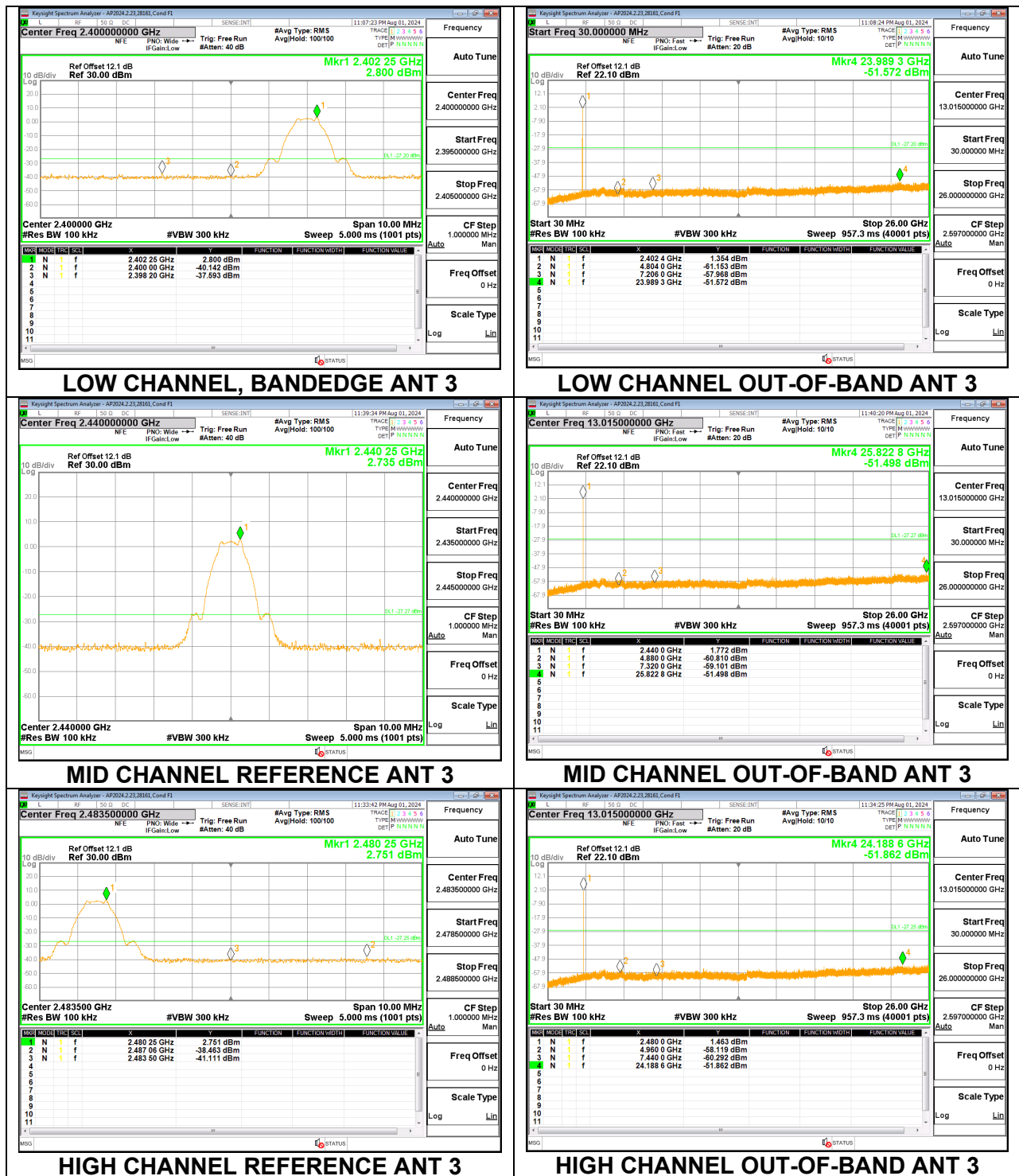
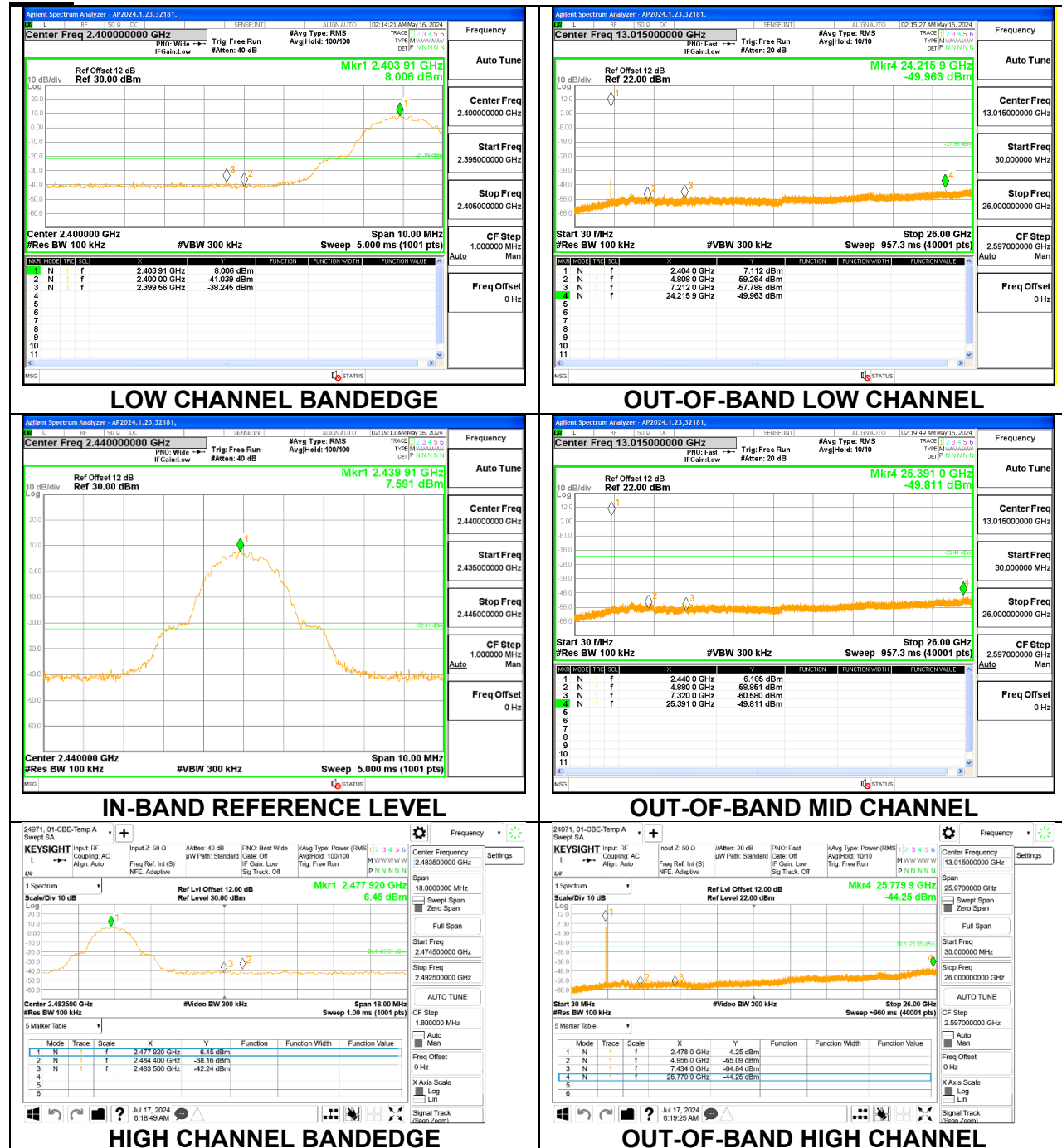


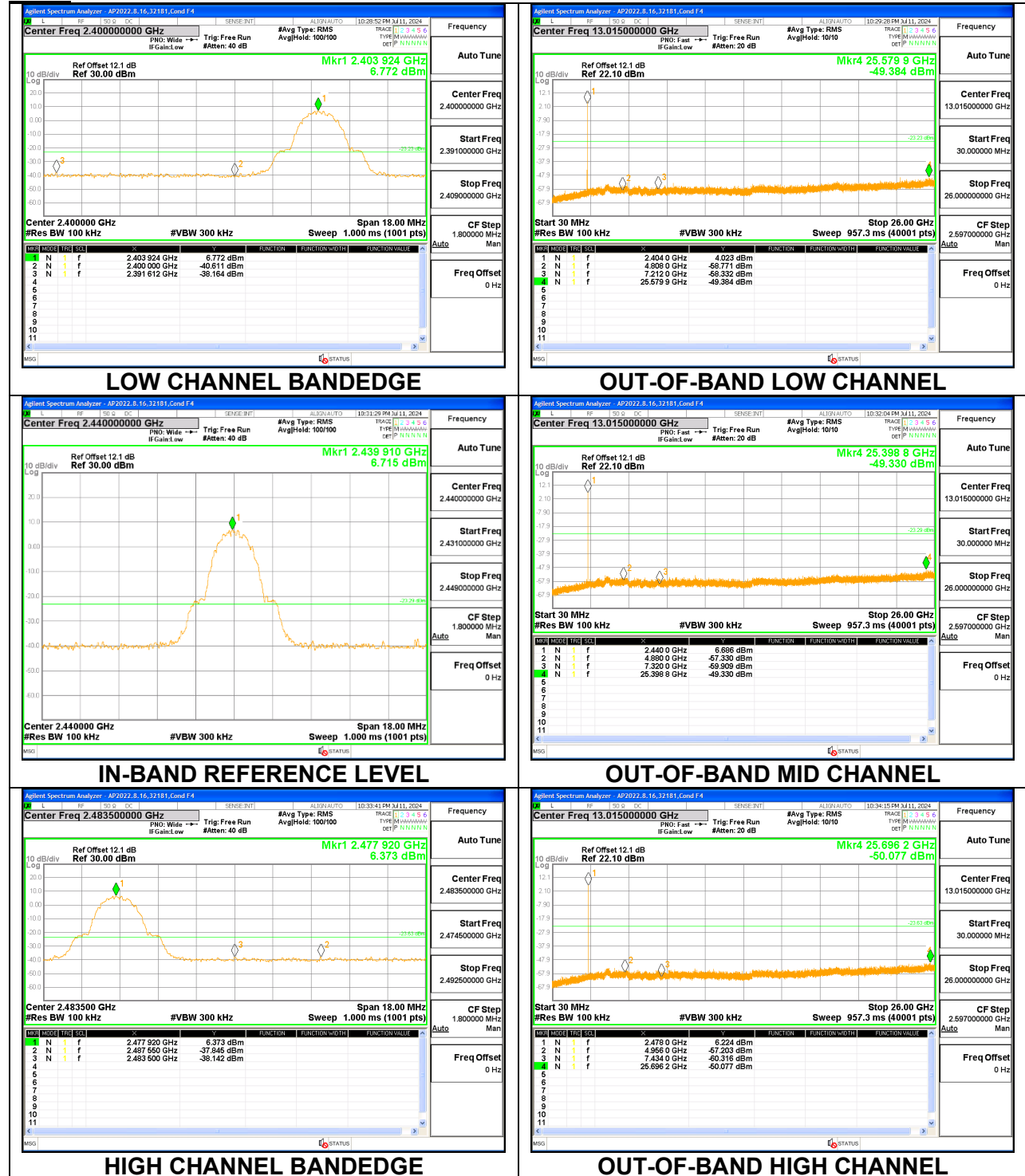


9.7.7. LOW POWER BLE (2Mbps)

ANT 4

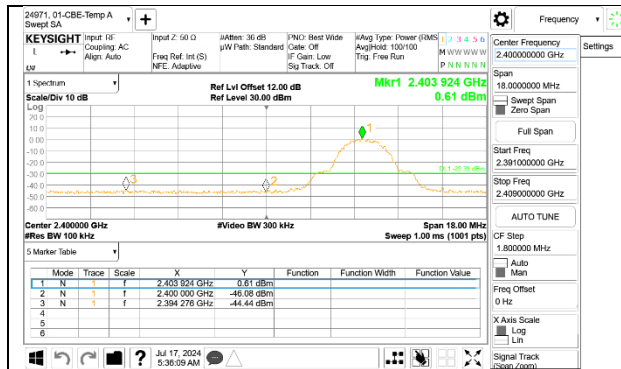


ANT 3

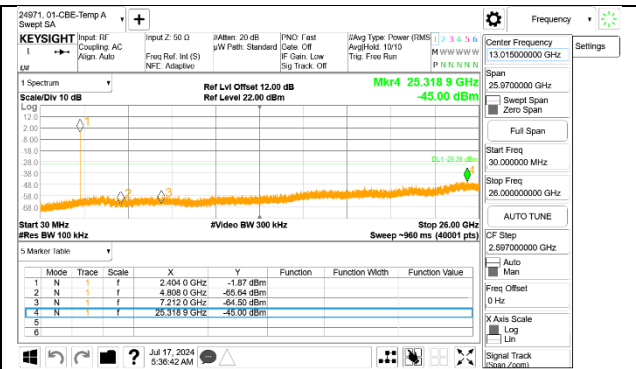


9.7.8. LOW POWER BLE TXBF (2Mbps)

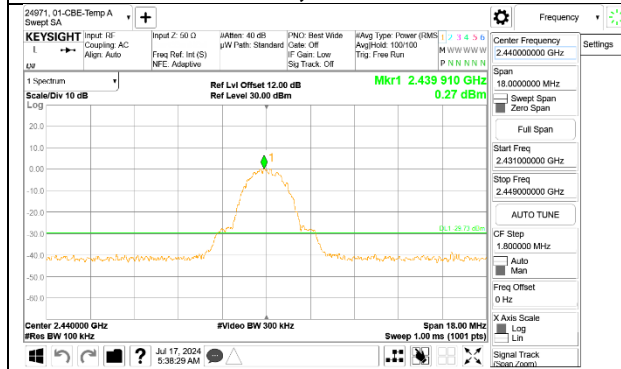
Note: Test procedures and setting are same as BLE normal mode.



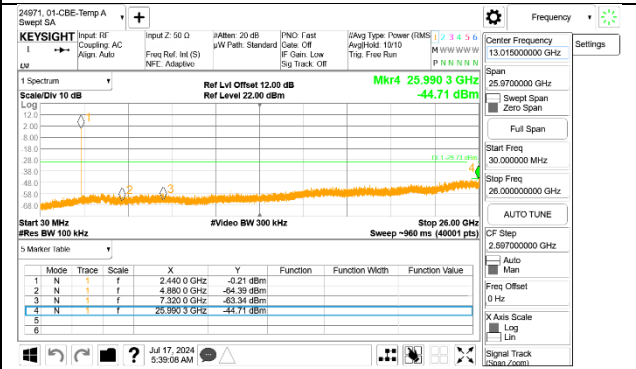
LOW CHANNEL, BANDEDGE ANT 4



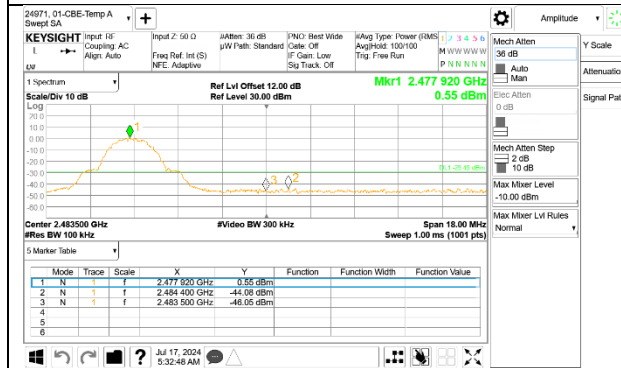
LOW CHANNEL OUT-OF-BAND ANT 4



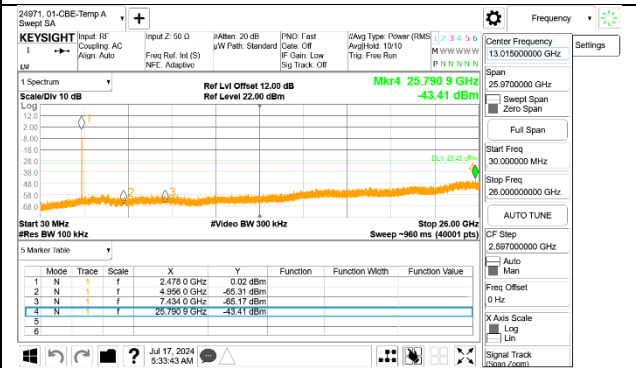
MID CHANNEL REFERENCE ANT 4



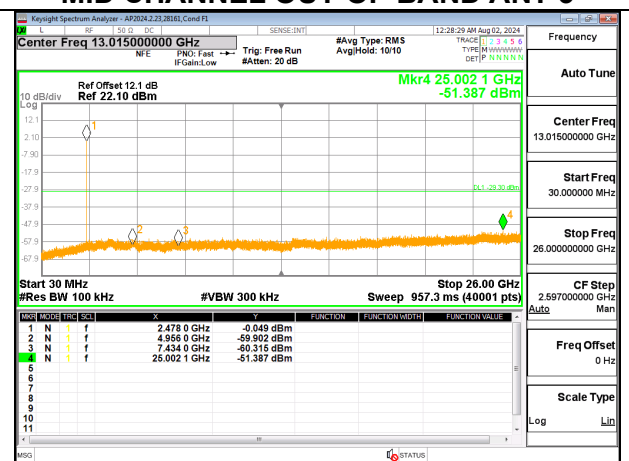
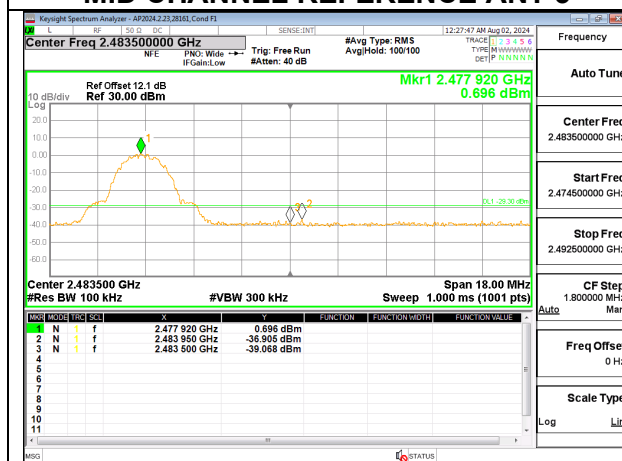
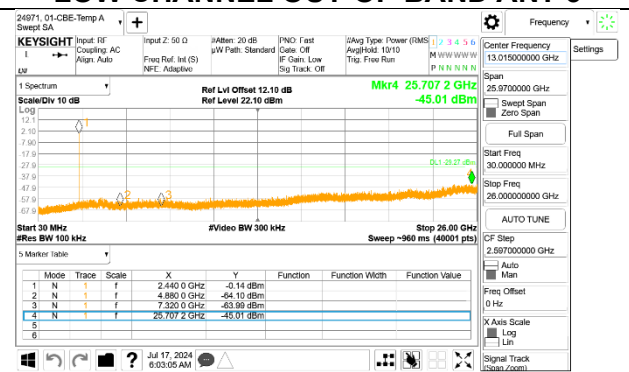
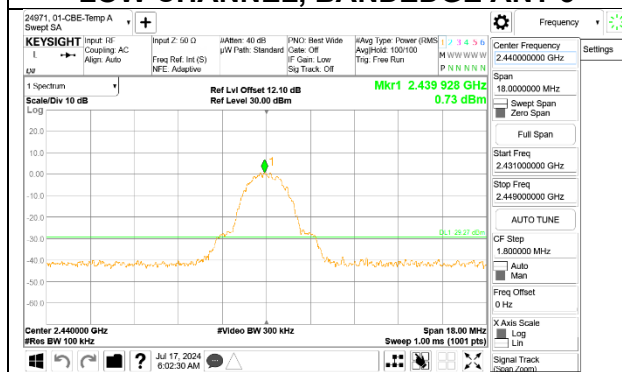
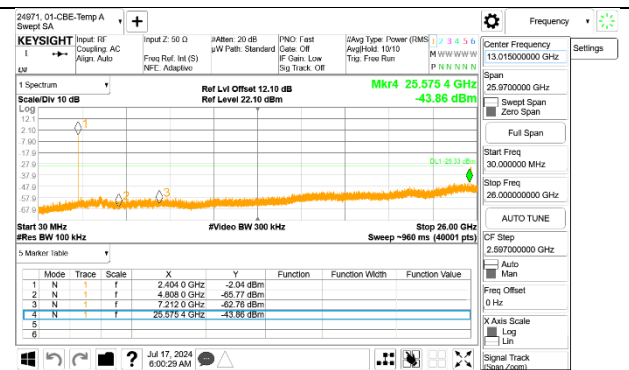
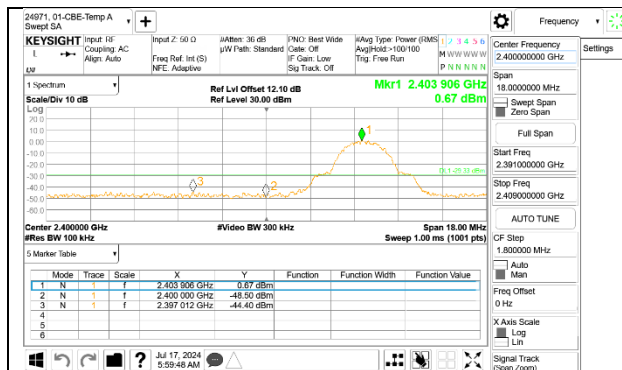
MID CHANNEL OUT-OF-BAND ANT 4



HIGH CHANNEL BANDEDGE ANT 4



HIGH CHANNEL OUT-OF-BAND ANT 4



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

Based 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

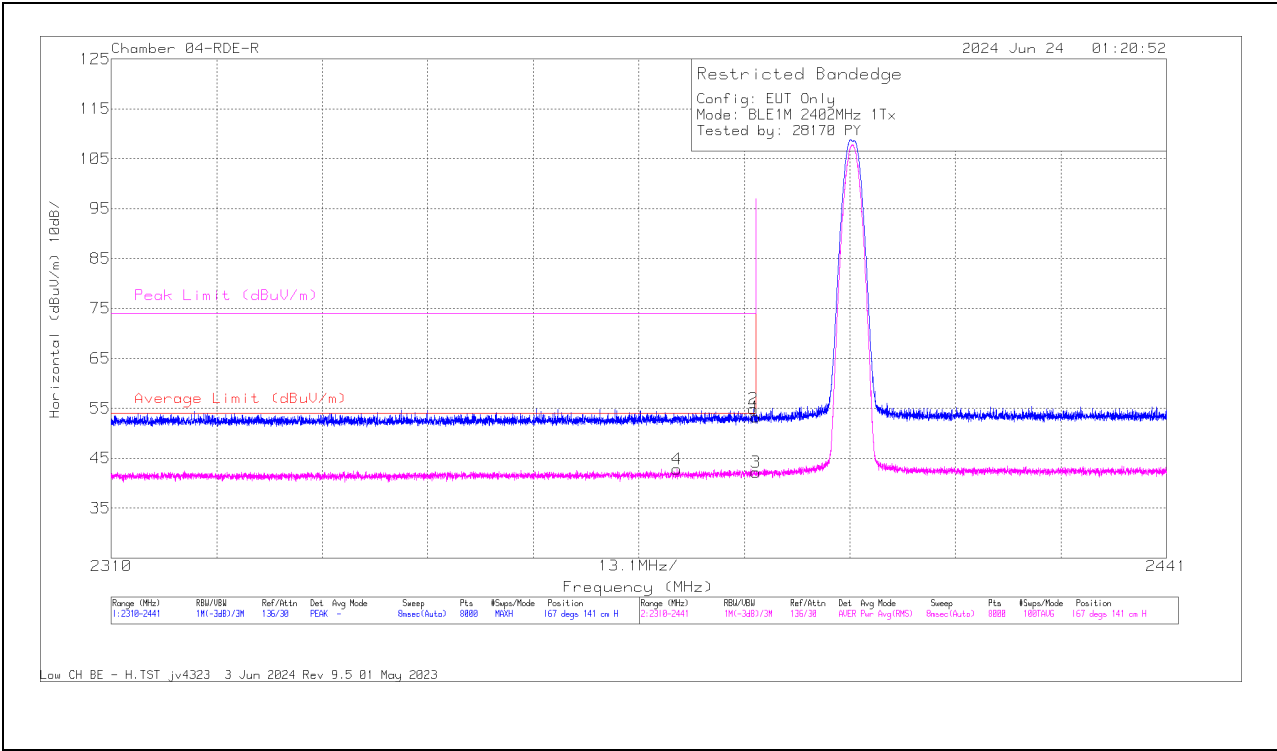
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

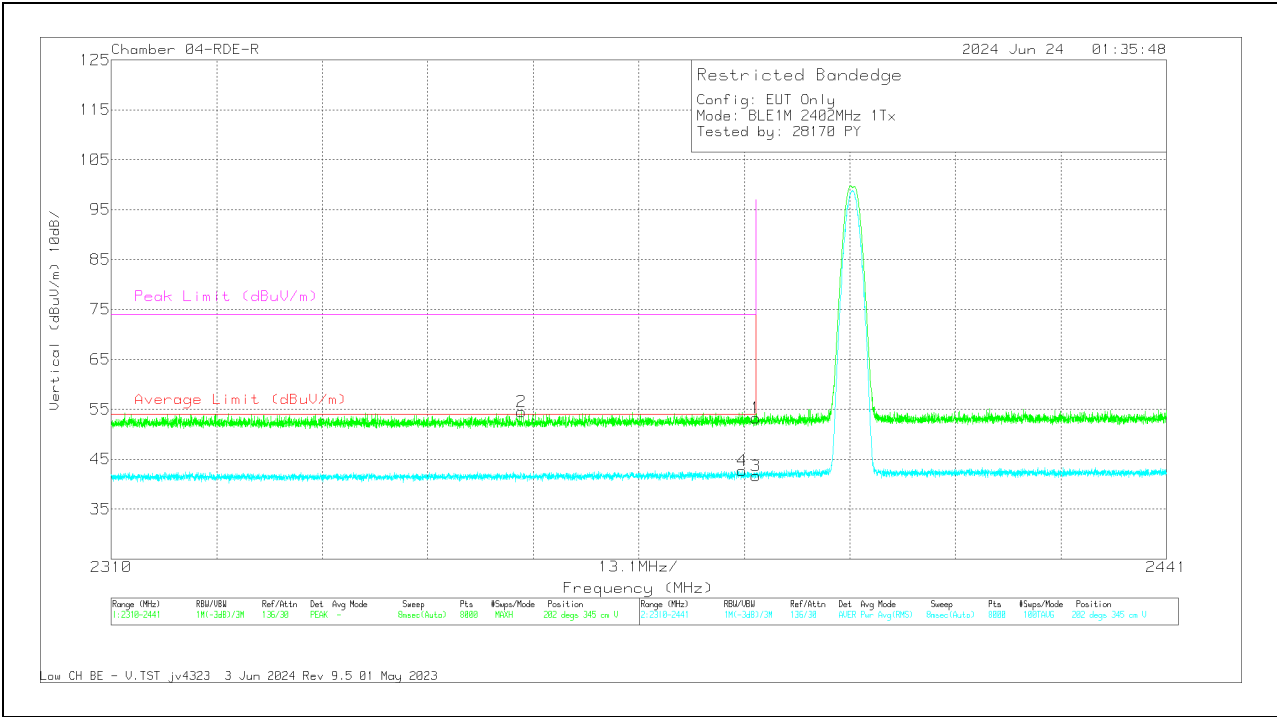
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2380.225	51.39	RMS	31.9	-40.47	42.82	54	-11.18	-	-	167	141	H
2	2389.723	63.37	Pk	32	-40.44	54.93	-	-	74	-19.07	167	141	H
1	2390	61.65	Pk	32	-40.44	53.21	-	-	74	-20.79	167	141	H
3	2390	50.62	RMS	32	-40.44	42.18	54	-11.82	-	-	167	141	H

