

9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

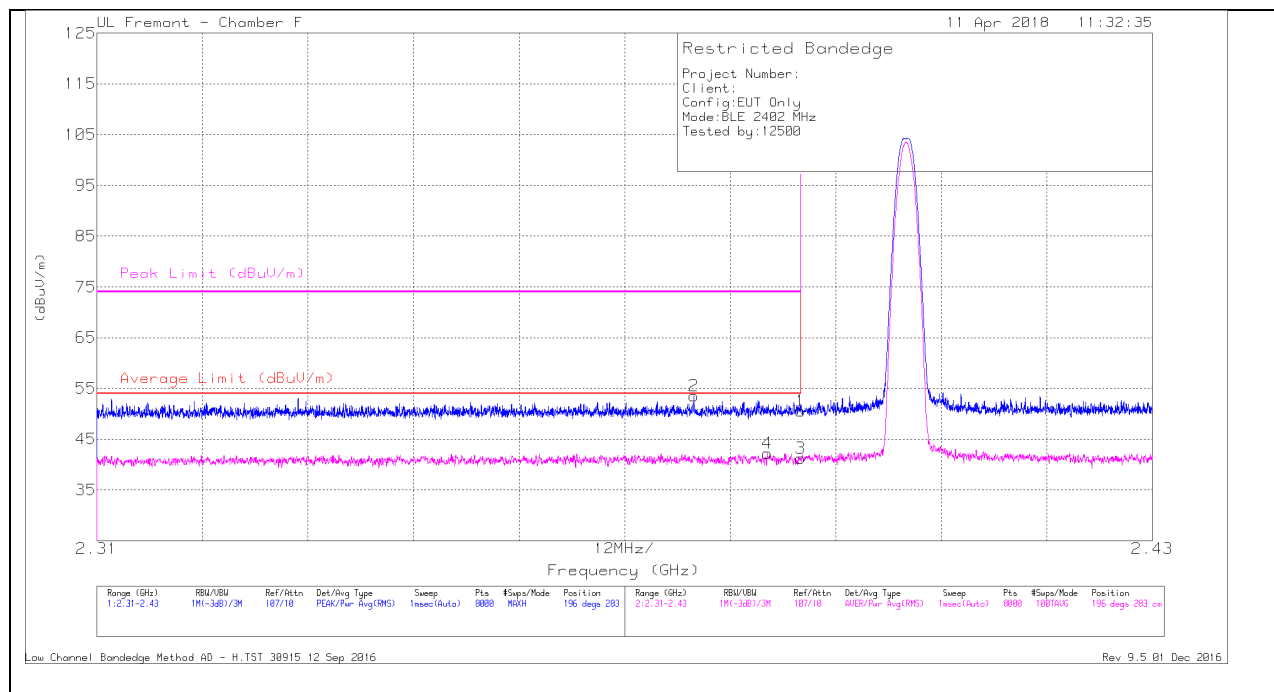
9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. HIGH POWER BLE (1Mbps)

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.22	Pk	31.9	-20.6	50.52	-	-	74	-23.48	196	283	H
2	* 2.378	42.37	Pk	31.8	-20.6	53.57	-	-	74	-20.43	196	283	H
3	* 2.39	29.89	RMS	31.9	-20.6	41.19	54	-12.81	-	-	196	283	H
4	* 2.386	30.92	RMS	31.9	-20.6	42.22	54	-11.78	-	-	196	283	H

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

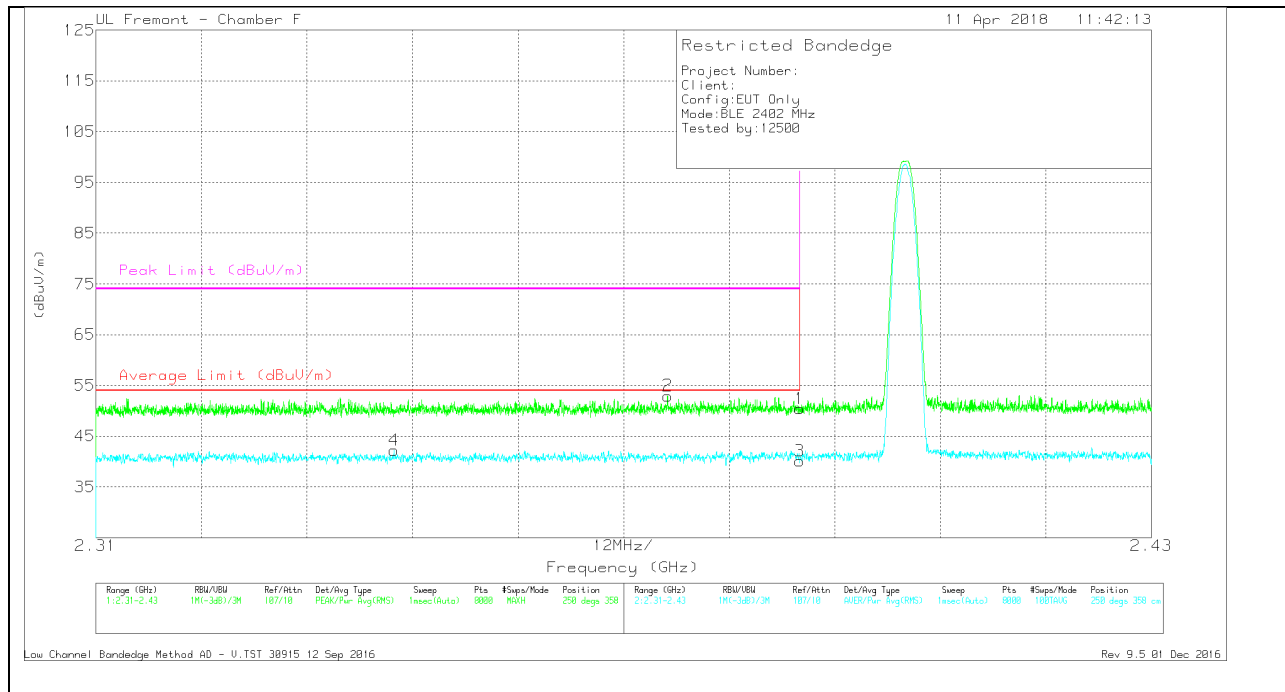
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.15	Pk	31.9	-20.6	50.45	-	-	74	-23.55	250	358	V
2	* 2.375	41.76	Pk	31.8	-20.6	52.96	-	-	74	-21.04	250	358	V
3	* 2.39	28.77	RMS	31.9	-20.6	40.07	54	-13.93	-	-	250	358	V
4	* 2.344	31.17	RMS	31.7	-20.7	42.17	54	-11.83	-	-	250	358	V

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

Pk - Peak detector

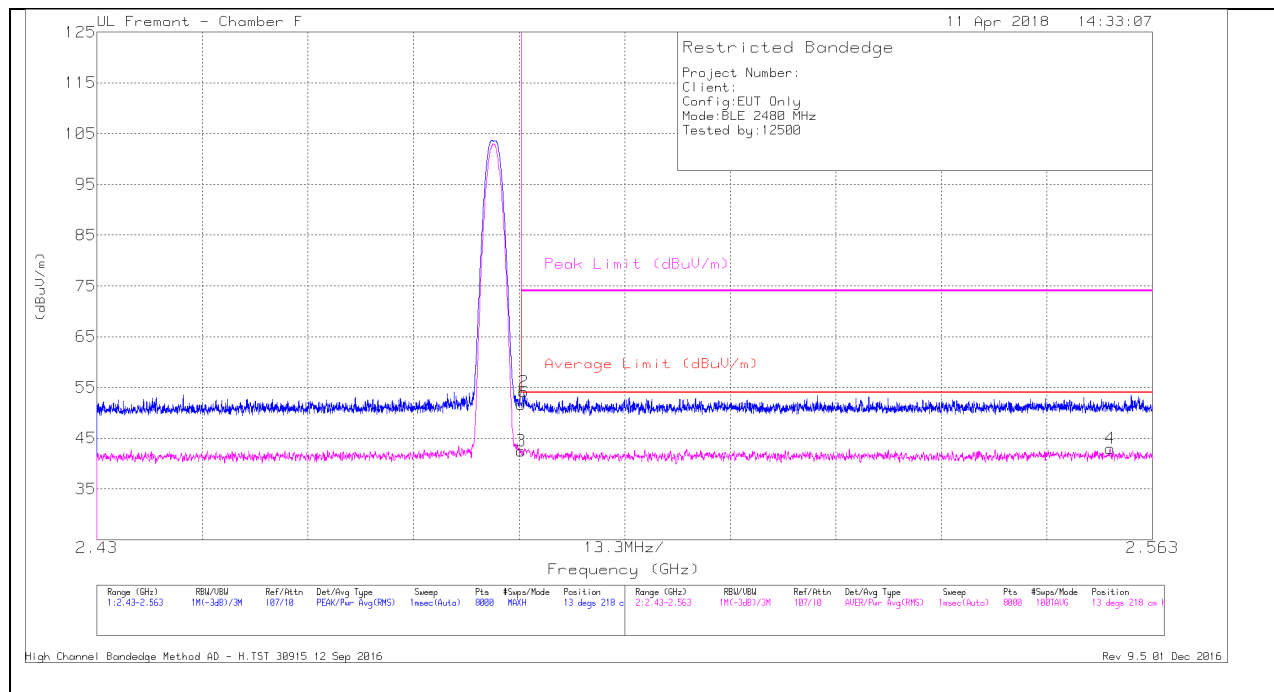
RMS - RMS detection

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BANEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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	* 2.484	40.31	Pk	32.1	-20.7	51.71	-	-	74	-22.29	13	218	H
2	* 2.484	42.77	Pk	32.1	-20.7	54.17	-	-	74	-19.83	13	218	H
3	* 2.484	31.07	RMS	32.1	-20.7	42.47	54	-11.53	-	-	13	218	H
4	2.558	31.48	RMS	32.2	-20.7	42.98	54	-11.02	-	-	13	218	H

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

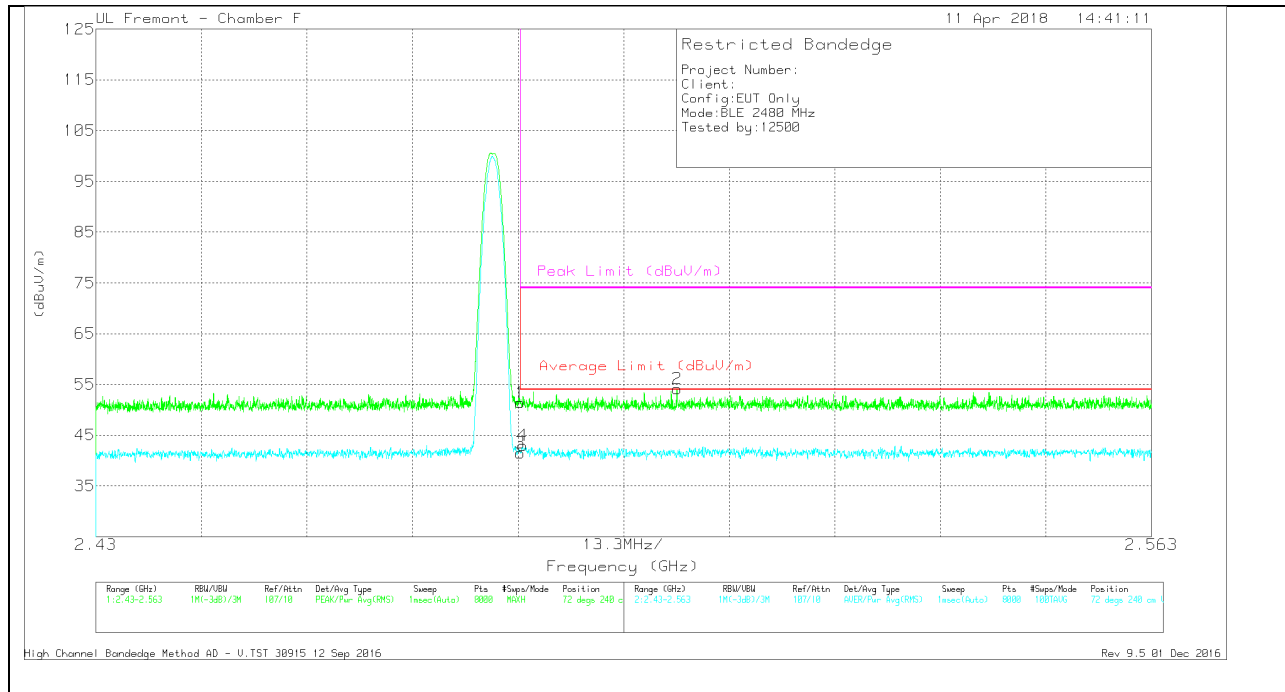
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.05	Pk	32.1	-20.7	51.45	-	-	74	-22.55	72	240	V
2	2.503	42.56	Pk	32.2	-20.6	54.16	-	-	74	-19.84	72	240	V
3	* 2.484	30.04	RMS	32.1	-20.7	41.44	54	-12.56	-	-	72	240	V
4	* 2.484	31.51	RMS	32.1	-20.7	42.91	54	-11.09	-	-	72	240	V

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

Pk - Peak detector

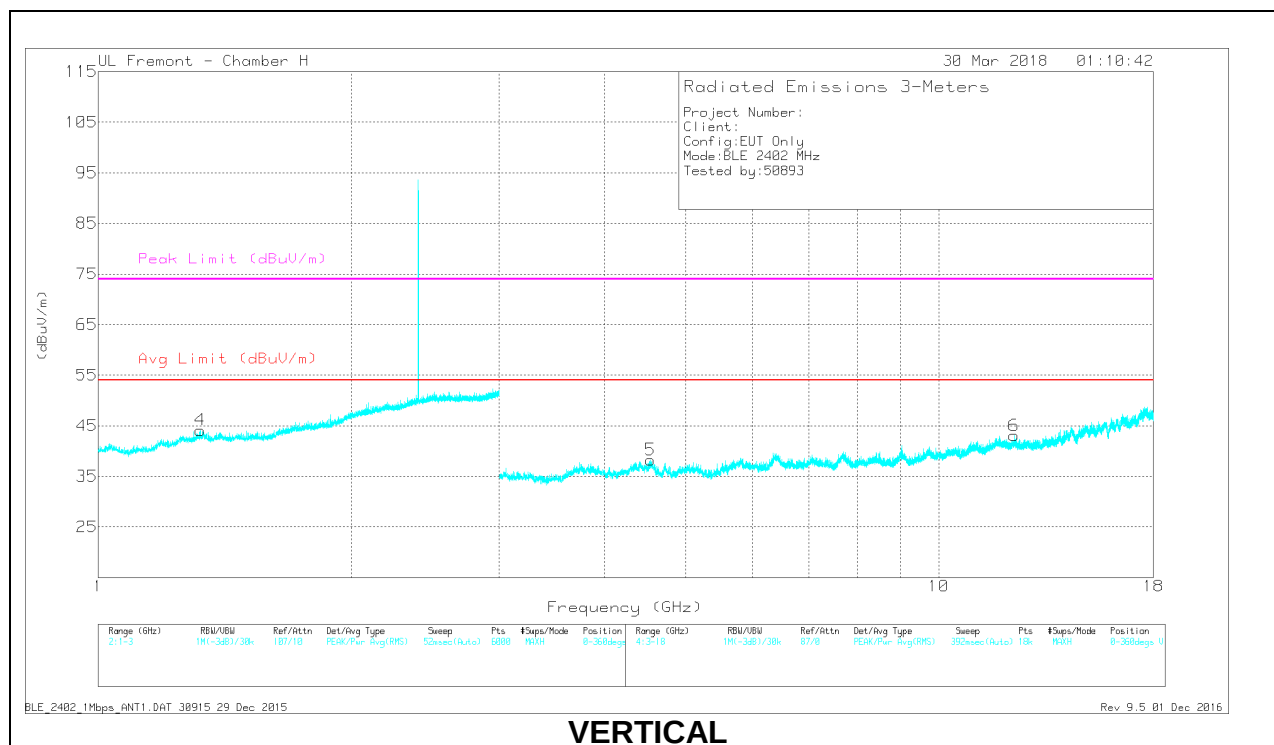
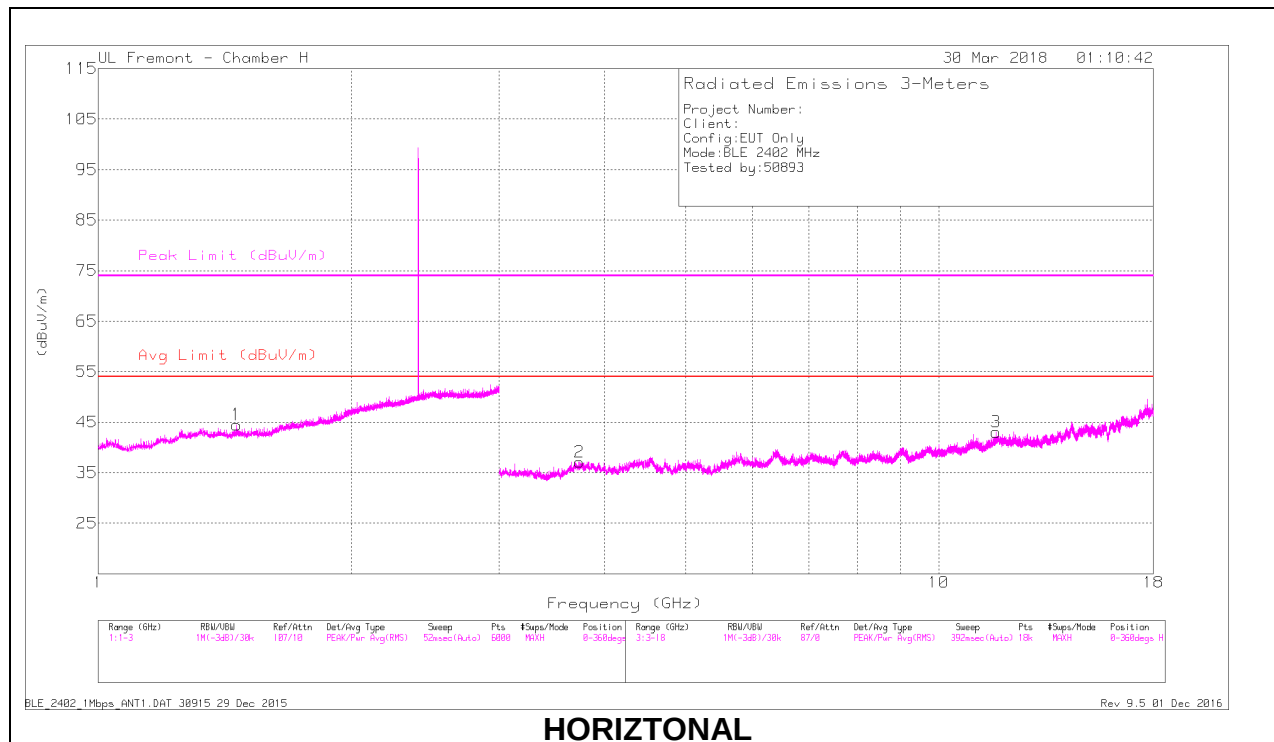
RMS - RMS detection

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HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

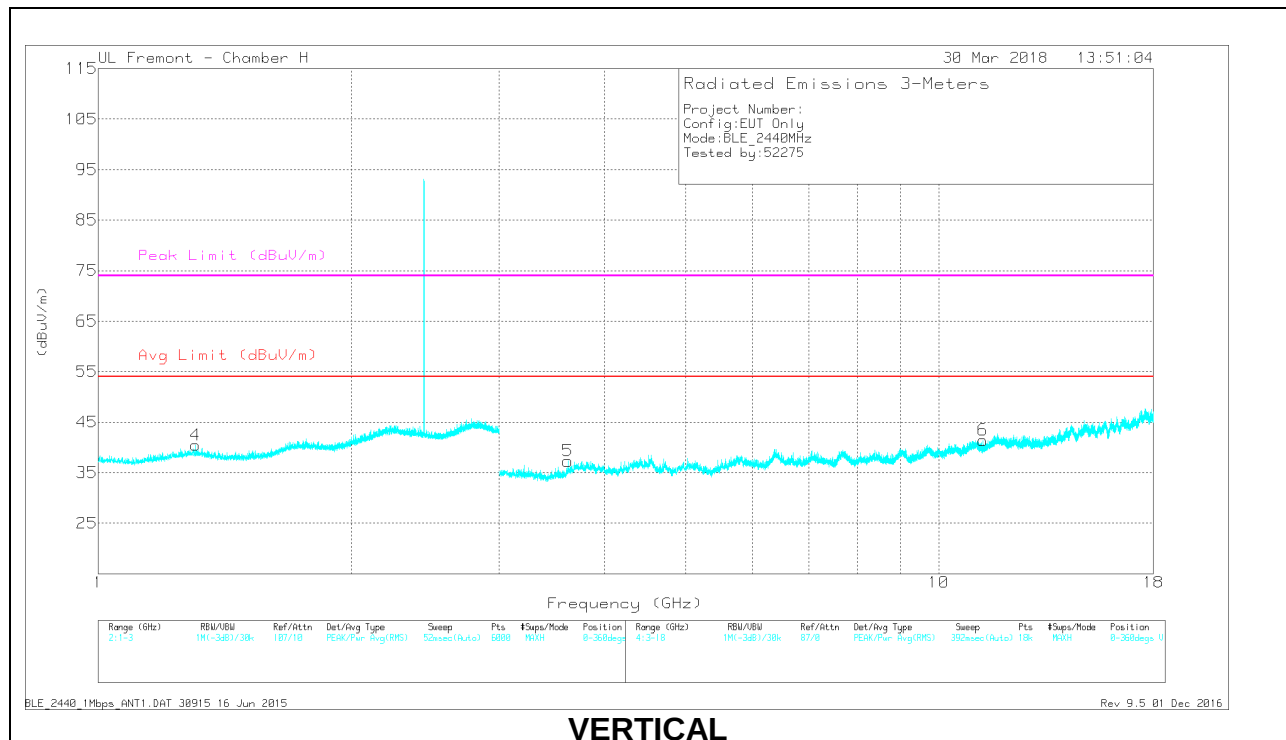
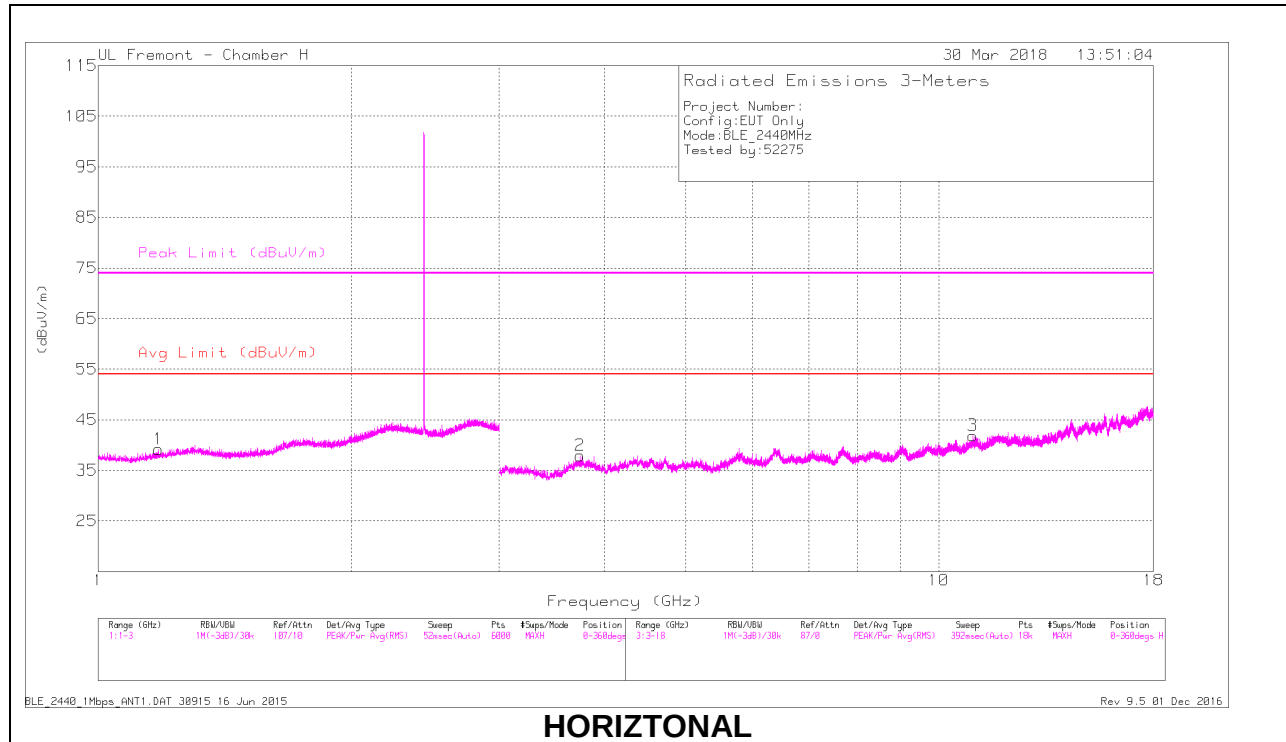
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.46	37.46	PK2	28.6	-15.5	50.56	-	-	74	-23.44	358	235	H
	* 1.459	25.21	MAv1	28.6	-15.5	38.31	54	-15.69	-	-	358	235	H
2	* 3.736	45.84	PK2	33.1	-35.2	43.74	-	-	74	-30.26	41	336	H
	* 3.733	34.15	MAv1	33.1	-35.3	31.95	54	-22.05	-	-	41	336	H
3	* 11.702	35.85	PK2	38.8	-25.9	48.75	-	-	74	-25.25	10	134	H
	* 11.702	24.38	MAv1	38.8	-25.9	37.28	54	-16.72	-	-	10	134	H
4	* 1.323	37.01	PK2	29.1	-15.9	50.21	-	-	74	-23.79	42	112	V
	* 1.323	25.27	MAv1	29.1	-15.9	38.47	54	-15.53	-	-	42	112	V
5	* 4.54	44.7	PK2	34.3	-34.7	44.3	-	-	74	-29.7	83	139	V
	* 4.536	33.06	MAv1	34.3	-34.7	32.66	54	-21.34	-	-	83	139	V
6	* 12.293	36	PK2	38.8	-25.9	48.9	-	-	74	-25.1	44	100	V
	* 12.294	24.21	MAv1	38.8	-25.9	37.11	54	-16.89	-	-	44	100	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

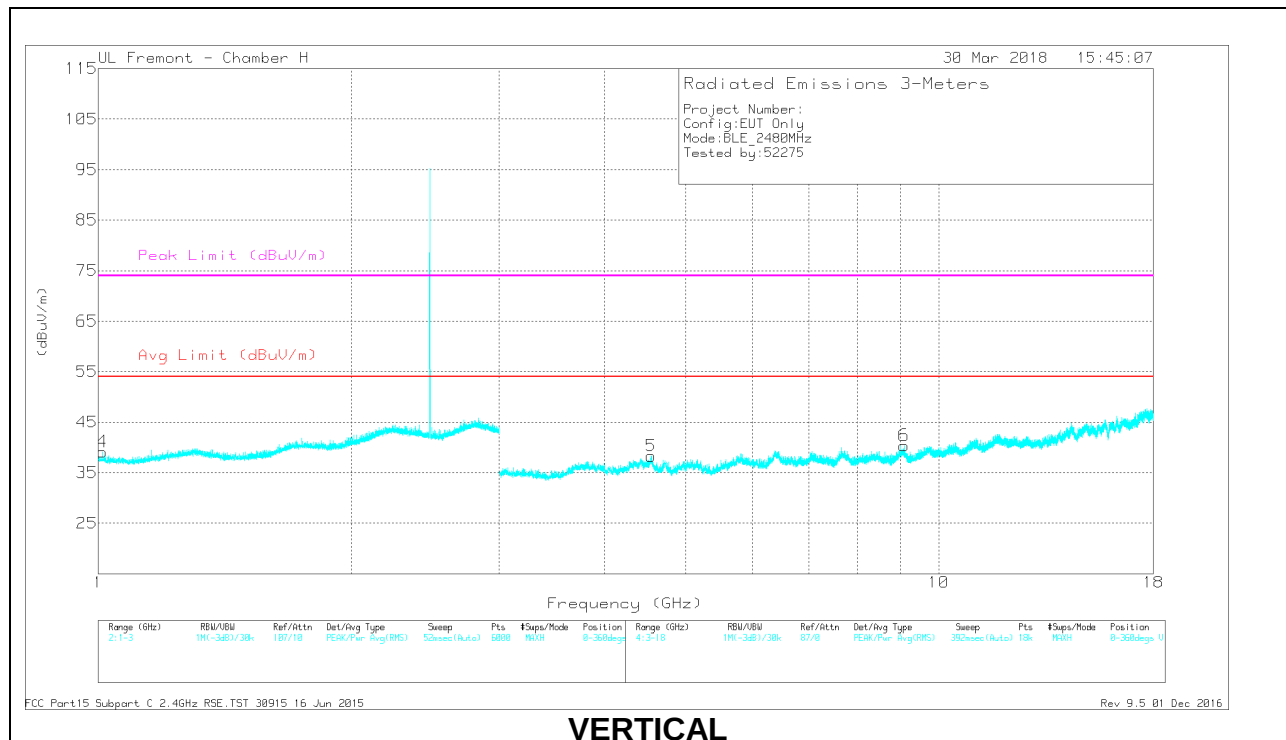
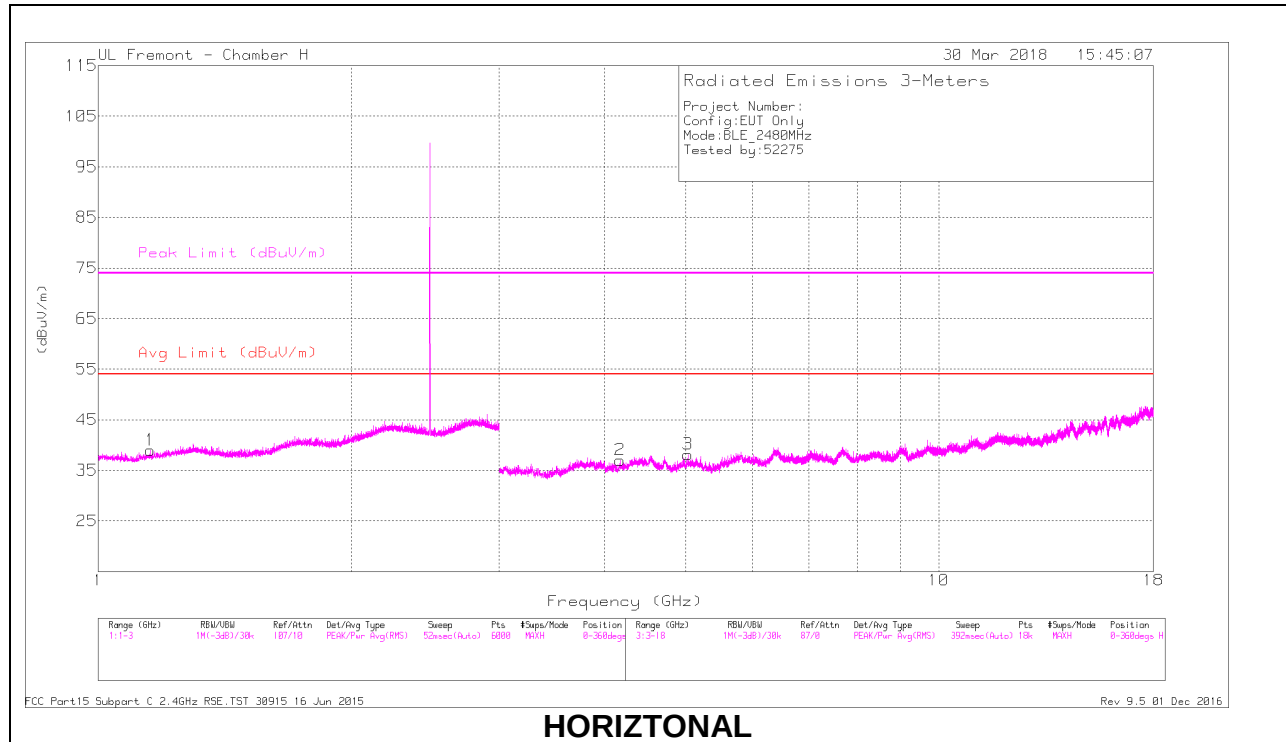
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.18	45.42	PK2	27.7	-27.4	45.72	-	-	74	-28.28	114	228	H
	* 1.177	33.35	MAv1	27.7	-27.3	33.75	54	-20.25	-	-	114	228	H
2	* 3.742	46.33	PK2	33.1	-35.2	44.23	-	-	74	-29.77	124	353	H
	* 3.744	34.38	MAv1	33.1	-35.2	32.28	54	-21.72	-	-	124	353	H
3	* 10.988	36.99	PK2	38	-26.9	48.09	-	-	74	-25.91	312	106	H
	* 10.986	25.47	MAv1	38	-26.9	36.57	54	-17.43	-	-	312	106	H
4	* 1.308	45.4	PK2	29.2	-27.5	47.1	-	-	74	-26.9	301	189	V
	* 1.308	33.06	MAv1	29.2	-27.5	34.76	54	-19.24	-	-	301	189	V
5	* 3.62	45.36	PK2	33.2	-35.3	43.26	-	-	74	-30.74	305	252	V
	* 3.621	33.55	MAv1	33.2	-35.3	31.45	54	-22.55	-	-	305	252	V
6	* 11.289	35.89	PK2	38.1	-26.4	47.59	-	-	74	-26.41	289	310	V
	* 11.288	24.34	MAv1	38.1	-26.4	36.04	54	-17.96	-	-	289	310	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.154	46.01	PK2	27.4	-27.2	46.21	-	-	74	-27.79	352	169	H
	* 1.155	33.38	MAv1	27.4	-27.2	33.58	54	-20.42	-	-	352	169	H
2	* 4.175	44.81	PK2	33.5	-34.5	43.81	-	-	74	-30.19	295	323	H
	* 4.177	32.79	MAv1	33.5	-34.5	31.79	54	-22.21	-	-	295	323	H
3	* 5.03	44.48	PK2	34.1	-33.5	45.08	-	-	74	-28.92	307	303	H
	* 5.028	32.02	MAv1	34.1	-33.5	32.62	54	-21.38	-	-	307	303	H
4	* 1.014	44.7	PK2	27.5	-26.9	45.3	-	-	74	-28.7	38	365	V
	* 1.01	32.72	MAv1	27.5	-26.9	33.32	54	-20.68	-	-	38	365	V
5	* 4.549	45.41	PK2	34.3	-34.7	45.01	-	-	74	-28.99	254	345	V
	* 4.548	33.73	MAv1	34.3	-34.7	33.33	54	-20.67	-	-	254	345	V
6	* 9.094	38.29	PK2	36.6	-28.6	46.29	-	-	74	-27.71	260	220	V
	* 9.093	26.62	MAv1	36.6	-28.6	34.62	54	-19.38	-	-	260	220	V

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

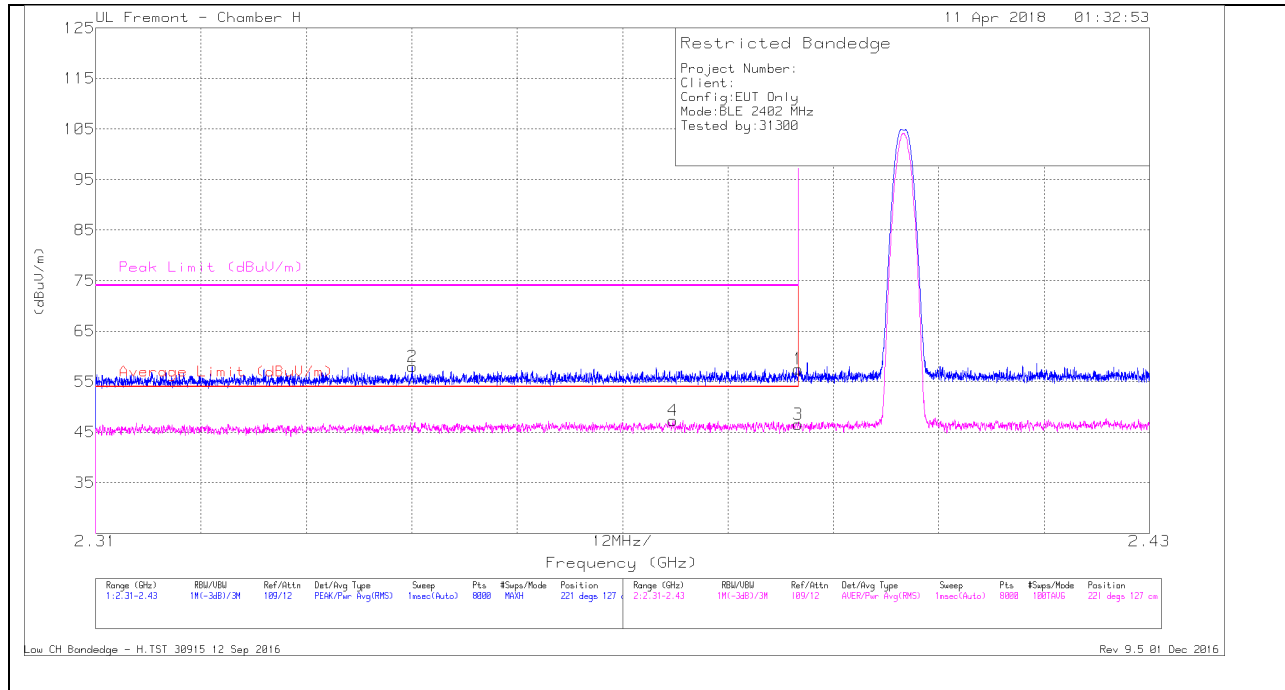
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Antenna 3

BANEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.346	39.84	Pk	32.1	-14	57.94	-	-	74	-16.06	221	127	H
4	* 2.376	29.14	RMS	32.2	-14	47.34	54	-6.66	-	-	221	127	H
1	* 2.39	39.25	Pk	32.3	-14	57.55	-	-	74	-16.45	221	127	H
3	* 2.39	28.26	RMS	32.3	-14	46.56	54	-7.44	-	-	221	127	H

