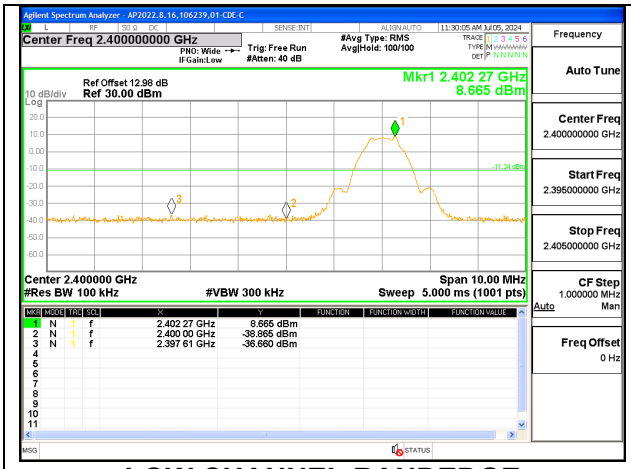
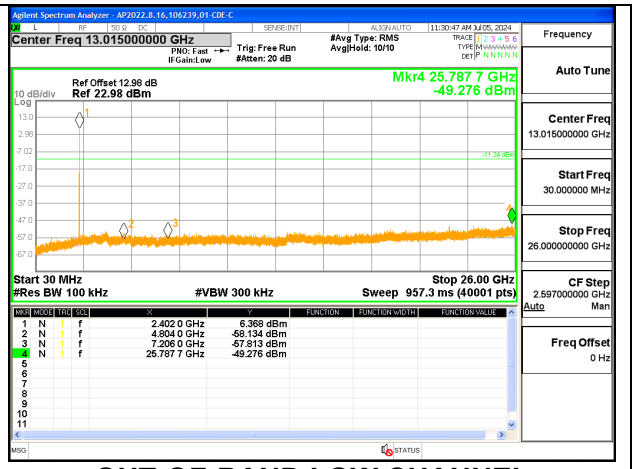
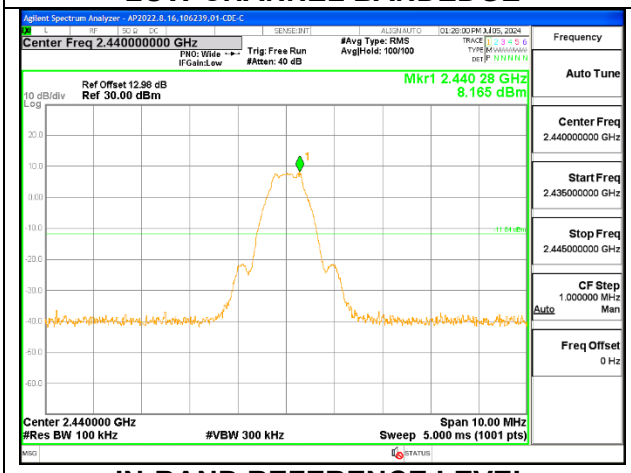
ANT 3



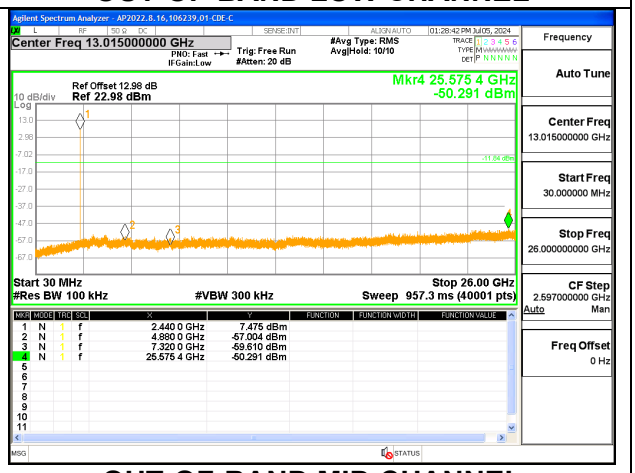
LOW CHANNEL BANDEDGE



OUT-OF-BAND LOW CHANNEL



IN-BAND REFERENCE LEVEL



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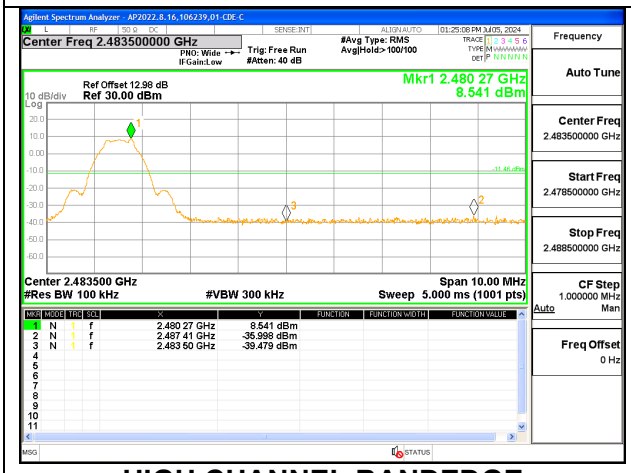
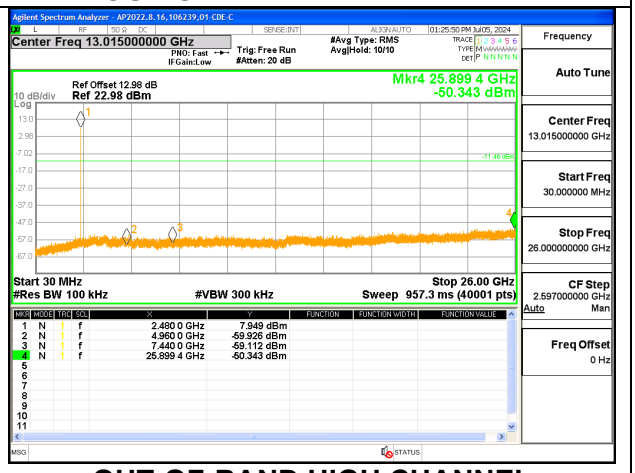


HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

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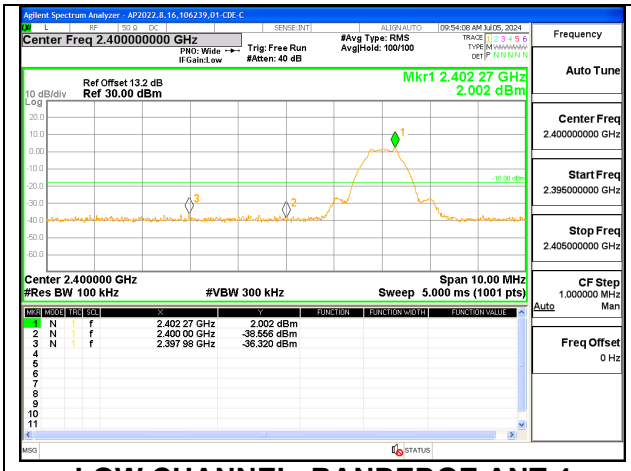
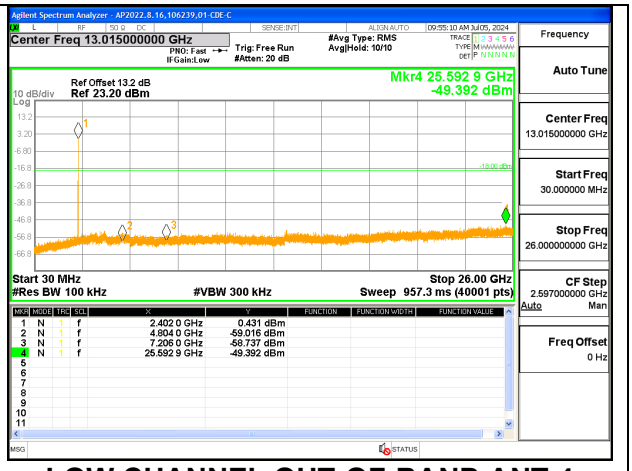
9.7.6. **LOW POWER BLE TXBF (1Mbps)**

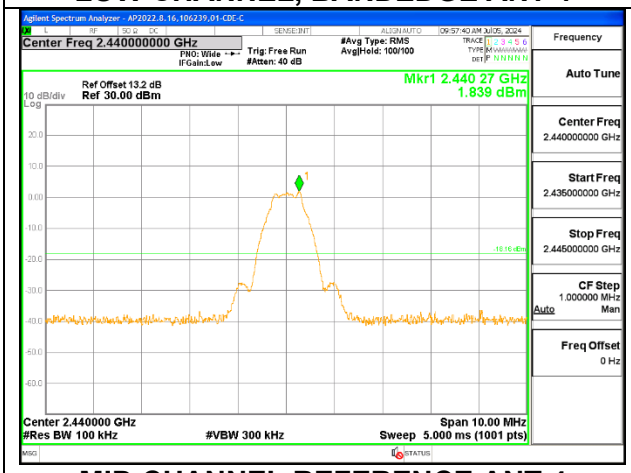
Note: Test procedures and setting are same as BLE normal mode.



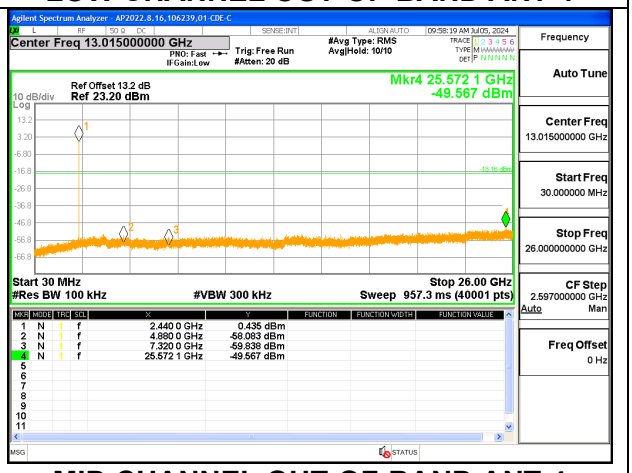
LOW CHANNEL, BANDEDGE ANT 4



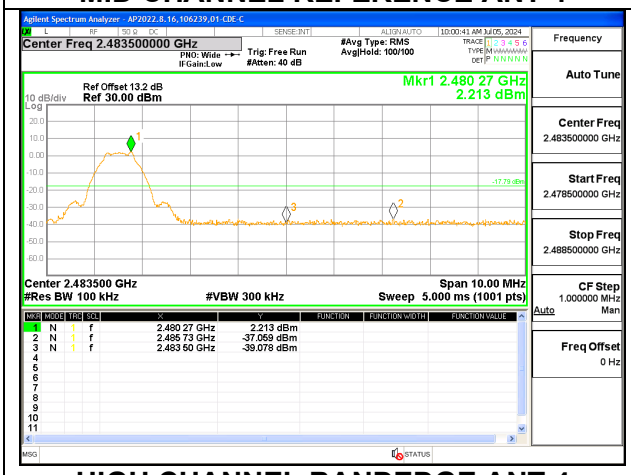
LOW CHANNEL OUT-OF-BAND ANT 4



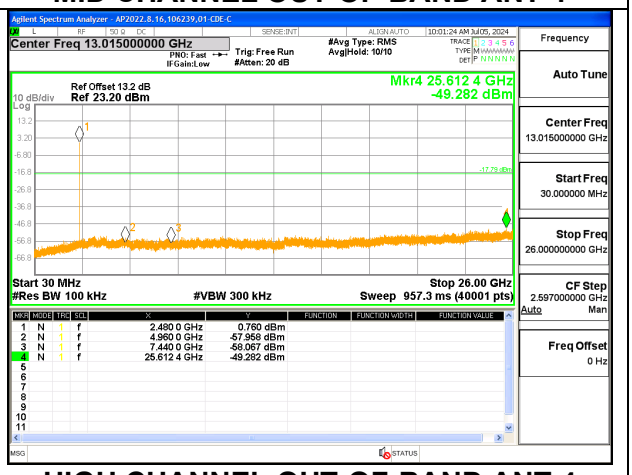
MID CHANNEL REFERENCE ANT 4



MID CHANNEL OUT-OF-BAND ANT 4



HIGH CHANNEL BANDEDGE ANT 4



HIGH CHANNEL OUT-OF-BAND ANT 4

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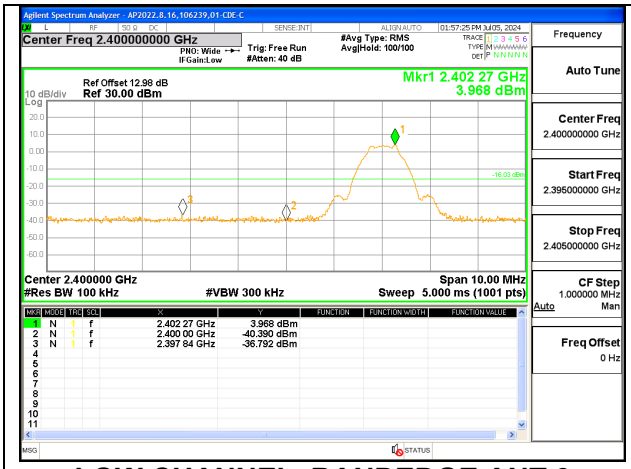
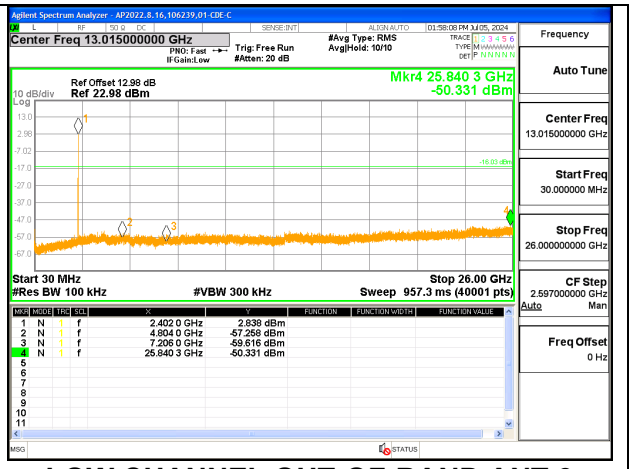
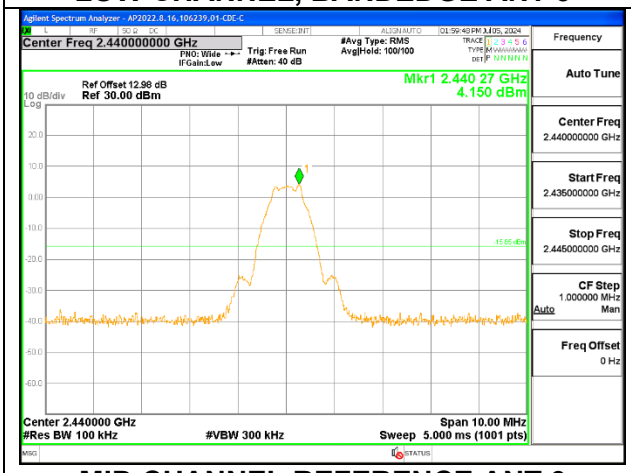


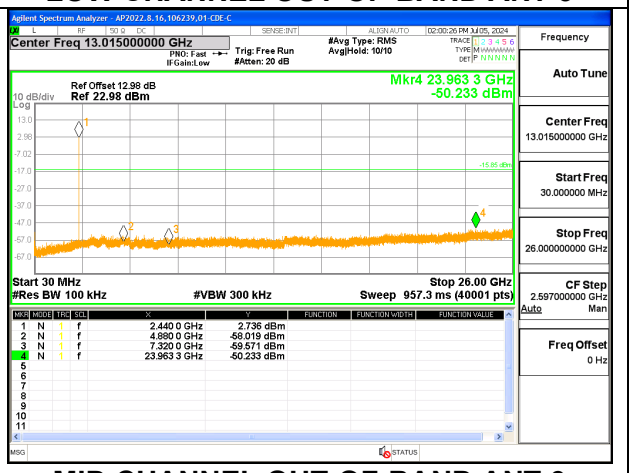
LOW CHANNEL, BANDEDGE ANT 3



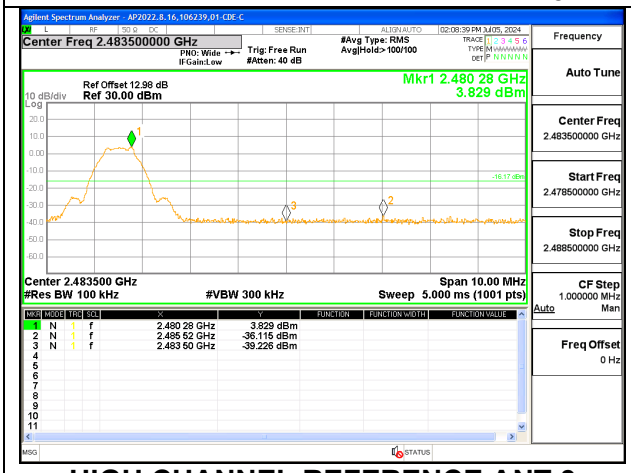
LOW CHANNEL OUT-OF-BAND ANT 3



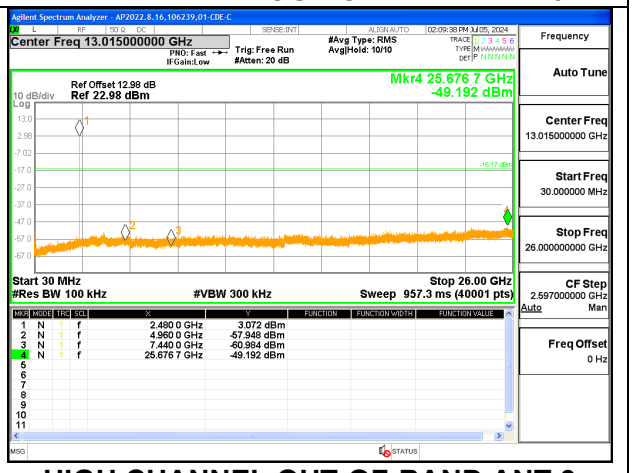
MID CHANNEL REFERENCE ANT 3



MID CHANNEL OUT-OF-BAND ANT 3



HIGH CHANNEL REFERENCE ANT 3



HIGH CHANNEL OUT-OF-BAND ANT 3

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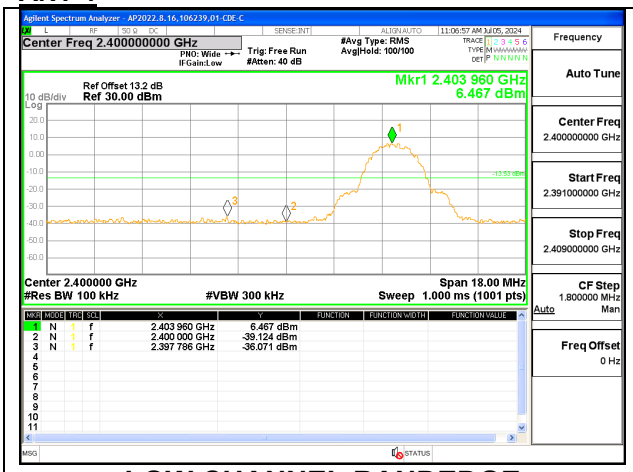
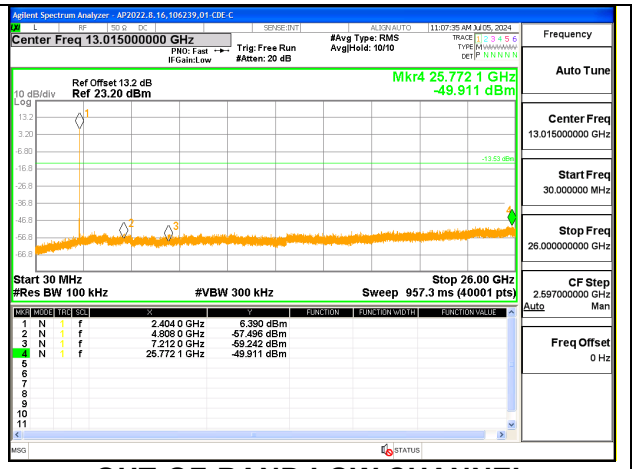
9.7.7. **LOW POWER BLE (2Mbps)**

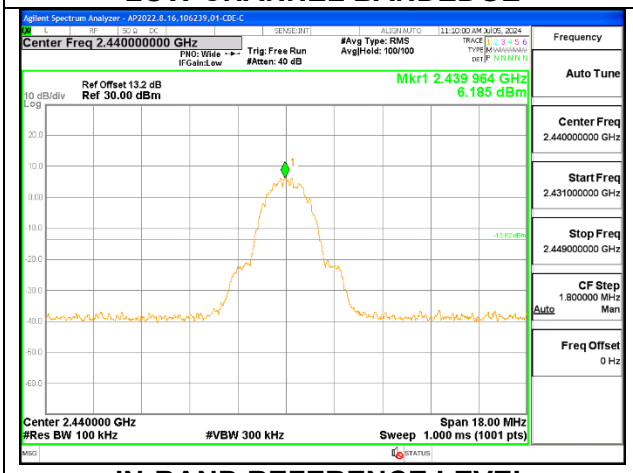
ANT 4



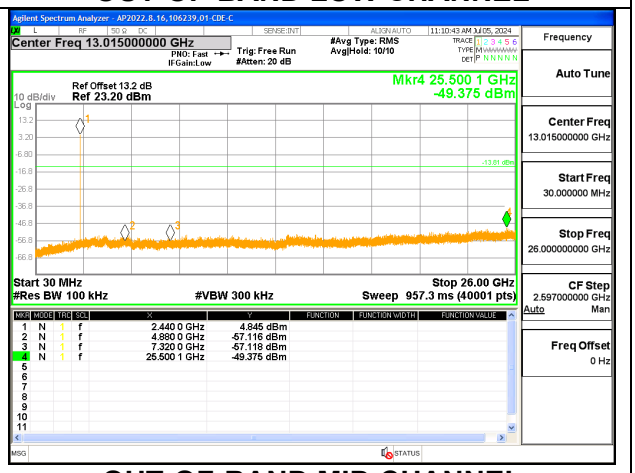
LOW CHANNEL BANDEDGE



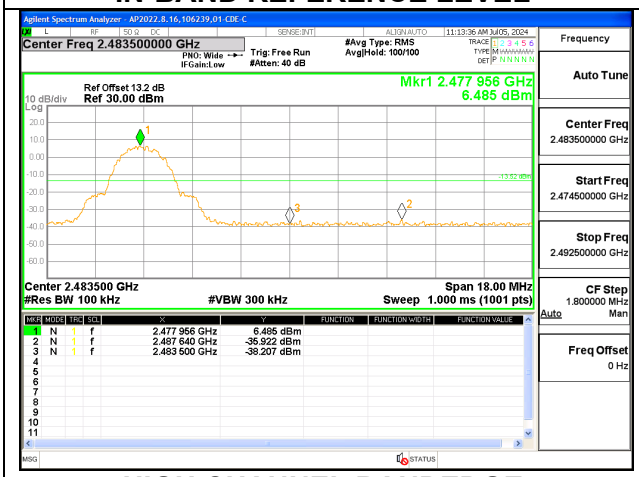
OUT-OF-BAND LOW CHANNEL



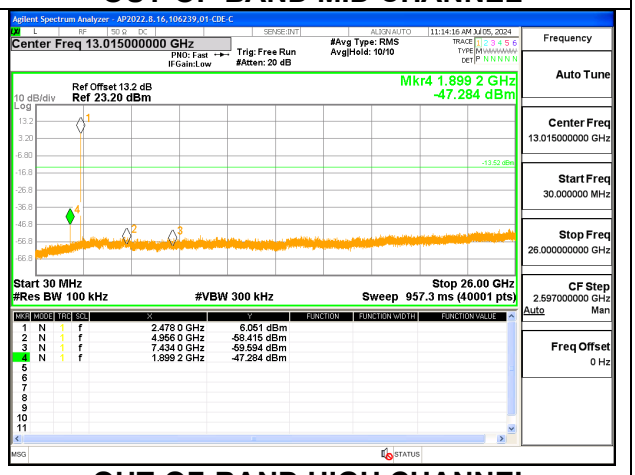
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

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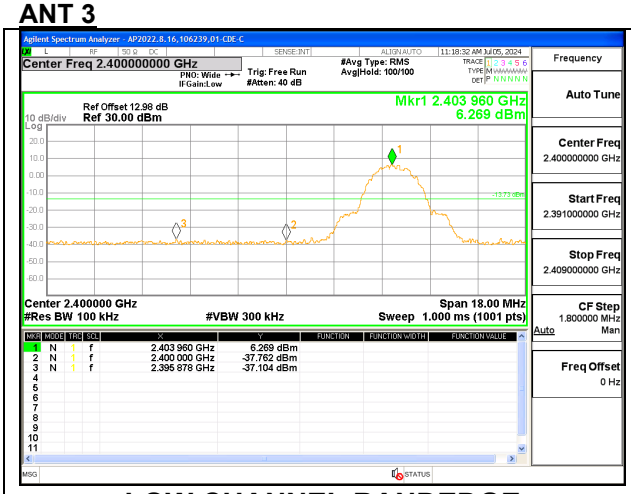
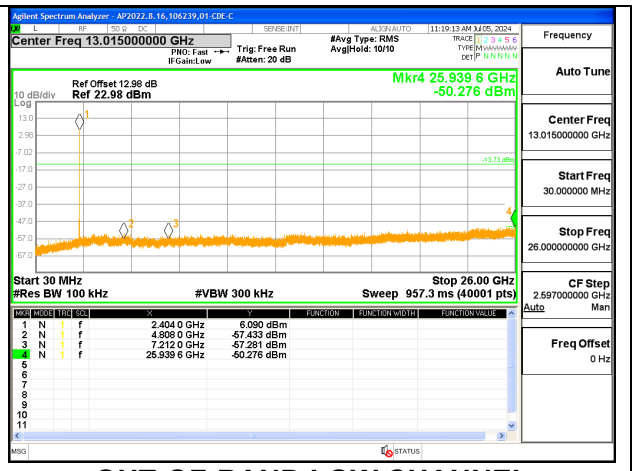
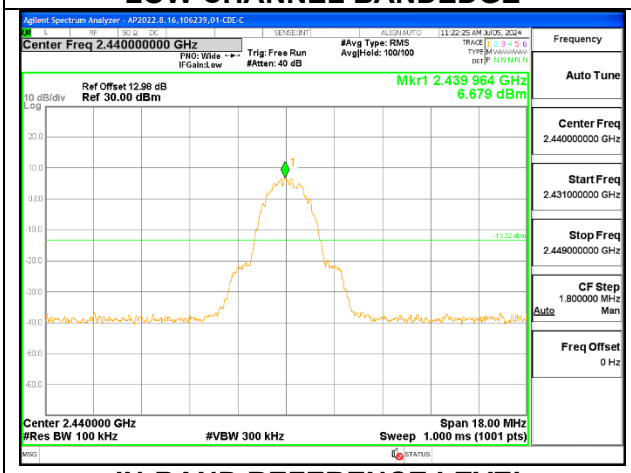
ANT 3



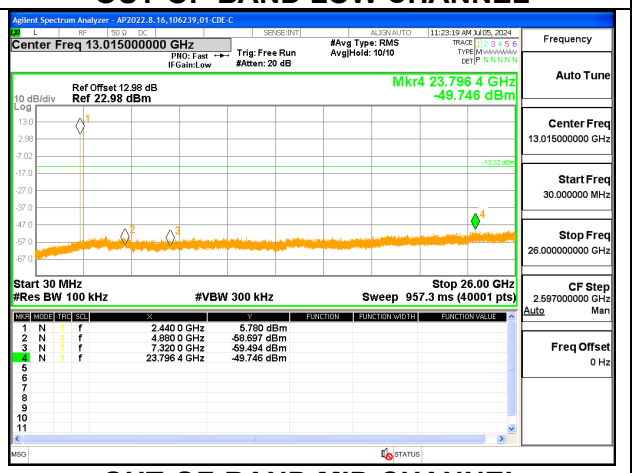
LOW CHANNEL BANDEDGE



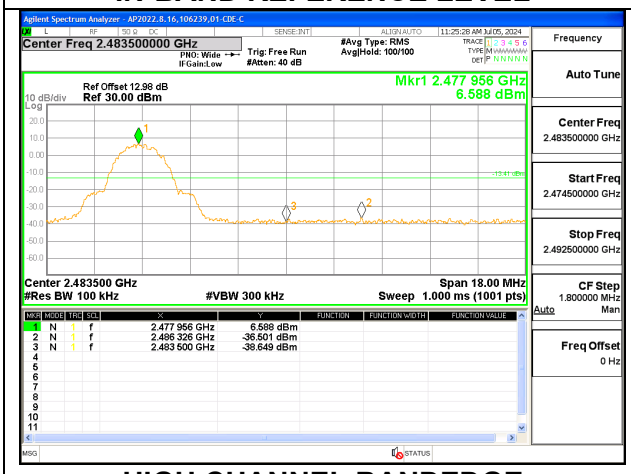
OUT-OF-BAND LOW CHANNEL



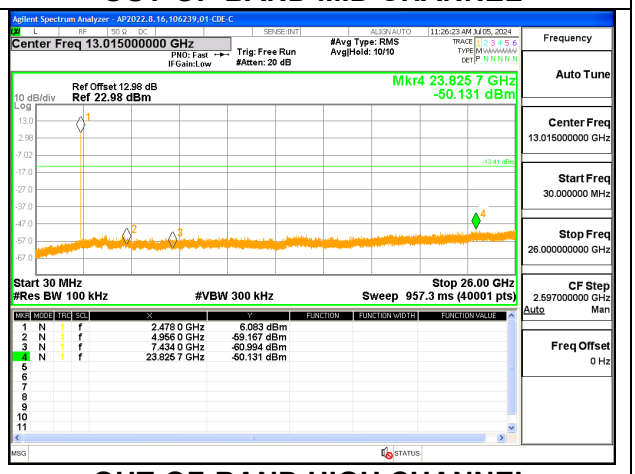
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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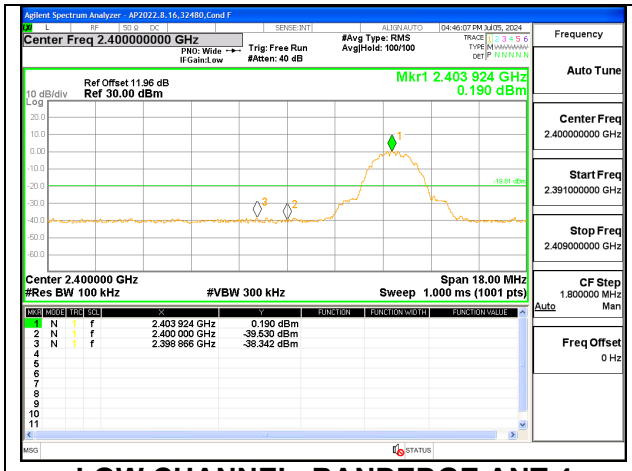
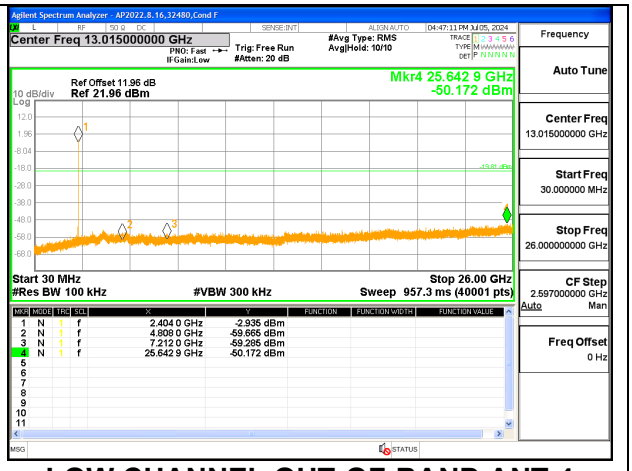
9.7.8. **LOW POWER BLE TXBF (2Mbps)**

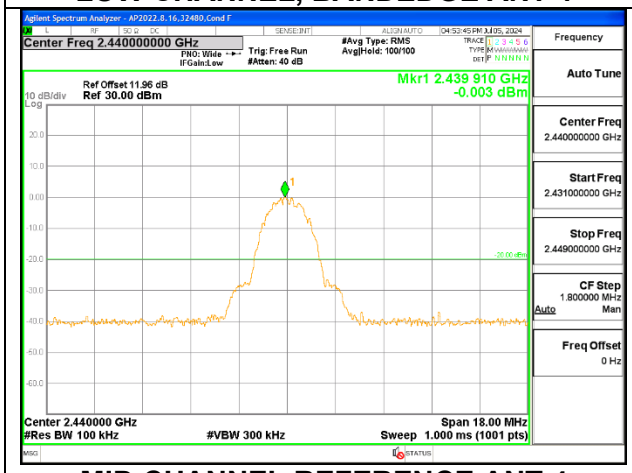
Note: Test procedures and setting are same as BLE normal mode.



