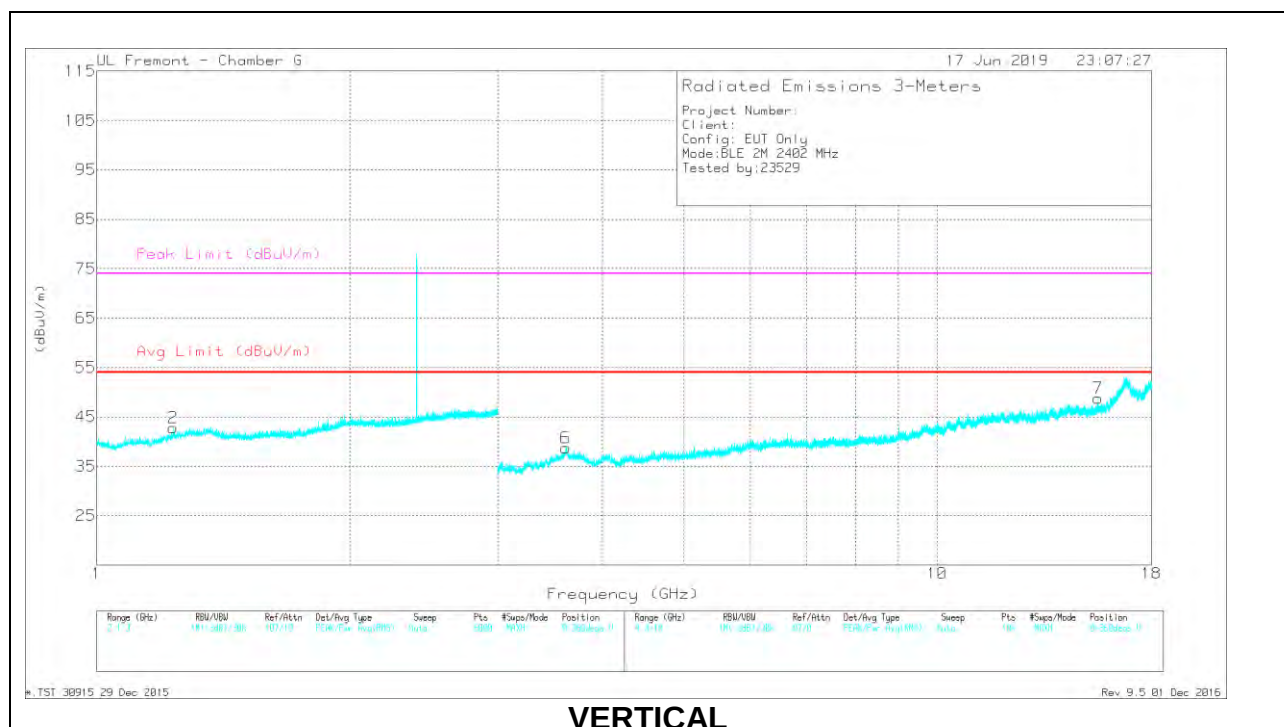
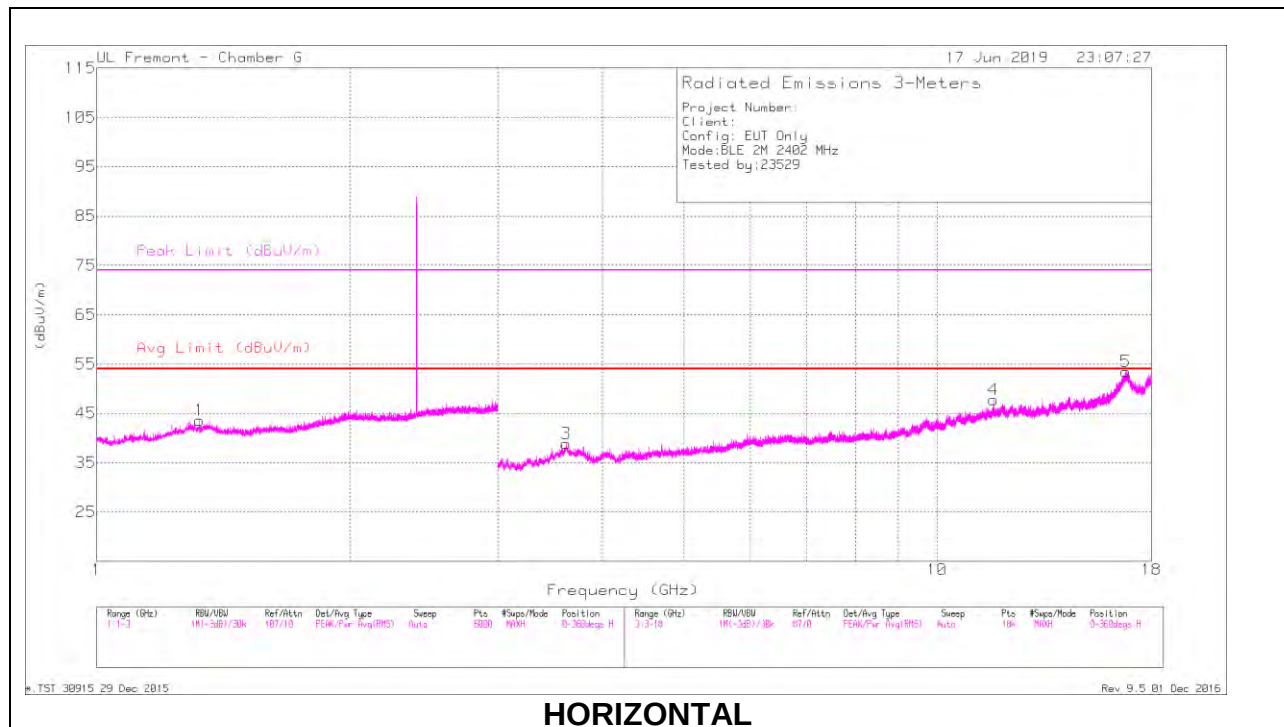


HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



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	* 1.326	43.2	PK2	29.7	-23.5	49.4	-	-	74	-24.6	144	195	H
	* 1.324	31.73	MAV1	29.8	-23.5	38.03	54	15.97	-	-	144	195	H
2	* 1.234	43.84	PK2	29.2	-23.7	49.34	-	-	74	-24.66	321	211	V
	* 1.234	32.26	MAV1	29.2	-23.7	37.76	54	16.24	-	-	321	211	V
3	* 3.618	39.78	PK2	35.7	-30.1	45.38	-	-	74	-28.62	213	124	H
	* 3.617	29.16	MAV1	35.7	-30.1	34.76	54	19.24	-	-	213	124	H
4	* 11.682	37.44	PK2	39.2	-22.8	53.84	-	-	74	-20.16	196	260	H
	* 11.683	24.59	MAV1	39.2	-22.8	40.99	54	13.01	-	-	196	260	H
6	* 3.616	41.47	PK2	35.6	-30.1	46.97	-	-	74	-27.03	108	293	V
	* 3.617	30.35	MAV1	35.7	-30.1	35.95	54	18.05	-	-	108	293	V
7	* 15.547	36.08	PK2	40.9	-22.5	54.48	-	-	74	-19.52	156	278	V
	* 15.545	25.43	MAV1	40.9	-22.6	43.73	54	10.27	-	-	156	278	V
5	16.781	36.17	PK2	41.8	-17.6	60.37	-	-	-	-	22	190	H

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

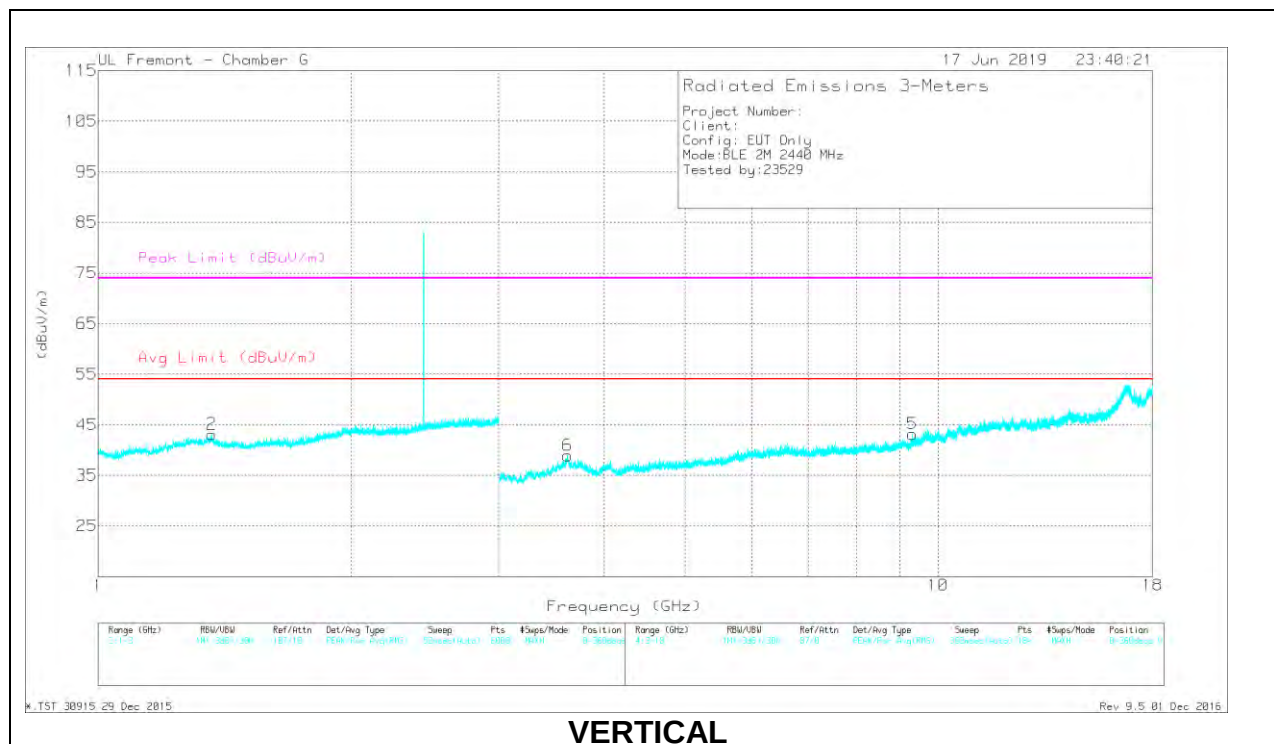
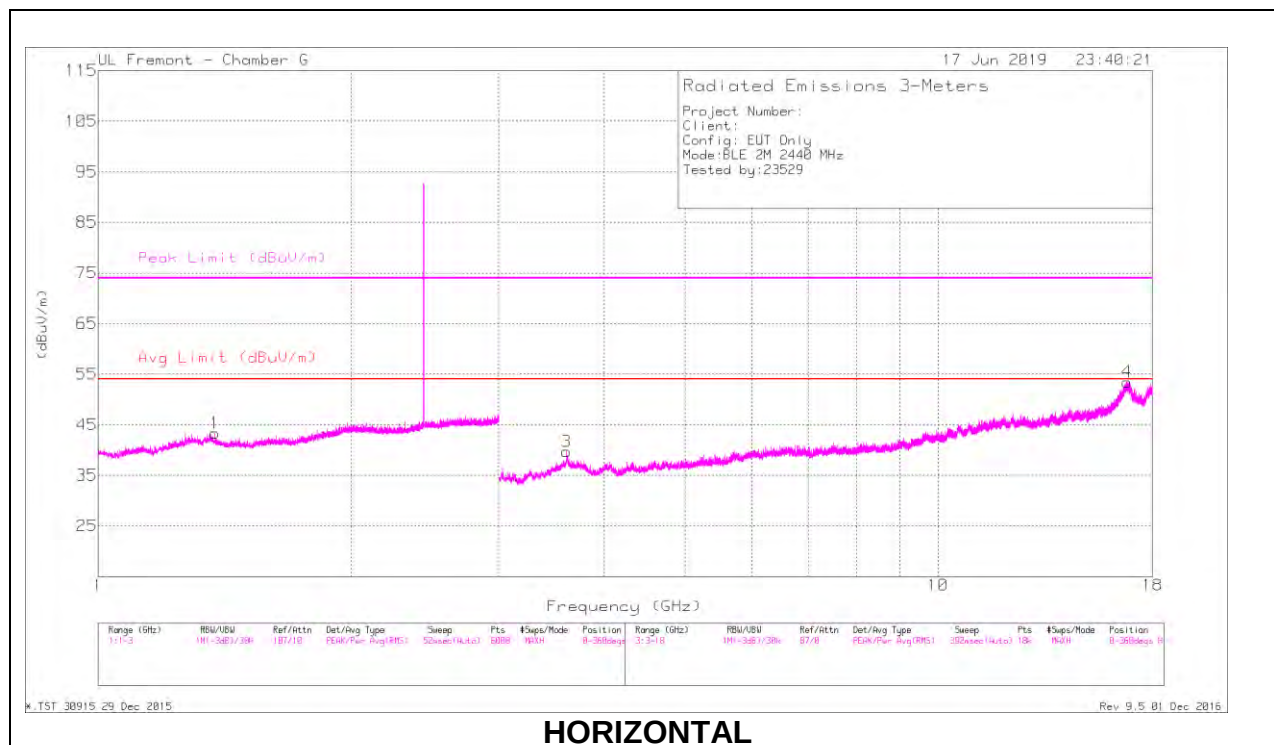
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

MID CHANNEL RESULTS



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	* 1.377	44	PK2	29.6	-23.2	50.4	-	-	74	-23.6	122	164	H
	* 1.377	31.89	MAV1	29.6	-23.2	38.29	54	15.71	-	-	122	164	H
2	* 1.365	43.56	PK2	30	-23.2	50.36	-	-	74	-23.64	266	257	V
	* 1.363	31.96	MAV1	30	-23.2	38.76	54	15.24	-	-	266	257	V
3	* 3.614	40.25	PK2	35.4	-30.2	45.45	-	-	74	-28.55	123	159	H
	* 3.611	29.54	MAV1	35.2	-30.2	34.54	54	19.46	-	-	123	159	H
5	* 9.323	37.55	PK2	36.8	-25.4	48.95	-	-	74	-25.05	328	202	V
	* 9.321	26.63	MAV1	36.7	-25.5	37.83	54	16.17	-	-	328	202	V
6	* 3.621	41.08	PK2	35.7	-30	46.78	-	-	74	-27.22	311	234	V
	* 3.621	29.91	MAV1	35.7	-30	35.61	54	18.39	-	-	311	234	V
4	16.794	36.43	PK2	41.8	-17.4	60.83	-	-	-	-	86	179	H

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

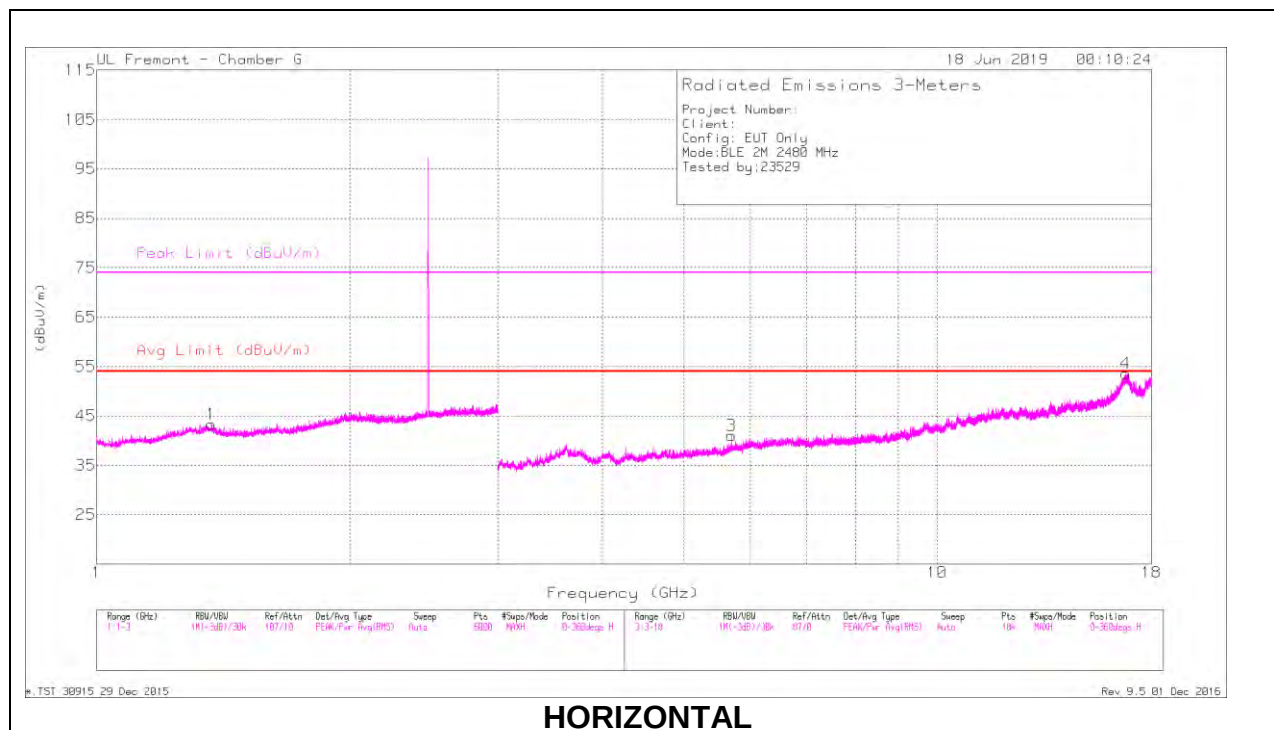
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

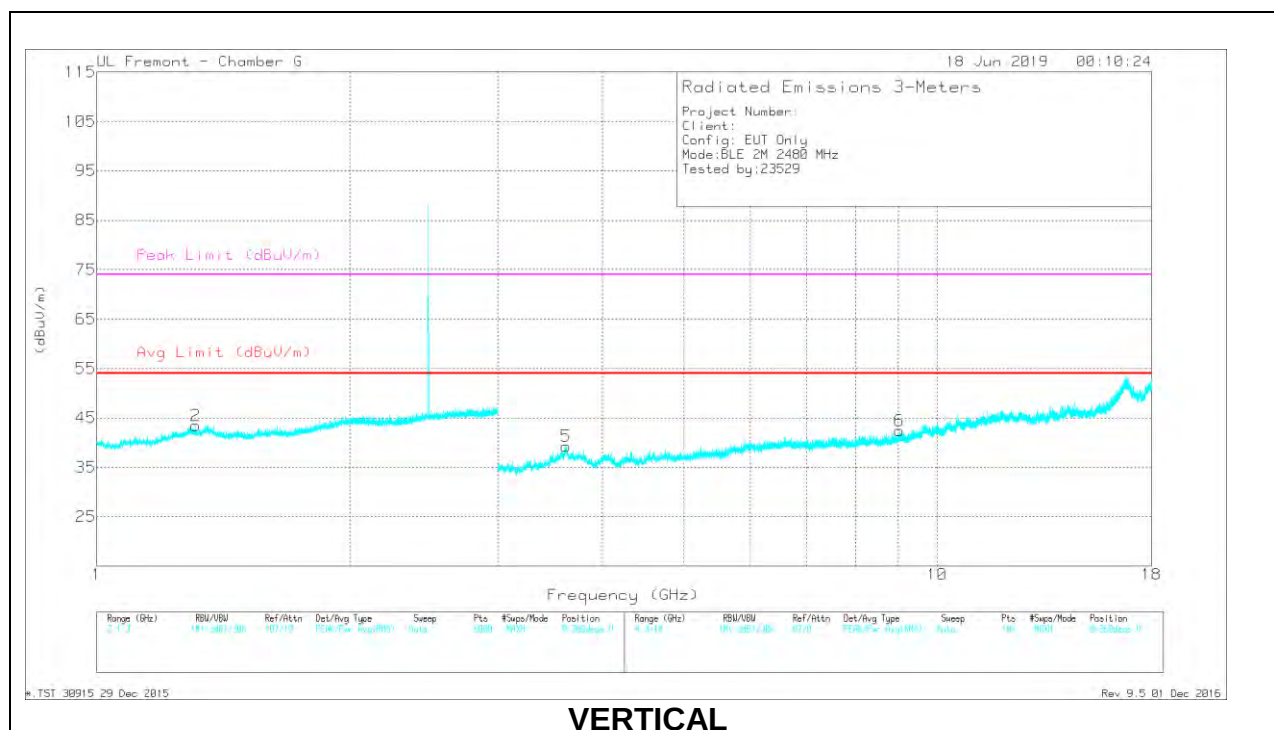
*.TST 30915 29 Dec 2015

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	* 1.369	44.34	PK2	30	-23.2	51.14	-	-	74	-22.86	321	202	H
	* 1.368	31.94	MAv1	30	-23.2	38.74	54	-	-	-	321	202	H
								15.26					
2	* 1.312	43.77	PK2	29.7	-23.5	49.97	-	-	74	-24.03	94	277	H
	* 1.313	32.02	MAv1	29.7	-23.5	38.22	54	-	-	-	94	277	H
								15.78					
5	* 3.622	41.1	PK2	35.6	-29.9	46.8	-	-	74	-27.2	143	193	V
	* 3.62	29.81	MAv1	35.7	-30	35.51	54	-	-	-	143	193	V
								18.49					
6	* 9.021	37.24	PK2	36.4	-25.2	48.44	-	-	74	-25.56	177	195	V
	* 9.023	26.44	MAv1	36.4	-25.2	37.64	54	-	-	-	177	195	V
								16.36					
3	5.695	39.51	PK2	35	-28.6	45.91	-	-	-	-	97	175	H
4	16.786	36.46	PK2	41.7	-17.4	60.76	-	-	-	-	182	201	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

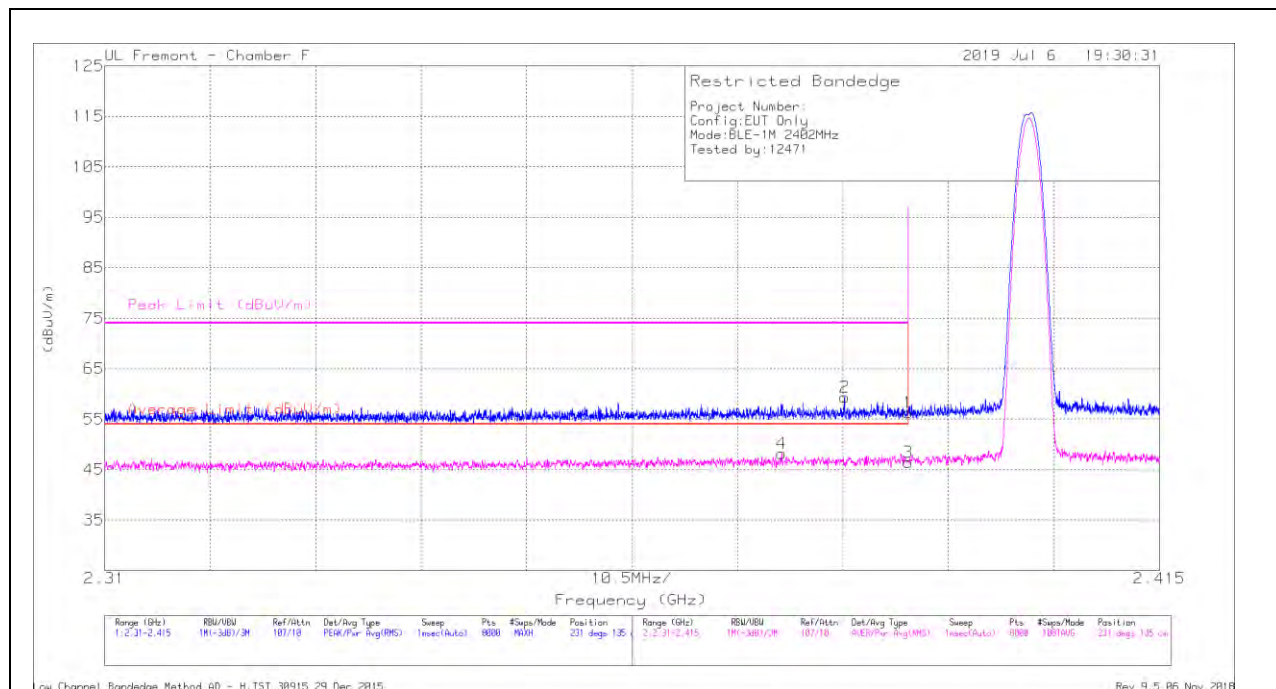
*.TST 30915 29 Dec 2015

Rev 9.5 01 Dec 2016

9.2.5 BEAMFORMING, HIGH POWER BLE (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Ampl/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	38.75	Pk	32	-14.5	56.25	-	-	74	-17.75	231	135	H
2	* 2.384	42.01	Pk	31.9	-14.5	59.41	-	-	74	-14.59	231	135	H
3	* 2.39	28.9	RMS	32	-14.5	46.4	54	-7.6	-	-	231	135	H
4	* 2.377	30.68	RMS	31.9	-14.4	48.18	54	-5.82	-	-	231	135	H

