

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fbr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
* 1.125	43.46	PK-U	27.6	-33.9	37.16	-	-	74	-36.84	-	-	74	113	H
* 1.125	35.5	ADR	27.6	-33.9	29.2	54	-24.8	-	-	-	-	74	113	H
* 1.44	54.54	PK-U	28.3	-33.4	49.44	-	-	74	-24.56	-	-	264	180	H
* 1.44	35.02	ADR	28.3	-33.4	29.92	54	-24.08	-	-	-	-	264	180	H
* 1.375	42.41	PK-U	28.5	-33.3	37.61	-	-	74	-36.39	-	-	212	262	V
* 1.375	32.22	ADR	28.5	-33.3	27.42	54	-26.58	-	-	-	-	212	262	V
* 8.317	36.29	PK-U	36.1	-25.9	46.49	-	-	74	-27.51	-	-	359	144	V
* 8.317	23.67	ADR	36.1	-25.9	33.87	54	-20.13	-	-	-	-	359	144	V
2.4	50.45	PK-U	32	-32.6	49.85	-	-	-	-	68.2	-18.35	208	136	H
2.4	44.81	ADR	32	-32.6	44.21	-	-	-	-	-	-	208	136	H
2.4	44.62	PK-U	32	-32.6	44.02	-	-	-	-	68.2	-24.18	200	105	V
2.4	39.81	ADR	32	-32.6	39.21	-	-	-	-	-	-	200	105	V

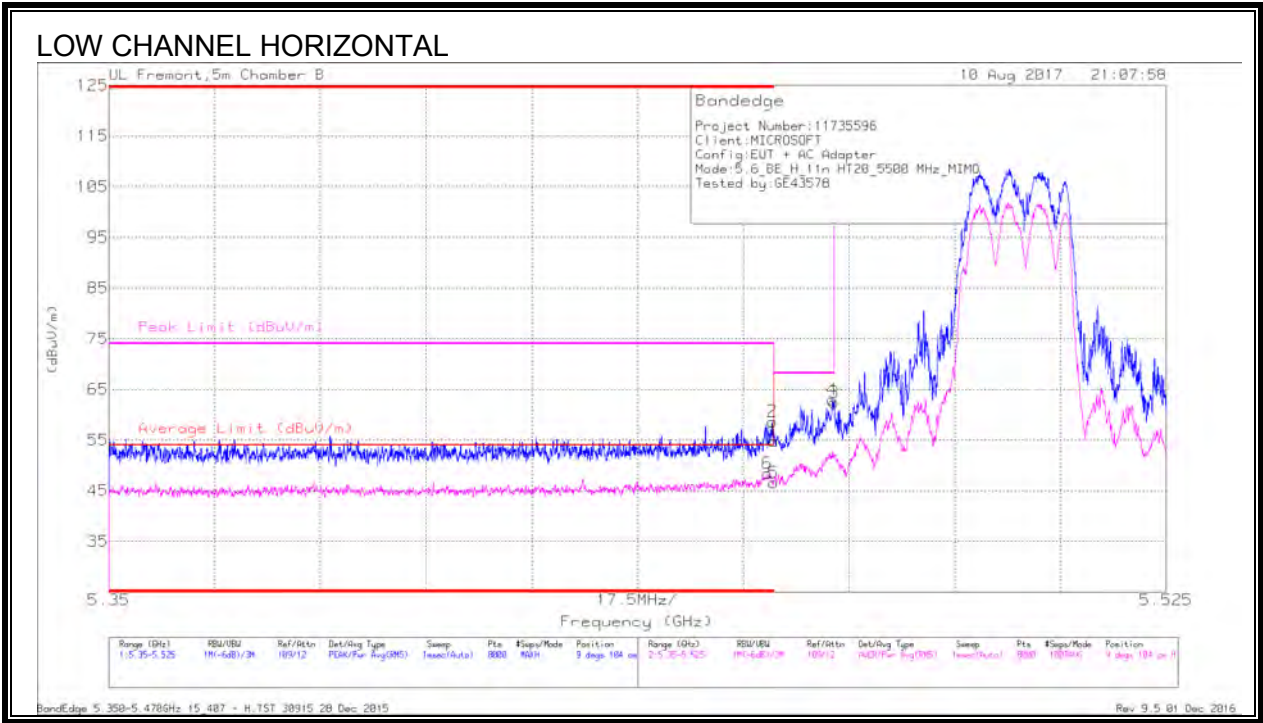
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.10.11n HT20 2TX MODE IN THE 5.6GHz BAND

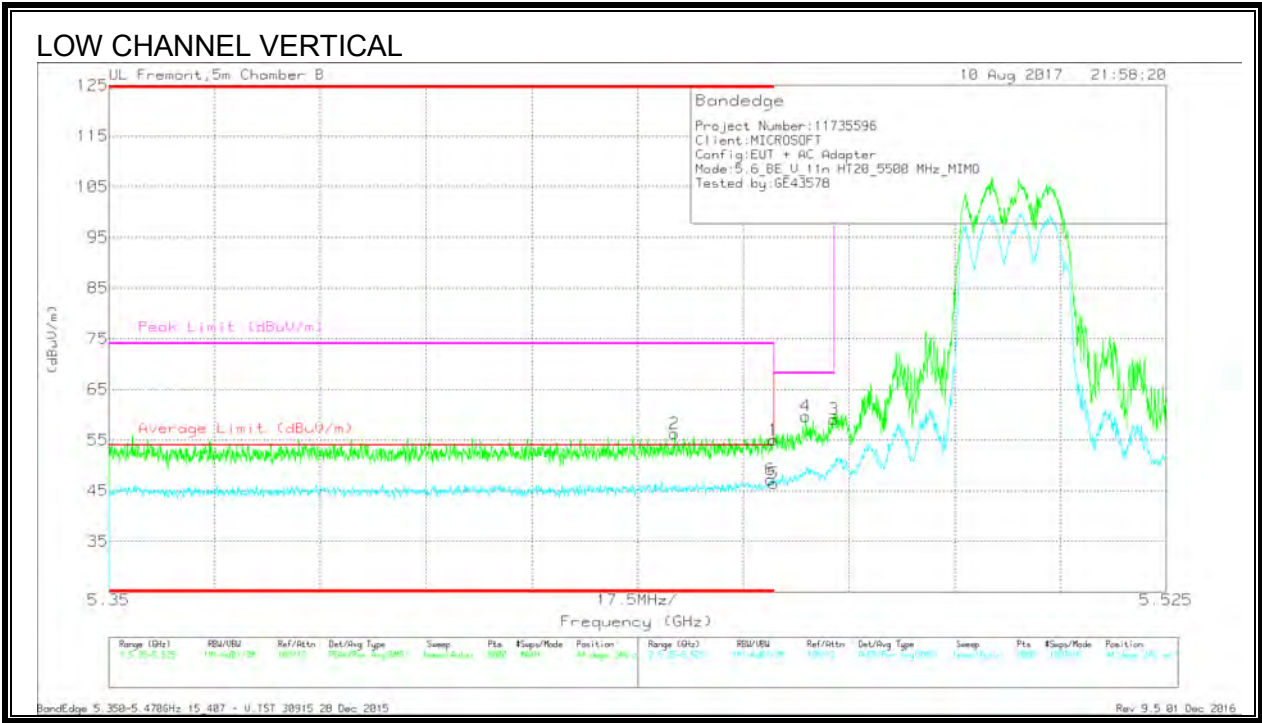
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.47	Pk	35.2	-18.9	0	54.77	-	-	74	-19.23	9	104	H
2	* 5.46	42.37	Pk	35.2	-18.9	0	58.67	-	-	74	-15.33	9	104	H
5	* 5.46	30.3	RMS	35.2	-18.9	0	46.6	54	-7.4	-	-	9	104	H
6	* 5.459	32.06	RMS	35.2	-18.8	0	48.46	54	-5.54	-	-	9	104	H
3	5.47	46.2	Pk	35.2	-18.9	0	62.5	-	-	68.2	-5.7	9	104	H
4	5.47	46.62	Pk	35.2	-18.9	0	62.92	-	-	68.2	-5.28	9	104	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection



Trace Markers

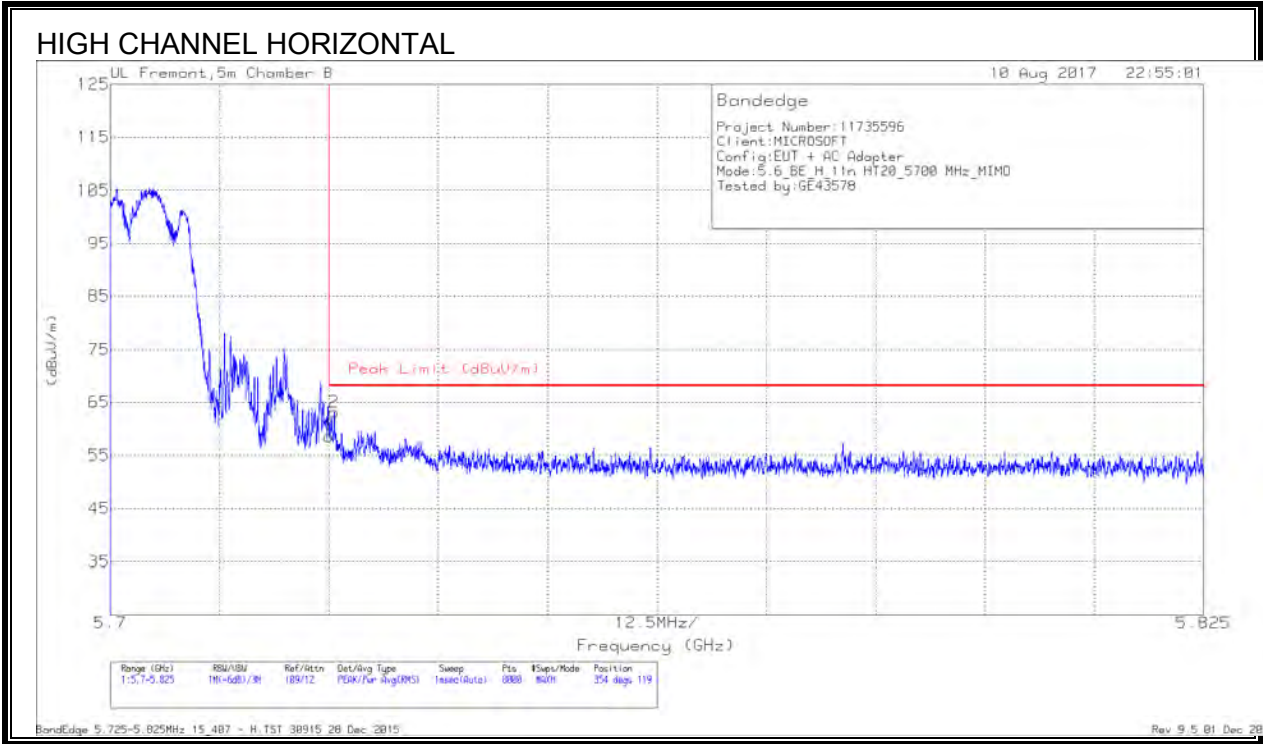
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.46	38.74	Pk	35.2	-18.9	0	55.04	-	-	74	-18.96	44	246	V
2	* 5.444	39.79	Pk	35.1	-18.6	0	56.29	-	-	74	-17.71	44	246	V
5	* 5.46	30.16	RMS	35.2	-18.9	0	46.46	54	-7.54	-	-	44	246	V
6	* 5.46	30.91	RMS	35.2	-18.9	0	47.21	54	-6.79	-	-	44	246	V
4	5.465	43.37	Pk	35.2	-18.9	0	59.67	-	-	68.2	-8.53	44	246	V
3	5.47	42.79	Pk	35.2	-18.9	0	59.09	-	-	68.2	-9.11	44	246	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

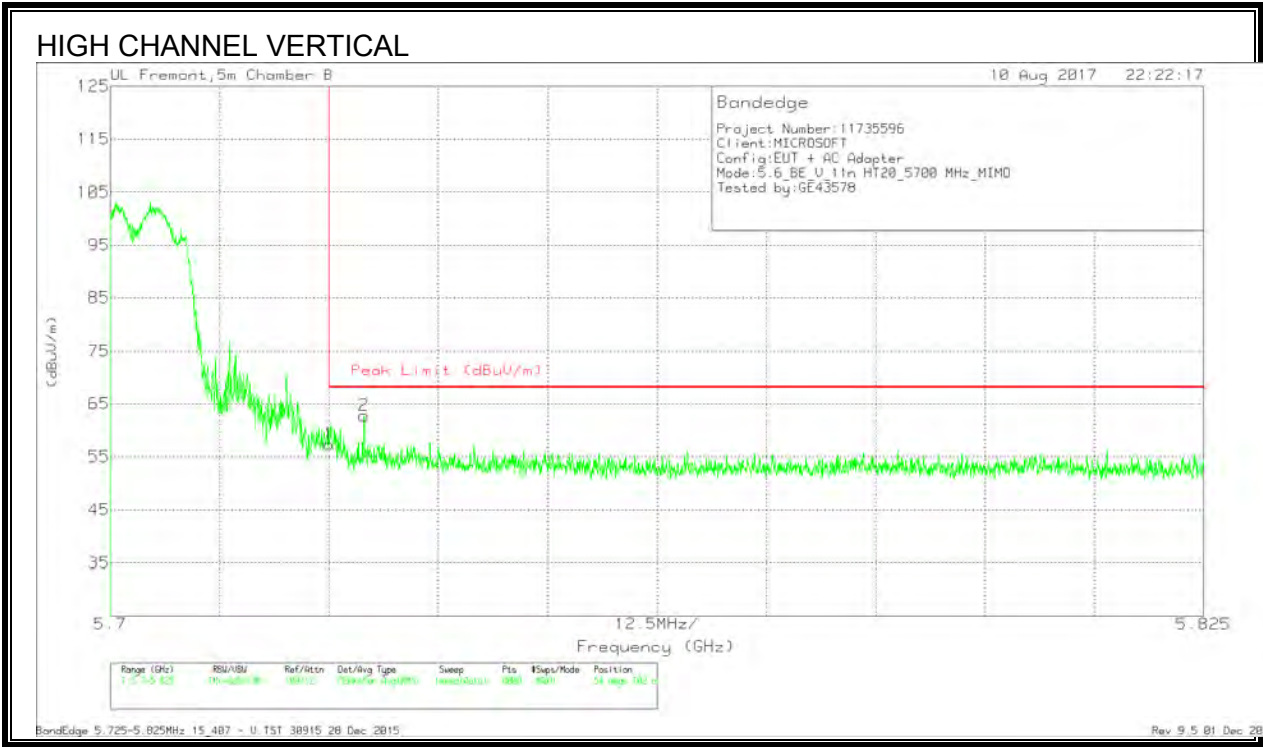
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.06	Pk	35	-19.5	58.56	68.2	-9.64	354	119	H
2	5.726	47.65	Pk	35	-19.5	63.15	68.2	-5.05	354	119	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

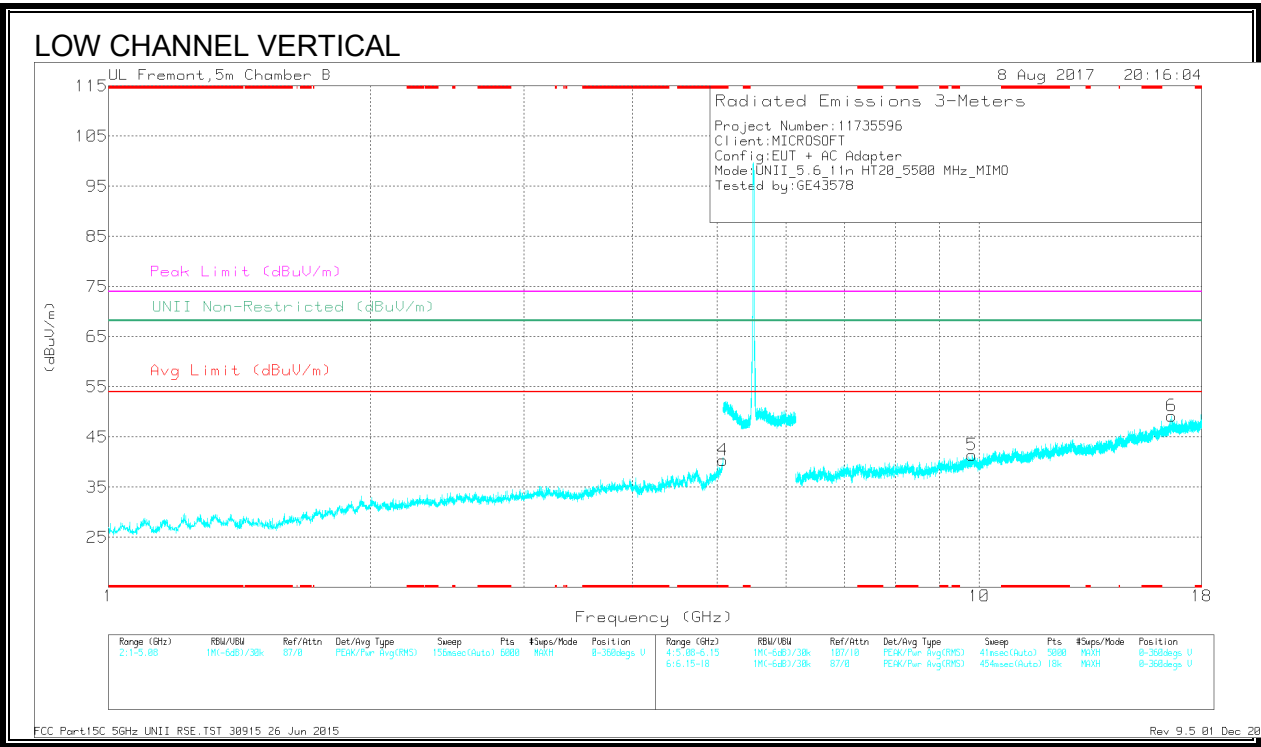
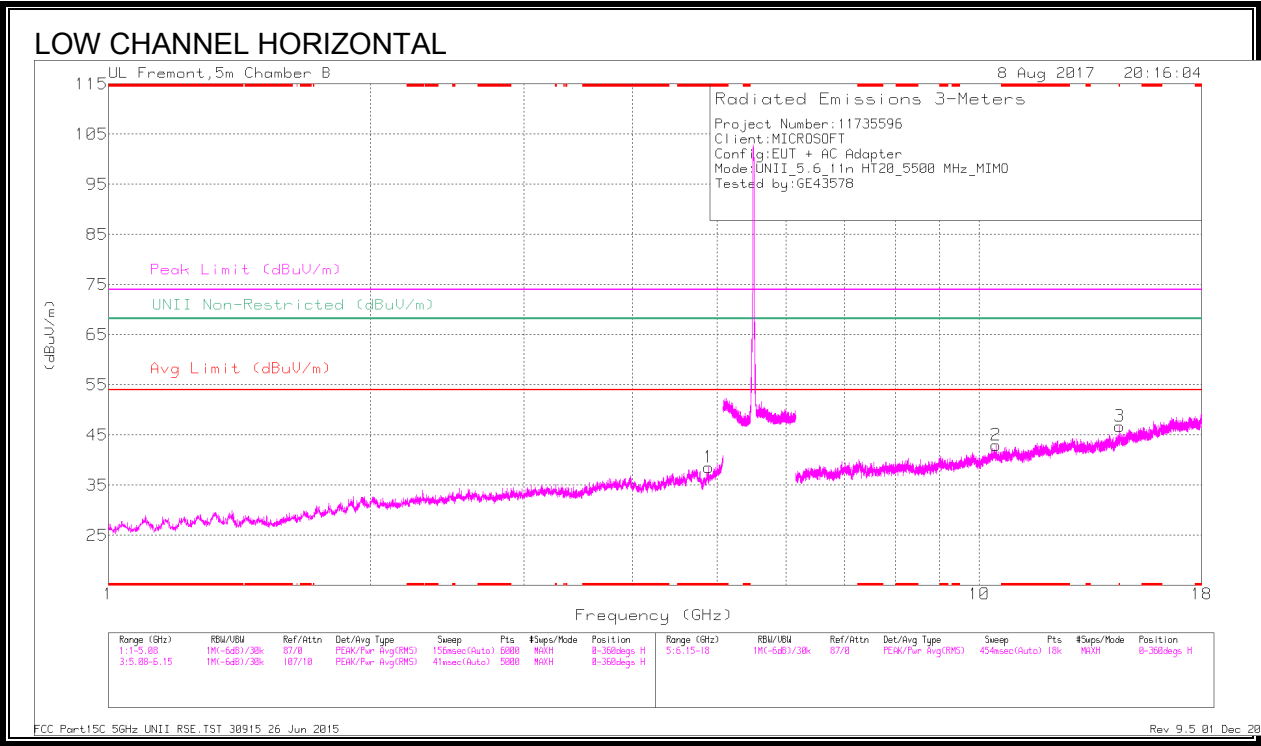


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.86	Pk	35	-19.5	57.36	68.2	-10.84	54	102	V
2	5.729	47.35	Pk	35	-19.6	62.75	68.2	-5.45	54	102	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



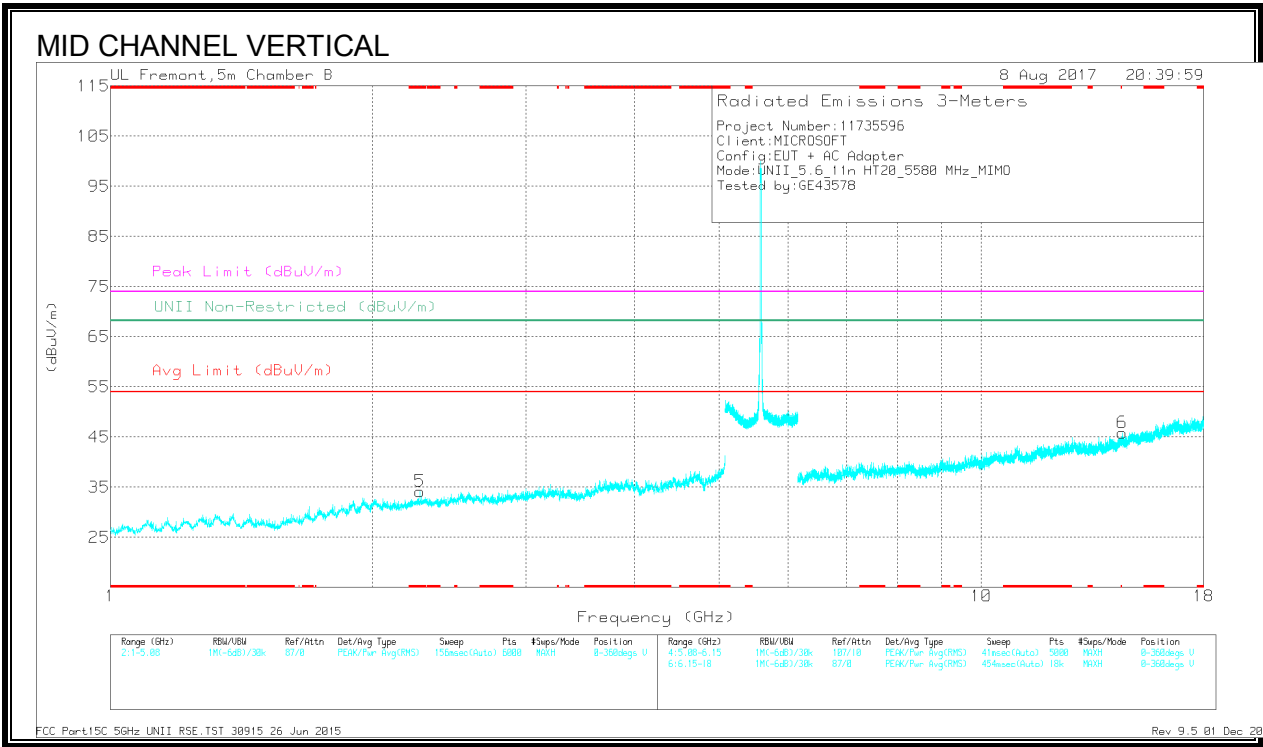
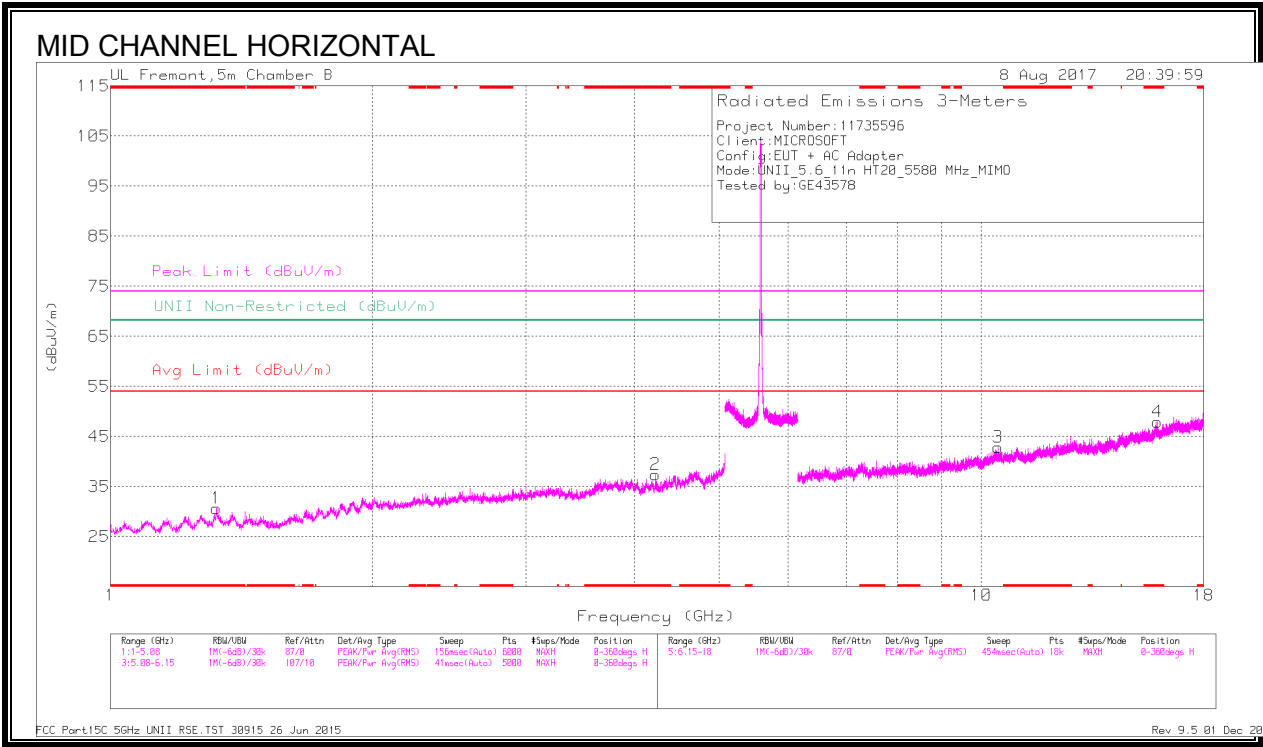
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1503 (dB/m)	Amp/CM/FHz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	U-NII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 4.892	37.57	PK-U	34.4	-28.8	0	43.17	-	-	74	-30.83	-	-	129	200	H
	* 4.89	25.14	ADR	34.4	-28.7	0	30.84	54	-23.16	-	-	-	-	129	200	H
4	* 5.074	39.49	PK-U	34.3	-25.8	0	47.99	-	-	74	-26.01	-	-	236	102	V
	* 5.075	26.71	ADR	34.3	-25.5	0	35.51	54	-18.49	-	-	-	-	236	102	V
3	* 14.494	32.64	PK-U	39.9	-20.5	0	52.04	-	-	74	-21.96	-	-	67	102	H
	* 14.493	20.35	ADR	39.9	-20.5	0	39.75	54	-14.25	-	-	-	-	67	102	H
5	9.813	34.72	PK-U	36.9	-23.6	0	48.02	-	-	-	-	68.2	-20.18	39	104	V
2	10.452	33.55	PK-U	37.5	-22.7	0	48.35	-	-	-	-	68.2	-19.85	327	199	H
6	16.64	30.99	PK-U	42.2	-19.2	0	53.99	-	-	-	-	68.2	-14.21	117	104	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



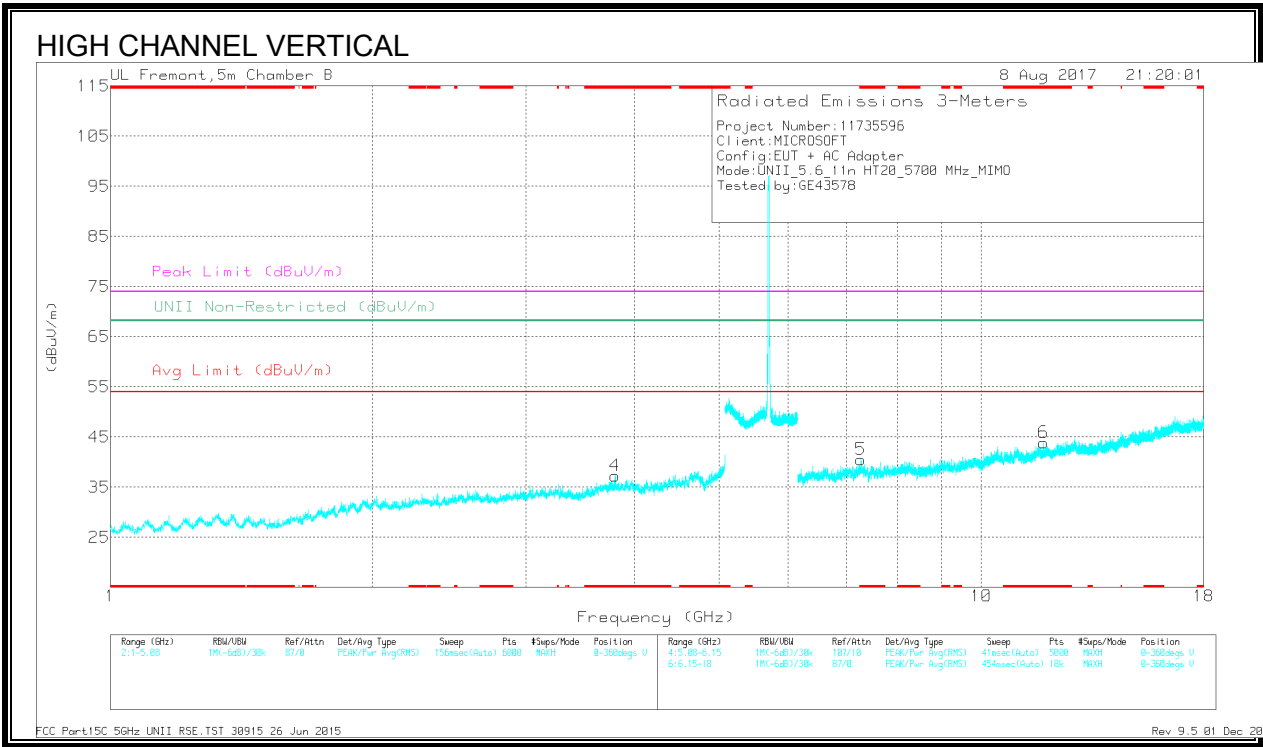
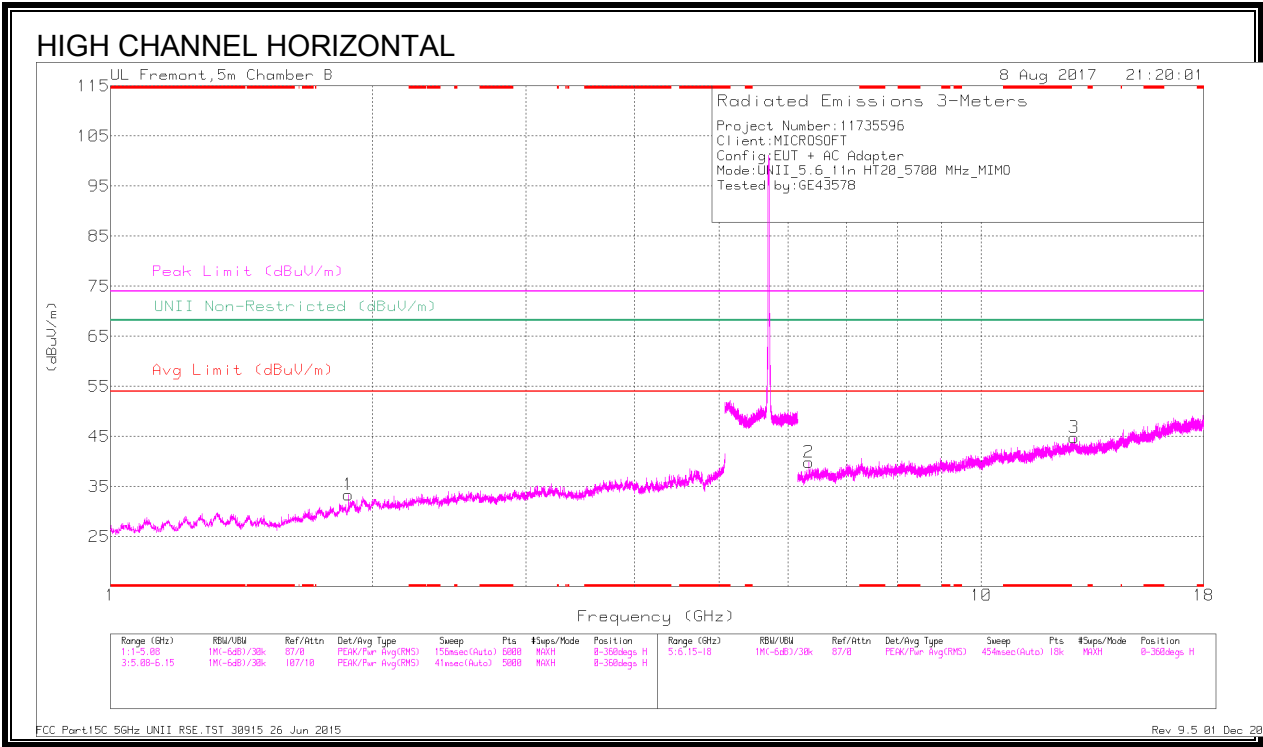
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/CM/Fit/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (m)	Polarity
1	* 1.324	41.85	PK-U	28.9	-33.6	0	37.15	-	-	74	-36.85	-	-	196	101	H
	* 1.324	29.38	ADR	28.9	-33.6	0	24.68	54	-29.32	-	-	-	-	196	101	H
2	* 4.226	39.46	PK-U	33.4	-29.9	0	42.96	-	-	74	-31.04	-	-	281	101	H
	* 4.227	27.26	ADR	33.4	-30	0	30.66	54	-23.34	-	-	-	-	281	101	H
5	* 2.267	39.78	PK-U	32	-32.1	0	39.68	-	-	74	-34.32	-	-	21	101	V
	* 2.268	27.35	ADR	32	-32.1	0	27.25	54	-26.75	-	-	-	-	21	101	V
4	* 15.925	31.64	PK-U	41.1	-18.8	0	53.94	-	-	74	-20.06	-	-	141	199	H
	* 15.925	19.31	ADR	41.1	-18.7	0	41.71	54	-12.29	-	-	-	-	141	199	H
3	10.447	34.44	PK-U	37.5	-22.7	0	49.24	-	-	-	-	68.2	-18.96	238	104	H
6	14.521	32.2	PK-U	39.9	-20.2	0	51.9	-	-	-	-	68.2	-16.3	91	104	V

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PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



