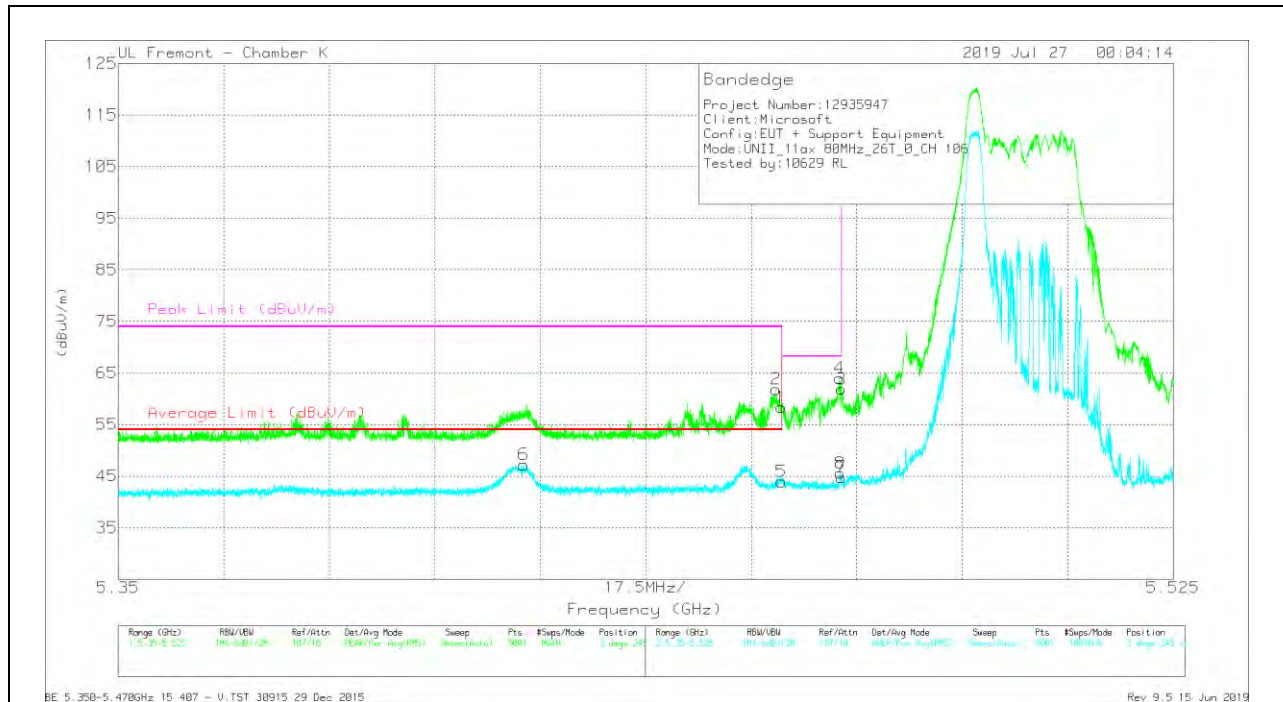


VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dBm)	Amp/Cbl/Filtr/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	43.54	Pk	34.5	-19.7	0	58.34	-	-	74	-15.66	3	245	V
2	* 5.4591	47.05	Pk	34.5	-19.7	0	61.85	-	-	74	-12.15	3	245	V
3	5.46999	47.06	Pk	34.5	-19.7	0	61.86	-	-	68.2	-6.34	3	245	V
4	5.46968	49.18	Pk	34.5	-19.7	0	63.98	-	-	68.2	-4.22	3	245	V
5	* 5.46	29.15	RMS	34.5	-19.7	0	43.95	54	-10.05	-	-	3	245	V
6	* 5.41726	32.42	RMS	34.5	-19.7	0	47.22	54	-6.78	-	-	3	245	V
7	5.46999	29.98	RMS	34.5	-19.7	0	44.78	-	-	-	-	3	245	V
8	5.46978	30.74	RMS	34.5	-19.7	0	45.54	-	-	-	-	3	245	V

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

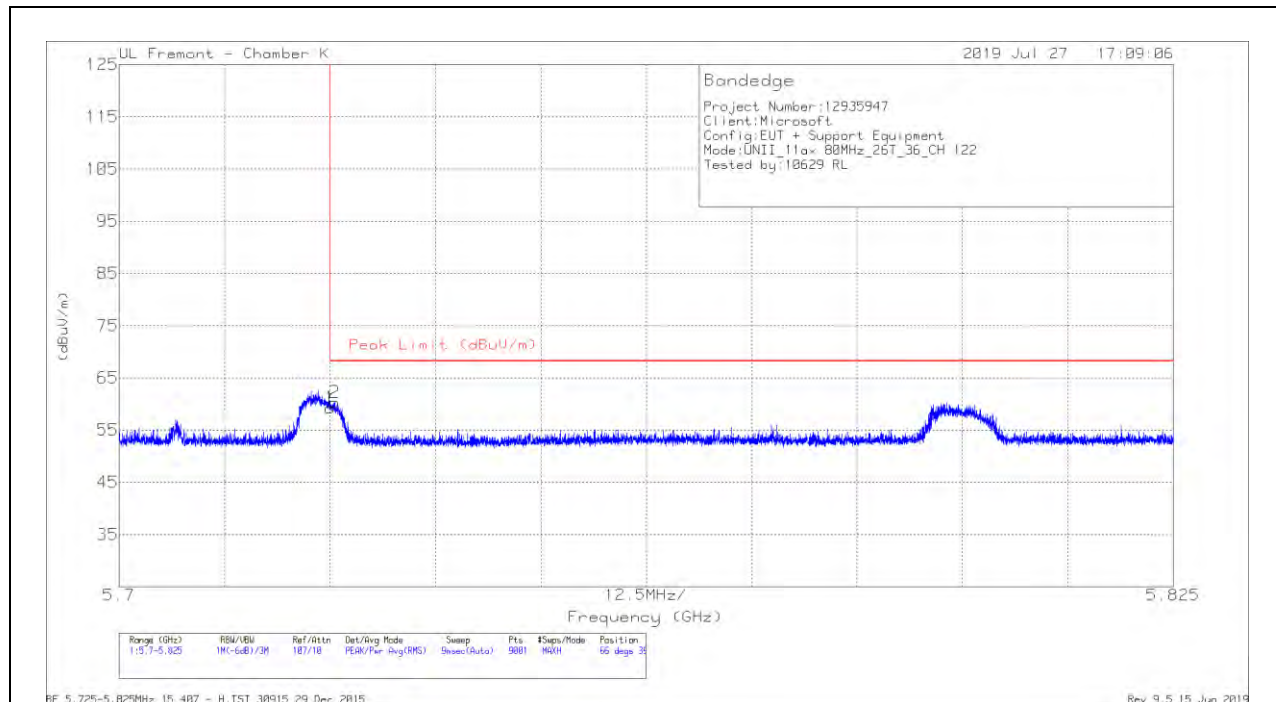
Pk - Peak detector

RMS - RMS detection

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU Index 36

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

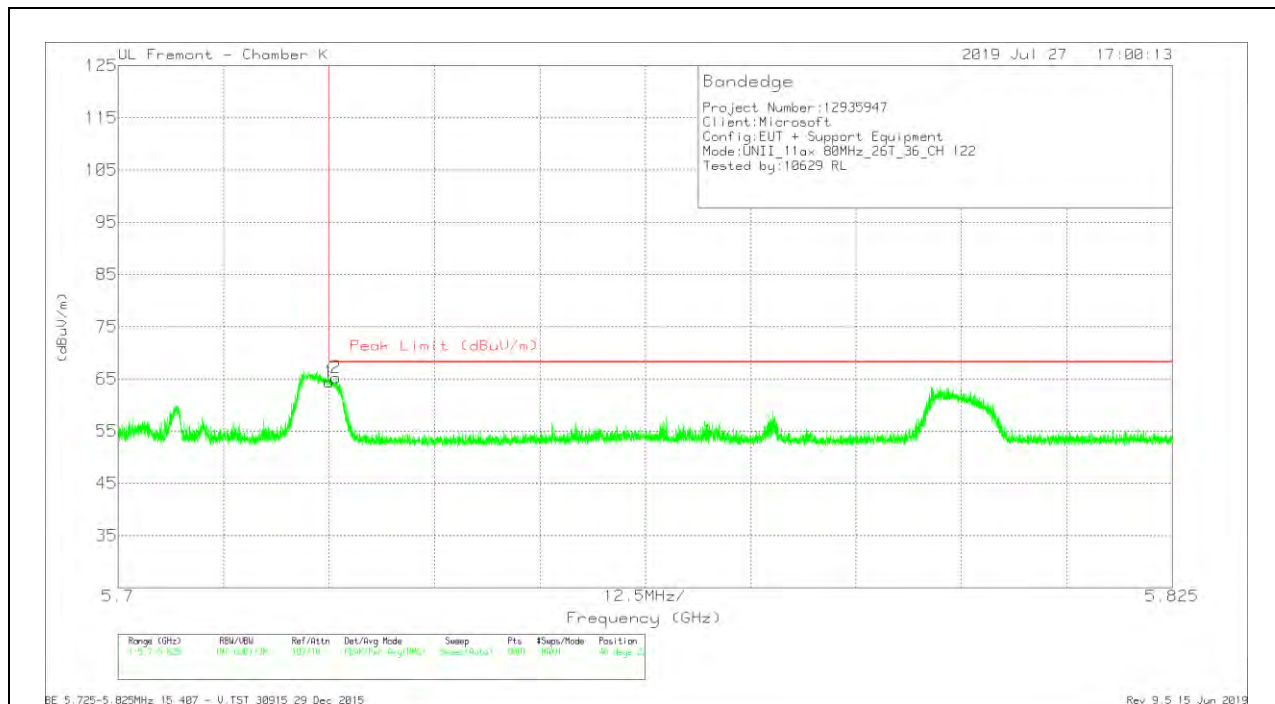


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.44	Pk	34.8	-19	0	59.24	68.2	-8.96	66	399	H
2	5.72556	44.5	Pk	34.8	-19	0	60.3	68.2	-7.9	66	399	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	48.62	Pk	34.8	-19	0	64.42	68.2	-3.78	48	224	V
2	5.72585	49.43	Pk	34.8	-19	0	65.23	68.2	-2.97	48	224	V