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

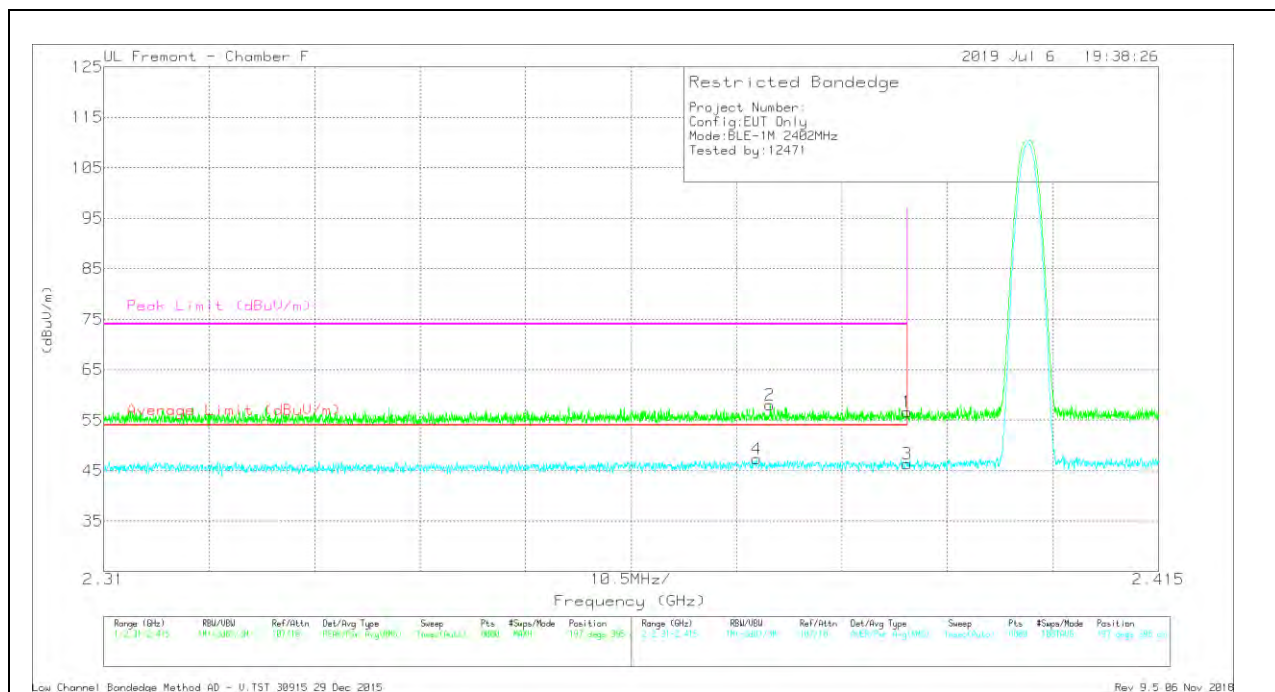
Pk - Peak detector

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 (dBm)	Ampl/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.1	Pk	32	-14.5	56.6	-	-	74	-17.4	197	395	V
2	* 2.376	40.46	Pk	31.9	-14.4	57.96	-	-	74	-16.04	197	395	V
3	* 2.39	28.87	RMS	32	-14.5	46.37	54	-7.63	-	-	197	395	V
4	* 2.375	29.85	RMS	31.9	-14.4	47.35	54	-6.65	-	-	197	395	V

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

Pk - Peak detector

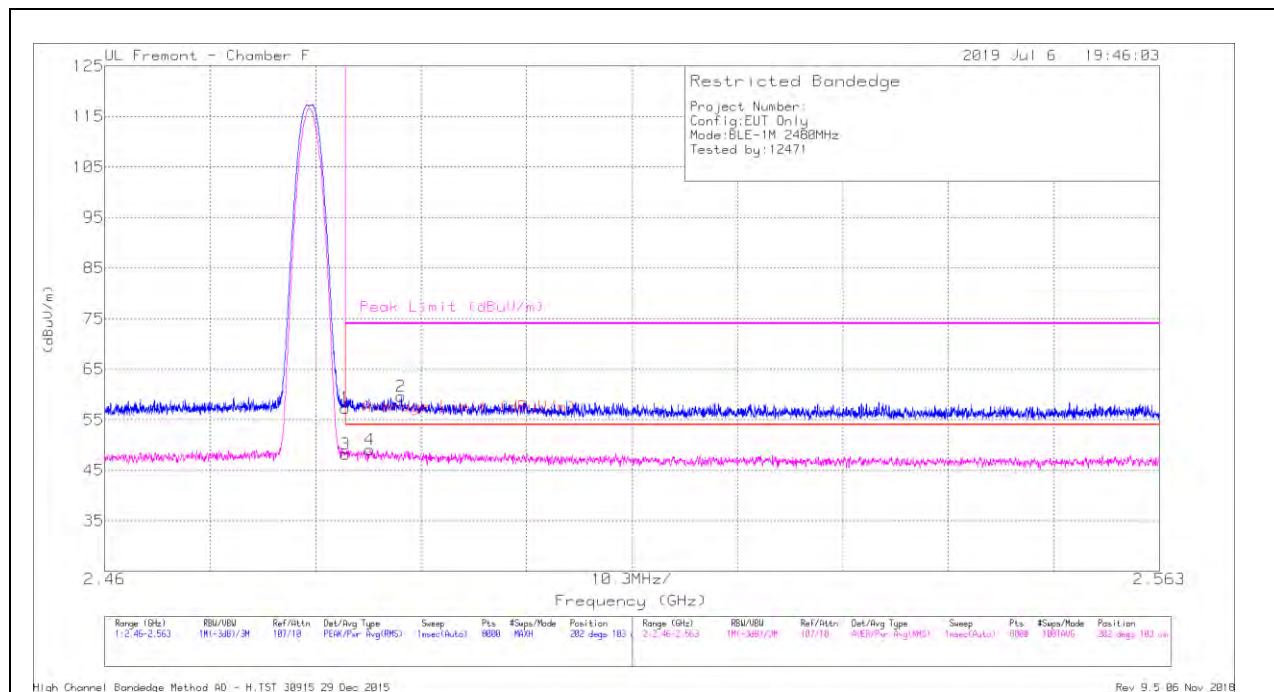
RMS - RMS detection

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/Cbl/Ftr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.61	Pk	32.4	-14.7	57.31	-	-	74	-16.69	202	103	H
2	* 2.489	41.81	Pk	32.3	-14.5	59.61	-	-	74	-14.39	202	103	H
3	* 2.484	30.51	RMS	32.4	-14.7	48.21	54	-5.79	-	-	202	103	H
4	* 2.486	31.2	RMS	32.4	-14.6	49	54	-5	-	-	202	103	H

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

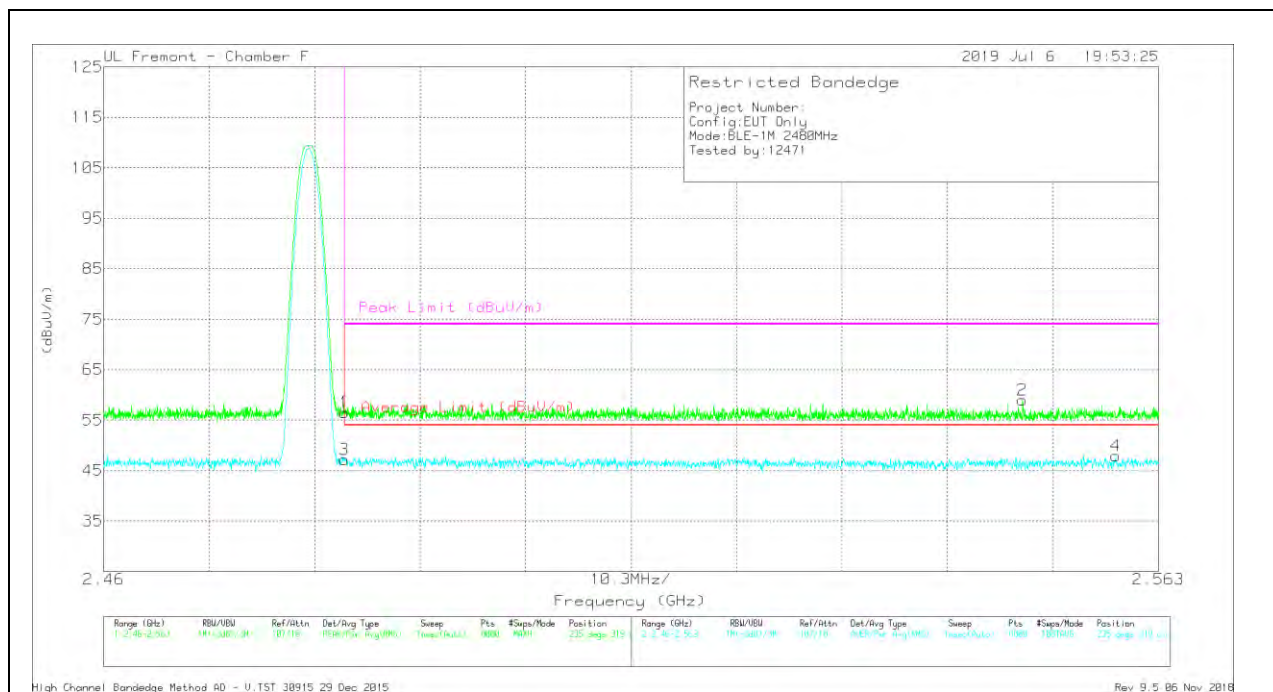
Pk - Peak detector

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)	Ampl/Cbl/Ftr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.79	Pk	32.4	-14.7	56.49	-	-	74	-17.51	235	319	V
2	2.55	41.42	Pk	32.3	-14.7	59.02	-	-	74	-14.98	235	319	V
3	* 2.484	29.46	RMS	32.4	-14.7	47.16	54	-6.84	-	-	235	319	V
4	2.559	30.08	RMS	32.4	-14.5	47.98	54	-6.02	-	-	235	319	V

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

Pk - Peak detector

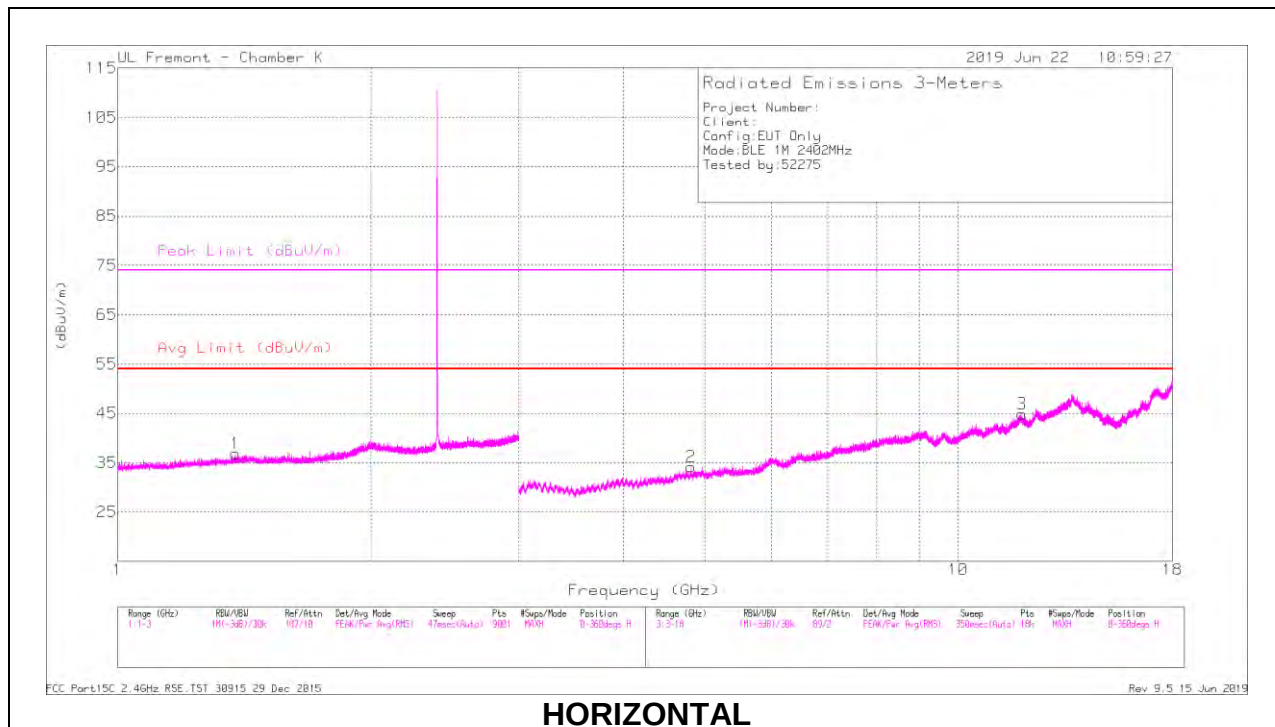
RMS - RMS detection

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

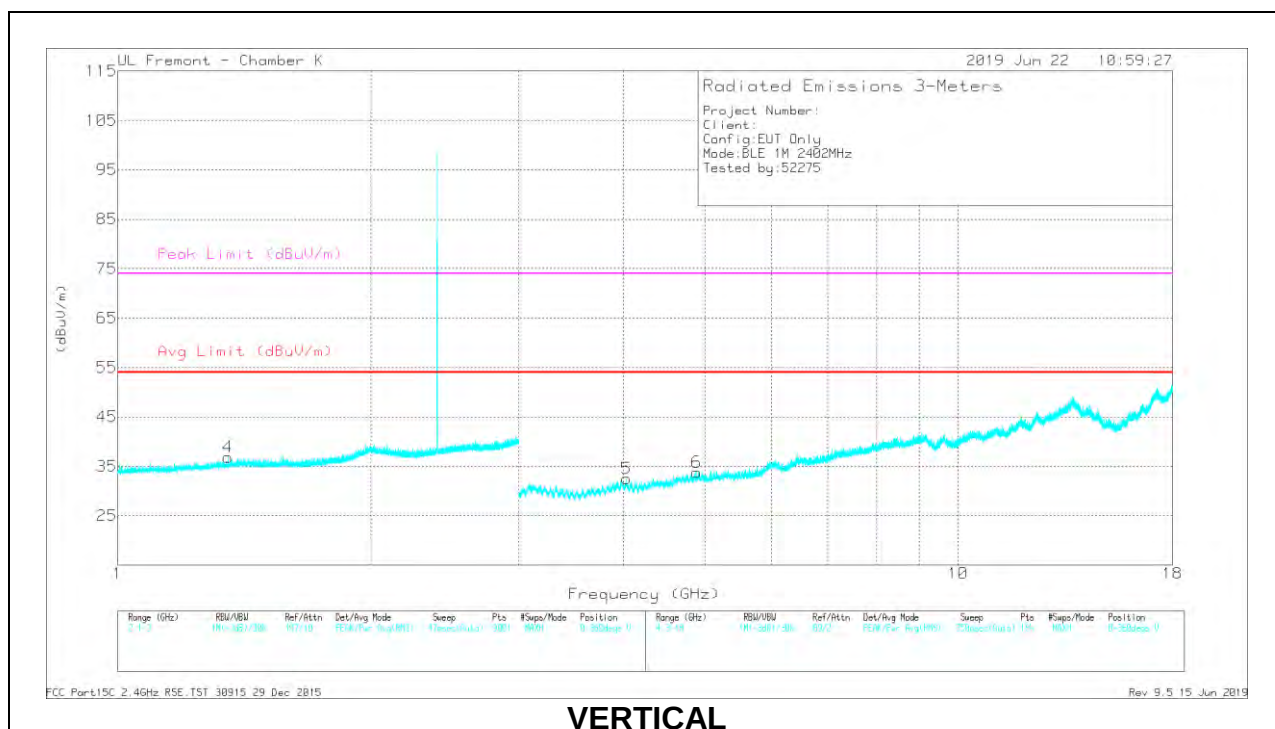
Rev 9.5 06 Nov 2018

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Markers	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	* 1.38132	43.43	PK2	24.7	-23.8	44.33	-	-	74	-29.67	329	210	H
	* 1.37983	32.85	MAv1	24.7	-23.8	33.75	54	-20.25	-	-	329	210	H
4	* 1.35329	43.19	PK2	24.5	-23.8	43.89	-	-	74	-30.11	277	134	V
	* 1.35229	33.46	MAv1	24.5	-23.9	34.06	54	-19.94	-	-	277	134	V
2	* 4.81537	39.66	PK2	33	-30.4	42.26	-	-	74	-31.74	19	211	H
	* 4.81518	28.34	MAv1	33	-30.4	30.94	54	-23.06	-	-	19	211	H
3	* 11.91376	31.79	PK2	40.1	-20.3	51.59	-	-	74	-22.41	55	110	H
	* 11.91583	22.23	MAv1	40.1	-20.3	42.03	54	-11.97	-	-	55	110	H
5	* 4.03251	39.8	PK2	31.4	-31.2	40	-	-	74	-34	115	244	V
	* 4.03139	29.35	MAv1	31.4	-31.3	29.45	54	-24.55	-	-	115	244	V
6	* 4.89125	38.95	PK2	33.2	-30.4	41.75	-	-	74	-32.25	90	321	V
	* 4.88928	28.47	MAv1	33.2	-30.4	31.27	54	-22.73	-	-	90	321	V

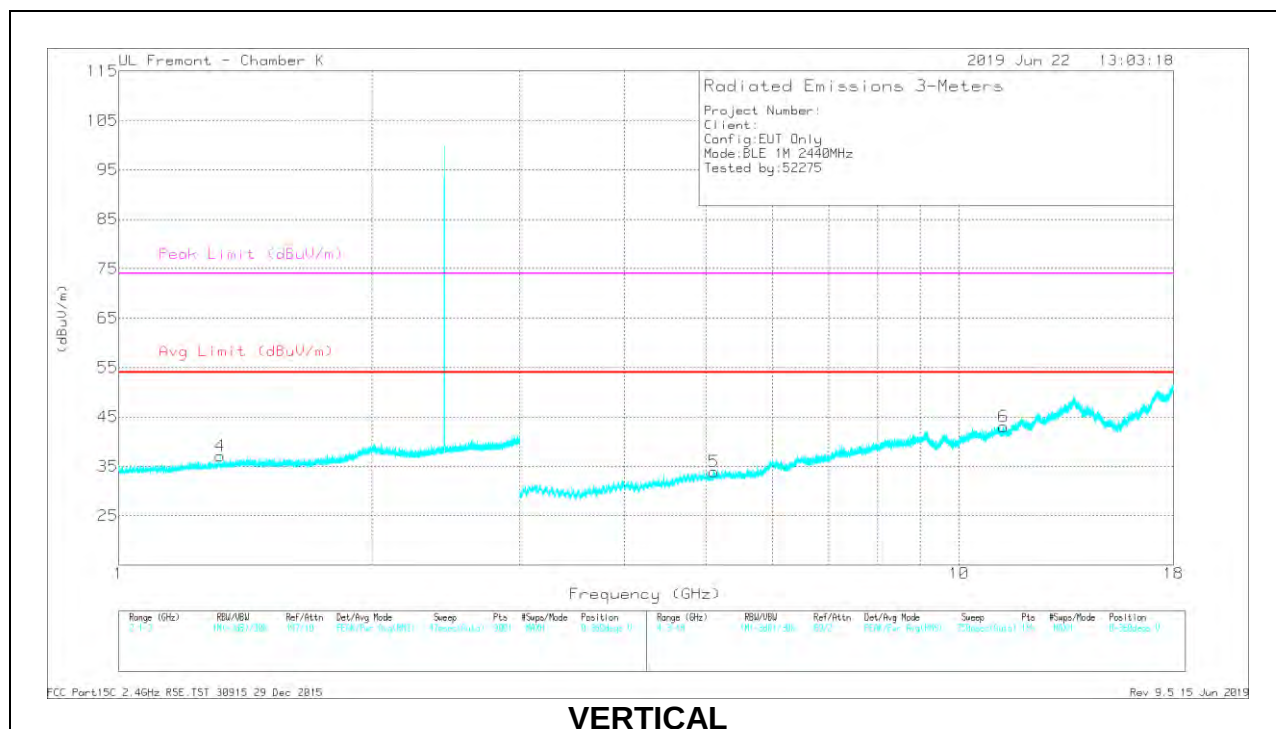
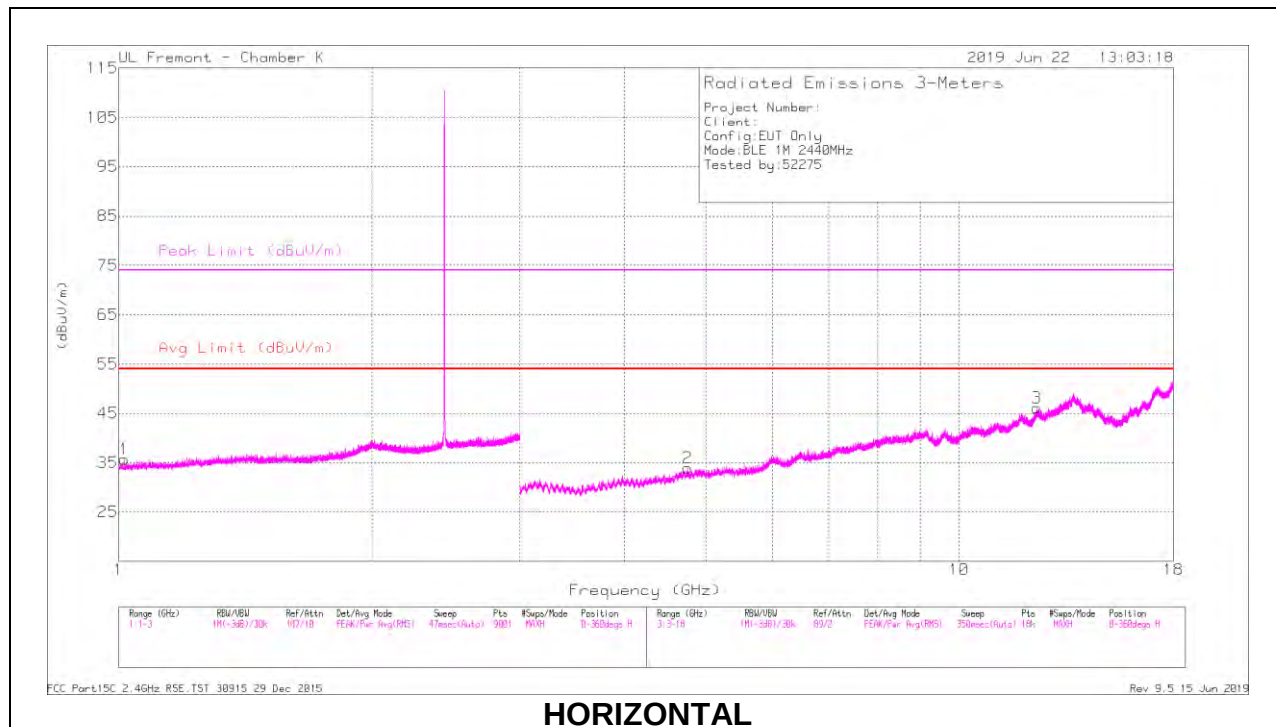
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