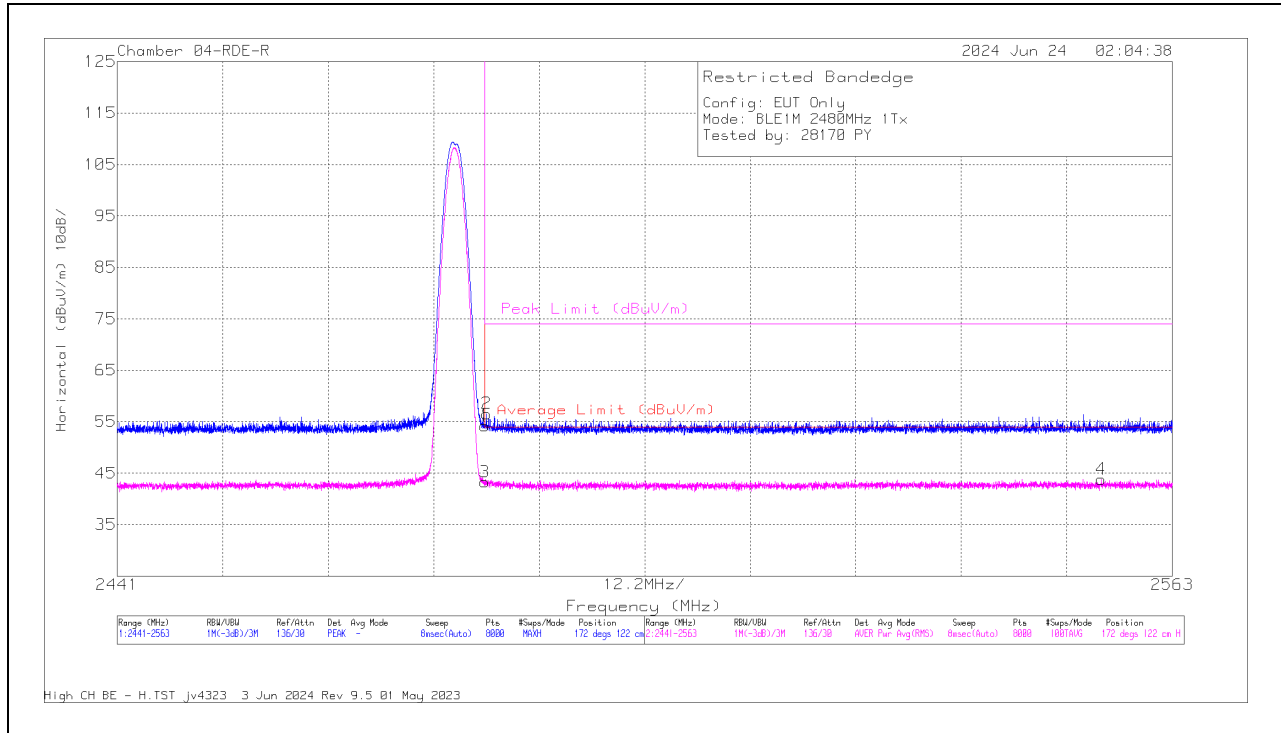
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2360.949	63.29	Pk	31.8	-40.54	54.55	-	-	74	-19.45	202	345	V
4	2388.348	51.18	RMS	32	-40.43	42.75	54	-11.25	-	-	202	345	V
1	2390	61.74	Pk	32	-40.44	53.3	-	-	74	-20.7	202	345	V
3	2390	50.08	RMS	32	-40.44	41.64	54	-12.36	-	-	202	345	V

Pk - Peak detector
RMS - RMS detection

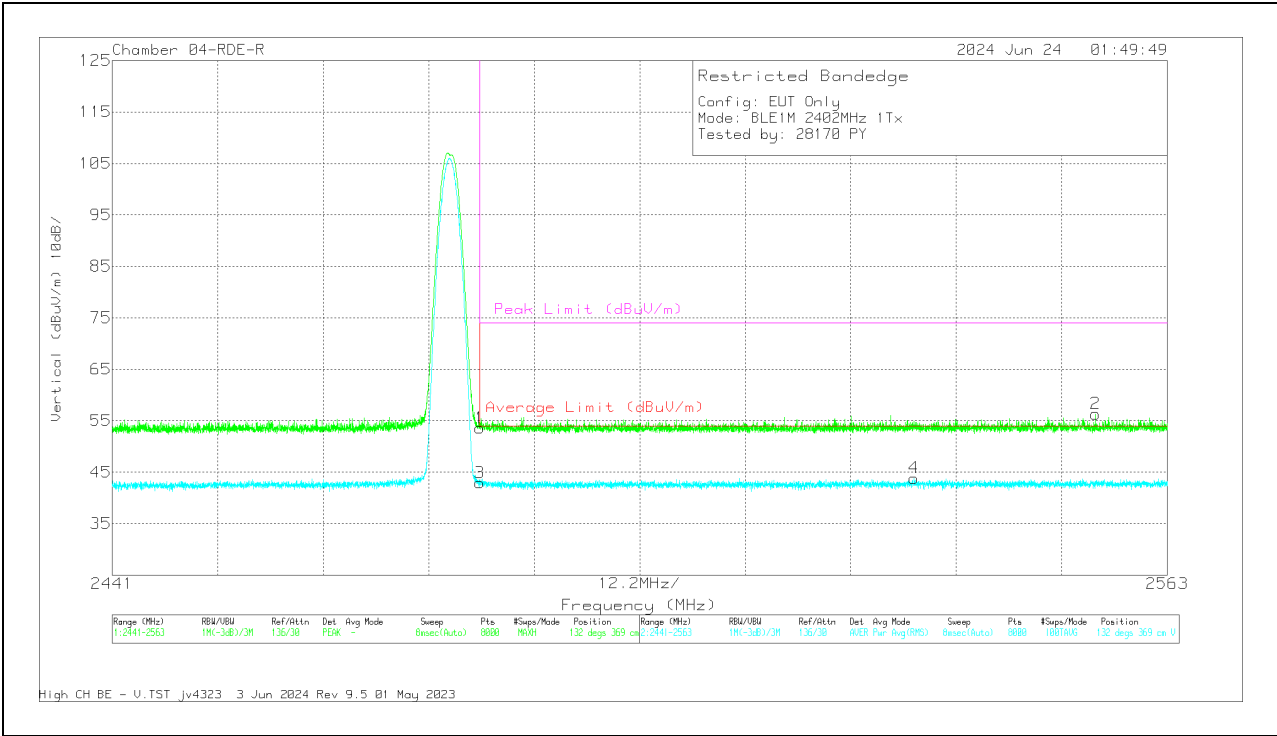
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	62.05	Pk	32.3	-40.12	54.23	-	-	74	-19.77	172	122	H
3	2483.5	51.13	RMS	32.3	-40.12	43.31	54	-10.69	-	-	172	122	H
2	2483.69	64.4	Pk	32.3	-40.12	56.58	-	-	74	-17.42	172	122	H
4	2554.765	51.34	RMS	32.3	-39.83	43.81	54	-10.19	-	-	172	122	H

Pk - Peak detector

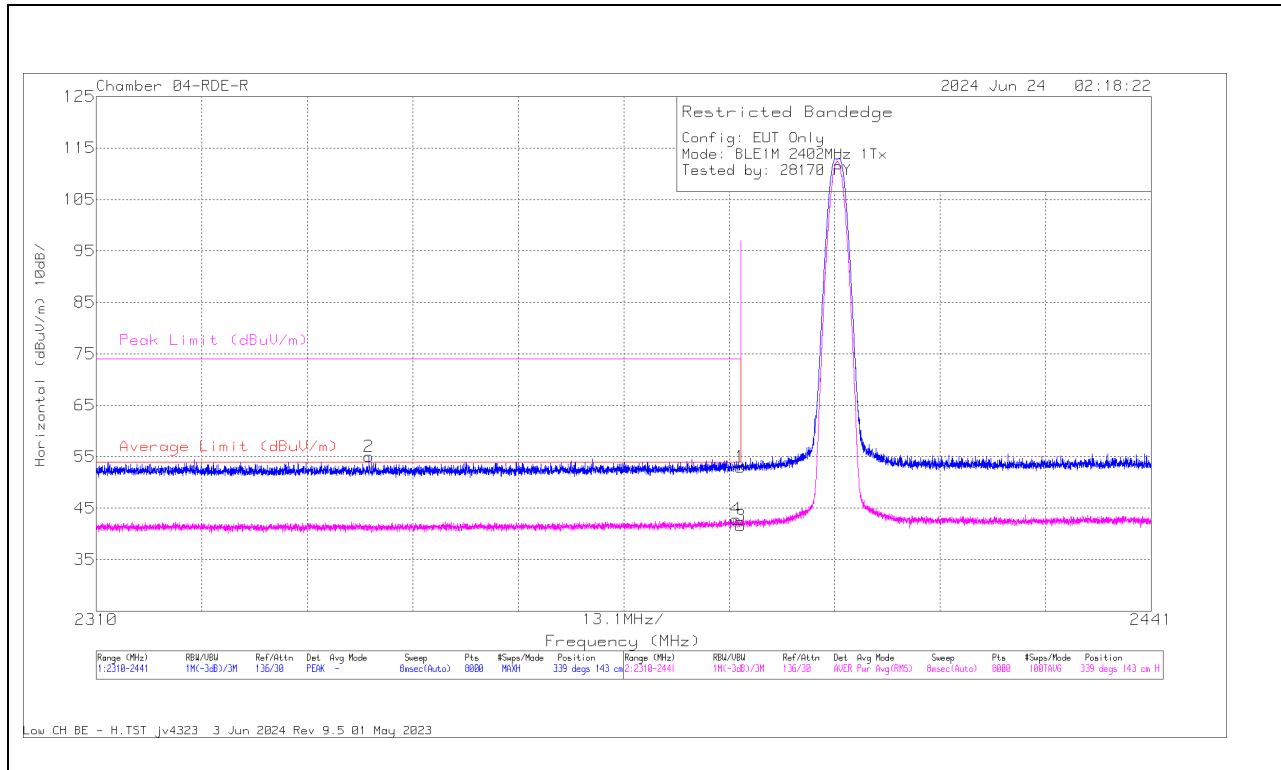
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	61.4	Pk	32.3	-40.12	53.58	-	-	74	-20.42	132	369	V
3	2483.5	50.76	RMS	32.3	-40.12	42.94	54	-11.06	-	-	132	369	V
4	2533.732	51.38	RMS	32.4	-39.92	43.86	54	-10.14	-	-	132	369	V
2	2554.704	63.87	Pk	32.3	-39.83	56.34	-	-	74	-17.66	132	369	V

Pk - Peak detector
RMS - RMS detection

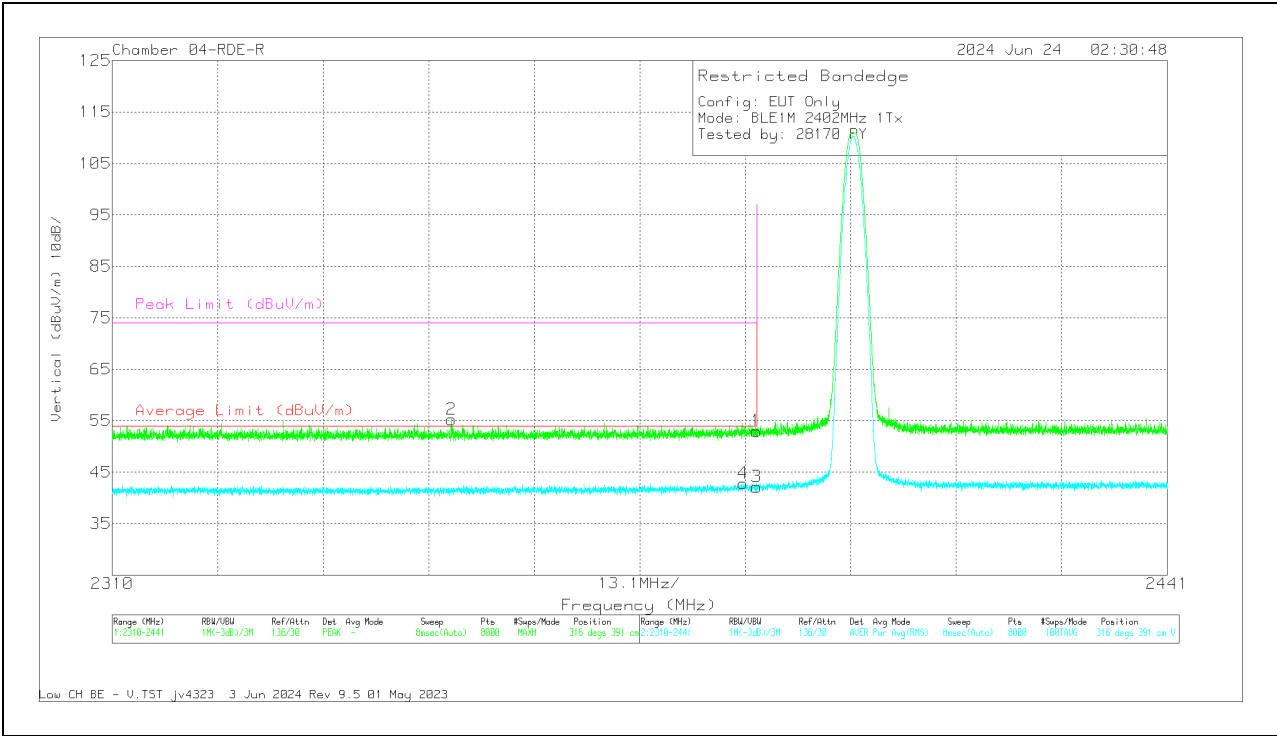
ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2343.835	63.83	Pk	31.8	-40.6	55.03	-	-	74	-18.97	339	143	H
4	2389.461	51.32	RMS	32	-40.43	42.89	54	-11.11	-	-	339	143	H
1	2390	61.44	Pk	32	-40.44	53	-	-	74	-21	339	143	H
3	2390	50.03	RMS	32	-40.44	41.59	54	-12.41	-	-	339	143	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

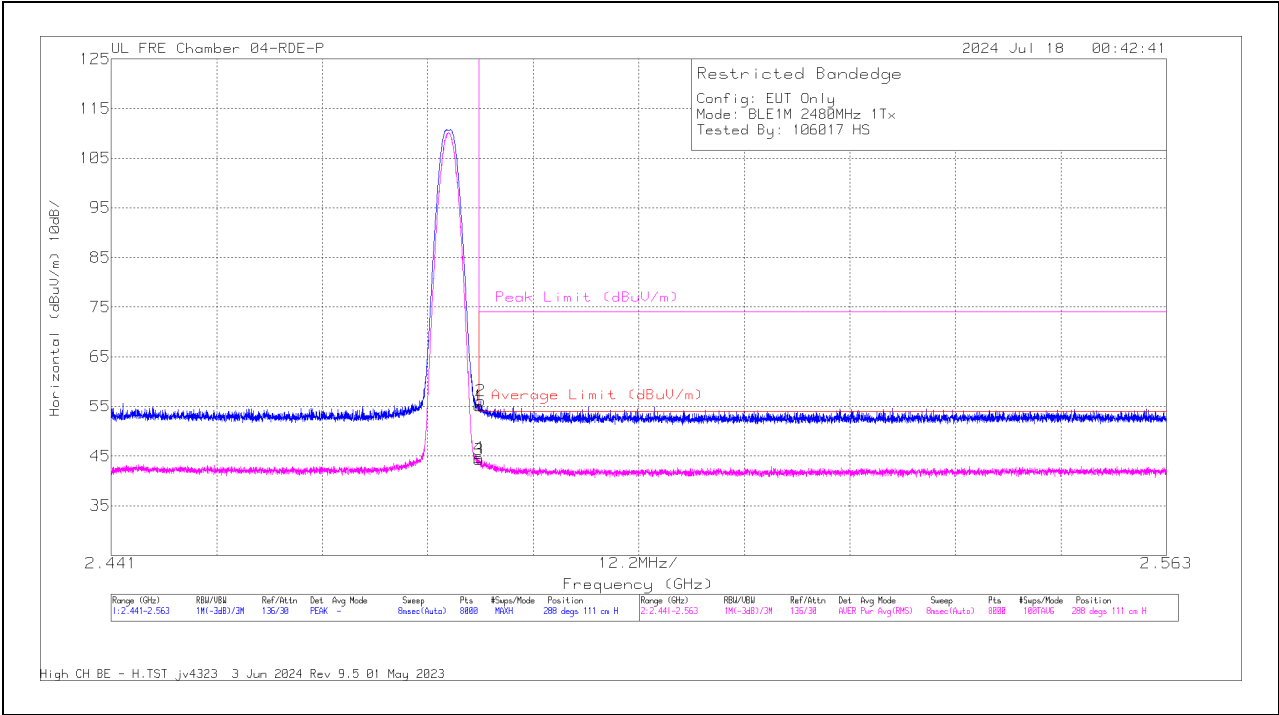


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2352.122	64.05	Pk	31.8	0	-40.6	55.25	-	-	74	-18.75	316	391	V
4	2388.331	51.26	RMS	32	0	-40.43	42.83	54	-11.17	-	-	316	391	V
1	2390	61.47	Pk	32	0	-40.44	53.03	-	-	74	-20.97	316	391	V
3	2390	50.61	RMS	32	0	-40.44	42.17	54	-11.83	-	-	316	391	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

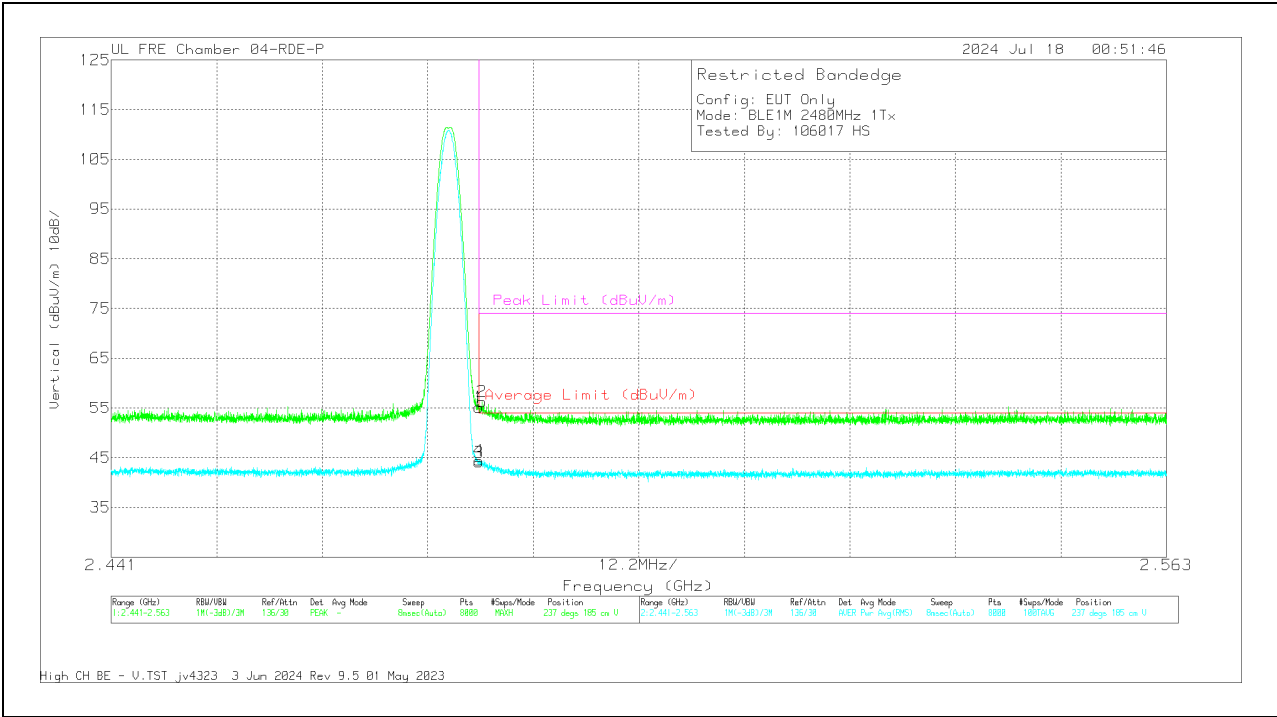
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (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	63.77	Pk	32.2	0	-40.83	55.14	-	-	74	-18.86	288	111	H
3	2.4835	52.94	RMS	32.2	0	-40.83	44.31	54	-9.69	-	-	288	111	H
4	2.483507	53.25	RMS	32.2	0	-40.83	44.62	54	-9.38	-	-	288	111	H
2	2.483751	64.79	Pk	32.2	0	-40.83	56.16	-	-	74	-17.84	288	111	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



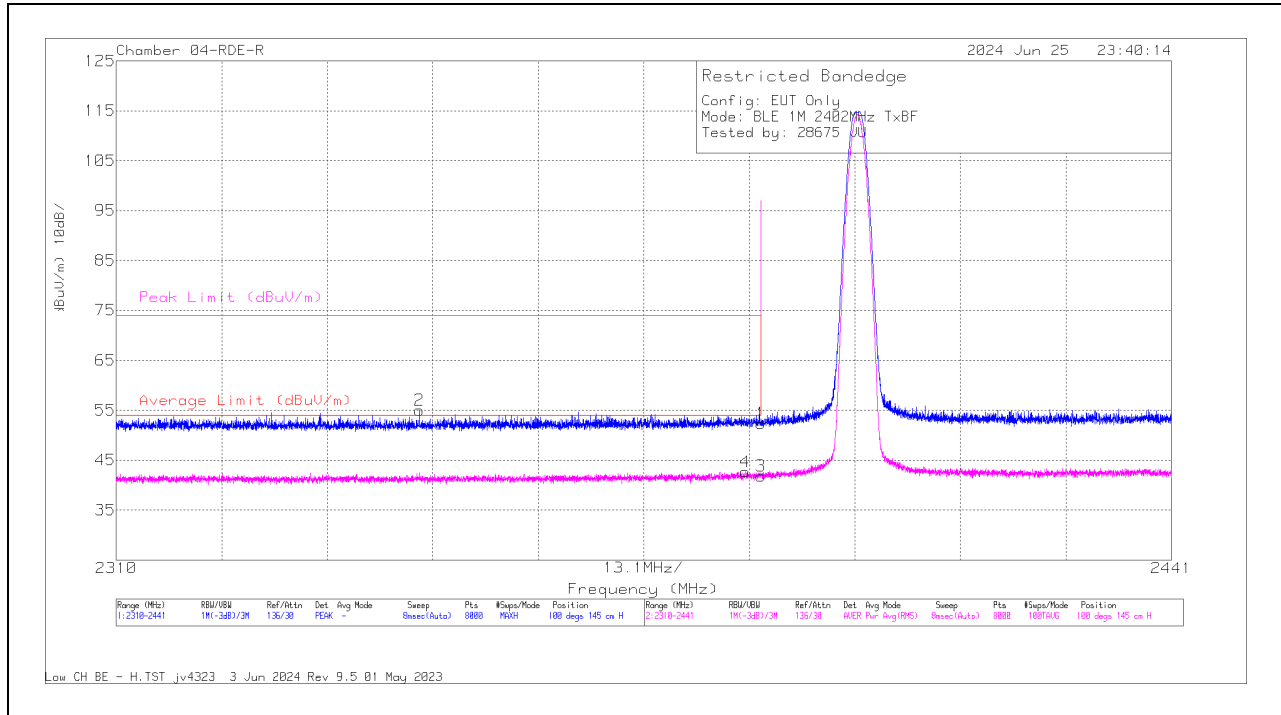
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	63.71	Pk	32.2	0	-40.83	55.08	-	-	74	-18.92	237	185	V
3	2.4835	52.71	RMS	32.2	0	-40.83	44.08	54	-9.92	-	-	237	185	V
4	2.483538	53.09	RMS	32.2	0	-40.83	44.46	54	-9.54	-	-	237	185	V
2	2.483889	64.88	Pk	32.2	0	-40.83	56.25	-	-	74	-17.75	237	185	V

Pk - Peak detector
RMS - RMS detection

10.2.2. HIGH POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

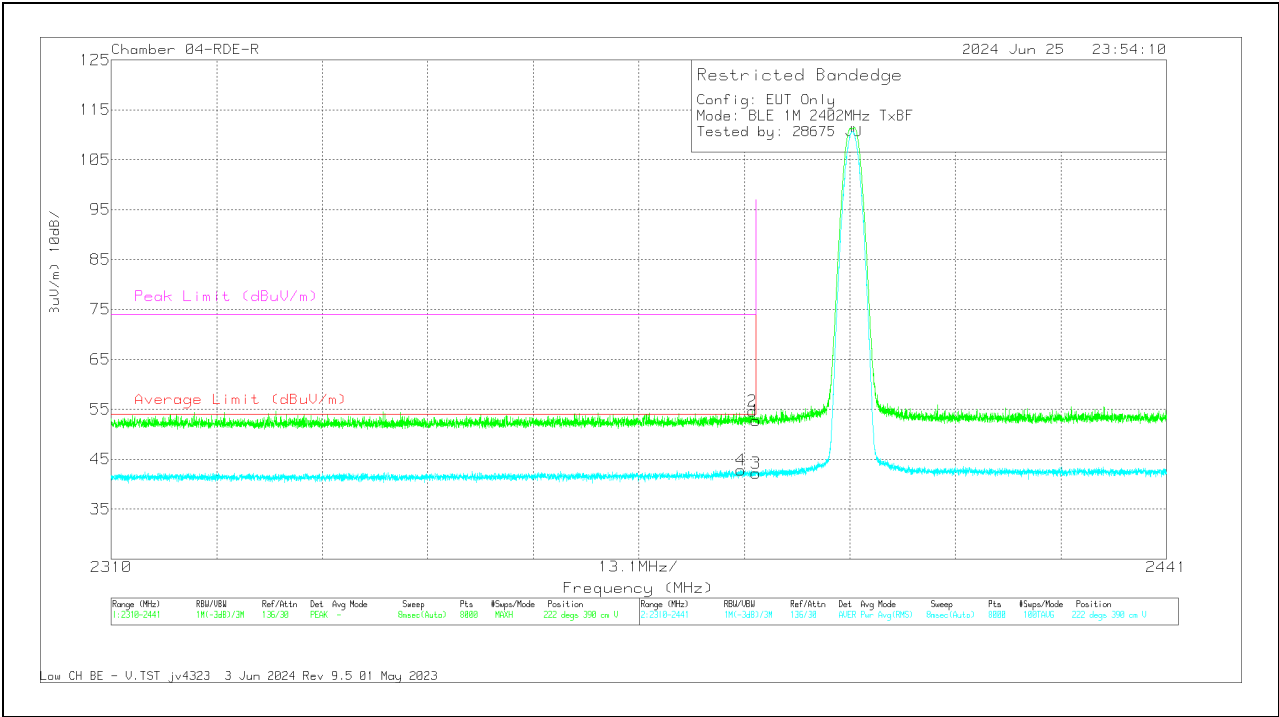


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2347.651	63.77	Pk	31.8	-40.59	54.98	-	-	74	-19.02	100	145	H
4	2388.069	51.08	RMS	32	-40.43	42.65	54	-11.35	-	-	100	145	H
1	2390	60.78	Pk	32	-40.44	52.34	-	-	74	-21.66	100	145	H
3	2390	50.22	RMS	32	-40.44	41.78	54	-12.22	-	-	100	145	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

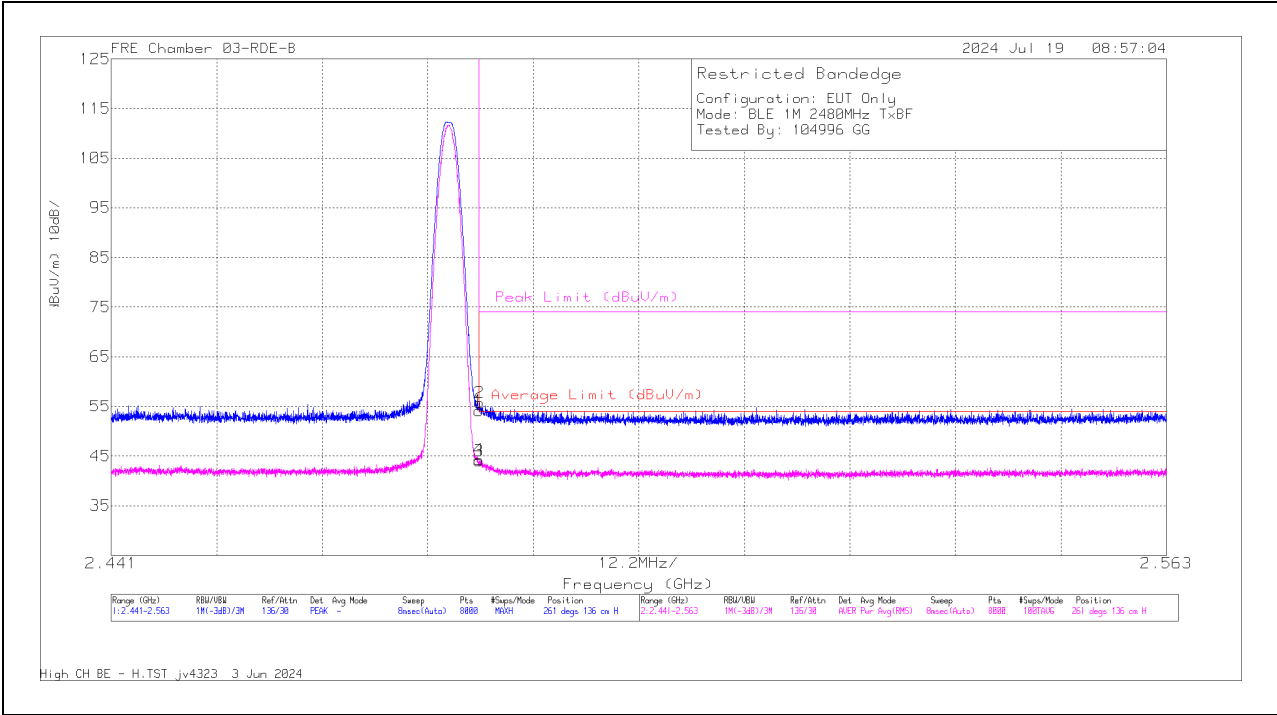


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2388.151	51.28	RMS	32	-40.43	42.85	54	-11.15	-	-	222	390	V
2	2389.609	63.08	Pk	32	-40.44	54.64	-	-	74	-19.36	222	390	V
1	2390	61.16	Pk	32	-40.44	52.72	-	-	74	-21.28	222	390	V
3	2390	50.6	RMS	32	-40.44	42.16	54	-11.84	-	-	222	390	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