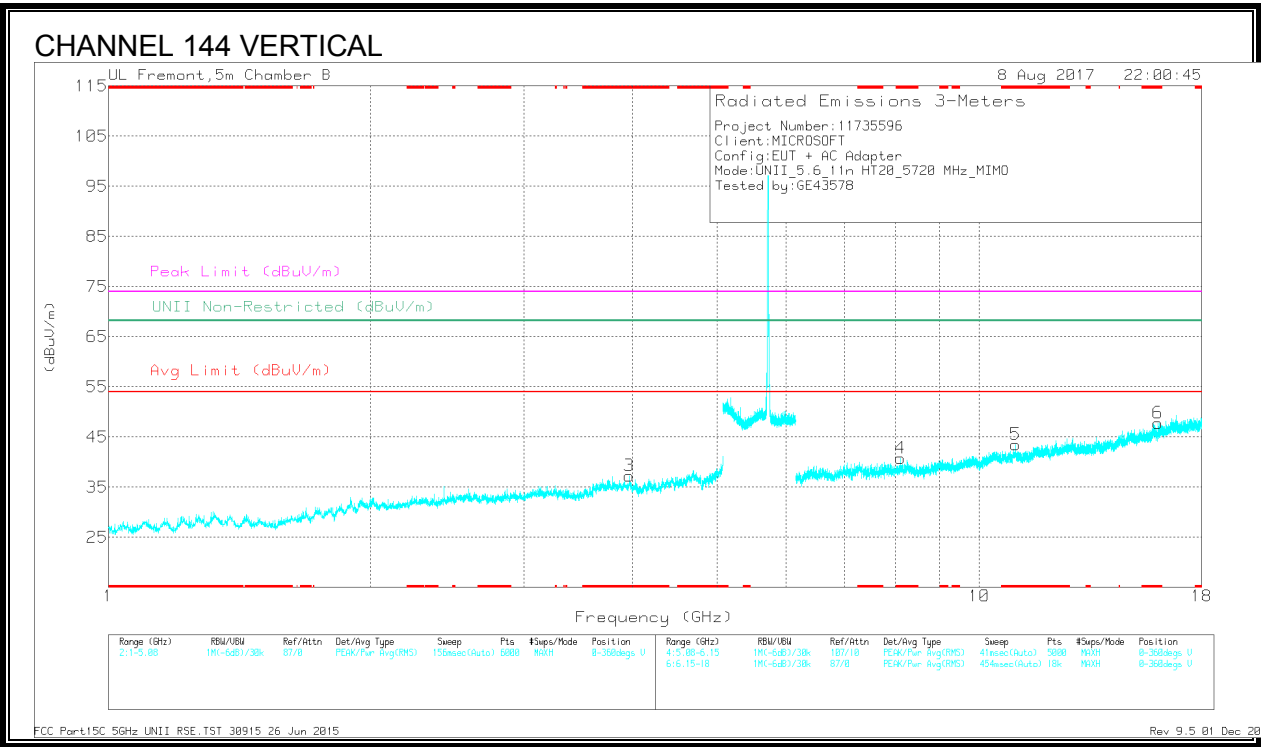
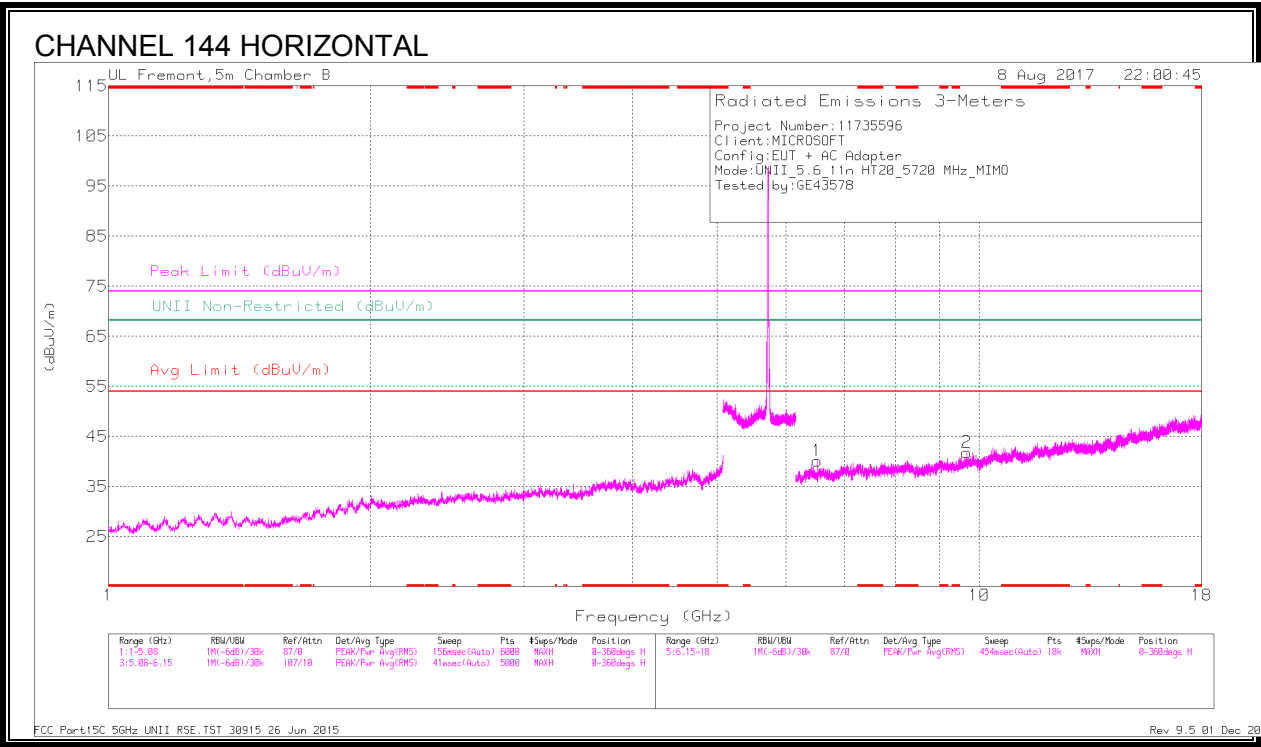
Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF TBE3 (dB/m)	Amp/CIS/FIR/Fed (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (m)	Polarity
4	* 3.799	40.84	PK-U	33.5	-30.8	0	43.54	-	-	74	-30.46	-	-	47	199	V
	* 3.8	28.58	ADR	33.6	-30.8	0	31.38	54	-22.62	-	-	-	-	47	199	V
5	* 7.274	36.92	PK-U	35.8	-25.8	0	46.92	-	-	74	-27.08	-	-	350	104	V
	* 7.275	24.38	ADR	35.8	-25.8	0	34.38	54	-19.62	-	-	-	-	350	104	V
6	* 11.791	33.67	PK-U	38.6	-22	0	50.27	-	-	74	-23.73	-	-	73	199	V
	* 11.79	21.47	ADR	38.6	-21.9	0	38.17	54	-15.83	-	-	-	-	73	199	V
1	1.878	43.91	PK-U	30.9	-33	0	41.81	-	-	-	-	68.2	-26.39	275	100	H
2	6.339	37.01	PK-U	35.7	-27.9	0	44.81	-	-	-	-	68.2	-23.39	84	104	H
3	12.775	32.45	PK-U	39.4	-21.3	0	50.55	-	-	-	-	68.2	-17.65	319	104	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Ch/FHz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (m)	Polarity
3	* 3.965	39.1	PK-U	33.5	-29.3	0	43.3	-	-	74	-30.7	-	-	40	199	V
	* 3.964	27.4	ADR	33.5	-29.3	0	31.6	54	-22.4	-	-	-	-	40	199	V
4	* 8.121	36.1	PK-U	36	-26.1	0	46	-	-	74	-28	-	-	196	104	V
	* 8.121	24.04	ADR	36	-26.1	0	33.94	54	-20.06	-	-	-	-	196	104	V
5	* 11.003	33.16	PK-U	37.7	-21.5	0	49.36	-	-	74	-24.64	-	-	289	104	V
	* 11.003	21.53	ADR	37.7	-21.5	0	37.73	54	-16.27	-	-	-	-	289	104	V
6	* 16.025	31.98	PK-U	41.2	-20.1	0	53.08	-	-	74	-20.92	-	-	128	199	V
	* 16.024	19.96	ADR	41.2	-20	0	41.16	54	-12.84	-	-	-	-	128	199	V
1	6.517	37.24	PK-U	35.7	-28.7	0	44.24	-	-	-	-	68.2	-23.96	301	104	H
2	9.675	33.81	PK-U	36.9	-23.5	0	47.21	-	-	-	-	68.2	-20.99	261	199	H

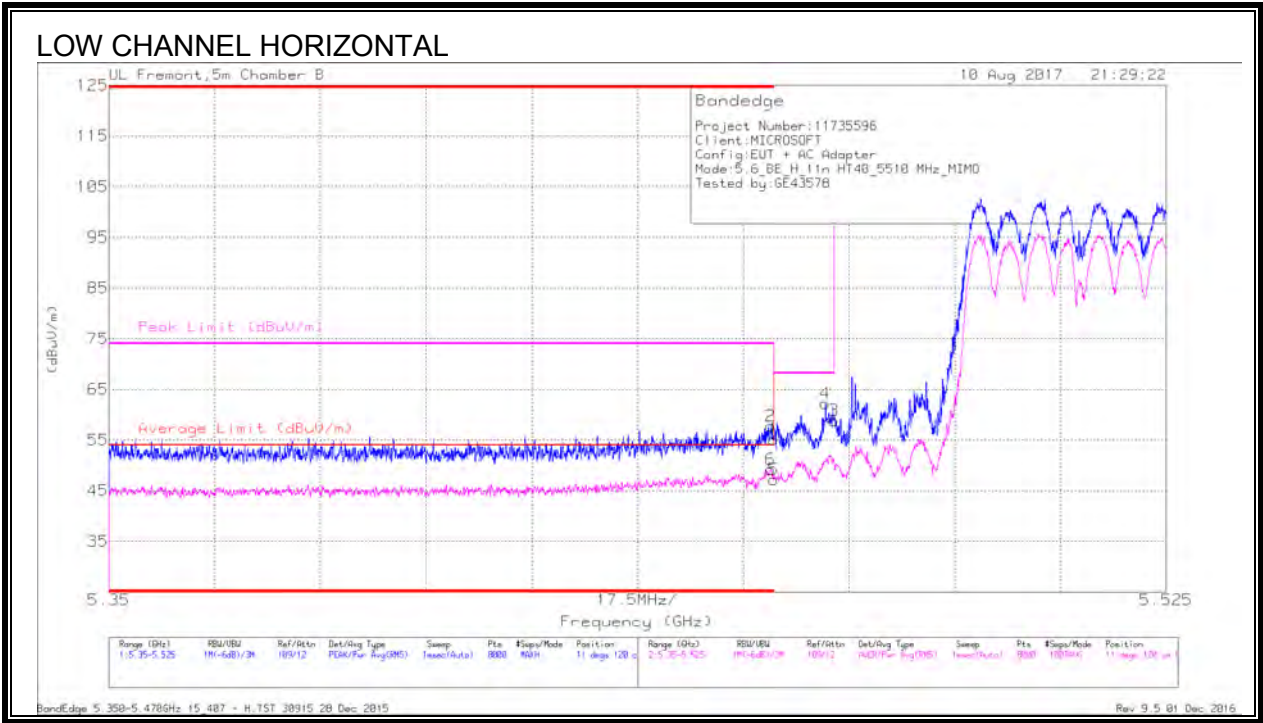
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.11.11n HT40 2TX MODE IN THE 5.6GHz BAND

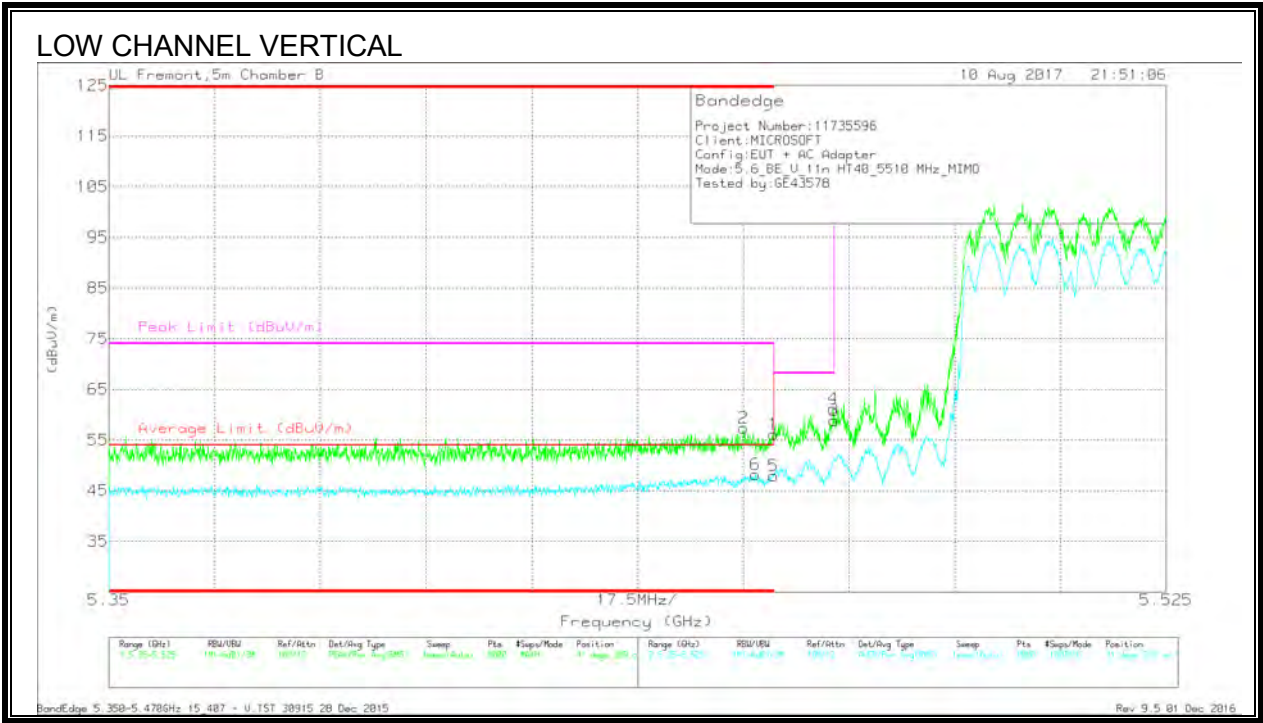
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/P1tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.46	38.78	Pk	35.2	-18.9	0	55.08	-	-	74	-18.92	11	120	H
2	* 5.46	41.4	Pk	35.2	-18.9	0	57.7	-	-	74	-16.3	11	120	H
5	* 5.46	30.9	RMS	35.2	-18.9	0	47.2	54	-6.8	-	-	11	120	H
6	* 5.46	32.91	RMS	35.2	-18.9	0	49.21	54	-4.79	-	-	11	120	H
4	5.469	45.88	Pk	35.2	-18.9	0	62.18	-	-	68.2	-6.02	11	120	H
3	5.47	42.51	Pk	35.2	-18.9	0	58.81	-	-	68.2	-9.39	11	120	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection



Trace Markers

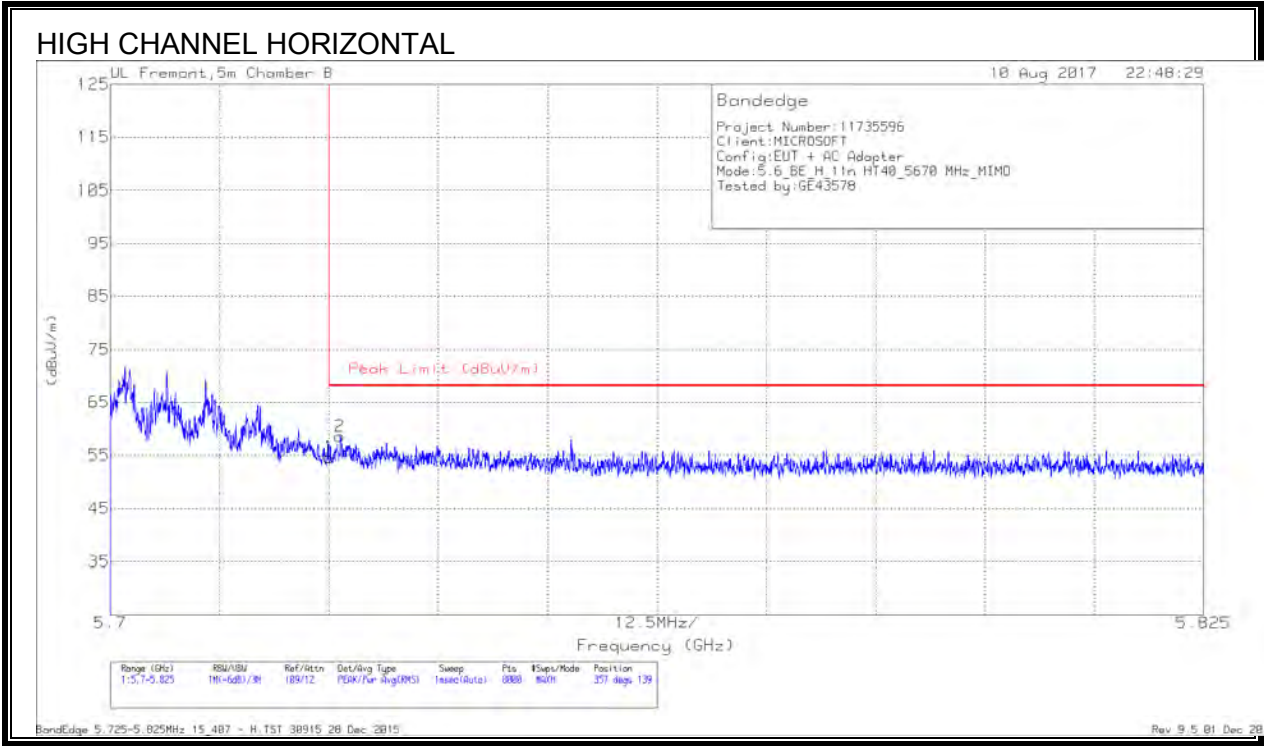
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.46	39.87	Pk	35.2	-18.9	0	56.17	-	-	74	-17.83	41	289	V
2	* 5.455	41.04	Pk	35.2	-18.9	0	57.34	-	-	74	-16.66	41	289	V
5	* 5.46	31.62	RMS	35.2	-18.9	0	47.92	54	-6.08	-	-	41	289	V
6	* 5.457	31.92	RMS	35.2	-18.9	0	48.22	54	-5.78	-	-	41	289	V
3	5.47	42.52	Pk	35.2	-18.9	0	58.82	-	-	68.2	-9.38	41	289	V
4	5.47	44.9	Pk	35.2	-18.9	0	61.2	-	-	68.2	-7	41	289	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

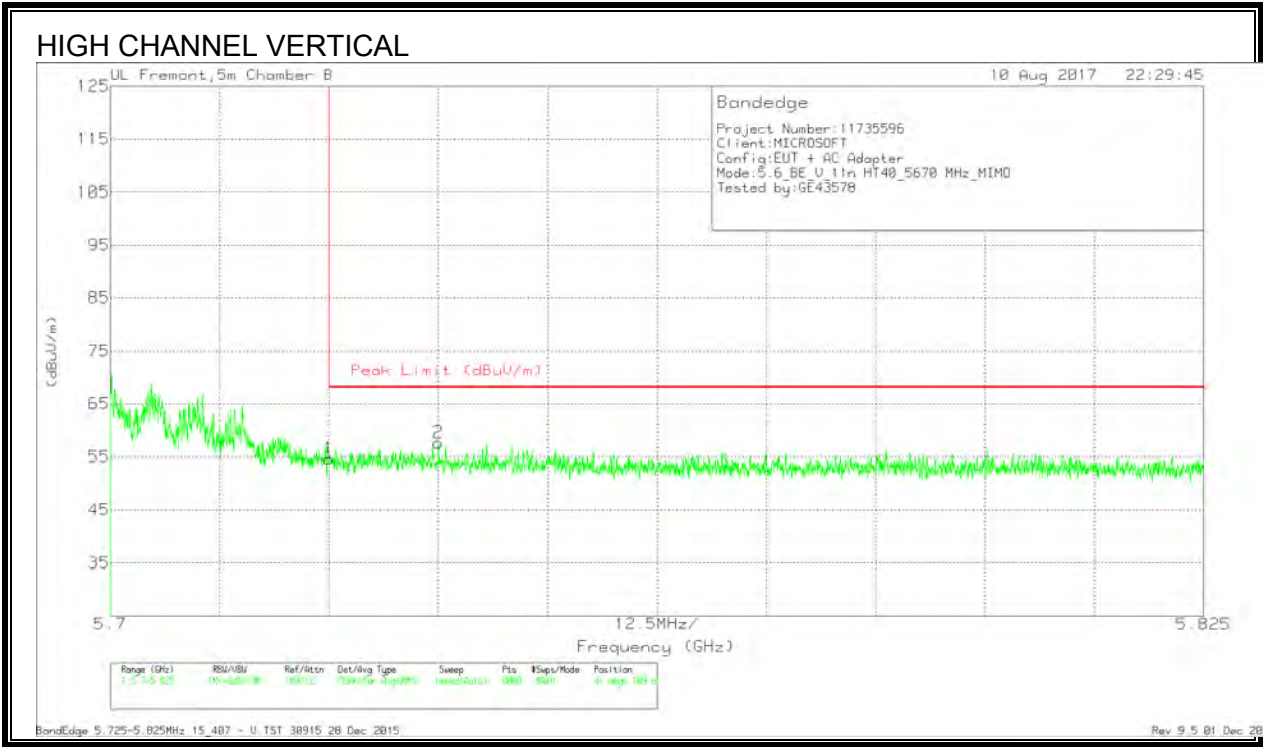
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.15	Pk	35	-19.5	54.65	68.2	-13.55	357	139	H
2	5.726	43.11	Pk	35	-19.5	58.61	68.2	-9.59	357	139	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

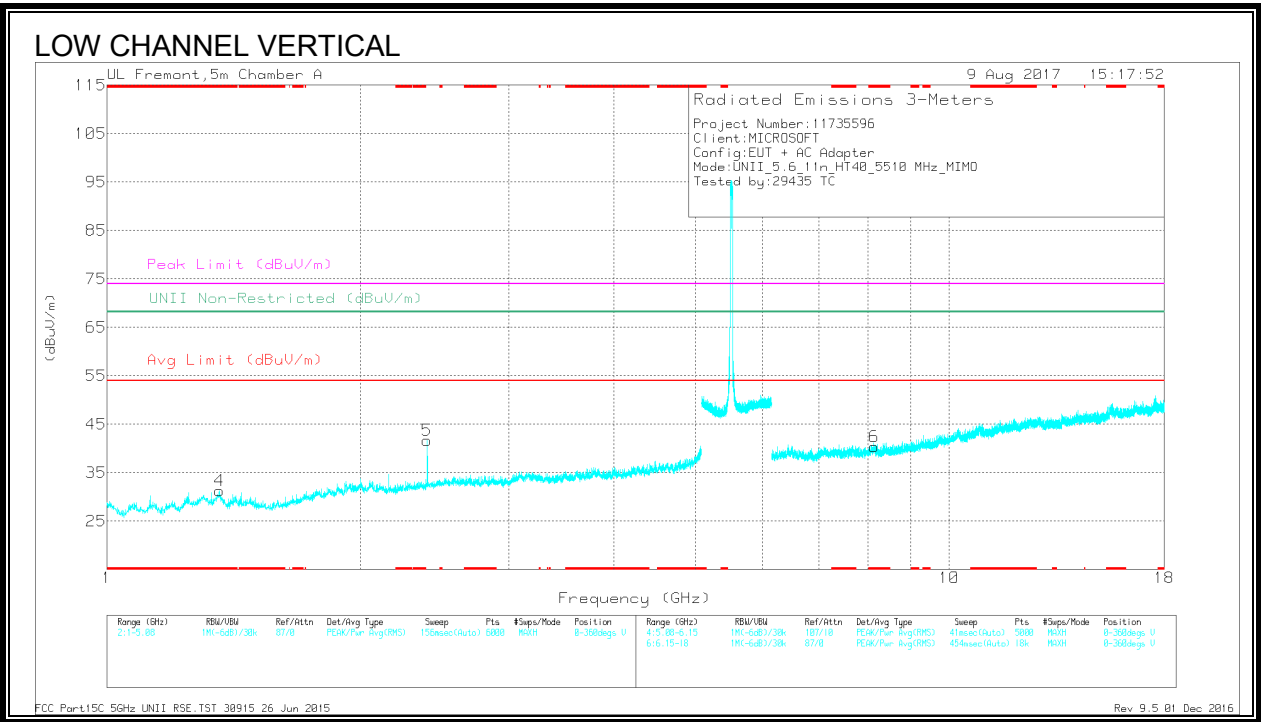
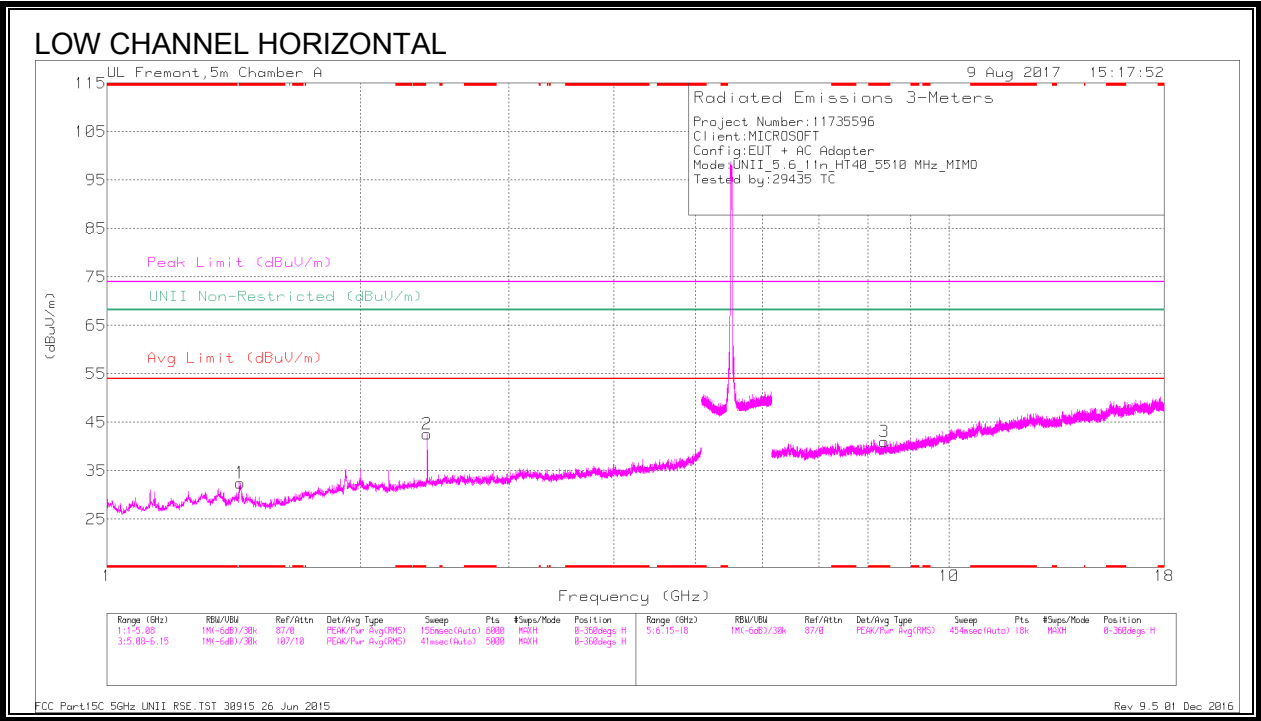


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.21	Pk	35	-19.5	54.71	68.2	-13.49	41	109	V
2	5.737	42.07	Pk	35	-19.4	57.67	68.2	-10.53	41	109	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



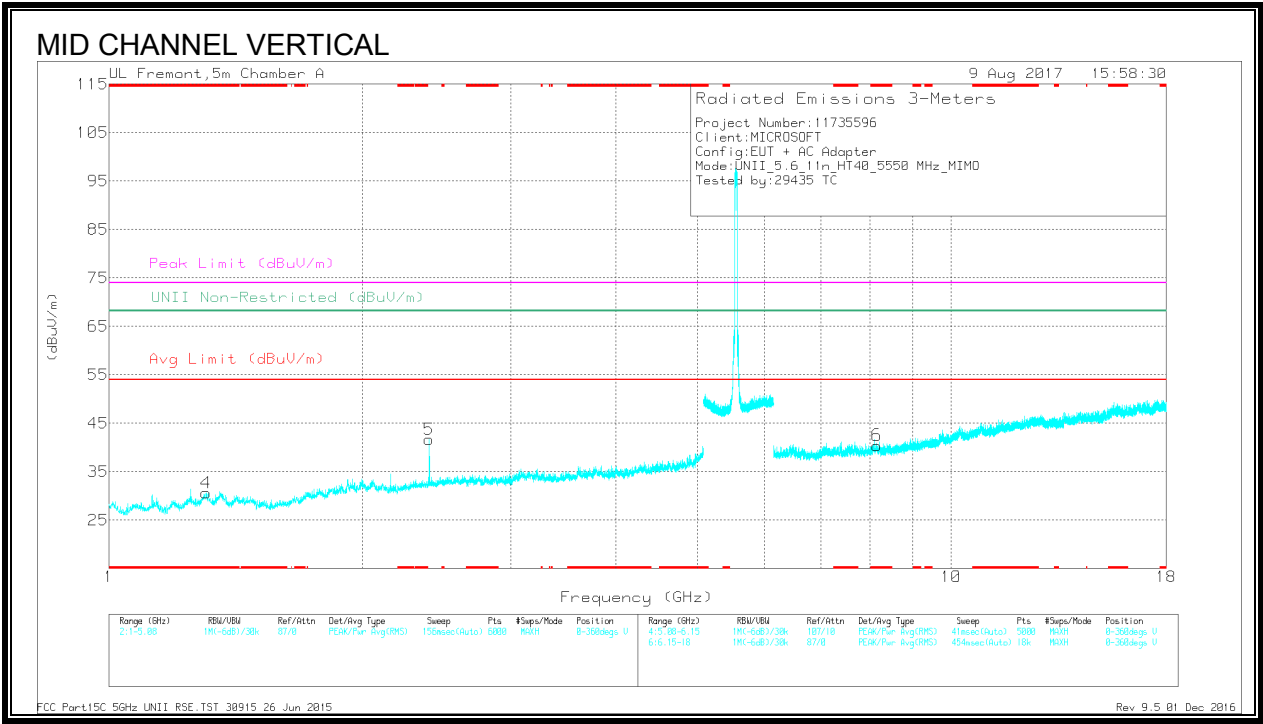
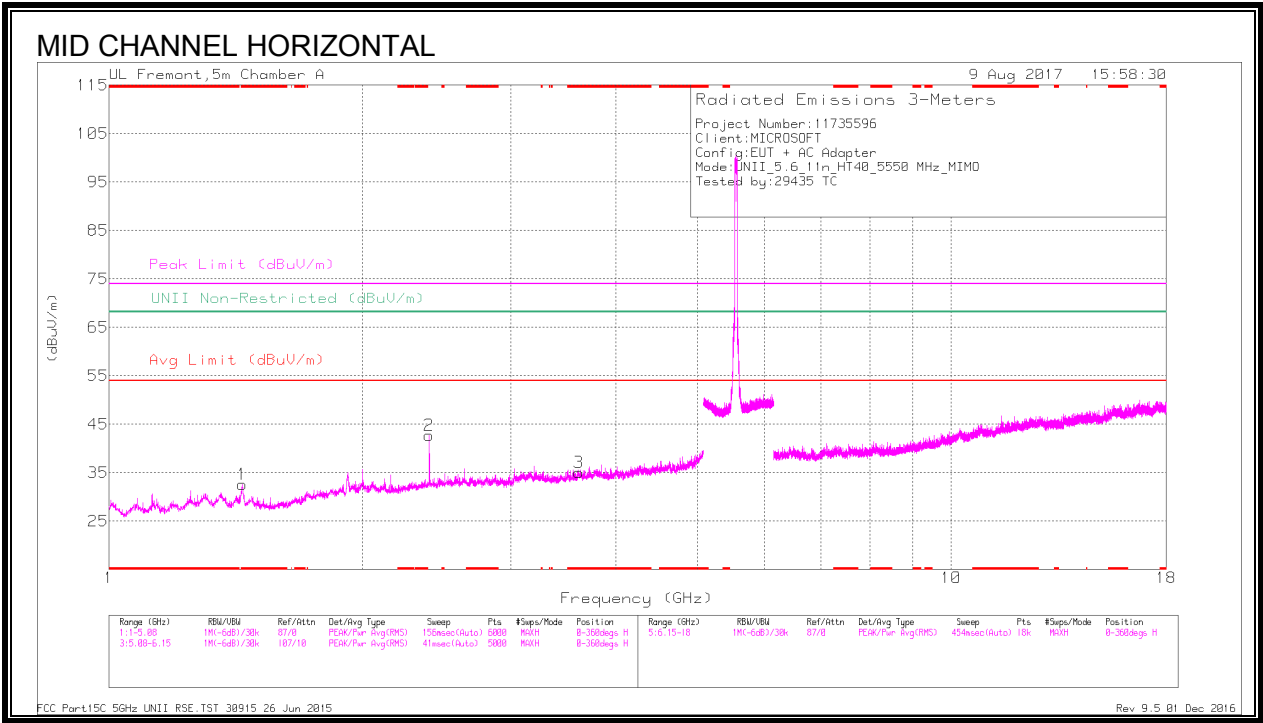
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filtz/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 1.44	50.73	PK-U	28.7	-32.6	46.83	-	-	74	-27.17	-	-	262	195	H
	* 1.44	31.78	ADR	28.7	-32.6	27.88	54	-26.12	-	-	-	-	262	195	H
4	* 1.36	41.01	PK-U	29.3	-32.8	37.51	-	-	74	-36.49	-	-	281	103	V
	* 1.359	29.08	ADR	29.3	-32.8	25.58	54	-28.42	-	-	-	-	281	103	V
3	* 8.377	33.95	PK-U	35.8	-23	46.75	-	-	74	-27.25	-	-	223	173	H
	* 8.376	22.15	ADR	35.8	-23.1	34.85	54	-19.15	-	-	-	-	223	173	H
6	* 8.152	33.57	PK-U	35.8	-22.3	47.07	-	-	74	-26.93	-	-	83	142	V
	* 8.149	21.82	ADR	35.8	-22.3	35.32	54	-18.68	-	-	-	-	83	142	V
2	2.4	49.13	PK-U	31.8	-31.5	49.43	-	-	-	-	68.2	-19.77	319	245	H
5	2.4	45.23	PK-U	31.8	-31.5	45.53	-	-	-	-	68.2	-22.67	202	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



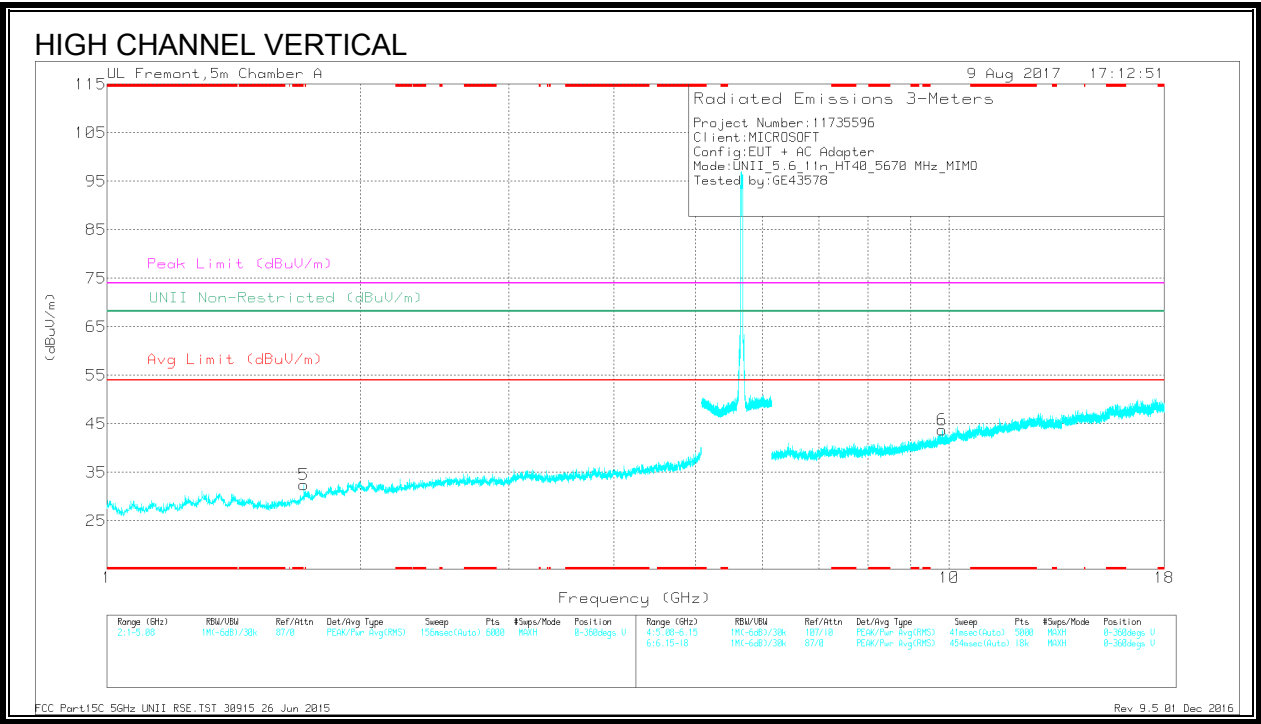
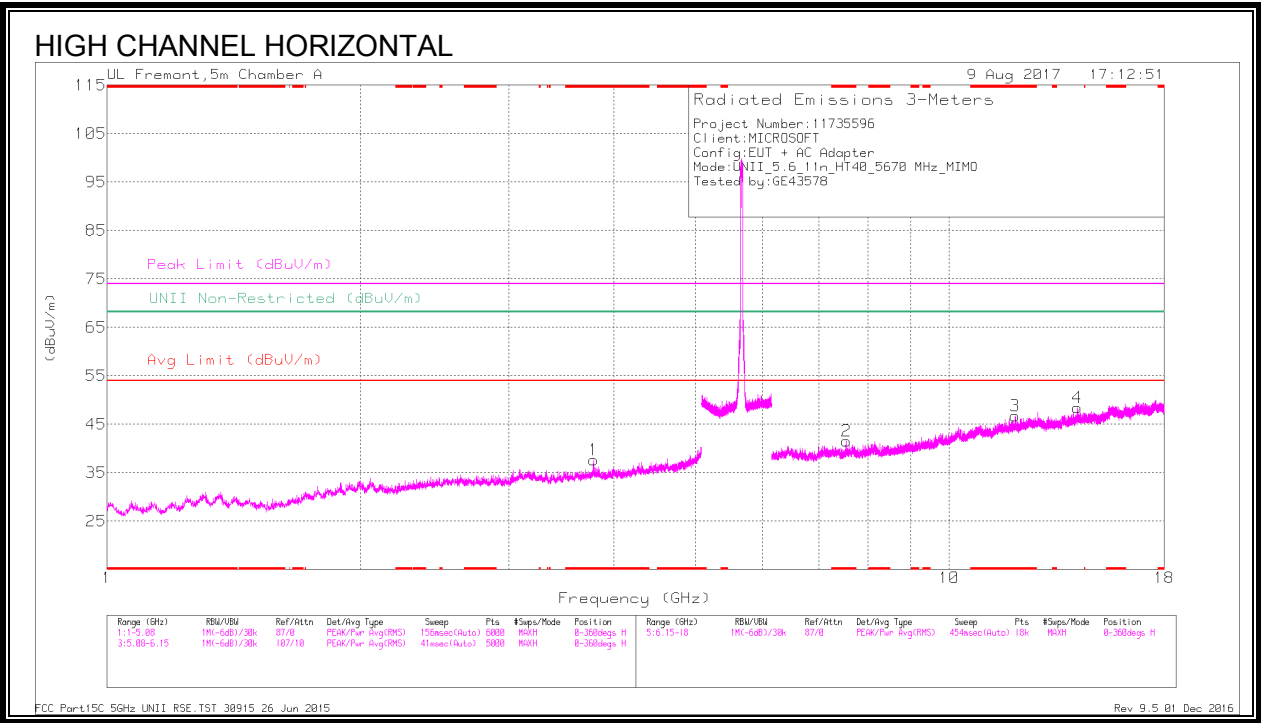
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T82 (dB/m)	Amp/Cb/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.44	49.99	PK-U	28.7	-32.6	46.09	-	-	74	-27.91	-	-	97	129	H
	* 1.44	31.43	ADR	28.7	-32.6	27.53	54	-26.47	-	-	-	-	97	129	H
3	* 3.611	38.52	PK-U	33	-29.9	41.62	-	-	74	-32.38	-	-	358	141	H
	* 3.614	26.61	ADR	33	-29.9	29.71	54	-24.29	-	-	-	-	358	141	H
4	* 1.305	40.7	PK-U	29.4	-33.1	37	-	-	74	-37	-	-	31	106	V
	* 1.304	28.98	ADR	29.4	-33.1	25.28	54	-28.72	-	-	-	-	31	106	V
6	* 8.165	33.46	PK-U	35.8	-22.4	46.86	-	-	74	-27.14	-	-	164	230	V
	* 8.165	21.7	ADR	35.8	-22.4	35.1	54	-18.9	-	-	-	-	164	230	V
2	2.4	47.37	PK-U	31.8	-31.5	47.67	-	-	-	-	68.2	-20.53	36	374	H
	2.4	41.56	ADR	31.8	-31.5	41.86	-	-	-	-	-	-	36	374	H
5	2.4	42.69	PK-U	31.8	-31.5	42.99	-	-	-	-	68.2	-25.21	313	131	V
	2.4	36.09	ADR	31.8	-31.5	36.39	-	-	-	-	-	-	313	131	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



