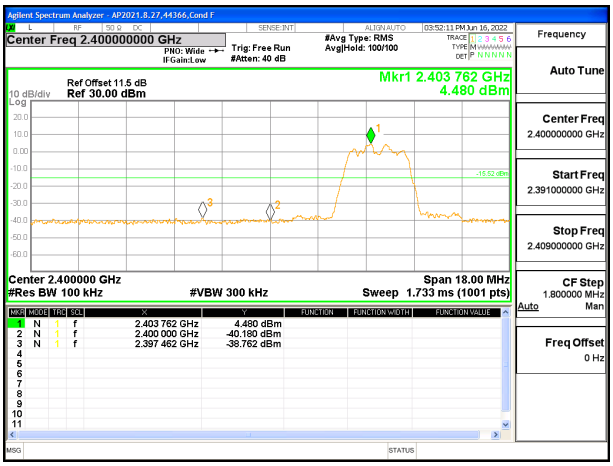
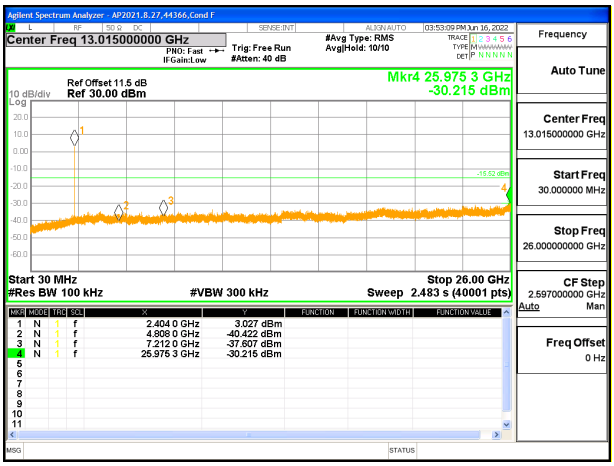
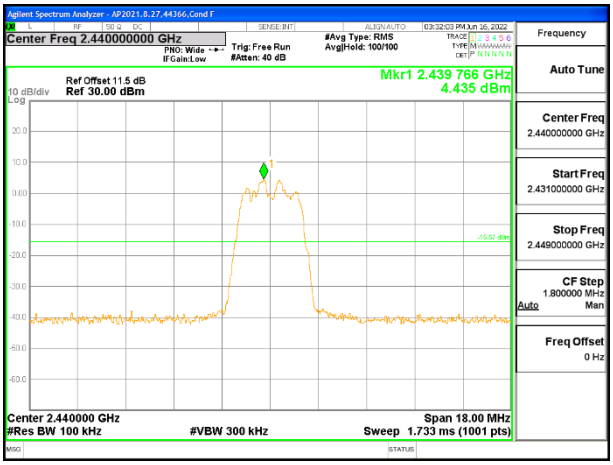
ANT 3



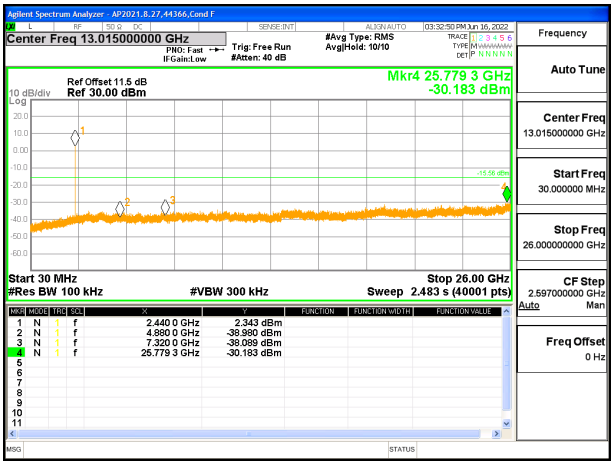
LOW CHANNEL BANDEDGE ANT 3



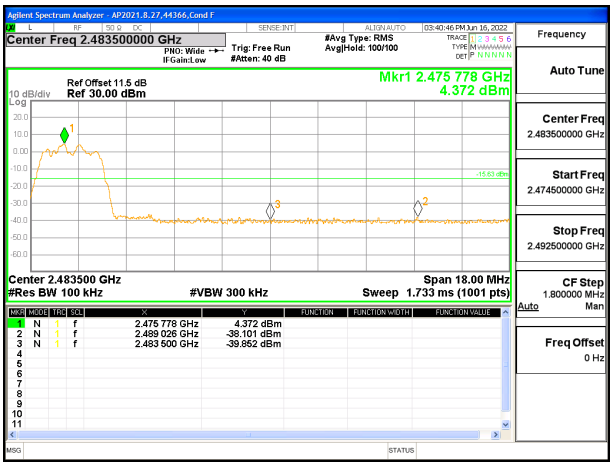
OUT-OF-BAND LOW CHANNEL ANT 3



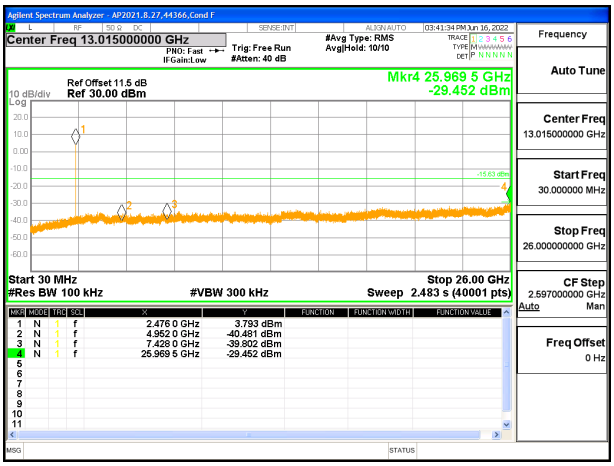
IN-BAND REFERENCE LEVEL ANT 3



OUT-OF-BAND MID CHANNEL ANT 3



HIGH CHANNEL BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL ANT 3

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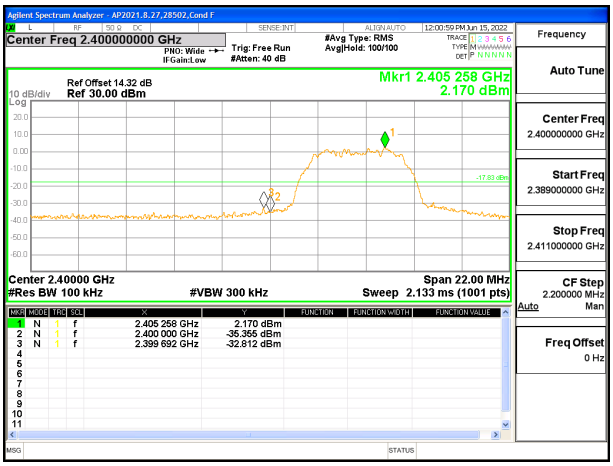
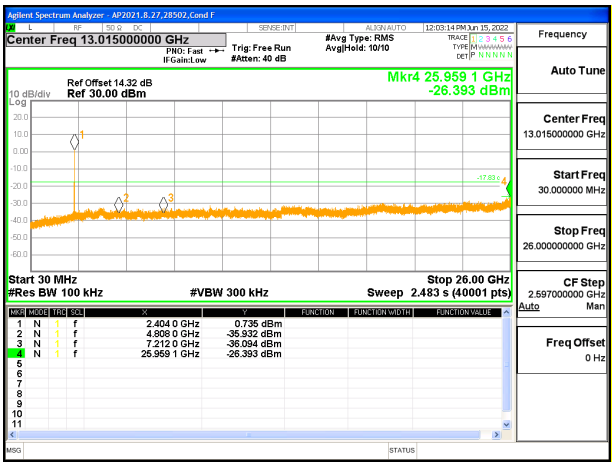
9.7.7. LOW POWER HDR (HDR8)

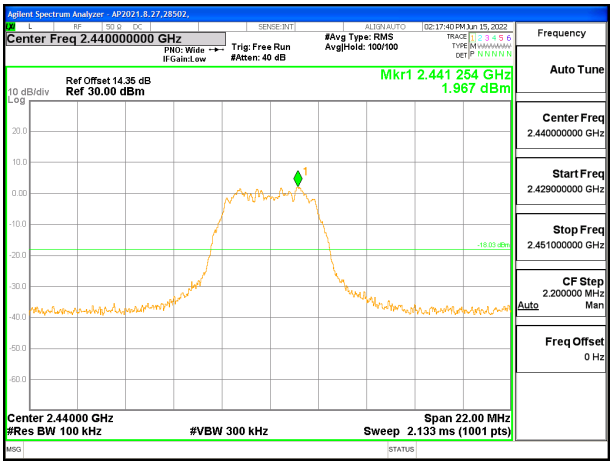
ANT 4



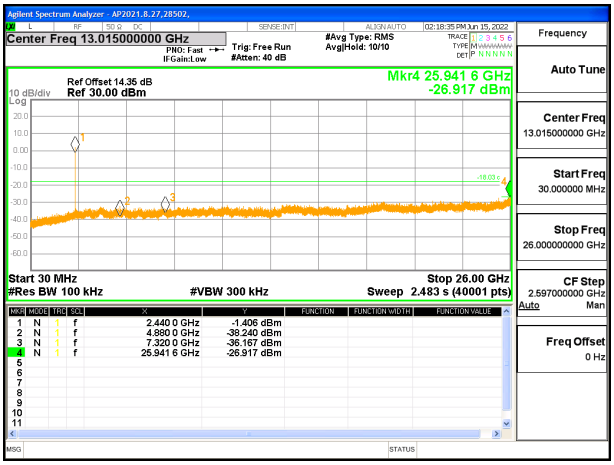
LOW CHANNEL BANDEDGE



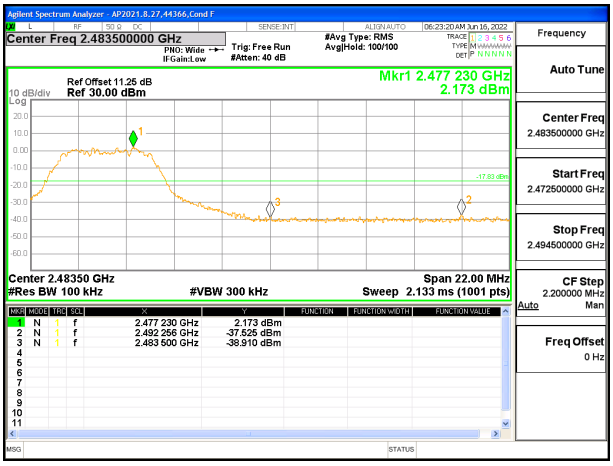
OUT-OF-BAND LOW CHANNEL



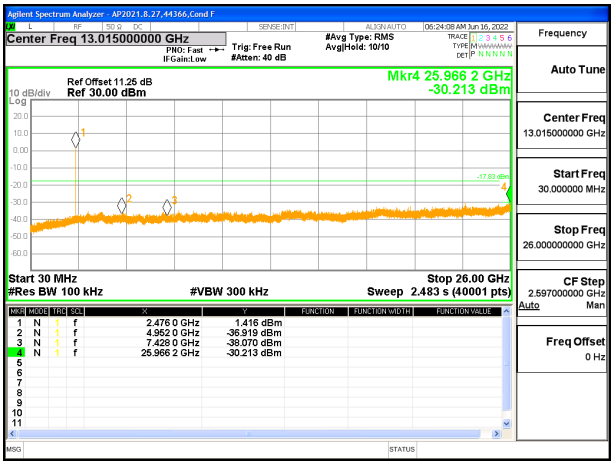
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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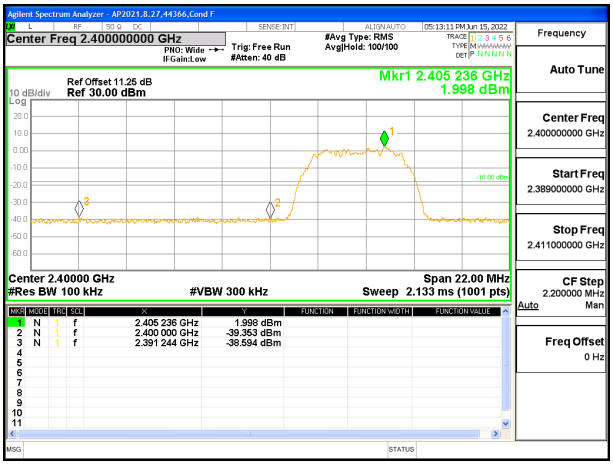
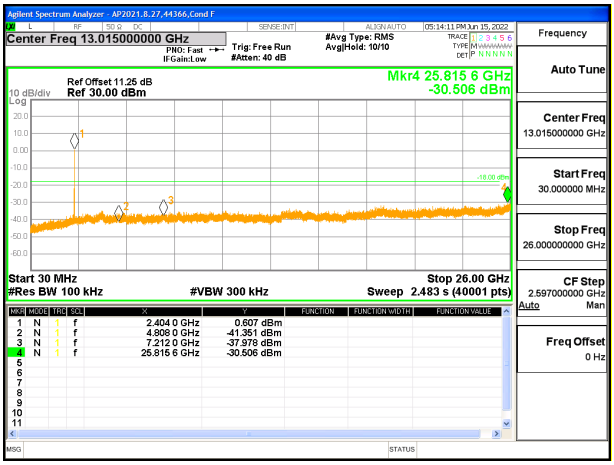
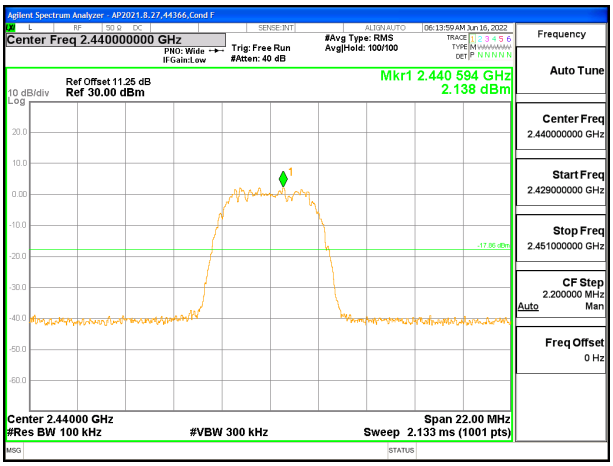


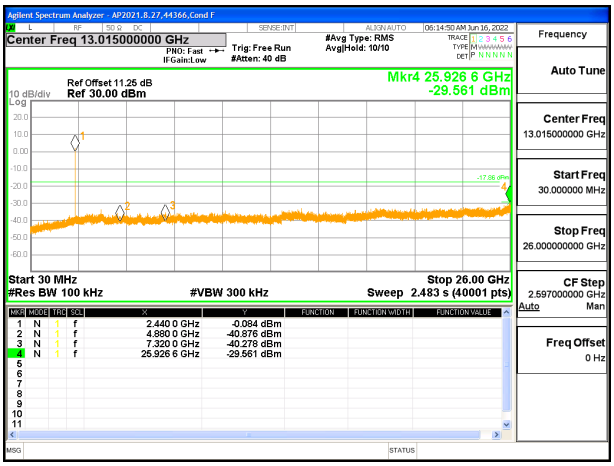
LOW CHANNEL BANDEDGE



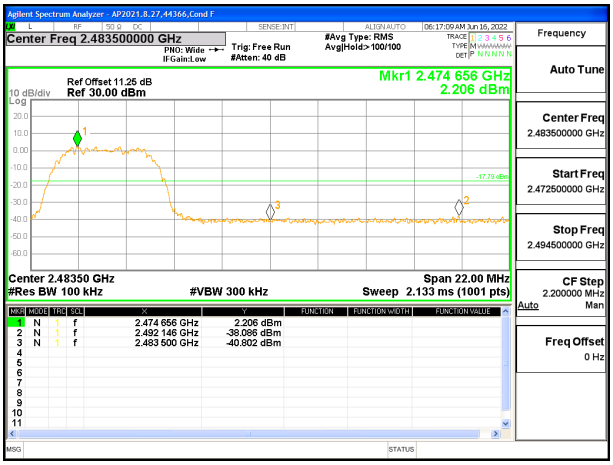
OUT-OF-BAND LOW CHANNEL



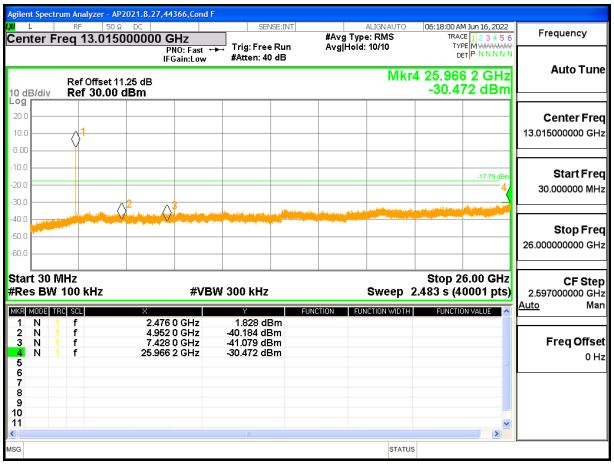
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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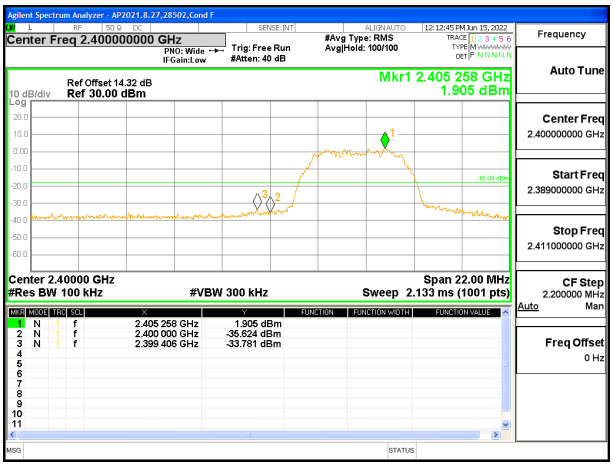
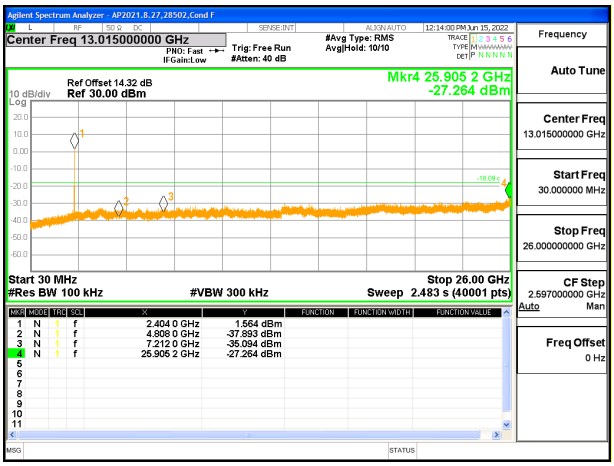
9.7.8. LOW POWER HDR TXBF (HDR8)

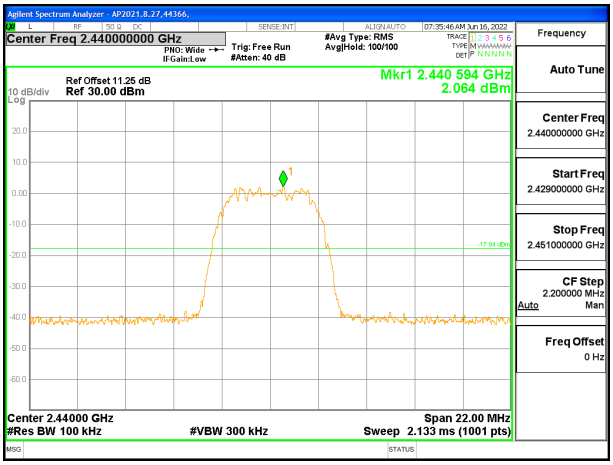
ANT 4



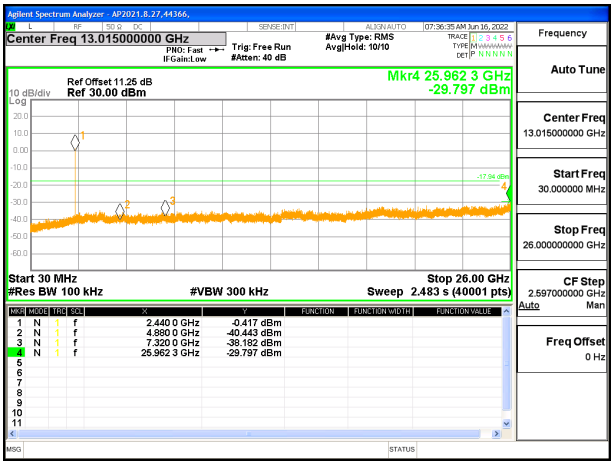
LOW CHANNEL BANDEDGE ANT 4



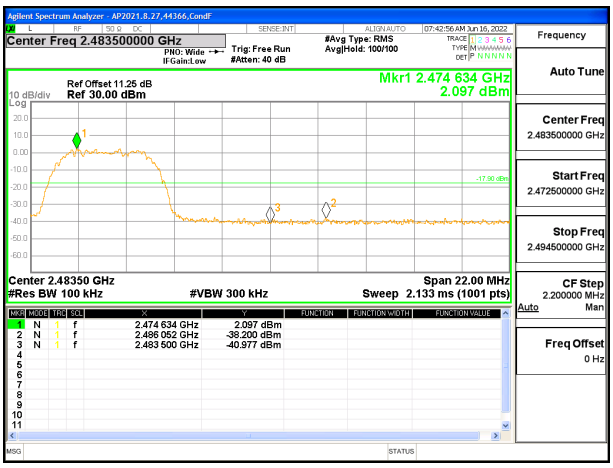
OUT-OF-BAND LOW CHANNEL ANT 4



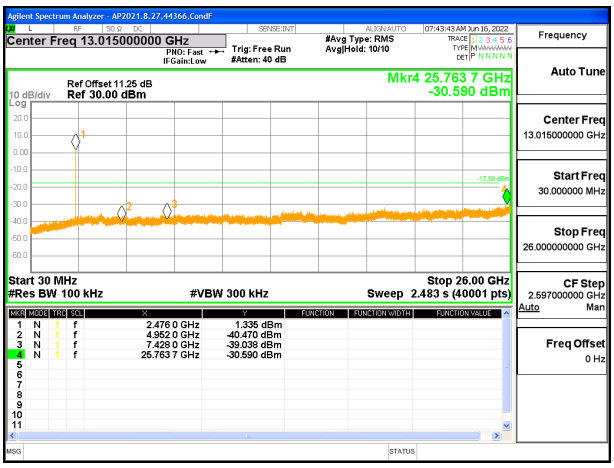
IN-BAND REFERENCE LEVEL ANT 4



OUT-OF-BAND MID CHANNEL ANT 4



HIGH CHANNEL BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL ANT 4

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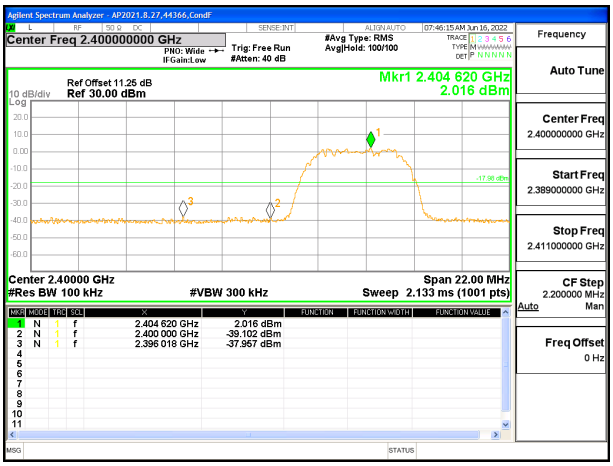
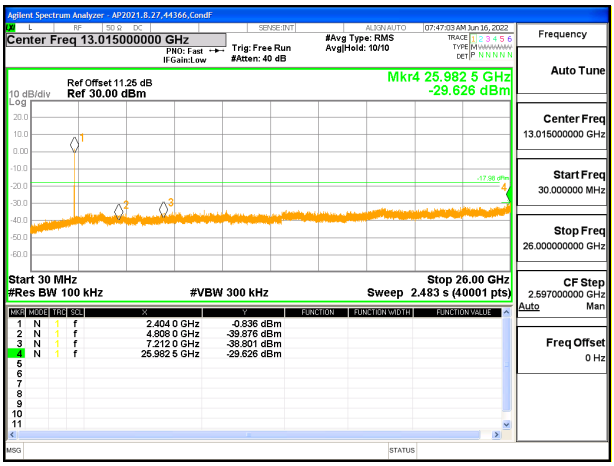
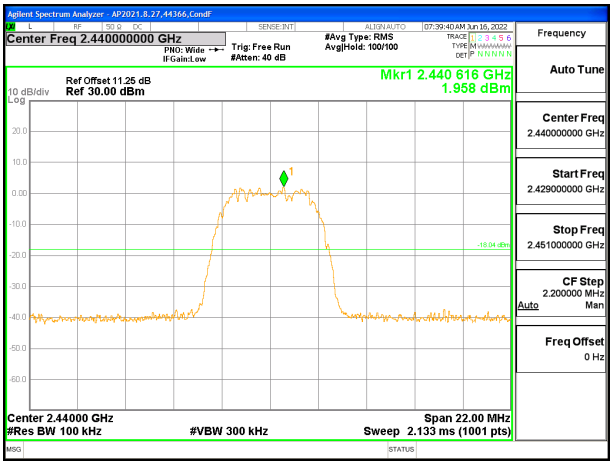


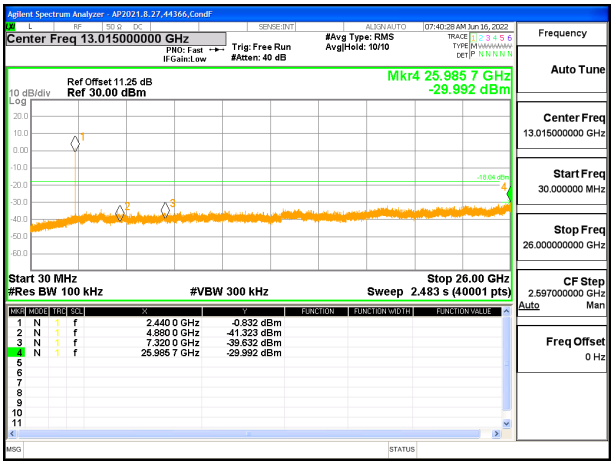
LOW CHANNEL BANDEDGE ANT 3



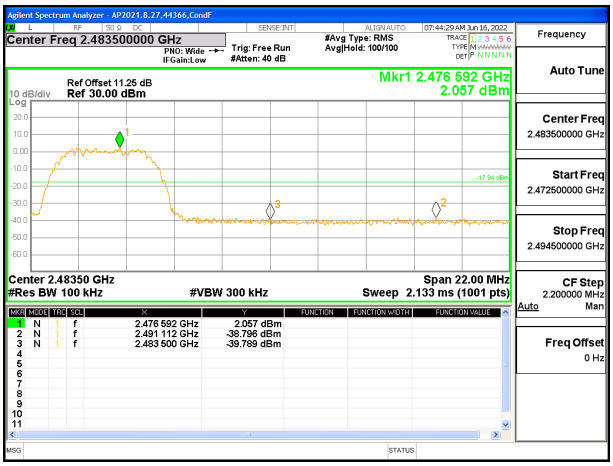
OUT-OF-BAND LOW CHANNEL ANT 3



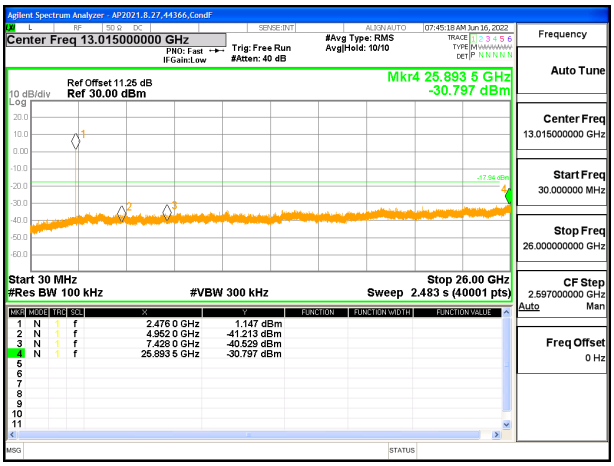
IN-BAND REFERENCE LEVEL ANT 3



OUT-OF-BAND MID CHANNEL ANT 3



HIGH CHANNEL BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 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

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

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

RESULTS:

