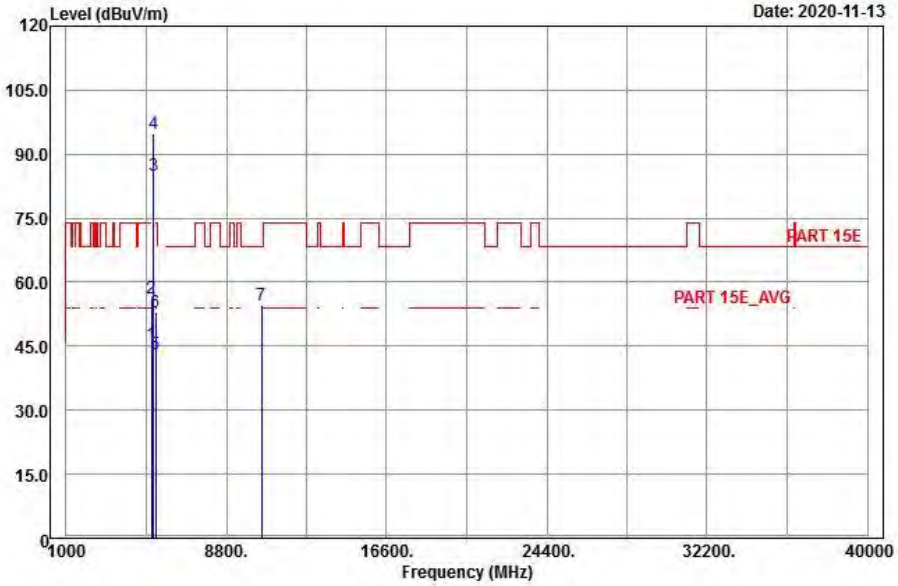
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

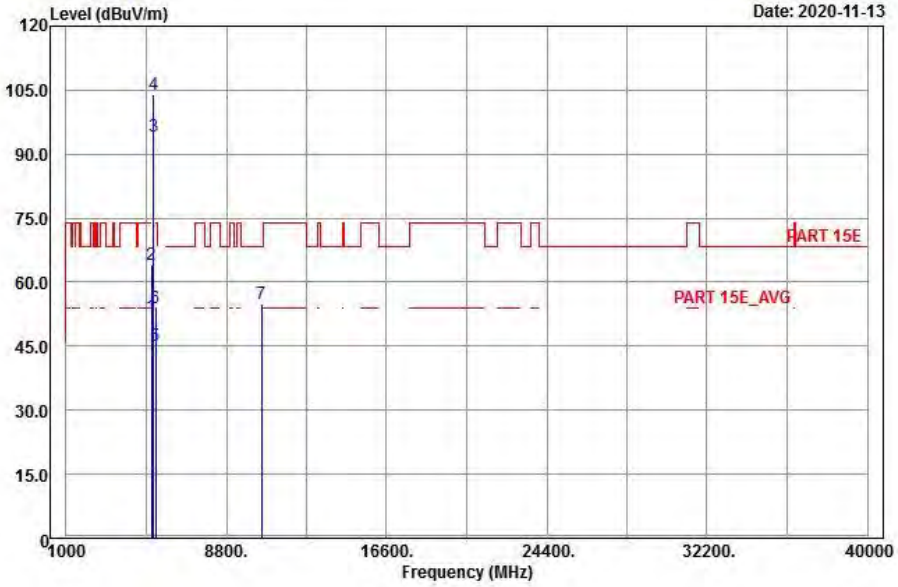
Channel 50 (484, S66)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (996,67)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

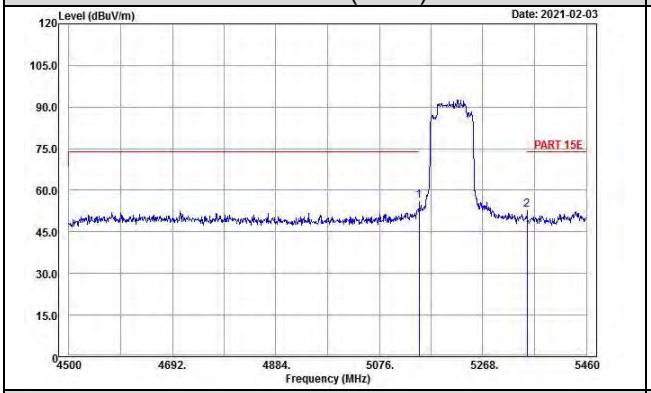
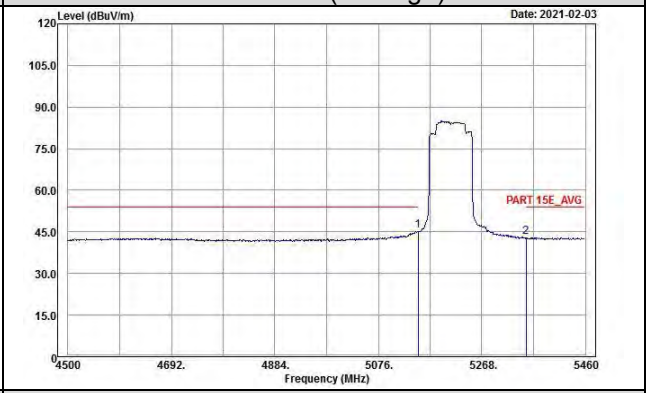
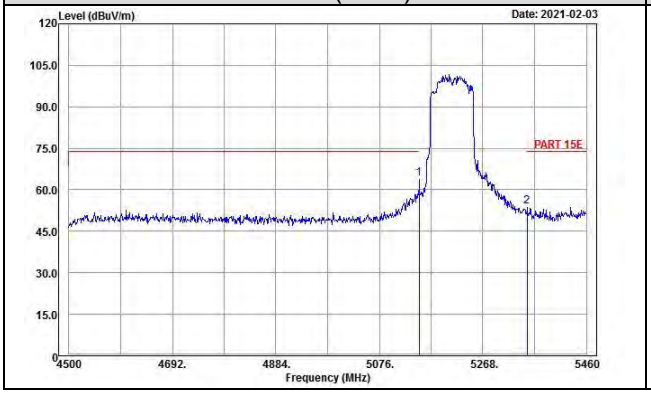
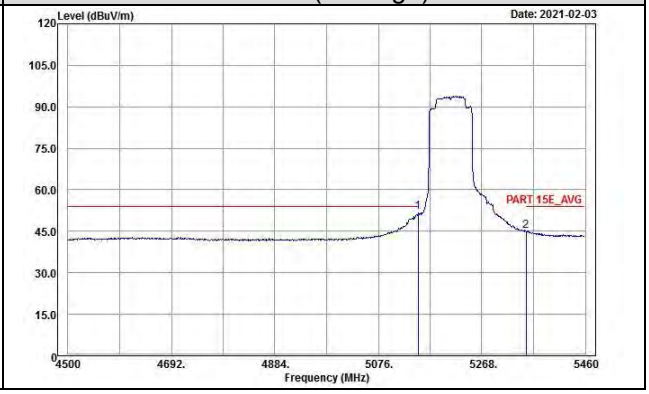


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	45.52	35.47	10.05	54	-8.48	118	225	Average
5150	56.13	46.08	10.05	74	-17.87	118	225	Peak
5250	85.13	75.03	10.1			113	276	Average
5250	94.98	84.88	10.1			113	276	Peak
5350	43.08	32.85	10.23	54	-10.92	113	276	Average
5350	52.92	42.69	10.23	74	-21.08	113	276	Peak
*10500	54.66	38.83	15.83	68.2	-13.54	156	207	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	51.98	41.93	10.05	54	-2.02	202	27	Average
5150	64.19	54.14	10.05	74	-9.81	202	27	Average
5250	94.21	84.11	10.1			210	20	Average
5250	104	93.9	10.1			210	20	Peak
5350	45.23	35	10.23	54	-8.77	210	20	Average
5350	53.95	43.72	10.23	74	-20.05	210	20	Peak
*10500	55.01	39.18	15.83	68.2	-13.19	204	161	Peak

Remarks:

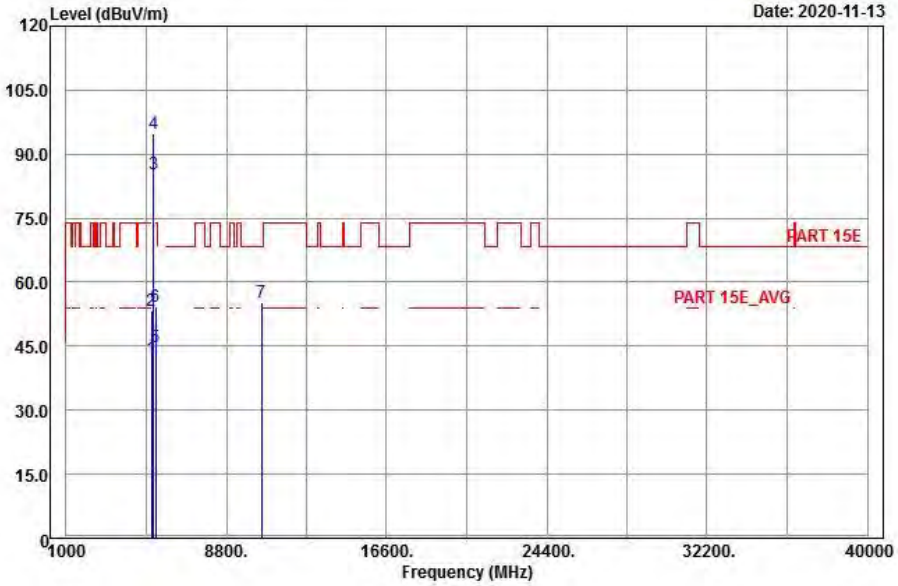
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

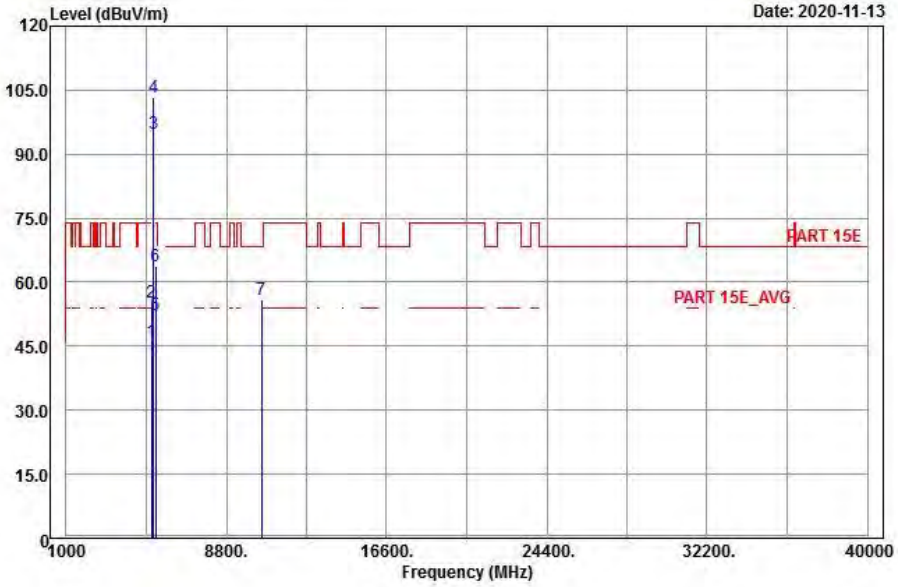
Channel 50 (996, 67)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 50 (996,S67)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

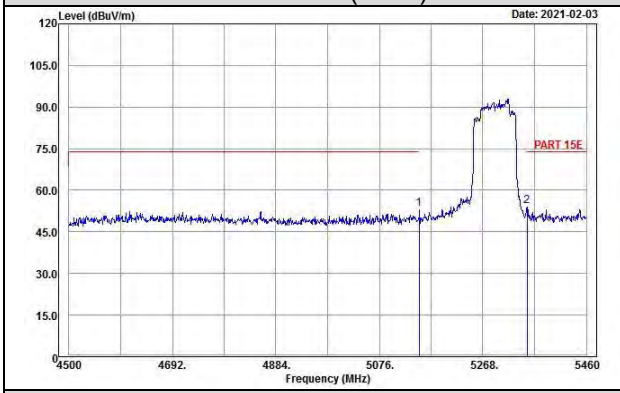
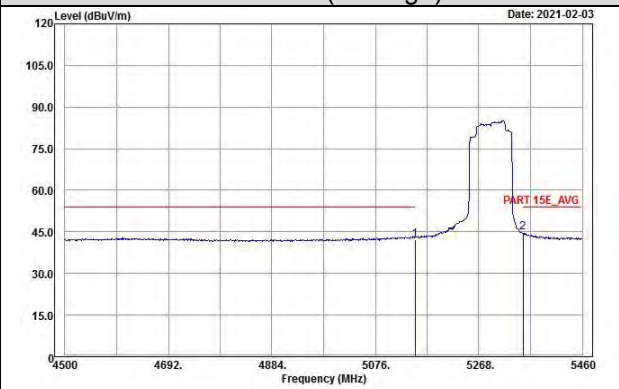
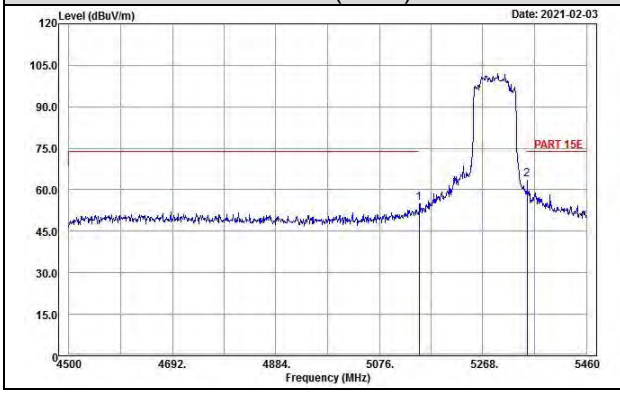
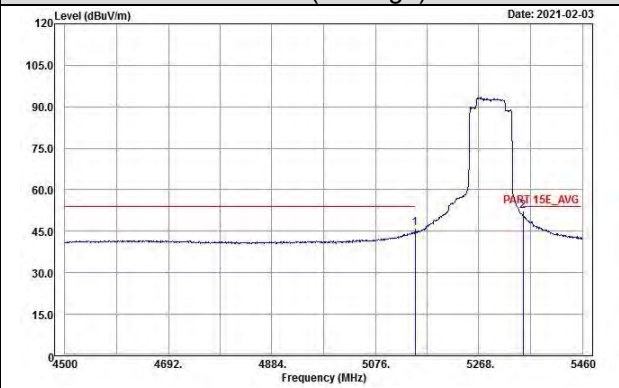


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	42.26	32.21	10.05	54	-11.74	113	270	Average
5150	53.22	43.17	10.05	74	-20.78	113	270	Peak
5250	85.43	75.33	10.1			113	270	Average
5250	94.92	84.82	10.1			113	270	Peak
5350	44.66	34.43	10.23	54	-9.34	109	266	Average
5350	54.4	44.17	10.23	74	-19.6	109	266	Peak
*10500	55.11	39.28	15.83	68.2	-13.09	126	194	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5150	46.14	36.09	10.05	54	-7.86	203	20	Average
5150	55.29	45.24	10.05	74	-18.71	203	20	Peak
5250	94.73	84.63	10.1			210	20	Average
5250	103.19	93.09	10.1			210	20	Peak
5350	52.2	41.97	10.23	54	-1.8	208	22	Average
5350	63.72	53.49	10.23	74	-10.28	208	22	Peak
*10500	55.75	39.92	15.83	68.2	-12.45	164	283	Peak

Remarks:

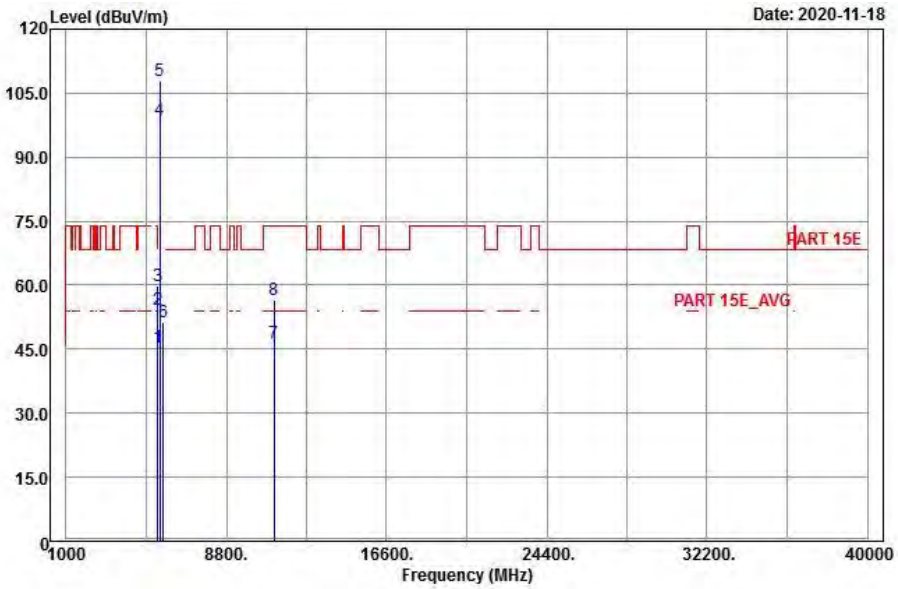
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5250 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

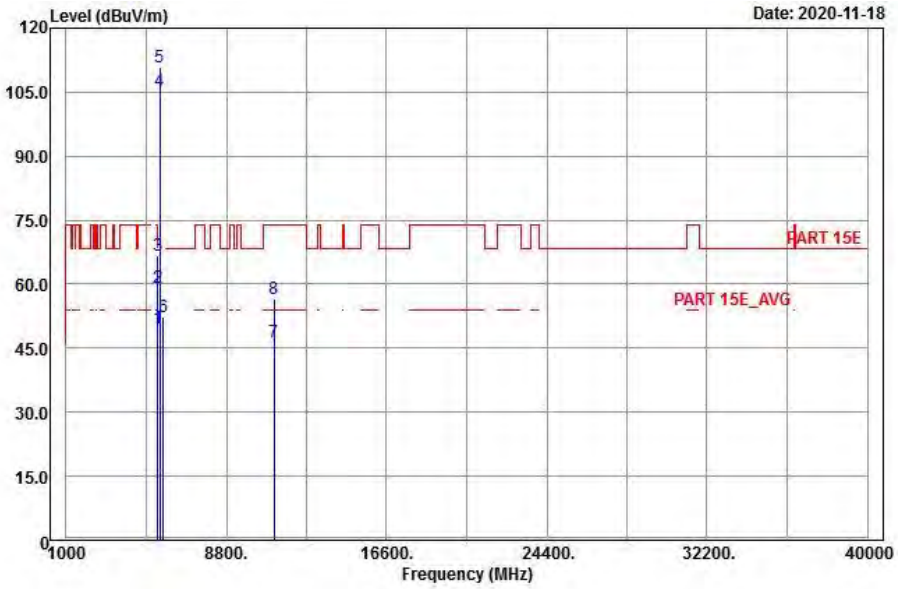
Channel 50 (996, S67)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (242,61)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

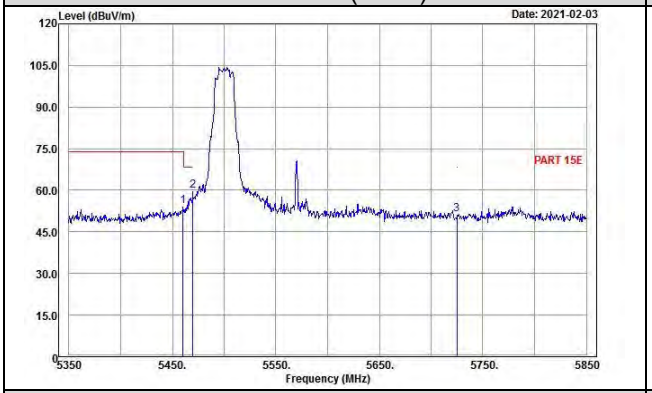
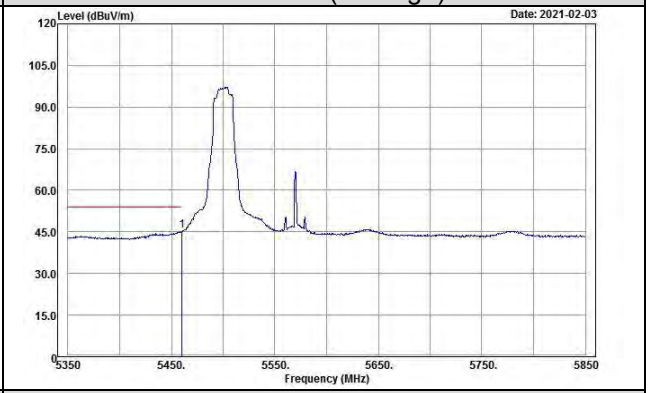
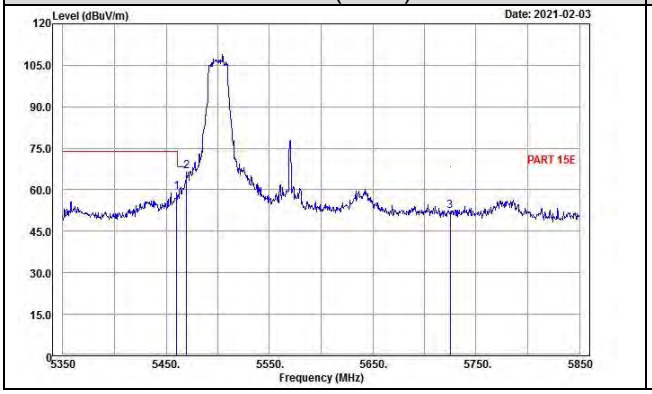
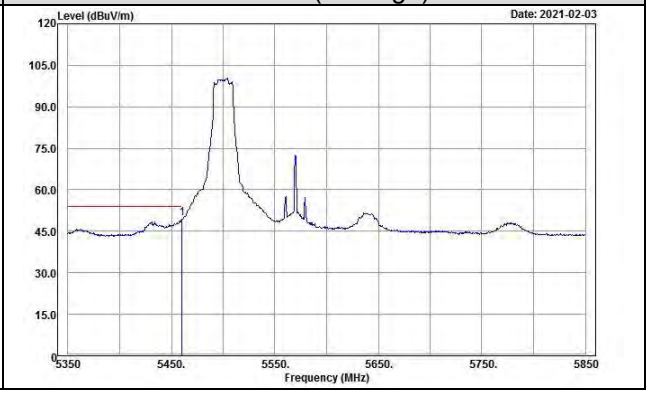


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	45.44	34.93	10.51	54	-8.56	116	24	Average
5460	54.25	43.74	10.51	74	-19.75	116	24	Peak
*5470	59.94	49.41	10.53	68.2	-8.26	116	24	Peak
5570	98.6	87.9	10.7			109	20	Average
5570	107.81	97.11	10.7			109	20	Peak
*5725	51.35	40.43	10.92	68.2	-16.85	109	20	Peak
11140	46.29	29.95	16.34	54	-7.71	131	76	Average
11140	56.54	40.2	16.34	74	-17.46	131	76	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	49.59	39.08	10.51	54	-4.41	232	26	Average
5460	59.07	48.56	10.51	74	-14.93	232	26	Peak
*5470	66.57	56.04	10.53	68.2	-1.63	232	26	Peak
5570	105.2	94.5	10.7			232	17	Average
5570	110.82	100.12	10.7			232	17	Peak
*5725	52.47	41.55	10.92	68.2	-15.73	232	17	Peak
11140	46.58	30.24	16.34	54	-7.42	145	107	Average
11140	56.51	40.17	16.34	74	-17.49	145	107	Peak

Remarks:

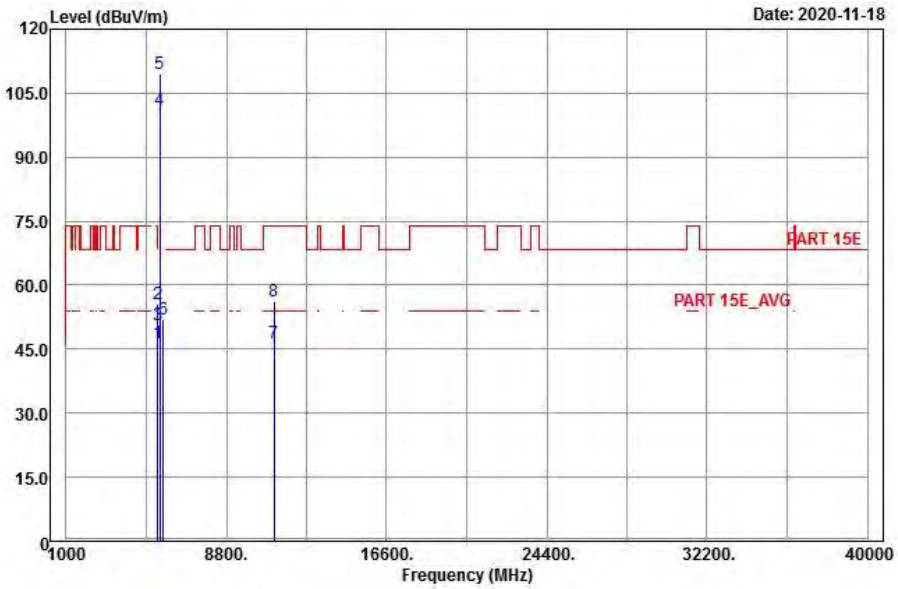
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

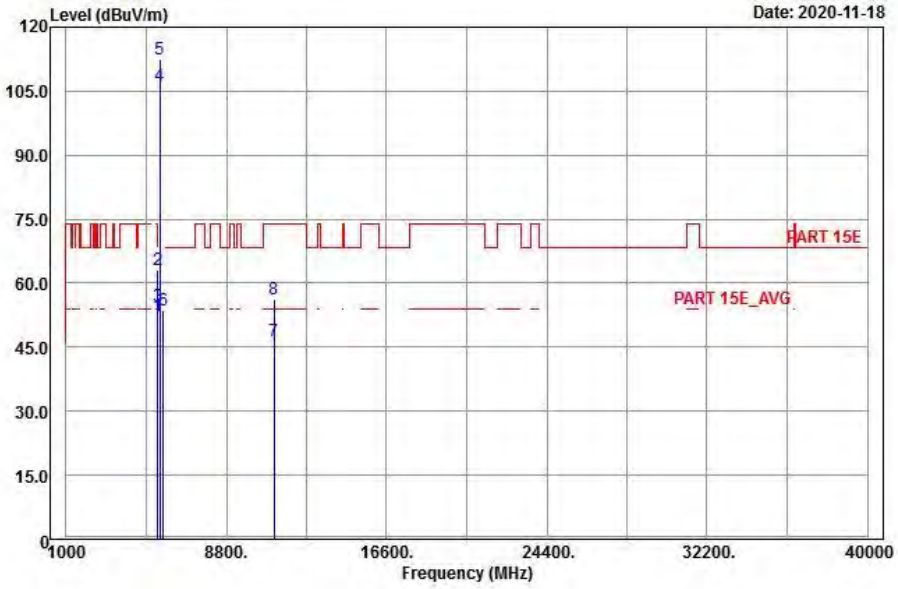
Channel 114 (242, 61)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (242,S64)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

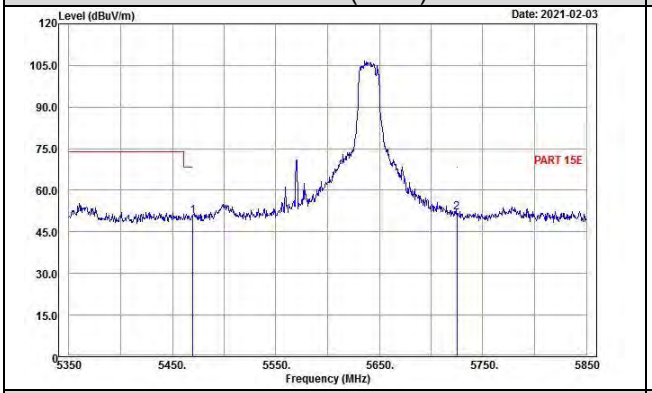
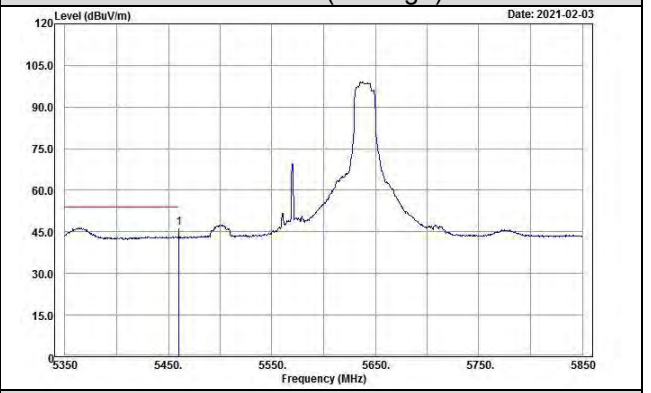
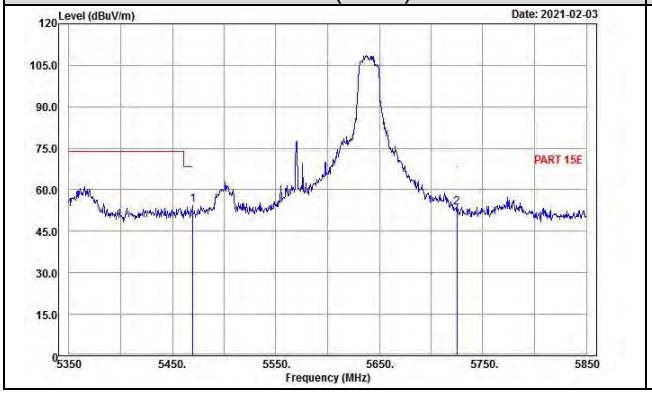
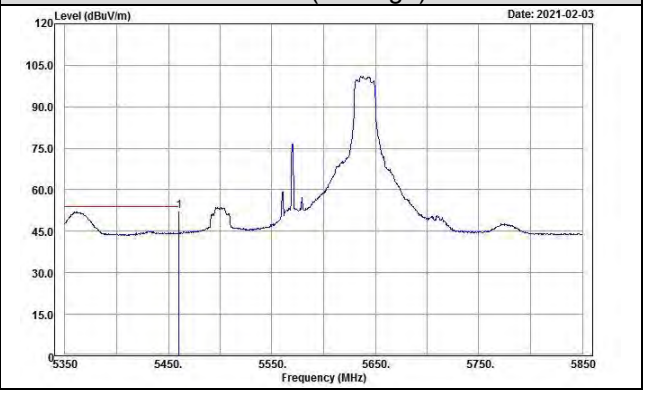


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	46.54	36.03	10.51	54	-7.46	110	36	Average
5460	55.52	45.01	10.51	74	-18.48	110	36	Peak
*5470	50.71	40.18	10.53	68.2	-17.49	110	36	Peak
5570	100.98	90.28	10.7			109	20	Average
5570	109.48	98.78	10.7			109	20	Peak
*5725	52.05	41.13	10.92	68.2	-16.15	109	20	Peak
11140	46.27	29.93	16.34	54	-7.73	156	275	Average
11140	56.39	40.05	16.34	74	-17.61	156	275	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	52.42	41.91	10.51	54	-1.58	219	14	Average
5460	63.17	52.66	10.51	74	-10.83	219	14	Peak
*5470	54.63	44.1	10.53	68.2	-13.57	219	14	Peak
5570	106.32	95.62	10.7			232	17	Average
5570	112.58	101.88	10.7			232	17	Peak
*5725	53.62	42.7	10.92	68.2	-14.58	232	17	Peak
11140	46.28	29.94	16.34	54	-7.72	135	176	Average
11140	56.2	39.86	16.34	74	-17.8	135	176	Peak

Remarks:

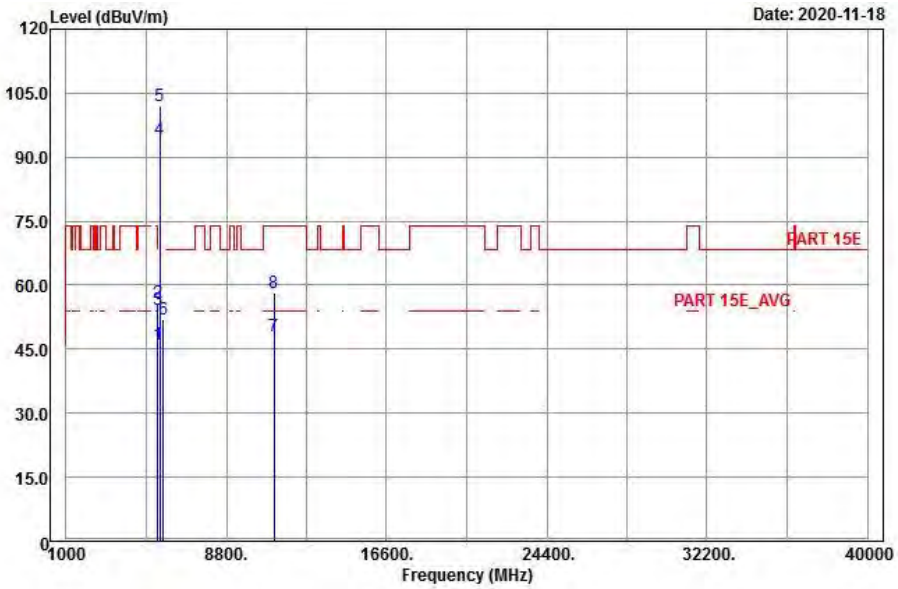
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

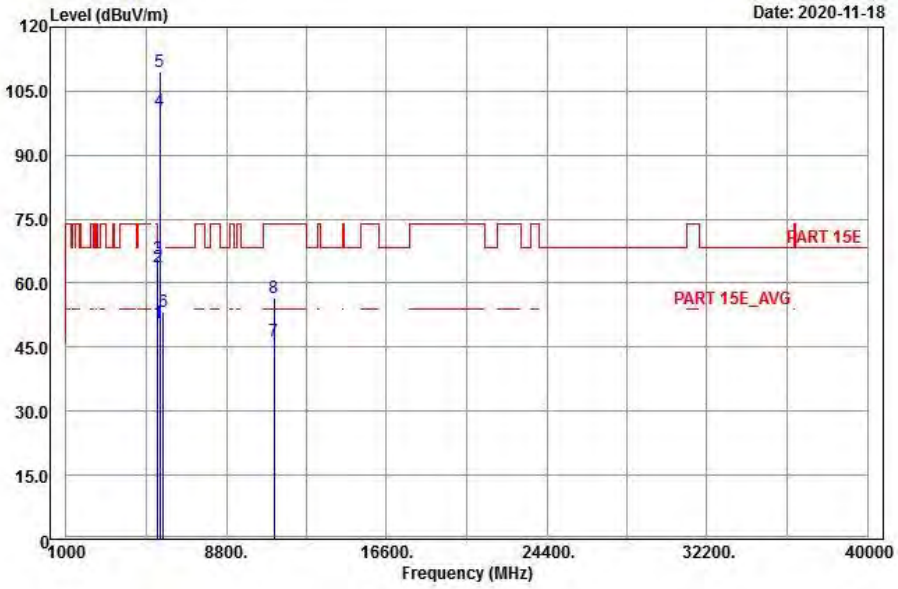
Channel 114 (242, S64)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (484,65)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

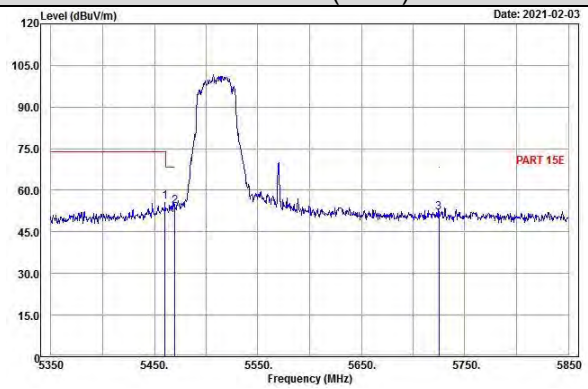
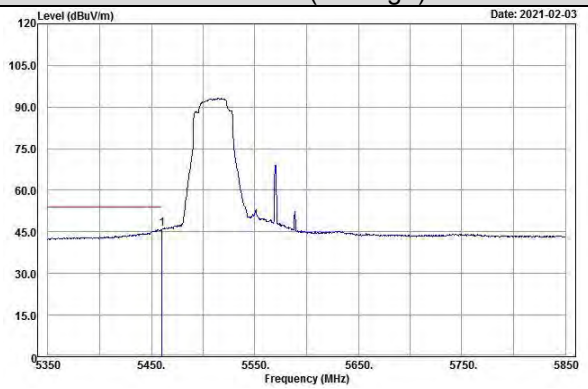
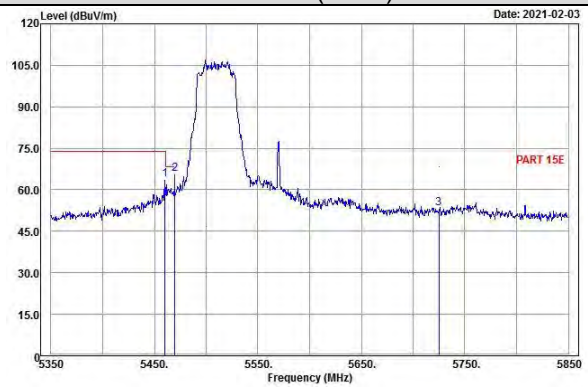
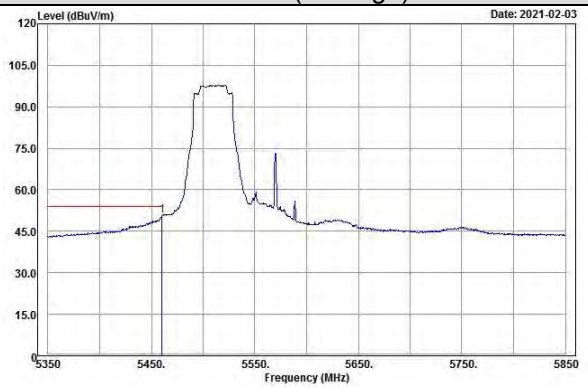


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	46.06	35.55	10.51	54	-7.94	122	19	Average
5460	56.02	45.51	10.51	74	-17.98	122	19	Peak
*5470	54.26	43.73	10.53	68.2	-13.94	122	19	Peak
5570	94.21	83.51	10.7			132	20	Average
5570	102.02	91.32	10.7			132	20	Peak
*5725	51.98	41.06	10.92	68.2	-16.22	132	20	Peak
11140	48.17	31.83	16.34	54	-5.83	168	228	Average
11140	58.27	41.93	16.34	74	-15.73	168	228	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	50.79	40.28	10.51	54	-3.21	251	18	Average
5460	63.76	53.25	10.51	74	-10.24	251	18	Peak
*5470	65.75	55.22	10.53	68.2	-2.45	251	18	Peak
5570	100.47	89.77	10.7			232	17	Average
5570	109.48	98.78	10.7			232	17	Peak
*5725	53.21	42.29	10.92	68.2	-14.99	232	17	Peak
11140	46.31	29.97	16.34	54	-7.69	185	247	Average
11140	56.47	40.13	16.34	74	-17.53	185	247	Peak

Remarks:

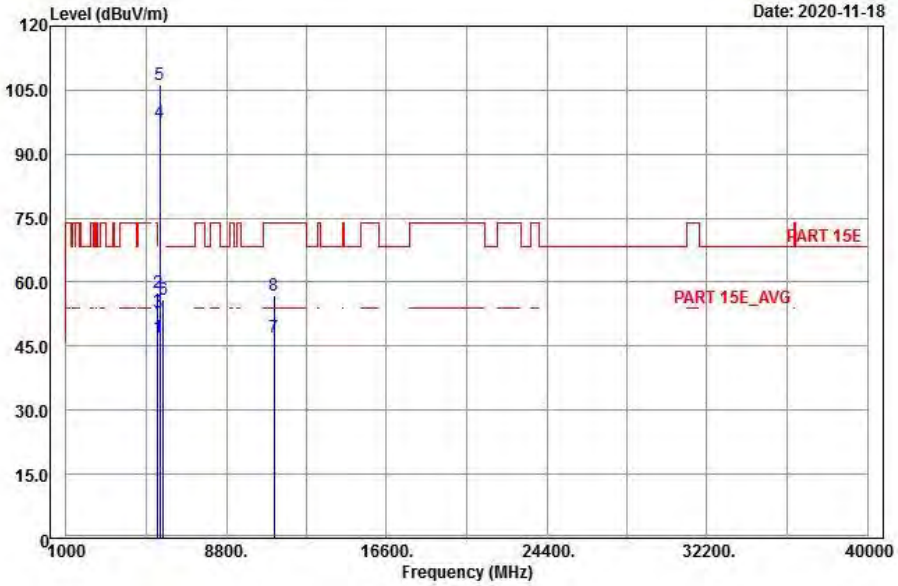
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

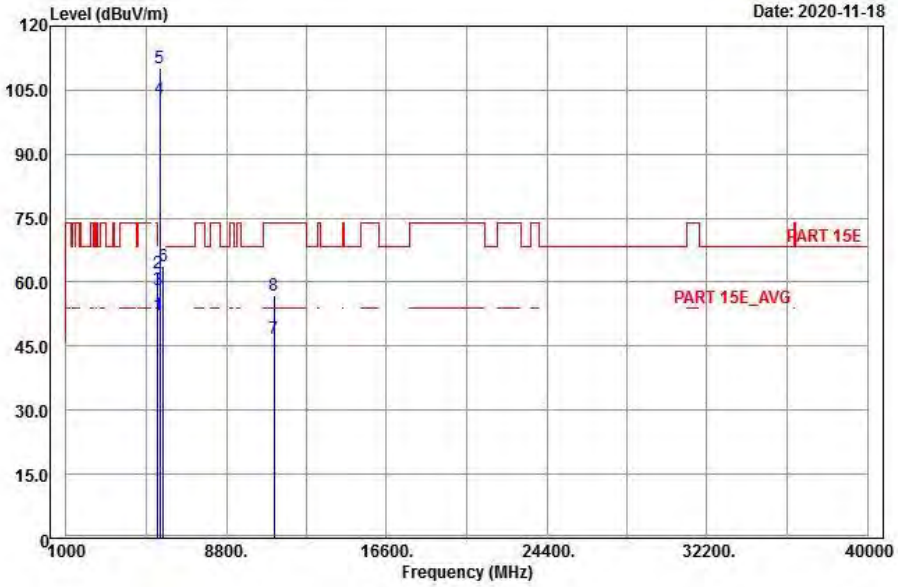
Channel 114 (484, 65)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (484,S66)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

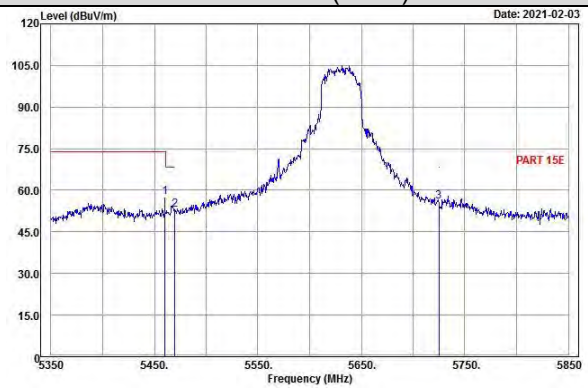
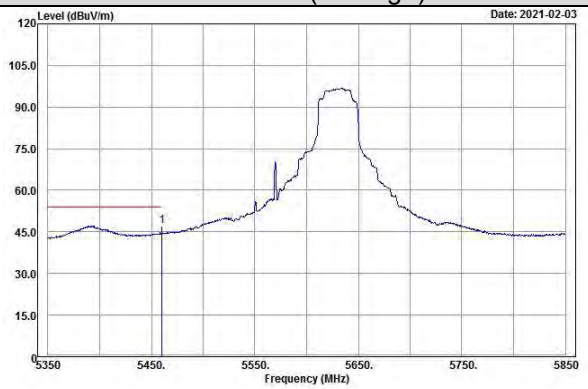
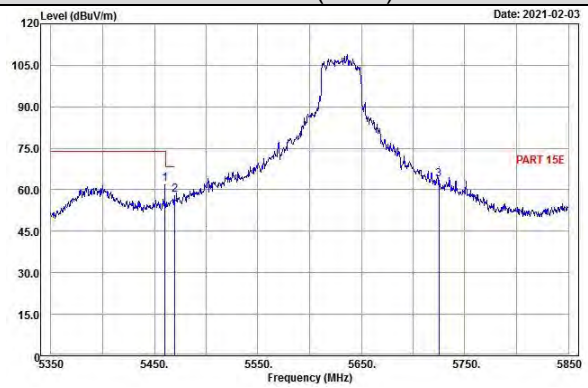
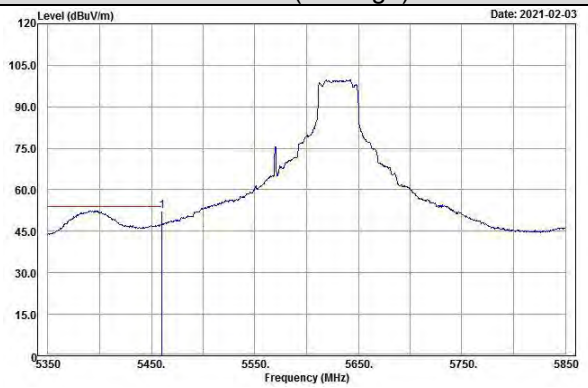


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	47.15	36.64	10.51	54	-6.85	138	17	Average
5460	57.67	47.16	10.51	74	-16.33	138	17	Peak
*5470	52.94	42.41	10.53	68.2	-15.26	138	17	Peak
5570	97.35	86.65	10.7			132	20	Average
5570	106.36	95.66	10.7			132	20	Peak
*5725	56.05	45.13	10.92	68.2	-12.15	132	20	Peak
11140	47.15	30.81	16.34	54	-6.85	162	143	Average
11140	56.98	40.64	16.34	74	-17.02	162	143	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	52.47	41.96	10.51	54	-1.53	227	25	Average
5460	62.27	51.76	10.51	74	-11.73	227	25	Peak
*5470	58.36	47.83	10.53	68.2	-9.84	227	25	Peak
5570	103.15	92.45	10.7			232	17	Average
5570	110.12	99.42	10.7			232	17	Peak
*5725	63.82	52.9	10.92	68.2	-4.38	227	25	Peak
11140	46.82	30.48	16.34	54	-7.18	134	59	Average
11140	56.99	40.65	16.34	74	-17.01	134	59	Peak

Remarks:

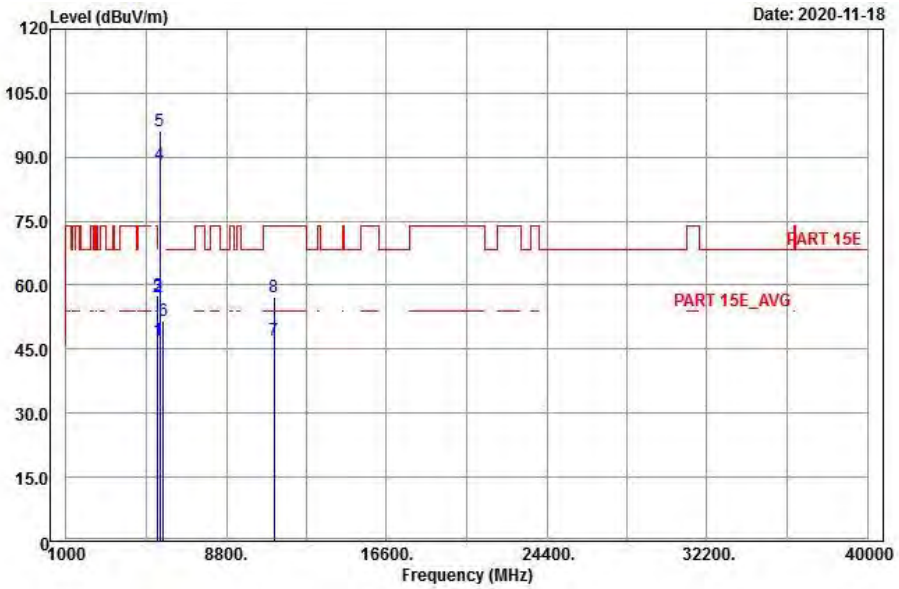
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

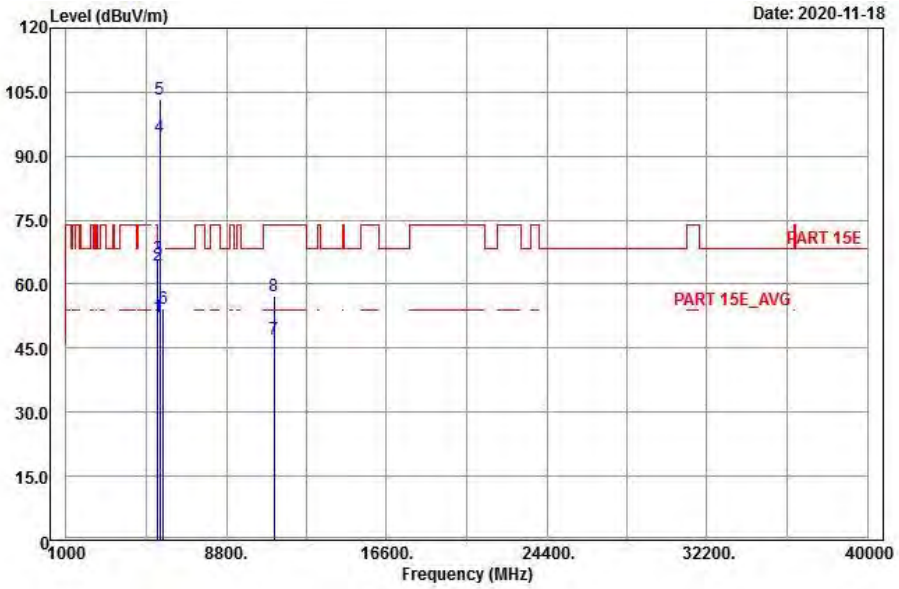
Channel 114 (484, S66)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (996,67)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

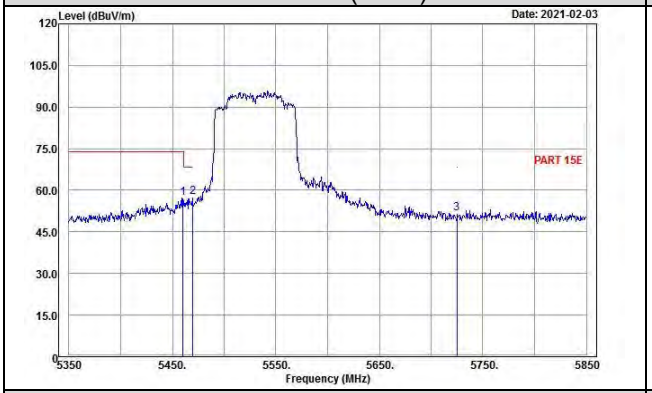
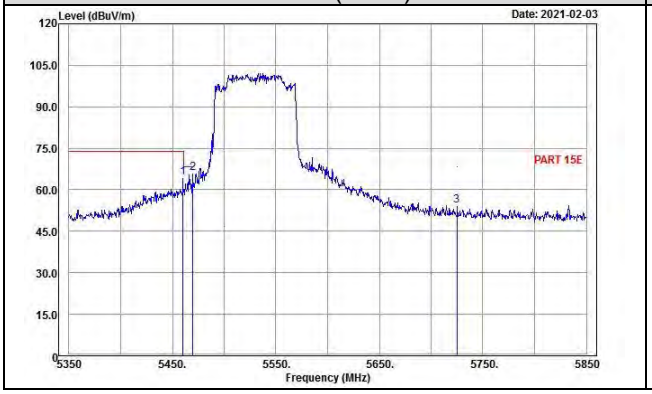
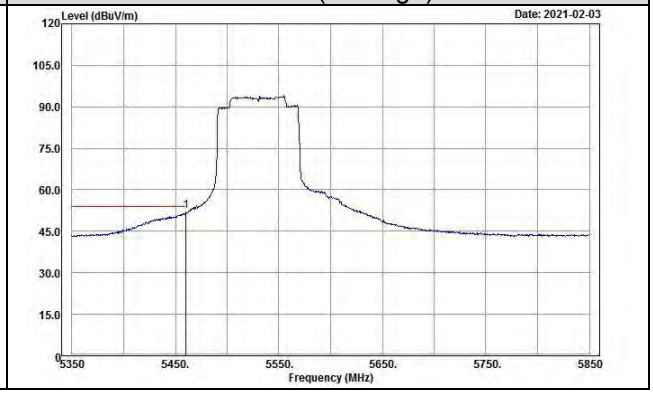


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	47.18	36.67	10.51	54	-6.82	132	36	Average
5460	57.31	46.8	10.51	74	-16.69	132	36	Peak
*5470	57.47	46.94	10.53	68.2	-10.73	132	36	Peak
5570	88.43	77.73	10.7			132	20	Average
5570	96.26	85.56	10.7			132	20	Peak
*5725	51.59	40.67	10.92	68.2	-16.61	132	20	Peak
11140	47.11	30.77	16.34	54	-6.89	185	342	Average
11140	57.29	40.95	16.34	74	-16.71	185	342	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	52.21	41.7	10.51	54	-1.79	246	21	Average
5460	64.52	54.01	10.51	74	-9.48	246	21	Peak
*5470	66.16	55.63	10.53	68.2	-2.04	246	21	Peak
5570	94.49	83.79	10.7			232	17	Average
5570	103.32	92.62	10.7			232	17	Peak
*5725	54.18	43.26	10.92	68.2	-14.02	232	17	Peak
11140	47.24	30.9	16.34	54	-6.76	160	72	Average
11140	57.31	40.97	16.34	74	-16.69	160	72	Peak

Remarks:

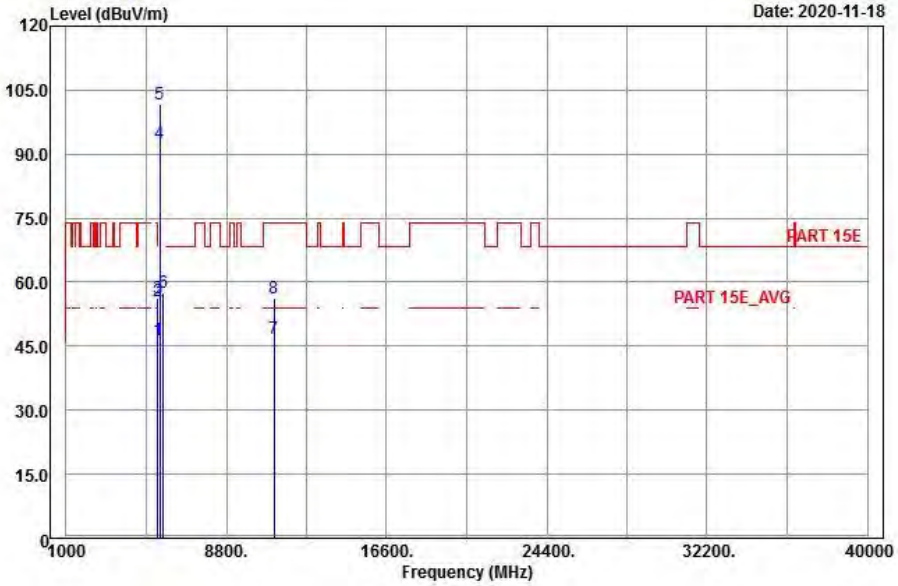
1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

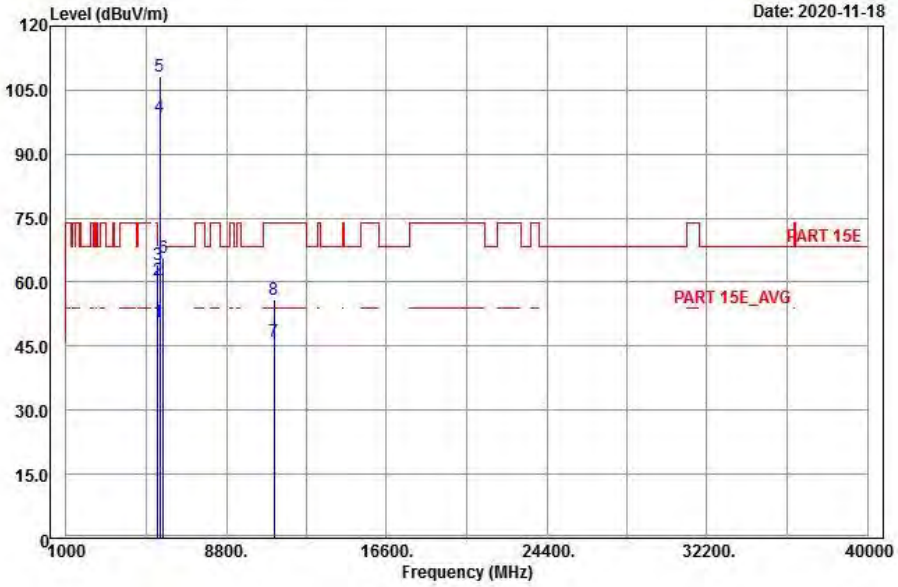
Channel 114 (996, 67)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

EUT Test Condition		Measurement Detail	
Channel	Channel 114 (996,S67)	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical

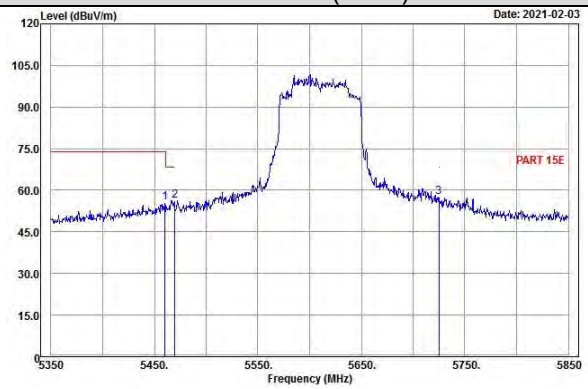
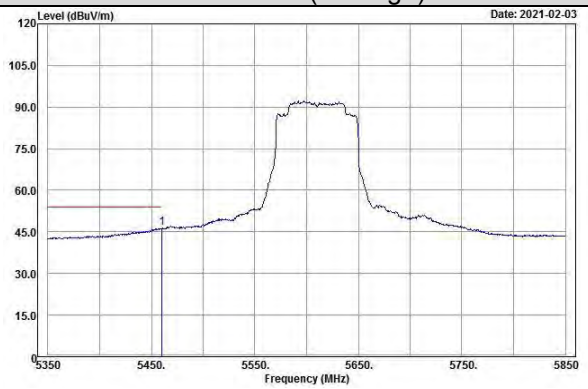
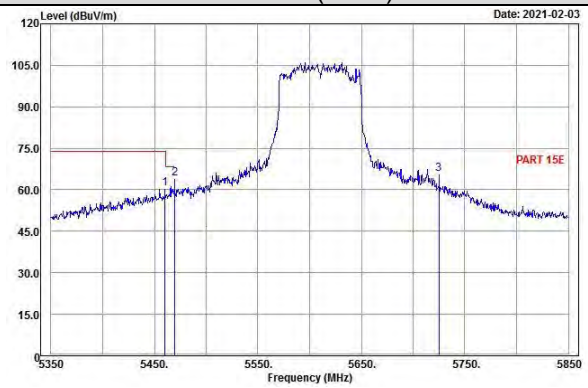
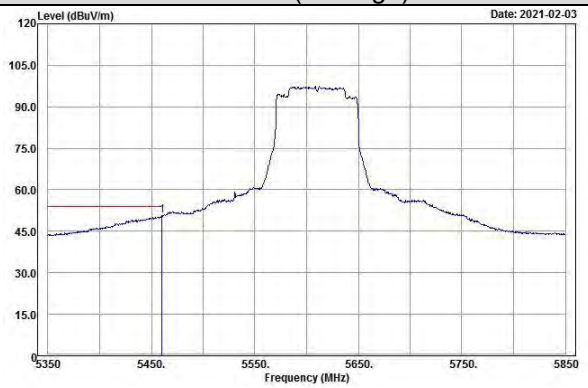


Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	46.38	35.87	10.51	54	-7.62	145	31	Average
5460	55.49	44.98	10.51	74	-18.51	145	31	Peak
*5470	56.26	45.73	10.53	68.2	-11.94	145	31	Peak
5570	92.38	81.68	10.7			132	20	Average
5570	101.75	91.05	10.7			132	20	Peak
*5725	57.64	46.72	10.92	68.2	-10.56	121	29	Peak
11140	46.65	30.31	16.34	54	-7.35	185	56	Average
11140	56.4	40.06	16.34	74	-17.6	185	56	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
5460	50.63	40.12	10.51	54	-3.37	256	27	Average
5460	60.45	49.94	10.51	74	-13.55	256	27	Peak
*5470	63.99	53.46	10.53	68.2	-4.21	256	27	Peak
5570	98.6	87.9	10.7			232	17	Average
5570	108.12	97.42	10.7			232	17	Peak
*5725	65.85	54.93	10.92	68.2	-2.35	236	54	Peak
11140	46.23	29.89	16.34	54	-7.77	154	274	Average
11140	56.02	39.68	16.34	74	-17.98	154	274	Peak

Remarks:

1. Emission Level = Read Level + Factor

   Margin Value = Emission Level – Limit value
2. 5570 MHz: Fundamental Frequency
3. *: Out of Restricted Band
4. The other emission levels were very low against the limit.

Channel 114 (996, S67)	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

9 kHz ~ 30 MHz Data:

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

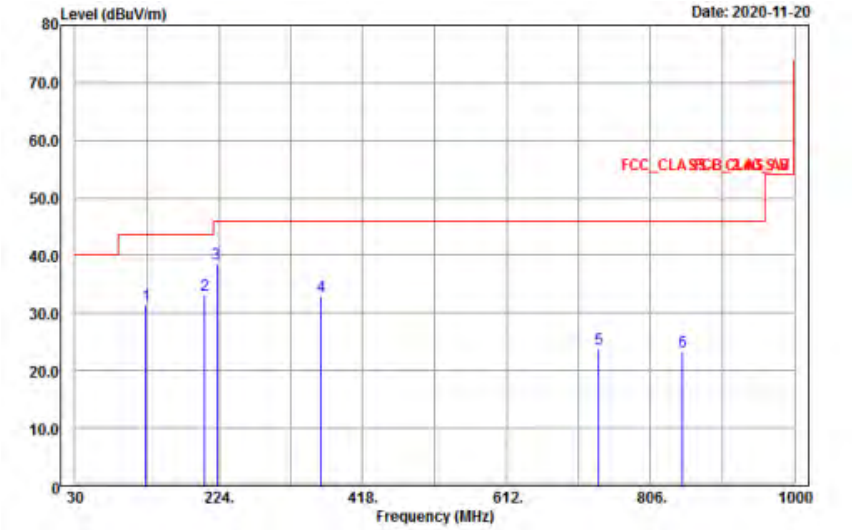
30 MHz ~ 1 GHz Worst-Case Data:

Chain A

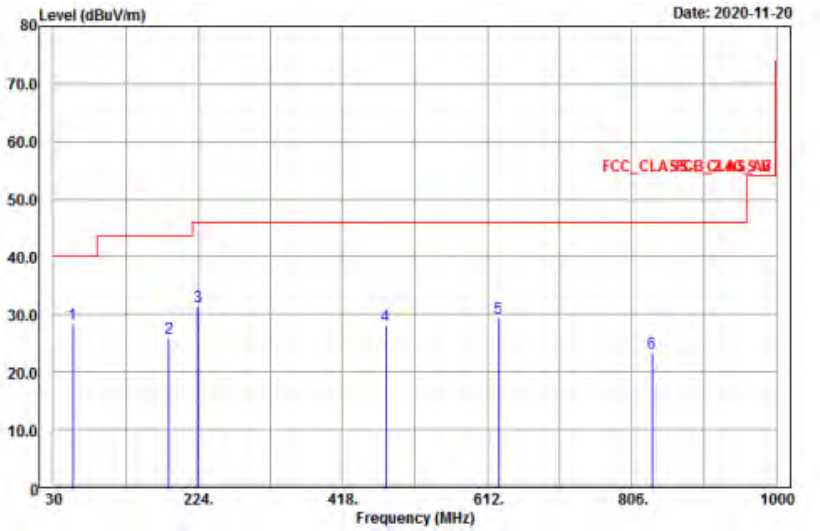
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) or Quasi-Peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
126.12	31.32	51.4	-20.08	43.5	-12.18	115	173	Peak
204.96	33.12	51.3	-18.18	43.5	-10.38	190	143	Peak
221.43	38.64	56.45	-17.81	46	-7.36	184	37	Peak
361.6	32.93	47.49	-14.56	46	-13.07	188	354	Peak
736.1	23.75	32.37	-8.62	46	-22.25	167	182	Peak
849.5	23.23	30.05	-6.82	46	-22.77	127	56	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
55.92	28.39	44.02	-15.63	40	-11.61	284	117	Peak
184.98	26	45.15	-19.15	43.5	-17.5	191	243	Peak
223.86	31.47	49.13	-17.66	46	-14.53	142	116	Peak
475.7	28.04	40.86	-12.82	46	-17.96	267	106	Peak
627.6	29.38	39.77	-10.39	46	-16.62	107	133	Peak
833.4	23.3	30.32	-7.02	46	-22.7	166	228	Peak

Remarks:

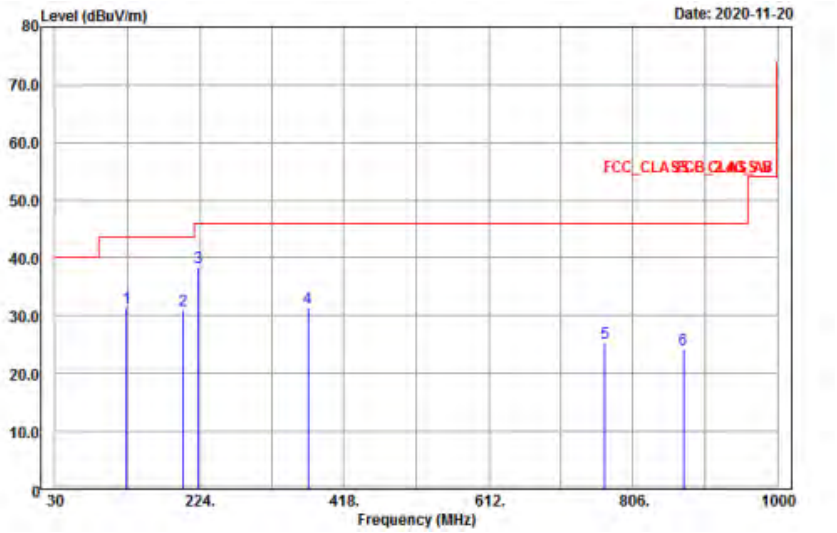
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

Chain B

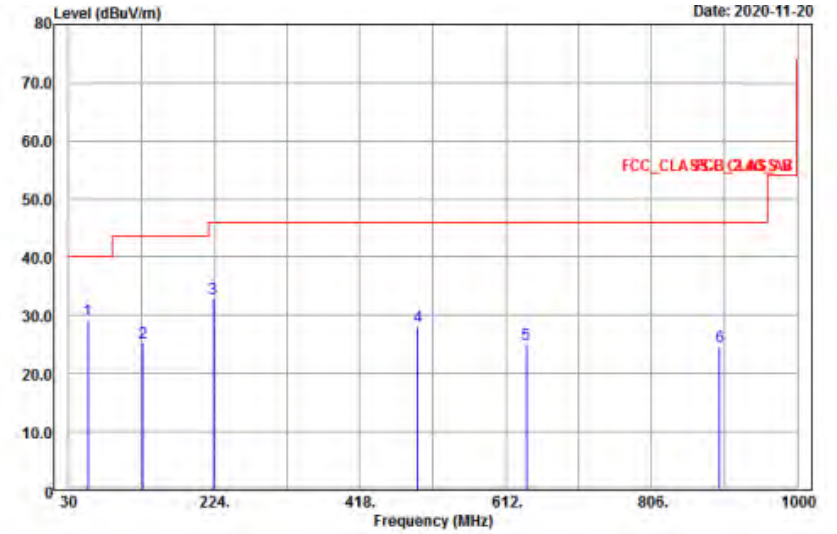
802.11ac (VHT80)

EUT Test Condition		Measurement Detail	
Channel	Channel 42	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) or Quasi-Peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
126.12	31.47	51.55	-20.08	43.5	-12.03	133	137	Peak
201.99	30.93	49.14	-18.21	43.5	-12.57	184	120	Peak
221.7	38.4	56.16	-17.76	46	-7.6	164	129	Peak
369.3	31.45	45.86	-14.41	46	-14.55	231	176	Peak
768.3	25.3	33.56	-8.26	46	-20.7	187	136	Peak
874	24.26	30.55	-6.29	46	-21.74	144	173	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
55.92	29.11	44.74	-15.63	40	-10.89	109	154	Peak
128.82	25.3	45.69	-20.39	43.5	-18.2	183	246	Peak
223.05	32.93	50.64	-17.71	46	-13.07	121	175	Peak
495.3	28.14	40.53	-12.39	46	-17.86	168	21	Peak
639.5	25.02	35.32	-10.3	46	-20.98	109	254	Peak
896.4	24.69	30.67	-5.98	46	-21.31	127	117	Peak

Remarks:

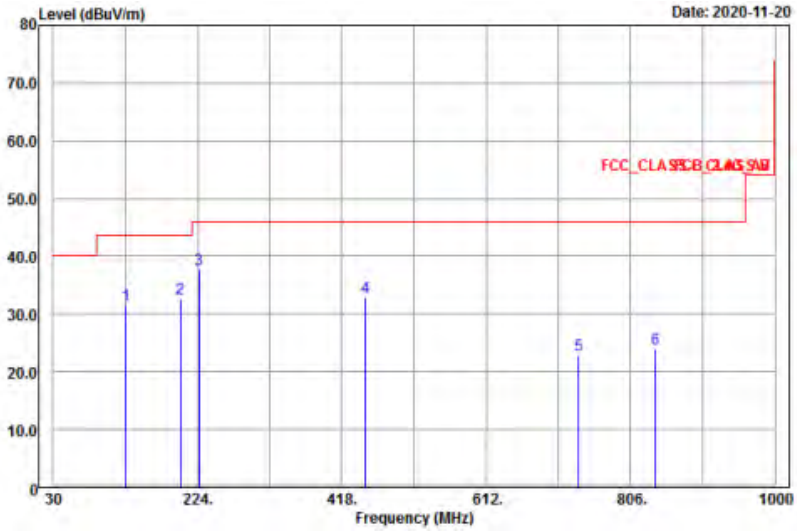
1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

MIMO

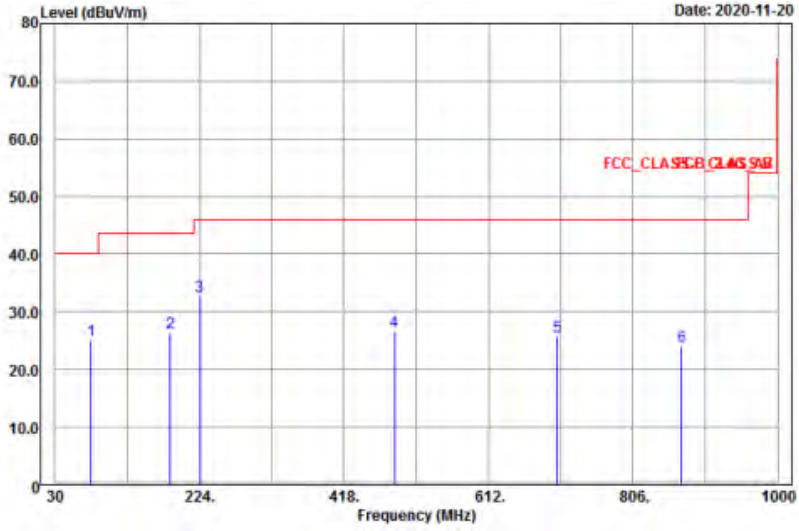
802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 102	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) or Quasi-Peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Harry Hsueh

Horizontal



Vertical



Antenna Polarity & Test Distance: Horizontal at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
127.47	31.66	51.85	-20.19	43.5	-11.84	224	170	Peak
201.18	32.68	50.89	-18.21	43.5	-10.82	108	273	Peak
226.29	37.68	55.26	-17.58	46	-8.32	198	143	Peak
449.8	32.97	46.24	-13.27	46	-13.03	120	75	Peak
736.1	22.78	31.4	-8.62	46	-23.22	236	276	Peak
839.7	24.04	31.01	-6.97	46	-21.96	192	161	Peak
Antenna Polarity & Test Distance: Vertical at 3 m								
Frequency (MHz)	Emission Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)	Remark
78.87	25.16	46.47	-21.31	40	-14.84	137	102	Peak
184.71	26.46	45.7	-19.24	43.5	-17.04	149	259	Peak
224.13	32.64	50.3	-17.66	46	-13.36	157	126	Peak
485.5	26.51	39.11	-12.6	46	-19.49	198	135	Peak
704.6	25.65	34.8	-9.15	46	-20.35	130	48	Peak
871.2	23.99	30.32	-6.33	46	-22.01	179	226	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin Value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 04, 2020	Dec. 03, 2021
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 04, 2020	Sep. 03, 2021
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 20, 2020	Feb. 19, 2021
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 28, 2020	Aug. 27, 2021
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-12040.
4. Test Date: 2021/1/8

4.2.3 Test Procedures

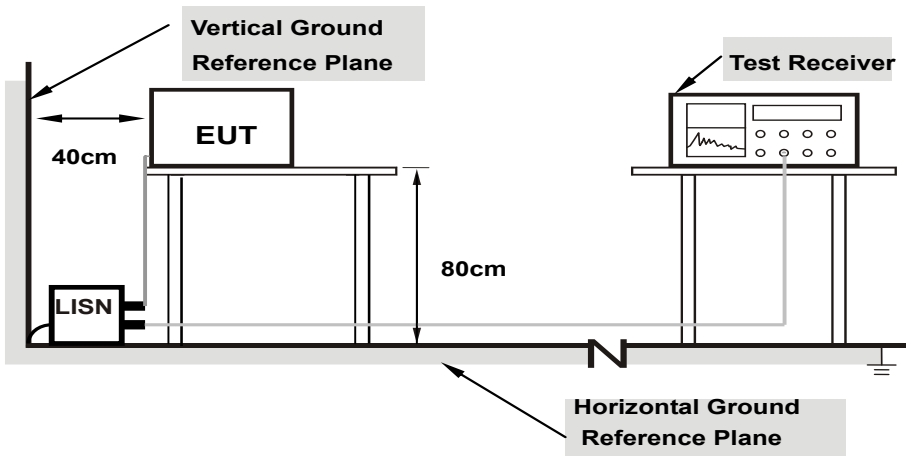
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit -20 dB) was not recorded.

Note: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

a. Placed the EUT on a testing table.
b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

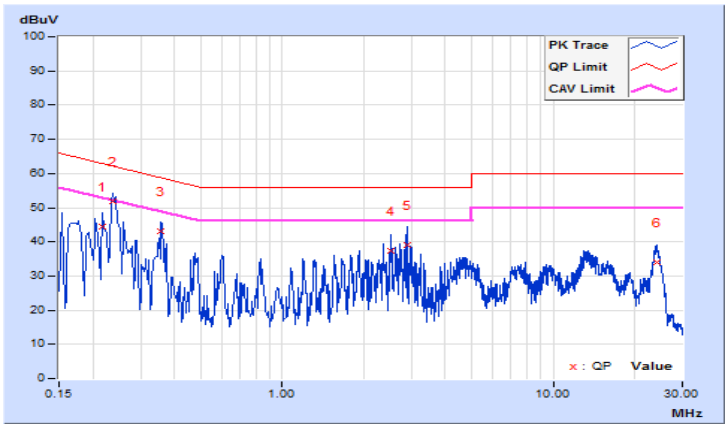
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	18℃, 70%RH
Tested by	Jones Chang	Test Date	2021/1/8
Test Mode	Mode A		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.21647	9.66	34.65	18.52	44.31	28.18	62.95	52.95	-18.64	-24.77
2	0.23602	9.66	42.12	33.31	51.78	42.97	62.24	52.24	-10.46	-9.27
3	0.35723	9.66	33.40	21.88	43.06	31.54	58.79	48.79	-15.73	-17.25
4	2.52337	9.71	27.75	14.05	37.46	23.76	56.00	46.00	-18.54	-22.24
5	2.88309	9.72	29.43	14.06	39.15	23.78	56.00	46.00	-16.85	-22.22
6	24.22387	9.84	24.19	14.91	34.03	24.75	60.00	50.00	-25.97	-25.25

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

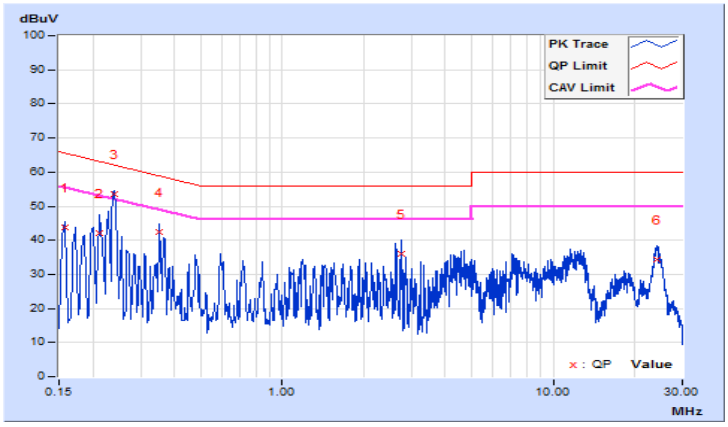


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	18℃, 70%RH
Tested by	Jones Chang	Test Date	2021/1/8
Test Mode	Mode A		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15782	9.68	34.05	16.36	43.73	26.04	65.58	55.58	-21.85	-29.54
2	0.21256	9.68	32.24	16.29	41.92	25.97	63.10	53.10	-21.18	-27.13
3	**0.23993**	**9.68**	**43.84**	**30.82**	**53.52**	**40.50**	**62.10**	**52.10**	**-8.58**	**-11.60**
4	0.35332	9.68	32.77	20.24	42.45	29.92	58.88	48.88	-16.43	-18.96
5	2.75015	9.75	26.33	11.35	36.08	21.10	56.00	46.00	-19.92	-24.90
6	24.21214	9.97	24.54	15.27	34.51	25.24	60.00	50.00	-25.49	-24.76

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

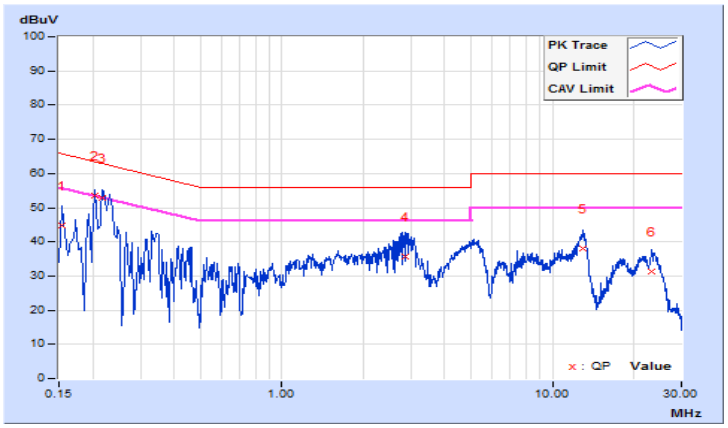


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	18℃, 70%RH
Tested by	Jones Chang	Test Date	2021/1/8
Test Mode	Mode B		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.65	34.97	6.83	44.62	16.48	65.79	55.79	-21.17	-39.31
2	0.20474	9.66	43.84	24.02	53.50	33.68	63.42	53.42	-9.92	-19.74
3	0.21647	9.66	43.09	22.62	52.75	32.28	62.95	52.95	-10.20	-20.67
4	2.85181	9.72	26.06	6.80	35.78	16.52	56.00	46.00	-20.22	-29.48
5	12.98262	9.83	28.36	19.28	38.19	29.11	60.00	50.00	-21.81	-20.89
6	23.32457	9.84	21.37	15.13	31.21	24.97	60.00	50.00	-28.79	-25.03

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

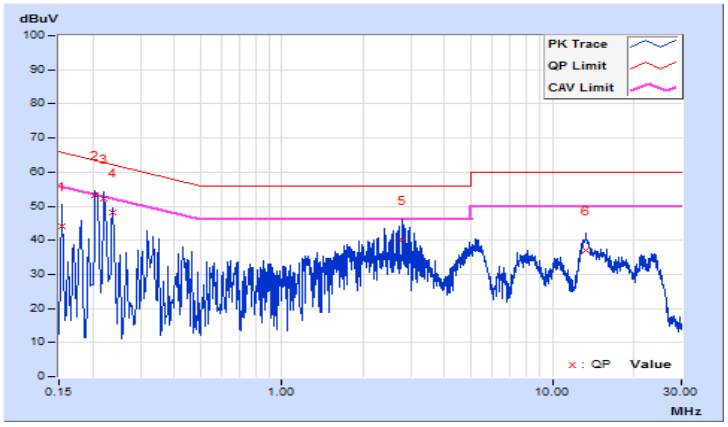


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	18℃, 70%RH
Tested by	Jones Chang	Test Date	2021/1/8
Test Mode	Mode B		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.68	34.28	6.29	43.96	15.97	65.79	55.79	-21.83	-39.82
2	0.20474	9.68	43.63	23.75	53.31	33.43	63.42	53.42	-10.11	-19.99
3	0.22038	9.68	42.62	22.15	52.30	31.83	62.80	52.80	-10.50	-20.97
4	0.23602	9.68	38.38	23.14	48.06	32.82	62.24	52.24	-14.18	-19.42
5	2.79707	9.75	30.16	10.09	39.91	19.84	56.00	46.00	-16.09	-26.16
6	13.30324	9.90	27.07	18.77	36.97	28.67	60.00	50.00	-23.03	-21.33

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250 mW (24 dBm)
U-NII-2A	√		250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-2C	√		250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-3	√		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

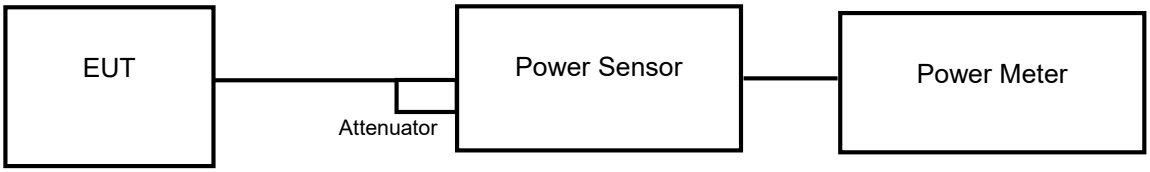
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20 MHz channel widths with $N_{ANT} \geq 5$.

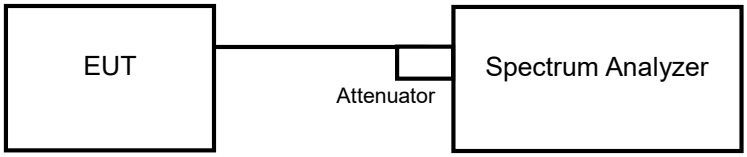
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

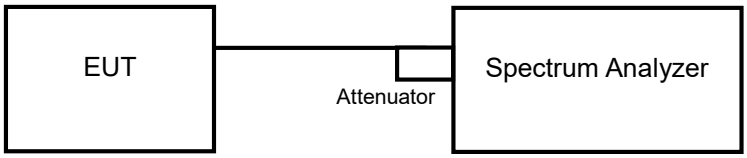
<Power Output Measurement>



or



<26 dB Bandwidth>



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

Average Power Measurement

<802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ax (HE20), 802.11ax (HE40)>

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

<802.11ac (VHT80), 802.11ac (VHT160, 802.11ax (HE80), 802.11ax (HE160)>

a. Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99 % occupied bandwidth) of the signal.
b. Set sweep trigger to “free run”.
c. Set RBW = 1 MHz.
d. Set VBW ≥ 3 MHz
e. Number of points in sweep ≥ 2 Span / RBW.
f. Sweep time ≤ (number of points in sweep) * T
g. Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
h. Detector = RMS.
i. Trace mode = max hold.
j. Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
k. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum

26 dB Bandwidth

a. Set RBW = approximately 1 % of the emission bandwidth.
b. Set the VBW ≥ 3 x RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Results

Power Output:

Chain A

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	83.946	19.24	24	Pass
40	5200	93.541	19.71	24	Pass
48	5240	91.833	19.63	24	Pass
52	5260	95.28	19.79	24	Pass
60	5300	79.983	19.03	24	Pass
64	5320	83.368	19.21	24	Pass
100	5500	85.507	19.32	24	Pass
116	5580	97.949	19.91	24	Pass
140	5700	77.804	18.91	24	Pass
144	5720 (U-NII-2C)	91.929	19.47	23.15	Pass
144	5720 (U-NII-3)	5.99	7.61	30	Pass
149	5745	99.083	19.96	30	Pass
157	5785	96.605	19.85	30	Pass
165	5825	97.051	19.87	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (24.04) = 24.81 dBm > 24 dBm.
2. 11 dBm + 10log (23.63) = 24.73 dBm > 24 dBm.
3. 11 dBm + 10log (23.50) = 24.71 dBm > 24 dBm.
4. 11 dBm + 10log (23.55) = 24.72 dBm > 24 dBm.
5. 11 dBm + 10log (23.70) = 24.75 dBm > 24 dBm.
6. 11 dBm + 10log (23.06) = 24.63 dBm > 24 dBm.
7. 11 dBm + 10log (16.43) = 23.15 dBm < 24 dBm.

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	82.794	19.18	24	Pass
40	5200	93.325	19.70	24	Pass
48	5240	94.189	19.74	24	Pass
52	5260	93.111	19.69	24	Pass
60	5300	92.257	19.65	24	Pass
64	5320	82.414	19.16	24	Pass
100	5500	99.541	19.98	24	Pass
116	5580	98.175	19.92	24	Pass
140	5700	86.298	19.36	24	Pass
144	5720 (U-NII-2C)	89.677	19.43	23.28	Pass
144	5720 (U-NII-3)	5.09	6.97	30	Pass
149	5745	98.855	19.95	30	Pass
157	5785	98.401	19.93	30	Pass
165	5825	96.828	19.86	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (23.82) = 24.77 dBm > 24 dBm.
2. 11 dBm + 10log (23.24) = 24.66 dBm > 24 dBm.
3. 11 dBm + 10log (23.57) = 24.72 dBm > 24 dBm.
4. 11 dBm + 10log (24.03) = 24.81 dBm > 24 dBm.
5. 11 dBm + 10log (23.56) = 24.72 dBm > 24 dBm.
6. 11 dBm + 10log (24.27) = 24.85 dBm > 24 dBm.
7. 11 dBm + 10log (16.92) = 23.28 dBm < 24 dBm.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	72.778	18.62	24	Pass
46	5230	98.628	19.94	24	Pass
54	5270	77.983	18.92	24	Pass
62	5310	58.21	17.65	24	Pass
102	5510	72.111	18.58	24	Pass
110	5550	96.605	19.85	24	Pass
134	5670	87.096	19.40	24	Pass
142	5710 (U-NII-2C)	94.479	19.65	24	Pass
142	5710 (U-NII-3)	6.612	8.10	30	Pass
151	5755	98.175	19.92	30	Pass
159	5795	98.175	19.92	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (43.83) = 27.42 dBm > 24 dBm.
2. 11 dBm + 10log (44.24) = 27.46 dBm > 24 dBm.
3. 11 dBm + 10log (44.19) = 27.45 dBm > 24 dBm.
4. 11 dBm + 10log (44.16) = 27.45 dBm > 24 dBm.
5. 11 dBm + 10log (44.29) = 27.46 dBm > 24 dBm.
6. 11 dBm + 10log (36.58) = 26.63 dBm > 24 dBm.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	57.412	17.59	24	Pass
58	5290	46.881	16.71	24	Pass
106	5530	62.087	17.93	24	Pass
122	5610	62.373	17.95	24	Pass
138	5690 (U-NII-2C)	85.901	19.34	24	Pass
138	5690 (U-NII-3)	2.301	3.62	30	Pass
155	5775	88.512	19.47	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (86.01) = 30.35 dBm > 24 dBm.
2. 11 dBm + 10log (86.41) = 30.37 dBm > 24 dBm.
3. 11 dBm + 10log (85.30) = 30.31 dBm > 24 dBm.
4. 11 dBm + 10log (77.99) = 29.92 dBm > 24 dBm.

802.11ac (VHT160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	14.723	11.68	24	Pass
50	5250 (U-NII-2A)	14.859	11.72	24	Pass
114	5570	33.113	15.20	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.31) = 30.21 dBm > 24 dBm.
2. 11 dBm + 10log (166.28) = 33.21 dBm > 24 dBm.

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	79.25	18.99	24	Pass
40	5200	98.175	19.92	24	Pass
48	5240	99.312	19.97	24	Pass
52	5260	83.946	19.24	24	Pass
60	5300	83.56	19.22	24	Pass
64	5320	78.524	18.95	24	Pass
100	5500	93.972	19.73	24	Pass
116	5580	98.175	19.92	24	Pass
140	5700	87.498	19.42	24	Pass
144	5720 (U-NII-2C)	84.995	19.13	23.09	Pass
144	5720 (U-NII-3)	17.717	12.34	30	Pass
149	5745	98.855	19.95	30	Pass
157	5785	99.312	19.97	30	Pass
165	5825	98.175	19.92	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (23.16) = 24.65 dBm > 24 dBm.
2. 11 dBm + 10log (22.83) = 24.59 dBm > 24 dBm.
3. 11 dBm + 10log (23.07) = 24.63 dBm > 24 dBm.
4. 11 dBm + 10log (22.56) = 24.53 dBm > 24 dBm.
5. 11 dBm + 10log (23.47) = 24.71 dBm > 24 dBm.
6. 11 dBm + 10log (22.96) = 24.61 dBm > 24 dBm.
7. 11 dBm + 10log (16.19) = 23.09 dBm < 24 dBm.

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	74.302	18.71	24	Pass
46	5230	88.308	19.46	24	Pass
54	5270	83.753	19.23	24	Pass
62	5310	54.954	17.40	24	Pass
102	5510	79.068	18.98	24	Pass
110	5550	98.855	19.95	24	Pass
134	5670	76.913	18.86	24	Pass
142	5710 (U-NII-2C)	94.242	19.65	24	Pass
142	5710 (U-NII-3)	6.796	8.23	30	Pass
151	5755	99.312	19.97	30	Pass
159	5795	98.855	19.95	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (43.44) = 27.38 dBm > 24 dBm.
2. 11 dBm + 10log (42.74) = 27.31 dBm > 24 dBm.
3. 11 dBm + 10log (42.99) = 27.33 dBm > 24 dBm.
4. 11 dBm + 10log (43.32) = 27.37 dBm > 24 dBm.
5. 11 dBm + 10log (42.67) = 27.30 dBm > 24 dBm.
6. 11 dBm + 10log (36.33) = 26.60 dBm > 24 dBm.

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	61.944	17.92	24	Pass
58	5290	44.361	16.47	24	Pass
106	5530	52.602	17.21	24	Pass
122	5610	66.222	18.21	24	Pass
138	5690 (U-NII-2C)	86.696	19.38	24	Pass
138	5690 (U-NII-3)	2.661	4.25	30	Pass
155	5775	87.498	19.42	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.41) = 30.21 dBm > 24 dBm.
2. 11 dBm + 10log (82.94) = 30.19 dBm > 24 dBm.
3. 11 dBm + 10log (83.20) = 30.20 dBm > 24 dBm.
4. 11 dBm + 10log (76.41) = 29.83 dBm > 24 dBm.

802.11ax (HE160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	12.823	11.08	24	Pass
50	5250 (U-NII-2A)	12.942	11.12	24	Pass
114	5570	33.037	15.19	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.46) = 30.21 dBm > 24 dBm.
2. 11 dBm + 10log (163.29) = 33.13 dBm > 24 dBm.