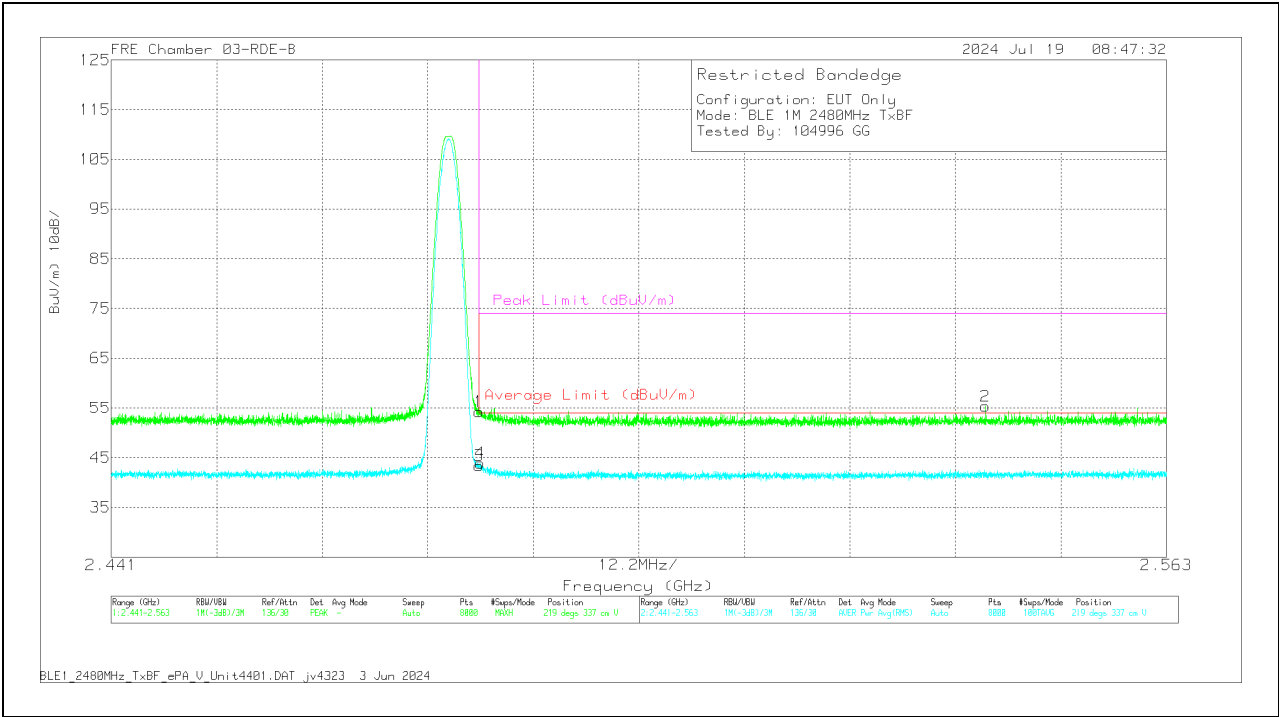
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	236300 ACF (dB/m)	Gain/Loss (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	63.45	Pk	32.2	-41.5	54.15	-	-	74	-19.85	261	136	H
2	* 2.483568	65.01	Pk	32.2	-41.5	55.71	-	-	74	-18.29	261	136	H
3	* 2.4835	53.37	RMS	32.2	-41.5	44.07	54	-9.93	-	-	261	136	H
4	* 2.483523	53.57	RMS	32.2	-41.5	44.27	54	-9.73	-	-	261	136	H

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

VERTICAL RESULT



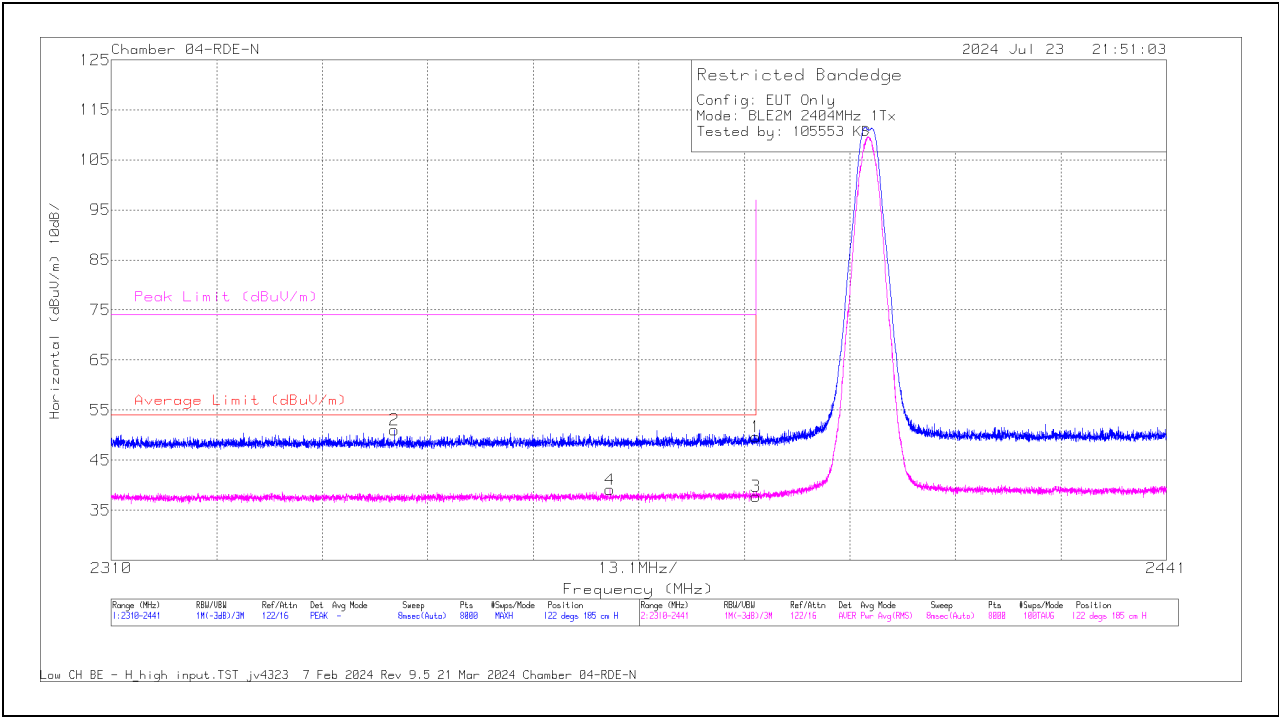
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

10.2.3. HIGH POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

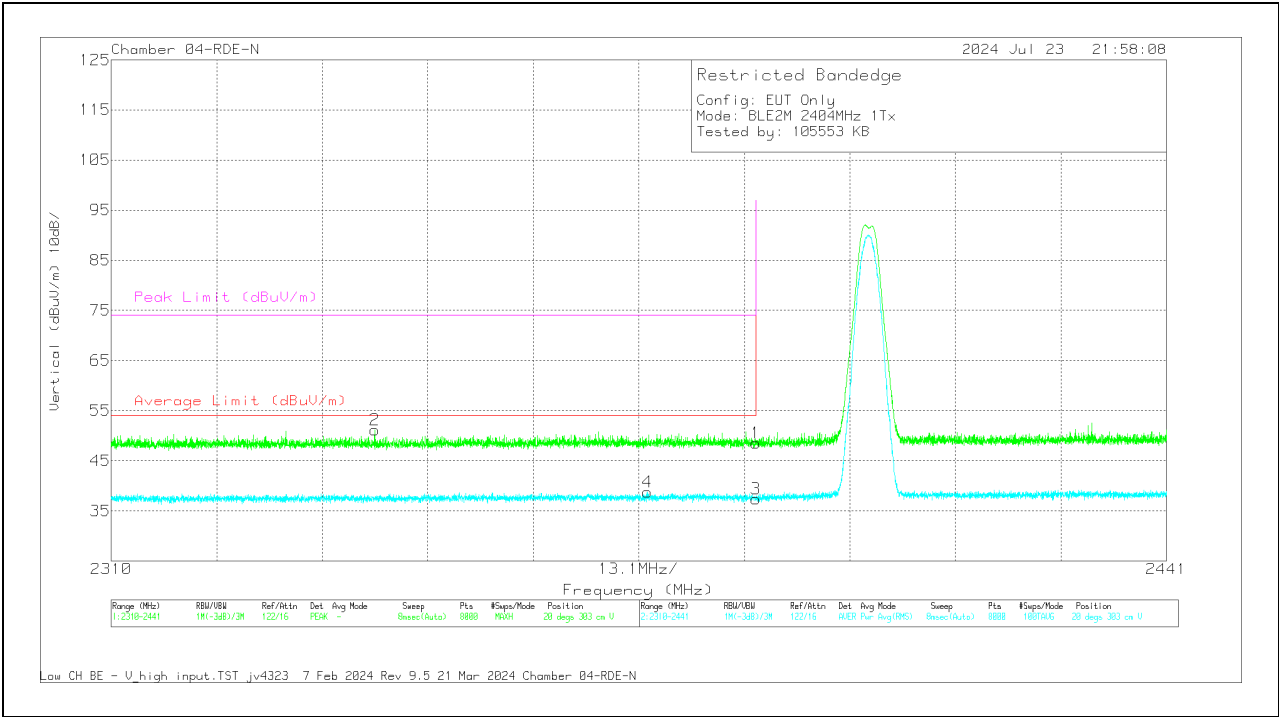
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2345.129	46.57	Pk	31.6	-27.19	50.98	-	-	74	-23.02	122	185	H
4	2371.889	34.45	RMS	31.7	-27.07	39.08	54	-14.92	-	-	122	185	H
1	2390	45.07	Pk	31.8	-27.17	49.7	-	-	74	-24.3	122	185	H
3	2390	33.14	RMS	31.8	-27.17	37.77	54	-16.23	-	-	122	185	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

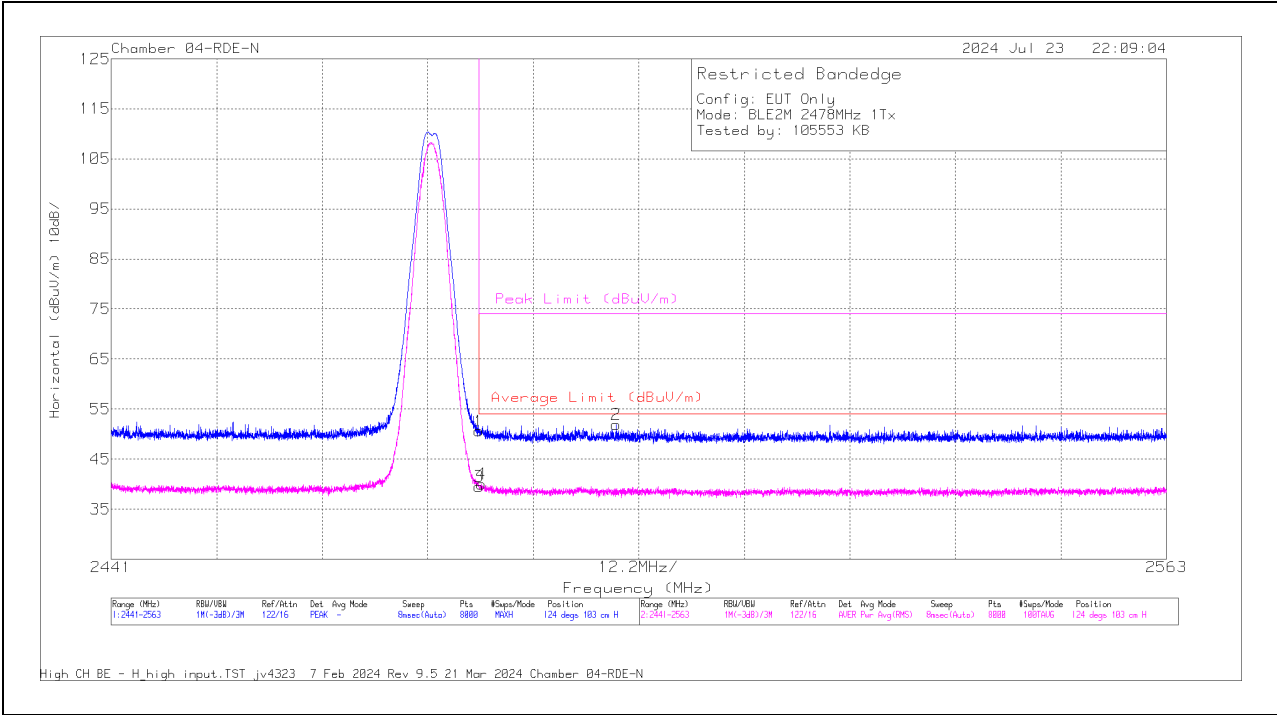


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2342.705	46.73	Pk	31.6	-27.18	51.15	-	-	74	-22.85	20	303	V
4	2376.573	34.18	RMS	31.7	-27.15	38.73	54	-15.27	-	-	20	303	V
1	2390	43.93	Pk	31.8	-27.17	48.56	-	-	74	-25.44	20	303	V
3	2390	32.71	RMS	31.8	-27.17	37.34	54	-16.66	-	-	20	303	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

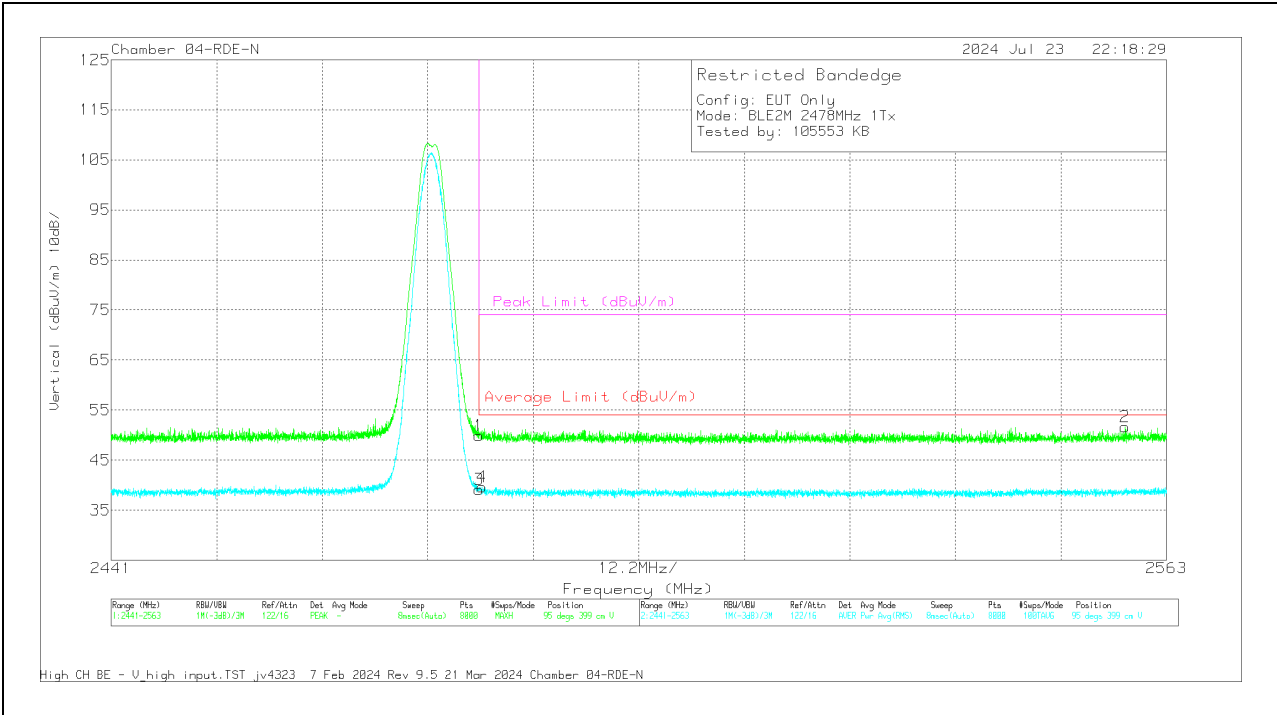
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (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	45.39	Pk	32.2	-27	50.59	-	-	74	-23.41	124	103	H
3	2483.5	34.31	RMS	32.2	-27	39.51	54	-14.49	-	-	124	103	H
4	2483.828	34.79	RMS	32.2	-26.99	40	54	-14	-	-	124	103	H
2	2499.369	46.63	Pk	32.2	-26.94	51.89	-	-	74	-22.11	124	103	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



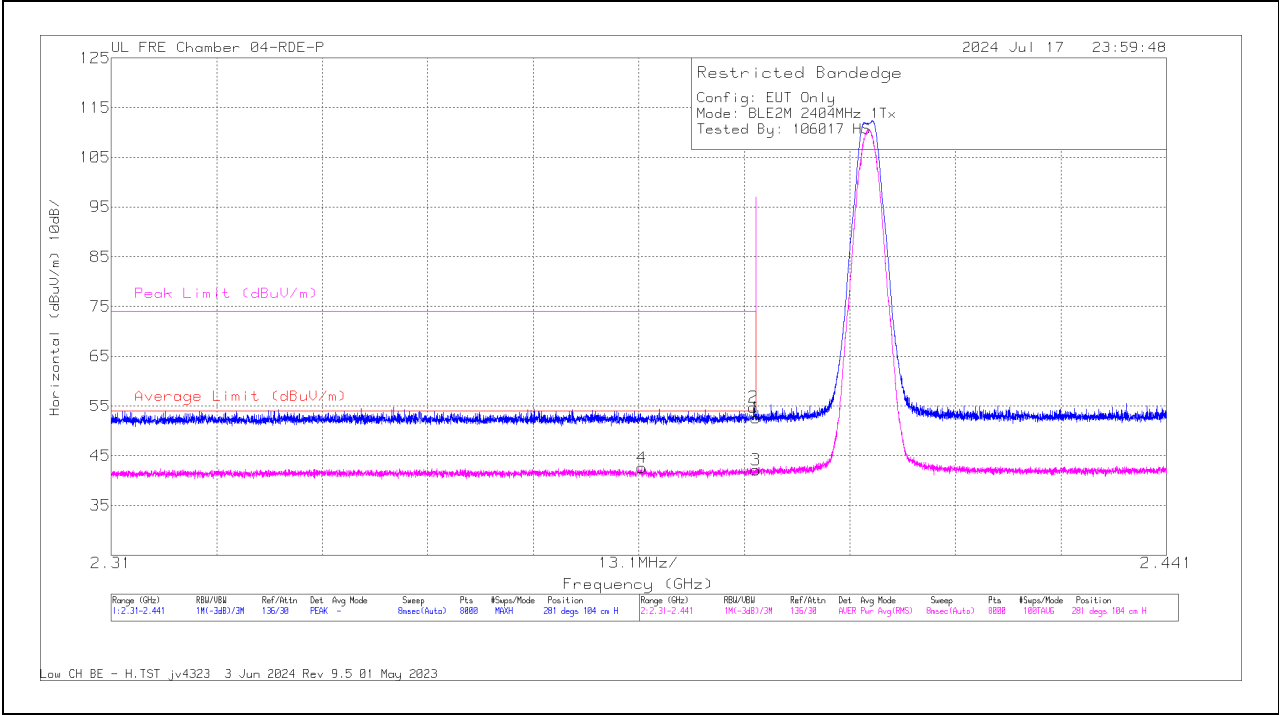
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	44.72	Pk	32.2	-27	49.92	-	-	74	-24.08	95	399	V
3	2483.5	33.89	RMS	32.2	-27	39.09	54	-14.91	-	-	95	399	V
4	2483.904	34.4	RMS	32.2	-26.99	39.61	54	-14.39	-	-	95	399	V
2	2558.212	46.3	Pk	32.2	-26.84	51.66	-	-	74	-22.34	95	399	V

Pk - Peak detector
RMS - RMS detection

ANT 3

BANDEDGE (LOW CHANNEL)

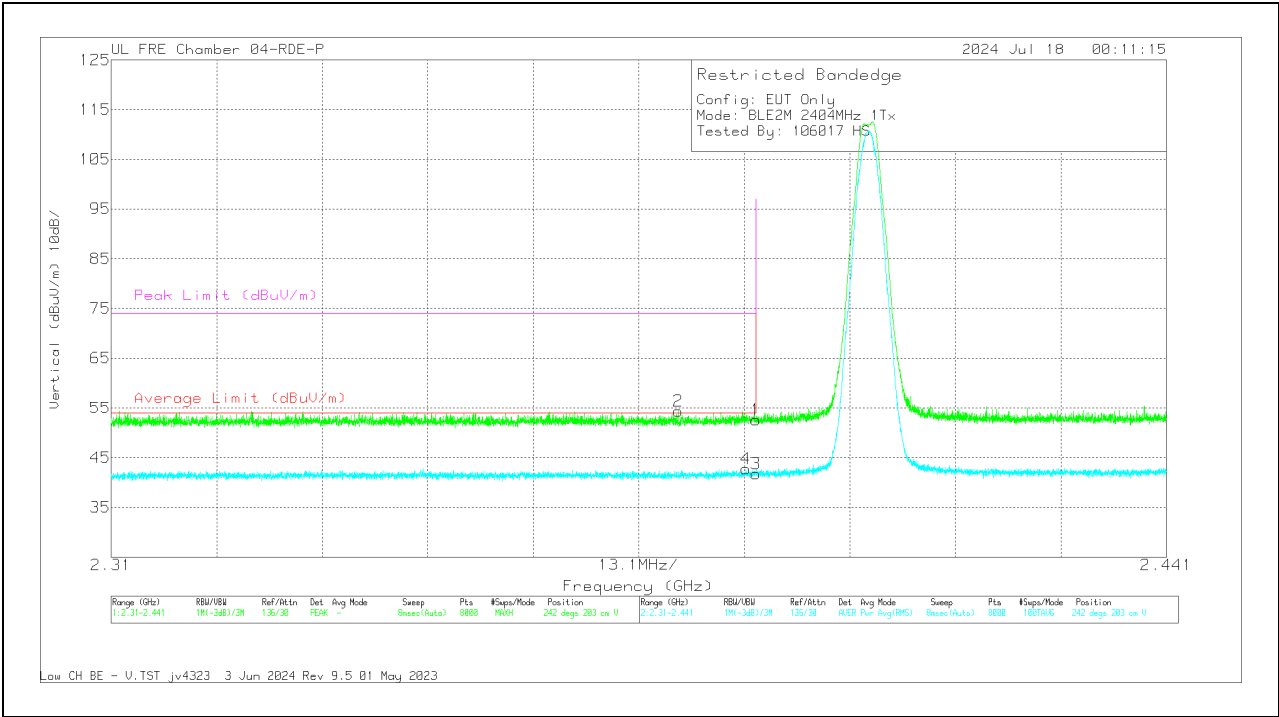
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.375852	51.36	RMS	32	0	-40.78	42.58	54	-11.42	-	-	281	104	H
2	2.389756	63.49	Pk	32	0	-40.75	54.74	-	-	74	-19.26	281	104	H
1	2.39	61.4	Pk	32	0	-40.75	52.65	-	-	74	-21.35	281	104	H
3	2.39	50.84	RMS	32	0	-40.75	42.09	54	-11.91	-	-	281	104	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

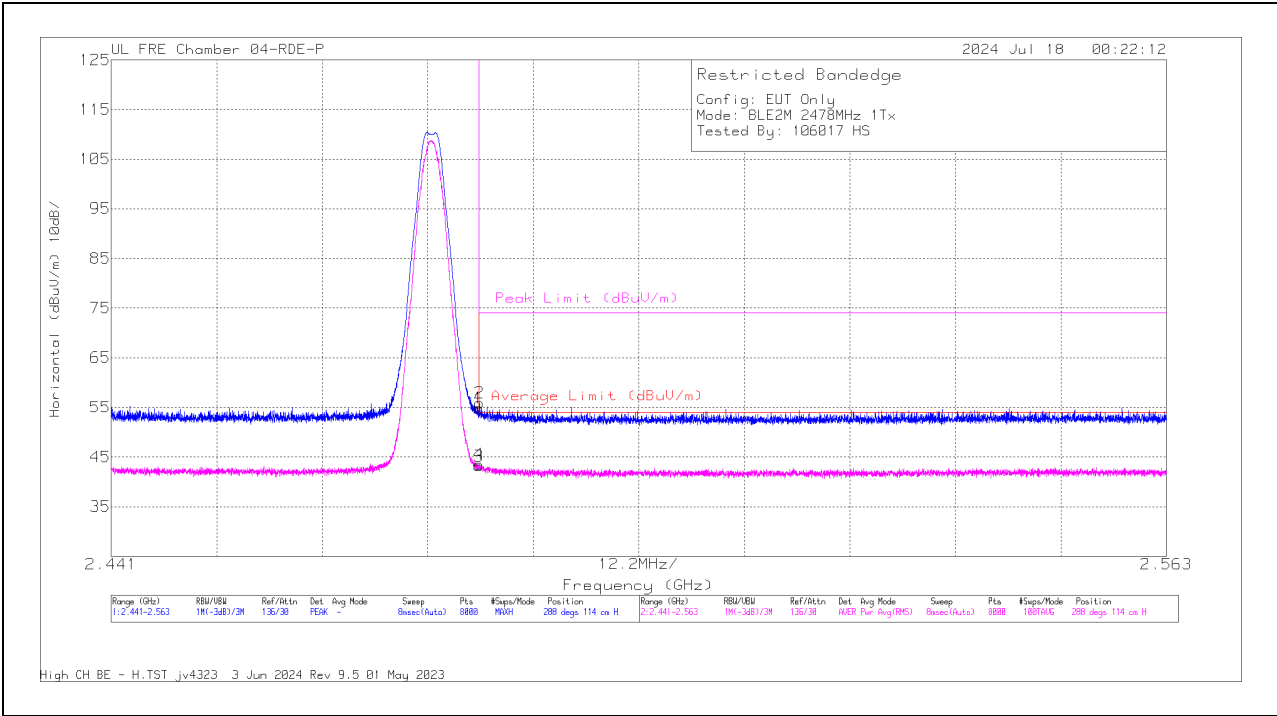


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.380388	63.19	Pk	32	0	-40.78	54.41	-	-	74	-19.59	242	203	V
4	2.388823	51.48	RMS	32	0	-40.75	42.73	54	-11.27	-	-	242	203	V
1	2.39	61.38	Pk	32	0	-40.75	52.63	-	-	74	-21.37	242	203	V
3	2.39	50.46	RMS	32	0	-40.75	41.71	54	-12.29	-	-	242	203	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

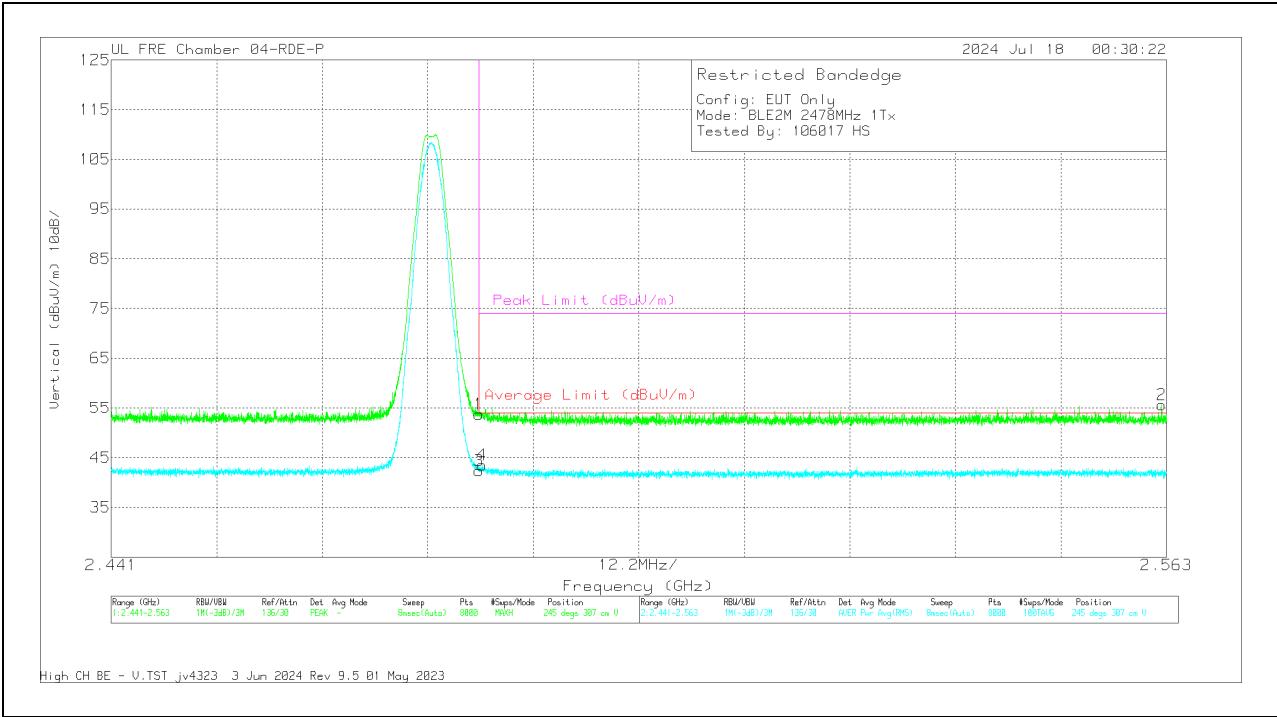
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (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	63.49	Pk	32.2	0	-40.83	54.86	-	-	74	-19.14	288	114	H
3	*2.4835	51.83	RMS	32.2	0	-40.83	43.2	54	-10.8	-	-	288	114	H
4	2.483507	52.12	RMS	32.2	0	-40.83	43.49	54	-10.51	-	-	288	114	H
2	2.483553	64.5	Pk	32.2	0	-40.83	55.87	-	-	74	-18.13	288	114	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

