

10. VLP TPC

LIMITS

FCC §15.407 (d) (10)

(10) Very low power devices operating in the 5.925-6.425 and 6.525-6.875 GHz bands shall employ a transmit power control (TPC) mechanism. A very low power device is required to have the capability to operate at least 6 dB below the maximum EIRP power spectral density (PSD) value of -5 dBm/MHz.

RSS 248 4.5.6

a. The maximum e.i.r.p. spectral density shall not exceed -5 dBm/MHz
A very low-power device shall implement transmitter power control in order to have the capability to operate at least 6 dB lower than the maximum e.i.r.p. spectral density limit.

PROCEDURE

This test demonstrates the ability of the device to increase and decrease power by the required 6dB as the RSSI is decreased and increased.

1. Configure EUT and companion device for peer-to-peer communication (refer to section 6.6)
2. Set variable attenuator to 0dB (noise free spectral environment, Low RSSI simulation)
3. Establish a link and start communication between EUT and companion device
4. Capture PSD spectrum analyzer trace (3)
5. Set variable attenuator to 40dB (noisy spectral environment, High RSSI simulation)
6. Capture PSD spectrum analyzer trace (2)
7. Compare the highest PSD from trace (2) to the highest PSD on trace (3) and determine the delta.

SA Settings: 100kHz RBW/ 300kHz VBW

Span: 1.5MHz

Sweep: 1ms, max hold enabled for 100 sweeps with rms detector enabled.

Set up - Refer to Section 6.6. EUT was set to HDR4 hopping low power mode.

Companion device used for testing only supports HDR4 IPA hopping mode thus that is the mode used for testing.

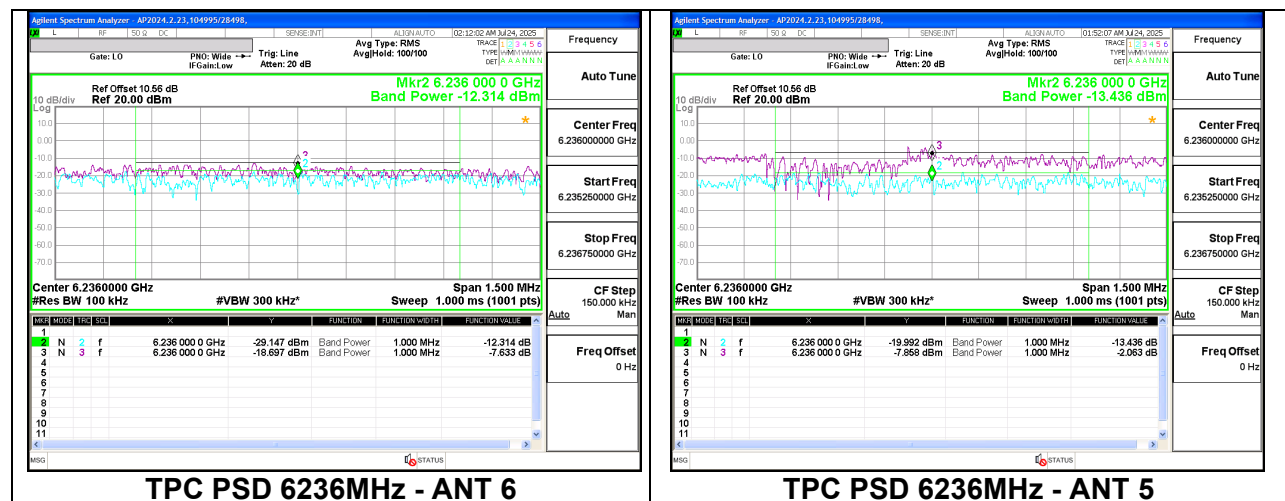
RESULTS

Mode	Antenna 6					Antenna 5				
Frequency (MHz)	Highest Measured PSD EIRP (dBm/MHz)	Trace 2 EIRP PSD (dBm/MHz)	Trace 3 EIRP PSD (dBm/MHz)	Delta (dB)	High RSSI PSD EIRP (dBm/MHz)	Highest Measured PSD EIRP (dBm/MHz)	Trace 2 EIRP PSD (dBm/MHz)	Trace 3 EIRP PSD (dBm/MHz)	Delta (dB)	High RSSI PSD EIRP (dBm/MHz)
6236	-7.916	-12.314	-7.633	4.68	-12.60	-8.167	-13.436	-2.063	11.37	-19.54

For the TPC checks the device is operating in its normal (frequency hopping mode). Due to the frequency hopping operations, capturing the absolute rms PSD values is impractical. To show that output power is reduced with the high RSSI to a level at or below -11dBm/MHz the delta between the high RSSI and low RSSI PSD levels measured with the device hopping is applied to the measured maximum PSD for HDR4 from section 9.3.1 to show that the PSD at the high RSSI level is at or below -11dBm/MHz. The relative measurements (with the device hopping) are made following ANSI C63.10 section 12.6(e) (RBW < 1MHz and integration over 1MHz) at the center of the channel to reduce the impact from adjacent channels.