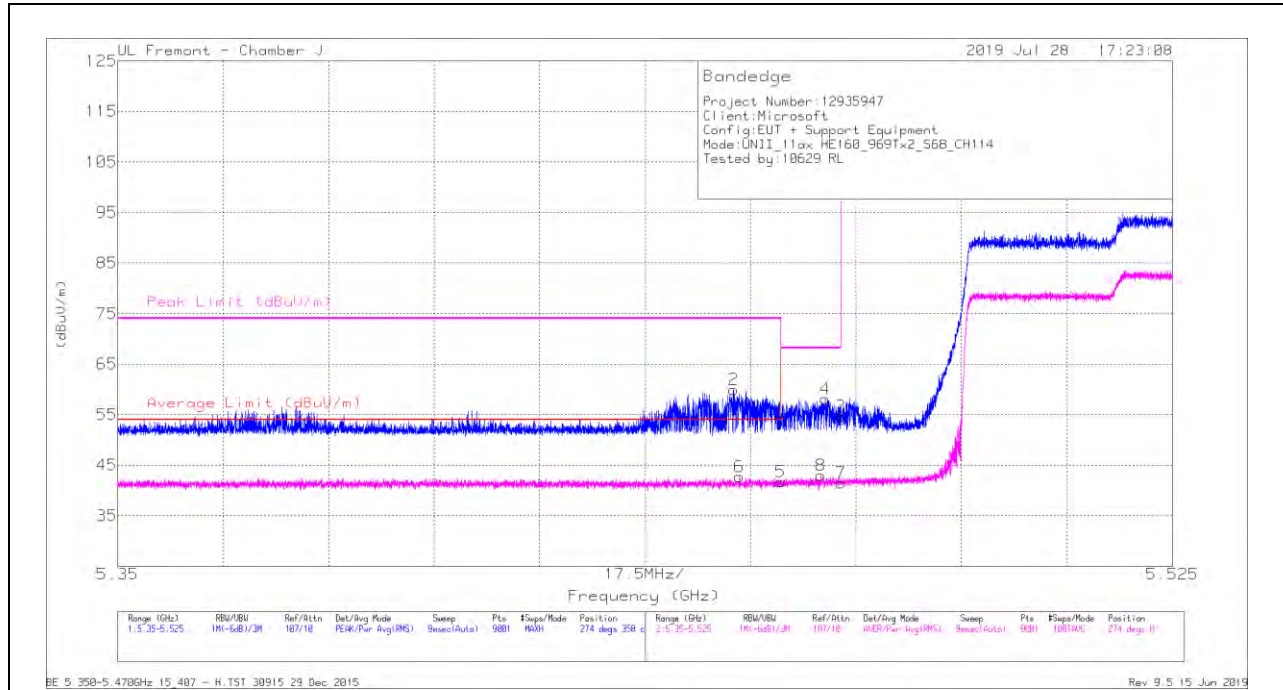
Pk - Peak detector

9.1.4. TX ABOVE 1 GHz 802.11ax HE160 MODE IN THE 5.6 GHz BAND

2TX Chain 0 + Chain 1 OFDMA MODE – 2x996-Tones, RU Index 68

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/Ftr/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	40.56	PK	34.2	-20.5	0	54.26	-	-	74	-19.74	274	358	H
2	* 5.45216	46.23	PK	34.2	-20.5	0	59.93	-	-	74	-14.07	274	358	H
3	5.46999	40.97	PK	34.2	-20.5	0	54.67	-	-	68.2	-13.53	274	358	H
4	5.46742	44.46	PK	34.2	-20.5	0	58.16	-	-	68.2	-10.04	274	358	H
5	* 5.46	28.05	RMS	34.2	-20.5	0	41.75	54	-12.25	-	-	274	358	H
6	* 5.45319	29.06	RMS	34.2	-20.5	0	42.76	54	-11.24	-	-	274	358	H
7	5.46999	27.79	RMS	34.2	-20.5	0	41.49	-	-	-	-	274	358	H
8	5.4667	29.28	RMS	34.2	-20.5	0	42.98	-	-	-	-	274	358	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dBm)	Amp/Cbl/Filtr/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	41.49	Pk	34.5	-19.7	0	56.29	-	-	74	-17.71	14	243	V
2	* 5.44802	50.87	Pk	34.4	-19.7	0	65.57	-	-	74	-8.43	14	243	V
3	5.46999	42.17	Pk	34.5	-19.7	0	56.97	-	-	68.2	-11.23	14	243	V
4	5.46021	47.13	Pk	34.5	-19.7	0	61.93	-	-	68.2	-6.27	14	243	V
5	* 5.46	28.78	RMS	34.5	-19.7	0	43.58	54	-10.42	-	-	14	243	V
6	* 5.44741	31.28	RMS	34.4	-19.7	0	45.98	54	-8.02	-	-	14	243	V
7	5.46999	28.77	RMS	34.5	-19.7	0	43.57	-	-	-	-	14	243	V
8	5.46126	29.79	RMS	34.4	-19.7	0	44.49	-	-	-	-	14	243	V

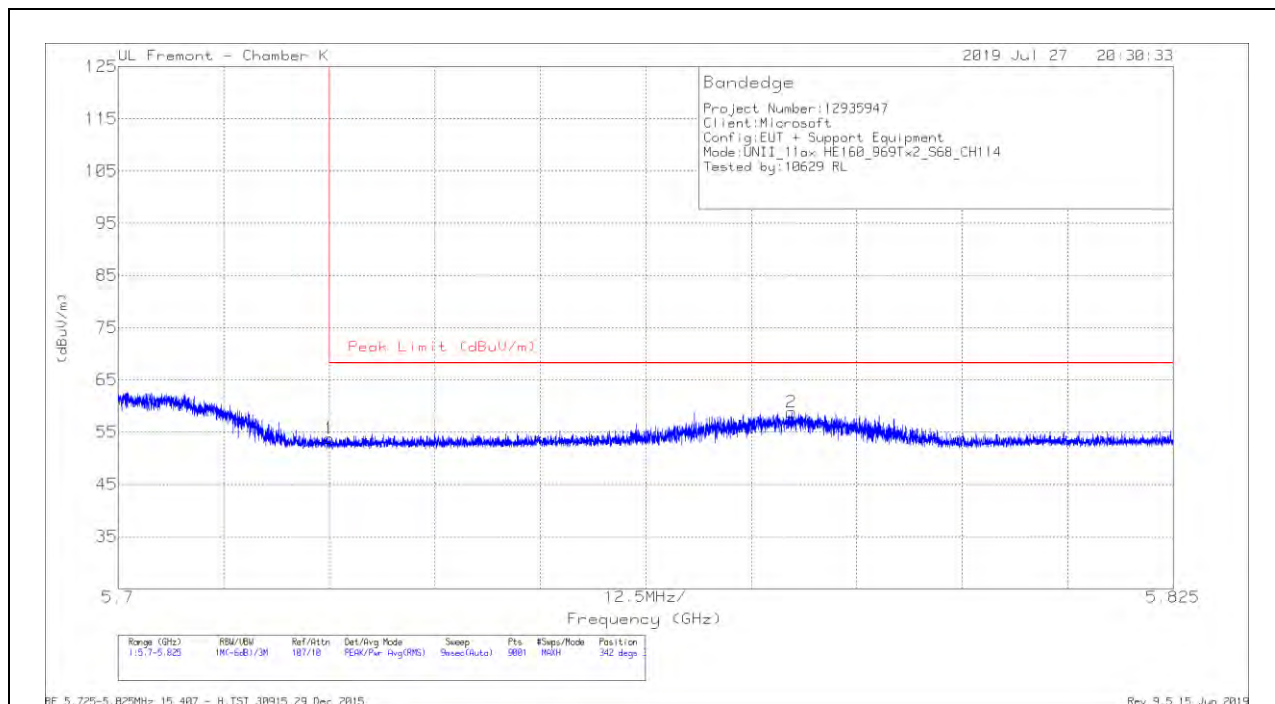
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

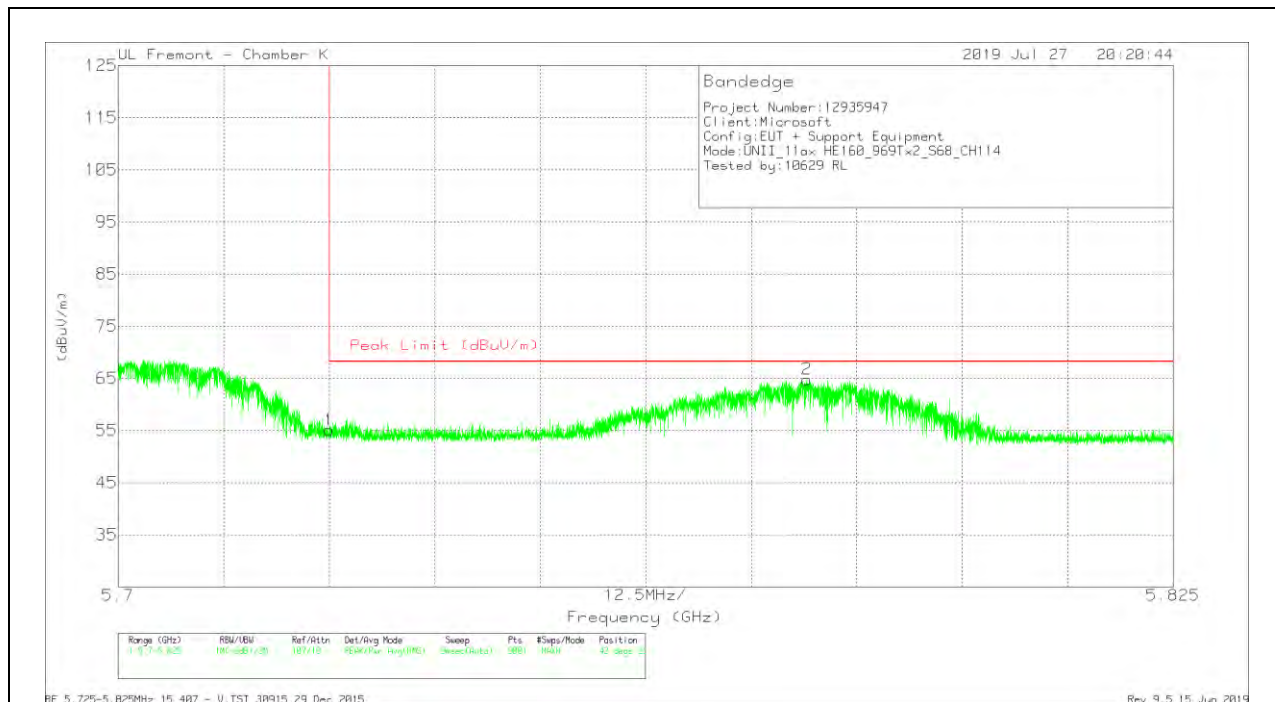


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.99	Pk	34.8	-19	0	53.79	68.2	-14.41	342	331	H
2	5.77977	42.6	Pk	35	-18.8	0	58.8	68.2	-9.4	342	331	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

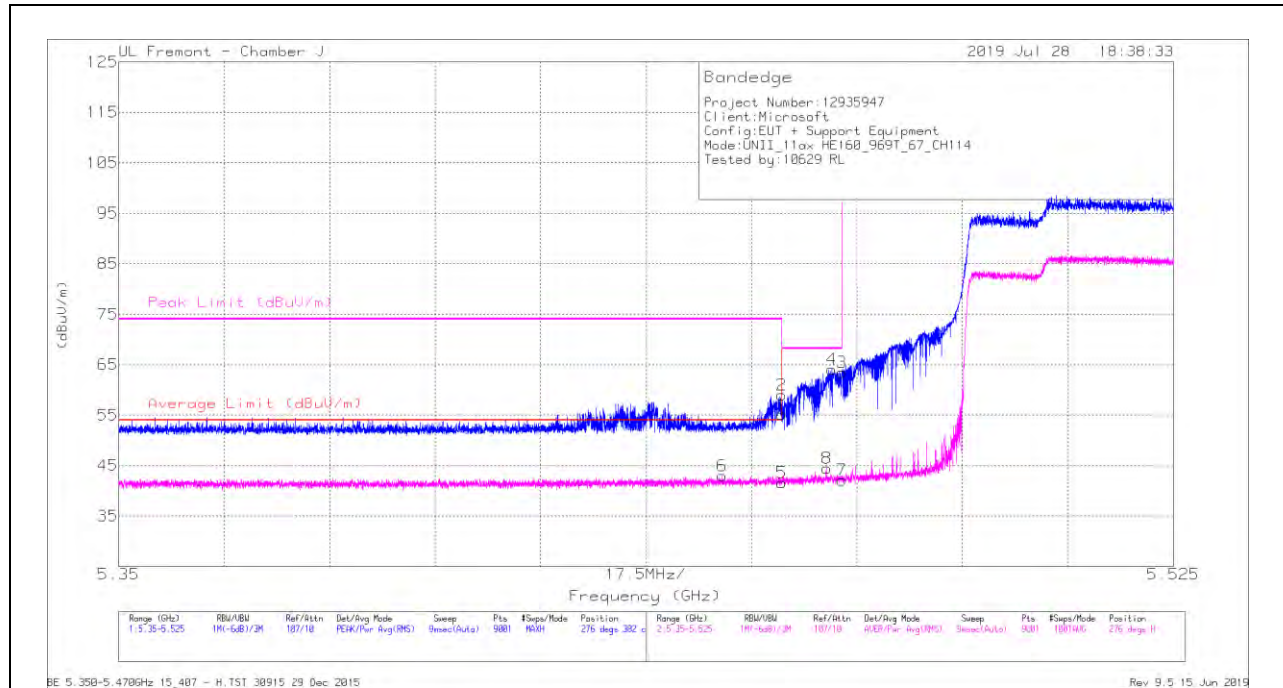
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.27	Pk	34.8	-19	0	55.07	68.2	-13.13	42	252	V
2	5.78157	48.6	Pk	35	-18.8	0	64.8	68.2	-3.4	42	252	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 996-Tones, RU Index 67