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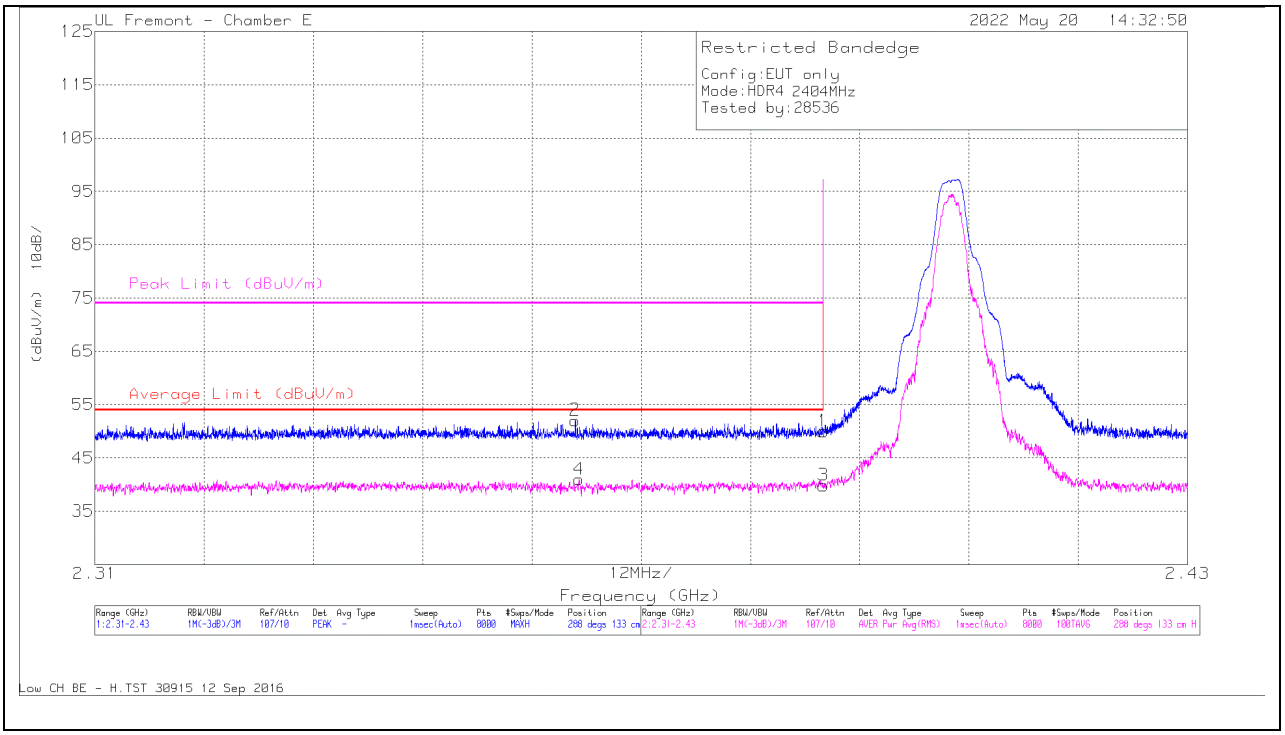
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.89	Pk	32	-25.9	49.99	-	-	74	-24.01	288	133	H
2	* 2.362762	46.03	Pk	32	-26	52.03	-	-	74	-21.97	288	133	H
3	* 2.39	33.74	RMS	32	-25.9	39.84	54	-14.16	-	-	288	133	H
4	* 2.363182	34.97	RMS	32	-26	40.97	54	-13.03	-	-	288	133	H

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

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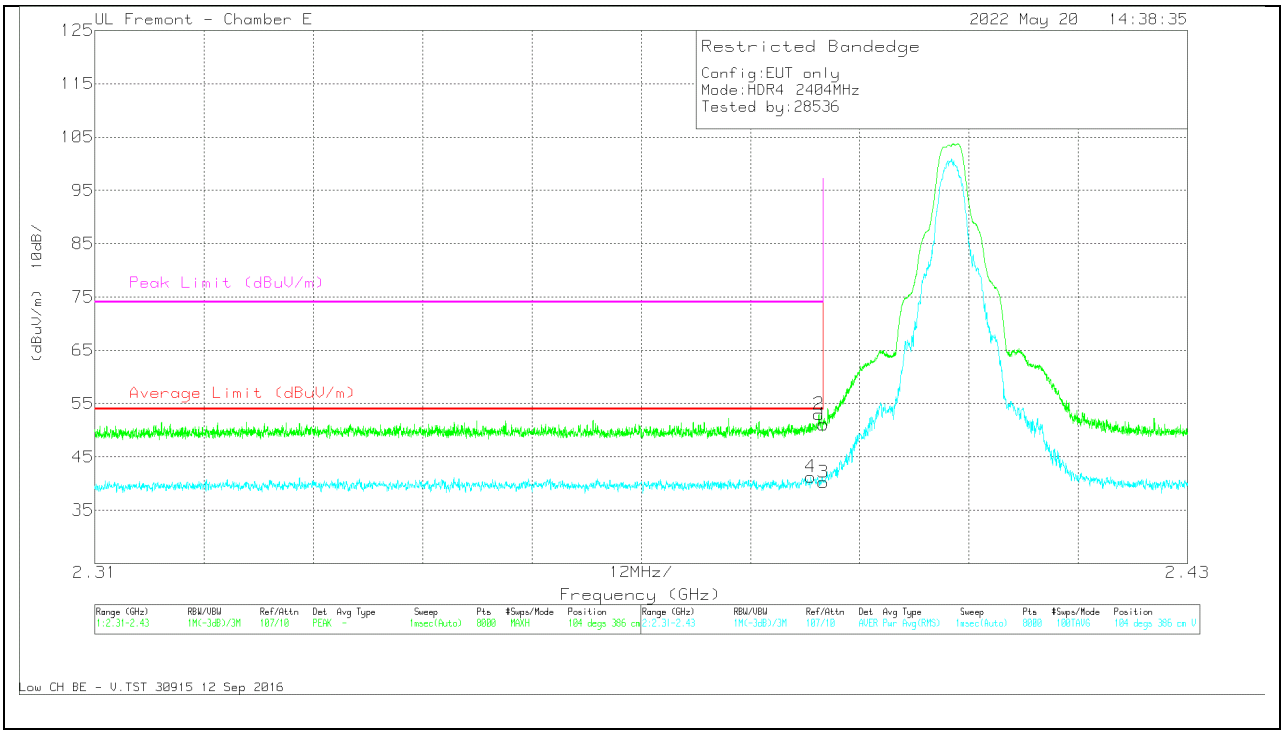
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	45.01	Pk	32	-25.9	51.11	-	-	74	-22.89	104	386	V
2	* 2.389511	46.88	Pk	32	-25.9	52.98	-	-	74	-21.02	104	386	V
3	* 2.39	34.13	RMS	32	-25.9	40.23	54	-13.77	-	-	104	386	V
4	* 2.38861	35.16	RMS	32	-25.9	41.26	54	-12.74	-	-	104	386	V

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

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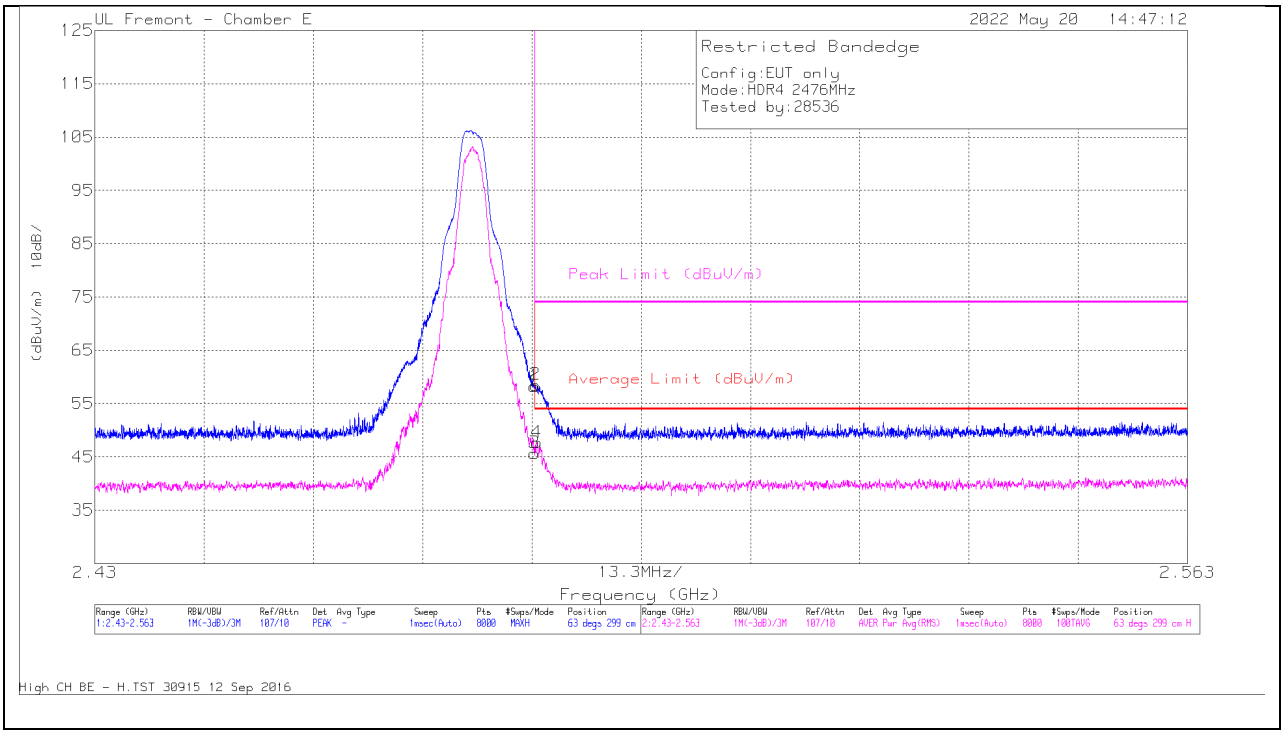
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	52.36	Pk	31.8	-25.9	58.26	-	-	74	-15.74	63	299	H
2	* 2.483639	52.64	Pk	31.8	-25.9	58.54	-	-	74	-15.46	63	299	H
3	* 2.4835	39.79	RMS	31.8	-25.9	45.69	54	-8.31	-	-	63	299	H
4	* 2.483805	41.79	RMS	31.9	-26	47.69	54	-6.31	-	-	63	299	H

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

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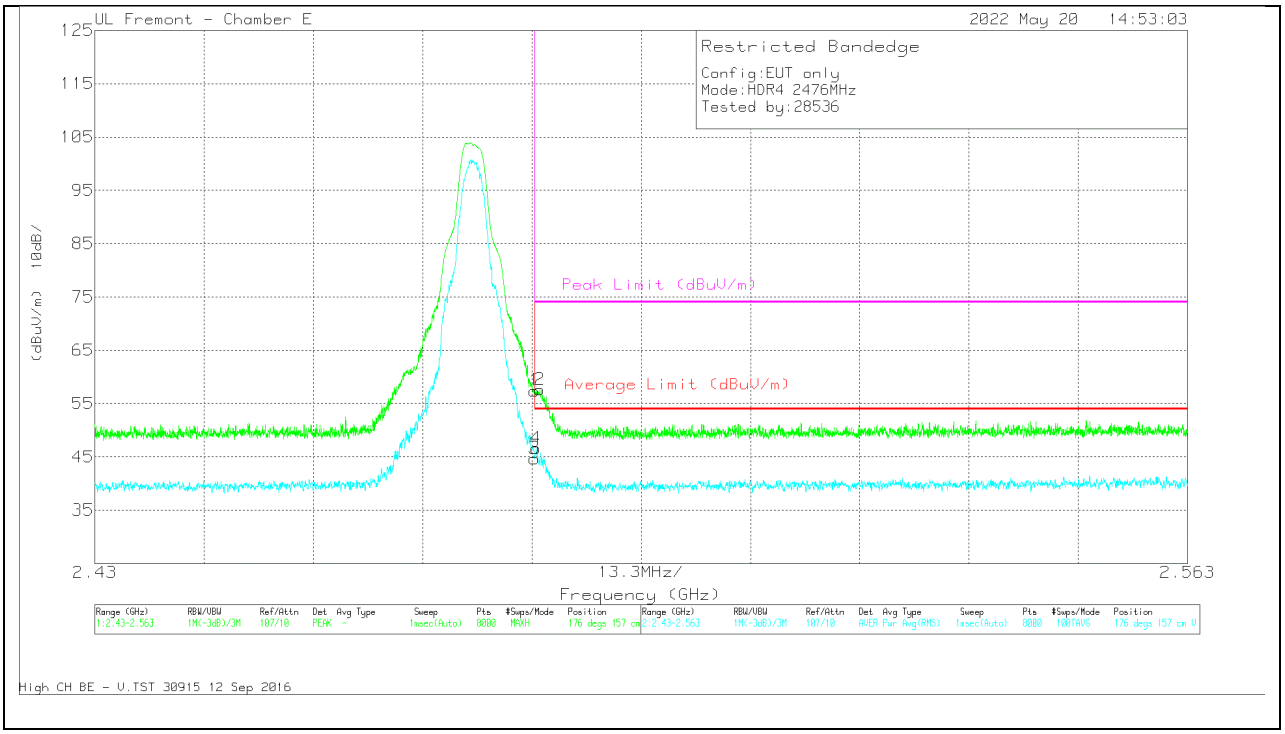
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	51.53	Pk	31.8	-25.9	57.43	-	-	74	-16.57	176	157	V
3	* 2.4835	38.81	RMS	31.8	-25.9	44.71	54	-9.29	-	-	176	157	V
4	* 2.483705	40.71	RMS	31.9	-26	46.61	54	-7.39	-	-	176	157	V
2	* 2.484154	51.69	Pk	31.9	-26	57.59	-	-	74	-16.41	176	157	V

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

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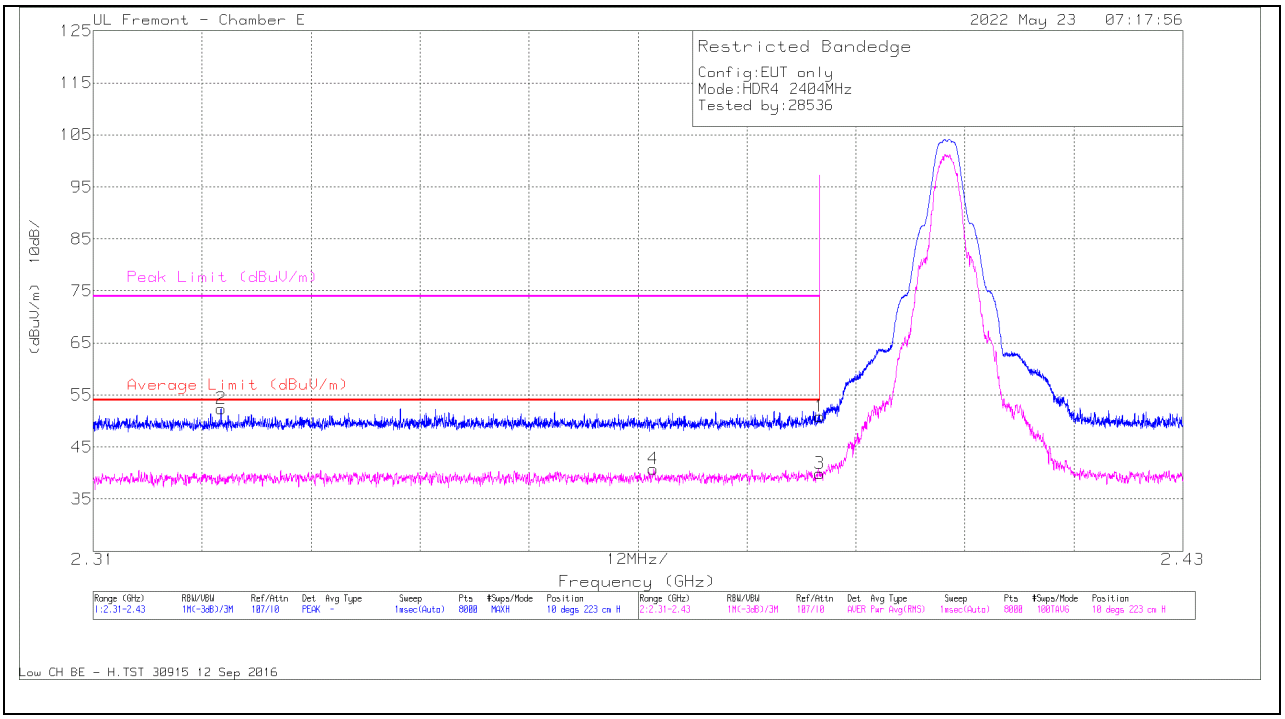
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.324087	46.47	Pk	31.9	-26	52.37	-	-	74	-21.63	10	223	H
4	* 2.371673	34.8	RMS	32	-26	40.8	54	-13.2	-	-	10	223	H
1	* 2.39	44.75	Pk	32	-25.9	50.85	-	-	74	-23.15	10	223	H
3	* 2.39	33.82	RMS	32	-25.9	39.92	54	-14.08	-	-	10	223	H

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

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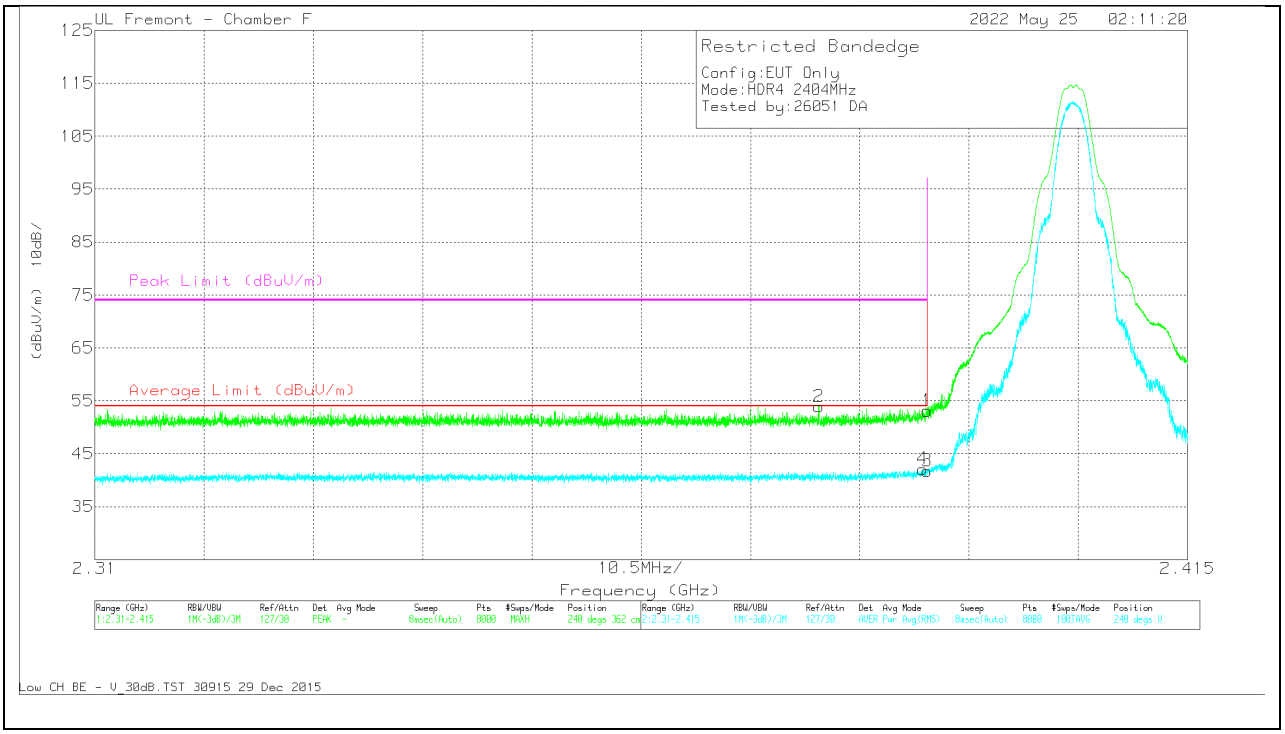
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.43	Pk	32.1	-39.4	53.13	-	-	74	-20.87	240	362	V
2	* 2.379573	61.39	Pk	32	-39.5	53.89	-	-	74	-20.11	240	362	V
3	* 2.39	49.04	RMS	32.1	-39.4	41.74	54	-12.26	-	-	240	362	V
4	* 2.389536	49.4	RMS	32.1	-39.4	42.1	54	-11.9	-	-	240	362	V

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

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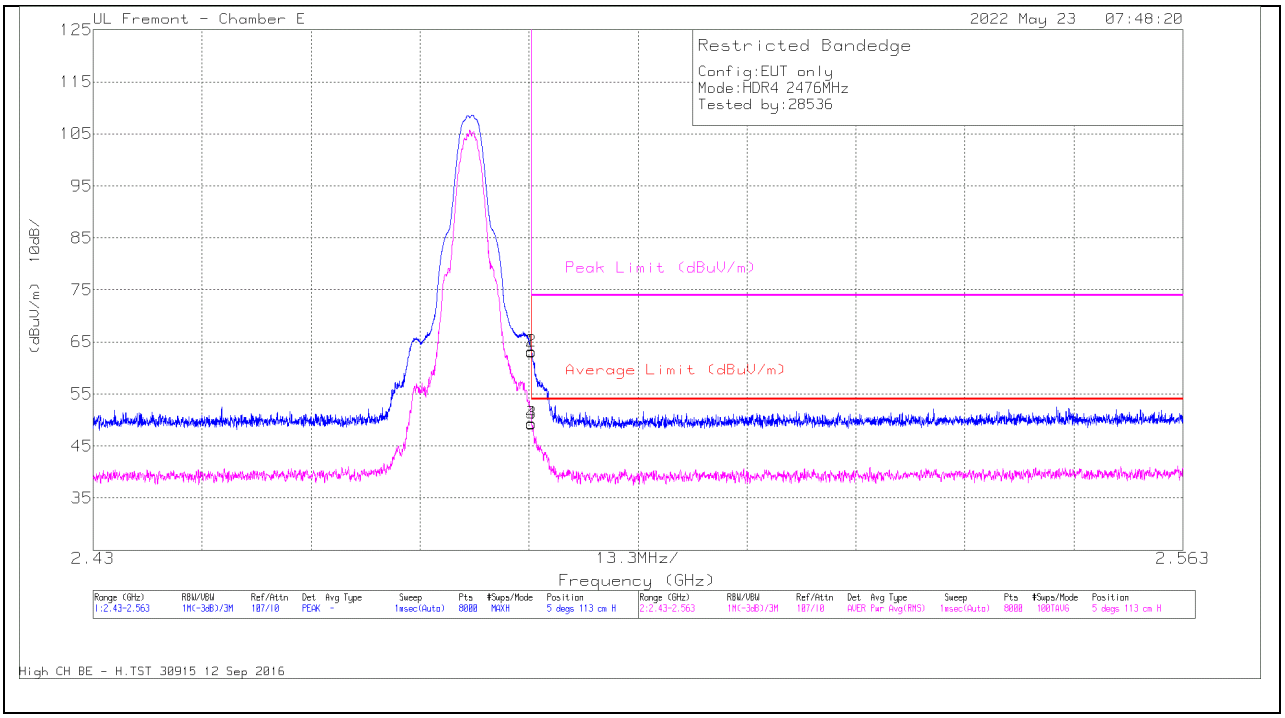
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	57.22	Pk	31.8	-25.9	63.12	-	-	74	-10.88	5	113	H
3	* 2.4835	43.48	RMS	31.8	-25.9	49.38	54	-4.62	-	-	5	113	H
2	* 2.483506	57.37	Pk	31.8	-25.9	63.27	-	-	74	-10.73	5	113	H
4	* 2.483506	43.33	RMS	31.8	-25.9	49.23	54	-4.77	-	-	5	113	H

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

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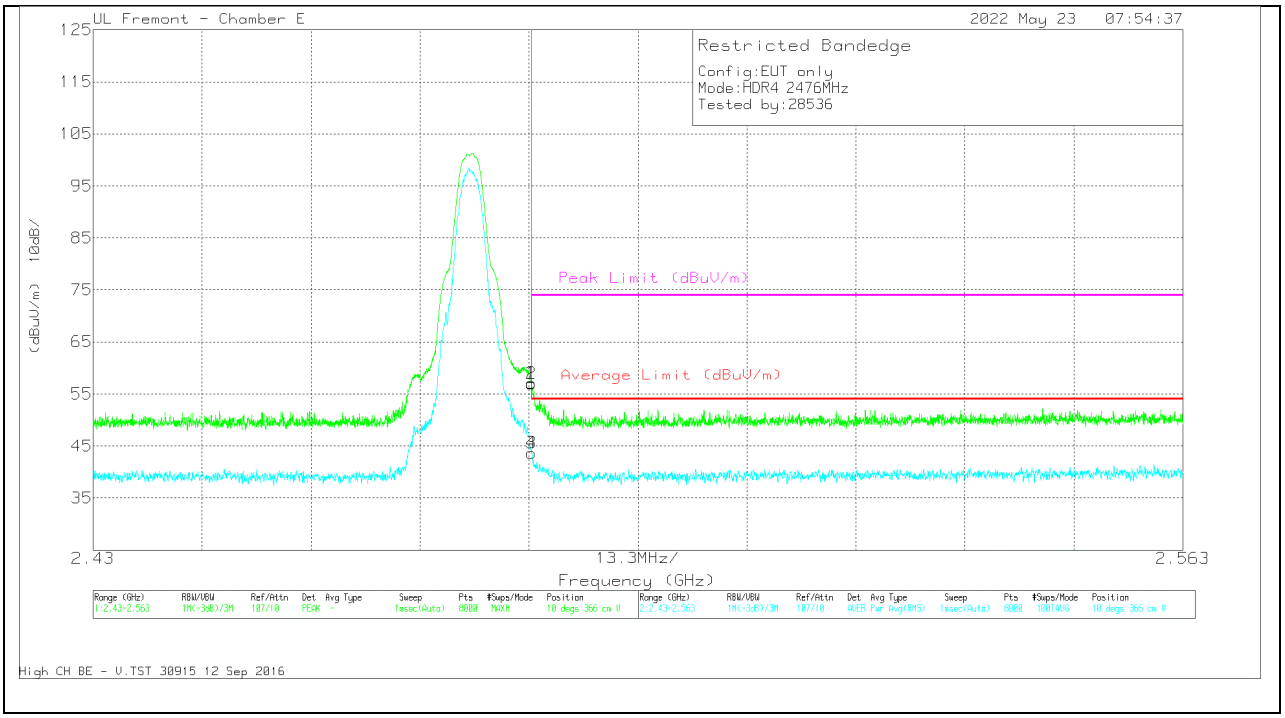
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	51.21	Pk	31.8	-25.9	57.11	-	-	74	-16.89	10	366	V
3	* 2.4835	37.72	RMS	31.8	-25.9	43.62	54	-10.38	-	-	10	366	V
2	* 2.483506	51.08	Pk	31.8	-25.9	56.98	-	-	74	-17.02	10	366	V
4	* 2.483522	37.7	RMS	31.8	-25.9	43.6	54	-10.4	-	-	10	366	V

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

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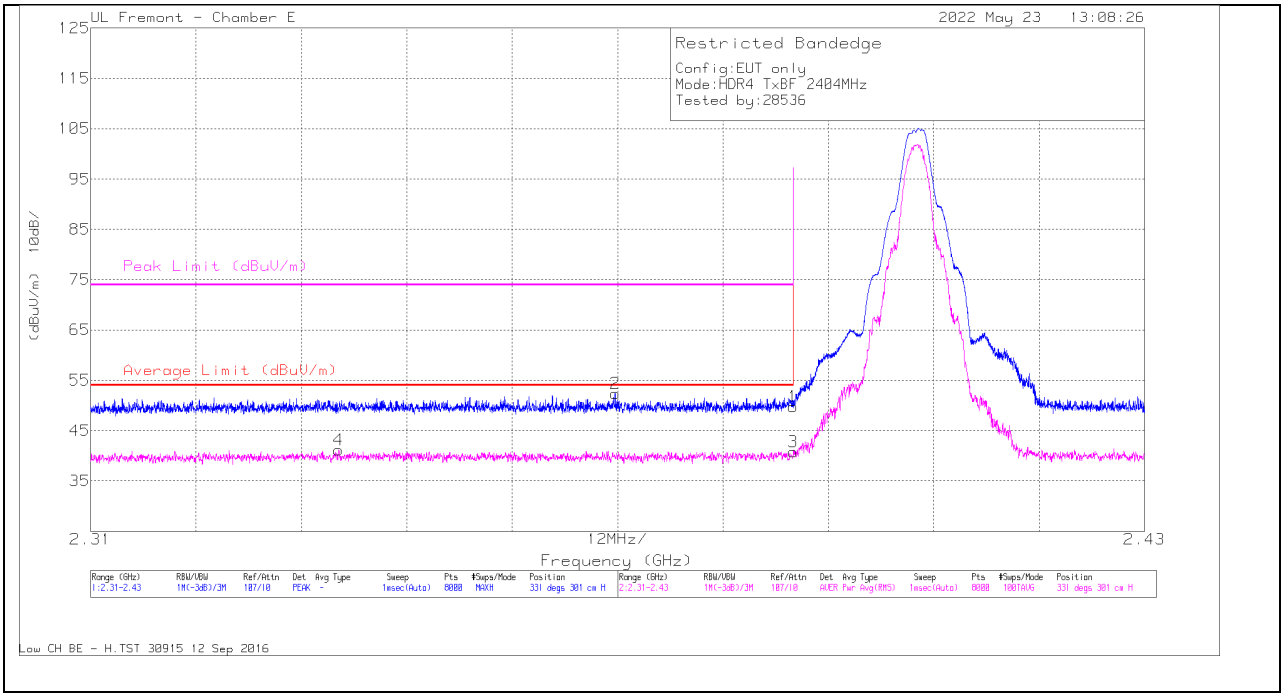
10.2.2. HIGH POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.338249	35.02	RMS	32	-25.9	41.12	54	-12.88	-	-	331	301	H
2	* 2.369723	46.41	Pk	32	-26	52.41	-	-	74	-21.59	331	301	H
1	* 2.39	43.69	Pk	32	-25.9	49.79	-	-	74	-24.21	331	301	H
3	* 2.39	34.64	RMS	32	-25.9	40.74	54	-13.26	-	-	331	301	H