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

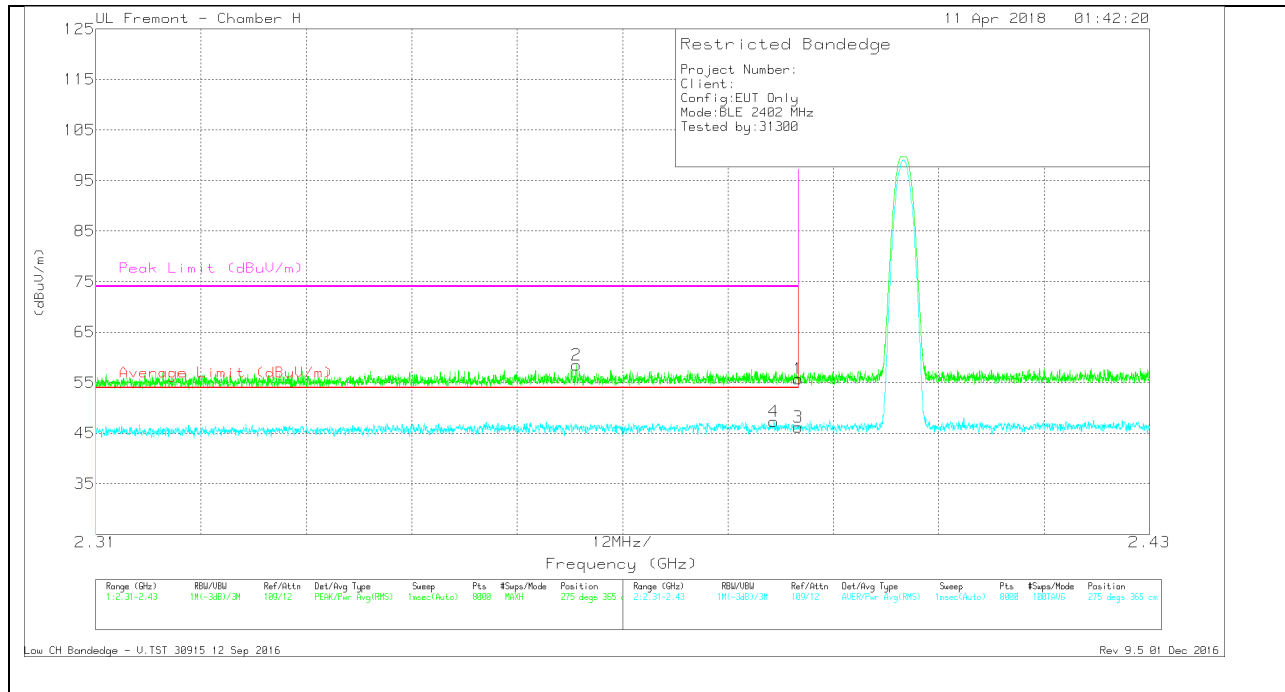
Pk - Peak detector

RMS - RMS detection

Low CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.365	40.34	Pk	32.2	-14	58.54	-	-	74	-15.46	275	365	V
4	* 2.387	28.99	RMS	32.3	-14	47.29	54	-6.71	-	-	275	365	V
1	* 2.39	37.42	Pk	32.3	-14	55.72	-	-	74	-18.28	275	365	V
3	* 2.39	27.86	RMS	32.3	-14	46.16	54	-7.84	-	-	275	365	V

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

Pk - Peak detector

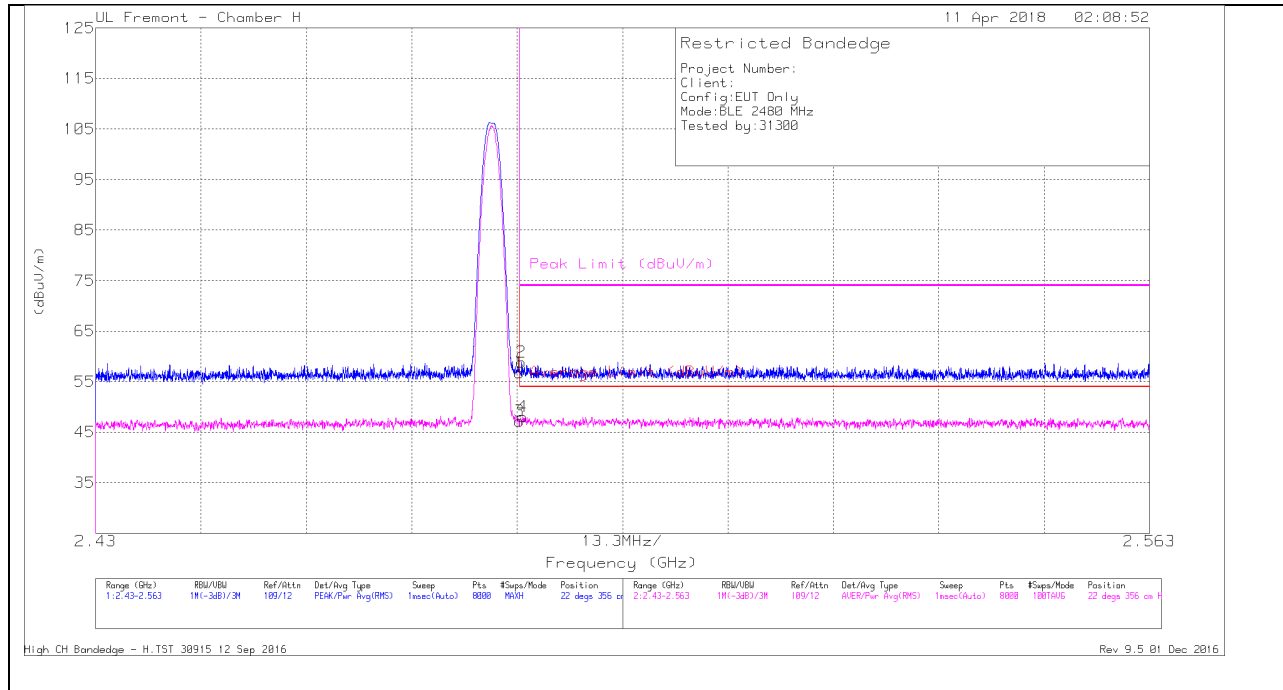
RMS - RMS detection

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BANDEGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/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	* 2.484	38.16	Pk	32.4	-13.8	56.76	-	-	74	-17.24	22	356	H
2	* 2.484	40.24	Pk	32.4	-13.8	58.84	-	-	74	-15.16	22	356	H
3	* 2.484	28.55	RMS	32.4	-13.8	47.15	54	-6.85	-	-	22	356	H
4	* 2.484	29.43	RMS	32.4	-13.8	48.03	54	-5.97	-	-	22	356	H

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

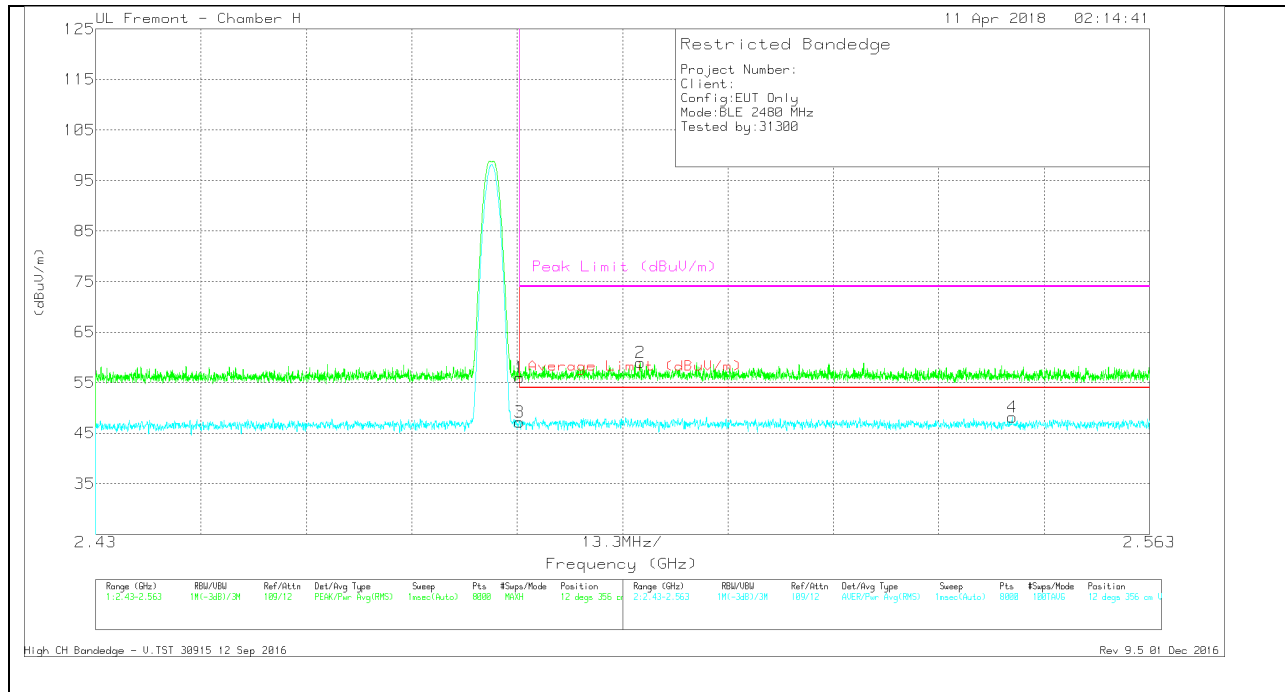
Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/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	* 2.484	37.36	Pk	32.4	-13.8	55.96	-	-	74	-18.04	12	356	V
3	* 2.484	28.56	RMS	32.4	-13.8	47.16	54	-6.84	-	-	12	356	V
2	* 2.499	40.4	Pk	32.4	-13.8	59	-	-	74	-15	12	356	V
4	2.546	29.62	RMS	32.3	-13.7	48.22	54	-5.78	-	-	12	356	V

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

Pk - Peak detector

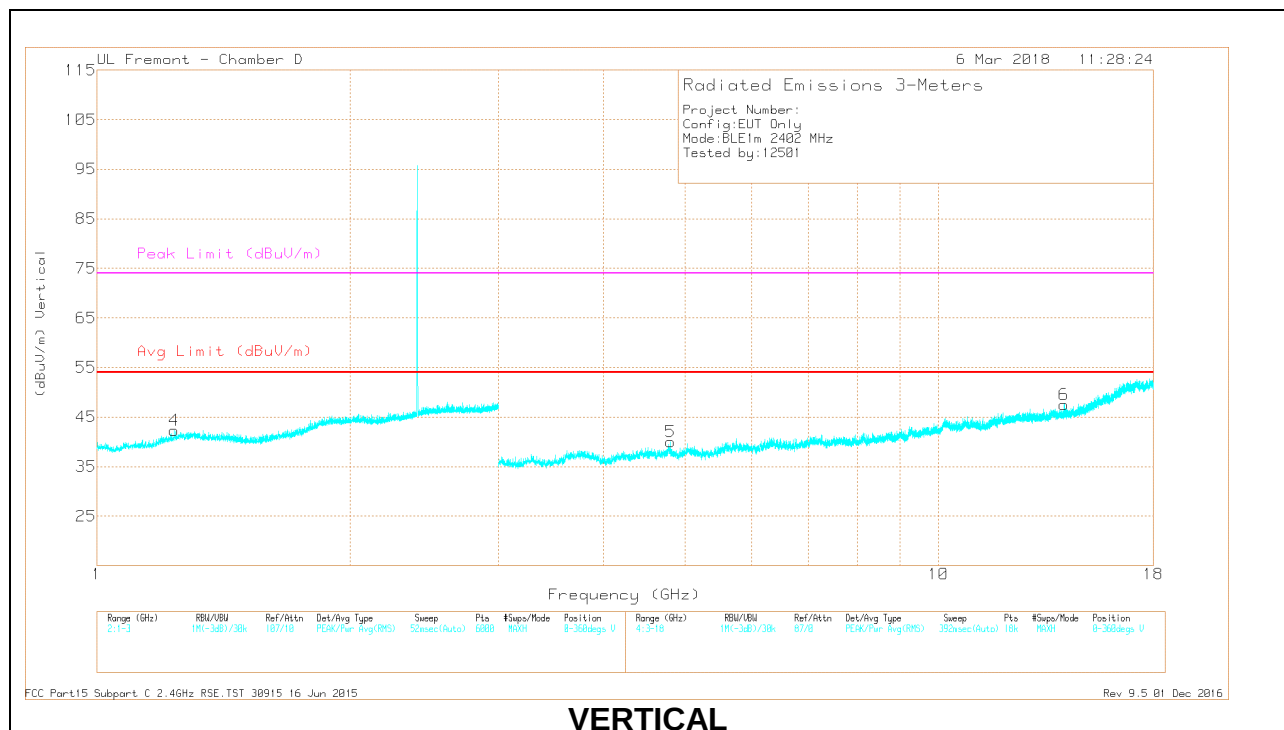
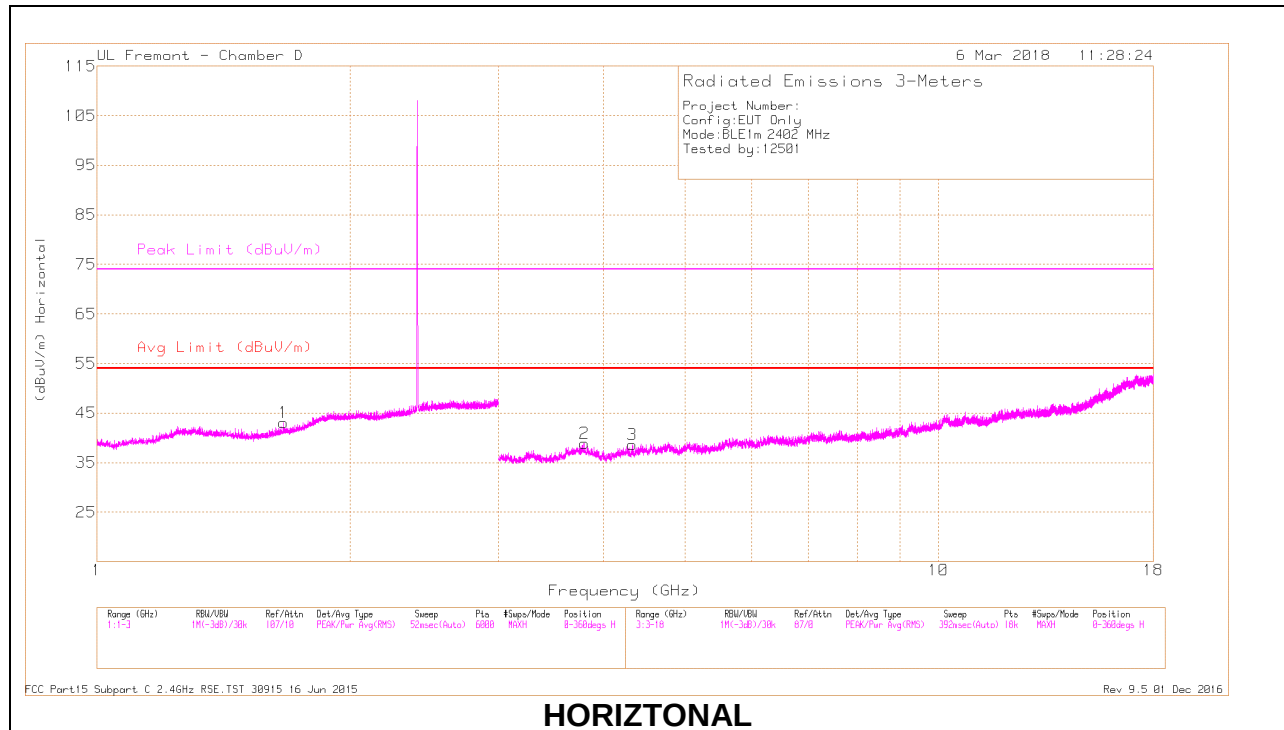
RMS - RMS detection

High CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

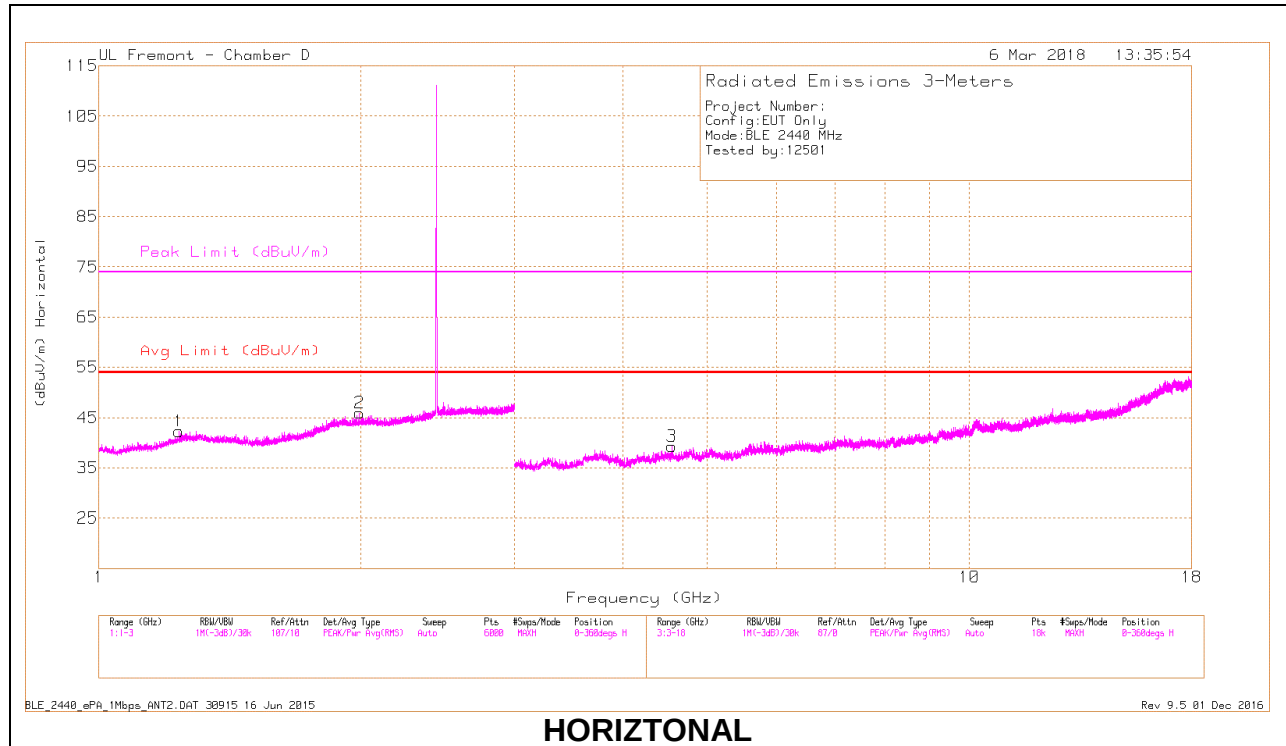
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.668	41.72	PK2	28.9	-21.4	49.22	-	-	74	-24.78	17	265	H
	* 1.669	29.73	MAv1	28.9	-21.4	37.23	54	-16.77	-	-	17	265	H
2	* 3.797	38.26	PK2	33.6	-27.9	43.96	-	-	74	-30.04	228	207	H
	* 3.796	26.35	MAv1	33.6	-28	31.95	54	-22.05	-	-	228	207	H
3	* 4.331	38.39	PK2	34	-28.2	44.19	-	-	74	-29.81	137	316	H
	* 4.329	26.65	MAv1	34	-28.2	32.45	54	-21.55	-	-	137	316	H
4	* 1.234	41.99	PK2	28.8	-22	48.79	-	-	74	-25.21	284	113	V
	* 1.235	29.85	MAv1	28.8	-22	36.65	54	-17.35	-	-	284	113	V
5	* 4.802	36.58	PK2	34.5	-26.5	44.58	-	-	74	-29.42	151	291	V
	* 4.805	25.06	MAv1	34.5	-26.5	33.06	54	-20.94	-	-	151	291	V
6	14.103	35.72	PK2	39.1	-21.4	53.42	-	-	-	-	215	366	V

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

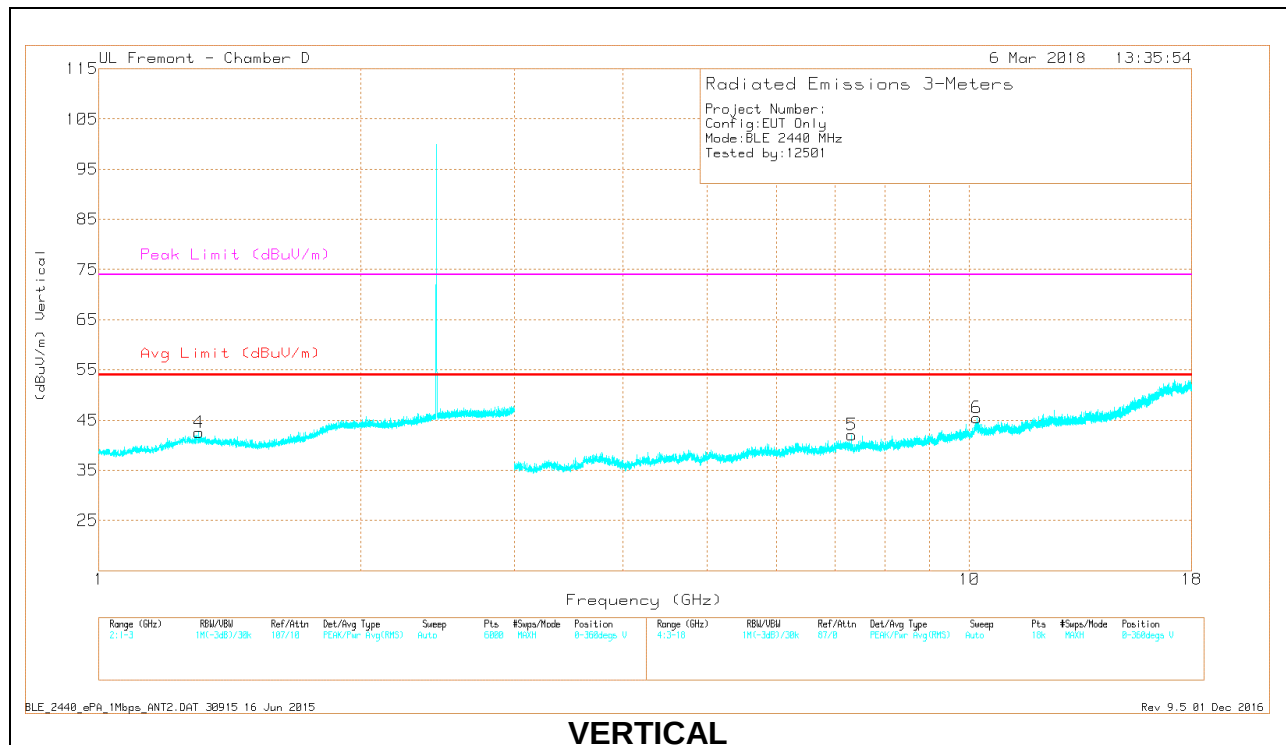
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

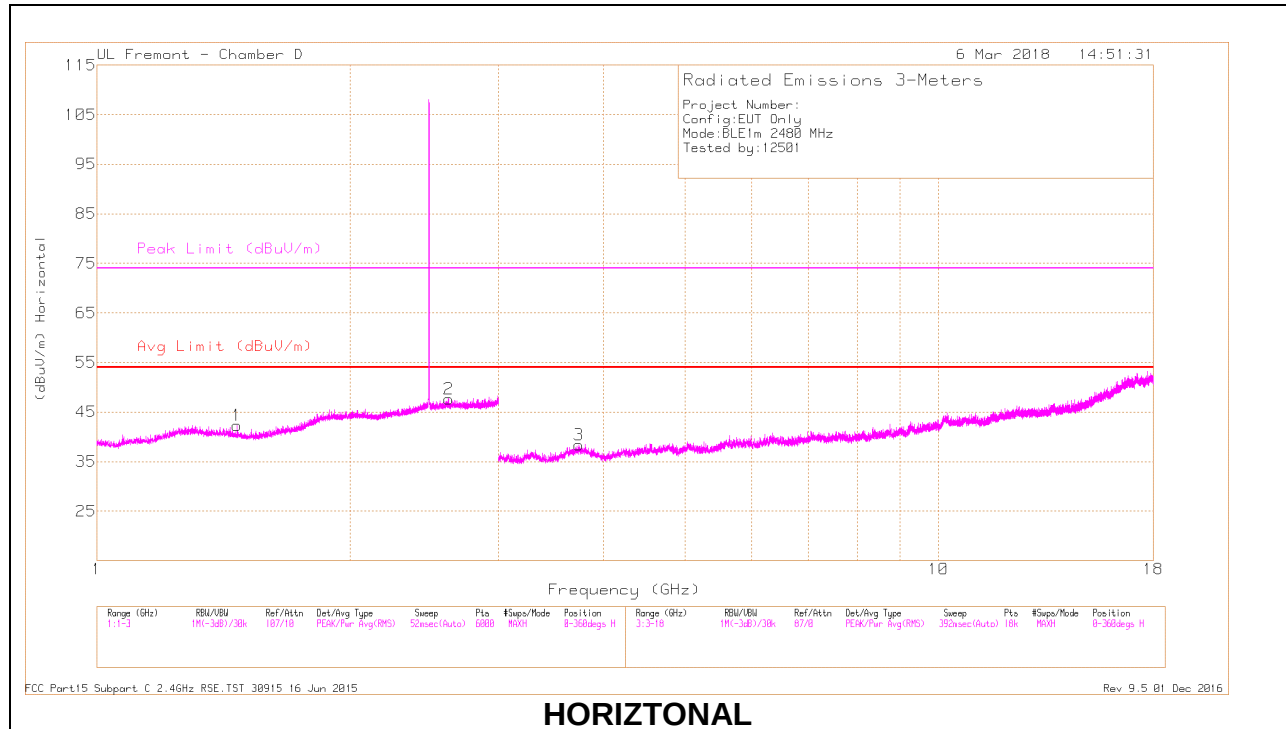
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.237	41.7	PK2	28.9	-22	48.6	-	-	74	-25.4	16	330	H
	* 1.237	29.83	MAv1	28.9	-22	36.73	54	-17.27	-	-	16	330	H
2	1.994	41.28	PK2	31.5	-21	51.78	-	-	-	-	320	399	H
3	* 4.55	37.76	PK2	34.6	-27.6	44.76	-	-	74	-29.24	178	102	H
	* 4.551	26.25	MAv1	34.6	-27.5	33.35	54	-20.65	-	-	178	102	H
4	* 1.304	41.72	PK2	29.3	-22	49.02	-	-	74	-24.98	234	138	V
	* 1.304	29.82	MAv1	29.3	-22	37.12	54	-16.88	-	-	234	138	V
5	* 7.325	35.91	PK2	36.1	-24.5	47.51	-	-	74	-26.49	135	135	V
	* 7.324	24.53	MAv1	36.1	-24.6	36.03	54	-17.97	-	-	135	135	V
6	10.194	32.88	PK2	37.5	-19.3	51.08	-	-	-	-	103	114	V

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

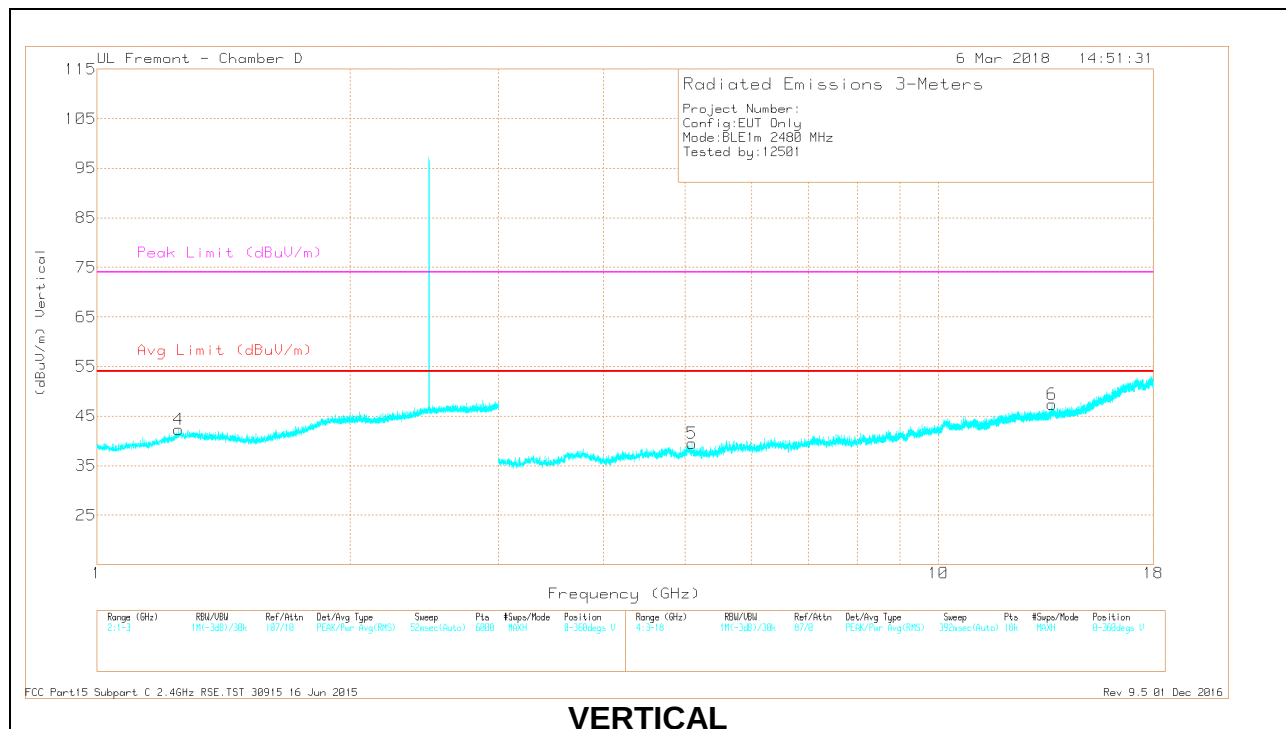
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.468	42.13	PK2	28.3	-21.7	48.73	-	-	74	-25.27	138	190	H
	* 1.465	29.57	MAv1	28.3	-21.7	36.17	54	-17.83	-	-	138	190	H
4	* 1.25	42.24	PK2	29.1	-22	49.34	-	-	74	-24.66	71	225	V
	* 1.25	29.91	MAv1	29.1	-22	37.01	54	-16.99	-	-	71	225	V
3	* 3.734	38.27	PK2	33.4	-28.2	43.47	-	-	74	-30.53	216	279	H
	* 3.736	26.54	MAv1	33.4	-28.2	31.74	54	-22.26	-	-	216	279	H
5	* 5.093	36.69	PK2	34.5	-26.6	44.59	-	-	74	-29.41	5	232	V
	* 5.094	25.54	MAv1	34.5	-26.6	33.44	54	-20.56	-	-	5	232	V
2	2.62	41.8	PK2	32.6	-20.3	54.1	-	-	-	-	156	372	H
6	13.647	36.05	PK2	39	-21.3	53.75	-	-	-	-	110	191	V

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

PK2 - KDB558074 Method: Maximum Peak

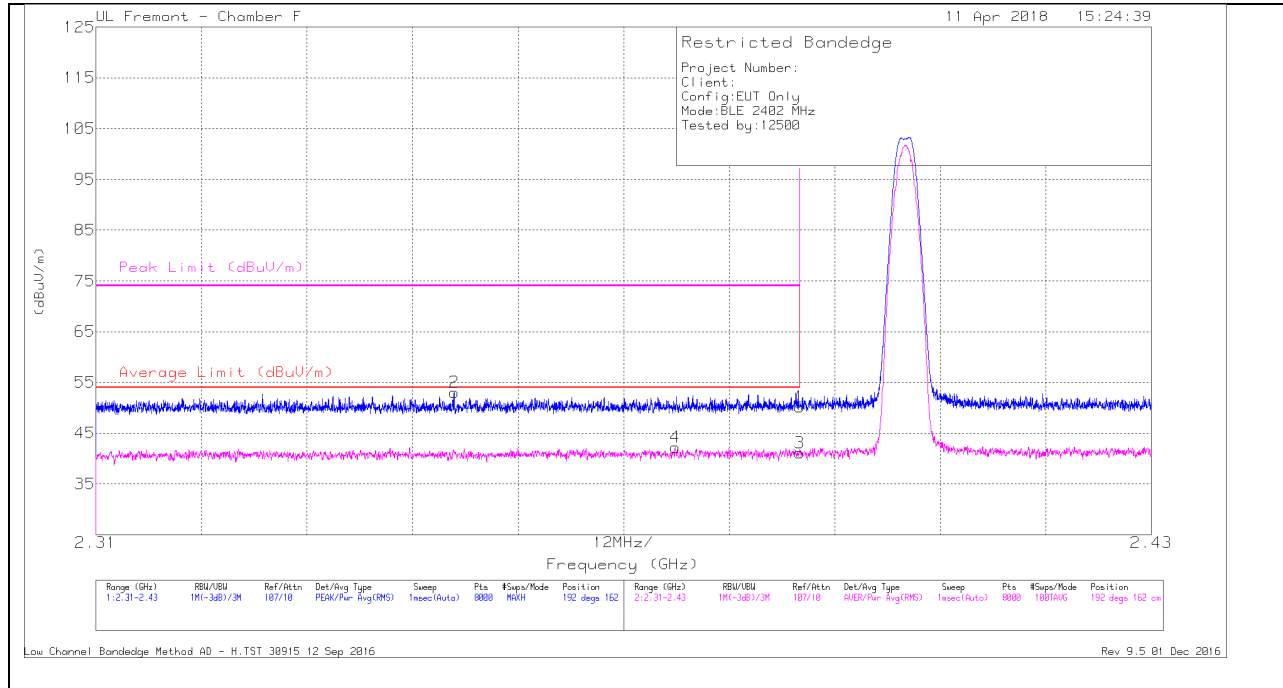
MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.2. HIGH POWER BLE (2Mbps)

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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)	Polarization
1	* 2.39	38.87	Pk	31.9	-20.6	50.17	-	-	74	-23.83	192	162	H
2	* 2.351	42.01	Pk	31.7	-20.7	53.01	-	-	74	-20.99	192	162	H
3	* 2.39	29.75	RMS	31.9	-20.6	41.05	54	-12.95	-	-	192	162	H
4	* 2.376	31.02	RMS	31.8	-20.6	42.22	54	-11.78	-	-	192	162	H

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

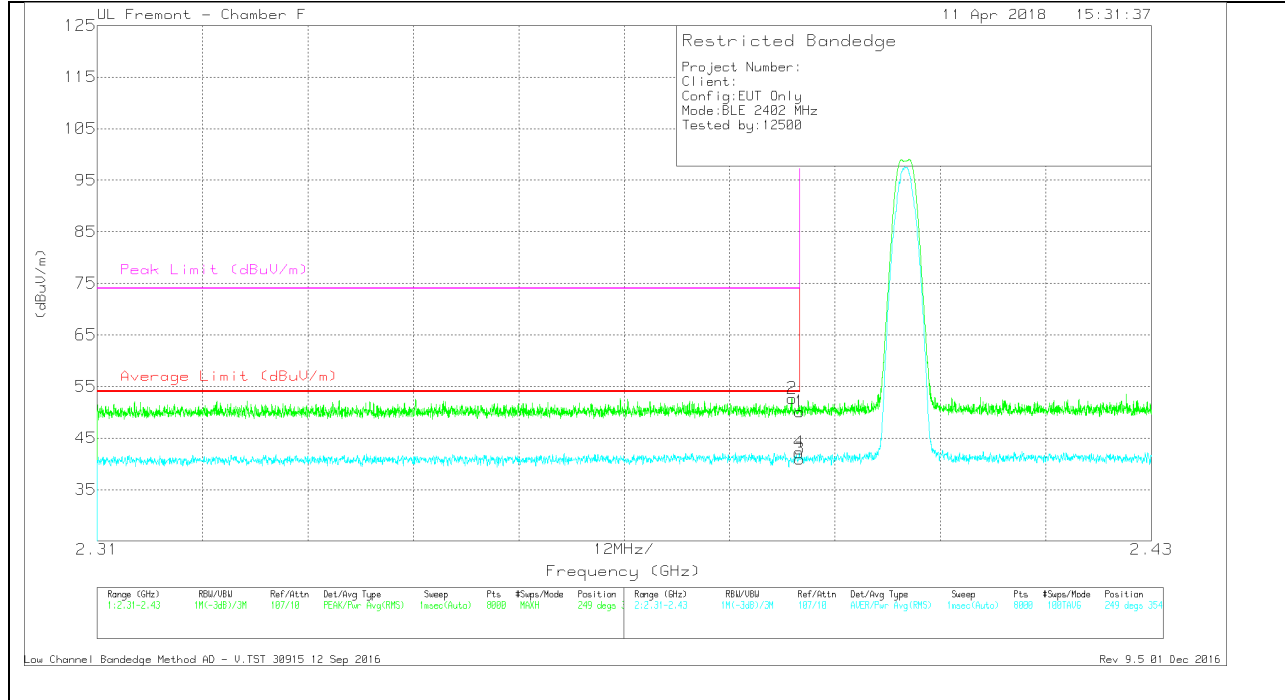
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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)	Polarization
1	* 2.39	38.8	Pk	31.9	-20.6	50.1	-	-	74	-23.9	249	354	V
2	* 2.389	41.4	Pk	31.9	-20.6	52.7	-	-	74	-21.3	249	354	V
3	* 2.39	29.67	RMS	31.9	-20.6	40.97	54	-13.03	-	-	249	354	V
4	* 2.39	30.91	RMS	31.9	-20.6	42.21	54	-11.79	-	-	249	354	V