26 dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	23.34
40	5200	23.07
48	5240	22.99
52	5260	24.04
60	5300	23.63
64	5320	23.50
100	5500	23.55
116	5580	23.70
140	5700	23.06
144	5720 (U-NII-2C)	16.43
144	5720 (U-NII-3)	6.57

802.11n (HT20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	23.79
40	5200	23.73
48	5240	23.44
52	5260	23.82
60	5300	23.24
64	5320	23.57
100	5500	24.03
116	5580	23.56
140	5700	24.27
144	5720 (U-NII-2C)	16.92
144	5720 (U-NII-3)	7.04

802.11n (HT40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
38	5190	44.03
46	5230	44.09
54	5270	43.83
62	5310	44.24
102	5510	44.19
110	5550	44.16
134	5670	44.29
142	5710 (U-NII-2C)	36.58
142	5710 (U-NII-3)	6.56

802.11ac (VHT80)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
42	5210	85.90
58	5290	86.01
106	5530	86.41
122	5610	85.30
138	5690 (U-NII-2C)	77.99
138	5690 (U-NII-3)	7.52

802.11ac (VHT160)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
50	5250 (U-NII-1)	82.75
50	5250 (U-NII-2A)	83.31
114	5570	166.28

802.11ax (HE20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	23.62
40	5200	23.60
48	5240	22.71
52	5260	23.16
60	5300	22.83
64	5320	23.07
100	5500	22.56
116	5580	23.47
140	5700	22.96
144	5720 (U-NII-2C)	16.19
144	5720 (U-NII-3)	5.96

802.11ax (HE40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
38	5190	43.44
46	5230	42.95
54	5270	43.44
62	5310	42.74
102	5510	42.99
110	5550	43.32
134	5670	42.67
142	5710 (U-NII-2C)	36.33
142	5710 (U-NII-3)	6.29

802.11ax (HE80)

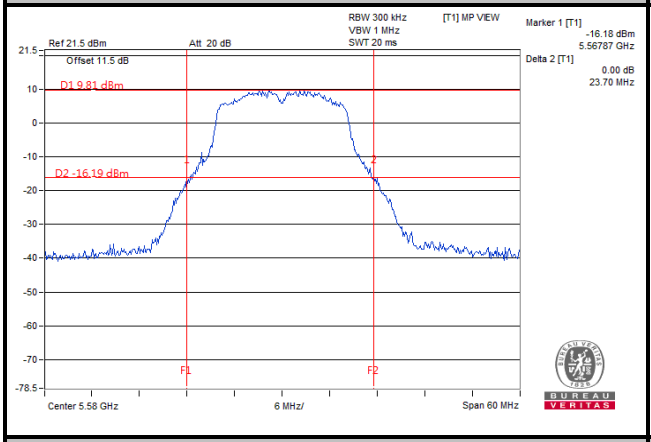
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
42	5210	83.65
58	5290	83.41
106	5530	82.94
122	5610	83.20
138	5690 (U-NII-2C)	76.41
138	5690 (U-NII-3)	6.56

802.11ax (HE160)

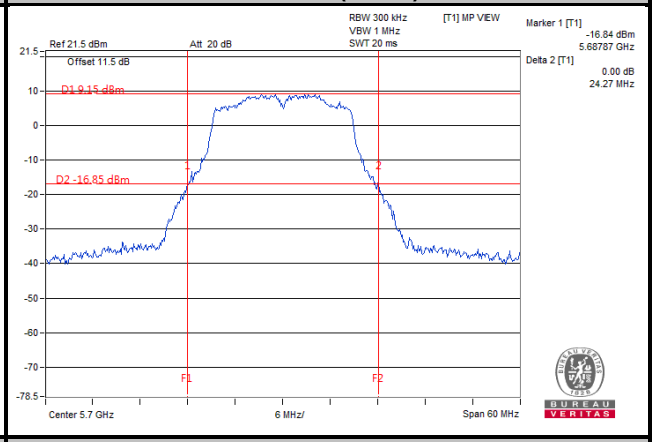
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
50	5250 (U-NII-1)	83.62
50	5250 (U-NII-2A)	83.46
114	5570	163.29

Spectrum Plot of Worst Value

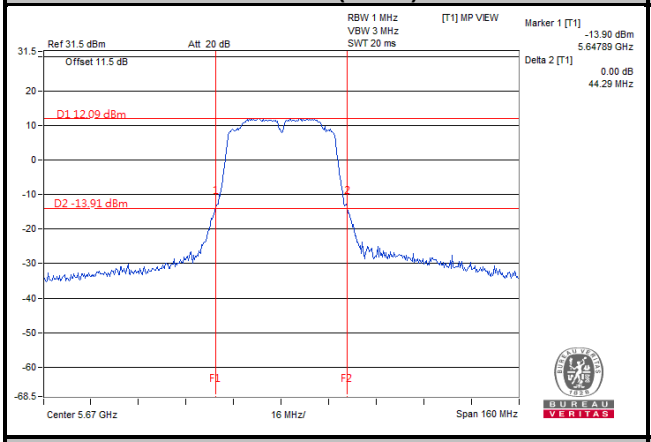
802.11a



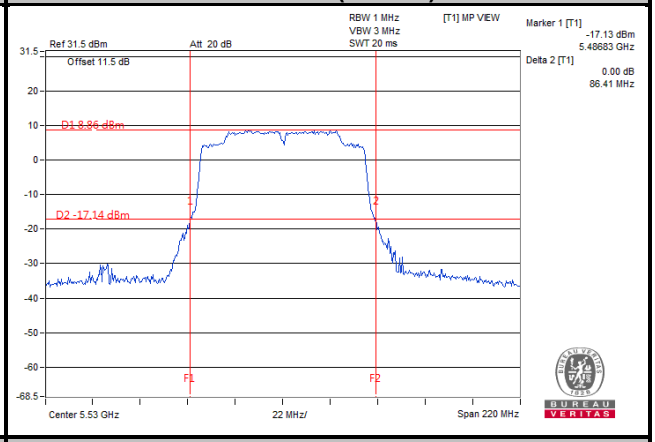
802.11n (HT20)



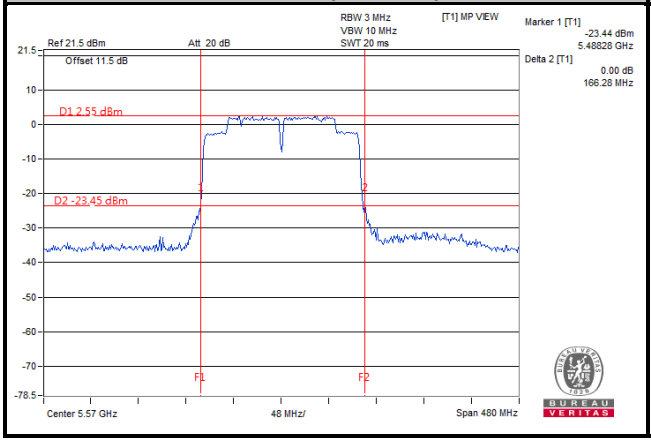
802.11n (HT40)



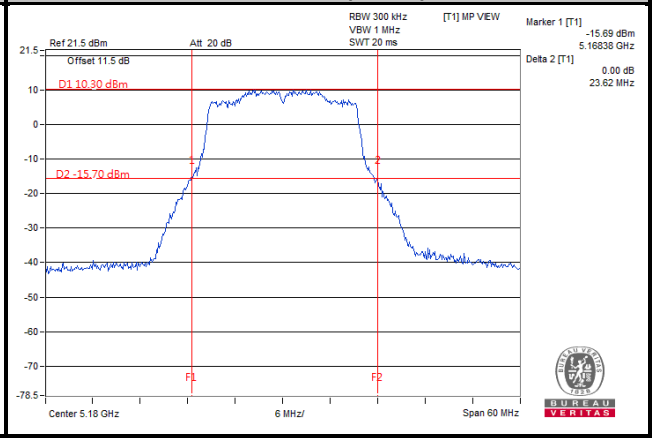
802.11ac (VHT80)



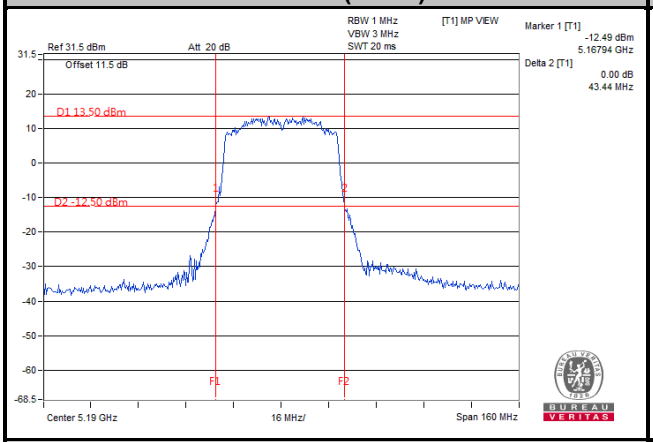
802.11ac (VHT160)



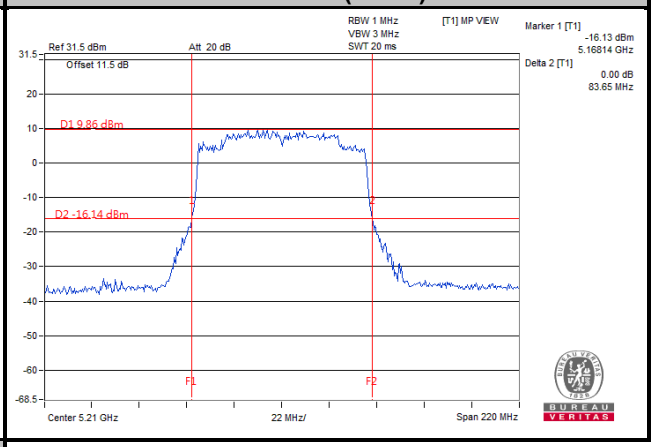
802.11ax (HE20)



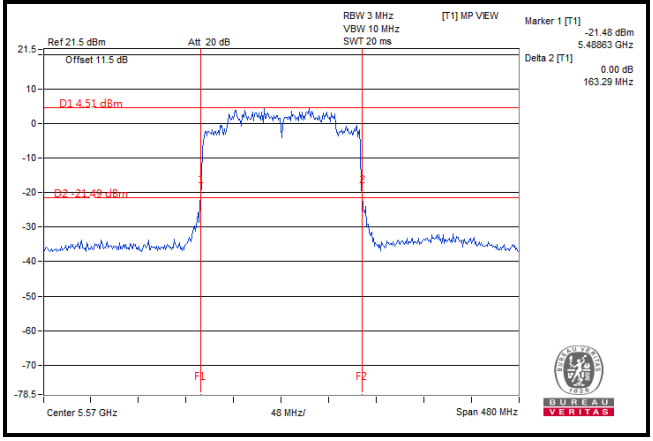
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



Chain B

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	79.983	19.03	24	Pass
40	5200	79.799	19.02	24	Pass
48	5240	79.616	19.01	24	Pass
52	5260	80.353	19.05	24	Pass
60	5300	80.538	19.06	24	Pass
64	5320	80.724	19.07	24	Pass
100	5500	79.983	19.03	24	Pass
116	5580	80.353	19.05	24	Pass
140	5700	79.616	19.01	24	Pass
144	5720 (U-NII-2C)	65.834	18.02	23.20	Pass
144	5720 (U-NII-3)	10.434	10.02	30	Pass
149	5745	81.47	19.11	30	Pass
157	5785	81.658	19.12	30	Pass
165	5825	82.604	19.17	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (23.92) = 24.79 dBm > 24 dBm.
2. 11 dBm + 10log (23.58) = 24.73 dBm > 24 dBm.
3. 11 dBm + 10log (23.20) = 24.65 dBm > 24 dBm.
4. 11 dBm + 10log (23.22) = 24.66 dBm > 24 dBm.
5. 11 dBm + 10log (23.70) = 24.75 dBm > 24 dBm.
6. 11 dBm + 10log (23.00) = 24.62 dBm > 24 dBm.
7. 11 dBm + 10log (16.61) = 23.20 dBm < 24 dBm.

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	80.353	19.05	24	Pass
40	5200	79.983	19.03	24	Pass
48	5240	80.353	19.05	24	Pass
52	5260	79.616	19.01	24	Pass
60	5300	80.538	19.06	24	Pass
64	5320	80.353	19.05	24	Pass
100	5500	62.806	17.98	24	Pass
116	5580	83.368	19.21	24	Pass
140	5700	83.176	19.20	24	Pass
144	5720 (U-NII-2C)	66.952	18.11	23.31	Pass
144	5720 (U-NII-3)	7.191	8.42	30	Pass
149	5745	82.414	19.16	30	Pass
157	5785	82.604	19.17	30	Pass
165	5825	81.658	19.12	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (23.74) = 24.75 dBm > 24 dBm.
2. 11 dBm + 10log (24.08) = 24.82 dBm > 24 dBm.
3. 11 dBm + 10log (23.57) = 24.72 dBm > 24 dBm.
4. 11 dBm + 10log (24.17) = 24.83 dBm > 24 dBm.
5. 11 dBm + 10log (24.10) = 24.82 dBm > 24 dBm.
6. 11 dBm + 10log (24.01) = 24.80 dBm > 24 dBm.
7. 11 dBm + 10log (17.02) = 23.31 dBm < 24 dBm.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	76.736	18.85	24	Pass
46	5230	79.983	19.03	24	Pass
54	5270	80.353	19.05	24	Pass
62	5310	76.913	18.86	24	Pass
102	5510	77.446	18.89	24	Pass
110	5550	82.224	19.15	24	Pass
134	5670	83.753	19.23	24	Pass
142	5710 (U-NII-2C)	80.353	19.05	24	Pass
142	5710 (U-NII-3)	5.047	7.03	30	Pass
151	5755	83.176	19.20	30	Pass
159	5795	82.224	19.15	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (43.76) = 27.41 dBm > 24 dBm.
2. 11 dBm + 10log (43.85) = 27.42 dBm > 24 dBm.
3. 11 dBm + 10log (44.19) = 27.45 dBm > 24 dBm.
4. 11 dBm + 10log (44.26) = 27.46 dBm > 24 dBm.
5. 11 dBm + 10log (43.59) = 27.39 dBm > 24 dBm.
6. 11 dBm + 10log (37.28) = 26.71 dBm > 24 dBm.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	66.681	18.24	24	Pass
58	5290	76.736	18.85	24	Pass
106	5530	60.674	17.83	24	Pass
122	5610	78.705	18.96	24	Pass
138	5690 (U-NII-2C)	86.077	19.24	24	Pass
138	5690 (U-NII-3)	2.415	3.72	30	Pass
155	5775	84.14	19.25	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (86.96) = 30.39 dBm > 24 dBm.
2. 11 dBm + 10log (85.91) = 30.34 dBm > 24 dBm.
3. 11 dBm + 10log (85.51) = 30.32 dBm > 24 dBm.
4. 11 dBm + 10log (77.30) = 29.88 dBm > 24 dBm.

802.11ac (VHT160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	17.219	12.36	24	Pass
50	5250 (U-NII-2A)	16.52	12.18	24	Pass
114	5570	42.855	16.32	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.65) = 30.22 dBm > 24 dBm.
2. 11 dBm + 10log (165.84) = 33.20 dBm > 24 dBm.

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	81.283	19.10	24	Pass
40	5200	82.224	19.15	24	Pass
48	5240	81.096	19.09	24	Pass
52	5260	82.224	19.15	24	Pass
60	5300	83.368	19.21	24	Pass
64	5320	84.723	19.28	24	Pass
100	5500	83.753	19.23	24	Pass
116	5580	83.176	19.20	24	Pass
140	5700	82.224	19.15	24	Pass
144	5720 (U-NII-2C)	65.005	**18.01**	23.16	Pass
144	5720 (U-NII-3)	9.704	9.75	30	Pass
149	5745	88.716	19.48	30	Pass
157	5785	87.297	19.41	30	Pass
165	5825	87.498	19.42	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (22.68) = 24.56 dBm > 24 dBm.
2. 11 dBm + 10log (22.65) = 24.55 dBm > 24 dBm.
3. 11 dBm + 10log (23.31) = 24.68 dBm > 24 dBm.
4. 11 dBm + 10log (23.23) = 24.66 dBm > 24 dBm.
5. 11 dBm + 10log (23.33) = 24.68 dBm > 24 dBm.
6. 11 dBm + 10log (23.28) = 24.67 dBm > 24 dBm.
7. 11 dBm + 10log (16.47) = 23.16 dBm < 24 dBm.

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	69.183	18.40	24	Pass
46	5230	82.224	19.15	24	Pass
54	5270	81.283	19.10	24	Pass
62	5310	81.846	19.13	24	Pass
102	5510	79.616	19.01	24	Pass
110	5550	81.658	19.12	24	Pass
134	5670	81.846	19.13	24	Pass
142	5710 (U-NII-2C)	68.135	19.23	24	Pass
142	5710 (U-NII-3)	4.596	6.52	30	Pass
151	5755	81.283	19.10	30	Pass
159	5795	80.353	19.05	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (42.32) = 27.27 dBm > 24 dBm.
2. 11 dBm + 10log (43.44) = 27.38 dBm > 24 dBm.
3. 11 dBm + 10log (43.33) = 27.37 dBm > 24 dBm.
4. 11 dBm + 10log (42.79) = 27.31 dBm > 24 dBm.
5. 11 dBm + 10log (42.89) = 27.32 dBm > 24 dBm.
6. 11 dBm + 10log (36.53) = 26.63 dBm > 24 dBm.

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	49.888	16.98	24	Pass
58	5290	78.524	18.95	24	Pass
106	5530	51.642	17.13	24	Pass
122	5610	82.224	19.15	24	Pass
138	5690 (U-NII-2C)	82.794	19.18	24	Pass
138	5690 (U-NII-3)	2.541	4.05	30	Pass
155	5775	83.368	19.21	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.85) = 30.24 dBm > 24 dBm.
2. 11 dBm + 10log (84.34) = 30.26 dBm > 24 dBm.
3. 11 dBm + 10log (83.07) = 30.19 dBm > 24 dBm.
4. 11 dBm + 10log (76.48) = 29.84 dBm > 24 dBm.

802.11ax (HE160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	18.281	12.62	24	Pass
50	5250 (U-NII-2A)	18.113	12.58	24	Pass
114	5570	52.602	17.21	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.71) = 30.23 dBm > 24 dBm.
2. 11 dBm + 10log (163.65) = 33.14 dBm > 24 dBm.

26 dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	24.05
40	5200	24.33
48	5240	23.83
52	5260	23.92
60	5300	23.58
64	5320	23.20
100	5500	23.22
116	5580	23.70
140	5700	23.00
144	5720 (U-NII-2C)	16.61
144	5720 (U-NII-3)	7.01

802.11n (HT20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	24.37
40	5200	24.31
48	5240	23.92
52	5260	23.74
60	5300	24.08
64	5320	23.57
100	5500	24.17
116	5580	24.10
140	5700	24.01
144	5720 (U-NII-2C)	17.02
144	5720 (U-NII-3)	6.59

802.11n (HT40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
38	5190	43.88
46	5230	44.41
54	5270	43.76
62	5310	43.85
102	5510	44.19
110	5550	44.26
134	5670	43.59
142	5710 (U-NII-2C)	37.28
142	5710 (U-NII-3)	7.20

802.11ac (VHT80)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
42	5210	84.68
58	5290	86.96
106	5530	85.91
122	5610	85.51
138	5690 (U-NII-2C)	77.30
138	5690 (U-NII-3)	7.40

802.11ac (VHT160)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
50	5250 (U-NII-1)	83.09
50	5250 (U-NII-2A)	83.65
114	5570	165.84

802.11ax (HE20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
36	5180	23.45
40	5200	23.15
48	5240	23.51
52	5260	22.68
60	5300	22.65
64	5320	23.31
100	5500	23.23
116	5580	23.33
140	5700	23.28
144	5720 (U-NII-2C)	16.47
144	5720 (U-NII-3)	6.64

802.11ax (HE40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
38	5190	42.73
46	5230	43.72
54	5270	42.32
62	5310	43.44
102	5510	43.33
110	5550	42.79
134	5670	42.89
142	5710 (U-NII-2C)	36.53
142	5710 (U-NII-3)	6.44

802.11ax (HE80)

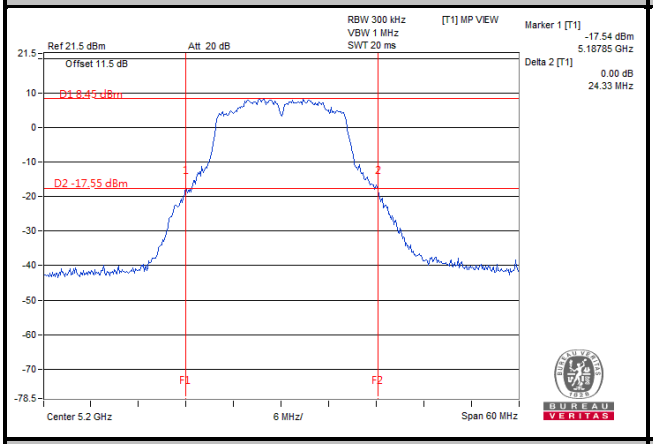
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
42	5210	83.88
58	5290	83.85
106	5530	84.34
122	5610	83.07
138	5690 (U-NII-2C)	76.48
138	5690 (U-NII-3)	6.61

802.11ax (HE160)

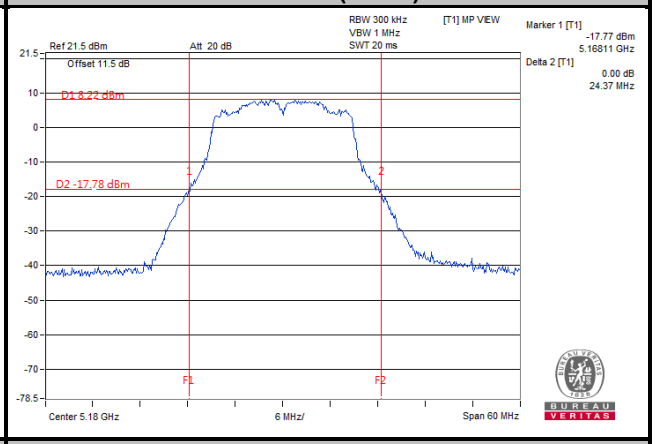
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)
50	5250 (U-NII-1)	83.40
50	5250 (U-NII-2A)	83.71
114	5570	163.65

Spectrum Plot of Worst Value

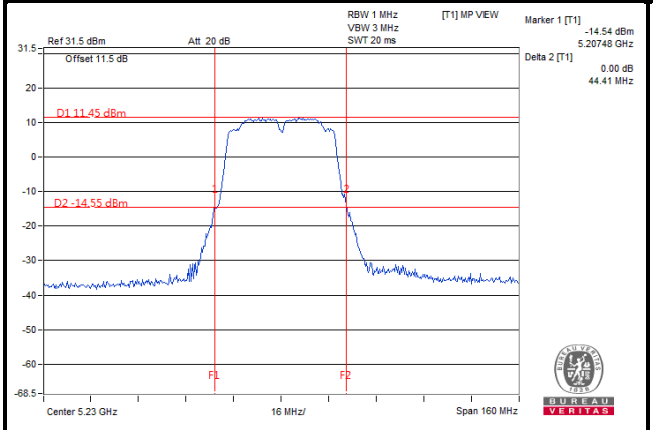
802.11a



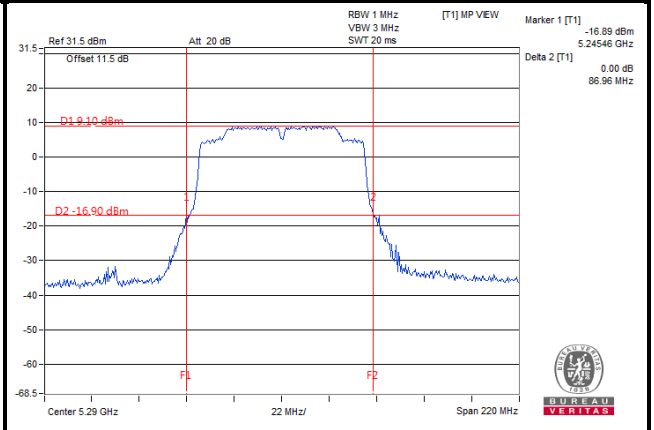
802.11n (HT20)



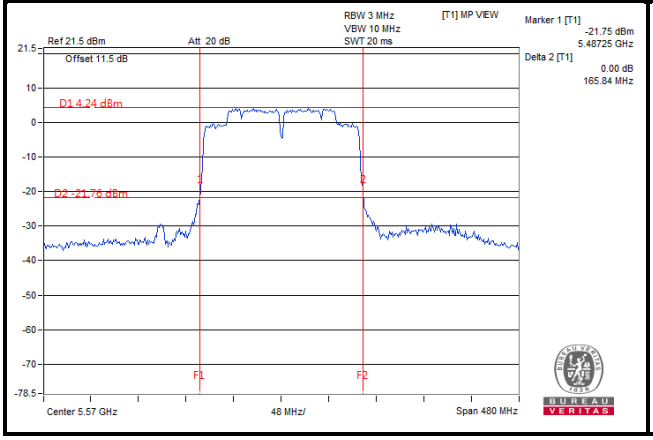
802.11n (HT40)



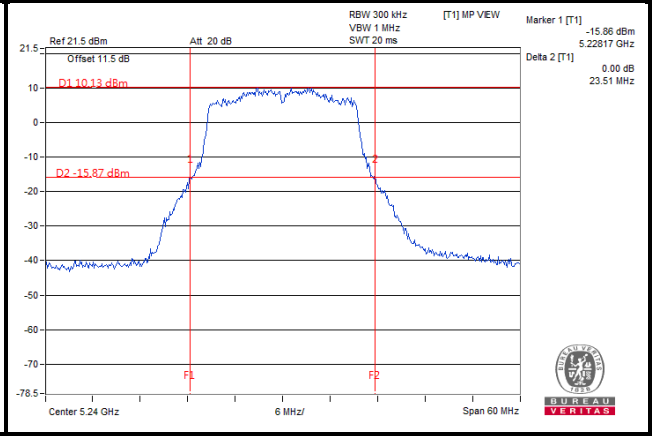
802.11ac (VHT80)



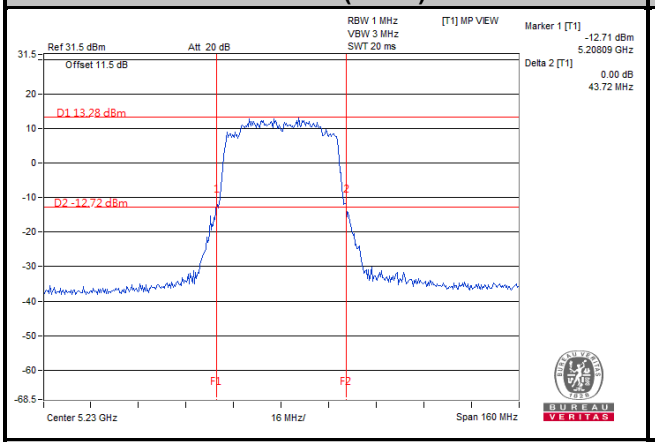
802.11ac (VHT160)



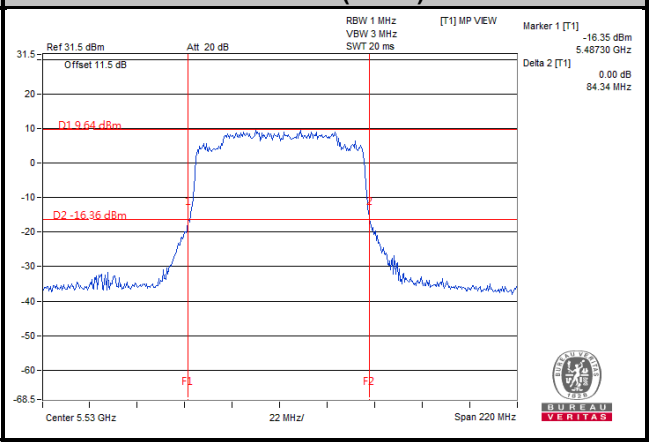
802.11ax (HE20)



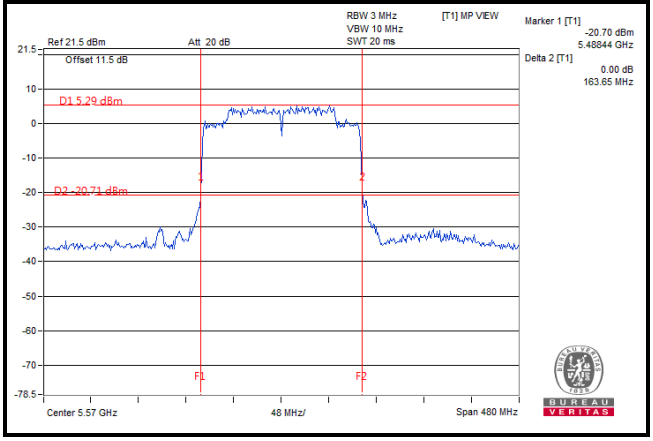
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



MIMO

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
36	5180	18.20	18.19	131.987	21.21	24	Pass
40	5200	19.09	19.06	161.634	22.09	24	Pass
48	5240	19.04	18.99	159.418	22.03	24	Pass
52	5260	18.67	18.59	145.898	21.64	24	Pass
60	5300	18.71	18.67	147.923	21.70	24	Pass
64	5320	18.72	18.71	148.775	21.73	24	Pass
100	5500	18.74	18.65	148.099	21.71	24	Pass
116	5580	18.69	18.66	147.412	21.69	24	Pass
140	5700	18.39	18.35	137.415	21.38	24	Pass
144	5720 (U-NII-2C)	18.01	18.25	133.008	21.14	23.29	Pass
144	5720 (U-NII-3)	7.40	9.85	15.498	11.81	30	Pass
149	5745	18.96	18.92	156.688	21.95	30	Pass
157	5785	18.91	18.87	154.894	21.90	30	Pass
165	5825	18.90	18.82	153.833	21.87	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (23.55) = 24.72 dBm > 24 dBm.
2. 11 dBm + 10log (23.85) = 24.77 dBm > 24 dBm.
3. 11 dBm + 10log (23.64) = 24.74 dBm > 24 dBm.
4. 11 dBm + 10log (24.08) = 24.82 dBm > 24 dBm.
5. 11 dBm + 10log (23.78) = 24.76 dBm > 24 dBm.
6. 11 dBm + 10log (24.31) = 24.86 dBm > 24 dBm.
7. 11 dBm + 10log (16.97) = 23.29 dBm < 24 dBm.

Chain B

1. 11 dBm + 10log (23.84) = 24.77 dBm > 24 dBm.
2. 11 dBm + 10log (24.37) = 24.87 dBm > 24 dBm.
3. 11 dBm + 10log (23.96) = 24.79 dBm > 24 dBm.
4. 11 dBm + 10log (24.13) = 24.83 dBm > 24 dBm.
5. 11 dBm + 10log (24.29) = 24.85 dBm > 24 dBm.
6. 11 dBm + 10log (24.41) = 24.88 dBm > 24 dBm.
7. 11 dBm + 10log (16.97) = 23.29 dBm < 24 dBm.

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
38	5190	16.92	16.90	98.182	19.92	24	Pass
46	5230	19.42	19.41	174.796	22.43	24	Pass
54	5270	18.93	18.85	154.899	21.90	24	Pass
62	5310	16.87	16.82	96.725	19.86	24	Pass
102	5510	16.96	16.94	99.09	19.96	24	Pass
110	5550	18.95	18.87	155.614	21.92	24	Pass
134	5670	18.47	18.38	139.172	21.44	24	Pass
142	5710 (U-NII-2C)	18.77	18.81	151.368	21.80	24	Pass
142	5710 (U-NII-3)	6.87	6.50	9.331	9.70	30	Pass
151	5755	18.75	18.69	148.95	21.73	30	Pass
159	5795	18.67	18.66	147.072	21.68	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (43.73) = 27.41 dBm > 24 dBm.
2. 11 dBm + 10log (43.78) = 27.41 dBm > 24 dBm.
3. 11 dBm + 10log (45.80) = 27.61 dBm > 24 dBm.
4. 11 dBm + 10log (43.82) = 27.42 dBm > 24 dBm.
5. 11 dBm + 10log (43.77) = 27.41 dBm > 24 dBm.
6. 11 dBm + 10log (36.94) = 26.67 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (44.19) = 27.45 dBm > 24 dBm.
2. 11 dBm + 10log (44.31) = 27.47 dBm > 24 dBm.
3. 11 dBm + 10log (44.74) = 27.51 dBm > 24 dBm.
4. 11 dBm + 10log (43.69) = 27.40 dBm > 24 dBm.
5. 11 dBm + 10log (44.29) = 27.46 dBm > 24 dBm.
6. 11 dBm + 10log (37.13) = 26.70 dBm > 24 dBm.

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
42	5210	16.15	16.11	82.042	19.14	24	Pass
58	5290	14.91	14.98	62.452	17.96	24	Pass
106	5530	15.60	15.55	72.2	18.59	24	Pass
122	5610	18.40	18.32	137.103	21.37	24	Pass
138	5690 (U-NII-2C)	18.63	18.82	149.154	21.74	24	Pass
138	5690 (U-NII-3)	2.74	3.08	3.912	5.92	30	Pass
155	5775	18.99	18.95	157.774	21.98	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (86.79) = 30.38 dBm > 24 dBm.
2. 11 dBm + 10log (86.16) = 30.35 dBm > 24 dBm.
3. 11 dBm + 10log (86.80) = 30.39 dBm > 24 dBm.
4. 11 dBm + 10log (77.72) = 29.91 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (83.92) = 30.24 dBm > 24 dBm.
2. 11 dBm + 10log (86.62) = 30.38 dBm > 24 dBm.
3. 11 dBm + 10log (85.70) = 30.33 dBm > 24 dBm.
4. 11 dBm + 10log (77.57) = 29.90 dBm > 24 dBm.

802.11ac (VHT160)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
50	5250 (U-NII-1)	10.05	10.12	20.396	13.10	24	Pass
50	5250 (U-NII-2A)	10.06	10.18	20.562	13.13	24	Pass
114	5570	14.43	14.40	55.275	17.43	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (83.69) = 30.23 dBm > 24 dBm.
2. 11 dBm + 10log (165.38) = 33.18 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (83.80) = 30.23 dBm > 24 dBm.
2. 11 dBm + 10log (164.96) = 33.17 dBm > 24 dBm.

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
36	5180	18.98	18.95	157.591	21.98	24	Pass
40	5200	18.96	18.94	157.048	21.96	24	Pass
48	5240	18.99	18.91	157.054	21.96	24	Pass
52	5260	18.90	18.85	154.361	21.89	24	Pass
60	5300	18.91	18.86	154.717	21.90	24	Pass
64	5320	18.86	18.83	153.297	21.86	24	Pass
100	5500	18.91	18.90	155.428	21.92	24	Pass
116	5580	18.90	18.85	154.361	21.89	24	Pass
140	5700	18.92	18.83	154.367	21.89	24	Pass
144	5720 (U-NII-2C)	17.77	17.43	119.058	20.61	23.45	Pass
144	5720 (U-NII-3)	10.13	10.17	21.401	13.16	30	Pass
149	5745	18.74	18.73	149.462	21.75	30	Pass
157	5785	18.98	18.92	157.051	21.96	30	Pass
165	5825	18.95	18.93	156.686	21.95	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.34) = 25.04 dBm > 24 dBm.
2. 11 dBm + 10log (25.50) = 25.07 dBm > 24 dBm.
3. 11 dBm + 10log (25.40) = 25.05 dBm > 24 dBm.
4. 11 dBm + 10log (25.06) = 24.99 dBm > 24 dBm.
5. 11 dBm + 10log (25.29) = 25.03 dBm > 24 dBm.
6. 11 dBm + 10log (24.71) = 24.93 dBm > 24 dBm.
7. 11 dBm + 10log (17.74) = 23.49 dBm < 24 dBm.

Chain B

1. 11 dBm + 10log (24.66) = 24.92 dBm > 24 dBm.
2. 11 dBm + 10log (24.68) = 24.92 dBm > 24 dBm.
3. 11 dBm + 10log (24.79) = 24.94 dBm > 24 dBm.
4. 11 dBm + 10log (25.33) = 25.04 dBm > 24 dBm.
5. 11 dBm + 10log (25.08) = 24.99 dBm > 24 dBm.
6. 11 dBm + 10log (25.19) = 25.01 dBm > 24 dBm.
7. 11 dBm + 10log (17.60) = 23.45 dBm < 24 dBm.

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
38	5190	17.22	17.17	104.842	20.21	24	Pass
46	5230	19.43	19.40	174.796	22.43	24	Pass
54	5270	18.92	18.85	154.719	21.90	24	Pass
62	5310	16.85	16.80	96.28	19.84	24	Pass
102	5510	17.95	17.90	124.033	20.94	24	Pass
110	5550	18.92	18.90	155.608	21.92	24	Pass
134	5670	18.93	18.90	155.787	21.93	24	Pass
142	5710 (U-NII-2C)	18.64	18.55	144.728	21.61	24	Pass
142	5710 (U-NII-3)	6.46	7.13	9.59	9.82	30	Pass
151	5755	18.98	18.92	157.051	21.96	30	Pass
159	5795	18.96	18.95	157.228	21.97	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (45.37) = 27.57 dBm > 24 dBm.
2. 11 dBm + 10log (45.88) = 27.62 dBm > 24 dBm.
3. 11 dBm + 10log (45.61) = 27.59 dBm > 24 dBm.
4. 11 dBm + 10log (45.36) = 27.57 dBm > 24 dBm.
5. 11 dBm + 10log (45.08) = 27.54 dBm > 24 dBm.
6. 11 dBm + 10log (38.41) = 26.84 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (44.70) = 27.50 dBm > 24 dBm.
2. 11 dBm + 10log (45.69) = 27.60 dBm > 24 dBm.
3. 11 dBm + 10log (46.61) = 27.68 dBm > 24 dBm.
4. 11 dBm + 10log (46.03) = 27.63 dBm > 24 dBm.
5. 11 dBm + 10log (45.59) = 27.59 dBm > 24 dBm.
6. 11 dBm + 10log (38.05) = 26.80 dBm > 24 dBm.

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
42	5210	16.23	16.15	83.186	19.20	24	Pass
58	5290	16.35	16.28	85.614	19.33	24	Pass
106	5530	15.98	15.92	78.712	18.96	24	Pass
122	5610	18.24	18.15	131.994	21.21	24	Pass
138	5690 (U-NII-2C)	18.17	18.11	133.654	21.26	24	Pass
138	5690 (U-NII-3)	3.35	1.94	3.821	5.71	30	Pass
155	5775	19.23	19.14	165.788	22.20	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (88.77) = 30.48 dBm > 24 dBm.
2. 11 dBm + 10log (86.53) = 30.37 dBm > 24 dBm.
3. 11 dBm + 10log (86.23) = 30.36 dBm > 24 dBm.
4. 11 dBm + 10log (78.65) = 29.96 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (87.38) = 30.41 dBm > 24 dBm.
2. 11 dBm + 10log (87.01) = 30.40 dBm > 24 dBm.
3. 11 dBm + 10log (88.32) = 30.46 dBm > 24 dBm.
4. 11 dBm + 10log (77.69) = 29.90 dBm > 24 dBm.

802.11ax (HE160)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
50	5250 (U-NII-1)	10.02	10.08	20.232	13.06	24	Pass
50	5250 (U-NII-2A)	10.15	10.12	20.632	13.15	24	Pass
114	5570	14.26	14.08	52.254	17.18	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (83.55) = 30.22 dBm > 24 dBm.
2. 11 dBm + 10log (166.60) = 33.22 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (85.15) = 30.30 dBm > 24 dBm.
2. 11 dBm + 10log (165.11) = 33.18 dBm > 24 dBm.

26 dB Bandwidth:

802.11n (HT20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
36	5180	24.21	24.12
40	5200	23.91	24.59
48	5240	23.67	23.99
52	5260	23.55	23.84
60	5300	23.85	24.37
64	5320	23.64	23.96
100	5500	24.08	24.13
116	5580	23.78	24.29
140	5700	24.31	24.41
144	5720 (U-NII-2C)	16.97	16.97
144	5720 (U-NII-3)	7.02	6.99

802.11n (HT40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
38	5190	44.14	44.44
46	5230	44.04	44.03
54	5270	43.73	44.19
62	5310	43.78	44.31
102	5510	45.80	44.74
110	5550	43.82	43.69
134	5670	43.77	44.29
142	5710 (U-NII-2C)	36.94	37.13
142	5710 (U-NII-3)	6.70	7.02

802.11ac (VHT80)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
42	5210	85.89	84.85
58	5290	86.79	83.92
106	5530	86.16	86.62
122	5610	86.80	85.70
138	5690 (U-NII-2C)	77.72	77.57
138	5690 (U-NII-3)	7.52	7.58

802.11ac (VHT160)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
50	5250 (U-NII-1)	83.02	82.80
50	5250 (U-NII-2A)	83.69	83.80
114	5570	165.38	164.96

802.11ax (HE20)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
36	5180	25.01	25.38
40	5200	24.77	24.49
48	5240	25.54	24.64
52	5260	25.34	24.66
60	5300	25.50	24.68
64	5320	25.40	24.79
100	5500	25.06	25.33
116	5580	25.29	25.08
140	5700	24.71	25.19
144	5720 (U-NII-2C)	17.74	17.60
144	5720 (U-NII-3)	7.39	7.40

802.11ax (HE40)

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
38	5190	44.97	46.51
46	5230	44.91	46.69
54	5270	45.37	44.70
62	5310	45.88	45.69
102	5510	45.61	46.61
110	5550	45.36	46.03
134	5670	45.08	45.59
142	5710 (U-NII-2C)	38.41	38.05
142	5710 (U-NII-3)	7.64	8.65

802.11ax (HE80)

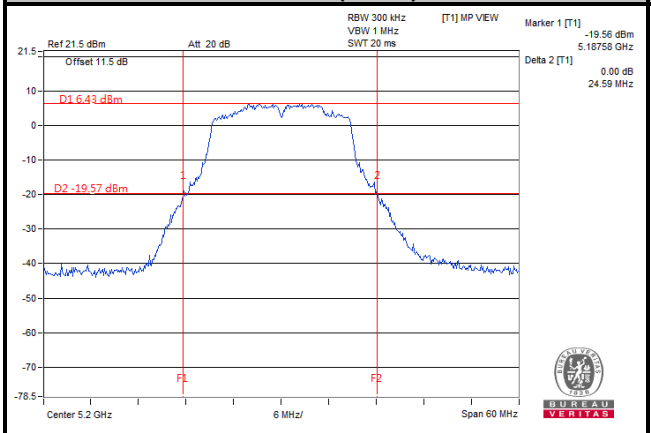
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
42	5210	89.08	85.26
58	5290	88.77	87.38
106	5530	86.53	87.01
122	5610	86.23	88.32
138	5690 (U-NII-2C)	78.65	77.69
138	5690 (U-NII-3)	8.75	7.95

802.11ax (HE160)

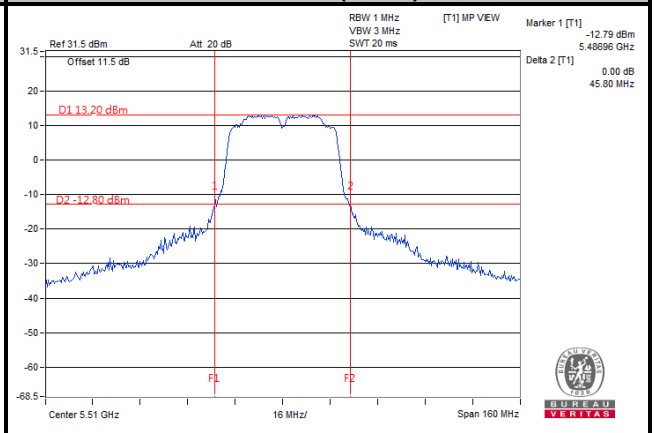
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	
		Chain A	Chain B
50	5250 (U-NII-1)	83.51	83.42
50	5250 (U-NII-2A)	83.55	85.15
114	5570	166.60	165.11

Spectrum Plot of Worst Value

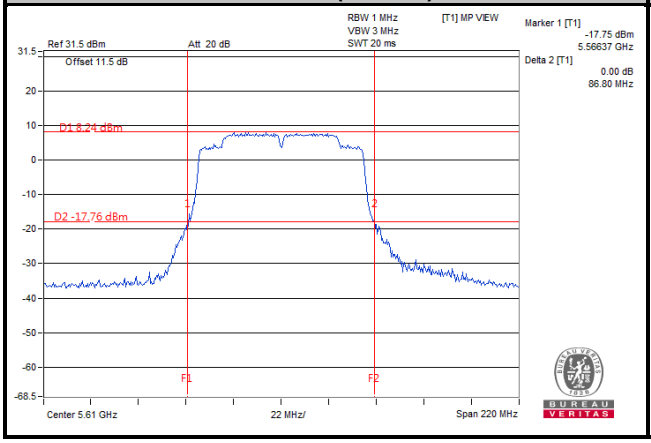
802.11n (HT20)



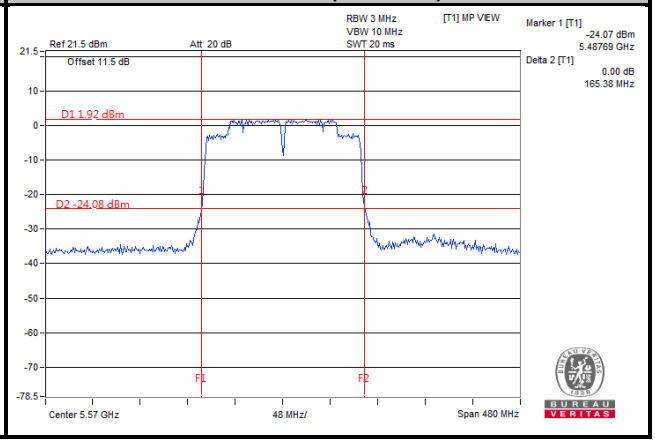
802.11n (HT40)



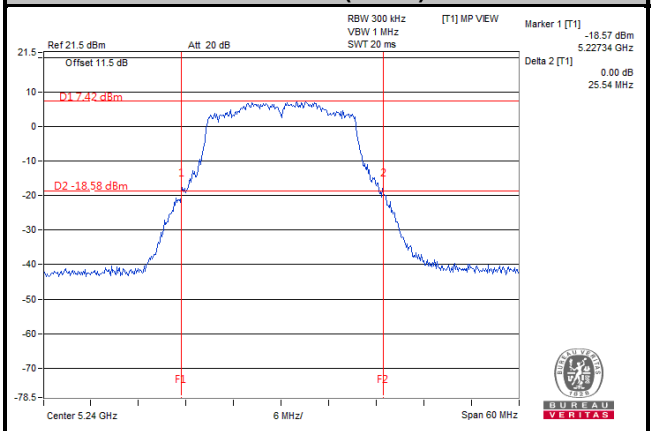
802.11ac (VHT80)



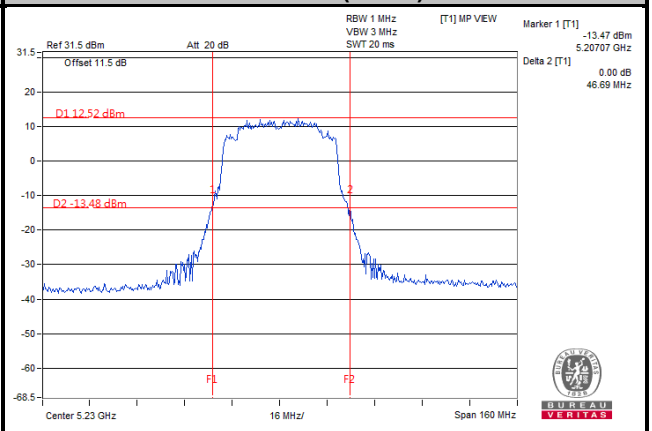
802.11ac (VHT160)



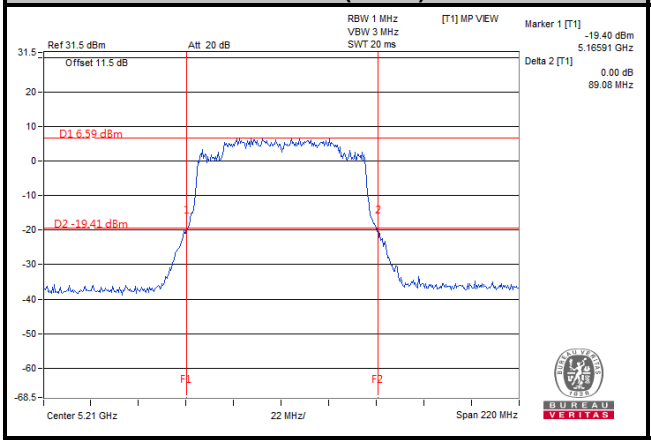
802.11ax (HE20)



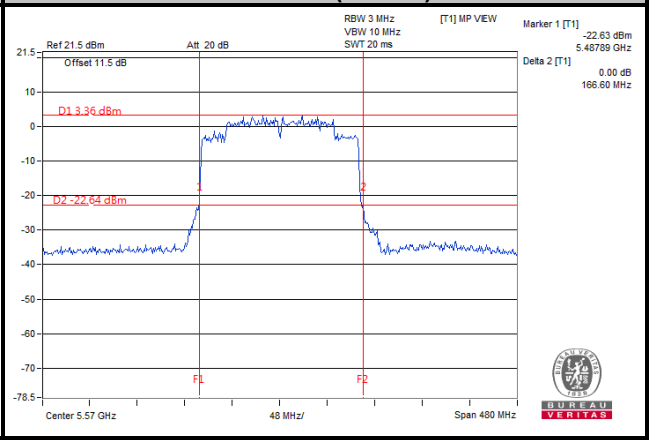
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



Partial RU

Chain A

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	31.117	14.93	24	Pass
100	5500	30.339	14.82	24	Pass
149	5745	98.855	19.95	30	Pass

Note:

For U-NII-2C Band:

1. 11 dBm + 10log (22.56) = 24.53 dBm > 24 dBm.

