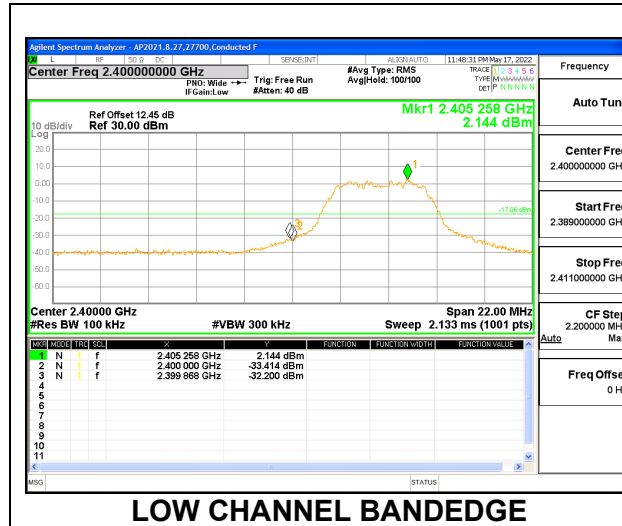
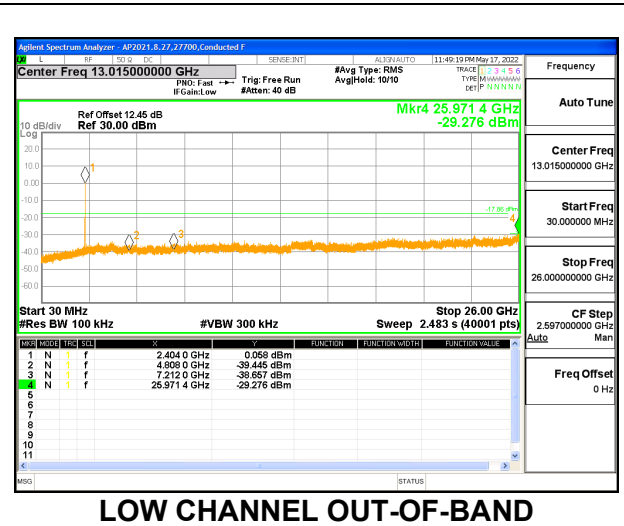


9.7.7. LOW POWER HDR (HDR8)

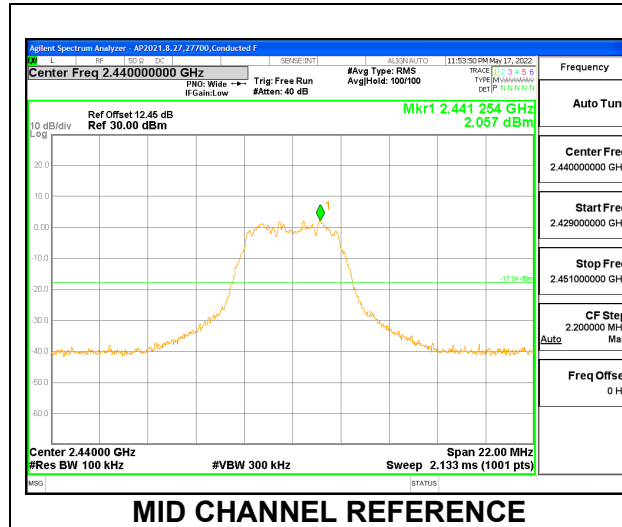
ANT 4



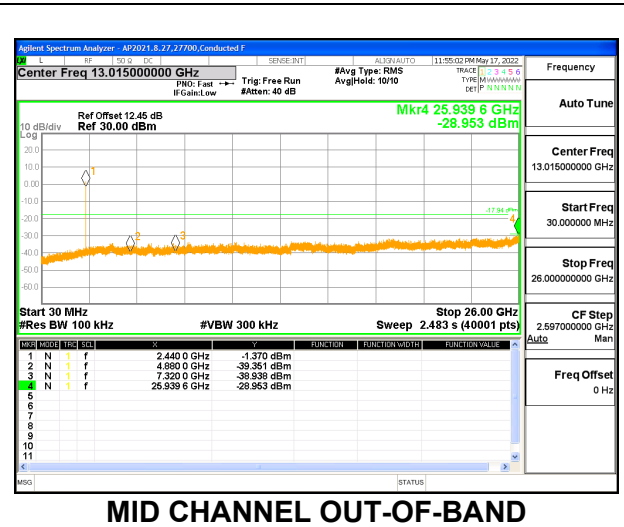
LOW CHANNEL BANDEDGE



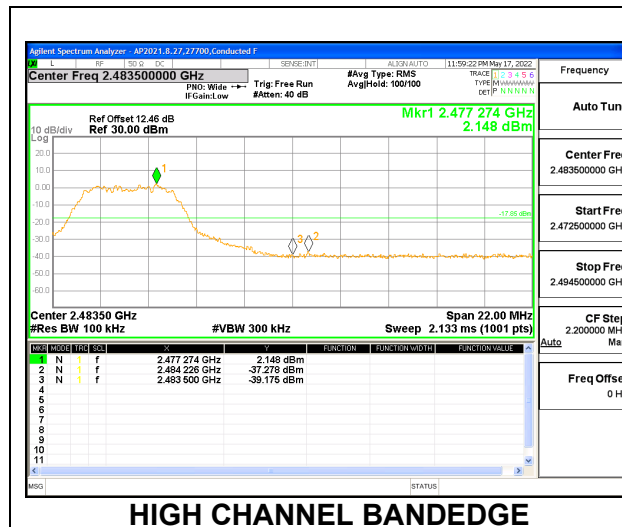
LOW CHANNEL OUT-OF-BAND



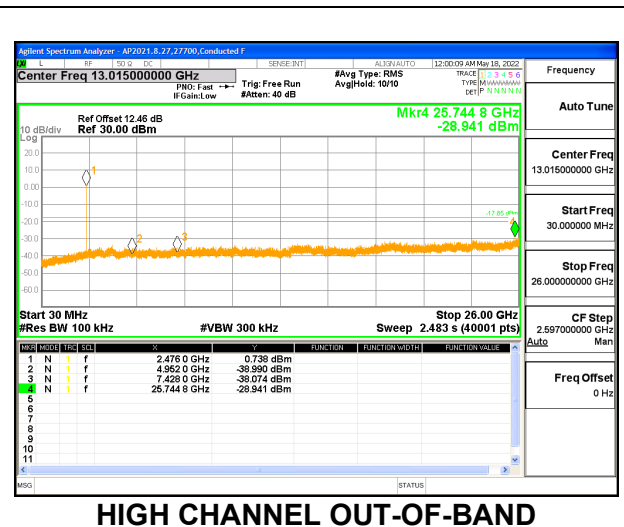
MID CHANNEL REFERENCE



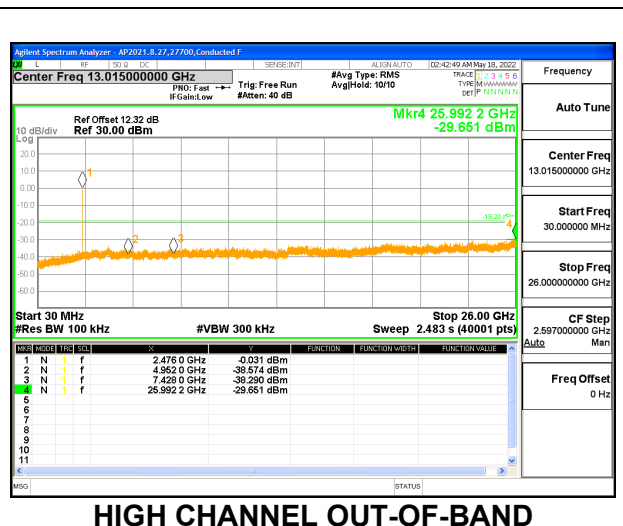
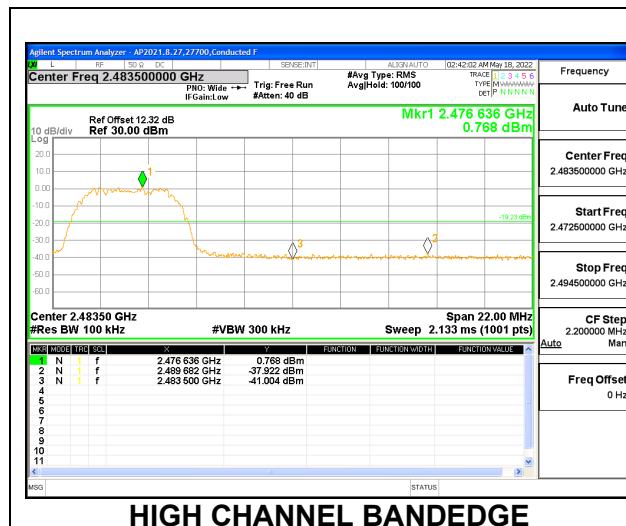
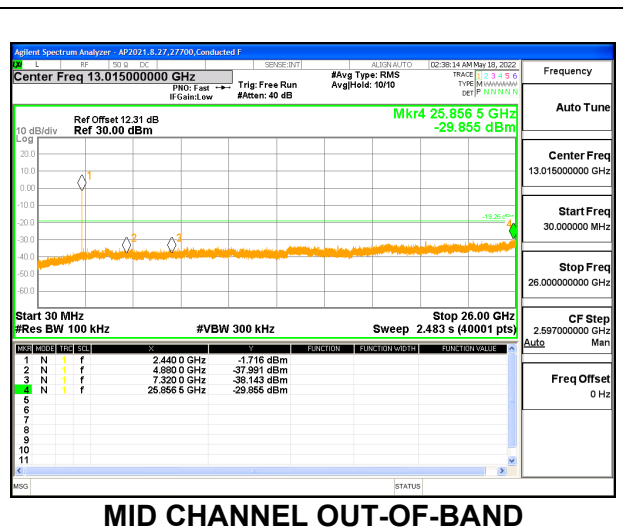
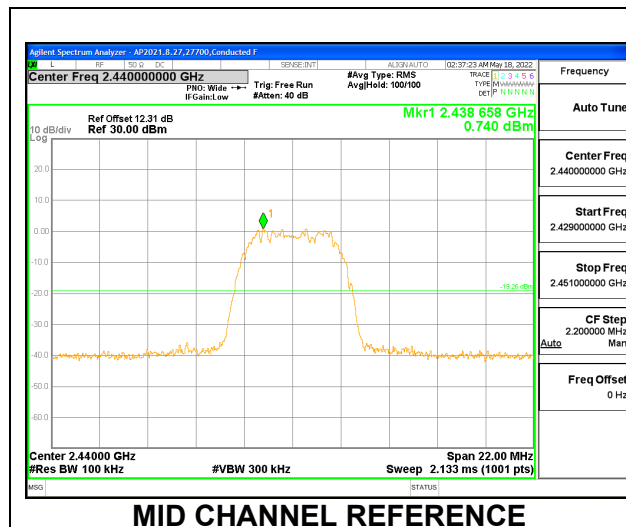
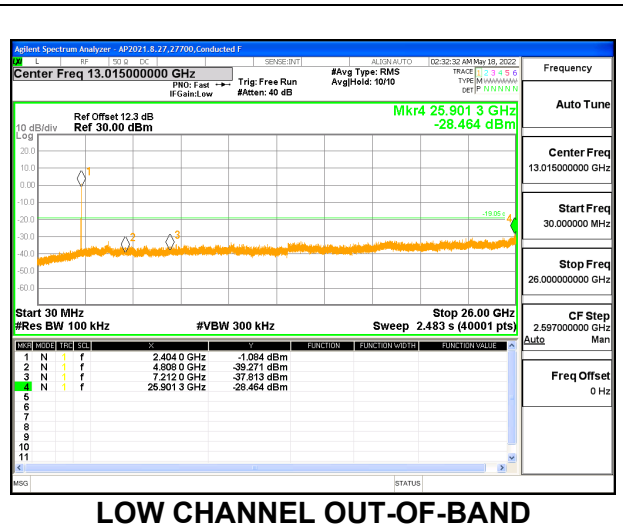
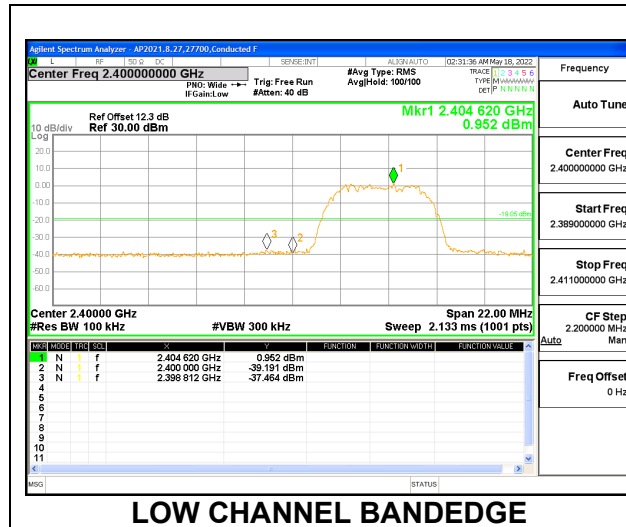
MID CHANNEL OUT-OF-BAND



HIGH CHANNEL BANDEDGE

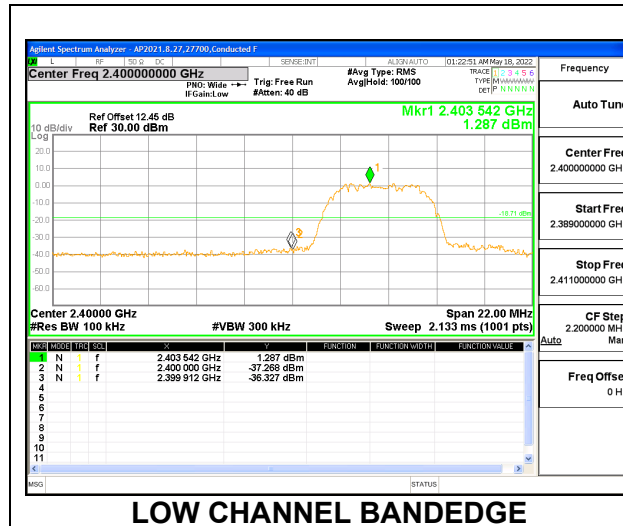


HIGH CHANNEL OUT-OF-BAND

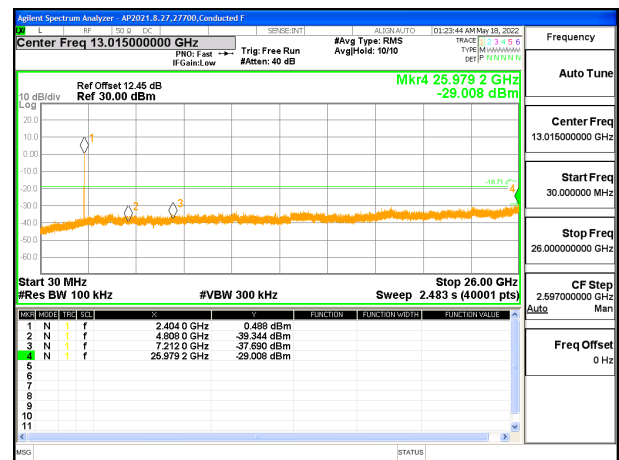
ANT 3

9.7.8. LOW POWER HDR TXBF (HDR8)

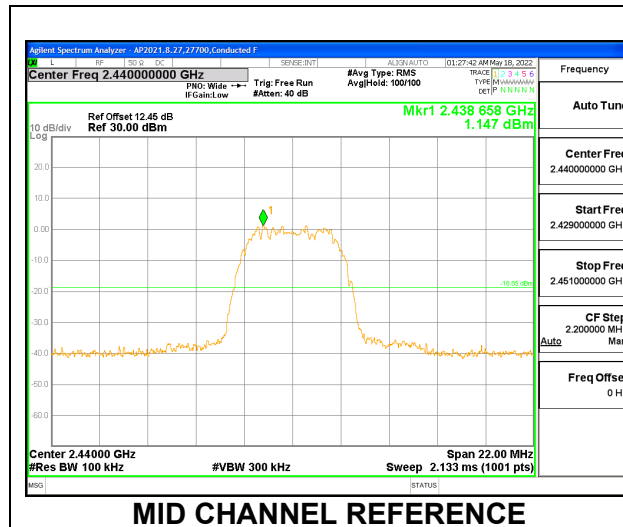
ANT 4



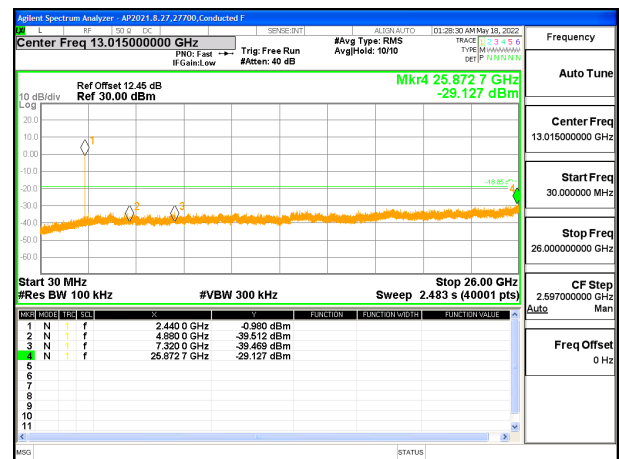
LOW CHANNEL BANDEDGE



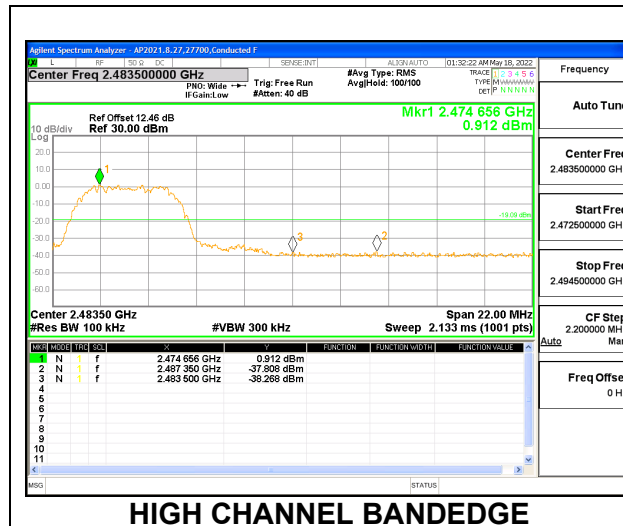
LOW CHANNEL OUT-OF-BAND



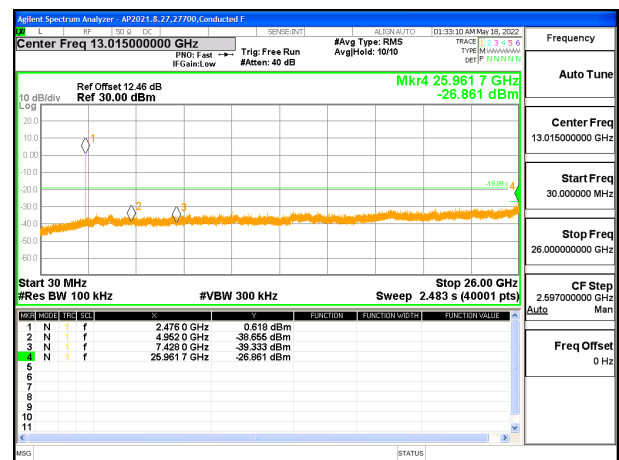
MID CHANNEL REFERENCE



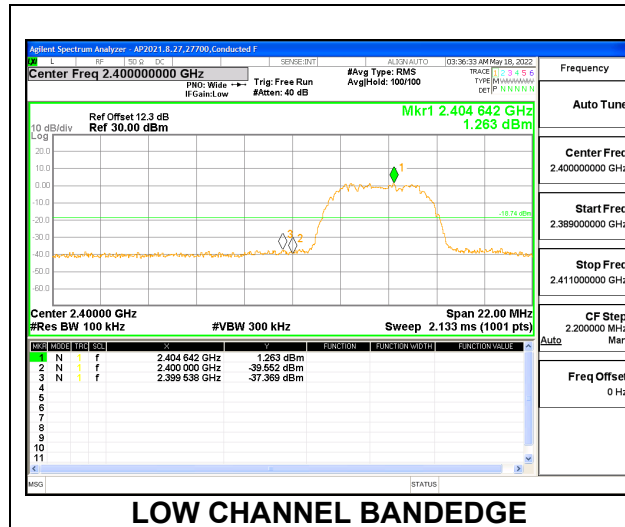
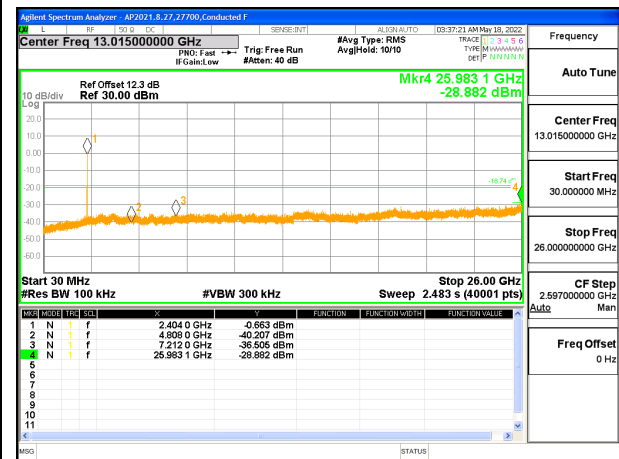
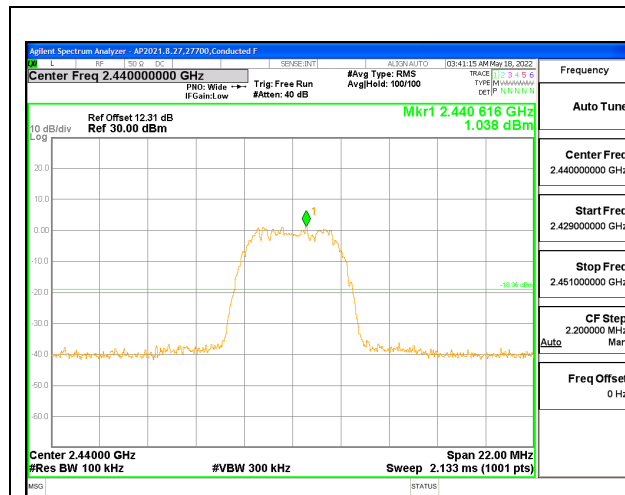
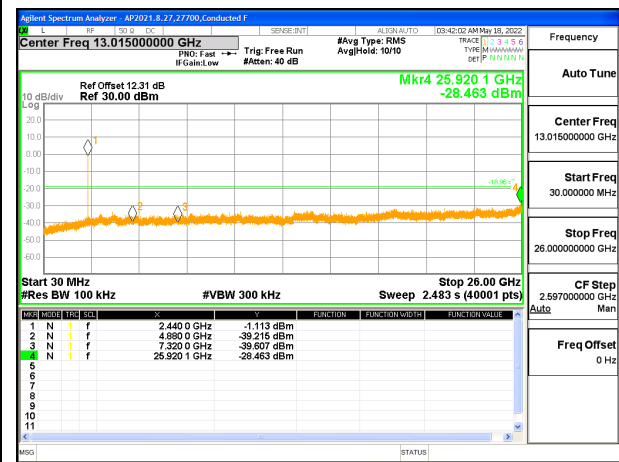
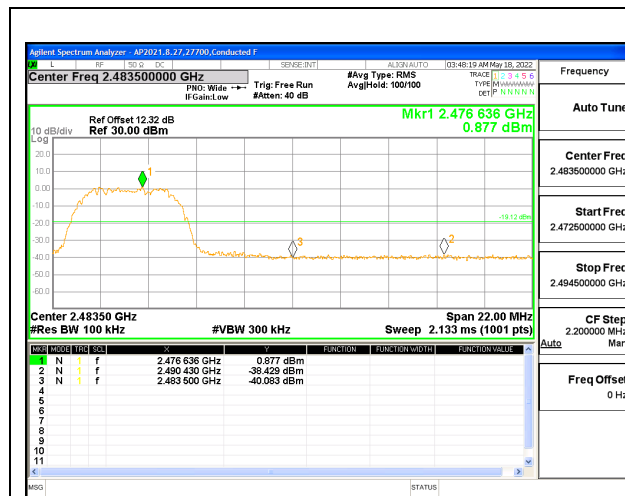
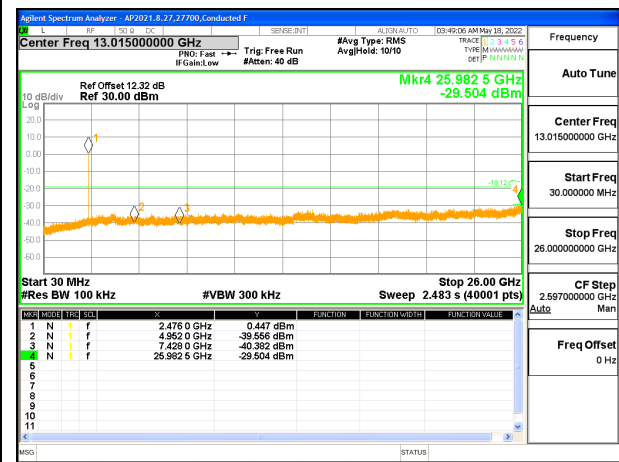
MID CHANNEL OUT-OF-BAND



HIGH CHANNEL BANDEDGE



HIGH CHANNEL OUT-OF-BAND

ANT 3**LOW CHANNEL BANDEDGE****LOW CHANNEL OUT-OF-BAND****MID CHANNEL REFERENCE****MID CHANNEL OUT-OF-BAND****HIGH CHANNEL BANDEDGE****HIGH CHANNEL OUT-OF-BAND**

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.

Note: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as report in the table) using free space impedance of 377 Ohms. For example, the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y - 51.5 = Z$ dBuA/m, which has the same margin, W dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit. In addition:

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.