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

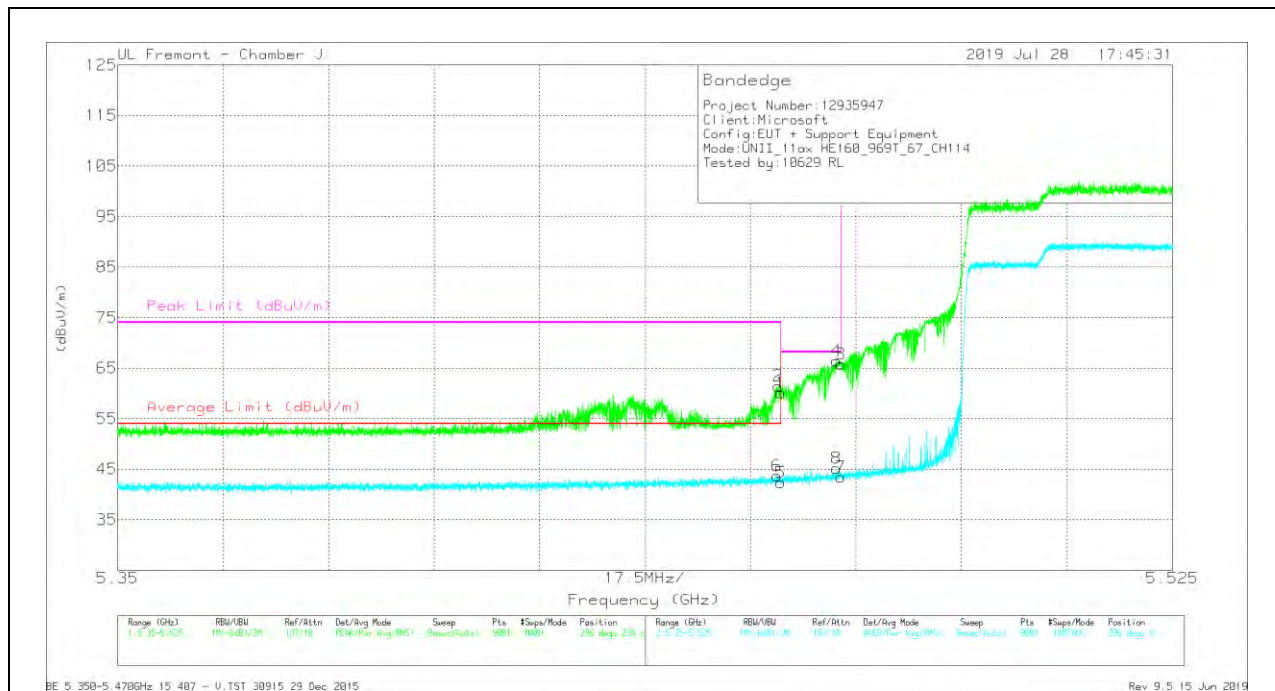
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.4	Pk	34.2	-20.5	55.1	-	-	74	-18.9	276	382	H
2	* 5.45998	45.28	Pk	34.2	-20.5	58.98	-	-	74	-15.02	276	382	H
3	5.46999	49.8	Pk	34.2	-20.5	63.5	-	-	68.2	-4.7	276	382	H
4	5.4683	50.38	Pk	34.2	-20.5	64.08	-	-	68.2	-4.12	276	382	H
5	* 5.46	27.95	RMS	34.2	-20.5	41.65	54	-12.35	-	-	276	382	H
6	* 5.45012	29.21	RMS	34.2	-20.5	42.91	54	-11.09	-	-	276	382	H
7	5.46999	28.4	RMS	34.2	-20.5	42.1	-	-	-	-	276	382	H
8	5.46748	30.77	RMS	34.2	-20.5	44.47	-	-	-	-	276	382	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/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	46.45	Pk	34.2	-20.5	0	60.15	-	-	74	-13.85	296	234	V
2	* 5.45959	47.72	Pk	34.2	-20.5	0	61.42	-	-	74	-12.58	296	234	V
3	5.46999	52.06	Pk	34.2	-20.5	0	65.76	-	-	68.2	-2.44	296	234	V
4	5.46927	52.74	Pk	34.2	-20.5	0	66.44	-	-	68.2	-1.76	296	234	V
5	* 5.46	28.65	RMS	34.2	-20.5	0	42.35	54	-11.65	-	-	296	234	V
6	* 5.45939	30.02	RMS	34.2	-20.5	0	43.72	54	-10.28	-	-	296	234	V
7	5.46999	29.78	RMS	34.2	-20.5	0	43.48	-	-	-	-	296	234	V
8	5.46923	31.54	RMS	34.2	-20.5	0	45.24	-	-	-	-	296	234	V

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

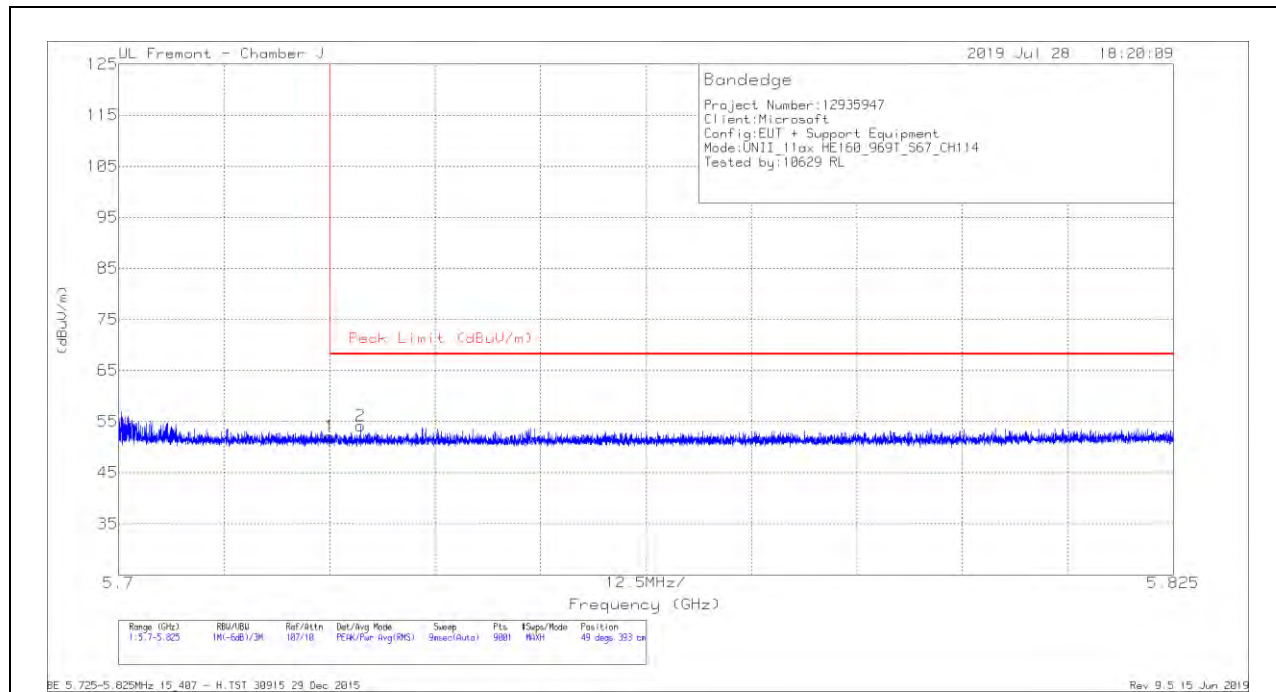
Pk - Peak detector

RMS - RMS detection

2TX Chain 0 + Chain 1 OFDMA MODE – 996-Tones, RU Index S67

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

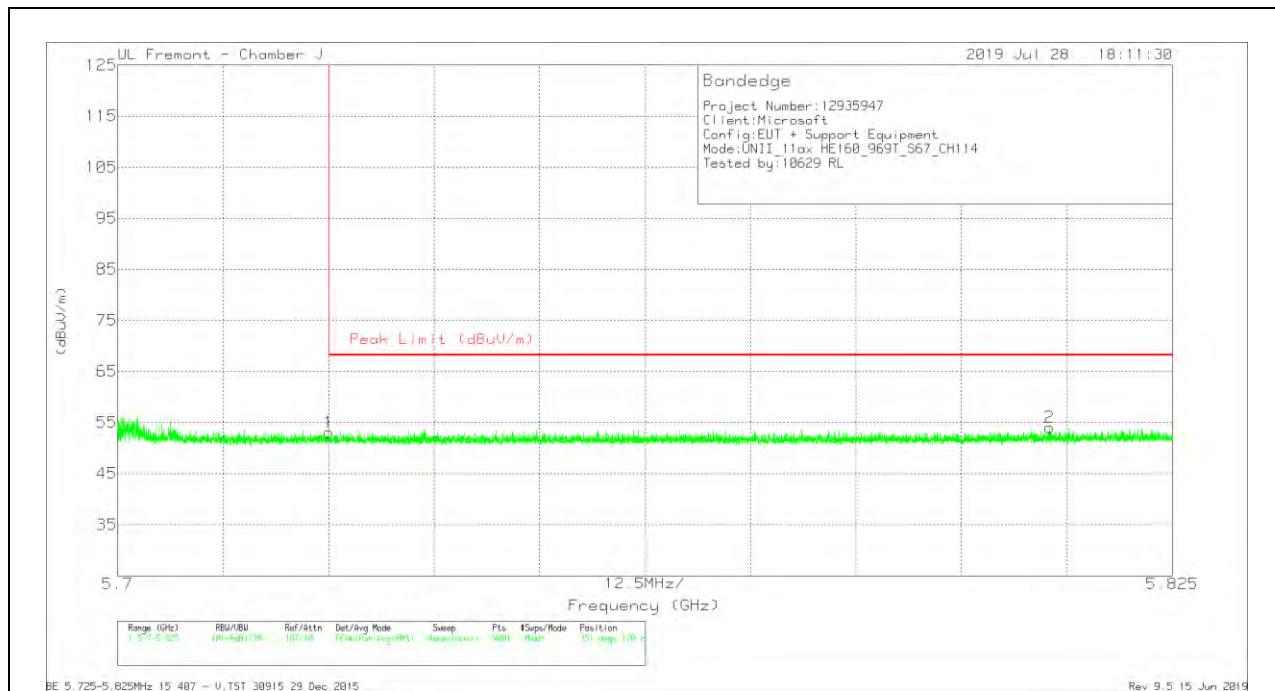


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.35	Pk	34.1	-20.4	0	52.05	68.2	-16.15	49	393	H
2	5.72868	40.52	Pk	34.1	-20.4	0	54.22	68.2	-13.98	49	393	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

