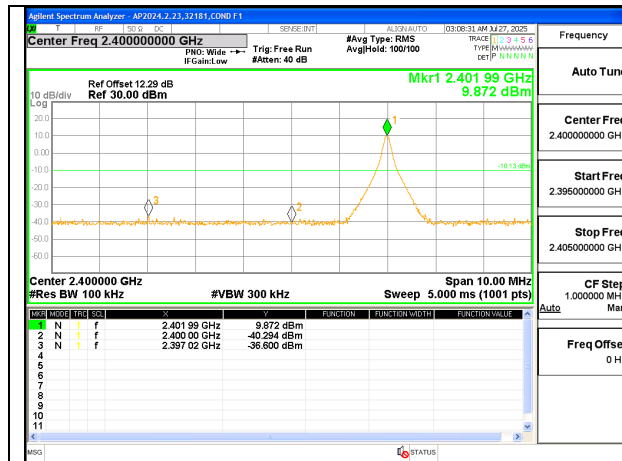
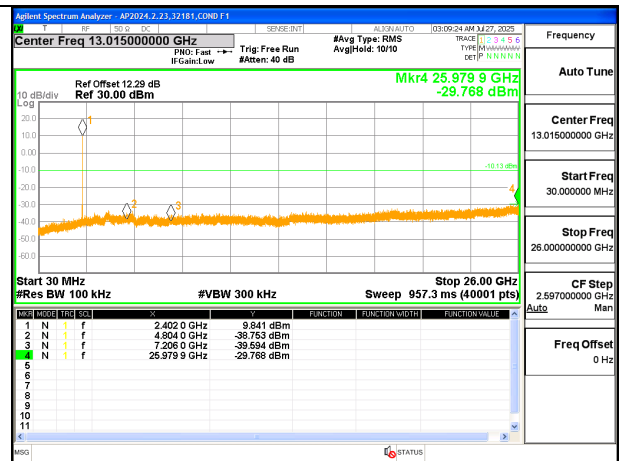
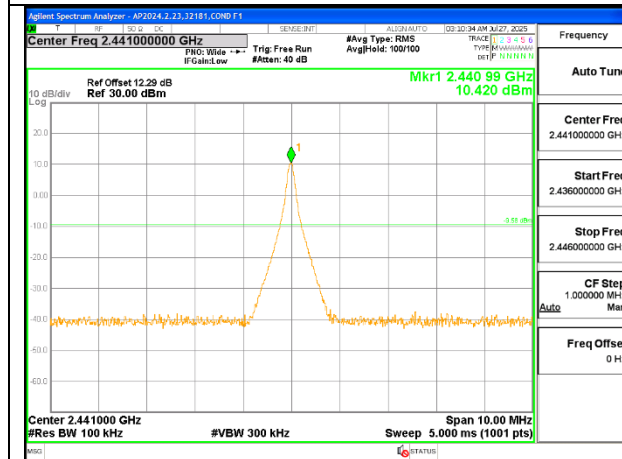
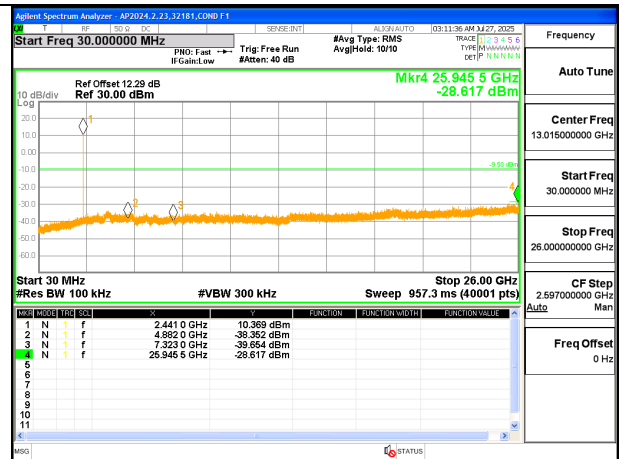
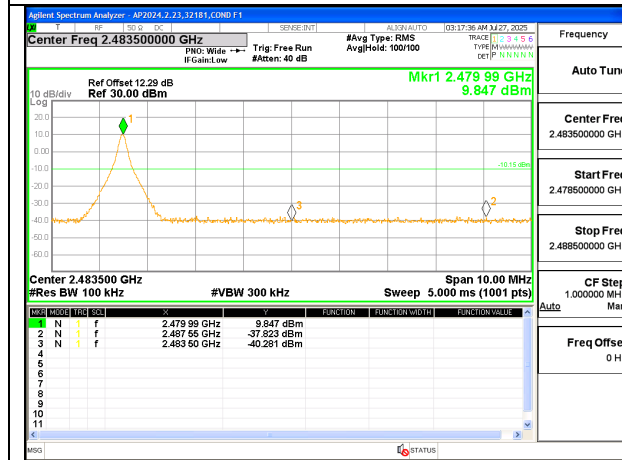
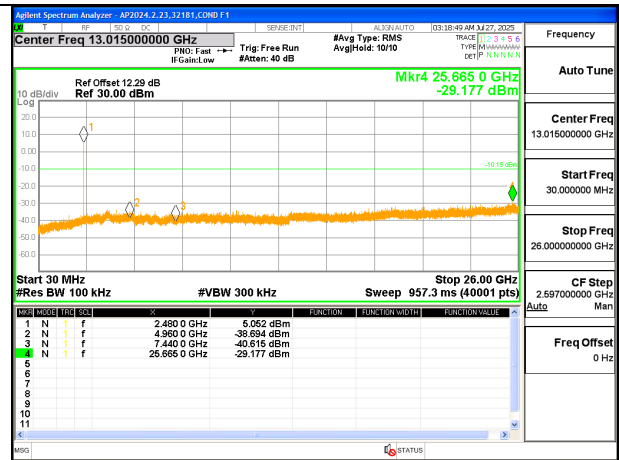
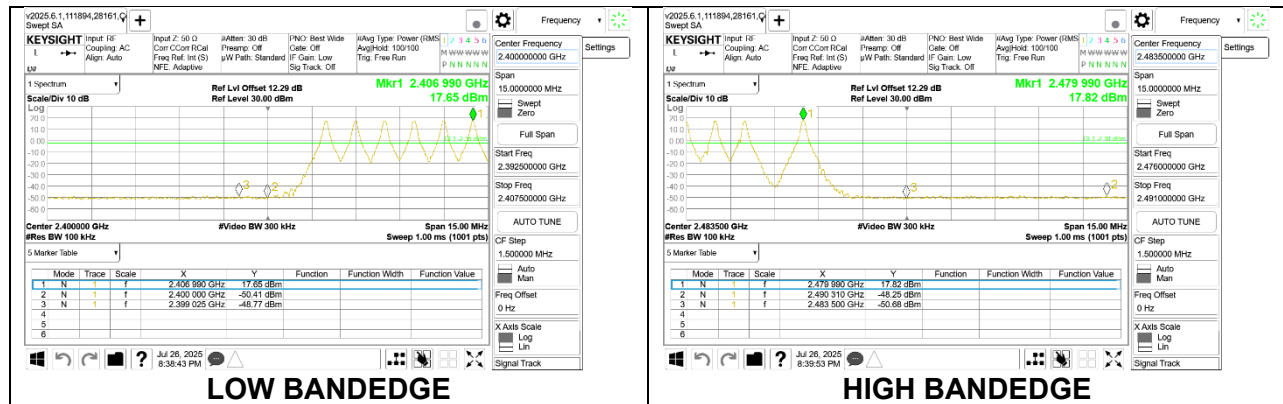


ANT 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

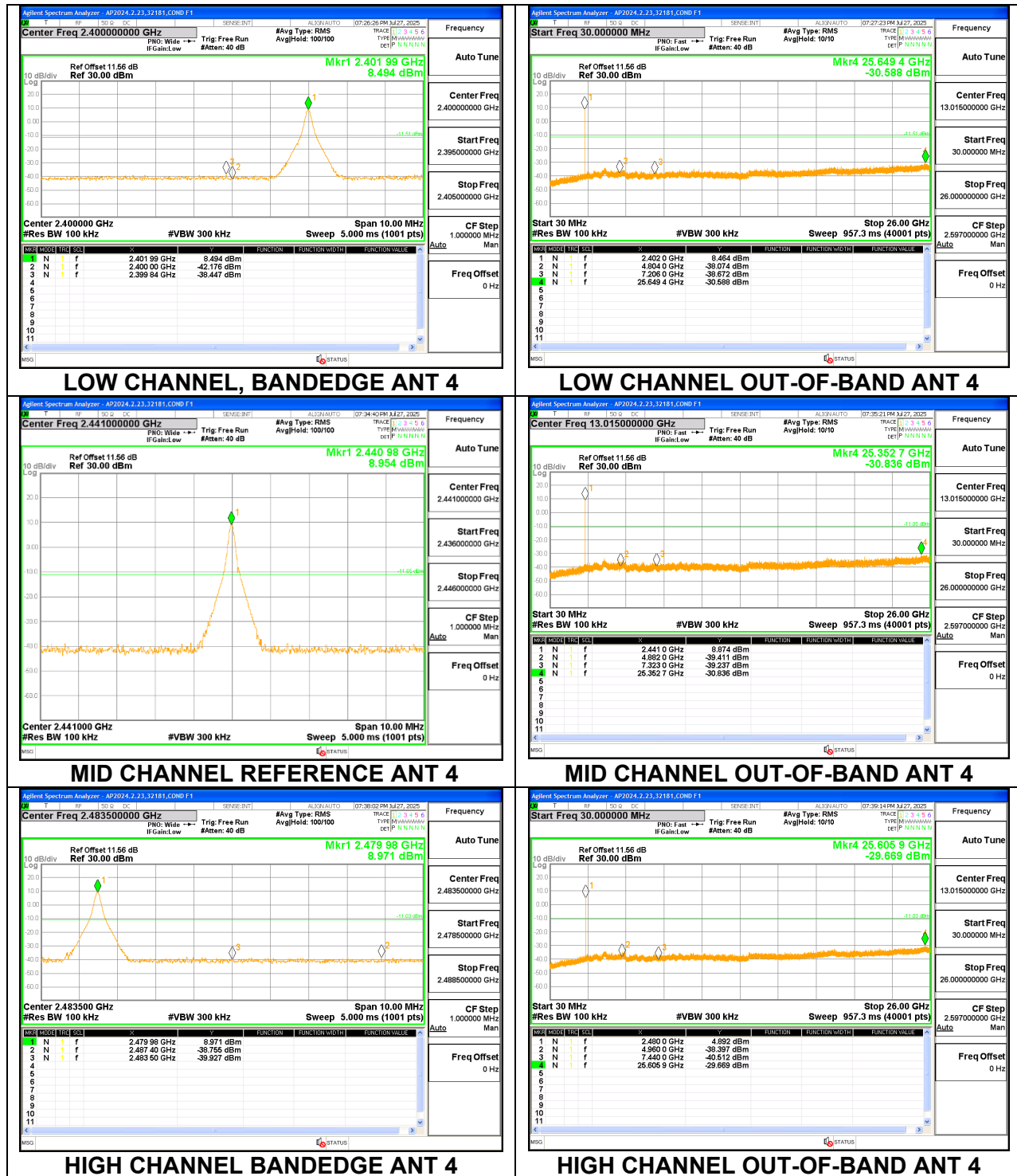
ANT 3 SPURIOUS EMISSIONS, NON-HOPPING**LOW CHANNEL BANDEDGE****OUT-OF-BAND LOW CHANNEL****IN-BAND REFERENCE LEVEL****OUT-OF-BAND MID CHANNEL****HIGH CHANNEL BANDEDGE****OUT-OF-BAND HIGH CHANNEL**

ANT 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

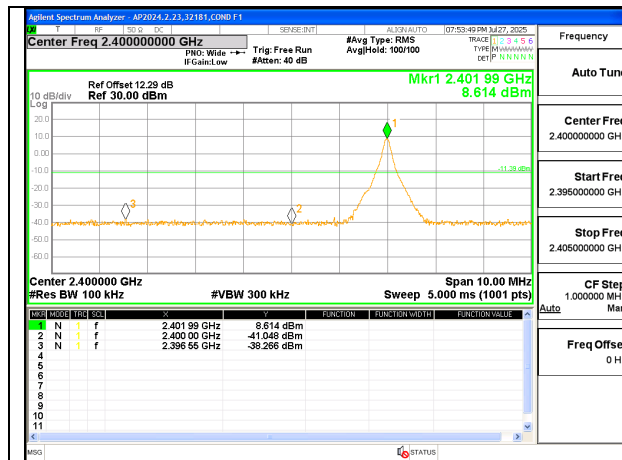
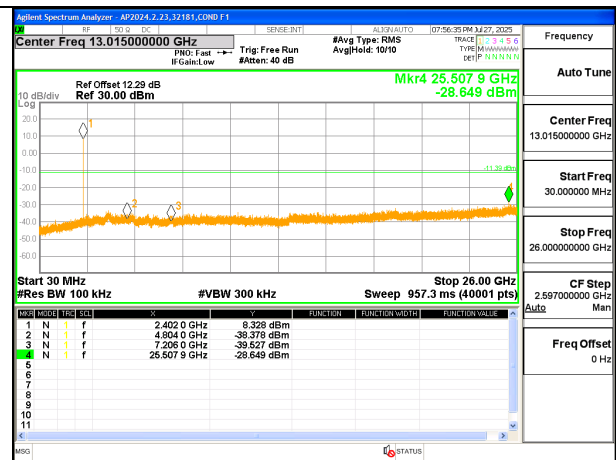
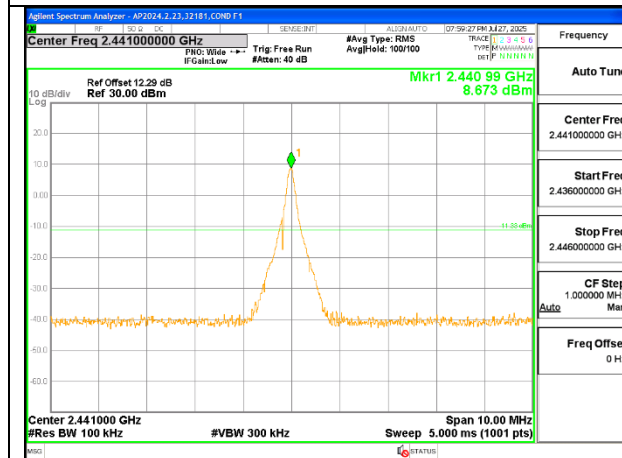
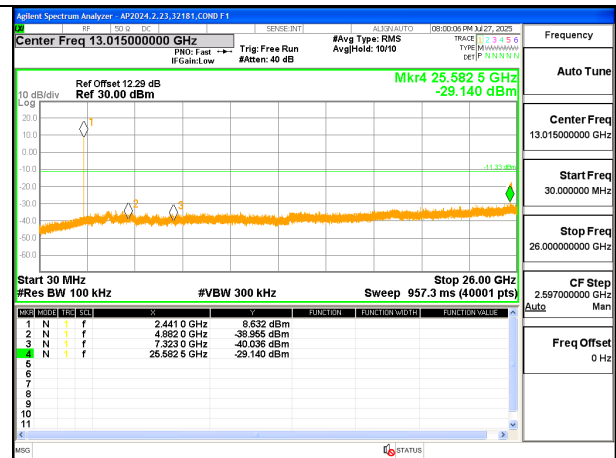
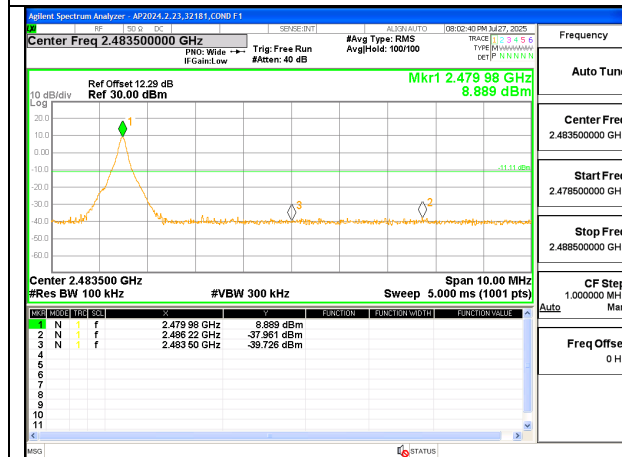
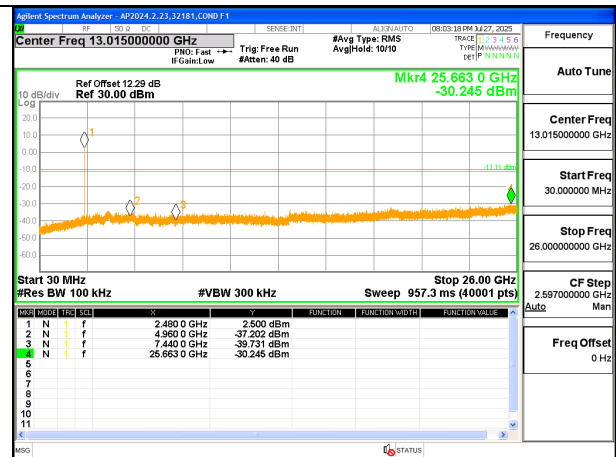
9.8.12. LOW POWER ENHANCED DATA RATE TXBF BTCSM2 MODULATION

Note: Test procedure on beamforming mode is same as BT basic and EDR mode

ANT 4



ANT 4 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

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

ANT 3 SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

10. RADIATED TEST RESULTS

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. 1MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements where the actual VBW set for tests are as follows:

Bluetooth GFSK/8PSK:500Hz; BTCSM2: 30kHz

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.

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only. Blue color trace on plots: Parallel orientation. Green color trace on plots: Perpendicular orientation.

Note: The limits in CFR 47, Part 5, 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 electrical field strength levels (as report in the table) using free space impedance of 377Ohms. For example, the measurement of 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 margins, W dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

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.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

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

KDB 558074 D01 15.247 Meas Guidance

Use of a duty cycle correction factor (DCCF) is permitted for calculating average radiated field strength emission levels for an FHSS device in 15.247. This DCCF can be applied when the field strength limit (e.g., within a Government Restricted band) and the conditions specified in Section 15.35(c) can be satisfied. The average radiated field strength is calculated by subtracting the DCCF from the maximum radiated field strength level as determined through measurement. The maximum radiated field strength level represents the worst-case (maximum amplitude) RMS measurement of the emission(s) during continuous transmission (i.e., not including any time intervals during which the transmitter is off or is transmitting at a reduced power level). It is also acceptable to apply the DCCF to a measurement performed with a peak detector instead of the specified RMS power averaging detector. Note that Section 15.35(c) specifies that the DCCF shall represent the worst-case (greatest duty cycle) over any 100 msec transmission period.

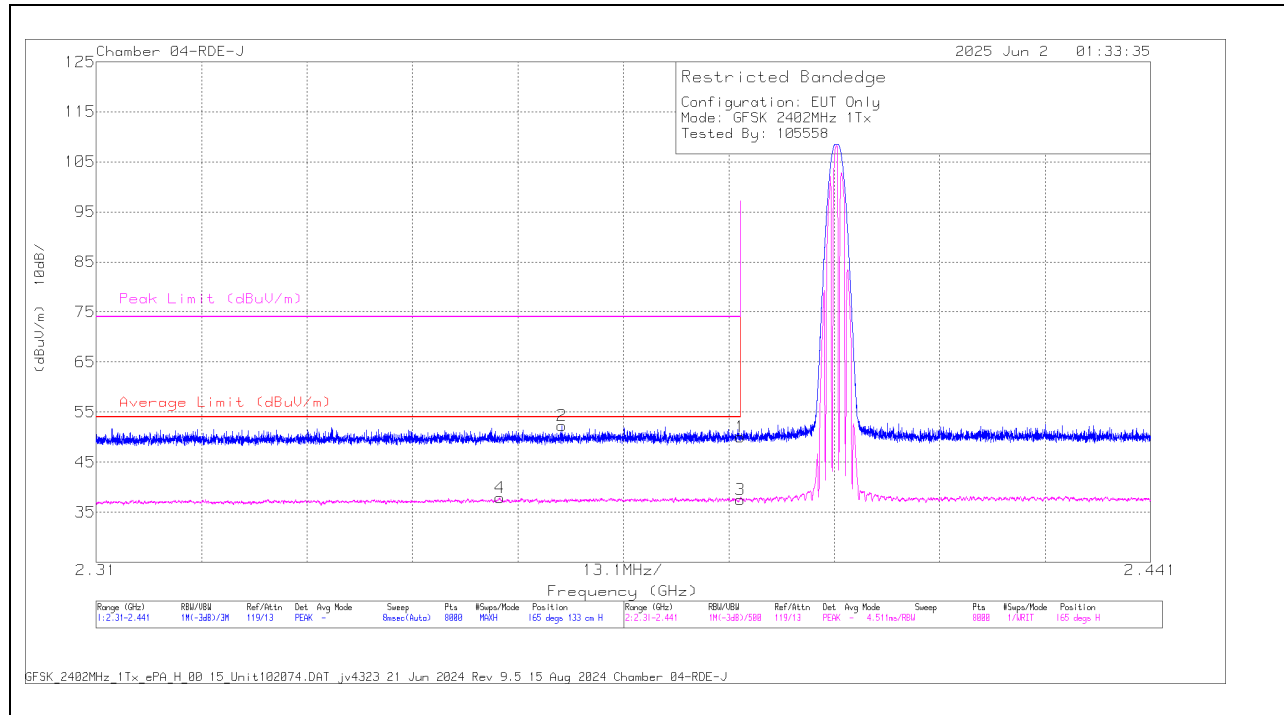
10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



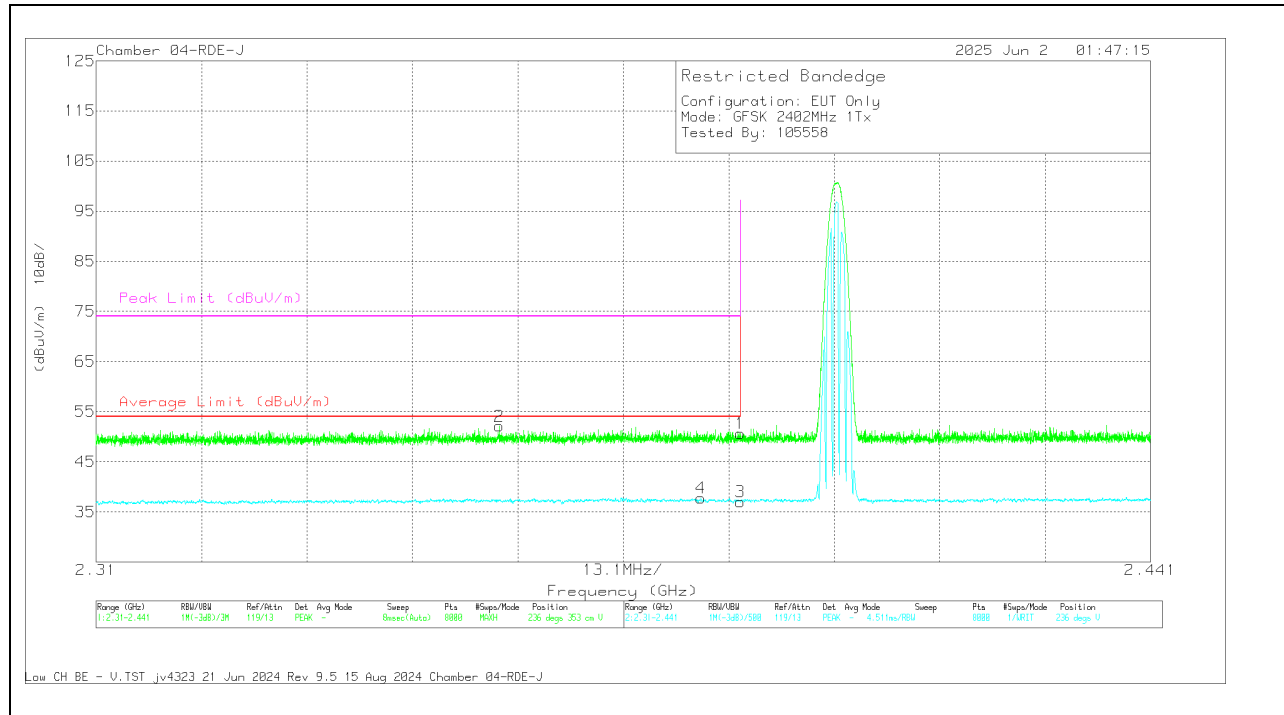
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin(dB)	Azimuth (Degs)	Height(cm)	Polarity
1	* 2.39	54.93	Pk	32.2	-37.1	50.03	-	-	74	-23.97	165	133	H
2	* 2.367827	57.26	Pk	32.1	-37.1	52.26	-	-	74	-21.74	165	133	H
3	* 2.39	42.36	VA1T	32.2	-37.1	37.46	54	-16.54	-	-	165	133	H
4	* 2.360146	42.89	VA1T	32.1	-37.1	37.89	54	-16.11	-	-	165	133	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

VERTICAL RESULT

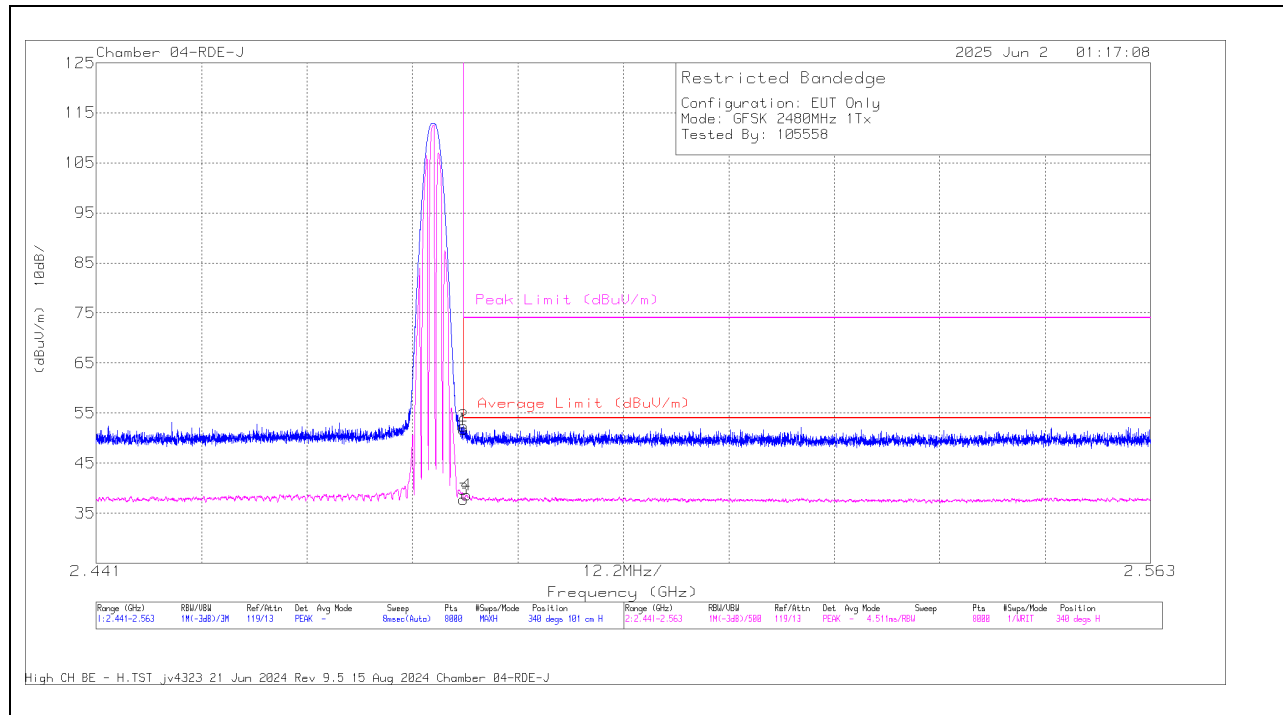


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.58	Pk	32.2	-37.1	50.68	-	-	74	-23.32	236	353	V
2	* 2.360097	57.09	Pk	32.1	-37.1	52.09	-	-	74	-21.91	236	353	V
3	* 2.39	41.92	VA1T	32.2	-37.1	37.02	54	-16.98	-	-	236	353	V
4	* 2.385121	42.66	VA1T	32.2	-37.1	37.76	54	-16.24	-	-	236	353	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

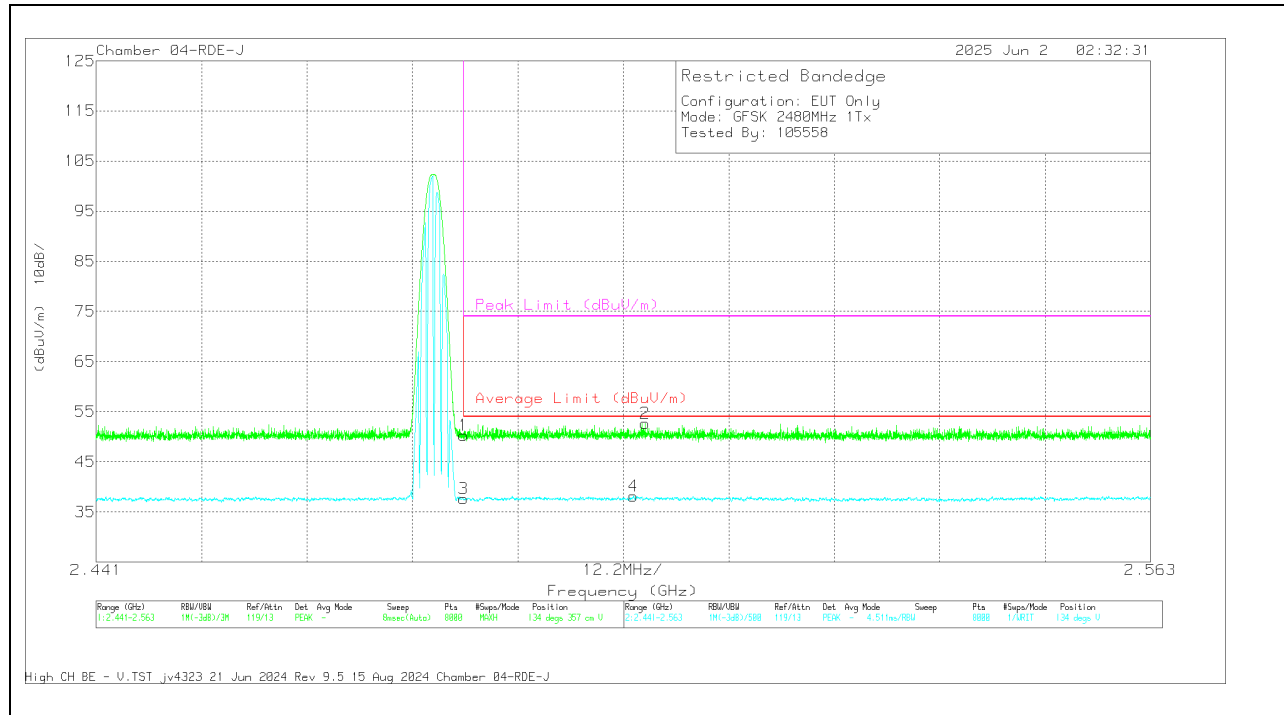
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	56.26	Pk	32.4	-36.9	51.76	-	-	74	-22.24	340	101	H
2	* 2.483507	56.86	Pk	32.4	-36.9	52.36	-	-	74	-21.64	340	101	H
3	* 2.4835	42.25	VA1T	32.4	-36.9	37.75	54	-16.25	-	-	340	101	H
4	* 2.483889	43.18	VA1T	32.4	-36.9	38.68	54	-15.32	-	-	340	101	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

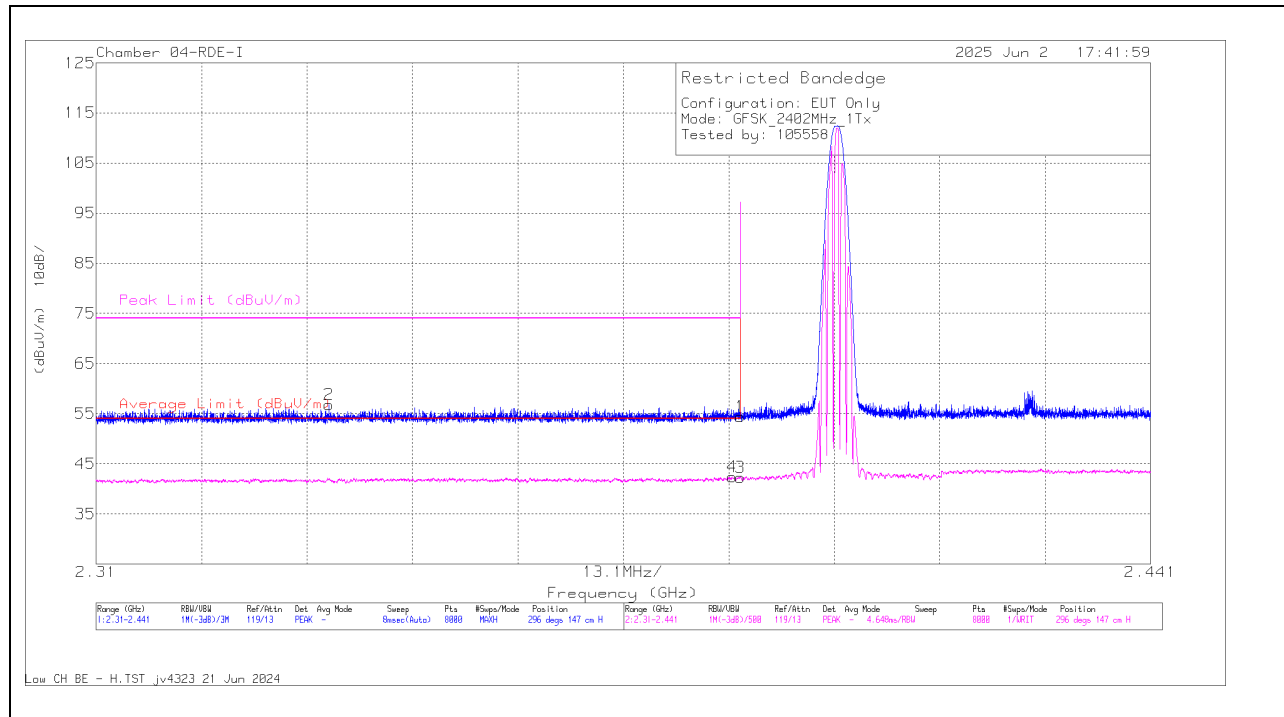


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	54.74	Pk	32.4	-36.9	50.24	-	-	74	-23.76	134	357	V
2	2.504525	57.07	Pk	32.5	-36.9	52.67	-	-	74	-21.33	134	357	V
3	* 2.4835	42.12	VA1T	32.4	-36.9	37.62	54	-16.38	-	-	134	357	V
4	2.503182	42.56	VA1T	32.5	-36.9	38.16	54	-15.84	-	-	134	357	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

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

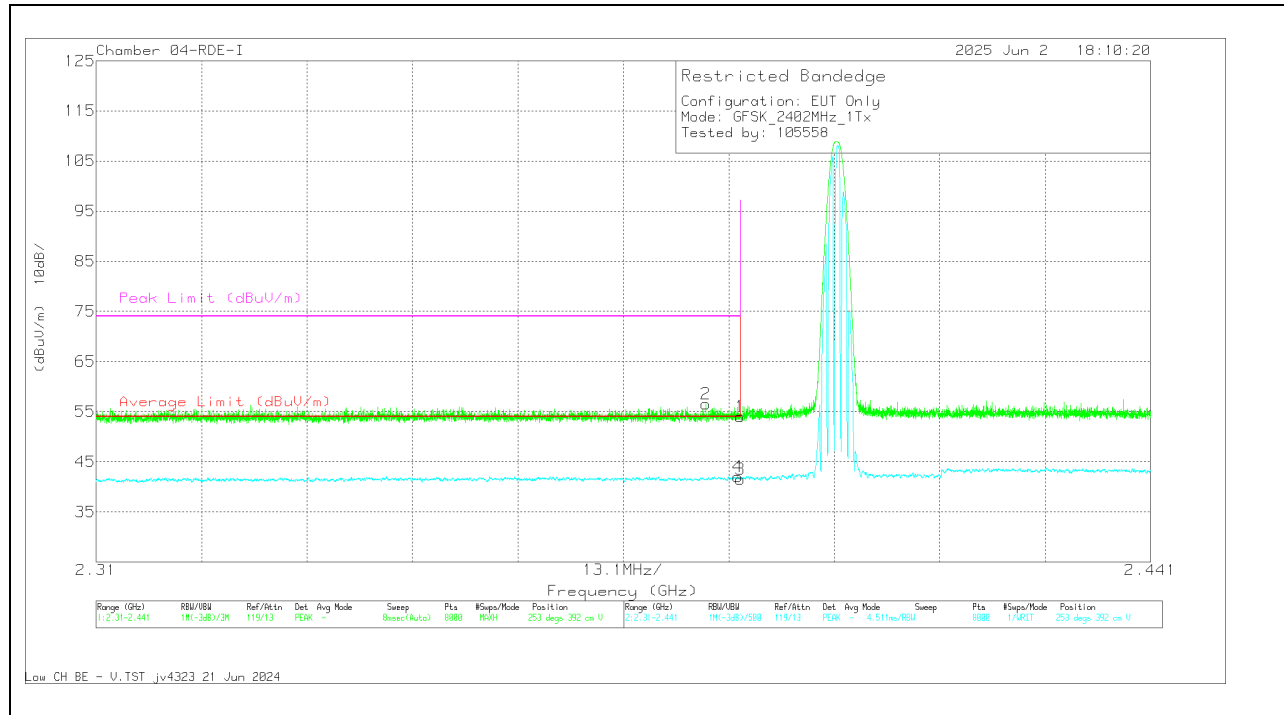
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.51	Pk	31.8	-19.9	54.41	-	-	74	-19.59	296	147	H
2	* 2.338905	44.93	Pk	31.6	-19.7	56.83	-	-	74	-17.17	296	147	H
3	* 2.39	30.33	VA1T	31.8	-19.9	42.23	54	-11.77	-	-	296	147	H
4	* 2.389035	30.35	VA1T	31.8	-19.8	42.35	54	-11.65	-	-	296	147	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

VERTICAL RESULT

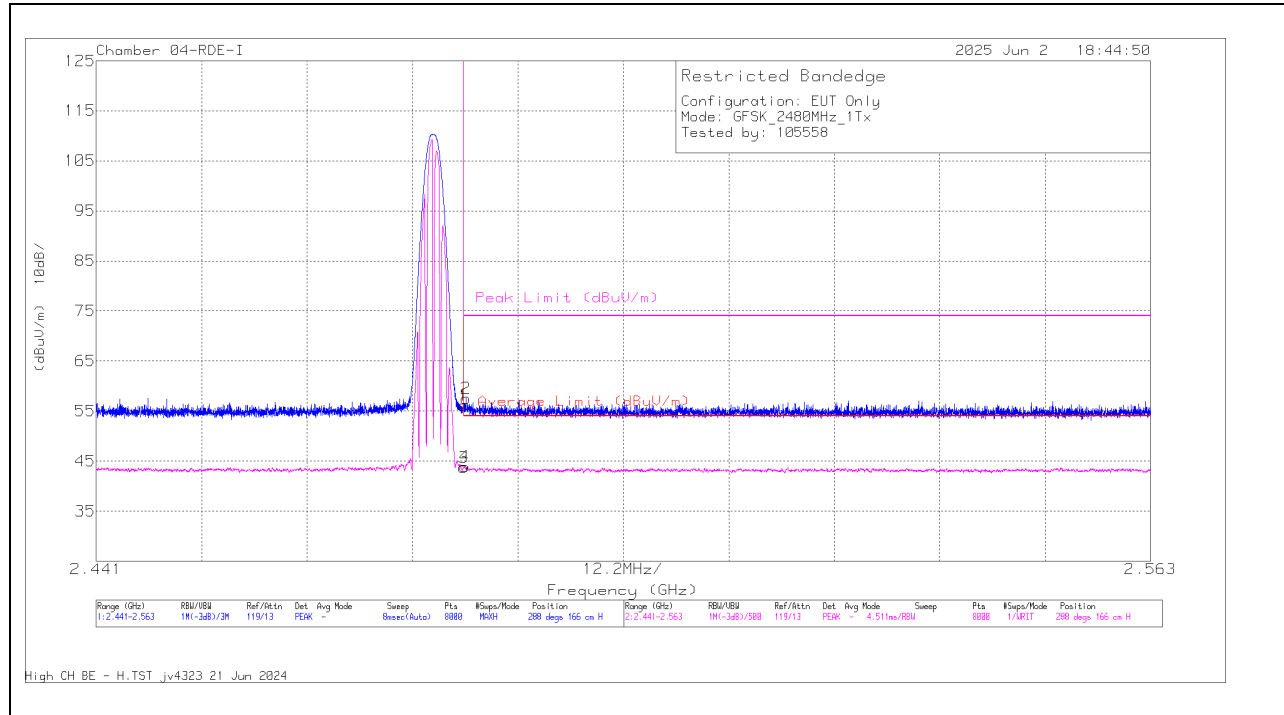


Marker	Frequency (GHz)	Meter cReading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.15	Pk	31.8	-19.9	54.05	-	-	74	-19.95	253	392	V
2	* 2.38576	44.51	Pk	31.8	-19.8	56.51	-	-	74	-17.49	253	392	V
3	* 2.39	29.61	VA1T	31.8	-19.9	41.51	54	-12.49	-	-	253	392	V
4	* 2.389707	30	VA1T	31.8	-19.8	42	54	-12	-	-	253	392	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