RESULTS:

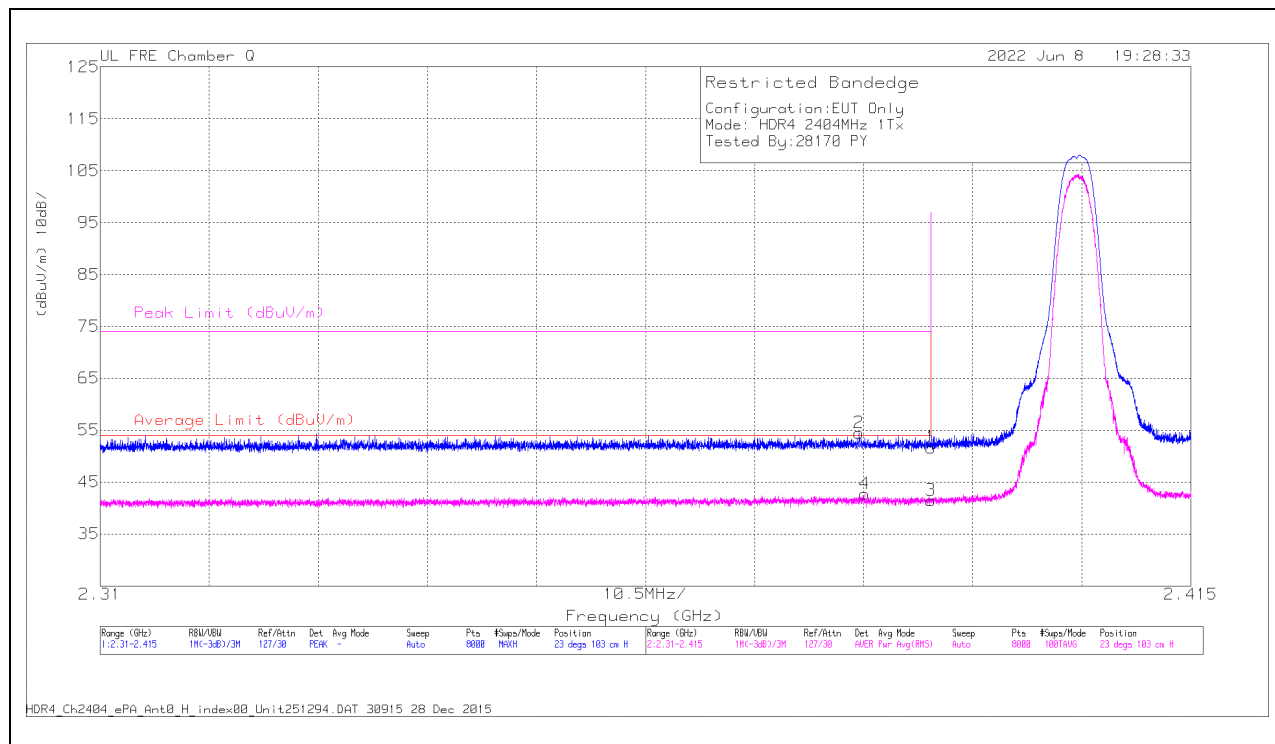
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

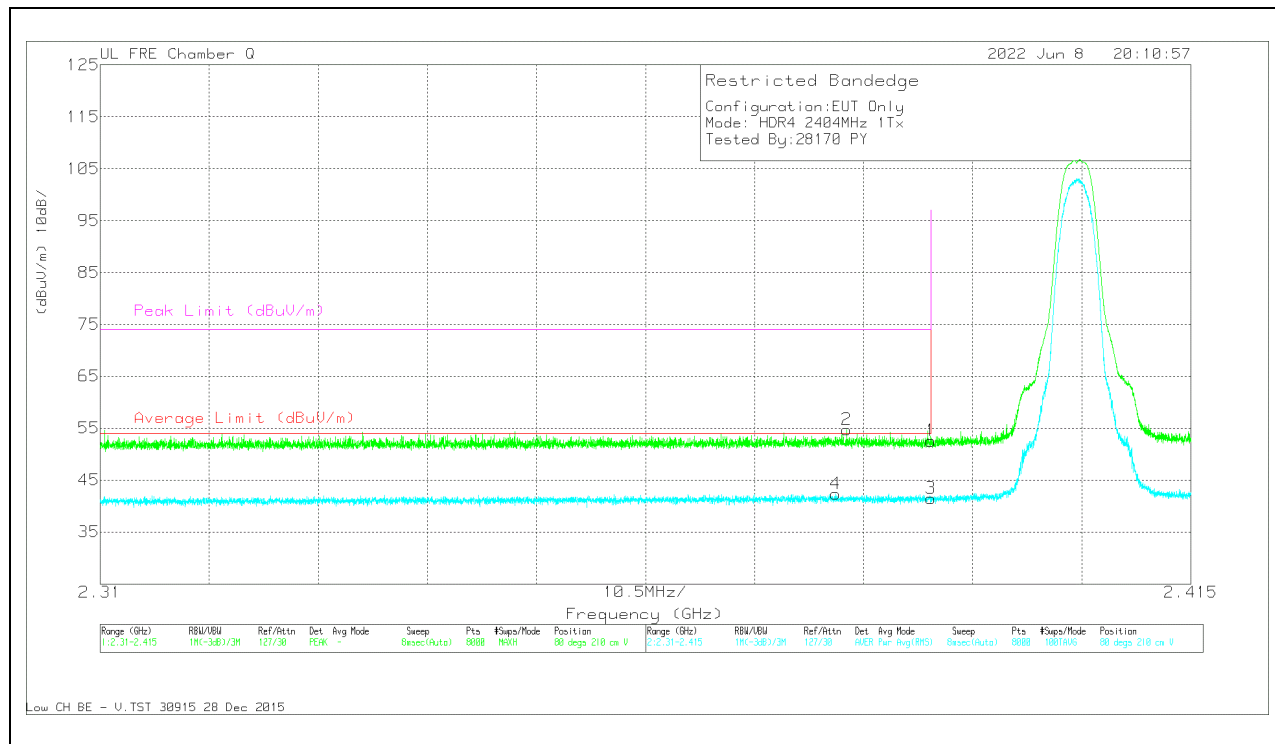


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.383065	56.86	Pk	32	-34.4	54.46	-	-	74	-19.54	23	103	H
4	2.383603	45.13	RMS	32	-34.4	42.73	54	-11.27	-	-	23	103	H
1	2.39	54.06	Pk	31.9	-34.3	51.66	-	-	74	-22.34	23	103	H
3	2.39	43.82	RMS	31.9	-34.3	41.42	54	-12.58	-	-	23	103	H

Pk - Peak detector

RMS - RMS detection

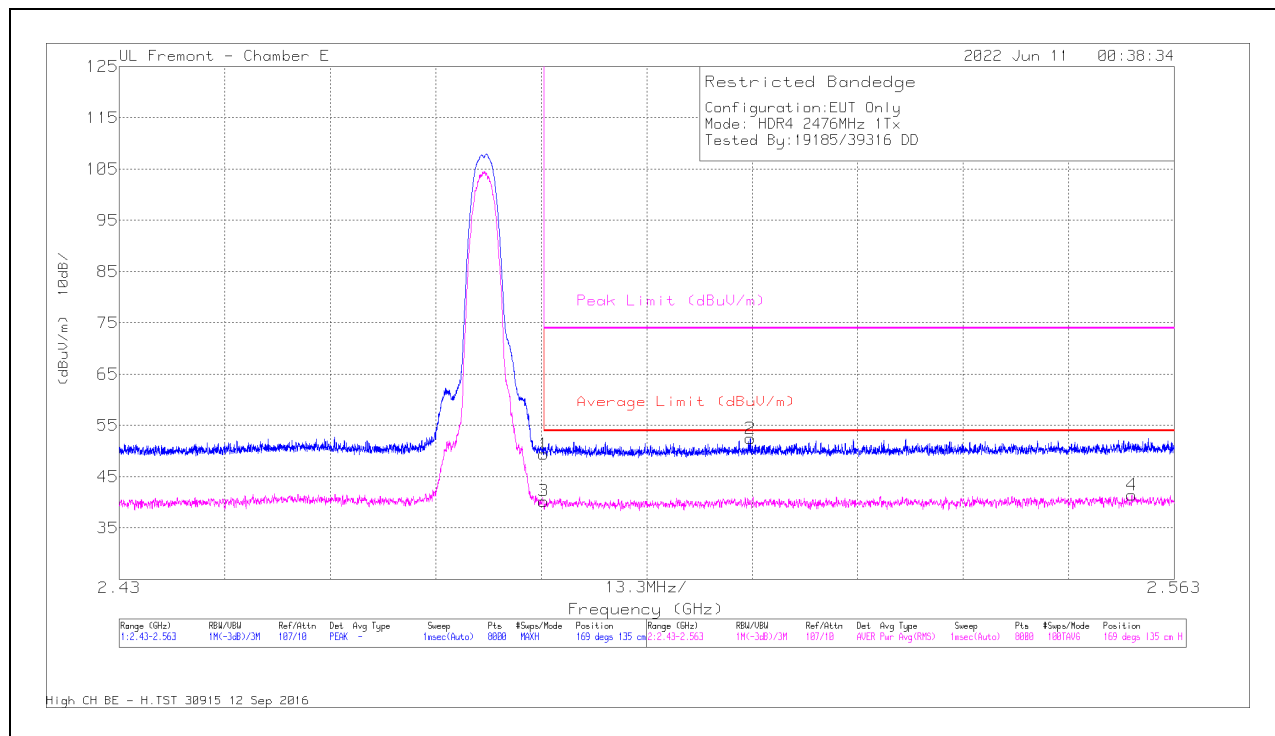
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
4	2.380781	44.78	RMS	32	-34.4	42.38	54	-11.62	-	-	80	210	V
2	2.381857	57.14	Pk	32	-34.4	54.74	-	-	74	-19.26	80	210	V
1	2.39	54.94	Pk	31.9	-34.3	52.54	-	-	74	-21.46	80	210	V
3	2.39	43.91	RMS	31.9	-34.3	41.51	54	-12.49	-	-	80	210	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

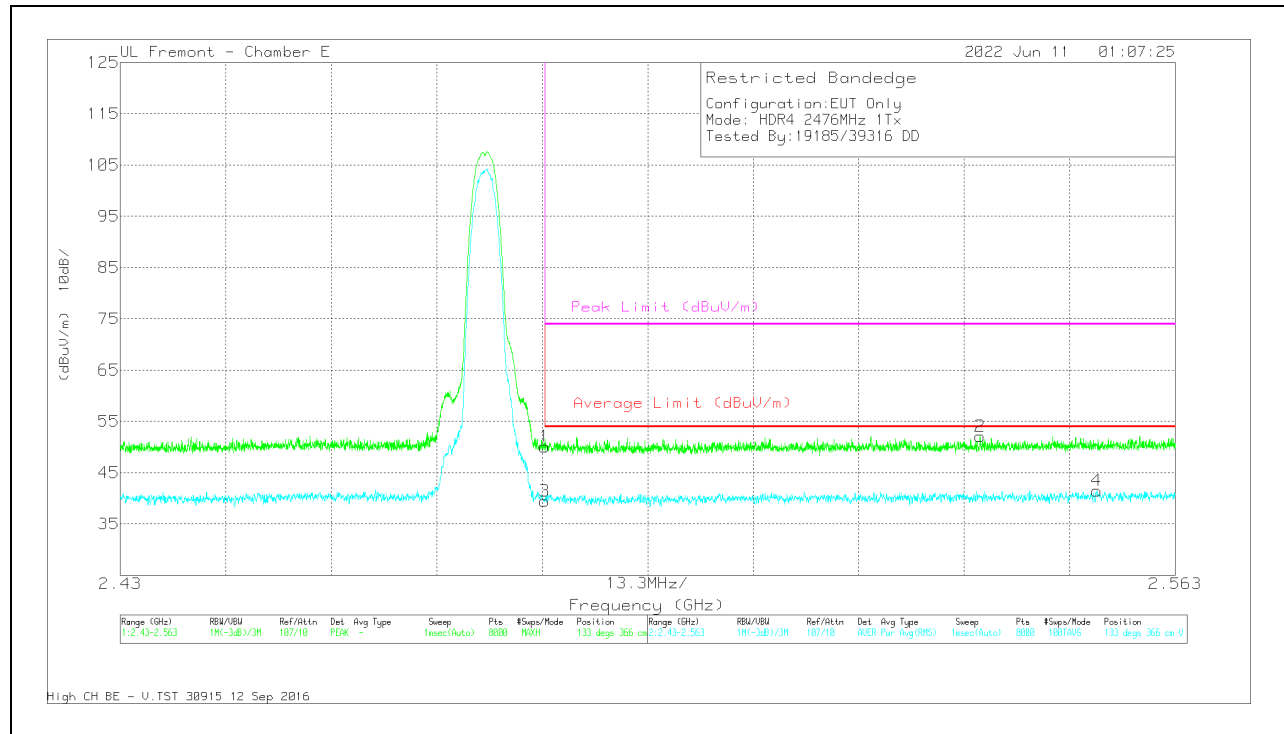
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.49	Pk	31.8	-25.9	49.39	-	-	74	-24.61	169	135	H
3	* 2.4835	34.35	RMS	31.8	-25.9	40.25	54	-13.75	-	-	169	135	H
2	2.50956	46.34	Pk	32	-25.9	52.44	-	-	74	-21.56	169	135	H
4	2.557645	34.92	RMS	32.4	-25.9	41.42	54	-12.58	-	-	169	135	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

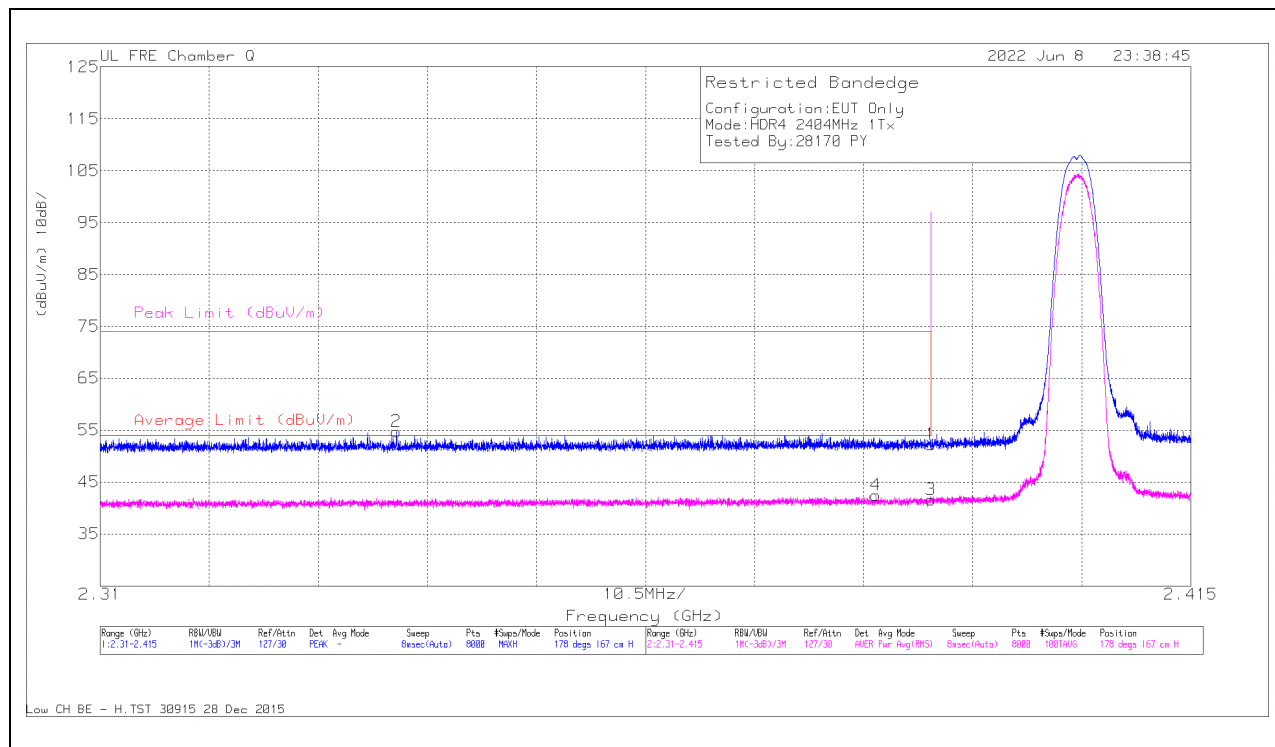


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	44.18	Pk	31.8	-25.9	50.08	-	-	74	-23.92	133	366	V
3	* 2.4835	33.54	RMS	31.8	-25.9	39.44	54	-14.56	-	-	133	366	V
2	2.538391	45.78	Pk	32.3	-26	52.08	-	-	74	-21.92	133	366	V
4	2.553123	35.08	RMS	32.4	-26	41.48	54	-12.52	-	-	133	366	V

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

Pk - Peak detector

RMS - RMS detection

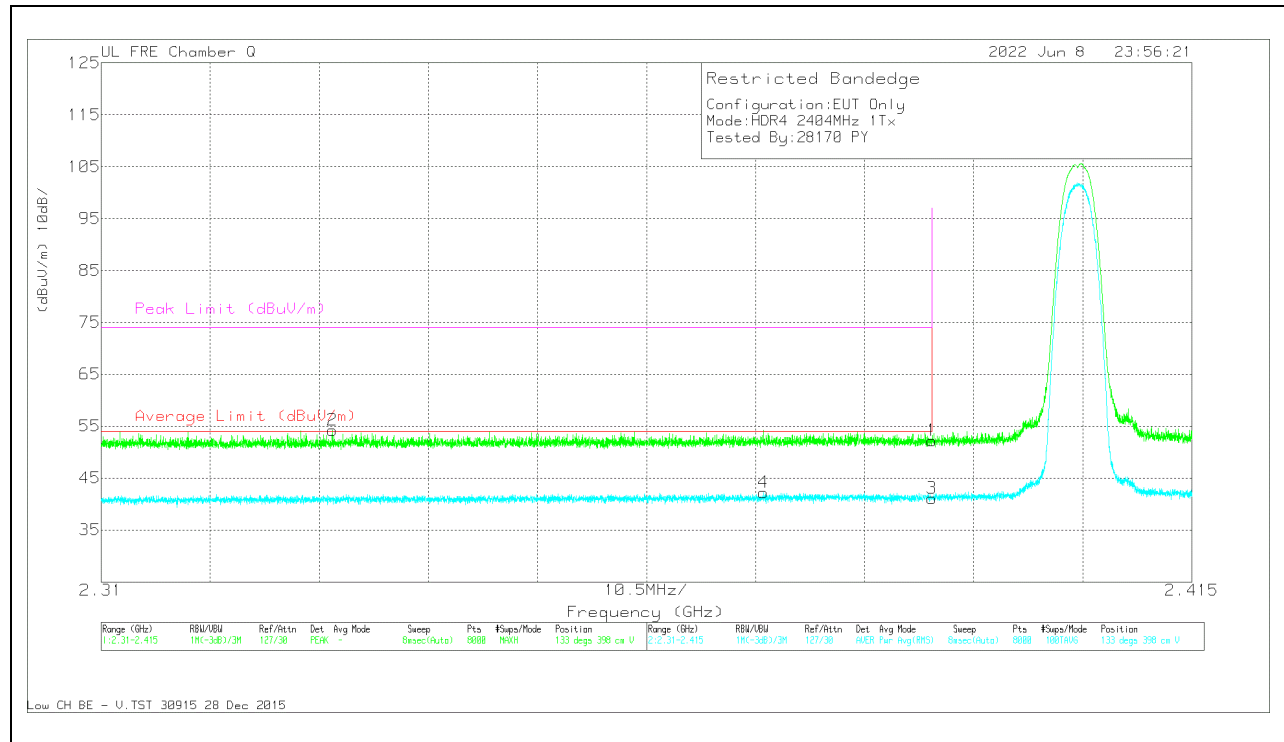
ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.338525	57.35	Pk	31.8	-34.4	54.75	-	-	74	-19.25	178	167	H
4	2.384666	44.82	RMS	32	-34.4	42.42	54	-11.58	-	-	178	167	H
1	2.39	54.66	Pk	31.9	-34.3	52.26	-	-	74	-21.74	178	167	H
3	2.39	43.95	RMS	31.9	-34.3	41.55	54	-12.45	-	-	178	167	H

Pk - Peak detector

RMS - RMS detection

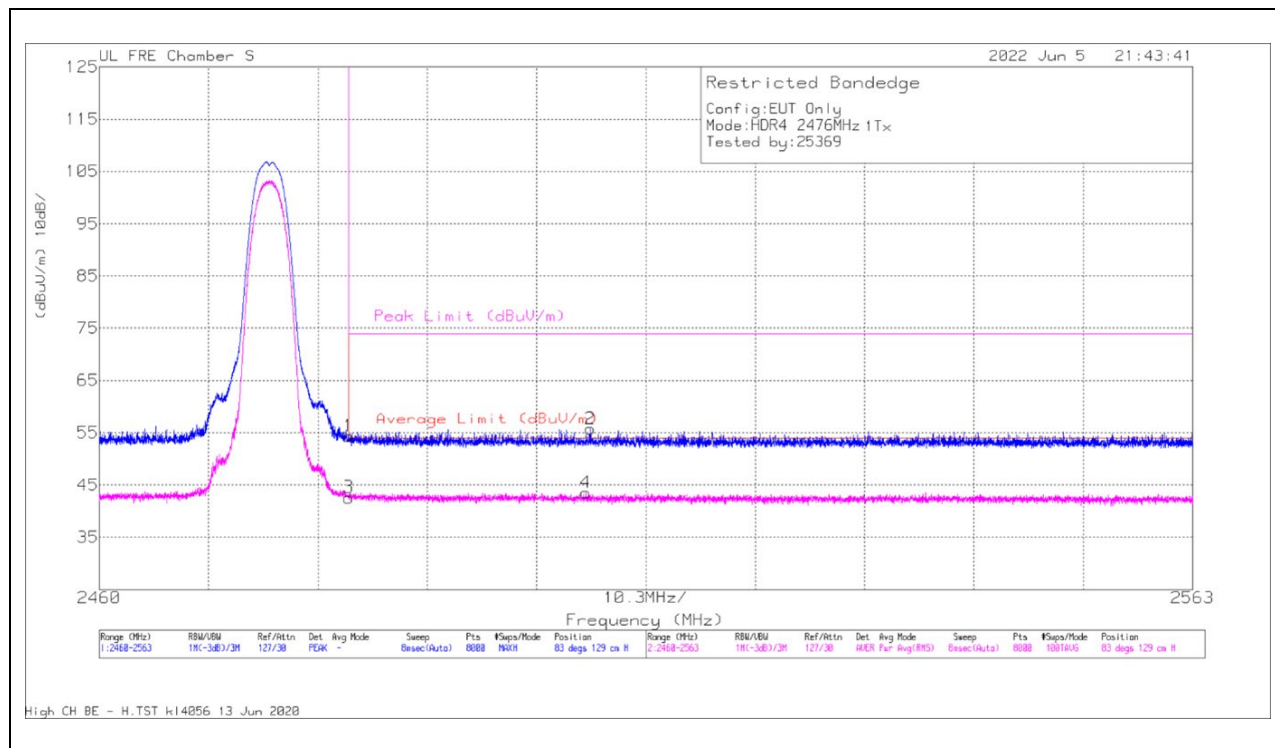
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
2	2.332237	56.73	Pk	31.9	-34.4	54.23	-	-	74	-19.77	133	398	V
4	2.373771	44.7	RMS	31.9	-34.4	42.2	54	-11.8	-	-	133	398	V
1	2.39	54.67	Pk	31.9	-34.3	52.27	-	-	74	-21.73	133	398	V
3	2.39	43.48	RMS	31.9	-34.3	41.08	54	-12.92	-	-	133	398	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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)	Polarity
1	2483.5	56.96	Pk	32.4	-35	54.36	-	-	74	-19.64	83	129	H
3	2483.5	45.19	RMS	32.4	-35	42.59	54	-11.41	-	-	83	129	H
4	2505.829	46.04	RMS	32.4	-34.9	43.54	54	-10.46	-	-	83	129	H
2	2506.241	58.27	Pk	32.4	-34.9	55.77	-	-	74	-18.23	83	129	H

Pk - Peak detector

RMS - RMS detection

UL FRE Chamber S

2022 Jun 5 21:34:01

Restricted Bondedge
Config:EUT Only
Mode:RDR4 2476MHz 1Tx
Tested by:25369

(dBuV/m) 10dB/

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

10.38MHz/

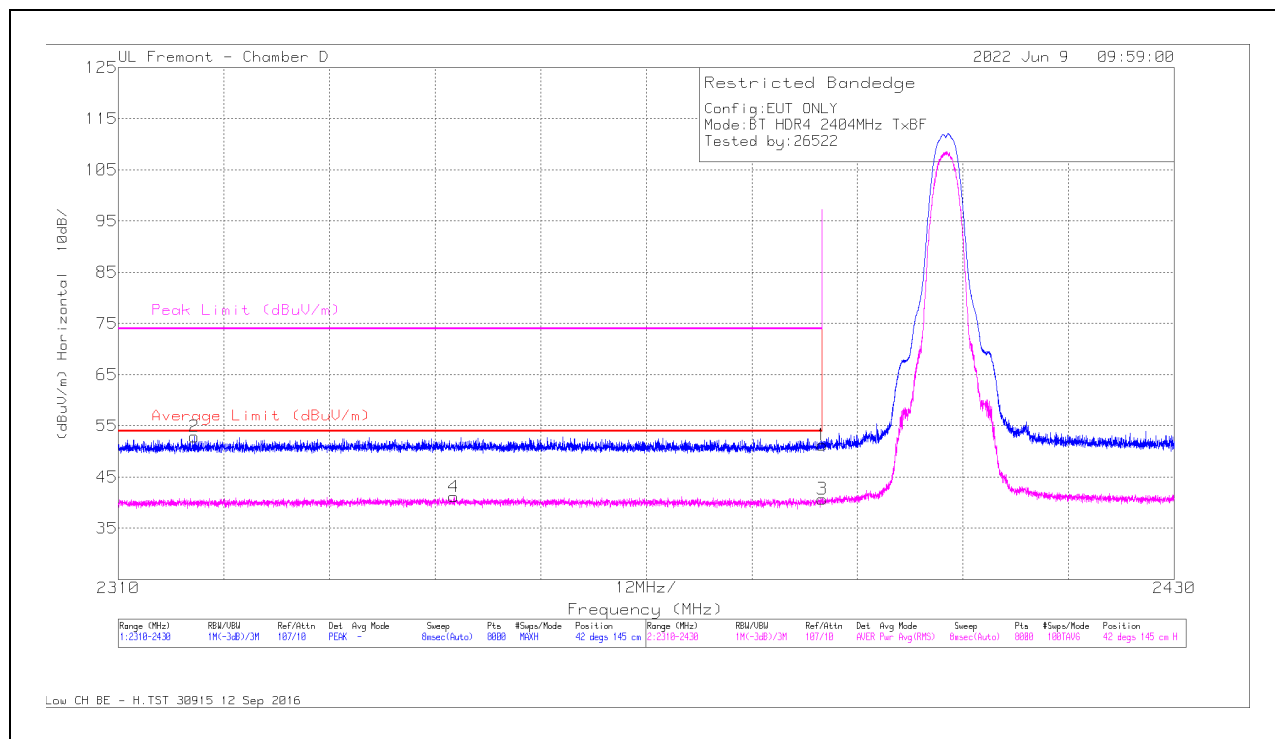
Frequency (MHz)

Range (Hz)	RBW/GBW	Ref/Relin	Det.	Avg Mode	Temp	Pre	Power/Mode	Position	Range (Hz)	RBW/GBW	Ref/Relin	Det.	Avg Mode	Temp	Pre	Power/Mode	Position
24.50-25.63	100-100000	100/100	Peak		Room/Amb	dBm	Peak	10 dBm 20 dB 10	24.50-25.63	100-100000	100/100	Peak	100/100	Room/Amb	dBm	Peak	10 dBm 20 dB 10

High Ch BE - U-TST 144856 13 Jun 2020

Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	AF 206807 (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	2483.5	55.77	Pk	32.4	-35	53.17	-	-	74	-20.83	51	397	V
3	2483.5	45.16	RMS	32.4	-35	42.56	54	-11.44	-	-	51	397	V
4	2483.552	46.23	RMS	32.4	-35	43.63	54	-10.37	-	-	51	397	V
2	2505.842	58.59	Pk	32.4	-34.9	56.09	-	-	74	-17.91	51	397	V

Pk - Peak detector
RMS - RMS detection

10.2.2. HIGH POWER HDR TXBF (HDR4)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

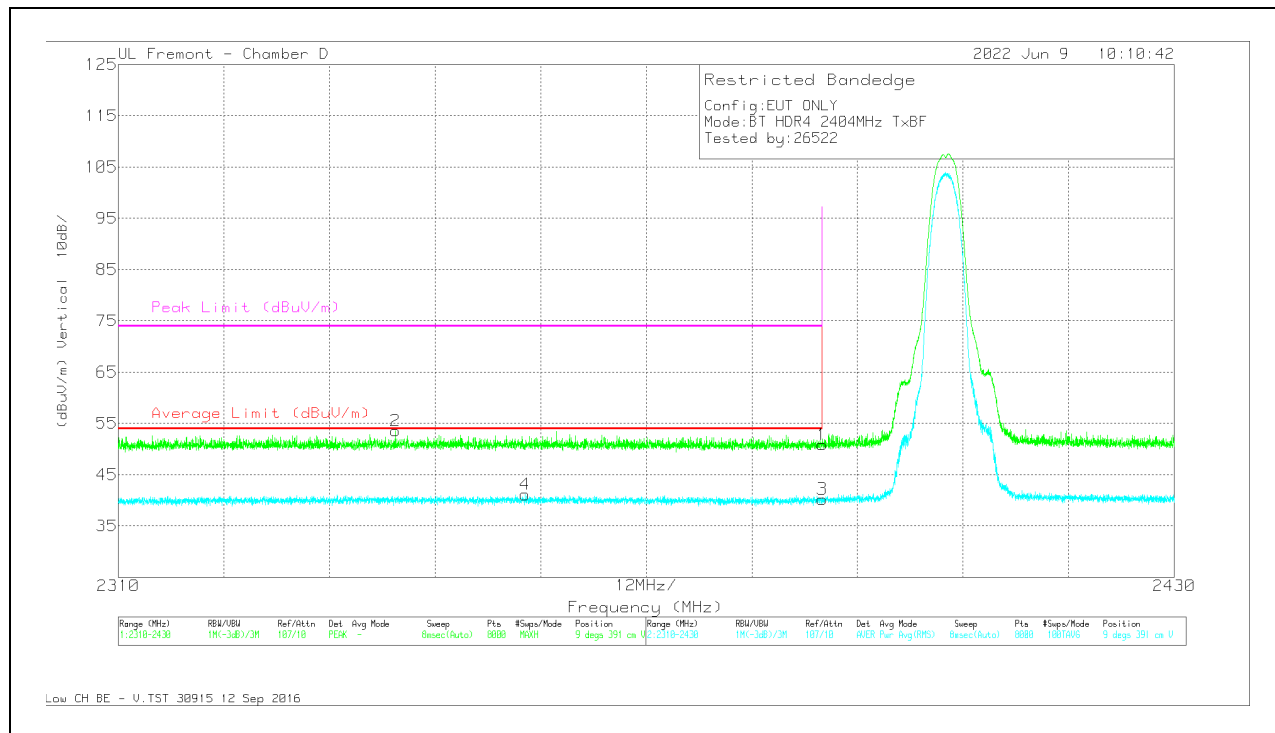
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (dB/m)	Amp/Cb/Filt/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	39.85	Pk	32.1	-20.7	51.25	-	-	74	-22.75	42	145	H
2	* 2318.626	41.6	Pk	32.1	-20.8	52.9	-	-	74	-21.1	42	145	H
3	* 2390	29.31	RMS	32.1	-20.7	40.71	54	-13.29	-	-	42	145	H
4	* 2348.12	29.66	RMS	32.3	-20.8	41.16	54	-12.84	-	-	42	145	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

