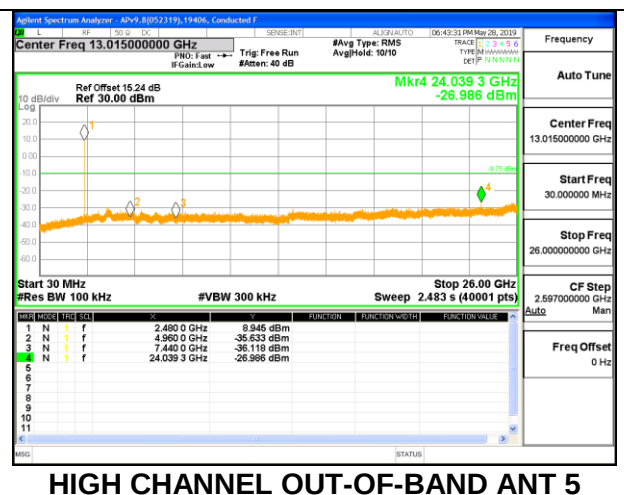
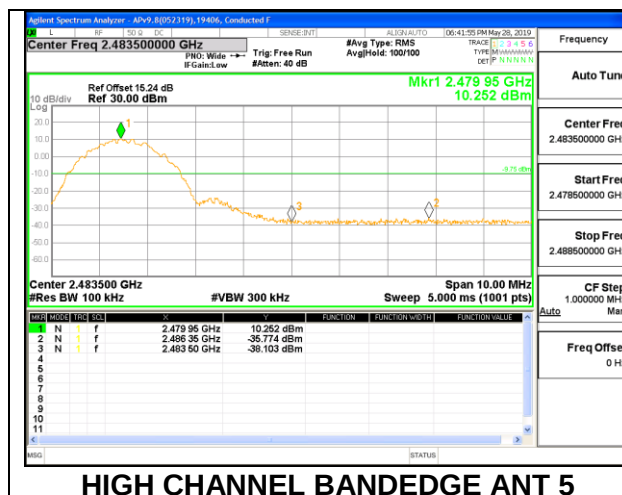
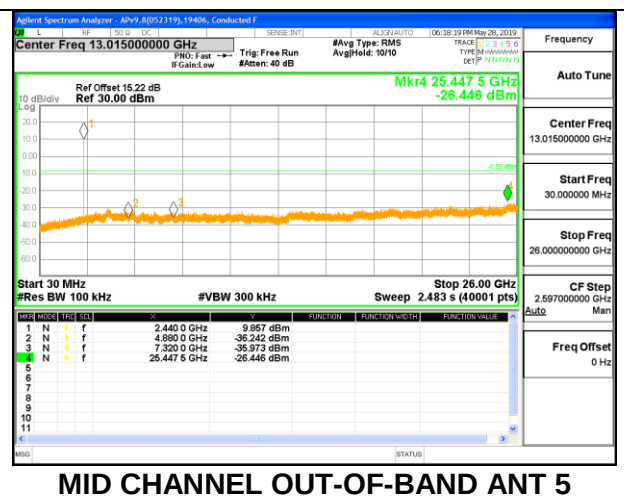
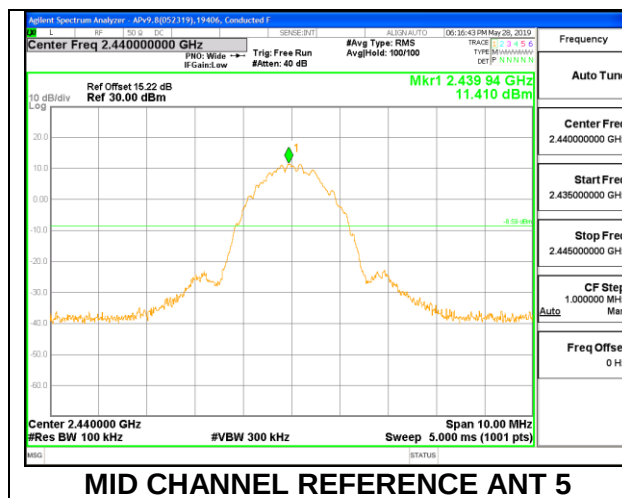
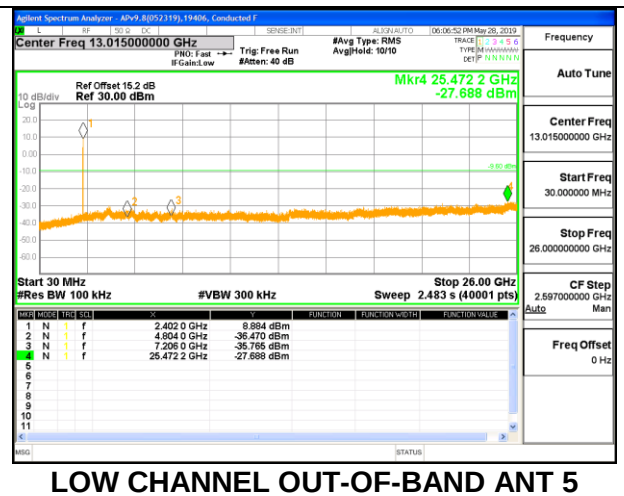
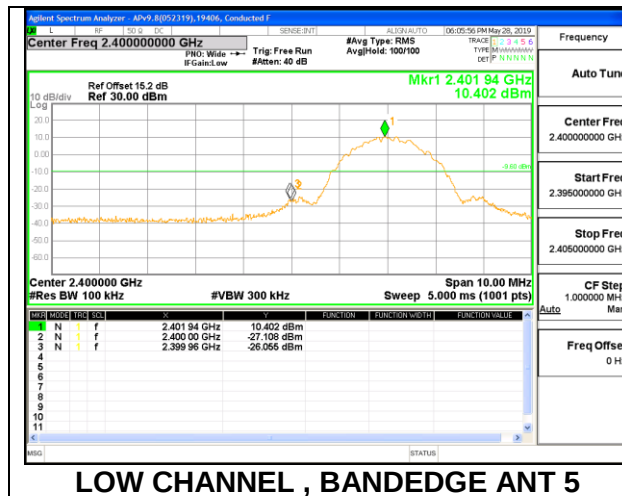


LOW POWER, 2Mbps

Note: Test procedures and setting on beamforming are same as BLE normal mode

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.

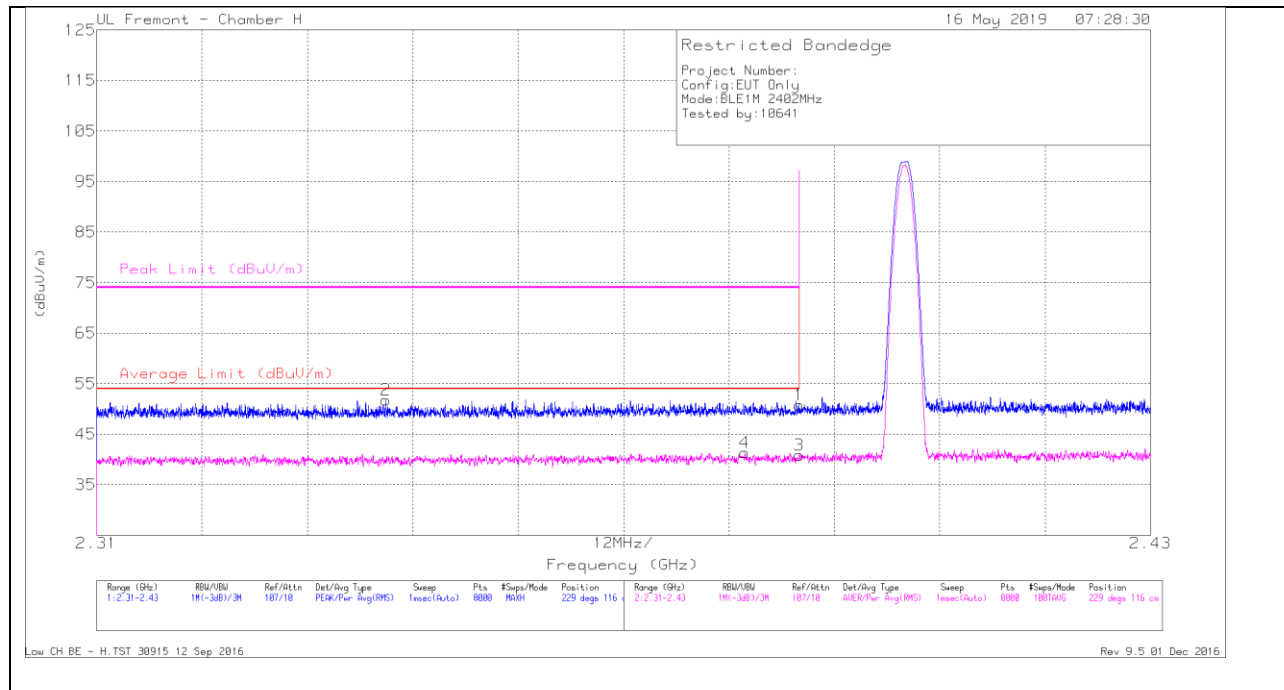
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

9.2. TRANSMITTER ABOVE 1 GHz**9.2.1. ANTENNA 2, HIGH POWER BLE (1Mbps)****BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

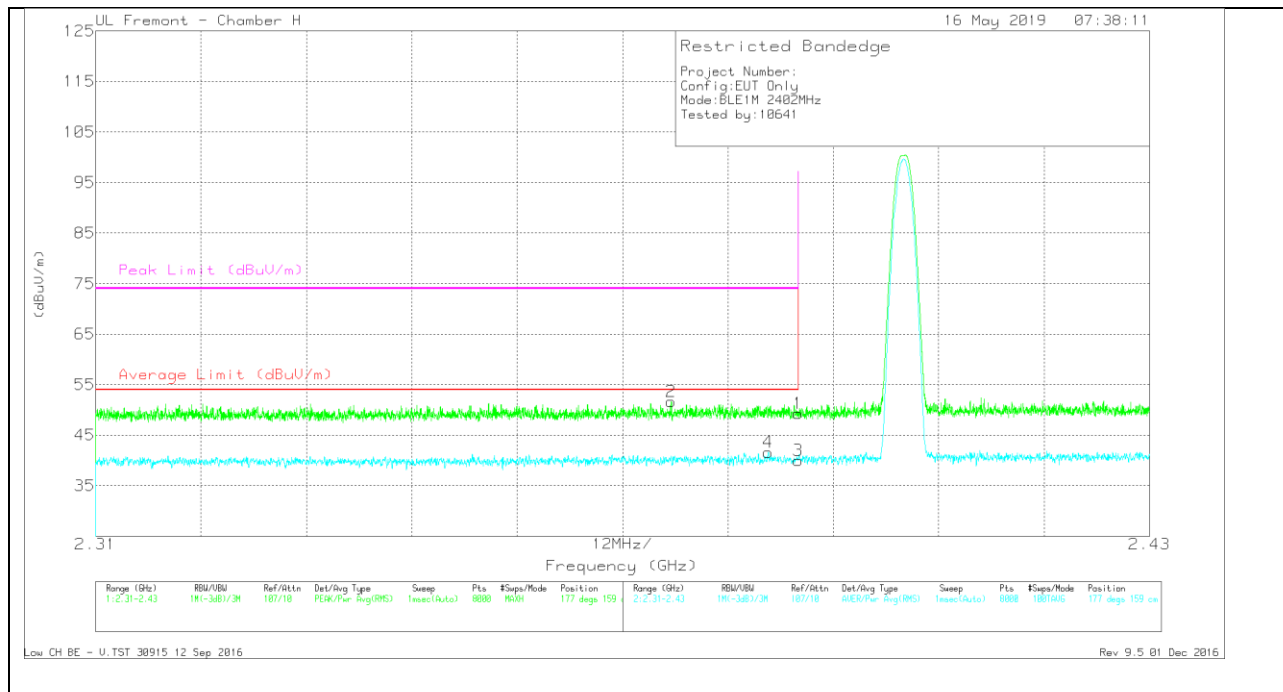
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Ampl/CbI/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.74	Pk	31.6	-23.5	50.84	-	-	74	-23.16	229	116	H
2	* 2.343	44.13	Pk	31.3	-23.6	51.83	-	-	74	-22.17	229	116	H
3	* 2.39	32.8	RMS	31.6	-23.5	40.9	54	-13.1	-	-	229	116	H
4	* 2.384	33.28	RMS	31.6	-23.5	41.38	54	-12.62	-	-	229	116	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

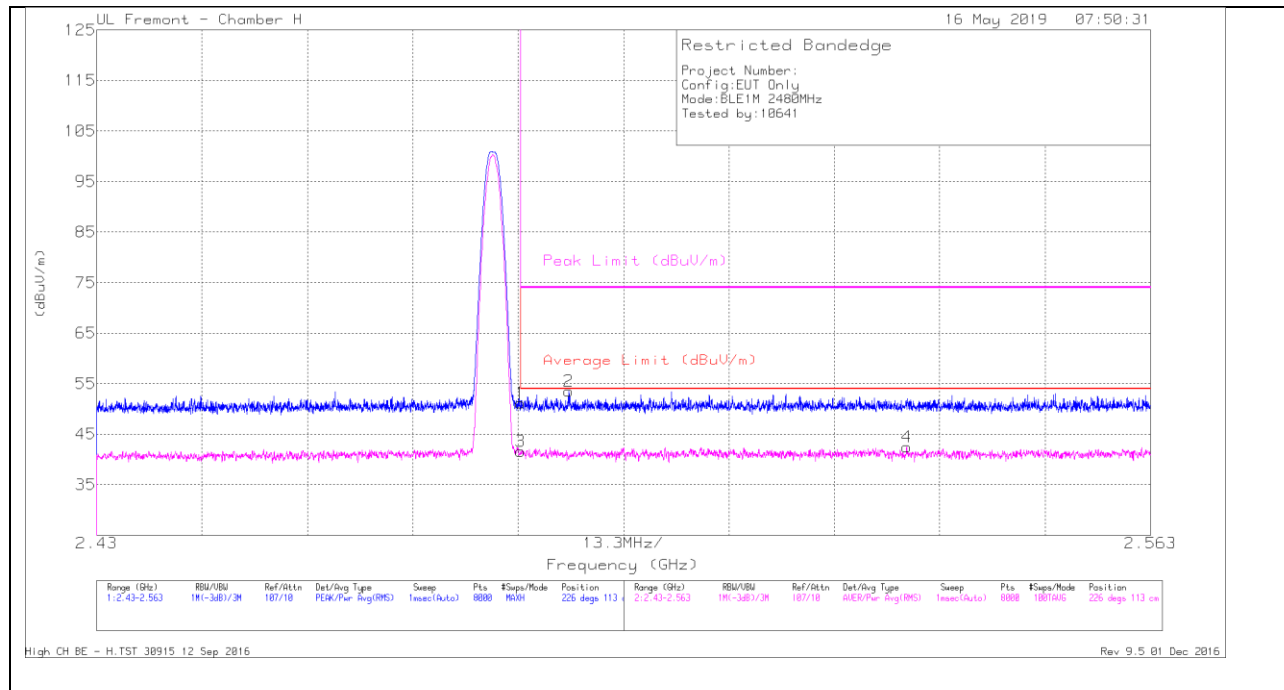


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.2	Pk	31.6	-23.5	49.3	-	-	74	-24.7	177	159	V
2	* 2.376	43.58	Pk	31.6	-23.5	51.68	-	-	74	-22.32	177	159	V
3	* 2.39	31.84	RMS	31.6	-23.5	39.94	54	-14.06	-	-	177	159	V
4	* 2.387	33.56	RMS	31.6	-23.5	41.66	54	-12.34	-	-	177	159	V

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

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	42.2	Pk	32.3	-23.3	51.2	-	-	74	-22.8	226	113	H
2	* 2.49	44.47	Pk	32.3	-23.3	53.47	-	-	74	-20.53	226	113	H
3	* 2.484	32.61	RMS	32.3	-23.3	41.61	54	-12.39	-	-	226	113	H
4	2.532	33.3	RMS	32.4	-23.2	42.5	54	-11.5	-	-	226	113	H

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

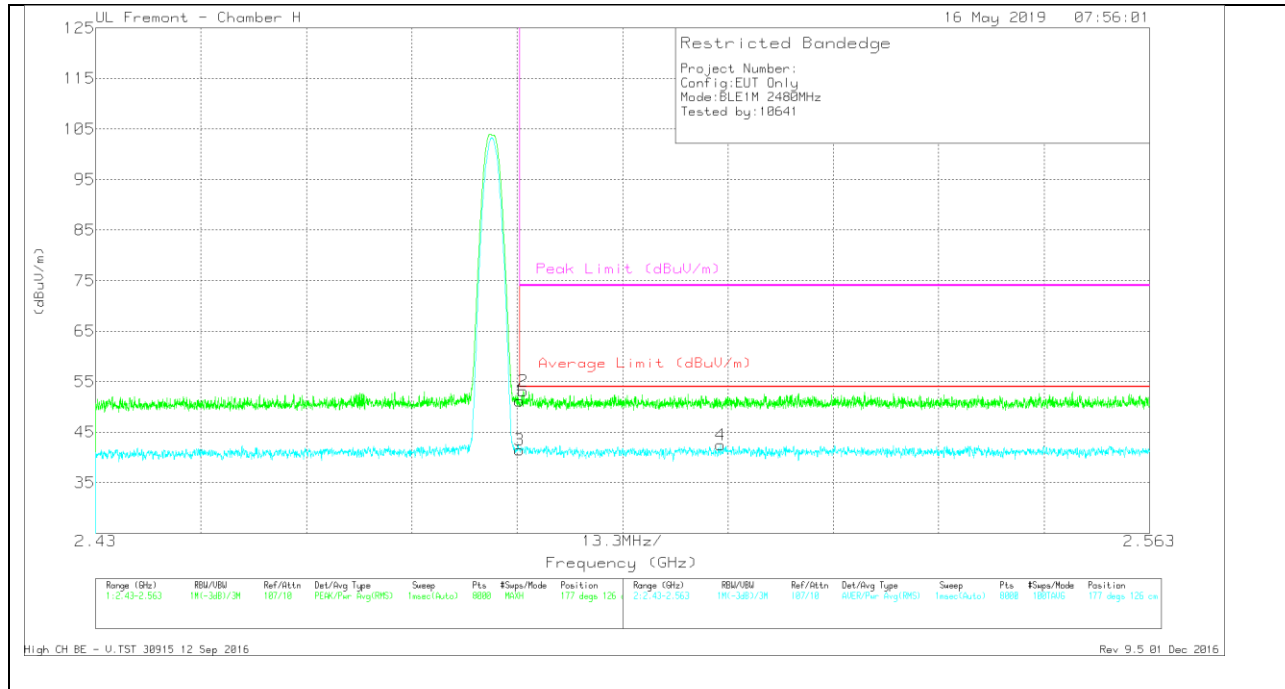
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	42.21	Pk	32.3	-23.3	51.21	-	-	74	-22.79	177	126	V
2	* 2.484	44.1	Pk	32.3	-23.3	53.1	-	-	74	-20.9	177	126	V
3	* 2.484	32.51	RMS	32.3	-23.3	41.51	54	-12.49	-	-	177	126	V
4	2.509	33.29	RMS	32.4	-23.2	42.49	54	-11.51	-	-	177	126	V

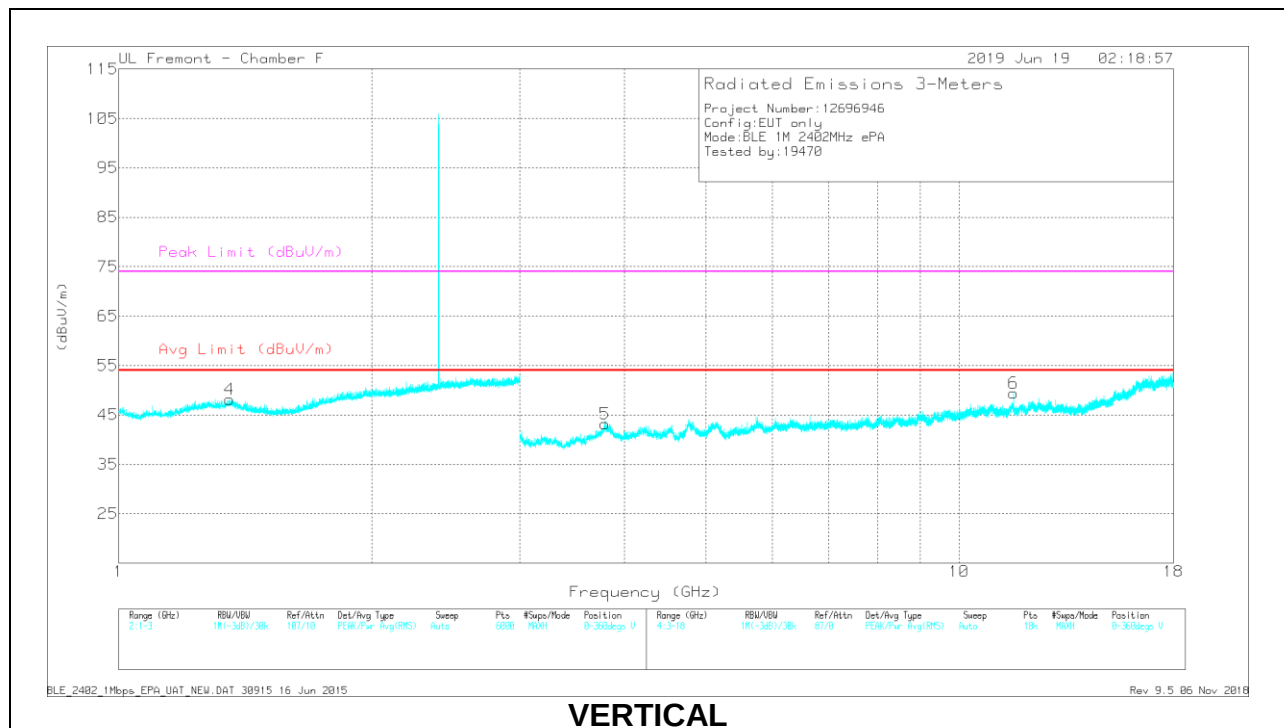
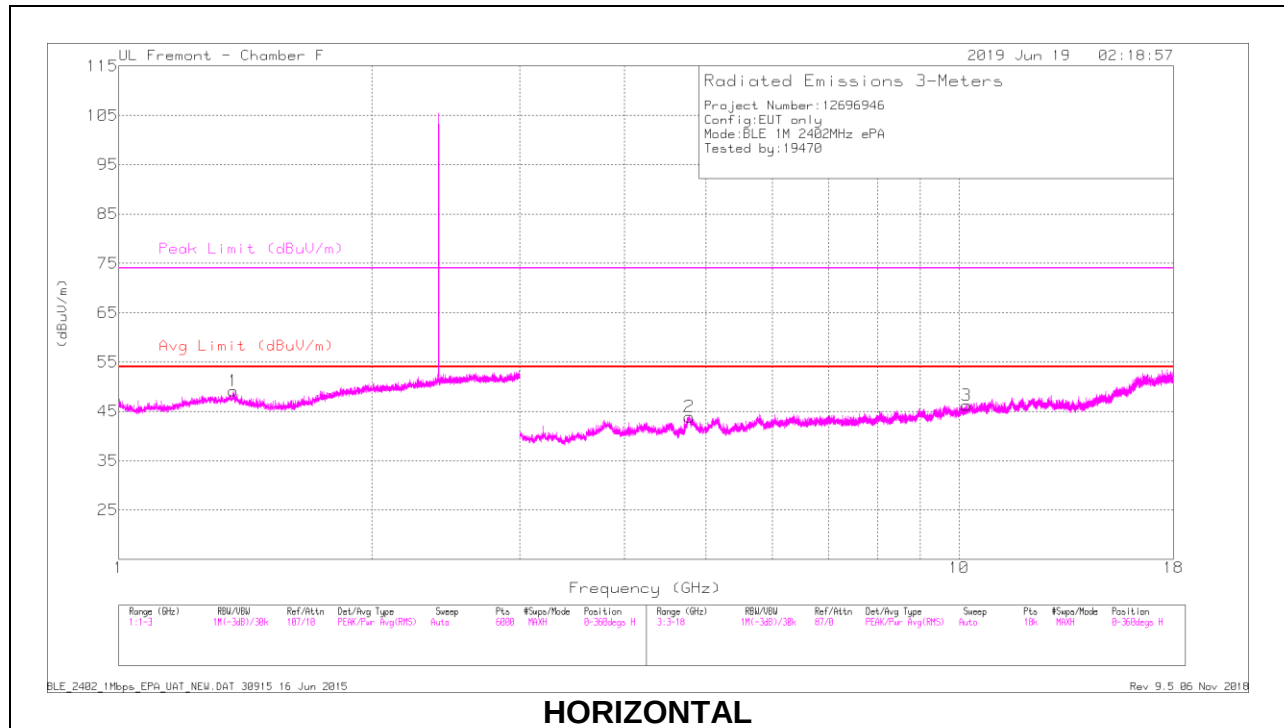
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH BE - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

