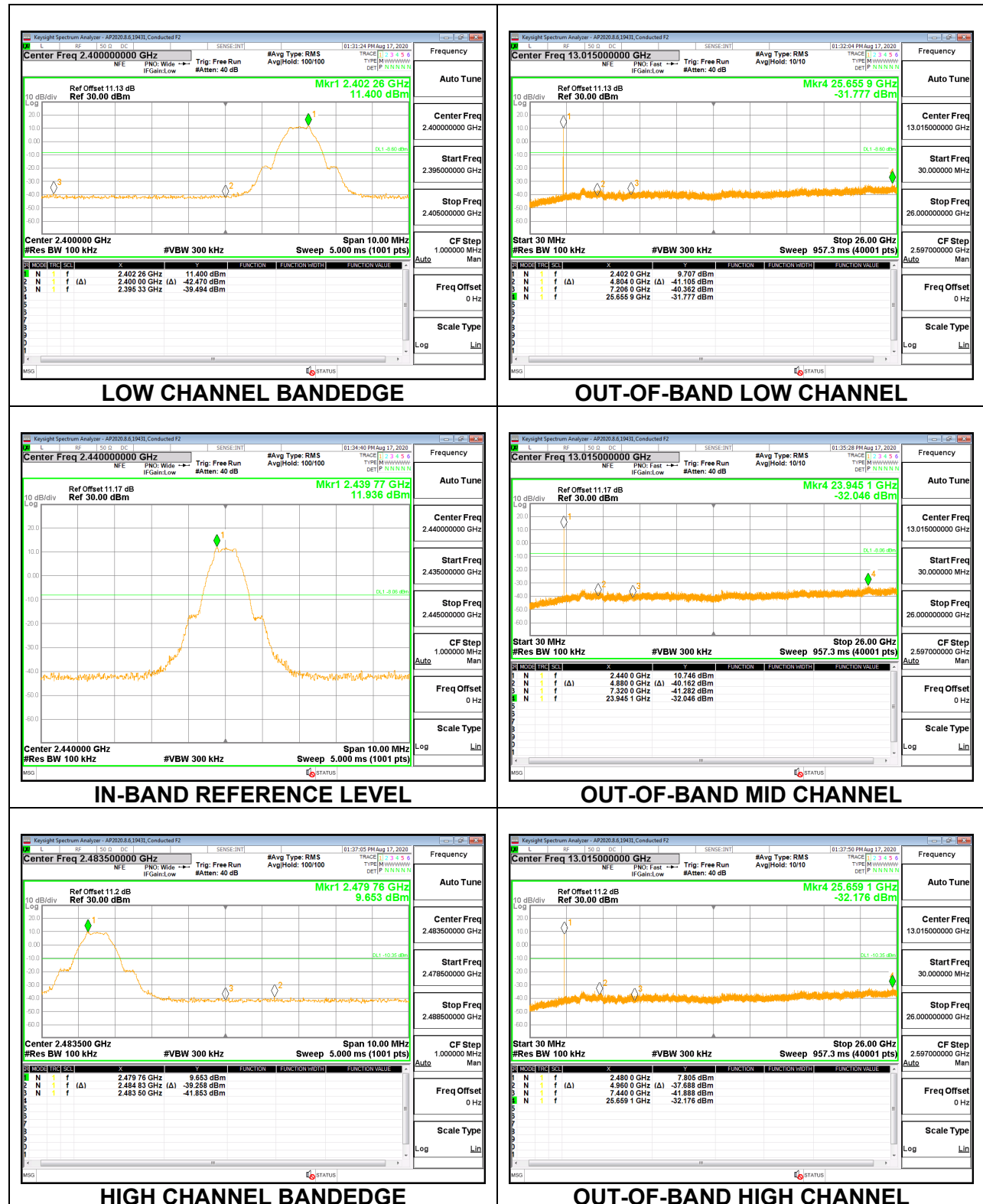


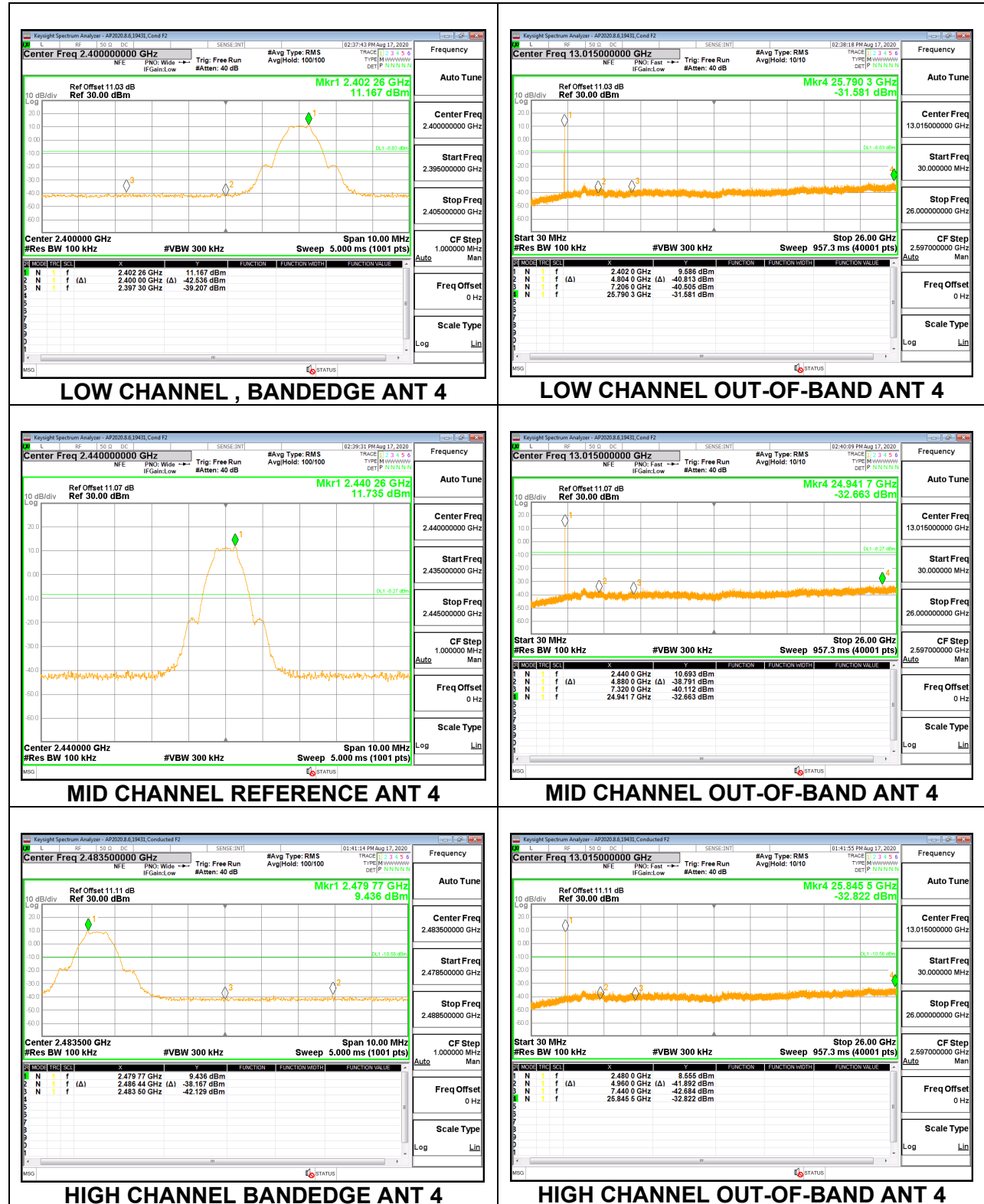
ANT 3



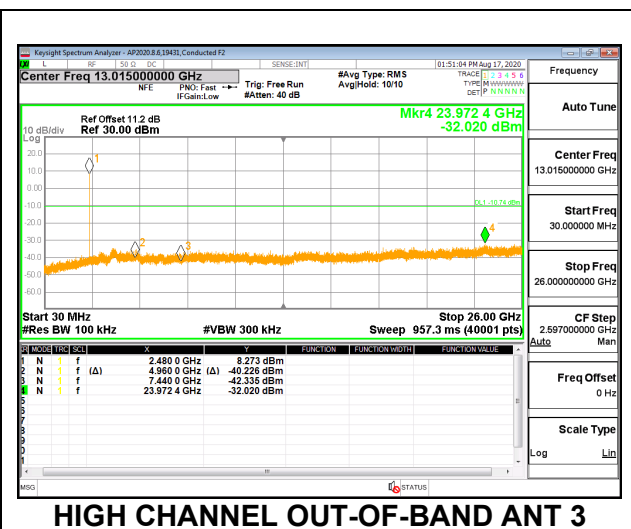
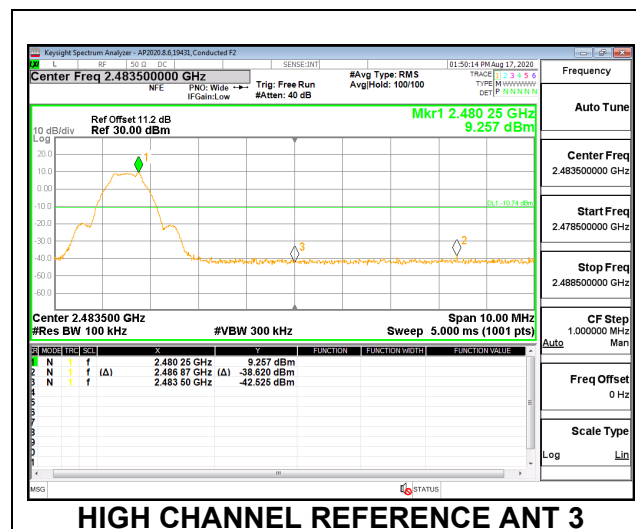
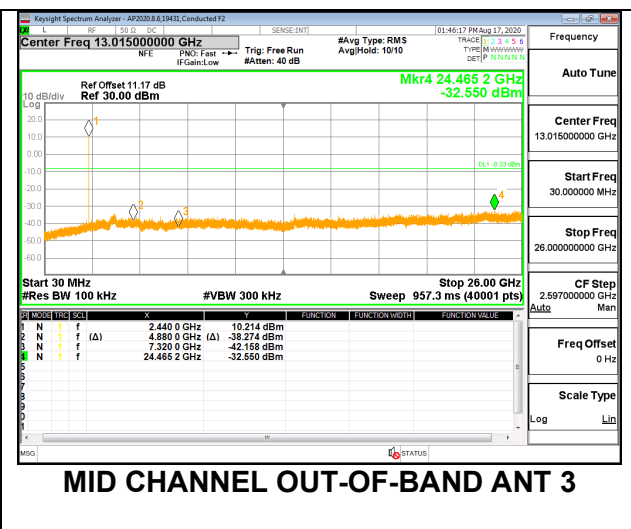
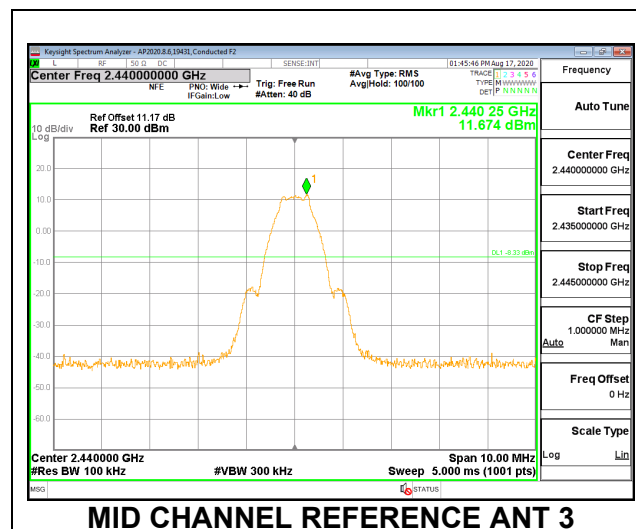
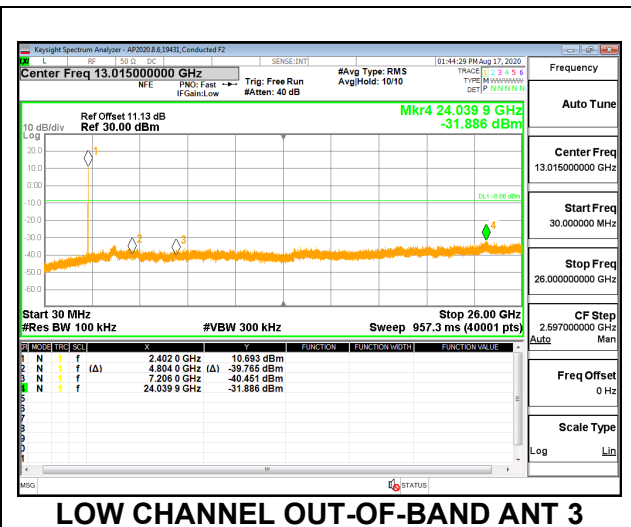
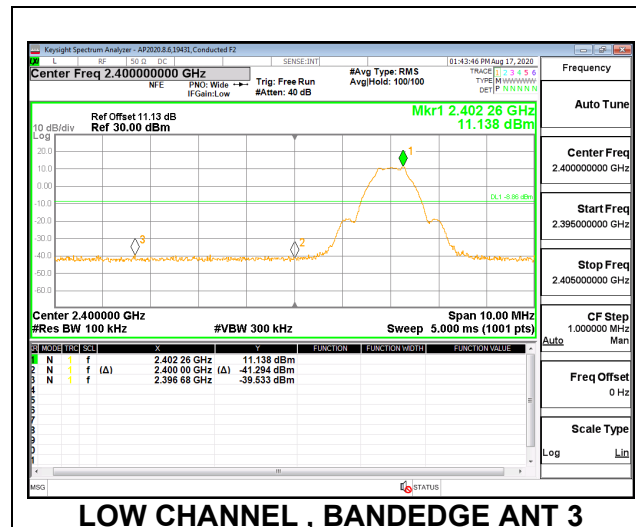
9.7.6. LOW POWER BLE TXBF (1Mbps)

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

ANT 4

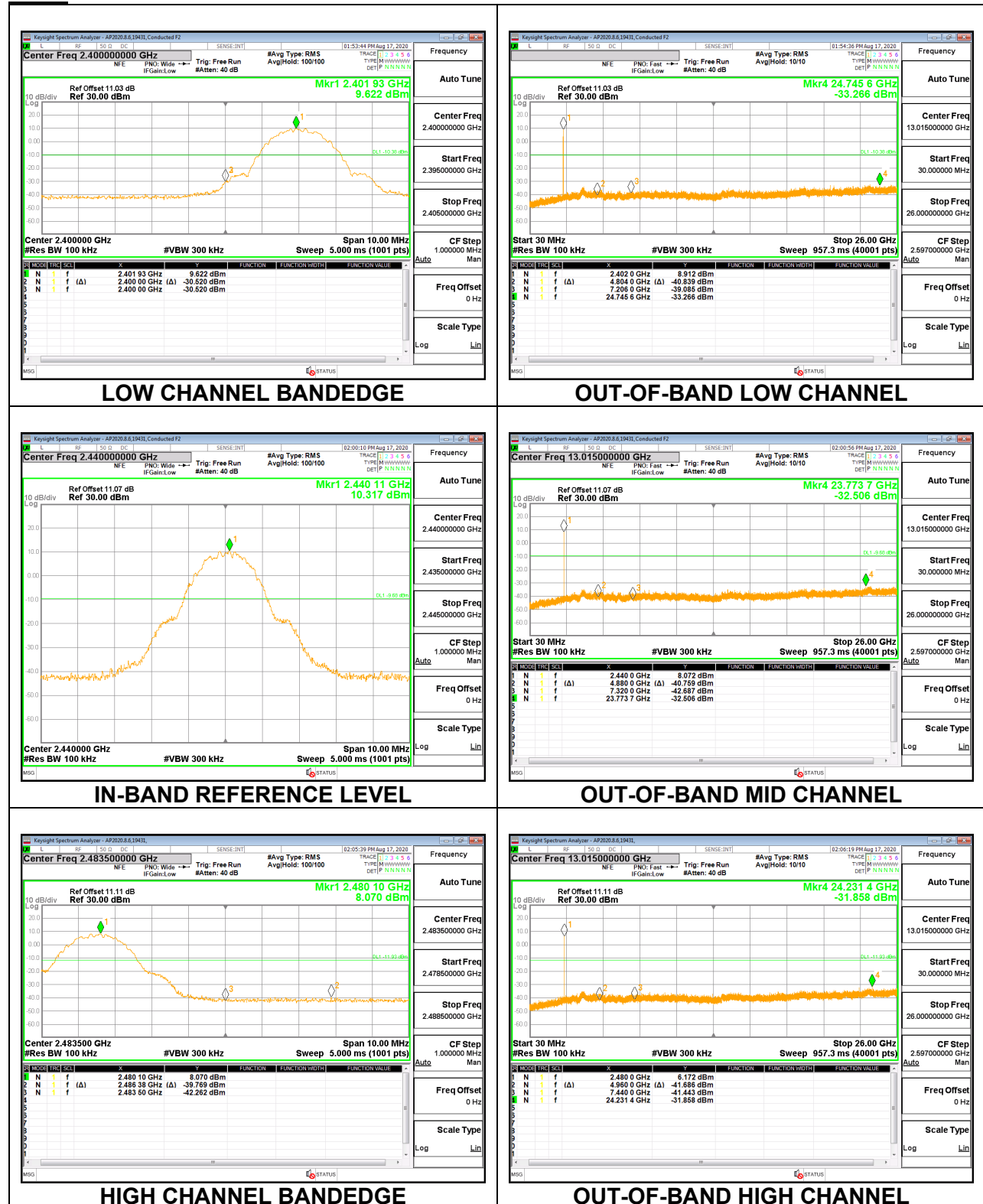


ANT 3



9.7.7. LOW POWER BLE (2Mbps)

ANT 4



The figure displays four screenshots of a Keysight Spectrum Analyzer interface, each showing a different measurement setup for channel bandedge and reference level.

Top Left: LOW CHANNEL BANDEDGE

- Center Freq: 2.40000000 GHz
- Ref Offset: 11.13 dB, Ref: 30.00 dBm
- Mkr1: 2.40193 GHz, 9.738 dBm
- Span: 10.00 MHz, Sweep: 5.000 ms (1001 pts)
- #VBW 300 kHz, #Res BW 100 kHz
- Table:

N	MODE	FREQ [GHz]	SCAL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	2.40193	f	(Δ)	9.738	dBm		
2	N	2.40000	f	(Δ)	-30.628	dBm		
3	N	2.40000	f		-30.628	dBm		

Top Right: OUT-OF-BAND LOW CHANNEL

- Center Freq: 13.015000000 GHz
- Ref Offset: 11.13 dB, Ref: 30.00 dBm
- Mkr4: 23.8594 GHz, -32.380 dBm
- Span: 26.00 MHz, Sweep: 957.3 ms (40001 pts)
- #VBW 300 kHz, #Res BW 100 kHz
- Table:

N	MODE	FREQ [GHz]	SCAL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	2.40200	f	(Δ)	7.041	dBm		
2	N	4.80400	f	(Δ)	-41.399	dBm		
3	N	7.20600	f	(Δ)	-41.044	dBm		
4	N	23.8594	f		-32.380	dBm		

Bottom Left: IN-BAND REFERENCE LEVEL

- Center Freq: 2.44000000 GHz
- Ref Offset: 11.17 dB, Ref: 30.00 dBm
- Mkr1: 2.44009 GHz, 10.395 dBm
- Span: 10.00 MHz, Sweep: 5.000 ms (1001 pts)
- #VBW 300 kHz, #Res BW 100 kHz
- Table:

N	MODE	FREQ [GHz]	SCAL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	2.44009	f	(Δ)	10.395	dBm		
2	N	2.44000	f	(Δ)	-30.628	dBm		
3	N	2.44000	f		-30.628	dBm		

Bottom Right: OUT-OF-BAND MID CHANNEL

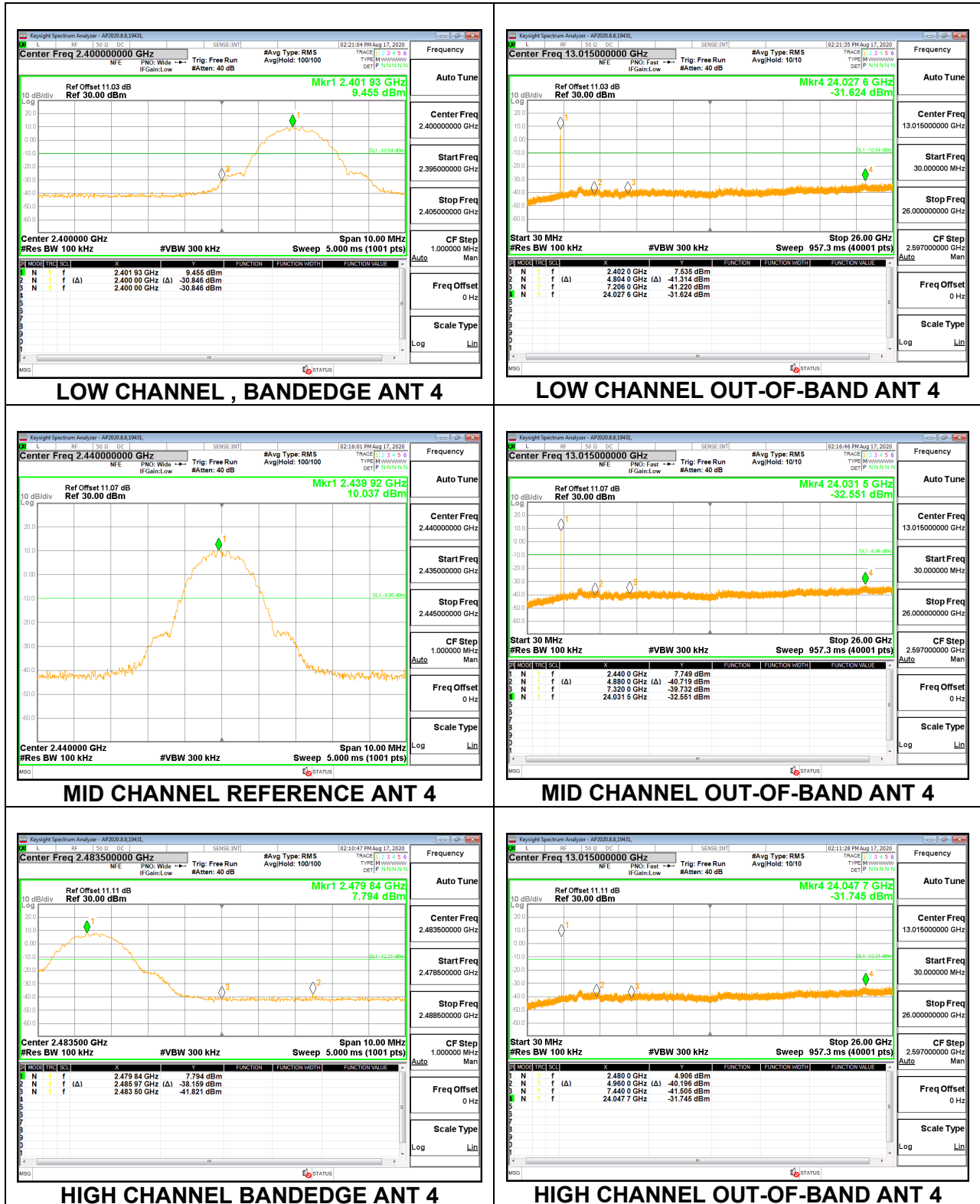
- Center Freq: 13.015000000 GHz
- Ref Offset: 11.17 dB, Ref: 30.00 dBm
- Mkr4: 25.5468 GHz, -32.196 dBm
- Span: 26.00 MHz, Sweep: 957.3 ms (40001 pts)
- #VBW 300 kHz, #Res BW 100 kHz
- Table:

N	MODE	FREQ [GHz]	SCAL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	2.44000	f	(Δ)	7.865	dBm		
2	N	4.88000	f	(Δ)	-39.582	dBm		
3	N	7.32000	f	(Δ)	-40.132	dBm		
4	N	25.5468	f		-32.196	dBm		

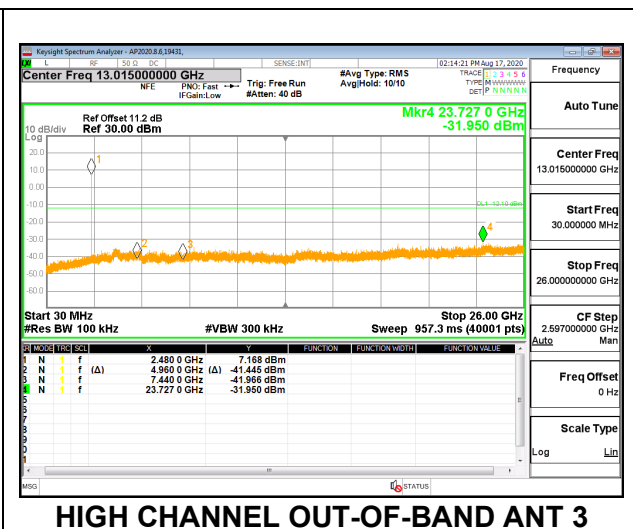
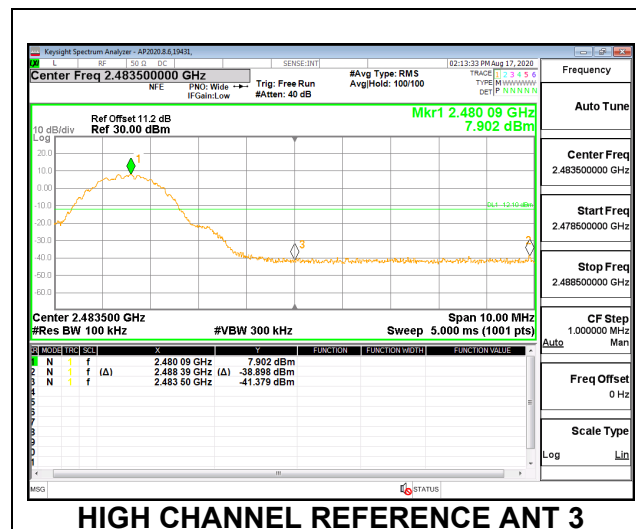
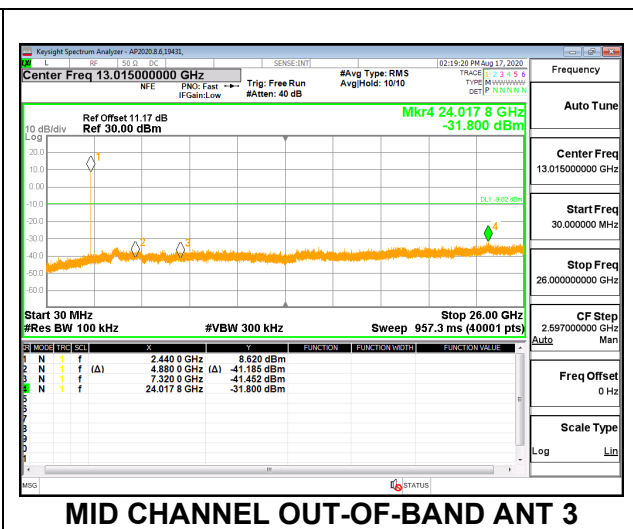
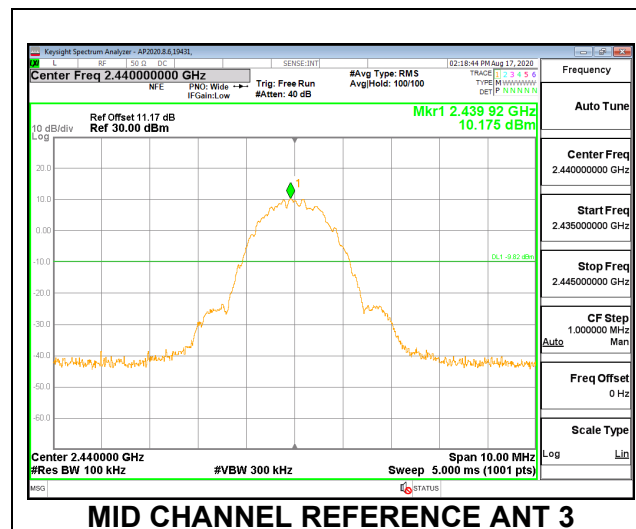
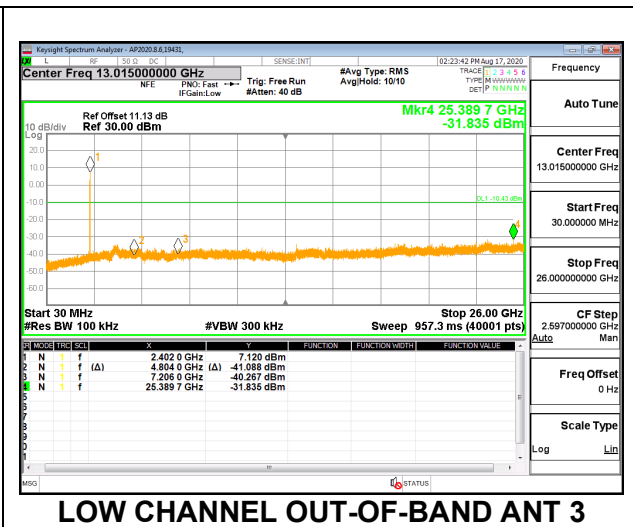
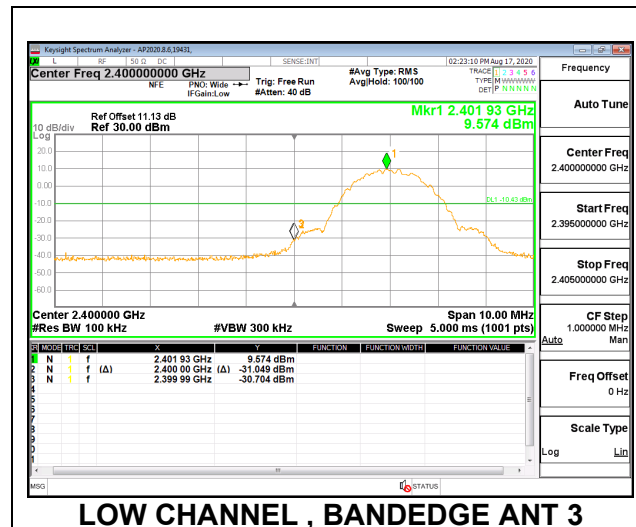
9.7.8. LOW POWER BLE TXBF (2Mbps)

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

ANT 4



ANT 3



10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

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

TEST PROCEDURE

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

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

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

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

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

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

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

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

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

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

Compliance with radiated spurious emissions limits in the restricted bands closest to the allocated 2402 – 2480 MHz band were performed on all modes for the low and high channels. Additional measurements on adjacent channels to the low and/or high channels were limited to cases where the edge channels have a significantly lower rated power than the adjacent channels.