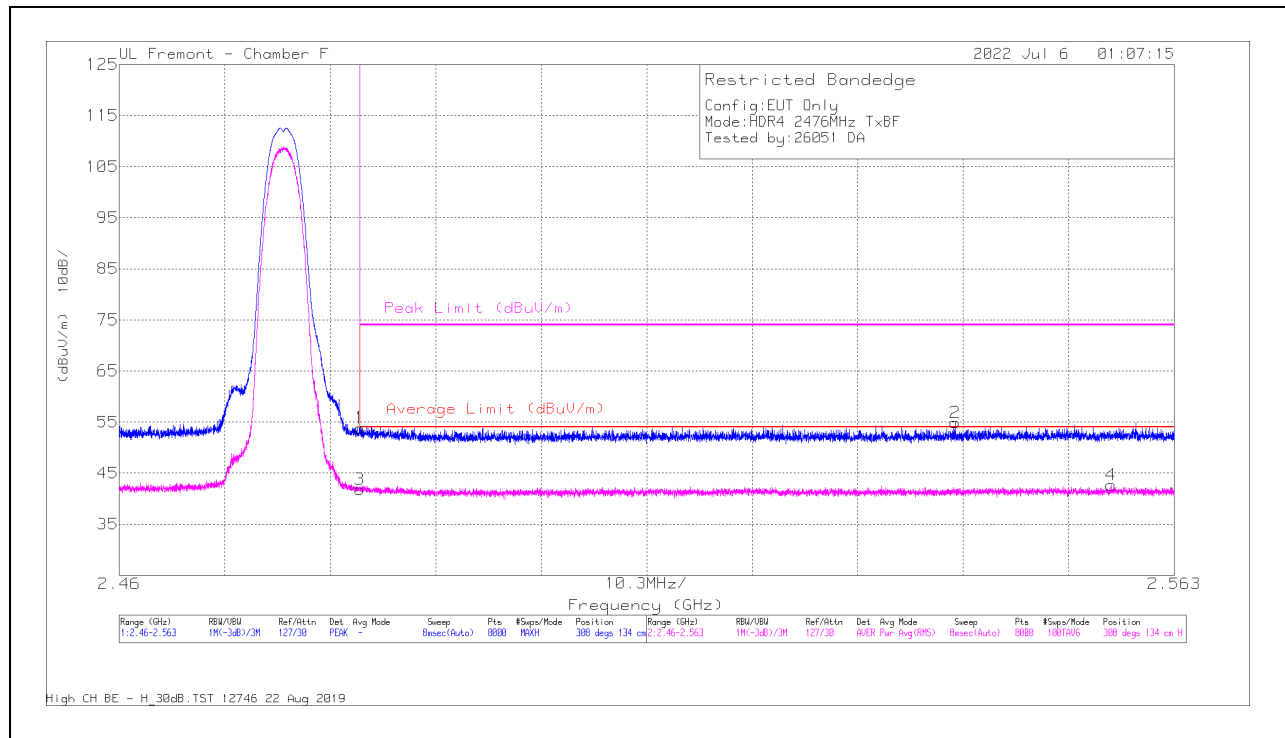


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2390	39.44	Pk	32.1	-20.7	50.84	-	-	74	-23.16	9	391	V
2	* 2341.504	42.14	Pk	32.3	-20.9	53.54	-	-	74	-20.46	9	391	V
3	* 2390	28.82	RMS	32.1	-20.7	40.22	54	-13.78	-	-	9	391	V
4	* 2356.236	29.62	RMS	32.3	-20.8	41.12	54	-12.88	-	-	9	391	V

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

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

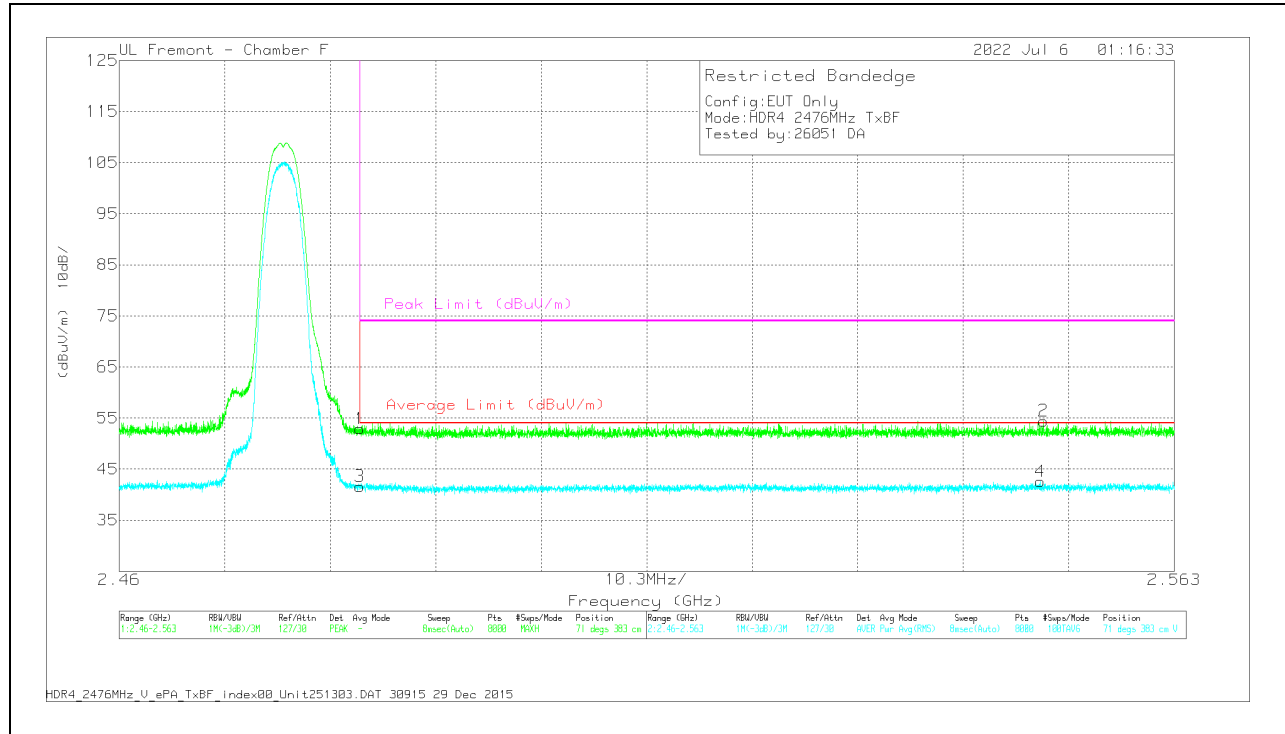
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.61	Pk	32.3	-39.1	53.81	-	-	74	-20.19	308	134	H
2	2.541614	61.49	Pk	32.4	-39	54.89	-	-	74	-19.11	308	134	H
3	* 2.4835	48.62	RMS	32.3	-39.1	41.82	54	-12.18	-	-	308	134	H
4	2.556835	49.25	RMS	32.4	-39	42.65	54	-11.35	-	-	308	134	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	81887 ACF (dB)	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	59.7	Pk	32.3	-39.1	52.9	-	-	74	-21.1	71	383	V
2	2.550216	61.05	Pk	32.4	-39	54.45	-	-	74	-19.55	71	383	V
3	* 2.4835	48.4	RMS	32.3	-39.1	41.6	54	-12.4	-	-	71	383	V
4	2.549933	49.26	RMS	32.4	-39.1	42.56	54	-11.44	-	-	71	383	V

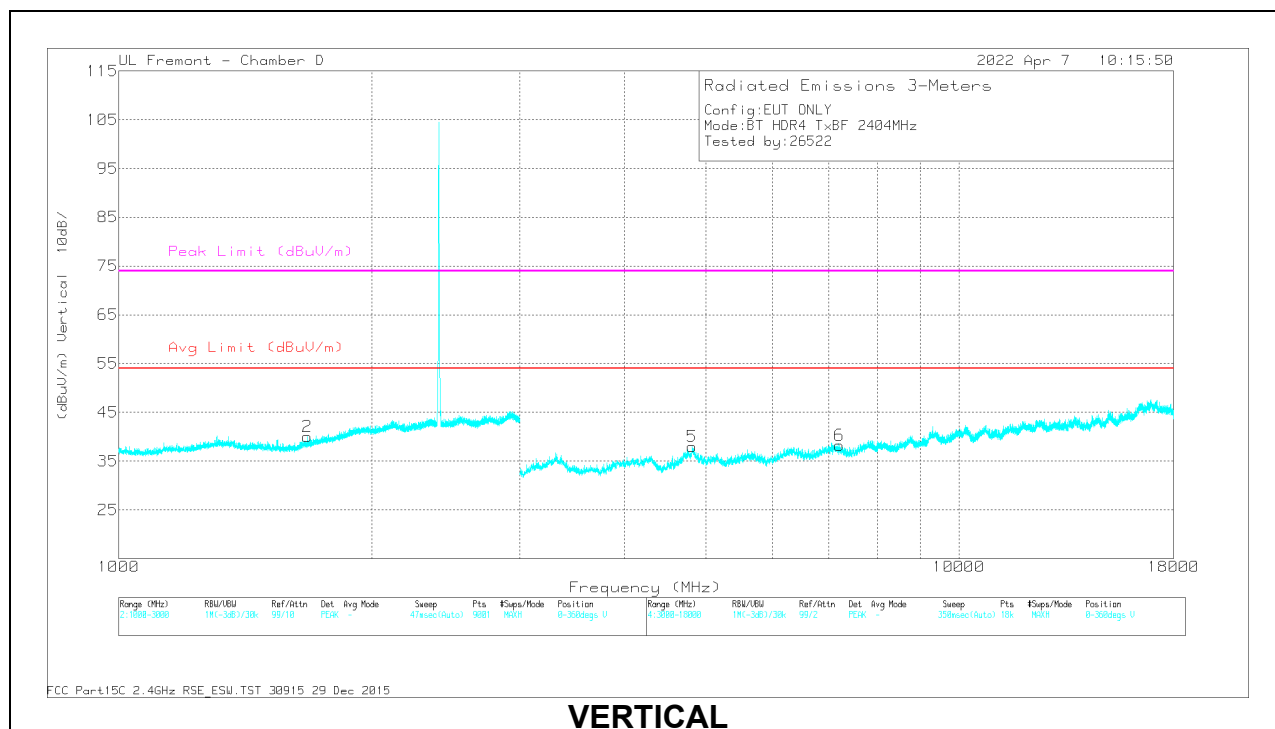
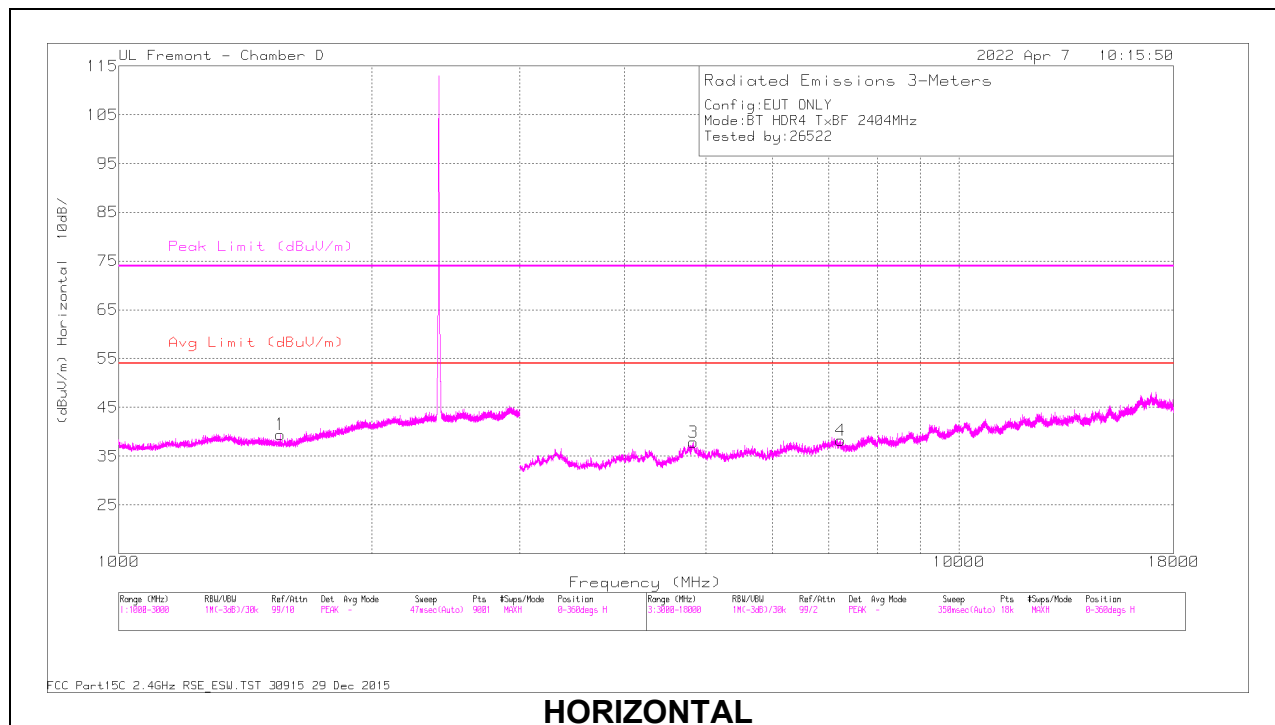
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

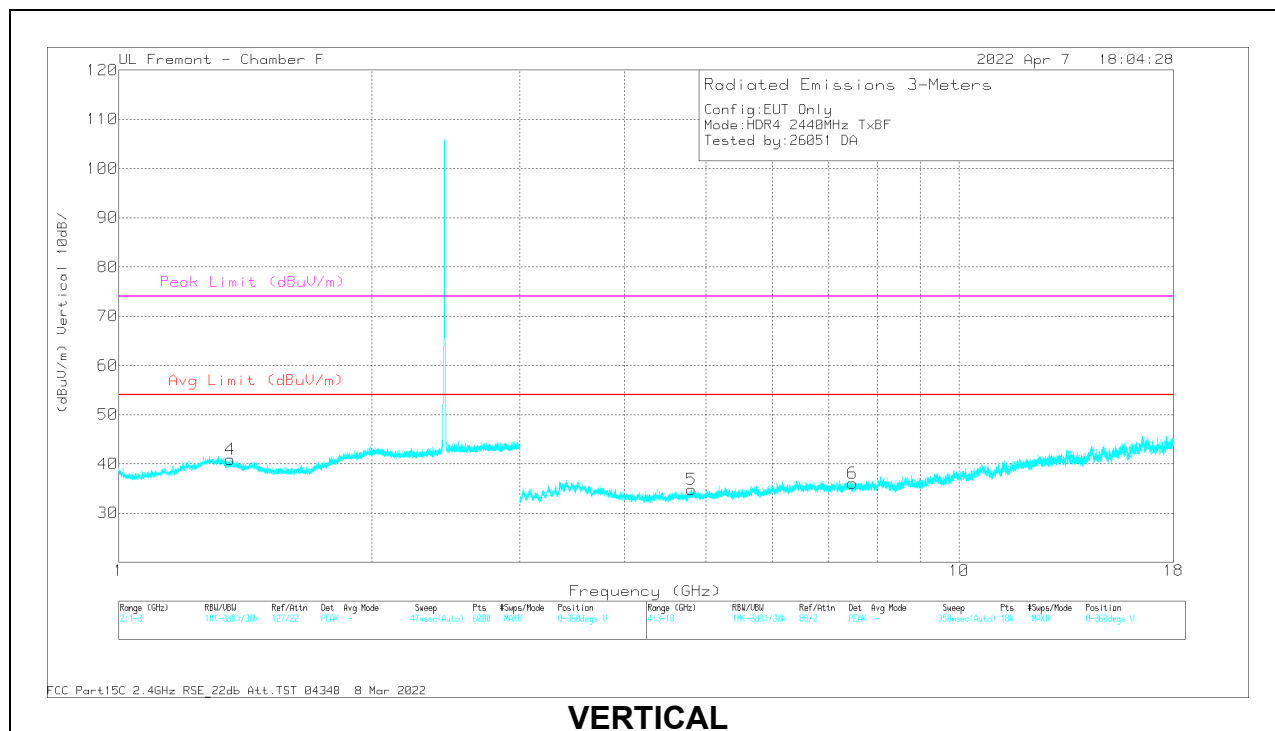
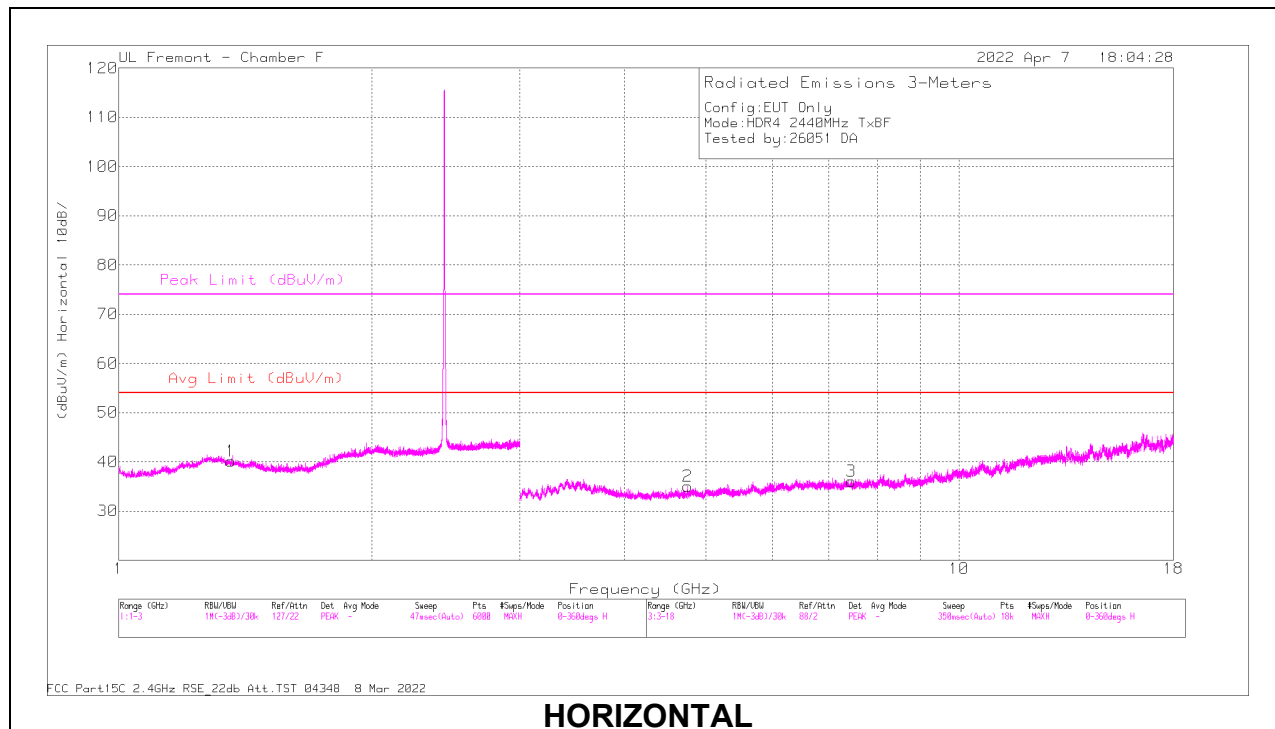
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1559.81	42.05	PK2	27.8	-21.8	48.05	-	-	74	-25.95	205	195	H
	* 1559.363	30.25	MAv1	27.8	-21.8	36.25	54	-17.75	-	-	205	195	H
2	* 1676.405	41.85	PK2	28.7	-21.6	48.95	-	-	74	-25.05	228	201	V
	* 1677.4	30.34	MAv1	28.7	-21.6	37.44	54	-16.56	-	-	228	201	V
3	* 4826.513	39.36	PK2	34.3	-25.6	48.06	-	-	74	-25.94	180	376	H
	* 4826.425	27.05	MAv1	34.3	-25.6	35.75	54	-18.25	-	-	180	376	H
4	* 4813.295	38.61	PK2	34.3	-25.5	47.41	-	-	74	-26.59	94	212	V
	* 4816.013	26.77	MAv1	34.3	-25.4	35.67	54	-18.33	-	-	94	212	V
5	7209.2	37.9	PK2	35.9	-25	48.8	-	-	-	-	274	153	V
6	7234.27	36.78	PK2	35.9	-25	47.68	-	-	-	-	264	144	H

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

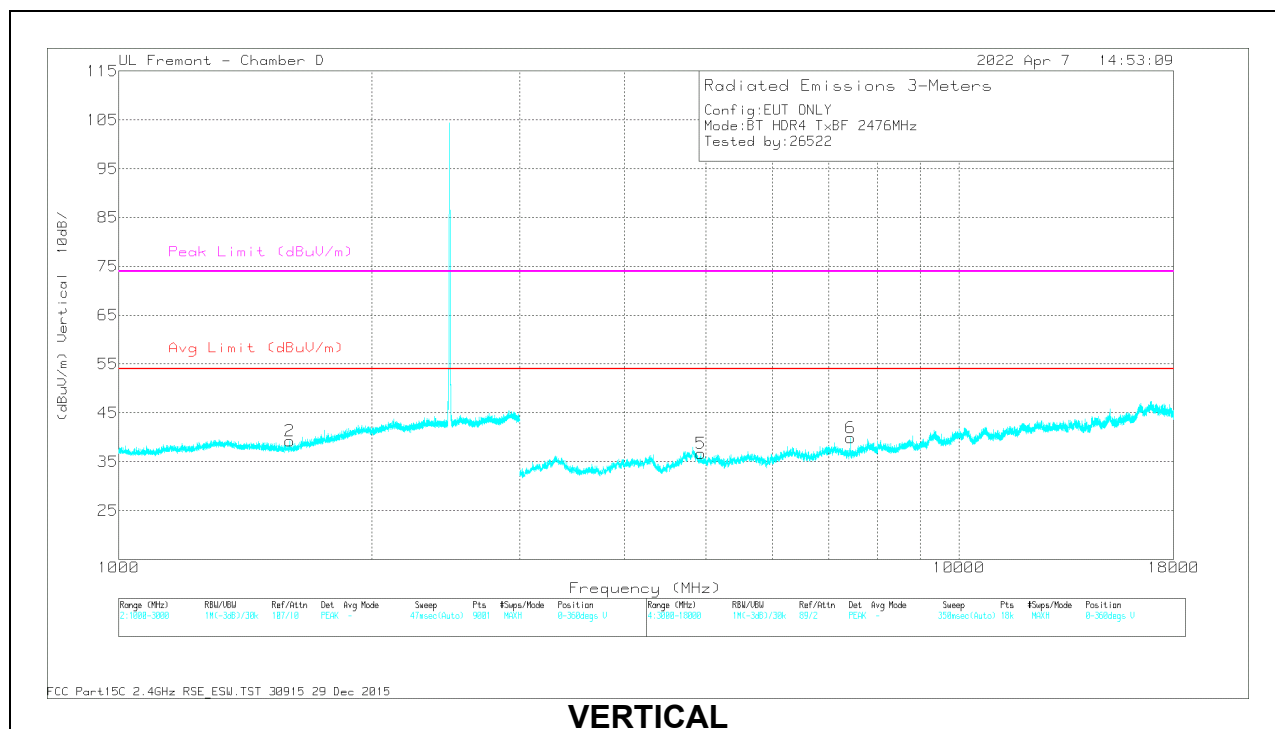
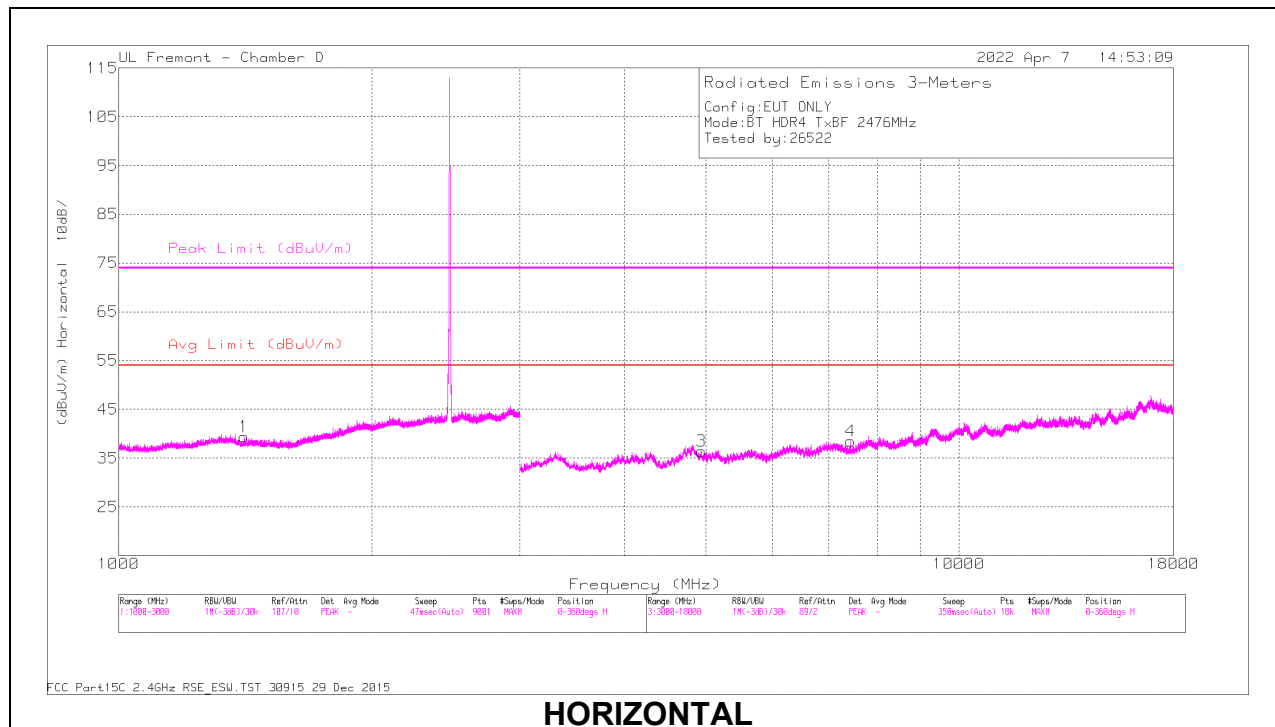
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.359004	59.51	PK2	29.6	-38.9	50.21	-	-	74	-23.79	347	217	H
	* 1.357813	47.86	MAv1	29.6	-38.9	38.56	54	-15.44	-	-	347	217	H
	* 1.358325	59.89	PK2	29.6	-38.9	50.59	-	-	74	-23.41	291	178	V
2	* 1.357841	47.85	MAv1	29.6	-38.9	38.55	54	-15.45	-	-	291	178	V
	* 4.753126	57.52	PK2	34	-47.3	44.22	-	-	74	-29.78	230	103	H
	* 4.754387	45.6	MAv1	34	-47.3	32.3	54	-21.7	-	-	230	103	H
3	* 7.444179	56.59	PK2	35.7	-45.6	46.69	-	-	74	-27.31	189	118	H
	* 7.443552	44.07	MAv1	35.8	-45.5	34.37	54	-19.63	-	-	189	118	H
	* 4.803295	57.48	PK2	34.2	-47.4	44.28	-	-	74	-29.72	119	101	V
5	* 4.801275	45.83	MAv1	34.2	-47.5	32.53	54	-21.47	-	-	119	101	V
	* 7.473296	55.9	PK2	35.7	-45.8	45.8	-	-	74	-28.2	52	157	V
	* 7.475302	44.27	MAv1	35.7	-45.7	34.27	54	-19.73	-	-	52	157	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



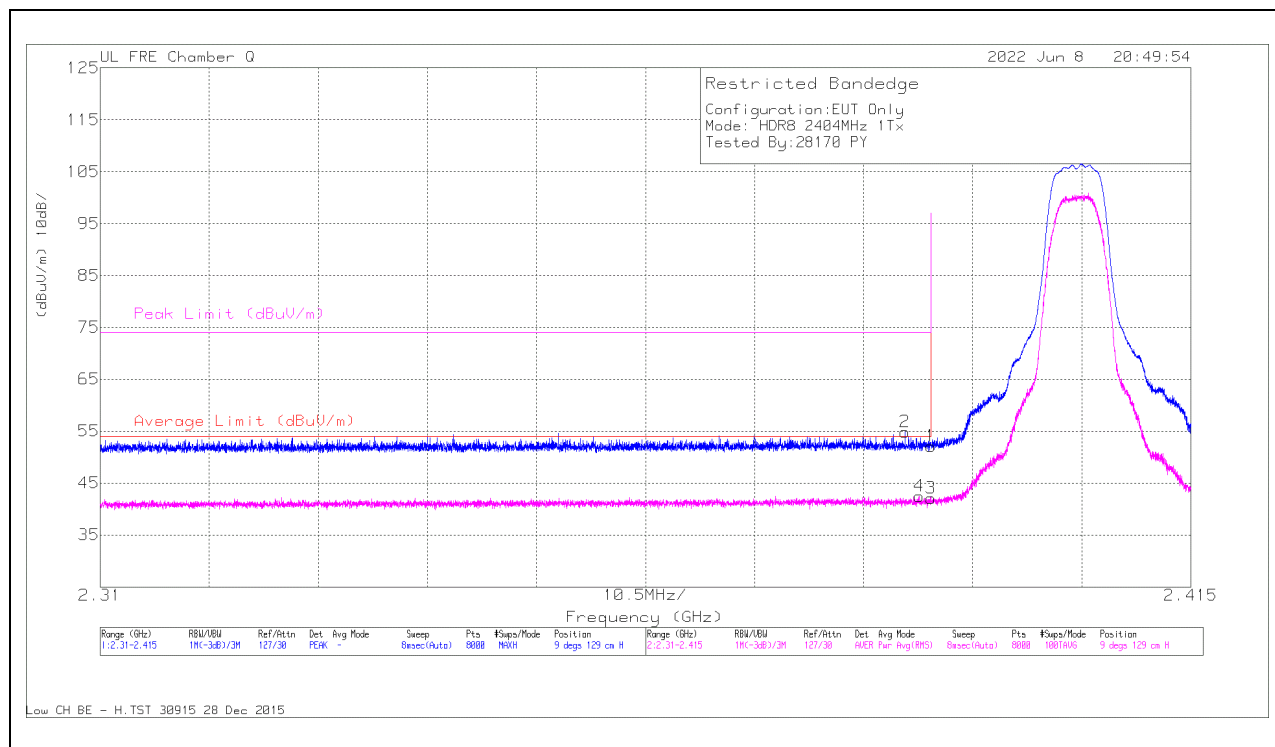
RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (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	* 1410.916	42.22	PK2	28.2	-22	48.42	-	-	74	-25.58	176	219	H
	* 1409.989	30.54	MAv1	28.2	-22	36.74	54	-17.26	-	-	176	219	H
2	* 1596.757	42.55	PK2	27.8	-21.7	48.65	-	-	74	-25.35	296	241	V
	* 1599.087	30.46	MAv1	27.8	-21.7	36.56	54	-17.44	-	-	296	241	V
3	* 4935.772	38.48	PK2	34.5	-27.3	45.68	-	-	74	-28.32	35	306	H
	* 4937.678	27.26	MAv1	34.5	-27.4	34.36	54	-19.64	-	-	35	306	H
4	* 7427.536	39.09	PK2	36	-25.7	49.39	-	-	74	-24.61	154	106	H
	* 7428.327	27.76	MAv1	36	-25.6	38.16	54	-15.84	-	-	154	106	H
5	* 4930.404	39.04	PK2	34.5	-27.3	46.24	-	-	74	-27.76	235	264	V
	* 4928.985	27.28	MAv1	34.5	-27.3	34.48	54	-19.52	-	-	235	264	V
6	* 7427.089	39.51	PK2	36	-25.7	49.81	-	-	74	-24.19	162	104	V
	* 7428.172	28.84	MAv1	36	-25.6	39.24	54	-14.76	-	-	162	104	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