802.11ax (HE20) (26, 8)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	30.761	14.88	24	Pass
140	5700	31.189	14.94	24	Pass

Note:

For U-NII-2A Band:

1. 11 dBm + 10log (23.07) = 24.63 dBm > 24 dBm.
2. 11 dBm + 10log (22.96) = 24.61 dBm > 24 dBm.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	49.431	16.94	24	Pass
100	5500	48.417	16.85	24	Pass
149	5745	95.719	19.81	30	Pass

Note:

For U-NII-2C Band:

1. 11 dBm + 10log (22.56) = 24.53 dBm > 24 dBm.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	49.659	16.96	24	Pass
140	5700	47.863	16.80	24	Pass

Note:

For U-NII-2A Band:

1. 11 dBm + 10log (23.07) = 24.63 dBm > 24 dBm.
2. 11 dBm + 10log (22.96) = 24.61 dBm > 24 dBm.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	99.541	19.98	24	Pass
100	5500	97.499	19.89	24	Pass
149	5745	98.401	19.93	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (22.56) = 24.53 dBm > 24 dBm.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	98.175	19.92	24	Pass
140	5700	95.499	19.80	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (23.07) = 24.63 dBm > 24 dBm.
2. 11 dBm + 10log (22.96) = 24.61 dBm > 24 dBm.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	87.096	19.40	24	Pass
102	5510	95.94	19.82	24	Pass
151	5755	98.628	19.94	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (42.99) = 27.33 dBm > 24 dBm.

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
62	5310	87.498	19.42	24	Pass
134	5670	97.949	19.91	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (42.74) = 27.31 dBm > 24 dBm.
2. 11 dBm + 10log (42.67) = 27.30 dBm > 24 dBm.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	77.446	18.89	24	Pass
58	5290	94.624	19.76	24	Pass
106	5530	68.391	18.35	24	Pass
155	5775	97.499	19.89	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (82.94) = 30.19 dBm > 24 dBm.
2. 11 dBm + 10log (83.20) = 30.20 dBm > 24 dBm.

802.11ax (HE160) (996, 67)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	43.152	16.35	24	Pass
50	5250 (U-NII-2A)	0.01413	-18.50	24	Pass
114	5570	52.481	17.20	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.46) = 30.21 dBm > 24 dBm.
2. 11 dBm + 10log (163.29) = 33.13 dBm > 24 dBm.

802.11ax (HE160) (996, S67)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	0.002089	-26.80	24	Pass
50	5250 (U-NII-2A)	19.454	12.89	24	Pass
114	5570	74.473	18.72	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.46) = 30.21 dBm > 24 dBm.
2. 11 dBm + 10log (163.29) = 33.13 dBm > 24 dBm.

Chain B

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	30.832	14.89	24	Pass
100	5500	30.2	14.80	24	Pass
149	5745	88.105	19.45	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (23.23) = 24.66 dBm > 24 dBm.

802.11ax (HE20) (26, 8)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	30.409	14.83	24	Pass
140	5700	30.69	14.87	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (23.31) = 24.68 dBm > 24 dBm.
2. 11 dBm + 10log (23.28) = 24.67 dBm > 24 dBm.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	70.469	18.48	24	Pass
100	5500	68.865	18.38	24	Pass
149	5745	87.498	19.42	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (23.23) = 24.66 dBm > 24 dBm.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	68.391	18.35	24	Pass
140	5700	62.806	17.98	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (23.31) = 24.68 dBm > 24 dBm.
2. 11 dBm + 10log (23.28) = 24.67 dBm > 24 dBm.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	87.498	19.42	24	Pass
100	5500	86.896	19.39	24	Pass
149	5745	87.297	19.41	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (23.23) = 24.66 dBm > 24 dBm.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
64	5320	87.297	19.41	24	Pass
140	5700	88.716	19.48	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (23.31) = 24.68 dBm > 24 dBm.
2. 11 dBm + 10log (23.28) = 24.67 dBm > 24 dBm.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	84.14	19.25	24	Pass
102	5510	83.753	19.23	24	Pass
151	5755	84.14	19.25	30	Pass

Note:
For U-NII-2C Band:
1. 11 dBm + 10log (43.33) = 27.37 dBm > 24 dBm.

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
62	5310	87.7	19.43	24	Pass
134	5670	87.096	19.40	24	Pass

Note:
For U-NII-2A Band:
1. 11 dBm + 10log (43.44) = 27.38 dBm > 24 dBm.
2. 11 dBm + 10log (42.89) = 27.32 dBm > 24 dBm.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	66.069	18.20	24	Pass
58	5290	87.498	19.42	24	Pass
106	5530	77.983	18.92	24	Pass
155	5775	86.099	19.35	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.85) = 30.24 dBm > 24 dBm.
2. 11 dBm + 10log (84.34) = 30.26 dBm > 24 dBm.

802.11ax (HE160) (996, 67)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	51.523	17.12	24	Pass
50	5250 (U-NII-2A)	0.01452	-18.38	24	Pass
114	5570	27.861	14.45	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.71) = 30.23 dBm > 24 dBm.
2. 11 dBm + 10log (163.65) = 33.14 dBm > 24 dBm.

802.11ax (HE160) (996, S67)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	0.01435	-18.43	24	Pass
50	5250 (U-NII-2A)	48.978	16.90	24	Pass
114	5570	70.469	18.48	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (83.71) = 30.23 dBm > 24 dBm.
2. 11 dBm + 10log (163.65) = 33.14 dBm > 24 dBm.

MIMO

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
36	5180	10.87	10.72	24.021	13.81	24	Pass
100	5500	10.40	10.35	21.804	13.39	24	Pass
149	5745	17.43	17.46	111.054	20.46	30	Pass

Note:

For U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.06) = 24.99 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (25.33) = 25.04 dBm > 24 dBm.

802.11ax (HE20) (26, 8)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
64	5320	10.85	10.79	24.157	13.83	24	Pass
140	5700	10.42	10.38	21.93	13.41	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.40) = 25.05 dBm > 24 dBm.
2. 11 dBm + 10log (24.71) = 24.93 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (24.79) = 24.94 dBm > 24 dBm.
2. 11 dBm + 10log (25.19) = 25.01 dBm > 24 dBm.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
36	5180	13.95	13.90	49.378	16.94	24	Pass
100	5500	13.21	13.15	41.595	16.19	24	Pass
149	5745	17.42	17.48	111.184	20.46	30	Pass

Note:

For U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.06) = 24.99 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (25.33) = 25.04 dBm > 24 dBm.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
64	5320	13.71	13.65	46.67	16.69	24	Pass
140	5700	13.19	13.12	41.357	16.17	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.40) = 25.05 dBm > 24 dBm.
2. 11 dBm + 10log (24.71) = 24.93 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (24.79) = 24.94 dBm > 24 dBm.
2. 11 dBm + 10log (25.19) = 25.01 dBm > 24 dBm.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
36	5180	16.85	16.79	96.17	19.83	24	Pass
100	5500	15.82	15.81	76.301	18.83	24	Pass
149	5745	17.41	17.47	110.928	20.45	30	Pass

Note:

For U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.06) = 24.99 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (25.33) = 25.04 dBm > 24 dBm.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
64	5320	16.42	16.35	87.005	19.40	24	Pass
140	5700	15.89	15.82	77.009	18.87	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (25.40) = 25.05 dBm > 24 dBm.
2. 11 dBm + 10log (24.71) = 24.93 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (24.79) = 24.94 dBm > 24 dBm.
2. 11 dBm + 10log (25.19) = 25.01 dBm > 24 dBm.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
38	5190	18.68	18.62	146.568	21.66	24	Pass
102	5510	18.45	18.40	139.167	21.44	24	Pass
151	5755	19.35	19.30	171.213	22.34	30	Pass

Note:

For U-NII-2C Band:

Chain A

1. 11 dBm + 10log (45.61) = 27.59 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (46.61) = 27.68 dBm > 24 dBm.

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
62	5310	18.85	18.78	152.245	21.83	24	Pass
134	5670	18.93	18.90	155.787	21.93	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (45.88) = 27.62 dBm > 24 dBm.
2. 11 dBm + 10log (45.08) = 27.54 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (45.69) = 27.60 dBm > 24 dBm.
2. 11 dBm + 10log (45.59) = 27.59 dBm > 24 dBm.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
42	5210	17.90	17.81	122.054	20.87	24	Pass
58	5290	18.95	18.85	155.26	21.91	24	Pass
106	5530	17.85	17.81	121.349	20.84	24	Pass
155	5775	19.48	19.43	176.416	22.47	30	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (88.77) = 30.48 dBm > 24 dBm.
2. 11 dBm + 10log (86.53) = 30.37 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (87.38) = 30.41 dBm > 24 dBm.
2. 11 dBm + 10log (87.01) = 30.40 dBm > 24 dBm.

802.11ax (HE160) (996, 67)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
50	5250 (U-NII-1)	12.41	8.70	24.831	13.95	24	Pass
50	5250 (U-NII-2A)	-25.95	-26.38	0.004842	-23.15	24	Pass
114	5570	13.25	13.11	41.599	16.19	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

1. 11 dBm + 10log (83.55) = 30.22 dBm > 24 dBm.
2. 11 dBm + 10log (166.60) = 33.22 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (85.15) = 30.30 dBm > 24 dBm.
2. 11 dBm + 10log (165.11) = 33.18 dBm > 24 dBm.

802.11ax (HE160) (996, S67)

Channel	Frequency (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain A	Chain B				
50	5250 (U-NII-1)	-21.37	-22.64	0.01274	-18.95	24	Pass
50	5250 (U-NII-2A)	14.29	14.33	53.955	17.32	24	Pass
114	5570	18.18	18.12	130.629	21.16	24	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain A

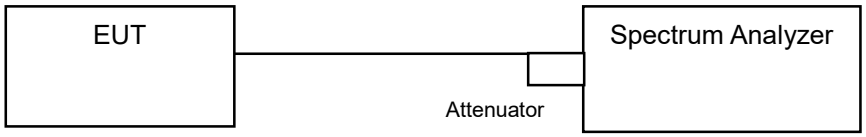
1. 11 dBm + 10log (83.55) = 30.22 dBm > 24 dBm.
2. 11 dBm + 10log (166.60) = 33.22 dBm > 24 dBm.

Chain B

1. 11 dBm + 10log (85.15) = 30.30 dBm > 24 dBm.
2. 11 dBm + 10log (165.11) = 33.18 dBm > 24 dBm.

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1 % to 5 % of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

4.4.4 Test Results

Chain A

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.80
40	5200	16.68
48	5240	16.80
52	5260	16.80
60	5300	16.80
64	5320	16.68
100	5500	16.80
116	5580	16.80
140	5700	16.68
144	5720 (U-NII-2C)	13.40
144	5720 (U-NII-3)	3.28
149	5745	16.68
157	5785	16.68
165	5825	16.68

802.11n (HT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.88
40	5200	17.88
48	5240	17.88
52	5260	17.88
60	5300	17.88
64	5320	17.88
100	5500	17.88
116	5580	17.88
140	5700	17.88
144	5720 (U-NII-2C)	13.88
144	5720 (U-NII-3)	3.88
149	5745	17.88
157	5785	17.88
165	5825	17.76

802.11n (HT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.36
46	5230	36.24
54	5270	36.24
62	5310	36.24
102	5510	36.24
110	5550	36.36
134	5670	36.24
142	5710 (U-NII-2C)	33.24
142	5710 (U-NII-3)	3.12
151	5755	36.36
159	5795	36.24

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.36
58	5290	75.36
106	5530	75.12
122	5610	75.12
138	5690 (U-NII-2C)	72.68
138	5690 (U-NII-3)	2.44
155	5775	75.36

802.11ac (VHT160)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
50	5250 (U-NII-1)	76.80
50	5250 (U-NII-2A)	76.80
114	5570	153.60

802.11ax (HE20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.96
40	5200	18.96
48	5240	18.96
52	5260	18.84
60	5300	18.96
64	5320	18.96
100	5500	18.96
116	5580	18.96
140	5700	18.84
144	5720 (U-NII-2C)	14.60
144	5720 (U-NII-3)	4.36
149	5745	18.87
157	5785	18.96
165	5825	18.96

802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.80
46	5230	37.68
54	5270	37.68
62	5310	37.80
102	5510	37.80
110	5550	37.80
134	5670	37.68
142	5710 (U-NII-2C)	33.84
142	5710 (U-NII-3)	3.84
151	5755	37.68
159	5795	37.68

802.11ax (HE80)

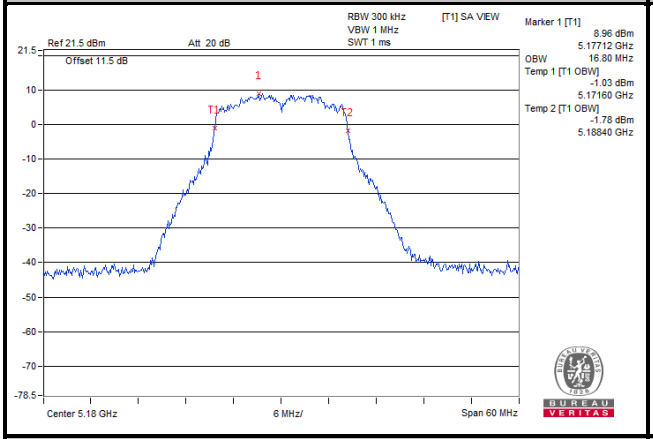
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	77.04
58	5290	76.80
106	5530	76.80
122	5610	77.04
138	5690 (U-NII-2C)	73.64
138	5690 (U-NII-3)	3.40
155	5775	76.69

802.11ax (HE160)

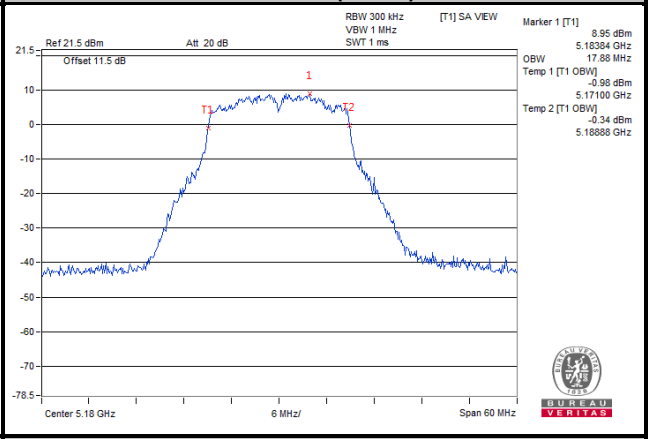
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
50	5250 (U-NII-1)	77.76
50	5250 (U-NII-2A)	77.76
114	5570	153.60

Spectrum Plot of Worst Value

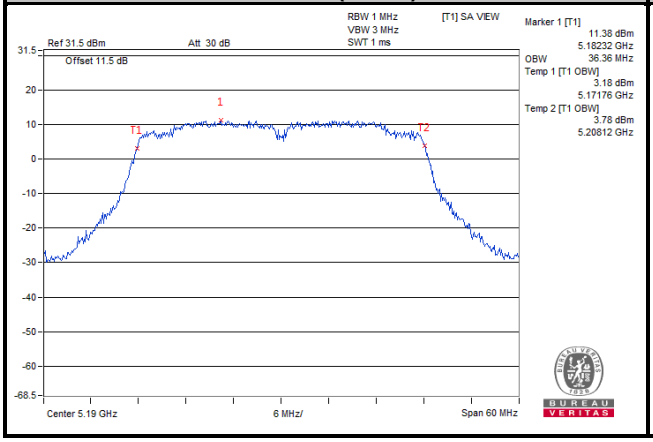
802.11a



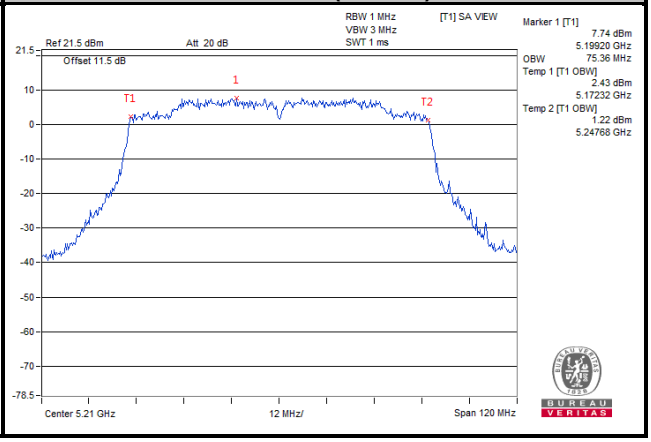
802.11n (HT20)



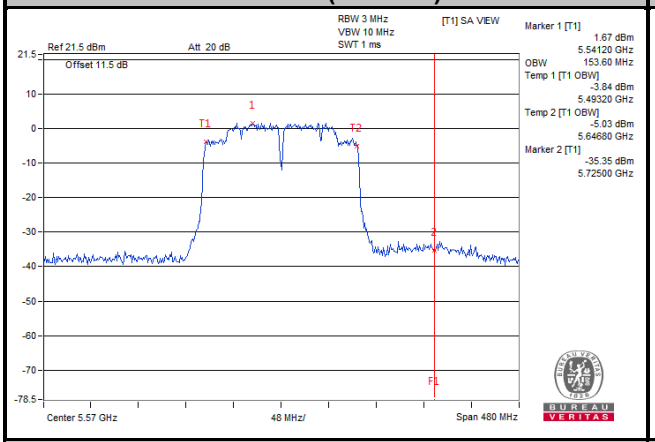
802.11n (HT40)



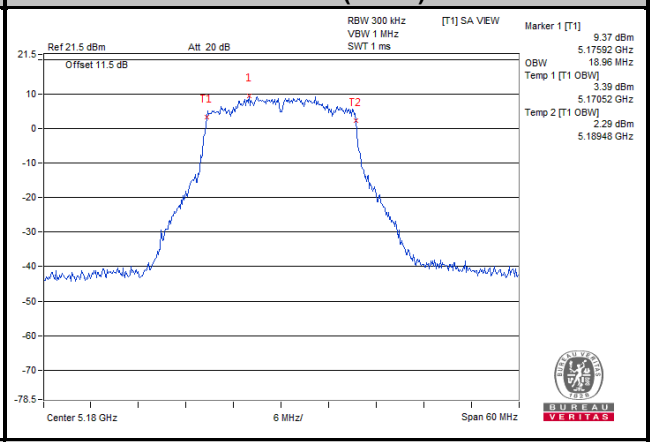
802.11ac (VHT80)



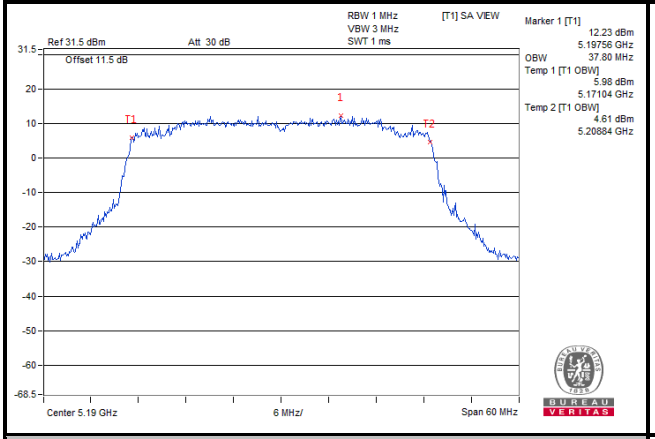
802.11ac (VHT160)



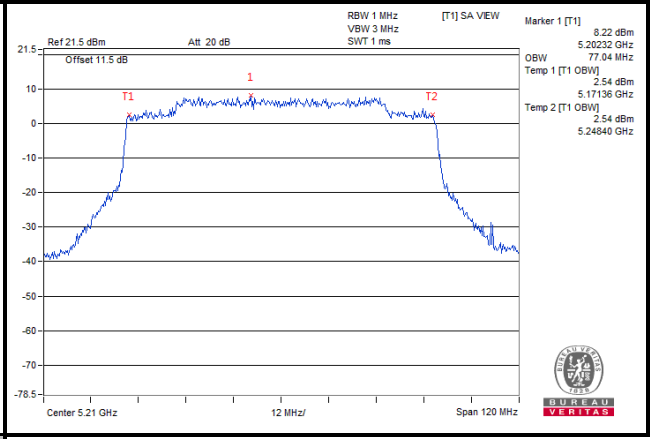
802.11ax (HE20)



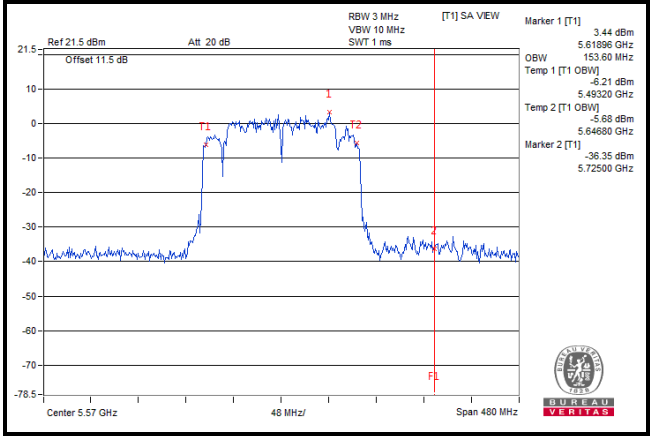
802.11ax (HE40)



802.11ax (HE80)



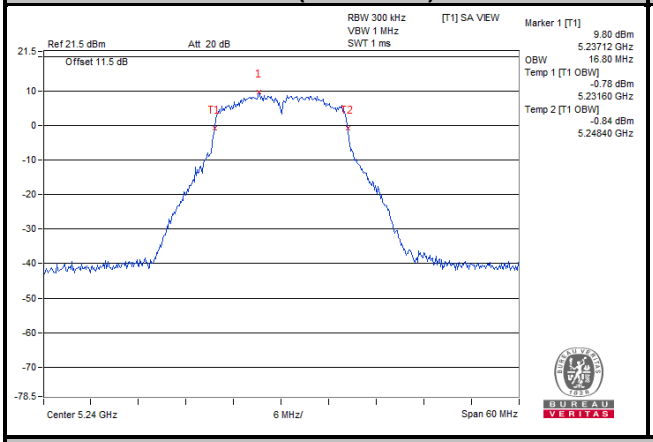
802.11ax (HE160)



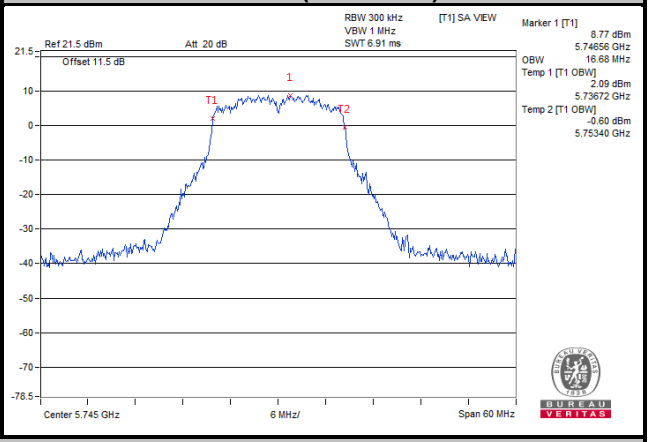
Spectrum Plot for Nearby DFS Band

802.11a

Ch 48 (5240 MHz)

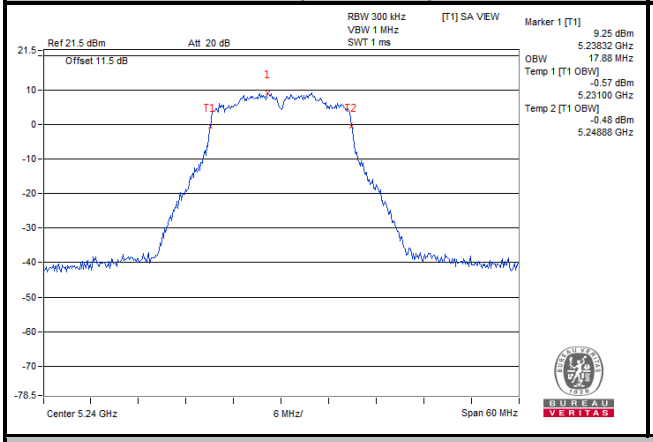


Ch 149 (5745 MHz)

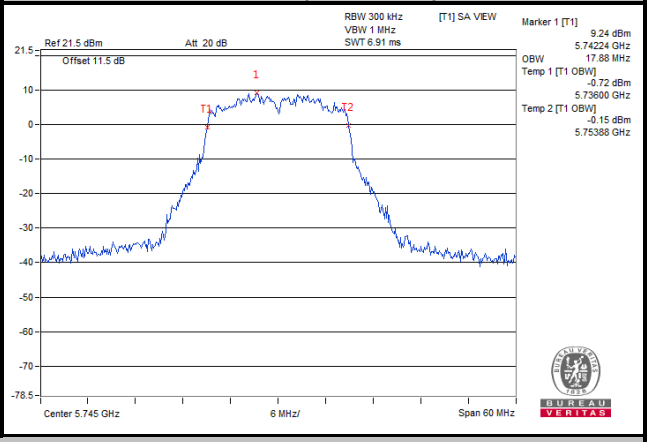


802.11n (HT20)

Ch 48 (5240 MHz)

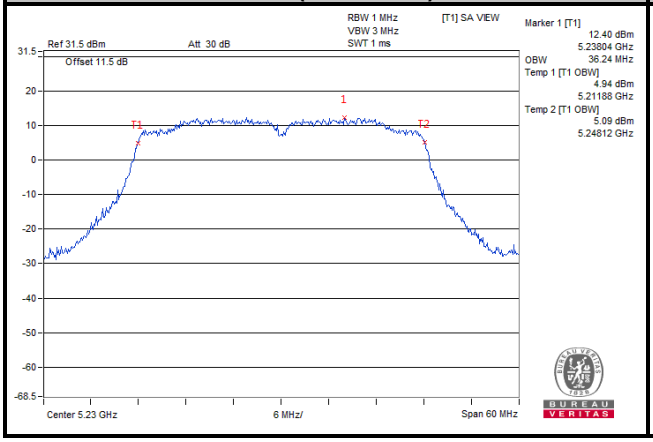


Ch 149 (5745 MHz)

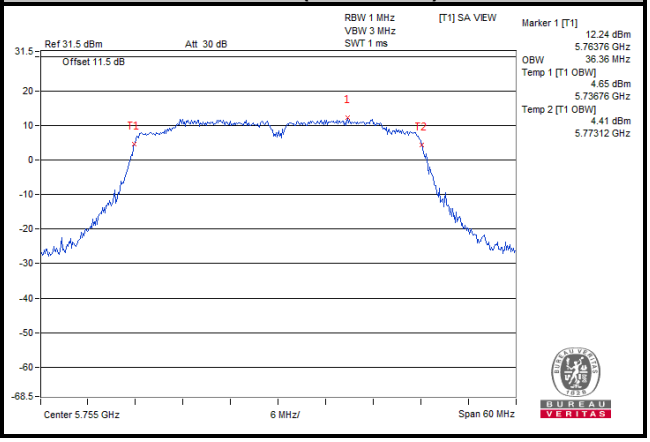


802.11n (HT40)

Ch 46 (5230 MHz)

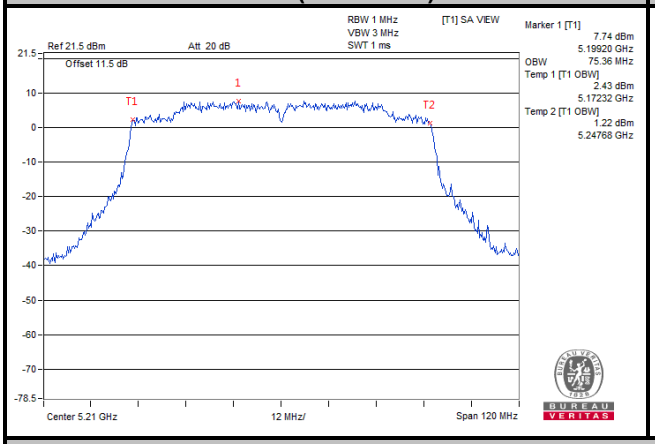


Ch 151 (5755 MHz)

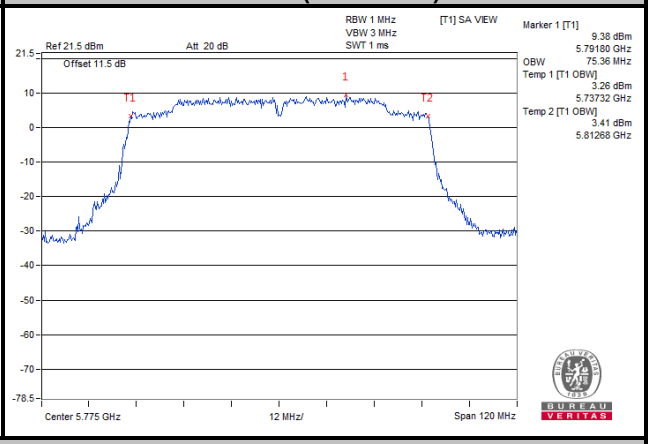


802.11ac (VHT80)

Ch 42 (5210 MHz)

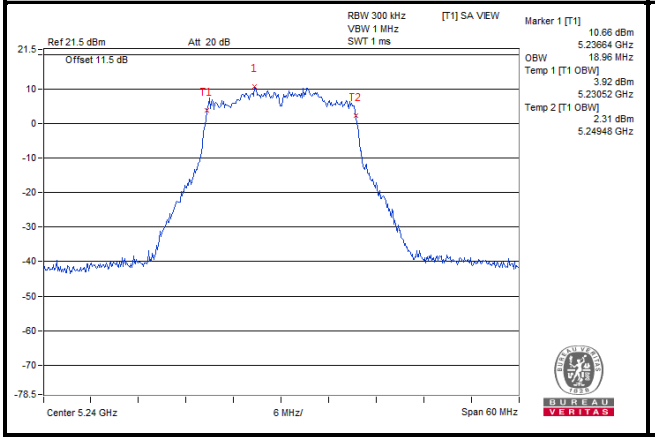


Ch 155 (5775 MHz)

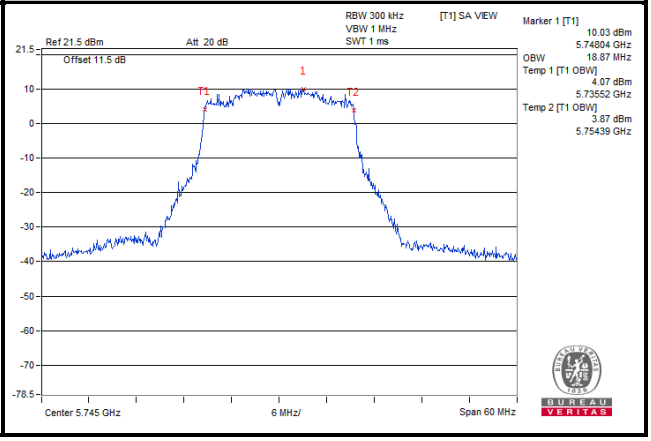


802.11ax (HE20)

Ch 48 (5240 MHz)

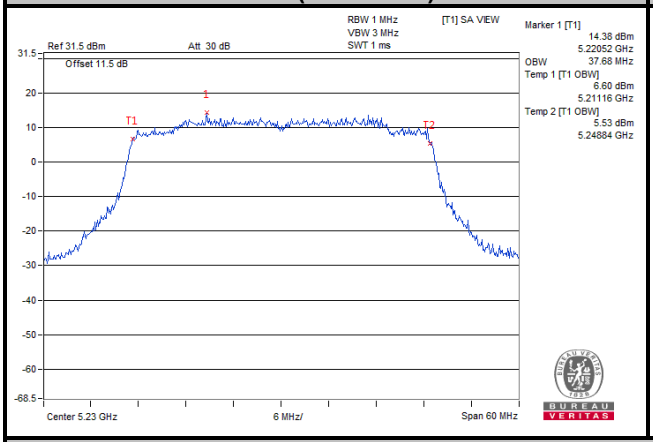


Ch 149 (5745 MHz)

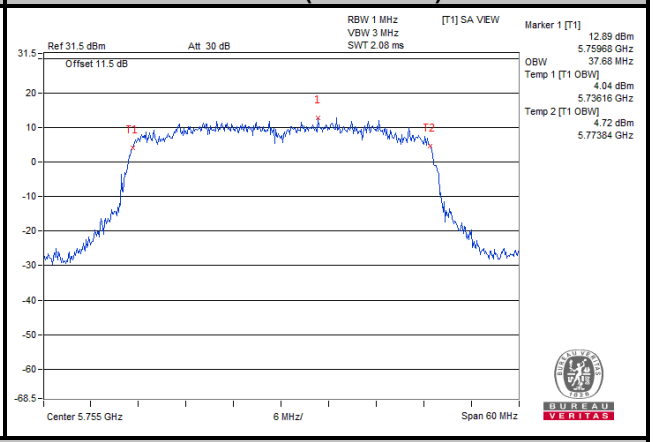


802.11ax (HE40)

Ch 46 (5230 MHz)

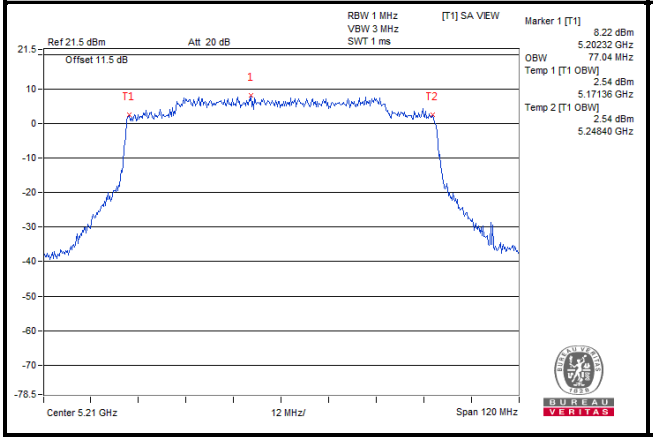


Ch 151 (5755 MHz)

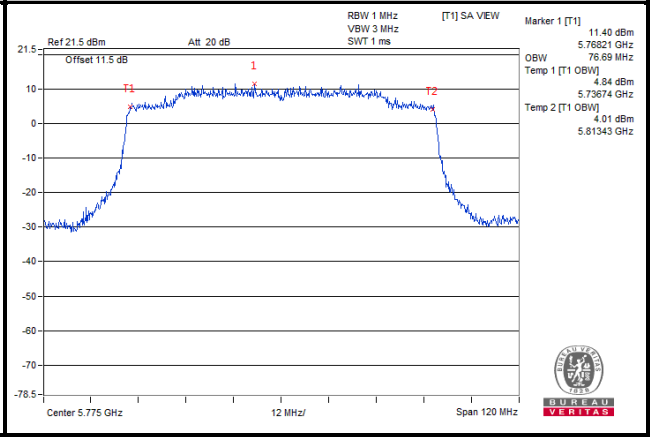


802.11ax (HE80)

Ch 42 (5210 MHz)



Ch 155 (5775 MHz)



Chain B

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.80
40	5200	16.68
48	5240	16.80
52	5260	16.68
60	5300	16.80
64	5320	16.80
100	5500	16.80
116	5580	16.92
140	5700	16.80
144	5720 (U-NII-2C)	13.40
144	5720 (U-NII-3)	3.28
149	5745	16.68
157	5785	16.68
165	5825	16.68

802.11n (HT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.88
40	5200	17.88
48	5240	17.88
52	5260	17.88
60	5300	17.88
64	5320	17.88
100	5500	17.88
116	5580	17.88
140	5700	17.88
144	5720 (U-NII-2C)	14.00
144	5720 (U-NII-3)	3.88
149	5745	17.88
157	5785	17.88
165	5825	17.88

802.11n (HT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.36
46	5230	36.24
54	5270	36.24
62	5310	36.36
102	5510	36.36
110	5550	36.36
134	5670	36.36
142	5710 (U-NII-2C)	33.24
142	5710 (U-NII-3)	3.12
151	5755	36.36
159	5795	36.24

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.36
58	5290	75.12
106	5530	75.36
122	5610	75.12
138	5690 (U-NII-2C)	72.68
138	5690 (U-NII-3)	2.68
155	5775	75.14

802.11ac (VHT160)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
50	5250 (U-NII-1)	76.80
50	5250 (U-NII-2A)	76.80
114	5570	153.60

802.11ax (HE20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.96
40	5200	18.84
48	5240	18.96
52	5260	18.96
60	5300	18.96
64	5320	18.96
100	5500	18.96
116	5580	18.96
140	5700	18.96
144	5720 (U-NII-2C)	14.48
144	5720 (U-NII-3)	4.48
149	5745	18.96
157	5785	19.08
165	5825	18.84

802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.80
46	5230	37.92
54	5270	37.80
62	5310	37.92
102	5510	37.80
110	5550	37.80
134	5670	37.92
142	5710 (U-NII-2C)	33.96
142	5710 (U-NII-3)	3.84
151	5755	37.74
159	5795	37.68

802.11ax (HE80)

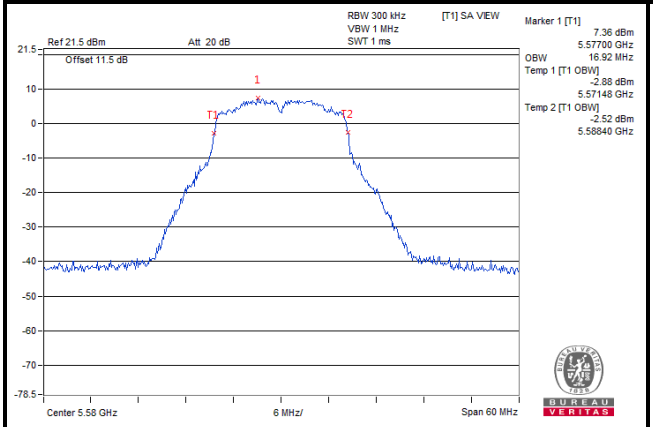
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	77.28
58	5290	76.80
106	5530	77.04
122	5610	76.80
138	5690 (U-NII-2C)	73.40
138	5690 (U-NII-3)	3.16
155	5775	76.80

802.11ax (HE160)

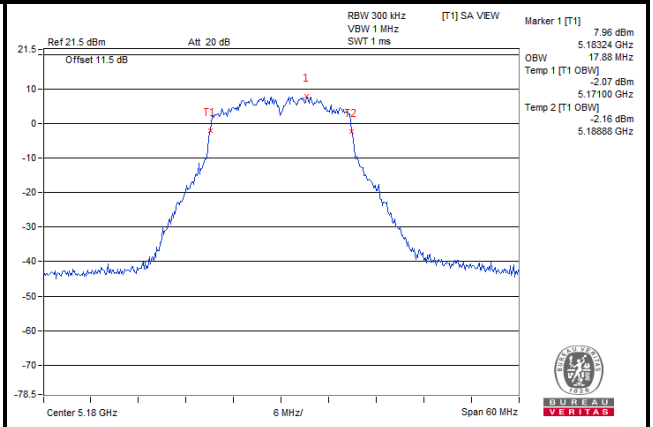
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
50	5250 (U-NII-1)	77.76
50	5250 (U-NII-2A)	77.76
114	5570	155.52

Spectrum Plot of Worst Value

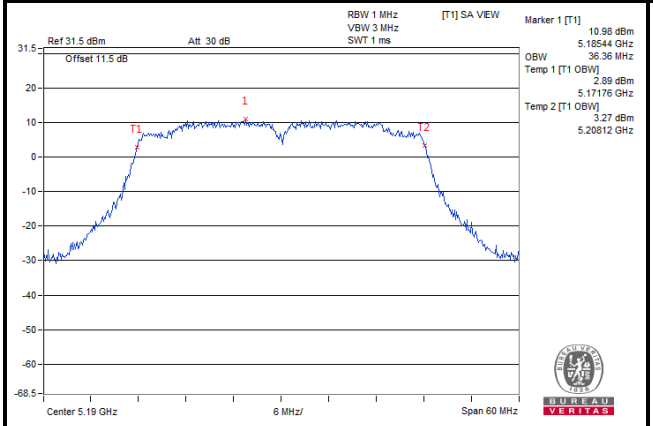
802.11a



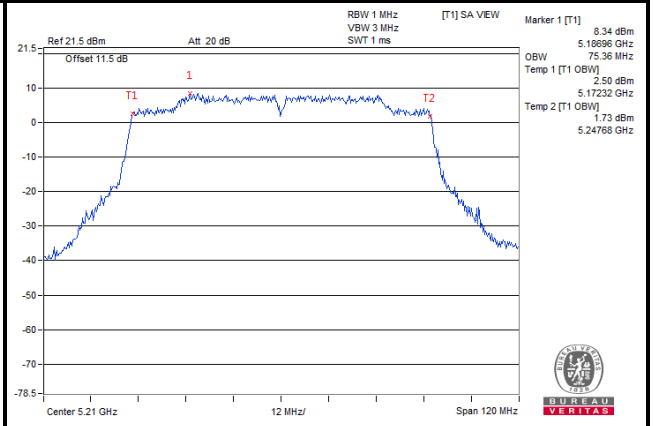
802.11n (HT20)



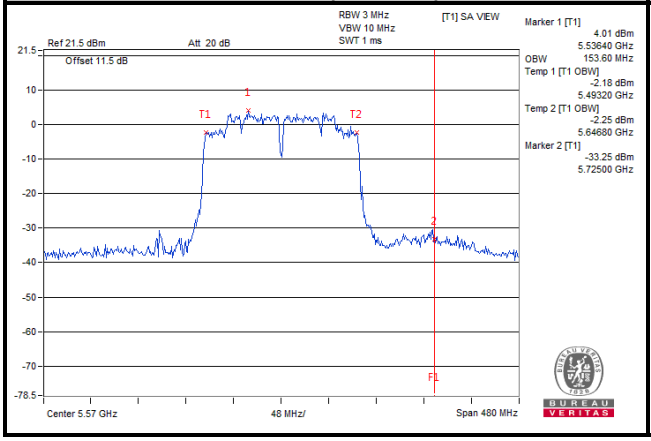
802.11n (HT40)



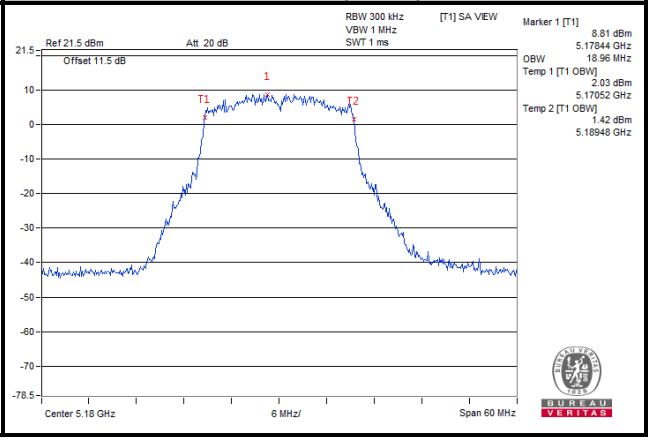
802.11ac (VHT80)



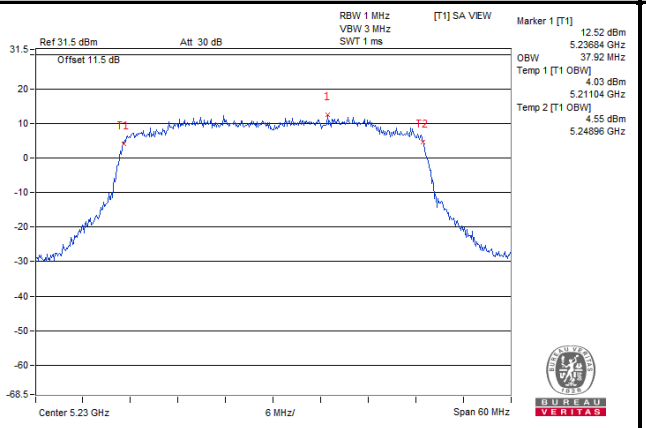
802.11ac (VHT160)



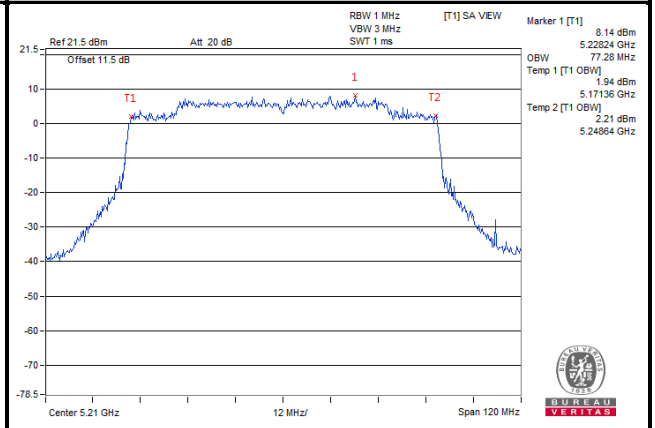
802.11ax (HE20)