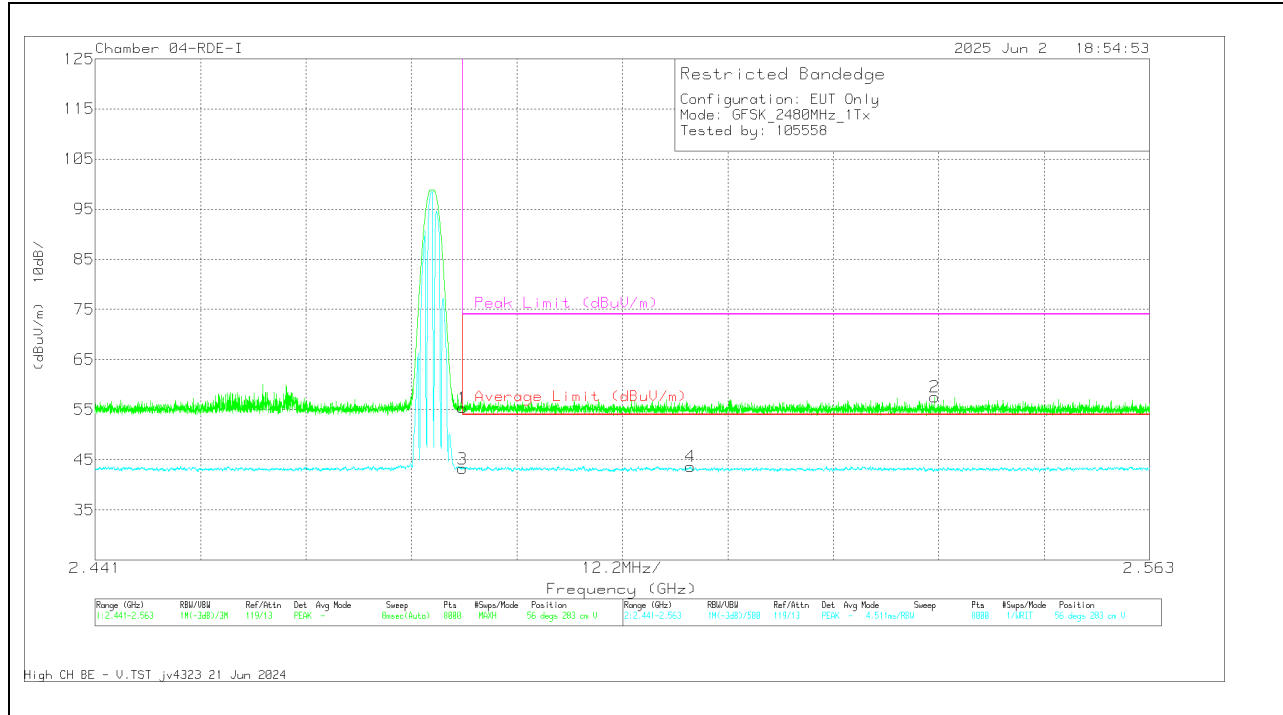
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	44.13	Pk	32.3	-20.3	56.13	-	-	74	-17.87	288	166	H
2	* 2.483812	45.53	Pk	32.3	-20.3	57.53	-	-	74	-16.47	288	166	H
3	* 2.4835	31.71	VA1T	32.3	-20.3	43.71	54	-10.29	-	-	288	166	H
4	* 2.48366	31.9	VA1T	32.3	-20.3	43.9	54	-10.1	-	-	288	166	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	43.34	Pk	32.3	-20.3	55.34	-	-	74	-18.66	56	283	V
2	2.538125	45.68	Pk	32.4	-20.5	57.58	-	-	74	-16.42	56	283	V
3	* 2.4835	31.21	VA1T	32.3	-20.3	43.21	54	-10.79	-	-	56	283	V
4	2.509878	31.68	VA1T	32.4	-20.4	43.68	54	-10.32	-	-	56	283	V

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

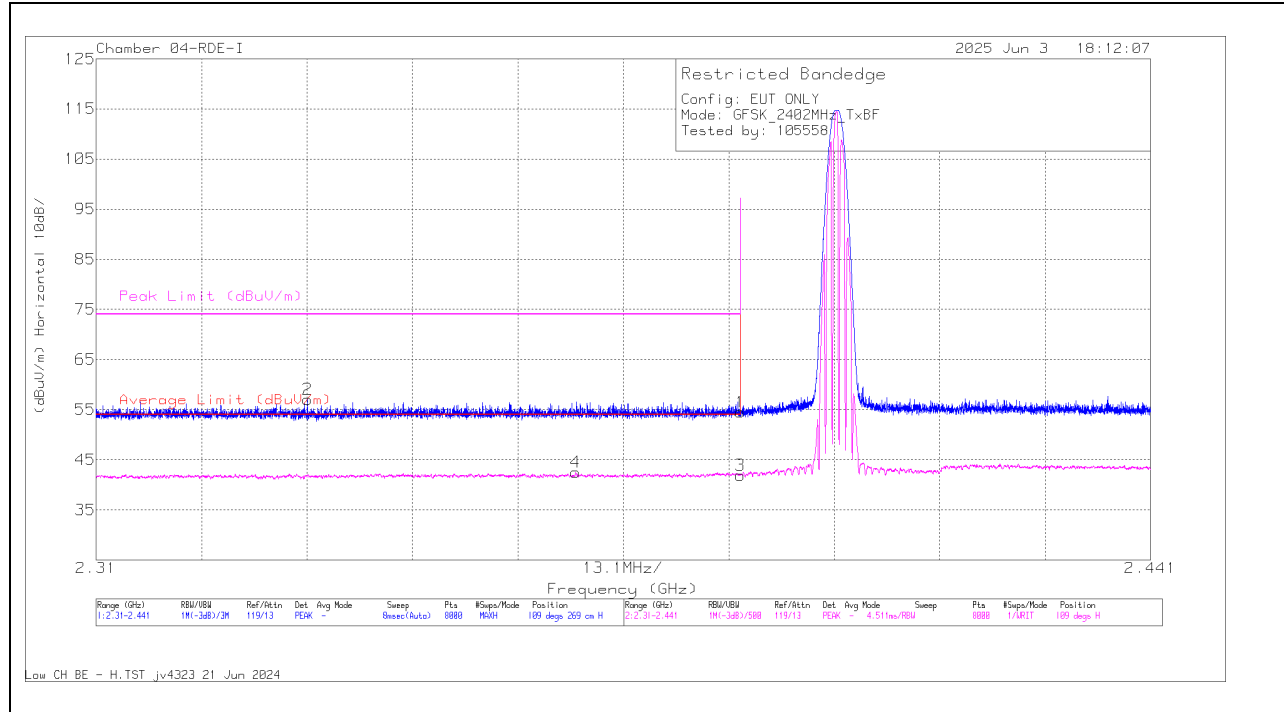
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.2. HIGH POWER BASIC DATA RATE TX BF GFSK MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



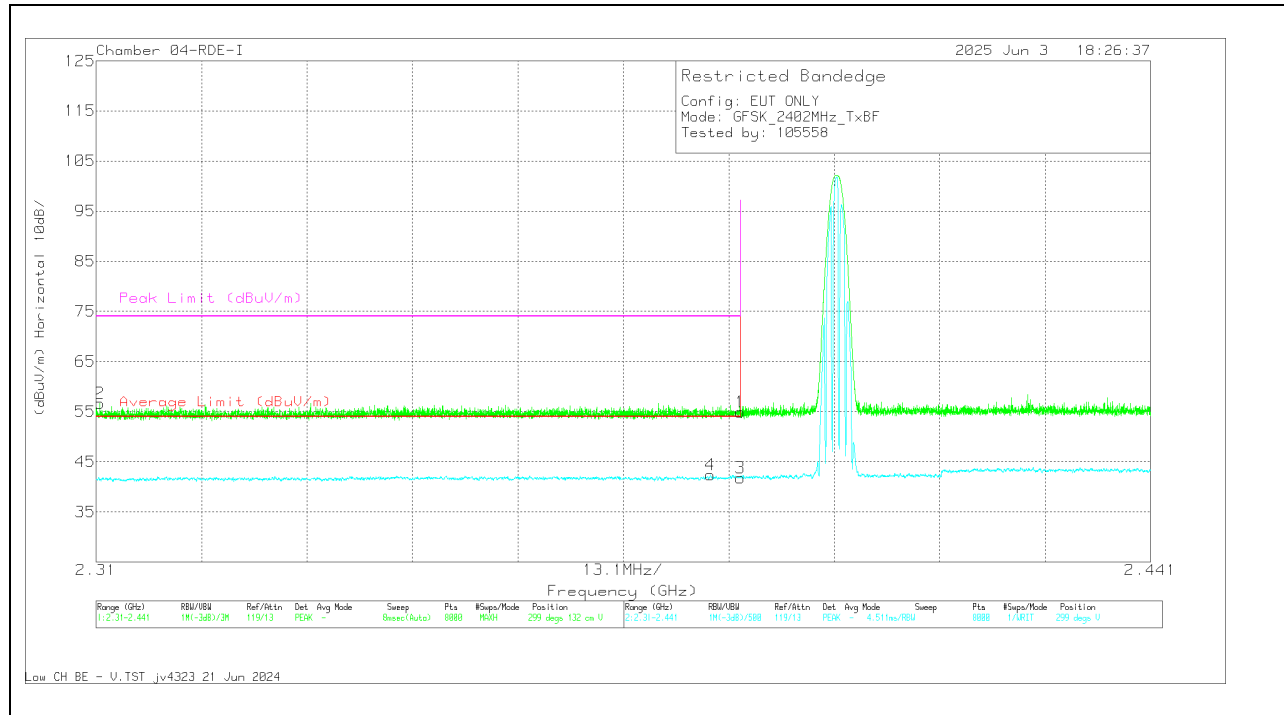
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.58	Pk	31.8	-19.9	54.48	-	-	74	-19.52	109	269	H
2	* 2.336252	45.14	Pk	31.6	-19.7	57.04	-	-	74	-16.96	109	269	H
3	* 2.39	30.01	VA1T	31.8	-19.9	41.91	54	-12.09	-	-	109	269	H
4	* 2.36958	30.53	VA1T	31.7	-19.7	42.53	54	-11.47	-	-	109	269	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

VERTICAL RESULT

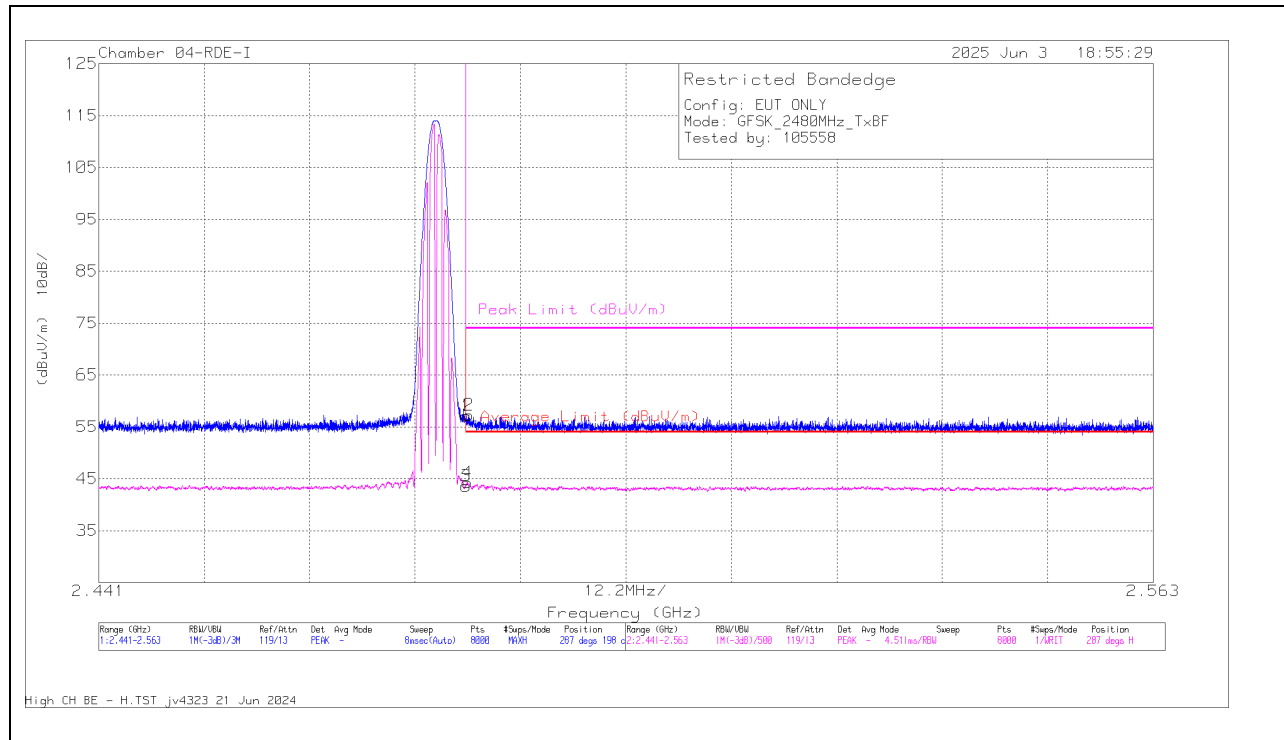


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.05	Pk	31.8	-19.9	54.95	-	-	74	-19.05	299	132	V
2	* 2.310459	44.89	Pk	31.5	-19.7	56.69	-	-	74	-17.31	299	132	V
3	* 2.39	29.9	VA1T	31.8	-19.9	41.8	54	-12.2	-	-	299	132	V
4	* 2.3863	30.39	VA1T	31.8	-19.8	42.39	54	-11.61	-	-	299	132	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

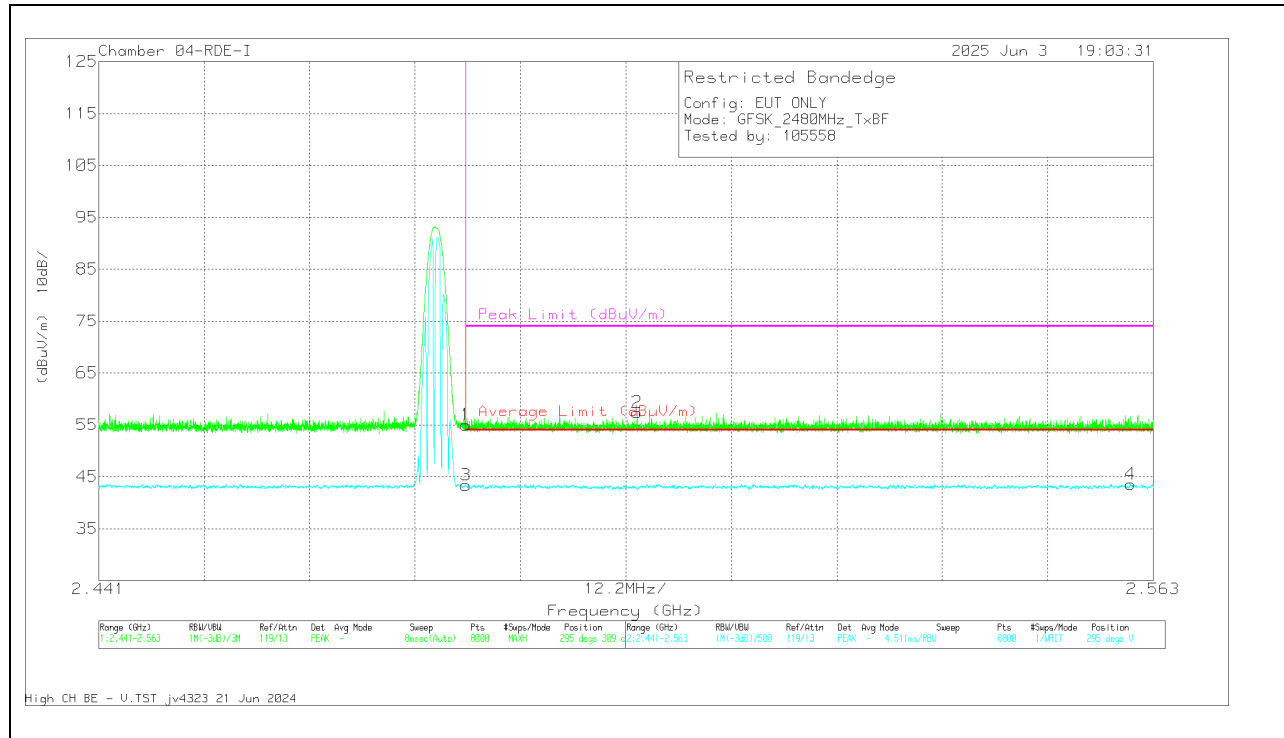
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	45.12	PK	32.3	-20.3	57.12	-	-	74	-16.88	287	198	H
2	* 2.483858	45.26	PK	32.3	-20.3	57.26	-	-	74	-16.74	287	198	H
3	* 2.4835	31.64	VA1T	32.3	-20.3	43.64	54	-10.36	-	-	287	198	H
4	* 2.48366	32.26	VA1T	32.3	-20.3	44.26	54	-9.74	-	-	287	198	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	42.99	Pk	32.3	-20.3	54.99	-	-	74	-19.01	295	309	V
2	2.503289	45.38	Pk	32.3	-20.3	57.38	-	-	74	-16.62	295	309	V
3	* 2.4835	31.39	VA1T	32.3	-20.3	43.39	54	-10.61	-	-	295	309	V
4	2.560377	31.58	VA1T	32.4	-20.4	43.58	54	-10.42	-	-	295	309	V

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

Pk - Peak detector

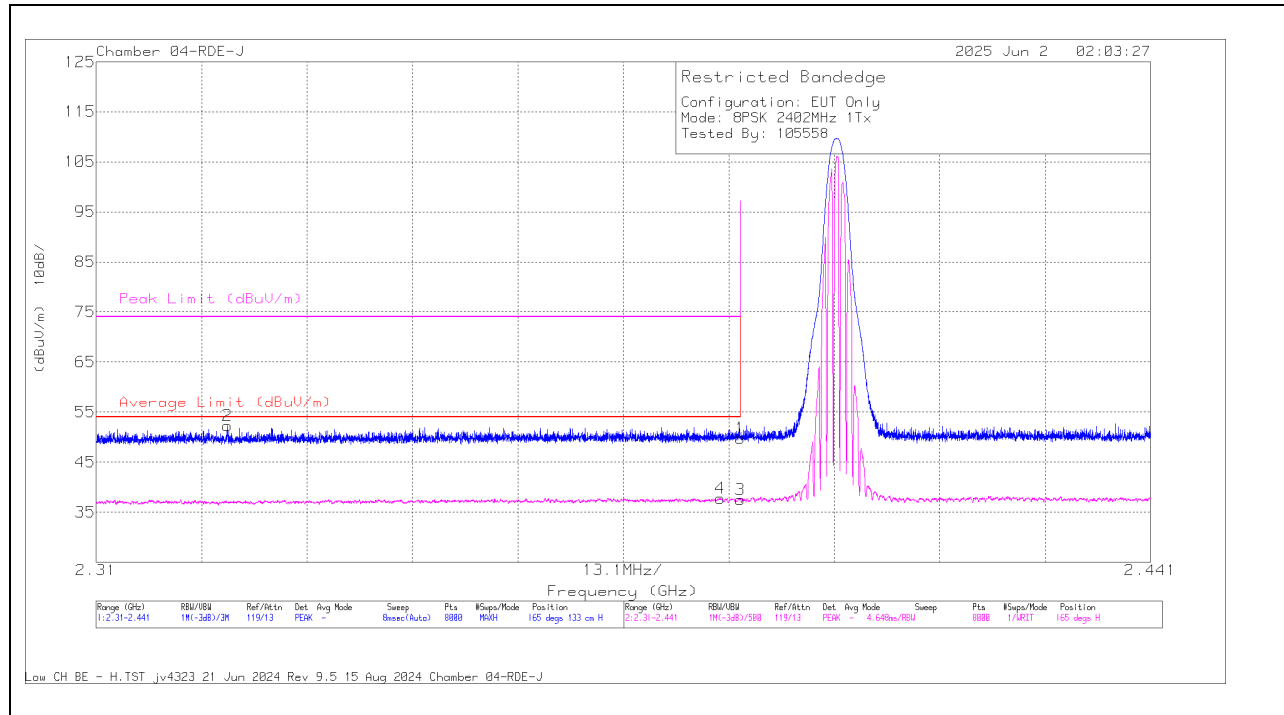
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.3. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



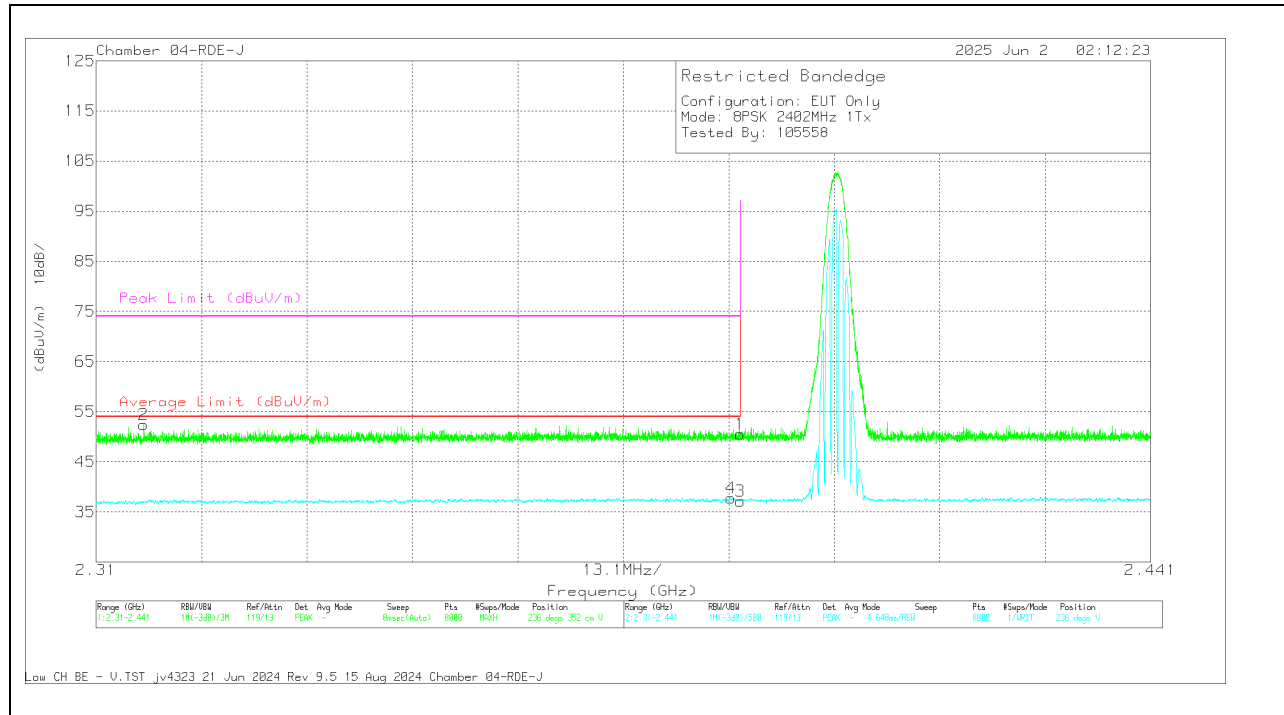
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.72	Pk	32.2	-37.1	49.82	-	-	74	-24.18	165	133	H
2	* 2.326295	57.52	Pk	31.9	-37.1	52.32	-	-	74	-21.68	165	133	H
3	* 2.39	42.46	VA1T	32.2	-37.1	37.56	54	-16.44	-	-	165	133	H
4	* 2.387512	42.69	VA1T	32.2	-37.1	37.79	54	-16.21	-	-	165	133	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

VERTICAL RESULT

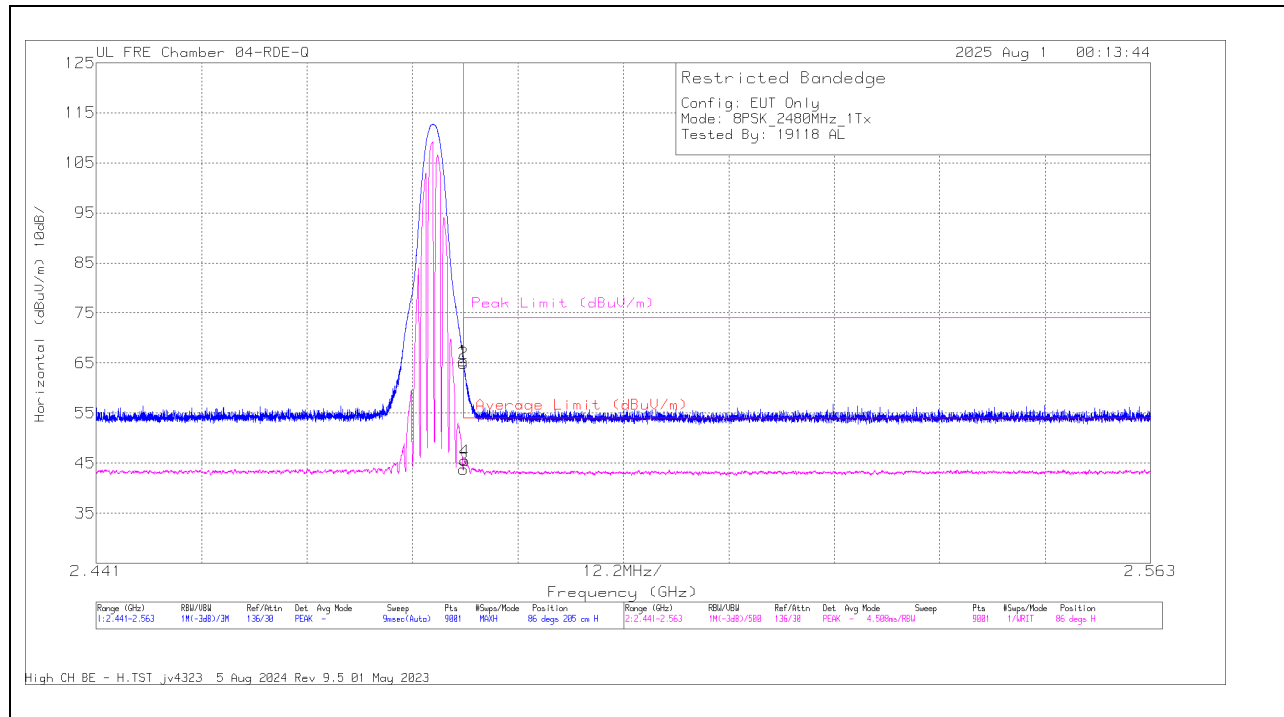


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.42	Pk	32.2	-37.1	50.52	-	-	74	-23.48	236	352	V
2	* 2.315896	57.73	Pk	31.8	-37.1	52.43	-	-	74	-21.57	236	352	V
3	* 2.39	42.04	VA1T	32.2	-37.1	37.14	54	-16.86	-	-	236	352	V
4	* 2.388839	42.7	VA1T	32.2	-37.1	37.8	54	-16.2	-	-	236	352	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

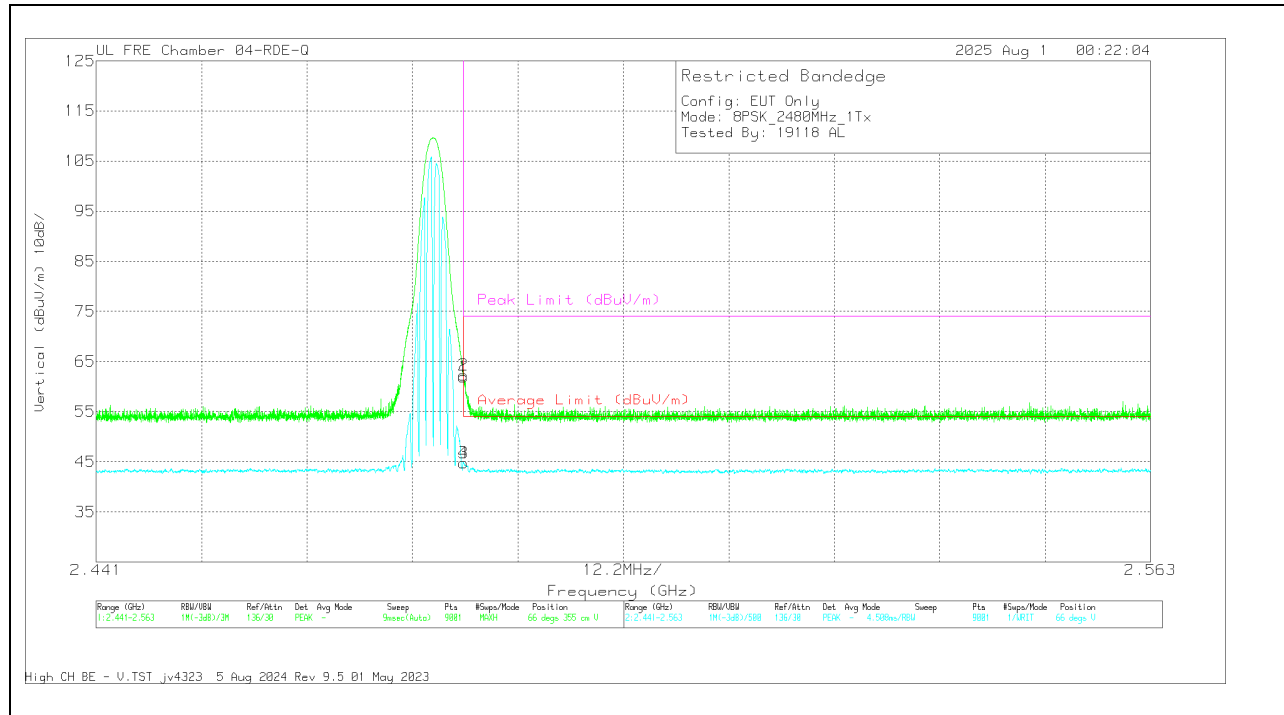
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	71.14	Pk	32.4	-38.18	65.36	-	-	74	-8.64	86	205	H
2	*2.483512	70.71	Pk	32.4	-38.18	64.93	-	-	74	-9.07	86	205	H
3	*2.4835	49.51	VA1T	32.4	-38.18	43.73	54	-10.27	-	-	86	205	H
4	*2.483674	51.24	VA1T	32.4	-38.18	45.46	54	-8.54	-	-	86	205	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

VERTICAL RESULT

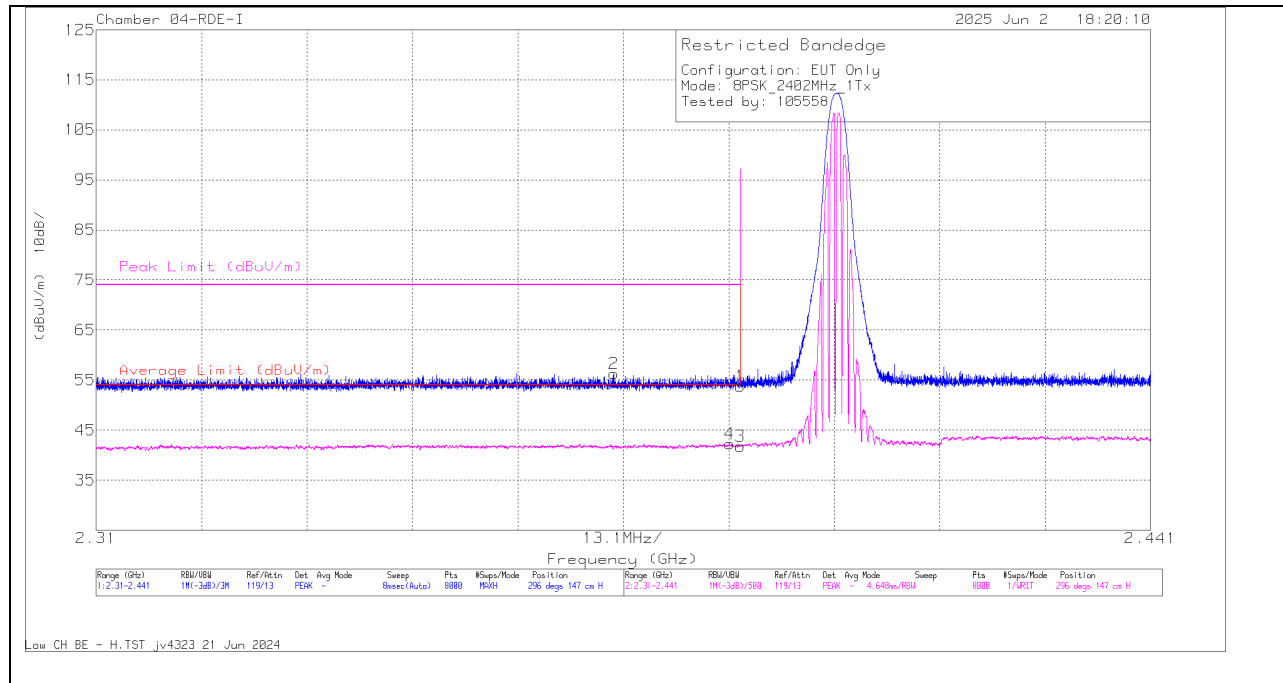


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	67.68	Pk	32.4	-38.18	61.9	-	-	74	-12.1	66	355	V
2	*2.483512	68.05	Pk	32.4	-38.18	62.27	-	-	74	-11.73	66	355	V
3	*2.4835	50.54	VA1T	32.4	-38.18	44.76	54	-9.24	-	-	66	355	V
4	*2.483525	50.52	VA1T	32.4	-38.18	44.74	54	-9.26	-	-	66	355	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

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

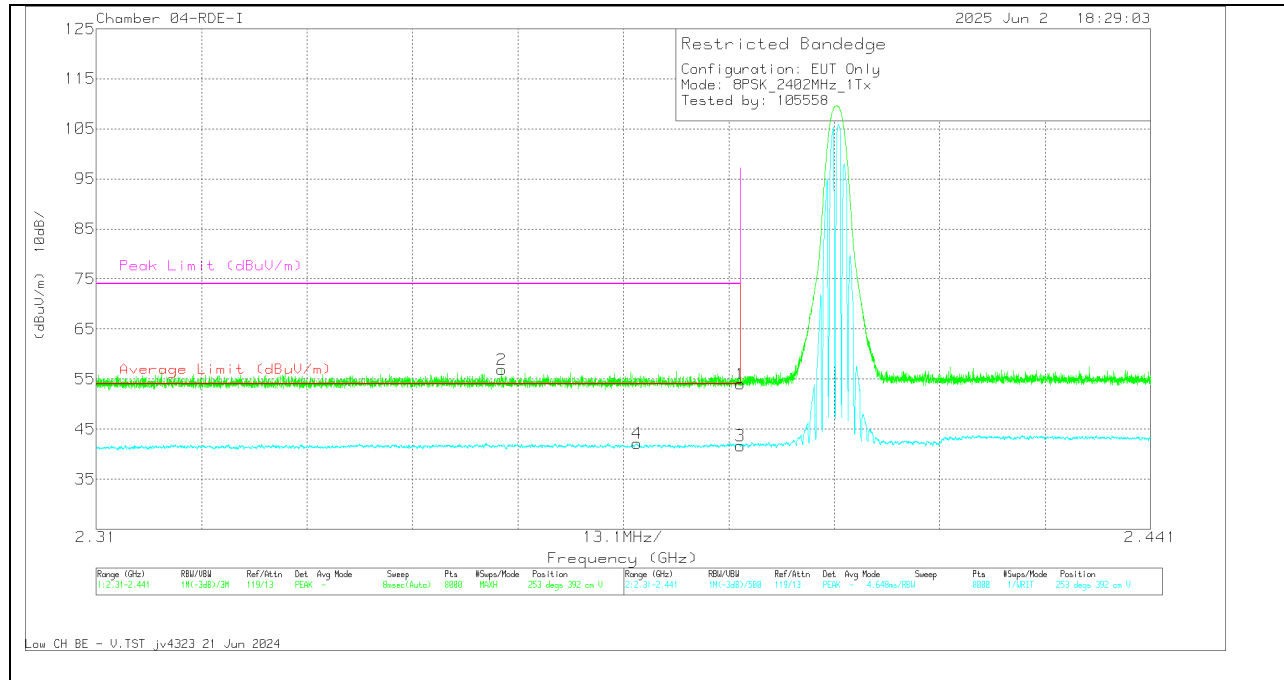
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.83	Pk	31.8	-19.9	53.73	-	-	74	-20.27	296	147	H
2	* 2.374296	44.4	Pk	31.7	-19.8	56.3	-	-	74	-17.7	296	147	H
3	* 2.39	29.82	VA1T	31.8	-19.9	41.72	54	-12.28	-	-	296	147	H
4	* 2.388724	30.26	VA1T	31.8	-19.8	42.26	54	-11.74	-	-	296	147	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

VERTICAL RESULT

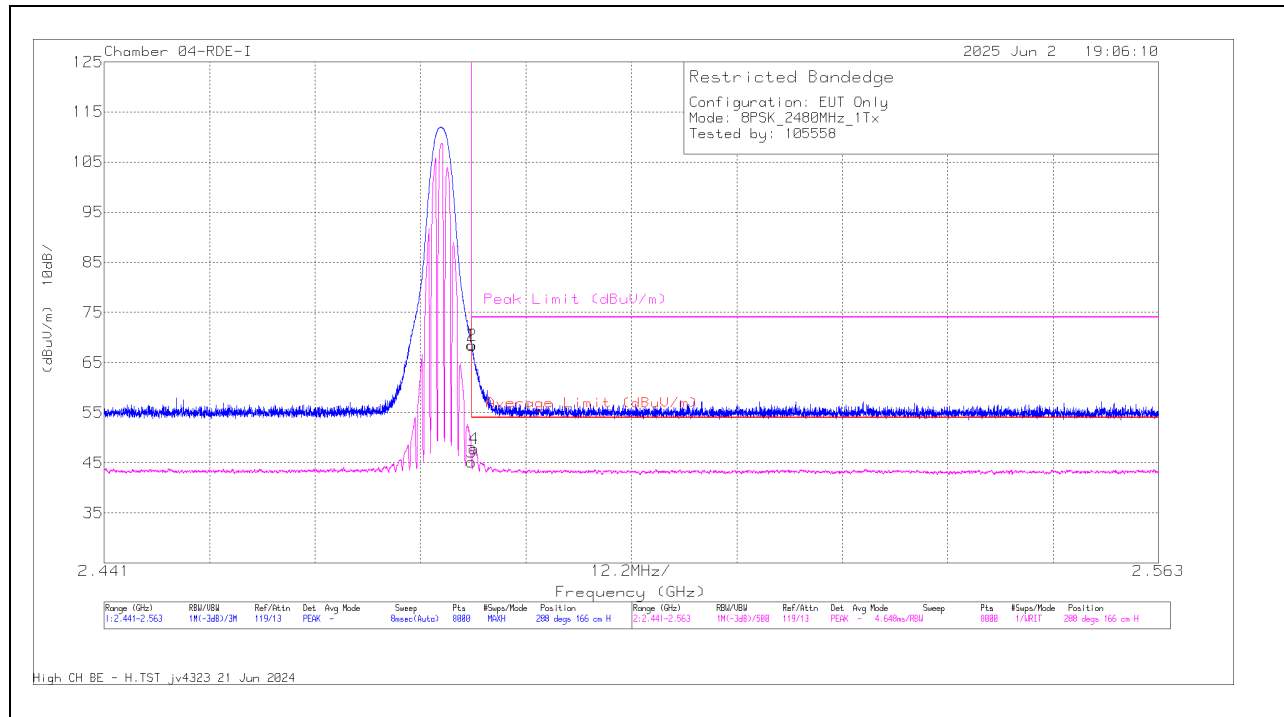


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.08	Pk	31.8	-19.9	53.98	-	-	74	-20.02	253	392	V
2	* 2.360408	44.86	Pk	31.7	-19.7	56.86	-	-	74	-17.14	253	392	V
3	* 2.39	29.74	VA1T	31.8	-19.9	41.64	54	-12.36	-	-	253	392	V
4	* 2.377195	30.29	VA1T	31.7	-19.8	42.19	54	-11.81	-	-	253	392	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