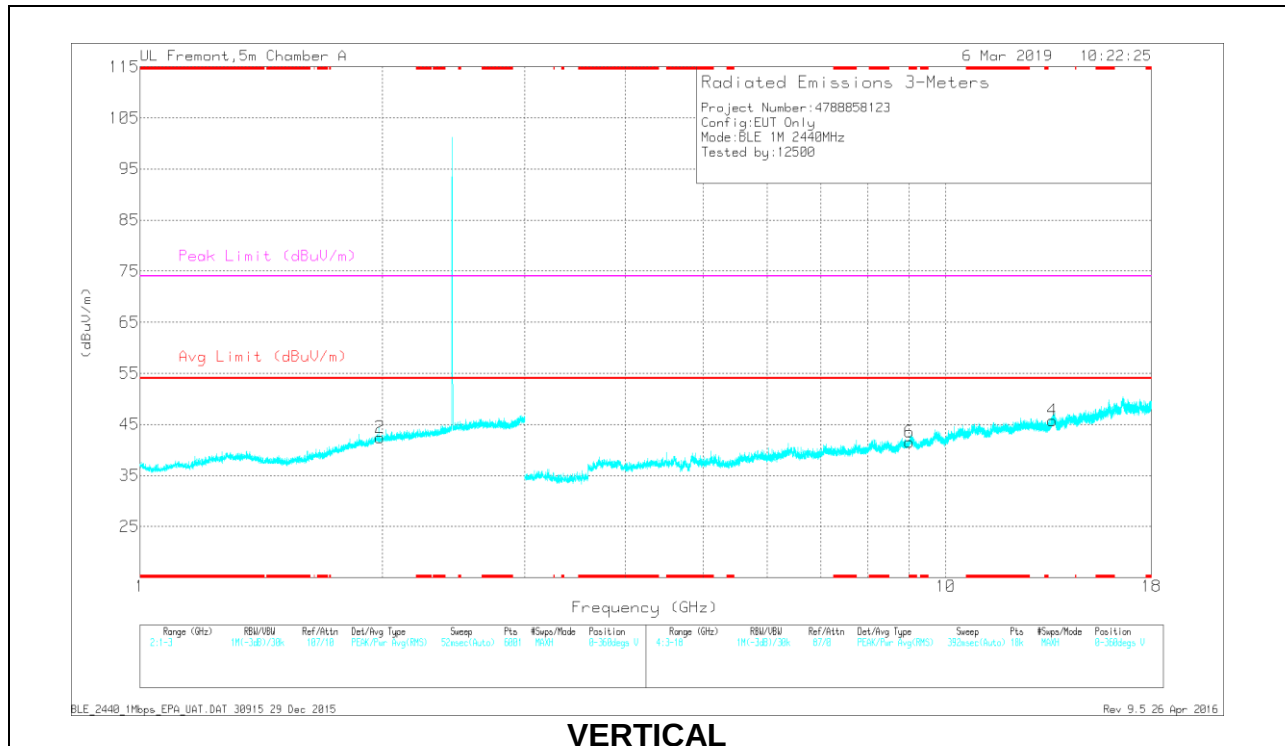
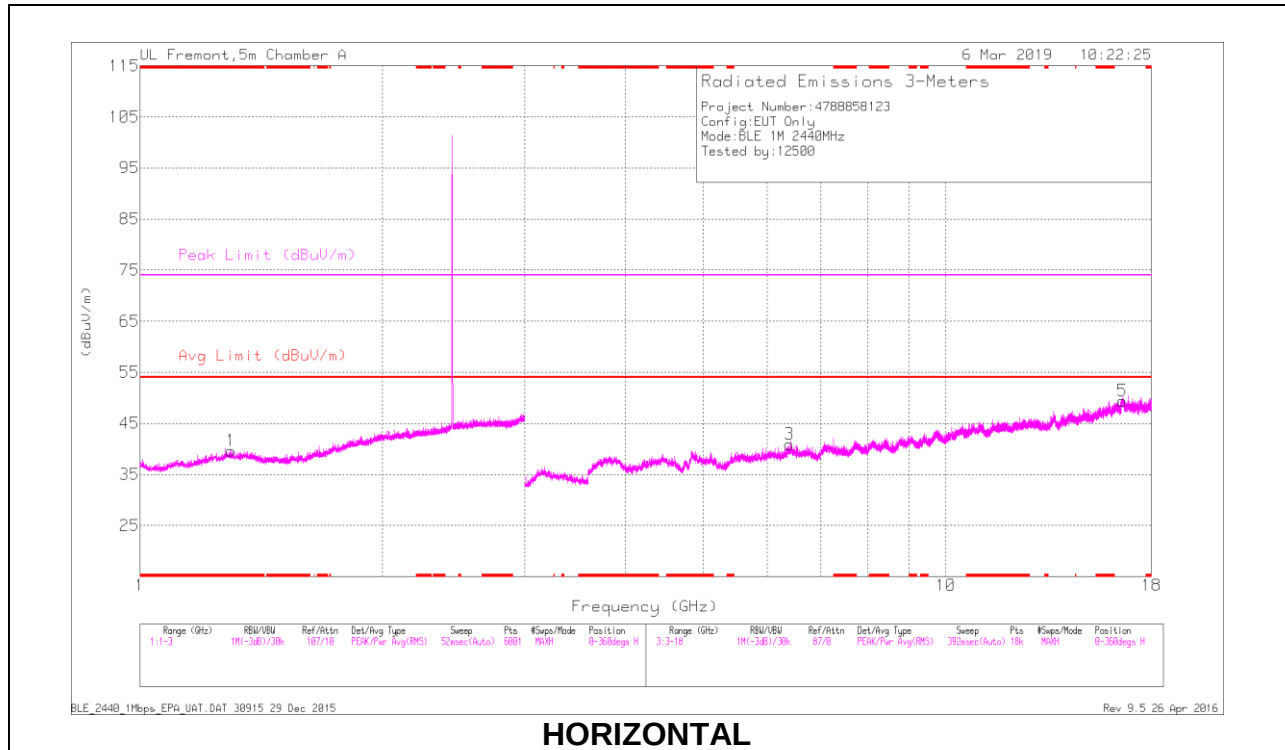
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.372	41.72	PK2	29.3	-15.5	55.52	-	-	74	-18.48	107	155	H
* 1.369	29.53	MAv1	29.4	-15.4	43.53	54	-10.47	-	-	107	155	H
* 1.356	41.49	PK2	29.3	-15.5	55.29	-	-	74	-18.71	143	165	V
* 1.355	29.63	MAv1	29.3	-15.5	43.43	54	-10.57	-	-	143	165	V
* 4.777	36.28	PK2	34.1	-20.9	49.48	-	-	74	-24.52	129	233	H
* 4.774	25.41	MAv1	34.1	-20.8	38.71	54	-15.29	-	-	129	233	H
10.213	34.96	PK2	37.2	-18.8	53.36	-	-	-	-	207	165	H
10.214	23.48	MAv1	37.2	-18.7	41.98	54	-12.02	-	-	207	165	H
* 3.789	37.68	PK2	33.6	-21.6	49.68	-	-	74	-24.32	190	230	V
* 3.791	26.65	MAv1	33.6	-21.6	38.65	54	-15.35	-	-	190	230	V
* 11.618	35.05	PK2	38.4	-19.6	53.85	-	-	74	-20.15	215	239	V
* 11.62	24.22	MAv1	38.4	-19.6	43.02	54	-10.98	-	-	215	239	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

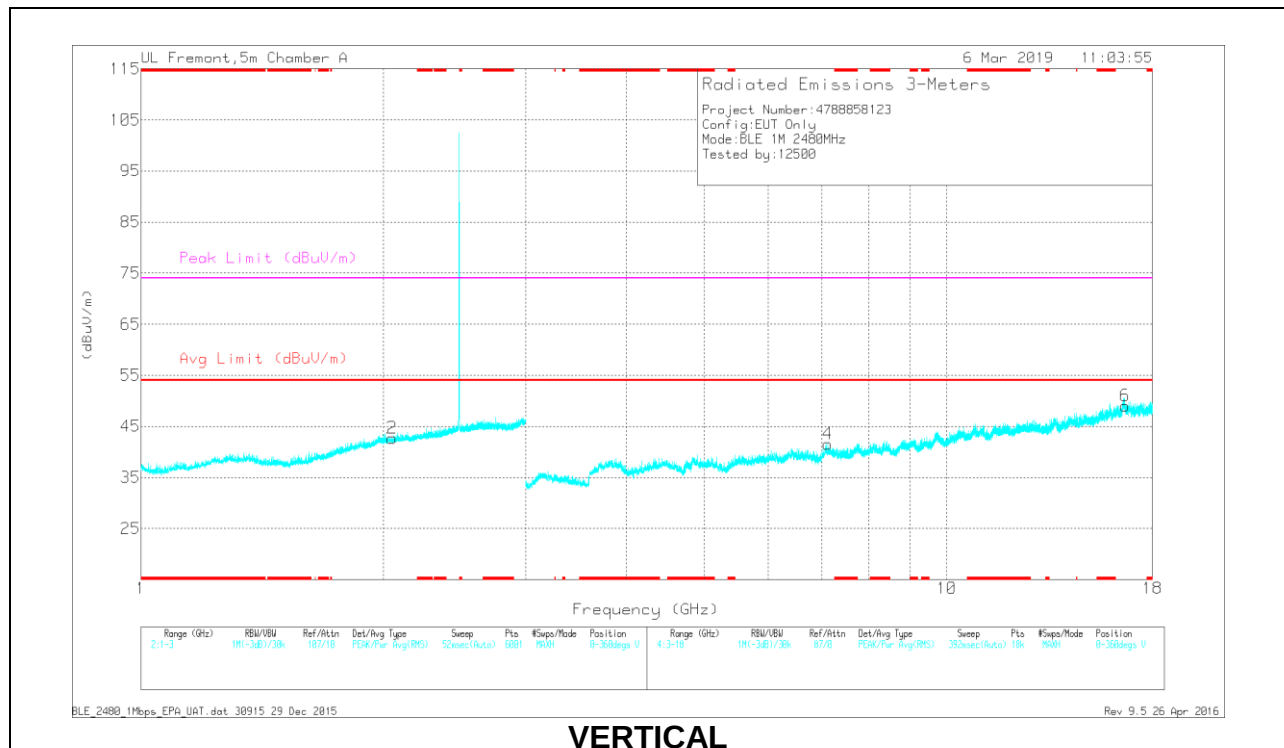
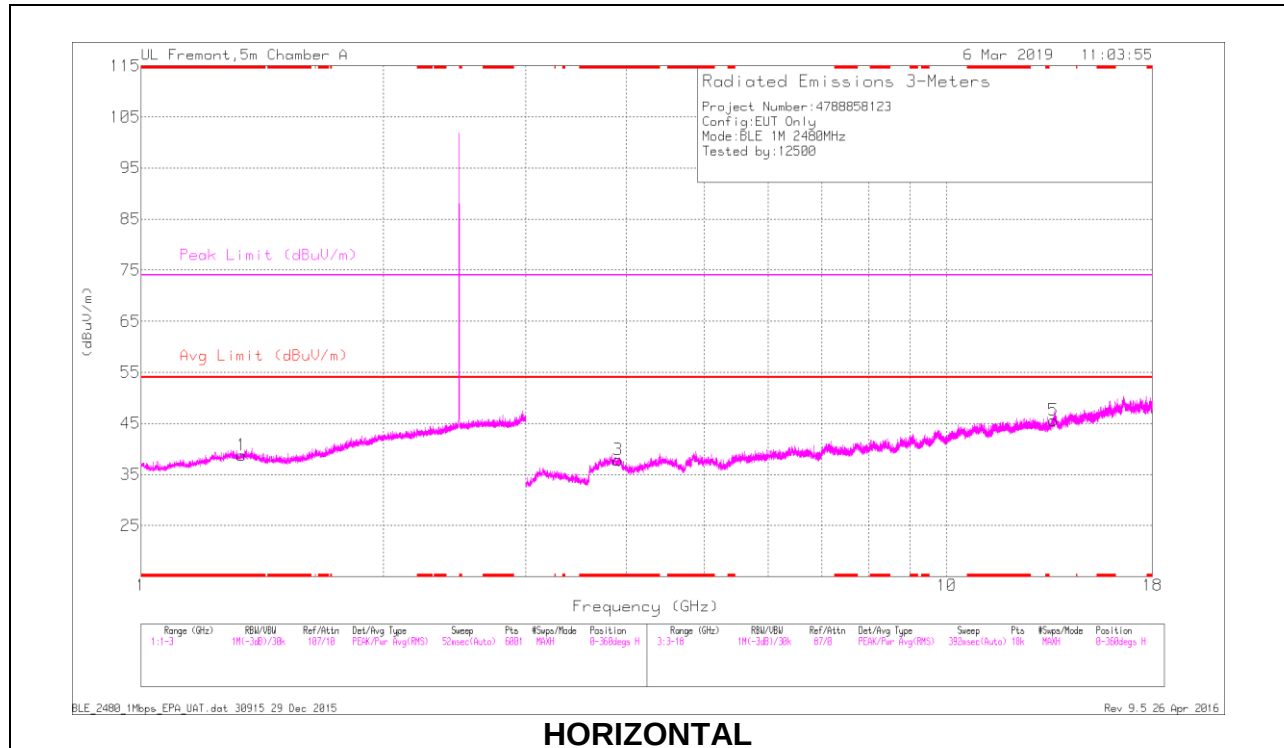
Markers	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.295	42.03	PK2	29.1	-25	46.13	-	-	74	-27.87	95	153	H
	* 1.297	30.64	MAv1	29.1	-25	34.74	54	-19.26	-	-	95	153	H
6	* 9.015	34.77	PK2	36.3	-22.6	48.47	-	-	74	-25.53	97	210	V
	* 9.014	24.79	MAv1	36.3	-22.7	38.39	54	-15.61	-	-	97	210	V
2	1.986	42.04	PK2	31.5	-23.7	49.84	-	-	-	-	158	210	V
3	6.398	35.71	PK2	35.6	-25.2	46.11	-	-	-	-	179	120	H
4	13.557	32.95	PK2	38.7	-19.6	52.05	-	-	-	-	104	178	V
5	16.559	32.83	PK2	41.8	-18.5	56.13	-	-	-	-	108	182	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



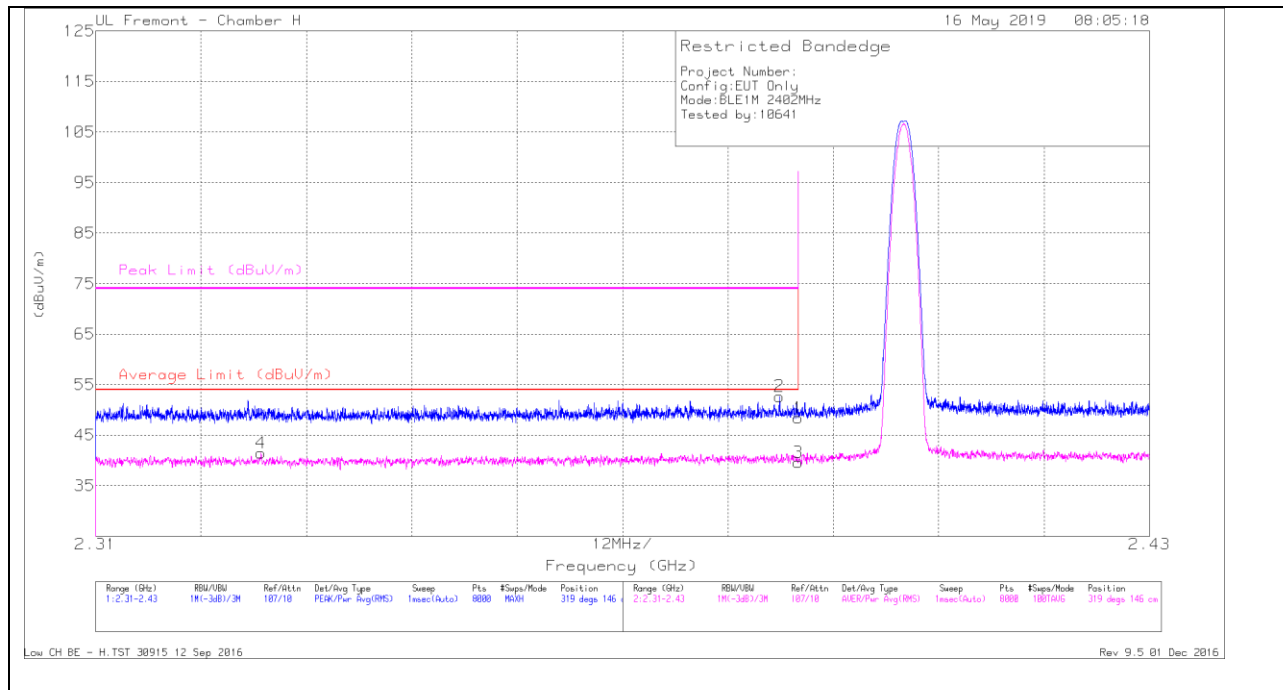
RADIATED EMISSIONS

	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.332	42.2	PK2	28.9	-25	46.1	-	-	74	-27.9	228	196	H
	* 1.333	30.87	MAv1	28.9	-25	34.77	54	-19.23	-	-	228	196	H
3	* 3.91	39.36	PK2	33.6	-29.1	43.86	-	-	74	-30.14	247	240	H
	* 3.911	28.58	MAv1	33.6	-29.1	33.08	54	-20.92	-	-	247	240	H
2	2.048	41.72	PK2	31.3	-23.4	49.62	-	-	-	-	305	298	V
4	7.118	35.35	PK2	35.6	-24.1	46.85	-	-	-	-	0	101	V
5	13.559	33.18	PK2	39	-19.5	52.68	-	-	-	-	32	230	H
6	16.643	34.36	PK2	41.9	-19.4	56.86	-	-	-	-	118	162	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. ANTENNA 5, HIGH POWER BLE (1Mbps)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	40.35	Pk	31.6	-23.5	48.45	-	-	74	-25.55	319	146	H
2	* 2.388	44.61	Pk	31.6	-23.5	52.71	-	-	74	-21.29	319	146	H
3	* 2.39	31.51	RMS	31.6	-23.5	39.61	54	-14.39	-	-	319	146	H
4	* 2.329	33.75	RMS	31.3	-23.6	41.45	54	-12.55	-	-	319	146	H

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

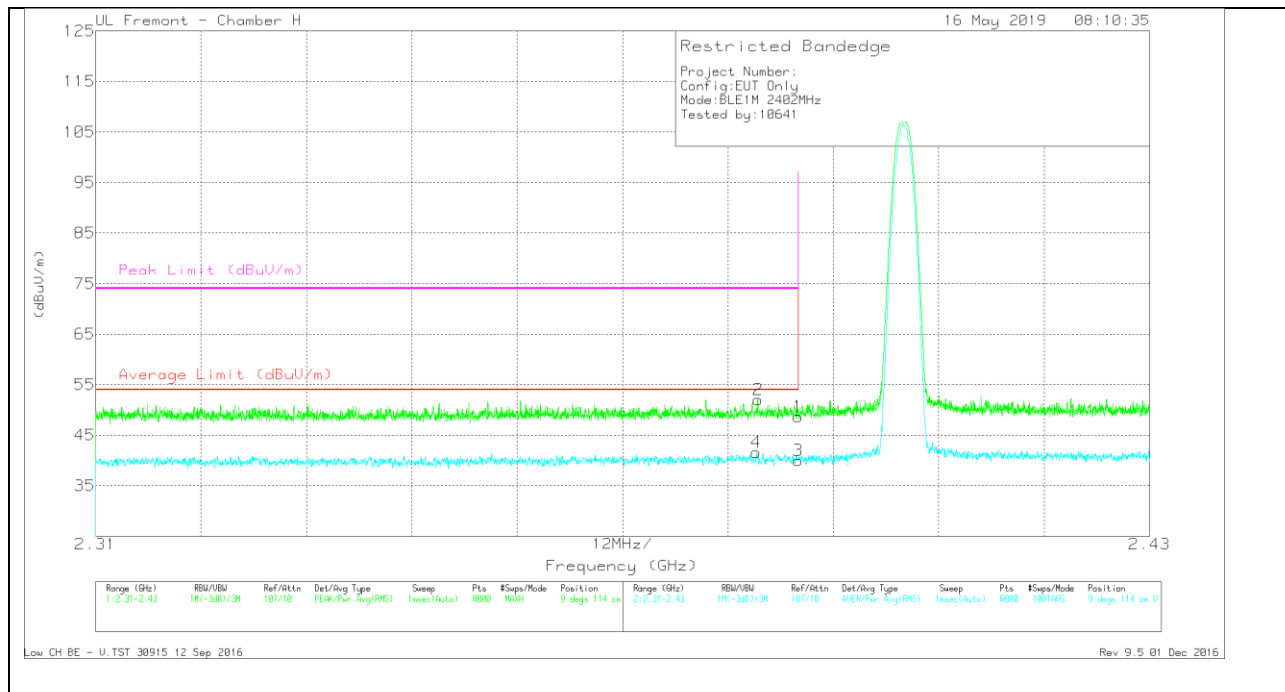
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	40.57	Pk	31.6	-23.5	48.67	-	-	74	-25.33	9	114	V
2	* 2.385	43.94	Pk	31.6	-23.5	52.04	-	-	74	-21.96	9	114	V
3	* 2.39	31.85	RMS	31.6	-23.5	39.95	54	-14.05	-	-	9	114	V
4	* 2.385	33.47	RMS	31.6	-23.5	41.57	54	-12.43	-	-	9	114	V