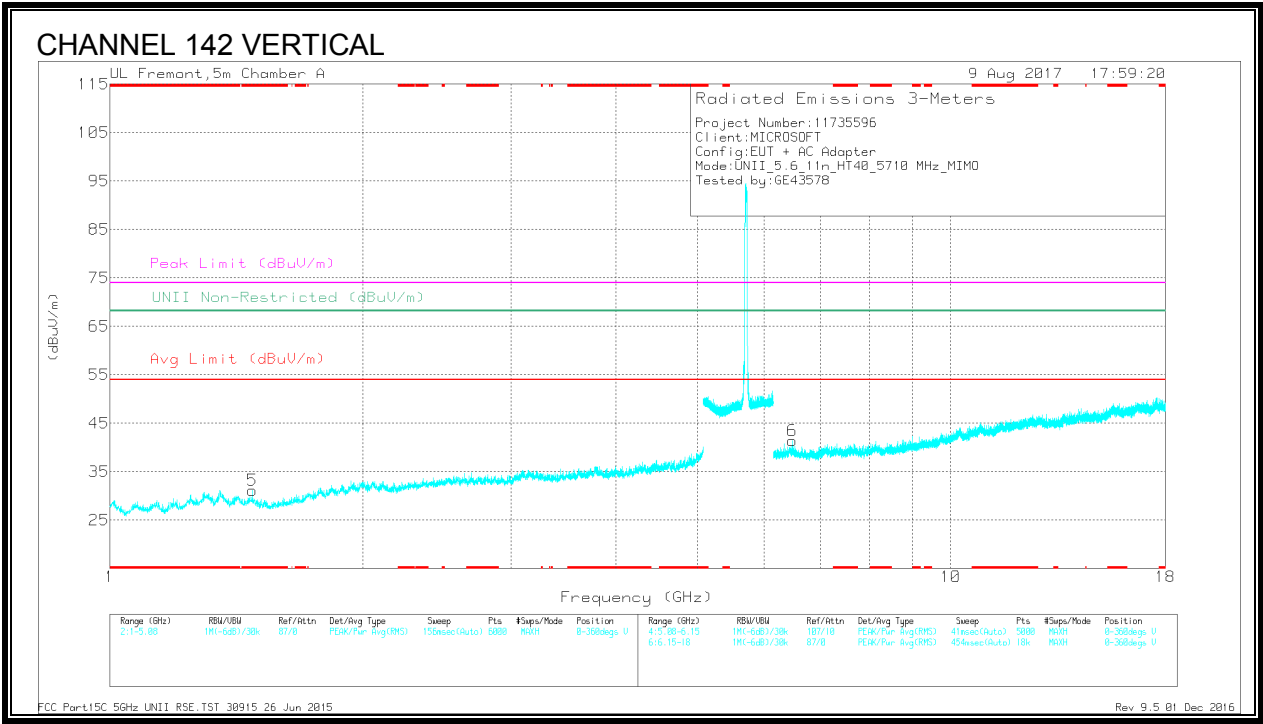
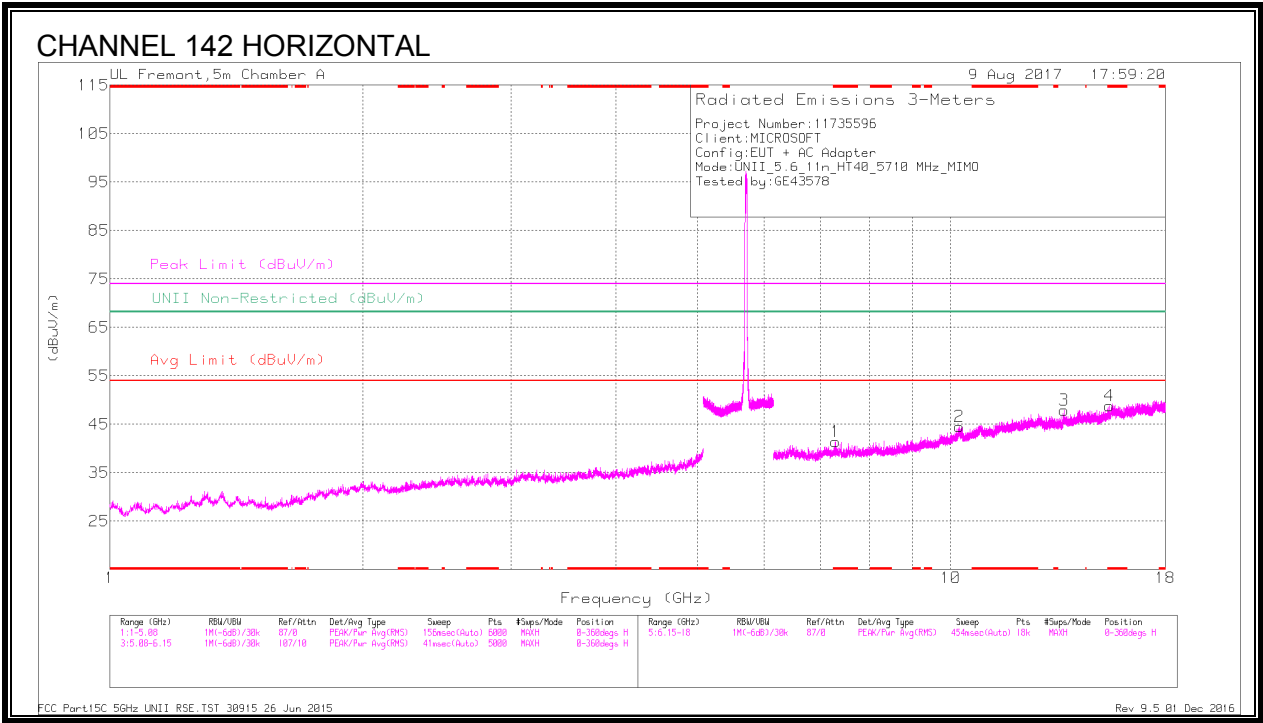
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1502 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Limit Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degrees)	Height (m)	Polarity
1	* 3.78	39.18	PK-U	33.2	-29	0	43.38	-	-	74	-30.62	-	-	108	199	H
	* 3.78	26.92	ADR	33.2	-29	0	31.12	54	-22.88	-	-	-	-	108	199	H
2	* 7.552	34.12	PK-U	35.7	-22.8	0	47.02	-	-	74	-26.98	-	-	278	102	H
	* 7.552	22.05	ADR	35.7	-22.8	0	34.95	54	-19.05	-	-	-	-	278	102	H
3	* 11.967	32.52	PK-U	38.9	-19.1	0	52.32	-	-	74	-21.68	-	-	169	102	H
	* 11.967	20.37	ADR	38.9	-19.1	0	40.17	54	-13.83	-	-	-	-	169	102	H
5	1.715	40.12	PK-U	29.2	-32.1	0	37.22	-	-	-	-	68.2	-30.98	171	102	V
6	9.805	33.13	PK-U	37	-21.4	0	48.73	-	-	-	-	68.2	-19.47	141	199	V
4	14.19	32.84	PK-U	39.6	-19.6	0	52.84	-	-	-	-	68.2	-15.36	270	199	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T62 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	ULRI Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
5	* 1.477	40.92	PK-U	28.6	-32.9	0	36.62	-	-	74	-37.38	-	-	294	200	V
	* 1.477	28.93	ADR	28.6	-32.9	0	24.63	54	-29.37	-	-	-	-	294	200	V
1	* 7.298	34.3	PK-U	35.7	-23.4	0	46.6	-	-	74	-27.4	-	-	90	102	H
	* 7.297	22.17	ADR	35.7	-23.4	0	34.47	54	-19.53	-	-	-	-	90	102	H
4	* 15.44	33.87	PK-U	39.9	-18.3	0	55.47	-	-	74	-18.53	-	-	122	199	H
	* 15.439	20.96	ADR	39.9	-18.3	0	42.56	54	-11.44	-	-	-	-	122	199	H
6	6.474	34.2	PK-U	35.7	-23.9	0	46	-	-	-	-	68.2	-22.2	134	102	V
2	10.24	32.45	PK-U	37.5	-19.6	0	50.35	-	-	-	-	68.2	-17.85	49	102	H
3	13.632	33.94	PK-U	39.3	-19.6	0	53.64	-	-	-	-	68.2	-14.56	128	102	H

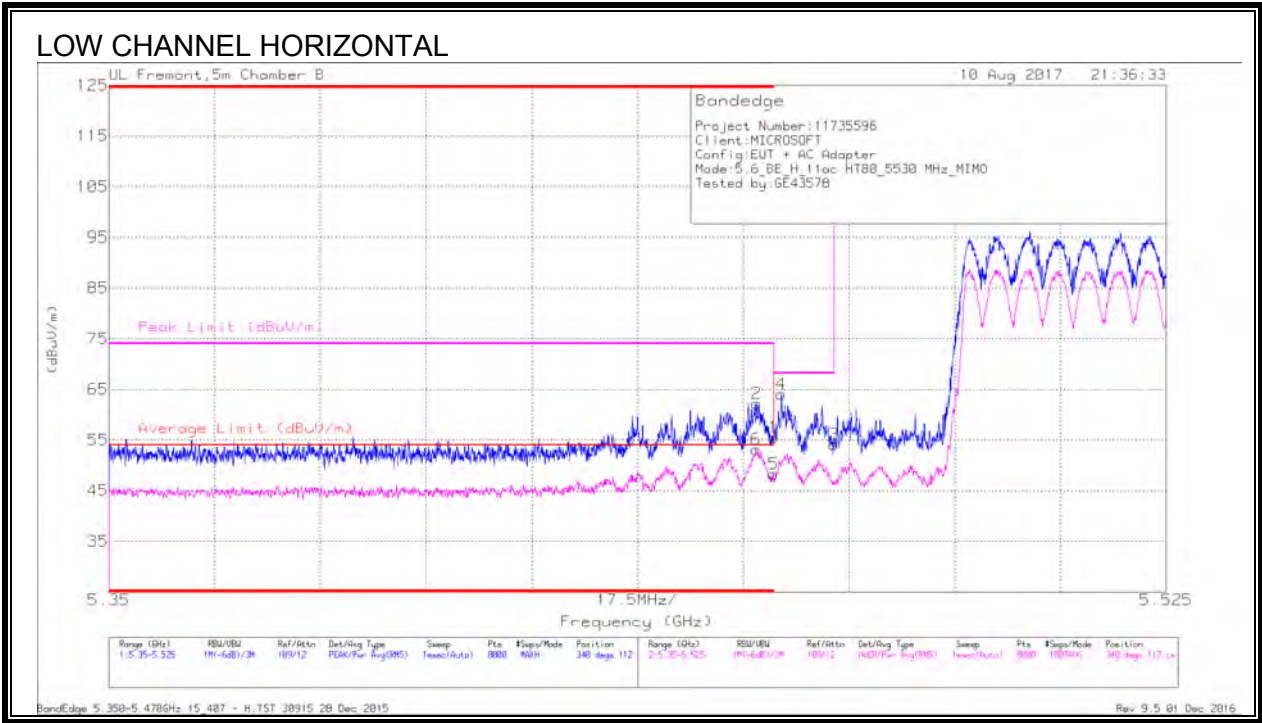
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.12.11ac VHT80 2TX MODE IN THE 5.6GHz BAND

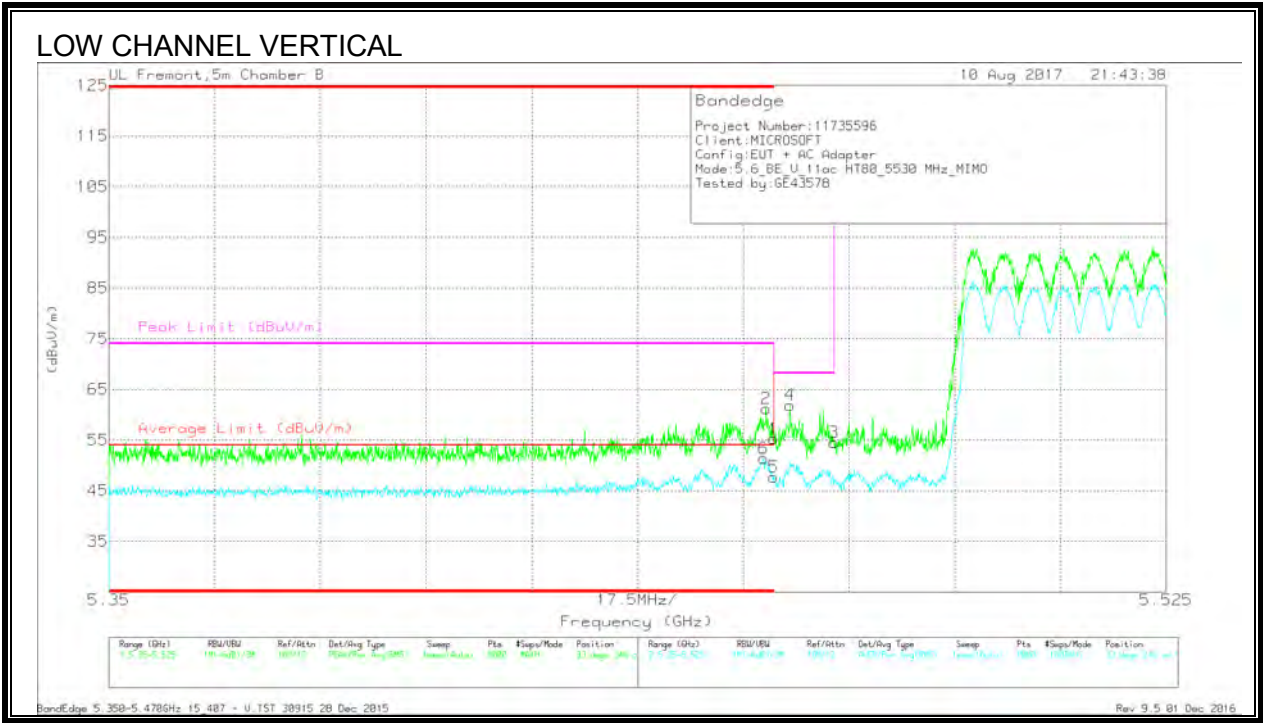
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.46	39.17	Pk	35.2	-18.9	0	55.47	-	-	74	-18.53	340	112	H
2	* 5.457	45.88	Pk	35.2	-18.9	0	62.18	-	-	74	-11.82	340	112	H
5	* 5.46	31.98	RMS	35.2	-18.9	0	48.28	54	-5.72	-	-	340	112	H
6	* 5.457	36.88	RMS	35.2	-18.9	0	53.18	54	-8.2	-	-	340	112	H
4	5.461	47.77	Pk	35.2	-18.9	0	64.07	-	-	68.2	-4.13	340	112	H
3	5.47	37.88	Pk	35.2	-18.9	0	54.18	-	-	68.2	-14.02	340	112	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection



Trace Markers

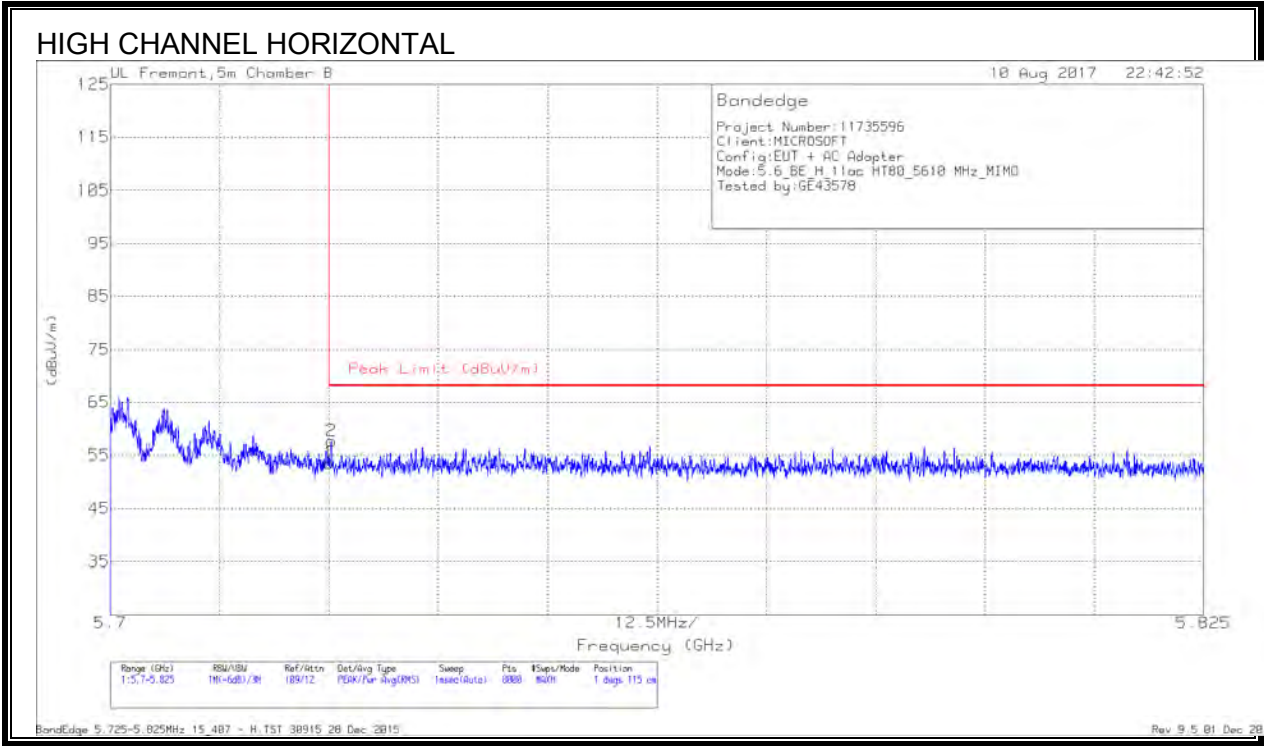
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF Y863 (dB/m)	Amp/Cb/Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.46	38.97	Pk	35.2	-18.9	0	55.27	-	-	74	-18.73	33	246	V
2	* 5.459	44.84	Pk	35.2	-18.8	0	61.24	-	-	74	-12.76	33	246	V
5	* 5.46	31.33	RMS	35.2	-18.9	0	47.63	54	-6.37	-	-	33	246	V
6	* 5.458	34.99	RMS	35.2	-18.8	0	51.39	54	-2.61	-	-	33	246	V
4	5.463	45.5	Pk	35.2	-18.8	0	61.9	-	-	68.2	-6.3	33	246	V
3	5.47	38.24	Pk	35.2	-18.9	0	54.54	-	-	68.2	-13.66	33	246	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

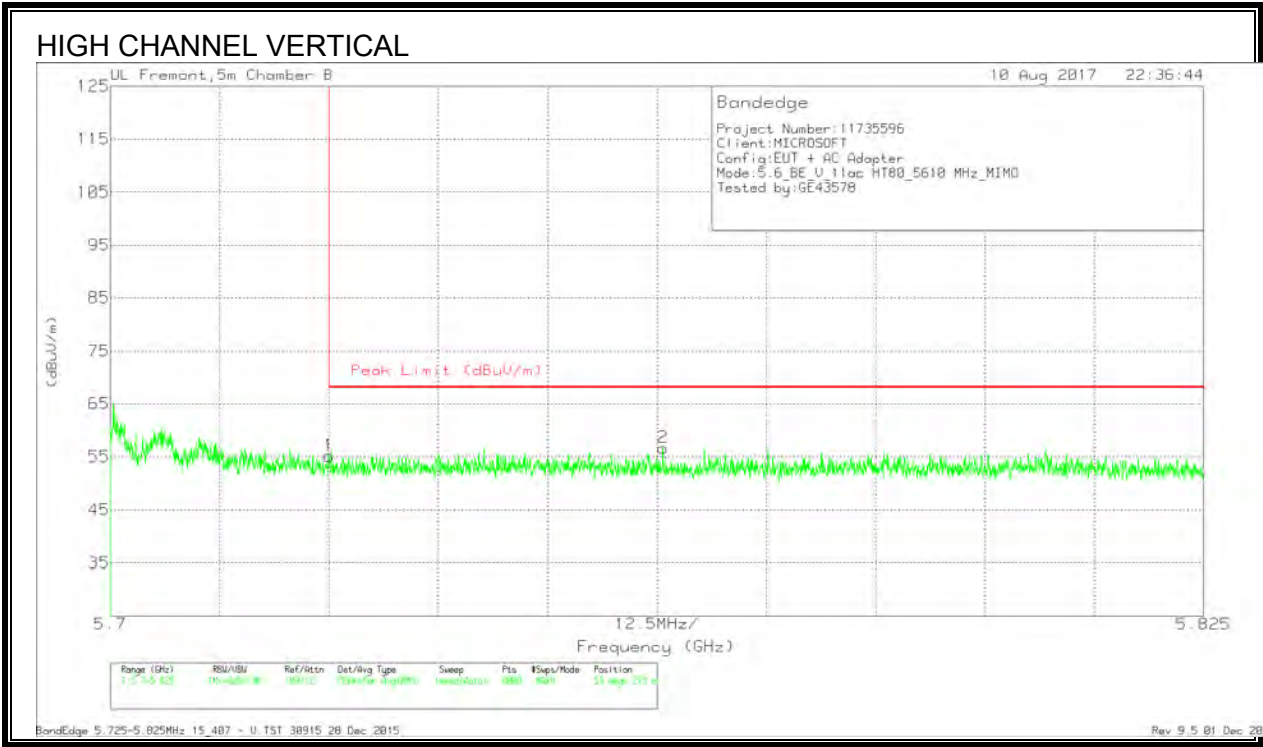
RESTRICTED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.1	Pk	35	-19.5	53.6	68.2	-14.6	1	115	H
2	5.725	42.22	Pk	35	-19.5	57.72	68.2	-10.48	1	115	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

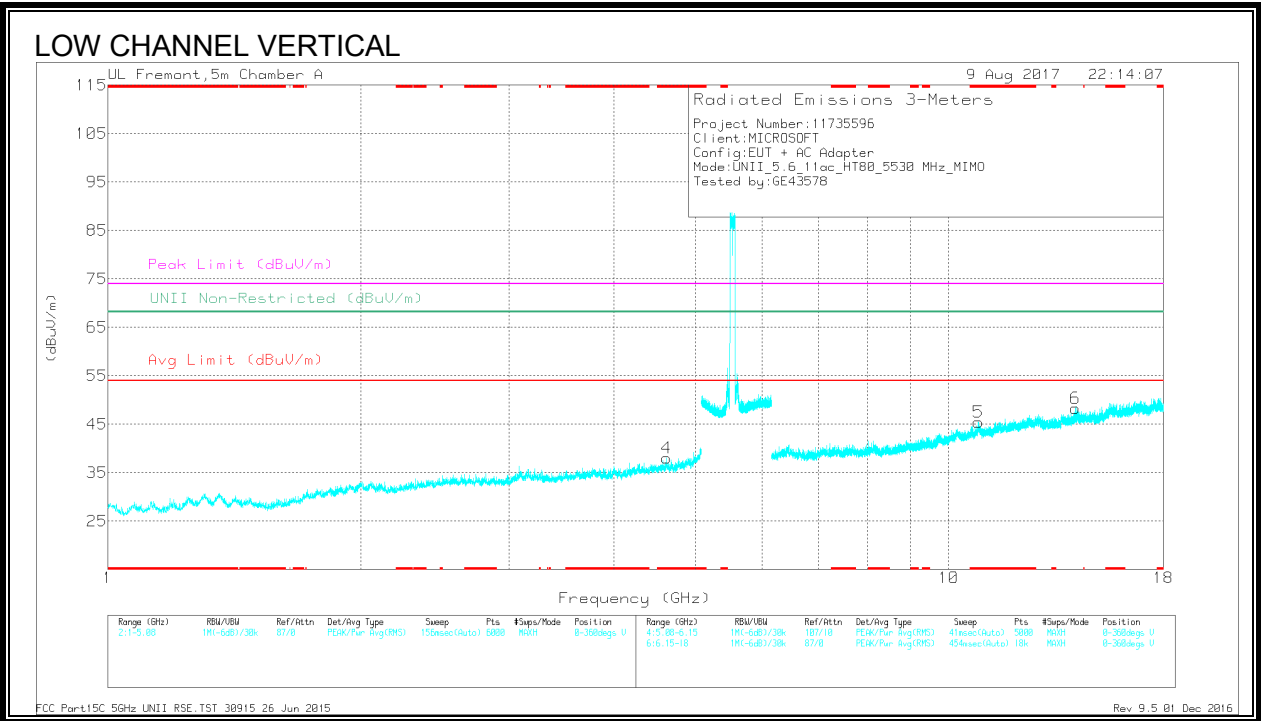
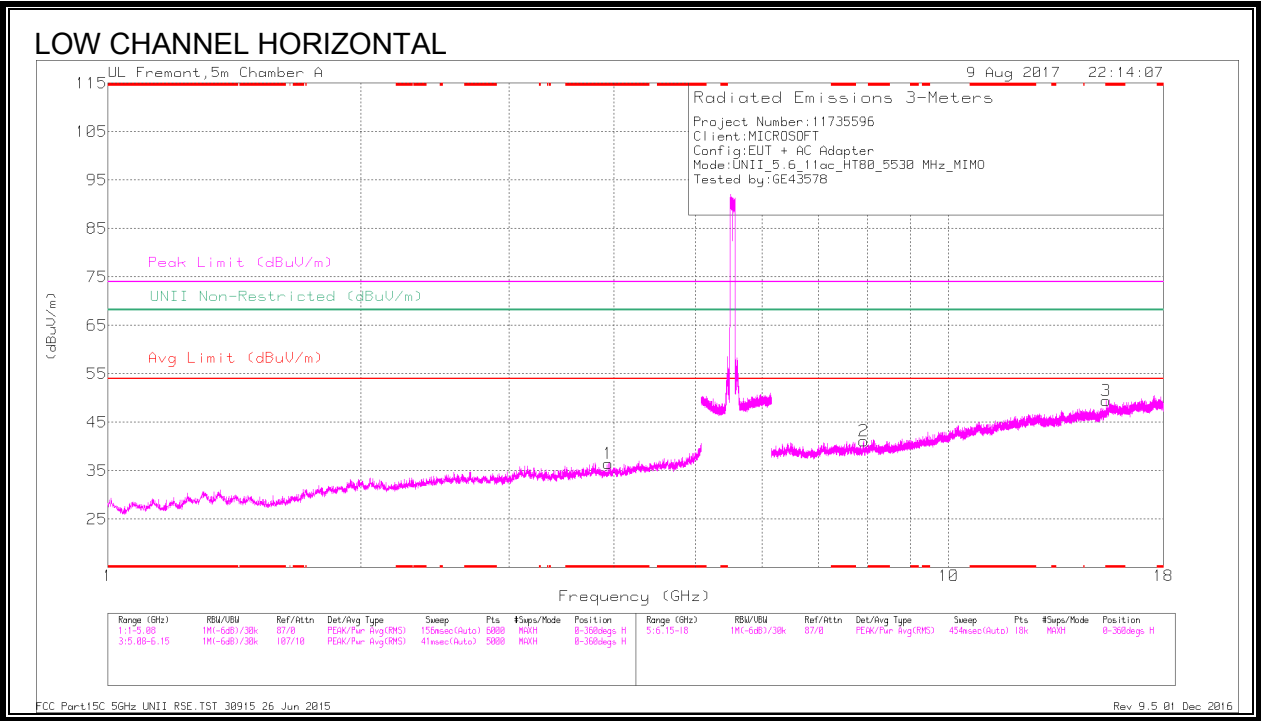


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.63	Pk	35	-19.5	55.13	68.2	-13.07	53	275	V
2	5.763	41.19	Pk	35	-19.5	56.69	68.2	-11.51	53	275	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



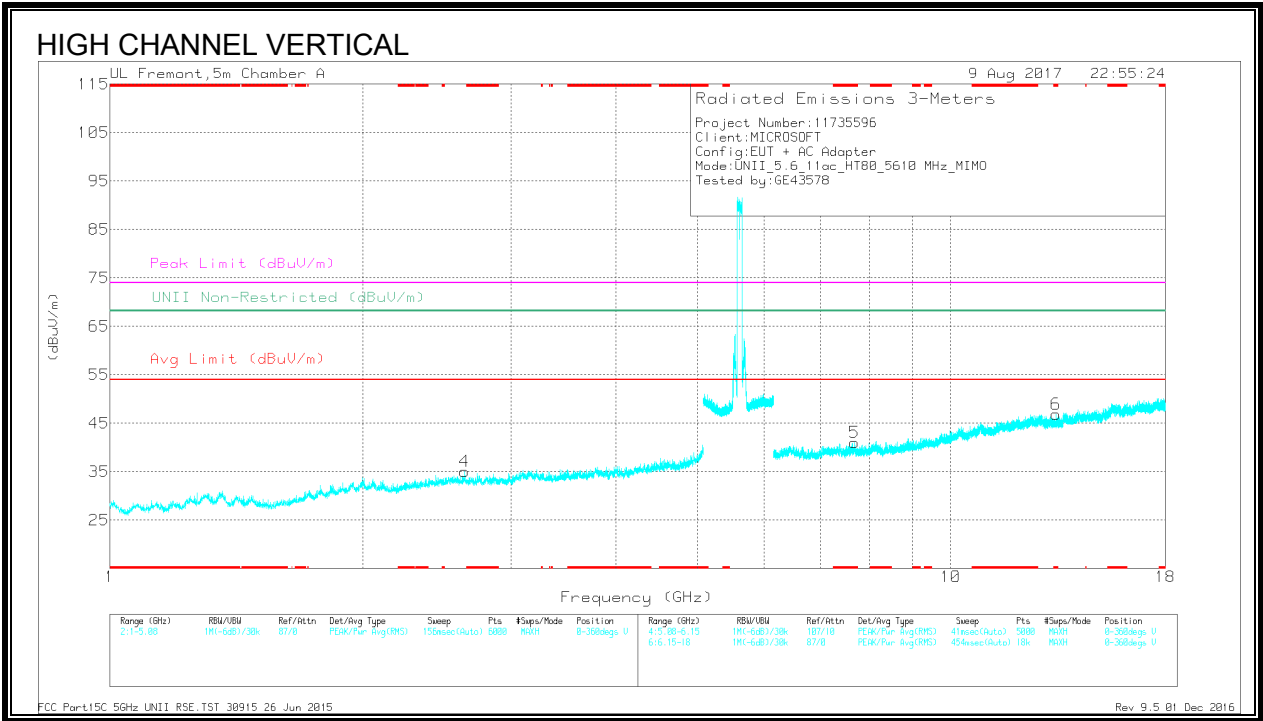
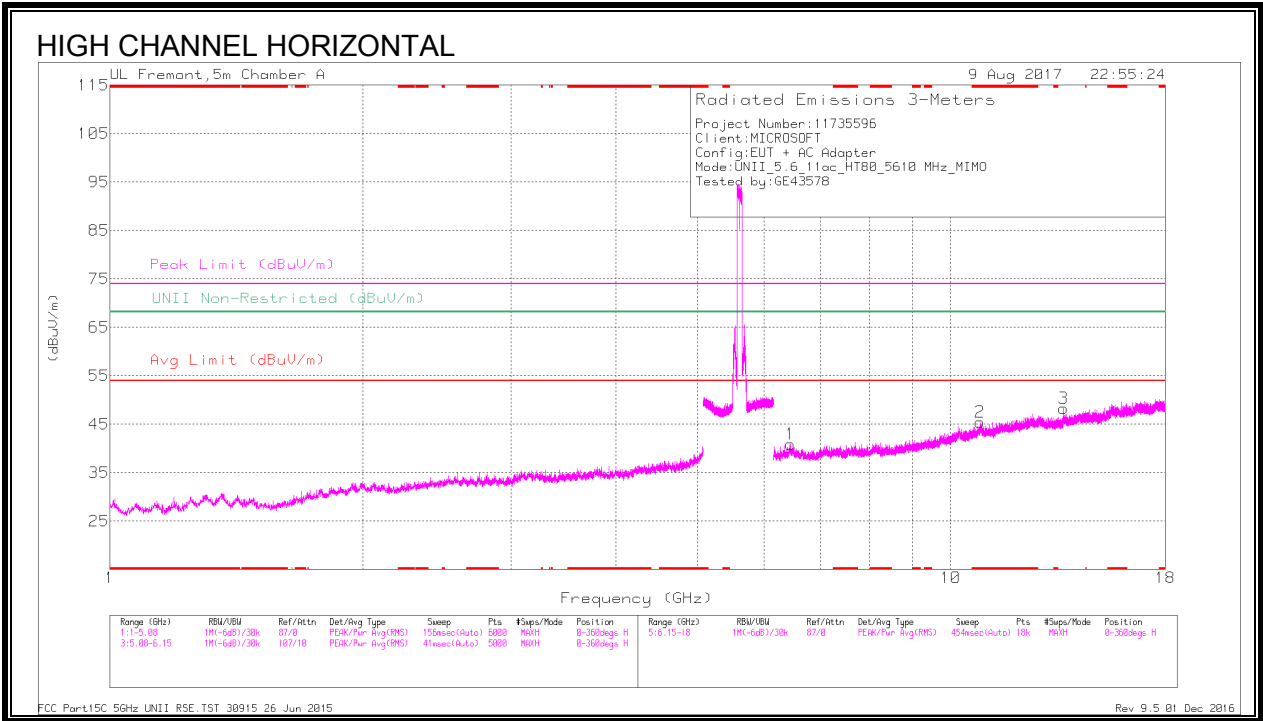
Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T62 (dB/m)	Amp/Cable/Fit/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	ULRI Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 3.938	38.65	PK-U	33.2	-29.6	0	42.25	-	-	74	-31.75	-	-	210	199	H
	* 3.938	26.66	ADR	33.2	-29.6	0	30.26	54	-23.74	-	-	-	-	210	199	H
4	* 4.619	37.52	PK-U	34	-27.4	0	44.12	-	-	74	-29.88	-	-	27	199	V
	* 4.619	25.41	ADR	34	-27.4	0	32.01	54	-21.99	-	-	-	-	27	199	V
3	* 15.389	32.95	PK-U	39.9	-18.4	0	54.45	-	-	74	-19.55	-	-	314	199	H
	* 15.389	21.09	ADR	39.9	-18.4	0	42.59	54	-11.41	-	-	-	-	314	199	H
5	* 10.846	32.4	PK-U	37.9	-18.8	0	51.5	-	-	74	-22.5	-	-	301	102	V
	* 10.845	20.44	ADR	37.9	-18.9	0	39.44	54	-14.56	-	-	-	-	301	102	V
2	7.92	33.06	PK-U	35.8	-22.9	0	45.96	-	-	-	-	68.2	-22.24	232	102	H
6	14.153	32.96	PK-U	39.5	-19.5	0	52.96	-	-	-	-	68.2	-15.24	95	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