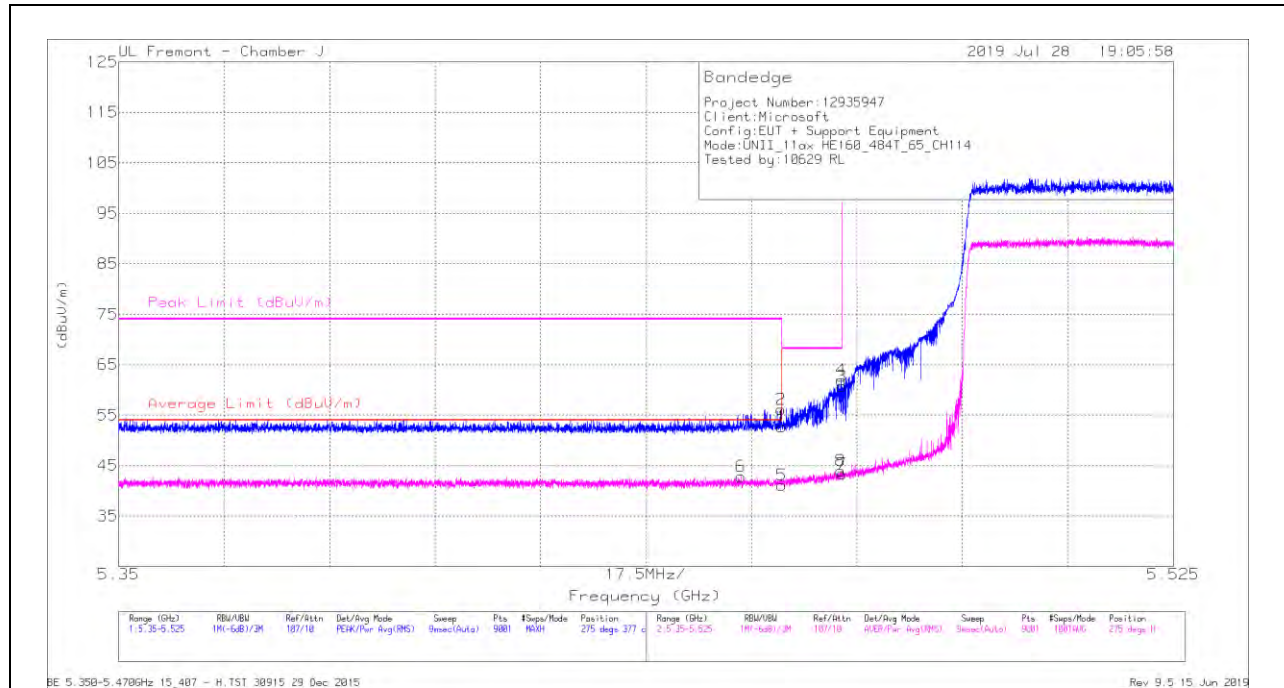
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.39	Pk	34.1	-20.4	0	53.09	68.2	-15.11	351	120	V
2	5.81047	39.85	Pk	34.3	-20.1	0	54.05	68.2	-14.15	351	120	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 484-Tones, RU Index 65

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb1/Filtr/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	38.96	Pk	34.2	-20.5	0	52.66	-	-	74	-21.34	275	377	H
2	* 5.45986	42.43	Pk	34.2	-20.5	0	56.13	-	-	74	-17.87	275	377	H
3	5.46999	47.07	Pk	34.2	-20.5	0	60.77	-	-	68.2	-7.43	275	377	H
4	5.46989	48.24	Pk	34.2	-20.5	0	61.94	-	-	68.2	-6.26	275	377	H
5	* 5.46	27.4	RMS	34.2	-20.5	0	41.1	54	-12.9	-	-	275	377	H
6	* 5.45325	29.1	RMS	34.2	-20.5	0	42.8	54	-11.2	-	-	275	377	H
7	5.46999	29.69	RMS	34.2	-20.5	0	43.39	-	-	-	-	275	377	H
8	5.46974	30.22	RMS	34.2	-20.5	0	43.92	-	-	-	-	275	377	H

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

Pk - Peak detector

RMS - RMS detection

UL Fremont - Chamber J

2019 Jul 28 18:56:13

Bandedge

Project Number: 12935947
 Client: Microsoft
 Config: EUT + Support Equipment
 Made: UNIL 110x PE160_484T_65_CH114
 Tested by: 10629 RL

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

dBuV/m

Frequency (GHz)

17.5MHz/

5.35 5.525

Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pls	#Seps/Mode	Position	Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pls	#Seps/Mode	Position
1.57 B+5.525	100 kHz/100 kHz	107 dB	Pk/Pk (Avg/Max)	Down/Up (Auto)	1000	1000	5 degs 230 cm	1.57 B+5.525	100 kHz/100 kHz	107 dB	Pk/Pk (Avg/Max)	Down/Up (Auto)	1000	1000	5 degs 230 cm

BE 5.350-5.470GHz 15 dB - U.TST 30915 29 Dec 2015

Rev 9.5 15 Jun 2019

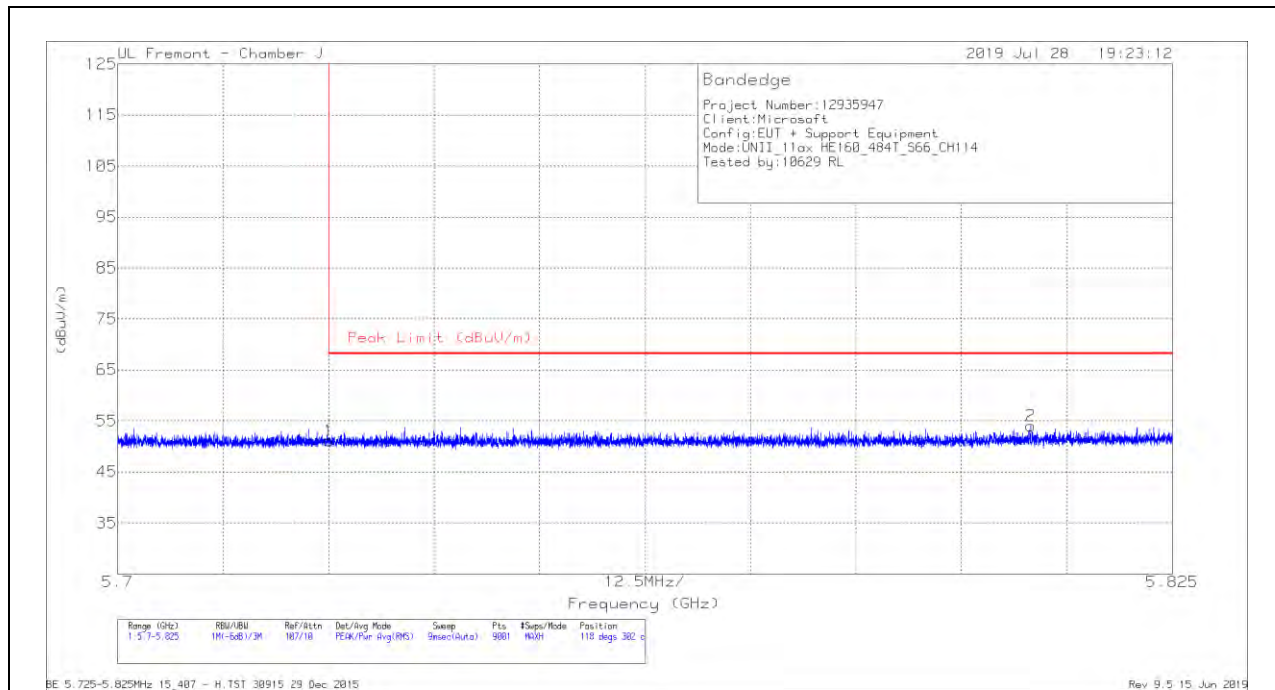
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/IFltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	46.06	Pk	34.2	-20.5	0	59.76	-	-	74	-14.24	5	238	V
2	* 5.45562	46.98	Pk	34.2	-20.5	0	60.68	-	-	74	-13.32	5	238	V
3	5.46999	51.93	Pk	34.2	-20.5	0	65.63	-	-	68.2	-2.57	5	238	V
4	5.4691	52.94	Pk	34.2	-20.5	0	66.64	-	-	68.2	-1.56	5	238	V
5	* 5.46	28.71	RMS	34.2	-20.5	0	42.41	54	-11.59	-	-	5	238	V
6	* 5.45686	29.96	RMS	34.2	-20.5	0	43.66	54	-10.34	-	-	5	238	V
7	5.46999	30.78	RMS	34.2	-20.5	0	44.48	-	-	-	-	5	238	V
8	5.46948	32.56	RMS	34.2	-20.5	0	46.26	-	-	-	-	5	238	V

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2TX Chain 0 + Chain 1 OFDMA MODE – 484-Tones, RU Index S66

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

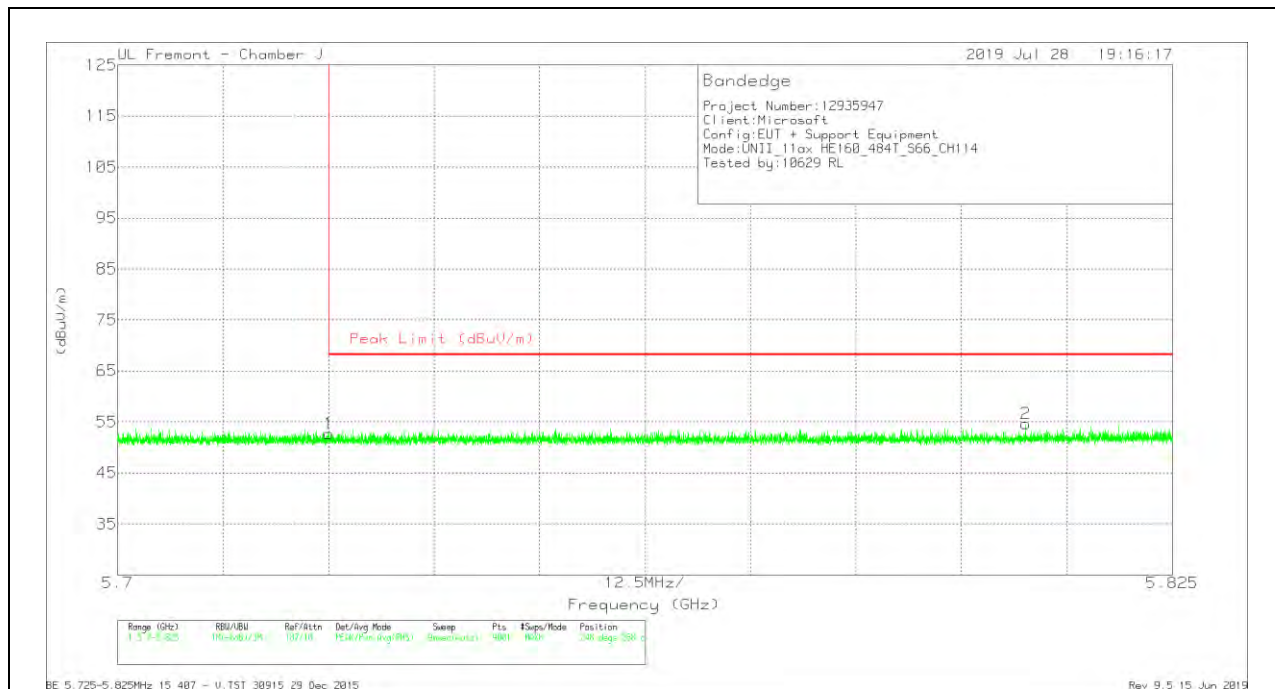


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.35	Pk	34.1	-20.4	0	51.05	68.2	-17.15	118	302	H
2	5.80818	39.85	Pk	34.3	-20.1	0	54.05	68.2	-14.15	118	302	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

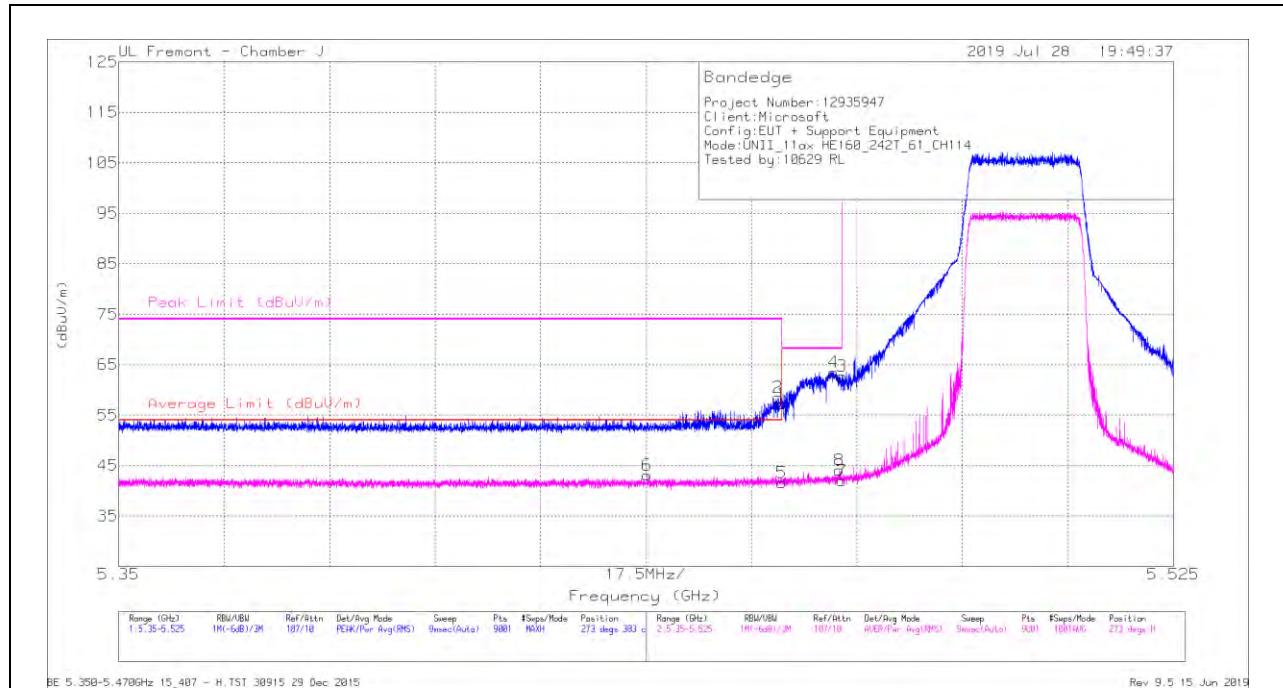
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.97	Pk	34.1	-20.4	0	52.67	68.2	-15.53	248	268	V
2	5.80758	40.46	Pk	34.3	-20.1	0	54.66	68.2	-13.54	248	268	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 242-Tones, RU Index 61