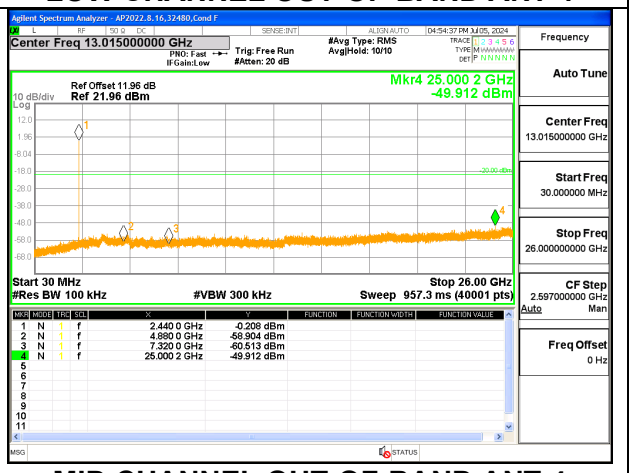
LOW CHANNEL, BANDEDGE ANT 4



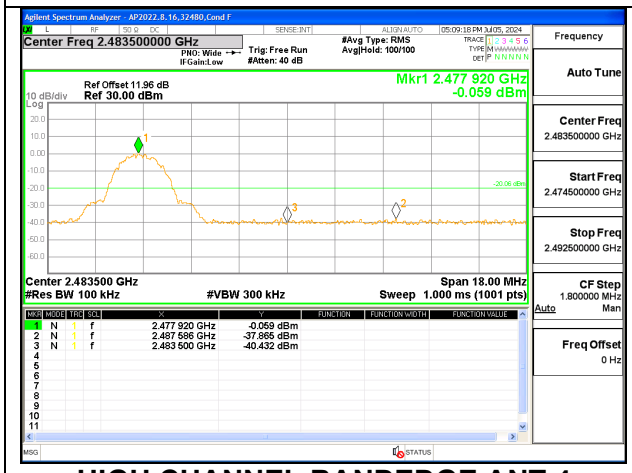
LOW CHANNEL OUT-OF-BAND ANT 4



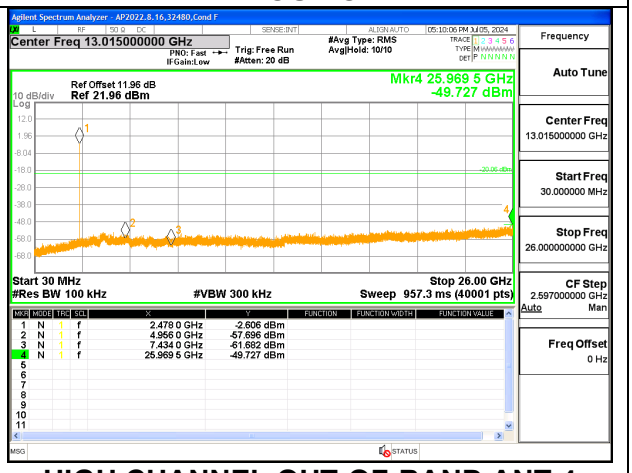
MID CHANNEL REFERENCE ANT 4



MID CHANNEL OUT-OF-BAND ANT 4



HIGH CHANNEL BANDEDGE ANT 4



HIGH CHANNEL OUT-OF-BAND ANT 4

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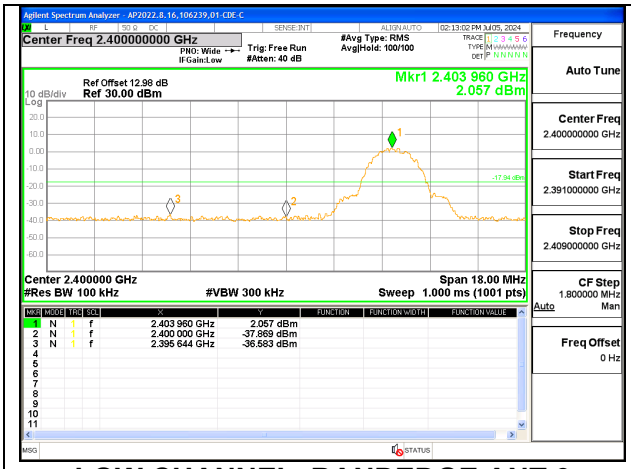
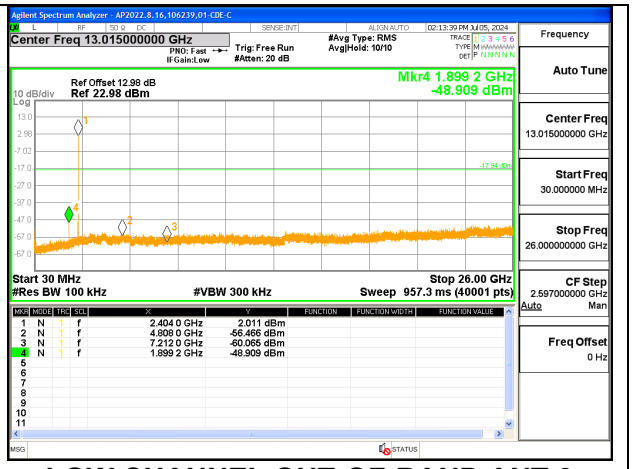
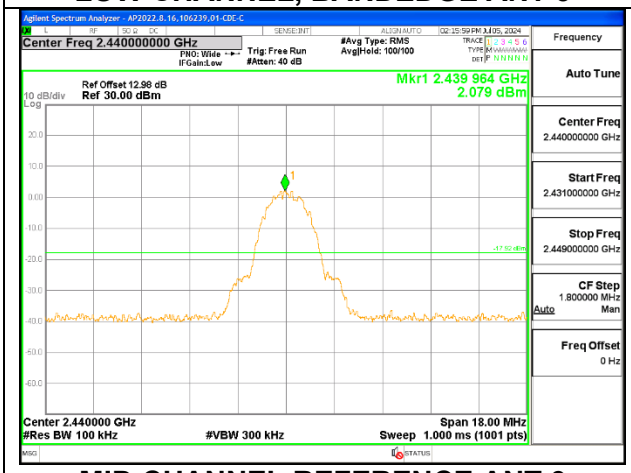


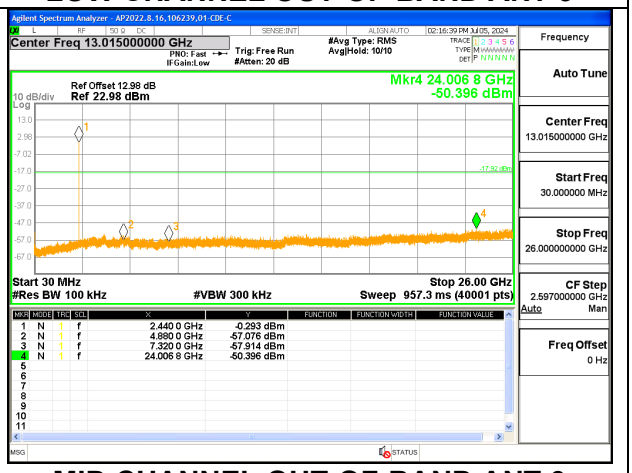
LOW CHANNEL, BANDEDGE ANT 3



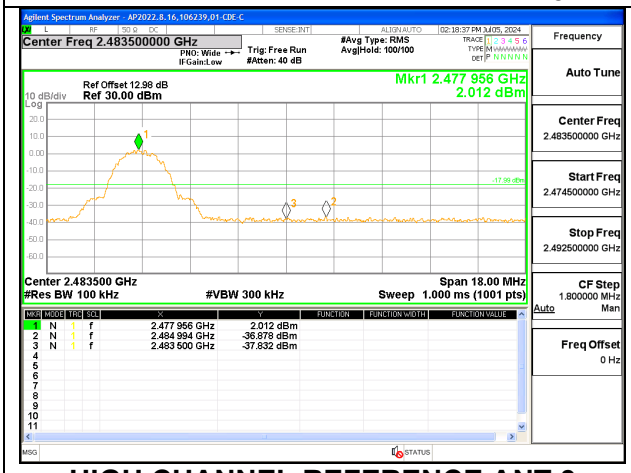
LOW CHANNEL OUT-OF-BAND ANT 3



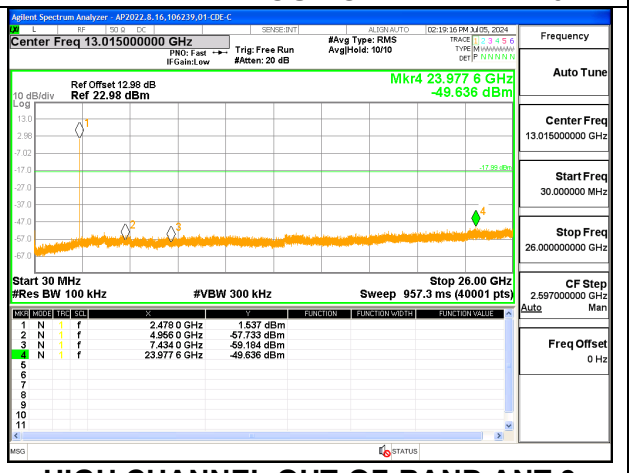
MID CHANNEL REFERENCE ANT 3



MID CHANNEL OUT-OF-BAND ANT 3



HIGH CHANNEL REFERENCE ANT 3



HIGH CHANNEL OUT-OF-BAND ANT 3

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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.

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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

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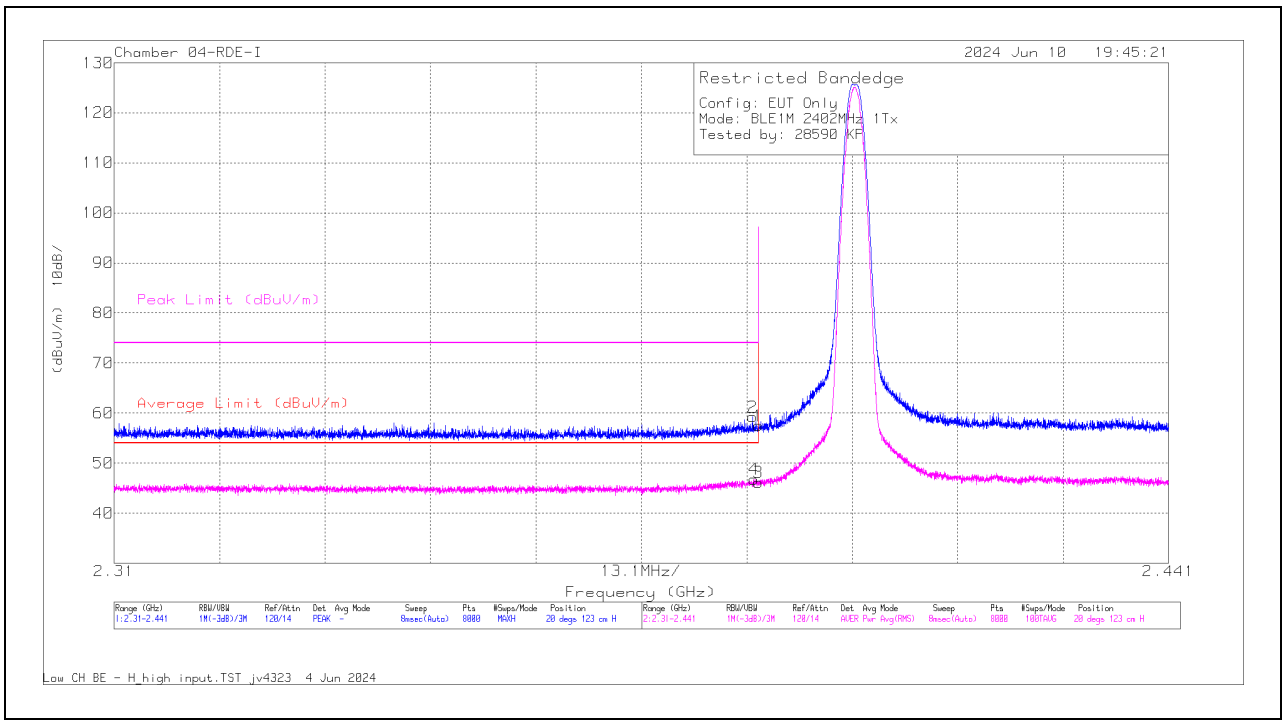
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	44.97	Pk	31.7	-19.2	57.47	-	-	74	-16.53	20	123	H
2	* 2.389347	46.72	Pk	31.7	-19.2	59.22	-	-	74	-14.78	20	123	H
3	* 2.39	33.65	RMS	31.7	-19.2	46.15	54	-7.85	-	-	20	123	H
4	* 2.389478	34.31	RMS	31.7	-19.2	46.81	54	-7.19	-	-	20	123	H

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

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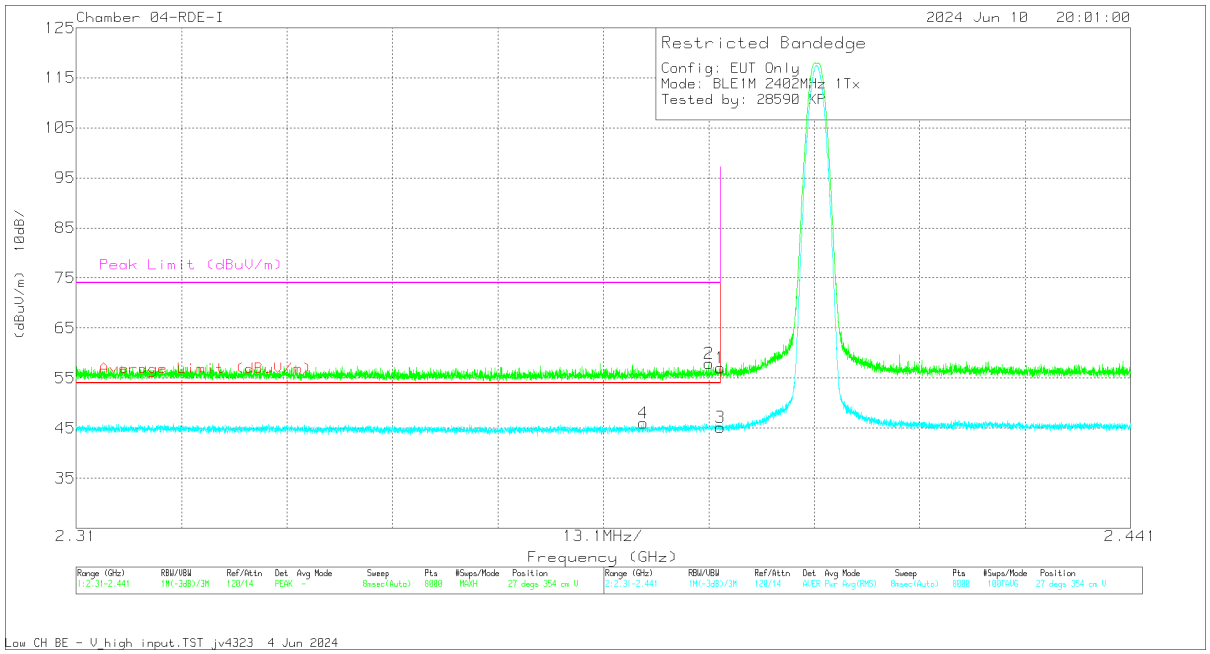
VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	44.58	Pk	31.7	-19.2	57.08	-	-	74	-16.92	27	354	V
2	* 2.38861	45.46	Pk	31.7	-19.2	57.96	-	-	74	-16.04	27	354	V
3	* 2.39	32.69	RMS	31.7	-19.2	45.19	54	-8.81	-	-	27	354	V
4	* 2.380454	33.48	RMS	31.7	-19.2	45.98	54	-8.02	-	-	27	354	V

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

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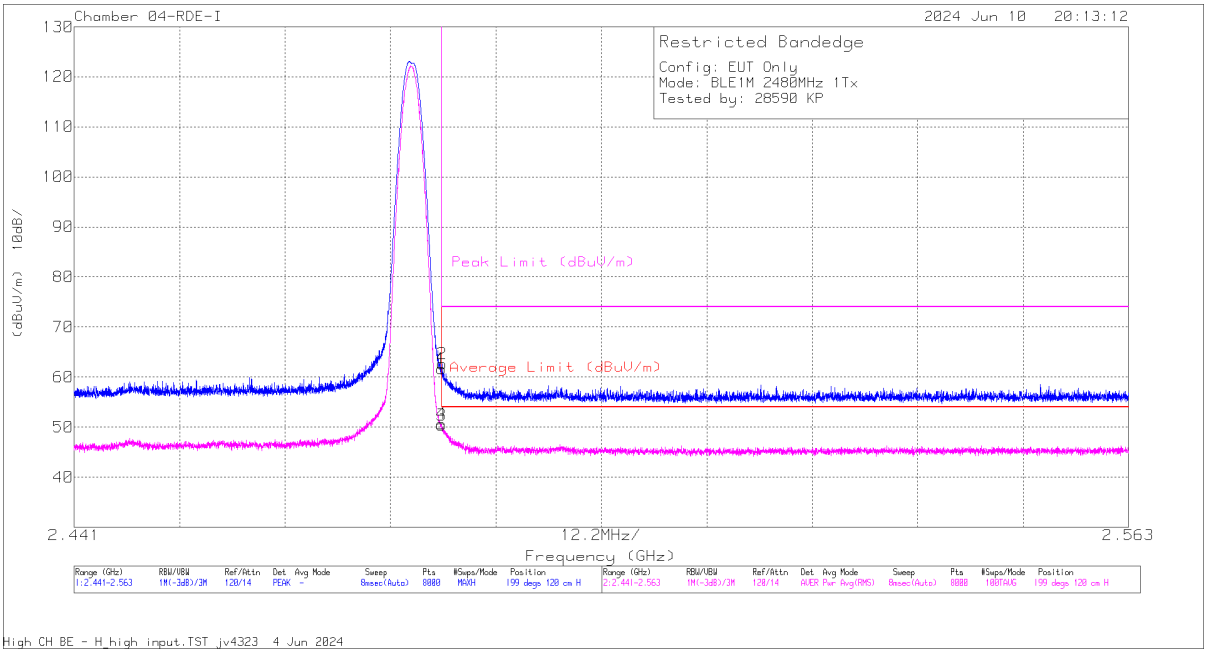
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	48.82	Pk	32	-19.2	61.62	-	-	74	-12.38	199	120	H
2	* 2.483553	49.85	Pk	32	-19.2	62.65	-	-	74	-11.35	199	120	H
3	* 2.4835	37.57	RMS	32	-19.2	50.37	54	-3.63	-	-	199	120	H
4	* 2.483507	37.86	RMS	32	-19.2	50.66	54	-3.34	-	-	199	120	H

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

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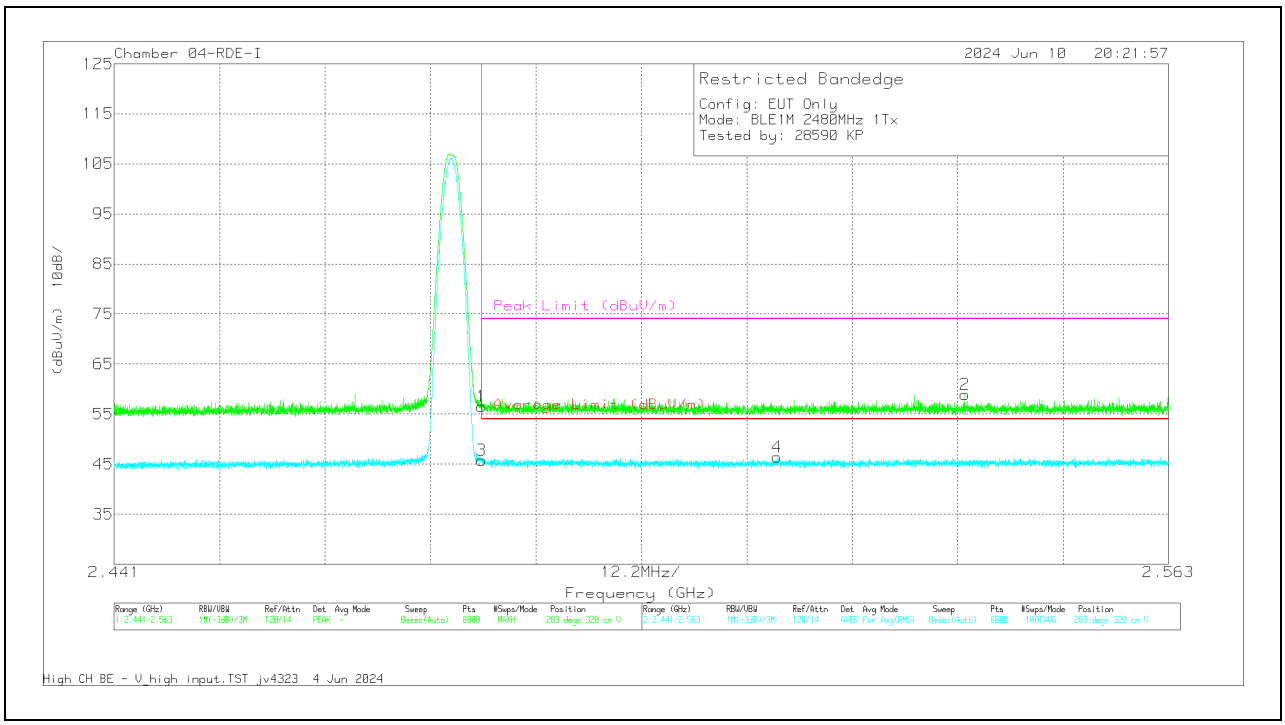
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	43.78	Pk	32	-19.2	56.58	-	-	74	-17.42	283	320	V
3	* 2.4835	32.95	RMS	32	-19.2	45.75	54	-8.25	-	-	283	320	V
4	2.517702	33.58	RMS	32.1	-19.3	46.38	54	-7.62	-	-	283	320	V
2	2.539436	46.14	Pk	32.2	-19.4	58.94	-	-	74	-15.06	283	320	V

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

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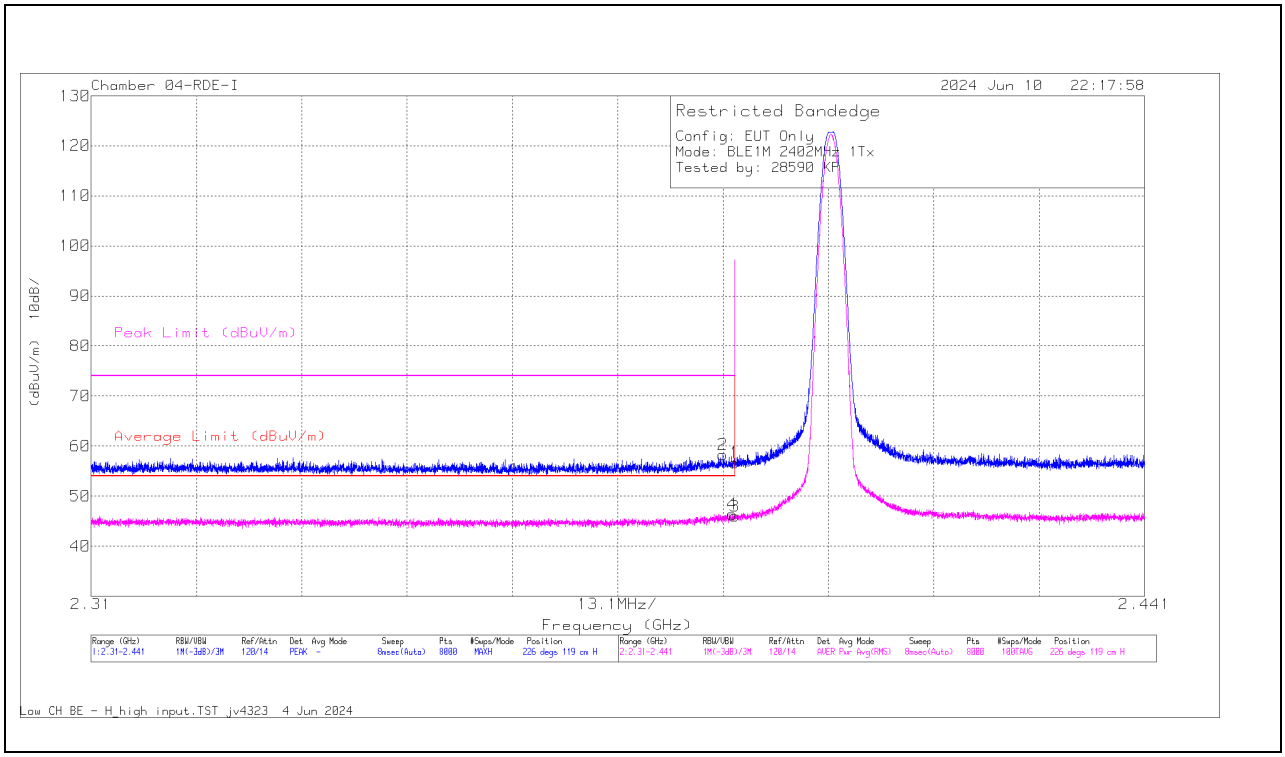
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	44.17	Pk	31.7	-19.2	56.67	-	-	74	-17.33	226	119	H
2	* 2.38856	45.75	Pk	31.7	-19.2	58.25	-	-	74	-15.75	226	119	H
3	* 2.39	33.46	RMS	31.7	-19.2	45.96	54	-8.04	-	-	226	119	H
4	* 2.38974	33.92	RMS	31.7	-19.2	46.42	54	-7.58	-	-	226	119	H

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

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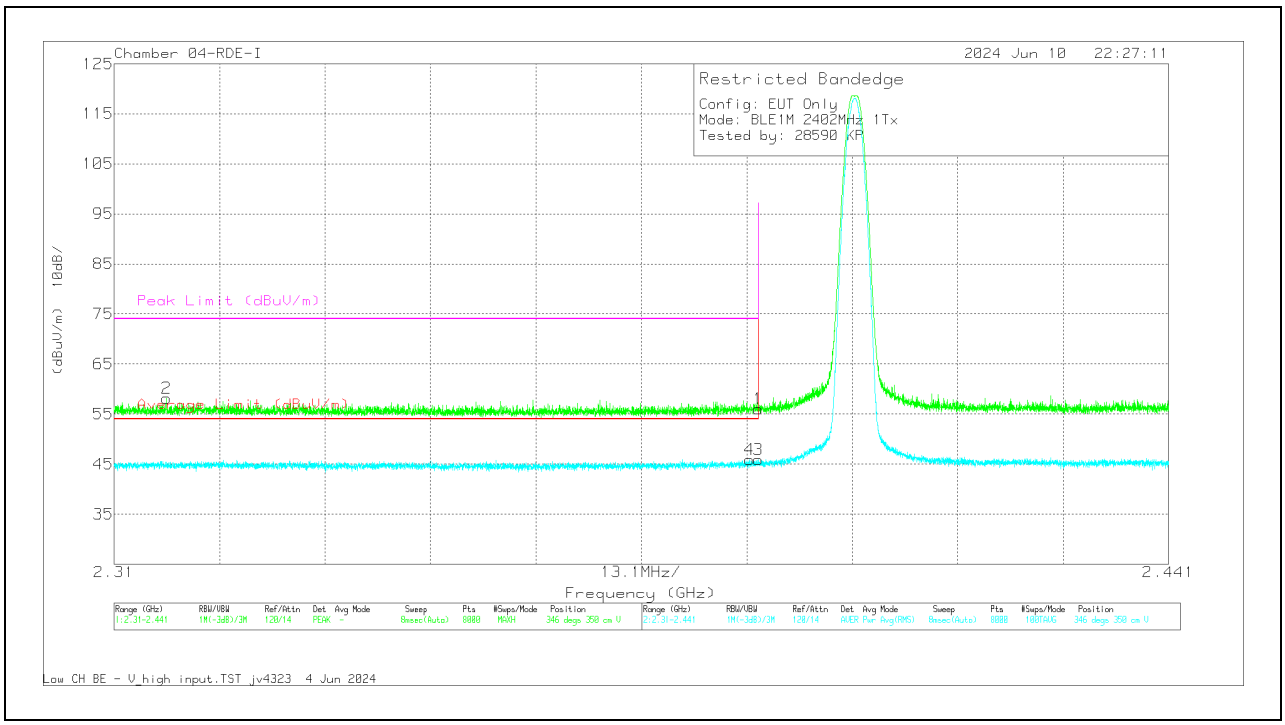
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	43.49	Pk	31.7	-19.2	55.99	-	-	74	-18.01	346	350	V
2	* 2.316551	45.52	Pk	31.7	-19.1	58.12	-	-	74	-15.88	346	350	V
3	* 2.39	33.42	RMS	31.7	-19.2	45.92	54	-8.08	-	-	346	350	V
4	* 2.388937	33.36	RMS	31.7	-19.2	45.86	54	-8.14	-	-	346	350	V

