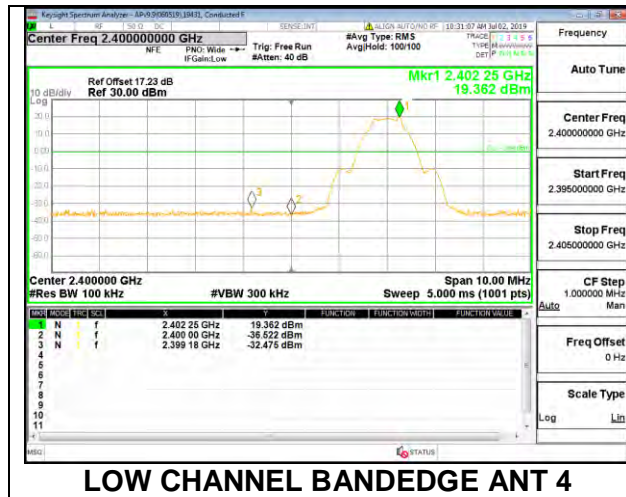
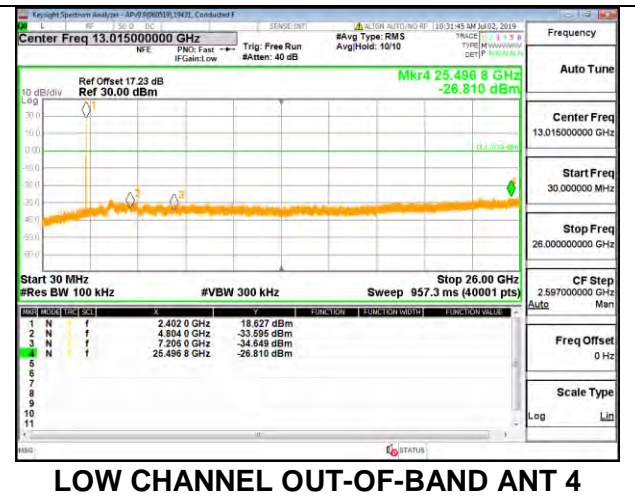


### 8.13 BEAMFORMING, CONDUCTED SPURIOUS

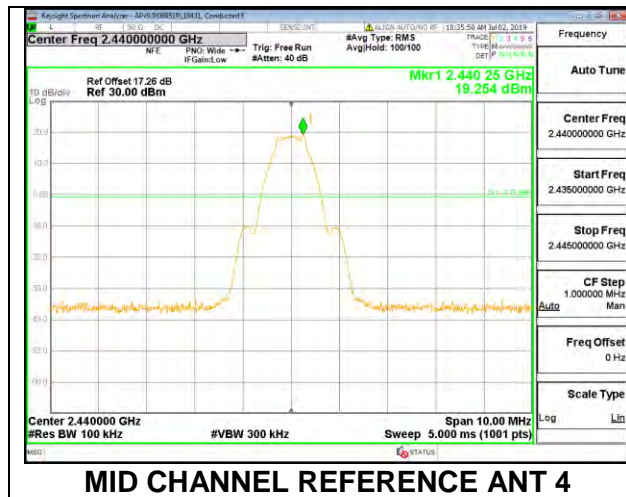
#### 8.13.1 HIGH POWER BLE (1Mbps)



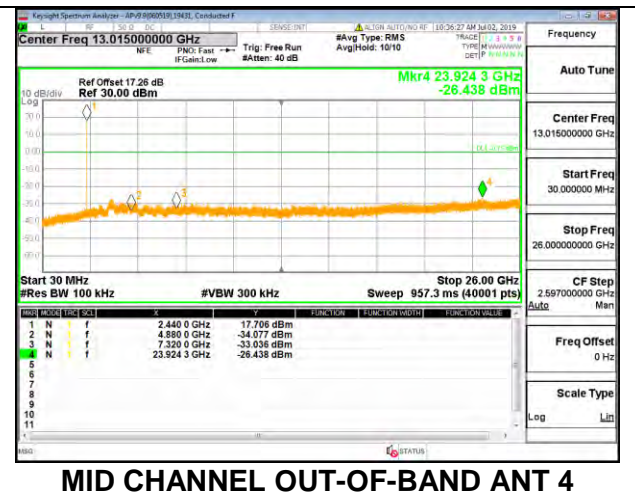
LOW CHANNEL BANDEDGE ANT 4



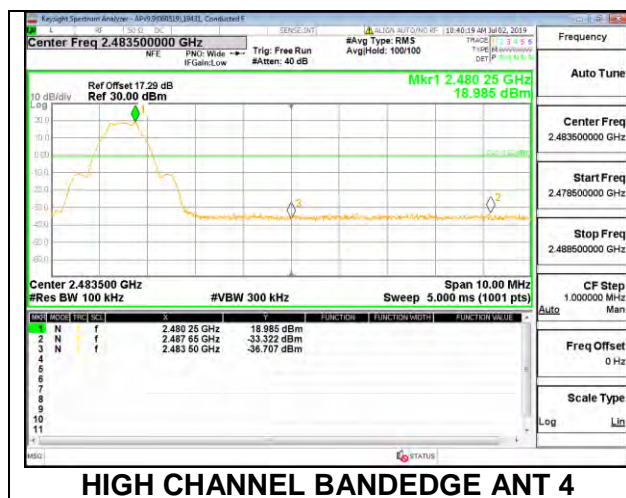
LOW CHANNEL OUT-OF-BAND ANT 4



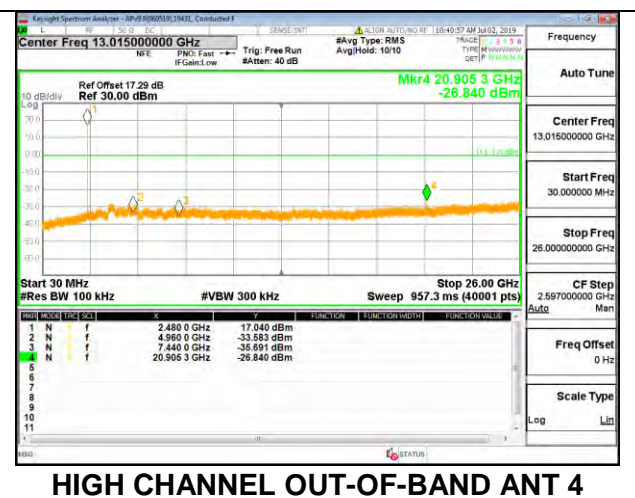
MID CHANNEL REFERENCE ANT 4



MID CHANNEL OUT-OF-BAND ANT 4

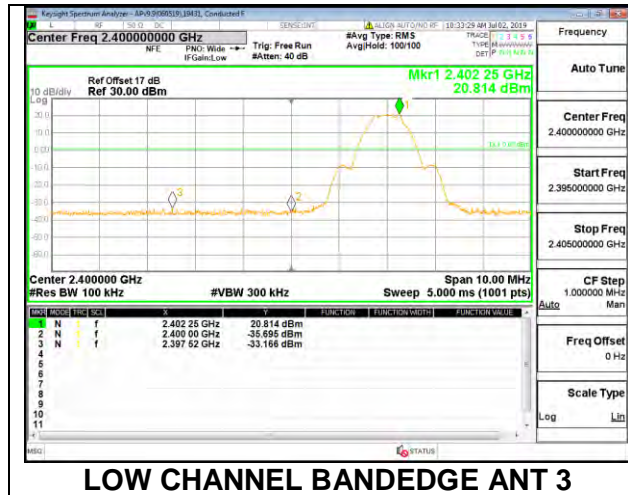


HIGH CHANNEL BANDEDGE ANT 4

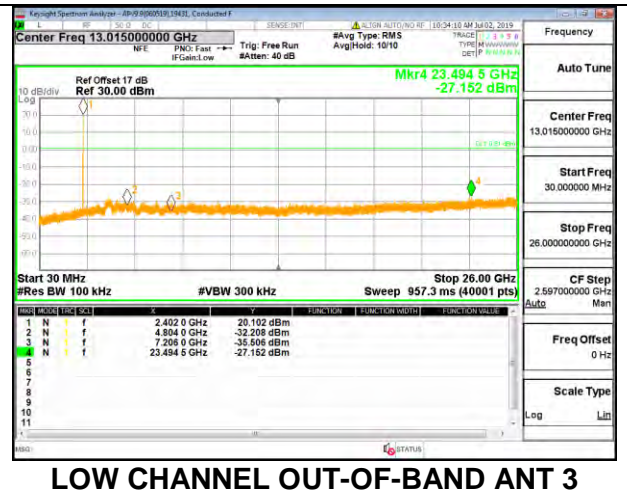


HIGH CHANNEL OUT-OF-BAND ANT 4

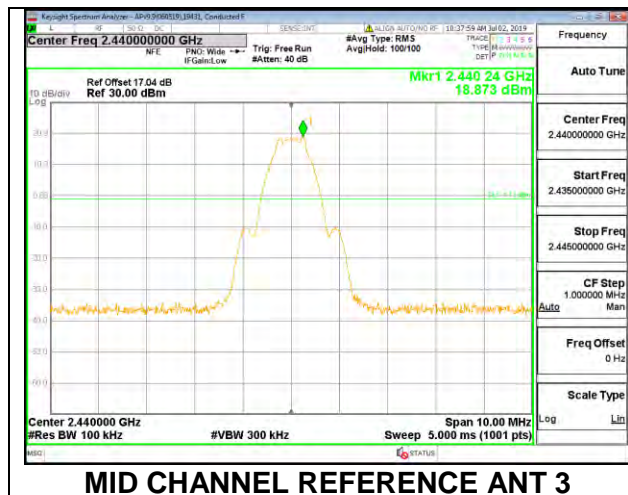
**HIGH POWER, 1Mbps,**



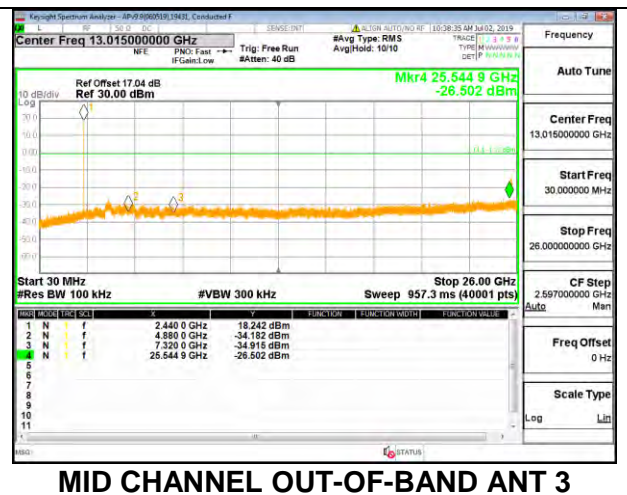
**LOW CHANNEL BANDEDGE ANT 3**



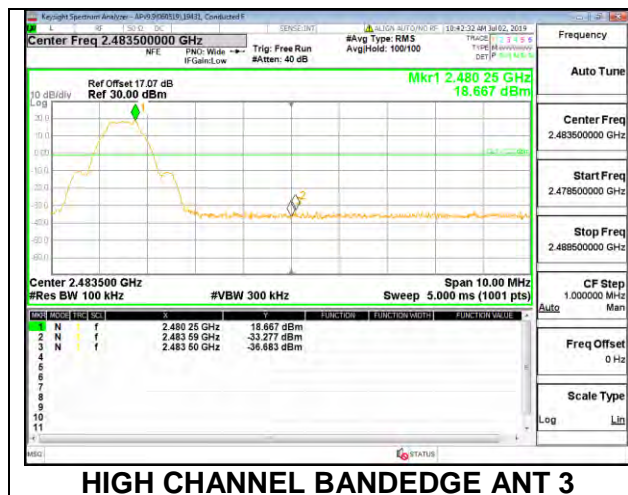
**LOW CHANNEL OUT-OF-BAND ANT 3**



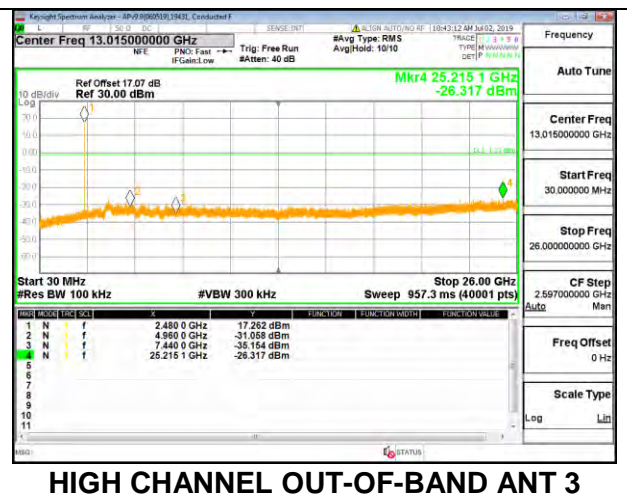
**MID CHANNEL REFERENCE ANT 3**



**MID CHANNEL OUT-OF-BAND ANT 3**

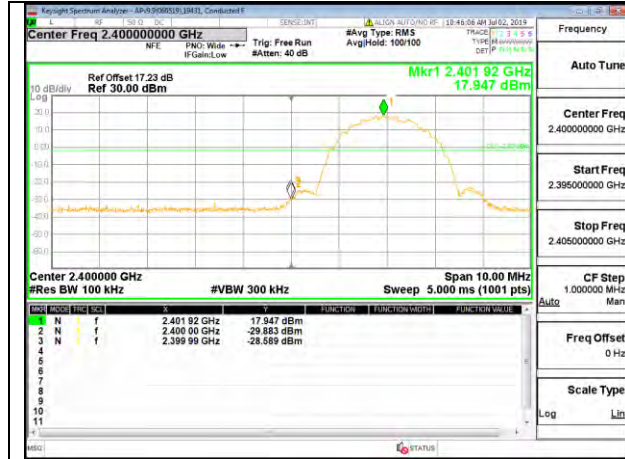


**HIGH CHANNEL BANDEDGE ANT 3**

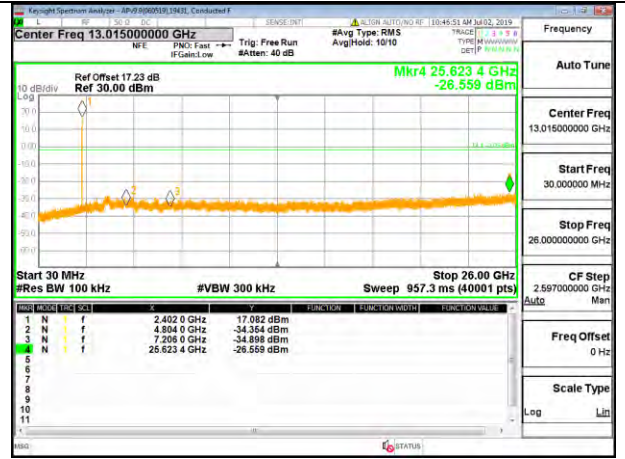


**HIGH CHANNEL OUT-OF-BAND ANT 3**

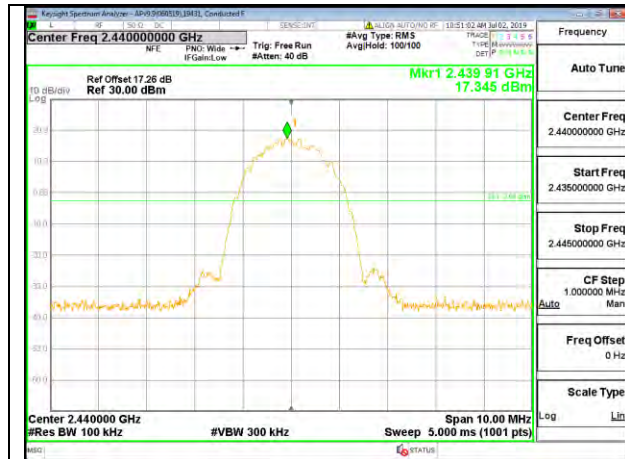
### 8.13.2 HIGH POWER BLE (2Mbps)