The device is compliant because when TPC is on the PSD is less than -11dBm/MHz.

Note: Testing was performed on SISO for BT UNII-5 TPC certification. Please refer to the operation description document regarding BT Tx BF TPC.

VLP TPC POWER LEVEL REDUCTION

11. RADIATED TEST RESULTS

LIMITS

FCC §15.35(b)
 FCC §15.205 Restrict bands
 §15.209 and FCC §15.407(b)(6) -Un-Restrict bands

RSS-GEN 8.1
 RSS-GEN 8.9 Un-Restrict bands
 RSS-GEN 8.10 Restrict bands

RSS 248 Issue 3 section 4.6.2a

Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27dBm/MHz rms and -7dBm/MHz Peak.

General field strength limits at frequencies above 30 MHz;

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 1GHz and 18GHz to 40 GHz is investigated with the transmitter set to transmit at the channel with highest output power as worst-case scenario. 1GHz to 18GHz was set to the lowest, middle, and highest channels in the 6 GHz bands.

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.

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.

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 reported in the table), using the 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.

RESULTS

The plots in these sections are for reference settings only for different bandwidths and different antenna ports.

11.1. TRANSMITTER OUTSIDE 5.925 - 7.125 GHz, 1- 18GHz

11.1.1. UNII-5 BAND SISO MODE – BANDEDGE – HIGH POWER

UNII-5 (SISO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Conversion Factor (dB)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading EIRP (dBm)	Avg Limit (dBum)	Avg Margin (dB)	Pk Limit (dBm)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
BDR	6106	6	5.863335	-63.63	Pk	35.1	11.8	0	-23.39	-40.12	-	-	-7	-33.12	325	101	H
			5.889001	-76.22	RMS	35.2	11.8	1.15	-23.29	-51.36	-27	-24.36	-	-	325	100	H
			5.925	-66.39	Pk	35.2	11.8	0	-23.36	-42.75	-	-	-7	-35.75	325	101	H
			5.925	-76.53	RMS	35.2	11.8	1.15	-23.36	-51.74	-27	-24.74	-	-	325	100	H
			5.865868	-65	Pk	35.1	11.8	0	-23.36	-41.46	-	-	-7	-34.46	322	107	V
			5.902868	-77.14	RMS	35.2	11.8	1.15	-23.28	-52.27	-27	-25.27	-	-	322	107	V
		5	5.925	-67.88	Pk	35.2	11.8	0	-23.36	-44.24	-	-	-7	-37.24	322	107	V
			5.925	-77.86	RMS	35.2	11.8	1.15	-23.36	-53.07	-27	-26.07	-	-	322	107	V
			5.842534	-66.17	Pk	34.9	11.8	0	-16.5	-35.97	-	-	-7	-28.97	72	110	H
			5.915535	-79.06	RMS	35.1	11.8	1.15	-16.2	-47.21	-27	-20.21	-	-	72	110	H
			5.925	-69.16	Pk	35.1	11.8	0	-16.2	-38.46	-	-	-7	-31.46	72	110	H
			5.925	-79.84	RMS	35.1	11.8	1.15	-16.2	-47.99	-27	-20.99	-	-	72	110	H
			5.856068	-67.52	Pk	34.9	11.8	0	-16.3	-37.12	-	-	-7	-30.12	154	110	V
			5.857868	-78.79	RMS	34.9	11.8	1.15	-16.4	-47.34	-27	-20.34	-	-	154	110	V
			5.925	-70.93	Pk	35.1	11.8	0	-16.2	-40.23	-	-	-7	-33.23	154	110	V
			5.925	-80.5	RMS	35.1	11.8	1.15	-16.2	-48.65	-27	-21.65	-	-	154	110	V
LE1M	6106	6	5.925	-51.77	Pk	35	11.8	0	-34.9	-39.87	-	-	-7	-32.87	267	101	H
			5.882868	-49.51	Pk	34.9	11.8	0	-34.71	-37.52	-	-	-7	-30.52	267	101	H
			5.925	-61.85	RMS	35	11.8	0.7	-34.9	-49.25	-27	-22.25	-	-	267	101	H
			5.903135	-61.13	RMS	34.9	11.8	0.7	-34.8	-48.53	-27	-21.53	-	-	267	101	H