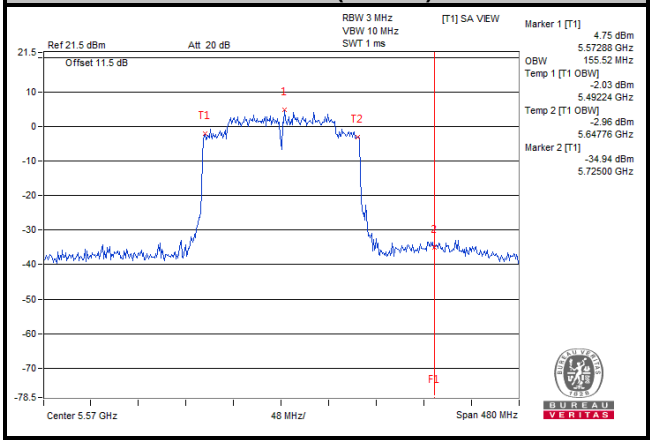
802.11ax (HE40)



802.11ax (HE80)



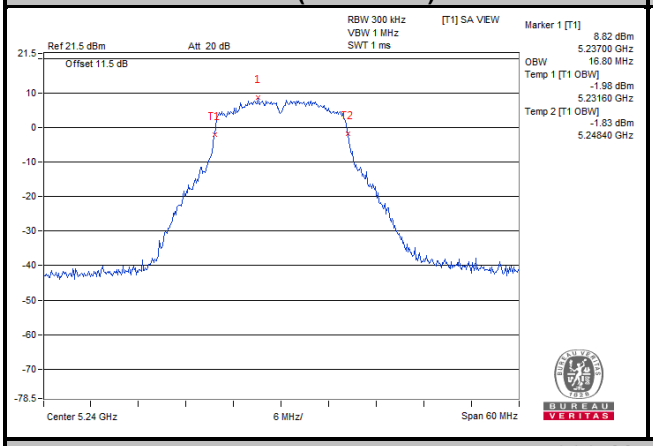
802.11ax (HE160)



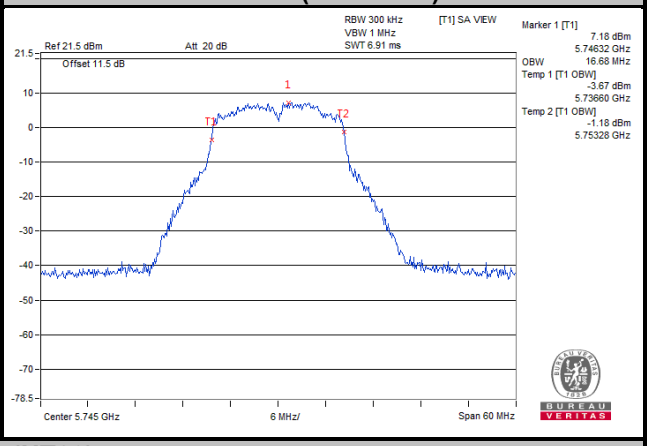
Spectrum Plot for Nearby DFS Band

802.11a

Ch 48 (5240 MHz)

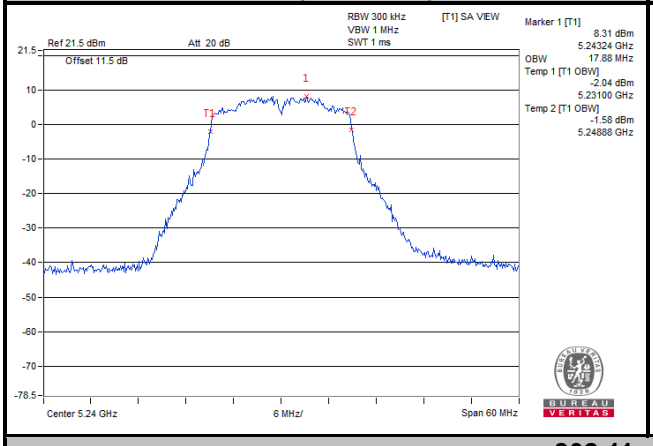


Ch 149 (5745 MHz)

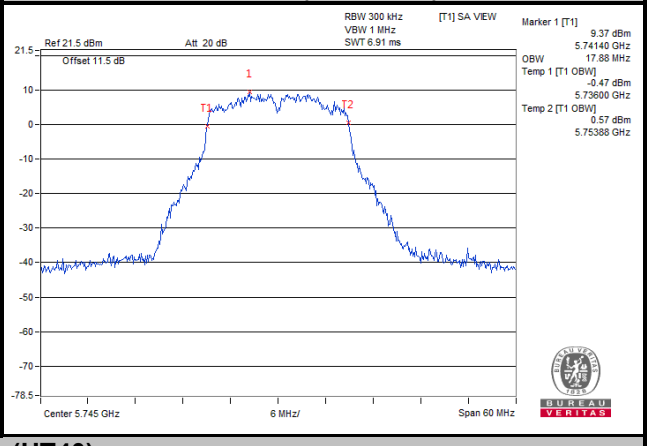


802.11n (HT20)

Ch 48 (5240 MHz)

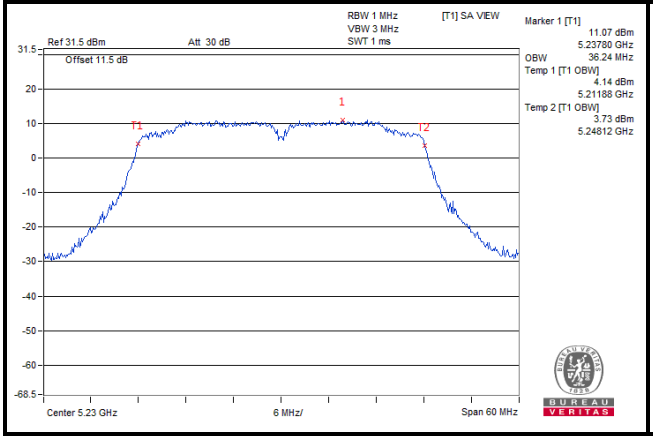


Ch 149 (5745 MHz)

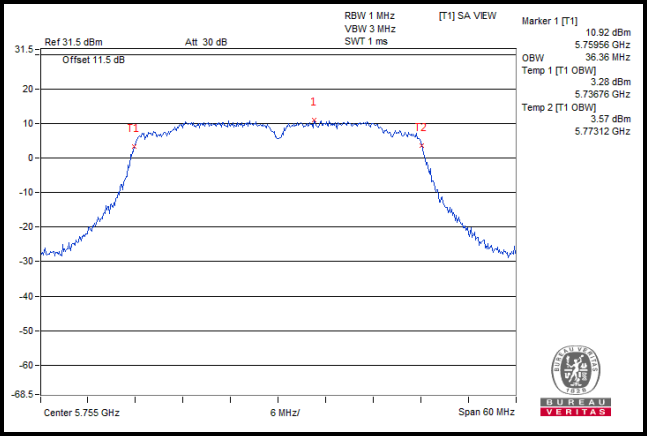


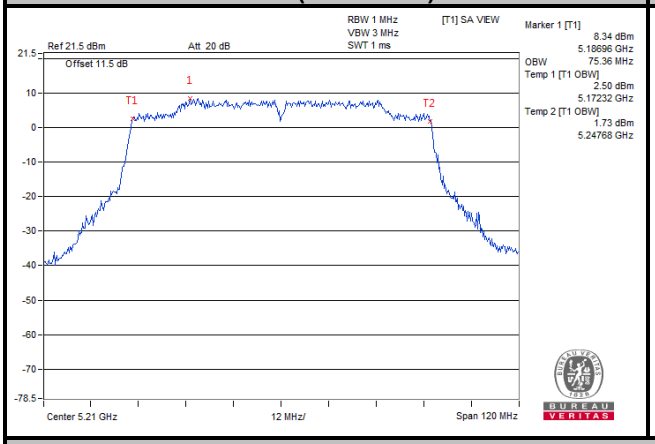
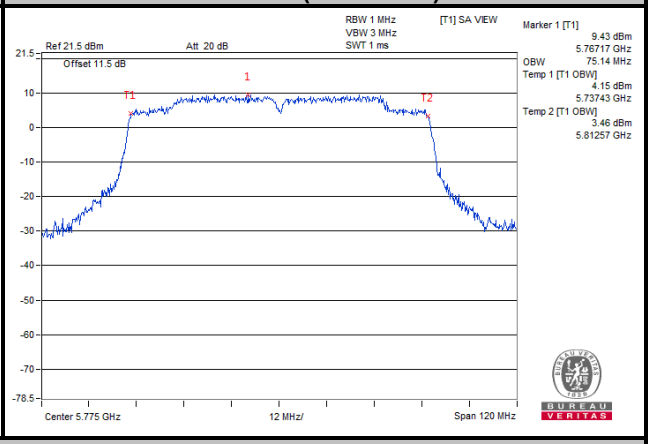
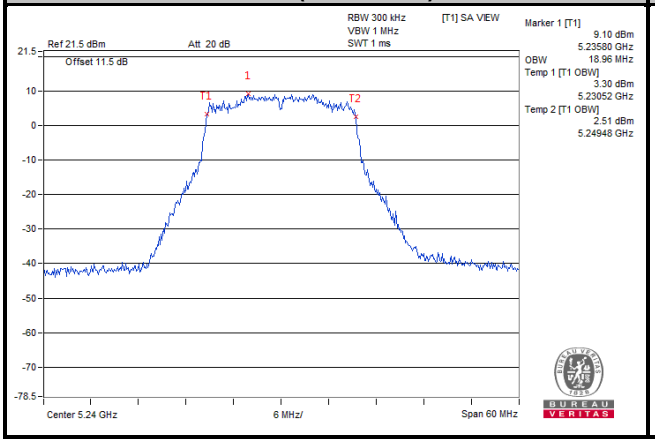
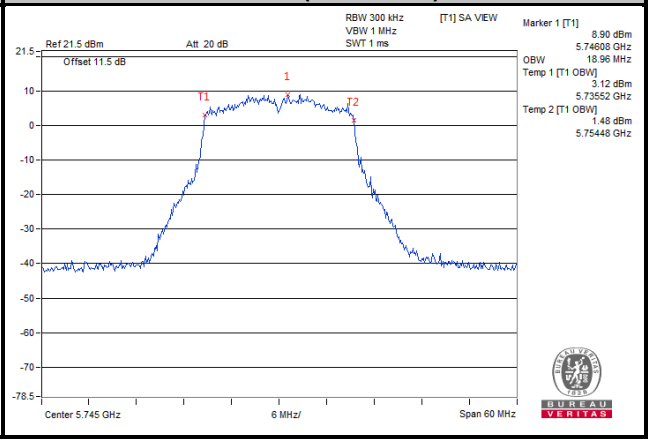
802.11n (HT40)

Ch 46 (5230 MHz)



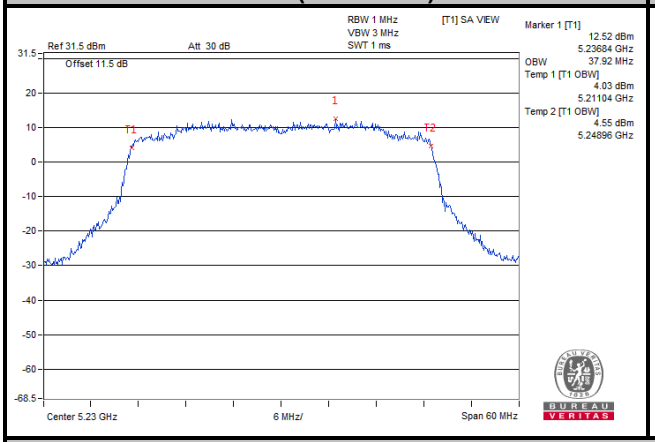
Ch 151 (5755 MHz)



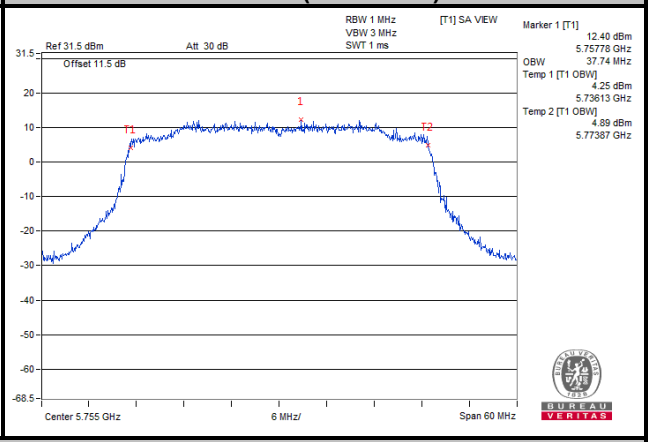
802.11ac (VHT80)	
Ch 42 (5210 MHz)	Ch 155 (5775 MHz)
	
802.11ax (HE20)	
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	

802.11ax (HE40)

Ch 46 (5230 MHz)

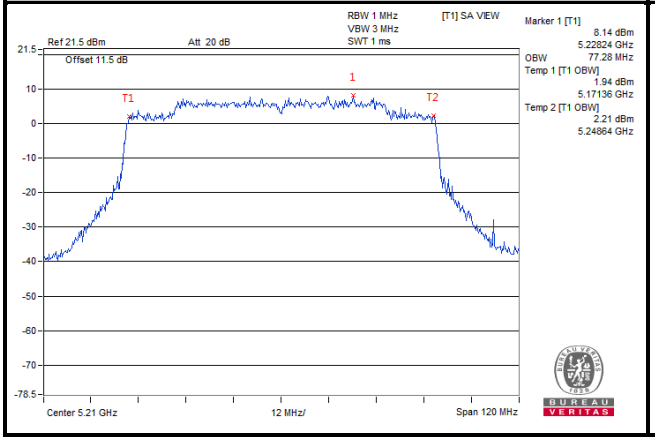


Ch 151 (5755 MHz)

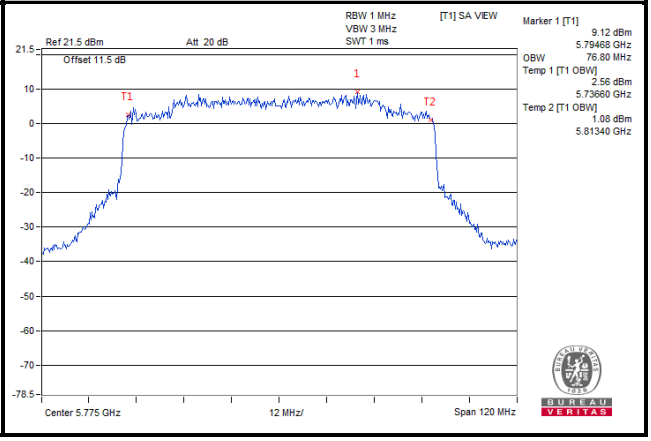


802.11ax (HE80)

Ch 42 (5210 MHz)



Ch 155 (5775 MHz)



MIMO

802.11n (HT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
36	5180	17.76	17.76
40	5200	17.88	17.88
48	5240	17.88	17.88
52	5260	17.88	17.88
60	5300	17.88	17.88
64	5320	17.88	17.88
100	5500	17.88	17.88
116	5580	17.88	17.88
140	5700	17.88	17.88
144	5720 (U-NII-2C)	14.00	14.00
144	5720 (U-NII-3)	3.88	3.88
149	5745	17.88	17.88
157	5785	17.88	17.88
165	5825	17.88	17.88

802.11n (HT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
38	5190	36.36	36.24
46	5230	36.24	36.24
54	5270	36.36	36.24
62	5310	36.24	36.36
102	5510	36.36	36.24
110	5550	36.36	36.24
134	5670	36.36	36.36
142	5710 (U-NII-2C)	33.12	33.12
142	5710 (U-NII-3)	3.12	3.12
151	5755	36.24	36.24
159	5795	36.24	36.24

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
42	5210	75.12	75.36
58	5290	75.36	75.12
106	5530	75.12	75.12
122	5610	75.12	75.12
138	5690 (U-NII-2C)	72.44	72.44
138	5690 (U-NII-3)	2.44	2.44
155	5775	75.36	75.36

802.11ac (VHT160)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
50	5250 (U-NII-1)	76.80	76.80
50	5250 (U-NII-2A)	76.80	76.80
114	5570	153.60	153.60

802.11ax (HE20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
36	5180	18.96	19.08
40	5200	19.08	19.08
48	5240	19.08	19.08
52	5260	19.08	19.08
60	5300	18.96	19.08
64	5320	19.08	19.08
100	5500	19.08	19.08
116	5580	19.08	19.08
140	5700	19.08	19.08
144	5720 (U-NII-2C)	14.60	14.60
144	5720 (U-NII-3)	4.48	4.48
149	5745	19.08	18.96
157	5785	19.08	18.96
165	5825	19.08	18.96

802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
38	5190	37.92	37.80
46	5230	37.80	37.92
54	5270	37.92	37.92
62	5310	37.92	38.04
102	5510	37.92	37.80
110	5550	37.92	37.80
134	5670	37.92	38.04
142	5710 (U-NII-2C)	33.84	33.96
142	5710 (U-NII-3)	3.96	3.96
151	5755	37.74	37.74
159	5795	37.83	37.80

802.11ax (HE80)

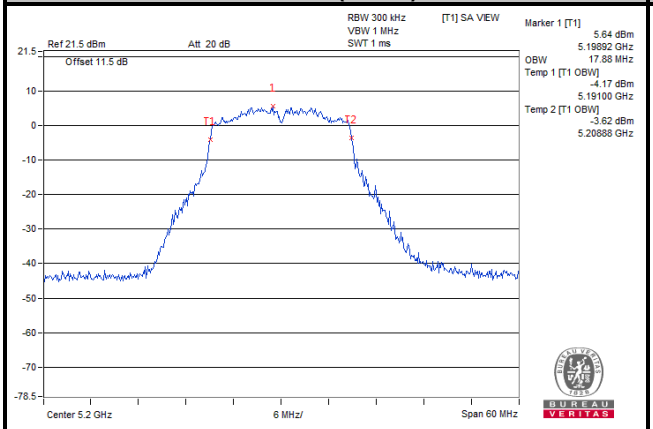
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
42	5210	76.80	76.80
58	5290	76.80	77.04
106	5530	76.80	76.80
122	5610	76.80	77.04
138	5690 (U-NII-2C)	72.92	73.40
138	5690 (U-NII-3)	3.64	3.40
155	5775	76.80	76.80

802.11ax (HE160)

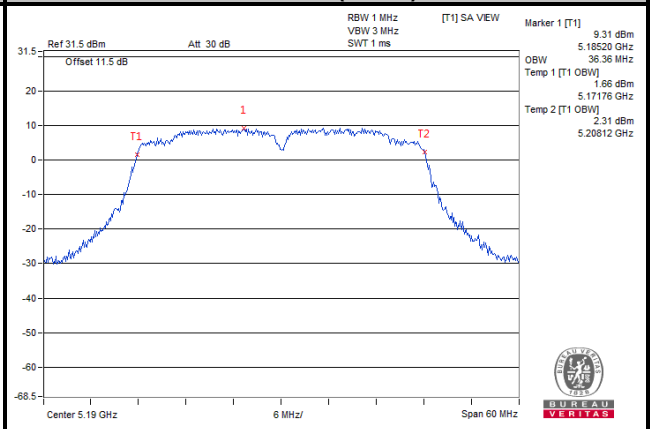
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain A	Chain B
50	5250 (U-NII-1)	77.76	77.76
50	5250 (U-NII-2A)	77.76	77.76
114	5570	155.52	155.52

Spectrum Plot of Worst Value

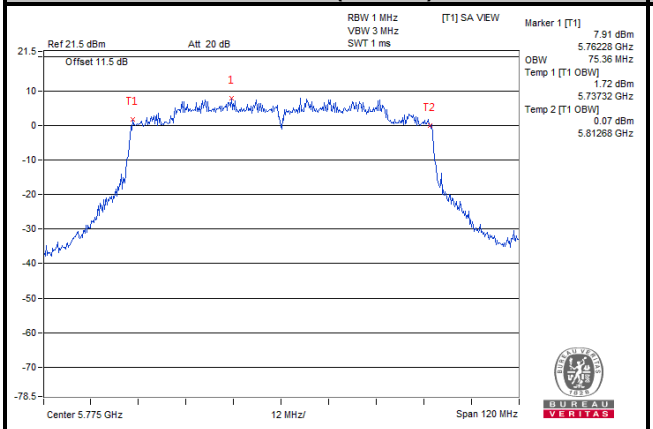
802.11n (HT20)



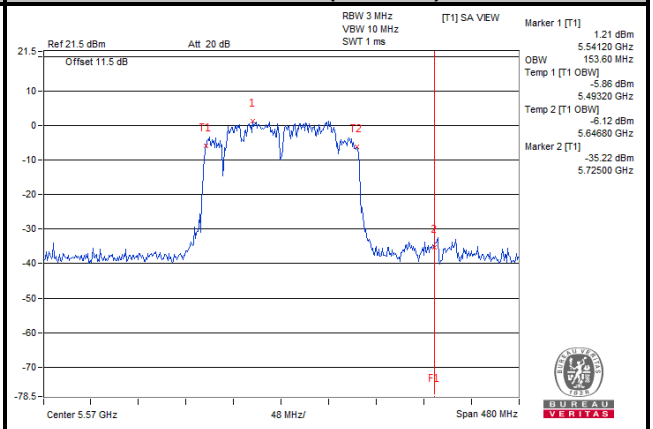
802.11n (HT40)



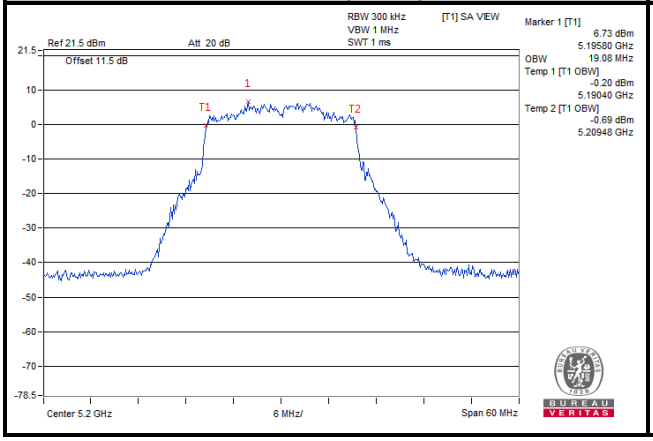
802.11ac (VHT80)



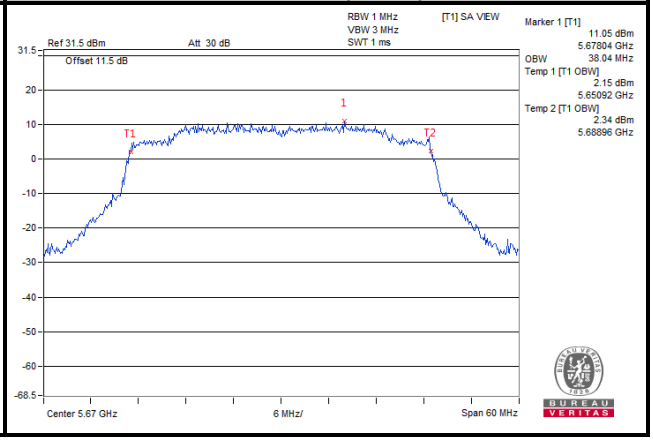
802.11ac (VHT160)

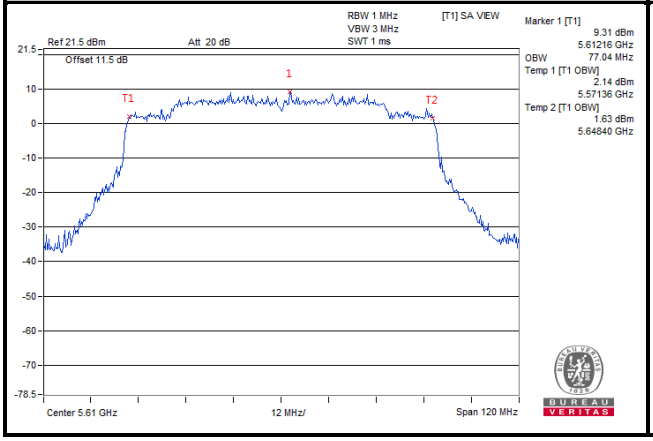
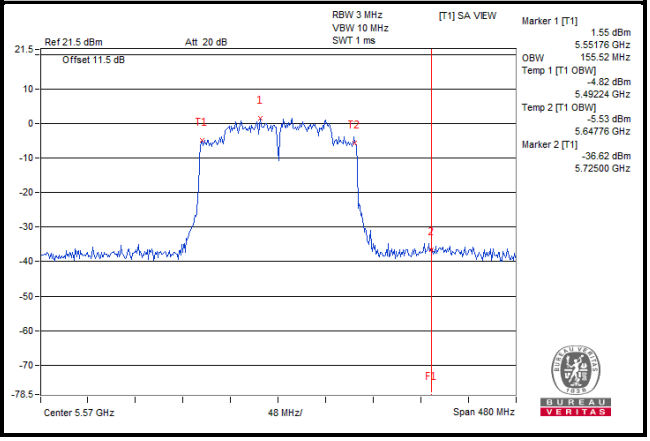


802.11ax (HE20)



802.11ax (HE40)

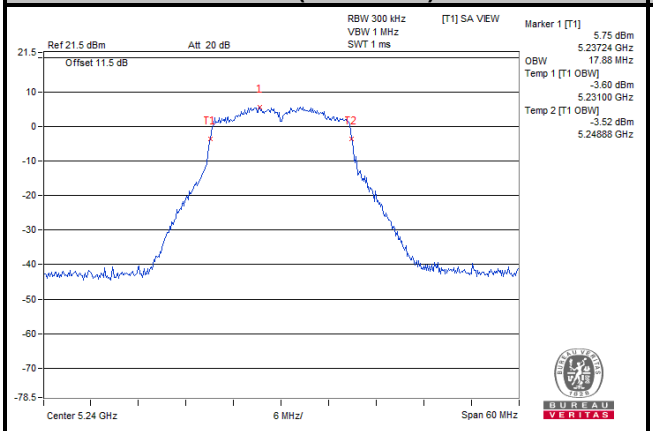
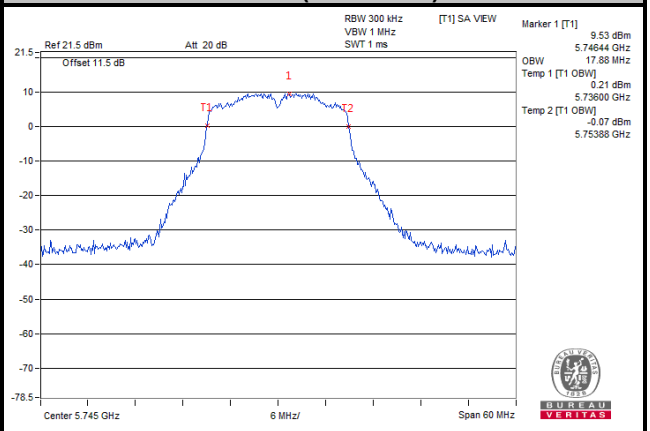


802.11ax (HE80)	802.11ax (HE160)
	

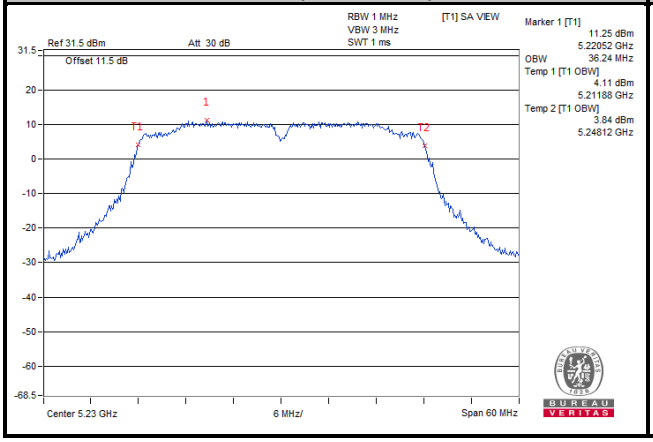
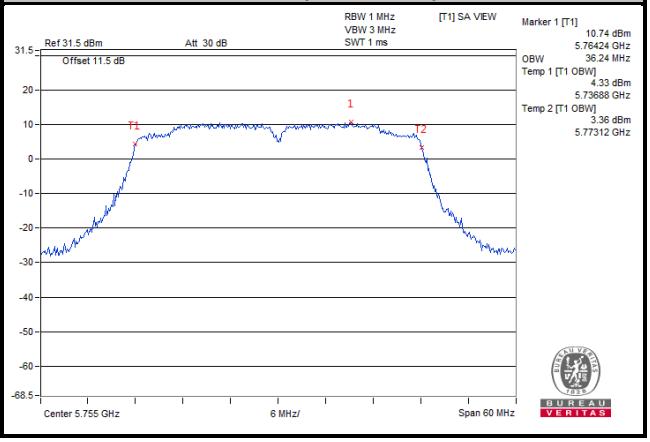
Chain A

Spectrum Plot for Nearby DFS Band

802.11n (HT20)

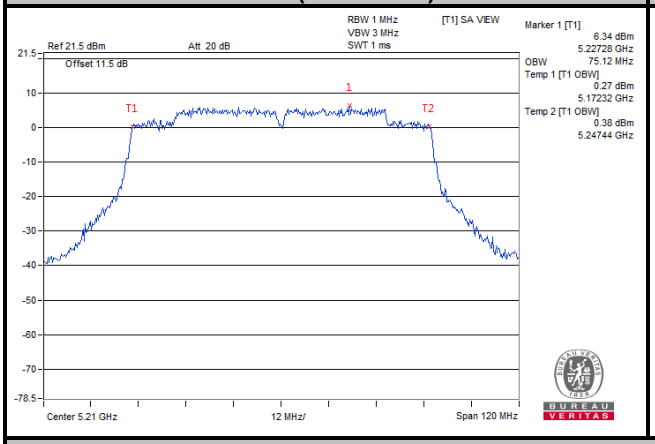
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	

802.11n (HT40)

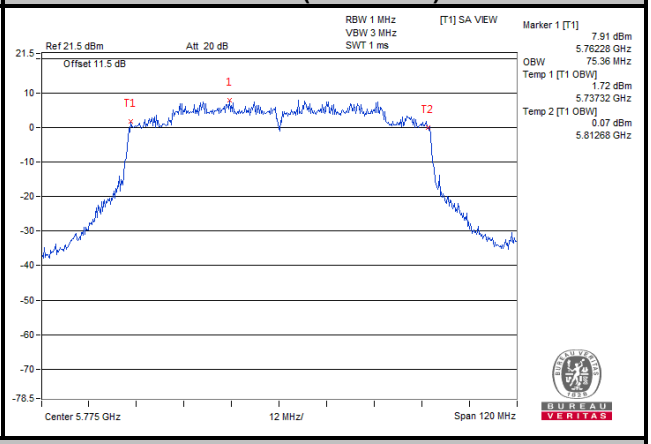
Ch 46 (5230 MHz)	Ch 151 (5755 MHz)
	

802.11ac (VHT80)

Ch 42 (5210 MHz)

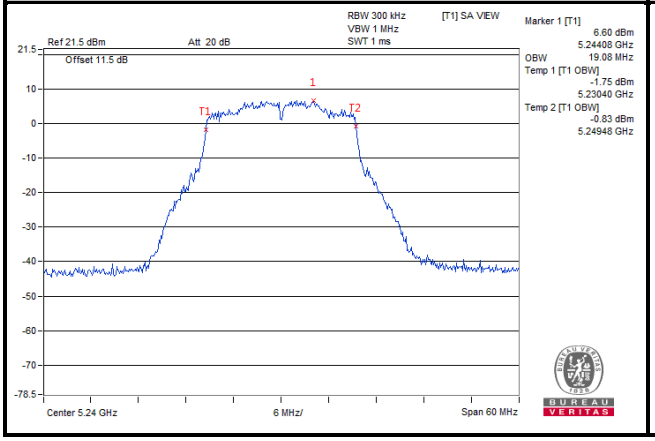


Ch 155 (5775 MHz)

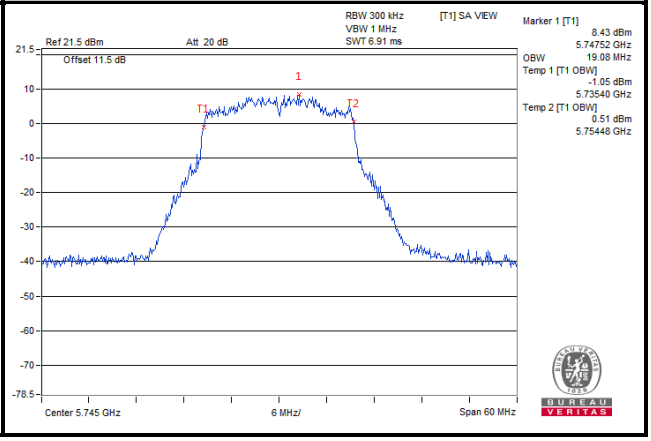


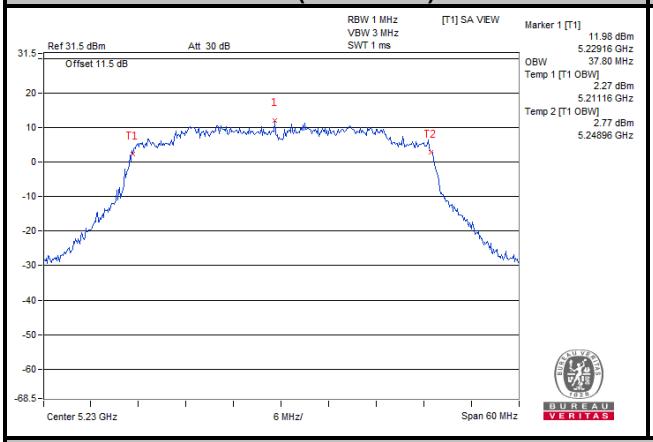
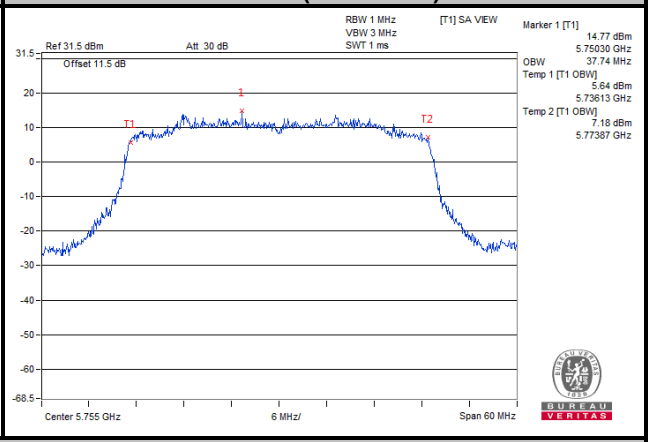
802.11ax (HE20)

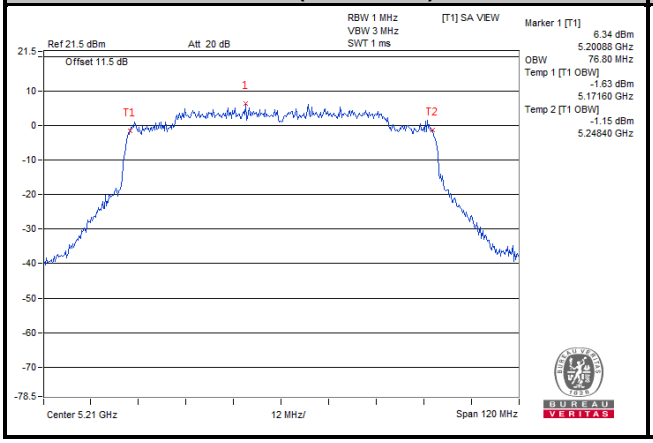
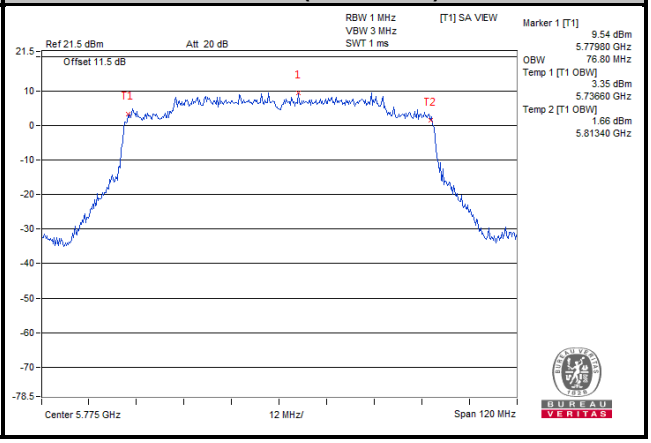
Ch 48 (5240 MHz)



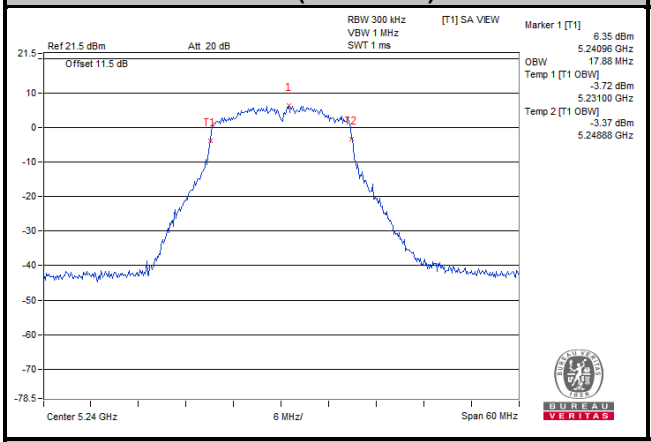
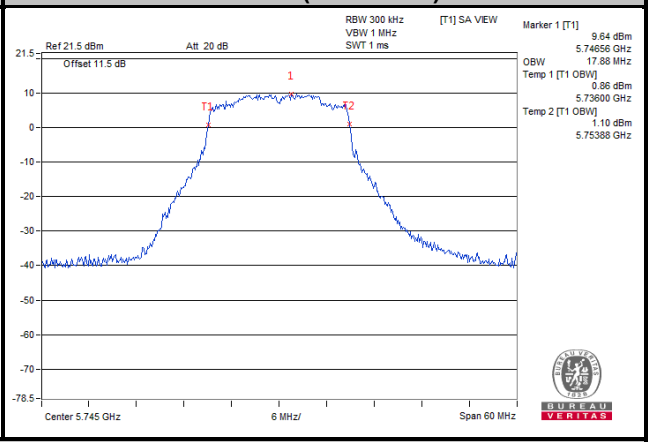
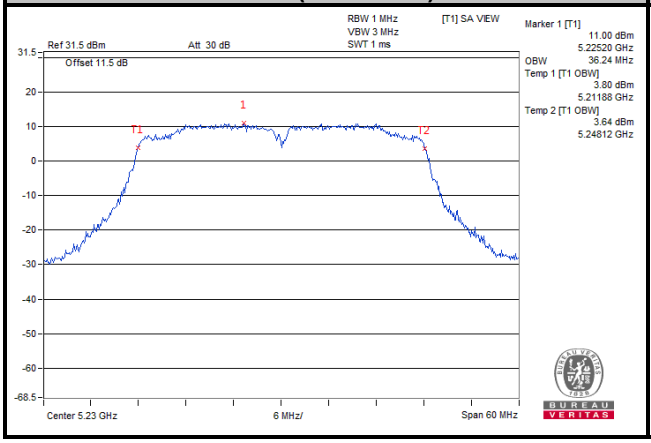
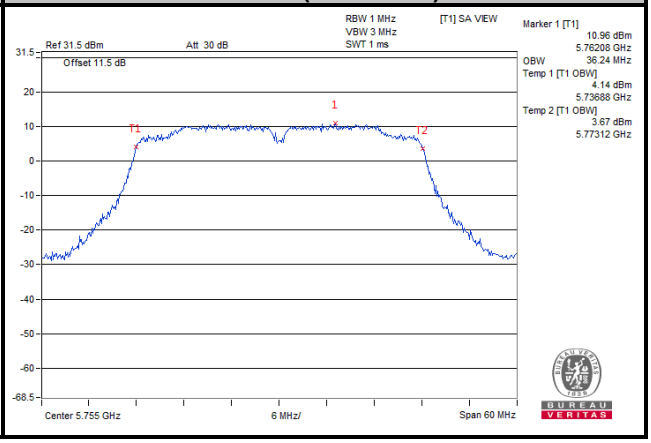
Ch 149 (5745 MHz)

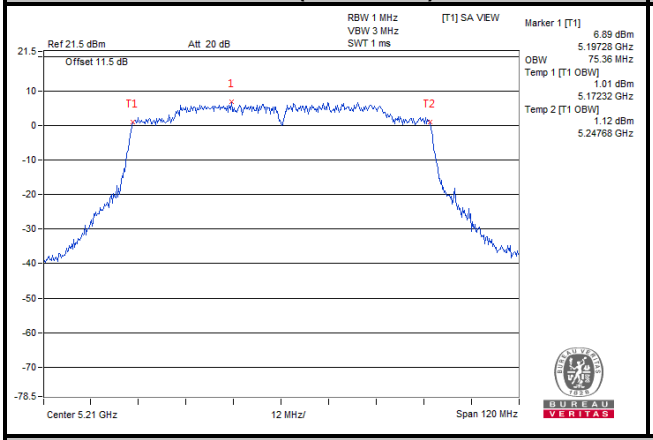
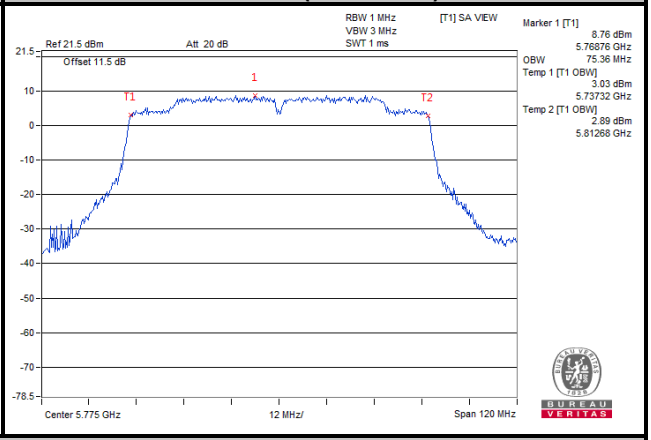
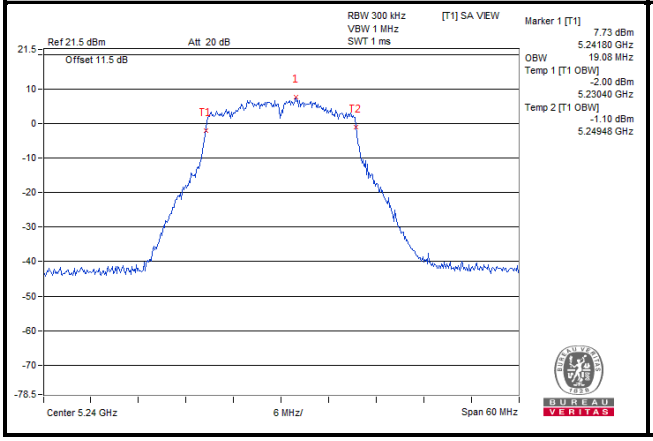
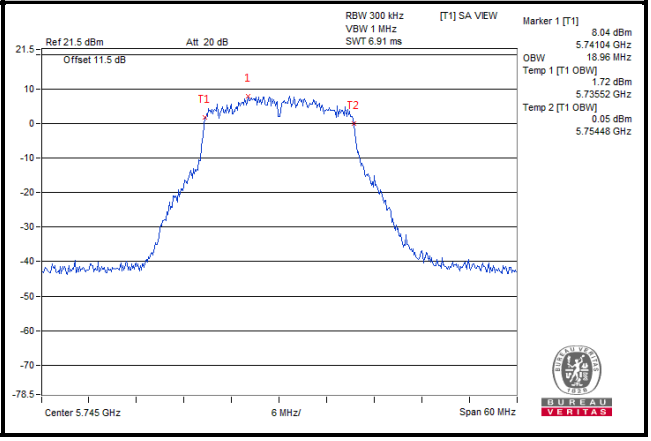


802.11ax (HE40)	
Ch 46 (5230 MHz)	Ch 151 (5755 MHz)
	

802.11ax (HE80)	
Ch 42 (5210 MHz)	Ch 155 (5775 MHz)
	

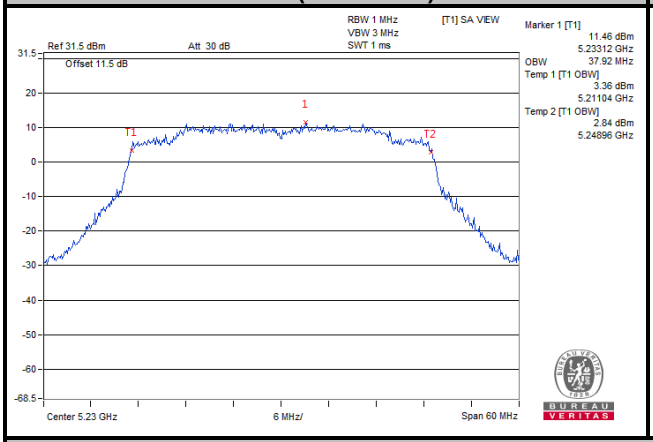
Chain B

Spectrum Plot for Nearby DFS Band	
802.11n (HT20)	
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	
802.11n (HT40)	
Ch 46 (5230 MHz)	Ch 151 (5755 MHz)
	

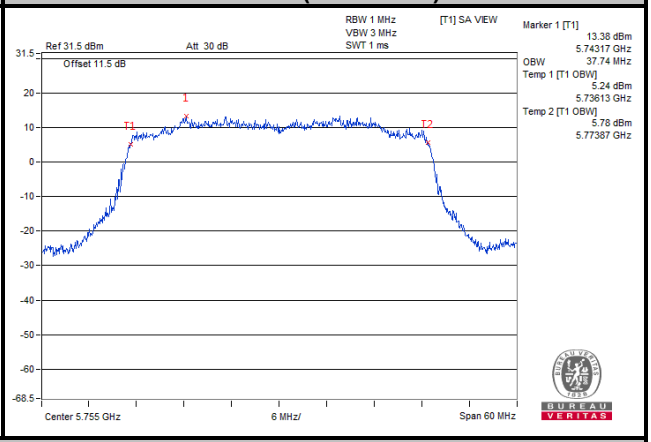
802.11ac (VHT80)	
Ch 42 (5210 MHz)	Ch 155 (5775 MHz)
	
802.11ax (HE20)	
Ch 48 (5240 MHz)	Ch 149 (5745 MHz)
	

802.11ax (HE40)

Ch 46 (5230 MHz)

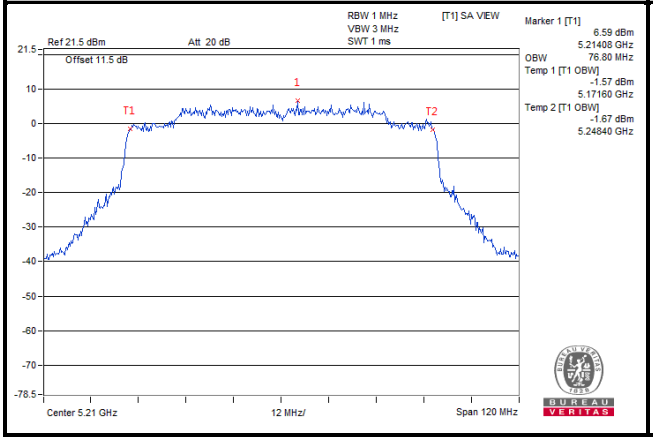


Ch 151 (5755 MHz)