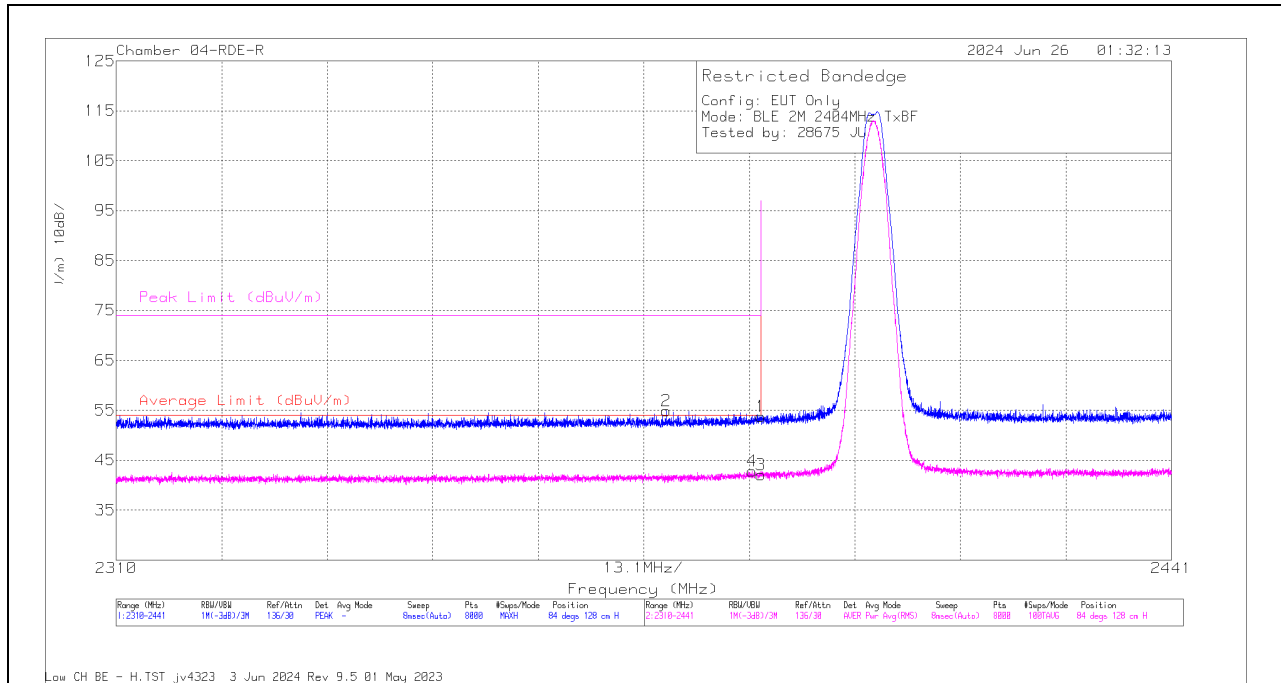


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	62.39	Pk	32.2	0	-40.83	53.76	-	-	74	-20.24	245	307	V
3	2.4835	51.01	RMS	32.2	0	-40.83	42.38	54	-11.62	-	-	245	307	V
4	2.483889	52.13	RMS	32.2	0	-40.83	43.5	54	-10.5	-	-	245	307	V
2	2.562452	64.07	Pk	32.2	0	-40.64	55.63	-	-	74	-18.37	245	307	V

Pk - Peak detector
RMS - RMS detection

10.2.4. HIGH POWER BLE TXBF (2Mbps) BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

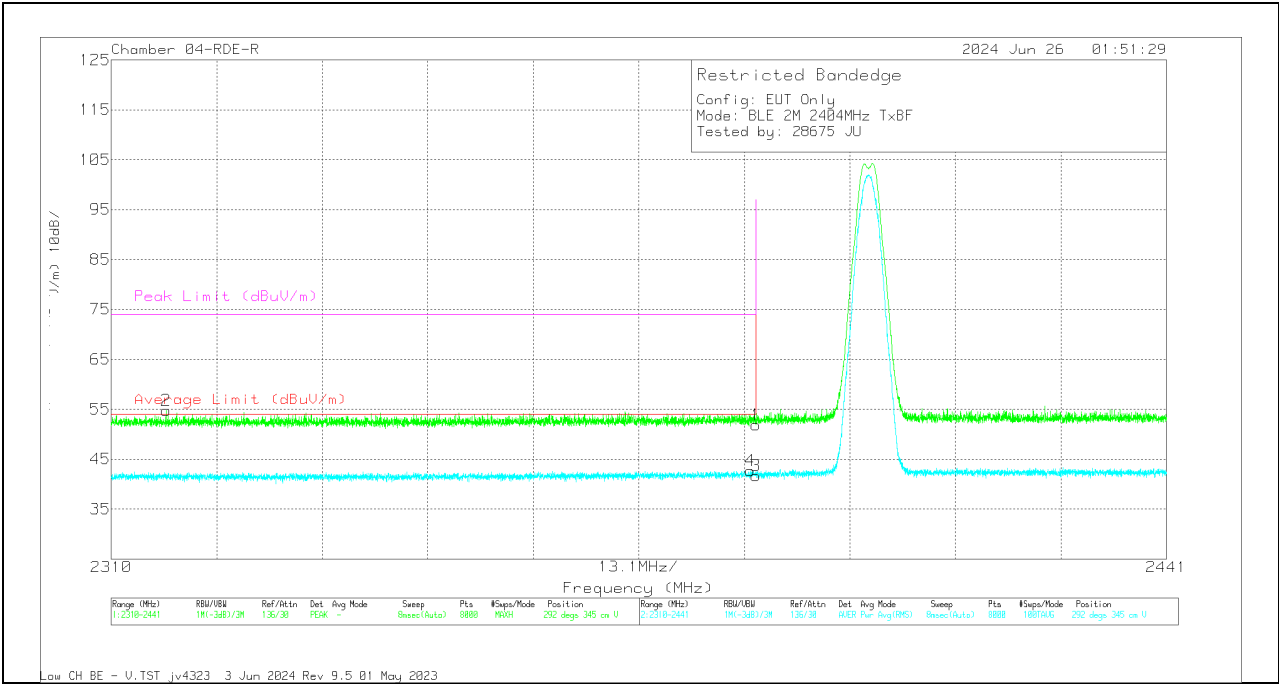


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2378.276	63.52	Pk	31.9	-40.48	54.94	-	-	74	-19.06	84	128	H
4	2388.954	51.23	RMS	32	-40.43	42.8	54	-11.2	-	-	84	128	H
1	2390	62.22	Pk	32	-40.44	53.78	-	-	74	-20.22	84	128	H
3	2390	50.51	RMS	32	-40.44	42.07	54	-11.93	-	-	84	128	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

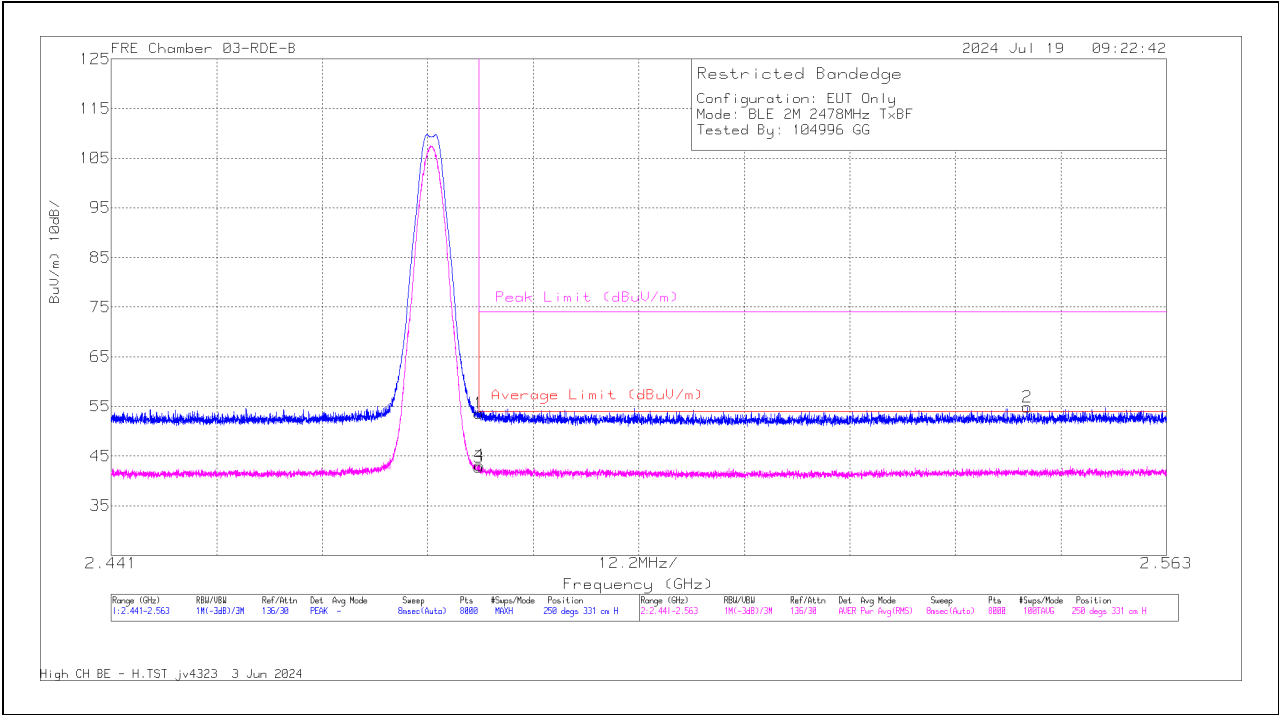


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2316.829	63.61	Pk	31.7	-40.55	54.76	-	-	74	-19.24	292	345	V
4	2389.363	51.17	RMS	32	-40.43	42.74	54	-11.26	-	-	292	345	V
1	2390	60.35	Pk	32	-40.44	51.91	-	-	74	-22.09	292	345	V
3	2390	50.17	RMS	32	-40.44	41.73	54	-12.27	-	-	292	345	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

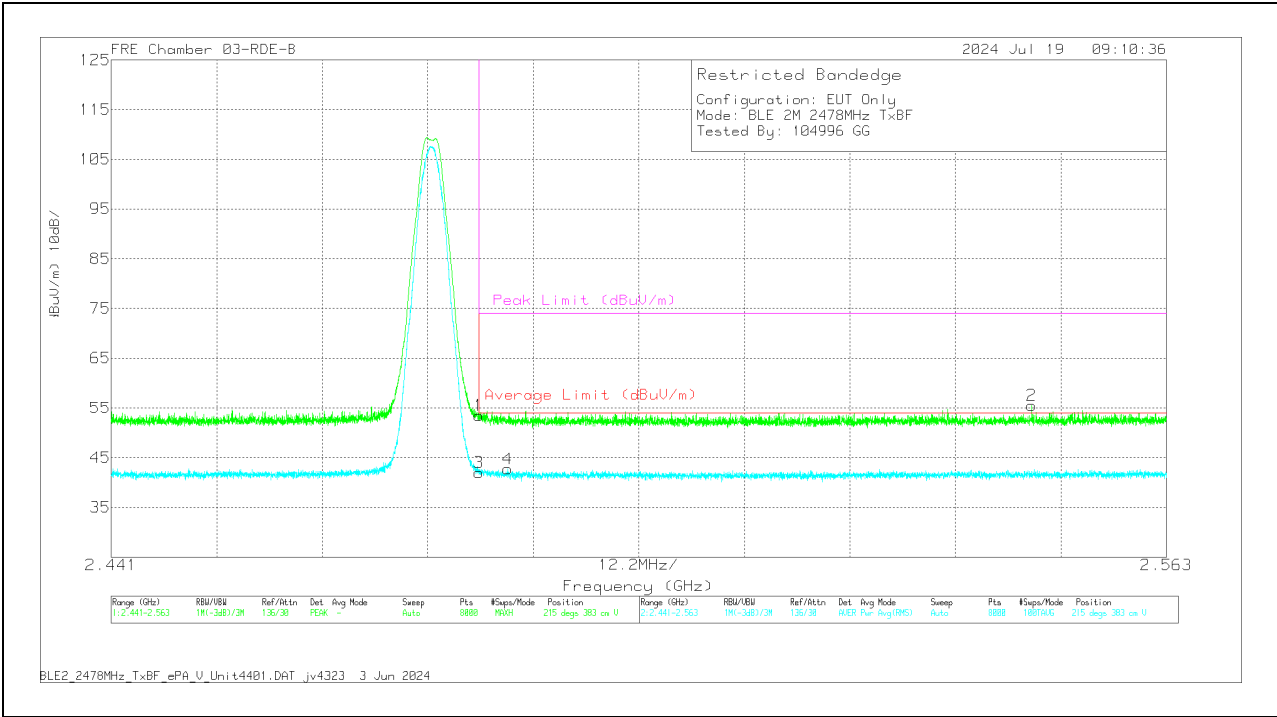
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (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	62.9	Pk	32.2	-41.5	53.6	-	-	74	-20.4	250	331	H
3	* 2.4835	52.07	RMS	32.2	-41.5	42.77	54	-11.23	-	-	250	331	H
4	* 2.483614	52.41	RMS	32.2	-41.5	43.11	54	-10.89	-	-	250	331	H
2	2.546879	63.79	Pk	32.3	-41.21	54.88	-	-	74	-19.12	250	331	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	230300 ACF (dB/m)	Gain/Loss (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	62.76	Pk	32.2	-41.5	53.46	-	-	74	-20.54	215	383	V
3	* 2.4835	51.35	RMS	32.2	-41.5	42.05	54	-11.95	-	-	215	383	V
4	* 2.486832	52.01	RMS	32.2	-41.5	42.71	54	-11.29	-	-	215	383	V
2	2.547428	64.42	Pk	32.3	-41.24	55.48	-	-	74	-18.52	215	383	V

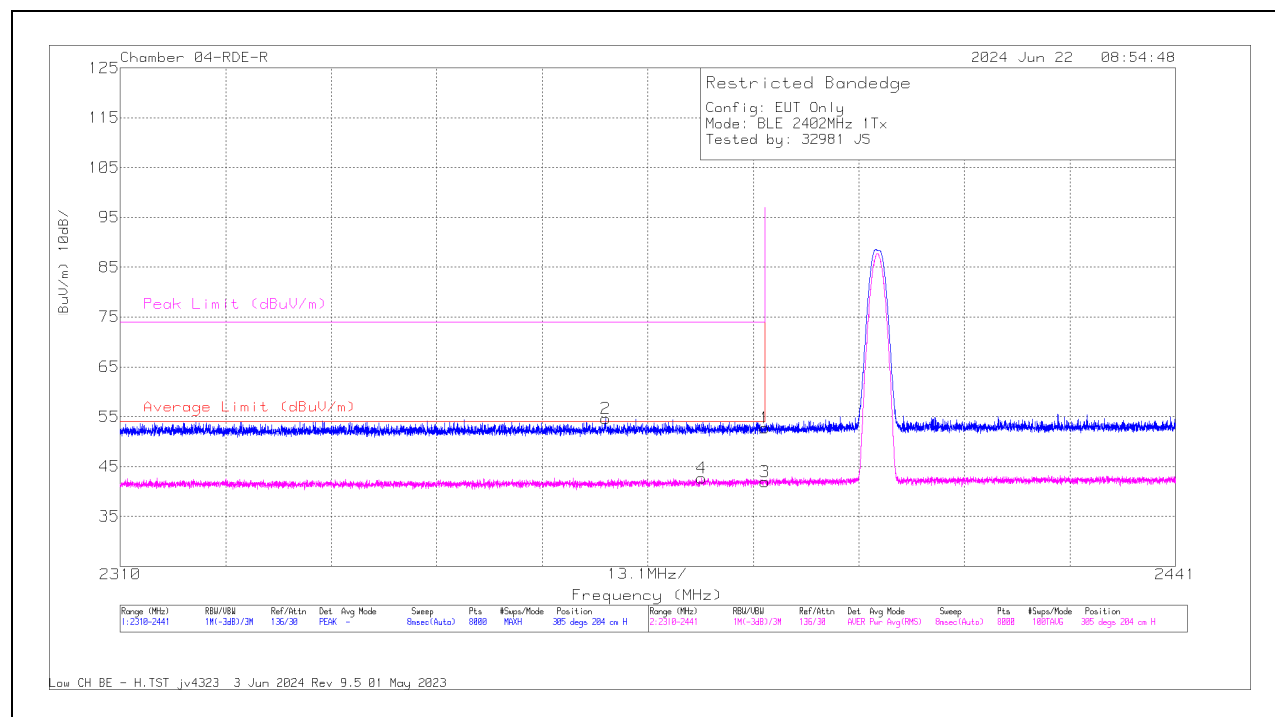
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

10.2.5. LOW POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

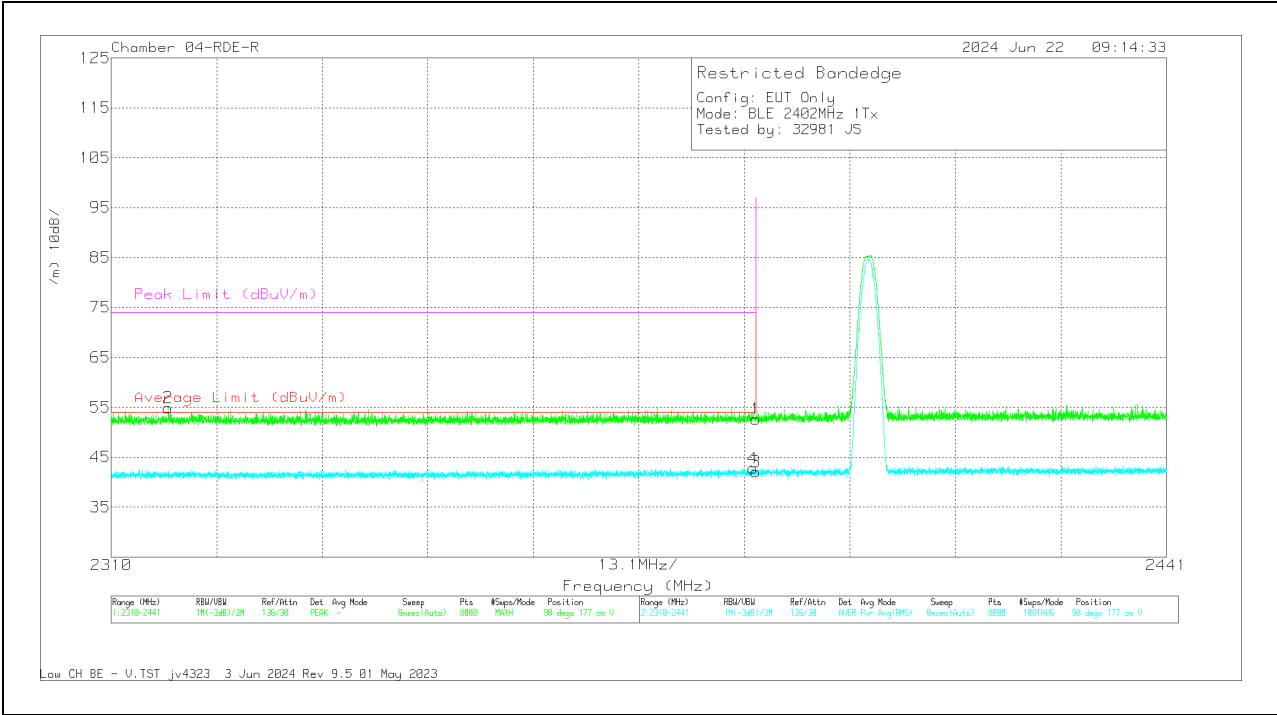


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2370.251	63.26	Pk	31.9	-40.55	54.61	-	-	74	-19.39	305	204	H
4	2382.206	51.28	RMS	31.9	-40.46	42.72	54	-11.28	-	-	305	204	H
1	2390	61.15	Pk	32	-40.44	52.71	-	-	74	-21.29	305	204	H
3	2390	50.36	RMS	32	-40.44	41.92	54	-12.08	-	-	305	204	H

Pk - Peak detector

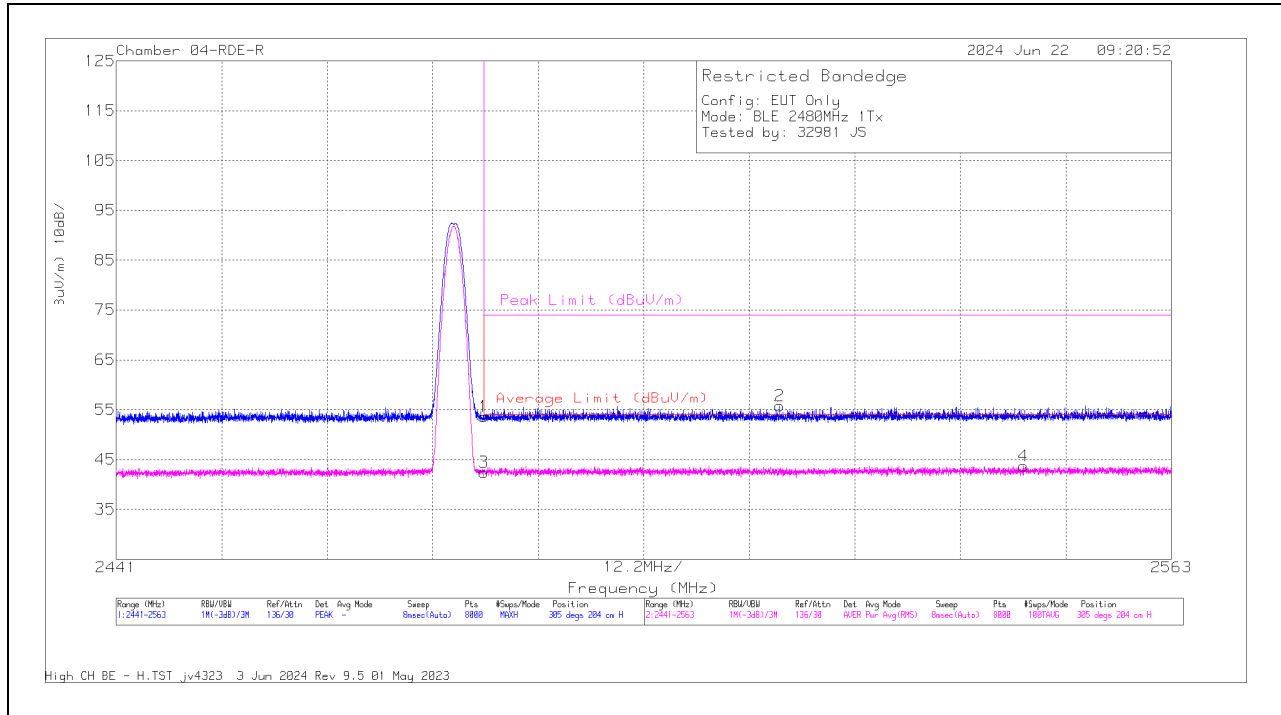
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2317.091	63.74	Pk	31.7	0	-40.55	54.89	-	-	74	-19.11	98	177	V
4	2389.674	51.21	RMS	32	0	-40.44	42.77	54	-11.23	-	-	98	177	V
1	2390	61.07	Pk	32	0	-40.44	52.63	-	-	74	-21.37	98	177	V
3	2390	50.48	RMS	32	0	-40.44	42.04	54	-11.96	-	-	98	177	V

Pk - Peak detector
RMS - RMS detection

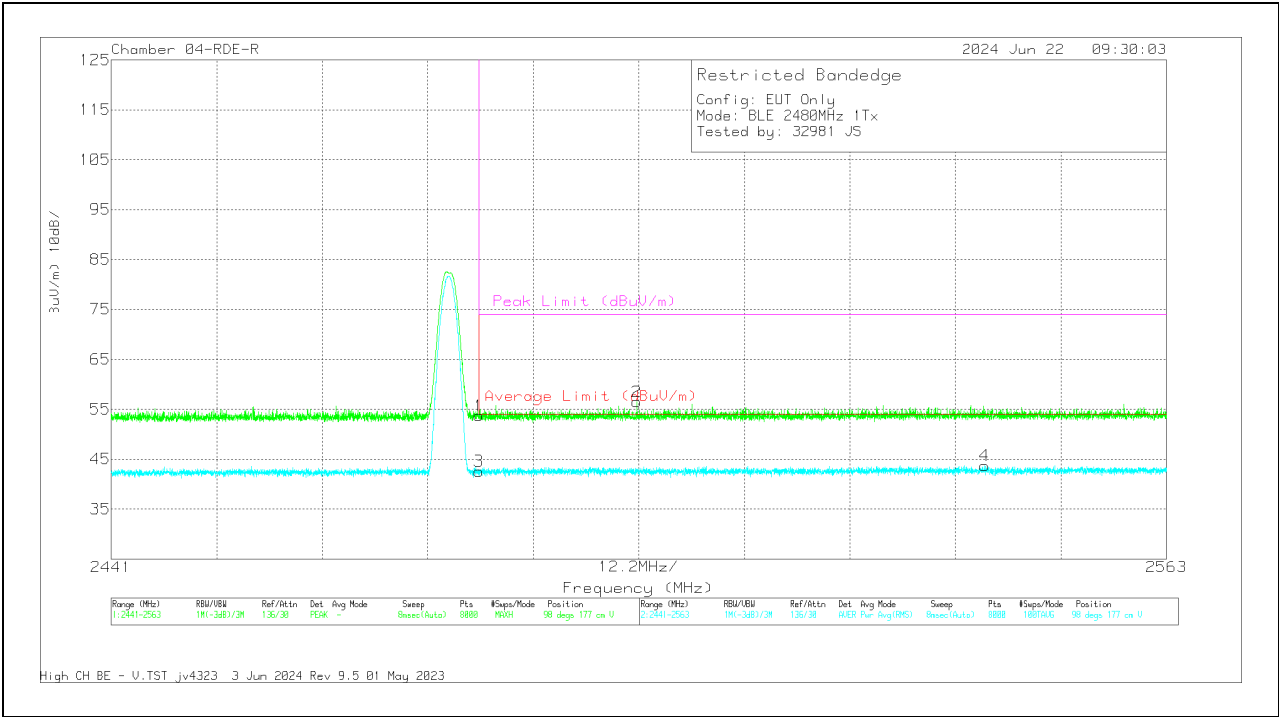
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	61.45	Pk	32.3	-40.12	53.63	-	-	74	-20.37	305	204	H
3	2483.5	50.32	RMS	32.3	-40.12	42.5	54	-11.5	-	-	305	204	H
2	2517.702	63.52	Pk	32.3	-40.01	55.81	-	-	74	-18.19	305	204	H
4	2545.903	51.27	RMS	32.4	-39.92	43.75	54	-10.25	-	-	305	204	H

Pk - Peak detector

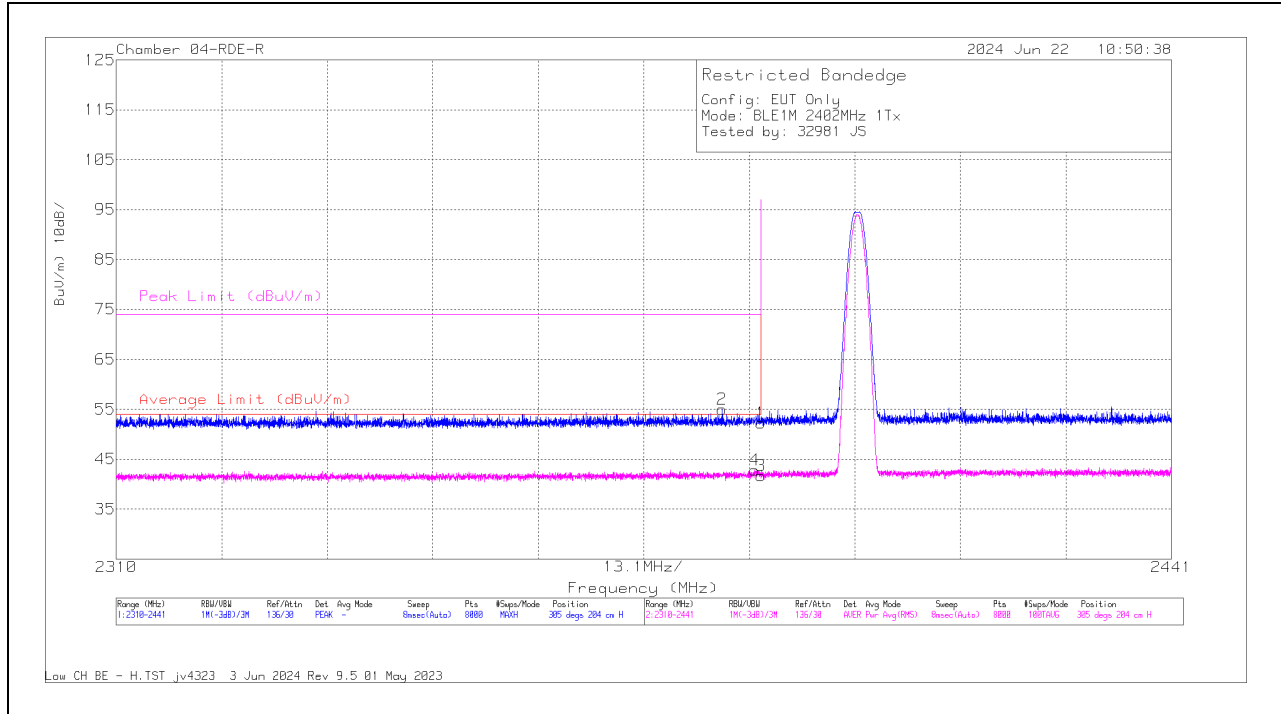
RMS - RMS detection

VERTICAL RESULT



Marker	Frequ ncy (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Averag e Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/ m)	PK Margin (dB)	Azimet h (Degs)	Height (cm)	Polarity
1	2483.5	61.52	Pk	32.3	0	-40.12	53.7	-	-	74	-20.3	98	177	V
3	2483.5	50.43	RMS	32.3	0	-40.12	42.61	54	-11.39	-	-	98	177	V
2	2501.76	64.21	Pk	32.3	0	-40.04	56.47	-	-	74	-17.53	98	177	V
4	2541.98	51.23	RMS	32.4	0	-39.94	43.69	54	-10.31	-	-	98	177	V