			5.925	-52.18	Pk	35	11.8	0	-34.9	-40.28	-	-	-7	-33.28	203	101	V
			5.823734	-49.29	Pk	34.7	11.8	0	-34.6	-37.39	-	-	-7	-30.39	203	101	V
		5	5.925	-62.72	RMS	35	11.8	0.7	-34.9	-50.12	-27	-23.12	-	-	203	101	V
			5.870335	-61.29	RMS	34.8	11.8	0.7	-34.87	-48.86	-27	-21.86	-	-	203	101	V
			5.857668	-72.72	RMS	35.1	11.8	0.7	-23.48	-48.6	-27	-21.6	-	-	81	100	H
			5.912601	-61.01	Pk	35.2	11.8	0	-23.34	-37.35	-	-	-7	-30.35	81	101	H
			5.925	-62.7	Pk	35.2	11.8	0	-23.36	-39.06	-	-	-7	-32.06	81	101	H
			5.925	-74.51	RMS	35.2	11.8	0.7	-23.36	-50.17	-27	-23.17	-	-	81	100	H
			5.861268	-61.02	Pk	35.1	11.8	0	-23.43	-37.55	-	-	-7	-30.55	27	206	V
			5.903268	-73.23	RMS	35.2	11.8	0.7	-23.28	-48.81	-27	-21.81	-	-	27	206	V
			5.925	-63.66	Pk	35.2	11.8	0	-23.36	-40.02	-	-	-7	-33.02	27	206	V
			5.925	-74.16	RMS	35.2	11.8	0.7	-23.36	-49.82	-27	-22.82	-	-	27	206	V
LE2M	6106	6	5.886935	-64.7	Pk	35.2	11.8	0	-23.33	-41.03	-	-	-7	-34.03	325	100	H
			5.889735	-78.76	RMS	35.2	11.8	2.41	-23.2	-52.55	-27	-25.55	-	-	325	100	H
			5.925	-66.76	Pk	35.2	11.8	0	-23.36	-43.12	-	-	-7	-36.12	325	100	H
			5.925	-79.15	RMS	35.2	11.8	2.41	-23.36	-53.1	-27	-26.1	-	-	325	100	H
			5.849801	-64.54	Pk	35.1	11.8	0	-23.44	-41.08	-	-	-7	-34.08	322	108	V
			5.909001	-77.19	RMS	35.2	11.8	2.41	-23.24	-51.02	-27	-24.02	-	-	322	108	V
		5	5.925	-67.68	Pk	35.2	11.8	0	-23.36	-44.04	-	-	-7	-37.04	322	108	V
			5.9225	-77.25	RMS	35.2	11.8	2.41	-23.36	-51.2	-27	-24.2	-	-	322	108	V
			5.863268	-66.57	Pk	34.9	11.8	0	-16.4	-36.27	-	-	-7	-29.27	269	280	H
			5.872335	-78.62	RMS	35	11.8	2.41	-16.2	-45.61	-27	-18.61	-	-	269	280	H
			5.925	-68.94	Pk	35.1	11.8	0	-16.2	-38.24	-	-	-7	-31.24	269	280	H
			5.925	-80.48	RMS	35.1	11.8	2.41	-16.2	-47.37	-27	-20.37	-	-	269	280	H
			5.832668	-78.37	RMS	34.9	11.8	2.41	-16.6	-45.86	-27	-18.86	-	-	289	167	V
			5.857401	-66.75	Pk	34.9	11.8	0	-16.3	-36.35	-	-	-7	-29.35	289	167	V
			5.925	-69.95	Pk	35.1	11.8	0	-16.2	-39.25	-	-	-7	-32.25	289	167	V
			5.925	-80.42	RMS	35.1	11.8	2.41	-16.2	-47.31	-27	-20.31	-	-	289	167	V
HDT4	6106	6	5.761267	-60.21	RMS	34.8	11.8	0.29	-36.73	-50.05	-27	-23.05	-	-	324	369	H
			5.922935	-47.9	Pk	35.2	11.8	0	-36.54	-37.44	-	-	-7	-30.44	324	369	H
			5.925	-50.88	Pk	35.2	11.8	0	-36.54	-40.42	-	-	-7	-33.42	324	369	H
			5.925	-62	RMS	35.2	11.8	0.29	-36.54	-51.25	-27	-24.25	-	-	324	369	H
			5.842668	-48.26	Pk	35	11.8	0	-36.76	-38.22	-	-	-7	-31.22	62	219	V
			5.919535	-60.76	RMS	35.2	11.8	0.29	-36.52	-49.99	-27	-22.99	-	-	62	219	V
		5	5.925	-50.66	Pk	35.2	11.8	0	-36.54	-40.2	-	-	-7	-33.2	62	219	V
			5.925	-61.9	RMS	35.2	11.8	0.29	-36.54	-51.15	-27	-24.15	-	-	62	219	V
			5.6368	-46.93	Pk	34.6	11.8	0	-37.33	-37.86	-	-	-7	-30.86	36	220	H
			5.893268	-60.52	RMS	35.1	11.8	0.29	-36.6	-49.93	-27	-22.93	-	-	36	220	H
			5.925	-51.51	Pk	35.2	11.8	0	-36.54	-41.05	-	-	-7	-34.05	36	220	H
			5.925	-62	RMS	35.2	11.8	0.29	-36.54	-51.25	-27	-24.25	-	-	36	220	H
			5.727667	-47.88	Pk	34.7	11.8	0	-36.97	-38.35	-	-	-7	-31.35	55	213	V
			5.918401	-60.73	RMS	35.2	11.8	0.29	-36.55	-49.99	-27	-22.99	-	-	55	213	V
			5.925	-50.85	Pk	35.2	11.8	0	-36.54	-40.39	-	-	-7	-33.39	55	213	V
			5.925	-61.55	RMS	35.2	11.8	0.29	-36.54	-50.8	-27	-23.8	-	-	55	213	V