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

Pk - Peak detector

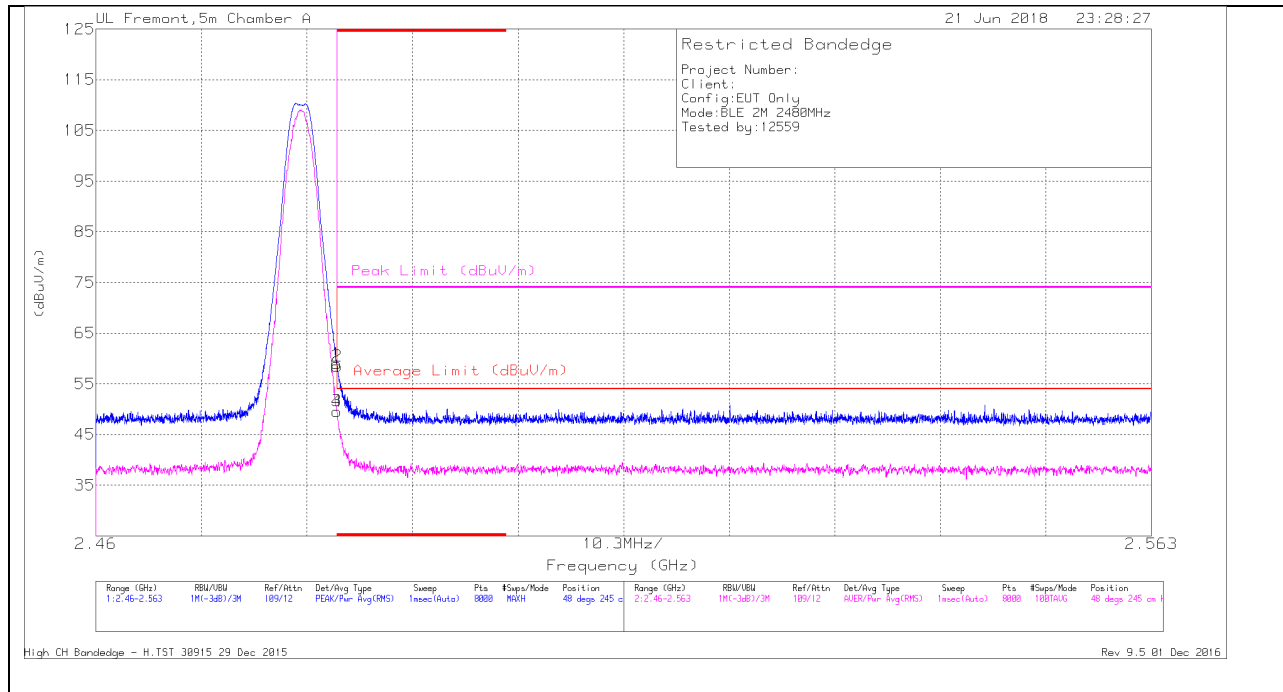
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

BANDEGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.53	Pk	32.3	-22.9	58.93	-	-	74	-15.07	48	245	H
2	* 2.484	49.12	Pk	32.3	-22.9	58.52	-	-	74	-15.48	48	245	H
3	* 2.484	40.21	RMS	32.3	-22.9	49.61	54	-4.39	-	-	48	245	H
4	* 2.484	40.19	RMS	32.3	-22.9	49.59	54	-4.41	-	-	48	245	H

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

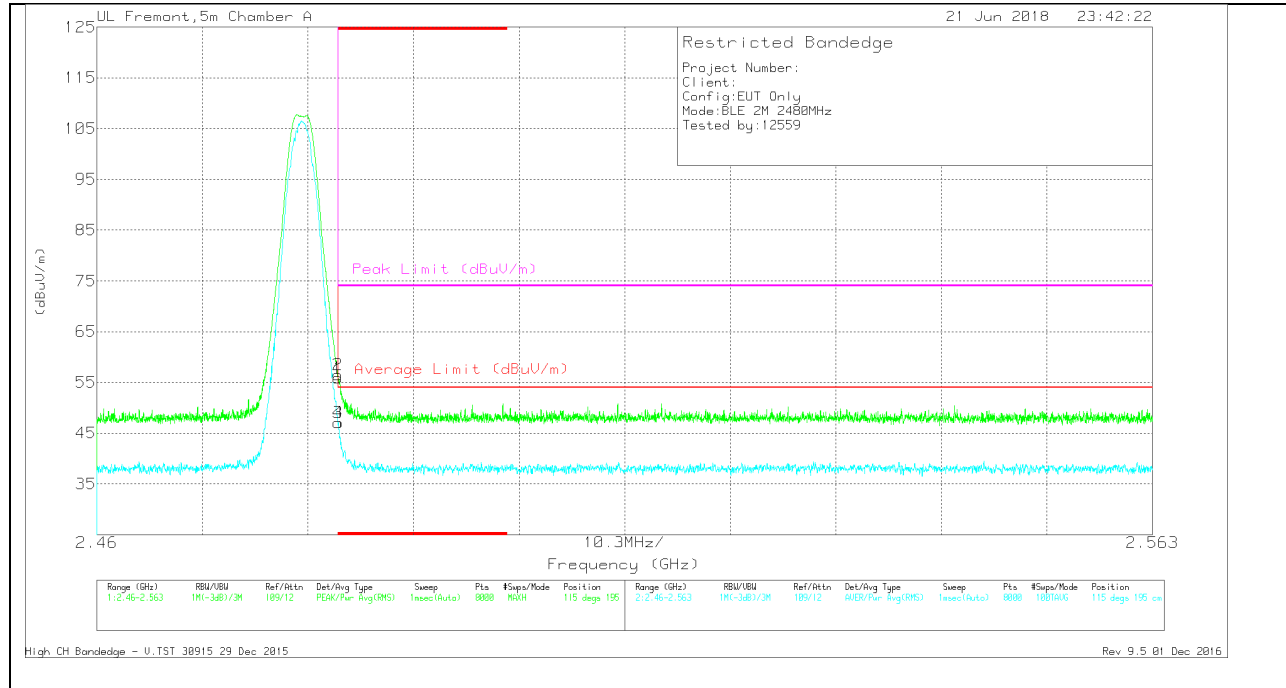
Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 2.484	46.45	Pk	32.3	-22.9	55.85	-	-	74	-18.15	115	195	V
2	* 2.484	47.07	Pk	32.3	-22.9	56.47	-	-	74	-17.53	115	195	V
3	* 2.484	37.66	RMS	32.3	-22.9	47.06	54	-6.94	-	-	115	195	V
4	* 2.484	37.65	RMS	32.3	-22.9	47.05	54	-6.95	-	-	115	195	V

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

Pk - Peak detector

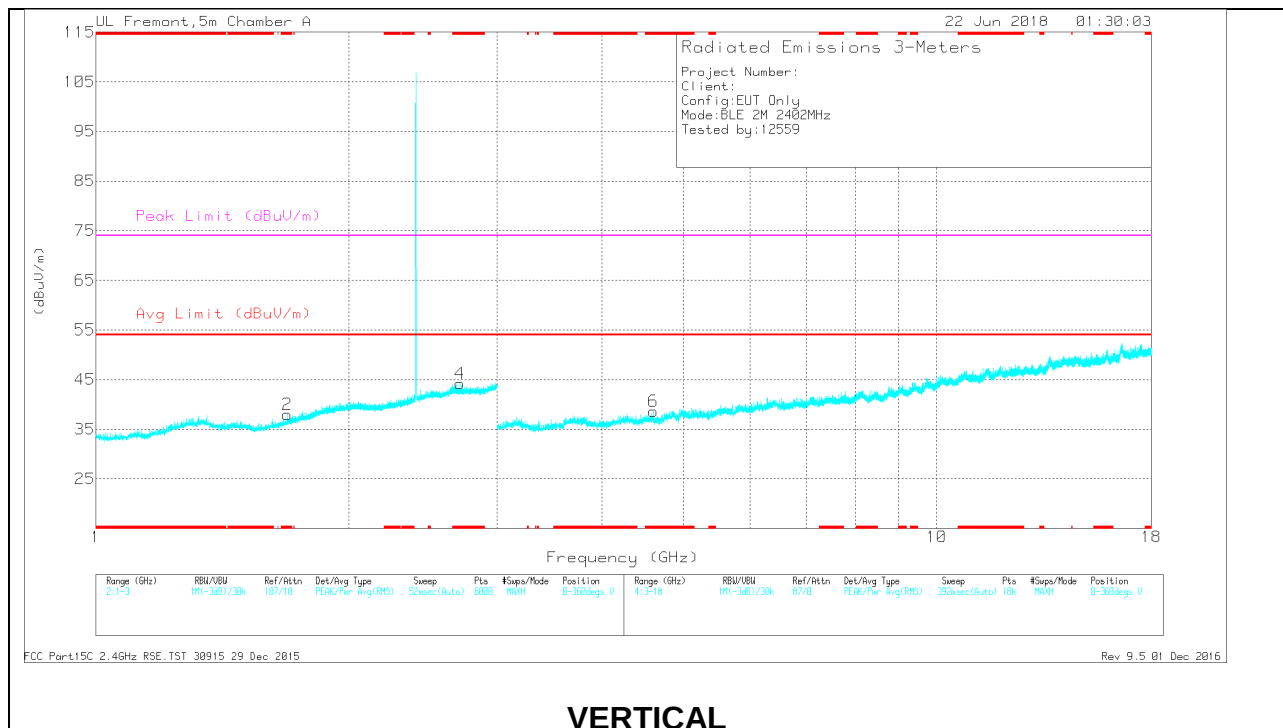
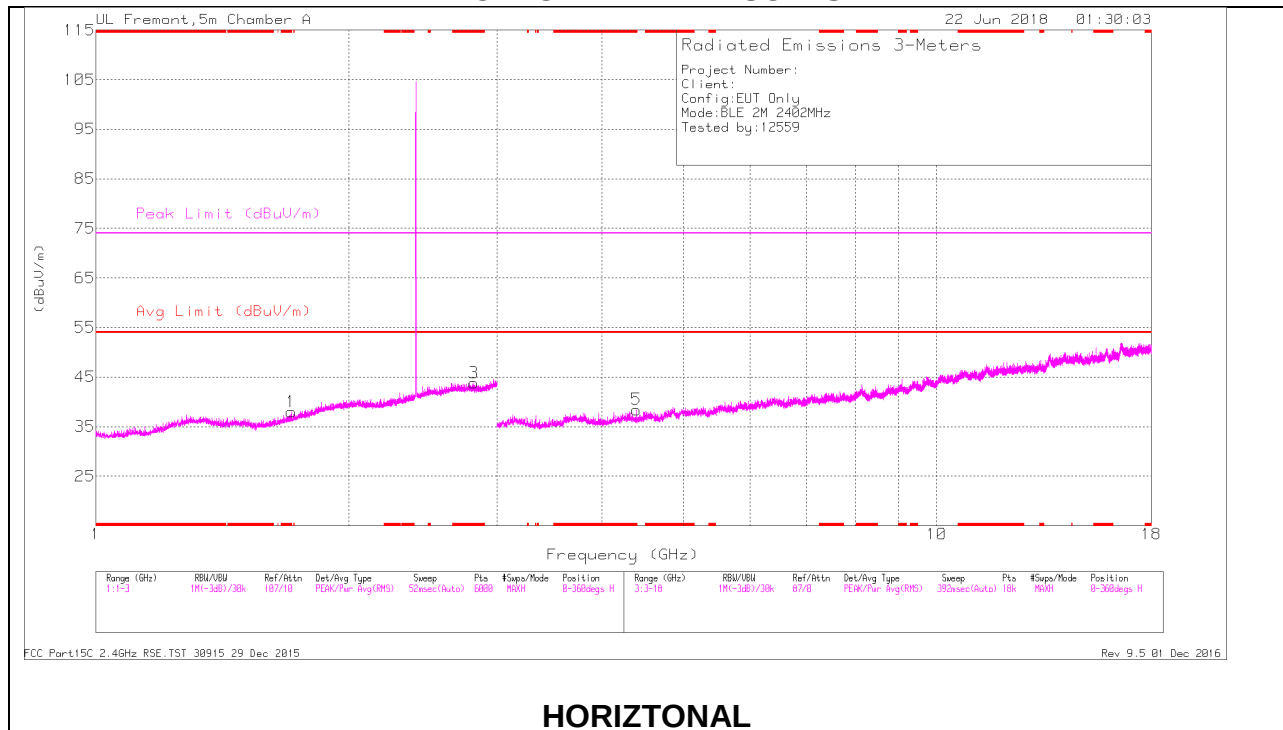
RMS - RMS detection

High CH Bandedge - V.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Markers	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.69	38.43	PK2	28.9	-23	44.33	-	-	74	-29.67	277	227	H
	* 1.668	26	MAv1	28.7	-23.1	31.6	54	-22.4	-	-	277	227	H
3	* 2.813	38.98	PK2	32.2	-21.7	49.48	-	-	74	-24.52	4	299	H
	* 2.813	26.96	MAv1	32.2	-21.7	37.46	54	-16.54	-	-	4	299	H
2	* 1.688	38.5	PK2	28.8	-23	44.3	-	-	74	-29.7	255	327	V
	* 1.688	25.99	MAv1	28.8	-23	31.79	54	-22.21	-	-	255	327	V
4	* 2.712	39.15	PK2	32.5	-22.3	49.35	-	-	74	-24.65	235	259	V
	* 2.712	27.12	MAv1	32.5	-22.3	37.32	54	-16.68	-	-	235	259	V
5	* 4.393	38.82	PK2	33.7	-27.8	44.72	-	-	74	-29.28	14	189	H
	* 4.393	26.73	MAv1	33.7	-27.8	32.63	54	-21.37	-	-	14	189	H
6	* 4.601	39.95	PK2	34.1	-27.1	46.95	-	-	74	-27.05	253	227	V
	* 4.6	26.18	MAv1	34.1	-27.1	33.18	54	-20.82	-	-	253	227	V

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

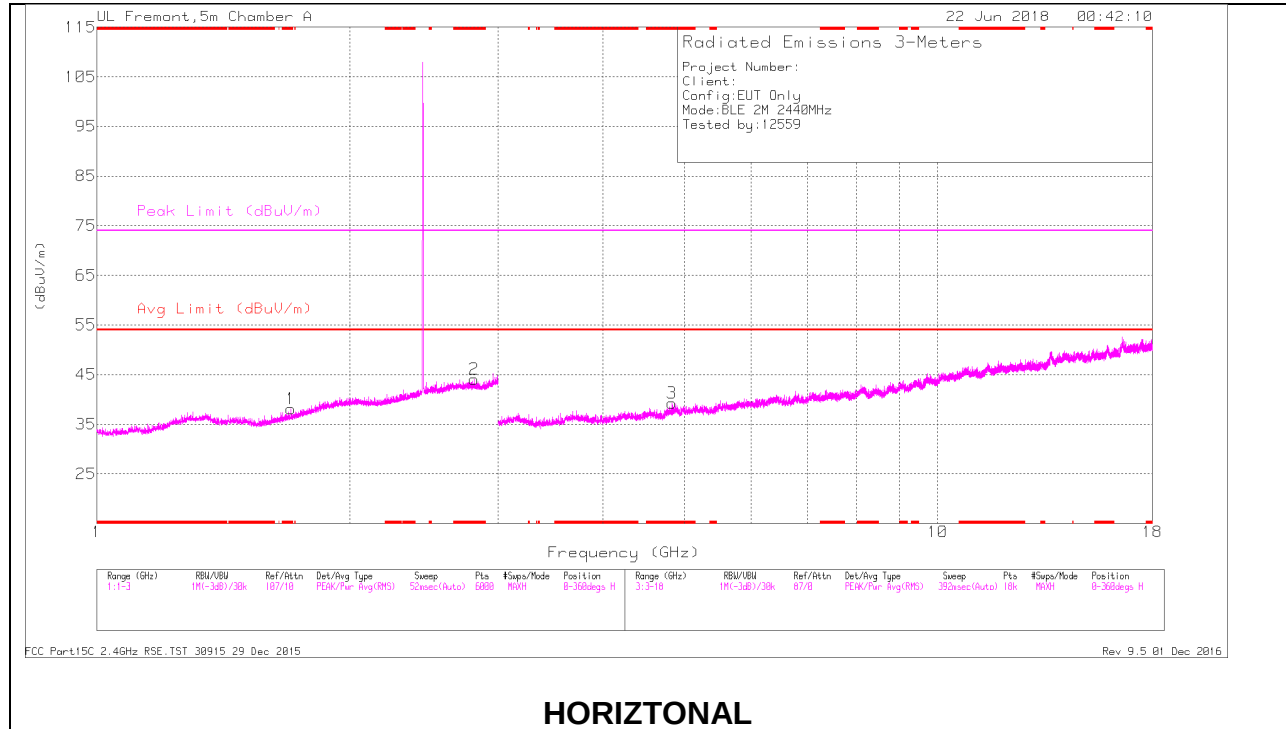
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

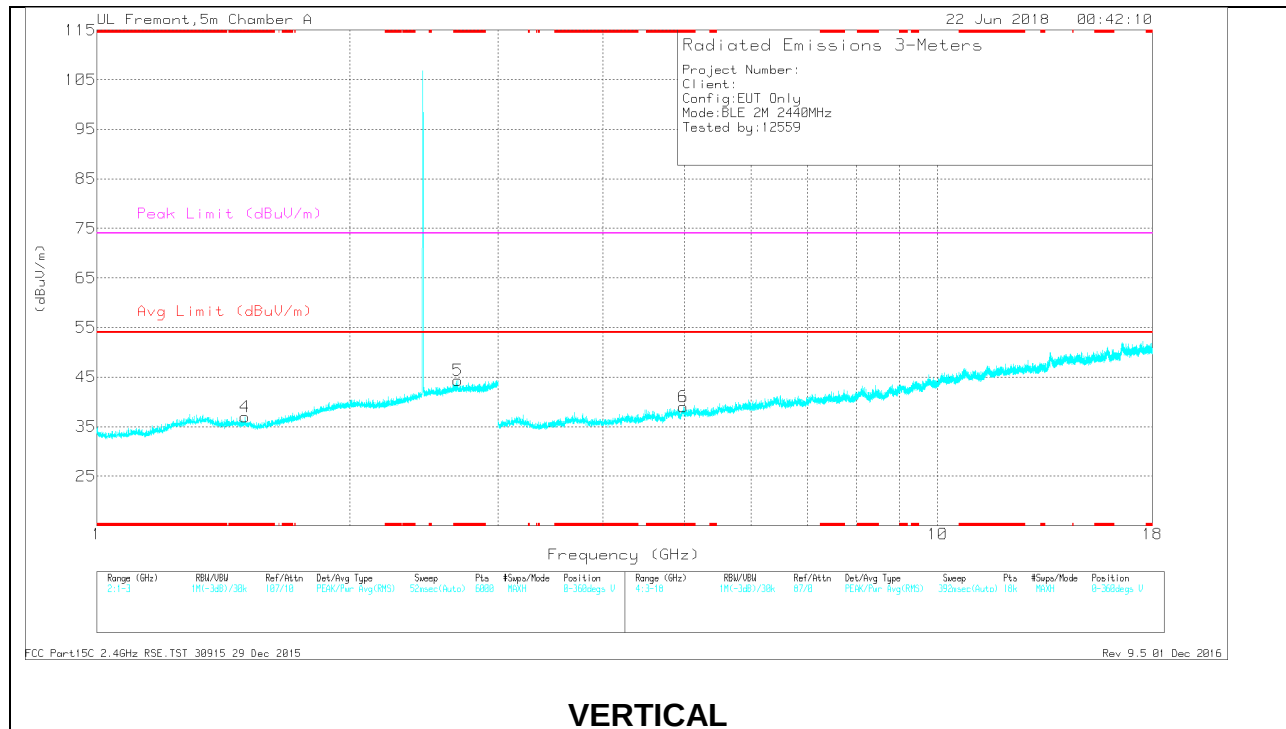
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

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MID CHANNEL RESULTS



HORIZTONAL



VERTICAL

RADIATED EMISSIONS

Markers	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.7	38.01	PK2	29	-23	44.01	-	-	74	-29.99	42	237	H
	* 1.704	26.05	MAv1	29	-23.1	31.95	54	-22.05	-	-	42	237	H
2	* 2.81	38.68	PK2	32.2	-21.8	49.08	-	-	74	-24.92	163	325	H
	* 2.813	26.95	MAv1	32.2	-21.7	37.45	54	-16.55	-	-	163	325	H
4	* 1.5	38.1	PK2	28.4	-23	43.5	-	-	74	-30.5	293	165	V
	* 1.502	25.7	MAv1	28.4	-23	31.1	54	-22.9	-	-	293	165	V
5	* 2.69	39.32	PK2	32.5	-22.3	49.52	-	-	74	-24.48	255	163	V
	* 2.689	27.29	MAv1	32.5	-22.3	37.49	54	-16.51	-	-	255	163	V
3	* 4.835	37.2	PK2	34.2	-25.7	45.7	-	-	74	-28.3	11	140	H
	* 4.832	24.91	MAv1	34.2	-25.8	33.31	54	-20.69	-	-	11	140	H
6	* 4.979	39.19	PK2	34.3	-26.9	46.59	-	-	74	-27.41	51	305	V
	* 4.978	27.07	MAv1	34.3	-26.9	34.47	54	-19.53	-	-	51	305	V

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

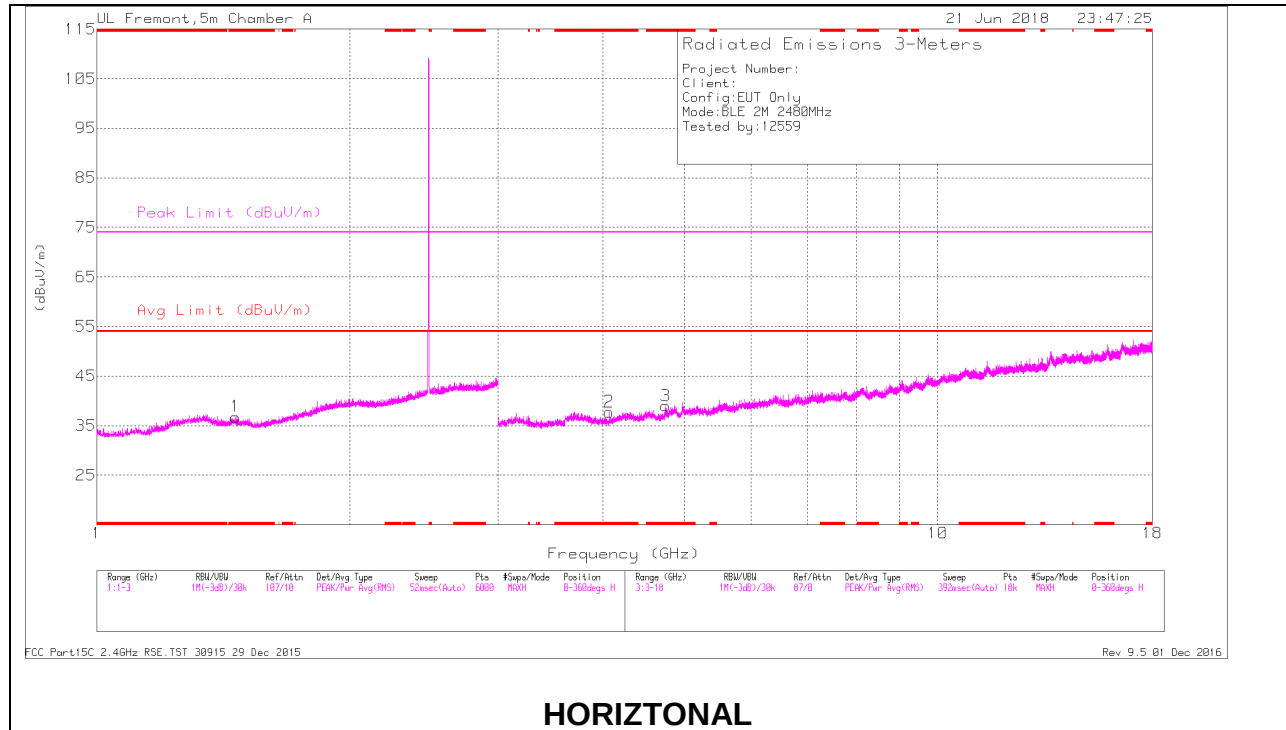
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

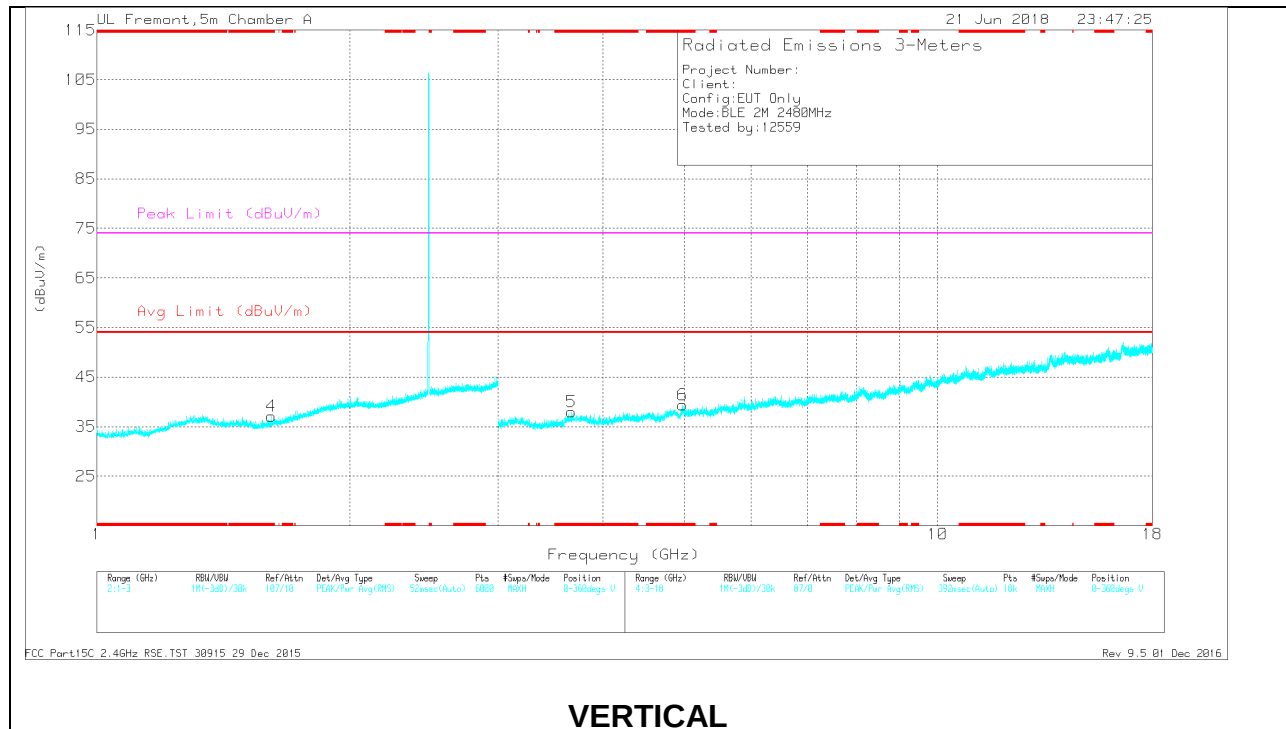
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

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HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Markers	Frequen cy (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cb l/Filtr/P ad (dB)	Correct ed Reading (dBuV/ m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.462	37.94	PK2	28.7	-23.2	43.44	-	-	74	-30.56	48	343	H
	* 1.462	25.71	MAv1	28.7	-23.2	31.21	54	-22.79	-	-	48	343	H
4	* 1.614	38.14	PK2	28.3	-23.1	43.34	-	-	74	-30.66	299	333	V
	* 1.614	25.84	MAv1	28.3	-23.1	31.04	54	-22.96	-	-	299	333	V
2	* 4.067	38.28	PK2	33.4	-27.8	43.88	-	-	74	-30.12	175	161	H
	* 4.069	26.34	MAv1	33.4	-27.7	32.04	54	-21.96	-	-	175	161	H
3	* 4.749	38.16	PK2	34	-27.1	45.06	-	-	74	-28.94	221	272	H
	* 4.749	26.27	MAv1	34	-27.1	33.17	54	-20.83	-	-	221	272	H
5	* 3.667	38.9	PK2	33	-27.7	44.2	-	-	74	-29.8	128	237	V
	* 3.667	26.82	MAv1	33	-27.7	32.12	54	-21.88	-	-	128	237	V
6	* 4.975	39.63	PK2	34.3	-26.9	47.03	-	-	74	-26.97	210	163	V
	* 4.974	27.14	MAv1	34.3	-26.8	34.64	54	-19.36	-	-	210	163	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

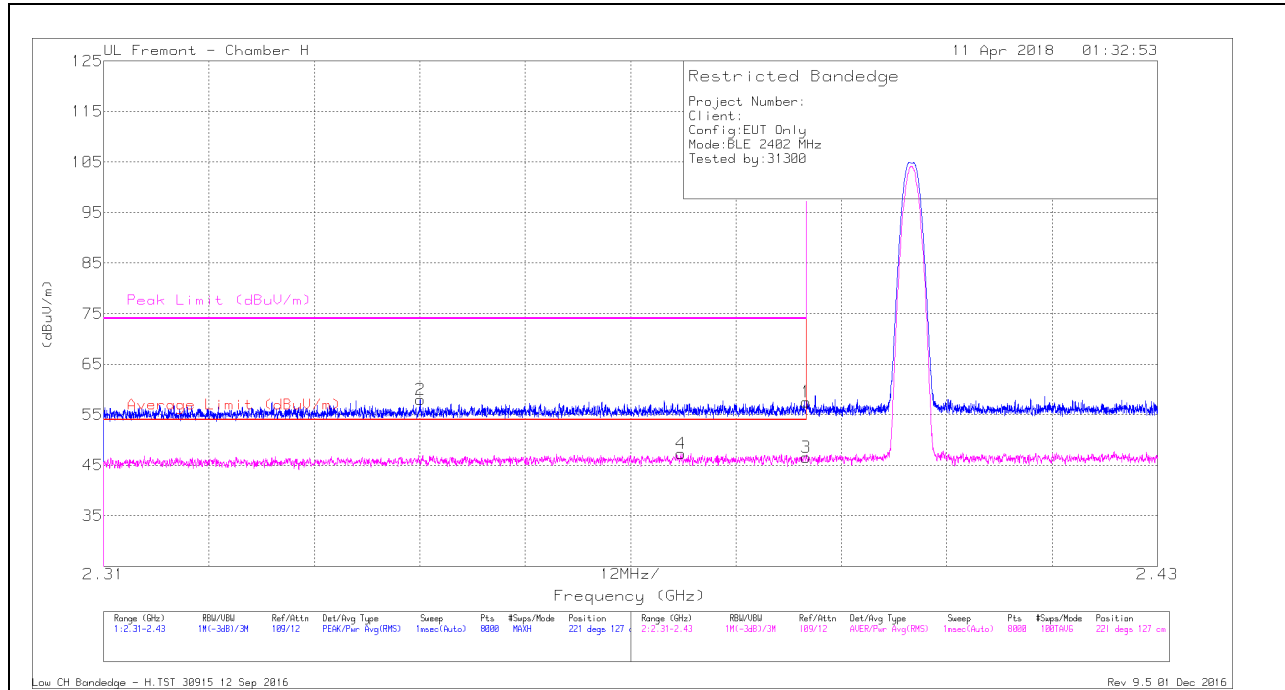
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

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Antenna 3

BANEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.346	39.84	Pk	32.1	-14	57.94	-	-	74	-16.06	221	127	H
4	* 2.376	29.14	RMS	32.2	-14	47.34	54	-6.66	-	-	221	127	H
1	* 2.39	39.25	Pk	32.3	-14	57.55	-	-	74	-16.45	221	127	H
3	* 2.39	28.26	RMS	32.3	-14	46.56	54	-7.44	-	-	221	127	H

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

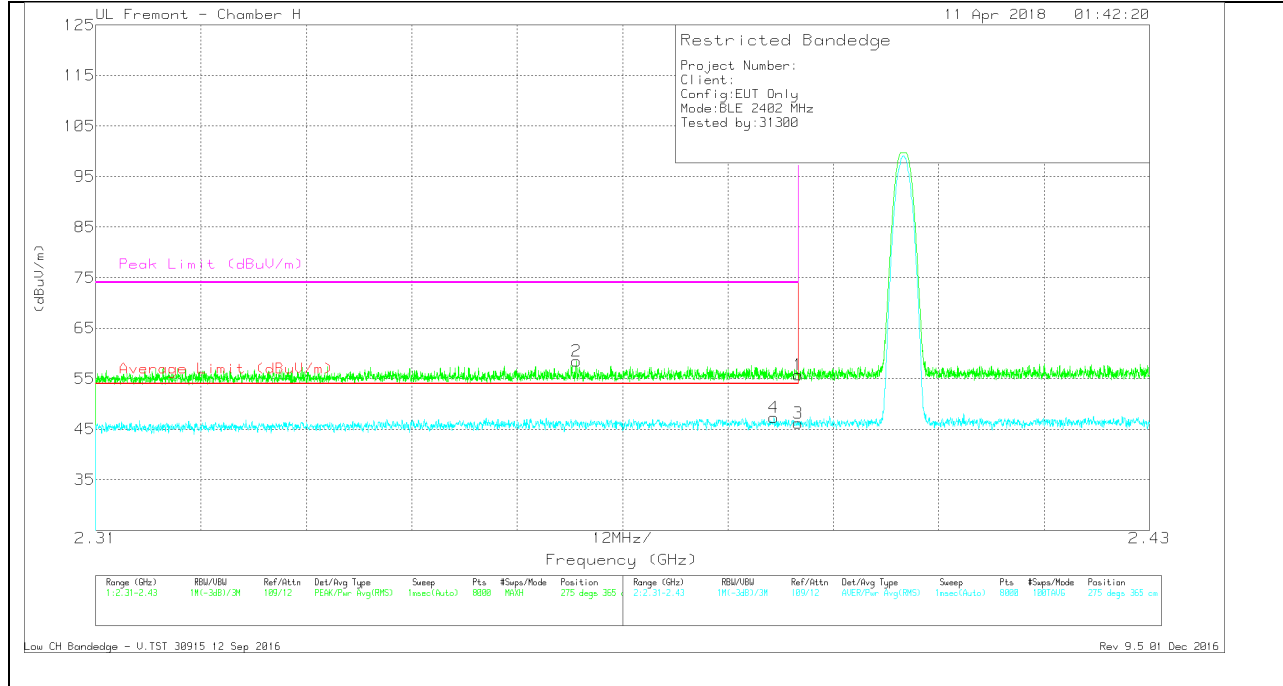
Pk - Peak detector

RMS - RMS detection

Low CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.365	40.34	Pk	32.2	-14	58.54	-	-	74	-15.46	275	365	V
4	* 2.387	28.99	RMS	32.3	-14	47.29	54	-6.71	-	-	275	365	V
1	* 2.39	37.42	Pk	32.3	-14	55.72	-	-	74	-18.28	275	365	V
3	* 2.39	27.86	RMS	32.3	-14	46.16	54	-7.84	-	-	275	365	V

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

Pk - Peak detector

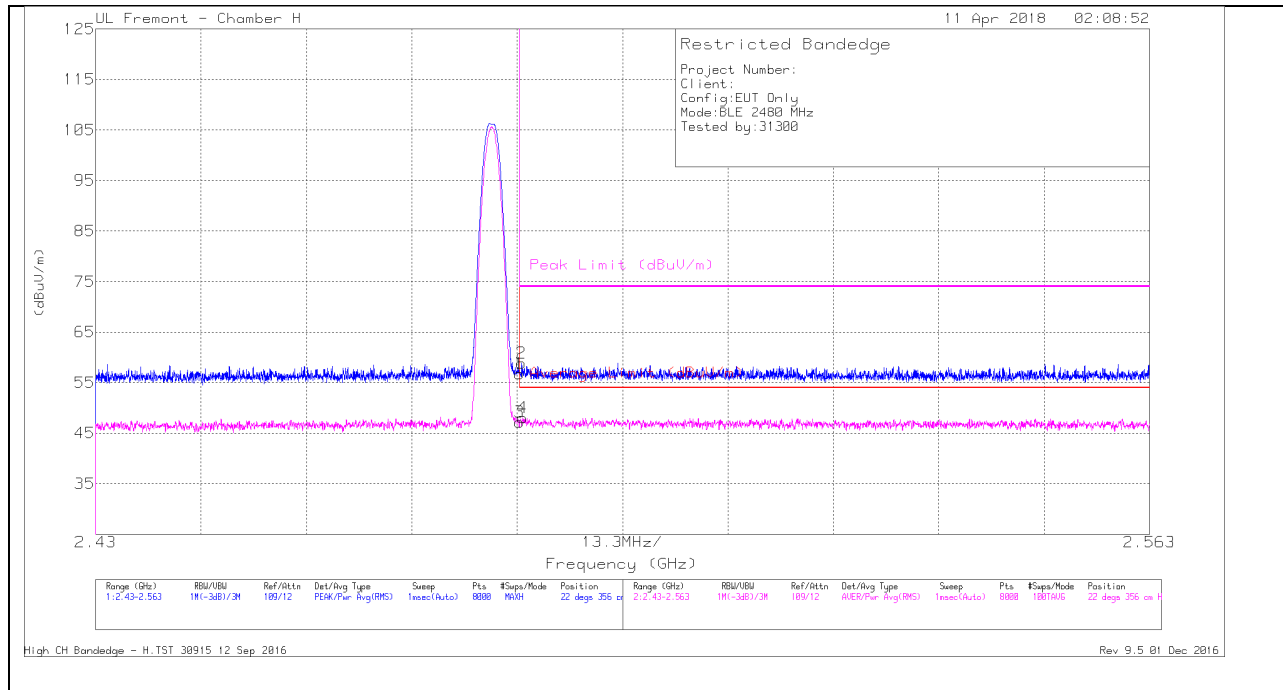
RMS - RMS detection

Low CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/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	* 2.484	38.16	Pk	32.4	-13.8	56.76	-	-	74	-17.24	22	356	H
2	* 2.484	40.24	Pk	32.4	-13.8	58.84	-	-	74	-15.16	22	356	H
3	* 2.484	28.55	RMS	32.4	-13.8	47.15	54	-6.85	-	-	22	356	H
4	* 2.484	29.43	RMS	32.4	-13.8	48.03	54	-5.97	-	-	22	356	H