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

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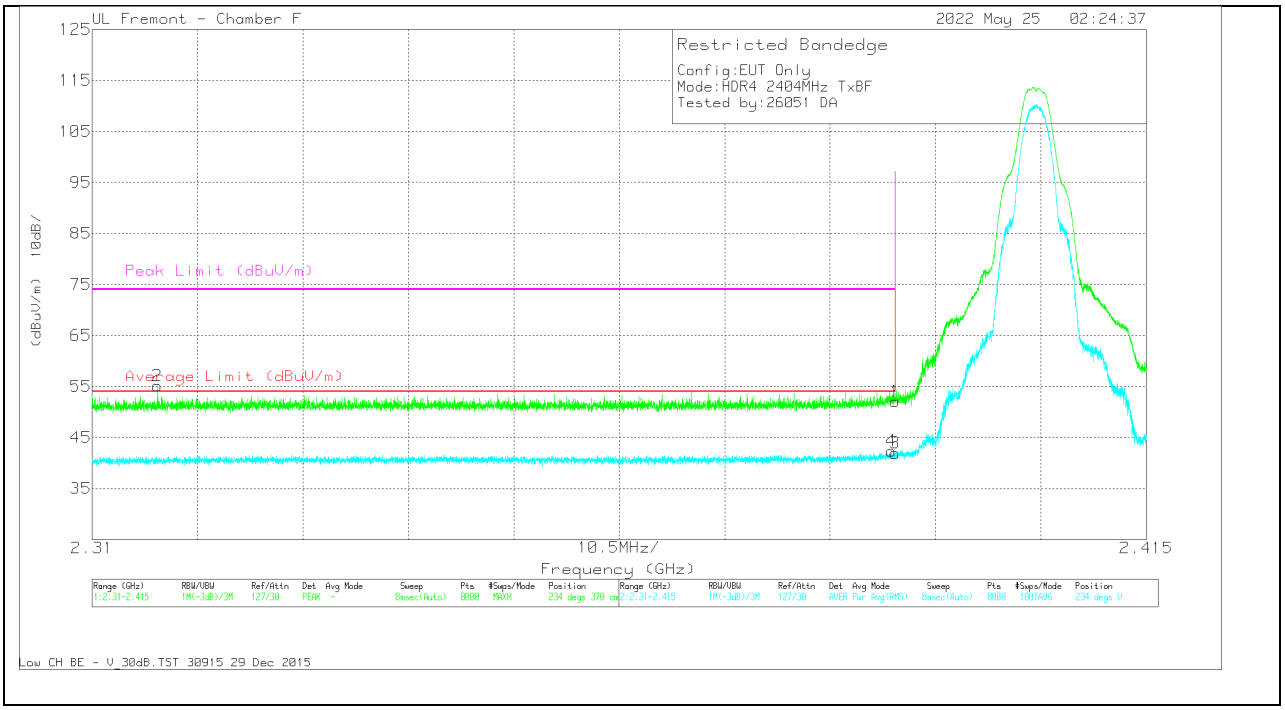
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	59.35	Pk	32.1	-39.4	52.05	-	-	74	-21.95	234	370	V
2	* 2.316511	62.71	Pk	32	-39.6	55.11	-	-	74	-18.89	234	370	V
3	* 2.39	49.22	RMS	32.1	-39.4	41.92	54	-12.08	-	-	234	370	V
4	* 2.389589	49.66	RMS	32.1	-39.4	42.36	54	-11.64	-	-	234	370	V

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

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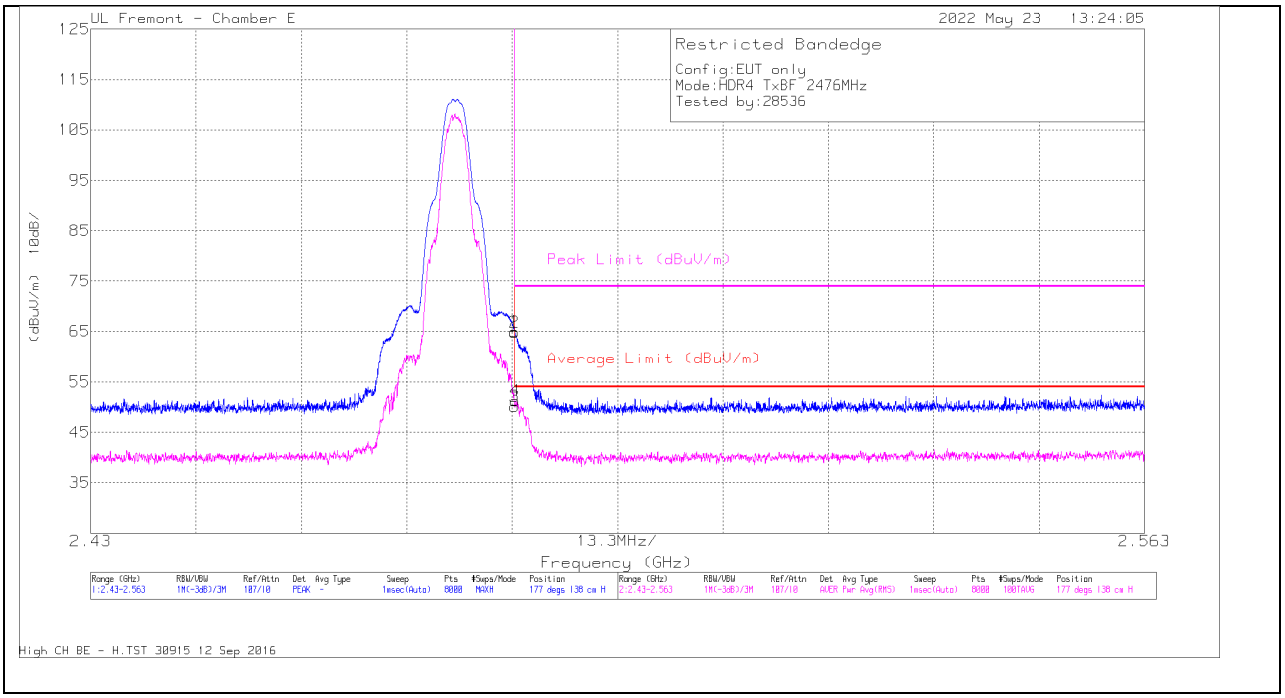
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	59.03	Pk	31.8	-25.9	64.93	-	-	74	-9.07	177	138	H
2	* 2.483522	58.99	Pk	31.8	-25.9	64.89	-	-	74	-9.11	177	138	H
3	* 2.4835	44.26	RMS	31.8	-25.9	50.16	54	-3.84	-	-	177	138	H
4	* 2.483572	45.39	RMS	31.8	-25.9	51.29	54	-2.71	-	-	177	138	H

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

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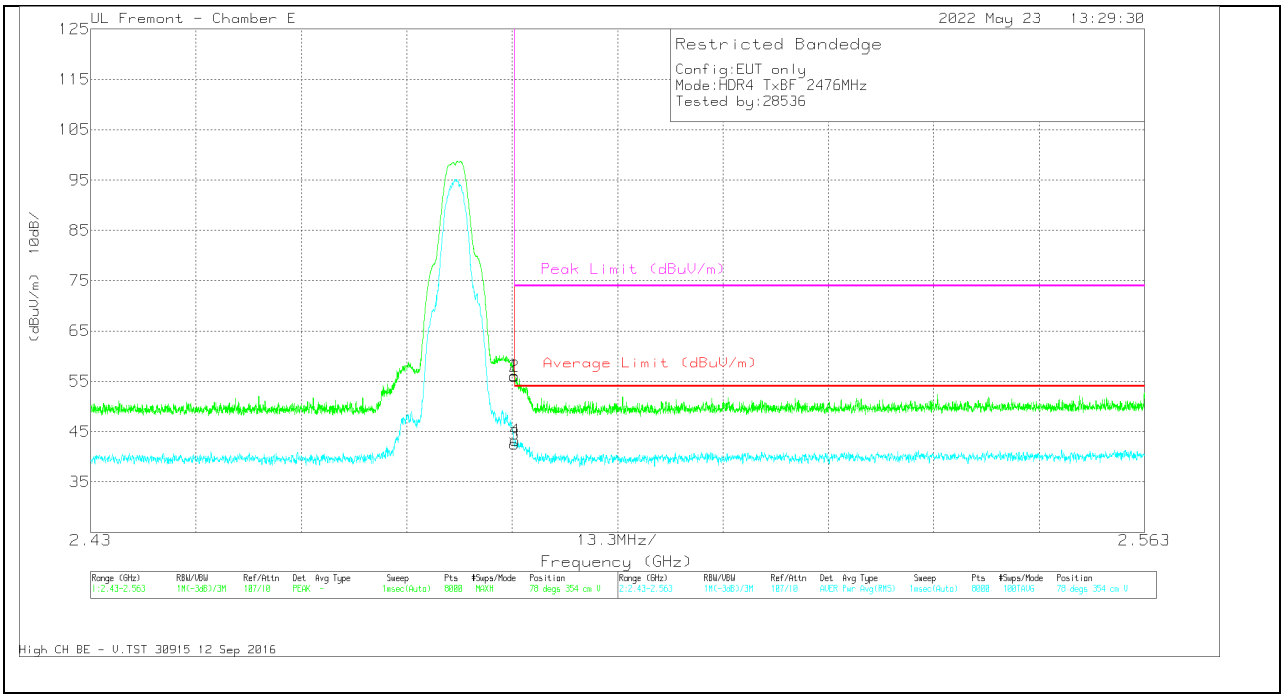
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	50.26	Pk	31.8	-25.9	56.16	-	-	74	-17.84	78	354	V
2	* 2.483506	50.13	Pk	31.8	-25.9	56.03	-	-	74	-17.97	78	354	V
3	* 2.4835	36.65	RMS	31.8	-25.9	42.55	54	-11.45	-	-	78	354	V
4	* 2.483572	37.37	RMS	31.8	-25.9	43.27	54	-10.73	-	-	78	354	V

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

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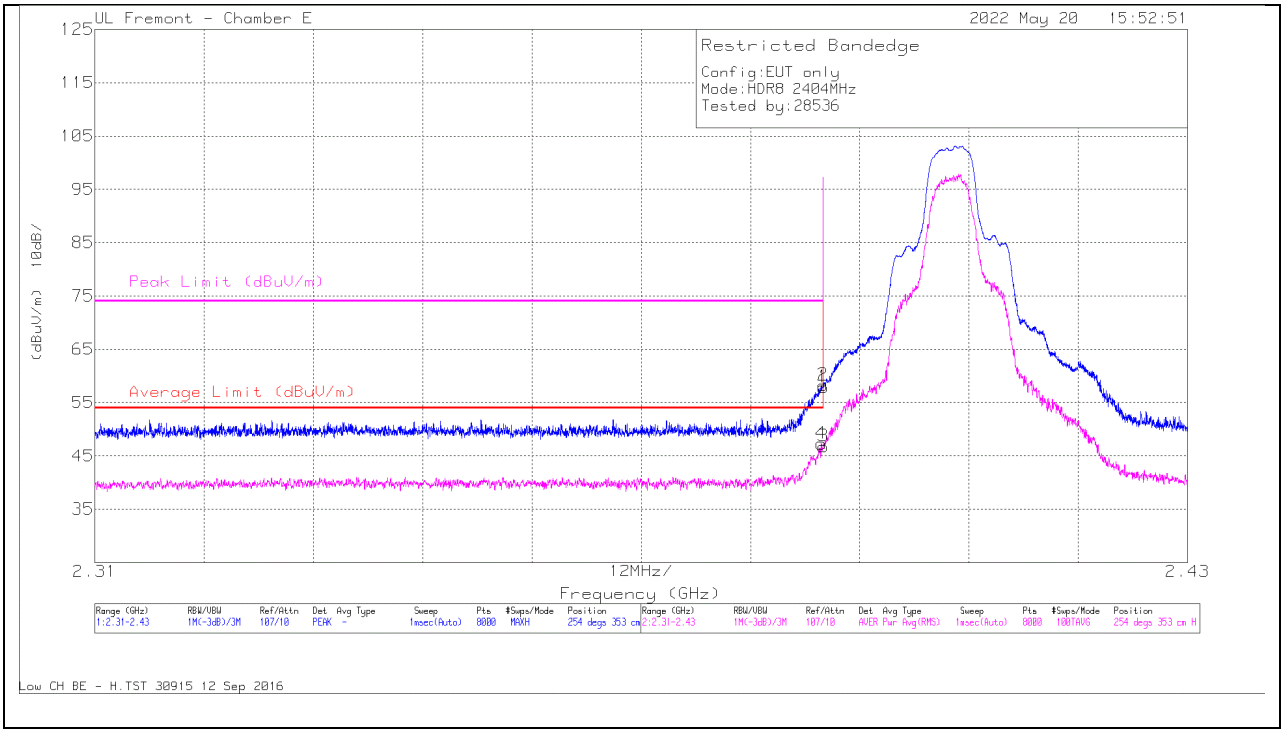
10.2.3. HIGH POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.389781	41.21	RMS	32	-25.9	47.31	54	-6.69	-	-	254	353	H
2	* 2.389946	52.18	Pk	32	-25.9	58.28	-	-	74	-15.72	254	353	H
1	* 2.39	51.81	Pk	32	-25.9	57.91	-	-	74	-16.09	254	353	H
3	* 2.39	40.69	RMS	32	-25.9	46.79	54	-7.21	-	-	254	353	H

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

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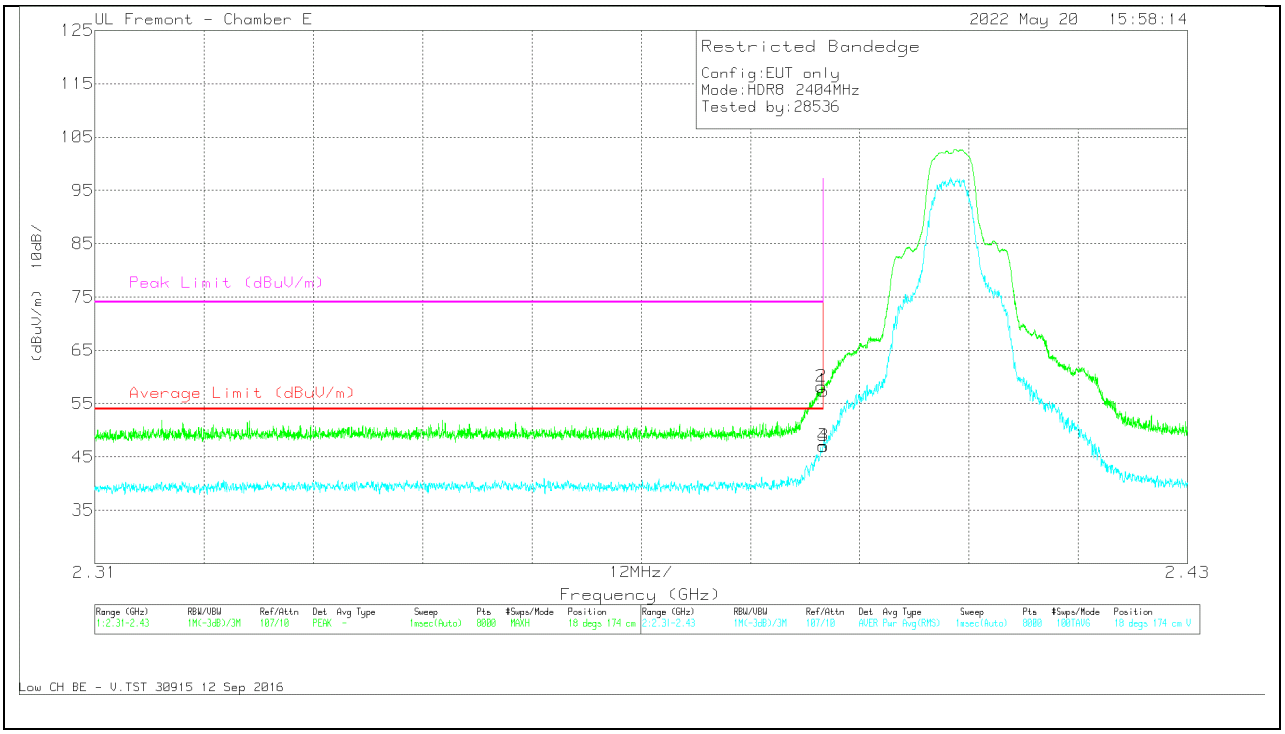
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389796	52.09	Pk	32	-25.9	58.19	-	-	74	-15.81	18	174	V
4	* 2.389991	40.89	RMS	32	-25.9	46.99	54	-7.01	-	-	18	174	V
1	* 2.39	51.31	Pk	32	-25.9	57.41	-	-	74	-16.59	18	174	V
3	* 2.39	40.96	RMS	32	-25.9	47.06	54	-6.94	-	-	18	174	V

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

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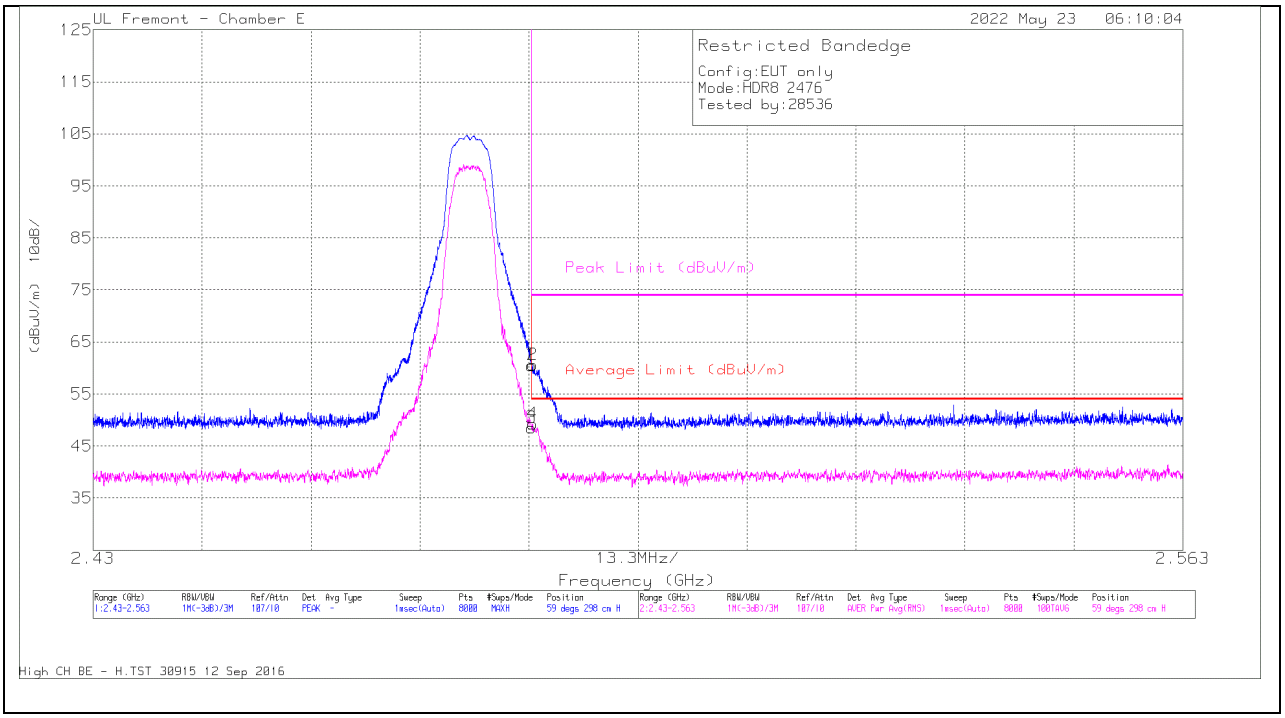
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	54.54	Pk	31.8	-25.9	60.44	-	-	74	-13.56	59	298	H
2	* 2.483622	54.71	Pk	31.8	-25.9	60.61	-	-	74	-13.39	59	298	H
3	* 2.4835	42.63	RMS	31.8	-25.9	48.53	54	-5.47	-	-	59	298	H
4	* 2.483622	43.34	RMS	31.8	-25.9	49.24	54	-4.76	-	-	59	298	H

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

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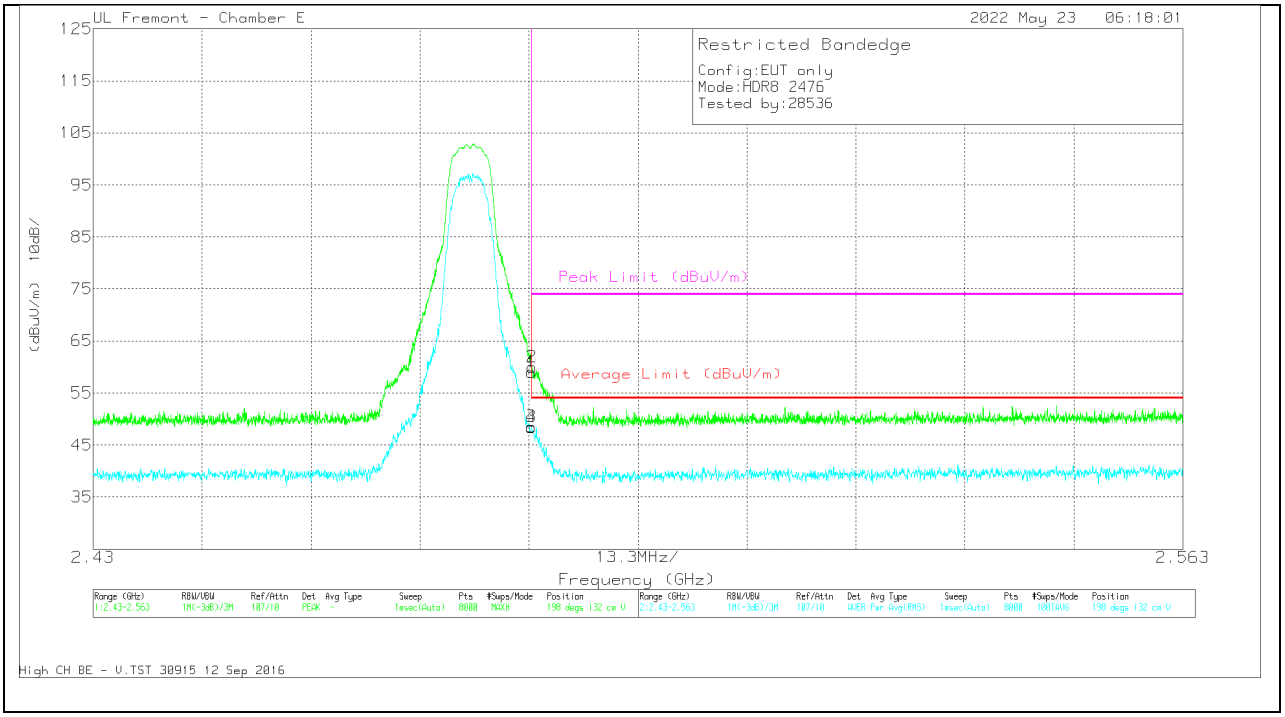
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	53.03	Pk	31.8	-25.9	58.93	-	-	74	-15.07	198	132	V
3	* 2.4835	42.57	RMS	31.8	-25.9	48.47	54	-5.53	-	-	198	132	V
4	* 2.483506	42.52	RMS	31.8	-25.9	48.42	54	-5.58	-	-	198	132	V
2	* 2.483556	54.09	Pk	31.8	-25.9	59.99	-	-	74	-14.01	198	132	V

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

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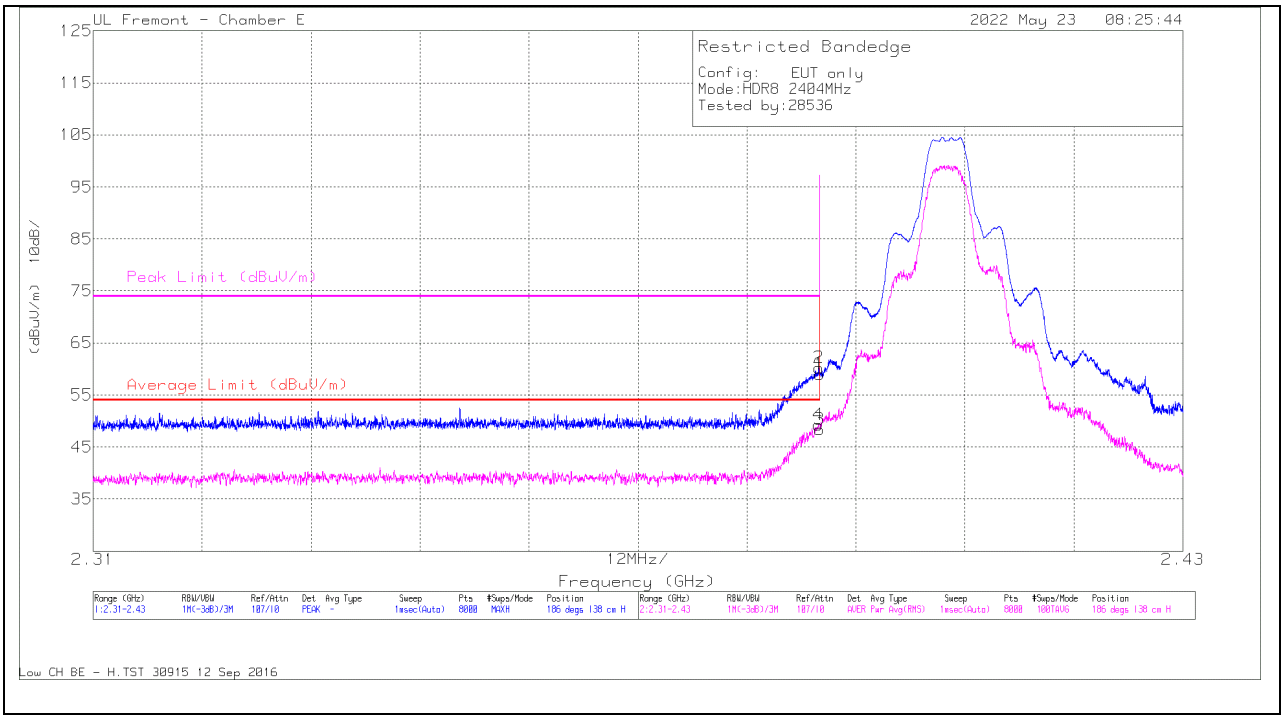
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.389886	43.17	RMS	32	-25.9	49.27	54	-4.73	-	-	186	138	H
2	* 2.389946	54.09	Pk	32	-25.9	60.19	-	-	74	-13.81	186	138	H
1	* 2.39	52.88	Pk	32	-25.9	58.98	-	-	74	-15.02	186	138	H
3	* 2.39	42.24	RMS	32	-25.9	48.34	54	-5.66	-	-	186	138	H

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

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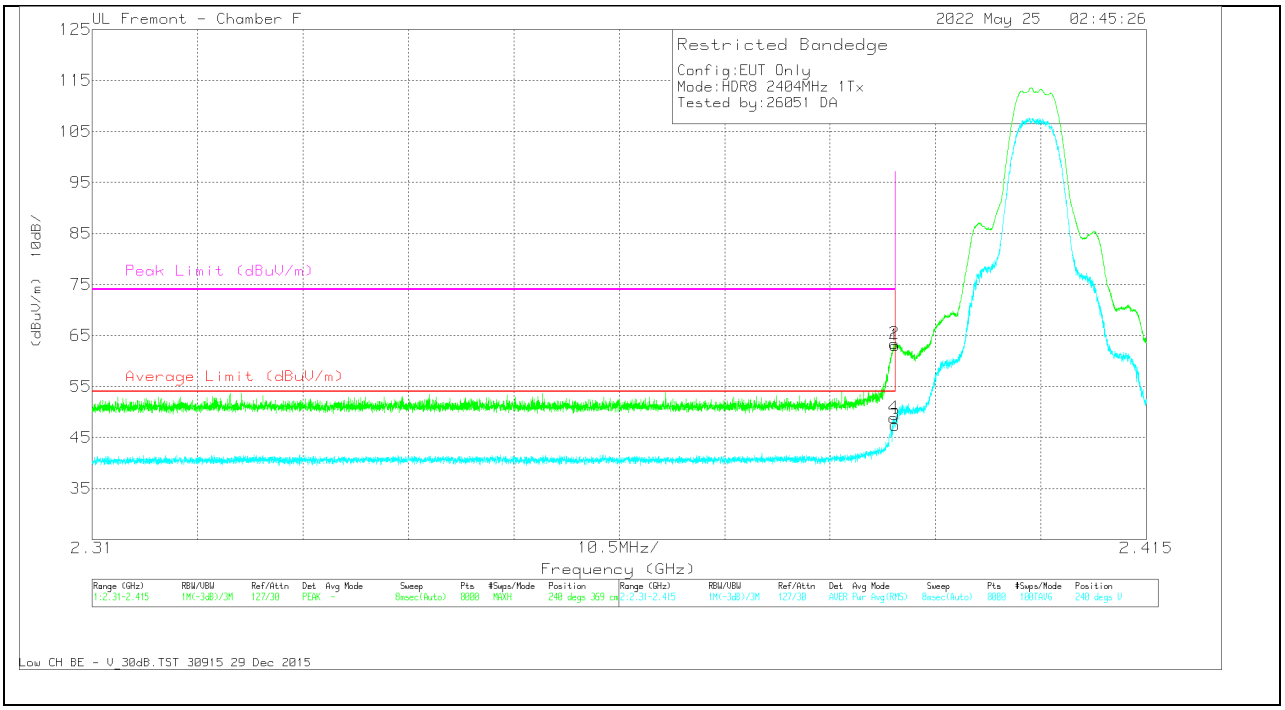
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	70.38	Pk	32.1	-39.4	63.08	-	-	74	-10.92	240	369	V
2	* 2.389917	70.73	Pk	32.1	-39.4	63.43	-	-	74	-10.57	240	369	V
3	* 2.39	54.77	RMS	32.1	-39.4	47.47	54	-6.53	-	-	240	369	V
4	* 2.389865	56.19	RMS	32.1	-39.4	48.89	54	-5.11	-	-	240	369	V

