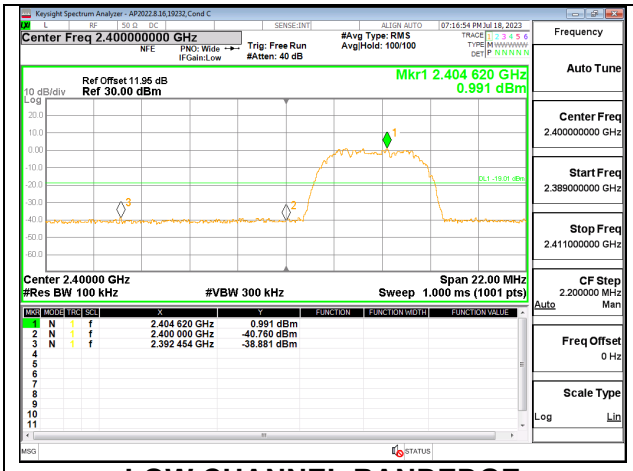
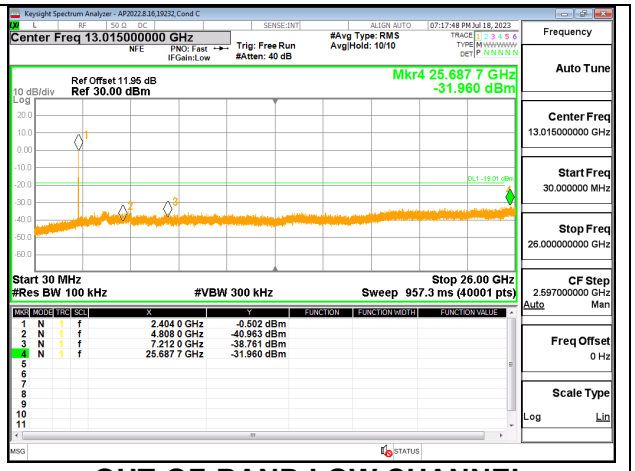
9.7.7. LOW POWER HDR (HDR8)

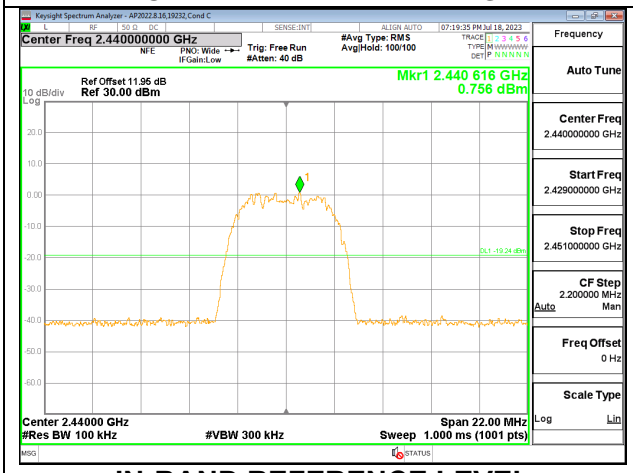
ANT 4



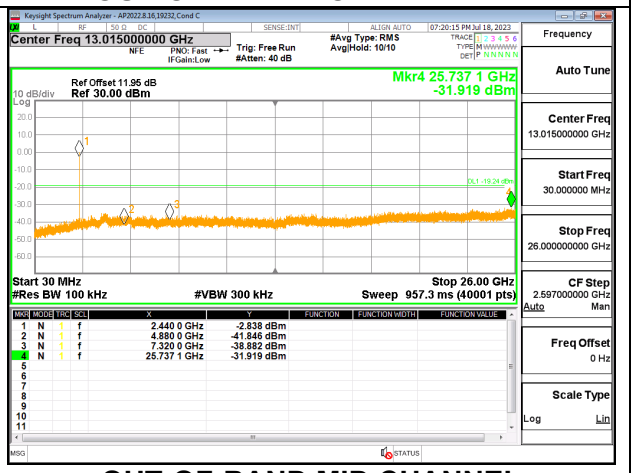
LOW CHANNEL BANDEDGE



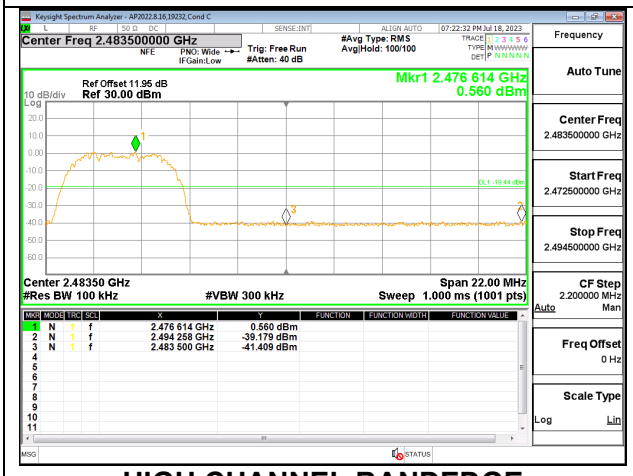
OUT-OF-BAND LOW CHANNEL



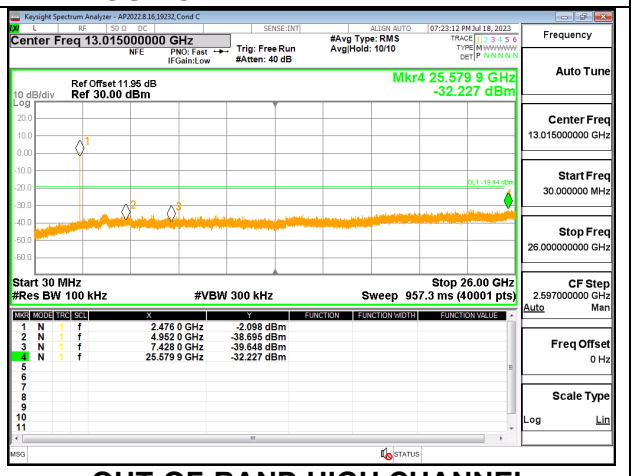
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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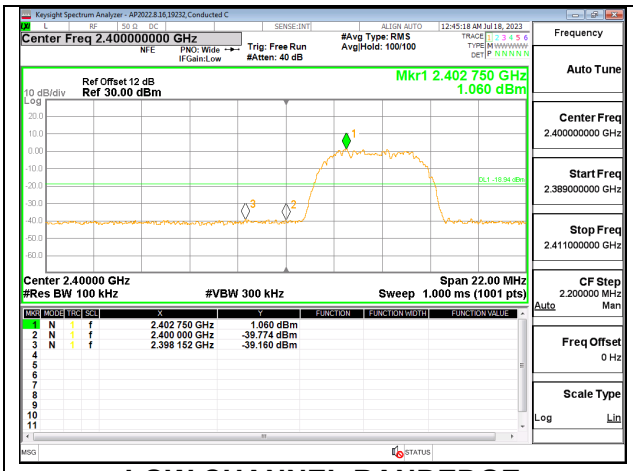
ANT 3



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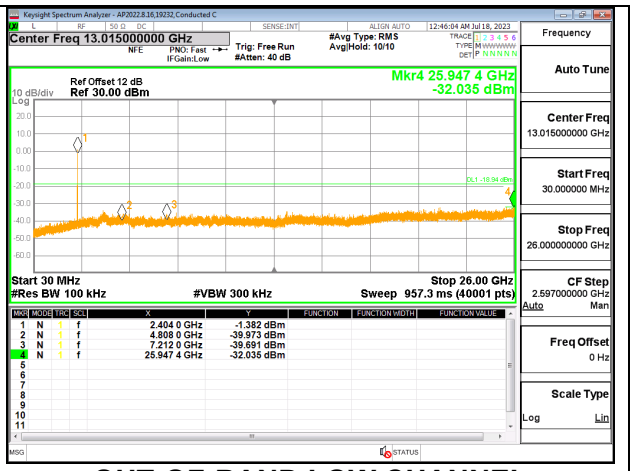

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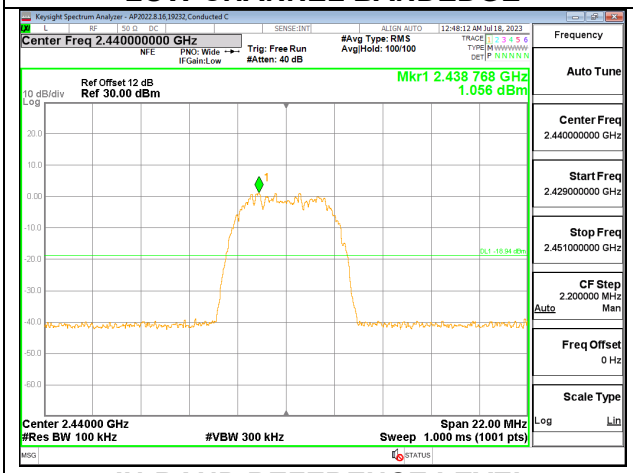
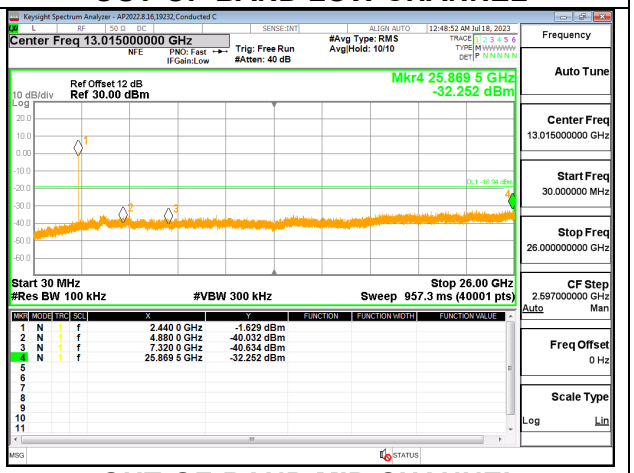
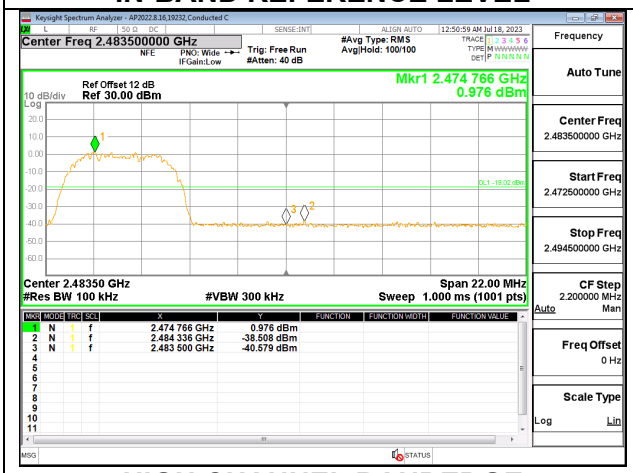


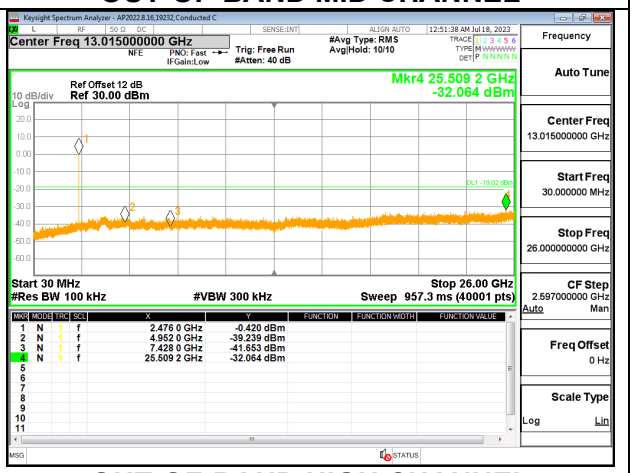
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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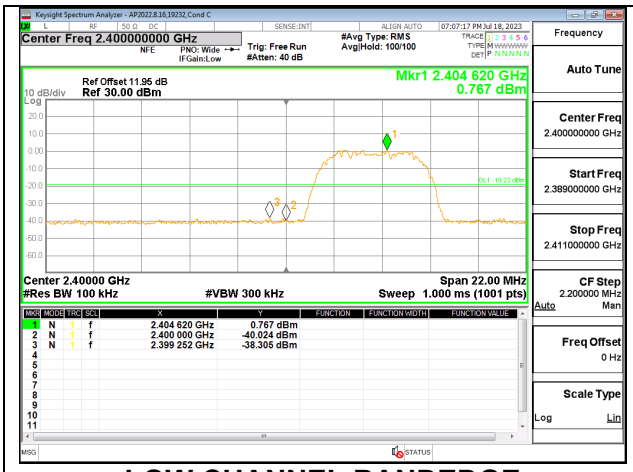
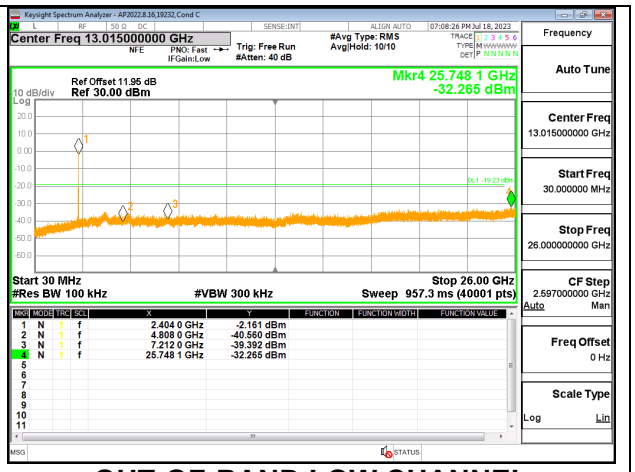
9.7.8. LOW POWER HDR TXBF (HDR8)

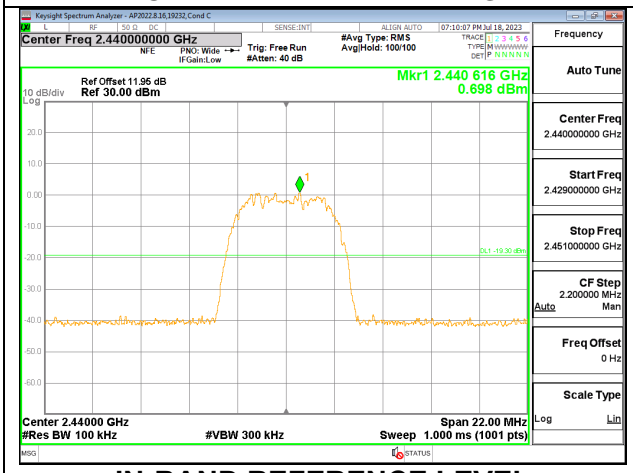
ANT 4



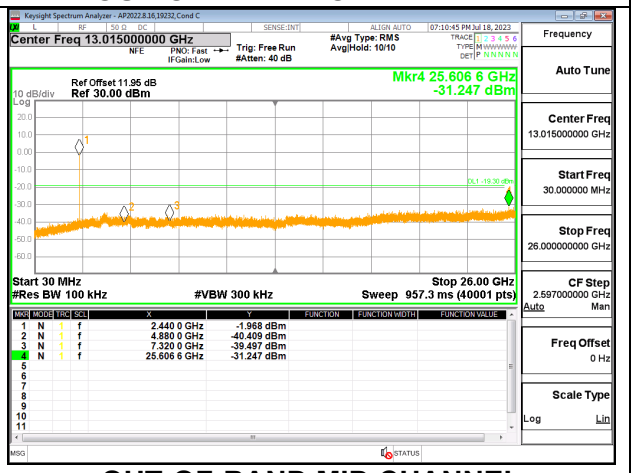
LOW CHANNEL BANDEDGE



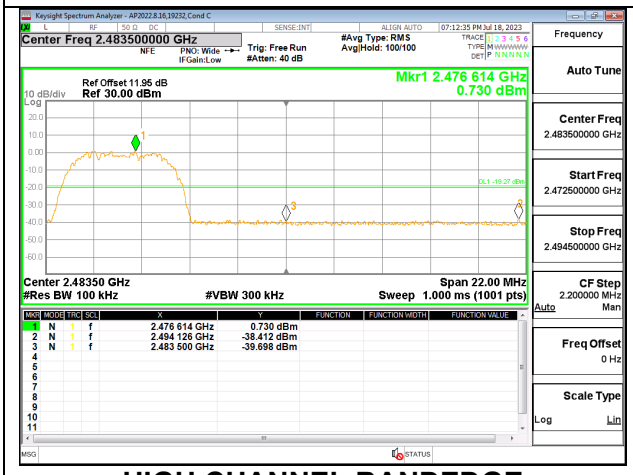
OUT-OF-BAND LOW CHANNEL



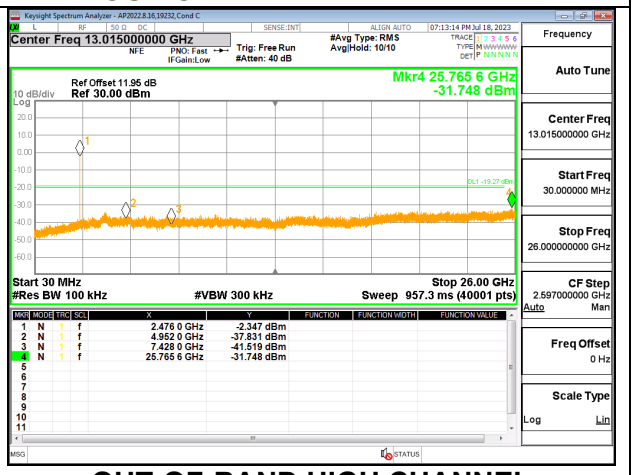
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



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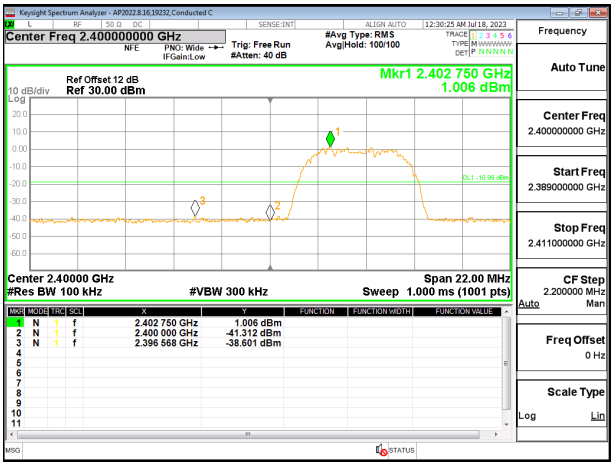
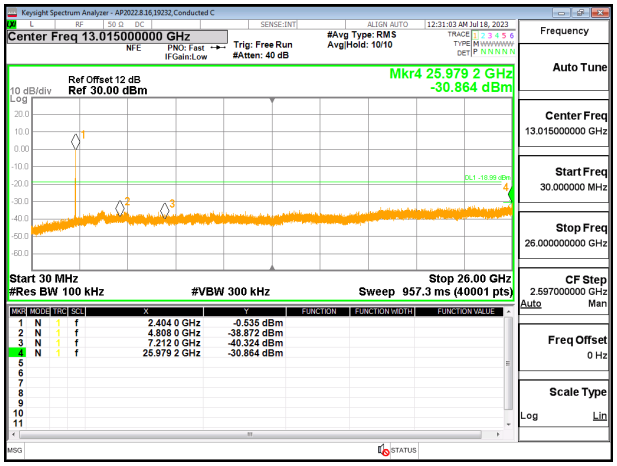
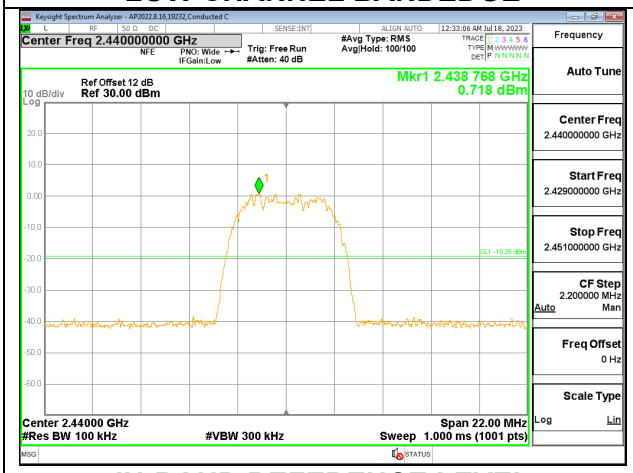


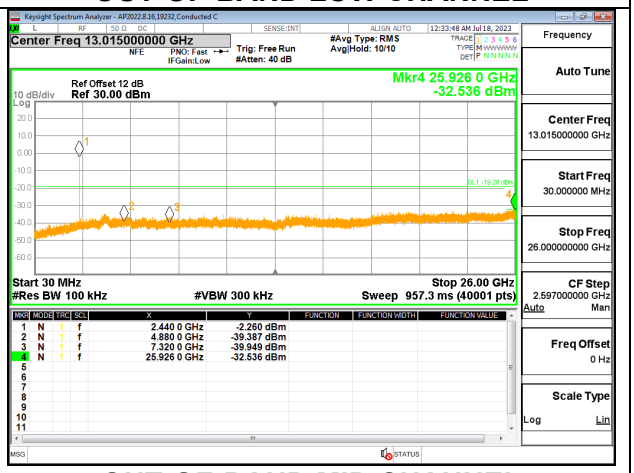
LOW CHANNEL BANDEDGE



OUT-OF-BAND LOW CHANNEL

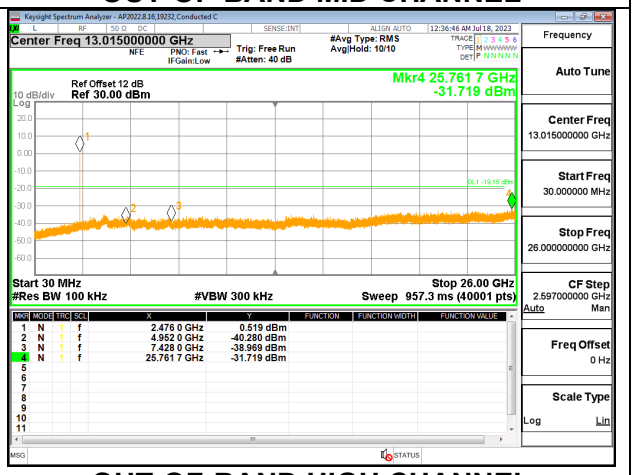


IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

HIGH CHANNEL BANDEDGE



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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 scans above 1 GHz test, two methods are used: the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T (10 Hz) video bandwidth with peak detector for average measurements; and other method with 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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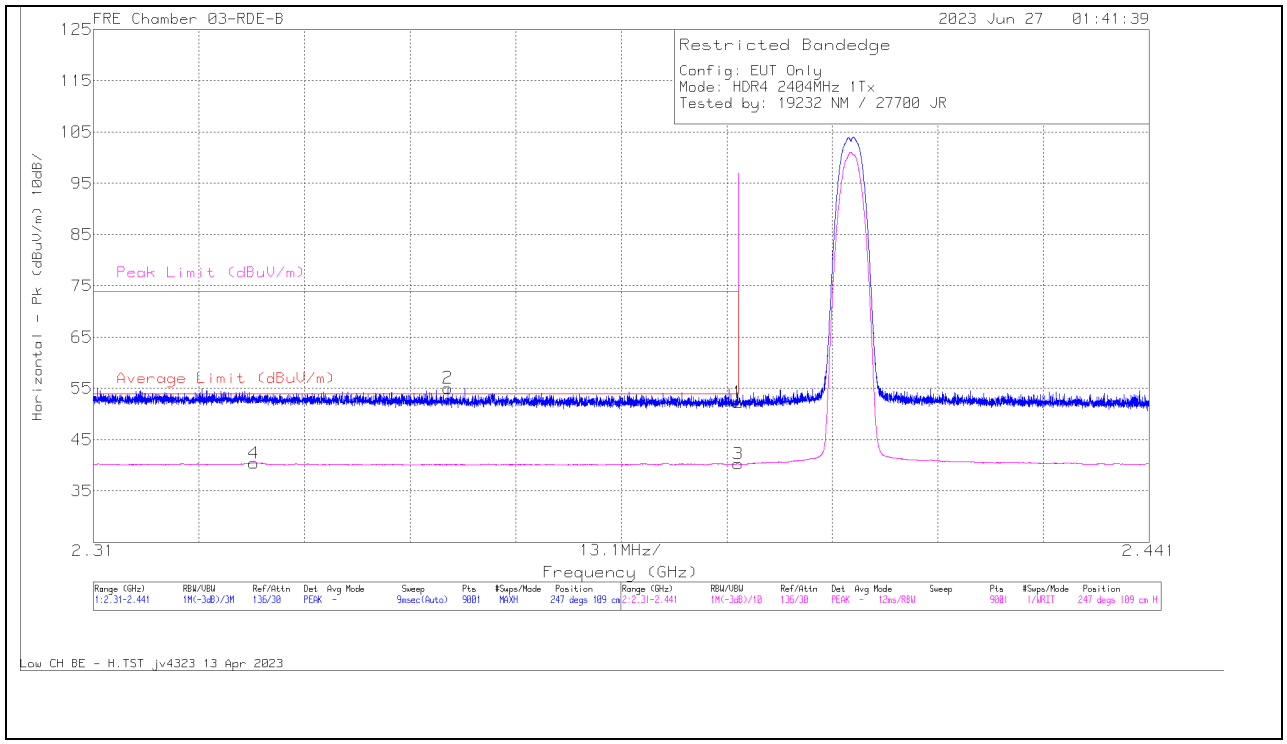
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.23	Pk	32.2	0	-41.2	52.23	-	-	74	-21.77	247	109	H
2	* 2.353974	64.18	Pk	32.1	0	-41.2	55.08	-	-	74	-18.92	247	109	H
3	* 2.39	49.28	VA1T	32.2	0	-41.2	40.28	54	-13.72	-	-	247	109	H
4	* 2.329927	49.53	VA1T	32.1	0	-41.2	40.43	54	-13.57	-	-	247	109	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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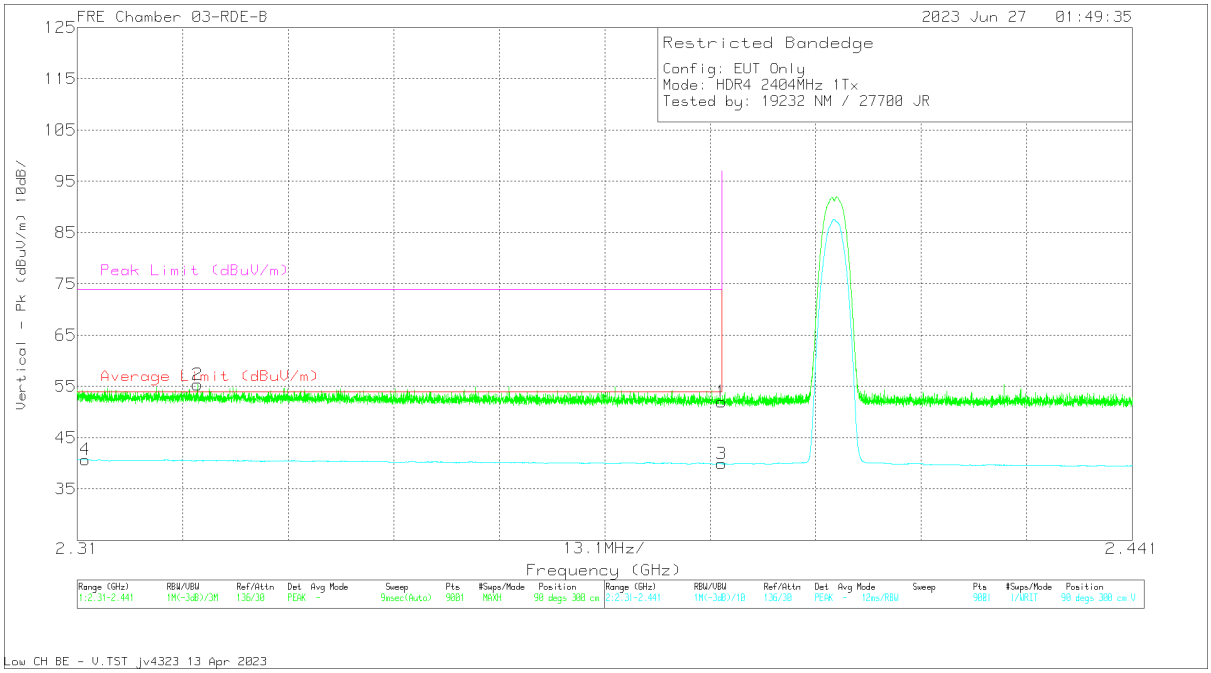
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.98	Pk	32.2	0	-41.2	51.98	-	-	74	-22.02	90	300	V
2	* 2.324934	64.47	Pk	32.1	0	-41.2	55.37	-	-	74	-18.63	90	300	V
3	* 2.39	48.91	VA1T	32.2	0	-41.2	39.91	54	-14.09	-	-	90	300	V
4	* 2.31099	49.82	VA1T	32	0	-41.1	40.72	54	-13.28	-	-	90	300	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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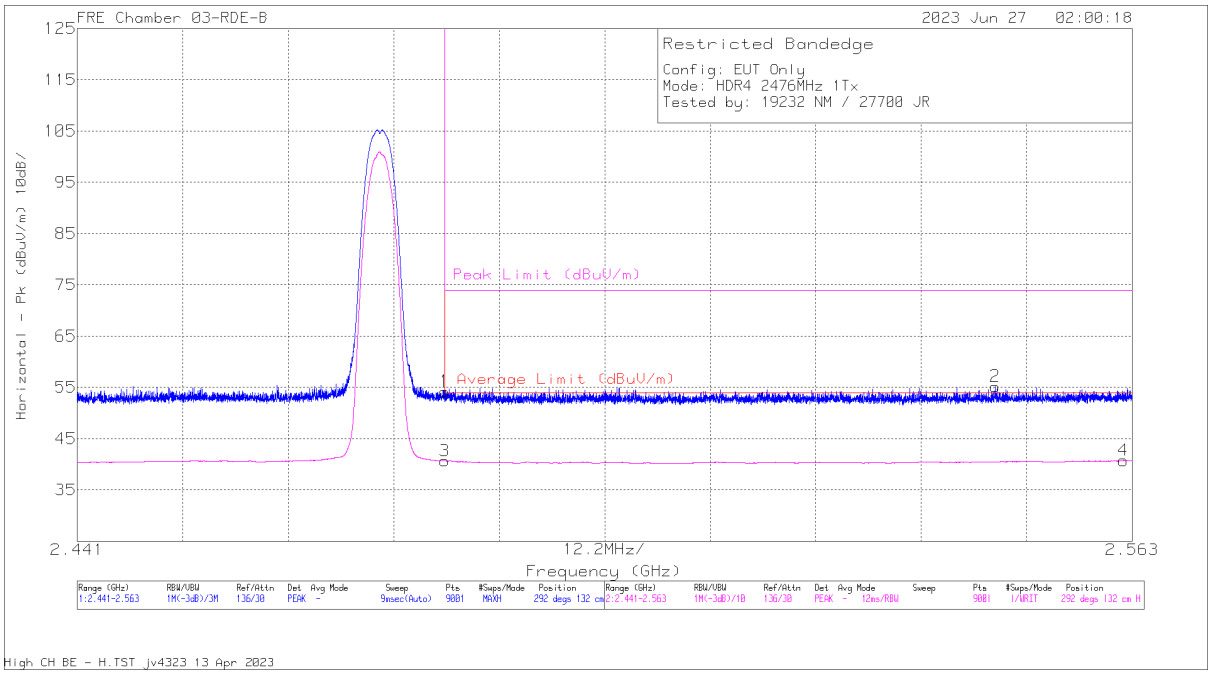
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	63.17	Pk	32.2	0	-41.15	54.22	-	-	74	-19.78	292	132	H
3	* 2.4835	49.62	VA1T	32.2	0	-41.15	40.67	54	-13.33	-	-	292	132	H
2	2.547143	63.87	Pk	32.3	0	-40.99	55.18	-	-	74	-18.82	292	132	H
4	2.561987	49.25	VA1T	32.3	0	-40.8	40.75	54	-13.25	-	-	292	132	H