RADIATED EMISSIONS

Markers	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	* 1.01356	42	PK2	23.5	-23.8	41.7	-	-	74	-32.3	15	229	H
	* 1.0141	32.37	MAv1	23.5	-23.8	32.07	54	-21.93	-	-	15	229	H
4	* 1.32099	43.27	PK2	24.5	-23.9	43.87	-	-	74	-30.13	189	197	V
	* 1.32135	32.77	MAv1	24.5	-23.9	33.37	54	-20.63	-	-	189	197	V
2	* 4.75772	38.45	PK2	32.8	-30.2	41.05	-	-	74	-32.95	250	321	H
	* 4.76038	28.13	MAv1	32.8	-30.2	30.73	54	-23.27	-	-	250	321	H
3	* 12.36936	32.32	PK2	40.8	-20.1	53.02	-	-	74	-20.98	180	114	H
	* 12.37017	22.12	MAv1	40.8	-20.1	42.82	54	-11.18	-	-	180	114	H
5	* 5.1133	38.51	PK2	33.3	-29.9	41.91	-	-	74	-32.09	200	264	V
	* 5.116	28.4	MAv1	33.3	-29.9	31.8	54	-22.2	-	-	200	264	V
6	* 11.30714	32.56	PK2	39.2	-21	50.76	-	-	74	-23.24	319	198	V
	* 11.3083	22.06	MAv1	39.2	-21	40.26	54	-13.74	-	-	319	198	V

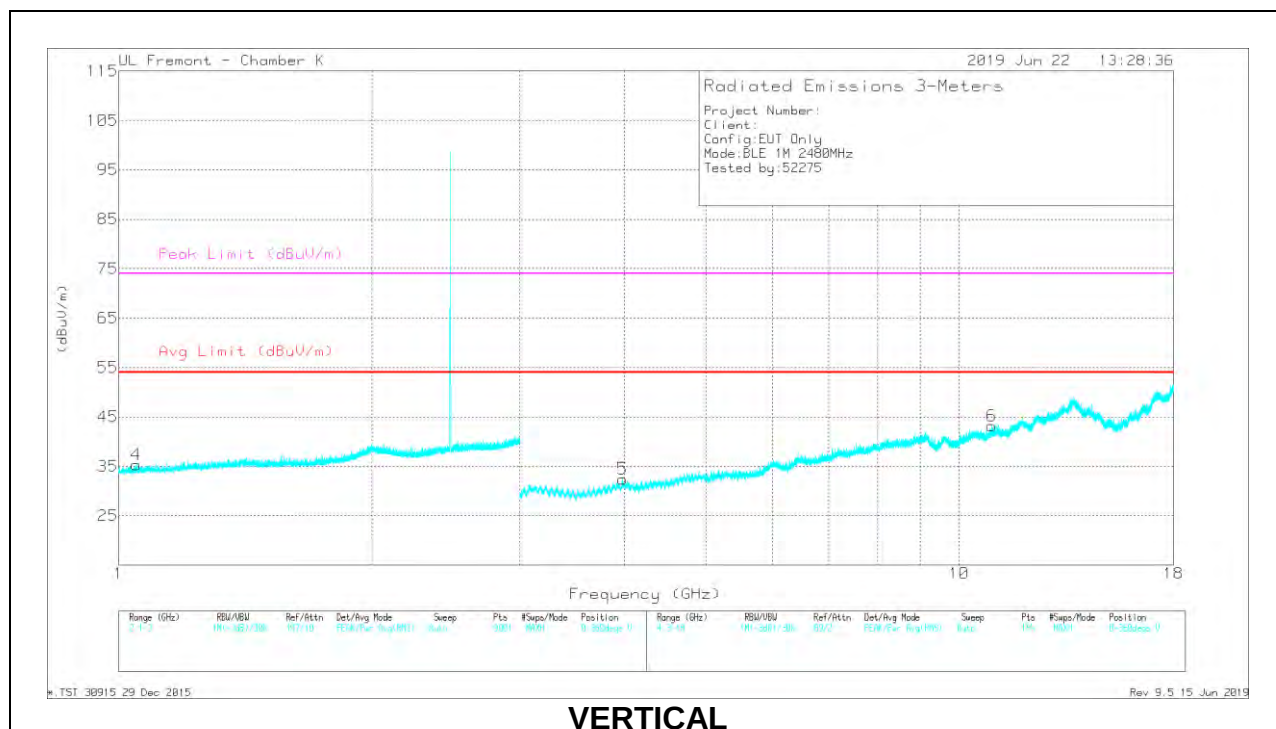
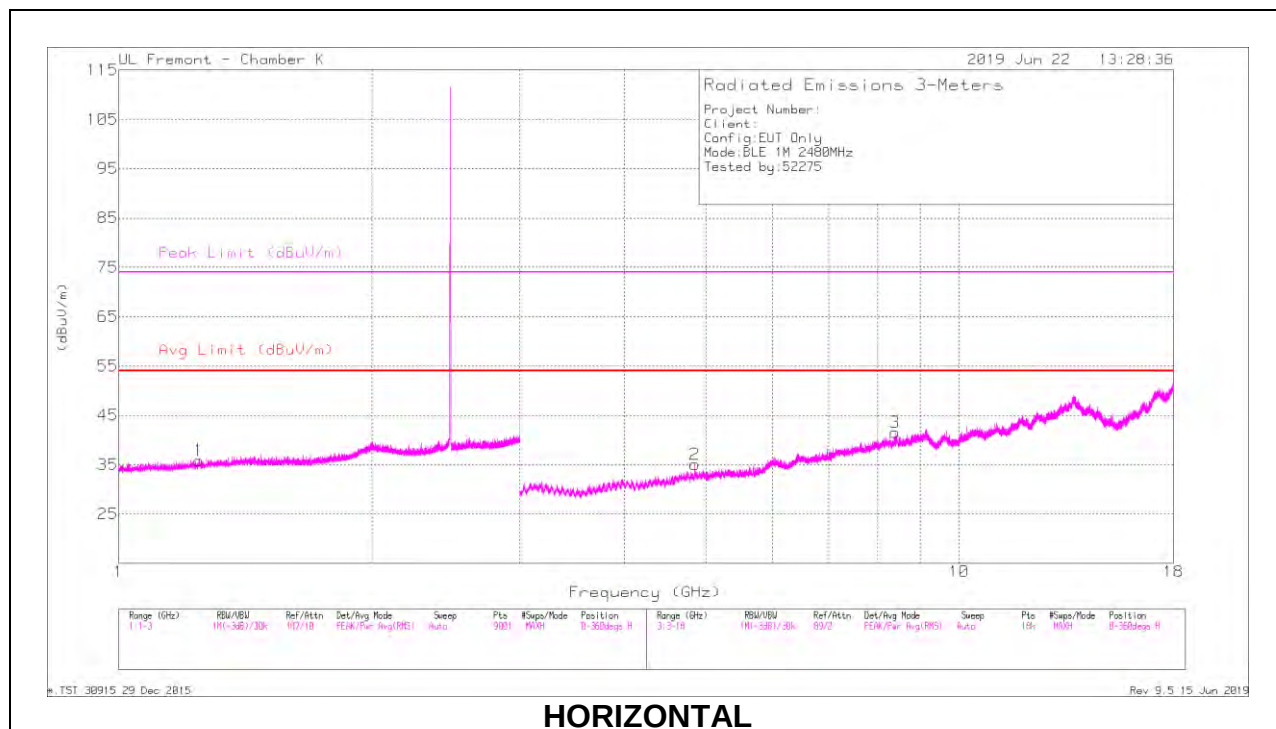
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



RADIATED EMISSIONS

Markers	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	* 1.24758	42.92	PK2	24.3	-23.9	43.32	-	-	74	-30.68	300	229	H
	* 1.2469	32.93	MAv1	24.3	-23.9	33.33	54	-20.67	-	-	300	229	H
4	* 1.04651	42.83	PK2	23.6	-23.7	42.73	-	-	74	-31.27	197	368	V
	* 1.04622	33.32	MAv1	23.6	-23.7	33.22	54	-20.78	-	-	197	368	V
2	* 4.85025	38.17	PK2	33.2	-30.4	40.97	-	-	74	-33.03	344	101	H
	* 4.85197	27.91	MAv1	33.2	-30.5	30.61	54	-23.39	-	-	344	101	H
3	* 8.39787	34.15	PK2	38.3	-24.3	48.15	-	-	74	-25.85	300	170	H
	* 8.39894	23.86	MAv1	38.3	-24.3	37.86	54	-16.14	-	-	300	170	H
5	* 3.97556	39.47	PK2	31.5	-31.5	39.47	-	-	74	-34.53	178	178	V
	* 3.97955	29.32	MAv1	31.5	-31.6	29.22	54	-24.78	-	-	178	178	V
6	* 10.94662	33.1	PK2	39.4	-21.7	50.8	-	-	74	-23.2	178	255	V
	* 10.94345	21.69	MAv1	39.4	-21.7	39.39	54	-14.61	-	-	178	255	V

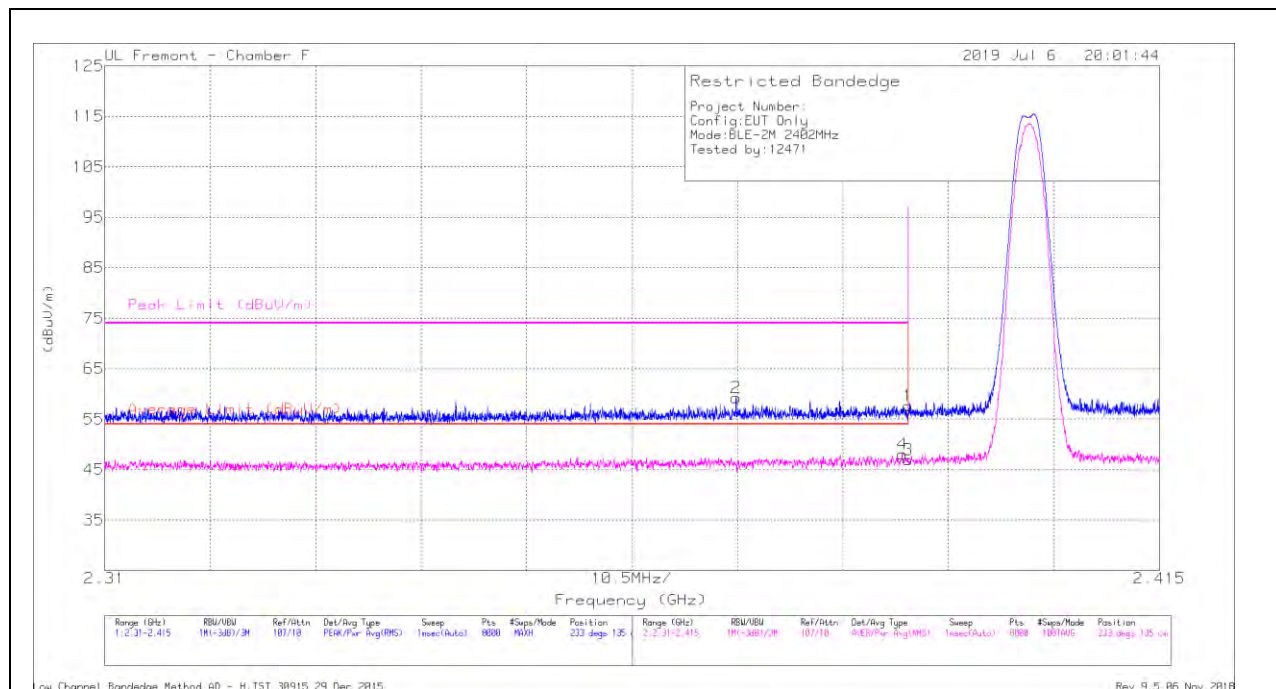
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

*.TST 30915 29 Dec 2015
Rev 9.5 15 Jun 2019

9.2.6 BEAMFORMING, HIGH POWER BLE (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dBm)	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	40.12	Pk	32	-14.5	57.62	-	-	74	-16.38	233	135	H
2	* 2.373	41.75	Pk	31.9	-14.4	59.25	-	-	74	-14.75	233	135	H
3	* 2.39	29.45	RMS	32	-14.5	46.95	54	-7.05	-	-	233	135	H
4	* 2.389	30.55	RMS	32	-14.5	48.05	54	-5.95	-	-	233	135	H

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

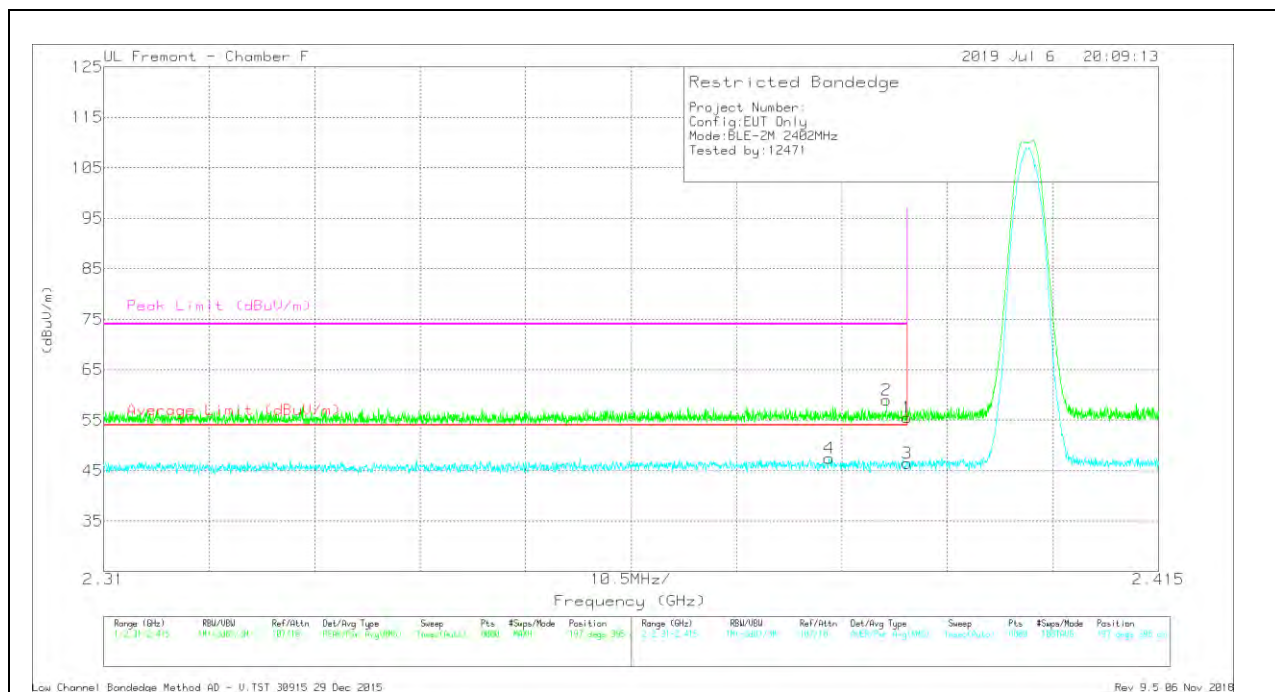
Pk - Peak detector

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)	Ampl/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	38.04	Pk	32	-14.5	55.54	-	-	74	-18.46	197	395	V
2	* 2.388	41.59	Pk	31.9	-14.5	58.99	-	-	74	-15.01	197	395	V
3	* 2.39	28.89	RMS	32	-14.5	46.39	54	-7.61	-	-	197	395	V
4	* 2.382	30.02	RMS	31.9	-14.5	47.42	54	-6.58	-	-	197	395	V

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

Pk - Peak detector

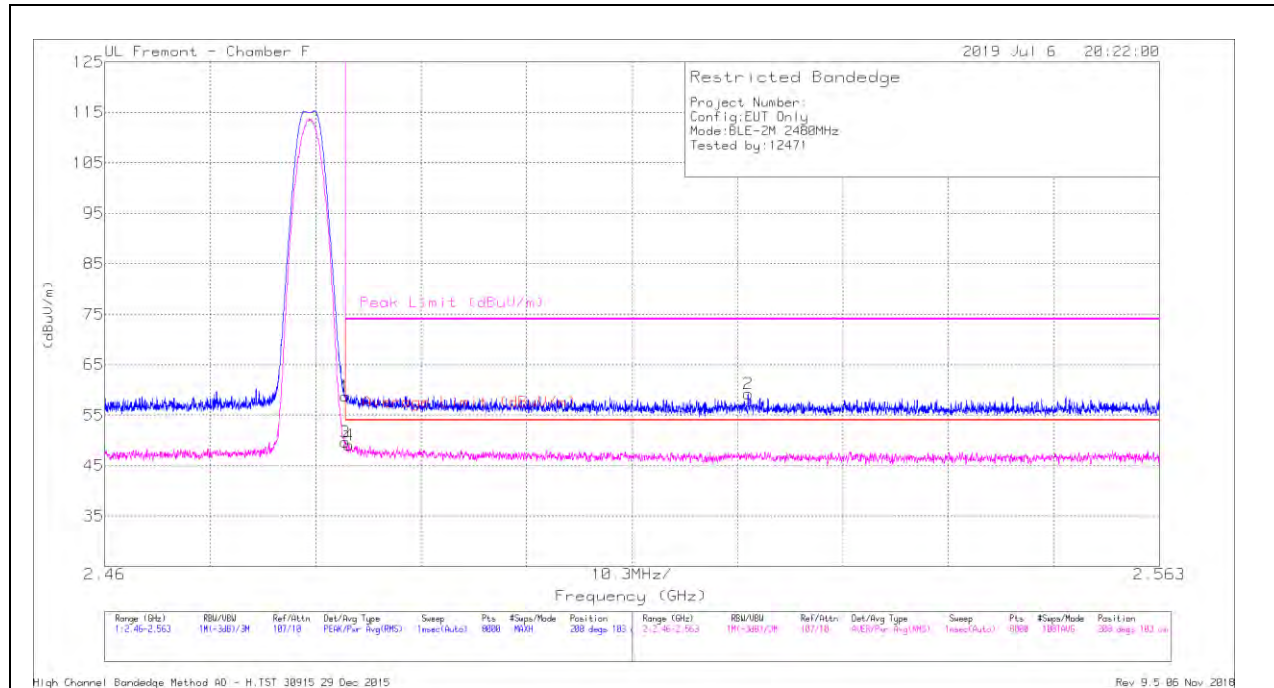
RMS - RMS detection

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

Rev 9.5 06 Nov 2018

BANDEGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dBm)	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	41.03	Pk	32.4	-14.7	58.73	-	-	74	-15.27	208	103	H
2	2.523	41.4	Pk	32.3	-14.5	59.2	-	-	74	-14.8	208	103	H
3	* 2.484	31.97	RMS	32.4	-14.7	49.67	54	-4.33	-	-	208	103	H
4	* 2.484	31.32	RMS	32.4	-14.7	49.02	54	-4.98	-	-	208	103	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

UL Fremont - Chamber F

2019 Jul 6 20:27:37

Restricted Bandedge

Project Number:
Config: EUT Only
Mode: BLE-ZH 2458MHz
Tested by: 12471

Peak Limit (dBu/m)

Reference Level (dBu/m)

dBu/m

Frequency (GHz)

10.3MHz/

2.46 2.563

Range (GHz)	RSU/BSU	Ref/Attn	Det/Avg Type	Sweep	Pts	#Seps/Mode	Position	Range (GHz)	RSU/BSU	Ref/Attn	Det/Avg Type	Sweep	Pts	#Seps/Mode	Position
1.2746-2.563	RM-3307-1H	01716	RES-MV-Freq(MG)	Trace(Auto)	1000	Auto	240 degs 307	1.2746-2.563	RM-3307-1H	01716	RES-MV-Freq(MG)	Trace(Auto)	1000	Auto	240 degs 307

High Channel Bandedge Method A0 - U.15T 38915 29 Dec 2015

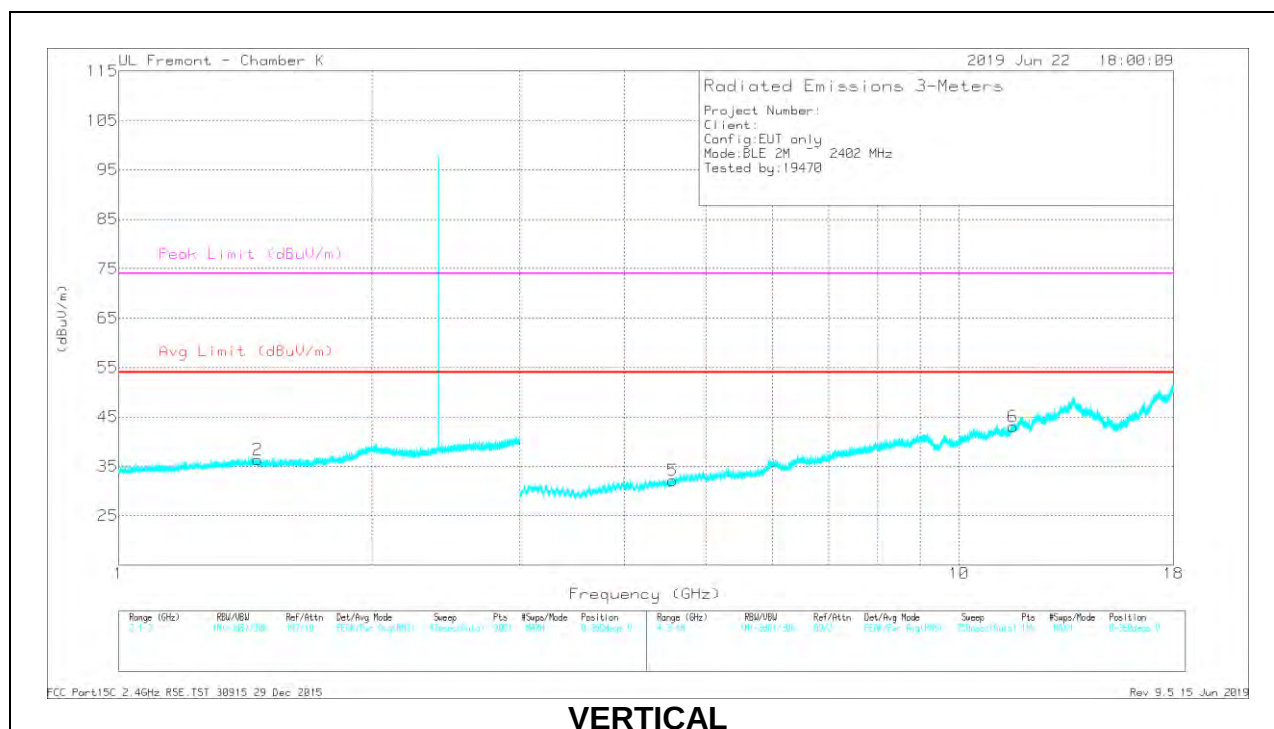
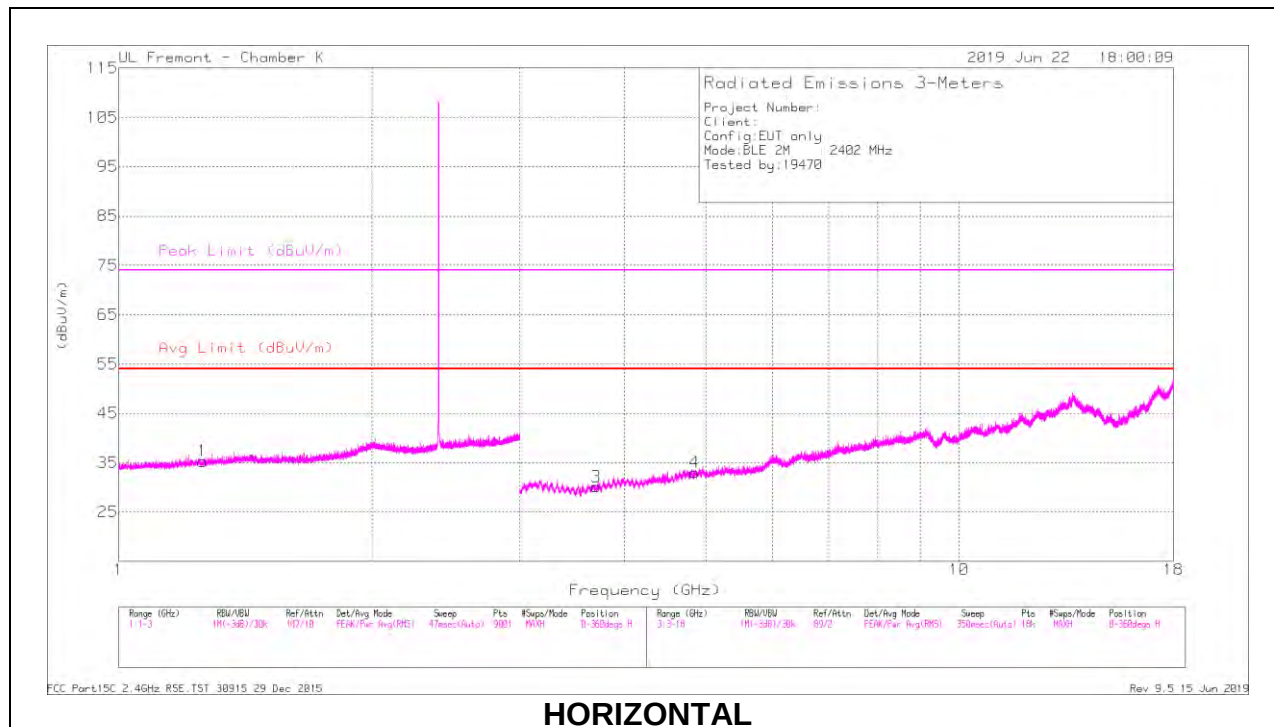
Rev 9.5 05 Nov 2018