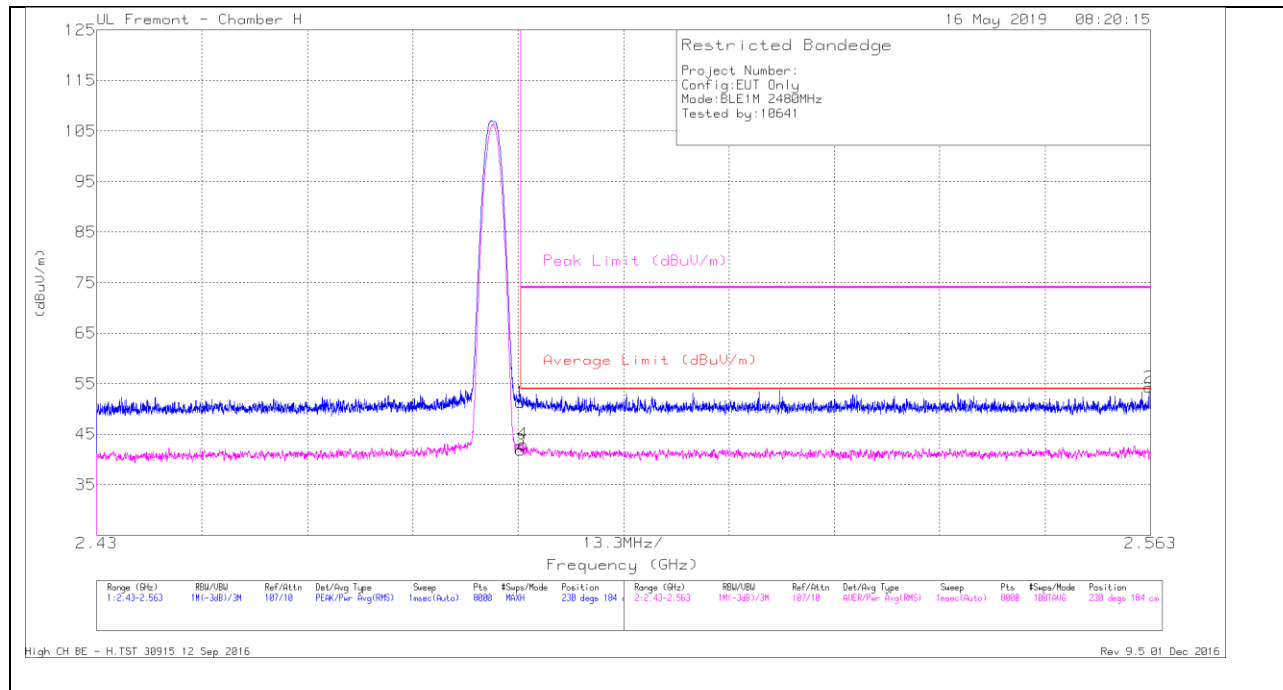
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

Low CH BE - 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 T136 (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	42.24	Pk	32.3	-23.3	51.24	-	-	74	-22.76	230	184	H
3	* 2.484	32.84	RMS	32.3	-23.3	41.84	54	-12.16	-	-	230	184	H
4	* 2.484	34.03	RMS	32.3	-23.3	43.03	54	-10.97	-	-	230	184	H
2	2.563	45.06	Pk	32.4	-23.2	54.26	-	-	74	-19.74	230	184	H

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

Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

UL Fremont - Chamber H

16 May 2019 08:26:35

Restricted Bandedge

Project Number:
Config: EUT Only
Mode: BLE1M 2480MHz
Tested by: 10641

(dBuV/m)

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

13.3MHz/

Frequency (GHz)

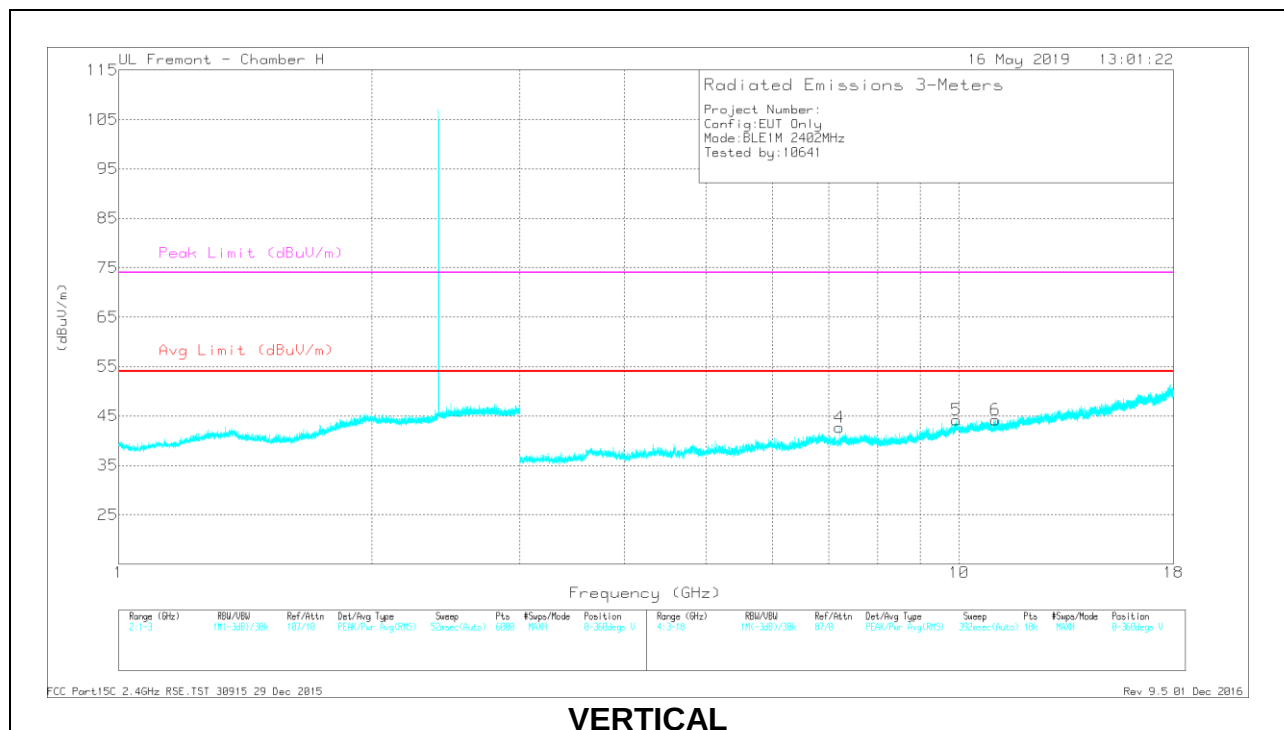
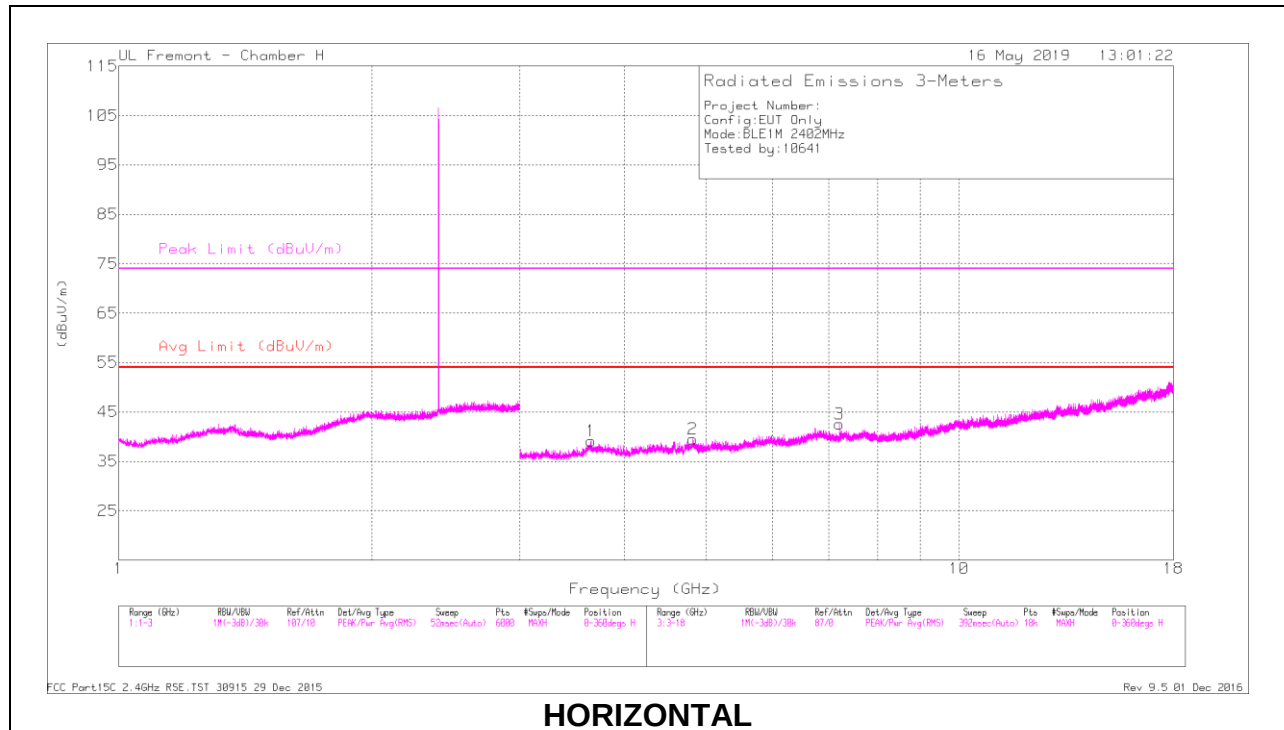
Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position	Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position
1.2 43-2.563	1M-3dB/3M	187/10	PKR/Pwr Avg(RMS)	Insect/Auto	8888	NA/1	183 degs 125 cm	2.2 43-2.563	1M-3dB/3M	187/10	PKR/Pwr Avg(RMS)	Insect/Auto	8888	180/10	183 degs 125 cm

High CH BE - U.TST 30915 12 Sep 2016

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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/CbU/Itr/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	41.98	Pk	32.3	-23.3	50.98	-	-	74	-23.02	183	125	V
3	* 2.484	32.93	RMS	32.3	-23.3	41.93	54	-12.07	-	-	183	125	V
4	* 2.486	33.97	RMS	32.3	-23.3	42.97	54	-11.03	-	-	183	125	V
2	2.526	44.36	Pk	32.3	-23.1	53.56	-	-	74	-20.44	183	125	V

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.644	40.7	PK2	33.1	-29.6	44.2	-	-	74	-29.8	135	100	H
	* 3.645	29.32	MAv1	33.1	-29.6	32.82	54	-21.18	-	-	135	100	H
2	* 4.824	42.17	PK2	34.1	-30.3	45.97	-	-	74	-28.03	170	126	H
	* 4.826	30.85	MAv1	34.1	-30.3	34.65	54	-19.35	-	-	170	126	H
6	* 11.058	36.59	PK2	37.8	-23.4	50.99	-	-	74	-23.01	189	193	V
	* 11.059	24.94	MAv1	37.8	-23.4	39.34	54	-14.66	-	-	189	193	V
3	7.207	41.12	PK2	36.3	-28	49.42	-	-	74	-24.58	266	115	H
4	7.207	40.6	PK2	36.3	-28	48.9	-	-	74	-25.1	353	300	V
5	9.935	35.49	PK2	37.1	-22.4	50.19	-	-	74	-23.81	146	162	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

RADIATED EMISSIONS

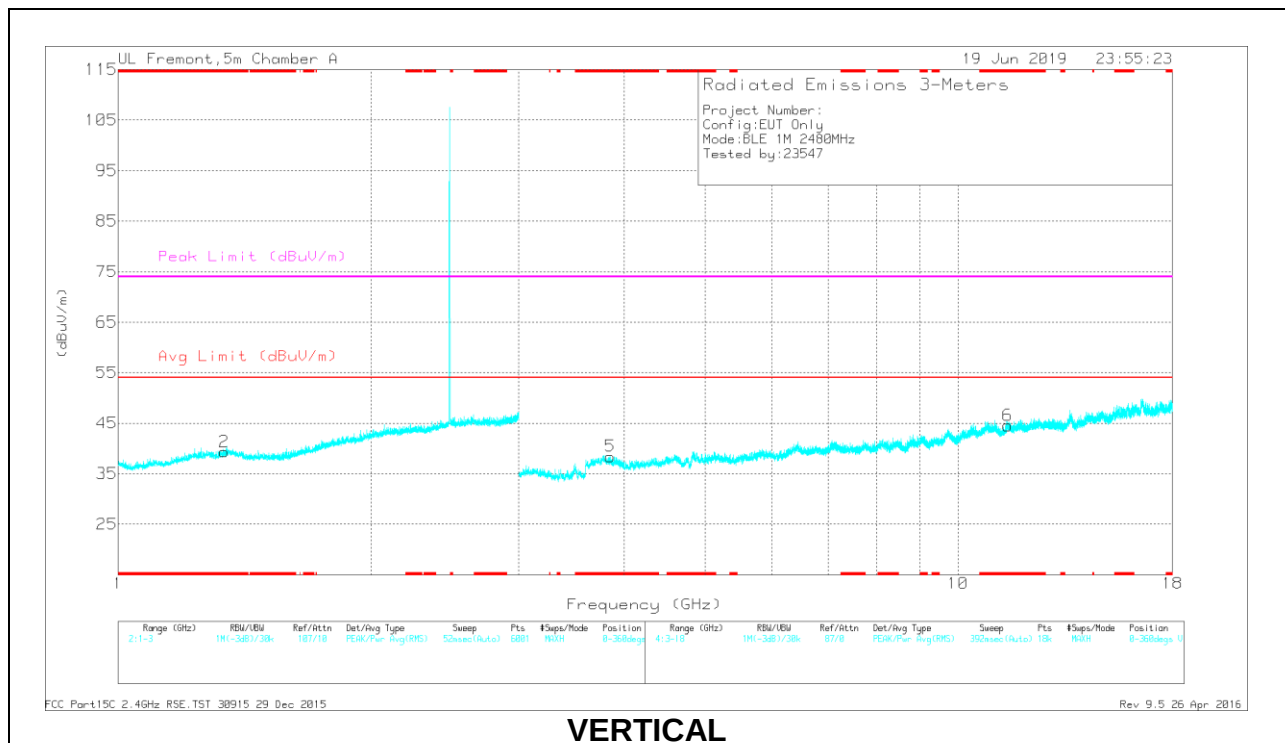
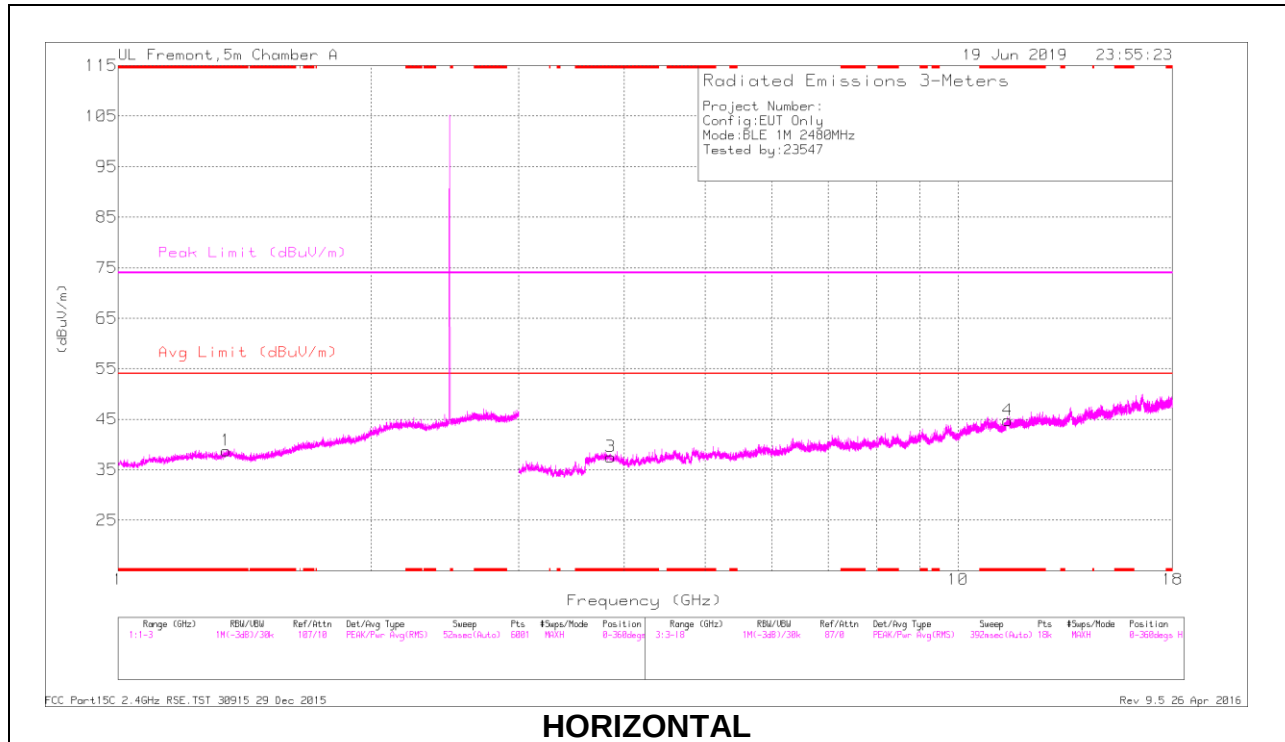
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.57	44.74	PK2	28.1	-24.7	48.14	-	-	74	-25.86	269	209	H
	* 1.569	33.26	MAv1	28.1	-24.7	36.66	54	-17.34	-	-	269	209	H
1	* 1.278	46.2	PK2	29.2	-25.4	50	-	-	74	-24	234	205	V
	* 1.277	33.66	MAv1	29.2	-25.4	37.46	54	-16.54	-	-	234	205	V
5	* 4.789	42.56	PK2	34.1	-30.2	46.46	-	-	74	-27.54	186	225	H
	* 4.79	31.09	MAv1	34.1	-30.2	34.99	54	-19.01	-	-	186	225	H
6	* 12.392	36.22	PK2	39.2	-23.2	52.22	-	-	74	-21.78	147	208	H
	* 12.39	25.01	MAv1	39.2	-23.2	41.01	54	-12.99	-	-	147	208	H
2	* 4.722	41.9	PK2	34	-29.9	46	-	-	74	-28	181	242	V
	* 4.721	30.52	MAv1	34	-29.9	34.62	54	-19.38	-	-	181	242	V
3	* 15.458	35.54	PK2	40.8	-21.7	54.64	-	-	74	-19.36	213	279	V
	* 15.456	24.41	MAv1	40.9	-21.6	43.71	54	-10.29	-	-	213	279	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



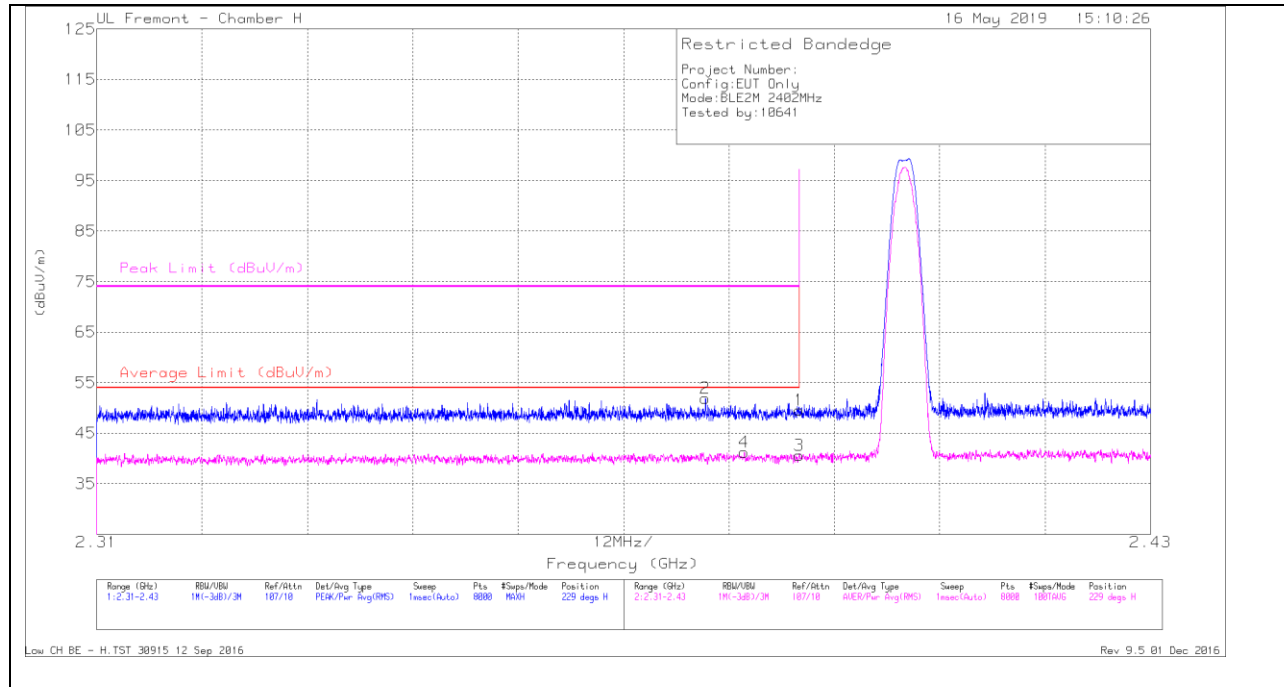
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 1.344	42.45	PK2	29.3	-25	46.75	-	-	74	-27.25	286	103	H
* 1.347	31.74	MAv1	29.4	-25	36.14	54	-17.86	-	-	286	103	H
* 1.335	42.8	PK2	29.2	-24.9	47.1	-	-	74	-26.9	286	199	V
* 1.338	32.07	MAv1	29.3	-25	36.37	54	-17.63	-	-	286	199	V
* 3.857	39.23	PK2	33.7	-29.2	43.73	-	-	74	-30.27	286	199	H
* 3.859	29.97	MAv1	33.7	-29.2	34.47	54	-19.53	-	-	286	199	H
* 11.458	33.67	PK2	38.1	-19.7	52.07	-	-	74	-21.93	286	199	H
* 11.457	23.2	MAv1	38.1	-19.7	41.6	54	-12.4	-	-	286	199	H
* 3.852	40.14	PK2	33.6	-29.2	44.54	-	-	74	-29.46	286	102	V
* 3.853	29.75	MAv1	33.6	-29.2	34.15	54	-19.85	-	-	286	102	V
* 11.462	33.72	PK2	38.1	-19.7	52.12	-	-	74	-21.88	286	102	V
* 11.463	23.37	MAv1	38.1	-19.7	41.77	54	-12.23	-	-	286	102	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. ANTENNA 2, HIGH POWER BLE (2Mbps)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dBm)	Amp/Cbl/FiltriP 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	* 2.39	41.48	Pk	31.6	-23.5	49.58	-	-	74	-24.42	229	100	H
2	* 2.379	43.8	Pk	31.6	-23.5	51.9	-	-	74	-22.1	229	100	H
3	* 2.39	32.55	RMS	31.6	-23.5	40.65	54	-13.35	-	-	229	100	H
4	* 2.384	33.16	RMS	31.6	-23.5	41.26	54	-12.74	-	-	229	100	H