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

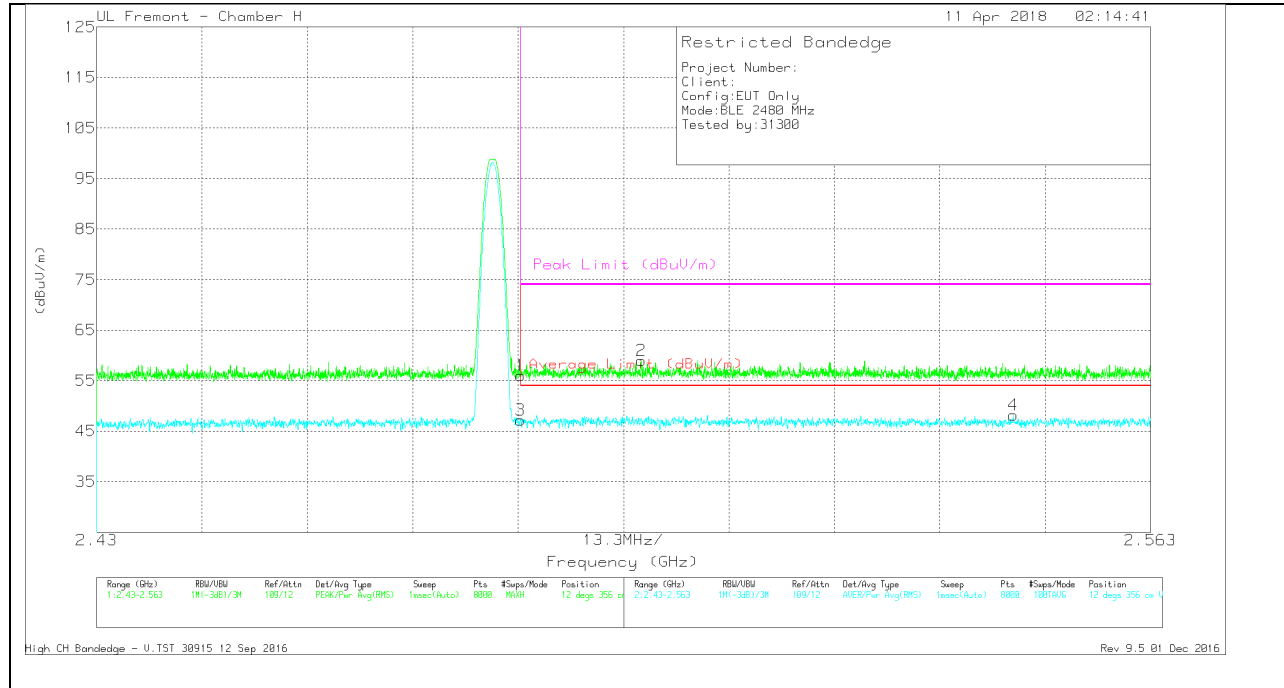
Pk - Peak detector

RMS - RMS detection

High CH Bandedge - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	37.36	Pk	32.4	-13.8	55.96	-	-	74	-18.04	12	356	V
3	* 2.484	28.56	RMS	32.4	-13.8	47.16	54	-6.84	-	-	12	356	V
2	* 2.499	40.4	Pk	32.4	-13.8	59	-	-	74	-15	12	356	V
4	2.546	29.62	RMS	32.3	-13.7	48.22	54	-5.78	-	-	12	356	V

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

Pk - Peak detector

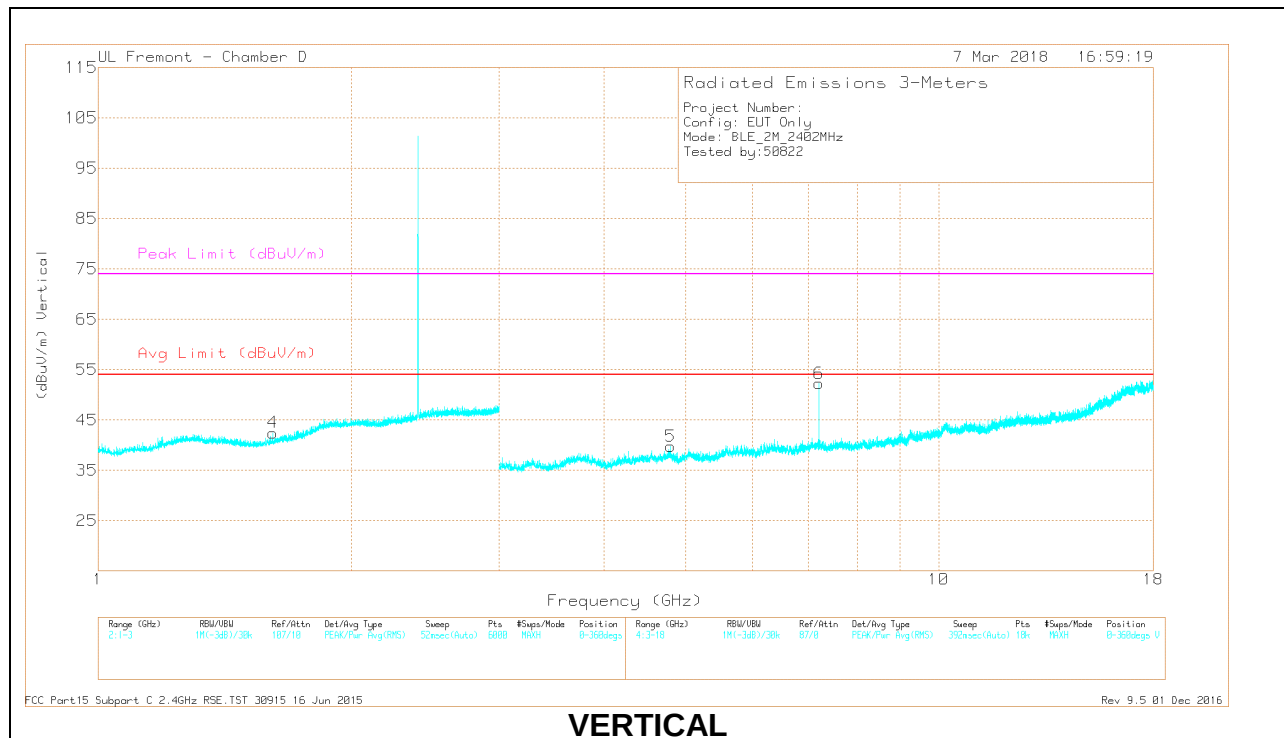
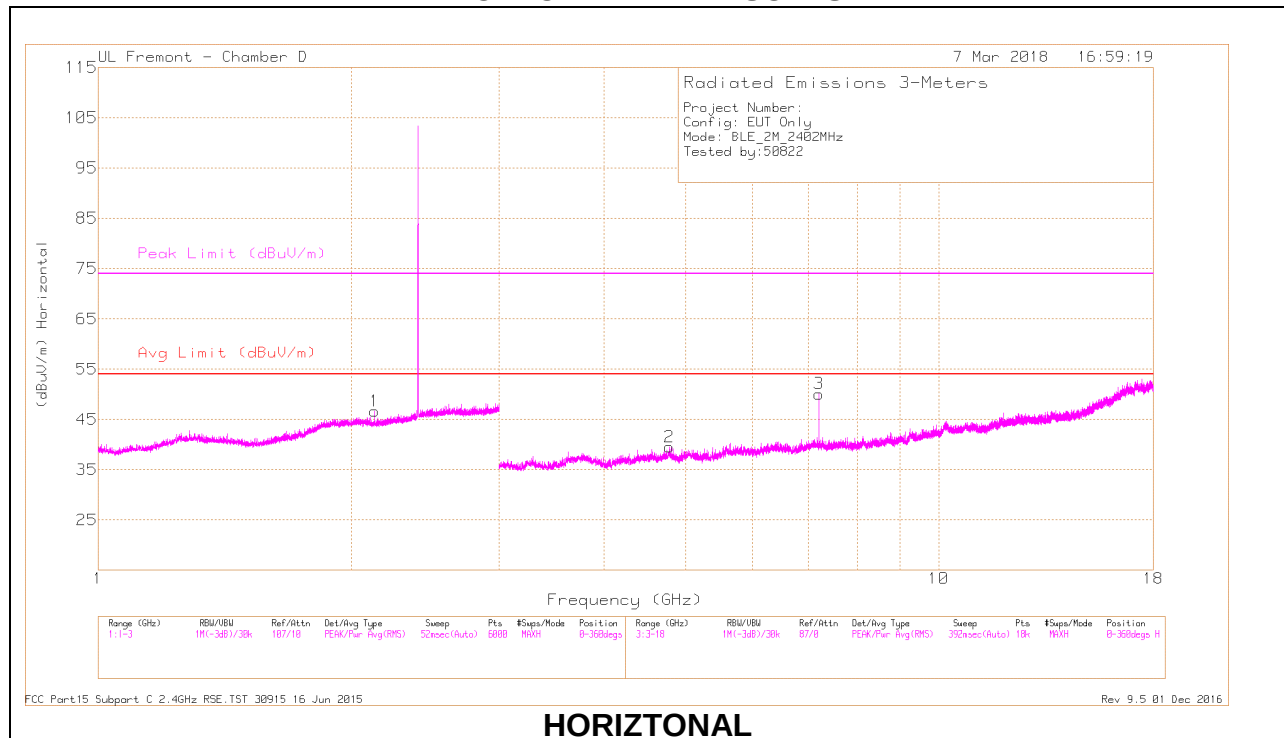
RMS - RMS detection

High CH Bandedge - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

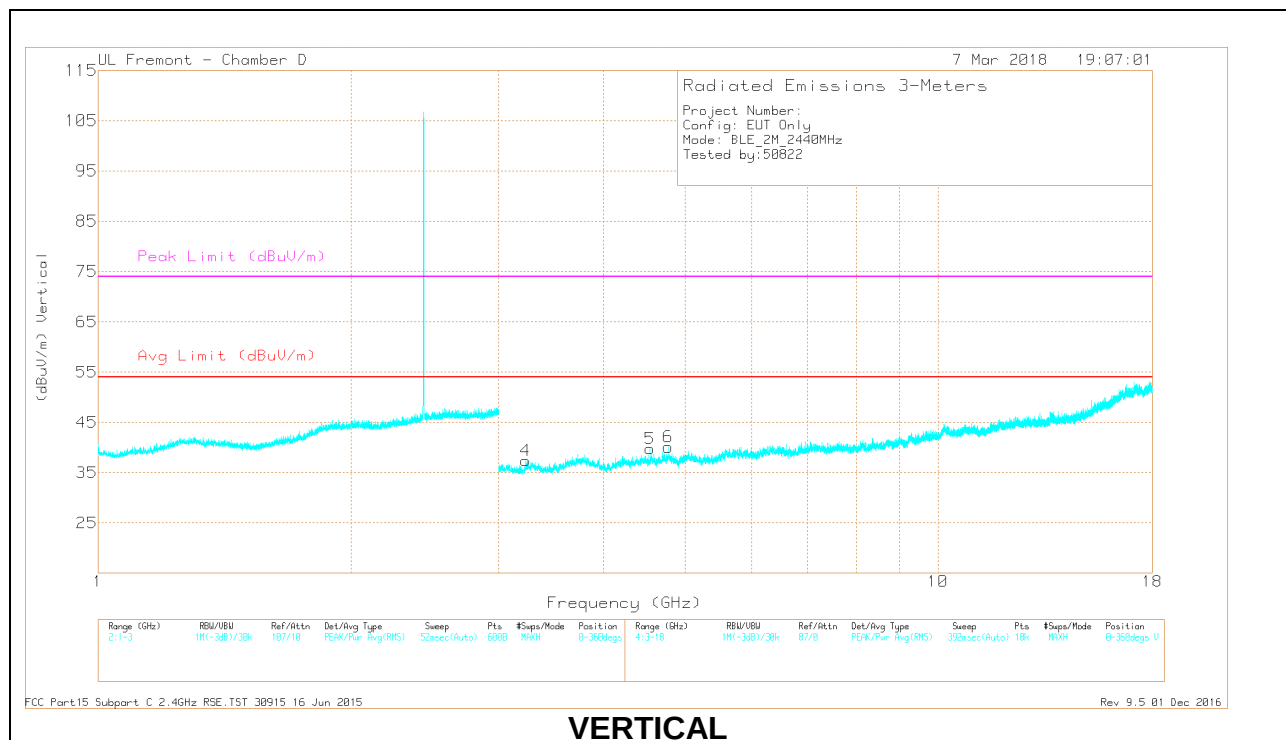
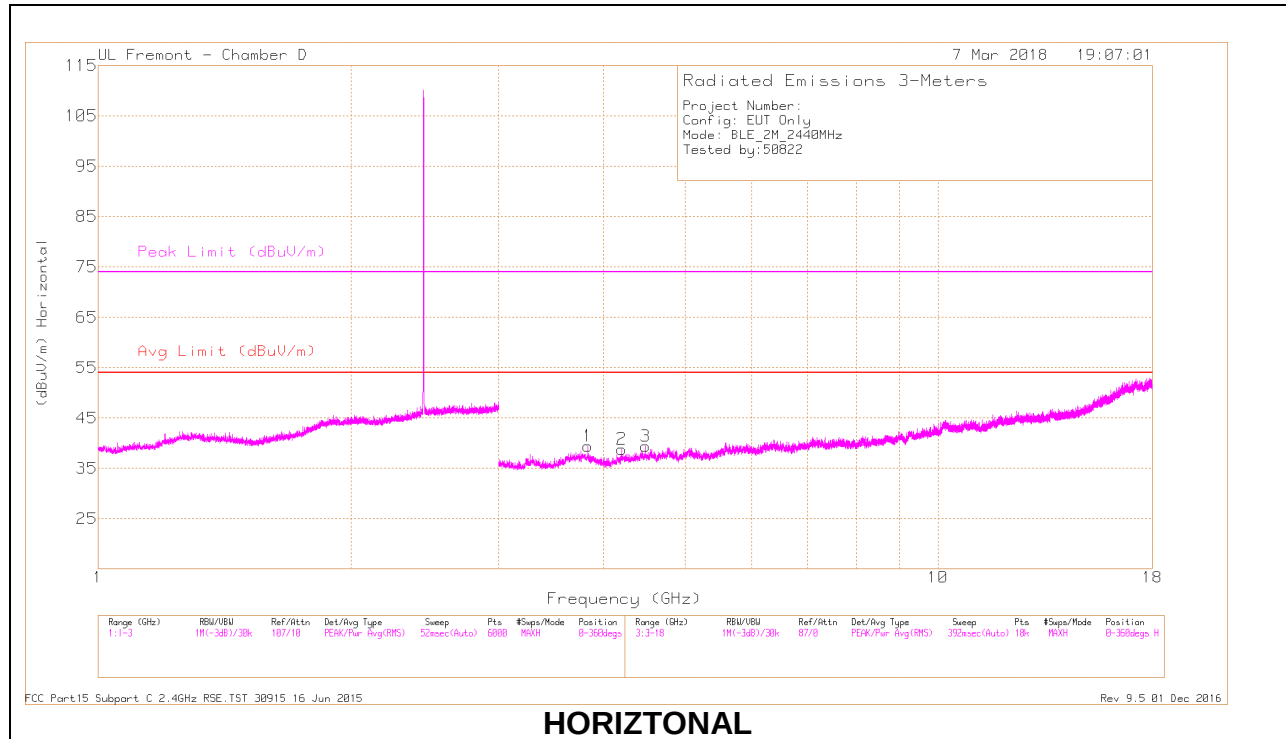
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.135	29.68	MAv1	31	-20.8	39.88	-	-	-	-	225	108	H
	2.136	41.61	PK2	31	-20.8	51.81	-	-	-	-	225	108	H
2	* 4.779	38.6	PK2	34.5	-26.2	46.9	-	-	74	-27.1	248	241	H
	* 4.778	26.1	MAv1	34.5	-26.2	34.4	54	-19.6	-	-	248	241	H
3	7.207	41.02	PK2	36.3	-24.6	52.72	-	-	-	-	274	371	H
	* 1.613	41.66	PK2	28.5	-21.6	48.56	-	-	74	-25.44	268	112	V
4	* 1.615	29.73	MAv1	28.5	-21.5	36.73	54	-17.27	-	-	268	112	V
	* 4.797	37.16	PK2	34.5	-26.3	45.36	-	-	74	-28.64	213	145	V
5	* 4.798	25.29	MAv1	34.5	-26.3	33.49	54	-20.51	-	-	213	145	V
	7.205	41.07	PK2	36.3	-24.6	52.77	-	-	-	-	42	106	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

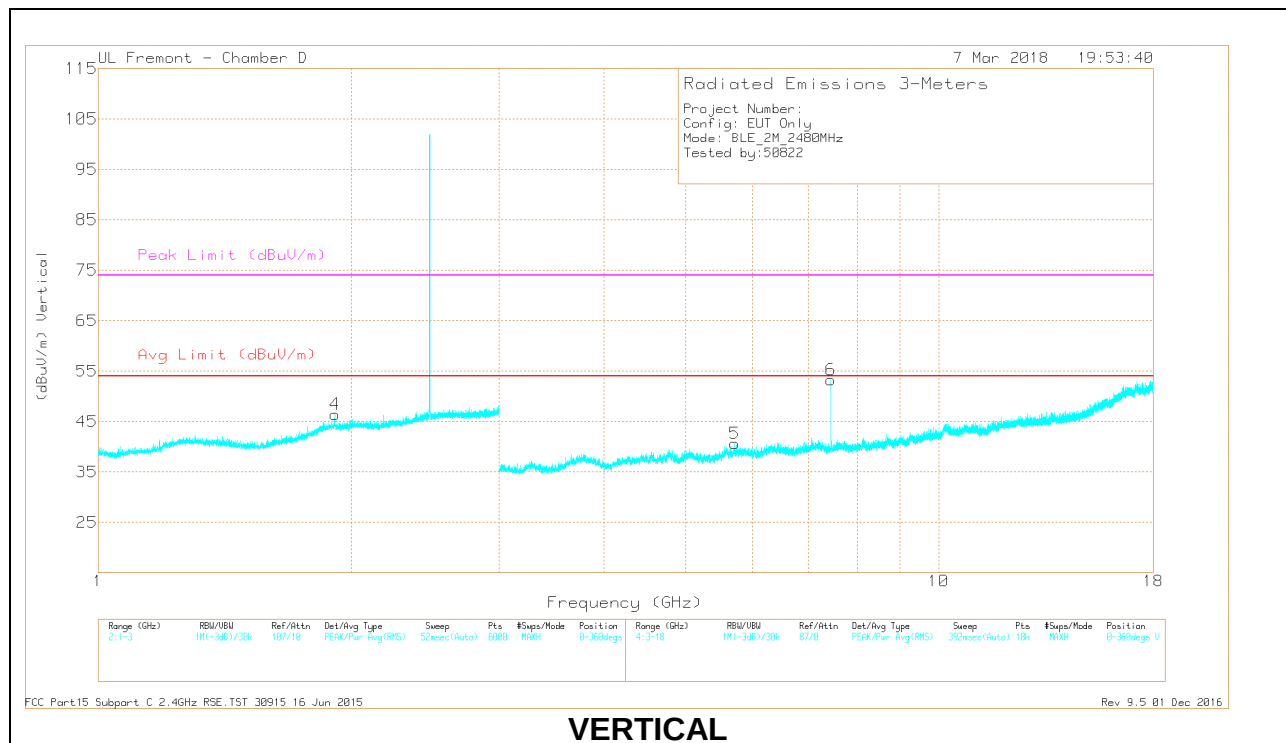
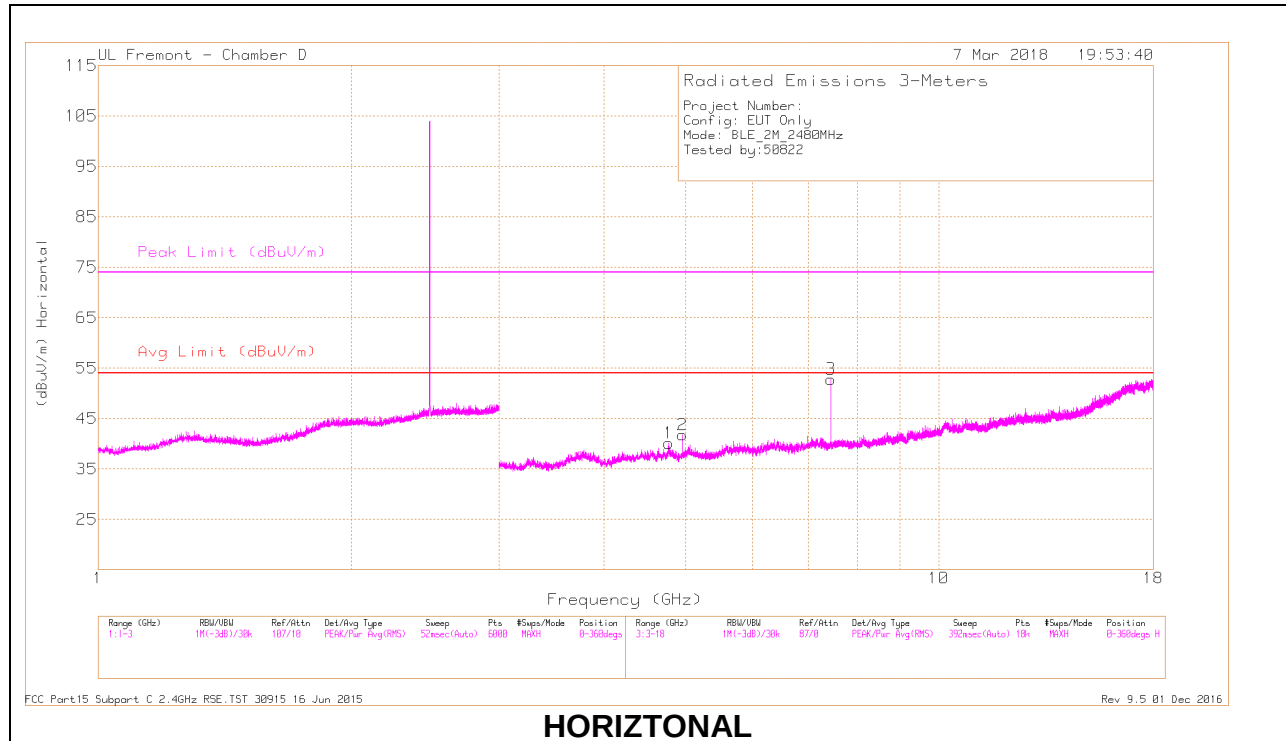
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.826	38.24	PK2	33.6	-28.2	43.64	-	-	74	-30.36	290	156	H
	* 3.829	26.82	MAV1	33.6	-28.2	32.22	54	-21.78	-	-	290	156	H
2	* 4.204	37.31	PK2	33.7	-27.2	43.81	-	-	74	-30.19	302	111	H
	* 4.204	25.82	MAV1	33.7	-27.2	32.32	54	-21.68	-	-	302	111	H
3	4.486	37.16	PK2	34.4	-27.5	44.06	-	-	-	-	190	105	H
4	3.23	39.25	PK2	33.1	-28.3	44.05	-	-	-	-	53	106	V
5	* 4.545	38.29	PK2	34.6	-27.5	45.39	-	-	74	-28.61	316	160	V
	* 4.545	26.11	MAV1	34.6	-27.5	33.21	54	-20.79	-	-	316	160	V
6	* 4.773	38.27	PK2	34.5	-26.3	46.47	-	-	74	-27.53	261	106	V
	* 4.774	26.02	MAV1	34.5	-26.3	34.22	54	-19.78	-	-	261	106	V

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

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.773	37.35	PK2	34.5	-26.3	45.55	-	-	74	-28.45	345	102	H
	* 4.776	26.01	MAv1	34.5	-26.2	34.31	54	-19.69	-	-	345	102	H
2	* 4.96	37.91	PK2	34.3	-27.1	45.11	-	-	74	-28.89	305	304	H
	* 4.959	27.36	MAv1	34.3	-27.1	34.56	54	-19.44	-	-	305	304	H
3	* 7.441	36.92	PK2	36.2	-23.9	49.22	-	-	74	-24.78	313	104	H
	* 7.441	26.52	MAv1	36.2	-23.9	38.82	54	-15.18	-	-	313	104	H
6	* 7.441	37.73	PK2	36.2	-23.9	50.03	-	-	74	-23.97	46	140	V
	* 7.441	26.69	MAv1	36.2	-23.9	38.99	54	-15.01	-	-	46	140	V
4	1.912	41.39	PK2	31.5	-21.1	51.79	-	-	-	-	94	254	V
	1.912	29.62	MAv1	31.5	-21.1	40.02	-	-	-	-	94	254	V
5	5.722	25.24	MAv1	35.6	-26.7	34.14	-	-	-	-	151	114	V
	5.724	36.81	PK2	35.6	-26.7	45.71	-	-	-	-	151	114	V

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

PK2 - KDB558074 Method: Maximum Peak

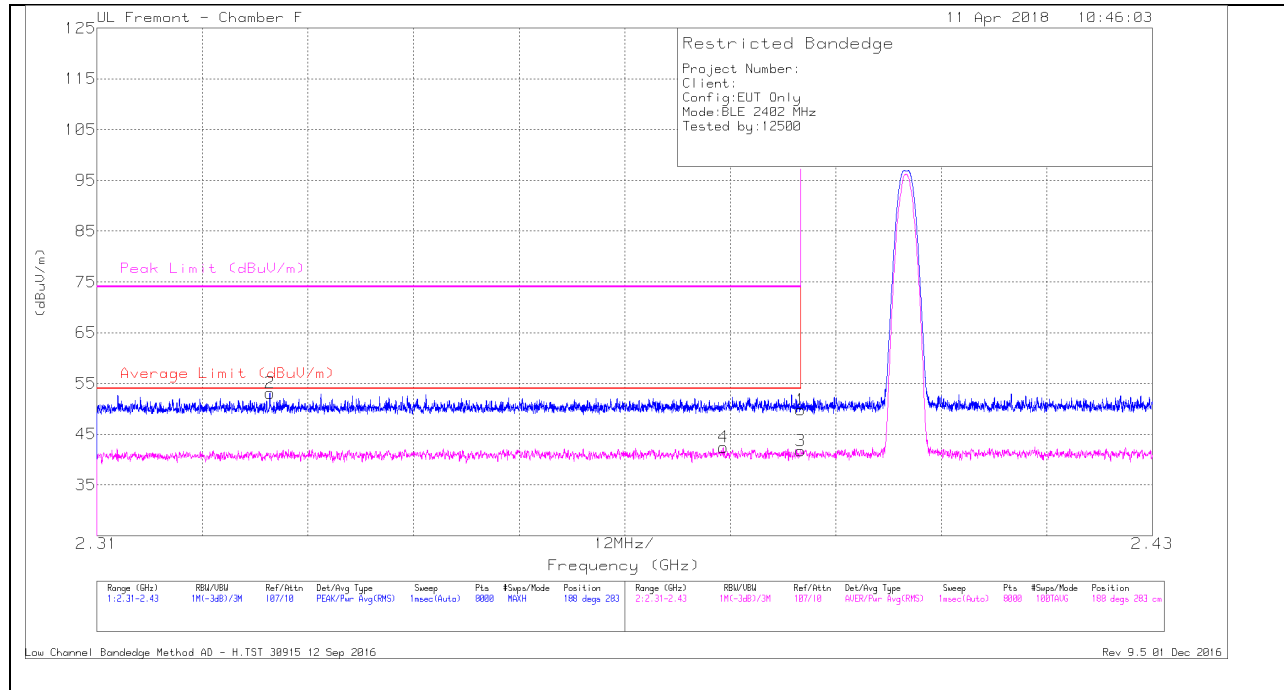
MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.3. LOW POWER BLE (1Mbps)

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/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	* 2.39	38.48	Pk	31.9	-20.6	49.78	-	-	74	-24.22	188	283	H
2	* 2.33	42.09	Pk	31.7	-20.7	53.09	-	-	74	-20.91	188	283	H
3	* 2.39	30.43	RMS	31.9	-20.6	41.73	54	-12.27	-	-	188	283	H
4	* 2.381	31.21	RMS	31.8	-20.6	42.41	54	-11.59	-	-	188	283	H

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

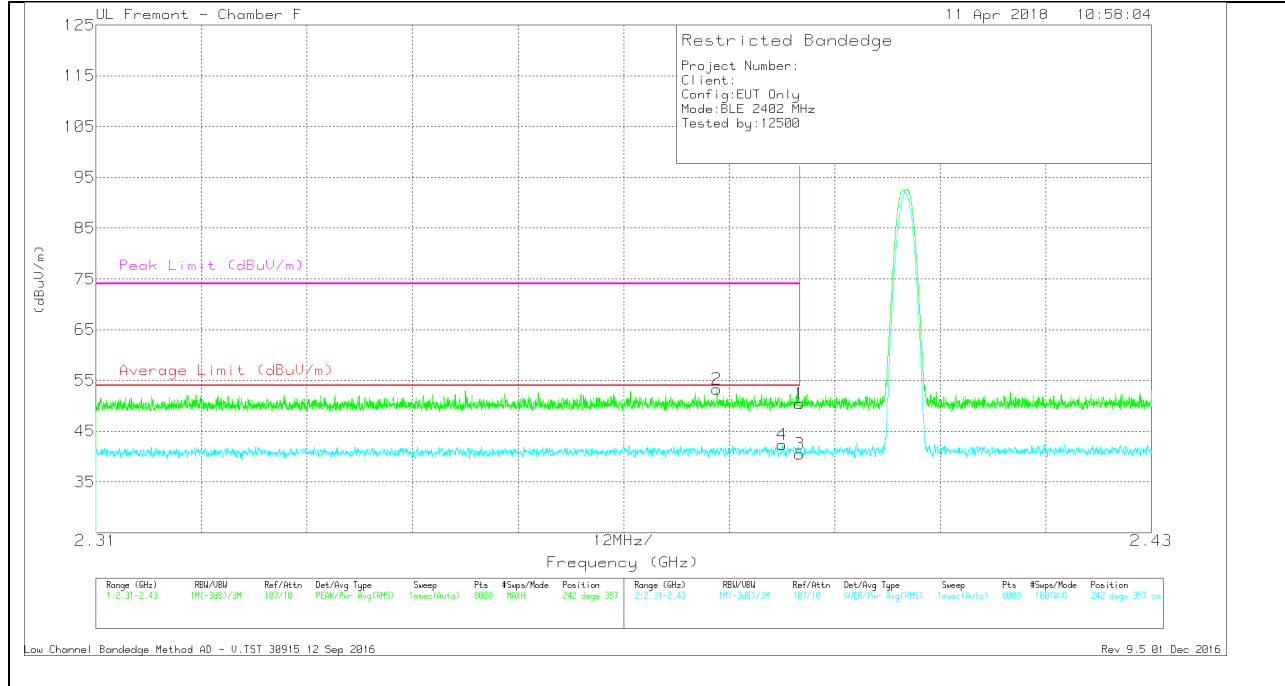
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitr/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	* 2.39	39.09	Pk	31.9	-20.6	50.39	-	-	74	-23.61	242	357	V
2	* 2.381	42.09	Pk	31.8	-20.6	53.29	-	-	74	-20.71	242	357	V
3	* 2.39	29.22	RMS	31.9	-20.6	40.52	54	-13.48	-	-	242	357	V
4	* 2.388	31.06	RMS	31.9	-20.6	42.36	54	-11.64	-	-	242	357	V

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

Pk - Peak detector

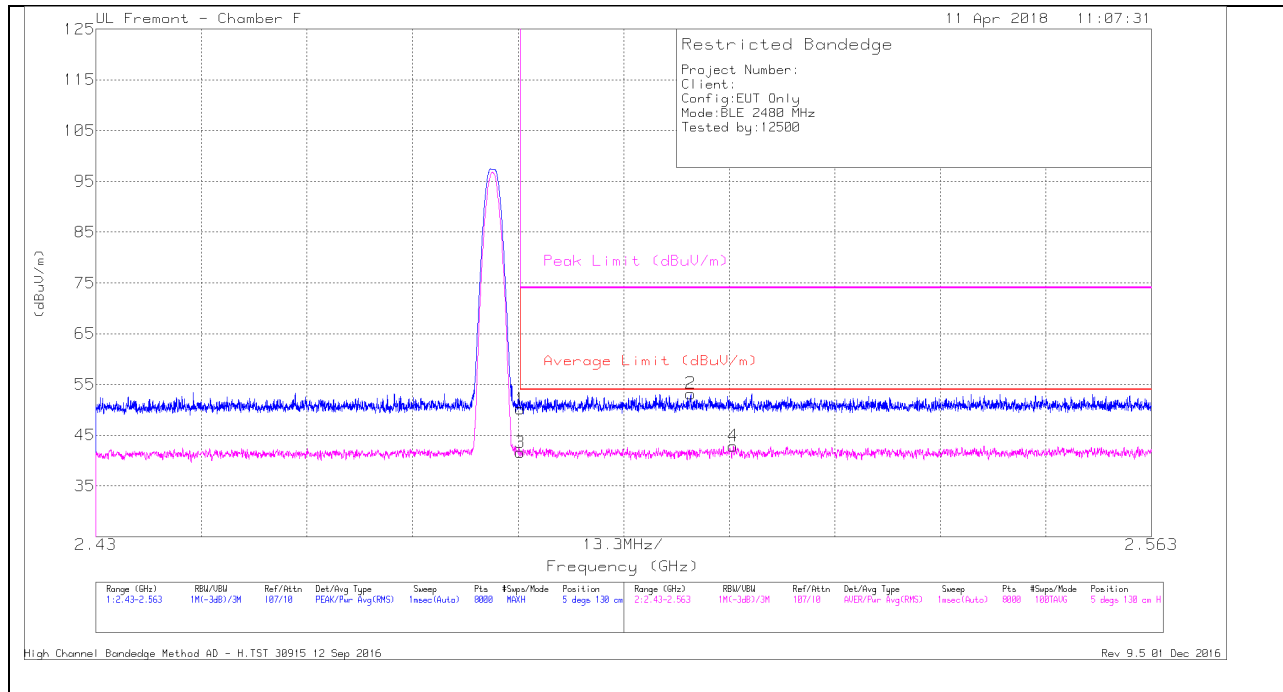
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.72	Pk	32.1	-20.7	50.12	-	-	74	-23.88	5	130	H
2	2.505	41.61	Pk	32.2	-20.6	53.21	-	-	74	-20.79	5	130	H
3	* 2.484	30.2	RMS	32.1	-20.7	41.6	54	-12.4	-	-	5	130	H
4	2.51	31.3	RMS	32.2	-20.6	42.9	54	-11.1	-	-	5	130	H

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

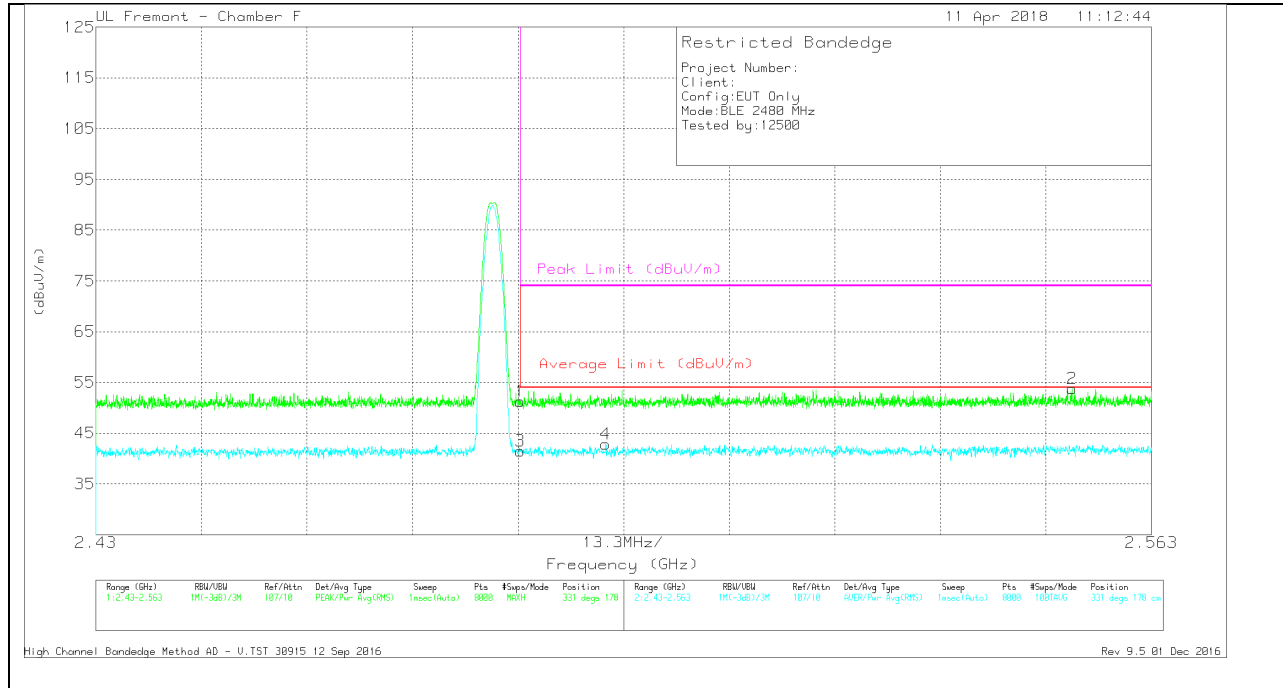
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.94	Pk	32.1	-20.7	51.34	-	-	74	-22.66	331	178	V
2	2.553	42.14	Pk	32.2	-20.6	53.74	-	-	74	-20.26	331	178	V
3	* 2.484	30.1	RMS	32.1	-20.7	41.5	54	-12.5	-	-	331	178	V
4	* 2.494	31.35	RMS	32.2	-20.7	42.85	54	-11.15	-	-	331	178	V