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

Pk - Peak detector

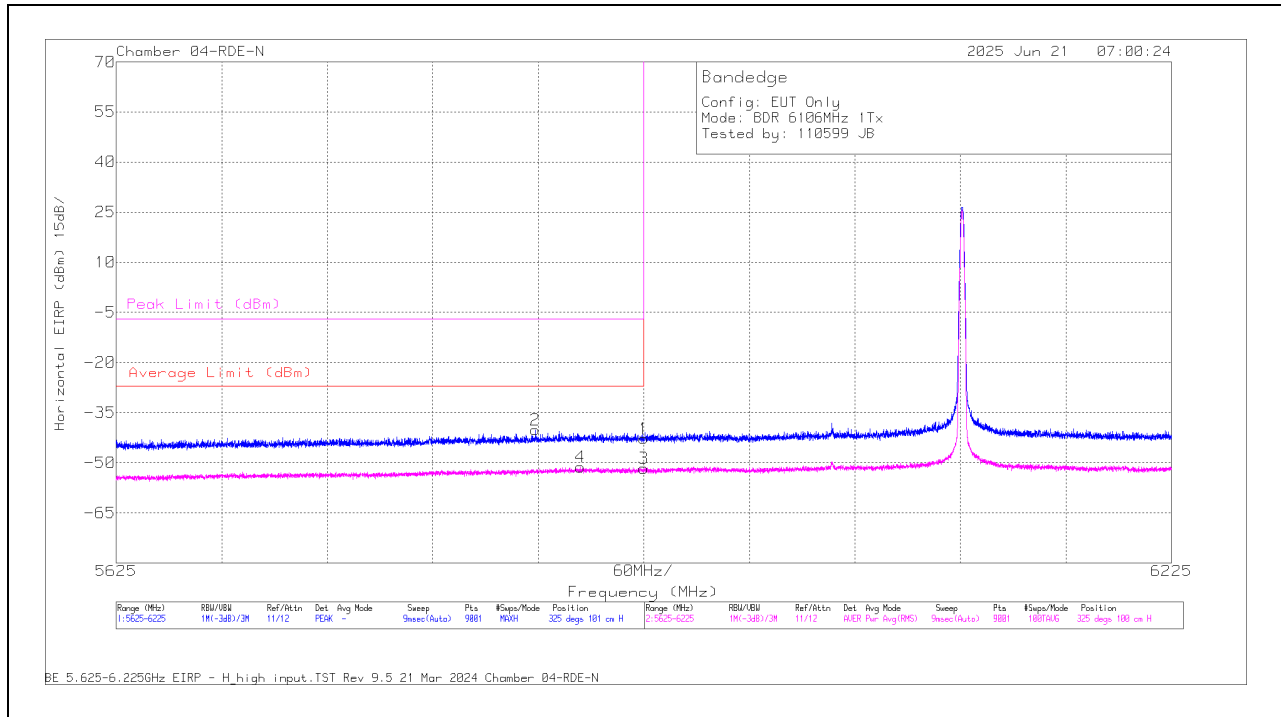
RMS - RMS detection

UNII-5 (SISO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Conversion Factor (dB)	DCCF (dB)	Gain/Loss (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
HDR4	6106	6	5.899401	-63.63	Pk	35.2	11.8	0	-23.24	-39.87	-	-	-7	-32.87	325	100	H
			5.906801	-77.61	RMS	35.2	11.8	1.3	-23.33	-52.64	-27	-25.64	-	-	325	100	H
			5.925	-66.02	Pk	35.2	11.8	0	-23.36	-42.38	-	-	-7	-35.38	325	100	H
			5.925	-78.26	RMS	35.2	11.8	1.3	-23.36	-53.32	-27	-26.32	-	-	325	100	H
			5.894401	-76.86	RMS	35.2	11.8	1.3	-23.23	-51.79	-27	-24.79	-	-	322	108	V
			5.899668	-65.14	Pk	35.2	11.8	0	-23.25	-41.39	-	-	-7	-34.39	322	108	V
			5.925	-67.08	Pk	35.2	11.8	0	-23.36	-43.44	-	-	-7	-36.44	322	108	V
			5.925	-78.1	RMS	35.2	11.8	1.3	-23.36	-53.16	-27	-26.16	-	-	322	108	V
		5	5.815068	-66.5	Pk	34.8	11.8	0	-16.7	-36.6	-	-	-7	-29.6	95	132	H
			5.924868	-79.08	RMS	35.1	11.8	1.3	-16.2	-47.08	-27	-20.08	-	-	95	132	H
			5.925	-69.45	Pk	35.1	11.8	0	-16.2	-38.75	-	-	-7	-31.75	95	132	H
			5.925	-79.88	RMS	35.1	11.8	1.3	-16.2	-47.88	-27	-20.88	-	-	95	132	H
			5.914668	-67.55	Pk	35.1	11.8	0	-16.2	-36.85	-	-	-7	-29.85	112	110	V
			5.917801	-79.06	RMS	35.1	11.8	1.3	-16.2	-47.06	-27	-20.06	-	-	112	110	V
			5.925	-69.09	Pk	35.1	11.8	0	-16.2	-38.39	-	-	-7	-31.39	112	110	V
			5.925	-80.54	RMS	35.1	11.8	1.3	-16.2	-48.54	-27	-21.54	-	-	112	110	V
XHDPSP2	6106	6	5.860801	-66.77	Pk	34.9	11.8	0	-16.2	-36.27	-	-	-7	-29.27	249	139	H
			5.904001	-78.9	RMS	35	11.8	0	-16.3	-48.4	-27	-21.4	-	-	249	139	H