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

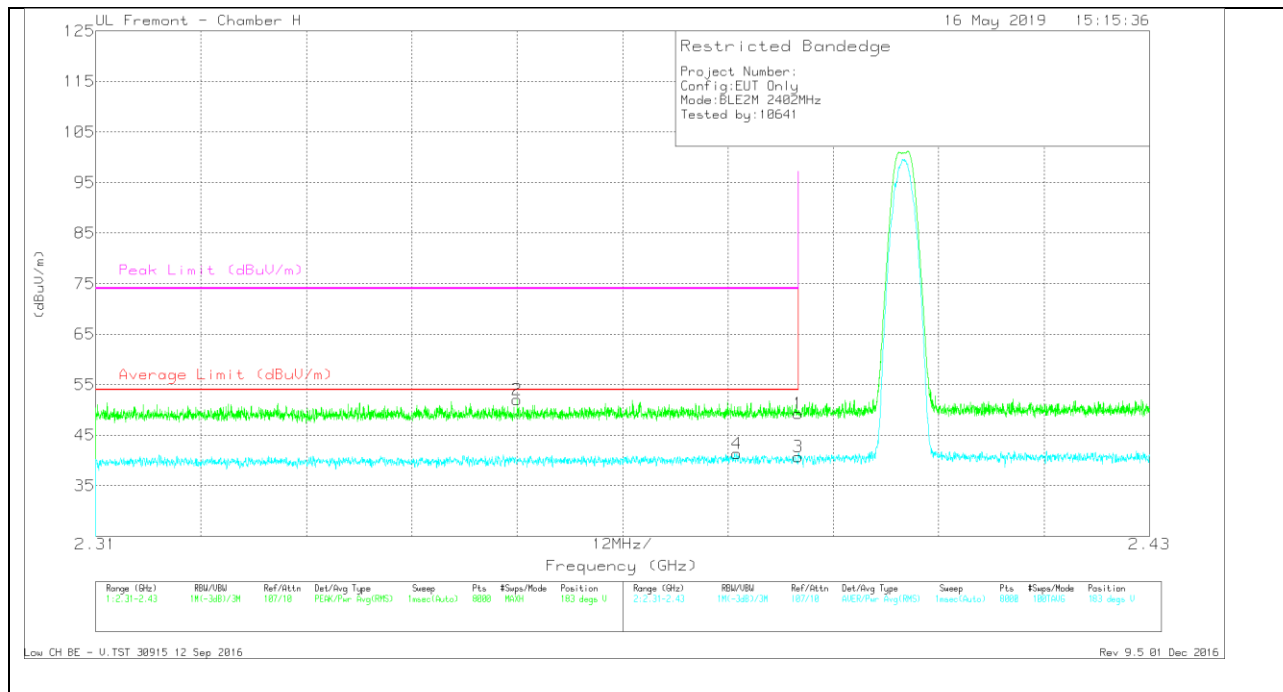
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	41.16	Pk	31.6	-23.5	49.26	-	-	74	-24.74	183	185	V
2	* 2.358	44.26	Pk	31.4	-23.6	52.06	-	-	74	-21.94	183	185	V
3	* 2.39	32.68	RMS	31.6	-23.5	40.78	54	-13.22	-	-	183	185	V
4	* 2.383	33.3	RMS	31.6	-23.5	41.4	54	-12.6	-	-	183	185	V

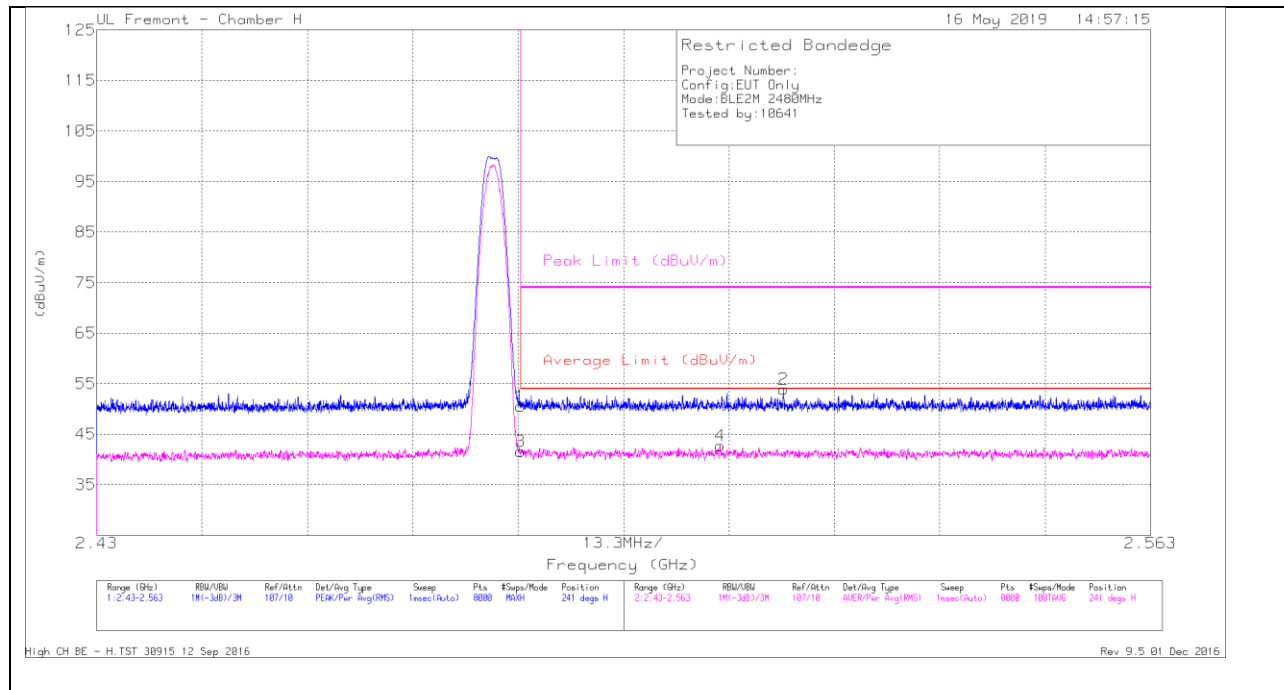
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

Low CH BE - 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 T136 (dB/m)	Amp/Cbl/Filtr/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	41.55	Pk	32.3	-23.3	50.55	-	-	74	-23.45	241	110	H
3	* 2.484	32.64	RMS	32.3	-23.3	41.64	54	-12.36	-	-	241	110	H
4	2.509	33.54	RMS	32.4	-23.2	42.74	54	-11.26	-	-	241	110	H
2	2.517	44.75	Pk	32.3	-23.2	53.85	-	-	74	-20.15	241	110	H

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

Pk - Peak detector

RMS - RMS detection

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UL Fremont - Chamber H

16 May 2019 15:03:49

Restricted Bandedge

Project Number:
Config:EUT Only
Mode:BLE2M 2480MHz
Tested by:18641

(dBuV/m)

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

2.43 13.3MHz/ 2.563

Frequency (GHz)

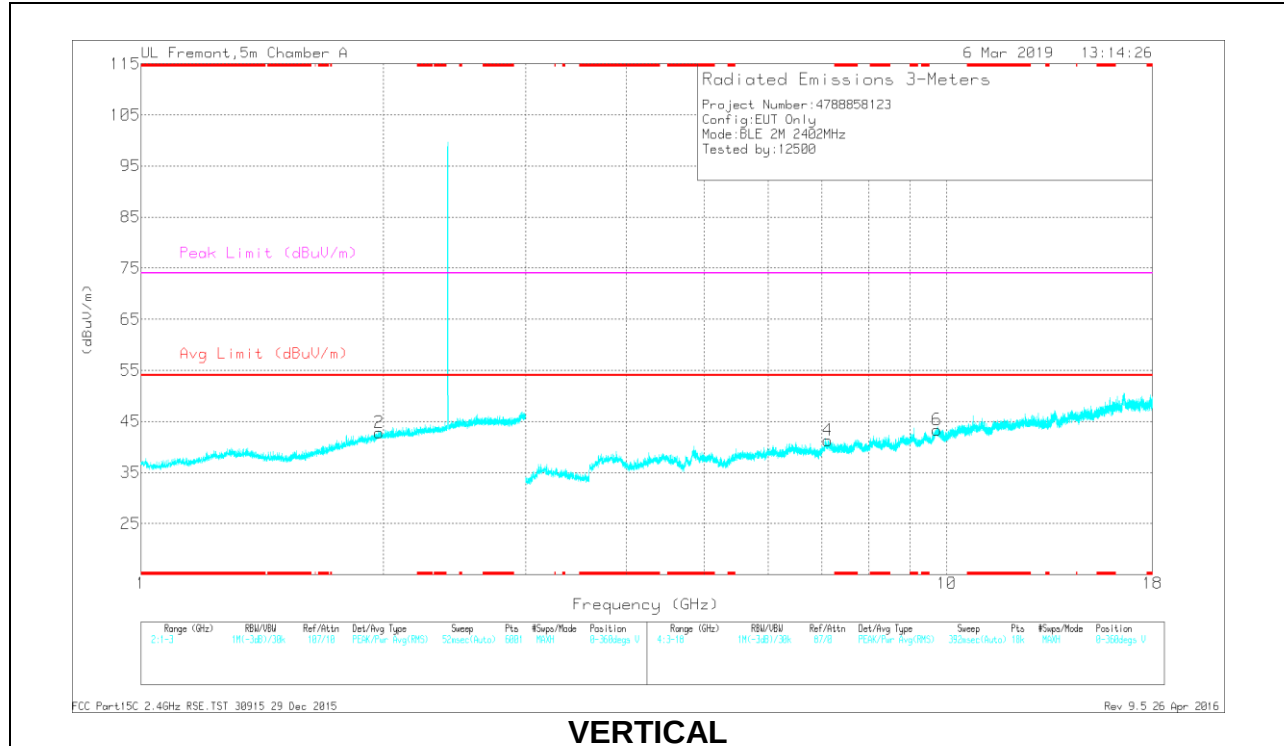
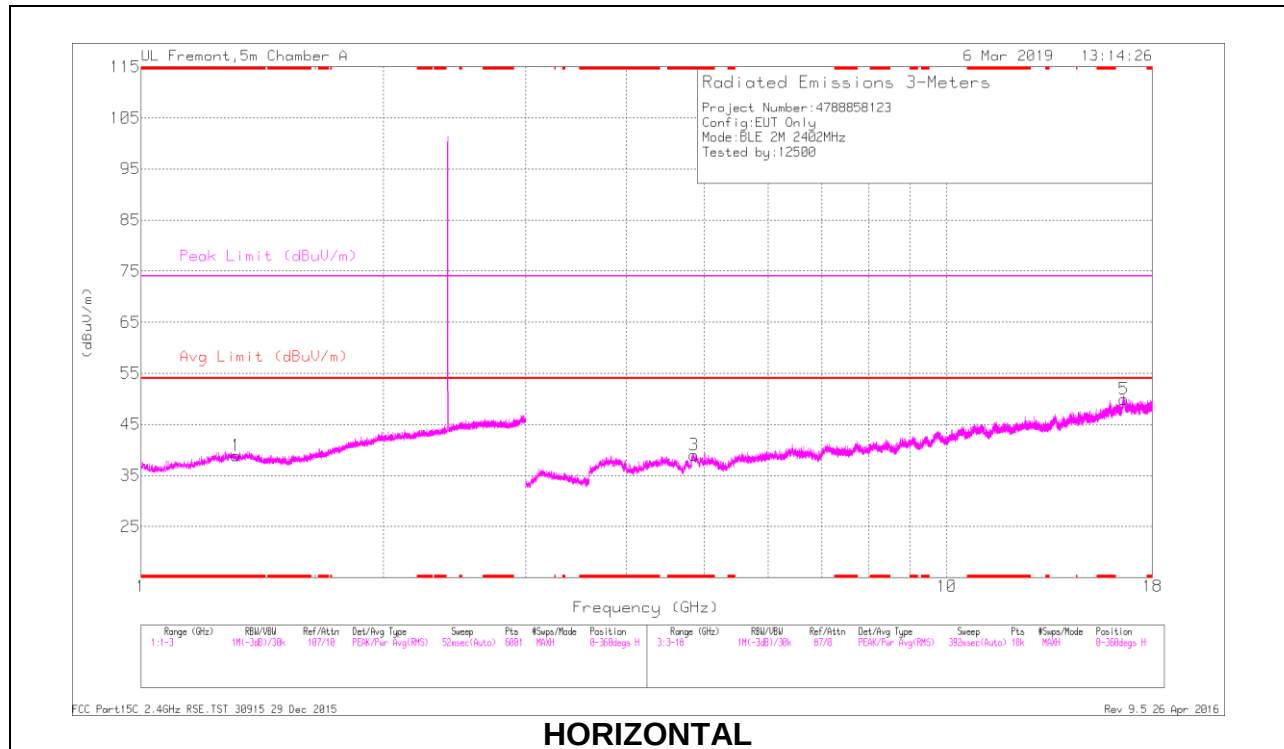
Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position	Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position
1.2 43-2.563	1K-3dB/3M	187/18	PKR/Pwr Avg(RMS)	Insect/Auto	8888	NA/1	192 degs U	2.2 43-2.563	1K-3dB/3M	187/18	PKR/Pwr Avg(RMS)	Insect/Auto	8888	180/18	192 degs U

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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dBm)	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	42.71	Pk	32.3	-23.3	51.71	-	-	74	-22.29	192	171	V
3	* 2.484	32.48	RMS	32.3	-23.3	41.48	54	-12.52	-	-	192	171	V
4	2.507	33.19	RMS	32.3	-23.2	42.29	54	-11.71	-	-	192	171	V
2	2.529	43.8	Pk	32.4	-23.2	53	-	-	74	-21	192	171	V

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HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

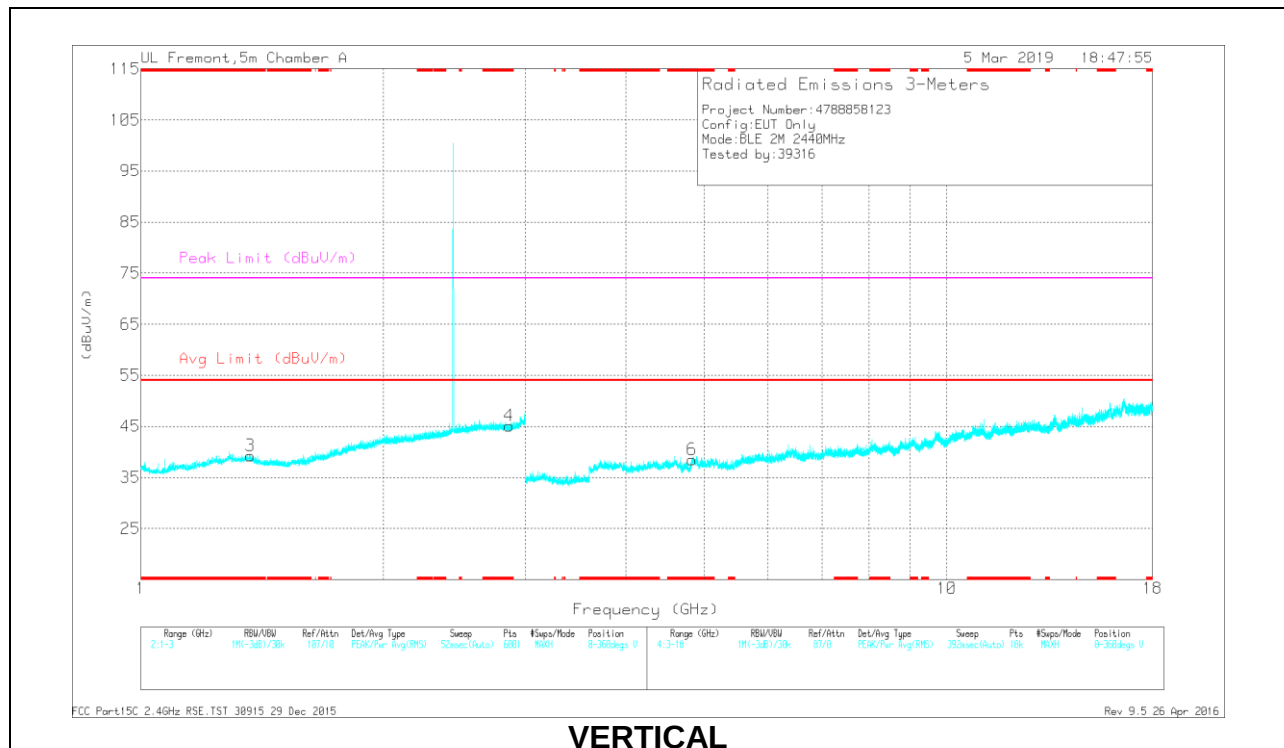
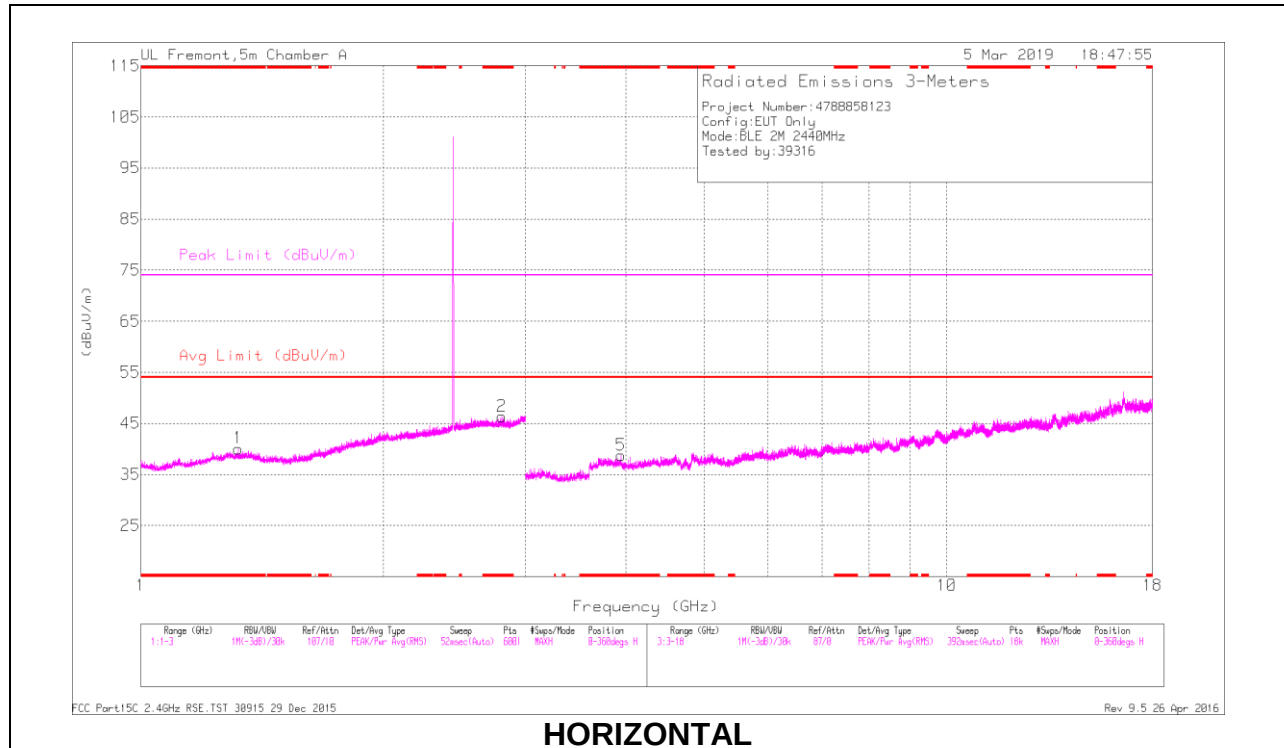
Markers	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.312	42.3	PK2	29	-24.9	46.4	-	-	74	-27.6	228	144	H
	* 1.314	30.57	MAv1	29	-24.9	34.67	54	-19.33	-	-	228	144	H
3	* 4.854	38.31	PK2	34.1	-27.1	45.31	-	-	74	-28.69	13	196	H
	* 4.855	27.45	MAv1	34.1	-27.1	34.45	54	-19.55	-	-	13	196	H
2	1.977	41.45	PK2	31.6	-23.7	49.35	-	-	-	-	255	174	V
4	7.116	35.88	PK2	35.6	-24.2	47.28	-	-	-	-	32	214	V
6	9.724	33.75	PK2	36.9	-21.1	49.55	-	-	-	-	20	114	V
5	16.593	32.42	PK2	41.8	-18	56.22	-	-	-	-	228	187	H