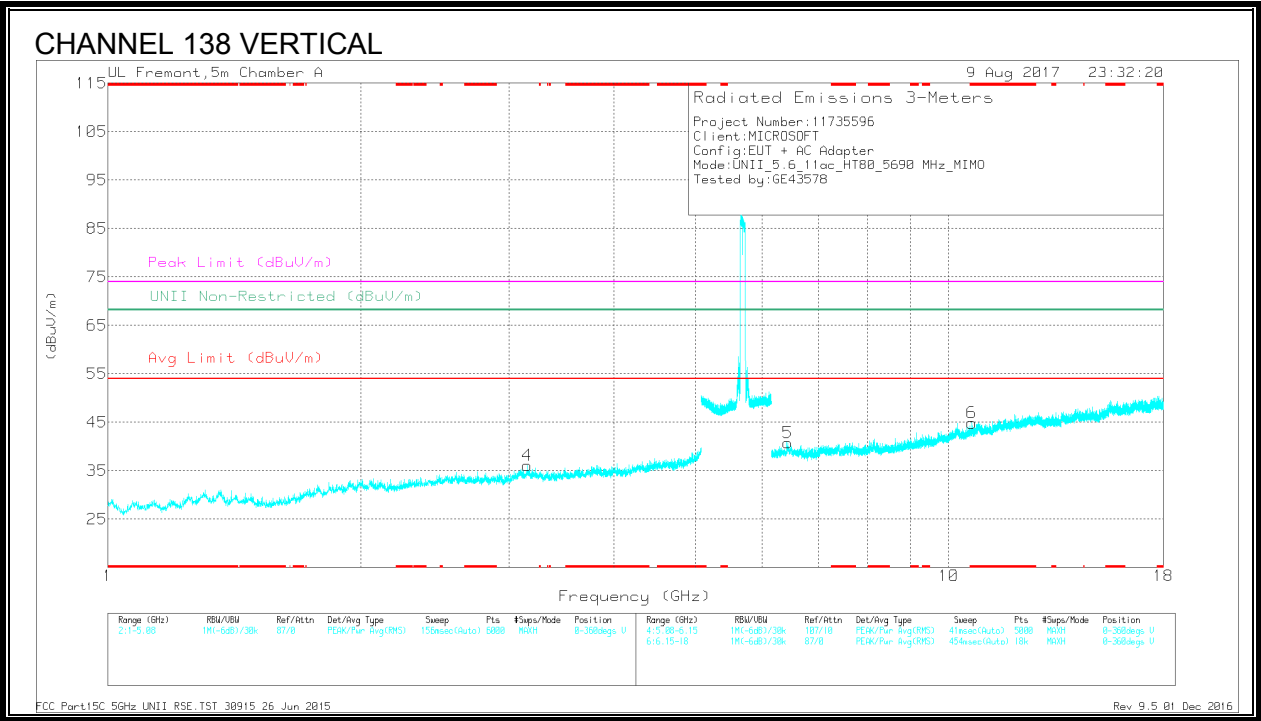
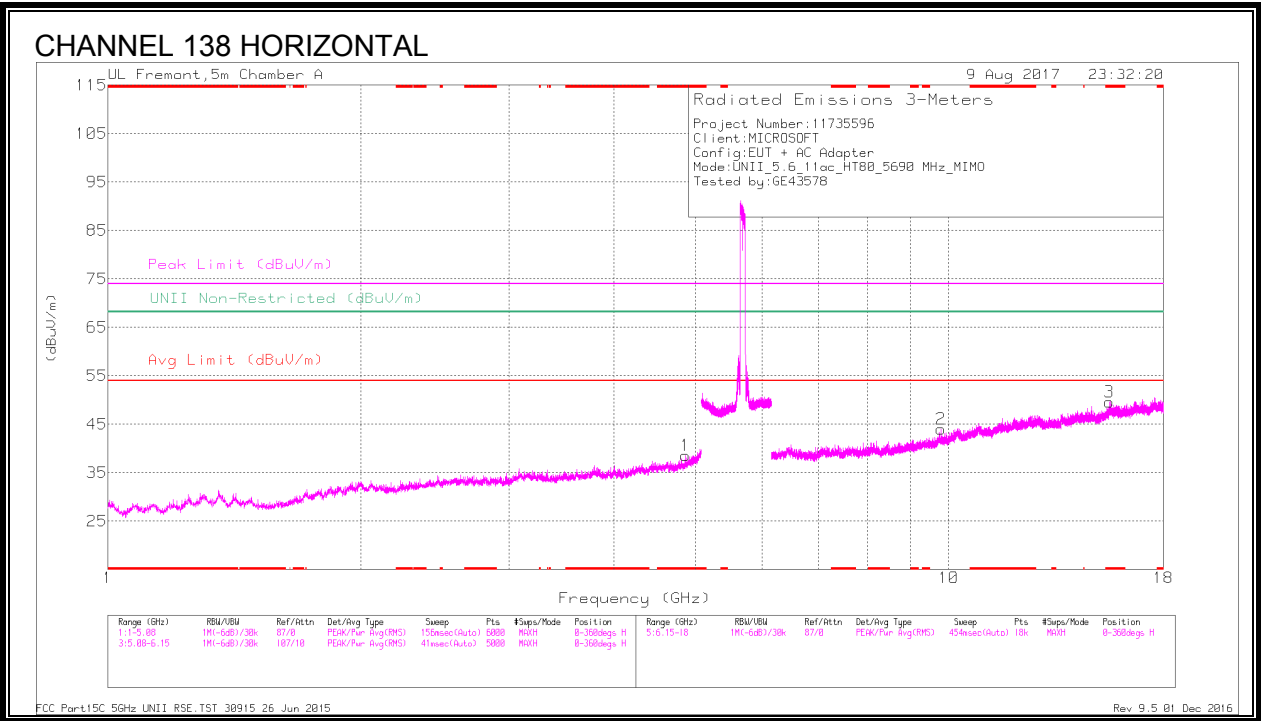
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF 1502 (dB/m)	Amp/Cable/Port/Pad (dB)	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Limit Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degrees)	Height (m)	Polarity
2	* 10.829	32.76	PK-U	37.8	-19.4	0	51.16	-	-	74	-22.84	-	-	307	199	H
	* 10.829	20.67	ADR	37.8	-19.4	0	39.07	54	-14.93	-	-	-	-	307	199	H
5	* 7.683	34.4	PK-U	35.7	-22.7	0	47.4	-	-	74	-26.6	-	-	197	199	V
	* 7.684	22.18	ADR	35.7	-22.7	0	35.18	54	-18.82	-	-	-	-	197	199	V
6	* 13.349	32.76	PK-U	39.4	-19.8	0	52.36	-	-	74	-21.64	-	-	31	102	V
	* 13.348	20.77	ADR	39.4	-19.8	0	40.37	54	-13.63	-	-	-	-	31	102	V
4	2.641	39.53	PK-U	32.5	-31.5	0	40.53	-	-	-	-	68.2	-27.67	236	100	V
1	6.443	35.17	PK-U	35.8	-23.7	0	47.27	-	-	-	-	68.2	-20.93	278	199	H
3	13.61	33.22	PK-U	39.2	-19.6	0	52.82	-	-	-	-	68.2	-15.38	71	199	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T62 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	ULRI Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 4.866	37.91	PK-U	34.1	-27.2	0	44.81	-	-	74	-29.19	-	-	200	200	H
	* 4.867	25.47	ADR	34.1	-27.2	0	32.37	54	-21.63	-	-	-	-	200	200	H
3	* 15.512	32.95	PK-U	40	-17.5	0	55.45	-	-	74	-18.55	-	-	124	102	H
	* 15.512	20.7	ADR	40	-17.4	0	43.3	54	-10.7	-	-	-	-	124	102	H
6	* 10.654	33.35	PK-U	37.7	-20.3	0	50.75	-	-	74	-23.25	-	-	294	102	V
	* 10.654	21.54	ADR	37.7	-20.3	0	38.94	54	-15.06	-	-	-	-	294	102	V
4	3.155	38.7	PK-U	32.8	-29.6	0	41.9	-	-	-	-	68.2	-26.3	183	102	V
5	6.438	35.23	PK-U	35.8	-23.7	0	47.33	-	-	-	-	68.2	-20.87	357	200	V
2	9.784	32.94	PK-U	36.9	-21.3	0	48.54	-	-	-	-	68.2	-19.66	350	199	H

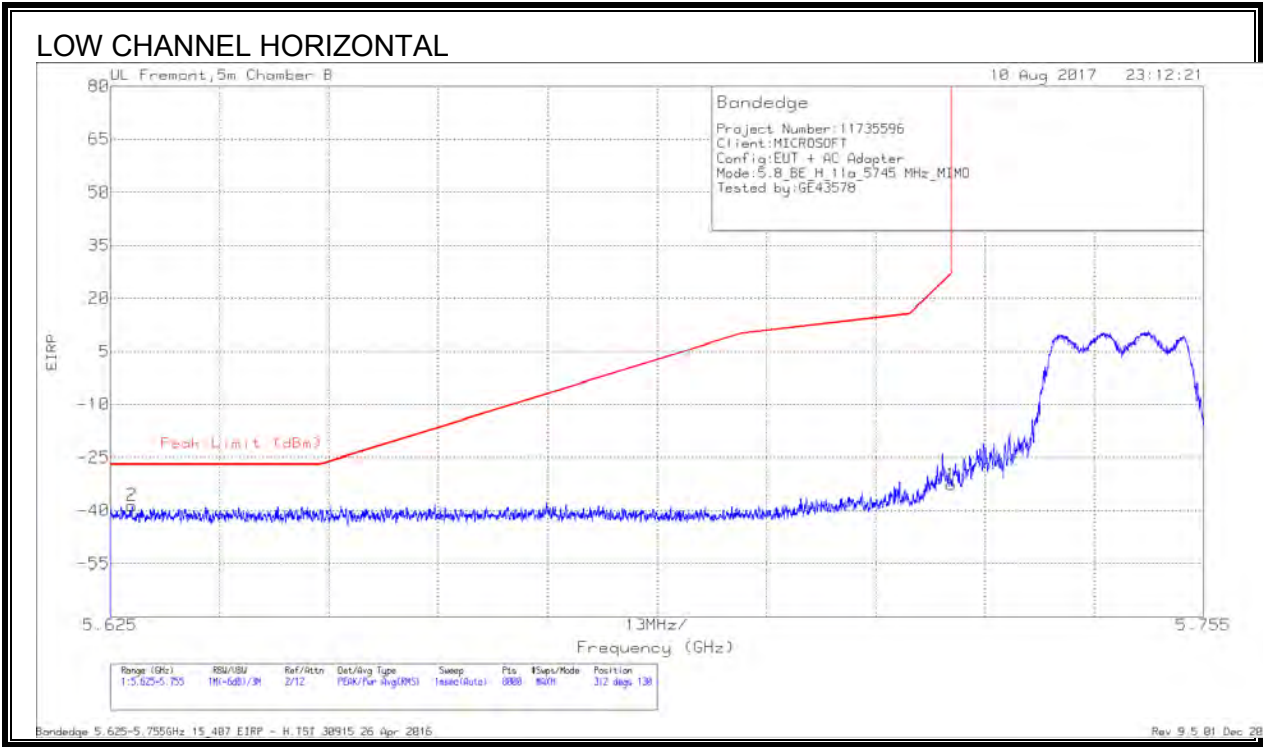
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.13.11a 2TX MODE IN THE 5.8GHz BAND

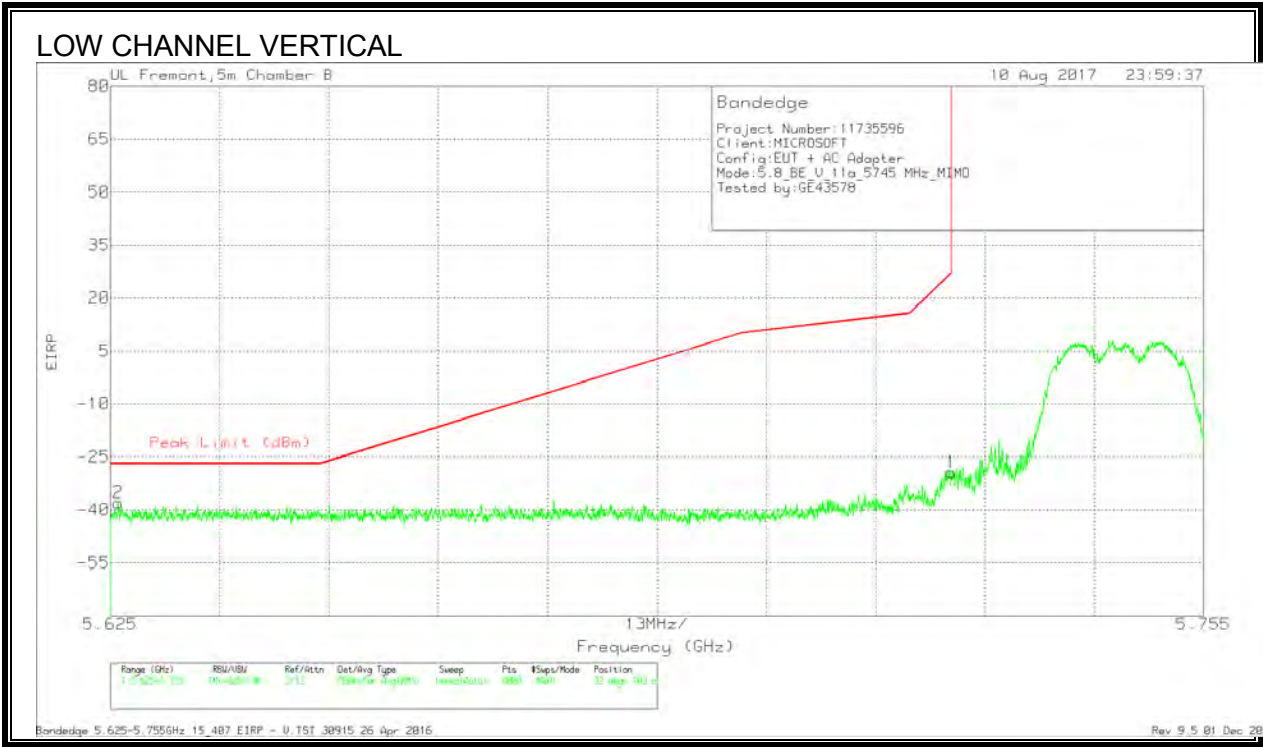
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.628	-66.37	Pk	35.3	-19.3	11.8	-38.57	-27	-11.57	312	130	H
1	5.725	-60.05	Pk	35	-19.5	11.8	-32.75	27	-59.75	312	130	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

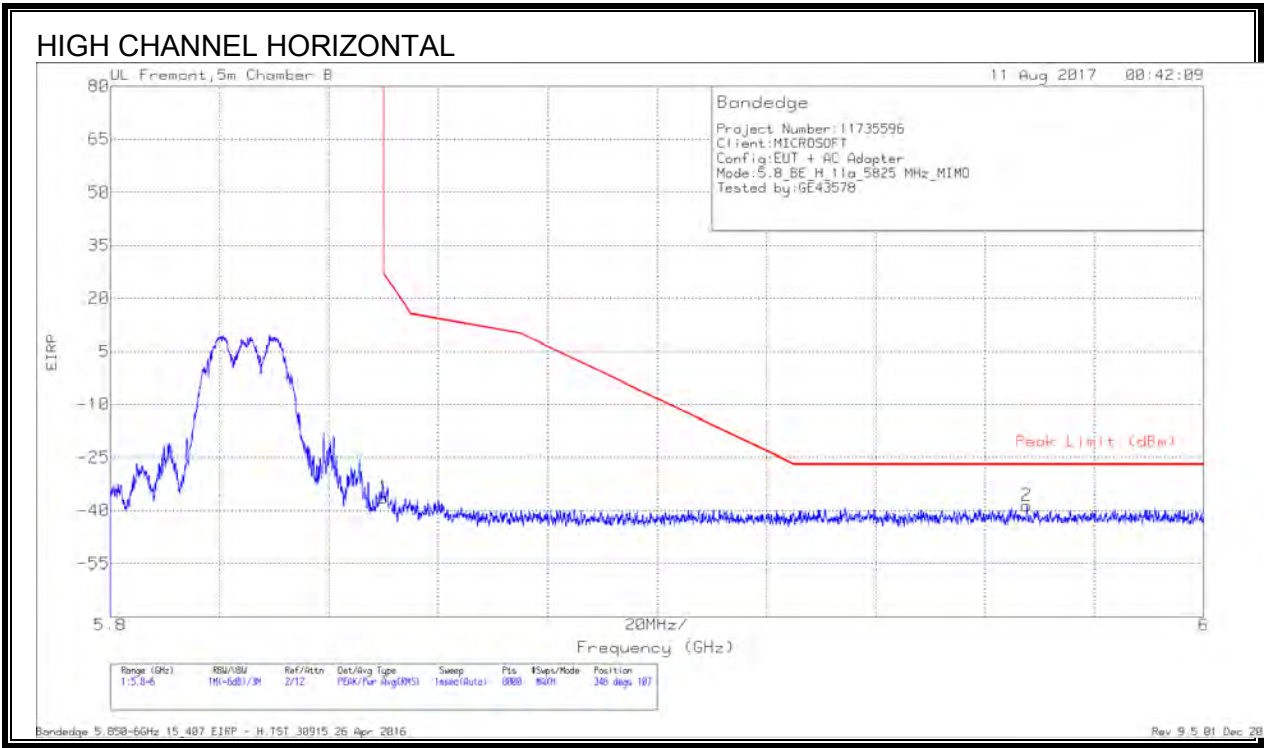


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.626	-65.91	Pk	35.3	-19.2	11.8	-38.01	-27	-11.01	32	103	V
1	5.725	-56.73	Pk	35	-19.5	11.8	-29.43	27	-56.43	32	103	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

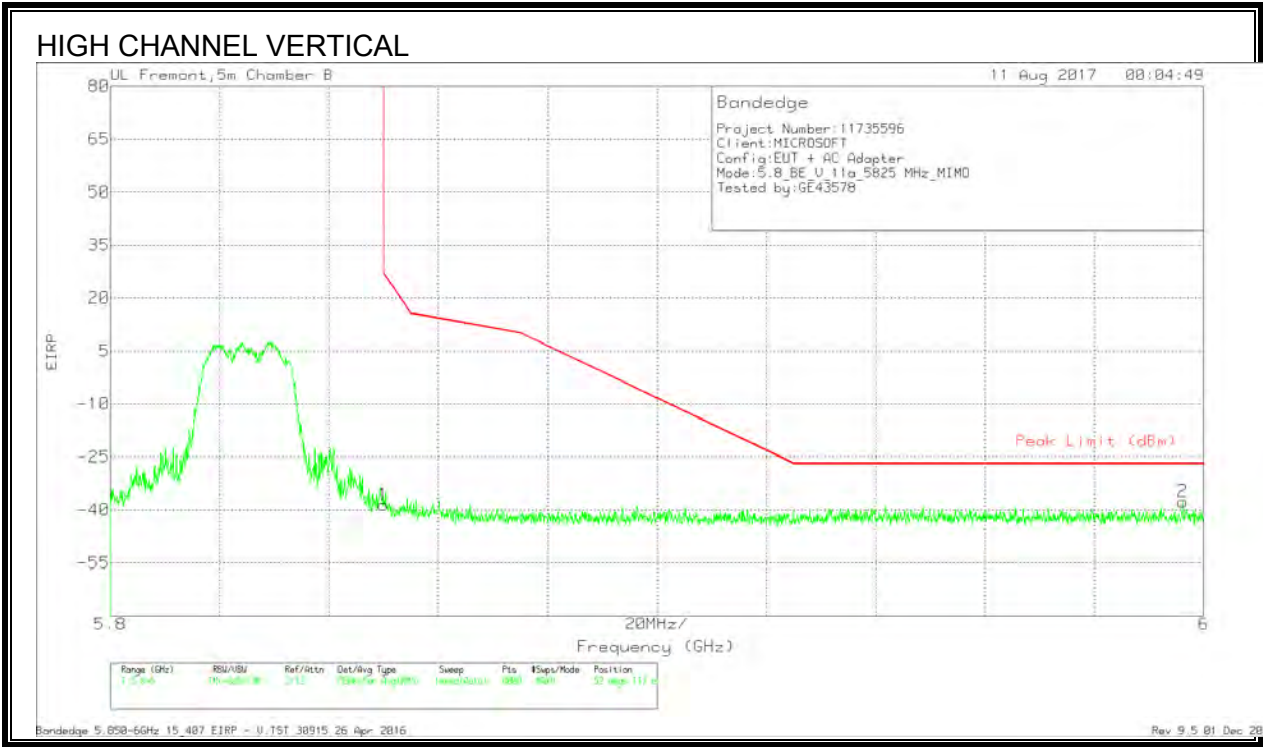
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.02	Pk	35.1	-19.3	11.8	-36.42	26.99	-63.41	346	107	H
2	5.968	-66.75	Pk	35.3	-18.9	11.8	-38.55	-27	-11.55	346	107	H

Pk - Peak detector

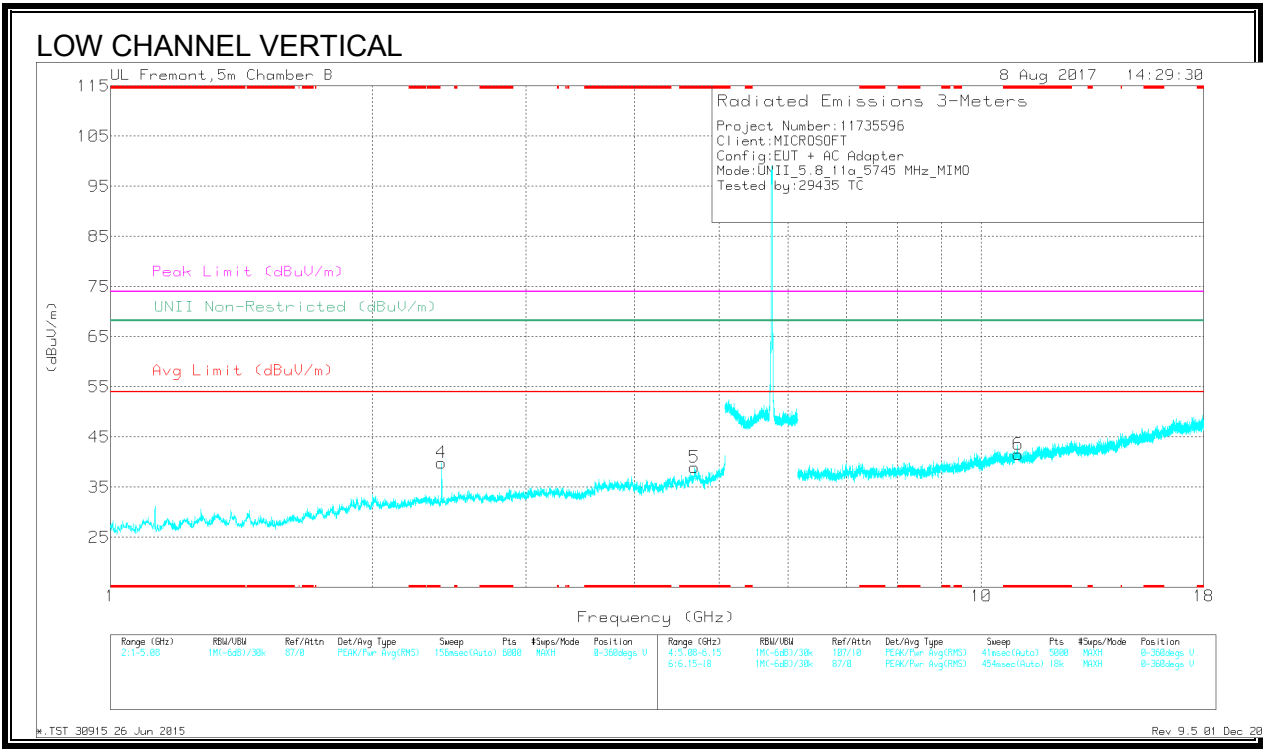
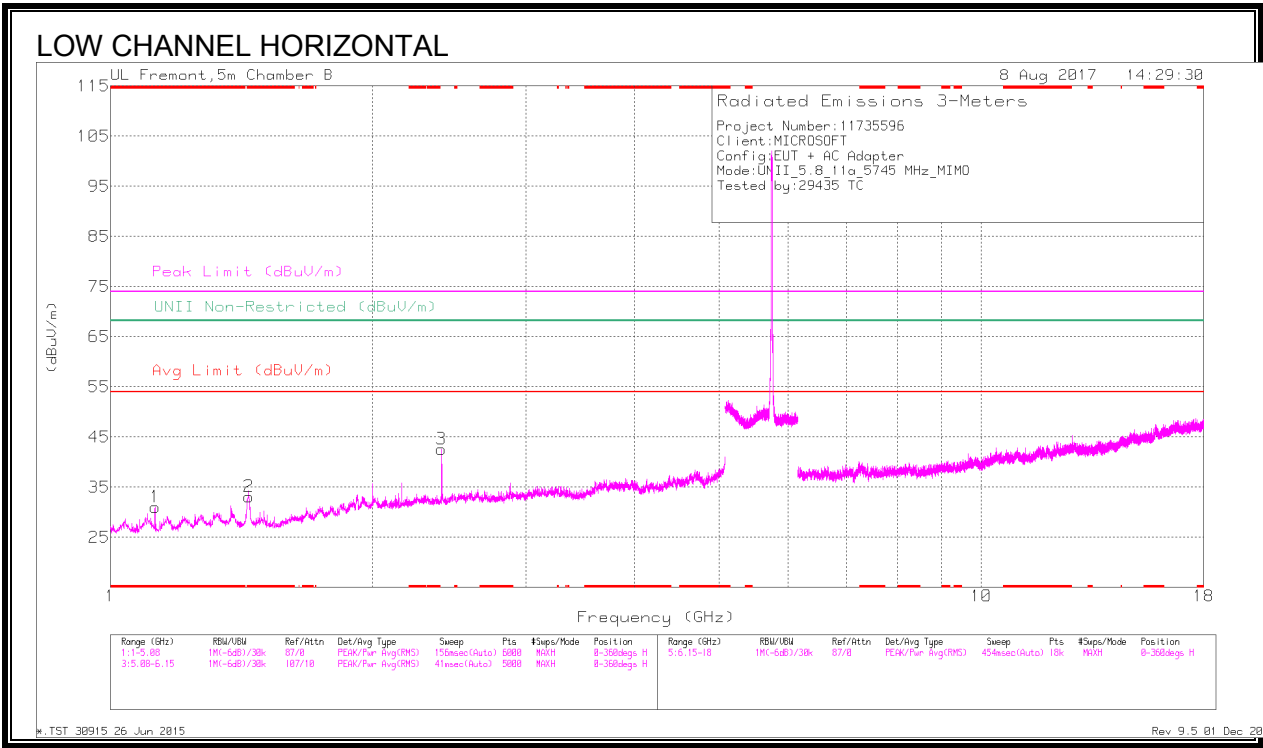


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.21	Pk	35.1	-19.3	11.8	-38.61	26.99	-65.6	52	117	V
2	5.996	-65.99	Pk	35.3	-18.8	11.8	-37.69	-27	-10.69	52	117	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



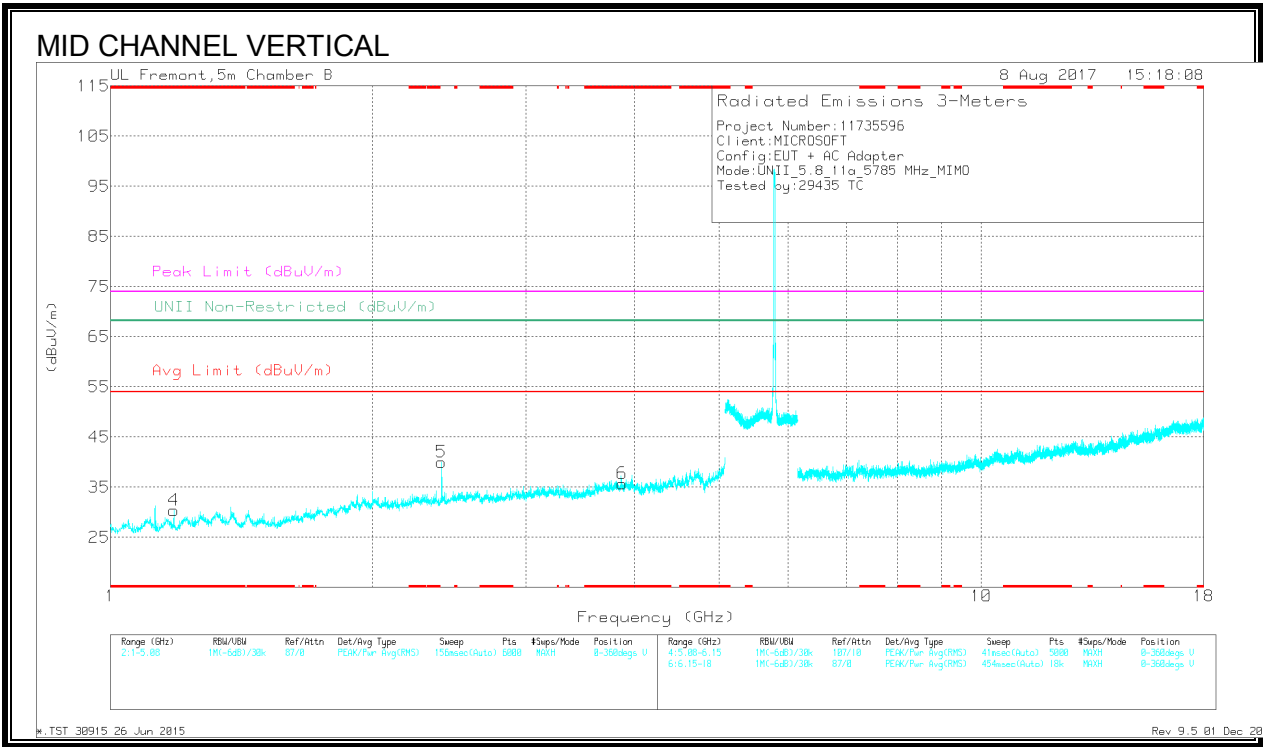
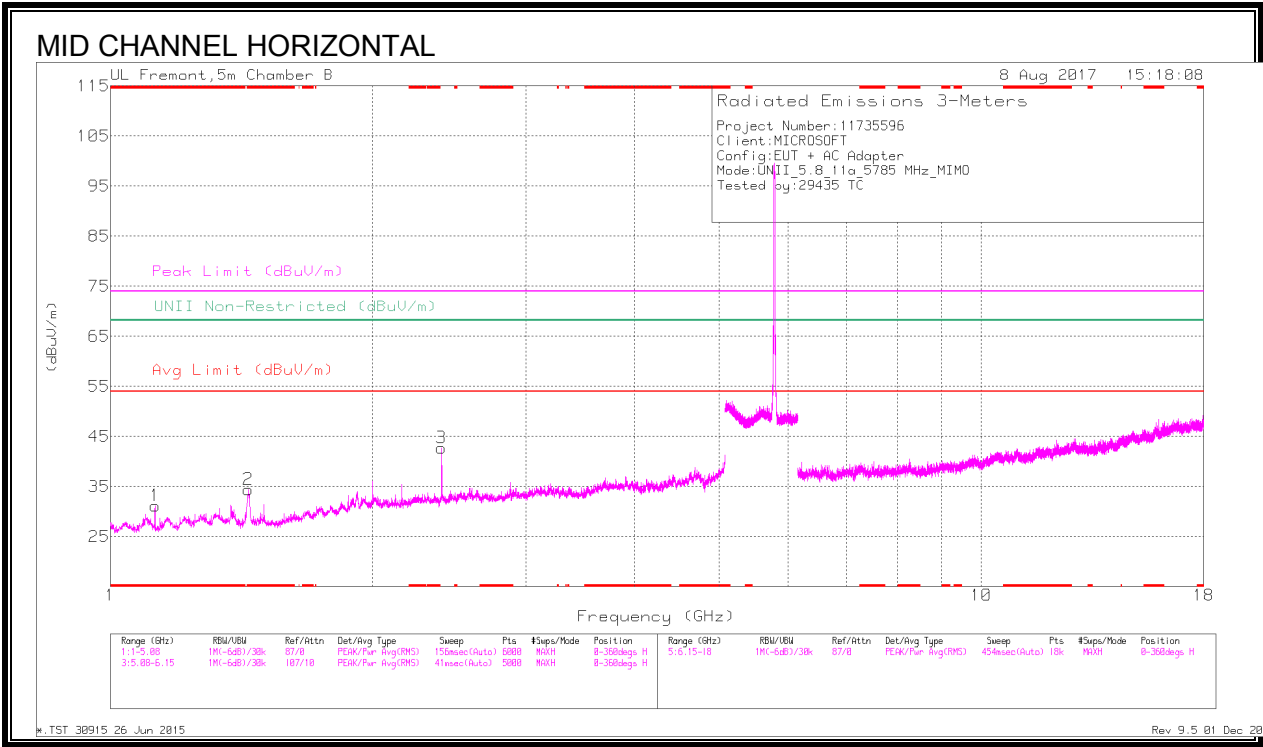
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Psd (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 1.125	43.34	PK-U	27.6	-33.9	37.04	-	-	74	-36.96	-	-	183	210	H
	* 1.125	34.89	ADR	27.6	-33.9	28.59	54	-25.41	-	-	-	-	183	210	H
2	* 1.44	53.6	PK-U	28.3	-33.4	48.5	-	-	74	-25.5	-	-	271	139	H
	* 1.44	34.49	ADR	28.3	-33.4	29.39	54	-24.61	-	-	-	-	271	139	H
5	* 4.68	38.69	PK-U	34.3	-28.9	44.09	-	-	74	-29.91	-	-	329	349	V
	* 4.682	27.71	ADR	34.2	-28.9	33.01	54	-20.99	-	-	-	-	329	349	V
6	* 11.027	33.91	PK-U	37.8	-22.4	49.31	-	-	74	-24.69	-	-	318	233	V
	* 11.025	21.41	ADR	37.7	-22.4	36.71	54	-17.29	-	-	-	-	318	233	V
3	2.4	48.81	PK-U	32	-32.6	48.21	-	-	-	-	68.2	-19.99	202	141	H
4	2.401	45.86	PK-U	32	-32.6	45.26	-	-	-	-	68.2	-22.94	201	106	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



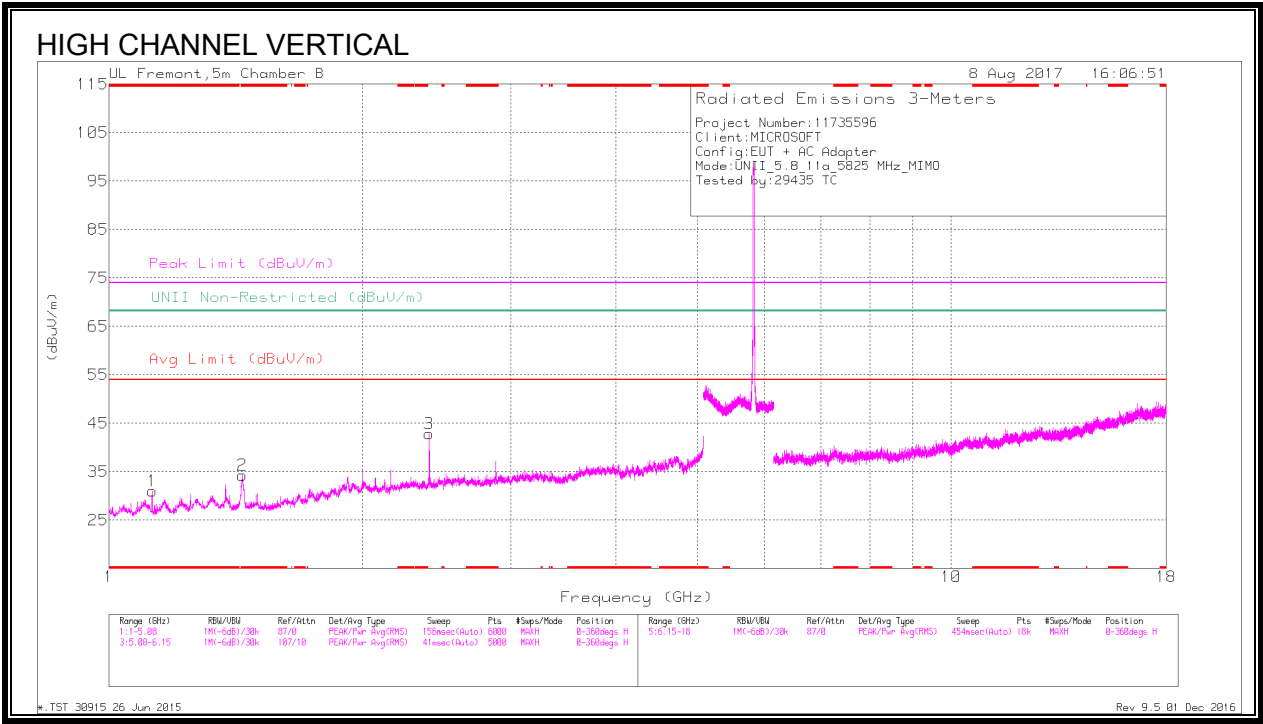
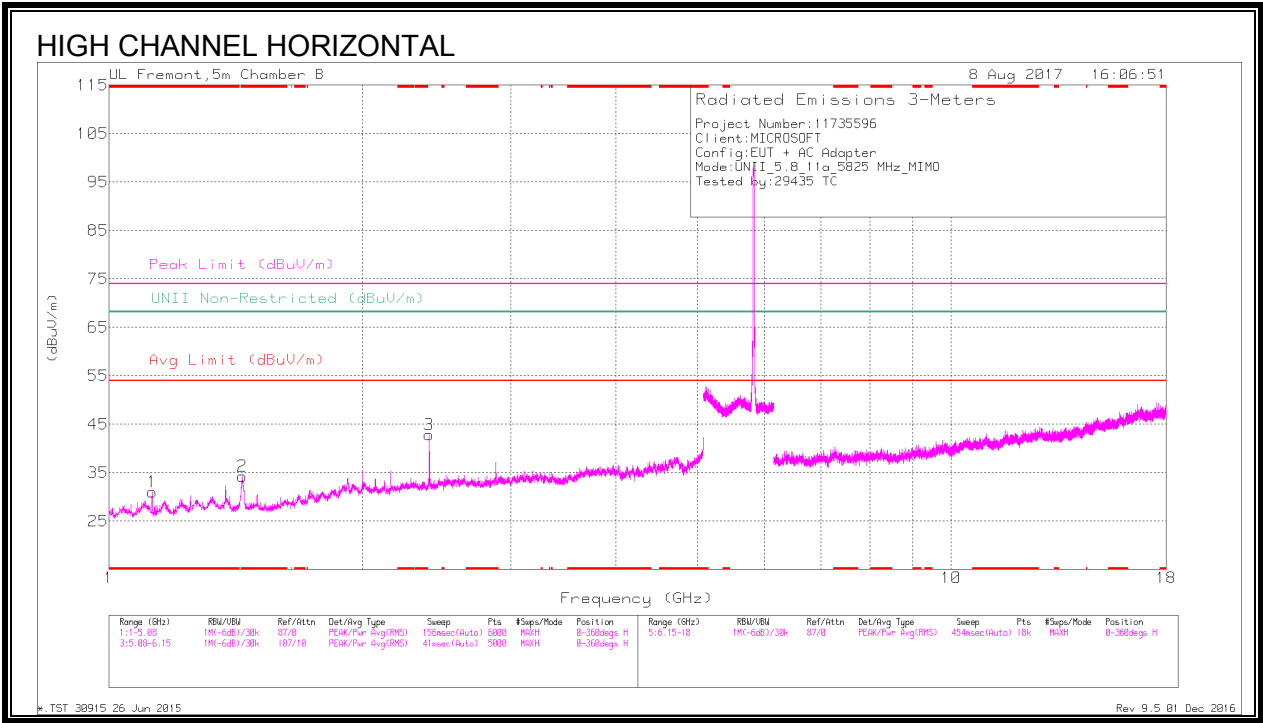
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	43.3	PK-U	27.6	-33.9	37	-	-	74	-37	-	-	74	109	H
	* 1.125	35.89	ADR	27.6	-33.9	29.59	54	-24.41	-	-	-	-	74	109	H
2	* 1.44	54.32	PK-U	28.3	-33.4	49.22	-	-	74	-24.78	-	-	269	168	H
	* 1.44	35.05	ADR	28.3	-33.4	29.95	54	-24.05	-	-	-	-	269	168	H
4	* 1.184	41.11	PK-U	27.8	-34	34.91	-	-	74	-39.09	-	-	115	223	V
	* 1.184	28.56	ADR	27.8	-34	22.36	54	-31.64	-	-	-	-	115	223	V
6	* 3.867	39.34	PK-U	33.5	-30.5	42.34	-	-	74	-31.66	-	-	299	174	V
	* 3.868	27.97	ADR	33.5	-30.6	30.87	54	-23.13	-	-	-	-	299	174	V
3	2.4	45.74	PK-U	32	-32.6	45.14	-	-	-	-	68.2	-23.06	200	105	V
5	2.401	50.08	PK-U	32	-32.6	49.48	-	-	-	-	68.2	-18.72	212	139	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Ch/Flt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	43.25	PK-U	27.6	-33.9	36.95	-	-	74	-37.05	-	-	73	110	H
	* 1.125	36	ADR	27.6	-33.9	29.7	54	-24.3	-	-	-	-	73	110	H
2	* 1.44	52.52	PK-U	28.3	-33.4	47.42	-	-	74	-26.58	-	-	197	138	H
	* 1.44	33.32	ADR	28.3	-33.4	28.22	54	-25.78	-	-	-	-	197	138	H
4	* 1.375	42.48	PK-U	28.5	-33.3	37.68	-	-	74	-36.32	-	-	215	323	V
	* 1.375	31.7	ADR	28.5	-33.3	26.9	54	-27.1	-	-	-	-	215	323	V
6	* 11.027	32.9	PK-U	37.8	-22.4	48.3	-	-	74	-25.7	-	-	79	173	V
	* 11.027	21.44	ADR	37.8	-22.5	36.74	54	-17.26	-	-	-	-	79	173	V
3	2.4	50.21	PK-U	32	-32.6	49.61	-	-	-	-	68.2	-18.59	207	133	H
5	2.4	46.89	PK-U	32	-32.6	46.29	-	-	-	-	68.2	-21.91	200	105	V