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

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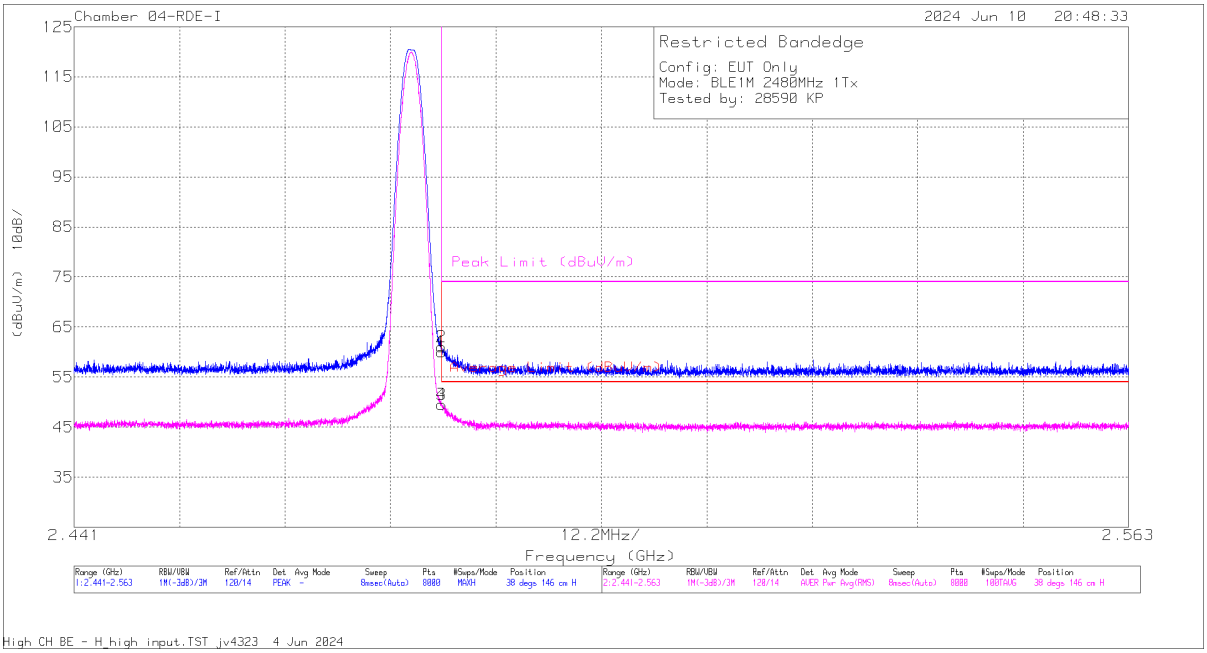
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	47.23	Pk	32	-19.2	60.03	-	-	74	-13.97	38	146	H
3	* 2.4835	36.77	RMS	32	-19.2	49.57	54	-4.43	-	-	38	146	H
4	* 2.483507	36.76	RMS	32	-19.2	49.56	54	-4.44	-	-	38	146	H
2	* 2.483538	48.21	Pk	32	-19.2	61.01	-	-	74	-12.99	38	146	H

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

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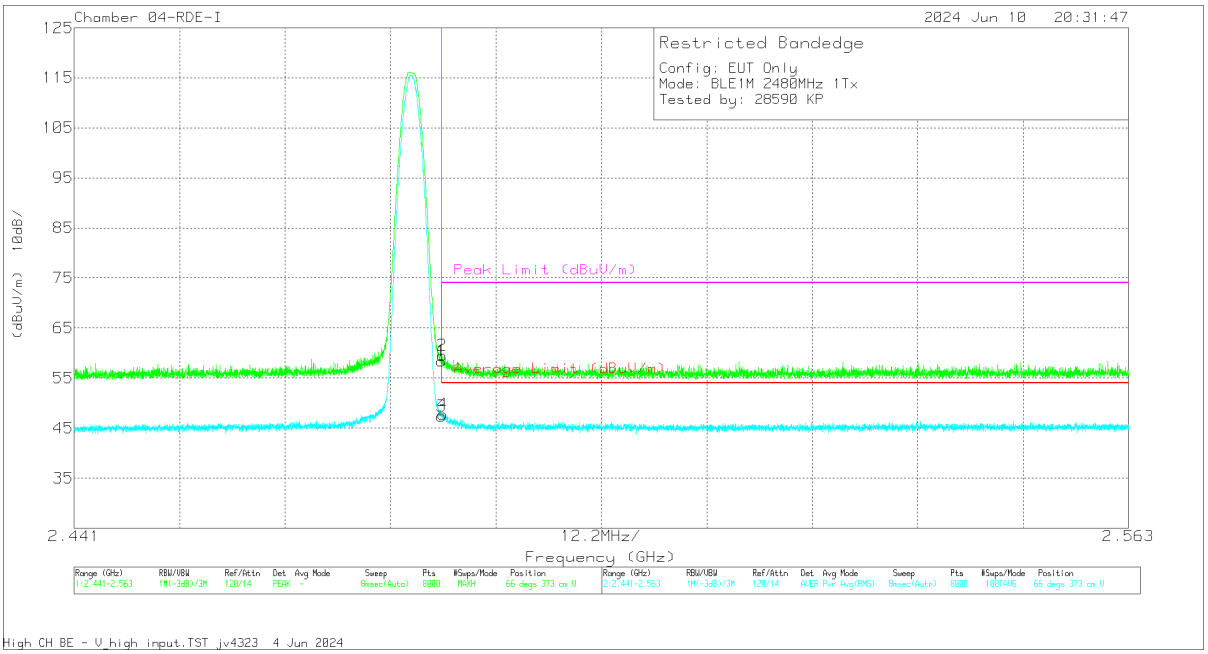
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	45.66	Pk	32	-19.2	58.46	-	-	74	-15.54	66	373	V
2	* 2.483614	46.79	Pk	32	-19.2	59.59	-	-	74	-14.41	66	373	V
3	* 2.4835	34.57	RMS	32	-19.2	47.37	54	-6.63	-	-	66	373	V
4	* 2.483645	34.97	RMS	32	-19.2	47.77	54	-6.23	-	-	66	373	V

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

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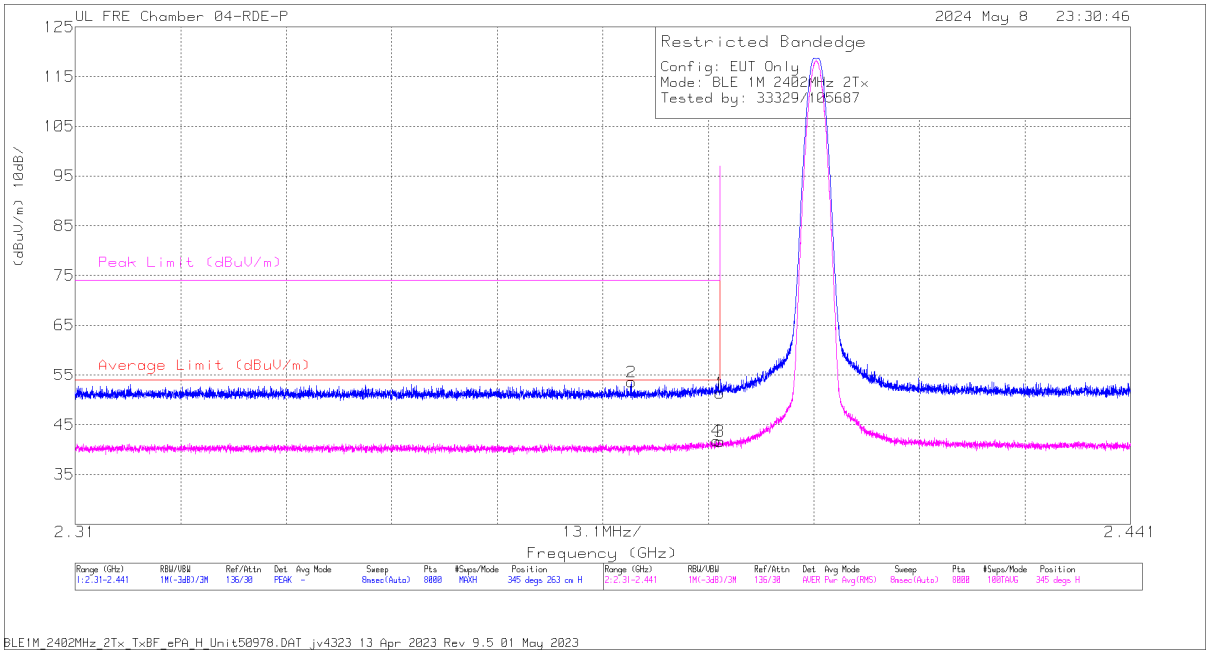
10.2.2. HIGH POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	60.1	Pk	32	-40.75	51.35	-	-	74	-22.65	345	263	H
2	* 2.379078	62.34	Pk	32	-40.79	53.55	-	-	74	-20.45	345	263	H
3	* 2.39	50.33	RMS	32	-40.75	41.58	54	-12.42	-	-	345	263	H
4	* 2.389609	50.55	RMS	32	-40.75	41.8	54	-12.2	-	-	345	263	H

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

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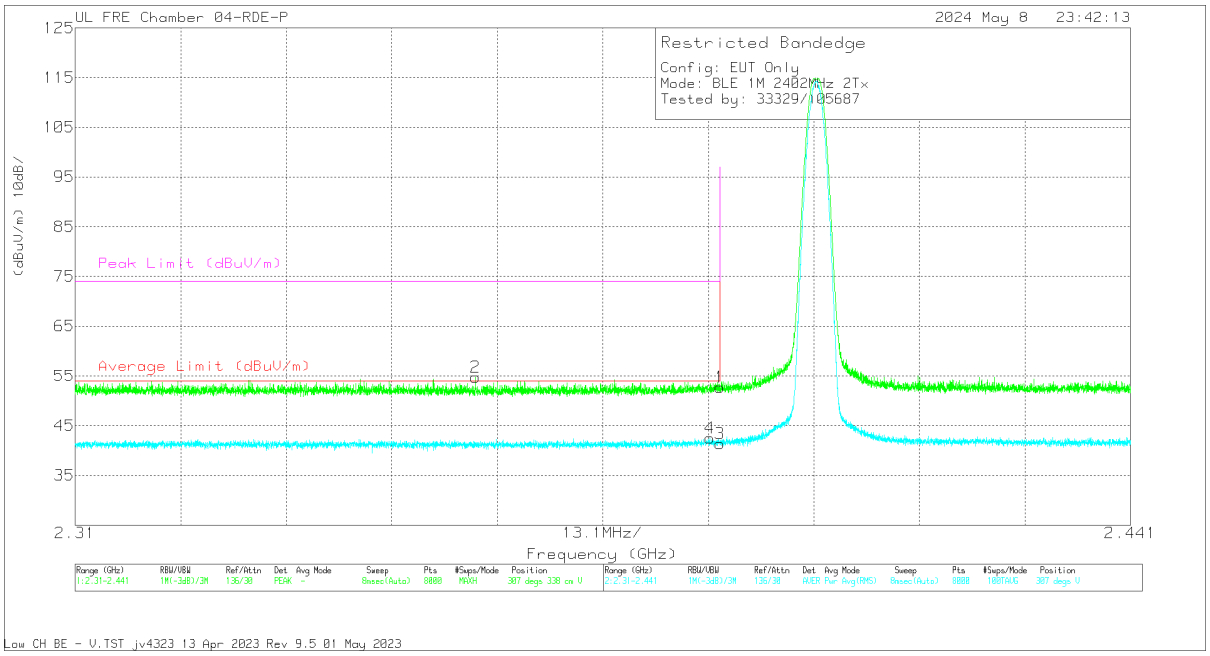
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	61.44	Pk	32	-40.75	52.69	-	-	74	-21.31	307	338	V
2	* 2.359688	63.59	Pk	31.9	-40.77	54.72	-	-	74	-19.28	307	338	V
3	* 2.39	50.08	RMS	32	-40.75	41.33	54	-12.67	-	-	307	338	V
4	* 2.388757	51.27	RMS	32	-40.75	42.52	54	-11.48	-	-	307	338	V

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

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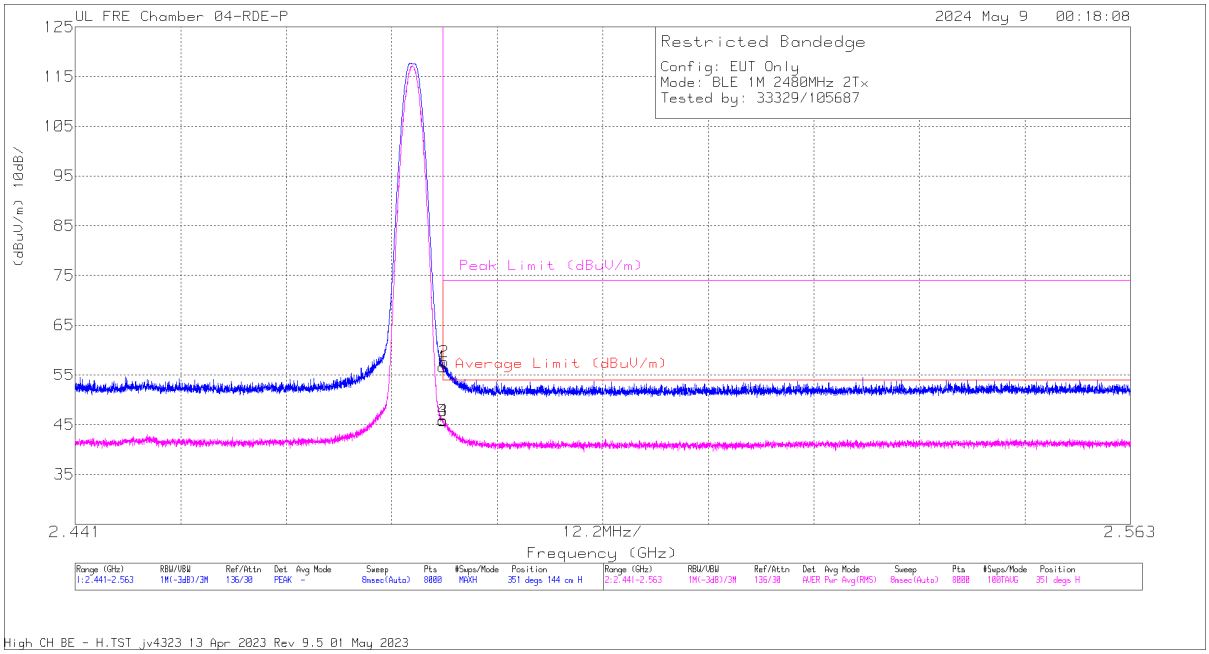
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	65.25	Pk	32.2	-40.83	56.62	-	-	74	-17.38	351	144	H
2	* 2.483629	66.31	Pk	32.2	-40.83	57.68	-	-	74	-16.32	351	144	H
3	* 2.4835	54.38	RMS	32.2	-40.83	45.75	54	-8.25	-	-	351	144	H
4	* 2.483538	54.57	RMS	32.2	-40.83	45.94	54	-8.06	-	-	351	144	H

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

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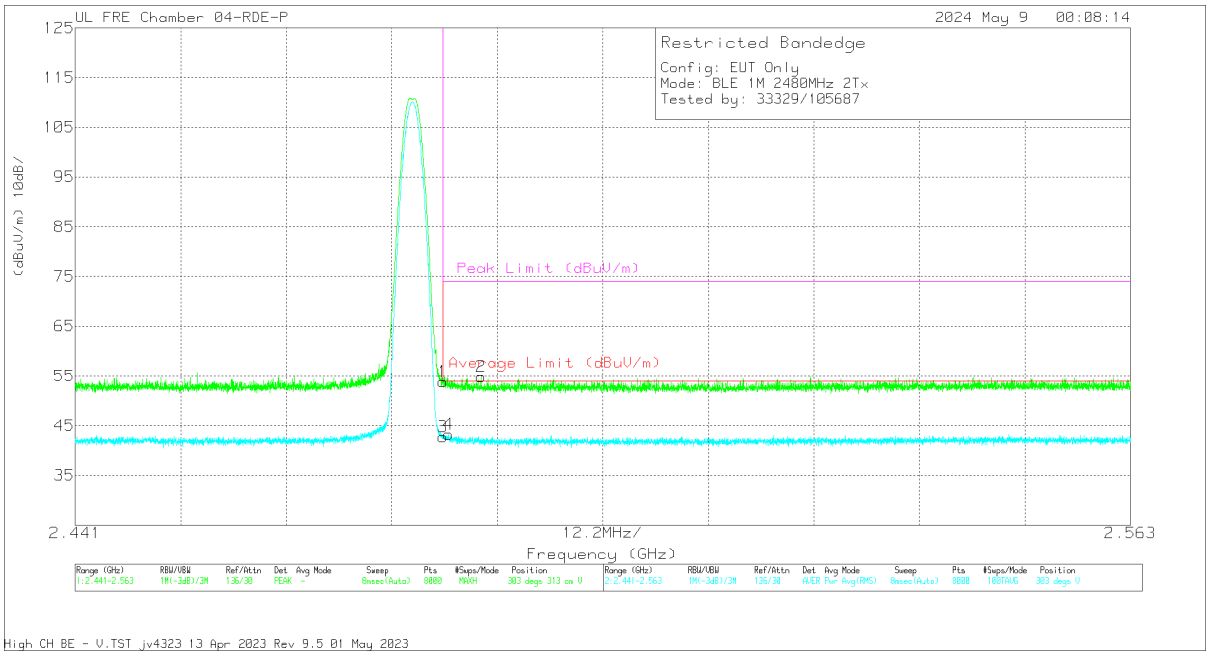
VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	62.51	Pk	32.2	-40.83	53.88	-	-	74	-20.12	303	313	V
2	* 2.48793	63.52	Pk	32.2	-40.83	54.89	-	-	74	-19.11	303	313	V
3	* 2.4835	51.41	RMS	32.2	-40.83	42.78	54	-11.22	-	-	303	313	V
4	* 2.484163	51.93	RMS	32.2	-40.83	43.3	54	-10.7	-	-	303	313	V

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

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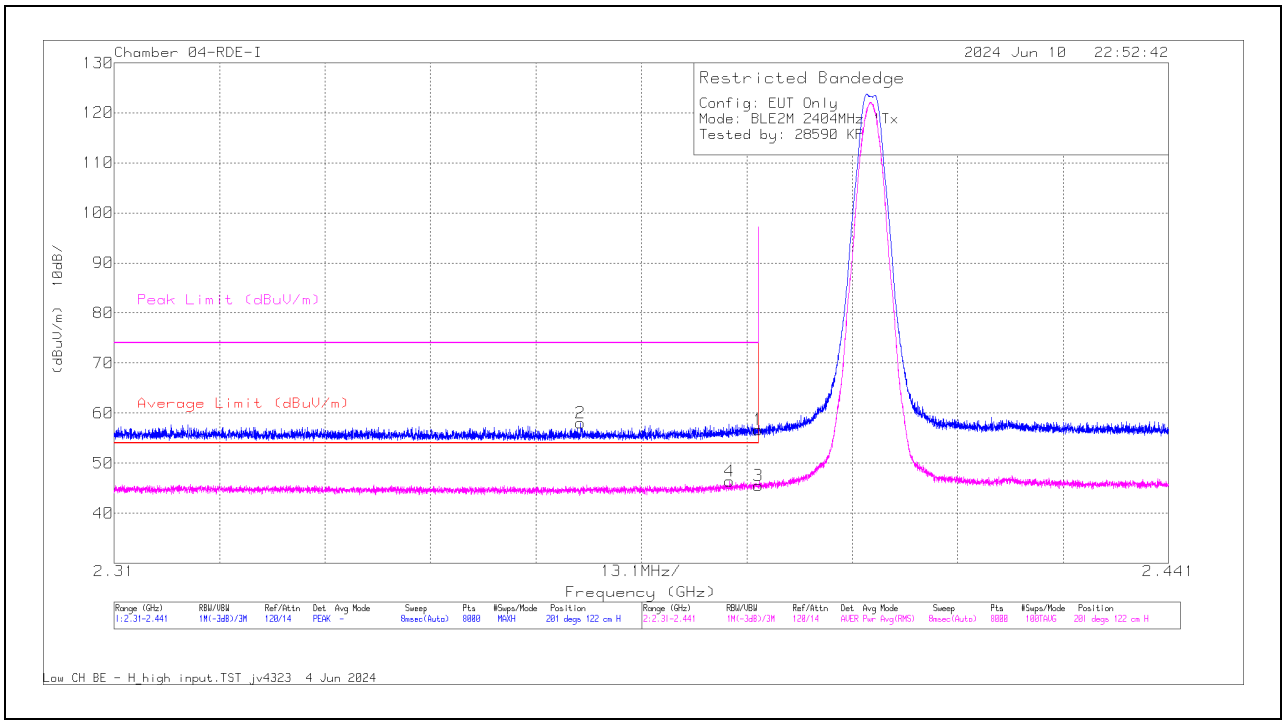
10.2.3. HIGH POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	44.16	Pk	31.7	-19.2	56.66	-	-	74	-17.34	201	122	H
2	* 2.367942	45.62	Pk	31.7	-19.3	58.02	-	-	74	-15.98	201	122	H
3	* 2.39	33.01	RMS	31.7	-19.2	45.51	54	-8.49	-	-	201	122	H
4	* 2.386464	33.87	RMS	31.7	-19.2	46.37	54	-7.63	-	-	201	122	H

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

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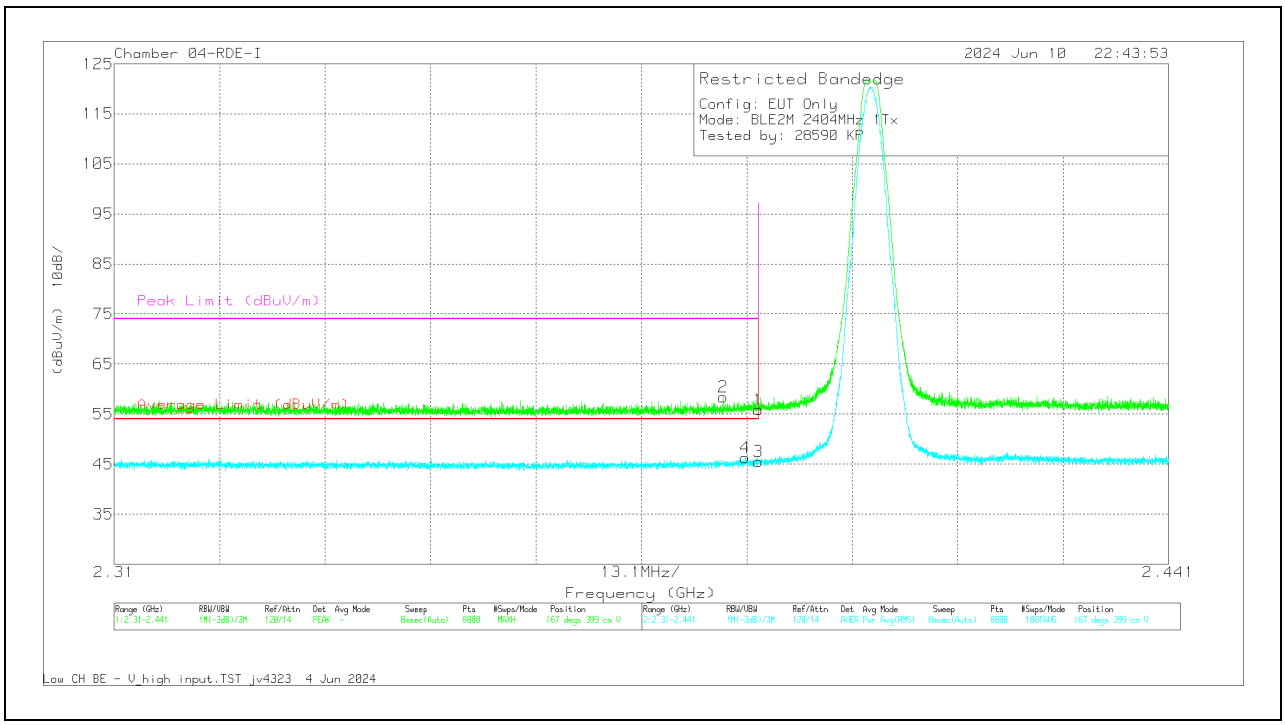
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	43.36	Pk	31.7	-19.2	55.86	-	-	74	-18.14	167	399	V
2	* 2.385694	45.91	Pk	31.7	-19.2	58.41	-	-	74	-15.59	167	399	V
3	* 2.39	33.05	RMS	31.7	-19.2	45.55	54	-8.45	-	-	167	399	V
4	* 2.388429	33.8	RMS	31.7	-19.2	46.3	54	-7.7	-	-	167	399	V

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

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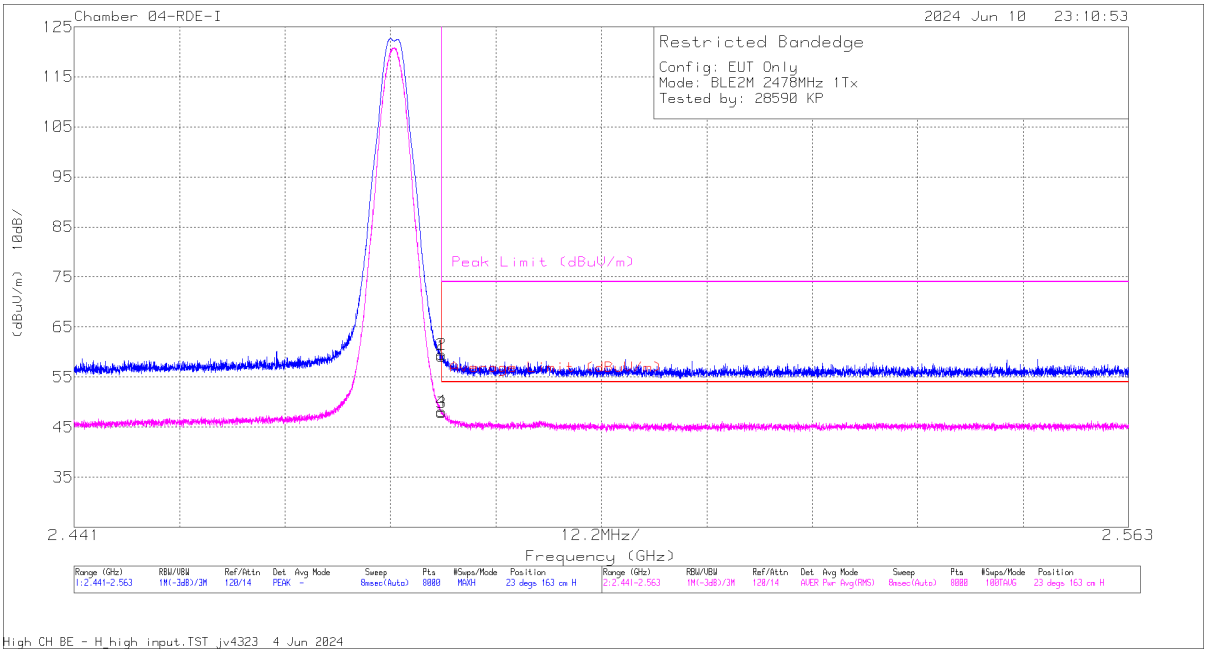
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	46.32	Pk	32	-19.2	59.12	-	-	74	-14.88	23	163	H
2	* 2.483523	46.69	Pk	32	-19.2	59.49	-	-	74	-14.51	23	163	H
3	* 2.4835	35.05	RMS	32	-19.2	47.85	54	-6.15	-	-	23	163	H
4	* 2.483538	35.32	RMS	32	-19.2	48.12	54	-5.88	-	-	23	163	H