Compliance with radiated spurious emissions limits in the restricted bands between 1GHz and 18GHz (except as explained for the band edge) the operating band were performed on the low, middle and high channel for 2Mbps mode. As this mode has the highest output power and highest power spectral density it is considered worst case for spurious emissions across all modes. For these tests both transmit chains were operating simultaneously and set to the maximum power per chain to cover both TXBF mode. Spurious emissions for frequencies below 1GHz and above 18GHz were limited to the center channel as preliminary testing indicated that changing the operating frequency had no significant impact on the emissions in those frequency bands.

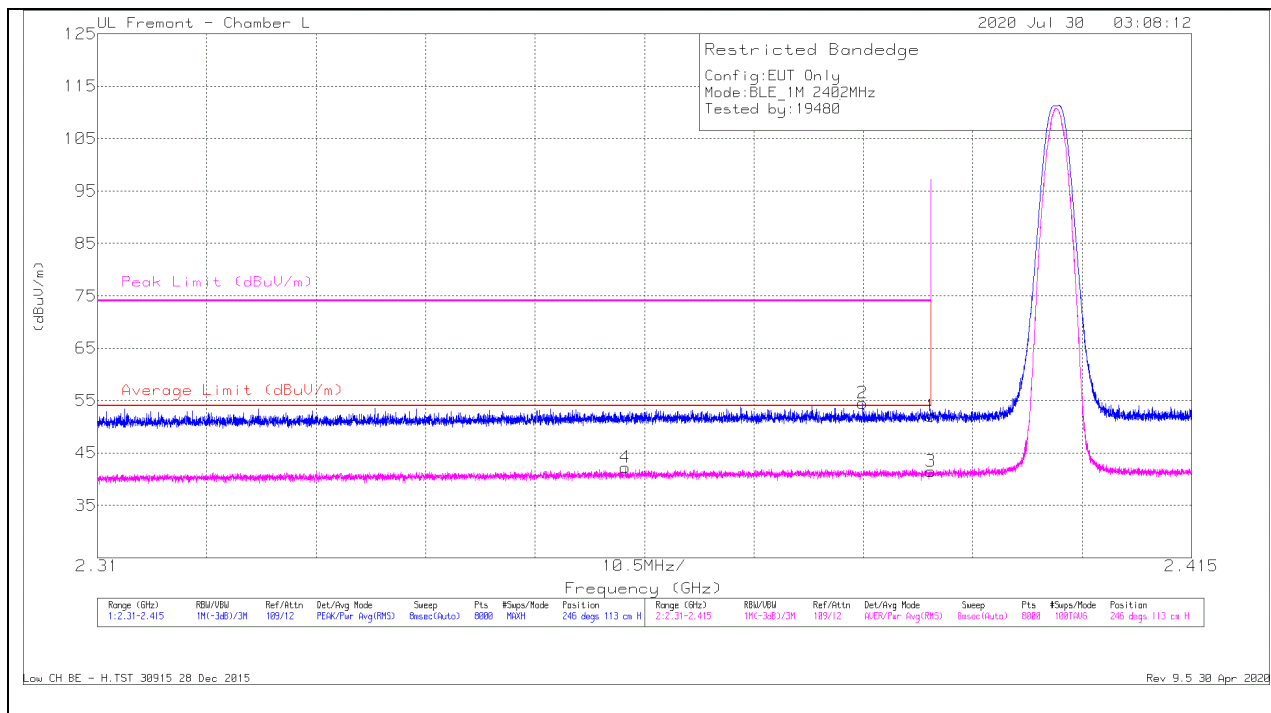
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



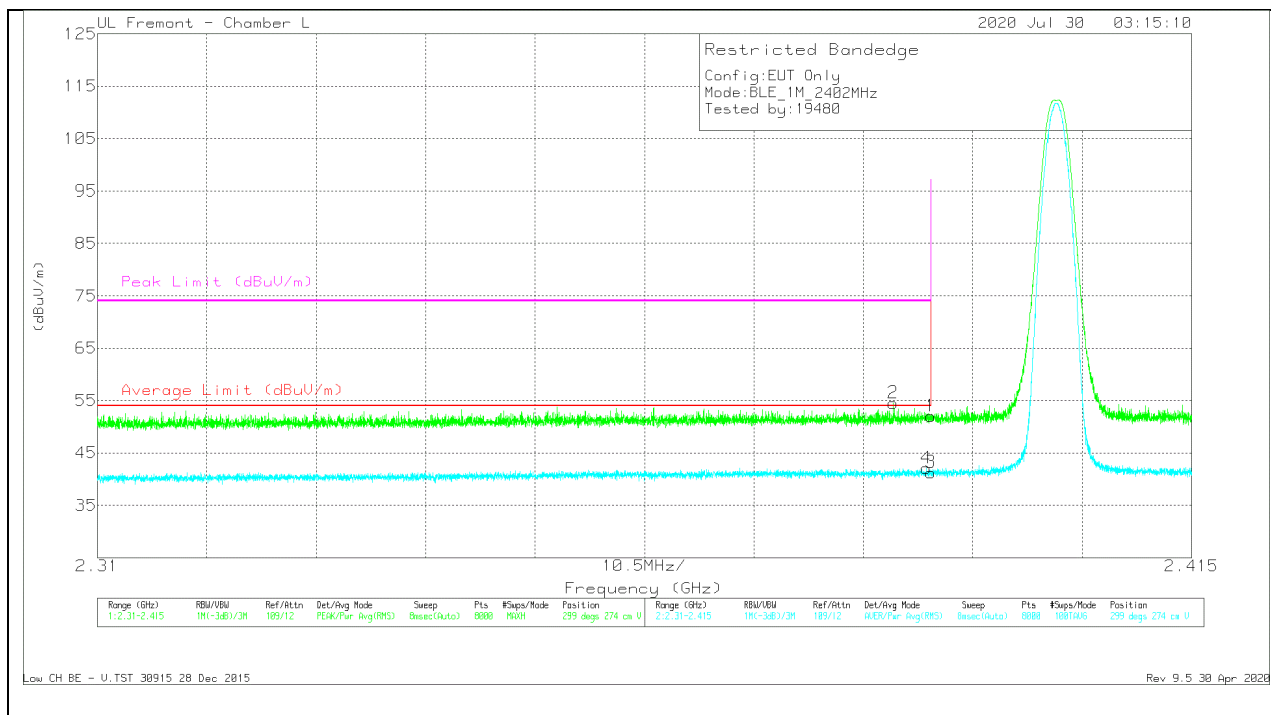
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	33.21	Pk	31.9	-13.1	52.01	-	-	74	-21.99	246	113	H
2	* 2.38342	35.75	Pk	31.8	-13	54.55	-	-	74	-19.45	246	113	H
3	* 2.39	22.72	RMS	31.9	-13.1	41.52	54	-12.48	-	-	246	113	H
4	* 2.36068	23.67	RMS	31.7	-13.1	42.27	54	-11.73	-	-	246	113	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Mark er	Frequency (GHz)	Meter Readi ng (dBuV)	Det	AF 344 (dB/m)	Amp/C bl/Filtr/ Pad (dB)	Correc ted Readi ng (dBuV/ m)	Avera ge Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimet h (Degs)	Height (cm)	Polarit y
1	* 2.39	33.24	Pk	31.9	-13.1	52.04	-	-	74	-21.96	299	274	V
2	* 2.38635	35.87	Pk	31.8	-13.1	54.57	-	-	74	-19.43	299	274	V
3	* 2.39	22.49	RMS	31.9	-13.1	41.29	54	-12.71	-	-	299	274	V
4	* 2.38955	23.3	RMS	31.9	-13.1	42.1	54	-11.9	-	-	299	274	V

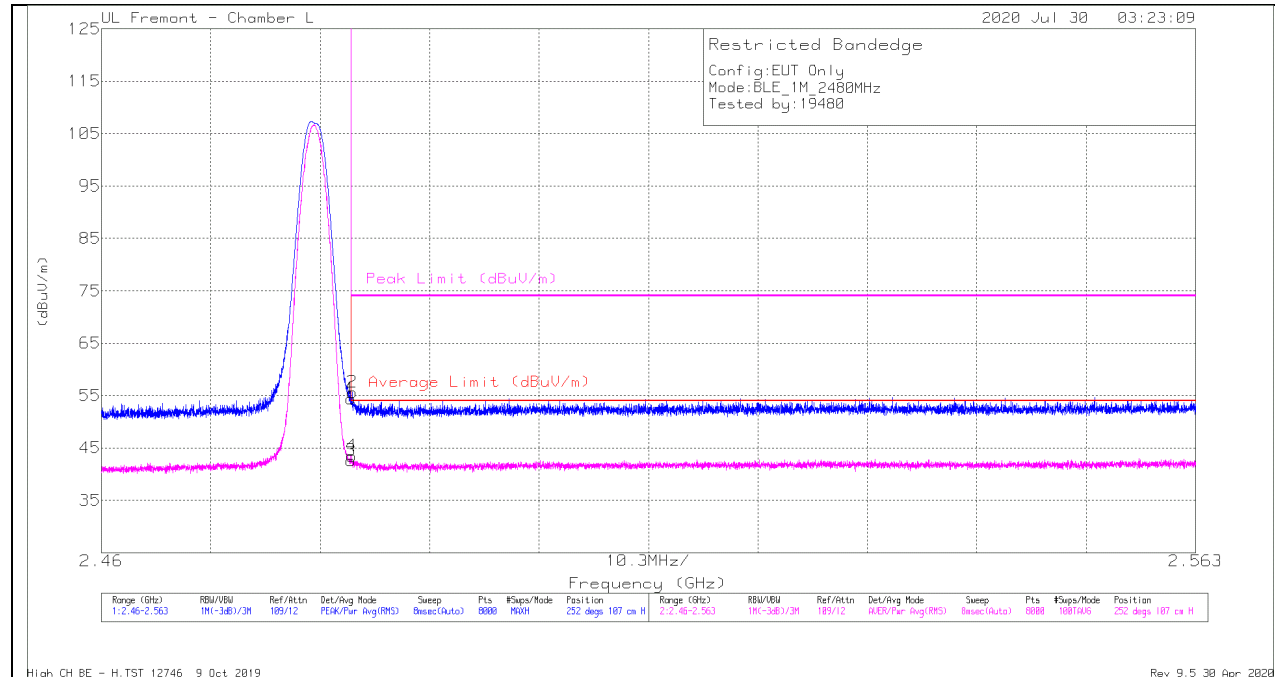
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



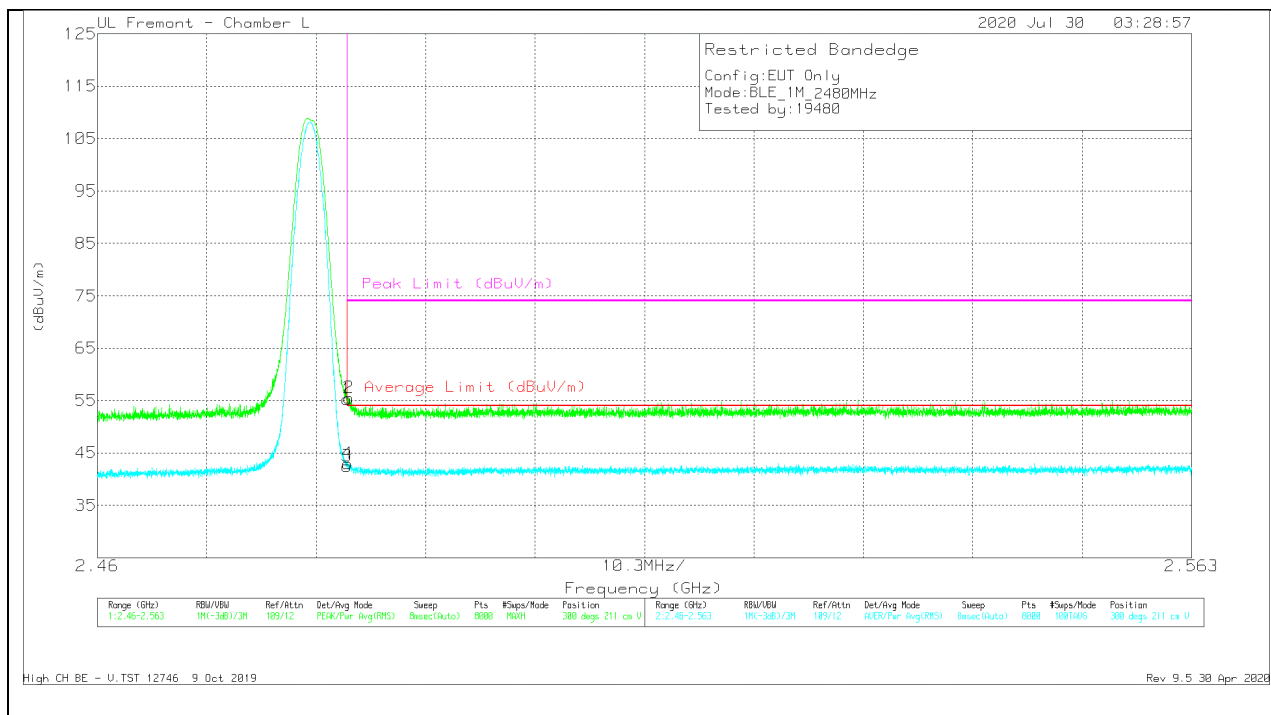
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	34.98	Pk	32.3	-12.9	54.38	-	-	74	-19.62	252	107	H
2	* 2.48359	36.27	Pk	32.3	-12.9	55.67	-	-	74	-18.33	252	107	H
3	* 2.4835	23.25	RMS	32.3	-12.9	42.65	54	-11.35	-	-	252	107	H
4	* 2.48356	24.03	RMS	32.3	-12.9	43.43	54	-10.57	-	-	252	107	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



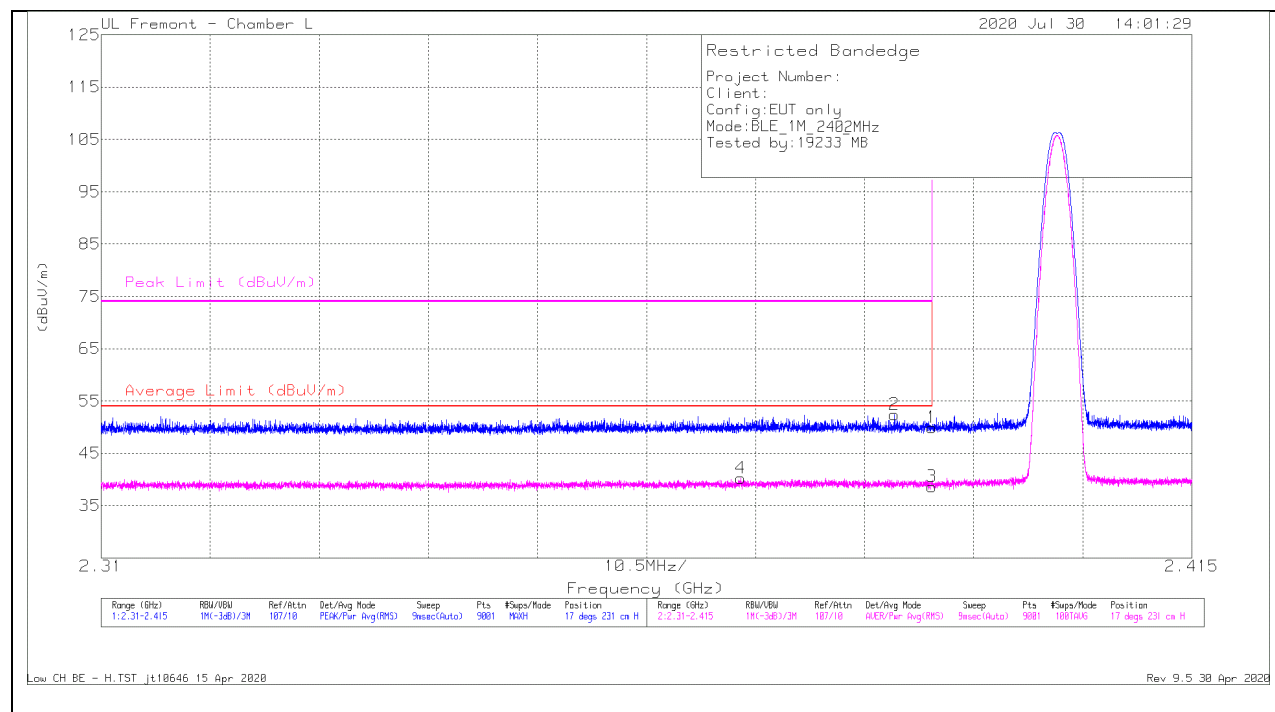
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	35.91	Pk	32.3	-12.9	55.31	-	-	74	-18.69	300	211	V
2	* 2.48366	36.15	Pk	32.3	-12.9	55.55	-	-	74	-18.45	300	211	V
3	* 2.4835	23.1	RMS	32.3	-12.9	42.5	54	-11.5	-	-	300	211	V
4	* 2.48354	23.56	RMS	32.3	-12.9	42.96	54	-11.04	-	-	300	211	V

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

ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



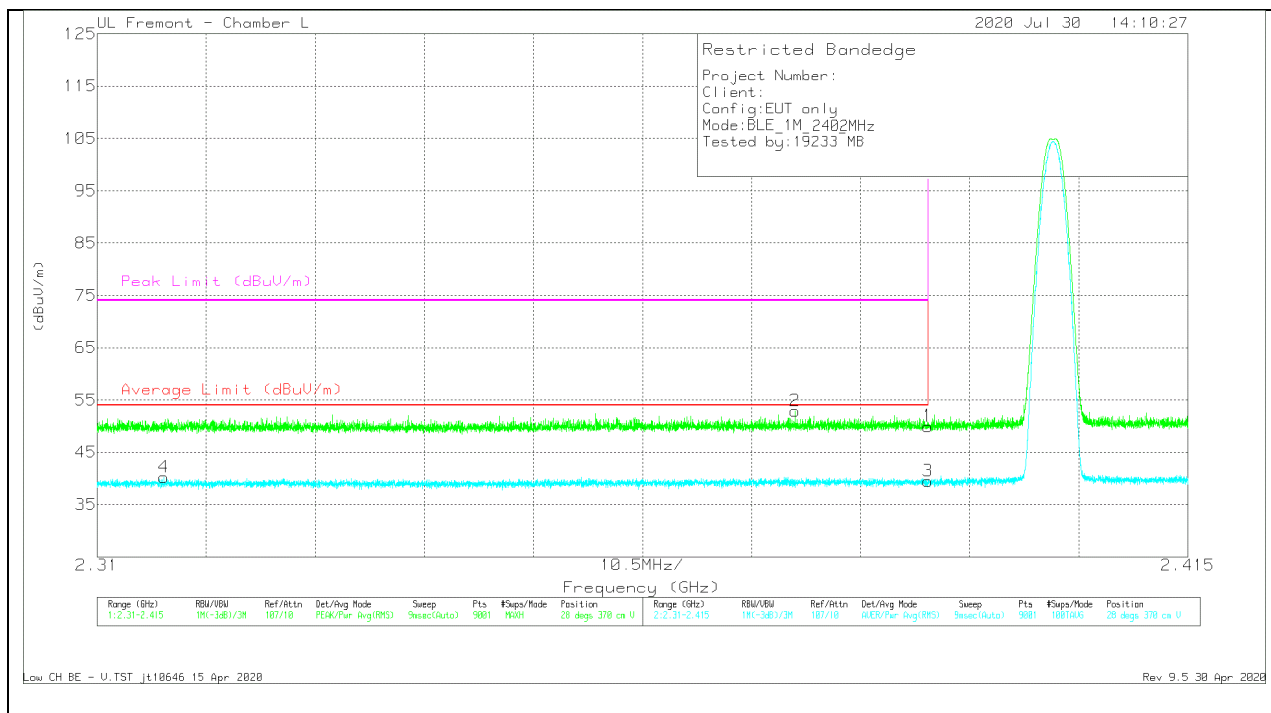
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	39.14	Pk	31.9	-21.1	49.94	-	-	74	-24.06	17	231	H
2	* 2.38638	41.72	Pk	31.8	-21.1	52.42	-	-	74	-21.58	17	231	H
3	* 2.38999	27.82	RMS	31.9	-21.1	38.62	54	-15.38	-	-	17	231	H
4	* 2.37158	29.6	RMS	31.8	-21.2	40.2	54	-13.8	-	-	17	231	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

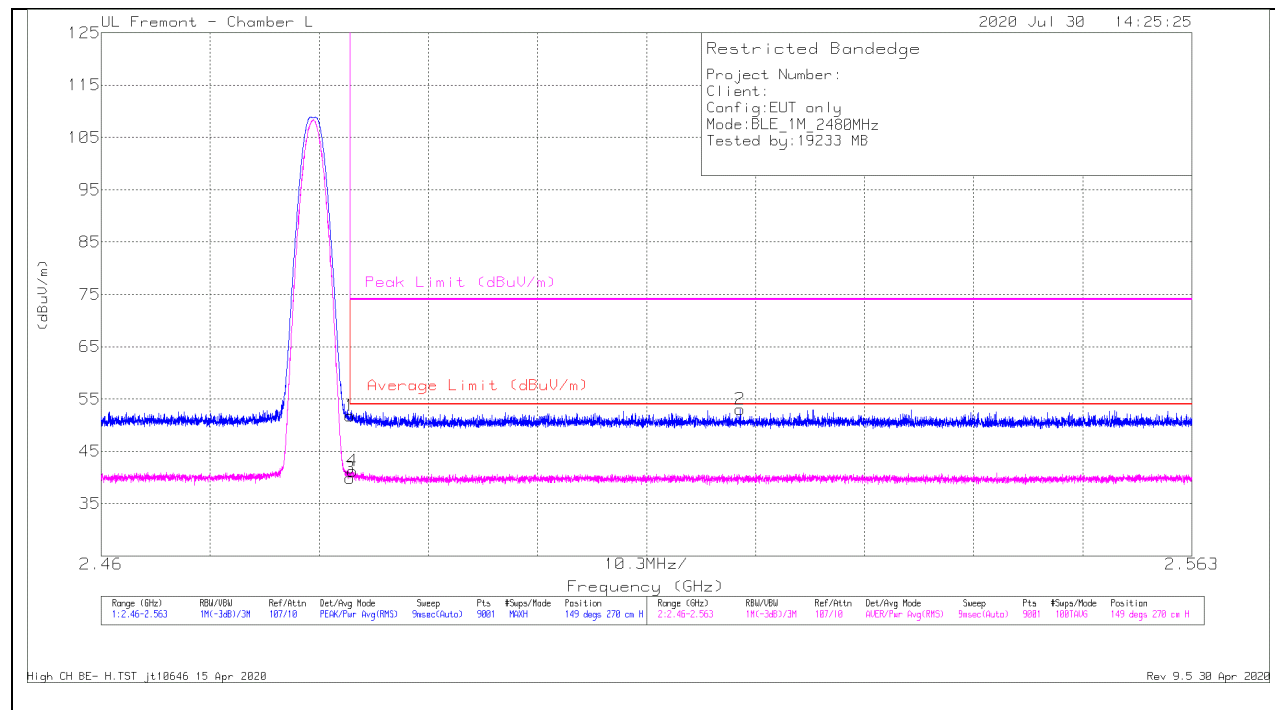


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.38999	39.18	Pk	31.9	-21.1	49.98	-	-	74	-24.02	28	370	V
2	* 2.37719	42.26	Pk	31.8	-21.2	52.86	-	-	74	-21.14	28	370	V
3	* 2.38999	28.74	RMS	31.9	-21.1	39.54	54	-14.46	-	-	28	370	V
4	* 2.31642	29.83	RMS	31.7	-21.3	40.23	54	-13.77	-	-	28	370	V

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

BANDEDGE (HIGH CHANNEL)

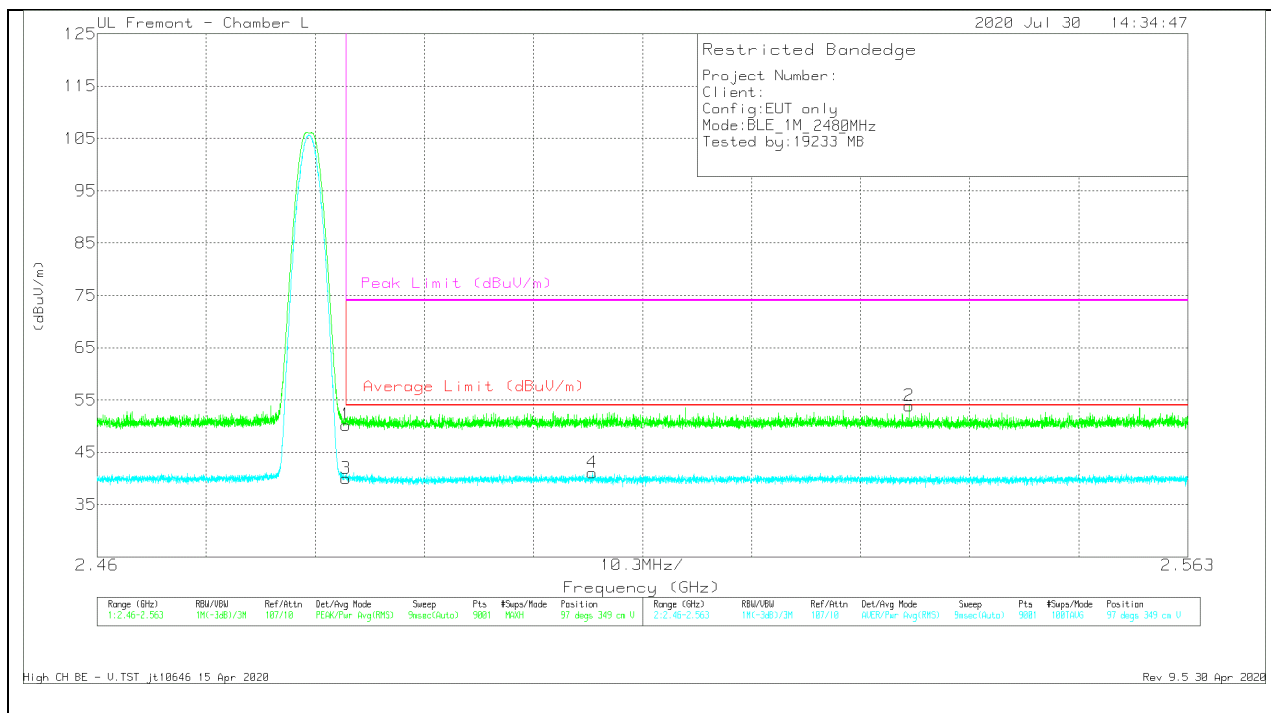
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.48351	40.43	Pk	32.3	-20.9	51.83	-	-	74	-22.17	149	270	H
2	2.52037	41.65	Pk	32.3	-20.9	53.05	-	-	74	-20.95	149	270	H
3	* 2.48351	28.49	RMS	32.3	-20.9	39.89	54	-14.11	-	-	149	270	H
4	* 2.48371	29.85	RMS	32.3	-20.9	41.25	54	-12.75	-	-	149	270	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 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.48351	38.83	Pk	32.3	-20.9	50.23	-	-	74	-23.77	97	349	V
2	2.5367	42.39	Pk	32.3	-20.8	53.89	-	-	74	-20.11	97	349	V
3	* 2.48351	28.58	RMS	32.3	-20.9	39.98	54	-14.02	-	-	97	349	V
4	2.50677	29.63	RMS	32.4	-20.9	41.13	54	-12.87	-	-	97	349	V