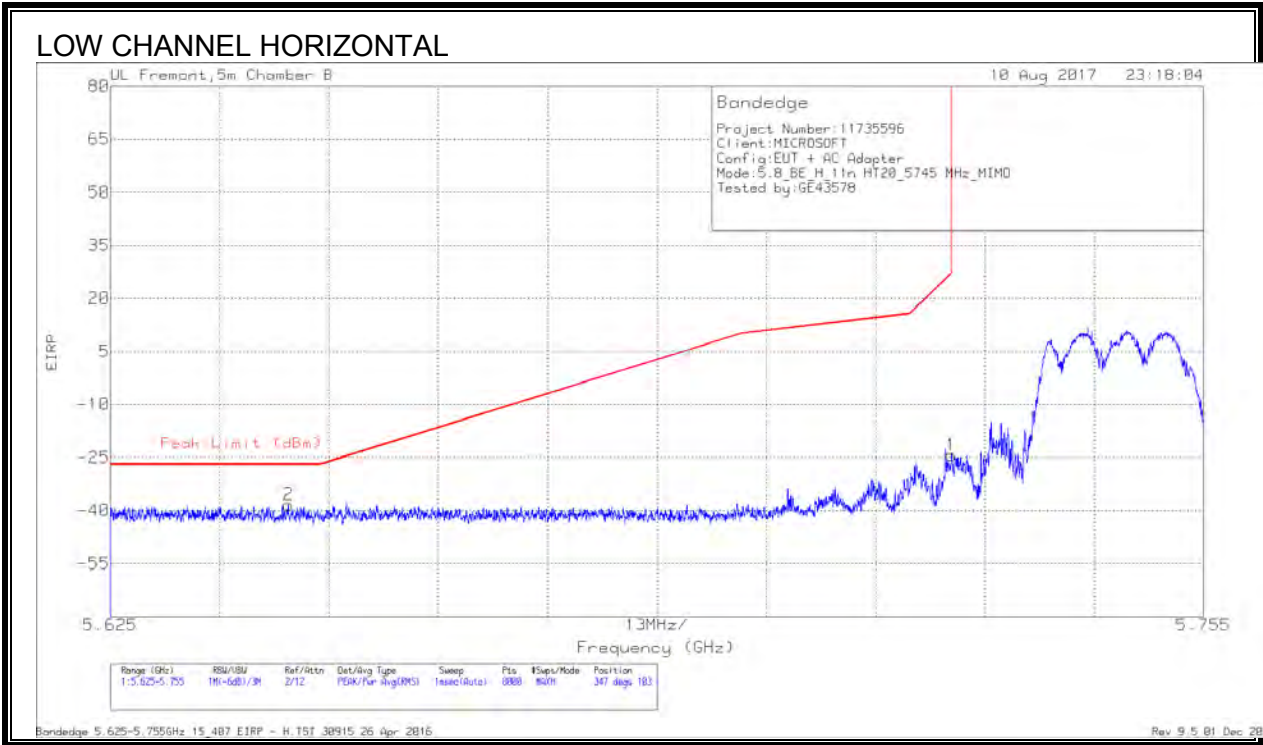
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.14.11n HT20 2TX MODE IN THE 5.8GHz BAND

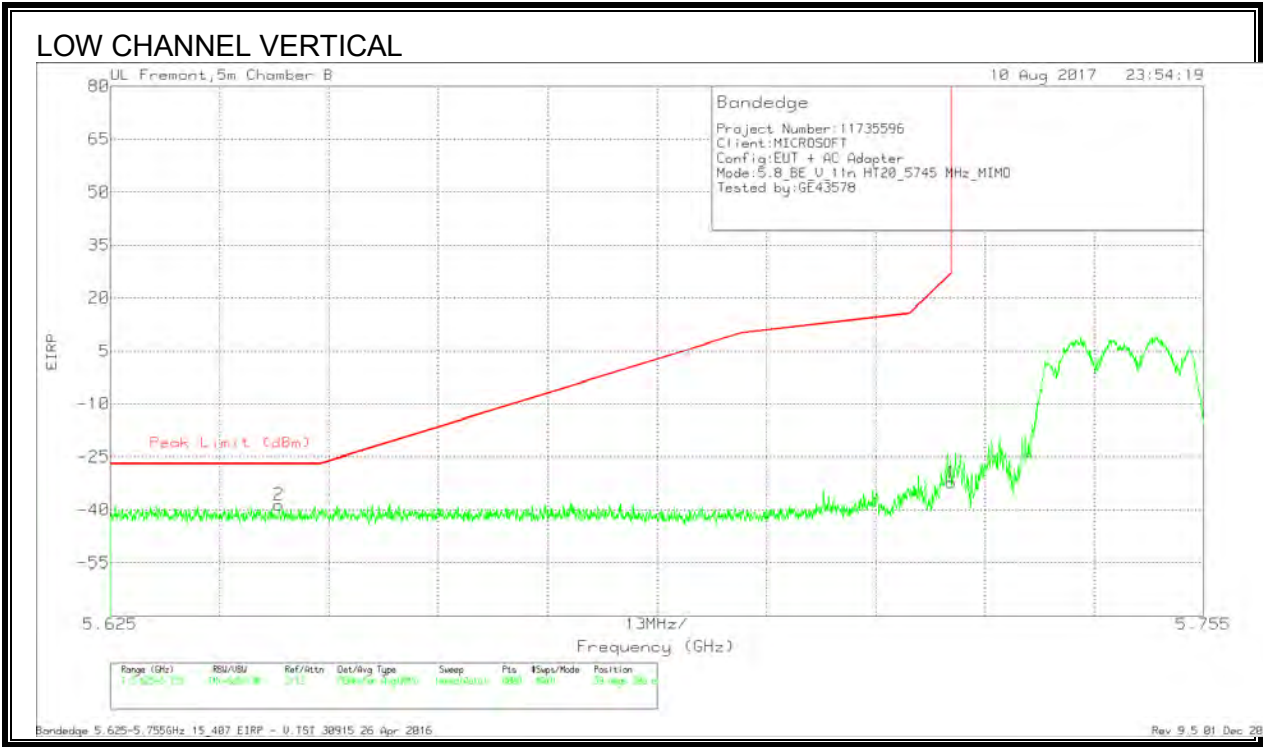
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cb/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.646	-66.18	Pk	35.3	-19.4	11.8	-38.48	-27	-11.48	347	103	H
1	5.725	-51.68	Pk	35	-19.5	11.8	-24.38	27	-51.38	347	103	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

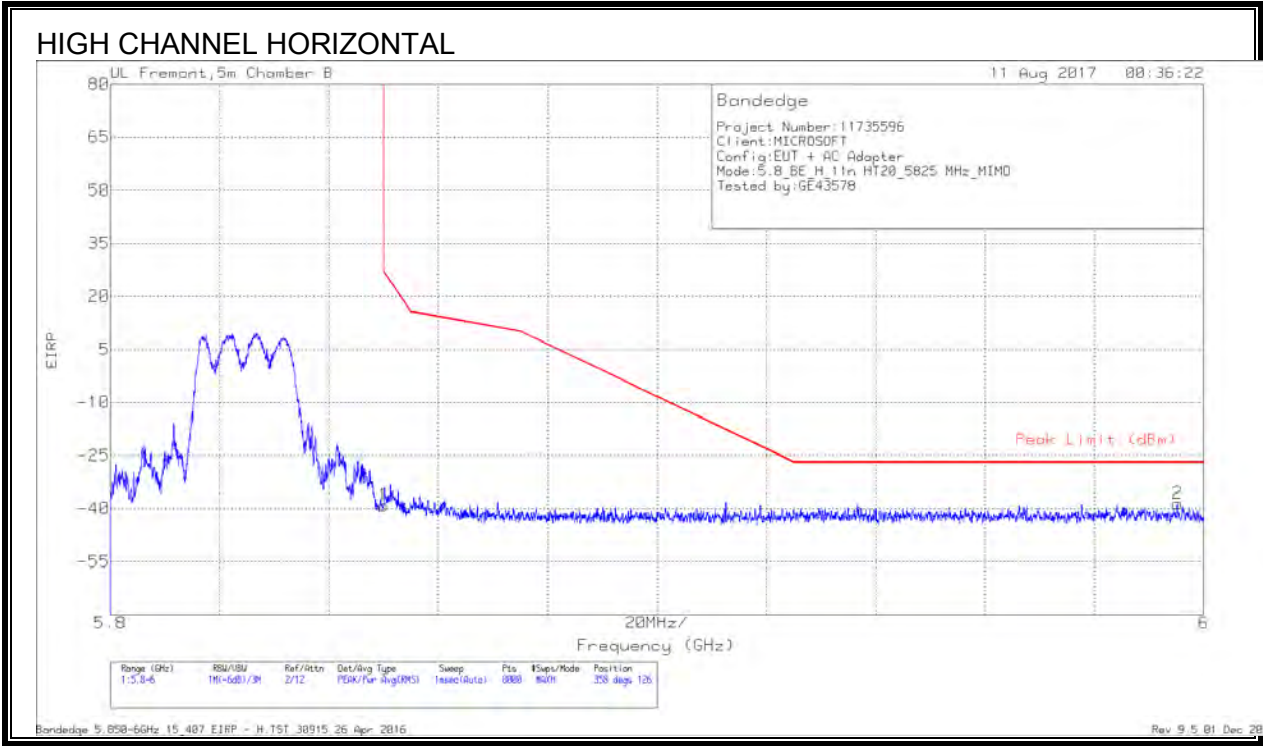


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/CbI/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.645	-66.27	Pk	35.3	-19.4	11.8	-38.57	-27	-11.57	39	396	V
1	5.725	-59.66	Pk	35	-19.5	11.8	-32.36	27	-59.36	39	396	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

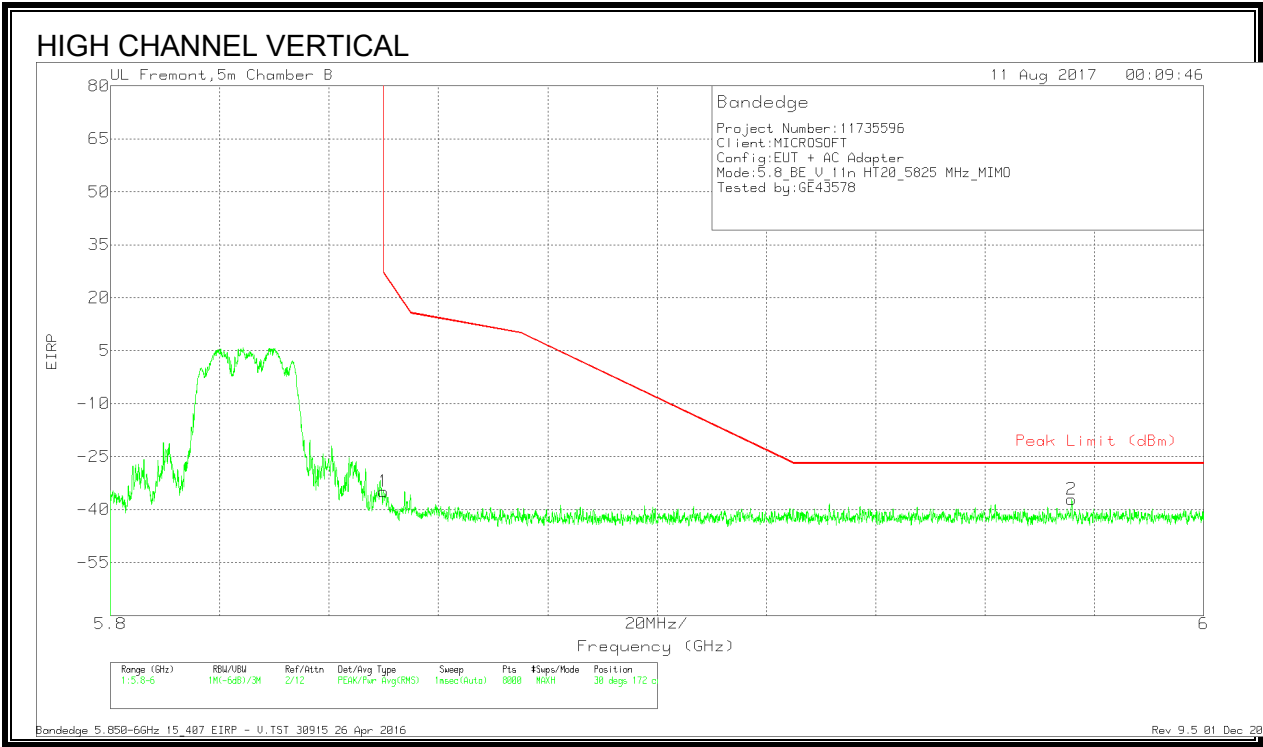
AUTHORIZED BANDEDGE (HIGH CHANNEL)



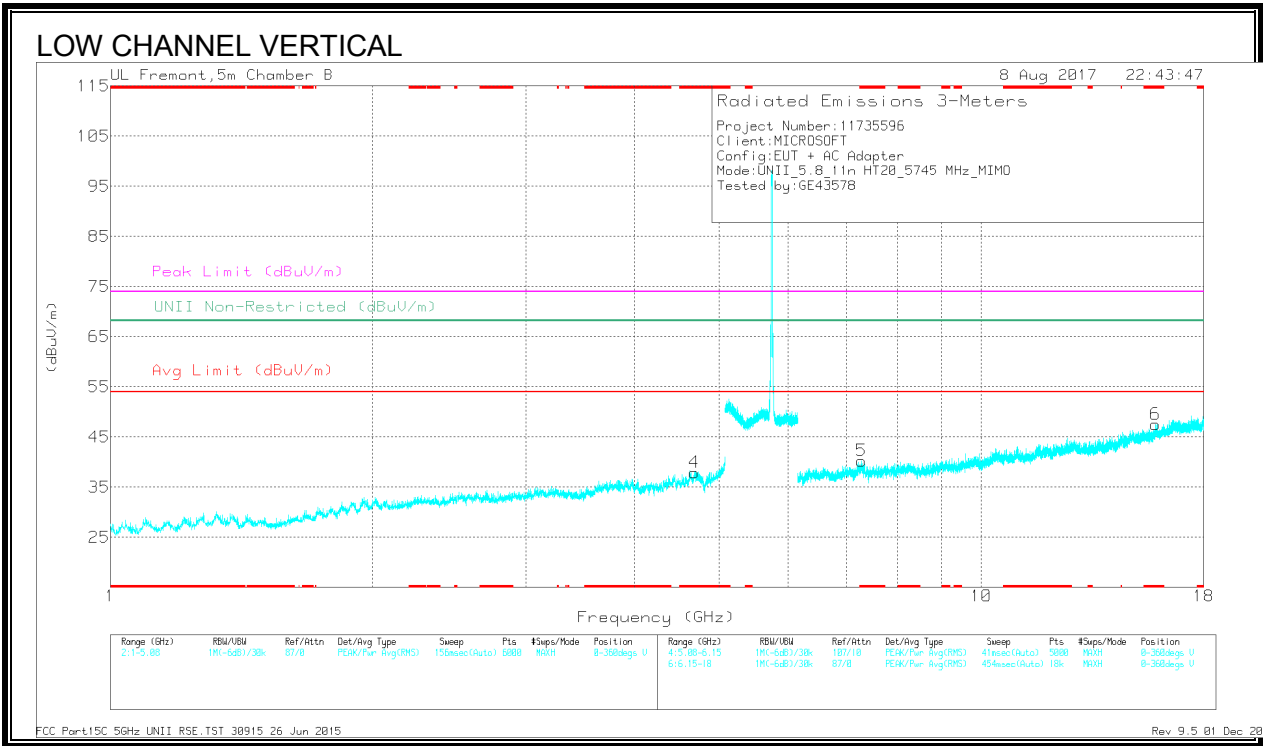
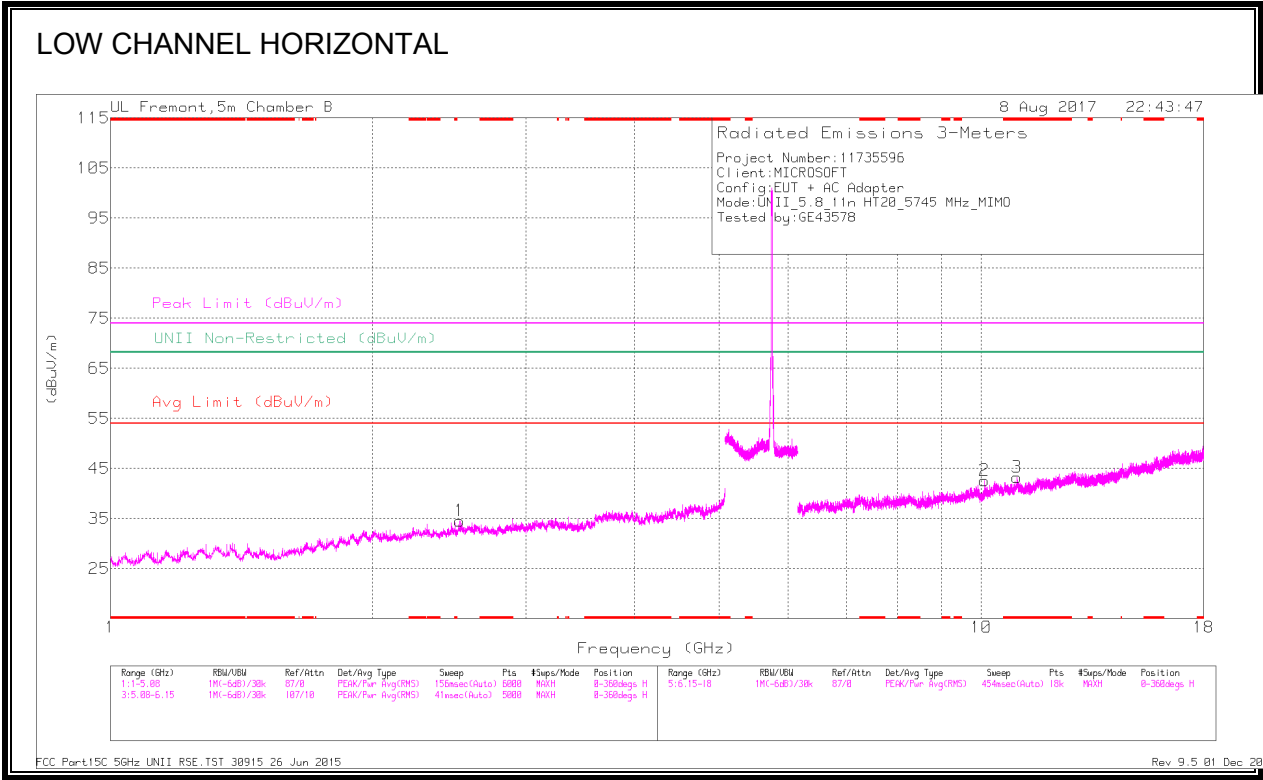
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.71	Pk	35.1	-19.3	11.8	-39.11	26.99	-66.1	358	126	H
2	5.995	-66.95	Pk	35.3	-18.8	11.8	-38.65	-27	-11.65	358	126	H

Pk - Peak detector



HARMONICS AND SPURIOUS EMISSIONS



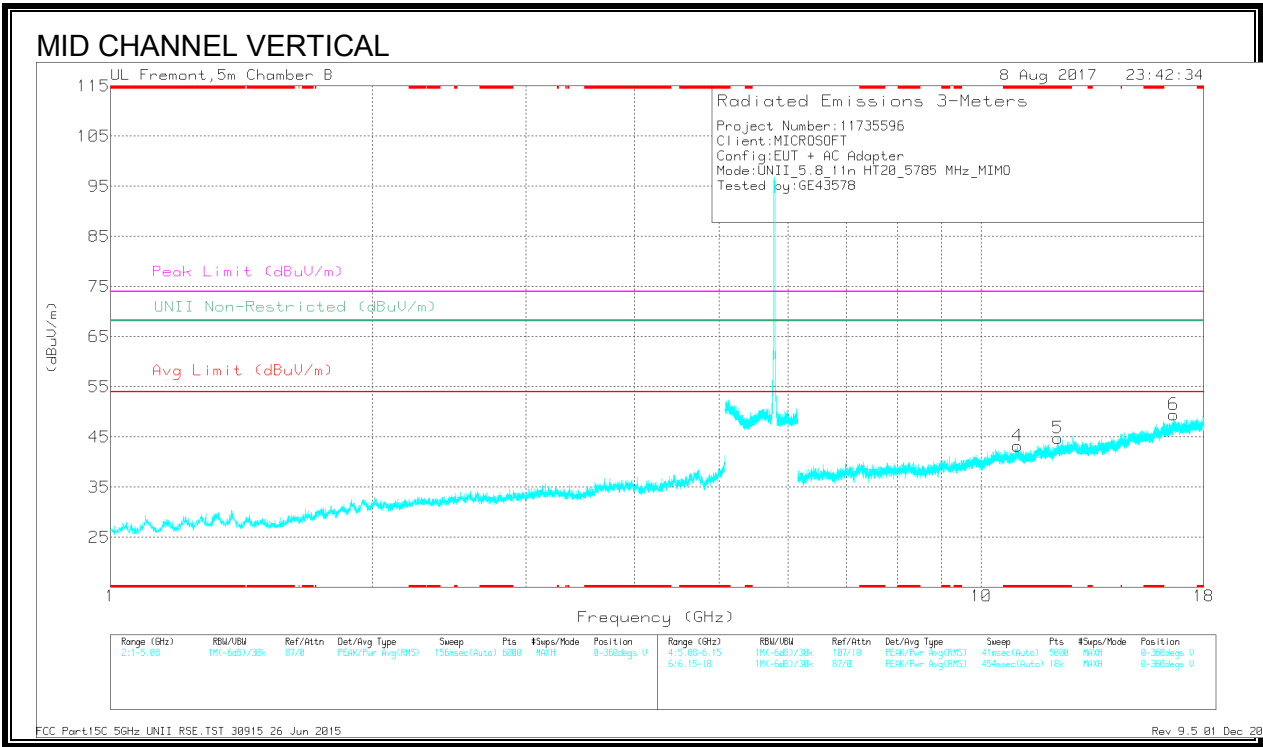
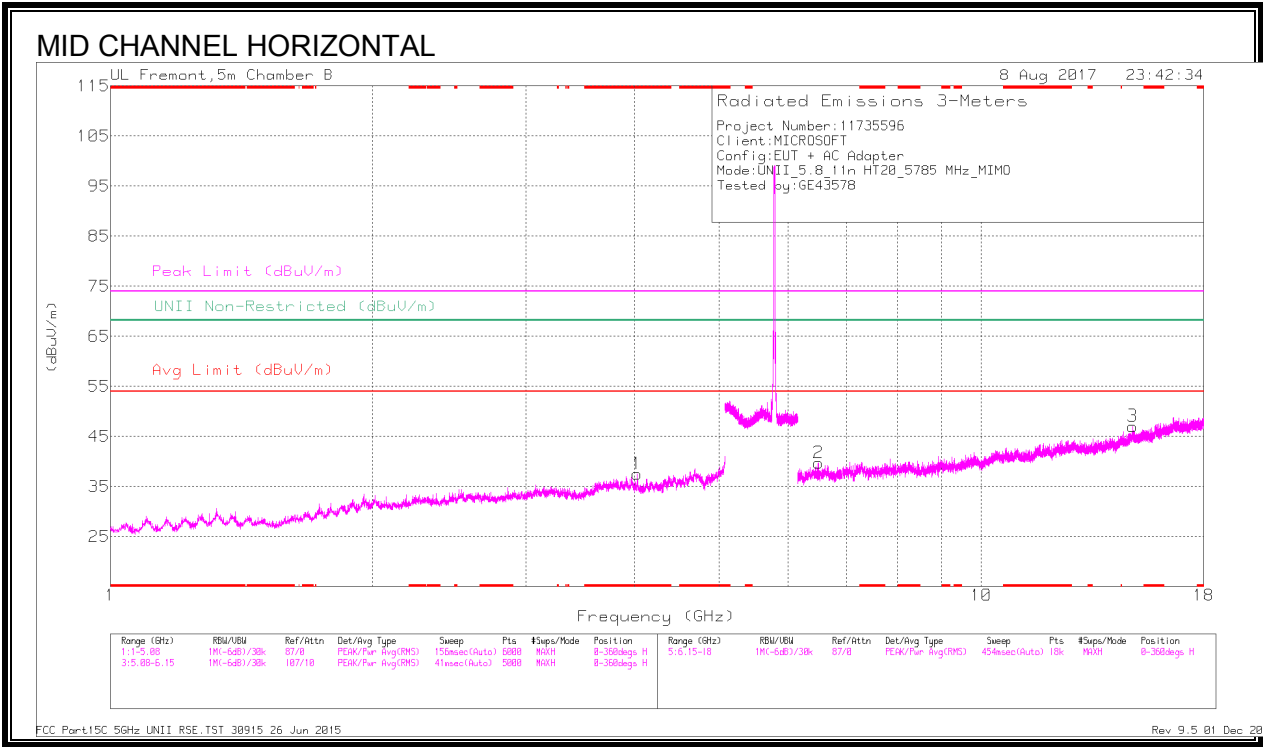
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T8E3 (dB/m)	Amp/Ch/FHz/Psd (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.683	39.91	PK-U	34.2	-29	0	45.11	-	-	74	-28.89	-	-	88	104	V
	* 4.684	27.68	ADR	34.2	-29	0	32.88	54	-21.12	-	-	-	-	88	104	V
3	* 10.986	33.48	PK-U	37.7	-22.1	0	49.08	-	-	74	-24.92	-	-	120	199	H
	* 10.985	21.44	ADR	37.7	-22.1	0	37.04	54	-16.96	-	-	-	-	120	199	H
5	* 7.288	36.7	PK-U	35.8	-26	0	46.5	-	-	74	-27.5	-	-	142	199	V
	* 7.289	28.54	ADR	35.8	-26	0	34.34	54	-19.66	-	-	-	-	142	199	V
6	* 15.854	32.42	PK-U	41	-18.7	0	54.72	-	-	74	-19.28	-	-	80	104	V
	* 15.854	19.72	ADR	41	-18.7	0	42.02	54	-11.98	-	-	-	-	80	104	V
1	2.518	40.46	PK-U	32.6	-31.8	0	41.26	-	-	-	-	68.2	-26.94	4	199	H
2	10.076	33.92	PK-U	37.3	-23.4	0	47.82	-	-	-	-	68.2	-20.38	103	199	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



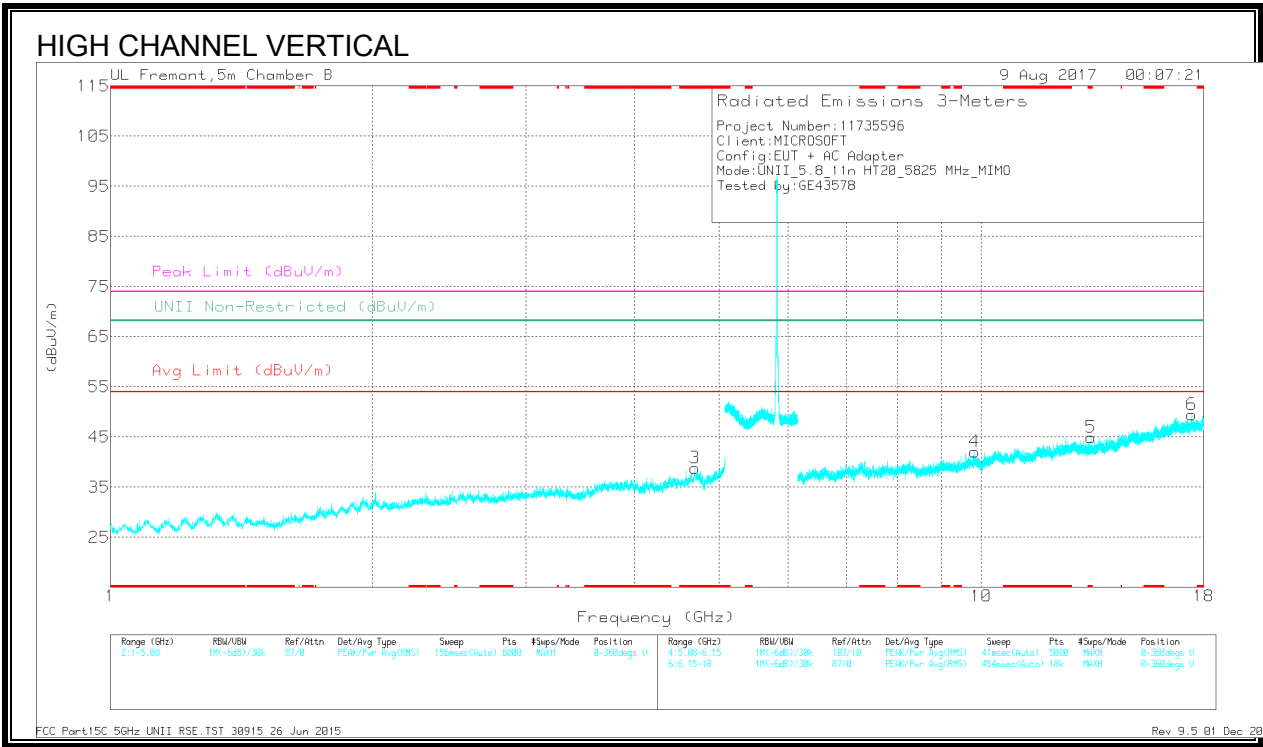
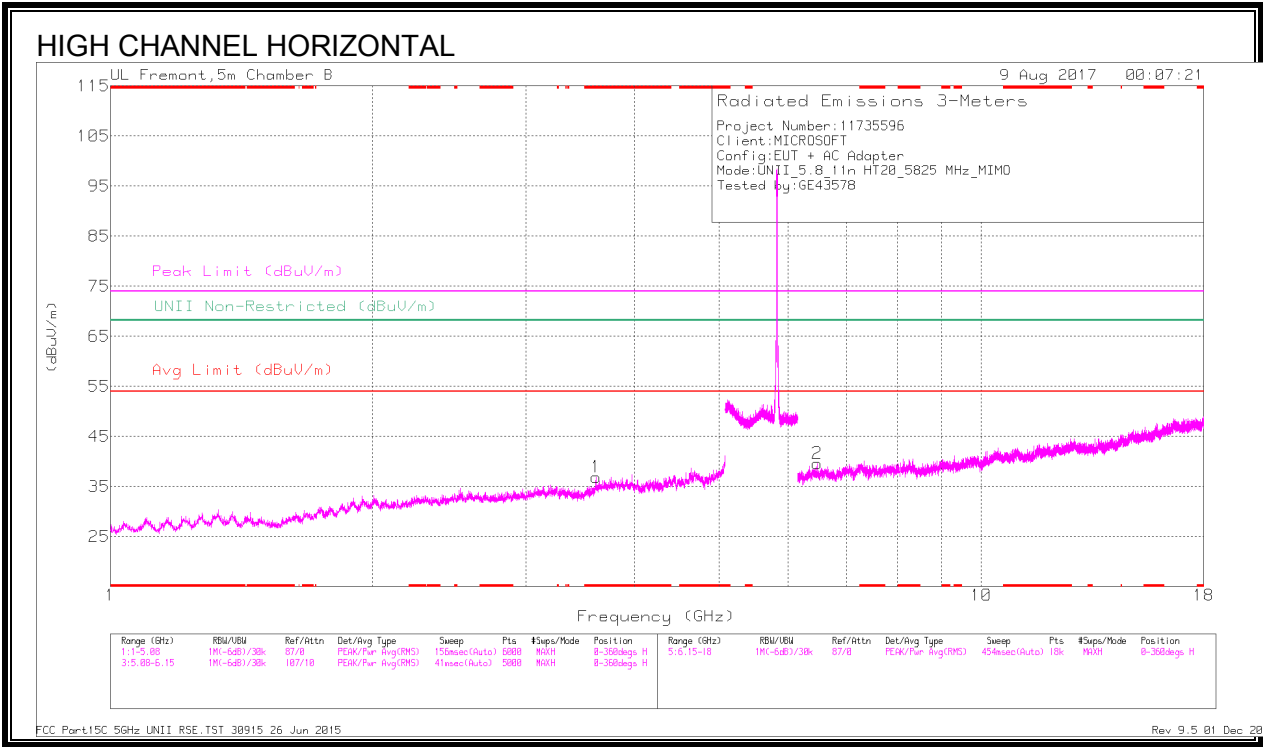
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1863 (dB/m)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Unli Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (m)	Polarity
1	* 4.029	39.56	PK-U	33.5	-30.1	0	42.96	-	-	74	-31.04	-	-	142	200	H
	* 4.028	27.33	ADR	33.5	-30.1	0	30.73	54	-23.27	-	-	-	-	142	200	H
4	* 11	33.22	PK-U	37.7	-21.5	0	49.42	-	-	74	-24.58	-	-	257	200	V
	* 11.002	21.38	ADR	37.7	-21.5	0	37.58	54	-16.42	-	-	-	-	257	200	V
5	* 12.247	32.86	PK-U	39.1	-21.9	0	50.06	-	-	74	-23.94	-	-	271	104	V
	* 12.247	20.92	ADR	39.1	-21.9	0	38.12	54	-15.88	-	-	-	-	271	104	V
2	6.499	37.84	PK-U	35.7	-28.5	0	45.04	-	-	-	-	68.2	-23.16	303	104	H
3	14.92	32.68	PK-U	40.6	-21.1	0	52.18	-	-	-	-	68.2	-16.02	5	104	H
6	16.622	31.7	PK-U	42.1	-19	0	54.8	-	-	-	-	68.2	-13.4	322	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Ch/FHz/Psd (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 3.61	39.6	PK-U	33.2	-31.3	0	41.5	-	-	74	-32.5	-	-	117	199	H
	* 3.61	27.77	ADR	33.2	-31.3	0	29.67	54	-24.33	-	-	-	-	117	199	H
3	* 4.688	39.49	PK-U	34.2	-29.1	0	44.59	-	-	74	-29.41	-	-	203	199	V
	* 4.689	27.85	ADR	34.2	-29	0	33.05	54	-20.95	-	-	-	-	203	199	V
5	* 13.37	32.69	PK-U	39.3	-21.9	0	50.09	-	-	74	-23.91	-	-	214	104	V
	* 13.371	20.99	ADR	39.3	-21.9	0	38.39	54	-15.61	-	-	-	-	214	104	V
2	6.477	37.63	PK-U	35.7	-28	0	45.33	-	-	-	-	68.2	-22.87	307	199	H
4	9.828	33.25	PK-U	36.9	-23.3	0	46.85	-	-	-	-	68.2	-21.35	152	104	V
6	17.441	31.69	PK-U	41.7	-18.5	0	54.89	-	-	-	-	68.2	-13.31	360	199	V

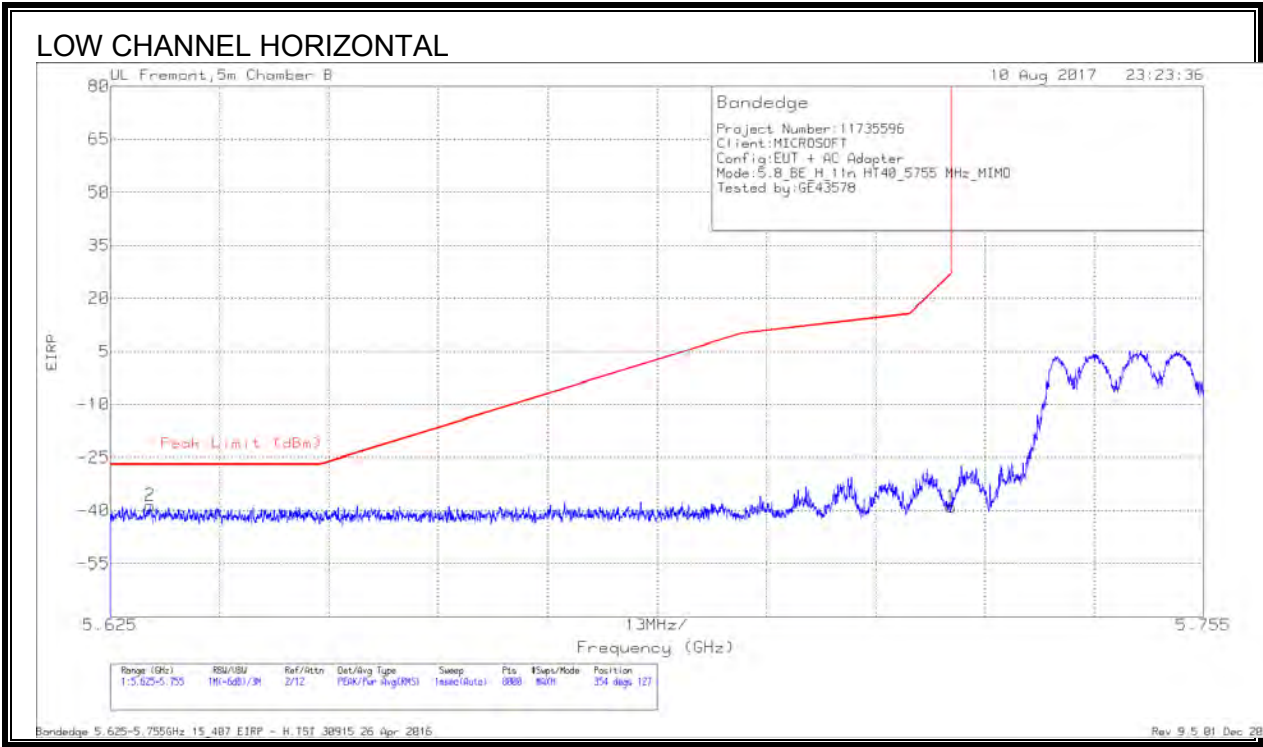
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.15.11n HT40 2TX MODE IN THE 5.8GHz BAND