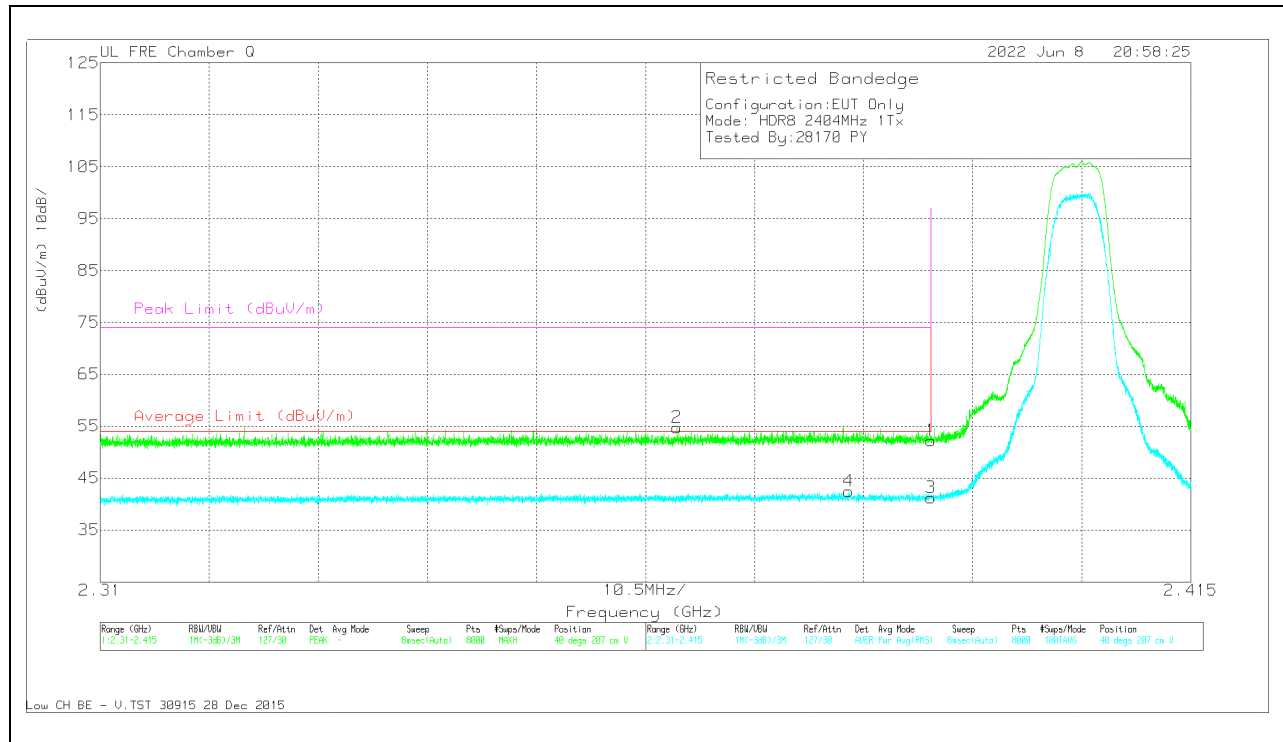
10.2.3. HIGH POWER HDR (HDR8)**ANT 4****BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
2	2.387476	57.3	Pk	31.9	-34.4	54.8	-	-	74	-19.2	9	129	H
4	2.388828	44.97	RMS	31.9	-34.4	42.47	54	-11.53	-	-	9	129	H
1	2.39	54.53	Pk	31.9	-34.3	52.13	-	-	74	-21.87	9	129	H
3	2.39	44.47	RMS	31.9	-34.3	42.07	54	-11.93	-	-	9	129	H

Pk - Peak detector

RMS - RMS detection

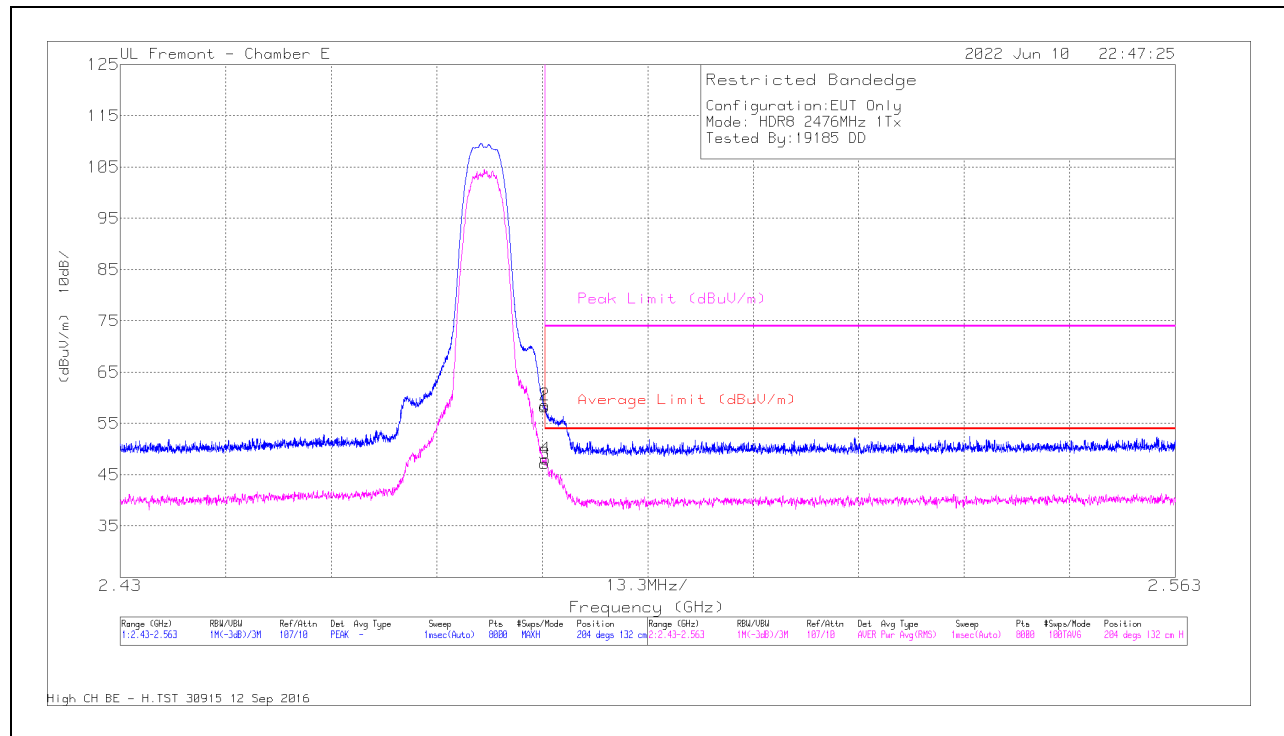
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
2	2.365527	57.28	Pk	31.9	-34.4	54.78	-	-	74	-19.22	40	207	V
4	2.382041	44.88	RMS	32	-34.4	42.48	54	-11.52	-	-	40	207	V
1	2.39	54.6	Pk	31.9	-34.3	52.2	-	-	74	-21.8	40	207	V
3	2.39	43.61	RMS	31.9	-34.3	41.21	54	-12.79	-	-	40	207	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

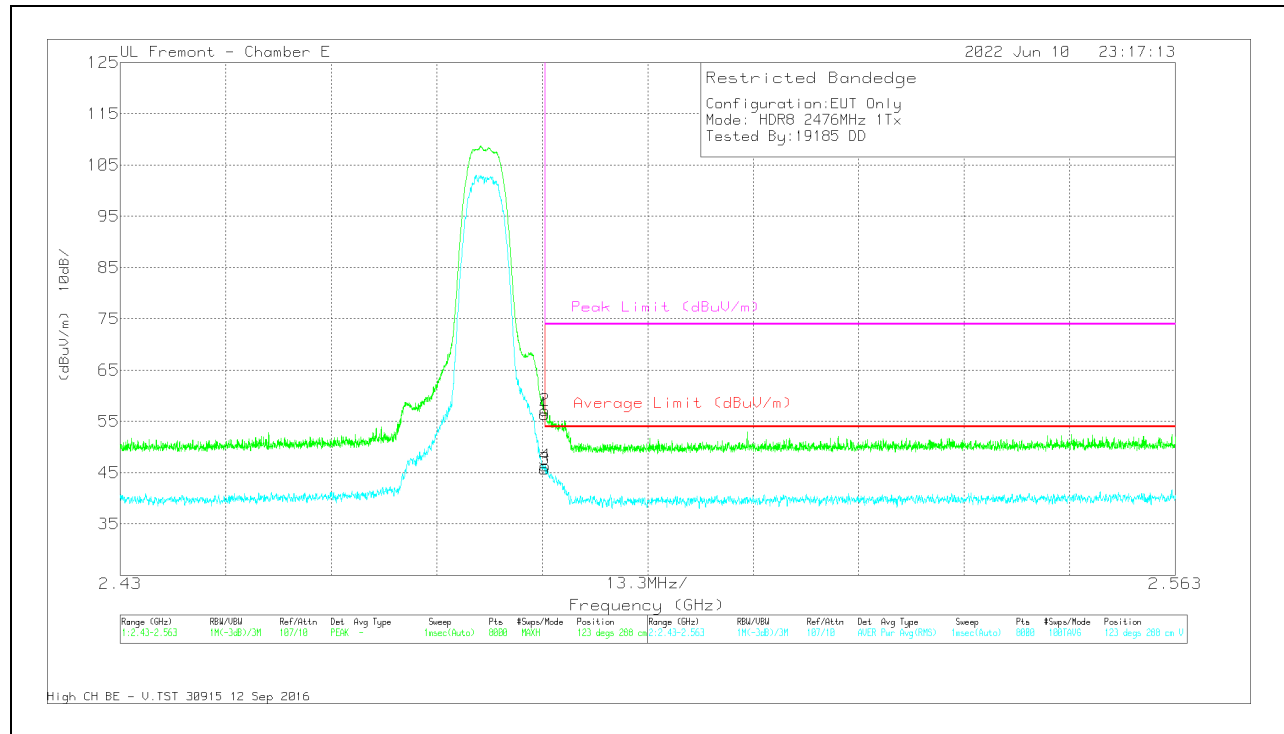
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	52.32	Pk	31.8	-25.9	58.22	-	-	74	-15.78	204	132	H
2	* 2.483539	52.7	Pk	31.8	-25.9	58.6	-	-	74	-15.4	204	132	H
3	* 2.4835	41.26	RMS	31.8	-25.9	47.16	54	-6.84	-	-	204	132	H
4	* 2.483639	42.17	RMS	31.8	-25.9	48.07	54	-5.93	-	-	204	132	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

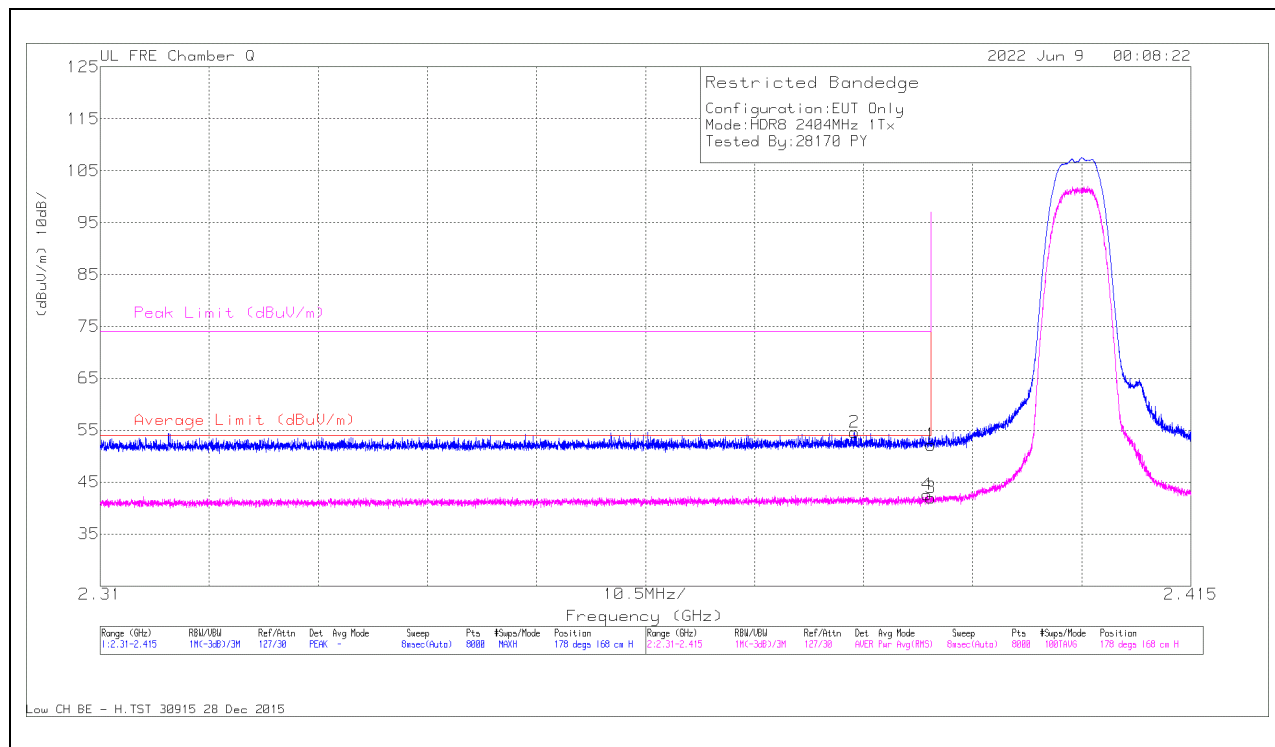


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	50.51	Pk	31.8	-25.9	56.41	-	-	74	-17.59	123	288	V
2	* 2.483556	51.26	Pk	31.8	-25.9	57.16	-	-	74	-16.84	123	288	V
3	* 2.4835	39.78	RMS	31.8	-25.9	45.68	54	-8.32	-	-	123	288	V
4	* 2.483572	40.48	RMS	31.8	-25.9	46.38	54	-7.62	-	-	123	288	V

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

Pk - Peak detector

RMS - RMS detection

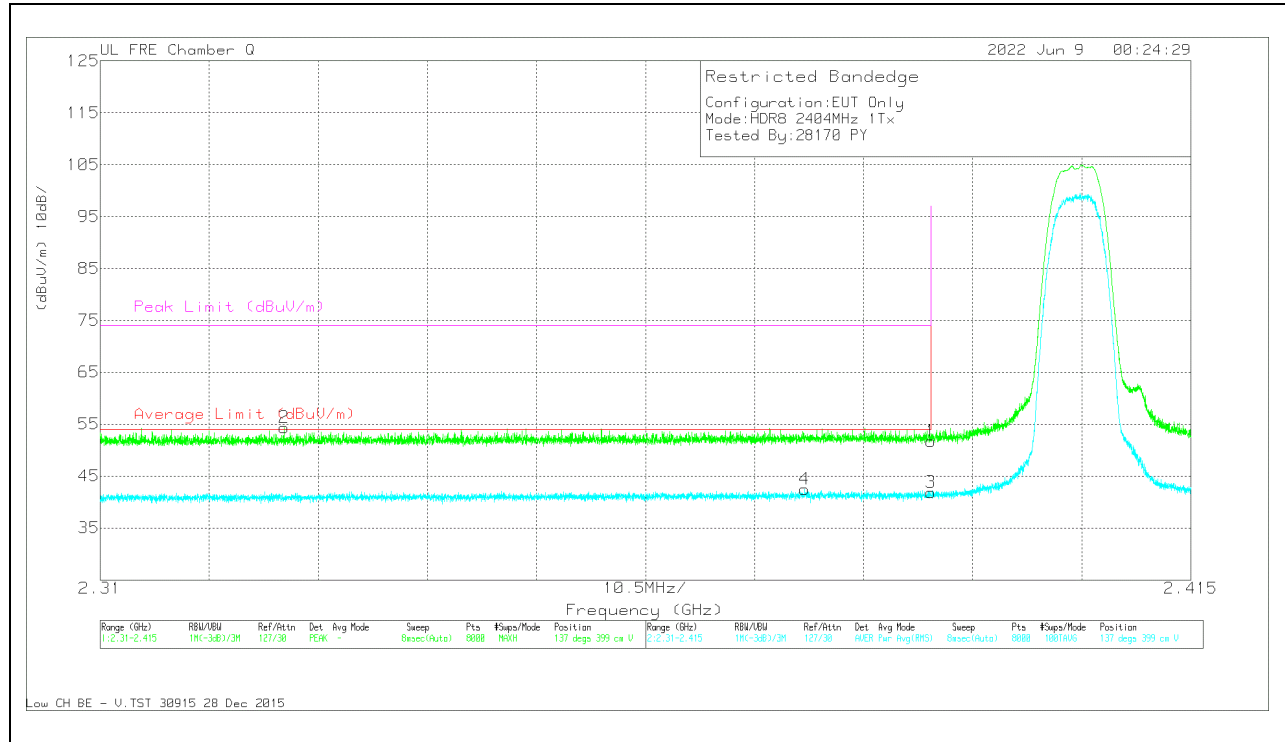
ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.382592	57.01	Pk	32	-34.4	54.61	-	-	74	-19.39	178	168	H
4	2.389602	44.95	RMS	31.9	-34.3	42.55	54	-11.45	-	-	178	168	H
1	2.39	54.56	Pk	31.9	-34.3	52.16	-	-	74	-21.84	178	168	H
3	2.39	44.38	RMS	31.9	-34.3	41.98	54	-12.02	-	-	178	168	H

Pk - Peak detector

RMS - RMS detection

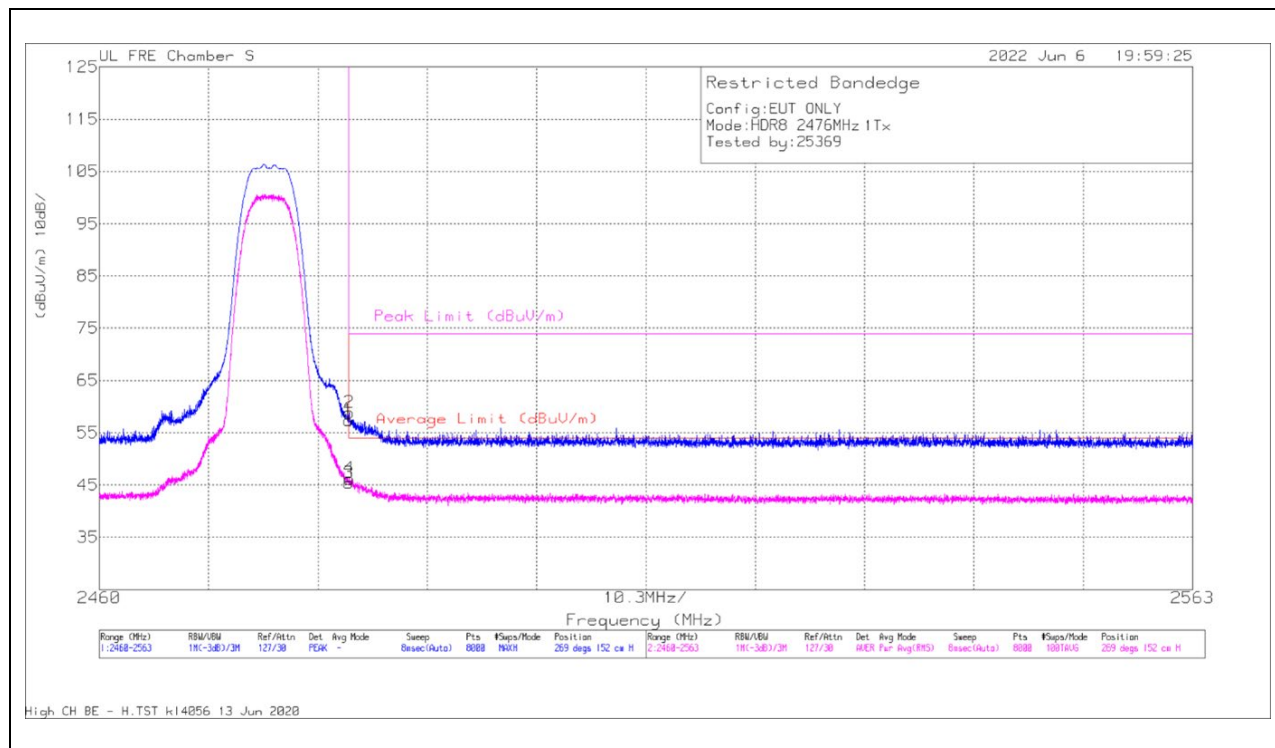
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.327682	56.94	Pk	31.8	-34.4	54.34	-	-	74	-19.66	137	399	V
4	2.37784	44.77	RMS	32	-34.3	42.47	54	-11.53	-	-	137	399	V
1	2.39	54.16	Pk	31.9	-34.3	51.76	-	-	74	-22.24	137	399	V
3	2.39	44.2	RMS	31.9	-34.3	41.8	54	-12.2	-	-	137	399	V

Pk - Peak detector

RMS - RMS detection

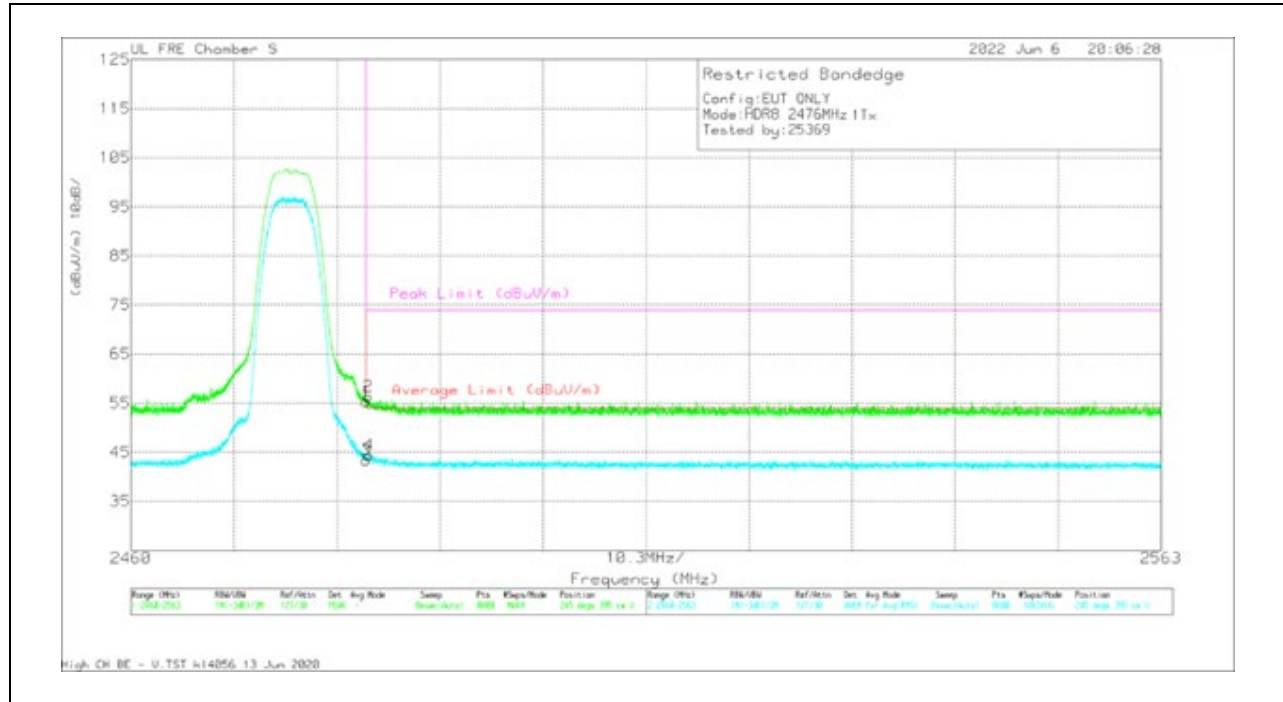
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	59.99	Pk	32.4	-35	57.39	-	-	74	-16.61	269	152	H
3	2483.5	47.98	RMS	32.4	-35	45.38	54	-8.62	-	-	269	152	H
2	2483.539	61.5	Pk	32.4	-35	58.9	-	-	74	-15.1	269	152	H
4	2483.565	48.81	RMS	32.4	-35	46.21	54	-7.79	-	-	269	152	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



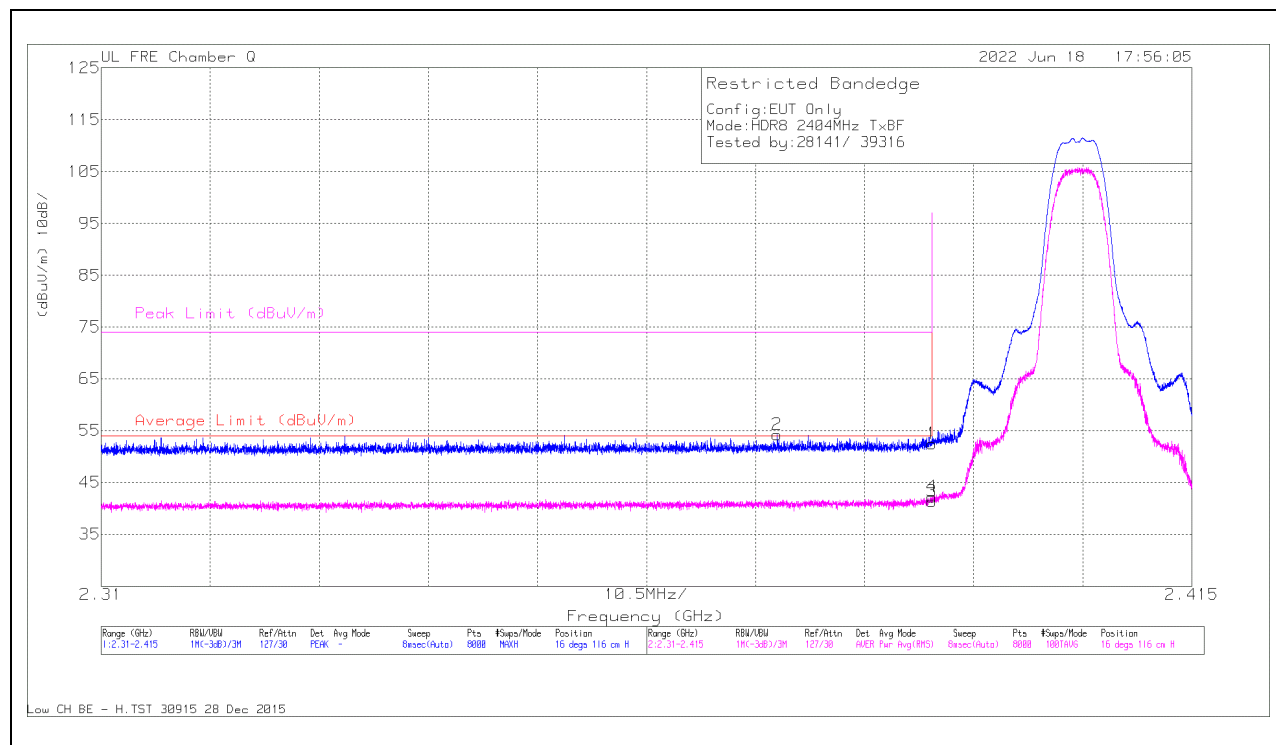
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	57.97	Pk	32.4	-35	55.37	-	-	74	-18.63	245	395	V
3	2483.5	45.95	RMS	32.4	-35	43.35	54	-10.65	-	-	245	395	V
2	2483.732	58.96	Pk	32.4	-35	56.36	-	-	74	-17.64	245	395	V
4	2483.771	47.01	RMS	32.4	-35	44.41	54	-9.59	-	-	245	395	V