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

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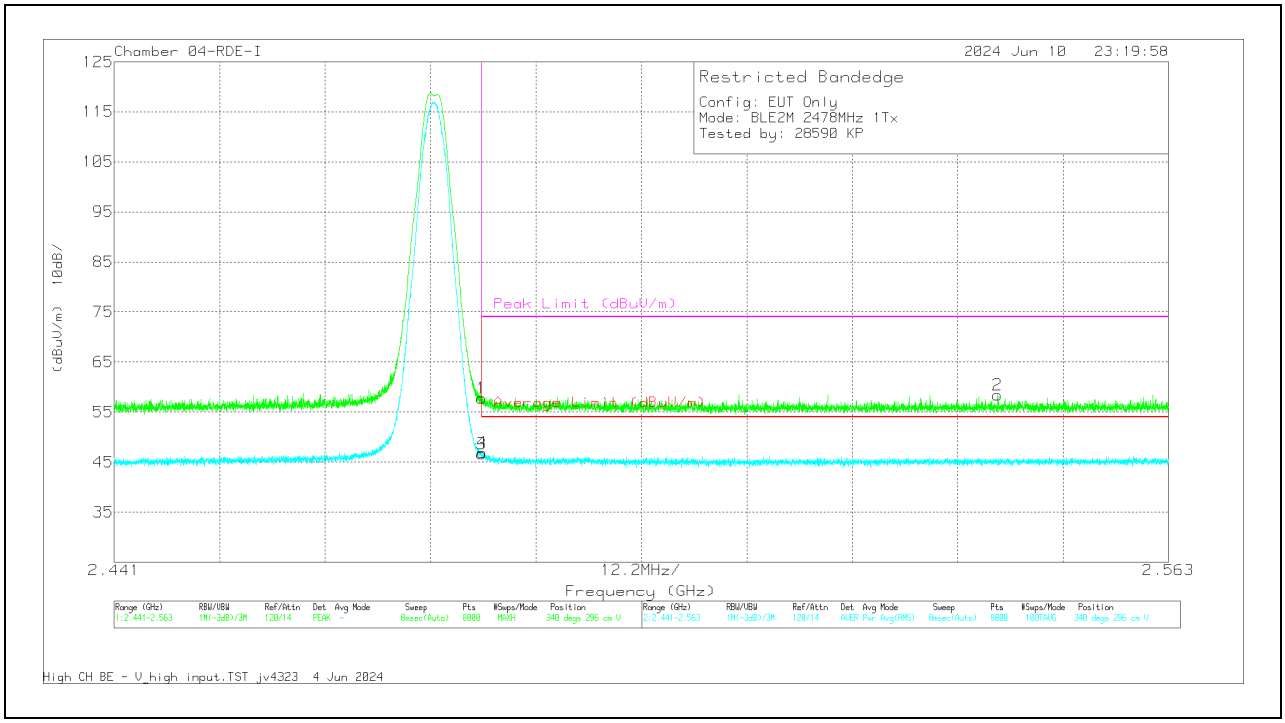
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	44.97	Pk	32	-19.2	57.77	-	-	74	-16.23	340	296	V
3	* 2.4835	33.86	RMS	32	-19.2	46.66	54	-7.34	-	-	340	296	V
4	* 2.483553	34.11	RMS	32	-19.2	46.91	54	-7.09	-	-	340	296	V
2	2.543204	45.52	Pk	32.2	-19.3	58.42	-	-	74	-15.58	340	296	V

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

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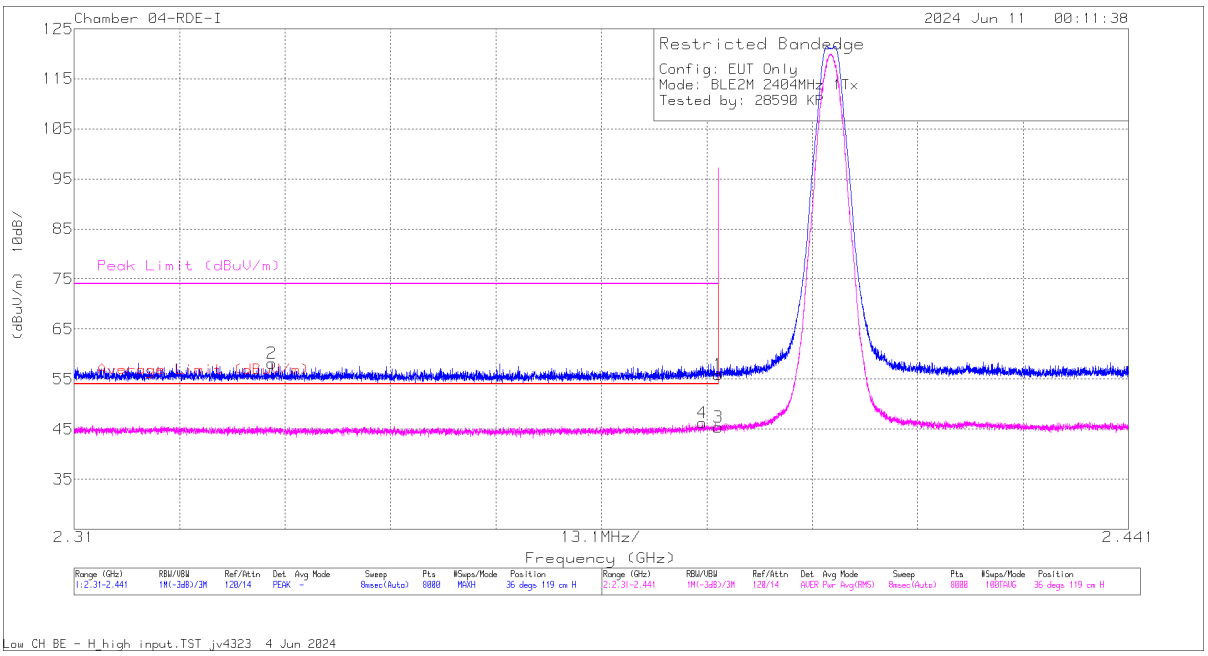
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	43.37	Pk	31.7	-19.2	55.87	-	-	74	-18.13	36	119	H
2	* 2.334566	45.57	Pk	31.7	-19.1	58.17	-	-	74	-15.83	36	119	H
3	* 2.39	32.92	RMS	31.7	-19.2	45.42	54	-8.58	-	-	36	119	H
4	* 2.388053	33.78	RMS	31.7	-19.2	46.28	54	-7.72	-	-	36	119	H

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

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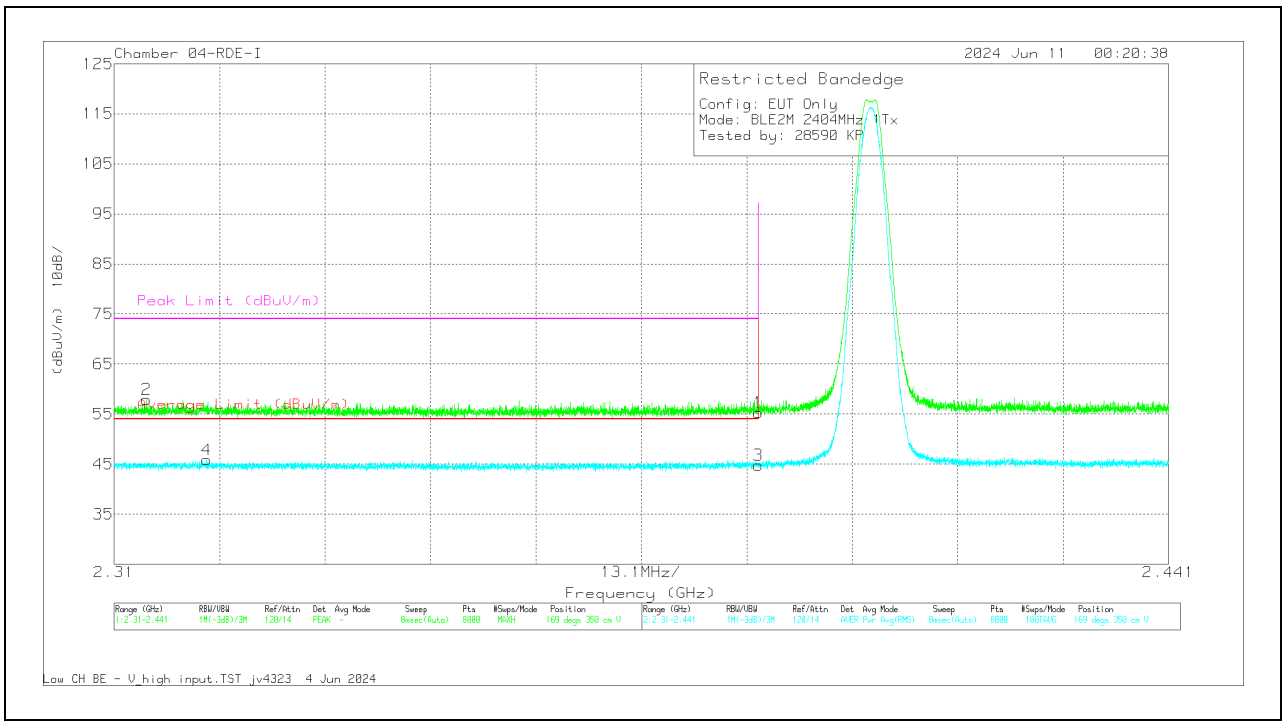
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	* 2.39	42.75	Pk	31.7	-19.2	55.25	-	-	74	-18.75	169	350	V
2	* 2.313996	45.29	Pk	31.7	-19.1	57.89	-	-	74	-16.11	169	350	V
3	* 2.39	32.29	RMS	31.7	-19.2	44.79	54	-9.21	-	-	169	350	V
4	* 2.321497	33.14	RMS	31.7	-19	45.84	54	-8.16	-	-	169	350	V

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

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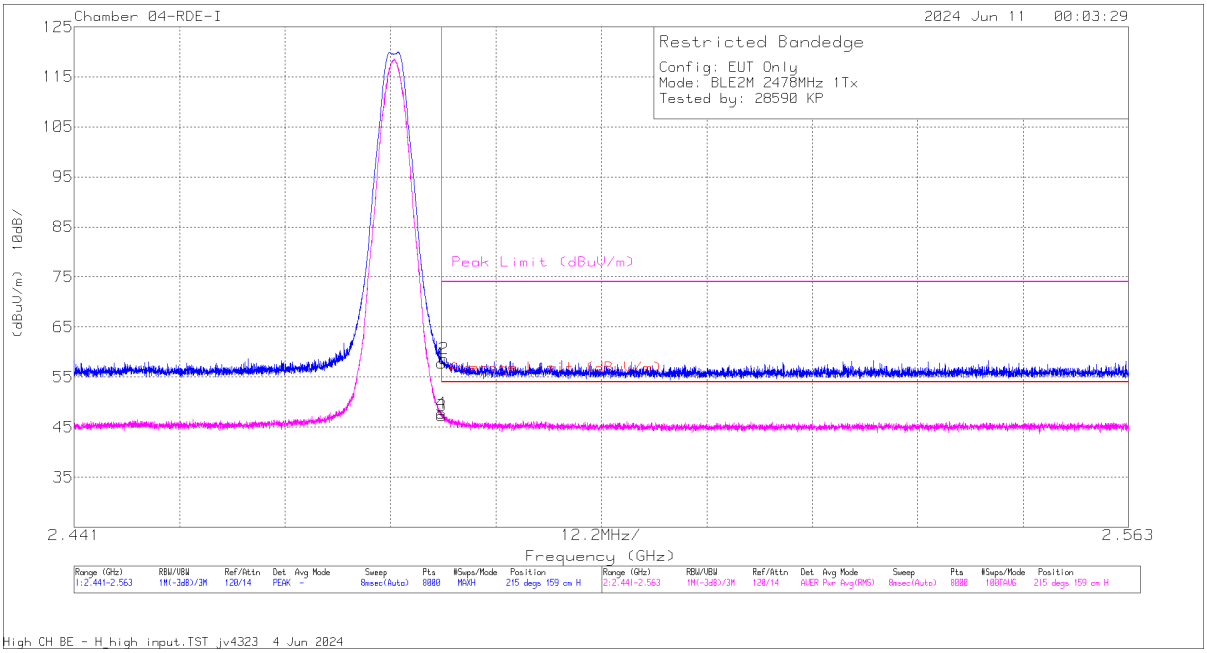
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	44.94	Pk	32	-19.2	57.74	-	-	74	-16.26	215	159	H
2	* 2.483797	45.85	Pk	32	-19.2	58.65	-	-	74	-15.35	215	159	H
3	* 2.4835	34.46	RMS	32	-19.2	47.26	54	-6.74	-	-	215	159	H
4	* 2.483523	35	RMS	32	-19.2	47.8	54	-6.2	-	-	215	159	H

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

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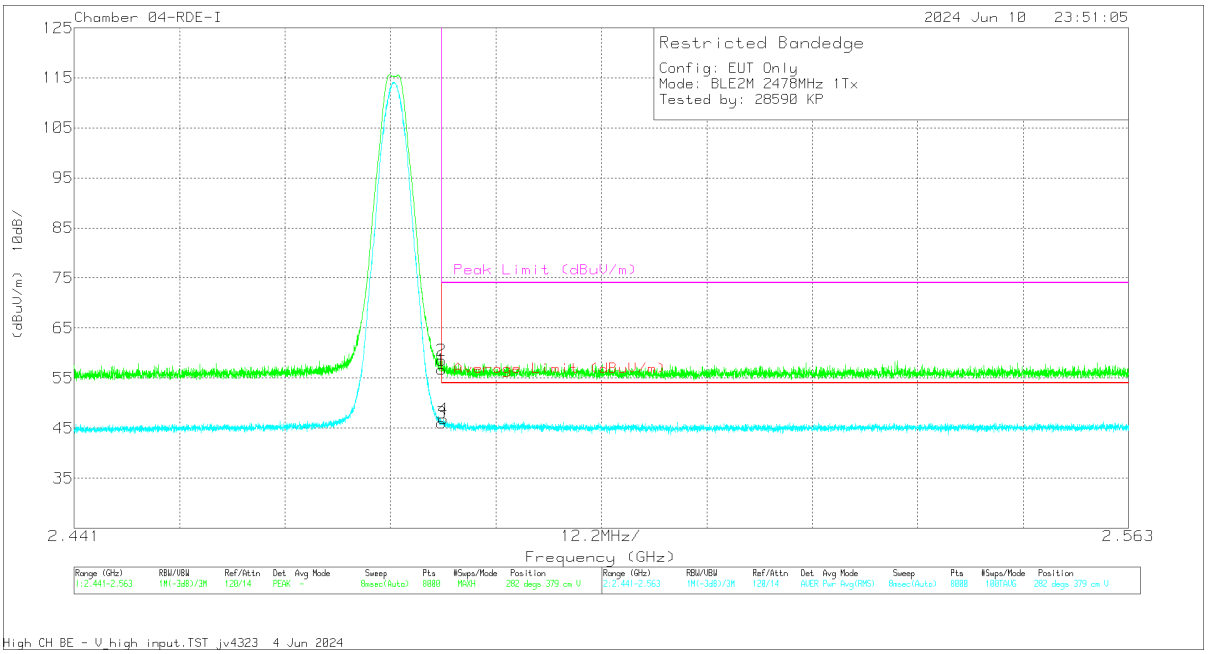
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 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	43.92	Pk	32	-19.2	56.72	-	-	74	-17.28	282	379	V
2	* 2.483538	45.77	Pk	32	-19.2	58.57	-	-	74	-15.43	282	379	V
3	* 2.4835	33.22	RMS	32	-19.2	46.02	54	-7.98	-	-	282	379	V
4	* 2.483736	34.03	RMS	32	-19.2	46.83	54	-7.17	-	-	282	379	V

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

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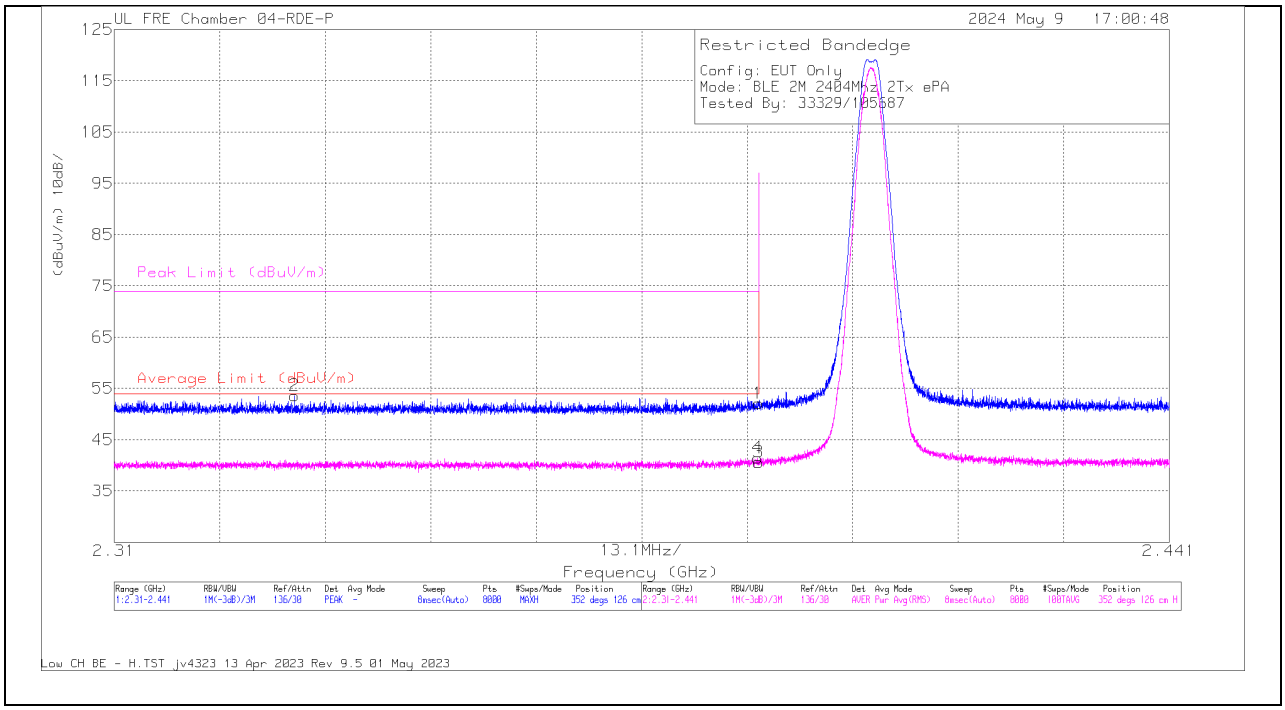
10.2.4. HIGH POWER BLE TXBF (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	2.332355	62.49	Pk	31.9	-40.8	53.59	-	-	74	-20.41	352	126	H
4	2.389903	50.21	RMS	32	-40.75	41.46	54	-12.54	-	-	352	126	H
1	2.39	60.83	Pk	32	-40.75	52.08	-	-	74	-21.92	352	126	H
3	2.39	49.37	RMS	32	-40.75	40.62	54	-13.38	-	-	352	126	H

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

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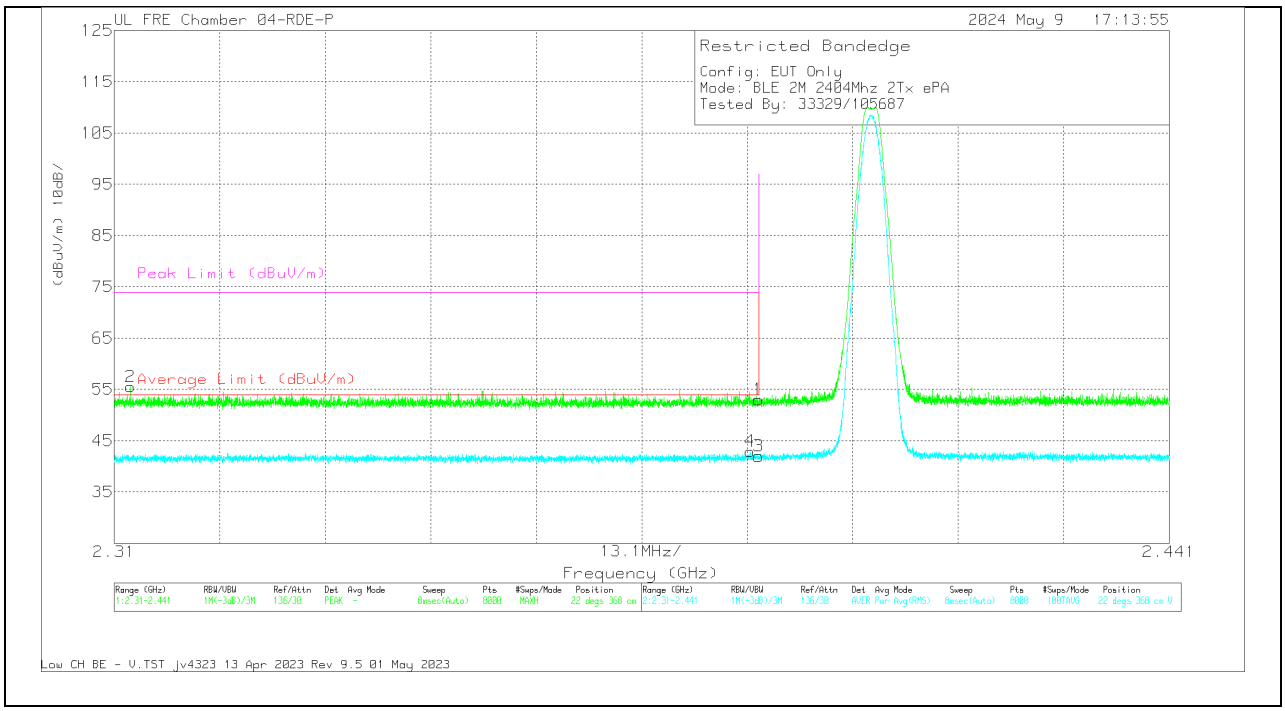
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	2.312014	64.43	Pk	31.9	-40.82	55.51	-	-	74	-18.49	22	368	V
4	2.38897	51.68	RMS	32	-40.75	42.93	54	-11.07	-	-	22	368	V
1	2.39	61.76	Pk	32	-40.75	53.01	-	-	74	-20.99	22	368	V
3	2.39	50.72	RMS	32	-40.75	41.97	54	-12.03	-	-	22	368	V

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

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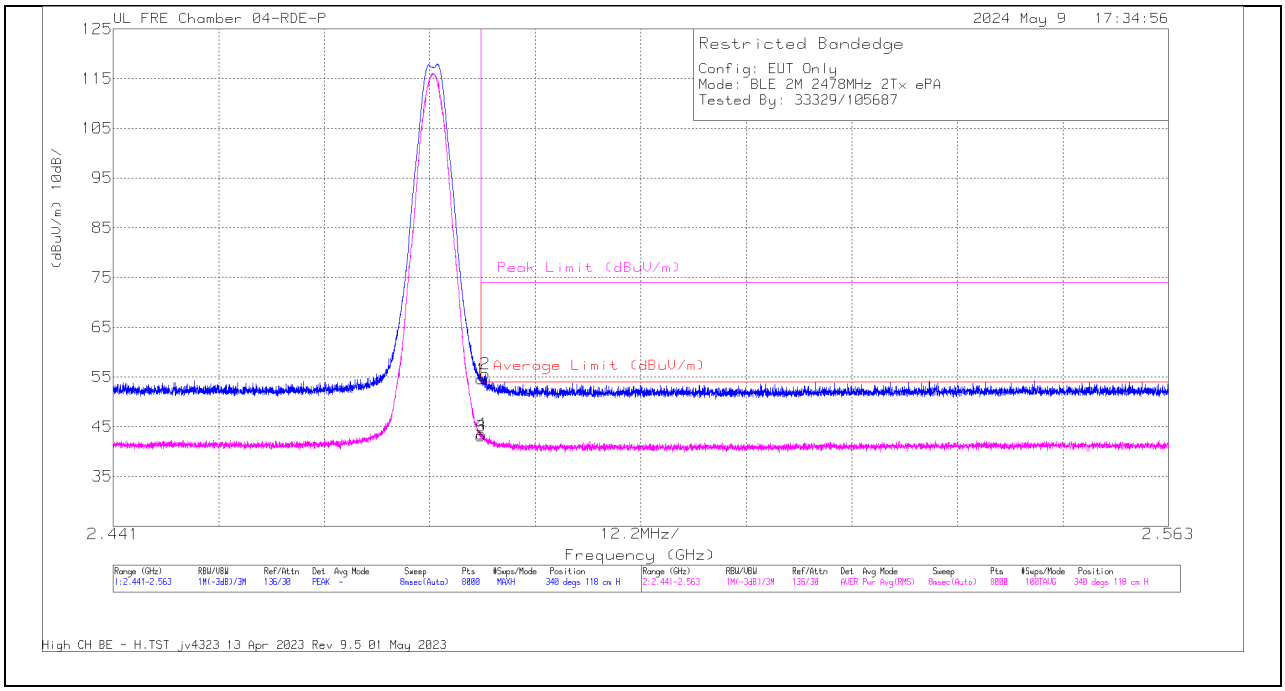
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	63.19	Pk	32.2	-40.83	54.56	-	-	74	-19.44	340	118	H
3	*2.4835	51.72	RMS	32.2	-40.83	43.09	54	-10.91	-	-	340	118	H
4	*2.483614	52.18	RMS	32.2	-40.83	43.55	54	-10.45	-	-	340	118	H
2	*2.483995	64.21	Pk	32.2	-40.83	55.58	-	-	74	-18.42	340	118	H

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

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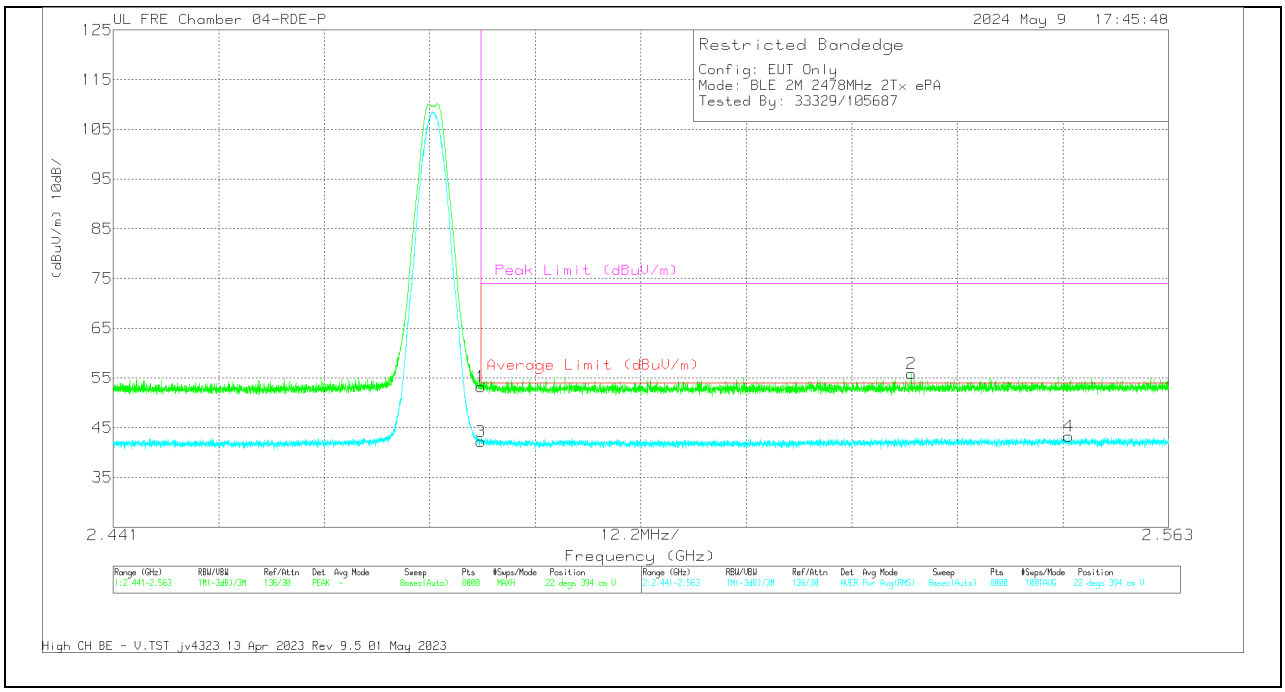
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.83	Pk	32.2	-40.83	53.2	-	-	74	-20.8	22	394	V
3	*2.4835	50.83	RMS	32.2	-40.83	42.2	54	-11.8	-	-	22	394	V
2	*2.533259	64.18	Pk	32.4	-40.7	55.88	-	-	74	-18.12	22	394	V
4	*2.55147	51.53	RMS	32.4	-40.65	43.28	54	-10.72	-	-	22	394	V

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

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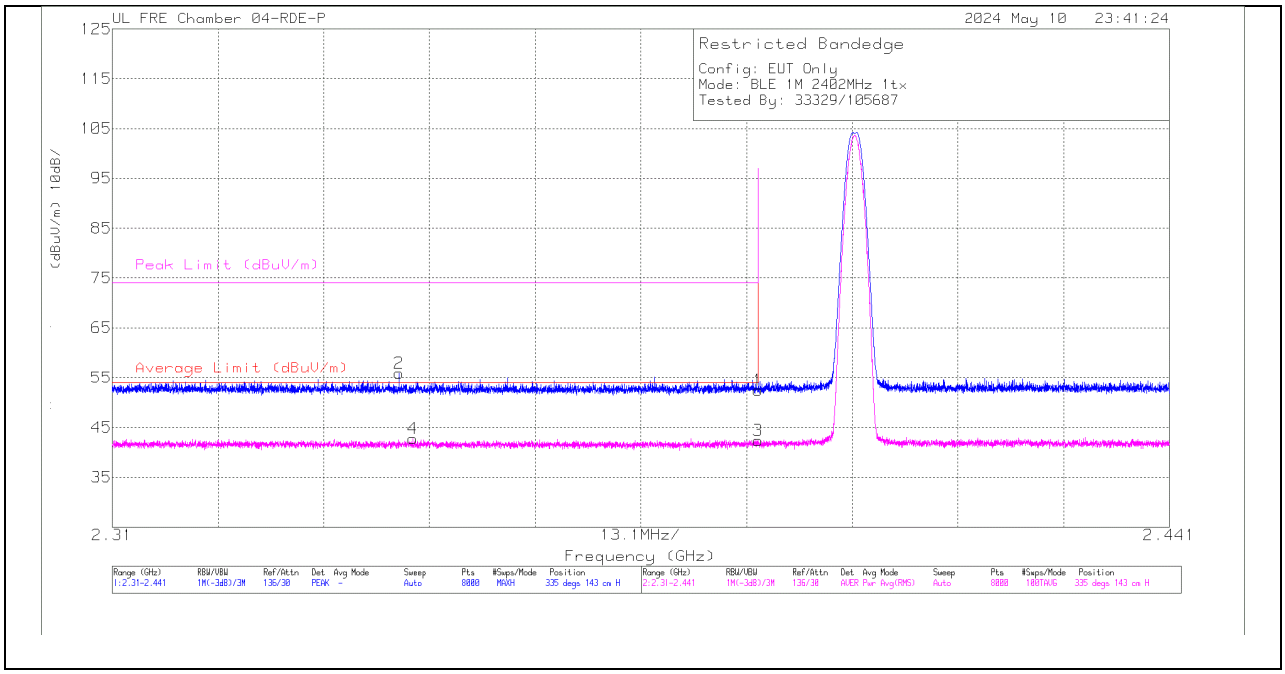
10.2.5. LOW POWER BLE (1Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	2.345554	64.74	Pk	31.9	-40.77	55.87	-	-	74	-18.13	335	143	H
4	2.347225	51.65	RMS	31.9	-40.78	42.77	54	-11.23	-	-	335	143	H
1	2.39	61.22	Pk	32	-40.75	52.47	-	-	74	-21.53	335	143	H
3	2.39	51.15	RMS	32	-40.75	42.4	54	-11.6	-	-	335	143	H