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	* 2.484	38.45	Pk	32.4	-14.7	56.15	-	-	74	-17.85	240	367	V
2	2.524	40.38	Pk	32.4	-14.5	58.28	-	-	74	-15.72	240	367	V
3	* 2.484	29.91	RMS	32.4	-14.7	47.61	54	-6.39	-	-	240	367	V
4	2.56	30.33	RMS	32.4	-14.6	48.13	54	-5.87	-	-	240	367	V

High Channel Bandedge Method AD - V.TST 30915 29 Dec 2015
Rev 9.5 06 Nov 2018

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



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	* 1.25697	43.68	PK2	24.4	-24	44.08	-	-	74	-29.92	170	132	H
	* 1.25959	33.04	MAv1	24.4	-23.9	33.54	54	-20.46	-	-	170	132	H
2	* 1.46145	43.98	PK2	24.6	-23.9	44.68	-	-	74	-29.32	139	155	V
	* 1.4629	32.8	MAv1	24.6	-23.9	33.5	54	-20.5	-	-	139	155	V
3	* 3.6991	39.9	PK2	30.3	-31.8	38.4	-	-	74	-35.6	139	155	H
	* 3.69637	29.35	MAv1	30.3	-31.9	27.75	54	-26.25	-	-	139	155	H
4	* 4.8494	38.72	PK2	33.2	-30.4	41.52	-	-	74	-32.48	139	155	H
	* 4.84915	28.38	MAv1	33.2	-30.4	31.18	54	-22.82	-	-	139	155	H
5	* 4.55917	39.74	PK2	32.1	-30.9	40.94	-	-	74	-33.06	139	155	V
	* 4.56102	29.24	MAv1	32.1	-30.9	30.44	54	-23.56	-	-	139	155	V
6	* 11.5921	32.36	PK2	39.6	-20.6	51.36	-	-	74	-22.64	139	155	V
	* 11.5917	21.79	MAv1	39.6	-20.6	40.79	54	-13.21	-	-	139	155	V

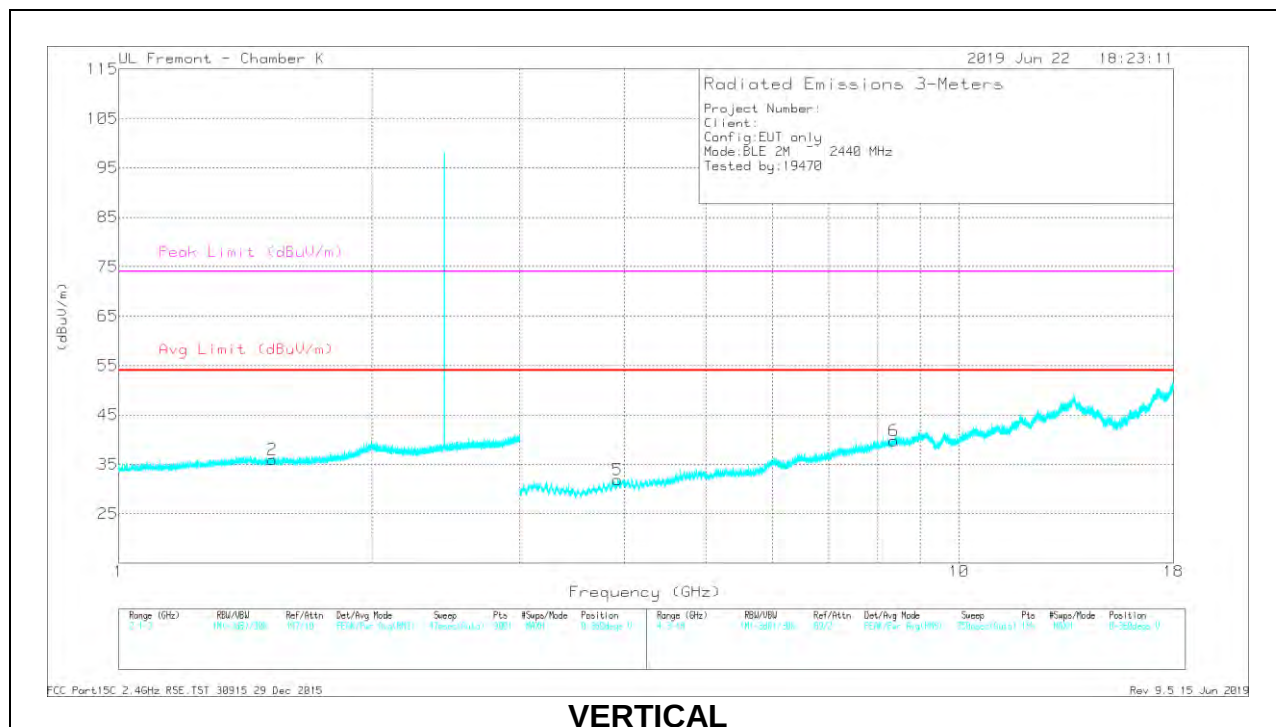
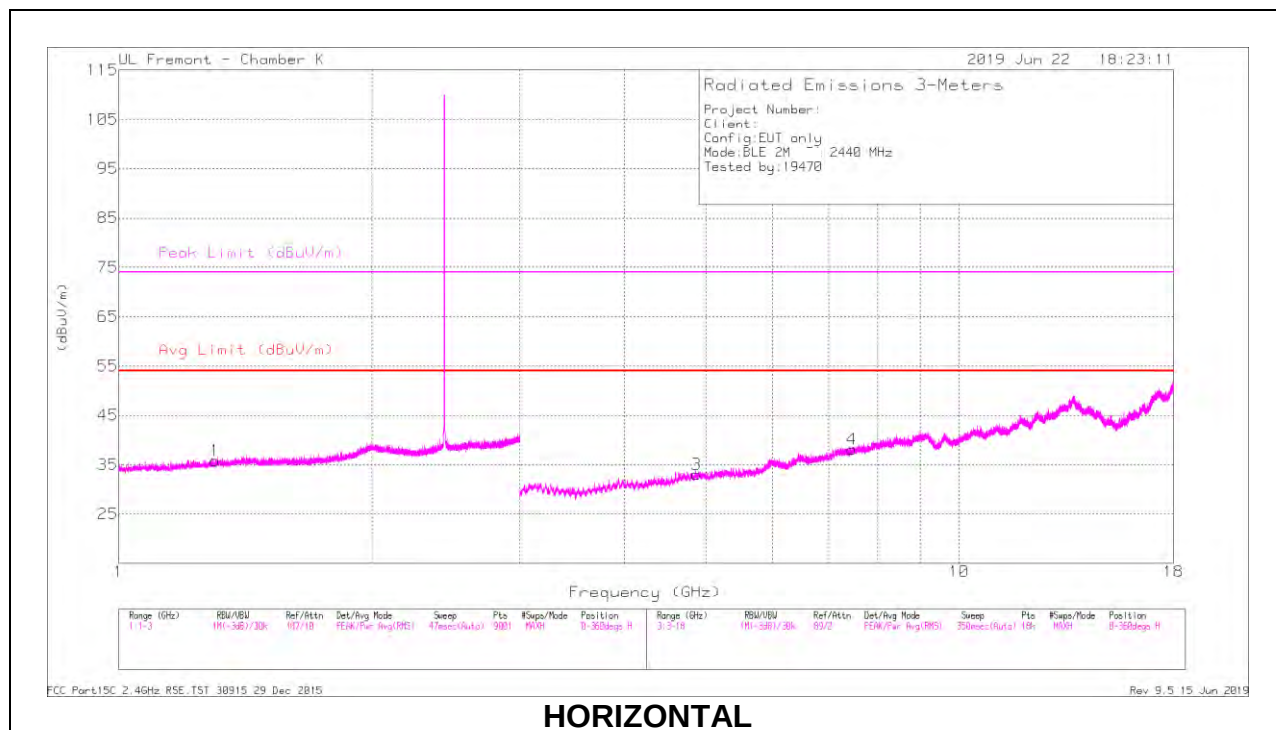
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



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	* 1.30203	43.04	PK2	24.5	-23.9	43.64	-	-	74	-30.36	0	101	H
	* 1.30067	32.46	MAv1	24.5	-23.9	33.06	54	-20.94	-	-	0	101	H
2	* 1.52164	43.21	PK2	24.6	-23.8	44.01	-	-	74	-29.99	0	101	V
	* 1.52044	33.05	MAv1	24.6	-23.8	33.85	54	-20.15	-	-	0	101	V
3	* 4.87212	38.66	PK2	33.2	-30.5	41.36	-	-	74	-32.64	0	101	H
	* 4.87111	28.55	MAv1	33.2	-30.5	31.25	54	-22.75	-	-	0	101	H
4	* 7.45614	34.89	PK2	37.1	-26.1	45.89	-	-	74	-28.11	0	101	H
	* 7.45482	25.1	MAv1	37.1	-26.1	36.1	54	-17.9	-	-	0	101	H
5	* 3.9268	39.48	PK2	31.4	-31.7	39.18	-	-	74	-34.82	0	101	V
	* 3.92649	30.12	MAv1	31.4	-31.7	29.82	54	-24.18	-	-	0	101	V
6	* 8.36523	33.66	PK2	38.2	-24.3	47.56	-	-	74	-26.44	0	101	V
	* 8.36722	23.66	MAv1	38.2	-24.3	37.56	54	-16.44	-	-	0	101	V

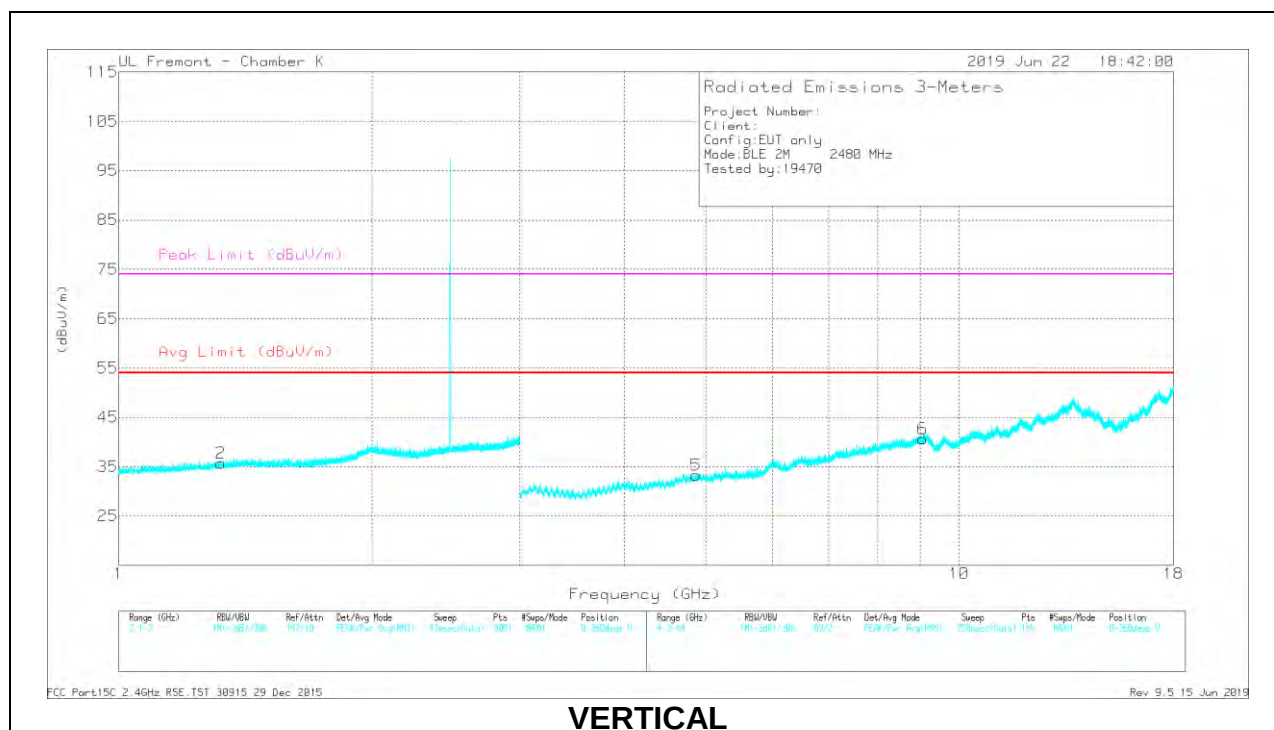
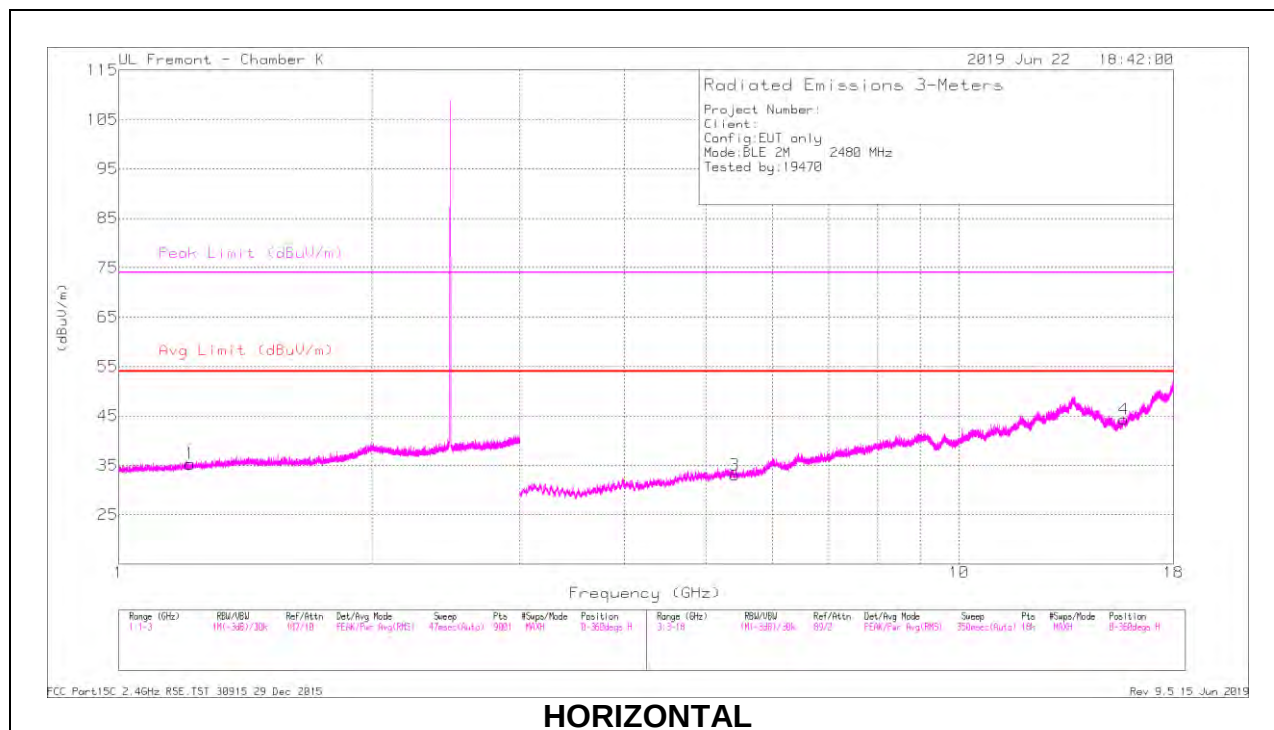
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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 15 Jun 2019

HIGH CHANNEL RESULTS



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	* 1.21638	43.47	PK2	24.2	-23.9	43.77	-	-	74	-30.23	0	100	H
	* 1.21433	32.55	MAv1	24.2	-23.9	32.85	54	-21.15	-	-	0	100	H
2	* 1.32176	43.27	PK2	24.5	-23.9	43.87	-	-	74	-30.13	0	100	V
	* 1.32465	33.28	MAv1	24.5	-23.9	33.88	54	-20.12	-	-	0	100	V
3	* 5.41122	37.95	PK2	33.5	-29.4	42.05	-	-	74	-31.95	0	100	H
	* 5.41034	26.62	MAv1	33.5	-29.4	30.72	54	-23.28	-	-	0	100	H
4	* 15.7115	30.77	PK2	38.8	-17.4	52.17	-	-	74	-21.83	0	100	H
	* 15.7121	20.69	MAv1	38.9	-17.3	42.29	54	-11.71	-	-	0	100	H
5	* 4.86797	38.77	PK2	33.2	-30.6	41.37	-	-	74	-32.63	0	100	V
	* 4.86605	28.94	MAv1	33.2	-30.6	31.54	54	-22.46	-	-	0	100	V
6	* 9.05332	34.25	PK2	38.6	-23.7	49.15	-	-	74	-24.85	0	100	V
	* 9.05232	23.93	MAv1	38.6	-23.7	38.83	54	-15.17	-	-	0	100	V

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

PK2 - KDB558074 Method: Maximum Peak

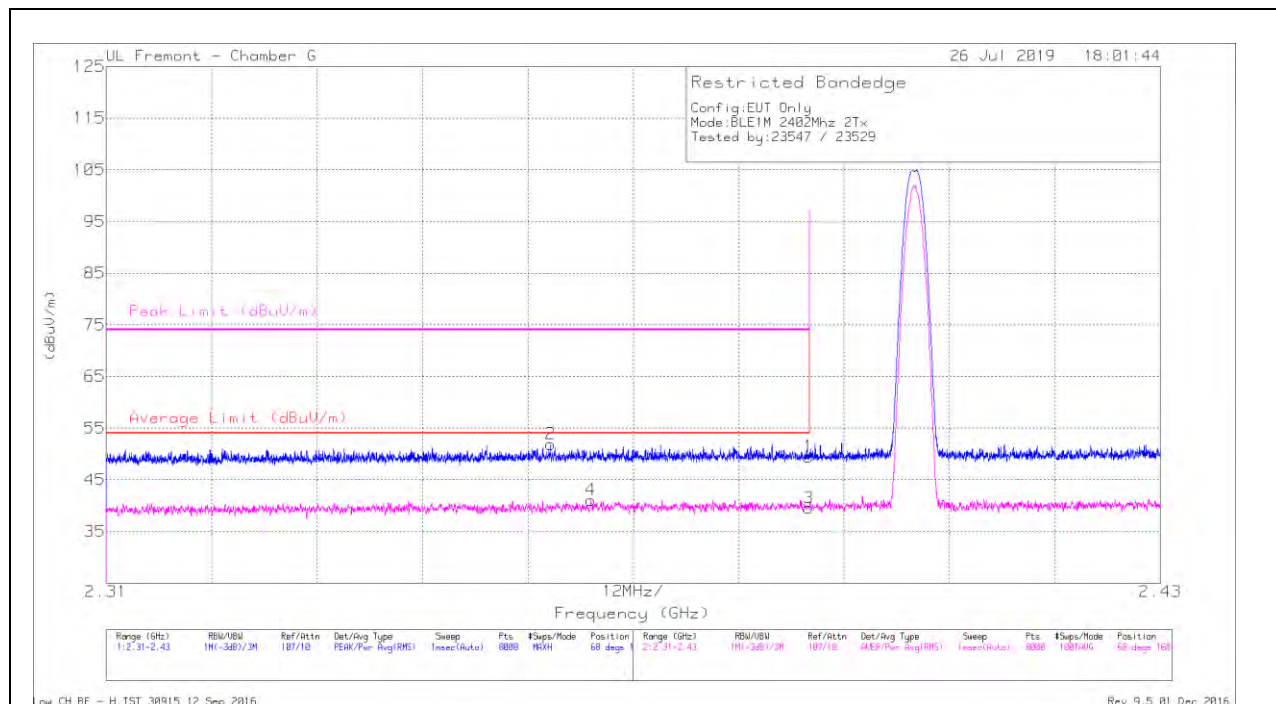
MAv1 - KDB558074 Option 1 Maximum RMS Average

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

9.2.7 BEAMFORMING, LOW POWER BLE (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dBm)	Amp/CbI/Fit/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.361	42.32	Pk	31.8	-22.2	51.92	-	-	74	-22.08	68	168	H
4	* 2.365	31.47	RMS	31.8	-22.2	41.07	54	-12.93	-	-	68	168	H
1	* 2.39	39.77	Pk	31.9	-22.2	49.47	-	-	74	-24.53	68	168	H
3	* 2.39	29.86	RMS	31.9	-22.2	39.56	54	-14.44	-	-	68	168	H

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

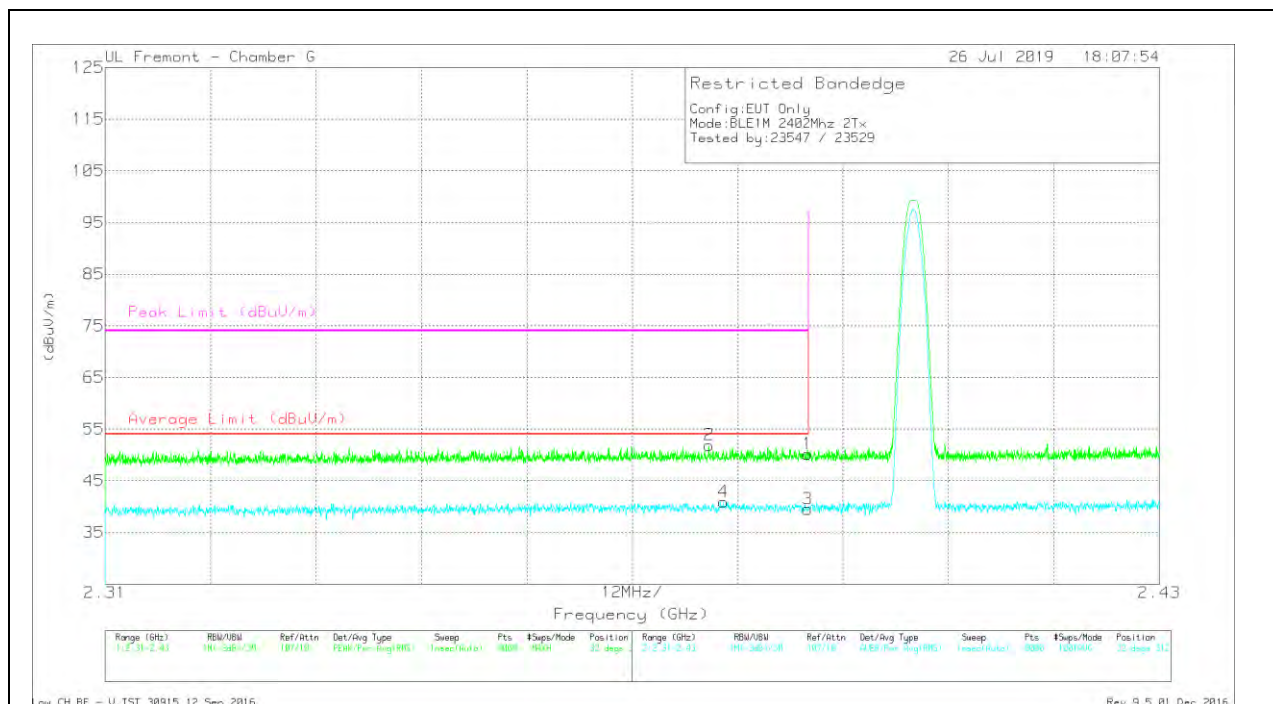
Pk - Peak detector

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/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	* 2.379	42.22	Pk	31.9	-22.2	51.92	-	-	74	-22.08	32	312	V
4	* 2.38	31.22	RMS	31.9	-22.2	40.92	54	-13.08	-	-	32	312	V
1	* 2.39	40.48	Pk	31.9	-22.2	50.18	-	-	74	-23.82	32	312	V
3	* 2.39	29.82	RMS	31.9	-22.2	39.52	54	-14.48	-	-	32	312	V