Pk - Peak detector
RMS - RMS detection

10.2.4. HIGH POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

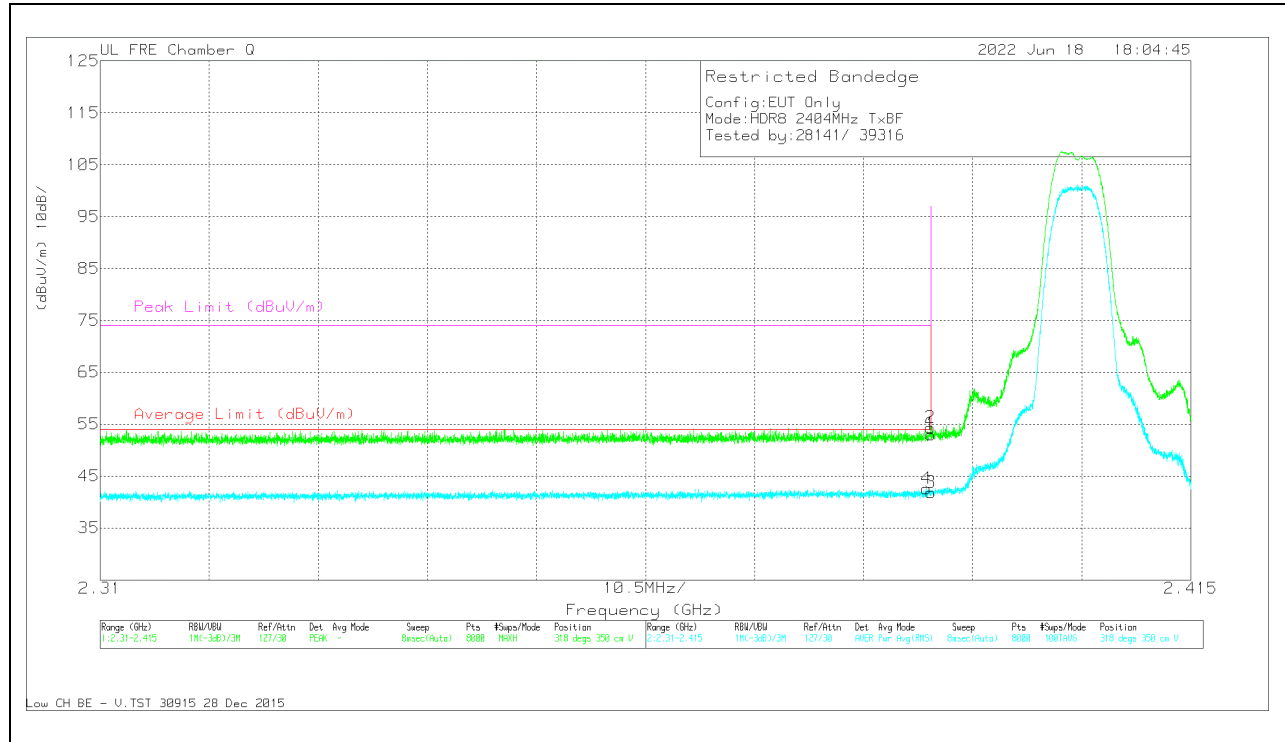
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.375097	56.67	Pk	31.9	-34.4	54.17	-	-	74	-19.83	16	116	H
4	2.389957	44.64	RMS	31.9	-34.3	42.24	54	-11.76	-	-	16	116	H
1	2.39	54.86	Pk	31.9	-34.3	52.46	-	-	74	-21.54	16	116	H
3	2.39	43.79	RMS	31.9	-34.3	41.39	54	-12.61	-	-	16	116	H

Pk - Peak detector
RMS - RMS detection

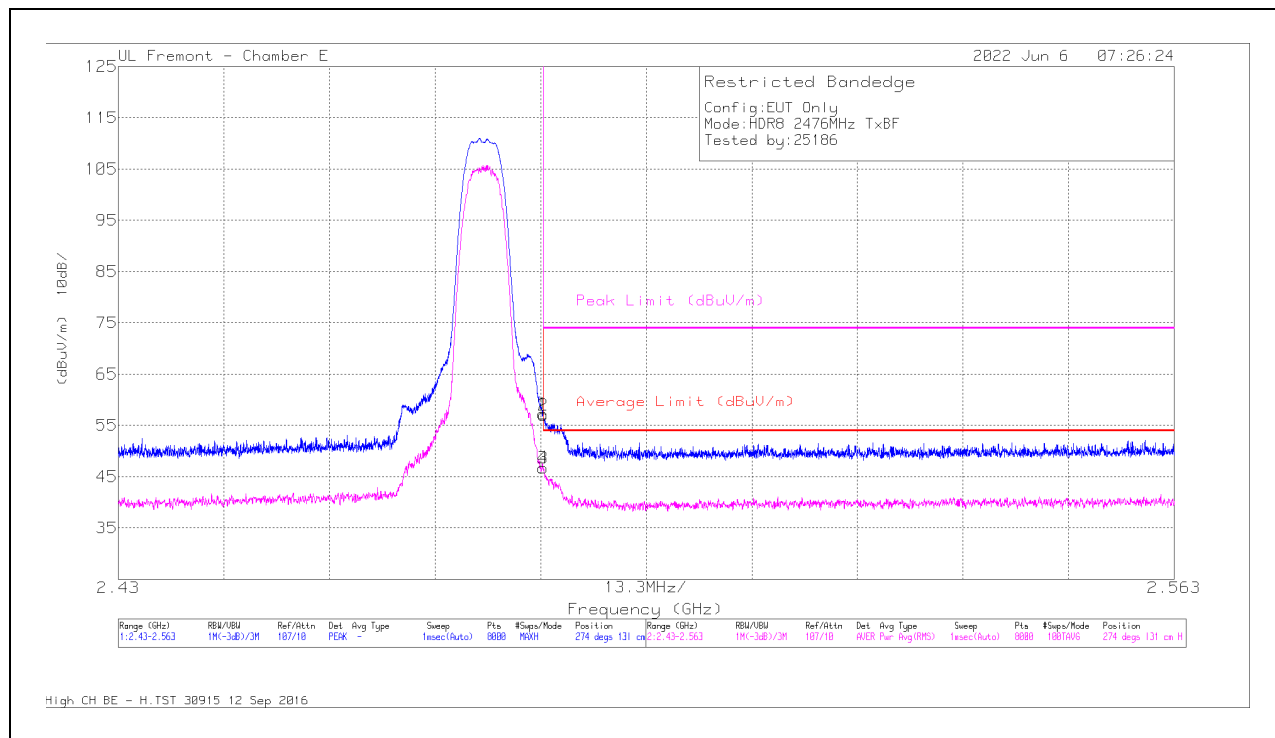
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (dB/m)	Amp/CbI/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
4	2.38955	44.96	RMS	31.9	-34.3	42.56	54	-11.44	-	-	318	350	V
2	2.38993	56.72	Pk	31.9	-34.3	54.32	-	-	74	-19.68	318	350	V
1	2.39	55.43	Pk	31.9	-34.3	53.03	-	-	74	-20.97	318	350	V
3	2.39	44.29	RMS	31.9	-34.3	41.89	54	-12.11	-	-	318	350	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

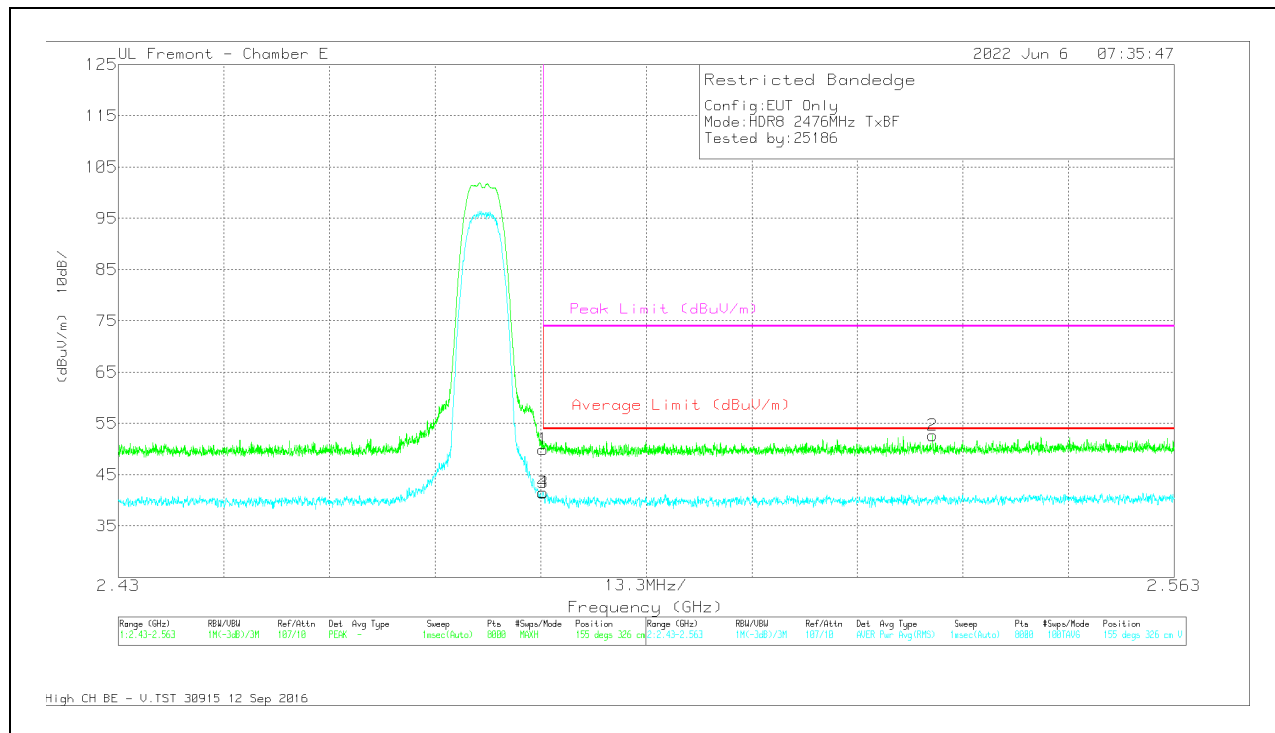
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	51.34	Pk	31.8	-25.9	57.24	-	-	74	-16.76	274	131	H
2	* 2.483539	51.1	Pk	31.8	-25.9	57	-	-	74	-17	274	131	H
3	* 2.4835	40.77	RMS	31.8	-25.9	46.67	54	-7.33	-	-	274	131	H
4	* 2.483506	40.81	RMS	31.8	-25.9	46.71	54	-7.29	-	-	274	131	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	200897 ACF (dB/m)	Amp/Cbl/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	44.03	PK	31.8	-25.9	49.93	-	-	74	-24.07	155	326	V
3	* 2.4835	35.61	RMS	31.8	-25.9	41.51	54	-12.49	-	-	155	326	V
4	* 2.483506	35.59	RMS	31.8	-25.9	41.49	54	-12.51	-	-	155	326	V
2	2.532572	46.47	PK	32.2	-26	52.67	-	-	74	-21.33	155	326	V

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

PK - Peak detector

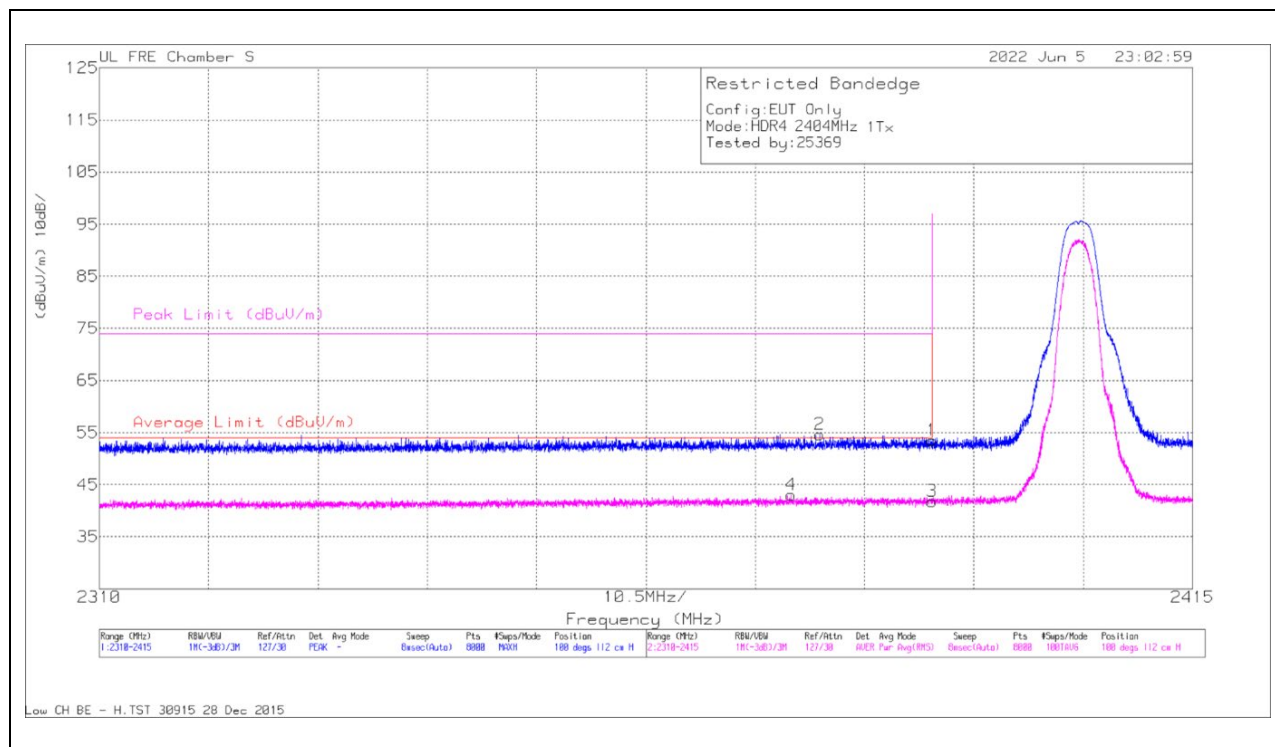
RMS - RMS detection

10.2.5. LOW POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	AF 206807 (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
4	2376.449	46.1	RMS	32.1	-35.2	43	54	-11	-	-	100	112	H
2	2379.192	57.75	Pk	32.1	-35.2	54.65	-	-	74	-19.35	100	112	H
1	2390	56.52	Pk	32.2	-35.2	53.52	-	-	74	-20.48	100	112	H
3	2390	44.74	RMS	32.2	-35.2	41.74	54	-12.26	-	-	100	112	H

Pk - Peak detector

RMS - RMS detection

UL FRE Chamber S

2022 Jun 5 23:13:07

Restricted Bandedge

Config: EUT Only

Mode: RDR4 2404MHz 1Tx

Tested by: 25369

Peak Limit (dBu/Hz)

Average Limit (dBu/Hz)

2

0.4

10.5MHz/

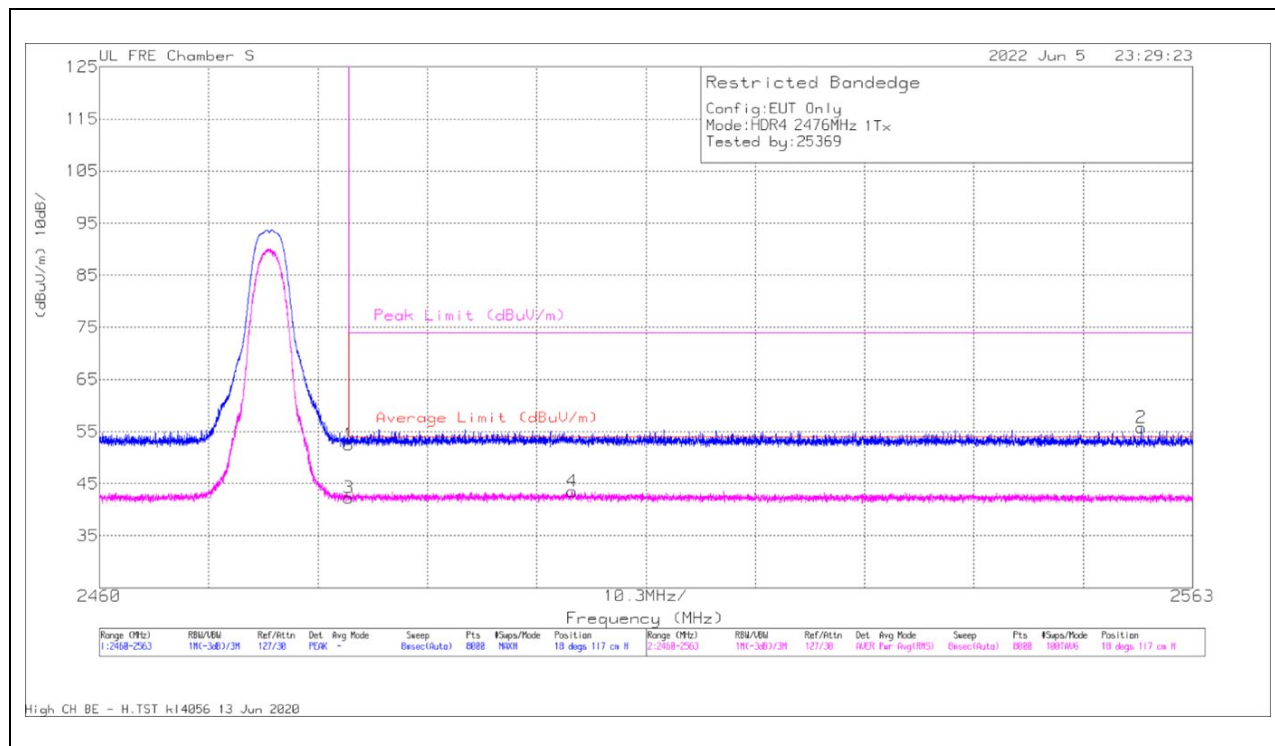
Frequency (MHz)

Range (MHz)	RBW (Hz)	Ref (dBm)	Det. Avg Mode	Sweep	File	Exp/Mode	Post/Type	Range (MHz)	RBW (Hz)	Ref (dBm)	Det. Avg Mode	Sweep	File	Exp/Mode	Post/Type
2370-2415	400-5000	127.50	1000	1000	1000	1000	1000	2404-2415	400-5000	127.50	1000	1000	1000	1000	1000

Low OH BE - U.TST 30915 20 Dec 2015

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/CbI/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	2369.518	58.04	Pk	32	-35.2	54.84	-	-	74	-19.16	65	187	V
4	2389.983	45.92	RMS	32.2	-35.2	42.92	54	-11.08	-	-	65	187	V
1	2390	55.5	Pk	32.2	-35.2	52.5	-	-	74	-21.5	65	187	V
3	2390	44.65	RMS	32.2	-35.2	41.65	54	-12.35	-	-	65	187	V

This report shall not be reproduced except in full, without the written approval of UL LLC.

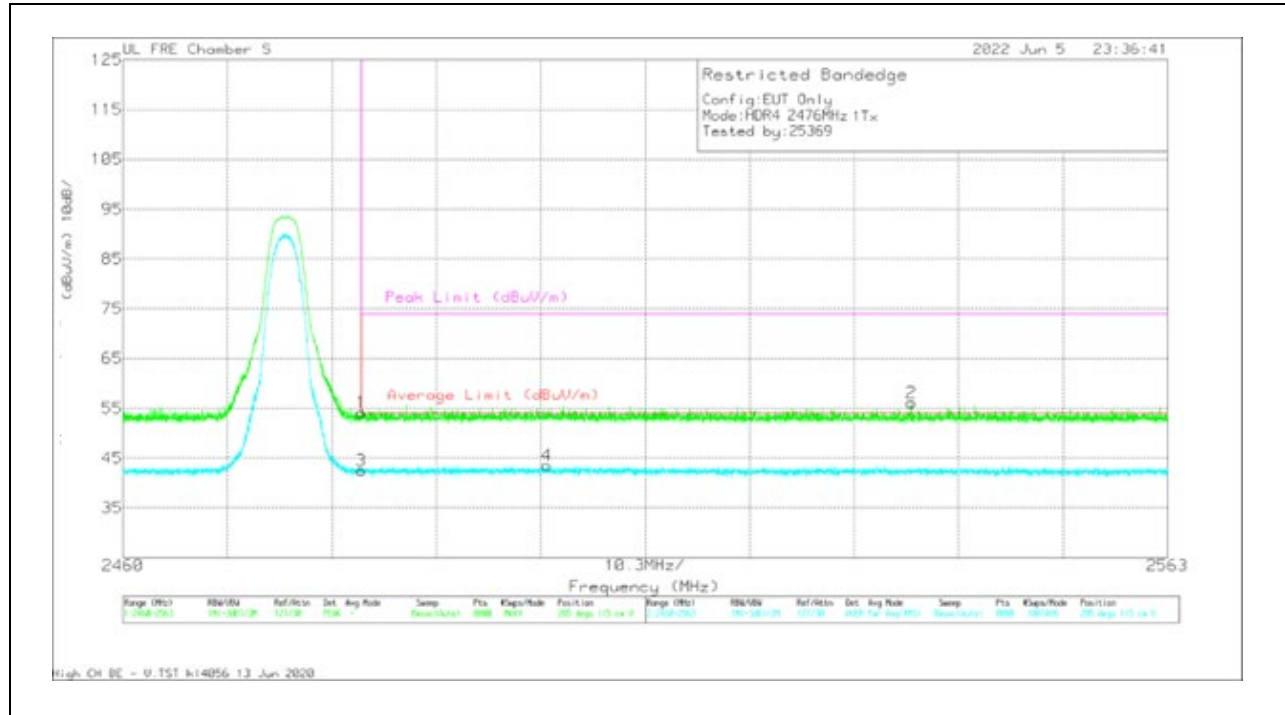
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	55.05	Pk	32.4	-35	52.45	-	-	74	-21.55	18	117	H
3	2483.5	44.88	RMS	32.4	-35	42.28	54	-11.72	-	-	18	117	H
4	2504.529	46.05	RMS	32.4	-34.9	43.55	54	-10.45	-	-	18	117	H
2	2558.174	58.35	Pk	32.1	-34.7	55.75	-	-	74	-18.25	18	117	H

Pk - Peak detector

RMS - RMS detection

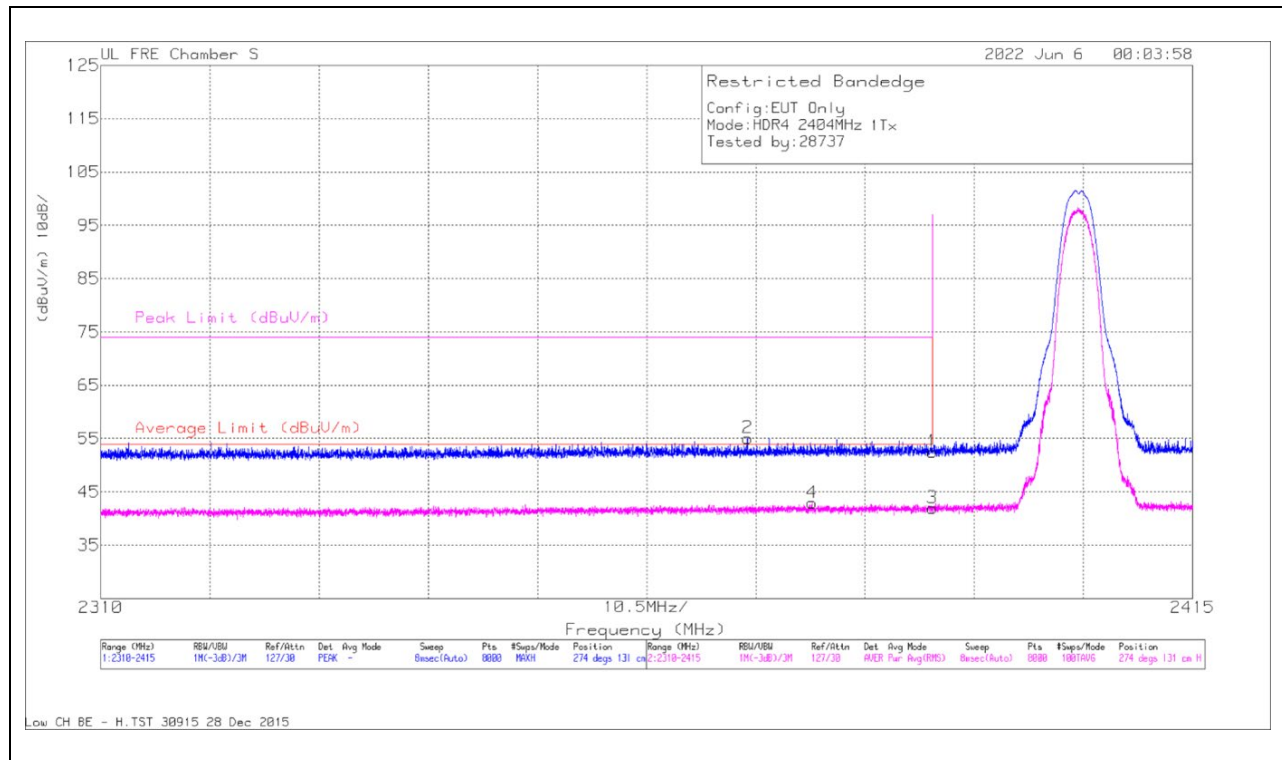
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	56.78	Pk	32.4	-35	54.18	-	-	74	-19.82	285	115	V
3	2483.5	45.11	RMS	32.4	-35	42.51	54	-11.49	-	-	285	115	V
4	2501.773	45.98	RMS	32.4	-34.8	43.58	54	-10.42	-	-	285	115	V
2	2537.751	58.76	Pk	32.2	-34.8	56.16	-	-	74	-17.84	285	115	V

Pk - Peak detector

RMS - RMS detection

ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2372.196	58.31	PK	32	-35.2	55.11	-	-	74	-18.89	274	131	H
4	2378.405	46.05	RMS	32.1	-35.2	42.95	54	-11.05	-	-	274	131	H
1	2390	55.53	PK	32.2	-35.2	52.53	-	-	74	-21.47	274	131	H
3	2390	44.99	RMS	32.2	-35.2	41.99	54	-12.01	-	-	274	131	H

Pk - Peak detector

RMS - RMS detection

UL FRE Chamber S

2022 Jun 6 08:12:13

Restricted Bondedge

Config:EUT Only
Mode:HRR4 2404MHz 1Tx
Tested by:28737

Peak Limit (dBμV/m)

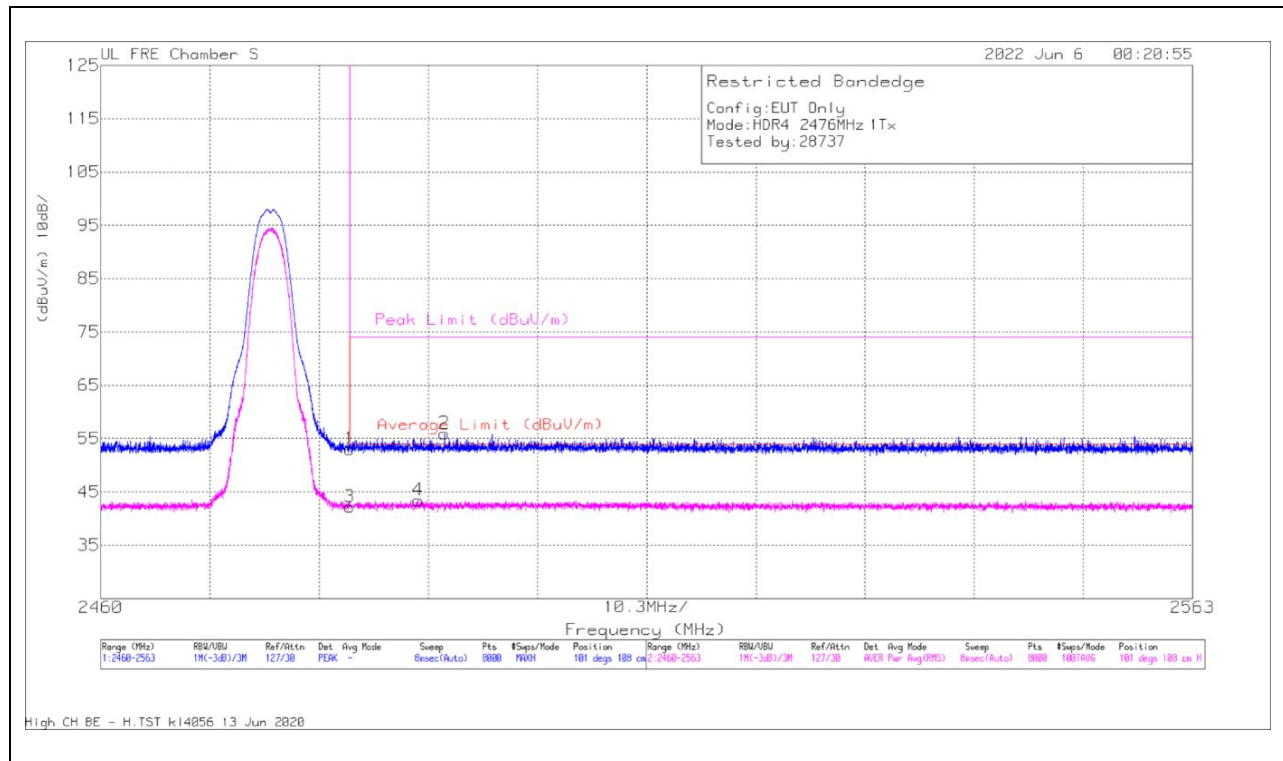
Average Limit (dBμV/m)

Frequency (MHz)

Low Ch BE - U.TST 30915 28 Dec 2015

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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
2	2374.69	58.21	Pk	32.1	-35.2	55.11	-	-	74	-18.89	227	370	V
4	2382.225	45.74	RMS	32.2	-35.2	42.74	54	-11.26	-	-	227	370	V
1	2390	55.18	Pk	32.2	-35.2	52.18	-	-	74	-21.82	227	370	V
3	2390	45.01	RMS	32.2	-35.2	42.01	54	-11.99	-	-	227	370	V

UL LLC.
47173 Benicia Street, Fremont, CA 94538; USA. TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL LLC.