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

Pk - Peak detector

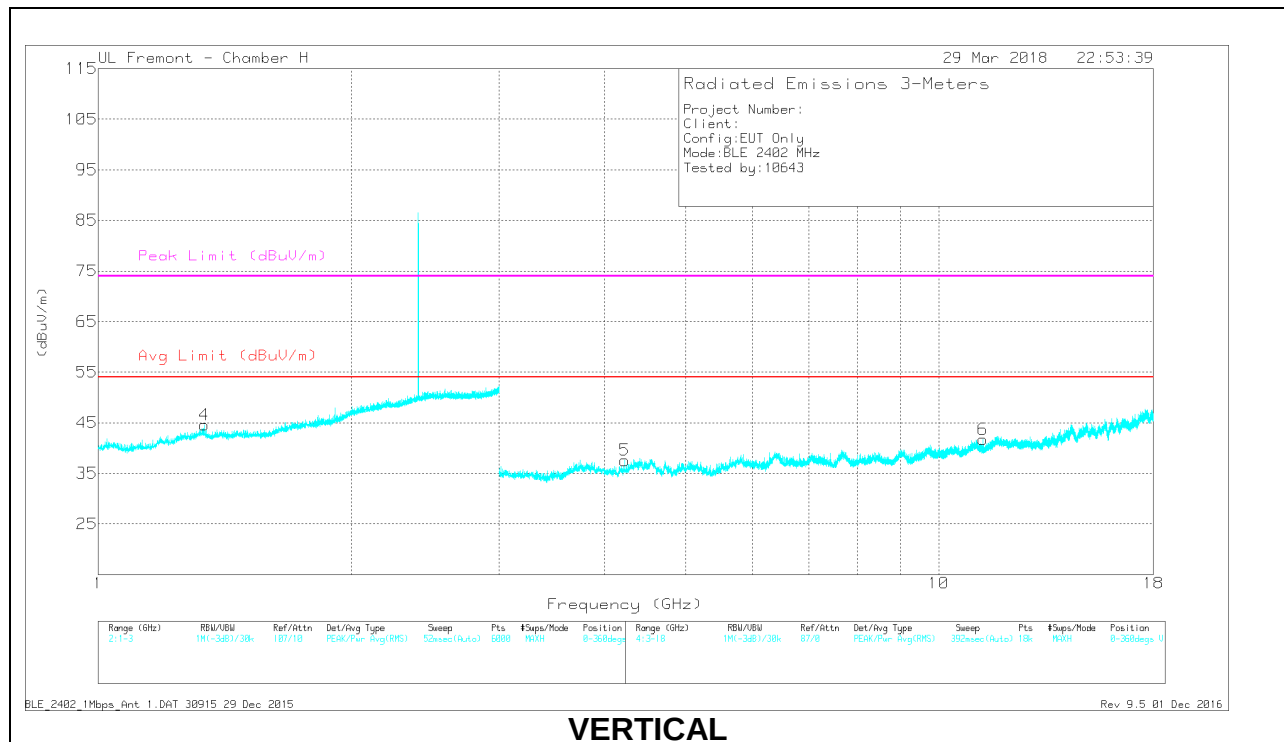
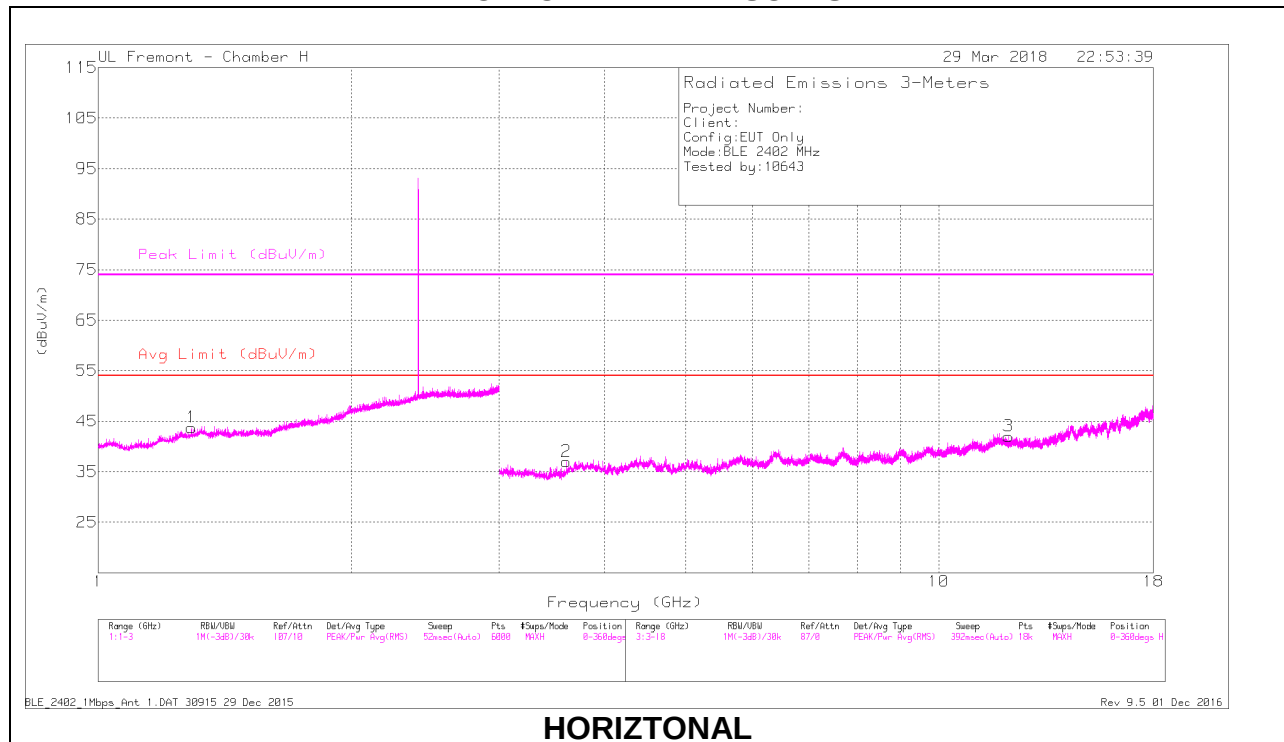
RMS - RMS detection

High Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

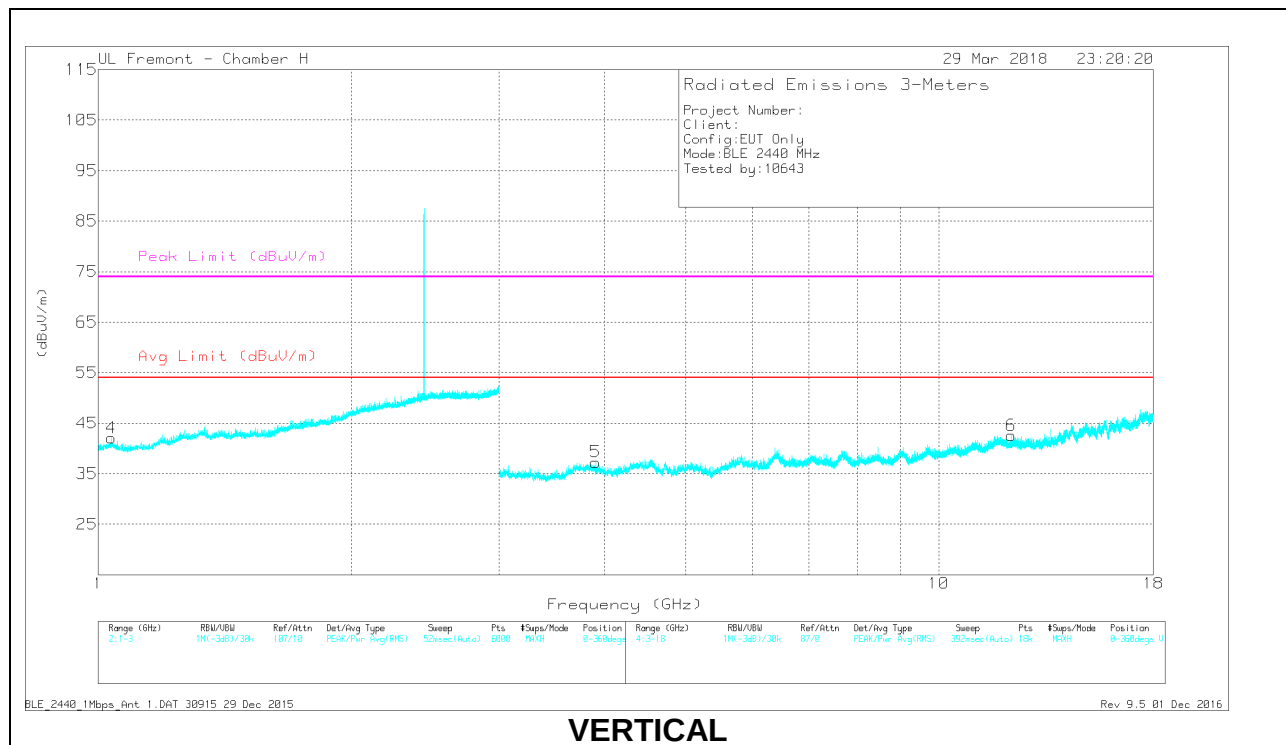
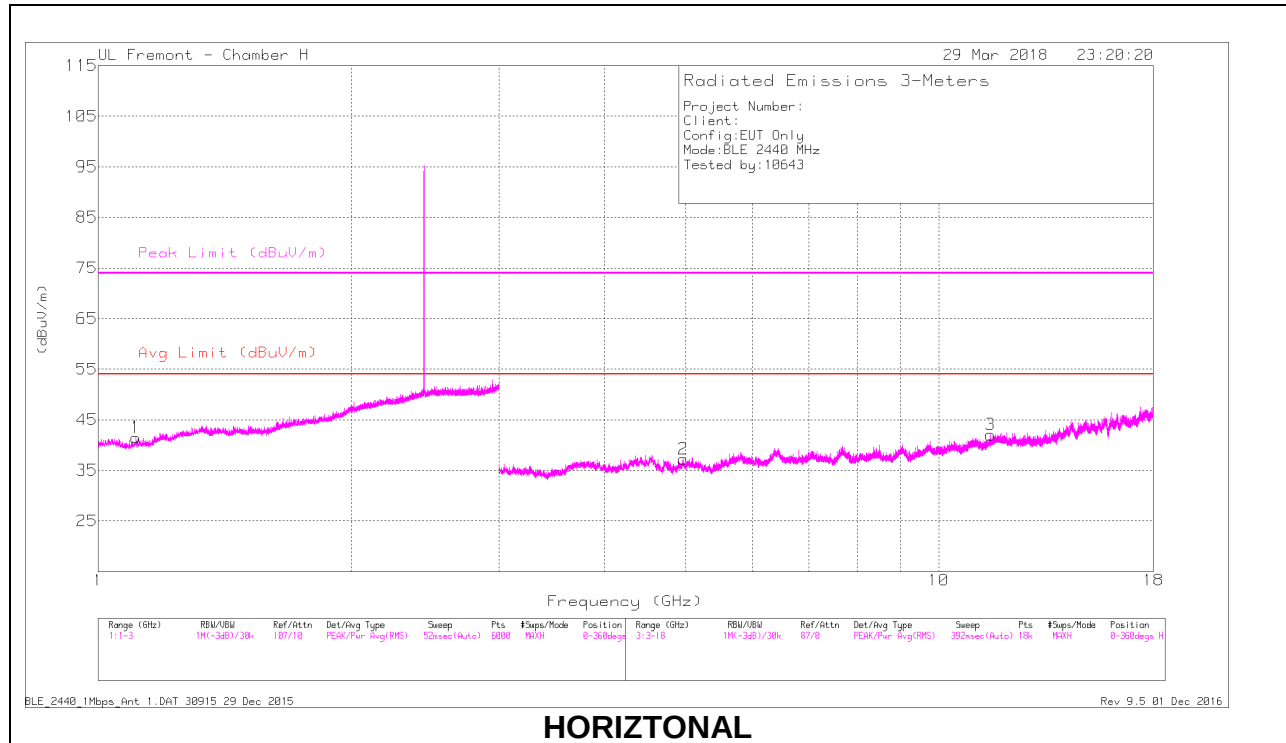
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.293	37.18	PK2	29.1	-15.9	50.38	-	-	74	-23.62	218	111	H
	* 1.291	24.57	MAv1	29.1	-15.9	37.77	54	-16.23	-	-	218	111	H
2	* 3.605	44.7	PK2	33.2	-35.2	42.7	-	-	74	-31.3	310	128	H
	* 3.605	33.32	MAv1	33.2	-35.2	31.32	54	-22.68	-	-	310	128	H
3	* 12.106	35.24	PK2	38.8	-25.9	48.14	-	-	74	-25.86	0	146	H
	* 12.105	23.79	MAv1	38.8	-26	36.59	54	-17.41	-	-	0	146	H
4	* 1.335	37.95	PK2	29.1	-15.8	51.25	-	-	74	-22.75	142	110	V
	* 1.334	25.22	MAv1	29.1	-15.8	38.52	54	-15.48	-	-	142	110	V
5	* 4.23	44.24	PK2	33.5	-35	42.74	-	-	74	-31.26	133	278	V
	* 4.232	33.05	MAv1	33.5	-35	31.55	54	-22.45	-	-	133	278	V
6	* 11.289	37.02	PK2	38.1	-26.4	48.72	-	-	74	-25.28	0	297	V
	* 11.289	24.28	MAv1	38.1	-26.4	35.98	54	-18.02	-	-	0	297	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

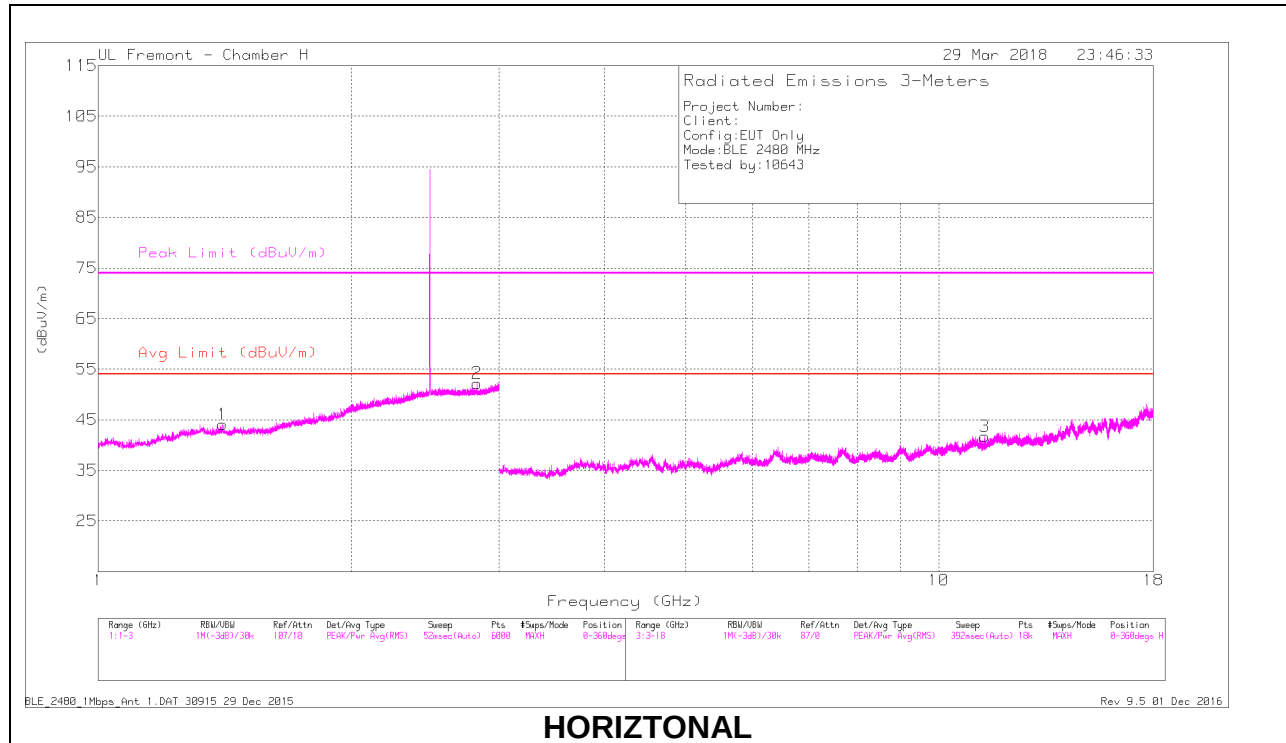
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.109	38.49	PK2	27	-16.1	49.39	-	-	74	-24.61	85	227	H
	* 1.11	25.17	MAv1	27	-16.1	36.07	54	-17.93	-	-	85	227	H
2	* 4.964	42.98	PK2	34.1	-33.7	43.38	-	-	74	-30.62	291	291	H
	* 4.964	31.38	MAv1	34.1	-33.7	31.78	54	-22.22	-	-	291	291	H
3	* 11.515	35.75	PK2	38.4	-26.3	47.85	-	-	74	-26.15	345	238	H
	* 11.517	24.36	MAv1	38.4	-26.3	36.46	54	-17.54	-	-	345	238	H
4	* 1.037	37.28	PK2	27.3	-16.2	48.38	-	-	74	-25.62	350	262	V
	* 1.036	25.37	MAv1	27.3	-16.2	36.47	54	-17.53	-	-	350	262	V
5	* 3.904	44.25	PK2	33.4	-34.7	42.95	-	-	74	-31.05	221	168	V
	* 3.903	32.5	MAv1	33.4	-34.7	31.2	54	-22.8	-	-	221	168	V
6	* 12.195	35.77	PK2	38.7	-26	48.47	-	-	74	-25.53	274	315	V
	* 12.194	24.29	MAv1	38.7	-26	36.99	54	-17.01	-	-	274	315	V

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

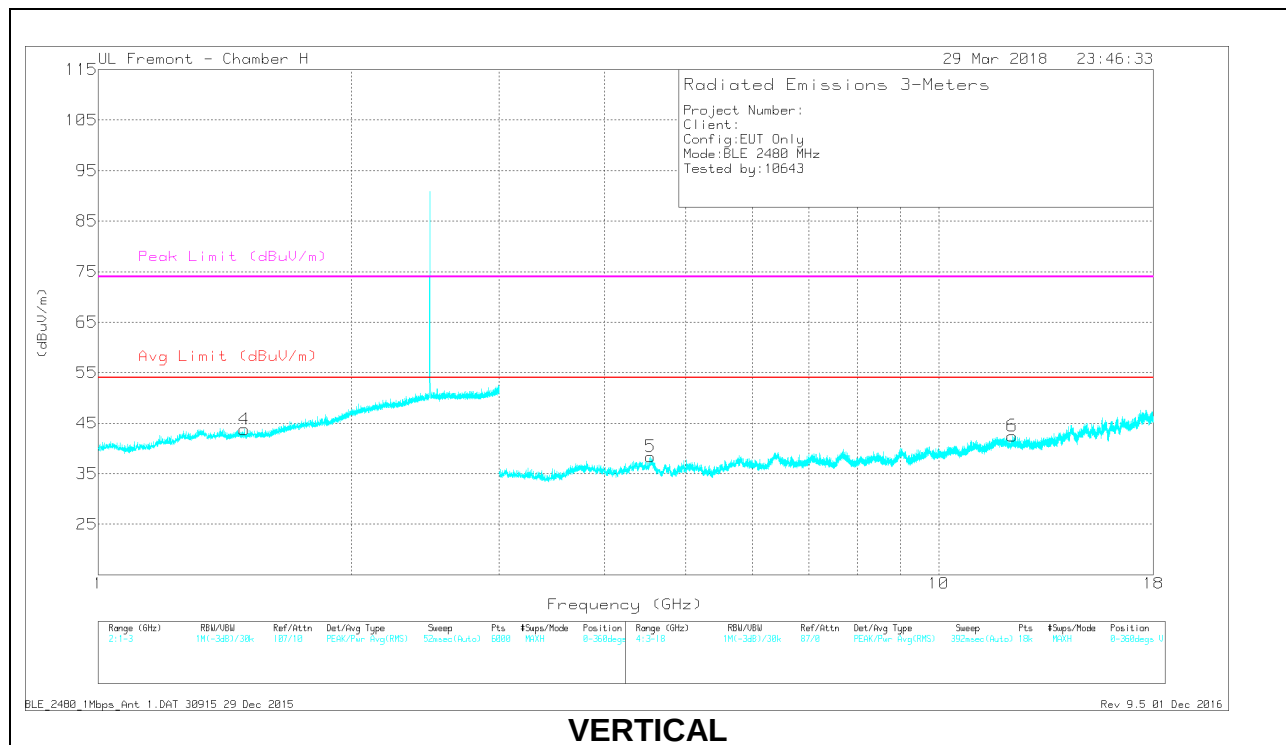
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.405	37.99	PK2	28.8	-15.5	51.29	-	-	74	-22.71	139	270	H
	* 1.405	25.07	MAv1	28.8	-15.5	38.37	54	-15.63	-	-	139	270	H
2	* 2.82	38.89	PK2	32.4	-13.7	57.59	-	-	74	-16.41	228	127	H
	* 2.82	26.34	MAv1	32.4	-13.7	45.04	54	-8.96	-	-	228	127	H
4	* 1.492	37.14	PK2	28.5	-15.3	50.34	-	-	74	-23.66	198	275	V
	* 1.491	24.92	MAv1	28.5	-15.3	38.12	54	-15.88	-	-	198	275	V
3	* 11.343	36.01	PK2	38.2	-26.6	47.61	-	-	74	-26.39	23	348	H
	* 11.345	24.55	MAv1	38.2	-26.5	36.25	54	-17.75	-	-	23	348	H
5	* 4.543	45.37	PK2	34.3	-34.7	44.97	-	-	74	-29.03	312	341	V
	* 4.543	33.54	MAv1	34.3	-34.7	33.14	54	-20.86	-	-	312	341	V
6	* 12.229	35.58	PK2	38.7	-25.9	48.38	-	-	74	-25.62	300	242	V
	* 12.23	23.72	MAv1	38.7	-25.9	36.52	54	-17.48	-	-	300	242	V

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

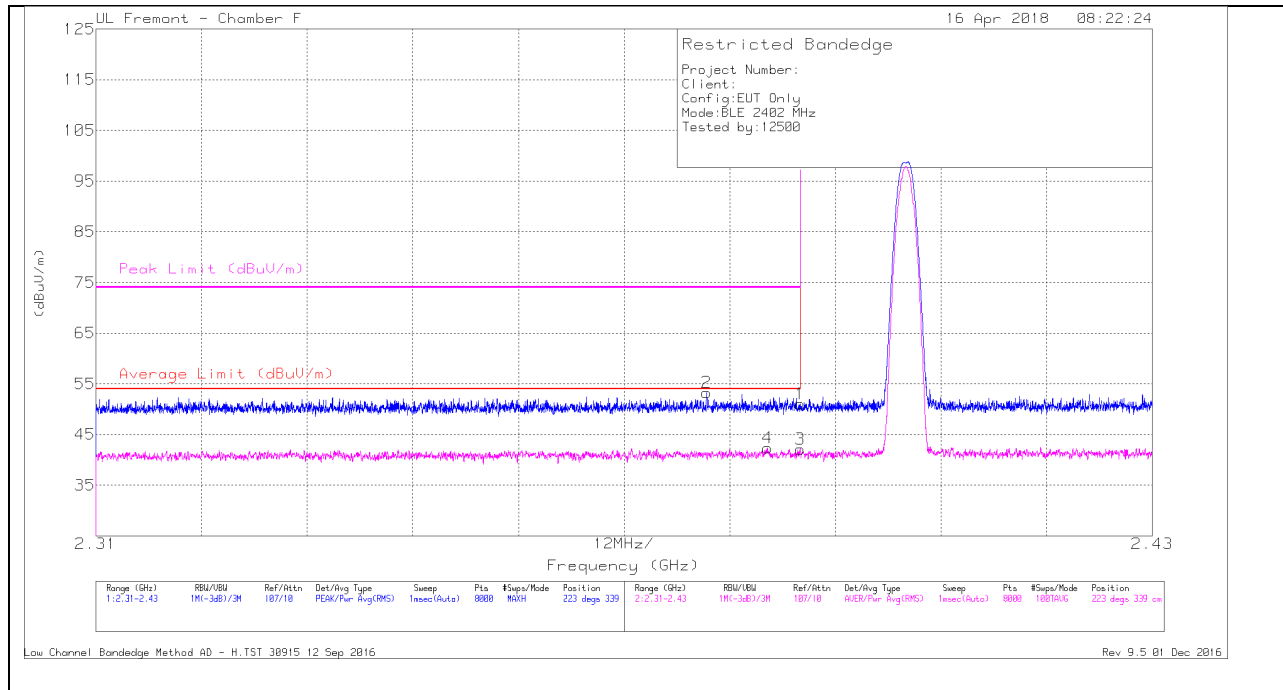
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Ftr/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	* 2.39	39.77	Pk	31.9	-20.6	51.07	-	-	74	-22.93	223	339	H
2	* 2.379	42.08	Pk	31.8	-20.6	53.28	-	-	74	-20.72	223	339	H
3	* 2.39	30.84	RMS	31.9	-20.6	42.14	54	-11.86	-	-	223	339	H
4	* 2.386	31.08	RMS	31.9	-20.6	42.38	54	-11.62	-	-	223	339	H

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

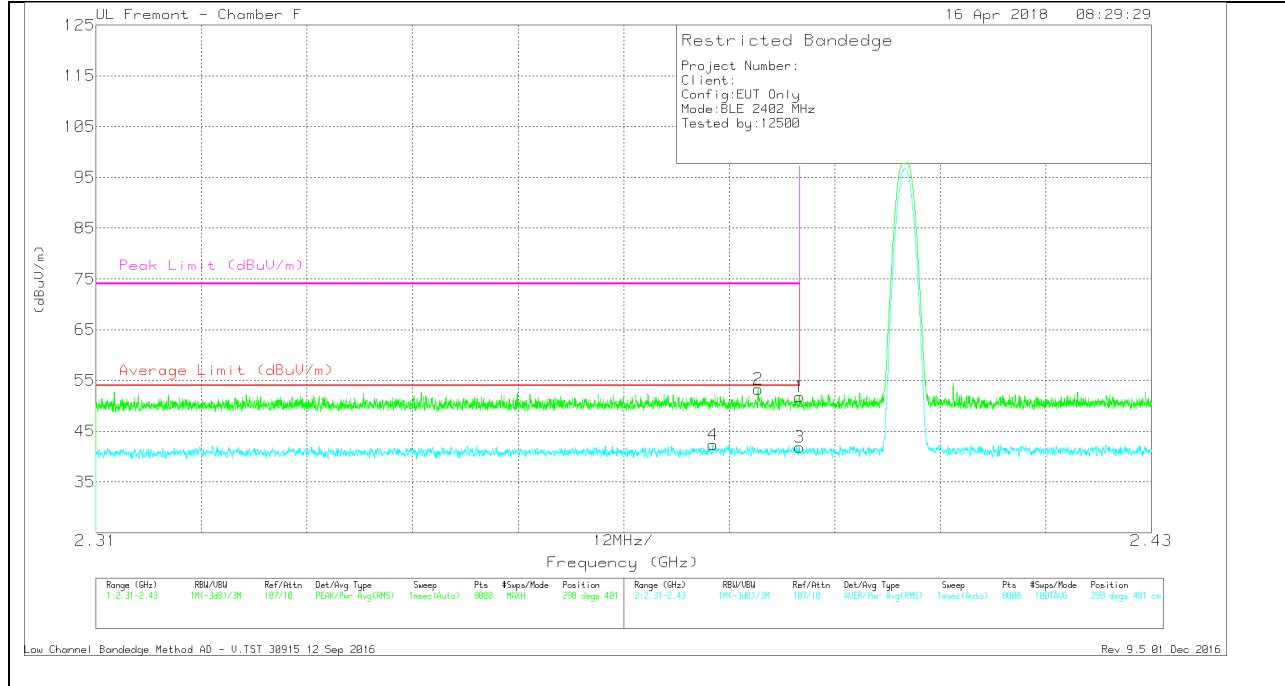
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.52	Pk	31.9	-20.6	51.82	-	-	74	-22.18	298	401	V
2	* 2.385	42.04	Pk	31.8	-20.6	53.24	-	-	74	-20.76	298	401	V
3	* 2.39	30.54	RMS	31.9	-20.6	41.84	54	-12.16	-	-	298	401	V
4	* 2.38	31.13	RMS	31.8	-20.6	42.33	54	-11.67	-	-	298	401	V

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

Pk - Peak detector

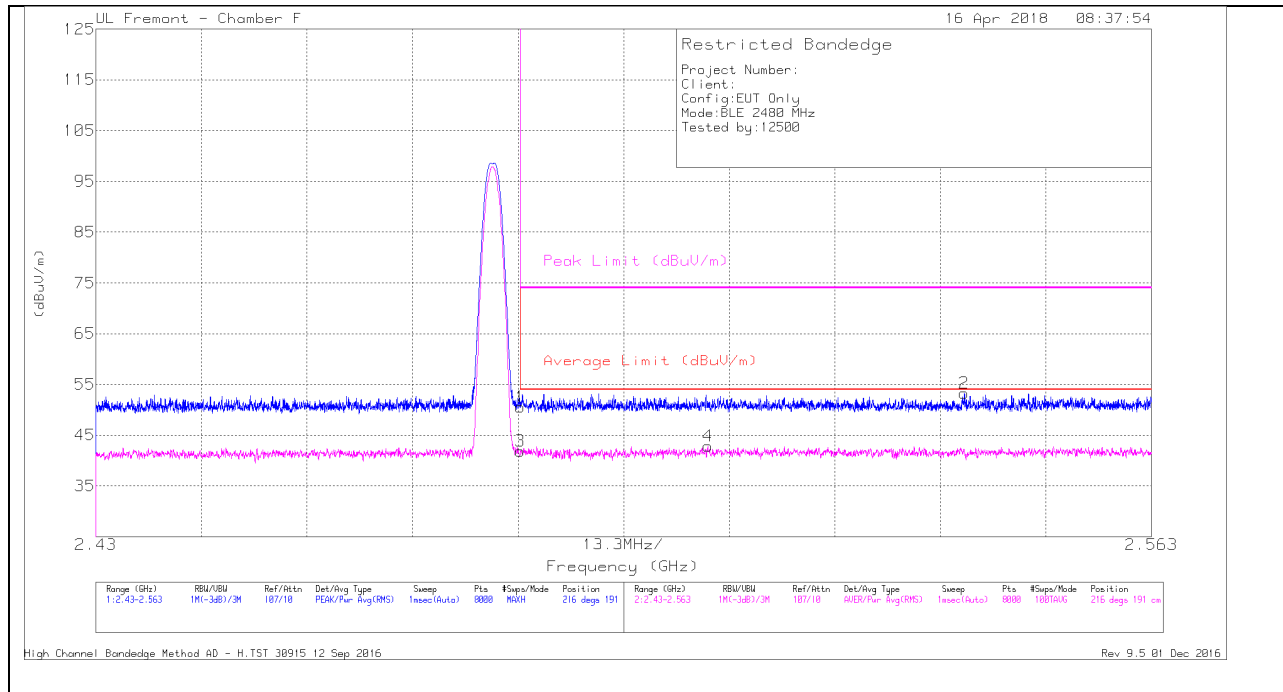
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

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BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.19	Pk	32.1	-20.7	50.59	-	-	74	-23.41	216	191	H
2	2.539	41.75	Pk	32.2	-20.7	53.25	-	-	74	-20.75	216	191	H
3	* 2.484	30.46	RMS	32.1	-20.7	41.86	54	-12.14	-	-	216	191	H
4	2.507	31.29	RMS	32.2	-20.6	42.89	54	-11.11	-	-	216	191	H

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

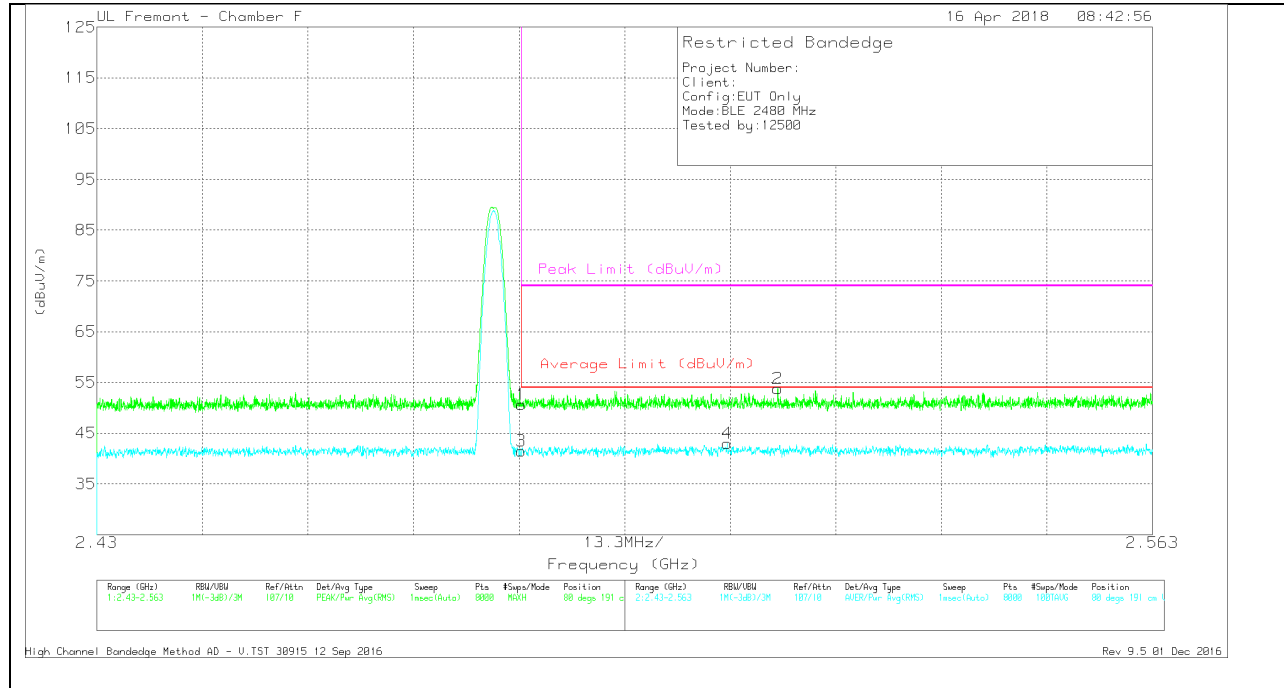
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.29	Pk	32.1	-20.7	50.69	-	-	74	-23.31	80	191	V
2	2.516	42.28	Pk	32.2	-20.7	53.78	-	-	74	-20.22	80	191	V
3	* 2.484	30.07	RMS	32.1	-20.7	41.47	54	-12.53	-	-	80	191	V
4	2.509	31.36	RMS	32.2	-20.6	42.96	54	-11.04	-	-	80	191	V

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

Pk - Peak detector

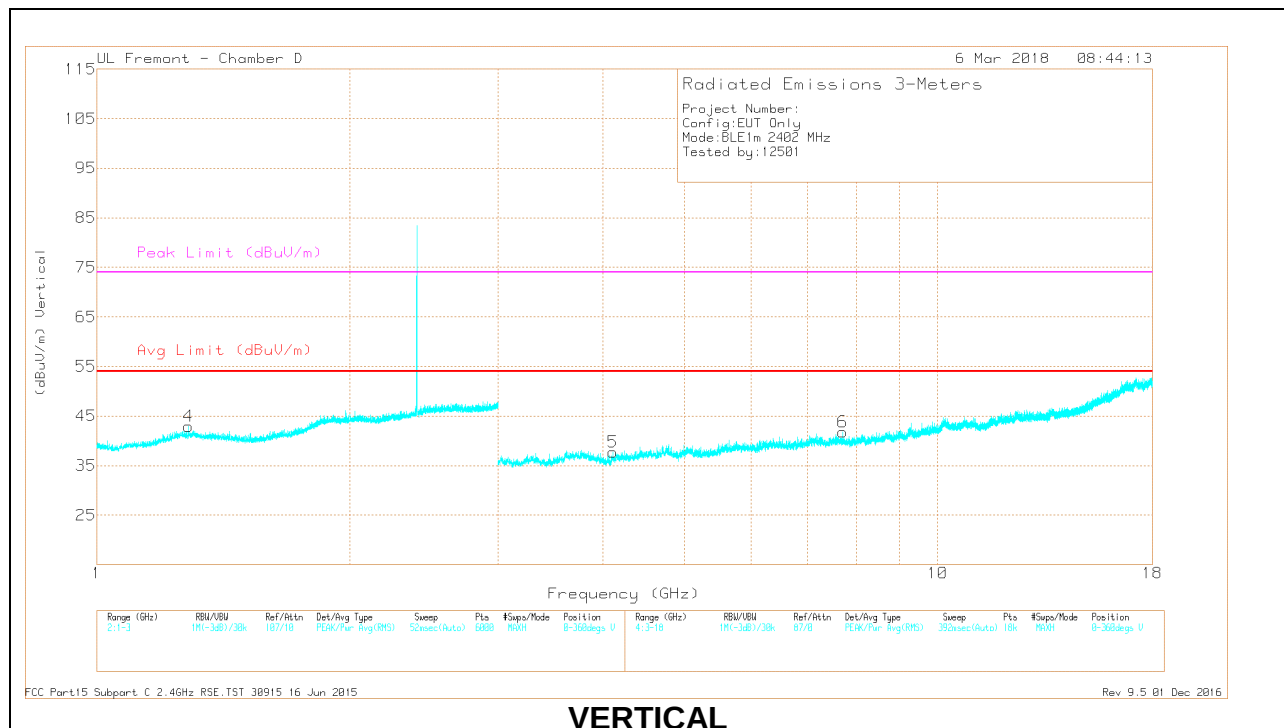
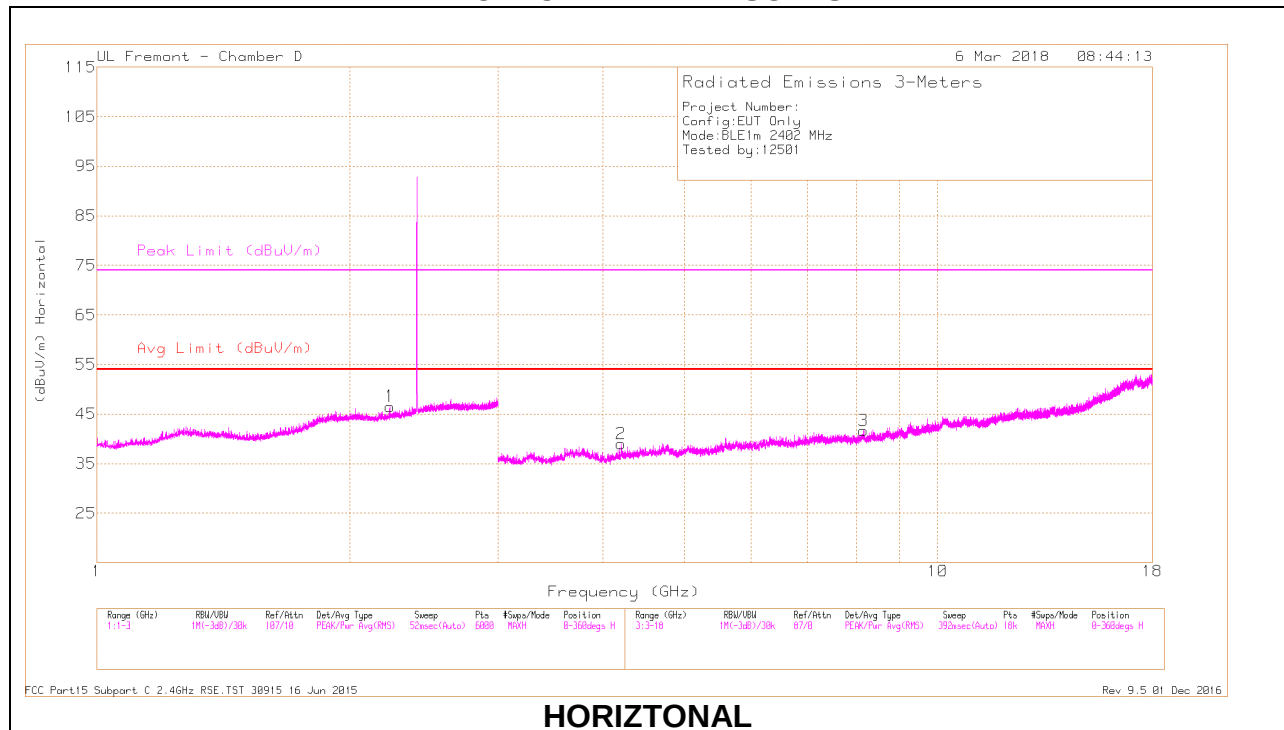
RMS - RMS detection

High Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

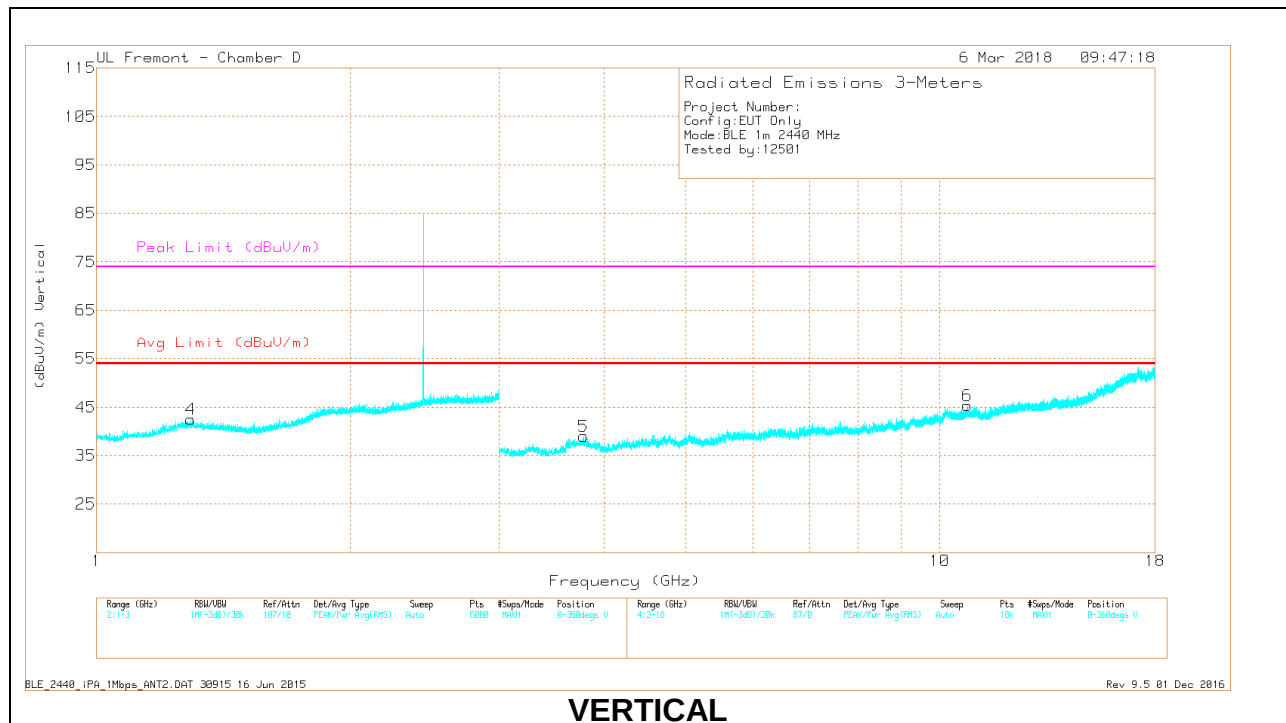
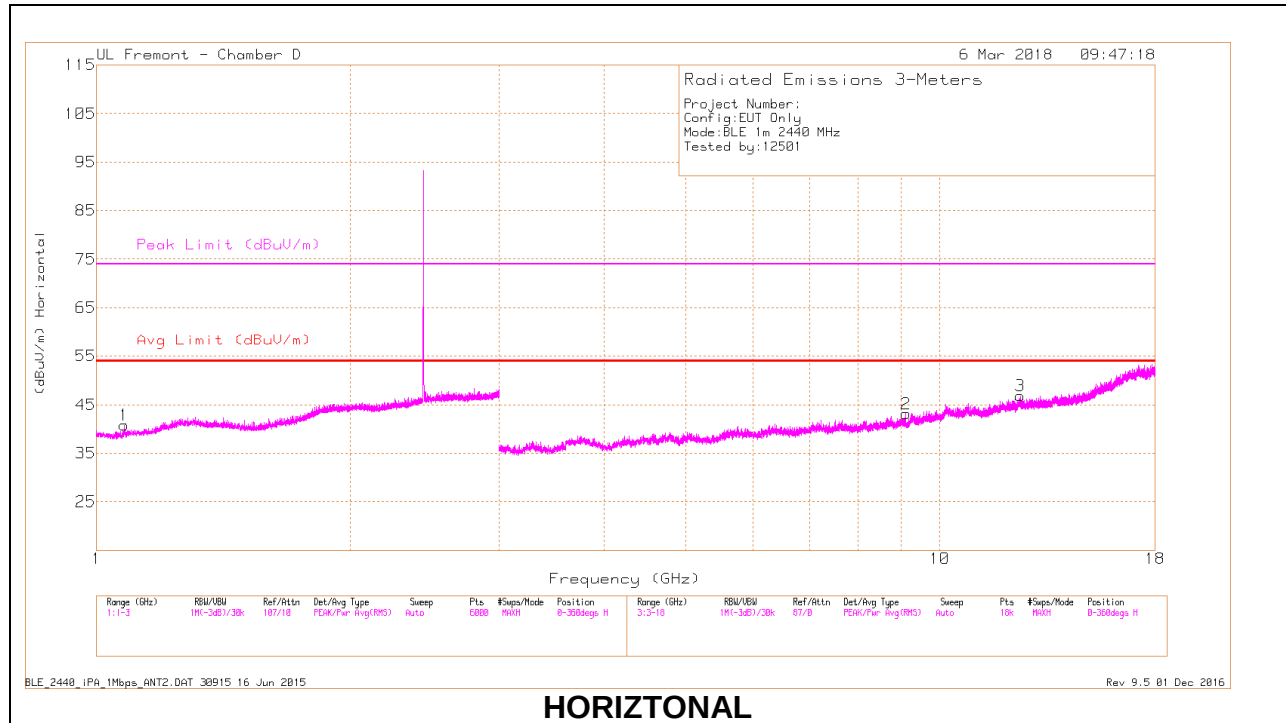
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.228	41.49	PK2	31.4	-20.8	52.09	-	-	74	-21.91	246	212	H
	* 2.229	29.64	MAv1	31.4	-20.7	40.34	54	-13.66	-	-	246	212	H
2	* 4.206	38.36	PK2	33.7	-27.2	44.86	-	-	74	-29.14	80	259	H
	* 4.204	25.89	MAv1	33.7	-27.2	32.39	54	-21.61	-	-	80	259	H
3	* 8.164	34.58	PK2	35.8	-22.6	47.78	-	-	74	-26.22	214	288	H
	* 8.162	23.14	MAv1	35.8	-22.7	36.24	54	-17.76	-	-	214	288	H
4	* 1.285	42.16	PK2	29.2	-22.1	49.26	-	-	74	-24.74	51	242	V
	* 1.285	29.89	MAv1	29.2	-22	37.09	54	-16.91	-	-	51	242	V
5	* 4.109	37.83	PK2	33.6	-27.8	43.63	-	-	74	-30.37	318	215	V
	* 4.109	26.22	MAv1	33.6	-27.8	32.02	54	-21.98	-	-	318	215	V
6	* 7.71	35.76	PK2	36	-24.1	47.66	-	-	74	-26.34	327	266	V
	* 7.712	24.25	MAv1	36	-24.2	36.05	54	-17.95	-	-	327	266	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

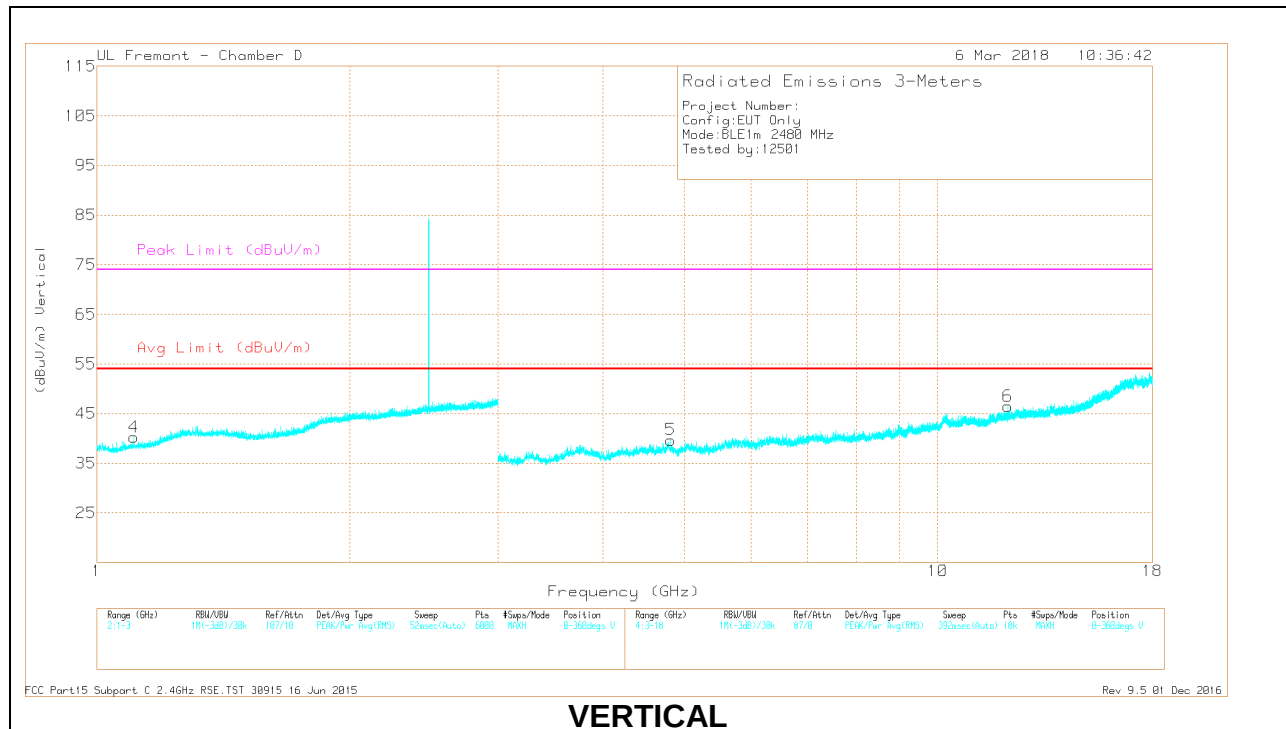
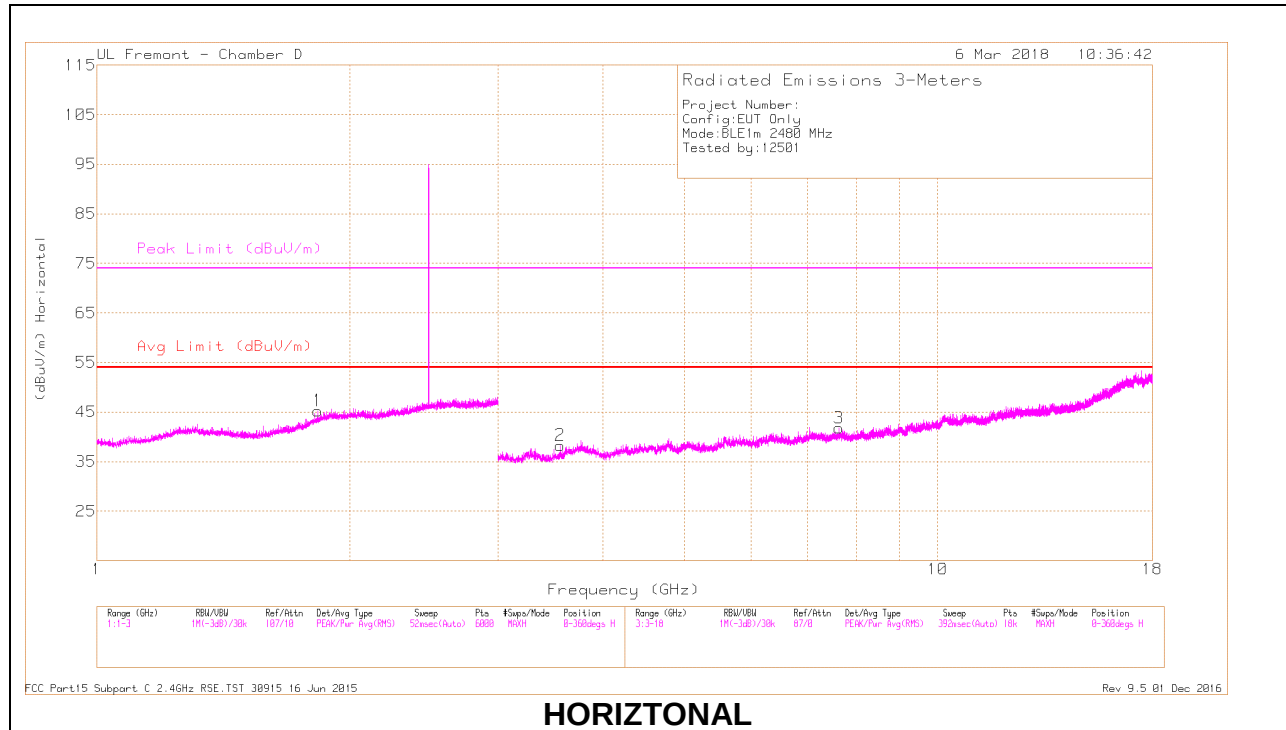
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.077	42.43	PK2	27.1	-22.3	47.23	-	-	74	-26.77	27	169	H
	* 1.077	30.15	MAv1	27.1	-22.3	34.95	54	-19.05	-	-	27	169	H
2	* 9.115	34.32	PK2	36.3	-22.2	48.42	-	-	74	-25.58	4	281	H
	* 9.113	22.66	MAv1	36.3	-22.2	36.76	54	-17.24	-	-	4	281	H
3	* 12.445	33.49	PK2	39	-19.8	52.69	-	-	74	-21.31	360	254	H
	* 12.448	22.07	MAv1	39	-19.8	41.27	54	-12.73	-	-	360	254	H
4	* 1.295	42.16	PK2	29.3	-22	49.46	-	-	74	-24.54	250	253	V
	* 1.295	29.89	MAv1	29.3	-22	37.19	54	-16.81	-	-	250	253	V
5	* 3.782	38.18	PK2	33.6	-27.9	43.88	-	-	74	-30.12	354	356	V
	* 3.781	26.65	MAv1	33.6	-27.9	32.35	54	-21.65	-	-	354	356	V
6	* 10.775	33.03	PK2	37.7	-19.6	51.13	-	-	74	-22.87	127	151	V
	* 10.777	21.64	MAv1	37.7	-19.6	39.74	54	-14.26	-	-	127	151	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.107	41.74	PK2	27.4	-22.3	46.84	-	-	74	-27.16	0	247	V
	* 1.106	30.04	MAv1	27.4	-22.3	35.14	54	-18.86	-	-	0	247	V
2	* 3.556	38.69	PK2	33.4	-27.9	44.19	-	-	74	-29.81	116	364	H
	* 3.556	26.98	MAv1	33.4	-27.9	32.48	54	-21.52	-	-	116	364	H
3	* 7.635	35.36	PK2	36.2	-24.1	47.46	-	-	74	-26.54	304	135	H
	* 7.634	24.03	MAv1	36.2	-24.1	36.13	54	-17.87	-	-	304	135	H
5	* 4.811	37.11	PK2	34.5	-26.6	45.01	-	-	74	-28.99	305	105	V
	* 4.81	25.55	MAv1	34.5	-26.5	33.55	54	-20.45	-	-	305	105	V
6	* 12.126	33.74	PK2	38.9	-20.4	52.24	-	-	74	-21.76	246	245	V
	* 12.126	21.93	MAv1	38.9	-20.4	40.43	54	-13.57	-	-	246	245	V
1	1.831	41.3	PK2	30.9	-21.2	51	-	-	-	-	184	305	H

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

PK2 - KDB558074 Method: Maximum Peak

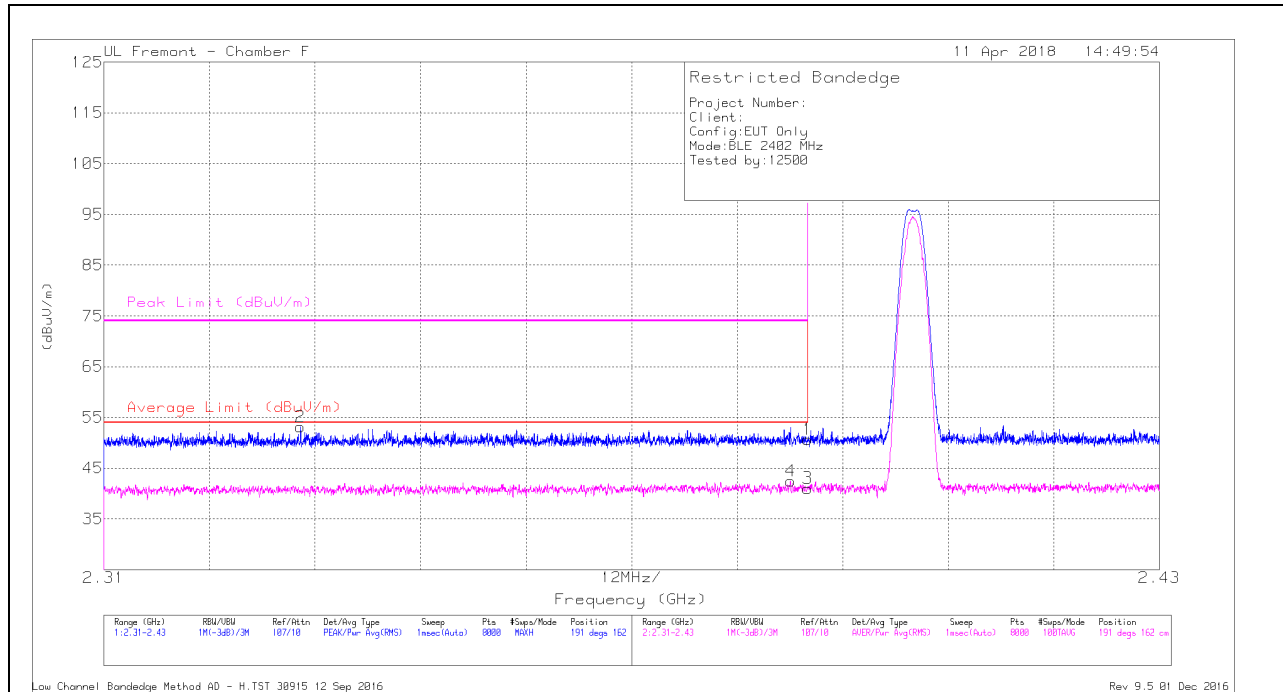
MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.4. LOW POWER BLE (2Mbps)

Antenna 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.4	Pk	31.9	-20.6	50.7	-	-	74	-23.3	191	162	H
2	* 2.332	42.11	Pk	31.7	-20.7	53.11	-	-	74	-20.89	191	162	H
3	* 2.39	29.74	RMS	31.9	-20.6	41.04	54	-12.96	-	-	191	162	H
4	* 2.388	31.16	RMS	31.9	-20.6	42.46	54	-11.54	-	-	191	162	H

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

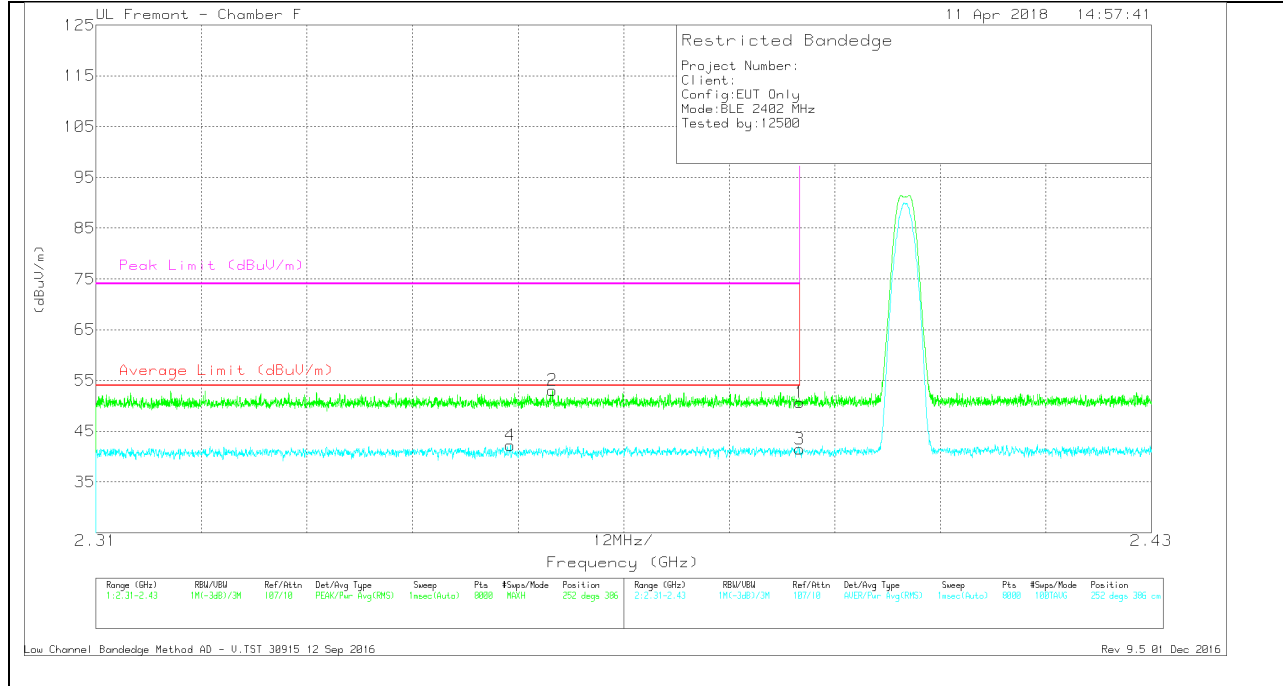
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.31	Pk	31.9	-20.6	50.61	-	-	74	-23.39	252	386	V
2	* 2.362	41.98	Pk	31.8	-20.7	53.08	-	-	74	-20.92	252	386	V
3	* 2.39	30.22	RMS	31.9	-20.6	41.52	54	-12.48	-	-	252	386	V
4	* 2.357	31.08	RMS	31.8	-20.7	42.18	54	-11.82	-	-	252	386	V

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

Pk - Peak detector

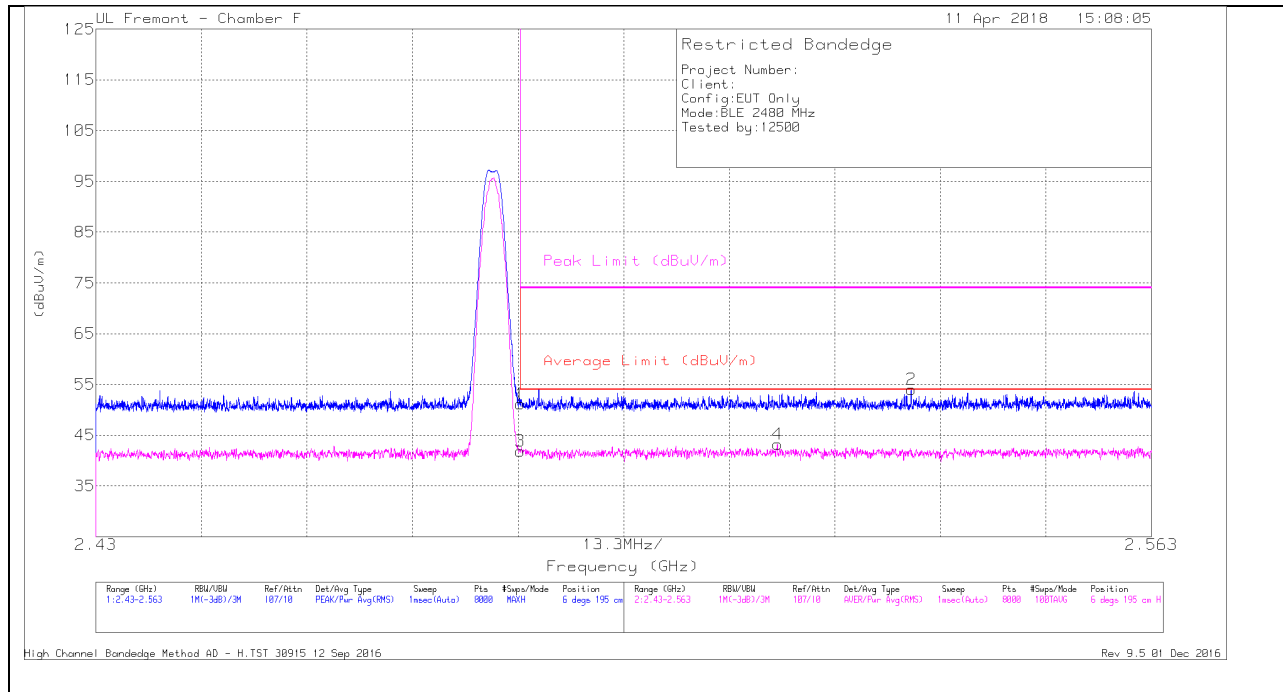
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

BANDEGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.72	Pk	32.1	-20.7	51.12	-	-	74	-22.88	6	195	H
2	2.533	42.55	Pk	32.2	-20.7	54.05	-	-	74	-19.95	6	195	H
3	* 2.484	30.43	RMS	32.1	-20.7	41.83	54	-12.17	-	-	6	195	H
4	2.516	31.64	RMS	32.2	-20.6	43.24	54	-10.76	-	-	6	195	H

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

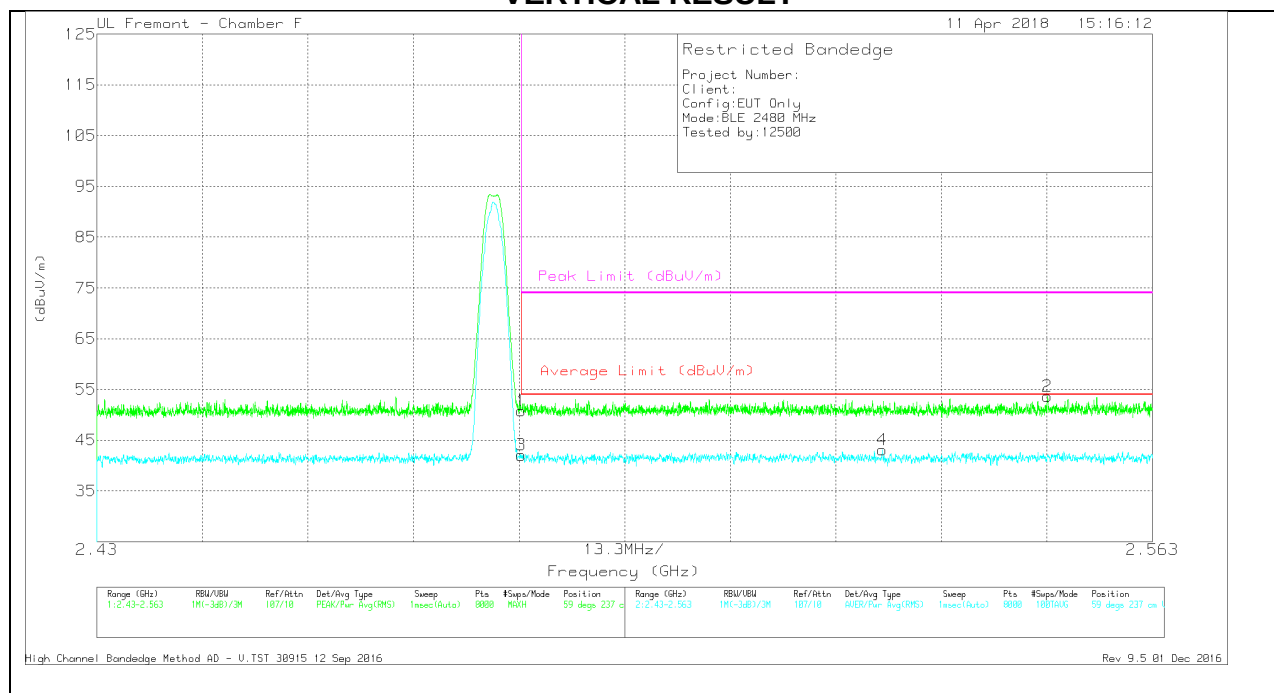
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Fltr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.4	Pk	32.1	-20.7	50.8	-	-	74	-23.2	59	237	V
2	2.55	42.03	Pk	32.2	-20.6	53.63	-	-	74	-20.37	59	237	V
3	* 2.484	30.64	RMS	32.1	-20.7	42.04	54	-11.96	-	-	59	237	V
4	2.529	31.55	RMS	32.2	-20.7	43.05	54	-10.95	-	-	59	237	V

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

Pk - Peak detector

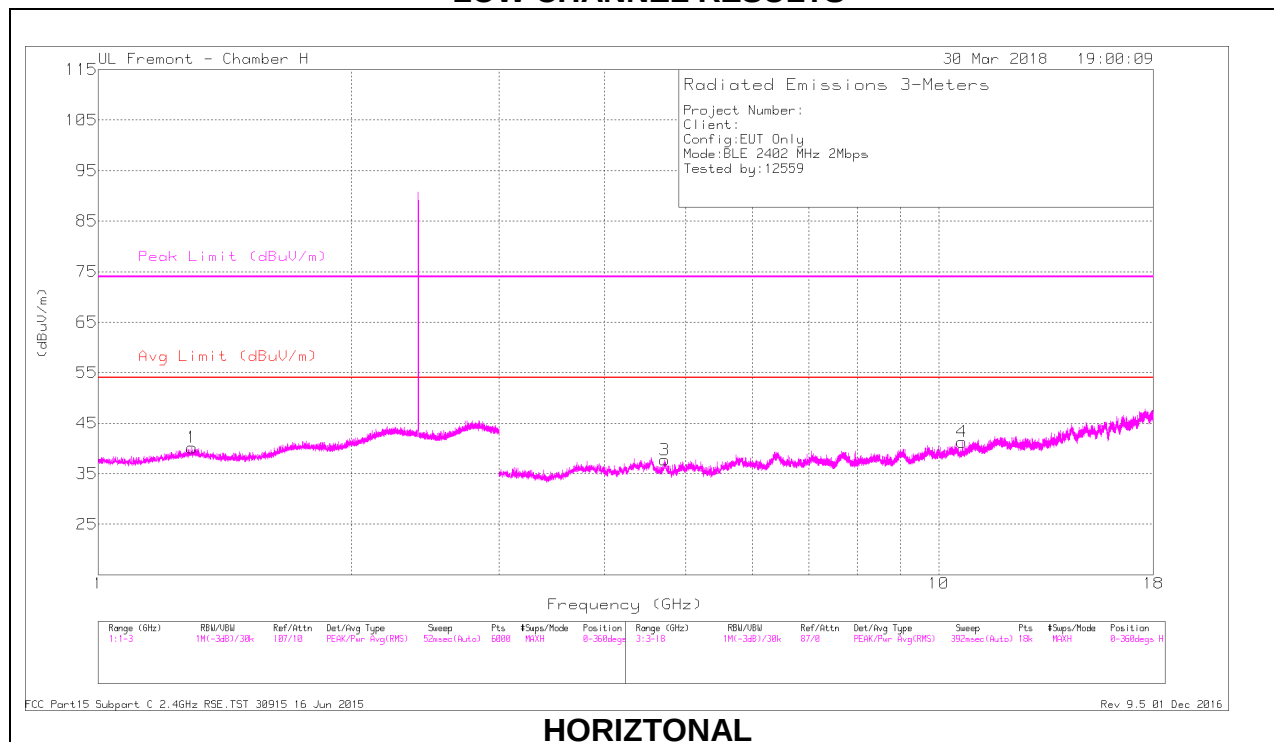
RMS - RMS detection

High Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

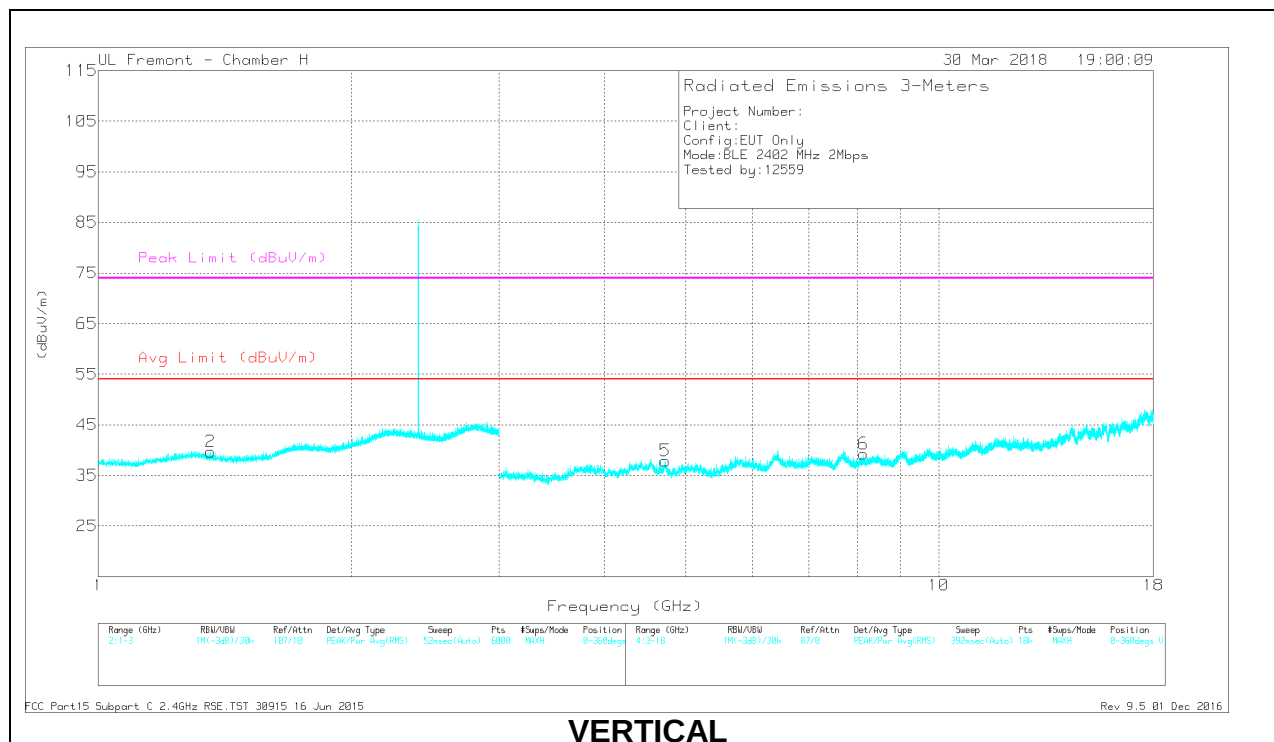
Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