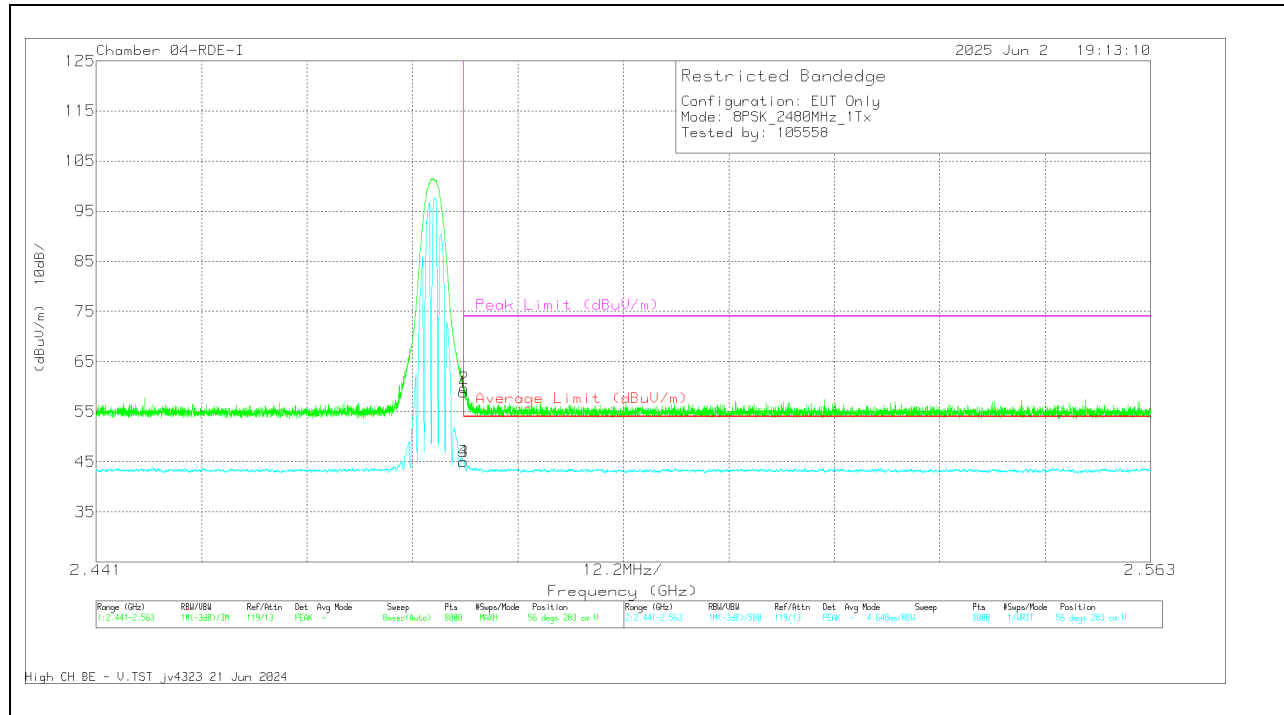
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	56.48	Pk	32.3	-20.3	68.48	-	-	74	-5.52	288	166	H
2	* 2.483584	56.44	Pk	32.3	-20.3	68.44	-	-	74	-5.56	288	166	H
3	* 2.4835	33.16	VA1T	32.3	-20.3	45.16	54	-8.84	-	-	288	166	H
4	* 2.483828	35.79	VA1T	32.3	-20.3	47.79	54	-6.21	-	-	288	166	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	46.92	Pk	32.3	-20.3	58.92	-	-	74	-15.08	56	283	V
2	* 2.483614	47.72	Pk	32.3	-20.3	59.72	-	-	74	-14.28	56	283	V
3	* 2.4835	33.02	VA1T	32.3	-20.3	45.02	54	-8.98	-	-	56	283	V
4	* 2.483507	33.01	VA1T	32.3	-20.3	45.01	54	-8.99	-	-	56	283	V

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

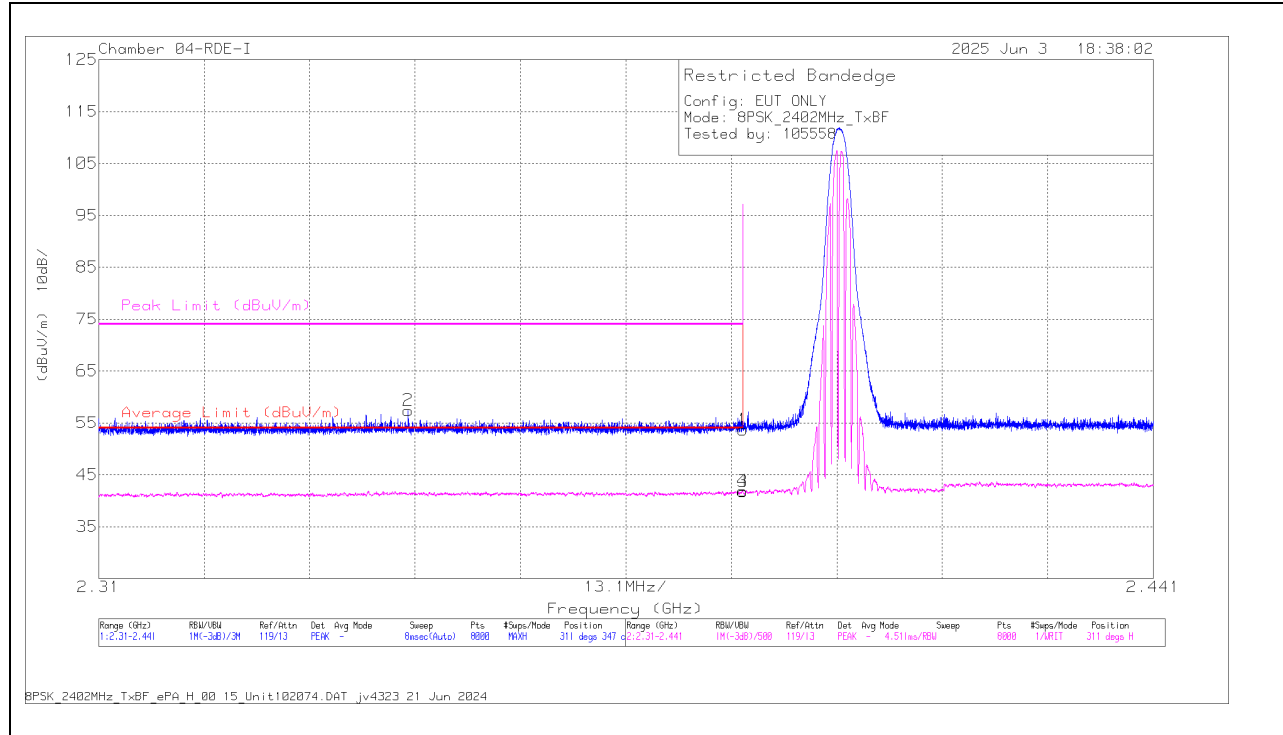
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.4. HIGH POWER BASIC DATA RATE TXBF 8PSK MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



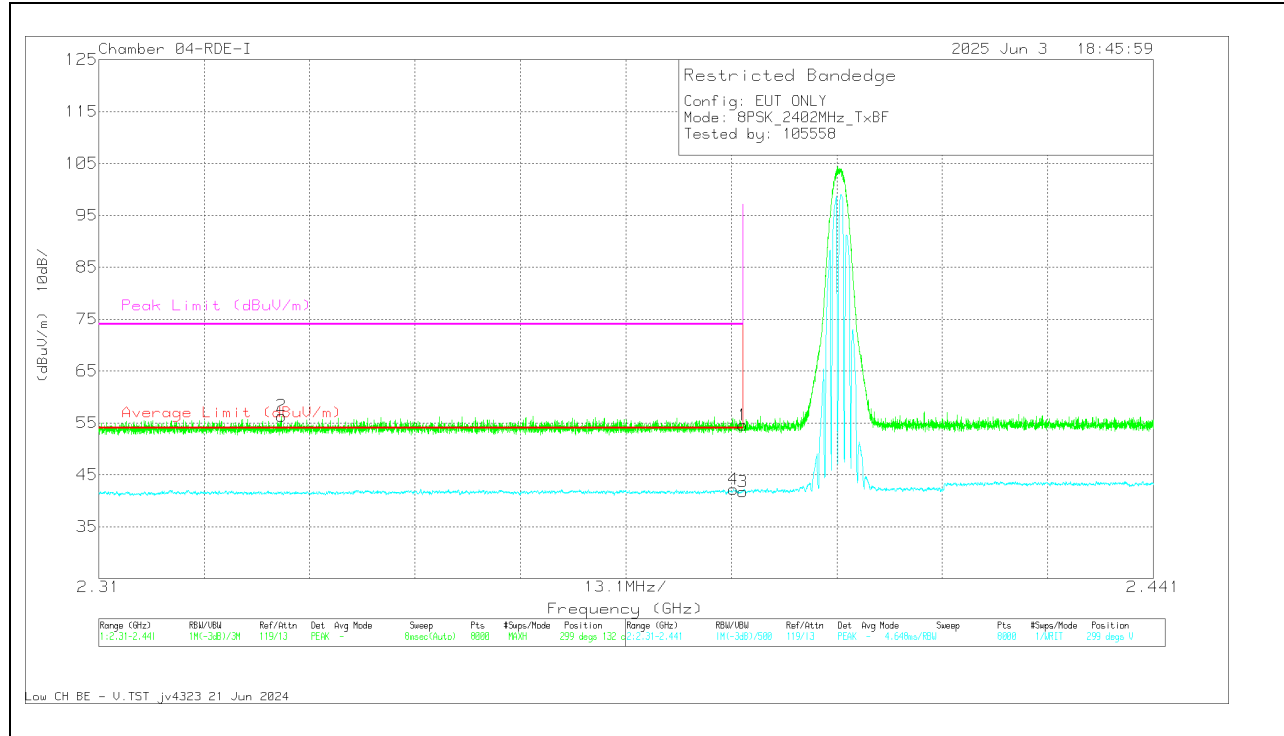
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.79	Pk	31.8	-19.9	53.69	-	-	74	-20.31	311	347	H
2	* 2.348453	45.42	Pk	31.7	-19.7	57.42	-	-	74	-16.58	311	347	H
3	* 2.39	29.88	VA1T	31.8	-19.9	41.78	54	-12.22	-	-	311	347	H
4	* 2.389985	29.86	VA1T	31.8	-19.8	41.86	54	-12.14	-	-	311	347	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

VERTICAL RESULT

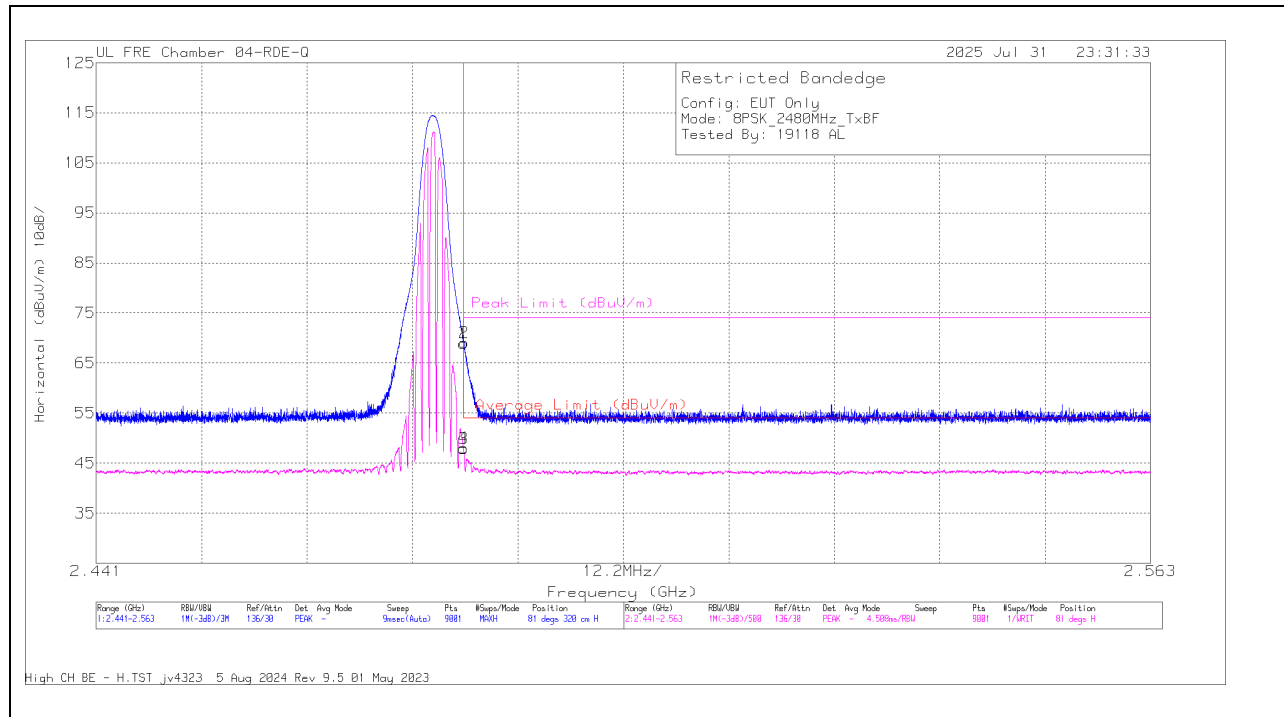


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.67	Pk	31.8	-19.9	54.57	-	-	74	-19.43	299	132	V
2	* 2.332731	44.45	Pk	31.6	-19.7	56.35	-	-	74	-17.65	299	132	V
3	* 2.39	29.82	VA1T	31.8	-19.9	41.72	54	-12.28	-	-	299	132	V
4	* 2.388855	30.21	VA1T	31.8	-19.8	42.21	54	-11.79	-	-	299	132	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

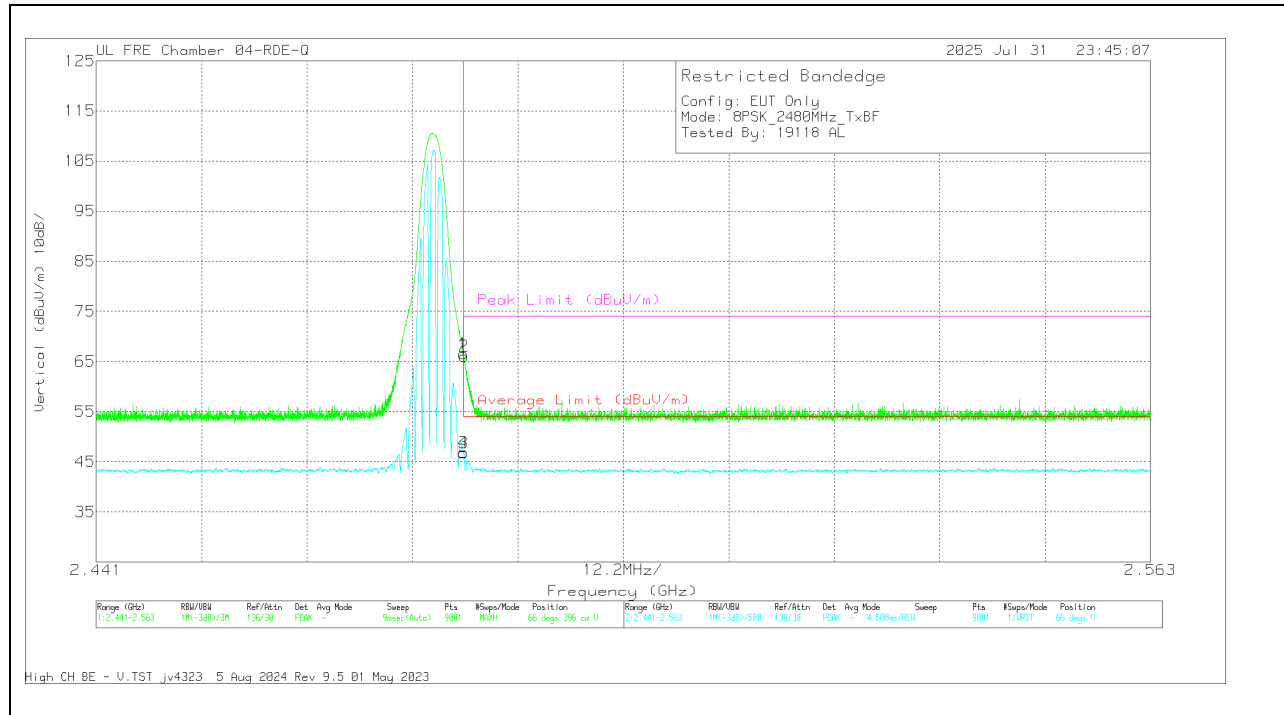
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	74.65	Pk	32.4	-38.18	68.87	-	-	74	-5.13	81	320	H
2	*2.483552	74.89	Pk	32.4	-38.18	69.11	-	-	74	-4.89	81	320	H
3	*2.4835	53.69	VA1T	32.4	-38.18	47.91	54	-6.09	-	-	81	320	H
4	*2.483525	53.85	VA1T	32.4	-38.18	48.07	54	-5.93	-	-	81	320	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	72.31	Pk	32.4	-38.18	66.53	-	-	74	-7.47	66	396	V
2	*2.483593	71.81	Pk	32.4	-38.18	66.03	-	-	74	-7.97	66	396	V
3	*2.4835	52.61	VA1T	32.4	-38.18	46.83	54	-7.17	-	-	66	396	V
4	*2.483512	52.52	VA1T	32.4	-38.18	46.74	54	-7.26	-	-	66	396	V

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

Pk - Peak detector

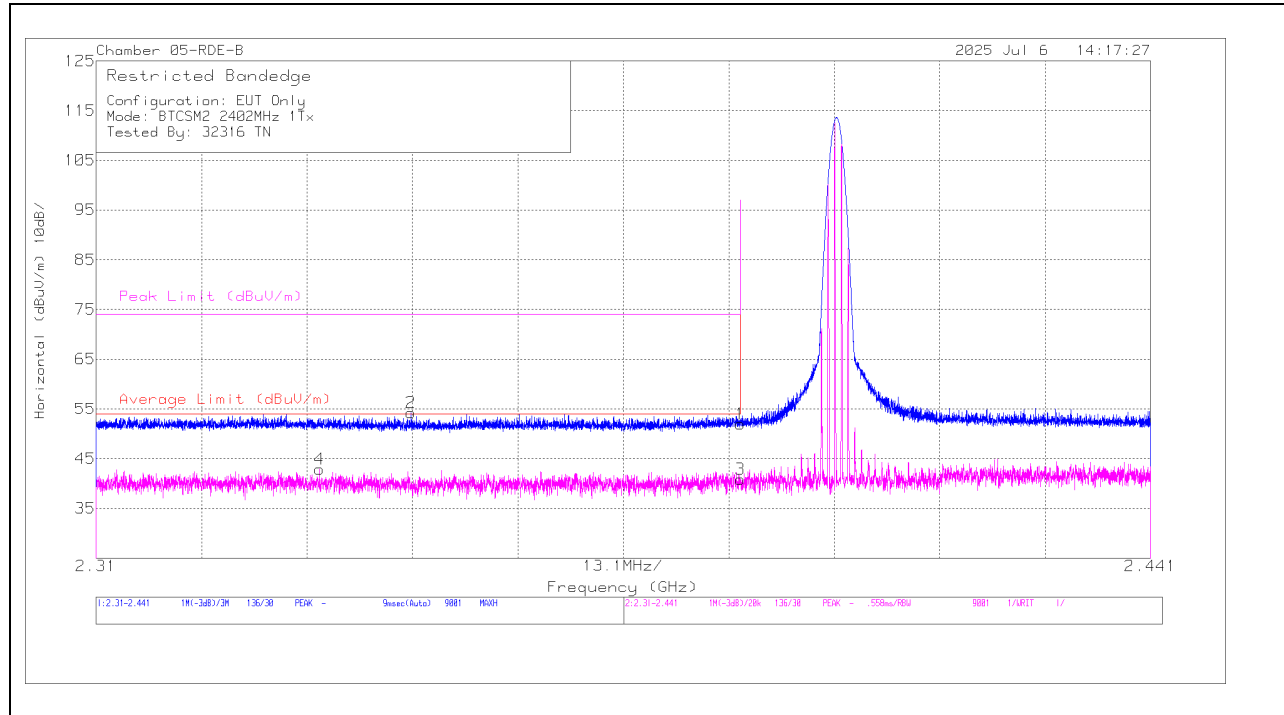
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.5. HIGH POWER ENHANCED DATA RATE BTCSM2 MODULATION

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



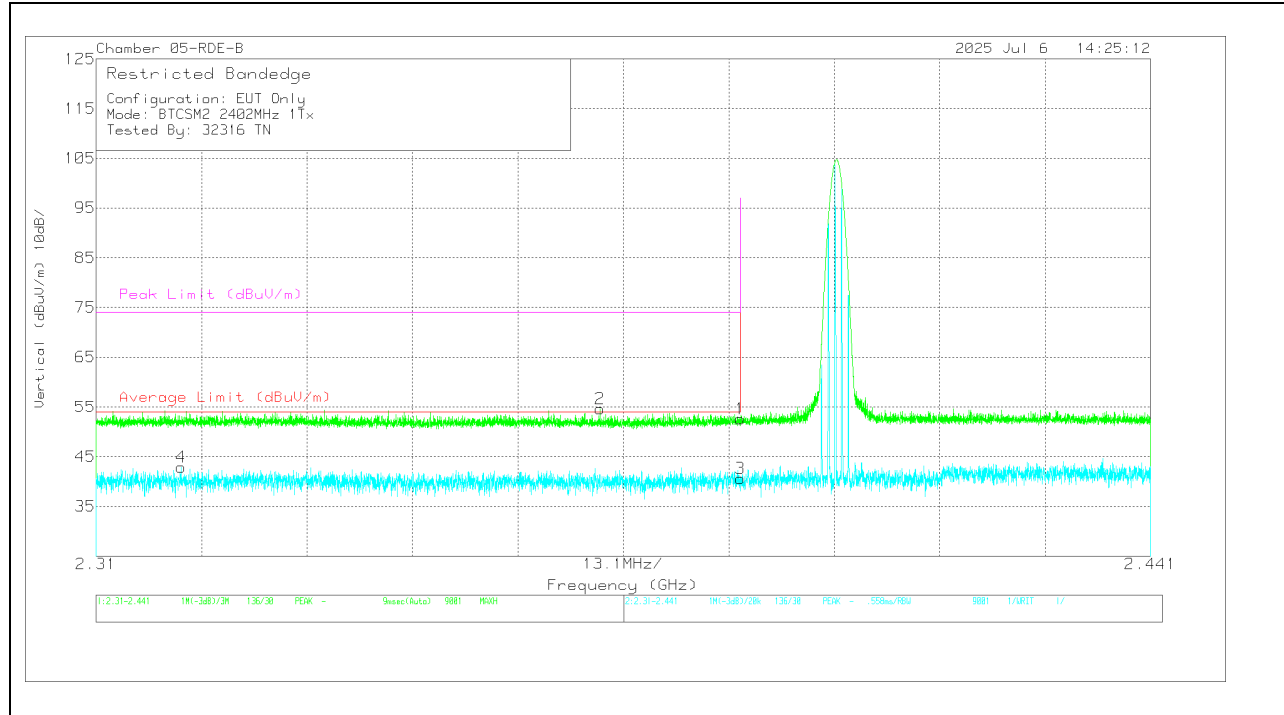
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	*2.39	60.38	Pk	32	-40.39	51.99	-	-	74	-22.01	110	122	H
2	*2.349097	62.96	Pk	31.8	-40.56	54.2	-	-	74	-19.8	110	122	H
3	*2.39	49.27	VA1T	32	-40.39	40.88	54	-13.12	-	-	110	122	H
4	*2.337744	51.74	VA1T	31.8	-40.61	42.93	54	-11.07	-	-	110	122	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

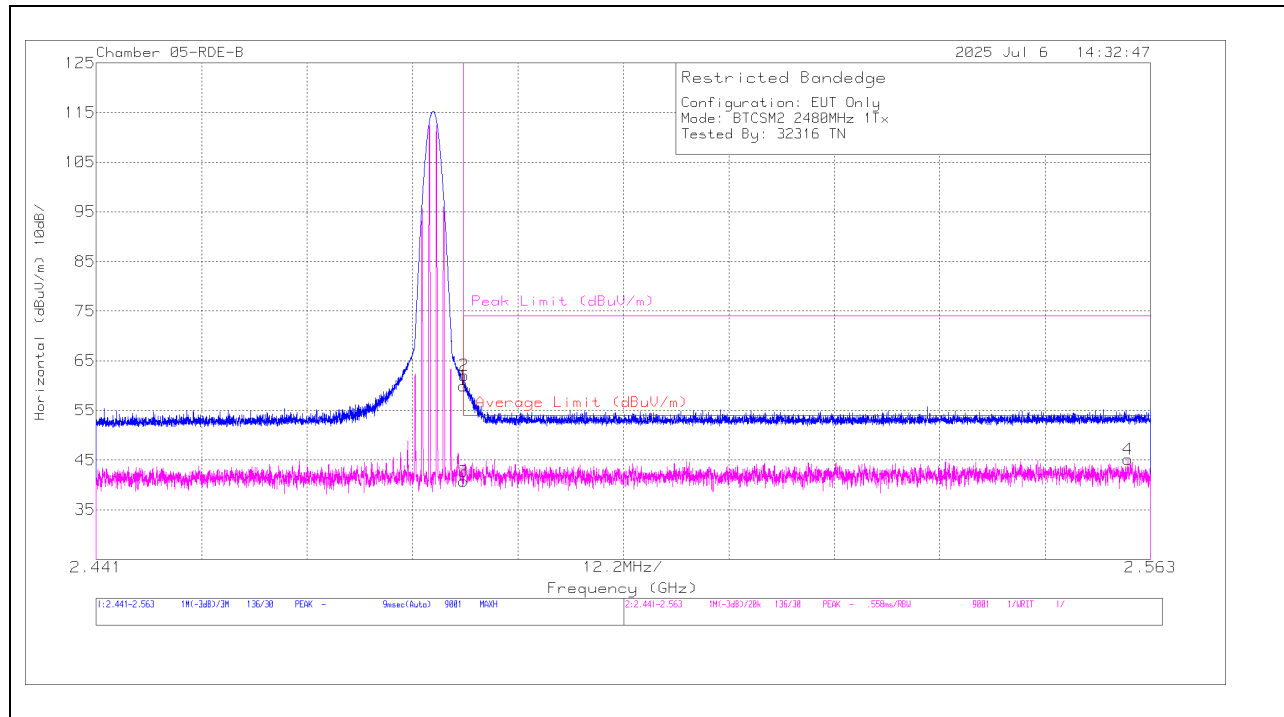


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.98	Pk	32	-40.39	52.59	-	-	74	-21.41	246	309	V
2	*2.372591	63.28	Pk	31.9	-40.56	54.62	-	-	74	-19.38	246	309	V
3	*2.39	48.99	VA1T	32	-40.39	40.6	54	-13.4	-	-	246	309	V
4	*2.320568	51.8	VA1T	31.7	-40.64	42.86	54	-11.14	-	-	246	309	V

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

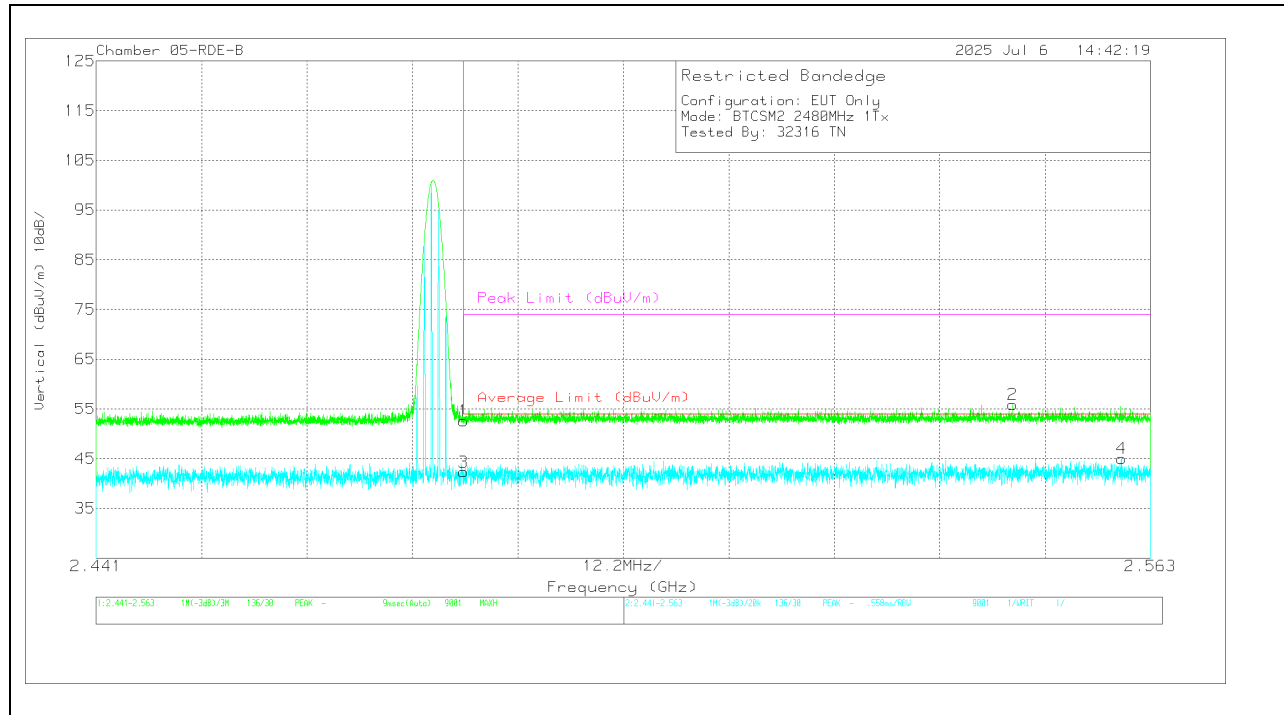
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	68.07	Pk	32.2	-40.39	59.88	-	-	74	-14.12	102	141	H
2	*2.483552	70.22	Pk	32.2	-40.38	62.04	-	-	74	-11.96	102	141	H
3	*2.4835	48.88	VA1T	32.2	-40.39	40.69	54	-13.31	-	-	102	141	H
4	*2.560374	52.93	VA1T	32.3	-40.1	45.13	54	-8.87	-	-	102	141	H

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

- Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

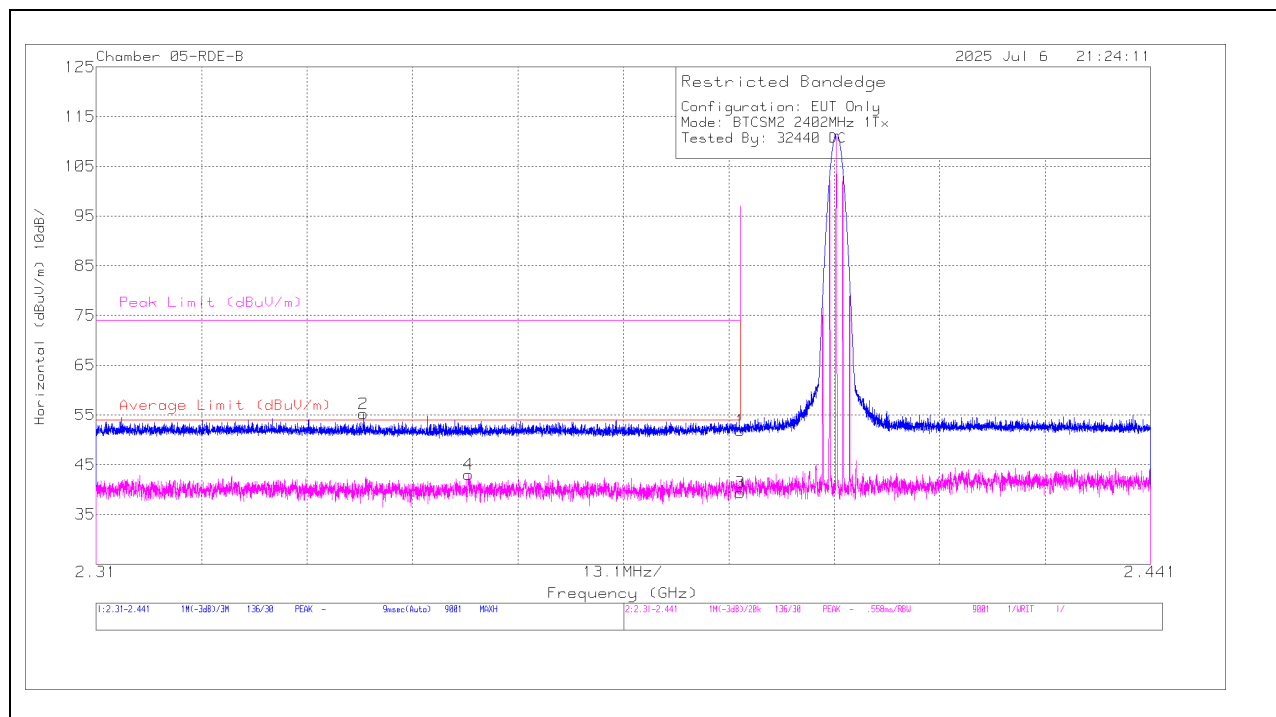


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.76	Pk	32.2	-40.39	52.57	-	-	74	-21.43	17	256	V
2	*2.547049	63.72	Pk	32.3	-40.12	55.9	-	-	74	-18.1	17	256	V
3	*2.4835	50.51	VA1T	32.2	-40.39	42.32	54	-11.68	-	-	17	256	V
4	*2.559629	52.83	VA1T	32.3	-40.1	45.03	54	-8.97	-	-	17	256	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

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

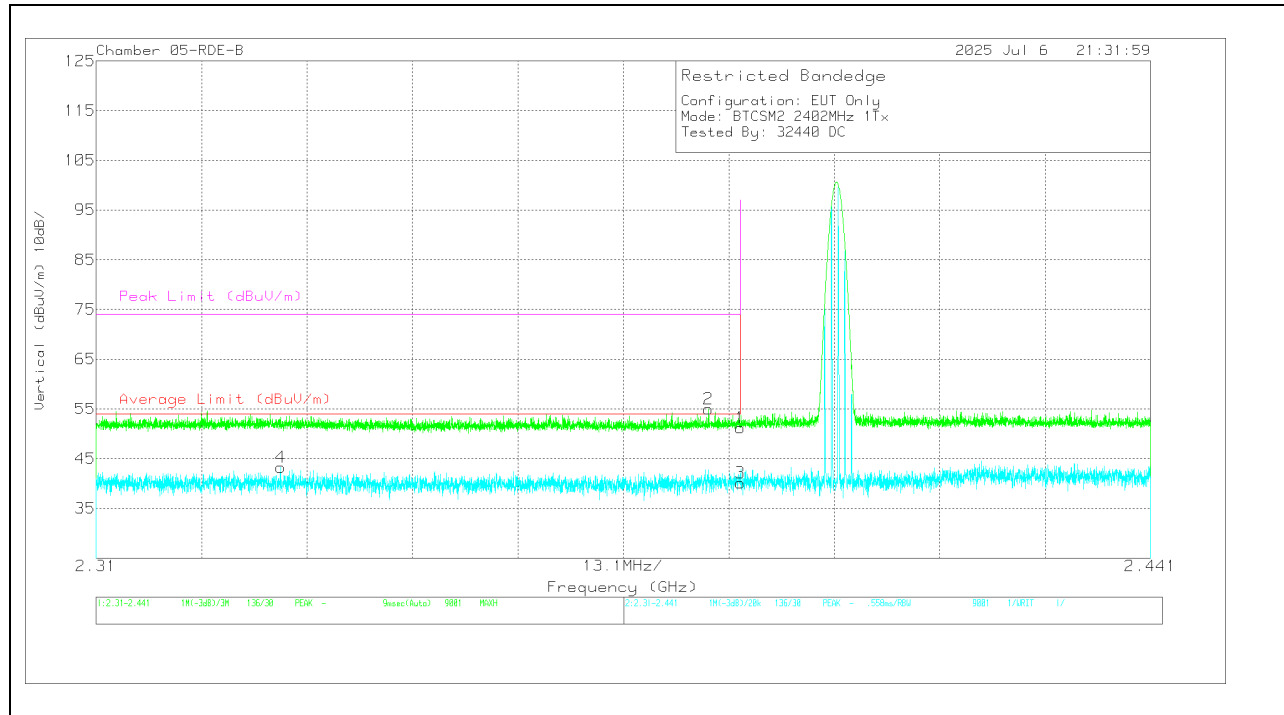
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.24	Pk	32	-40.39	51.85	-	-	74	-22.15	10	152	H
2	*2.343173	64.01	Pk	31.8	-40.61	55.2	-	-	74	-18.8	10	152	H
3	*2.39	47.73	VA1T	32	-40.39	39.34	54	-14.66	-	-	10	152	H
4	*2.356244	51.59	VA1T	31.9	-40.44	43.05	54	-10.95	-	-	10	152	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