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/Fitr/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	43.57	Pk	34.2	-20.5	0	57.27	-	-	74	-16.73	273	383	H
2	* 5.46939	44.83	Pk	34.2	-20.5	0	58.53	-	-	74	-15.47	273	383	H
3	5.46999	49.06	Pk	34.2	-20.5	0	62.76	-	-	68.2	-5.44	273	383	H
4	5.46865	49.81	Pk	34.2	-20.5	0	63.51	-	-	68.2	-4.69	273	383	H
5	* 5.46	27.9	RMS	34.2	-20.5	0	41.6	54	-12.4	-	-	273	383	H
6	* 5.43763	29.4	RMS	34.3	-20.6	0	43.1	54	-10.9	-	-	273	383	H
7	5.46999	28.23	RMS	34.2	-20.5	0	41.93	-	-	-	-	273	383	H
8	5.46954	30.35	RMS	34.2	-20.5	0	44.05	-	-	-	-	273	383	H

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

Pk - Peak detector

RMS - RMS detection

UL Fremont - Chamber J

2019 Jul 28 19:38:53

Bandedge

Project Number: 12935947
 Client: Microsoft
 Config: EUT + Support Equipment
 Mode: UNII_11ax_HE160_242T_61_CH114
 Tested by: 10629 RL

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

dBuV/m

Frequency (GHz)

17.5MHz/

5.35 5.525

Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pls	#Sps/Mode	Position	Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pls	#Sps/Mode	Position
1.57 B+5.525	150000/150000	107/10	PWR/Pwr (avg) (RMS)	Down (Auto)	1000	1000	3 degs 247 cm	1.57 B+5.525	150000/150000	107/10	PWR/Pwr (avg) (RMS)	Down (Auto)	1000	1000	3 degs 1

BE 5.350-5.470GHz 15 407 - U.TSI 30915 29 Dec 2015

Rev 9.5.15 Jun 2015

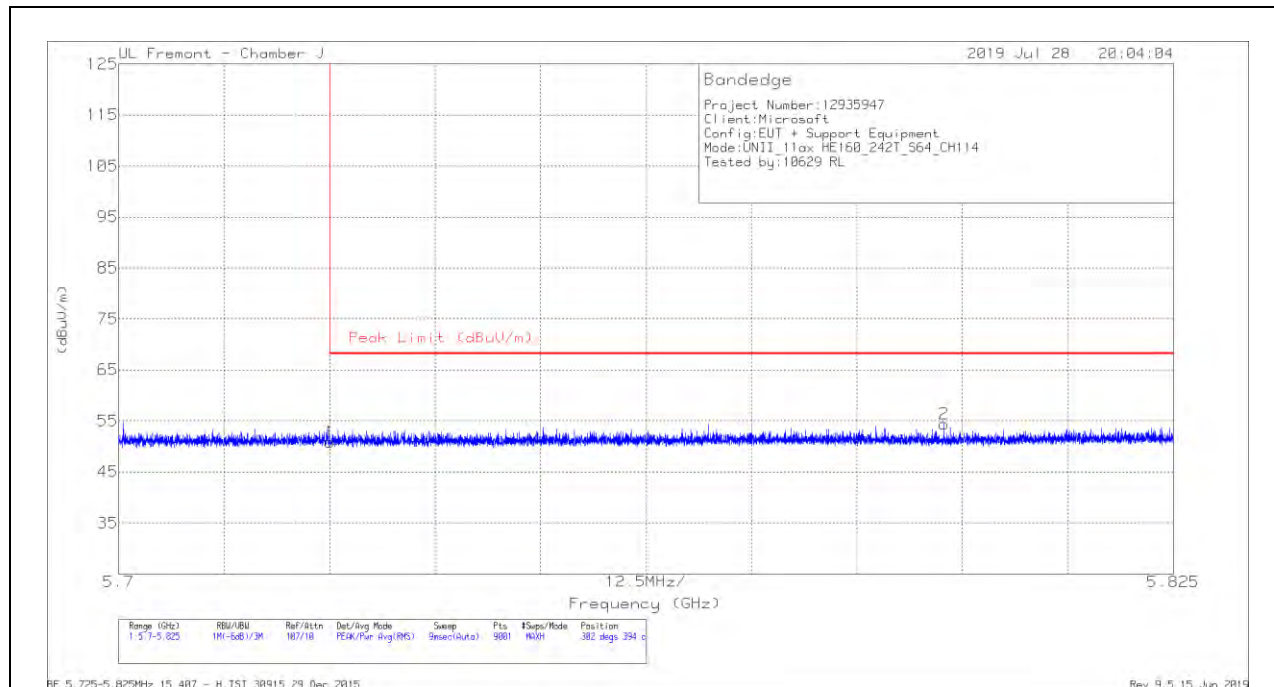
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/IFltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	47.71	Pk	34.2	-20.5	0	61.41	-	-	74	-12.59	3	247	V
2	* 5.45978	48.45	Pk	34.2	-20.5	0	62.15	-	-	74	-11.85	3	247	V
3	5.46999	49.54	Pk	34.2	-20.5	0	63.24	-	-	68.2	-4.96	3	247	V
4	5.46598	52.21	Pk	34.2	-20.5	0	65.91	-	-	68.2	-2.29	3	247	V
5	* 5.46	27.97	RMS	34.2	-20.5	0	41.67	54	-12.33	-	-	3	247	V
6	* 5.4591	30.21	RMS	34.2	-20.5	0	43.91	54	-10.09	-	-	3	247	V
7	5.46999	29.55	RMS	34.2	-20.5	0	43.25	-	-	-	-	3	247	V
8	5.46824	31.58	RMS	34.2	-20.5	0	45.28	-	-	-	-	3	247	V

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2TX Chain 0 + Chain 1 OFDMA MODE – 242-Tones, RU Index S64

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

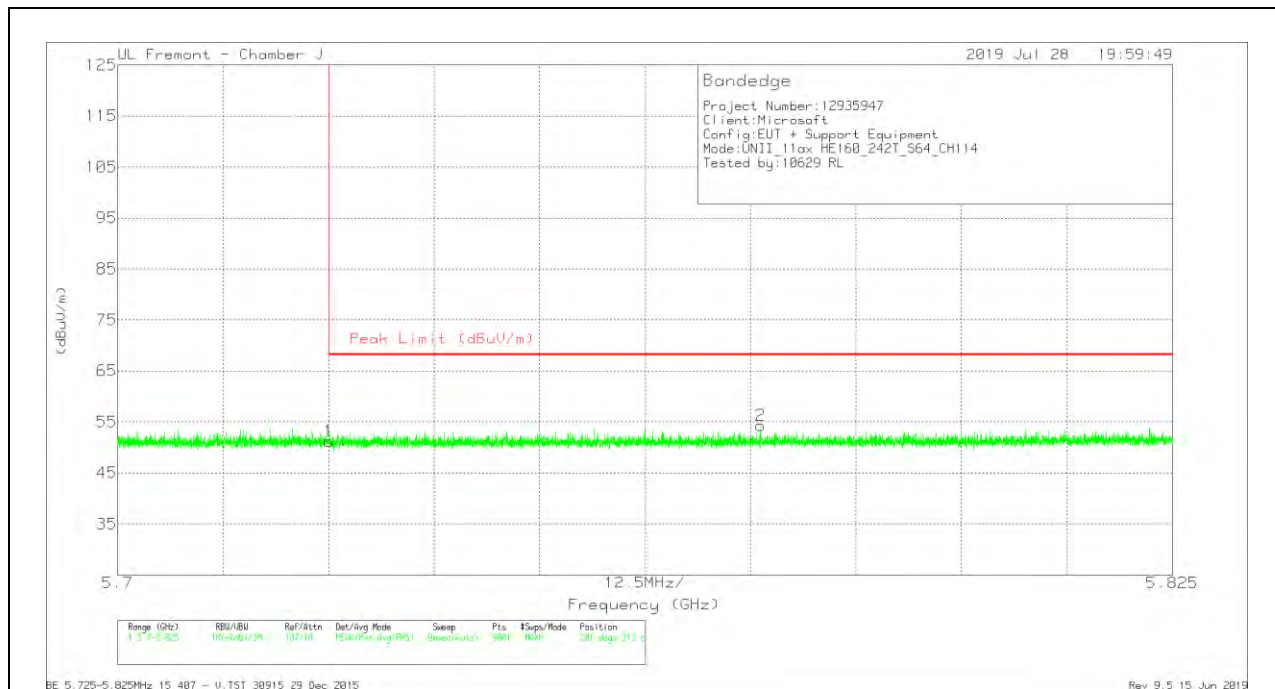


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.12	Pk	34.1	-20.4	0	50.82	68.2	-17.38	302	394	H
2	5.79781	40.34	Pk	34.2	-20.1	0	54.44	68.2	-13.76	302	394	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

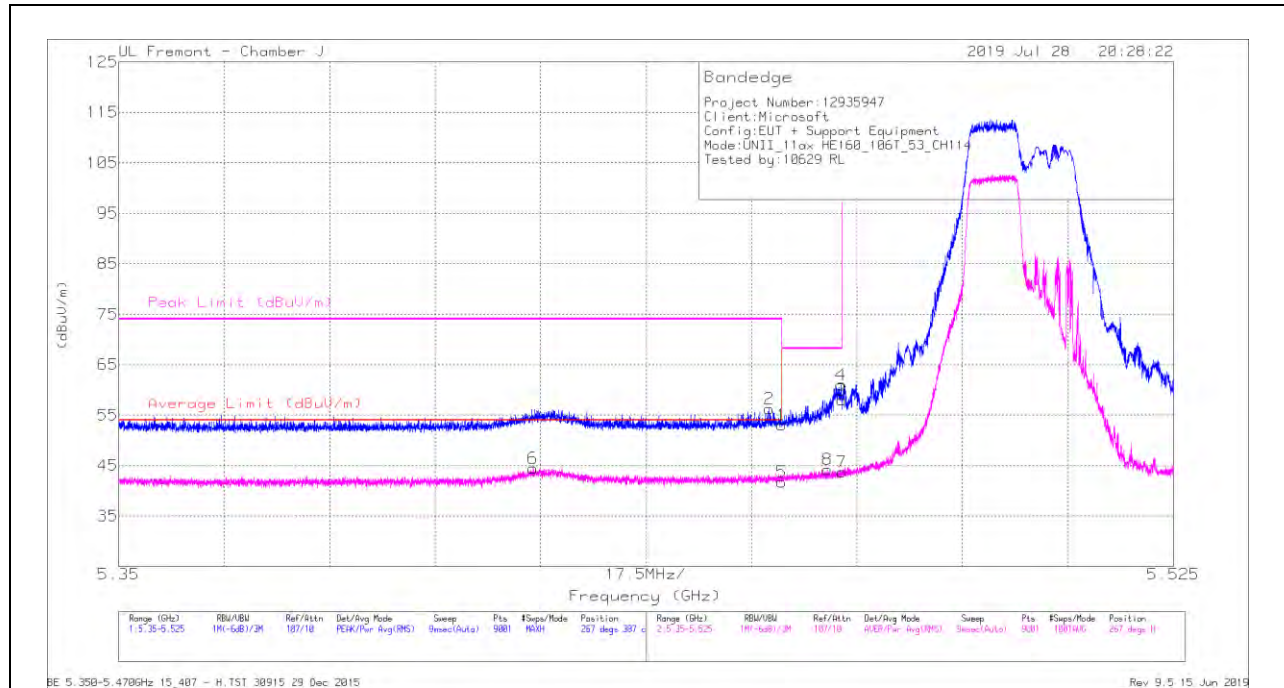
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.53	Pk	34.1	-20.4	0	51.23	68.2	-16.97	201	313	V
2	5.77618	40.28	Pk	34.2	-20.2	0	54.28	68.2	-13.92	201	313	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 106-Tones, RU Index 53