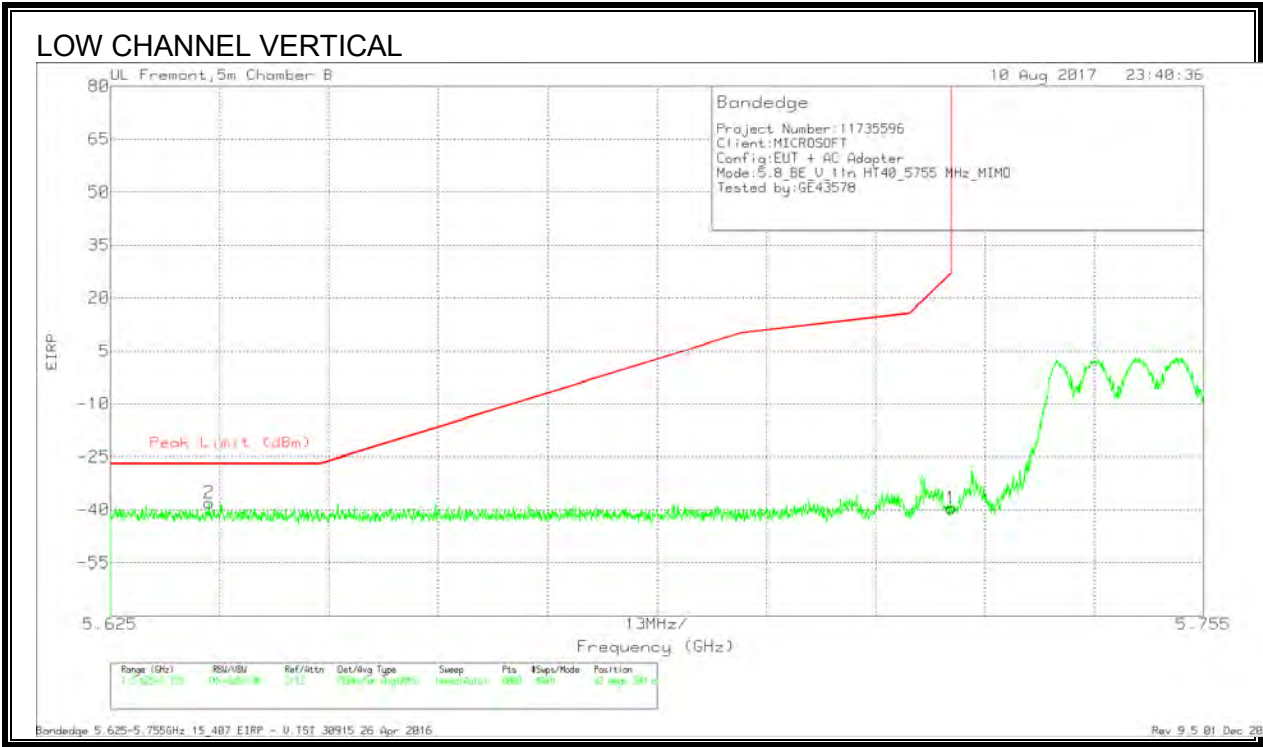
RESTRICTED BANDEDGE (LOW CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.63	-66.36	Pk	35.3	-19.4	11.8	-38.66	-27	-11.66	354	127	H
1	5.725	-66.27	Pk	35	-19.5	11.8	-38.97	27	-65.97	354	127	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

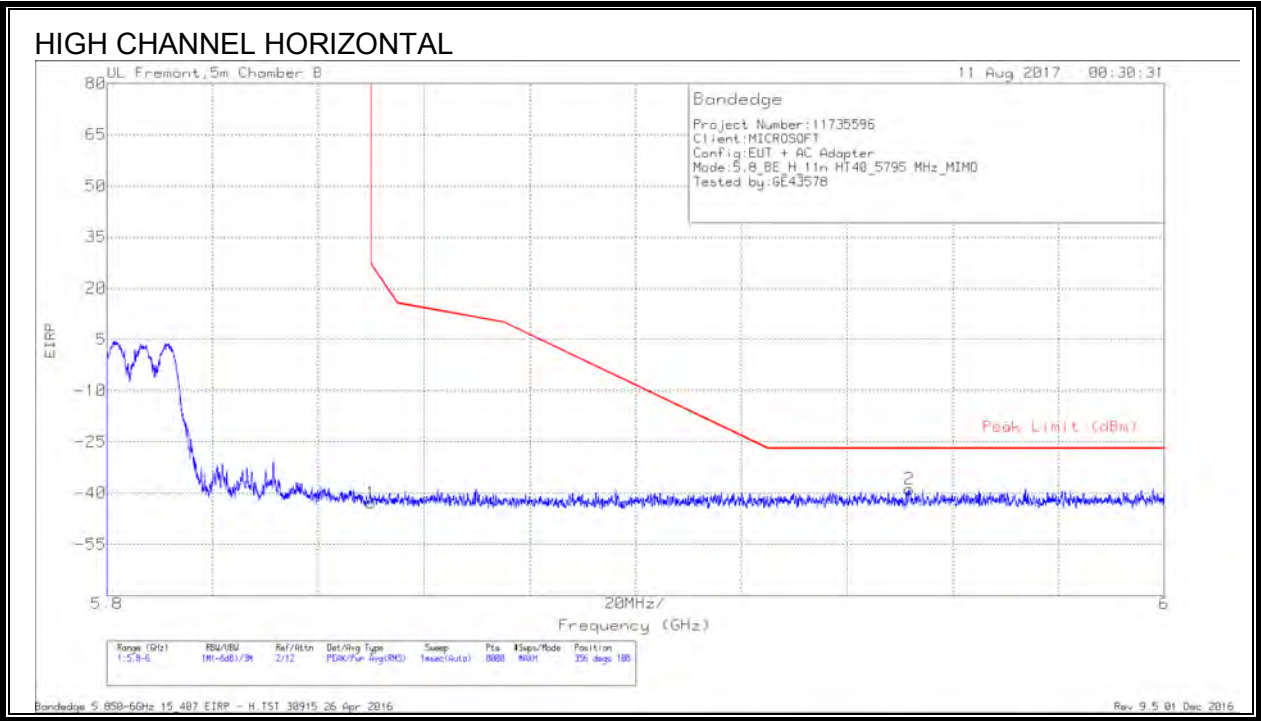


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.637	-65.71	Pk	35.3	-19.4	11.8	-38.01	-27	-11.01	42	398	V
1	5.725	-66.73	Pk	35	-19.5	11.8	-39.43	27	-66.43	42	398	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

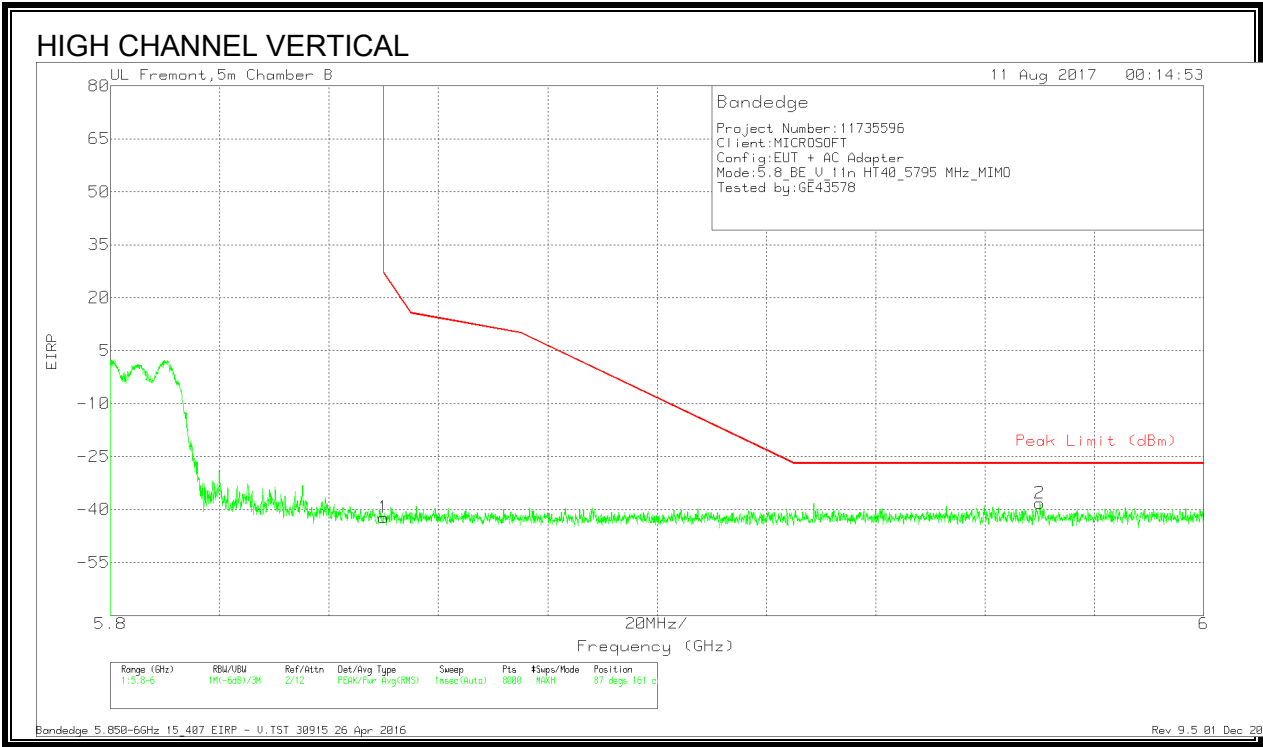
AUTHORIZED BANDEDGE (HIGH CHANNEL)



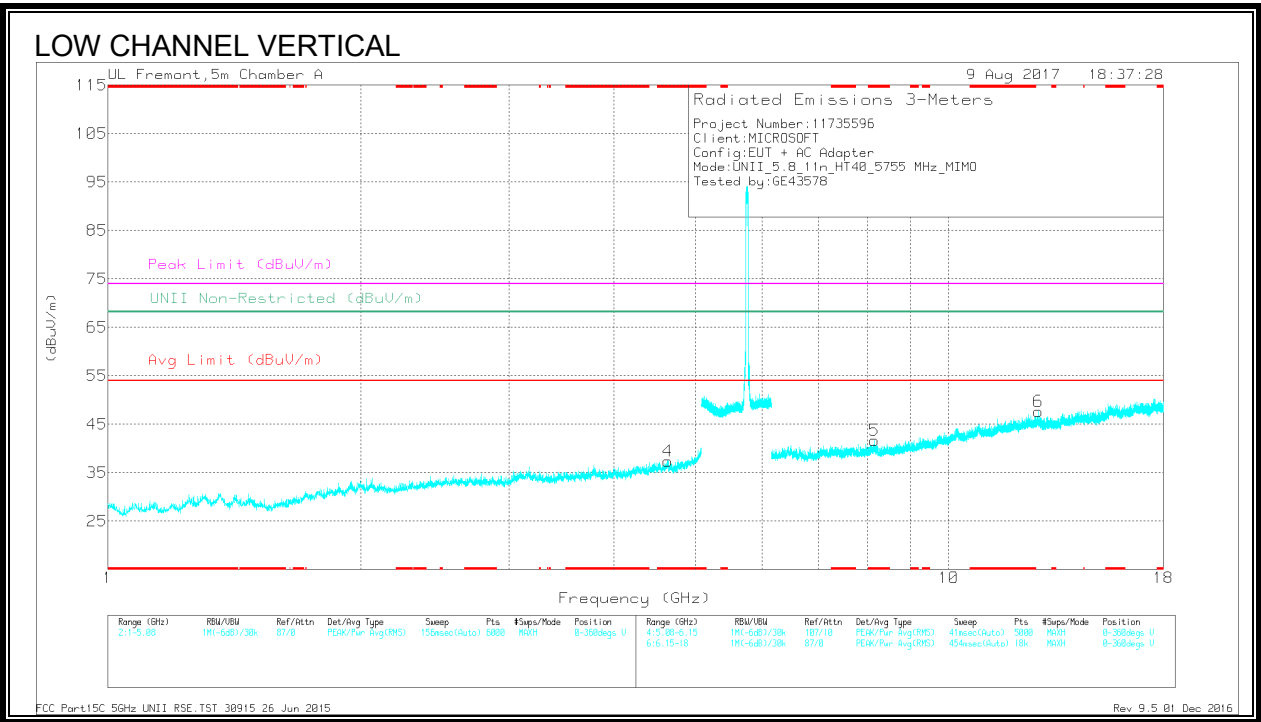
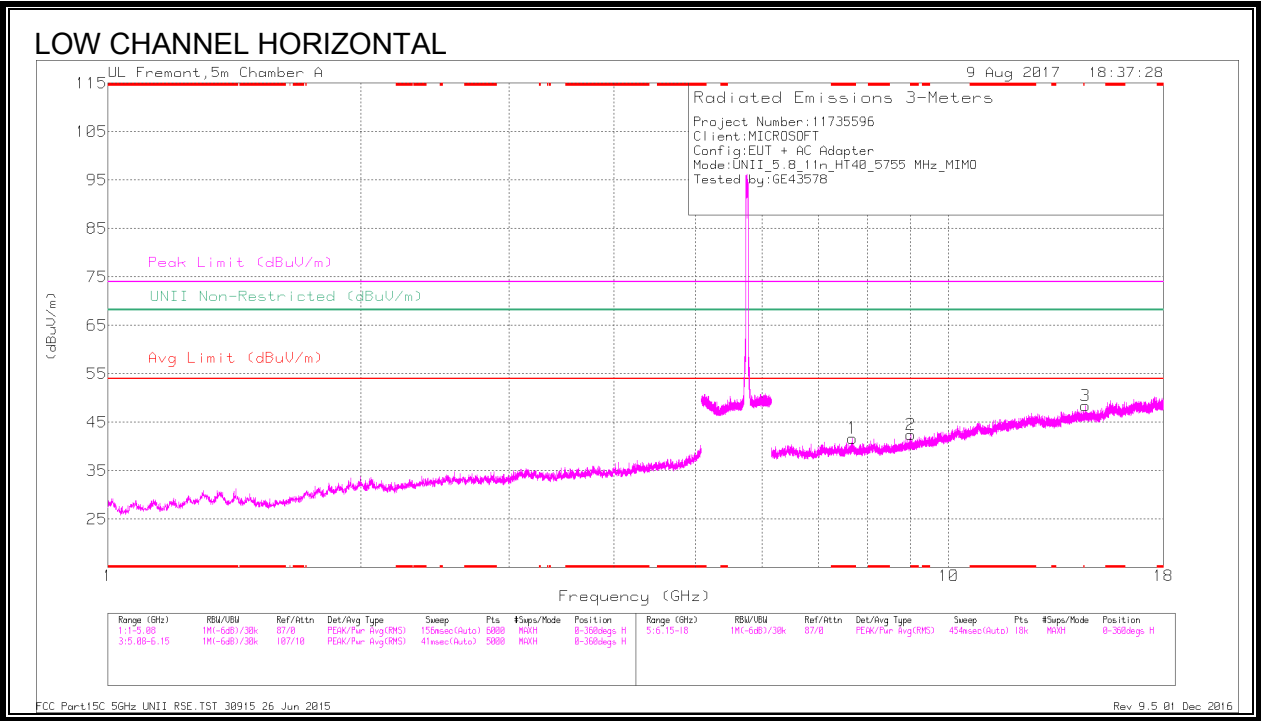
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Par d (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-70.38	Pk	35.1	-19.3	11.8	-42.78	26.99	-69.77	356	108	H
2	5.952	-66.81	Pk	35.2	-18.9	11.8	-38.71	-27	-11.71	356	108	H

Pk - Peak detector



HARMONICS AND SPURIOUS EMISSIONS



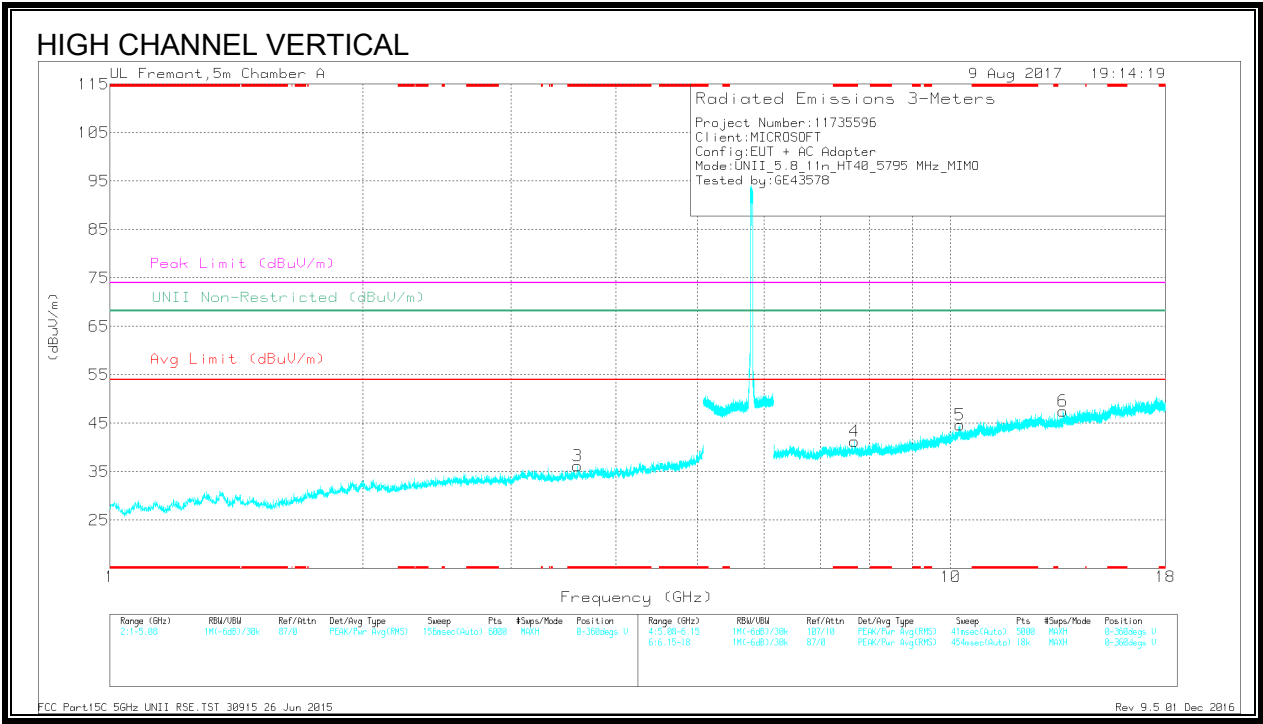
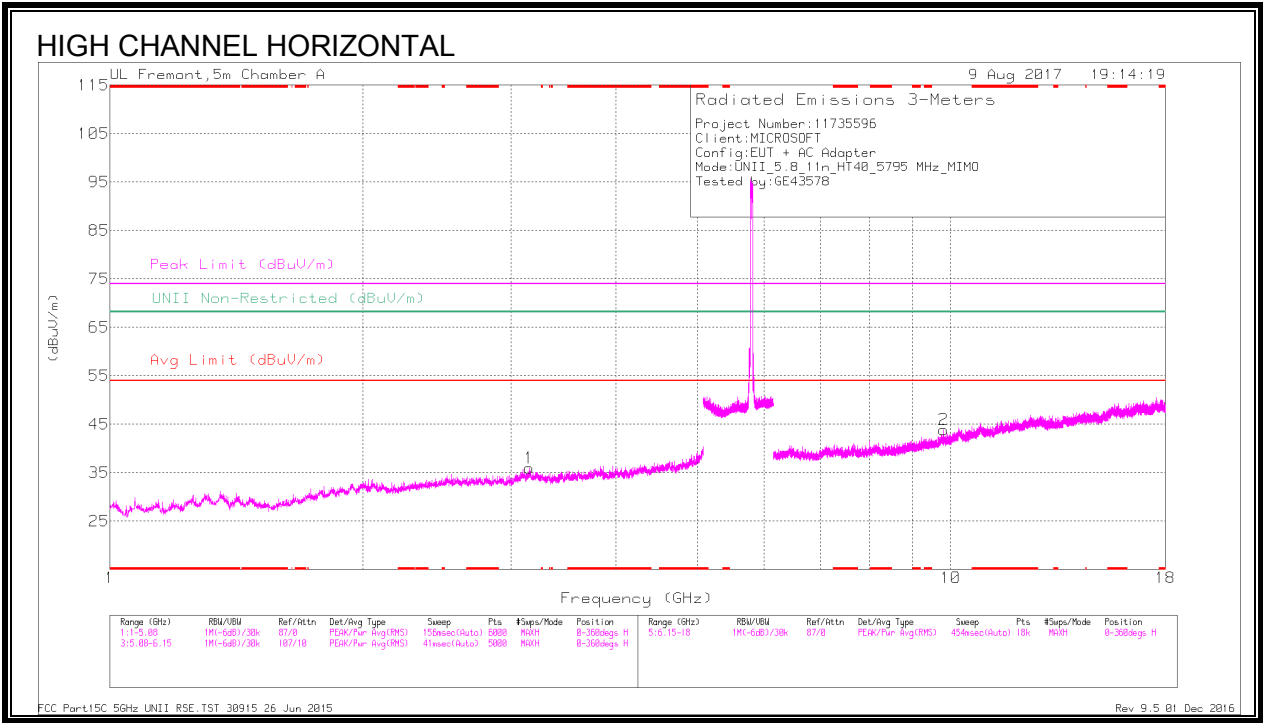
Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fbz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Feet)	Height (m)	Polarity
4	* 4.632	37.42	PK-U	34	-27.5	0	43.92	-	-	74	-30.08	-	-	104	200	V
	* 4.632	25.3	ADR	34	-27.5	0	31.8	54	-22.2	-	-	-	-	104	200	V
1	* 7.686	34.23	PK-U	35.7	-22.8	0	47.13	-	-	74	-26.87	-	-	129	102	H
	* 7.687	22.08	ADR	35.7	-22.8	0	34.98	54	-19.02	-	-	-	-	129	102	H
2	* 9.011	34.26	PK-U	36.2	-22.2	0	48.26	-	-	74	-25.74	-	-	38	102	H
	* 9.012	21.7	ADR	36.2	-22.2	0	35.7	54	-18.3	-	-	-	-	38	102	H
5	* 8.164	33.9	PK-U	35.8	-22.4	0	47.3	-	-	74	-26.7	-	-	89	199	V
	* 8.163	21.77	ADR	35.8	-22.4	0	35.17	54	-18.83	-	-	-	-	89	199	V
6	12.779	31.96	PK-U	39.3	-19	0	52.26	-	-	-	-	68.2	-15.94	289	199	V
3	14.545	32.98	PK-U	39.8	-19.5	0	53.28	-	-	-	-	68.2	-14.92	190	199	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fbz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Unlit Non-Restricted (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (m)	Polarity
3	* 3.601	39.08	PK-U	33	-30	0	42.08	-	-	74	-31.92	-	-	203	199	V
	* 3.601	26.66	ADR	33	-30	0	29.66	54	-24.34	-	-	-	-	203	199	V
4	* 7.681	34.13	PK-U	35.7	-22.7	0	47.13	-	-	74	-26.87	-	-	64	199	V
	* 7.68	22.07	ADR	35.7	-22.7	0	35.07	54	-18.93	-	-	-	-	64	199	V
1	3.155	38.52	PK-U	32.8	-29.6	0	41.72	-	-	-	-	68.2	-26.48	65	199	H
2	9.809	32.96	PK-U	37	-21.4	0	48.56	-	-	-	-	68.2	-19.64	128	199	H
5	10.259	32.14	PK-U	37.5	-19.8	0	49.84	-	-	-	-	68.2	-18.36	346	199	V
6	13.6	32.96	PK-U	39.2	-19.5	0	52.66	-	-	-	-	68.2	-15.54	95	199	V

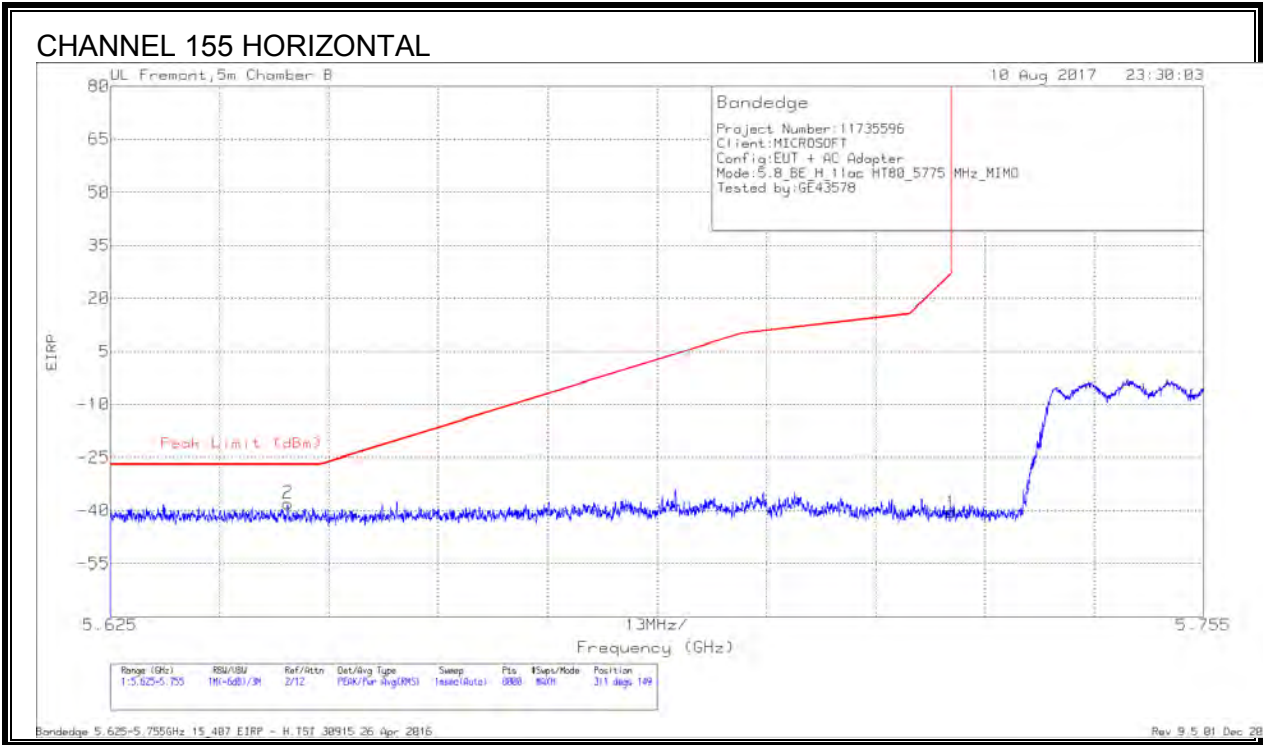
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.1.16.11ac HT80 2TX MODE IN THE 5.8GHz BAND

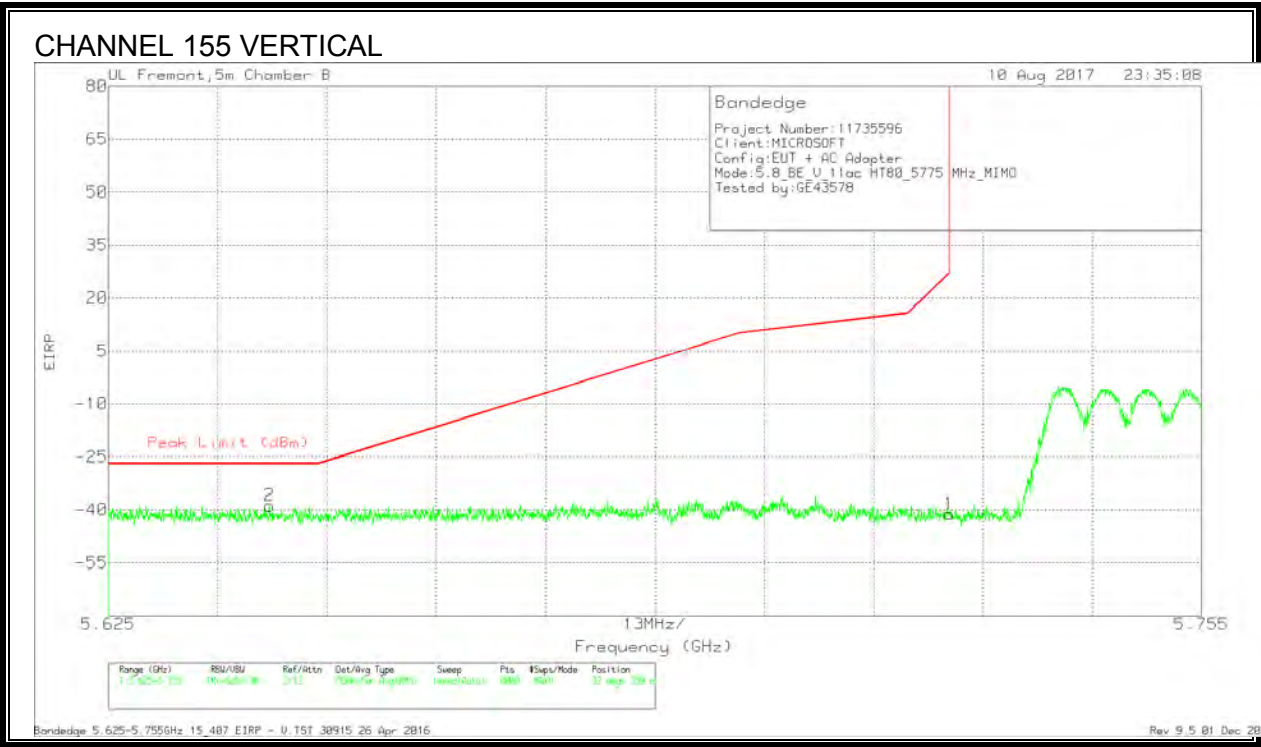
RESTRICTED BANDEDGE (CHANNEL 155)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cb1/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.646	-65.64	Pk	35.3	-19.4	11.8	-37.94	-27	-10.94	311	149	H
1	5.725	-67.81	Pk	35	-19.5	11.8	-40.51	27	-67.51	311	149	H

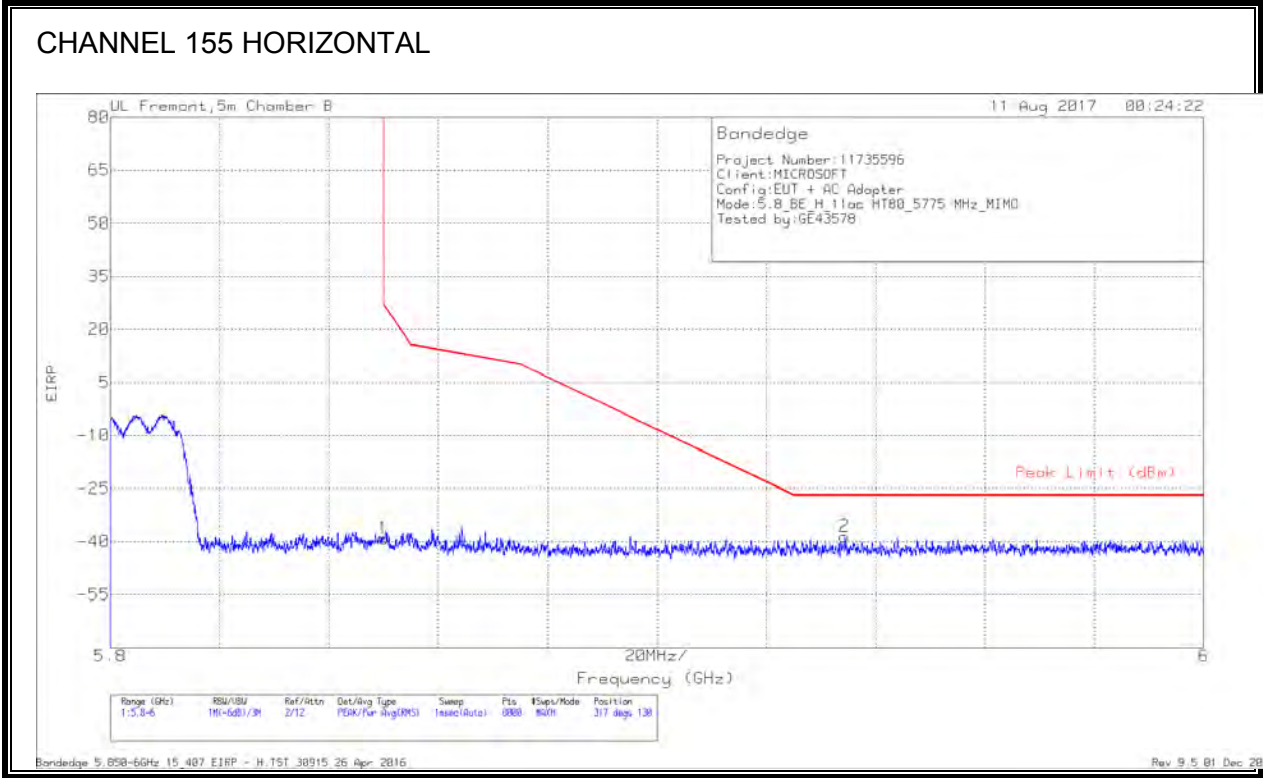
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.644	-66.46	Pk	35.3	-19.5	11.8	-38.86	-27	-11.86	32	359	V
1	5.725	-68.52	Pk	35	-19.5	11.8	-41.22	27	-68.22	32	359	V

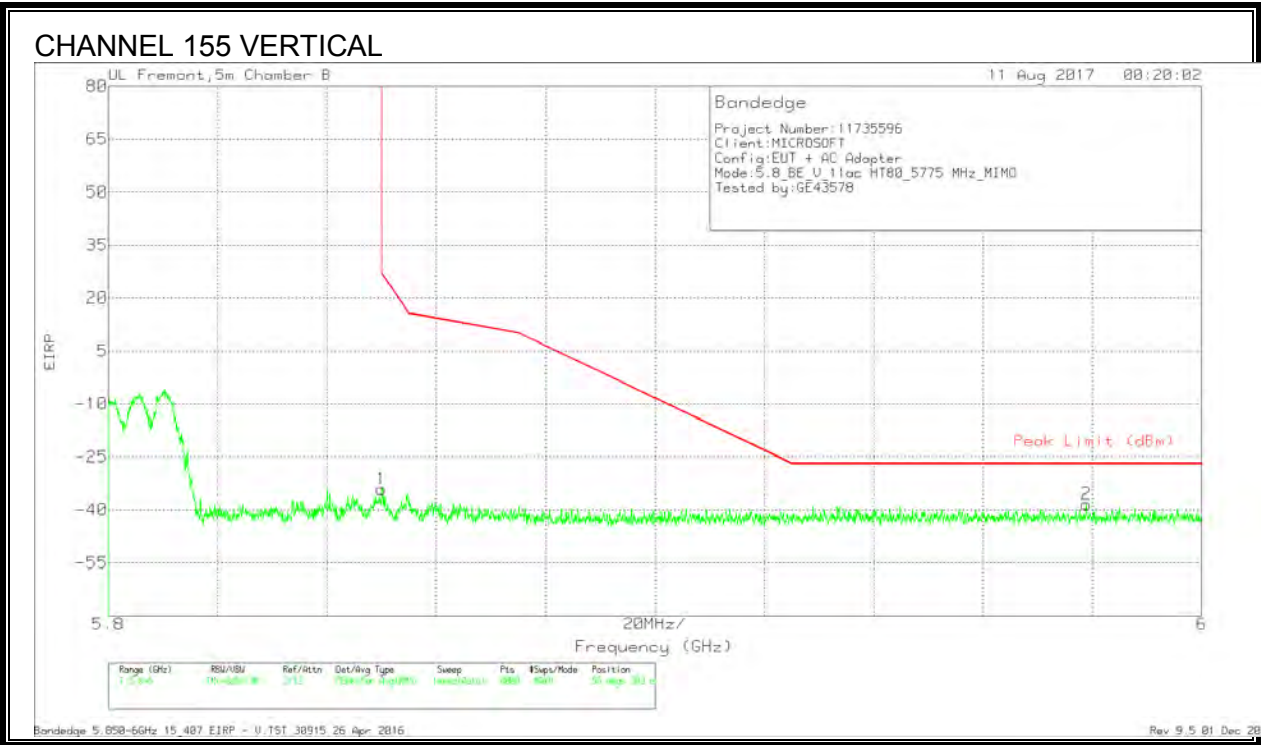
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cb/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.76	Pk	35.1	-19.3	11.8	-39.16	26.99	-66.15	317	130	H
2	5.934	-66.65	Pk	35.2	-19	11.8	-38.65	-27	-11.65	317	130	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

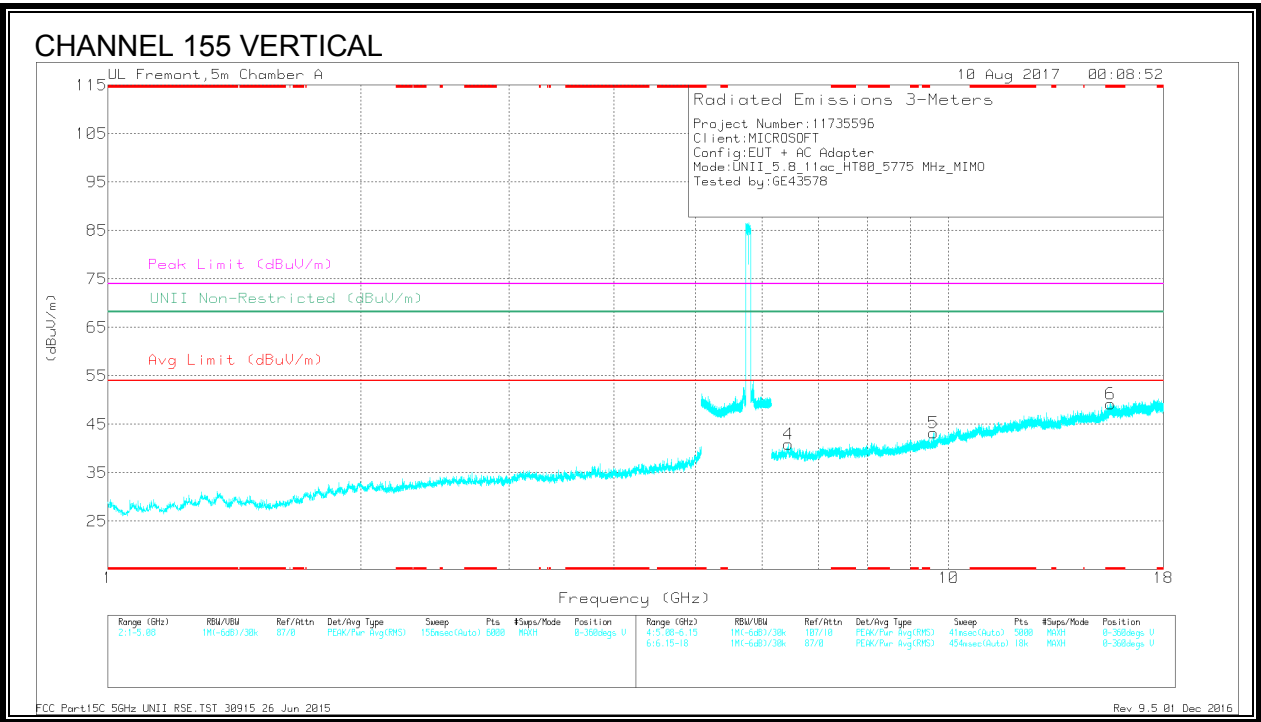
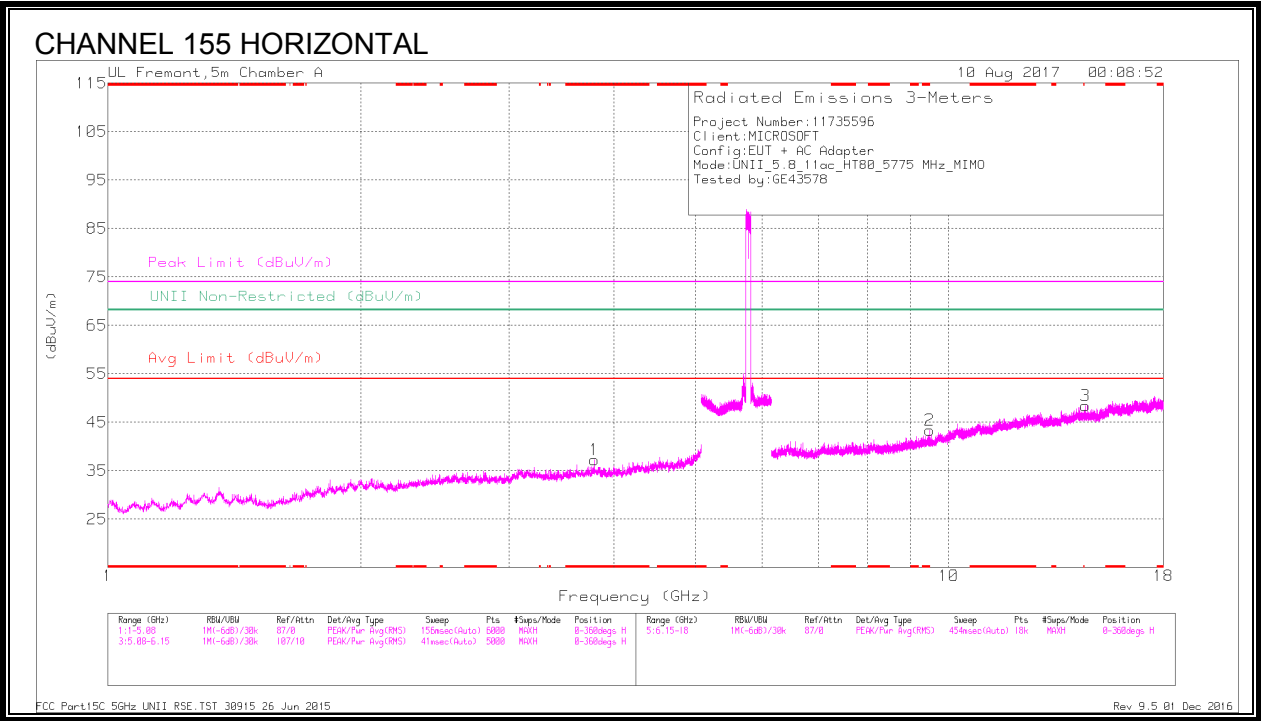