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

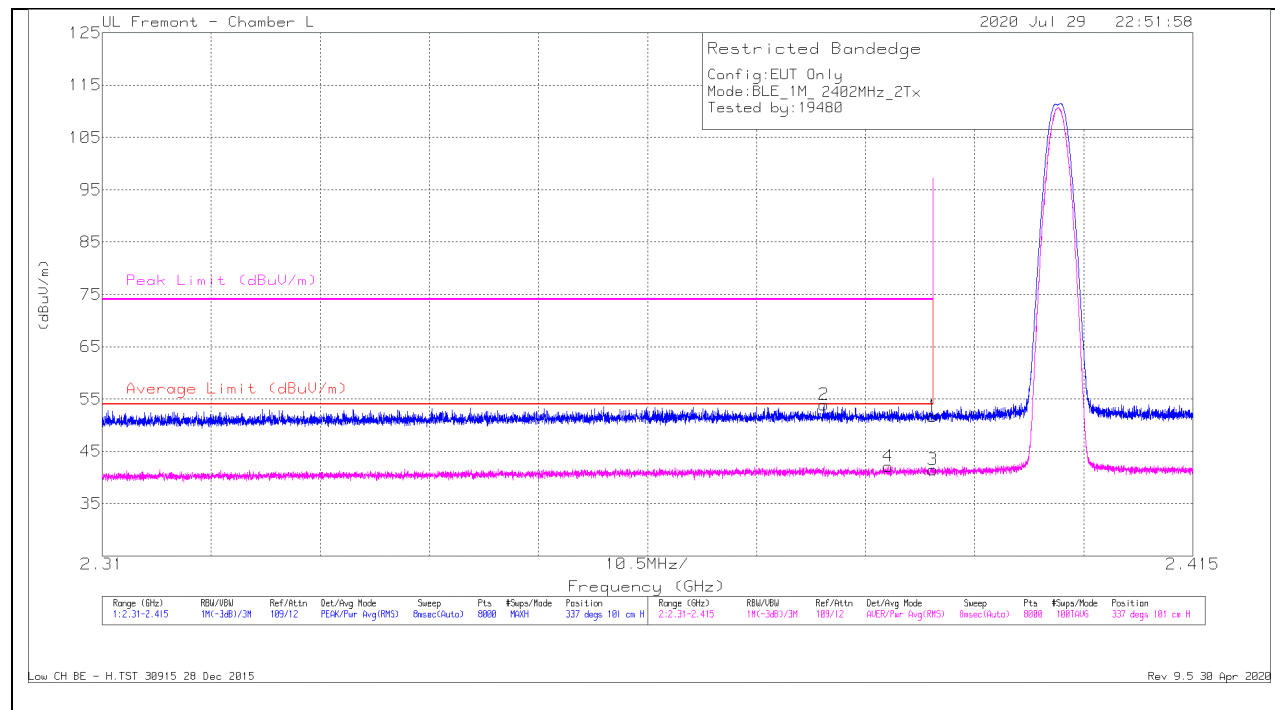
Pk - Peak detector

RMS - RMS detection

10.2.2. HIGH POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

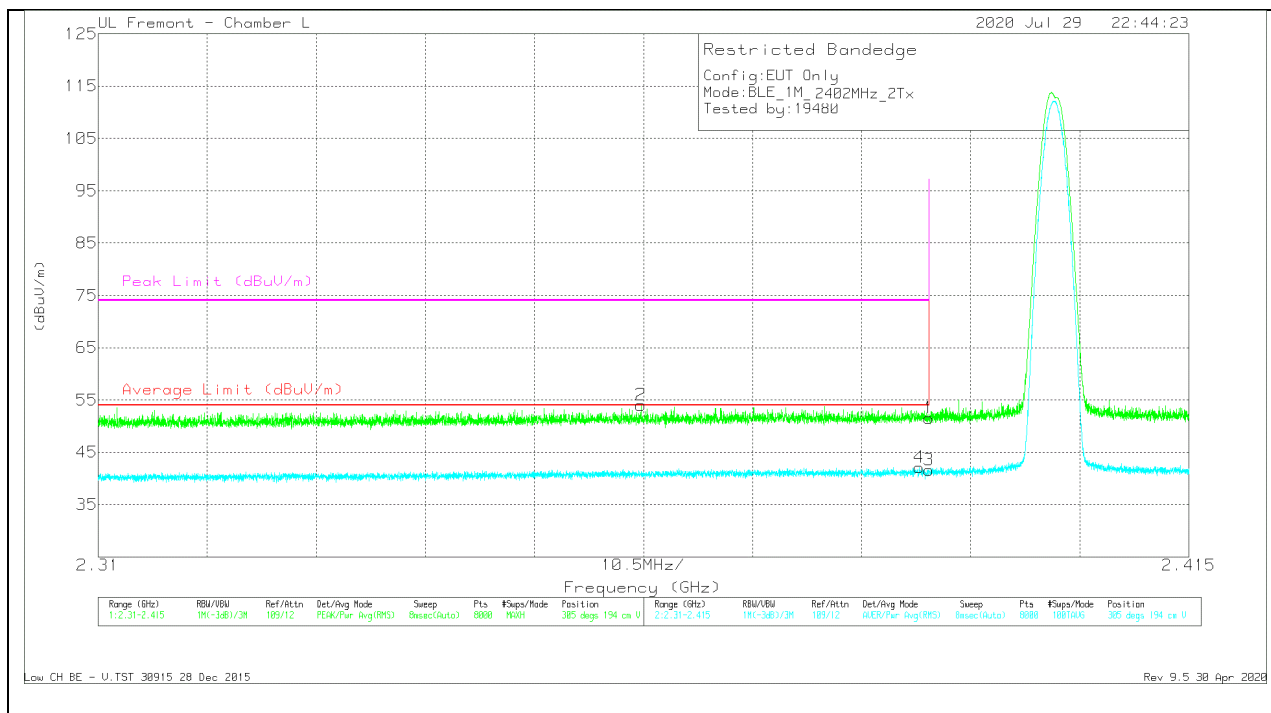
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.39	32.87	Pk	31.9	-13.1	51.67	-	-	74	-22.33	337	101	H
2	* 2.37947	35.12	Pk	31.8	-13	53.92	-	-	74	-20.08	337	101	H
3	* 2.39	22.72	RMS	31.9	-13.1	41.52	54	-12.48	-	-	337	101	H
4	* 2.38565	23.43	RMS	31.8	-13.1	42.13	54	-11.87	-	-	337	101	H

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

VERTICAL RESULT

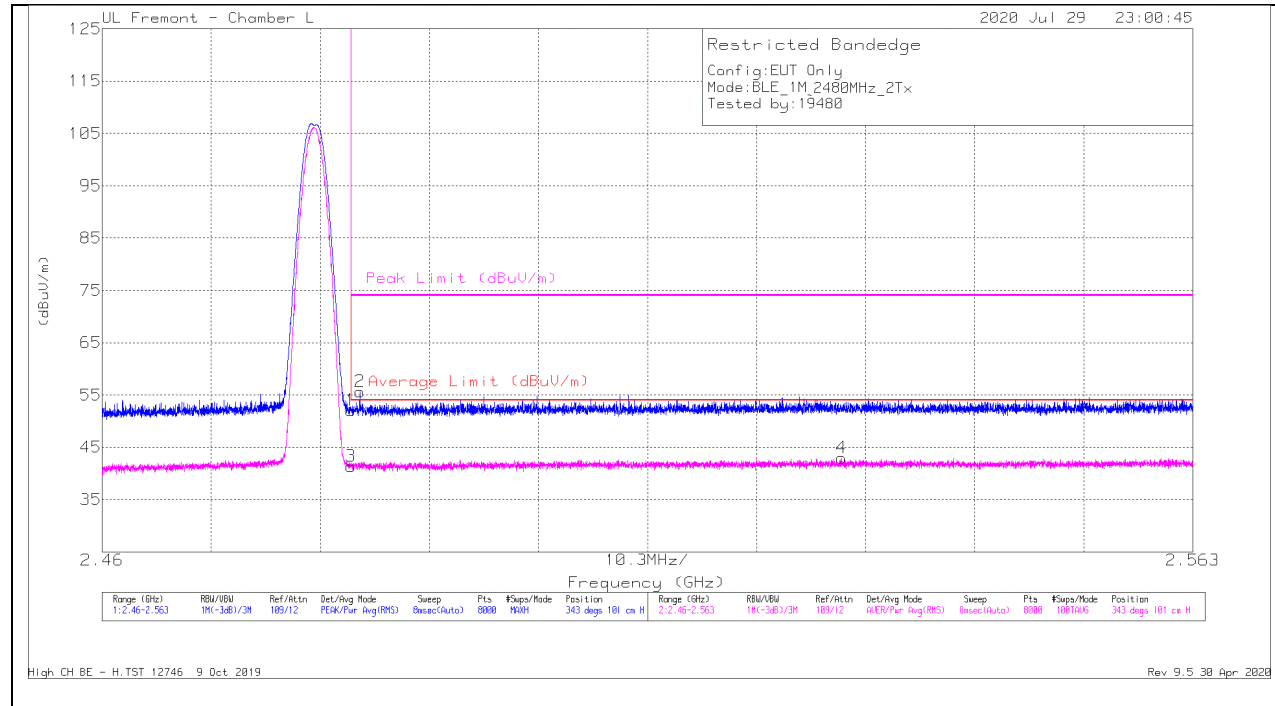


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	32.74	Pk	31.9	-13.1	51.54	-	-	74	-22.46	305	194	V
2	* 2.36225	35.45	Pk	31.7	-13.1	54.05	-	-	74	-19.95	305	194	V
3	* 2.39	22.85	RMS	31.9	-13.1	41.65	54	-12.35	-	-	305	194	V
4	* 2.38905	23.34	RMS	31.9	-13.1	42.14	54	-11.86	-	-	305	194	V

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

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

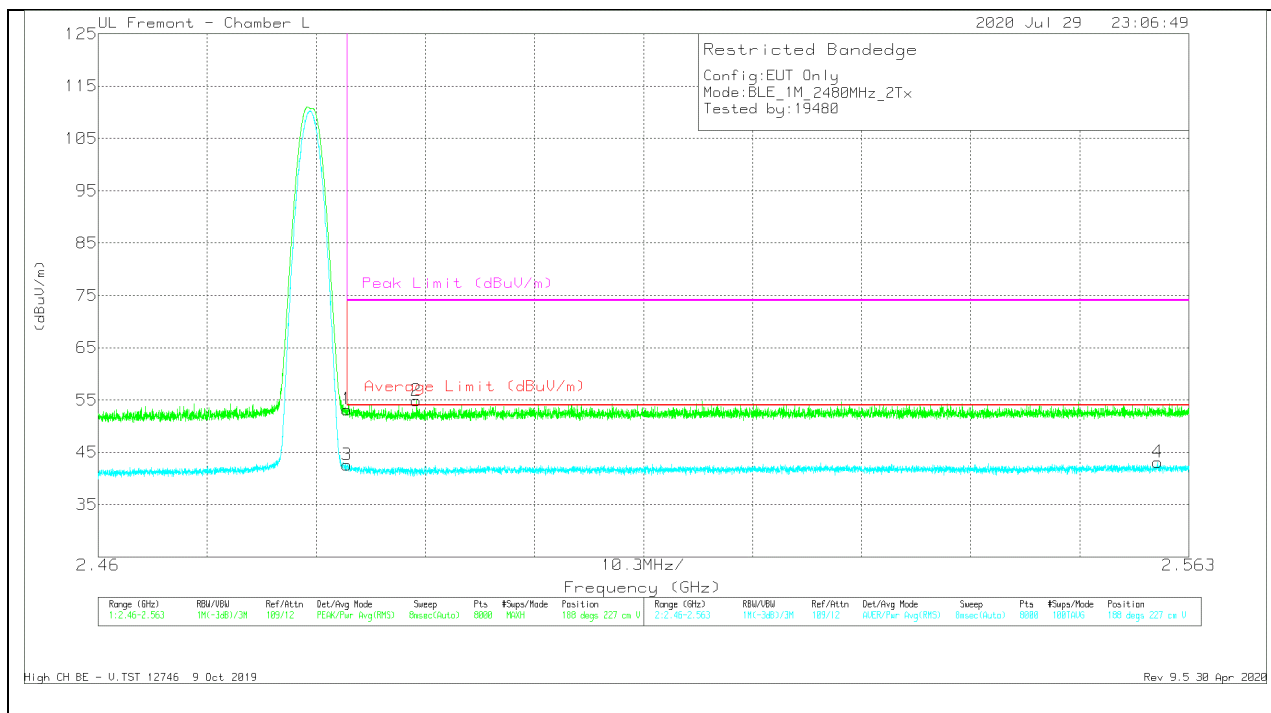
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarization
1	* 2.4835	32.66	Pk	32.3	-12.9	52.06	-	-	74	-21.94	343	101	H
2	* 2.48435	36.26	Pk	32.3	-12.9	55.66	-	-	74	-18.34	343	101	H
3	* 2.4835	21.98	RMS	32.3	-12.9	41.38	54	-12.62	-	-	343	101	H
4	2.52981	23.25	RMS	32.4	-12.7	42.95	54	-11.05	-	-	343	101	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 344 (dB/m)	Amp/Cb/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	* 2.4835	33.81	Pk	32.3	-12.9	53.21	-	-	74	-20.79	188	227	V
2	* 2.49007	35.4	Pk	32.3	-12.8	54.9	-	-	74	-19.1	188	227	V
3	* 2.4835	23.25	RMS	32.3	-12.9	42.65	54	-11.35	-	-	188	227	V
4	2.56004	23.35	RMS	32.4	-12.6	43.15	54	-10.85	-	-	188	227	V

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

Pk - Peak detector

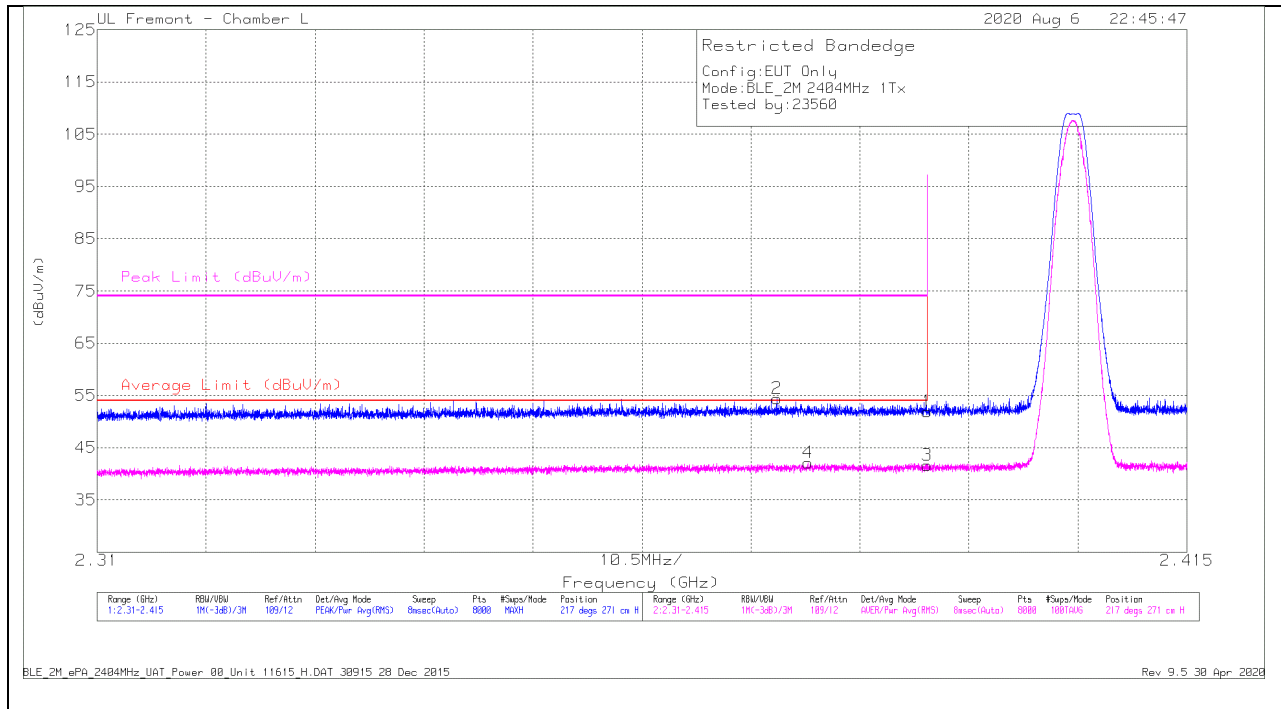
RMS - RMS detection

10.2.3. HIGH POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



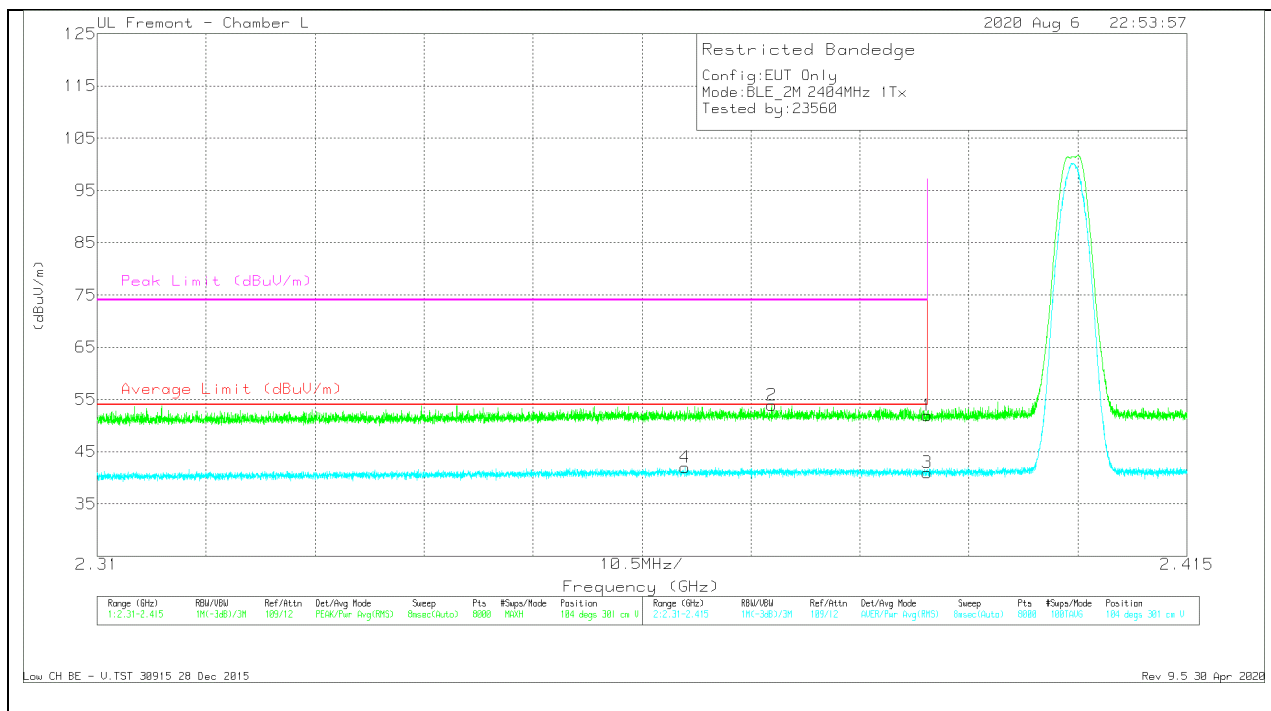
Mark er	Frequen cy (GHz)	Meter Readi ng (dBuV)	Det	AF 344 (dB/m)	Amp/C bl/Filtr/ Pad (dB)	Correc ted Readi ng (dBuV/ m)	Avera ge Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimet h (Degs)	Height (cm)	Polarit y
1	* 2.39	33.06	Pk	31.9	-13.1	51.86	-	-	74	-22.14	217	271	H
2	* 2.3754	35.56	Pk	31.8	-13	54.36	-	-	74	-19.64	217	271	H
3	* 2.39	22.76	RMS	31.9	-13.1	41.56	54	-12.44	-	-	217	271	H
4	* 2.3785	23.28	RMS	31.8	-13	42.08	54	-11.92	-	-	217	271	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Ma r k e r	Frequenc y (GHz)	Meter Readi ng (dBuV)	Det	AF 344 (dB/m)	Amp/C b/Filtr/ Pad (dB)	Correc ted Readi ng (dBuV/ m)	Avera ge Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimet h (Degs)	Height (cm)	Polarit y
1	* 2.39	33.05	Pk	31.9	-13.1	51.85	-	-	74	-22.15	104	301	V
2	* 2.37503	35.07	Pk	31.8	-13	53.87	-	-	74	-20.13	104	301	V
3	* 2.39	22.2	RMS	31.9	-13.1	41	54	-13	-	-	104	301	V
4	* 2.36664	23.29	RMS	31.8	-13.1	41.99	54	-12.01	-	-	104	301	V

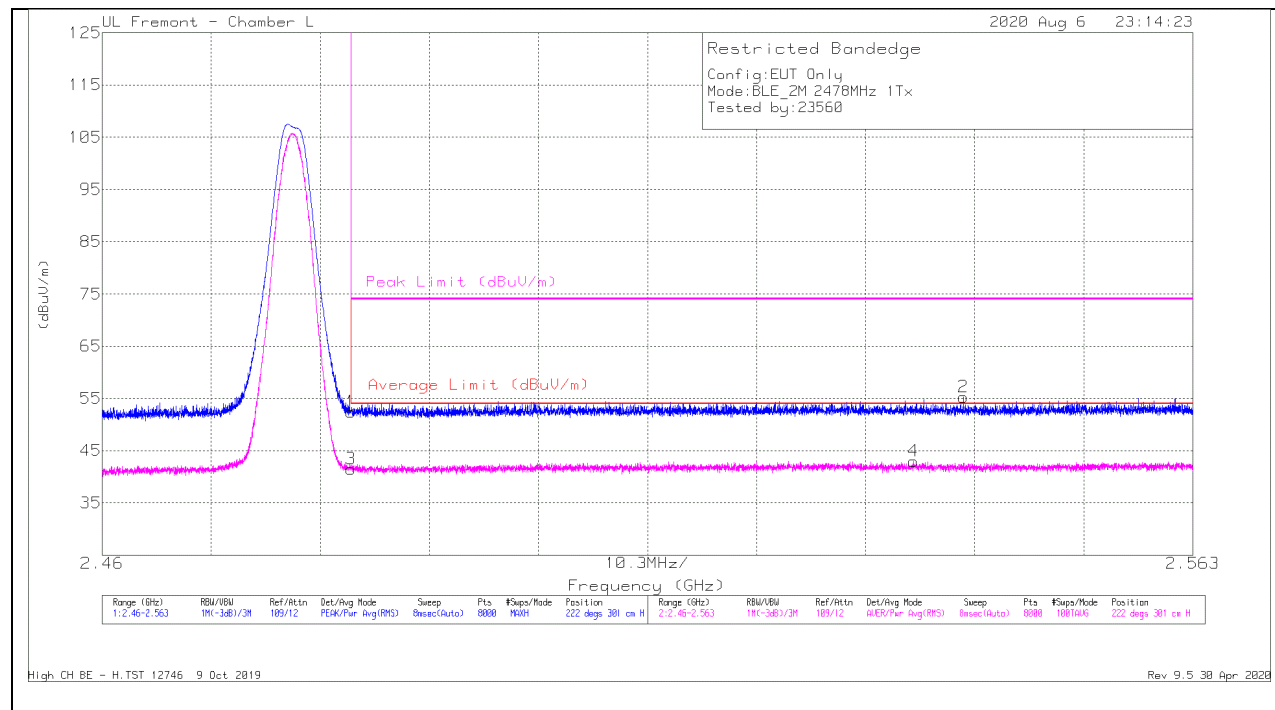
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



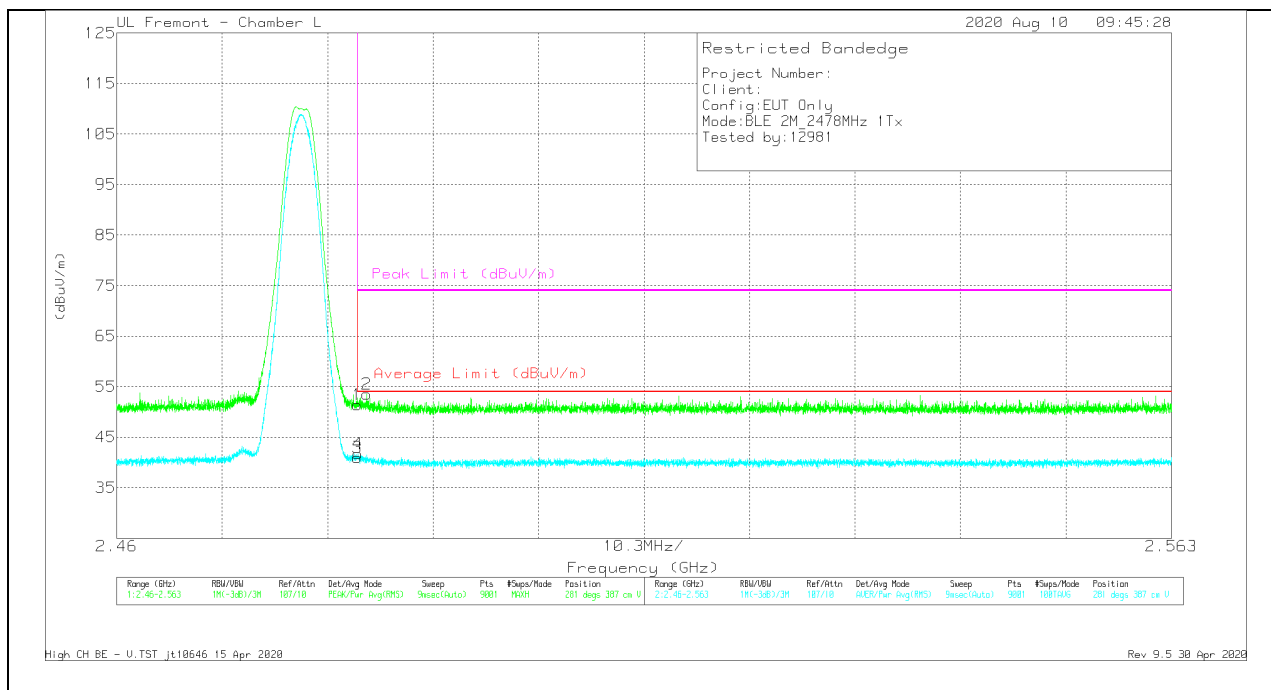
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	32.99	Pk	32.3	-12.9	52.39	-	-	74	-21.61	222	301	H
2	2.54132	35.65	Pk	32.3	-12.7	55.25	-	-	74	-18.75	222	301	H
3	* 2.4835	22.11	RMS	32.3	-12.9	41.51	54	-12.49	-	-	222	301	H
4	2.53659	23.41	RMS	32.3	-12.7	43.01	54	-10.99	-	-	222	301	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



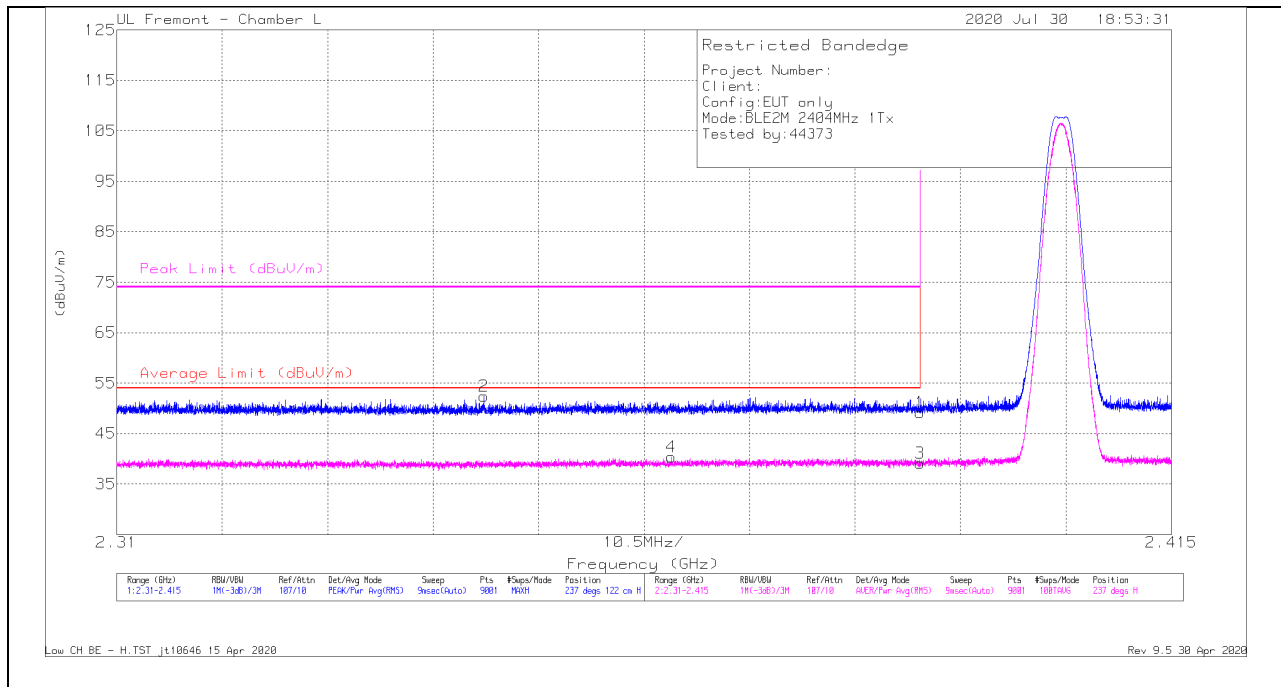
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polariz
1	* 2.48351	39.99	Pk	32.3	-20.9	51.39	-	-	74	-22.61	281	387	V
2	* 2.48443	42.14	Pk	32.3	-20.9	53.54	-	-	74	-20.46	281	387	V
3	* 2.48351	29.62	RMS	32.3	-20.9	41.02	54	-12.98	-	-	281	387	V
4	* 2.48354	30.3	RMS	32.3	-20.9	41.7	54	-12.3	-	-	281	387	V

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

ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



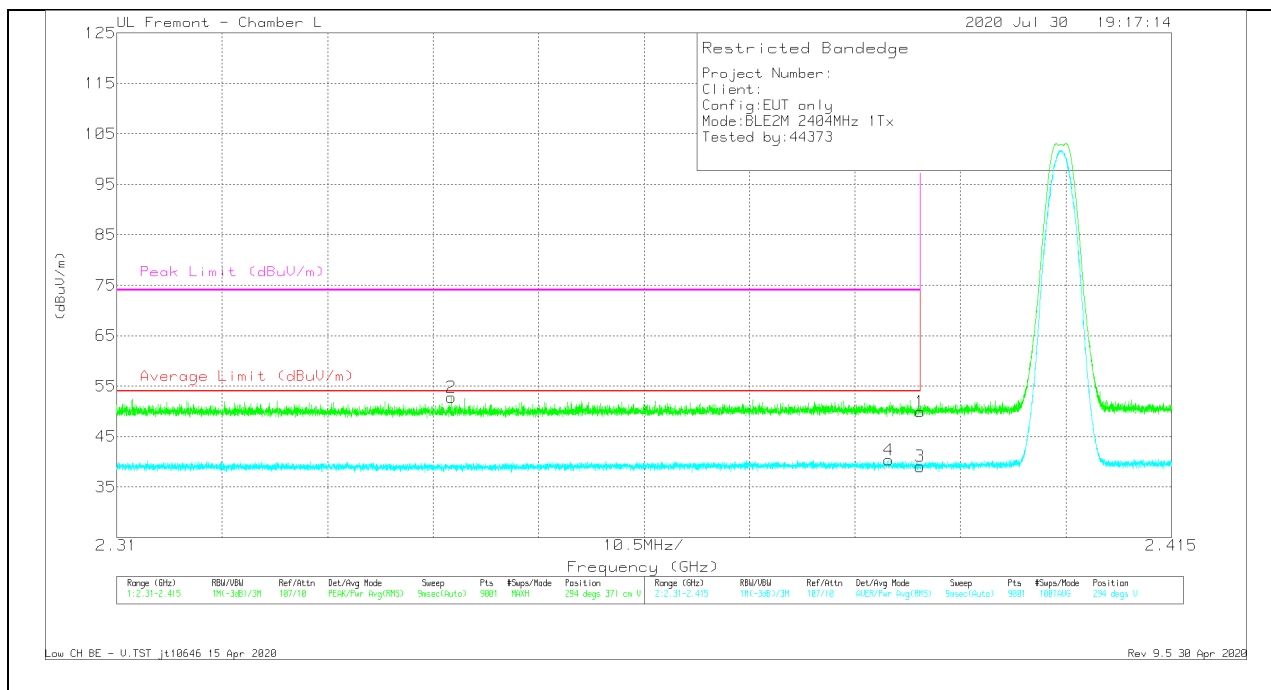
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb I/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.32	Pk	31.9	-21.1	49.12	-	-	74	-24.88	237	122	H
2	* 2.34653	42	Pk	31.6	-21.2	52.4	-	-	74	-21.6	237	122	H
3	* 2.38999	28.3	RMS	31.9	-21.1	39.1	54	-14.9	-	-	237	122	H
4	* 2.36521	29.89	RMS	31.7	-21.2	40.39	54	-13.61	-	-	237	122	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 344 (dB/m)	Amp/Cb I/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	* 2.38999	39.07	Pk	31.9	-21.1	49.87	-	-	74	-24.13	294	371	V
2	* 2.34331	42.36	Pk	31.6	-21.2	52.76	-	-	74	-21.24	294	371	V
3	* 2.38999	28.26	RMS	31.9	-21.1	39.06	54	-14.94	-	-	294	371	V
4	* 2.38685	29.7	RMS	31.8	-21.1	40.4	54	-13.6	-	-	294	371	V