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

Pk - Peak detector

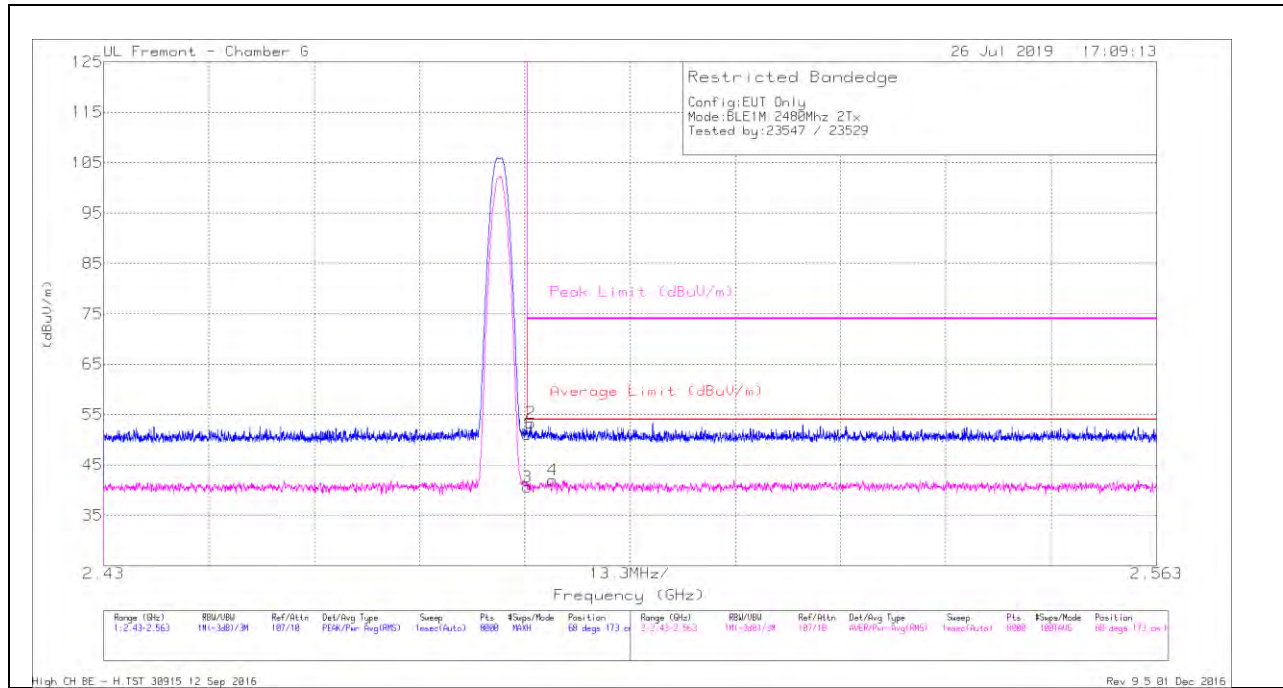
RMS - RMS detection

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 (dBm)	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	40.61	Pk	32.5	-22.1	51.01	-	-	74	-22.99	68	173	H
2	* 2.484	42.93	Pk	32.5	-22.1	53.33	-	-	74	-20.67	68	173	H
3	* 2.484	30.17	RMS	32.5	-22.1	40.57	54	-13.43	-	-	68	173	H
4	* 2.487	31.64	RMS	32.5	-22.2	41.94	54	-12.06	-	-	68	173	H

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

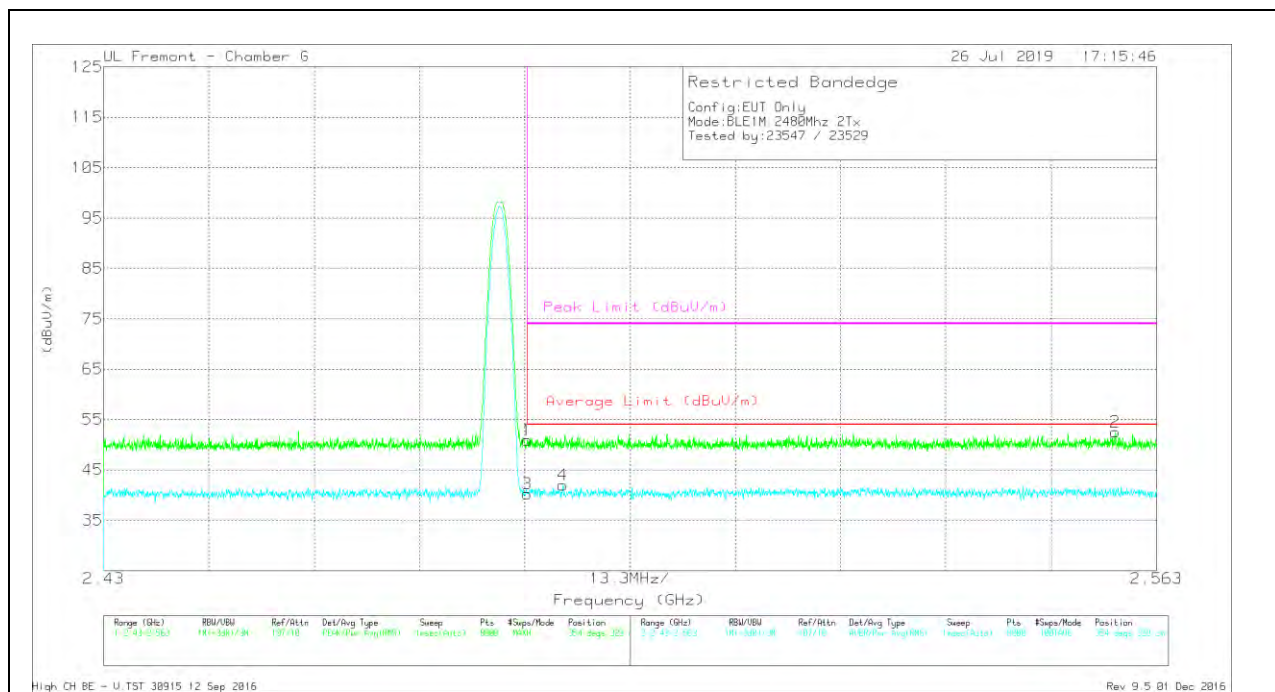
Pk - Peak detector

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 (dBm)	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	40.46	Pk	32.5	-22.1	50.86	-	-	74	-23.14	354	329	V
3	* 2.484	29.86	RMS	32.5	-22.1	40.26	54	-13.74	-	-	354	329	V
4	* 2.488	31.69	RMS	32.5	-22.2	41.99	54	-12.01	-	-	354	329	V
2	2.558	42.26	PK	32.4	-22.1	52.56	-	-	74	-21.44	354	329	V

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

Pk - Peak detector

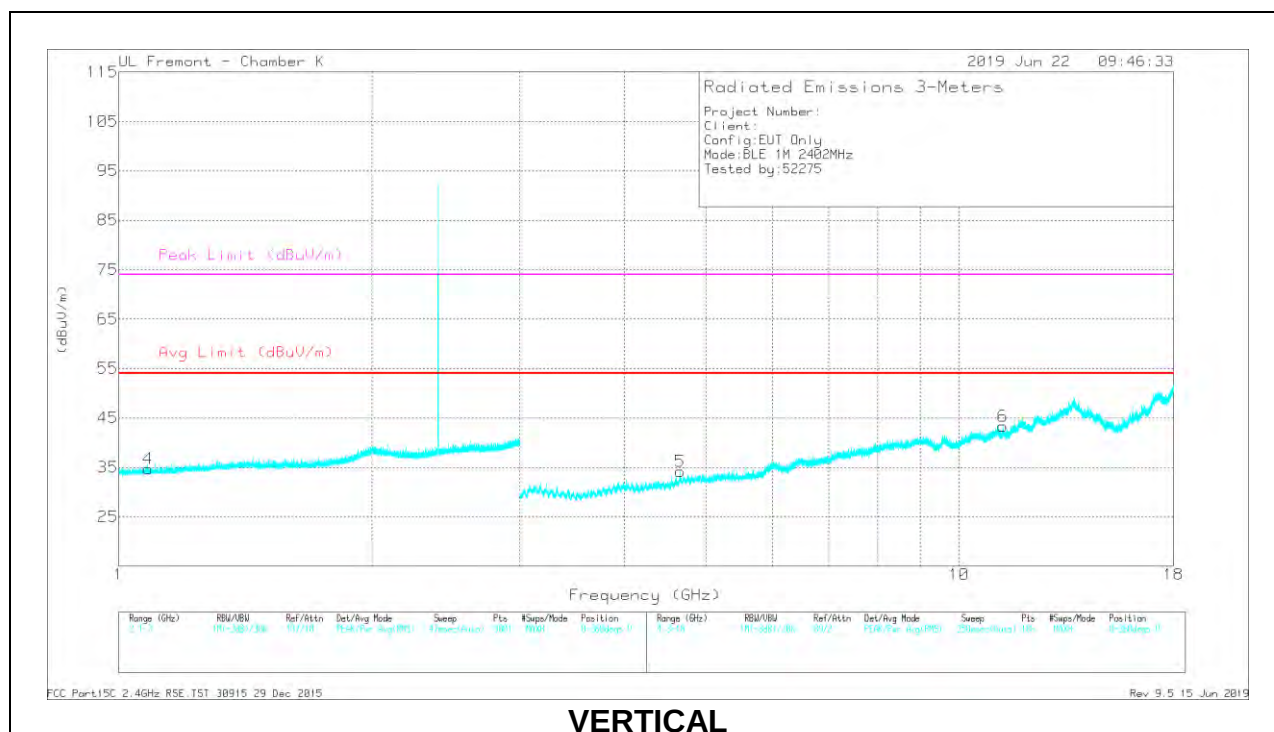
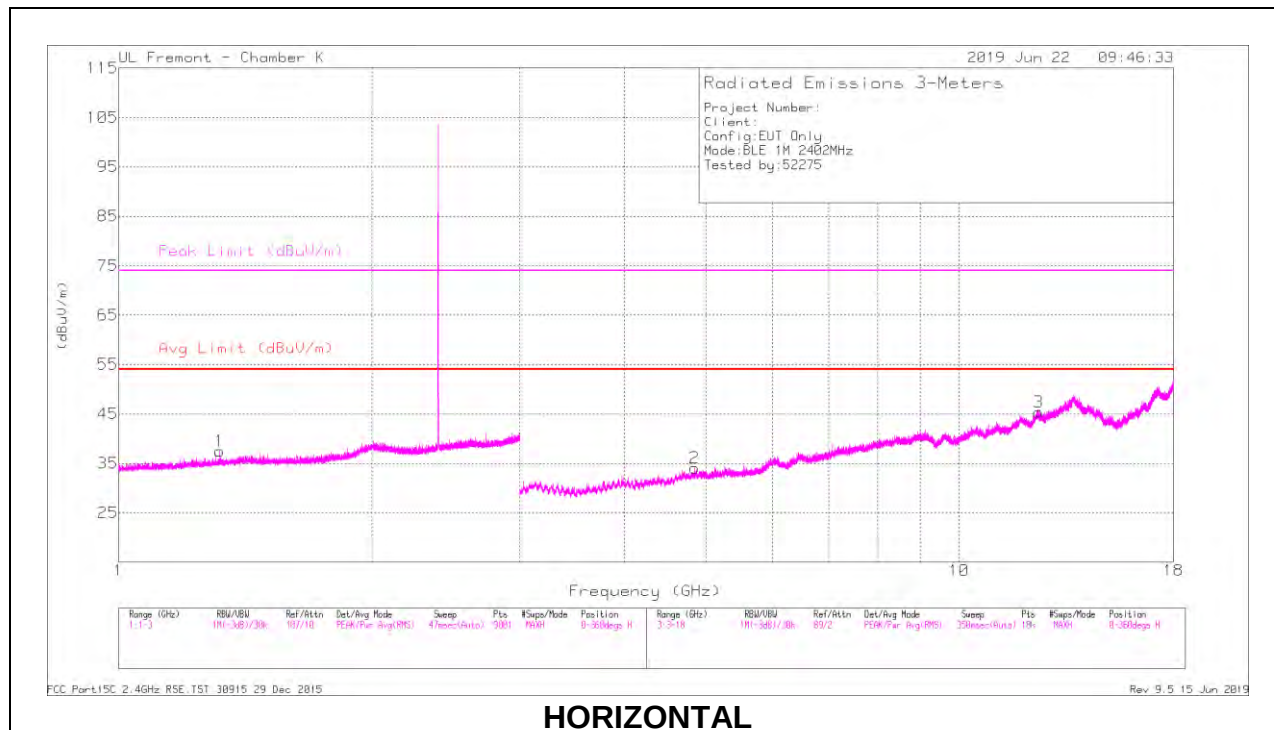
RMS - RMS detection

High CH BE - V.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Markers	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	* 1.31802	43.68	PK2	24.5	-23.9	44.28	-	-	74	-29.72	31	220	H
	* 1.31995	33.45	MAv1	24.5	-23.9	34.05	54	-19.95	-	-	31	220	H
4	* 1.08445	42.56	PK2	23.7	-23.7	42.56	-	-	74	-31.44	204	151	V
	* 1.08384	32.46	MAv1	23.7	-23.8	32.36	54	-21.64	-	-	204	151	V
2	* 4.84727	38.35	PK2	33.2	-30.3	41.25	-	-	74	-32.75	211	240	H
	* 4.85065	28.3	MAv1	33.2	-30.4	31.1	54	-22.9	-	-	211	240	H
3	* 12.44678	31.9	PK2	40.9	-20.1	52.7	-	-	74	-21.3	249	167	H
	* 12.44462	21.84	MAv1	40.9	-20.1	42.64	54	-11.36	-	-	249	167	H
5	* 4.65759	39.42	PK2	32.6	-30.8	41.22	-	-	74	-32.78	301	102	V
	* 4.65633	29.32	MAv1	32.6	-30.8	31.12	54	-22.88	-	-	301	102	V
6	* 11.29236	33.7	PK2	39.2	-21.1	51.8	-	-	74	-22.2	331	300	V
	* 11.28923	22.45	MAv1	39.2	-21.1	40.55	54	-13.45	-	-	331	300	V

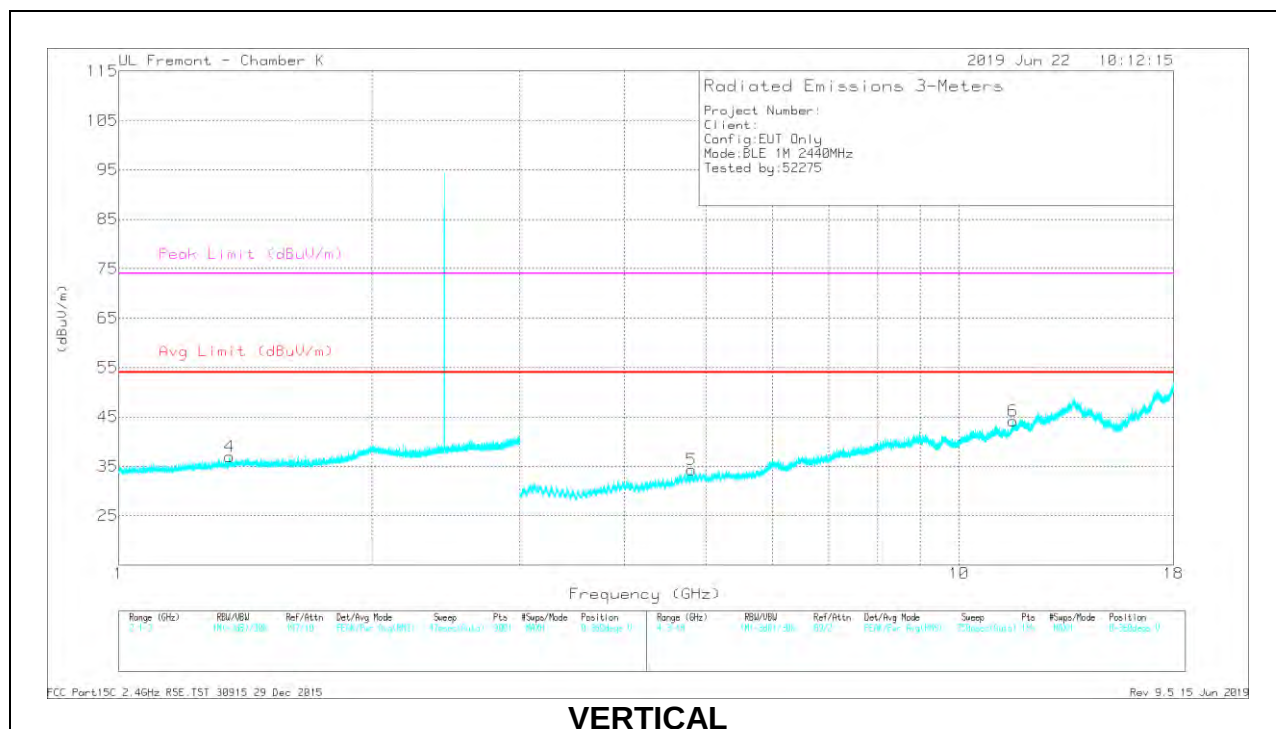
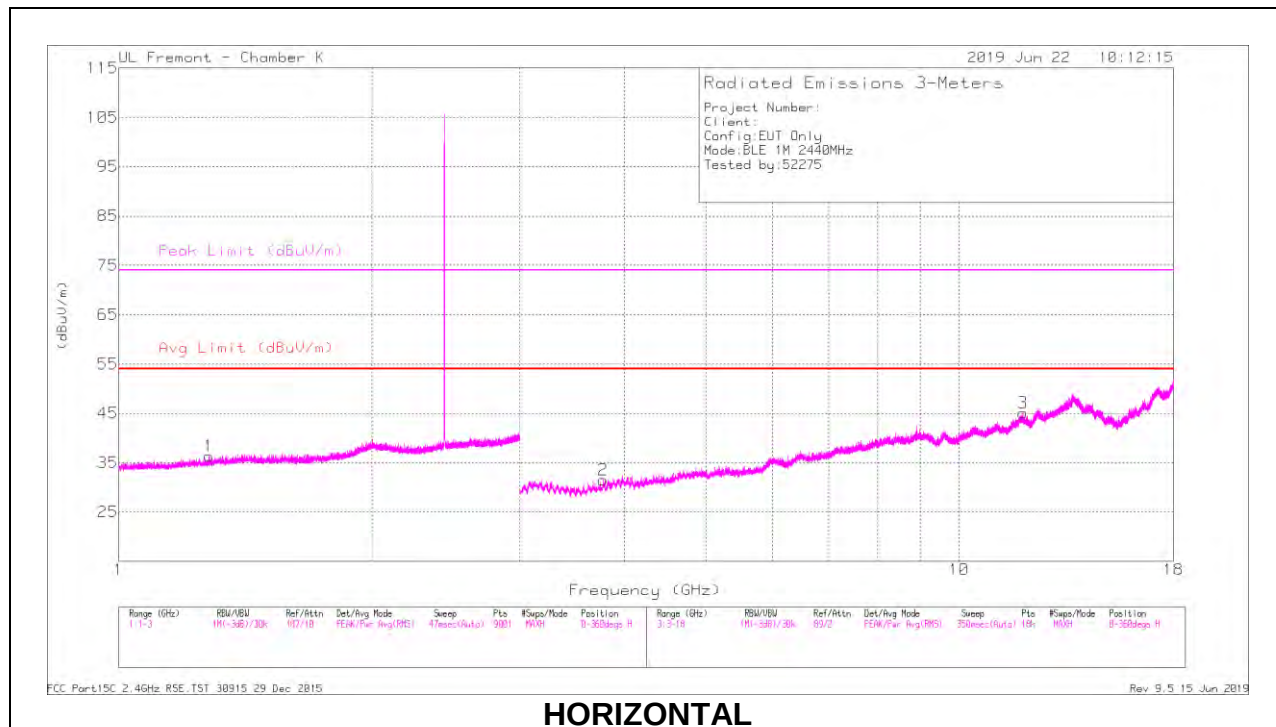
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



RADIATED EMISSIONS

Markers	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	* 1.27886	43.2	PK2	24.4	-23.9	43.7	-	-	74	-30.3	360	300	H
	* 1.27963	32.62	MAv1	24.4	-23.9	33.12	54	-20.88	-	-	360	300	H
4	* 1.35269	43.28	PK2	24.5	-23.9	43.88	-	-	74	-30.12	300	151	V
	* 1.35508	33.27	MAv1	24.5	-23.8	33.97	54	-20.03	-	-	300	151	V
2	* 3.77434	39.69	PK2	30.6	-31.6	38.69	-	-	74	-35.31	289	112	H
	* 3.77374	29.61	MAv1	30.6	-31.6	28.61	54	-25.39	-	-	289	112	H
3	* 11.9175	31.69	PK2	40.1	-20.3	51.49	-	-	74	-22.51	255	187	H
	* 11.9175	22.18	MAv1	40.1	-20.3	41.98	54	-12.02	-	-	255	187	H
5	* 4.80477	38.91	PK2	33	-30.3	41.61	-	-	74	-32.39	315	228	V
	* 4.80793	28.19	MAv1	33	-30.2	30.99	54	-23.01	-	-	315	228	V
6	* 11.59772	32.59	PK2	39.6	-20.5	51.69	-	-	74	-22.31	321	188	V
	* 11.60027	21.83	MAv1	39.6	-20.5	40.93	54	-13.07	-	-	321	188	V