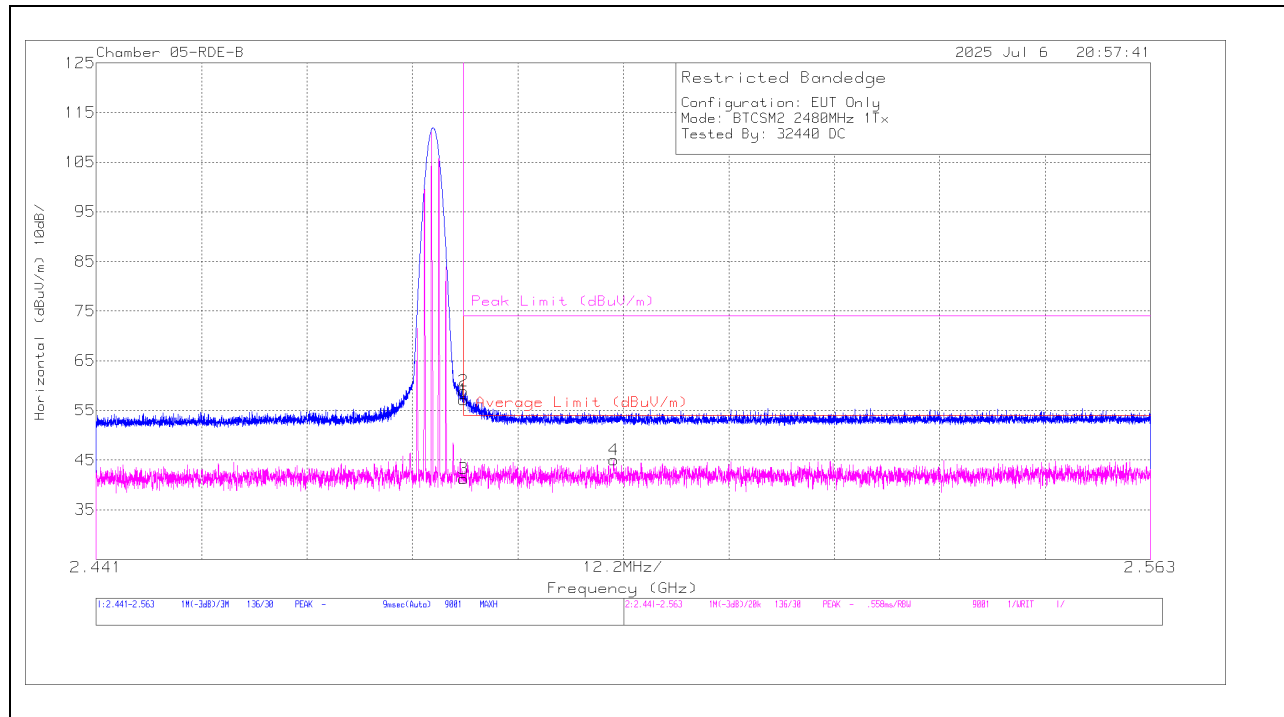


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	59.65	Pk	32	-40.39	51.26	-	-	74	-22.74	160	346	V
2	*2.386084	63.43	Pk	32	-40.39	55.04	-	-	74	-18.96	160	346	V
3	*2.39	48.48	VA1T	32	-40.39	40.09	54	-13.91	-	-	160	346	V
4	*2.332911	52.01	VA1T	31.8	-40.59	43.22	54	-10.78	-	-	160	346	V

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

- Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

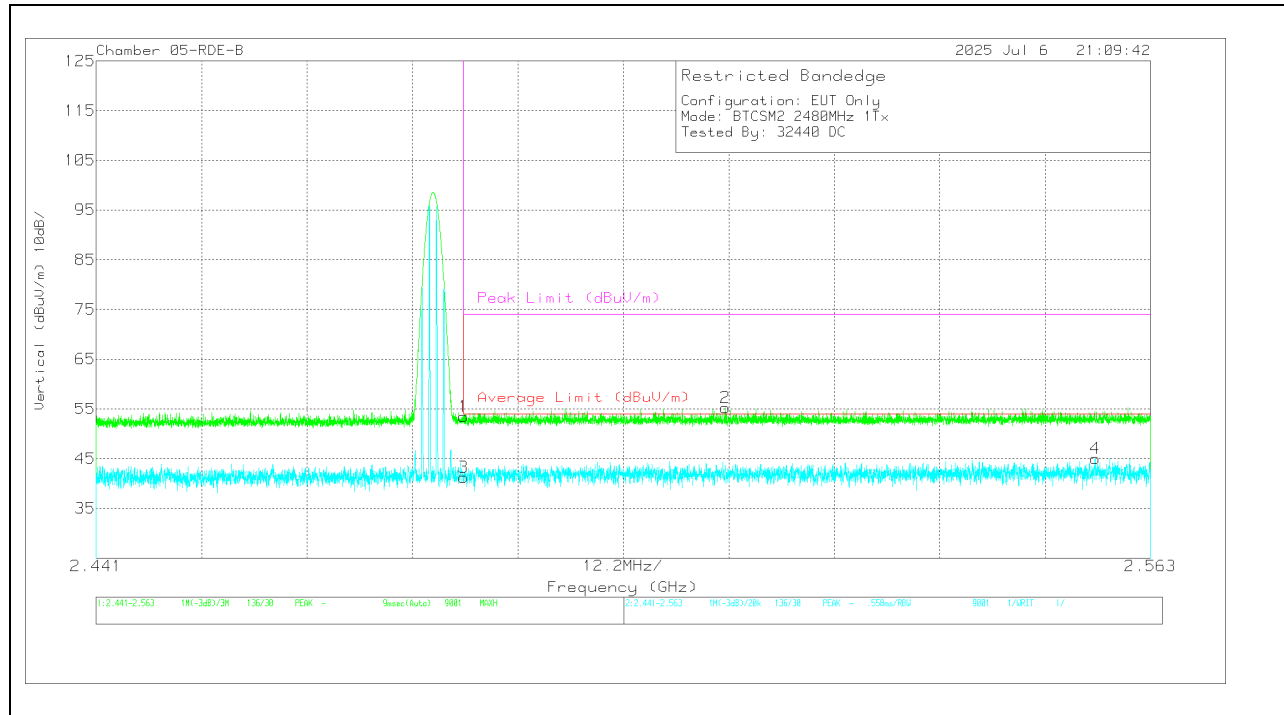
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	65.34	Pk	32.2	-40.39	57.15	-	-	74	-16.85	6	122	H
2	*2.483539	67.1	Pk	32.2	-40.38	58.92	-	-	74	-15.08	6	122	H
3	*2.4835	49.43	VA1T	32.2	-40.39	41.24	54	-12.76	-	-	6	122	H
4	*2.500877	53.08	VA1T	32.3	-40.38	45	54	-9	-	-	6	122	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	61.63	Pk	32.2	-40.39	53.44	-	-	74	-20.56	288	220	V
2	*2.513823	63.25	Pk	32.3	-40.26	55.29	-	-	74	-18.71	288	220	V
3	*2.4835	49.41	VA1T	32.2	-40.39	41.22	54	-12.78	-	-	288	220	V
4	*2.556592	52.83	VA1T	32.3	-40.11	45.02	54	-8.98	-	-	288	220	V

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

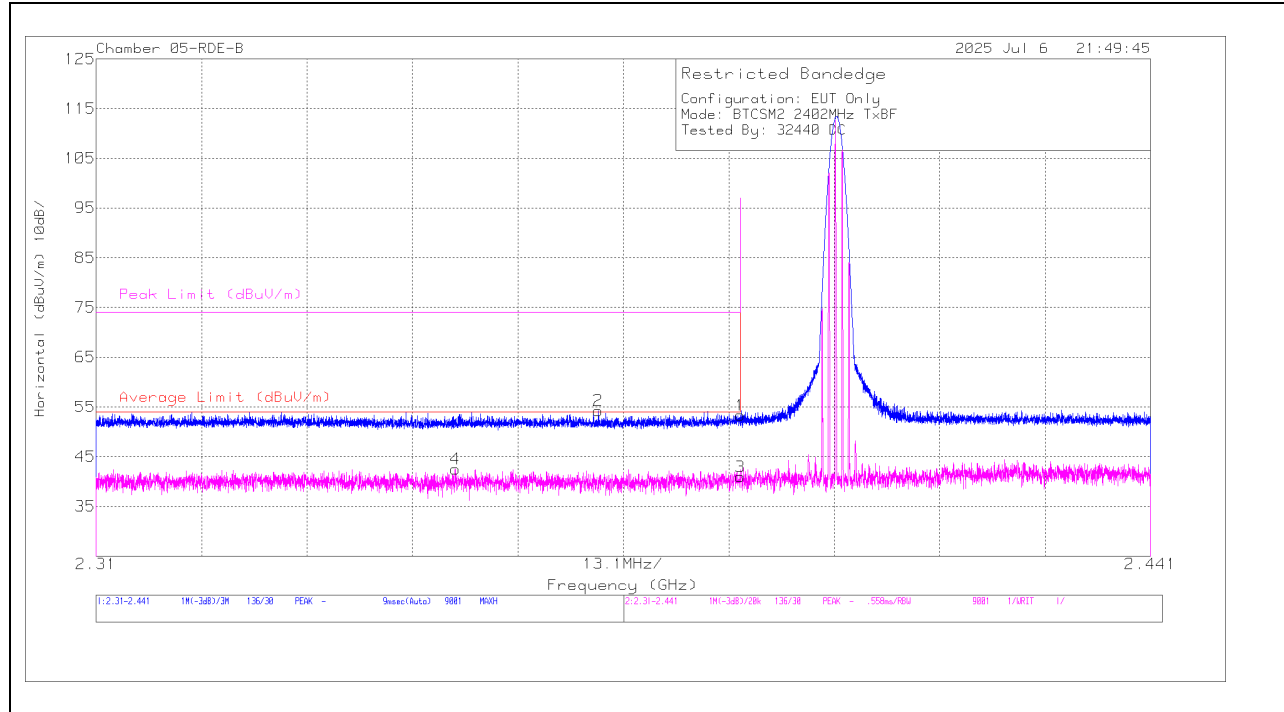
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.6. HIGH POWER ENHANCED DATA RATE TX BF BTCSM2 MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



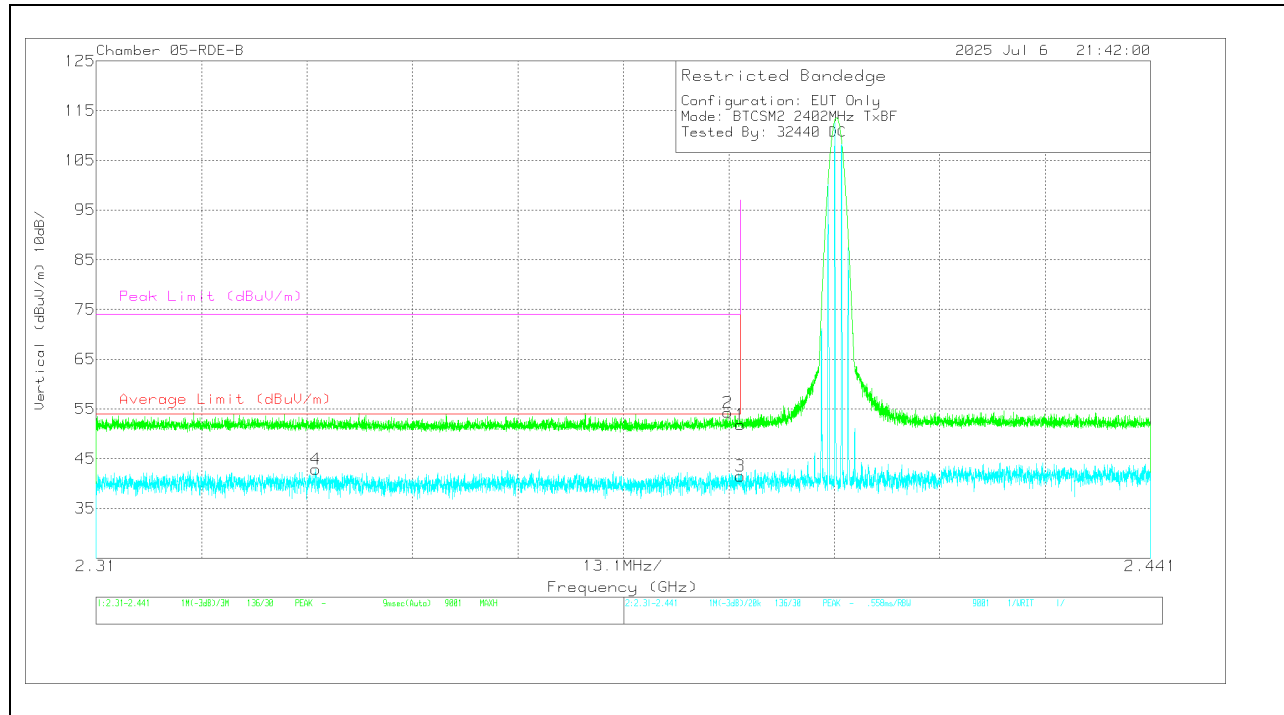
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	61.69	Pk	32	-40.39	53.3	-	-	74	-20.7	65	101	H
2	*2.372387	62.93	Pk	31.9	-40.57	54.26	-	-	74	-19.74	65	101	H
3	*2.39	49.33	VA1T	32	-40.39	40.94	54	-13.06	-	-	65	101	H
4	*2.354658	51.09	VA1T	31.9	-40.47	42.52	54	-11.48	-	-	65	101	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B=1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

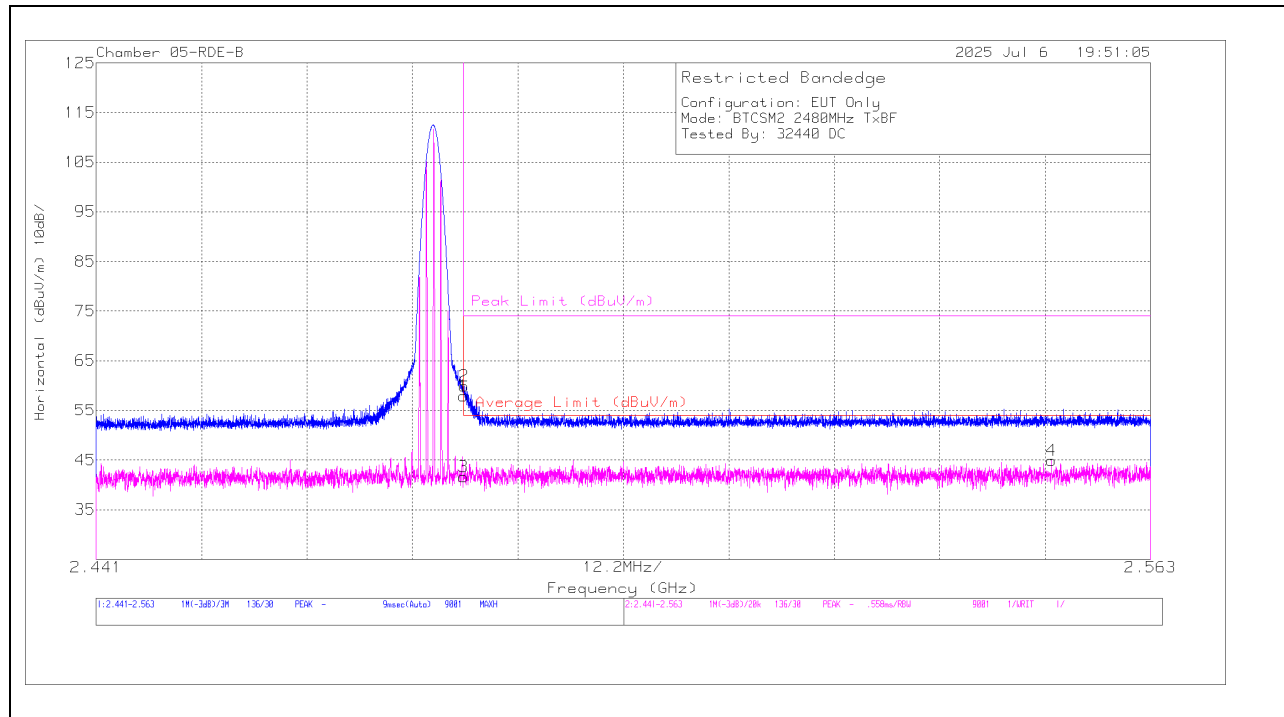


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.23	Pk	32	-40.39	51.84	-	-	74	-22.16	123	139	V
2	*2.388457	62.68	Pk	32	-40.38	54.3	-	-	74	-19.7	123	139	V
3	*2.39	49.87	VA1T	32	-40.39	41.48	54	-12.52	-	-	123	139	V
4	*2.337263	51.73	VA1T	31.8	-40.62	42.91	54	-11.09	-	-	123	139	V

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

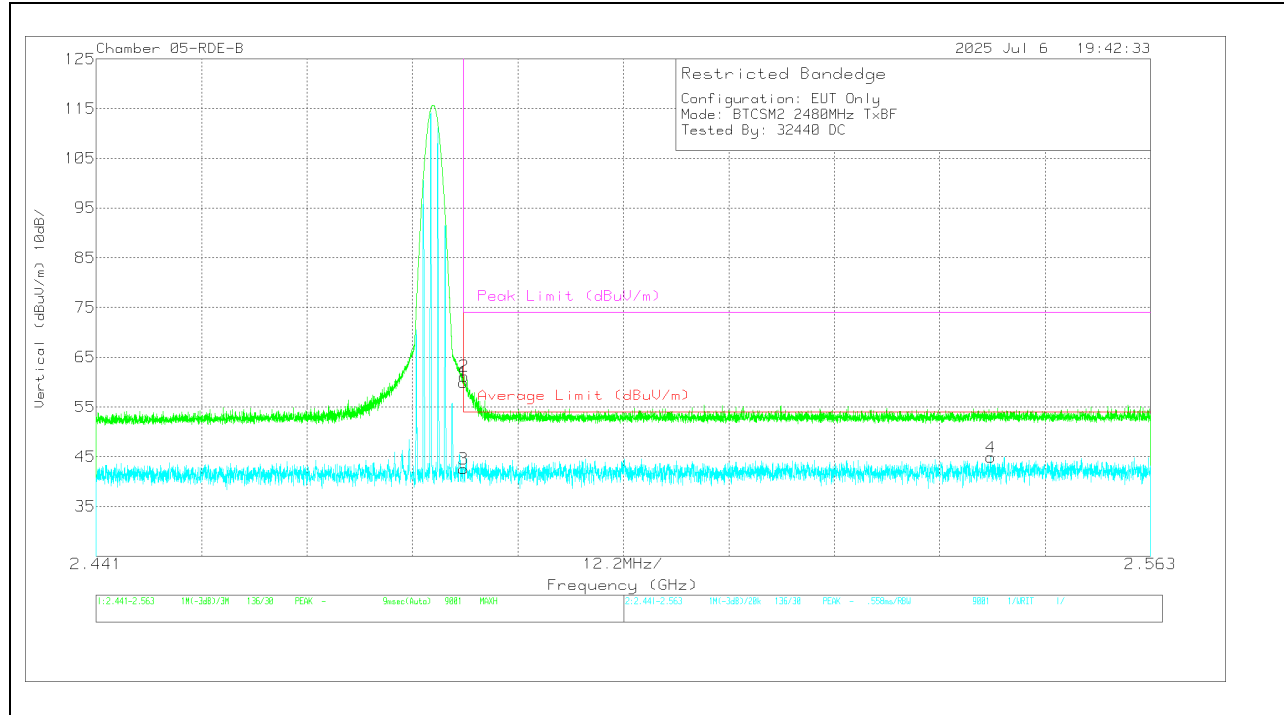
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	66.12	Pk	32.2	-40.39	57.93	-	-	74	-16.07	345	160	H
2	*2.483593	68.13	Pk	32.2	-40.38	59.95	-	-	74	-14.05	345	160	H
3	*2.4835	49.8	VA1T	32.2	-40.39	41.61	54	-12.39	-	-	345	160	H
4	*2.551549	52.68	VA1T	32.3	-40.11	44.87	54	-9.13	-	-	345	160	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B=1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

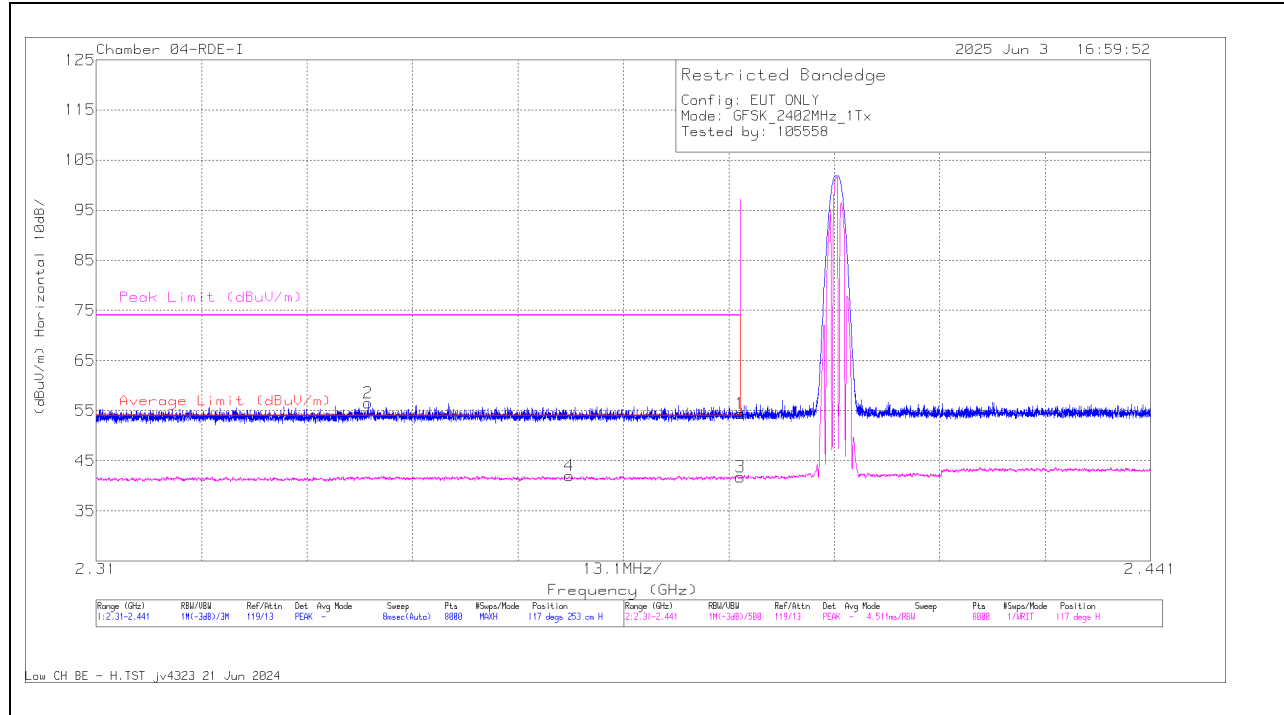


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	68.15	Pk	32.2	-40.39	59.96	-	-	74	-14.04	305	129	V
2	*2.483566	69.36	Pk	32.2	-40.38	61.18	-	-	74	-12.82	305	129	V
3	*2.4835	50.75	VA1T	32.2	-40.39	42.56	54	-11.44	-	-	305	129	V
4	*2.544527	52.69	VA1T	32.3	-40.14	44.85	54	-9.15	-	-	305	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

10.1.7. LOW POWER BASIC DATA RATE GFSK MODULATION**ANT 4****BANDEDGE (LOW CHANNEL)****HORIZONTAL RESULT**

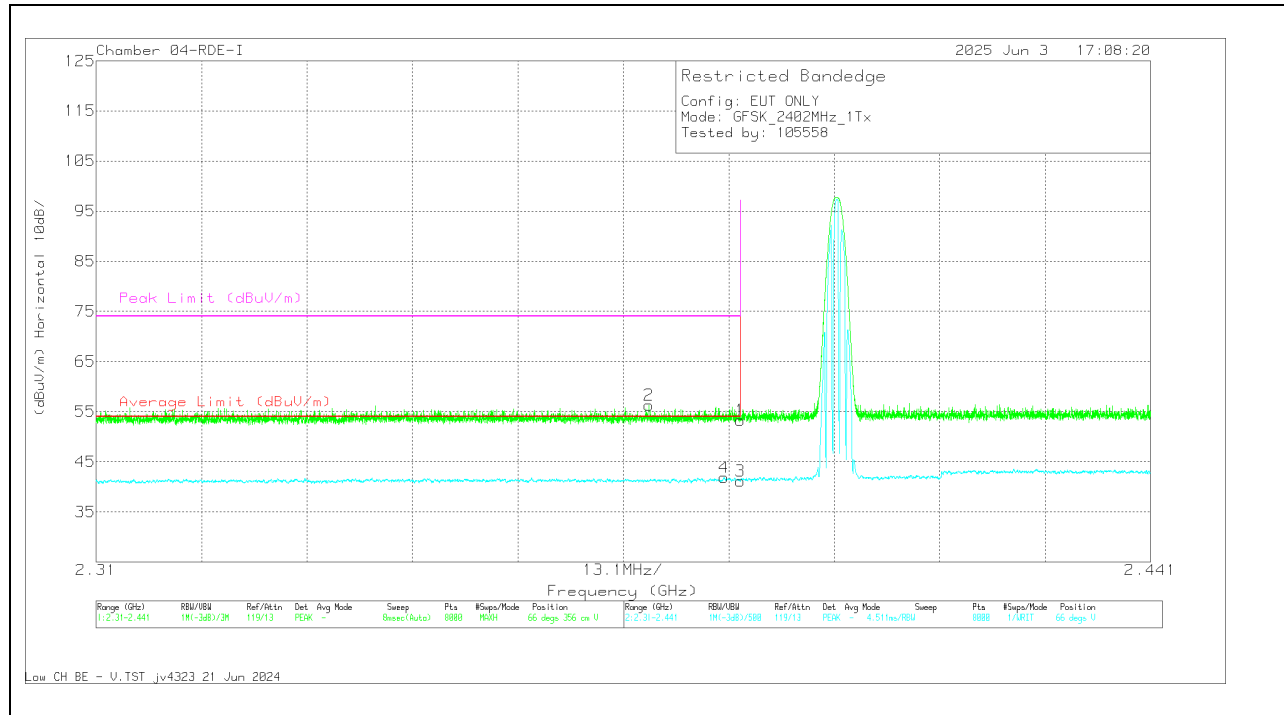
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.55	Pk	31.8	-19.9	54.45	-	-	74	-19.55	117	253	H
2	* 2.343786	44.41	Pk	31.7	-19.6	56.51	-	-	74	-17.49	117	253	H
3	* 2.39	29.86	VA1T	31.8	-19.9	41.76	54	-12.24	-	-	117	253	H
4	* 2.368793	30.05	VA1T	31.7	-19.7	42.05	54	-11.95	-	-	117	253	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

VERTICAL RESULT

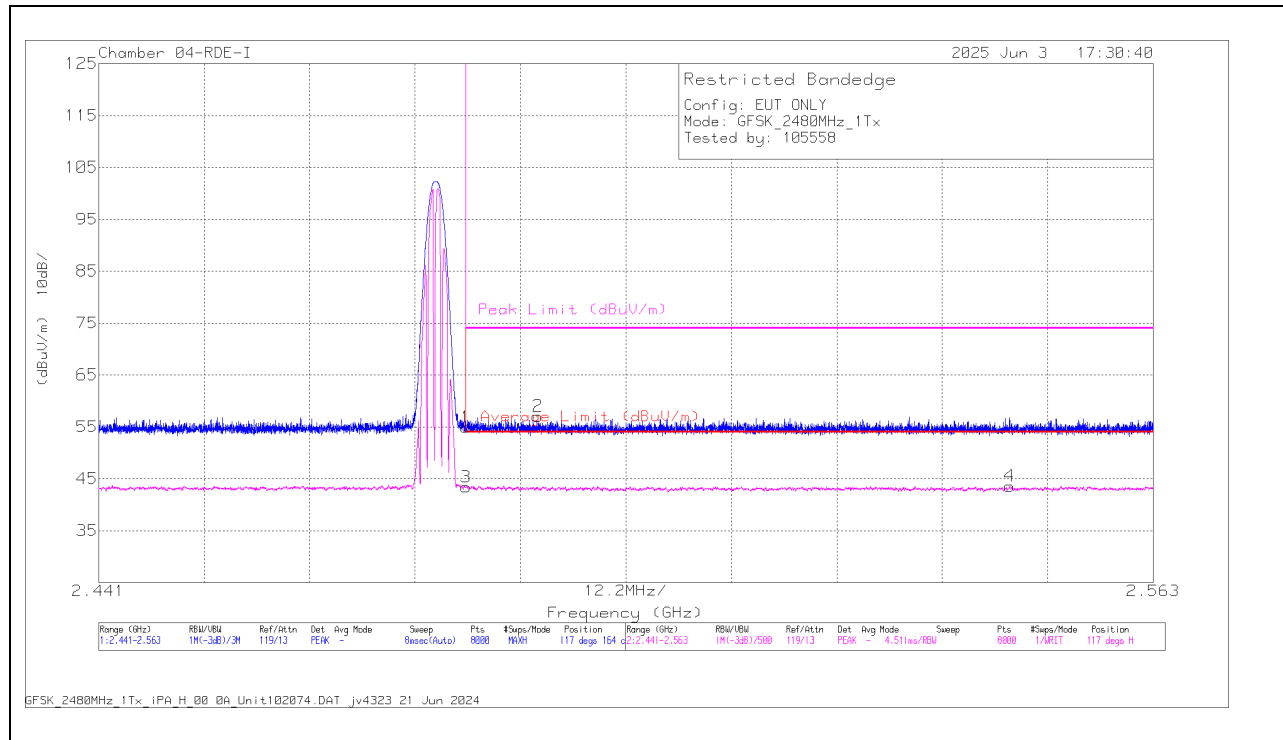


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.37	Pk	31.8	-19.9	53.27	-	-	74	-20.73	66	356	V
2	* 2.378685	44.28	Pk	31.7	-19.7	56.28	-	-	74	-17.72	66	356	V
3	* 2.39	29.2	VA1T	31.8	-19.9	41.1	54	-12.9	-	-	66	356	V
4	* 2.387987	29.84	VA1T	31.8	-19.8	41.84	54	-12.16	-	-	66	356	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

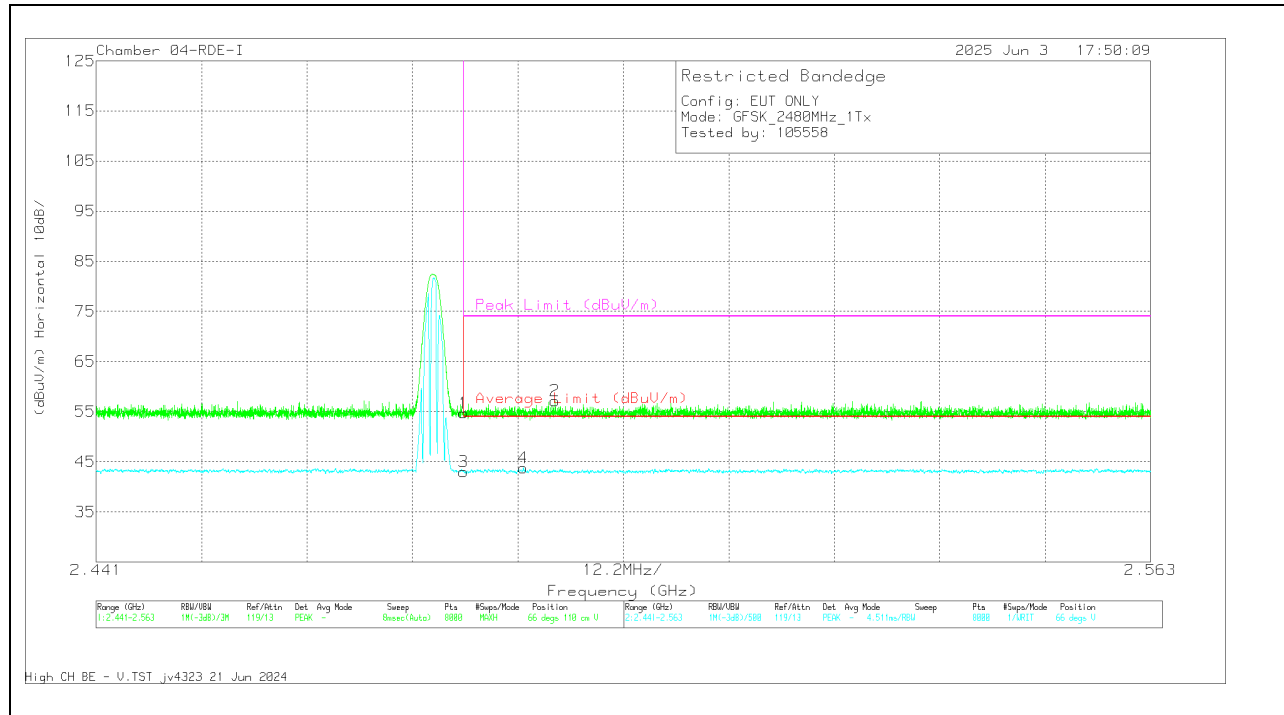
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.93	Pk	32.3	-20.3	54.93	-	-	74	-19.07	117	164	H
2	* 2.49185	45.04	Pk	32.3	-20.3	57.04	-	-	74	-16.96	117	164	H
3	* 2.4835	31.41	VA1T	32.3	-20.3	43.41	54	-10.59	-	-	117	164	H
4	2.546391	31.69	VA1T	32.4	-20.5	43.59	54	-10.41	-	-	117	164	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

VERTICAL RESULT

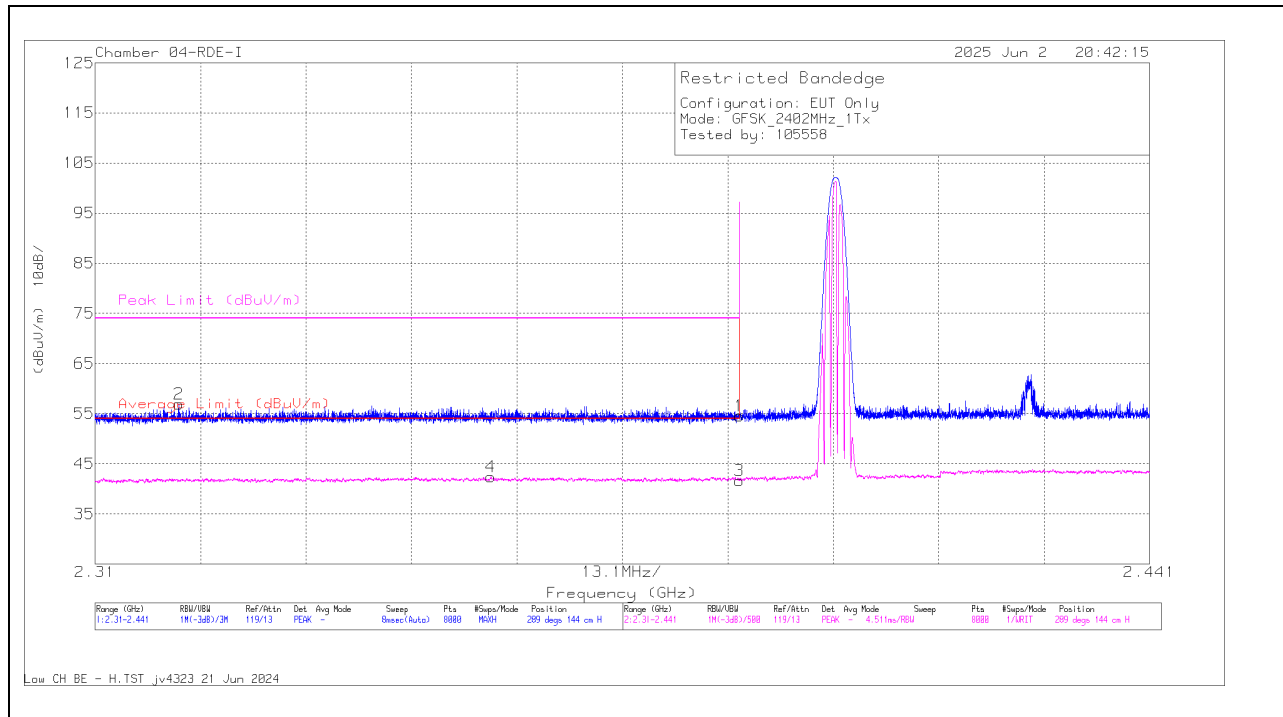


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.72	Pk	32.3	-20.3	54.72	-	-	74	-19.28	66	110	V
2	* 2.494123	45.14	Pk	32.3	-20.3	57.14	-	-	74	-16.86	66	110	V
3	* 2.4835	31.05	VA1T	32.3	-20.3	43.05	54	-10.95	-	-	66	110	V
4	* 2.490432	31.81	VA1T	32.3	-20.3	43.81	54	-10.19	-	-	66	110	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

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

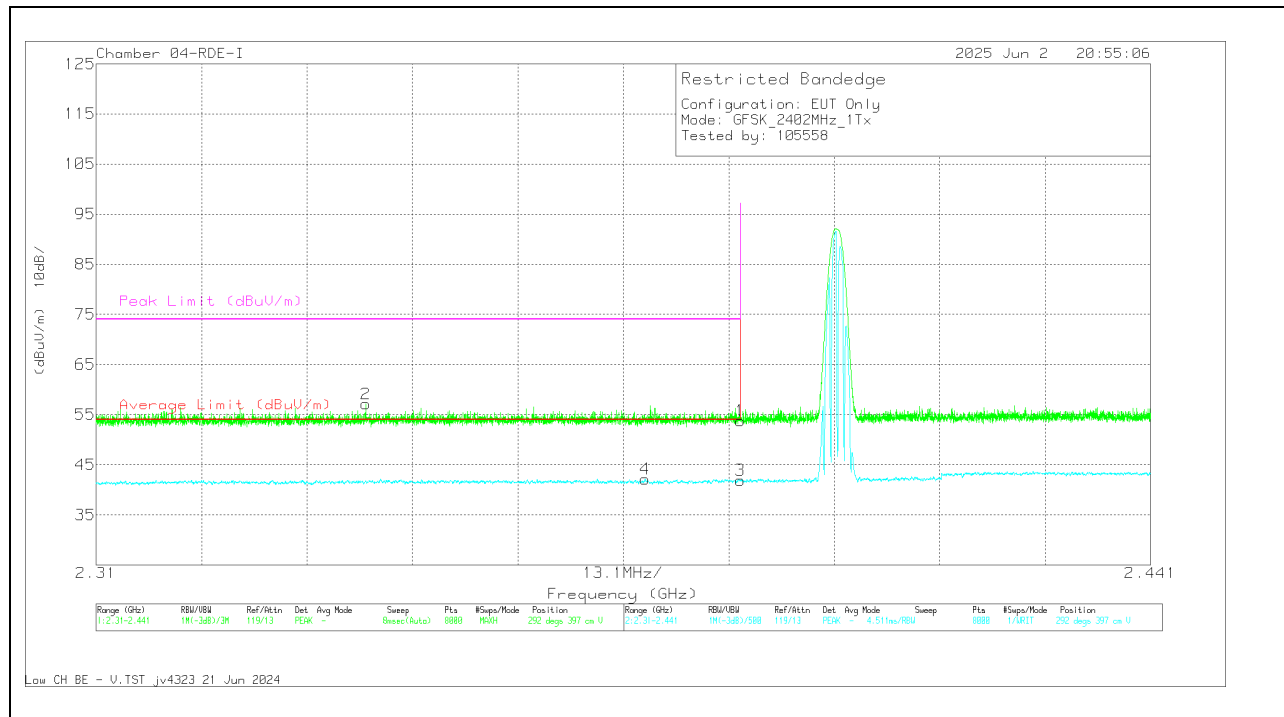
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.64	Pk	31.8	-19.9	54.54	-	-	74	-19.46	289	144	H
2	* 2.320399	44.98	Pk	31.6	-19.7	56.88	-	-	74	-17.12	289	144	H
3	* 2.39	29.78	VA1T	31.8	-19.9	41.68	54	-12.32	-	-	289	144	H
4	* 2.35918	30.36	VA1T	31.7	-19.7	42.36	54	-11.64	-	-	289	144	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