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cb/Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-61.73	Pk	35.1	-19.3	11.8	-34.13	26.99	-61.12	58	383	V
2	5.979	-66.56	Pk	35.3	-18.9	11.8	-38.36	-27	-11.36	58	383	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1502 (dB/m)	Amp/Cable/Port/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Limit Non-Restricted (dBuV/m)	PK Margin (dB)	Altitude (Degrees)	Height (m)	Polarity
1	* 3.79	39.15	PK-U	33.2	-28.9	0	43.45	-	-	74	-30.55	-	-	7	100	H
	* 3.789	26.18	ADR	33.2	-28.9	0	30.48	54	-23.52	-	-	-	-	7	100	H
2	* 9.493	33.51	PK-U	36.7	-22	0	48.21	-	-	74	-25.79	-	-	319	199	H
	* 9.492	21.61	ADR	36.7	-22	0	36.31	54	-17.69	-	-	-	-	319	199	H
6	* 15.587	33.45	PK-U	40	-17.6	0	55.85	-	-	74	-18.15	-	-	188	199	V
	* 15.587	21.72	ADR	40	-17.6	0	44.12	54	-9.88	-	-	-	-	188	199	V
4	6.443	34.35	PK-U	35.8	-23.7	0	46.45	-	-	-	-	68.2	-21.75	122	199	V
5	9.598	33.4	PK-U	36.8	-21.7	0	48.5	-	-	-	-	68.2	-19.7	126	199	V
3	14.543	32.75	PK-U	39.8	-19.5	0	53.05	-	-	-	-	68.2	-15.15	144	199	H

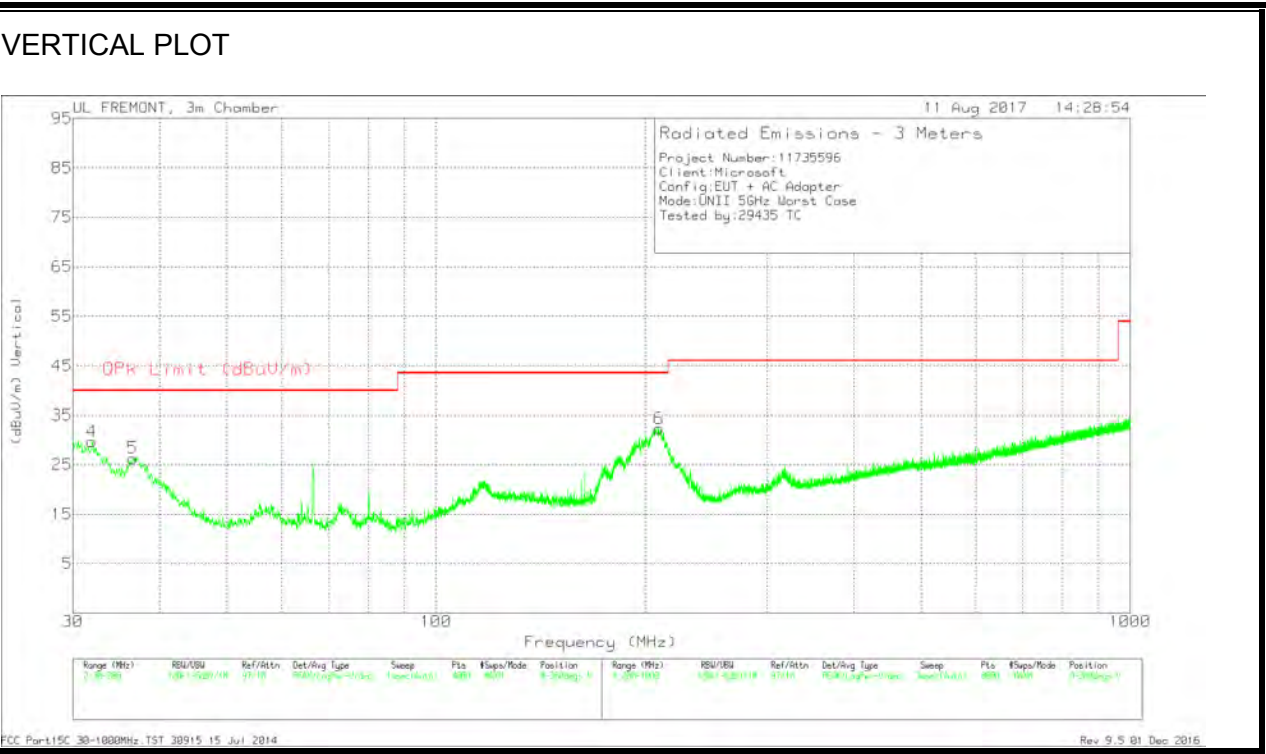
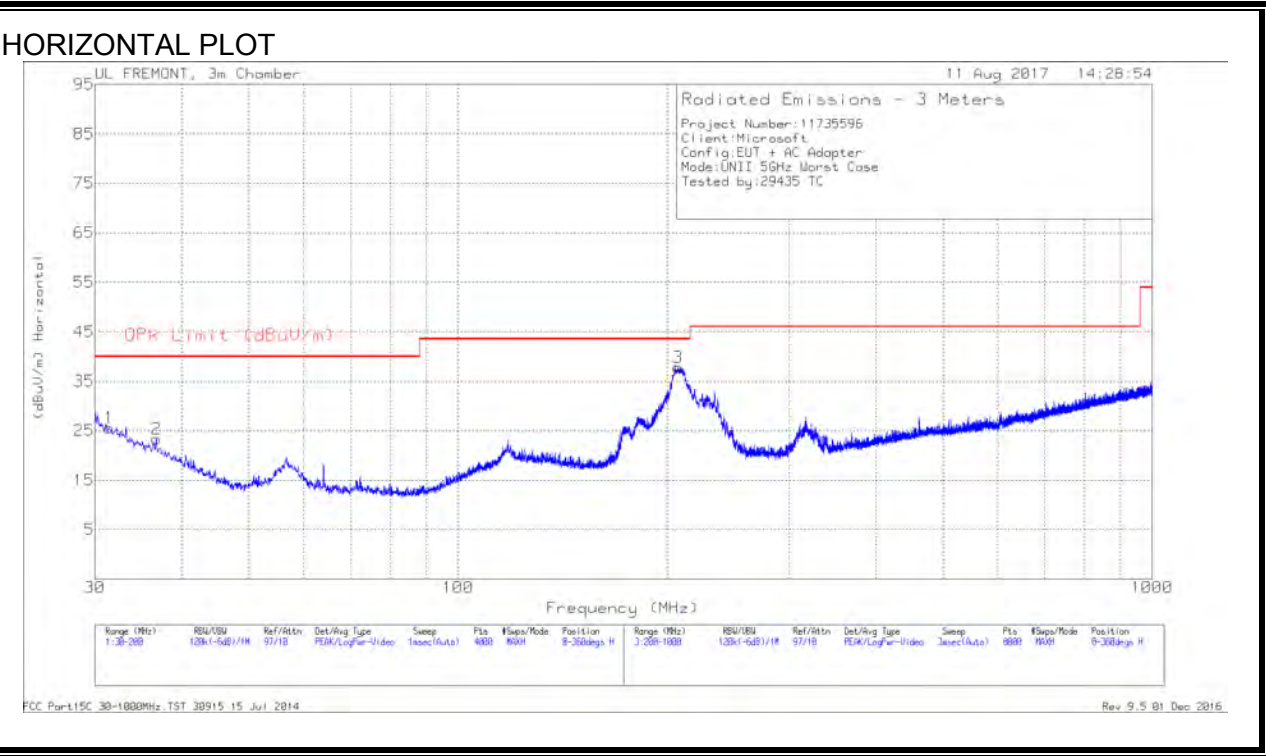
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.4879	28.62	Pk	24.2	-27.2	25.62	40	-14.38	0-360	400	H
4	31.9555	33.02	Pk	23.9	-27.2	29.72	40	-10.28	0-360	100	V
5	36.5892	33	Pk	20.5	-27.2	26.3	40	-13.7	0-360	100	V
2	36.7592	30.17	Pk	20.4	-27.2	23.37	40	-16.63	0-360	300	H
3	207.601	47.85	Pk	14.9	-25	37.75	43.52	-5.77	0-360	100	H
6	209.5012	42.82	Pk	14.5	-25	32.32	43.52	-11.2	0-360	200	V

Pk - Peak detector

Radiated Emissions

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.4879	28.62	Pk	24.2	-27.2	25.62	40	-14.38	0-360	400	H
4	31.9555	33.02	Pk	23.9	-27.2	29.72	40	-10.28	0-360	100	V
5	36.5892	33	Pk	20.5	-27.2	26.3	40	-13.7	0-360	100	V
2	207.5573	49.06	Pk	14.9	-25	38.96	43.52	-4.56	199	184	H
	207.5573	44.75	Qp	14.9	-25	34.65	43.52	-8.87	199	184	H
3	207.601	47.85	Pk	14.9	-25	37.75	43.52	-5.77	0-360	100	H
6	209.5012	42.82	Pk	14.5	-25	32.32	43.52	-11.2	0-360	200	V

Pk - Peak detector

Qp - Quasi-Peak detector

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
207.5573	49.06	Pk	14.9	-25	38.96	43.52	-4.56	199	184	H
207.5573	44.75	Qp	14.9	-25	34.65	43.52	-8.87	199	184	H

Pk - Peak detector

Qp - Quasi-Peak detector

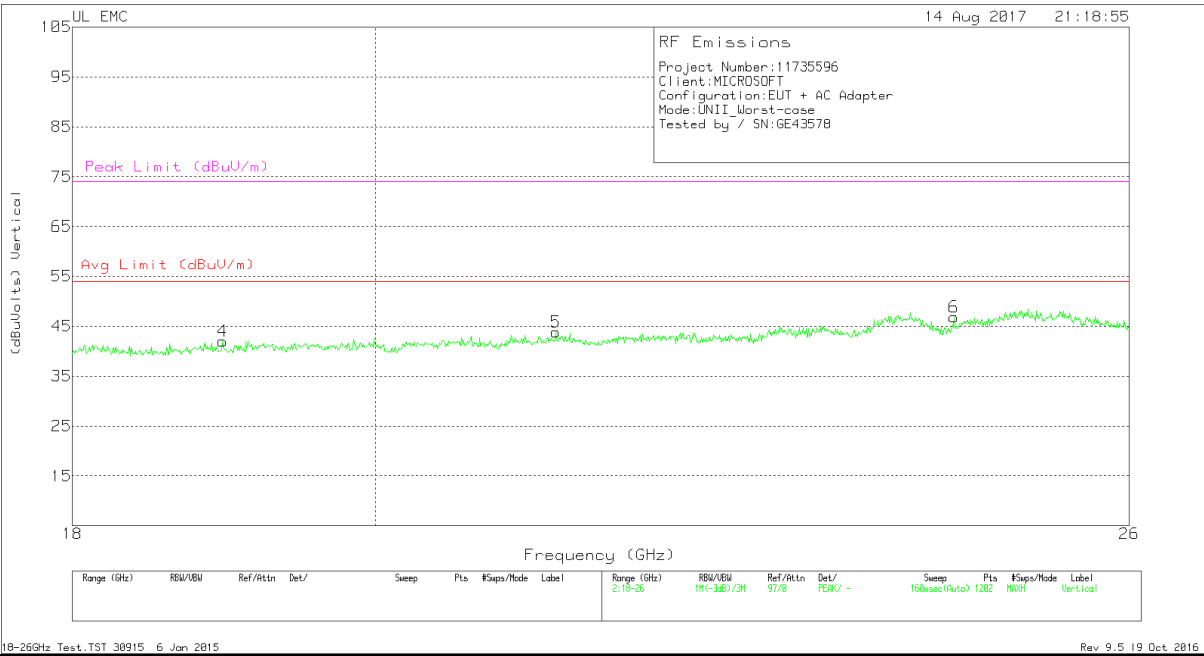
10.3. WORST-CASE 18 to 26 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



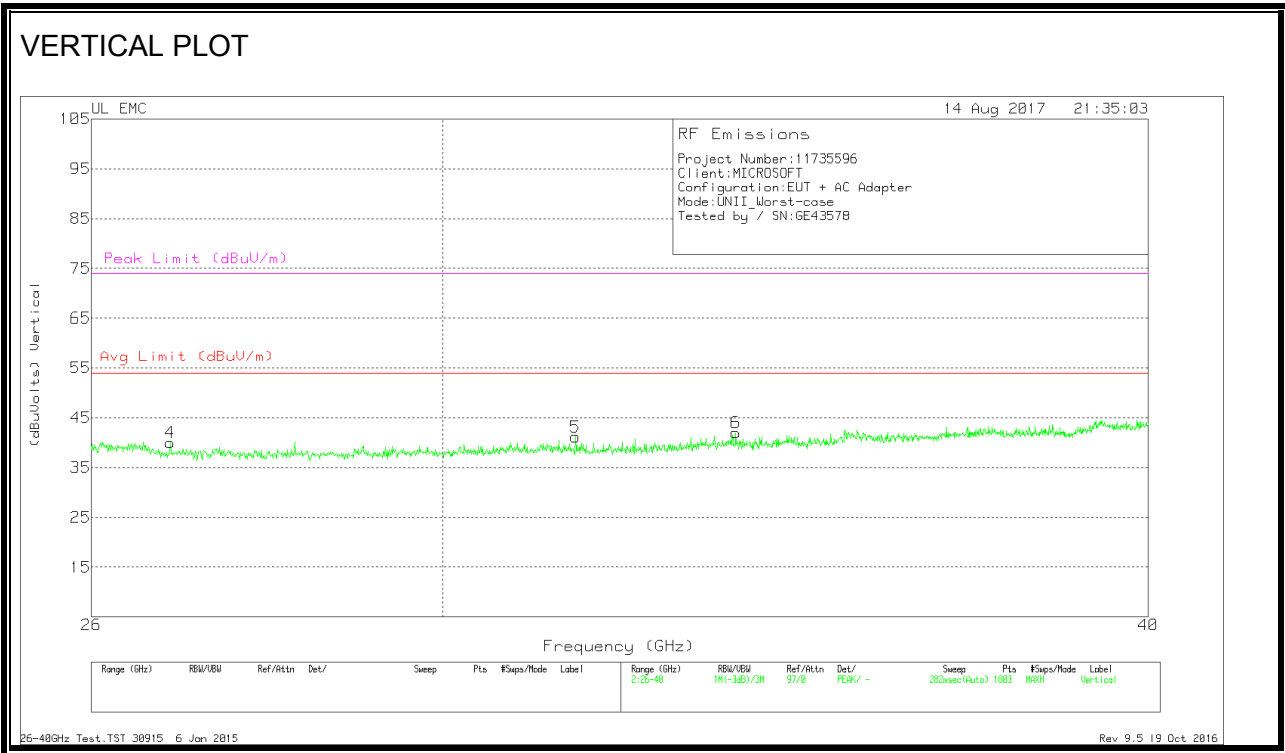
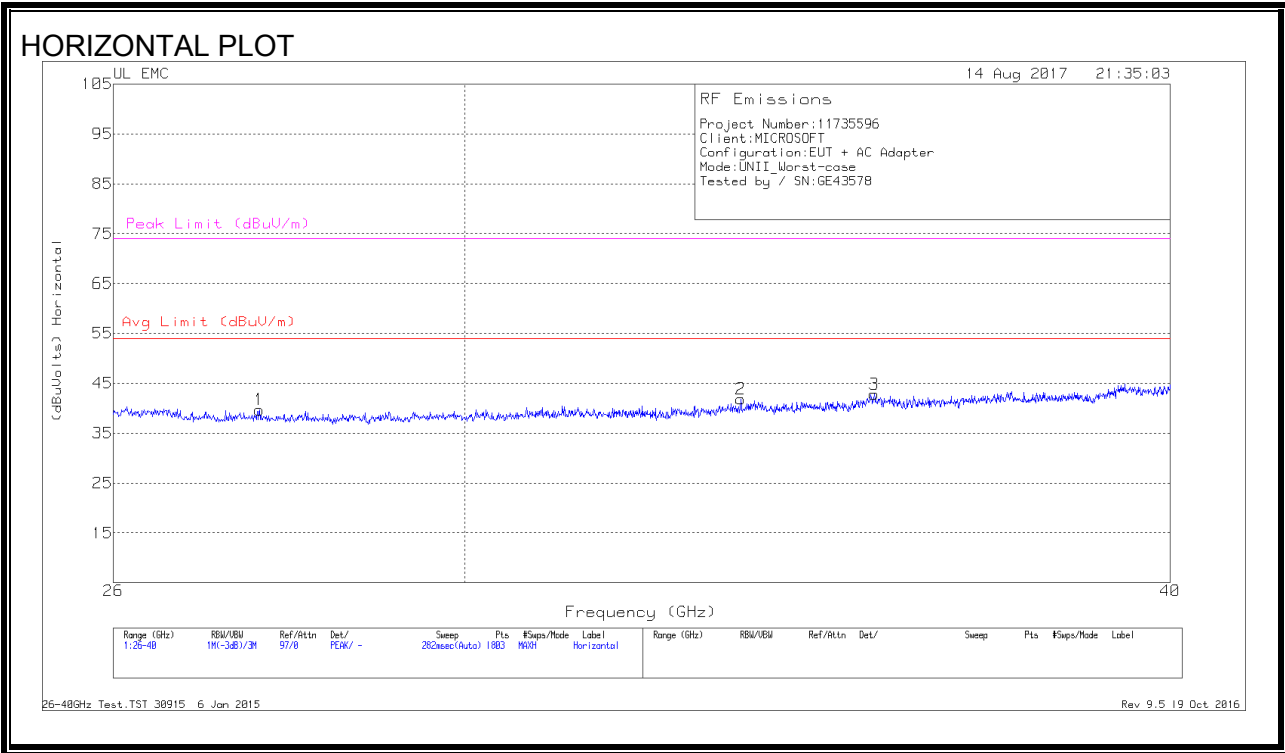
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T449 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.745	41.2	Pk	32.7	-21.9	-9.5	42.5	54	-11.5	74	-31.5
2	21.724	41.1	Pk	33.2	-21.3	-9.5	43.5	54	-10.5	74	-30.5
3	24.575	42.7	Pk	34.1	-20.3	-9.5	47	54	-7	74	-27
4	18.966	41.3	Pk	32.4	-22.2	-9.5	42	54	-12	74	-32
5	21.297	41.73	Pk	33	-21.4	-9.5	43.83	54	-10.17	74	-30.17
6	24.461	42.43	Pk	34	-20.1	-9.5	46.83	54	-7.17	74	-27.17

Pk - Peak detector

10.4. WORST-CASE 26 to 40 GHz

SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION)



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	27.593	45.07	Pk	35.8	-31.7	-9.5	39.67	54	-14.33	74	-34.33
2	33.575	47.53	Pk	37	-33.2	-9.5	41.83	54	-12.17	74	-32.17
3	35.455	48.33	Pk	37.9	-33.9	-9.5	42.83	54	-11.17	74	-31.17
4	26.847	45.5	Pk	35.4	-31.4	-9.5	40	54	-14	74	-34
5	31.671	47.87	Pk	36.3	-33.5	-9.5	41.17	54	-12.83	74	-32.83
6	33.808	48.2	Pk	36.9	-33.6	-9.5	42	54	-12	74	-32

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

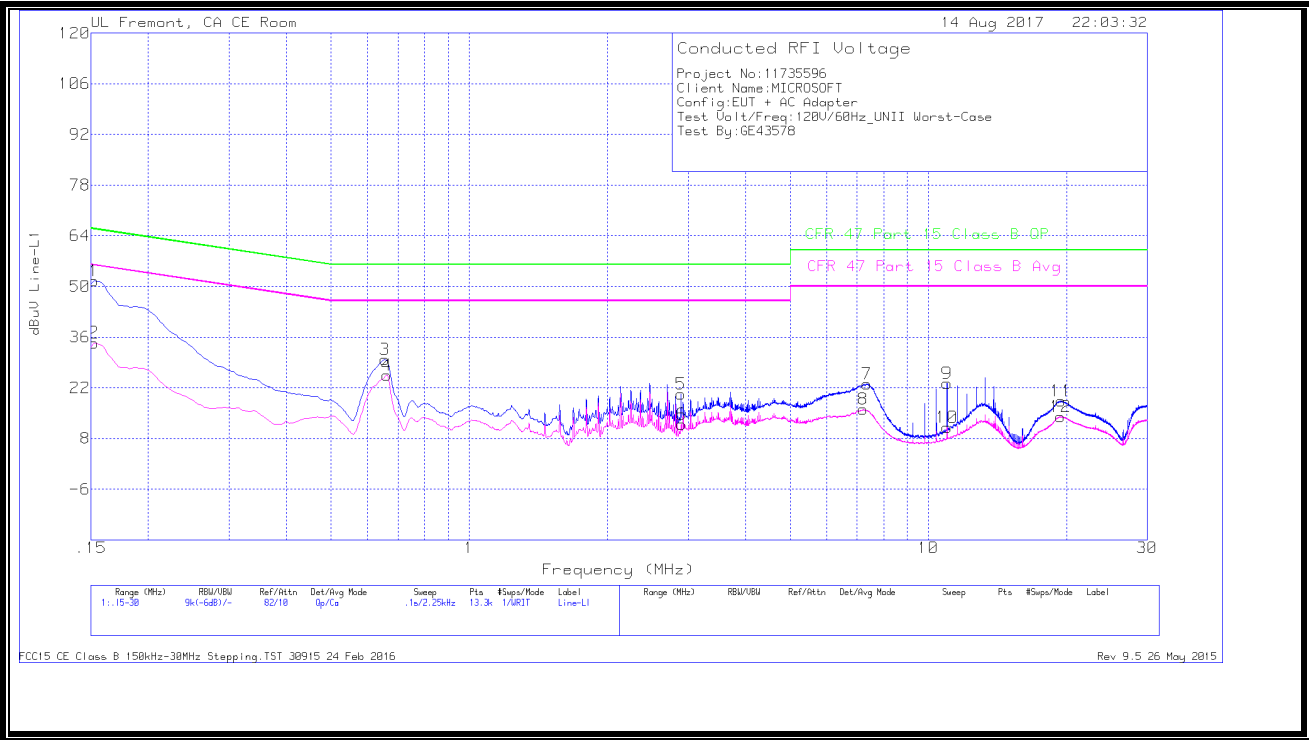
TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

LINE 1 RESULTS



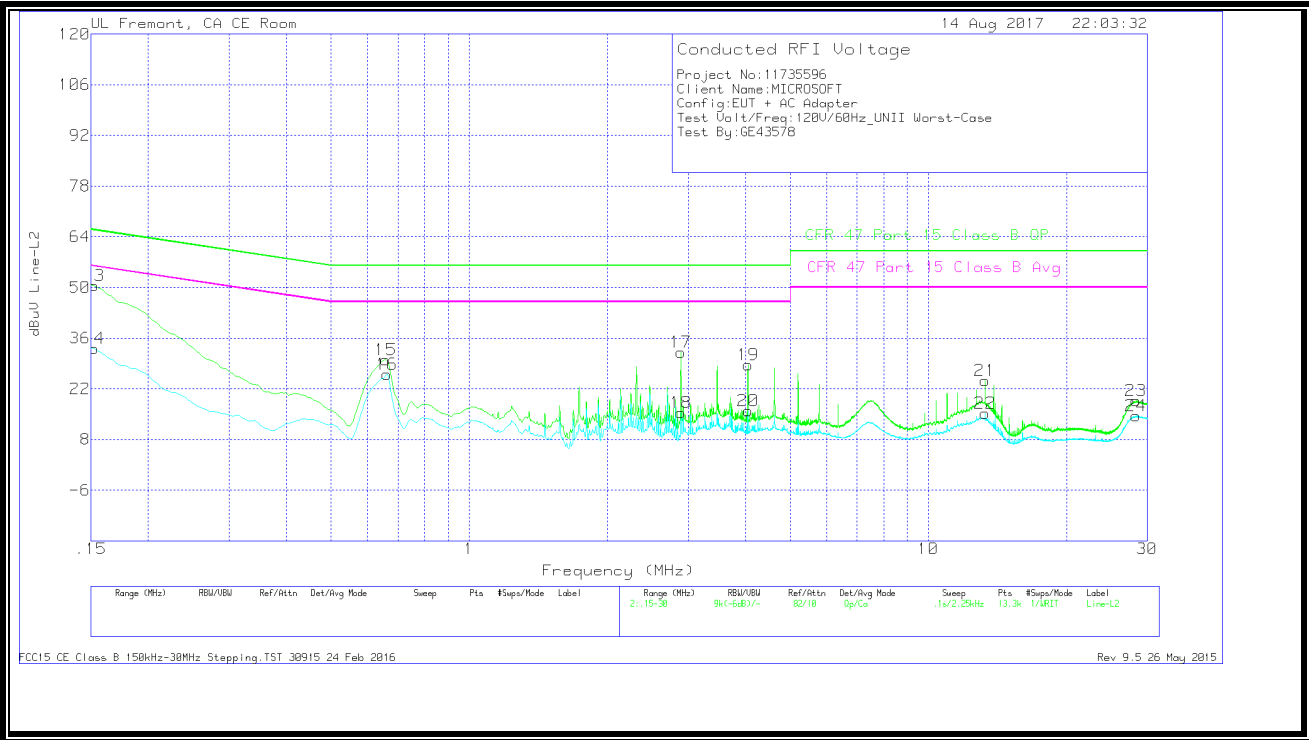
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.15225	41.33	Qp	.1	.1	10.1	51.63	65.88	-14.25	-	-
2	.15225	24.14	Ca	.1	.1	10.1	34.44	-	-	55.88	-21.44
3	.65512	19.56	Qp	0	.1	10.1	29.76	56	-26.24	-	-
4	.66075	15.33	Ca	0	.1	10.1	25.53	-	-	46	-20.47
5	2.8905	10	Qp	0	.1	10.1	20.2	56	-35.8	-	-
6	2.89725	1.71	Ca	0	.1	10.1	11.91	-	-	46	-34.09
7	7.3545	12.73	Qp	0	.2	10.2	23.13	60	-36.87	-	-
8	7.2195	5.67	Ca	0	.2	10.2	16.07	-	-	50	-33.93
9	10.98825	12.87	Qp	0	.2	10.2	23.27	60	-36.73	-	-
10	10.98825	.62	Ca	0	.2	10.2	11.02	-	-	50	-38.98
11	19.44938	7.7	Qp	.1	.3	10.3	18.4	60	-41.6	-	-
12	19.39313	3.32	Ca	.1	.3	10.3	14.02	-	-	50	-35.98

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.15225	40.45	Qp	0	0	10.1	50.55	65.88	-15.33	-	-
14	.15225	23.08	Ca	0	0	10.1	33.18	-	-	55.88	-22.7
15	.6585	19.79	Qp	0	.1	10.1	29.99	56	-26.01	-	-
16	.66075	15.77	Ca	0	.1	10.1	25.97	-	-	46	-20.03
17	2.8905	21.86	Qp	0	.1	10.1	32.06	56	-23.94	-	-
18	2.8905	5.16	Ca	0	.1	10.1	15.36	-	-	46	-30.64
19	4.047	18.44	Qp	0	.1	10.1	28.64	56	-27.36	-	-
20	4.04925	5.76	Ca	0	.1	10.1	15.96	-	-	46	-30.04
21	13.299	13.82	Qp	.1	.2	10.2	24.32	60	-35.68	-	-
22	13.299	4.66	Ca	.1	.2	10.2	15.16	-	-	50	-34.84
23	28.32225	7.82	Qp	.1	.3	10.5	18.72	60	-41.28	-	-
24	28.32225	3.6	Ca	.1	.3	10.5	14.5	-	-	50	-35.5

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. DYNAMIC FREQUENCY SELECTION

12.1. OVERVIEW

12.1.1. LIMITS

INDUSTRY CANADA

IC RSS-247 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-247 Issue 2

Note: For the band 5600–5650 MHz, no operation is permitted.

Until further notice, devices subject to this annex shall not be capable of transmitting in the band 5600–5650 MHz. This restriction is for the protection of Environment Canada weather radars operating in this band.

FCC

§15.407 (h), FCC KDB 905462 D02 “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION” and KDB 905462 D03 “U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY”.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client (without DFS)	Client (with DFS)
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see notes)
E.I.R.P. $\geq$ 200 mill watt	-64 dBm
E.I.R.P. < 200 mill watt and power spectral density < 10 dBm/MHz	-62 dBm
E.I.R.P. < 200 mill watt that do not meet power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.	

Table 4: DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds (See Note 1)
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. (See Note 3)
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the <i>U-NII Detection Bandwidth</i> detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (usec)	PRI (usec)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table 5a	Roundup: $\{(1/360) \times (19 \times 10^6 \text{ PRI}_{\text{usec}})\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 usec. With a minimum increment of 1 usec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the <i>Detection Bandwidth</i> test, <i>Channel Move Time</i> , and <i>Channel Closing Time</i> tests.					

Table 6 – Long Pulse Radar Test Signal

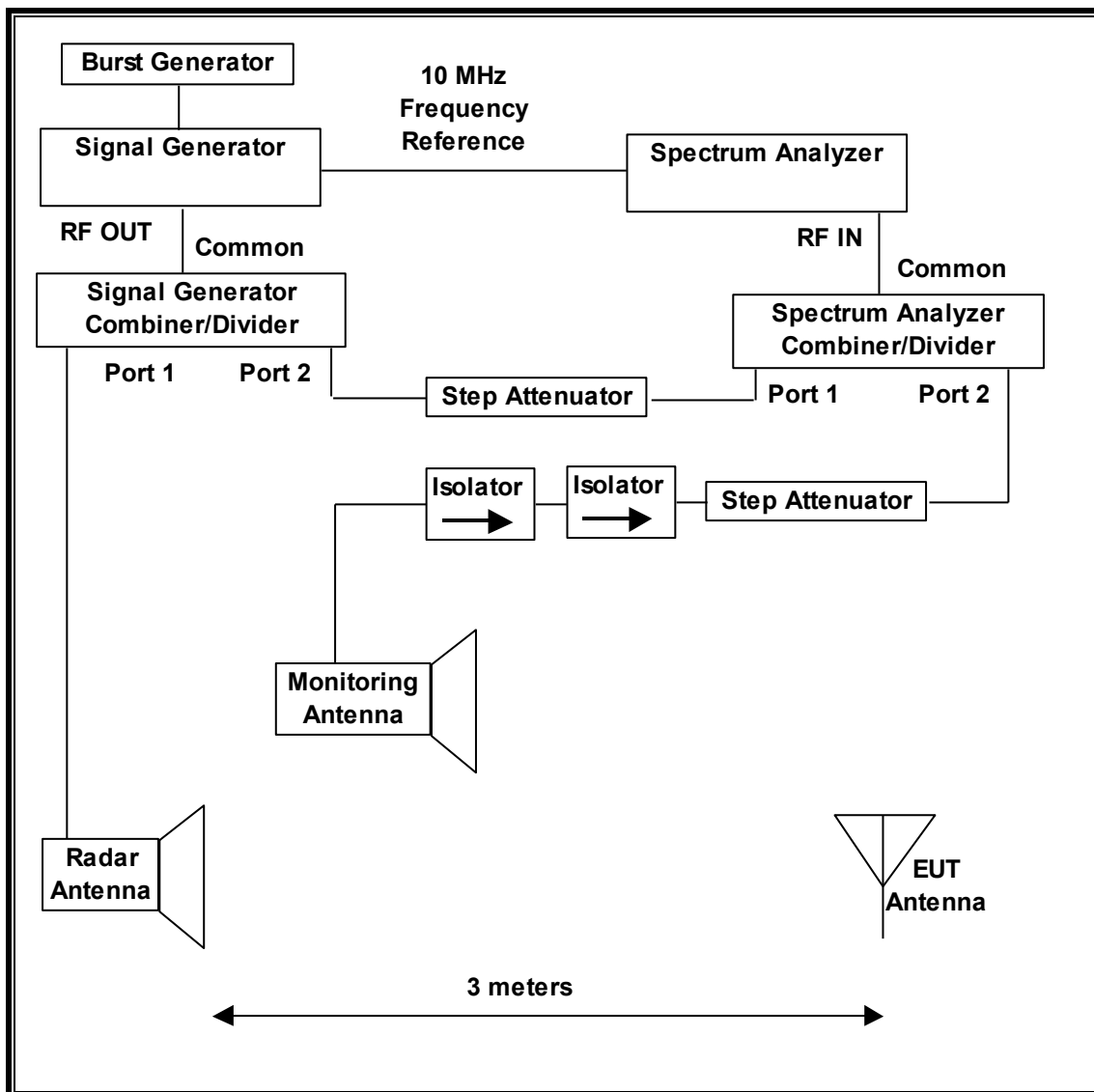
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

12.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 1, 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the DFS tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	Cal Due
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	US51350187	06/22/18
Signal Generator, MXG X-Series RF Vector	Agilent	N5182B	MY51350337	04/21/18
Arbitrary Waveform Generator	Agilent / HP	33220A	MY44037572	04/06/18

12.1.3. TEST AND MEASUREMENT SOFTWARE

The following test and measurement software was utilized for the tests documented in this report:

TEST SOFTWARE LIST		
Name	Version	Test / Function
Aggregate Time-PXA	3.0	Channel Loading and Aggregate Closing Time
PXA Read	3.0.0.9	Signal Generator Screen Capture
SGXProject.exe	1.7	Radar Waveform Generation and Download

12.1.4. TEST ROOM ENVIRONMENT

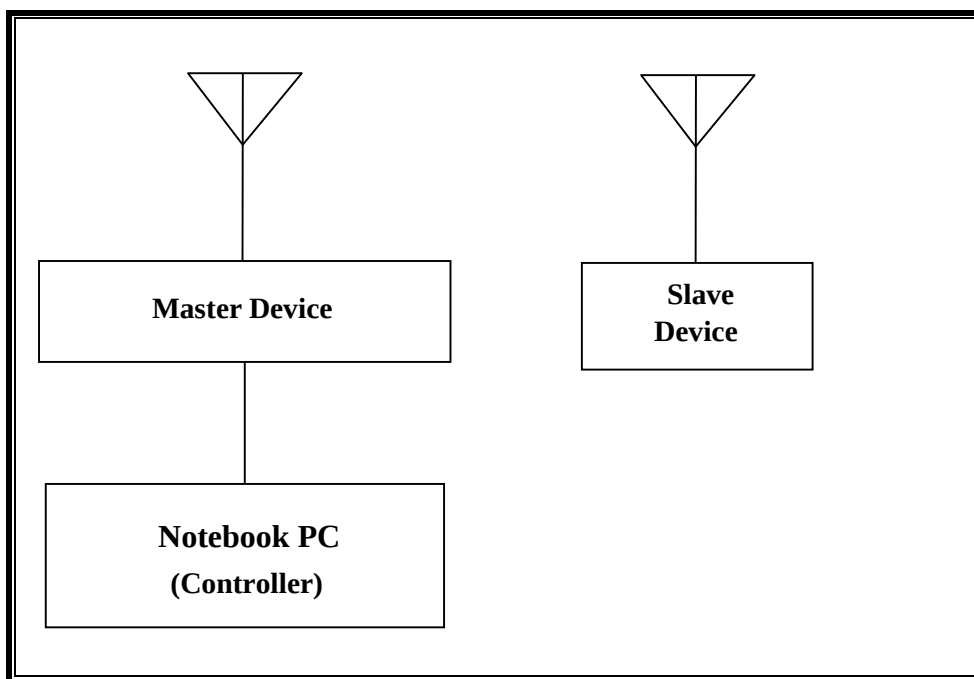
The test room temperature and humidity shall be maintained within normal temperature of 15~35 °C and normal humidity 20~75% (relative humidity).

ENVIRONMENT CONDITION

Parameter	Value
Temperature	24.5 °C
Humidity	33 %

12.1.5. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter (EUT)	Microsoft	1800	0D130E12AVB77	DoC
802.11ac Dual Band Wireless Access Point (Master Device)	Cisco	AIR-CAP3702E-A-K9	FTX181570A6	LDK102087
P.O.E. Injector (Master)	Phihong	POE30U-560(G)	PHI170102N2	DoC
Notebook PC (Controller)	Lenovo	Type 4236-B92	PB-HEX04 12/05	DoC
AC Adapter (Controller PC)	Lenovo	42T4418	11S42T4418Z1ZGW G08R90M	DoC

12.1.6. DESCRIPTION OF EUT

For FCC the EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

For IC the EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges, excluding the 5600-5650 MHz range.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 16.75 dBm EIRP in the 5250-5350 MHz band and 17.5 dBm EIRP in the 5470-5725 MHz band.