			5.925	-69.48	Pk	35.1	11.8	0	-16.2	-38.78	-	-	-7	-31.78	249	139	H
			5.925	-79.88	RMS	35.1	11.8	0	-16.2	-49.18	-27	-22.18	-	-	249	139	H
			5.829668	-66.94	Pk	34.9	11.8	0	-16.8	-37.04	-	-	-7	-30.04	231	107	V
			5.847801	-79.33	RMS	34.9	11.8	0	-16.3	-48.93	-27	-21.93	-	-	231	107	V
			5.925	-70.34	Pk	35.1	11.8	0	-16.2	-39.64	-	-	-7	-32.64	231	107	V
			5.925	-80.51	RMS	35.1	11.8	0	-16.2	-49.81	-27	-22.81	-	-	231	107	V
		5	5.824934	-48.85	Pk	35.1	11.8	0	-35.94	-37.89	-	-	-7	-30.89	142	224	H
			5.853534	-60.77	RMS	35.1	11.8	0	-35.9	-49.77	-27	-22.77	-	-	142	224	H
			5.925	-49.3	Pk	35.2	11.8	0	-35.86	-38.16	-	-	-7	-31.16	142	224	H
			5.925	-62.31	RMS	35.2	11.8	0	-35.86	-51.17	-27	-24.17	-	-	142	224	H
			5.888135	-60.97	RMS	35.1	11.8	0	-35.87	-49.94	-27	-22.94	-	-	170	207	V
			5.891201	-48.67	Pk	35.1	11.8	0	-35.91	-37.68	-	-	-7	-30.68	170	207	V
			5.925	-51.56	Pk	35.2	11.8	0	-35.86	-40.42	-	-	-7	-33.42	170	207	V
			5.925	-62.75	RMS	35.2	11.8	0	-35.86	-51.61	-27	-24.61	-	-	170	207	V
HDRPM8	6107	6	5.908001	-79.11	RMS	35	11.8	0.3	-16.3	-48.31	-27	-21.31	-	-	20	105	H
			5.912601	-67.64	Pk	35.1	11.8	0	-16.2	-36.94	-	-	-7	-29.94	20	105	H
			5.925	-69.85	Pk	35.1	11.8	0	-16.2	-39.15	-	-	-7	-32.15	20	105	H
			5.925	-80.47	RMS	35.1	11.8	0.3	-16.2	-49.47	-27	-22.47	-	-	20	105	H
			5.859001	-78.93	RMS	34.9	11.8	0.3	-16.2	-48.13	-27	-21.13	-	-	308	198	V
			5.907268	-67.54	Pk	35	11.8	0	-16.4	-37.14	-	-	-7	-30.14	308	198	V
			5.925	-69.89	Pk	35.1	11.8	0	-16.2	-39.19	-	-	-7	-32.19	308	198	V
		5	5.925	-79.67	RMS	35.1	11.8	0.3	-16.2	-48.67	-27	-21.67	-	-	308	198	V
			5.909468	-61.05	RMS	35.2	11.8	0.3	-35.9	-49.65	-27	-22.65	-	-	154	227	H