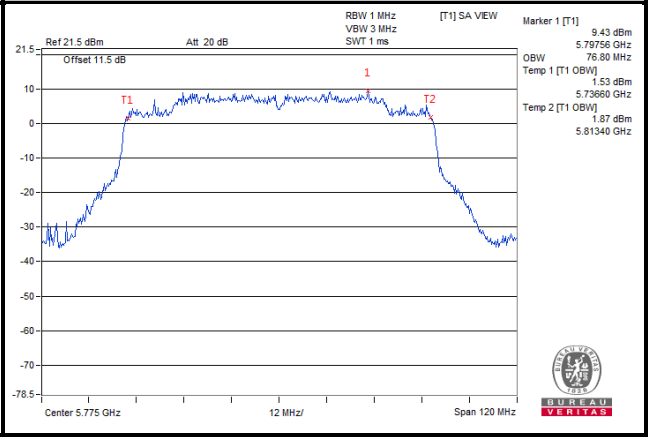


802.11ax (HE80)

Ch 42 (5210 MHz)



Ch 155 (5775 MHz)

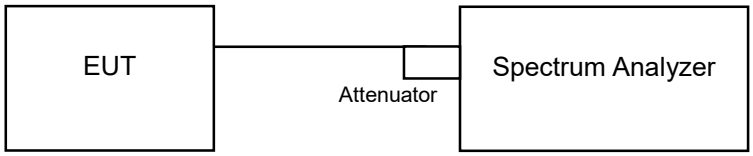


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17 dBm/MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11 dBm/MHz
U-NII-2A	√		11 dBm/MHz
U-NII-2C	√		11 dBm/MHz
U-NII-3	√		30 dBm/500 kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 RBW, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 RBW, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

※**For U-NII-3: without duty cycle &** Duty cycle >98 %

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 500 kHz, Set VBW ≥ 3 RBW, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
4. Sweep time = auto, trigger set to “free run”.
5. Trace average at least 100 traces in power averaging mode.
6. Record the max value

※**For U-NII-3: with duty cycle &** Duty cycle <98 %

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 RBW, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300 kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.5.7 Test Results

Chain A

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	4.21	0.16	4.37	11	Pass
40	5200	4.18	0.16	4.34	11	Pass
48	5240	4.27	0.16	4.43	11	Pass
52	5260	4.41	0.16	4.57	11	Pass
60	5300	4.22	0.16	4.38	11	Pass
64	5320	4.58	0.16	4.75	11	Pass
100	5500	4.28	0.16	4.45	11	Pass
116	5580	4.23	0.16	4.39	11	Pass
140	5700	4.11	0.16	4.27	11	Pass
144	5720 (U-NII-2C)	4.25	0.16	4.41	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	4.38	0.10	4.48	11	Pass
40	5200	4.32	0.10	4.42	11	Pass
48	5240	4.43	0.10	4.53	11	Pass
52	5260	4.54	0.10	4.64	11	Pass
60	5300	4.59	0.10	4.69	11	Pass
64	5320	4.65	0.10	4.75	11	Pass
100	5500	4.26	0.10	4.36	11	Pass
116	5580	4.27	0.10	4.37	11	Pass
140	5700	4.18	0.10	4.28	11	Pass
144	5720 (U-NII-2C)	4.29	0.10	4.39	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	1.24	0.10	1.34	11	Pass
46	5230	1.92	0.10	2.02	11	Pass
54	5270	1.65	0.10	1.75	11	Pass
62	5310	2.16	0.10	2.26	11	Pass
102	5510	1.44	0.10	1.54	11	Pass
110	5550	1.51	0.10	1.61	11	Pass
134	5670	1.62	0.10	1.72	11	Pass
142	5710 (U-NII-2C)	0.96	0.10	1.06	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80):

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	-2.65	11	Pass
58	5290	-4.33	11	Pass
106	5530	-2.20	11	Pass
122	5610	-2.10	11	Pass
138	5690 (U-NII-2C)	-1.52	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ac (VHT160)

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-9.56	11	Pass
50	5250 (U-NII-2A)	-9.15	11	Pass
114	5570	-9.89	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE20)

Channel	Frqeuency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	4.04	0.14	4.18	11	Pass
40	5200	3.86	0.14	4.00	11	Pass
48	5240	3.95	0.14	4.09	11	Pass
52	5260	4.27	0.14	4.41	11	Pass
60	5300	4.29	0.14	4.43	11	Pass
64	5320	4.37	0.14	4.51	11	Pass
100	5500	4.38	0.14	4.52	11	Pass
116	5580	4.05	0.14	4.19	11	Pass
140	5700	3.93	0.14	4.07	11	Pass
144	5720 (U-NII-2C)	4.58	0.14	4.72	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	0.85	0.09	0.94	11	Pass
46	5230	1.47	0.09	1.56	11	Pass
54	5270	1.46	0.09	1.55	11	Pass
62	5310	-0.29	0.09	-0.20	11	Pass
102	5510	1.23	0.09	1.32	11	Pass
110	5550	1.07	0.09	1.16	11	Pass
134	5670	1.11	0.09	1.20	11	Pass
142	5710 (U-NII-2C)	1.09	0.09	1.18	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80):

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	-3.27	11	Pass
58	5290	-3.87	11	Pass
106	5530	-3.22	11	Pass
122	5610	-2.01	11	Pass
138	5690 (U-NII-2C)	-1.49	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE160)

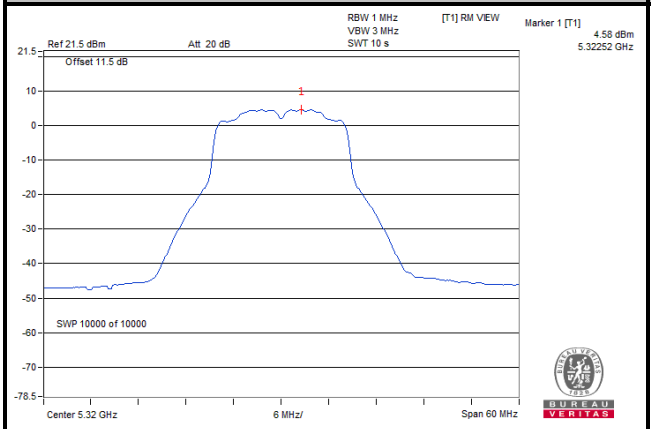
Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-10.13	11	Pass
50	5250 (U-NII-2A)	-9.61	11	Pass
114	5570	-7.74	11	Pass

Note:

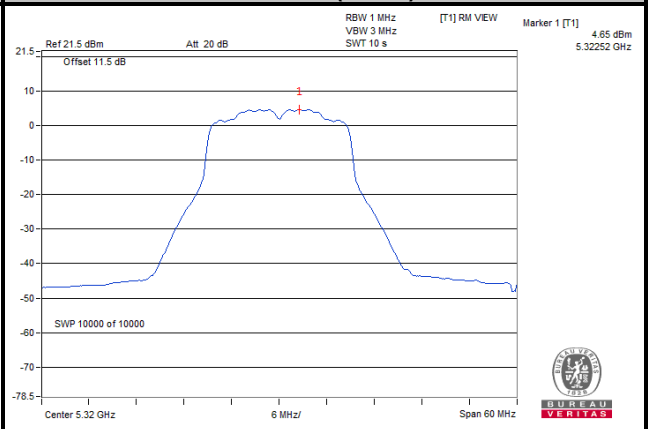
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value

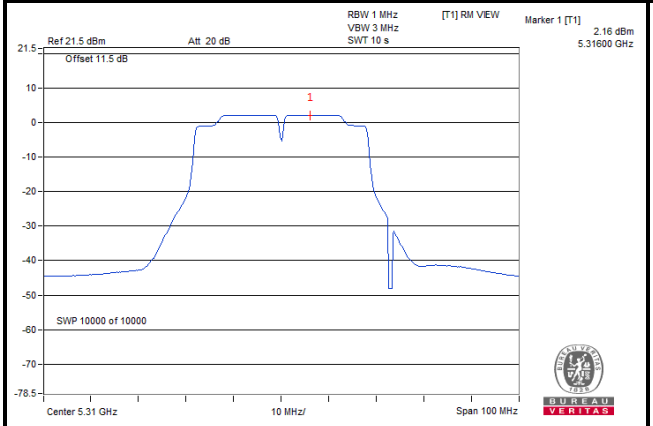
802.11a



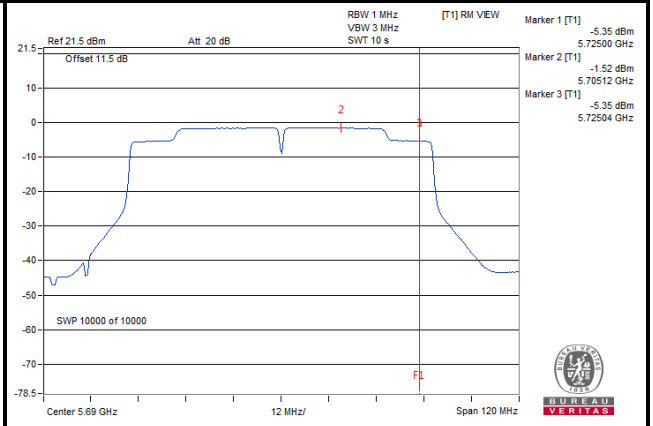
802.11n (HT20)



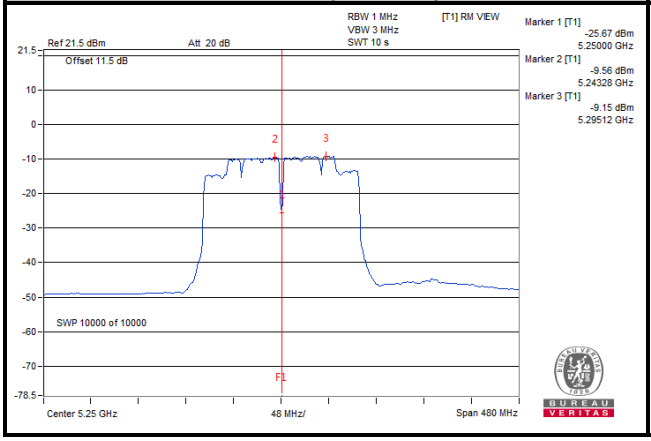
802.11n (HT40)



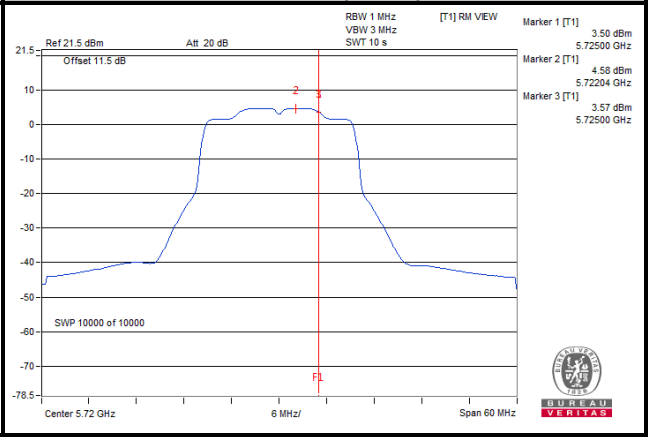
802.11ac (VHT80)



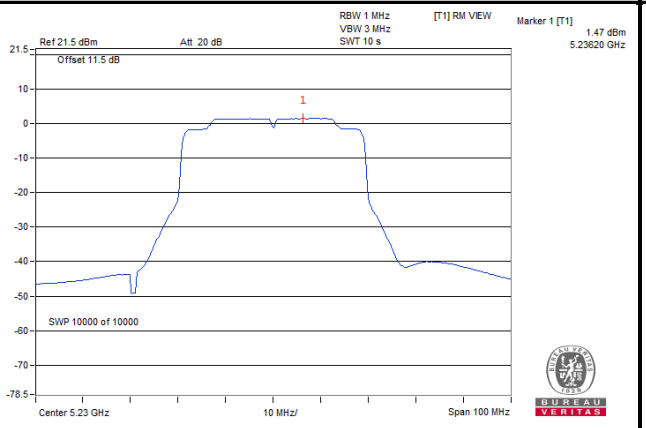
802.11ac (VHT160)



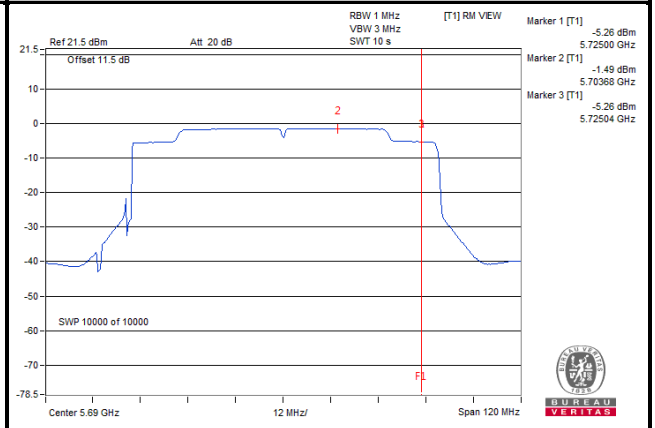
802.11ax (HE20)



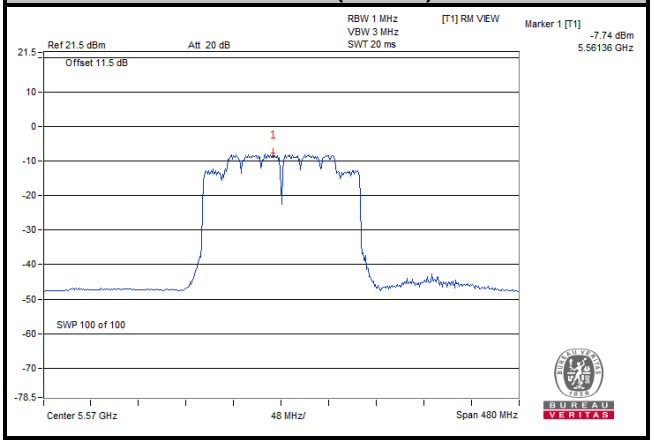
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



For U-NII-3 Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-1.05	1.17	0.16	1.33	30	Pass
149	5745	1.05	3.27	0.16	3.43	30	Pass
157	5785	1.6	3.82	0.16	3.98	30	Pass
165	5825	1.65	3.87	0.16	4.03	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-0.69	1.53	0.1	1.63	30	Pass
149	5745	1.57	3.79	0.1	3.89	30	Pass
157	5785	1.76	3.98	0.1	4.08	30	Pass
165	5825	1.84	4.06	0.1	4.16	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
142	5710 (U-NII-3)	-6.51	-4.29	0.1	-4.19	30	Pass
151	5755	-2.59	-0.37	0.1	-0.27	30	Pass
159	5795	-2.37	-0.15	0.1	-0.05	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80):

Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
138	5690 (U-NII-3)	-10.01	-7.79	30	Pass
155	5775	-5.72	-3.5	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE20)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-1.32	0.9	0.14	1.04	30	Pass
149	5745	0.32	2.54	0.14	2.68	30	Pass
157	5785	0.66	2.88	0.14	3.02	30	Pass
165	5825	0.57	2.79	0.14	2.93	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
142	5710 (U-NII-3)	-6.78	-4.56	0.09	-4.47	30	Pass
151	5755	-3.36	-1.14	0.09	-1.05	30	Pass
159	5795	-3.19	-0.97	0.09	-0.88	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80):

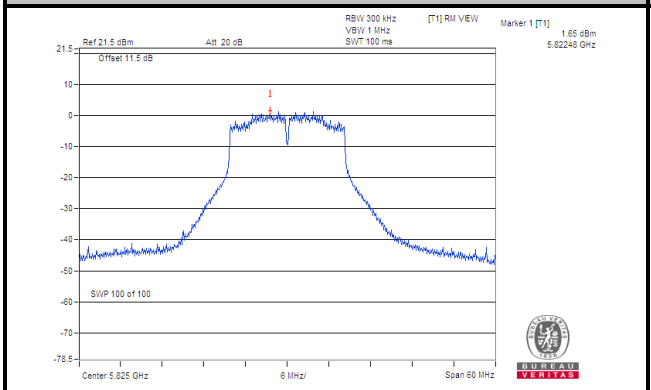
Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
138	5690 (U-NII-3)	-10.29	-8.07	30	Pass
155	5775	-6.59	-4.37	30	Pass

Note:

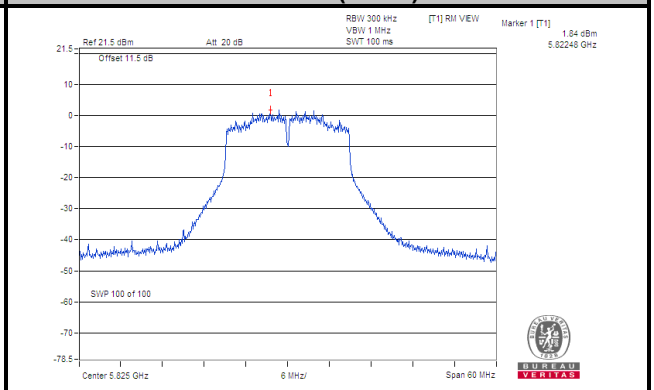
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value

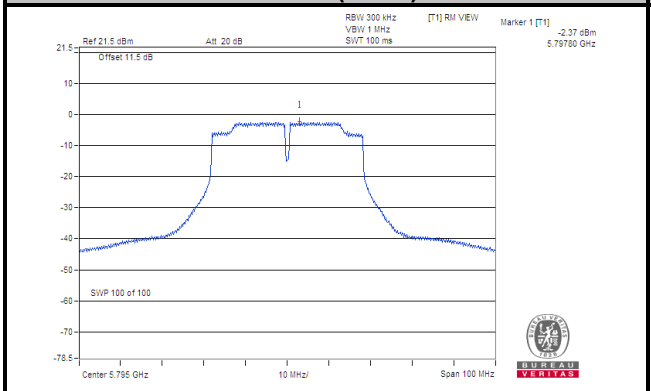
802.11a



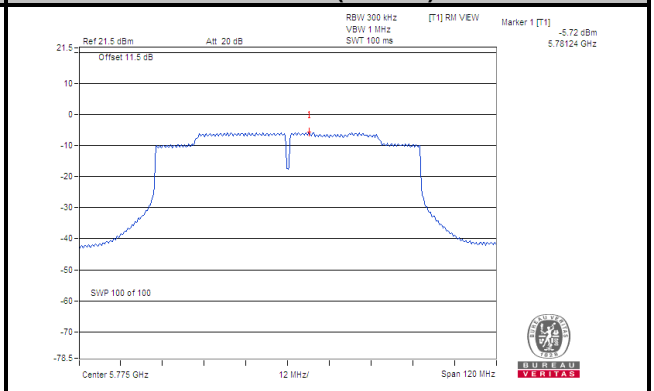
802.11n (HT20)



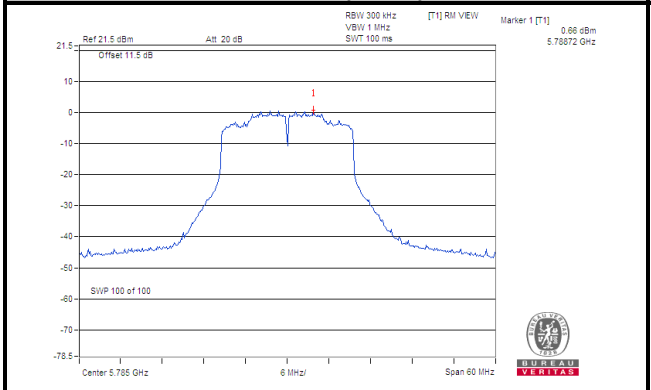
802.11n (HT40)



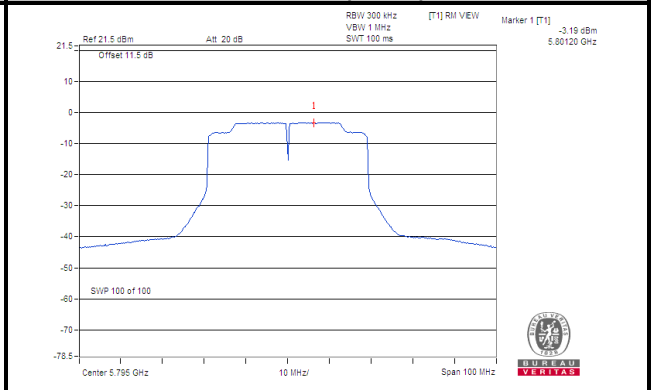
802.11ac (VHT80)



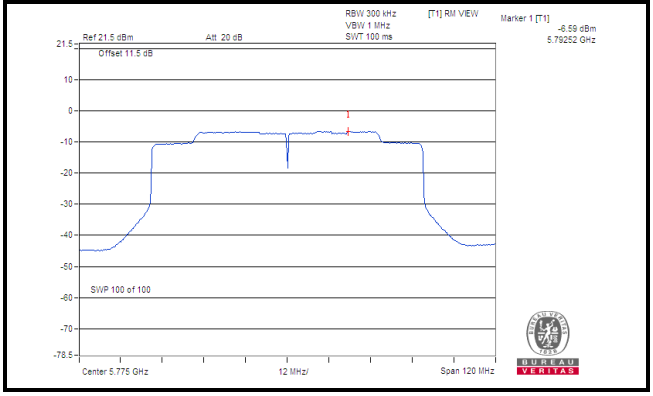
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Chain B

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	3.09	0.16	3.26	11	Pass
40	5200	3.23	0.16	3.39	11	Pass
48	5240	3.31	0.16	3.48	11	Pass
52	5260	3.44	0.16	3.60	11	Pass
60	5300	3.55	0.16	3.71	11	Pass
64	5320	3.45	0.16	3.62	11	Pass
100	5500	2.59	0.16	2.76	11	Pass
116	5580	2.35	0.16	2.51	11	Pass
140	5700	2.22	0.16	2.39	11	Pass
144	5720 (U-NII-2C)	2.26	0.16	2.43	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	3.34	0.15	3.49	11	Pass
40	5200	3.37	0.15	3.52	11	Pass
48	5240	3.47	0.15	3.62	11	Pass
52	5260	3.62	0.15	3.77	11	Pass
60	5300	3.61	0.15	3.76	11	Pass
64	5320	3.52	0.15	3.67	11	Pass
100	5500	4.65	0.15	4.80	11	Pass
116	5580	4.60	0.15	4.75	11	Pass
140	5700	4.49	0.15	4.64	11	Pass
144	5720 (U-NII-2C)	4.53	0.15	4.68	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	0.66	0.10	0.76	11	Pass
46	5230	0.78	0.10	0.88	11	Pass
54	5270	1.11	0.10	1.21	11	Pass
62	5310	1.01	0.10	1.11	11	Pass
102	5510	0.20	0.10	0.30	11	Pass
110	5550	-0.01	0.10	0.09	11	Pass
134	5670	-0.08	0.10	0.02	11	Pass
142	5710 (U-NII-2C)	0.00	0.10	0.10	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80):

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	-1.94	0.11	-1.83	11	Pass
58	5290	-1.66	0.11	-1.55	11	Pass
106	5530	-3.25	0.11	-3.14	11	Pass
122	5610	-2.76	0.11	-2.65	11	Pass
138	5690 (U-NII-2C)	-2.95	0.11	-2.84	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT160)

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-7.41	11	Pass
50	5250 (U-NII-2A)	-7.23	11	Pass
114	5570	-7.59	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	3.27	0.12	3.39	11	Pass
40	5200	3.35	0.12	3.47	11	Pass
48	5240	3.51	0.12	3.63	11	Pass
52	5260	3.57	0.12	3.69	11	Pass
60	5300	3.58	0.12	3.70	11	Pass
64	5320	3.40	0.12	3.52	11	Pass
100	5500	2.50	0.12	2.62	11	Pass
116	5580	2.27	0.12	2.39	11	Pass
140	5700	2.16	0.12	2.28	11	Pass
144	5720 (U-NII-2C)	2.21	0.12	2.33	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	0.19	0.10	0.29	11	Pass
46	5230	0.18	0.10	0.29	11	Pass
54	5270	0.46	0.10	0.57	11	Pass
62	5310	0.35	0.10	0.45	11	Pass
102	5510	-0.80	0.10	-0.70	11	Pass
110	5550	-0.76	0.10	-0.66	11	Pass
134	5670	-0.72	0.10	-0.62	11	Pass
142	5710 (U-NII-2C)	-0.75	0.10	-0.65	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80):

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	-3.55	11	Pass
58	5290	-2.25	11	Pass
106	5530	-3.27	11	Pass
122	5610	-3.37	11	Pass
138	5690 (U-NII-2C)	-3.55	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE160)

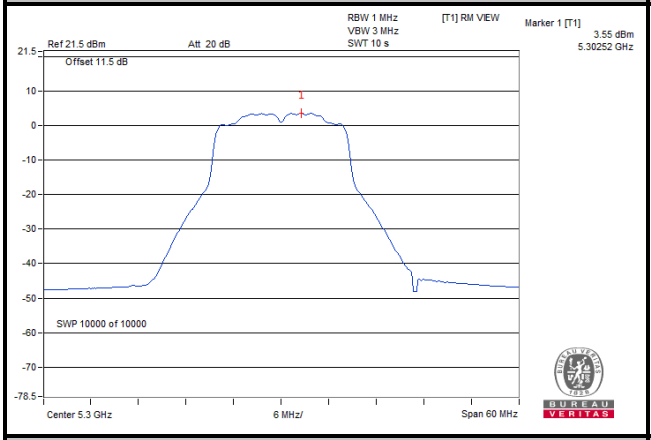
Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-8.30	11	Pass
50	5250 (U-NII-2A)	-7.96	11	Pass
114	5570	-8.43	11	Pass

Note:

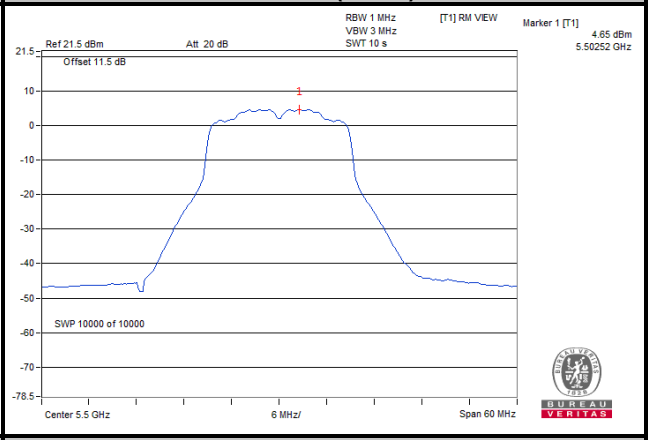
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value

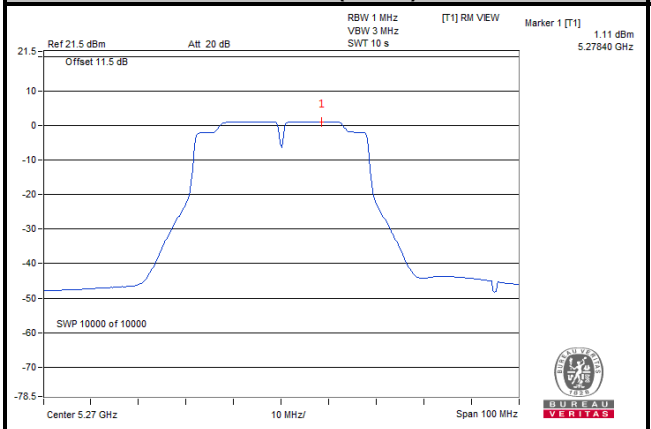
802.11a



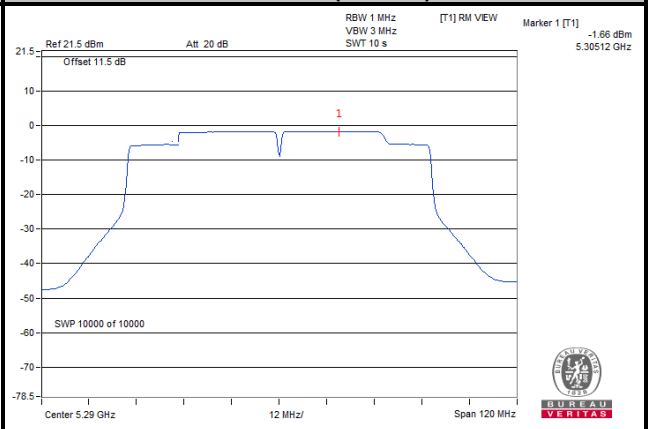
802.11n (HT20)



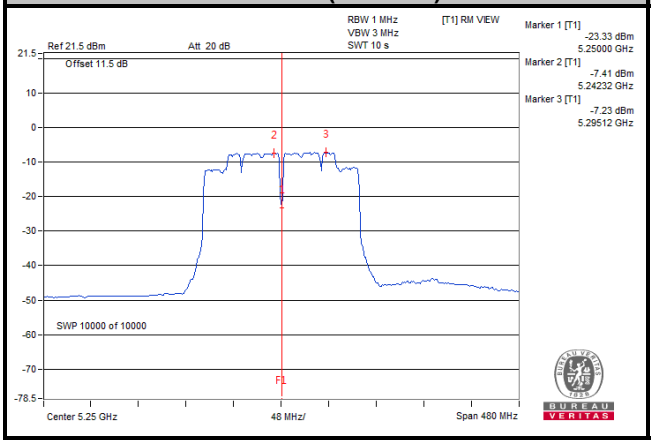
802.11n (HT40)



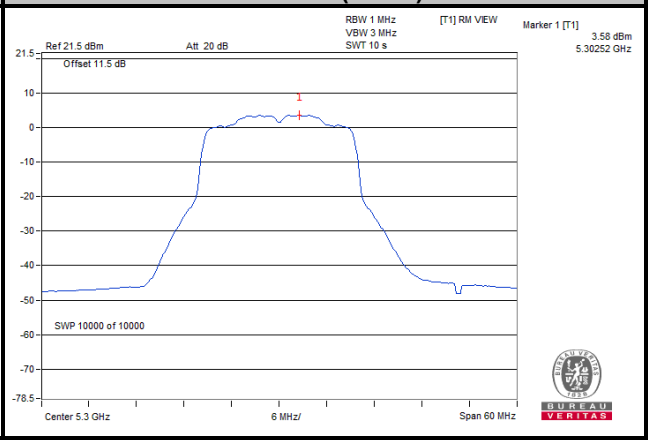
802.11ac (VHT80)



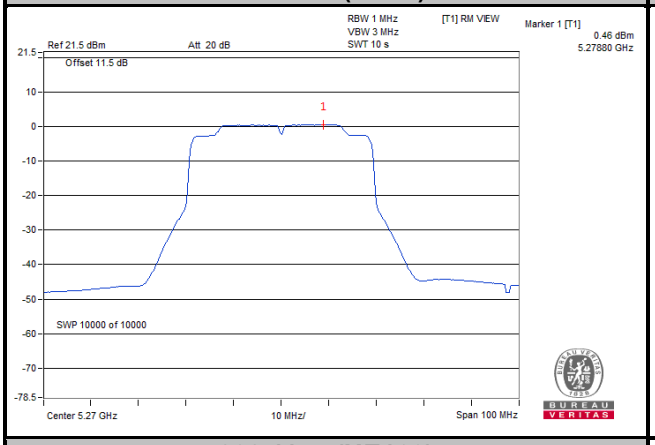
802.11ac (VHT160)



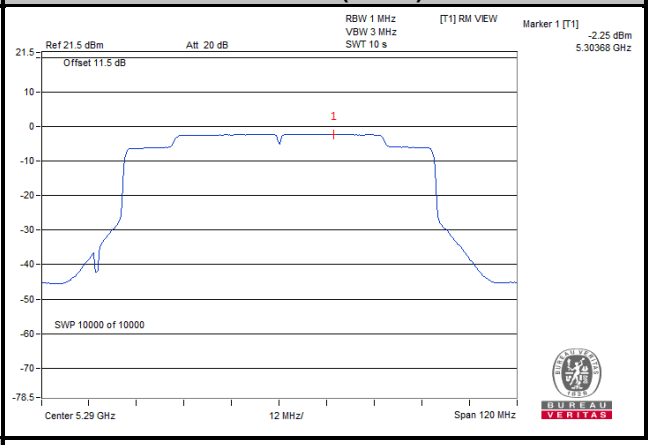
802.11ax (HE20)



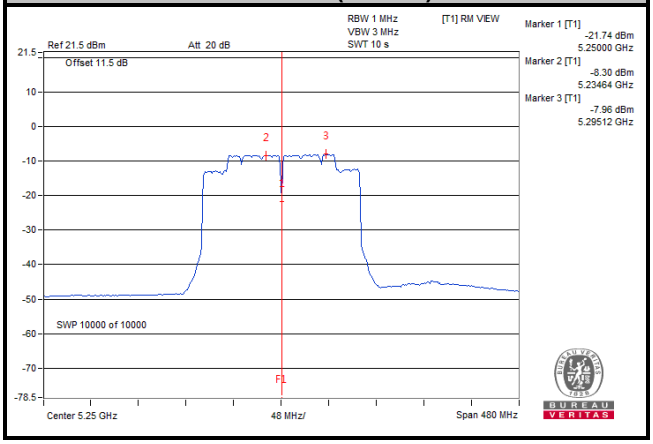
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



For U-NII-3 Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-1.32	0.9	0.16	1.06	30	Pass
149	5745	0.24	2.46	0.16	2.62	30	Pass
157	5785	0.63	2.85	0.16	3.01	30	Pass
165	5825	0.62	2.84	0.16	3	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-1.29	0.93	0.15	1.08	30	Pass
149	5745	0.95	3.17	0.15	3.32	30	Pass
157	5785	1.21	3.43	0.15	3.58	30	Pass
165	5825	1.23	3.45	0.15	3.6	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
142	5710 (U-NII-3)	-6.74	-4.52	0.1	-4.42	30	Pass
151	5755	-3.45	-1.23	0.1	-1.13	30	Pass
159	5795	-3.1	-0.88	0.1	-0.78	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80):

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
138	5690 (U-NII-3)	-10.51	-8.29	0.11	-8.18	30	Pass
155	5775	-6.26	-4.04	0.11	-3.93	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
144	5720 (U-NII-3)	-2.94	-0.72	0.12	-0.6	30	Pass
149	5745	-0.64	1.58	0.12	1.7	30	Pass
157	5785	-0.42	1.8	0.12	1.92	30	Pass
165	5825	-0.34	1.88	0.12	2	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
142	5710 (U-NII-3)	-7.47	-5.25	0.1	-5.15	30	Pass
151	5755	-4.15	-1.93	0.1	-1.83	30	Pass
159	5795	-3.98	-1.76	0.1	-1.66	30	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80):

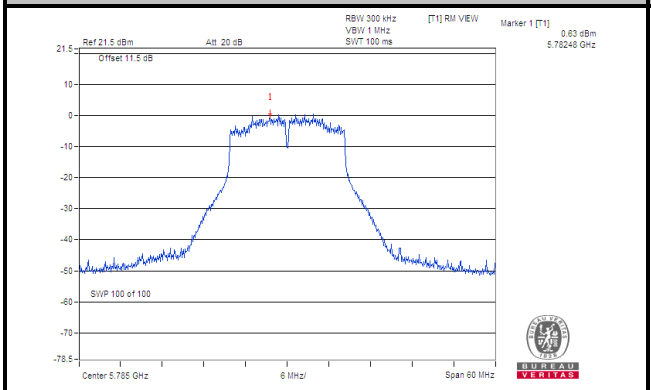
Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
138	5690 (U-NII-3)	-11.02	-8.8	30	Pass
155	5775	-6.75	-4.53	30	Pass

Note:

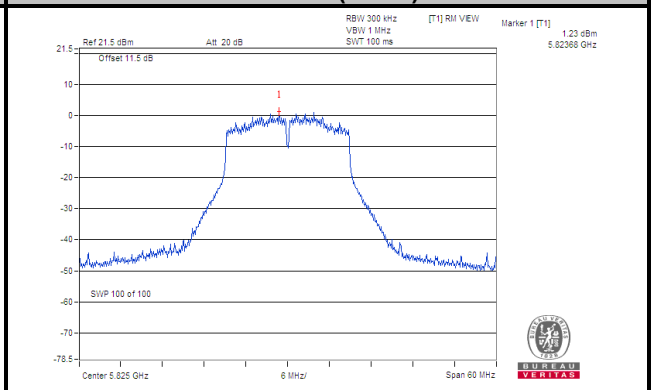
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value

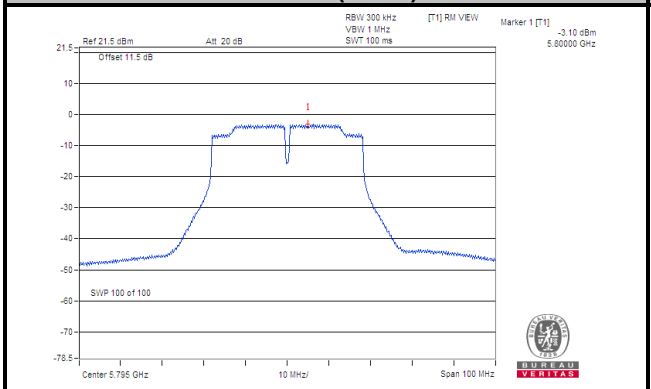
802.11a



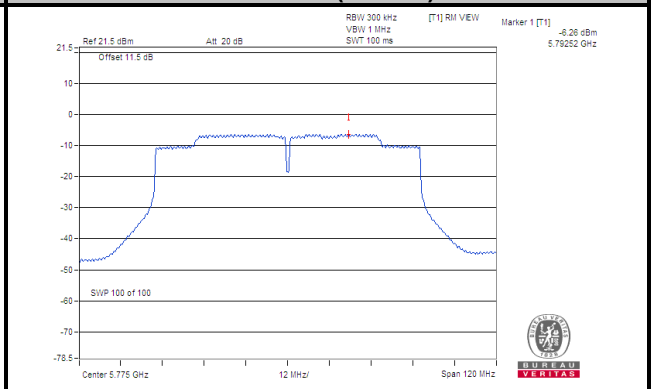
802.11n (HT20)



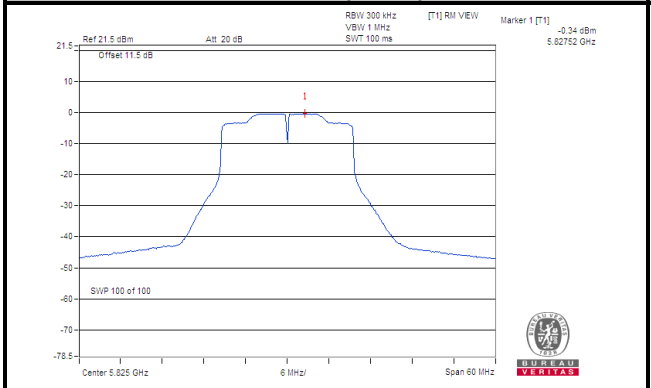
802.11n (HT40)



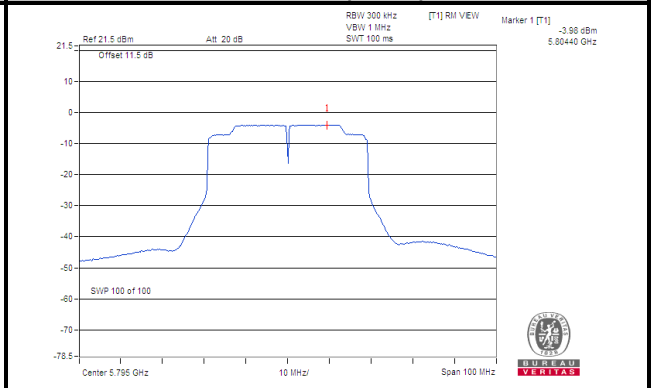
802.11ac (VHT80)



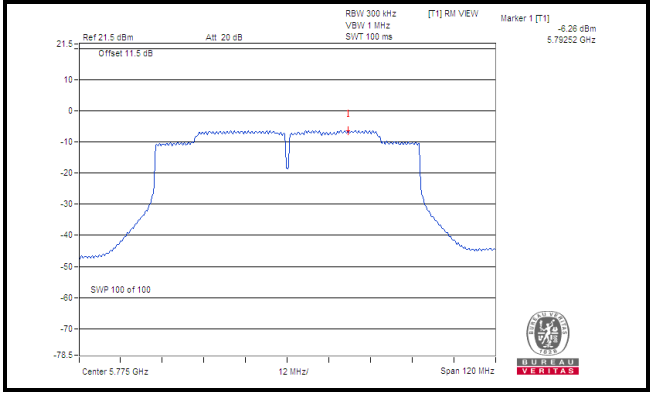
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



MIMO

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11n (HT20)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
36	5180	5.38	5.40	0.10	8.50	11	Pass
40	5200	5.33	5.46	0.10	8.50	11	Pass
48	5240	5.36	5.54	0.10	8.56	11	Pass
52	5260	5.19	5.16	0.10	8.28	11	Pass
60	5300	5.23	5.18	0.10	8.31	11	Pass
64	5320	4.96	4.99	0.10	8.08	11	Pass
100	5500	4.64	4.78	0.10	7.82	11	Pass
116	5580	4.73	4.76	0.10	7.85	11	Pass
140	5700	4.87	5.00	0.10	8.04	11	Pass
144	5720 (U-NII-2C)	5.11	4.93	0.10	8.13	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
38	5190	2.96	1.41	5.26	11	Pass
46	5230	2.89	3.04	5.98	11	Pass
54	5270	2.88	3.09	6.00	11	Pass
62	5310	2.98	3.08	6.04	11	Pass
102	5510	3.48	3.68	6.59	11	Pass
110	5550	3.41	3.47	6.45	11	Pass
134	5670	3.57	3.67	6.63	11	Pass
142	5710 (U-NII-2C)	3.84	4.04	6.95	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ac (VHT80):

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
42	5210	-0.12	0.26	3.08	11	Pass
58	5290	-0.96	-0.71	2.18	11	Pass
106	5530	-0.82	0.80	3.08	11	Pass
122	5610	-0.23	0.86	3.36	11	Pass
138	5690 (U-NII-2C)	-0.19	1.17	3.55	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ac (VHT160)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
50	5250 (U-NII-1)	-2.17	-2.01	0.92	11	Pass
50	5250 (U-NII-2A)	-2.14	-1.86	1.01	11	Pass
114	5570	-1.51	-1.72	1.40	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ax (HE20)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
36	5180	5.69	5.78	0.14	8.89	11	Pass
40	5200	5.68	5.70	0.14	8.84	11	Pass
48	5240	5.70	5.72	0.14	8.86	11	Pass
52	5260	5.74	6.03	0.14	9.04	11	Pass
60	5300	5.72	6.11	0.14	9.07	11	Pass
64	5320	5.83	5.90	0.14	9.02	11	Pass
100	5500	5.41	5.56	0.14	8.64	11	Pass
116	5580	5.50	5.53	0.14	8.67	11	Pass
140	5700	5.71	5.74	0.14	8.88	11	Pass
144	5720 (U-NII-2C)	5.84	5.75	0.14	8.95	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
38	5190	3.36	3.56	6.47	11	Pass
46	5230	3.33	3.81	6.59	11	Pass
54	5270	3.55	1.90	5.81	11	Pass
62	5310	3.59	1.78	5.79	11	Pass
102	5510	4.09	4.67	7.40	11	Pass
110	5550	4.03	4.41	7.23	11	Pass
134	5670	4.33	4.66	7.51	11	Pass
142	5710 (U-NII-2C)	4.34	4.65	7.51	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ax (HE80):

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
42	5210	0.65	1.25	0.11	4.08	11	Pass
58	5290	0.60	1.44	0.11	4.16	11	Pass
106	5530	1.09	1.72	0.11	4.54	11	Pass
122	5610	1.52	1.75	0.11	4.76	11	Pass
138	5690 (U-NII-2C)	1.64	-0.13	0.11	3.96	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160)

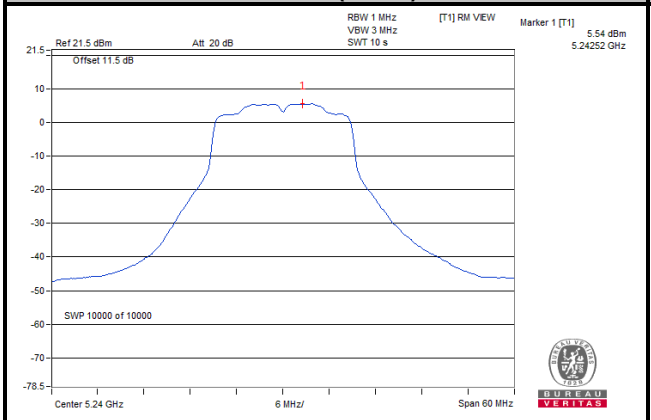
Channel	Frequency (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
50	5250 (U-NII-1)	-0.72	-1.63	1.86	11	Pass
50	5250 (U-NII-2A)	-0.71	-1.49	1.93	11	Pass
114	5570	-2.12	-2.02	0.94	11	Pass

Note:

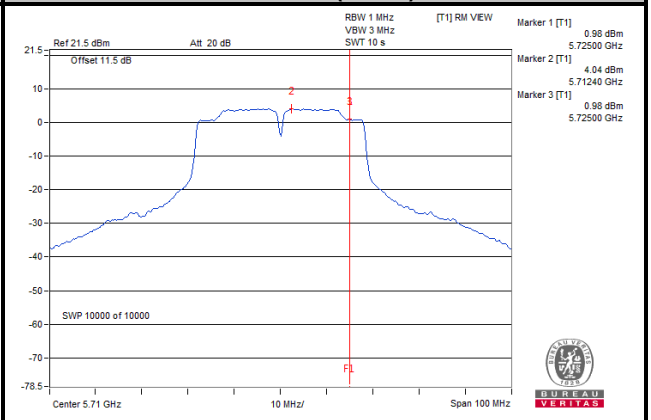
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

Spectrum Plot of Worst Value

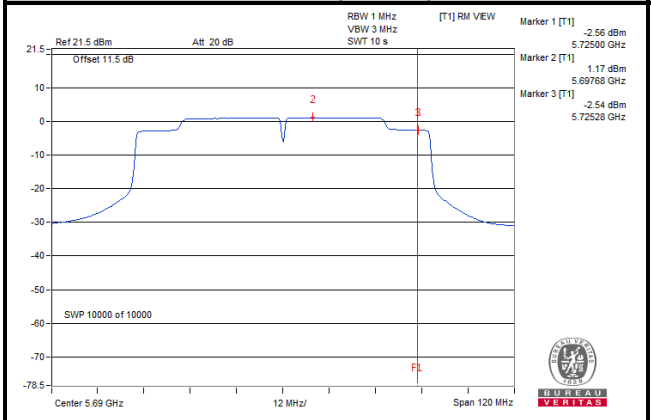
802.11n (HT20)



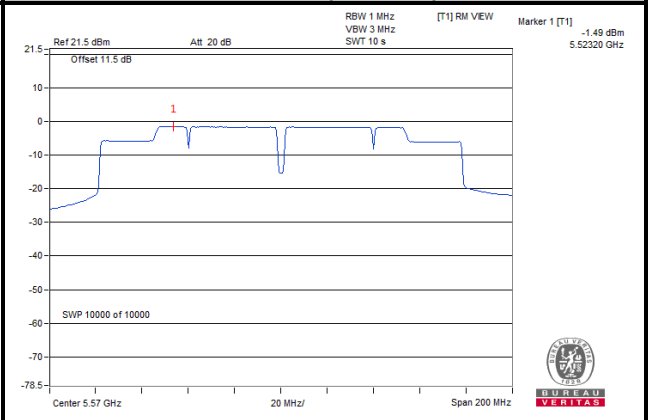
802.11n (HT40)



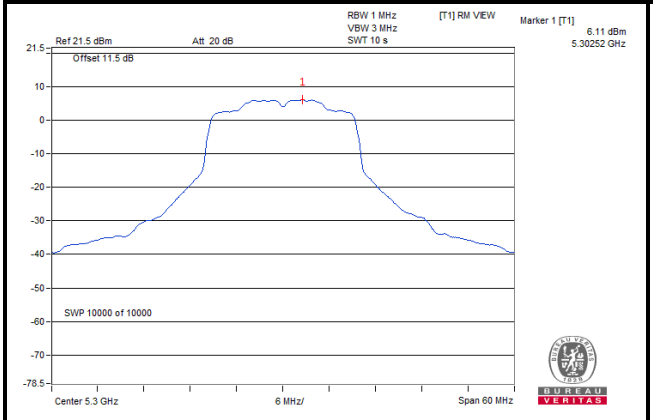
802.11ac (VHT80)



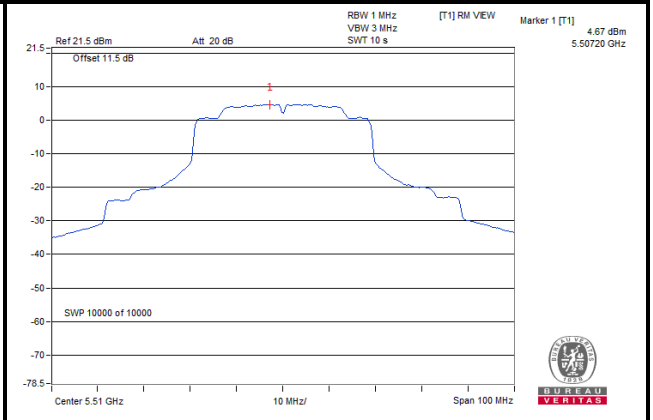
802.11ac (VHT160)



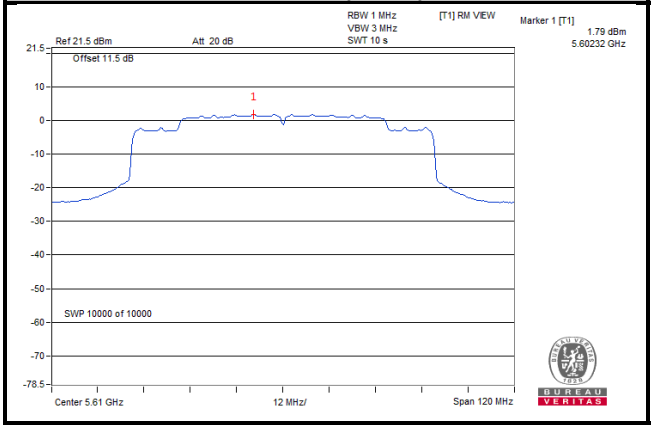
802.11ax (HE20)



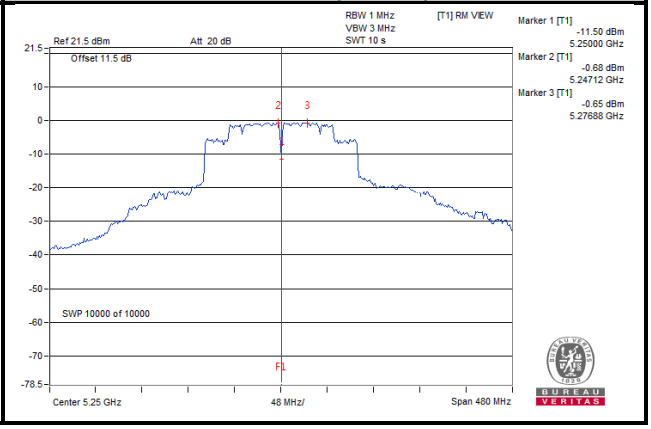
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



For U-NII-3 Band

802.11n (HT20)

TX Chain	Channel	Frequency (MHz)	PSD w/o Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	144	5720 (U-NII-3)	-1.92	0.3	3.01	0.1	3.41	30	Pass
	149	5745	0.58	2.8	3.01	0.1	5.91	30	Pass
	157	5785	0.9	3.12	3.01	0.1	6.23	30	Pass
	165	5825	1.09	3.31	3.01	0.1	6.42	30	Pass
1	144	5720 (U-NII-3)	-2.58	-0.36	3.01	0.1	2.75	30	Pass
	149	5745	0.61	2.83	3.01	0.1	5.94	30	Pass
	157	5785	0.95	3.17	3.01	0.1	6.28	30	Pass
	165	5825	1.04	3.26	3.01	0.1	6.37	30	Pass

NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	142	5710 (U-NII-3)	-6.91	-4.69	3.01	-1.68	30	Pass
	151	5755	-3.87	-1.65	3.01	1.36	30	Pass
	159	5795	-3.66	-1.44	3.01	1.57	30	Pass
1	142	5710 (U-NII-3)	-6.94	-4.72	3.01	-1.71	30	Pass
	151	5755	-3.74	-1.52	3.01	1.49	30	Pass
	159	5795	-3.64	-1.42	3.01	1.59	30	Pass

NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.