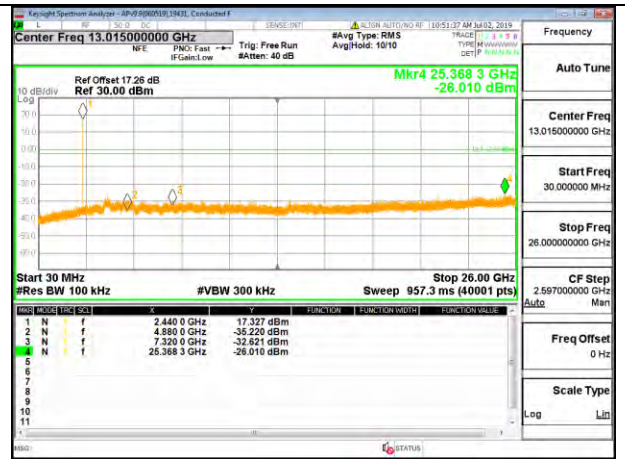
**LOW CHANNEL BANDEDGE ANT 4**



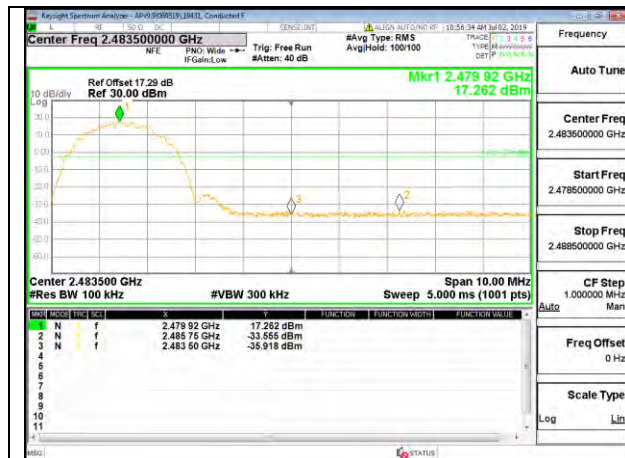
**LOW CHANNEL OUT-OF-BAND ANT 4**



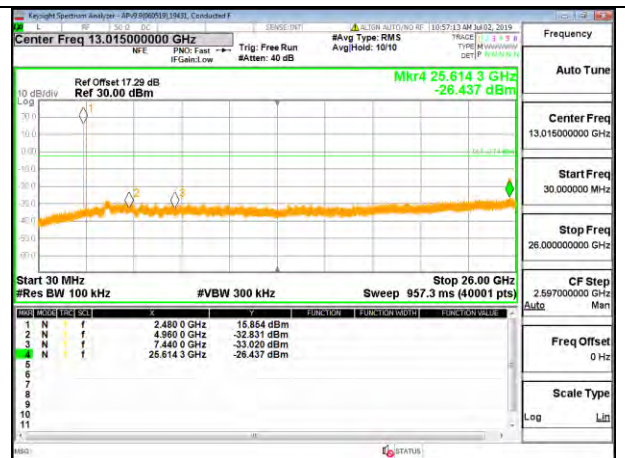
**MID CHANNEL REFERENCE ANT 4**



**MID CHANNEL OUT-OF-BAND ANT 4**

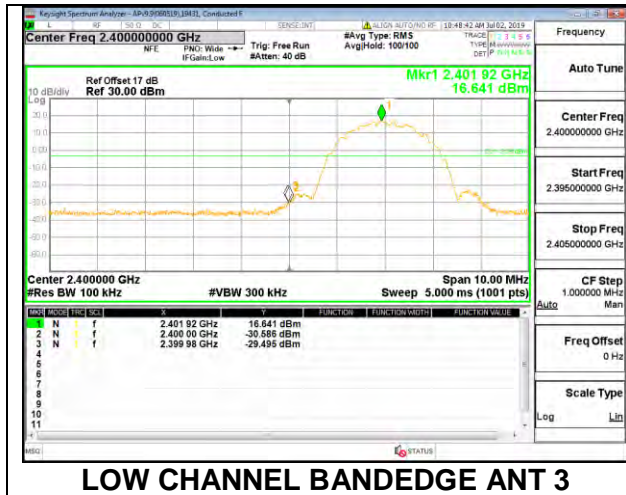


**HIGH CHANNEL BANDEDGE ANT 4**

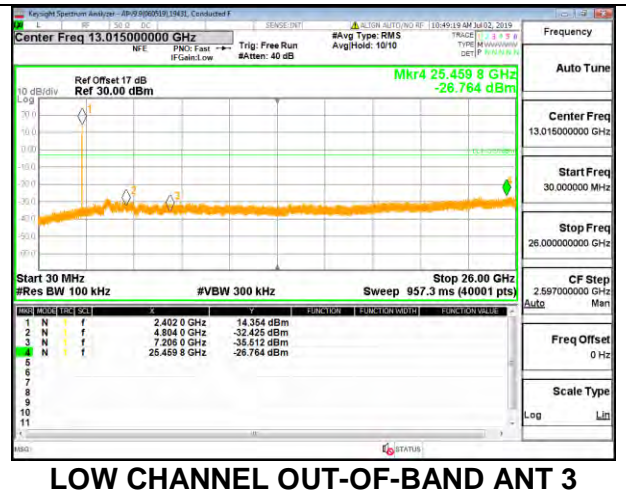


**HIGH CHANNEL OUT-OF-BAND ANT 4**

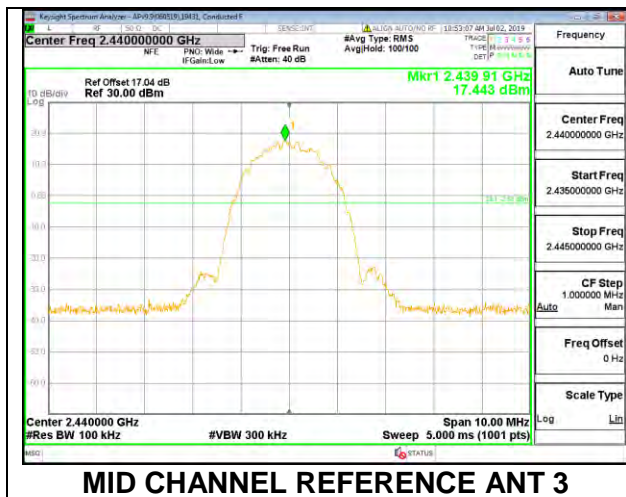
**HIGH POWER, 2Mbps**



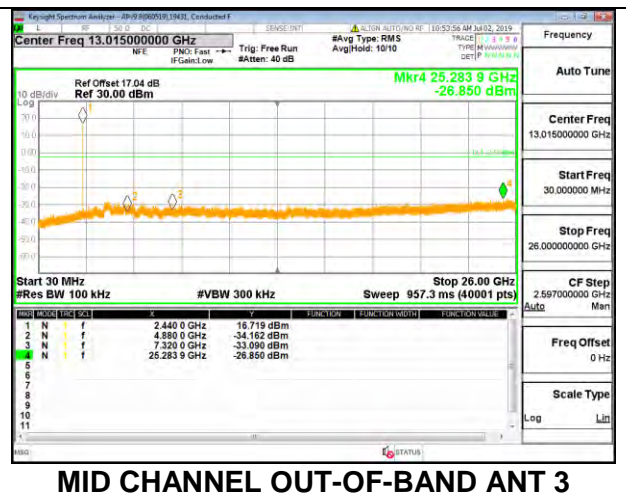
**LOW CHANNEL BANDEDGE ANT 3**



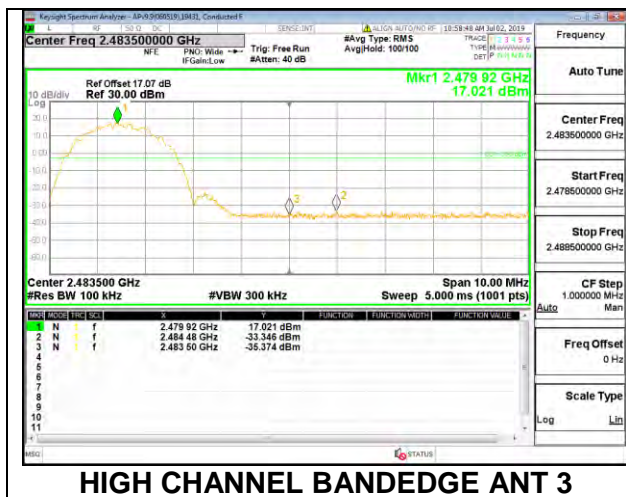
**LOW CHANNEL OUT-OF-BAND ANT 3**



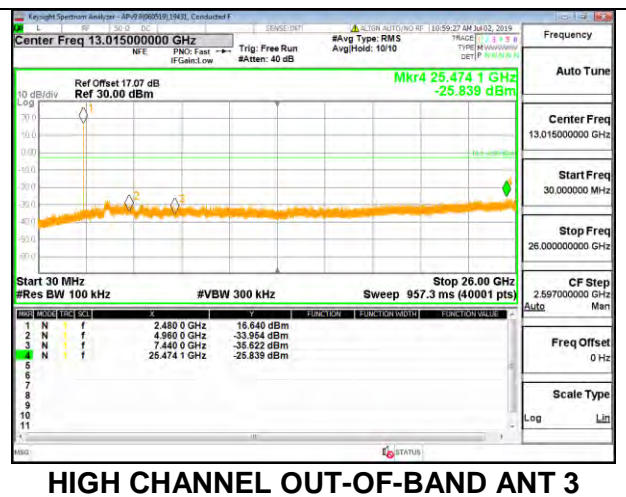
**MID CHANNEL REFERENCE ANT 3**



**MID CHANNEL OUT-OF-BAND ANT 3**

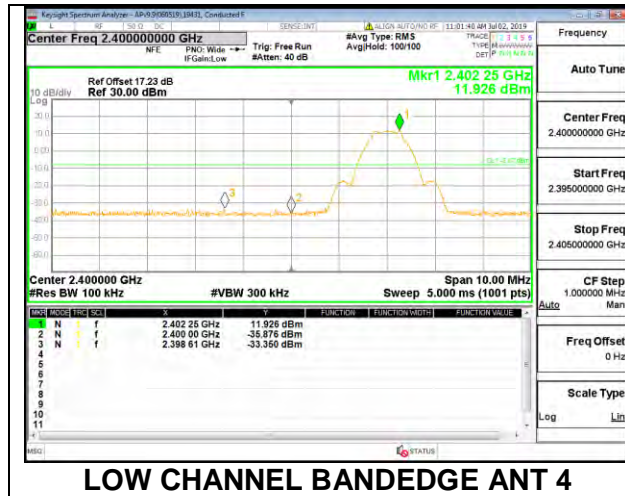


**HIGH CHANNEL BANDEDGE ANT 3**

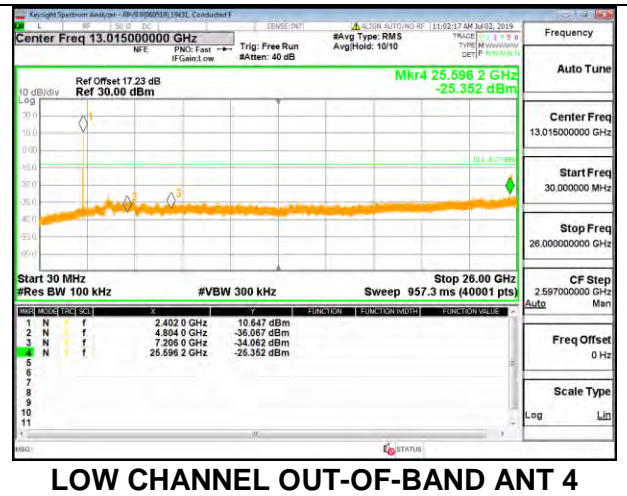


**HIGH CHANNEL OUT-OF-BAND ANT 3**

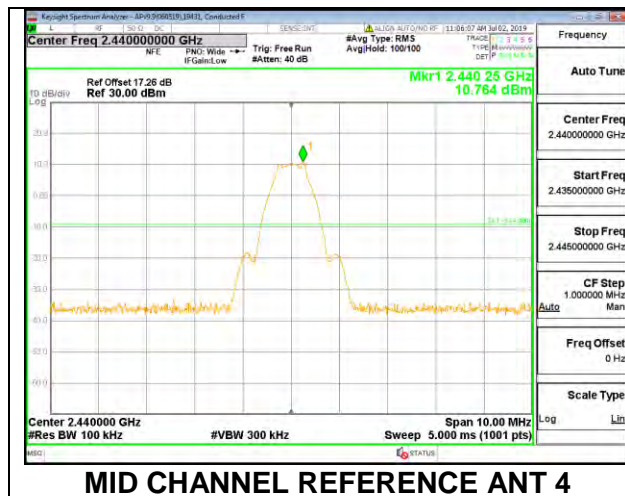
**8.13.3 LOW POWER BLE (1Mbps)**



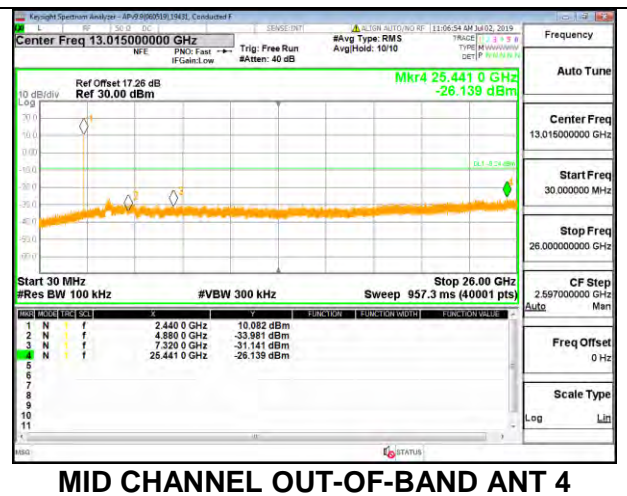
**LOW CHANNEL BANDEDGE ANT 4**



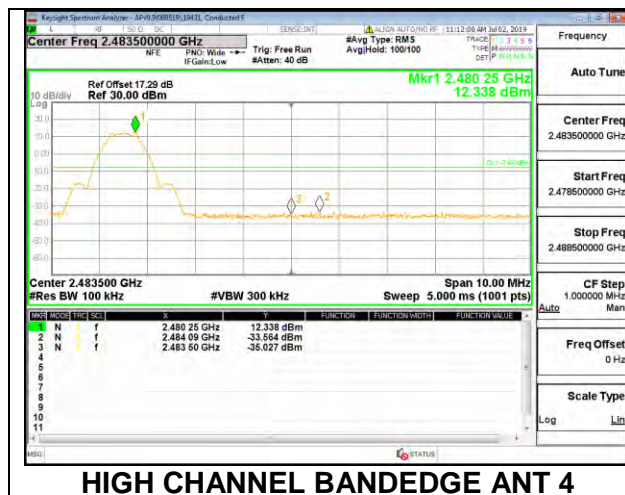
**LOW CHANNEL OUT-OF-BAND ANT 4**



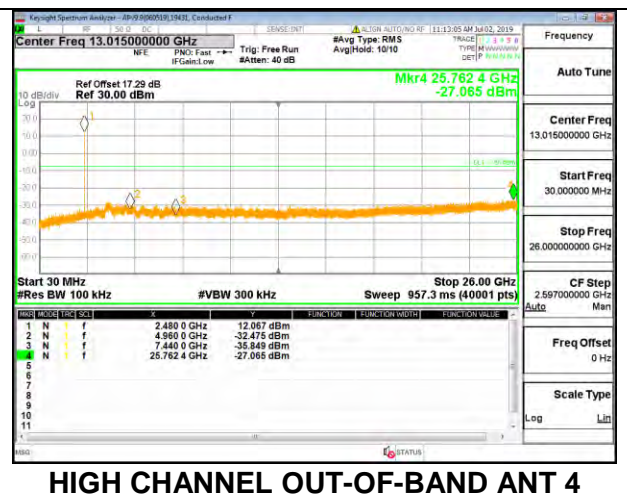
**MID CHANNEL REFERENCE ANT 4**



**MID CHANNEL OUT-OF-BAND ANT 4**

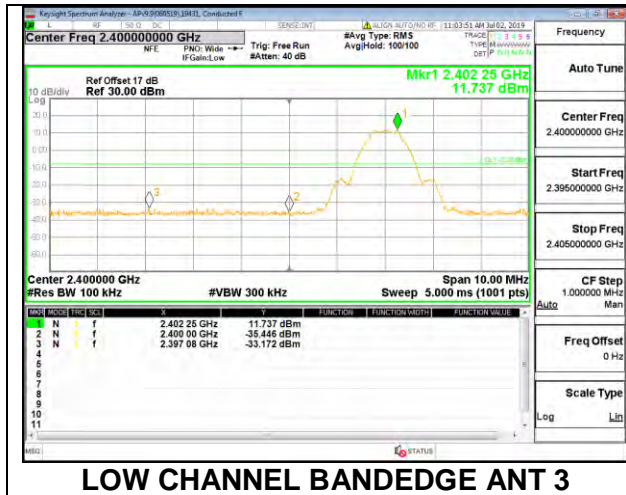


**HIGH CHANNEL BANDEDGE ANT 4**

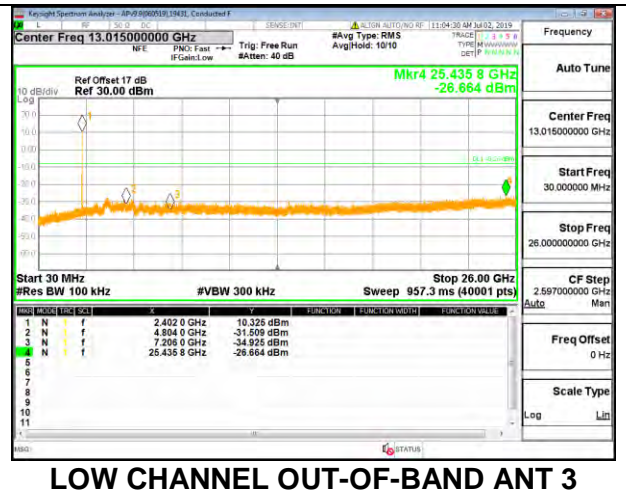


**HIGH CHANNEL OUT-OF-BAND ANT 4**

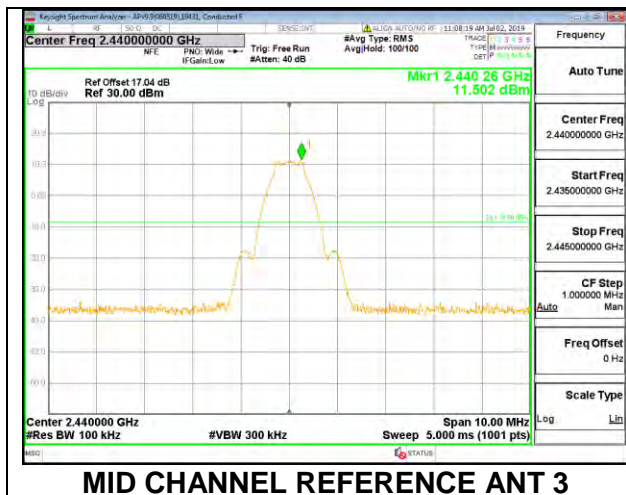
**LOW POWER, 1Mbps,**



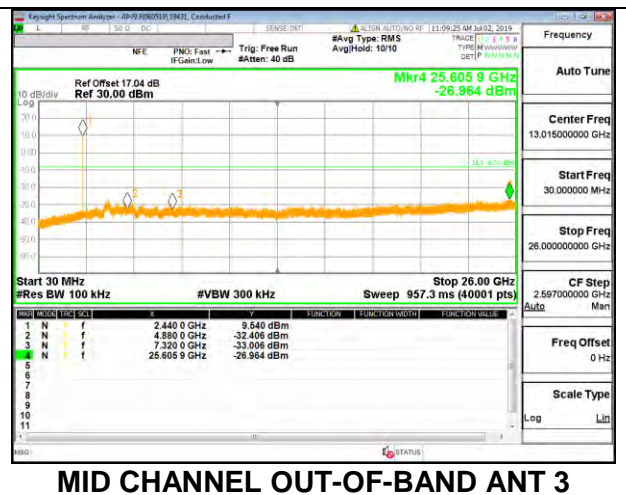
**LOW CHANNEL BANDEDGE ANT 3**



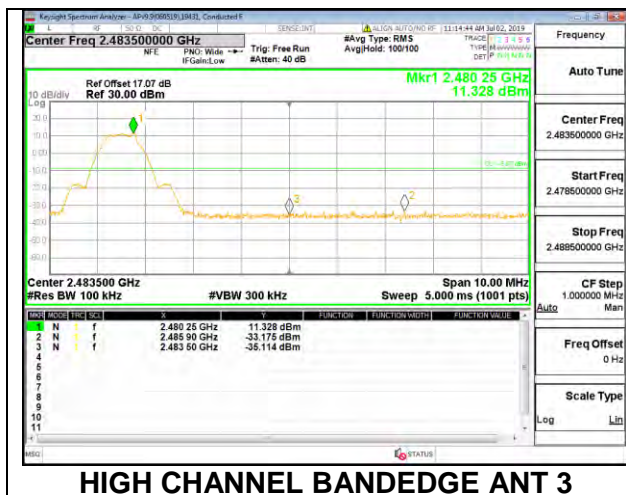
**LOW CHANNEL OUT-OF-BAND ANT 3**



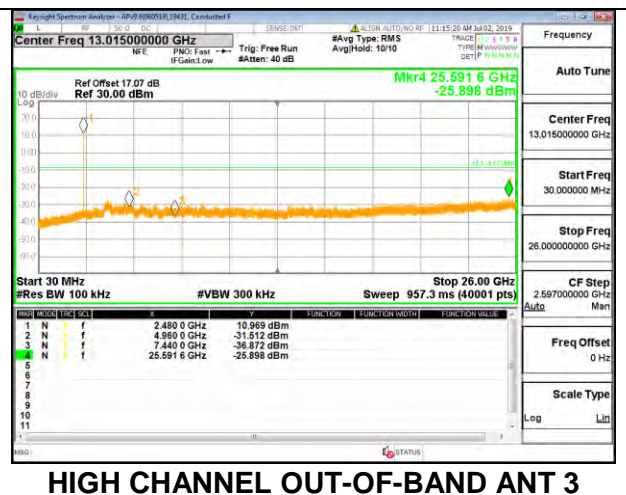
**MID CHANNEL REFERENCE ANT 3**



**MID CHANNEL OUT-OF-BAND ANT 3**

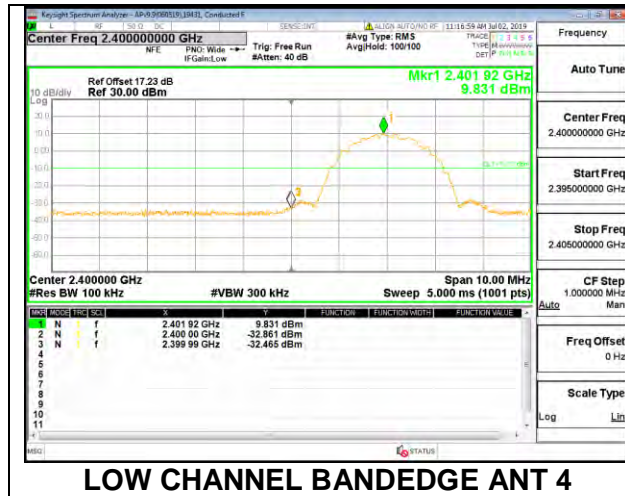


**HIGH CHANNEL BANDEDGE ANT 3**

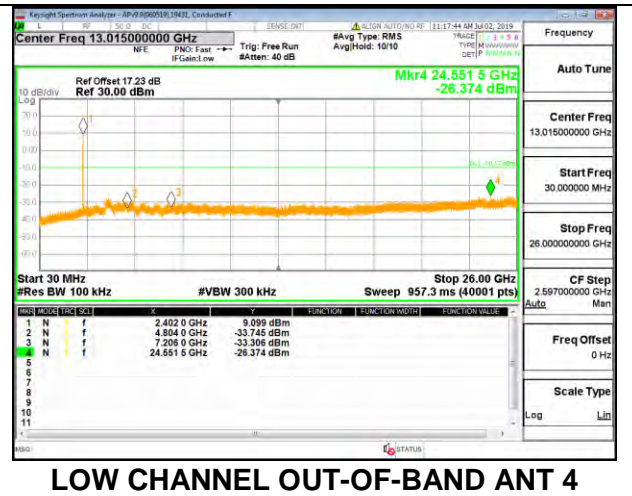


**HIGH CHANNEL OUT-OF-BAND ANT 3**

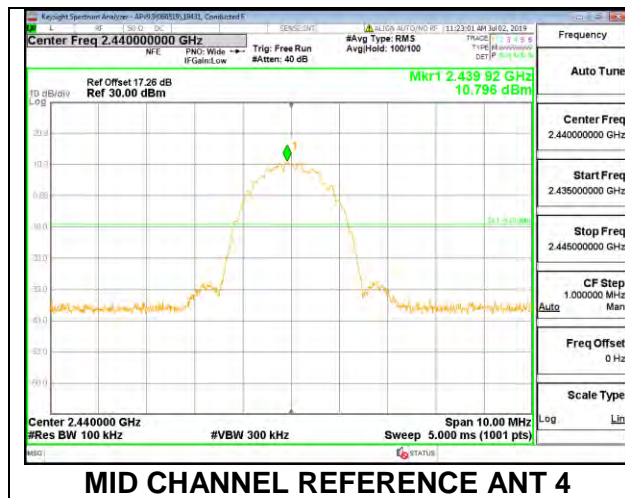
**8.13.4 LOW POWER BLE (2Mbps)**



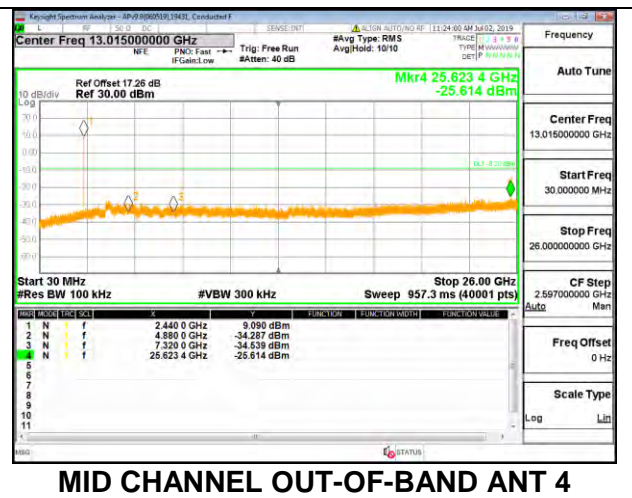
**LOW CHANNEL BANDEDGE ANT 4**



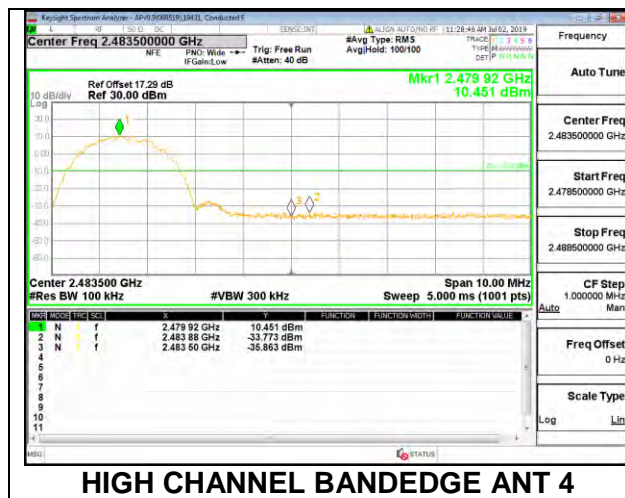
**LOW CHANNEL OUT-OF-BAND ANT 4**



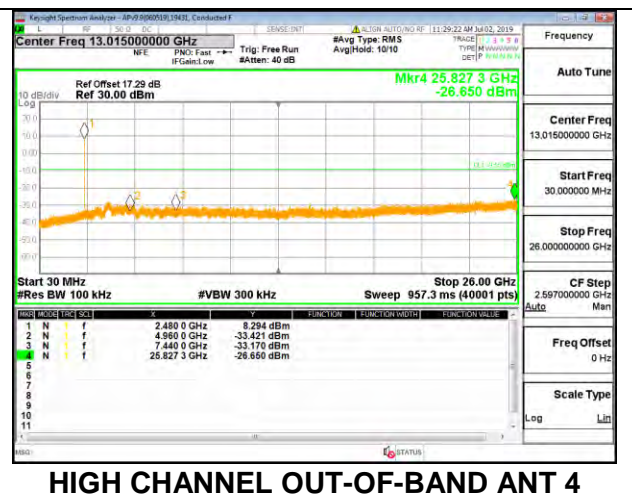
**MID CHANNEL REFERENCE ANT 4**



**MID CHANNEL OUT-OF-BAND ANT 4**

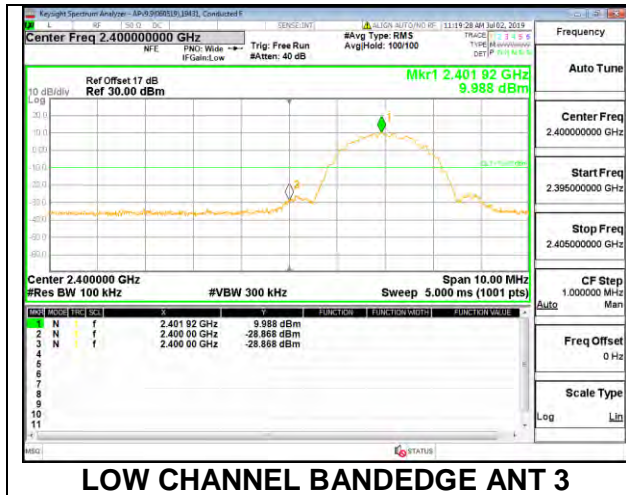


**HIGH CHANNEL BANDEDGE ANT 4**

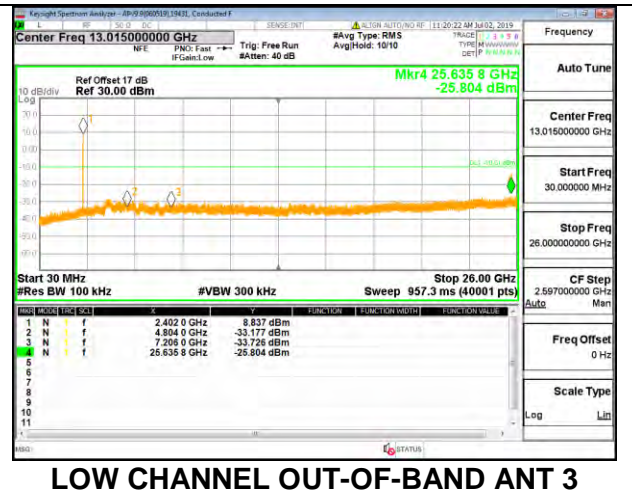


**HIGH CHANNEL OUT-OF-BAND ANT 4**

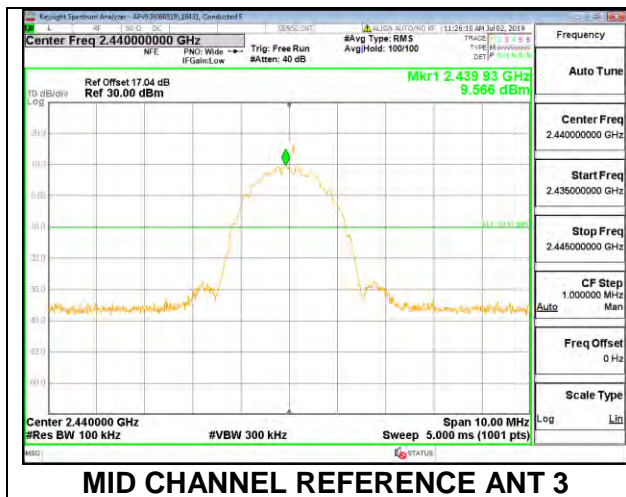
**LOW POWER, 2Mbps**



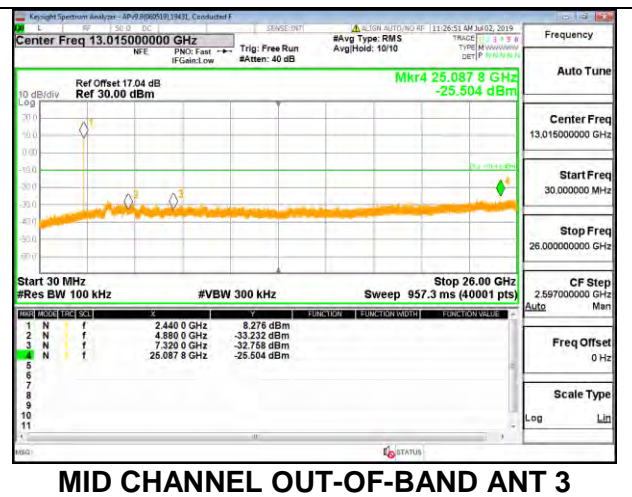
**LOW CHANNEL BANDEDGE ANT 3**



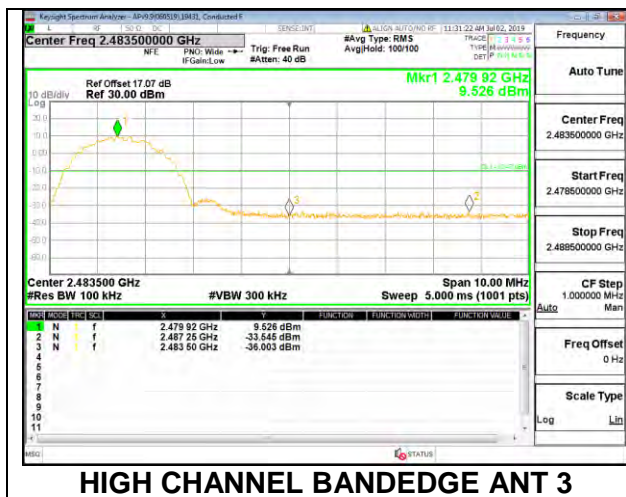
**LOW CHANNEL OUT-OF-BAND ANT 3**



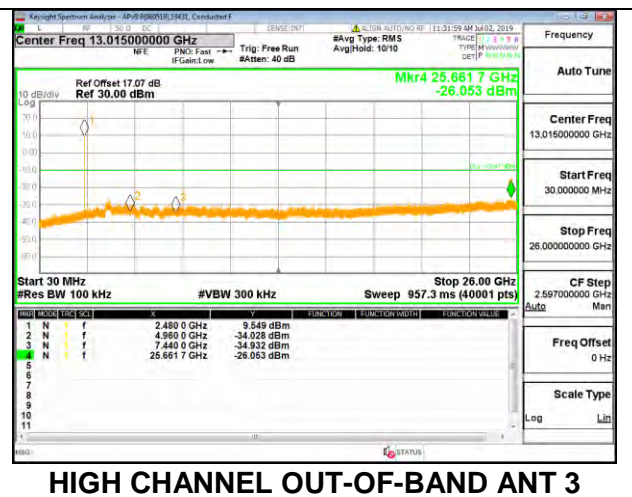
**MID CHANNEL REFERENCE ANT 3**



**MID CHANNEL OUT-OF-BAND ANT 3**



**HIGH CHANNEL BANDEDGE ANT 3**



**HIGH CHANNEL OUT-OF-BAND ANT 3**

Note: Test procedures and settings 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.

**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.

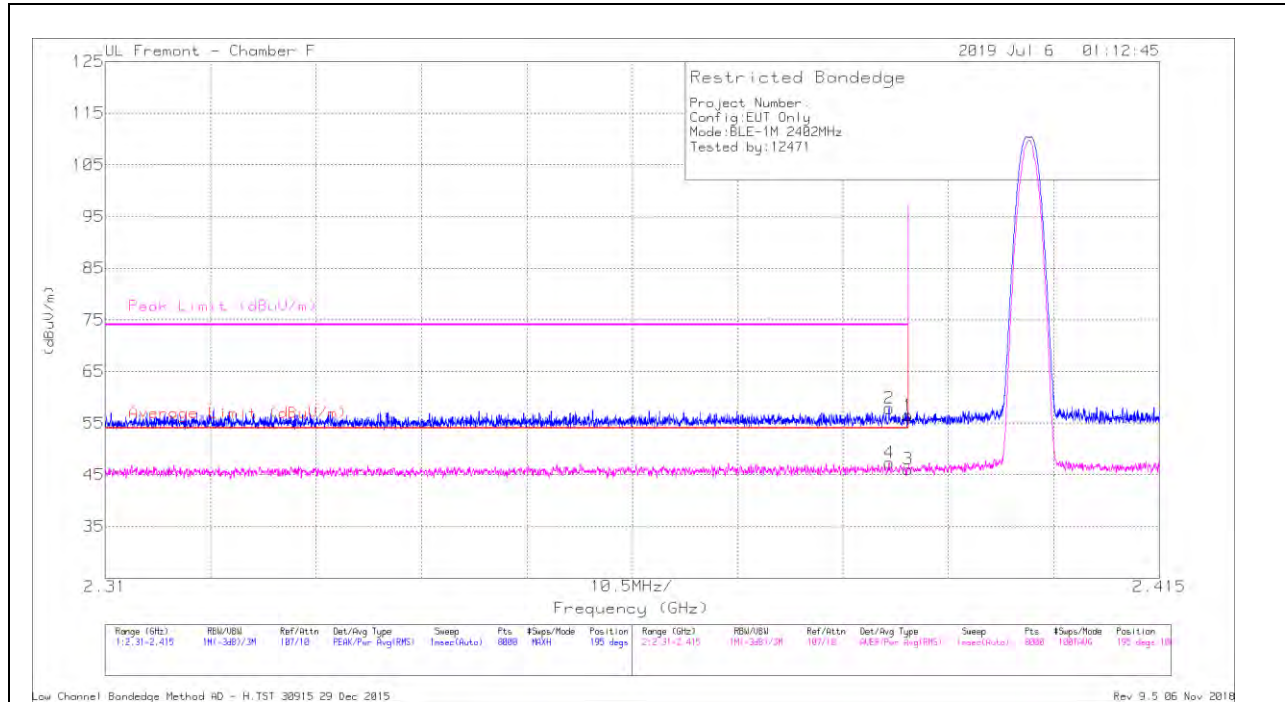
## 9.2. TRANSMITTER ABOVE 1 GHz

### 9.2.1. High Power BLE (1Mbps)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	38.97	Pk	32	-14.5	56.47	-	-	74	-17.53	195	106	H
2	* 2.388	40.4	Pk	32	-14.5	57.9	-	-	74	-16.1	195	106	H
3	* 2.39	28.57	RMS	32	-14.5	46.07	54	-7.93	-	-	195	106	H
4	* 2.388	29.82	RMS	32	-14.5	47.32	54	-6.68	-	-	195	106	H

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

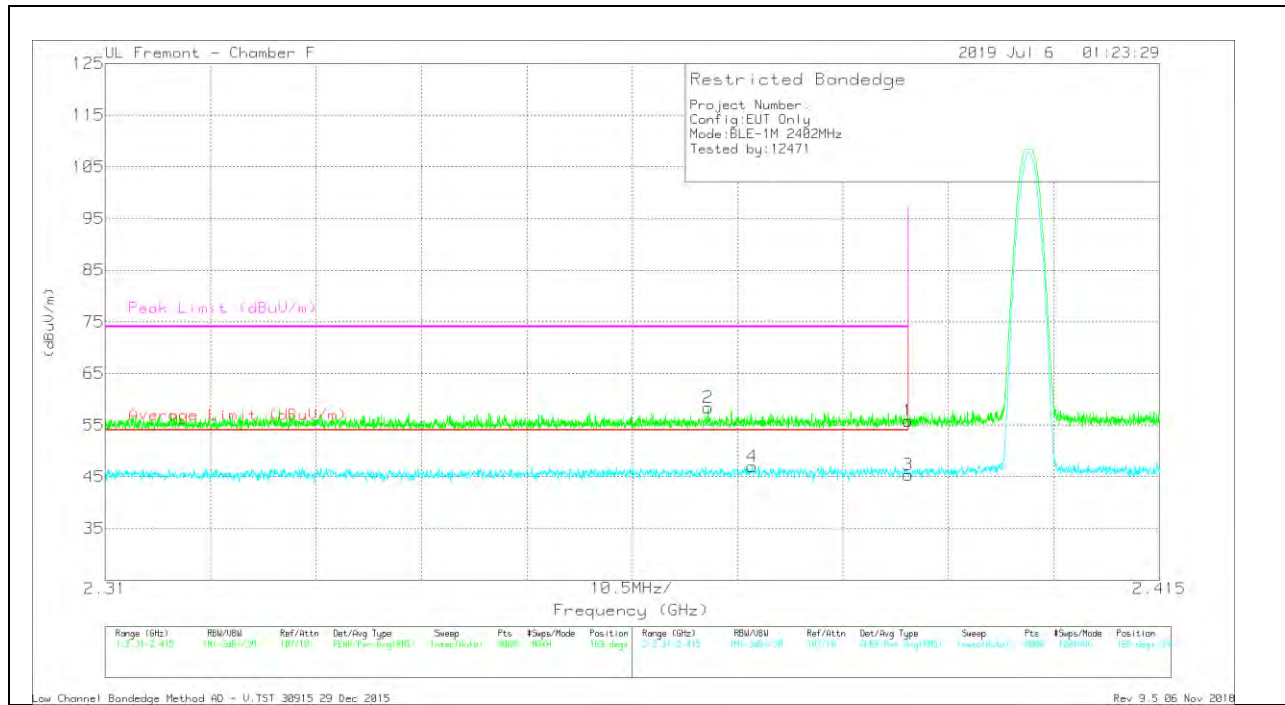
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.39	38.34	Pk	32	-14.5	55.84	-	-	74	-18.16	169	398	V
2	* 2.37	40.98	Pk	31.9	-14.5	58.38	-	-	74	-15.62	169	398	V
3	* 2.39	27.86	RMS	32	-14.5	45.36	54	-8.64	-	-	169	398	V
4	* 2.374	29.49	RMS	31.9	-14.4	46.99	54	-7.01	-	-	169	398	V

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

Pk - Peak detector

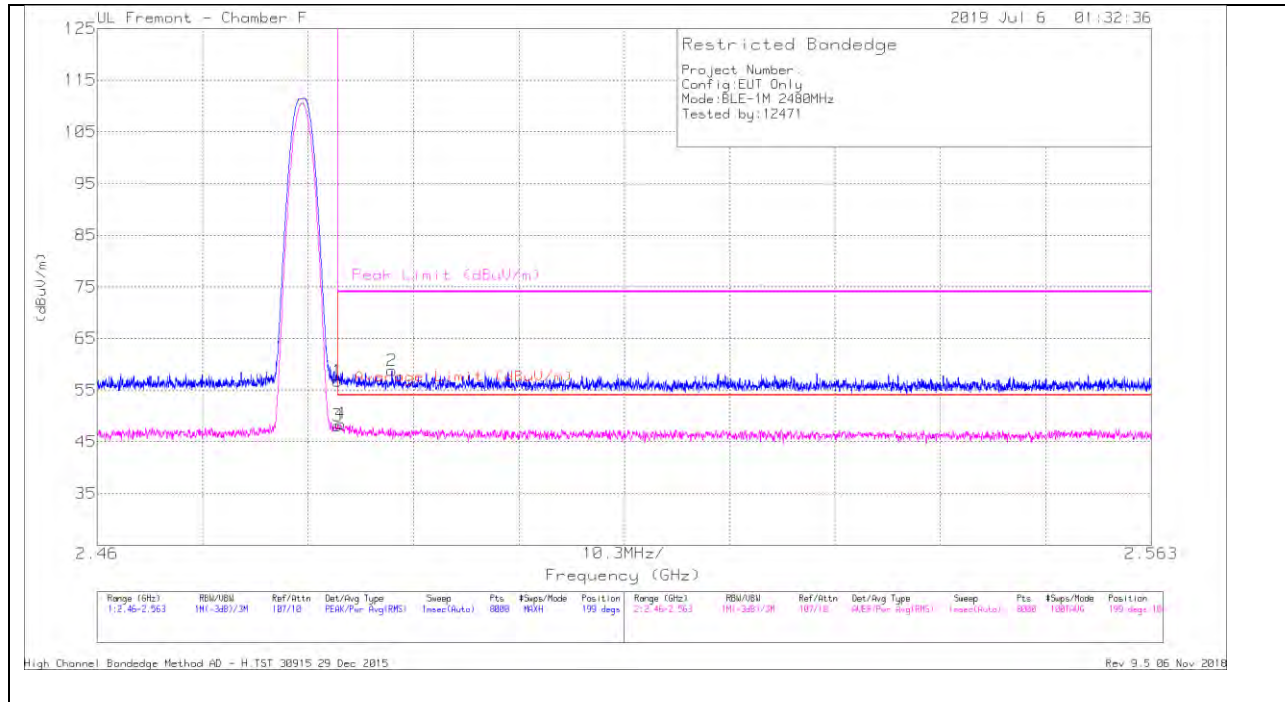
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dBm)	Amp/Cb/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	39.05	Pk	32.4	-14.7	56.75	-	-	74	-17.25	199	104	H
2	* 2.489	40.97	Pk	32.3	-14.5	58.77	-	-	74	-15.23	199	104	H
3	* 2.484	30.39	RMS	32.4	-14.7	48.09	54	-5.91	-	-	199	104	H
4	* 2.484	30.8	RMS	32.4	-14.7	48.5	54	-5.5	-	-	199	104	H

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

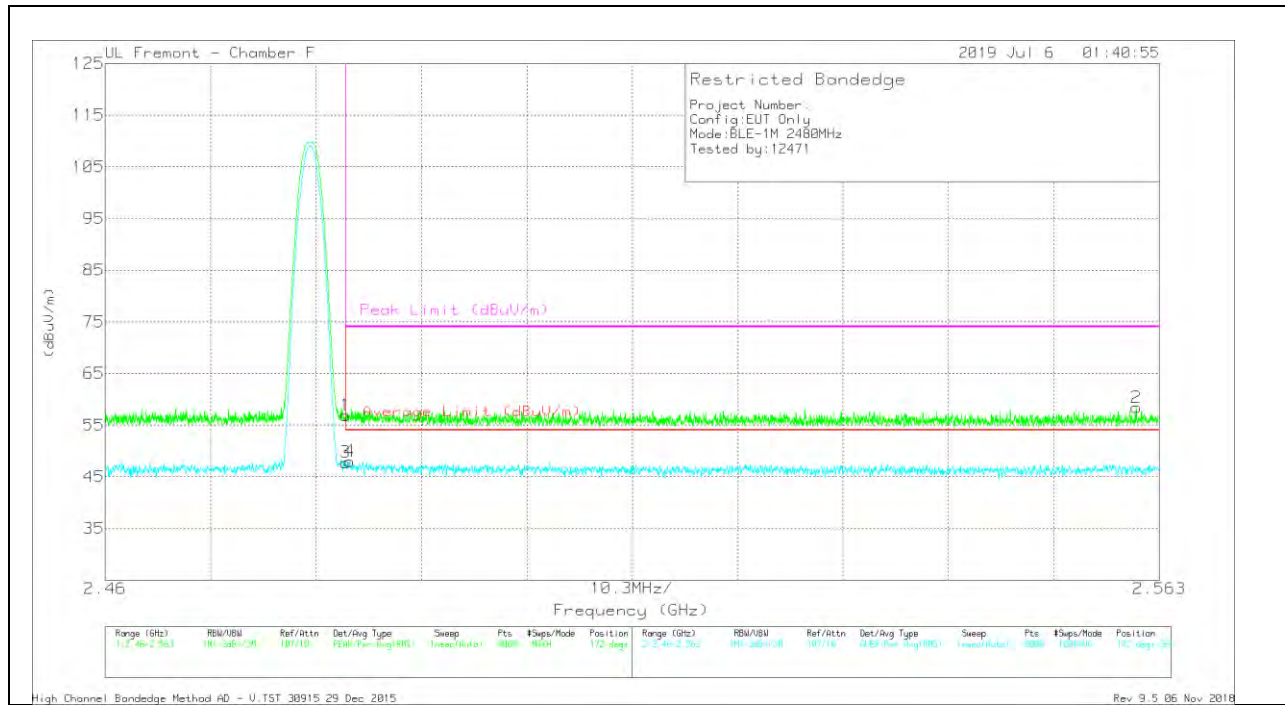
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	39.17	Pk	32.4	-14.7	56.87	-	-	74	-17.13	172	365	V
2	2.561	40.62	Pk	32.4	-14.6	58.42	-	-	74	-15.58	172	365	V
3	* 2.484	30.08	RMS	32.4	-14.7	47.78	54	-6.22	-	-	172	365	V
4	* 2.484	30.27	RMS	32.4	-14.7	47.97	54	-6.03	-	-	172	365	V

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

Pk - Peak detector

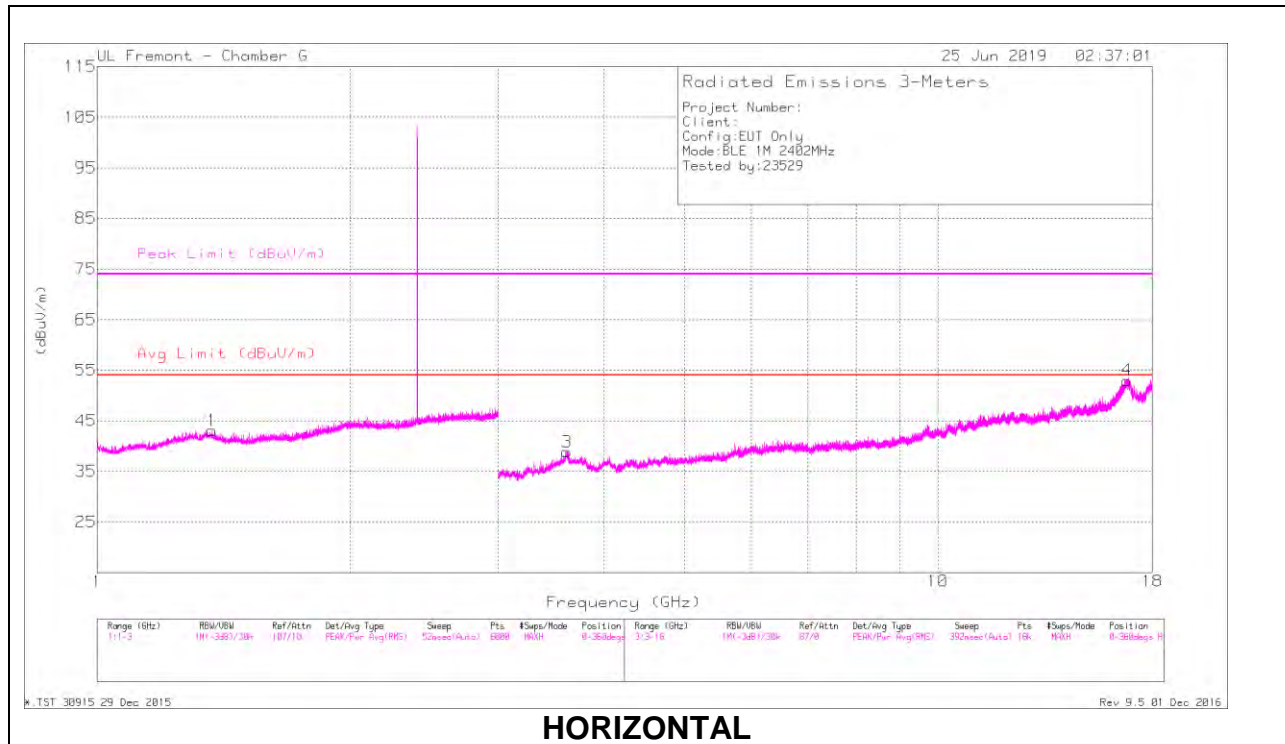
RMS - RMS detection

High Channel Bandedge Method AD - V.TST 30915 29 Dec 2015

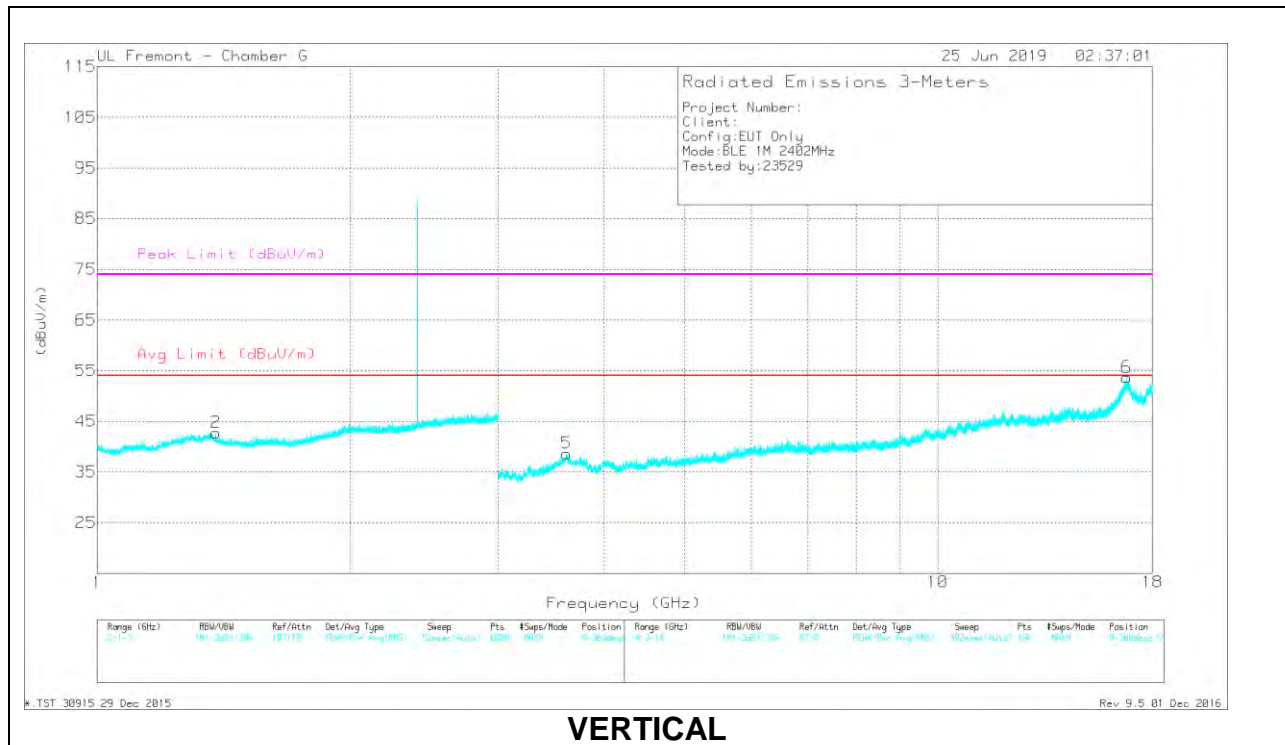
Rev 9.5 06 Nov 2018

**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.367	43.82	PK2	30	-23.2	50.62	-	-	74	-23.38	360	101	H
	* 1.367	31.56	MAv1	30	-23.2	38.36	54	-15.64	-	-	360	101	H
2	* 1.385	42.76	PK2	29.4	-23.1	49.06	-	-	74	-24.94	360	101	V
	* 1.385	31.41	MAv1	29.4	-23.1	37.71	54	-16.29	-	-	360	101	V
3	* 3.621	40.19	PK2	35.7	-30	45.89	-	-	74	-28.11	360	101	H
	* 3.621	29.2	MAv1	35.7	-30	34.9	54	-19.1	-	-	360	101	H
5	* 3.616	40.46	PK2	35.6	-30.1	45.96	-	-	74	-28.04	360	101	V
	* 3.616	29.2	MAv1	35.6	-30.1	34.7	54	-19.3	-	-	360	101	V
6	16.783	36.31	PK2	41.8	-17.5	60.61	-	-	-	-	360	101	V
4	16.806	36.2	PK2	41.8	-17.7	60.3	-	-	-	-	360	101	H

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

PK2 - KDB558074 Method: Maximum Peak

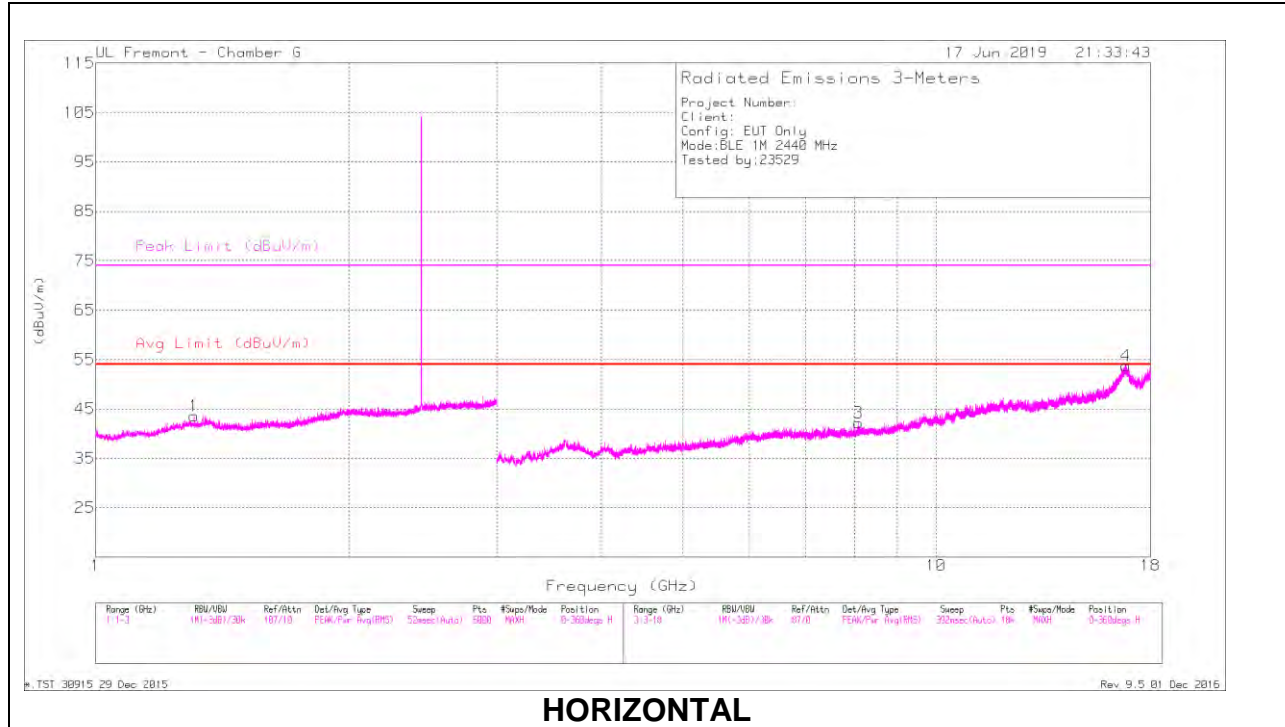
MAv1 - KDB558074 Option 1 Maximum RMS Average