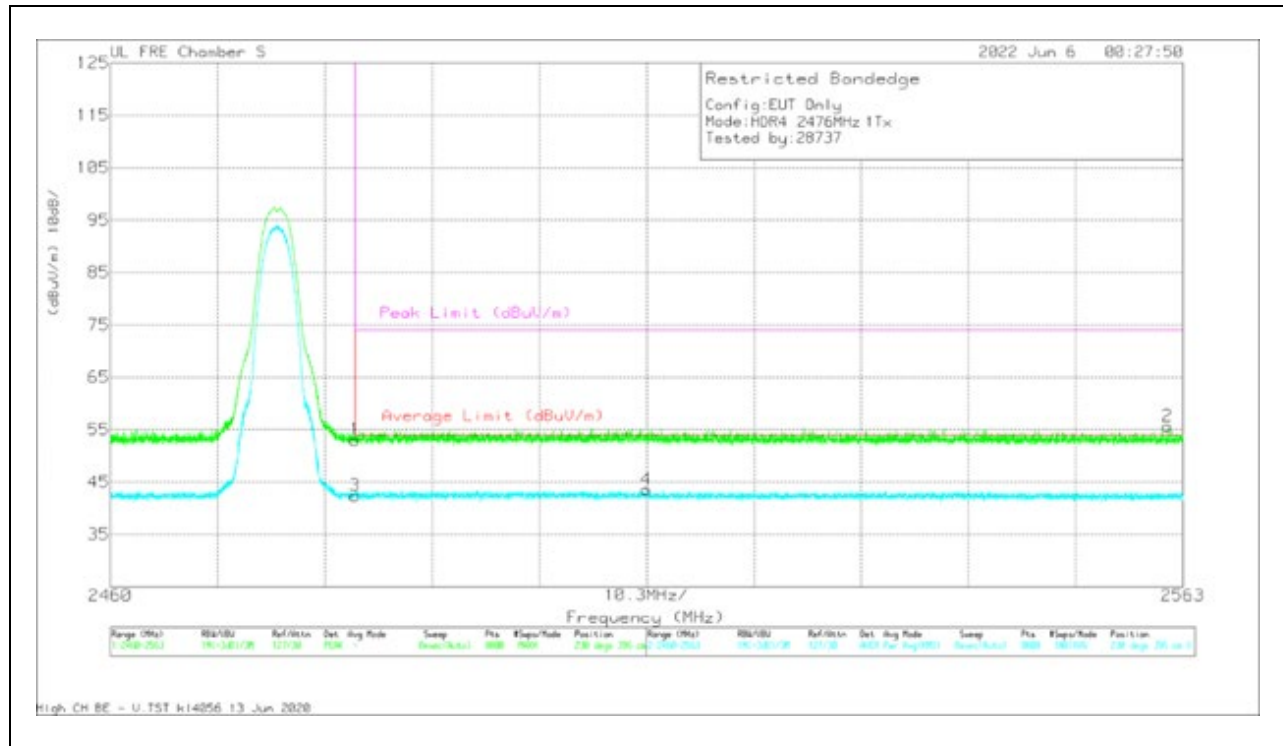
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	55.65	Pk	32.4	-35	53.05	-	-	74	-20.95	101	108	H
3	2483.5	44.81	RMS	32.4	-35	42.21	54	-11.79	-	-	101	108	H
4	2489.952	45.96	RMS	32.4	-34.9	43.46	54	-10.54	-	-	101	108	H
2	2492.411	58.44	Pk	32.4	-34.9	55.94	-	-	74	-18.06	101	108	H

Pk - Peak detector

RMS - RMS detection

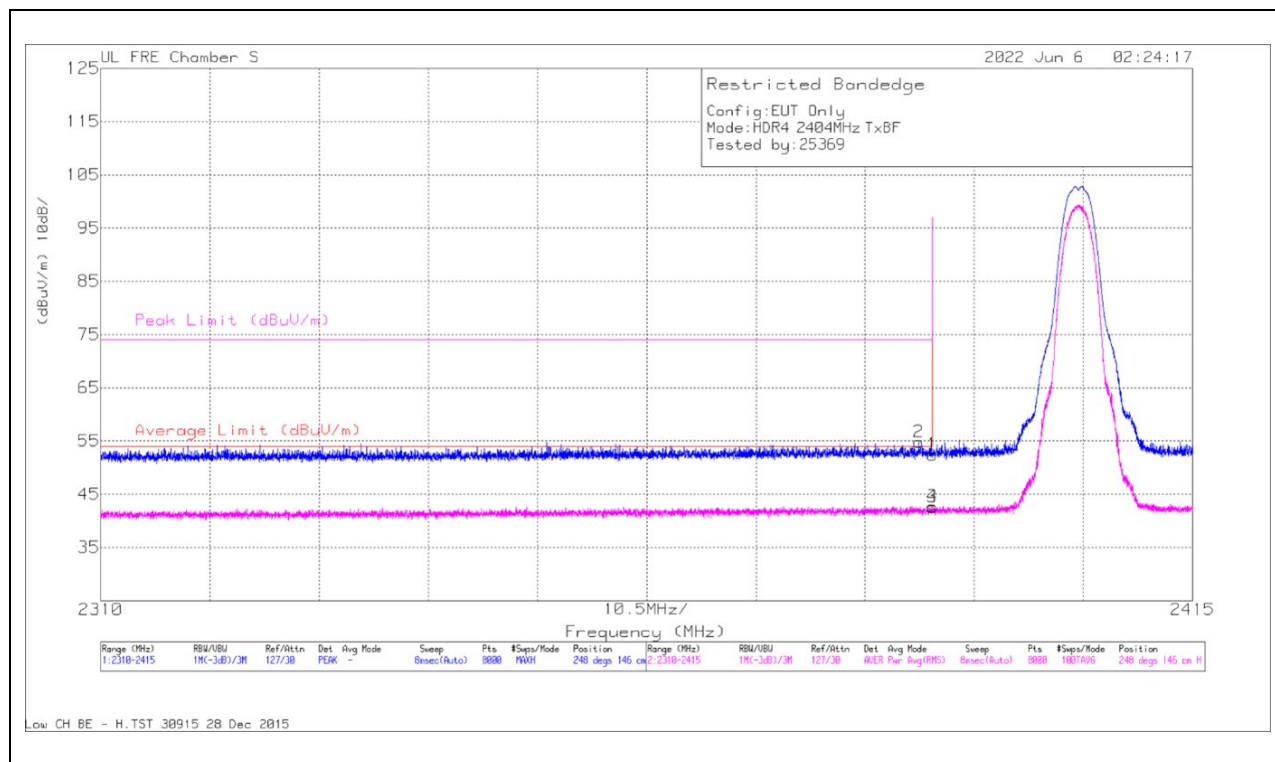
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	55.62	Pk	32.4	-35	53.02	-	-	74	-20.98	230	396	V
3	2483.5	45	RMS	32.4	-35	42.4	54	-11.6	-	-	230	396	V
4	2511.482	46.05	RMS	32.3	-34.8	43.55	54	-10.45	-	-	230	396	V
2	2561.535	58.35	Pk	32	-34.7	55.65	-	-	74	-18.35	230	396	V

Pk - Peak detector

RMS - RMS detection

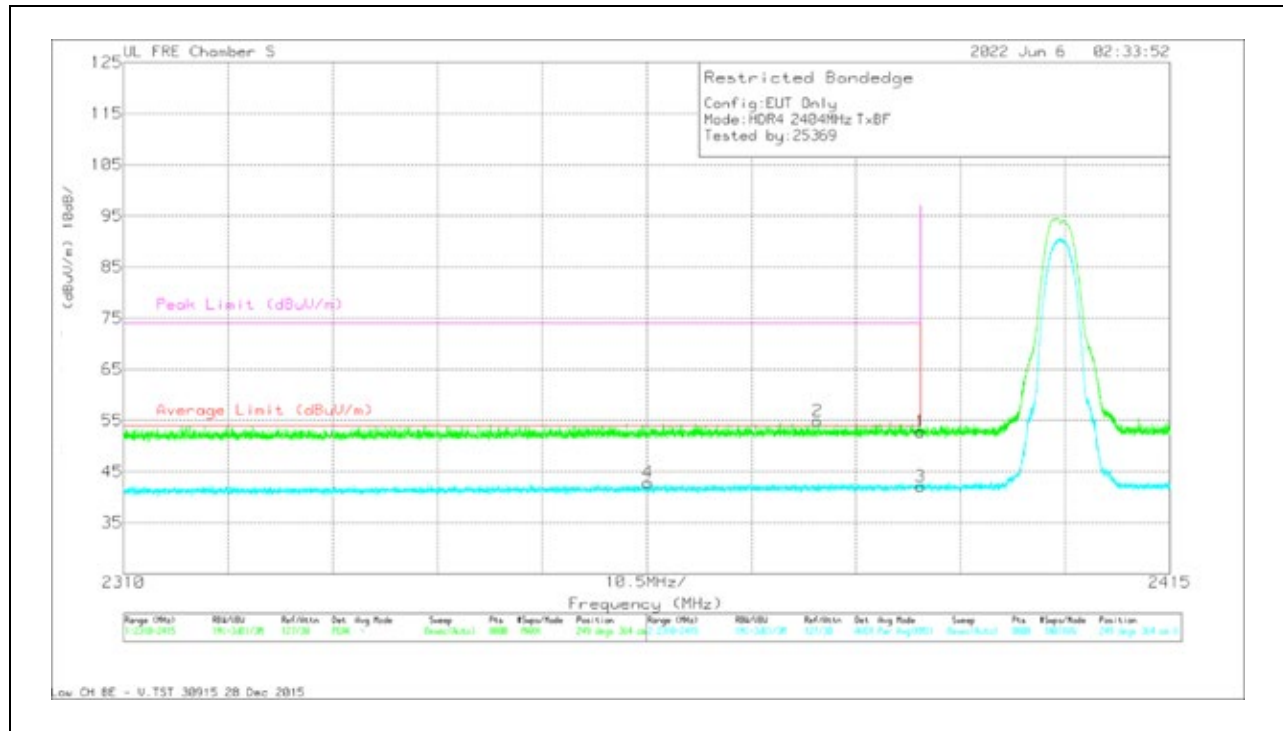
10.2.6. LOW POWER HDR TXBF (HDR4)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/Cb/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2388.657	57.81	Pk	32.2	-35.2	54.81	-	-	74	-19.19	248	146	H
4	2389.996	45.7	RMS	32.2	-35.2	42.7	54	-11.3	-	-	248	146	H
1	2390	55.39	Pk	32.2	-35.2	52.39	-	-	74	-21.61	248	146	H
3	2390	45.59	RMS	32.2	-35.2	42.59	54	-11.41	-	-	248	146	H

Pk - Peak detector

RMS - RMS detection

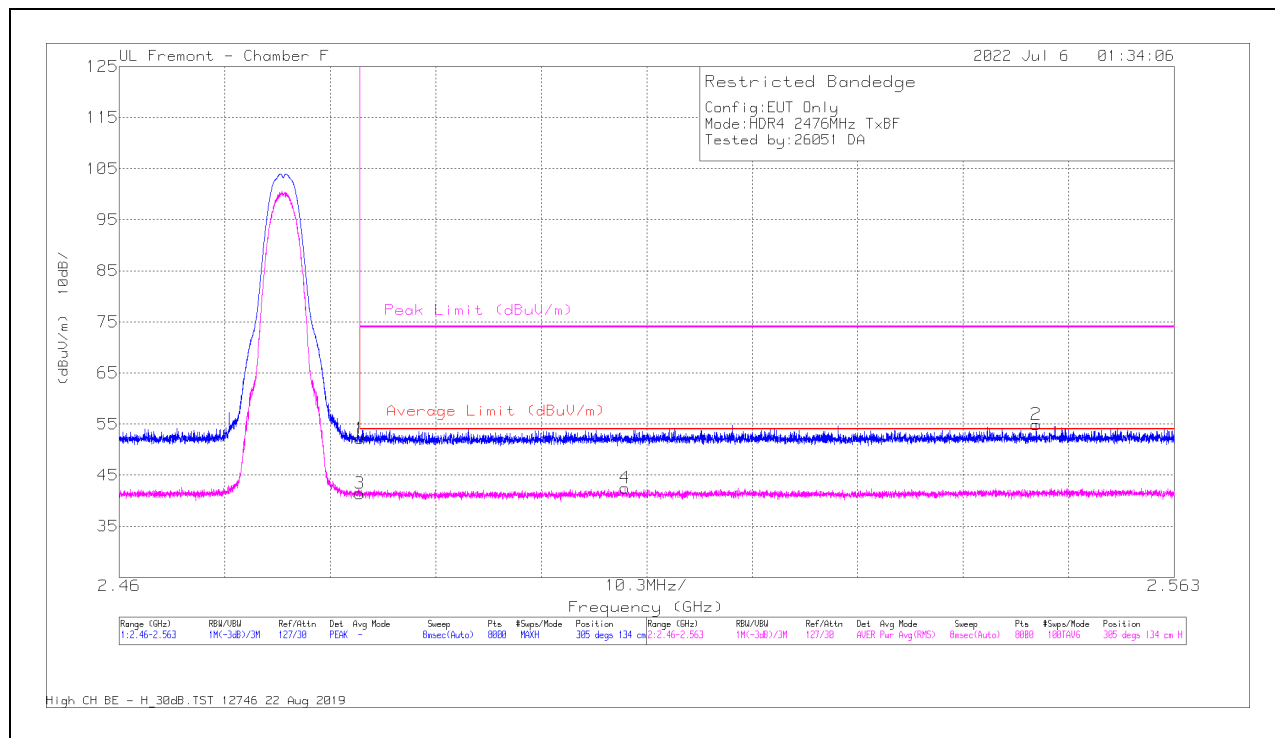
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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
4	2362.613	46.13	RMS	31.9	-35.2	42.83	54	-11.17	-	-	249	364	V
2	2379.665	58.02	Pk	32.1	-35.2	54.92	-	-	74	-19.08	249	364	V
1	2390	55.81	Pk	32.2	-35.2	52.81	-	-	74	-21.19	249	364	V
3	2390	45.07	RMS	32.2	-35.2	42.07	54	-11.93	-	-	249	364	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

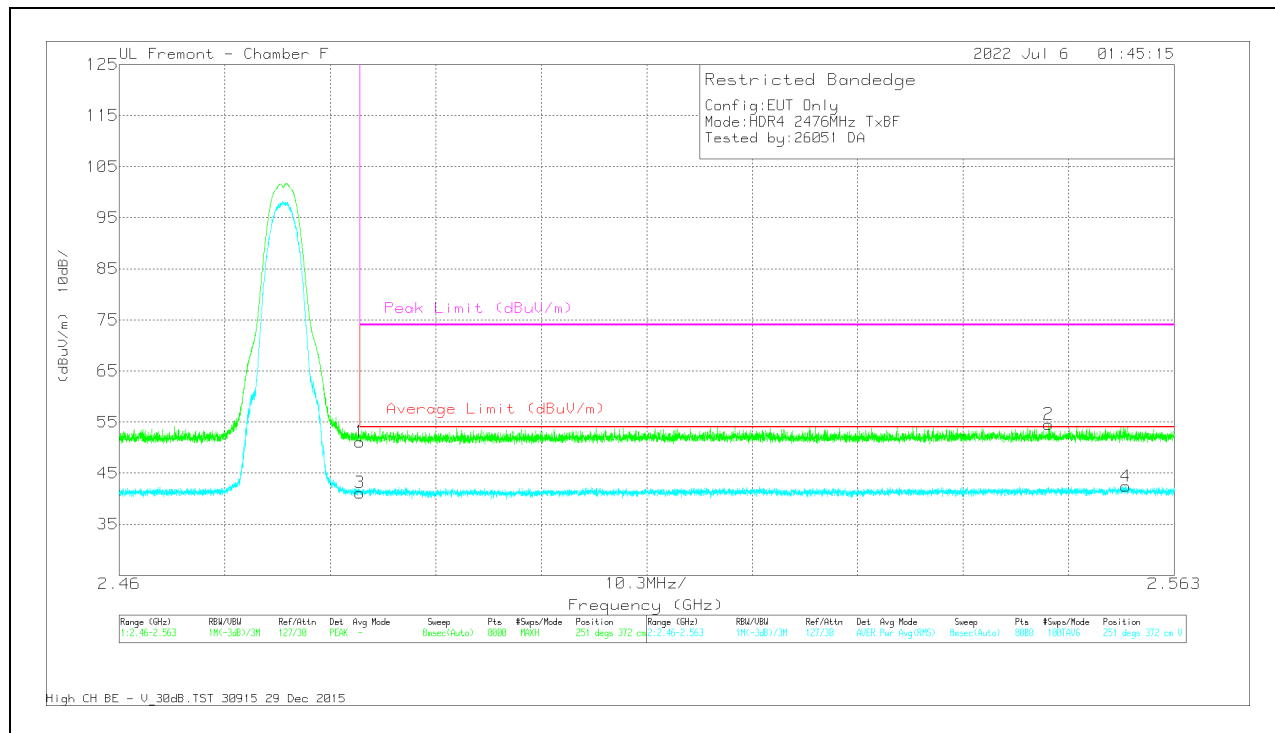
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	58.95	Pk	32.3	-39.1	52.15	-	-	74	-21.85	305	134	H
2	2.549521	61.63	Pk	32.4	-39.1	54.93	-	-	74	-19.07	305	134	H
3	* 2.4835	48.23	RMS	32.3	-39.1	41.43	54	-12.57	-	-	305	134	H
4	2.509383	49.3	RMS	32.3	-39.1	42.5	54	-11.5	-	-	305	134	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

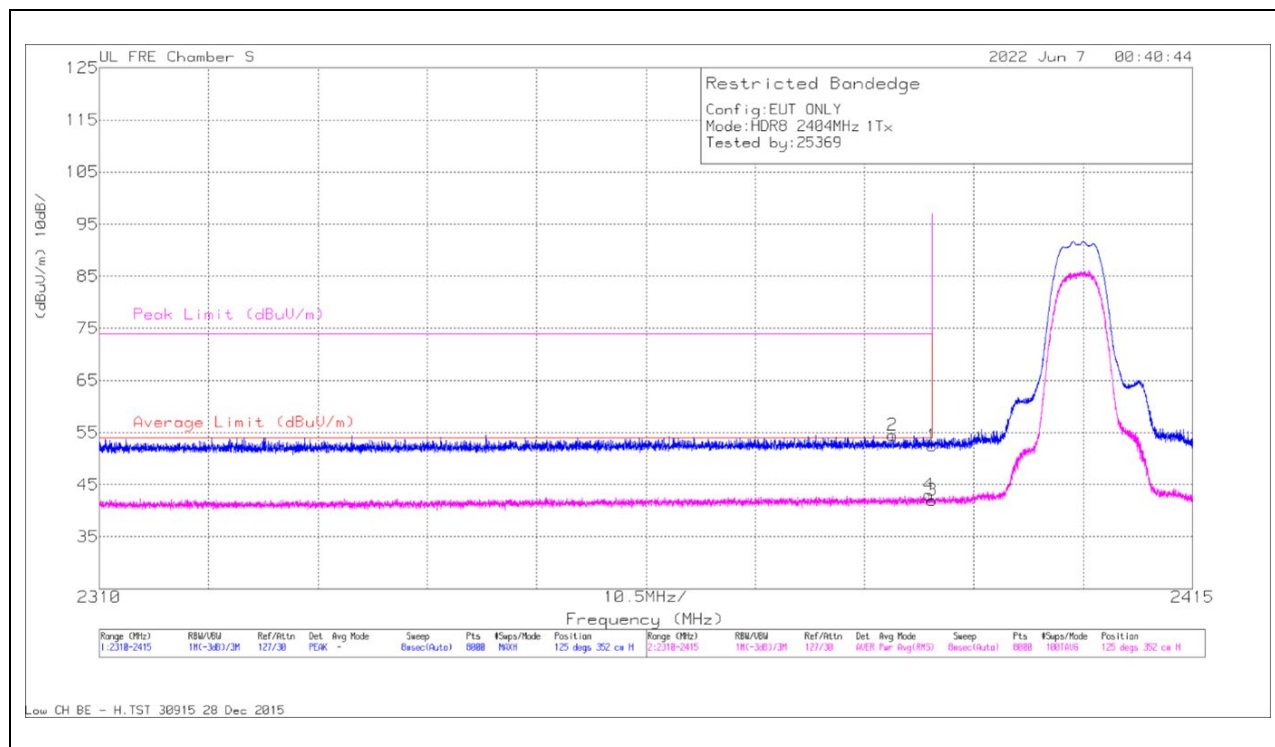


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	57.91	Pk	32.3	-39.1	51.11	-	-	74	-22.89	251	372	V
2	2.550731	61.17	Pk	32.4	-39	54.57	-	-	74	-19.43	251	372	V
3	* 2.4835	47.96	RMS	32.3	-39.1	41.16	54	-12.84	-	-	251	372	V
4	2.55829	48.93	RMS	32.4	-38.9	42.43	54	-11.57	-	-	251	372	V

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

PK - Peak detector

RMS - RMS detection

10.2.7. LOW POWER HDR (HDR8)**ANT 4****BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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
2	2386.163	57.51	Pk	32.2	-35.2	54.51	-	-	74	-19.49	125	352	H
4	2389.655	46.07	RMS	32.2	-35.2	43.07	54	-10.93	-	-	125	352	H
1	2390	55.52	Pk	32.2	-35.2	52.52	-	-	74	-21.48	125	352	H
3	2390	45.01	RMS	32.2	-35.2	42.01	54	-11.99	-	-	125	352	H

Pk - Peak detector

RMS - RMS detection

UL FRE Chamber S

2022 Jun 7 08:49:48

Restricted Bondedge

Config: EUT ONLY

Mode: HDRB 2404MHz ITx

Tested by: 25369

Peak Limit (dBU/m)

Average Limit (dBU/m)

2

1

4

3

10.5MHz/

Frequency (MHz)

2310

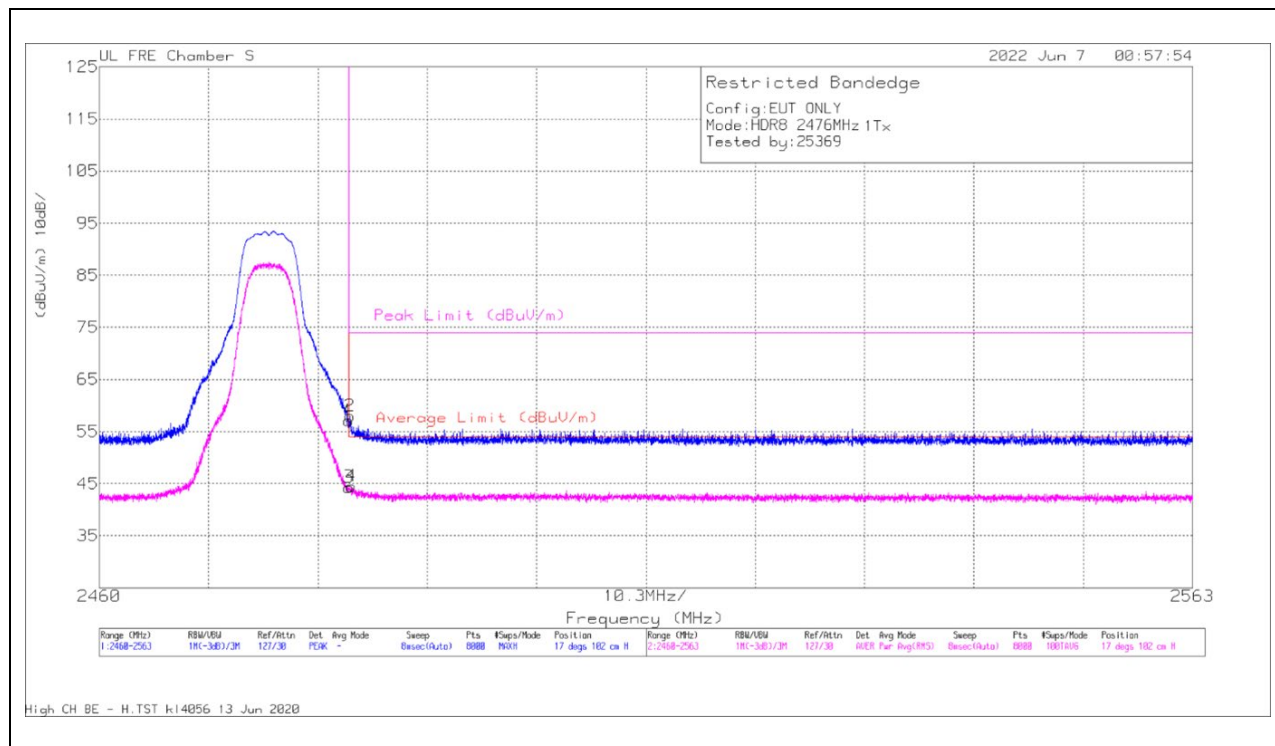
2415

Range (MHz)	RBW/MBW	Ref/Res	Det. Avg Mode	Sweep	Pre	Exp/Mode	Position	Range (MHz)	RBW/MBW	Ref/Res	Det. Avg Mode	Sweep	Pre	Exp/Mode	Position
2310-2415	100-10000	100-100	Peak	Peak	Peak	Peak	Peak	2404-2415	100-10000	100-100	Peak	Peak	Peak	Peak	Peak

Low Ot BE - U.TST 30915 20 Dec 2015

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/CbI/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	2378.339	58.15	Pk	32.1	-35.2	55.05	-	-	74	-18.95	68	219	V
4	2384.601	45.86	RMS	32.2	-35.2	42.86	54	-11.14	-	-	68	219	V
1	2390	55.66	Pk	32.2	-35.2	52.66	-	-	74	-21.34	68	219	V
3	2390	45.22	RMS	32.2	-35.2	42.22	54	-11.78	-	-	68	219	V

UL LLC.
 47173 Benicia Street, Fremont, CA 94538; USA. TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL LLC.