VERTICAL RESULT

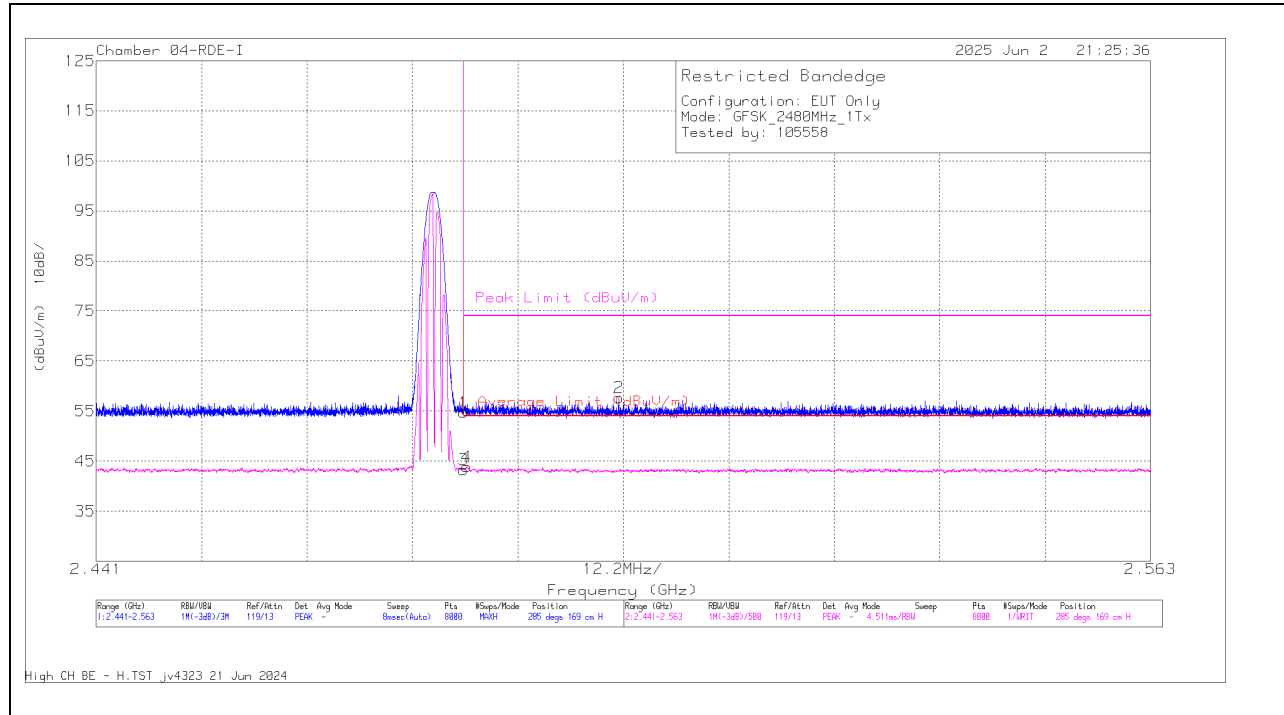


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.88	Pk	31.8	-19.9	53.78	-	-	74	-20.22	292	397	V
2	* 2.343524	45.01	Pk	31.7	-19.6	57.11	-	-	74	-16.89	292	397	V
3	* 2.39	30.02	VA1T	31.8	-19.9	41.92	54	-12.08	-	-	292	397	V
4	* 2.378194	30.14	VA1T	31.7	-19.7	42.14	54	-11.86	-	-	292	397	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

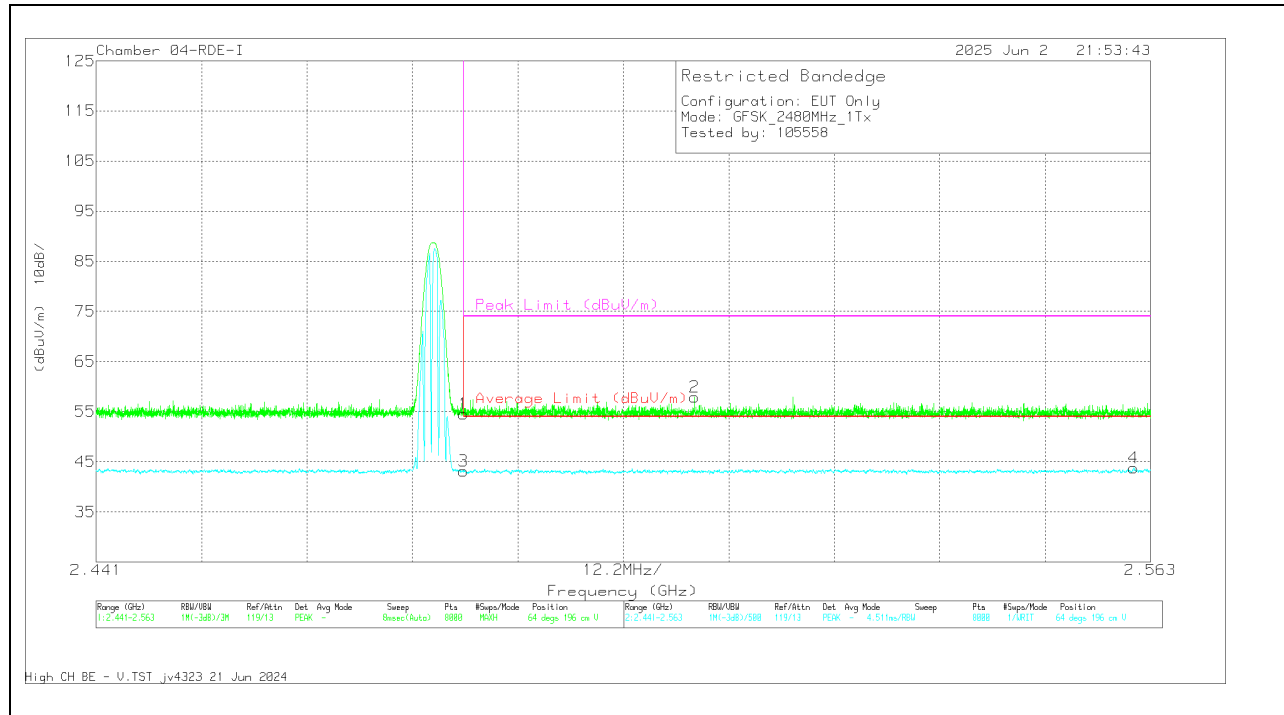
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.72	Pk	32.3	-20.3	54.72	-	-	74	-19.28	285	169	H
2	2.501459	45.69	Pk	32.3	-20.3	57.69	-	-	74	-16.31	285	169	H
3	* 2.4835	31.31	VA1T	32.3	-20.3	43.31	54	-10.69	-	-	285	169	H
4	* 2.483843	31.83	VA1T	32.3	-20.3	43.83	54	-10.17	-	-	285	169	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	42.53	Pk	32.3	-20.3	54.53	-	-	74	-19.47	64	196	V
2	2.510229	45.92	Pk	32.4	-20.4	57.92	-	-	74	-16.08	64	196	V
3	* 2.4835	31.16	VA1T	32.3	-20.3	43.16	54	-10.84	-	-	64	196	V
4	2.561064	31.73	VA1T	32.4	-20.4	43.73	54	-10.27	-	-	64	196	V

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

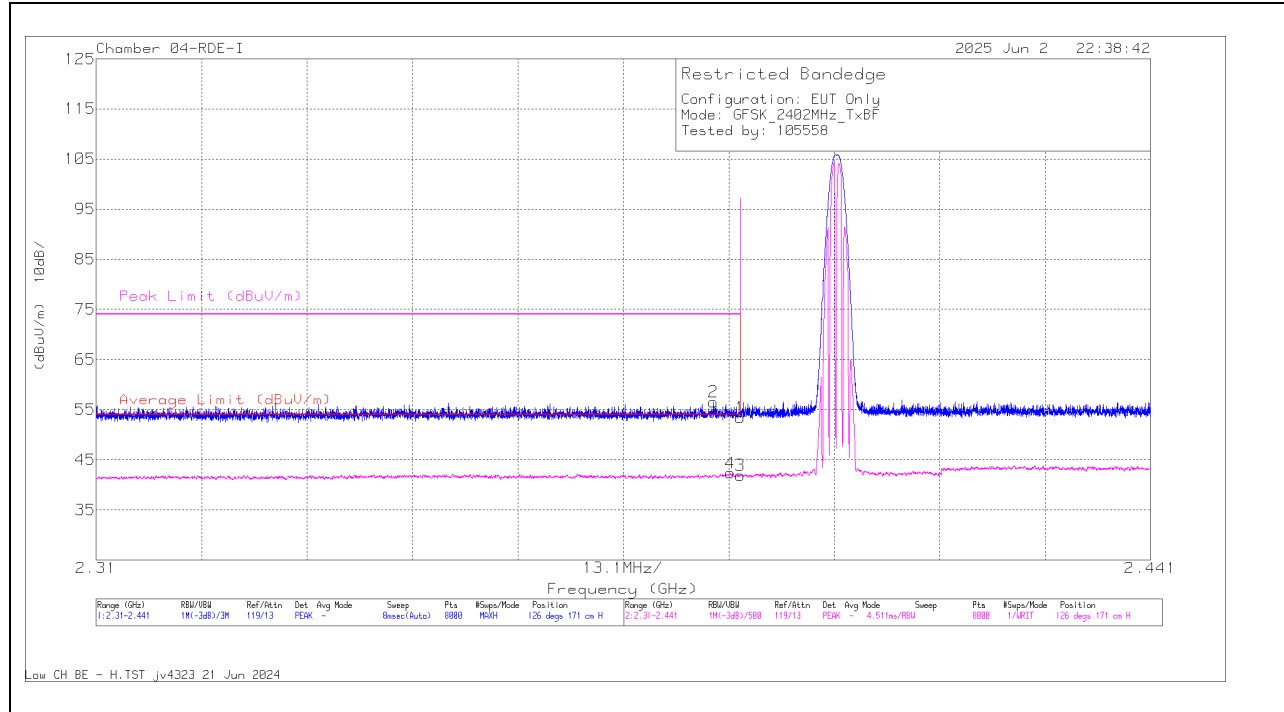
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.8. LOW POWER BASIC DATA RATE TXBF GFSK MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



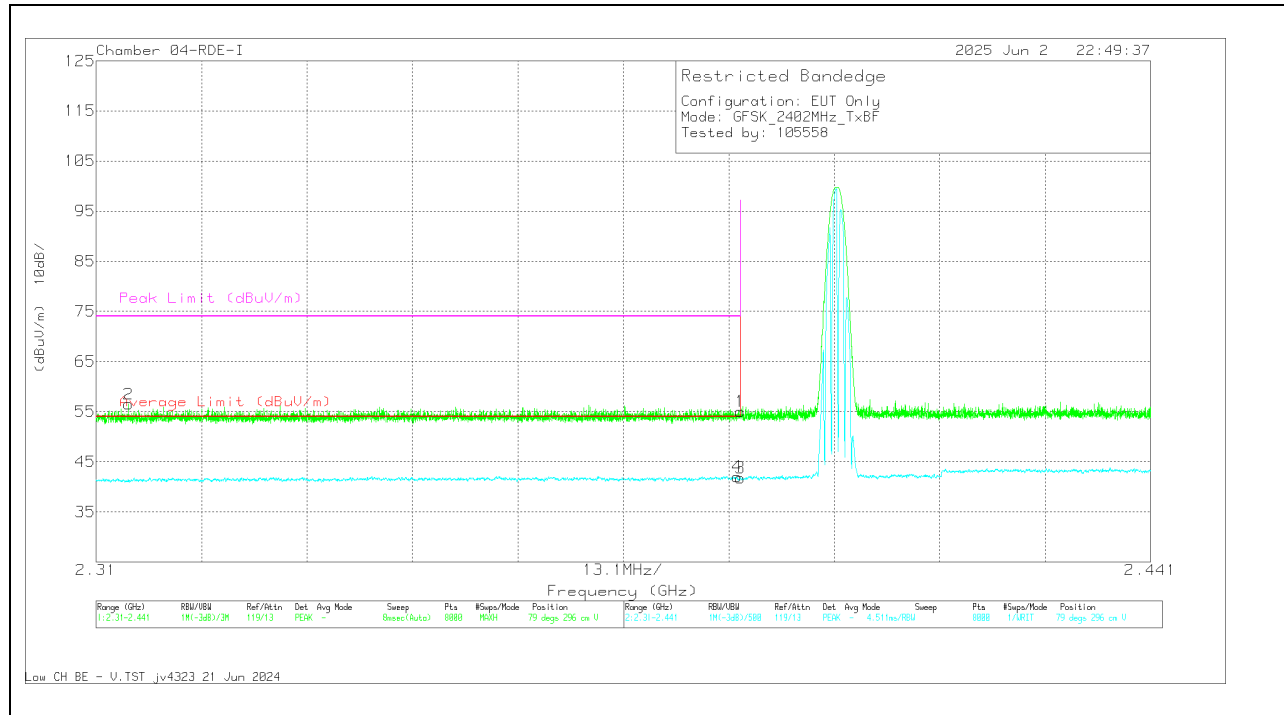
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.52	Pk	31.8	-19.9	53.42	-	-	74	-20.58	126	171	H
2	* 2.386661	44.51	Pk	31.8	-19.8	56.51	-	-	74	-17.49	126	171	H
3	* 2.39	29.94	VA1T	31.8	-19.9	41.84	54	-12.16	-	-	126	171	H
4	* 2.38879	30.33	VA1T	31.8	-19.8	42.33	54	-11.67	-	-	126	171	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

VERTICAL RESULT

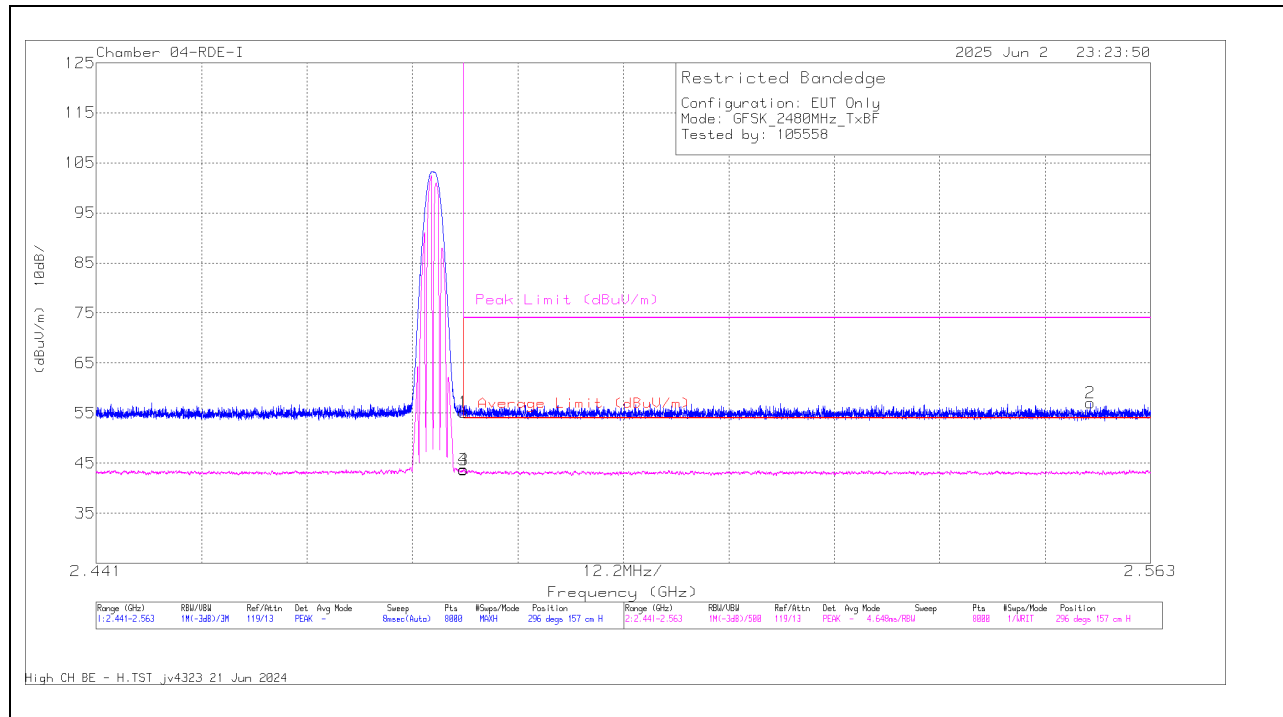


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.1	Pk	31.8	-19.9	55	-	-	74	-19	79	296	V
2	* 2.314012	44.68	Pk	31.5	-19.7	56.48	-	-	74	-17.52	79	296	V
3	* 2.39	29.91	VA1T	31.8	-19.9	41.81	54	-12.19	-	-	79	296	V
4	* 2.389625	30.06	VA1T	31.8	-19.8	42.06	54	-11.94	-	-	79	296	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

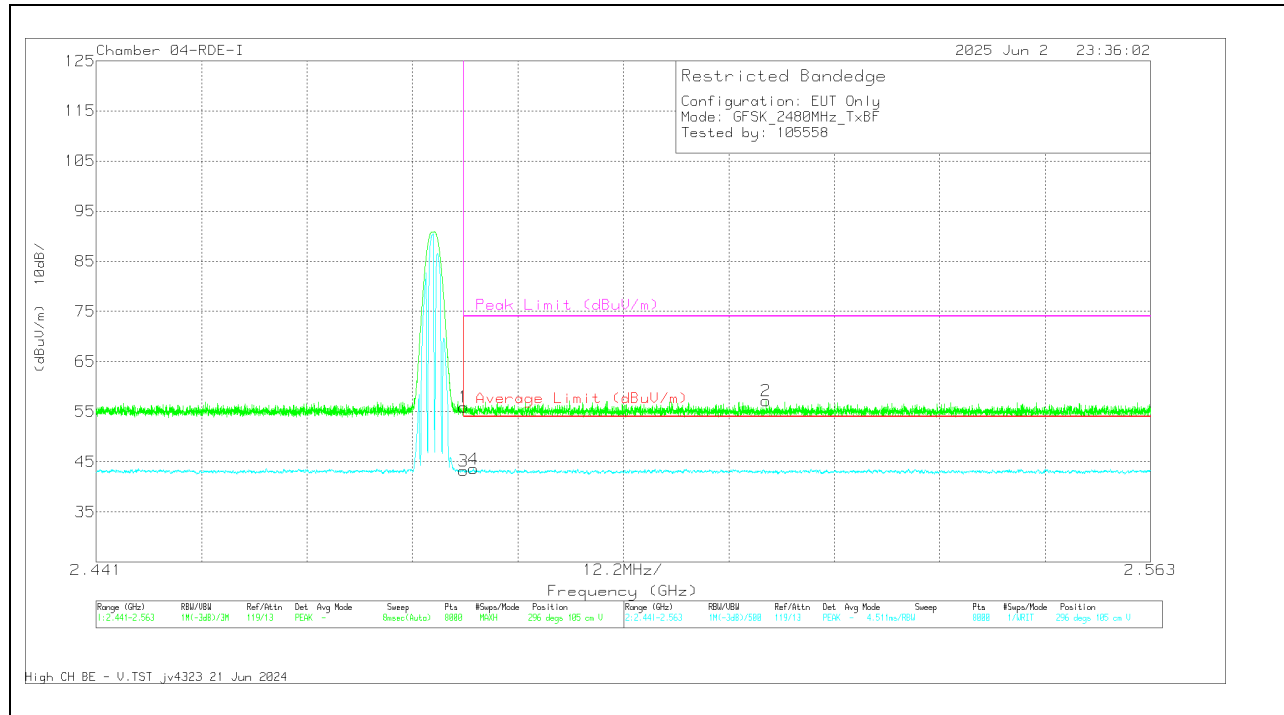
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.18	Pk	32.3	-20.3	55.18	-	-	74	-18.82	296	157	H
2	2.556015	45.09	Pk	32.4	-20.5	56.99	-	-	74	-17.01	296	157	H
3	* 2.4835	31.61	VA1T	32.3	-20.3	43.61	54	-10.39	-	-	296	157	H
4	* 2.483523	31.76	VA1T	32.3	-20.3	43.76	54	-10.24	-	-	296	157	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	43.93	Pk	32.3	-20.3	55.93	-	-	74	-18.07	296	105	V
2	2.518495	45.18	Pk	32.4	-20.4	57.18	-	-	74	-16.82	296	105	V
3	* 2.4835	31.2	VA1T	32.3	-20.3	43.2	54	-10.8	-	-	296	105	V
4	* 2.484682	31.58	VA1T	32.3	-20.3	43.58	54	-10.42	-	-	296	105	V

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

Pk - Peak detector

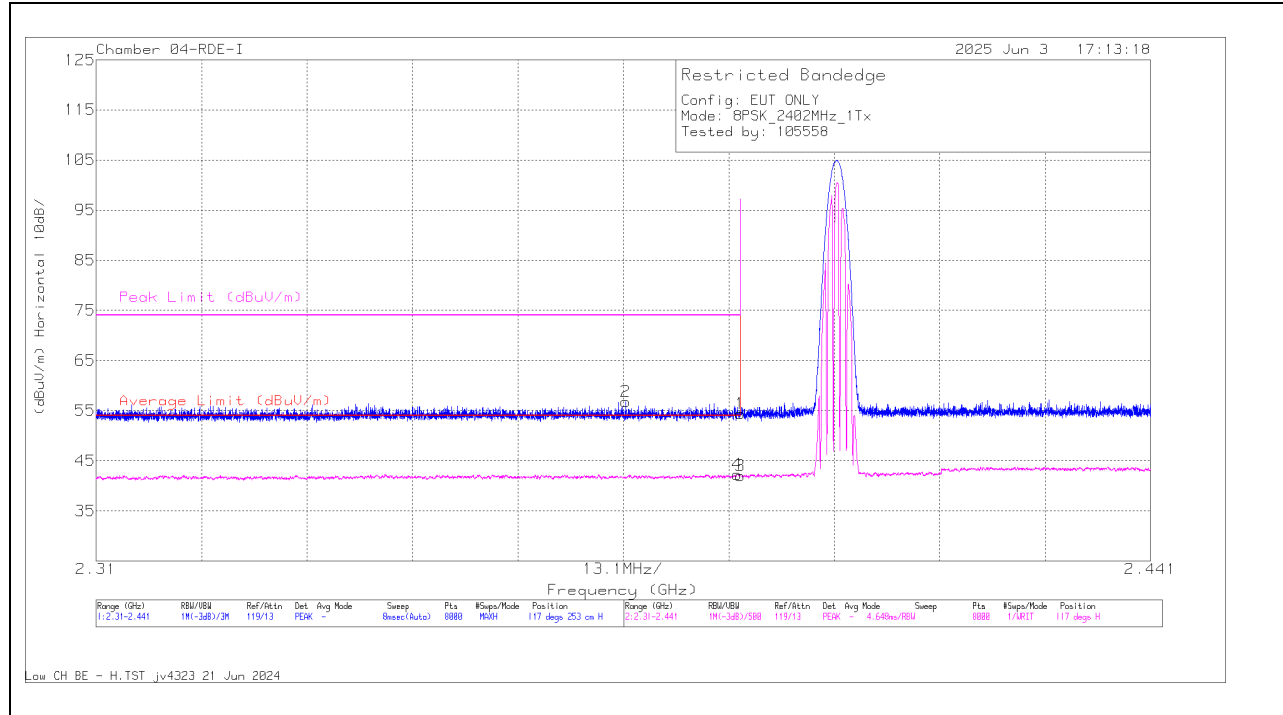
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.9. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



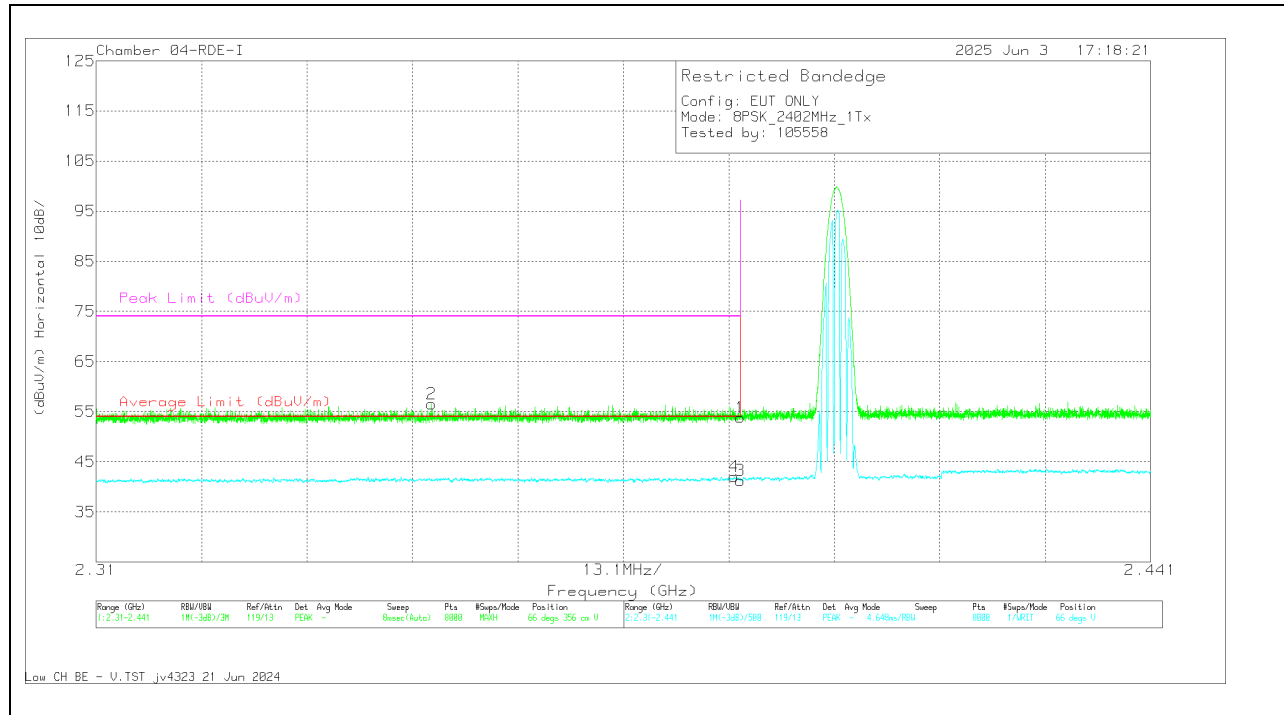
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.56	PK	31.8	-19.9	54.46	-	-	74	-19.54	117	253	H
2	* 2.375819	44.86	PK	31.7	-19.8	56.76	-	-	74	-17.24	117	253	H
3	* 2.39	30.15	VA1T	31.8	-19.9	42.05	54	-11.95	-	-	117	253	H
4	* 2.389674	30.3	VA1T	31.8	-19.8	42.3	54	-11.7	-	-	117	253	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

VERTICAL RESULT

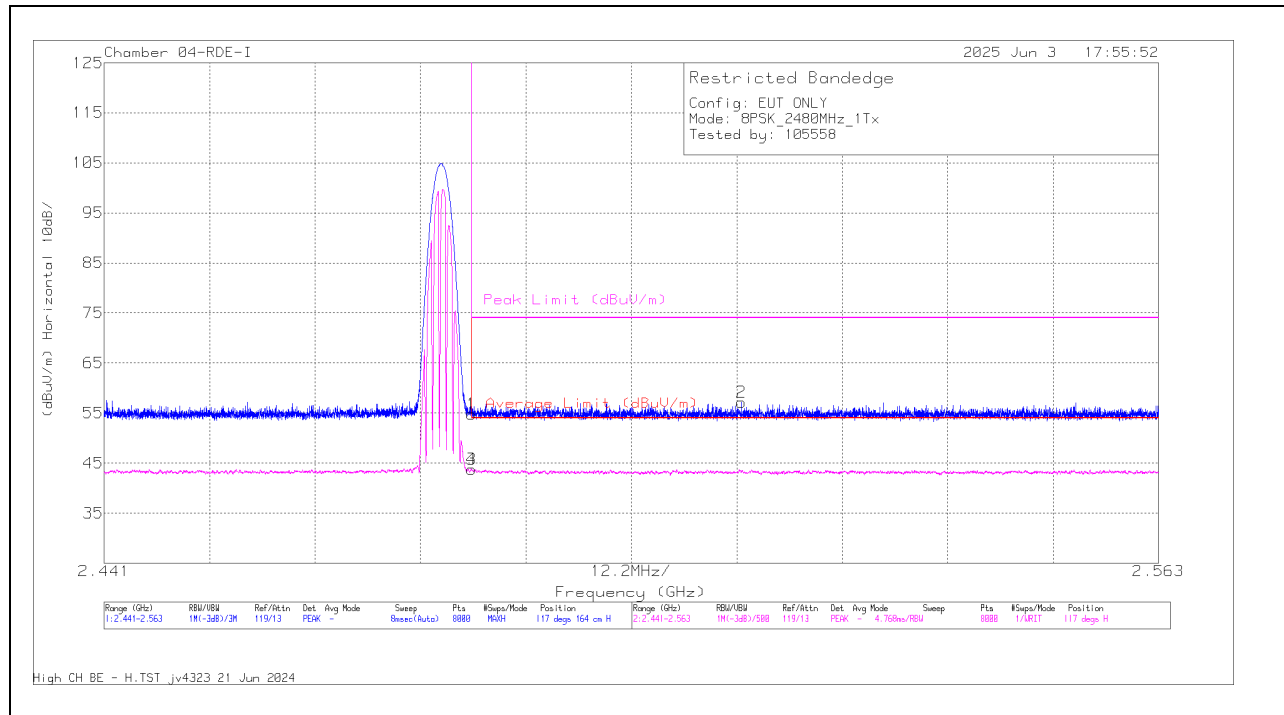


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.94	Pk	31.8	-19.9	53.84	-	-	74	-20.16	66	356	V
2	* 2.351696	44.5	Pk	31.7	-19.7	56.5	-	-	74	-17.5	66	356	V
3	* 2.39	29.35	VA1T	31.8	-19.9	41.25	54	-12.75	-	-	66	356	V
4	* 2.389281	29.98	VA1T	31.8	-19.8	41.98	54	-12.02	-	-	66	356	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

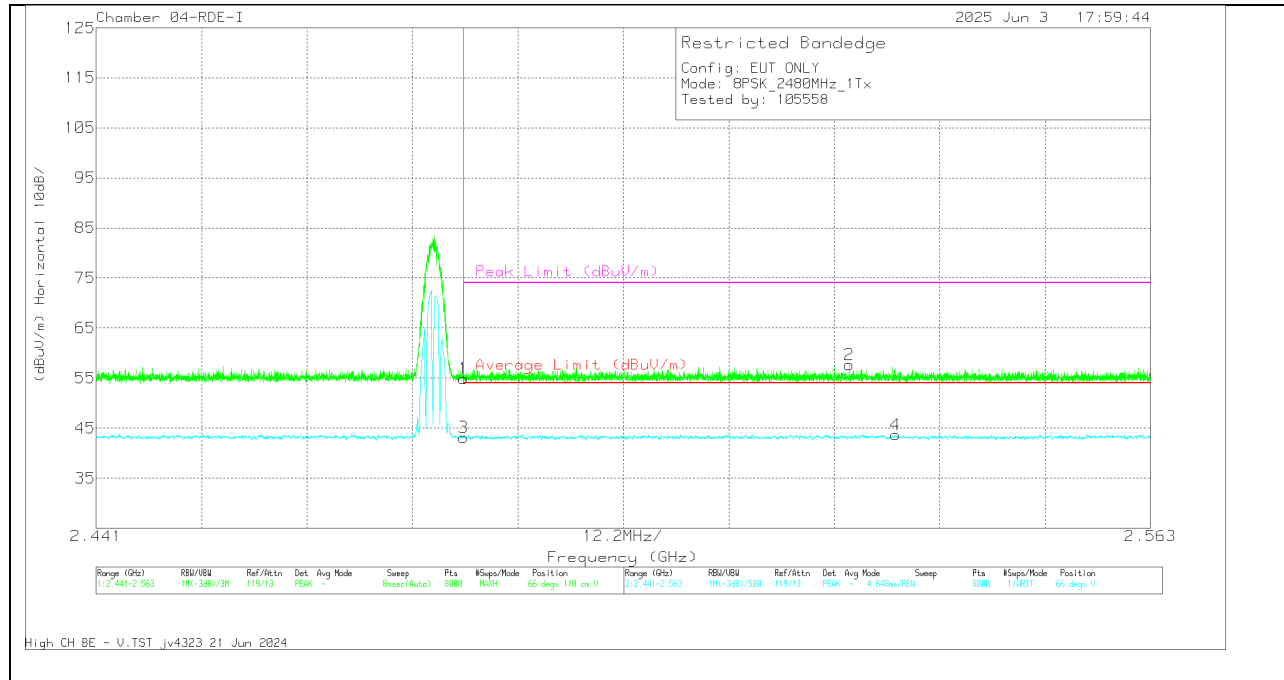
Marker	Frequency (GHz)	Meter Reading c(dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/P ad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.8	Pk	32.3	-20.3	54.8	-	-	74	-19.2	117	164	H
2	2.514743	45.15	Pk	32.4	-20.4	57.15	-	-	74	-16.85	117	164	H
3	* 2.4835	31.73	VA1T	32.3	-20.3	43.73	54	-10.27	-	-	117	164	H
4	* 2.483507	31.72	VA1T	32.3	-20.3	43.72	54	-10.28	-	-	117	164	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

VERTICAL RESULT

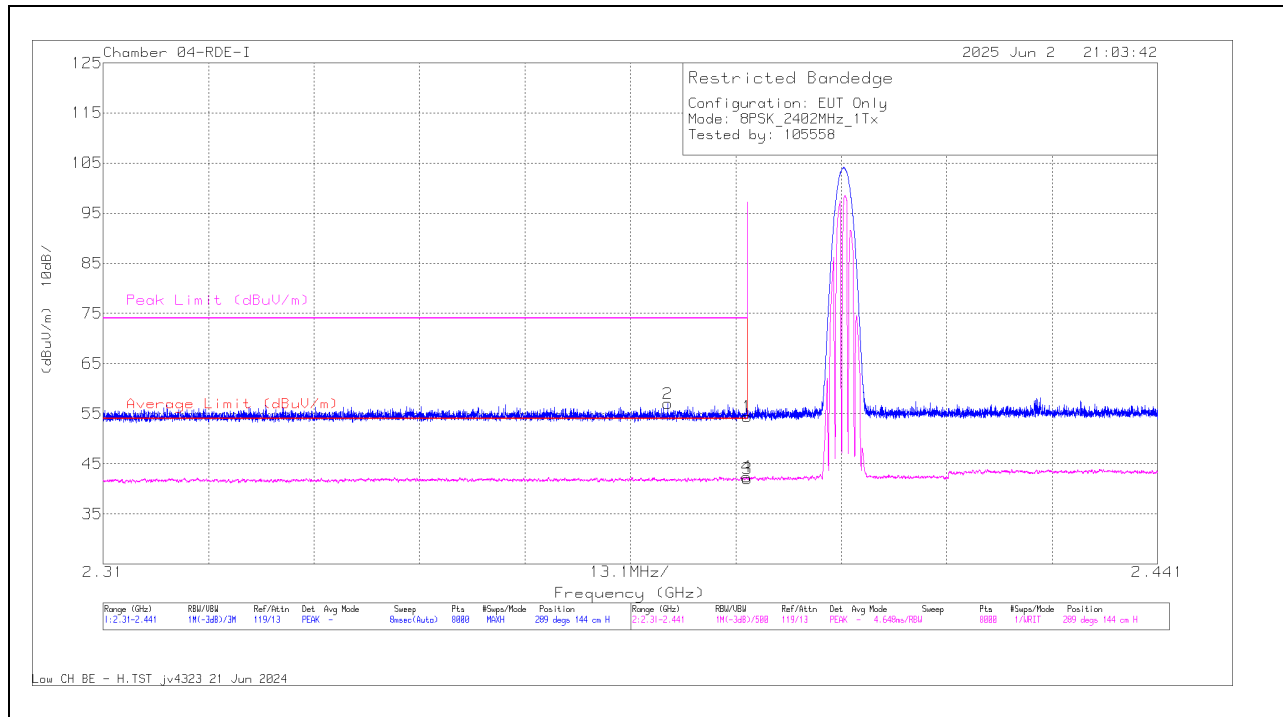


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.92	Pk	32.3	-20.3	54.92	-	-	74	-19.08	66	110	V
2	2.52815	45.63	Pk	32.4	-20.4	57.63	-	-	74	-16.37	66	110	V
3	* 2.4835	31.11	VA1T	32.3	-20.3	43.11	54	-10.89	-	-	66	110	V
4	2.533534	31.8	VA1T	32.4	-20.5	43.7	54	-10.3	-	-	66	110	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

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

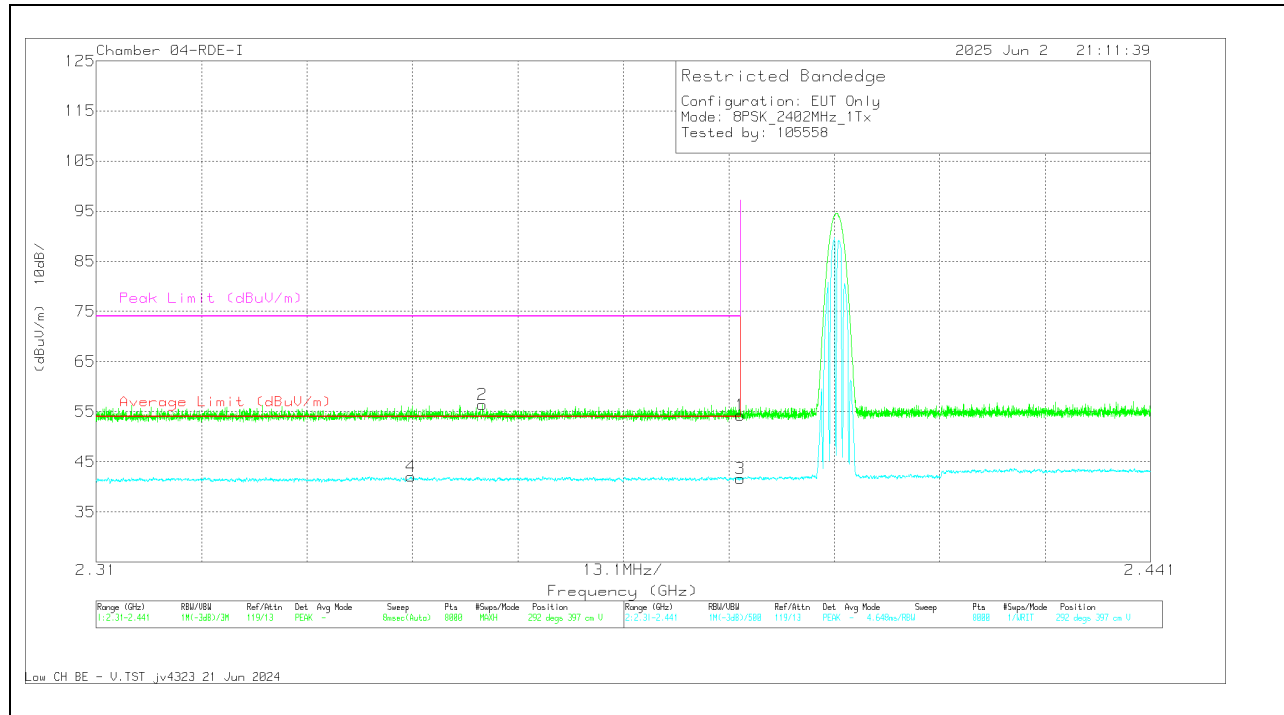
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	222740 ACF (dB/m)	Amp/Cbl/P ad (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.55	Pk	31.8	-19.9	54.45	-	-	74	-19.55	289	144	H
2	* 2.380159	45.08	Pk	31.7	-19.8	56.98	-	-	74	-17.02	289	144	H
3	* 2.39	30.1	VA1T	31.8	-19.9	42	54	-12	-	-	289	144	H
4	* 2.389953	30.38	VA1T	31.8	-19.8	42.38	54	-11.62	-	-	289	144	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