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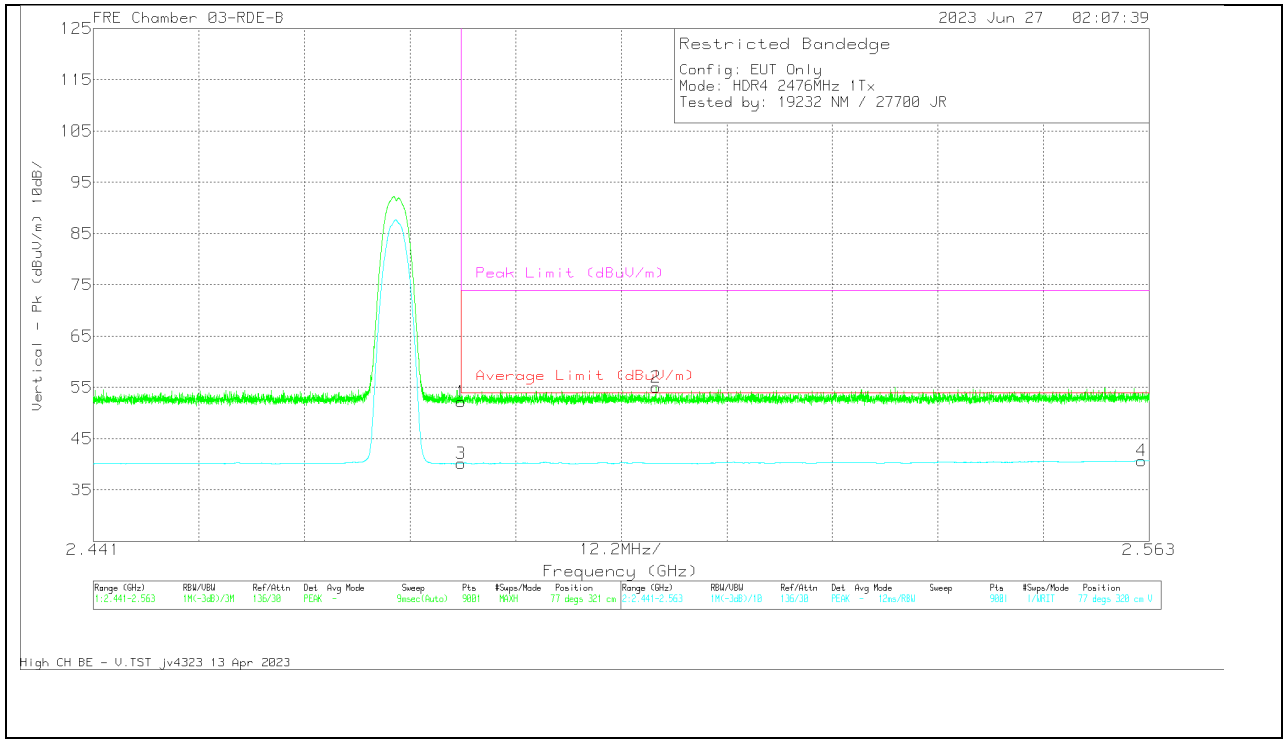
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.15	Pk	32.2	0	-41.15	52.2	-	-	74	-21.8	77	321	V
3	* 2.4835	49.13	VA1T	32.2	0	-41.15	40.18	54	-13.82	-	-	77	320	V
2	2.506015	63.92	Pk	32.2	0	-41.1	55.02	-	-	74	-18.98	77	321	V
4	2.562096	49.19	VA1T	32.3	0	-40.8	40.69	54	-13.31	-	-	77	320	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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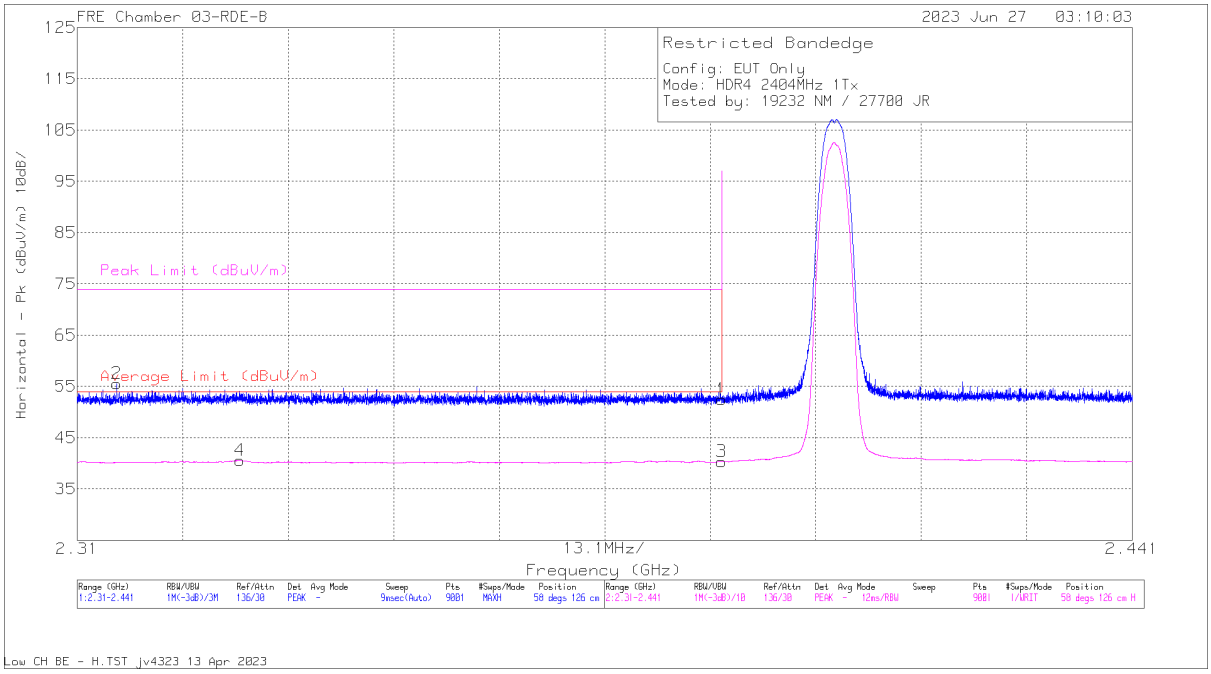
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.47	Pk	32.2	0	-41.2	52.47	-	-	74	-21.53	58	126	H
2	* 2.314905	64.67	Pk	32.1	0	-41.21	55.56	-	-	74	-18.44	58	126	H
3	* 2.39	49.34	VA1T	32.2	0	-41.2	40.34	54	-13.66	-	-	58	126	H
4	* 2.330175	49.66	VA1T	32.1	0	-41.2	40.56	54	-13.44	-	-	58	126	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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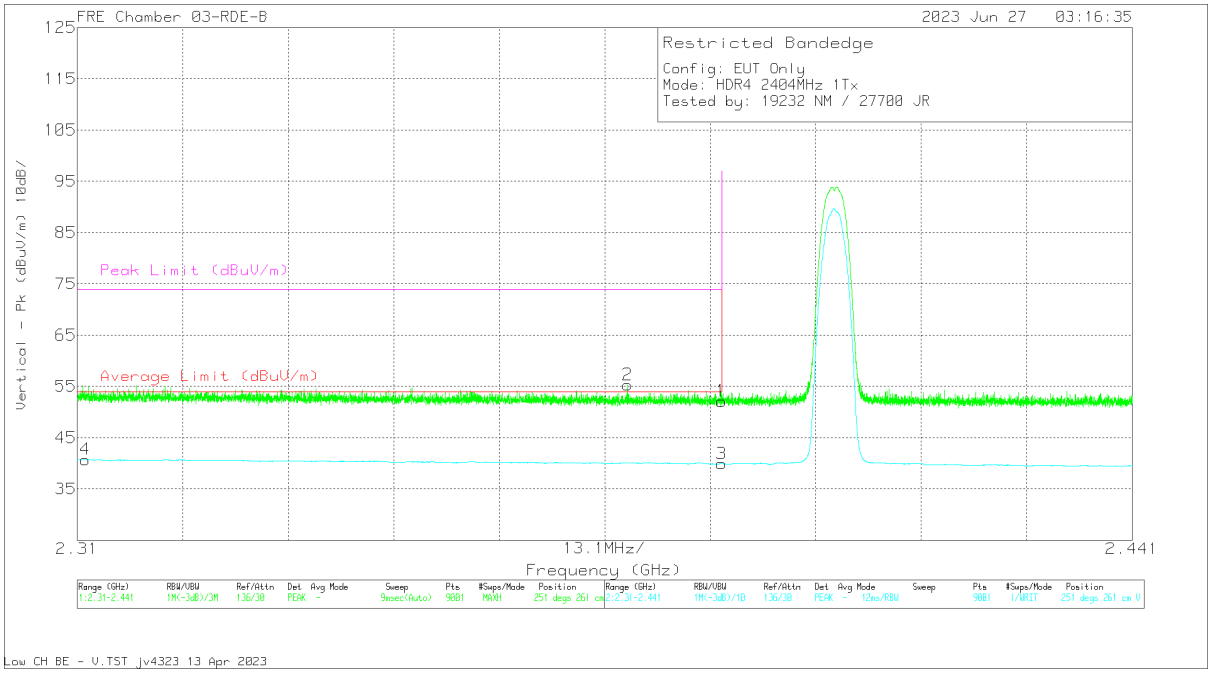
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.12	Pk	32.2	0	-41.2	52.12	-	-	74	-21.88	251	261	V
2	* 2.378355	64.39	Pk	32.1	0	-41.2	55.29	-	-	74	-18.71	251	261	V
3	* 2.39	48.93	VA1T	32.2	0	-41.2	39.93	54	-14.07	-	-	251	261	V
4	* 2.31099	49.84	VA1T	32	0	-41.1	40.74	54	-13.26	-	-	251	261	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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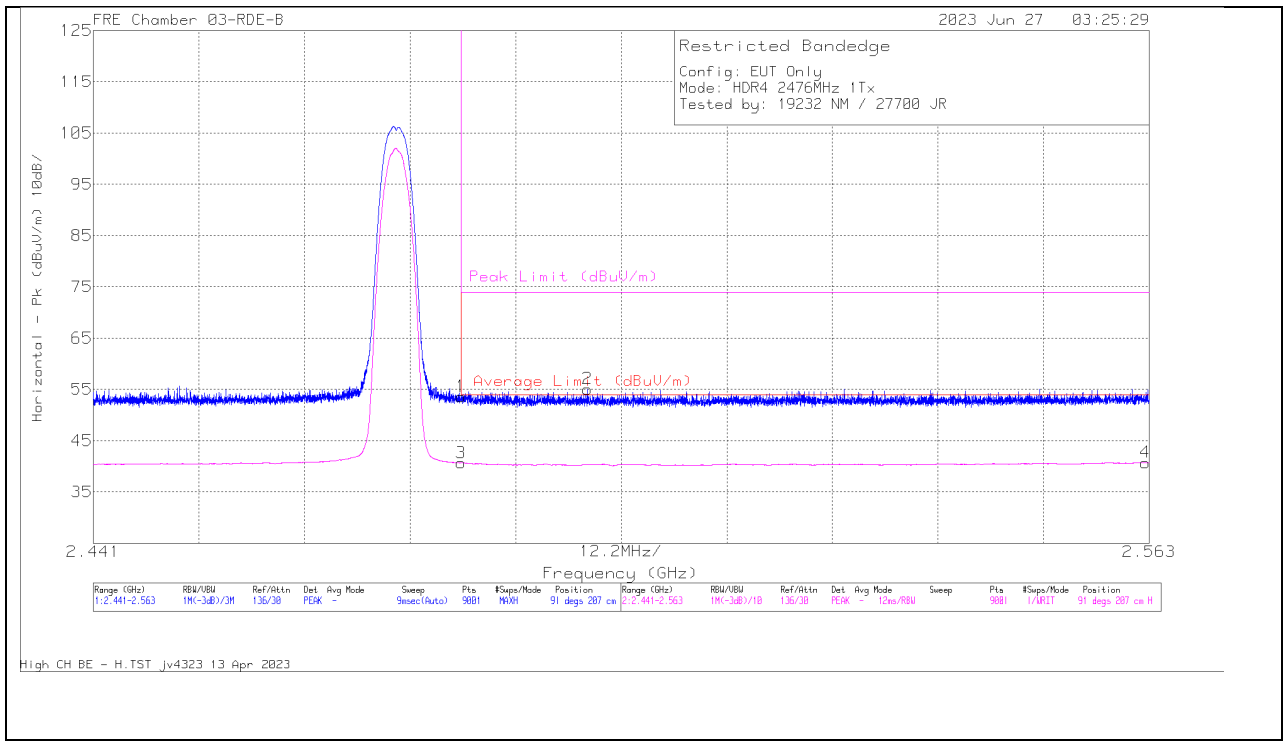
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	62.54	Pk	32.2	0	-41.15	53.59	-	-	74	-20.41	91	207	H
2	* 2.498111	64	Pk	32.2	0	-41.1	55.1	-	-	74	-18.9	91	207	H
3	* 2.4835	49.61	VA1T	32.2	0	-41.15	40.66	54	-13.34	-	-	91	207	H
4	2.562543	49.24	VA1T	32.3	0	-40.8	40.74	54	-13.26	-	-	91	207	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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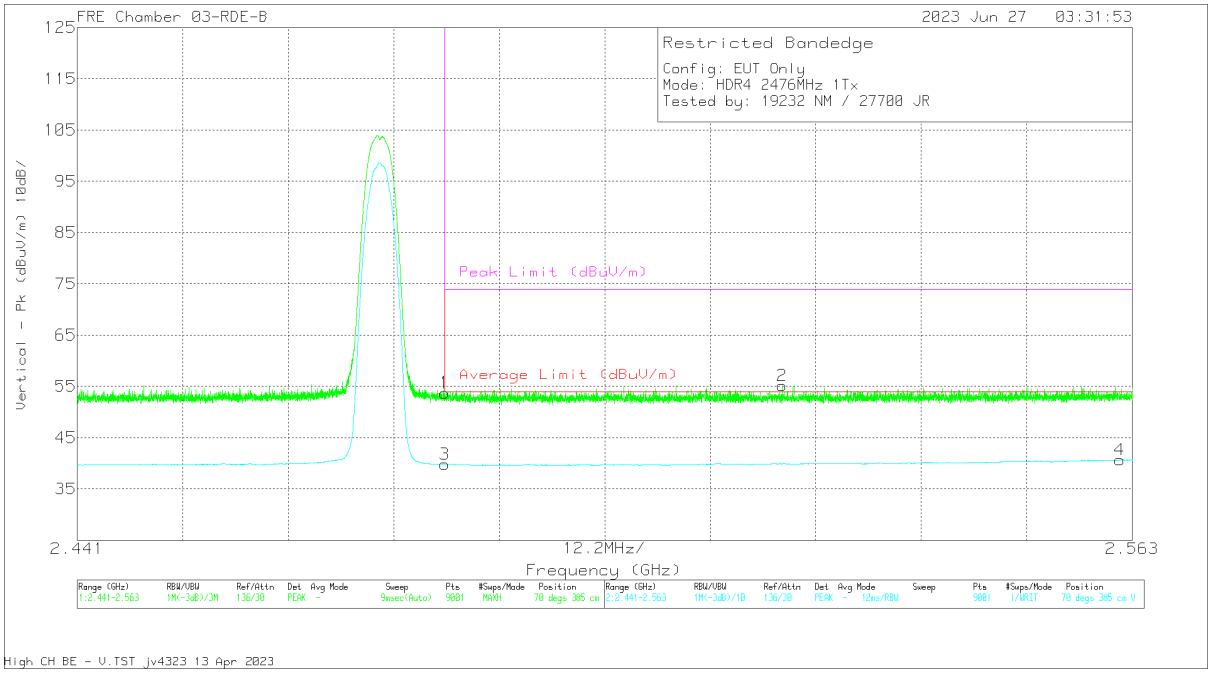
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	62.67	Pk	32.2	0	-41.15	53.72	-	-	74	-20.28	70	385	V
3	* 2.4835	48.75	VA1T	32.2	0	-41.15	39.8	54	-14.2	-	-	70	385	V
2	2.522499	63.85	Pk	32.3	0	-41	55.15	-	-	74	-18.85	70	385	V
4	2.561567	49.19	VA1T	32.3	0	-40.84	40.65	54	-13.35	-	-	70	385	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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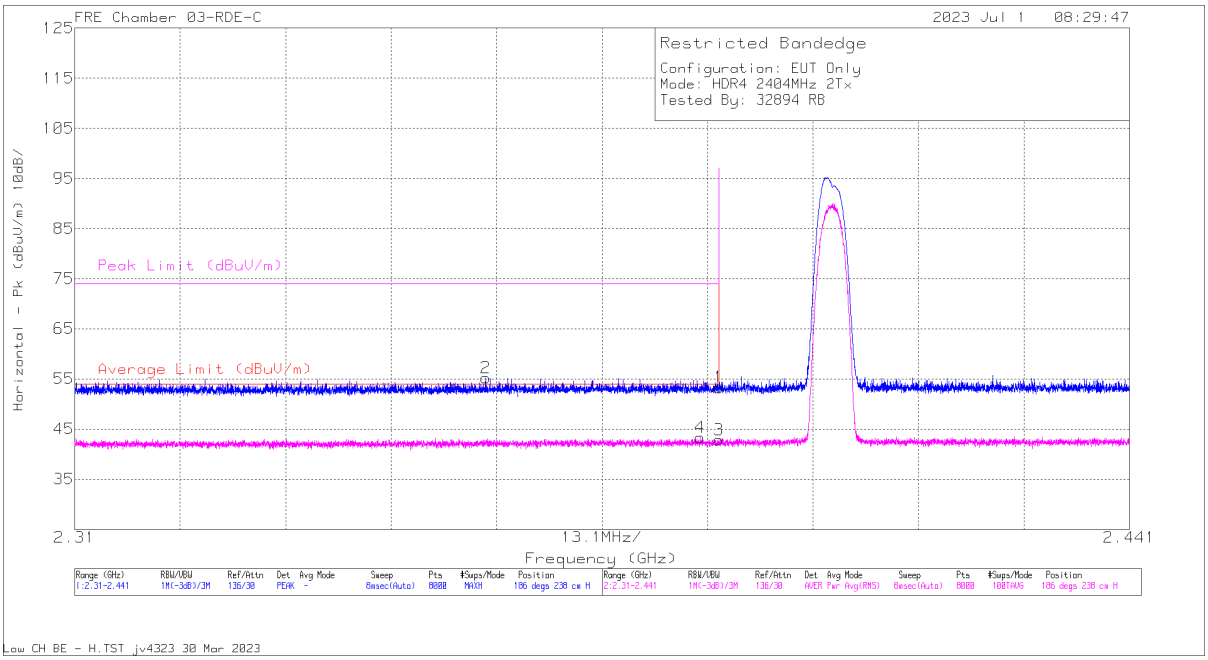
10.2.2. HIGH POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.99	Pk	32.1	-39.8	53.29	-	-	74	-20.71	186	238	H
2	* 2.361031	63.15	Pk	32	-39.9	55.25	-	-	74	-18.75	186	238	H
3	* 2.39	50.58	RMS	32.1	-39.8	42.88	54	-11.12	-	-	186	238	H
4	* 2.387709	51.11	RMS	32.1	-39.9	43.31	54	-10.69	-	-	186	238	H

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

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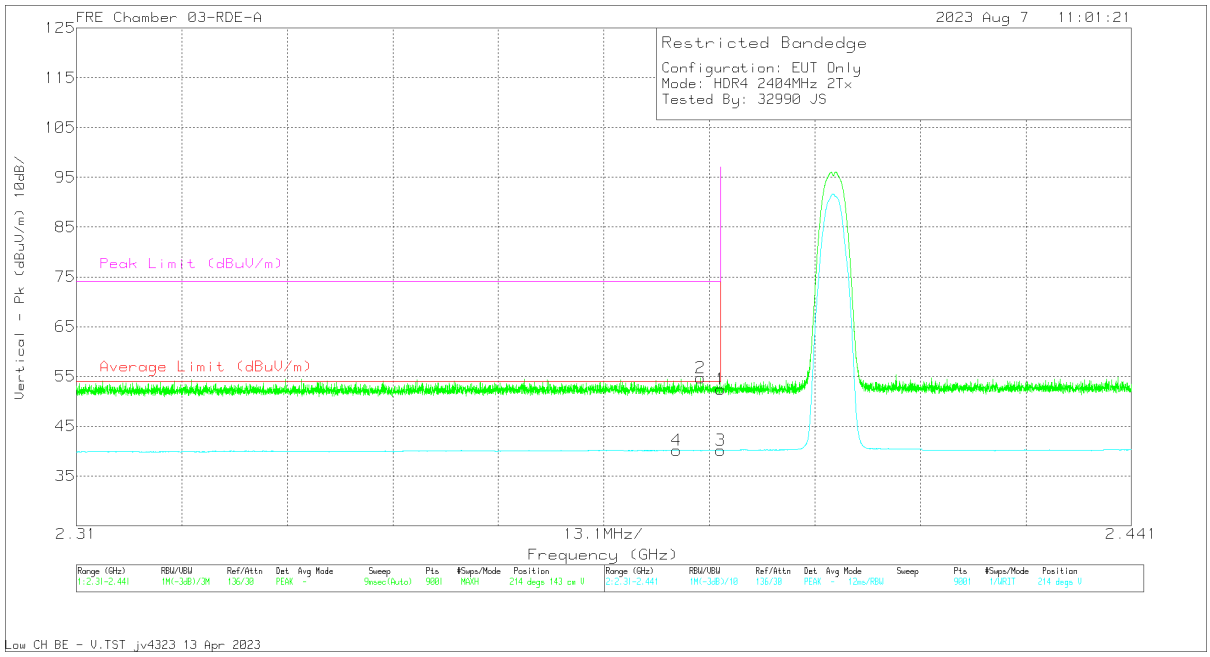
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB) 3mH	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61	Pk	31.9	0	-40.42	52.48	-	-	74	-21.52	214	143	V
2	* 2.387511	63.25	Pk	31.9	0	-40.43	54.72	-	-	74	-19.28	214	143	V
3	* 2.39	48.73	VA1T	31.9	0	-40.42	40.21	54	-13.79	-	-	214	143	V
4	* 2.384512	48.71	VA1T	31.9	0	-40.38	40.23	54	-13.77	-	-	214	143	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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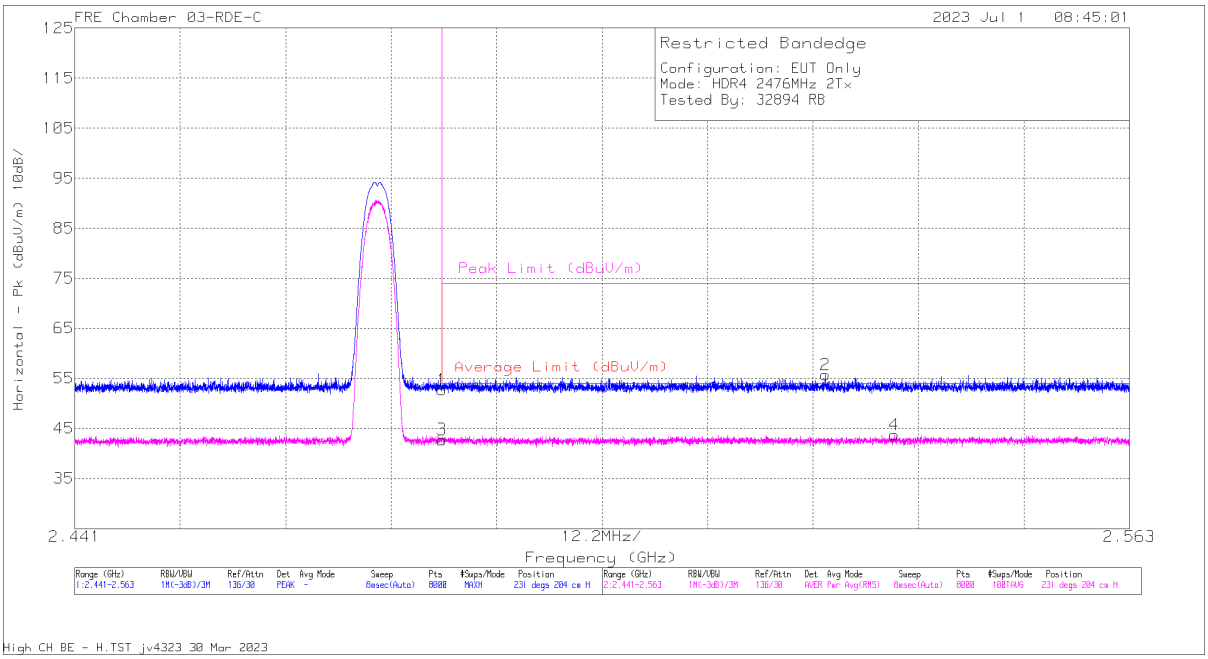
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.15	Pk	32.2	-39.6	52.75	-	-	74	-21.25	231	204	H
3	* 2.4835	50.17	RMS	32.2	-39.6	42.77	54	-11.23	-	-	231	204	H
2	2.52783	63	Pk	32.3	-39.6	55.7	-	-	74	-18.3	231	204	H
4	2.535806	50.88	RMS	32.3	-39.52	43.66	54	-10.34	-	-	231	204	H