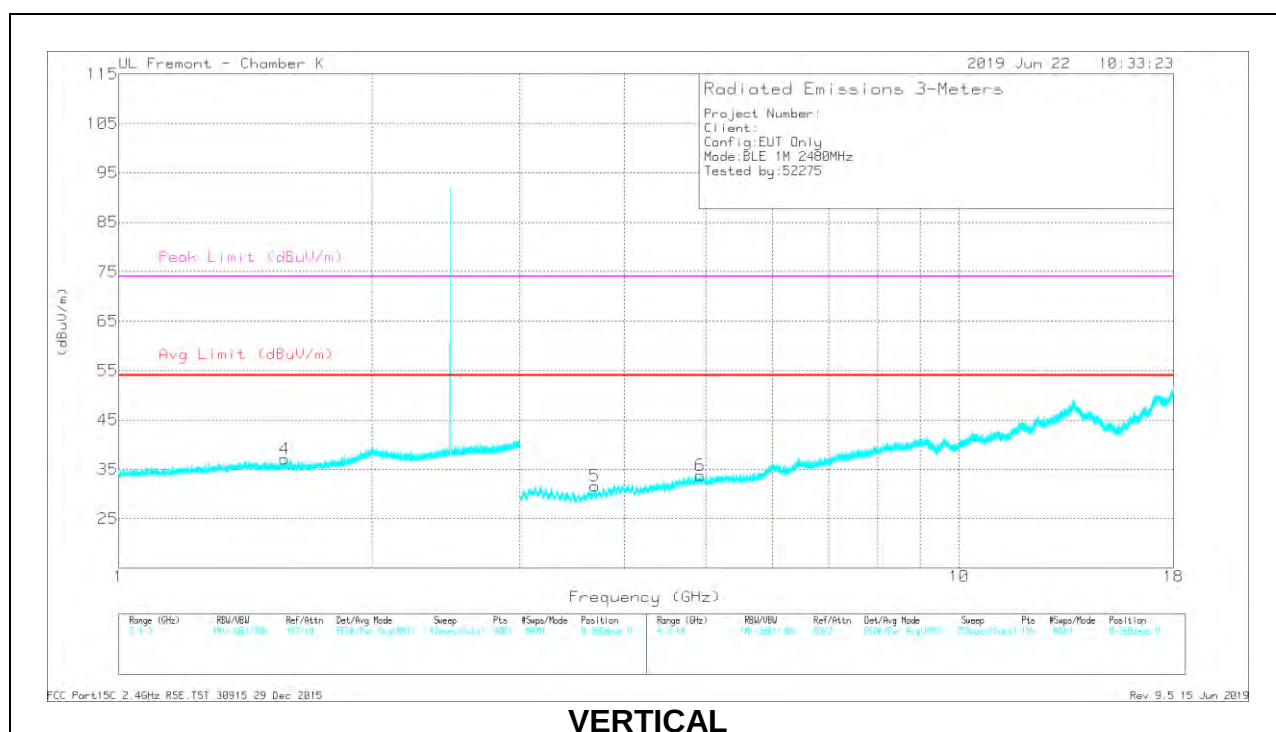
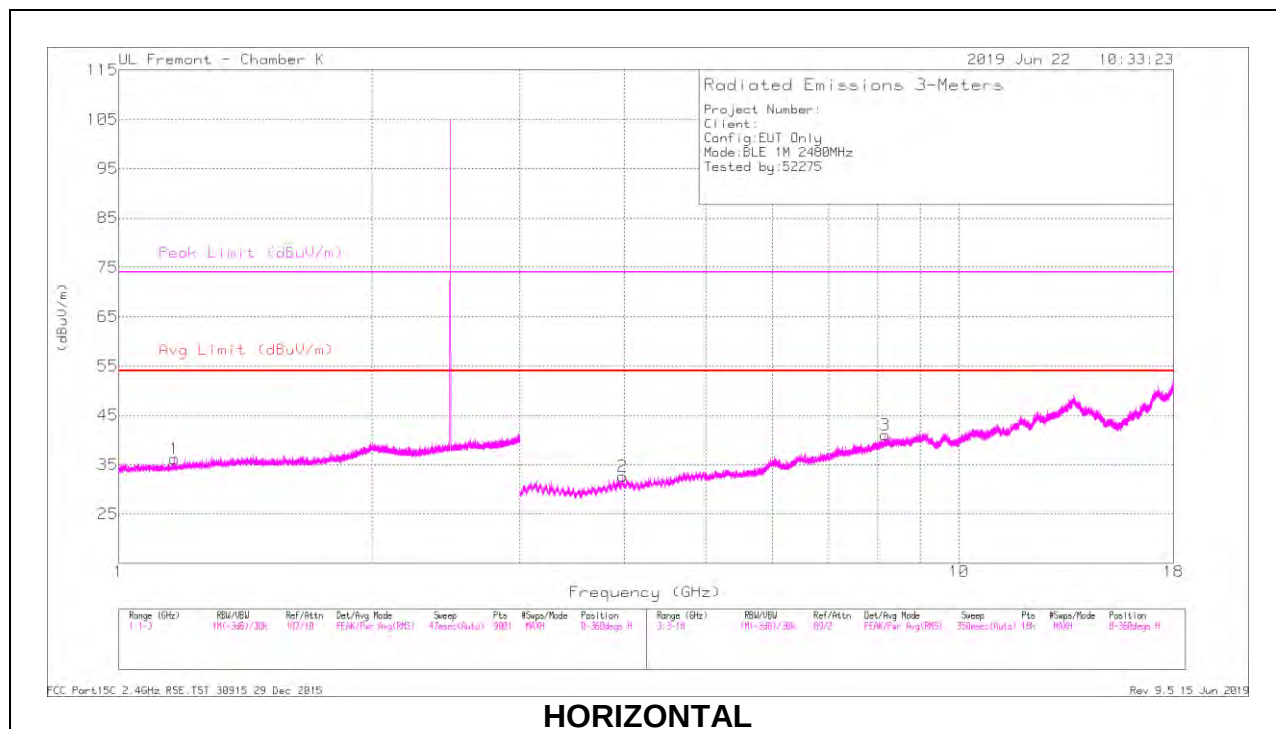
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



RADIATED EMISSIONS

Markers	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	* 1.16443	42.63	PK2	23.8	-23.9	42.53	-	-	74	-31.47	360	210	H
	* 1.16434	32.42	MAv1	23.8	-23.9	32.32	54	-21.68	-	-	360	210	H
4	* 1.57719	42.82	PK2	24.8	-23.8	43.82	-	-	74	-30.18	300	120	V
	* 1.57791	33.09	MAv1	24.8	-23.8	34.09	54	-19.91	-	-	300	120	V
2	* 3.97753	40.02	PK2	31.5	-31.5	40.02	-	-	74	-33.98	185	199	H
	* 3.97622	29.49	MAv1	31.5	-31.5	29.49	54	-24.51	-	-	185	199	H
3	* 8.16538	35.23	PK2	37.9	-25.3	47.83	-	-	74	-26.17	86	180	H
	* 8.16668	24.73	MAv1	37.9	-25.3	37.33	54	-16.67	-	-	86	180	H
5	* 3.69045	39.29	PK2	30.2	-31.9	37.59	-	-	74	-36.41	119	322	V
	* 3.68895	29.47	MAv1	30.2	-31.9	27.77	54	-26.23	-	-	119	322	V
6	* 4.92377	38.64	PK2	33.2	-30.6	41.24	-	-	74	-32.76	184	177	V
	* 4.92129	28.31	MAv1	33.2	-30.6	30.91	54	-23.09	-	-	184	177	V

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

PK2 - KDB558074 Method: Maximum Peak

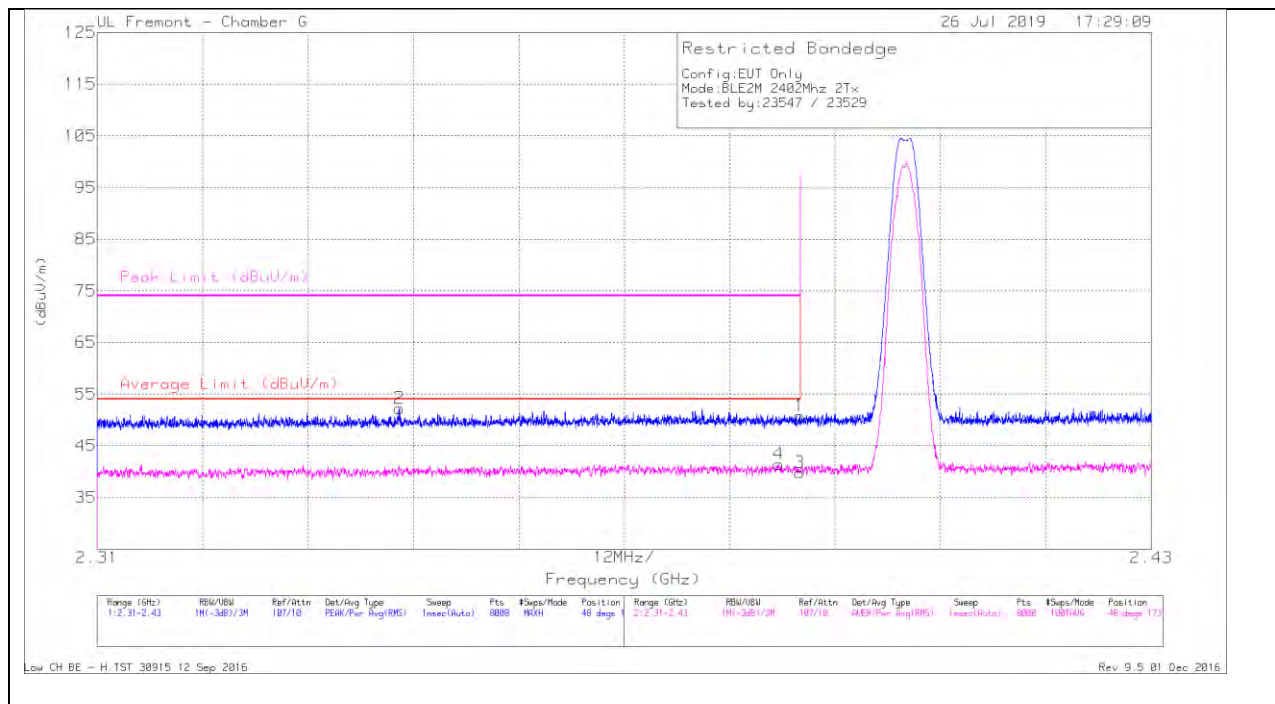
MAv1 - KDB558074 Option 1 Maximum RMS Average

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

9.2.8 BEAMFORMING, LOW POWER BLE (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dBm)	Amp/CbI/Filt/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	41.09	Pk	31.9	-22.2	50.79	-	-	74	-23.21	48	173	H
2	* 2.344	42.76	Pk	31.7	-22.2	52.26	-	-	74	-21.74	48	173	H
3	* 2.39	30.12	RMS	31.9	-22.2	39.82	54	-14.18	-	-	48	173	H
4	* 2.388	31.73	RMS	31.9	-22.2	41.43	54	-12.57	-	-	48	173	H

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

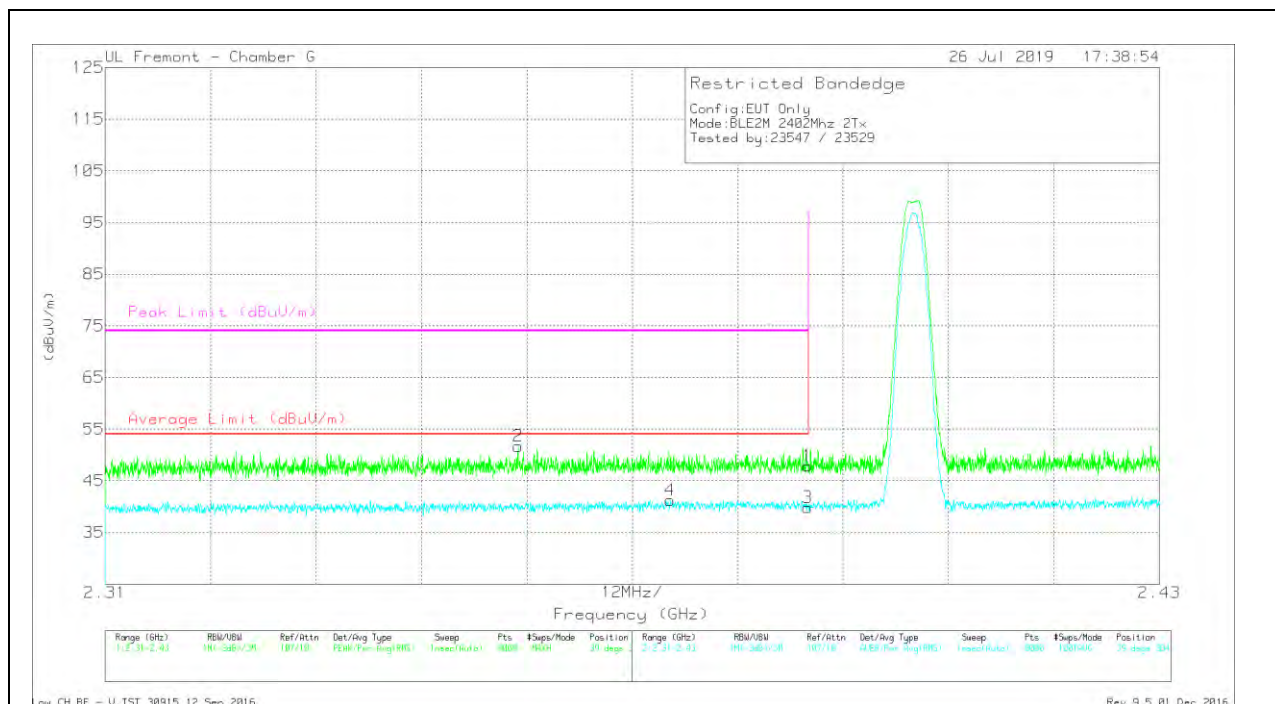
Pk - Peak detector

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 (dBm)	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
2	* 2.357	42.09	Pk	31.8	-22.2	51.69	-	-	74	-22.31	39	304	V
4	* 2.374	31.54	RMS	31.9	-22.2	41.24	54	-12.76	-	-	39	304	V
1	* 2.39	38.16	Pk	31.9	-22.2	47.86	-	-	74	-26.14	39	304	V
3	* 2.39	30.12	RMS	31.9	-22.2	39.82	54	-14.18	-	-	39	304	V

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

Pk - Peak detector

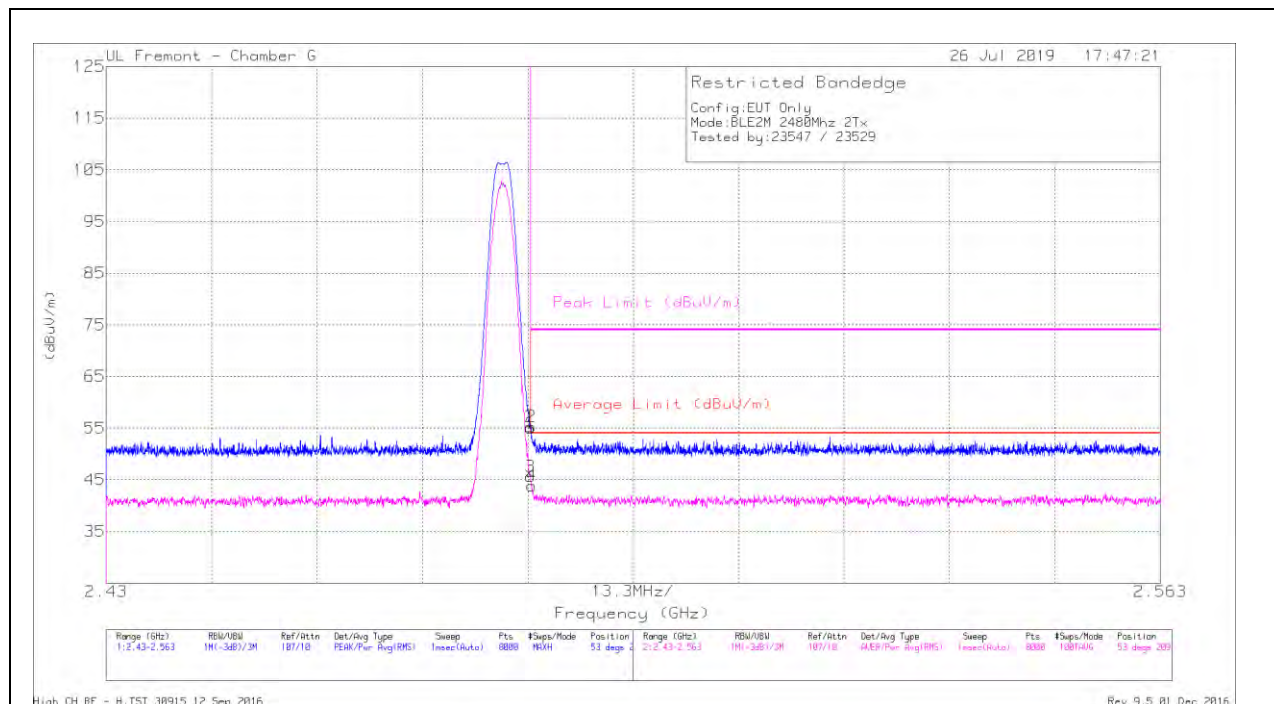
RMS - RMS detection

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 (dBm)	Amp/Cbif/Filter/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	44.63	Pk	32.5	-22.1	55.03	-	-	74	-18.97	53	209	H
2	* 2.484	44.87	Pk	32.5	-22.1	55.27	-	-	74	-18.73	53	209	H
3	* 2.484	35.24	RMS	32.5	-22.1	45.64	54	-8.36	-	-	53	209	H
4	* 2.484	33.48	RMS	32.5	-22.1	43.88	54	-10.12	-	-	53	209	H

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

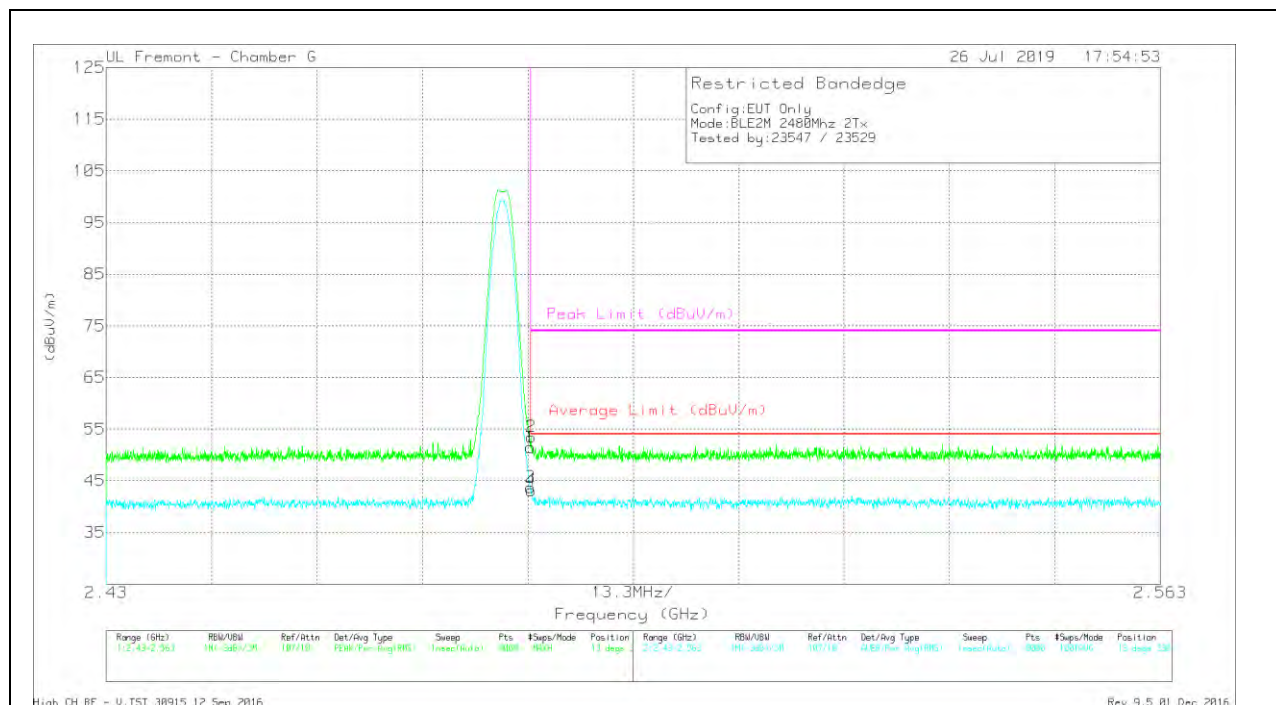
Pk - Peak detector

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/Filt/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	41.06	Pk	32.5	-22.1	51.46	-	-	74	-22.54	13	330	V
2	* 2.484	43.1	Pk	32.5	-22.1	53.5	-	-	74	-20.5	13	330	V
3	* 2.484	33.32	RMS	32.5	-22.1	43.72	54	-10.28	-	-	13	330	V
4	* 2.484	32.77	RMS	32.5	-22.1	43.17	54	-10.83	-	-	13	330	V

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

Pk - Peak detector

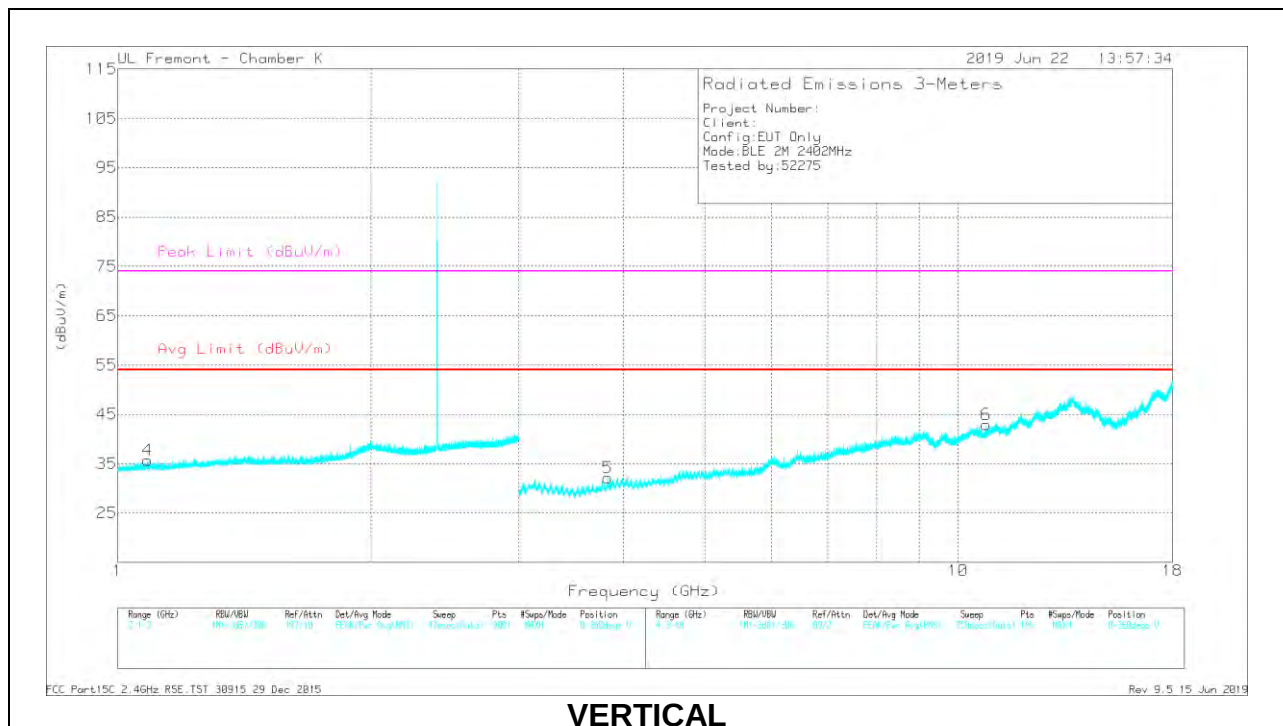
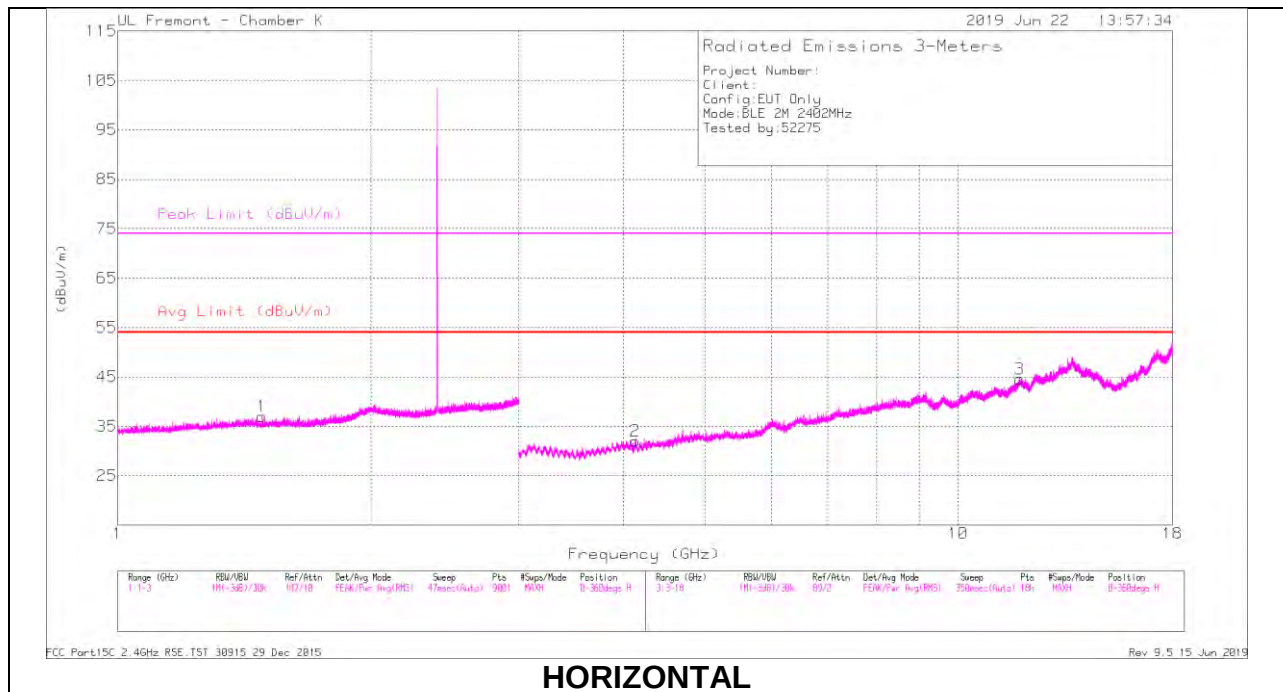
RMS - RMS detection