VERTICAL RESULT

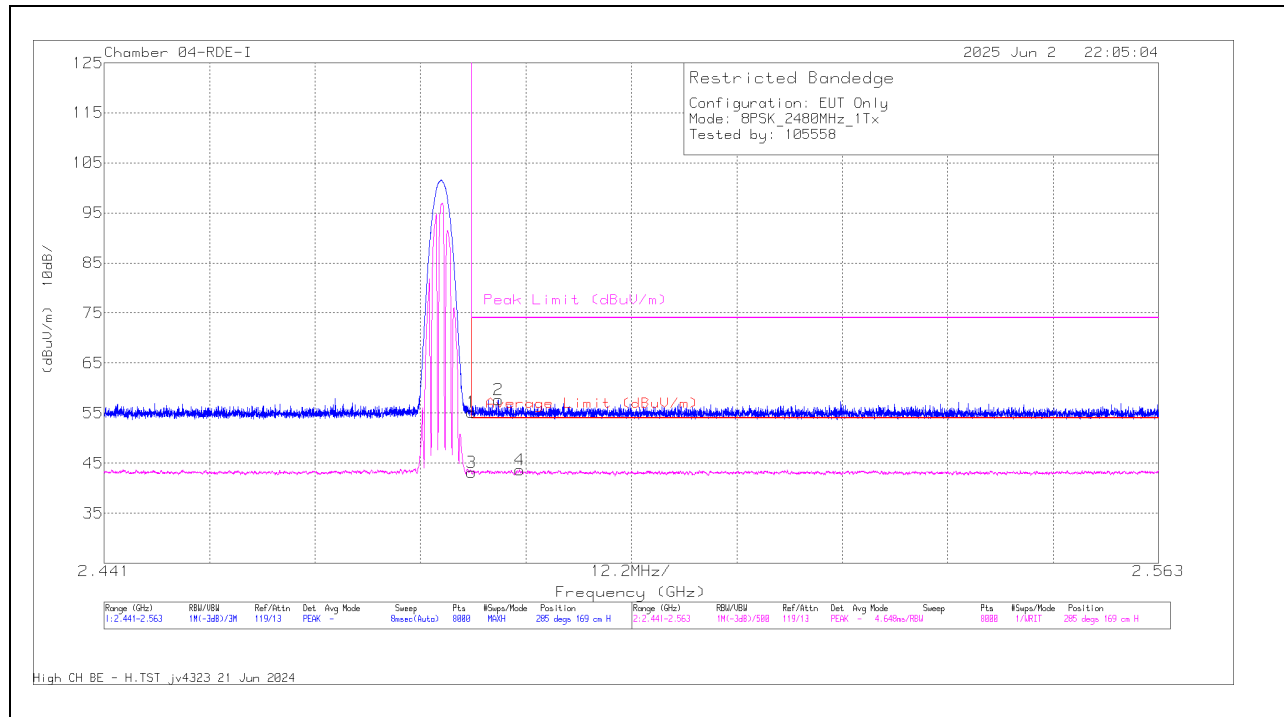


Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	222740 ACF (dB/m)	Amp/Cbl/ Pad (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.37	Pk	31.8	-19.9	54.27	-	-	74	-19.73	292	397	V
2	* 2.358001	44.42	Pk	31.7	-19.7	56.42	-	-	74	-17.58	292	397	V
3	* 2.39	29.72	VA1T	31.8	-19.9	41.62	54	-12.38	-	-	292	397	V
4	* 2.349108	30.07	VA1T	31.7	-19.7	42.07	54	-11.93	-	-	292	397	V

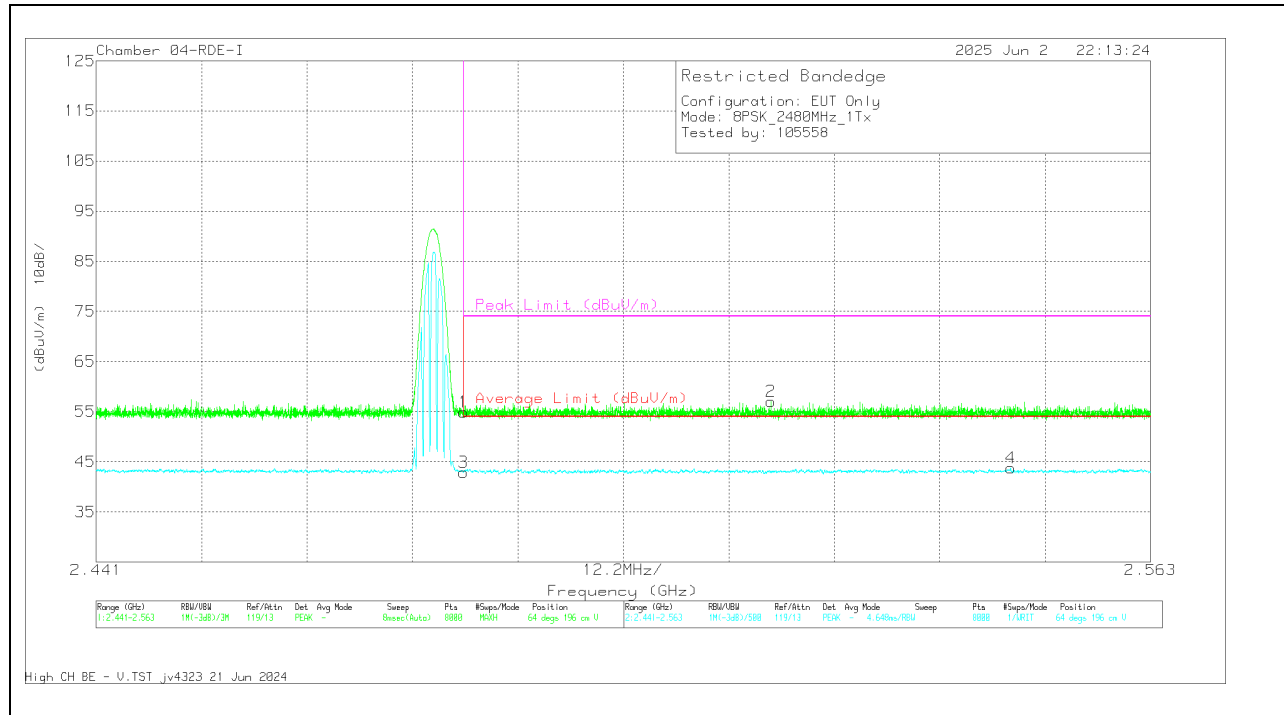
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	42.87	Pk	32.3	-20.3	54.87	-	-	74	-19.13	64	196	V
2	2.51909	45.02	Pk	32.4	-20.4	57.02	-	-	74	-16.98	64	196	V
3	* 2.4835	30.92	VA1T	32.3	-20.3	42.92	54	-11.08	-	-	64	196	V
4	2.546818	31.82	VA1T	32.4	-20.5	43.72	54	-10.28	-	-	64	196	V

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

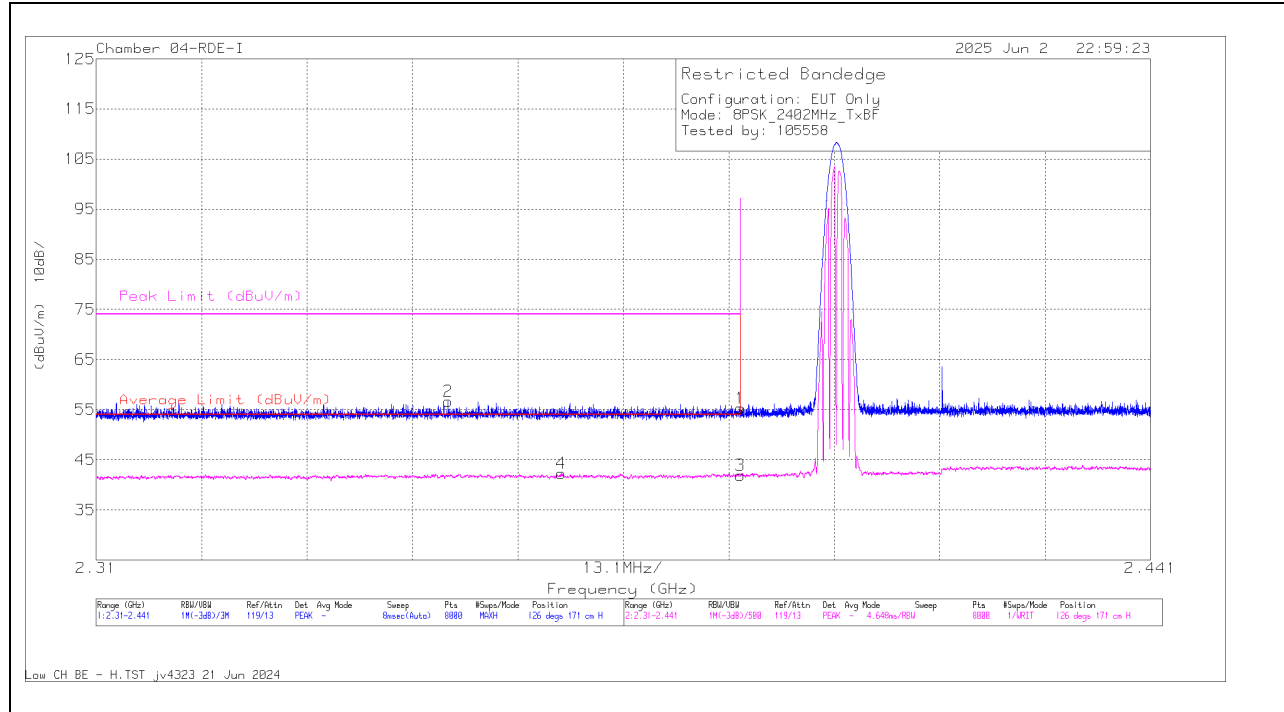
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.10. LOW POWER BASIC DATA RATE TXBF 8PSK MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



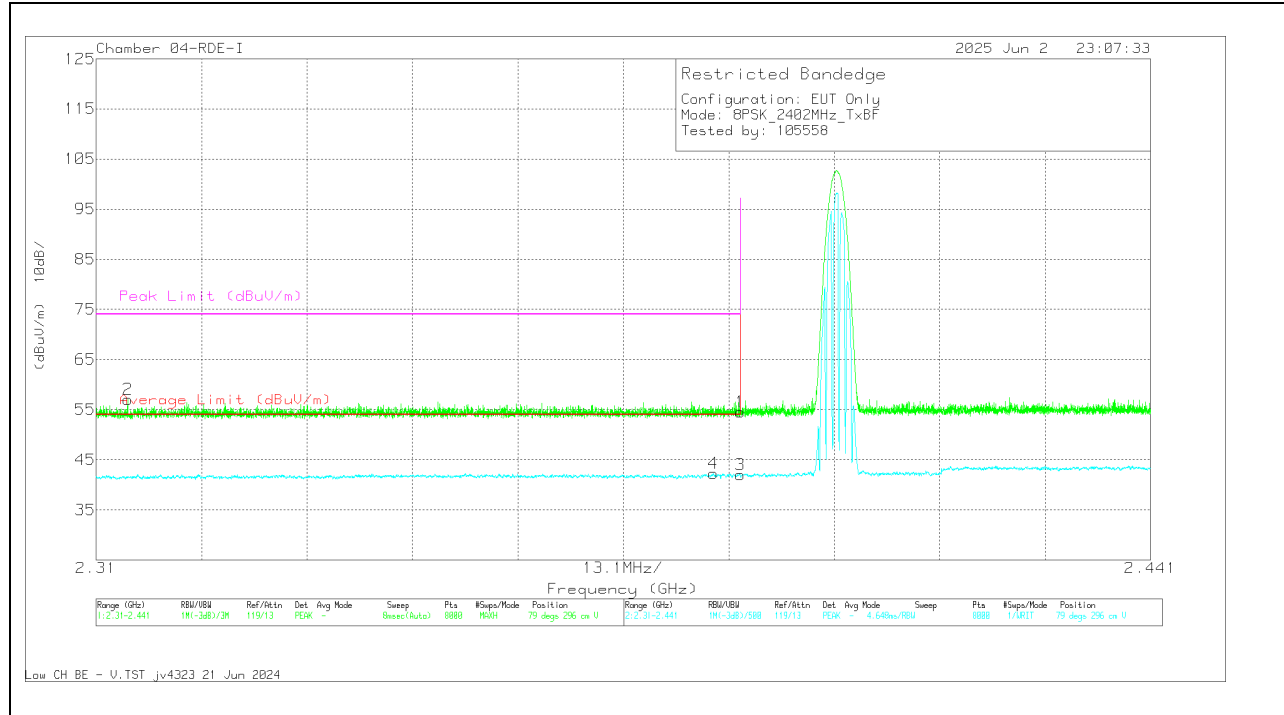
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.35	Pk	31.8	-19.9	55.25	-	-	74	-18.75	126	171	H
2	* 2.353743	44.68	Pk	31.7	-19.7	56.68	-	-	74	-17.32	126	171	H
3	* 2.39	29.96	VA1T	31.8	-19.9	41.86	54	-12.14	-	-	126	171	H
4	* 2.367778	30.26	VA1T	31.7	-19.7	42.26	54	-11.74	-	-	126	171	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

VERTICAL RESULT

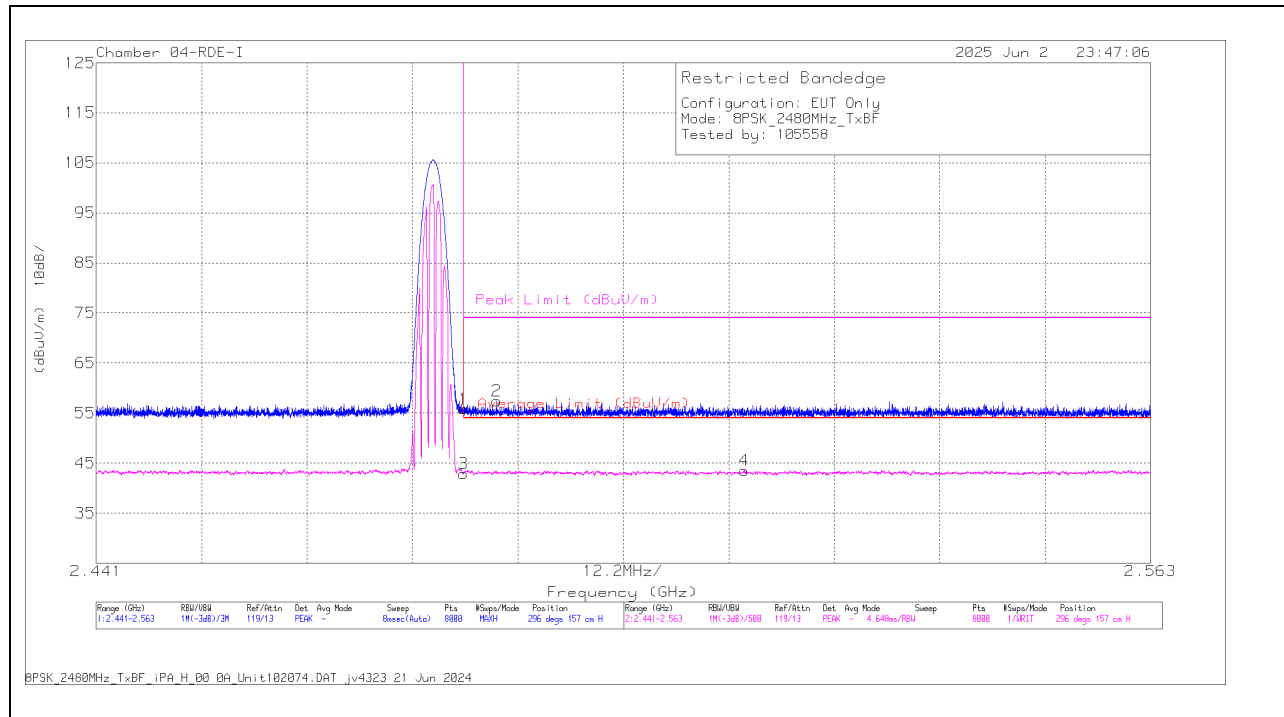


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.62	Pk	31.8	-19.9	54.52	-	-	74	-19.48	79	296	V
2	* 2.313914	45.27	Pk	31.5	-19.7	57.07	-	-	74	-16.93	79	296	V
3	* 2.39	30.1	VA1T	31.8	-19.9	42	54	-12	-	-	79	296	V
4	* 2.386677	30.31	VA1T	31.8	-19.8	42.31	54	-11.69	-	-	79	296	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	43.84	Pk	32.3	-20.3	55.84	-	-	74	-18.16	296	157	H
2	* 2.487336	45.46	Pk	32.3	-20.3	57.46	-	-	74	-16.54	296	157	H
3	* 2.4835	30.94	VA1T	32.3	-20.3	42.94	54	-11.06	-	-	296	157	H
4	2.516009	31.56	VA1T	32.4	-20.4	43.56	54	-10.44	-	-	296	157	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

Chamber 04-RDE-I

2025 Jun 2 23:58:43

Restricted Bandedge

Configuration: EUT Only
Mode: BPSK_2480MHz_TxBF
Tested by: 105558

Peak Limit 75 CdBuU/m

Average Limit 50 CdBuU/m

12.2MHz/

Frequency (GHz)

Range (GHz)	RBW/VBW	Ref/Attn	Det. Avg Mode	Sweep	Pls	#Swept/Mode	Position	Range (GHz)	RBW/VBW	Ref/Attn	Det. Avg Mode	Sweep	Pls	#Swept/Mode	Position	
11.2441~12.563	1M~3dB/3M	119/13	PERK	-	8880	160M	296 degs 105 on U	11.2441~12.563	1M~3dB/3M	119/13	PERK	-	4.6dBm/PERK	160M	17/101	296 degs 105 on U

High CH BE - V.TST_jv4323 21 Jun 2024

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 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	42.82	Pk	32.3	-20.3	54.82	-	-	74	-19.18	296	105	V
2	2.50152	45.16	Pk	32.3	-20.3	57.16	-	-	74	-16.84	296	105	V
3	* 2.4835	31.29	VAIT	32.3	-20.3	43.29	54	-10.71	-	-	296	105	V
4	2.560255	31.68	VAIT	32.4	-20.5	43.58	54	-10.42	-	-	296	105	V

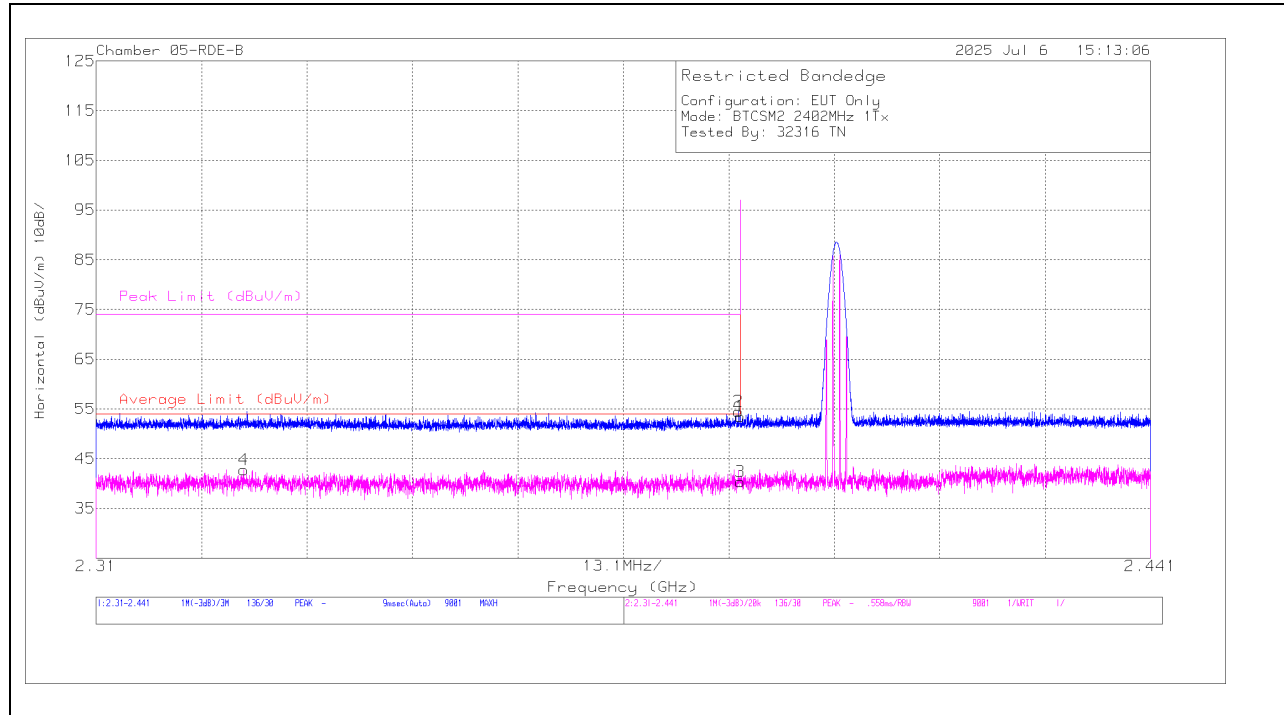
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average $V_B=1/T_{on}$ where: T_{on} is transmit duration

10.1.11. LOW POWER ENHANCED DATA RATE BTCSM2 MODULATION

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



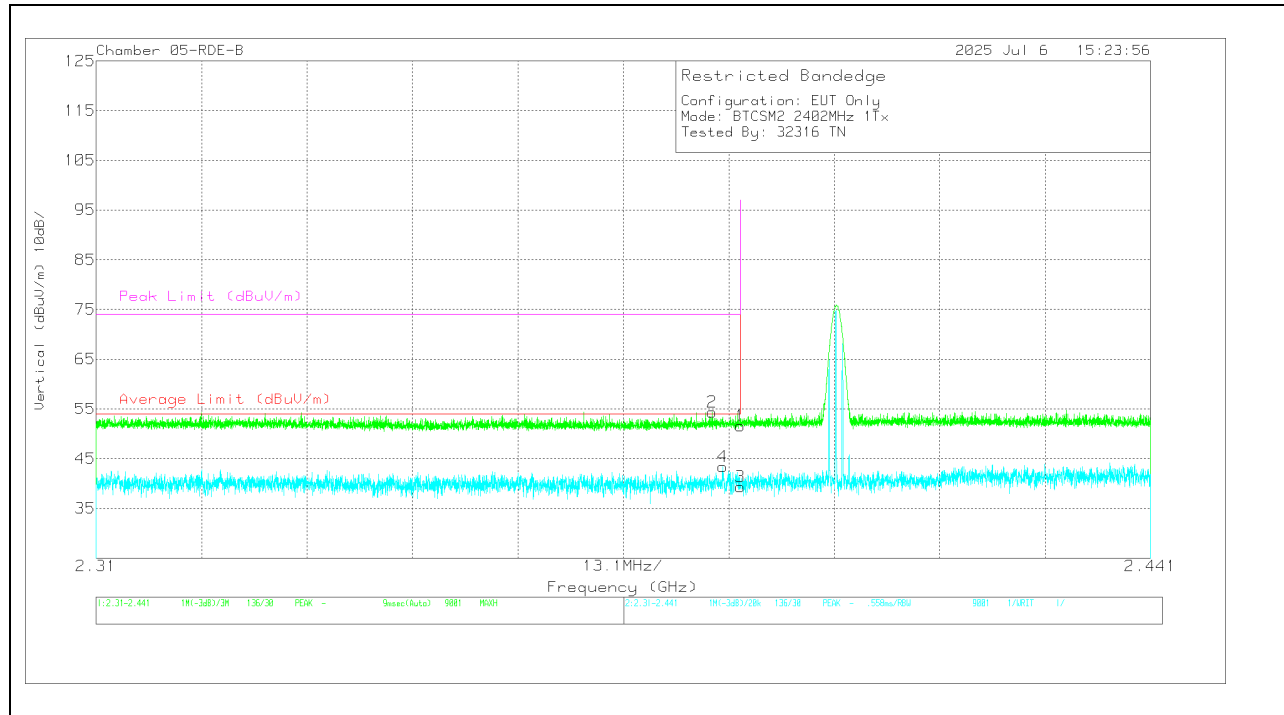
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	61.85	Pk	32	-40.39	53.46	-	-	74	-20.54	287	178	H
2	*2.389825	62.89	Pk	32	-40.39	54.5	-	-	74	-19.5	287	178	H
3	*2.39	48.75	VA1T	32	-40.39	40.36	54	-13.64	-	-	287	178	H
4	*2.328355	51.6	VA1T	31.8	-40.59	42.81	54	-11.19	-	-	287	178	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

VERTICAL RESULT

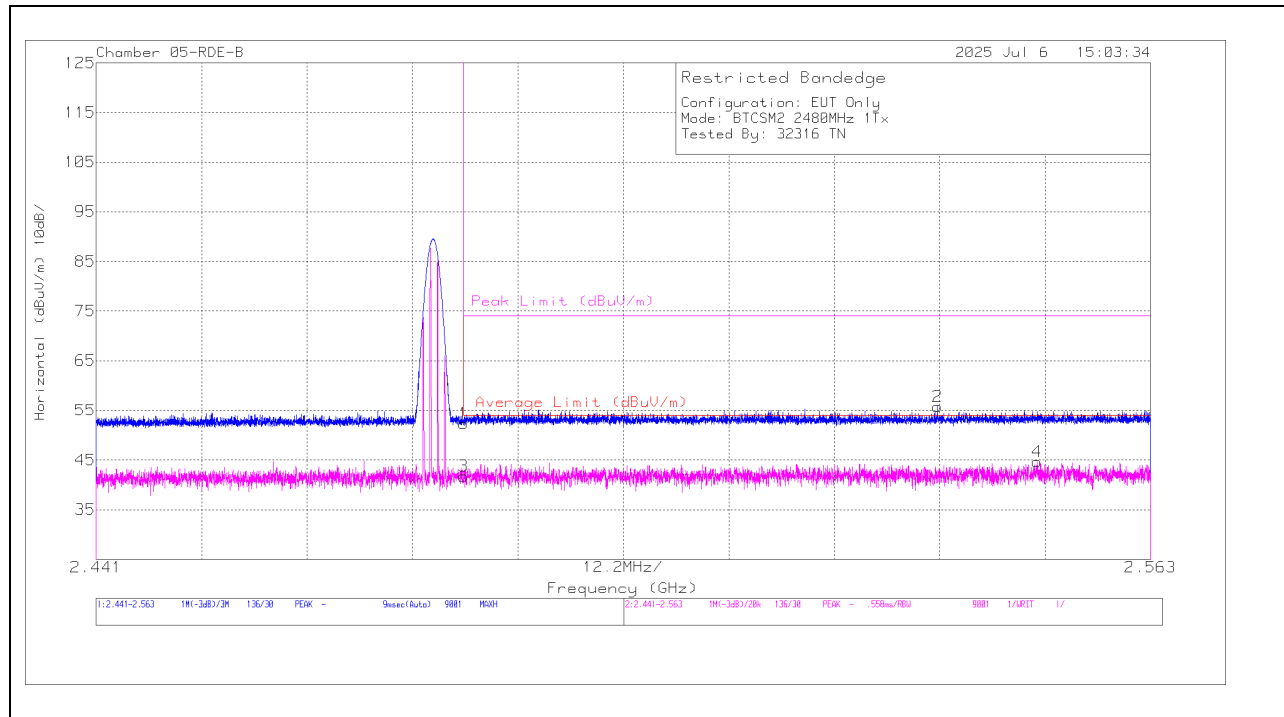


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.03	Pk	32	-40.39	51.64	-	-	74	-22.36	105	377	V
2	*2.386506	62.78	Pk	32	-40.39	54.39	-	-	74	-19.61	105	377	V
3	*2.39	47.75	VA1T	32	-40.39	39.36	54	-14.64	-	-	105	377	V
4	*2.387831	51.76	VA1T	32	-40.38	43.38	54	-10.62	-	-	105	377	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

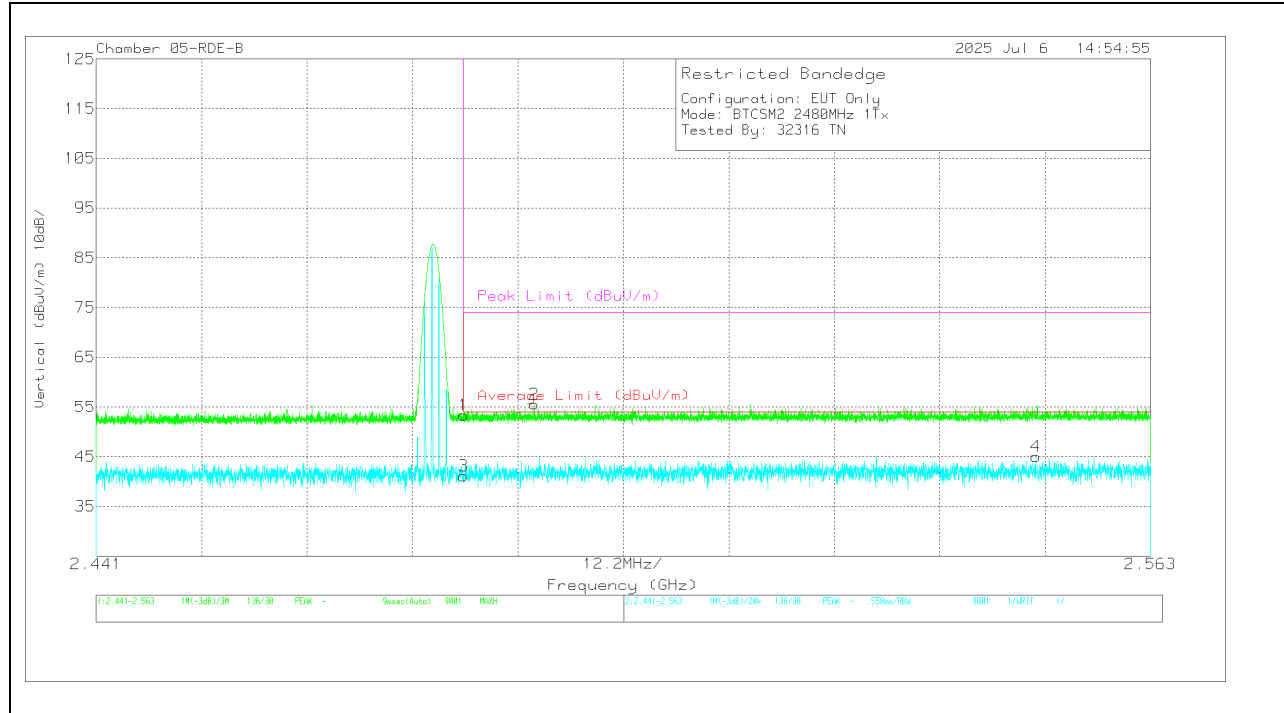
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.57	Pk	32.2	-40.39	52.38	-	-	74	-21.62	286	154	H
2	*2.538346	63.66	Pk	32.3	-40.22	55.74	-	-	74	-18.26	286	154	H
3	*2.4835	49.94	VA1T	32.2	-40.39	41.75	54	-12.25	-	-	286	154	H
4	*2.549855	52.46	VA1T	32.3	-40.11	44.65	54	-9.35	-	-	286	154	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

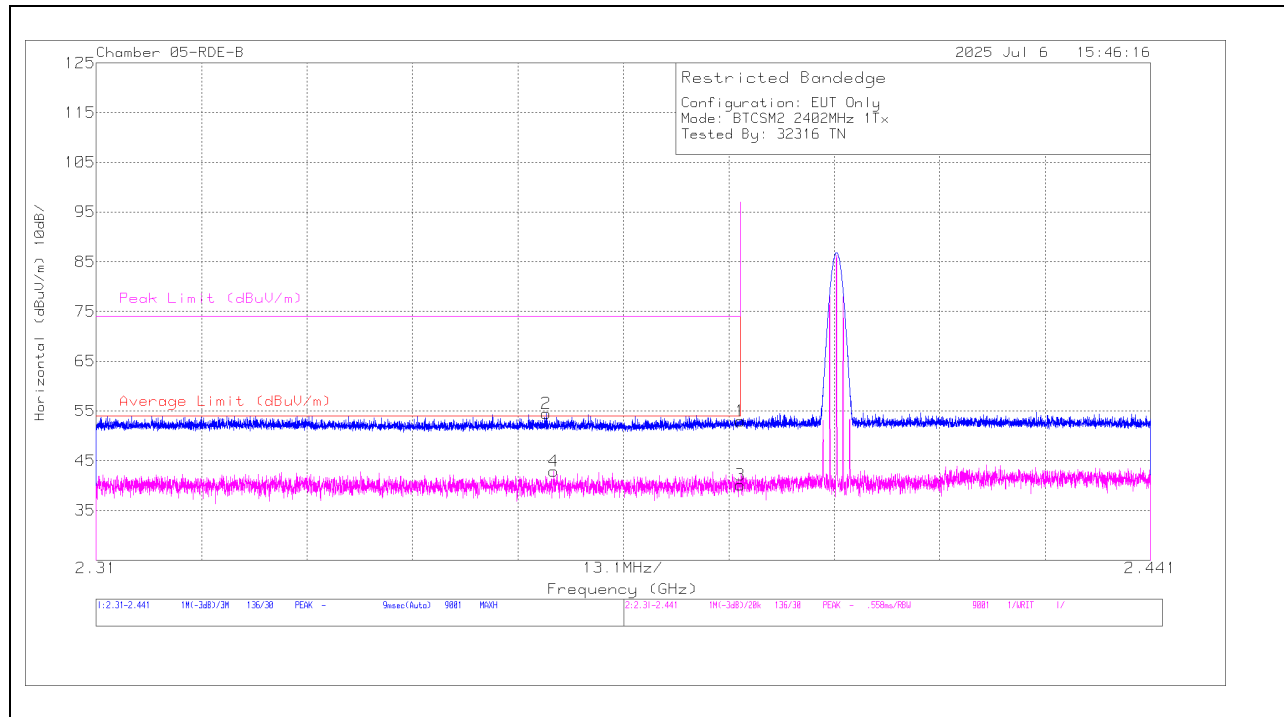
VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	61.58	Pk	32.2	-40.39	53.39	-	-	74	-20.61	320	374	V
2	*2.491699	63.63	Pk	32.3	-40.37	55.56	-	-	74	-18.44	320	374	V
3	*2.4835	49.33	VA1T	32.2	-40.39	41.14	54	-12.86	-	-	320	374	V
4	*2.549719	52.82	VA1T	32.3	-40.11	45.01	54	-8.99	-	-	320	374	V

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

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

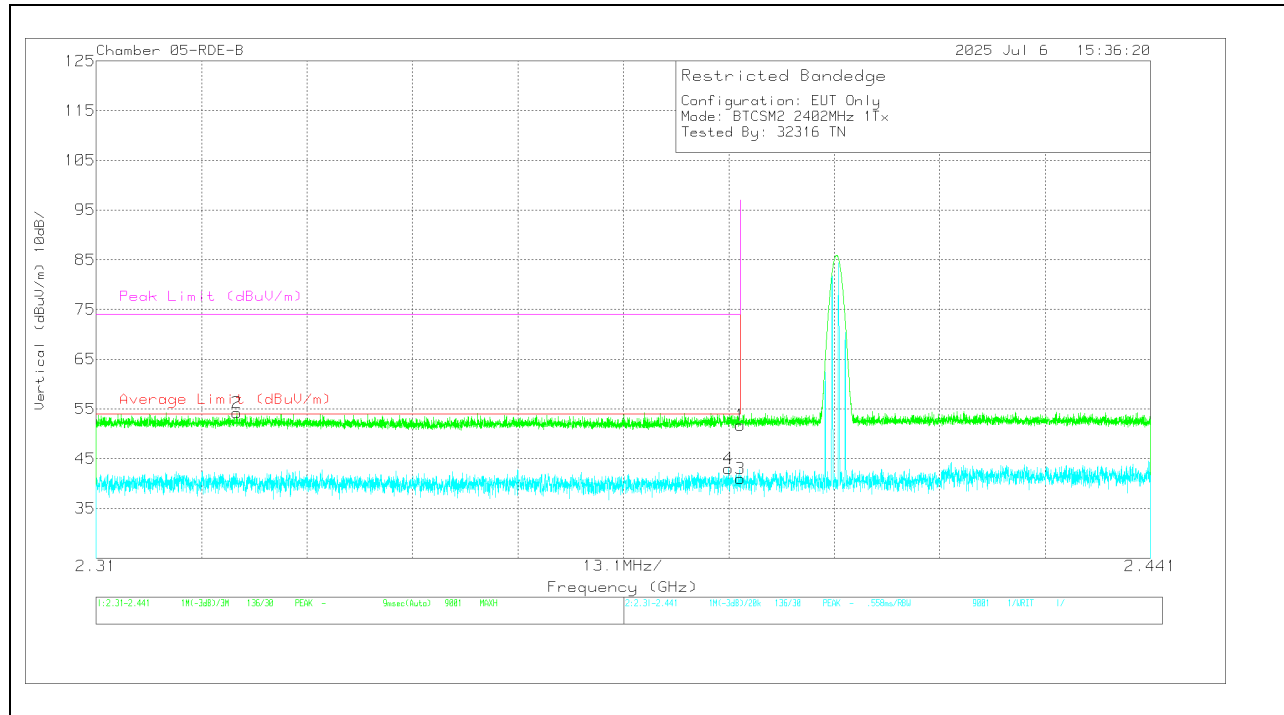
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	61.39	Pk	32	-40.39	53	-	-	74	-21	276	152	H
2	*2.365953	63.09	Pk	31.9	-40.5	54.49	-	-	74	-19.51	276	152	H
3	*2.39	48.55	VA1T	32	-40.39	40.16	54	-13.84	-	-	276	152	H
4	*2.366841	51.49	VA1T	31.9	-40.53	42.86	54	-11.14	-	-	276	152	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

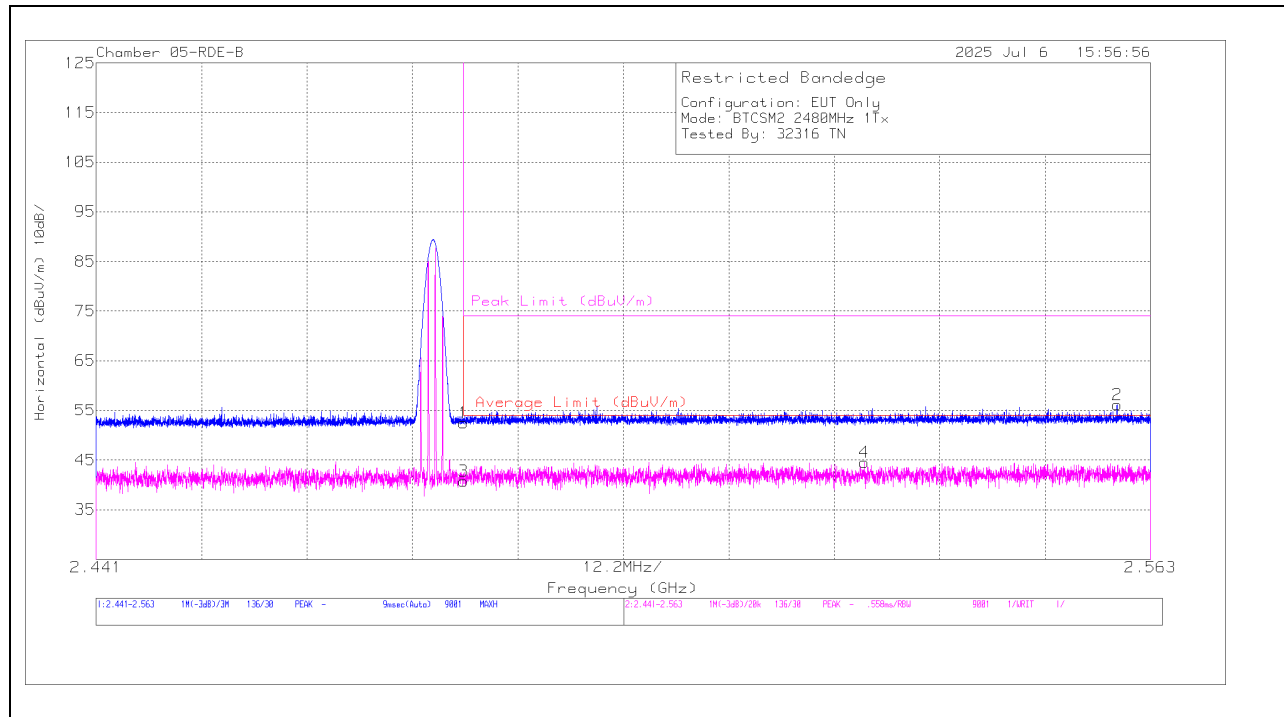


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.15	Pk	32	-40.39	51.76	-	-	74	-22.24	319	352	V
2	*2.327453	63.08	Pk	31.8	-40.59	54.29	-	-	74	-19.71	319	352	V
3	*2.39	49.39	VA1T	32	-40.39	41	54	-13	-	-	319	352	V
4	*2.388573	51.35	VA1T	32	-40.38	42.97	54	-11.03	-	-	319	352	V