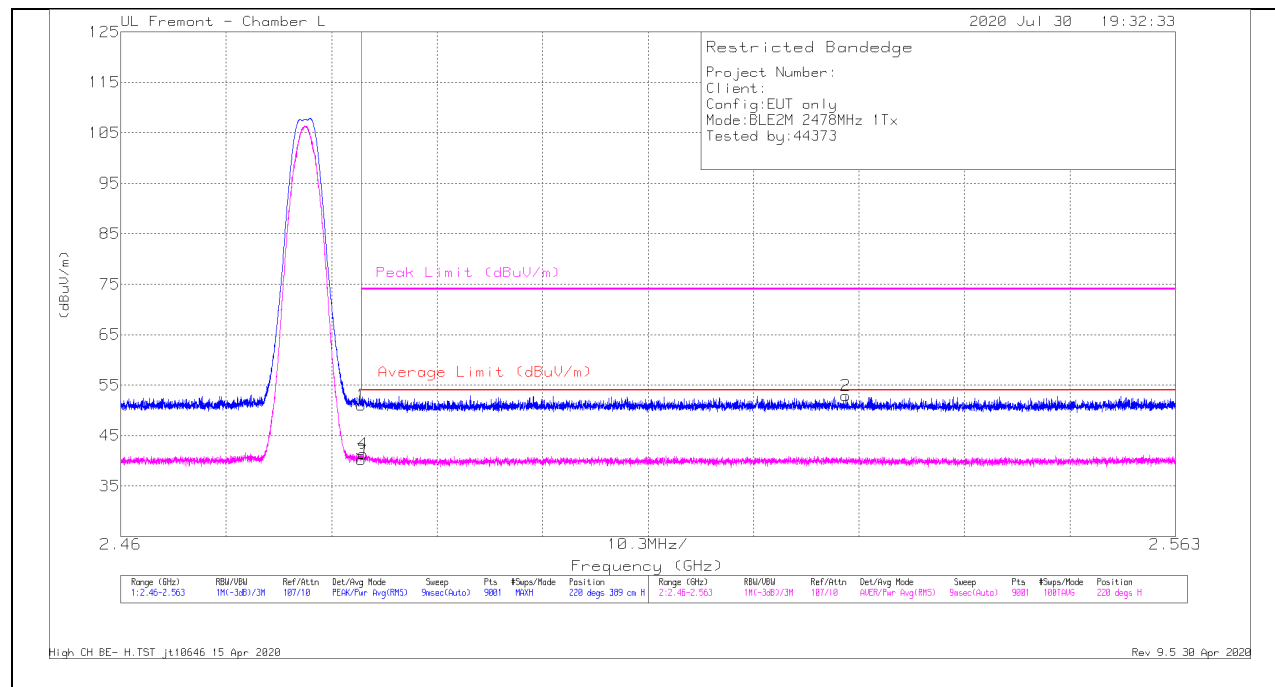
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



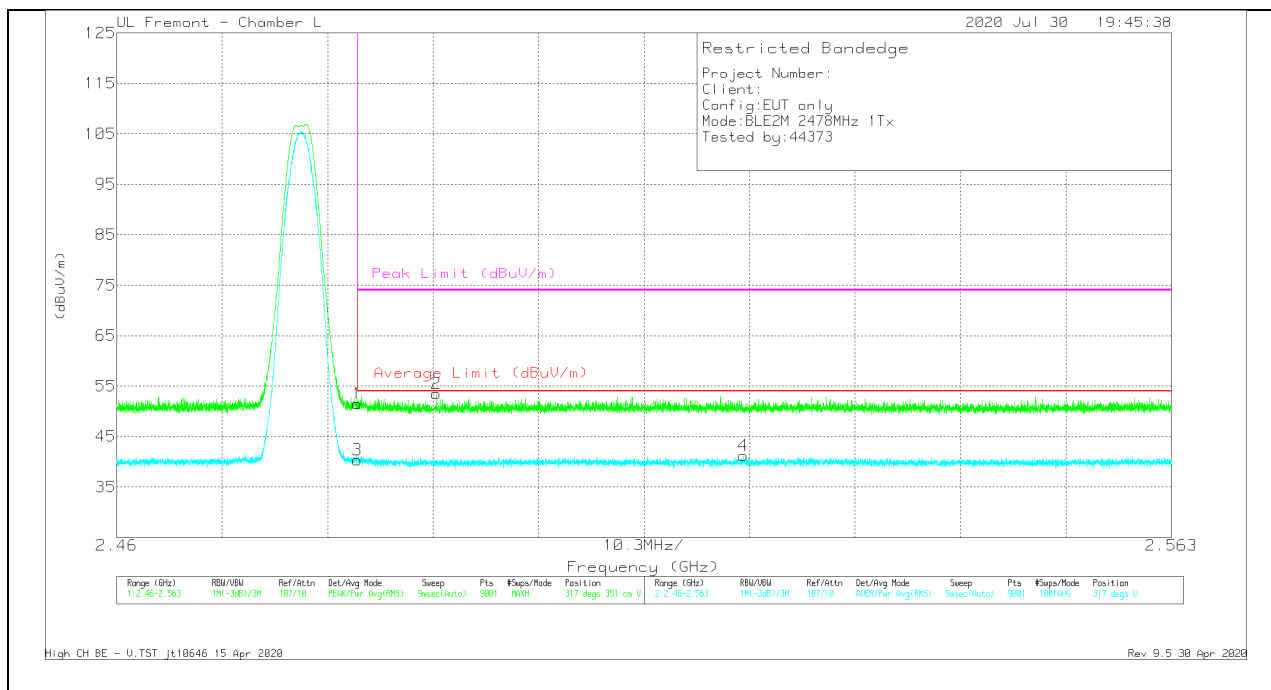
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb I/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.66	Pk	32.3	-20.9	51.06	-	-	74	-22.94	220	389	H
2	2.5308	41.39	Pk	32.4	-20.9	52.89	-	-	74	-21.11	220	389	H
3	* 2.48351	28.8	RMS	32.3	-20.9	40.2	54	-13.8	-	-	220	389	H
4	* 2.48369	29.94	RMS	32.3	-20.9	41.34	54	-12.66	-	-	220	389	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 344 (dB/m)	Amp/Cb I/Filtr/Pd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	40.09	Pk	32.3	-20.9	51.49	-	-	74	-22.51	317	351	V
2	* 2.49122	42.08	Pk	32.3	-20.9	53.48	-	-	74	-20.52	317	351	V
3	* 2.48351	28.98	RMS	32.3	-20.9	40.38	54	-13.62	-	-	317	351	V
4	2.52121	29.83	RMS	32.3	-20.9	41.23	54	-12.77	-	-	317	351	V

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

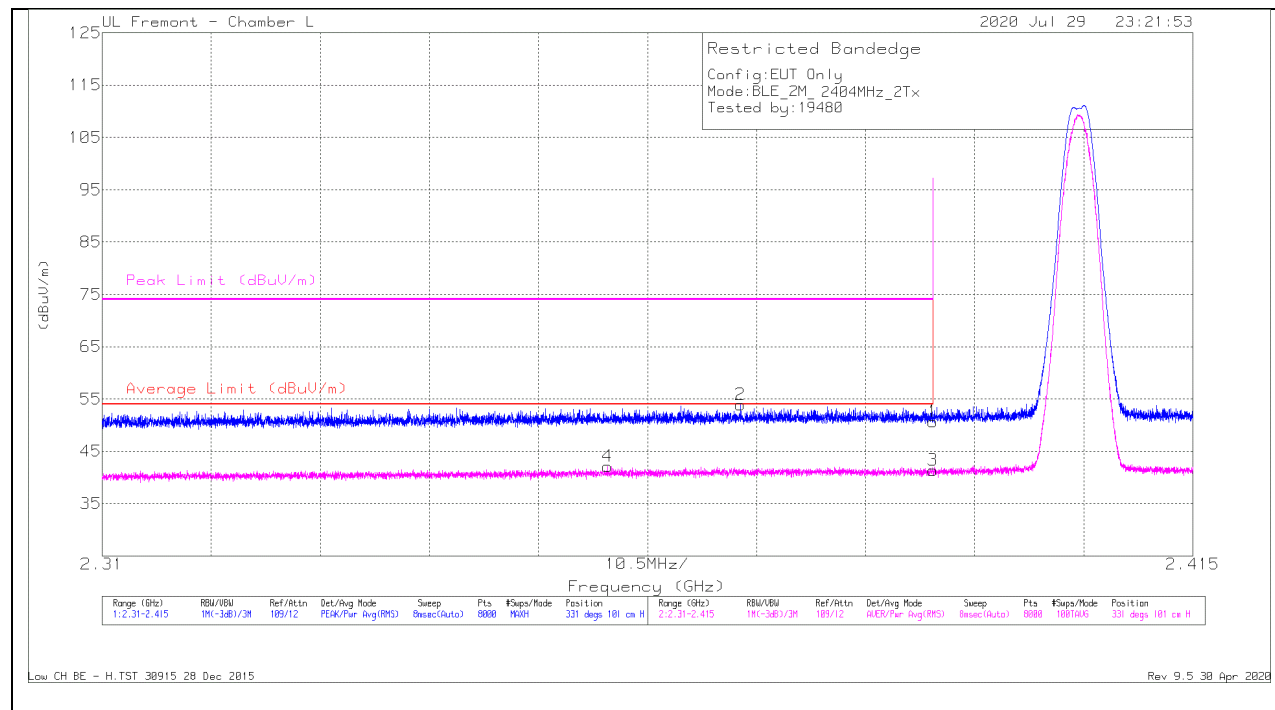
Pk - Peak detector

RMS - RMS detection

10.2.4. HIGH POWER BLE TXBF (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



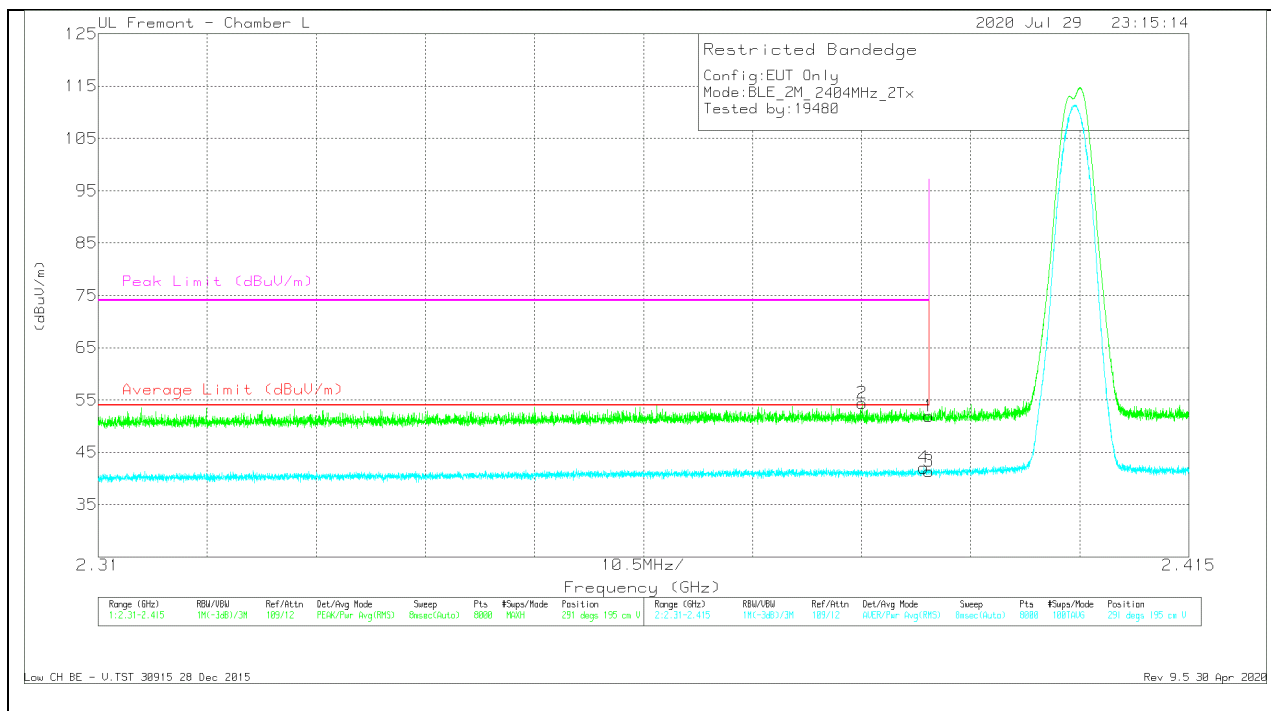
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	31.91	Pk	31.9	-13.1	50.71	-	-	74	-23.29	331	101	H
2	* 2.37147	35.19	Pk	31.8	-13.1	53.89	-	-	74	-20.11	331	101	H
3	* 2.39	22.53	RMS	31.9	-13.1	41.33	54	-12.67	-	-	331	101	H
4	* 2.35865	23.51	RMS	31.7	-13.1	42.11	54	-11.89	-	-	331	101	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

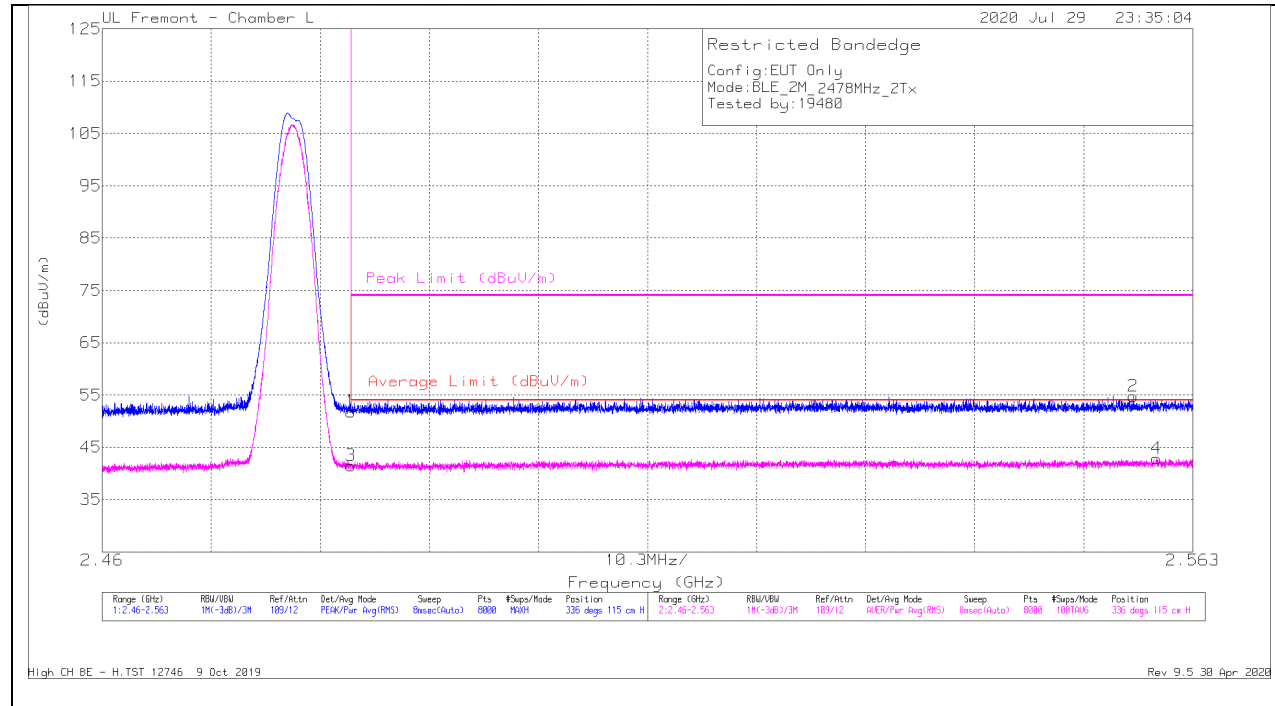


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	33.15	Pk	31.9	-13.1	51.95	-	-	74	-22.05	291	195	V
2	* 2.38356	35.57	Pk	31.8	-13	54.37	-	-	74	-19.63	291	195	V
3	* 2.39	22.59	RMS	31.9	-13.1	41.39	54	-12.61	-	-	291	195	V
4	* 2.38948	23.24	RMS	31.9	-13.1	42.04	54	-11.96	-	-	291	195	V

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

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

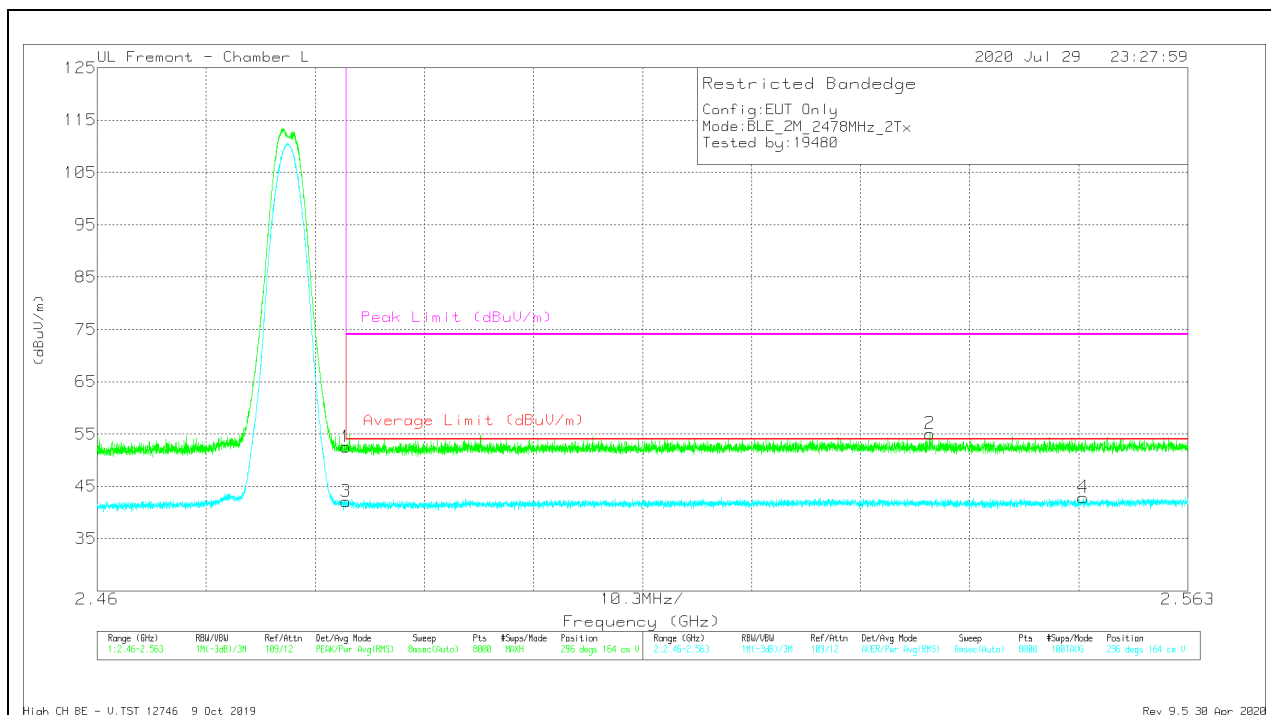
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	32.44	Pk	32.3	-12.9	51.84	-	-	74	-22.16	336	115	H
2	2.55739	35.11	Pk	32.3	-12.6	54.81	-	-	74	-19.19	336	115	H
3	* 2.4835	22.04	RMS	32.3	-12.9	41.44	54	-12.56	-	-	336	115	H
4	2.55955	23.05	RMS	32.4	-12.6	42.85	54	-11.15	-	-	336	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 344 (dB/m)	Amp/Cb/Flt r/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	* 2.4835	33.13	Pk	32.3	-12.9	52.53	-	-	74	-21.47	296	164	V
2	2.53861	35.47	Pk	32.3	-12.7	55.07	-	-	74	-18.93	296	164	V
3	* 2.4835	22.71	RMS	32.3	-12.9	42.11	54	-11.89	-	-	296	164	V
4	2.55311	23.2	RMS	32.3	-12.6	42.9	54	-11.1	-	-	296	164	V

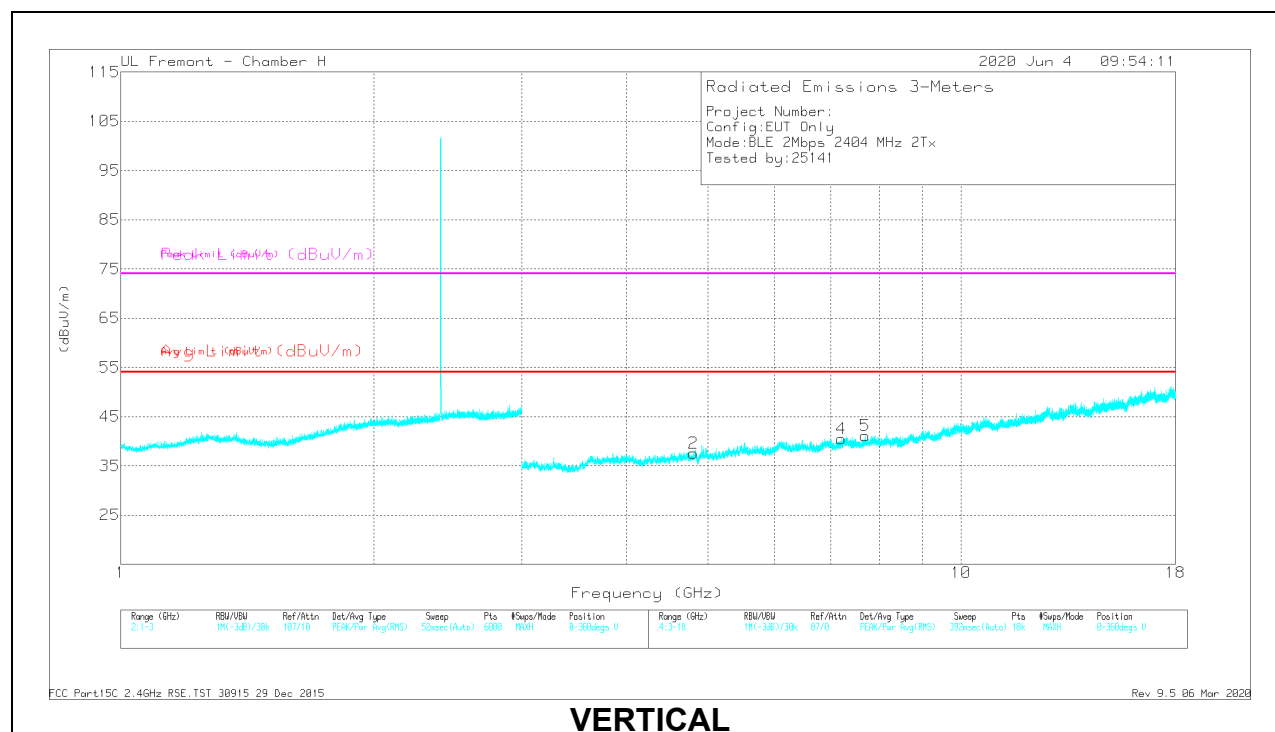
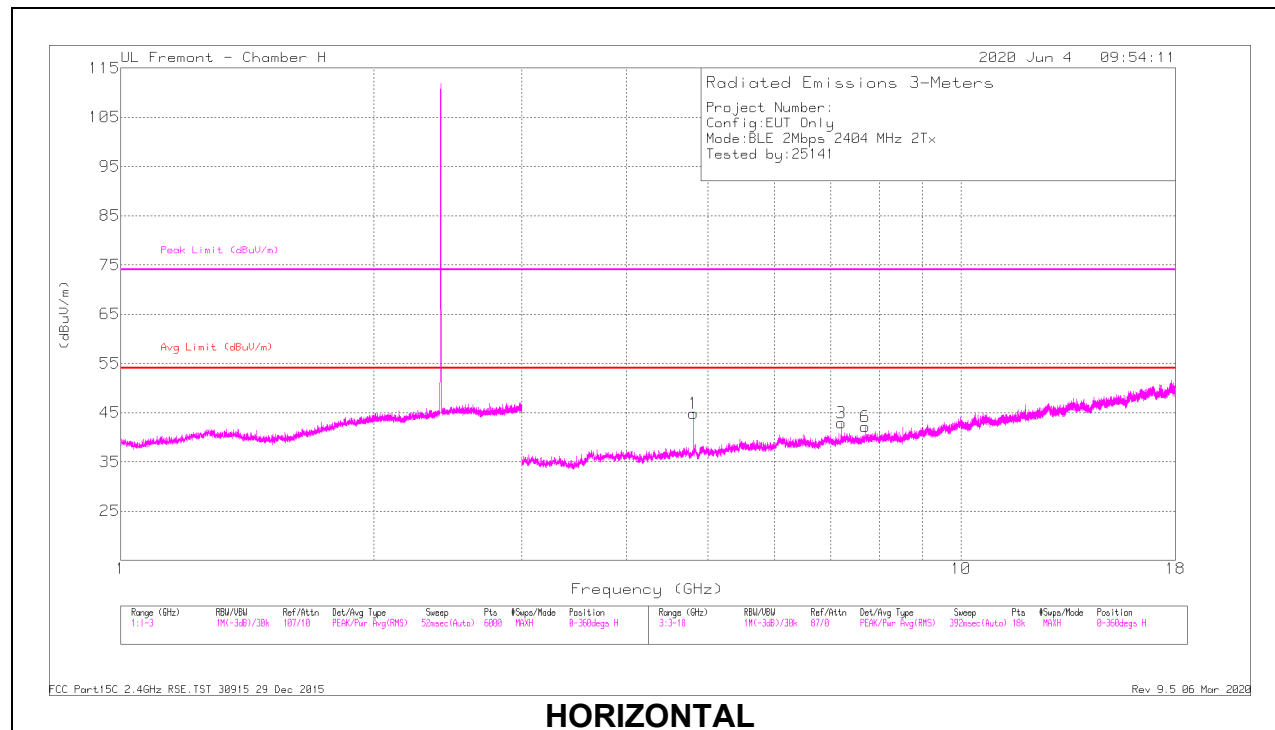
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

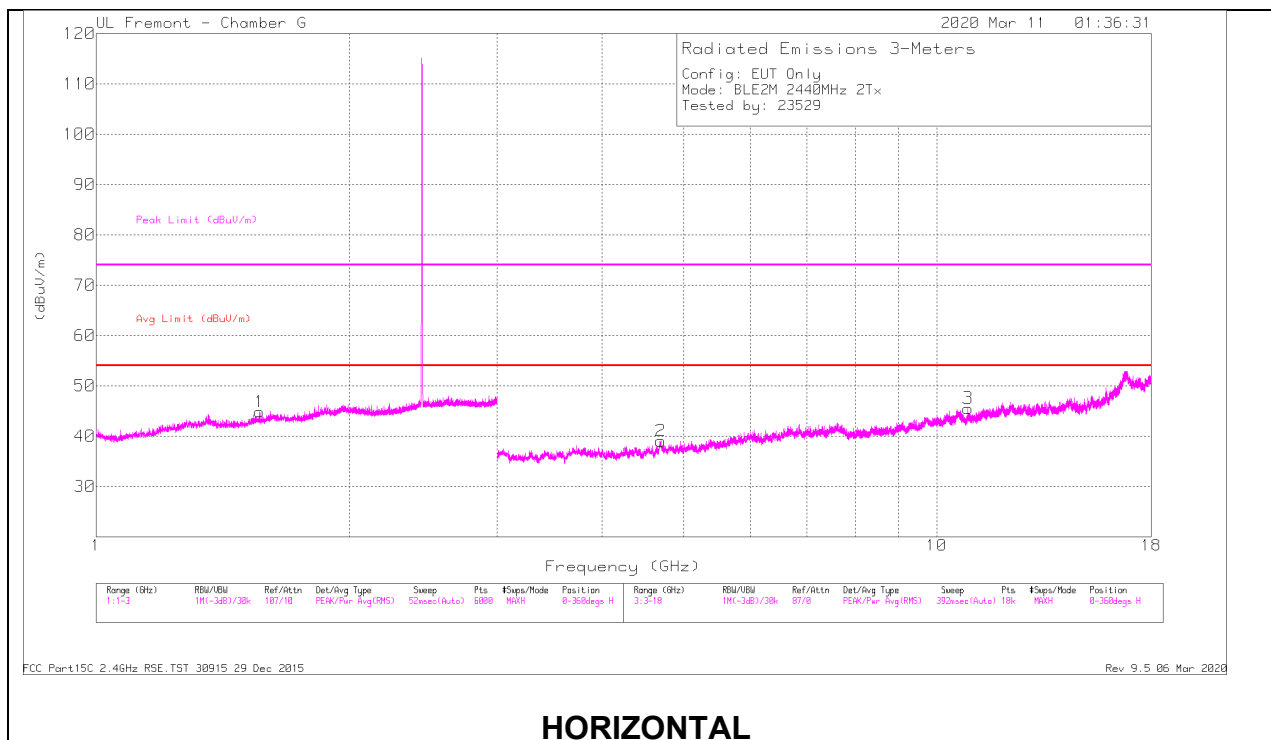
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.80501	43.37	PK2	34.4	-31.5	46.27	-	-	74	-27.73	283	139	H
1	* 4.80392	38.17	MAv1	34.4	-31.5	41.07	54	-12.93	-	-	283	139	H
6	* 7.6875	39.19	PK2	36.2	-27.3	48.09	-	-	74	-25.91	288	295	H
6	* 7.68671	27	MAv1	36.2	-27.3	35.9	54	-18.1	-	-	288	295	H
2	* 4.80455	43.02	PK2	34.4	-31.5	45.92	-	-	74	-28.08	235	313	V
2	* 4.80393	31.67	MAv1	34.4	-31.5	34.57	54	-19.43	-	-	235	313	V
5	* 7.68543	39.08	PK2	36.2	-27.3	47.98	-	-	74	-26.02	267	212	V
5	* 7.68762	27.09	MAv1	36.2	-27.3	35.99	54	-18.01	-	-	267	212	V
4	7.20693	28.21	MAv1	36	-28.5	35.71	-	-	-	-	65	104	V
4	7.20849	28.24	MAv1	35.9	-28.5	35.64	-	-	-	-	254	243	H
3	7.20957	39.4	PK2	35.9	-28.5	46.8	-	-	-	-	254	243	H
3	7.20989	40.9	PK2	35.9	-28.5	48.3	-	-	-	-	65	104	V