High CH BE - V.TST 30915 12 Sep 2016

Rev 9.5.01 Dec 2016

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Markers	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	* 1.4832	42.87	PK2	24.6	-23.9	43.57	-	-	74	-30.43	80	153	H
	* 1.48311	32.51	MAv1	24.6	-23.9	33.21	54	-20.79	-	-	80	153	H
4	* 1.08766	42.81	PK2	23.8	-23.8	42.81	-	-	74	-31.19	171	211	V
	* 1.08728	32.94	MAv1	23.7	-23.8	32.84	54	-21.16	-	-	171	211	V
2	* 4.1344	38.9	PK2	31.2	-30.6	39.5	-	-	74	-34.5	247	157	H
	* 4.13325	28.8	MAv1	31.2	-30.6	29.4	54	-24.6	-	-	247	157	H
3	* 11.83908	32.17	PK2	40	-19.7	52.47	-	-	74	-21.53	349	233	H
	* 11.84166	22.19	MAv1	40	-19.8	42.39	54	-11.61	-	-	349	233	H
5	* 3.82892	39.57	PK2	31	-31.2	39.37	-	-	74	-34.63	170	310	V
	* 3.8267	29.87	MAv1	31	-31.2	29.67	54	-24.33	-	-	170	310	V
6	* 10.81242	32.53	PK2	39.3	-22.1	49.73	-	-	74	-24.27	117	146	V
	* 10.8141	22.47	MAv1	39.3	-22.1	39.67	54	-14.33	-	-	117	146	V

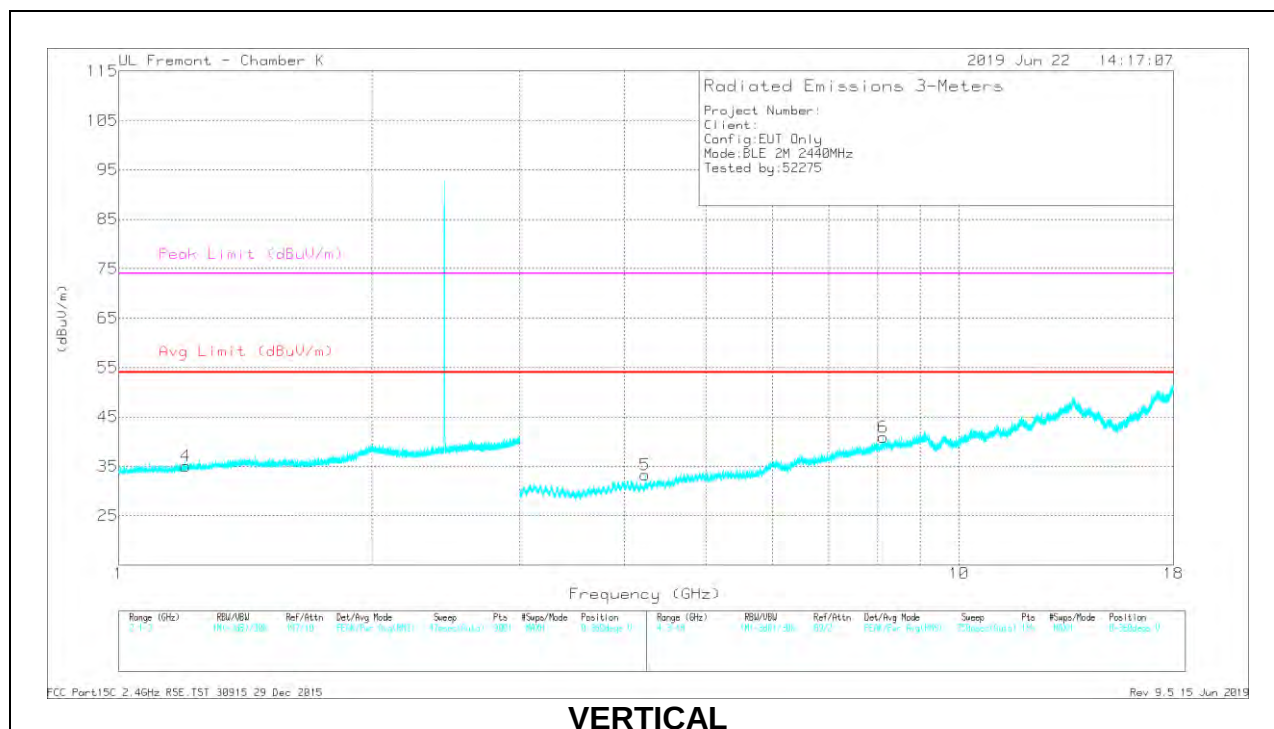
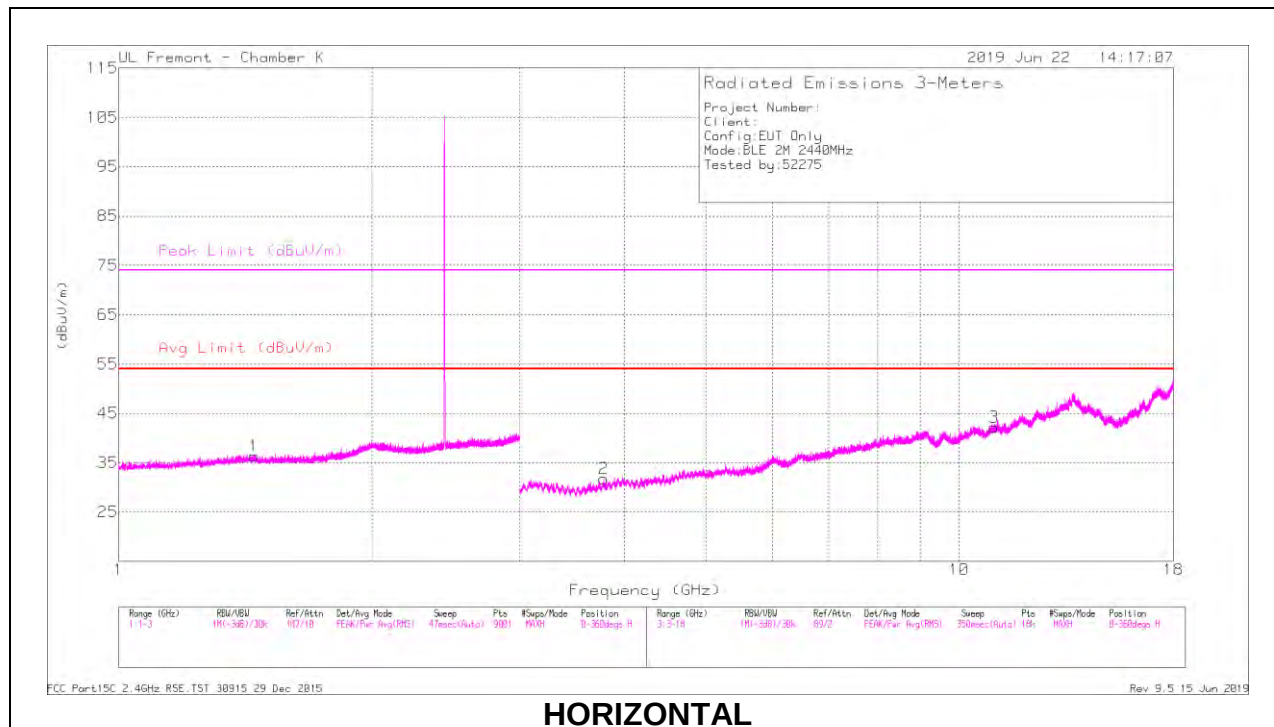
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



RADIATED EMISSIONS

Markers	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	* 1.44735	42.93	PK2	24.7	-23.7	43.93	-	-	74	-30.07	0	200	H
	* 1.45044	32.69	MAv1	24.7	-23.8	33.59	54	-20.41	-	-	0	200	H
4	* 1.20007	43.3	PK2	24.1	-24	43.4	-	-	74	-30.6	161	184	V
	* 1.204	32.95	MAv1	24.1	-23.8	33.25	54	-20.75	-	-	161	184	V
2	* 3.77582	40.51	PK2	30.7	-31.6	39.61	-	-	74	-34.39	246	254	H
	* 3.77942	29.64	MAv1	30.7	-31.6	28.74	54	-25.26	-	-	246	254	H
3	* 11.01693	31.92	PK2	39.4	-21.4	49.92	-	-	74	-24.08	151	158	H
	* 11.01841	22.14	MAv1	39.3	-21.4	40.04	54	-13.96	-	-	151	158	H
5	* 4.23309	40.35	PK2	31.3	-31.3	40.35	-	-	74	-33.65	54	231	V
	* 4.23457	29.5	MAv1	31.3	-31.3	29.5	54	-24.5	-	-	54	231	V
6	* 8.12935	35.78	PK2	37.9	-25.4	48.28	-	-	74	-25.72	254	311	V
	* 8.12832	24.76	MAv1	37.9	-25.4	37.26	54	-16.74	-	-	254	311	V

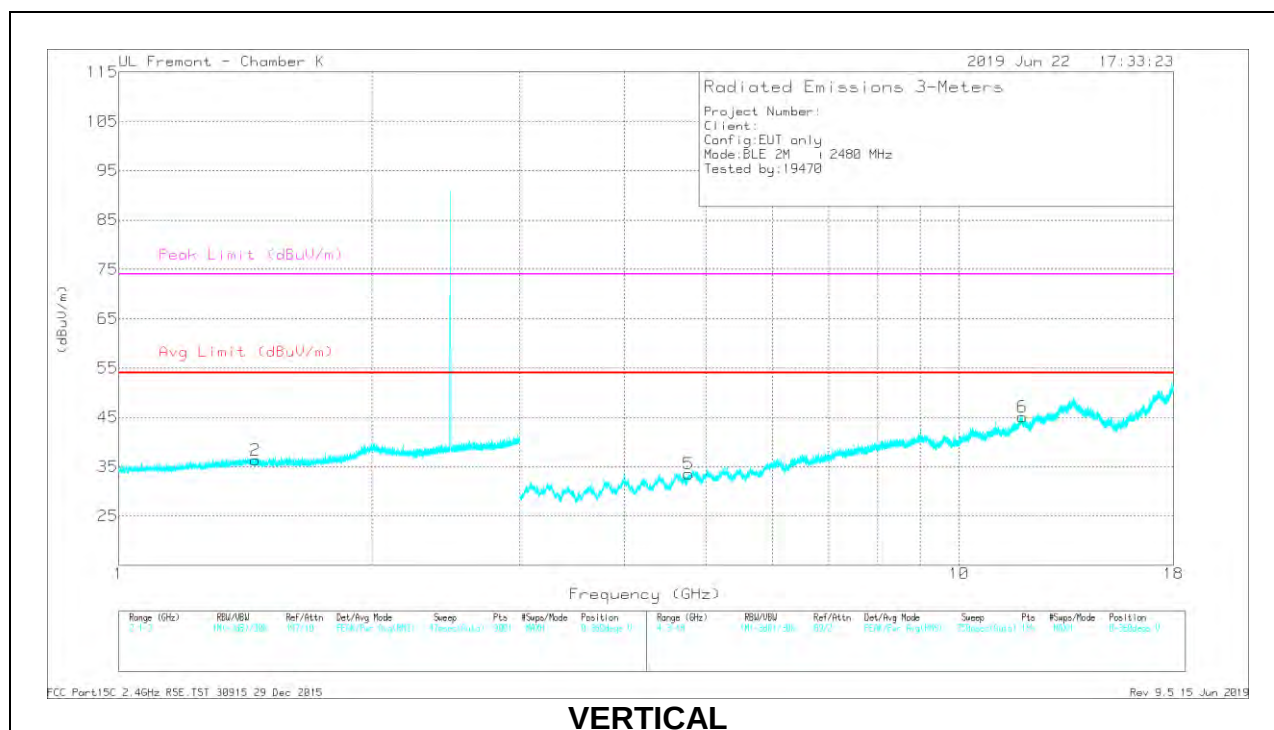
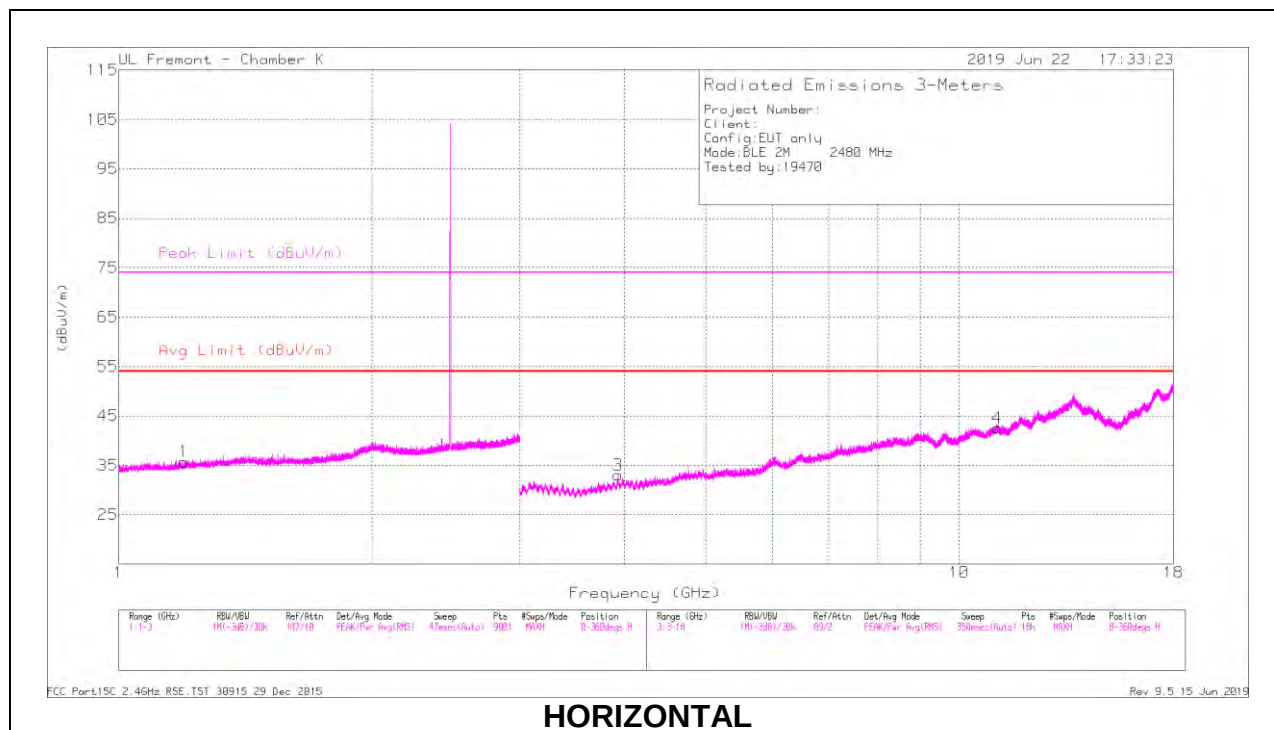
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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



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	* 1.1958	42.99	PK2	24.1	-23.9	43.19	-	-	74	-30.81	178	155	H
	* 1.196	32.58	MAv1	24.1	-23.9	32.78	54	-21.22	-	-	178	155	H
2	* 1.45338	42.65	PK2	24.7	-23.7	43.65	-	-	74	-30.35	187	175	V
	* 1.4532	33.44	MAv1	24.7	-23.7	34.44	54	-19.56	-	-	187	175	V
3	* 3.9269	40.96	PK2	31.4	-31.7	40.66	-	-	74	-33.34	175	212	H
	* 3.92605	30.53	MAv1	31.4	-31.7	30.23	54	-23.77	-	-	175	212	H
4	*	32.38	PK2	39.2	-20.7	50.88	-	-	74	-23.12	142	165	H
	11.10762												
	*	22.08	MAv1	39.2	-20.8	40.48	54	-13.52	-	-	142	165	H
5	11.11147												
	* 4.76646	38.58	PK2	32.9	-30.1	41.38	-	-	74	-32.62	173	208	V
	* 4.76752	28.38	MAv1	32.9	-30.1	31.18	54	-22.82	-	-	173	208	V
6	*	32.71	PK2	40	-20.1	52.61	-	-	74	-21.39	197	225	V
	11.89514												
	*	22.84	MAv1	40	-20.1	42.74	54	-11.26	-	-	197	225	V
	11.89616												

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

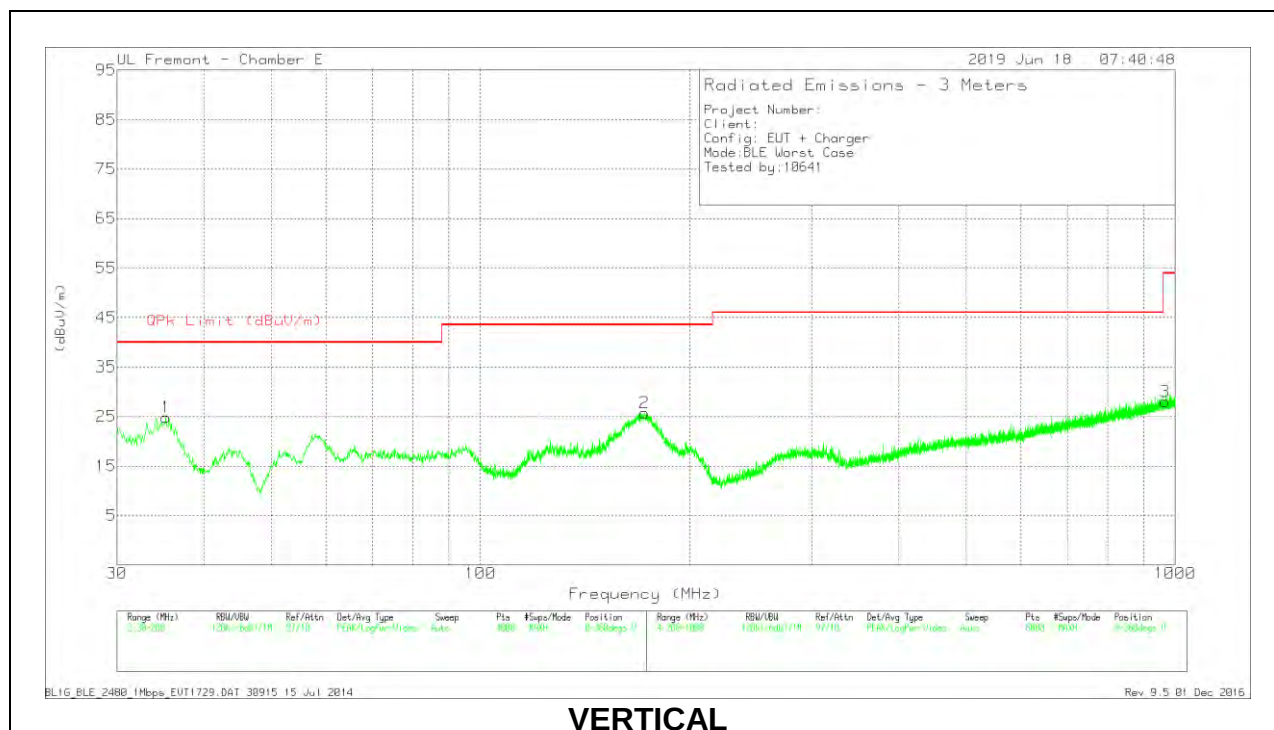
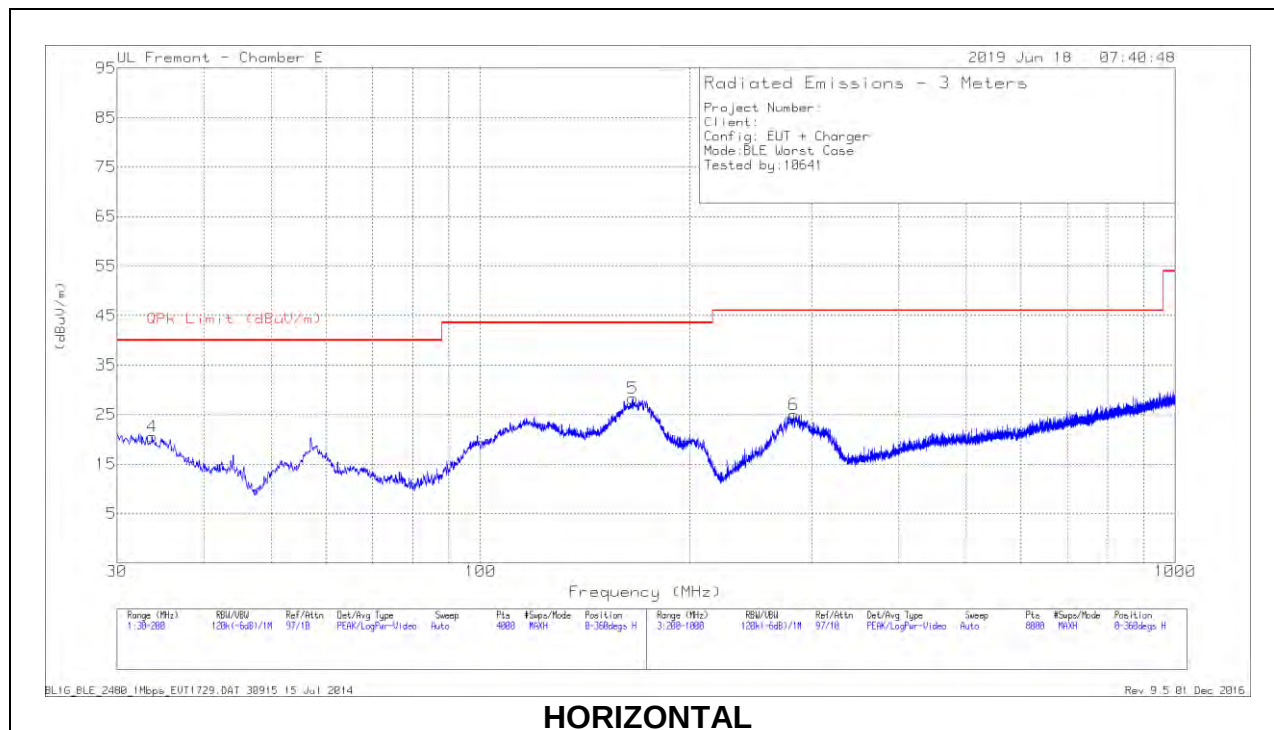
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

9.3 WORST CASE BELOW 1 GHZ

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



Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 165.7376	43.02	Pk	15.9	-30.7	28.22	43.52	-15.3	0-360	199	H
2	* 172.1568	40.75	Pk	15.6	-30.6	25.75	43.52	-17.77	0-360	100	V
6	* 282.3107	37.51	Pk	17.3	-29.9	24.91	46.02	-21.11	0-360	99	H
3	* 967.3997	27.25	Pk	26.9	-26.1	28.05	53.97	-25.92	0-360	99	V
4	33.6985	29.68	Pk	22.7	-31.9	20.48	40	-19.52	0-360	99	H
1	35.2714	35.07	Pk	21.7	-31.9	24.87	40	-15.13	0-360	100	V