* - 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

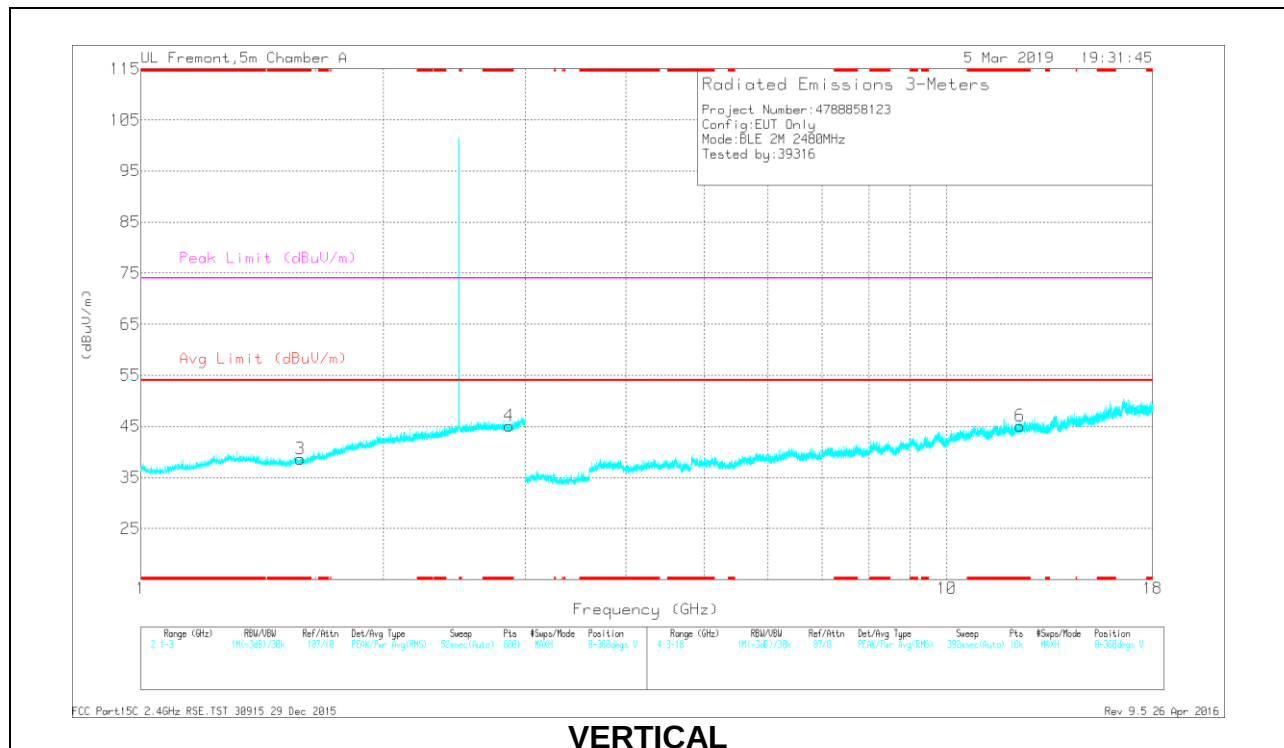
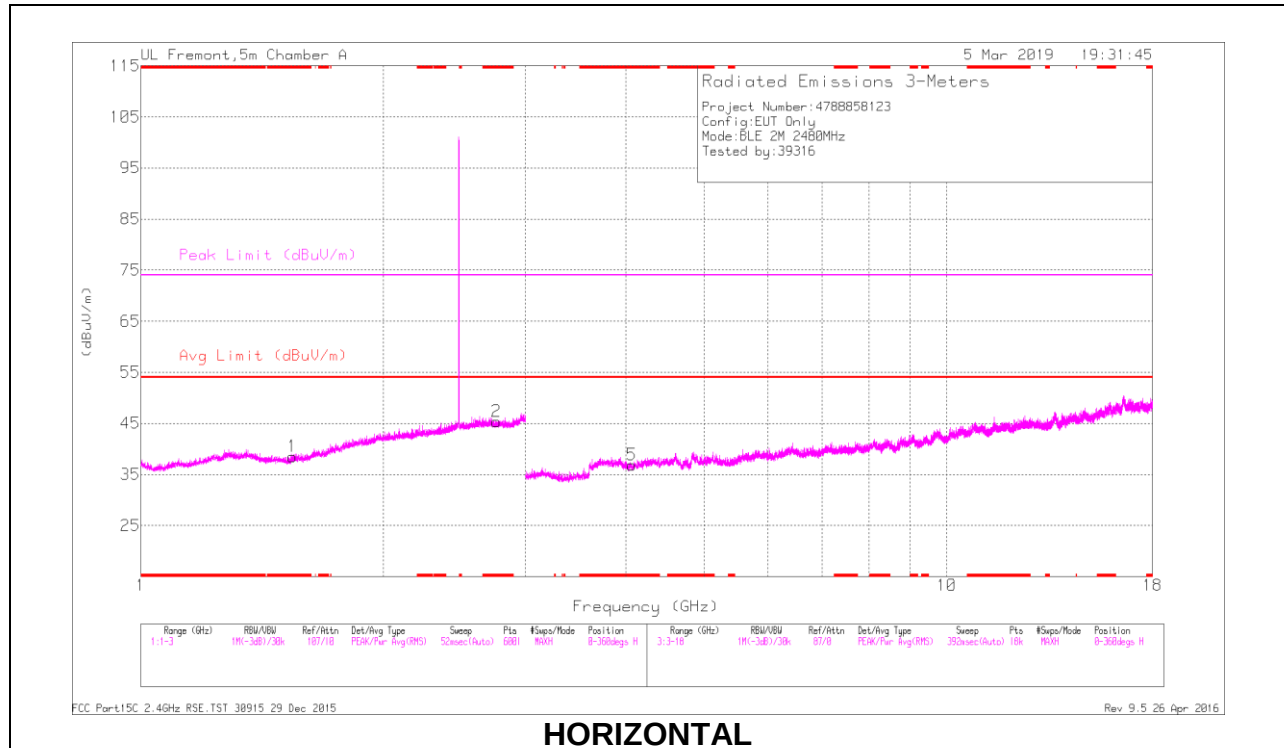
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.322	42.64	PK2	29	-24.9	46.74	-	-	74	-27.26	151	152	H
	* 1.321	30.69	MAv1	29	-24.9	34.79	54	-19.21	-	-	151	152	H
2	* 2.806	41.76	PK2	32.4	-22.1	52.06	-	-	74	-21.94	210	193	H
	* 2.805	31.13	MAv1	32.4	-22.1	41.43	54	-12.57	-	-	210	193	H
3	* 1.368	41.95	PK2	29.2	-25	46.15	-	-	74	-27.85	203	294	V
	* 1.37	30.64	MAv1	29.2	-25	34.84	54	-19.16	-	-	203	294	V
4	* 2.865	41.89	PK2	32.3	-22	52.19	-	-	74	-21.81	280	238	V
	* 2.863	30.78	MAv1	32.3	-22	41.08	54	-12.92	-	-	280	238	V
5	* 3.94	39.22	PK2	33.6	-28.7	44.12	-	-	74	-29.88	171	206	H
	* 3.94	29.05	MAv1	33.6	-28.7	33.95	54	-20.05	-	-	171	206	H
6	* 4.833	37.35	PK2	34.2	-26.8	44.75	-	-	74	-29.25	96	233	V
	* 4.833	28.05	MAv1	34.2	-26.8	35.45	54	-18.55	-	-	96	233	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



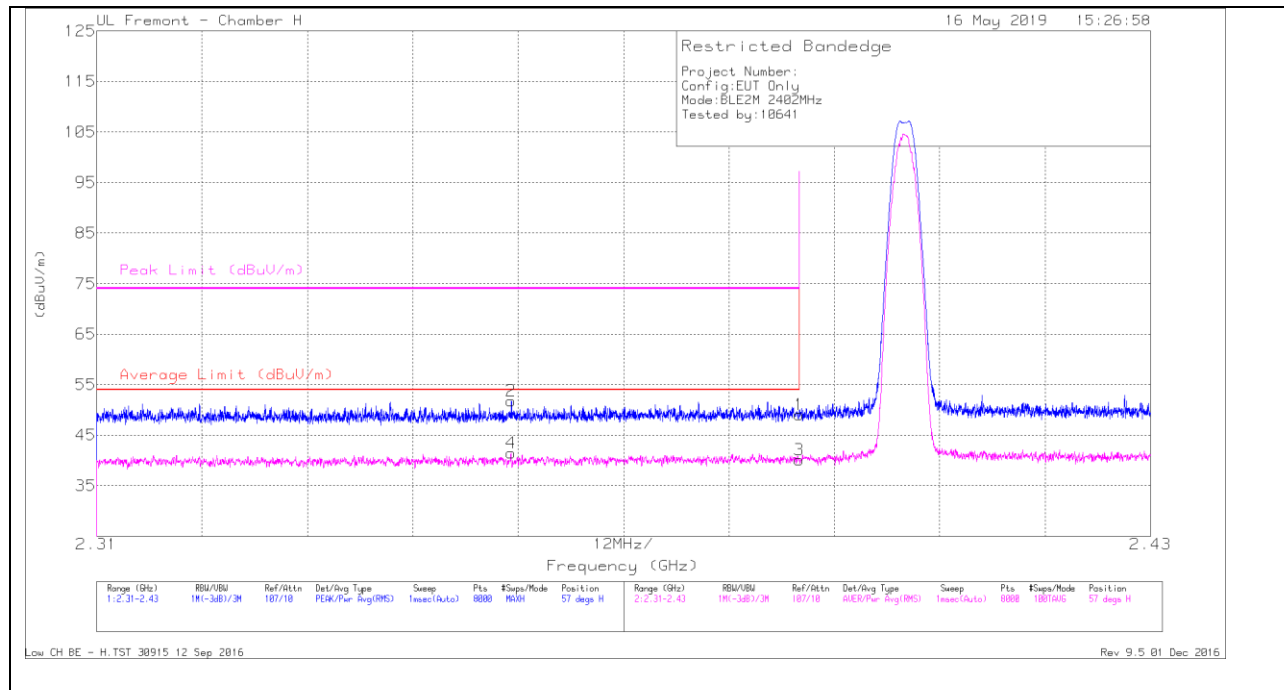
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
* 1.542	41.56	PK2	28.1	-24.4	45.26	-	-	74	-28.74	237	210	H
* 1.541	30.44	MAv1	28	-24.4	34.04	54	-19.96	-	-	237	210	H
* 2.762	42.41	PK2	32.4	-22.1	52.71	-	-	74	-21.29	296	106	H
* 2.763	30.42	MAv1	32.4	-22.1	40.72	54	-13.28	-	-	296	106	H
* 1.578	41.59	PK2	28.1	-24.2	45.49	-	-	74	-28.51	30	297	V
* 1.578	30.27	MAv1	28.1	-24.2	34.17	54	-19.83	-	-	30	297	V
* 2.863	41.94	PK2	32.3	-22	52.24	-	-	74	-21.76	239	246	V
* 2.862	30.32	MAv1	32.3	-22	40.62	54	-13.38	-	-	239	246	V
* 4.066	38.53	PK2	33.7	-28.7	43.53	-	-	74	-30.47	271	199	H
* 4.063	27.87	MAv1	33.7	-28.6	32.97	54	-21.03	-	-	271	199	H
* 12.331	32.56	PK2	39	-20.4	51.16	-	-	74	-22.84	2	156	V
* 12.328	22.42	MAv1	39	-20.5	40.92	54	-13.08	-	-	2	156	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.4. ANTENNA 5, HIGH POWER BLE (2Mbps)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dBm)	Amp/Cbl/Filtr/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	40.92	Pk	31.6	-23.5	49.02	-	-	74	-24.98	57	225	H
2	* 2.357	43.94	Pk	31.4	-23.6	51.74	-	-	74	-22.26	57	225	H
3	* 2.39	31.97	RMS	31.6	-23.5	40.07	54	-13.93	-	-	57	225	H
4	* 2.357	33.64	RMS	31.4	-23.6	41.44	54	-12.56	-	-	57	225	H

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

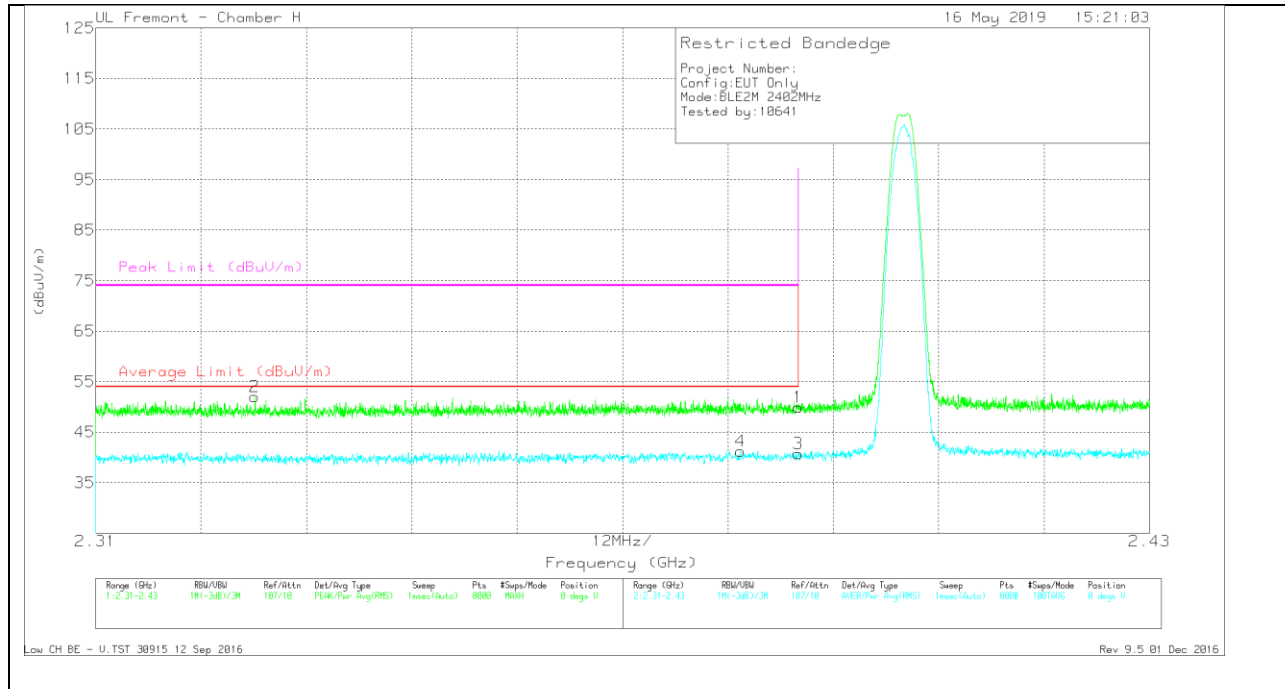
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 12 Sep 2016

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cb/Filtr/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	41.78	Pk	31.6	-23.5	49.88	-	-	74	-24.12	0	114	V
2	* 2.328	44.38	Pk	31.3	-23.6	52.08	-	-	74	-21.92	0	114	V
3	* 2.39	32.6	RMS	31.6	-23.5	40.7	54	-13.3	-	-	0	114	V
4	* 2.383	33.17	RMS	31.6	-23.5	41.27	54	-12.73	-	-	0	114	V

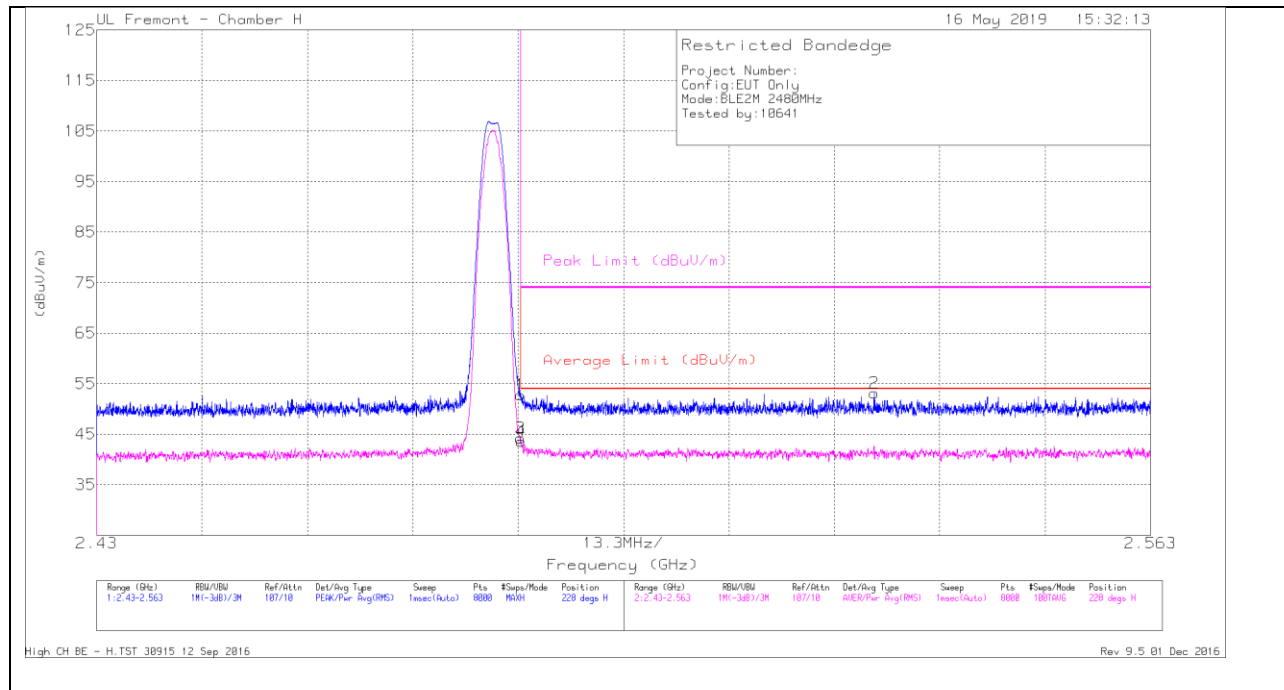
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

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BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF-T136 (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	43.8	Pk	32.3	-23.3	52.8	-	-	74	-21.2	228	116	H
3	* 2.484	35.24	RMS	32.3	-23.3	44.24	54	-9.76	-	-	228	116	H
4	* 2.484	34.58	RMS	32.3	-23.3	43.58	54	-10.42	-	-	228	116	H
2	2.528	43.9	Pk	32.3	-23.1	53.1	-	-	74	-20.9	228	116	H

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

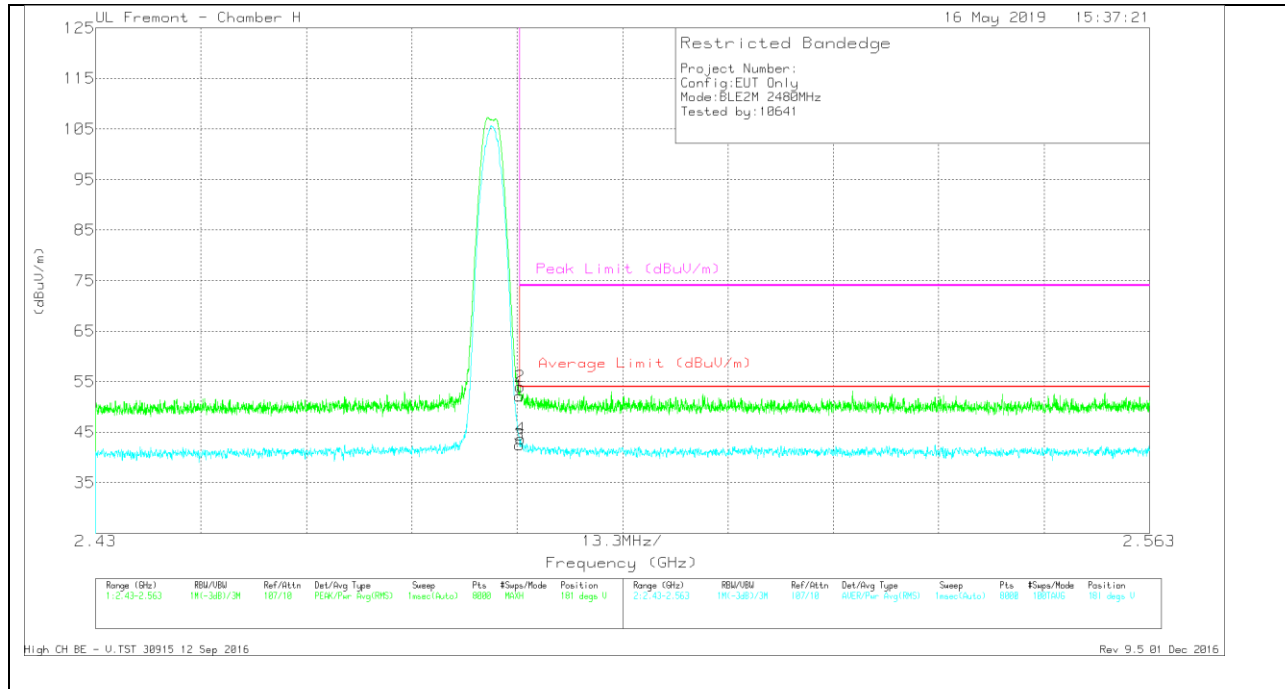
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/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	43.2	Pk	32.3	-23.3	52.2	-	-	74	-21.8	181	106	V
2	* 2.484	45.05	Pk	32.3	-23.3	54.05	-	-	74	-19.95	181	106	V
3	* 2.484	33.52	RMS	32.3	-23.3	42.52	54	-11.48	-	-	181	106	V
4	* 2.484	34.71	RMS	32.3	-23.3	43.71	54	-10.29	-	-	181	106	V

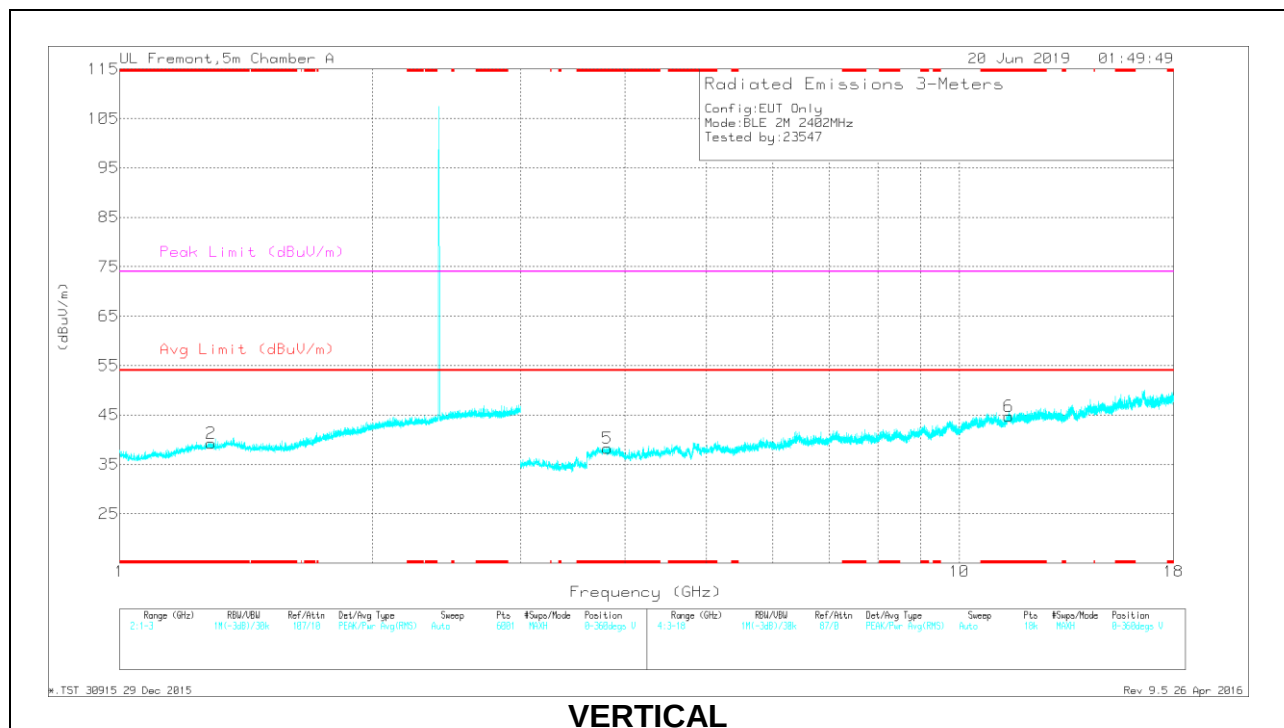
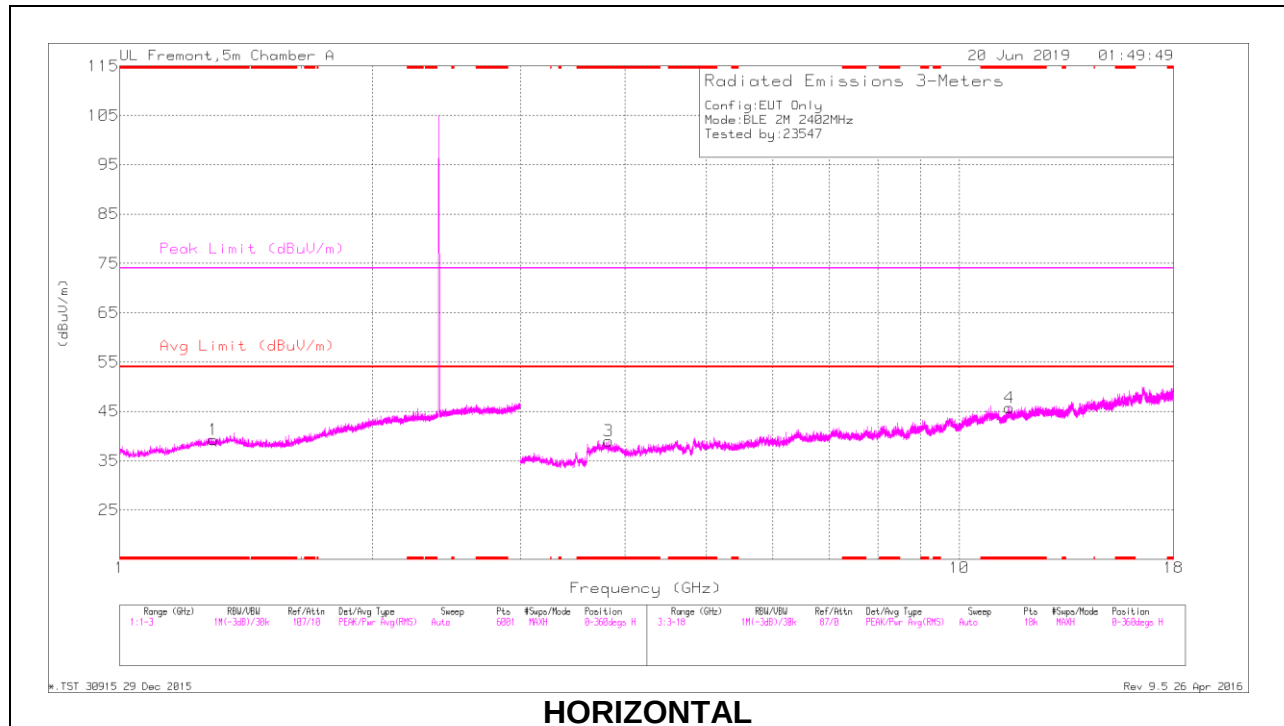
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH BE - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