			5.917935	-48.44	Pk	35.2	11.8	0	-35.85	-37.29	-	-	-7	-30.29	154	227	H
			5.925	-51.76	Pk	35.2	11.8	0	-35.86	-40.62	-	-	-7	-33.62	154	227	H
			5.925	-62.61	RMS	35.2	11.8	0.3	-35.86	-51.17	-27	-24.17	-	-	154	227	H
			5.714667	-60.33	RMS	34.9	11.8	0.3	-36.37	-49.7	-27	-22.7	-	-	173	235	V
			5.809534	-48.79	Pk	35	11.8	0	-36.01	-38	-	-	-7	-31	173	235	V
			5.925	-51.83	Pk	35.2	11.8	0	-35.86	-40.69	-	-	-7	-33.69	173	235	V
			5.925	-62.38	RMS	35.2	11.8	0.3	-35.86	-50.94	-27	-23.94	-	-	173	235	V
XHDPRL16	6109	6	5.885401	-78.94	RMS	35	11.8	0.2	-16.3	-48.24	-27	-21.24	-	-	126	117	H
			5.890201	-68.08	Pk	35	11.8	0	-16.3	-37.58	-	-	-7	-30.58	126	117	H
			5.925	-70.36	Pk	35.1	11.8	0	-16.2	-39.66	-	-	-7	-32.66	126	117	H
			5.925	-80.7	RMS	35.1	11.8	0.2	-16.2	-49.8	-27	-22.8	-	-	126	117	H
			5.802801	-66.97	Pk	34.8	11.8	0	-16.8	-37.17	-	-	-7	-30.17	137	107	V
			5.922801	-79.29	RMS	35.1	11.8	0.2	-16.3	-48.49	-27	-21.49	-	-	137	107	V
			5.925	-70.69	Pk	35.1	11.8	0	-16.2	-39.99	-	-	-7	-32.99	137	107	V
		5	5.925	-80.49	RMS	35.1	11.8	0.2	-16.2	-49.59	-27	-22.59	-	-	137	107	V
			5.845468	-60.91	RMS	35.1	11.8	0.2	-35.95	-49.72	-27	-22.74	-	-	145	218	H
			5.879401	-48.84	Pk	35.1	11.8	0	-35.93	-37.87	-	-	-7	-30.87	145	218	H
			5.925	-50.49	Pk	35.2	11.8	0	-35.86	-39.35	-	-	-7	-32.35	145	218	H
			5.925	-62.12	RMS	35.2	11.8	0.2	-35.88	-50.76	-27	-23.78	-	-	145	218	H
			5.866401	-49.06	Pk	35.1	11.8	0	-35.93	-38.09	-	-	-7	-31.09	186	278	V
			5.902001	-60.99	RMS	35.2	11.8	0.2	-35.87	-49.62	-27	-22.64	-	-	186	278	V
			5.925	-51.56	Pk	35.2	11.8	0	-35.86	-40.42	-	-	-7	-33.42	186	278	V
			5.925	-61.84	RMS	35.2	11.8	0.2	-35.88	-50.48	-27	-23.5	-	-	186	278	V