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb1/Fitr/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	39.35	Pk	34.2	-20.5	0	53.05	-	-	74	-20.95	267	387	H
2	* 5.45795	42.51	Pk	34.2	-20.5	0	56.21	-	-	74	-17.79	267	387	H
3	5.46999	44.35	Pk	34.2	-20.5	0	58.05	-	-	68.2	-10.15	267	387	H
4	5.46983	47.32	Pk	34.2	-20.5	0	61.02	-	-	68.2	-7.18	267	387	H
5	* 5.46	28.06	RMS	34.2	-20.5	0	41.76	54	-12.24	-	-	267	387	H
6	* 5.41875	30.78	RMS	34.3	-20.6	0	44.48	54	-9.52	-	-	267	387	H
7	5.46999	29.97	RMS	34.2	-20.5	0	43.67	-	-	-	-	267	387	H
8	5.46756	30.53	RMS	34.2	-20.5	0	44.23	-	-	-	-	267	387	H

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

Pk - Peak detector

RMS - RMS detection

UL Fremont - Chamber J

2019 Jul 28 20:19:06

Bandedge
 Project Number: 12935947
 Client: Microsoft
 Config: EUT + Support Equipment
 Mode: UNIL 110x HE160_186T_53_CH114
 Tested by: 10629 RL

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

dB

dB

dB

17.5MHz/

5.35

5.525

Frequency (GHz)

Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pts	#Seps/Mode	Position	Range (GHz)	RBW/ABW	Ref/Attn	Det/Avg Mode	Sweep	Pts	#Seps/Mode	Position
1.57 B-5.525	100/100/100	107/10	Pk/Pk (Avg/Max)	Down/Up/Full	1000	1000	250 degs 240	2.5 B-5.525	100/100/100	107/10	Pk/Pk (Avg/Max)	Down/Up/Full	1000	1000	250 degs 10

BE 5.350-5.470GHz 15.407 - U.TST 30915 29 Dec 2015

Rev 9.5.15 Jun 2019

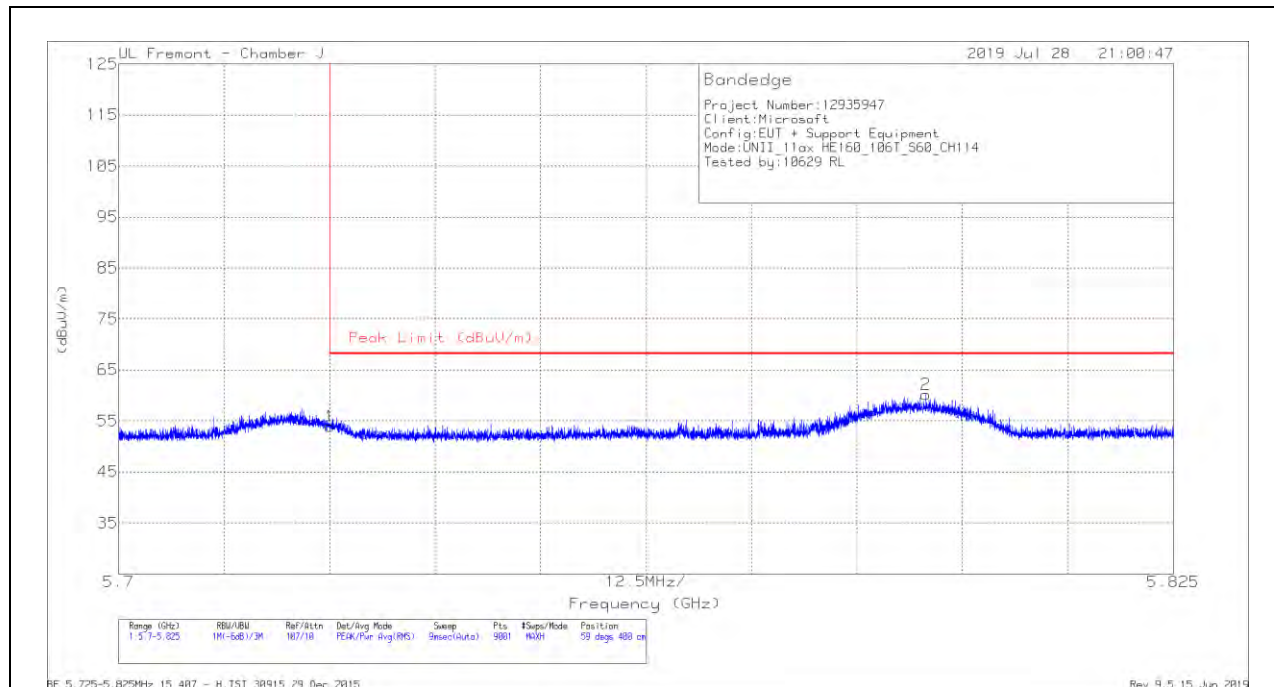
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/IFltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.31	Pk	34.2	-20.5	0	55.01	-	-	74	-18.99	295	240	V
2	* 5.45819	47.33	Pk	34.2	-20.5	0	61.03	-	-	74	-12.97	295	240	V
3	5.46999	51.29	Pk	34.2	-20.5	0	64.99	-	-	68.2	-3.21	295	240	V
4	5.46898	51.89	Pk	34.2	-20.5	0	65.59	-	-	68.2	-2.61	295	240	V
5	* 5.46	29.83	RMS	34.2	-20.5	0	43.53	54	-10.47	-	-	295	240	V
6	* 5.42087	32.34	RMS	34.2	-20.6	0	46.04	54	-7.96	-	-	295	240	V
7	5.46999	32.22	RMS	34.2	-20.5	0	45.92	-	-	-	-	295	240	V
8	5.4683	32.38	RMS	34.2	-20.5	0	46.08	-	-	-	-	295	240	V

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2TX Chain 0 + Chain 1 OFDMA MODE – 106-Tones, RU Index S60

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

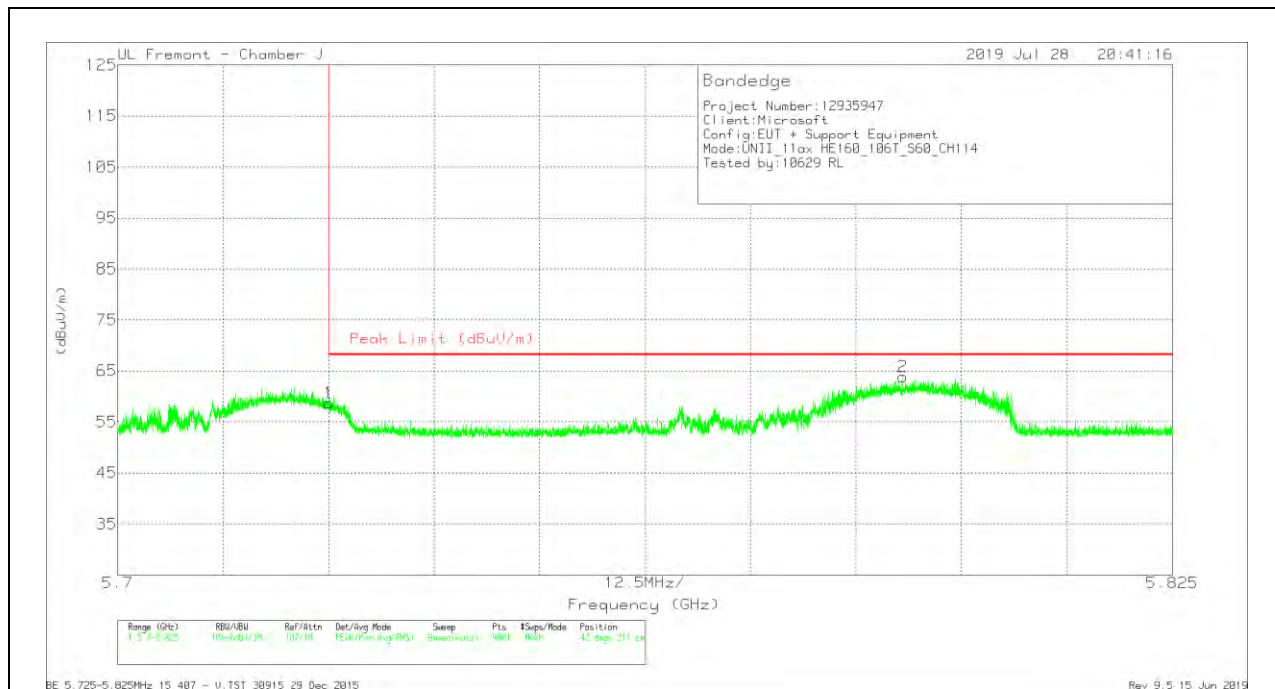


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	40.19	Pk	34.1	-20.4	0	53.89	68.2	-14.31	59	400	H
2	5.79565	46.16	Pk	34.2	-20.2	0	60.16	68.2	-8.04	59	400	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

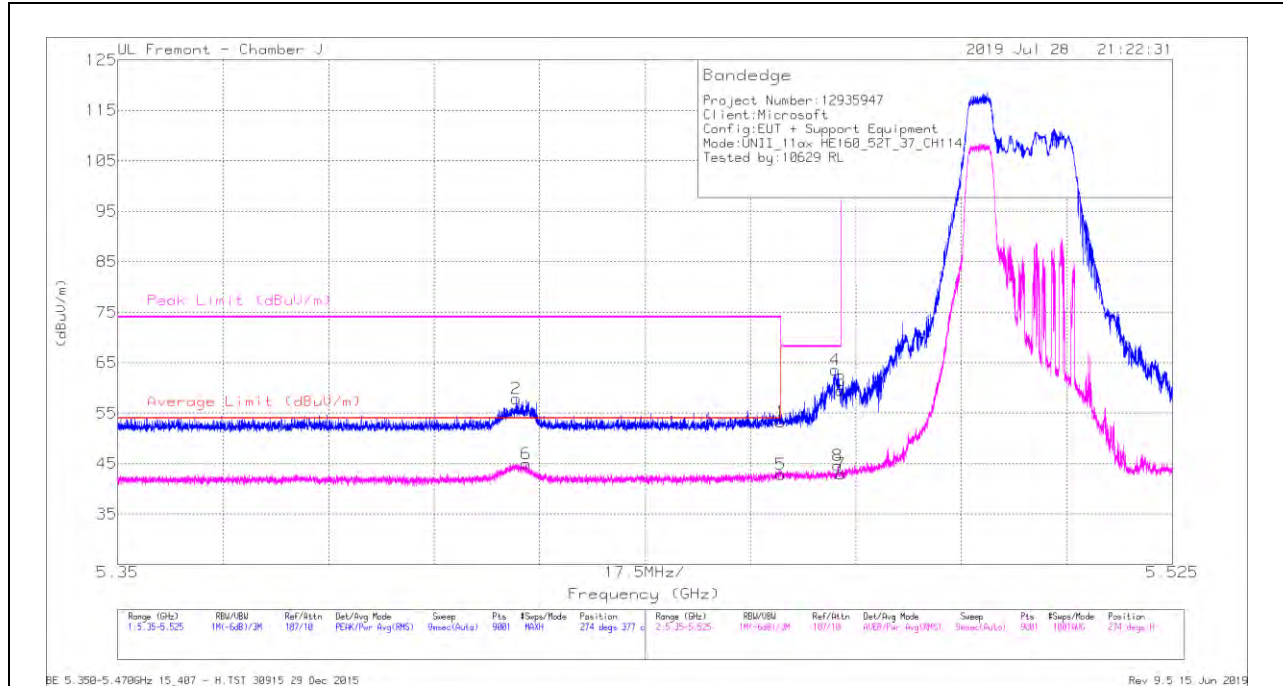
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	44.99	Pk	34.1	-20.4	0	58.69	68.2	-9.51	42	211	V
2	5.79306	49.82	Pk	34.2	-20.2	0	63.82	68.2	-4.38	42	211	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 52-Tones, RU Index 37