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

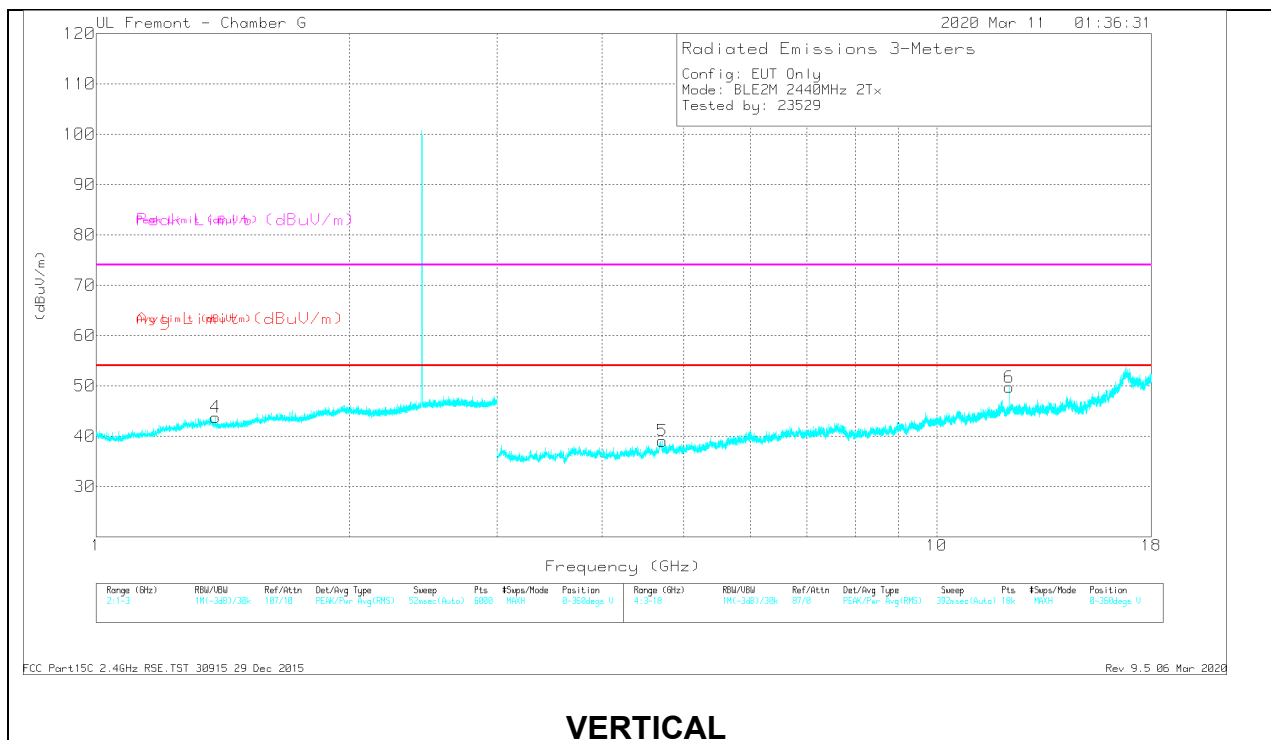
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

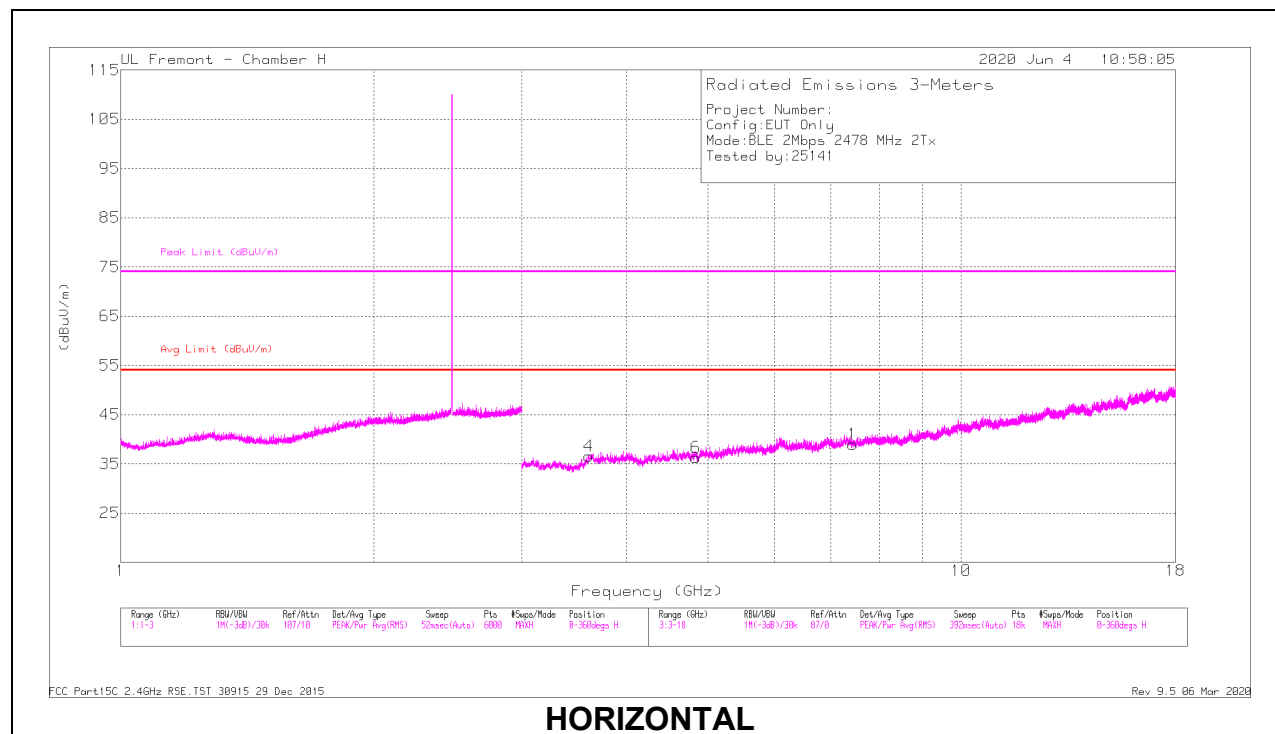
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.56462	44.54	PK2	28.5	-21.4	51.64	-	-	74	-22.36	245	144	H
	* 1.56226	31.85	MAv1	28.5	-21.4	38.95	54	-15.05	-	-	245	144	H
4	* 1.38444	43.8	PK2	29.3	-23.1	50	-	-	74	-24	179	250	V
	* 1.3846	32.41	MAv1	29.3	-23.1	38.61	54	-15.39	-	-	179	250	V
2	* 4.69559	40.21	PK2	34.1	-29.5	44.81	-	-	74	-29.19	194	223	H
	* 4.69458	28.97	MAv1	34.1	-29.5	33.57	54	-20.43	-	-	194	223	H
3	* 10.89417	37.17	PK2	37.6	-22.9	51.87	-	-	74	-22.13	225	127	H
	* 10.8958	25.71	MAv1	37.6	-22.9	40.41	54	-13.59	-	-	225	127	H
5	* 4.71887	38.6	PK2	34	-29.5	43.1	-	-	74	-30.9	125	170	V
	* 4.71843	27.19	MAv1	34	-29.5	31.69	54	-22.31	-	-	125	170	V
6	* 12.19938	40.2	PK2	39	-22.9	56.3	-	-	74	-17.7	235	108	V
	* 12.19909	30.08	MAv1	39	-22.9	46.18	54	-7.82	-	-	235	108	V

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

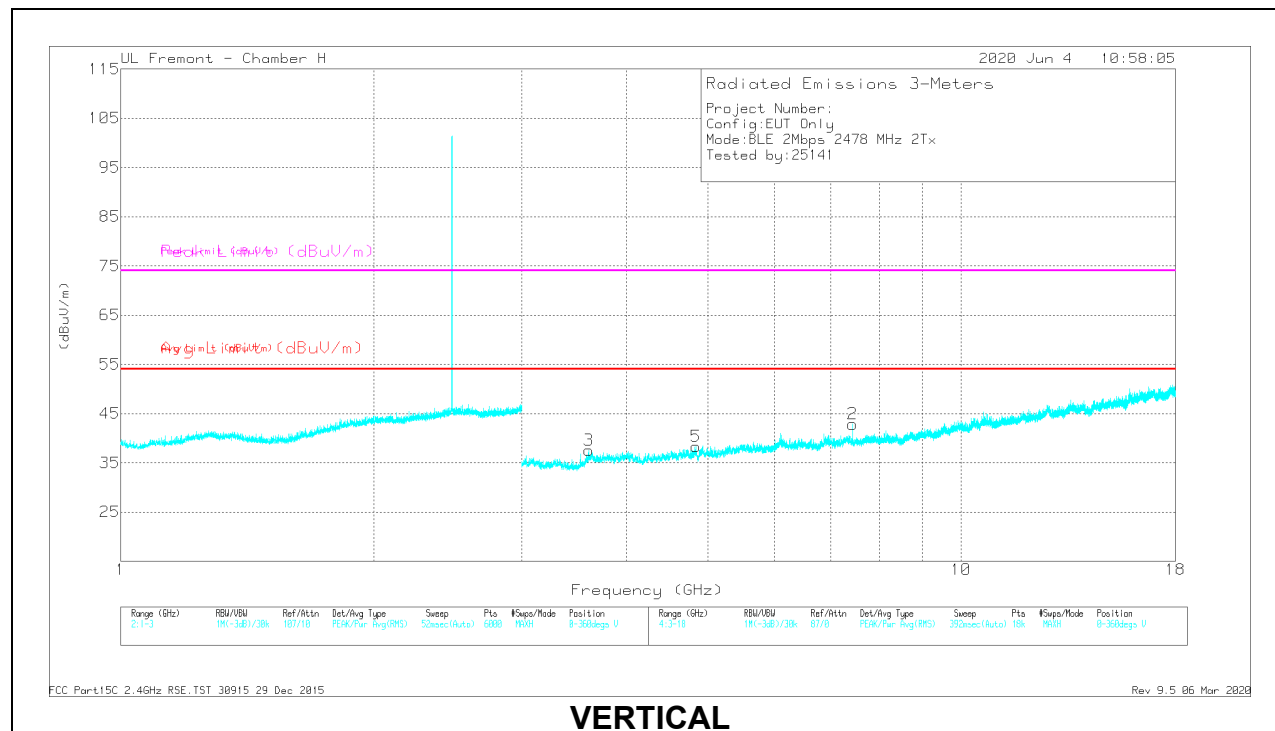
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.43479	38.54	PK2	36	-27.8	46.74	-	-	74	-27.26	329	292	H
1	* 7.43602	27.19	MAv1	36	-27.8	35.39	54	-18.61	-	-	329	292	H
4	* 3.60806	42.3	PK2	33	-30.8	44.5	-	-	74	-29.5	212	222	H
4	* 3.60923	30.29	MAv1	33	-30.8	32.49	54	-21.51	-	-	212	222	H
6	* 4.84187	42.73	PK2	34.4	-31.7	45.43	-	-	74	-28.57	349	205	H
6	* 4.84208	30.86	MAv1	34.4	-31.7	33.56	54	-20.44	-	-	349	205	H
2	* 7.43366	39.85	PK2	36	-27.7	48.15	-	-	74	-25.85	226	107	V
2	* 7.43507	28.81	MAv1	36	-27.8	37.01	54	-16.99	-	-	226	107	V
3	* 3.60866	42.11	PK2	33	-30.8	44.31	-	-	74	-29.69	2	338	V
3	* 3.60688	30.34	MAv1	33	-30.9	32.44	54	-21.56	-	-	2	338	V
5	* 4.83918	42.09	PK2	34.3	-31.6	44.79	-	-	74	-29.21	342	120	V
5	* 4.84034	30.91	MAv1	34.4	-31.6	33.71	54	-20.29	-	-	342	120	V

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

PK2 - KDB558074 Method: Maximum Peak

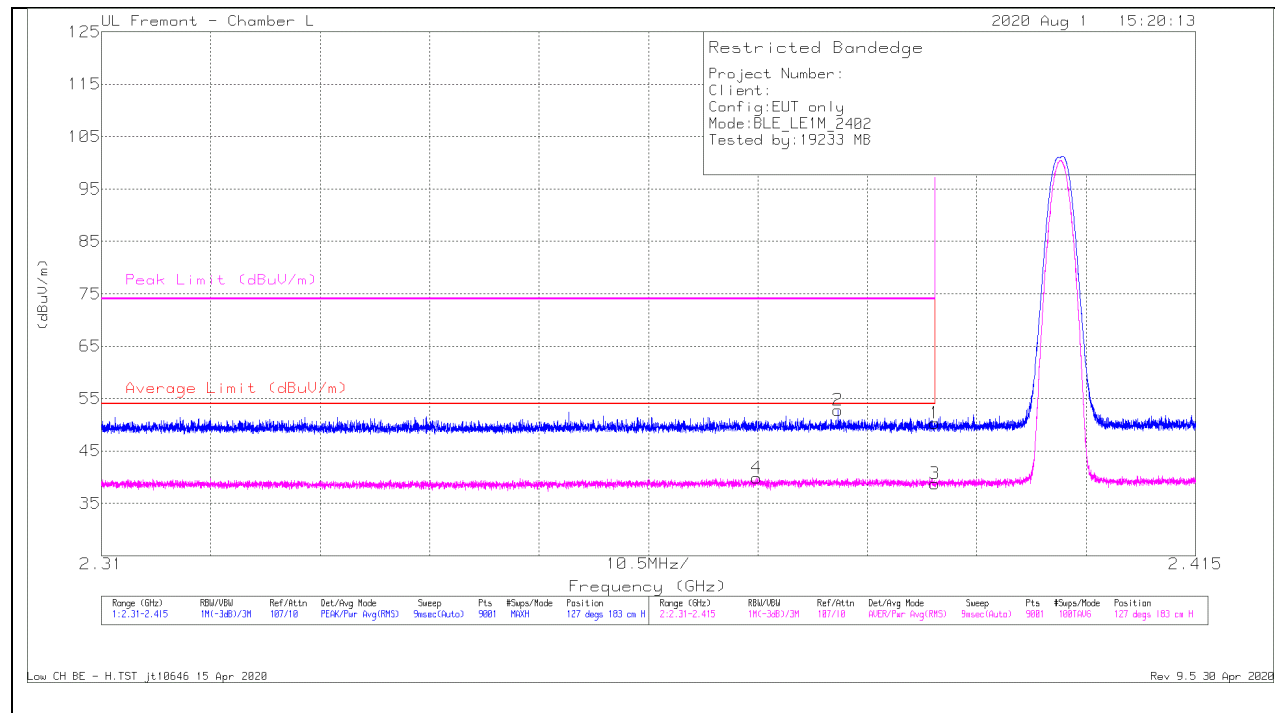
MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2.5. LOW POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

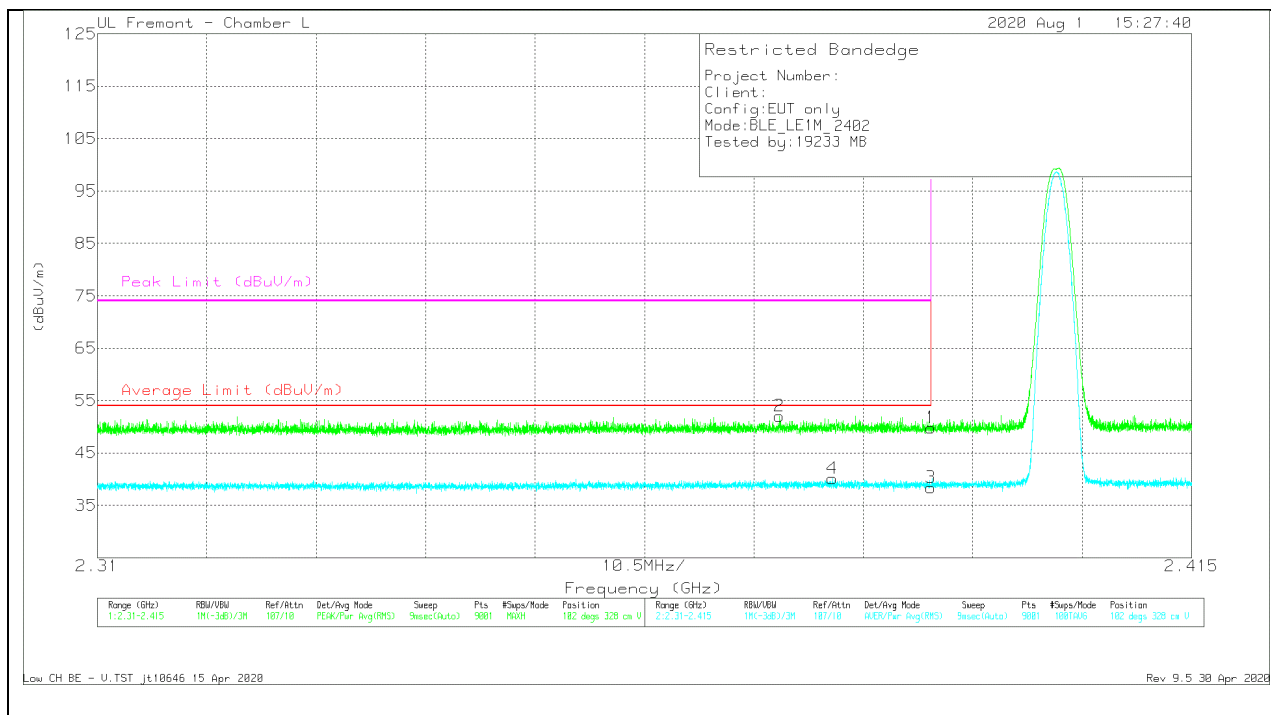
HORIZONTAL RESULT



Marker	Frequency (GHz)	Motor Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	39.47	Pk	31.9	-21.1	50.27	-	-	74	-23.73	127	183	H
2	* 2.38068	42.08	Pk	31.8	-21.1	52.78	-	-	74	-21.22	127	183	H
3	* 2.38999	27.94	RMS	31.9	-21.1	38.74	54	-15.26	-	-	127	183	H
4	* 2.37287	29.24	RMS	31.8	-21.2	39.84	54	-14.16	-	-	127	183	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 344 (dB/m)	Amp/Cbl/Filtr/Par d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.95	Pk	31.9	-21.1	49.75	-	-	74	-24.25	102	328	V
2	* 2.37546	41.44	Pk	31.8	-21.2	52.04	-	-	74	-21.96	102	328	V
3	* 2.38999	27.59	RMS	31.9	-21.1	38.39	54	-15.61	-	-	102	328	V
4	* 2.38053	29.37	RMS	31.8	-21.1	40.07	54	-13.93	-	-	102	328	V

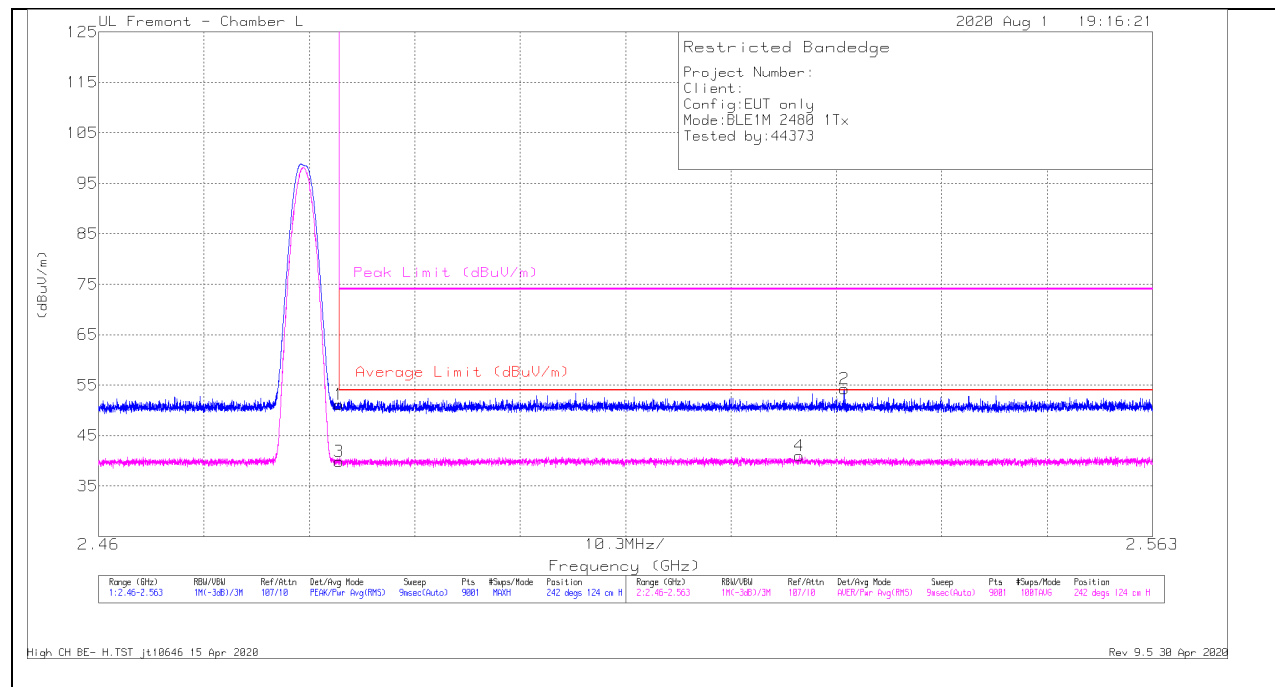
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL)

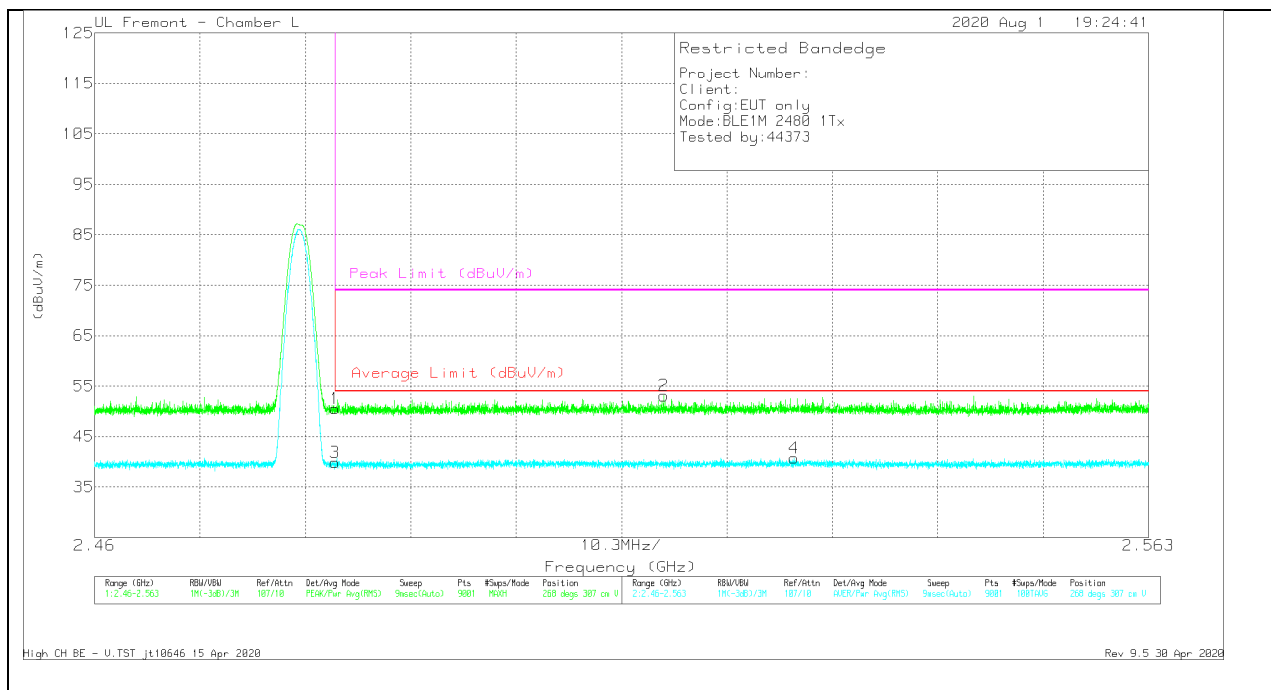
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.77	Pk	32.3	-20.9	51.17	-	-	74	-22.83	242	124	H
2	2.53266	42.81	Pk	32.3	-20.9	54.21	-	-	74	-19.79	242	124	H
3	* 2.48351	28.51	RMS	32.3	-20.9	39.91	54	-14.09	-	-	242	124	H
4	2.52846	29.35	RMS	32.4	-20.8	40.95	54	-13.05	-	-	242	124	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 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.11	Pk	32.3	-20.9	50.51	-	-	74	-23.49	268	307	V
2	2.51561	41.59	Pk	32.4	-20.9	53.09	-	-	74	-20.91	268	307	V
3	* 2.48351	28.45	RMS	32.3	-20.9	39.85	54	-14.15	-	-	268	307	V
4	2.52838	29.17	RMS	32.4	-20.8	40.77	54	-13.23	-	-	268	307	V

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

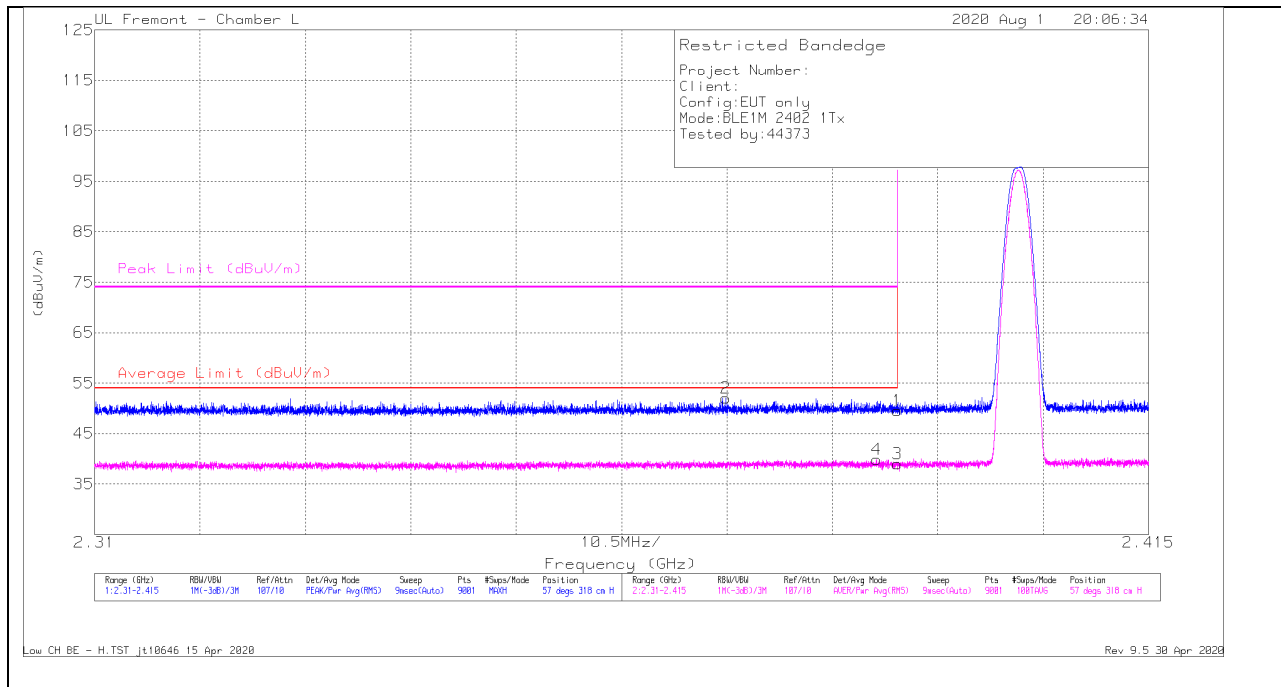
Pk - Peak detector

RMS - RMS detection

ANT 3

BANEDGE (LOW CHANNEL)