\*.TST 30915 29 Dec 2015

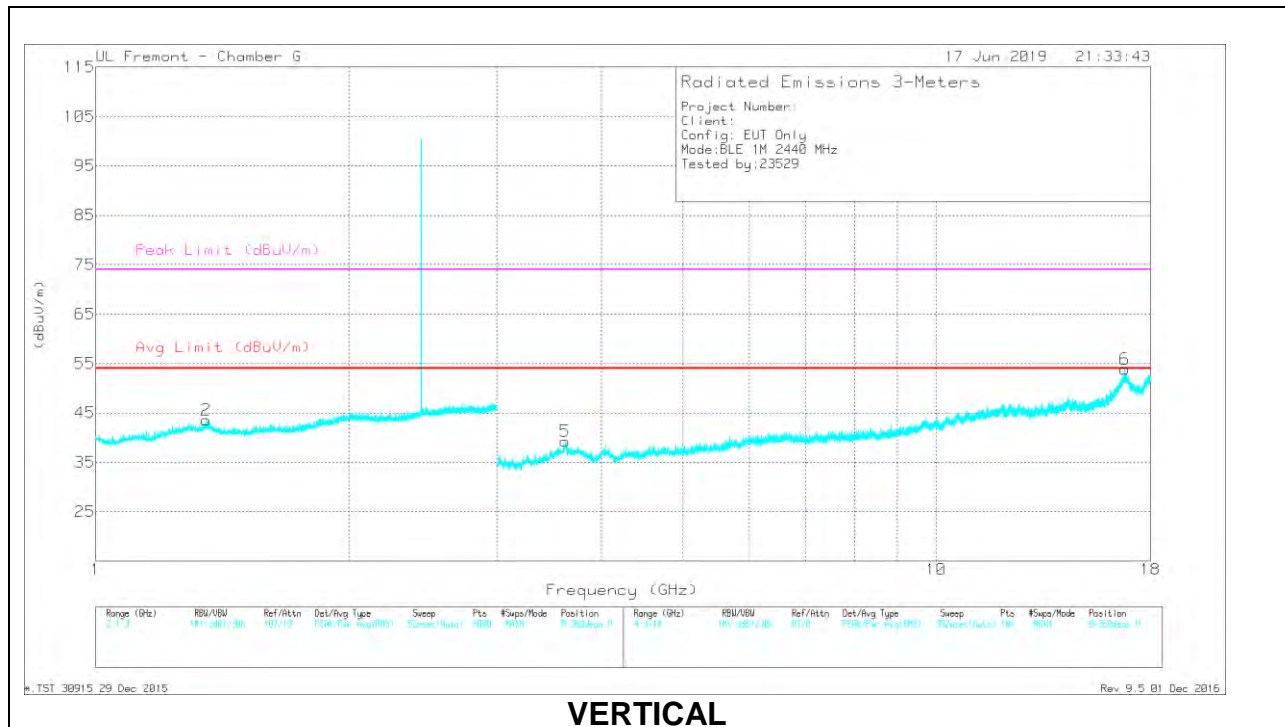
Rev 9.5 01 Dec 2016



### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.308	42.96	PK2	29.9	-23.5	49.36	-	-	74	-24.64	89	192	H
	* 1.309	31.99	MAv1	29.9	-23.5	38.39	54	-15.61	-	-	89	192	H
2	* 1.35	44.32	PK2	29.9	-23.3	50.92	-	-	74	-23.08	222	237	V
	* 1.351	32.07	MAv1	30	-23.3	38.77	54	-15.23	-	-	222	237	V
3	* 8.087	38.64	PK2	36.1	-26.8	47.94	-	-	74	-26.06	168	166	H
	* 8.087	27.53	MAv1	36.1	-26.8	36.83	54	-17.17	-	-	168	166	H
5	* 3.621	40.47	PK2	35.7	-30	46.17	-	-	74	-27.83	25	308	V
	* 3.618	29.05	MAv1	35.7	-30.1	34.65	54	-19.35	-	-	25	308	V
6	16.782	36.24	PK2	41.8	-17.6	60.44	-	-	-	-	328	297	V
4	16.829	35.89	PK2	41.7	-17.9	59.69	-	-	-	-	145	292	H

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

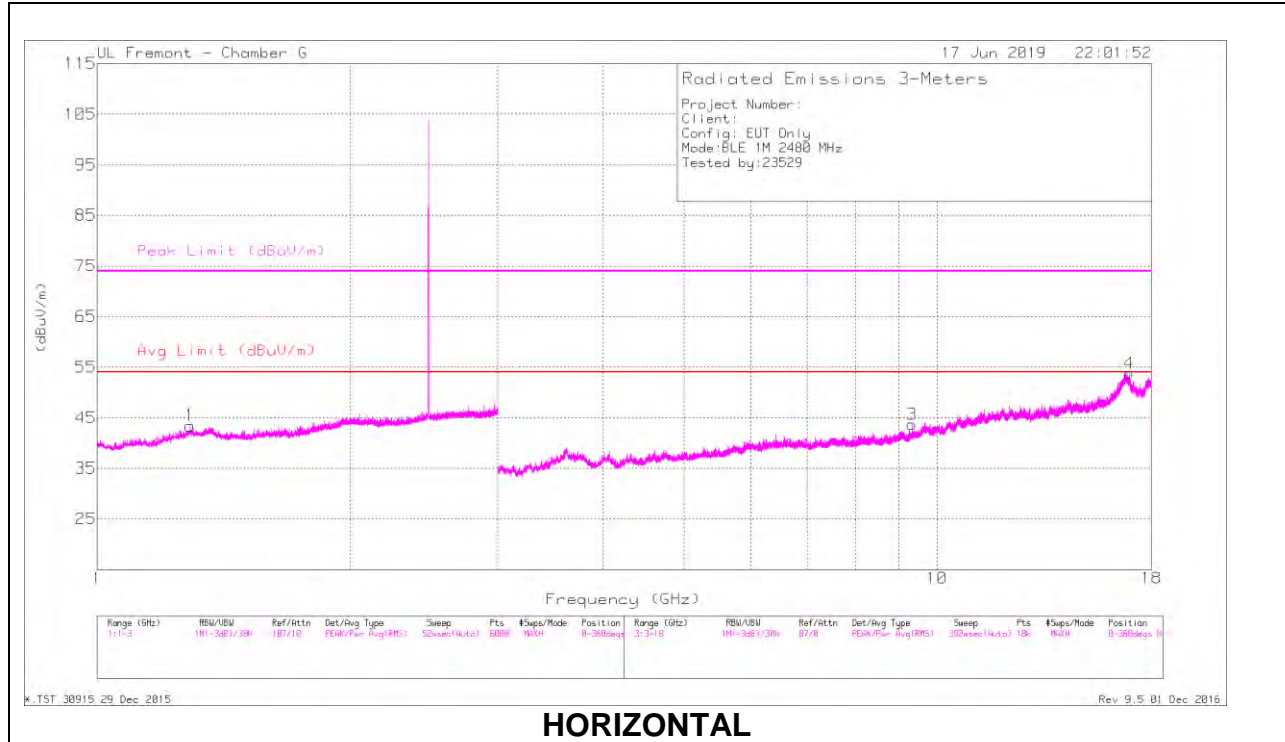
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

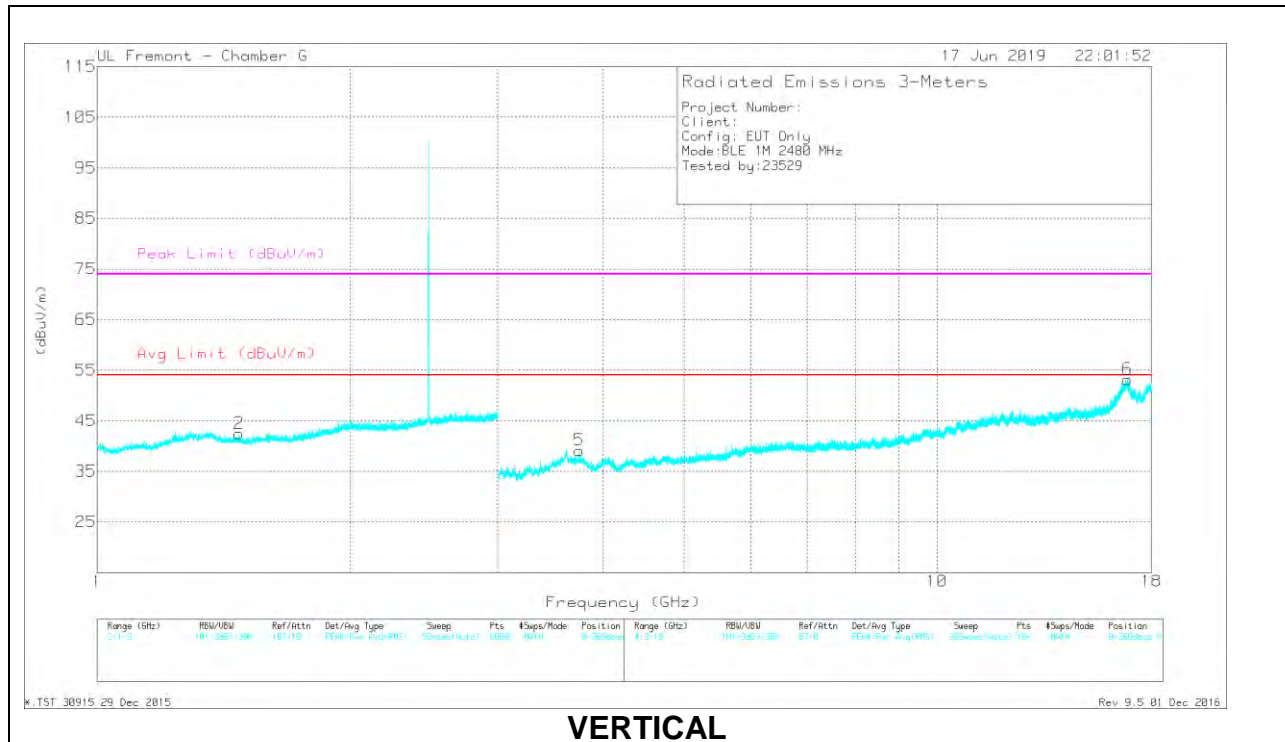
\*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

### RADIATED EMISSIONS

#### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	44.08	PK2	29.9	-23.5	50.48	-	-	74	-23.52	211	161	H
	* 1.29	32.08	MAV1	29.9	-23.5	38.48	54	-15.52	-	-	211	161	H
2	* 1.476	43.54	PK2	28.4	-22.3	49.64	-	-	74	-24.36	324	286	V
	* 1.474	32.08	MAV1	28.4	-22.4	38.08	54	-15.92	-	-	324	286	V
3	* 9.338	38.73	PK2	36.8	-25.3	50.23	-	-	74	-23.77	159	306	H
	* 9.337	26.84	MAV1	36.8	-25.3	38.34	54	-15.66	-	-	159	306	H
5	* 3.752	40.75	PK2	33.9	-28.9	45.75	-	-	74	-28.25	197	275	V
	* 3.753	29.53	MAV1	33.8	-28.9	34.43	54	-19.57	-	-	197	275	V
6	16.862	35.05	PK2	41.6	-17.8	58.85	-	-	-	-	260	312	V
4	16.944	36.69	PK2	41.6	-18	60.29	-	-	-	-	93	212	H

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

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

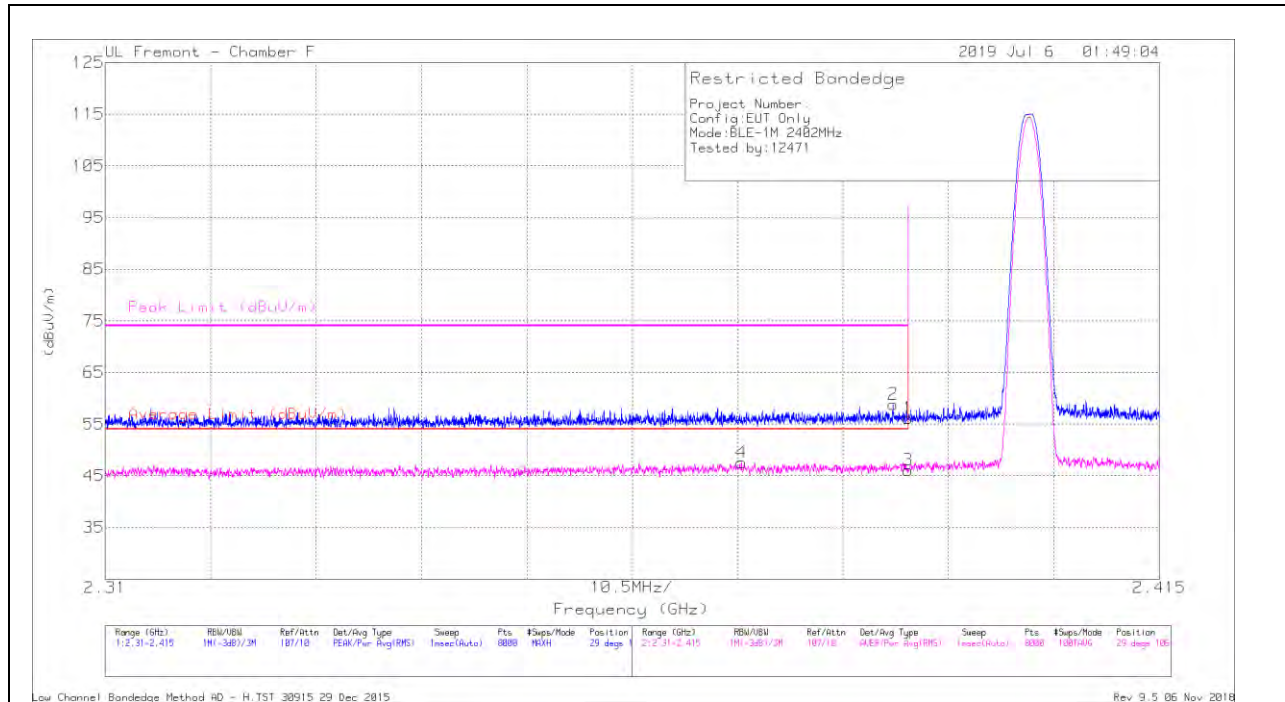
\*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	38.66	Pk	32	-14.5	56.16	-	-	74	-17.84	29	106	H
2	* 2.388	41.32	Pk	32	-14.5	58.82	-	-	74	-15.18	29	106	H
3	* 2.39	28.6	RMS	32	-14.5	46.1	54	-7.9	-	-	29	106	H
4	* 2.373	30.06	RMS	31.9	-14.4	47.56	54	-6.44	-	-	29	106	H

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

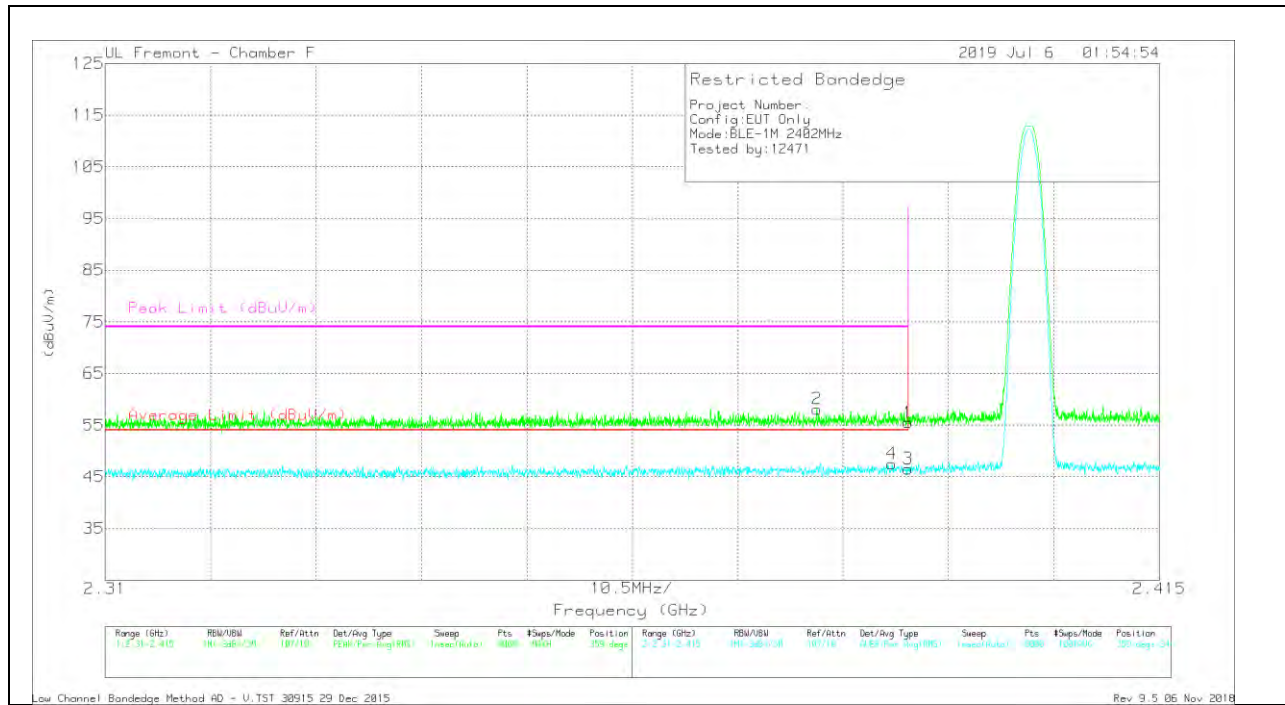
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.39	37.98	Pk	32	-14.5	55.48	-	-	74	-18.52	359	344	V
2	* 2.381	40.72	Pk	31.9	-14.5	58.12	-	-	74	-15.88	359	344	V
3	* 2.39	29.05	RMS	32	-14.5	46.55	54	-7.45	-	-	359	344	V
4	* 2.388	30.01	RMS	32	-14.5	47.51	54	-6.49	-	-	359	344	V

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

Pk - Peak detector

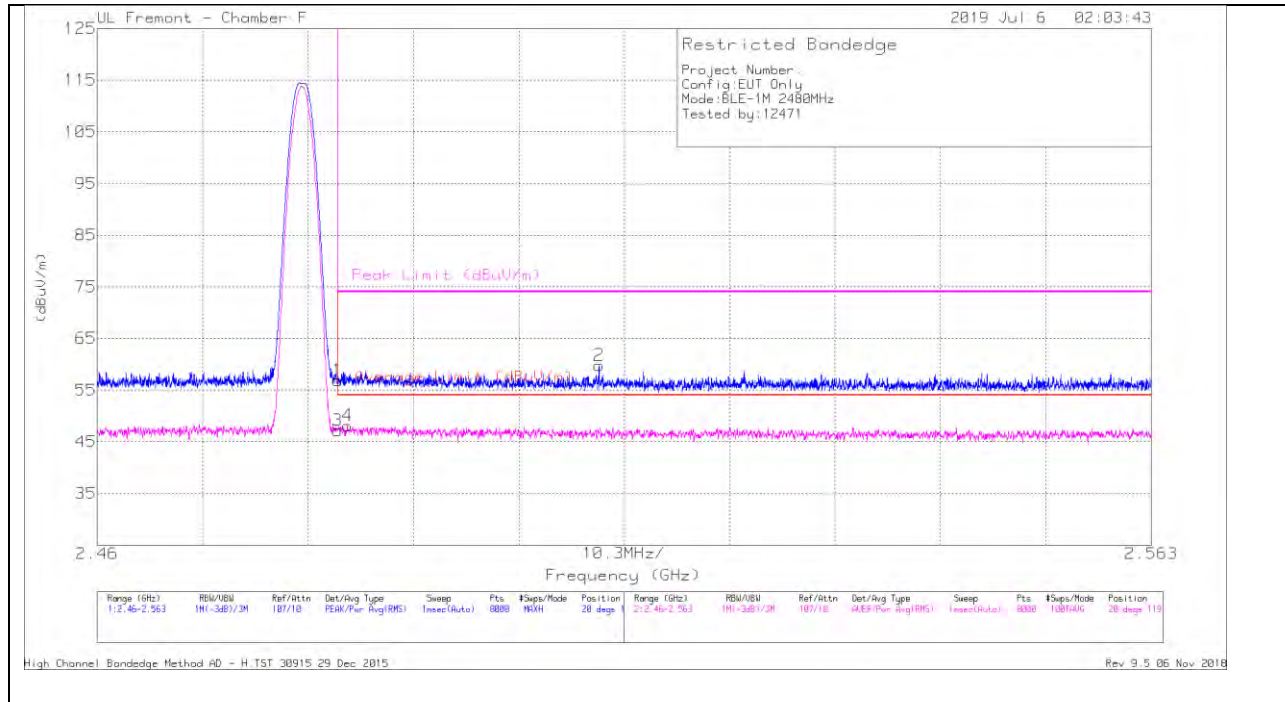
RMS - RMS detection

Low Channel Bandedge Method AD - V.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/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	39.22	Pk	32.4	-14.7	56.92	-	-	74	-17.08	20	119	H
2	2.509	42.09	Pk	32.4	-14.7	59.79	-	-	74	-14.21	20	119	H
3	* 2.484	29.48	RMS	32.4	-14.7	47.18	54	-6.82	-	-	20	119	H
4	* 2.484	30.39	RMS	32.4	-14.7	48.09	54	-5.91	-	-	20	119	H

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

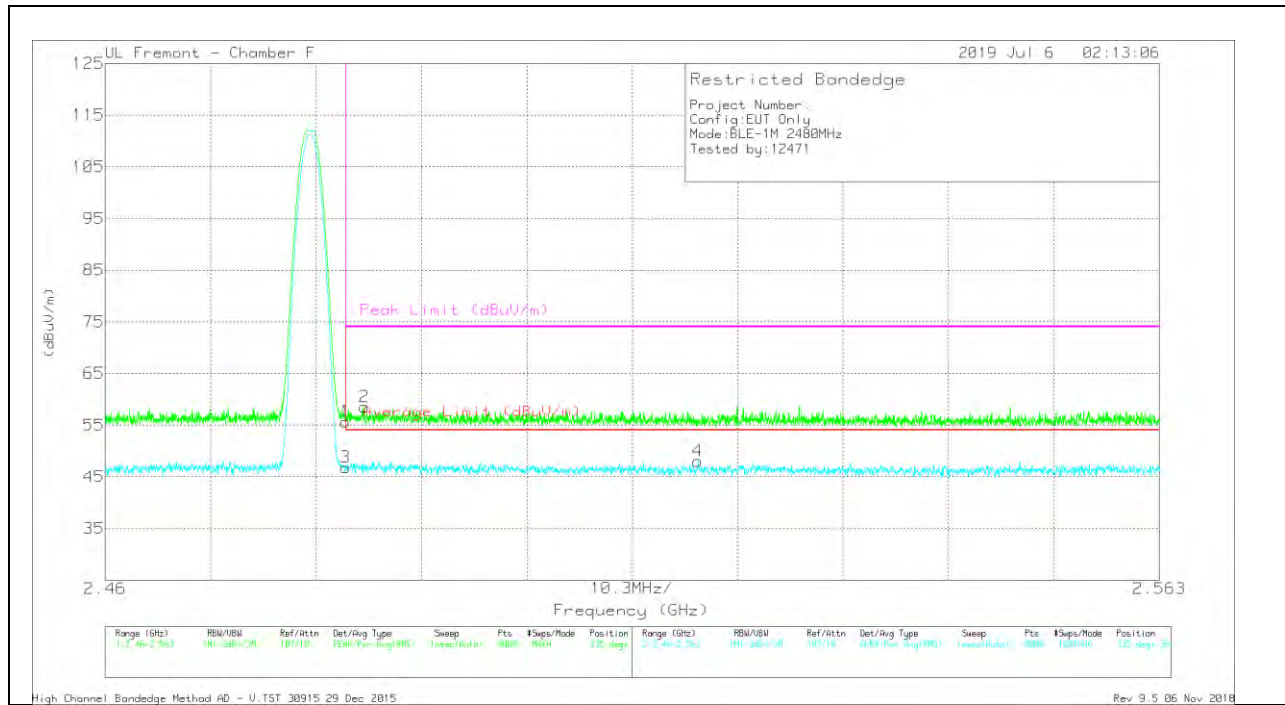
Pk - Peak detector

RMS - RMS detection

High Channel Bandedge Method AD - H.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	37.95	Pk	32.4	-14.7	55.65	-	-	74	-18.35	335	369	V
2	* 2.485	40.75	Pk	32.4	-14.6	58.55	-	-	74	-15.45	335	369	V
3	* 2.484	29.11	RMS	32.4	-14.7	46.81	54	-7.19	-	-	335	369	V
4	2.518	30.33	RMS	32.4	-14.7	48.03	54	-5.97	-	-	335	369	V

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

Pk - Peak detector

RMS - RMS detection

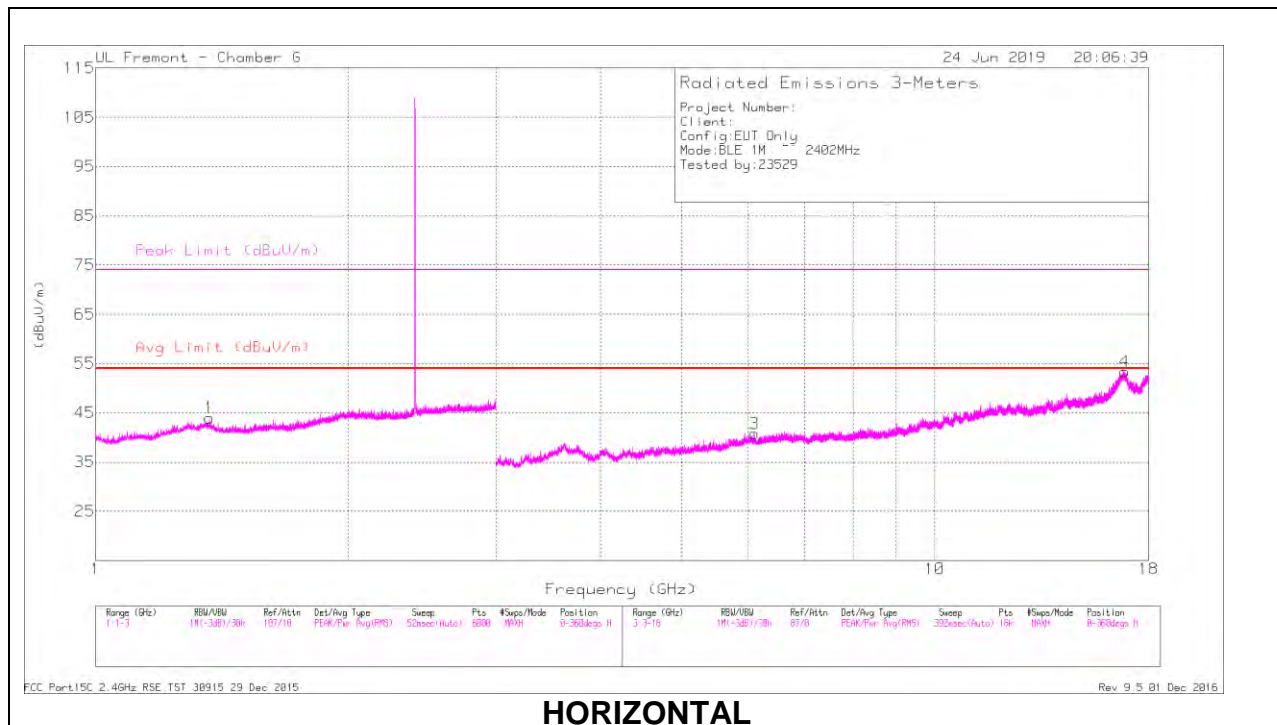
High Channel Bandedge Method AD - V.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

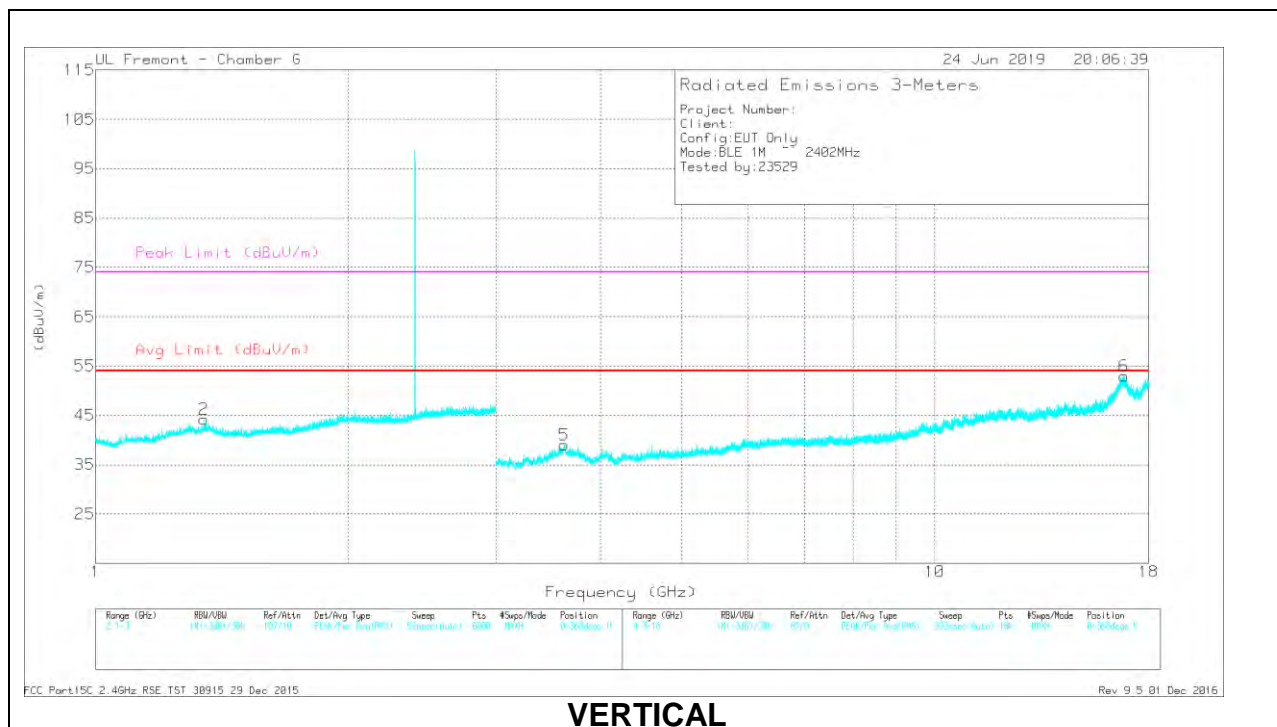


**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.366	43.38	PK2	30	-23.2	50.18	-	-	74	-23.82	360	101	H
	* 1.365	31.86	MAV1	30	-23.2	38.66	54	-15.34	-	-	360	101	H
2	* 1.346	43.93	PK2	29.8	-23.3	50.43	-	-	74	-23.57	360	101	V
	* 1.344	31.88	MAV1	29.8	-23.3	38.38	54	-15.62	-	-	360	101	V
5	* 3.624	40.86	PK2	35.5	-29.9	46.46	-	-	74	-27.54	360	101	V
	* 3.621	29.52	MAV1	35.7	-30	35.22	54	-18.78	-	-	360	101	V
3	6.094	40.38	PK2	35.7	-29.1	46.98	-	-	-	-	360	101	H
6	16.836	35.22	PK2	41.7	-17.8	59.12	-	-	-	-	360	101	V
4	16.874	36.07	PK2	41.7	-18.2	59.57	-	-	-	-	360	101	H

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

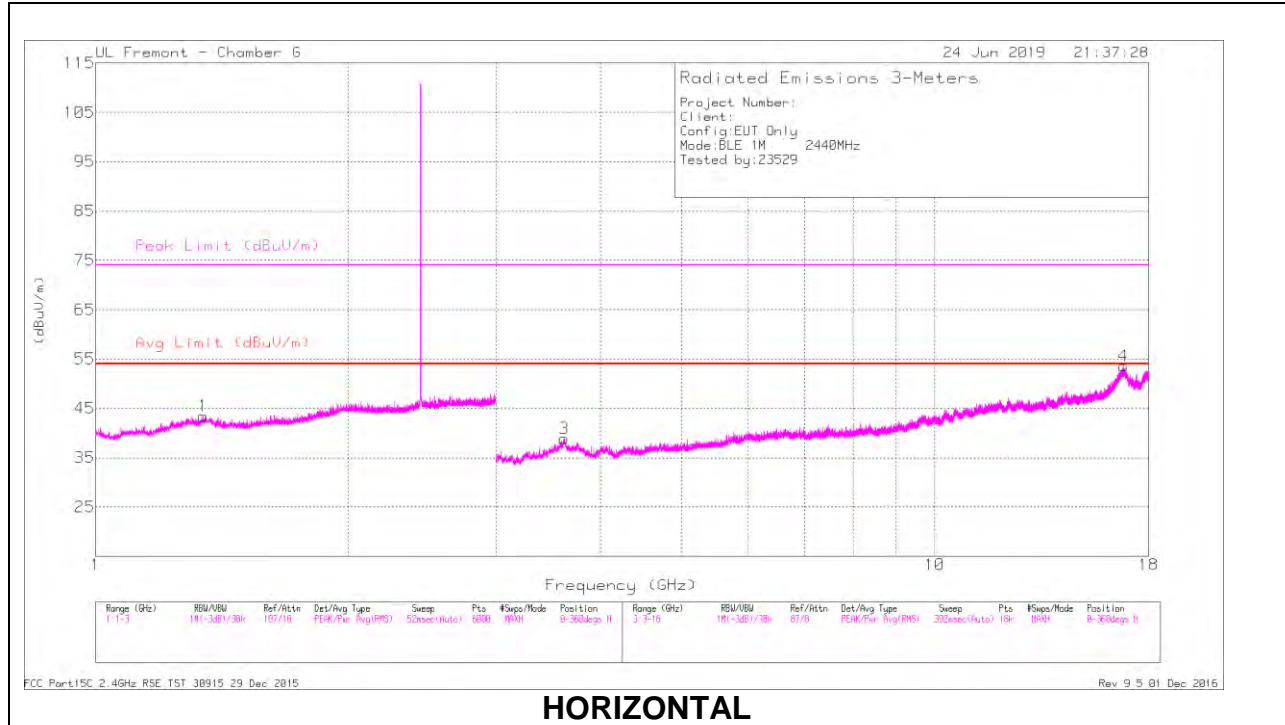
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

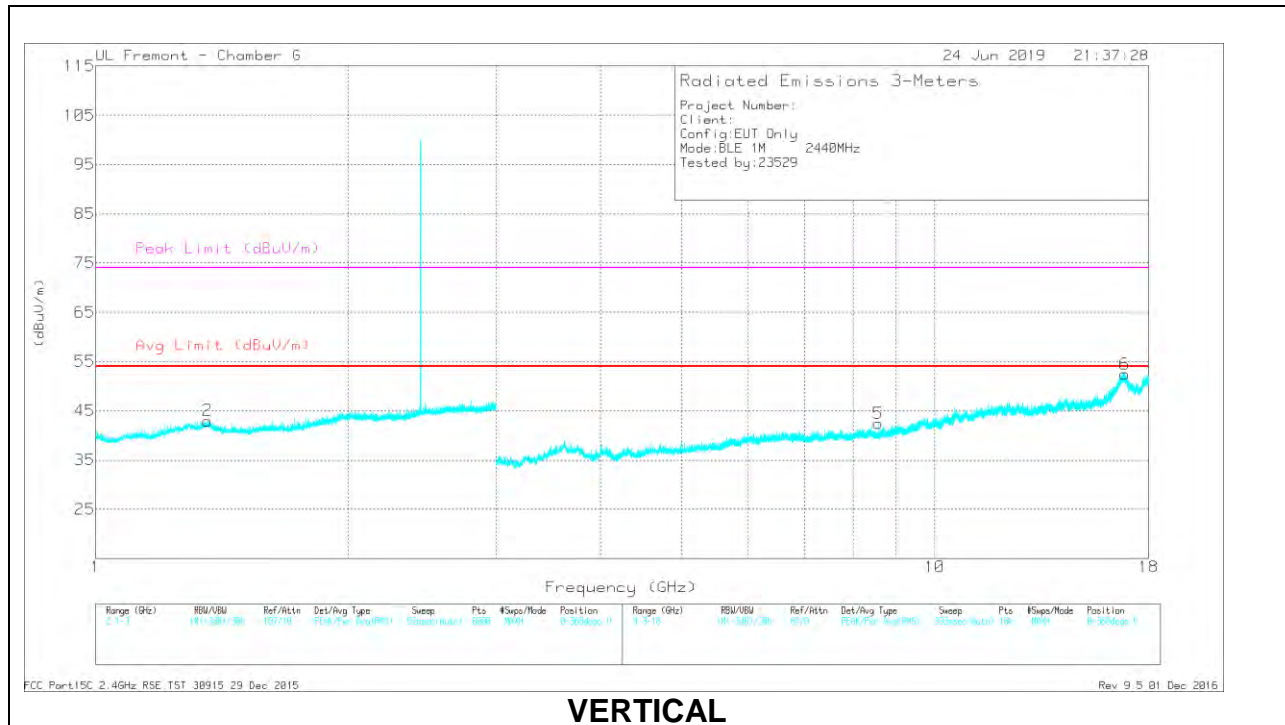
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### MID CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.343	43.56	PK2	29.8	-23.3	50.06	-	-	74	-23.94	0	101	H
	* 1.345	31.86	MAV1	29.8	-23.3	38.36	54	-15.64	-	-	0	101	H
2	* 1.357	43.93	PK2	30	-23.3	50.63	-	-	74	-23.37	0	101	V
	* 1.36	31.85	MAV1	29.9	-23.3	38.45	54	-15.55	-	-	0	101	V
3	* 3.619	40.58	PK2	35.7	-30	46.28	-	-	74	-27.72	0	101	H
	* 3.617	29.55	MAV1	35.7	-30.1	35.15	54	-18.85	-	-	0	101	H
5	8.574	38.4	PK2	36.2	-26.8	47.8	-	-	-	-	0	101	V
4	16.79	36.29	PK2	41.7	-17.4	60.59	-	-	-	-	0	101	H
6	16.859	35.81	PK2	41.6	-17.7	59.71	-	-	-	-	0	101	V

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

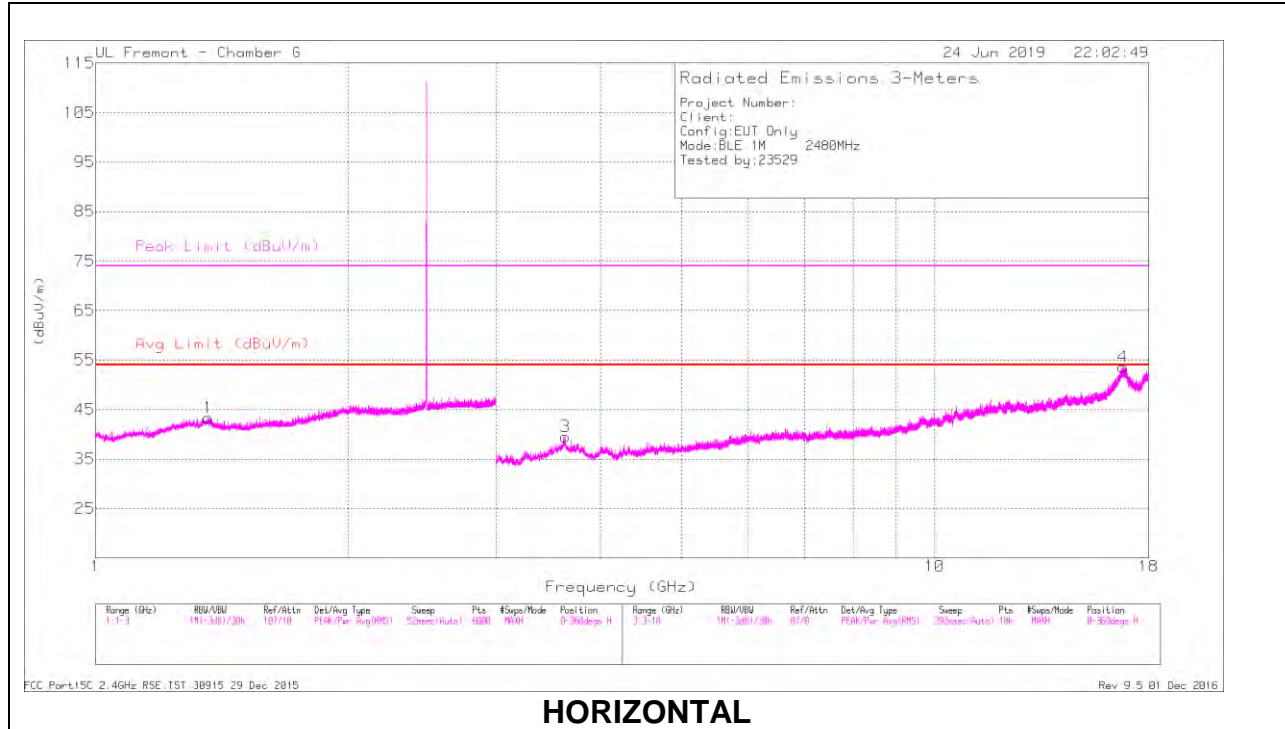
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