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

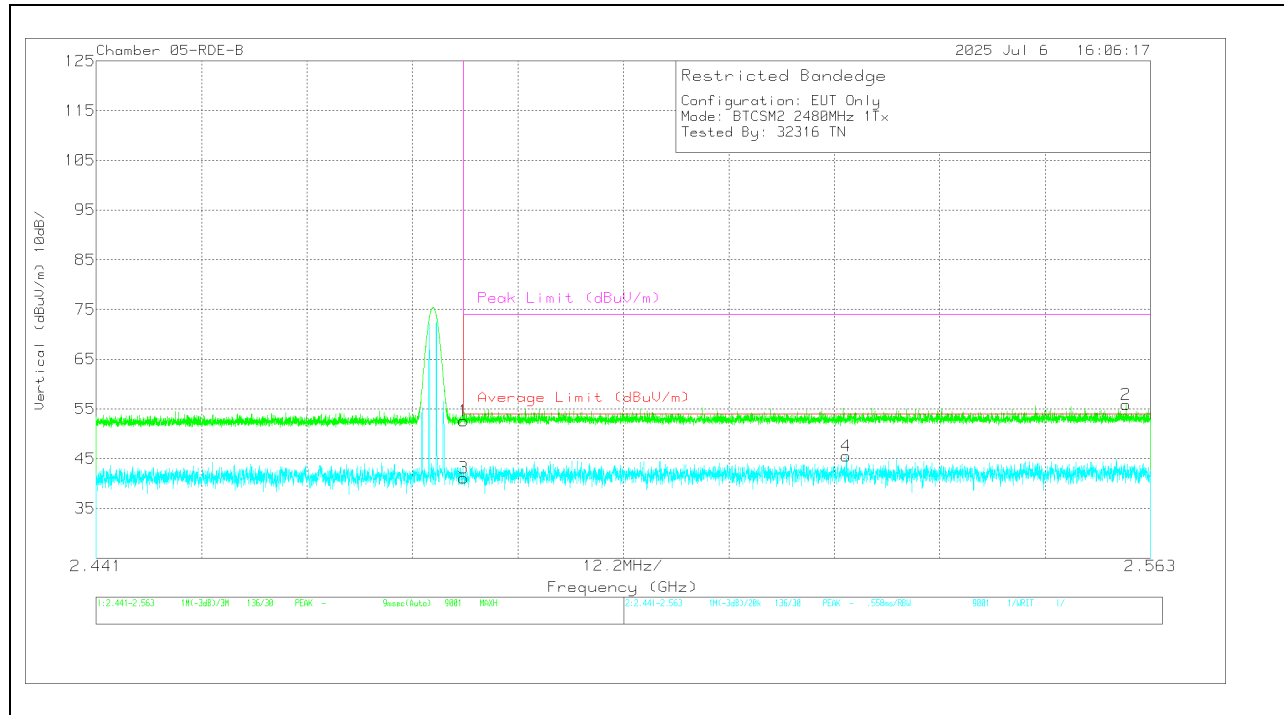
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dBm)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.63	Pk	32.2	-40.39	52.44	-	-	74	-21.56	103	116	H
2	*2.559127	63.88	Pk	32.3	-40.09	56.09	-	-	74	-17.91	103	116	H
3	*2.4835	48.96	VA1T	32.2	-40.39	40.77	54	-13.23	-	-	103	116	H
4	*2.529873	52.5	VA1T	32.3	-40.24	44.56	54	-9.44	-	-	103	116	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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.76	Pk	32.2	-40.39	52.57	-	-	74	-21.43	29	155	V
2	*2.560184	63.67	Pk	32.3	-40.1	55.87	-	-	74	-18.13	29	155	V
3	*2.4835	49.3	VA1T	32.2	-40.39	41.11	54	-12.89	-	-	29	155	V
4	*2.527799	53.5	VA1T	32.3	-40.24	45.56	54	-8.44	-	-	29	155	V

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

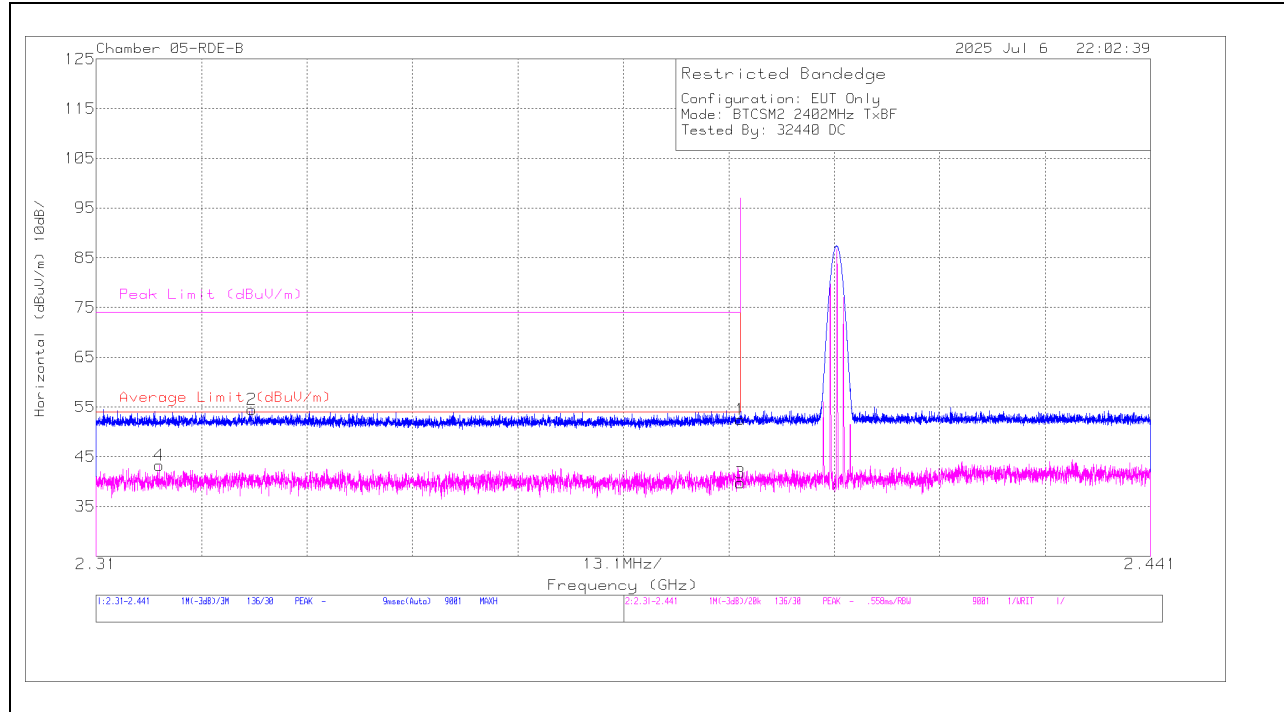
Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

10.1.12. LOW POWER ENHANCED DATA RATE TX BF BTCSM2 MODULATION

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



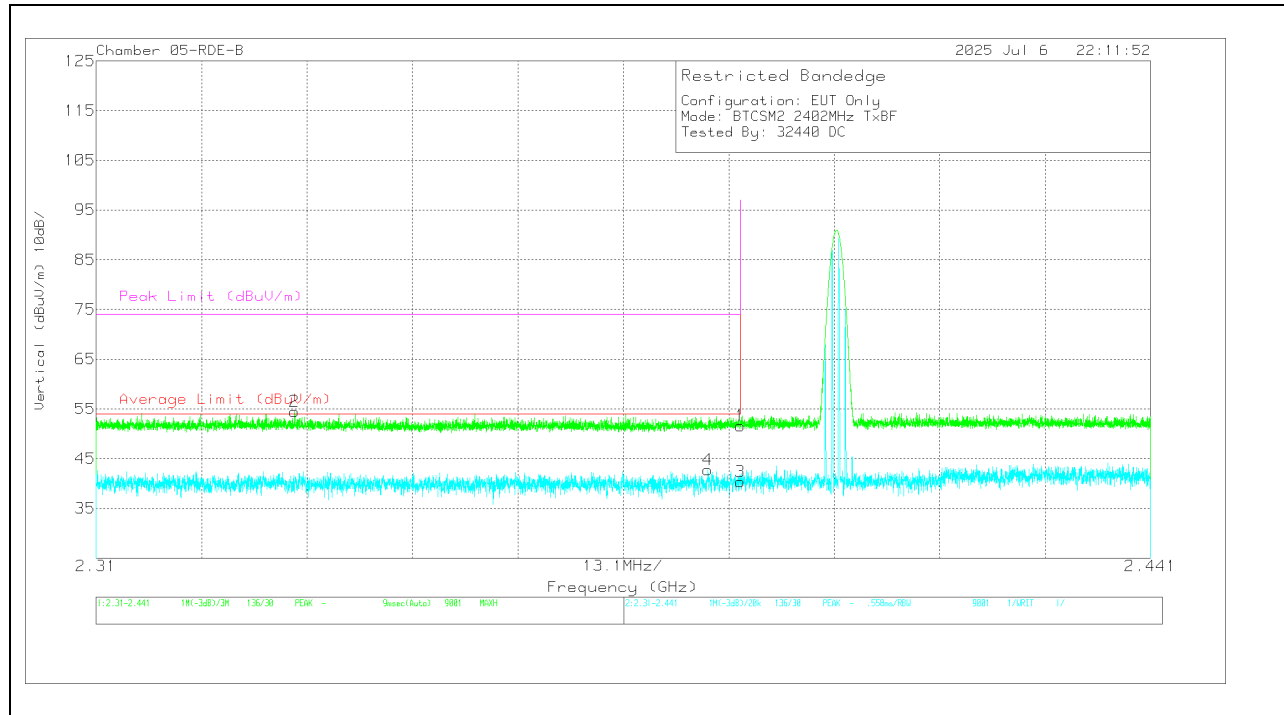
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	60.83	Pk	32	-40.39	52.44	-	-	74	-21.56	354	188	H
2	*2.329374	63.31	Pk	31.8	-40.58	54.53	-	-	74	-19.47	354	188	H
3	*2.39	48.12	VA1T	32	-40.39	39.73	54	-14.27	-	-	354	188	H
4	*2.317846	52.27	VA1T	31.7	-40.65	43.32	54	-10.68	-	-	354	188	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B=1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT

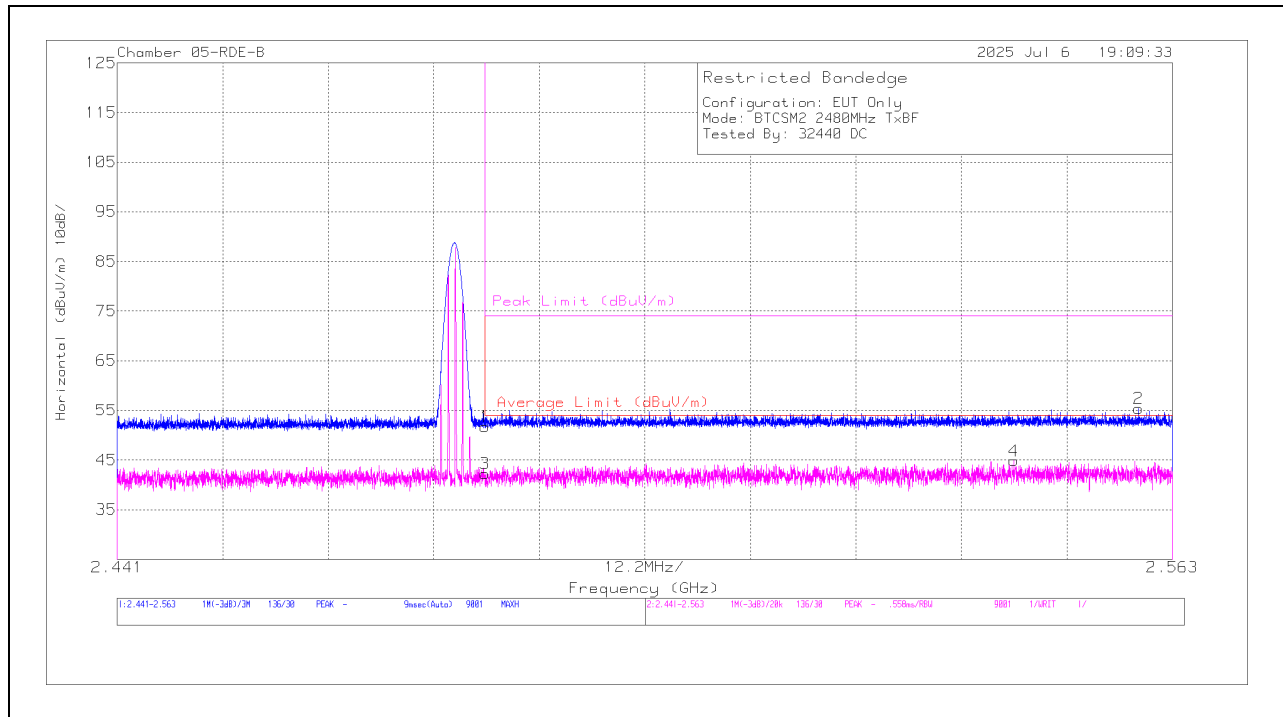


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.39	59.97	Pk	32	-40.39	51.58	-	-	74	-22.42	310	116	V
2	*2.334672	63.26	Pk	31.8	-40.61	54.45	-	-	74	-19.55	310	116	V
3	*2.39	48.79	VA1T	32	-40.39	40.4	54	-13.6	-	-	310	116	V
4	*2.386026	51.13	VA1T	32	-40.39	42.74	54	-11.26	-	-	310	116	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

BANDEDGE (HIGH CHANNEL)**HORIZONTAL RESULT**

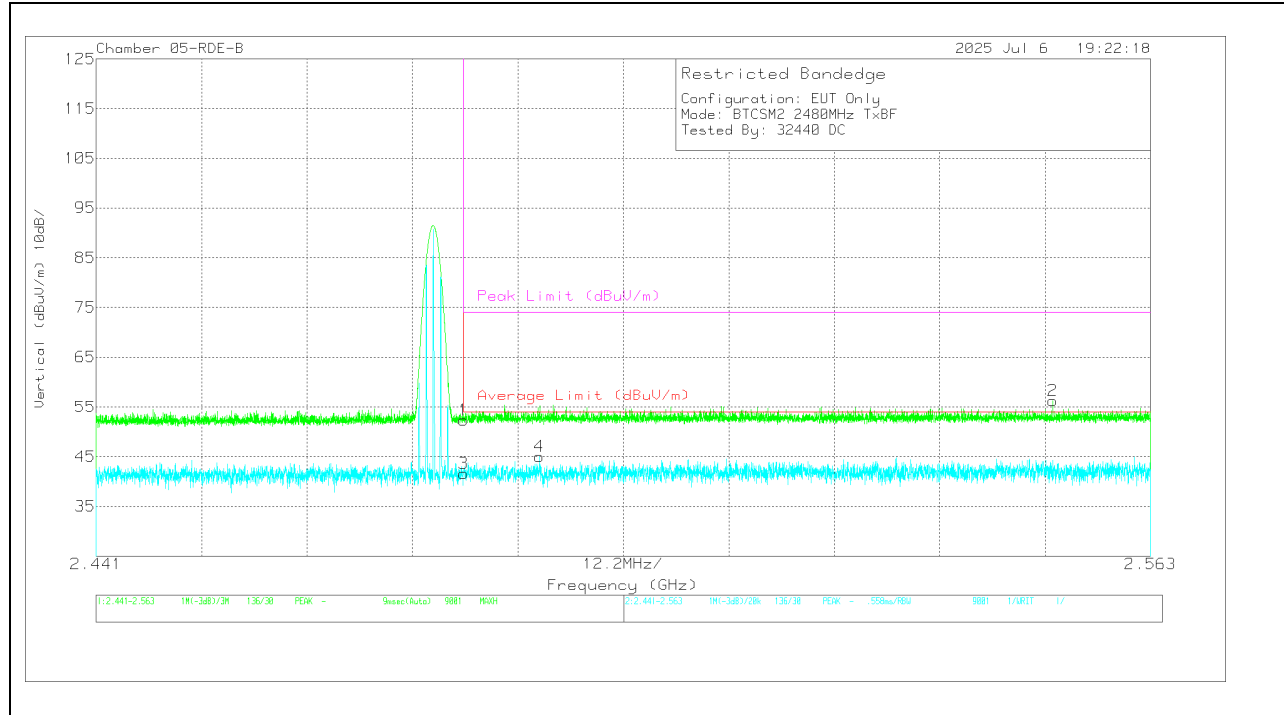
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	59.89	Pk	32.2	-40.39	51.7	-	-	74	-22.3	72	130	H
2	*2.5591	63.2	Pk	32.3	-40.09	55.41	-	-	74	-18.59	72	130	H
3	*2.4835	50.44	VA1T	32.2	-40.39	42.25	54	-11.75	-	-	72	130	H
4	*2.544676	52.68	VA1T	32.3	-40.14	44.84	54	-9.16	-	-	72	130	H

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	226672 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.57	Pk	32.2	-40.39	52.38	-	-	74	-21.62	301	110	V
2	*2.551671	64.08	Pk	32.3	-40.11	56.27	-	-	74	-17.73	301	110	V
3	*2.4835	49.86	VA1T	32.2	-40.39	41.67	54	-12.33	-	-	301	110	V
4	*2.492282	53.12	VA1T	32.3	-40.38	45.04	54	-8.96	-	-	301	110	V

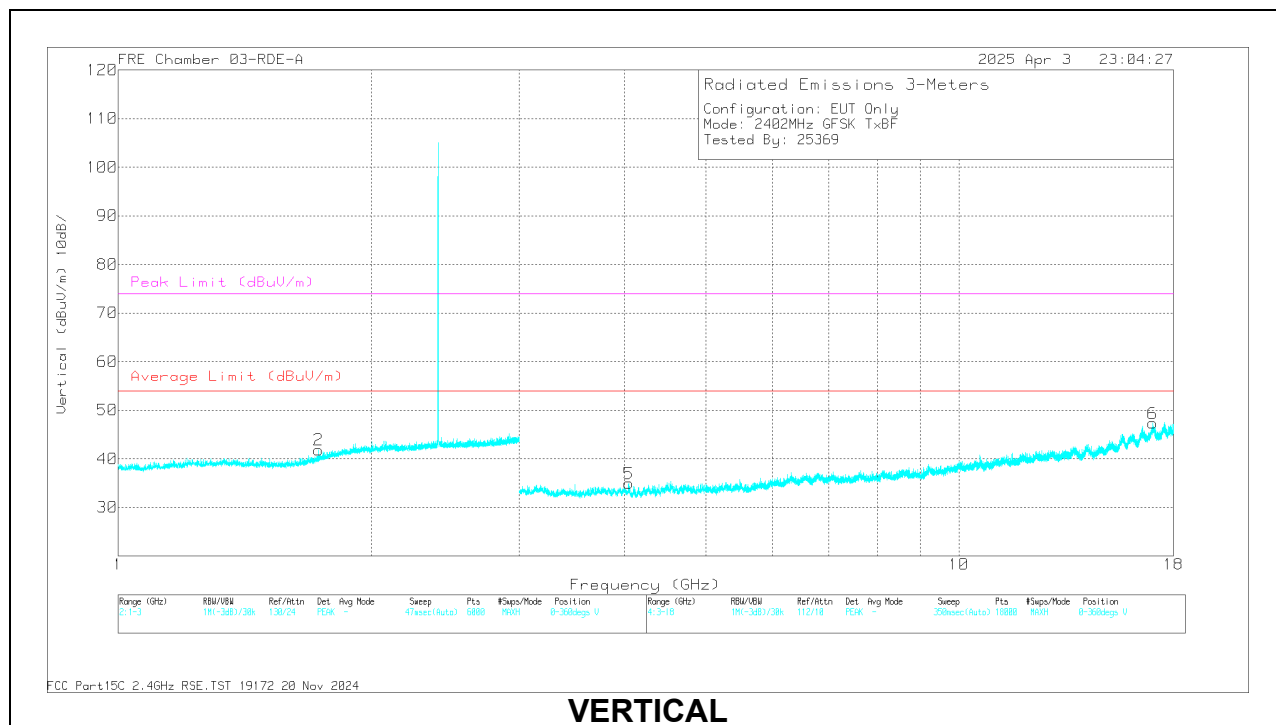
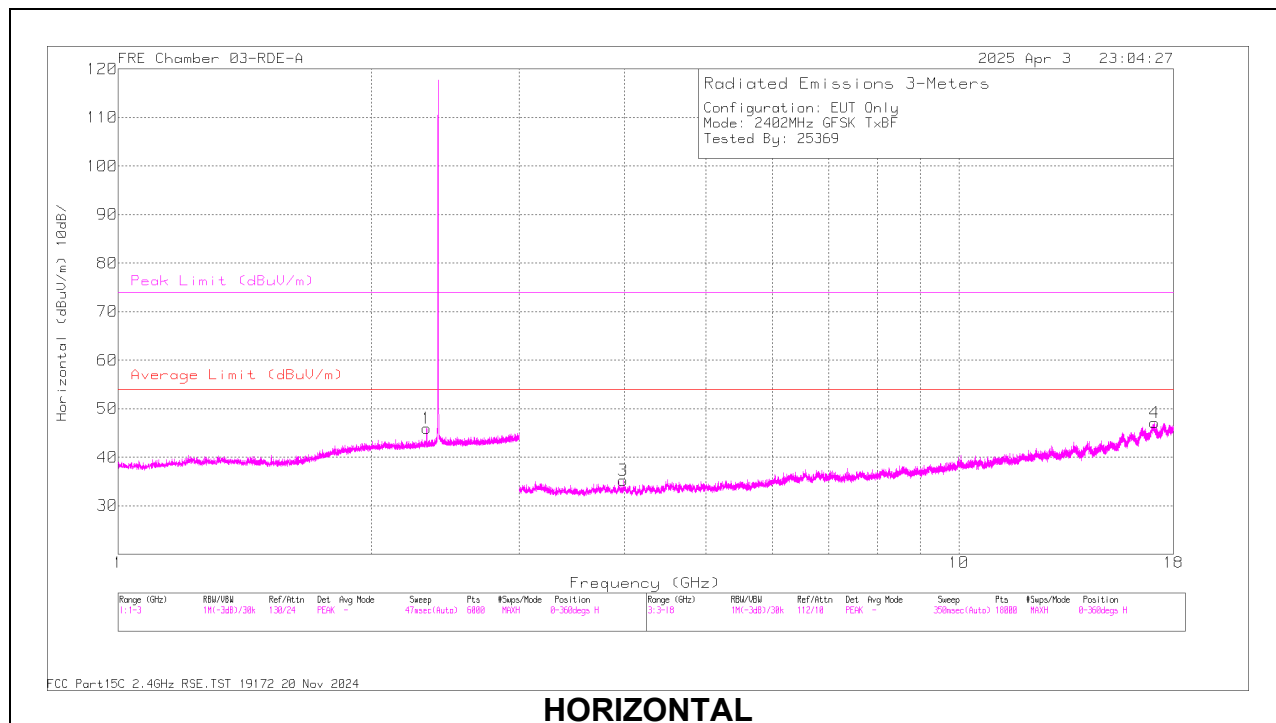
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.13. WORST CASE HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

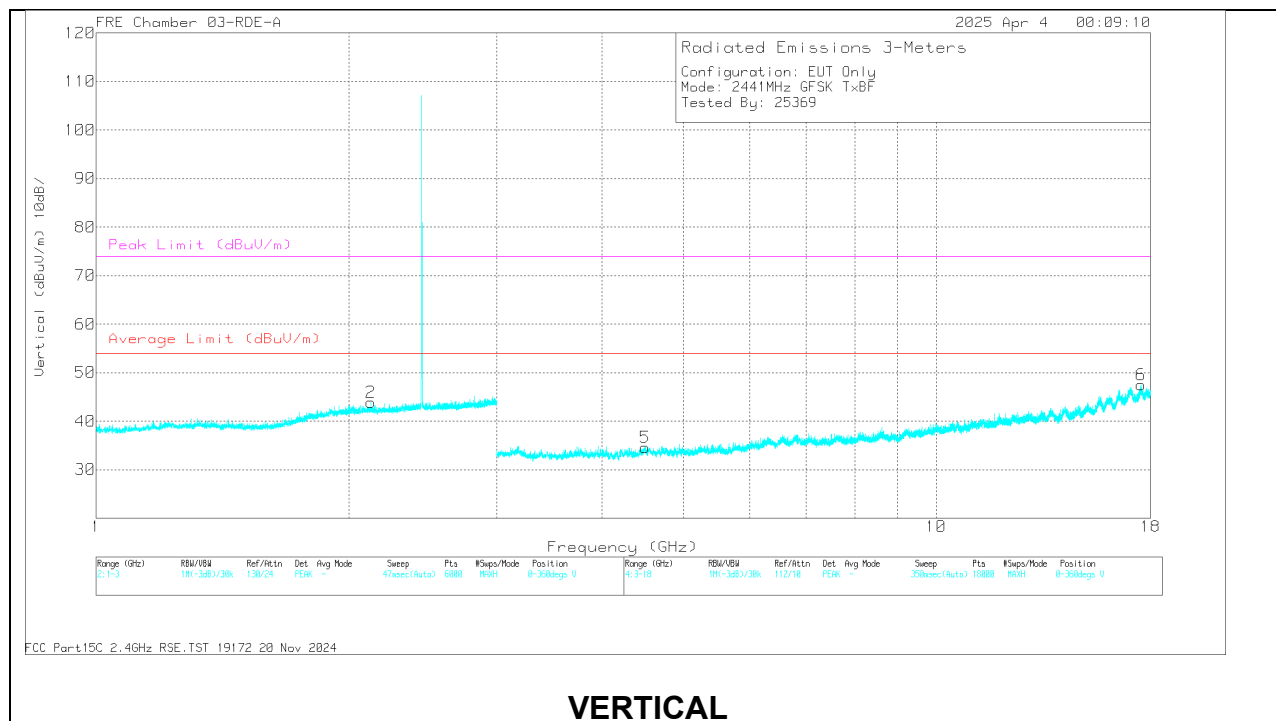
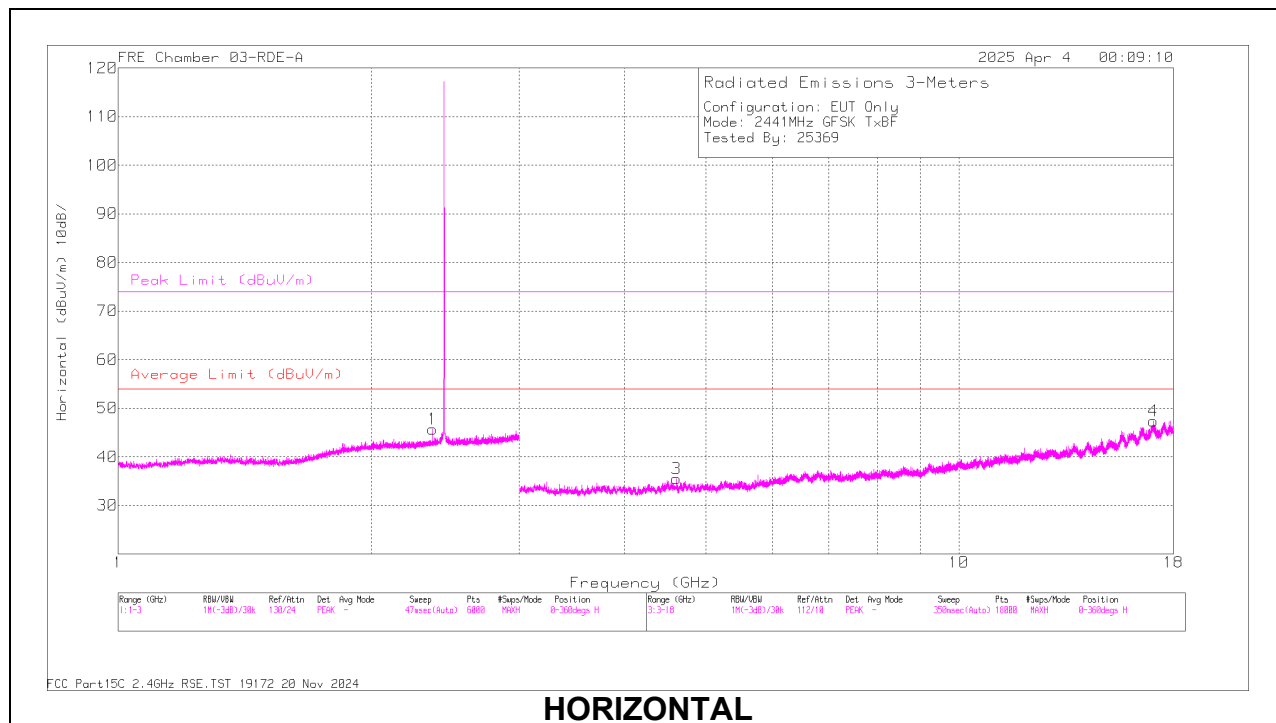
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226673 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.330287	60.15	PKFH	31.9	-40.37	51.68	-	-	74	-22.32	211	134	H
	* 2.330191	50.19	VA1T	31.9	-40.38	41.71	54	-12.29	-	-	211	134	H
2	1.73346	59.86	PKFH	29.4	-40.15	49.11	-	-	-	-	211	101	V
3	* 3.987718	55.36	PKFH	33.5	-47.3	41.56	-	-	74	-32.44	211	101	H
	* 3.990369	42.8	VA1T	33.5	-47.16	29.14	54	-24.86	-	-	211	101	H
4	17.083979	51.95	PKFH	41.8	-41	52.75	-	-	-	-	211	199	H
5	* 4.046738	55.13	PKFH	33.4	-46.73	41.8	-	-	74	-32.2	211	199	V
	* 4.04795	42.48	VA1T	33.4	-46.6	29.28	54	-24.72	-	-	211	199	V
6	16.998753	52.24	PKFH	41.9	-41.32	52.82	-	-	-	-	211	199	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

MID CHANNEL RESULTS



RADIATED EMISSIONS

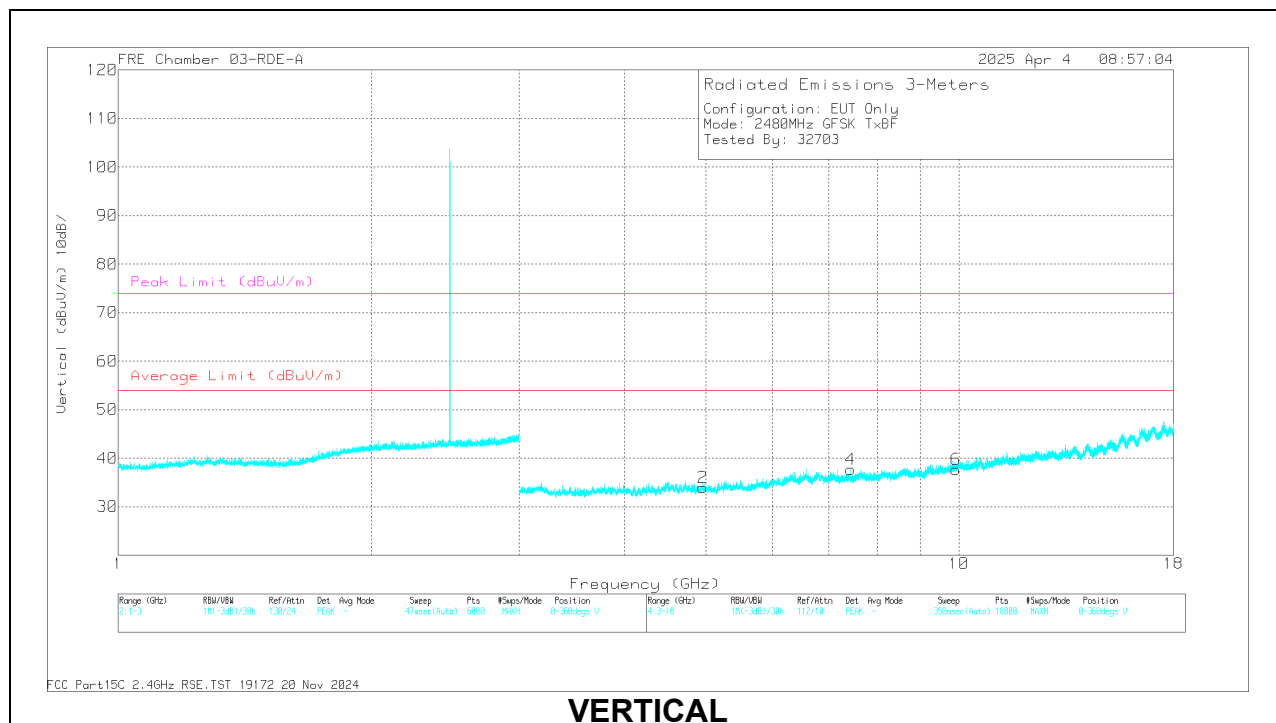
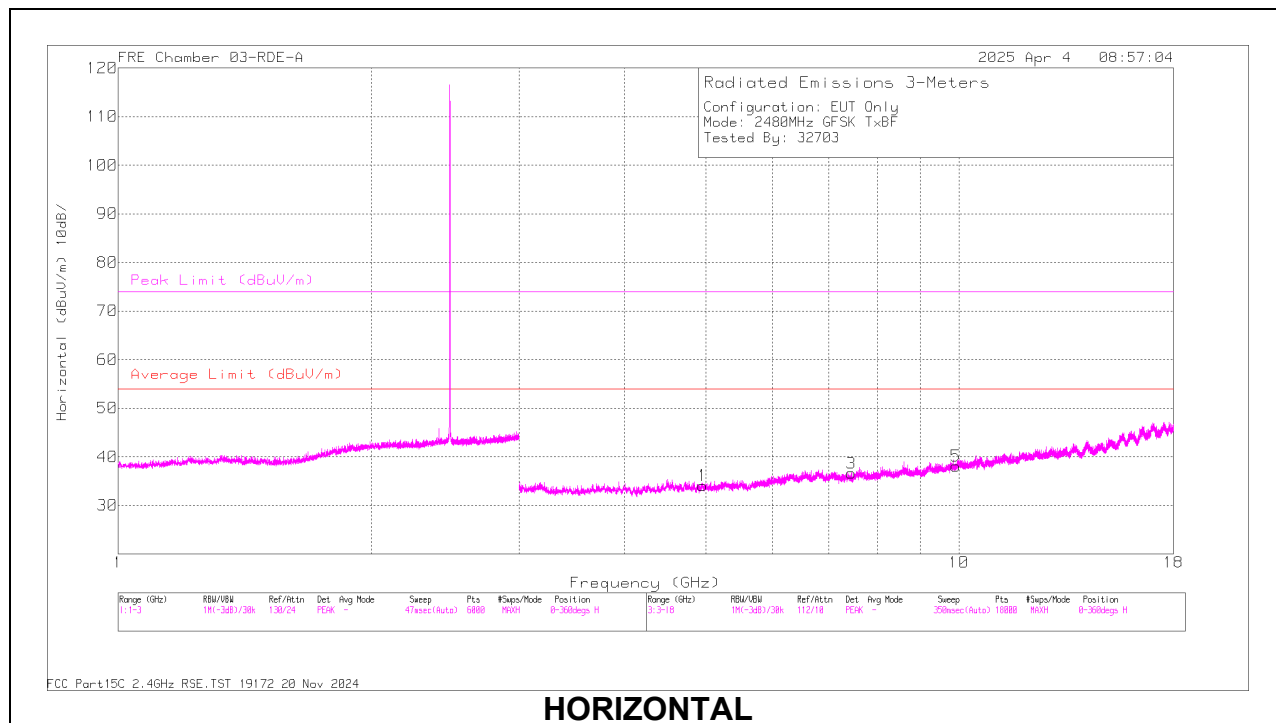
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226673 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.364827	59.41	PKFH	32	-40.3	51.11	-	-	74	-22.89	278	206	H
1	* 2.363002	46.92	VA1T	32	-40.2	38.72	54	-15.28	-	-	278	206	H
2	2.121773	59.72	PKFH	31.5	-40.4	50.82	-	-	-	-	278	101	V
3	* 4.614178	56.41	PKFH	34.1	-47.88	42.63	-	-	74	-31.37	278	200	H
3	* 4.61336	43.23	VA1T	34.1	-47.9	29.43	54	-24.57	-	-	278	200	H
4	17.043026	52.51	PKFH	41.8	-41.2	53.11	-	-	-	-	278	200	H
5	* 4.506936	56.43	PKFH	34	-47.89	42.54	-	-	74	-31.46	278	200	V
5	* 4.505605	43.84	VA1T	34	-47.8	30.04	54	-23.96	-	-	278	200	V
6	17.542464	51.17	PKFH	41.9	-39.6	53.47	-	-	-	-	278	200	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226673 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.960809	56.68	PKFH	34	-48.2	42.48	-	-	74	-31.52	155	255	H
	* 4.962654	43.7	VA1T	34	-48.1	29.6	54	-24.4	-	-	155	255	H
2	* 4.961979	56.44	PKFH	34	-48.1	42.34	-	-	74	-31.66	355	203	V
	* 4.959891	43.74	VA1T	34	-48.2	29.54	54	-24.46	-	-	355	203	V
3	* 7.449934	54.64	PKFH	35.8	-46.39	44.05	-	-	74	-29.95	236	185	H
	* 7.451589	42.18	VA1T	35.8	-46.4	31.58	54	-22.42	-	-	236	185	H
4	* 7.439347	56.02	PKFH	35.8	-46.4	45.42	-	-	74	-28.58	345	280	V
	* 7.440164	43.41	VA1T	35.8	-46.38	32.83	54	-21.17	-	-	345	280	V
5	9.91763	54.2	PKFH	37.1	-45.46	45.84	-	-	-	-	204	342	H
6	9.920661	53.68	PKFH	37.1	-45.53	45.25	-	-	-	-	106	219	V