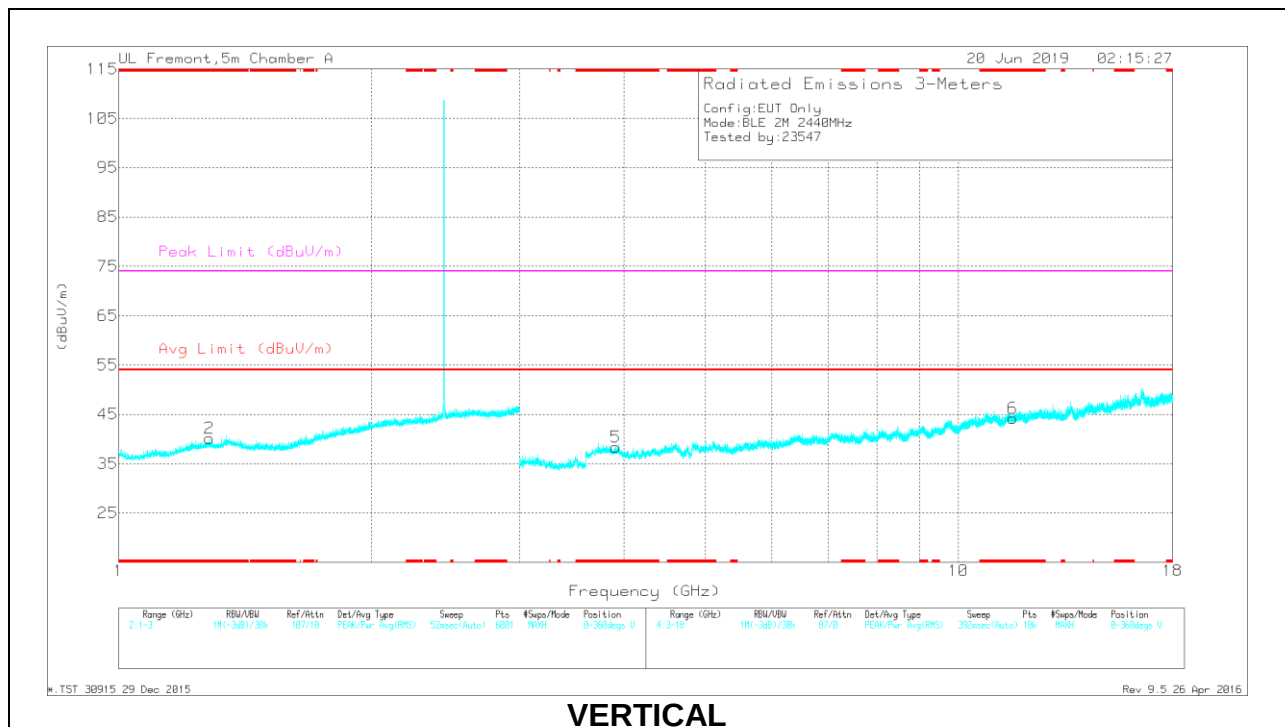
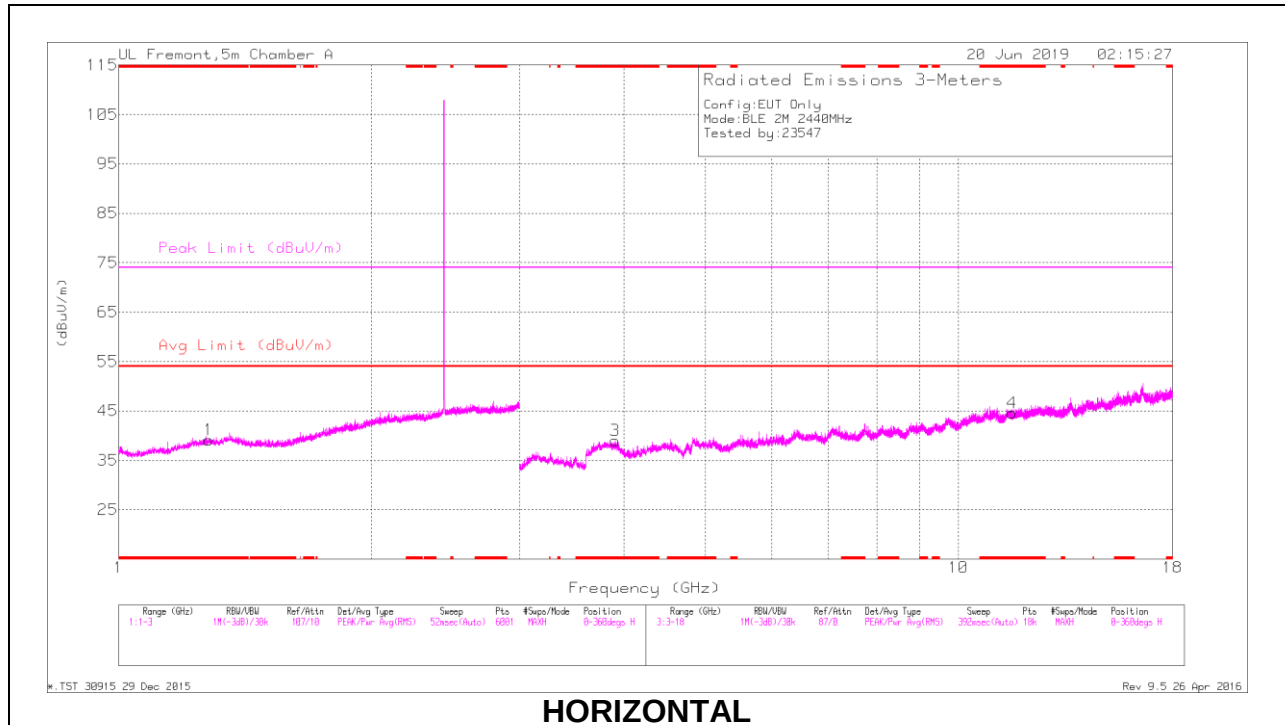
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT346 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.294	42.42	PK2	29	-24.9	46.52	-	-	74	-27.48	360	101	H
	* 1.292	31.54	MAv1	29	-24.9	35.64	54	-18.36	-	-	360	101	H
2	* 1.286	42.42	PK2	28.9	-25	46.32	-	-	74	-27.68	360	101	V
	* 1.287	31.58	MAv1	28.9	-25	35.48	54	-18.52	-	-	360	101	V
3	* 3.824	39.2	PK2	33.7	-29.1	43.8	-	-	74	-30.2	360	101	H
	* 3.825	29.72	MAv1	33.7	-29	34.42	54	-19.58	-	-	360	101	H
4	* 11.48	33.19	PK2	38	-19.6	51.59	-	-	74	-22.41	360	101	H
	* 11.48	23.19	MAv1	38	-19.6	41.59	54	-12.41	-	-	360	101	H
5	* 3.812	40.58	PK2	33.7	-29.1	45.18	-	-	74	-28.82	360	101	V
	* 3.812	29.82	MAv1	33.7	-29.1	34.42	54	-19.58	-	-	360	101	V
6	* 11.461	33.14	PK2	38.1	-19.7	51.54	-	-	74	-22.46	360	199	V
	* 11.461	23.3	MAv1	38.1	-19.7	41.7	54	-12.3	-	-	360	199	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

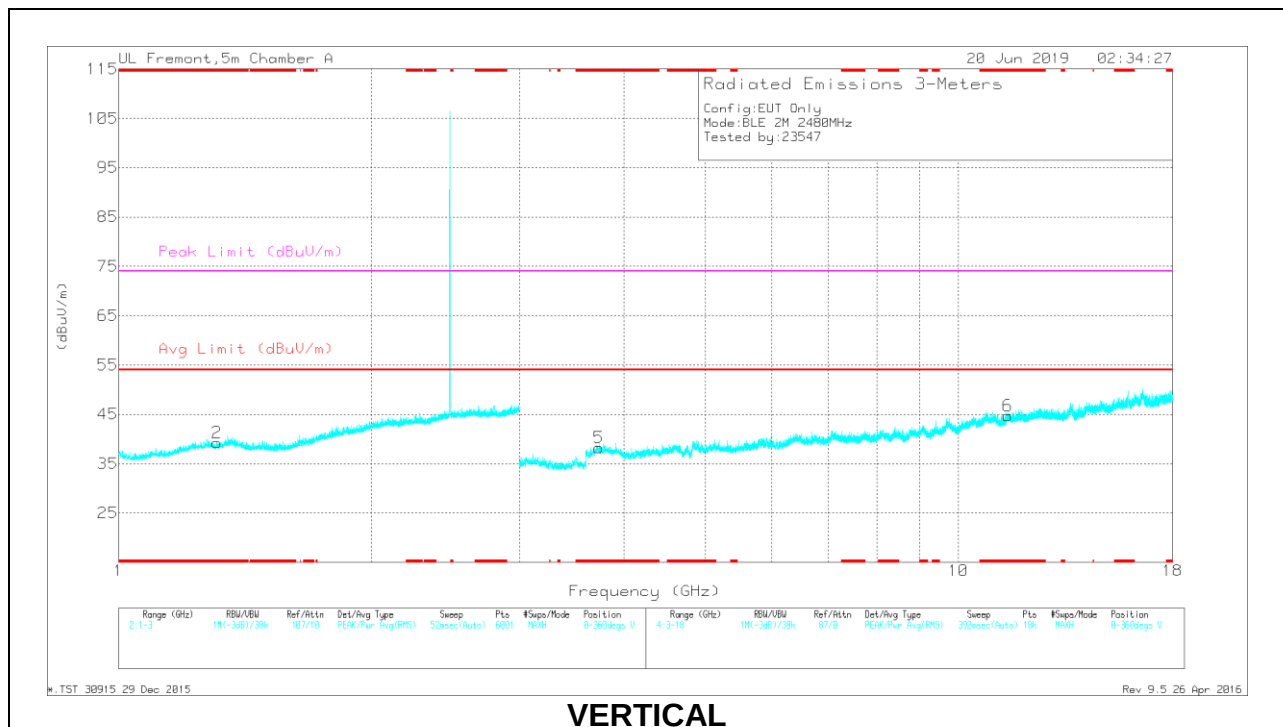
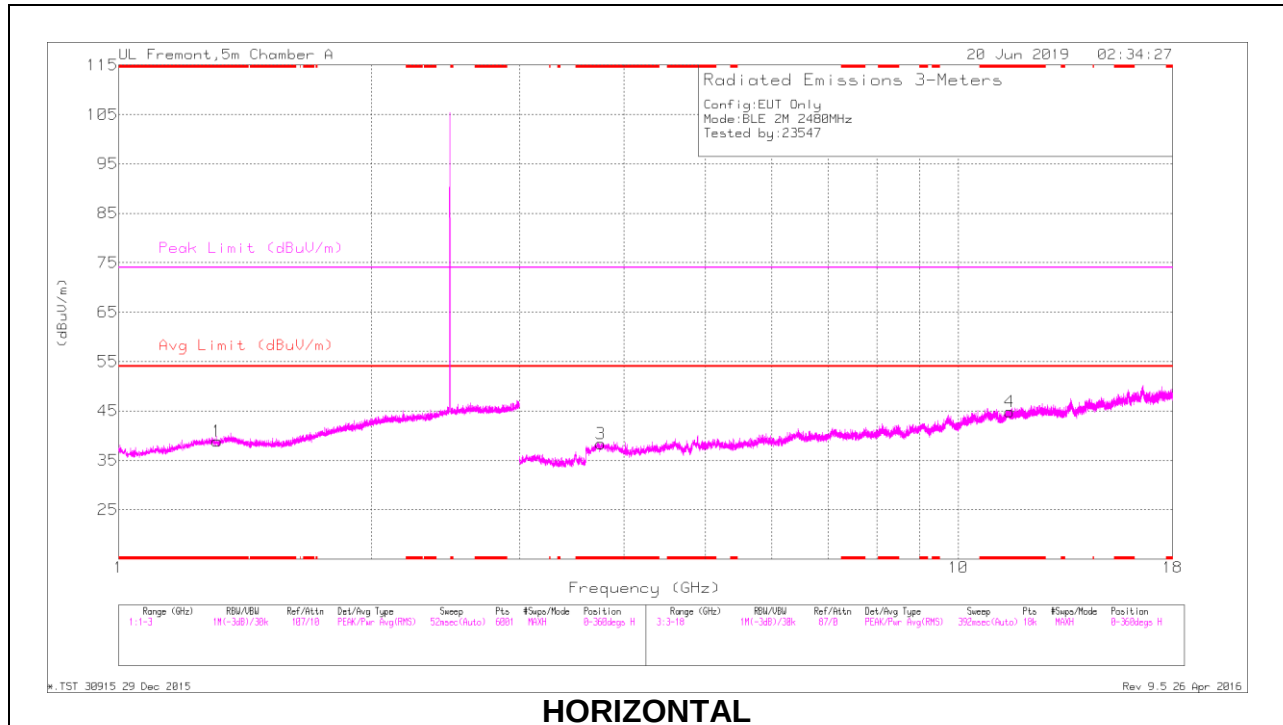
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT346 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.278	42	PK2	29.1	-24.9	46.2	-	-	74	-27.8	360	100	H
	* 1.277	31.72	MAv1	29.1	-24.9	35.92	54	-18.08	-	-	360	100	H
2	* 1.282	42.65	PK2	29	-25	46.65	-	-	74	-27.35	360	100	V
	* 1.28	31.43	MAv1	29.1	-24.9	35.63	54	-18.37	-	-	360	100	V
3	* 3.903	39.91	PK2	33.5	-28.8	44.61	-	-	74	-29.39	360	199	H
	* 3.905	30.1	MAv1	33.5	-28.9	34.7	54	-19.3	-	-	360	199	H
4	* 11.598	33.6	PK2	38.2	-20.4	51.4	-	-	74	-22.6	360	102	H
	* 11.598	23.67	MAv1	38.2	-20.4	41.47	54	-12.53	-	-	360	102	H
5	* 3.908	40.34	PK2	33.5	-29	44.84	-	-	74	-29.16	360	102	V
	* 3.906	30.03	MAv1	33.5	-29	34.53	54	-19.47	-	-	360	102	V
6	* 11.613	33.38	PK2	38.2	-20.4	51.18	-	-	74	-22.82	360	199	V
	* 11.614	23.46	MAv1	38.2	-20.4	41.26	54	-12.74	-	-	360	199	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



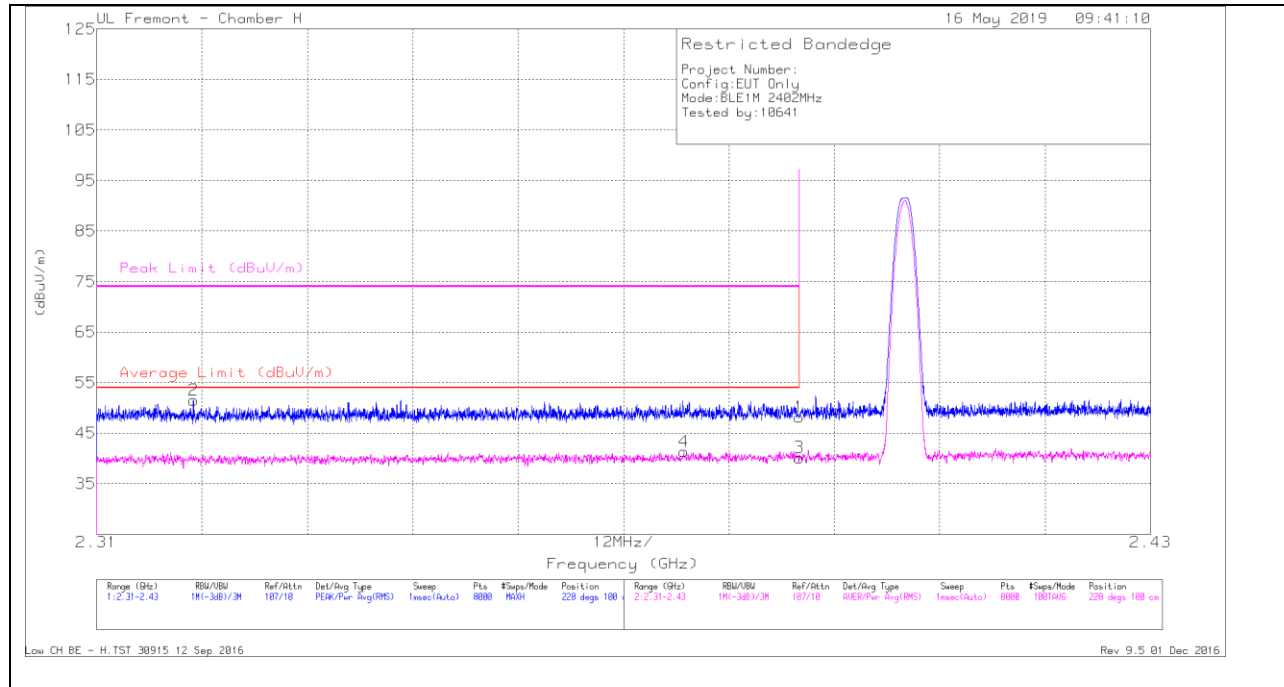
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT346 (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	* 1.31	41.77	PK2	29	-24.9	45.87	-	-	74	-28.13	360	100	H
	* 1.309	31.41	MAv1	29	-24.9	35.51	54	-18.49	-	-	360	100	H
2	* 1.307	40.78	PK2	29	-25	44.78	-	-	74	-29.22	360	199	V
	* 1.309	30.59	MAv1	29	-24.9	34.69	54	-19.31	-	-	360	199	V
3	* 3.755	39.65	PK2	33.5	-29.1	44.05	-	-	74	-29.95	360	102	H
	* 3.755	29.72	MAv1	33.5	-29.1	34.12	54	-19.88	-	-	360	102	H
4	* 11.518	33.64	PK2	38.1	-20	51.74	-	-	74	-22.26	360	102	H
	* 11.521	23.28	MAv1	38.1	-20	41.38	54	-12.62	-	-	360	102	H
5	* 3.732	40.3	PK2	33.4	-28.9	44.8	-	-	74	-29.2	360	102	V
	* 3.732	29.76	MAv1	33.4	-28.9	34.26	54	-19.74	-	-	360	102	V
6	* 11.455	33.6	PK2	38.1	-19.7	52	-	-	74	-22	360	102	V
	* 11.456	23.67	MAv1	38.1	-19.7	42.07	54	-11.93	-	-	360	102	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.5. ANTENNA 2, LOW POWER BLE (1Mbps)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/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	40.05	Pk	31.6	-23.5	48.15	-	-	74	-25.85	228	100	H
2	* 2.321	43.93	Pk	31.3	-23.7	51.53	-	-	74	-22.47	228	100	H
3	* 2.39	32.07	RMS	31.6	-23.5	40.17	54	-13.83	-	-	228	100	H
4	* 2.377	33.26	RMS	31.6	-23.5	41.36	54	-12.64	-	-	228	100	H

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

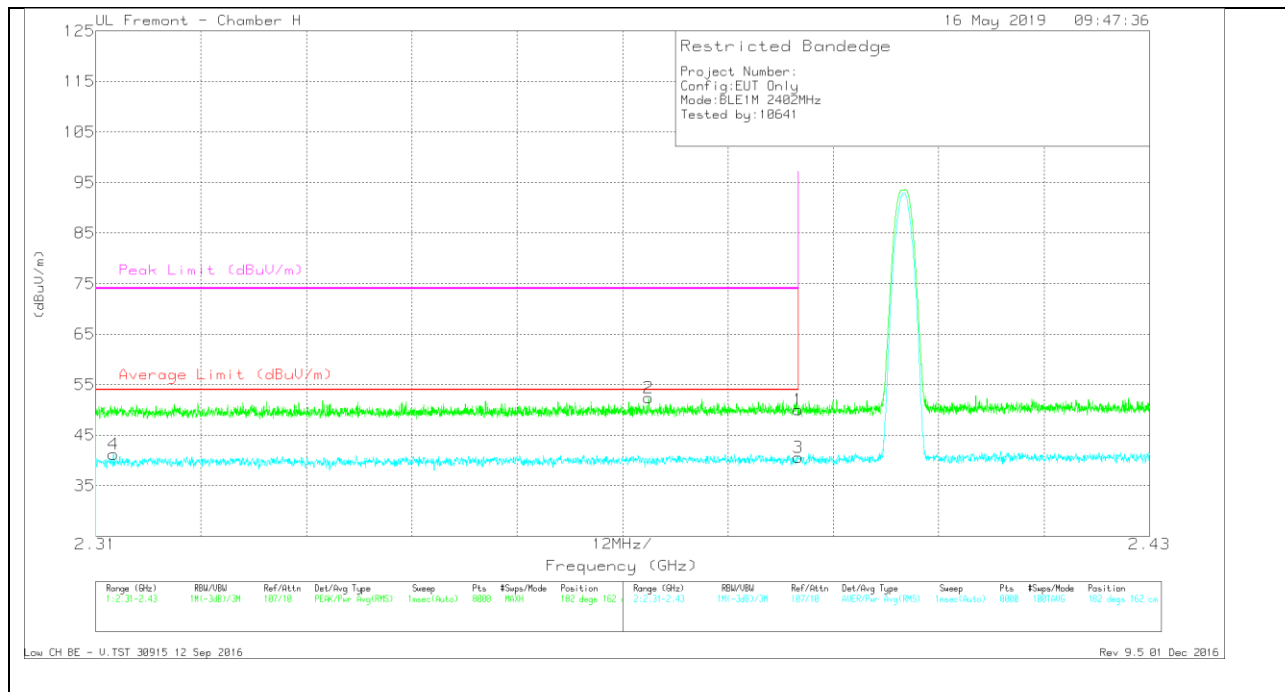
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	41.92	Pk	31.6	-23.5	50.02	-	-	74	-23.98	182	162	V
2	* 2.373	44.43	Pk	31.5	-23.5	52.43	-	-	74	-21.57	182	162	V
3	* 2.39	32.49	RMS	31.6	-23.5	40.59	54	-13.41	-	-	182	162	V
4	* 2.312	33.64	RMS	31.3	-23.7	41.24	54	-12.76	-	-	182	162	V