802.11ac (VHT80):

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	138	5690 (U-NII-3)	-10.63	-8.41	3.01	-5.4	30	Pass
	155	5775	-6.54	-4.32	3.01	-1.31	30	Pass
1	138	5690 (U-NII-3)	-10.56	-8.34	3.01	-5.33	30	Pass
	155	5775	-6.52	-4.3	3.01	-1.29	30	Pass

NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.

802.11ax (HE20)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	144	5720 (U-NII-3)	4.04	6.26	3.01	0.14	9.41	30	Pass
	149	5745	7.2	9.42	3.01	0.14	12.57	30	Pass
	157	5785	7.47	9.69	3.01	0.14	12.84	30	Pass
	165	5825	7.52	9.74	3.01	0.14	12.89	30	Pass
1	144	5720 (U-NII-3)	3.94	6.16	3.01	0.14	9.31	30	Pass
	149	5745	6.38	8.6	3.01	0.14	11.75	30	Pass
	157	5785	6.91	9.13	3.01	0.14	12.28	30	Pass
	165	5825	7	9.22	3.01	0.14	12.37	30	Pass

NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	142	5710 (U-NII-3)	0.09	2.31	3.01	5.32	30	Pass
	151	5755	4.32	6.54	3.01	9.55	30	Pass
	159	5795	4.64	6.86	3.01	9.87	30	Pass
1	142	5710 (U-NII-3)	0.43	2.65	3.01	5.66	30	Pass
	151	5755	3.75	5.97	3.01	8.98	30	Pass
	159	5795	4.15	6.37	3.01	9.38	30	Pass

NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.

802.11ax (HE80):

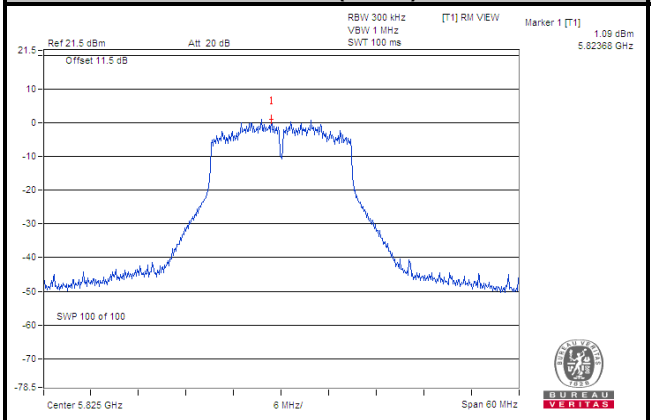
TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	138	5690 (U-NII-3)	-2.62	-0.4	3.01	0.11	2.72	30	Pass
	155	5775	1.63	3.85	3.01	0.11	6.97	30	Pass
1	138	5690 (U-NII-3)	-4.46	-2.24	3.01	0.11	0.88	30	Pass
	155	5775	1.29	3.51	3.01	0.11	6.63	30	Pass

NOTE:

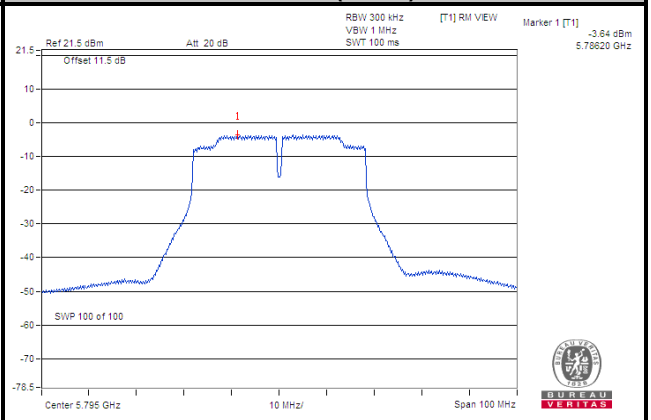
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

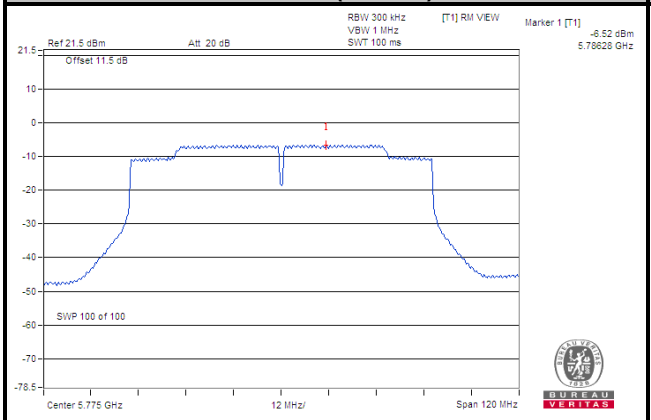
802.11n (HT20)



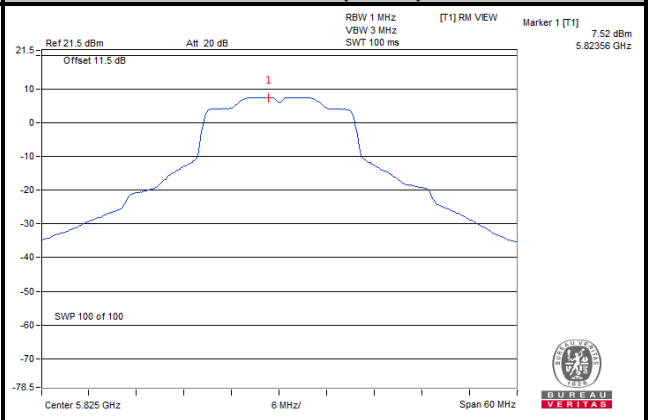
802.11n (HT40)



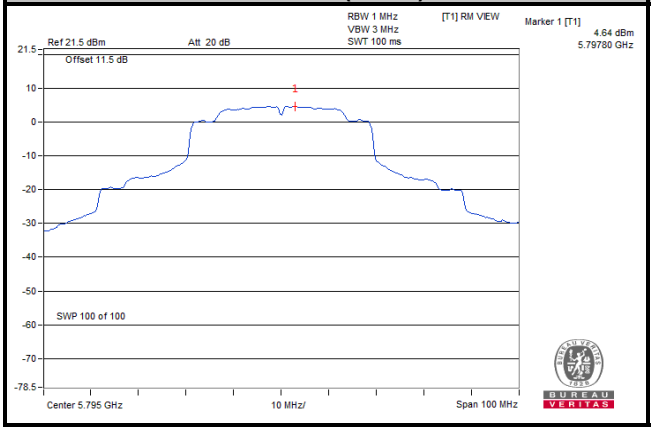
802.11ac (VHT80)



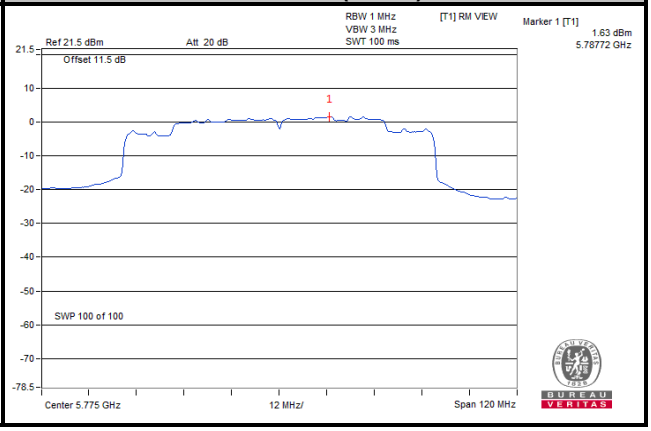
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Partial RU

Chain A

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	7.09	0.14	7.23	11	Pass
100	5500	6.34	0.14	6.48	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (26, 8)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	7.24	0.14	7.38	11	Pass
140	5700	6.15	0.14	6.29	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	6.19	0.14	6.33	11	Pass
100	5500	5.86	0.14	6.00	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	6.25	0.14	6.39	11	Pass
140	5700	4.65	0.14	4.79	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	9.10	0.14	9.24	11	Pass
100	5500	9.78	0.14	9.92	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	9.37	0.14	9.51	11	Pass
140	5700	8.87	0.14	9.01	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	6.66	11	Pass
102	5510	7.11	11	Pass

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
62	5310	7.11	0.74	7.85	11	Pass
134	5670	7.27	0.74	8.01	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	3.77	0.11	3.88	11	Pass
58	5290	4.01	0.11	4.12	11	Pass
106	5530	4.30	0.11	4.41	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160) (996, 67)

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	1.11	11	Pass
50	5250 (U-NII-2A)	-18.06	11	Pass
114	5570	-0.06	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE160) (996, S67)

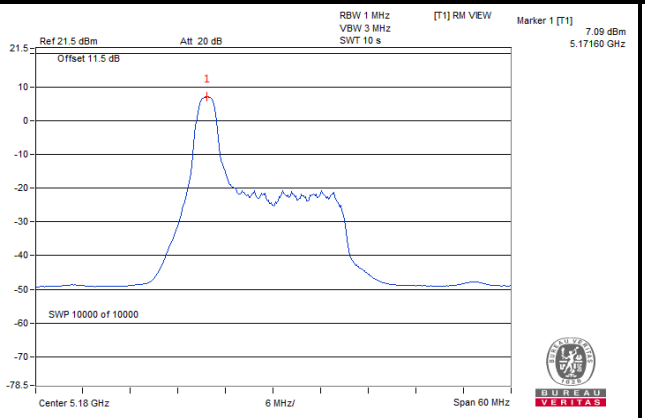
Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-16.15	11	Pass
50	5250 (U-NII-2A)	0.99	11	Pass
114	5570	-0.39	11	Pass

Note:

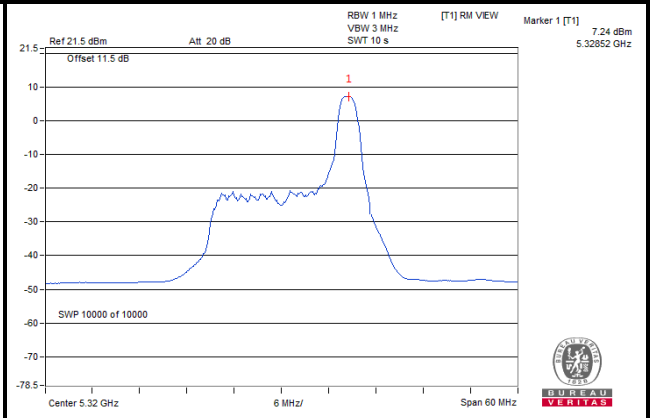
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value

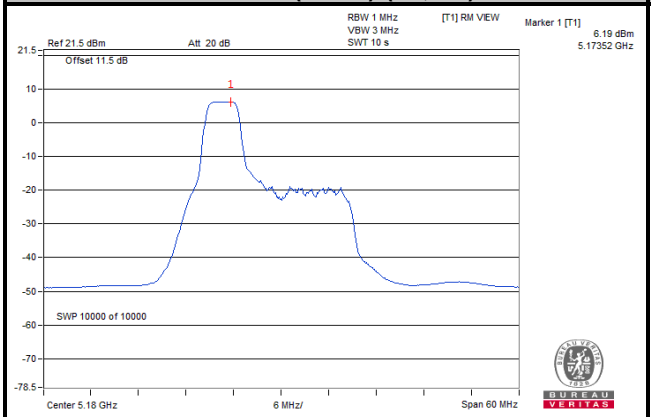
802.11ax (HE20) (26, 0)



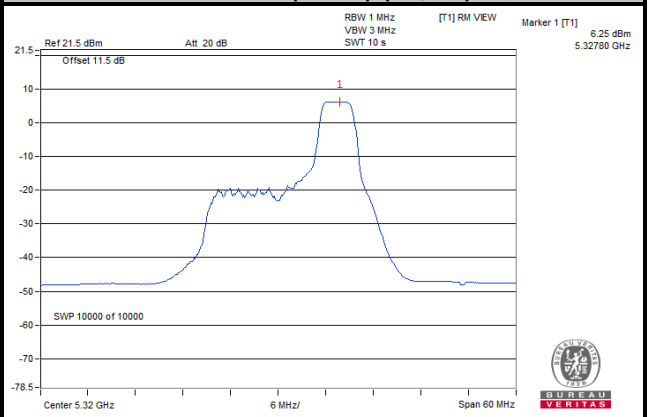
802.11ax (HE20) (26, 8)



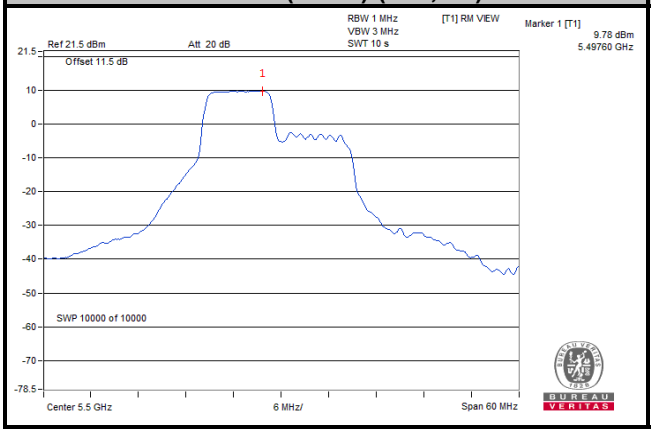
802.11ax (HE20) (52, 37)



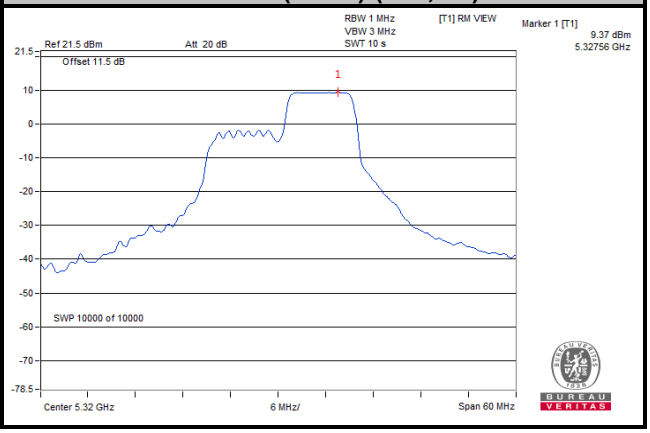
802.11ax (HE20) (52, 40)



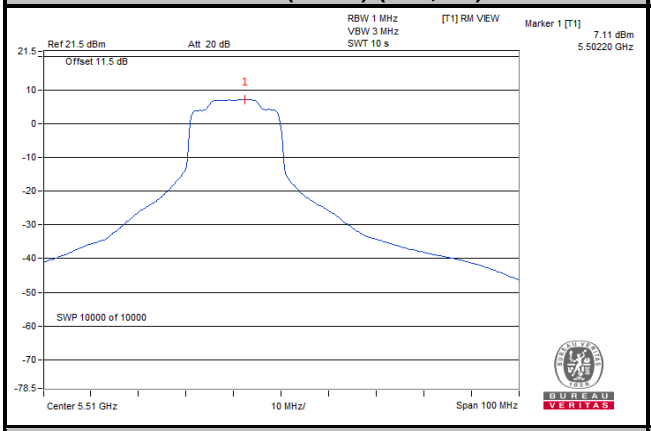
802.11ax (HE20) (106, 53)



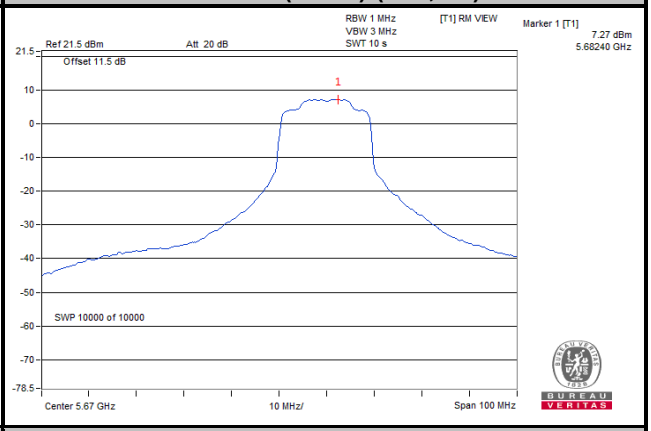
802.11ax (HE20) (106, 54)



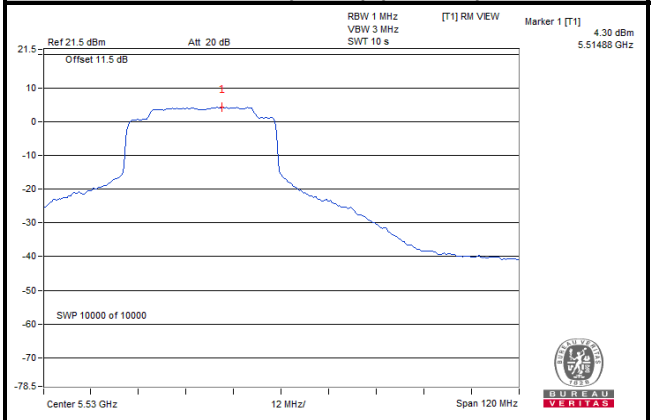
802.11ax (HE40) (242, 61)



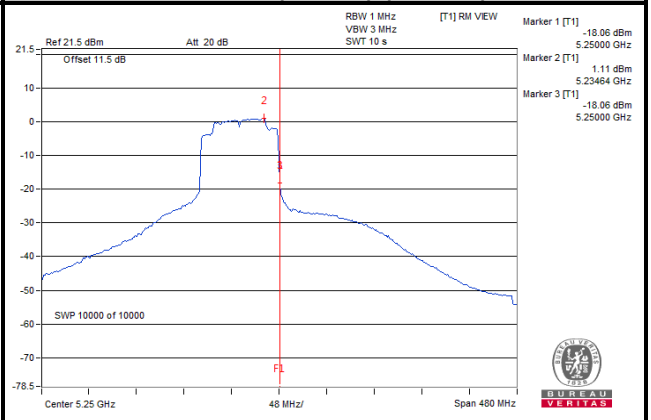
802.11ax (HE40) (242, 62)



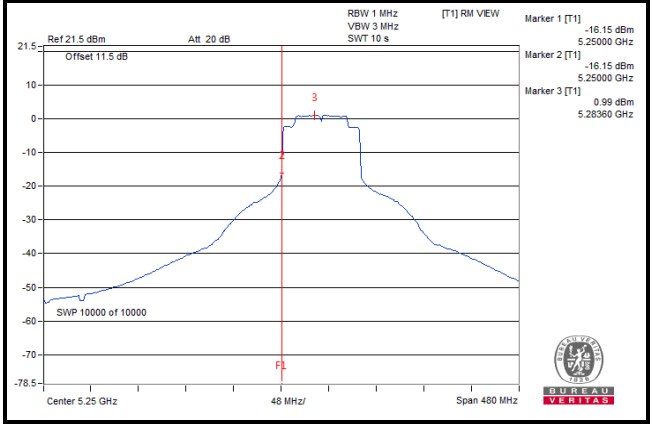
802.11ax (HE80) (484, 65)



802.11ax (HE160) (996, 67)



802.11ax (HE160) (996, S67)



For U-NII-3 Band

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	8.14	10.36	0.14	10.5	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	5.55	7.77	0.14	7.91	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	2.54	4.76	0.14	4.9	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40) (242, 61)

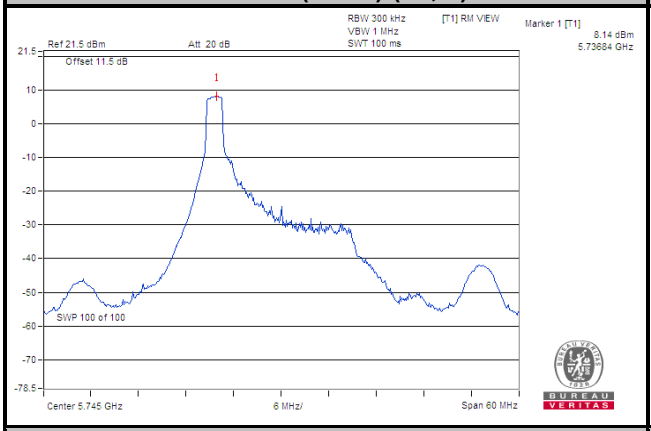
Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
151	5755	-0.02	2.2	30	Pass

802.11ax (HE80) (484, 65)

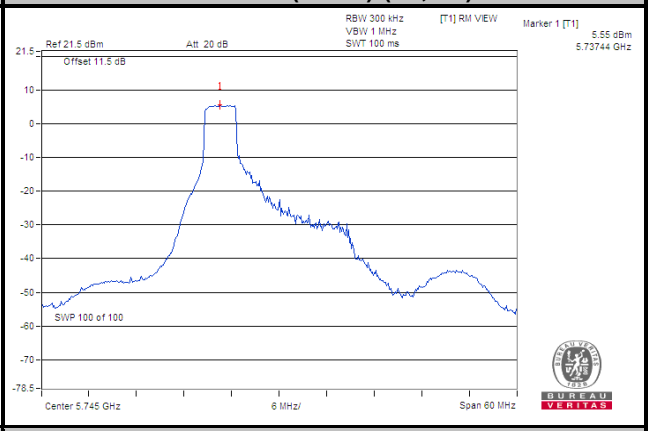
Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
155	5775	-3.46	-1.24	0.11	-1.13	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

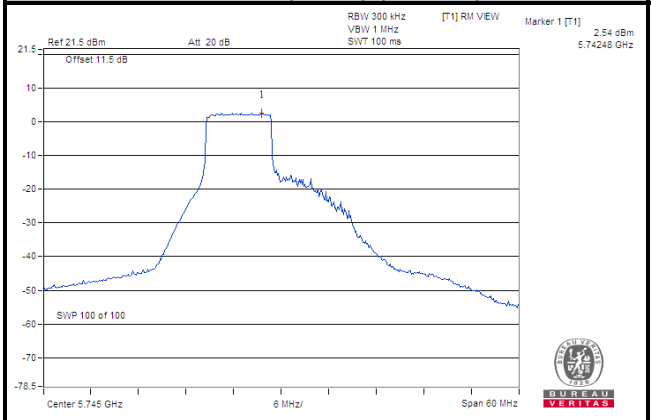
802.11ax (HE20) (26, 0)



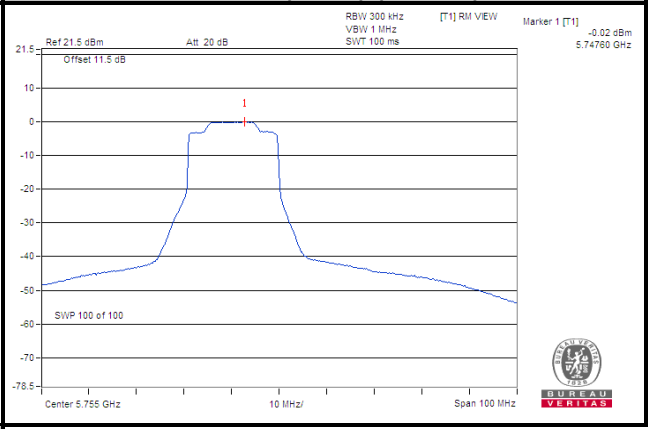
802.11ax (HE20) (52, 37)



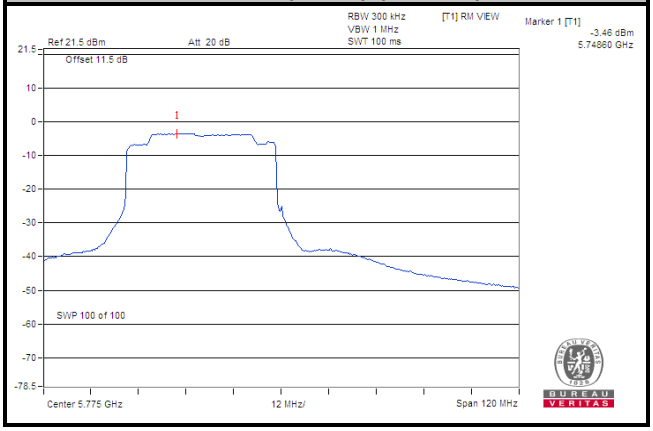
802.11ax (HE20) (106, 53)



802.11ax (HE40) (242, 61)



802.11ax (HE80) (484, 65)



Chain B

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	7.67	0.12	7.79	11	Pass
100	5500	7.84	0.12	7.96	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (26, 8)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	8.05	0.12	8.17	11	Pass
140	5700	7.96	0.12	8.08	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	8.50	0.12	8.62	11	Pass
100	5500	9.07	0.12	9.19	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	8.83	0.12	8.95	11	Pass
140	5700	8.60	0.12	8.72	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	8.80	0.12	8.92	11	Pass
100	5500	9.40	0.12	9.52	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
64	5320	9.84	0.14	9.98	11	Pass
140	5700	10.41	0.14	10.55	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	6.69	11	Pass
102	5510	6.96	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
62	5310	6.59	0.70	7.29	11	Pass
134	5670	6.83	0.70	7.53	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor (dB)	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
42	5210	3.14	0.10	3.24	11	Pass
58	5290	4.09	0.10	4.19	11	Pass
106	5530	4.39	0.10	4.49	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160) (996, 67)

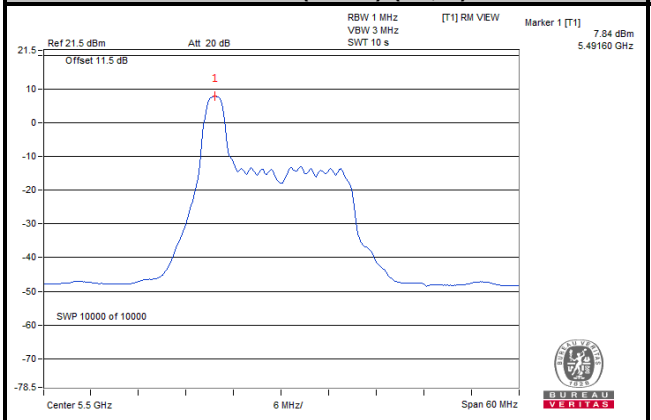
Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	1.05	11	Pass
50	5250 (U-NII-2A)	-16.86	11	Pass
114	5570	0.73	11	Pass

802.11ax (HE160) (996, S67)

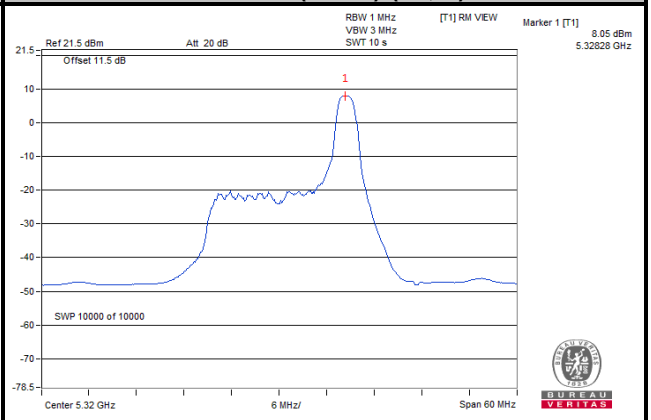
Channel	Frequency (MHz)	PSD (dBm)	Maximum Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	-16.59	11	Pass
50	5250 (U-NII-2A)	1.41	11	Pass
114	5570	1.67	11	Pass

Spectrum Plot of Worst Value

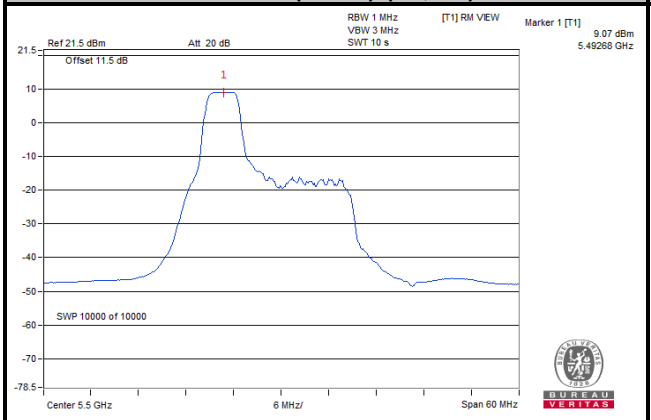
802.11ax (HE20) (26, 0)



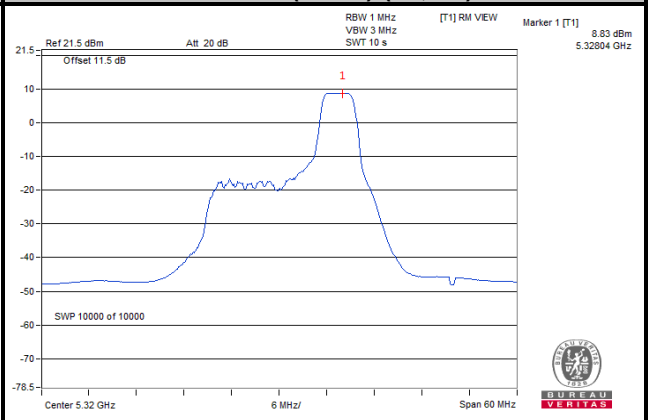
802.11ax (HE20) (26, 8)



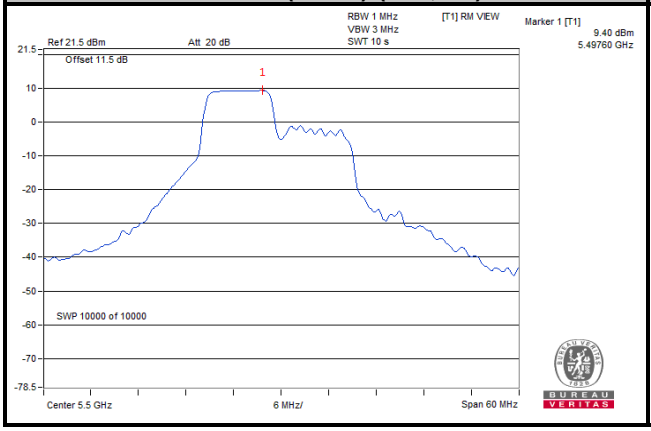
802.11ax (HE20) (52, 37)



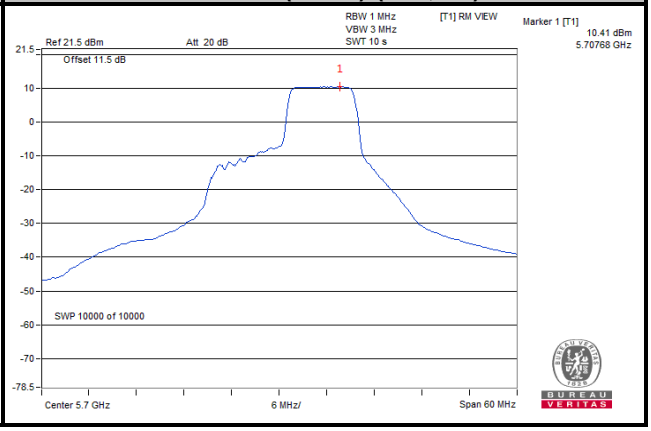
802.11ax (HE20) (52, 40)



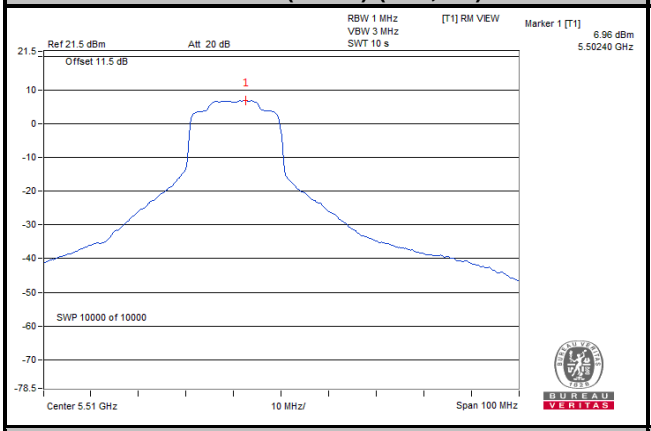
802.11ax (HE20) (106, 53)



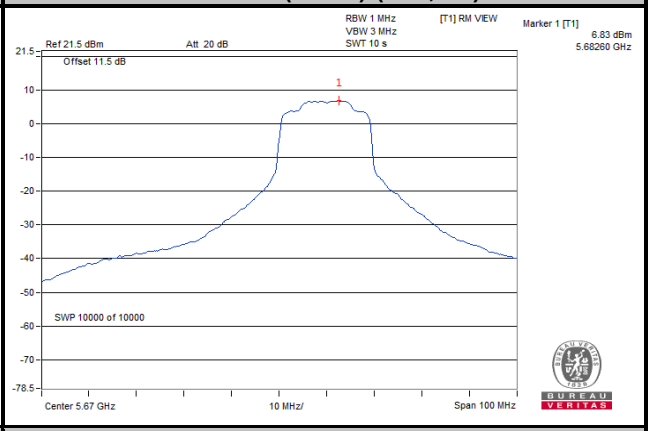
802.11ax (HE20) (106, 54)



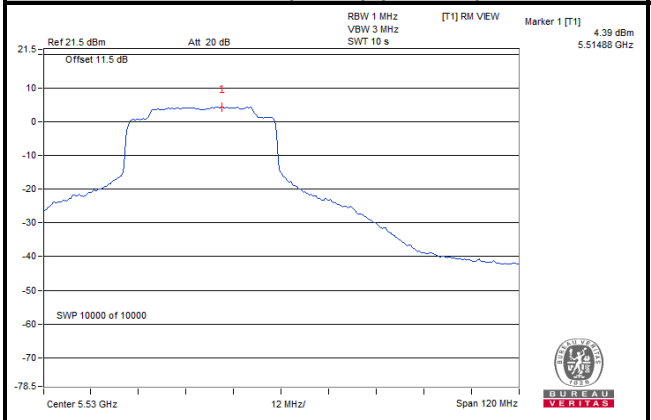
802.11ax (HE40) (242, 61)



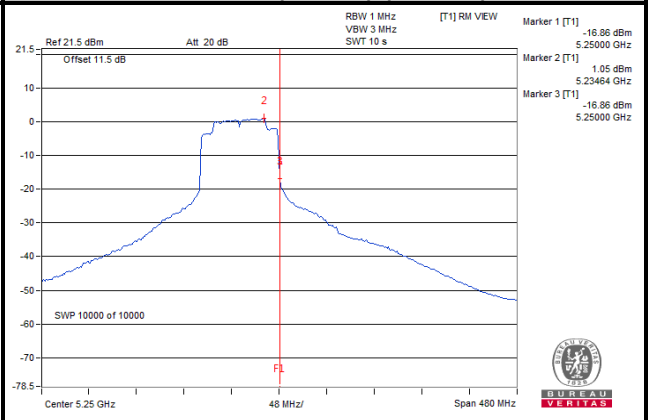
802.11ax (HE40) (242, 62)



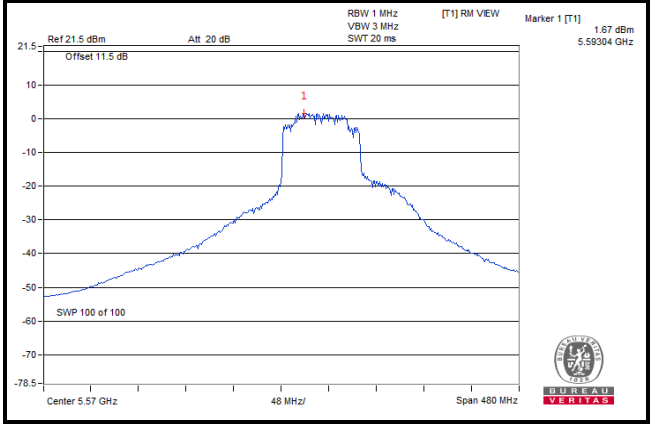
802.11ax (HE80) (484, 65)



802.11ax (HE160) (996, 67)



802.11ax (HE160) (996, S67)



For U-NII-3 Band

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	8.13	10.35	0.12	10.47	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	5.51	7.73	0.12	7.85	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
149	5745	3.17	5.39	0.12	5.51	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40) (242, 61)

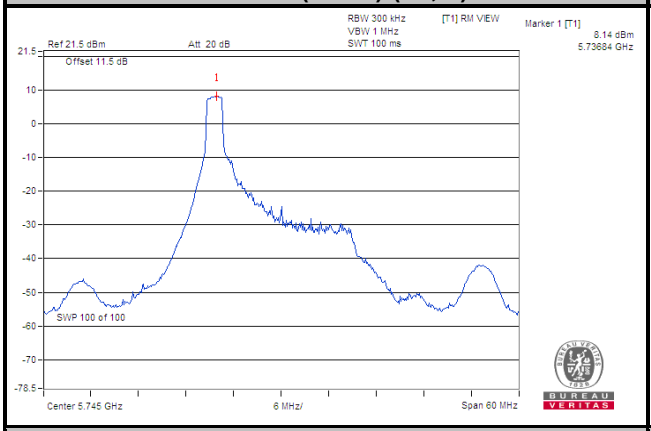
Channel	Frequency (MHz)	PSD w/o Duty Factor		Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)		
151	5755	-0.07	2.15	30	Pass

802.11ax (HE80) (484, 65)

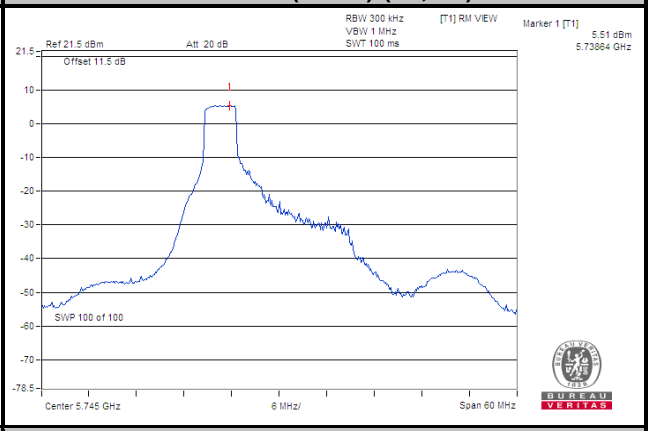
Channel	Frequency (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
		(dBm/300 kHz)	(dBm/500 kHz)				
155	5775	-2.59	-0.37	0.10	-0.27	30	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

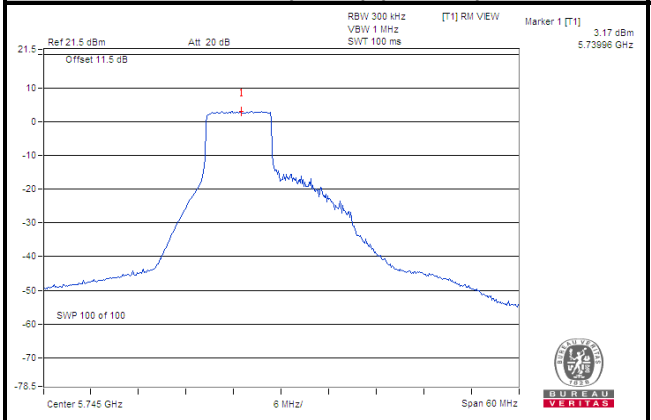
802.11ax (HE20) (26, 0)



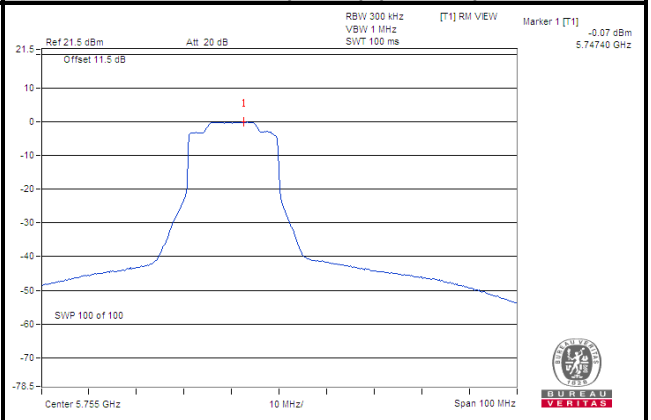
802.11ax (HE20) (52, 37)



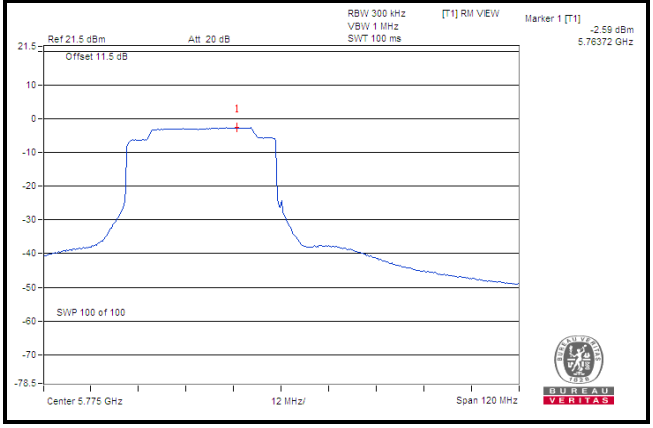
802.11ax (HE20) (106, 53)



802.11ax (HE40) (242, 61)



802.11ax (HE80) (484, 65)



MIMO

802.11ax (HE20) (26, 0)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
36	5180	5.88	6.07	0.14	9.13	11	Pass
100	5500	5.73	5.42	0.14	8.73	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (26, 08)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
64	5320	5.20	5.15	0.14	8.33	11	Pass
140	5700	5.33	5.15	0.14	8.40	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 37)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
36	5180	5.98	5.90	0.14	9.09	11	Pass
100	5500	5.61	5.68	0.14	8.80	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (52, 40)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
64	5320	5.35	5.32	0.14	8.49	11	Pass
140	5700	5.48	5.27	0.14	8.53	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 53)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
36	5180	6.05	5.81	0.14	9.09	11	Pass
100	5500	5.96	5.75	0.14	9.01	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20) (106, 54)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
64	5320	4.89	5.08	0.14	8.14	11	Pass
140	5700	4.68	5.16	0.14	8.08	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40) (242, 61)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
38	5190	5.42	5.51	8.48	11	Pass
102	5510	4.64	5.22	7.95	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ax (HE40) (242, 62)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
62	5310	5.40	5.62	0.09	8.61	11	Pass
134	5670	5.57	5.20	0.09	8.49	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80) (484, 65)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B				
42	5210	3.46	3.23	0.11	6.47	11	Pass
58	5290	3.69	3.65	0.11	6.79	11	Pass
106	5530	4.06	3.70	0.11	7.00	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160) (996, 67)

Channel	Frequency (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
50	5250 (U-NII-1)	-0.37	-0.67	2.49	11	Pass
50	5250 (U-NII-2A)	-18.45	-18.50	-15.47	11	Pass
114	5570	-0.30	-3.50	1.40	11	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

802.11ax (HE160) (996, S67)

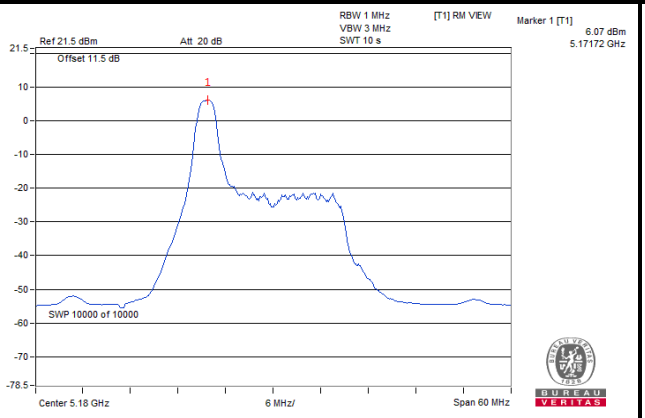
Channel	Frequency (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain A	Chain B			
50	5250 (U-NII-1)	-17.61	-18.13	-14.85	11	Pass
50	5250 (U-NII-2A)	0.22	-0.05	3.10	11	Pass
114	5570	-1.97	0.12	2.21	11	Pass

Note:

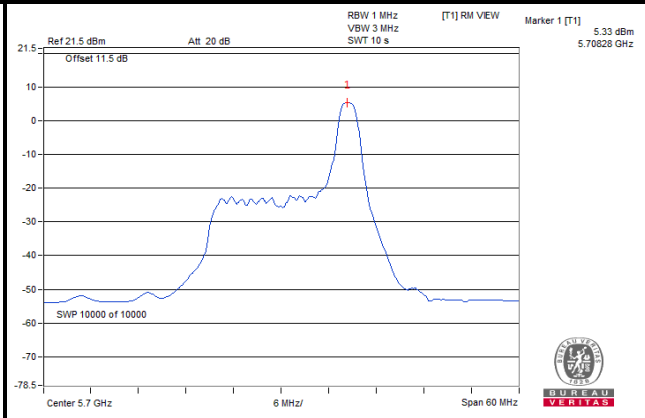
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.6$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2A Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.06$ dBi < 6 dBi, so there is no need to reduce the power density limit.
   For U-NII-2C Band:
   Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 5.05$ dBi < 6 dBi, so there is no need to reduce the power density limit.