Pk - Peak detector
RMS - RMS detection

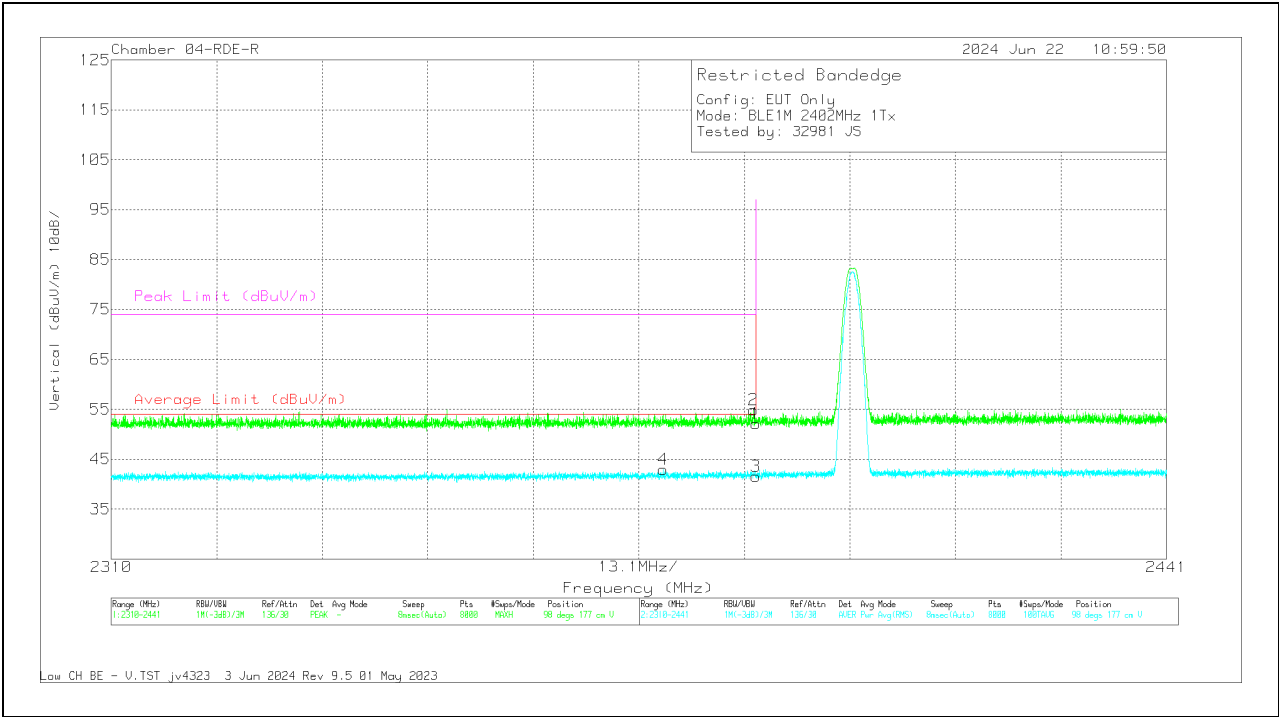
ANT 3**BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2385.236	63.54	Pk	31.9	-40.43	55.01	-	-	74	-18.99	305	204	H
4	2389.248	51.29	RMS	32	-40.43	42.86	54	-11.14	-	-	305	204	H
1	2390	60.69	Pk	32	-40.44	52.25	-	-	74	-21.75	305	204	H
3	2390	50.14	RMS	32	-40.44	41.7	54	-12.3	-	-	305	204	H

Pk - Peak detector

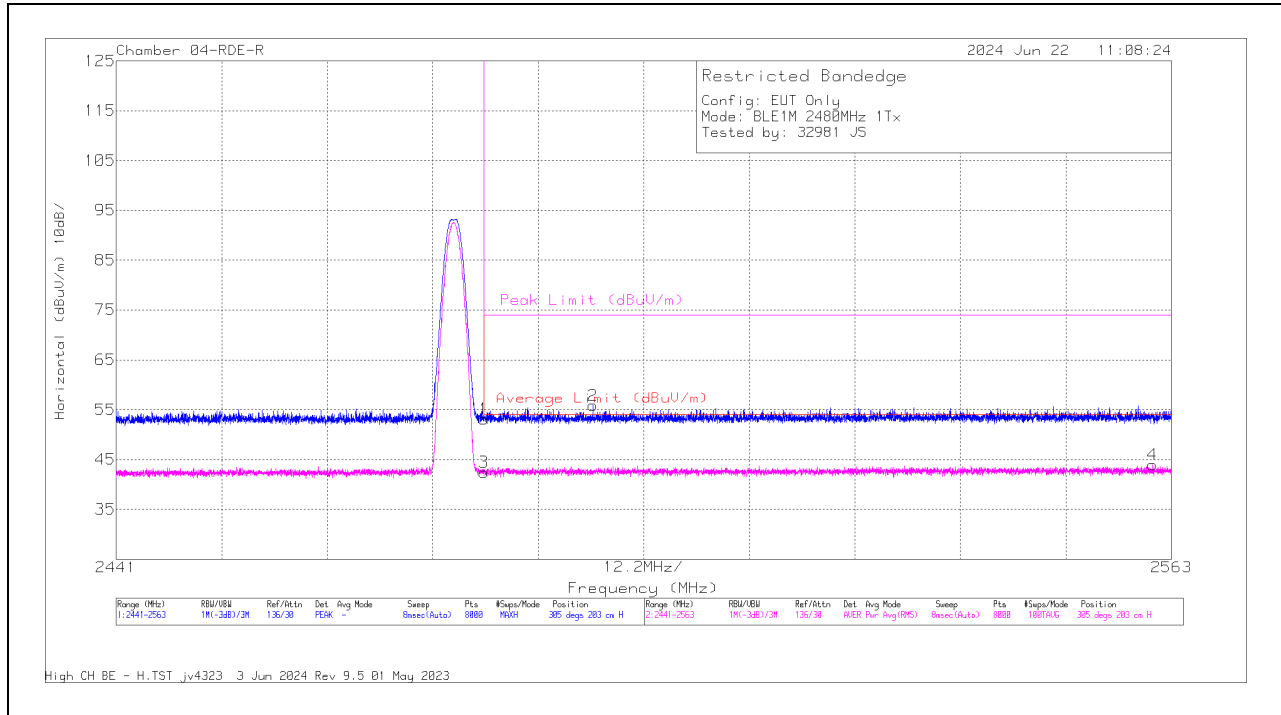
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2378.538	51.51	RMS	31.9	-40.47	42.94	54	-11.06	-	-	98	177	V
2	2389.69	63.34	Pk	32	-40.44	54.9	-	-	74	-19.1	98	177	V
1	2390	60.59	Pk	32	-40.44	52.15	-	-	74	-21.85	98	177	V
3	2390	50.04	RMS	32	-40.44	41.6	54	-12.4	-	-	98	177	V

Pk - Peak detector
RMS - RMS detection

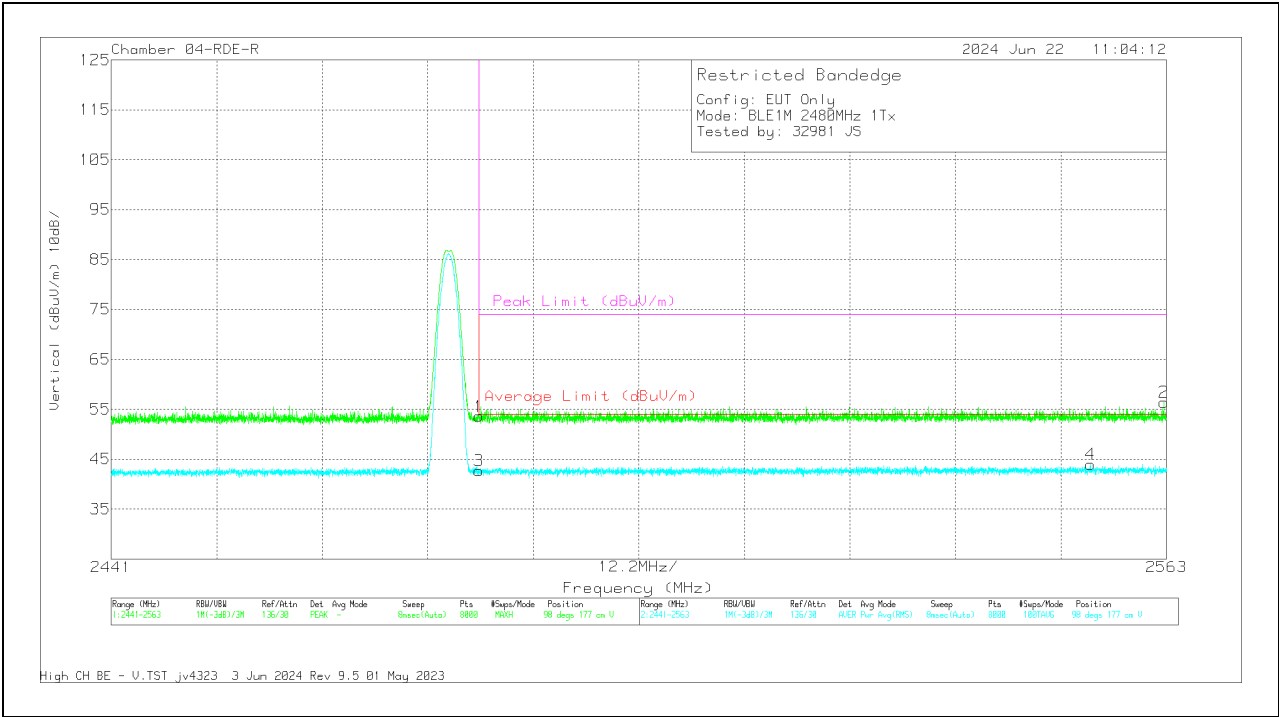
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	60.93	Pk	32.3	-40.12	53.11	-	-	74	-20.89	305	203	H
3	2483.5	50.22	RMS	32.3	-40.12	42.4	54	-11.6	-	-	305	203	H
2	2496.136	63.6	Pk	32.3	-40.06	55.84	-	-	74	-18.16	305	203	H
4	2560.835	51.48	RMS	32.3	-39.85	43.93	54	-10.07	-	-	305	203	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



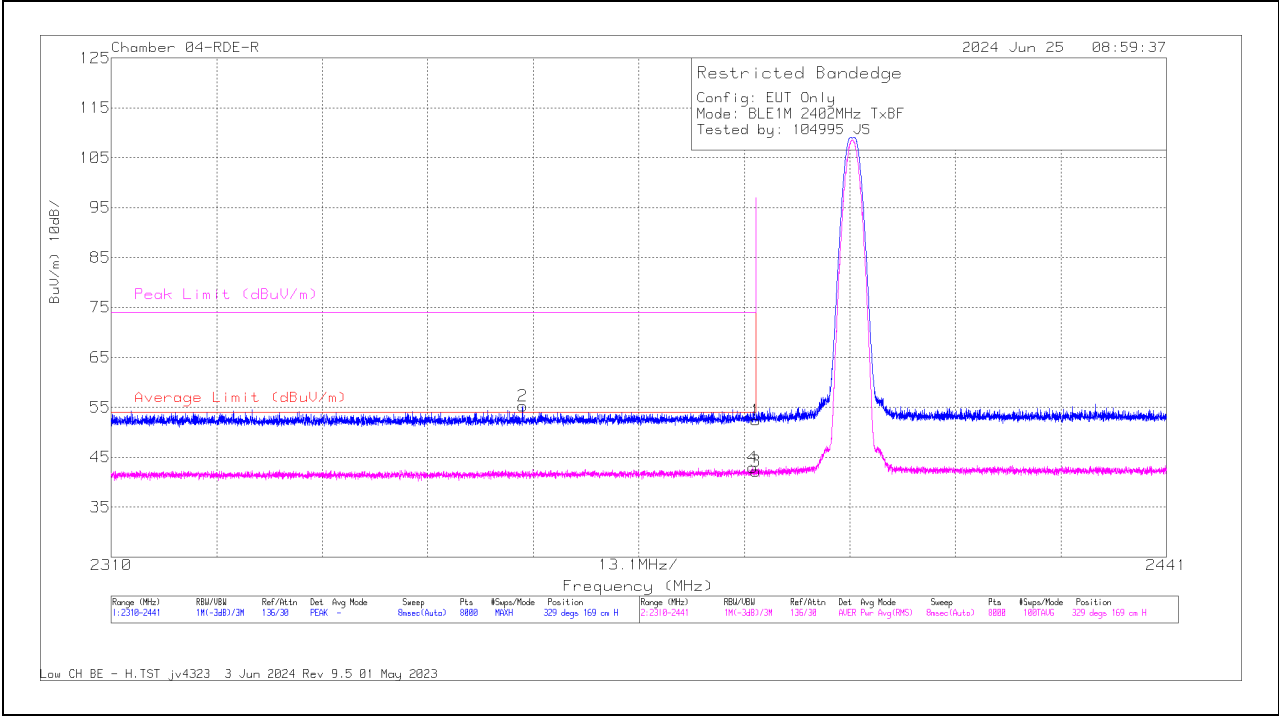
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.39	Pk	32.3	-40.12	53.57	-	-	74	-20.43	98	177	V
3	2483.5	50.54	RMS	32.3	-40.12	42.72	54	-11.28	-	-	98	177	V
4	2554.246	51.55	RMS	32.3	-39.84	44.01	54	-9.99	-	-	98	177	V
2	2562.696	63.96	Pk	32.3	-39.83	56.43	-	-	74	-17.57	98	177	V

Pk - Peak detector
RMS - RMS detection

10.2.6. LOW POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

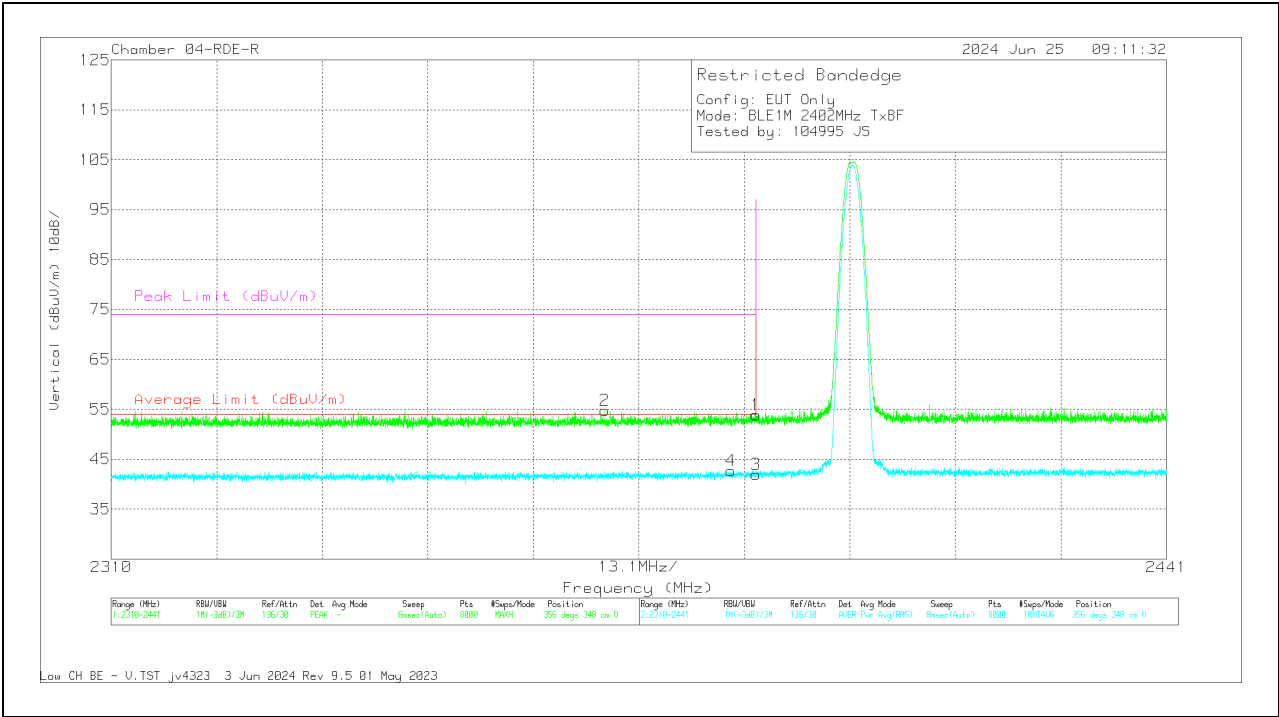
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2361.063	64.05	Pk	31.8	-40.54	55.31	-	-	74	-18.69	329	169	H
4	2389.625	51.4	RMS	32	-40.44	42.96	54	-11.04	-	-	329	169	H
1	2390	60.87	Pk	32	-40.44	52.43	-	-	74	-21.57	329	169	H
3	2390	50.65	RMS	32	-40.44	42.21	54	-11.79	-	-	329	169	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

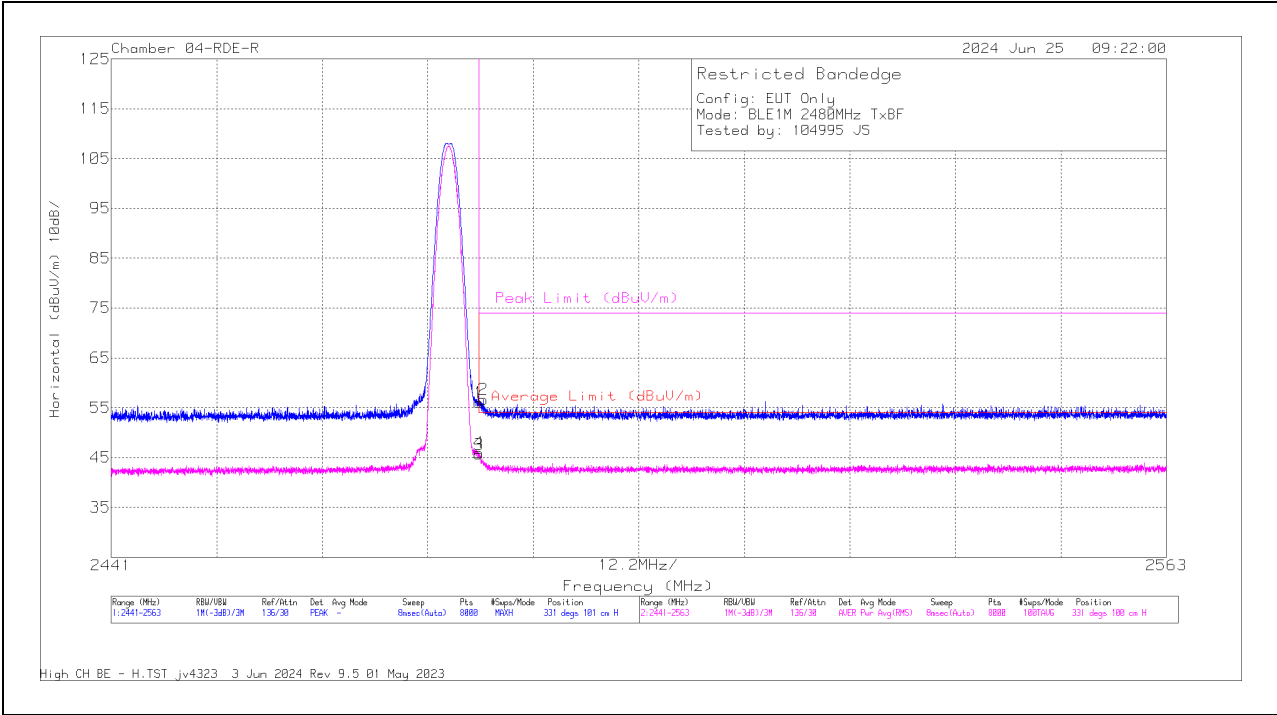


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2371.299	63.4	Pk	31.9	-40.53	54.77	-	-	74	-19.23	356	348	V
4	2386.956	51.11	RMS	32	-40.42	42.69	54	-11.31	-	-	356	348	V
1	2390	62.35	Pk	32	-40.44	53.91	-	-	74	-20.09	356	348	V
3	2390	50.38	RMS	32	-40.44	41.94	54	-12.06	-	-	356	348	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

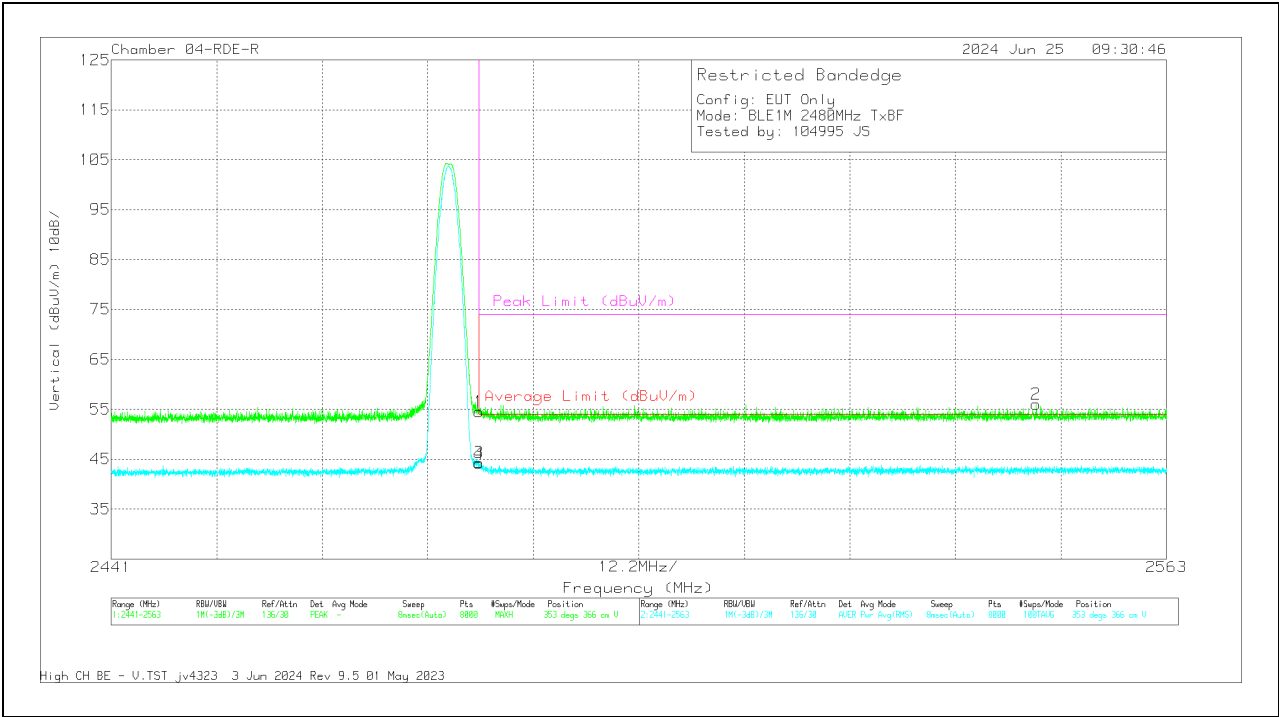
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	63.8	Pk	32.3	-40.12	55.98	-	-	74	-18.02	331	101	H
3	2483.5	53.47	RMS	32.3	-40.12	45.65	54	-8.35	-	-	331	100	H
4	2483.507	53.76	RMS	32.3	-40.12	45.94	54	-8.06	-	-	331	100	H
2	2484.041	64.42	Pk	32.3	-40.12	56.6	-	-	74	-17.4	331	101	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (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	62.32	Pk	32.3	-40.12	54.5	-	-	74	-19.5	353	366	V
3	2483.5	52.11	RMS	32.3	-40.12	44.29	54	-9.71	-	-	353	366	V
4	2483.523	51.96	RMS	32.3	-40.12	44.14	54	-9.86	-	-	353	366	V
2	2547.932	63.53	Pk	32.4	-39.91	56.02	-	-	74	-17.98	353	366	V

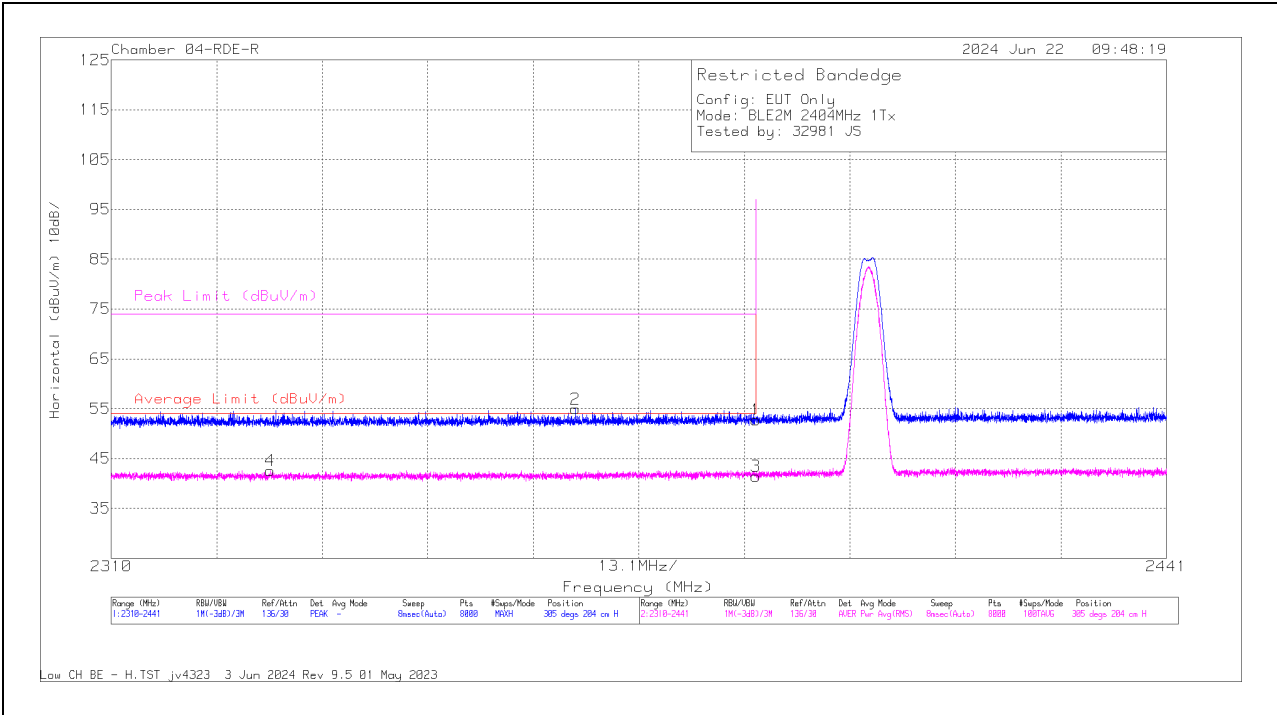
Pk - Peak detector
RMS - RMS detection

10.2.7. LOW POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

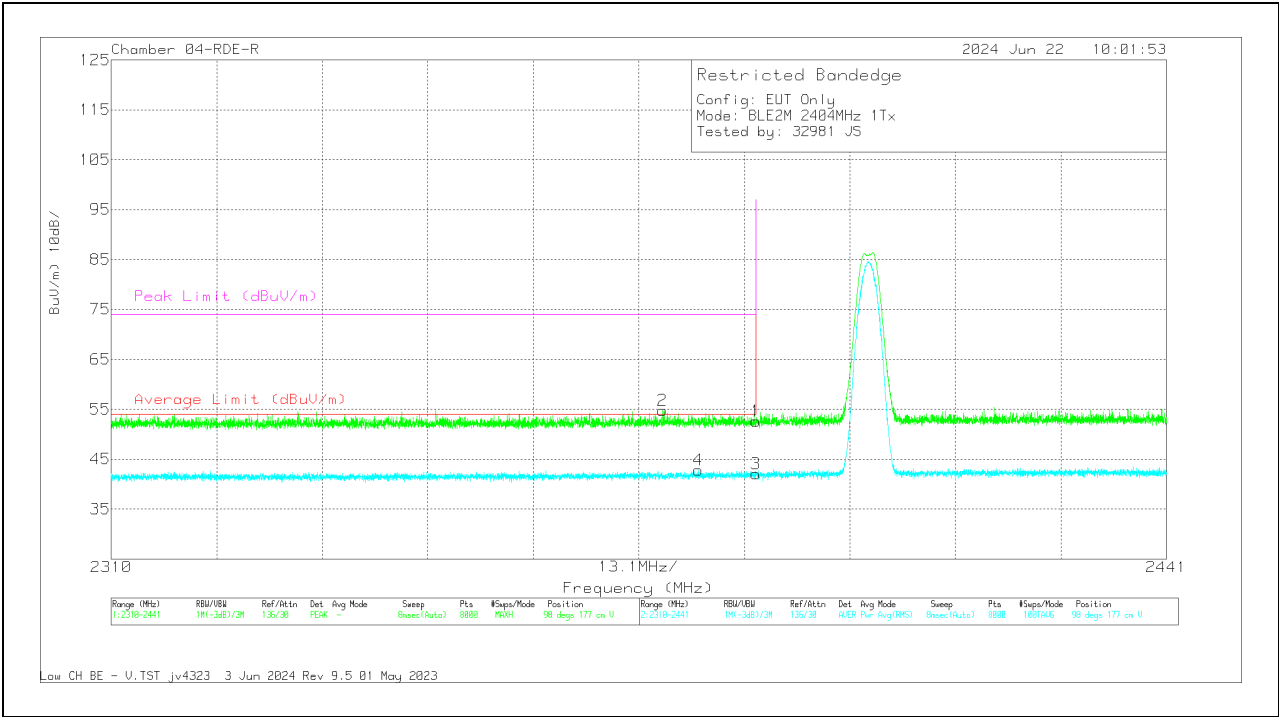
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2329.718	51.41	RMS	31.8	-40.59	42.62	54	-11.38	-	-	305	204	H
2	2367.647	63.61	Pk	31.9	-40.56	54.95	-	-	74	-19.05	305	204	H
1	2390	61.2	Pk	32	-40.44	52.76	-	-	74	-21.24	305	204	H
3	2390	49.87	RMS	32	-40.44	41.43	54	-12.57	-	-	305	204	H