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

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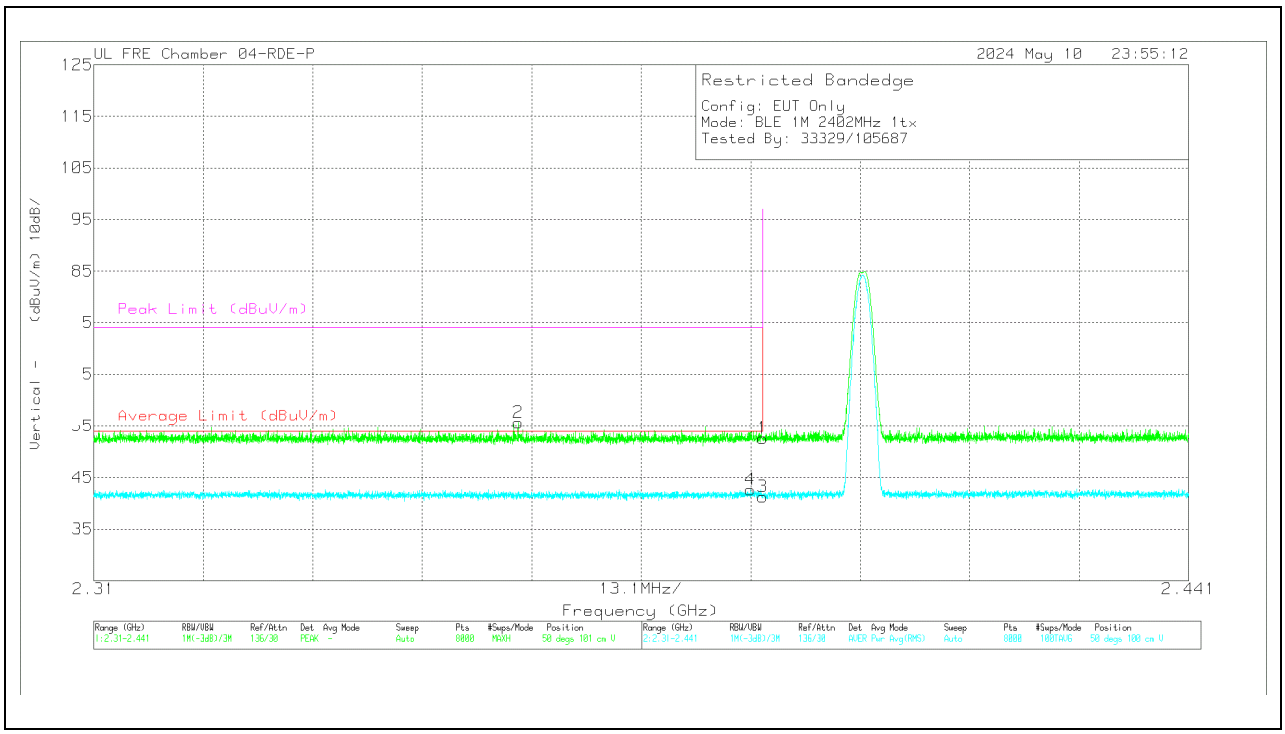
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	2.360752	64.49	Pk	31.9	-40.76	55.63	-	-	74	-18.37	50	101	V
4	2.38856	51.41	RMS	32	-40.75	42.66	54	-11.34	-	-	50	100	V
1	2.39	61.34	Pk	32	-40.75	52.59	-	-	74	-21.41	50	101	V
3	2.39	50.05	RMS	32	-40.75	41.3	54	-12.7	-	-	50	100	V

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

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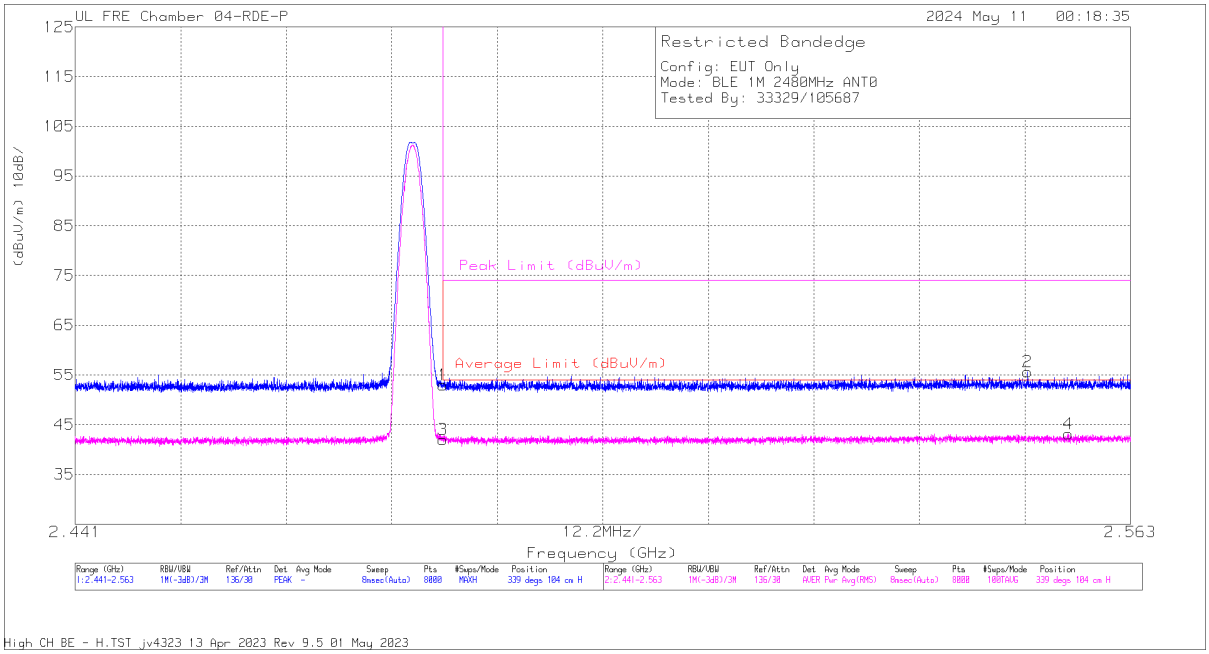
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.66	Pk	32.2	-40.83	53.03	-	-	74	-20.97	339	104	H
3	2.4835	50.59	RMS	32.2	-40.83	41.96	54	-12.04	-	-	339	104	H
2	2.551104	63.85	Pk	32.4	-40.64	55.61	-	-	74	-18.39	339	104	H
4	2.555848	51.38	RMS	32.4	-40.65	43.13	54	-10.87	-	-	339	104	H

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

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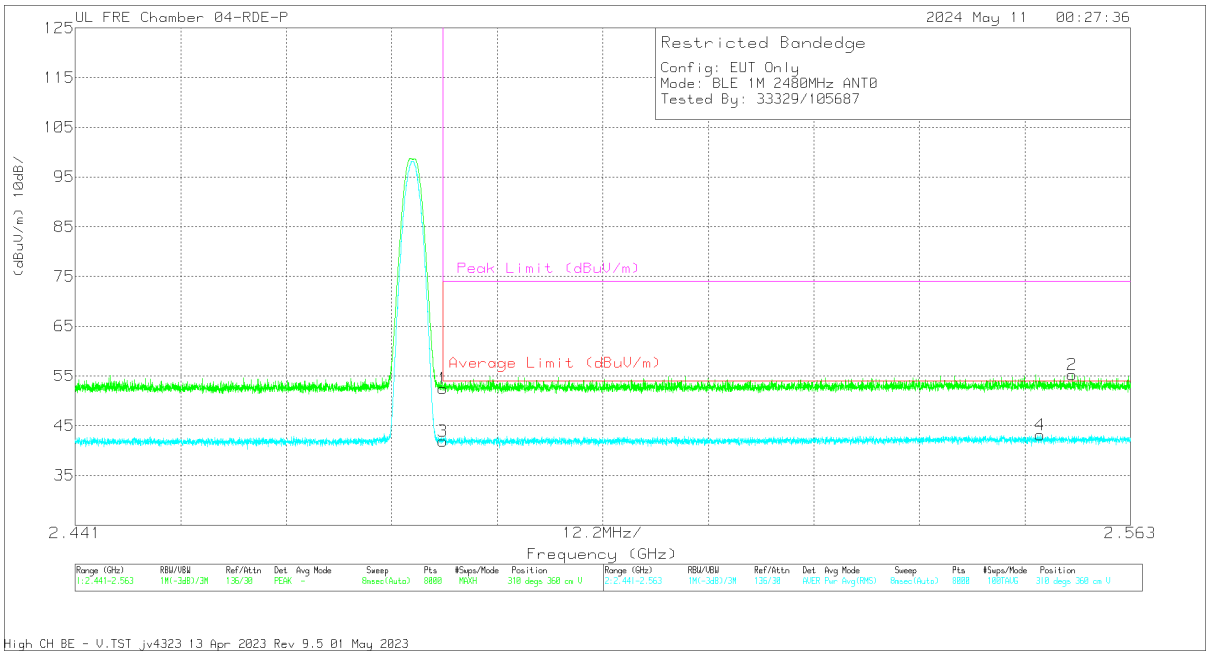
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.1	Pk	32.2	-40.83	52.47	-	-	74	-21.53	310	360	V
3	*2.4835	50.54	RMS	32.2	-40.83	41.91	54	-12.09	-	-	310	360	V
4	*2.552538	51.43	RMS	32.4	-40.65	43.18	54	-10.82	-	-	310	360	V
2	*2.556275	63.52	Pk	32.4	-40.65	55.27	-	-	74	-18.73	310	360	V

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

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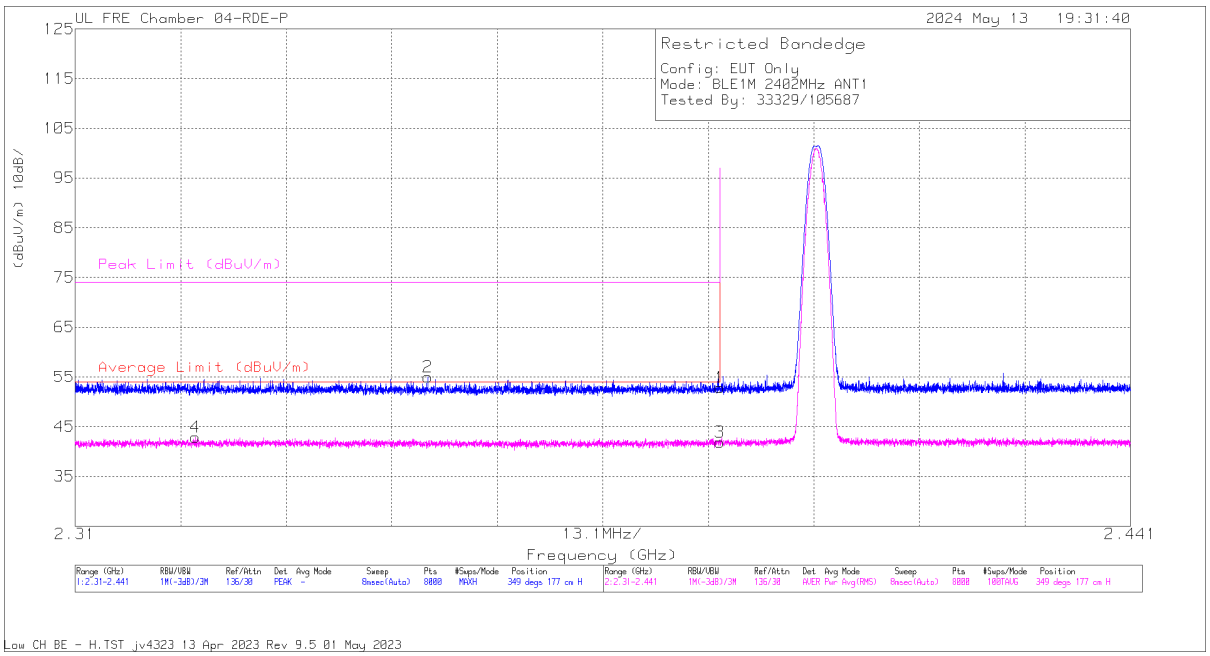
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.324903	51.79	RMS	31.9	-40.82	42.87	54	-11.13	-	-	349	177	H
2	*2.353776	63.9	Pk	31.9	-40.78	55.02	-	-	74	-18.98	349	177	H
1	*2.39	61.63	Pk	32	-40.75	52.88	-	-	74	-21.12	349	177	H
3	*2.39	50.6	RMS	32	-40.75	41.85	54	-12.15	-	-	349	177	H

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

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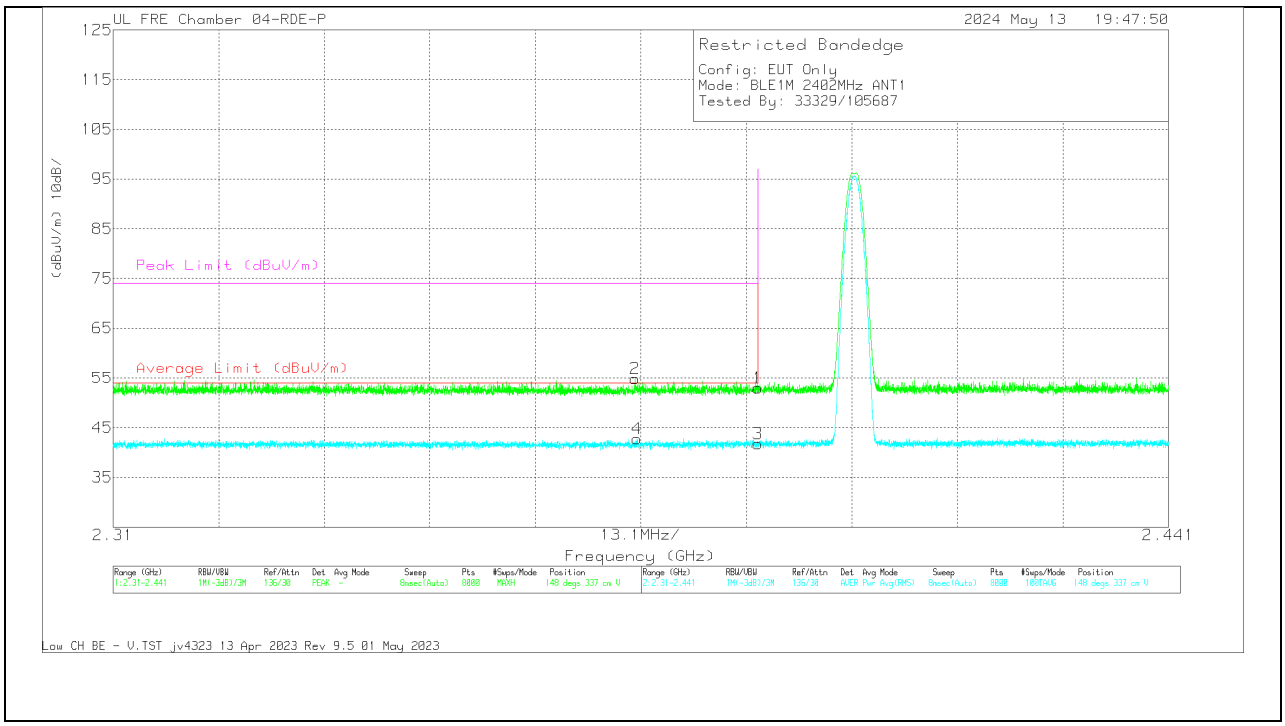
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.374804	63.68	Pk	32	-40.76	54.92	-	-	74	-19.08	148	337	V
4	*2.375049	51.53	RMS	32	-40.76	42.77	54	-11.23	-	-	148	337	V
1	*2.39	61.7	Pk	32	-40.75	52.95	-	-	74	-21.05	148	337	V
3	*2.39	50.53	RMS	32	-40.75	41.78	54	-12.22	-	-	148	337	V

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

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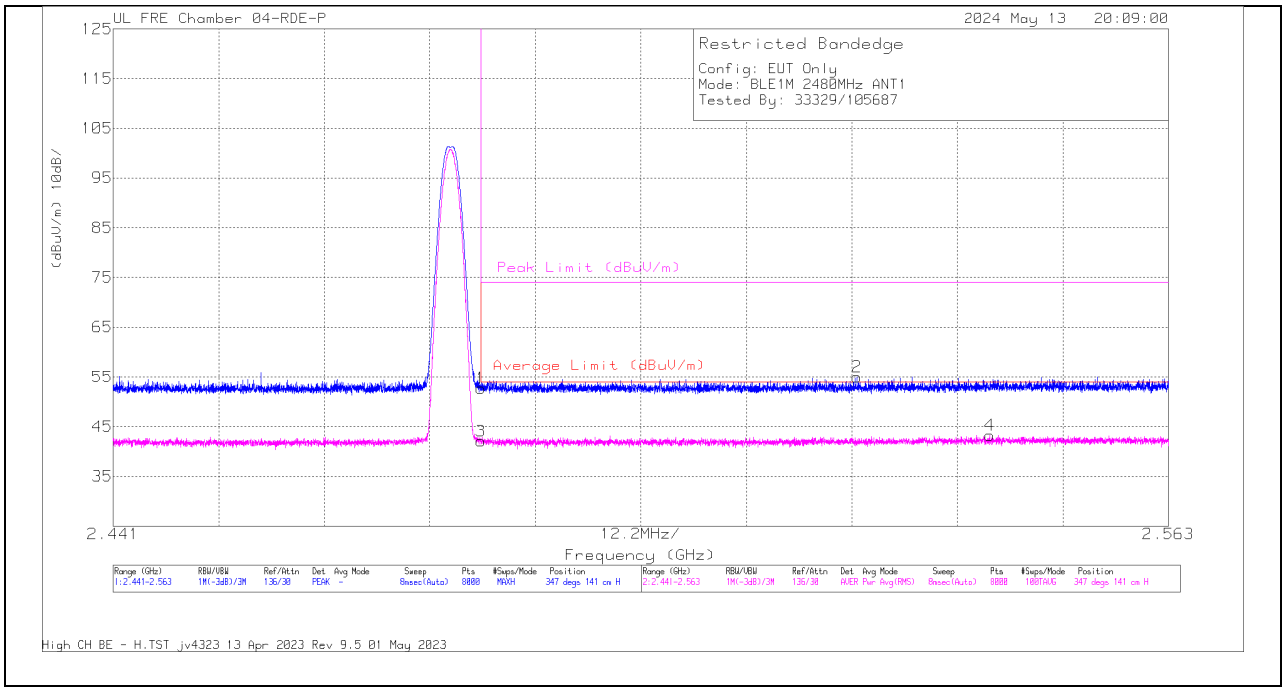
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.34	Pk	32.2	-40.83	52.71	-	-	74	-21.29	347	141	H
3	*2.4835	50.71	RMS	32.2	-40.83	42.08	54	-11.92	-	-	347	141	H
2	*2.527006	63.35	Pk	32.4	-40.71	55.04	-	-	74	-18.96	347	141	H
4	*2.54235	51.56	RMS	32.4	-40.67	43.29	54	-10.71	-	-	347	141	H

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

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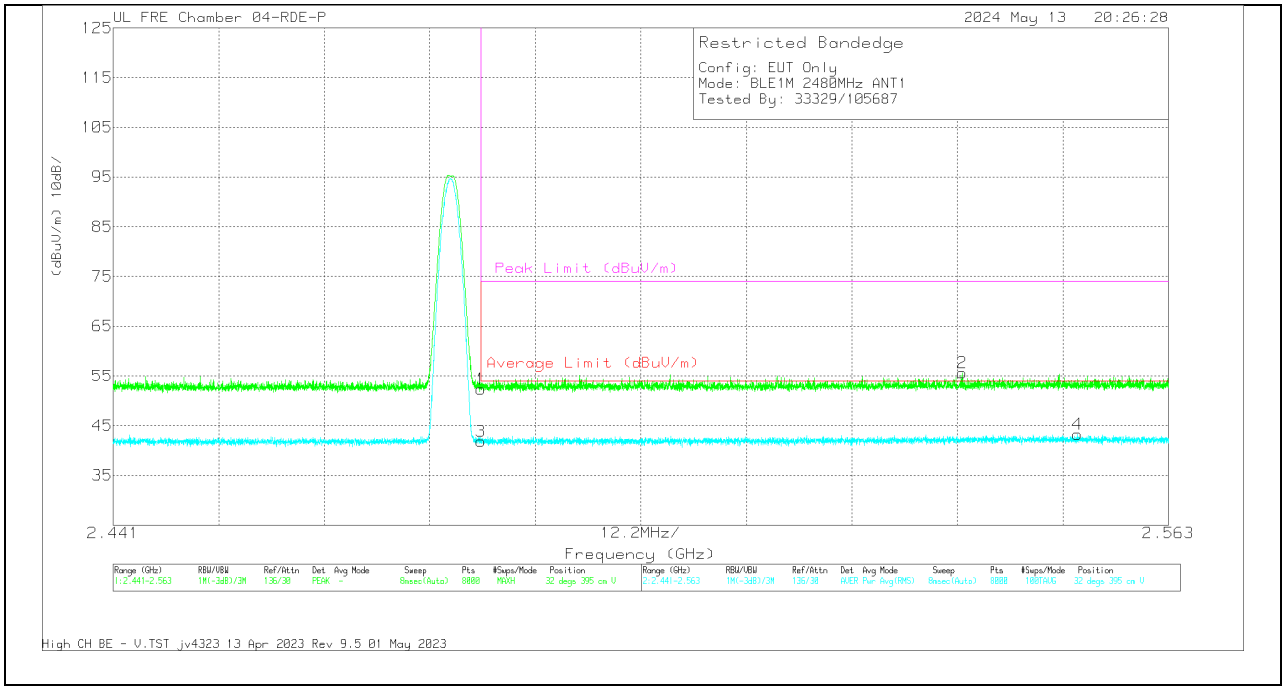
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.01	Pk	32.2	-40.83	52.38	-	-	74	-21.62	32	395	V
3	*2.4835	50.46	RMS	32.2	-40.83	41.83	54	-12.17	-	-	32	395	V
2	*2.539131	63.94	Pk	32.4	-40.71	55.63	-	-	74	-18.37	32	395	V
4	*2.552507	51.49	RMS	32.4	-40.65	43.24	54	-10.76	-	-	32	395	V

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

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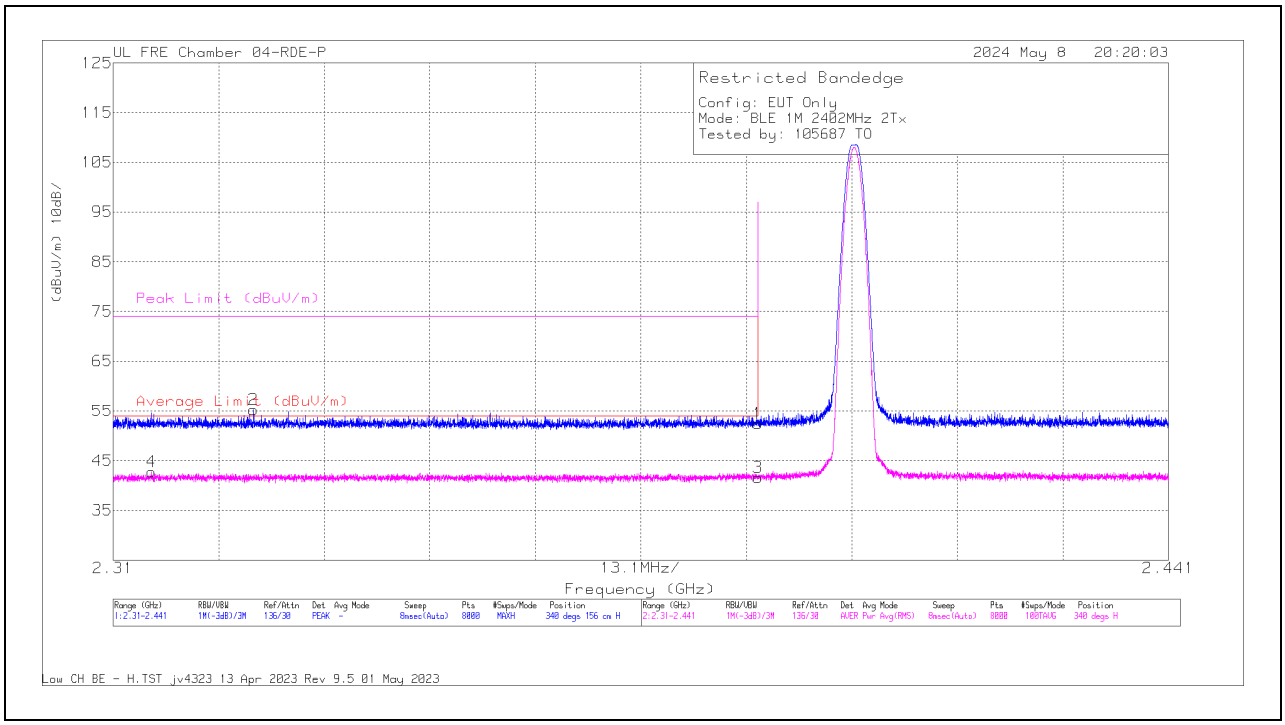
10.2.6. LOW POWER BLE TXBF (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	61.19	Pk	32	-40.75	52.44	-	-	74	-21.56	340	156	H
2	* 2.327442	64.13	Pk	31.9	-40.81	55.22	-	-	74	-18.78	340	156	H
3	* 2.39	50.33	RMS	32	-40.75	41.58	54	-12.42	-	-	340	156	H
4	* 2.314766	51.65	RMS	31.9	-40.81	42.74	54	-11.26	-	-	340	156	H

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

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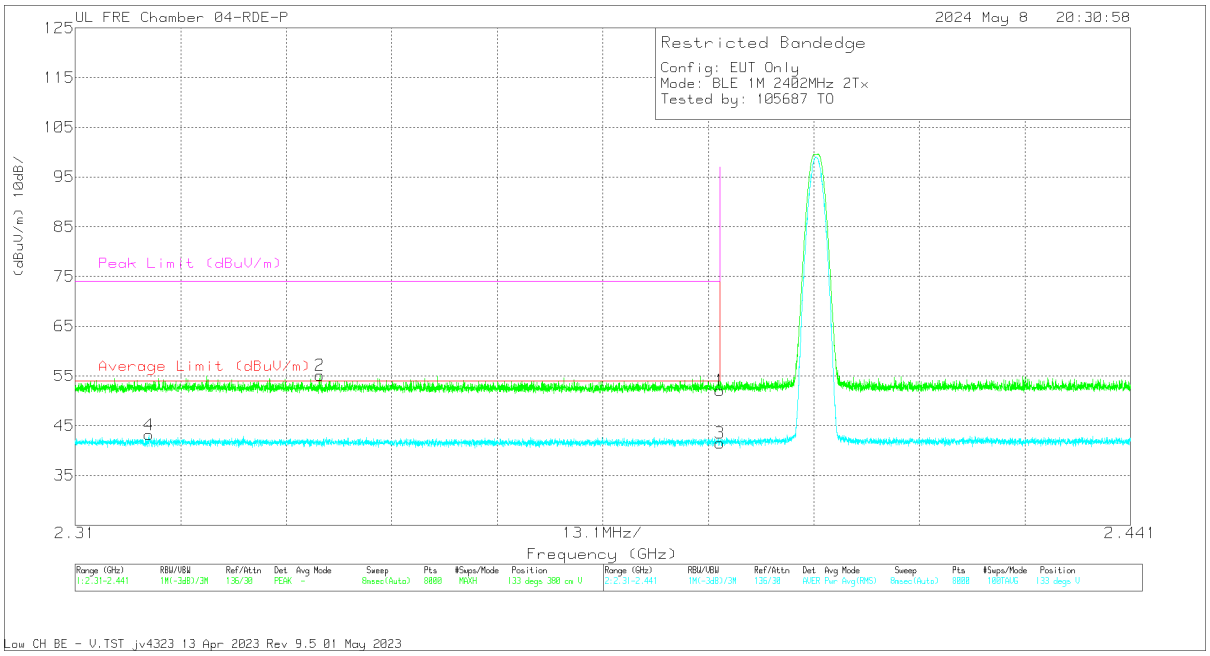
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	60.86	Pk	32	-40.75	52.11	-	-	74	-21.89	133	380	V
2	* 2.340363	63.98	Pk	31.9	-40.78	55.1	-	-	74	-18.9	133	380	V
3	* 2.39	50.27	RMS	32	-40.75	41.52	54	-12.48	-	-	133	380	V
4	* 2.319138	52.12	RMS	31.9	-40.82	43.2	54	-10.8	-	-	133	380	V