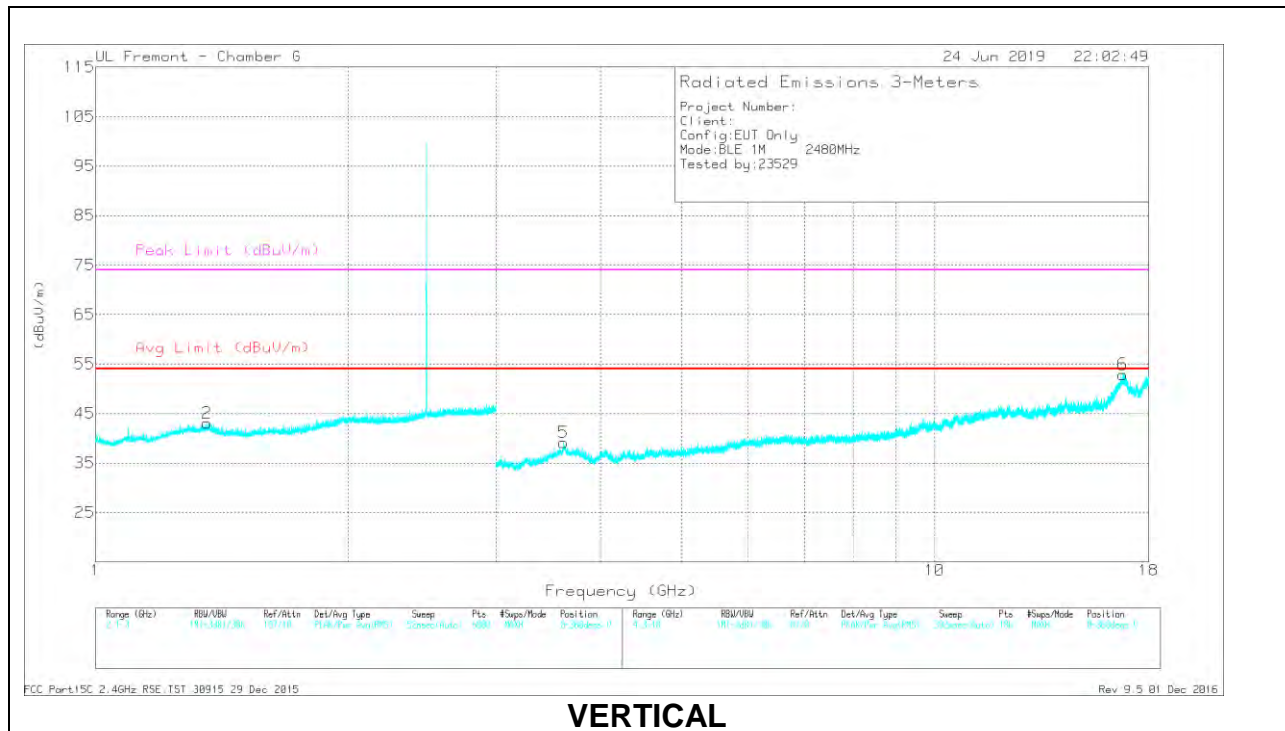
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.361	43.6	PK2	29.9	-23.2	50.3	-	-	74	-23.7	0	101	H
	* 1.362	31.8	MAv1	29.9	-23.2	38.5	54	-15.5	-	-	0	101	H
2	* 1.356	43.51	PK2	30	-23.3	50.21	-	-	74	-23.79	0	101	V
	* 1.356	31.84	MAv1	30	-23.3	38.54	54	-15.46	-	-	0	101	V
3	* 3.63	40.1	PK2	35.1	-29.7	45.5	-	-	74	-28.5	0	101	H
	* 3.63	29.16	MAv1	35.1	-29.7	34.56	54	-19.44	-	-	0	101	H
5	* 3.609	40.76	PK2	35.1	-30.3	45.56	-	-	74	-28.44	0	101	V
	* 3.609	29.69	MAv1	35.1	-30.3	34.49	54	-19.51	-	-	0	101	V
6	16.782	36.21	PK2	41.7	-17.6	60.31	-	-	-	-	0	101	V
4	16.791	37.11	PK2	41.7	-17.4	61.41	-	-	-	-	0	101	H

\* - 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

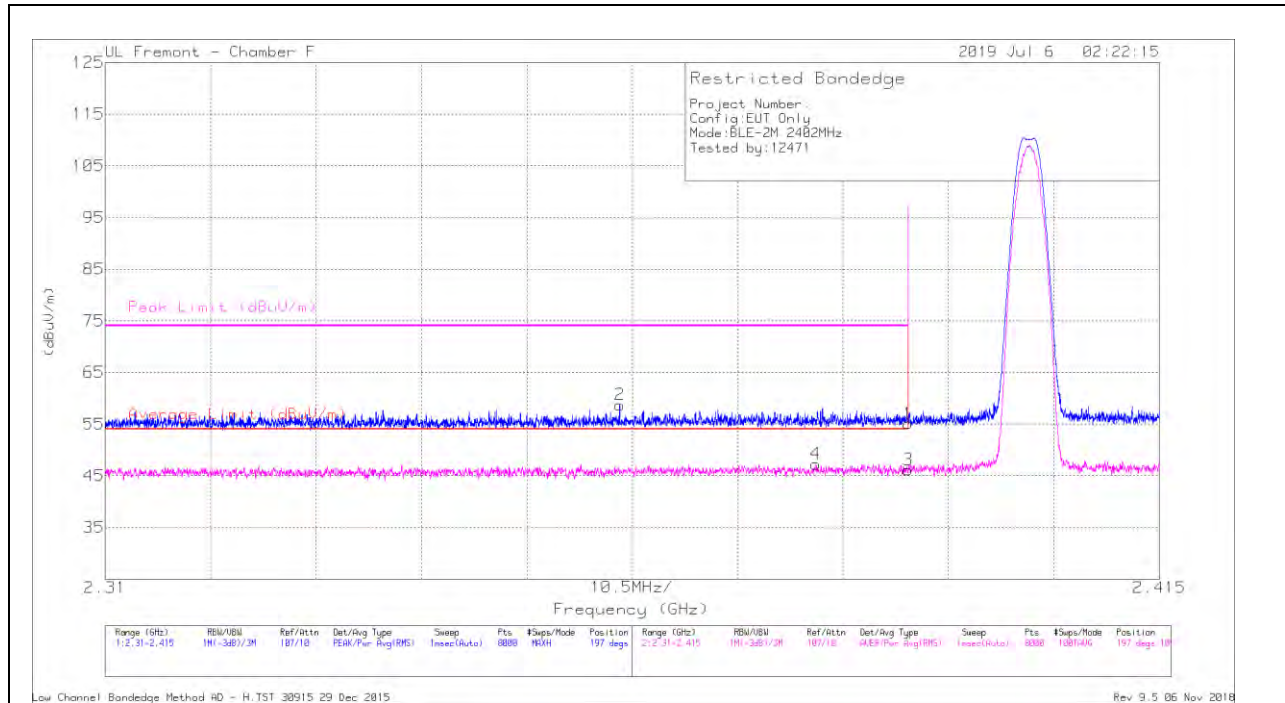
Rev 9.5 01 Dec 2016

### 9.2.2. High Power BLE (2Mbps)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/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	37.62	Pk	32	-14.5	55.12	-	-	74	-18.88	197	109	H
2	* 2.361	41.43	Pk	31.8	-14.5	58.73	-	-	74	-15.27	197	109	H
3	* 2.39	28.65	RMS	32	-14.5	46.15	54	-7.85	-	-	197	109	H
4	* 2.381	29.87	RMS	31.9	-14.5	47.27	54	-6.73	-	-	197	109	H

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

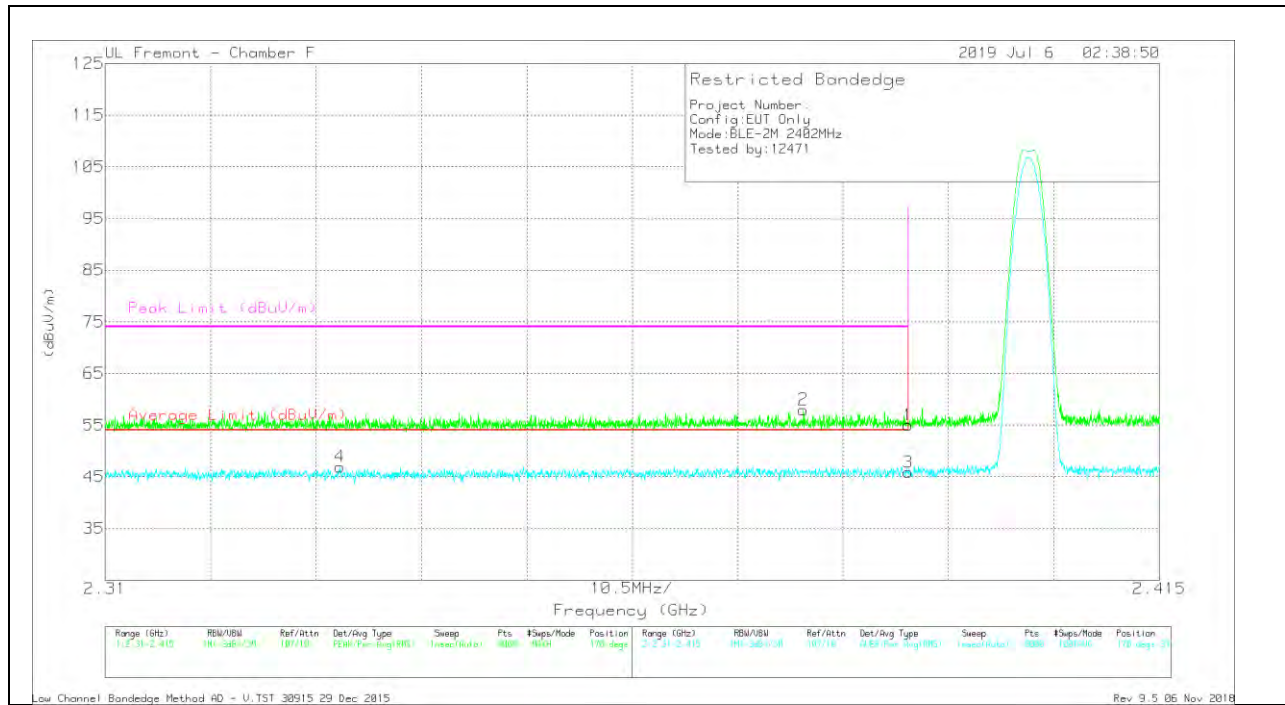
Pk - Peak detector

RMS - RMS detection

Low Channel Bandedge Method AD - H.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.39	37.52	Pk	32	-14.5	55.02	-	-	74	-18.98	170	397	V
2	* 2.38	40.49	Pk	31.9	-14.4	57.99	-	-	74	-16.01	170	397	V
3	* 2.39	28.39	RMS	32	-14.5	45.89	54	-8.11	-	-	170	397	V
4	* 2.333	29.83	RMS	31.6	-14.5	46.93	54	-7.07	-	-	170	397	V

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

Pk - Peak detector

RMS - RMS detection

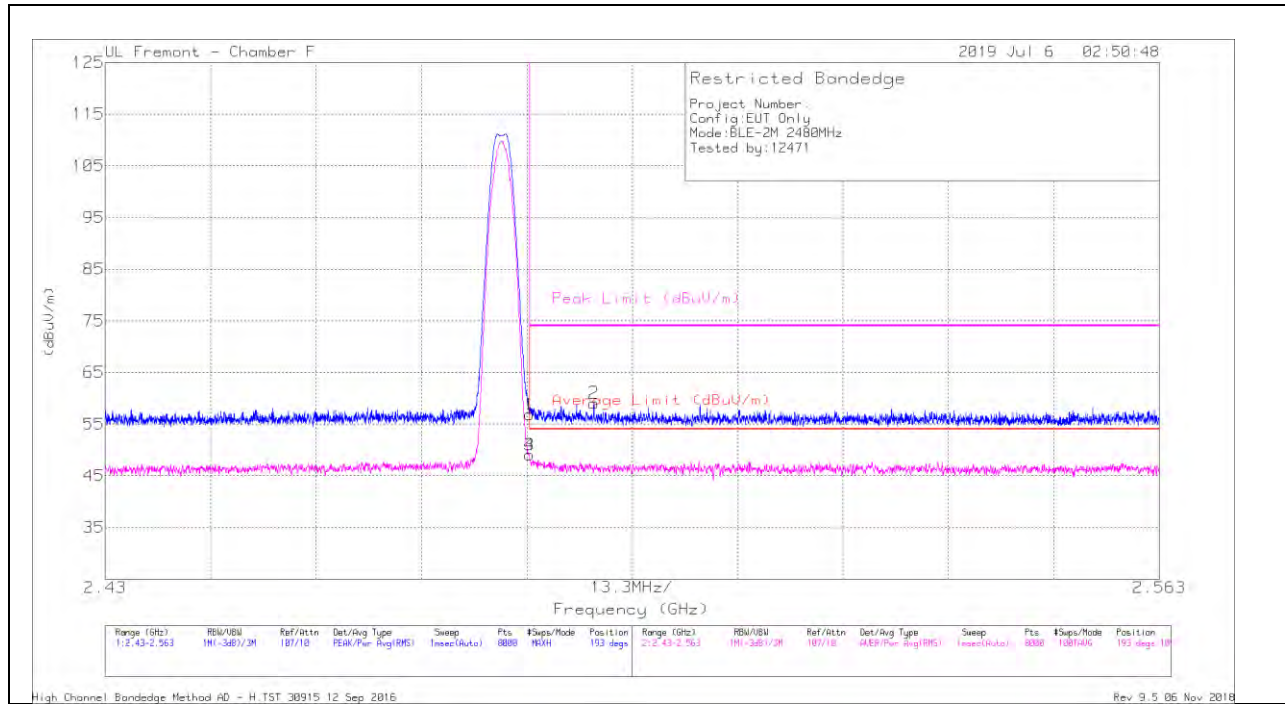
Low Channel Bandedge Method AD - V.TST 30915 29 Dec 2015

Rev 9.5 06 Nov 2018



**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/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	39.12	Pk	32.4	-14.7	56.82	-	-	74	-17.18	193	109	H
2	* 2.492	41.45	Pk	32.3	-14.7	59.05	-	-	74	-14.95	193	109	H
3	* 2.484	31.33	RMS	32.4	-14.7	49.03	54	-4.97	-	-	193	109	H
4	* 2.484	31.34	RMS	32.4	-14.7	49.04	54	-4.96	-	-	193	109	H

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

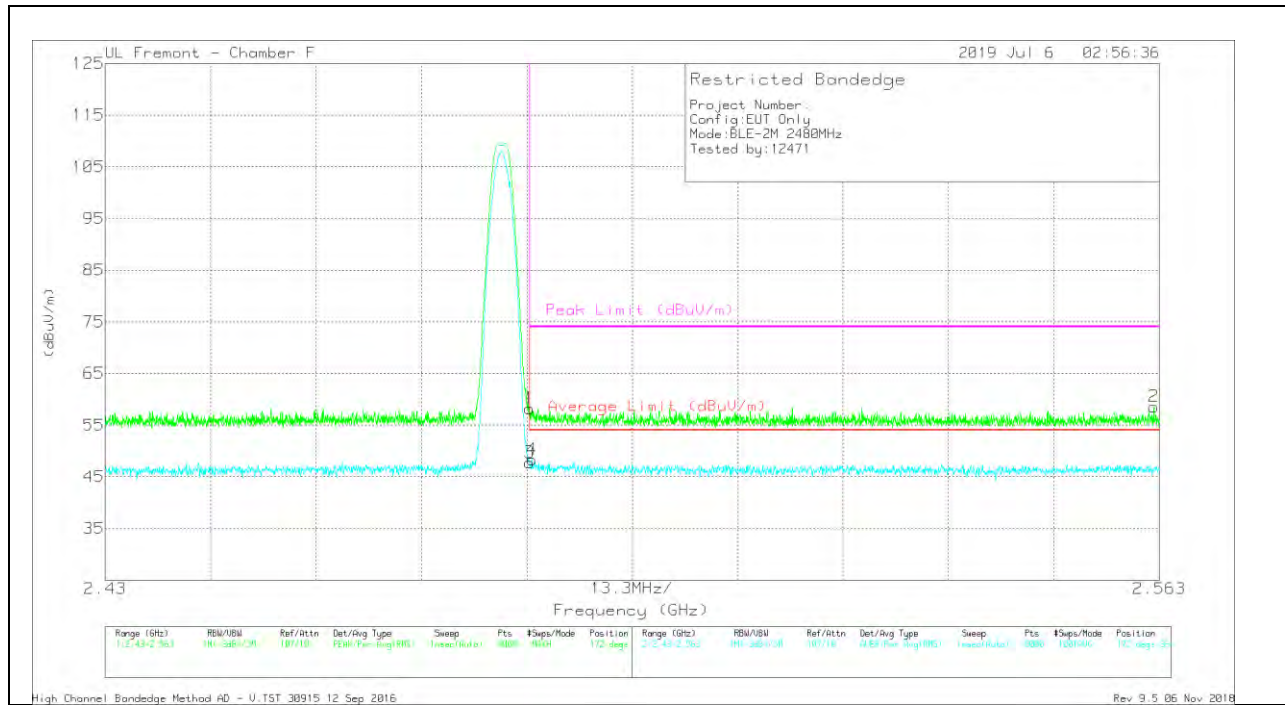
Pk - Peak detector

RMS - RMS detection

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

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	40.53	Pk	32.4	-14.7	58.23	-	-	74	-15.77	172	364	V
2	2.562	40.8	Pk	32.4	-14.6	58.6	-	-	74	-15.4	172	364	V
3	* 2.484	30.06	RMS	32.4	-14.7	47.76	54	-6.24	-	-	172	364	V
4	* 2.484	30.65	RMS	32.4	-14.7	48.35	54	-5.65	-	-	172	364	V

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

Pk - Peak detector

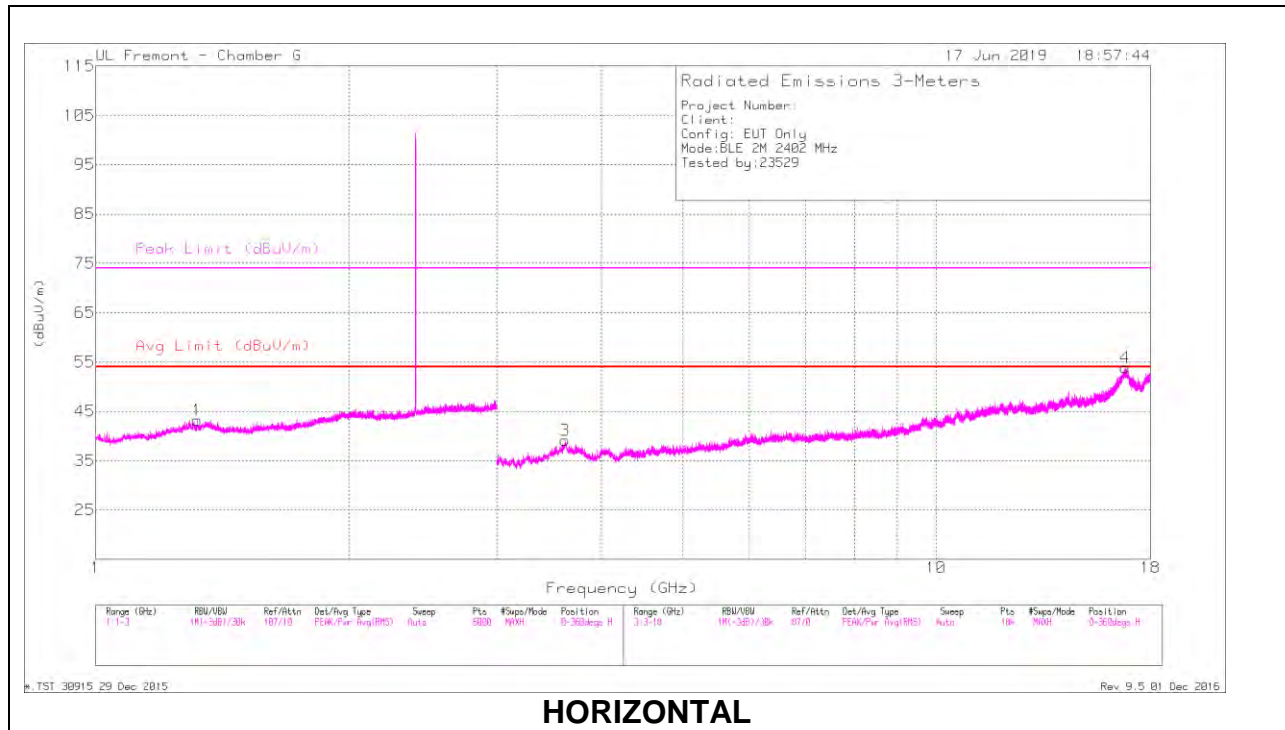
RMS - RMS detection

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

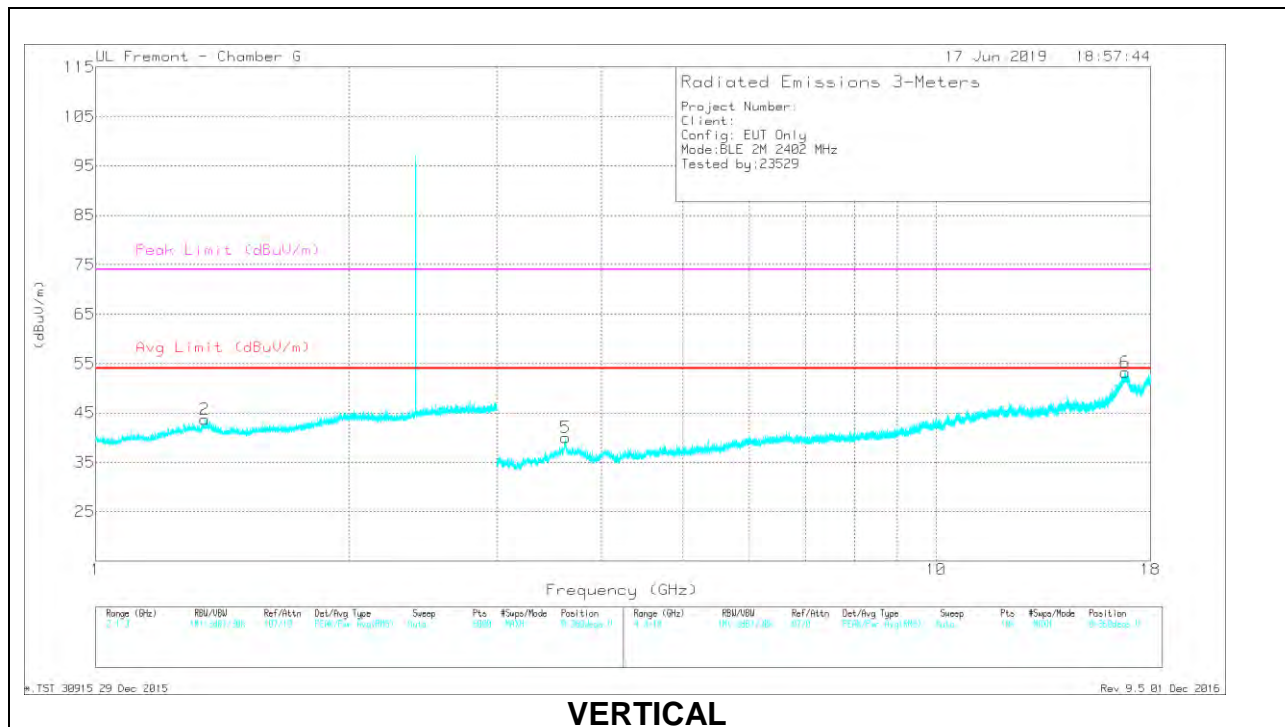
Rev 9.5 06 Nov 2018

**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.315	43.96	PK2	29.6	-23.5	50.06	-	-	74	-23.94	184	165	H
	* 1.322	31.97	MAv1	29.8	-23.5	38.27	54	-15.73	-	-	184	165	H
2	* 1.347	43.35	PK2	29.8	-23.3	49.85	-	-	74	-24.15	225	203	V
	* 1.349	31.84	MAv1	29.9	-23.3	38.44	54	-15.56	-	-	225	203	V
3	* 3.62	41.37	PK2	35.7	-30	47.07	-	-	74	-26.93	233	222	H
	* 3.62	30.05	MAv1	35.7	-30	35.75	54	-18.25	-	-	233	222	H
5	* 3.622	40.11	PK2	35.7	-29.9	45.91	-	-	74	-28.09	115	183	V
	* 3.621	29.28	MAv1	35.7	-30	34.98	54	-19.02	-	-	115	183	V
4	16.791	36.51	PK2	41.7	-17.4	60.81	-	-	-	-	168	289	H
6	16.798	35.34	PK2	41.7	-17.5	59.54	-	-	-	-	65	278	V

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

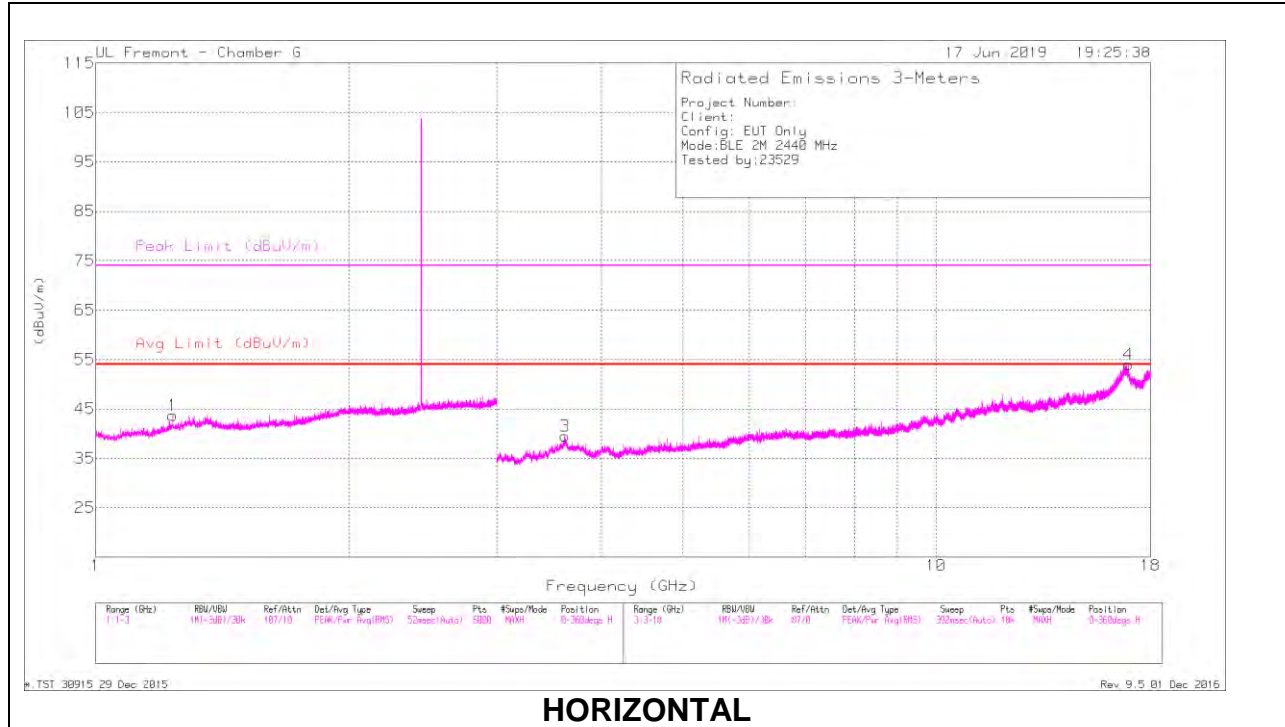
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

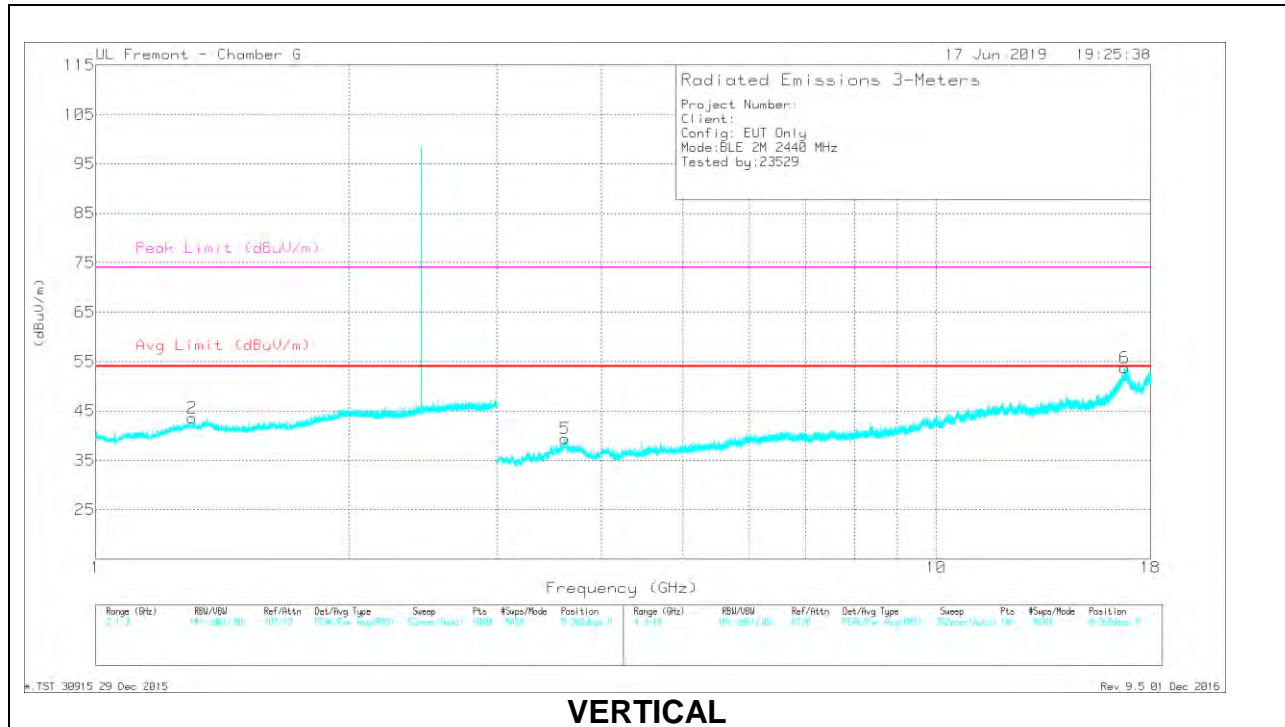
\*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.234	44.02	PK2	29.2	-23.7	49.52	-	-	74	-24.48	73	185	H
	* 1.235	32.02	MAV1	29.2	-23.7	37.52	54	-16.48	-	-	73	185	H
2	* 1.302	44.19	PK2	29.7	-23.5	50.39	-	-	74	-23.61	212	172	V
	* 1.3	32.5	MAV1	29.6	-23.5	38.6	54	-15.4	-	-	212	172	V
3	* 3.617	41.56	PK2	35.7	-30.1	47.16	-	-	74	-26.84	151	237	H
	* 3.617	29.75	MAV1	35.7	-30.1	35.35	54	-18.65	-	-	151	237	H
5	* 3.621	41.24	PK2	35.7	-30	46.94	-	-	74	-27.06	270	289	V
	* 3.62	30.14	MAV1	35.7	-30	35.84	54	-18.16	-	-	270	289	V
6	16.776	36.85	PK2	41.8	-17.7	60.95	-	-	-	-	180	167	V
4	16.942	36.05	PK2	41.6	-18.1	59.55	-	-	-	-	333	117	H

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

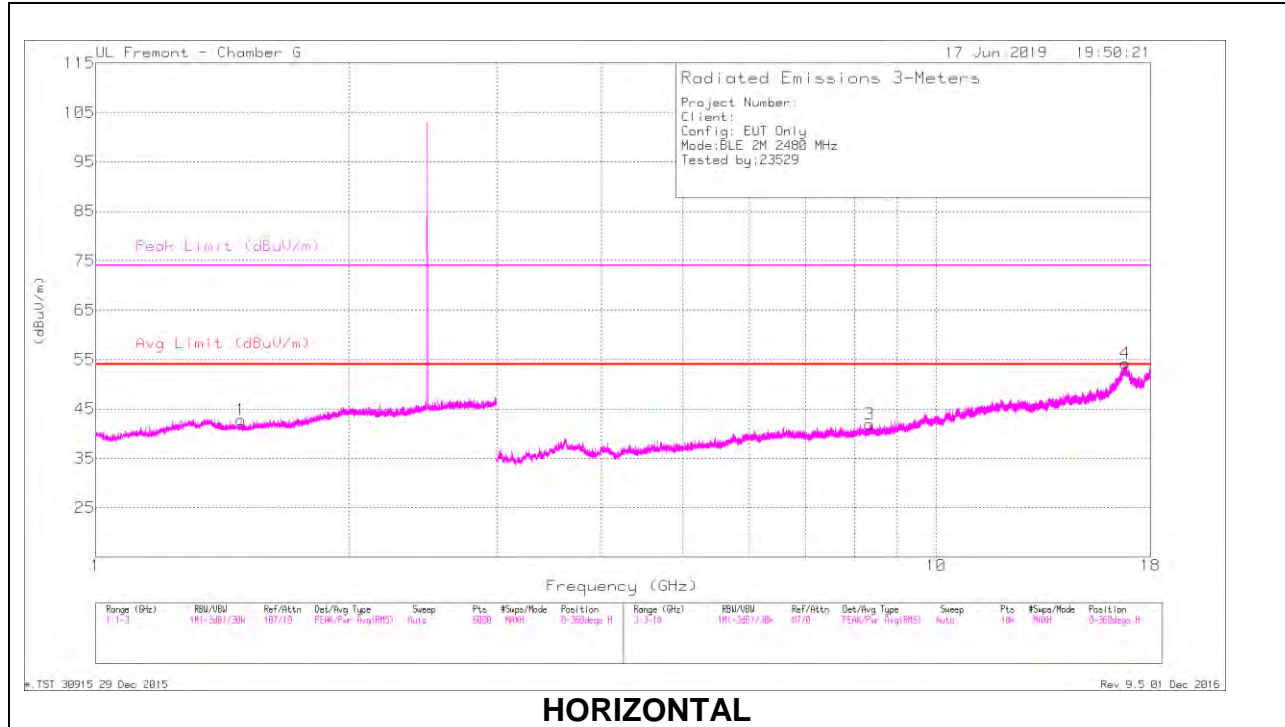
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

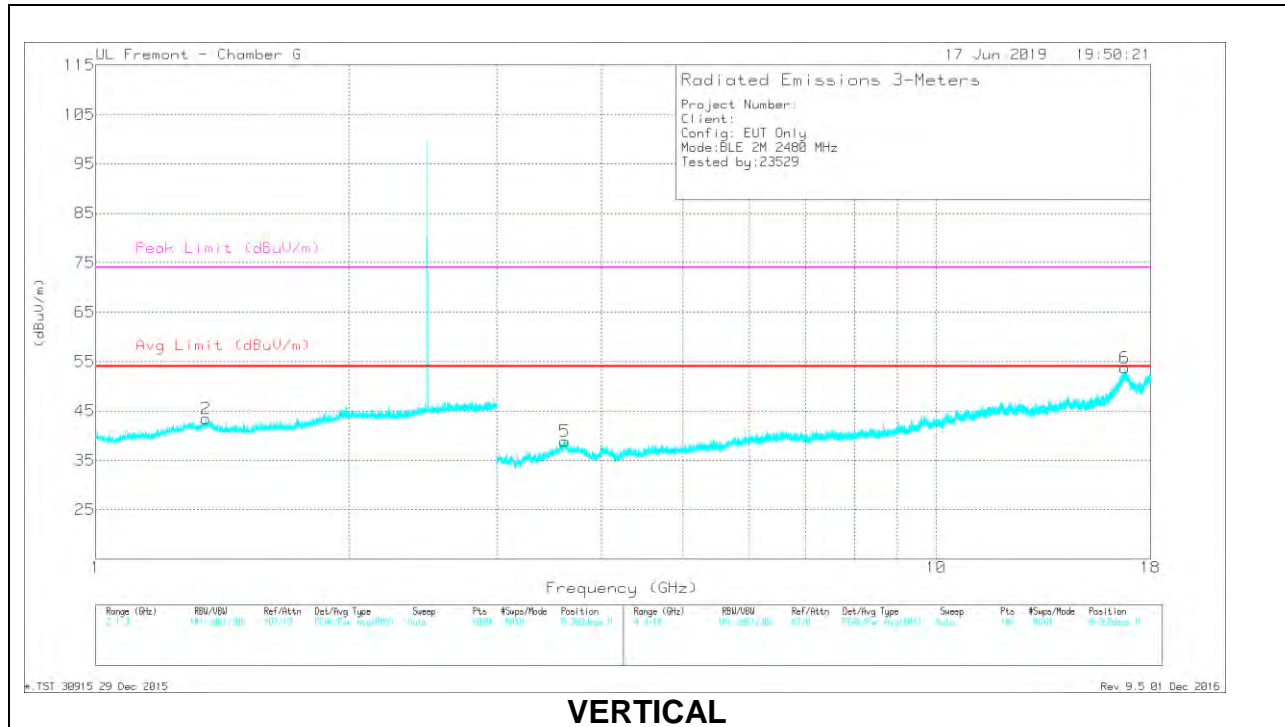
\*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.487	43.09	PK2	28.3	-22.3	49.09	-	-	74	-24.91	79	196	H
	* 1.487	31.38	MAv1	28.3	-22.3	37.38	54	-16.62	-	-	79	196	H
2	* 1.354	32.06	MAv1	30	-23.3	38.76	54	-15.24	-	-	79	185	V
	* 1.352	43.78	PK2	30	-23.3	50.48	-	-	74	-23.52	79	185	V
3	* 8.334	38.87	PK2	36.1	-26.8	48.17	-	-	74	-25.83	211	229	H
	* 8.335	27.64	MAv1	36.1	-26.8	36.94	54	-17.06	-	-	211	229	H
5	* 3.615	41.06	PK2	35.5	-30.2	46.36	-	-	74	-27.64	160	270	V
	* 3.614	29.95	MAv1	35.5	-30.2	35.25	54	-18.75	-	-	160	270	V
6	16.761	35.76	PK2	41.7	-18.2	59.26	-	-	-	-	348	206	V
4	16.791	37.27	PK2	41.7	-17.4	61.57	-	-	-	-	292	164	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