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

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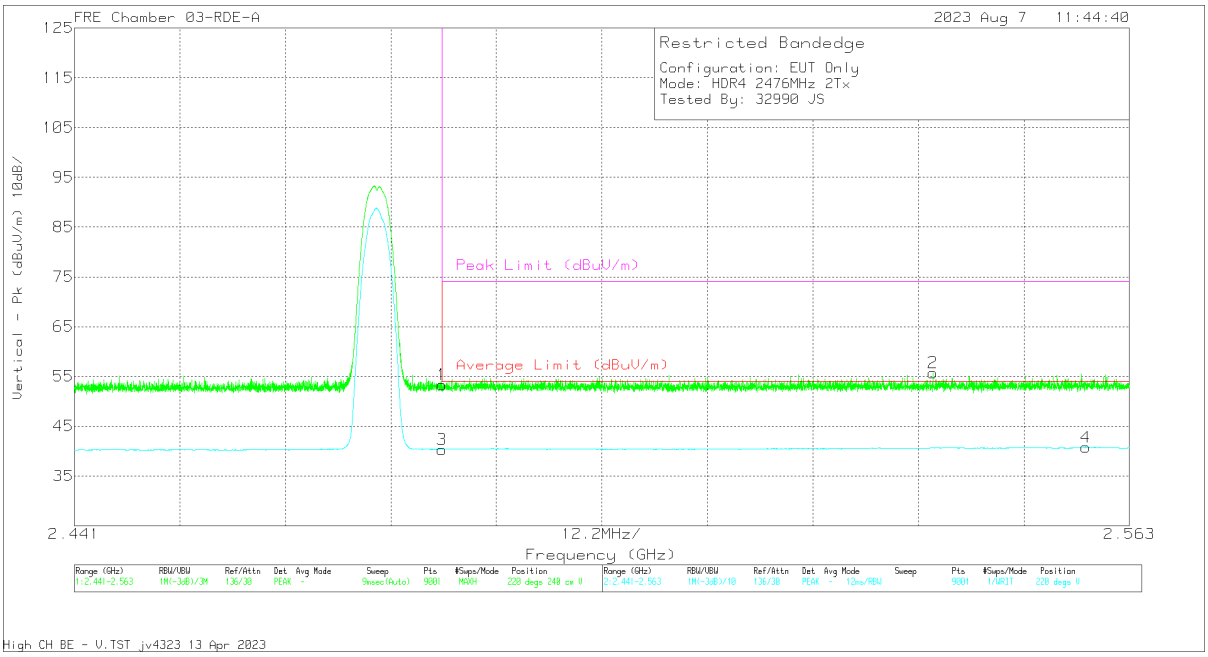
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB) 3mH	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.22	Pk	32.2	0	-40.11	53.31	-	-	74	-20.69	220	240	V
3	* 2.4835	48.27	VA1T	32.2	0	-40.11	40.36	54	-13.64	-	-	220	240	V
2	2.540311	63.46	Pk	32.2	0	-39.97	55.69	-	-	74	-18.31	220	240	V
4	2.557921	48.47	VA1T	32.2	0	-39.91	40.76	54	-13.24	-	-	220	240	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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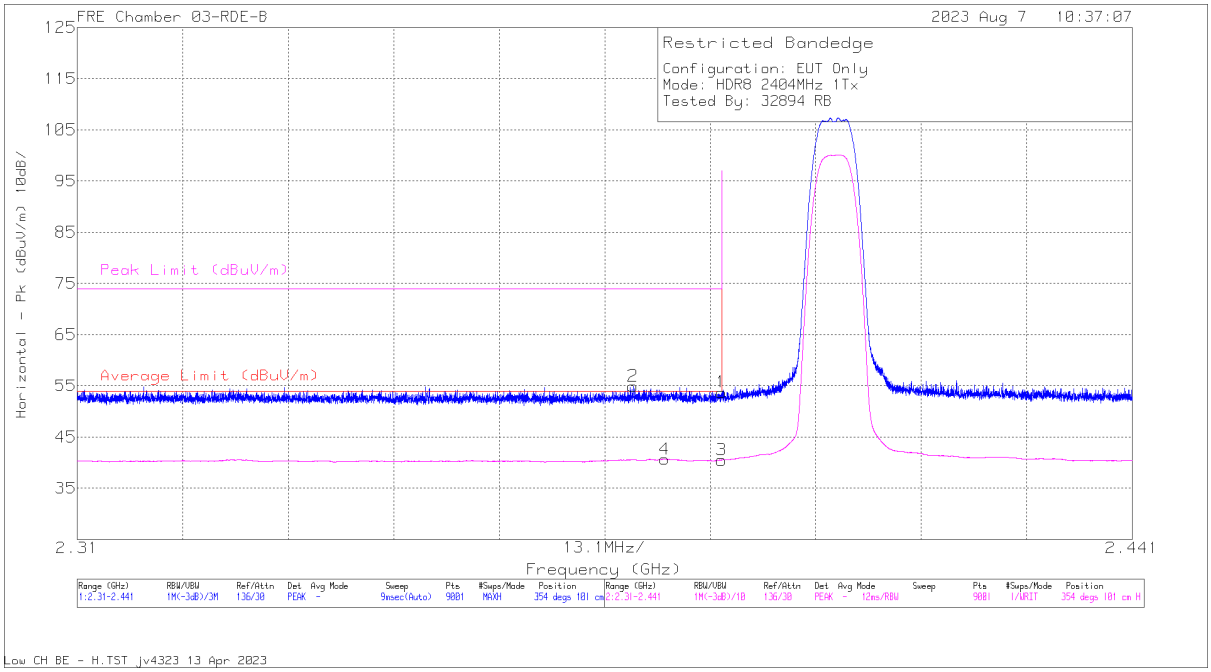
10.2.3. HIGH POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	62.75	Pk	32.2	-41.2	53.75	-	-	74	-20.25	354	101	H
2	* 2.37901	64.03	Pk	32.1	-41.2	54.93	-	-	74	-19.07	354	101	H
3	* 2.39	49.5	VA1T	32.2	-41.2	40.5	54	-13.5	-	-	354	101	H
4	* 2.38294	49.77	VA1T	32.1	-41.21	40.66	54	-13.34	-	-	354	101	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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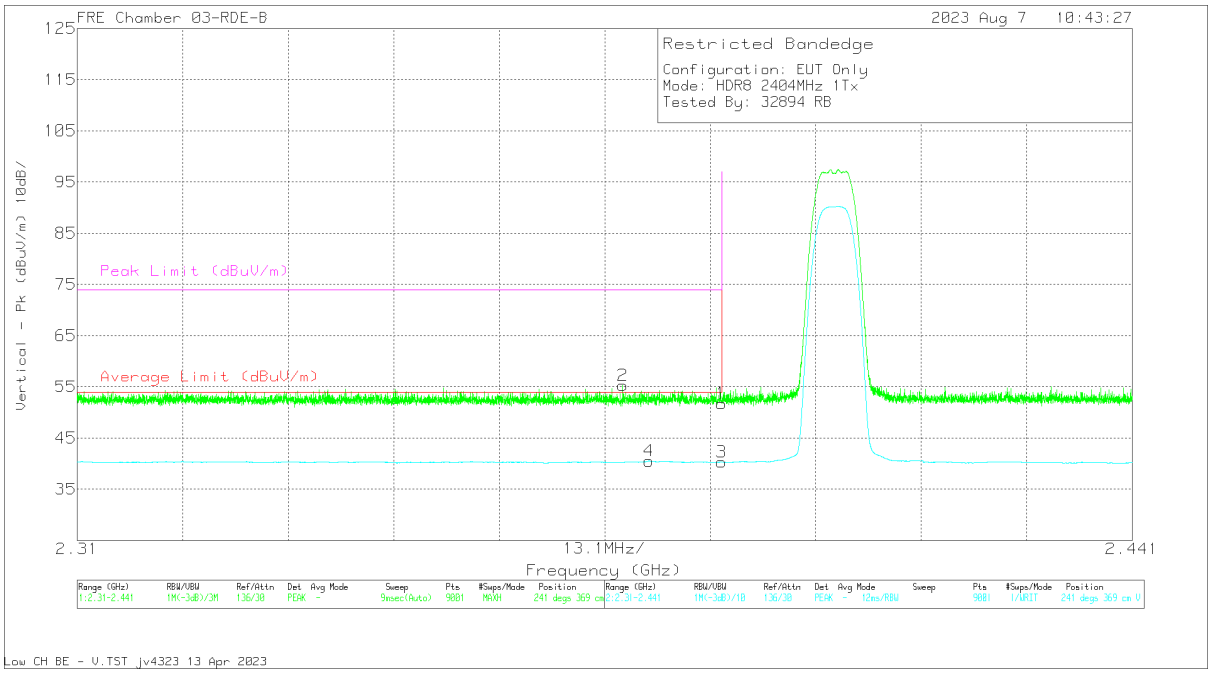
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.77	Pk	32.2	-41.2	51.77	-	-	74	-22.23	241	369	V
2	* 2.377744	64.4	Pk	32.1	-41.23	55.27	-	-	74	-18.73	241	369	V
3	* 2.39	49.28	VA1T	32.2	-41.2	40.28	54	-13.72	-	-	241	369	V
4	* 2.380975	49.52	VA1T	32.1	-41.1	40.52	54	-13.48	-	-	241	369	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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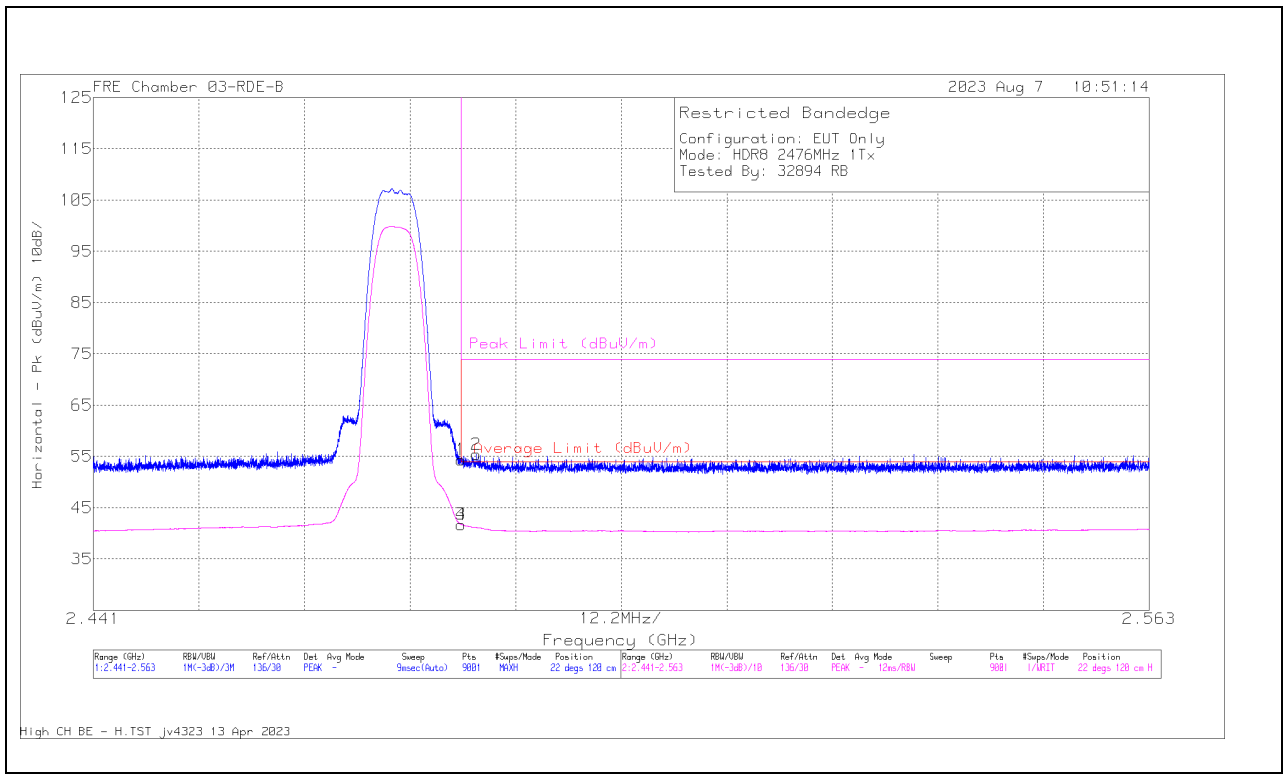
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	63.27	Pk	32.2	-41.15	54.32	-	-	74	-19.68	22	120	H
2	* 2.48522	64.37	Pk	32.2	-41.18	55.39	-	-	74	-18.61	22	120	H
3	* 2.4835	50.66	VA1T	32.2	-41.15	41.71	54	-12.29	-	-	22	120	H
4	* 2.483512	50.65	VA1T	32.2	-41.15	41.7	54	-12.3	-	-	22	120	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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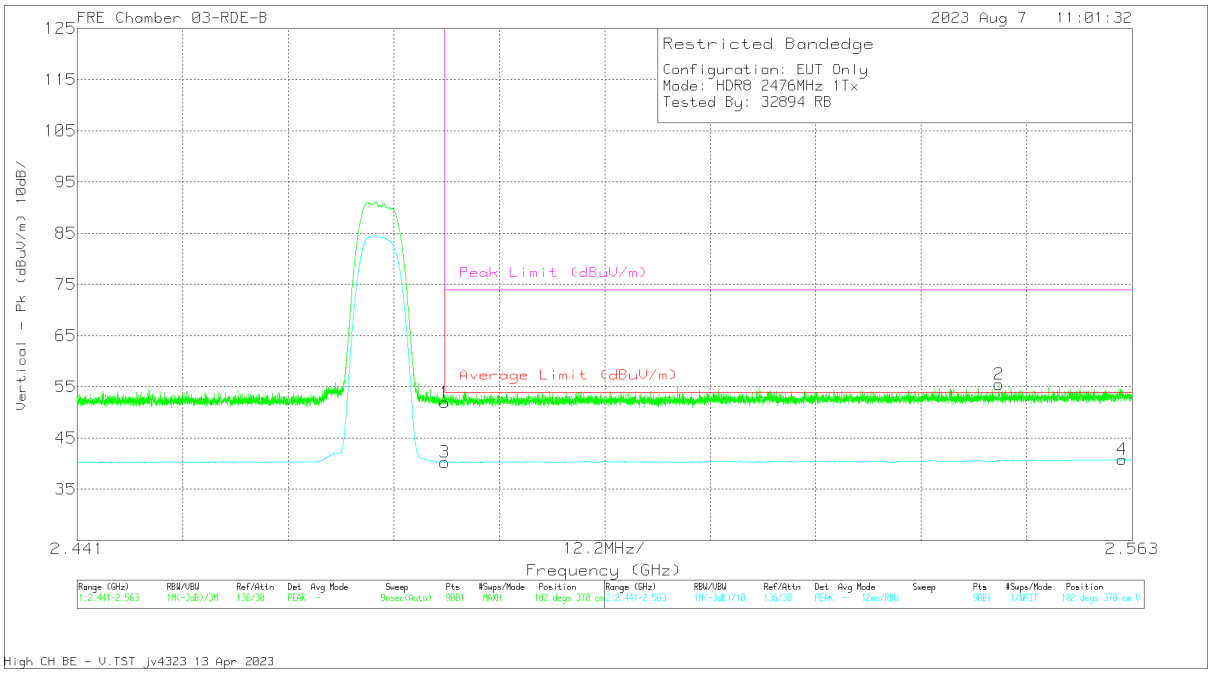
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.9	Pk	32.2	-41.15	51.95	-	-	74	-22.05	182	370	V
3	* 2.4835	49.2	VA1T	32.2	-41.15	40.25	54	-13.75	-	-	182	370	V
2	2.547564	64.13	Pk	32.3	-40.94	55.49	-	-	74	-18.51	182	370	V
4	2.561852	49.32	VA1T	32.3	-40.81	40.81	54	-13.19	-	-	182	370	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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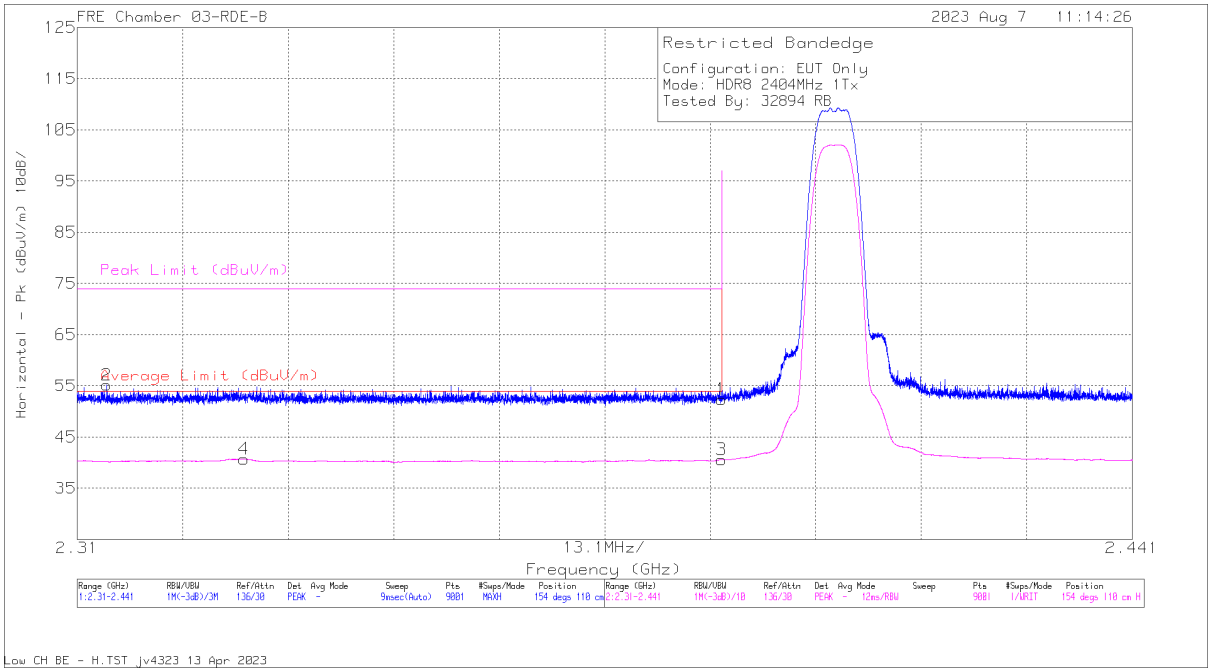
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.38	Pk	32.2	-41.2	52.38	-	-	74	-21.62	154	110	H
2	* 2.313668	64.3	Pk	32.1	-41.27	55.13	-	-	74	-18.87	154	110	H
3	* 2.39	49.58	VA1T	32.2	-41.2	40.58	54	-13.42	-	-	154	110	H
4	* 2.330699	49.8	VA1T	32.1	-41.2	40.7	54	-13.3	-	-	154	110	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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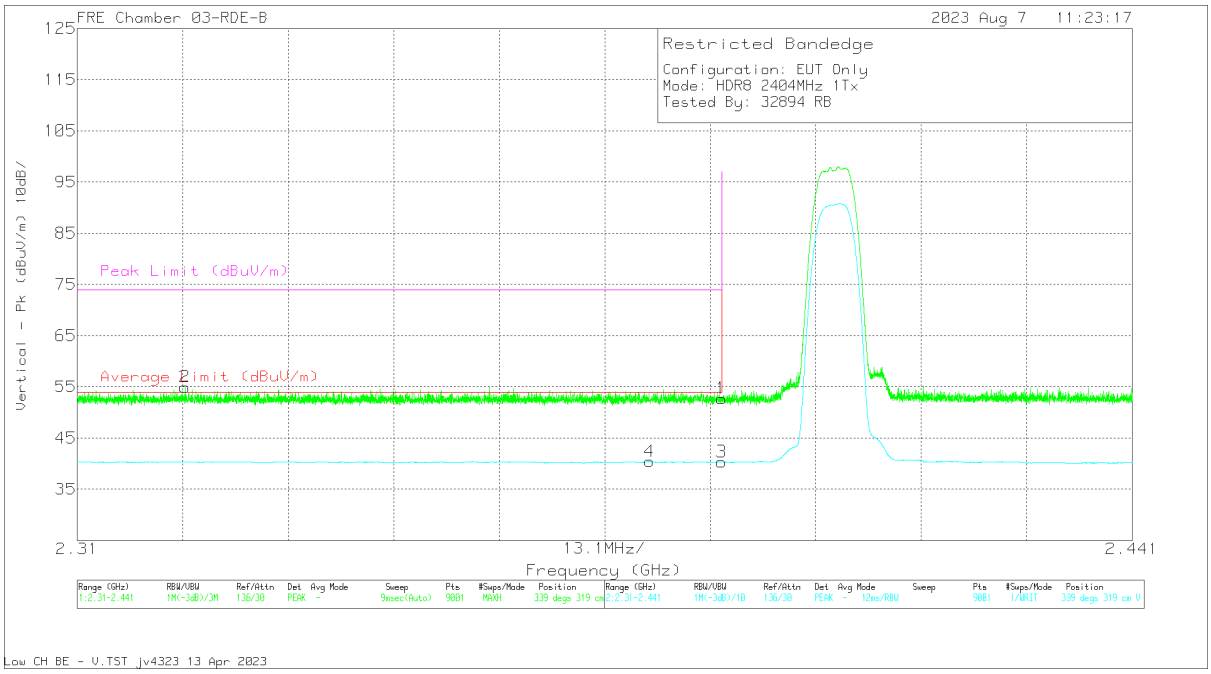
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.75	Pk	32.2	-41.2	52.75	-	-	74	-21.25	339	319	V
2	* 2.323377	64.01	Pk	32.1	-41.14	54.97	-	-	74	-19.03	339	319	V
3	* 2.39	49.32	VA1T	32.2	-41.2	40.32	54	-13.68	-	-	339	319	V
4	* 2.381062	49.41	VA1T	32.1	-41.11	40.4	54	-13.6	-	-	339	319	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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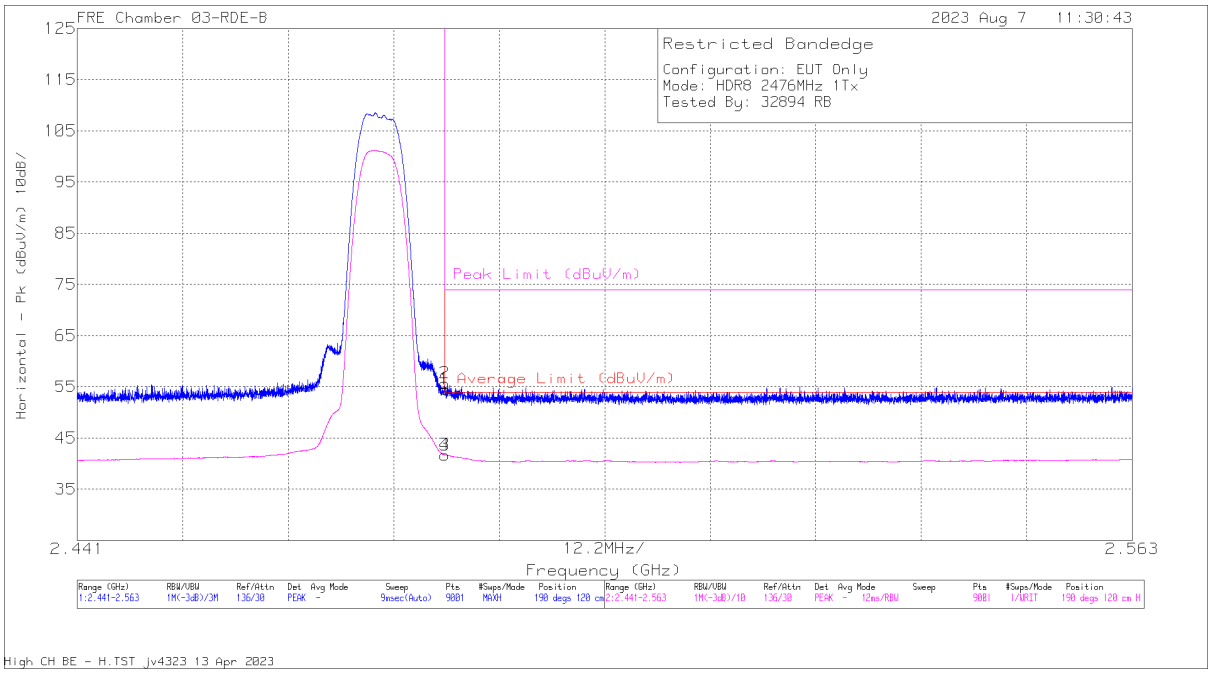
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	63.54	Pk	32.2	-41.15	54.59	-	-	74	-19.41	190	120	H
2	* 2.483512	64.65	Pk	32.2	-41.15	55.7	-	-	74	-18.3	190	120	H
3	* 2.4835	50.64	VA1T	32.2	-41.15	41.69	54	-12.31	-	-	190	120	H
4	* 2.483512	50.64	VA1T	32.2	-41.15	41.69	54	-12.31	-	-	190	120	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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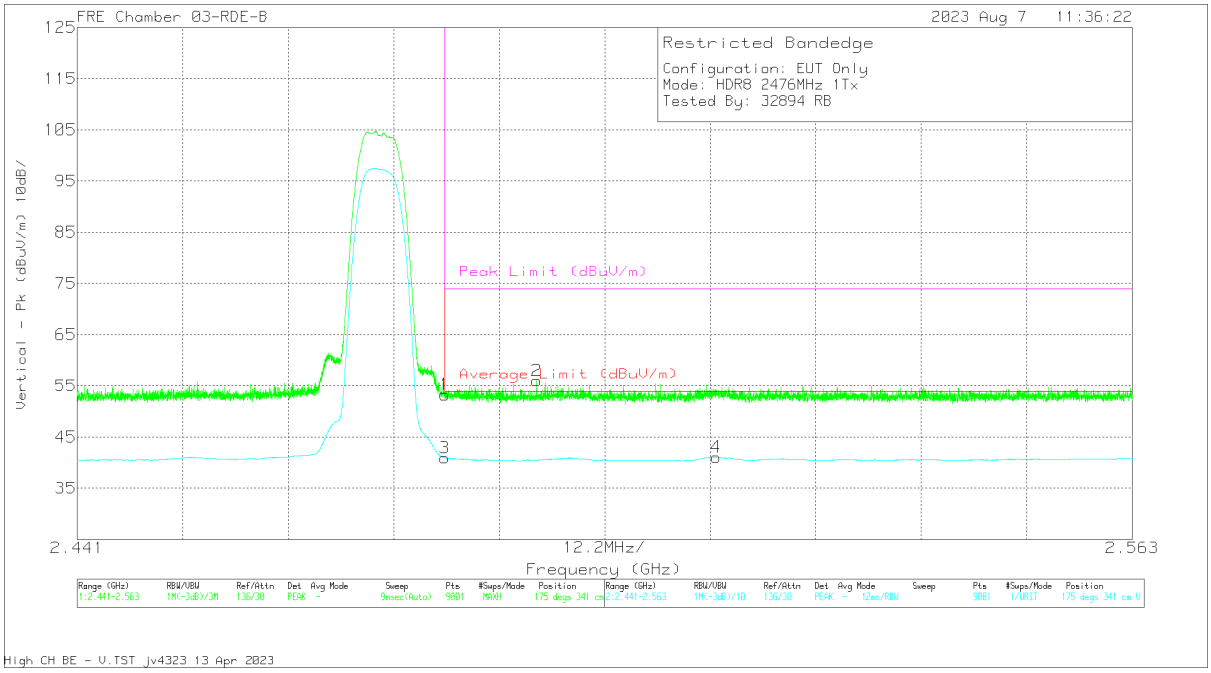
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	62.23	Pk	32.2	-41.15	53.28	-	-	74	-20.72	175	341	V
2	* 2.49414	64.89	Pk	32.2	-41.1	55.99	-	-	74	-18.01	175	341	V
3	* 2.4835	49.86	VA1T	32.2	-41.15	40.91	54	-13.09	-	-	175	341	V
4	2.514867	49.77	VA1T	32.2	-40.91	41.06	54	-12.94	-	-	175	341	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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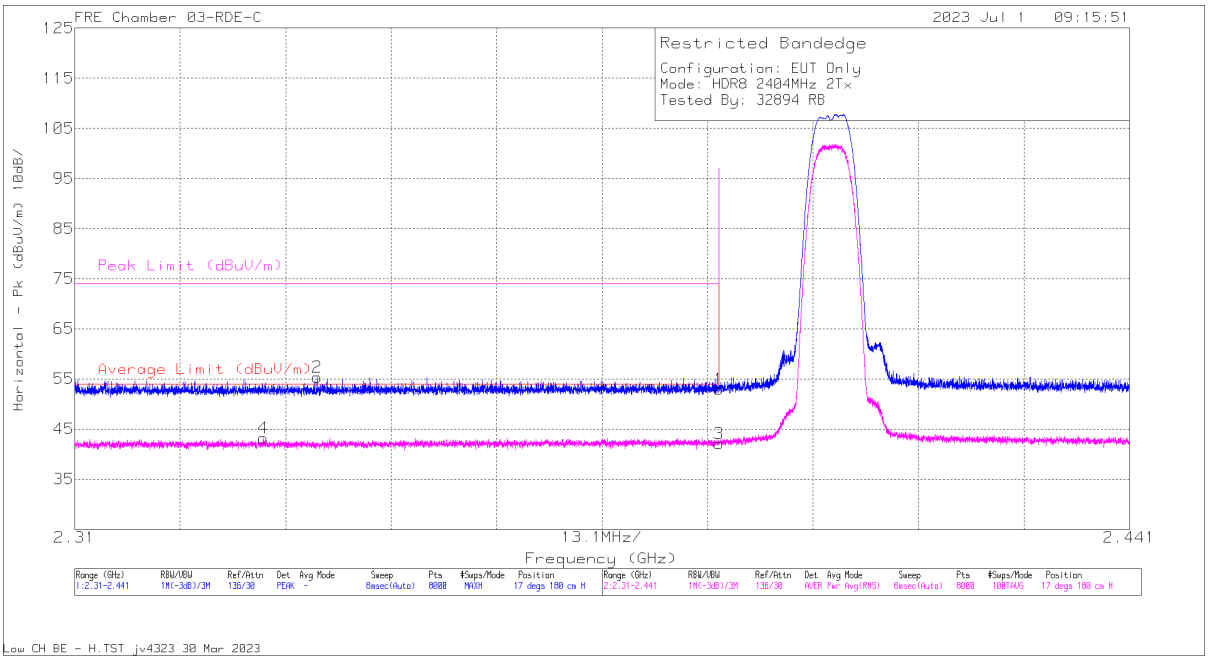
10.2.4. HIGH POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.64	Pk	32.1	-39.8	52.94	-	-	74	-21.06	17	180	H
2	* 2.340117	63.49	Pk	31.9	-40	55.39	-	-	74	-18.61	17	180	H
3	* 2.39	49.76	RMS	32.1	-39.8	42.06	54	-11.94	-	-	17	180	H
4	* 2.333452	51.35	RMS	31.8	-39.9	43.25	54	-10.75	-	-	17	180	H