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

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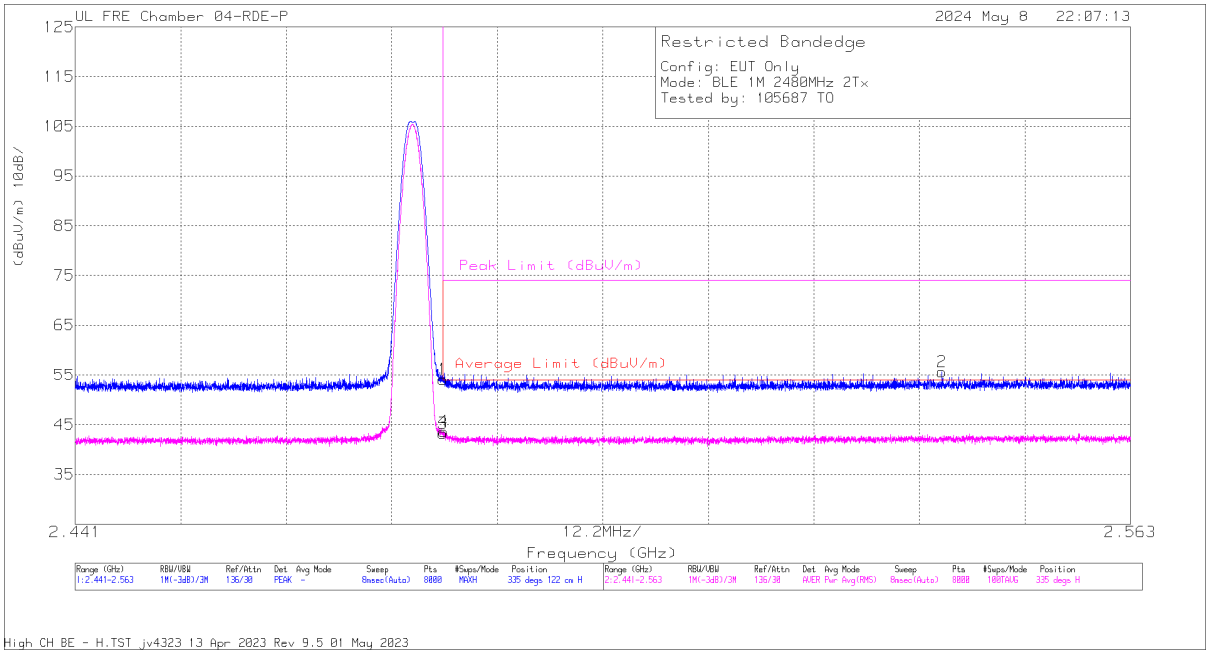
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	62.75	Pk	32.2	-40.83	54.12	-	-	74	-19.88	335	122	H
3	* 2.4835	51.88	RMS	32.2	-40.83	43.25	54	-10.75	-	-	335	122	H
4	* 2.483584	52.32	RMS	32.2	-40.83	43.69	54	-10.31	-	-	335	122	H
2	2.541221	63.92	Pk	32.4	-40.69	55.63	-	-	74	-18.37	335	122	H

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

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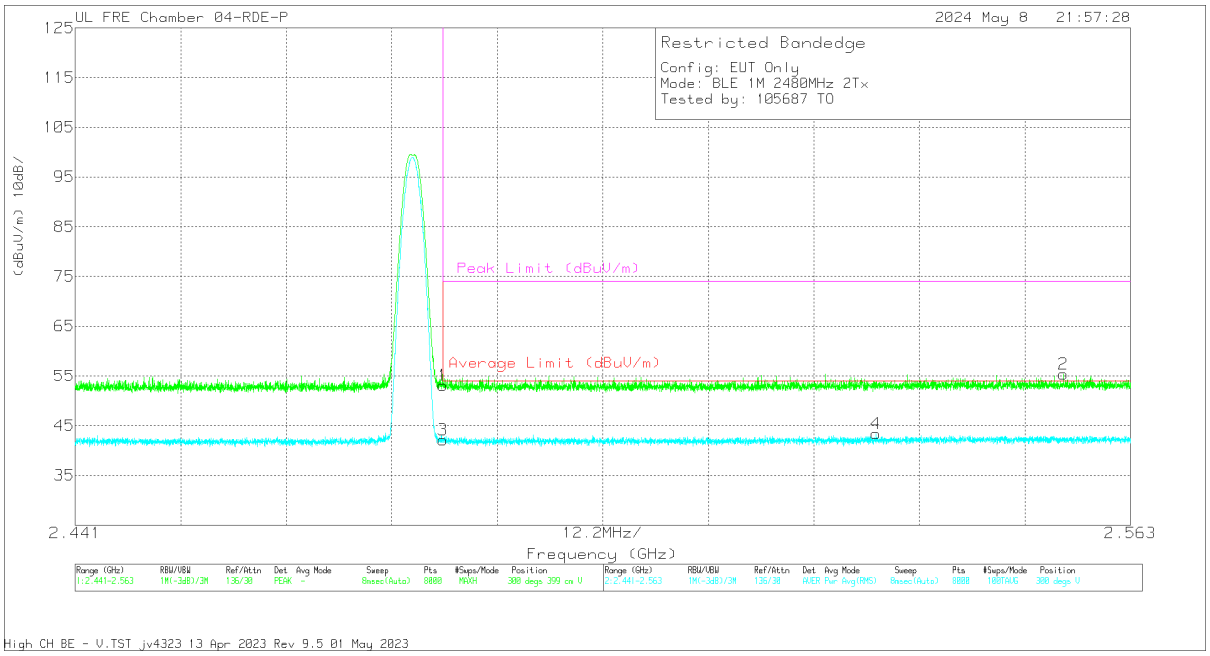
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.75	Pk	32.2	-40.83	53.12	-	-	74	-20.88	300	399	V
3	* 2.4835	50.81	RMS	32.2	-40.83	42.18	54	-11.82	-	-	300	399	V
4	2.533595	51.64	RMS	32.4	-40.69	43.35	54	-10.65	-	-	300	399	V
2	2.555237	63.64	Pk	32.4	-40.65	55.39	-	-	74	-18.61	300	399	V

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

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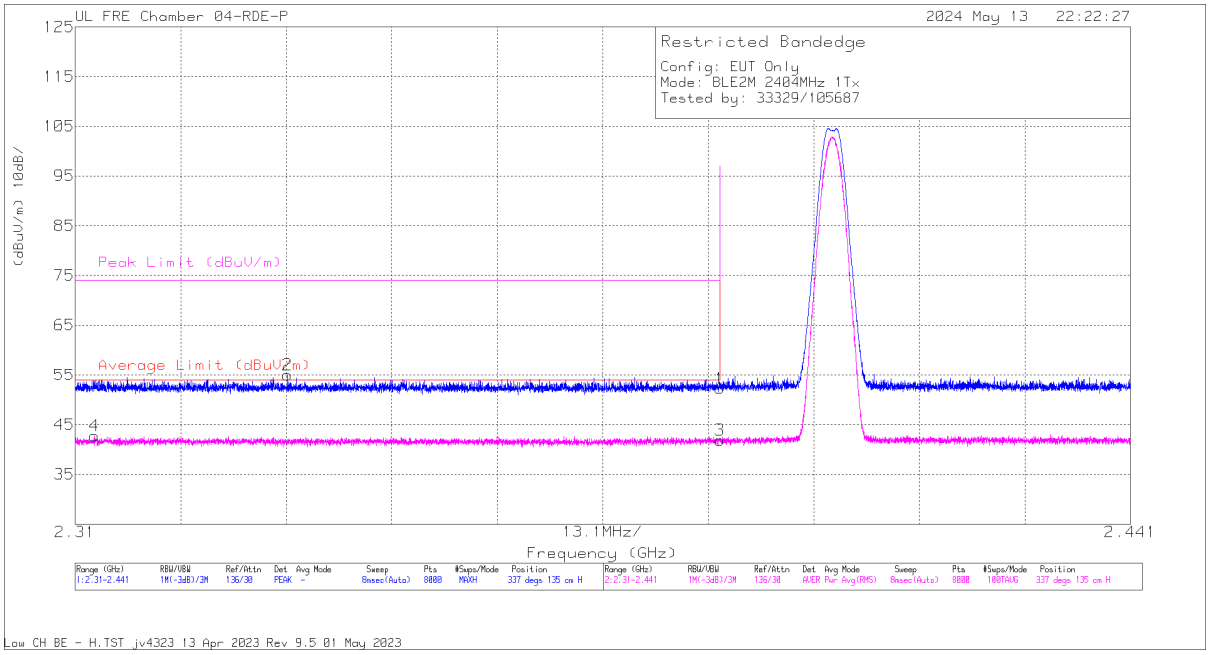
10.2.7. LOW POWER BLE (2Mbps)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.312424	51.69	RMS	31.9	-40.82	42.77	54	-11.23	-	-	337	135	H
2	*2.336383	63.88	Pk	31.9	-40.8	54.98	-	-	74	-19.02	337	135	H
1	*2.39	61.03	Pk	32	-40.75	52.28	-	-	74	-21.72	337	135	H
3	*2.39	50.63	RMS	32	-40.75	41.88	54	-12.12	-	-	337	135	H

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

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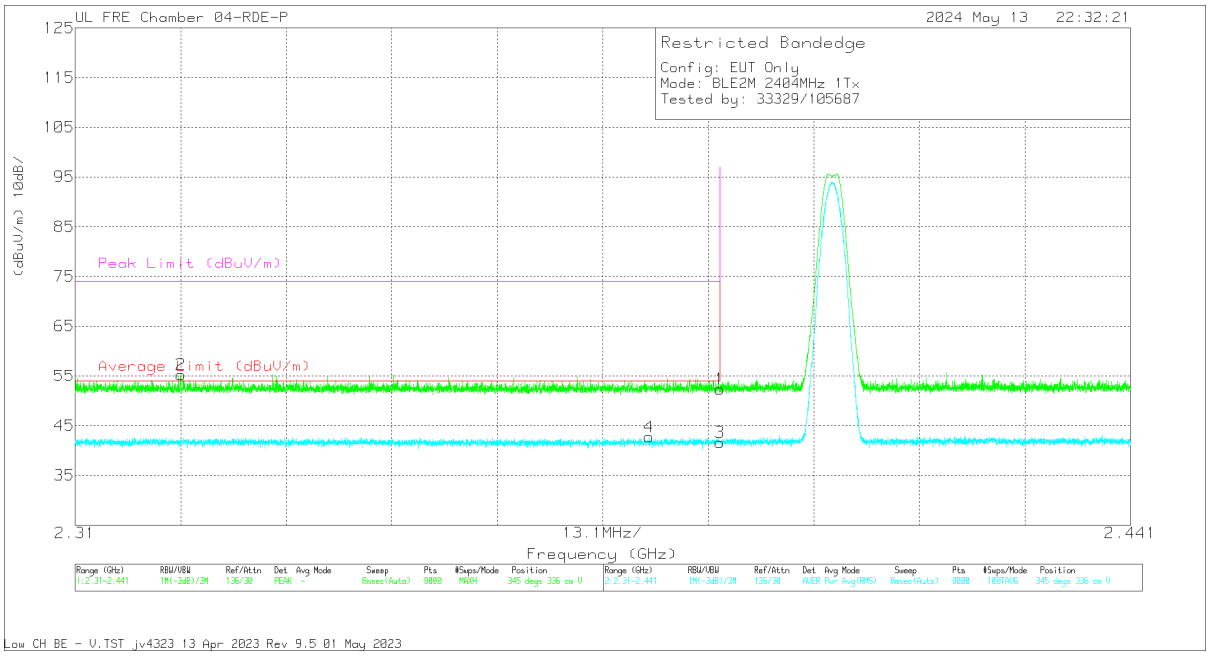
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.323102	64.2	Pk	31.9	-40.82	55.28	-	-	74	-18.72	345	336	V
4	*2.381256	51.48	RMS	32	-40.77	42.71	54	-11.29	-	-	345	336	V
1	*2.39	61.15	Pk	32	-40.75	52.4	-	-	74	-21.6	345	336	V
3	*2.39	50.41	RMS	32	-40.75	41.66	54	-12.34	-	-	345	336	V

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

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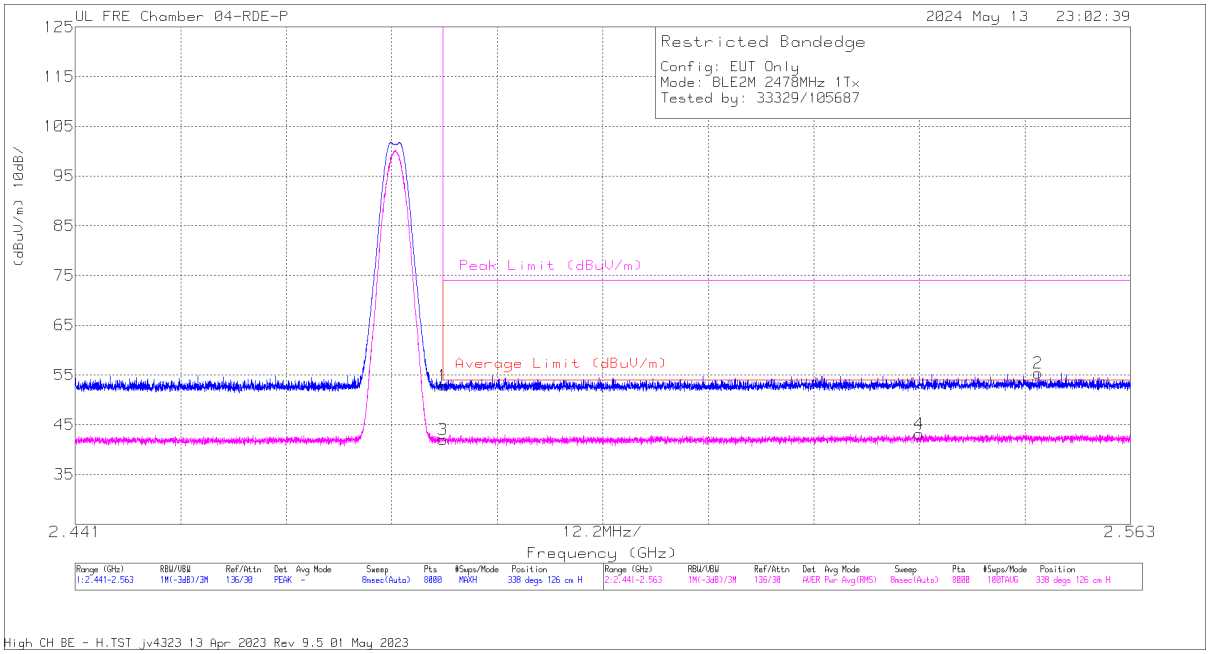
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.54	Pk	32.2	-40.83	52.91	-	-	74	-21.09	338	126	H
3	*2.4835	50.61	RMS	32.2	-40.83	41.98	54	-12.02	-	-	338	126	H
4	*2.538598	51.44	RMS	32.4	-40.7	43.14	54	-10.86	-	-	338	126	H
2	*2.552309	63.66	Pk	32.4	-40.66	55.4	-	-	74	-18.6	338	126	H

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

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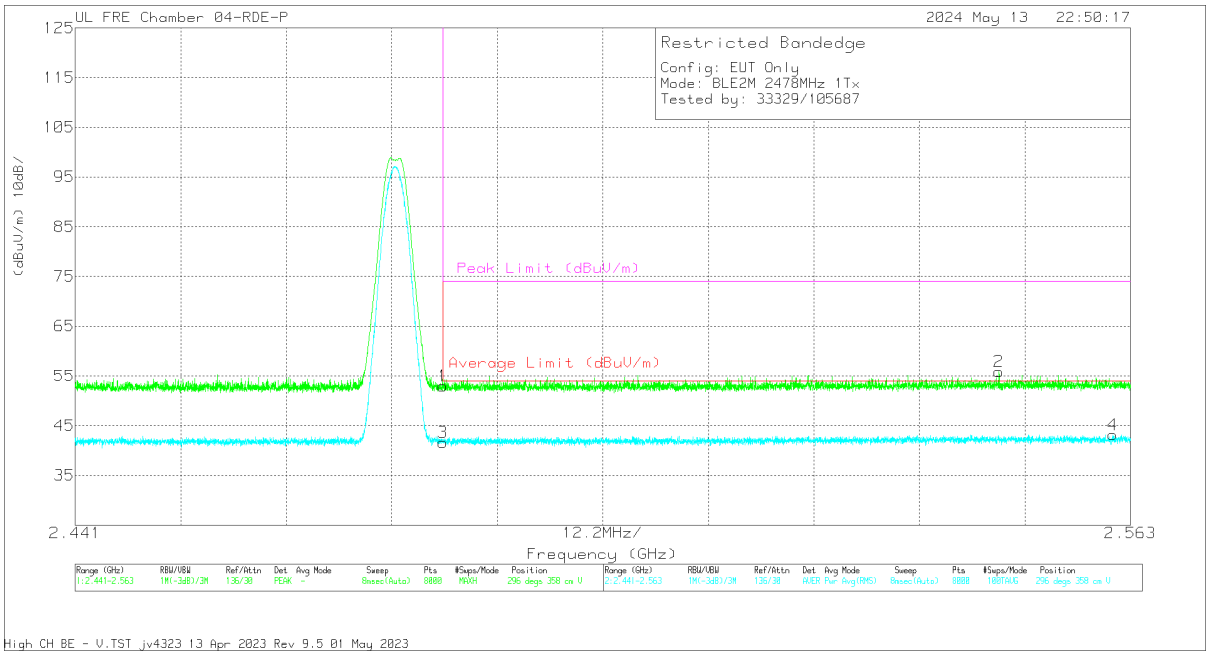
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.61	Pk	32.2	-40.83	52.98	-	-	74	-21.02	296	358	V
3	*2.4835	50.24	RMS	32.2	-40.83	41.61	54	-12.39	-	-	296	358	V
2	*2.54781	64.15	Pk	32.4	-40.65	55.9	-	-	74	-18.1	296	358	V
4	*2.560987	51.44	RMS	32.4	-40.64	43.2	54	-10.8	-	-	296	358	V

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

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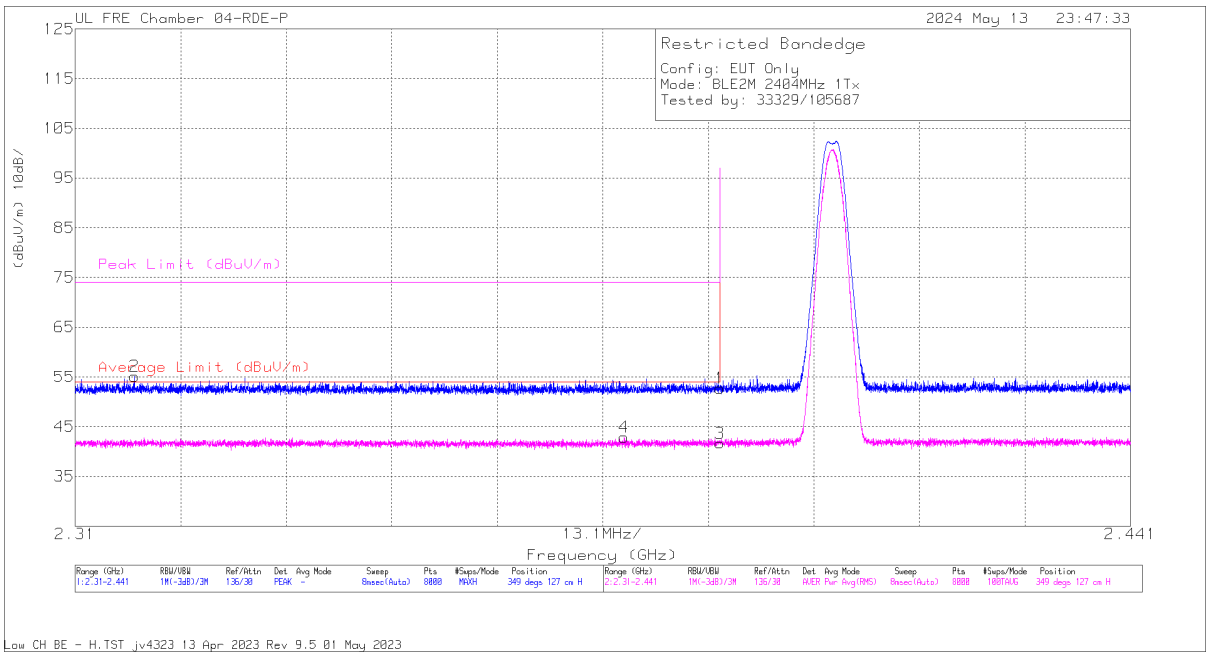
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.317386	64.07	Pk	31.9	-40.82	55.15	-	-	74	-18.85	349	127	H
4	*2.378145	51.7	RMS	32	-40.79	42.91	54	-11.09	-	-	349	127	H
1	*2.39	61.44	Pk	32	-40.75	52.69	-	-	74	-21.31	349	127	H
3	*2.39	50.43	RMS	32	-40.75	41.68	54	-12.32	-	-	349	127	H

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

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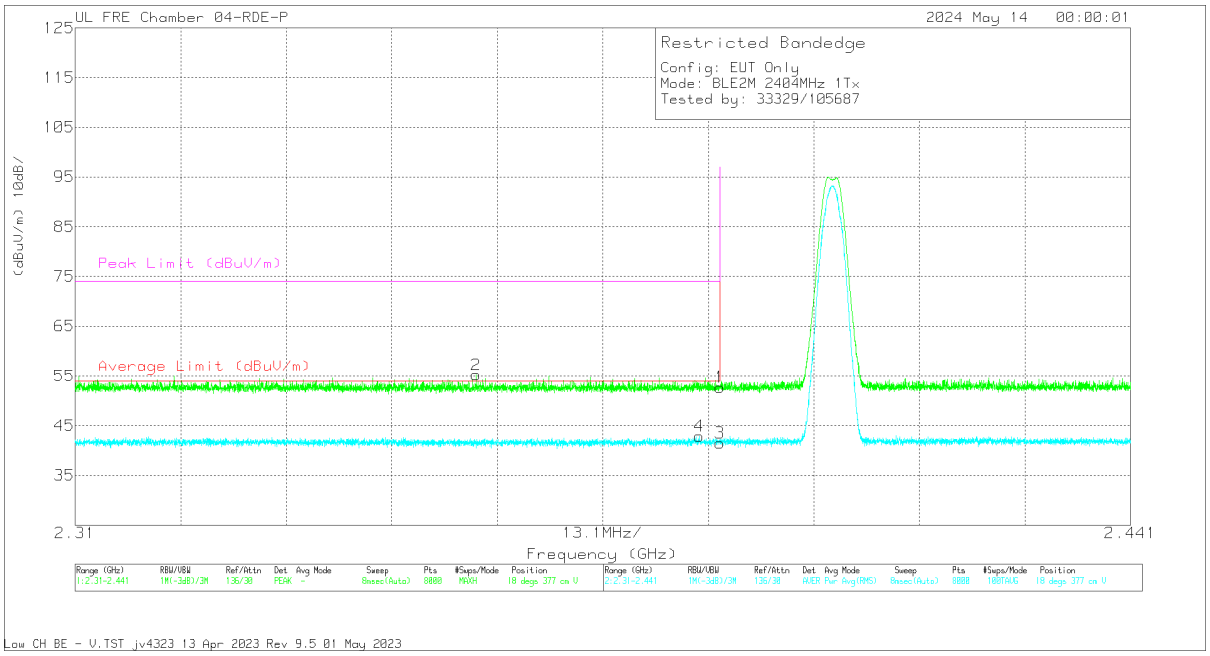
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	*2.35977	64.06	Pk	31.9	-40.77	55.19	-	-	74	-18.81	18	377	V
4	*2.387463	51.6	RMS	32	-40.75	42.85	54	-11.15	-	-	18	377	V
1	*2.39	61.45	Pk	32	-40.75	52.7	-	-	74	-21.3	18	377	V
3	*2.39	50.23	RMS	32	-40.75	41.48	54	-12.52	-	-	18	377	V

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

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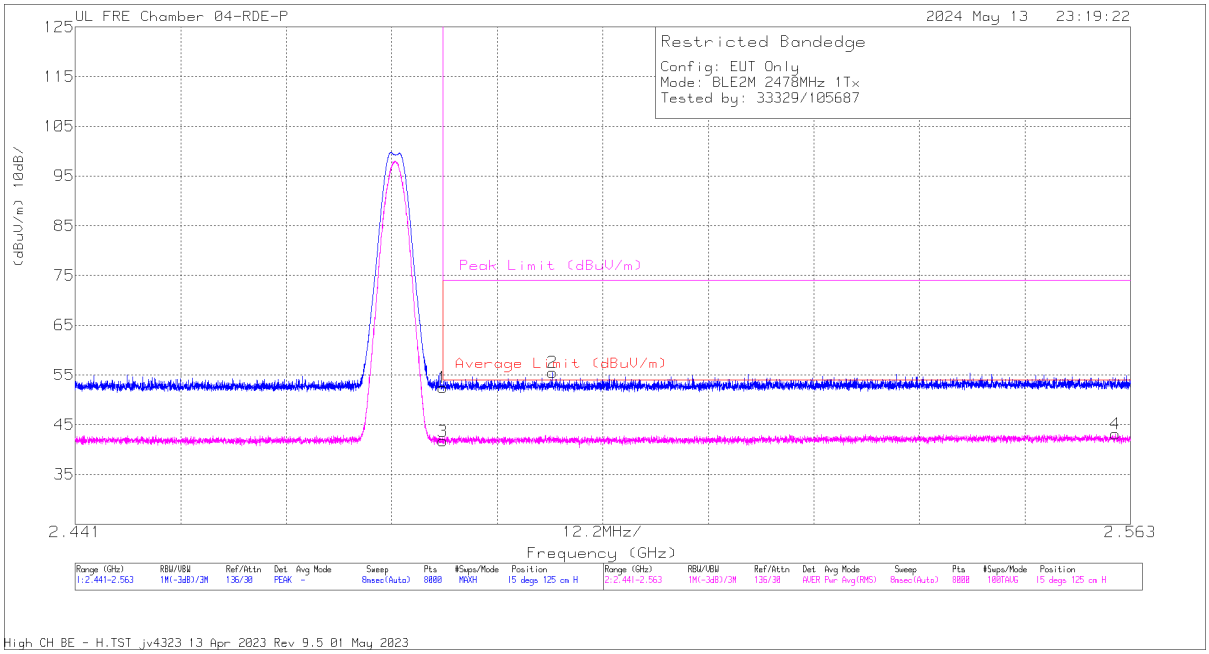
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.15	Pk	32.2	-40.83	52.52	-	-	74	-21.48	15	125	H
3	*2.4835	50.32	RMS	32.2	-40.83	41.69	54	-12.31	-	-	15	125	H
2	*2.496182	64.08	Pk	32.3	-40.84	55.54	-	-	74	-18.46	15	125	H
4	*2.561232	51.43	RMS	32.4	-40.64	43.19	54	-10.81	-	-	15	125	H

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

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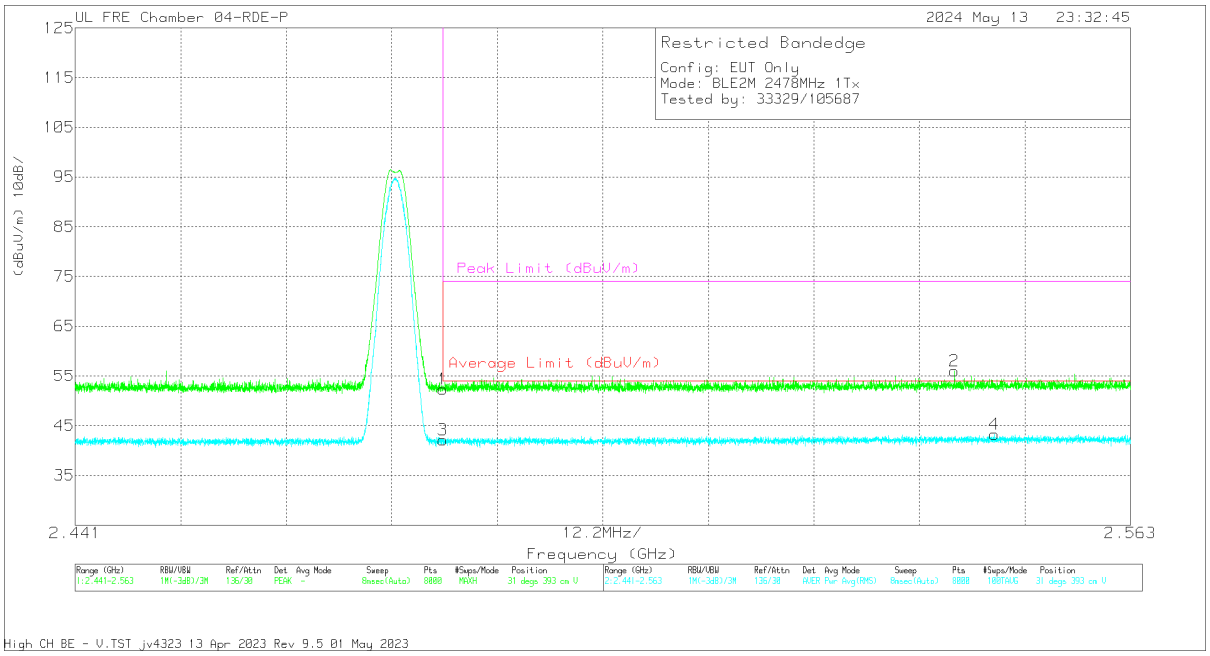
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.02	Pk	32.2	-40.83	52.39	-	-	74	-21.61	31	393	V
3	*2.4835	50.8	RMS	32.2	-40.83	42.17	54	-11.83	-	-	31	393	V
2	*2.542639	64.3	Pk	32.4	-40.67	56.03	-	-	74	-17.97	31	393	V
4	*2.547291	51.56	RMS	32.4	-40.66	43.3	54	-10.7	-	-	31	393	V