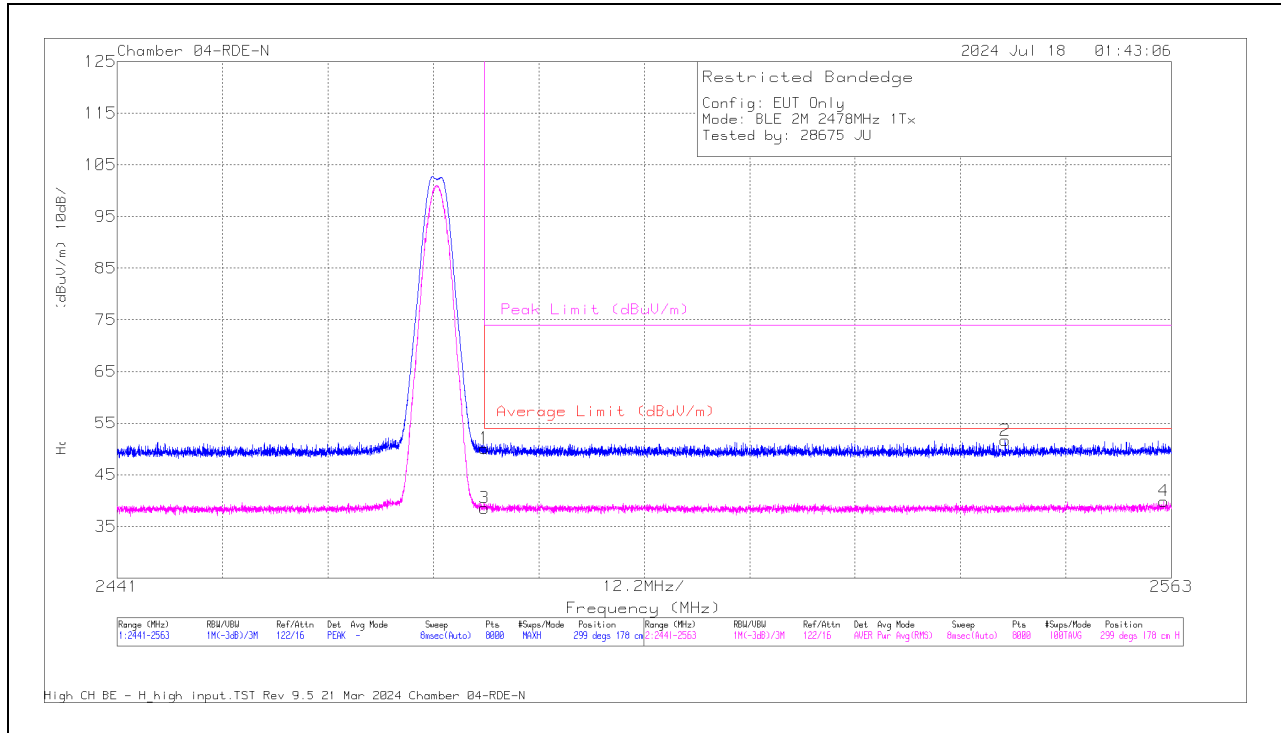
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2378.439	63.35	Pk	31.9	-40.48	54.77	-	-	74	-19.23	98	177	V
4	2382.845	51.39	RMS	31.9	-40.45	42.84	54	-11.16	-	-	98	177	V
1	2390	61.06	Pk	32	-40.44	52.62	-	-	74	-21.38	98	177	V
3	2390	50.52	RMS	32	-40.44	42.08	54	-11.92	-	-	98	177	V

Pk - Peak detector
RMS - RMS detection

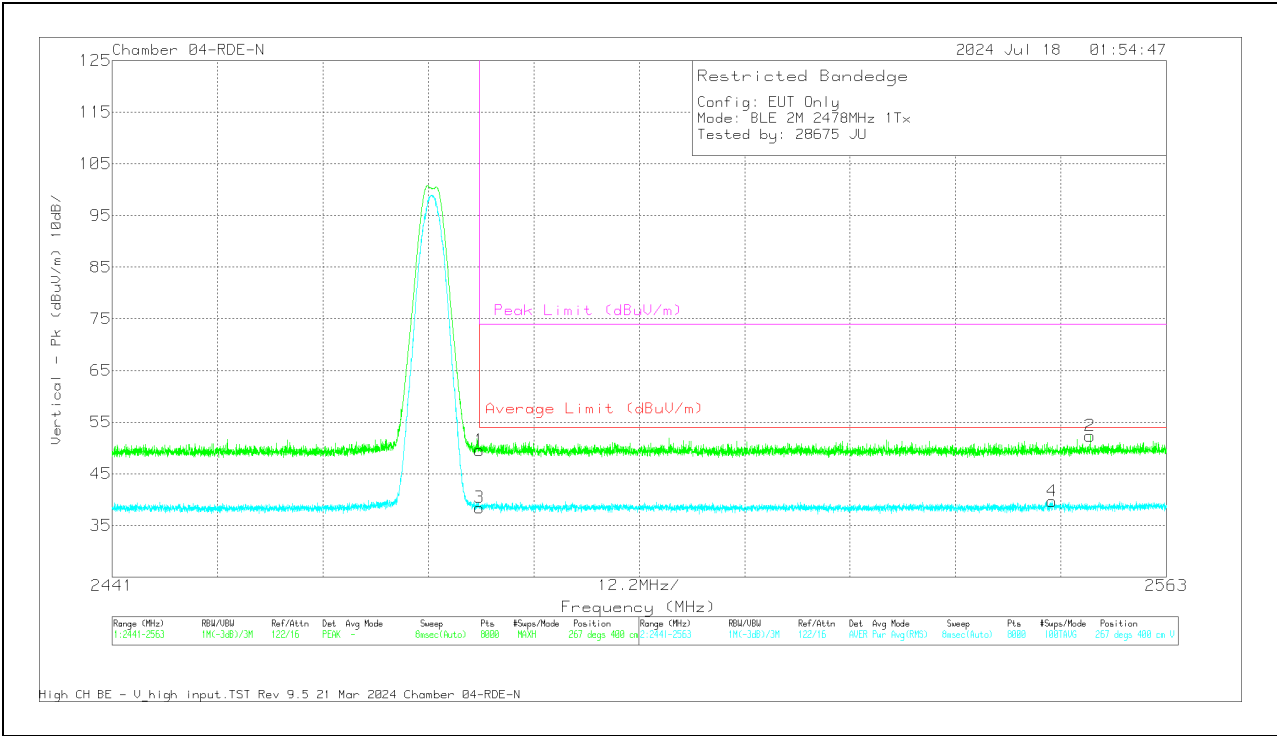
BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (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	44.92	Pk	32.2	-27	50.12	-	-	74	-23.88	299	178	H
3	2483.5	33.38	RMS	32.2	-27	38.58	54	-15.42	-	-	299	178	H
2	2543.768	46.36	Pk	32.2	-26.93	51.63	-	-	74	-22.37	299	178	H
4	2562.131	34.44	RMS	32.2	-26.74	39.9	54	-14.1	-	-	299	178	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



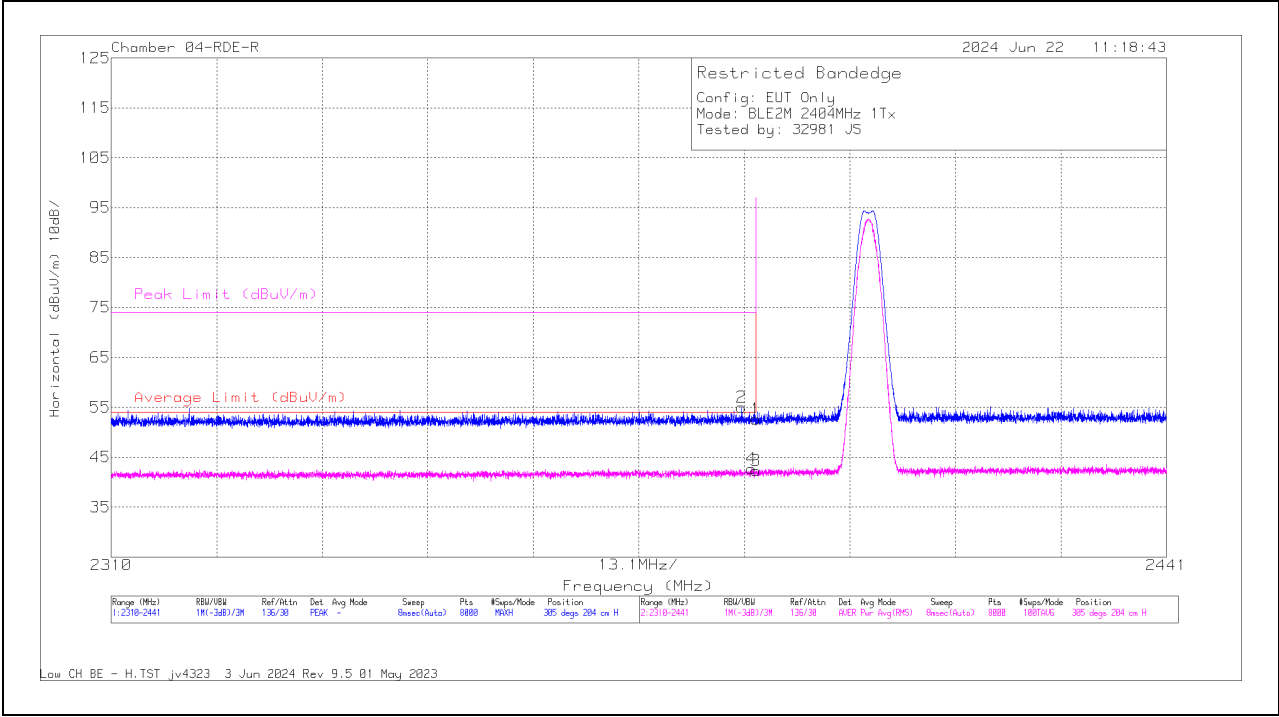
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	44.34	Pk	32.2	-27	49.54	-	-	74	-24.46	267	400	V
3	2483.5	33.24	RMS	32.2	-27	38.44	54	-15.56	-	-	267	400	V
4	2549.777	34.28	RMS	32.2	-26.8	39.68	54	-14.32	-	-	267	400	V
2	2554.17	47	Pk	32.2	-26.85	52.35	-	-	74	-21.65	267	400	V

Pk - Peak detector
RMS - RMS detection

ANT 3

BANDEDGE (LOW CHANNEL)

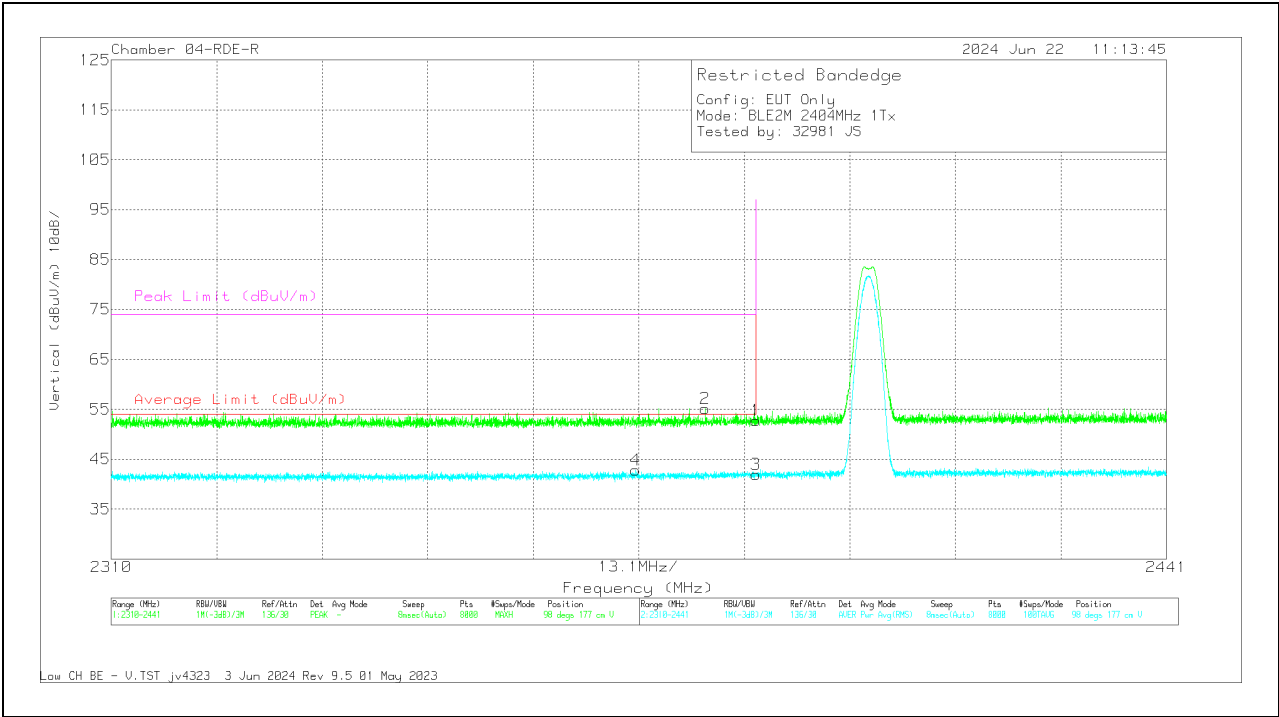
HORIZONTAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2388.217	63.41	Pk	32	-40.43	54.98	-	-	74	-19.02	305	204	H
4	2389.527	51.17	RMS	32	-40.44	42.73	54	-11.27	-	-	305	204	H
1	2390	61.03	Pk	32	-40.44	52.59	-	-	74	-21.41	305	204	H
3	2390	50.73	RMS	32	-40.44	42.29	54	-11.71	-	-	305	204	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

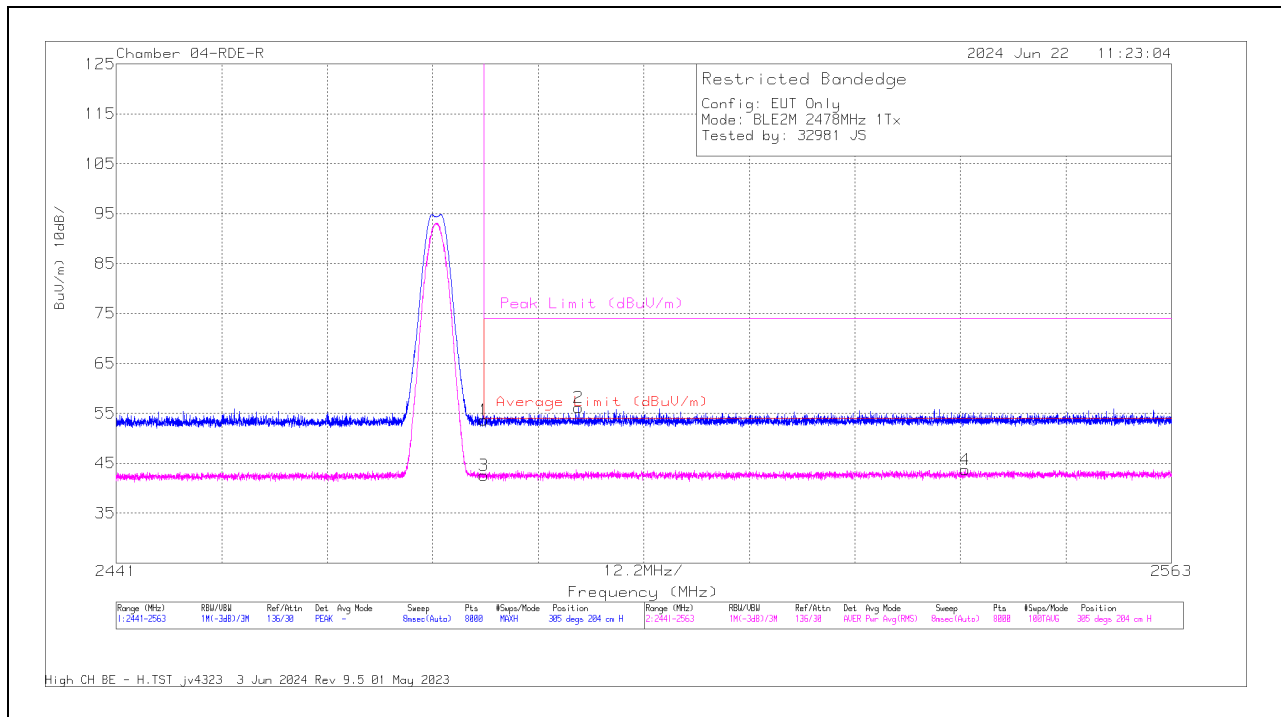


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2375.131	51.37	RMS	31.9	-40.48	42.79	54	-11.21	-	-	98	177	V
2	2383.746	63.71	Pk	31.9	-40.45	55.16	-	-	74	-18.84	98	177	V
1	2390	61.18	Pk	32	-40.44	52.74	-	-	74	-21.26	98	177	V
3	2390	50.44	RMS	32	-40.44	42	54	-12	-	-	98	177	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

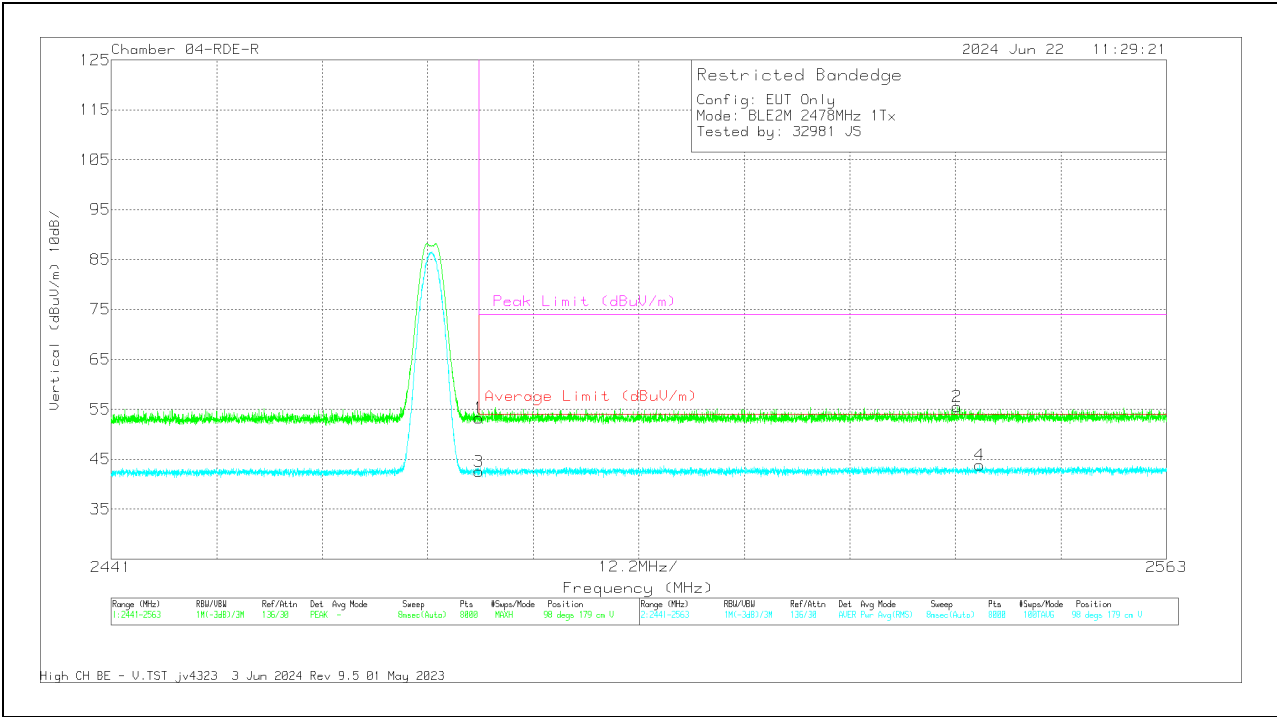


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.47	Pk	32.3	-40.12	53.65	-	-	74	-20.35	305	204	H
3	2483.5	50.39	RMS	32.3	-40.12	42.57	54	-11.43	-	-	305	204	H
2	2494.474	63.94	Pk	32.3	-40.09	56.15	-	-	74	-17.85	305	204	H
4	2539.177	51.24	RMS	32.4	-39.95	43.69	54	-10.31	-	-	305	204	H

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

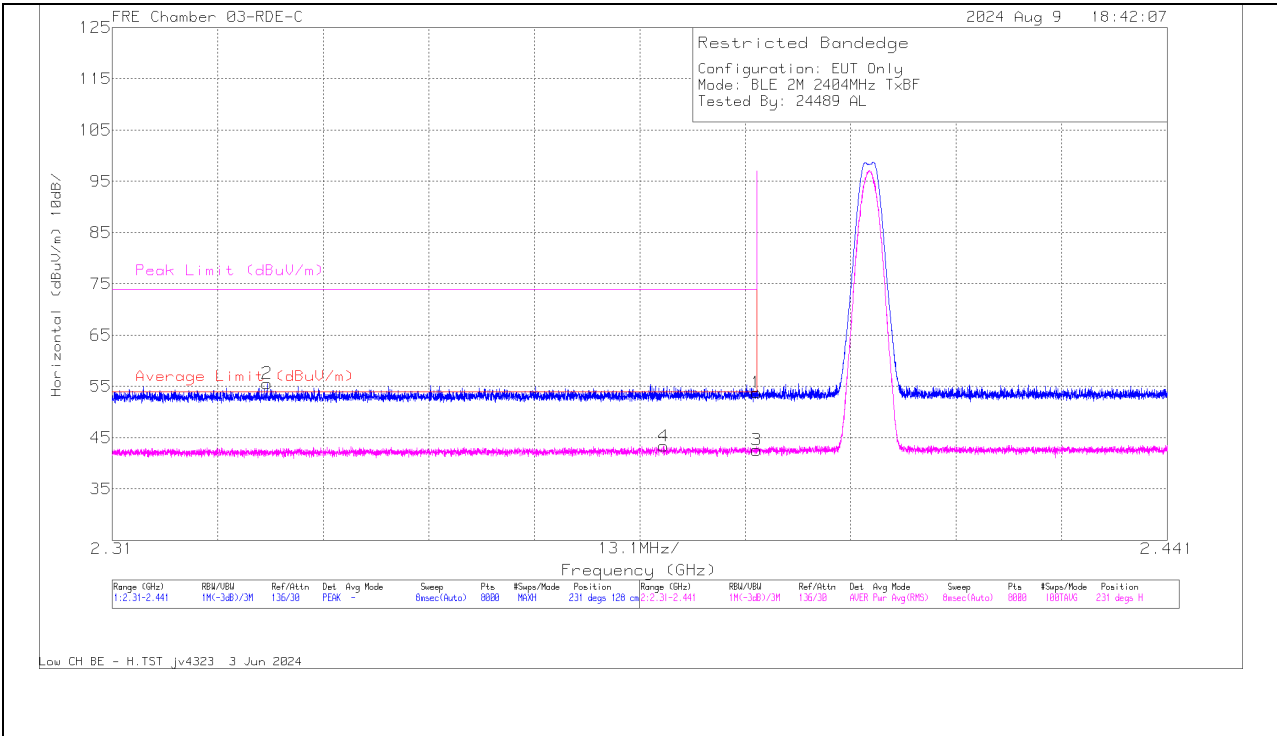


Pk - Peak detector
RMS - RMS detection

10.2.8. LOW POWER BLE TXBF (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



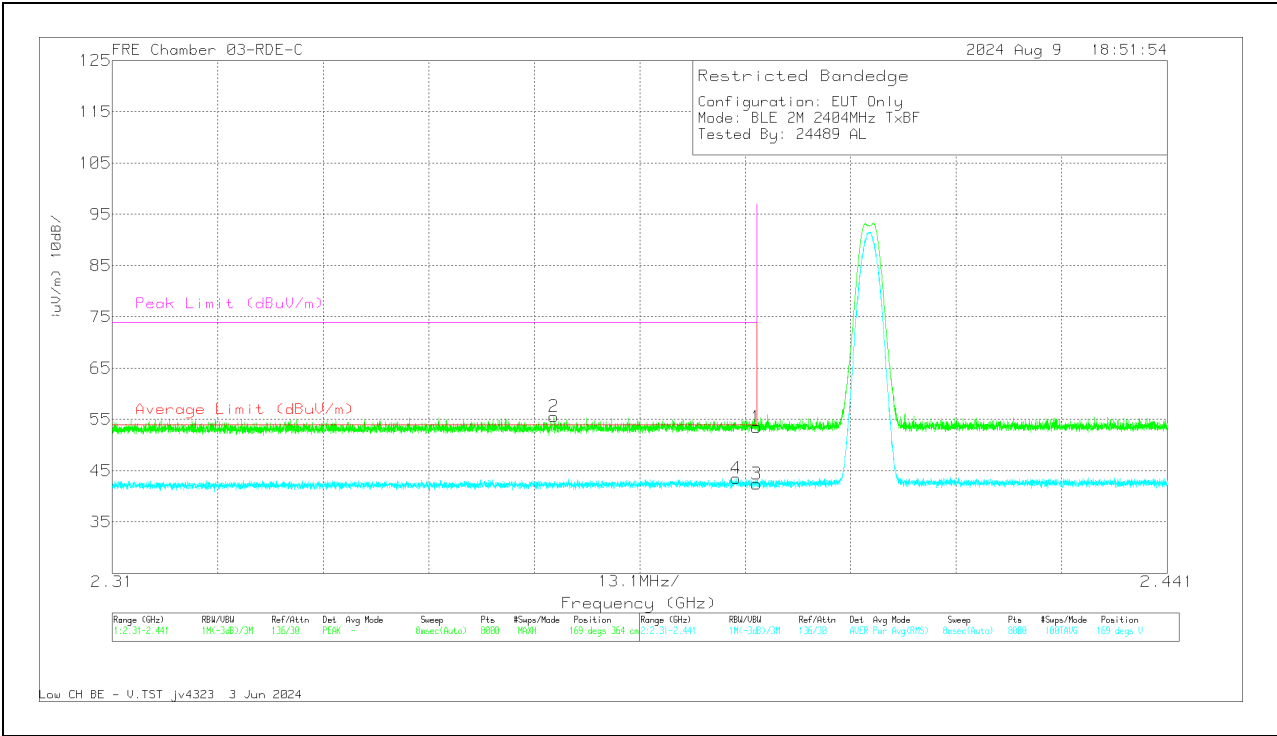
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	223084 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Dega)	Height (cm)	Polarity
1	* 2.39	61.41	Pk	31.9	-39.5	53.81	-	-	74	-20.19	231	128	H
2	* 2.329227	63.56	Pk	31.6	-39.6	55.56	-	-	74	-18.44	231	128	H
3	* 2.39	50.2	RMS	31.9	-39.5	42.6	54	-11.4	-	-	231	128	H
4	* 2.378456	51.08	RMS	31.8	-39.5	43.38	54	-10.62	-	-	231	128	H