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

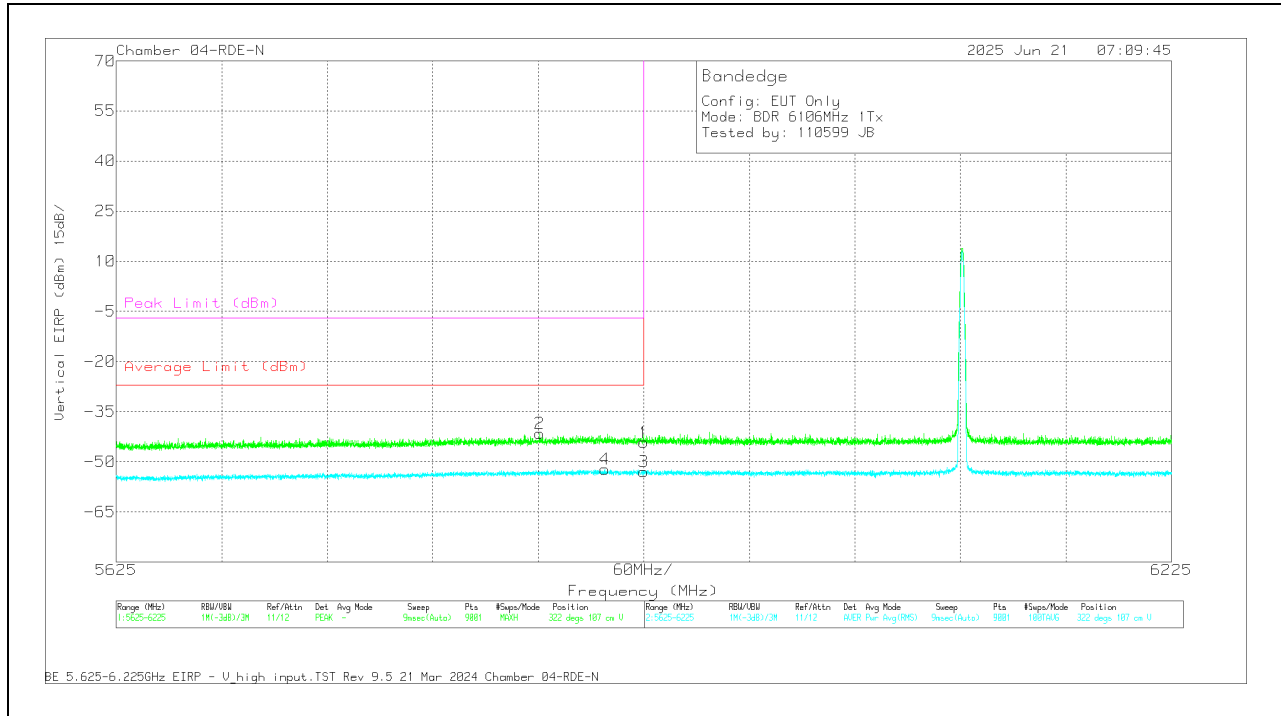
Pk - Peak detector

RMS - RMS detection

1TX Antenna 6:**BANDEDGE (LOW CHANNEL / 6106MHz)****HORIZONTAL RESULT**

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	41112 ACF (dB/m)	Conversion Factor (dB)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading EIRP (dBm)	Average Limit (dBm)	Margin (dB)	Peak Limit (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5863.335	-63.63	Pk	35.1	11.8	0	-23.39	-40.12	-	-	-7	-33.12	325	101	H
4	5889.001	-76.22	RMS	35.2	11.8	1.15	-23.29	-51.36	-27	-24.36	-	-	325	100	H
1	5925	-66.39	Pk	35.2	11.8	0	-23.36	-42.75	-	-	-7	-35.75	325	101	H
3	5925	-76.53	RMS	35.2	11.8	1.15	-23.36	-51.74	-27	-24.74	-	-	325	100	H

PK - Peak detector
RMS - RMS detection

VERTICAL RESULT

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	41112 ACF (dB/m)	Conversion Factor (dB)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading EIRP (dBm)	Average Limit (dBm)	Margin (dB)	Peak Limit (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5865.868	-65	Pk	35.1	11.8	0	-23.36	-41.46	-	-	-7	-34.46	322	107	V
4	5902.868	-77.14	RMS	35.2	11.8	1.15	-23.28	-52.27	-27	-25.27	-	-	322	107	V
1	5925	-67.88	Pk	35.2	11.8	0	-23.36	-44.24	-	-	-7	-37.24	322	107	V
3	5925	-77.86	RMS	35.2	11.8	1.15	-23.36	-53.07	-27	-26.07	-	-	322	107	V