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

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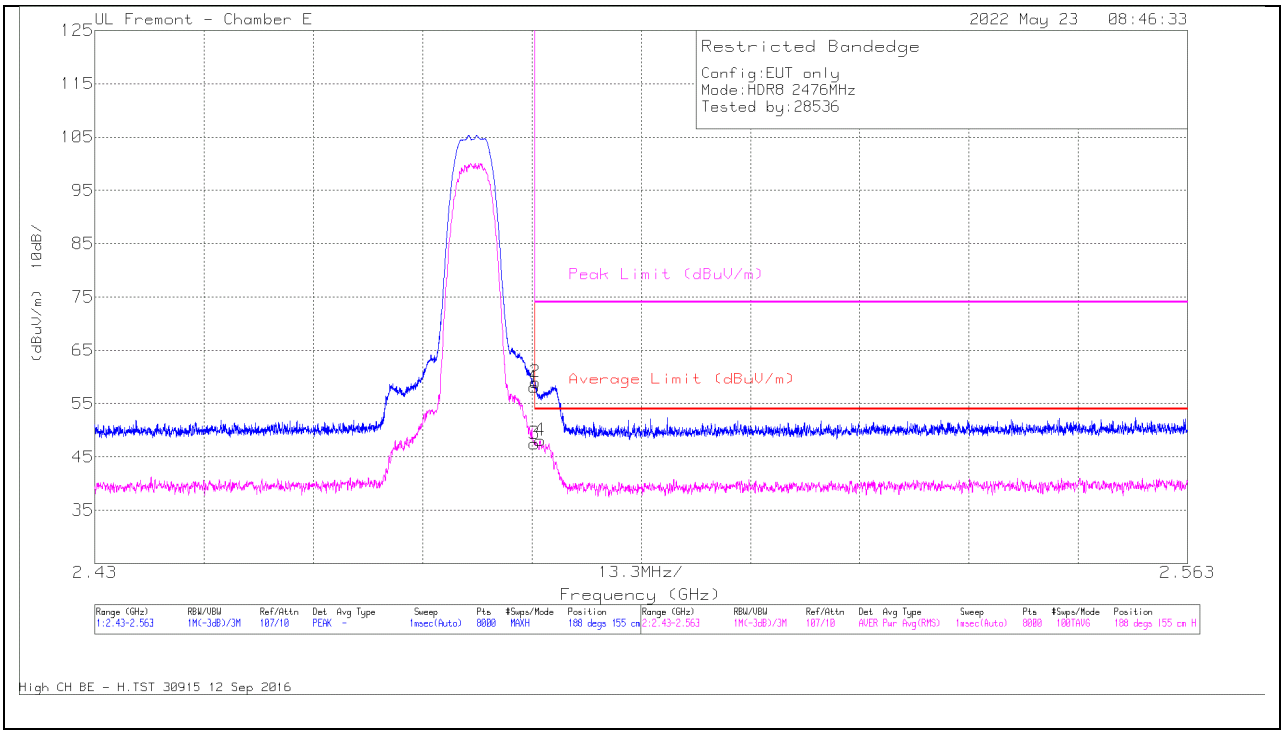
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	52.2	Pk	31.8	-25.9	58.1	-	-	74	-15.9	188	155	H
3	* 2.4835	41.6	RMS	31.8	-25.9	47.5	54	-6.5	-	-	188	155	H
2	* 2.483605	53.12	Pk	31.8	-25.9	59.02	-	-	74	-14.98	188	155	H
4	* 2.484204	42.21	RMS	31.9	-26	48.11	54	-5.89	-	-	188	155	H

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

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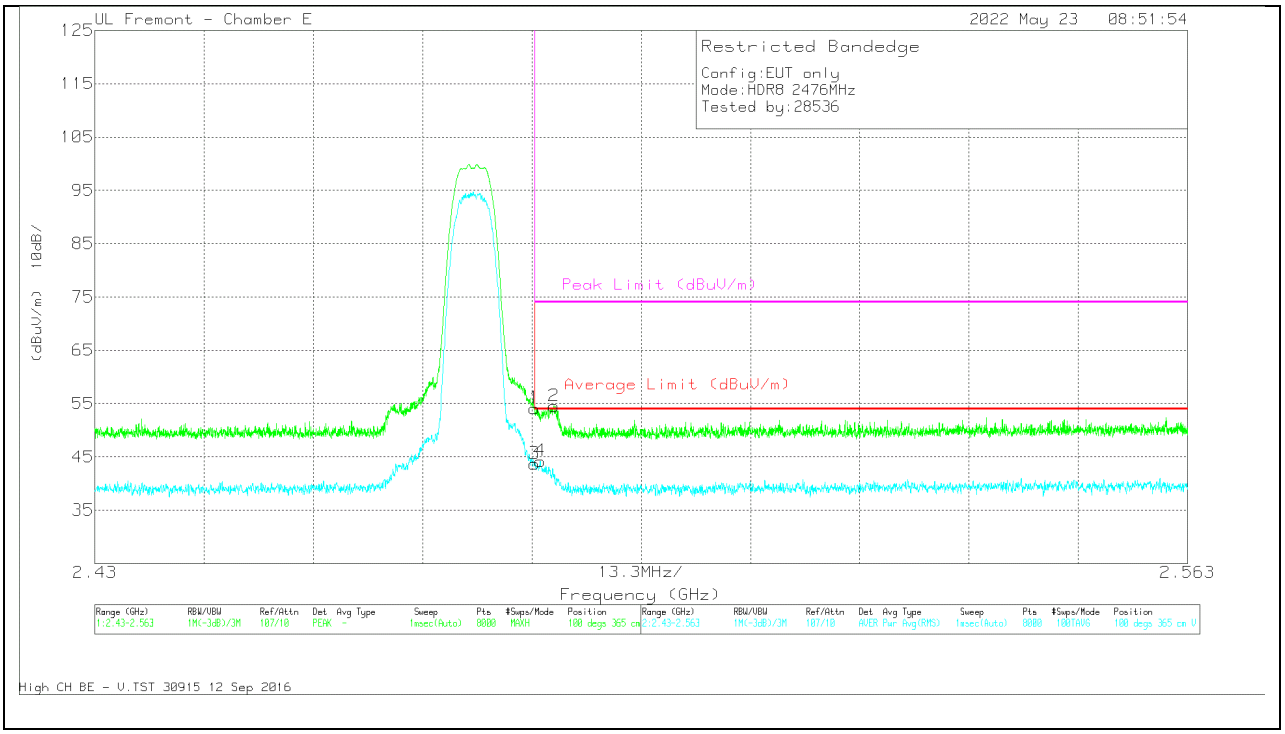
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	48.21	Pk	31.8	-25.9	54.11	-	-	74	-19.89	100	365	V
3	* 2.4835	37.82	RMS	31.8	-25.9	43.72	54	-10.28	-	-	100	365	V
4	* 2.484221	38.33	RMS	31.9	-26	44.23	54	-9.77	-	-	100	365	V
2	* 2.485883	48.63	Pk	31.9	-26	54.53	-	-	74	-19.47	100	365	V

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

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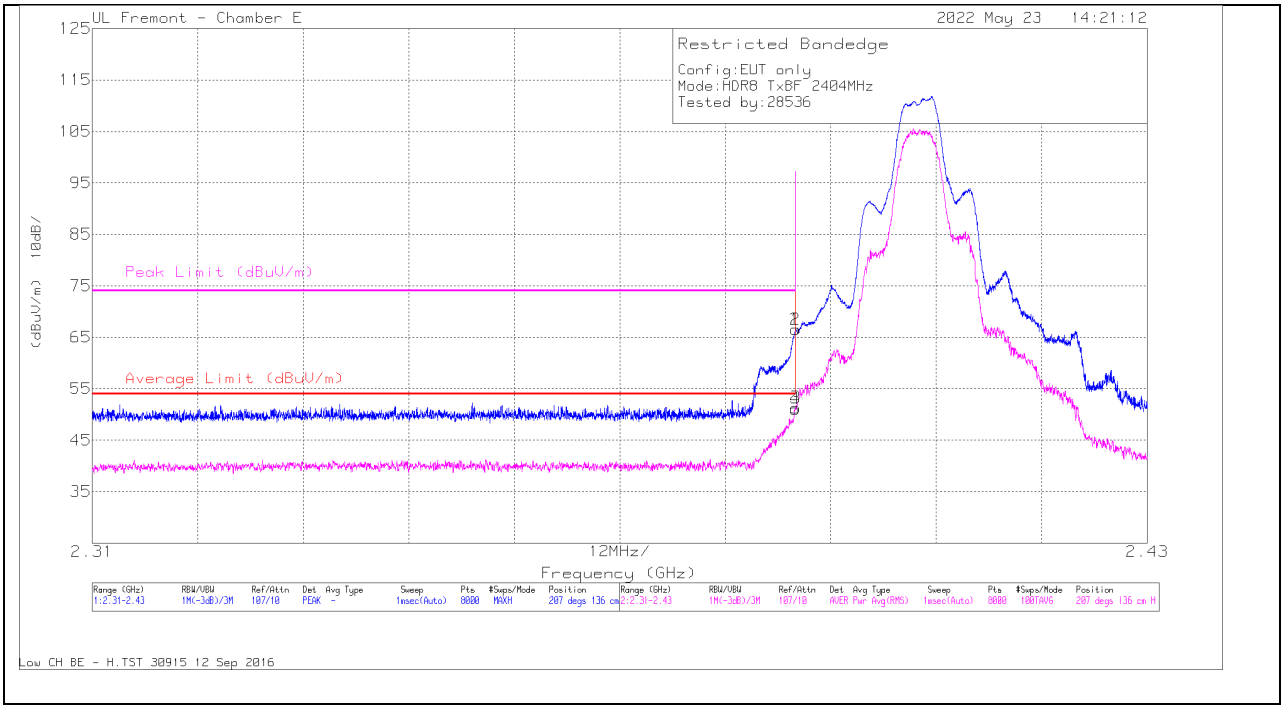
10.2.4. HIGH POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.44	Pk	32	-25.9	66.54	-	-	74	-7.46	207	136	H
2	* 2.389991	60.42	Pk	32	-25.9	66.52	-	-	74	-7.48	207	136	H
3	* 2.39	45.17	RMS	32	-25.9	51.27	54	-2.73	-	-	207	136	H
4	* 2.389946	44.97	RMS	32	-25.9	51.07	54	-2.93	-	-	207	136	H

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

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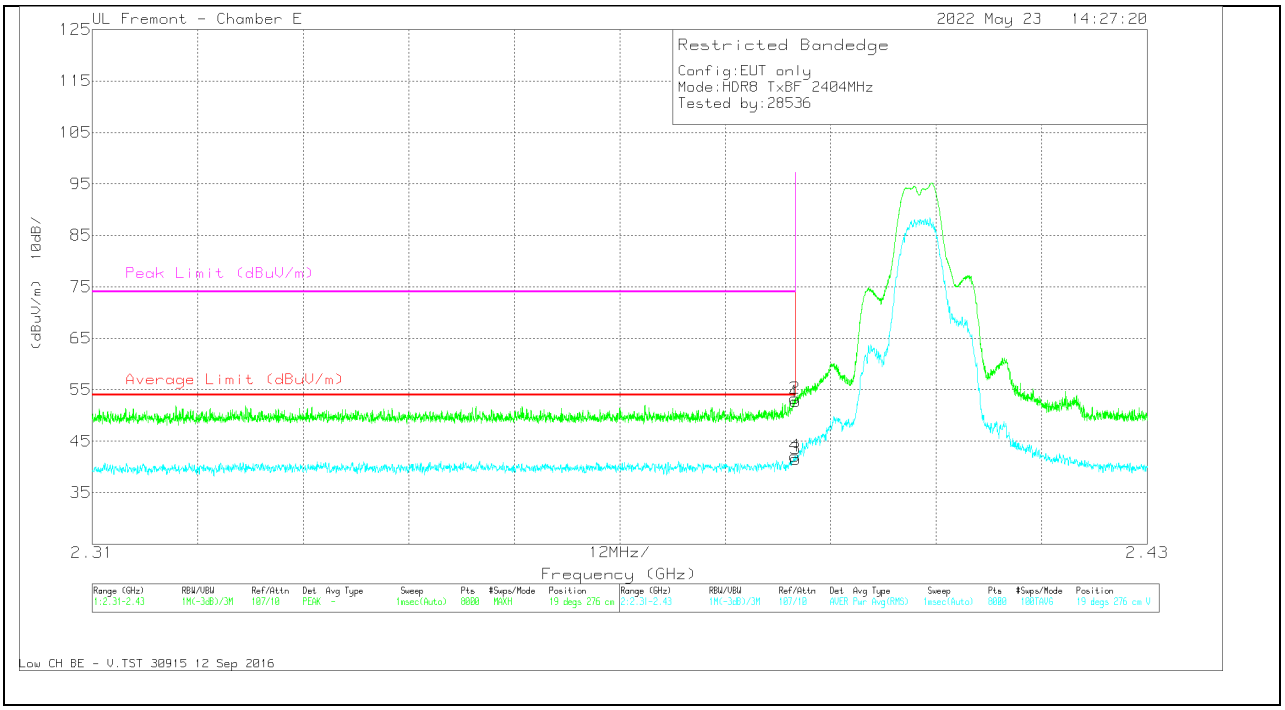
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	46.62	Pk	32	-25.9	52.72	-	-	74	-21.28	19	276	V
2	* 2.389931	47.22	Pk	32	-25.9	53.32	-	-	74	-20.68	19	276	V
3	* 2.39	35.47	RMS	32	-25.9	41.57	54	-12.43	-	-	19	276	V
4	* 2.389931	36.03	RMS	32	-25.9	42.13	54	-11.87	-	-	19	276	V

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

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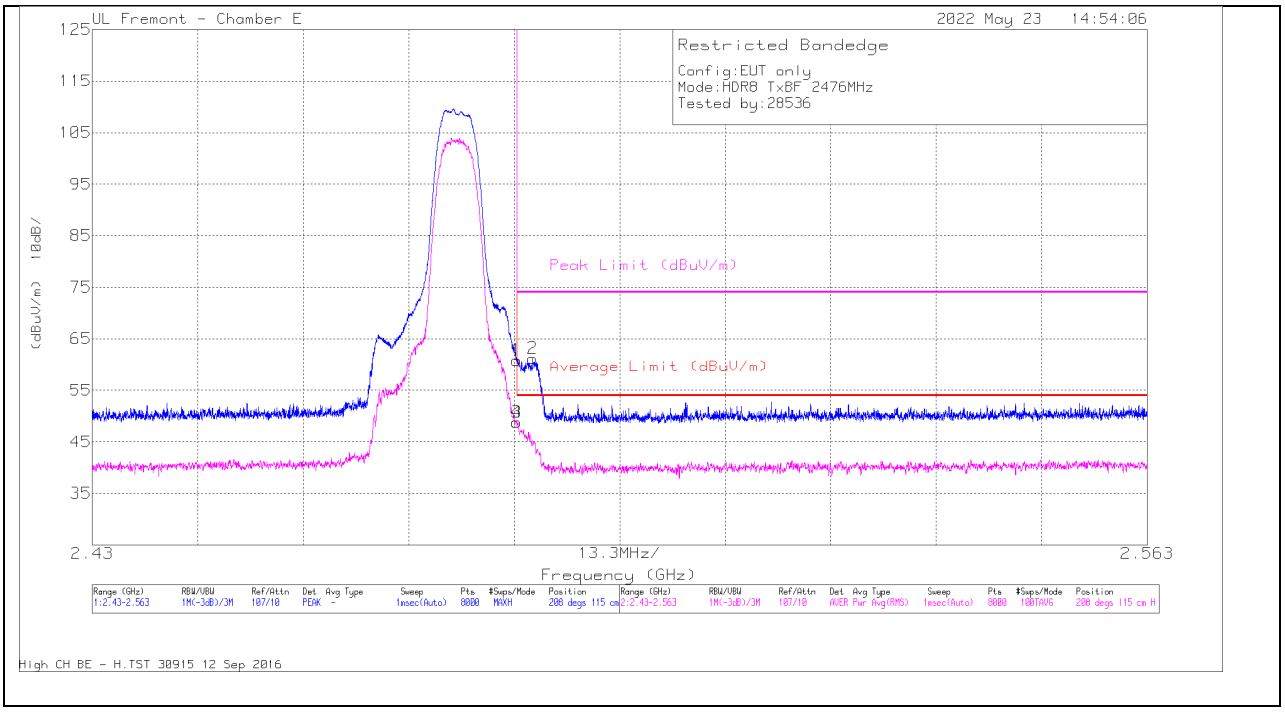
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	54.95	Pk	31.8	-25.9	60.85	-	-	74	-13.15	208	115	H
2	* 2.485534	55.29	Pk	31.9	-26	61.19	-	-	74	-12.81	208	115	H
3	* 2.4835	42.91	RMS	31.8	-25.9	48.81	54	-5.19	-	-	208	115	H
4	* 2.483506	42.89	RMS	31.8	-25.9	48.79	54	-5.21	-	-	208	115	H

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

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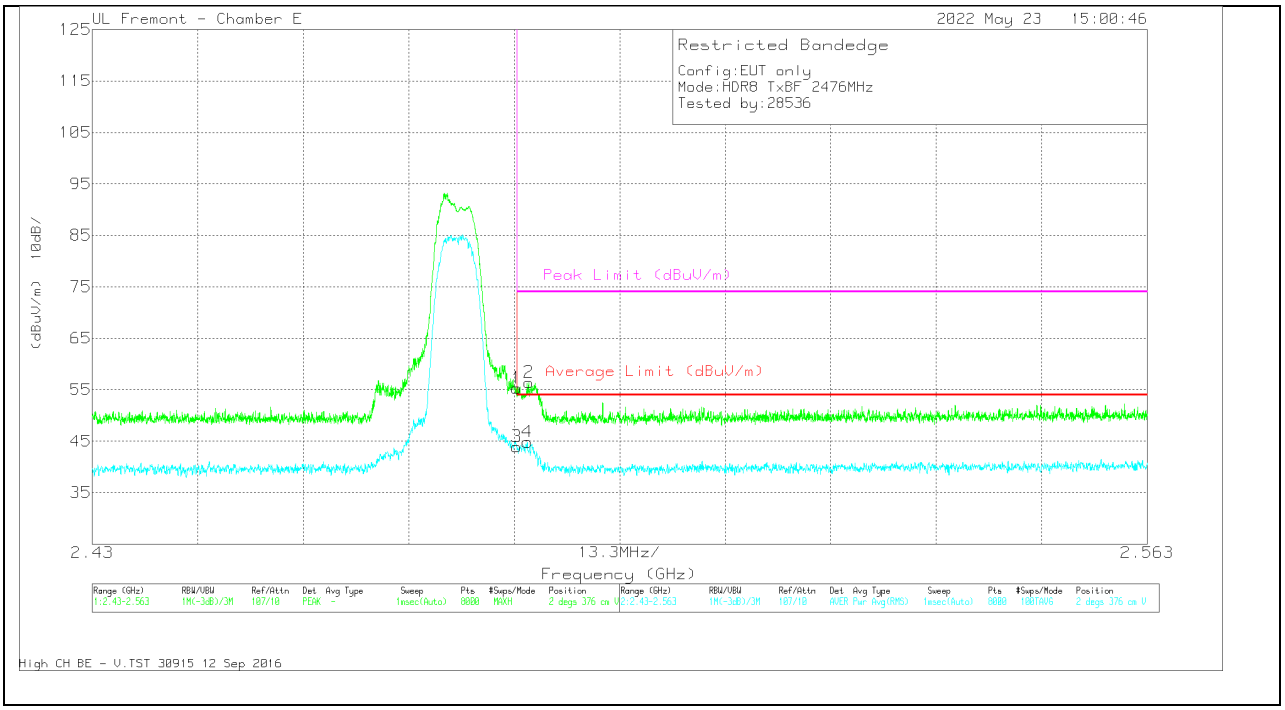
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	49.41	Pk	31.8	-25.9	55.31	-	-	74	-18.69	2	376	V
3	* 2.4835	38.03	RMS	31.8	-25.9	43.93	54	-10.07	-	-	2	376	V
4	* 2.484852	38.95	RMS	31.9	-26	44.85	54	-9.15	-	-	2	376	V
2	* 2.485019	50.53	Pk	31.9	-26	56.43	-	-	74	-17.57	2	376	V