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

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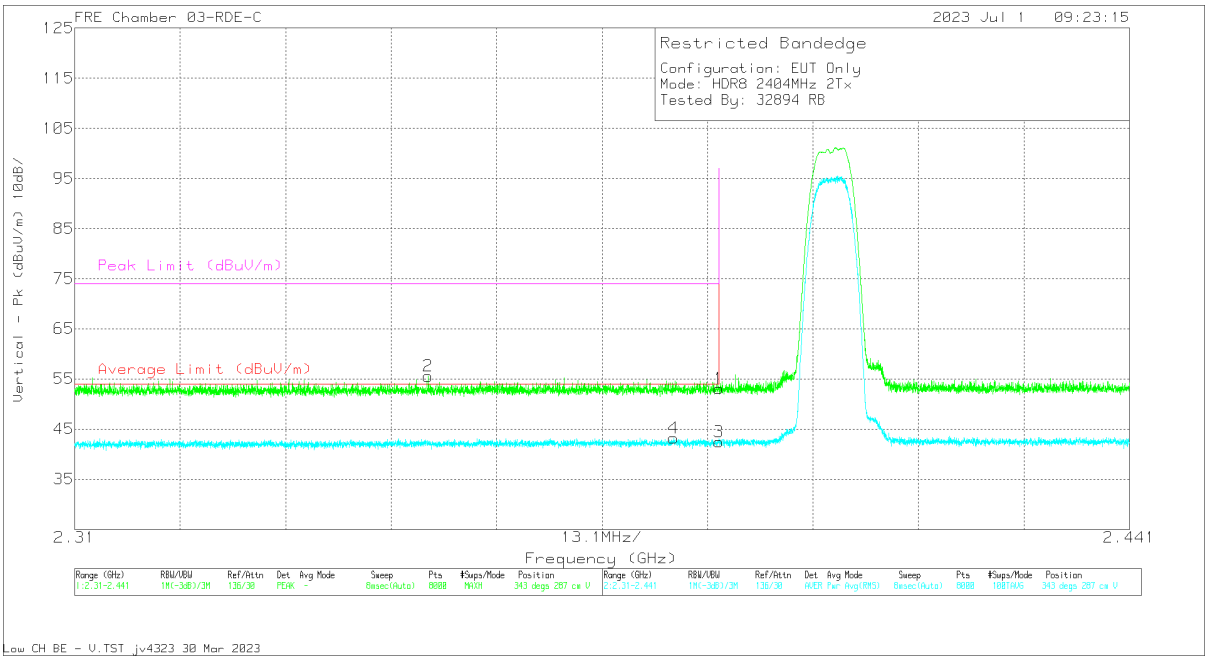
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.76	Pk	32.1	-39.8	53.06	-	-	74	-20.94	343	287	V
2	* 2.353923	63.53	Pk	31.9	-39.89	55.54	-	-	74	-18.46	343	287	V
3	* 2.39	50.17	RMS	32.1	-39.8	42.47	54	-11.53	-	-	343	287	V
4	* 2.384368	50.93	RMS	32.1	-39.86	43.17	54	-10.83	-	-	343	287	V

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

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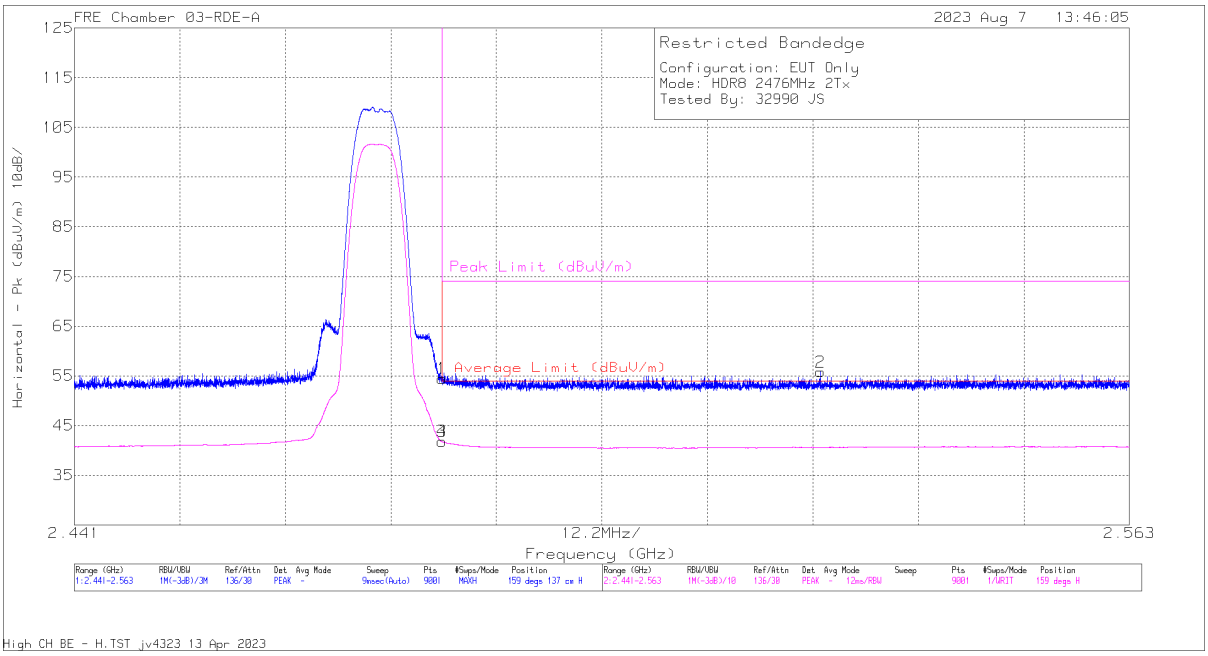
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB) 3mH	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	62.37	Pk	32.2	0	-40.11	54.46	-	-	74	-19.54	159	137	H
3	* 2.4835	49.71	VA1T	32.2	0	-40.11	41.8	54	-12.2	-	-	159	137	H
4	* 2.483512	49.69	VA1T	32.2	0	-40.11	41.78	54	-12.22	-	-	159	137	H
2	2.527298	63.63	Pk	32.2	0	-40.04	55.79	-	-	74	-18.21	159	137	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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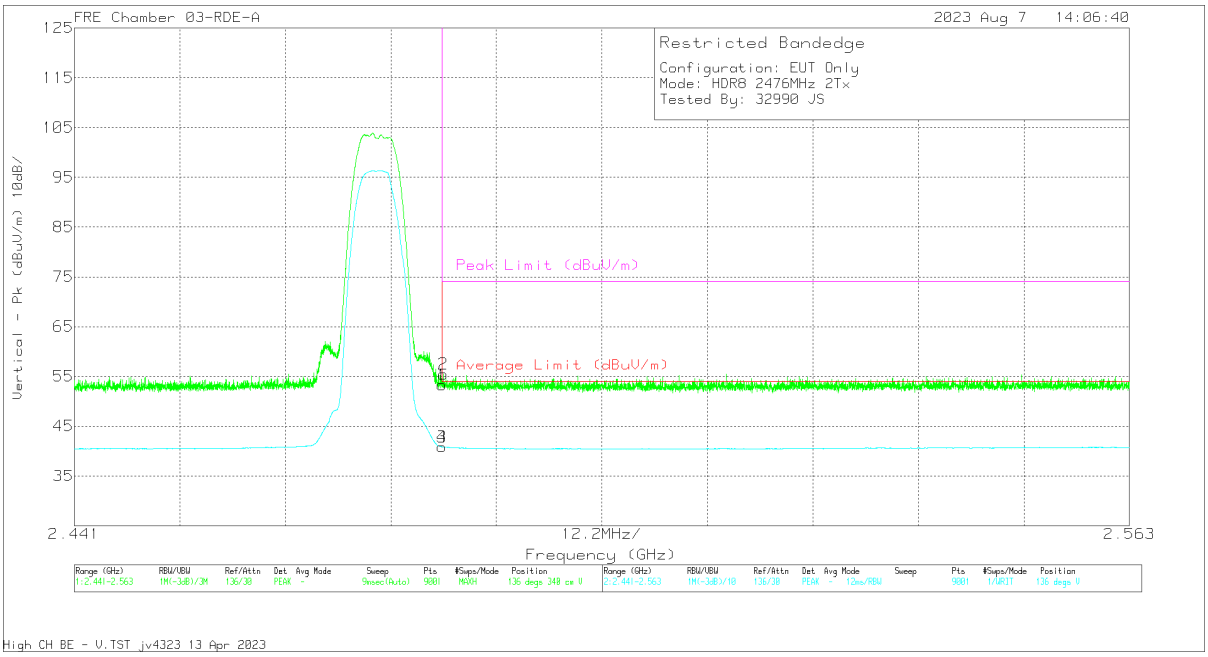
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB) 3mH	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.19	Pk	32.2	0	-40.11	53.28	-	-	74	-20.72	136	340	V
2	* 2.483647	63.36	Pk	32.2	0	-40.11	55.45	-	-	74	-18.55	136	340	V
3	* 2.4835	48.78	VA1T	32.2	0	-40.11	40.87	54	-13.13	-	-	136	340	V
4	* 2.483539	48.78	VA1T	32.2	0	-40.11	40.87	54	-13.13	-	-	136	340	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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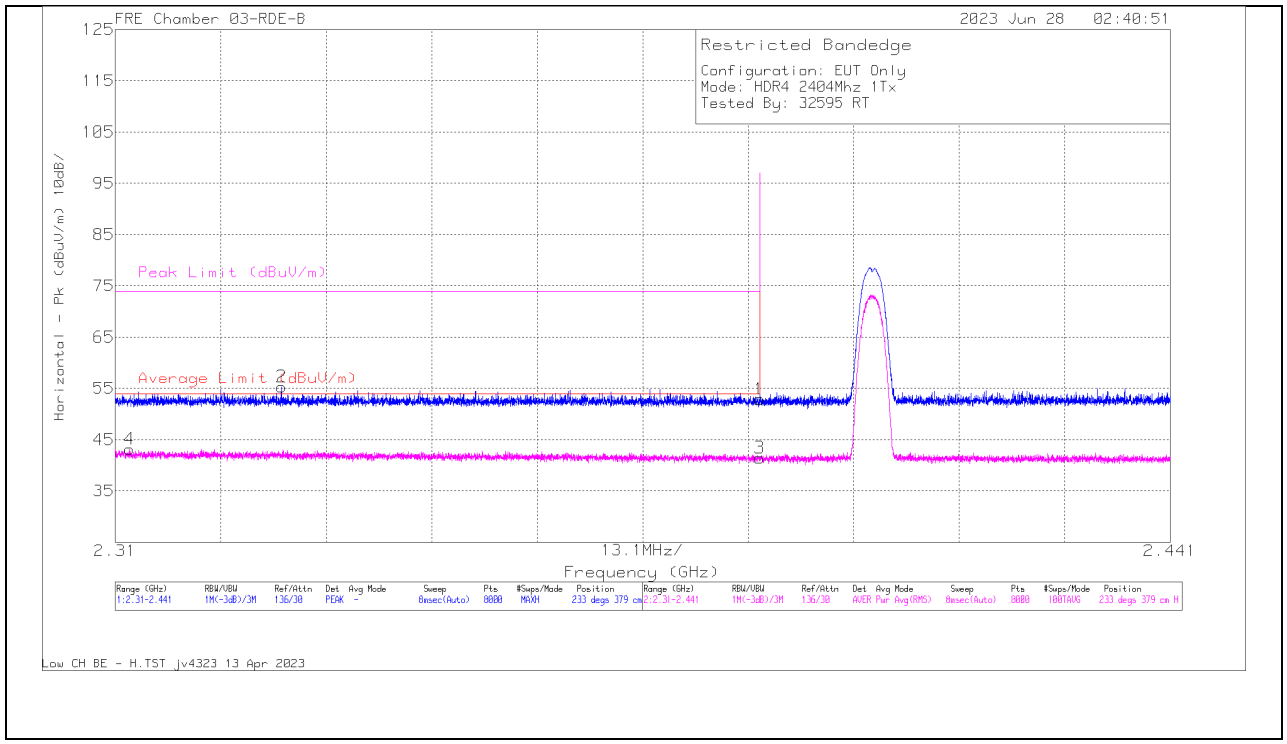
10.2.5. LOW POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.9	Pk	32.2	0	-41.2	52.9	-	-	74	-21.1	233	379	H
2	* 2.330635	64.4	Pk	32.1	0	-41.2	55.3	-	-	74	-18.7	233	379	H
3	* 2.39	50.45	RMS	32.2	0	-41.2	41.45	54	-12.55	-	-	233	379	H
4	* 2.311785	52.33	RMS	32	0	-41.18	43.15	54	-10.85	-	-	233	379	H

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

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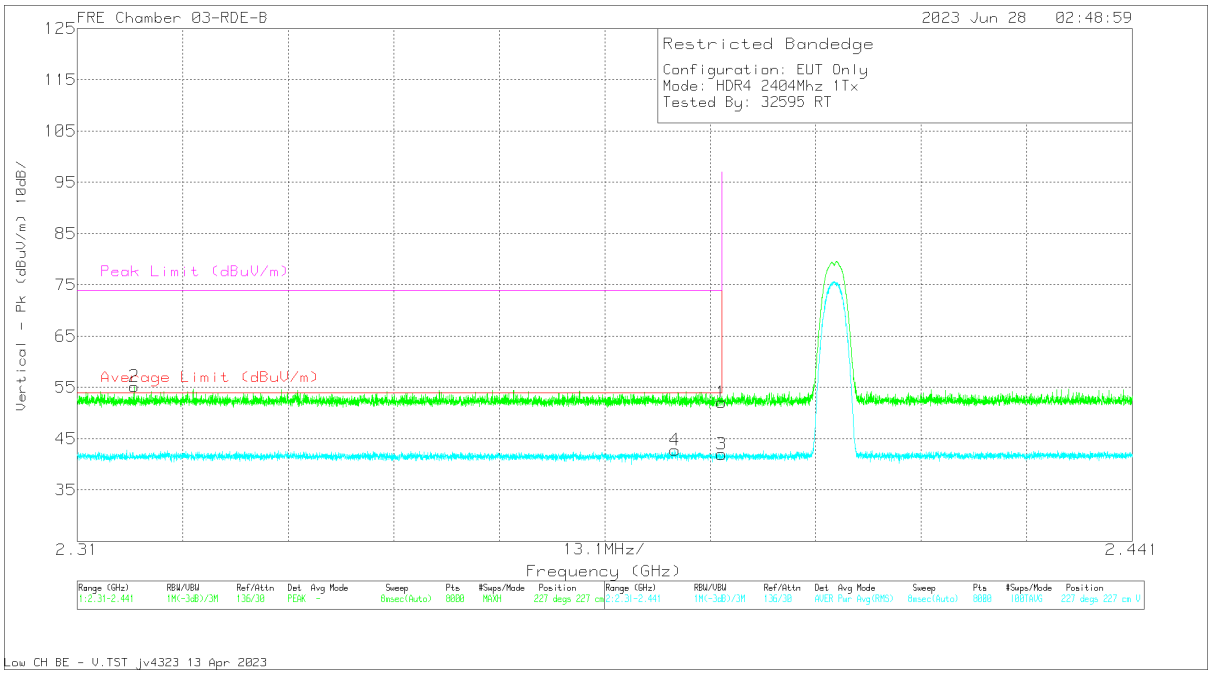
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	61.09	Pk	32.2	0	-41.2	52.09	-	-	74	-21.91	227	227	V
2	* 2.317075	64.28	Pk	32.1	0	-41.2	55.18	-	-	74	-18.82	227	227	V
3	* 2.39	50.99	RMS	32.2	0	-41.2	41.99	54	-12.01	-	-	227	227	V
4	* 2.384221	51.77	RMS	32.2	0	-41.2	42.77	54	-11.23	-	-	227	227	V

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

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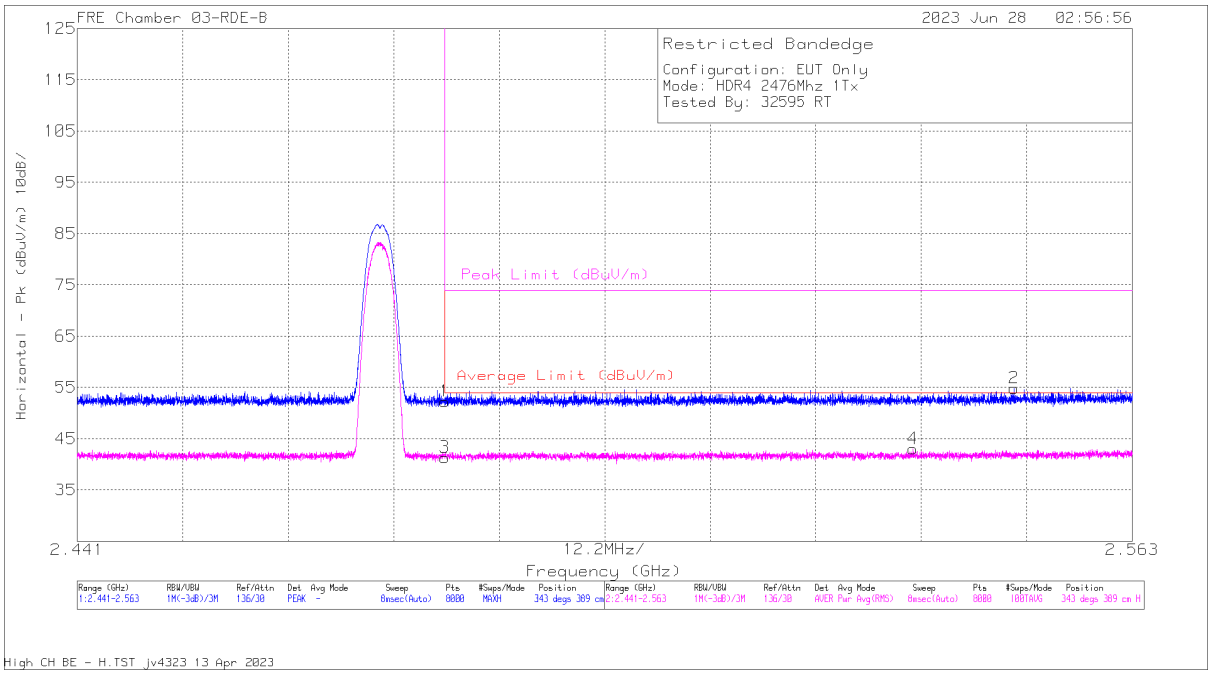
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.22	Pk	32.2	0	-41.15	52.27	-	-	74	-21.73	343	389	H
3	* 2.4835	50.29	RMS	32.2	0	-41.15	41.34	54	-12.66	-	-	343	389	H
4	2.537621	51.72	RMS	32.3	0	-41	43.02	54	-10.98	-	-	343	389	H
2	2.549335	63.45	Pk	32.3	0	-40.9	54.85	-	-	74	-19.15	343	389	H