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

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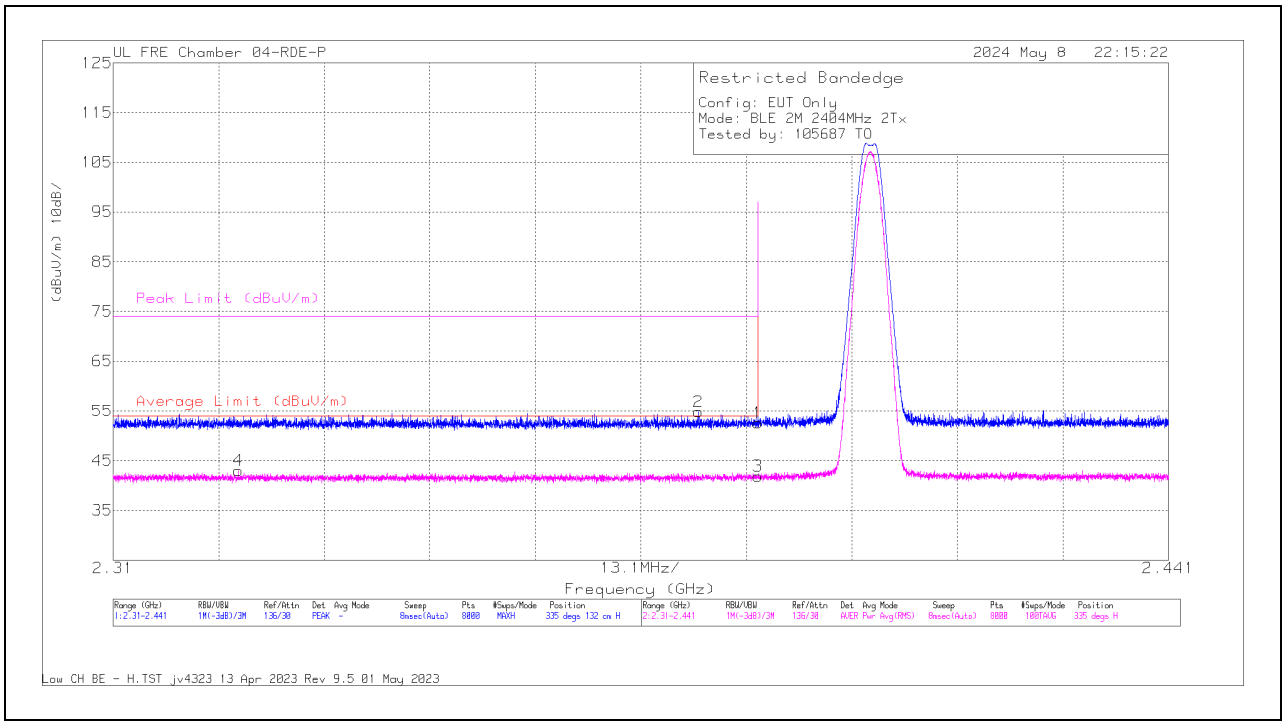
10.2.8. LOW POWER BLE TXBF (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	61.38	Pk	32	-40.75	52.63	-	-	74	-21.37	335	132	H
2	* 2.382616	63.58	Pk	32	-40.76	54.82	-	-	74	-19.18	335	132	H
3	* 2.39	50.58	RMS	32	-40.75	41.83	54	-12.17	-	-	335	132	H
4	* 2.325542	51.95	RMS	31.9	-40.81	43.04	54	-10.96	-	-	335	132	H

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

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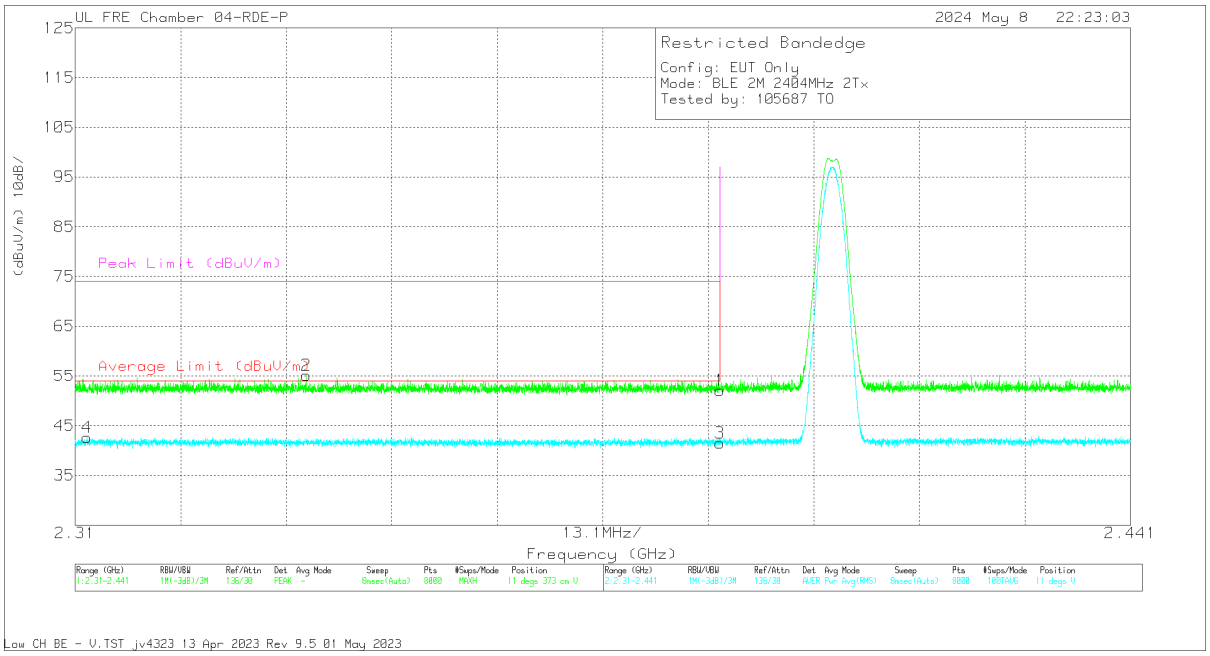
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	* 2.39	60.82	Pk	32	-40.75	52.07	-	-	74	-21.93	11	373	V
2	* 2.338676	64	Pk	31.9	-40.79	55.11	-	-	74	-18.89	11	373	V
3	* 2.39	50.24	RMS	32	-40.75	41.49	54	-12.51	-	-	11	373	V
4	* 2.31149	51.53	RMS	31.9	-40.82	42.61	54	-11.39	-	-	11	373	V

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

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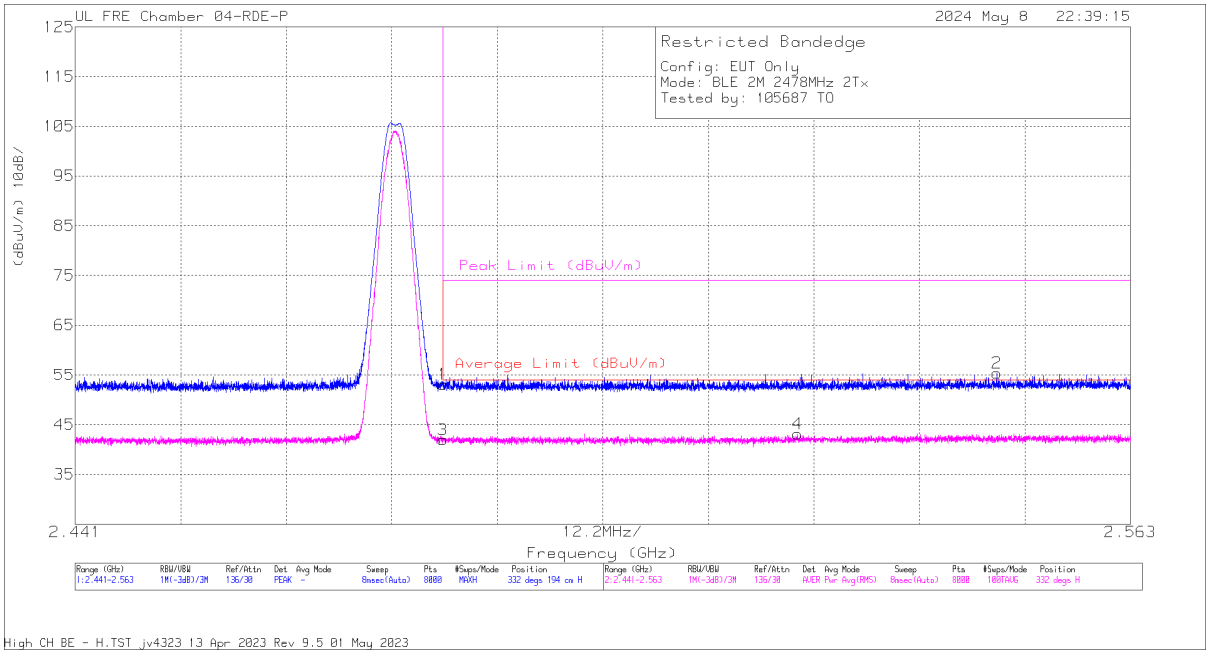
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61.75	Pk	32.2	-40.83	53.12	-	-	74	-20.88	332	194	H
3	* 2.4835	50.58	RMS	32.2	-40.83	41.95	54	-12.05	-	-	332	194	H
4	2.524535	51.46	RMS	32.4	-40.72	43.14	54	-10.86	-	-	332	194	H
2	2.547535	63.66	Pk	32.4	-40.66	55.4	-	-	74	-18.6	332	194	H

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

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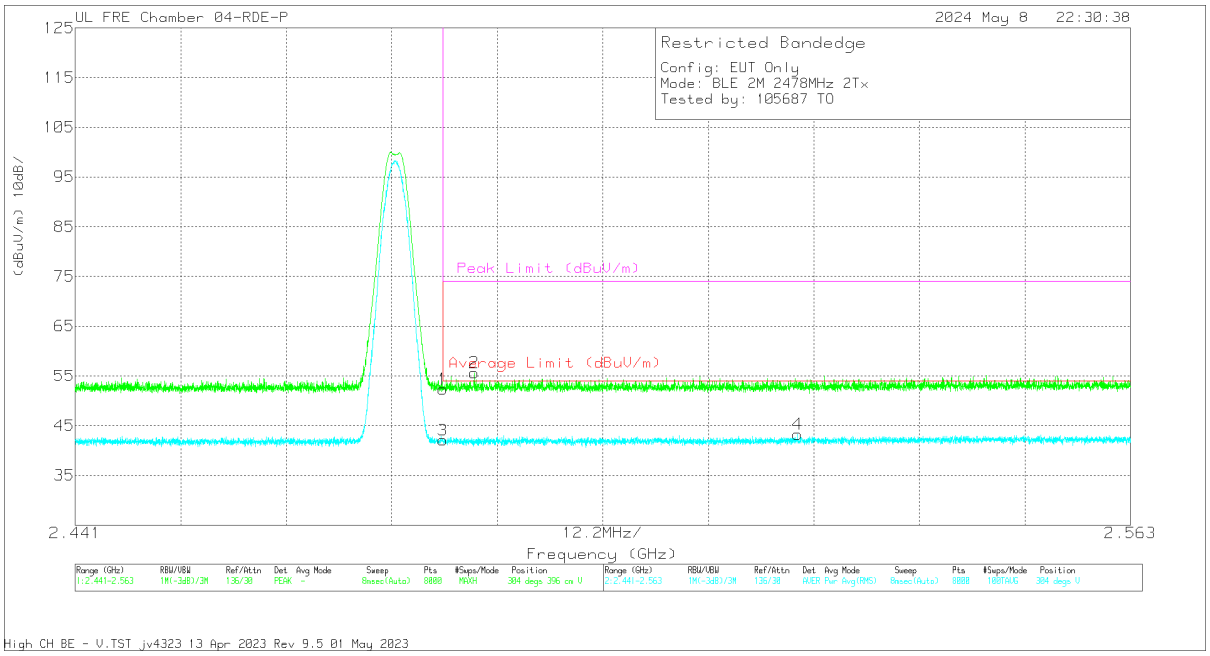
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	79834 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	61	Pk	32.2	-40.83	52.37	-	-	74	-21.63	304	396	V
2	* 2.487107	64.25	Pk	32.2	-40.82	55.63	-	-	74	-18.37	304	396	V
3	* 2.4835	50.7	RMS	32.2	-40.83	42.07	54	-11.93	-	-	304	396	V
4	2.524505	51.63	RMS	32.4	-40.72	43.31	54	-10.69	-	-	304	396	V

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

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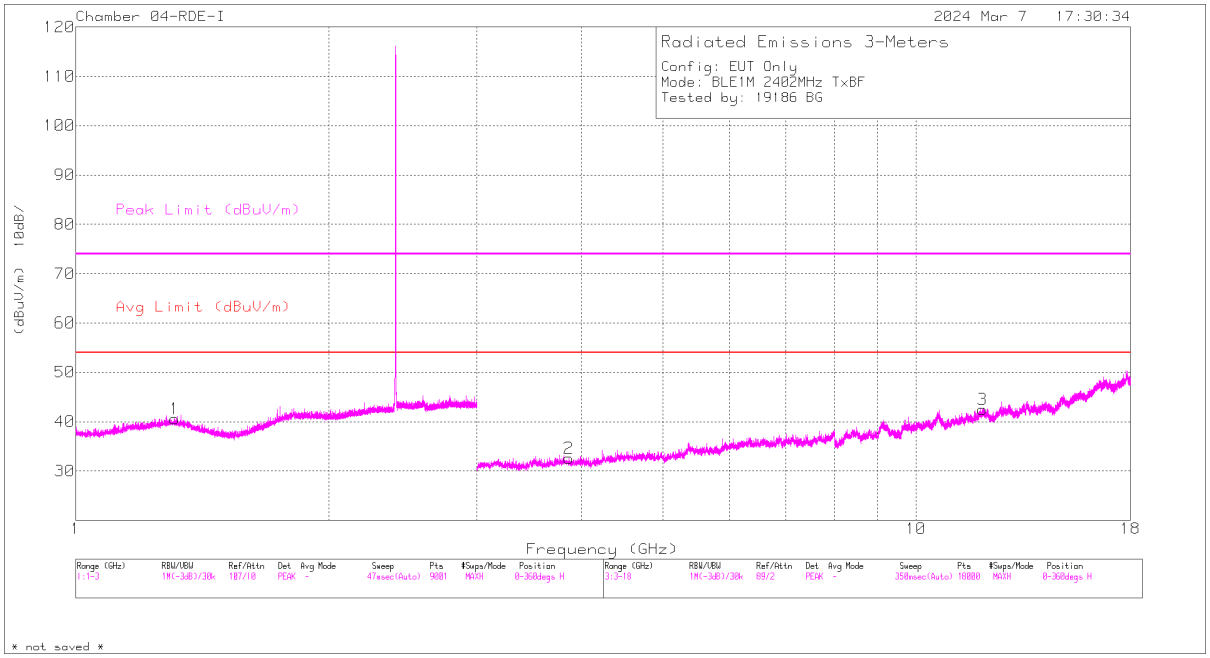
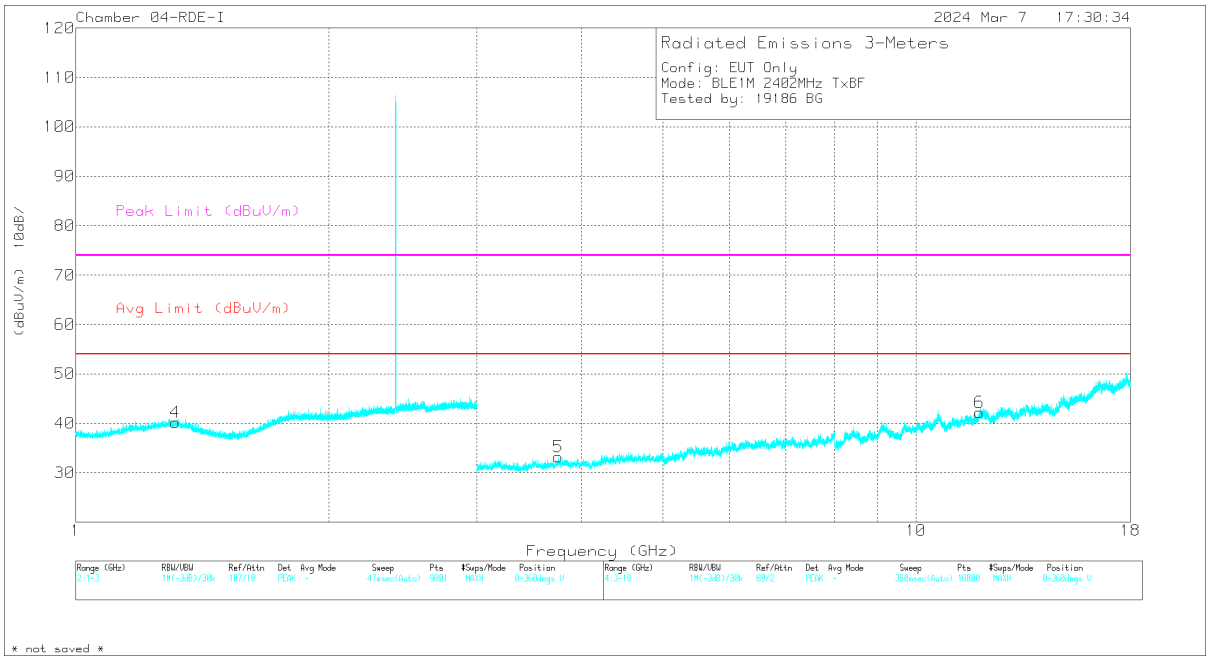
10.2.9. WORST CASE HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

1	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF - 3mH (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.311841	41.64	PK2	28.6	-20.5	49.74	-	-	74	-24.26	71	298	H
	* 1.310313	30.24	MAv1	28.6	-20.4	38.44	54	-15.56	-	-	71	298	H
4	* 1.314288	42.27	PK2	28.6	-20.4	50.47	-	-	74	-23.53	356	192	V
	* 1.31309	30.36	MAv1	28.6	-20.4	38.56	54	-15.44	-	-	356	192	V
2	* 3.867867	37.56	PK2	33.2	-28	42.76	-	-	74	-31.24	340	291	H
	* 3.865319	25.41	MAv1	33.2	-28	30.61	54	-23.39	-	-	340	291	H
3	* 12.004932	34.75	PK2	38.6	-20.7	52.65	-	-	74	-21.35	25	394	H
	* 12.004251	22.67	MAv1	38.6	-20.8	40.47	54	-13.53	-	-	25	394	H
5	* 3.74925	37.63	PK2	33.2	-27.7	43.13	-	-	74	-30.87	226	168	V
	* 3.749629	25.7	MAv1	33.2	-27.6	31.3	54	-22.7	-	-	226	168	V
6	* 11.901355	34.03	PK2	38.5	-20.6	51.93	-	-	74	-22.07	3	164	V
	* 11.900383	22.56	MAv1	38.5	-20.5	40.56	54	-13.44	-	-	3	164	V

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

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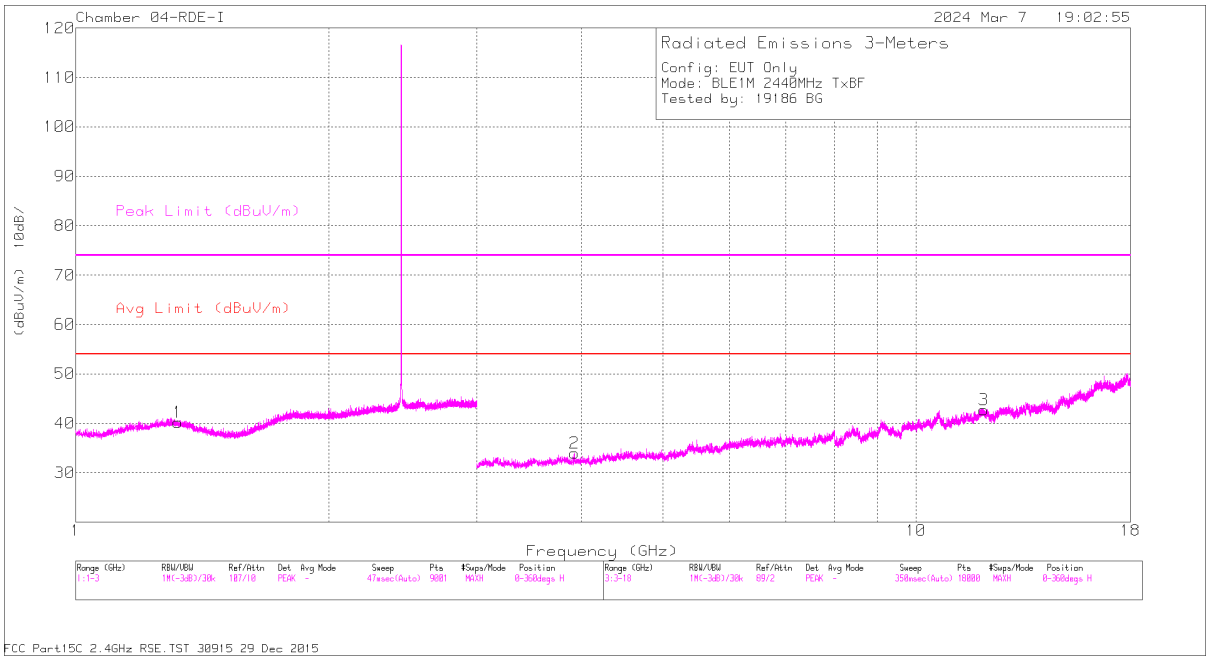
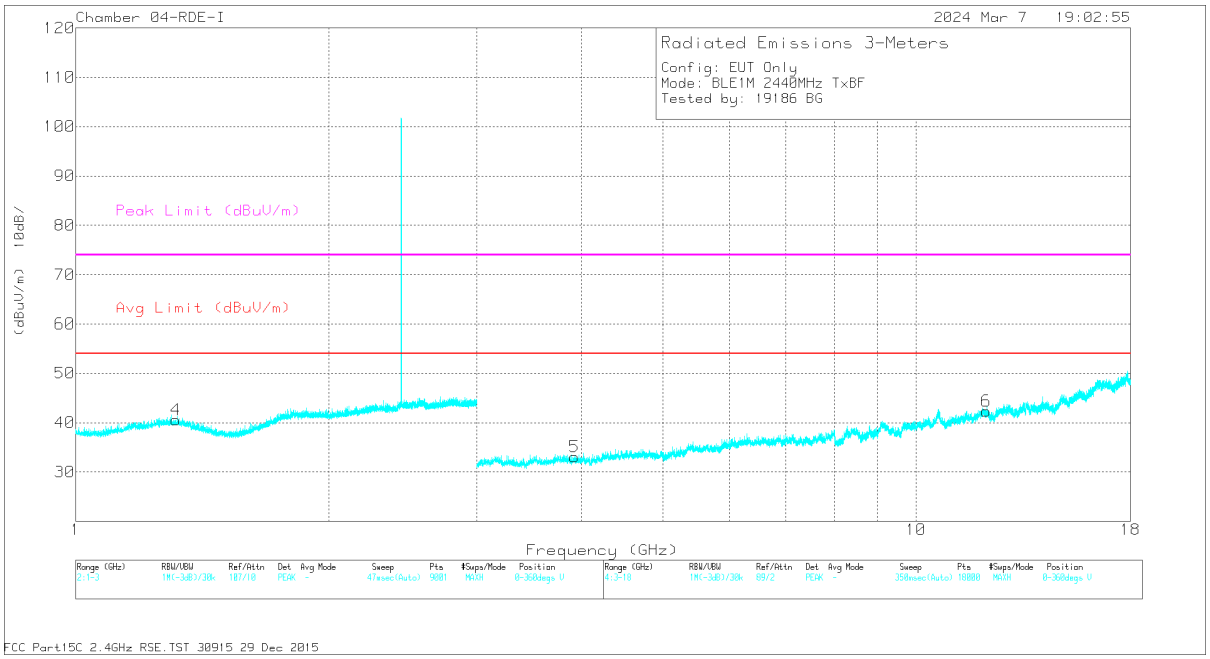
MID CHANNEL RESULTS



HORIZONTAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF - 3mH (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.324505	42.21	PK2	28.6	-20.5	50.31	-	-	74	-23.69	86	272	H
	* 1.32436	30.65	MAv1	28.6	-20.4	38.85	54	-15.15	-	-	86	272	H
4	* 1.317989	42.24	PK2	28.6	-20.5	50.34	-	-	74	-23.66	334	382	V
	* 1.317758	30.99	MAv1	28.6	-20.5	39.09	54	-14.91	-	-	334	382	V
2	* 3.922639	38.05	PK2	33.2	-28.5	42.75	-	-	74	-31.25	240	362	H
	* 3.919965	26.58	MAv1	33.2	-28.4	31.38	54	-22.62	-	-	240	362	H
3	* 12.050529	34.97	PK2	38.6	-20.5	53.07	-	-	74	-20.93	85	348	H
	* 12.048378	23.26	MAv1	38.6	-20.4	41.46	54	-12.54	-	-	85	348	H
5	* 3.922709	38.09	PK2	33.2	-28.5	42.79	-	-	74	-31.21	8	328	V
	* 3.922162	26.46	MAv1	33.2	-28.5	31.16	54	-22.84	-	-	8	328	V
6	* 12.125163	34.4	PK2	38.6	-20.7	52.3	-	-	74	-21.7	309	298	V
	* 12.124778	22.68	MAv1	38.6	-20.7	40.58	54	-13.42	-	-	309	298	V

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

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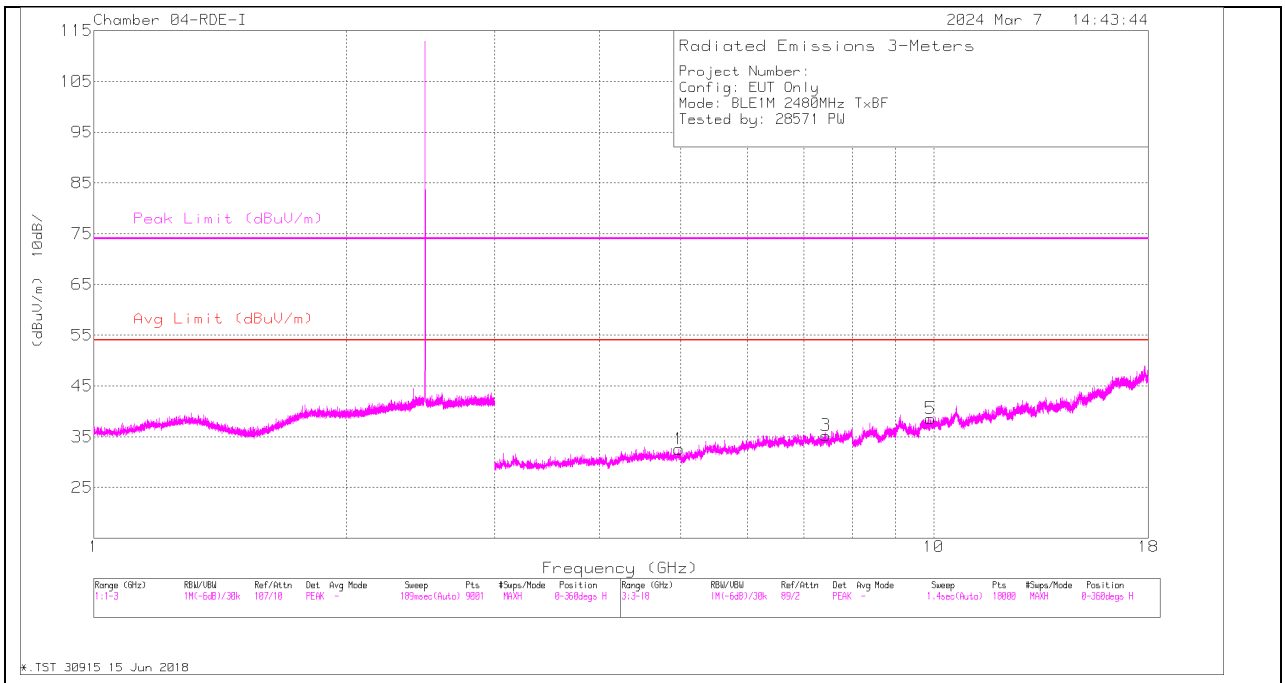
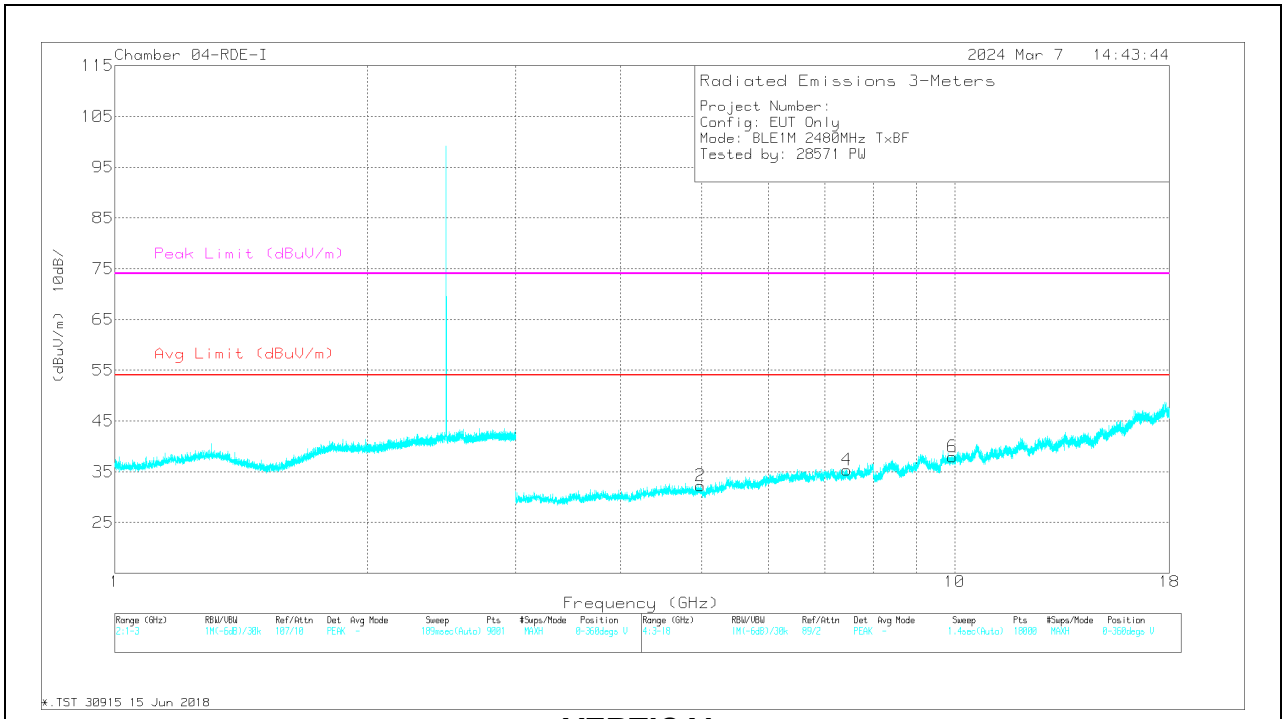
HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF - 3mH (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.975381	35.7	PK2	34	-27.3	0	42.4	-	-	74	-31.6	335	286	H
	* 4.97536	23.63	MAv1	34	-27.3	0	30.33	54	-23.67	-	-	335	286	H
3	* 7.432727	32.04	PK2	35.6	-23.2	0	44.44	-	-	74	-29.56	320	162	H
	* 7.432506	20.71	MAv1	35.6	-23.2	0	33.11	54	-20.89	-	-	320	162	H
2	* 4.976797	35.35	PK2	34	-27.4	0	41.95	-	-	74	-32.05	17	281	V
	* 4.975489	23.63	MAv1	34	-27.3	0	30.33	54	-23.67	-	-	17	281	V
4	* 7.436323	32.31	PK2	35.6	-23.2	0	44.71	-	-	74	-29.29	281	217	V
	* 7.436554	20.57	MAv1	35.6	-23.3	0	32.87	54	-21.13	-	-	281	217	V
5	9.910883	31.55	PK2	36.9	-21.3	0	47.15	-	-	-	-	349	180	H
	9.912729	20.51	MAv1	36.9	-21.3	0	36.11	-	-	-	-	349	180	H
6	9.930311	31.64	PK2	37	-21.2	0	47.44	-	-	-	-	71	196	V
	9.933641	20.26	MAv1	37	-21.1	0	36.16	-	-	-	-	71	196	V