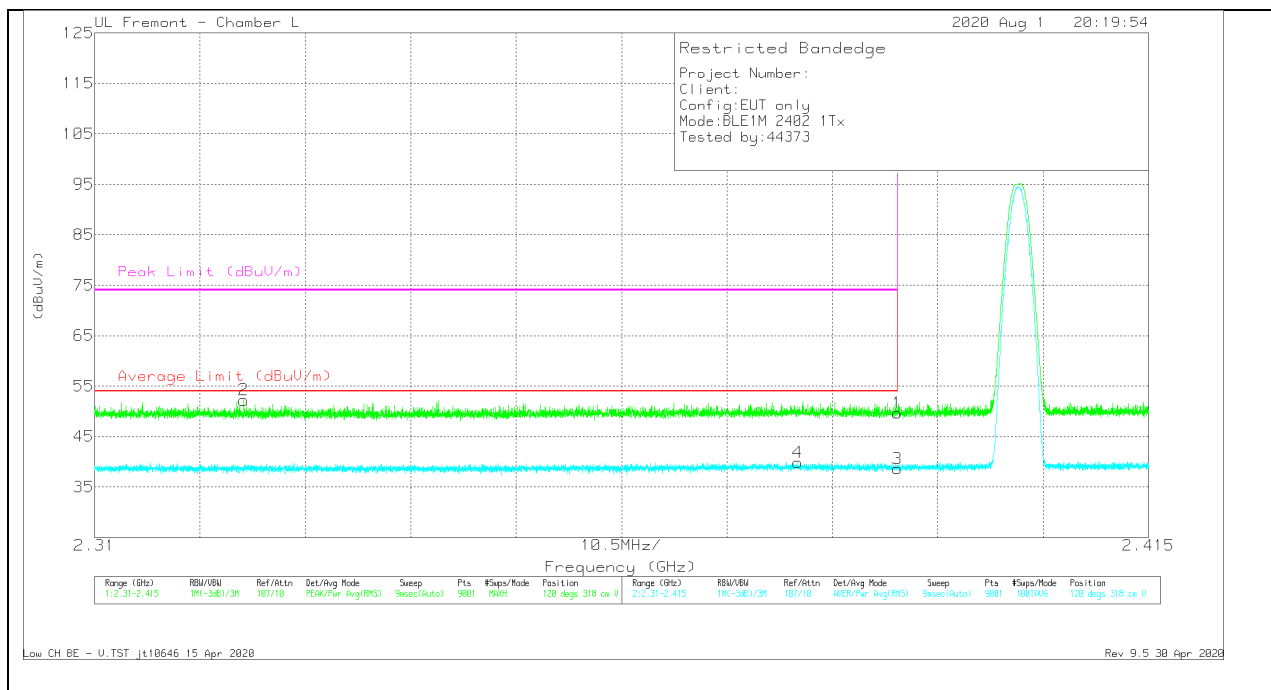
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.79	Pk	31.9	-21.1	49.59	-	-	74	-24.41	57	318	H
2	* 2.37289	41.43	Pk	31.8	-21.2	52.03	-	-	74	-21.97	57	318	H
3	* 2.38999	28.23	RMS	31.9	-21.1	39.03	54	-14.97	-	-	57	318	H
4	* 2.3879	29.08	RMS	31.9	-21.1	39.88	54	-14.12	-	-	57	318	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 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.91	Pk	31.9	-21.1	49.71	-	-	74	-24.29	120	318	V
2	* 2.32485	41.82	Pk	31.7	-21.3	52.22	-	-	74	-21.78	120	318	V
3	* 2.38999	27.86	RMS	31.9	-21.1	38.66	54	-15.34	-	-	120	318	V
4	* 2.38004	29.16	RMS	31.8	-21.1	39.86	54	-14.14	-	-	120	318	V

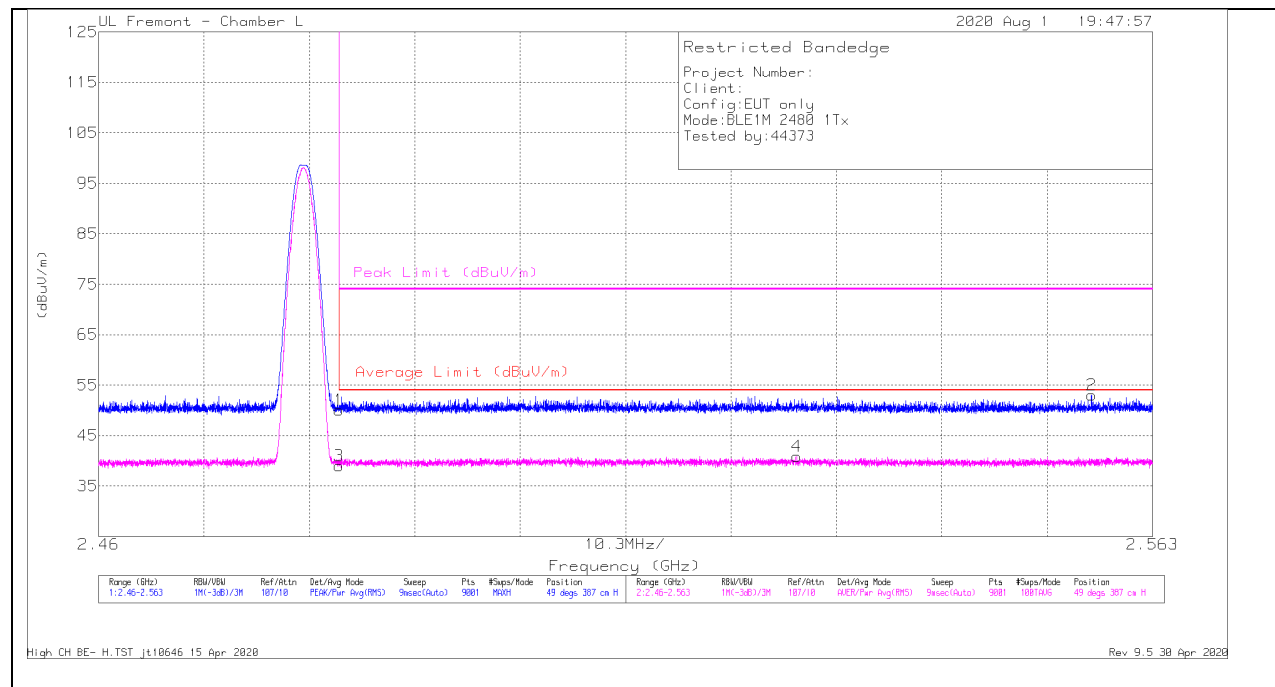
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

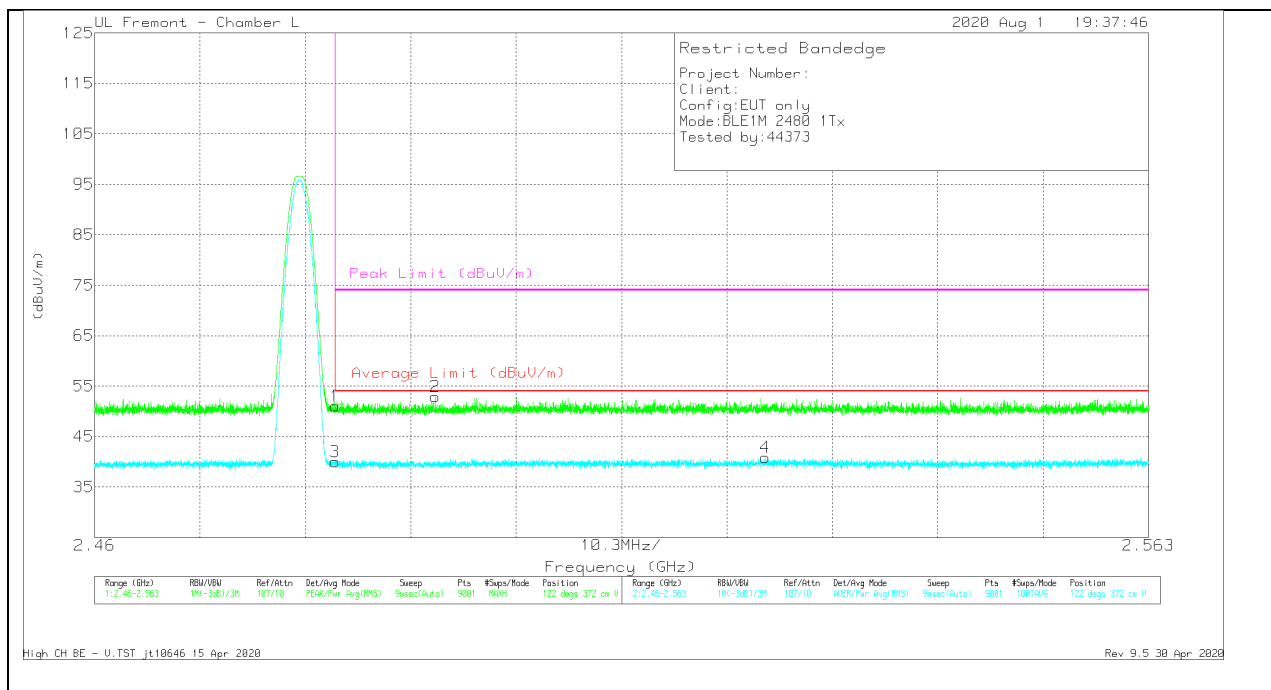
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.65	Pk	32.3	-20.9	50.05	-	-	74	-23.95	49	387	H
2	2.55703	41.55	Pk	32.3	-20.8	53.05	-	-	74	-20.95	49	387	H
3	* 2.48351	27.62	RMS	32.3	-20.9	39.02	54	-14.98	-	-	49	387	H
4	2.52824	29.27	RMS	32.4	-20.8	40.87	54	-13.13	-	-	49	387	H

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

VERTICAL RESULT



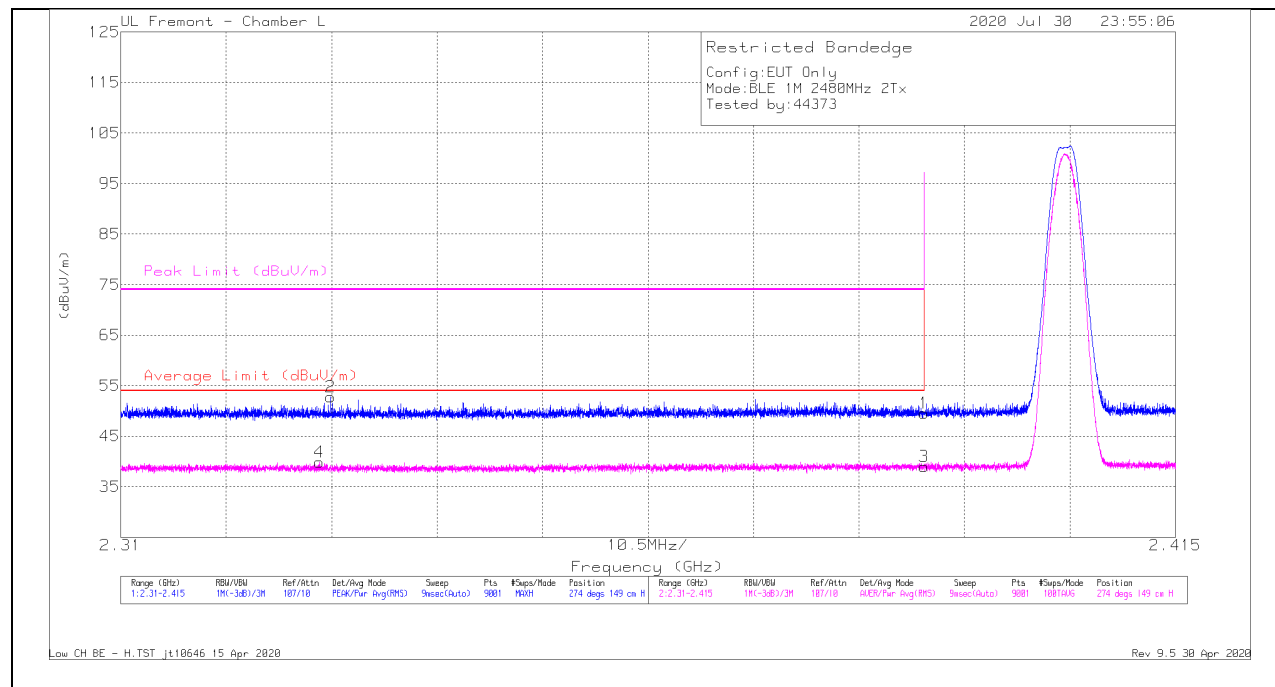
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.66	Pk	32.3	-20.9	51.06	-	-	74	-22.94	122	372	V
2	* 2.49329	41.52	Pk	32.3	-20.9	52.92	-	-	74	-21.08	122	372	V
3	* 2.48351	28.59	RMS	32.3	-20.9	39.99	54	-14.01	-	-	122	372	V
4	2.52555	29.3	RMS	32.4	-20.9	40.8	54	-13.2	-	-	122	372	V

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

10.2.6. LOW POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.73	Pk	31.9	-21.1	49.53	-	-	74	-24.47	274	149	H
2	* 2.33091	42.43	Pk	31.6	-21.3	52.73	-	-	74	-21.27	274	149	H
3	* 2.38999	28.19	RMS	31.9	-21.1	38.99	54	-15.01	-	-	274	149	H
4	* 2.32976	29.61	RMS	31.6	-21.3	39.91	54	-14.09	-	-	274	149	H

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

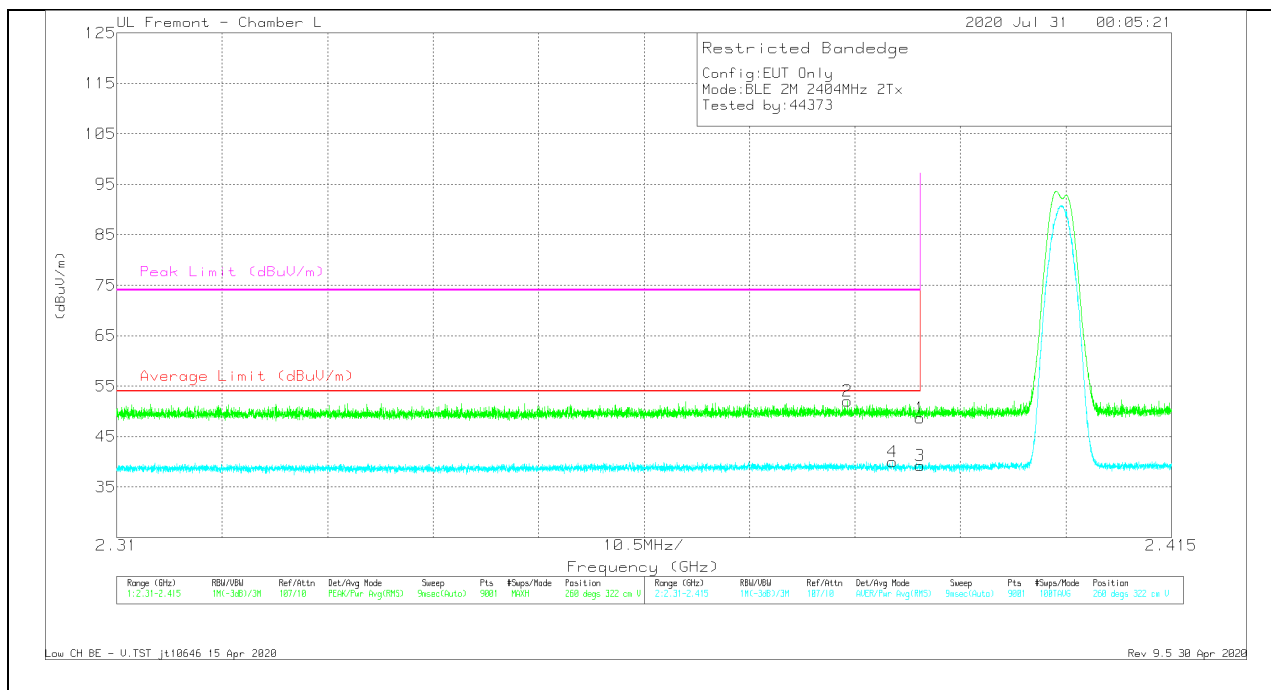
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST jt10646 15 Apr 2020

Rev 9.5 30 Apr 2020

VERTICAL RESULT



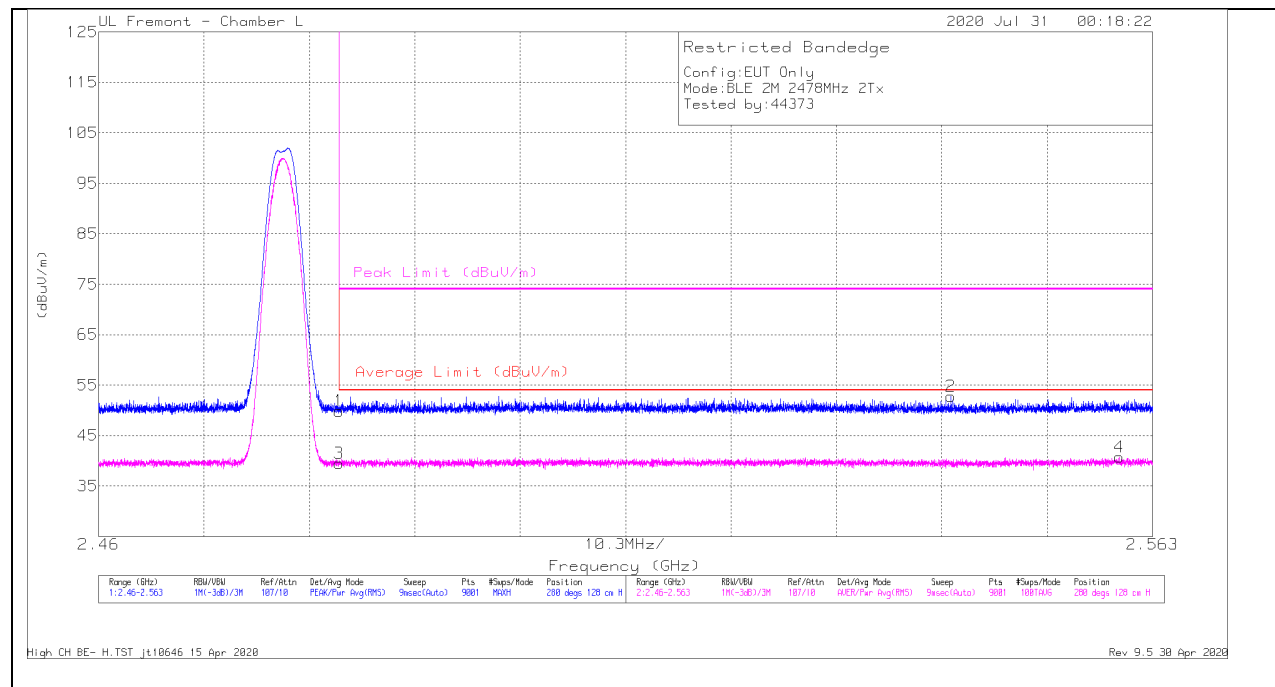
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	37.85	Pk	31.9	-21.1	48.65	-	-	74	-25.35	260	322	V
2	* 2.38274	41.3	Pk	31.8	-21.1	52	-	-	74	-22	260	322	V
3	* 2.38999	28.45	RMS	31.9	-21.1	39.25	54	-14.75	-	-	260	322	V
4	* 2.38724	29.3	RMS	31.8	-21.1	40	54	-14	-	-	260	322	V

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

Low CH BE - V.TST jt10646 15 Apr 2020
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BANEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

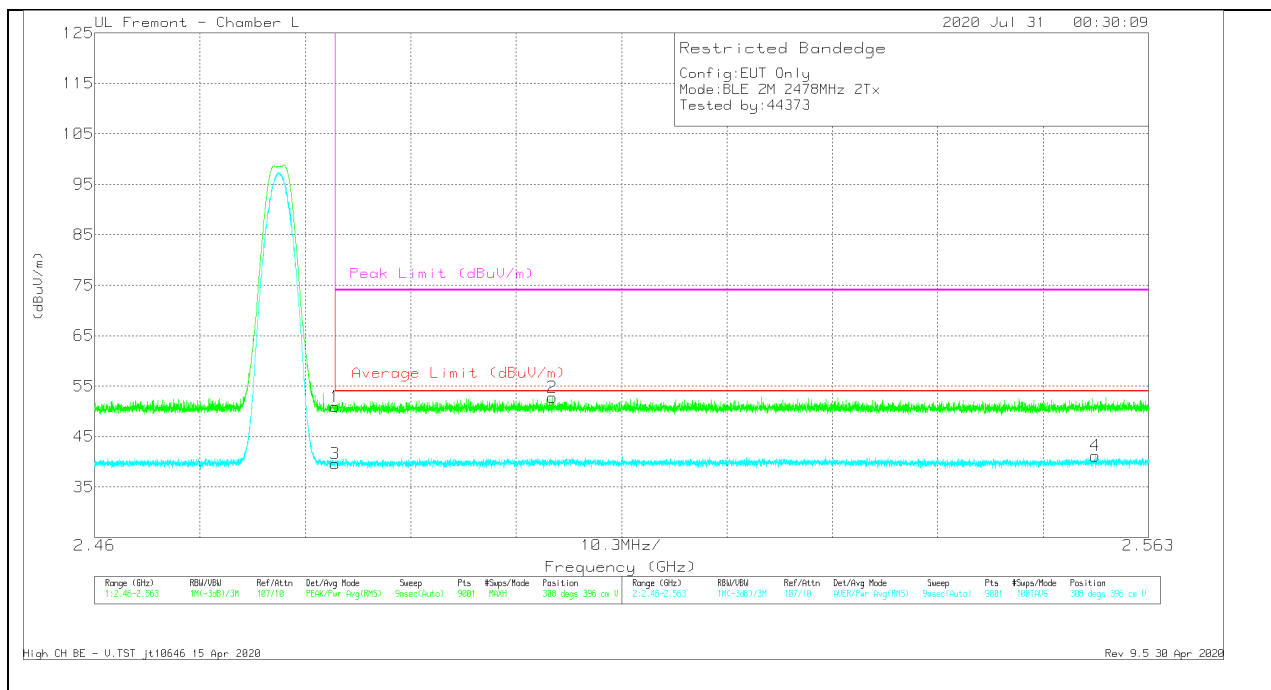


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.46	Pk	32.3	-20.9	49.86	-	-	74	-24.14	280	128	H
2	2.5433	41.3	Pk	32.3	-20.8	52.8	-	-	74	-21.2	280	128	H
3	* 2.48351	28.14	RMS	32.3	-20.9	39.54	54	-14.46	-	-	280	128	H
4	2.55973	29.09	RMS	32.4	-20.8	40.69	54	-13.31	-	-	280	128	H

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

High CH BE- H.TST jt10646 15 Apr 2020
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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.52	Pk	32.3	-20.9	50.92	-	-	74	-23.08	308	396	V
2	2.50471	41.32	Pk	32.4	-20.9	52.82	-	-	74	-21.18	308	396	V
3	* 2.48351	28.25	RMS	32.3	-20.9	39.65	54	-14.35	-	-	308	396	V
4	2.55779	29.67	RMS	32.3	-20.8	41.17	54	-12.83	-	-	308	396	V

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

Pk - Peak detector

RMS - RMS detection

High CH BE - V.TST jt10646 15 Apr 2020

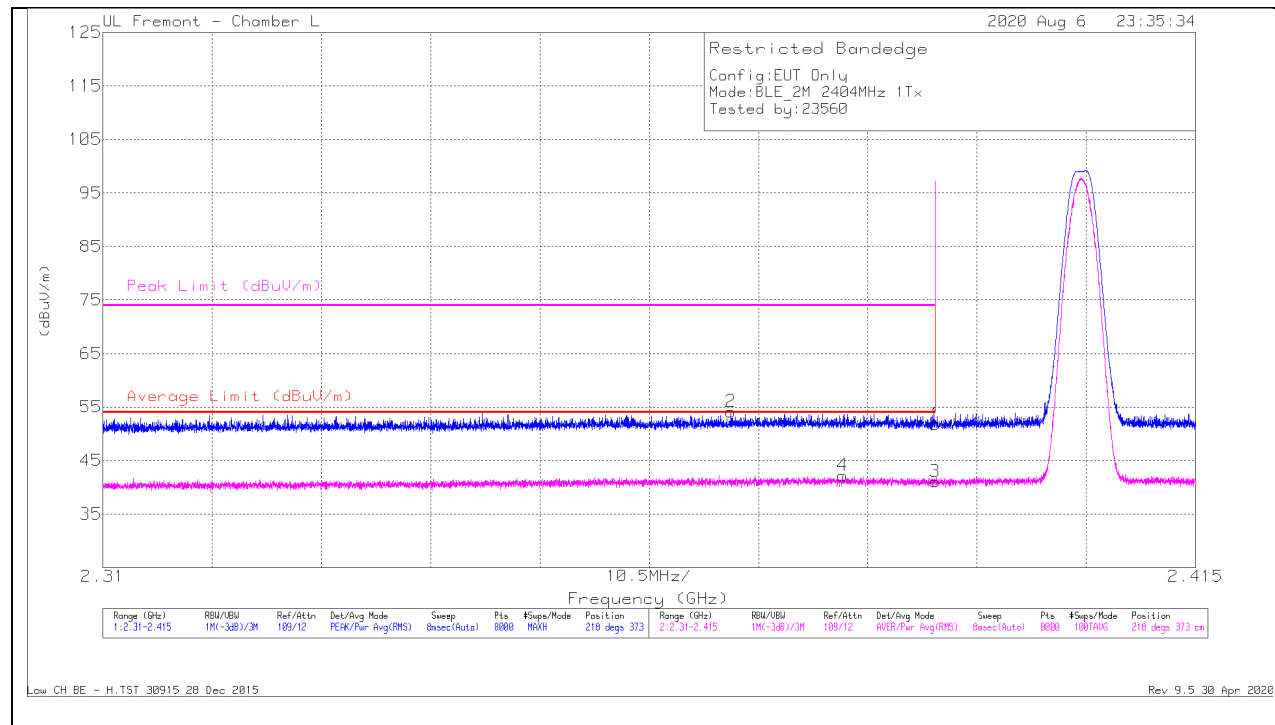
Rev 9.5 30 Apr 2020

10.2.7. LOW POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



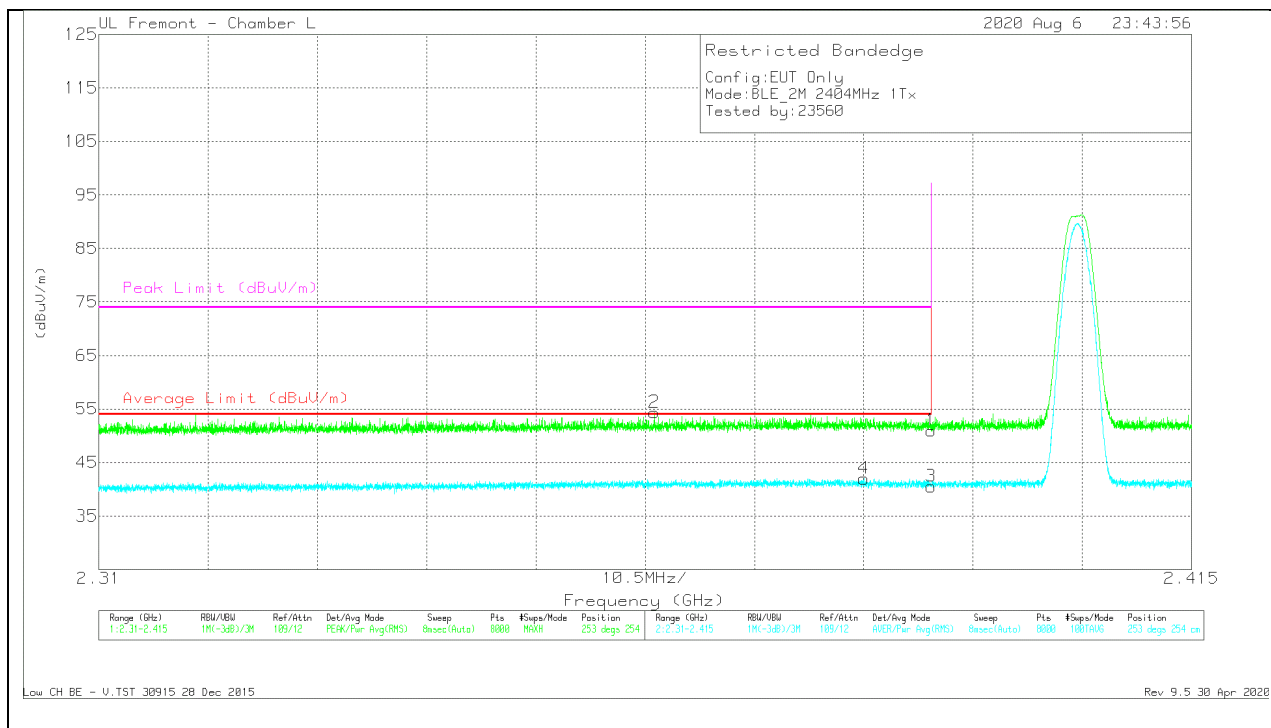
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/CbI/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	32.97	Pk	31.9	-13.1	51.77	-	-	74	-22.23	218	373	H
2	* 2.37036	35.4	Pk	31.8	-13.1	54.1	-	-	74	-19.9	218	373	H
3	* 2.39	22.23	RMS	31.9	-13.1	41.03	54	-12.97	-	-	218	373	H
4	* 2.38108	23.37	RMS	31.8	-13	42.17	54	-11.83	-	-	218	373	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 344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	32.18	Pk	31.9	-13.1	50.98	-	-	74	-23.02	253	254	V
2	* 2.36337	35.75	Pk	31.7	-13.1	54.35	-	-	74	-19.65	253	254	V
3	* 2.39	21.73	RMS	31.9	-13.1	40.53	54	-13.47	-	-	253	254	V
4	* 2.38351	23.19	RMS	31.8	-13	41.99	54	-12.01	-	-	253	254	V

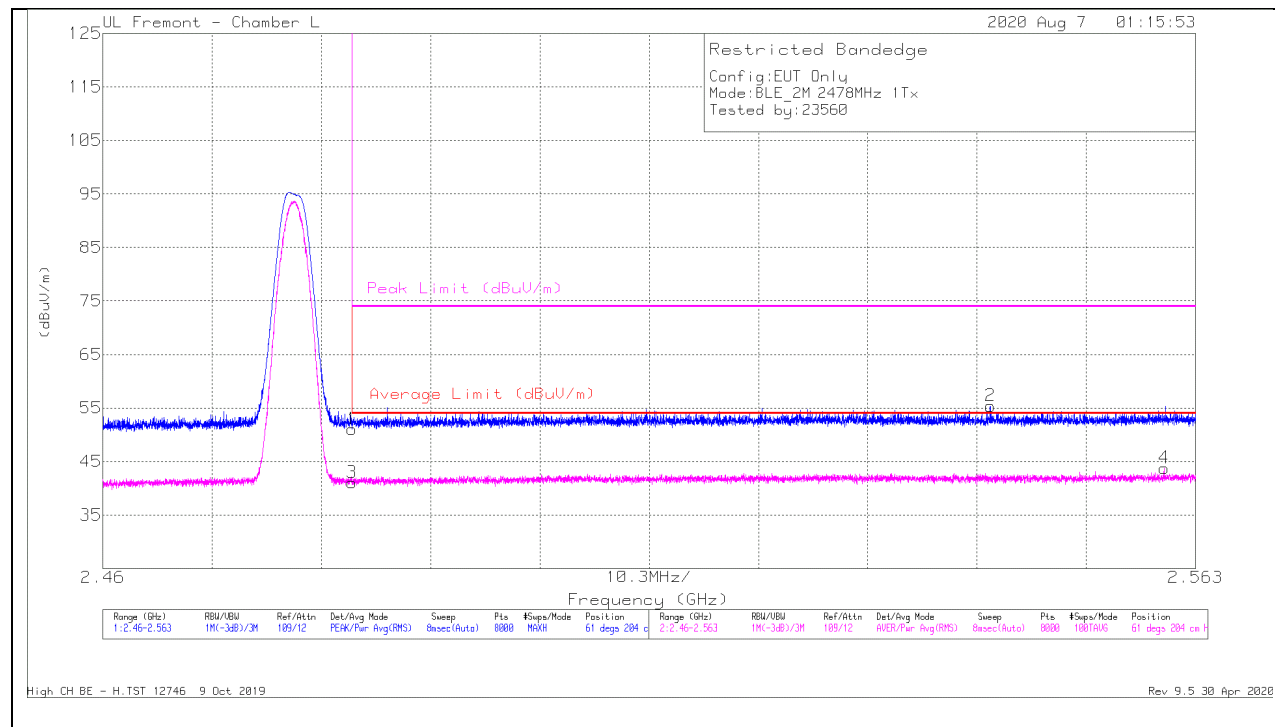
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