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

Pk - Peak detector

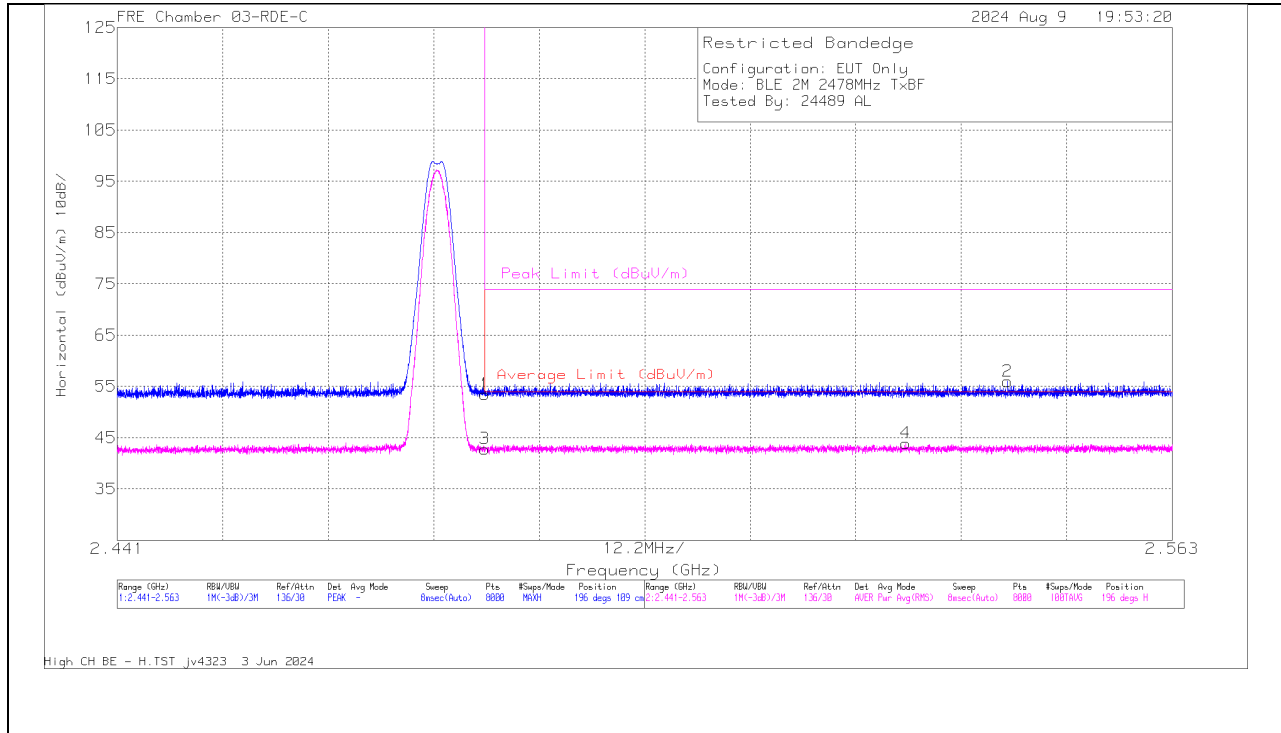
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	223084 ACF (dB/m) 3m	Gain/Loss (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	61.11	Pk	31.9	-39.5	53.51	-	-	74	-20.49	169	364	V
2	* 2.364863	63.35	Pk	31.8	-39.6	55.55	-	-	74	-18.45	169	364	V
3	* 2.39	50.02	RMS	31.9	-39.5	42.42	54	-11.58	-	-	169	364	V
4	* 2.387447	51.11	RMS	31.9	-39.5	43.51	54	-10.49	-	-	169	364	V

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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

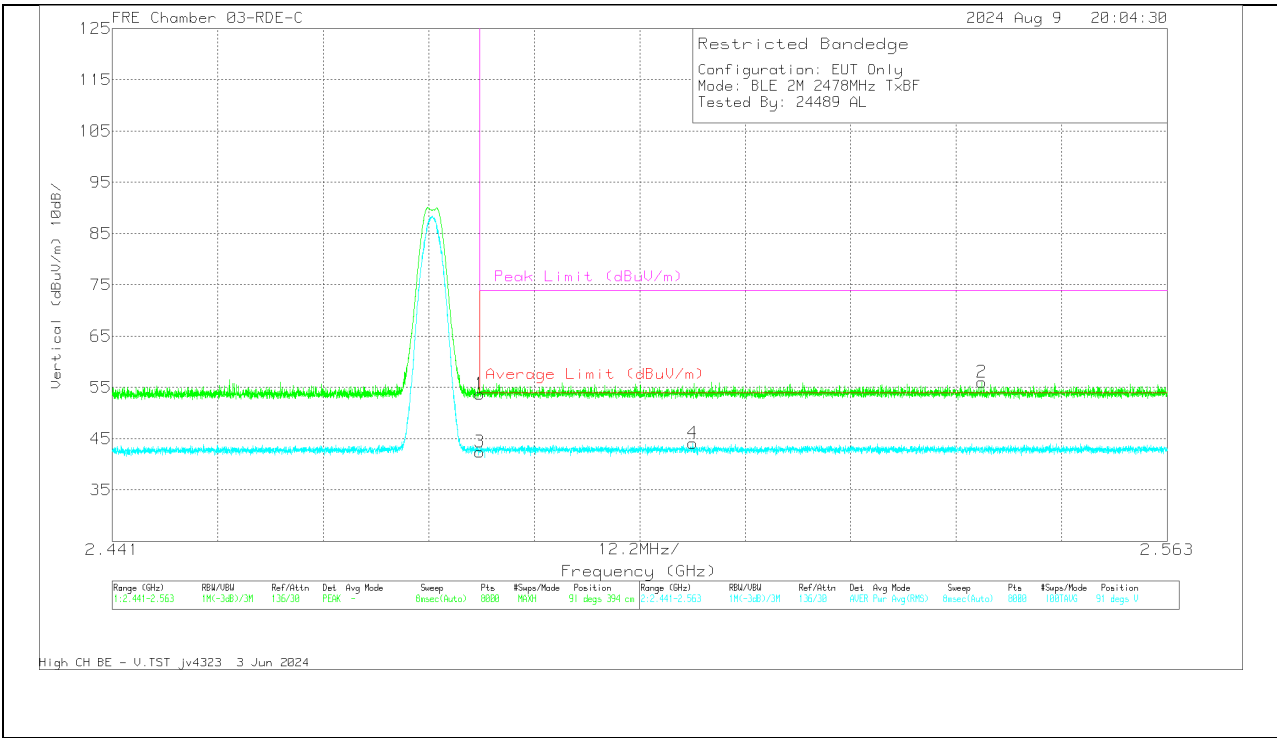
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	223084 ACF (dBm) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.64	Pk	32.2	-39.4	53.44	-	-	74	-20.56	196	109	H
3	* 2.4835	50.01	RMS	32.2	-39.4	42.81	54	-11.19	-	-	196	109	H
4	2.532192	50.93	RMS	32.2	-39.2	43.93	54	-10.07	-	-	196	109	H
2	2.543966	62.97	Pk	32.2	-39.2	55.97	-	-	74	-18.03	196	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

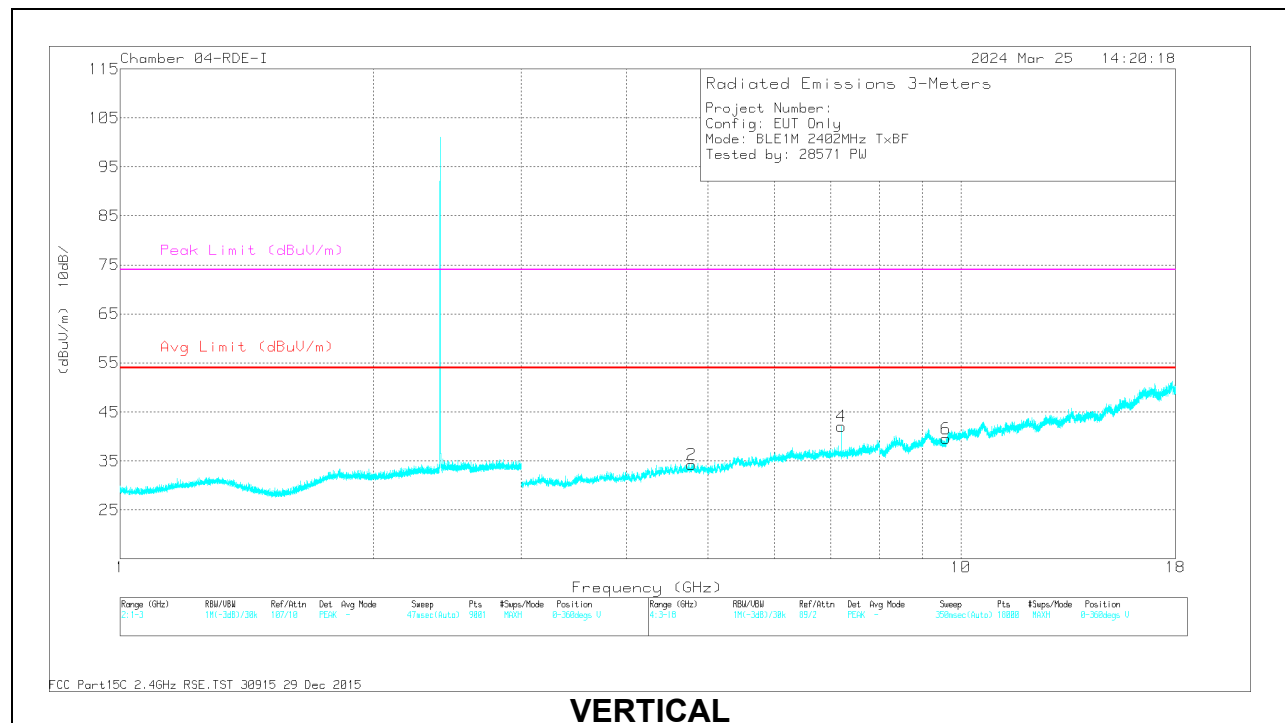
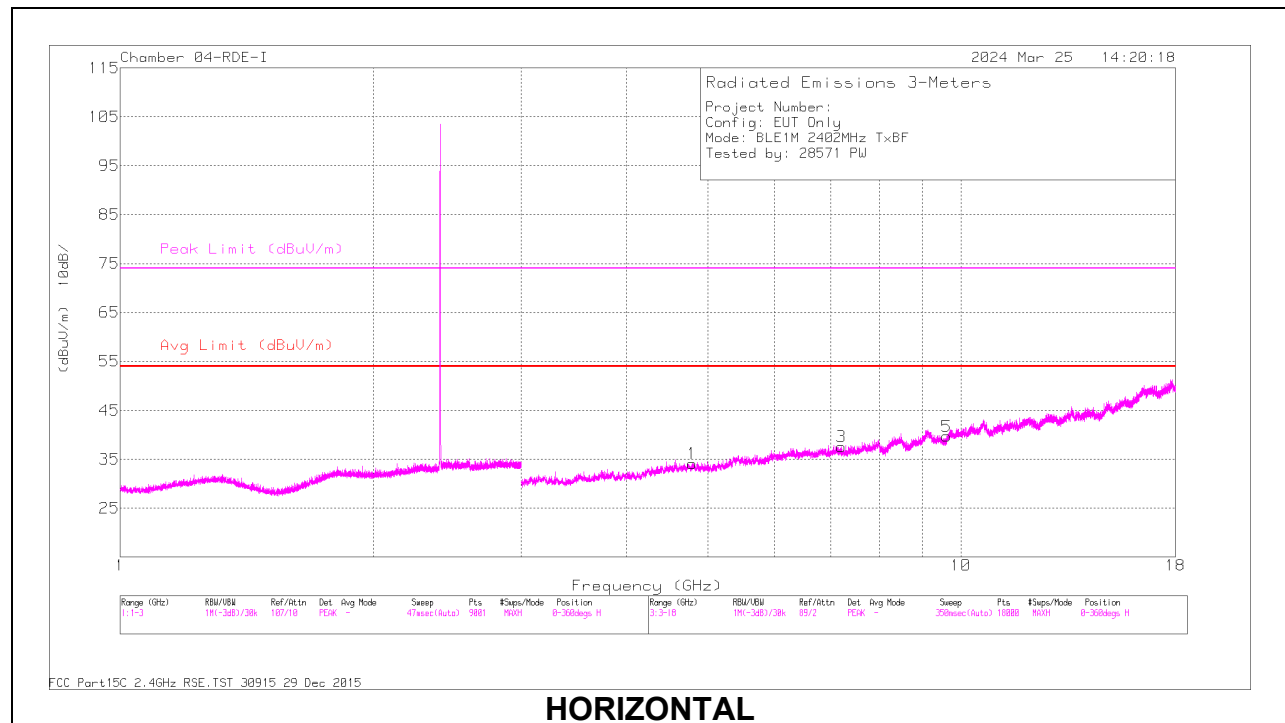


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	223084 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.93	Pk	32.2	-39.4	53.73	-	-	74	-20.27	91	394	V
3	* 2.4835	49.64	RMS	32.2	-39.4	42.44	54	-11.56	-	-	91	394	V
4	2.508109	51.16	RMS	32.2	-39.2	44.16	54	-9.84	-	-	91	394	V
2	2.541541	63.06	Pk	32.2	-39.2	56.06	-	-	74	-17.94	91	394	V

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

10.2.9. WORST CASE HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



Radiated Emissions

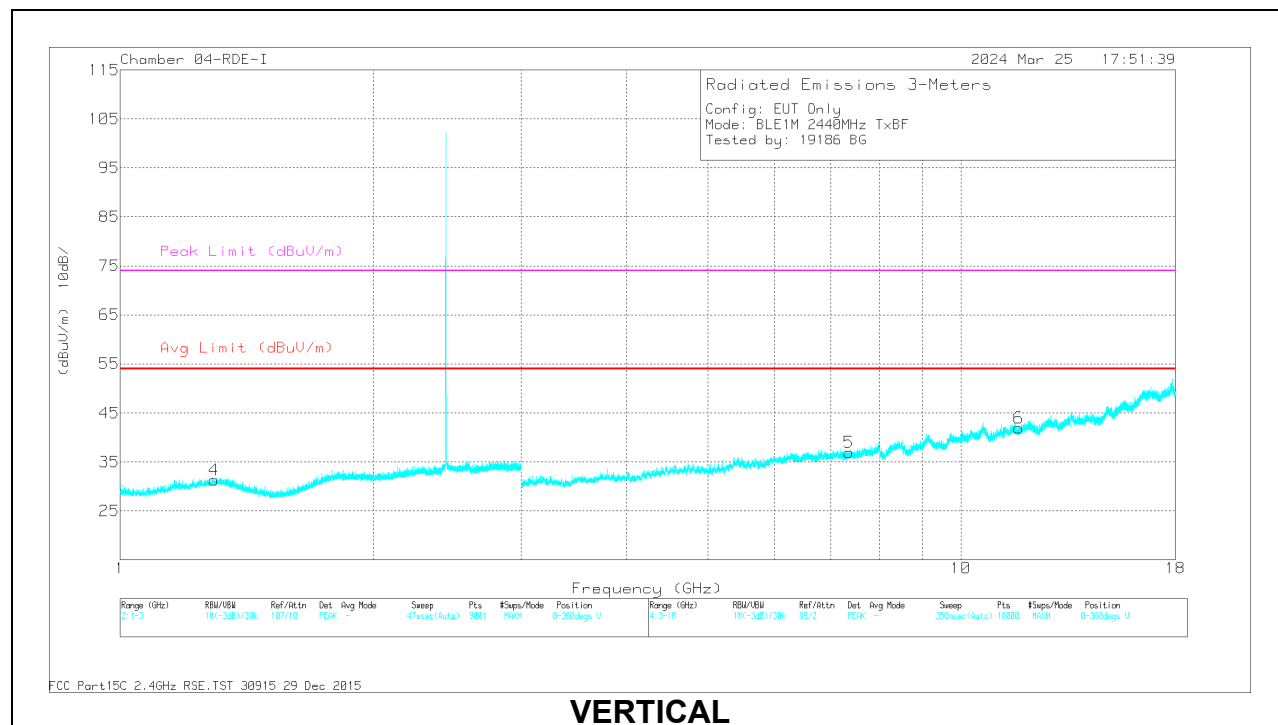
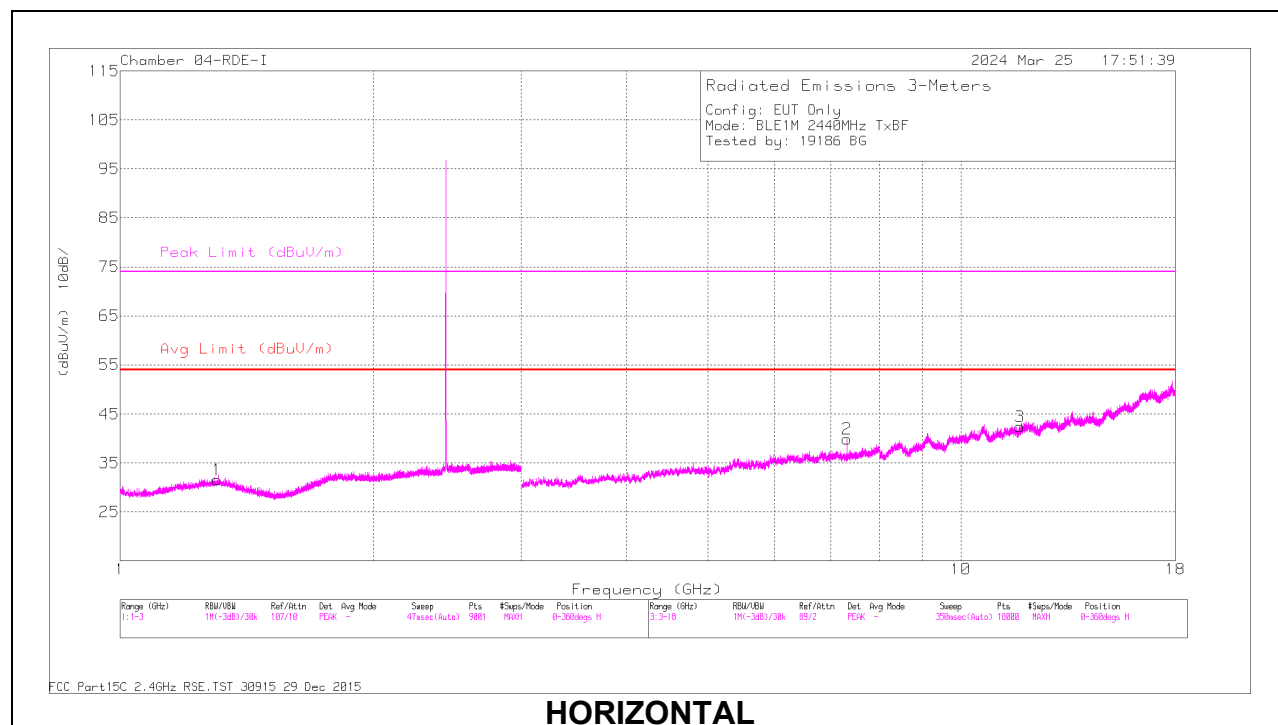
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m) - 3mH	Amp/Cbl/Fit r (d)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.791366	35.69	PK2	34.1	-26.1	43.69	-	-	74	-30.31	93	198	H
	* 4.791507	24.11	MAv1	34.1	-26.1	32.11	54	-21.89	-	-	93	198	H
2	* 4.786296	35.23	PK2	34.1	-26.1	43.23	-	-	74	-30.77	229	176	V
	* 4.787054	23.64	MAv1	34.1	-26.1	31.64	54	-22.36	-	-	229	176	V
3	7.205054	38.45	PK2	35.6	-24.4	49.65	-	-	-	-	114	106	V
	7.206247	24.27	MAv1	35.6	-24.4	35.47	-	-	-	-	75	174	H
4	7.206558	28.3	MAv1	35.6	-24.4	39.5	-	-	-	-	114	106	V
	7.206709	36.26	PK2	35.6	-24.4	47.46	-	-	-	-	75	174	H
5	9.595039	33.05	PK2	36.5	-21.6	47.95	-	-	-	-	313	251	V
	9.595667	21.44	MAv1	36.5	-21.6	36.34	-	-	-	-	313	251	V
6	9.623457	22.89	MAv1	36.5	-21.3	38.09	-	-	-	-	230	111	H
	9.624134	34.43	PK2	36.5	-21.3	49.63	-	-	-	-	230	111	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

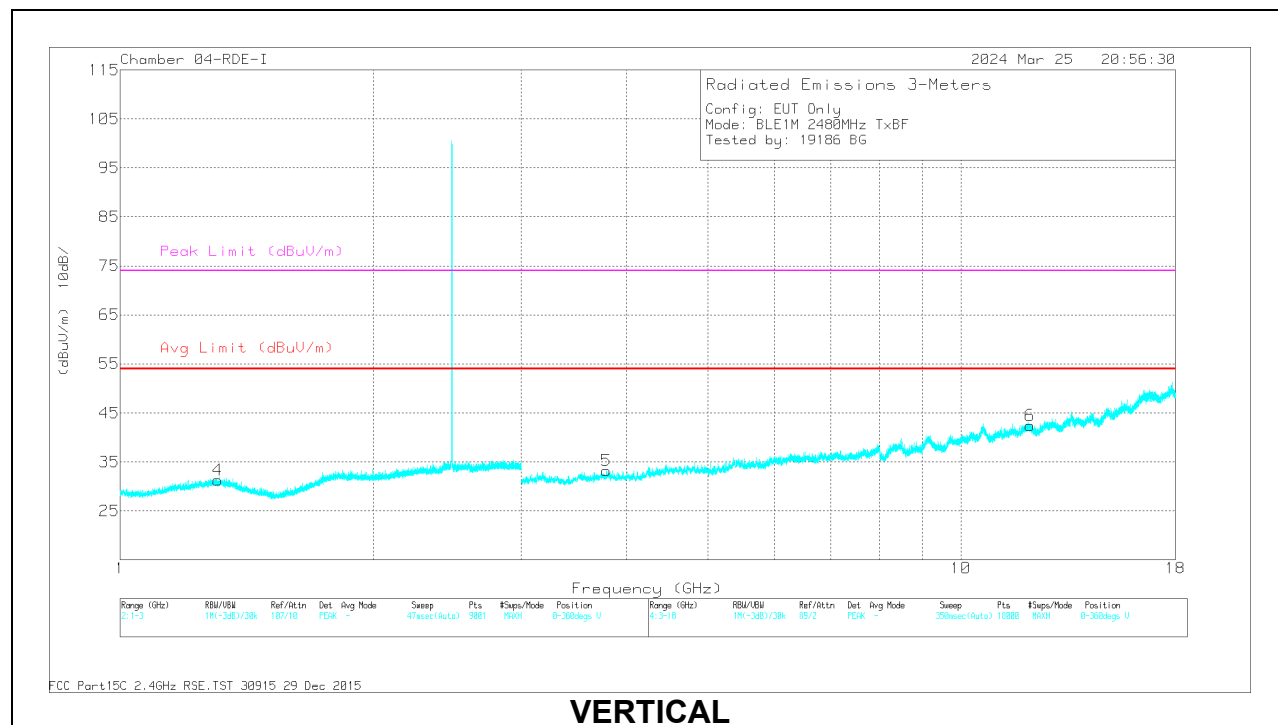
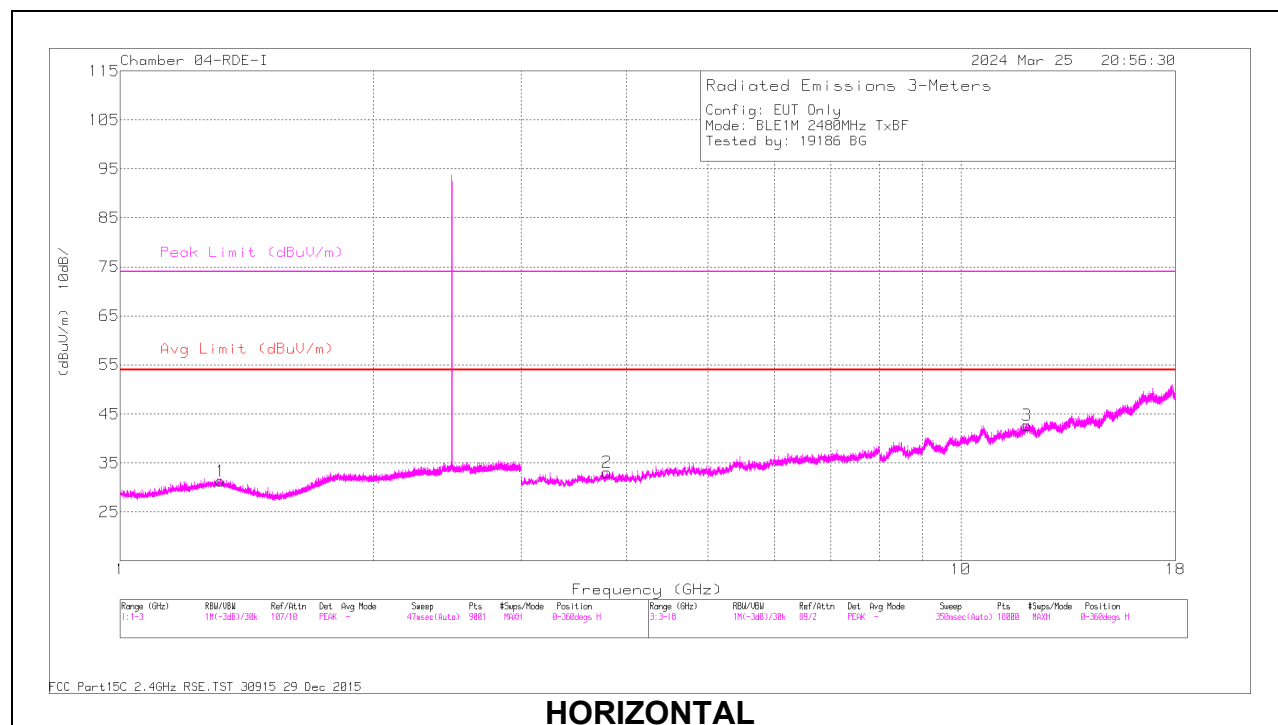
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m) -	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.301456	43.05	PK2	28.6	-29.7	41.95	-	-	74	-32.05	47	115	H
	* 1.301284	30.88	MAv1	28.6	-29.7	29.78	54	-24.22	-	-	47	115	H
4	* 1.292075	42.26	PK2	28.6	-29.7	41.16	-	-	74	-32.84	142	163	V
	* 1.294108	30.88	MAv1	28.6	-29.8	29.68	54	-24.32	-	-	142	163	V
6	* 11.72678	22.73	MAv1	38.3	-20.6	40.43	54	-13.57	-	-	266	231	V
	* 11.727053	34.33	PK2	38.3	-20.5	52.13	-	-	74	-21.87	266	231	V
3	* 11.751651	34.01	PK2	38.4	-20.2	52.21	-	-	74	-21.79	238	152	H
	* 11.753001	22.69	MAv1	38.4	-20.3	40.79	54	-13.21	-	-	238	152	H
2	* 7.319267	26.4	MAv1	35.6	-24.5	37.5	54	-16.5	-	-	353	105	H
	* 7.319906	37.44	PK2	35.6	-24.5	48.54	-	-	74	-25.46	353	105	H
5	* 7.353945	24.35	MAv1	35.6	-24.1	35.85	54	-18.15	-	-	327	220	V
	* 7.353957	35.62	PK2	35.6	-24.1	47.12	-	-	74	-26.88	327	220	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m) -	Amp/Cbl/Fitr (d)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.314839	42.2	PK2	28.6	-29.7	41.1	-	-	74	-32.9	272	349	H
	* 1.317045	30.64	MAv1	28.6	-29.7	29.54	54	-24.46	-	-	272	349	H
4	* 1.306756	42.91	PK2	28.6	-29.7	41.81	-	-	74	-32.19	307	278	V
	* 1.305376	30.69	MAv1	28.6	-29.7	29.59	54	-24.41	-	-	307	278	V
3	* 11.980977	22.72	MAv1	38.6	-20.7	40.62	54	-13.38	-	-	211	206	H
	* 11.982196	34.59	PK2	38.6	-20.6	52.59	-	-	74	-21.41	211	206	H
6	* 12.089814	34.28	PK2	38.6	-20.4	52.48	-	-	74	-21.52	346	190	V
	* 12.092923	22.76	MAv1	38.6	-20.4	40.96	54	-13.04	-	-	346	190	V
5	* 3.786505	37.97	PK2	33.3	-27.6	43.67	-	-	74	-30.33	279	104	V
	* 3.787607	25.89	MAv1	33.3	-27.6	31.59	54	-22.41	-	-	279	104	V
2	* 3.796162	25.68	MAv1	33.3	-27.5	31.48	54	-22.52	-	-	13	115	H
	* 3.79857	37.55	PK2	33.3	-27.5	43.35	-	-	74	-30.65	13	115	H