\*.TST 30915 29 Dec 2015

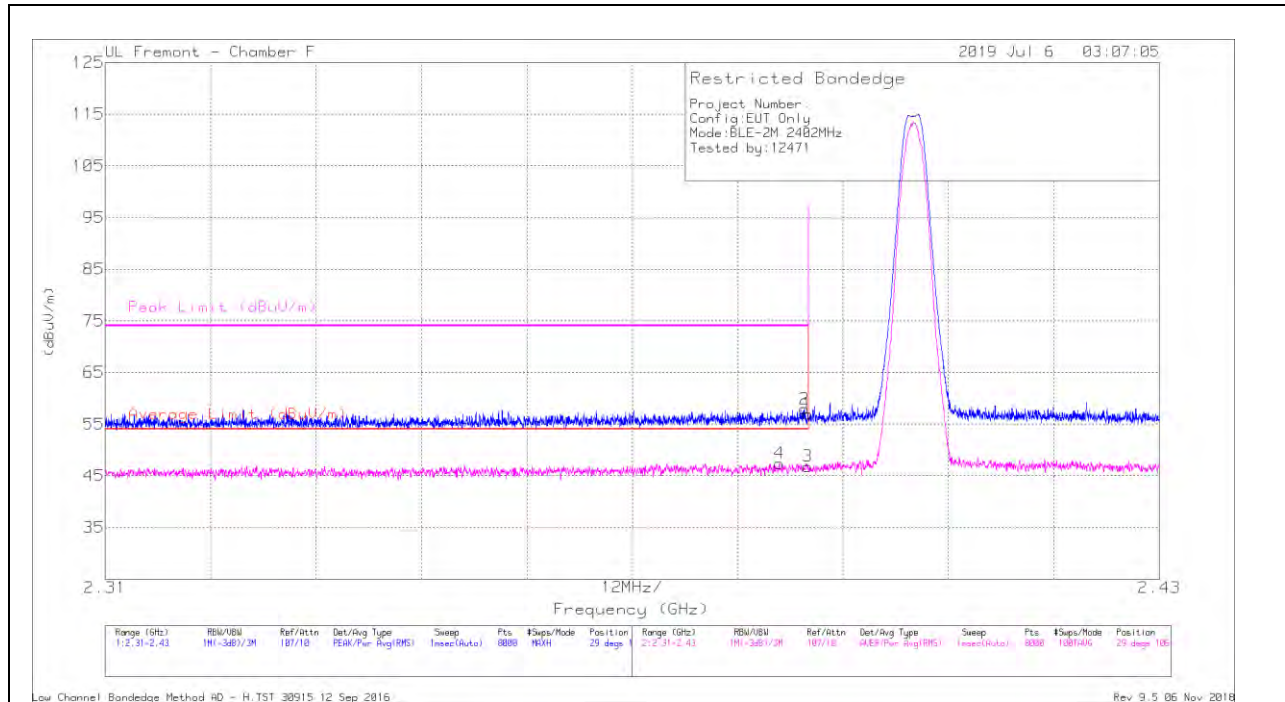
Rev 9.5 01 Dec 2016



**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	39.49	Pk	32	-14.5	56.99	-	-	74	-17.01	29	106	H
2	* 2.39	40.43	Pk	32	-14.5	57.93	-	-	74	-16.07	29	106	H
3	* 2.39	29.31	RMS	32	-14.5	46.81	54	-7.19	-	-	29	106	H
4	* 2.387	30	RMS	31.9	-14.5	47.4	54	-6.6	-	-	29	106	H

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

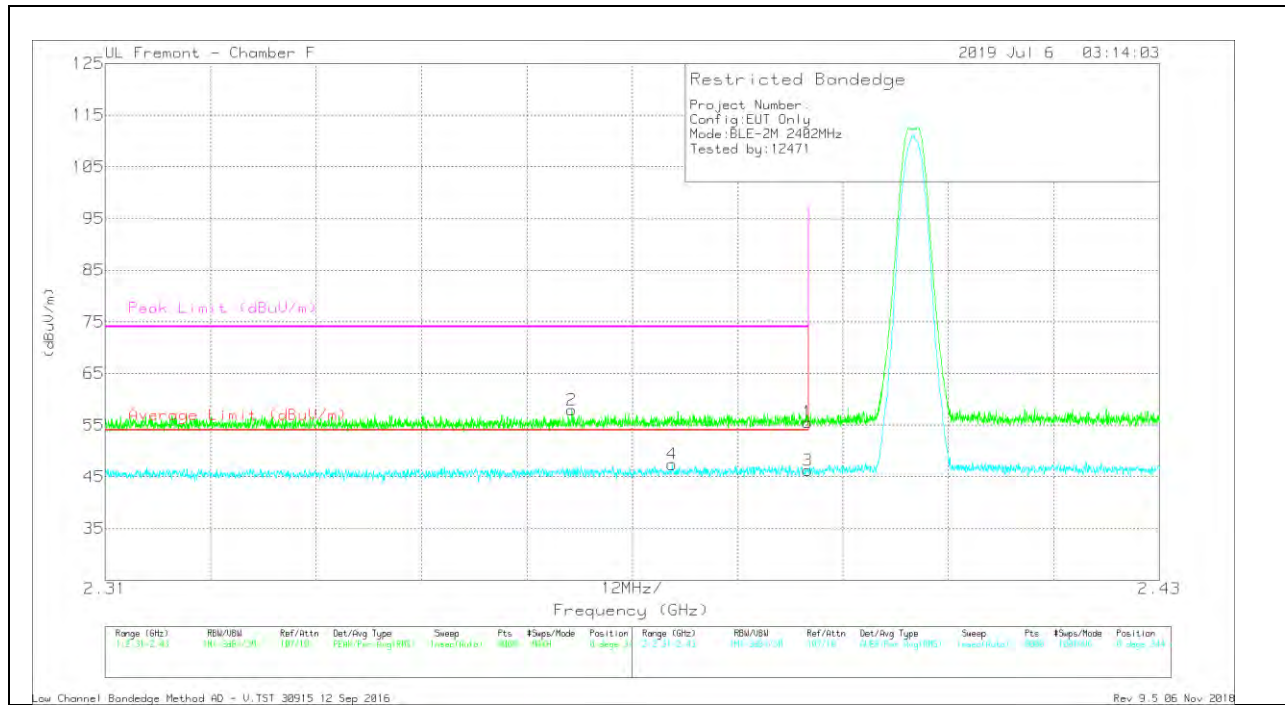
Pk - Peak detector

RMS - RMS detection

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

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.39	38.06	Pk	32	-14.5	55.56	-	-	74	-18.44	0	344	V
2	* 2.363	40.53	Pk	31.8	-14.4	57.93	-	-	74	-16.07	0	344	V
3	* 2.39	28.76	RMS	32	-14.5	46.26	54	-7.74	-	-	0	344	V
4	* 2.375	29.93	RMS	31.9	-14.4	47.43	54	-6.57	-	-	0	344	V

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

Pk - Peak detector

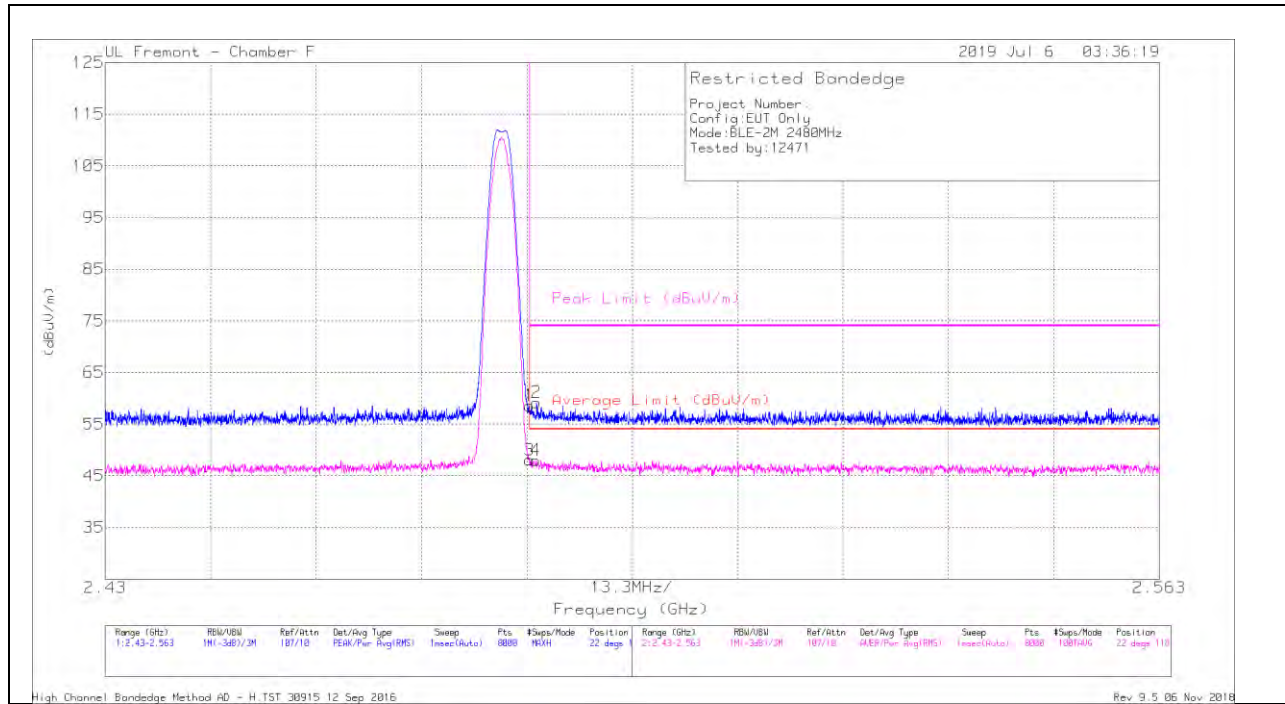
RMS - RMS detection

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

Rev 9.5 06 Nov 2018

**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	40.88	Pk	32.4	-14.7	58.58	-	-	74	-15.42	22	118	H
2	* 2.484	41.49	Pk	32.4	-14.7	59.19	-	-	74	-14.81	22	118	H
3	* 2.484	30.36	RMS	32.4	-14.7	48.06	54	-5.94	-	-	22	118	H
4	* 2.484	30.28	RMS	32.4	-14.7	47.98	54	-6.02	-	-	22	118	H

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

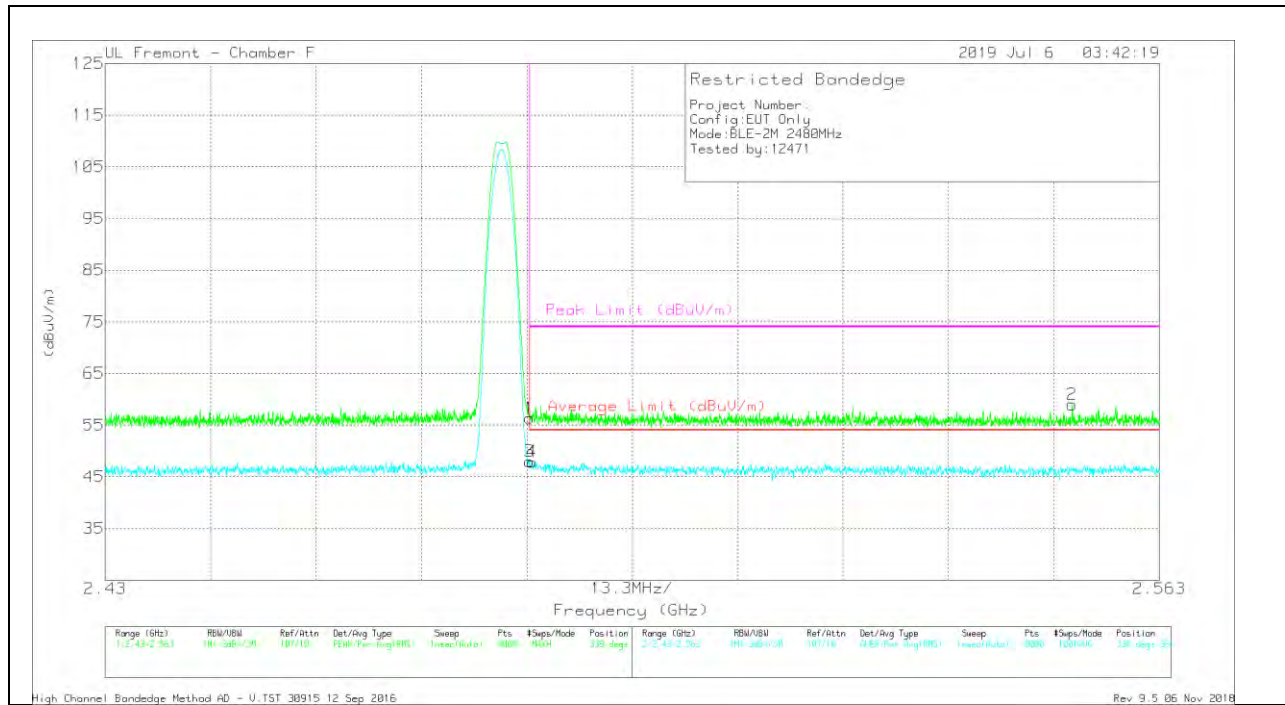
Pk - Peak detector

RMS - RMS detection

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

Rev 9.5 06 Nov 2018

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	38.64	Pk	32.4	-14.7	56.34	-	-	74	-17.66	338	366	V
2	2.552	41.29	Pk	32.3	-14.6	58.99	-	-	74	-15.01	338	366	V
3	* 2.484	30.3	RMS	32.4	-14.7	48	54	-6	-	-	338	366	V
4	* 2.484	30.16	RMS	32.4	-14.7	47.86	54	-6.14	-	-	338	366	V

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

Pk - Peak detector

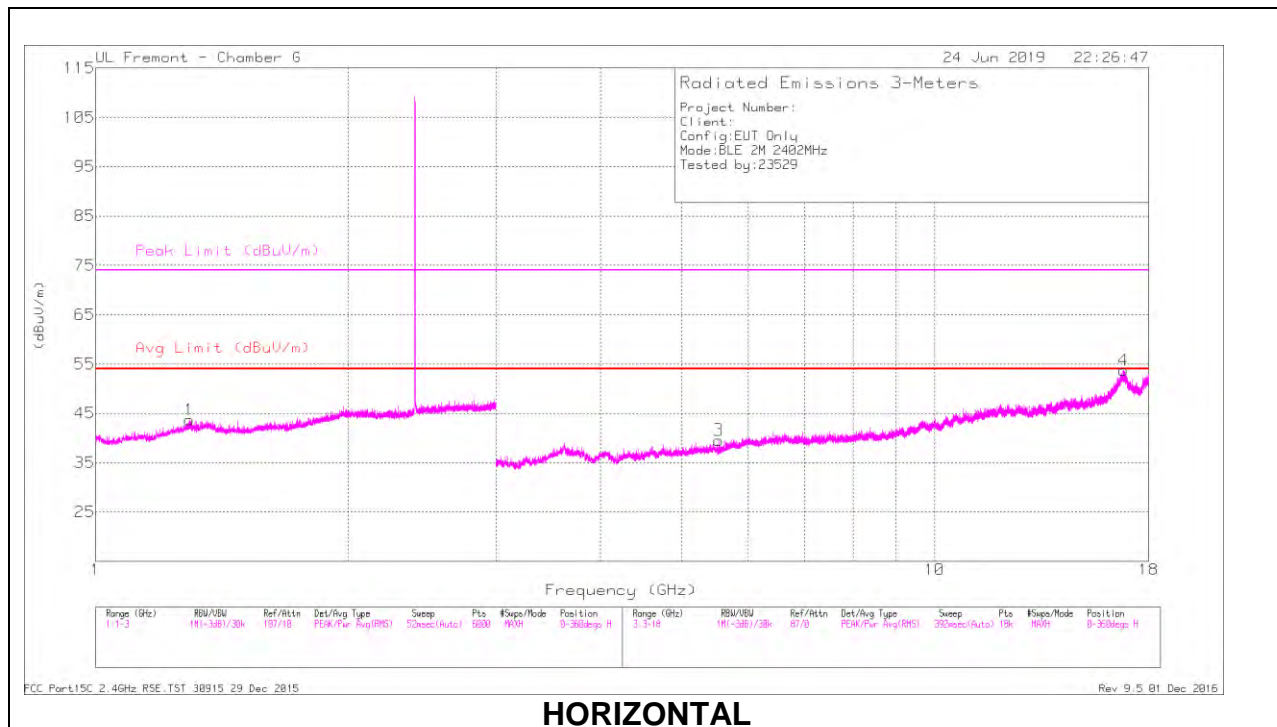
RMS - RMS detection

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

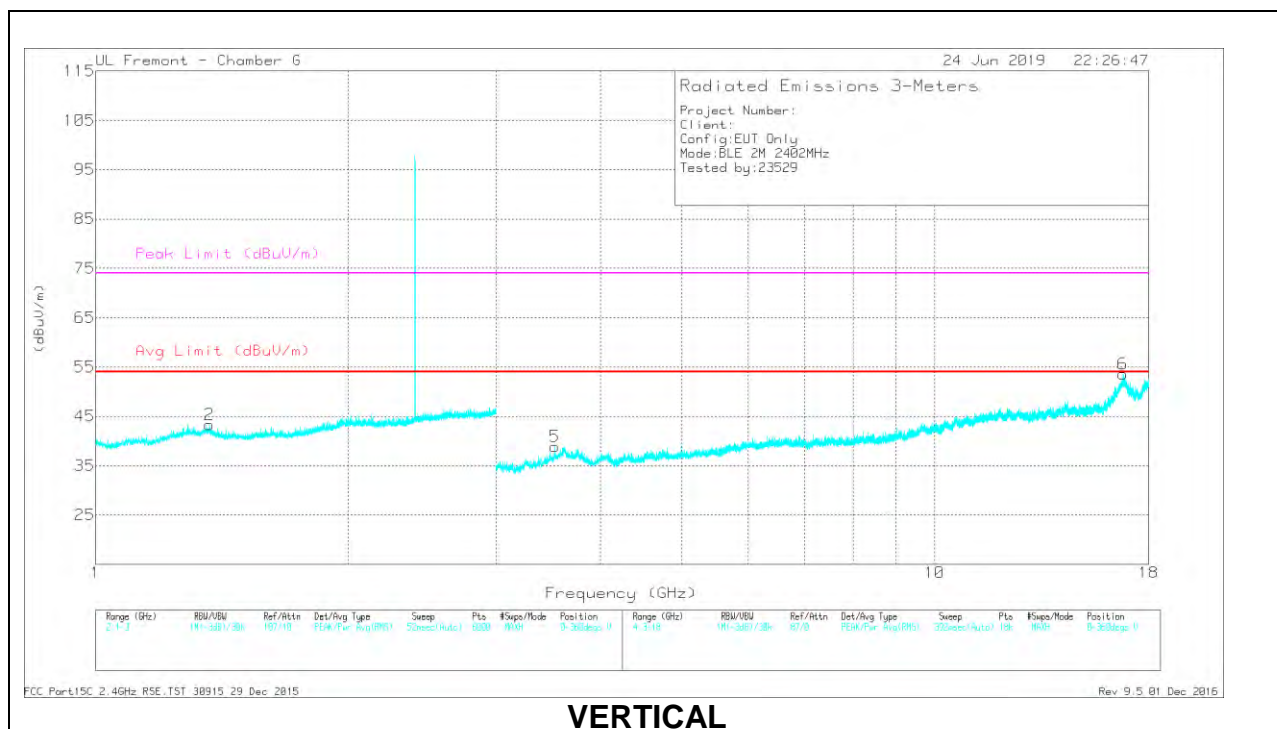
Rev 9.5 06 Nov 2018

**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	43.93	PK2	29.9	-23.5	50.33	-	-	74	-23.67	0	101	H
	* 1.292	32.09	MAV1	29.9	-23.5	38.49	54	-15.51	-	-	0	101	H
2	* 1.368	43.18	PK2	30	-23.2	49.98	-	-	74	-24.02	0	101	V
	* 1.365	31.81	MAV1	30	-23.2	38.61	54	-15.39	-	-	0	101	V
5	* 3.526	41.01	PK2	35	-30.5	45.51	-	-	74	-28.49	0	101	V
	* 3.527	29.3	MAV1	35	-30.6	33.7	54	-20.3	-	-	0	101	V
3	5.529	40.42	PK2	34.7	-29.8	45.32	-	-	-	-	0	101	H
6	16.771	35.43	PK2	41.8	-18	59.23	-	-	-	-	0	101	V
4	16.797	37.08	PK2	41.8	-17.5	61.38	-	-	-	-	0	101	H

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

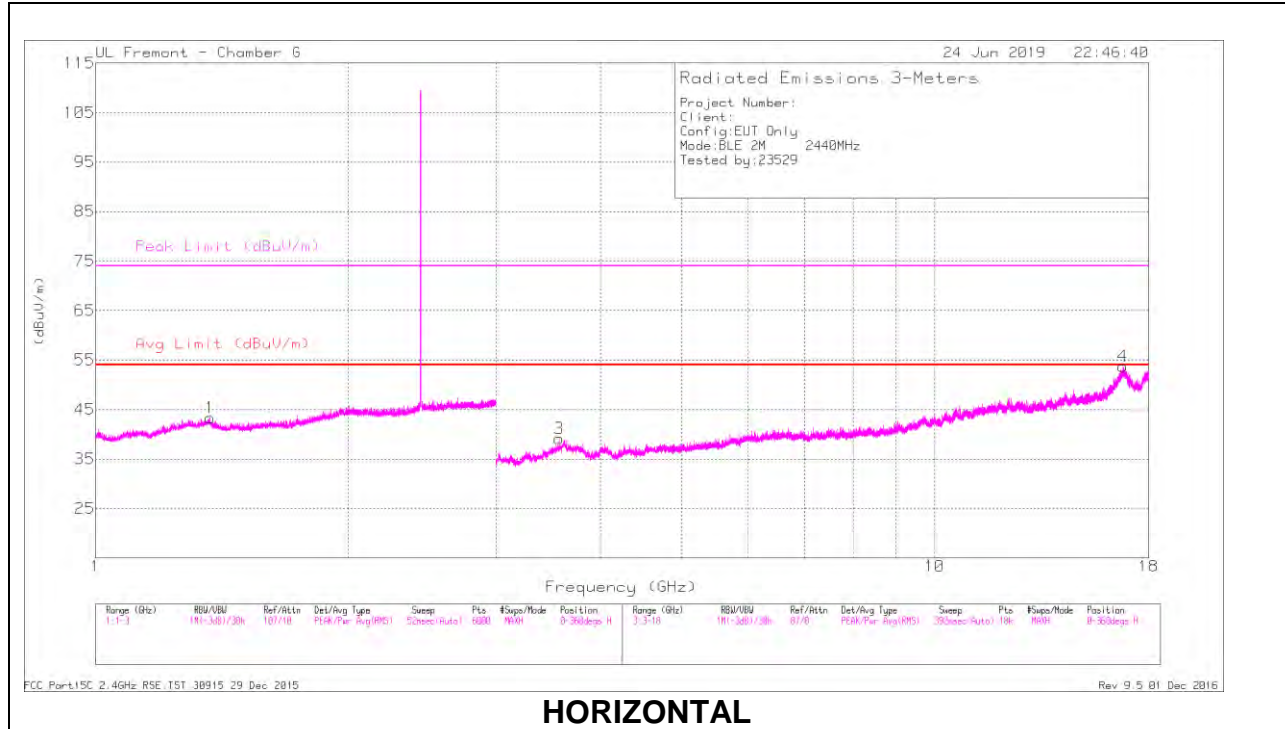
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

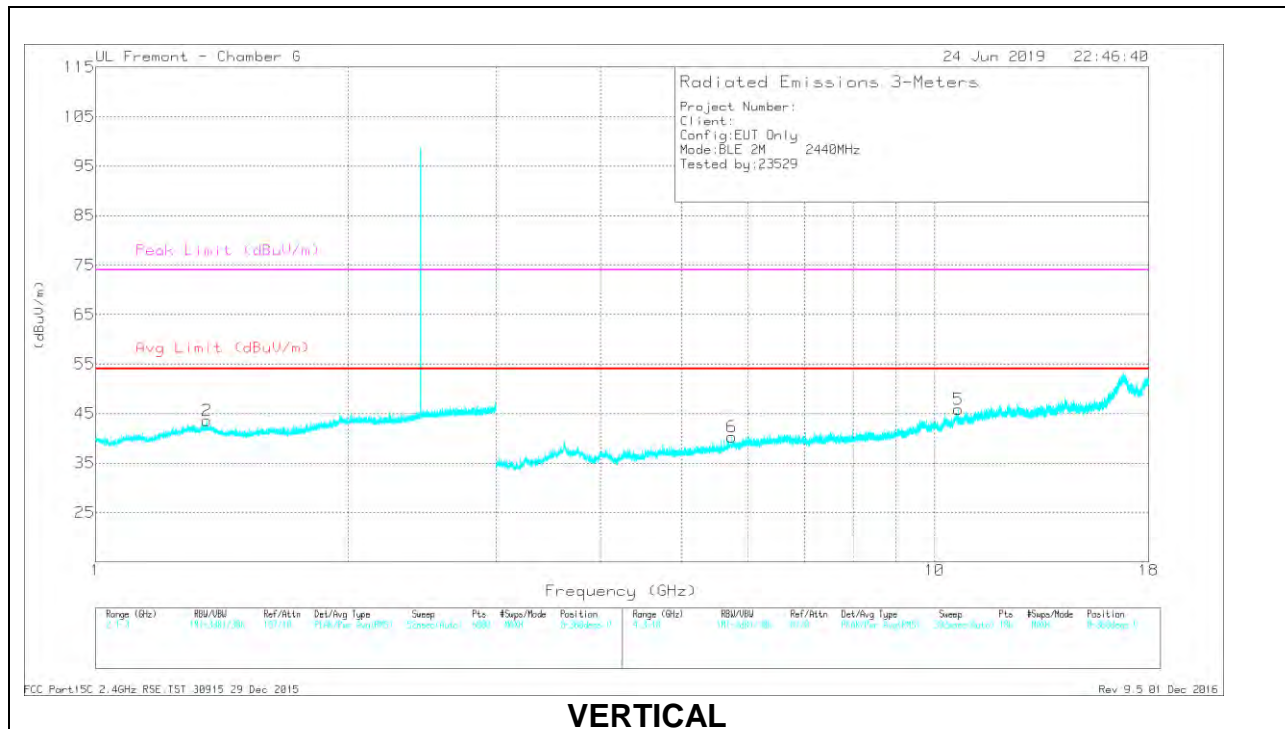
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.368	43.28	PK2	30	-23.2	50.08	-	-	74	-23.92	0	101	H
	* 1.37	31.61	MAv1	29.9	-23.2	38.31	54	-15.69	-	-	0	101	H
2	* 1.355	43.38	PK2	30	-23.3	50.08	-	-	74	-23.92	0	101	V
	* 1.356	31.86	MAv1	30	-23.3	38.56	54	-15.44	-	-	0	101	V
3	* 3.568	41.21	PK2	35.2	-30.8	45.61	-	-	74	-28.39	0	101	H
	* 3.571	29.9	MAv1	35.2	-30.8	34.3	54	-19.7	-	-	0	101	H
5	* 10.678	36.71	PK2	38.3	-23.6	51.41	-	-	74	-22.59	0	101	V
	* 10.678	25.56	MAv1	38.3	-23.6	40.26	54	-13.74	-	-	0	101	V
6	5.734	40.11	PK2	35.2	-28.7	46.61	-	-	-	-	0	101	V
4	16.772	36.21	PK2	41.8	-17.9	60.11	-	-	-	-	0	101	H

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

PK2 - KDB558074 Method: Maximum Peak

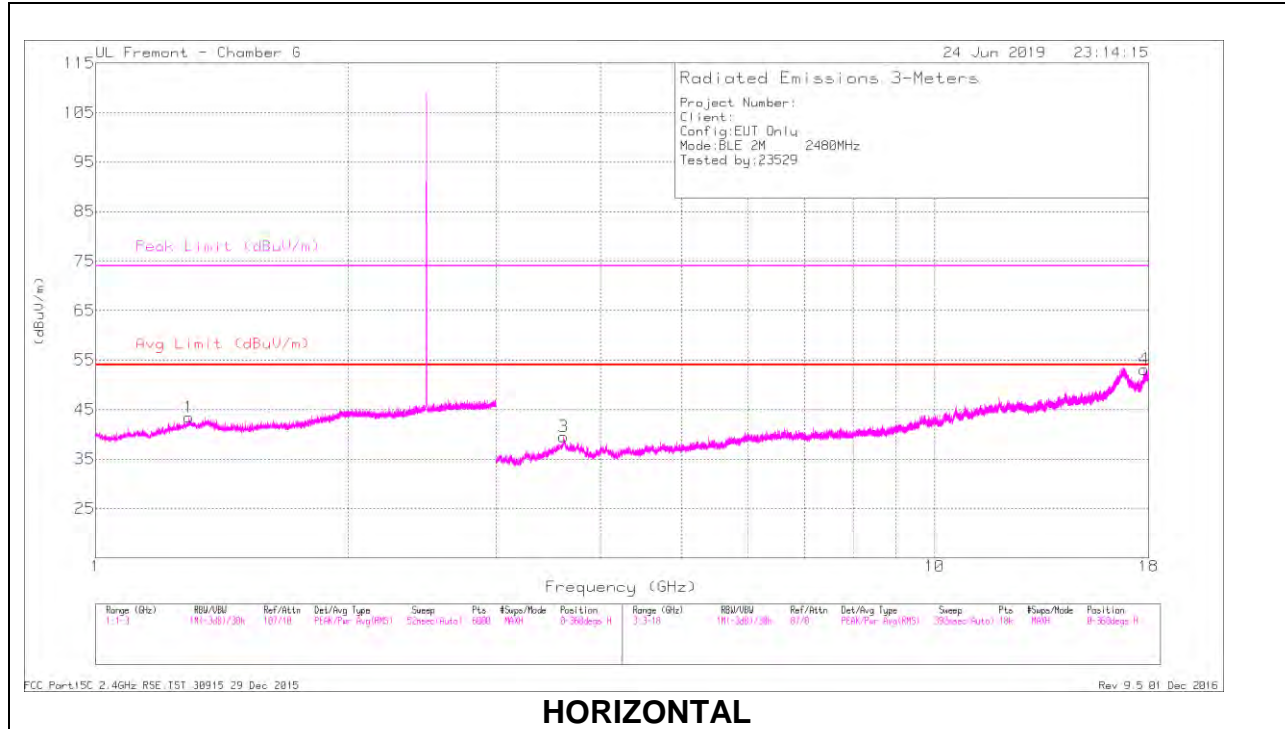
MAv1 - KDB558074 Option 1 Maximum RMS Average

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

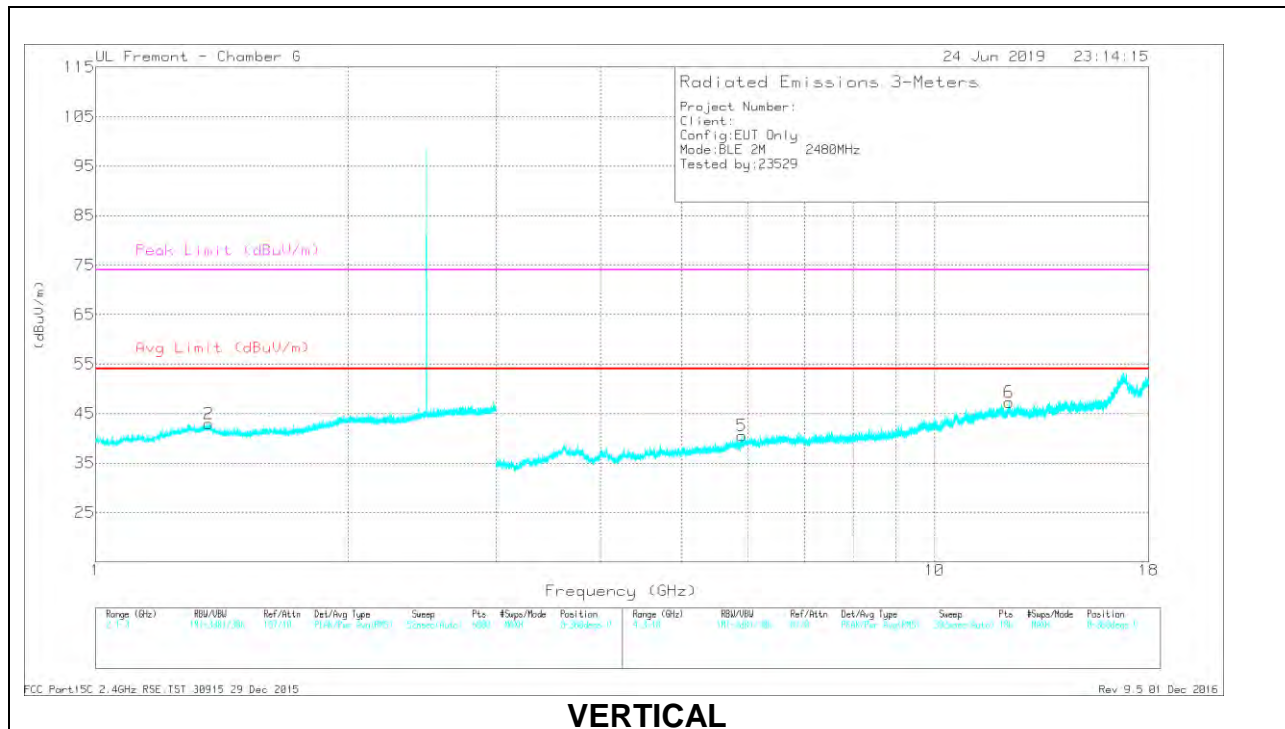
Rev 9.5 01 Dec 2016



### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.29	43.36	PK2	29.9	-23.5	49.76	-	-	74	-24.24	0	101	H
	* 1.29	31.93	MAV1	29.9	-23.5	38.33	54	-15.67	-	-	0	101	H
2	* 1.364	43.42	PK2	30	-23.2	50.22	-	-	74	-23.78	0	101	V
	* 1.364	31.74	MAV1	30	-23.2	38.54	54	-15.46	-	-	0	101	V
3	* 3.614	40.44	PK2	35.4	-30.2	45.64	-	-	74	-28.36	0	101	H
	* 3.614	29.46	MAV1	35.4	-30.2	34.66	54	-19.34	-	-	0	101	H
4	* 17.796	34.88	PK2	42.2	-18.5	58.58	-	-	74	-15.42	0	101	H
	* 17.798	23.79	MAV1	42.2	-18.5	47.49	54	-6.51	-	-	0	101	H
6	* 12.277	35.94	PK2	39.4	-22.2	53.14	-	-	74	-20.86	0	101	V
	* 12.275	24.61	MAV1	39.4	-22.2	41.81	54	-12.19	-	-	0	101	V
5	5.89	40.55	PK2	35.5	-29.4	46.65	-	-	-	-	0	101	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

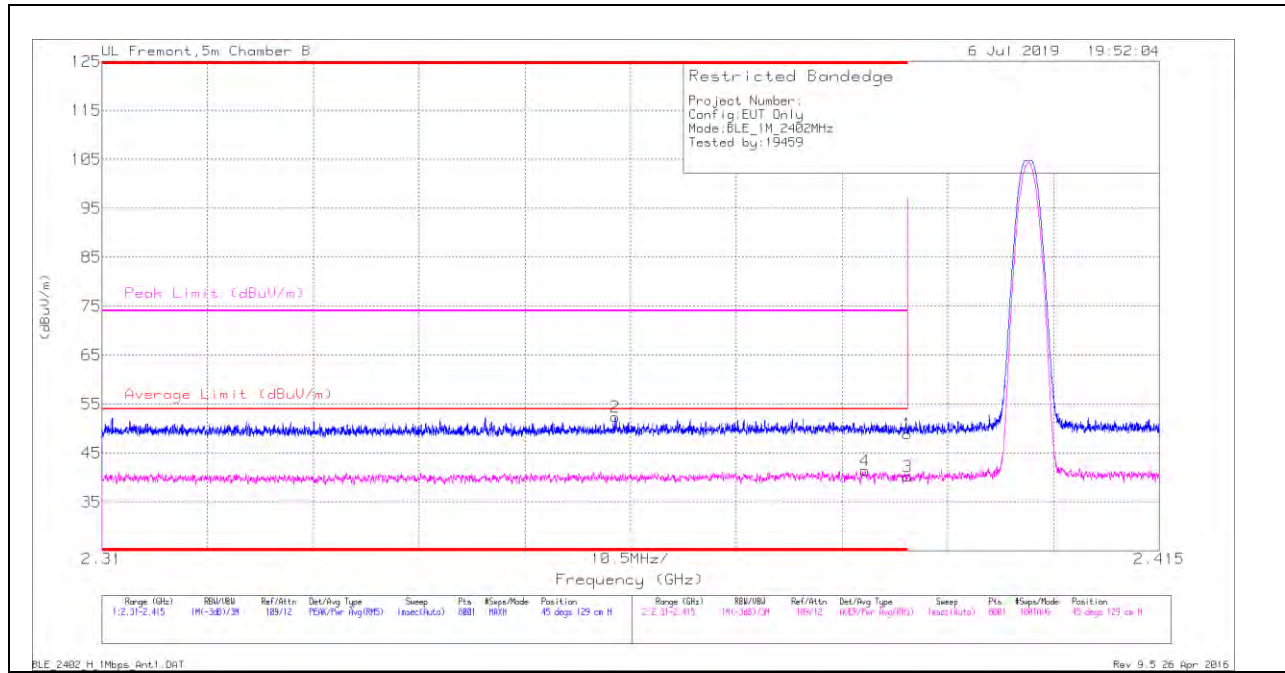
Rev 9.5 01 Dec 2016

### 9.2.3 Low Power BLE (1Mbps)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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	* 2.39	35.94	Pk	31.9	-18.9	48.94	-	-	74	-25.06	45	129	H
2	* 2.361	39.6	Pk	31.7	-18.9	52.4	-	-	74	-21.6	45	129	H
3	* 2.39	27.2	RMS	31.9	-18.9	40.2	54	-13.8	-	-	45	129	H
4	* 2.386	28.51	RMS	31.8	-18.9	41.41	54	-12.59	-	-	45	129	H