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

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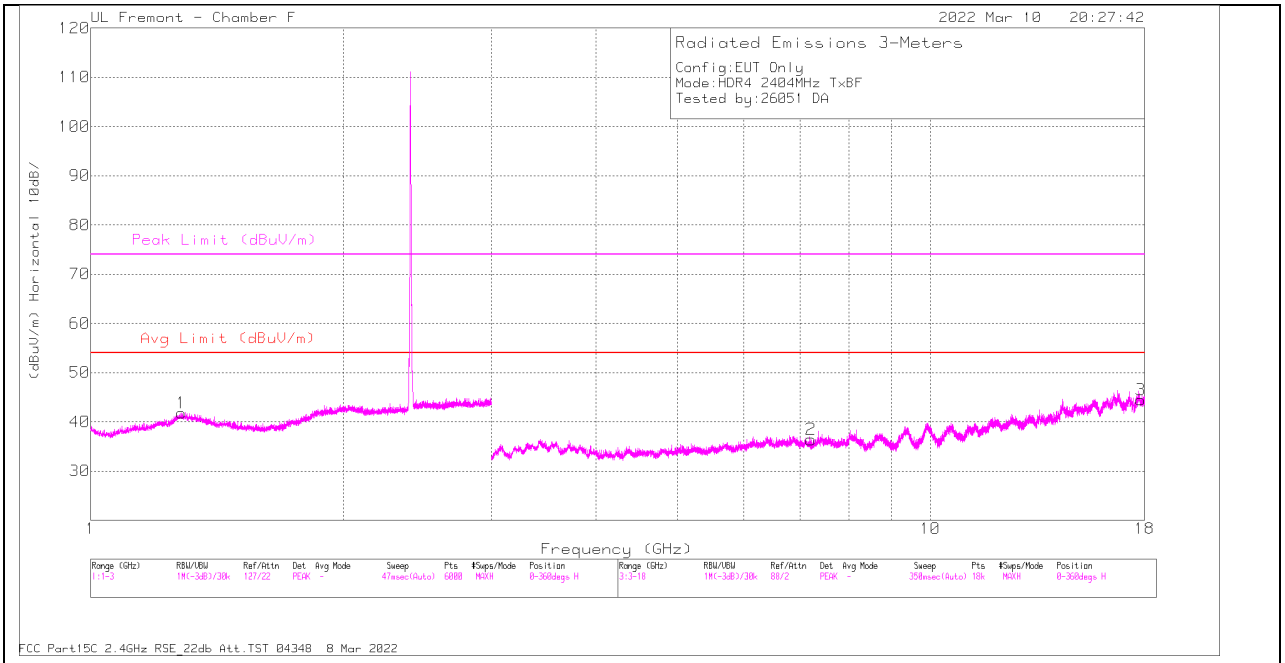
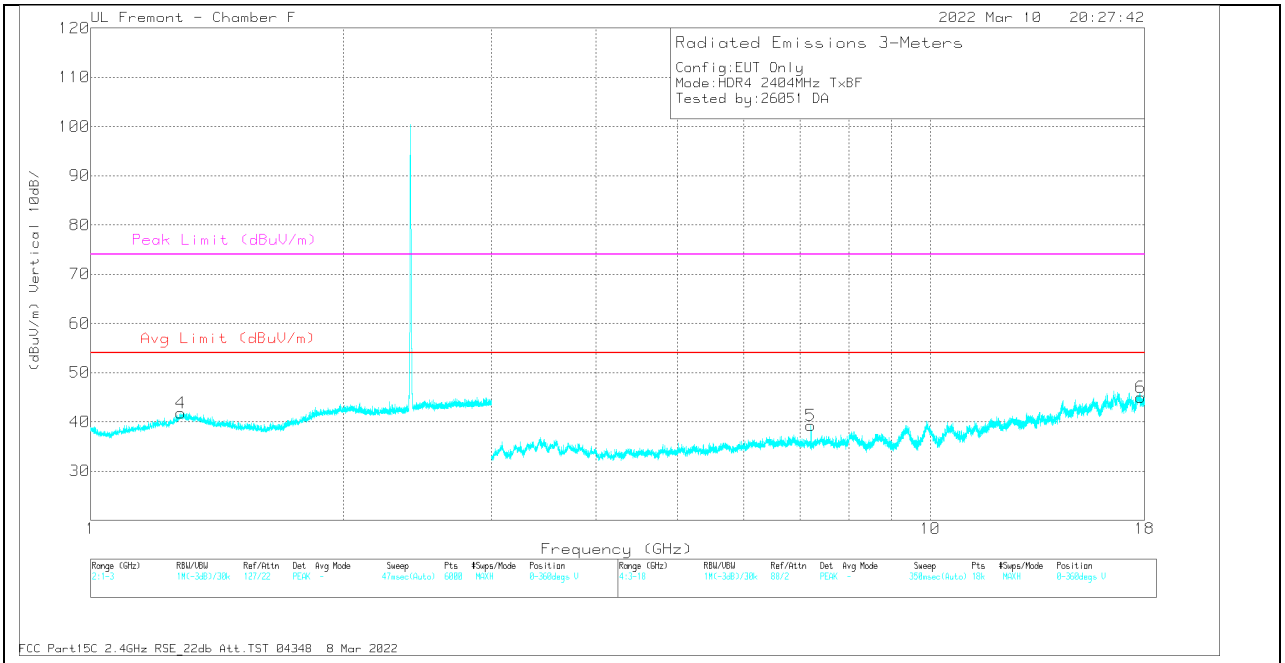
10.2.5. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/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	* 1.284005	59.84	PK2	30.4	-39	51.24	-	-	74	-22.76	265	199	H
	* 1.280804	48.55	MAv1	30.4	-39	39.95	54	-14.05	-	-	265	199	H
4	* 1.280949	60.14	PK2	30.4	-39	51.54	-	-	74	-22.46	120	101	V
	* 1.278969	48.57	MAv1	30.4	-39	39.97	54	-14.03	-	-	120	101	V
2	7.210357	56.43	PK2	35.5	-45.8	46.13	-	-	-	-	206	101	H
	7.21208	44.81	MAv1	35.6	-45.8	34.61	-	-	-	-	206	101	H
3	* 17.825093	57.38	PK2	41.8	-45.5	53.68	-	-	74	-20.32	188	200	H
	* 17.824074	45.93	MAv1	41.7	-45.5	42.13	54	-11.87	-	-	188	200	H
5	7.211998	58.68	PK2	35.6	-45.8	48.48	-	-	-	-	210	103	V
	7.210686	48.12	MAv1	35.6	-45.8	37.92	-	-	-	-	210	103	V
6	* 17.825287	57.71	PK2	41.8	-45.5	54.01	-	-	74	-19.99	75	200	V
	* 17.822864	45.85	MAv1	41.7	-45.4	42.15	54	-11.85	-	-	75	200	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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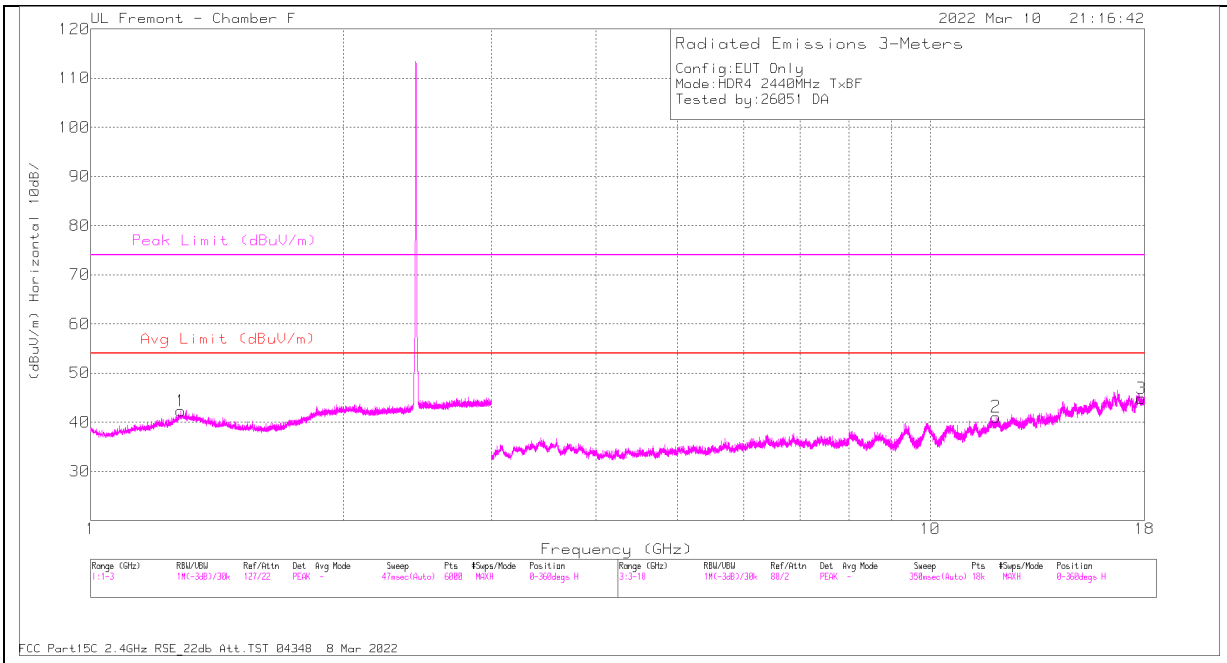
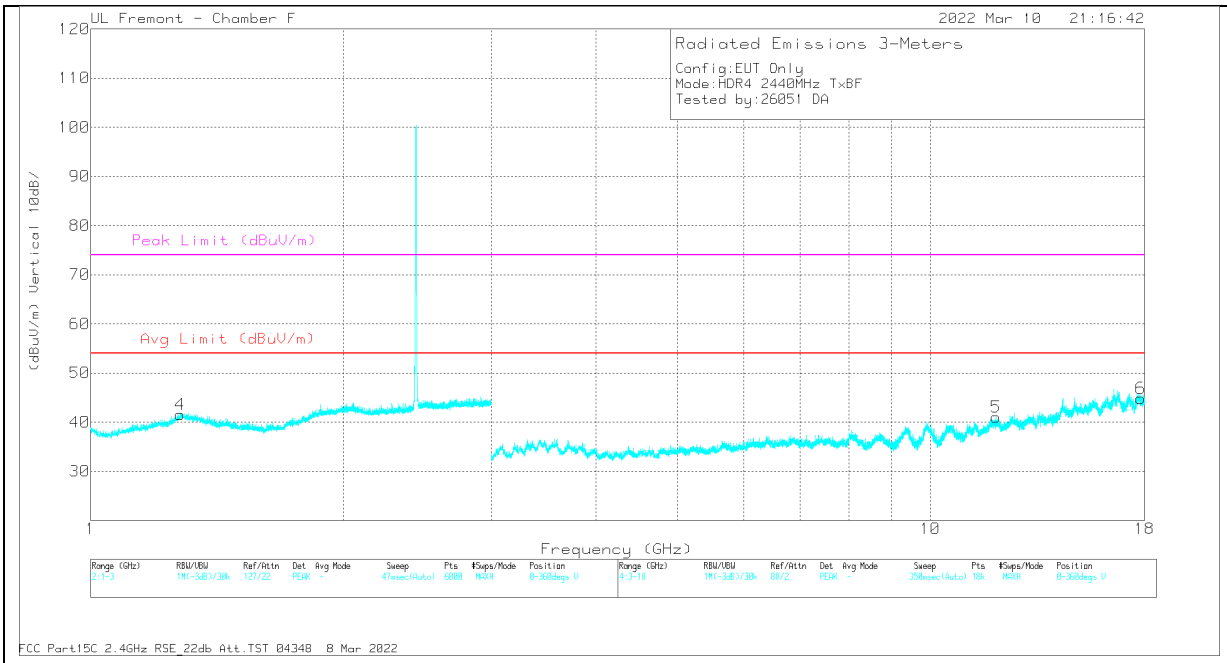
MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/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	* 1.281951	60.09	PK2	30.4	-39	51.49	-	-	74	-22.51	245	101	H
	* 1.278716	48.55	MAv1	30.4	-39	39.95	54	-14.05	-	-	245	101	H
4	* 1.280636	60.32	PK2	30.4	-39	51.72	-	-	74	-22.28	155	101	V
	* 1.280446	48.65	MAv1	30.4	-39	40.05	54	-13.95	-	-	155	101	V
2	* 11.974725	55.92	PK2	39.2	-44.9	50.22	-	-	74	-23.78	245	200	H
	* 11.971634	43.88	MAv1	39.2	-45	38.08	54	-15.92	-	-	245	200	H
3	* 17.843677	57.8	PK2	41.9	-45.4	54.3	-	-	74	-19.7	250	200	H
	* 17.845437	46.02	MAv1	41.9	-45.3	42.62	54	-11.38	-	-	250	200	H
5	* 11.974623	55.13	PK2	39.2	-44.9	49.43	-	-	74	-24.57	180	101	V
	* 11.973261	43.85	MAv1	39.2	-45	38.05	54	-15.95	-	-	180	101	V
6	* 17.826665	57.79	PK2	41.8	-45.5	54.09	-	-	74	-19.91	45	101	V
	* 17.82663	46.1	MAv1	41.8	-45.5	42.4	54	-11.6	-	-	45	101	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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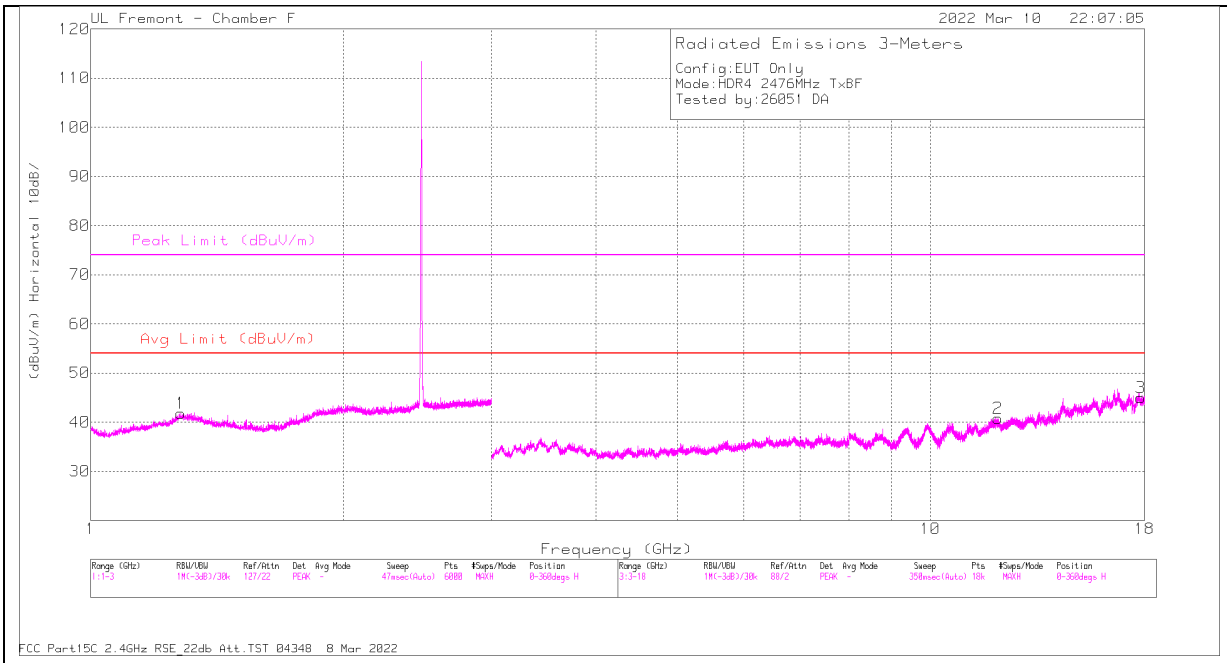
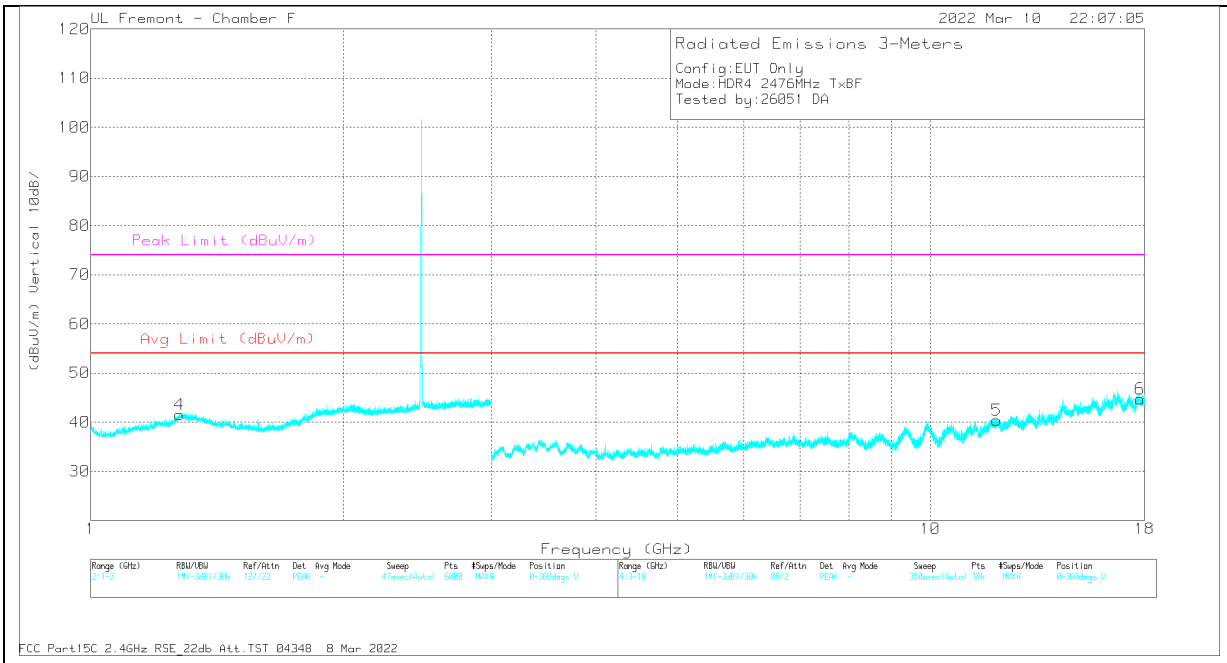
HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/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	* 1.278587	59.94	PK2	30.4	-39	51.34	-	-	74	-22.66	275	101	H
	* 1.278851	48.54	MAv1	30.4	-39	39.94	54	-14.06	-	-	275	101	H
4	* 1.27529	60.16	PK2	30.2	-38.9	51.46	-	-	74	-22.54	185	200	V
	* 1.275623	48.62	MAv1	30.2	-38.9	39.92	54	-14.08	-	-	185	200	V
2	* 12.036029	55.01	PK2	39.2	-44.7	49.51	-	-	74	-24.49	275	101	H
	* 12.037496	43.84	MAv1	39.2	-44.7	38.34	54	-15.66	-	-	275	101	H
3	* 17.815147	57.37	PK2	41.8	-45.4	53.77	-	-	74	-20.23	235	101	H
	* 17.813163	45.94	MAv1	41.8	-45.4	42.34	54	-11.66	-	-	235	101	H
5	* 12.012275	55.3	PK2	39.2	-44.9	49.6	-	-	74	-24.4	155	200	V
	* 12.009005	44.09	MAv1	39.2	-44.9	38.39	54	-15.61	-	-	155	200	V
6	* 17.788952	57.53	PK2	41.6	-45.6	53.53	-	-	74	-20.47	35	101	V
	* 17.785569	46.02	MAv1	41.6	-45.6	42.02	54	-11.98	-	-	35	101	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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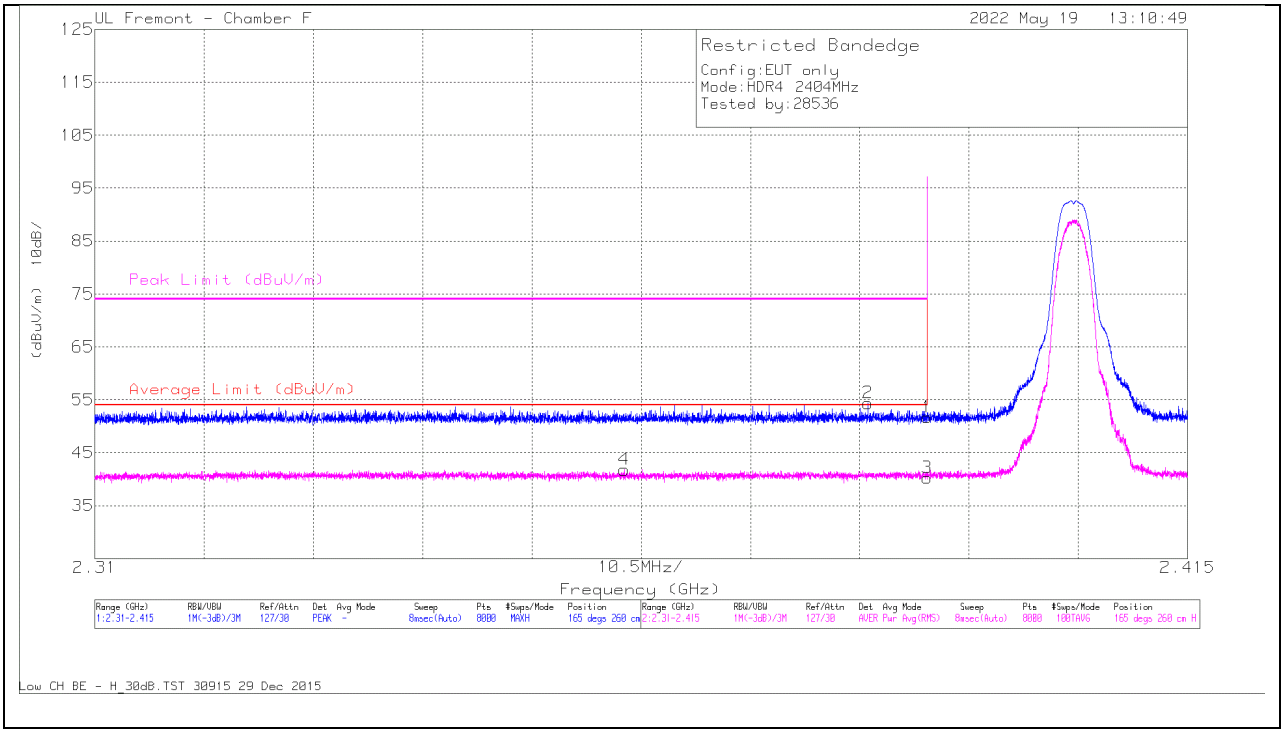
10.2.6. LOW POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.97	Pk	32.1	-39.4	51.67	-	-	74	-22.33	165	260	H
2	* 2.384273	61.76	Pk	32	-39.4	54.36	-	-	74	-19.64	165	260	H
3	* 2.39	47.54	RMS	32.1	-39.4	40.24	54	-13.76	-	-	165	260	H
4	* 2.360867	49.3	RMS	32	-39.5	41.8	54	-12.2	-	-	165	260	H

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

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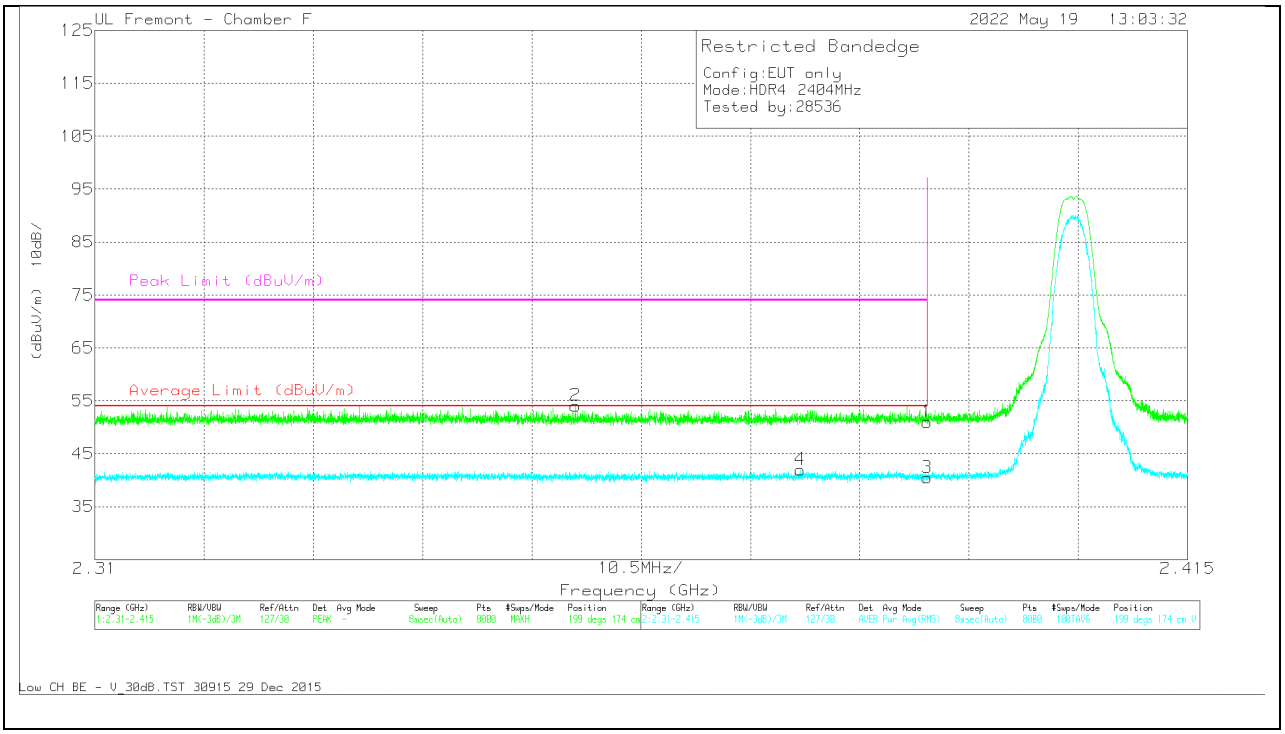
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.33	Pk	32.1	-39.4	51.03	-	-	74	-22.97	199	174	V
2	* 2.356181	61.59	Pk	32	-39.5	54.09	-	-	74	-19.91	199	174	V
3	* 2.39	47.78	RMS	32.1	-39.4	40.48	54	-13.52	-	-	199	174	V
4	* 2.377762	49.49	RMS	32	-39.5	41.99	54	-12.01	-	-	199	174	V

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

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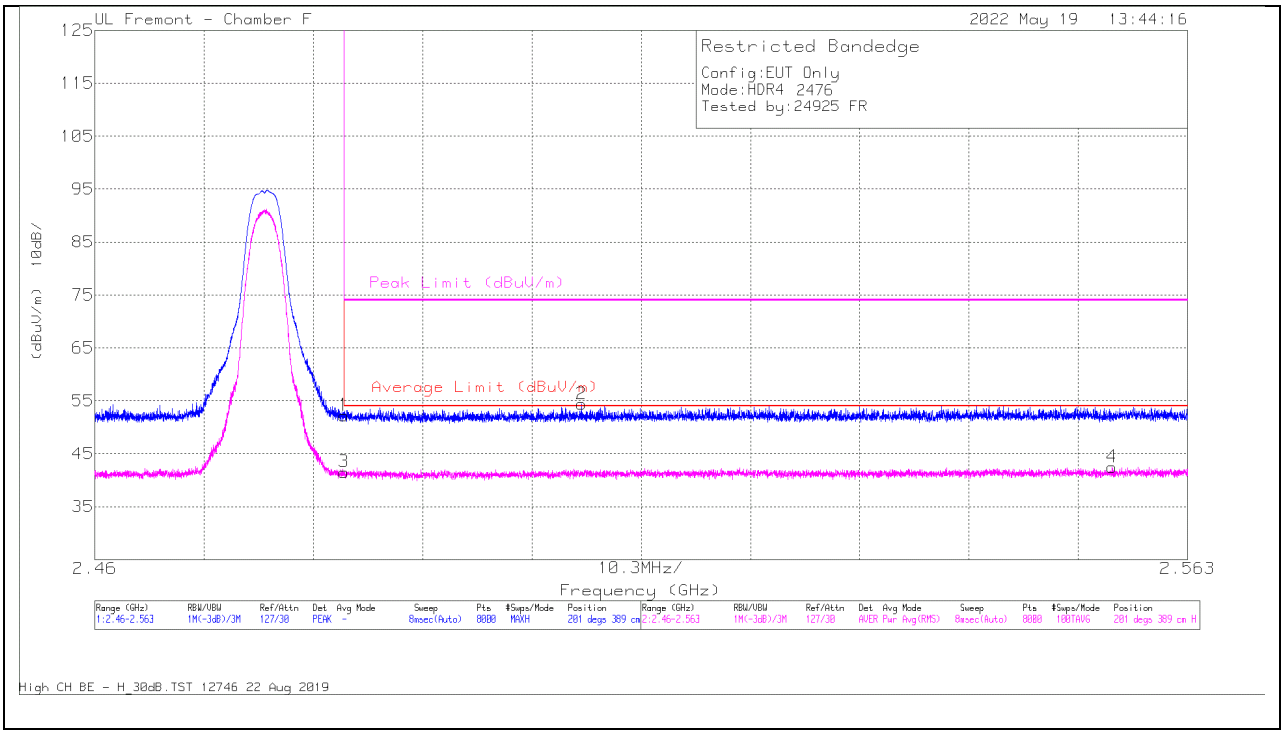
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	59	Pk	32.3	-39.1	52.2	-	-	74	-21.8	201	389	H
2	2.505881	61.1	Pk	32.3	-39	54.4	-	-	74	-19.6	201	389	H
3	* 2.4835	48.32	RMS	32.3	-39.1	41.52	54	-12.48	-	-	201	389	H
4	2.555856	49.16	RMS	32.4	-39.1	42.46	54	-11.54	-	-	201	389	H

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

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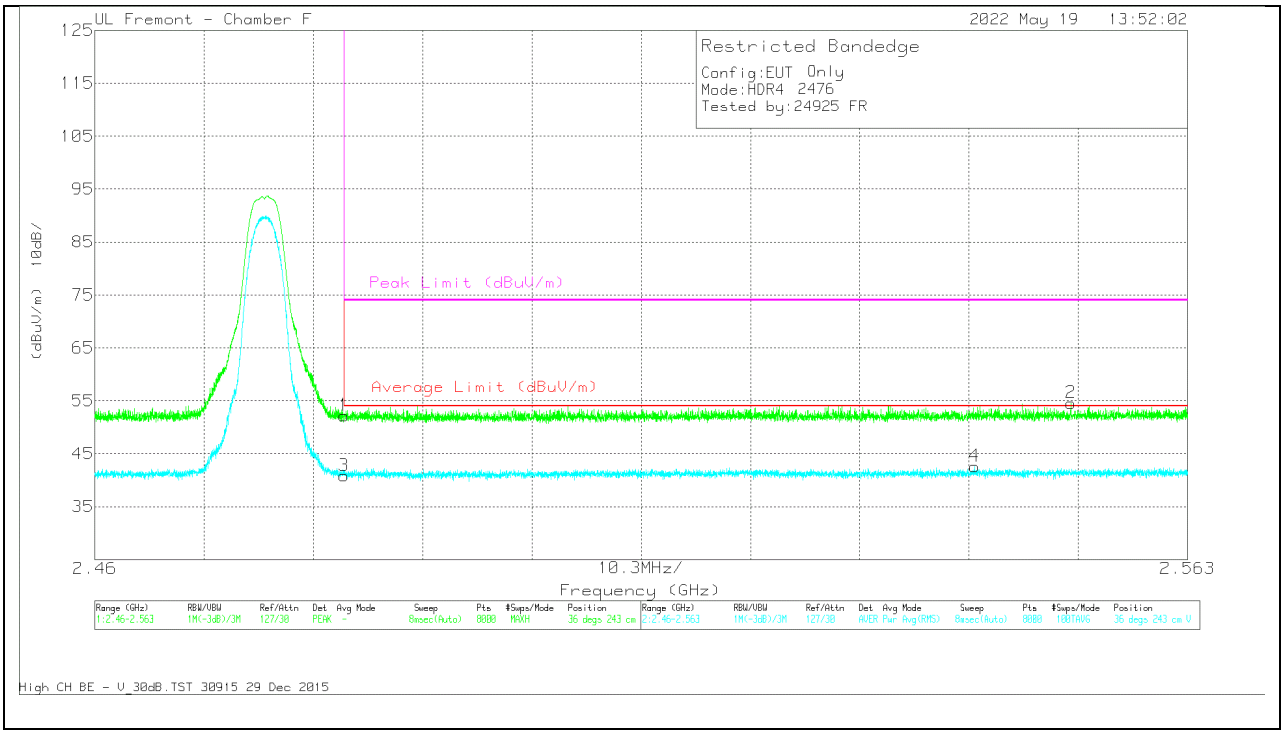
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	58.99	Pk	32.3	-39.1	52.19	-	-	74	-21.81	36	243	V
2	2.552006	61.18	Pk	32.4	-39	54.58	-	-	74	-19.42	36	243	V
3	* 2.4835	47.64	RMS	32.3	-39.1	40.84	54	-13.16	-	-	36	243	V
4	2.542928	49.22	RMS	32.4	-39	42.62	54	-11.38	-	-	36	243	V

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

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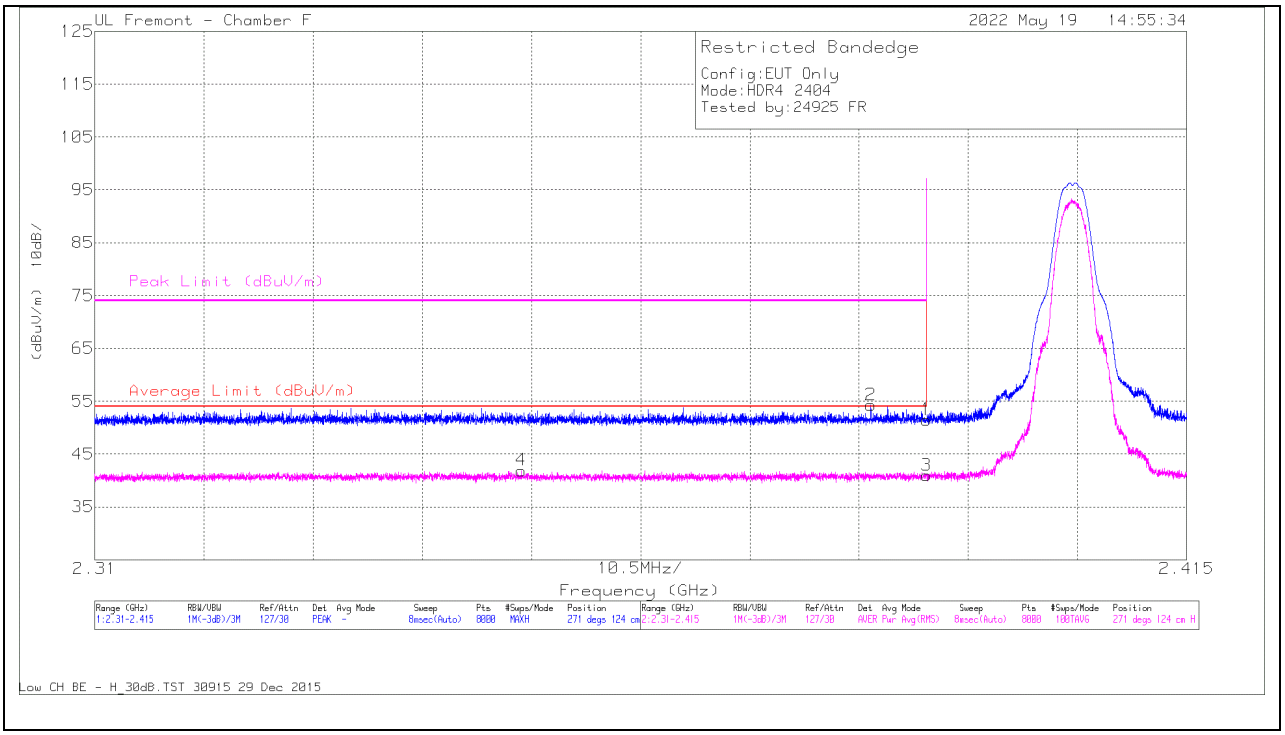
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.76	Pk	32.1	-39.4	51.46	-	-	74	-22.54	271	124	H
2	* 2.384627	61.67	Pk	32	-39.4	54.27	-	-	74	-19.73	271	124	H
3	* 2.39	48.27	RMS	32.1	-39.4	40.97	54	-13.03	-	-	271	124	H
4	* 2.351022	49.49	RMS	32	-39.6	41.89	54	-12.11	-	-	271	124	H