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

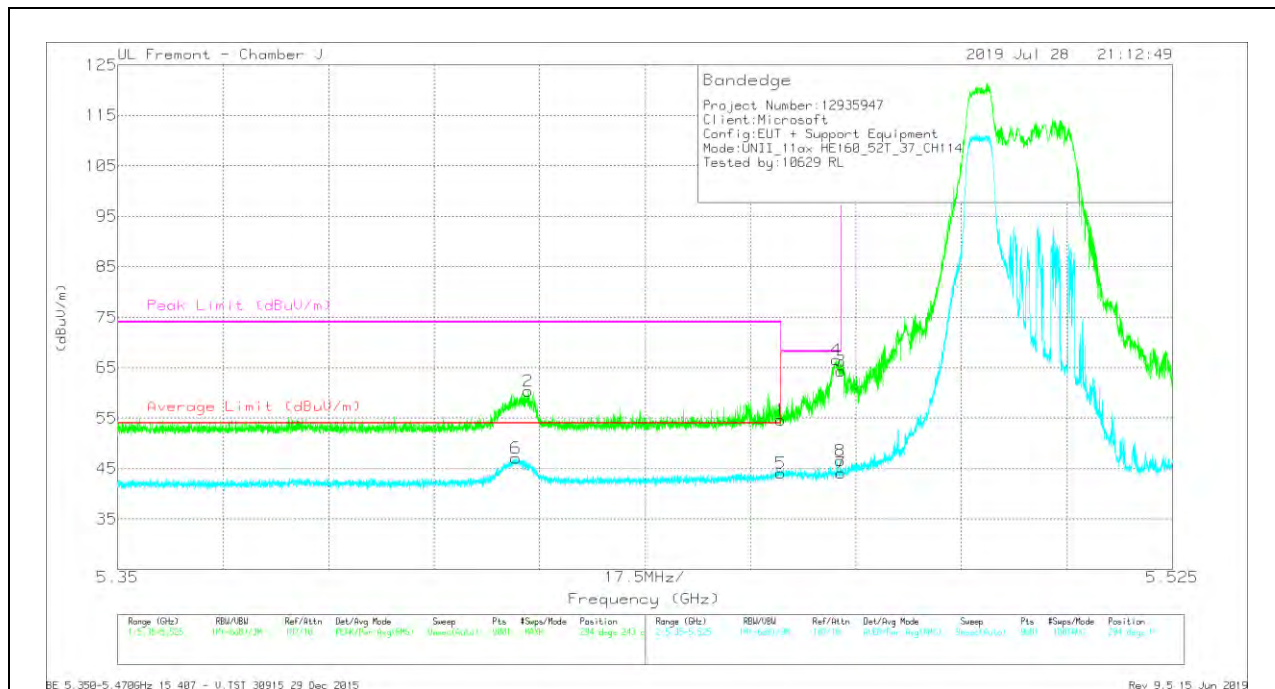
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.55	Pk	34.2	-20.5	0	53.25	-	-	74	-20.75	274	377	H
2	* 5.41617	44.03	Pk	34.4	-20.6	0	57.83	-	-	74	-16.17	274	377	H
3	5.46999	45.75	Pk	34.2	-20.5	0	59.45	-	-	68.2	-8.75	274	377	H
4	5.46906	49.88	Pk	34.2	-20.5	0	63.58	-	-	68.2	-4.62	274	377	H
5	* 5.46	29.12	RMS	34.2	-20.5	0	42.82	54	-11.18	-	-	274	377	H
6	* 5.41782	31.19	RMS	34.4	-20.6	0	44.99	54	-9.01	-	-	274	377	H
7	5.46999	29.22	RMS	34.2	-20.5	0	42.92	-	-	-	-	274	377	H
8	5.46946	30.88	RMS	34.2	-20.5	0	44.58	-	-	-	-	274	377	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/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	40.93	Pk	34.2	-20.5	0	54.63	-	-	74	-19.37	294	243	V
2	* 5.41811	46.5	Pk	34.4	-20.6	0	60.3	-	-	74	-13.7	294	243	V
3	5.46999	50.6	Pk	34.2	-20.5	0	64.3	-	-	68.2	-3.9	294	243	V
4	5.46927	52.87	Pk	34.2	-20.5	0	66.57	-	-	68.2	-1.63	294	243	V
5	* 5.46	30.33	RMS	34.2	-20.5	0	44.03	54	-9.97	-	-	294	243	V
6	* 5.41607	33.27	RMS	34.4	-20.6	0	47.07	54	-6.93	-	-	294	243	V
7	5.46999	30.37	RMS	34.2	-20.5	0	44.07	-	-	-	-	294	243	V
8	5.46989	32.92	RMS	34.2	-20.5	0	46.62	-	-	-	-	294	243	V

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

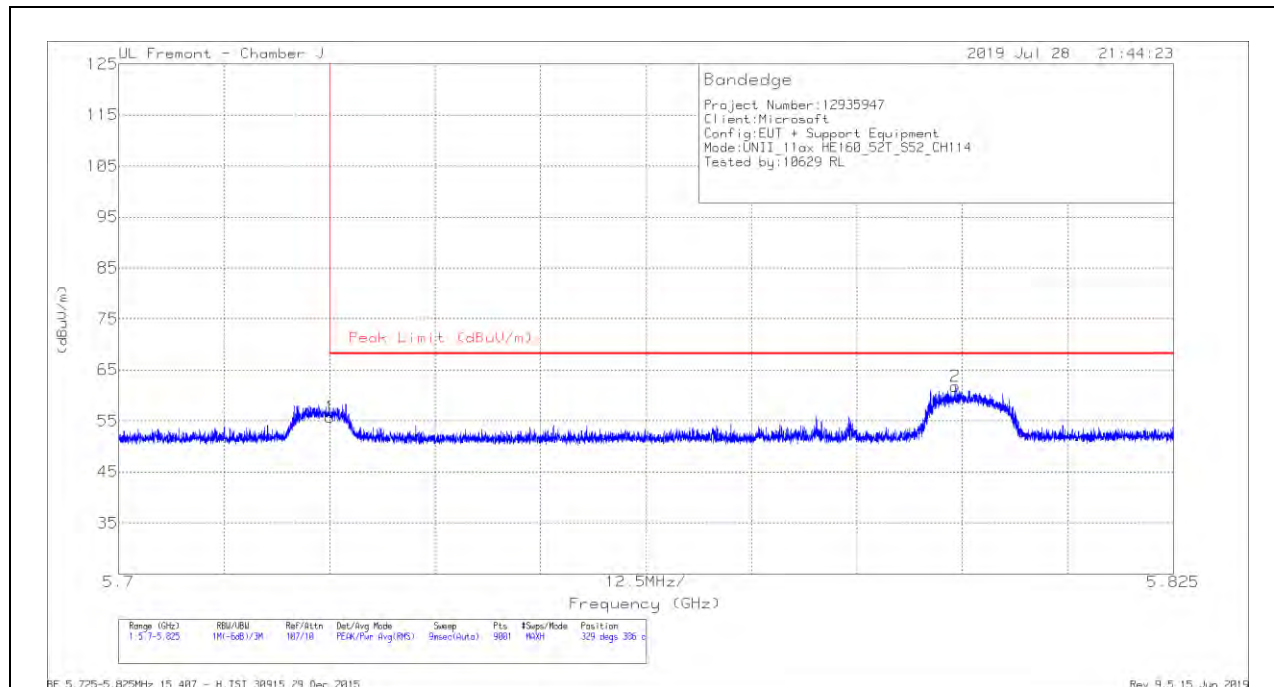
Pk - Peak detector

RMS - RMS detection

2TX Chain 0 + Chain 1 OFDMA MODE – 52-Tones, RU Index S52

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

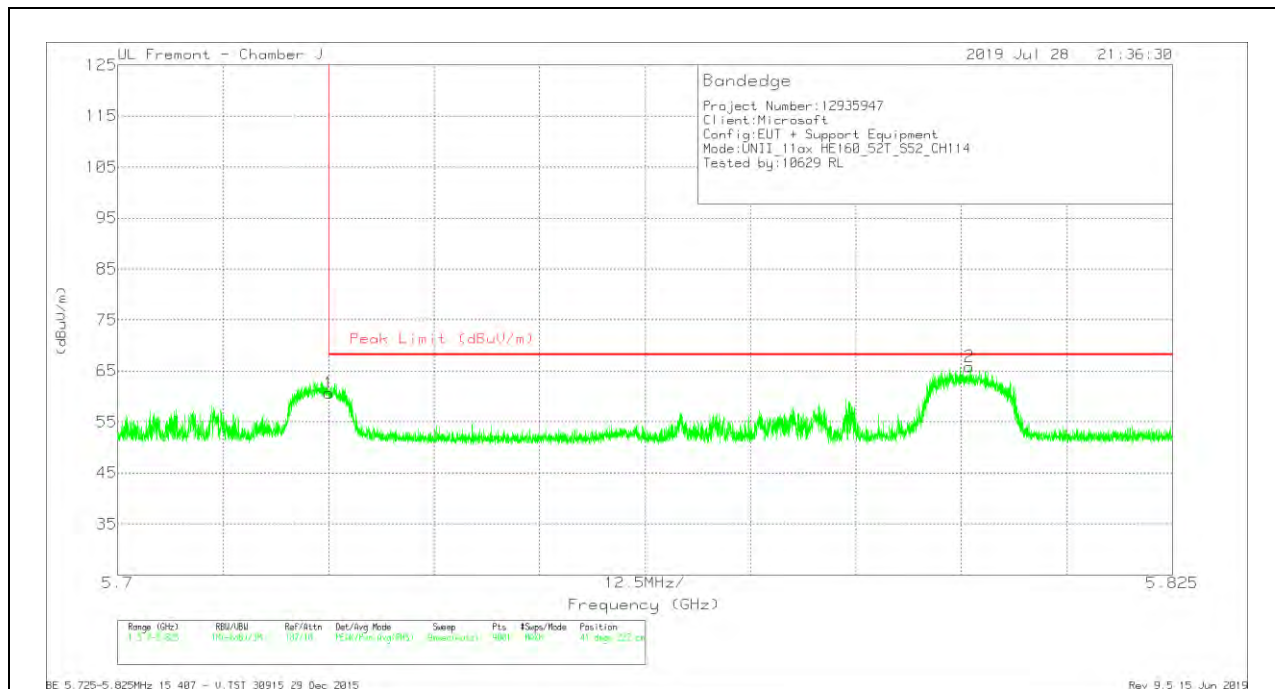


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	42.11	Pk	34.1	-20.4	0	55.81	68.2	-12.39	329	386	H
2	5.79914	47.65	Pk	34.2	-20.1	0	61.75	68.2	-6.45	329	386	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