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

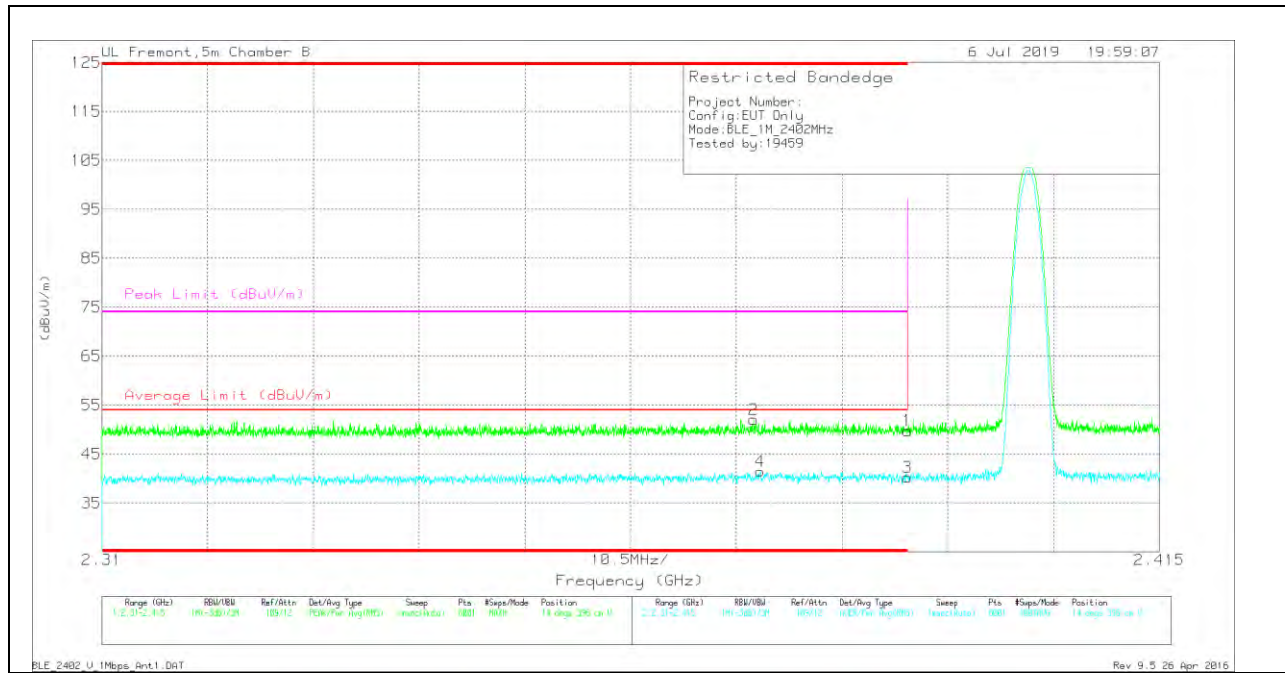
Pk - Peak detector

RMS - RMS detection

BLE\_2402\_H\_1Mbps\_Ant1.DAT

Rev 9.5 26 Apr 2016

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/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
2	* 2.375	39.18	Pk	31.8	-18.9	52.08	-	-	74	-21.92	14	396	V
4	* 2.375	28.6	RMS	31.8	-18.9	41.5	54	-12.5	-	-	14	396	V
1	* 2.39	36.81	Pk	31.9	-18.9	49.81	-	-	74	-24.19	14	396	V
3	* 2.39	27.3	RMS	31.9	-18.9	40.3	54	-13.7	-	-	14	396	V

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

Pk - Peak detector

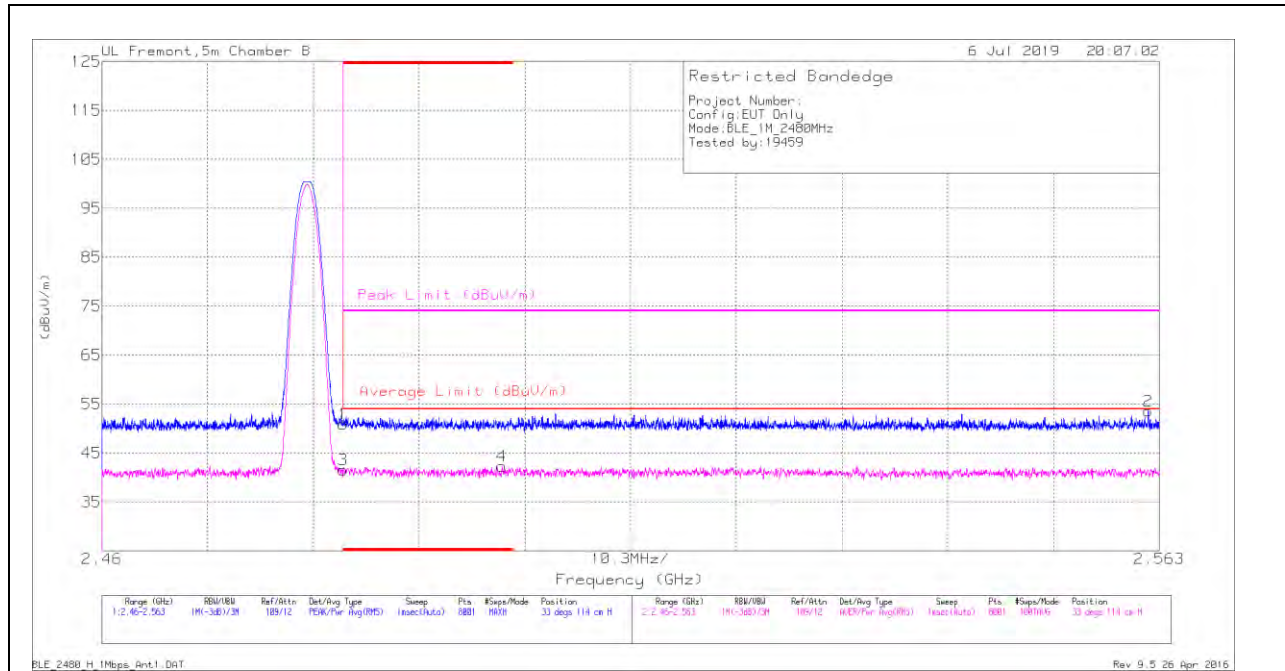
RMS - RMS detection

BLE\_2402\_V\_1Mbps\_Ant1.DAT

Rev 9.5 26 Apr 2016

**BANEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbi/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	37.5	Pk	32.3	-18.9	50.9	-	-	74	-23.1	33	114	H
3	* 2.484	28.2	RMS	32.3	-18.9	41.6	54	-12.4	-	-	33	114	H
4	* 2.499	28.86	RMS	32.4	-18.9	42.36	54	-11.64	-	-	33	114	H
2	2.562	40.03	Pk	32.4	-18.8	53.63	-	-	74	-20.37	33	114	H

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

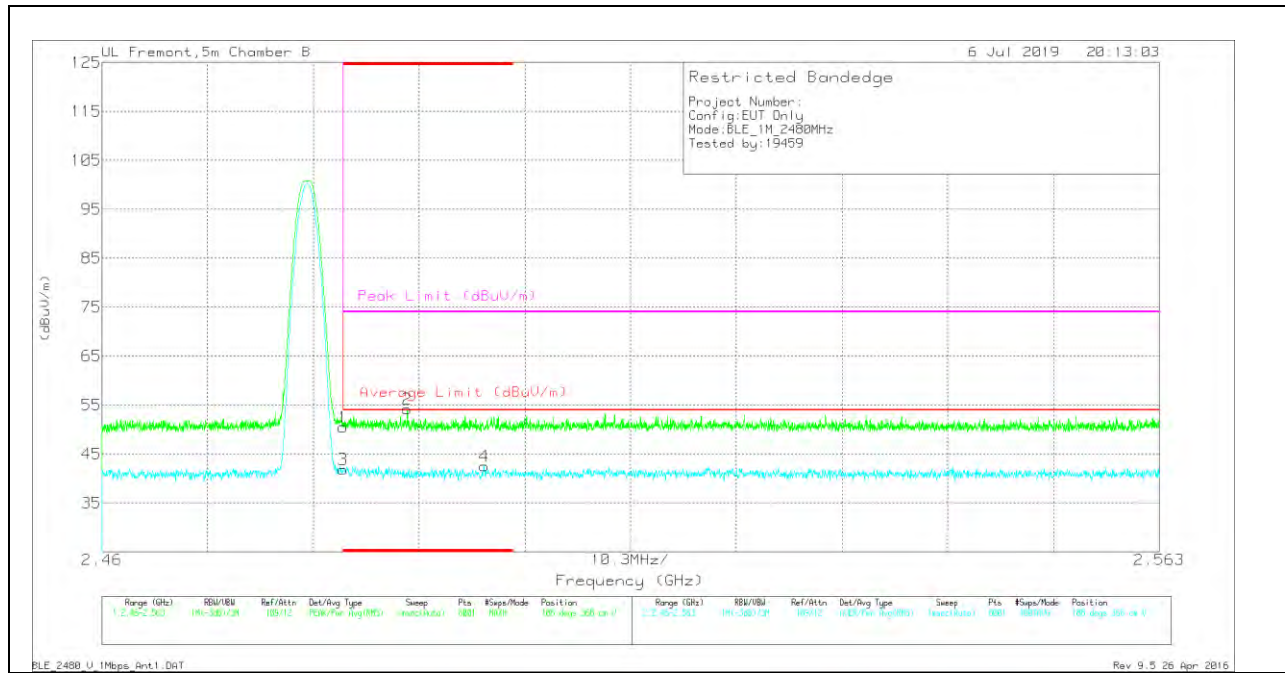
Pk - Peak detector

RMS - RMS detection

BLE\_2480\_H\_1Mbps\_Ant1.DAT

Rev 9.5 26 Apr 2016

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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	37.13	Pk	32.3	-18.9	50.53	-	-	74	-23.47	188	368	V
2	* 2.49	40.8	Pk	32.3	-18.9	54.2	-	-	74	-19.8	188	368	V
3	* 2.484	28.48	RMS	32.3	-18.9	41.88	54	-12.12	-	-	188	368	V
4	* 2.497	29.12	RMS	32.3	-18.9	42.52	54	-11.48	-	-	188	368	V

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

Pk - Peak detector

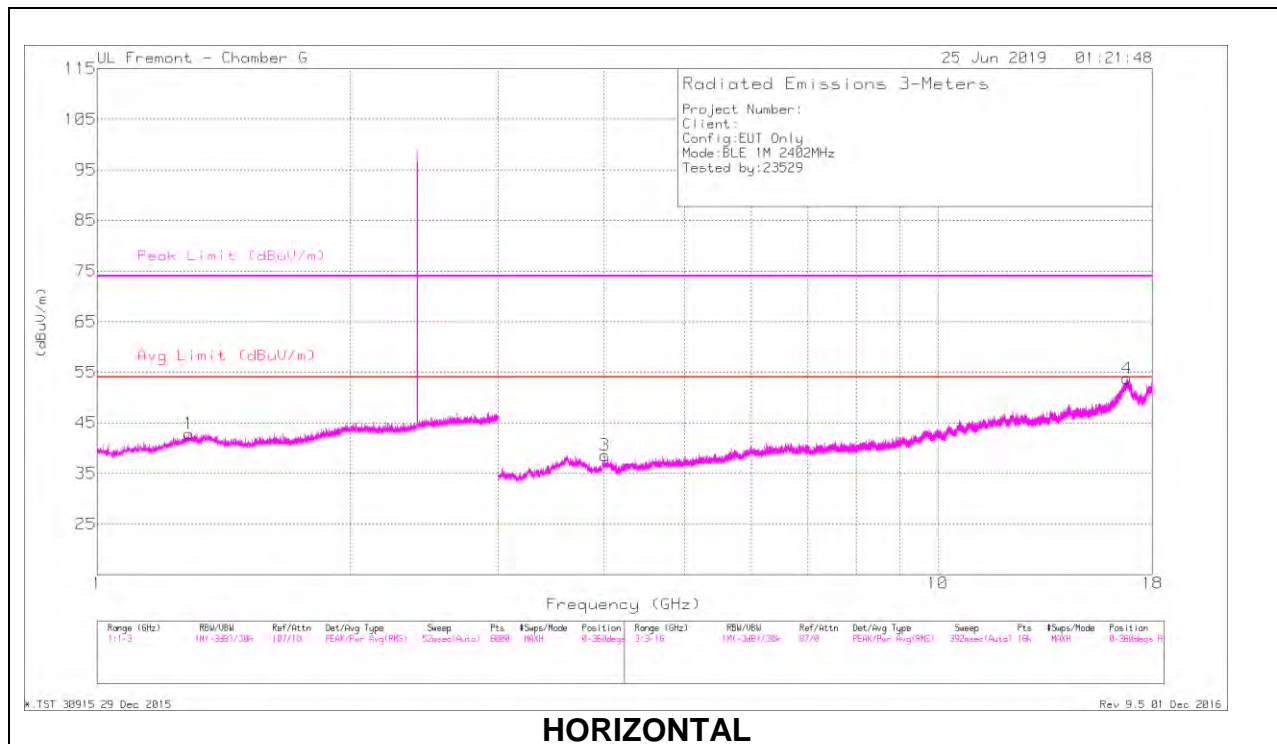
RMS - RMS detection

BLE\_2480\_V\_1Mbps\_Ant1.DAT

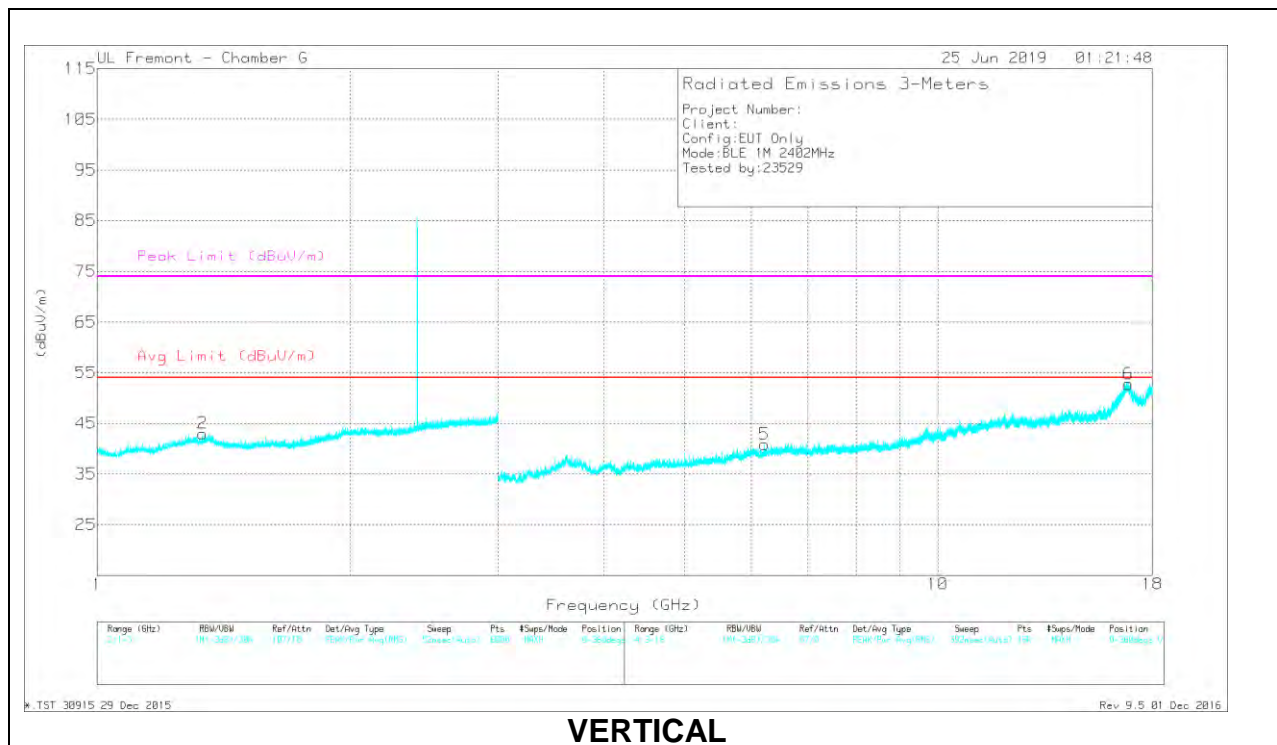
Rev 9.5 26 Apr 2016

**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.287	43.8	PK2	29.7	-23.5	50	-	-	74	-24	360	101	H
	* 1.287	31.75	MAv1	29.7	-23.5	37.95	54	16.05	-	-	360	101	H
2	* 1.335	43.68	PK2	29.7	-23.3	50.08	-	-	74	-23.92	360	101	V
	* 1.334	31.53	MAv1	29.7	-23.3	37.93	54	16.07	-	-	360	101	V
3	* 4.014	40.33	PK2	33.6	-29.2	44.73	-	-	74	-29.27	360	101	H
	* 4.016	28.99	MAv1	33.6	-29.2	33.39	54	20.61	-	-	360	101	H
5	6.222	39.52	PK2	35.9	-28.8	46.62	-	-	-	-	360	101	V
4	16.796	36.09	PK2	41.8	-17.5	60.39	-	-	-	-	360	101	H
6	16.862	35.32	PK2	41.6	-17.8	59.12	-	-	-	-	360	101	V

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

PK2 - KDB558074 Method: Maximum Peak

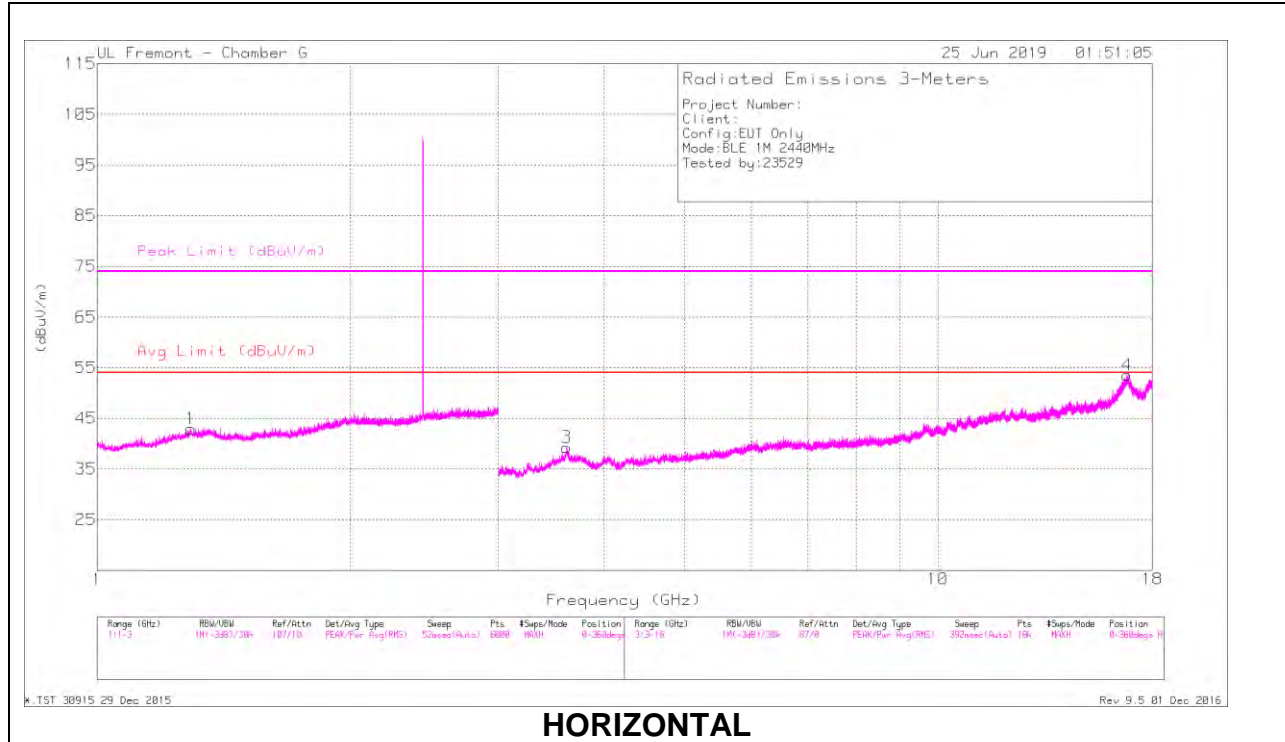
MAv1 - KDB558074 Option 1 Maximum RMS Average

\*.TST 30915 29 Dec 2015

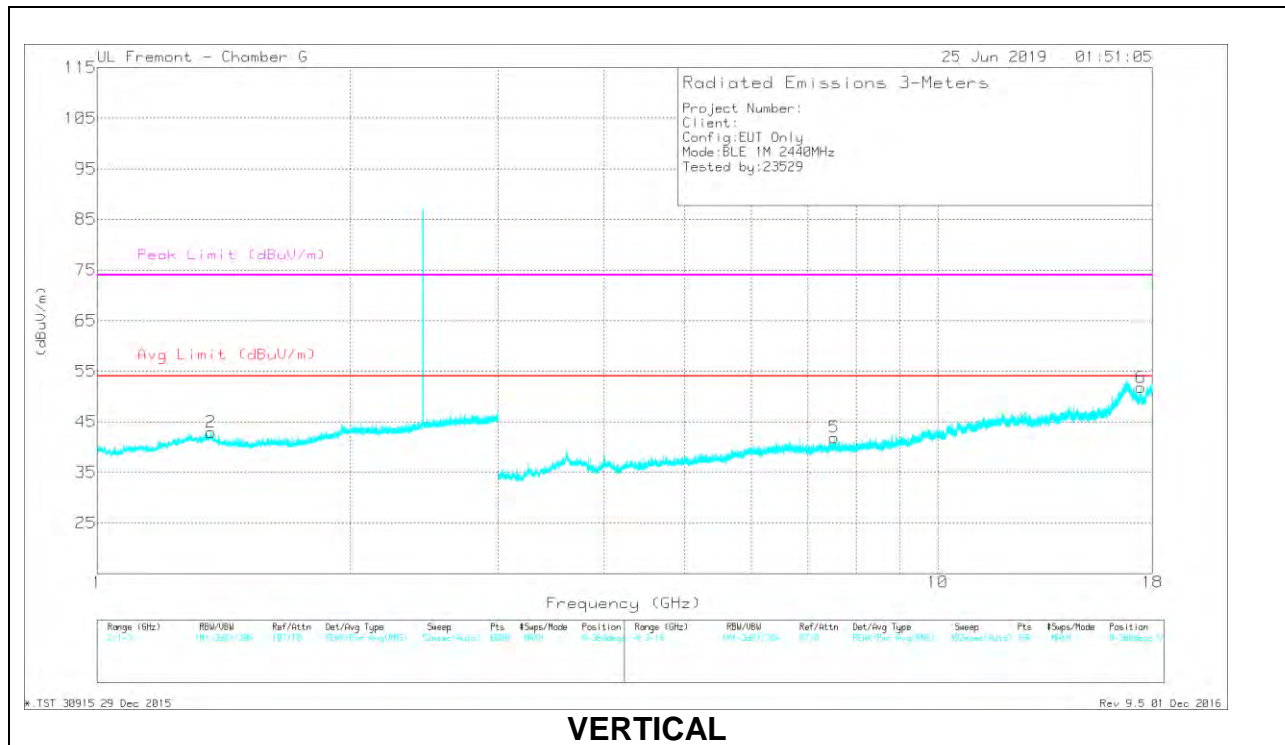
Rev 9.5 01 Dec 2016



### MID CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	43.76	PK2	29.9	-23.5	50.16	-	-	74	-23.84	360	101	H
	* 1.295	31.85	MAv1	29.9	-23.5	38.25	54	15.75	-	-	360	101	H
2	* 1.366	43.23	PK2	30	-23.2	50.03	-	-	74	-23.97	360	101	V
	* 1.366	31.68	MAv1	30	-23.2	38.48	54	15.52	-	-	360	101	V
3	* 3.614	40.22	PK2	35.5	-30.2	45.52	-	-	74	-28.48	360	101	H
	* 3.615	29.26	MAv1	35.5	-30.2	34.56	54	19.44	-	-	360	101	H
5	* 7.531	38.79	PK2	36.1	-27	47.89	-	-	74	-26.11	360	101	V
	* 7.534	27.46	MAv1	36	-27	36.46	54	17.54	-	-	360	101	V
4	16.796	36.39	PK2	41.8	-17.5	60.69	-	-	-	-	360	101	H
	17.442	34.93	PK2	41.1	-18.6	57.43	-	-	-	-	360	101	V

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

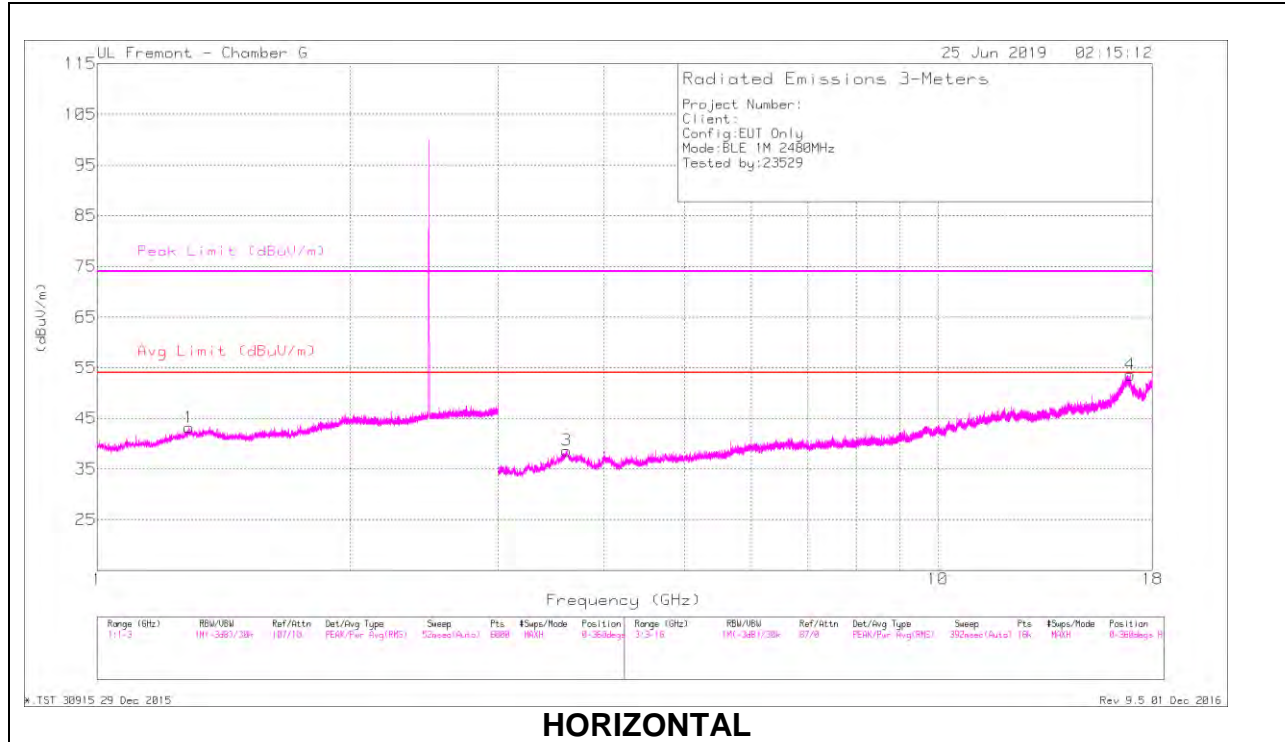
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

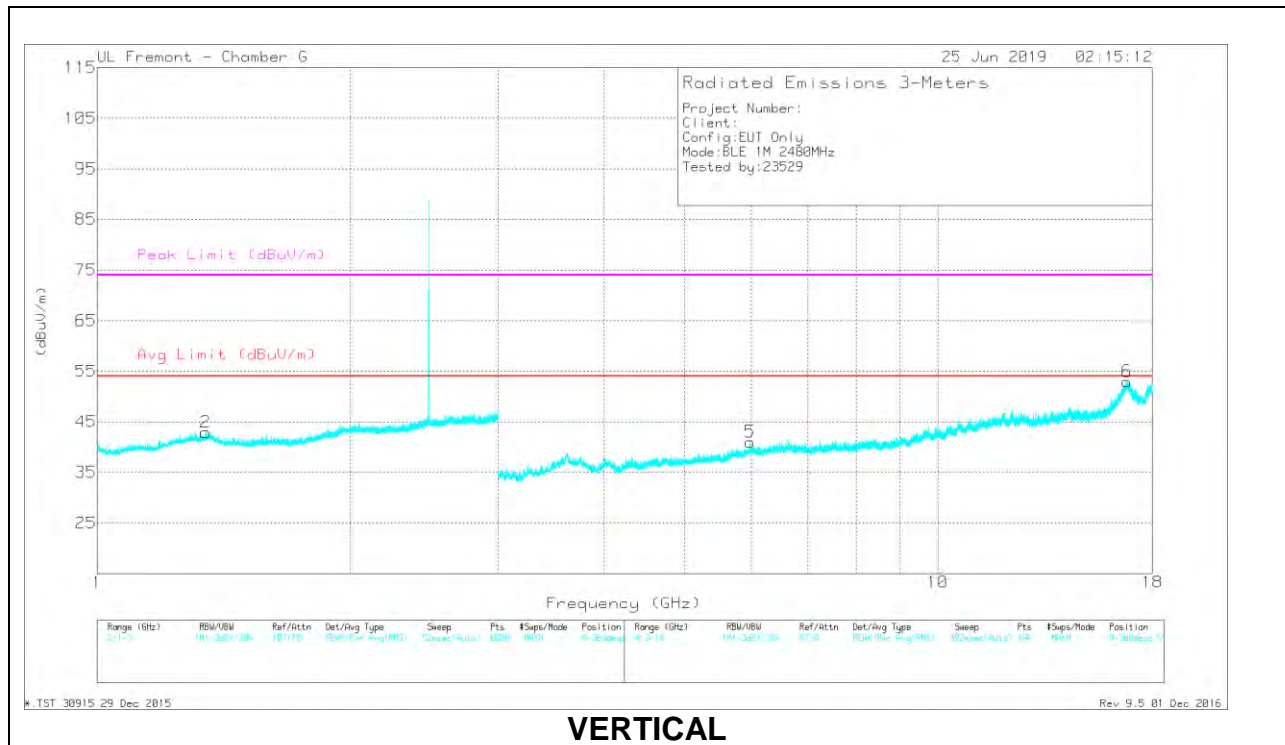
\* TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.286	44.41	PK2	29.7	-23.5	50.61	-	-	74	-23.39	360	101	H
	* 1.284	31.89	MAv1	29.7	-23.6	37.99	54	16.01	-	-	360	101	H
2	* 1.345	43.1	PK2	29.8	-23.3	49.6	-	-	74	-24.4	360	101	V
	* 1.344	31.64	MAv1	29.8	-23.3	38.14	54	15.86	-	-	360	101	V
3	* 3.616	40.08	PK2	35.6	-30.1	45.58	-	-	74	-28.42	360	101	H
	* 3.617	29.34	MAv1	35.7	-30.1	34.94	54	19.06	-	-	360	101	H
5	5.978	39.36	PK2	35.6	-28.2	46.76	-	-	-	-	360	101	V
6	16.805	35.32	PK2	41.7	-17.6	59.42	-	-	-	-	360	101	V
4	16.941	36.2	PK2	41.6	-18.1	59.7	-	-	-	-	360	101	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

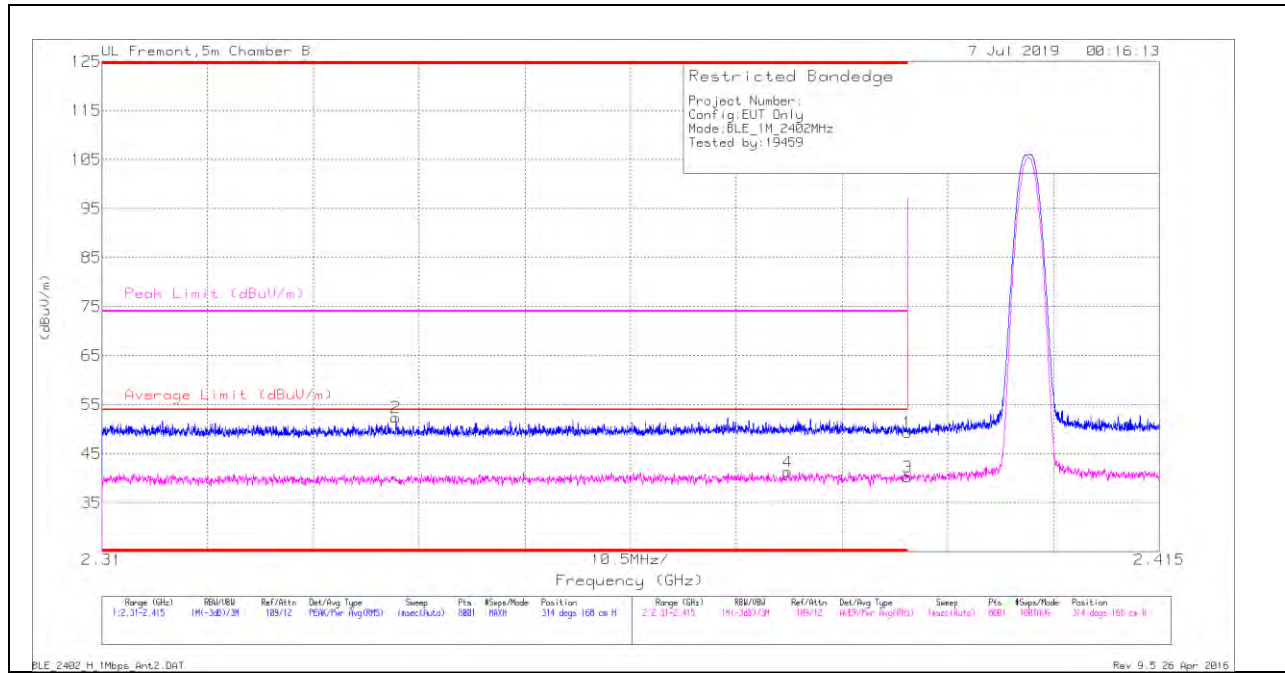
\*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbi/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	* 2.39	36.31	Pk	31.9	-18.9	49.31	-	-	74	-24.69	314	168	H
2	* 2.339	39.78	Pk	31.5	-18.9	52.38	-	-	74	-21.62	314	168	H
3	* 2.39	27.29	RMS	31.9	-18.9	40.29	54	-13.71	-	-	314	168	H
4	* 2.378	28.3	RMS	31.8	-18.8	41.3	54	-12.7	-	-	314	168	H

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

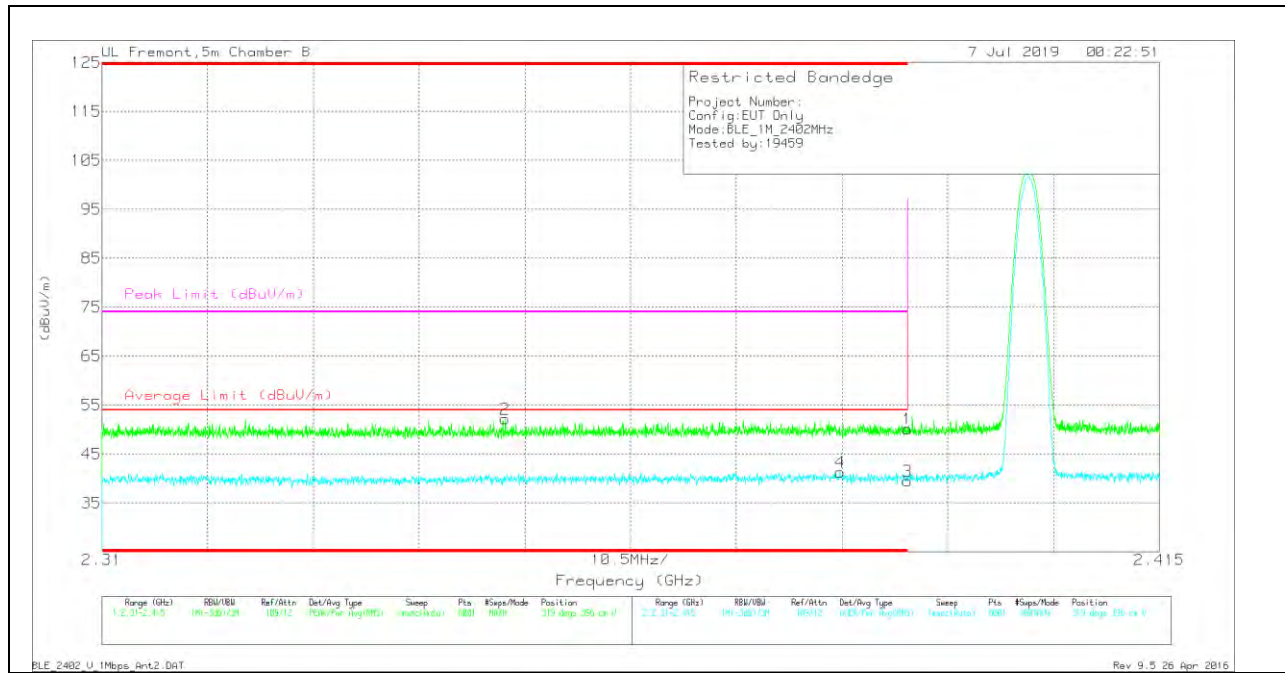
Pk - Peak detector

RMS - RMS detection

BLE\_2402\_H\_1Mbps\_Ant2.DAT

Rev 9.5 26 Apr 2016

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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
2	* 2.35	39.46	Pk	31.6	-18.9	52.16	-	-	74	-21.84	319	396	V
4	* 2.383	28.34	RMS	31.8	-18.8	41.34	54	-12.66	-	-	319	396	V
1	* 2.39	37.17	Pk	31.9	-18.9	50.17	-	-	74	-23.83	319	396	V
3	* 2.39	26.48	RMS	31.9	-18.9	39.48	54	-14.52	-	-	319	396	V