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

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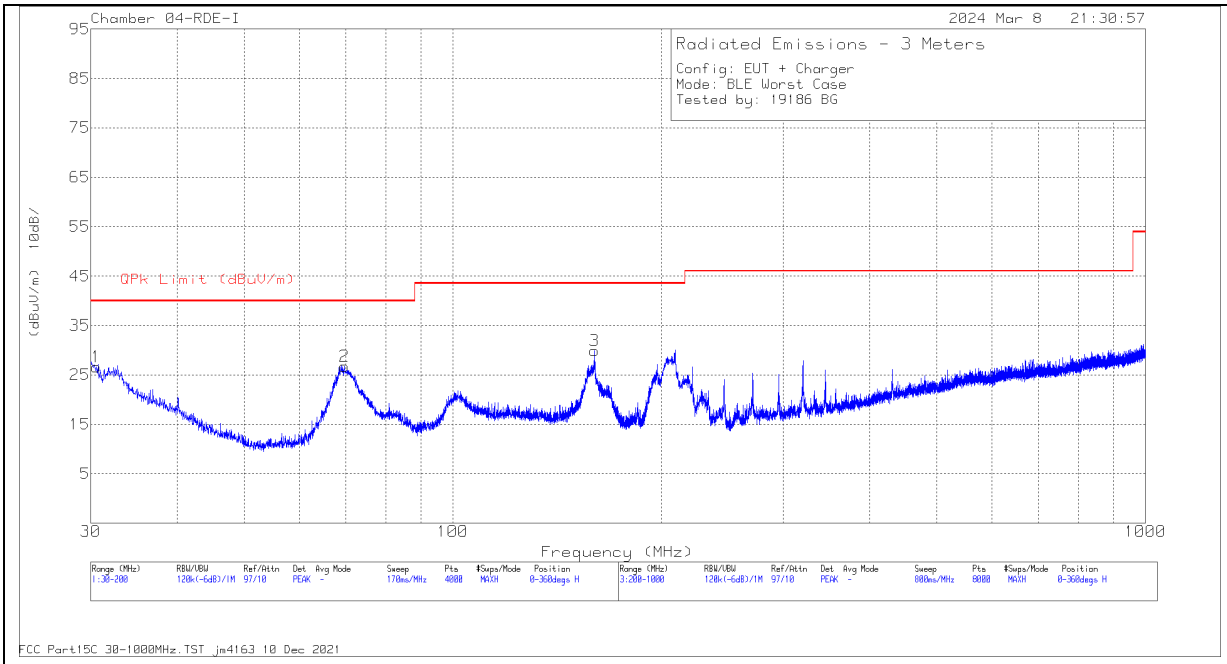
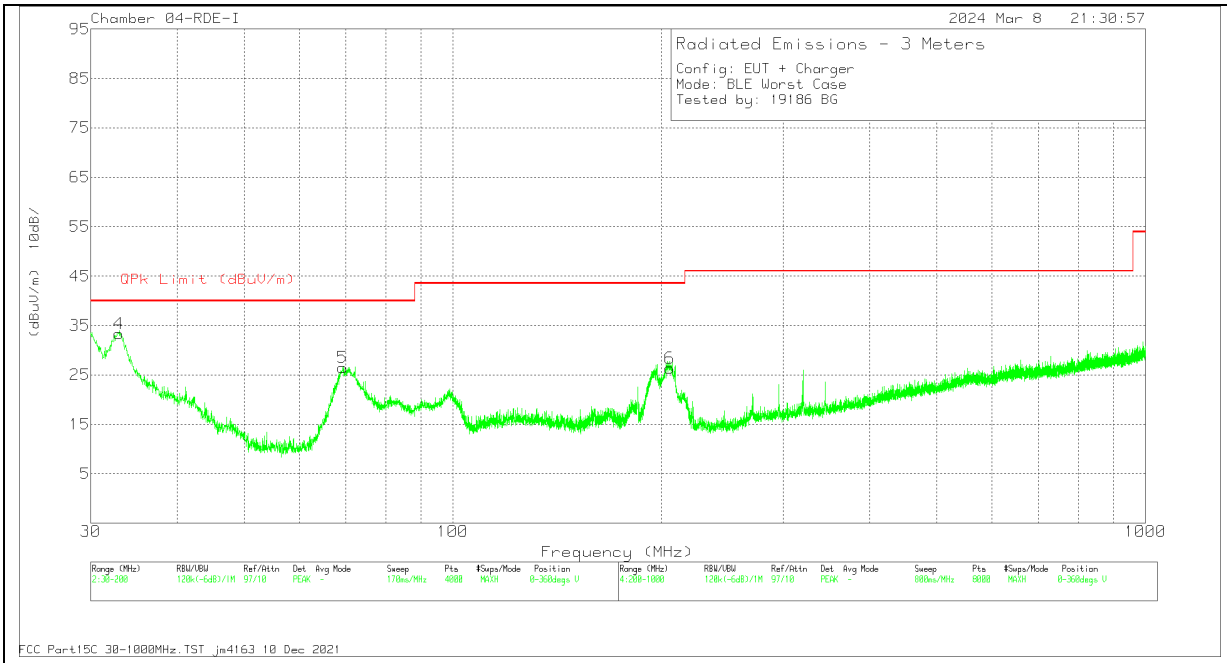
10.3. WORST CASE BELOW 1 GHz

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



HORIZONTAL



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DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80714 ACF - 10mH (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.5526	30.62	Pk	27.3	-31.3	26.62	40	-13.38	0-360	299	H
4	32.9333	38.84	Pk	25.7	-31.2	33.34	40	-6.66	0-360	101	V
	33.0353	35.23	Qp	25.6	-31.2	29.63	40	-10.37	166	104	V
5	69.3652	42.7	Pk	14.7	-30.9	26.5	40	-13.5	0-360	101	V
2	69.7478	42.95	Pk	14.7	-30.9	26.75	40	-13.25	0-360	199	H
3	160.169	42.28	Pk	17.9	-30.3	29.88	43.52	-13.64	0-360	199	H
6	205.501	39.46	Pk	17	-30.1	26.36	43.52	-17.16	0-360	101	V

Pk - Peak detector
Qp - Quasi-Peak detector

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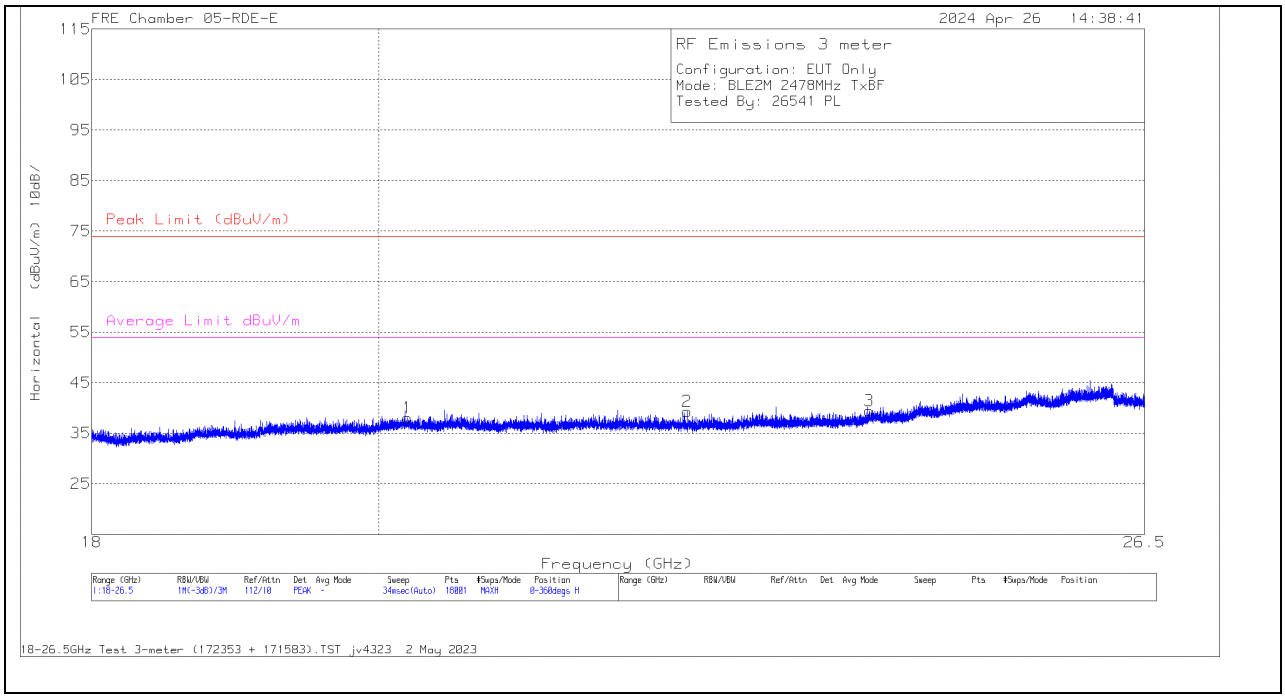
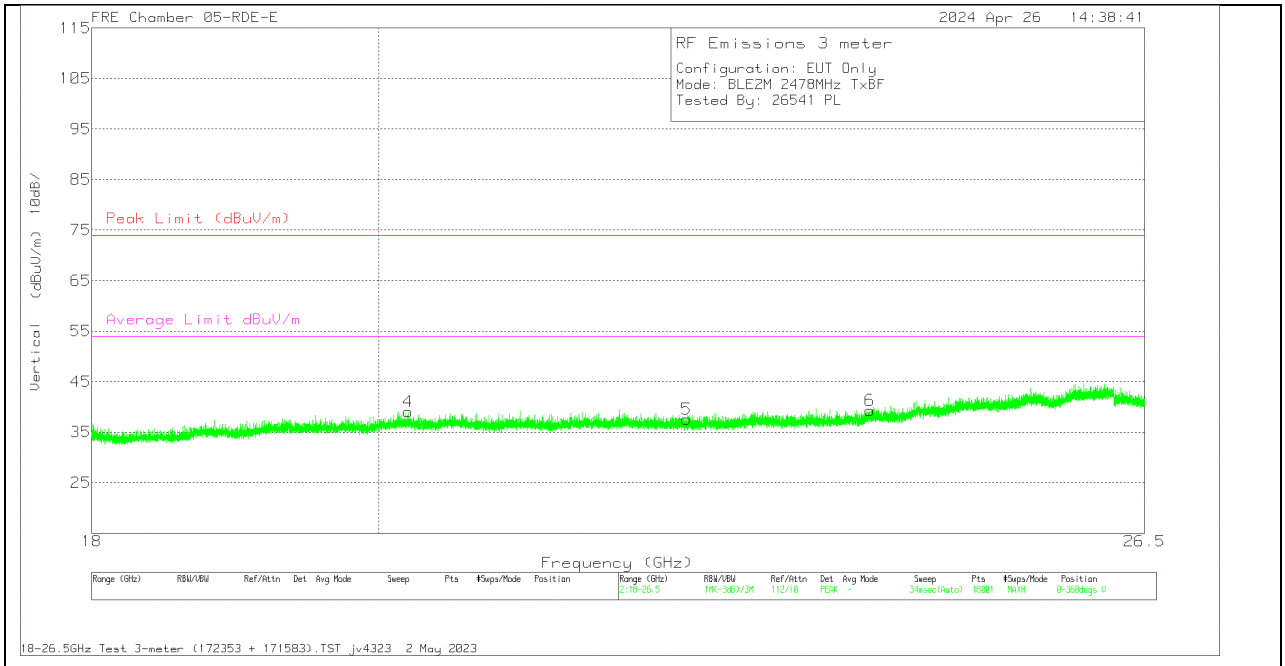
10.4. WORST CASE 18-26 GHz

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

HORIZONTAL



VERTICAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	172353 ACF - 3mH (dB/m)	171583 Amp Assembly (dB)	CBL (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 20.215666	45.44	Pk	33.1	-63.8	23.3	38.04	74	-35.96	54	-15.96	0-360	200	H
2	* 22.402526	46.58	Pk	33.8	-65.6	24.5	39.28	74	-34.72	54	-14.72	0-360	200	H
3	* 23.952358	44.94	Pk	34.2	-65.2	25.5	39.44	74	-34.56	54	-14.56	0-360	200	H
4	* 20.218971	46.44	Pk	33.1	-63.8	23.3	39.04	74	-34.96	54	-14.96	0-360	199	V
5	* 22.396387	44.89	Pk	33.8	-65.6	24.5	37.59	74	-36.41	54	-16.41	0-360	101	V
6	* 23.958025	44.8	Pk	34.2	-65.2	25.5	39.3	74	-34.70	54	-14.70	0-360	101	V

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

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11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	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

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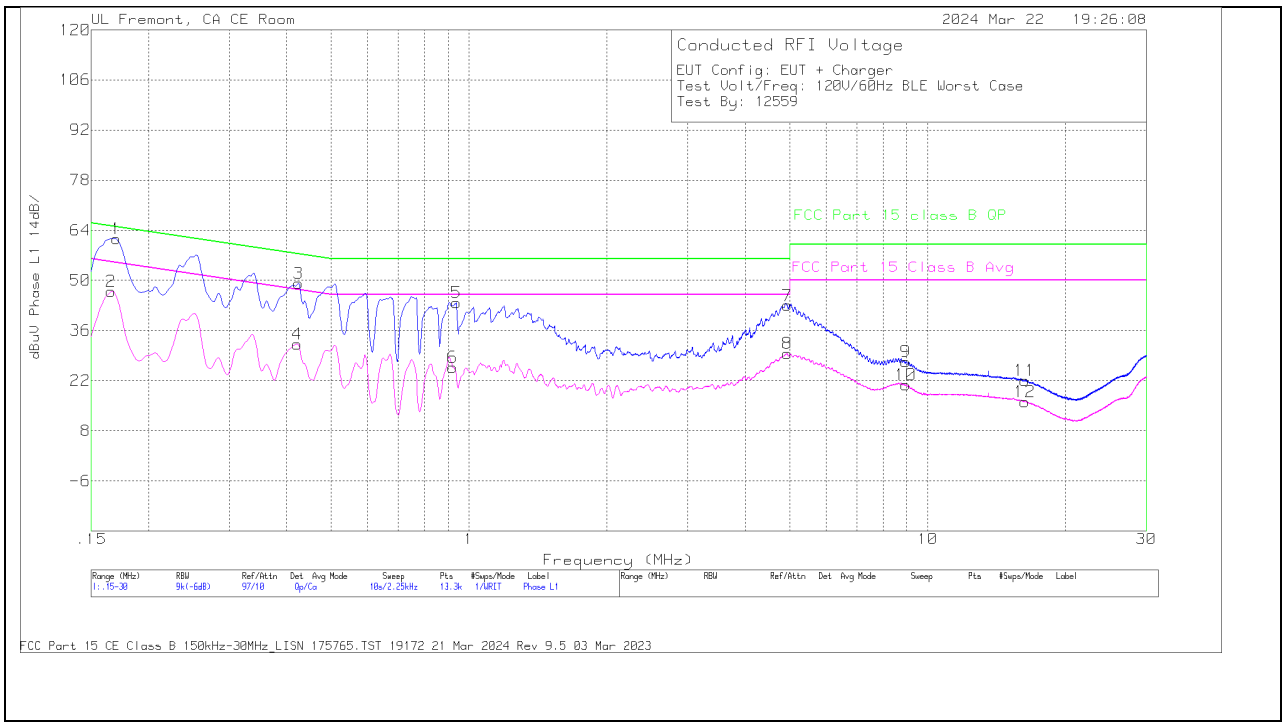
11.1. AC Power Line WITH AC/DC ADAPTER

LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	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	.1658	27.35	Ca	0	.1	9.5	10	46.95	55.17	-8.22	-	-
4	.4223	12.86	Ca	0	0	9.4	10	32.26	47.4	-15.14	-	-
6	.9218	6.29	Ca	.1	0	9.4	10	25.79	46	-20.21	-	-
8	4.9358	10.03	Ca	.1	0	9.4	10	29.53	46	-16.47	-	-
10	8.961	1.18	Ca	.2	0	9.4	10	20.78	50	-29.22	-	-
12	16.2983	-3.56	Ca	.2	.1	9.4	10	16.14	50	-33.86	-	-
1	.1703	42.09	Qp	0	.1	9.5	10	61.69	-	-	64.95	-3.26
3	.4245	29.74	Qp	0	0	9.4	10	49.14	-	-	57.36	-8.22
5	.9375	24.32	Qp	.1	0	9.3	10	43.72	-	-	56	-12.28
7	4.9358	23.49	Qp	.1	0	9.4	10	42.99	-	-	56	-13.01
9	8.9621	7.75	Qp	.2	0	9.4	10	27.35	-	-	60	-32.65
11	16.3028	2.36	Qp	.2	.1	9.4	10	22.06	-	-	60	-37.94

Qp - Quasi-Peak detector
Ca - CISPR average detection

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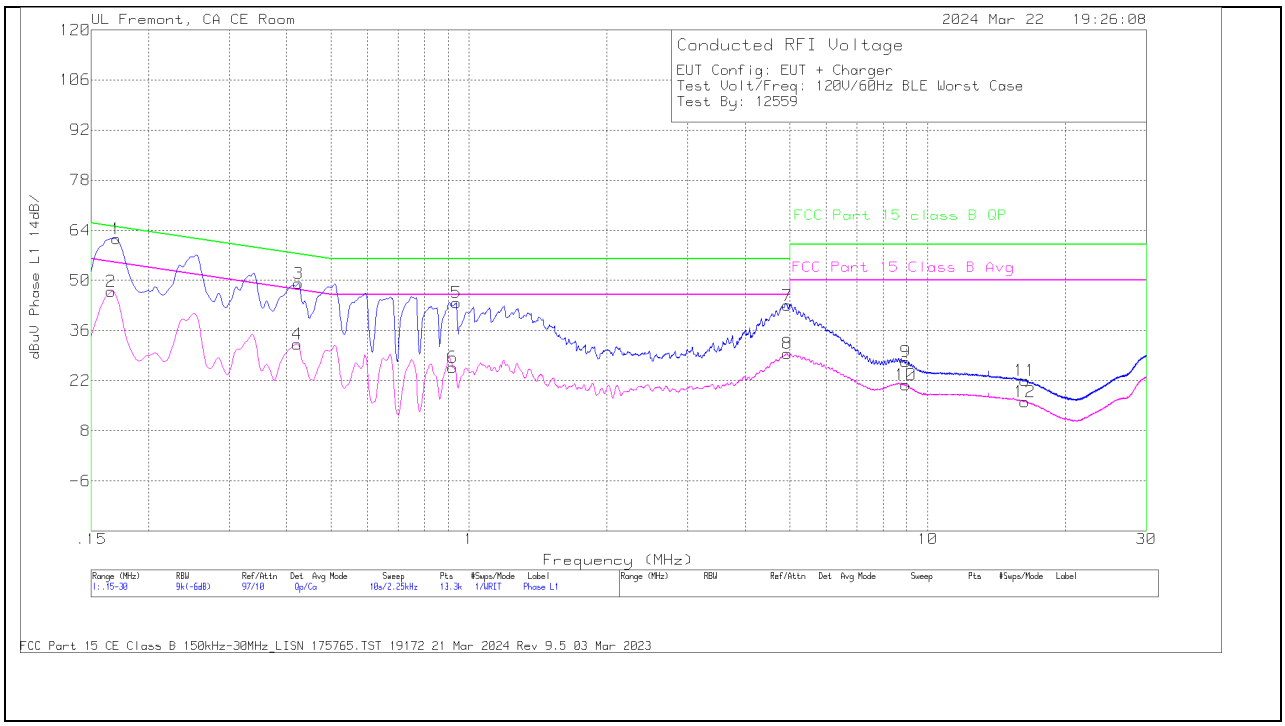
LINE 2 RESULTS



Range 2: Phase L2 .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)
14	.168	28.04	Ca	0	.1	9.5	10	47.64	55.06	-7.42	-	-
16	.4155	14.38	Ca	.1	0	9.4	10	33.88	47.54	-13.66	-	-
18	.9128	9.82	Ca	0	0	9.4	10	29.22	46	-16.78	-	-
20	4.8863	11.21	Ca	.1	0	9.4	10	30.71	46	-15.29	-	-
22	8.943	4.84	Ca	.2	0	9.4	10	24.44	50	-25.56	-	-
24	16.3185	-7.67	Ca	.2	.1	9.4	10	12.03	50	-37.97	-	-
13	.1658	42.29	Qp	0	.1	9.5	10	61.89	-	-	65.17	-3.28
15	.4155	29.93	Qp	.1	0	9.4	10	49.43	-	-	57.54	-8.11
17	.9105	24.52	Qp	0	0	9.4	10	43.92	-	-	56	-12.08
19	4.8885	25.16	Qp	.1	0	9.4	10	44.66	-	-	56	-11.34
21	8.9363	11.16	Qp	.2	0	9.4	10	30.76	-	-	60	-29.24
23	16.323	-1.52	Qp	.2	.1	9.4	10	18.18	-	-	60	-41.82

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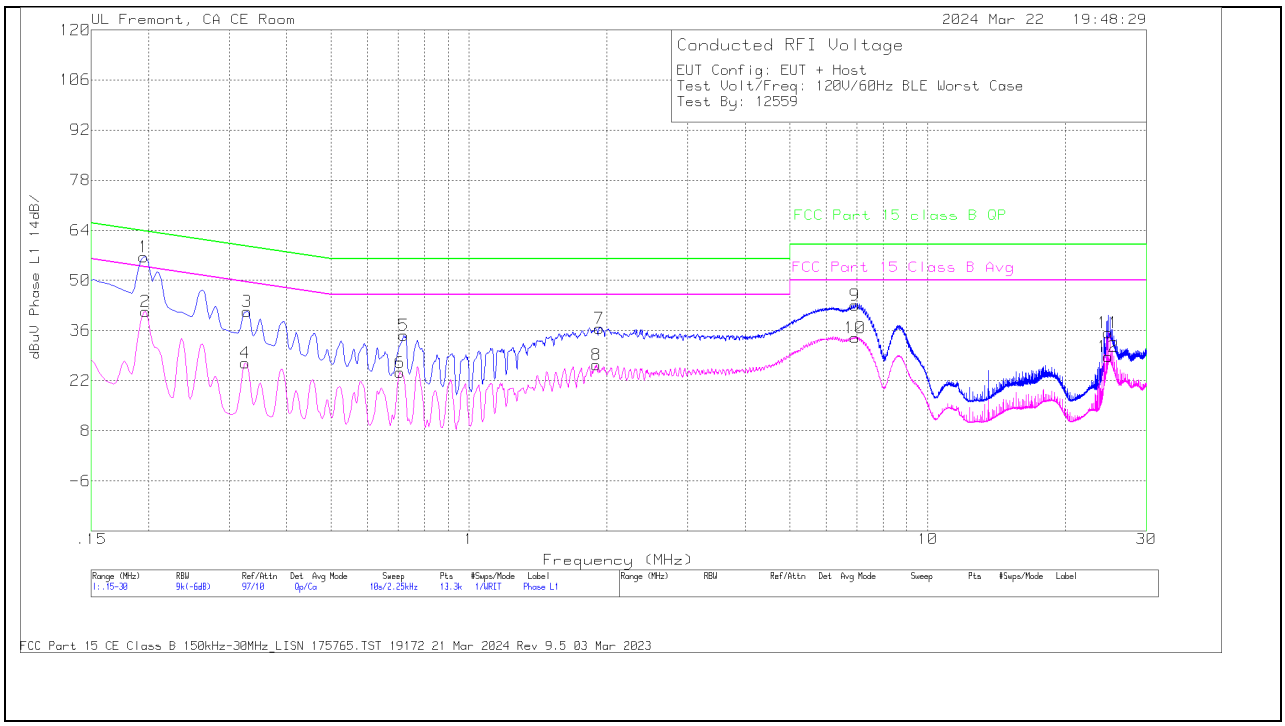
11.2. AC POWER LINE WITH LAPTOP

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	.1973	21.66	Ca	.1	.1	9.4	10	41.26	53.73	-12.47	-	-
4	.3255	7.49	Ca	0	0	9.4	10	26.89	49.57	-22.68	-	-
6	.708	4.85	Ca	.1	0	9.3	10	24.25	46	-21.75	-	-
8	1.896	7.07	Ca	0	0	9.3	10	26.37	46	-19.63	-	-
10	6.945	14.44	Ca	.2	0	9.4	10	34.04	50	-15.96	-	-
12	24.7515	8.72	Ca	.3	.2	9.5	10	28.72	50	-21.28	-	-
1	.195	36.98	Qp	.1	.1	9.4	10	56.58	-	-	63.82	-7.24
3	.3278	21.98	Qp	0	0	9.4	10	41.38	-	-	59.51	-18.13
5	.7215	15.27	Qp	.1	0	9.3	10	34.67	-	-	56	-21.33
7	1.9208	17.34	Qp	0	0	9.3	10	36.64	-	-	56	-19.36
9	6.9383	23.41	Qp	.2	0	9.4	10	43.01	-	-	60	-16.99
11	24.7515	15.38	Qp	.3	.2	9.5	10	35.38	-	-	60	-24.62

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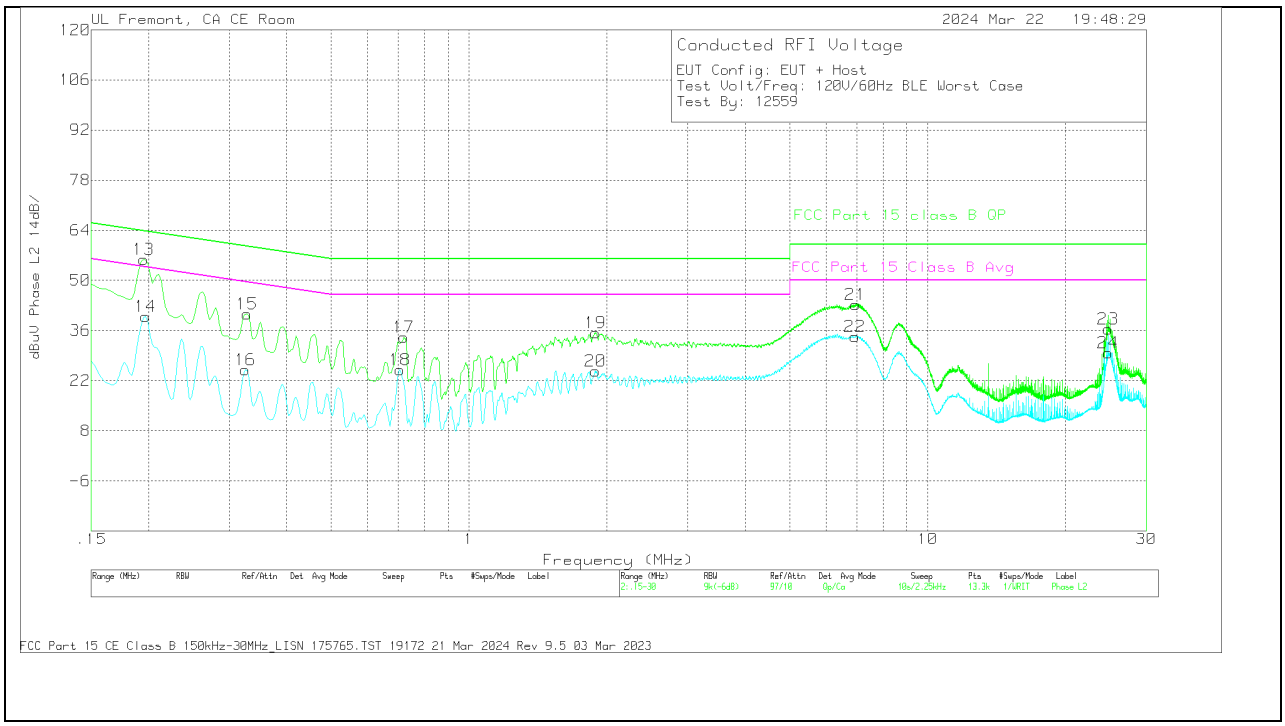
LINE 2 RESULTS



Range 2: Phase L2 .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)
14	.1973	20.47	Ca	.1	0	9.4	10	39.97	53.73	-13.76	-	-
16	.3255	5.53	Ca	.1	0	9.4	10	25.03	49.57	-24.54	-	-
18	.708	5.75	Ca	0	0	9.3	10	25.05	46	-20.95	-	-
20	1.8848	5.24	Ca	.1	0	9.3	10	24.64	46	-21.36	-	-
22	6.9416	14.85	Ca	.1	0	9.4	10	34.35	50	-15.65	-	-
24	24.7515	9.72	Ca	.3	.2	9.5	10	29.72	50	-20.28	-	-
13	.195	36.39	Qp	.1	0	9.4	10	55.89	-	-	63.82	-7.93
15	.3278	21.07	Qp	.1	0	9.4	10	40.57	-	-	59.51	-18.94
17	.7215	14.9	Qp	0	0	9.3	10	34.2	-	-	56	-21.8
19	1.8848	16	Qp	.1	0	9.3	10	35.4	-	-	56	-20.6
21	6.9608	23.78	Qp	.1	0	9.4	10	43.28	-	-	60	-16.72
23	24.7785	16.45	Qp	.3	.2	9.5	10	36.45	-	-	60	-23.55

Qp - Quasi-Peak detector
Ca - CISPR average detection

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12. SETUP PHOTOS

Please refer to setup photos 14982484-EP1V1

END OF TEST REPORT

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