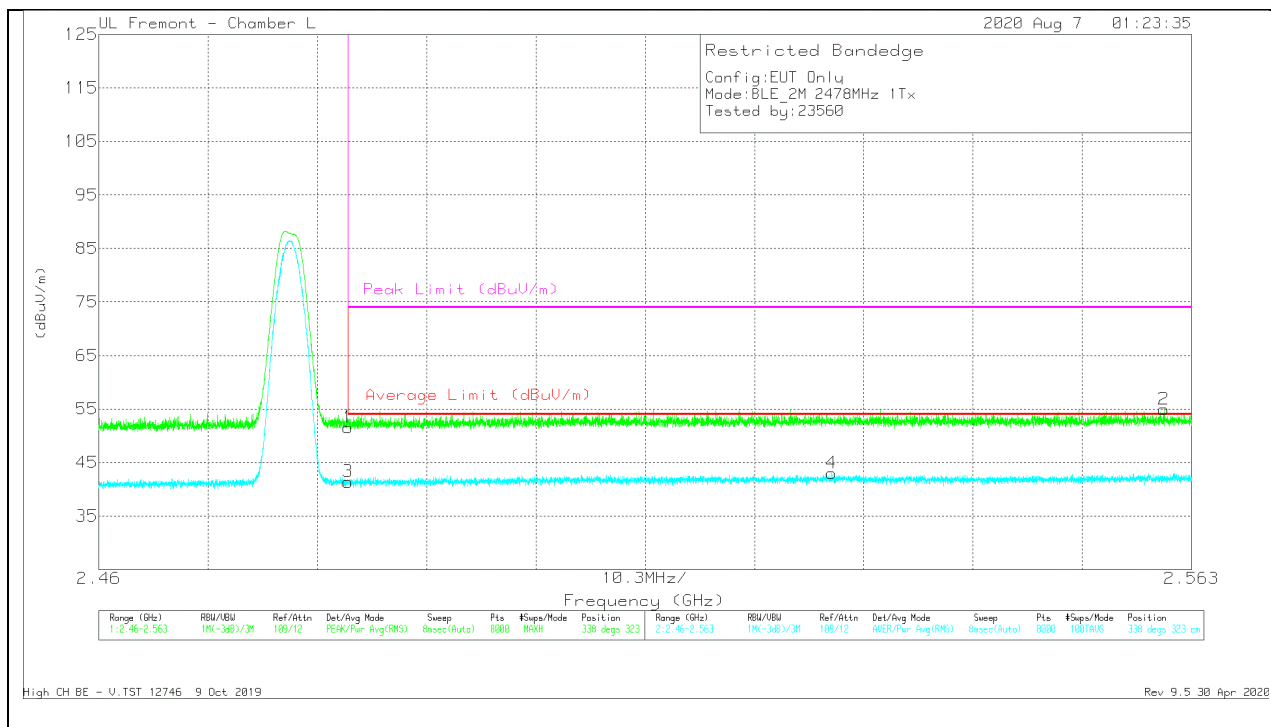
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	31.65	Pk	32.3	-12.9	51.05	-	-	74	-22.95	61	204	H
2	2.54365	35.78	Pk	32.3	-12.7	55.38	-	-	74	-18.62	61	204	H
3	* 2.4835	21.64	RMS	32.3	-12.9	41.04	54	-12.96	-	-	61	204	H
4	2.56003	23.97	RMS	32.4	-12.6	43.77	54	-10.23	-	-	61	204	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 344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	32.15	Pk	32.3	-12.9	51.55	-	-	74	-22.45	338	323	V
2	2.56039	35.15	Pk	32.4	-12.6	54.95	-	-	74	-19.05	338	323	V
3	* 2.4835	21.98	RMS	32.3	-12.9	41.38	54	-12.62	-	-	338	323	V
4	2.52906	23.31	RMS	32.4	-12.7	43.01	54	-10.99	-	-	338	323	V

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

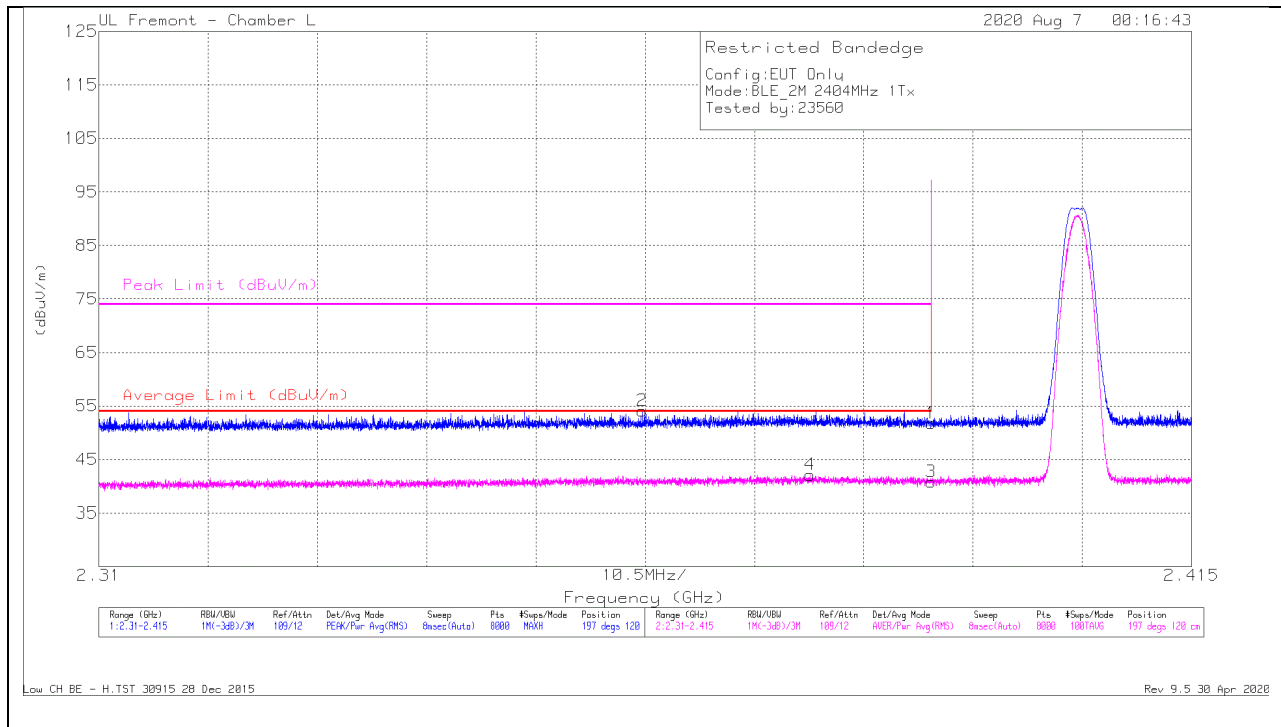
Pk - Peak detector

RMS - RMS detection

ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



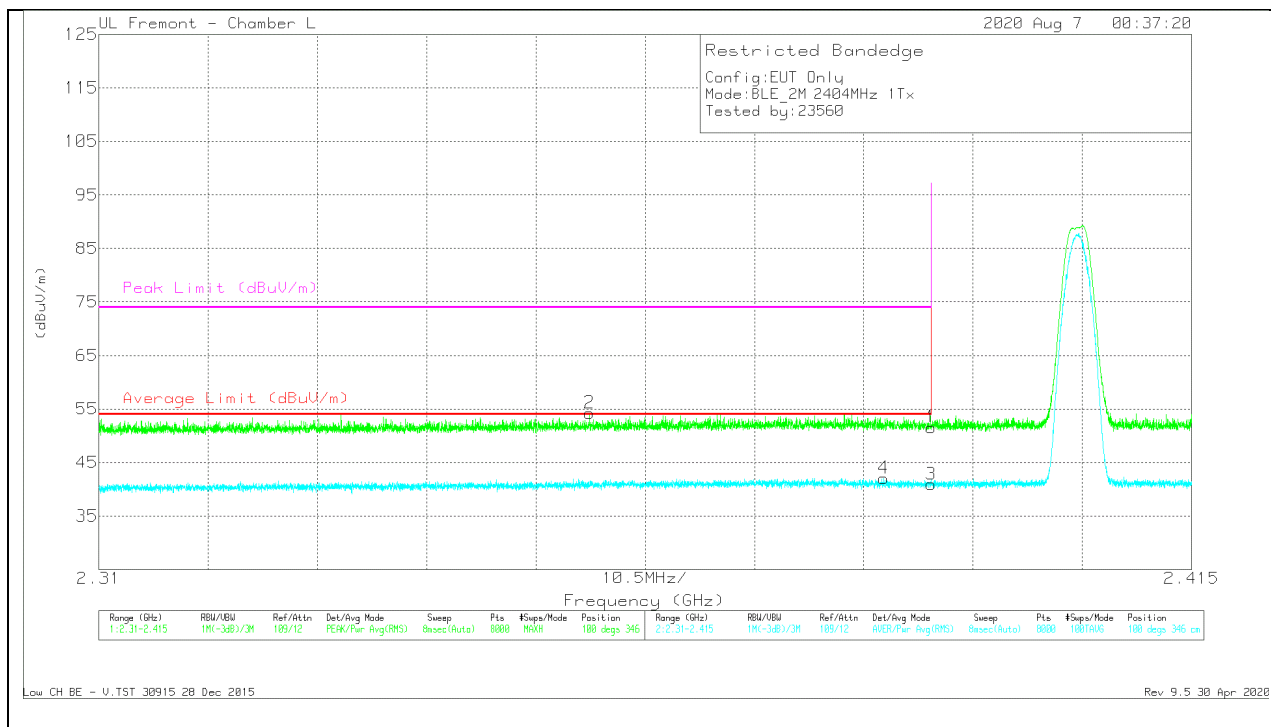
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cb/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	32.97	Pk	31.9	-13.1	51.77	-	-	74	-22.23	197	120	H
2	* 2.36222	35.48	Pk	31.7	-13.1	54.08	-	-	74	-19.92	197	120	H
3	* 2.39	22.01	RMS	31.9	-13.1	40.81	54	-13.19	-	-	197	120	H
4	* 2.37835	23.32	RMS	31.8	-13	42.12	54	-11.88	-	-	197	120	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 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	32.79	Pk	31.9	-13.1	51.59	-	-	74	-22.41	100	346	V
2	* 2.35717	35.64	Pk	31.7	-13.1	54.24	-	-	74	-19.76	100	346	V
3	* 2.39	22.14	RMS	31.9	-13.1	40.94	54	-13.06	-	-	100	346	V
4	* 2.38543	23.35	RMS	31.8	-13.1	42.05	54	-11.95	-	-	100	346	V

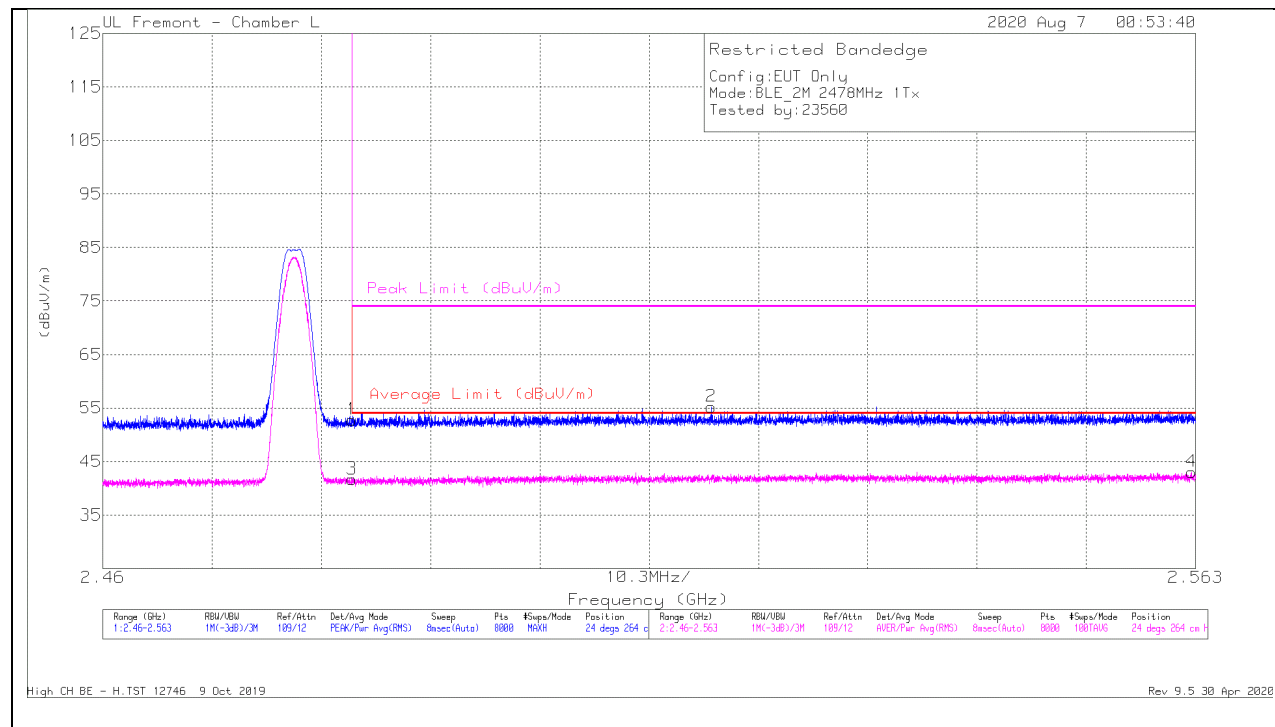
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



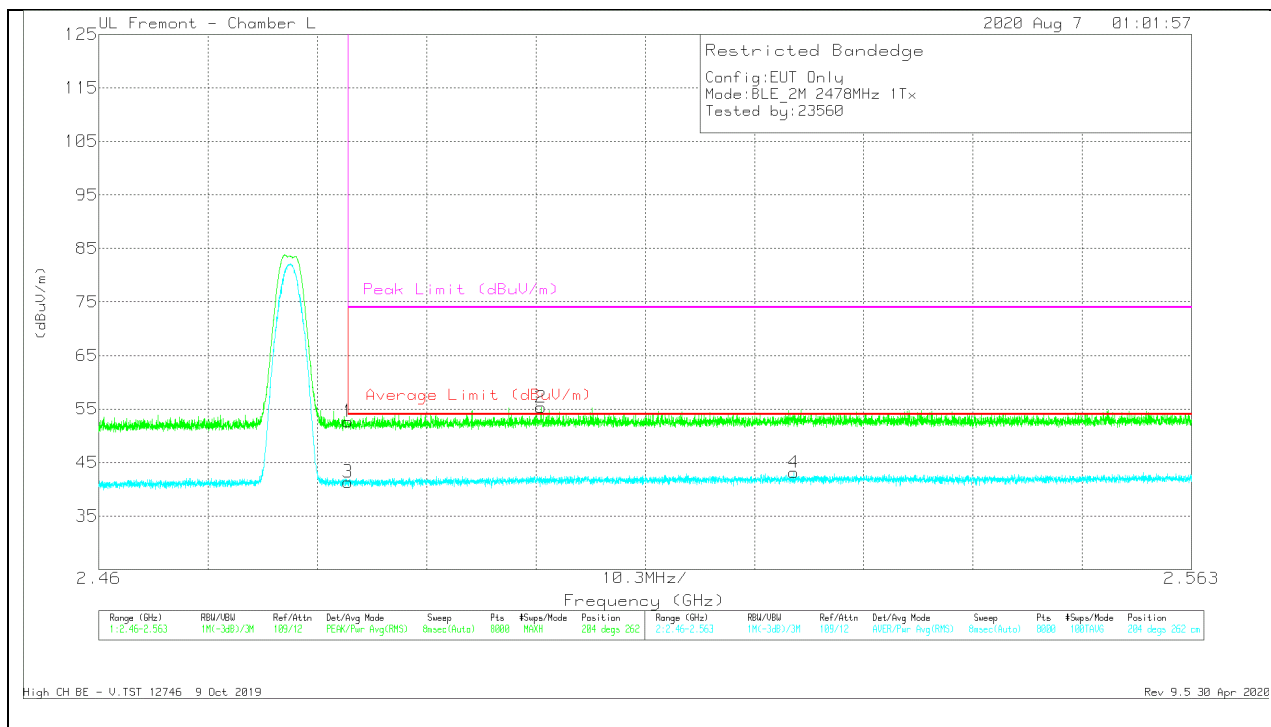
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	33.41	Pk	32.3	-12.9	52.51	-	-	74	-21.19	24	264	H
2	2.51735	35.65	Pk	32.4	-12.8	55.25	-	-	74	-18.75	24	264	H
3	* 2.4835	22.31	RMS	32.3	-12.9	41.71	54	-12.29	-	-	24	264	H
4	2.56263	23.27	RMS	32.4	-12.6	43.07	54	-10.93	-	-	24	264	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 344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	33.24	Pk	32.3	-12.9	52.64	-	-	74	-21.36	204	262	V
2	2.50168	35.71	Pk	32.4	-12.8	55.31	-	-	74	-18.69	204	262	V
3	* 2.4835	21.91	RMS	32.3	-12.9	41.31	54	-12.69	-	-	204	262	V
4	2.52552	23.42	RMS	32.4	-12.7	43.12	54	-10.88	-	-	204	262	V

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

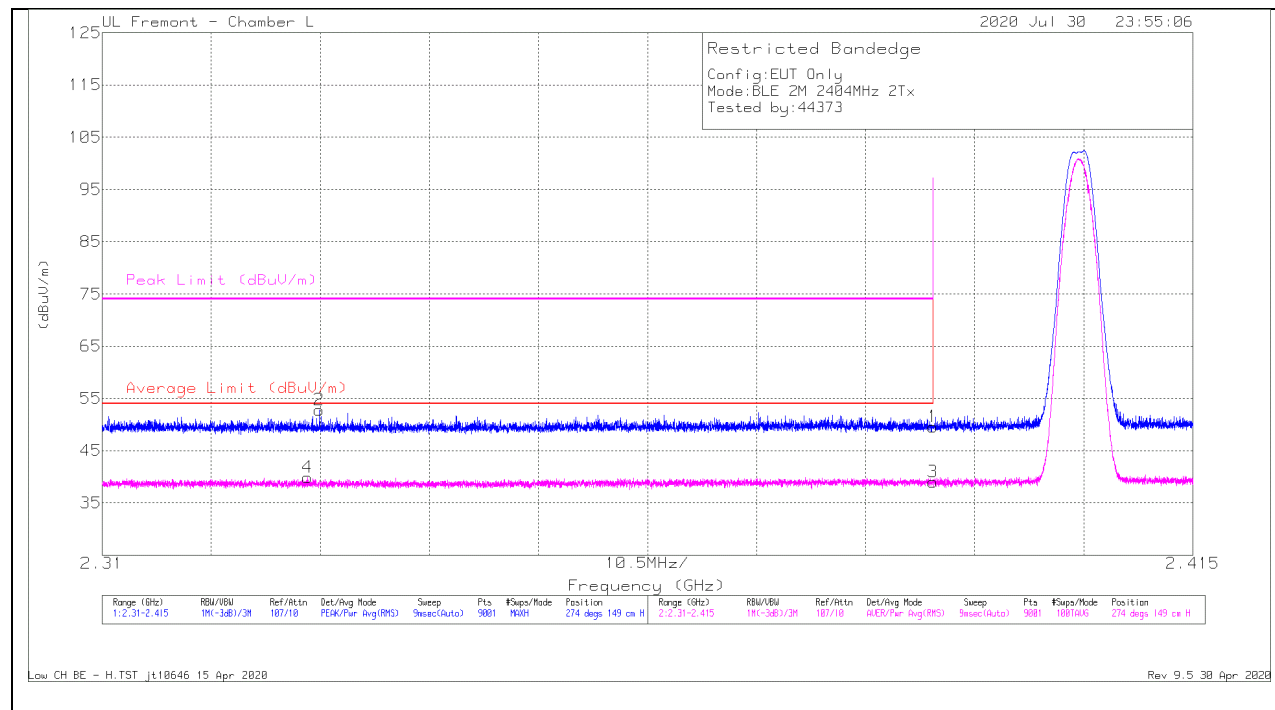
Pk - Peak detector

RMS - RMS detection

10.2.8. LOW POWER BLE TXBF (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



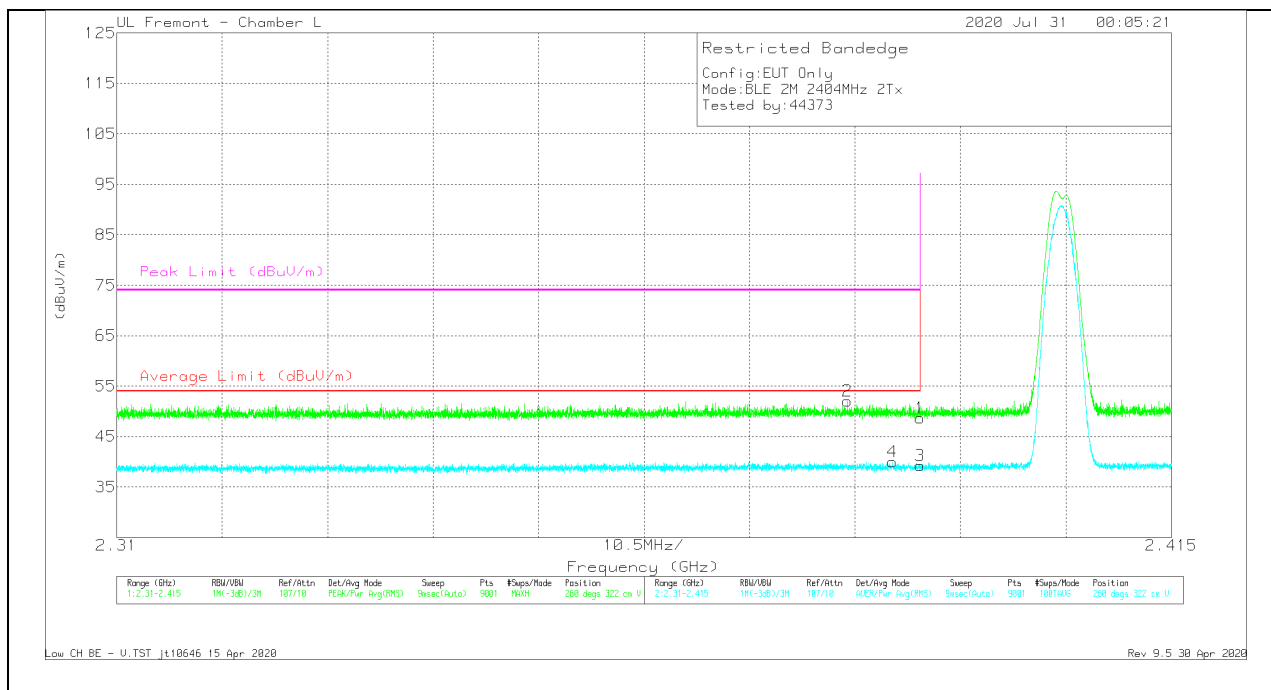
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Fitr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38.73	Pk	31.9	-21.1	49.53	-	-	74	-24.47	274	149	H
2	* 2.33091	42.43	Pk	31.6	-21.3	52.73	-	-	74	-21.27	274	149	H
3	* 2.38999	28.19	RMS	31.9	-21.1	38.99	54	-15.01	-	-	274	149	H
4	* 2.32976	29.61	RMS	31.6	-21.3	39.91	54	-14.09	-	-	274	149	H

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

Pk - Peak detector

RMS - RMS detection

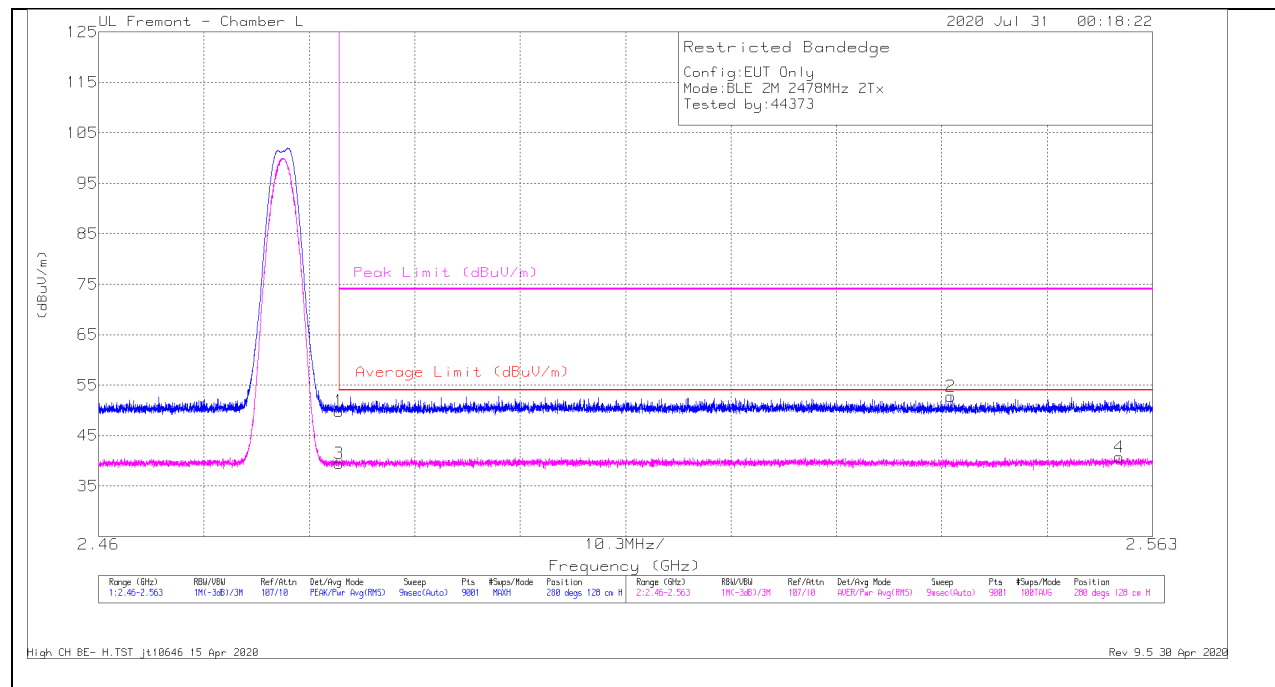
VERTICAL RESULT



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

BANEDGE (HIGH CHANNEL)

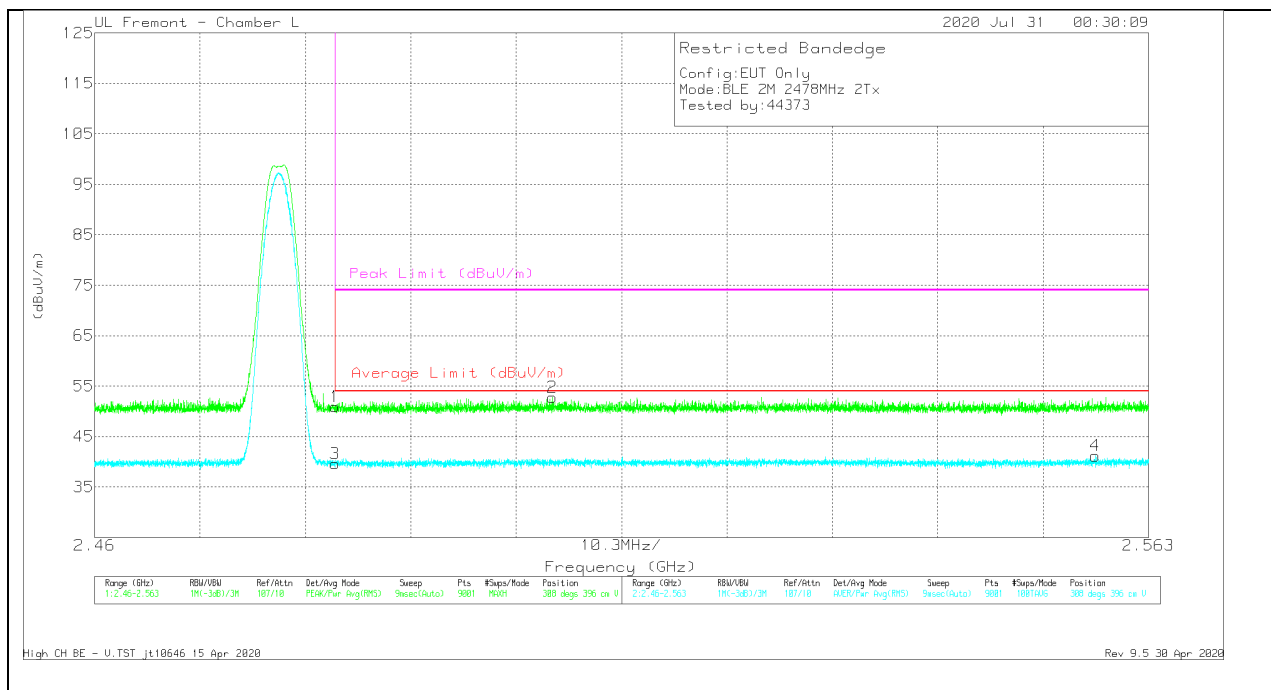
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 344 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.46	Pk	32.3	-20.9	49.86	-	-	74	-24.14	280	128	H
2	2.5433	41.3	Pk	32.3	-20.8	52.8	-	-	74	-21.2	280	128	H
3	* 2.48351	28.14	RMS	32.3	-20.9	39.54	54	-14.46	-	-	280	128	H
4	2.55973	29.09	RMS	32.4	-20.8	40.69	54	-13.31	-	-	280	128	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 344 (dB/m)	Amp/Cbl/Filt/Psd (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.52	Pk	32.3	-20.9	50.92	-	-	74	-23.08	308	396	V
2	2.50471	41.32	Pk	32.4	-20.9	52.82	-	-	74	-21.18	308	396	V
3	* 2.48351	28.25	RMS	32.3	-20.9	39.65	54	-14.35	-	-	308	396	V
4	2.55779	29.67	RMS	32.3	-20.8	41.17	54	-12.83	-	-	308	396	V