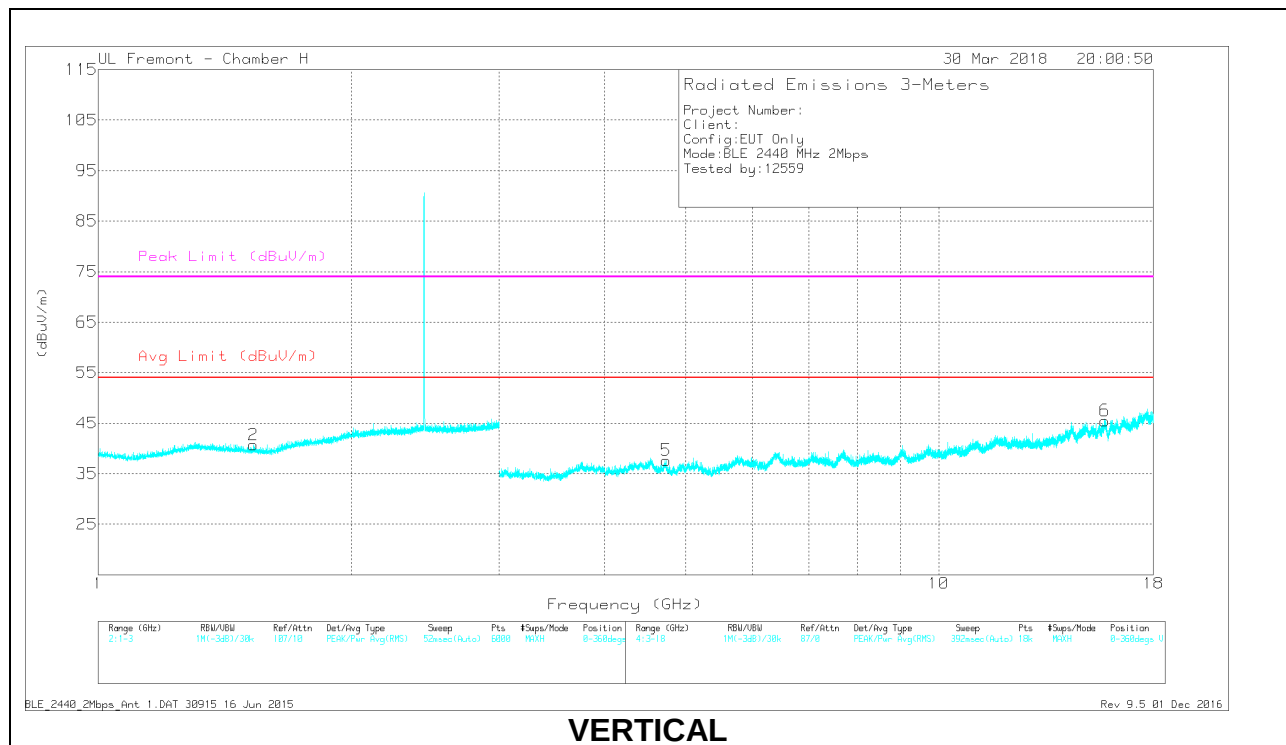
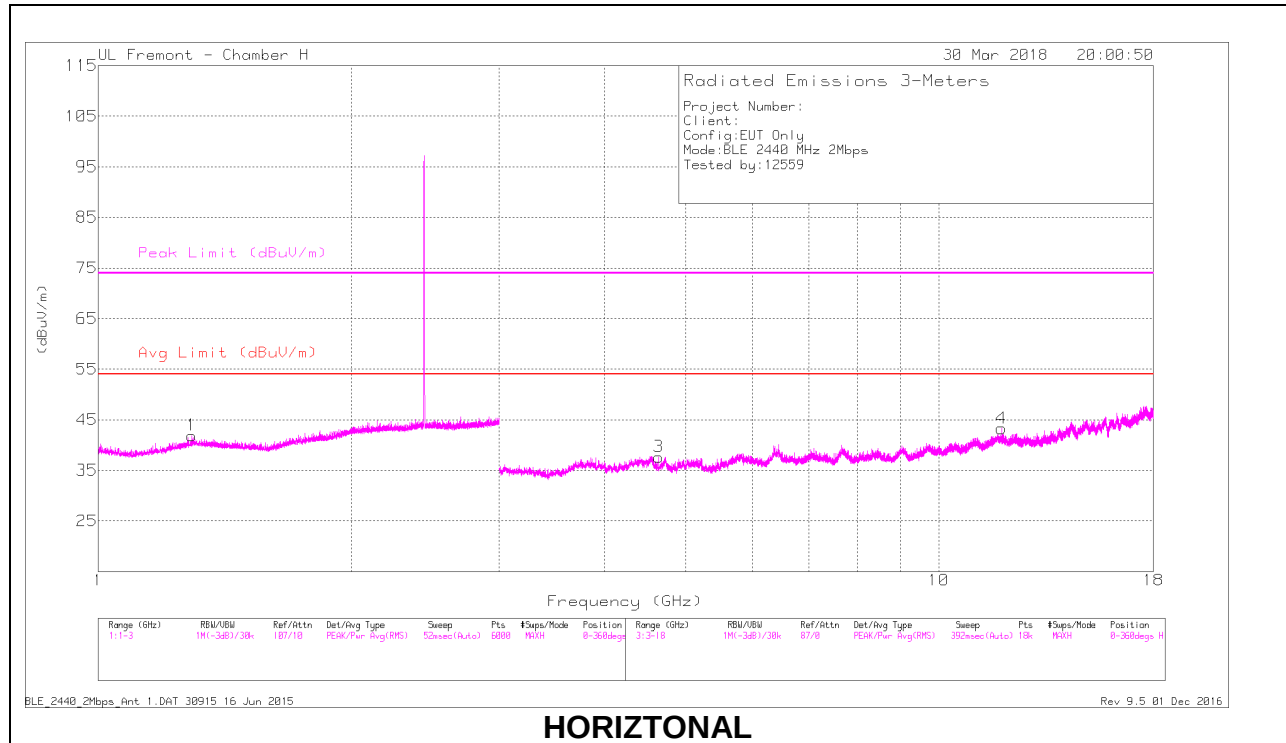
Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.291	45.72	PK2	29.1	-27.5	47.32	-	-	74	-26.68	46	386	H
	* 1.291	33.15	MAv1	29.1	-27.5	34.75	54	-19.25	-	-	46	386	H
2	* 1.362	46.71	PK2	28.9	-27.5	48.11	-	-	74	-25.89	163	107	V
	* 1.361	34.51	MAv1	29	-27.5	36.01	54	-17.99	-	-	163	107	V
3	* 4.718	42.11	PK2	34.1	-33.8	42.41	-	-	74	-31.59	222	326	H
	* 4.718	30.95	MAv1	34.1	-33.8	31.25	54	-22.75	-	-	222	326	H
4	* 10.656	37.58	PK2	37.6	-27.4	47.78	-	-	74	-26.22	0	391	H
	* 10.658	25.33	MAv1	37.6	-27.4	35.53	54	-18.47	-	-	0	391	H
5	* 4.727	42.87	PK2	34.2	-33.9	43.17	-	-	74	-30.83	277	126	V
	* 4.725	31.52	MAv1	34.1	-33.9	31.72	54	-22.28	-	-	277	126	V
6	* 8.134	39.22	PK2	36.2	-29.9	45.52	-	-	74	-28.48	357	378	V
	* 8.133	27.49	MAv1	36.2	-29.8	33.89	54	-20.11	-	-	357	378	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

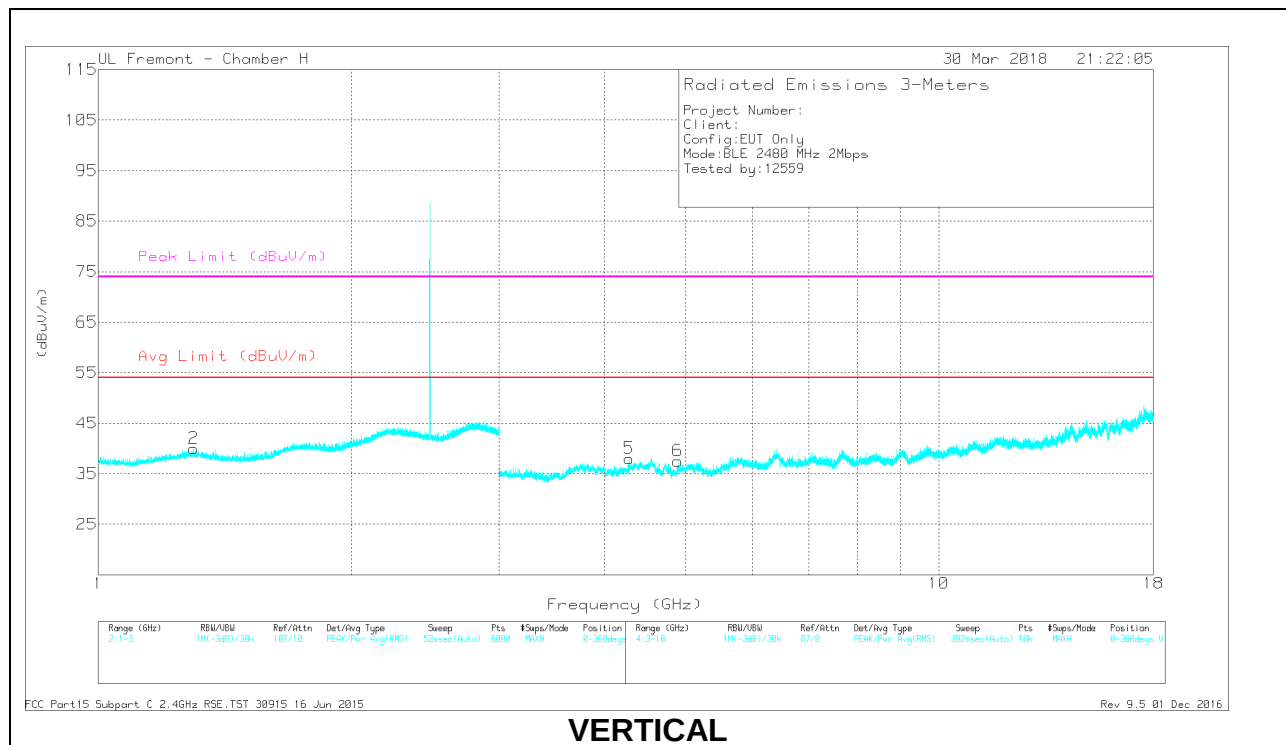
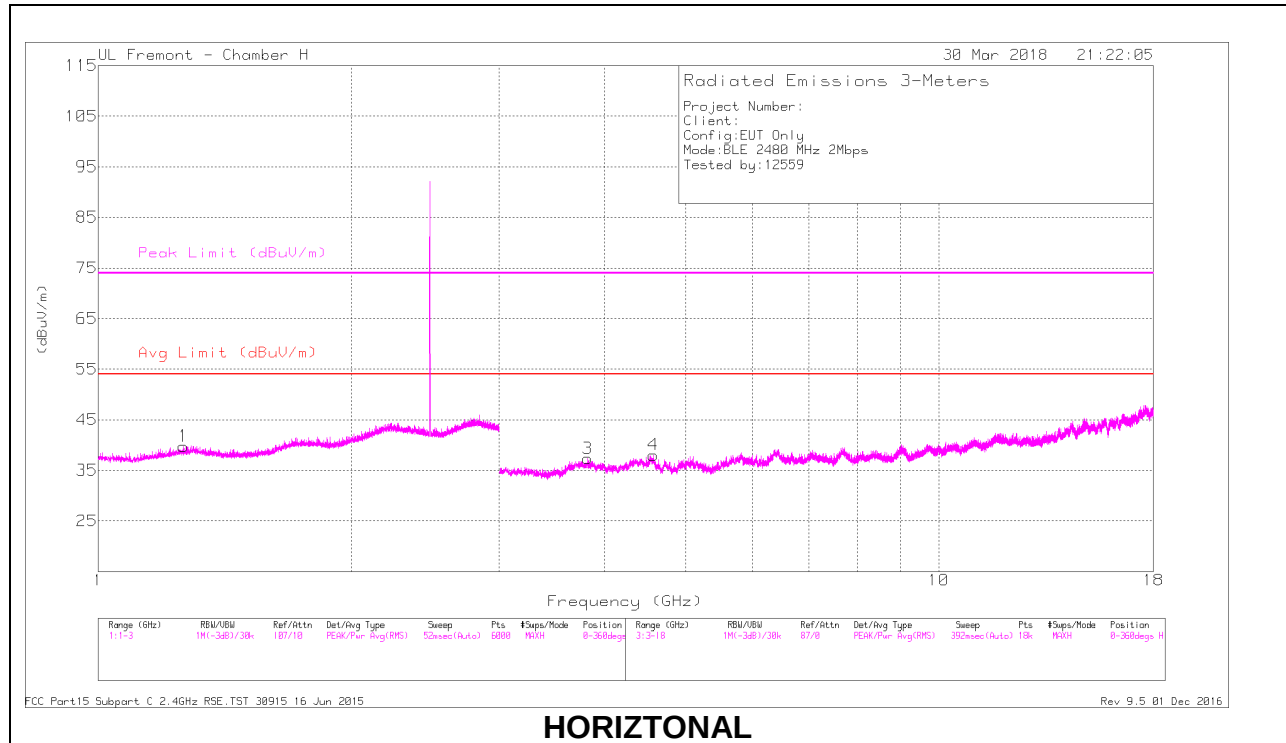
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.293	44.81	PK2	29.1	-27.5	46.41	-	-	74	-27.59	44	318	H
	* 1.292	33.09	MAv1	29.1	-27.5	34.69	54	-19.31	-	-	44	318	H
2	* 1.53	45.28	PK2	28.3	-27.7	45.88	-	-	74	-28.12	192	264	V
	* 1.53	33.43	MAv1	28.3	-27.7	34.03	54	-19.97	-	-	192	264	V
3	* 4.643	43.79	PK2	34.2	-34	43.99	-	-	74	-30.01	246	156	H
	* 4.645	32.21	MAv1	34.2	-33.9	32.51	54	-21.49	-	-	246	156	H
4	* 11.876	35.88	PK2	39	-26	48.88	-	-	74	-25.12	283	340	H
	* 11.874	24.18	MAv1	39	-26	37.18	54	-16.82	-	-	283	340	H
5	* 4.737	41.89	PK2	34.2	-34	42.09	-	-	74	-31.91	290	283	V
	* 4.736	30.78	MAv1	34.2	-34	30.98	54	-23.02	-	-	290	283	V
6	* 15.764	34.74	PK2	41.8	-24	52.54	-	-	74	-21.46	106	320	V
	* 15.766	23.52	MAv1	41.8	-24.1	41.22	54	-12.78	-	-	106	320	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.264	44.69	PK2	28.7	-27.5	45.89	-	-	74	-28.11	185	361	H
	* 1.263	33.19	MAv1	28.7	-27.5	34.39	54	-19.61	-	-	185	361	H
2	* 1.297	45.74	PK2	29.2	-27.5	47.44	-	-	74	-26.56	176	291	V
	* 1.299	33.05	MAv1	29.2	-27.5	34.75	54	-19.25	-	-	176	291	V
3	* 3.822	44.94	PK2	33.2	-34.8	43.34	-	-	74	-30.66	171	106	H
	* 3.82	33.54	MAv1	33.2	-34.8	31.94	54	-22.06	-	-	171	106	H
4	* 4.573	44.17	PK2	34.3	-34.5	43.97	-	-	74	-30.03	318	111	H
	* 4.573	32.75	MAv1	34.3	-34.5	32.55	54	-21.45	-	-	318	111	H
5	* 4.283	44.68	PK2	33.7	-34.8	43.58	-	-	74	-30.42	119	268	V
	* 4.283	33.08	MAv1	33.7	-34.8	31.98	54	-22.02	-	-	119	268	V
6	* 4.893	44.48	PK2	34.1	-33.5	45.08	-	-	74	-28.92	325	291	V
	* 4.893	32.02	MAv1	34.1	-33.5	32.62	-	-	-	-	325	291	V

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

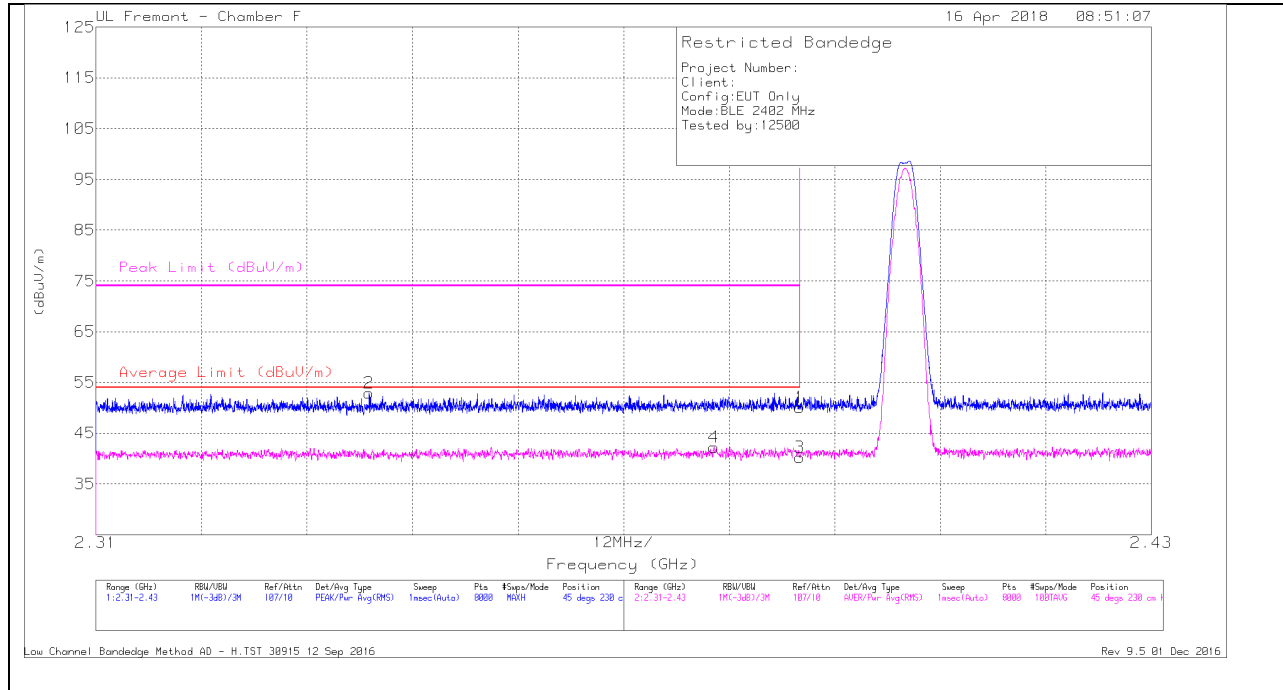
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

Antenna 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.78	Pk	31.9	-20.6	50.08	-	-	74	-23.92	45	230	H
2	* 2.341	41.9	Pk	31.7	-20.7	52.9	-	-	74	-21.1	45	230	H
3	* 2.39	28.97	RMS	31.9	-20.6	40.27	54	-13.73	-	-	45	230	H
4	* 2.38	31.05	RMS	31.8	-20.6	42.25	54	-11.75	-	-	45	230	H

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

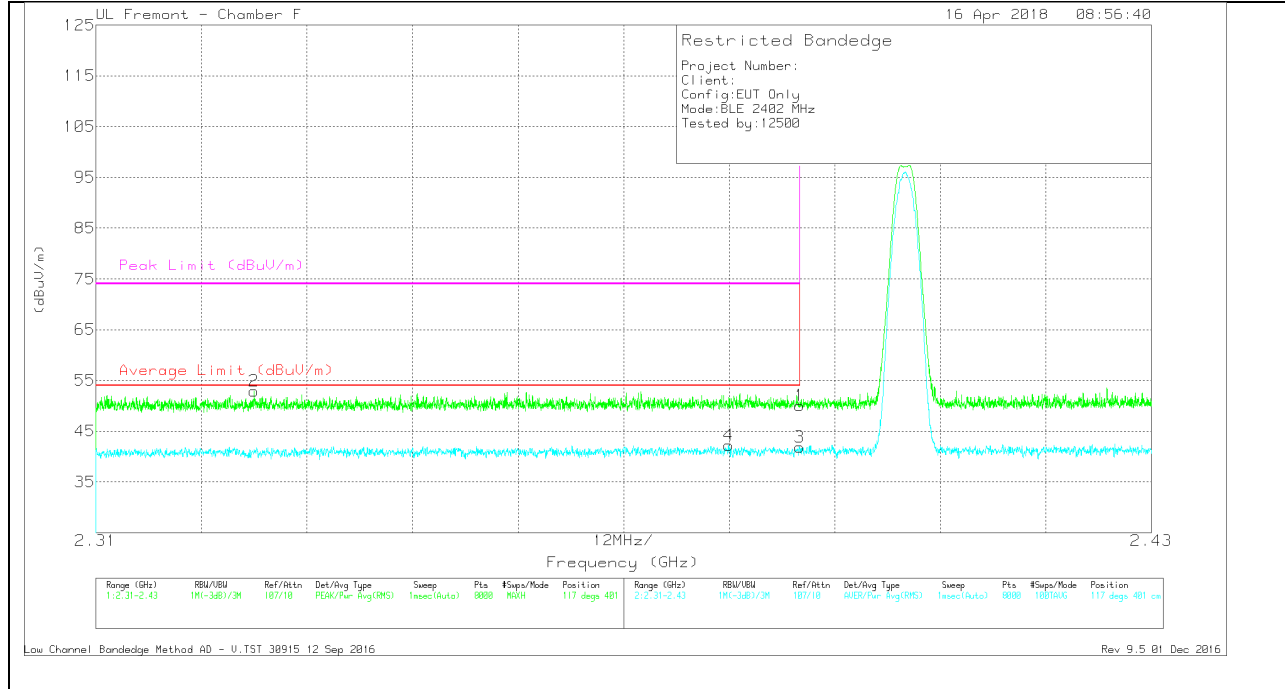
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.76	Pk	31.9	-20.6	50.06	-	-	74	-23.94	117	401	V
2	* 2.328	41.87	Pk	31.7	-20.7	52.87	-	-	74	-21.13	117	401	V
3	* 2.39	30.5	RMS	31.9	-20.6	41.8	54	-12.2	-	-	117	401	V
4	* 2.382	31.05	RMS	31.8	-20.6	42.25	54	-11.75	-	-	117	401	V

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

Pk - Peak detector

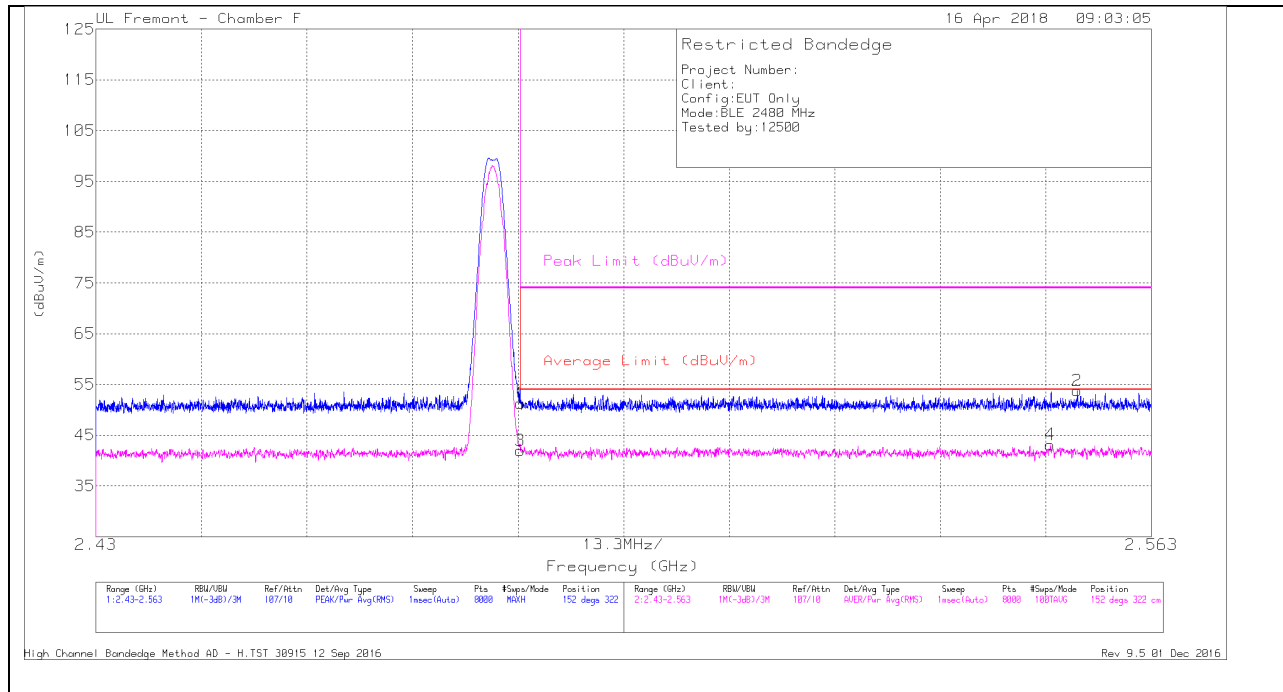
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.89	Pk	32.1	-20.7	51.29	-	-	74	-22.71	152	322	H
2	2.554	42.12	Pk	32.2	-20.6	53.72	-	-	74	-20.28	152	322	H
3	* 2.484	30.56	RMS	32.1	-20.7	41.96	54	-12.04	-	-	152	322	H
4	2.55	31.45	RMS	32.2	-20.5	43.15	54	-10.85	-	-	152	322	H

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

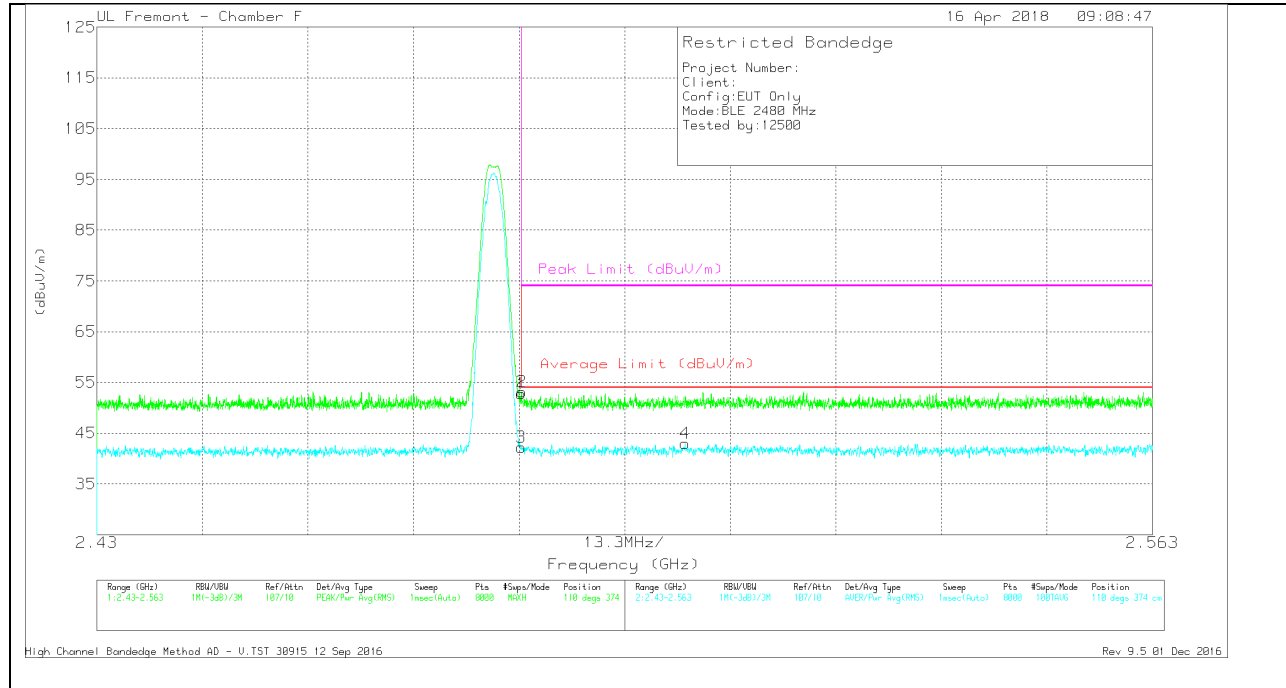
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/Fltr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.35	Pk	32.1	-20.7	52.75	-	-	74	-21.25	110	374	V
2	* 2.484	41.79	Pk	32.1	-20.7	53.19	-	-	74	-20.81	110	374	V
3	* 2.484	30.78	RMS	32.1	-20.7	42.18	54	-11.82	-	-	110	374	V
4	2.504	31.33	RMS	32.2	-20.6	42.93	54	-11.07	-	-	110	374	V

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

Pk - Peak detector

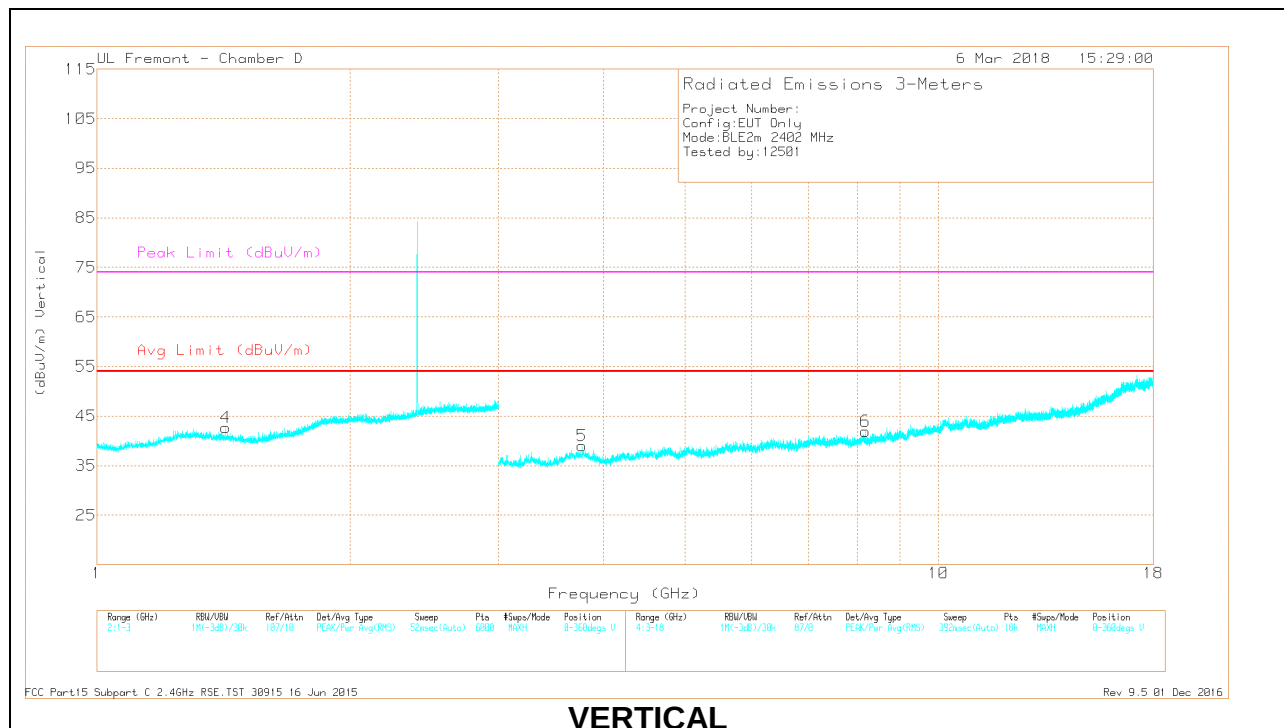
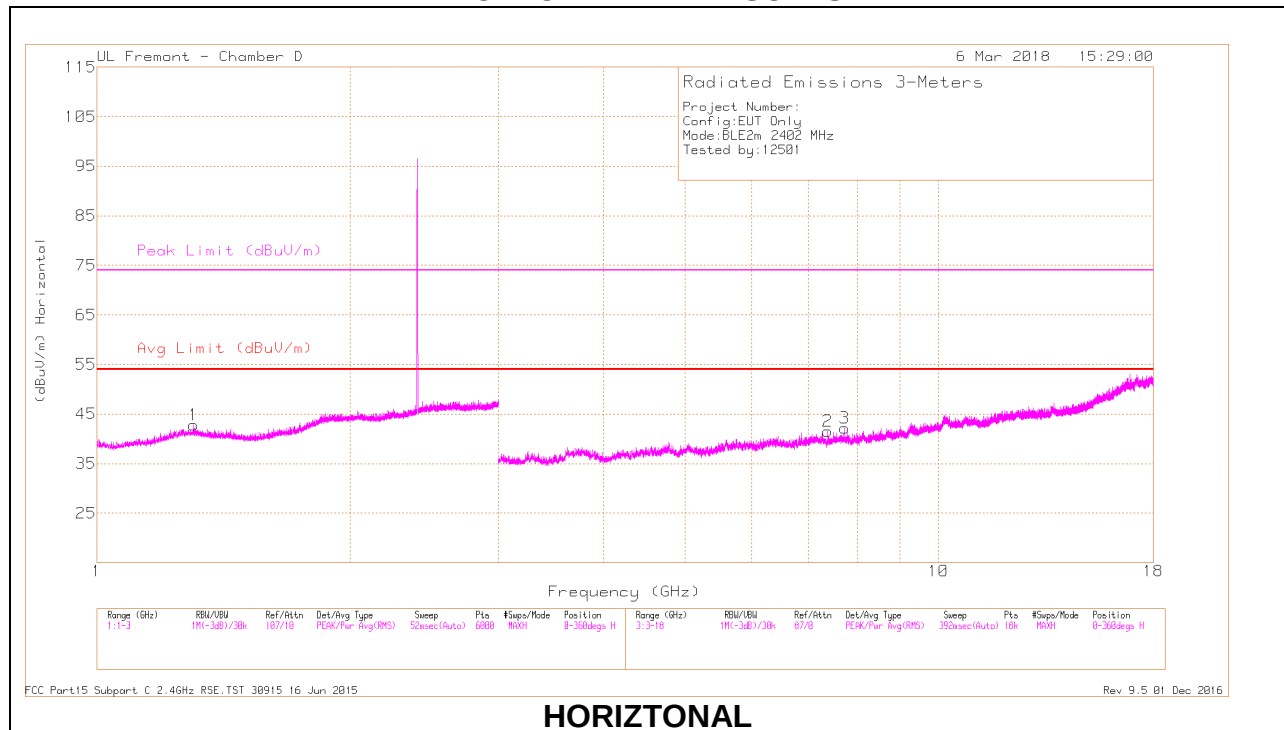
RMS - RMS detection

High Channel Bandedge Method AD - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

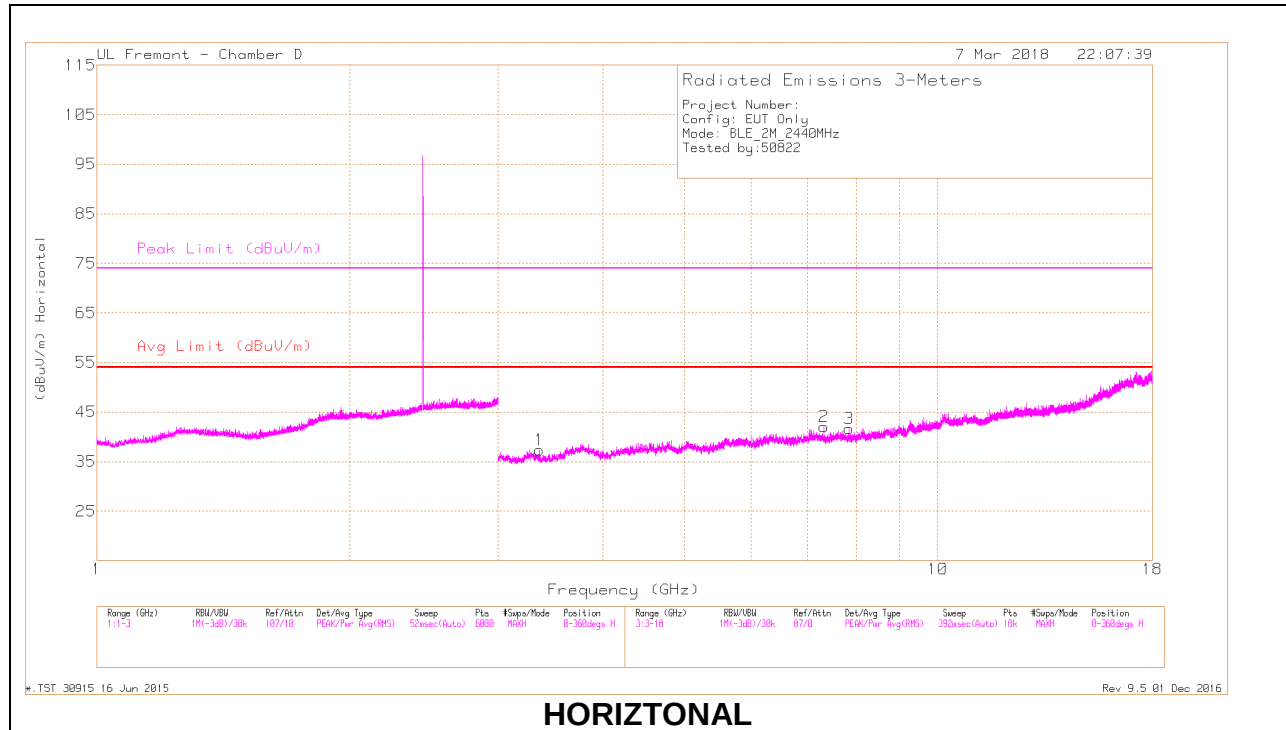
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.303	41.96	PK2	29.3	-22	49.26	-	-	74	-24.74	114	365	H
	* 1.303	29.76	MAv1	29.3	-22	37.06	54	-16.94	-	-	114	365	H
2	* 1.423	41.62	PK2	28.6	-21.8	48.42	-	-	74	-25.58	162	165	V
	* 1.422	29.64	MAv1	28.6	-21.8	36.44	54	-17.56	-	-	162	165	V
4	* 7.387	35.6	PK2	36.2	-24.6	47.2	-	-	74	-26.8	325	290	H
	* 7.39	24.09	MAv1	36.2	-24.5	35.79	54	-18.21	-	-	325	290	H
3	* 7.734	35.78	PK2	35.9	-23.9	47.78	-	-	74	-26.22	347	365	H
	* 7.734	24.02	MAv1	35.9	-23.9	36.02	54	-17.98	-	-	347	365	H
5	* 3.771	38.33	PK2	33.5	-27.9	43.93	-	-	74	-30.07	123	138	V
	* 3.77	26.29	MAv1	33.5	-27.9	31.89	54	-22.11	-	-	123	138	V
6	* 8.184	35.2	PK2	35.8	-22.8	48.2	-	-	74	-25.8	278	230	V
	* 8.185	23.11	MAv1	35.8	-22.9	36.01	54	-17.99	-	-	278	230	V

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

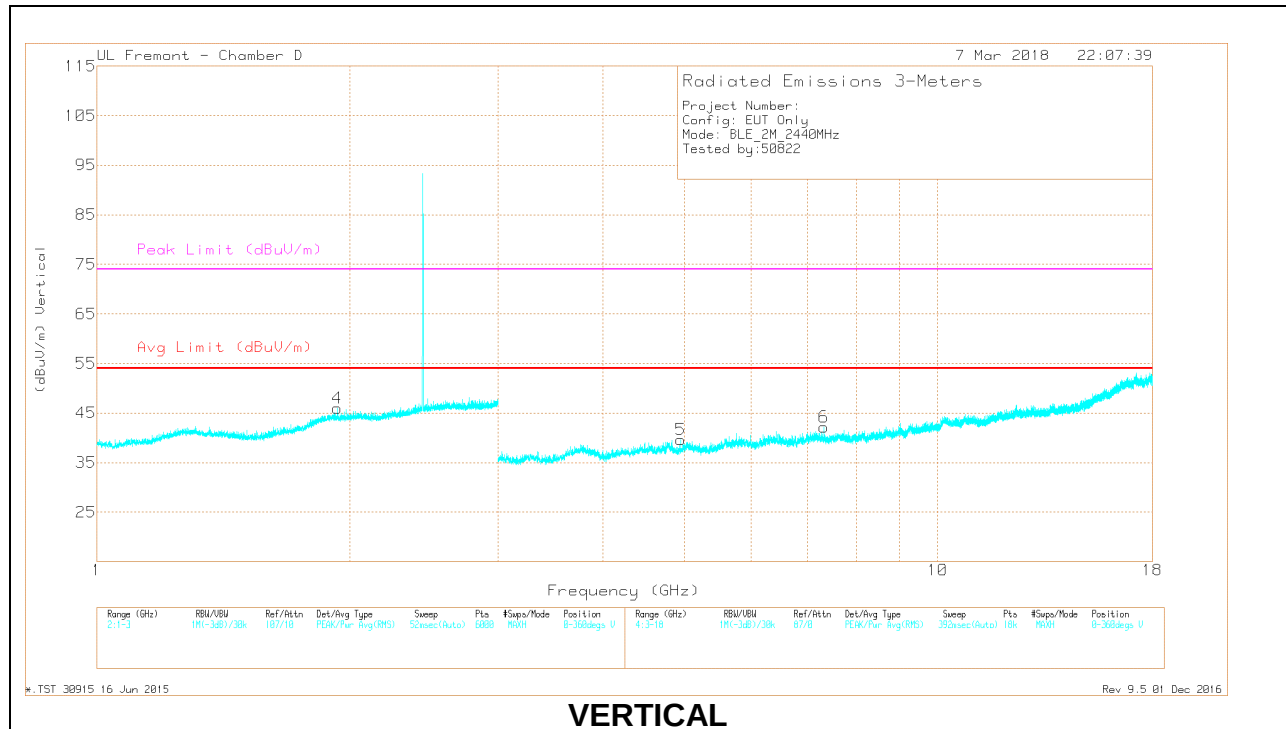
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