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

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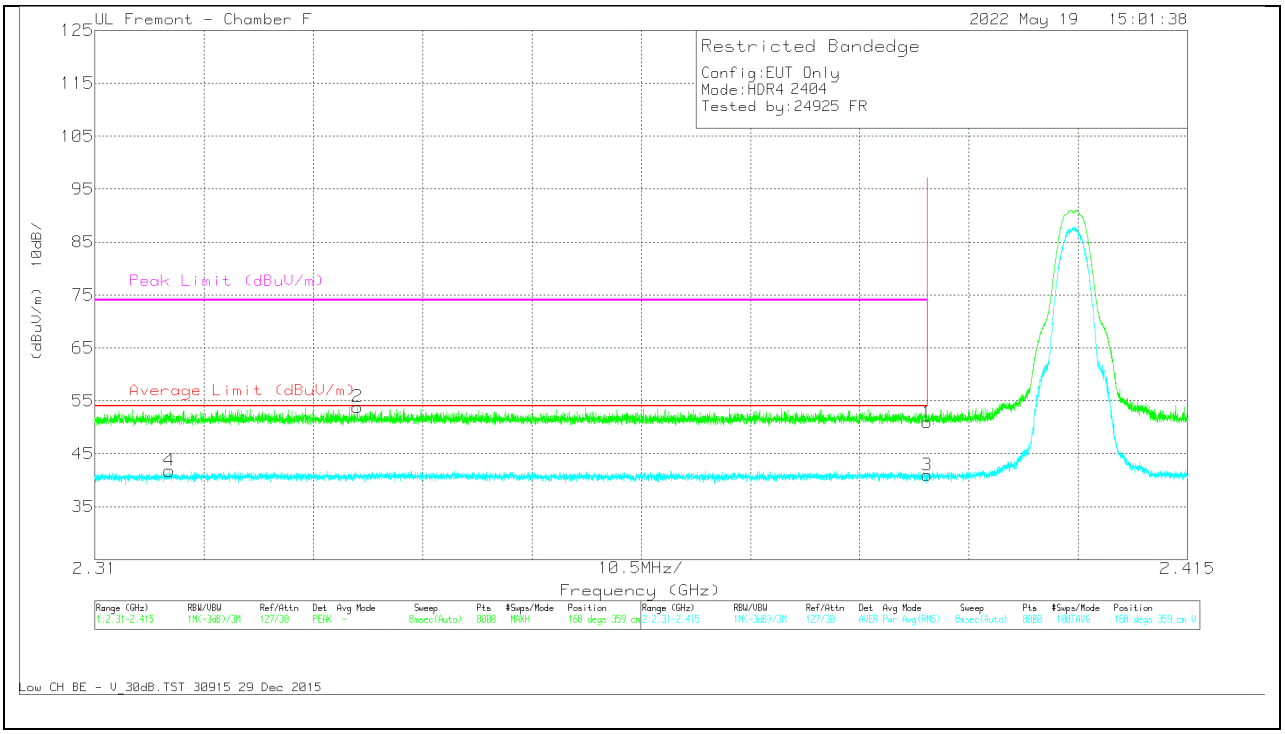
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.25	Pk	32.1	-39.4	50.95	-	-	74	-23.05	168	359	V
2	* 2.33523	61.45	Pk	32	-39.6	53.85	-	-	74	-20.15	168	359	V
3	* 2.39	48.25	RMS	32.1	-39.4	40.95	54	-13.05	-	-	168	359	V
4	* 2.317154	49.4	RMS	32	-39.6	41.8	54	-12.2	-	-	168	359	V

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

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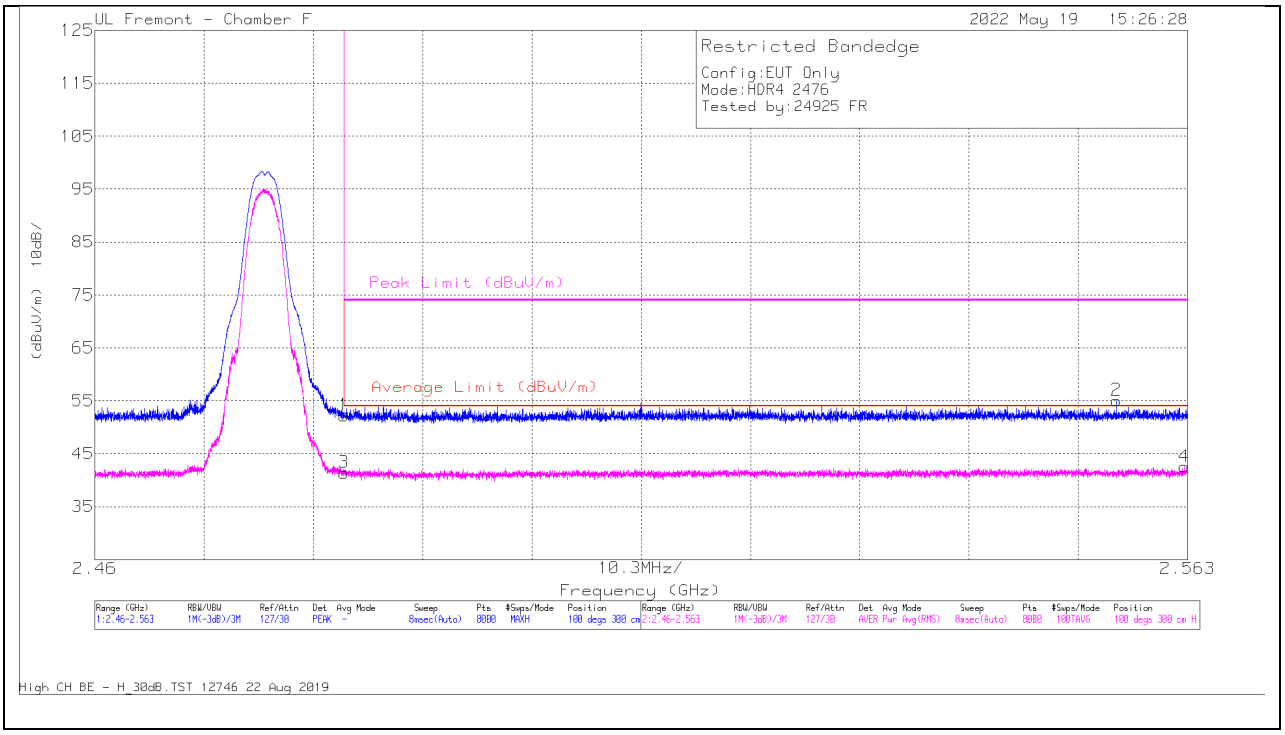
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	59.07	Pk	32.3	-39.1	52.27	-	-	74	-21.73	100	300	H
2	2.556294	61.66	Pk	32.4	-39	55.06	-	-	74	-18.94	100	300	H
3	* 2.4835	48.21	RMS	32.3	-39.1	41.41	54	-12.59	-	-	100	300	H
4	2.562668	49.17	RMS	32.4	-39	42.57	54	-11.43	-	-	100	300	H

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

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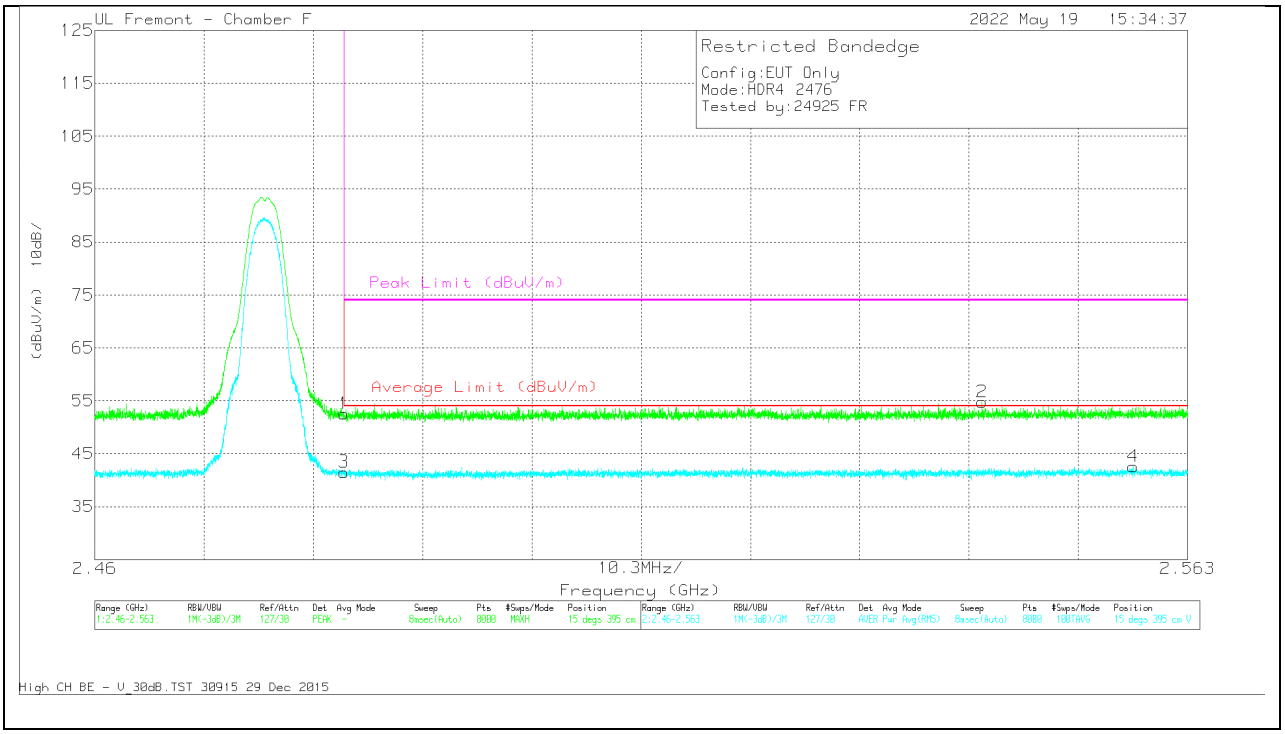
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	59.34	Pk	32.3	-39.1	52.54	-	-	74	-21.46	15	395	V
2	2.543636	61.36	Pk	32.4	-39	54.76	-	-	74	-19.24	15	395	V
3	* 2.4835	48.29	RMS	32.3	-39.1	41.49	54	-12.51	-	-	15	395	V
4	2.557878	49.06	RMS	32.4	-38.9	42.56	54	-11.44	-	-	15	395	V

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

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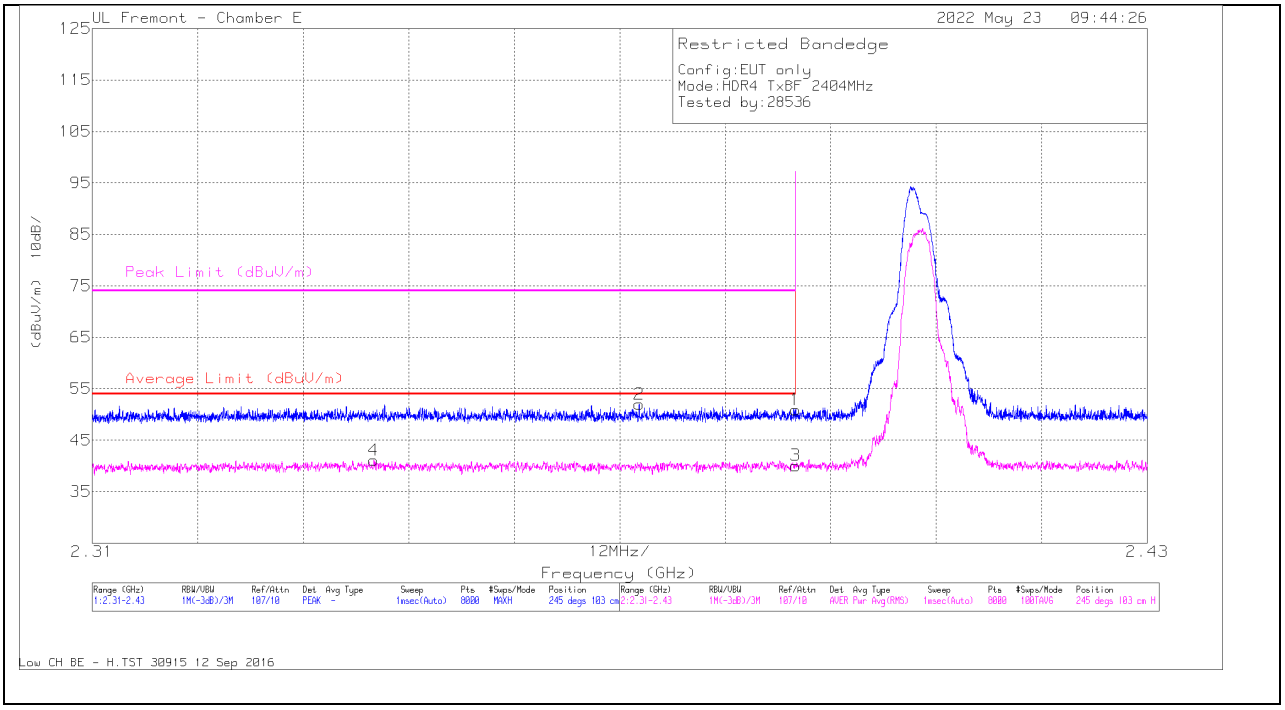
10.2.7. LOW POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.342029	35.11	RMS	32	-26	41.11	54	-12.89	-	-	245	103	H
2	* 2.372213	45.98	Pk	32	-26	51.98	-	-	74	-22.02	245	103	H
1	* 2.39	44.82	Pk	32	-25.9	50.92	-	-	74	-23.08	245	103	H
3	* 2.39	33.98	RMS	32	-25.9	40.08	54	-13.92	-	-	245	103	H

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

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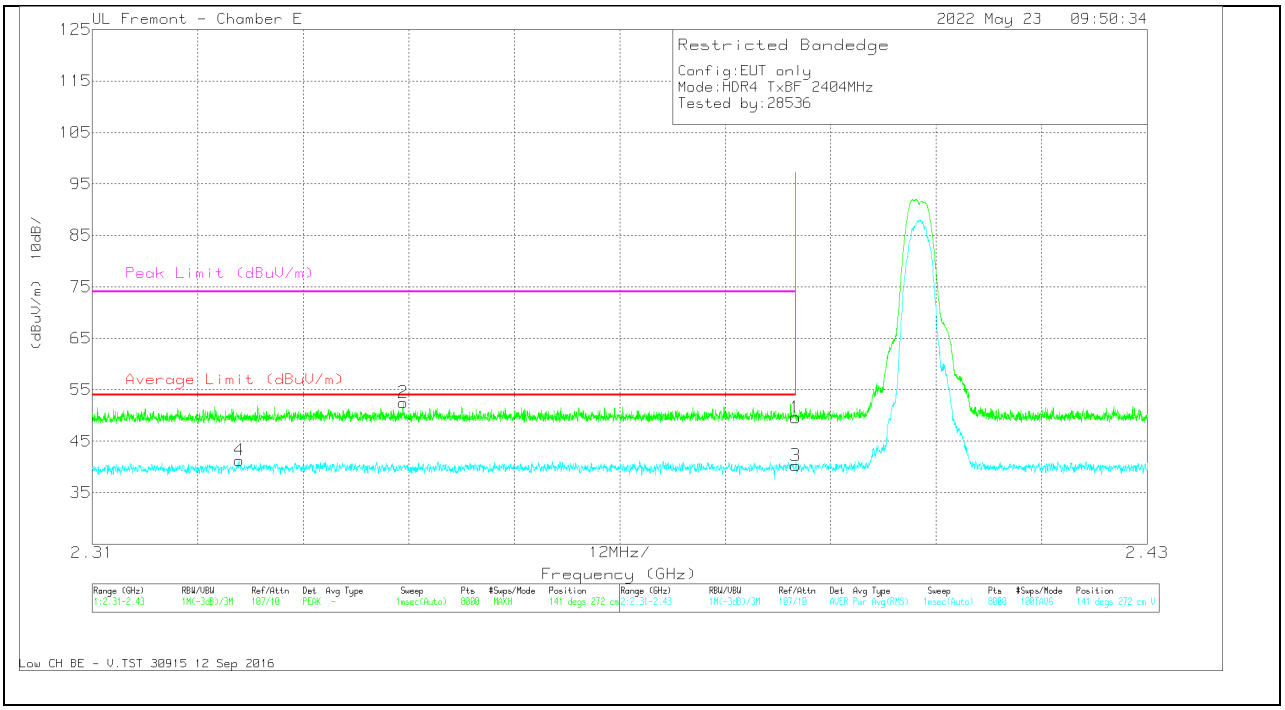

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.326697	35.4	RMS	31.9	-26	41.3	54	-12.7	-	-	141	272	V
2	* 2.345345	46.52	Pk	32	-26	52.52	-	-	74	-21.48	141	272	V
1	* 2.39	43.53	Pk	32	-25.9	49.63	-	-	74	-24.37	141	272	V
3	* 2.39	34.17	RMS	32	-25.9	40.27	54	-13.73	-	-	141	272	V

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

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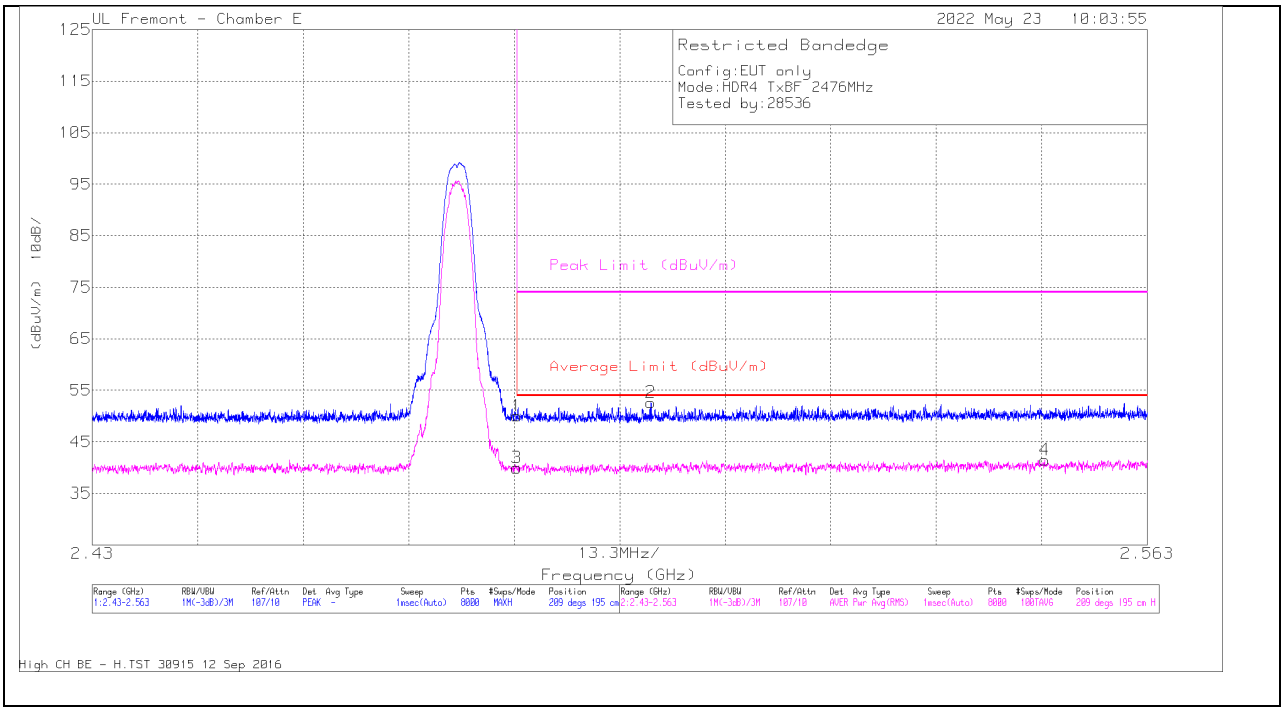
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	44.14	Pk	31.8	-25.9	50.04	-	-	74	-23.96	209	195	H
3	* 2.4835	34.08	RMS	31.8	-25.9	39.98	54	-14.02	-	-	209	195	H
2	2.500432	46.72	Pk	31.9	-26	52.62	-	-	74	-21.38	209	195	H
4	2.550064	35.09	RMS	32.4	-26	41.49	54	-12.51	-	-	209	195	H

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

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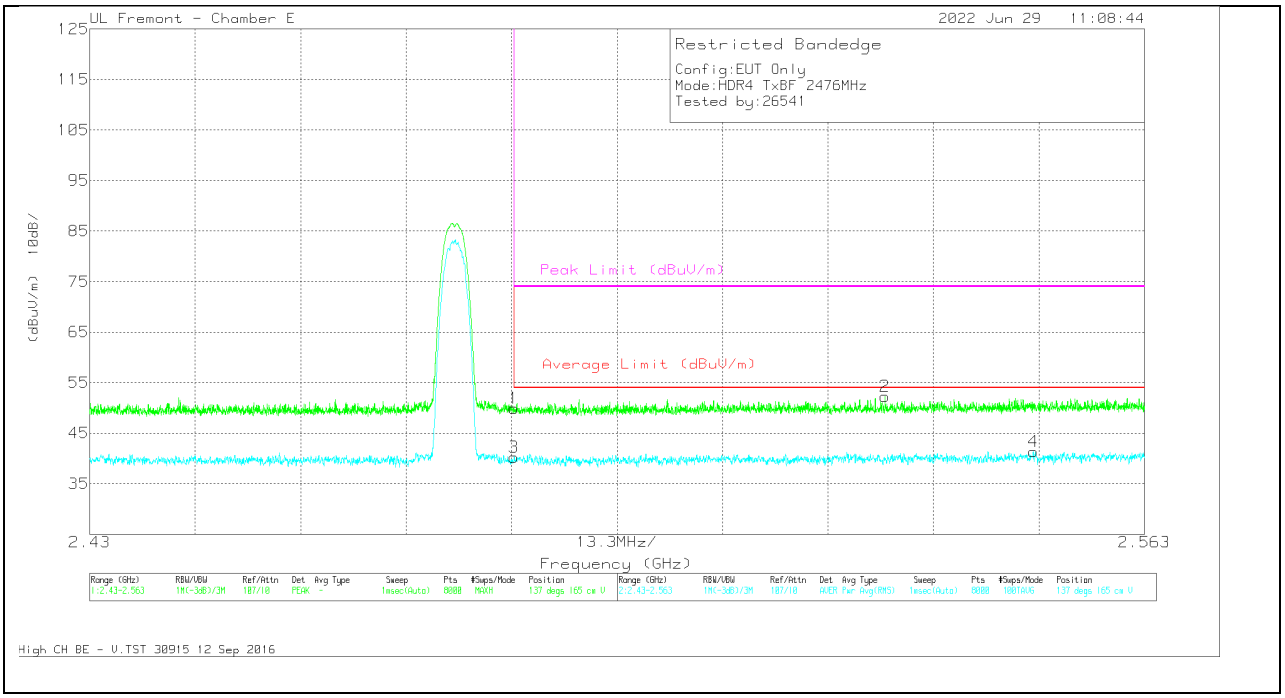

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	44.02	Pk	31.8	-25.9	49.92	-	-	74	-24.08	137	165	V
3	* 2.4835	34.28	RMS	31.8	-25.9	40.18	54	-13.82	-	-	137	165	V
2	2.530294	46.08	Pk	32.2	-26	52.28	-	-	74	-21.72	137	165	V
4	2.548983	34.86	RMS	32.4	-25.9	41.36	54	-12.64	-	-	137	165	V

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

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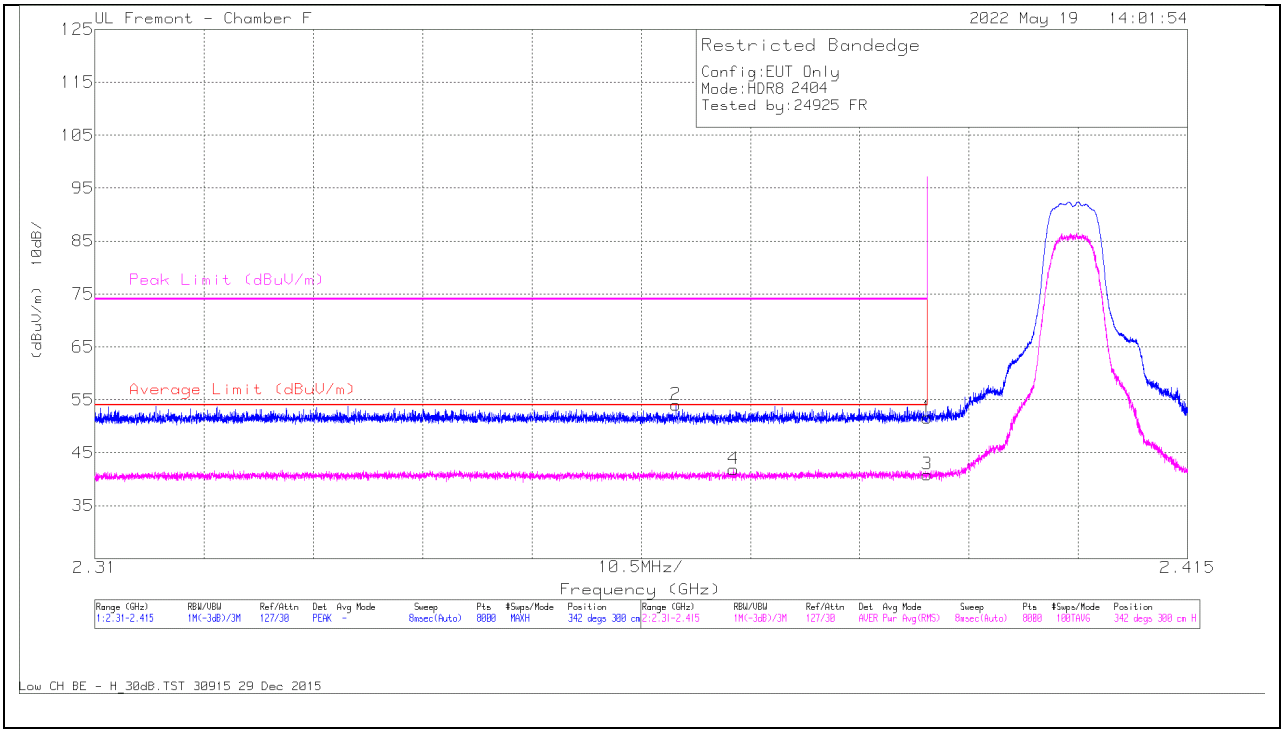
10.2.8. LOW POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.94	Pk	32.1	-39.4	51.64	-	-	74	-22.36	342	300	H
2	* 2.365842	61.58	Pk	32	-39.5	54.08	-	-	74	-19.92	342	300	H
3	* 2.39	48.21	RMS	32.1	-39.4	40.91	54	-13.09	-	-	342	300	H
4	* 2.371369	49.4	RMS	32	-39.5	41.9	54	-12.1	-	-	342	300	H

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

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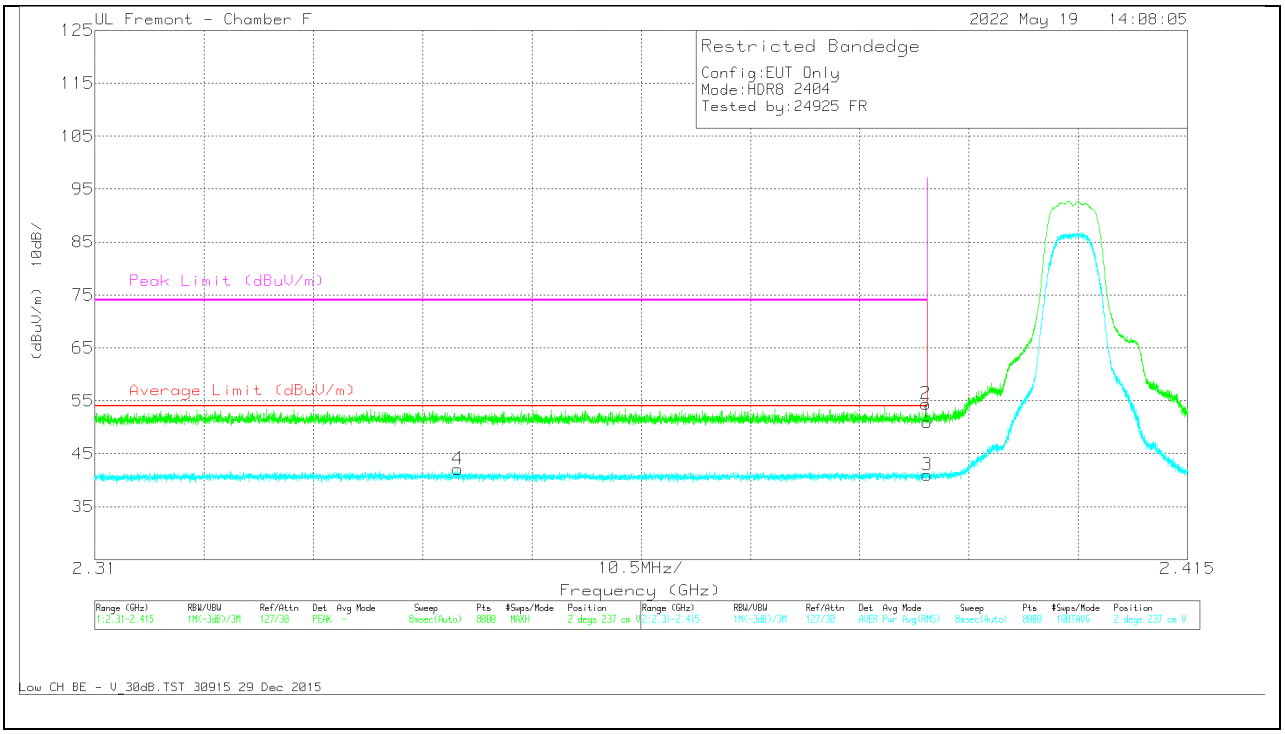
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	58.28	Pk	32.1	-39.4	50.98	-	-	74	-23.02	2	237	V
2	* 2.389852	61.74	Pk	32.1	-39.4	54.44	-	-	74	-19.56	2	237	V
3	* 2.39	48.31	RMS	32.1	-39.4	41.01	54	-12.99	-	-	2	237	V
4	* 2.344852	49.4	RMS	32.1	-39.4	42.1	54	-11.9	-	-	2	237	V