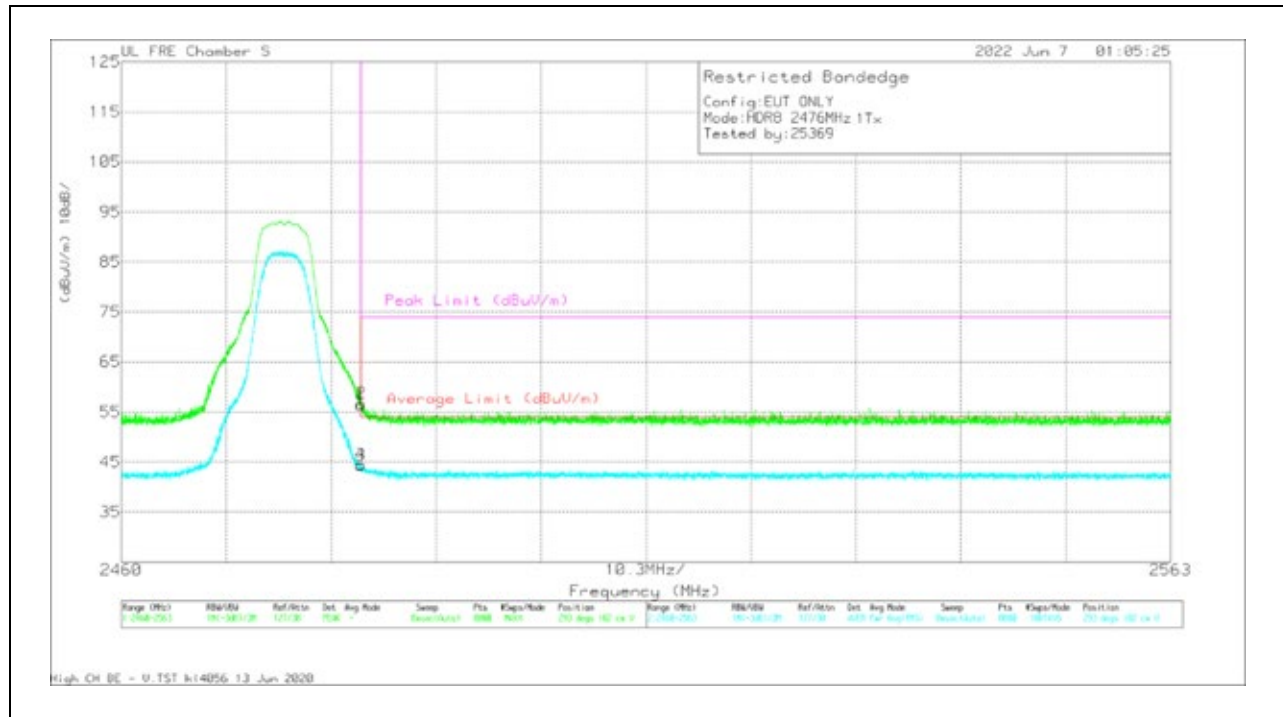
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	59.69	Pk	32.4	-35	57.09	-	-	74	-16.91	17	102	H
3	2483.5	46.93	RMS	32.4	-35	44.33	54	-9.67	-	-	17	102	H
2	2483.604	60.6	Pk	32.4	-35	58	-	-	74	-16	17	102	H
4	2483.732	47.11	RMS	32.4	-35	44.51	54	-9.49	-	-	17	102	H

Pk - Peak detector

RMS - RMS detection

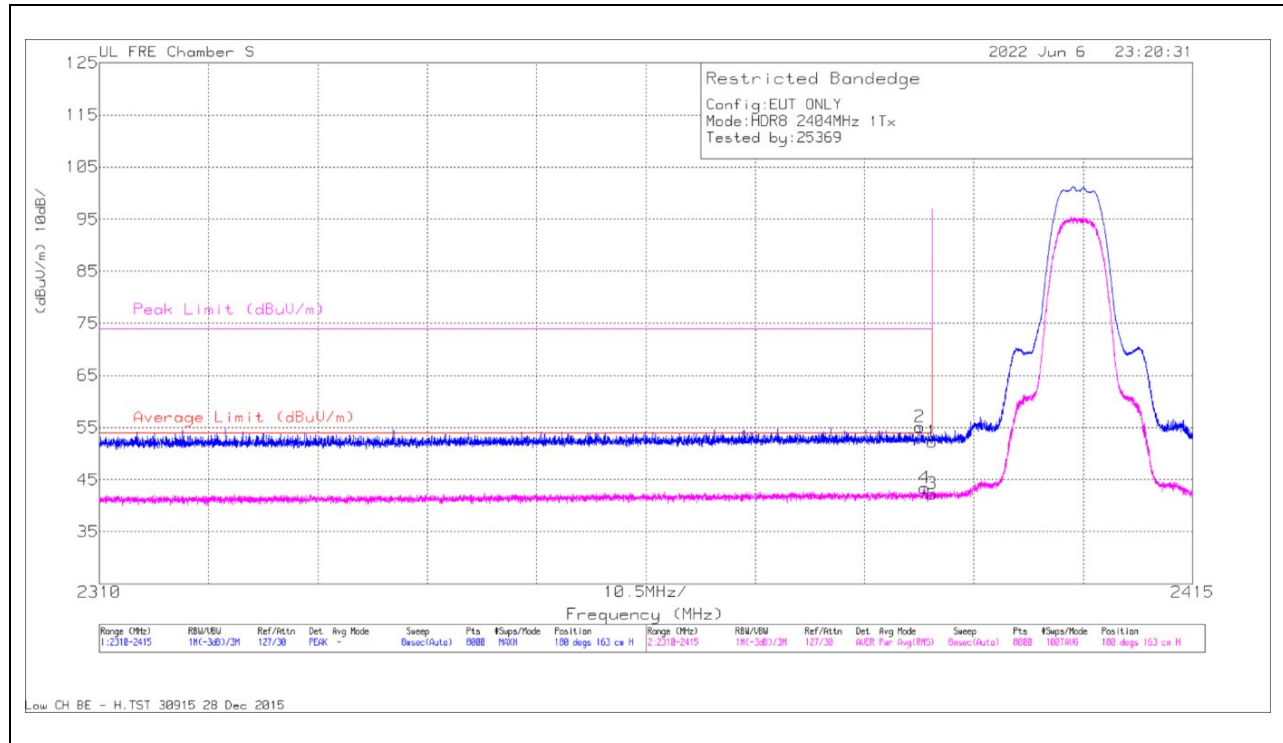
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	58.93	Pk	32.4	-35	56.33	-	-	74	-17.67	293	102	V
3	2483.5	47.05	RMS	32.4	-35	44.45	54	-9.55	-	-	293	102	V
4	2483.501	47.07	RMS	32.4	-35	44.47	54	-9.53	-	-	293	102	V
2	2483.552	59.34	Pk	32.4	-35	56.74	-	-	74	-17.26	293	102	V

Pk - Peak detector

RMS - RMS detection

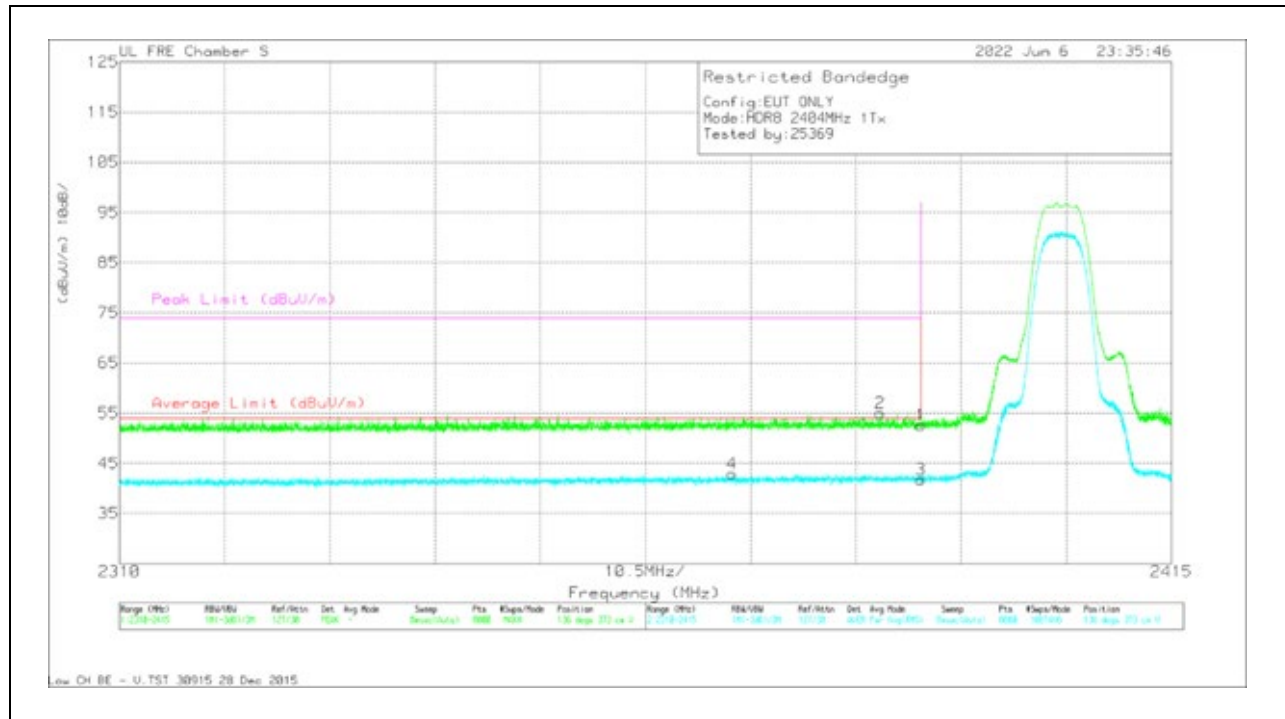
ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2388.801	58.1	Pk	32.2	-35.2	55.1	-	-	74	-18.9	180	163	H
4	2389.261	46.4	RMS	32.2	-35.2	43.4	54	-10.6	-	-	180	163	H
1	2390	55.25	Pk	32.2	-35.2	52.25	-	-	74	-21.75	180	163	H
3	2390	45.29	RMS	32.2	-35.2	42.29	54	-11.71	-	-	180	163	H

Pk - Peak detector

RMS - RMS detection

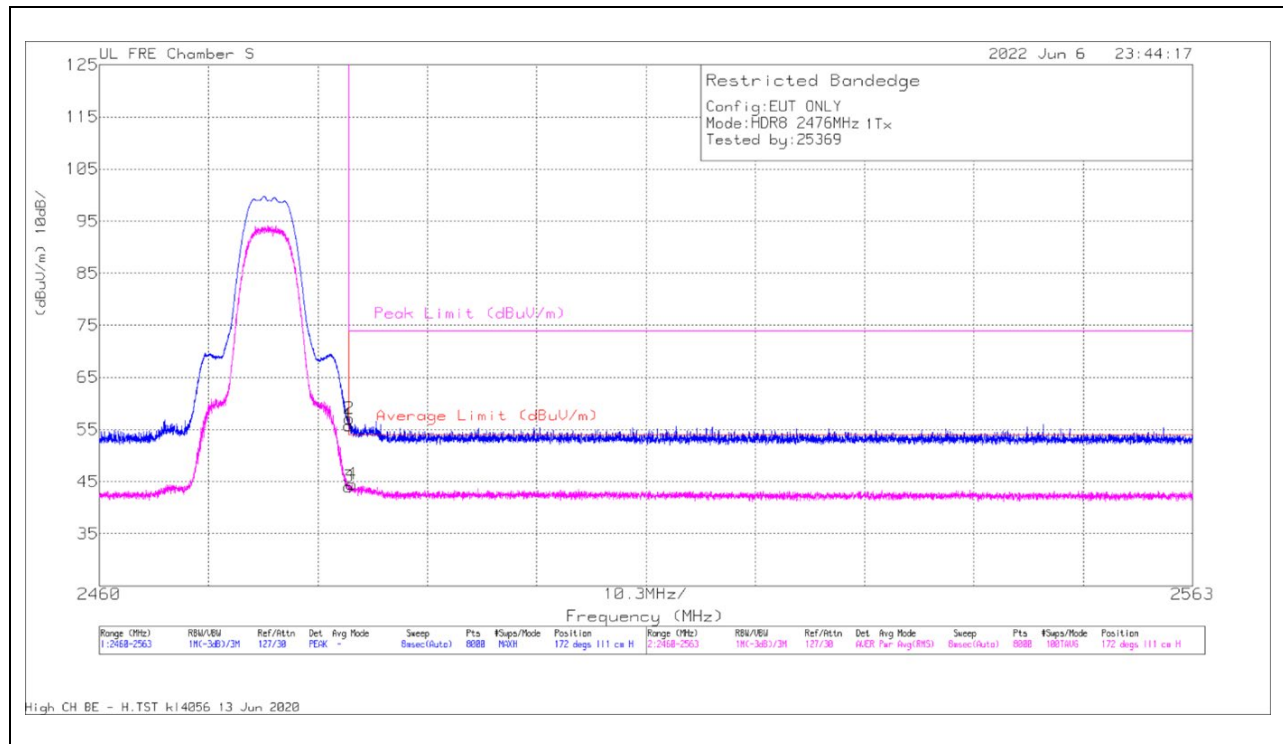
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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
4	2371.119	46.06	RMS	32	-35.2	42.86	54	-11.14	-	-	136	373	V
2	2385.94	57.94	Pk	32.2	-35.2	54.94	-	-	74	-19.06	136	373	V
1	2390	55.6	Pk	32.2	-35.2	52.6	-	-	74	-21.4	136	373	V
3	2390	44.76	RMS	32.2	-35.2	41.76	54	-12.24	-	-	136	373	V

Pk - Peak detector

RMS - RMS detection

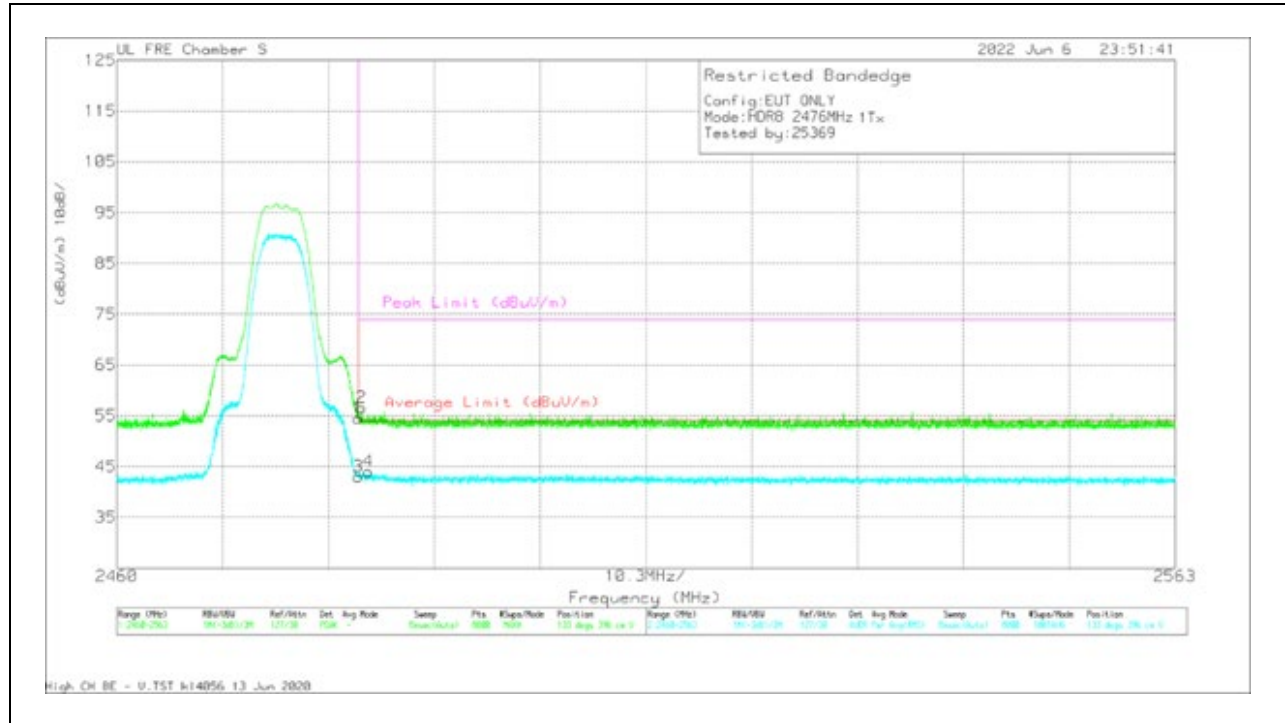
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (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	2483.5	58.3	Pk	32.4	-35	55.7	-	-	74	-18.3	172	111	H
3	2483.5	46.67	RMS	32.4	-35	44.07	54	-9.93	-	-	172	111	H
2	2483.565	59.71	Pk	32.4	-35	57.11	-	-	74	-16.89	172	111	H
4	2483.771	47.15	RMS	32.4	-35	44.55	54	-9.45	-	-	172	111	H

Pk - Peak detector

RMS - RMS detection

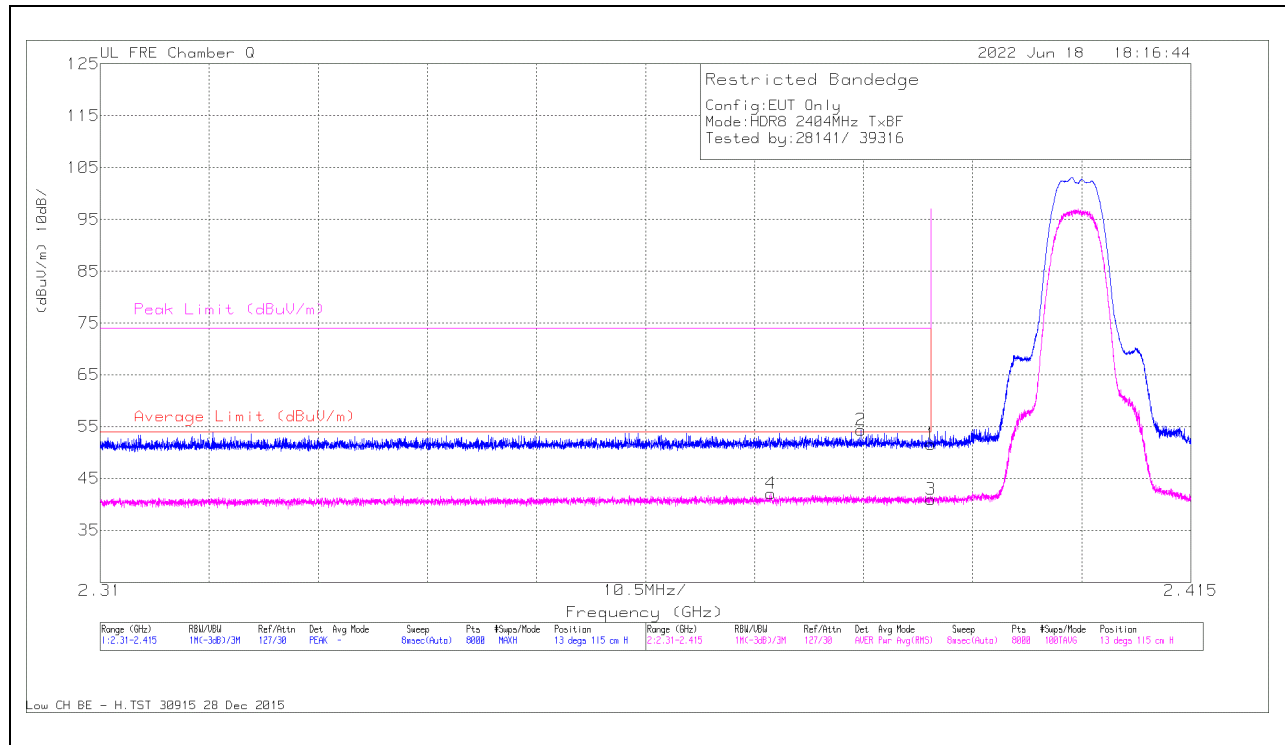
VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 206807 (dB/m)	Amp/CbI/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	2483.5	57.08	Pk	32.4	-35	54.48	-	-	74	-19.52	133	396	V
3	2483.5	45.59	RMS	32.4	-35	42.99	54	-11.01	-	-	133	396	V
2	2483.797	59.17	Pk	32.4	-35	56.57	-	-	74	-17.43	133	396	V
4	2484.466	46.56	RMS	32.4	-34.9	44.06	54	-9.94	-	-	133	396	V

Pk - Peak detector

RMS - RMS detection

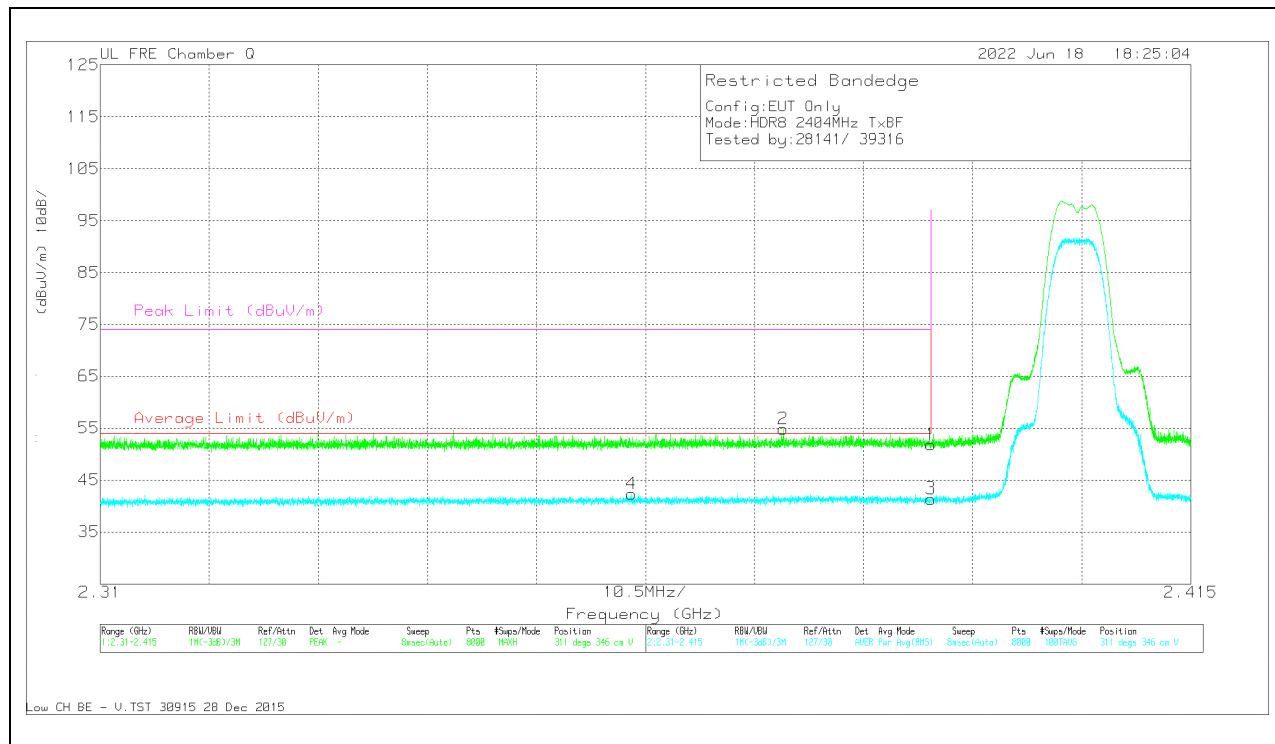
10.2.8. LOW POWER HDR TXBF (HDR8)**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
4	2.374572	44.54	RMS	31.9	-34.4	42.04	54	-11.96	-	-	13	115	H
2	2.383249	56.73	Pk	32	-34.4	54.33	-	-	74	-19.67	13	115	H
1	2.39	53.96	Pk	31.9	-34.3	51.56	-	-	74	-22.44	13	115	H
3	2.39	43.32	RMS	31.9	-34.3	40.92	54	-13.08	-	-	13	115	H

Pk - Peak detector

RMS - RMS detection

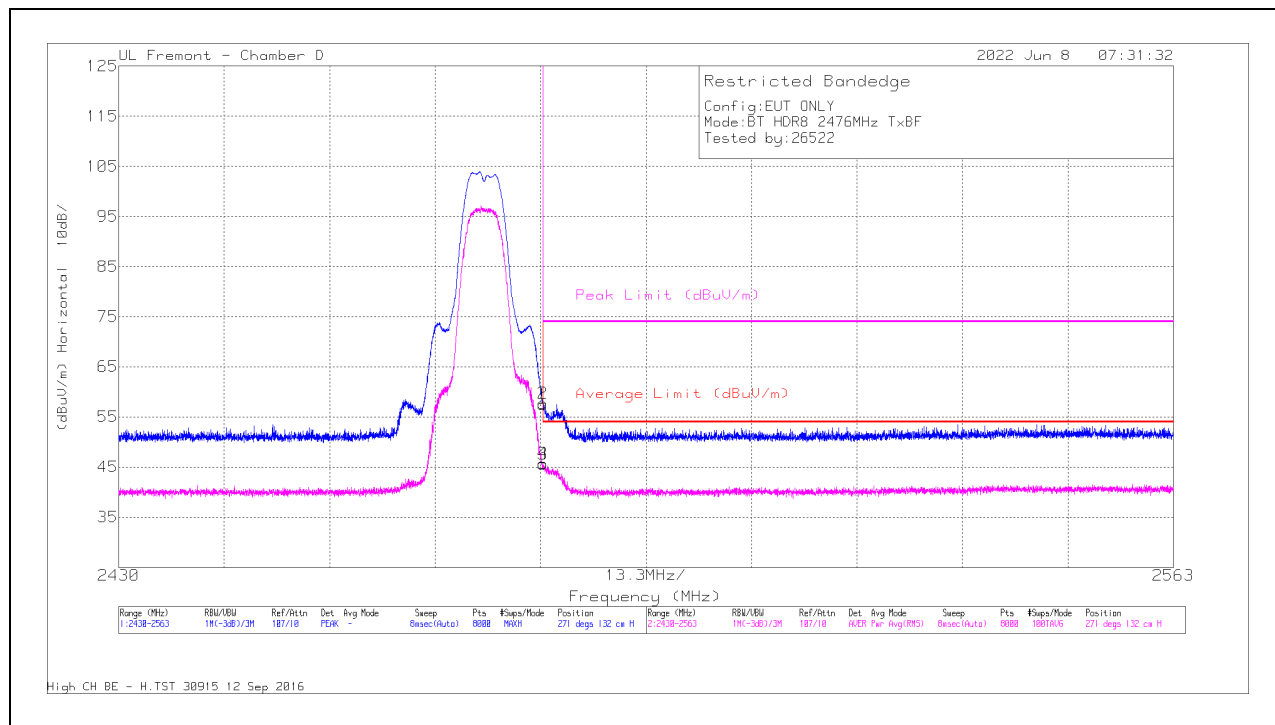
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 200895 (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
4	2.361156	44.79	RMS	31.9	-34.4	42.29	54	-11.71	-	-	311	346	V
2	2.375766	57.35	Pk	31.9	-34.4	54.85	-	-	74	-19.15	311	346	V
1	2.39	54.29	Pk	31.9	-34.3	51.89	-	-	74	-22.11	311	346	V
3	2.39	43.8	RMS	31.9	-34.3	41.4	54	-12.6	-	-	311	346	V

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

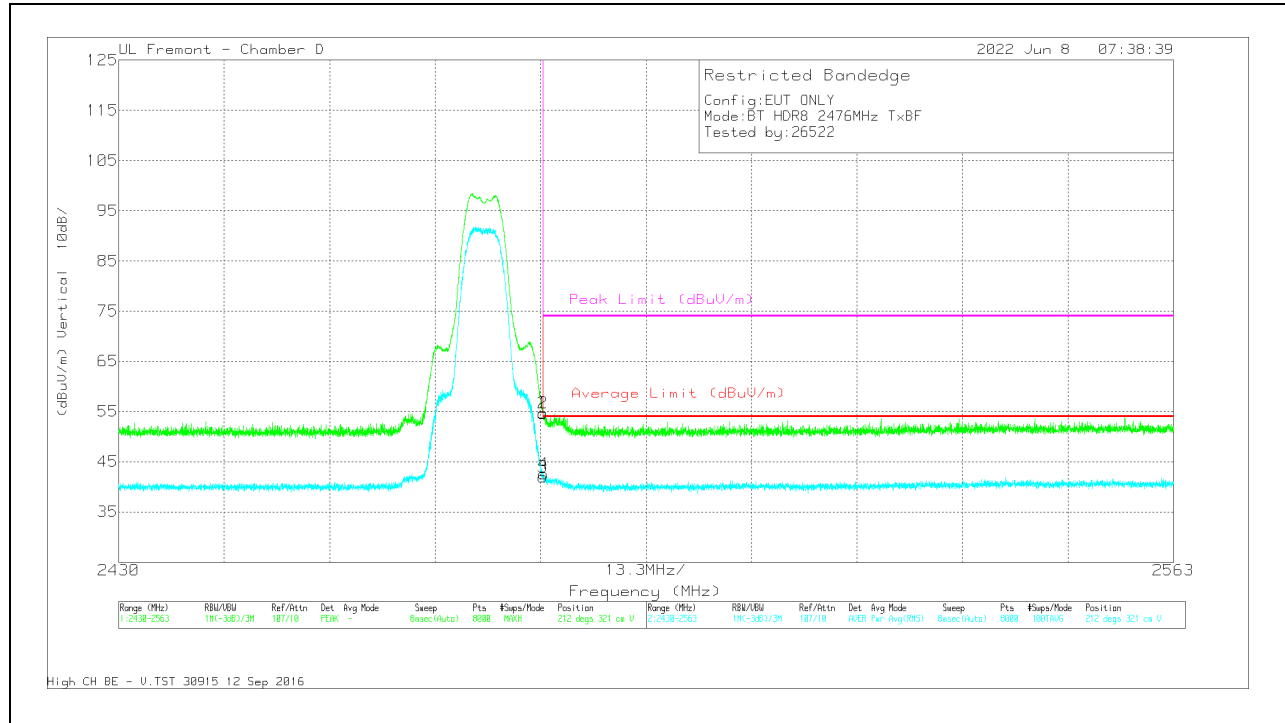
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	46.22	PK	32	-20.7	57.52	-	-	74	-16.48	271	132	H
2	* 2483.506	46.4	PK	32	-20.7	57.7	-	-	74	-16.3	271	132	H
3	* 2483.5	34.35	RMS	32	-20.7	45.65	54	-8.35	-	-	271	132	H
4	* 2483.506	34.43	RMS	32	-20.7	45.73	54	-8.27	-	-	271	132	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