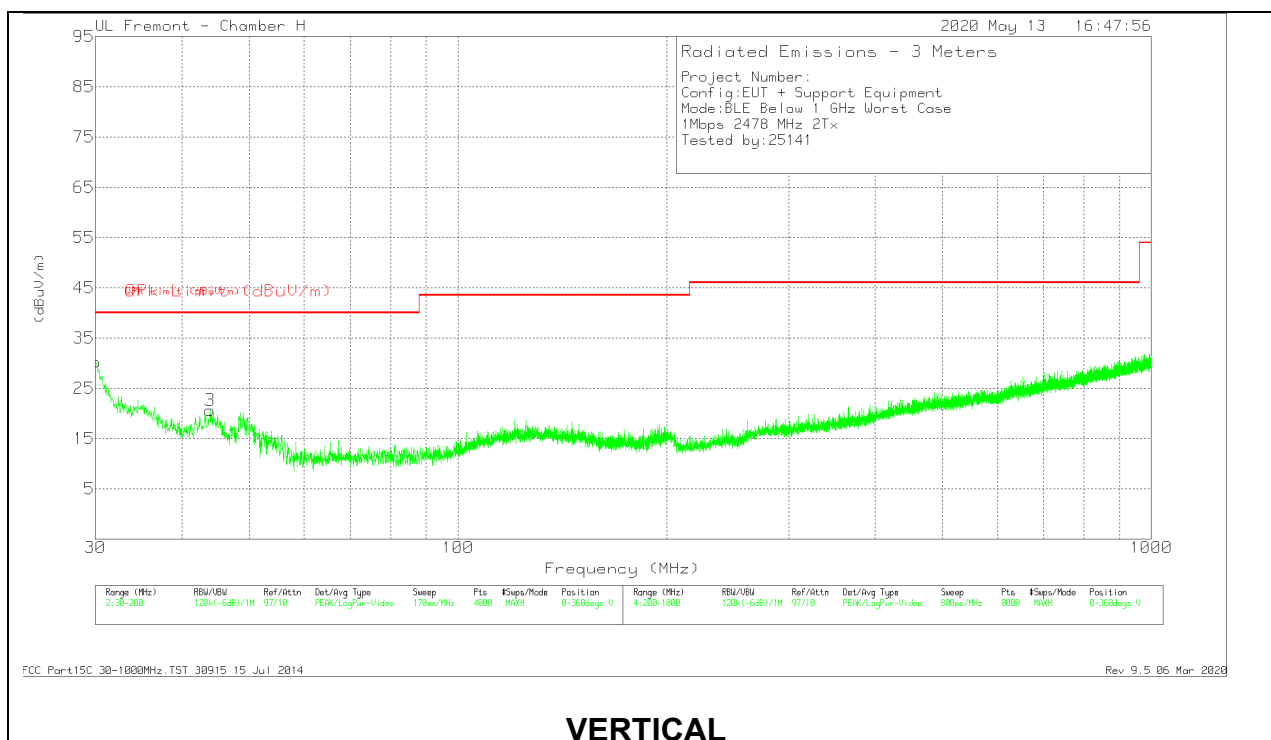
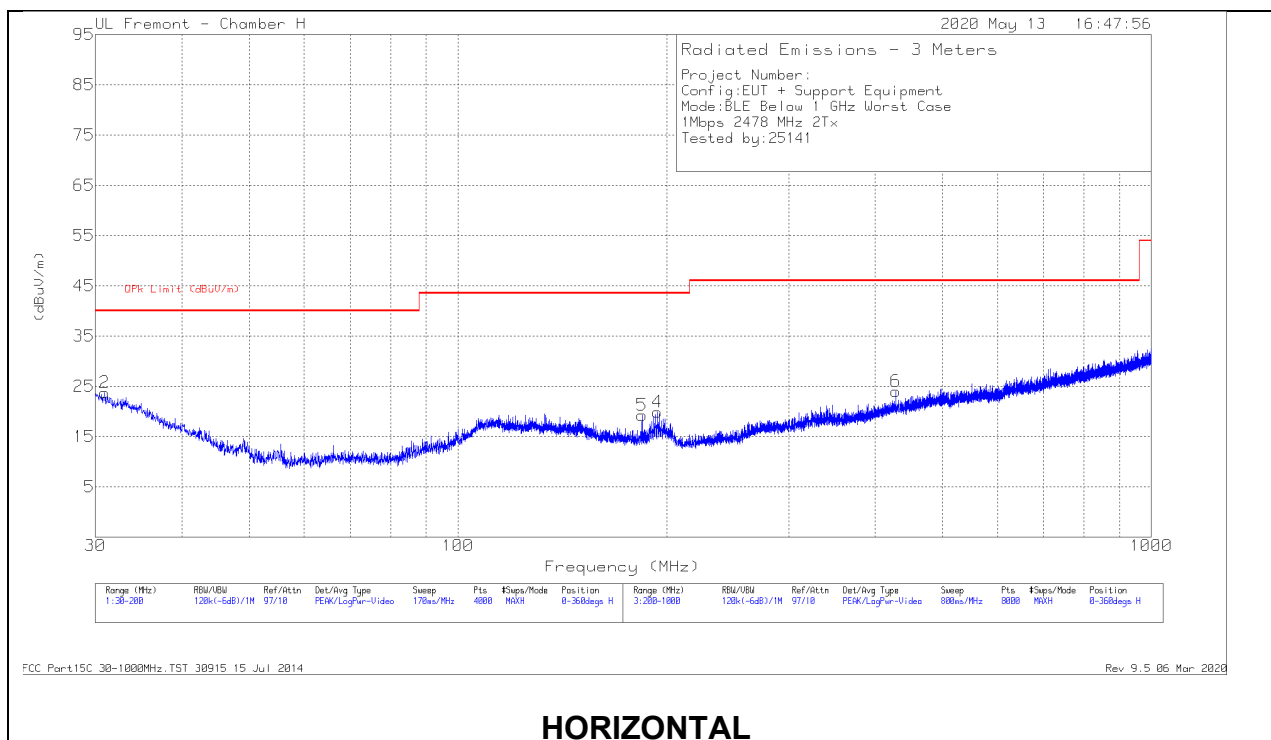
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

10.3. WORST CASE BELOW 1 GHZ

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



DATA

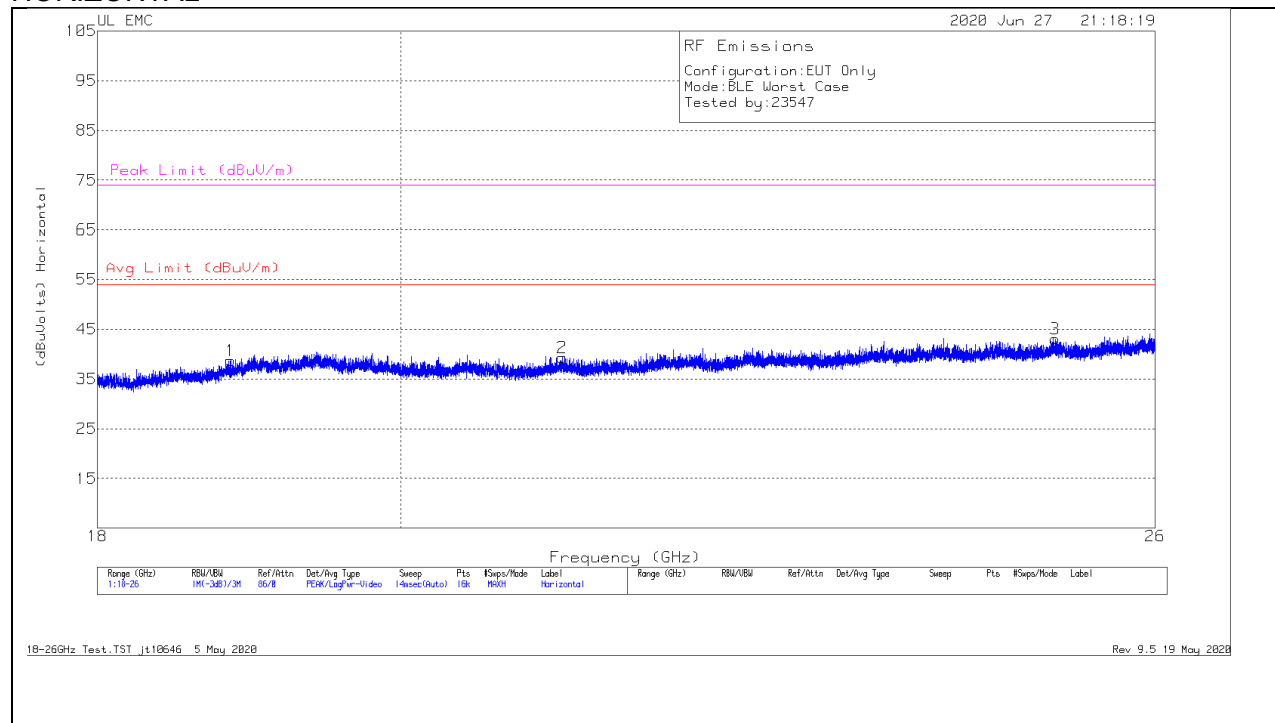
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.0425	34.53	Pk	27	-31.3	30.23	40	-9.77	0-360	100	V
2	30.9352	28.74	Pk	26.3	-31.3	23.74	40	-16.26	0-360	200	H
3	43.9011	34.42	Pk	17.3	-31.1	20.62	40	-19.38	0-360	100	V
5	184.3574	32.16	Pk	16.8	-29.7	19.26	43.52	-24.26	0-360	200	H
4	194.135	32.28	Pk	17.2	-29.6	19.88	43.52	-23.64	0-360	200	H
6	428.4297	30.12	Pk	22.3	-28.4	24.02	46.02	-22	0-360	400	H

Pk - -Peak detector

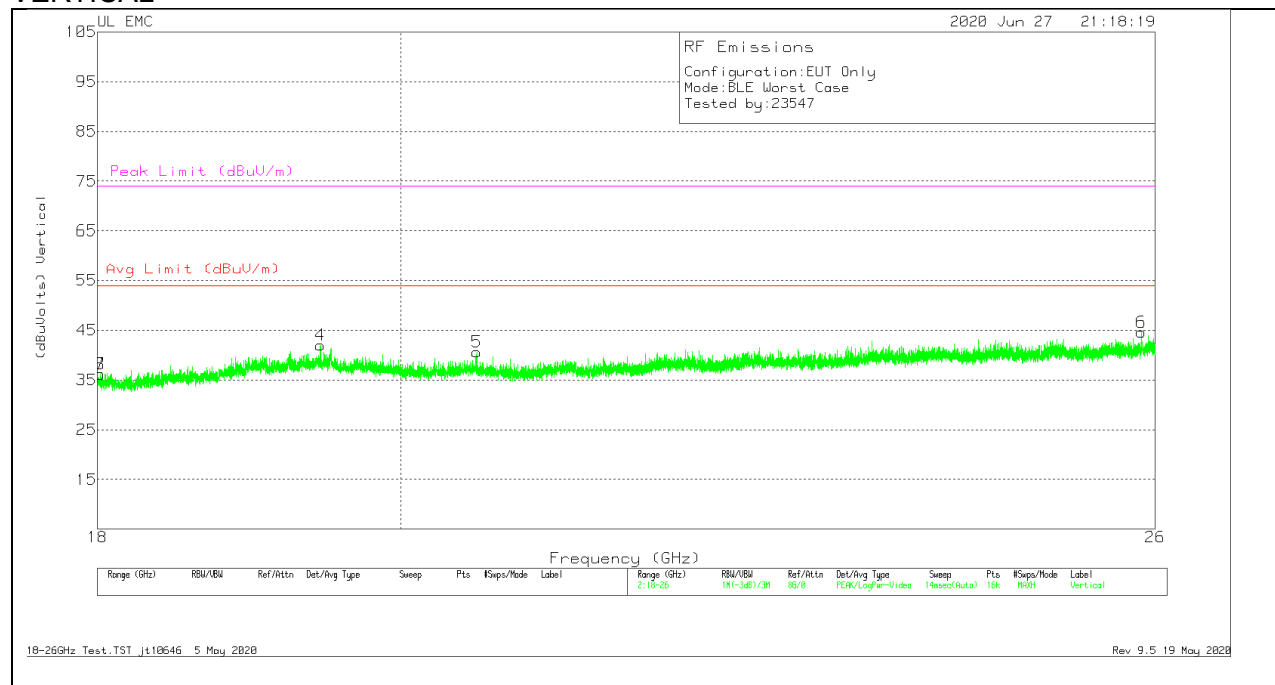
10.4. WORST CASE 18-26 GHz

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

HORIZONTAL



VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T125 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	18.85345	36.22	Pk	32.5	-20.5	-9.5	38.72	54	-15.28	74	-35.28
2	21.1548	36.72	Pk	33	-20.9	-9.5	39.32	54	-14.68	74	-34.68
3	25.11106	37.44	Pk	34.3	-19.2	-9.5	43.04	54	-10.96	74	-30.96
4	19.45041	38.01	Pk	32.7	-19.2	-9.5	42.01	54	-11.99	74	-31.99
5	20.53634	38.23	Pk	33.1	-21.2	-9.5	40.63	54	-13.37	74	-33.37
6	25.87451	40.24	Pk	34.5	-20.6	-9.5	44.64	54	-9.36	74	-29.36
7	18.017	35.38	Pk	32.5	-22.2	-9.5	36.18	54	-17.82	74	-37.82
8	18.017	35.38	Pk	32.5	-22.2	-9.5	36.18	54	-17.82	74	-37.82

Pk - Peak detector

11. 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.

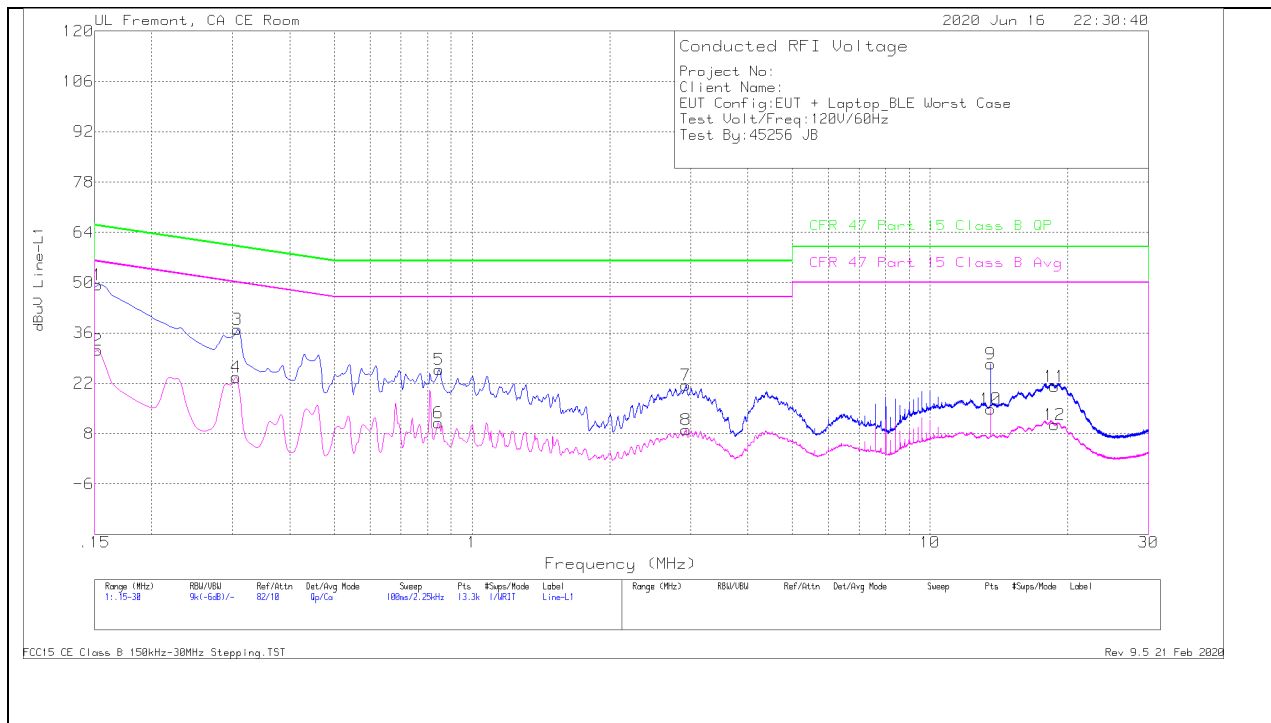
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line Host

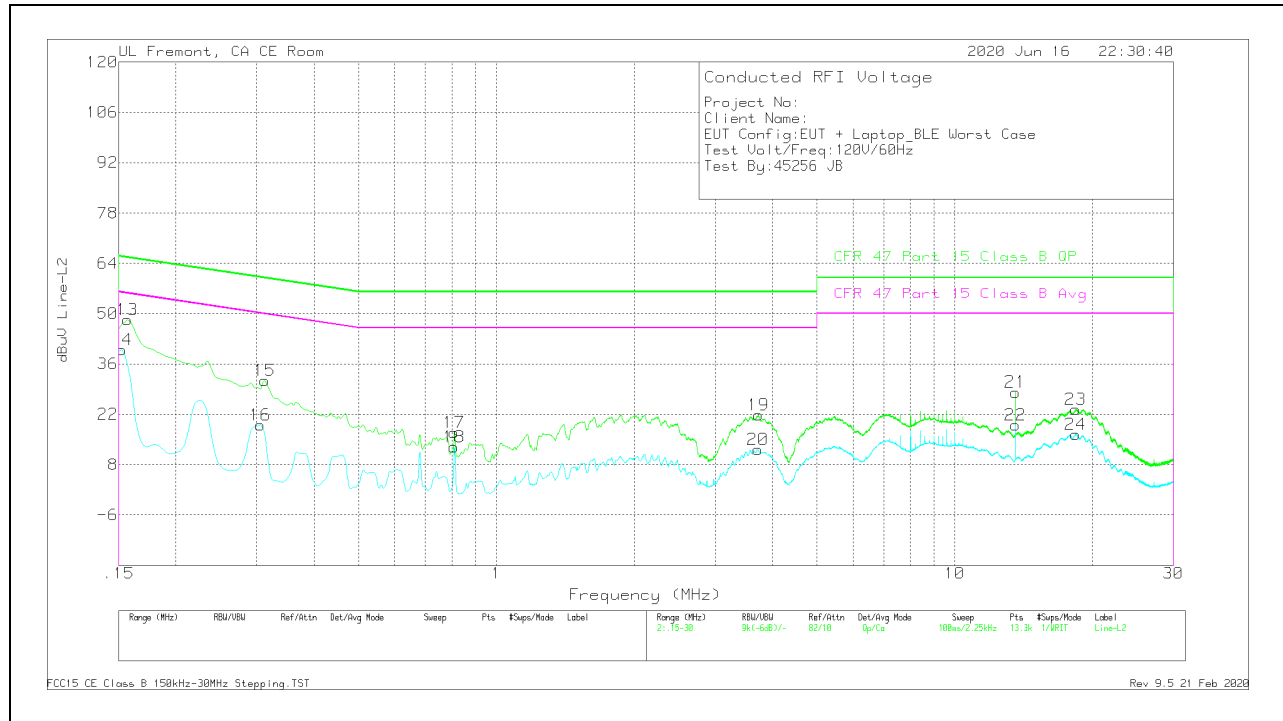
LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 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)M argin (dB)
1	.15225	39.36	Qp	.1	0	10	49.46	65.88	-16.42	-	-
2	.15225	21.15	Ca	.1	0	10	31.25	-	-	55.88	-24.63
3	.3075	26.93	Qp	0	0	10	36.93	60.04	-23.11	-	-
4	.30525	13.65	Ca	0	0	10	23.65	-	-	50.1	-26.45
5	.8475	15.75	Qp	0	0	10	25.75	56	-30.25	-	-
6	.84525	.92	Ca	0	0	10	10.92	-	-	46	-35.08
7	2.931	11.44	Qp	0	.1	10	21.54	56	-34.46	-	-
8	2.93325	-1.08	Ca	0	.1	10	9.02	-	-	46	-36.98
9	13.56	16.93	Qp	.1	.2	10.1	27.33	60	-32.67	-	-
10	13.56	4.47	Ca	.1	.2	10.1	14.87	-	-	50	-35.13
11	18.7125	10.67	Qp	0	.3	10.2	21.17	60	-38.83	-	-
12	18.70575	.03	Ca	0	.3	10.2	10.53	-	-	50	-39.47

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



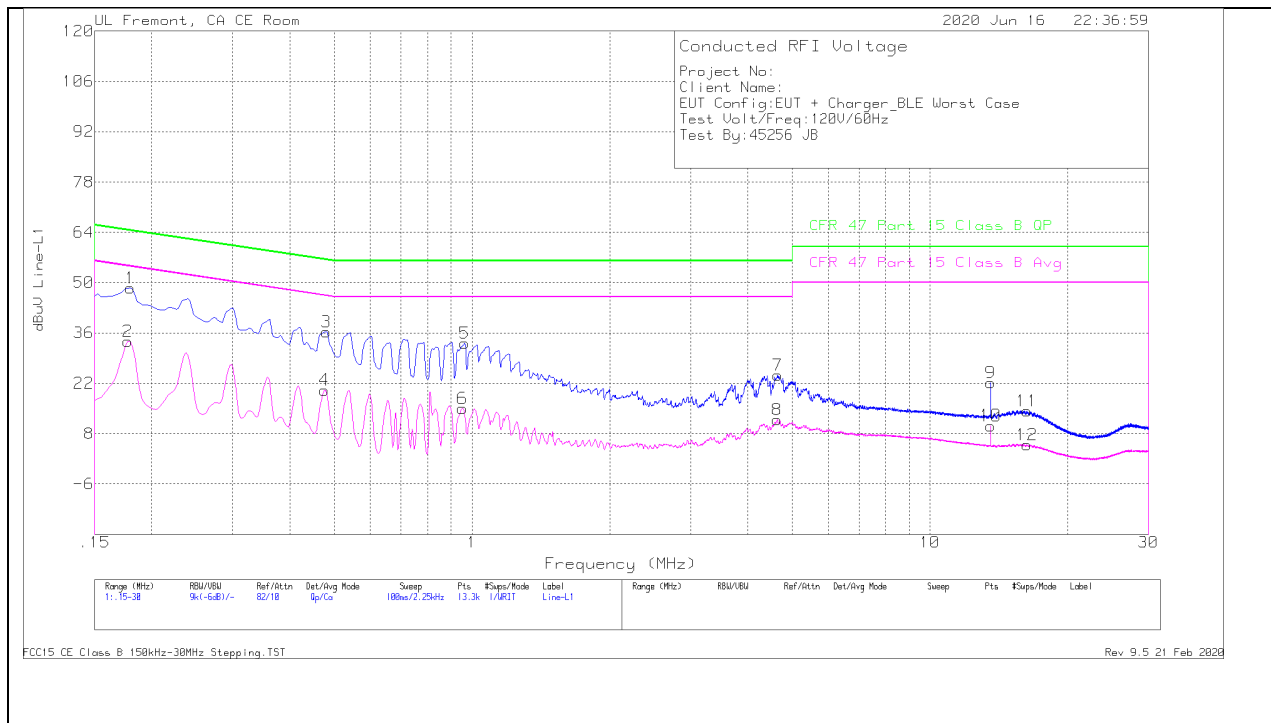
Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
13	.15675	38.27	Qp	0	0	10	48.27	65.63	-17.36	-	-
14	.15225	30.02	Ca	0	0	10	40.02	-	-	55.88	-15.86
15	.312	21.46	Qp	0	0	10	31.46	59.92	-28.46	-	-
16	.30525	9.02	Ca	0	0	10	19.02	-	-	50.1	-31.08
17	.80925	6.99	Qp	0	0	10	16.99	56	-39.01	-	-
18	.80925	2.93	Ca	0	0	10	12.93	-	-	46	-33.07
19	3.7275	11.64	Qp	0	.1	10	21.74	56	-34.26	-	-
20	3.72525	2.07	Ca	0	.1	10	12.17	-	-	46	-33.83
21	13.56	17.78	Qp	.1	.2	10.1	28.18	60	-31.82	-	-
22	13.56	8.61	Ca	.1	.2	10.1	19.01	-	-	50	-30.99
23	18.366	12.85	Qp	0	.3	10.2	23.35	60	-36.65	-	-
24	18.36825	5.98	Ca	0	.3	10.2	16.48	-	-	50	-33.52

Qp - Quasi-Peak detector

Ca - CISPR average detection

11.2. AC Power Line Norm

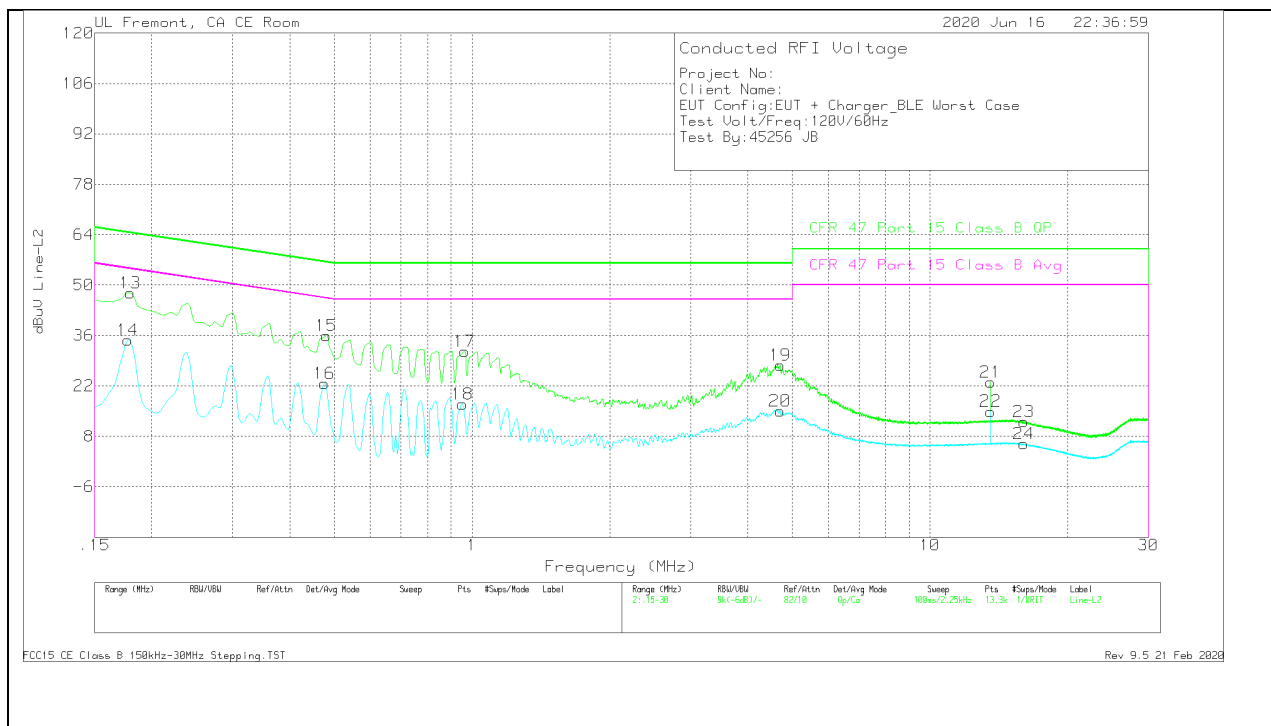
LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 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)M argin (dB)
1	.17925	38.48	Qp	0	0	10	48.48	64.52	-16.04	-	-
2	.177	23.65	Ca	0	0	10	33.65	-	-	54.63	-20.98
3	.48075	26.37	Qp	0	0	10	36.37	56.33	-19.96	-	-
4	.47625	10.15	Ca	0	0	10	20.15	-	-	46.4	-26.25
5	.9645	22.99	Qp	0	.1	10	33.09	56	-22.91	-	-
6	.95325	4.86	Ca	0	.1	10	14.96	-	-	46	-31.04
7	4.64775	14.05	Qp	0	.1	10.1	24.25	56	-31.75	-	-
8	4.64325	1.62	Ca	0	.1	10.1	11.82	-	-	46	-34.18
9	13.56	11.8	Qp	.1	.2	10.1	22.2	60	-37.8	-	-
10	13.56	-.19	Ca	.1	.2	10.1	10.21	-	-	50	-39.79
11	16.27575	3.75	Qp	0	.3	10.2	14.25	60	-45.75	-	-
12	16.2825	-5.58	Ca	0	.3	10.2	4.92	-	-	50	-45.08

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 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)M argin (dB)
13	.17925	37.88	Qp	0	0	10	47.88	64.52	-16.64	-	-
14	.177	24.73	Ca	0	0	10	34.73	-	-	54.63	-19.9
15	.48075	25.91	Qp	0	0	10	35.91	56.33	-20.42	-	-
16	.47625	12.7	Ca	0	0	10	22.7	-	-	46.4	-23.7
17	.9645	21.43	Qp	0	.1	10	31.53	56	-24.47	-	-
18	.95325	6.86	Ca	0	.1	10	16.96	-	-	46	-29.04
19	4.70625	17.58	Qp	0	.1	10.1	27.78	56	-28.22	-	-
20	4.704	4.82	Ca	0	.1	10.1	15.02	-	-	46	-30.98
21	13.56	12.6	Qp	.1	.2	10.1	23	60	-37	-	-
22	13.56	4.52	Ca	.1	.2	10.1	14.92	-	-	50	-35.08
23	16.05075	1.61	Qp	0	.3	10.2	12.11	60	-47.89	-	-
24	16.053	-4.64	Ca	0	.3	10.2	5.86	-	-	50	-44.14

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. SETUP PHOTOS

Please refer to 13179116-EP1V1 for setup photos

END OF TEST REPORT

END OF TEST REPORT