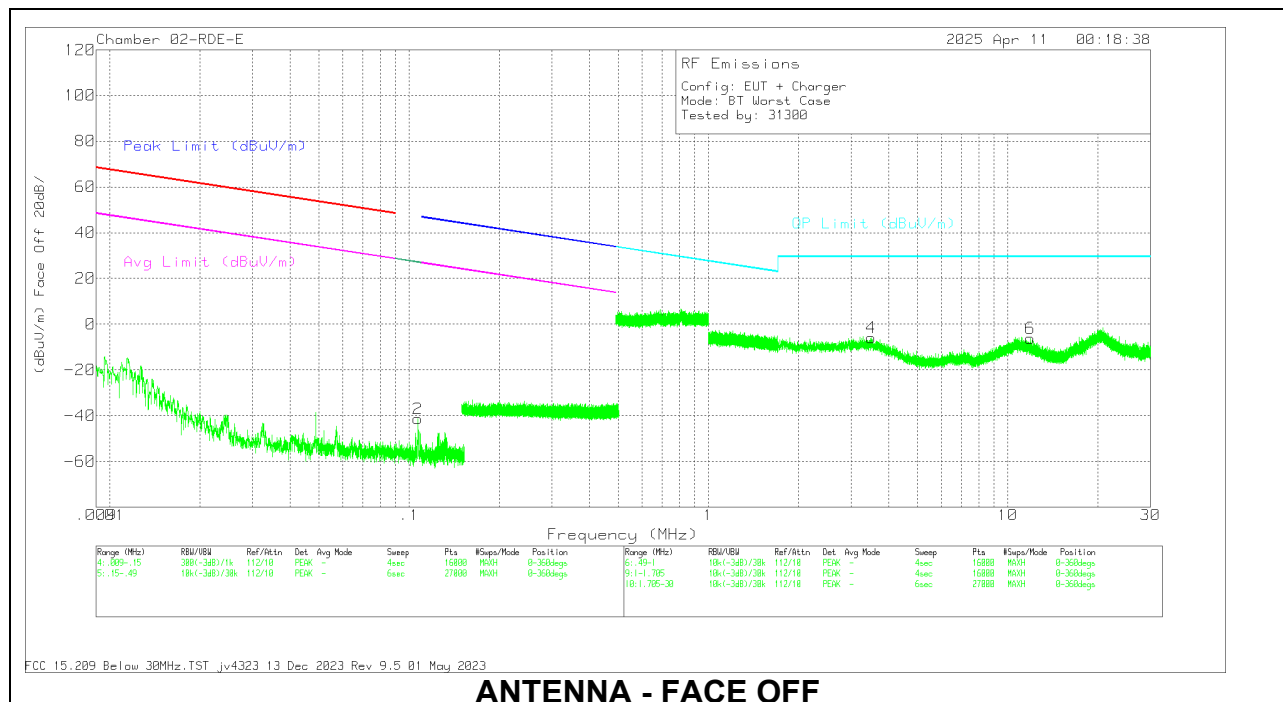
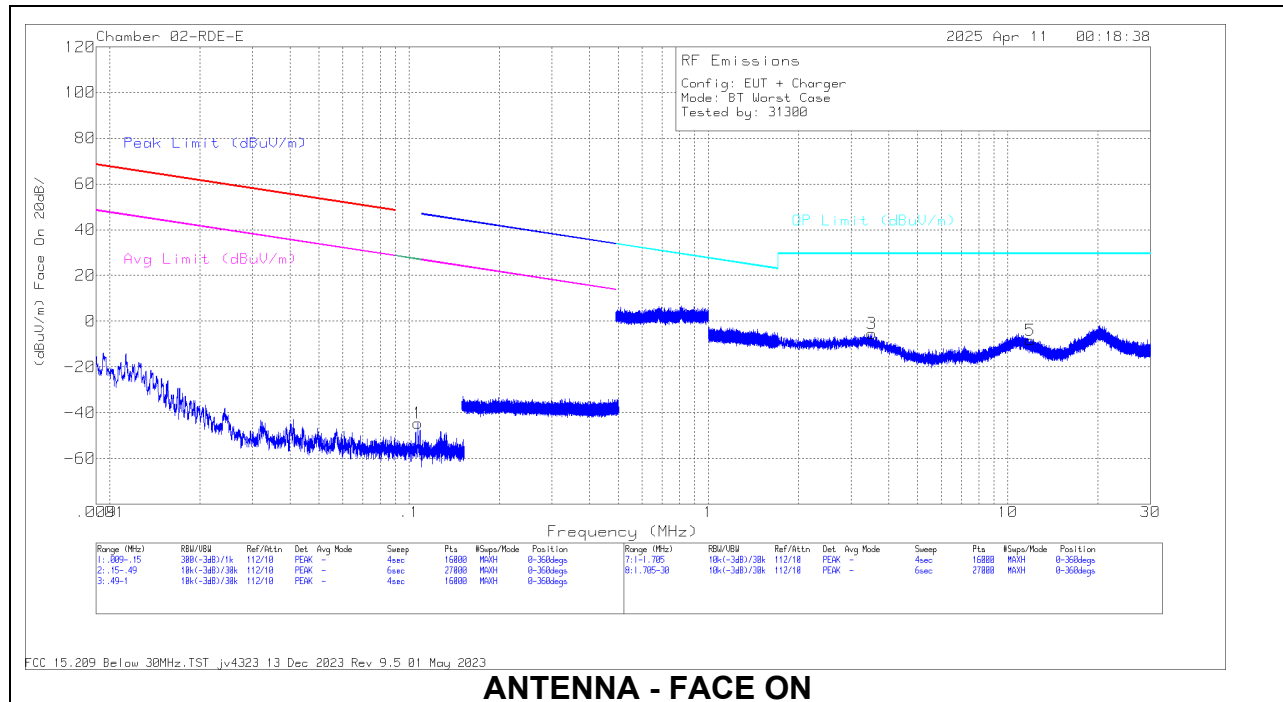
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.2. WORST CASE BELOW 30MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna ACF (dB/m)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.1071	11.81	Pk	55.8	-32.3	-80	-44.69	27.02	-71.71	0-360
2	.107	15.16	Pk	55.7	-32.3	-80	-41.44	27.03	-68.47	0-360

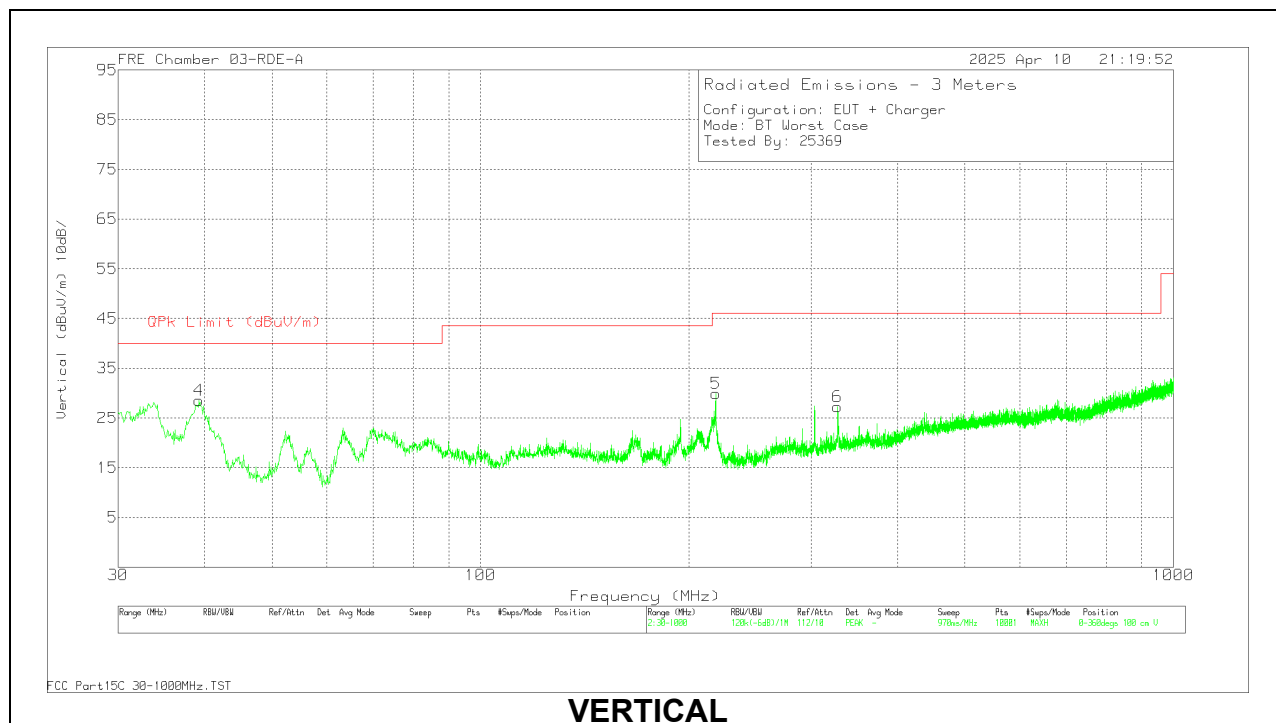
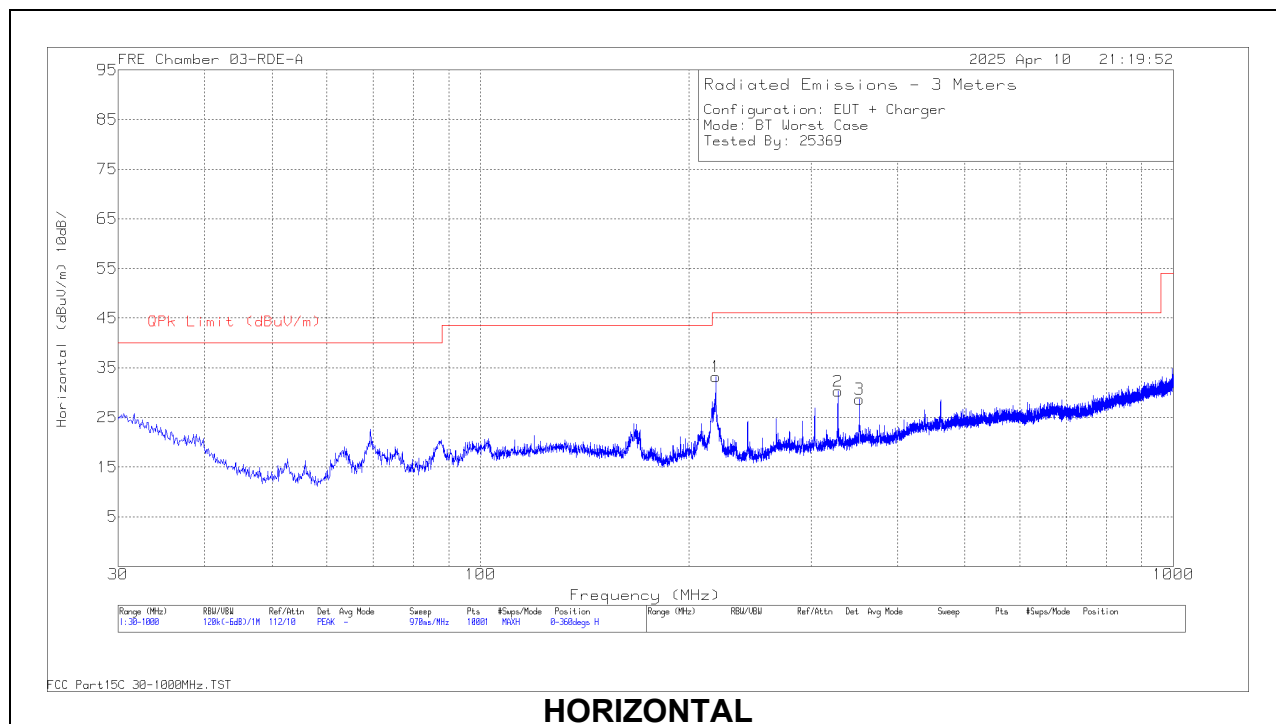
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna ACF (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
3	3.5128	21.08	Pk	37.5	-23.9	-40	-5.32	29.5	-34.82	0-360
4	3.4929	20.36	Pk	37.6	-23.8	-40	-5.84	29.5	-35.34	0-360
5	11.902	20.62	Pk	34.2	-23.1	-40	-8.28	29.5	-37.78	0-360
6	11.879	22.99	Pk	34.2	-23.3	-40	-6.11	29.5	-35.61	0-360

Pk - Peak detector

10.3. WORST CASE BELOW 1 GHZ

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



Below 1GHz Data

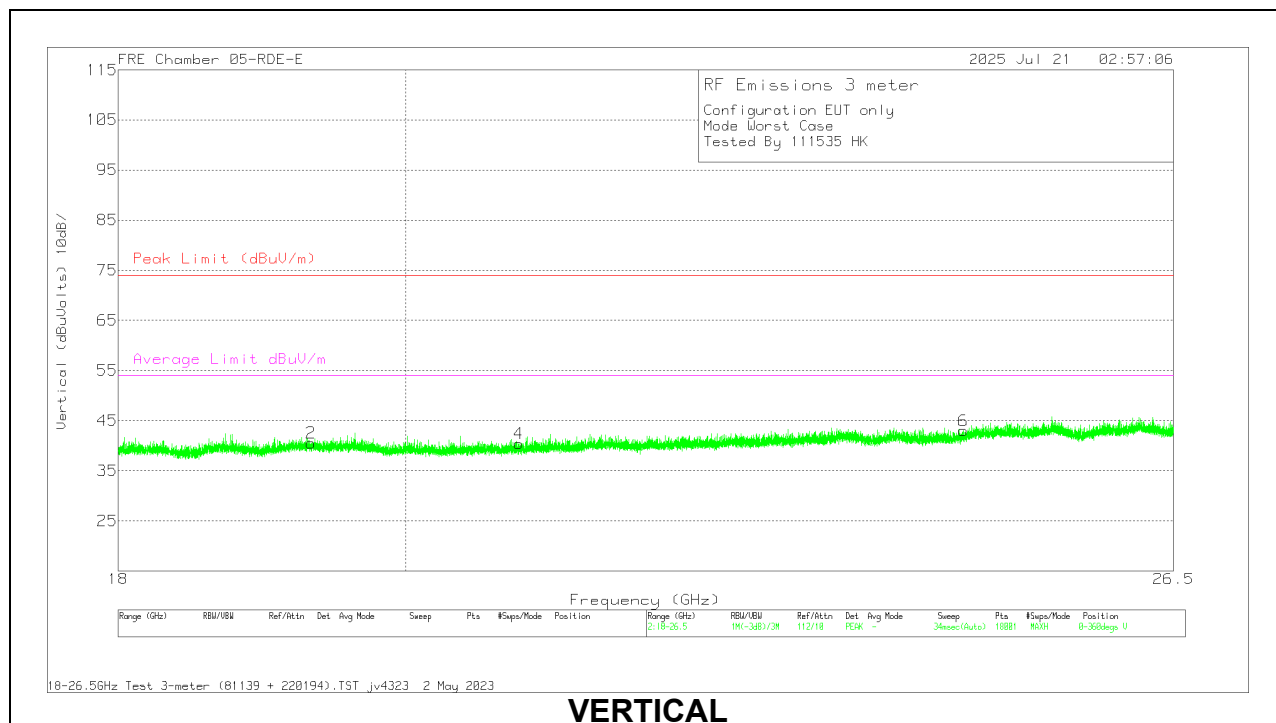
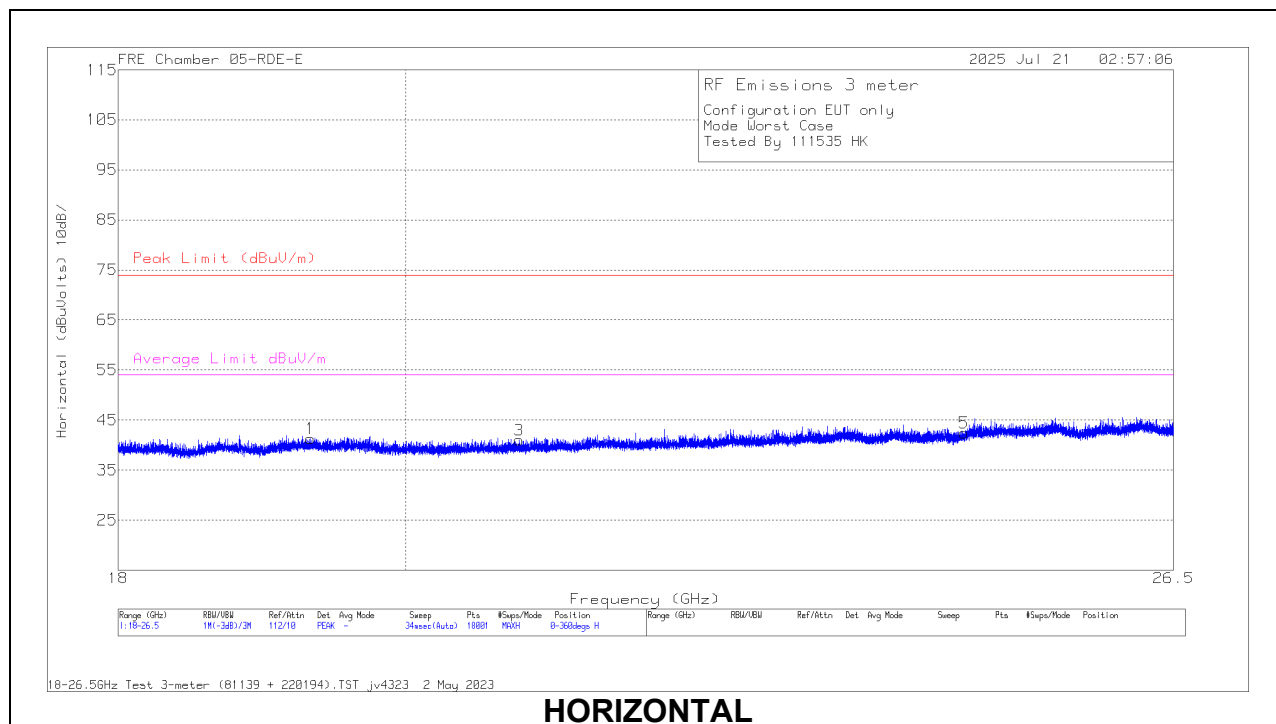
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80813 ACF (dB/m)	CBL AMP (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	218.43	43.9	Qp	16.5	-29.4	31	46.02	-15.02	340	108	H
2	* 327.691	36.16	Qp	19.9	-28.8	27.26	46.02	-18.76	319	110	H
3	352.129	34.1	Qp	20.1	-28.9	25.3	46.02	-20.72	308	102	H
4	39.1882	34.98	Qp	20.2	-30.8	24.38	40	-15.62	274	101	V
5	218.625	39.28	Qp	16.5	-29.3	26.48	46.02	-19.54	17	102	V
6	* 327.959	31.73	Qp	19.9	-28.9	22.73	46.02	-23.29	209	110	V

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

Qp - Quasi-Peak detector

10.4. WORST CASE 18-26 GHZ

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



18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 19.315075	45.45	PKFH	32.9	-62.3	23.9	39.95	74	-34.05	-	-	0	199	H
	* 19.314291	33.22	VA1T	32.9	-62.3	23.9	27.72	-	-	54	-26.28	0	199	H
3	* 20.849611	43.72	PKFH	33.5	-62.4	25	39.82	74	-34.18	-	-	0	199	H
	* 20.846853	30.81	VA1T	33.5	-62.4	25	26.91	-	-	54	-27.09	0	199	H
5	24.543992	43.36	PKFH	34	-62.8	27.6	42.16	74	-31.84	-	-	0	199	H
	24.543617	30.57	VA1T	34	-62.8	27.6	29.37	-	-	54	-24.63	0	199	H

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 19.317402	46.3	PKFH	32.9	-62.3	23.9	40.8	74	-33.2	-	-	0	199	V
	* 19.315844	33.18	VA1T	32.9	-62.3	23.9	27.68	-	-	54	-26.32	0	199	V
4	* 20.847906	43.14	PKFH	33.5	-62.4	25	39.24	74	-34.76	-	-	0	199	V
	* 20.847676	30.77	VA1T	33.5	-62.4	25	26.87	-	-	54	-27.13	0	199	V
6	24.535288	43.25	PKFH	34	-62.8	27.6	42.05	74	-31.95	-	-	0	101	V
	24.535398	30.55	VA1T	34	-62.8	27.6	29.35	-	-	54	-24.65	0	101	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

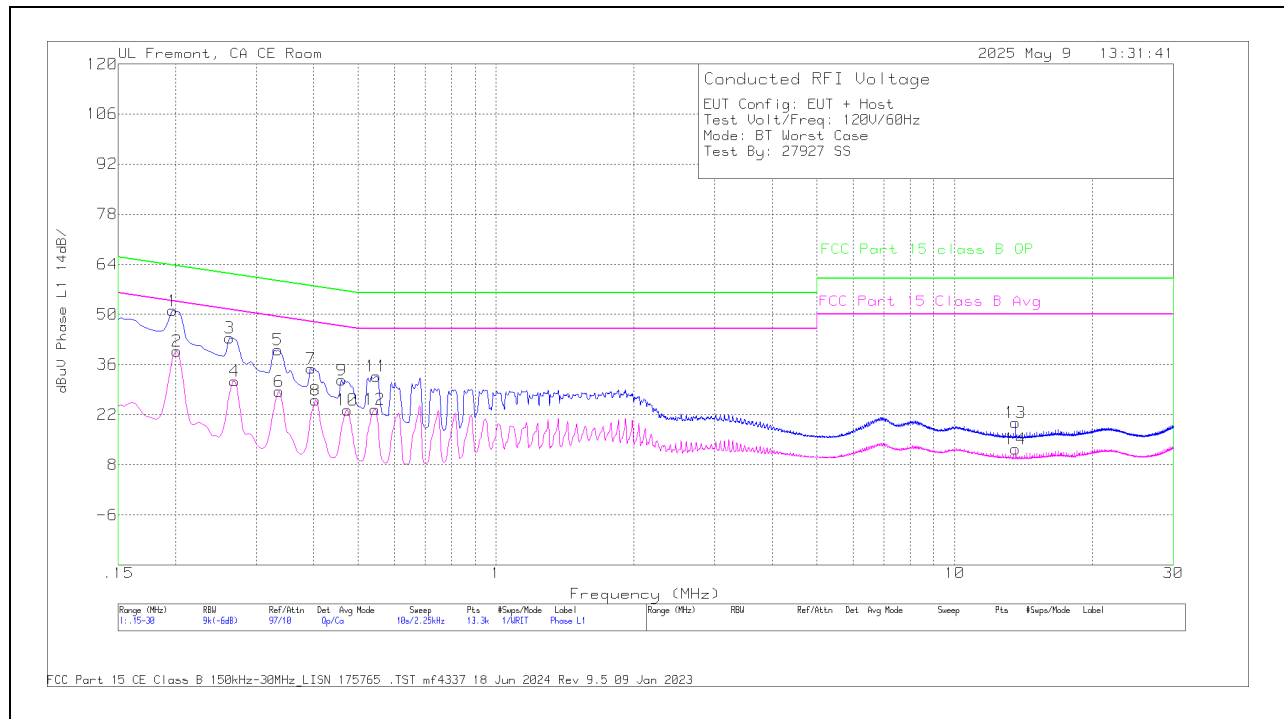
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

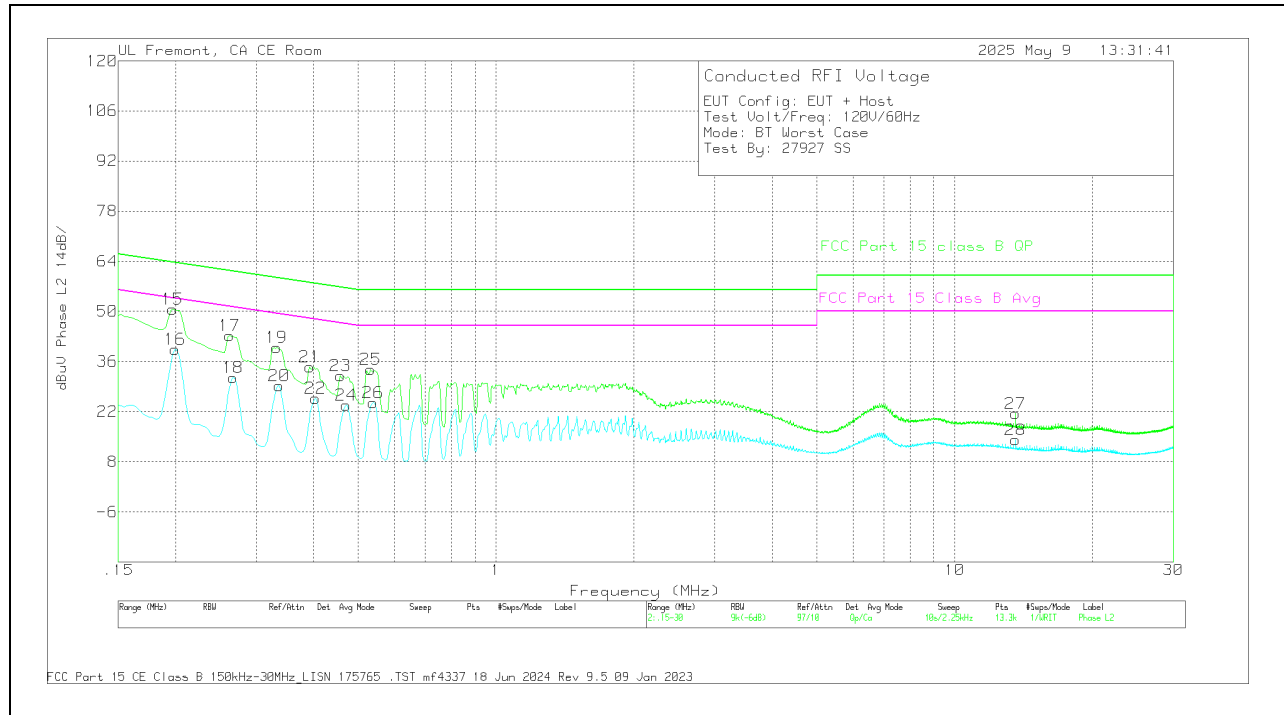
11.1.1. AC POWER LINE WITH LAPTOP

LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 C3_C1_Limiter no Pad_UL (dB)	LISN (dB)	10dB Atten (dB)	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
2	.2018	20.29	Ca	9.4	0	10	39.69	53.54	-13.85	-	-
4	.2693	12.01	Ca	9.4	0	10	31.41	51.14	-19.73	-	-
6	.3368	9.05	Ca	9.4	0	10	28.45	49.28	-20.83	-	-
8	.4043	6.6	Ca	9.4	0	10	26	47.77	-21.77	-	-
10	.474	3.93	Ca	9.4	0	10	23.33	46.44	-23.11	-	-
12	.5438	4.1	Ca	9.3	0	10	23.4	46	-22.6	-	-
14	13.56	-7.23	Ca	9.5	.1	10	12.37	50	-37.63	-	-
1	.1973	31.55	Qp	9.4	.1	10	51.05	-	-	63.73	-12.68
3	.2625	23.98	Qp	9.4	0	10	43.38	-	-	61.35	-17.97
5	.3345	20.73	Qp	9.4	0	10	40.13	-	-	59.34	-19.21
7	.3953	15.52	Qp	9.4	0	10	34.92	-	-	57.95	-23.03
9	.4605	12.21	Qp	9.4	0	10	31.61	-	-	56.68	-25.07
11	.5483	13.39	Qp	9.3	0	10	32.69	-	-	56	-23.31
13	13.56	.24	Qp	9.5	.1	10	19.84	-	-	60	-40.16

LINE 2 RESULTS



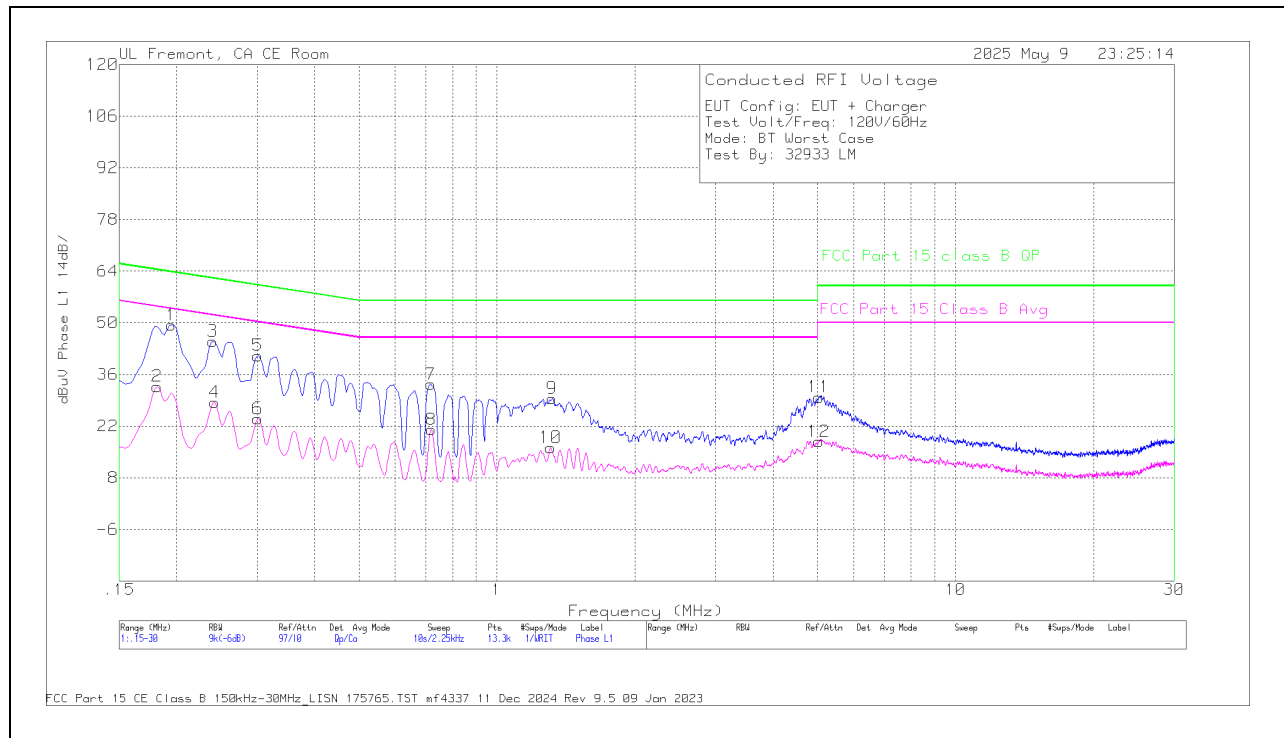
Range 2: Phase L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 C3_C2_Limiter no Pad_UL (dB)	LISN (dB)	10dB Atten (dB)	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
16	.1995	19.96	Ca	9.4	0	10	39.36	53.63	-14.27	-	-
18	.267	12.17	Ca	9.4	0	10	31.57	51.21	-19.64	-	-
20	.3368	9.87	Ca	9.3	0	10	29.17	49.28	-20.11	-	-
22	.4043	6.39	Ca	9.3	0	10	25.69	47.77	-22.08	-	-
24	.4718	4.54	Ca	9.3	0	10	23.84	46.48	-22.64	-	-
26	.5393	5.2	Ca	9.3	0	10	24.5	46	-21.5	-	-
28	13.56	-5.52	Ca	9.5	.1	10	14.08	50	-35.92	-	-
15	.1973	31.15	Qp	9.4	0	10	50.55	-	-	63.73	-13.18
17	.2625	23.91	Qp	9.4	0	10	43.31	-	-	61.35	-18.04
19	.3323	20.69	Qp	9.3	0	10	39.99	-	-	59.39	-19.4
21	.393	15.18	Qp	9.3	0	10	34.48	-	-	58	-23.52
23	.4583	12.7	Qp	9.3	0	10	32	-	-	56.72	-24.72
25	.5325	14.47	Qp	9.3	0	10	33.77	-	-	56	-22.23
27	13.56	1.84	Qp	9.5	.1	10	21.44	-	-	60	-38.56

Qp - Quasi-Peak detector

Ca - CISPR average detection

11.1.2. AC POWER LINE WITH AC/DC ADAPTER

LINE 1 RESULTS

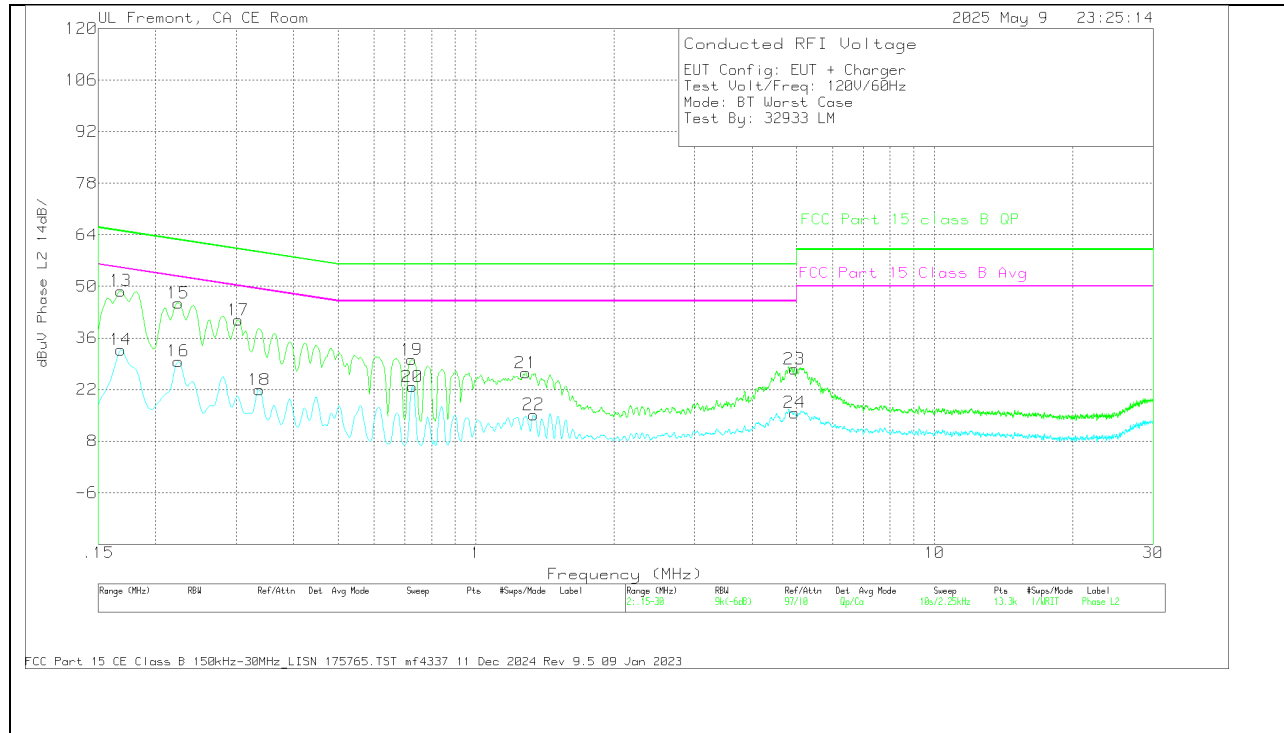


Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	CBL(dB)	LISN (dB)	CBL(dB)	10dB Atten (dB)	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
2	.1815	14.04	Ca	.2	.1	8.4	10	32.74	54.42	-21.68	-	-
4	.2423	10.34	Ca	-.1	0	8.2	10	28.44	52.02	-23.58	-	-
6	.3008	6.03	Ca	0	0	8	10	24.03	50.22	-26.19	-	-
8	.7193	2.43	Ca	.2	0	8.4	10	21.03	46	-24.97	-	-
10	1.3088	-2.41	Ca	.2	0	8.4	10	16.19	46	-29.81	-	-
12	5.0348	-6	Ca	.1	0	8.3	10	17.8	50	-32.2	-	-
1	.195	30.78	Qp	.1	.1	8.4	10	49.38	-	-	63.82	-14.44
3	.24	26.89	Qp	-.1	0	8.2	10	44.99	-	-	62.1	-17.11
5	.3008	23.1	Qp	0	0	8	10	41.1	-	-	60.22	-19.12
7	.717	14.82	Qp	.2	0	8.3	10	33.32	-	-	56	-22.68
9	1.32	10.75	Qp	.2	0	8.5	10	29.45	-	-	56	-26.55
11	5.0348	11.45	Qp	.1	0	8.3	10	29.85	-	-	60	-30.15

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	CBL(dB)	LISN (dB)	CBL(dB)	10dB Atten (dB)	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
14	.168	13.78	Ca	.4	.1	8.5	10	32.78	55.06	-22.28	-	-
16	.2243	11.39	Ca	0	0	8.3	10	29.69	52.66	-22.97	-	-
18	.3368	3.92	Ca	-.3	0	8.3	10	21.92	49.28	-27.36	-	-
20	.726	4.27	Ca	.1	0	8.4	10	22.77	46	-23.23	-	-
22	1.3358	-3.53	Ca	.2	0	8.5	10	15.17	46	-30.83	-	-
24	4.9515	-2.81	Ca	.2	0	8.3	10	15.69	46	-30.31	-	-
13	.168	29.78	Qp	.4	.1	8.5	10	48.78	-	-	65.06	-16.28
15	.2243	27.16	Qp	0	0	8.3	10	45.46	-	-	62.66	-17.2
17	.303	22.84	Qp	0	0	8	10	40.84	-	-	60.16	-19.32
19	.7238	11.47	Qp	.2	0	8.4	10	30.07	-	-	56	-25.93
21	1.284	8.03	Qp	.1	0	8.4	10	26.53	-	-	56	-29.47
23	4.9493	9.01	Qp	.2	0	8.3	10	27.51	-	-	56	-28.49

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. SETUP PHOTOS

Please refer to 15496277-EP1 for setup photos

APPENDIX A – SPOT CHECK EVALUATION

MODEL DIFFERENCES

The manufacturer hereby declares the following for models A3258, A3519, A3520 and A3521.

These models have the same PCB layout, design, common components, antennas, antenna locations and housing cases, except for FR2 is removed from variants and disabled/enabled cellular bands via software as shown below.

Model	FCC ID	IC ID	Feature Difference	Sim Support	Reference Model
A3258	BCG-E8947A	579C-E8947A	-With FR2 -No B11/21 -No UL MIMO	eSIM	-
A3519	BCG-E8951A	579C-E8951A	-Without FR2 -Added B11/21 -No UL MIMO	eSIM	A3258
A3520	BCG-E8952A	579C-E8952A	-Without FR2 -No B14, B29, B71, B11/21 -No UL MIMO	eSIM+pSIM	
A3521	BCG-E8953A	579C-E8953A	-Without FR2 -No B14, B29, B71, B11/21, B53 -No UL MIMO, MSS	pSIM+pSIM	

The spot check plan allows for data reuse from the reference model where the variant model data meets the limits and has not changed by more than the criteria from KDB 484596 D01 v03 equation (4).

$$d_{dB} = |V_{dB} - R_{dB}| \quad (1)$$

$$d_{dB} \leq d_{dBmax} \quad (2)$$

$$d_{dBmax}(M_{dB}) = \begin{cases} (3 + M_{dB}/20) \text{ dB} & , \text{ for } 0 \leq M_{dB} \leq 60 \text{ dB} \\ 6 \text{ dB} & , \text{ for } M_{dB} > 60 \text{ dB} \end{cases} \quad (4)$$

Where d_{dB} is deviation between the variant and the reference model, V_{dB} is variant spot check level, R_{dB} is the corresponding reference measurement level, d_{dBmax} is the maximum deviation d_{dB} allowed, and M_{dB} is the margin in dB.

SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3519

A3519 SPOT CHECK RESULTS											
Equipment Class / Technology	Frequency (GHz)	Mode / Config	Data Rate	Test Item	Channel	Measured Frequency	Original Model: A3258	Sub Model: A3519	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8947A IC : 579C-E8947A	FCC ID : BCG-E8951A IC : 579C-E8951A			
DSS / BT	2.4	Basic GFSK (TXBF) HP	1Mbps	Peak Power (dBm)	High	Fundamental (2.480 GHz)	20.25	20.23	-0.02	-0.75	Note 1
		EDR 8PSK (TxBF) HP	3Mbps	Radiated Bandedge (dBuV/m)	High	Peak / Horizontal High Bandedge (2.486552 GHz)	69.11	67.27	-1.84	-4.89	Note 1
		Basic GFSK (TXBF) HP	1Mbps	* RSE (dBuV/m)	Low	Average / Vertical (2.330191 GHz)	41.71	38.12	-3.59	-12.29	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

* 1-18GHz RSE mostly are noise floor and so the spot check was done against the emission captured in restricted band again.

SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3520

A3520 SPOT CHECK RESULTS											
Equipment Class / Technology	Frequency (GHz)	Mode	Data Rate	Test Item	Channel	Measured Frequency	Original Model: A3258	Sub Model: A3520	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8947A IC : 579C-E8947A	FCC ID : BCG-E8952A IC : 579C-E8952A			
DSS / BT	2.4	Basic GFSK (TXBF) HP	1Mbps	Peak Power (dBm)	High	Fundamental (2.480 GHz)	20.25	20.26	0.01	-0.75	Note 1
		EDR 8PSK (TxBF) HP	3Mbps	Radiated Bandedge (dBuV/m)	High	Peak / Horizontal High Bandedge (2.486552 GHz)	69.11	70.61	1.50	-4.89	Note 1
		Basic GFSK (TXBF) HP	1Mbps	* RSE (dBuV/m)	Low	Average / Vertical (2.330191 GHz)	41.71	42.42	0.71	-12.29	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

* 1-18GHz RSE mostly are noise floor and so the spot check was done against the emission captured in restricted band again

SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3521

A3521 SPOT CHECK RESULTS											
Equipment Class / Technology	Frequency (GHz)	Mode	Data Rate	Test Item	Channel	Measured Frequency	Original Model: A3258	Sub Model: A3521	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8947A IC : 579C-E8947A	FCC ID : BCG-E8953A IC : 579C-E8953A			
DSS / BT	2.4	Basic GFSK (TXBF) HP	1Mbps	Peak Power (dBm)	High	Fundamental (2.480 GHz)	20.25	20.18	-0.07	-0.75	Note 1
		EDR 8PSK (TxBF) HP	3Mbps	Radiated Bandedge (dBuV/m)	High	Peak / Horizontal High Bandedge (2.486552 GHz)	69.11	68.81	-0.30	-4.89	Note 1
		Basic GFSK (TXBF) HP	1Mbps	* RSE (dBuV/m)	Low	Average / Vertical (2.330191 GHz)	41.71	42.69	0.98	-12.29	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

* 1-18GHz RSE mostly are noise floor and so the spot check was done against the emission captured in restricted band again

END OF REPORT