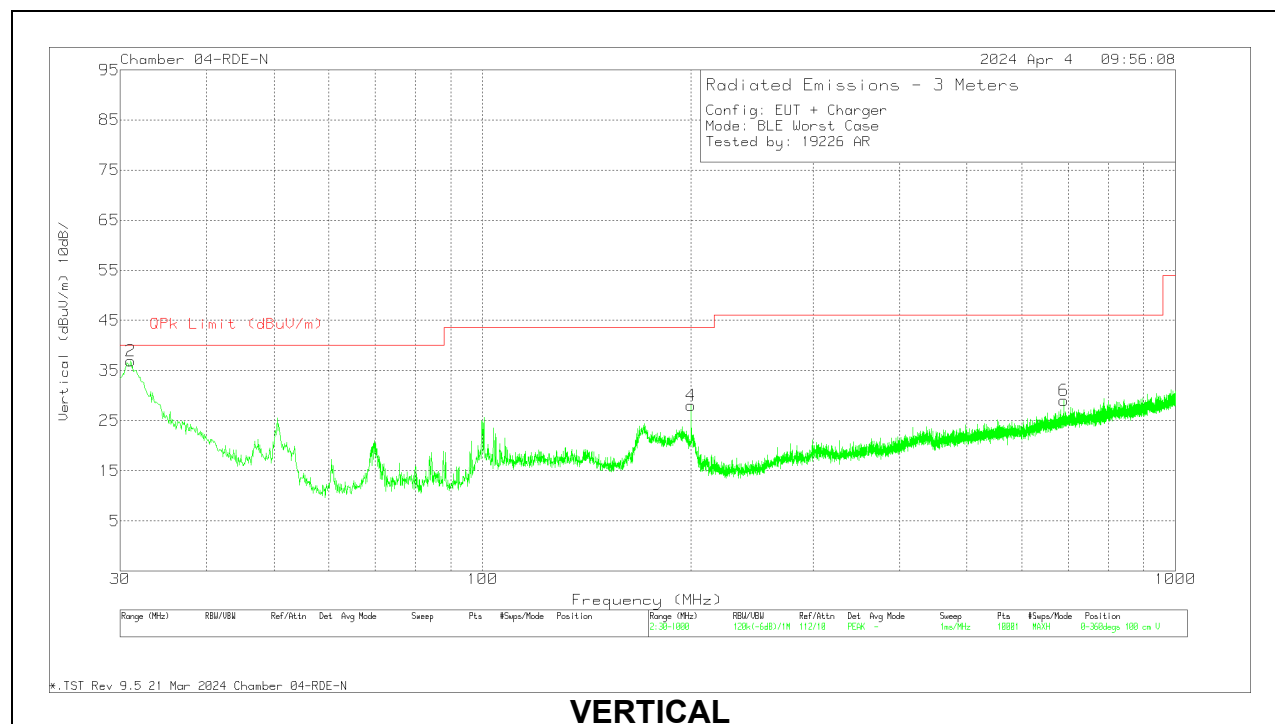
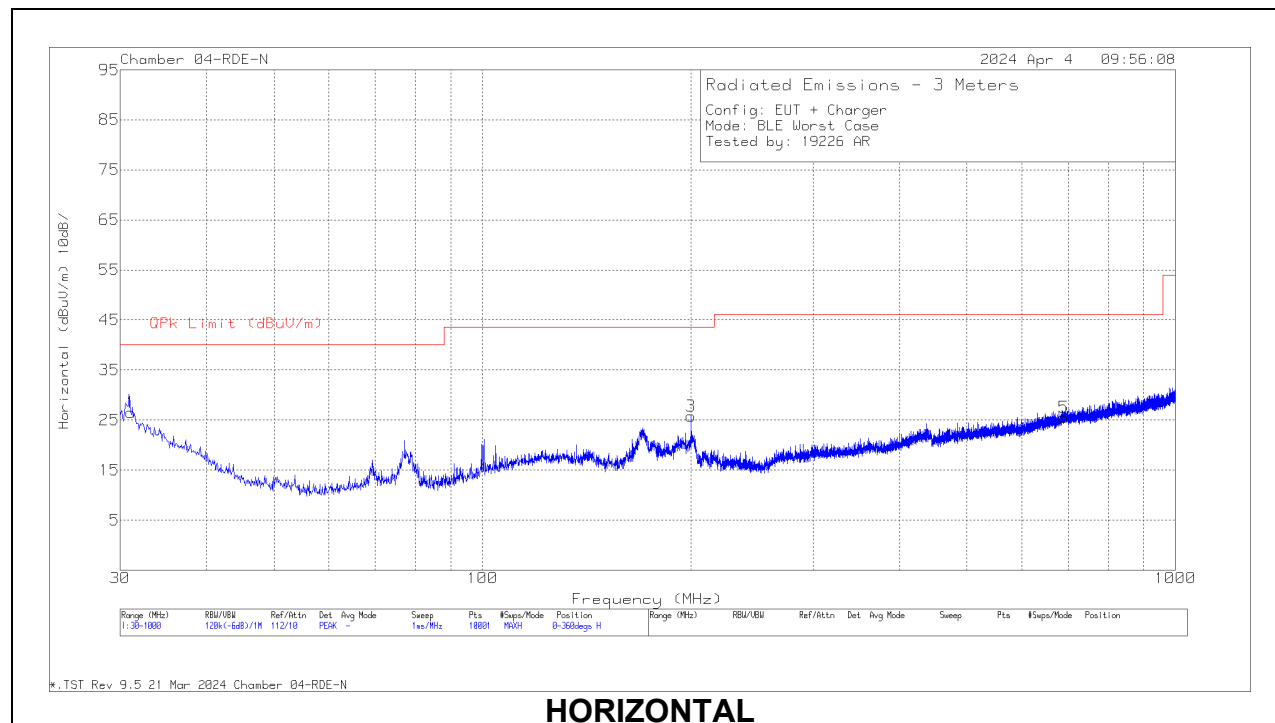
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.3. WORST CASE BELOW 1 GHz

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



Radiated Emissions

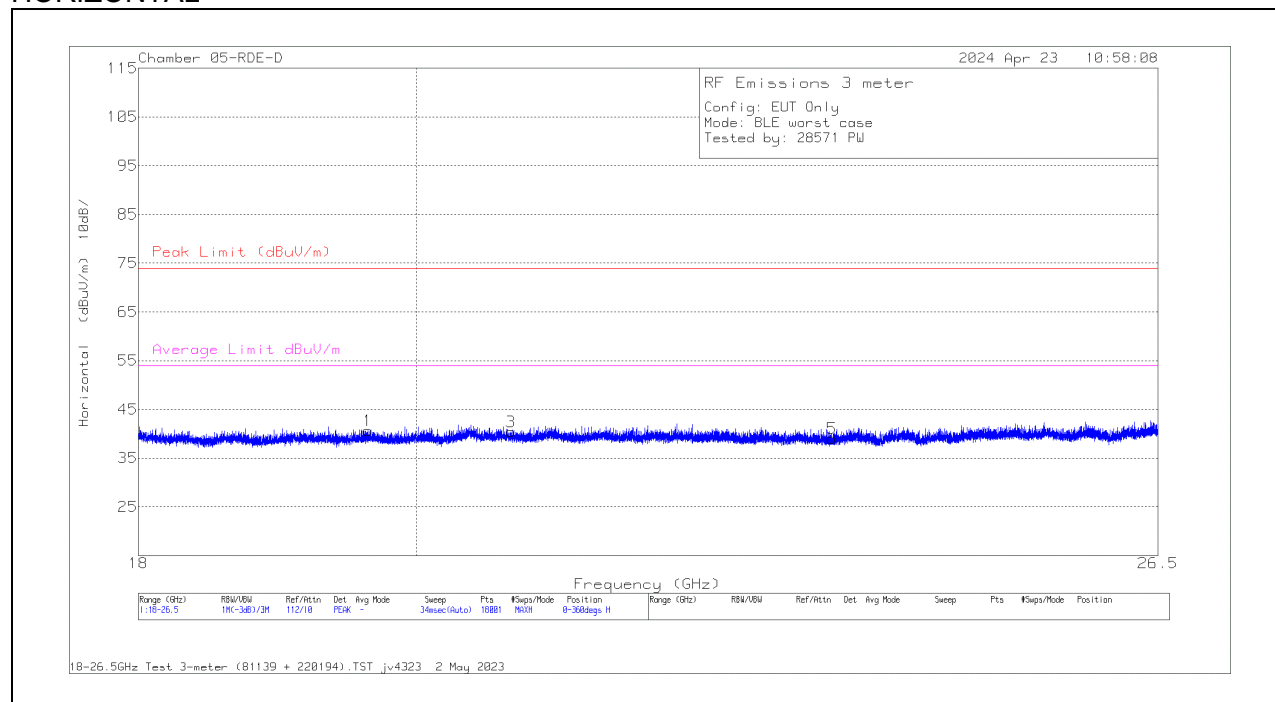
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	222008_A NSI 10m Horizontal (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.067	32.67	Pk	26.3	-32.4	26.57	40	-13.43	0-360	100	H
2	31.067	43.07	Pk	26.3	-32.4	36.97	40	-3.03	0-360	100	V
	31.067	39.41	QP	26.3	-32.4	33.31	40	-6.69	125	115	V
3	199.944	38.69	Pk	18.4	-31.3	25.79	43.52	-17.73	0-360	100	H
4	199.944	40.9	Pk	18.4	-31.3	28	43.52	-15.52	0-360	100	V
5	690.667	29.37	Pk	25.9	-29.7	25.57	46.02	-20.45	0-360	300	H
6	690.667	32.79	Pk	25.9	-29.7	28.99	46.02	-17.03	0-360	100	V

Pk - Peak detector

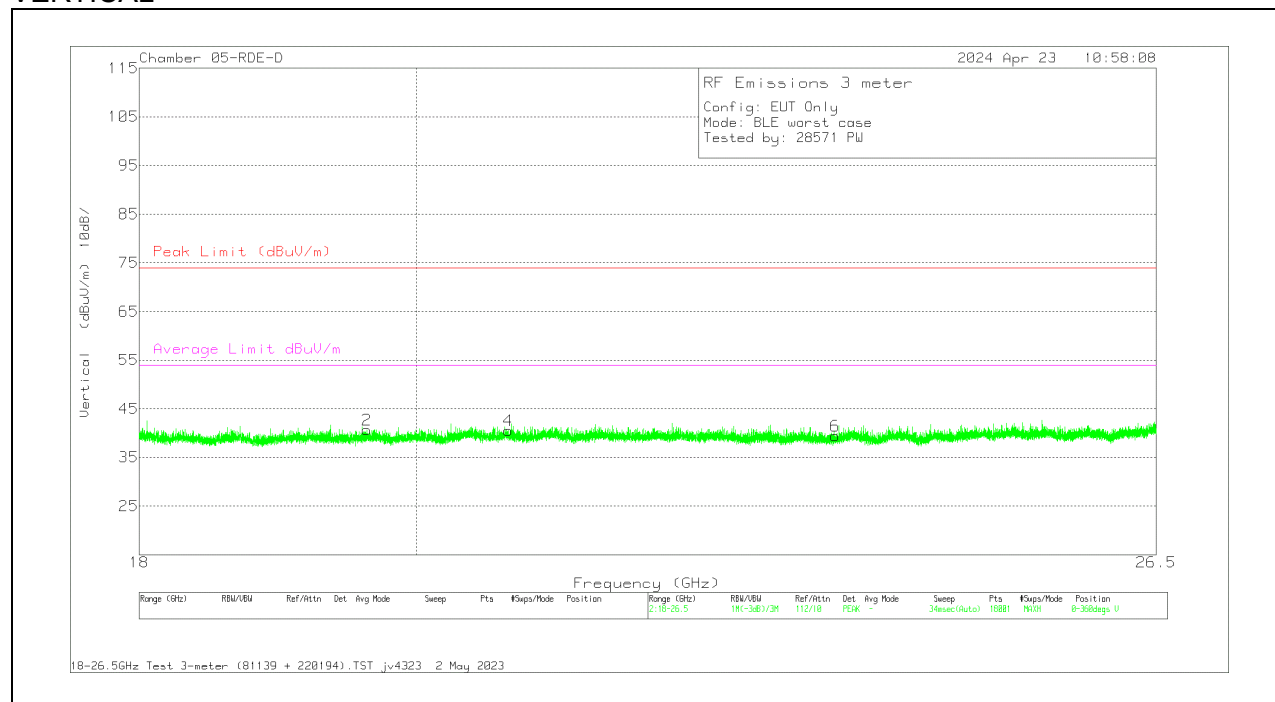
10.4. WORST CASE 18-26 GHz

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

HORIZONTAL



VERTICAL



DATA:

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	Amp/Cbl (dB)	Cables (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	19.629166	56.06	Pk	33.1	-61.6	13.1	40.66	74	-33.34	54	-13.34	0-360	200	V
1	19.639083	55.97	Pk	33.1	-61.5	13.1	40.67	74	-33.33	54	-13.33	0-360	200	H
4	20.712915	53.96	Pk	33.4	-60.4	13.6	40.56	74	-33.44	54	-13.44	0-360	200	V
3	20.733221	53.95	Pk	33.4	-60.5	13.6	40.45	74	-33.55	54	-13.55	0-360	101	H
5	23.416859	53.72	Pk	33.9	-62.9	14.3	39.02	74	-34.98	54	-14.98	0-360	101	H
6	23.456053	54.13	Pk	34	-63	14.3	39.43	74	-34.57	54	-14.57	0-360	101	V

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.

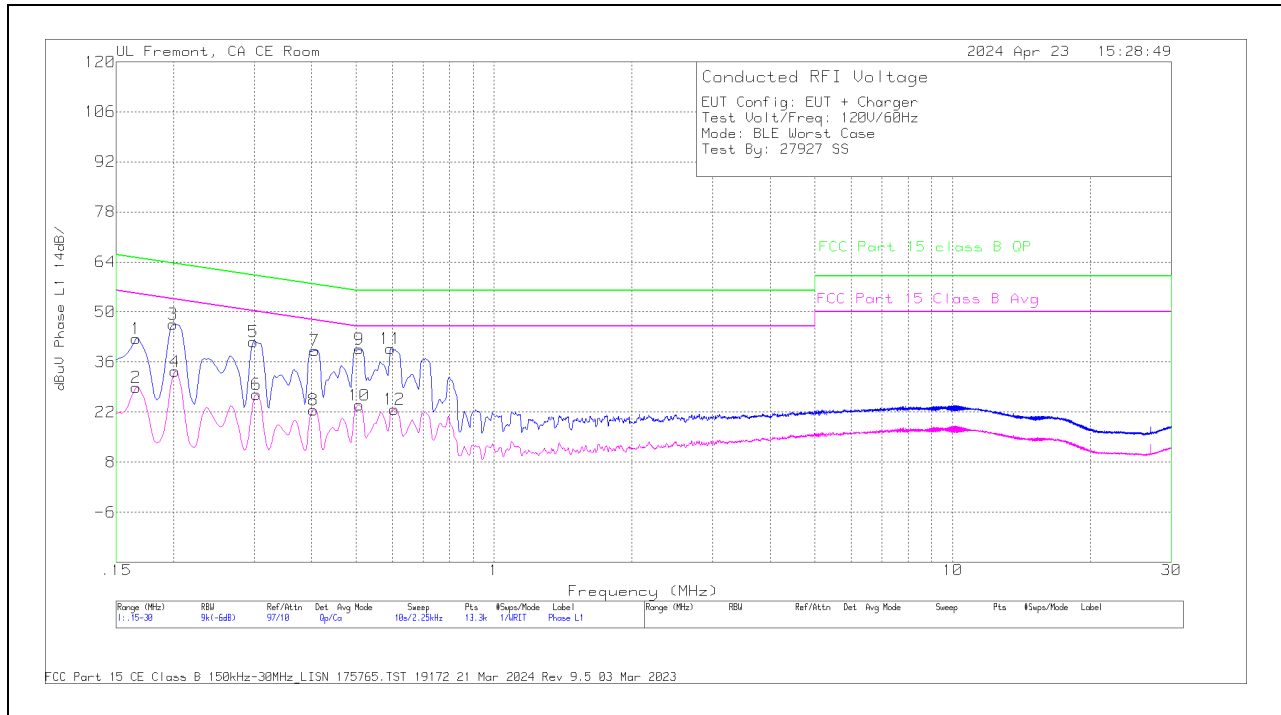
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line WITH AC/DC ADAPTER

LINE 1 RESULTS

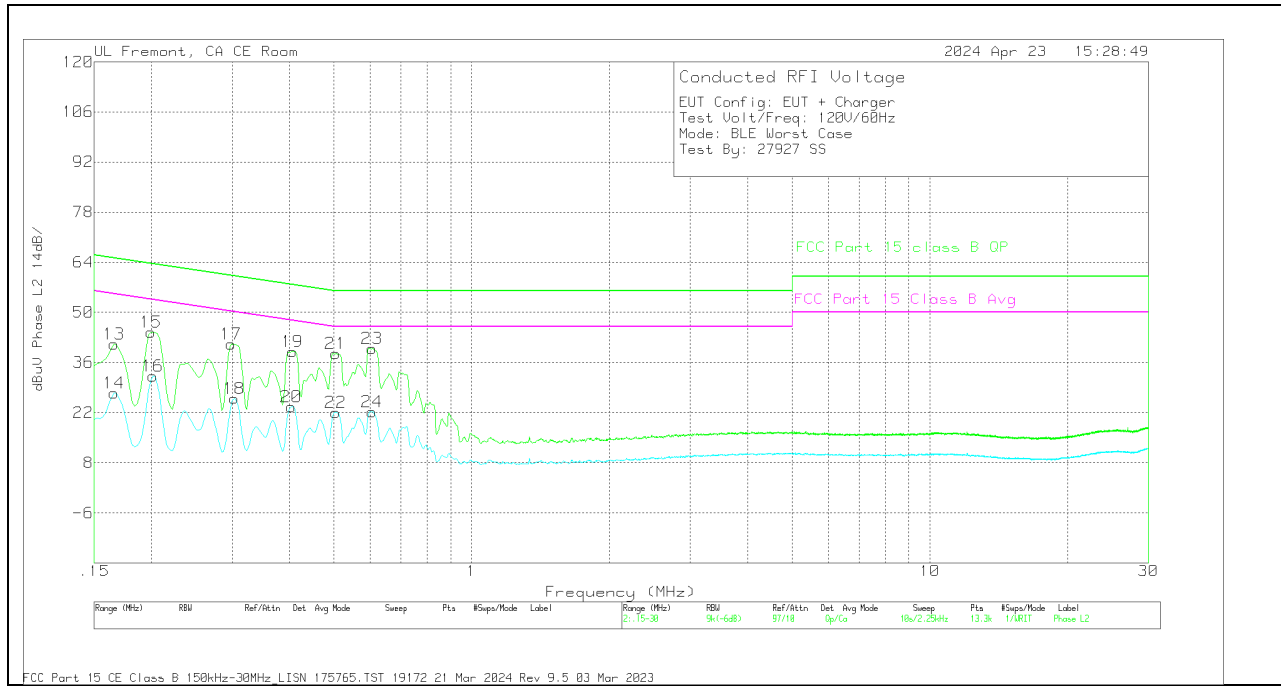


Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Tms Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
2	.1658	9.3	Ca	0	.1	9.5	10	28.9	55.17	-26.27	-	-
4	.2018	13.85	Ca	.1	0	9.4	10	33.35	53.54	-20.19	-	-
6	.303	7.43	Ca	.1	0	9.4	10	26.93	50.16	-23.23	-	-
8	.4043	3.22	Ca	0	0	9.4	10	22.62	47.77	-25.15	-	-
10	.5078	4.6	Ca	0	0	9.3	10	23.9	46	-22.1	-	-
12	.6068	3.31	Ca	0	0	9.4	10	22.71	46	-23.29	-	-
1	.1658	23	Qp	0	.1	9.5	10	42.6	-	-	65.17	-22.57
3	.1995	26.98	Qp	.1	.1	9.4	10	46.58	-	-	63.63	-17.05
5	.2985	22.19	Qp	.1	0	9.4	10	41.69	-	-	60.28	-18.59
7	.4065	19.85	Qp	0	0	9.4	10	39.25	-	-	57.72	-18.47
9	.5078	20.35	Qp	0	0	9.3	10	39.65	-	-	56	-16.35
11	.5955	20.28	Qp	0	0	9.4	10	39.68	-	-	56	-16.32

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



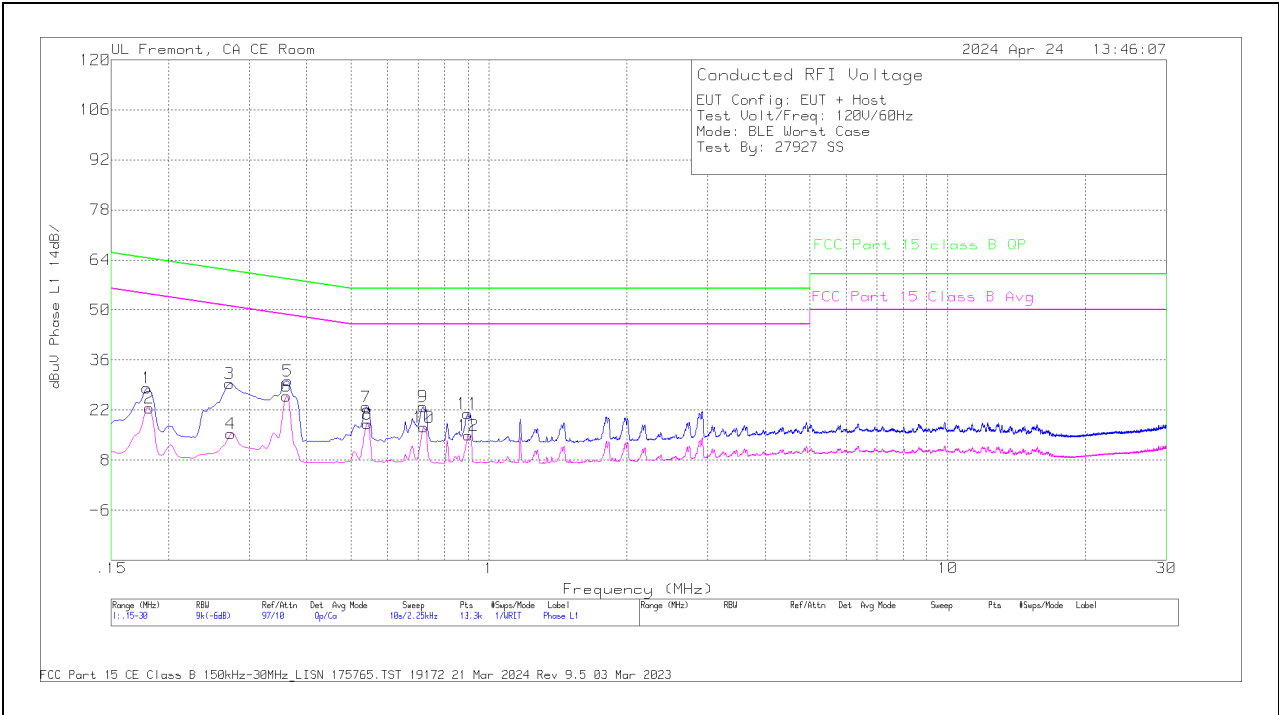
Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Trms Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
14	.1658	7.83	Ca	0	.1	9.5	10	27.43	55.17	-27.74	-	-
16	.2018	12.68	Ca	.1	0	9.4	10	32.18	53.54	-21.36	-	-
18	.303	6.48	Ca	.1	0	9.4	10	25.98	50.16	-24.18	-	-
20	.4043	4.07	Ca	.1	0	9.4	10	23.57	47.77	-24.2	-	-
22	.5055	2.82	Ca	0	0	9.3	10	22.12	46	-23.88	-	-
24	.6068	2.76	Ca	.1	0	9.4	10	22.26	46	-23.74	-	-
13	.1658	21.58	Qp	0	.1	9.5	10	41.18	-	-	65.17	-23.99
15	.1995	25.03	Qp	.1	0	9.4	10	44.53	-	-	63.63	-19.1
17	.2985	21.68	Qp	.1	0	9.4	10	41.18	-	-	60.28	-19.1
19	.4065	19.59	Qp	.1	0	9.4	10	39.09	-	-	57.72	-18.63
21	.5055	19.2	Qp	0	0	9.3	10	38.5	-	-	56	-17.5
23	.6068	20.45	Qp	.1	0	9.4	10	39.95	-	-	56	-16.05

Qp - Quasi-Peak detector

Ca - CISPR average detection

11.2. AC POWER LINE WITH LAPTOP

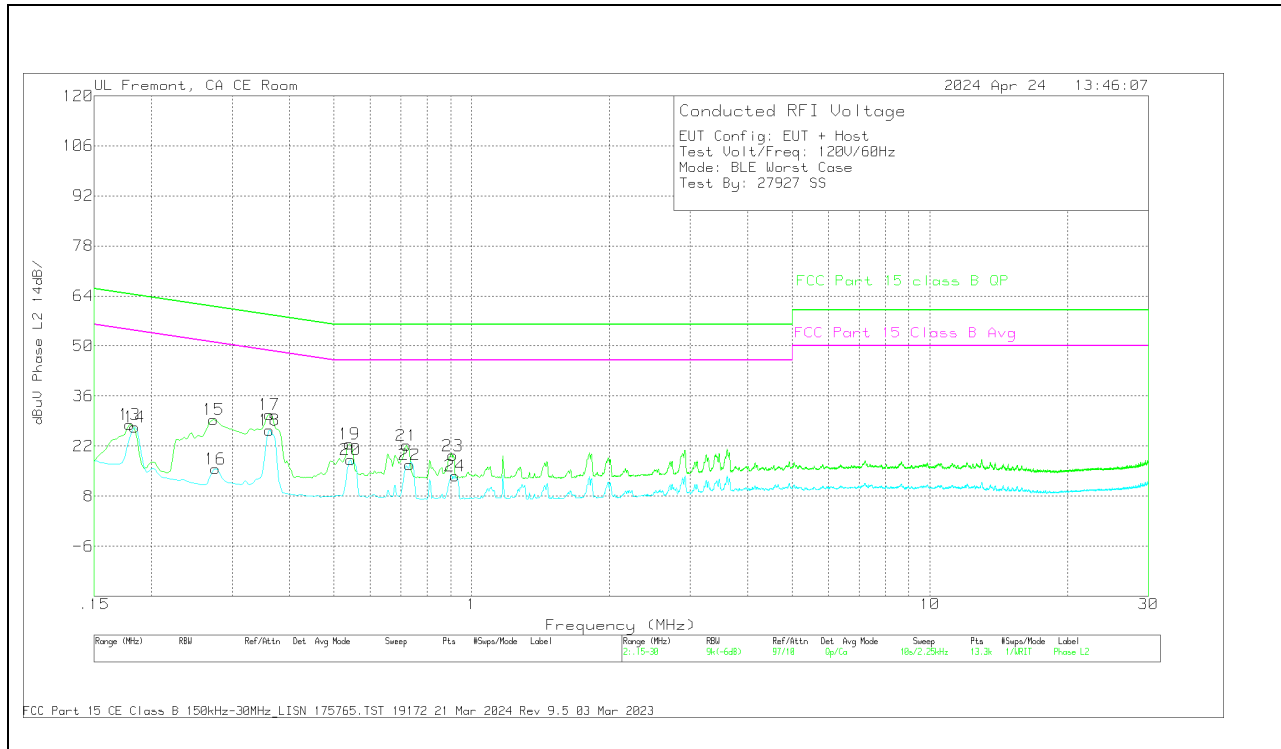
LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	Cbl (dB)	LISN (dB)	Trns Limiter (dB)	10 dB Pad	Corrected Reading dBUV	FCC Part 15 Class B Avg dBUV	Margin (dB)	FCC Part 15 class B QP dBUV	Margin (dB)
2	.1815	3.02	Ca	.1	.1	9.4	10	22.62	54.42	-31.8	-	-
4	.2738	-4.01	Ca	0	0	9.4	10	15.39	51	-35.61	-	-
6	.3615	6.52	Ca	0	0	9.4	10	25.92	48.69	-22.77	-	-
8	.5426	-1.3	Ca	.1	0	9.3	10	18.1	46	-27.9	-	-
10	.7215	-2.18	Ca	.1	0	9.3	10	17.22	46	-28.78	-	-
12	.9015	-4.56	Ca	.1	0	9.4	10	14.94	46	-31.06	-	-
1	.1793	8.58	Qp	.1	.1	9.4	10	28.18	-	-	64.52	-36.34
3	.2715	9.94	Qp	0	0	9.4	10	29.34	-	-	61.07	-31.73
5	.3638	10.79	Qp	0	0	9.4	10	30.19	-	-	58.64	-28.45
7	.5393	3.45	Qp	.1	0	9.3	10	22.85	-	-	56	-33.15
9	.7193	3.58	Qp	.1	0	9.3	10	22.98	-	-	56	-33.02
11	.8993	1.52	Qp	.1	0	9.4	10	21.02	-	-	56	-34.98

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Obs (dB)	LISN (dB)	Trms Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
14	.1838	7.86	Ca	.1	0	9.4	10	27.36	54.31	-26.95	-	-
16	.276	-3.86	Ca	.1	0	9.4	10	15.64	50.94	-35.3	-	-
18	.3615	6.95	Ca	.1	0	9.4	10	26.45	48.69	-22.24	-	-
20	.5438	-1.15	Ca	0	0	9.3	10	18.15	46	-27.85	-	-
22	.7328	-2.68	Ca	0	0	9.4	10	16.72	46	-29.28	-	-
24	.9195	-5.76	Ca	0	0	9.4	10	13.64	46	-32.36	-	-
13	.1793	8.58	Qp	.1	0	9.4	10	28.08	-	-	64.52	-36.44
15	.2738	9.95	Qp	0	0	9.4	10	29.35	-	-	61	-31.65
17	.3615	11.37	Qp	.1	0	9.4	10	30.87	-	-	58.69	-27.82
19	.5415	3.3	Qp	0	0	9.3	10	22.6	-	-	56	-33.4
21	.7215	2.85	Qp	0	0	9.3	10	22.15	-	-	56	-33.85
23	.9105	-.07	Qp	0	0	9.4	10	19.33	-	-	56	-36.67

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. SETUP PHOTOS

Please refer to setup photos 14982489-EP1V1

END OF TEST REPORT