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

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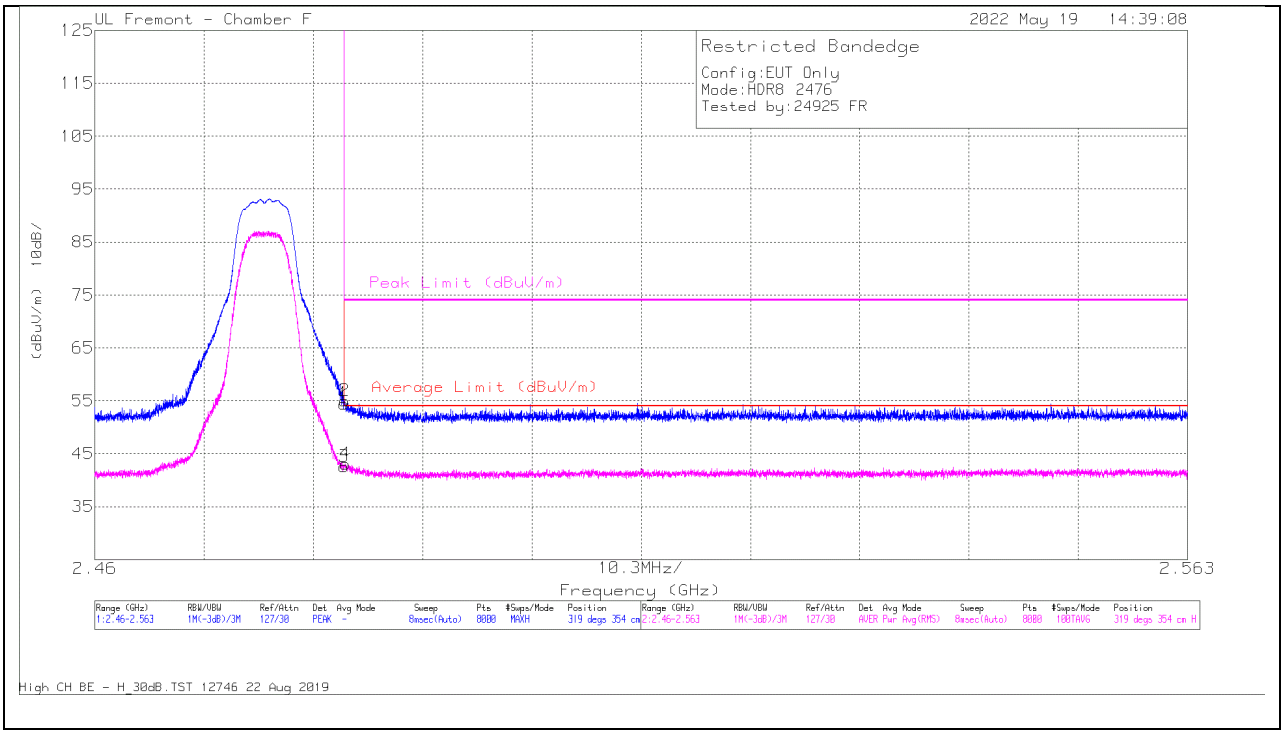
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.26	Pk	32.3	-39.1	54.46	-	-	74	-19.54	319	354	H
2	* 2.483552	61.82	Pk	32.3	-39.1	55.02	-	-	74	-18.98	319	354	H
3	* 2.4835	49.36	RMS	32.3	-39.1	42.56	54	-11.44	-	-	319	354	H
4	* 2.483629	49.85	RMS	32.3	-39.1	43.05	54	-10.95	-	-	319	354	H

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

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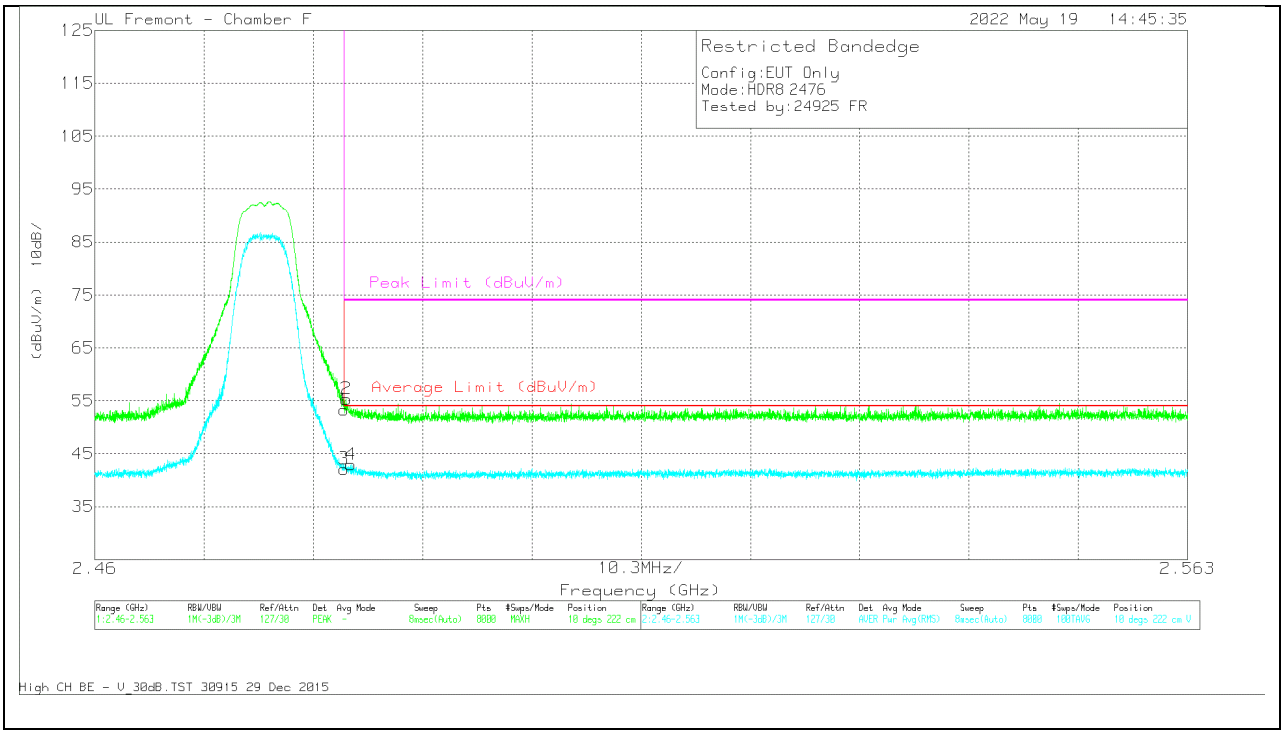
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.09	Pk	32.3	-39.1	53.29	-	-	74	-20.71	10	222	V
2	* 2.483694	62.14	Pk	32.3	-39.1	55.34	-	-	74	-18.66	10	222	V
3	* 2.4835	48.89	RMS	32.3	-39.1	42.09	54	-11.91	-	-	10	222	V
4	* 2.484132	49.73	RMS	32.3	-39.1	42.93	54	-11.07	-	-	10	222	V

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

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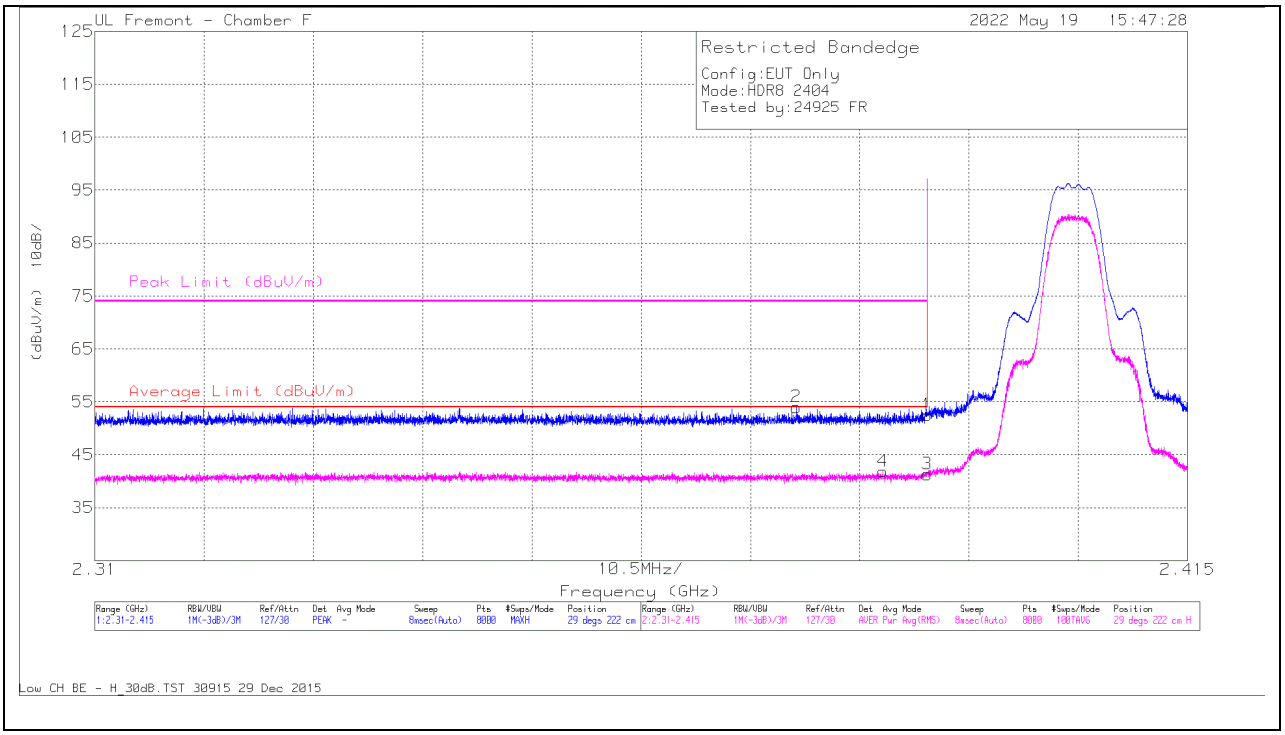
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	59.78	Pk	32.1	-39.4	52.48	-	-	74	-21.52	29	222	H
2	* 2.377394	61.48	Pk	32	-39.5	53.98	-	-	74	-20.02	29	222	H
3	* 2.39	48.61	RMS	32.1	-39.4	41.31	54	-12.69	-	-	29	222	H
4	* 2.385717	49.23	RMS	32	-39.4	41.83	54	-12.17	-	-	29	222	H

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

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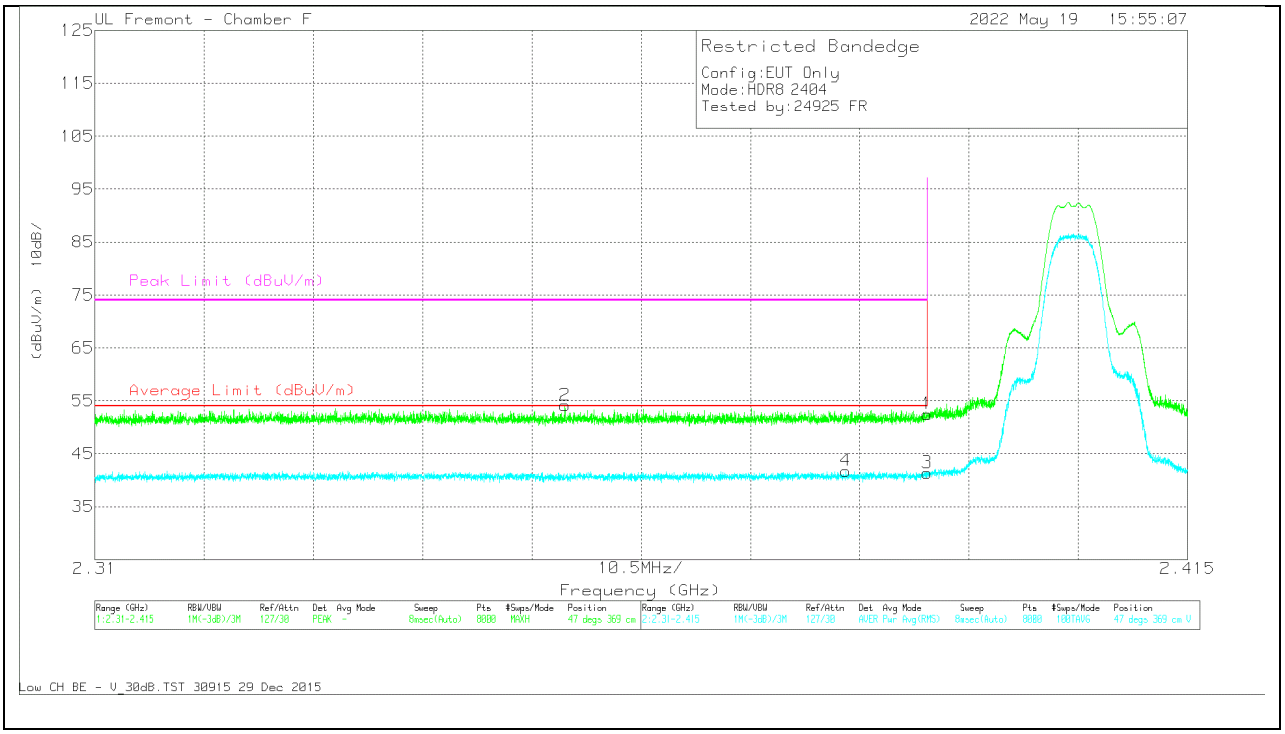
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81887 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	59.79	Pk	32.1	-39.4	52.49	-	-	74	-21.51	47	369	V
2	* 2.35517	61.64	Pk	32	-39.5	54.14	-	-	74	-19.86	47	369	V
3	* 2.39	48.69	RMS	32.1	-39.4	41.39	54	-12.61	-	-	47	369	V
4	* 2.382172	49.27	RMS	32	-39.5	41.77	54	-12.23	-	-	47	369	V

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

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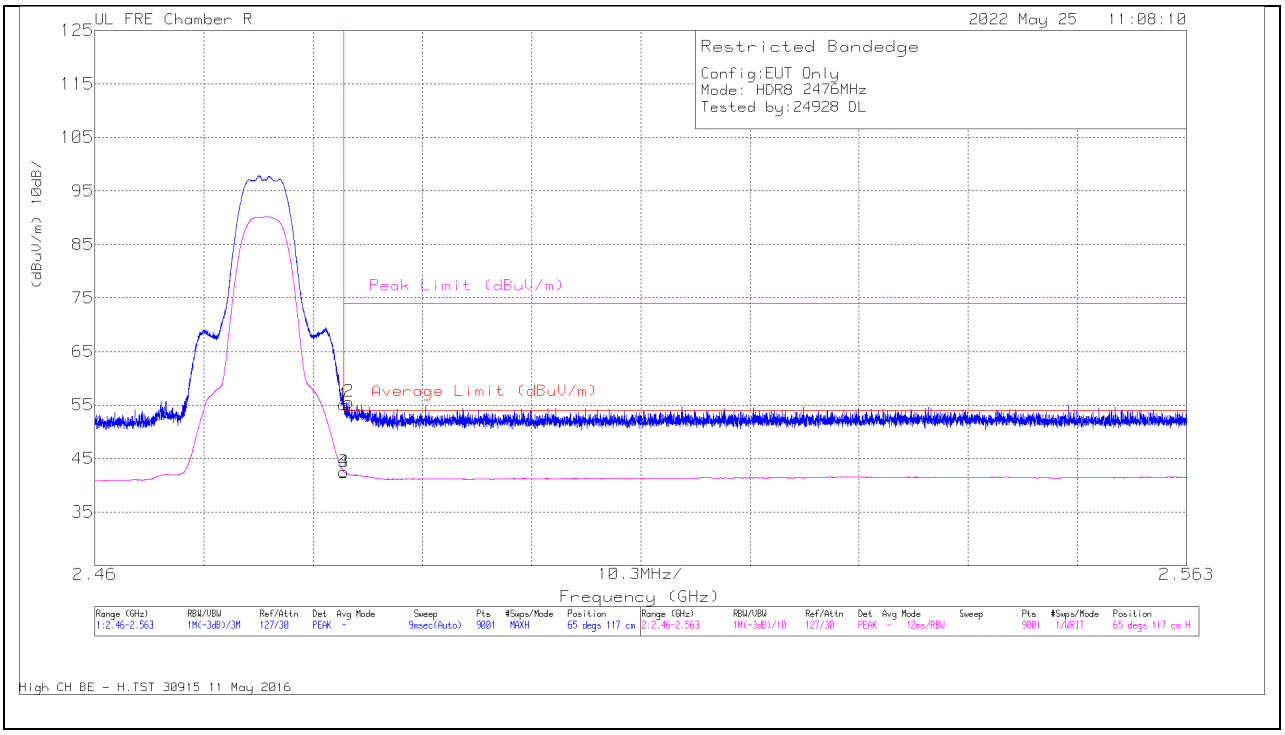
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	58.44	Pk	32.2	-35.6	55.04	-	-	74	-18.96	65	117	H
2	* 2.483998	59.01	Pk	32.2	-35.6	55.61	-	-	74	-18.39	65	117	H
3	* 2.4835	45.92	VA1T	32.2	-35.6	42.52	54	-11.48	-	-	65	117	H
4	* 2.483506	45.89	VA1T	32.2	-35.6	42.49	54	-11.51	-	-	65	117	H

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

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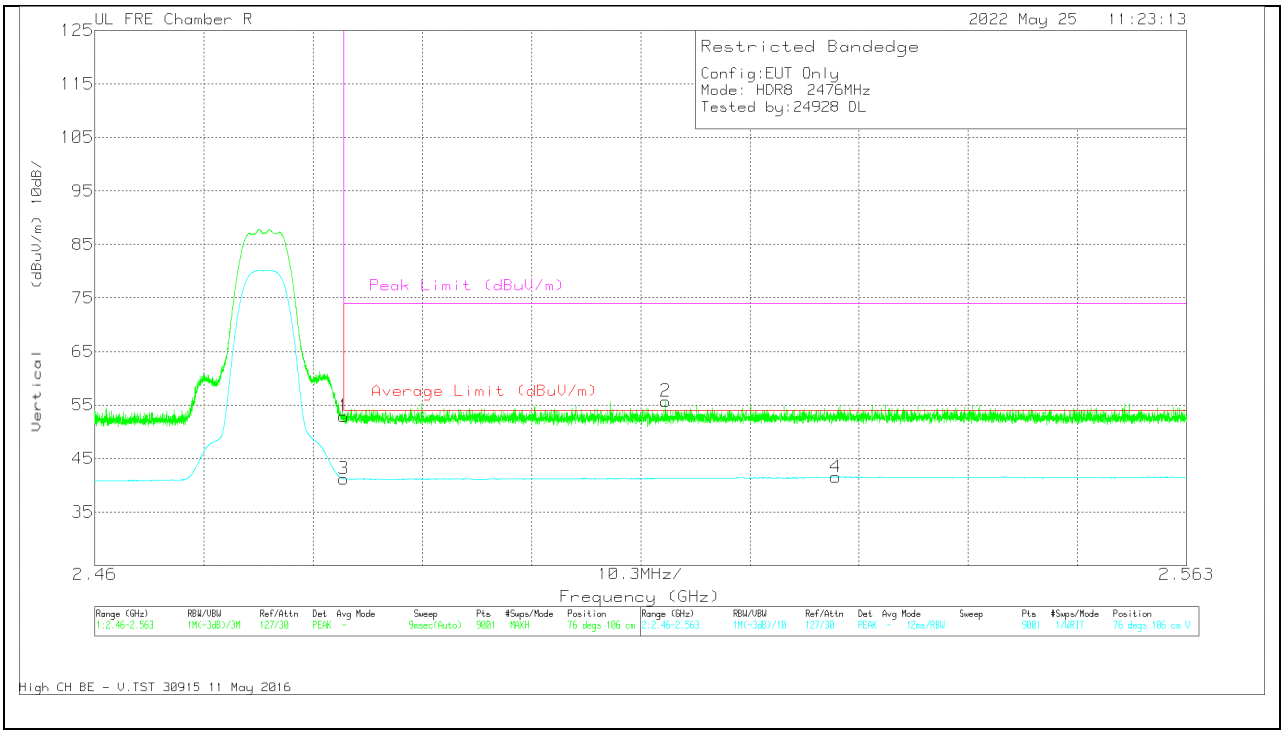
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 ACF (dB)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	56.29	Pk	32.2	-35.6	52.89	-	-	74	-21.11	76	106	V
3	* 2.4835	44.61	VA1T	32.2	-35.6	41.21	54	-12.79	-	-	76	106	V
2	2.513844	58.7	Pk	32.4	-35.4	55.7	-	-	74	-18.3	76	106	V
4	2.5299	44.45	VA1T	32.4	-35.3	41.55	54	-12.45	-	-	76	106	V

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

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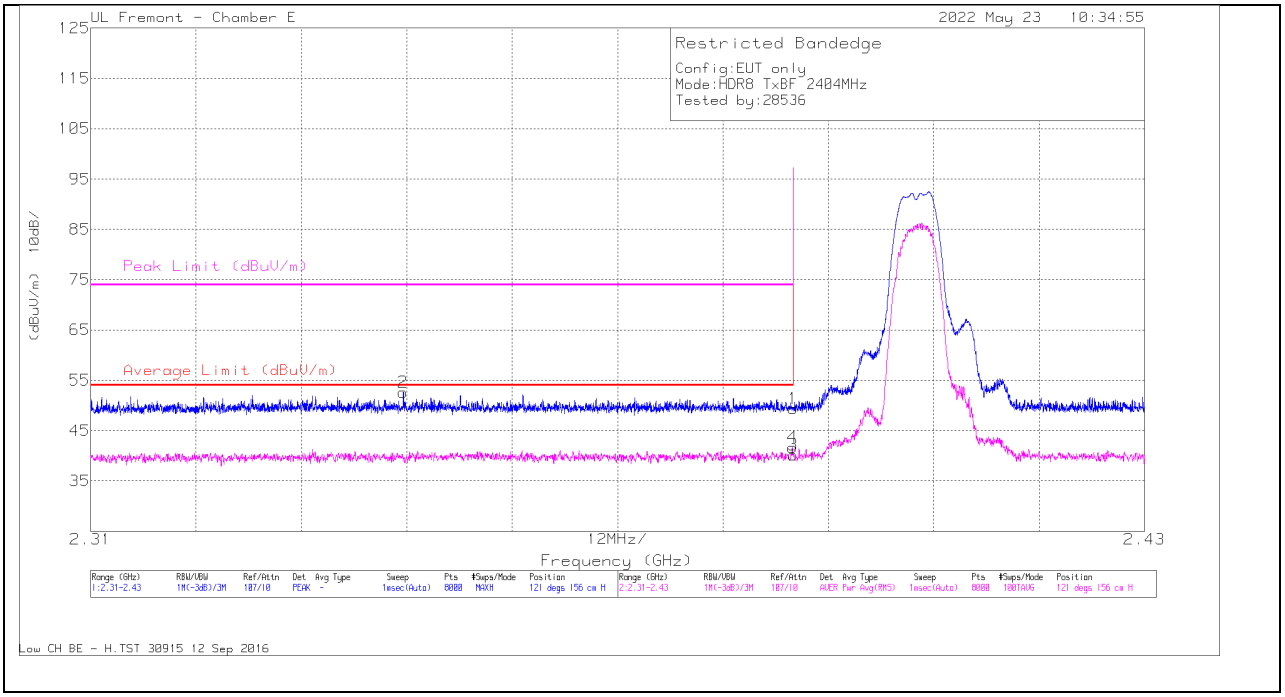
10.2.9. LOW POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.3456	46.63	Pk	32	-26	52.63	-	-	74	-21.37	121	156	H
4	* 2.389901	35.5	RMS	32	-25.9	41.6	54	-12.4	-	-	121	156	H
1	* 2.39	43.33	Pk	32	-25.9	49.43	-	-	74	-24.57	121	156	H
3	* 2.39	34.03	RMS	32	-25.9	40.13	54	-13.87	-	-	121	156	H

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

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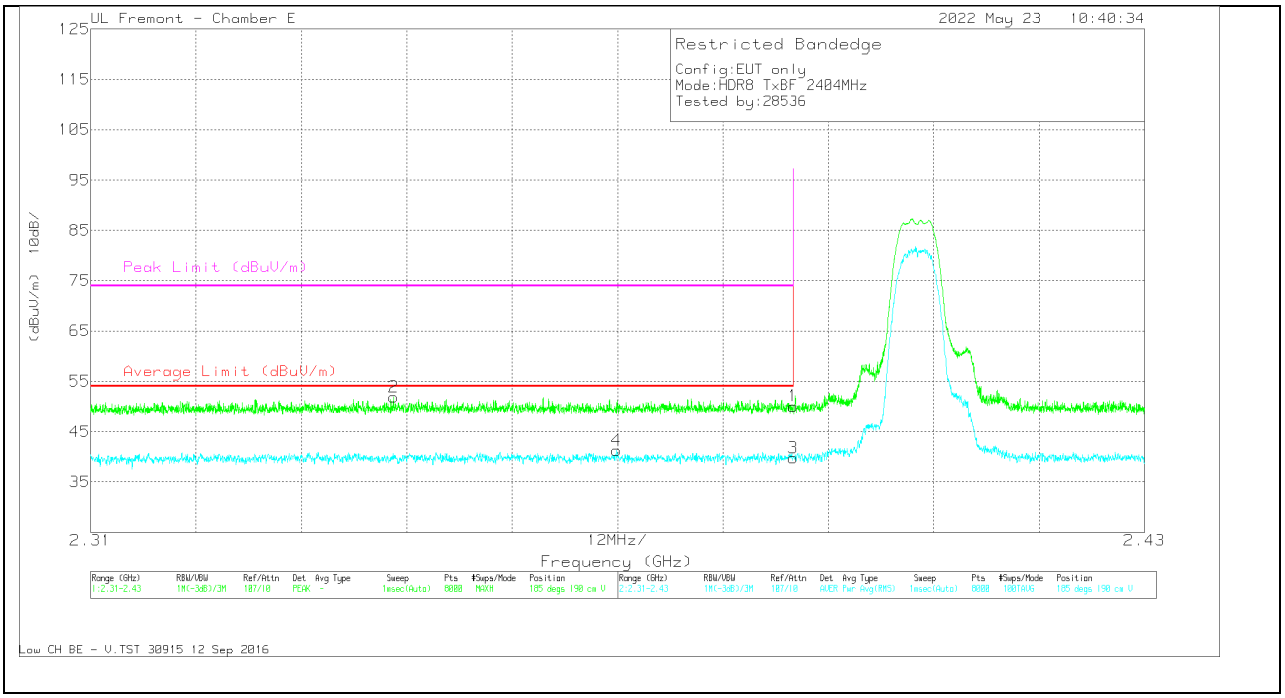
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.344505	45.9	Pk	32	-26	51.9	-	-	74	-22.1	185	190	V
4	* 2.369903	35.24	RMS	32	-26	41.24	54	-12.76	-	-	185	190	V
1	* 2.39	43.97	Pk	32	-25.9	50.07	-	-	74	-23.93	185	190	V
3	* 2.39	33.72	RMS	32	-25.9	39.82	54	-14.18	-	-	185	190	V

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

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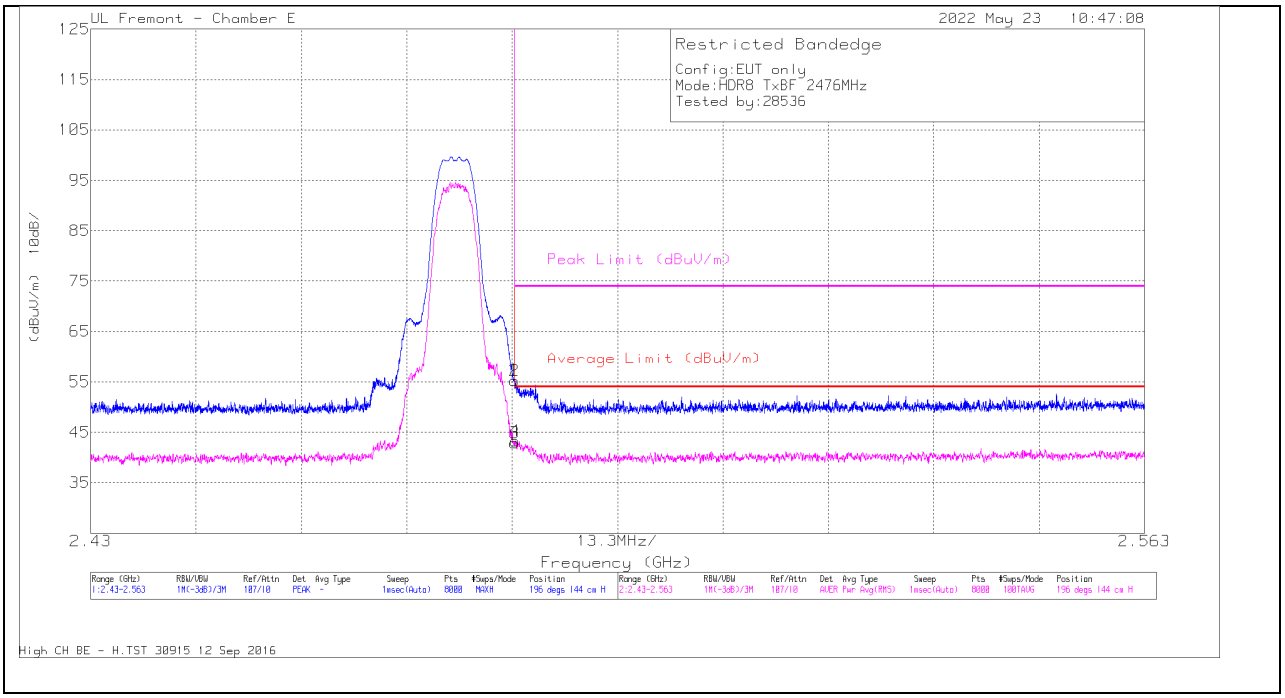
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	49.41	Pk	31.8	-25.9	55.31	-	-	74	-18.69	196	144	H
3	* 2.4835	37.04	RMS	31.8	-25.9	42.94	54	-11.06	-	-	196	144	H
2	* 2.483506	49.34	Pk	31.8	-25.9	55.24	-	-	74	-18.76	196	144	H
4	* 2.483589	37.37	RMS	31.8	-25.9	43.27	54	-10.73	-	-	196	144	H