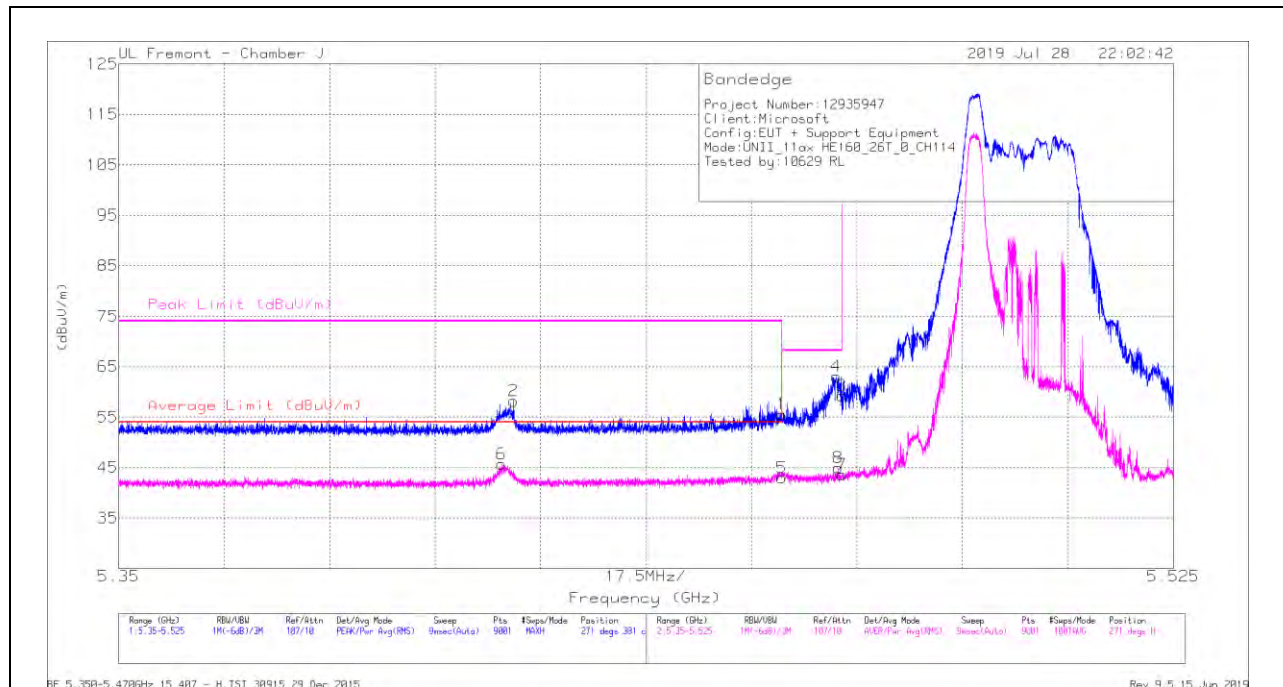
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	46.96	Pk	34.1	-20.4	0	60.66	68.2	-7.54	41	222	V
2	5.80095	51.73	Pk	34.2	-20.1	0	65.83	68.2	-2.37	41	222	V

Pk - Peak detector

2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU Index 0

BANDEDGE (MID CHANNEL LOW EDGE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb1/Fitr/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	41.87	Pk	34.2	-20.5	0	55.57	-	-	74	-18.43	271	381	H
2	* 5.41555	44.38	Pk	34.4	-20.6	0	58.18	-	-	74	-15.82	271	381	H
3	5.46999	45.52	Pk	34.2	-20.5	0	59.22	-	-	68.2	-8.98	271	381	H
4	5.4691	49.36	Pk	34.2	-20.5	0	63.06	-	-	68.2	-5.14	271	381	H
5	* 5.46	29.32	RMS	34.2	-20.5	0	43.02	54	-10.98	-	-	271	381	H
6	* 5.41349	31.89	RMS	34.4	-20.6	0	45.69	54	-8.31	-	-	271	381	H
7	5.46999	29.84	RMS	34.2	-20.5	0	43.54	-	-	-	-	271	381	H
8	5.46939	31.27	RMS	34.2	-20.5	0	44.97	-	-	-	-	271	381	H

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

Pk - Peak detector

RMS - RMS detection

UL Fremont - Chamber J

2019 Jul 28 21:52:28

Bandedge
Project Number: 12935947
Client: Microsoft
Config: EUT + Support Equipment
Made: UNIL 110x HE168_26T_8_CH114
Tested by: 10629 RL

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

dBm

dBuV/m

17.5MHz/

Frequency (GHz)

Range (GHz) 1.575-5.525 RBW/ABW 100kHz/300kHz Ref/Attn 107dB Det/Avg Mode PWR/Pwr (avg) (PWS) Sweep Downward Pts 1000 #Sweeps/Mode 1000 Position 0 deg, 25.000 Range (GHz) 1.575-5.525 RBW/ABW 100kHz/300kHz Ref/Attn 107dB Det/Avg Mode PWR/Pwr (avg) (PWS) Sweep Downward Pts 1000 #Sweeps/Mode 1000 Position 0 deg, 25.000

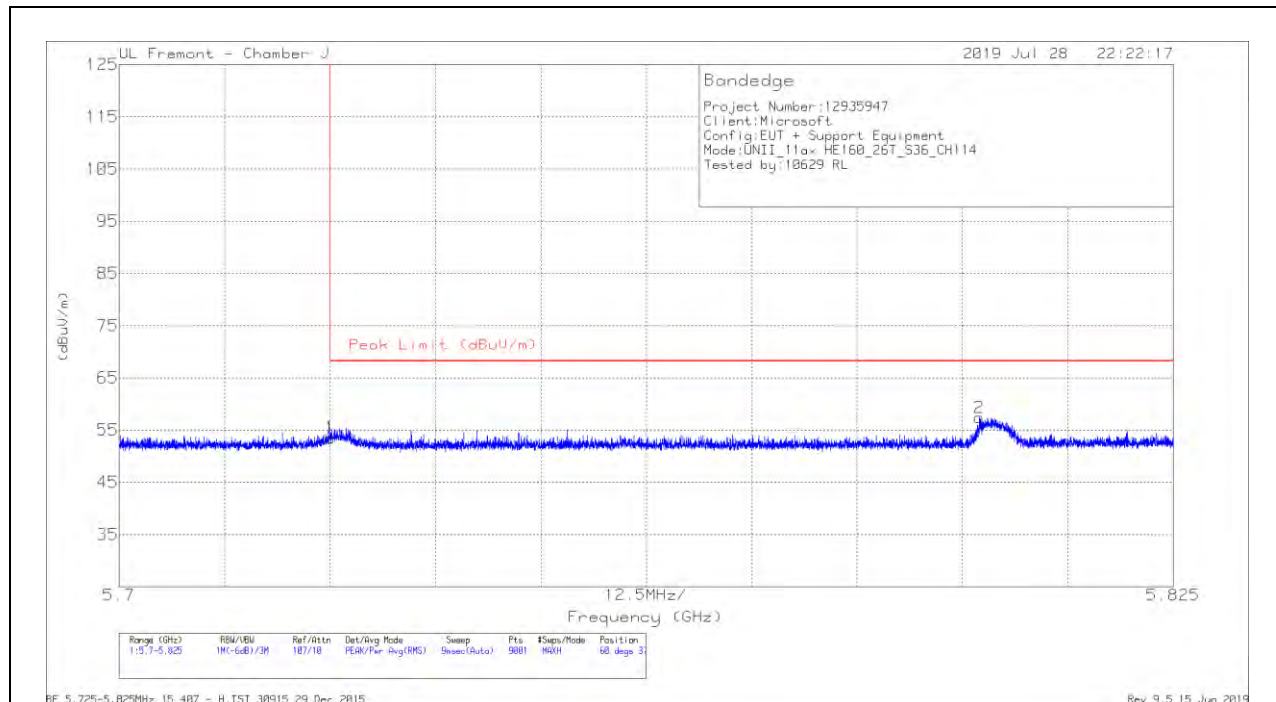
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/IFltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	43.21	Pk	34.2	-20.5	0	56.91	-	-	74	-17.09	8	255	V
2	* 5.41496	46.36	Pk	34.4	-20.6	0	60.16	-	-	74	-13.84	8	255	V
3	5.46999	50.88	Pk	34.2	-20.5	0	64.58	-	-	68.2	-3.62	8	255	V
4	5.46979	51.07	Pk	34.2	-20.5	0	64.77	-	-	68.2	-3.43	8	255	V
5	* 5.46	30.57	RMS	34.2	-20.5	0	44.27	54	-9.73	-	-	8	255	V
6	* 5.41428	33.87	RMS	34.4	-20.6	0	47.67	54	-6.33	-	-	8	255	V
7	5.46999	29.49	RMS	34.2	-20.5	0	43.19	-	-	-	-	8	255	V
8	5.46944	32.35	RMS	34.2	-20.5	0	46.05	-	-	-	-	8	255	V

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2TX Chain 0 + Chain 1 OFDMA MODE – 26-Tones, RU Index S36

BANDEDGE (MID CHANNEL HIGH EDGE)

HORIZONTAL RESULT

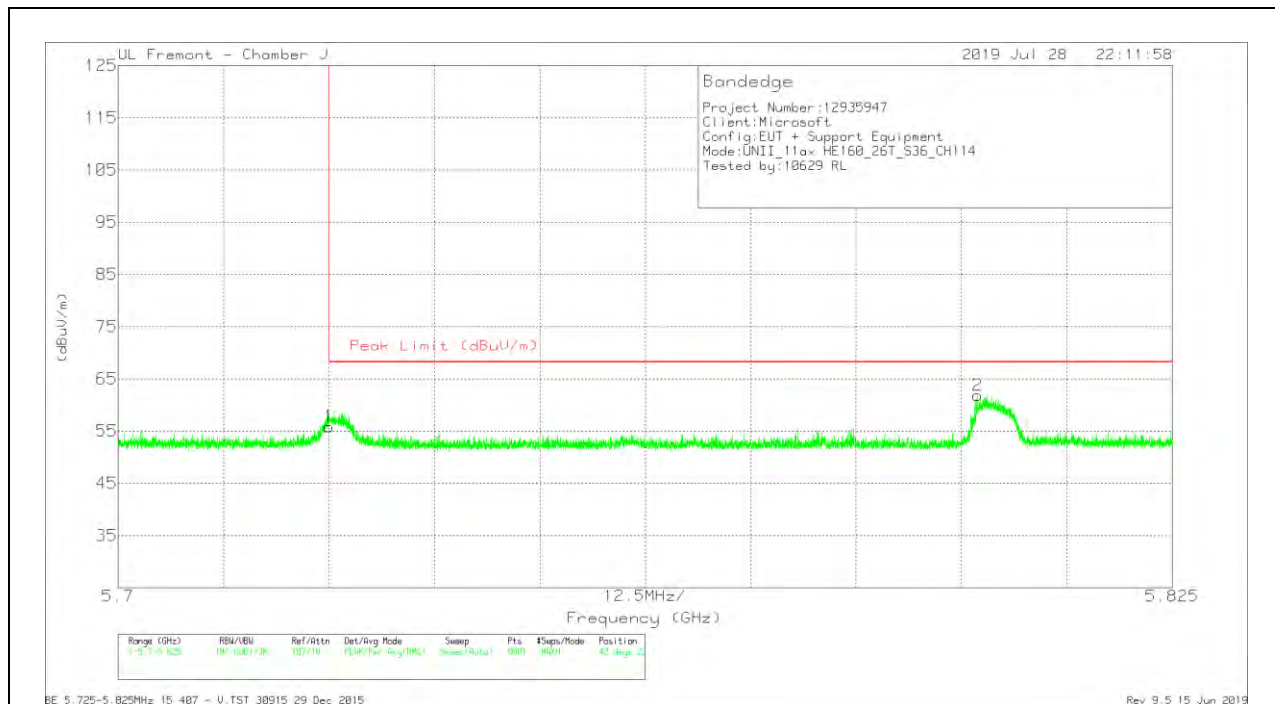


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.73	Pk	34.1	-20.4	0	53.43	68.2	-14.77	60	376	H
2	5.80202	43.29	Pk	34.2	-20.1	0	57.39	68.2	-10.81	60	376	H

Pk - Peak detector

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	42.13	Pk	34.1	-20.4	0	55.83	68.2	-12.37	42	225	V
2	5.8019	47.75	Pk	34.2	-20.1	0	61.85	68.2	-6.35	42	225	V

Pk - Peak detector

10. SETUP PHOTOS

Please refer to 12935947-EP1 for setup photos

END OF TEST REPORT