The EUT is constructed with two antenna assemblies that have respective gains of 2.8 dBi and 2.5 dBi in the 5250-5350 MHz band and 2.8 dBi and 1.9 dBi in the 5470-5725 MHz band.

Two antennas are utilized to meet the diversity and MIMO operational requirements.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is $-64 + 1 = -63$ dBm.

The calibrated radiated DFS Detection Threshold level is set to -64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The EUT uses two transmitter/receiver chains, each connected to an antenna to perform radiated tests.

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the Master Device to the Slave Device using iPerf version 2.0.5 software package.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz.

The software installed in the EUT is Windows 10 Pro version 1703, build 15063.600.

The software installed in the access point is AP3G2-K9W7-M Version 15.2(4)JB4.

UNIFORM CHANNEL SPREADING

This is requirement not applicable to Slave Devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102087. The minimum antenna gain for the Master Device is 6 dBi.

The rated output power of the Master unit is $> 23\text{dBm}$ (EIRP). Therefore the required interference threshold level is -64 dBm . After correction for procedural adjustments, the required radiated threshold at the antenna port is $-64 + 1 = -63\text{ dBm}$.

The calibrated radiated DFS Detection Threshold level is set to -64 dBm . The tested level is lower than the required level hence it provides a margin to the limit.

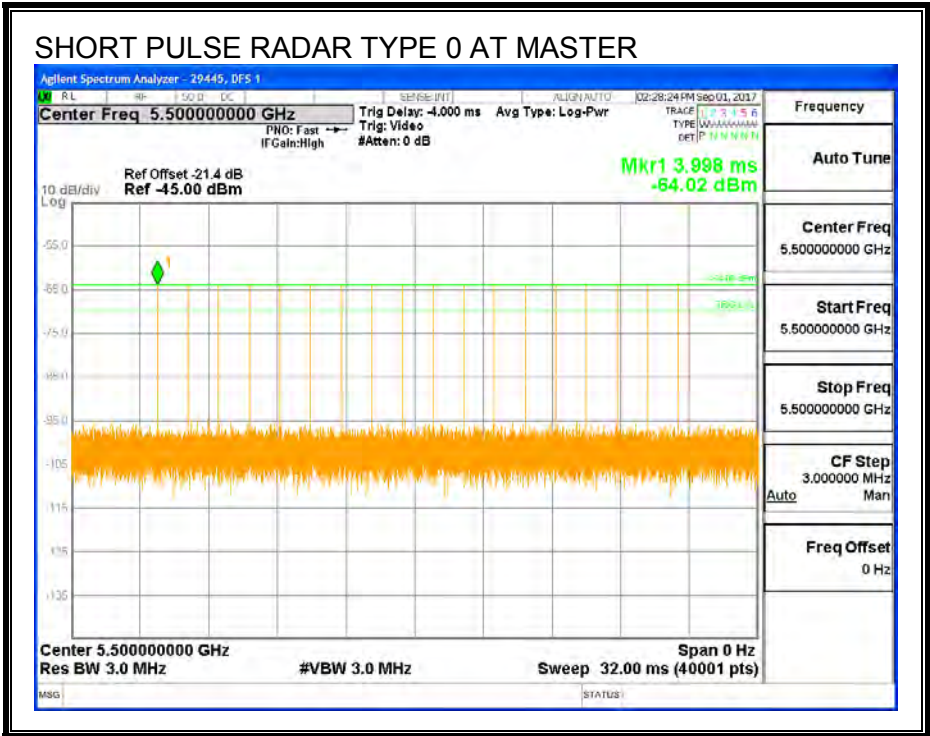
12.2. RESULTS FOR 20 MHz BANDWIDTH

12.2.1. TEST CHANNEL

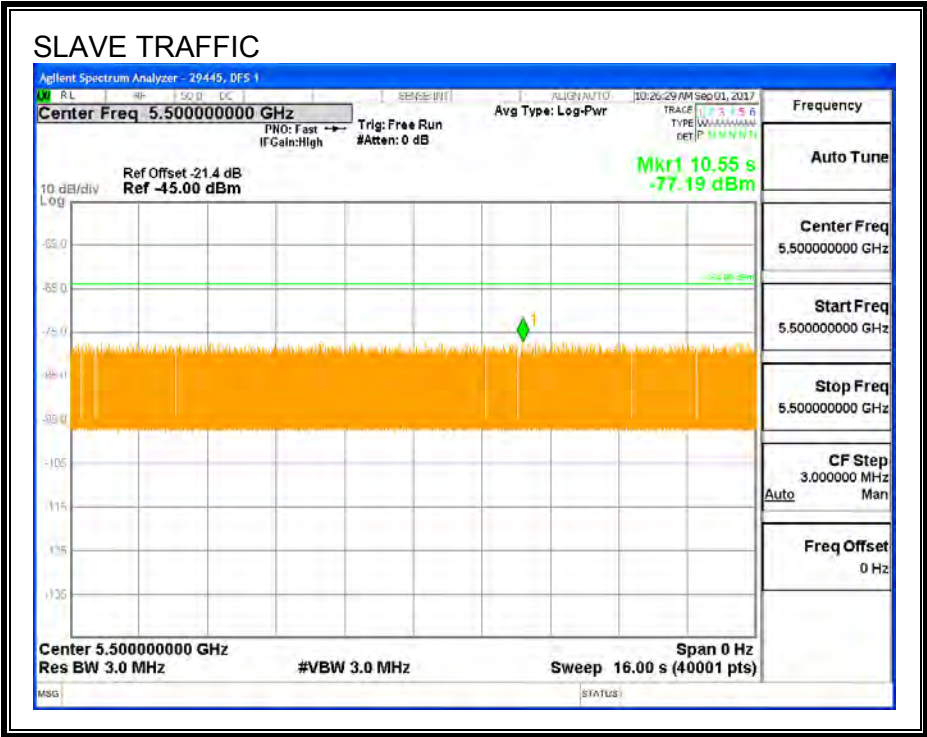
All tests were performed at a channel center frequency of 5500 MHz.

12.2.2. RADAR WAVEFORM AND TRAFFIC

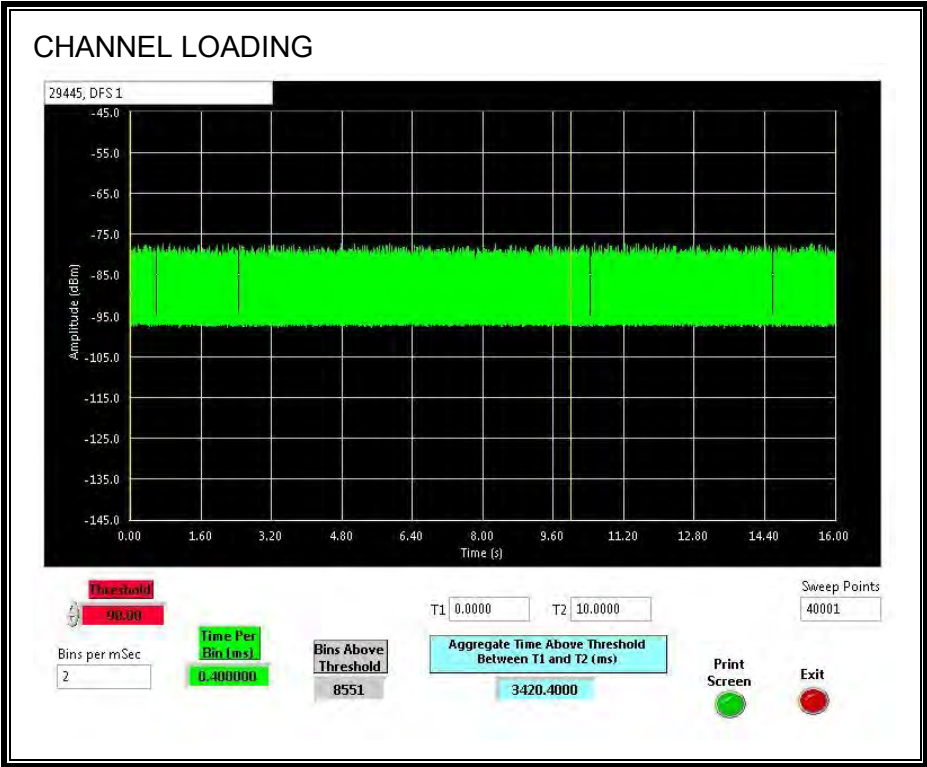
RADAR WAVEFORM



TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 34.2%

12.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

12.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

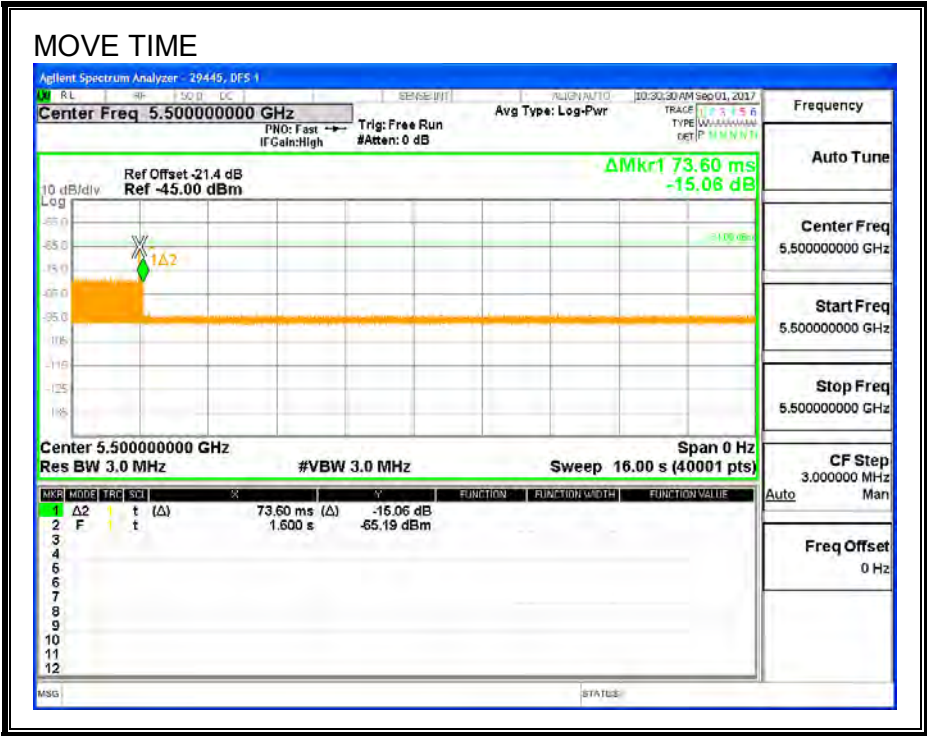
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

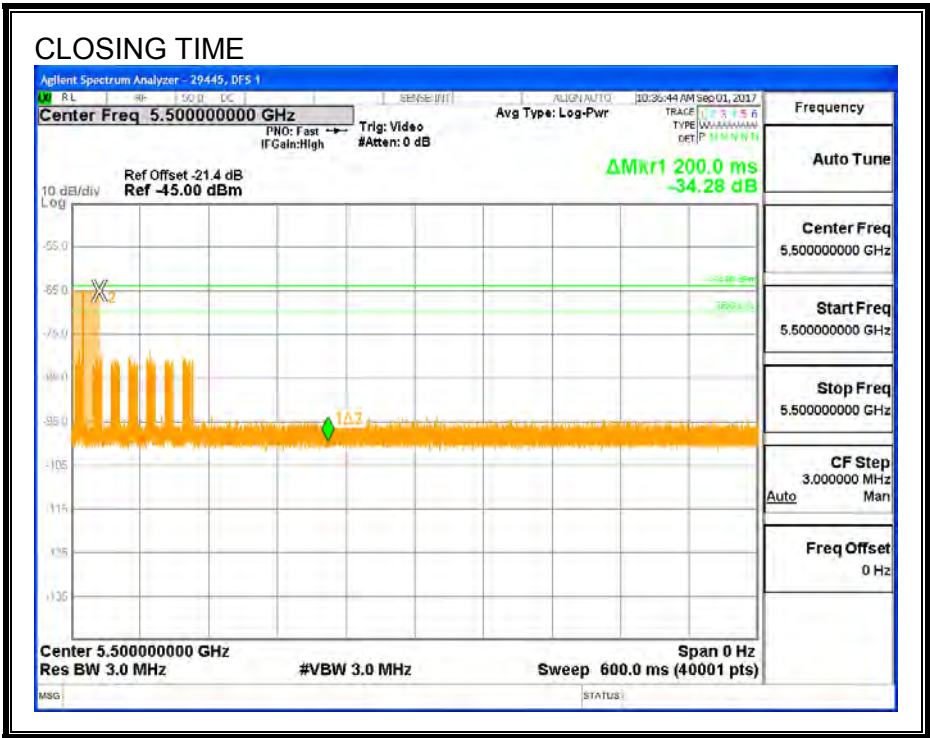
Channel Move Time (sec)	Limit (sec)
0.0736	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

MOVE TIME

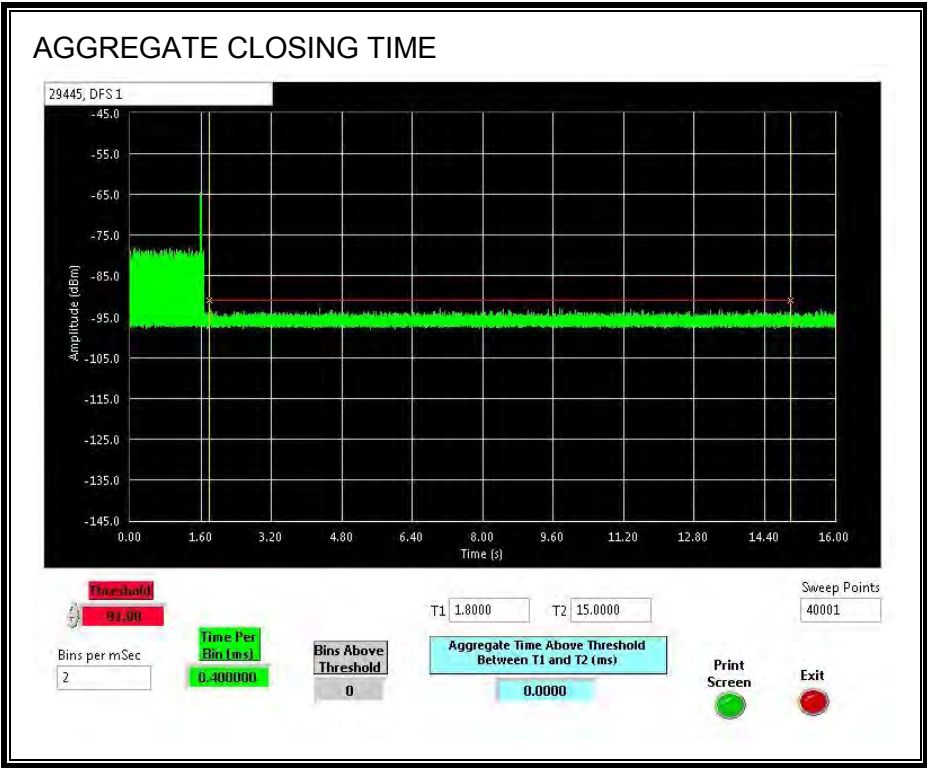


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



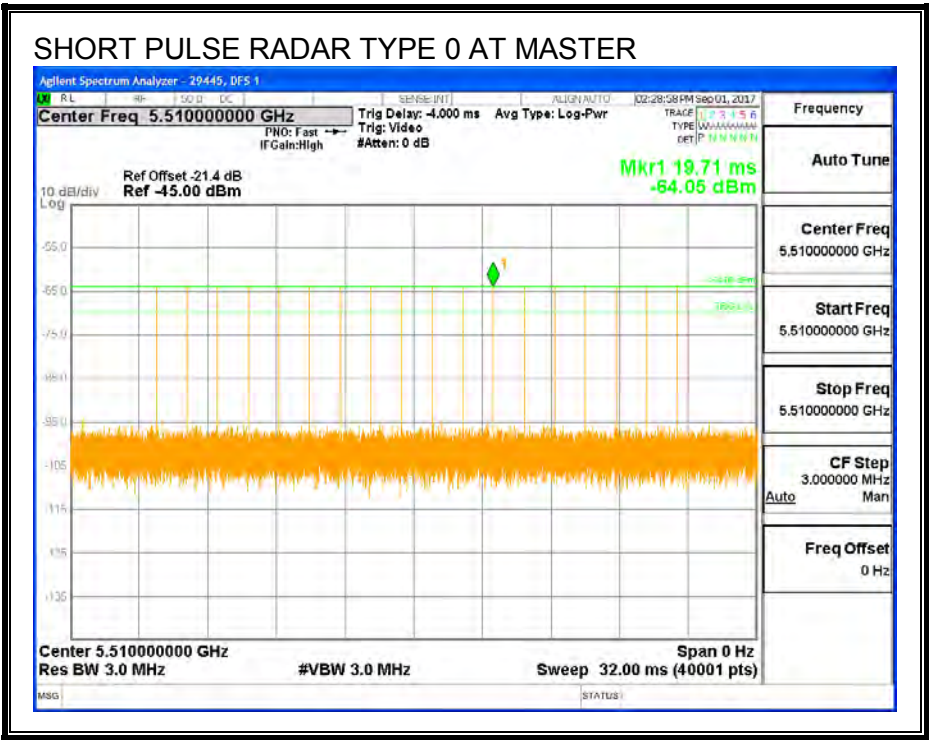
12.3. RESULTS FOR 40 MHz BANDWIDTH

12.3.1. TEST CHANNEL

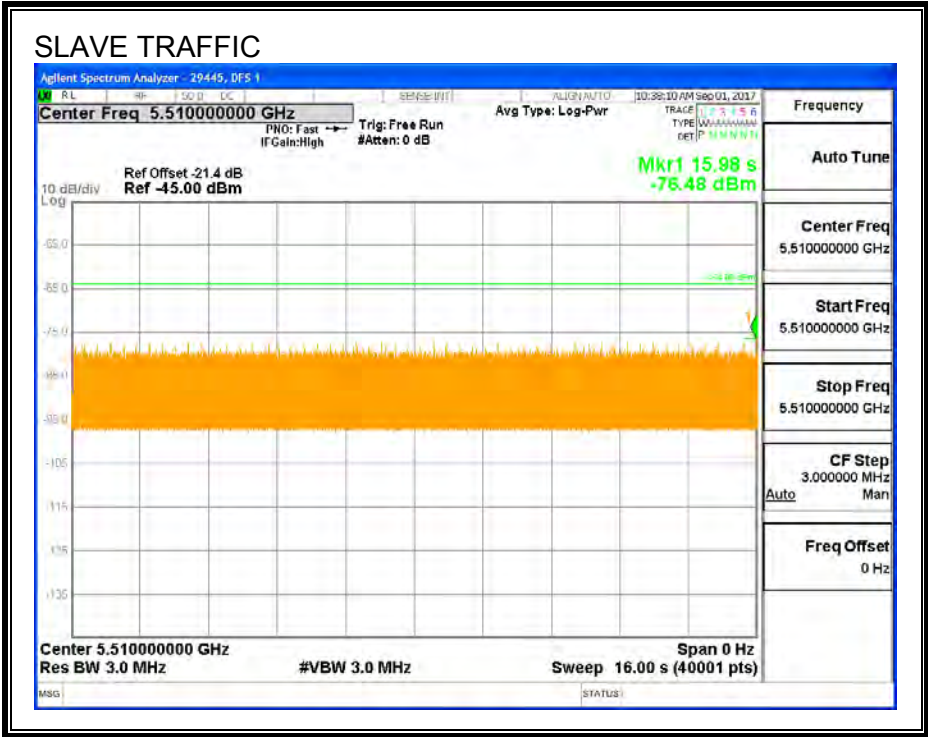
All tests were performed at a channel center frequency of 5510 MHz.

12.3.2. RADAR WAVEFORM AND TRAFFIC

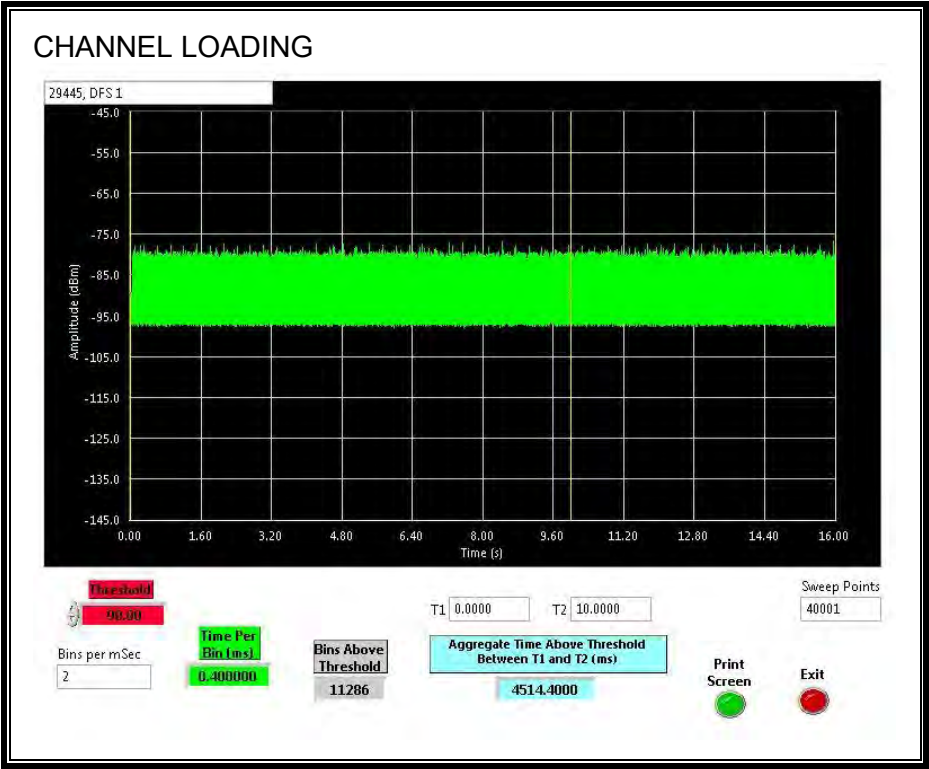
RADAR WAVEFORM



TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 45.14%

12.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

12.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

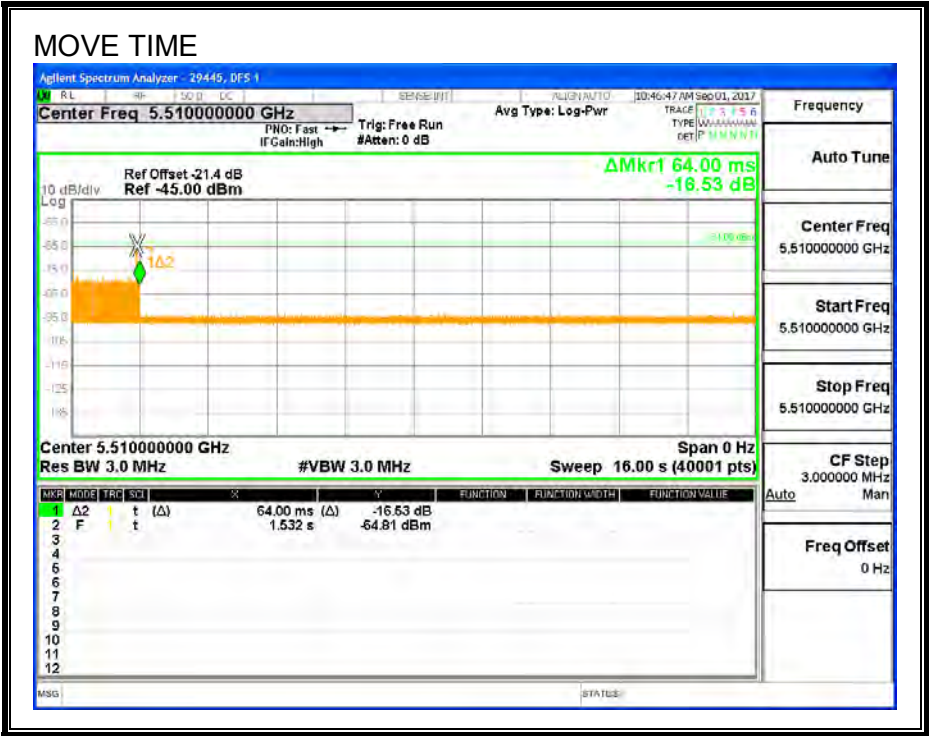
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

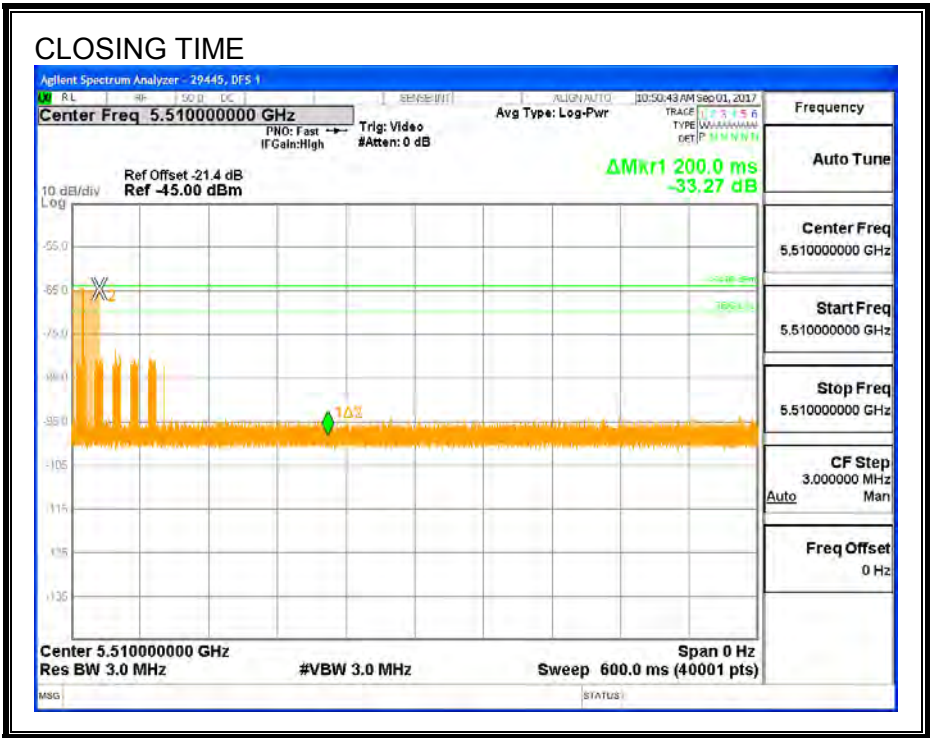
Channel Move Time (sec)	Limit (sec)
0.064	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

MOVE TIME



CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



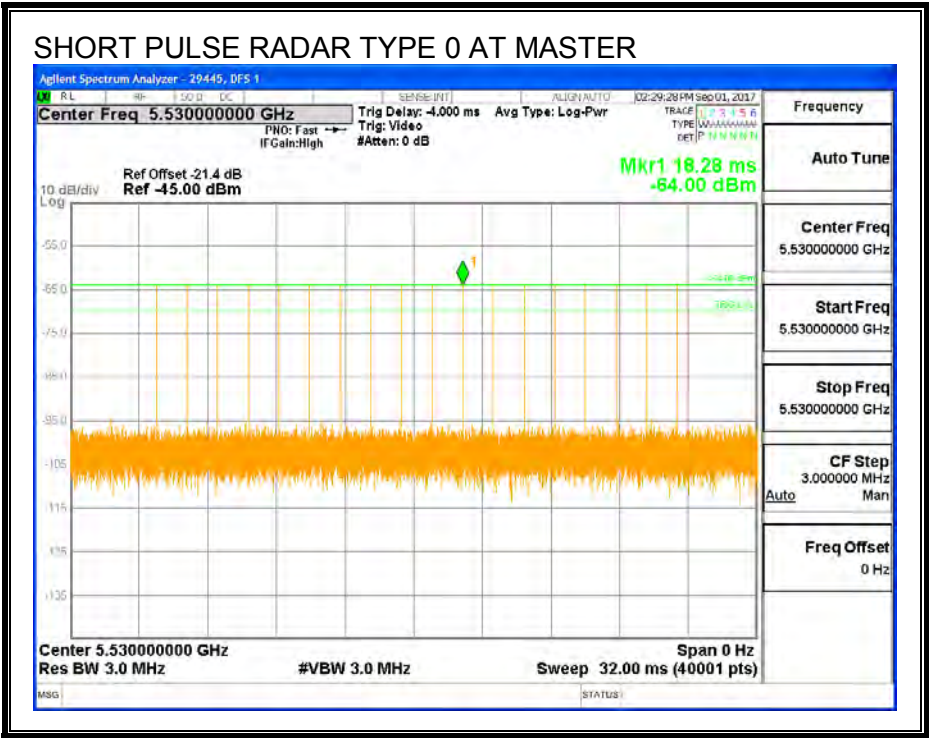
12.4. RESULTS FOR 80 MHz BANDWIDTH

12.4.1. TEST CHANNEL

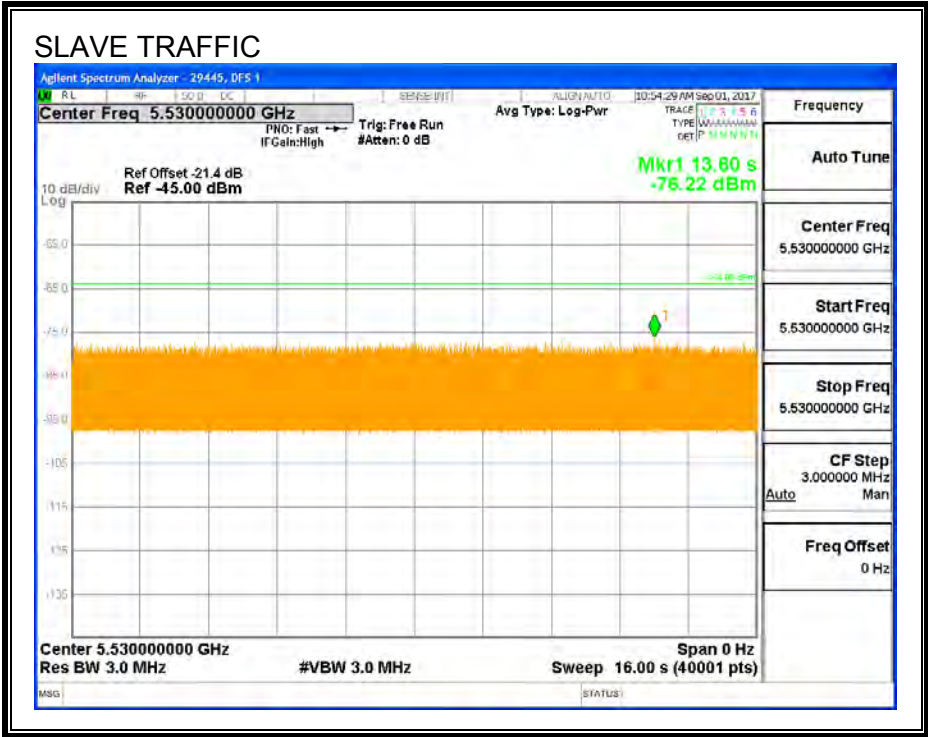
All tests were performed at a channel center frequency of 5530 MHz.

12.4.2. RADAR WAVEFORM AND TRAFFIC

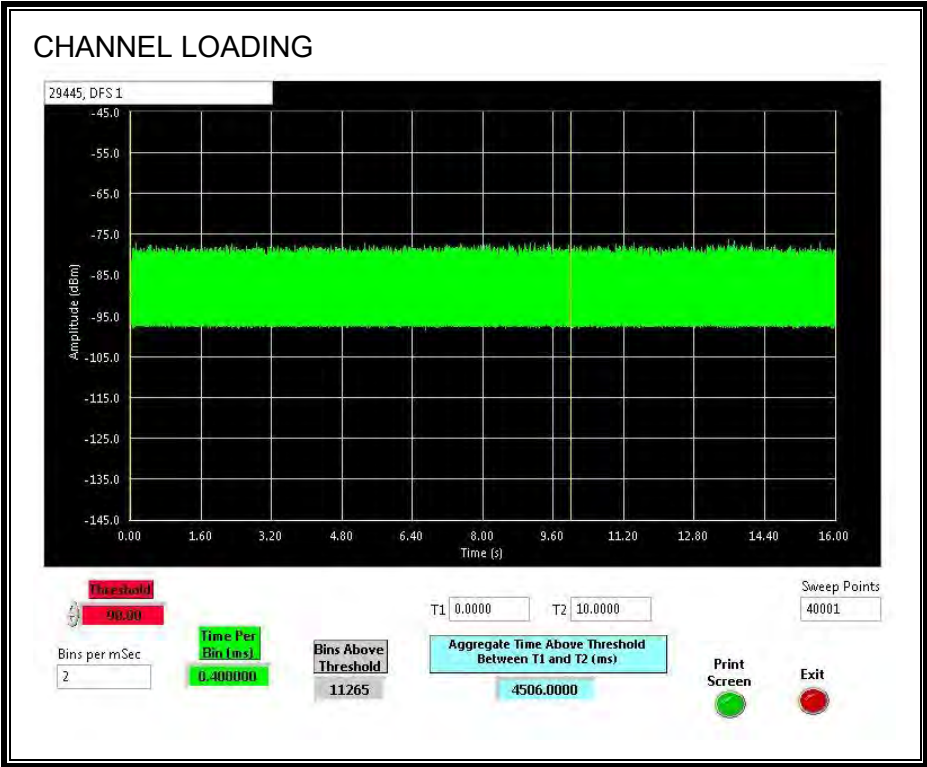
RADAR WAVEFORM



TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 45.06%

12.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

12.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

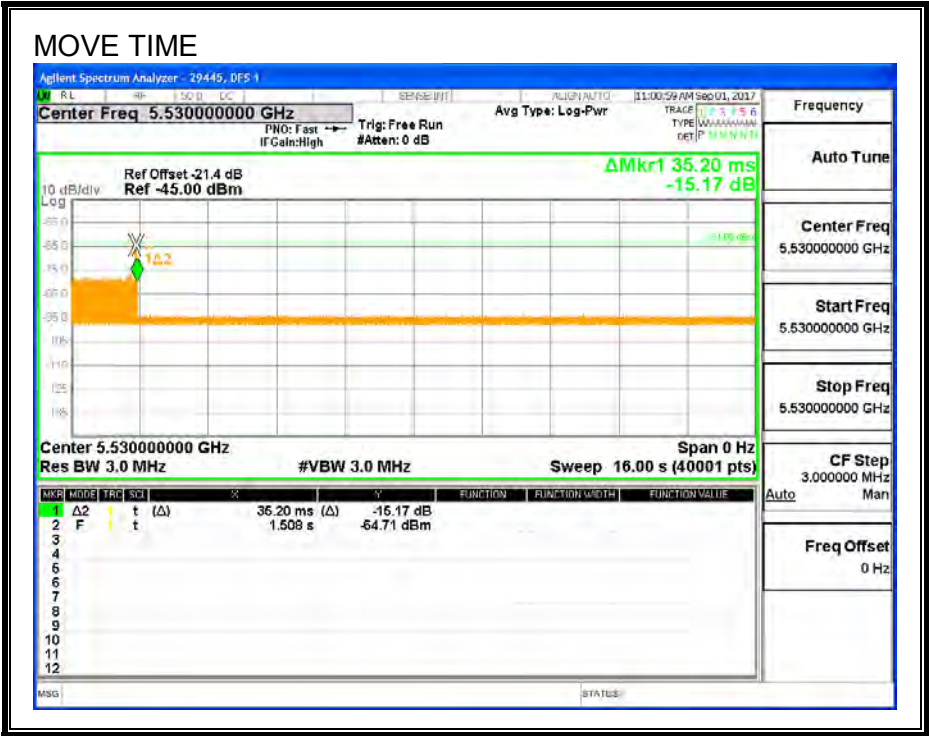
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

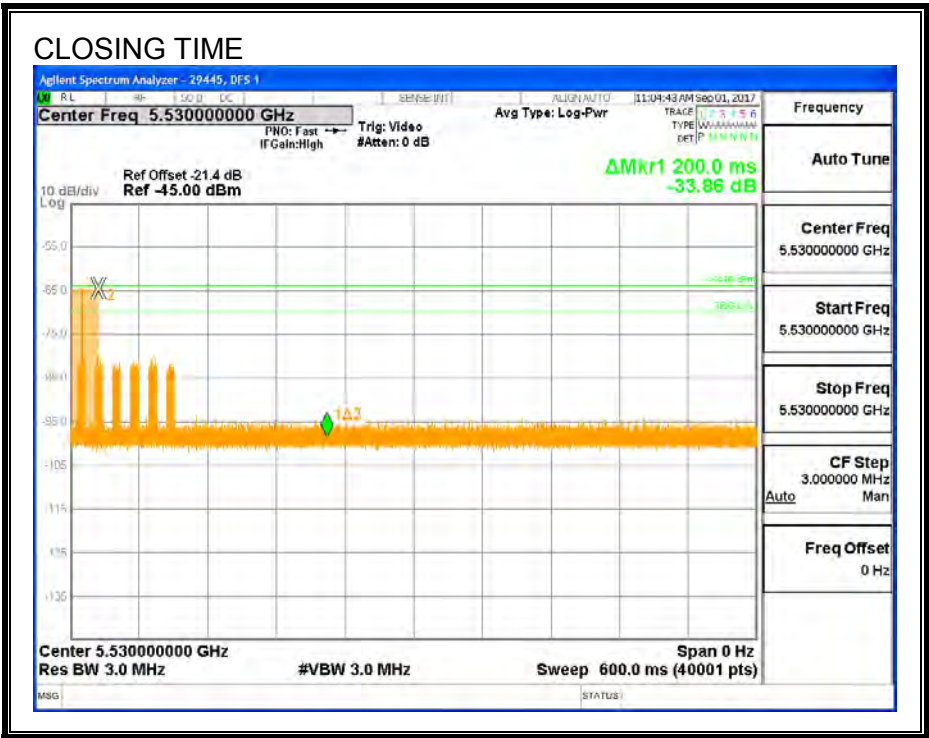
Channel Move Time (sec)	Limit (sec)
0.0352	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

MOVE TIME



CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



12.4.5. 30-MINUTE NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time. Activity resumed on the channel after the Master device performed a successful CAC.