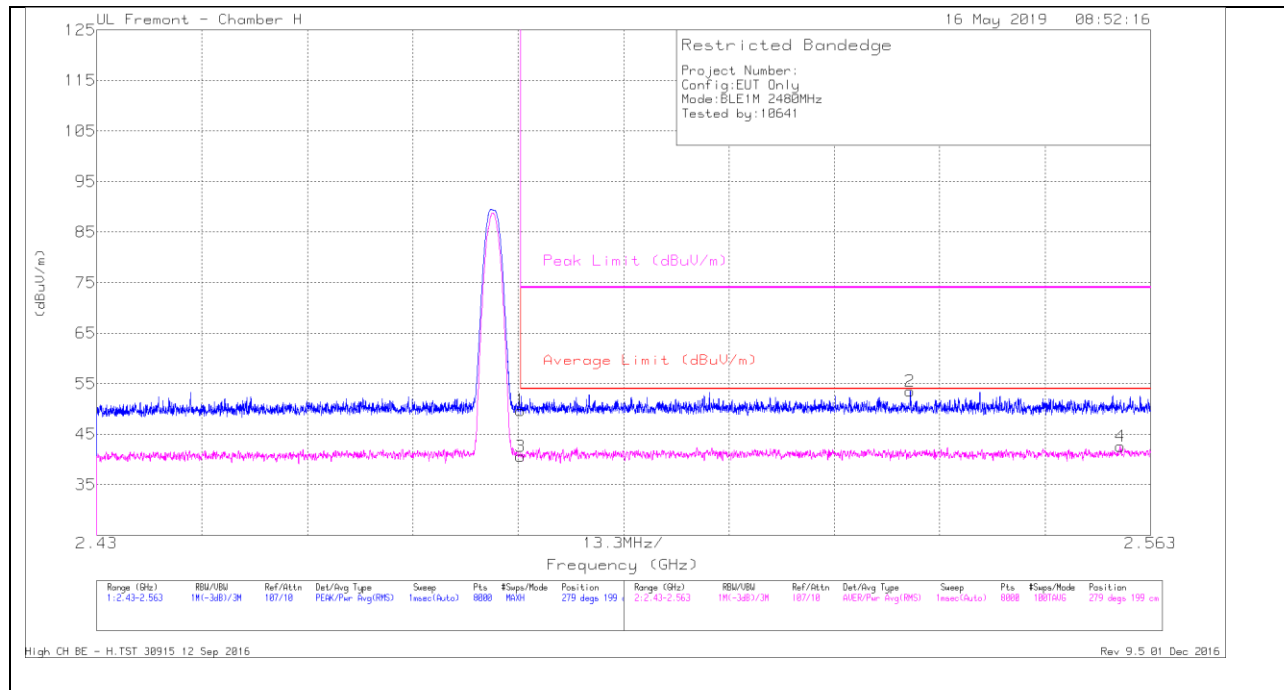
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

Low CH BE - 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 T136 (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	40.73	Pk	32.3	-23.3	49.73	-	-	74	-24.27	279	199	H
3	* 2.484	31.56	RMS	32.3	-23.3	40.56	54	-13.44	-	-	279	199	H
2	2.533	44.34	Pk	32.4	-23.2	53.54	-	-	74	-20.46	279	199	H
4	2.559	33.3	RMS	32.4	-23.1	42.6	54	-11.4	-	-	279	199	H

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

Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

UL Fremont - Chamber H

16 May 2019 08:58:40

Restricted Bandedge

Project Number:
Config:EUT Only
Mode:BLE1M 2480MHz
Tested by:10641

(dBuV/m)

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

2.43 13.3MHz/ 2.563

Frequency (GHz)

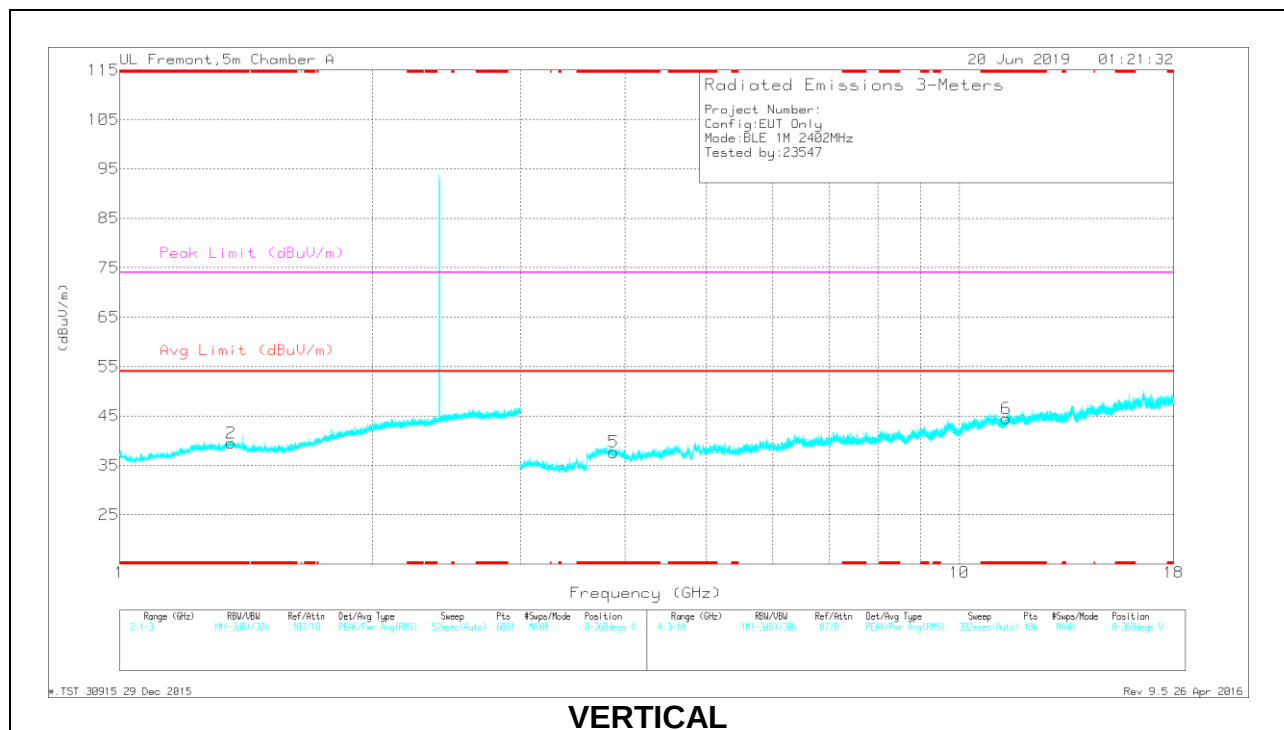
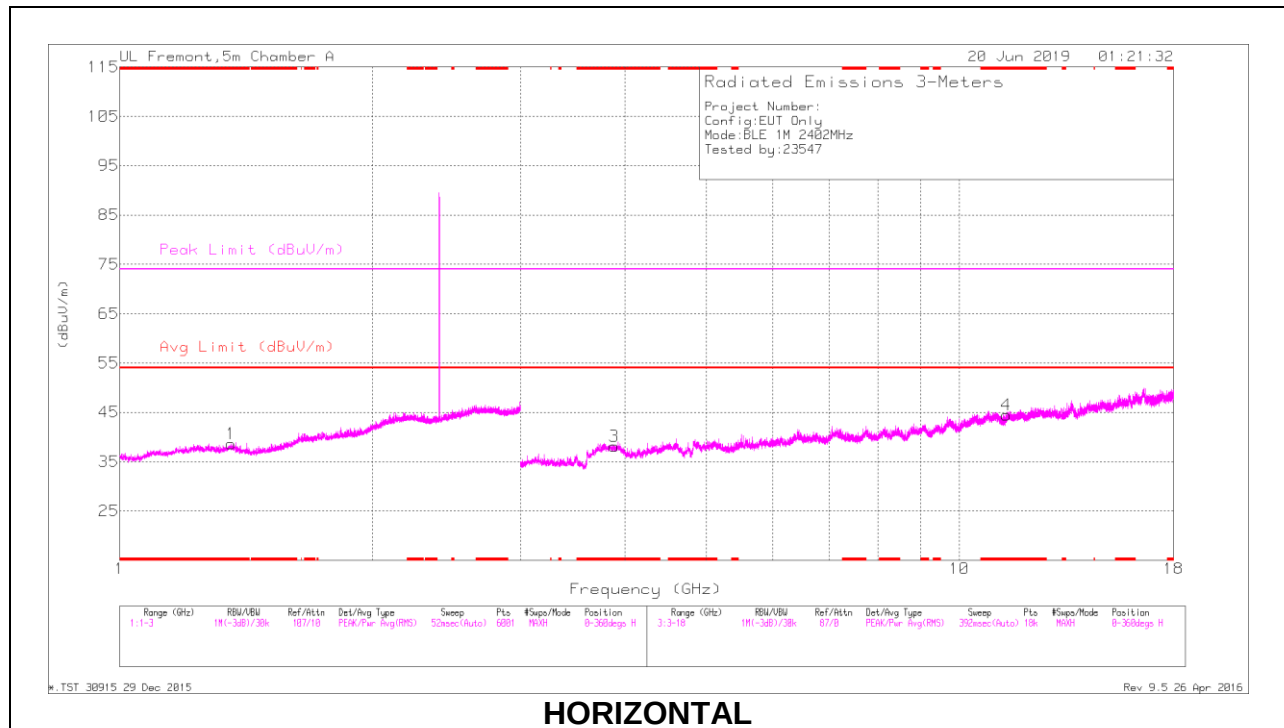
Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position	Range (GHz)	RBW/UBW	Ref/AltIn	Det/Avg Type	Sweep	Pls	#Seps/Mode	Position
1:2.43-2.563	1M-3dB/3M	187/10	PKR/Pwr Avg(RMS)	InsectAuto	8888	NSM1	183 degs 125	1:2.43-2.563	1M-3dB/3M	187/10	PKR/Pwr Avg(RMS)	InsectAuto	8888	180/10	183 degs 125 cm

High CH BE - U.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T136 (dBm)	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	40.88	Pk	32.3	-23.3	49.88	-	-	74	-24.12	183	126	V
2	* 2.487	43.91	Pk	32.3	-23.3	52.91	-	-	74	-21.09	183	126	V
3	* 2.484	31.57	RMS	32.3	-23.3	40.57	54	-13.43	-	-	183	126	V
4	2.556	33.26	RMS	32.4	-23.2	42.46	54	-11.54	-	-	183	126	V

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

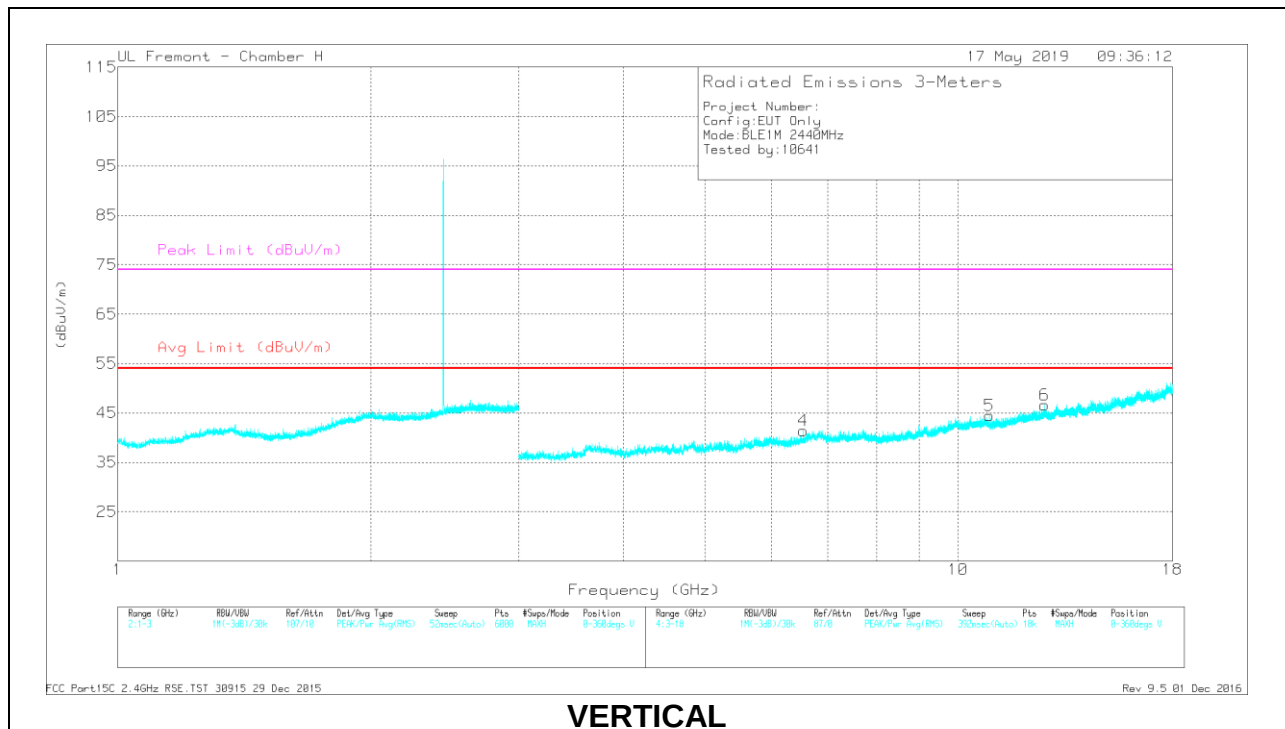
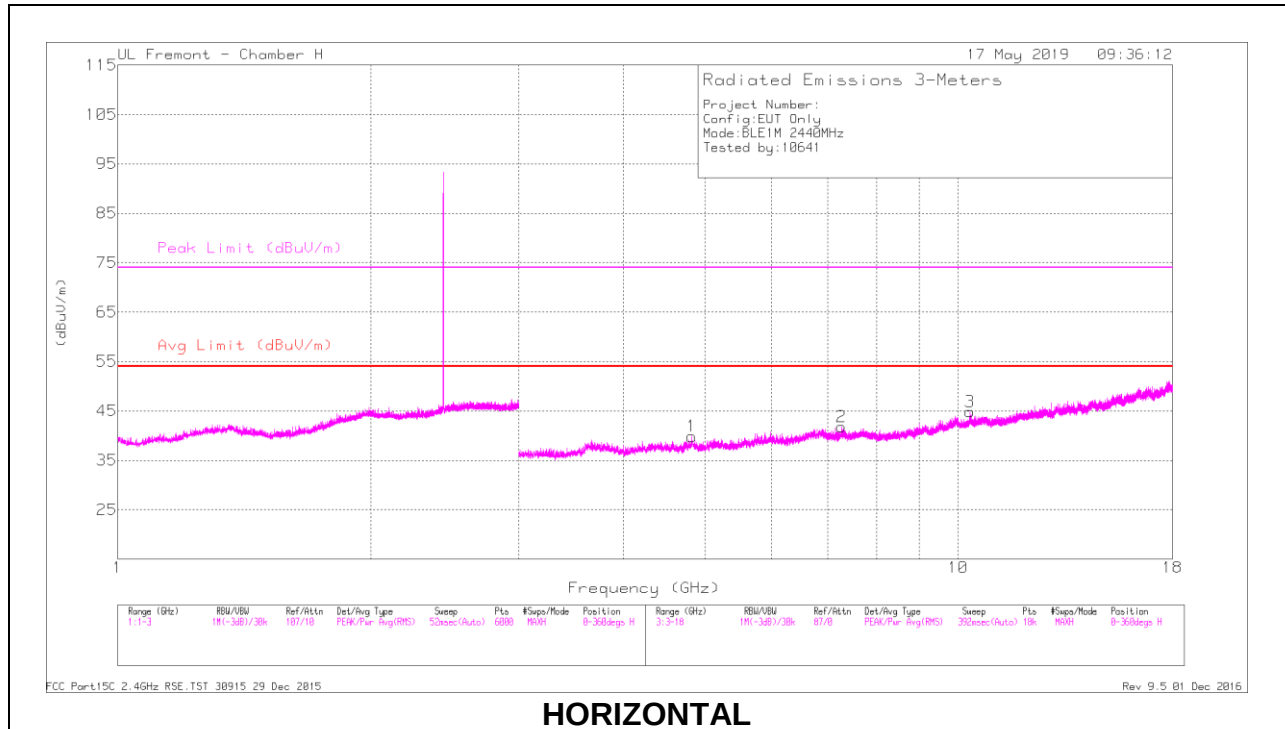
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT346 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.358	42.19	PK2	29.6	-25	46.79	-	-	74	-27.21	360	100	H
	* 1.355	31.54	MAv1	29.6	-25	36.14	54	-17.86	-	-	360	100	H
2	* 1.356	42.13	PK2	29.6	-25	46.73	-	-	74	-27.27	360	100	V
	* 1.356	31.55	MAv1	29.6	-25	36.15	54	-17.85	-	-	360	100	V
3	* 3.882	40.29	PK2	33.5	-28.9	44.89	-	-	74	-29.11	360	100	H
	* 3.882	29.83	MAv1	33.5	-28.9	34.43	54	-19.57	-	-	360	100	H
4	* 11.376	33.03	PK2	38	-20.1	50.93	-	-	74	-23.07	360	199	H
	* 11.377	23.14	MAv1	38.1	-20.1	41.14	54	-12.86	-	-	360	199	H
5	* 3.874	41.04	PK2	33.6	-29	45.64	-	-	74	-28.36	360	199	V
	* 3.872	29.58	MAv1	33.6	-29	34.18	54	-19.82	-	-	360	199	V
6	* 11.384	33.19	PK2	38.1	-20.1	51.19	-	-	74	-22.81	360	103	V
	* 11.384	23.16	MAv1	38.1	-20.1	41.16	54	-12.84	-	-	360	103	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

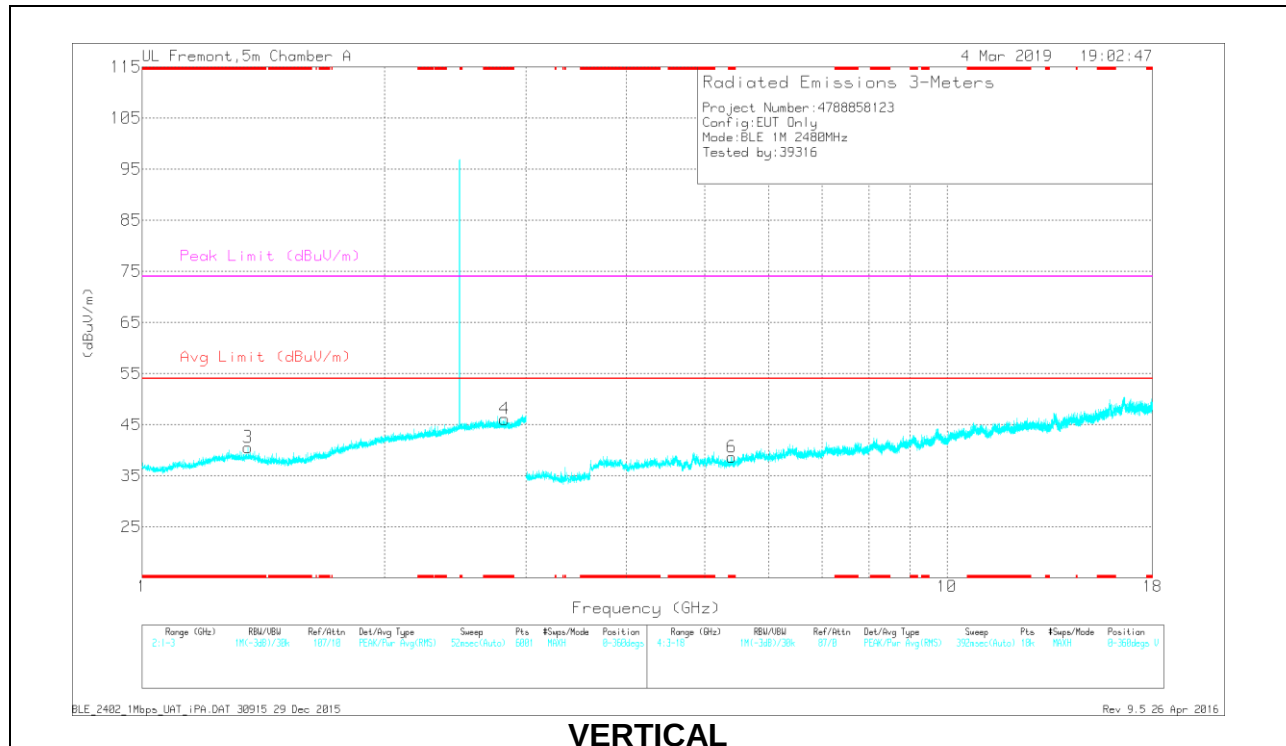
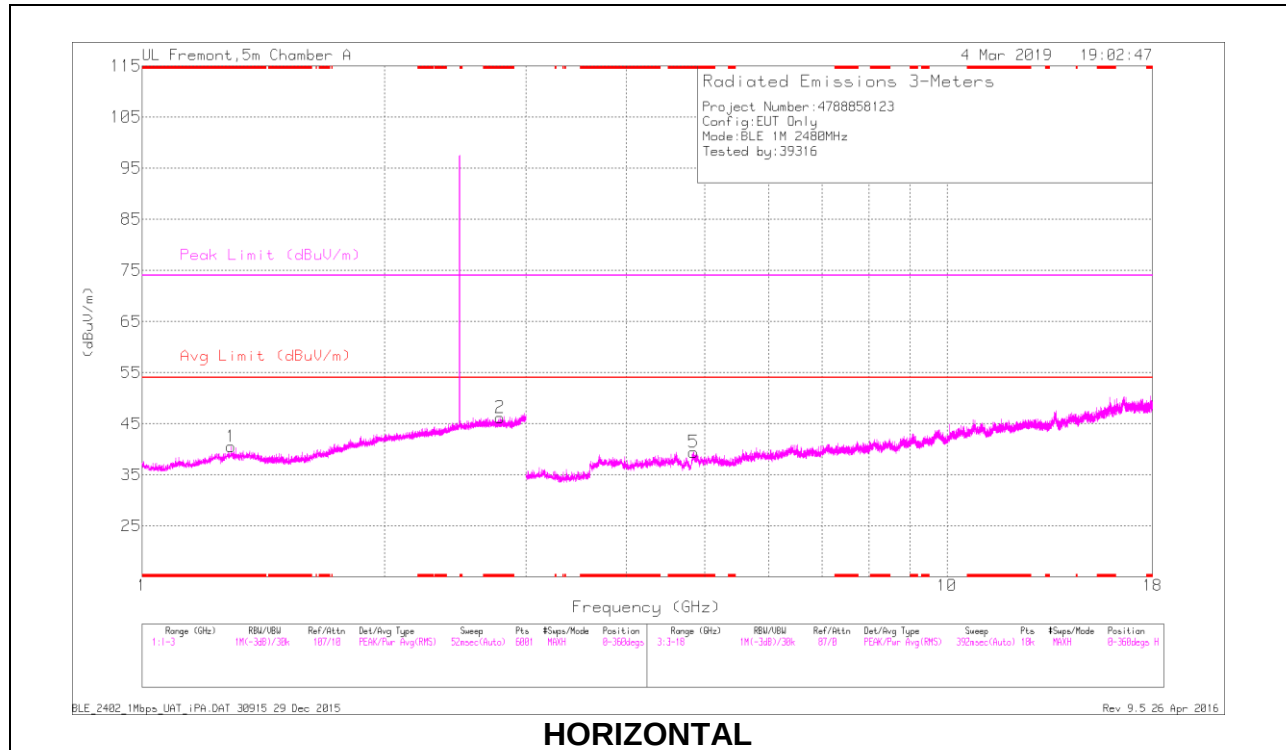
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.819	42.61	PK2	34.1	-30.4	46.31	-	-	74	-27.69	162	201	H
	* 4.818	30.58	MAV1	34.1	-30.4	34.28	54	-19.72	-	-	162	201	H
2	* 7.269	38.84	PK2	36.4	-27.1	48.14	-	-	74	-25.86	207	107	H
	* 7.269	27.73	MAV1	36.4	-27.1	37.03	54	-16.97	-	-	207	107	H
5	* 10.892	36.27	PK2	37.8	-23.4	50.67	-	-	74	-23.33	131	137	V
	* 10.892	24.9	MAV1	37.8	-23.4	39.3	54	-14.7	-	-	131	137	V
6	* 12.68	35.91	PK2	39.2	-22.2	52.91	-	-	74	-21.09	171	126	V
	* 12.678	24.5	MAV1	39.2	-22.2	41.5	54	-12.5	-	-	171	126	V
4	6.546	39.37	PK2	36.2	-27.9	47.67	-	-	74	-26.33	163	186	V
3	10.334	35.66	PK2	37.4	-22.7	50.36	-	-	74	-23.64	136	135	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