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

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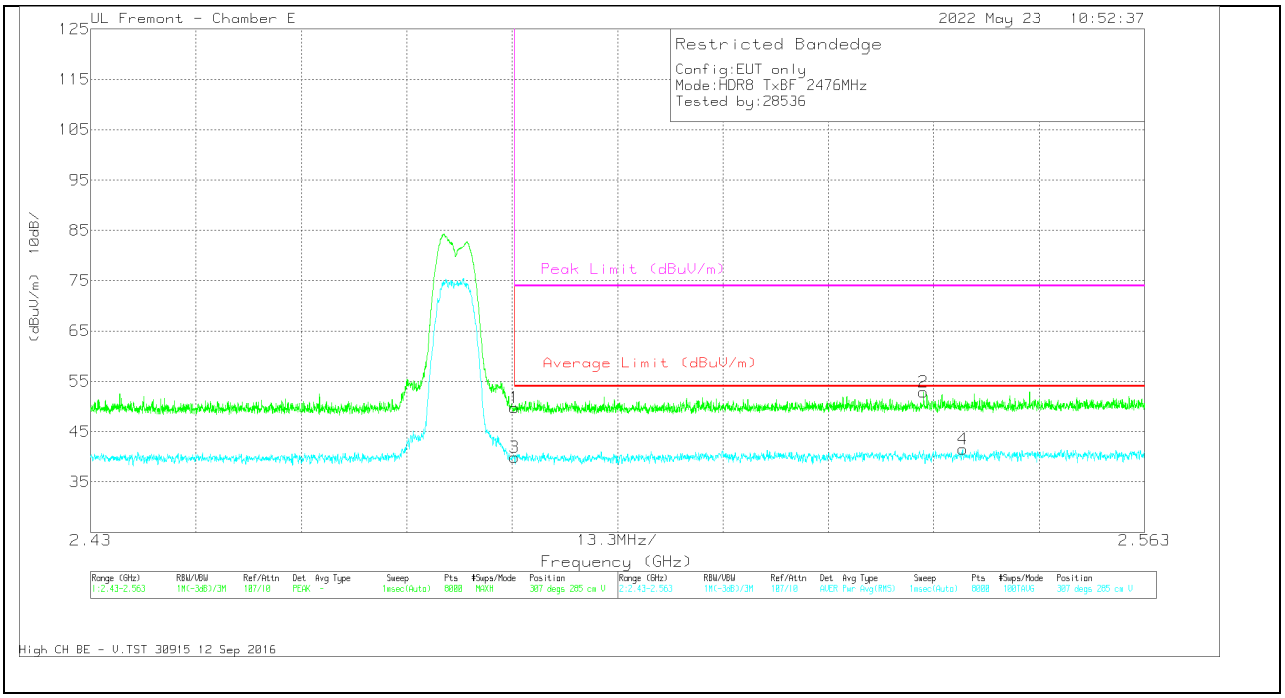
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.87	Pk	31.8	-25.9	49.77	-	-	74	-24.23	307	285	V
3	* 2.4835	34.05	RMS	31.8	-25.9	39.95	54	-14.05	-	-	307	285	V
2	2.535099	46.61	Pk	32.3	-26	52.91	-	-	74	-21.09	307	285	V
4	2.540054	35.2	RMS	32.3	-26	41.5	54	-12.5	-	-	307	285	V

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

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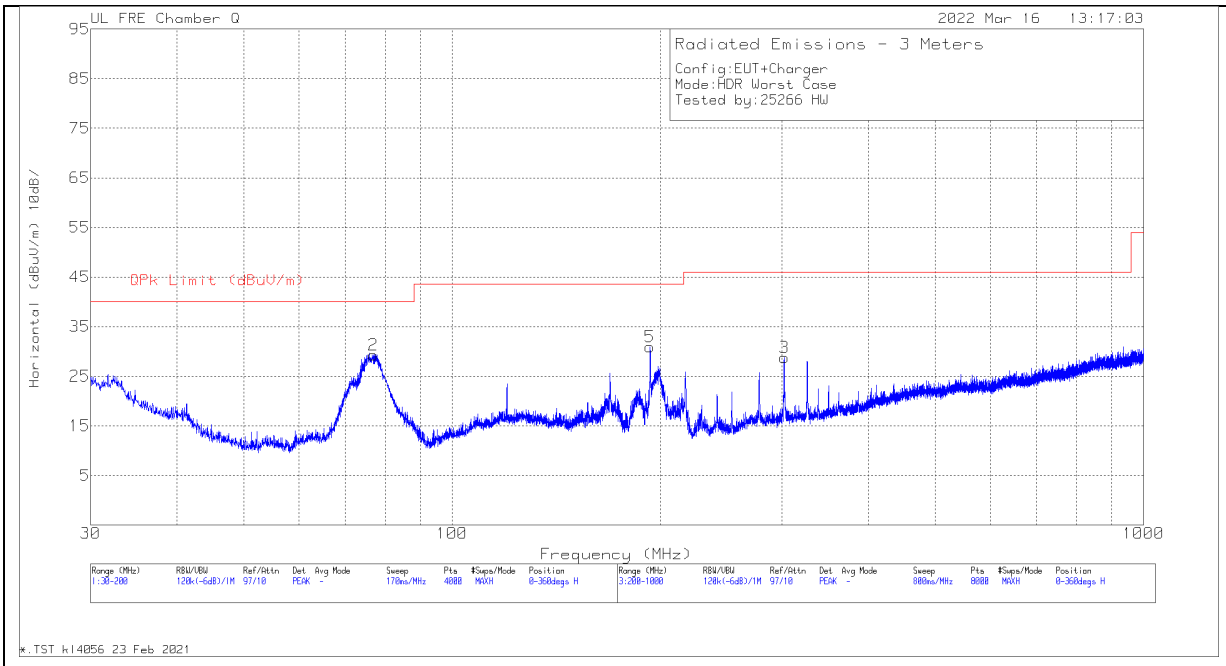
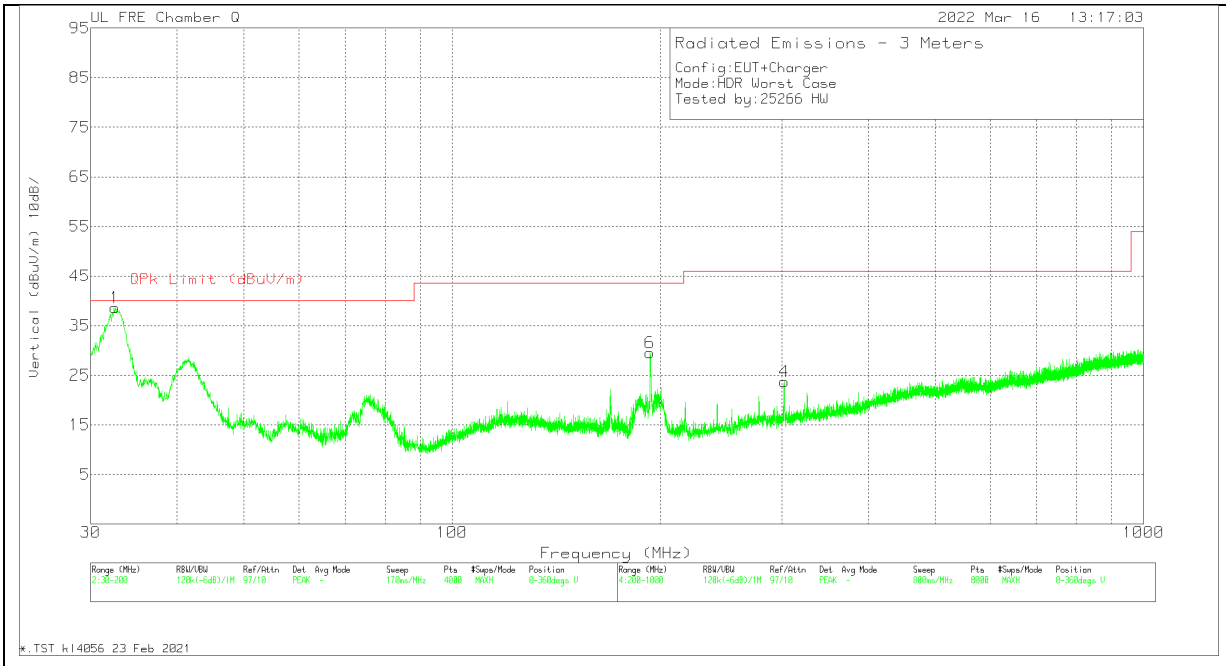
10.3. WORST CASE BELOW 1 GHz

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



HORIZONTAL



VERTICAL

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Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	174373 AF (dB/m)	Amp Cbl (Db)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	32.5082	40.46	Qp	25.1	-32.3	33.26	40	-6.74	37	131	V
2	76.8471	44.16	Qp	13.8	-32	25.96	40	-14.04	301	266	H
5	193.327	46.48	Qp	17.1	-31.4	32.18	43.52	-11.34	336	116	H
6	193.37	41.94	Qp	17.1	-31.4	27.64	43.52	-15.88	214	171	V
4	302.113	33.71	Qp	19	-30.9	21.81	46.02	-24.21	266	171	V
3	302.313	39.39	Qp	19	-30.9	27.49	46.02	-18.53	9	102	H

Qp - Quasi-Peak detector

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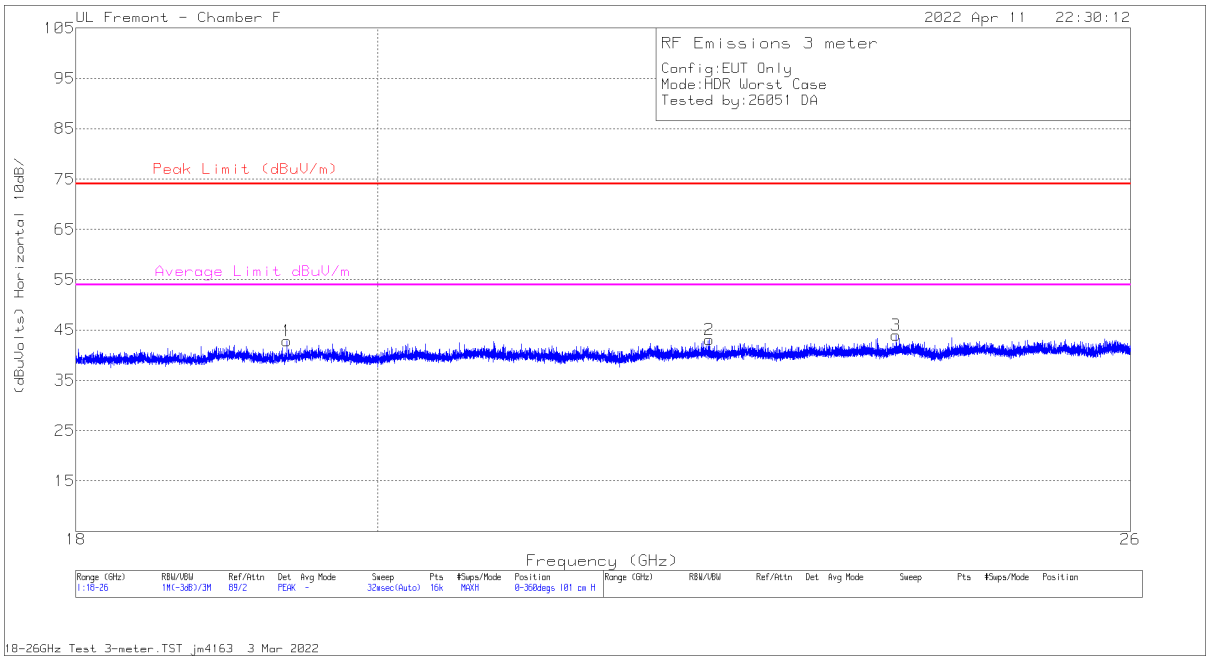
10.4. WORST CASE 18-26 GHz

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



HORIZONTAL

VERTICAL

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18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81140 AF (dB/m)	Cables (dB)	215705 Amp Kit (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 19.3755	53.22	Pk	32.6	18	-61	42.82	74	-31.18	54	-11.18	0-360	101	H
2	* 22.45	51.19	Pk	33.4	19.4	-60.9	43.09	74	-30.91	54	-10.91	0-360	200	H
3	* 23.962	51.41	Pk	33.8	20	-61.2	44.01	74	-29.99	54	-9.99	0-360	101	H
4	* 19.459	52.19	Pk	32.6	18	-61	41.79	74	-32.21	54	-12.21	0-360	200	V
5	* 22.584	50.26	Pk	33.4	19.5	-61	42.16	74	-31.84	54	-11.84	0-360	200	V
6	* 23.8215	50.33	Pk	33.7	20	-61.2	42.83	74	-31.17	54	-11.17	0-360	200	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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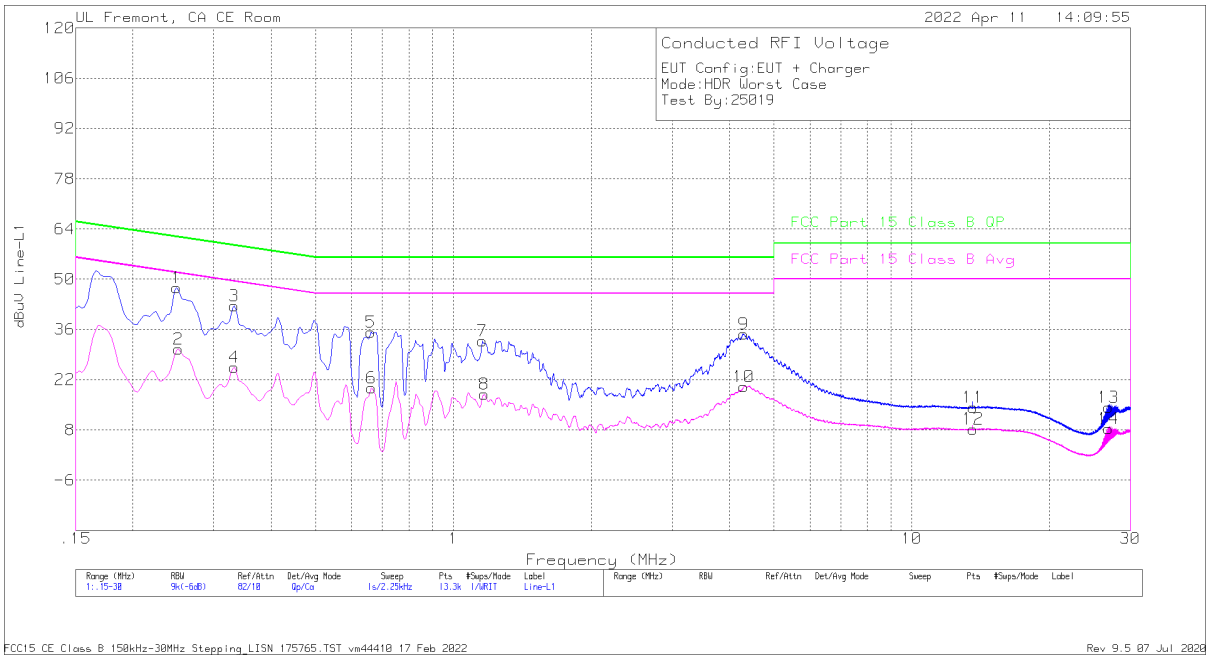
11.1. AC Power Line With AC/DC Adapter

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L1 (dB)	C1&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP (dBuV)	QP Margin (dB)	FCC Part 15 Class B Avg (dBuV)	Av(CISPR)Margin (dB)
2	.25125	21.18	Ca	0	0	9.3	30.48	-	-	51.72	-21.24
4	.33225	16.13	Ca	0	0	9.3	25.43	-	-	49.39	-23.96
6	.663	10.32	Ca	0	.1	9.3	19.72	-	-	46	-26.28
8	1.16925	8.56	Ca	0	.1	9.3	17.96	-	-	46	-28.04
10	4.30013	10.71	Ca	0	.1	9.3	20.11	-	-	46	-25.89
12	13.6185	-1.31	Ca	.1	.2	9.3	8.29	-	-	50	-41.71
14	26.87775	-1.55	Ca	.2	.3	9.4	8.35	-	-	50	-41.65
1	.249	38.32	Qp	0	0	9.3	47.62	61.79	-14.17	-	-
3	.33225	33.28	Qp	0	0	9.3	42.58	59.39	-16.81	-	-
5	.66075	25.88	Qp	0	.1	9.3	35.28	56	-20.72	-	-
7	1.158	23.35	Qp	0	.1	9.3	32.75	56	-23.25	-	-
9	4.2945	25.35	Qp	0	.1	9.3	34.75	56	-21.25	-	-
11	13.62075	4.77	Qp	.1	.2	9.3	14.37	60	-45.63	-	-
13	26.87775	4.45	Qp	.2	.3	9.4	14.35	60	-45.65	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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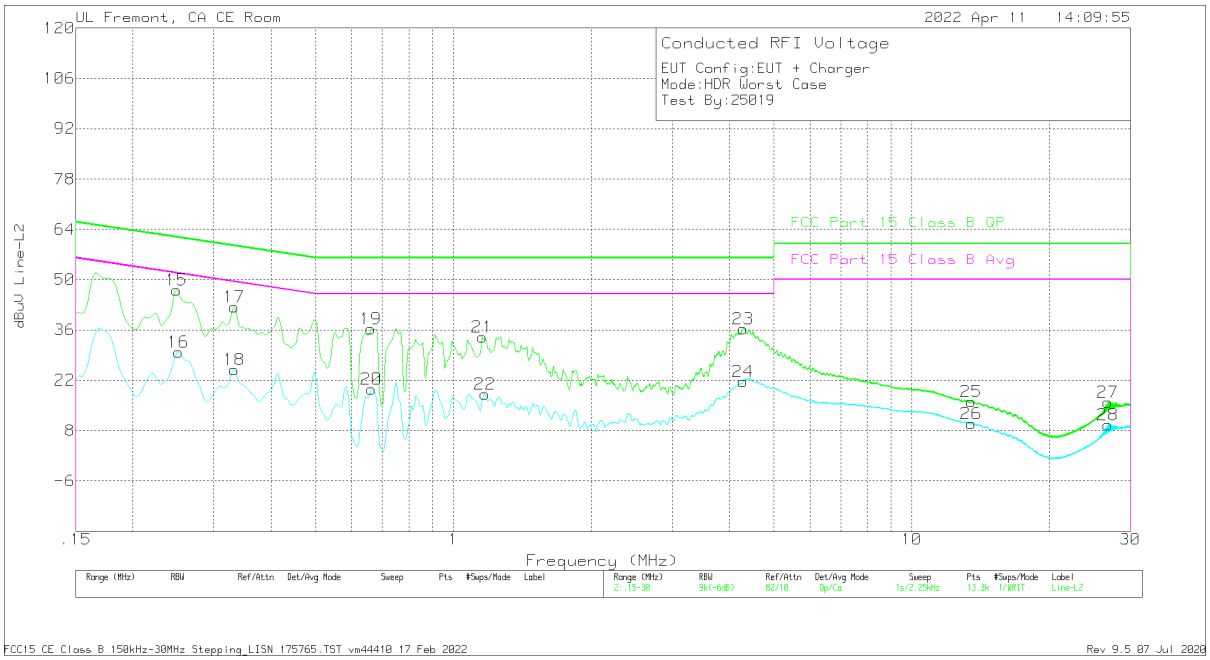
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L2 (dB)	C2&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR)Margin (dB)
16	.25125	20.6	Ca	0	0	9.3	29.9	-	-	51.72	-21.82
18	.33225	15.67	Ca	0	0	9.3	24.97	-	-	49.39	-24.42
20	.663	10.13	Ca	0	.1	9.3	19.53	-	-	46	-26.47
22	1.1715	8.8	Ca	0	.1	9.3	18.2	-	-	46	-27.8
24	4.28325	12.31	Ca	0	.1	9.3	21.71	-	-	46	-24.29
26	13.48688	.42	Ca	.1	.2	9.3	10.02	-	-	50	-39.98
28	26.80125	-.25	Ca	.2	.3	9.4	9.65	-	-	50	-40.35
15	.249	37.89	Qp	0	0	9.3	47.19	61.79	-14.6	-	-
17	.33225	33.03	Qp	0	0	9.3	42.33	59.39	-17.06	-	-
19	.66075	26.95	Qp	0	.1	9.3	36.35	56	-19.65	-	-
21	1.158	24.59	Qp	0	.1	9.3	33.99	56	-22.01	-	-
23	4.28325	26.94	Qp	0	.1	9.3	36.34	56	-19.66	-	-
25	13.488	6.45	Qp	.1	.2	9.3	16.05	60	-43.95	-	-
27	26.80125	5.94	Qp	.2	.3	9.4	15.84	60	-44.16	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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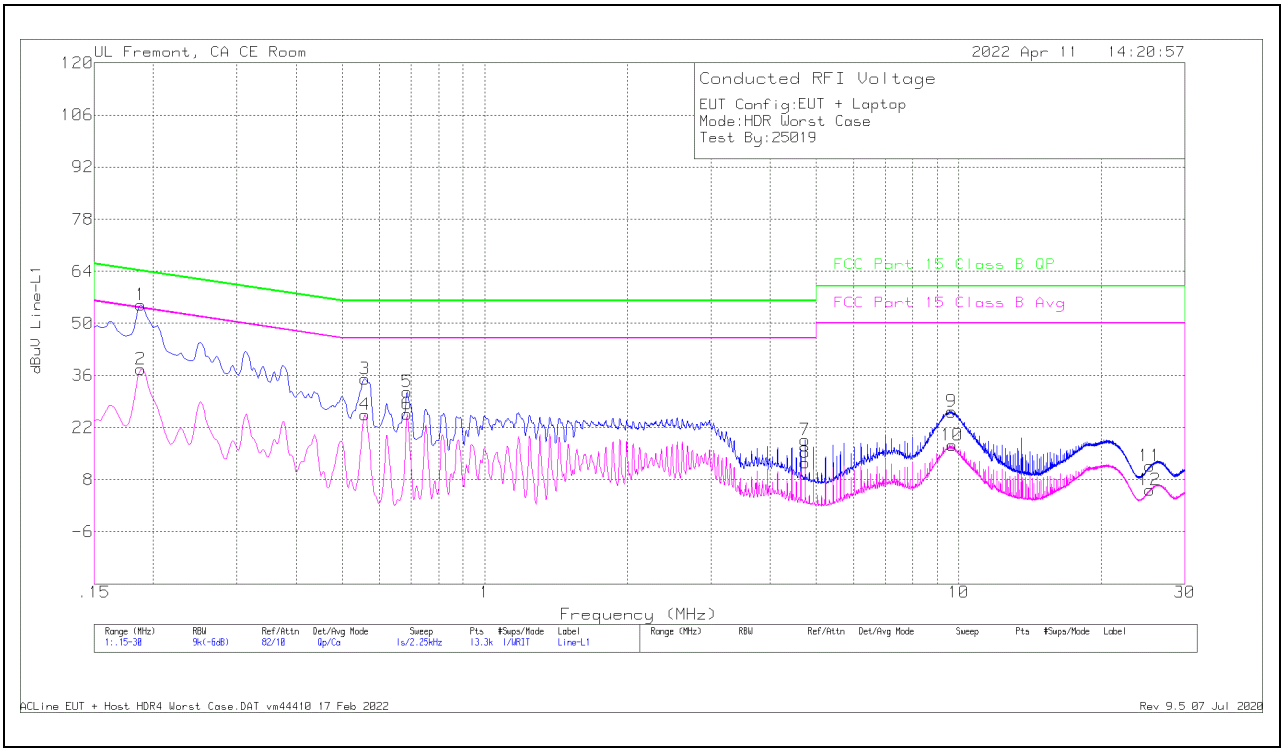
11.2. AC Power Line With Laptop

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L1 (dB)	C1&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR)Margin (dB)
2	.18825	28.21	Ca	.1	0	9.4	37.71	-	-	54.11	-16.4
4	.5595	16.18	Ca	0	0	9.3	25.48	-	-	46	-20.52
6	.6855	16.18	Ca	0	.1	9.3	25.58	-	-	46	-20.42
8	4.74	3.23	Ca	0	.1	9.3	12.63	-	-	46	-33.37
10	9.6765	7.61	Ca	.1	.2	9.3	17.21	-	-	50	-32.79
12	25.28475	-4.6	Ca	.2	.3	9.3	5.2	-	-	50	-44.8
1	.18825	45.49	Qp	.1	0	9.4	54.99	64.11	-9.12	-	-
3	.5595	25.79	Qp	0	0	9.3	35.09	56	-20.91	-	-
5	.6855	22.18	Qp	0	.1	9.3	31.58	56	-24.42	-	-
7	4.74	9.23	Qp	0	.1	9.3	18.63	56	-37.37	-	-
9	9.66975	16.67	Qp	.1	.2	9.3	26.27	60	-33.73	-	-
11	25.314	1.91	Qp	.2	.3	9.3	11.71	60	-48.29	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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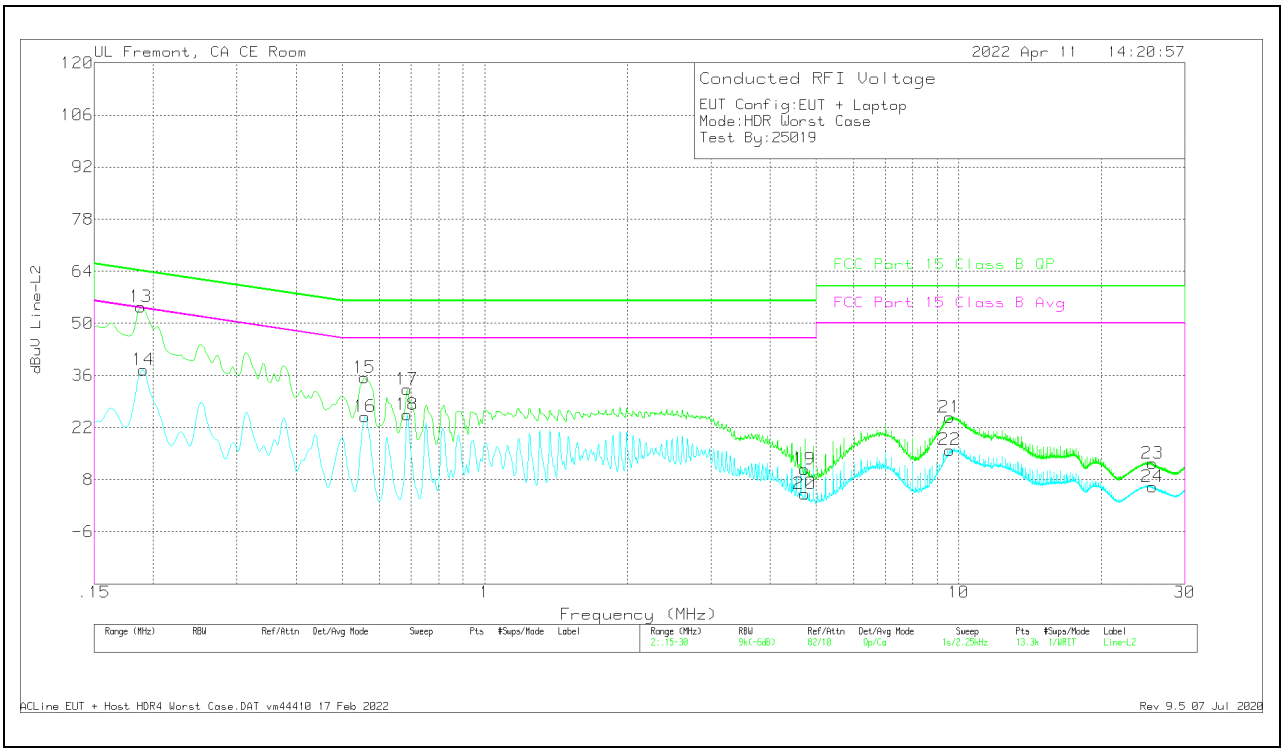
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L2 (dB)	C2&C3 cable (dB)	TekBox Limiter TBFL1 Model 207 (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP dBuV	QP Margin (dB)	FCC Part 15 Class B Avg dBuV	Av(CISPR)Margin (dB)
14	.1905	28.07	Ca	.1	0	9.3	37.47	-	-	54.01	-16.54
16	.5595	15.71	Ca	0	0	9.3	25.01	-	-	46	-20.99
18	.6855	16.04	Ca	0	.1	9.3	25.44	-	-	46	-20.56
20	4.73325	-5.26	Ca	0	.1	9.3	4.14	-	-	46	-41.86
22	9.57975	6.47	Ca	0	.2	9.3	15.97	-	-	50	-34.03
24	25.611	-3.7	Ca	.2	.3	9.3	6.1	-	-	50	-43.9
13	.18825	45	Qp	.1	0	9.4	54.5	64.11	-9.61	-	-
15	.55725	26.06	Qp	0	0	9.3	35.36	56	-20.64	-	-
17	.6855	22.86	Qp	0	.1	9.3	32.26	56	-23.74	-	-
19	4.72425	1.43	Qp	0	.1	9.3	10.83	56	-45.17	-	-
21	9.57975	15.26	Qp	0	.2	9.3	24.76	60	-35.24	-	-
23	25.6155	2.64	Qp	.2	.3	9.3	12.44	60	-47.56	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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12. SETUP PHOTOS

Please refer to 14040863-EP1V1 for setup photos

END OF TEST REPORT

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