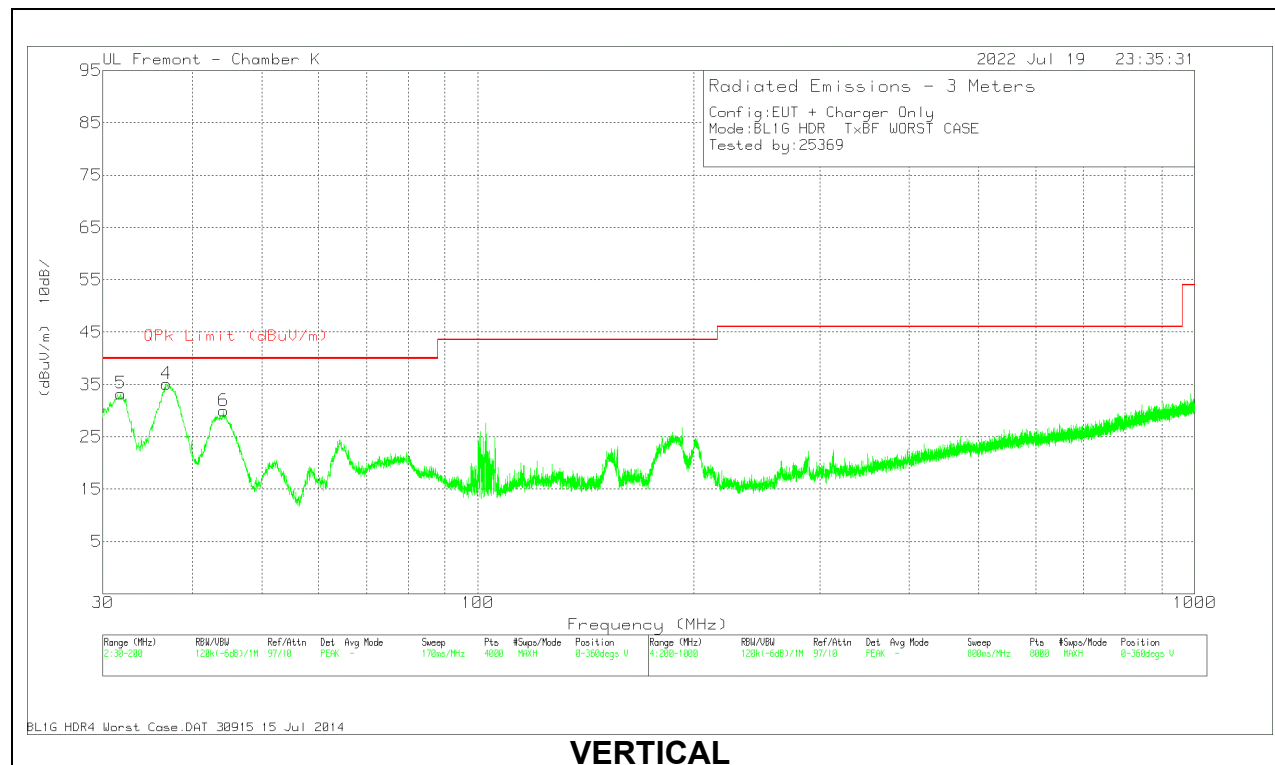
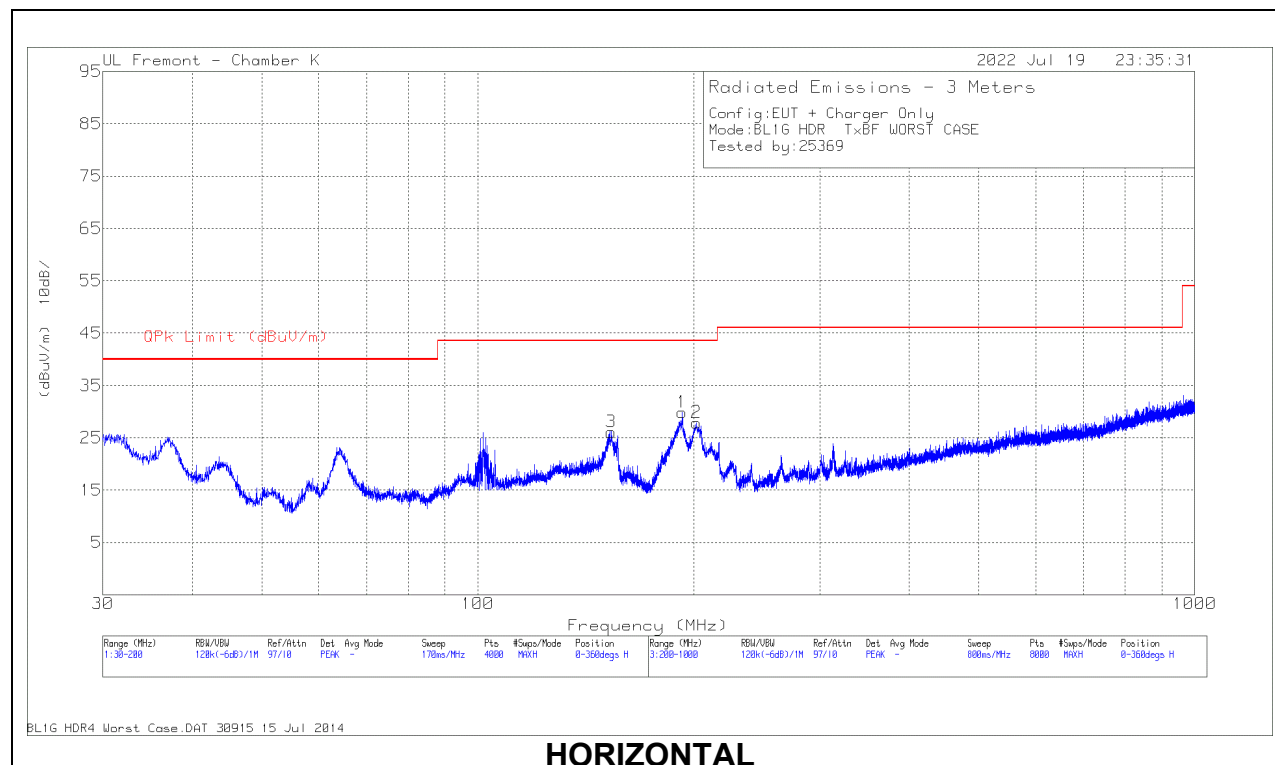


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	200786 ACF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2483.5	43.36	Pk	32	-20.7	54.66	-	-	74	-19.34	212	321	V
2	* 2483.522	43.41	Pk	32	-20.7	54.71	-	-	74	-19.29	212	321	V
3	* 2483.5	30.62	RMS	32	-20.7	41.92	54	-12.08	-	-	212	321	V
4	* 2483.589	31.26	RMS	32	-20.7	42.56	54	-11.44	-	-	212	321	V

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

Pk - Peak detector

RMS - RMS detection

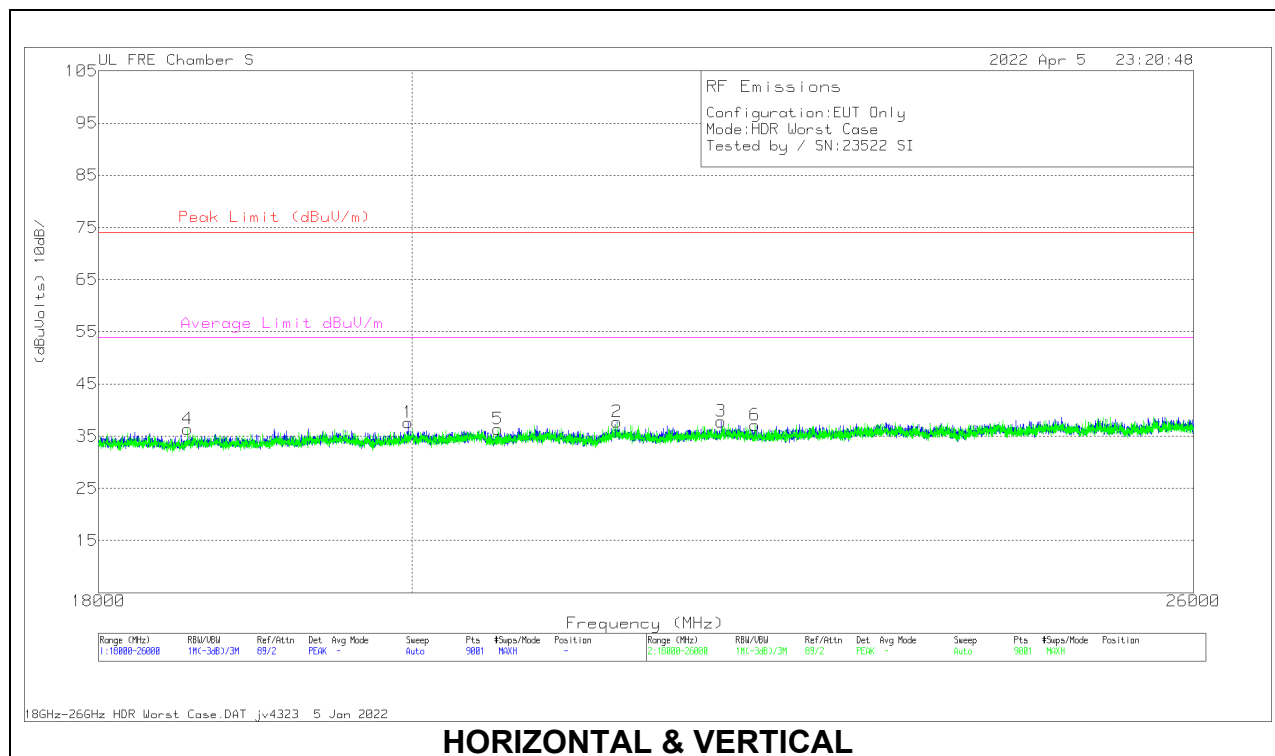
10.3. WORST CASE BELOW 1 GHz**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)**

Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	82258 ACF (dB)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	192.775	42.13	Pk	18	-30.3	29.83	43.52	-13.69	0-360	197	H
3	153.579	38.08	Pk	18.6	-30.6	26.08	43.52	-17.44	0-360	197	H
4	36.8018	43.91	Pk	22.7	-31.5	35.11	40	-4.89	0-360	101	V
	37.5817	39.28	Qp	22	-31.4	29.88	40	-10.12	260	180	V
5	31.7855	38.17	Pk	26.6	-31.5	33.27	40	-6.73	0-360	101	V
	32.0396	33.98	Qp	26.4	-31.5	28.88	40	-11.12	251	142	V
6	44.1987	44.26	Pk	17.1	-31.4	29.96	40	-10.04	0-360	101	V
2	202	39.37	Pk	18.8	-30.3	27.87	43.52	-15.65	0-360	101	H

Pk - Peak detector

Qp - Quasi-Peak detector

10.4. WORST CASE 18-26 GHz**SPURIOUS EMISSIONS 18-26 GHz (WORST-CASE CONFIGURATION)****HORIZONTAL & VERTICAL****18 – 26GHz DATA**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF 81139 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit (dBuV/m)	Margin (dB)
4	18547.556	71.9	Pk	33	-59	-9.5	36.4	74	-37.6	54	-16.86
5	20585.778	69.29	Pk	33.8	-57.2	-9.5	36.39	74	-37.61	54	-17.6
6	22440.001	70.14	Pk	34.2	-57.7	-9.5	37.14	74	-36.86	54	-17.61
1	19970.667	70.26	Pk	33.7	-56.9	-9.5	37.56	74	-36.44	54	-16.44
2	21424.889	70.31	Pk	33.8	-56.9	-9.5	37.71	74	-36.29	54	-16.29
3	22186.667	70.5	Pk	34.2	-57.4	-9.5	37.8	74	-36.2	54	-16.2

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	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.

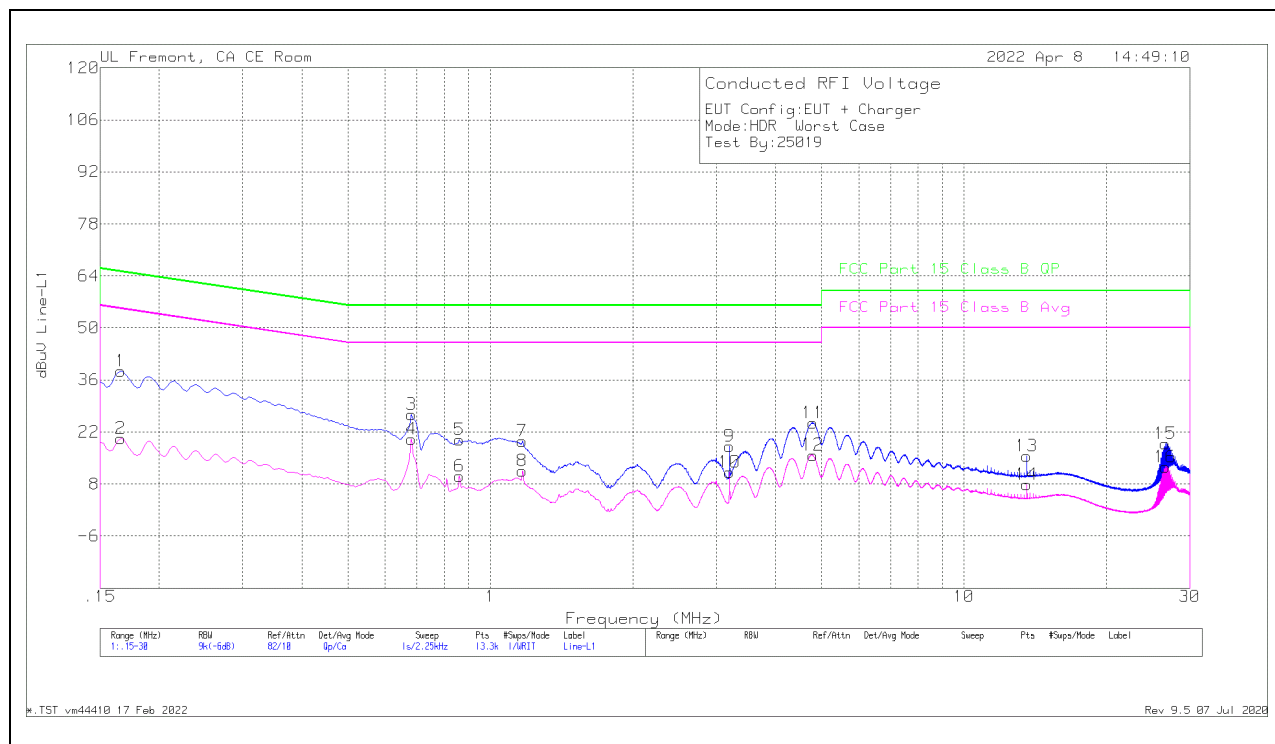
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line With AC/DC Adapter

LINE 1 RESULTS

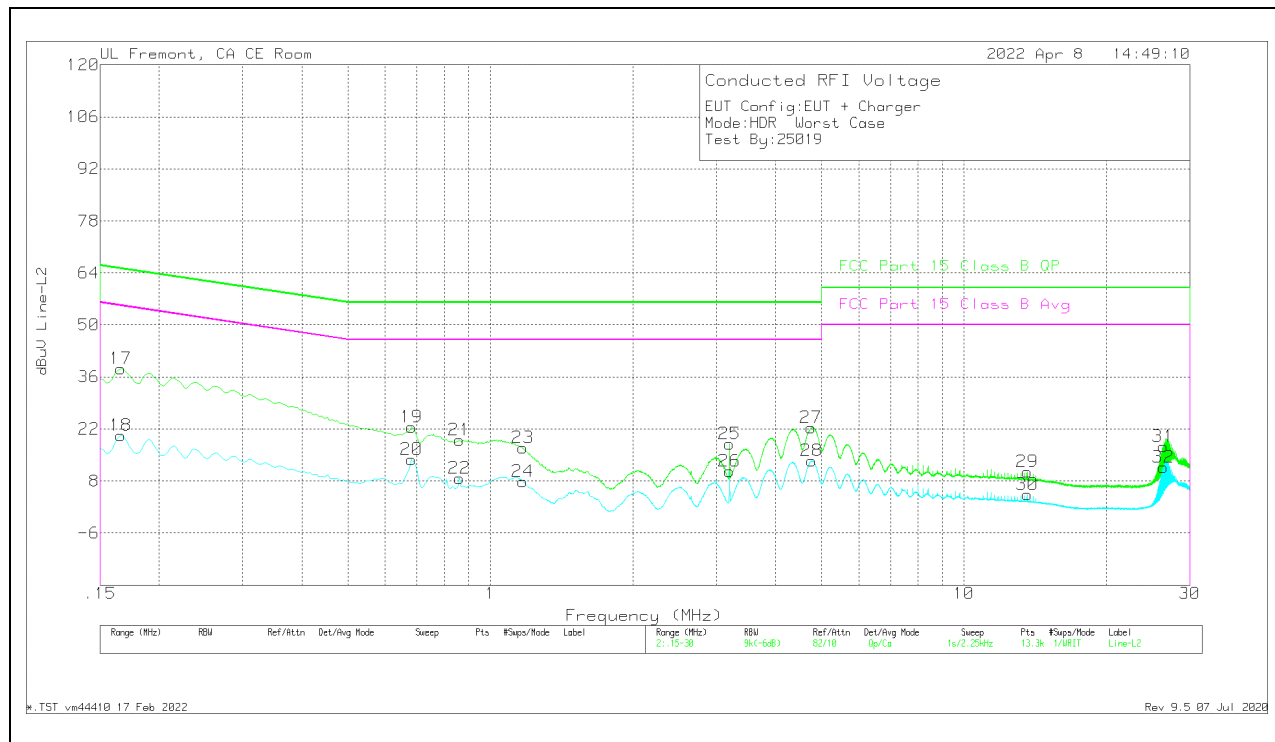


Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L1 (dB)	C1&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR) Margin (dB)
1	.16575	28.81	Qp	.1	0	9.4	38.31	65.17	-26.86	-	-
2	.16575	10.8	Ca	.1	0	9.4	20.3	-	-	55.17	-34.87
3	.681	17.23	Qp	0	.1	9.3	26.63	56	-29.37	-	-
4	.681	10.65	Ca	0	.1	9.3	20.05	-	-	46	-25.95
5	.861	10.51	Qp	0	.1	9.3	19.91	56	-36.09	-	-
6	.861	.66	Ca	0	.1	9.3	10.06	-	-	46	-35.94
7	1.16925	10.11	Qp	0	.1	9.3	19.51	56	-36.49	-	-
8	1.16925	2.16	Ca	0	.1	9.3	11.56	-	-	46	-34.44
9	3.19875	8.81	Qp	0	.1	9.3	18.21	56	-37.79	-	-
10	3.19875	1.7	Ca	0	.1	9.3	11.1	-	-	46	-34.9
11	4.79625	15.04	Qp	0	.1	9.3	24.44	56	-31.56	-	-
12	4.79625	6.39	Ca	0	.1	9.3	15.79	-	-	46	-30.21
13	13.56	6	Qp	.1	.2	9.3	15.6	60	-44.4	-	-
14	13.56	-1.82	Ca	.1	.2	9.3	7.78	-	-	50	-42.22
15	26.61	9.03	Qp	.2	.3	9.3	18.83	60	-41.17	-	-
16	26.60775	2.81	Ca	.2	.3	9.3	12.61	-	-	50	-37.39

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



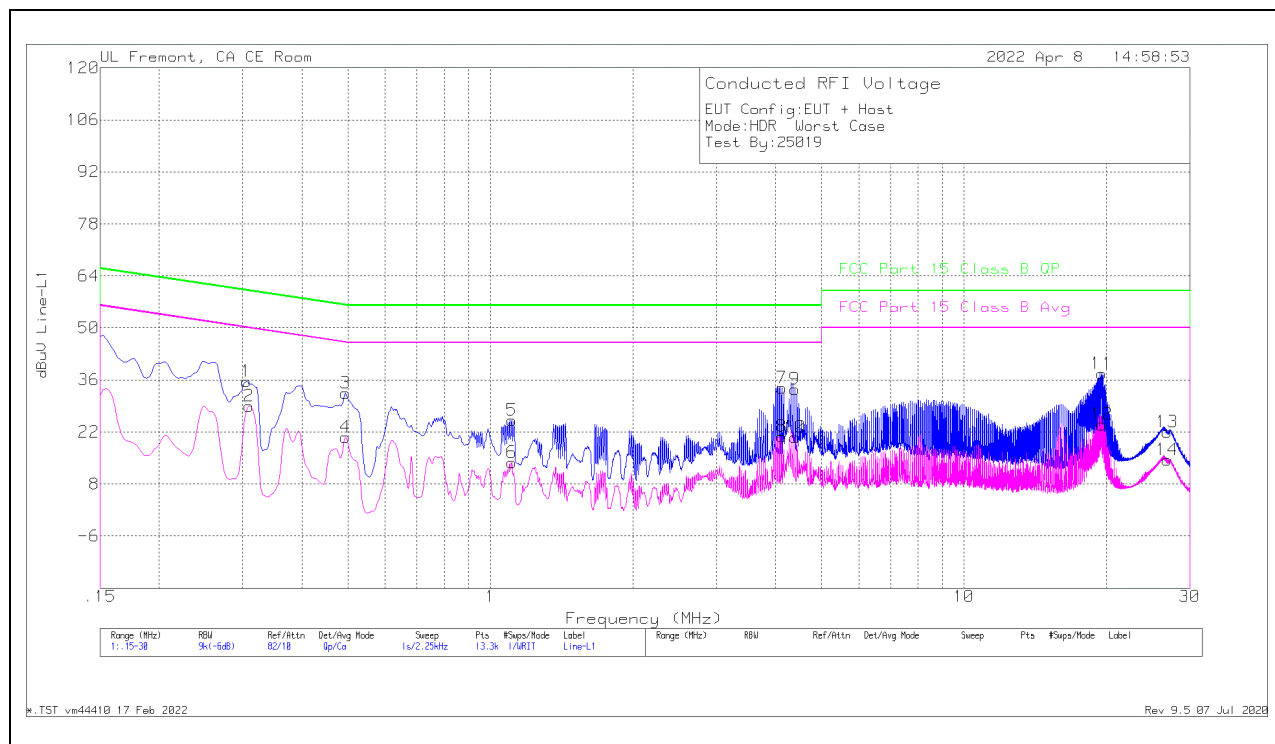
Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L2 (dB)	C2&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR) Margin (dB)
17	.16575	28.68	Qp	.1	0	9.4	38.18	65.17	-26.99	-	-
18	.16575	10.81	Ca	.1	0	9.4	20.31	-	-	55.17	-34.86
19	.681	13.15	Qp	0	.1	9.3	22.55	56	-33.45	-	-
20	.681	4.34	Ca	0	.1	9.3	13.74	-	-	46	-32.26
21	.861	9.68	Qp	0	.1	9.3	19.08	56	-36.92	-	-
22	.861	-6	Ca	0	.1	9.3	8.8	-	-	46	-37.2
23	1.1715	7.46	Qp	0	.1	9.3	16.86	56	-39.14	-	-
24	1.1715	-1.53	Ca	0	.1	9.3	7.87	-	-	46	-38.13
25	3.19875	8.64	Qp	0	.1	9.3	18.04	56	-37.96	-	-
26	3.19875	1.31	Ca	0	.1	9.3	10.71	-	-	46	-35.29
27	4.76025	13.01	Qp	0	.1	9.3	22.41	56	-33.59	-	-
28	4.776	3.97	Ca	0	.1	9.3	13.37	-	-	46	-32.63
29	13.596	.94	Qp	.1	.2	9.3	10.54	60	-49.46	-	-
30	13.596	-5.22	Ca	.1	.2	9.3	4.38	-	-	50	-45.62
31	26.38275	7.52	Qp	.2	.3	9.3	17.32	60	-42.68	-	-
32	26.38275	1.85	Ca	.2	.3	9.3	11.65	-	-	50	-38.35

Qp - Quasi-Peak detector

Ca - CISPR average detection

11.2. AC Power Line With Laptop

LINE 1 RESULTS



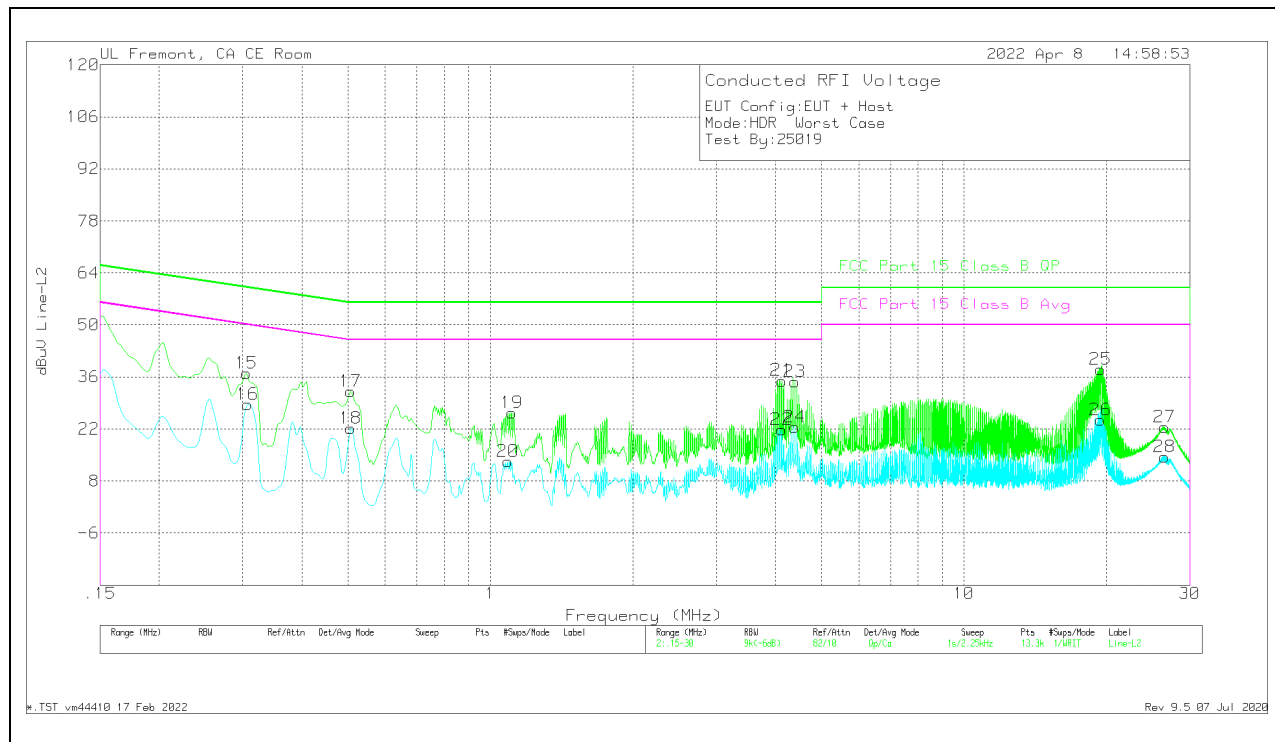
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L1 (dB)	C1&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR) Margin (dB)
1	.30525	26.36	Qp	0	0	9.3	35.66	60.1	-24.44	-	-
2	.30975	19.67	Ca	0	0	9.3	28.97	-	-	49.98	-21.01
3	.49425	23.08	Qp	0	0	9.3	32.38	56.1	-23.72	-	-
4	.49425	11.33	Ca	0	0	9.3	20.63	-	-	46.1	-25.47
5	1.11075	15.76	Qp	0	.1	9.3	25.16	56	-30.84	-	-
6	1.11075	4.33	Ca	0	.1	9.3	13.73	-	-	46	-32.27
7	4.1235	24.46	Qp	0	.1	9.3	33.86	56	-22.14	-	-
8	4.1235	11.41	Ca	0	.1	9.3	20.81	-	-	46	-25.19
9	4.39575	24.17	Qp	0	.1	9.3	33.57	56	-22.43	-	-
10	4.39575	11.23	Ca	0	.1	9.3	20.63	-	-	46	-25.37
11	19.527	28.04	Qp	.1	.2	9.3	37.64	60	-22.36	-	-
12	19.527	14.40	Ca	.1	.2	9.3	24.00	-	-	50	-26.00
13	26.87325	12.14	Qp	.2	.3	9.4	22.04	60	-37.96	-	-
14	26.87325	4.57	Ca	.2	.3	9.4	14.47	-	-	50	-35.53

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L2 (dB)	C2&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR) Margin (dB)
15	.30525	27.62	Qp	0	0	9.3	36.92	60.1	-23.18	-	-
16	.3075	19.29	Ca	0	0	9.3	28.59	-	-	50.04	-21.45
17	.50775	22.83	Qp	0	0	9.3	32.13	56	-23.87	-	-
18	.50775	12.82	Ca	0	0	9.3	22.12	-	-	46	-23.88
19	1.11075	16.92	Qp	0	.1	9.3	26.32	56	-29.68	-	-
20	1.08825	3.82	Ca	0	.1	9.3	13.22	-	-	46	-32.78
21	4.12125	25.59	Qp	0	.1	9.3	34.99	56	-21.01	-	-
22	4.12125	12.4	Ca	0	.1	9.3	21.8	-	-	46	-24.2
23	4.39575	25.31	Qp	0	.1	9.3	34.71	56	-21.29	-	-
24	4.39575	13.08	Ca	0	.1	9.3	22.48	-	-	46	-23.52
25	19.43025	28.45	Qp	.1	.2	9.3	38.05	60	-21.95	-	-
26	19.4325	14.86	Ca	.1	.2	9.3	24.46	-	-	50	-25.54
27	26.5335	12.73	Qp	.2	.3	9.3	22.53	60	-37.47	-	-
28	26.53125	4.76	Ca	.2	.3	9.3	14.56	-	-	50	-35.44

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. SETUP PHOTOS

Please refer to 14040866-EP1V1 for setup photos

END OF TEST REPORT