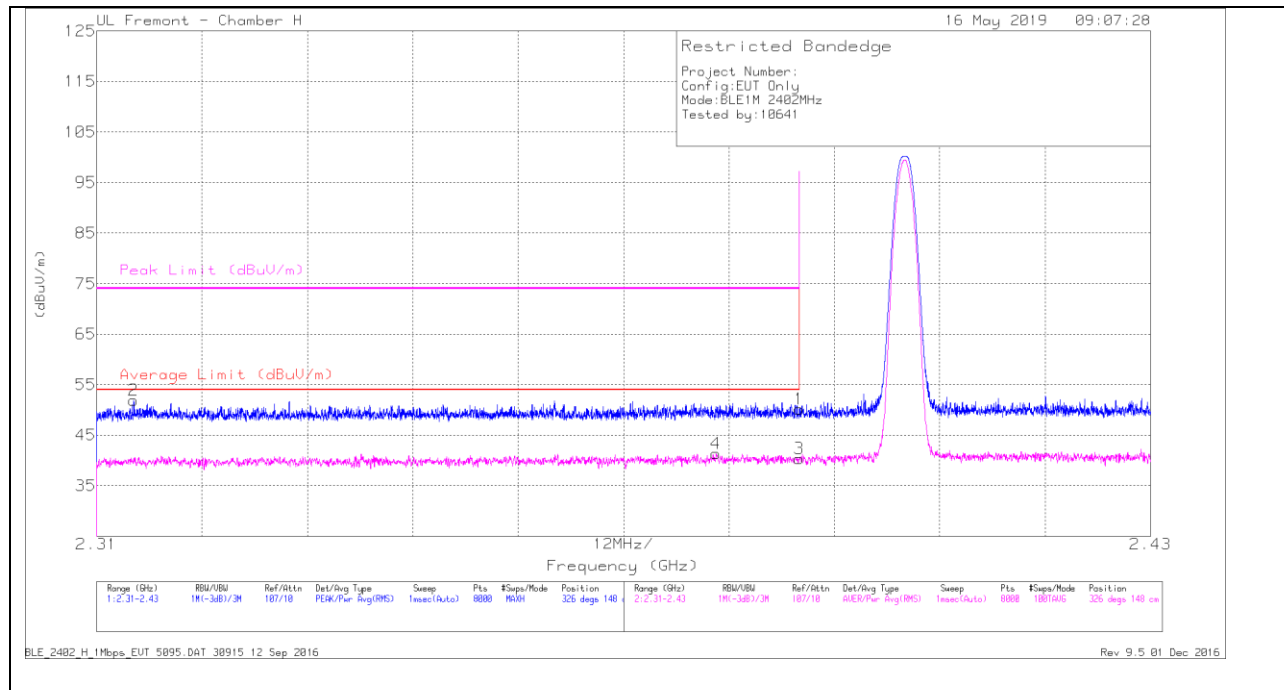
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
* 1.289	42.59	PK2	29.1	-24.9	46.79	-	-	74	-27.21	90	161	H
* 1.29	31.35	MAv1	29.1	-24.9	35.55	54	-18.45	-	-	90	161	H
* 2.786	41.89	PK2	32.4	-22.1	52.19	-	-	74	-21.81	152	233	H
* 2.787	31.25	MAv1	32.4	-22.1	41.55	54	-12.45	-	-	152	233	H
* 1.353	42.68	PK2	29.1	-24.9	46.88	-	-	74	-27.12	215	247	V
* 1.353	31.76	MAv1	29.1	-24.9	35.96	54	-18.04	-	-	215	247	V
* 2.822	41.72	PK2	32.4	-22.1	52.02	-	-	74	-21.98	289	284	V
* 2.82	30.88	MAv1	32.4	-22.1	41.18	54	-12.82	-	-	289	284	V
* 4.843	38.19	PK2	34.1	-27	45.29	-	-	74	-28.71	158	175	H
* 4.846	27.95	MAv1	34.1	-27	35.05	54	-18.95	-	-	158	175	H
* 5.404	38.13	PK2	34.6	-27.4	45.33	-	-	74	-28.67	73	305	V
* 5.404	27.21	MAv1	34.6	-27.4	34.41	54	-19.59	-	-	73	305	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.6. ANTENNA 5, LOW POWER BLE (1Mbps)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Ampl/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	* 2.39	42.06	Pk	31.6	-23.5	50.16	-	-	74	-23.84	326	148	H
2	* 2.314	44.16	Pk	31.3	-23.6	51.86	-	-	74	-22.14	326	148	H
3	* 2.39	32.25	RMS	31.6	-23.5	40.35	54	-13.65	-	-	326	148	H
4	* 2.381	33.3	RMS	31.6	-23.5	41.4	54	-12.6	-	-	326	148	H

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

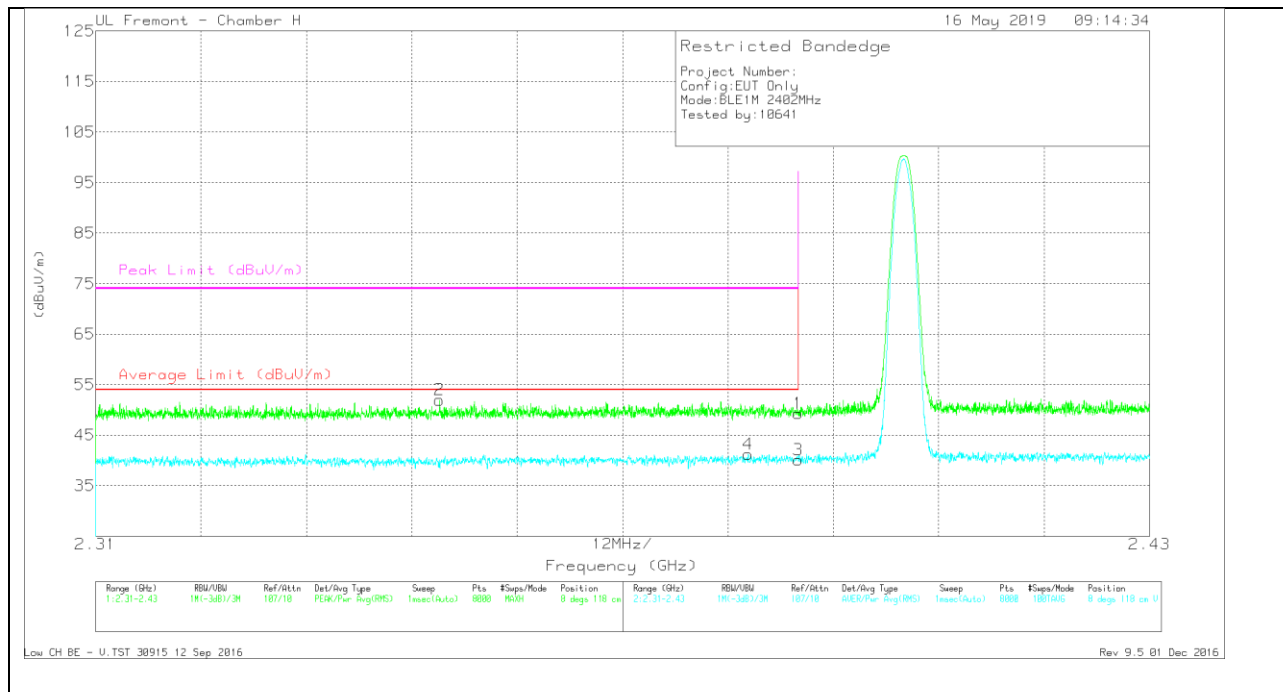
Pk - Peak detector

RMS - RMS detection

BLE_2402_H_1Mbps_EVT 5095.DAT 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Par 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	41.25	Pk	31.6	-23.5	49.35	-	-	74	-24.65	8	118	V
2	* 2.349	44.27	Pk	31.3	-23.6	51.97	-	-	74	-22.03	8	118	V
3	* 2.39	32.04	RMS	31.6	-23.5	40.14	54	-13.86	-	-	8	118	V
4	* 2.384	33.1	RMS	31.6	-23.5	41.2	54	-12.8	-	-	8	118	V

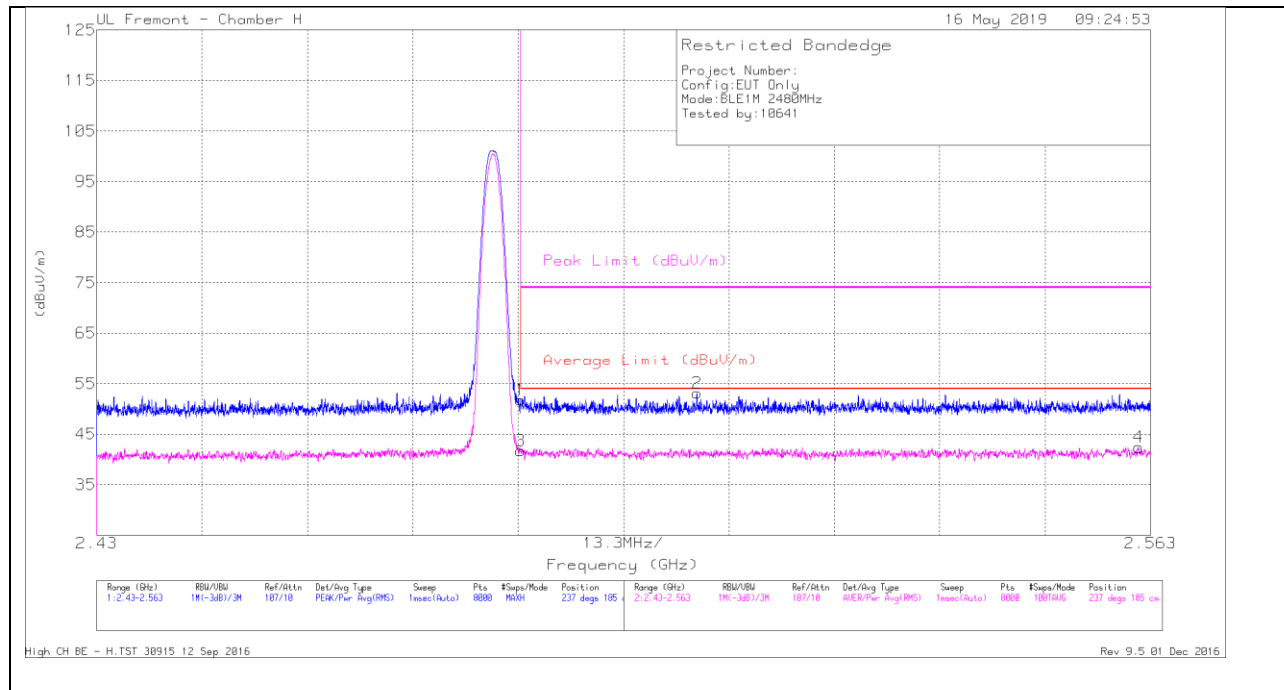
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

Low CH BE - V.TST 30915 12 Sep 2016

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BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	42.81	Pk	32.3	-23.3	51.81	-	-	74	-22.19	237	185	H
3	* 2.484	32.77	RMS	32.3	-23.3	41.77	54	-12.23	-	-	237	185	H
2	2.506	43.95	Pk	32.4	-23.2	53.15	-	-	74	-20.85	237	185	H
4	2.561	33.11	RMS	32.4	-23.1	42.41	54	-11.59	-	-	237	185	H

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

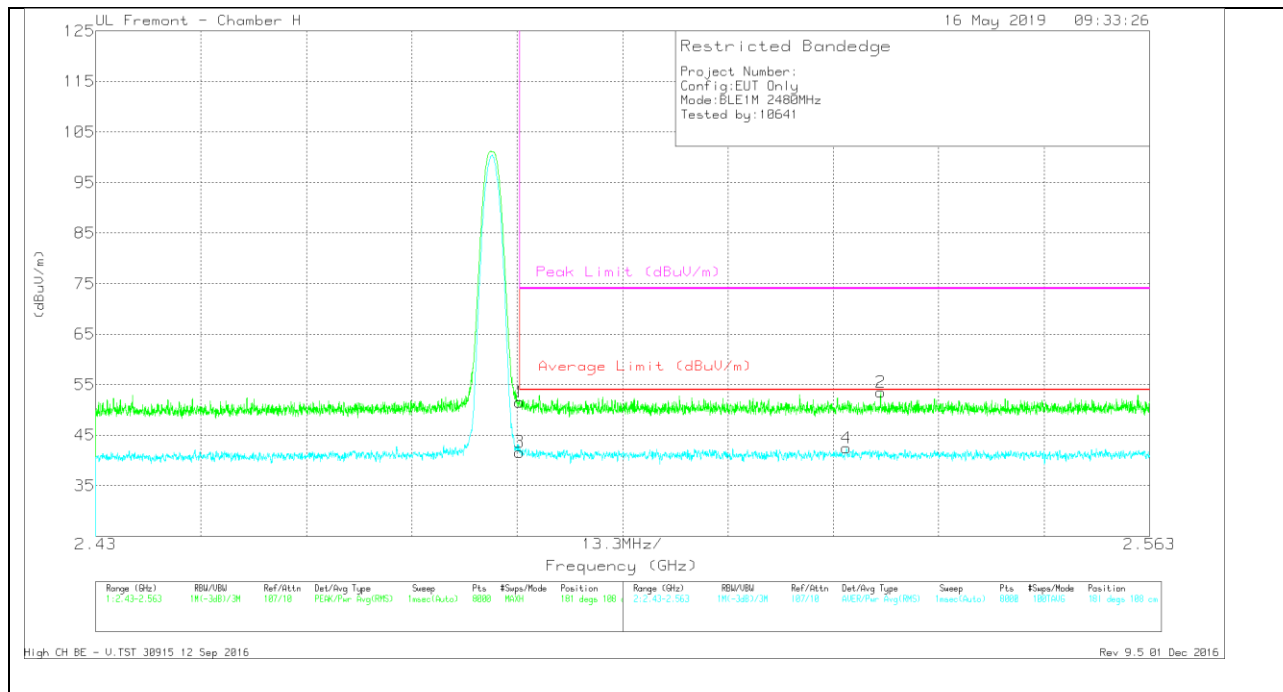
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (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	42.52	Pk	32.3	-23.3	51.52	-	-	74	-22.48	181	108	V
3	* 2.484	32.66	RMS	32.3	-23.3	41.66	54	-12.34	-	-	181	108	V
4	2.525	33.18	RMS	32.4	-23.1	42.48	54	-11.52	-	-	181	108	V
2	2.529	44.34	Pk	32.4	-23.2	53.54	-	-	74	-20.46	181	108	V

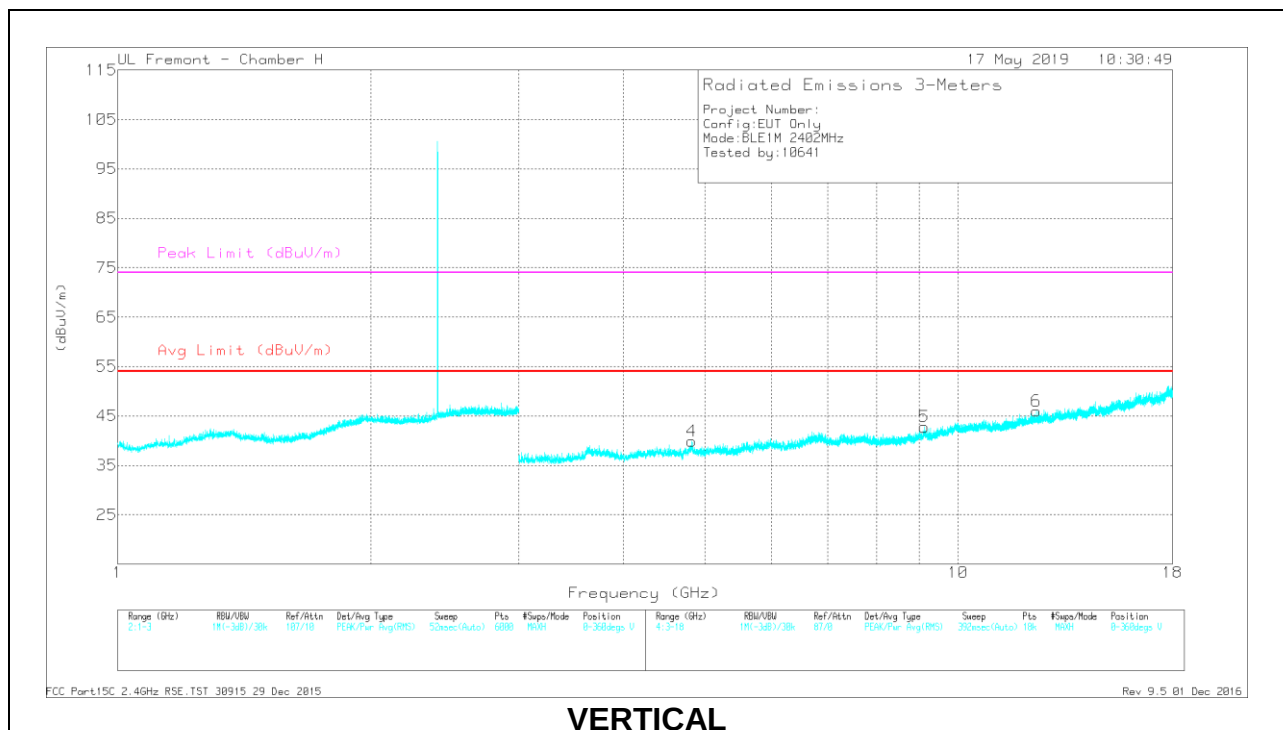
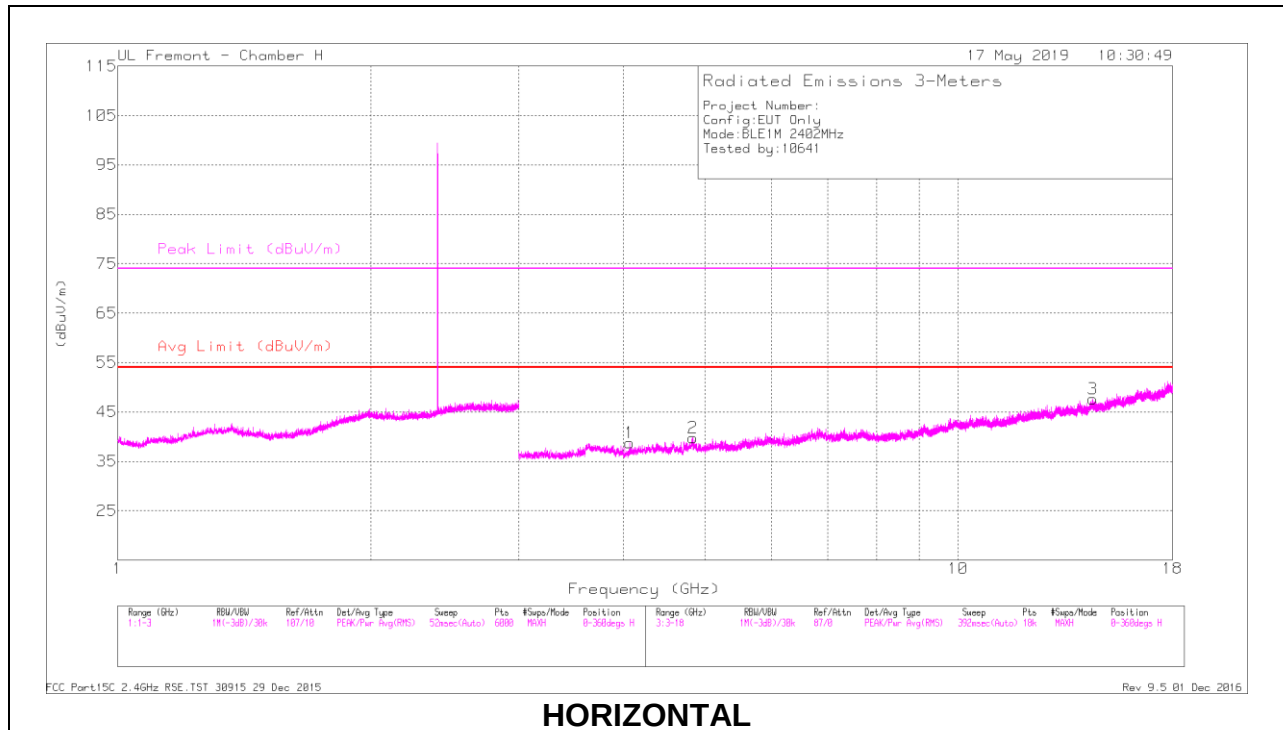
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

High CH BE - V.TST 30915 12 Sep 2016

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HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL RESULTS**

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT136 (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	* 4.064	41.69	PK2	33.2	-30.7	44.19	-	-	74	-29.81	298	113	H
	* 4.065	30.48	MAv1	33.2	-30.7	32.98	54	-21.02	-	-	298	113	H
2	* 4.838	42.47	PK2	34	-30.3	46.17	-	-	74	-27.83	238	142	H
	* 4.835	30.61	MAv1	34	-30.3	34.31	54	-19.69	-	-	238	142	H
3	* 14.477	36.61	PK2	39.9	-21.5	55.01	-	-	74	-18.99	193	124	H
	* 14.478	24.46	MAv1	39.8	-21.6	42.66	54	-11.34	-	-	193	124	H
4	* 4.824	42.06	PK2	34.1	-30.3	45.86	-	-	74	-28.14	170	154	V
	* 4.827	30.77	MAv1	34.1	-30.3	34.57	54	-19.43	-	-	170	154	V
5	* 9.116	36.94	PK2	36.3	-23.6	49.64	-	-	74	-24.36	211	165	V
	* 9.117	25.34	MAv1	36.3	-23.7	37.94	54	-16.06	-	-	211	165	V
6	* 12.4	35.89	PK2	39.1	-23.2	51.79	-	-	74	-22.21	242	181	V
	* 12.398	25	MAv1	39.1	-23.3	40.8	54	-13.2	-	-	242	181	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