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

Pk - Peak detector

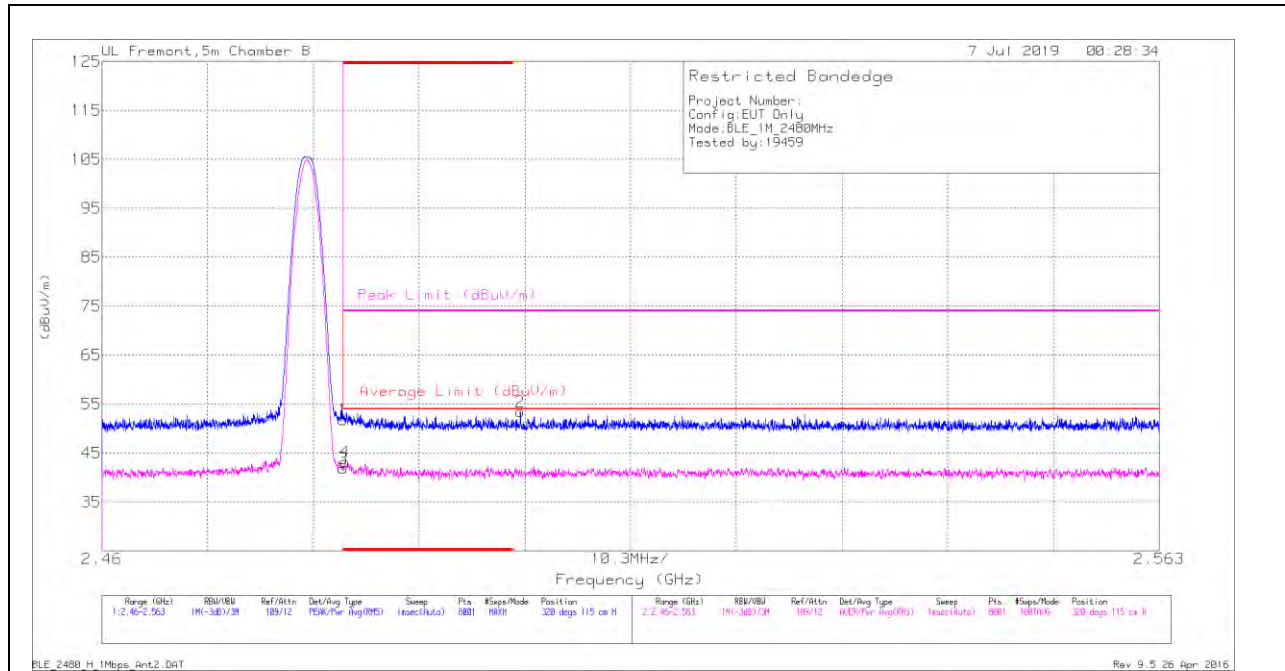
RMS - RMS detection

BLE\_2402\_V\_1Mbps\_Ant2.DAT

Rev 9.5 26 Apr 2016

**BANEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



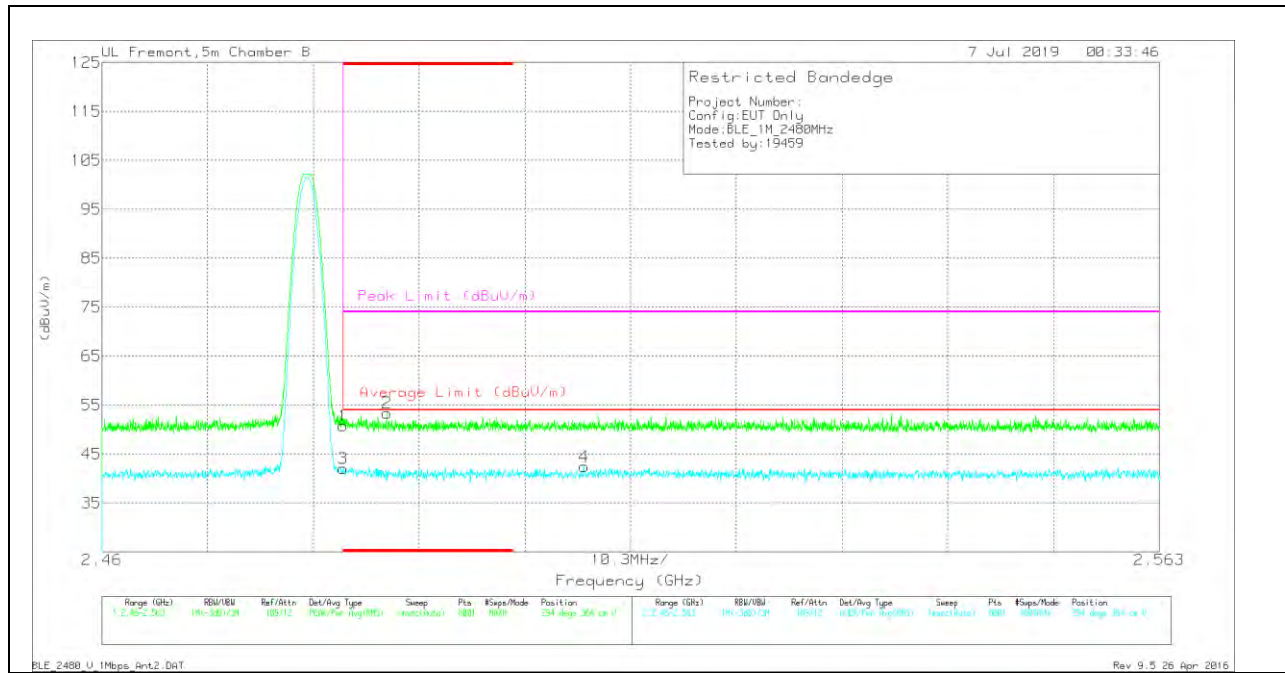
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.44	Pk	32.3	-18.9	51.84	-	-	74	-22.16	320	115	H
3	* 2.484	28.47	RMS	32.3	-18.9	41.87	54	-12.13	-	-	320	115	H
4	* 2.484	29.86	RMS	32.3	-18.9	43.26	54	-10.74	-	-	320	115	H
2	2.501	39.95	Pk	32.4	-18.9	53.45	-	-	74	-20.55	320	115	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



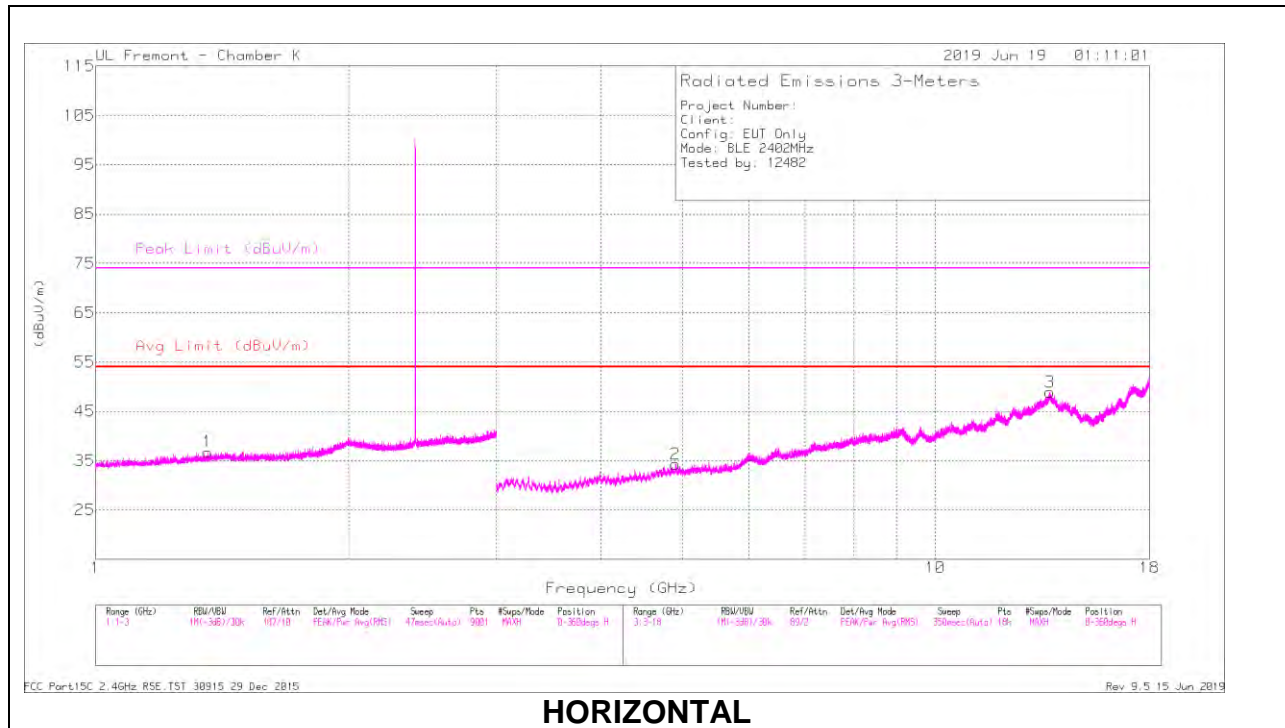
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/CbI/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	37.42	Pk	32.3	-18.9	50.82	-	-	74	-23.18	294	364	V
2	* 2.488	40	Pk	32.3	-18.9	53.4	-	-	74	-20.6	294	364	V
3	* 2.484	28.71	RMS	32.3	-18.9	42.11	54	-11.89	-	-	294	364	V
4	2.507	28.93	RMS	32.4	-18.9	42.43	54	-11.57	-	-	294	364	V

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

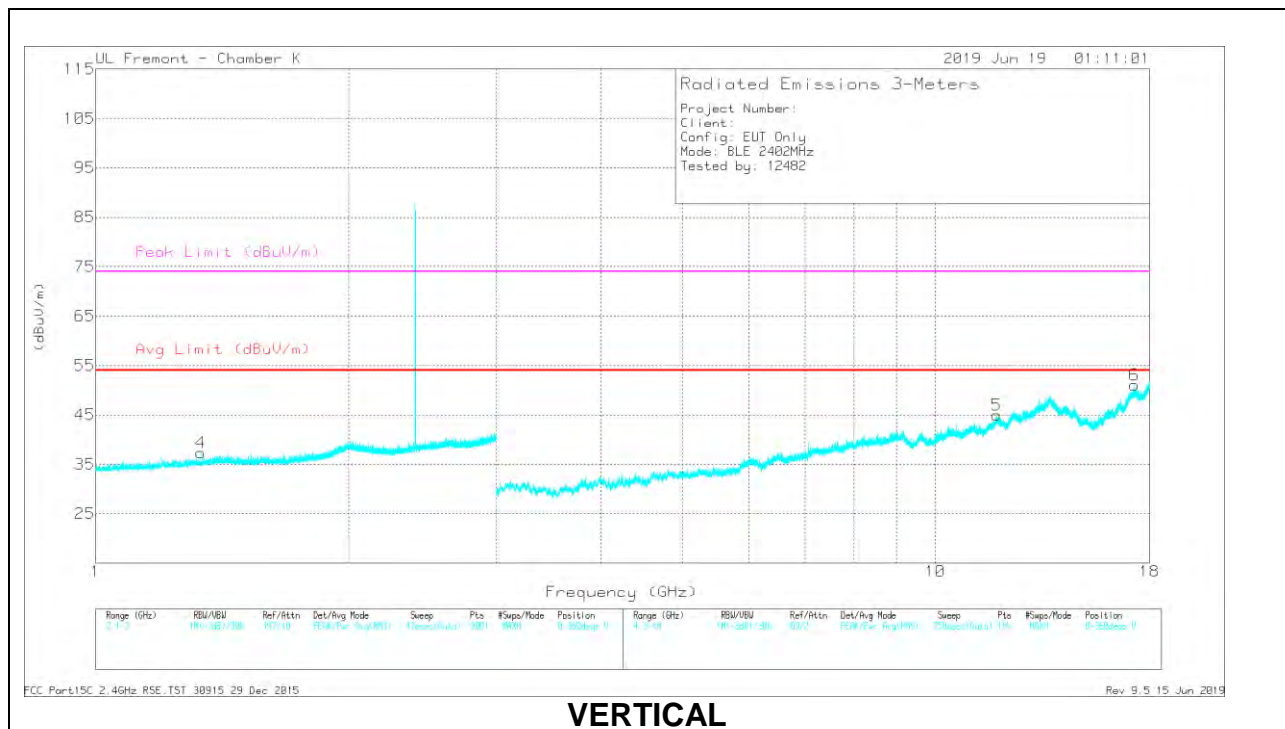


**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

### RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit 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	* 1.35832	43.38	PK2	24.5	-23.8	44.08	-	-	74	-29.92	360	100	H
	* 1.35831	33.09	MAv1	24.5	-23.8	33.79	54	-20.21	-	-	360	100	H
4	* 1.33644	43.66	PK2	24.5	-23.9	44.26	-	-	74	-29.74	298	109	V
	* 1.33249	33.32	MAv1	24.5	-23.9	33.92	54	-20.08	-	-	298	109	V
2	* 4.9029	38.53	PK2	33.3	-30.5	41.33	-	-	74	-32.67	347	182	H
	* 4.90054	28.55	MAv1	33.3	-30.5	31.35	54	-22.65	-	-	347	182	H
3	13.70579	32.53	PK2	43	-18.6	56.93	-	-	-	-	160	223	H
5	*	32.27	PK2	39.9	-19.6	52.57	-	-	74	-21.43	57	300	V
	11.82887	*											
	*	21.98	MAv1	39.9	-19.6	42.28	54	-11.72	-	-	57	300	V
6	11.82792	*											
	17.26729	31.8	PK2	43.3	-16.2	58.9	-	-	-	-	190	105	V

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

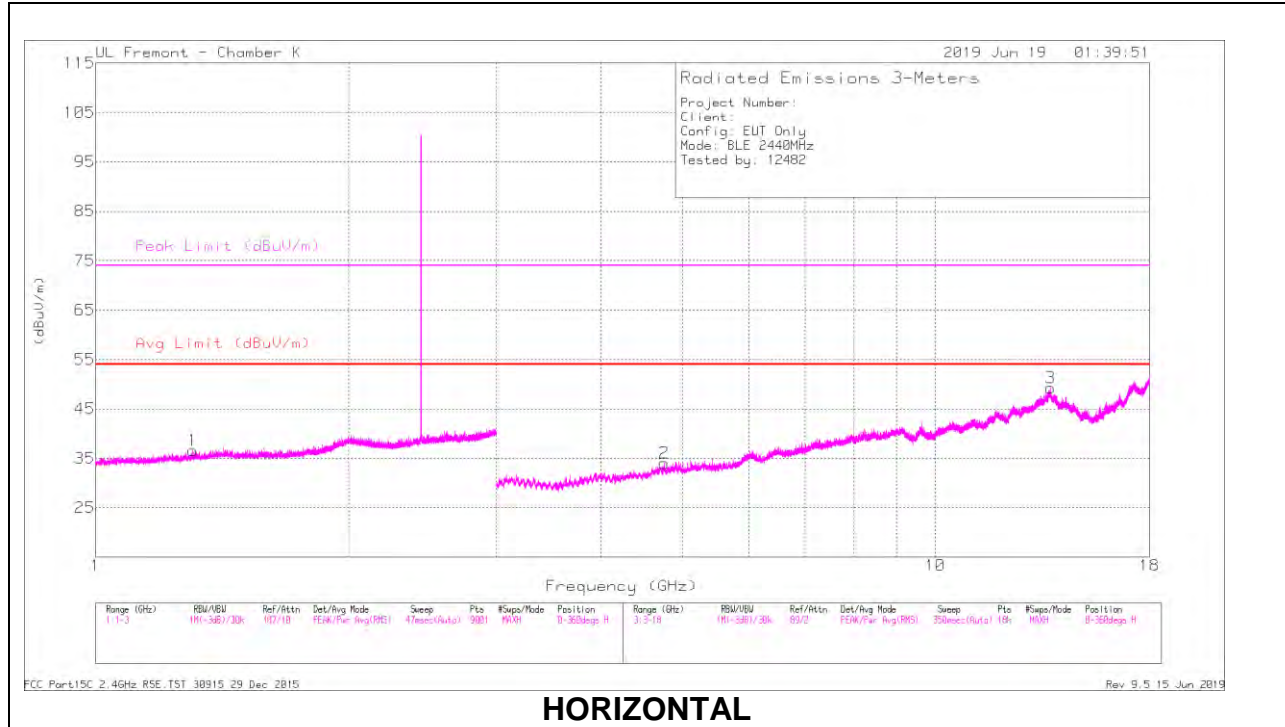
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

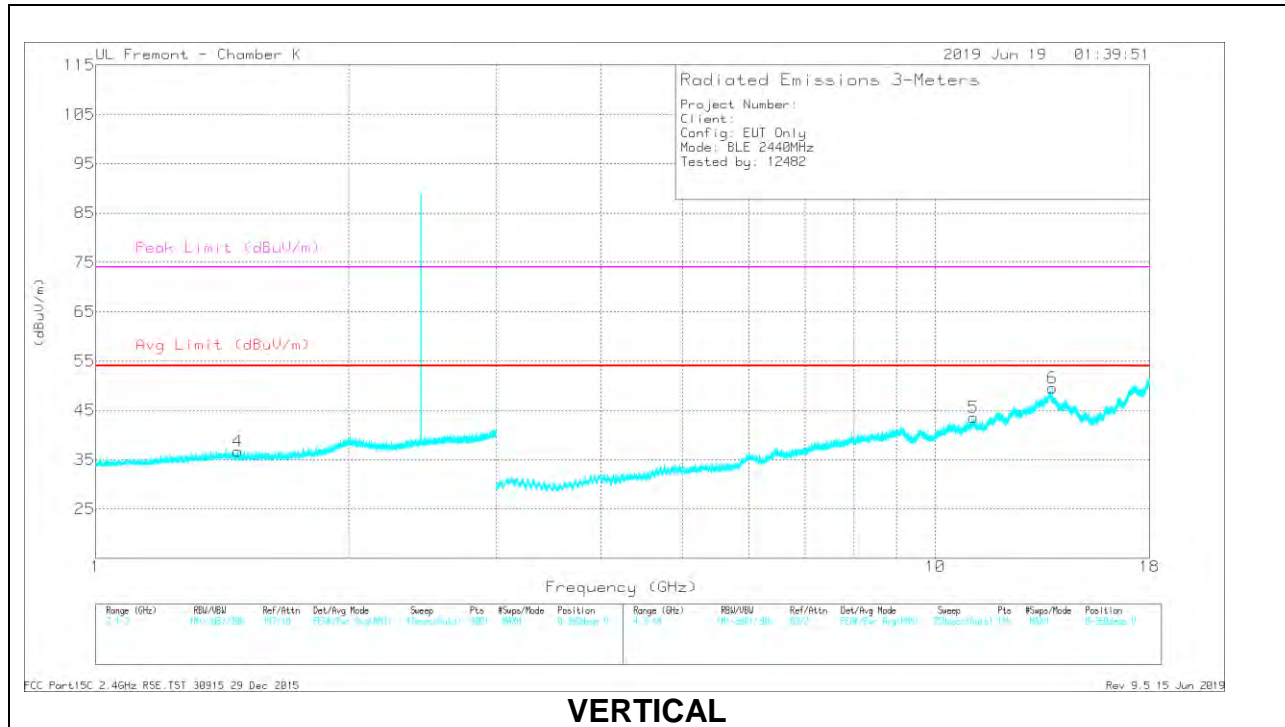
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 15 Jun 2019

### MID CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit 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	* 1.30289	42.78	PK2	24.5	-23.8	43.48	-	-	74	-30.52	345	123	H
	* 1.30388	33.57	MAv1	24.5	-23.8	34.27	54	-19.73	-	-	345	123	H
4	* 1.47688	43.25	PK2	24.6	-23.8	44.05	-	-	74	-29.95	14	224	V
	* 1.47618	33.69	MAv1	24.6	-23.8	34.49	54	-19.51	-	-	14	224	V
2	* 4.75832	38.85	PK2	32.8	-30.2	41.45	-	-	74	-32.55	101	189	H
	* 4.75828	28.75	MAv1	32.8	-30.2	31.35	54	-22.65	-	-	101	189	H
3	13.71259	31.8	PK2	43	-18.7	56.1	-	-	-	-	194	293	H
	*	31.92	PK2	39.2	-20.8	50.32	-	-	74	-23.68	278	318	V
5	11.10929	*											
	*	21.55	MAv1	39.2	-20.8	39.95	54	-14.05	-	-	278	318	V
6	11.10929												
	13.79793	31.64	PK2	42.8	-19.2	55.24	-	-	-	-	27	137	V

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

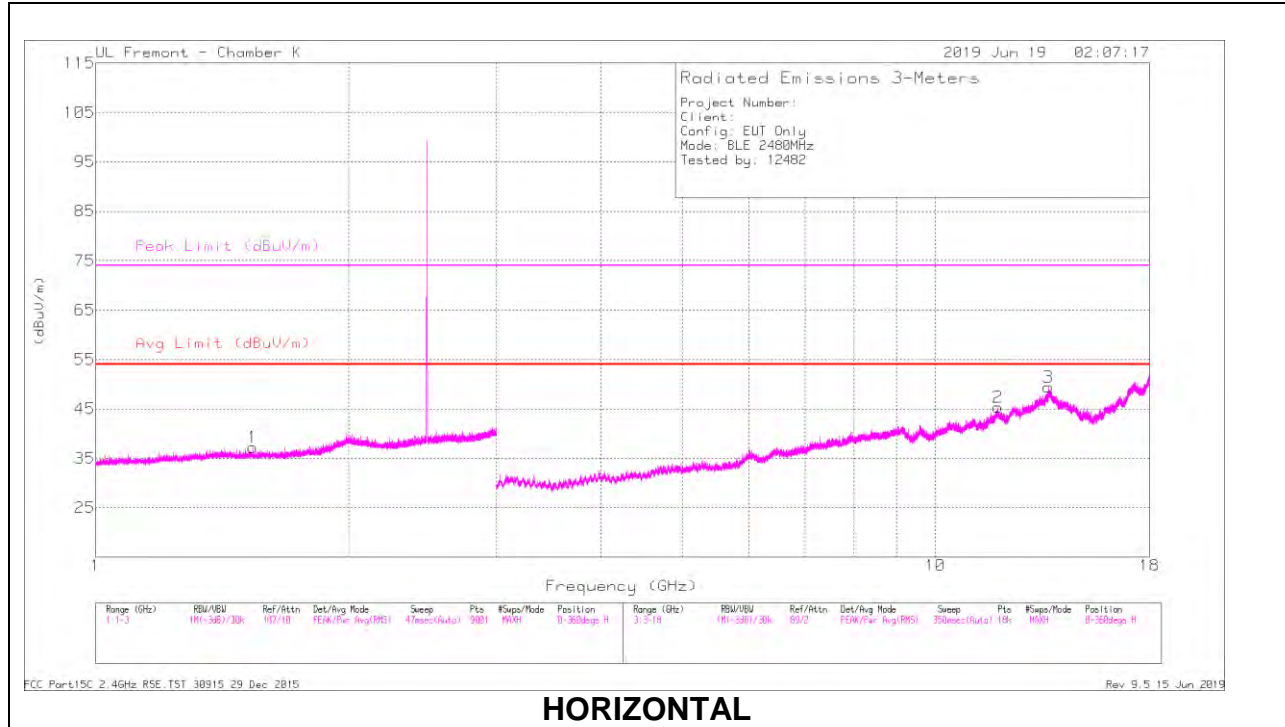
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

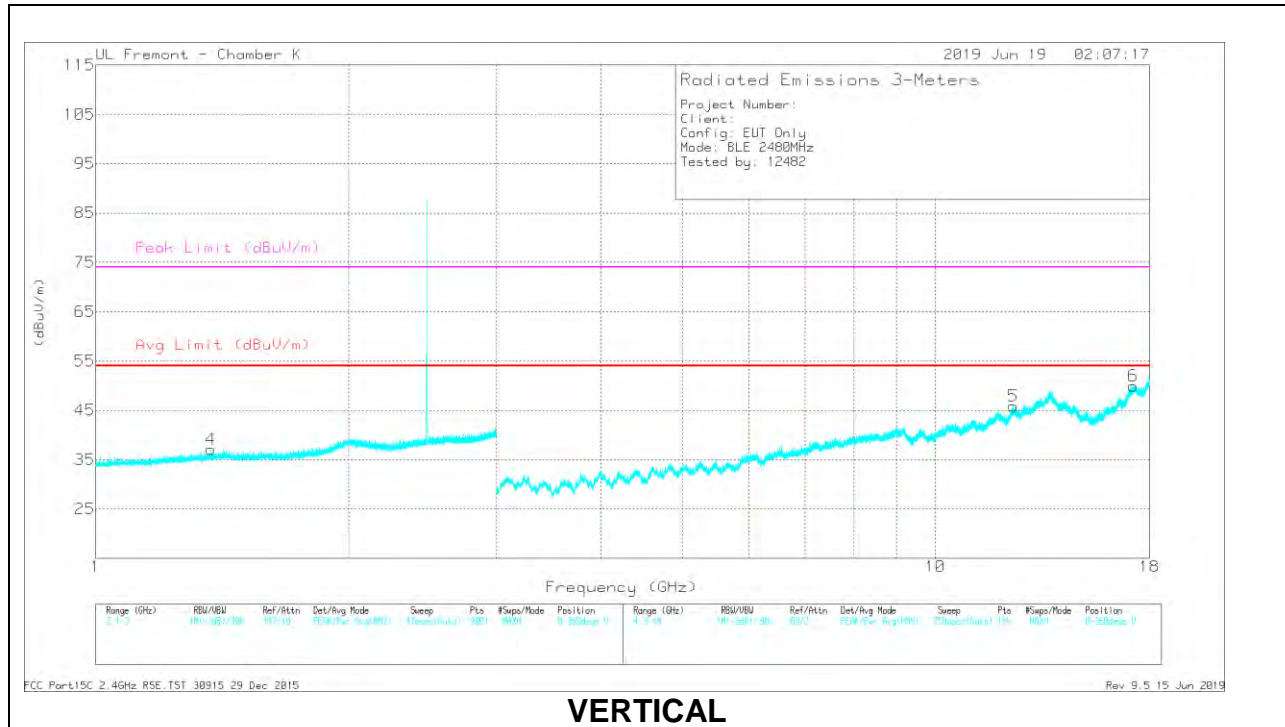
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 15 Jun 2019

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE019081 1 (dB/m)	Amp/Cbl/Fit 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	* 1.5388	43.11	PK2	24.7	-23.9	43.91	-	-	74	-30.09	360	100	H
	* 1.53967	32.87	MAv1	24.7	-23.9	33.67	54	-20.33	-	-	360	100	H
4	* 1.37182	42.79	PK2	24.6	-23.9	43.49	-	-	74	-30.51	360	100	V
	* 1.37212	32.93	MAv1	24.6	-23.9	33.63	54	-20.37	-	-	360	100	V
2	* 11.88245	32.92	PK2	40	-19.9	53.02	-	-	74	-20.98	360	100	H
	* 11.88412	22.07	MAv1	40	-20	42.07	54	-11.93	-	-	360	100	H
3	13.63996	32.72	PK2	43.1	-18.6	57.22	-	-	-	-	360	100	H
5	* 12.38776	32.61	PK2	40.8	-20.1	53.31	-	-	74	-20.69	360	100	V
	* 12.38738	22.16	MAv1	40.8	-20.1	42.86	54	-11.14	-	-	360	100	V
6	17.21583	31.14	PK2	43.4	-16.6	57.94	-	-	-	-	360	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAv1 - KDB558074 Option 1 Maximum RMS Average

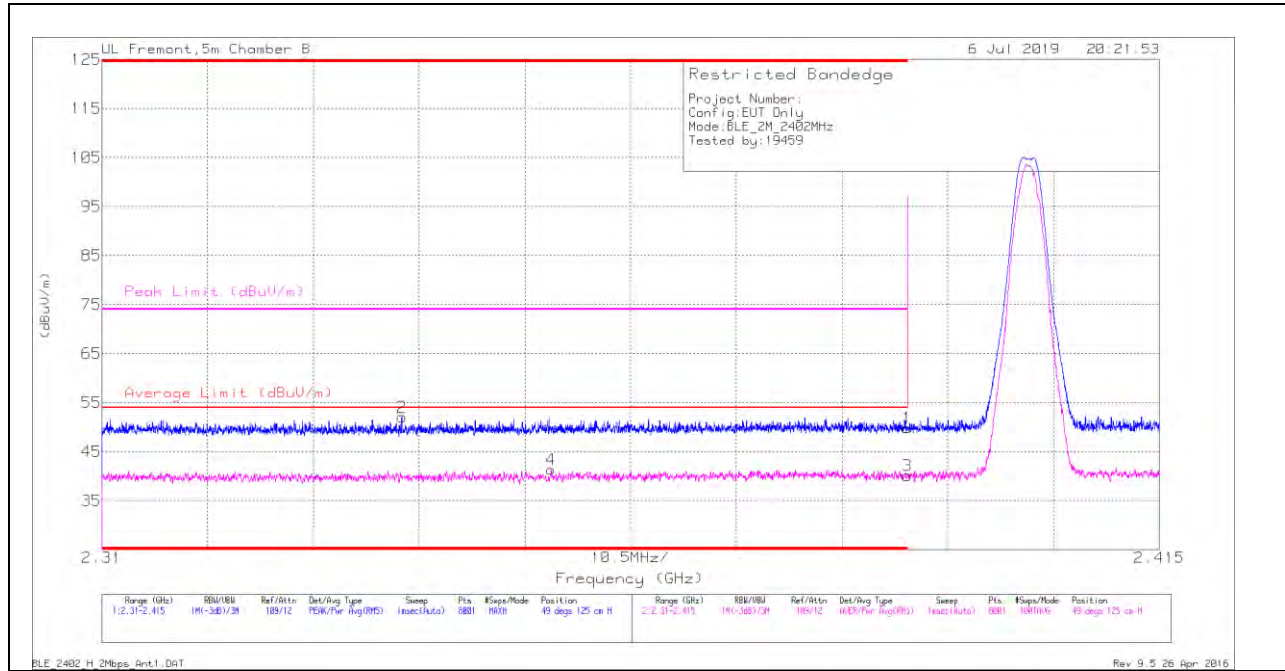
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015  
 Rev 9.5 15 Jun 2019

### 9.2.4 Low Power BLE (2Mbps)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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
2	* 2.34	39.44	Pk	31.5	-18.9	52.04	-	-	74	-21.96	49	125	H
4	* 2.355	28.77	RMS	31.6	-19	41.37	54	-12.63	-	-	49	125	H
1	* 2.39	36.82	Pk	31.9	-18.9	49.82	-	-	74	-24.18	49	125	H
3	* 2.39	27.14	RMS	31.9	-18.9	40.14	54	-13.86	-	-	49	125	H

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

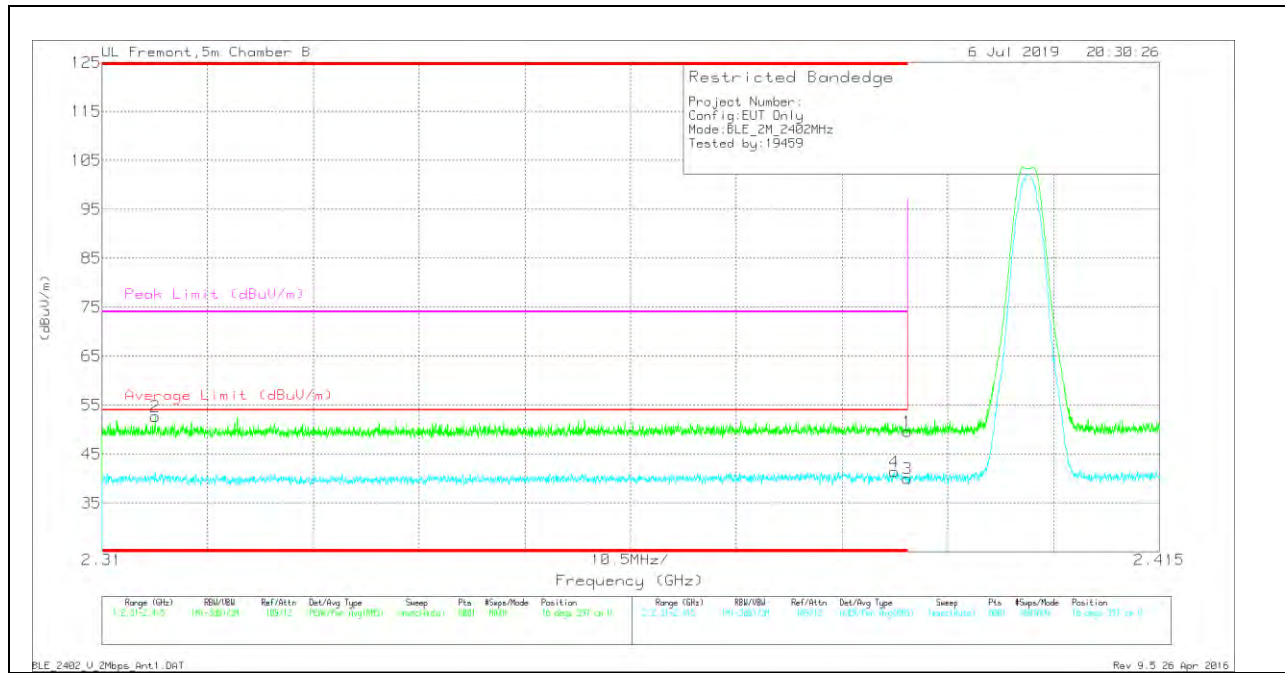
Pk - Peak detector

RMS - RMS detection

BLE\_2402\_H\_2Mbps\_Ant1.DAT

Rev 9.5.26 Apr 2016

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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
2	* 2.315	39.79	Pk	31.7	-18.8	52.69	-	-	74	-21.31	16	397	V
4	* 2.389	28.39	RMS	31.9	-18.9	41.39	54	-12.61	-	-	16	397	V
1	* 2.39	36.6	Pk	31.9	-18.9	49.6	-	-	74	-24.4	16	397	V
3	* 2.39	27.01	RMS	31.9	-18.9	40.01	54	-13.99	-	-	16	397	V

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

Pk - Peak detector

RMS - RMS detection

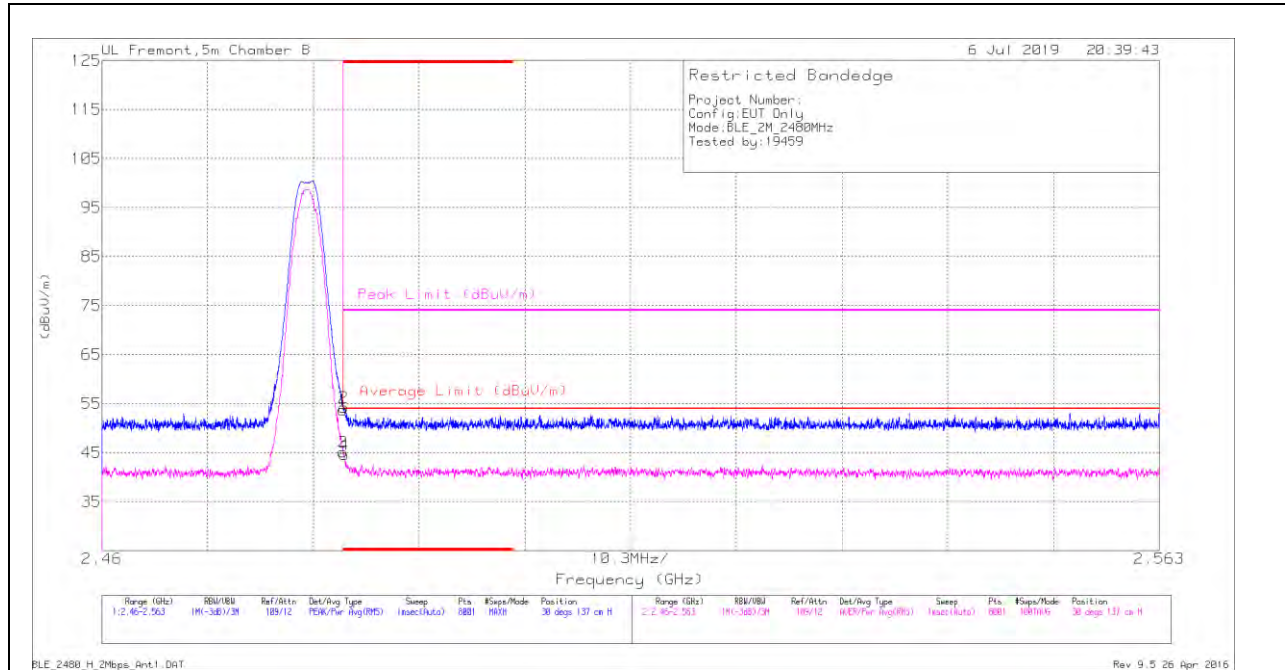
BLE\_2402\_V\_2Mbps\_Ant1.DAT

Rev 9.5 26 Apr 2016



**BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/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	40.36	Pk	32.3	-18.9	53.76	-	-	74	-20.24	30	137	H
2	* 2.484	40.82	Pk	32.3	-18.9	54.22	-	-	74	-19.78	30	137	H
3	* 2.484	31.75	RMS	32.3	-18.9	45.15	54	-8.85	-	-	30	137	H
4	* 2.484	31.23	RMS	32.3	-18.9	44.63	54	-9.37	-	-	30	137	H