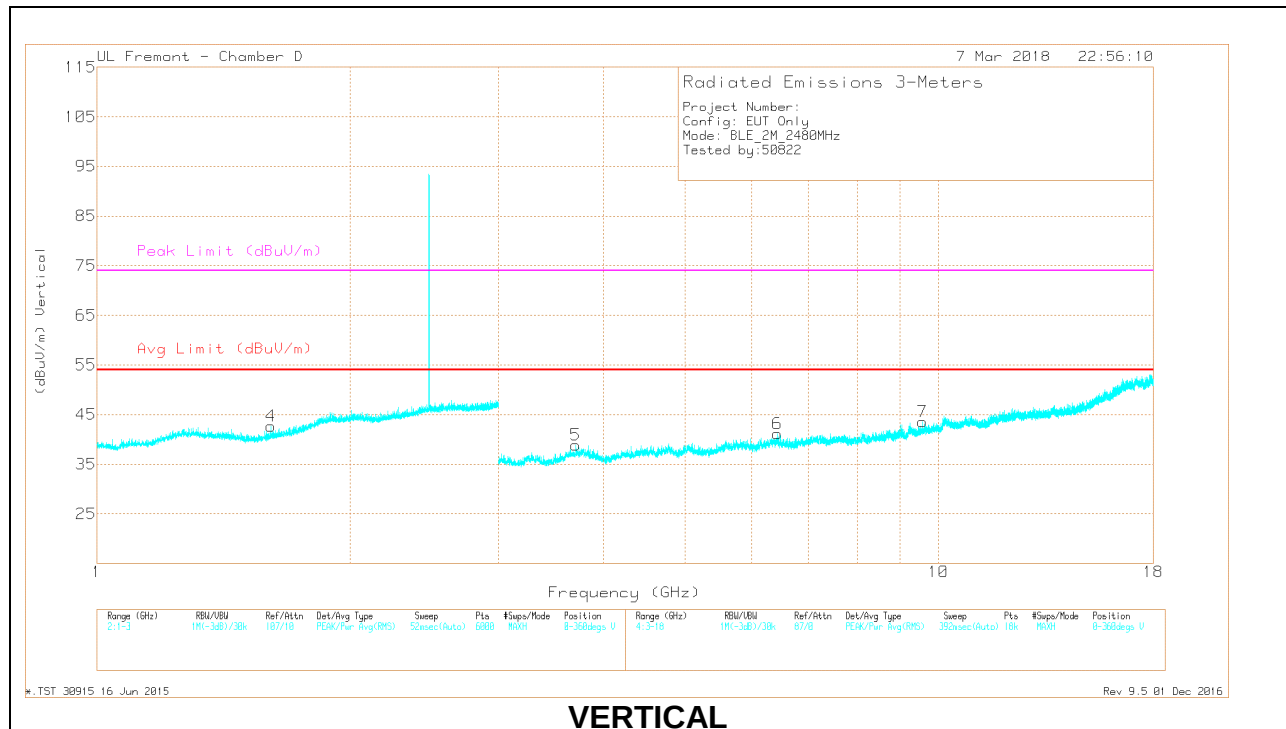
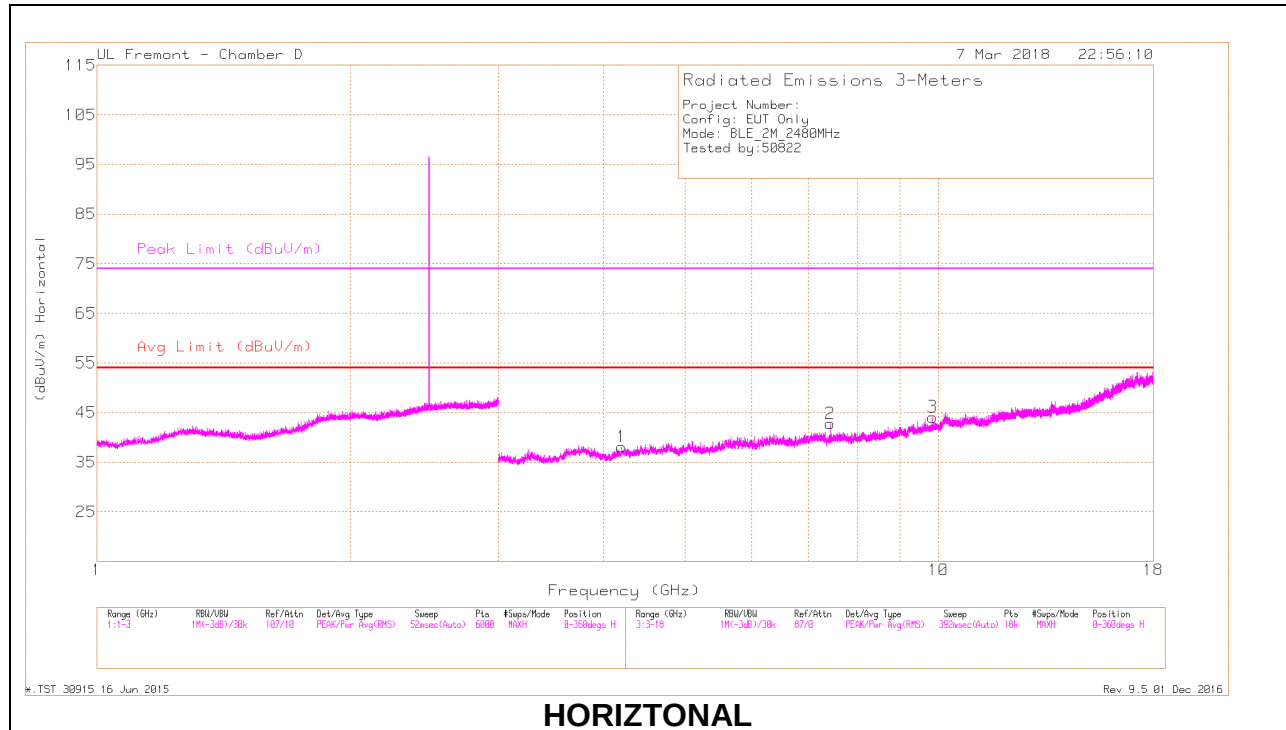
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.356	39.37	PK2	33.2	-28.5	44.07	-	-	74	-29.93	281	271	H
	* 3.354	27.24	MAv1	33.2	-28.5	31.94	54	-22.06	-	-	281	271	H
5	* 7.323	37.65	PK2	36.1	-24.6	49.15	-	-	74	-24.85	163	103	H
	* 7.324	26.91	MAv1	36.1	-24.5	38.51	54	-15.49	-	-	163	103	H
6	* 4.95	37.39	PK2	34.3	-27.3	44.39	-	-	74	-29.61	149	351	V
	* 4.947	25.89	MAv1	34.3	-27.3	32.89	54	-21.11	-	-	149	351	V
4	* 7.324	37.51	PK2	36.1	-24.5	49.11	-	-	74	-24.89	44	102	V
	* 7.324	27.1	MAv1	36.1	-24.5	38.7	54	-15.3	-	-	44	102	V
1	1.931	41.78	PK2	31.4	-21.1	52.08	-	-	-	-	264	256	V
	1.933	29.57	MAv1	31.4	-21.1	39.87	-	-	-	-	264	256	V
3	7.848	35.53	PK2	35.8	-23.5	47.83	-	-	-	-	339	226	H
	7.849	23.52	MAv1	35.8	-23.5	35.82	-	-	-	-	339	226	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.203	37.64	PK2	33.7	-27.2	44.14	-	-	74	-29.86	283	173	H
	* 4.204	25.86	MAv1	33.7	-27.2	32.36	54	-21.64	-	-	283	173	H
2	* 7.438	37.89	PK2	36.2	-24	50.09	-	-	74	-23.91	298	102	H
	* 7.439	27.7	MAv1	36.2	-24	39.9	54	-14.1	-	-	298	102	H
3	9.847	21.81	MAv1	37	-20.6	38.21	-	-	-	-	294	207	H
4	* 1.611	41.55	PK2	28.5	-21.6	48.45	-	-	74	-25.55	353	110	V
	* 1.608	29.6	MAv1	28.4	-21.6	36.4	54	-17.6	-	-	353	110	V
5	* 3.709	37.96	PK2	33.4	-28.5	42.86	-	-	74	-31.14	86	203	V
	* 3.709	26.8	MAv1	33.4	-28.5	31.7	54	-22.3	-	-	86	203	V
6	6.436	25.28	MAv1	36	-26	35.28	-	-	-	-	356	179	V

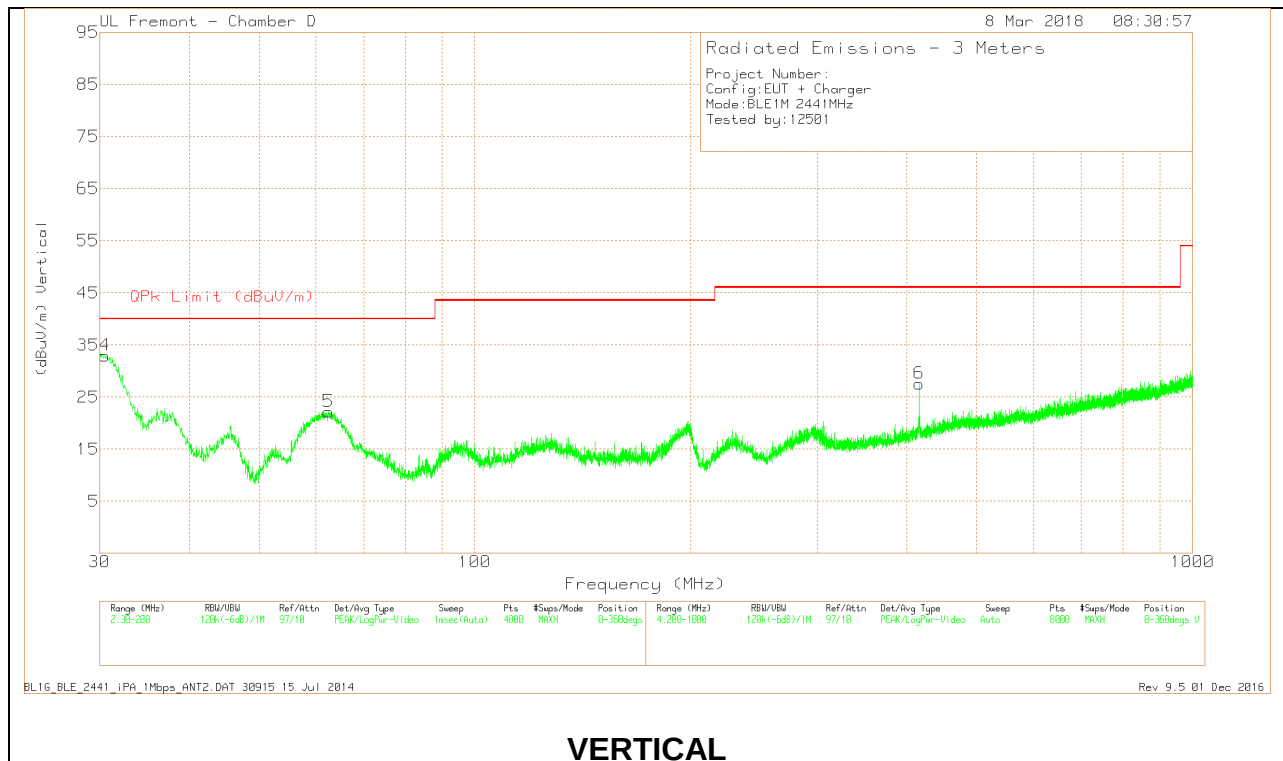
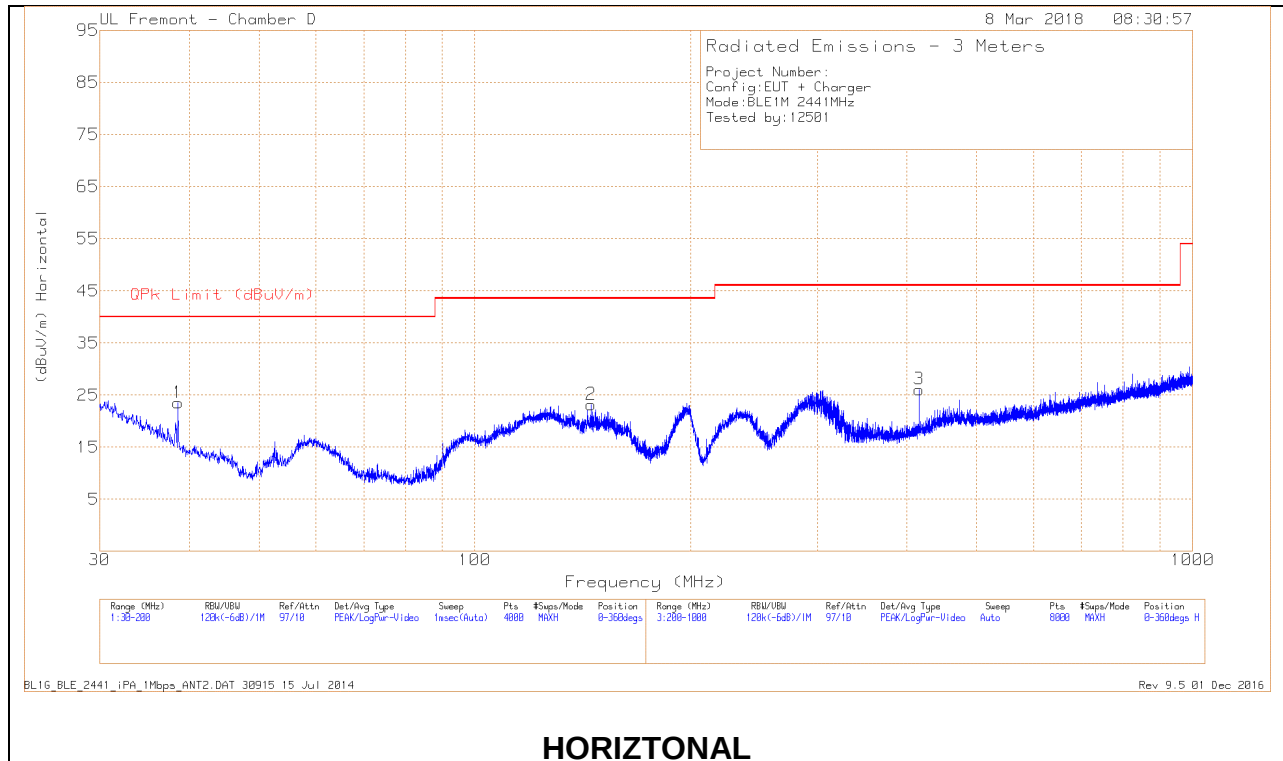
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.3. Worst Case below 1 GHz

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



Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	30.5101	39.36	Pk	25.5	-31.9	32.96	40	-7.04	0-360	100	V
1	38.5872	35.71	Pk	19.6	-31.8	23.51	40	-16.49	0-360	399	H
5	62.5209	41.38	Pk	12.4	-31.6	22.18	40	-17.82	0-360	100	V
2	145.1198	37.27	Pk	17	-31.1	23.17	43.52	-20.35	0-360	199	H
3	415.8281	35.48	Pk	20.4	-29.8	26.08	46.02	-19.94	0-360	299	H
6	415.9281	37.09	Pk	20.4	-29.9	27.59	46.02	-18.43	0-360	100	V

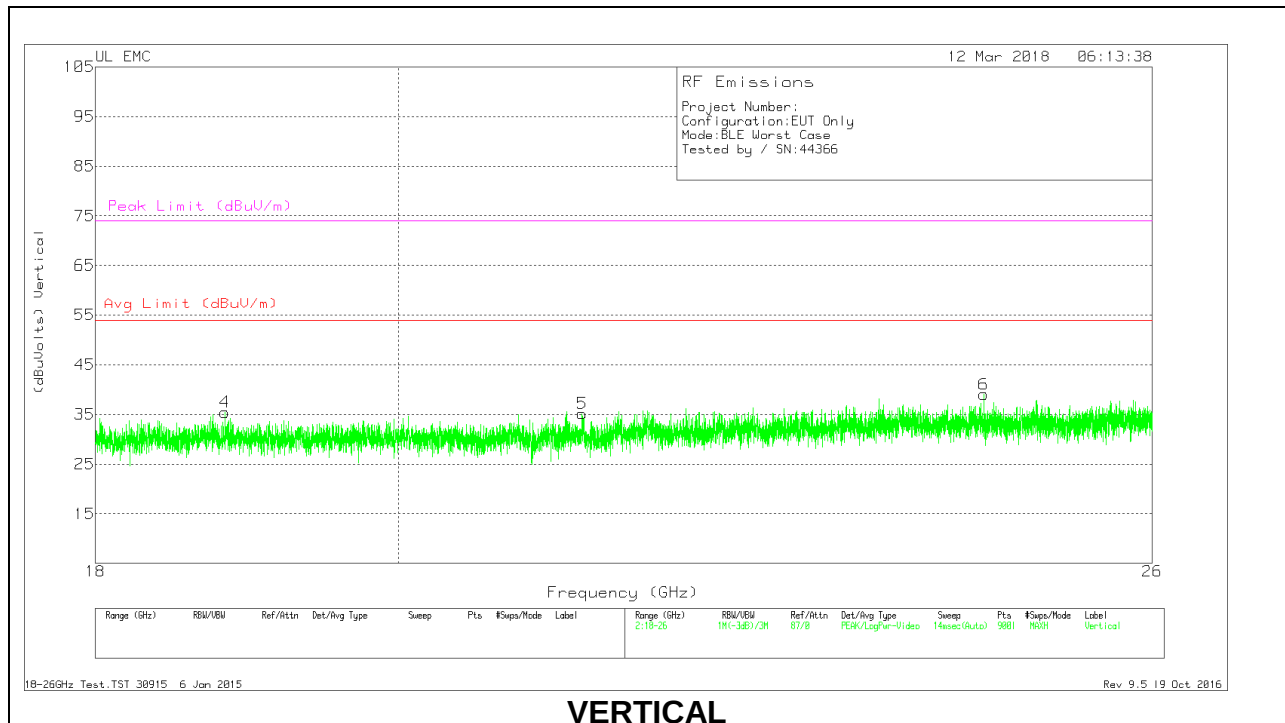
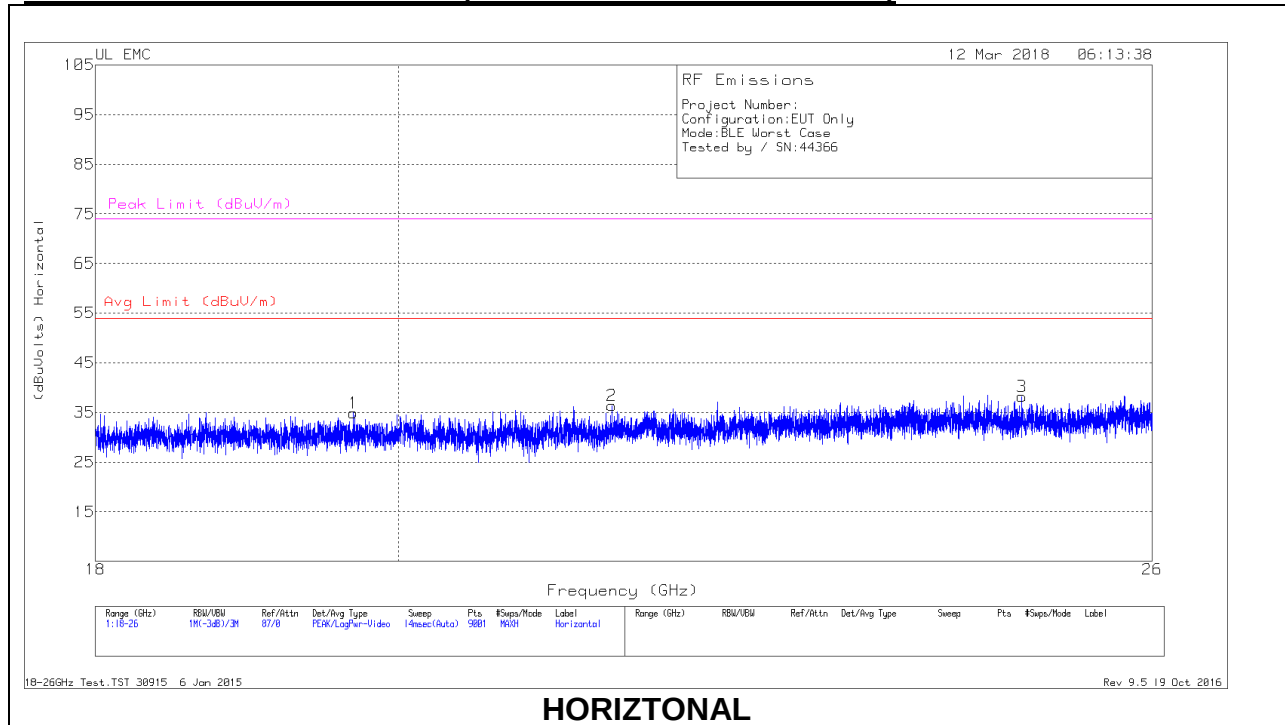
Pk - Peak detector

BL1G_BLE_2441_iPA_1Mbps_ANT2.DAT 30915 15 Jul 2014

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9.4. Worst Case 18-26 GHz

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



18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 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	19.69	37.12	Pk	32.5	-25.2	-9.5	34.92	54	-19.08	74	-39.08
2	21.544	38.15	Pk	33	-25.3	-9.5	36.35	54	-17.65	74	-37.65
3	24.846	38.08	Pk	33.9	-24.3	-9.5	38.18	54	-15.82	74	-35.82
4	18.829	37.51	Pk	32.4	-25	-9.5	35.41	54	-18.59	74	-38.59
5	21.321	36.68	Pk	33.2	-25.2	-9.5	35.18	54	-18.82	74	-38.82
6	24.519	38.85	Pk	34	-24.3	-9.5	39.05	54	-14.95	74	-34.95

Pk - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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.

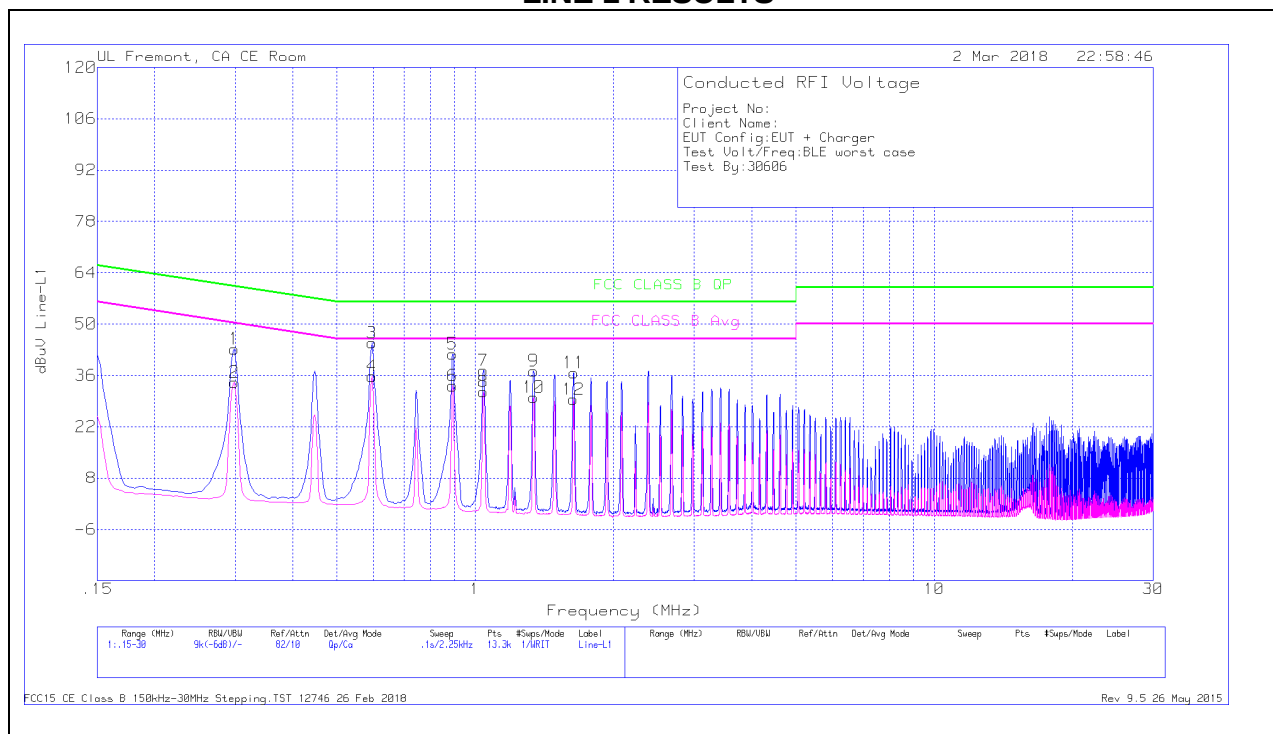
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

10.1.1. AC Power Line EUT WITH AC ADAPTER

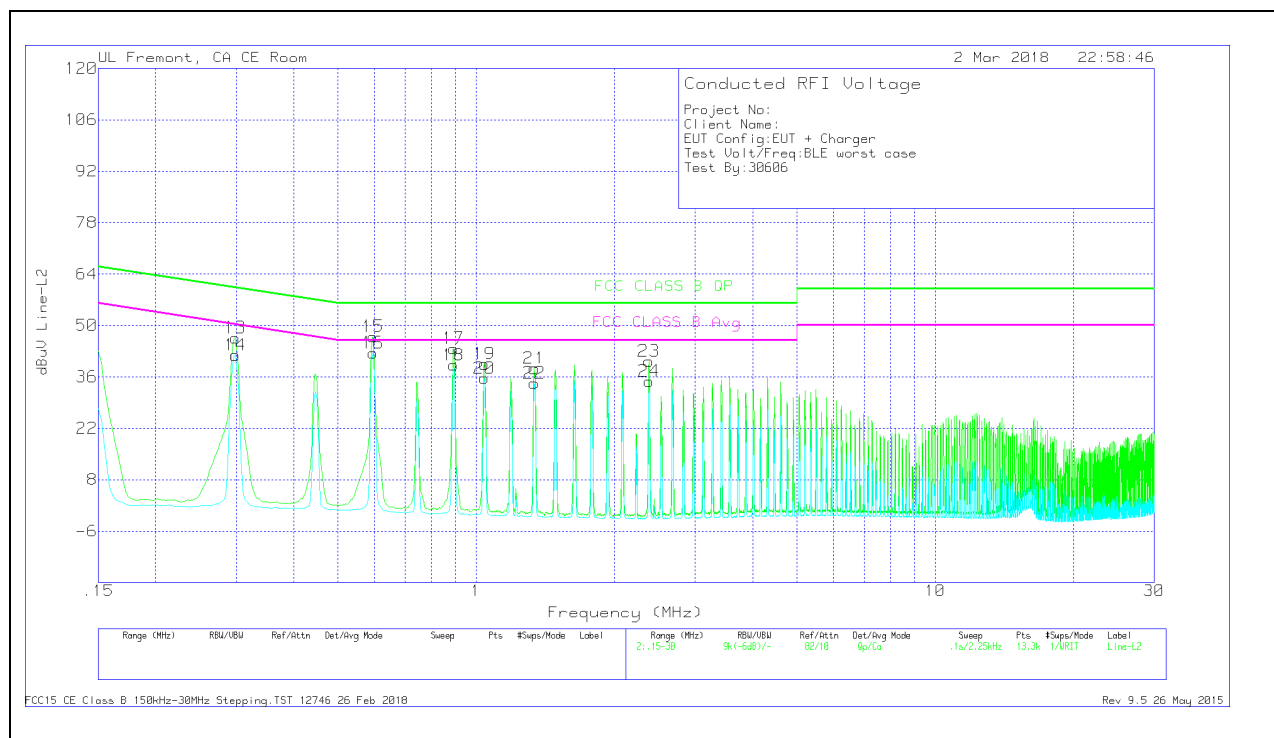
LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz										
Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Corrected Reading dBuV	FCC CLASS B QP	Margin (dB)	FCC CLASS B Avg	Margin (dB)
1	.2985	43.21	Qp	0	0	43.21	60.28	-17.07	-	-
2	.2985	34.12	Ca	0	0	34.12	-	-	50.28	-16.16
3	.5955	44.86	Qp	0	0	44.86	56	-11.14	-	-
4	.5955	35.75	Ca	0	0	35.75	-	-	46	-10.25
5	.8925	41.83	Qp	0	0	41.83	56	-14.17	-	-
6	.8925	33.18	Ca	0	0	33.18	-	-	46	-12.82
7	1.041	37.25	Qp	0	.1	37.35	56	-18.65	-	-
8	1.041	31.4	Ca	0	.1	31.5	-	-	46	-14.5
9	1.34025	37.11	Qp	0	.1	37.21	56	-18.79	-	-
10	1.34025	29.92	Ca	0	.1	30.02	-	-	46	-15.98
11	1.6395	36.61	Qp	0	.1	36.71	56	-19.29	-	-
12	1.63725	29.39	Ca	0	.1	29.49	-	-	46	-16.51

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS

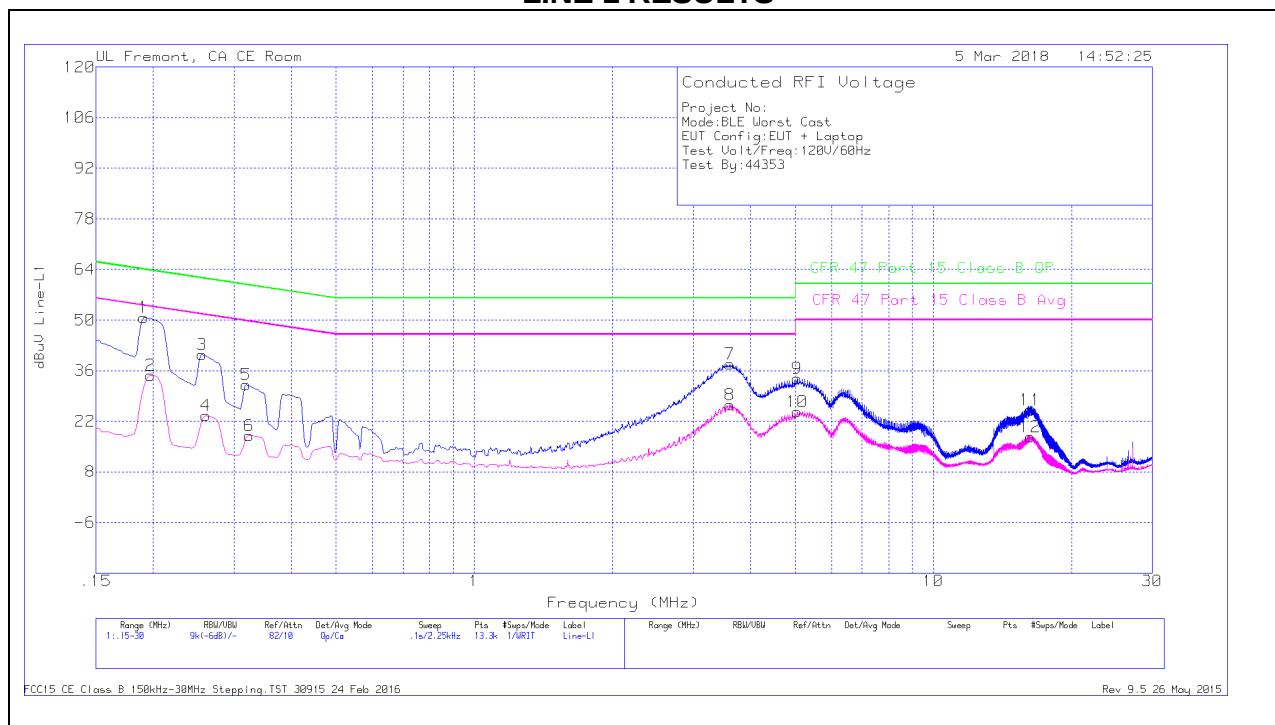


Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Corrected Reading dBuV	FCC CLASS B QP	Margin (dB)	FCC CLASS B Avg	Margin (dB)
13	.2985	46.64	Qp	0	0	46.64	60.28	-13.64	-	-
14	.2985	41.91	Ca	0	0	41.91	-	-	50.28	-8.37
15	.5955	46.95	Qp	0	0	46.95	56	-9.05	-	-
16	.5955	42.52	Ca	0	0	42.52	-	-	46	-3.48
17	.8925	43.73	Qp	0	0	43.73	56	-12.27	-	-
18	.8925	39.25	Ca	0	0	39.25	-	-	46	-6.75
19	1.041	39.42	Qp	0	.1	39.52	56	-16.48	-	-
20	1.041	35.51	Ca	0	.1	35.61	-	-	46	-10.39
21	1.338	38.21	Qp	0	.1	38.31	56	-17.69	-	-
22	1.338	34.2	Ca	0	.1	34.3	-	-	46	-11.7
23	2.3775	40.18	Qp	0	.1	40.28	56	-15.72	-	-
24	2.37975	34.72	Ca	0	.1	34.82	-	-	46	-11.18

Qp - Quasi-Peak detector
Ca - CISPR average detection

10.1.2. AC Power Line EUT WITH LAPTOP

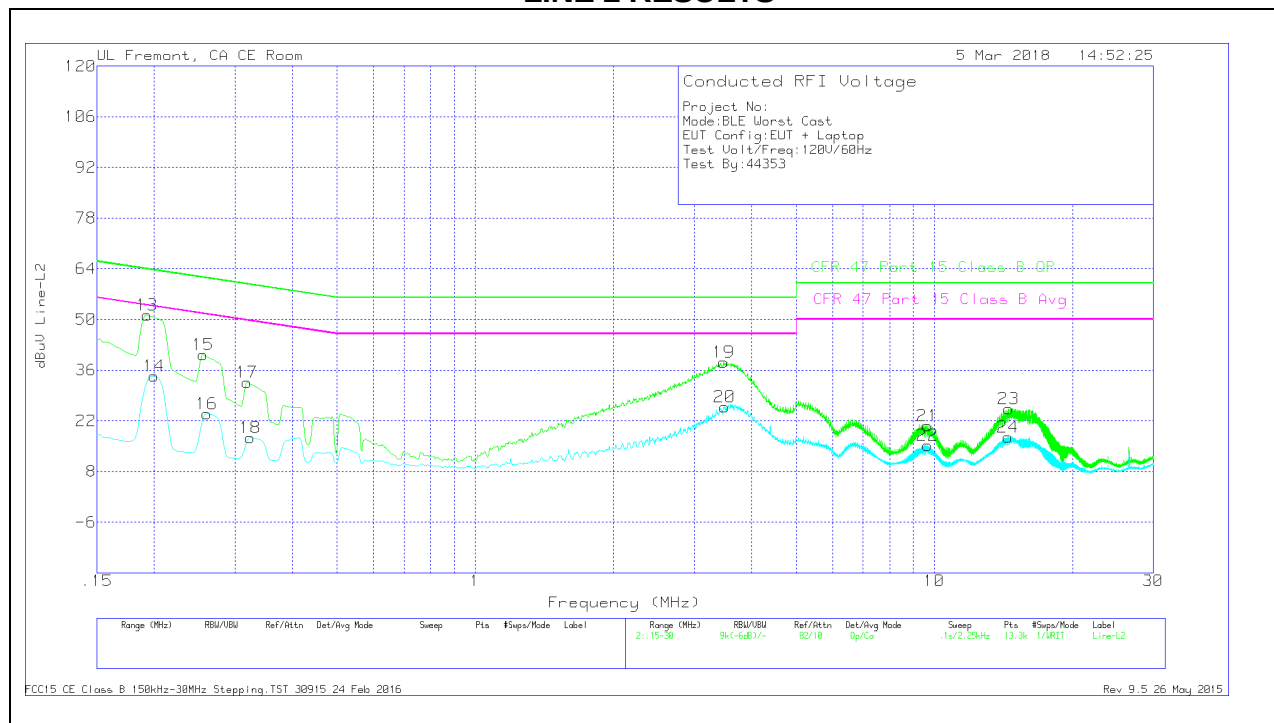
LINE 1 RESULTS



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	.1905	40.6	Qp	0	0	10.1	50.7	64.01	-13.31	-	-
2	.19725	24.65	Ca	0	0	10.1	34.75	-	-	53.73	-18.98
3	.25575	30.38	Qp	0	0	10.1	40.48	61.57	-21.09	-	-
4	.26025	13.41	Ca	0	0	10.1	23.51	-	-	51.42	-27.91
5	.31875	22.03	Qp	0	0	10.1	32.13	59.74	-27.61	-	-
6	.32325	7.96	Ca	0	0	10.1	18.06	-	-	49.62	-31.56
7	3.60375	27.56	Qp	0	.1	10.1	37.76	56	-18.24	-	-
8	3.6015	16.38	Ca	0	.1	10.1	26.58	-	-	46	-19.42
9	5.0595	23.7	Qp	0	.1	10.1	33.9	60	-26.1	-	-
10	5.0595	14.39	Ca	0	.1	10.1	24.59	-	-	50	-25.41
11	16.2578	14.61	Qp	0	.3	10.3	25.21	60	-34.79	-	-
12	16.2578	7.04	Ca	0	.3	10.3	17.64	-	-	50	-32.36

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	.19275	41.07	Qp	0	0	10.1	51.17	63.92	-12.75	-	-
14	.1995	24.2	Ca	0	0	10.1	34.3	-	-	53.63	-19.33
15	.25575	30.14	Qp	0	0	10.1	40.24	61.57	-21.33	-	-
16	.26025	13.88	Ca	0	0	10.1	23.98	-	-	51.42	-27.44
17	.31875	22.46	Qp	0	0	10.1	32.56	59.74	-27.18	-	-
18	.32325	7.16	Ca	0	0	10.1	17.26	-	-	49.62	-32.36
19	3.47775	28.04	Qp	0	.1	10.1	38.24	56	-17.76	-	-
20	3.49013	15.67	Ca	0	.1	10.1	25.87	-	-	46	-20.13
21	9.672	10.27	Qp	0	.2	10.2	20.67	60	-39.33	-	-
22	9.66075	4.85	Ca	0	.2	10.2	15.25	-	-	50	-34.75
23	14.541	14.76	Qp	.1	.3	10.2	25.36	60	-34.64	-	-
24	14.478	6.93	Ca	.1	.3	10.2	17.53	-	-	50	-32.47

Qp - Quasi-Peak detector
Ca - CISPR average detection

END OF REPORT

11. SETUP PHOTOS

Please refer to 12124121-EP1V1 for setup photos