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

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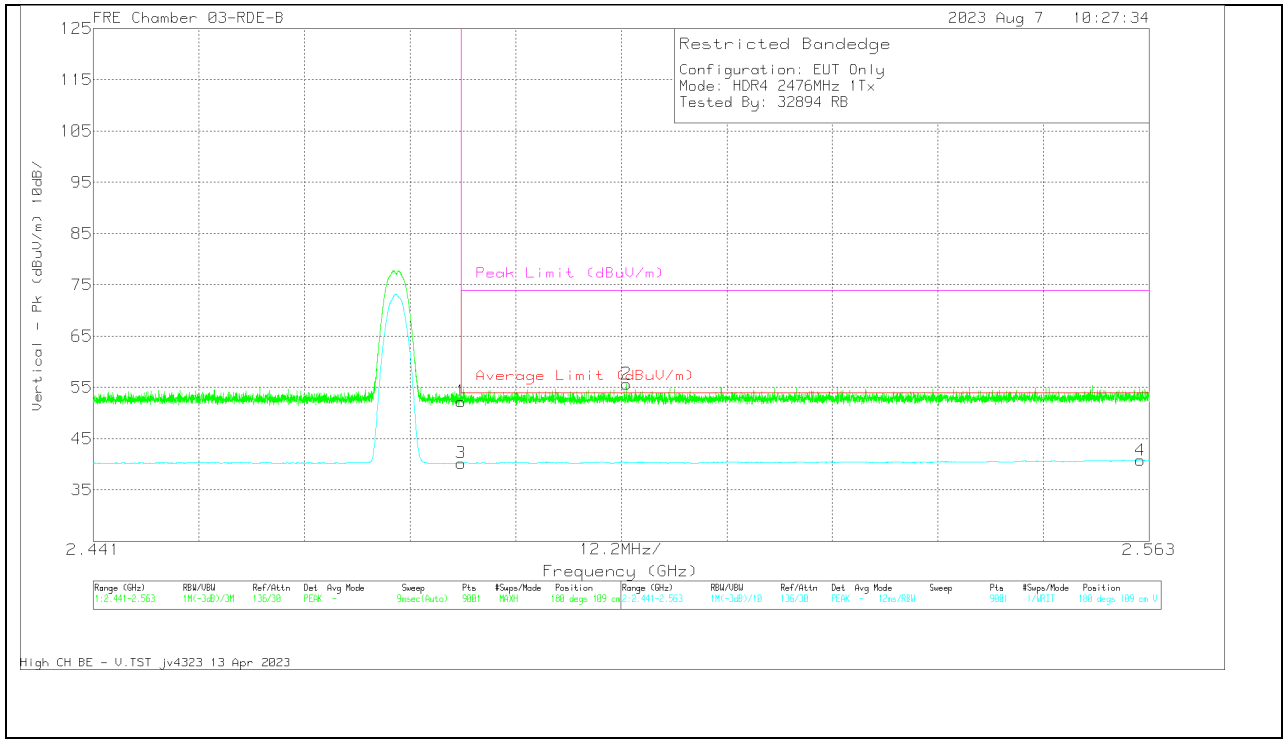
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	61.22	Pk	32.2	-41.15	52.27	-	-	74	-21.73	180	109	V
3	* 2.4835	49.19	VA1T	32.2	-41.15	40.24	54	-13.76	-	-	180	109	V
2	2.502585	64.54	Pk	32.2	-41.06	55.68	-	-	74	-18.32	180	109	V
4	2.56196	49.3	VA1T	32.3	-40.8	40.8	54	-13.2	-	-	180	109	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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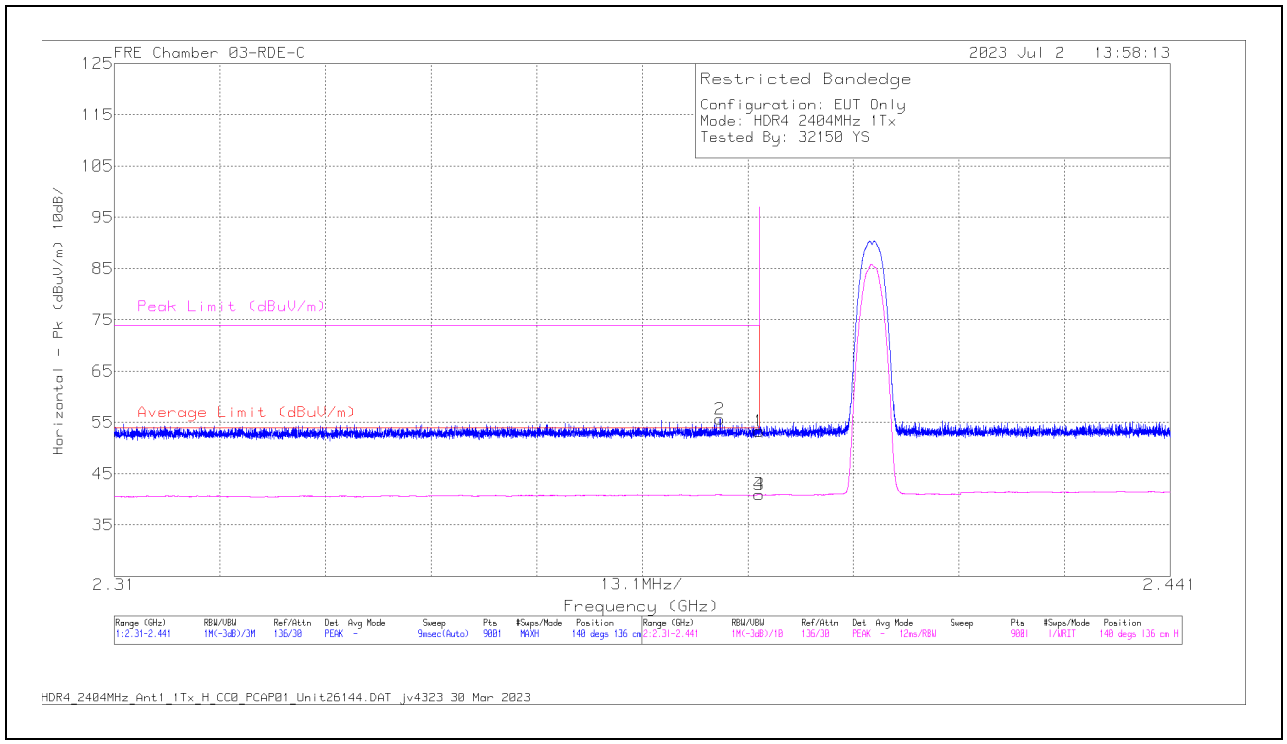
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.96	Pk	32.1	-39.8	53.26	-	-	74	-20.74	140	136	H
2	* 2.385153	63.35	Pk	32.1	-39.82	55.63	-	-	74	-18.37	140	136	H
3	* 2.39	48.64	VA1T	32.1	-39.8	40.94	54	-13.06	-	-	140	136	H
4	* 2.39	48.64	VA1T	32.1	-39.8	40.94	54	-13.06	-	-	140	136	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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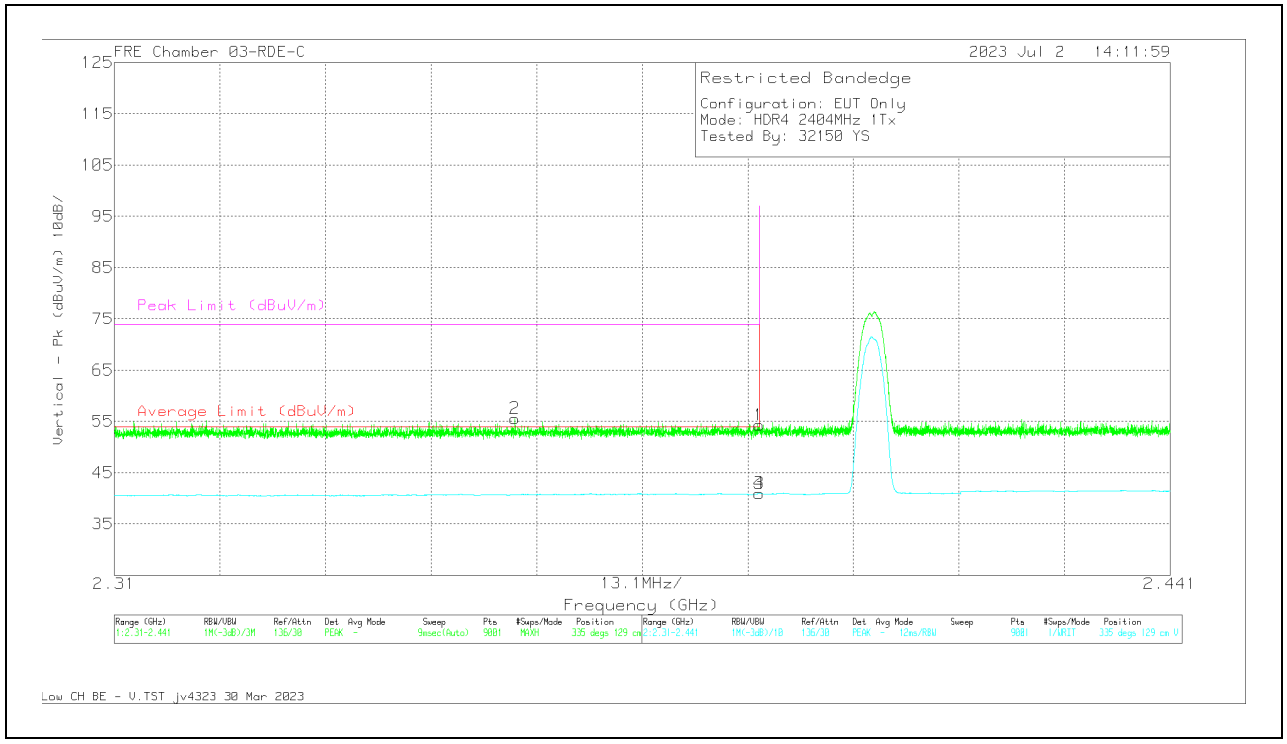
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	* 2.35968	63.47	Pk	32	-39.93	55.54	-	-	74	-18.46	335	129	V
1	* 2.39	61.97	Pk	32.1	-39.8	54.27	-	-	74	-19.73	335	129	V
3	* 2.39	48.67	VA1T	32.1	-39.8	40.97	54	-13.03	-	-	335	129	V
4	* 2.39	48.67	VA1T	32.1	-39.8	40.97	54	-13.03	-	-	335	129	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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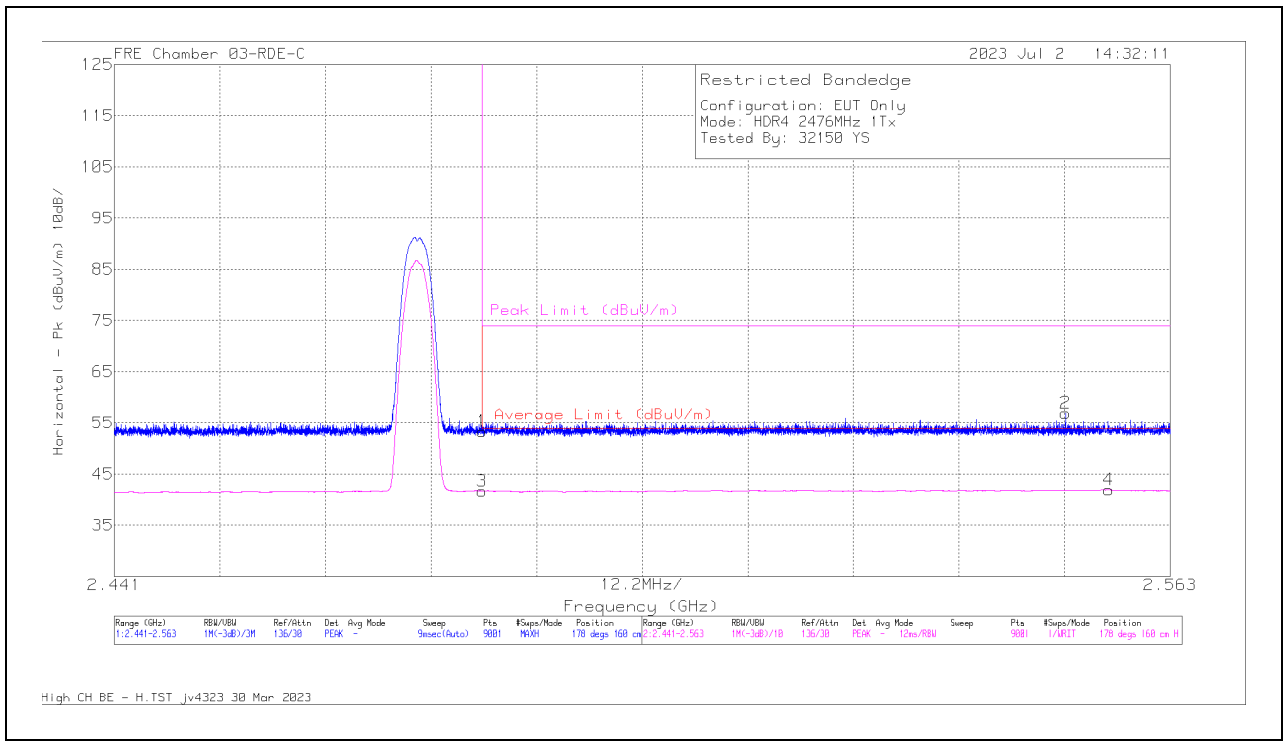
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.75	Pk	32.2	-39.6	53.35	-	-	74	-20.65	178	160	H
3	* 2.4835	49.06	VA1T	32.2	-39.6	41.66	54	-12.34	-	-	178	160	H
2	2.550898	64.12	Pk	32.3	-39.5	56.92	-	-	74	-17.08	178	160	H
4	2.555901	49.01	VA1T	32.3	-39.4	41.91	54	-12.09	-	-	178	160	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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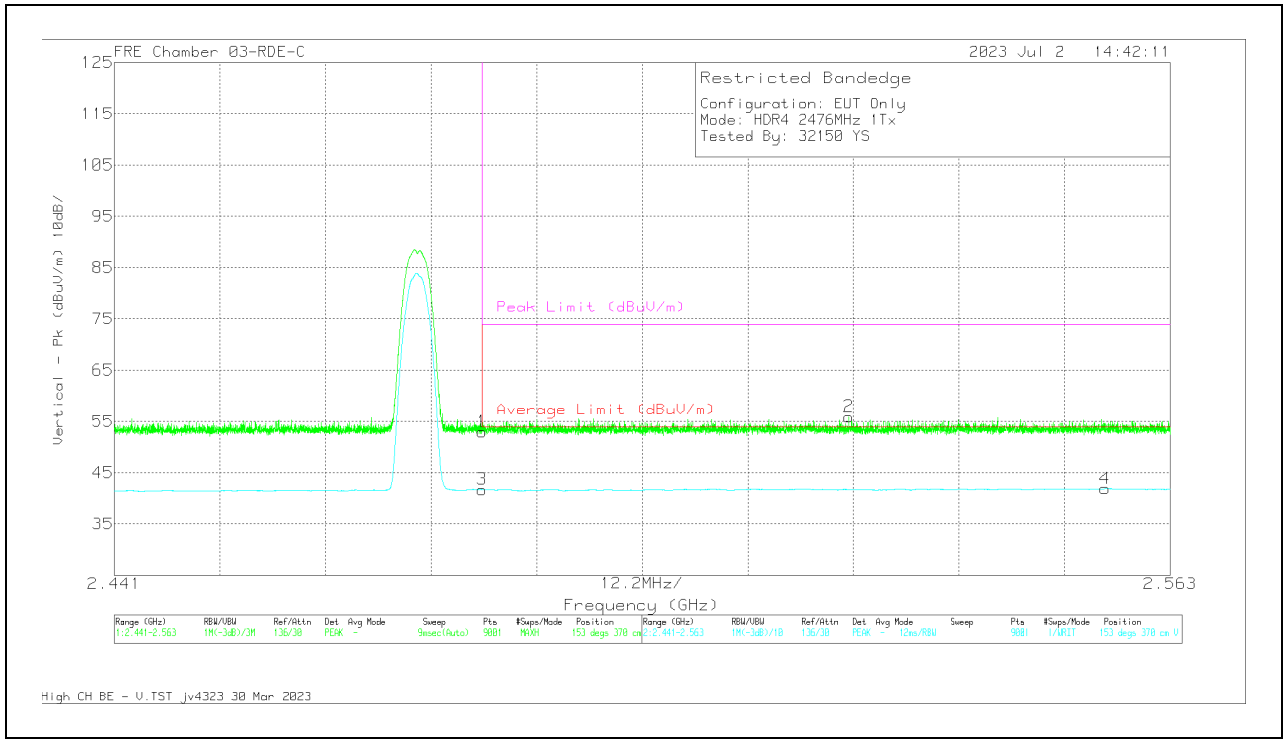
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.39	Pk	32.2	-39.6	52.99	-	-	74	-21.01	153	370	V
3	* 2.4835	49.12	VA1T	32.2	-39.6	41.72	54	-12.28	-	-	153	370	V
2	2.525861	63.24	Pk	32.3	-39.6	55.94	-	-	74	-18.06	153	370	V
4	2.555467	49	VA1T	32.3	-39.4	41.9	54	-12.1	-	-	153	370	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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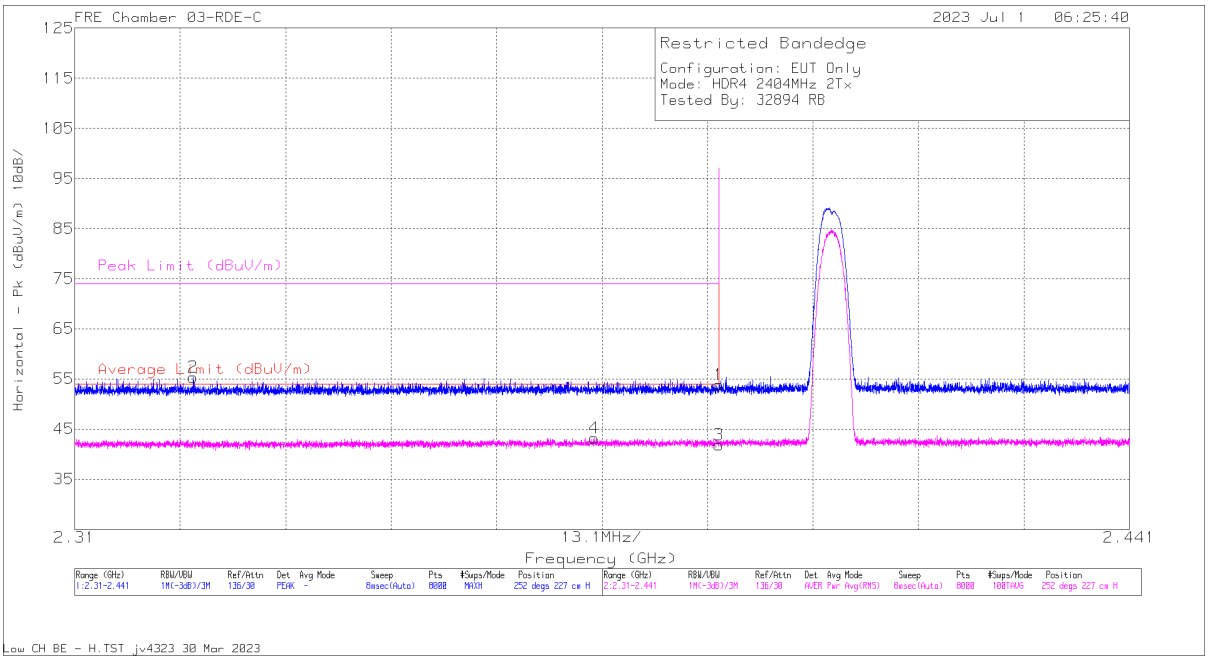
10.2.6. LOW POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	61.58	Pk	32.1	-39.8	53.88	-	-	74	-20.12	252	227	H
2	* 2.324739	63.47	Pk	31.8	-39.93	55.34	-	-	74	-18.66	252	227	H
3	* 2.39	49.5	RMS	32.1	-39.8	41.8	54	-12.2	-	-	252	227	H
4	* 2.374493	51.1	RMS	32	-39.85	43.25	54	-10.75	-	-	252	227	H

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

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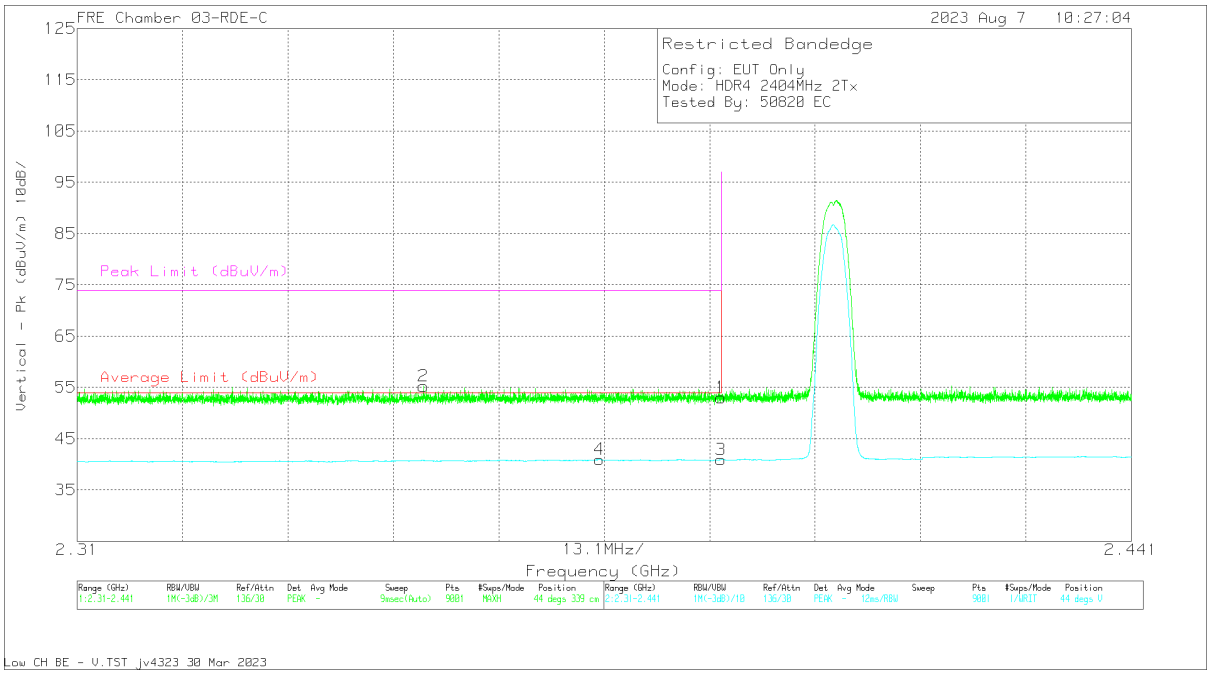
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.73	Pk	32.1	-39.8	53.03	-	-	74	-20.97	44	339	V
2	* 2.353028	63.13	Pk	31.9	-39.8	55.23	-	-	74	-18.77	44	339	V
3	* 2.39	48.61	VA1T	32.1	-39.8	40.91	54	-13.09	-	-	44	339	V
4	* 2.374905	48.74	VA1T	32	-39.81	40.93	54	-13.07	-	-	44	339	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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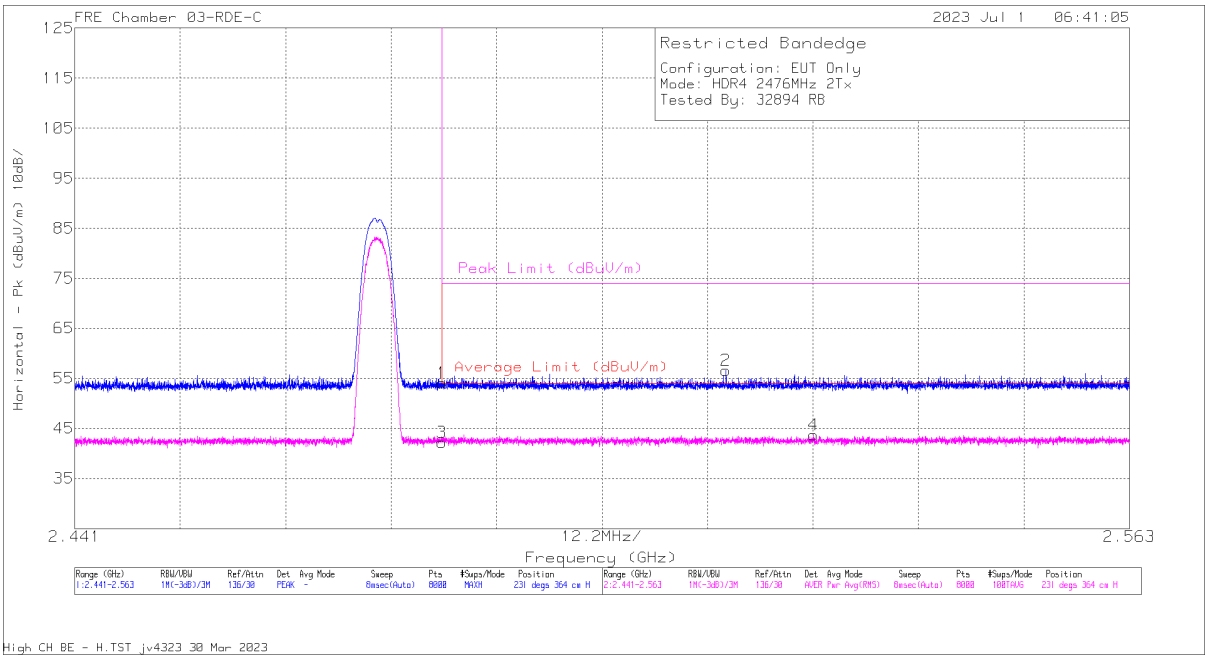
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	61.47	Pk	32.2	-39.6	54.07	-	-	74	-19.93	231	364	H
3	* 2.4835	49.67	RMS	32.2	-39.6	42.27	54	-11.73	-	-	231	364	H
2	2.516345	63.95	Pk	32.3	-39.6	56.65	-	-	74	-17.35	231	364	H
4	2.526426	51.06	RMS	32.3	-39.6	43.76	54	-10.24	-	-	231	364	H

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

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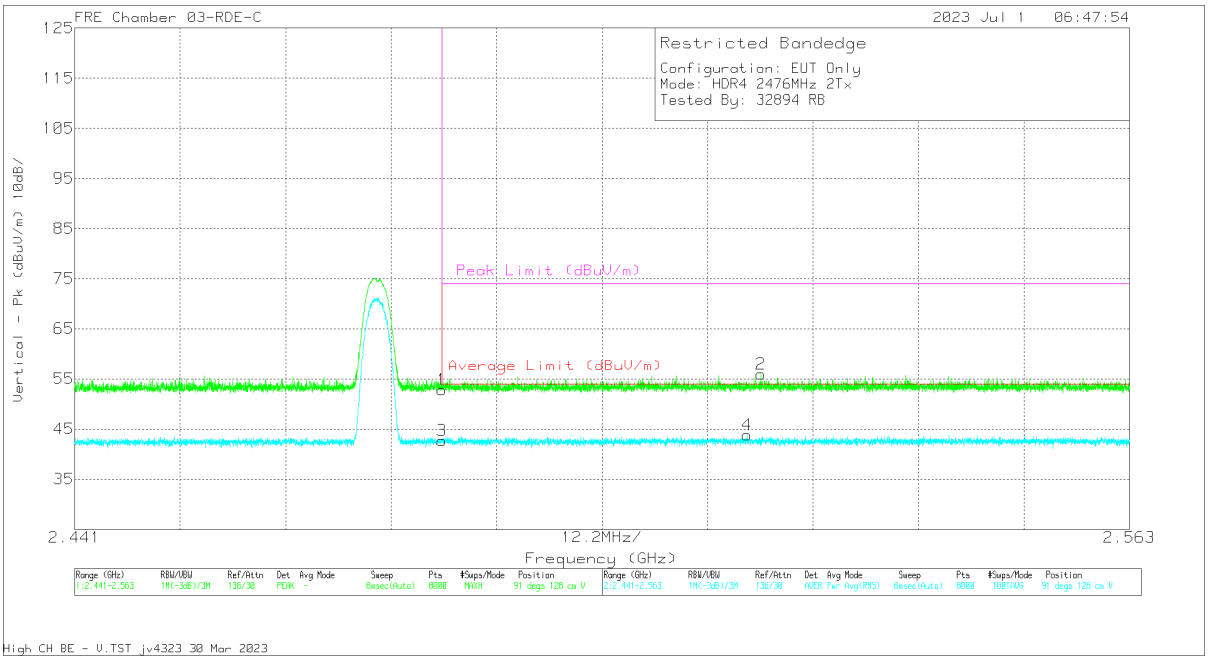
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.28	Pk	32.2	-39.6	52.88	-	-	74	-21.12	91	128	V
3	* 2.4835	50.1	RMS	32.2	-39.6	42.7	54	-11.3	-	-	91	128	V
4	2.518755	51.09	RMS	32.3	-39.6	43.79	54	-10.21	-	-	91	128	V
2	2.520356	63.21	Pk	32.3	-39.5	56.01	-	-	74	-17.99	91	128	V