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

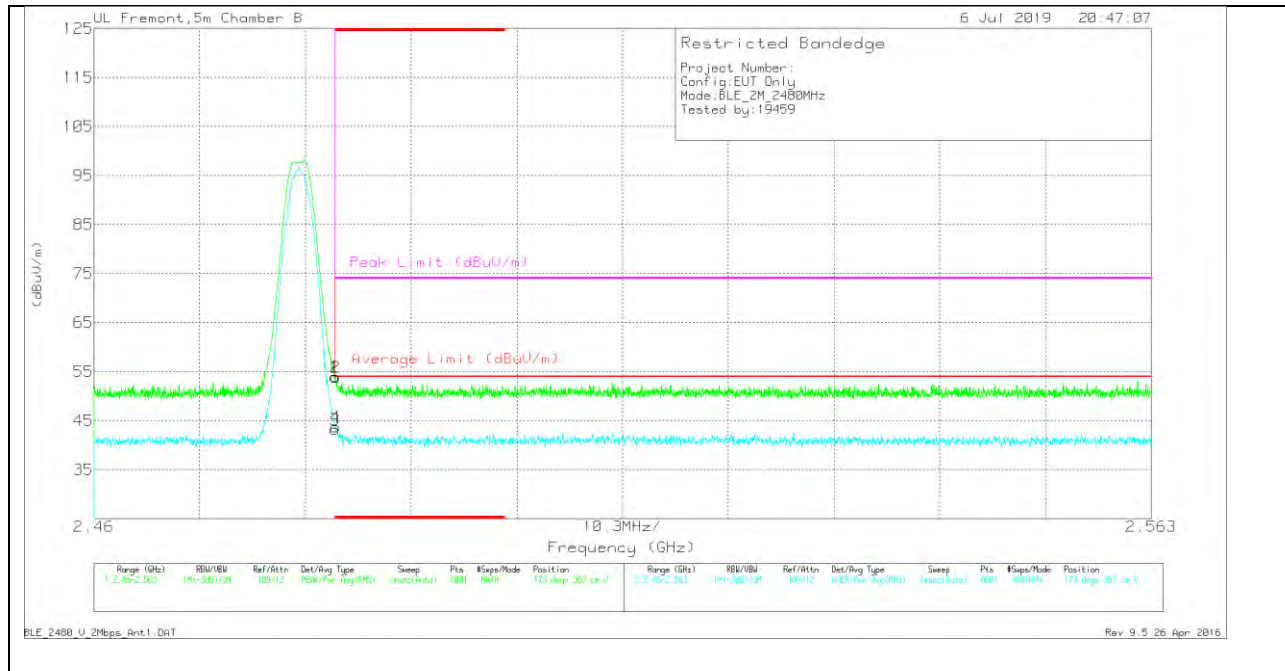
Pk - Peak detector

RMS - RMS detection

BLE\_2480\_H\_2Mbps\_Ant1.DAT

Rev 9.5 26 Apr 2016

### VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/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	40.62	Pk	32.3	-18.9	54.02	-	-	74	-19.98	173	367	V
2	* 2.484	40.49	Pk	32.3	-18.9	53.89	-	-	74	-20.11	173	367	V
3	* 2.484	29.8	RMS	32.3	-18.9	43.2	54	-10.8	-	-	173	367	V
4	* 2.484	30.3	RMS	32.3	-18.9	43.7	54	-10.3	-	-	173	367	V

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

Pk - Peak detector

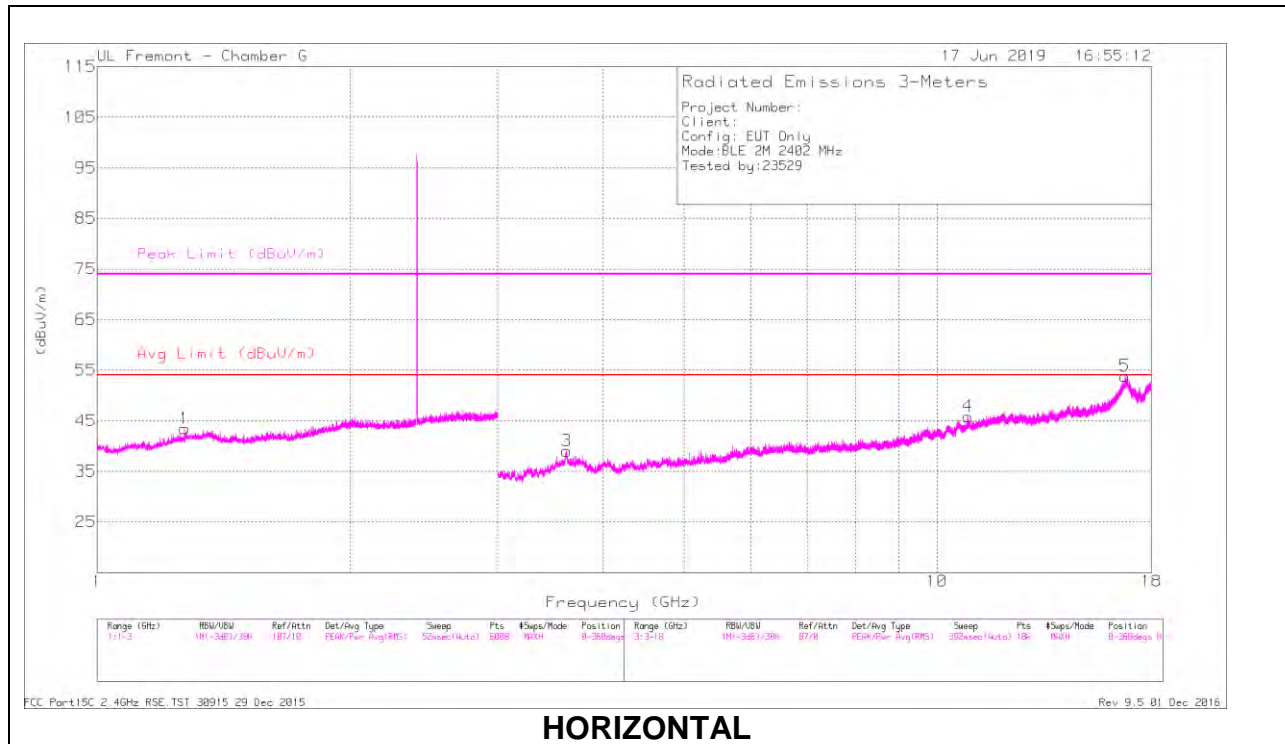
RMS - RMS detection

BLE\_2480\_V\_2Mbps\_Ant1.DAT

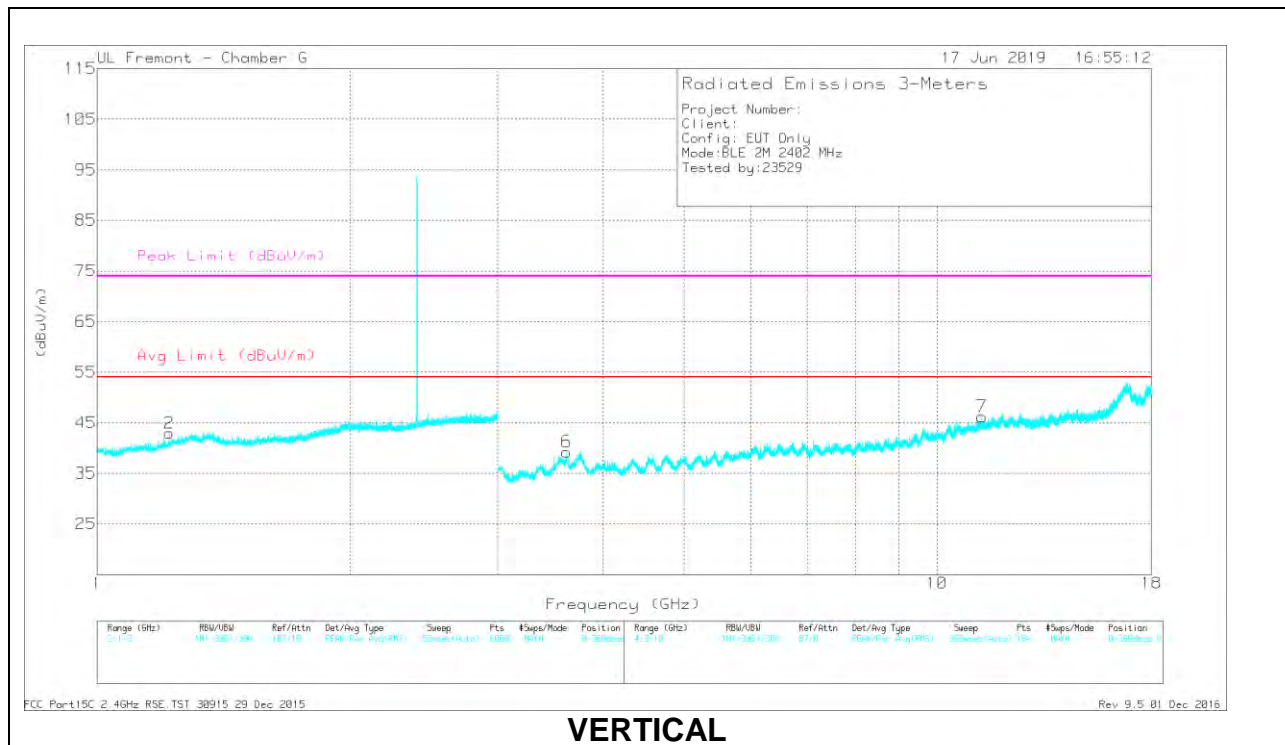
Rev 9.5 26 Apr 2016

**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.27	43.52	PK2	29.5	-23.6	49.42	-	-	74	-24.58	210	187	H
	* 1.27	31.95	MAv1	29.5	-23.6	37.85	54	16.15	-	-	210	187	H
2	* 1.22	43.55	PK2	29	-23.7	48.85	-	-	74	-25.15	109	269	V
	* 1.22	32.16	MAv1	29	-23.7	37.46	54	16.54	-	-	109	269	V
3	* 3.621	40.2	PK2	35.7	-30	45.9	-	-	74	-28.1	315	218	H
	* 3.622	29.02	MAv1	35.6	-29.9	34.72	54	19.28	-	-	315	218	H
4	* 10.889	36.93	PK2	38.3	-22.9	52.33	-	-	74	-21.67	206	162	H
	* 10.89	25.88	MAv1	38.3	-22.9	41.28	54	12.72	-	-	206	162	H
6	* 3.622	40.12	PK2	35.6	-29.9	45.82	-	-	74	-28.18	115	194	V
	* 3.62	28.99	MAv1	35.7	-30	34.69	54	19.31	-	-	115	194	V
7	* 11.313	36.8	PK2	38.7	-22.7	52.8	-	-	74	-21.2	195	204	V
	* 11.316	25.32	MAv1	38.7	-22.7	41.32	54	12.68	-	-	195	204	V
5	16.744	36.46	PK2	41.7	-18.3	59.86	-	-	-	-	290	136	H

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

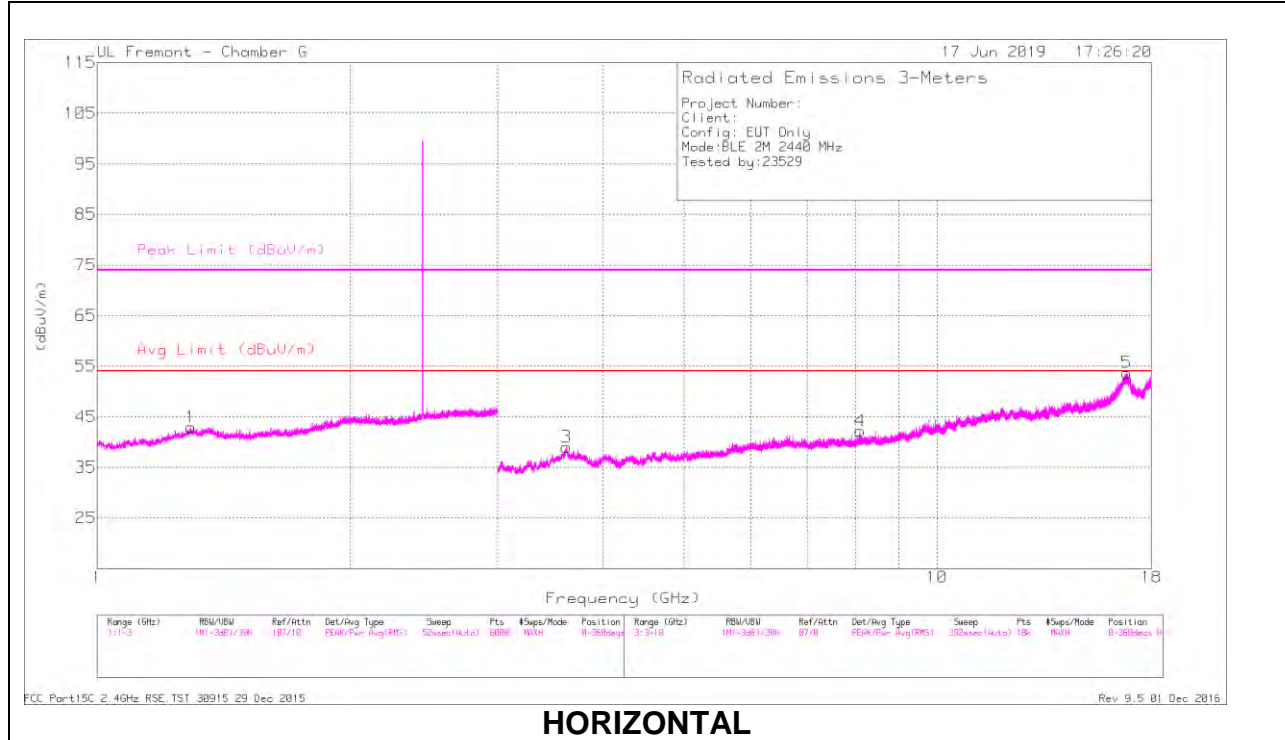
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

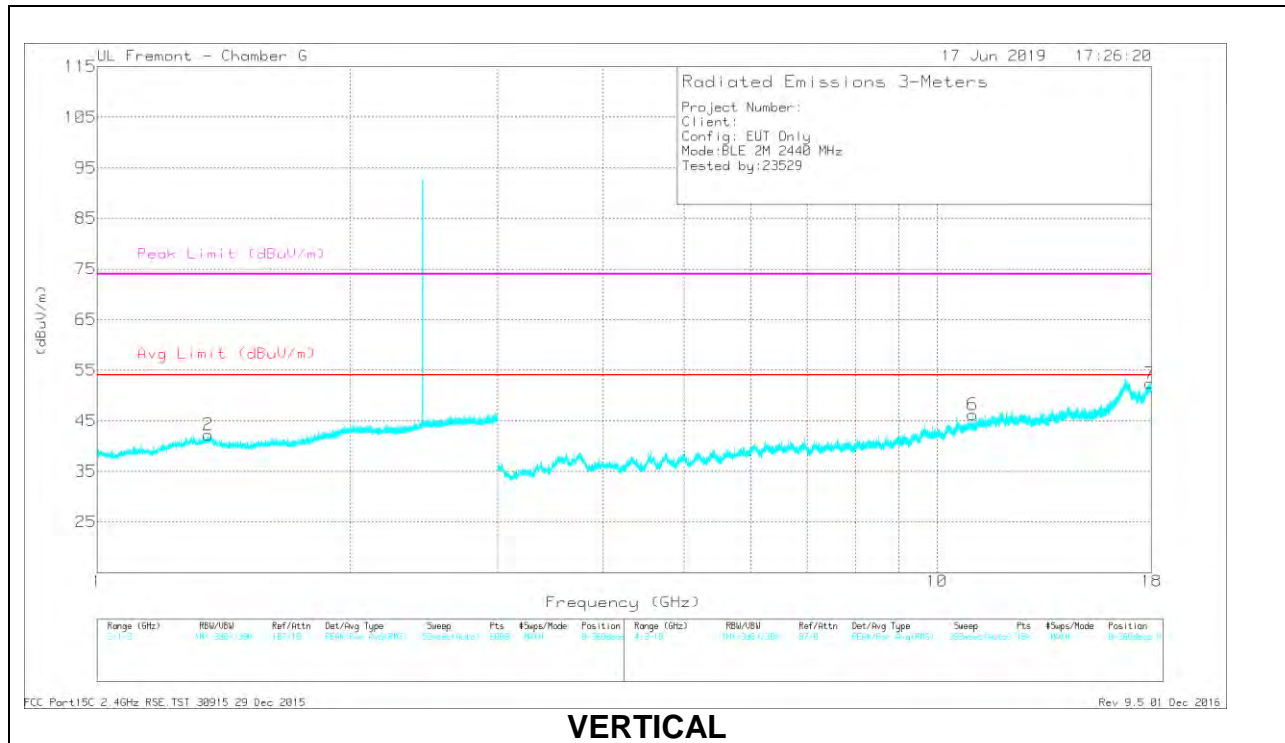
FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

### MID CHANNEL RESULTS



**HORIZONTAL**



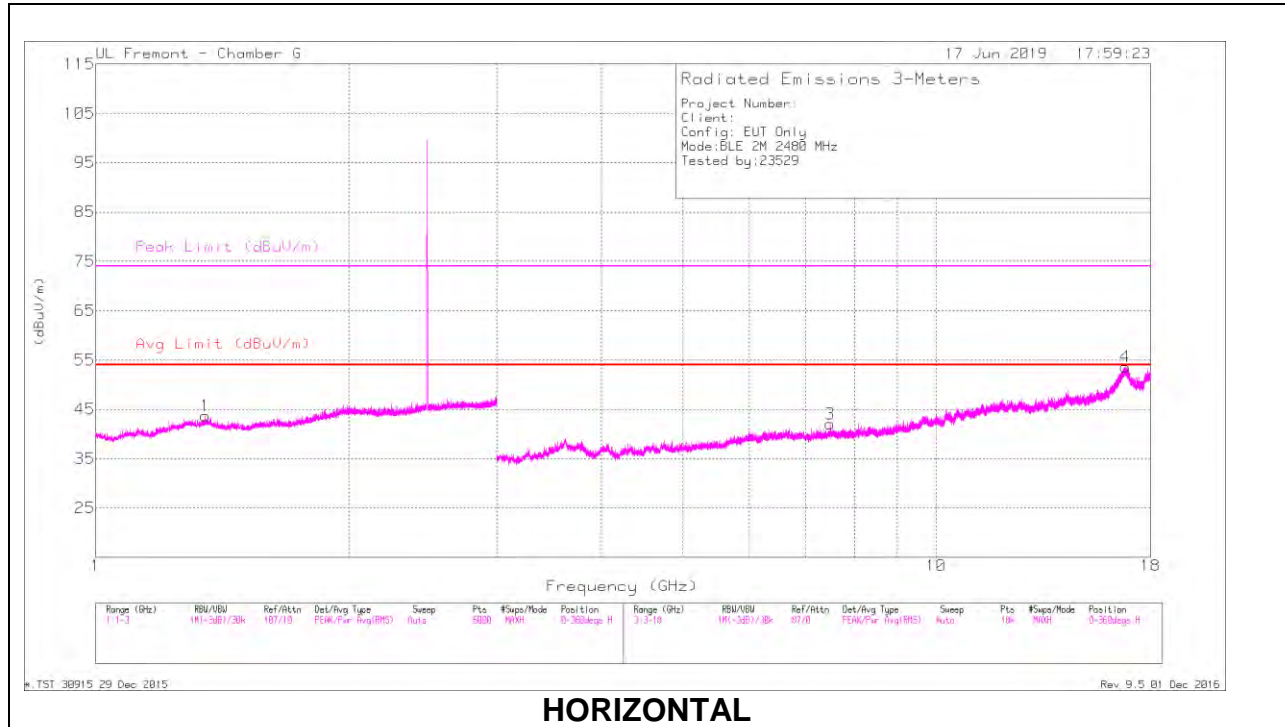
**VERTICAL**

**RADIATED EMISSIONS**

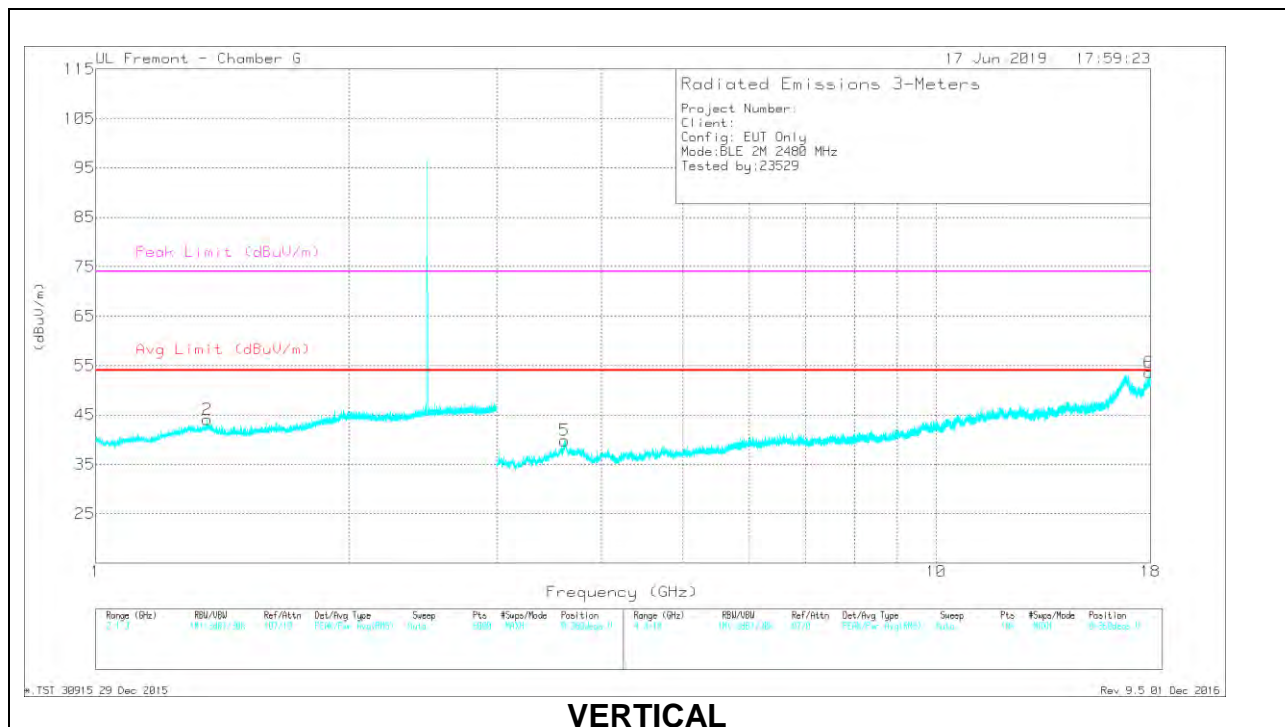
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.294	43.73	PK2	29.9	-23.5	50.13	-	-	74	-23.87	216	164	H
	* 1.294	32.2	MAv1	29.9	-23.5	38.6	54	-15.4	-	-	216	164	H
2	* 1.355	44.29	PK2	30	-23.3	50.99	-	-	74	-23.01	90	224	V
	* 1.357	32.51	MAv1	30	-23.3	39.21	54	14.79	-	-	90	224	V
3	* 3.62	40.9	PK2	35.7	-30	46.6	-	-	74	-27.4	131	203	H
	* 3.618	29.82	MAv1	35.7	-30.1	35.42	54	18.58	-	-	131	203	H
4	* 8.101	39.14	PK2	36.1	-26.7	48.54	-	-	74	-25.46	235	137	H
	* 8.1	27.48	MAv1	36.1	-26.7	36.88	54	17.12	-	-	235	137	H
6	* 11.028	36.31	PK2	38.3	-23.2	51.41	-	-	74	-22.59	72	269	V
	* 11.03	24.68	MAv1	38.3	-23.2	39.78	54	14.22	-	-	72	269	V
7	* 17.933	34.91	PK2	42.5	-17.9	59.51	-	-	74	-14.49	194	292	V
	* 17.932	23.22	MAv1	42.5	-17.9	47.82	54	-6.18	-	-	194	292	V
5	16.832	37.03	PK2	41.7	-17.9	60.83	-	-	-	-	4	184	H

\* - 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  
 Rev 9.5 01 Dec 2016

### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.353	43.15	PK2	30	-23.3	49.85	-	-	74	-24.15	112	236	H
	* 1.352	32.01	MAv1	30	-23.3	38.71	54	15.29	-	-	112	236	H
2	* 1.359	43.7	PK2	29.9	-23.3	50.3	-	-	74	-23.7	190	193	V
	* 1.358	32.16	MAv1	29.9	-23.3	38.76	54	15.24	-	-	190	193	V
3	* 7.48	39.08	PK2	36	-27.3	47.78	-	-	74	-26.22	297	146	H
	* 7.476	28.04	MAv1	36	-27.3	36.74	54	17.26	-	-	297	146	H
5	* 3.614	41.42	PK2	35.5	-30.2	46.72	-	-	74	-27.28	225	193	V
	* 3.616	30.14	MAv1	35.6	-30.1	35.64	54	18.36	-	-	225	193	V
6	* 17.928	34.39	PK2	42.5	-17.9	58.99	-	-	74	-15.01	337	277	V
	* 17.926	23.53	MAv1	42.6	-17.9	48.23	54	-5.77	-	-	337	277	V
4	16.792	36.22	PK2	41.7	-17.4	60.52	-	-	-	-	257	174	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

\*.TST 30915 29 Dec 2015

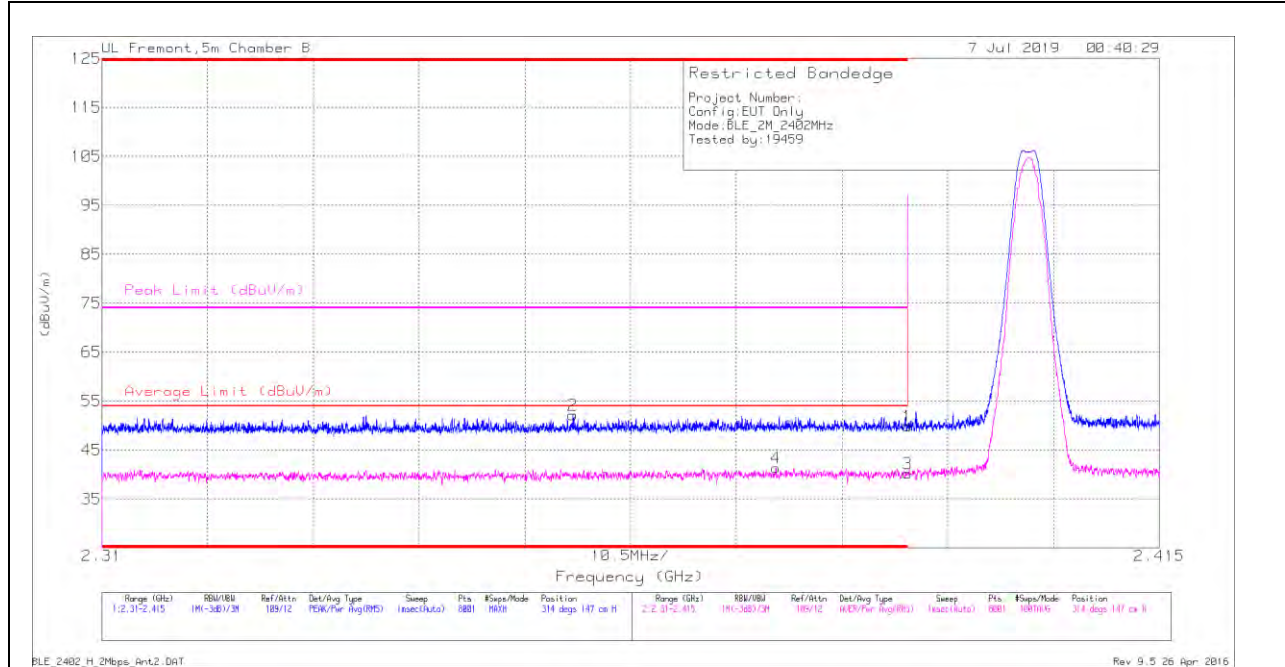
Rev 9.5 01 Dec 2016



**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



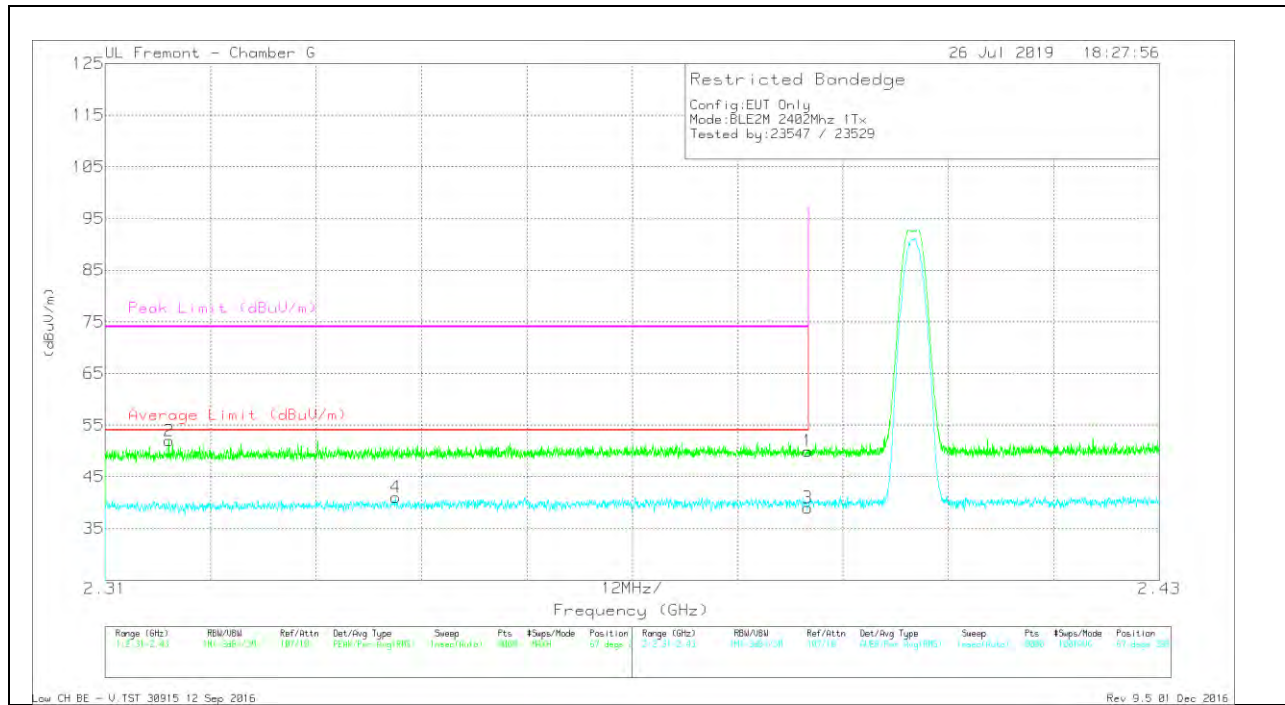
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbi/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.89	Pk	31.9	-18.9	49.89	-	-	74	-24.11	314	147	H
2	* 2.357	39.45	Pk	31.7	-19	52.15	-	-	74	-21.85	314	147	H
3	* 2.39	27.21	RMS	31.9	-18.9	40.21	54	-13.79	-	-	314	147	H
4	* 2.377	28.37	RMS	31.8	-18.8	41.37	54	-12.63	-	-	314	147	H

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

Pk - Peak detector

RMS - RMS detection

### VERTICAL RESULT



### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbi/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	* 2.39	40.26	Pk	31.9	-22.2	49.96	-	-	74	-24.04	67	298	V
2	* 2.317	42.75	Pk	31.5	-22.3	51.95	-	-	74	-22.05	67	298	V
3	* 2.39	29.26	RMS	31.9	-22.2	38.96	54	-15.04	-	-	67	298	V
4	* 2.343	31.54	RMS	31.7	-22.2	41.04	54	-12.96	-	-	67	298	V

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

Pk - Peak detector

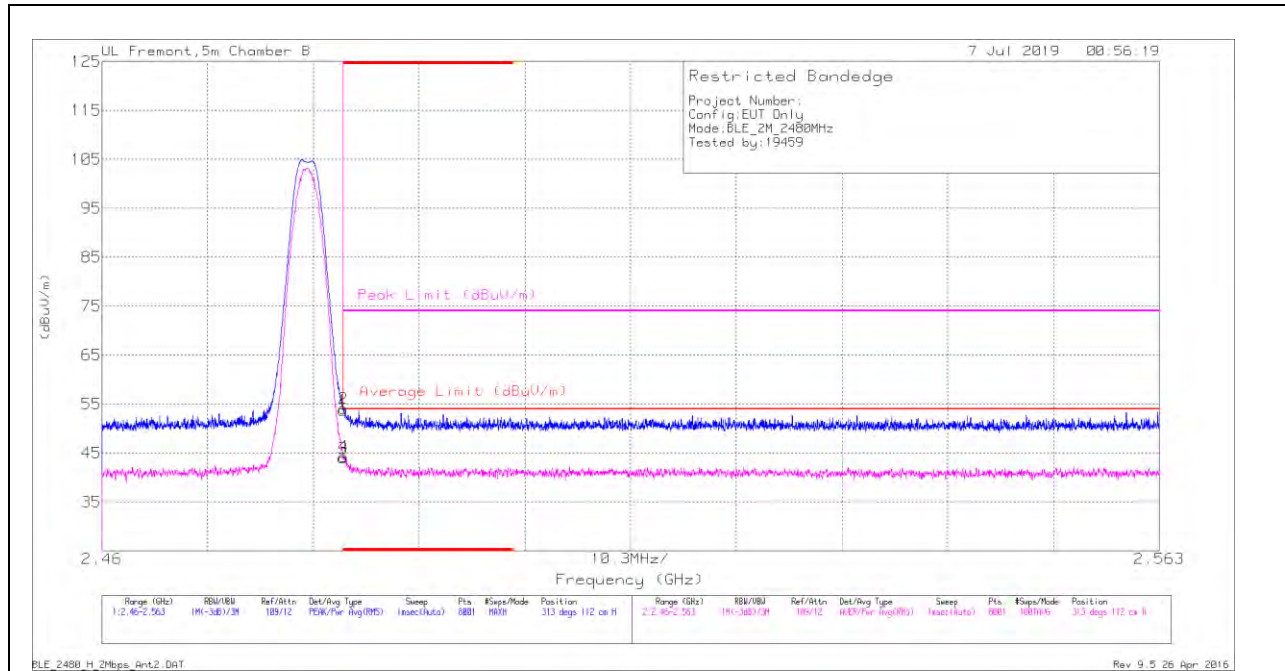
RMS - RMS detection

Low CH BE - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

**BANEDGE (HIGH CHANNEL)**

**HORIZONTAL RESULT**



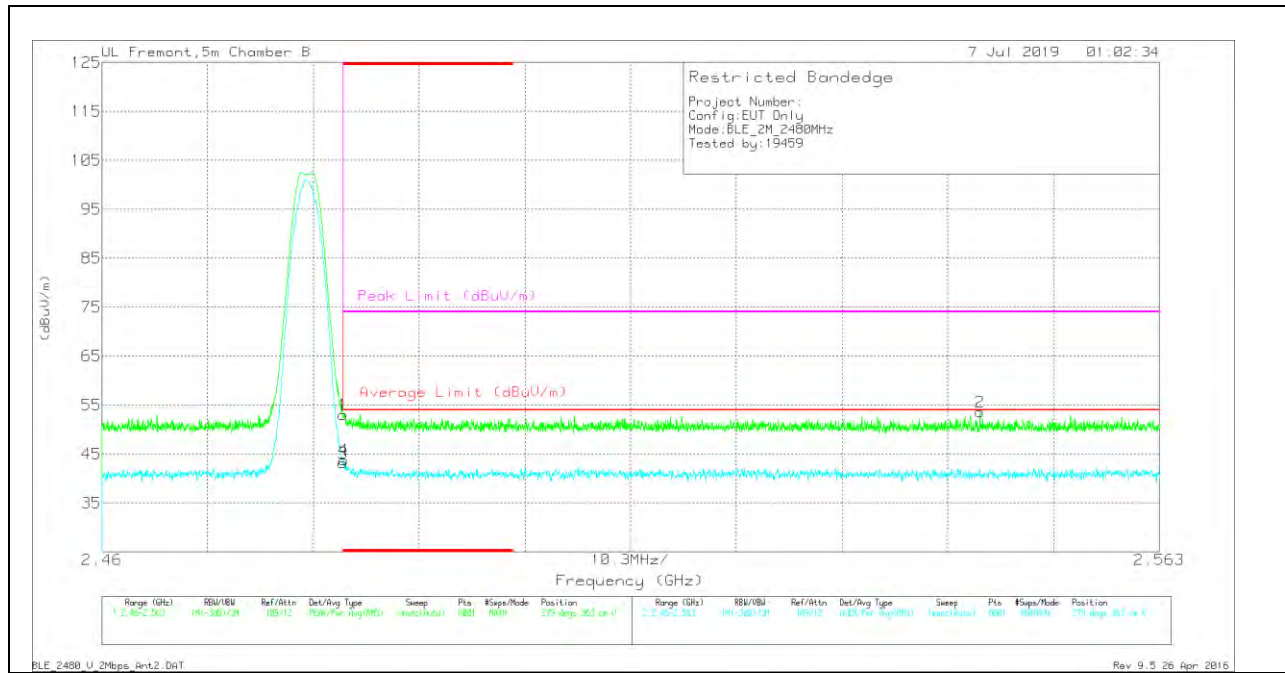
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.3	Pk	32.3	-18.9	53.7	-	-	74	-20.3	313	112	H
2	* 2.484	40.72	Pk	32.3	-18.9	54.12	-	-	74	-19.88	313	112	H
3	* 2.484	30.55	RMS	32.3	-18.9	43.95	54	-10.05	-	-	313	112	H
4	* 2.484	30.9	RMS	32.3	-18.9	44.3	54	-9.7	-	-	313	112	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 T344 (dB/m)	Amp/Cbf/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	39.63	Pk	32.3	-18.9	53.03	-	-	74	-20.97	279	363	V
3	* 2.484	29.77	RMS	32.3	-18.9	43.17	54	-10.83	-	-	279	363	V
4	* 2.484	30.39	RMS	32.3	-18.9	43.79	54	-10.21	-	-	279	363	V
2	2.546	40.21	Pk	32.3	-18.9	53.61	-	-	74	-20.39	279	363	V

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