Spectrum Plot of Worst Value

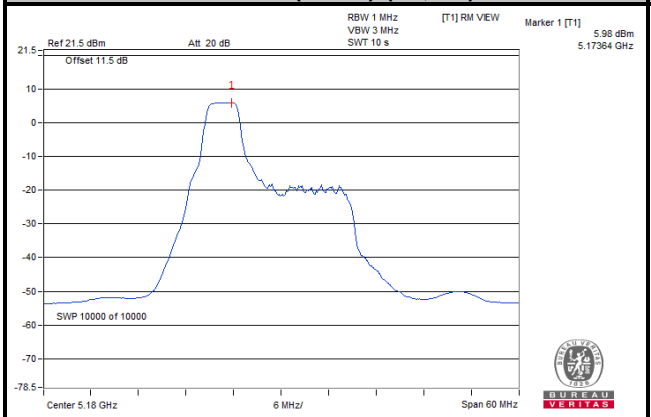
802.11ax (HE20) (26, 0)



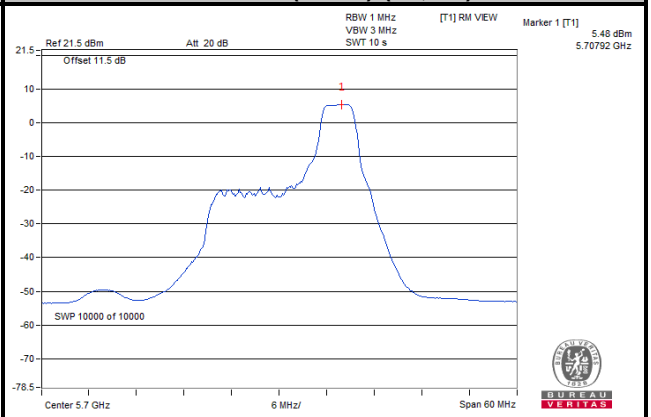
802.11ax (HE20) (26, 8)



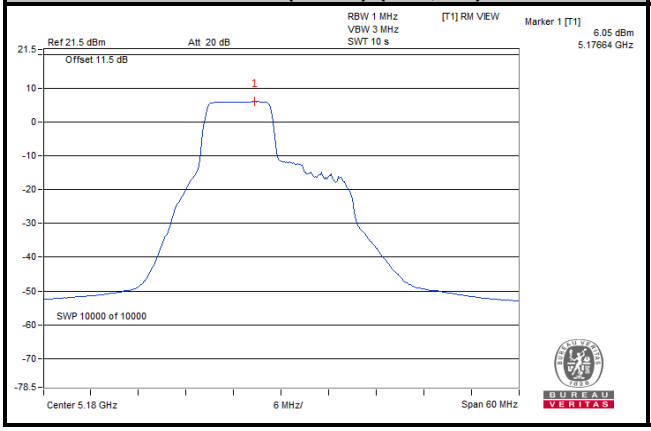
802.11ax (HE20) (52, 37)



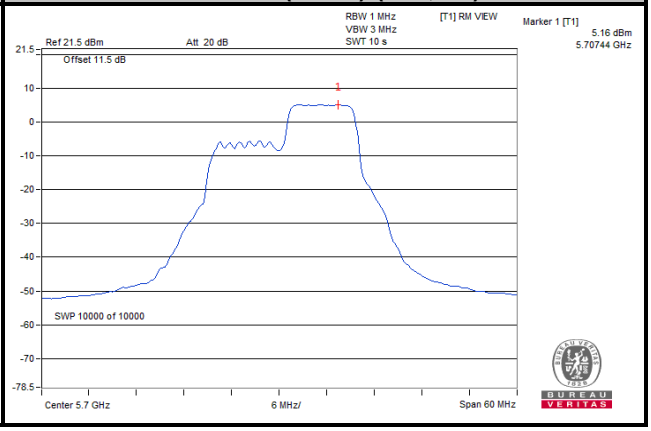
802.11ax (HE20) (52, 40)



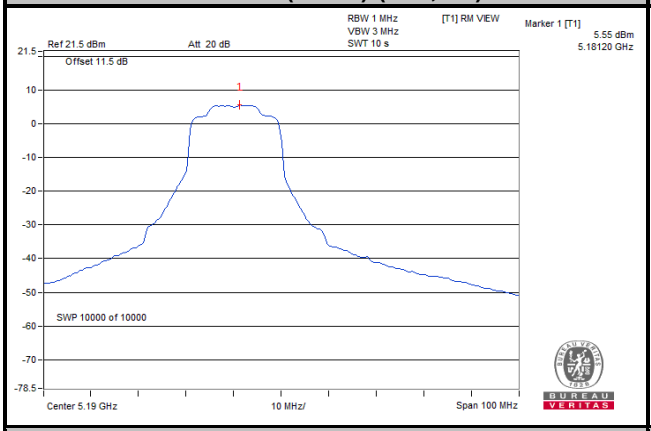
802.11ax (HE20) (106, 53)



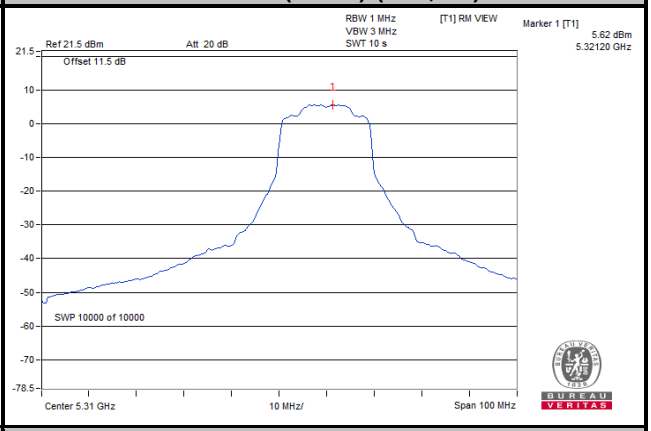
802.11ax (HE20) (106, 54)



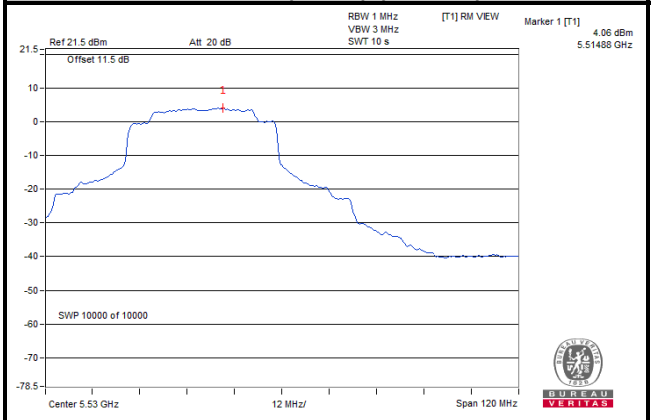
802.11ax (HE40) (242, 61)



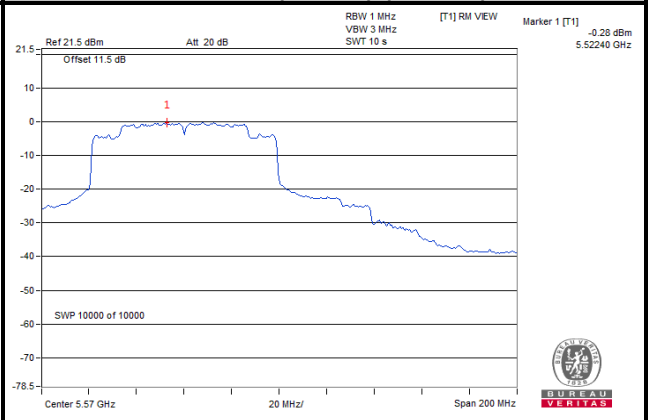
802.11ax (HE40) (242, 62)



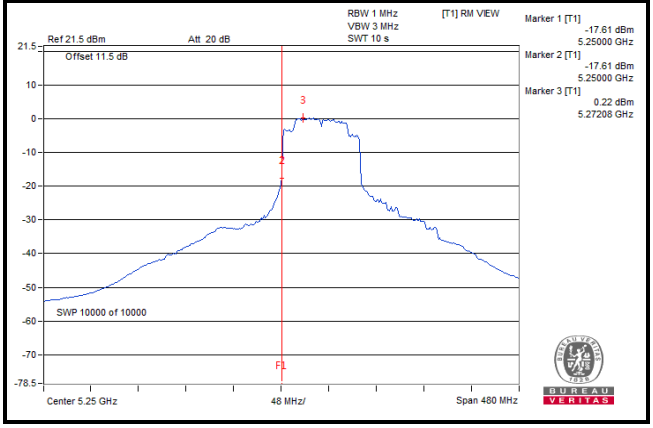
802.11ax (HE80) (484, 65)



802.11ax (HE160) (996, 67)



802.11ax (HE160) (996, S67)



For U-NII-3 Band

802.11ax (HE20) (26, 0)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	149	5745	8.16	10.38	3.01	0.14	13.53	30	Pass
1	149	5745	8.22	10.44	3.01	0.14	13.59	30	Pass

NOTE:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = 10log[($10^{G1/10}$ + $10^{G2/10}$ + …. + $10^{GN/10}$) / N_{ANT}] = 4.29 < 6 dBi, so the limit no need to reduced.

802.11ax (HE20) (52, 37)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	149	5745	5.41	7.63	3.01	0.14	10.78	30	Pass
1	149	5745	5.47	7.69	3.01	0.14	10.84	30	Pass

NOTE:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = 10log[($10^{G1/10}$ + $10^{G2/10}$ + …. + $10^{GN/10}$) / N_{ANT}] = 4.29 < 6 dBi, so the limit no need to reduced.

802.11ax (HE20) (106, 53)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	149	5745	2.11	4.33	3.01	0.14	7.48	30	Pass
1	149	5745	2.52	4.74	3.01	0.14	7.89	30	Pass

NOTE:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = 10log[($10^{G1/10}$ + $10^{G2/10}$ + …. + $10^{GN/10}$) / N_{ANT}] = 4.29 < 6 dBi, so the limit no need to reduced.

802.11ax (HE40) (242, 61)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)				
0	151	5755	-0.05	2.17	3.01	5.18	30	Pass
1	151	5755	-0.04	2.18	3.01	5.19	30	Pass

NOTE:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = 10log[($10^{G1/10}$ + $10^{G2/10}$ + …. + $10^{GN/10}$) / N_{ANT}] = 4.29 < 6 dBi, so the limit no need to reduced.
3. Refer to section 3.3 for duty cycle spectrum plot.

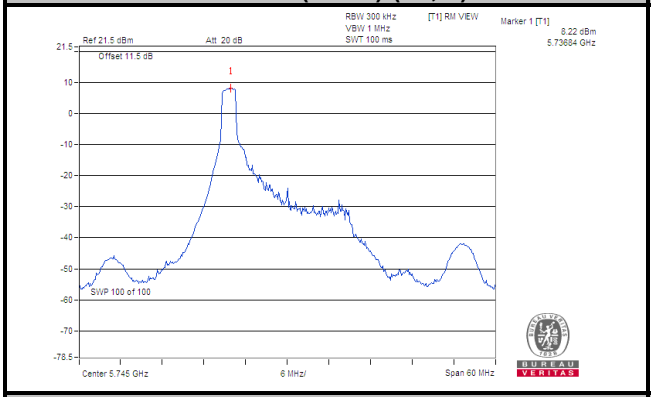
802.11ax (HE80) (484, 65)

TX Chain	Channel	Frequency (MHz)	PSD		10 log (N=2) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300 kHz)	(dBm/500 kHz)					
0	155	5775	-3.17	-0.95	3.01	0.11	2.17	30	Pass
1	155	5775	-3.48	-1.26	3.01	0.11	1.86	30	Pass

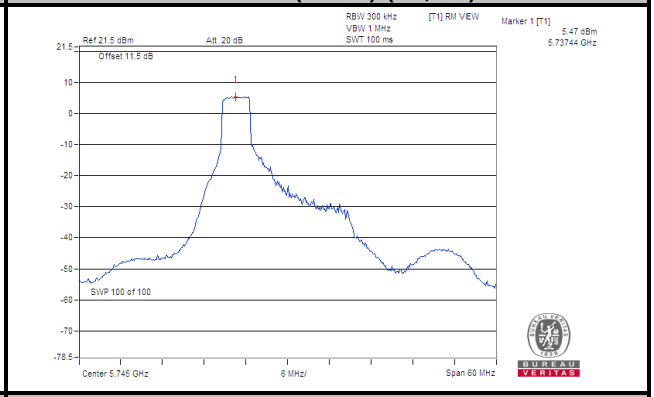
NOTE:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is measure value add 10 log (N_{ANT}) dB.
2. Uncorrelated, Directional gain = $10\log[(10^{G1/10} + 10^{G2/10} + \ldots. + 10^{GN/10}) / N_{ANT}] = 4.29 < 6$ dBi, so the limit no need to reduced.
3. Refer to section 3.3 for duty cycle spectrum plot.

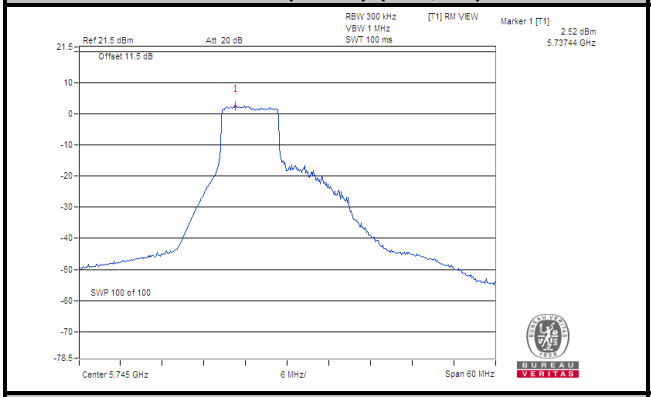
802.11ax (HE20) (26, 0)



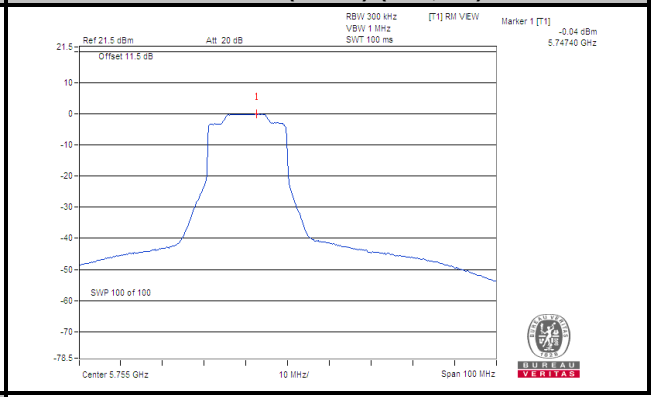
802.11ax (HE20) (52, 37)



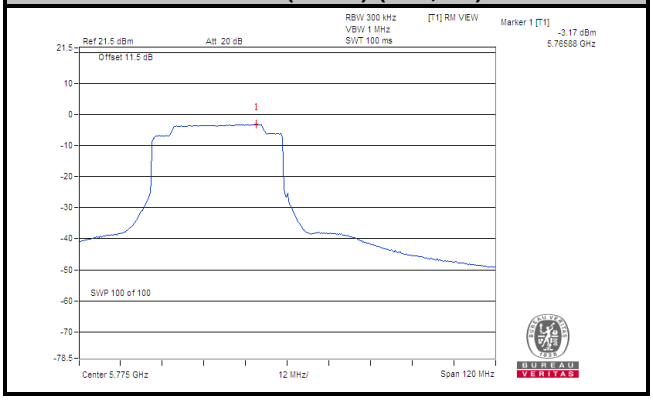
802.11ax (HE20) (106, 53)



802.11ax (HE40) (242, 61)



802.11ax (HE80) (484, 65)

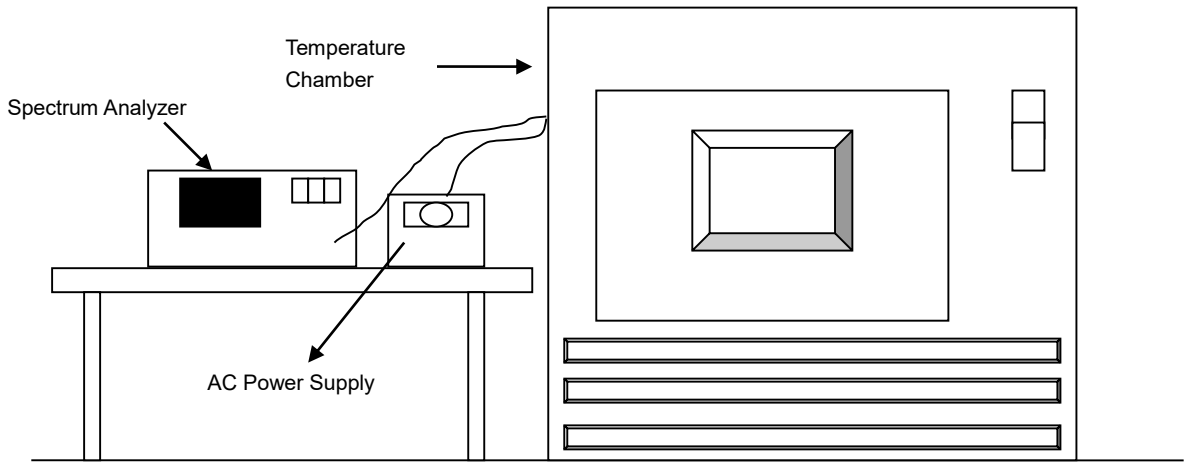


4.6 Frequency Stability

4.6.1 Limit of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation.

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Chain A

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
40	120	5180.0239	PASS	5180.0245	PASS	5180.0252	PASS	5180.0244	PASS
30	120	5179.9811	PASS	5179.9814	PASS	5179.9827	PASS	5179.9825	PASS
20	120	5180.0062	PASS	5180.0095	PASS	5180.0095	PASS	5180.0068	PASS
10	120	5180.0099	PASS	5180.0088	PASS	5180.0099	PASS	5180.0103	PASS
0	120	5179.9901	PASS	5179.9898	PASS	5179.9908	PASS	5179.9908	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0071	PASS	5180.0087	PASS	5180.0102	PASS	5180.0078	PASS
	120	5180.0062	PASS	5180.0095	PASS	5180.0095	PASS	5180.0068	PASS
	102	5180.0065	PASS	5180.0095	PASS	5180.0094	PASS	5180.0063	PASS

Chain B

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
40	120	5179.9996	PASS	5180.0007	PASS	5180.0024	PASS	5180.0014	PASS
30	120	5180.0116	PASS	5180.0107	PASS	5180.0131	PASS	5180.0118	PASS
20	120	5180.012	PASS	5180.0135	PASS	5180.0162	PASS	5180.0131	PASS
10	120	5180.0011	PASS	5180.0047	PASS	5180.0046	PASS	5180.0061	PASS
0	120	5179.982	PASS	5179.9803	PASS	5179.9828	PASS	5179.981	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0129	PASS	5180.0144	PASS	5180.0153	PASS	5180.0132	PASS
	120	5180.012	PASS	5180.0135	PASS	5180.0162	PASS	5180.0131	PASS
	102	5180.0119	PASS	5180.0143	PASS	5180.0166	PASS	5180.013	PASS

MIMO

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
40	120	5180.013	PASS	5180.0172	PASS	5180.0151	PASS	5180.0142	PASS
30	120	5180.023	PASS	5180.0239	PASS	5180.025	PASS	5180.0254	PASS
20	120	5180.0105	PASS	5180.0106	PASS	5180.0101	PASS	5180.0079	PASS
10	120	5179.9916	PASS	5179.9894	PASS	5179.9875	PASS	5179.9896	PASS
0	120	5179.9871	PASS	5179.9855	PASS	5179.9881	PASS	5179.9851	PASS

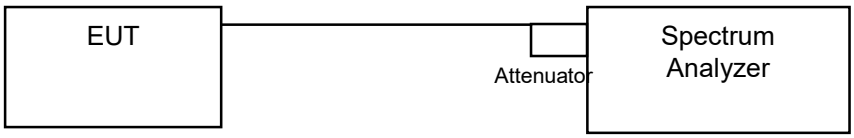
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0098	PASS	5180.01	PASS	5180.0096	PASS	5180.0089	PASS
	120	5180.0105	PASS	5180.0106	PASS	5180.0101	PASS	5180.0079	PASS
	102	5180.01	PASS	5180.0105	PASS	5180.0097	PASS	5180.0074	PASS

4.7 6 dB Bandwidth Measurement

4.7.1 Limits of 6 dB Bandwidth Measurement

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

MEASUREMENT PROCEDURE REF

a. Set resolution bandwidth (RBW) = 100 kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.7.7 Test Results

Chain A

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	2.57	0.5	Pass
149	5745	15.16	0.5	Pass
157	5785	15.16	0.5	Pass
165	5825	15.18	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	2.57	0.5	Pass
149	5745	15.15	0.5	Pass
157	5785	15.19	0.5	Pass
165	5825	15.19	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 (U-NII-3)	2.60	0.5	Pass
151	5755	35.26	0.5	Pass
159	5795	35.26	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 (U-NII-3)	1.40	0.5	Pass
155	5775	74.05	0.5	Pass

802.11ax (HE20)

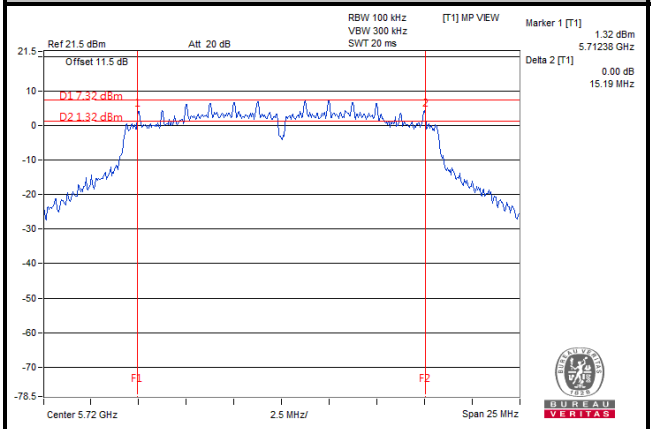
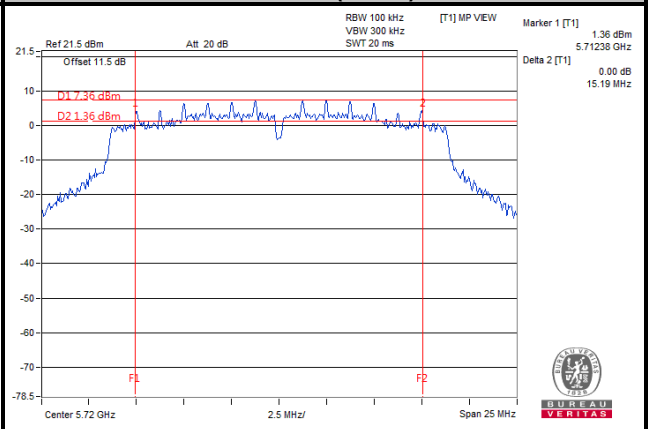
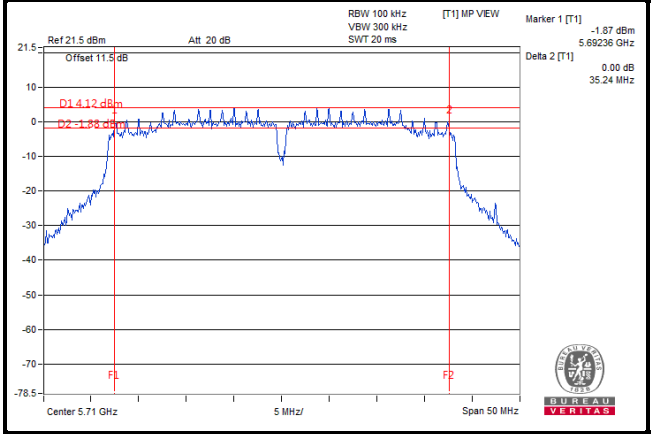
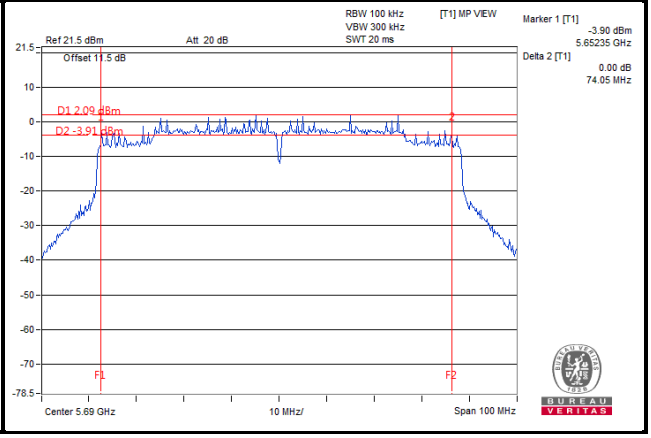
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	2.91	0.5	Pass
149	5745	16.98	0.5	Pass
157	5785	16.41	0.5	Pass
165	5825	16.26	0.5	Pass

802.11ax (HE40)

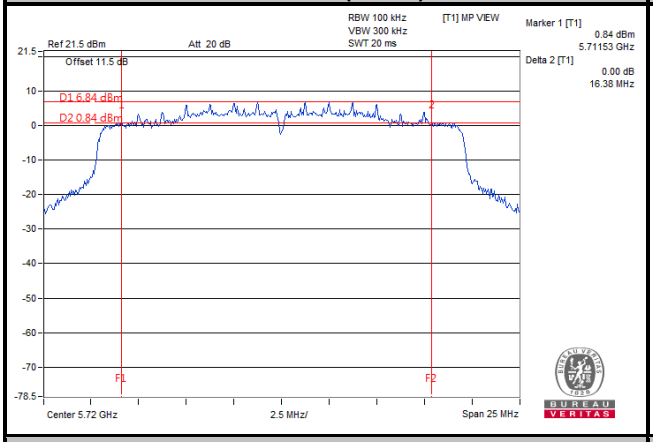
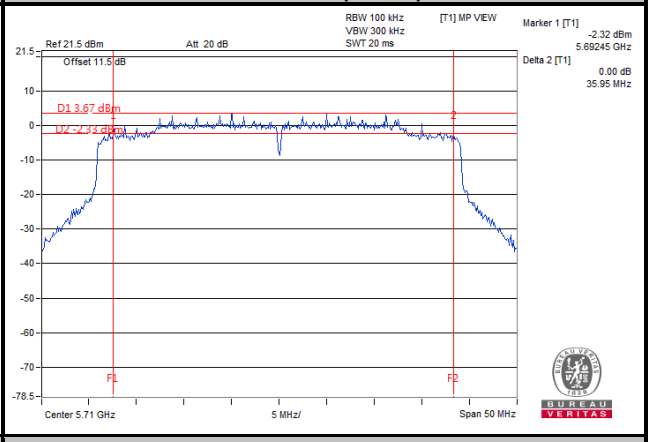
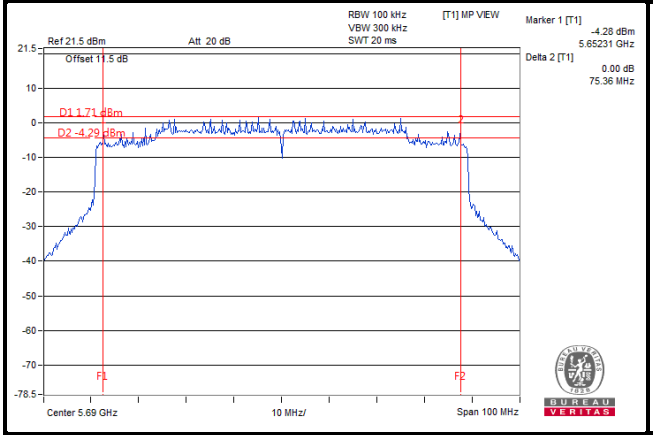
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 (U-NII-3)	3.40	0.5	Pass
151	5755	33.37	0.5	Pass
159	5795	36.91	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 (U-NII-3)	2.67	0.5	Pass
155	5775	75.15	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

Spectrum Plot of Worst Value	
802.11ax (HE20)	802.11ax (HE40)
	
802.11ax (HE80)	
	

Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

Chain B

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	2.57	0.5	Pass
149	5745	15.18	0.5	Pass
157	5785	15.20	0.5	Pass
165	5825	15.20	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	2.57	0.5	Pass
149	5745	15.18	0.5	Pass
157	5785	15.20	0.5	Pass
165	5825	15.20	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 (U-NII-3)	2.62	0.5	Pass
151	5755	35.12	0.5	Pass
159	5795	32.73	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 (U-NII-3)	2.60	0.5	Pass
155	5775	68.93	0.5	Pass

802.11ax (HE20)

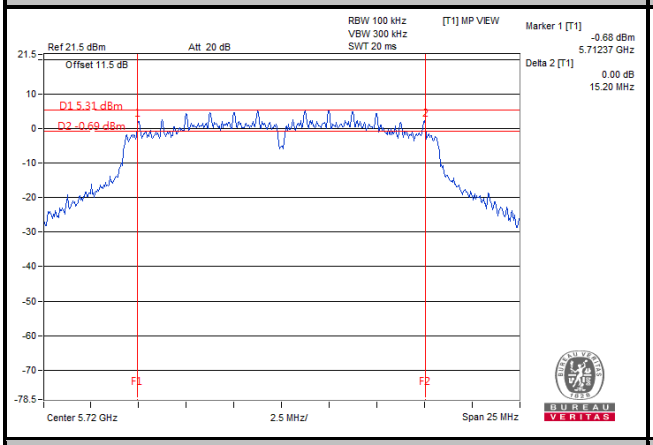
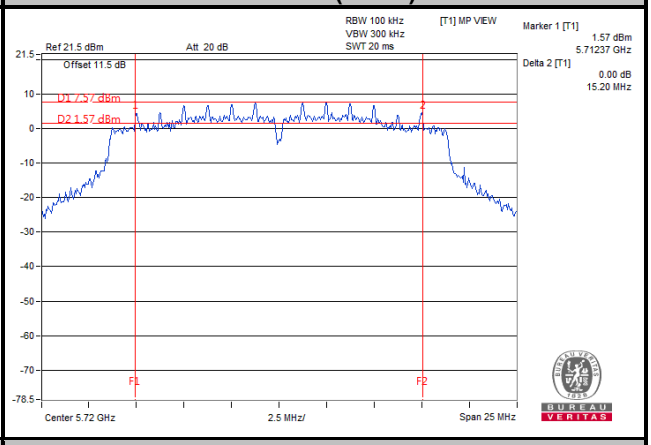
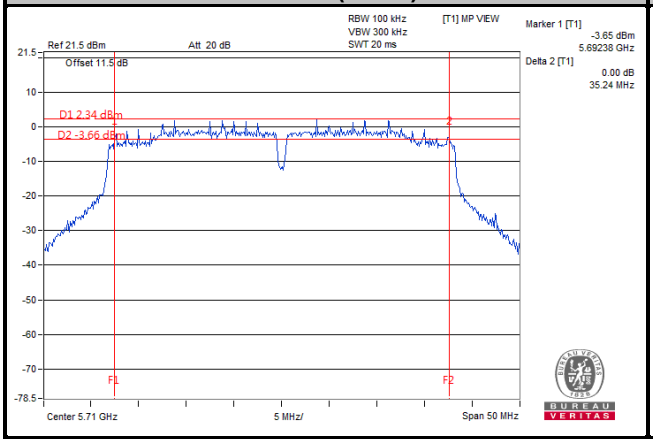
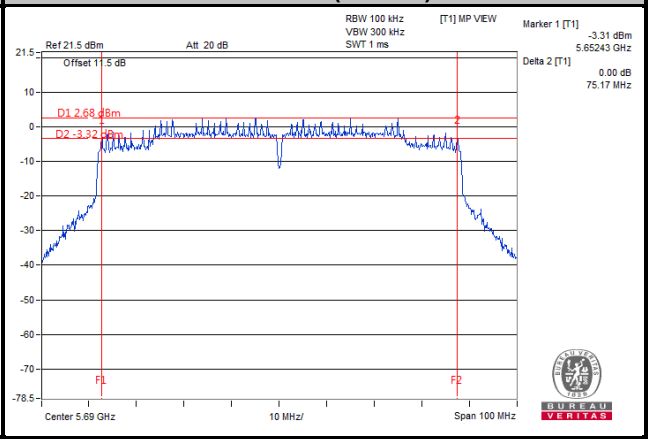
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 (U-NII-3)	3.11	0.5	Pass
149	5745	15.56	0.5	Pass
157	5785	16.97	0.5	Pass
165	5825	16.86	0.5	Pass

802.11ax (HE40)

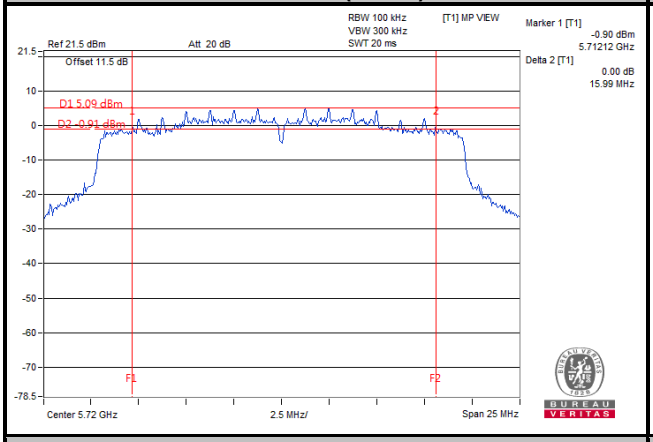
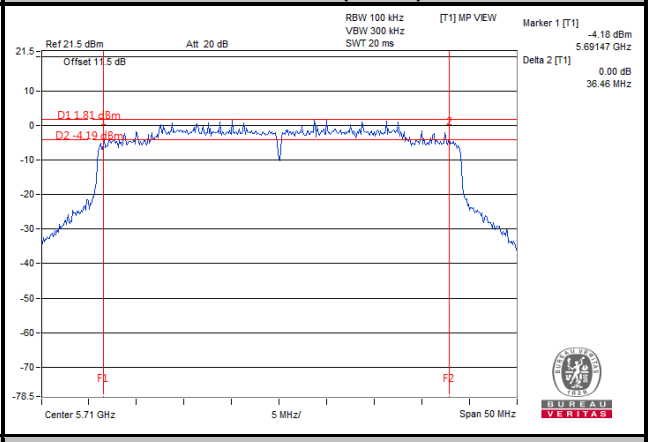
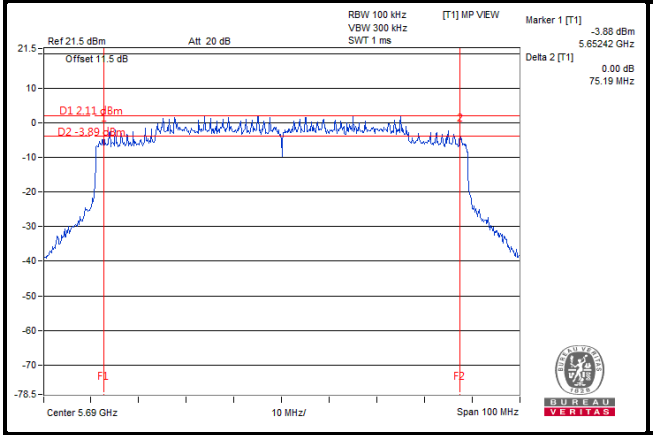
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 (U-NII-3)	2.93	0.5	Pass
151	5755	35.16	0.5	Pass
159	5795	35.25	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 (U-NII-3)	2.61	0.5	Pass
155	5775	74.14	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

Spectrum Plot of Worst Value	
802.11ax (HE20)	802.11ax (HE40)
	
802.11ax (HE80)	
	

Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

MIMO

802.11n (HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
144	5720 (U-NII-3)	2.57	2.57	0.5	Pass
149	5745	15.20	15.20	0.5	Pass
157	5785	15.21	15.20	0.5	Pass
165	5825	15.20	15.20	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
142	5710 (U-NII-3)	2.53	2.50	0.5	Pass
151	5755	35.17	33.91	0.5	Pass
159	5795	33.99	32.65	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
138	5690 (U-NII-3)	2.61	2.59	0.5	Pass
155	5775	75.30	71.50	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
144	5720 (U-NII-3)	2.54	3.85	0.5	Pass
149	5745	15.19	15.17	0.5	Pass
157	5785	15.13	16.46	0.5	Pass
165	5825	15.47	15.15	0.5	Pass

802.11ax (HE40)

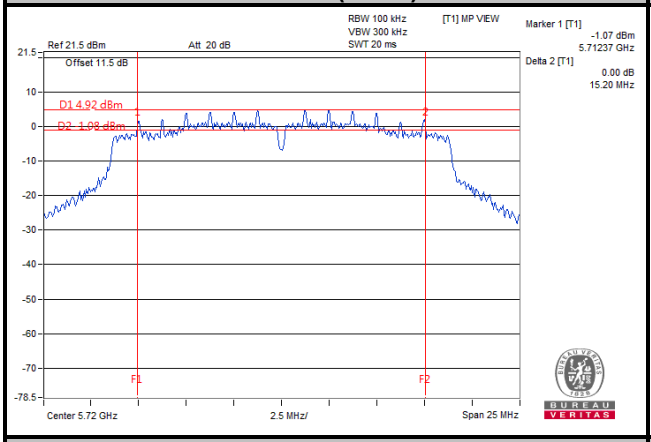
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
142	5710 (U-NII-3)	2.62	2.60	0.5	Pass
151	5755	35.26	35.16	0.5	Pass
159	5795	35.44	35.20	0.5	Pass

802.11ax (HE80)

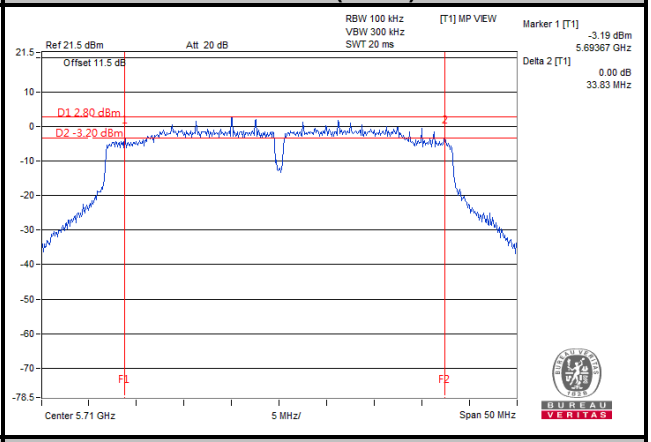
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain A	Chain B		
138	5690 (U-NII-3)	1.43	2.60	0.5	Pass
155	5775	75.32	74.03	0.5	Pass

Spectrum Plot of Worst Value

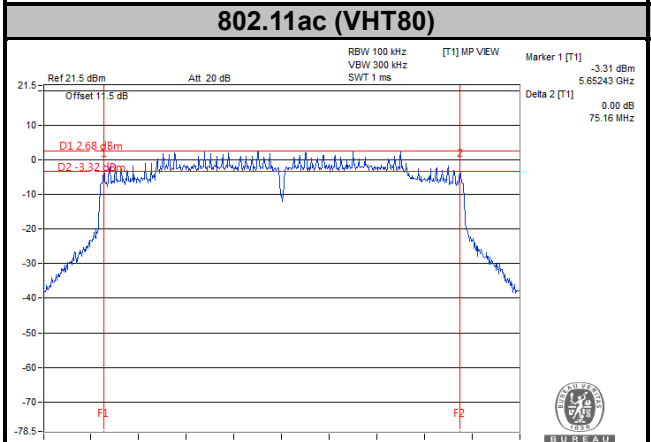
802.11n (HT20)



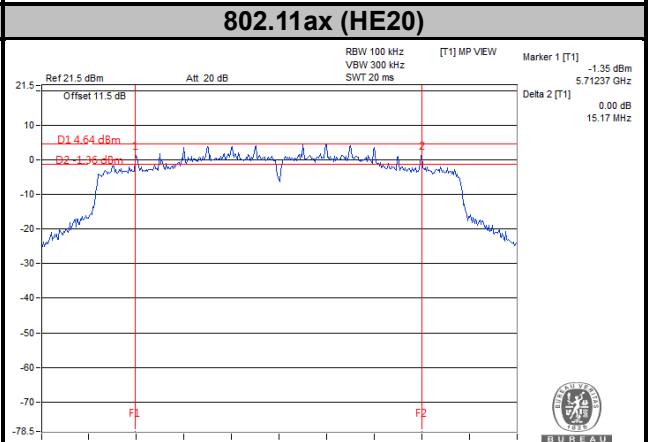
802.11n (HT40)



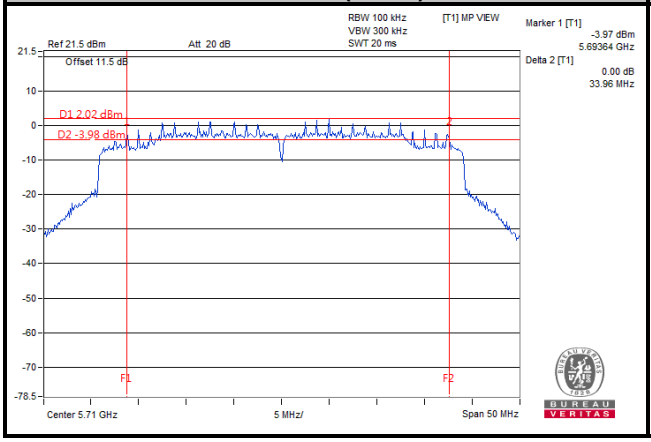
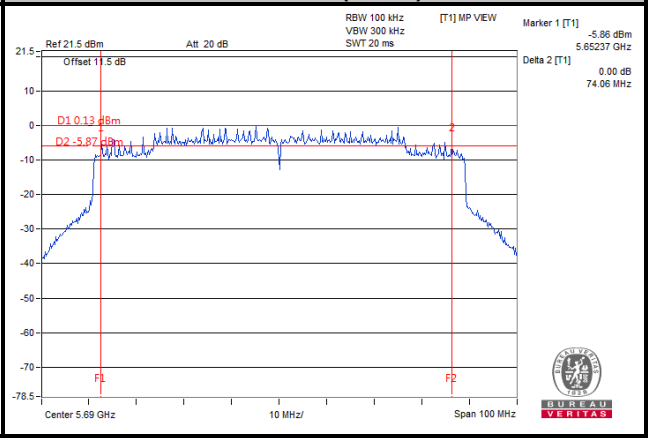
802.11ac (VHT80)



802.11ax (HE20)



Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

Spectrum Plot of Worst Value	
802.11ax (HE40)	802.11ax (HE80)
	

Note:
For Ch138 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch144 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz
For Ch142 (UNII-3 Band): The 6 dB bandwidth above 5725 MHz = Marker 1 + Delta 2 – 5725 MHz

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

--- END ---