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

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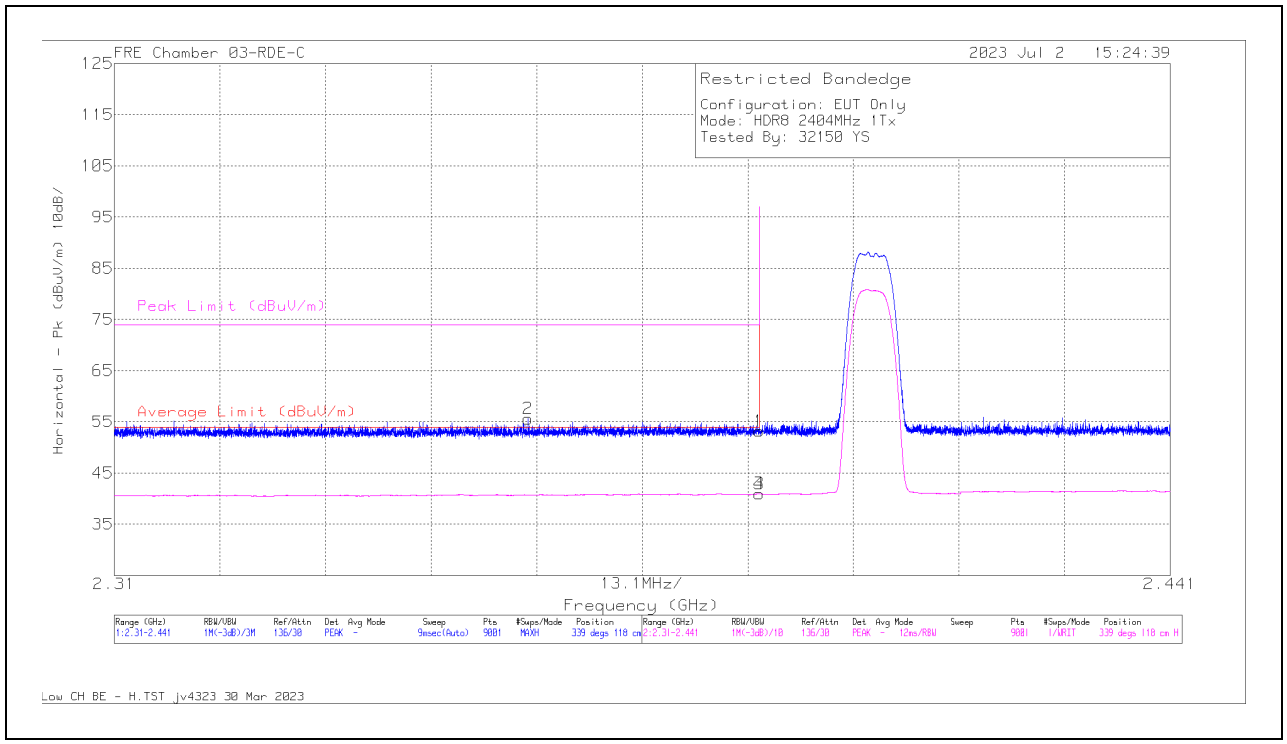
10.2.7. LOW POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.89	Pk	32.1	-39.8	53.19	-	-	74	-20.81	339	118	H
2	* 2.36131	63.5	Pk	32	-39.9	55.6	-	-	74	-18.4	339	118	H
3	* 2.39	48.65	VA1T	32.1	-39.8	40.95	54	-13.05	-	-	339	118	H
4	* 2.39	48.65	VA1T	32.1	-39.8	40.95	54	-13.05	-	-	339	118	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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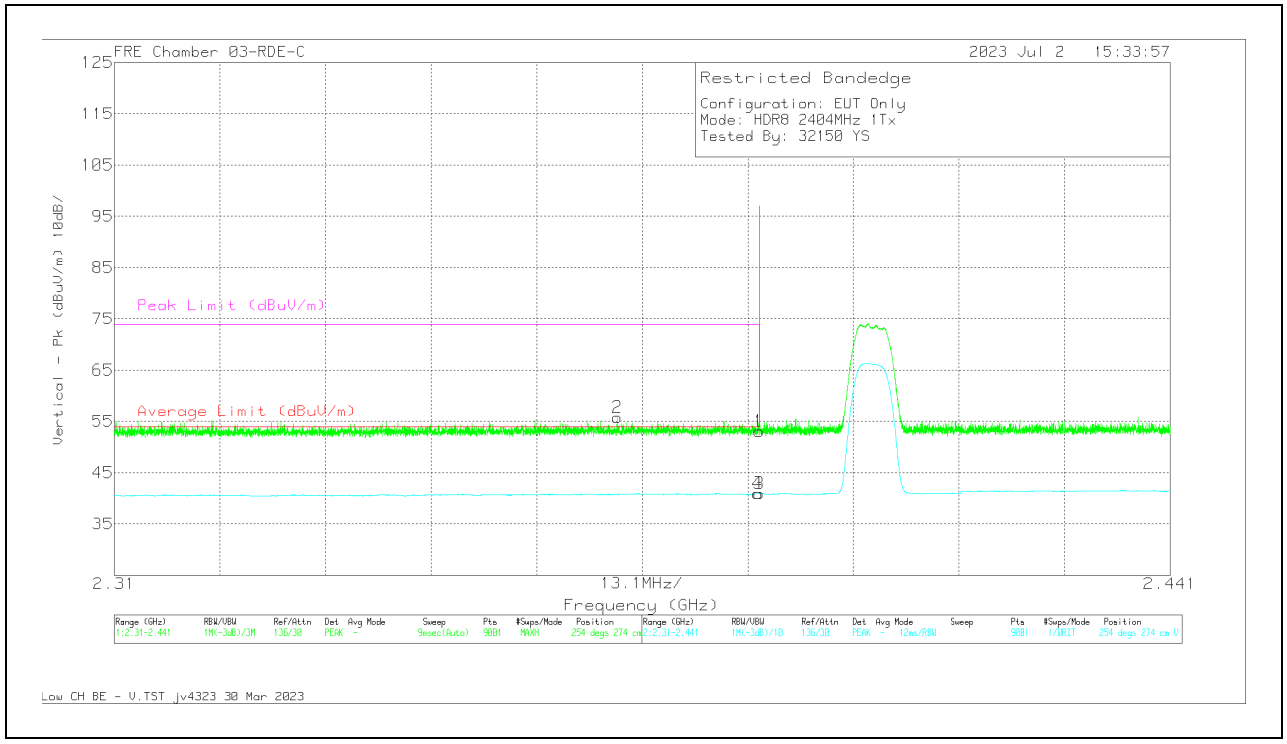
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.78	Pk	32.1	-39.8	53.08	-	-	74	-20.92	254	274	V
2	* 2.372402	63.68	Pk	32	-39.9	55.78	-	-	74	-18.22	254	274	V
3	* 2.39	48.63	VA1T	32.1	-39.8	40.93	54	-13.07	-	-	254	274	V
4	* 2.38984	48.67	VA1T	32.1	-39.83	40.94	54	-13.06	-	-	254	274	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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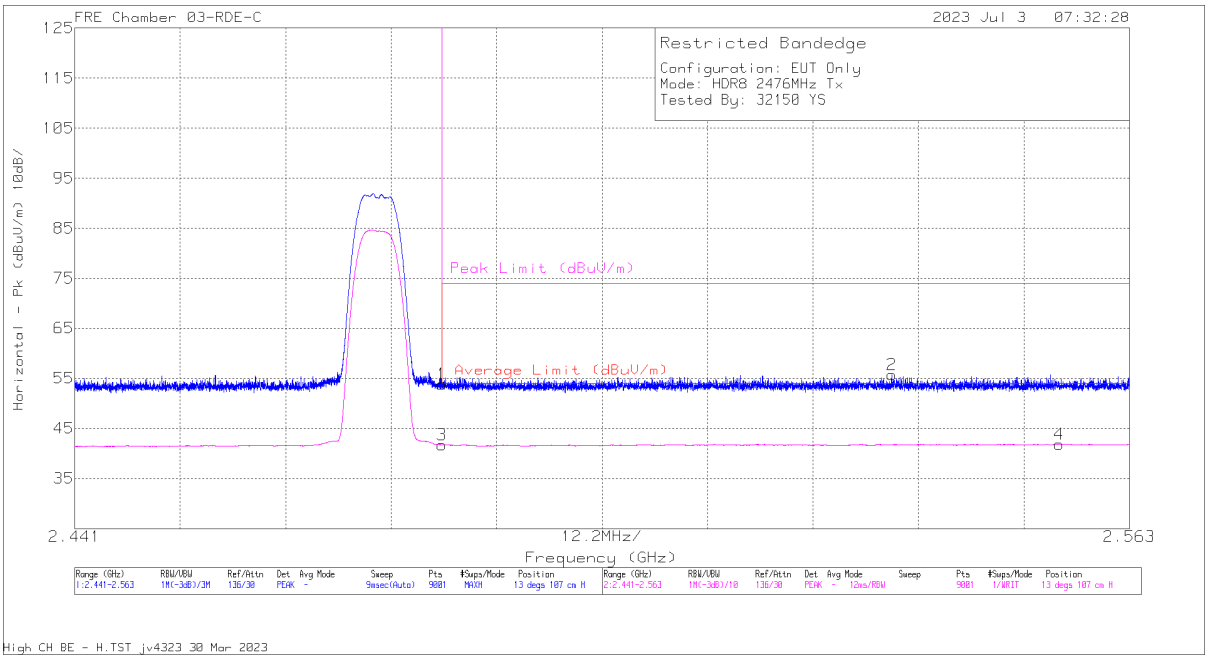
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	61.26	Pk	32.2	-39.6	53.86	-	-	74	-20.14	13	107	H
3	* 2.4835	49.12	VA1T	32.2	-39.6	41.72	54	-12.28	-	-	13	107	H
2	2.535499	63	Pk	32.3	-39.55	55.75	-	-	74	-18.25	13	107	H
4	2.55487	48.99	VA1T	32.3	-39.41	41.88	54	-12.12	-	-	13	107	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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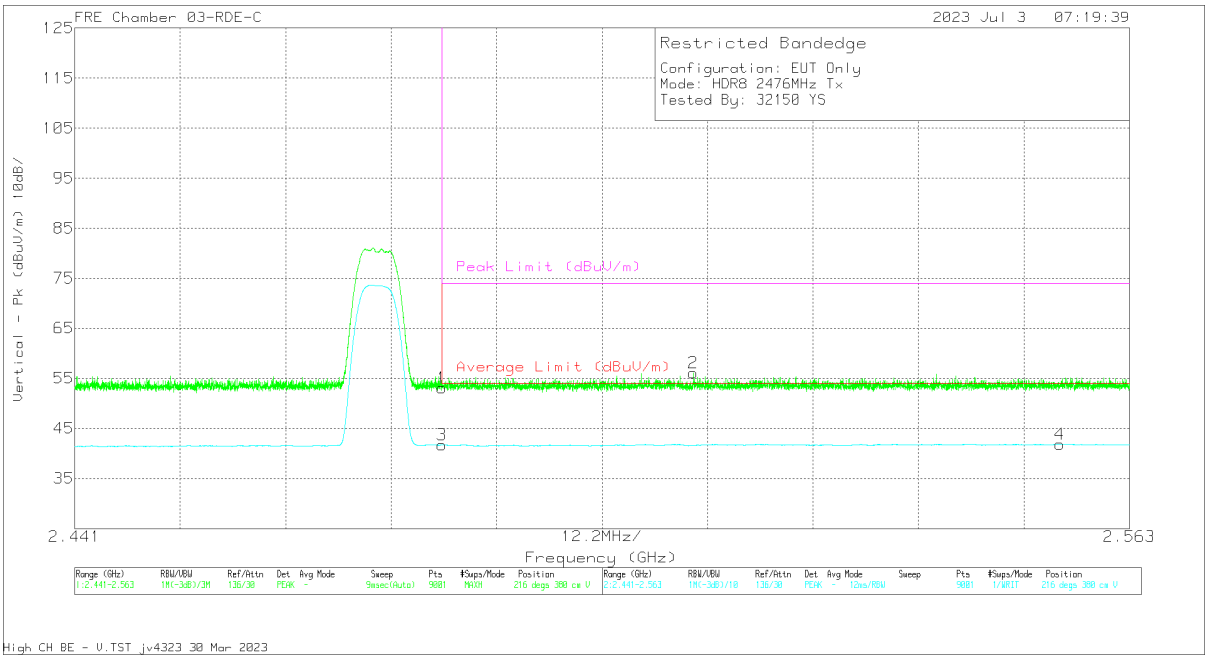
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.52	Pk	32.2	-39.6	53.12	-	-	74	-20.88	216	380	V
3	* 2.4835	49.07	VA1T	32.2	-39.6	41.67	54	-12.33	-	-	216	380	V
2	2.512562	63.43	Pk	32.3	-39.64	56.09	-	-	74	-17.91	216	380	V
4	2.554979	48.98	VA1T	32.3	-39.4	41.88	54	-12.12	-	-	216	380	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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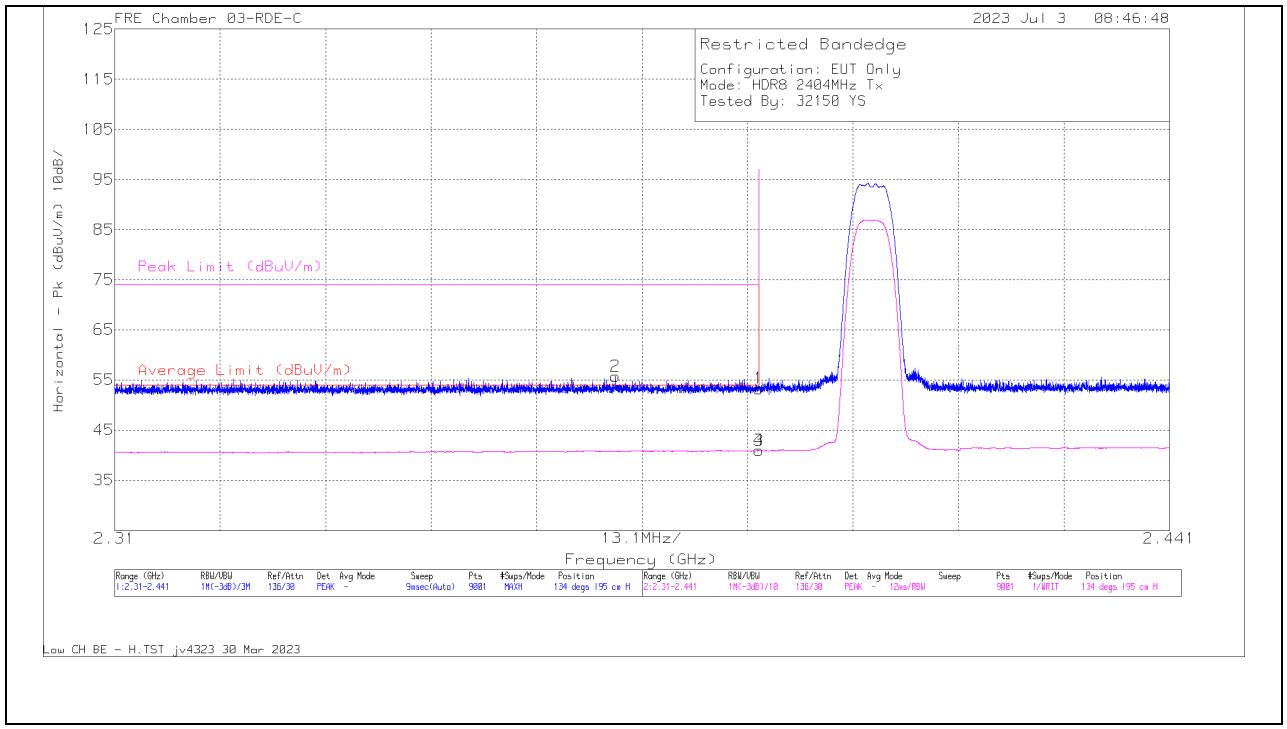
ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.99	Pk	32.1	-39.8	53.29	-	-	74	-20.71	134	195	H
2	* 2.372169	63.61	Pk	32	-39.9	55.71	-	-	74	-18.29	134	195	H
3	* 2.39	48.66	VA1T	32.1	-39.8	40.96	54	-13.04	-	-	134	195	H
4	* 2.39	48.66	VA1T	32.1	-39.8	40.96	54	-13.04	-	-	134	195	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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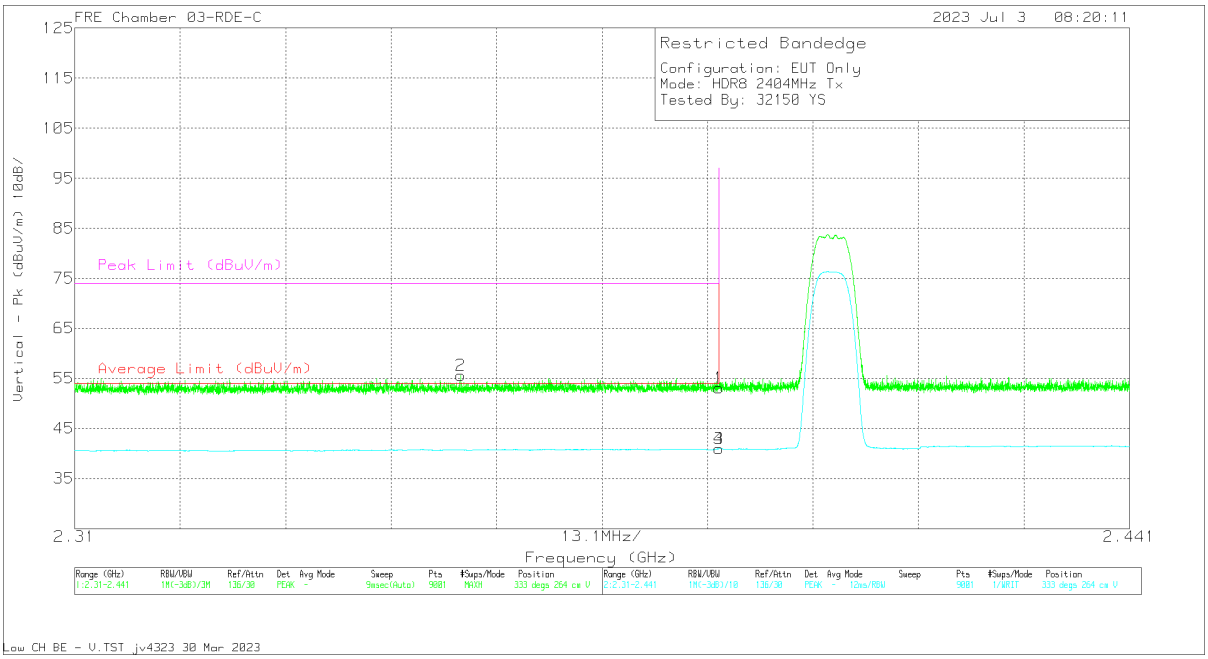
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.78	Pk	32.1	-39.8	53.08	-	-	74	-20.92	333	264	V
2	* 2.357977	63.5	Pk	32	-39.9	55.6	-	-	74	-18.4	333	264	V
3	* 2.39	48.63	VA1T	32.1	-39.8	40.93	54	-13.07	-	-	333	264	V
4	* 2.389985	48.64	VA1T	32.1	-39.8	40.94	54	-13.06	-	-	333	264	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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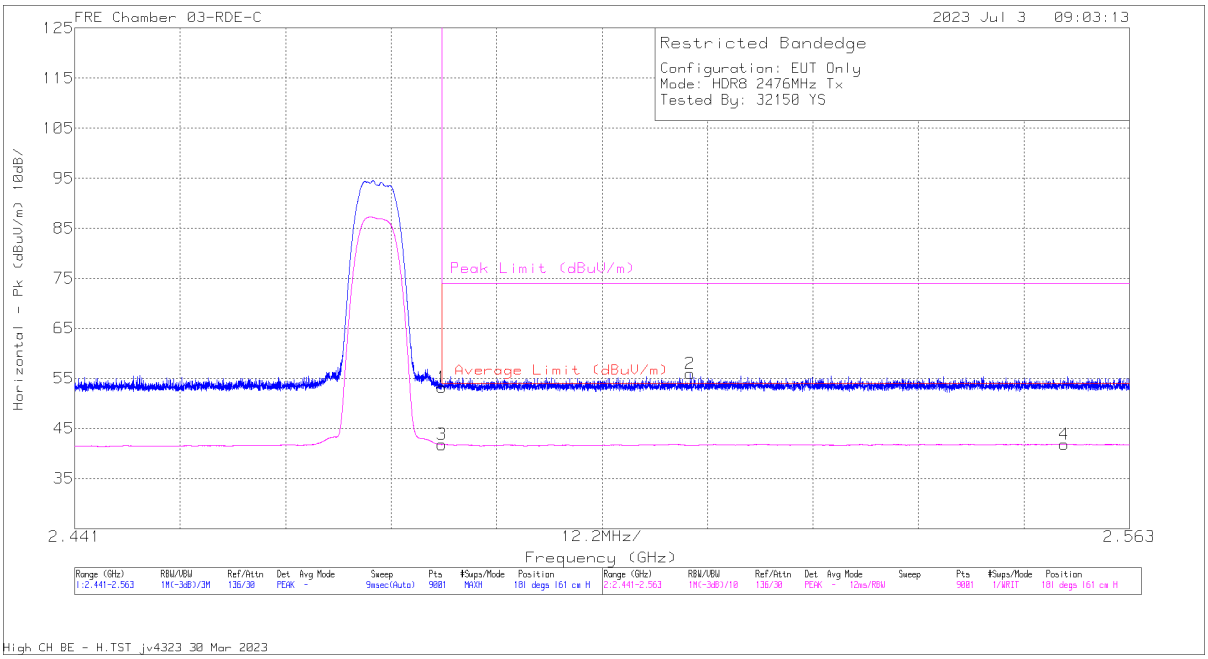
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.66	Pk	32.2	-39.6	53.26	-	-	74	-20.74	181	161	H
3	* 2.4835	49.18	VA1T	32.2	-39.6	41.78	54	-12.22	-	-	181	161	H
2	2.512169	63.39	Pk	32.3	-39.68	56.01	-	-	74	-17.99	181	161	H
4	2.55544	48.99	VA1T	32.3	-39.4	41.89	54	-12.11	-	-	181	161	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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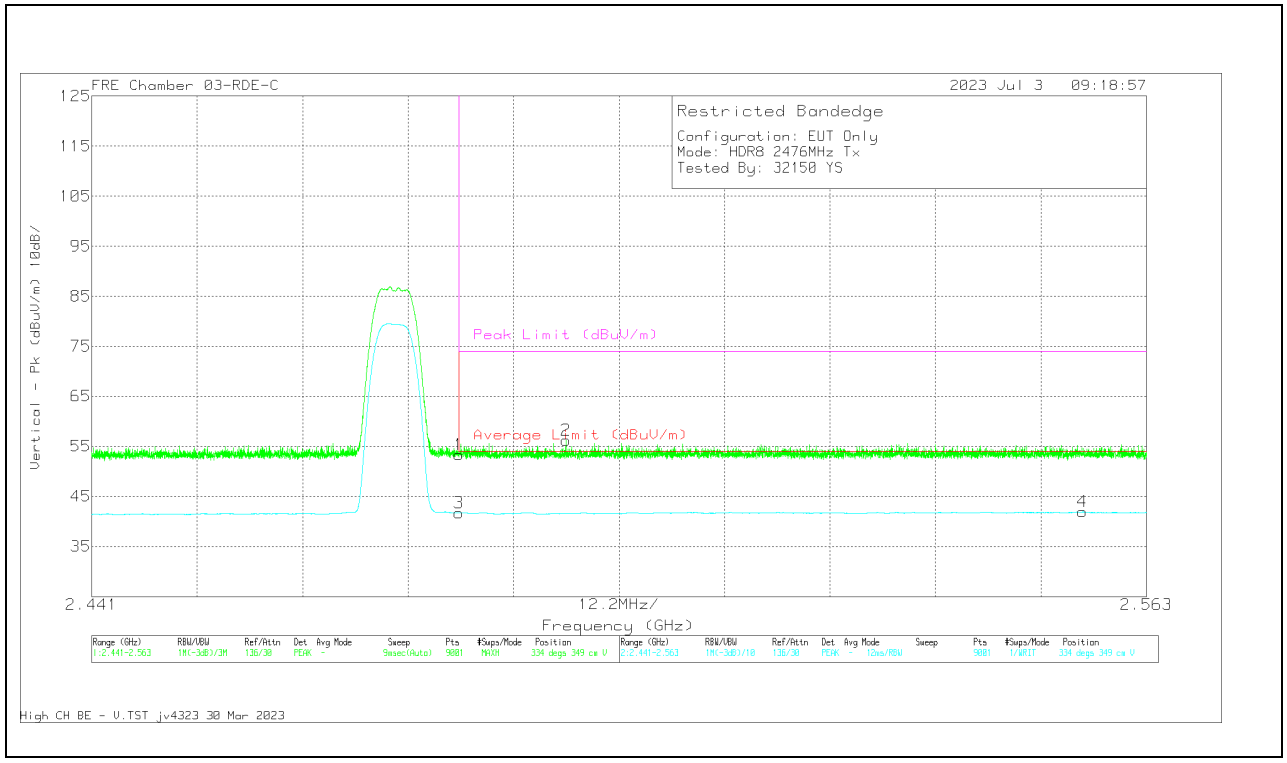
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.76	Pk	32.2	-39.6	53.36	-	-	74	-20.64	334	349	V
2	* 2.495834	63.56	Pk	32.3	-39.62	56.24	-	-	74	-17.76	334	349	V
3	* 2.4835	49.11	VA1T	32.2	-39.6	41.71	54	-12.29	-	-	334	349	V
4	2.555616	49.02	VA1T	32.3	-39.4	41.92	54	-12.08	-	-	334	349	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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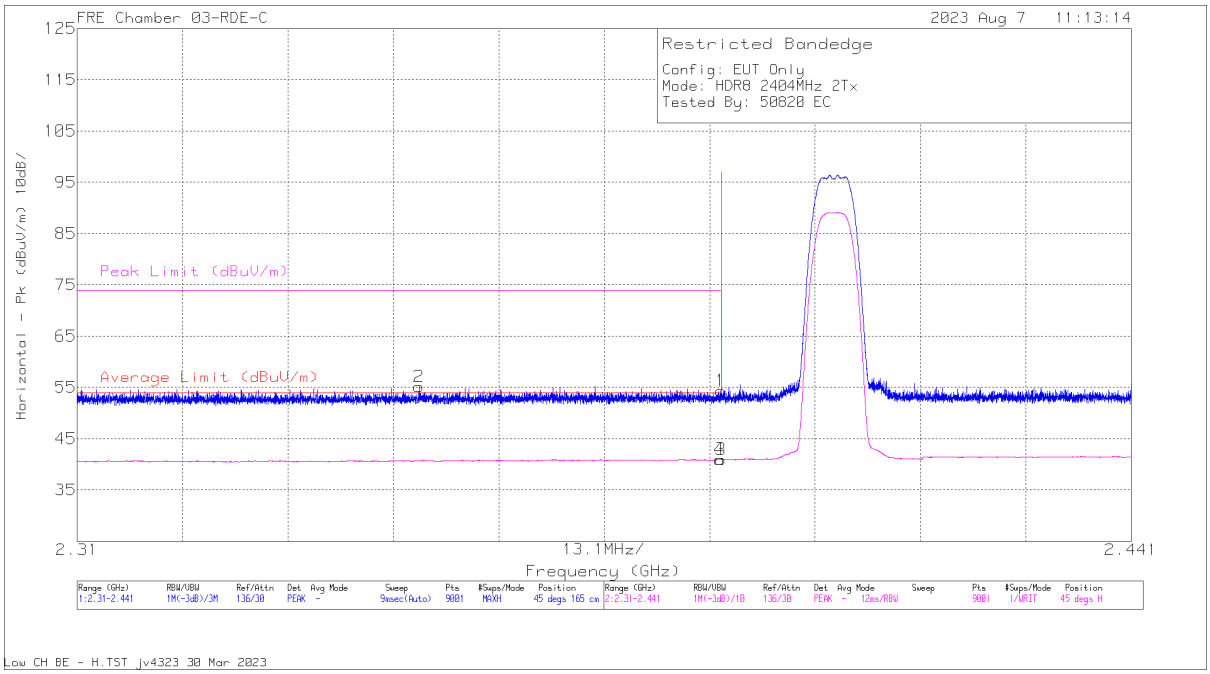
10.2.8. LOW POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	62.03	Pk	32.1	-39.8	54.33	-	-	74	-19.67	45	165	H
2	* 2.352474	63.1	Pk	31.9	-39.85	55.15	-	-	74	-18.85	45	165	H
3	* 2.39	48.63	VA1T	32.1	-39.8	40.93	54	-13.07	-	-	45	165	H
4	* 2.38984	48.67	VA1T	32.1	-39.83	40.94	54	-13.06	-	-	45	165	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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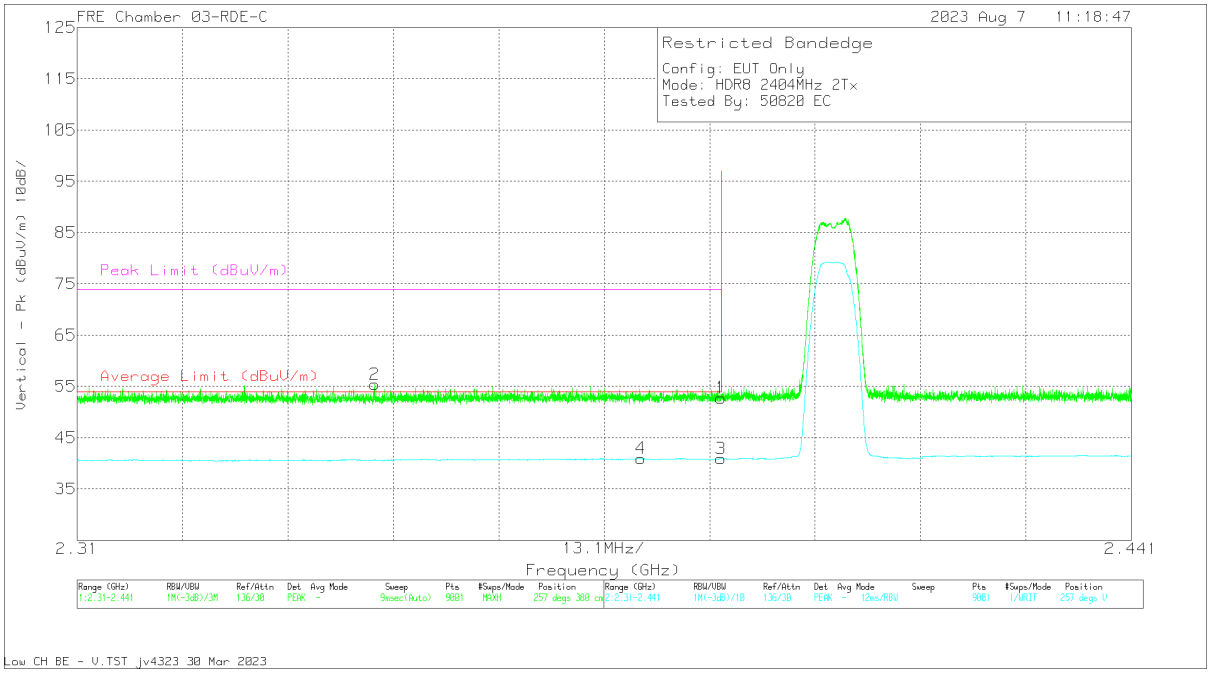
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	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	60.45	Pk	32.1	-39.8	52.75	-	-	74	-21.25	257	380	V
2	* 2.346943	63.4	Pk	31.9	-39.91	55.39	-	-	74	-18.61	257	380	V
3	* 2.39	48.61	VA1T	32.1	-39.8	40.91	54	-13.09	-	-	257	380	V
4	* 2.380029	48.64	VA1T	32.1	-39.8	40.94	54	-13.06	-	-	257	380	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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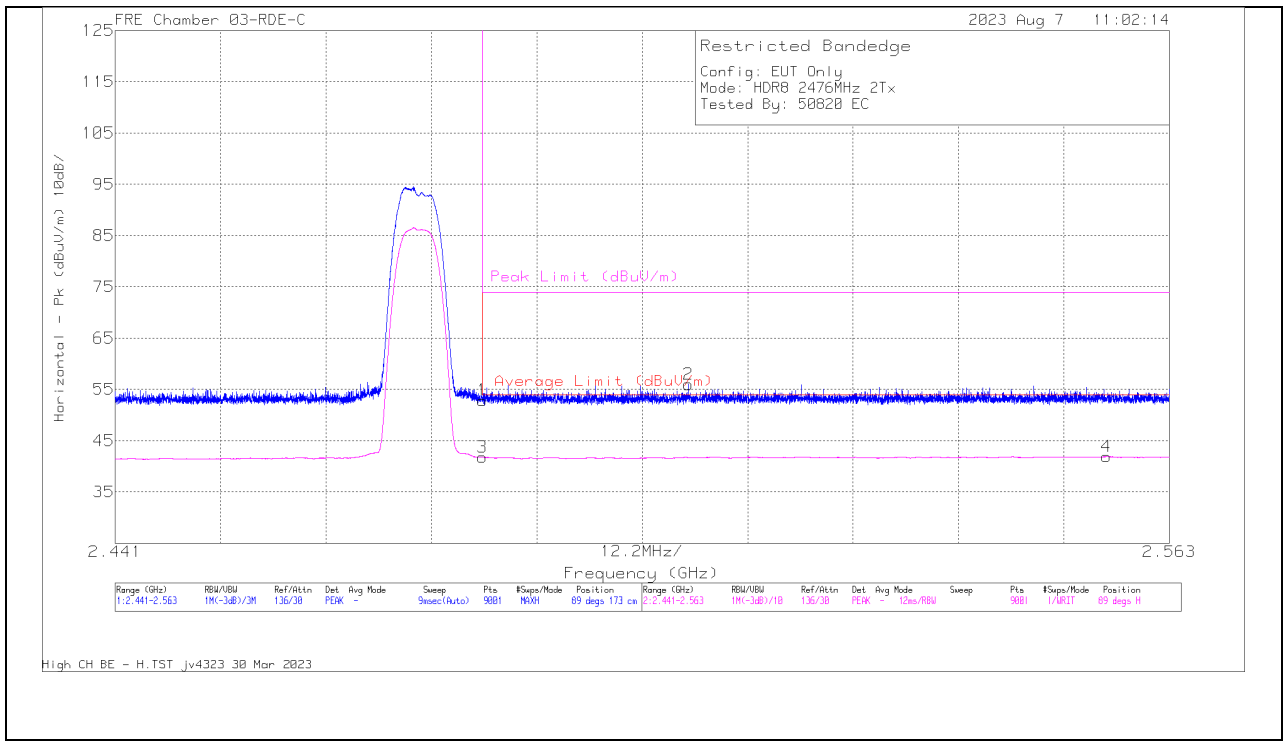
BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.28	Pk	32.2	-39.6	52.88	-	-	74	-21.12	89	173	H
3	* 2.4835	49.16	VA1T	32.2	-39.6	41.76	54	-12.24	-	-	89	172	H
2	2.507316	63.21	Pk	32.3	-39.53	55.98	-	-	74	-18.02	89	173	H
4	2.555711	49	VA1T	32.3	-39.4	41.9	54	-12.1	-	-	89	172	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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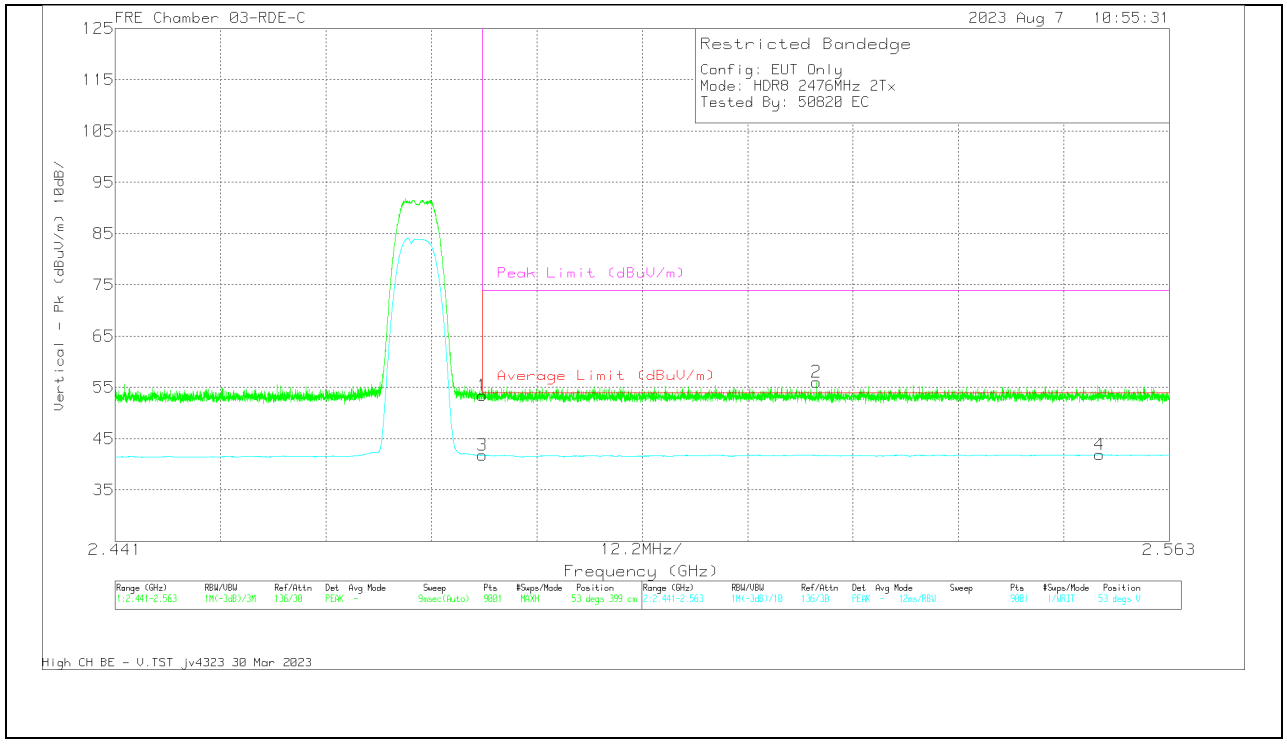
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB) 3mH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	60.82	Pk	32.2	-39.6	53.42	-	-	74	-20.58	53	399	V
3	* 2.4835	49.15	VA1T	32.2	-39.6	41.75	54	-12.25	-	-	53	399	V
2	2.522133	63.33	Pk	32.3	-39.6	56.03	-	-	74	-17.97	53	399	V
4	2.554952	48.99	VA1T	32.3	-39.4	41.89	54	-12.11	-	-	53	399	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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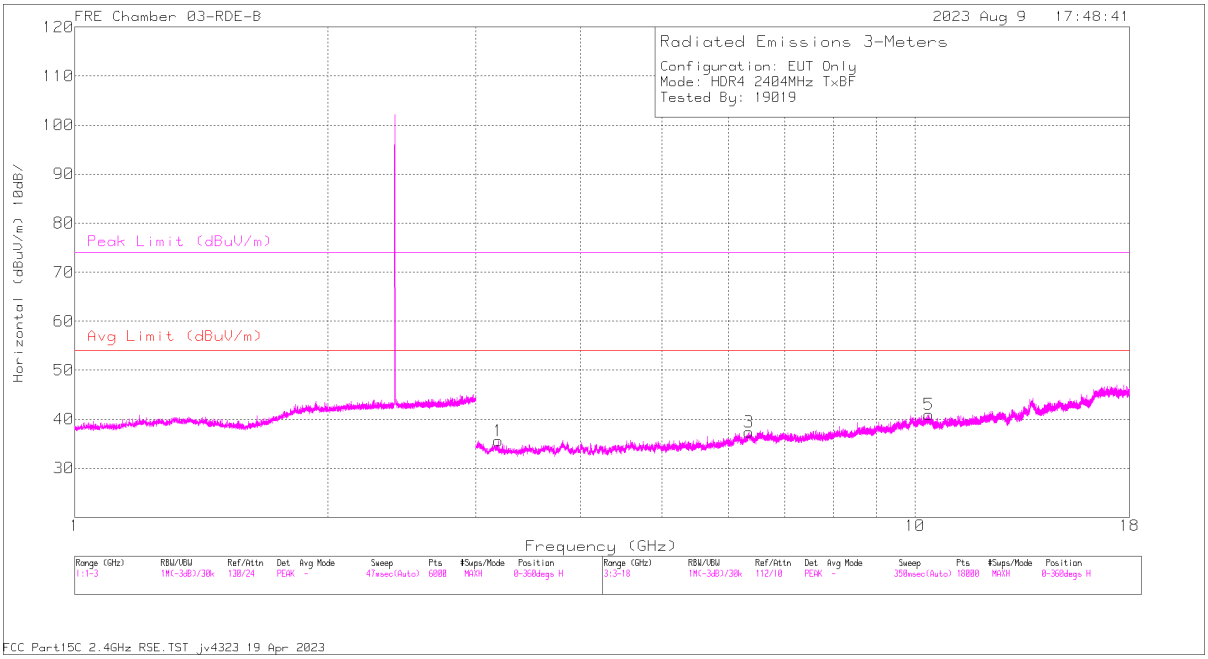
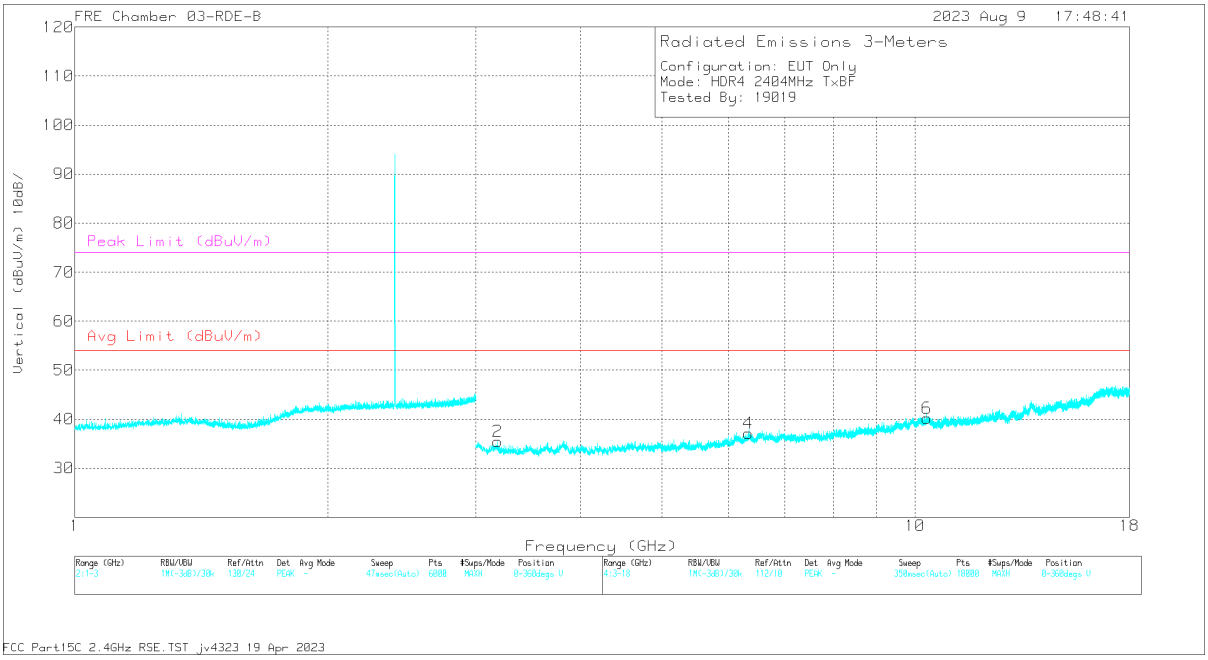
10.2.9. HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	3.187425	59.46	PK2	33.1	-47.66	44.9	74	-29.1	264	187	V
1	3.191108	59.62	PK2	33.1	-47.68	45.04	74	-28.96	111	179	H
4	6.331713	57.59	PK2	35.4	-45.9	47.09	74	-26.91	177	198	V
3	6.340779	58.11	PK2	35.4	-45.8	47.71	74	-26.29	38	107	H
6	10.345533	60.22	PK2	37.8	-47.39	50.63	74	-23.37	84	160	V
5	10.380172	58.99	PK2	37.8	-47.12	49.67	74	-24.33	356	213	H

PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

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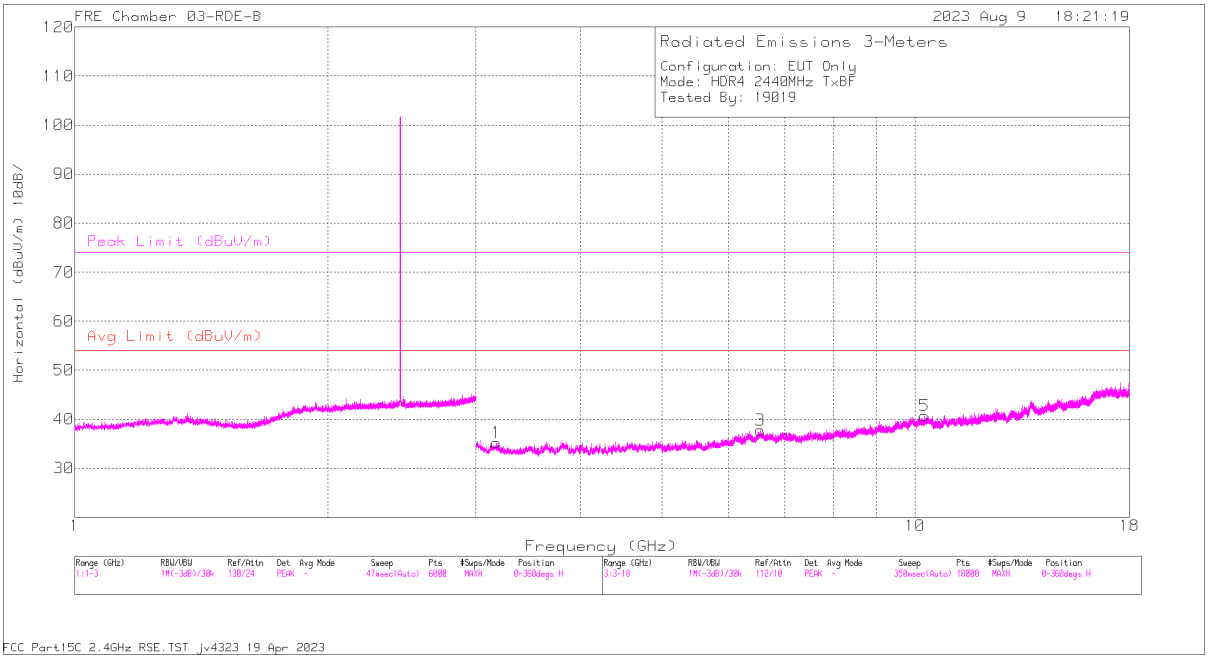
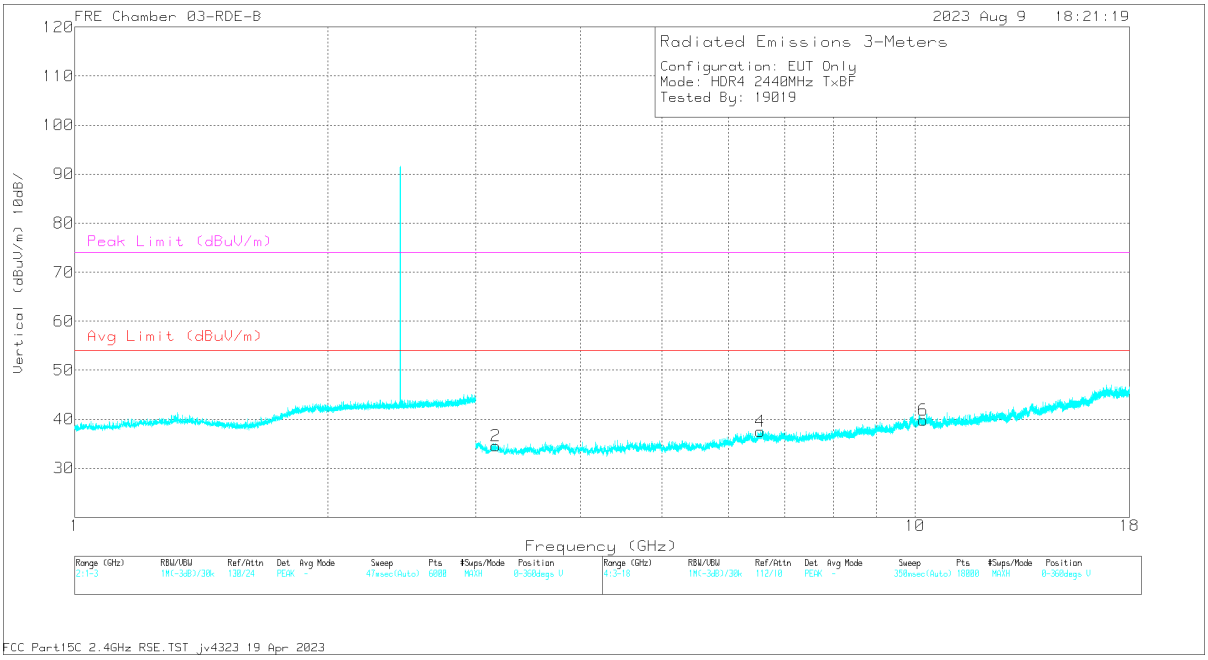
MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	3.16877	59.79	PK2	33.1	-47.75	45.14	74	-28.86	219	147	V
1	3.175803	59.48	PK2	33.1	-47.7	44.88	74	-29.12	121	157	H
4	6.541887	57.68	PK2	35.6	-45.8	47.48	74	-26.52	115	213	V
3	6.546164	58.44	PK2	35.6	-45.7	48.34	74	-25.66	170	136	H
6	10.220512	59.67	PK2	37.7	-47.65	49.72	74	-24.28	223	158	V
5	10.260939	59.44	PK2	37.7	-47.6	49.54	74	-24.46	147	180	H

PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

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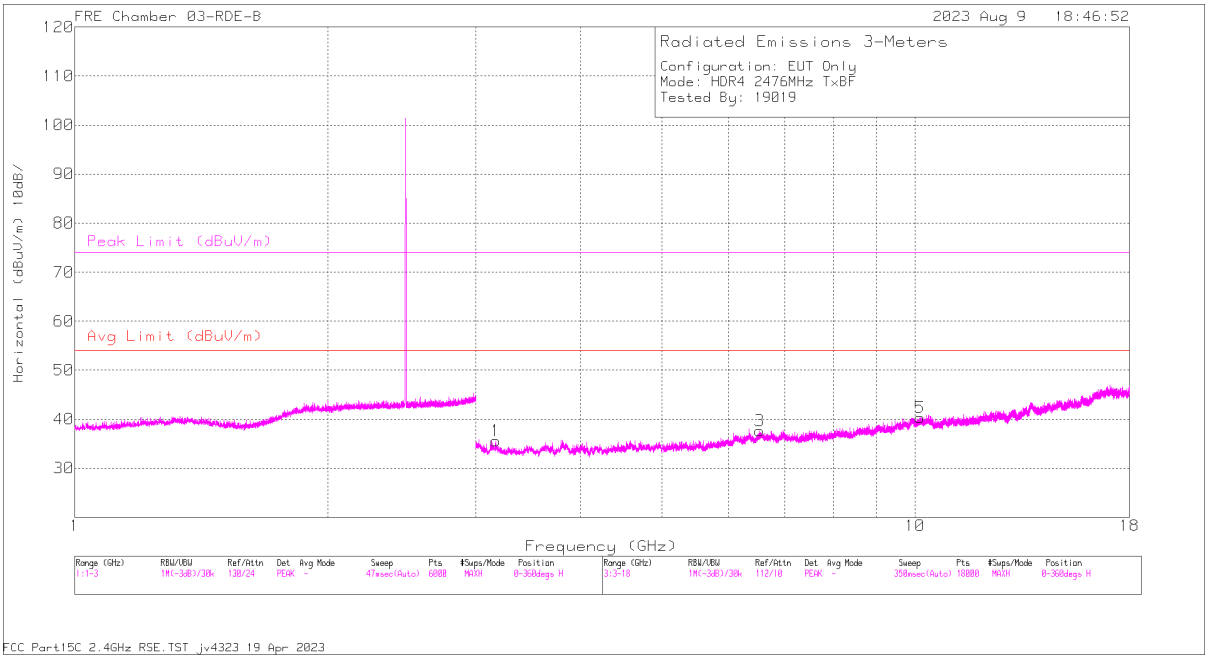
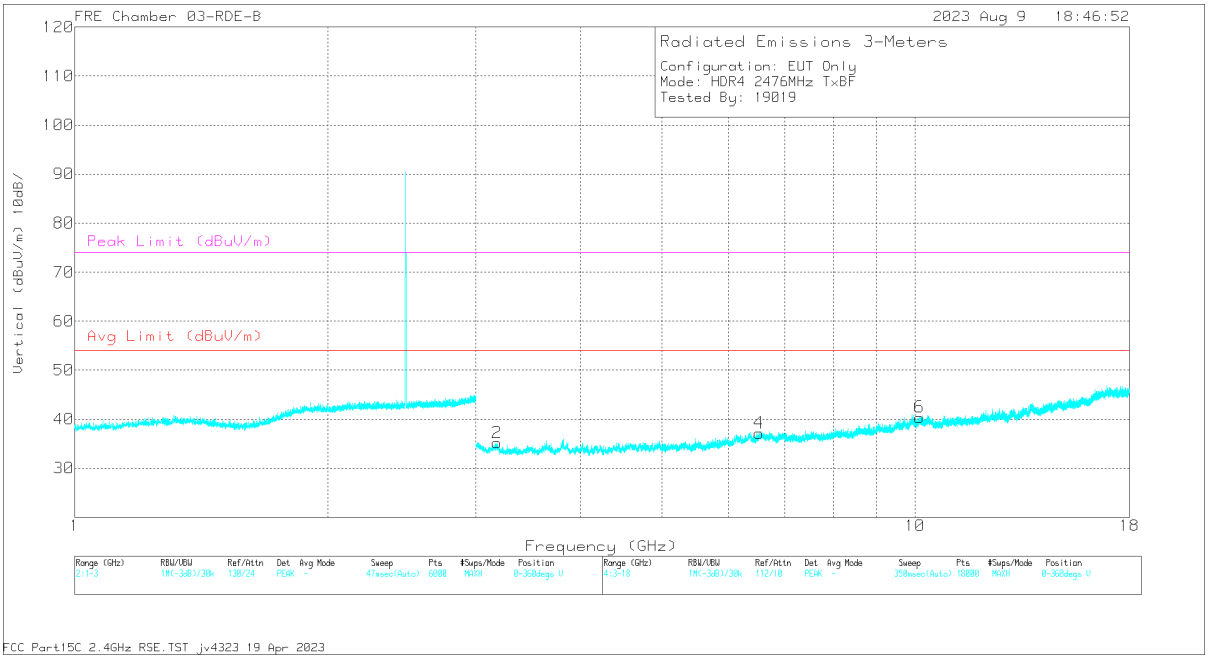
HIGH CHANNEL RESULTS



HORIZONTAL



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RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230300 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.169096	59.81	PK2	33.1	-47.7	45.21	74	-28.79	264	128	H
2	3.182673	59.01	PK2	33.1	-47.77	44.34	74	-29.66	197	108	V
4	6.524941	57.97	PK2	35.6	-45.9	47.67	74	-26.33	160	211	V
3	6.534937	57.66	PK2	35.6	-45.9	47.36	74	-26.64	180	106	H
6	10.130377	60.37	PK2	37.6	-47.9	50.07	74	-23.93	108	164	V
5	10.140069	59.46	PK2	37.6	-47.8	49.26	74	-24.74	134	147	H

PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

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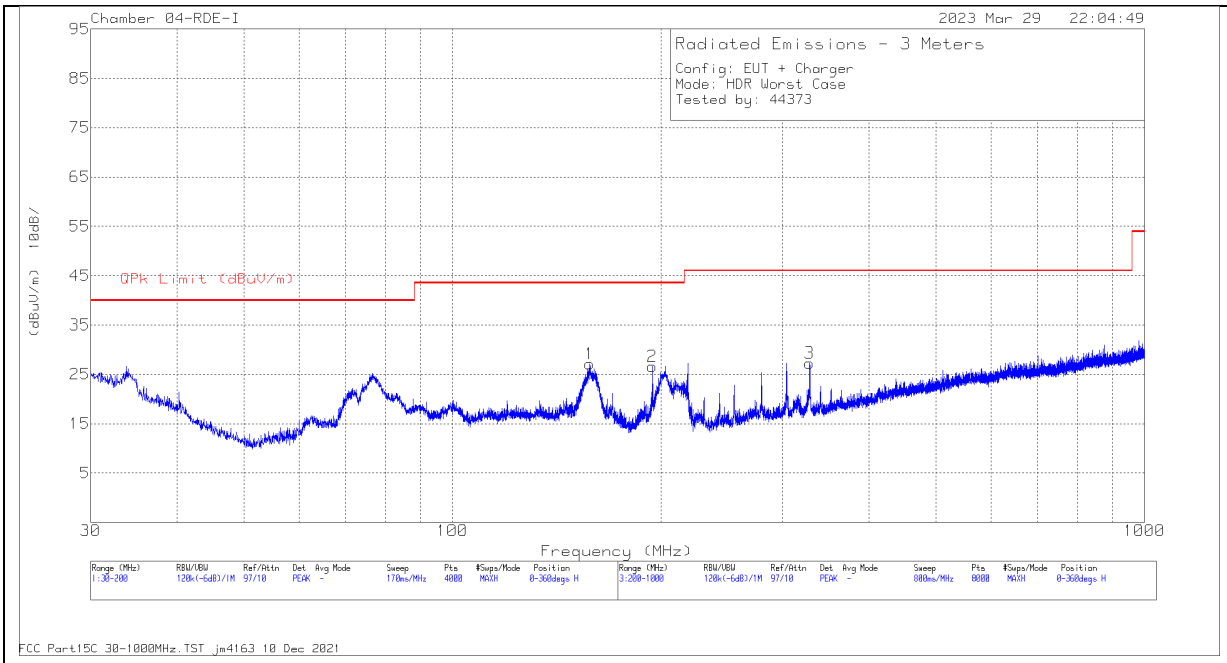
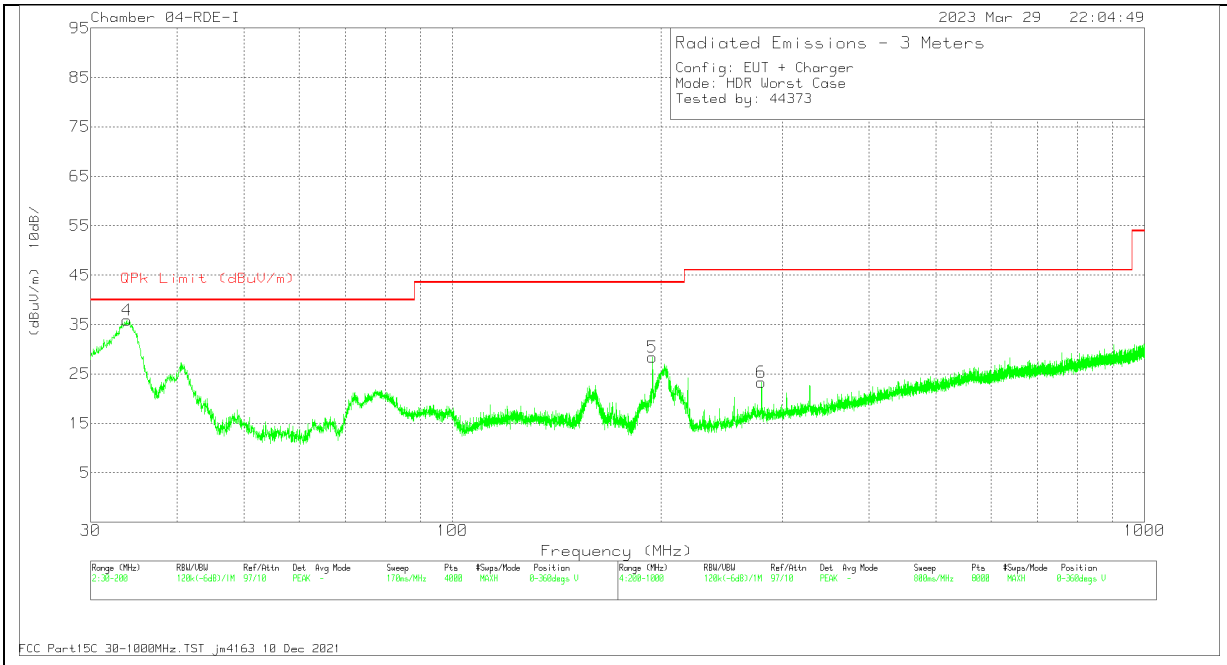
10.3. WORST CASE BELOW 1 GHz

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



HORIZONTAL



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Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80714 ACF (dB) - 10mH	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	158.001	39.27	Pk	18	-30.2	27.07	43.52	-16.45	0-360	199	H
2	194.518	38.69	Pk	17.9	-30	26.59	43.52	-16.93	0-360	100	H
4	33.826	42.04	Pk	25	-31.1	35.94	40	-4.06	0-360	100	V
	33.9891	37.11	Qp	24.9	-31.1	30.91	40	-9.09	20	143	V
5	194.56	40.44	Pk	18	-30	28.44	43.52	-15.08	0-360	100	V
3	* 328.217	37.11	Pk	19.7	-29.5	27.31	46.02	-18.71	0-360	100	H
6	* 279.61	33.87	Pk	19	-29.6	23.27	46.02	-22.75	0-360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector
Qp - Quasi-Peak detector

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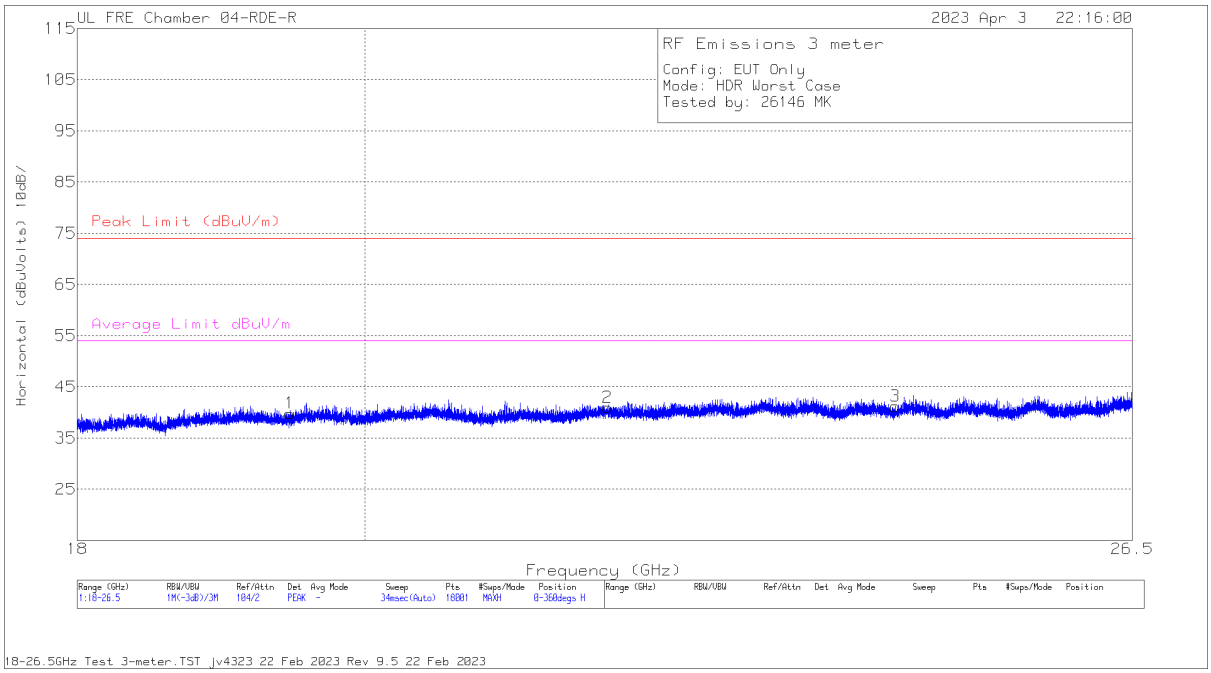
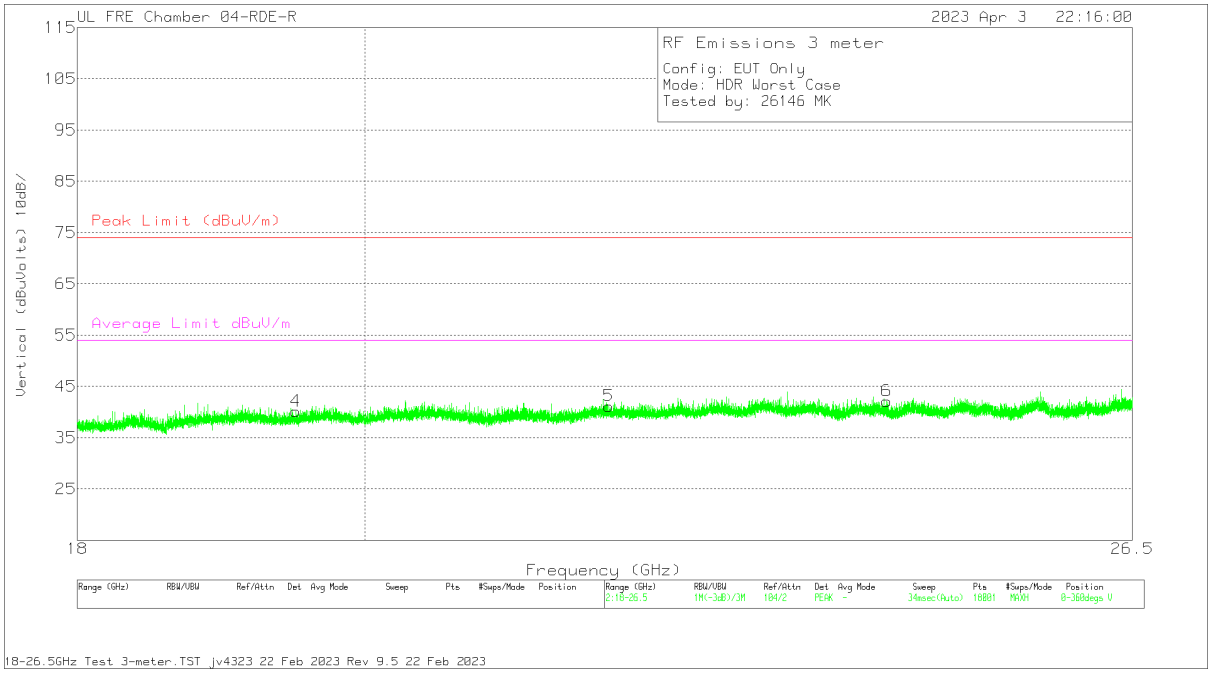
10.4. WORST CASE 18-26 GHz

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



HORIZONTAL



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	172353 ACF (dB) - 3mH	171583 Amp Assembly (dB)	Cables (dB)	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 19.459166	56.32	Pk	33.1	-65.2	15.6	39.82	74	-34.18	54	-14.18	0-360	100	H
4	* 19.503083	56.44	Pk	33.1	-65.1	15.7	40.14	74	-33.86	54	-13.86	0-360	99	V
2	21.860887	55.77	Pk	33.7	-65.1	16.6	40.97	74	-33.03	54	-13.03	0-360	100	H
5	21.873637	55.96	Pk	33.7	-65.1	16.6	41.16	74	-32.84	54	-12.84	0-360	99	V
6	24.219164	55.45	Pk	34.2	-64.9	17.4	42.15	74	-31.85	54	-11.85	0-360	99	V
3	24.296136	54.28	Pk	34.2	-64.8	17.5	41.18	74	-32.82	54	-12.82	0-360	100	H

* - 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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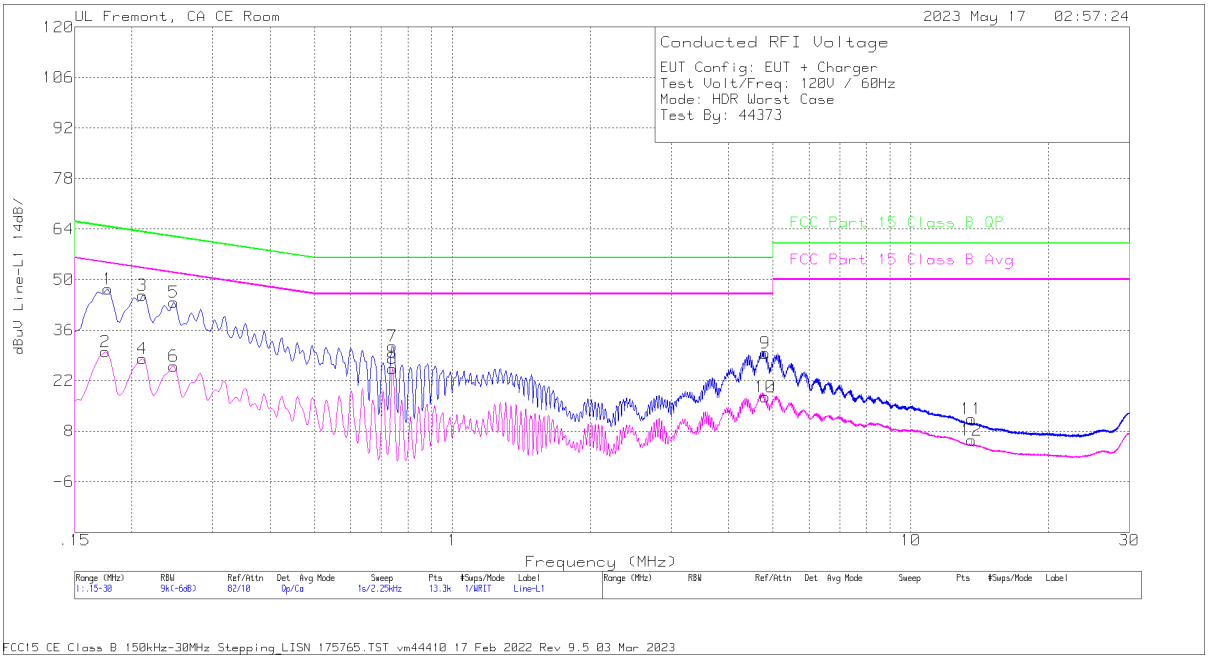
11.1. AC Power Line With AC/DC Adapter

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	L1_LISN.csv dB	C1&C3 cable path loss dB	207996 Limiter with short cabl 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	.1748	20.63	Ca	0	0	9.4	30.03	-	-	54.73	-24.7
4	.2108	18.67	Ca	0	0	9.4	28.07	-	-	53.18	-25.11
6	.2468	16.73	Ca	0	0	9.3	26.03	-	-	51.87	-25.84
8	.7395	15.96	Ca	0	.1	9.3	25.36	-	-	46	-20.64
10	4.8165	8.17	Ca	0	.1	9.3	17.57	-	-	46	-28.43
12	13.56	-4.1	Ca	.1	.2	9.3	5.5	-	-	50	-44.5
1	.177	38.06	Qp	0	0	9.4	47.46	64.63	-17.17	-	-
3	.2108	36.25	Qp	0	0	9.4	45.65	63.18	-17.53	-	-
5	.2468	34.5	Qp	0	0	9.3	43.8	61.87	-18.07	-	-
7	.7395	22.23	Qp	0	.1	9.3	31.63	56	-24.37	-	-
9	4.8188	20.18	Qp	0	.1	9.3	29.58	56	-26.42	-	-
11	13.56	1.88	Qp	.1	.2	9.3	11.48	60	-48.52	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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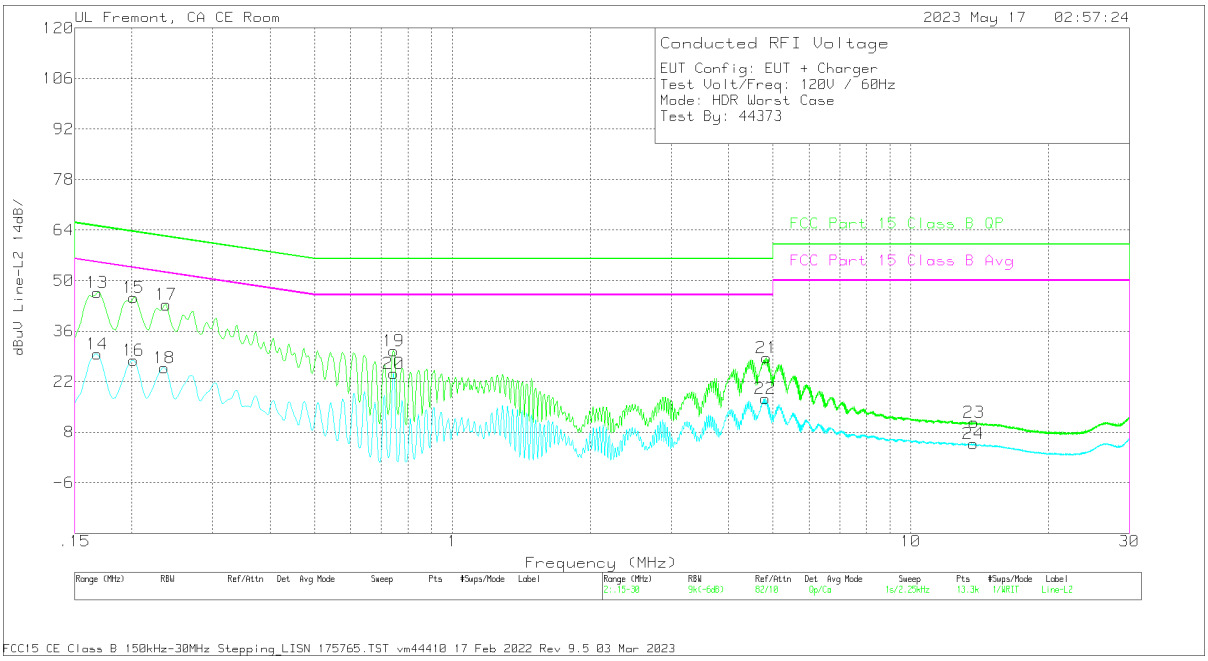
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	L2_LISN dB	C2&C3 cable path loss dB	207996 Limiter with short cabl 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	.168	20.25	Ca	0	0	9.4	29.65	-	-	55.06	-25.41
16	.2018	18.54	Ca	0	0	9.4	27.94	-	-	53.54	-25.6
18	.2355	16.61	Ca	0	0	9.3	25.91	-	-	52.25	-26.34
20	.744	14.8	Ca	0	.1	9.3	24.2	-	-	46	-21.8
22	4.8098	7.86	Ca	0	.1	9.3	17.26	-	-	46	-28.74
24	13.7018	-4.86	Ca	.1	.2	9.3	4.74	-	-	50	-45.26
13	.168	37.35	Qp	0	0	9.4	46.75	65.06	-18.31	-	-
15	.2018	35.83	Qp	0	0	9.4	45.23	63.54	-18.31	-	-
17	.2378	34.01	Qp	0	0	9.3	43.31	62.17	-18.86	-	-
19	.744	21.2	Qp	0	.1	9.3	30.6	56	-25.4	-	-
21	4.848	19.19	Qp	0	.1	9.3	28.59	56	-27.41	-	-
23	13.7288	1.09	Qp	.1	.2	9.3	10.69	60	-49.31	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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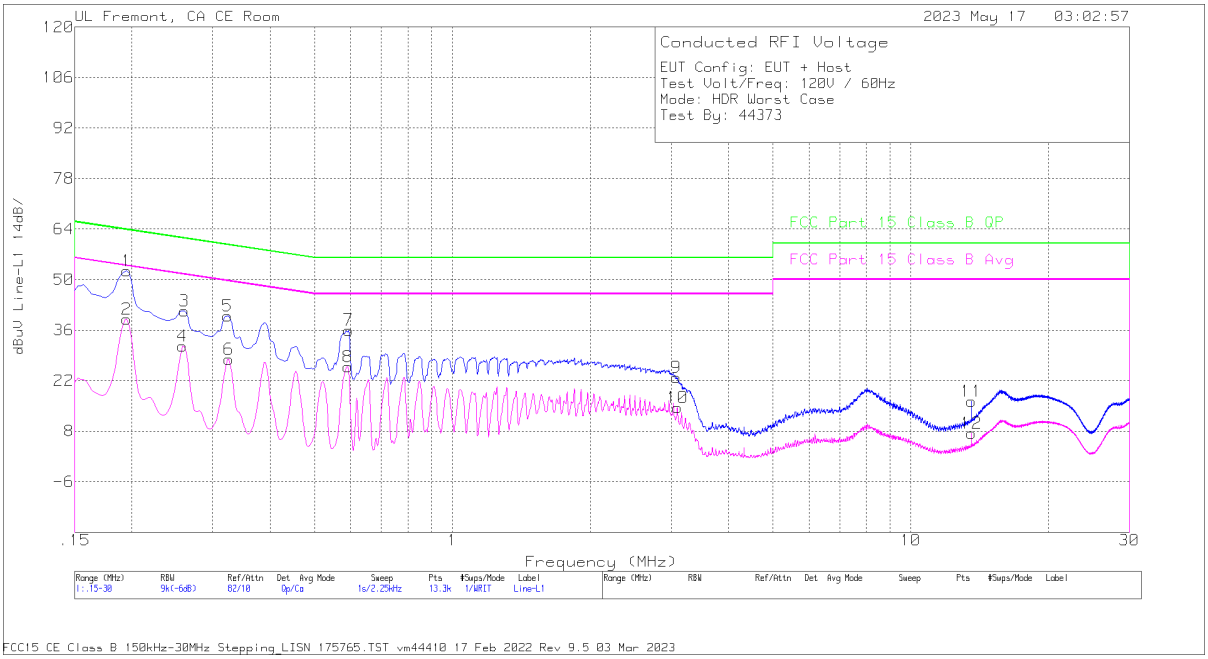
11.2. AC Power Line With Laptop

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	L1_LISN.csv dB	C1&C3 cable path loss dB	207996 Limiter with short cabl 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	.195	29.58	Ca	0	0	9.4	38.98	-	-	53.82	-14.84
4	.258	22.2	Ca	0	0	9.3	31.5	-	-	51.5	-20
6	.3255	18.62	Ca	0	0	9.3	27.92	-	-	49.57	-21.65
8	.591	16.48	Ca	0	.1	9.3	25.88	-	-	46	-20.12
10	3.0953	5.2	Ca	0	.1	9.3	14.6	-	-	46	-31.4
12	13.56	-2.21	Ca	.1	.2	9.3	7.39	-	-	50	-42.61
1	.195	43.02	Qp	0	0	9.4	52.42	63.82	-11.4	-	-
3	.2603	32.07	Qp	0	0	9.3	41.37	61.42	-20.05	-	-
5	.3233	30.55	Qp	0	0	9.3	39.85	59.62	-19.77	-	-
7	.5933	26.6	Qp	0	.1	9.3	36	56	-20	-	-
9	3.0773	13.53	Qp	0	.1	9.3	22.93	56	-33.07	-	-
11	13.56	6.6	Qp	.1	.2	9.3	16.2	60	-43.8	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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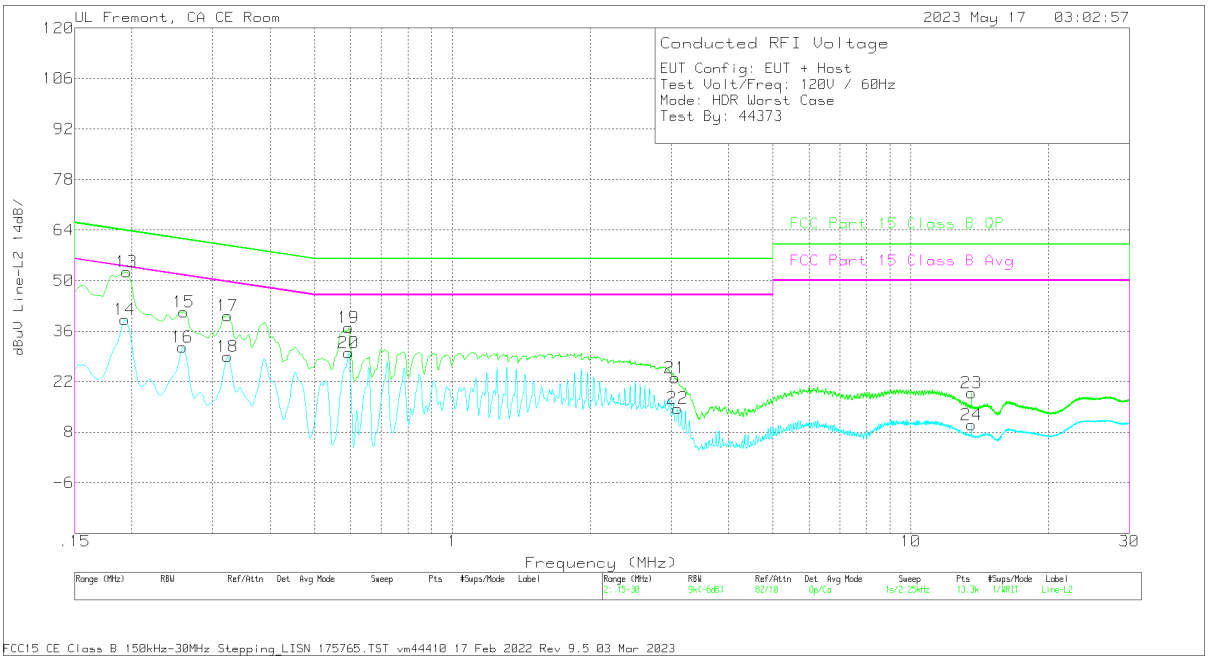
LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	L2_LISN dB	C2&C3 cable path loss dB	207996 Limiter with short cabl 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	.1928	29.86	Ca	0	0	9.4	39.26	-	-	53.92	-14.66
16	.258	22.28	Ca	0	0	9.3	31.58	-	-	51.5	-19.92
18	.3233	19.72	Ca	0	0	9.3	29.02	-	-	49.62	-20.6
20	.5933	20.57	Ca	0	.1	9.3	29.97	-	-	46	-16.03
22	3.0975	5.22	Ca	0	.1	9.3	14.62	-	-	46	-31.38
24	13.56	.35	Ca	.1	.2	9.3	9.95	-	-	50	-40.05
13	.195	42.99	Qp	0	0	9.4	52.39	63.82	-11.43	-	-
15	.2591	31.97	Qp	0	0	9.3	41.27	61.46	-20.19	-	-
17	.3233	30.9	Qp	0	0	9.3	40.2	59.62	-19.42	-	-
19	.5933	27.58	Qp	0	.1	9.3	36.98	56	-19.02	-	-
21	3.0615	13.68	Qp	0	.1	9.3	23.08	56	-32.92	-	-
23	13.56	9.31	Qp	.1	.2	9.3	18.91	60	-41.09	-	-

Qp - Quasi-Peak detector
Ca - CISPR average detection

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12. SETUP PHOTOS

Please refer to 14523771-EP1V1 for setup photos

END OF TEST REPORT

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