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

Pk - Peak detector

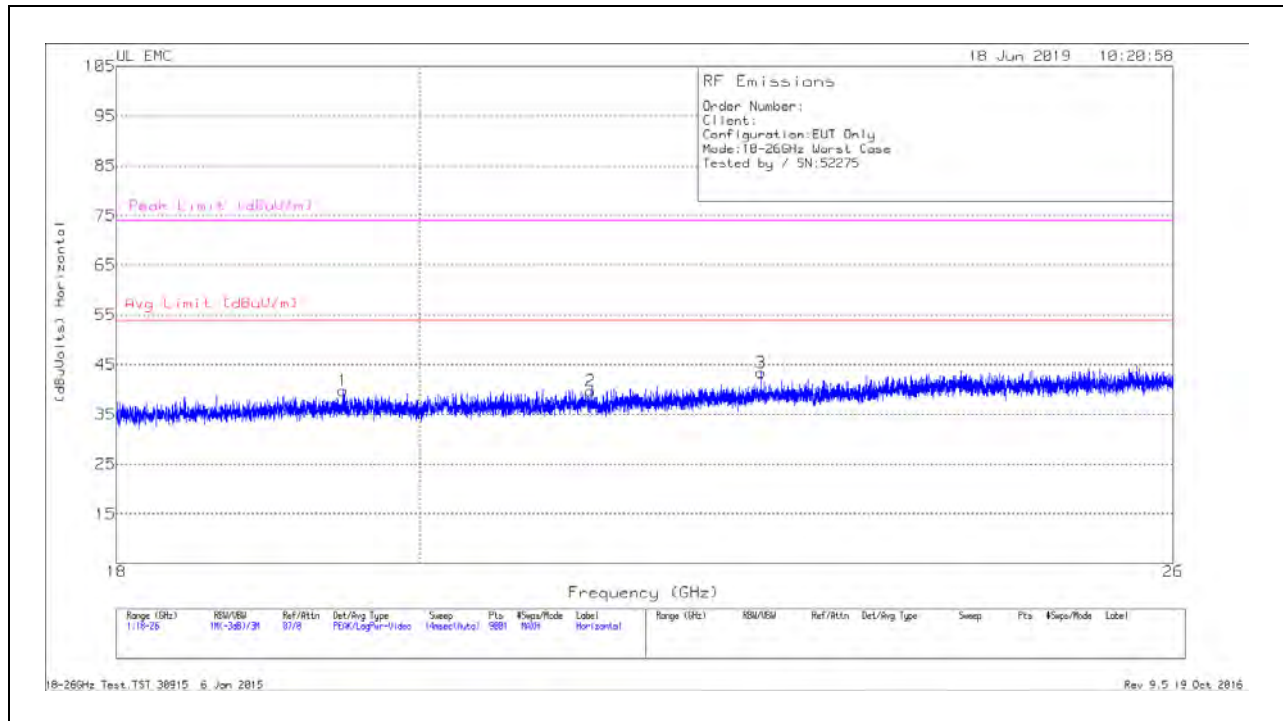
BL1G_BLE_2480_1Mbps_EVT1729.DAT 30915 15 Jul 2014

Rev 9.5 01 Dec 2016

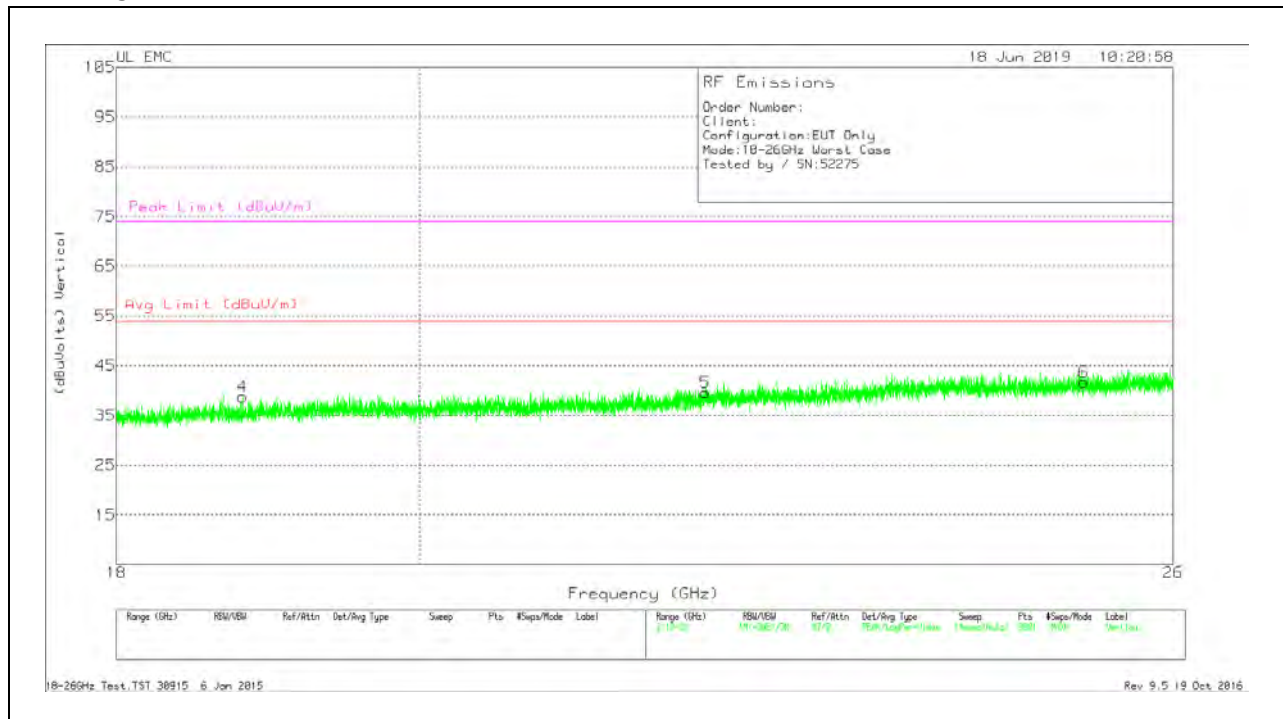
9.4 Worst Case 18-26 GHz

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

HORIZONTAL



VERTICAL



18 - 26GHz Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T449 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.476	37.96	Pk	32.8	-21.5	-9.5	39.76	54	-14.24	74	-34.24
2	21.228	37.41	Pk	33	-21.2	-9.5	39.71	54	-14.29	74	-34.29
3	22.527	39.7	Pk	33.5	-20.3	-9.5	43.4	54	-10.6	74	-30.6
4	18.808	37.75	Pk	32.4	-21.9	-9.5	38.75	54	-15.25	74	-35.25
5	22.092	36.09	Pk	33.4	-20.4	-9.5	39.59	54	-14.41	74	-34.41
6	25.202	36.44	Pk	34.5	-19.8	-9.5	41.64	54	-12.36	74	-32.36

Pk - Peak detector

18-26GHz Test.TST 30915 6 Jan 2015

Rev 9.5 19 Oct 2016

10 AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

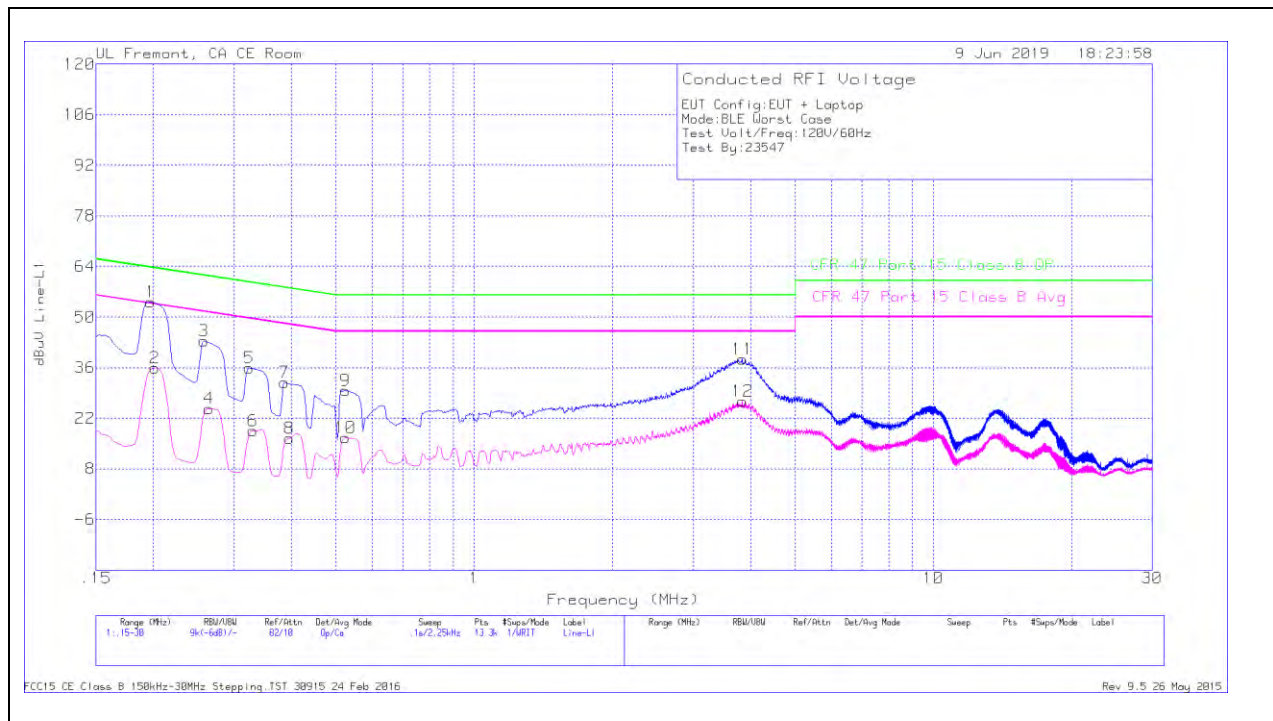
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

10.2.3 AC Power Line Host

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.19725	44.04	Qp	0	0	10.1	54.14	63.73	-9.59	-	-
2	.20175	25.78	Ca	0	0	10.1	35.88	-	-	53.54	-17.66
3	.258	33.34	Qp	0	0	10.1	43.44	61.5	-18.06	-	-
4	.26475	14.61	Ca	0	0	10.1	24.71	-	-	51.28	-26.57
5	.32325	25.74	Qp	0	0	10.1	35.84	59.62	-23.78	-	-
6	.33	8.45	Ca	0	0	10.1	18.55	-	-	49.45	-30.9
7	.38625	21.79	Qp	0	0	10.1	31.89	58.14	-26.25	-	-
8	.39525	6.3	Ca	0	0	10.1	16.4	-	-	47.95	-31.55
9	.5235	19.55	Qp	0	0	10.1	29.65	56	-26.35	-	-
10	.5235	6.53	Ca	0	0	10.1	16.63	-	-	46	-29.37
11	3.8355	28.21	Qp	0	.1	10.1	38.41	56	-17.59	-	-
12	3.8355	16.43	Ca	0	.1	10.1	26.63	-	-	46	-19.37

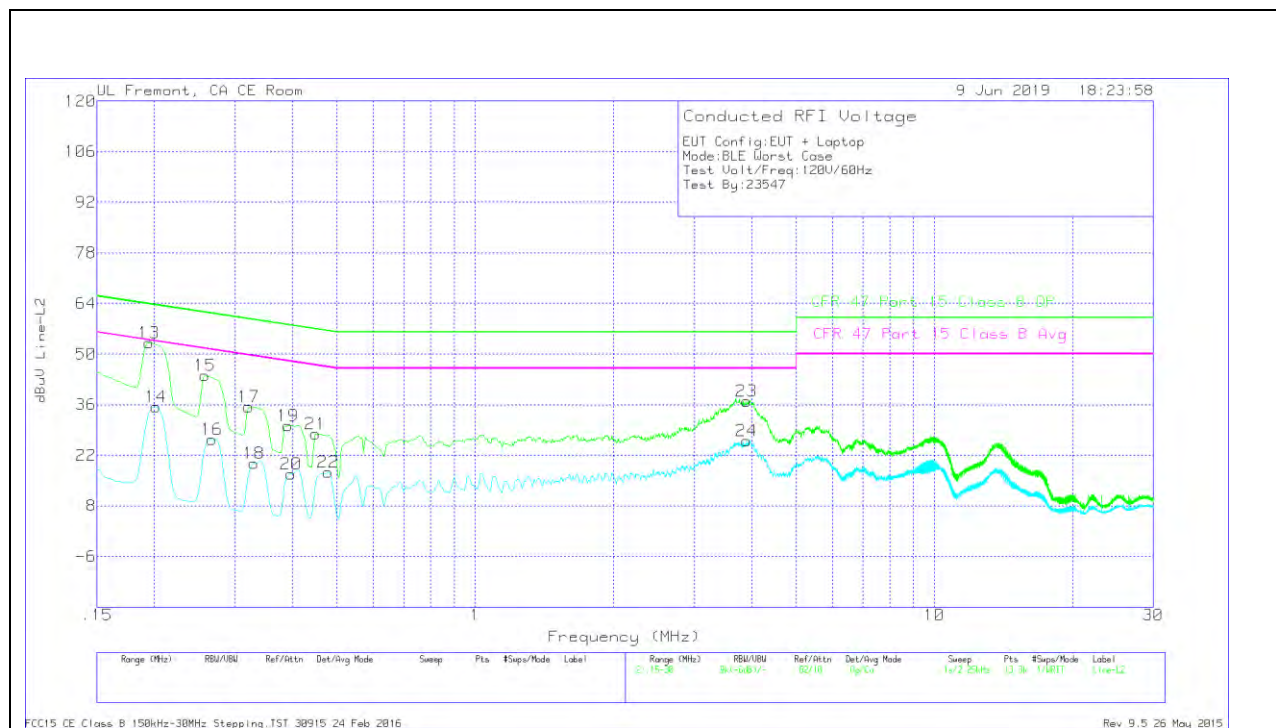
Qp - Quasi-Peak detector

Ca - CISPR average detection

FCC15 CE Class B 150kHz-30MHz Stepping TST 30915 24 Feb 2016

Rev 9.5 26 May 2015

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.195	43.02	Qp	0	0	10.1	53.12	63.82	-10.7	-	-
14	.20175	25.29	Ca	0	0	10.1	35.39	-	-	53.54	-18.15
15	.258	33.94	Qp	0	0	10.1	44.04	61.5	-17.46	-	-
16	.267	16.24	Ca	0	0	10.1	26.34	-	-	51.21	-24.87
17	.321	25.32	Qp	0	0	10.1	35.42	59.68	-24.26	-	-
18	.33	9.68	Ca	0	0	10.1	19.78	-	-	49.45	-29.67
19	.39075	20.13	Qp	0	0	10.1	30.23	58.05	-27.82	-	-
20	.3975	6.77	Ca	0	0	10.1	16.87	-	-	47.91	-31.04
21	.44925	17.88	Qp	0	0	10.1	27.98	56.89	-28.91	-	-
22	.4785	7.29	Ca	0	0	10.1	17.39	-	-	46.37	-28.98
23	3.90075	26.69	Qp	0	.1	10.1	36.89	56	-19.11	-	-
24	3.90075	15.88	Ca	0	.1	10.1	26.08	-	-	46	-19.92

Qp - Quasi-Peak detector

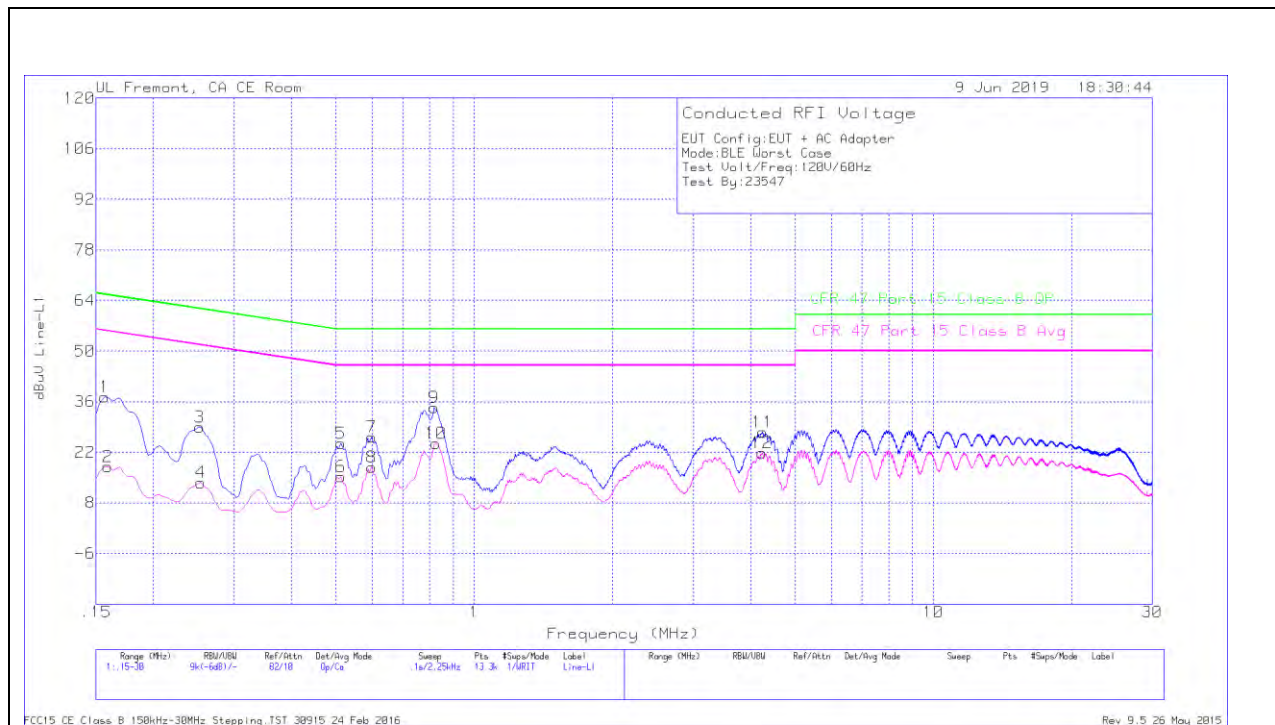
Ca - CISPR average detection

FCC15 CE Class B 150kHz-30MHz Stepping.TST 30915 24 Feb 2016

Rev 9.5 26 May 2015

10.2.4 AC Power Line Norm

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.15675	27.11	Qp	.1	0	10.1	37.31	65.63	-28.32	-	-
2	.159	7.88	Ca	.1	0	10.1	18.08	-	-	55.52	-37.44
3	.25238	18.83	Qp	0	0	10.1	28.93	61.68	-32.75	-	-
4	.2535	3.49	Ca	0	0	10.1	13.59	-	-	51.64	-38.05
5	.51225	14.31	Qp	0	0	10.1	24.41	56	-31.59	-	-
6	.51225	5.06	Ca	0	0	10.1	15.16	-	-	46	-30.84
7	.59775	16.14	Qp	0	0	10.1	26.24	56	-29.76	-	-
8	.59775	7.75	Ca	0	0	10.1	17.85	-	-	46	-28.15
9	.81825	24.2	Qp	0	0	10.1	34.3	56	-21.7	-	-
10	.825	14.37	Ca	0	0	10.1	24.47	-	-	46	-21.53
11	4.245	17.31	Qp	0	.1	10.1	27.51	56	-28.49	-	-
12	4.2405	11.6	Ca	0	.1	10.1	21.8	-	-	46	-24.2

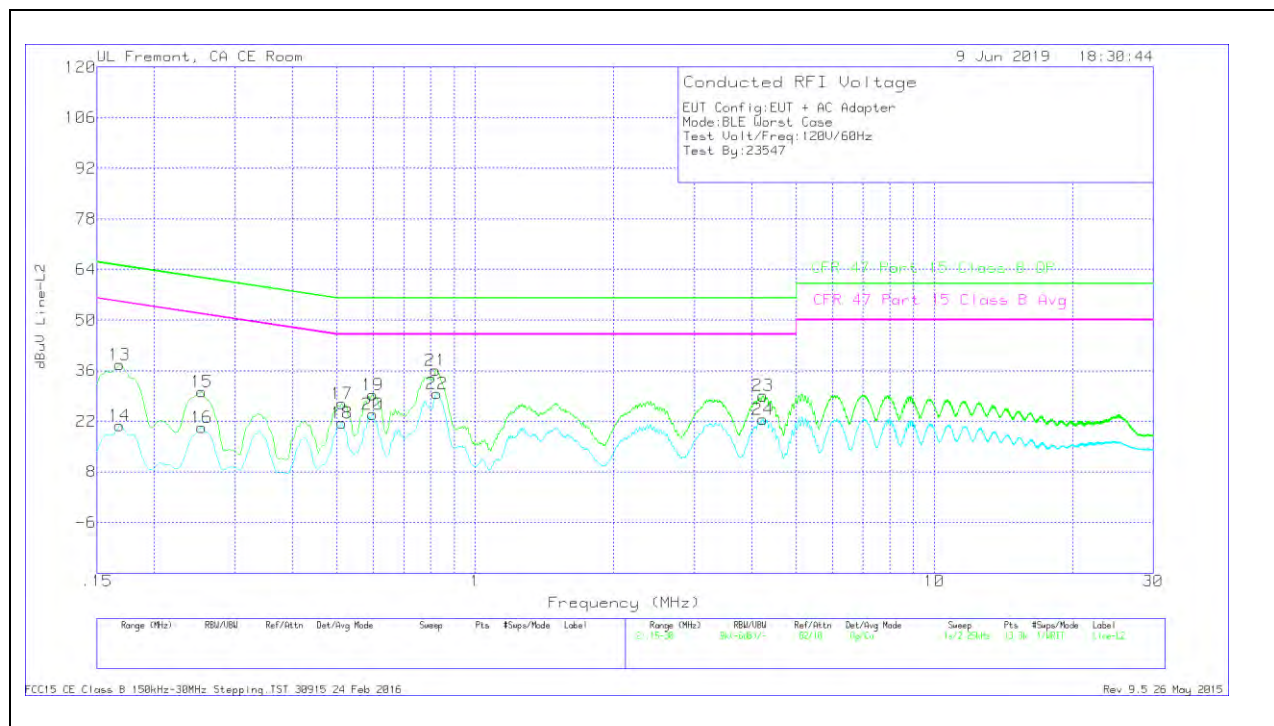
Qp - Quasi-Peak detector

Ca - CISPR average detection

FCC15 CE Class B 150kHz-30MHz Stepping TST 30915 24 Feb 2016

Rev 9.5 26 May 2015

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.168	27.42	Qp	.1	0	10.1	37.62	65.06	-27.44	-	-
14	.168	10.65	Ca	.1	0	10.1	20.85	-	-	55.06	-34.21
15	.2535	20.02	Qp	0	0	10.1	30.12	61.64	-31.52	-	-
16	.2535	10.23	Ca	0	0	10.1	20.33	-	-	51.64	-31.31
17	.51225	16.75	Qp	0	0	10.1	26.85	56	-29.15	-	-
18	.51225	11.4	Ca	0	0	10.1	21.5	-	-	46	-24.5
19	.59775	19.2	Qp	0	0	10.1	29.3	56	-26.7	-	-
20	.59775	13.8	Ca	0	0	10.1	23.9	-	-	46	-22.1
21	.8205	26.01	Qp	0	0	10.1	36.11	56	-19.89	-	-
22	.825	19.56	Ca	0	0	10.1	29.66	-	-	46	-16.34
23	4.23825	18.86	Qp	0	.1	10.1	29.06	56	-26.94	-	-
24	4.23825	12.37	Ca	0	.1	10.1	22.57	-	-	46	-23.43

Qp - Quasi-Peak detector

Ca - CISPR average detection

FCC15 CE Class B 150kHz-30MHz Stepping, TST 30915 24 Feb 2016

Rev 9.5 26 May 2015

END OF TEST REPORT

11 SETUP PHOTOS

Please refer to 12943451-EP1V1 for setup photos.