Pk - Peak detector
RMS - RMS detection

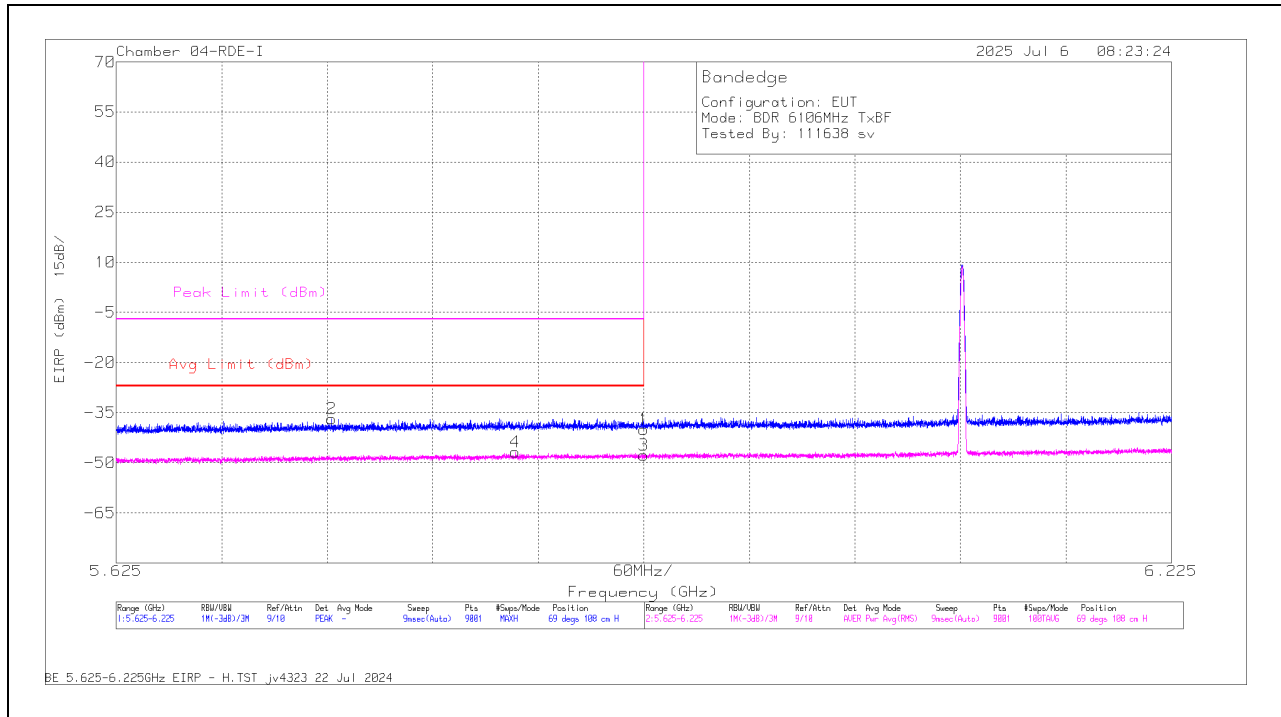
11.1.2. UNII-5 BAND MIMO MODE – BANDEDGE – HIGH POWER

UNII-5 (MIMO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Conversion Factor (dB)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading EIRP (dBm)	Avg Limit (dBm)	Avg Margin (dB)	Pk Limit (dBm)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
BDR	6106	6 + 5	5.747534	-65.96	Pk	34.6	11.8	0	-17.2	-36.76	-	-	-7	-29.76	69	108	H
			5.852001	-78.24	RMS	34.9	11.8	1.15	-16.4	-46.79	-27	-19.79	-	-	69	108	H
			5.925	-70.64	Pk	35.1	11.8	0	-16.2	-39.94	-	-	-7	-32.94	69	108	H
			5.925	-79.62	RMS	35.1	11.8	1.15	-16.2	-47.77	-27	-20.77	-	-	69	108	H
			5.901735	-66.98	Pk	35	11.8	0	-16.2	-36.38	-	-	-7	-29.38	122	115	V
			5.910201	-78.76	RMS	35	11.8	1.15	-16.3	-47.11	-27	-20.11	-	-	122	115	V
			5.925	-70.83	Pk	35.1	11.8	0	-16.2	-40.13	-	-	-7	-33.13	122	115	V
LE1M	6106	6 + 5	5.925	-79.84	RMS	35.1	11.8	1.15	-16.2	-47.99	-27	-20.99	-	-	122	115	V
			5.894668	-72.97	RMS	35.2	11.8	0.7	-23.23	-48.5	-27	-21.5	-	-	325	100	H
			5.917935	-60.78	Pk	35.2	11.8	0	-23.38	-37.16	-	-	-7	-30.16	325	101	H
			5.925	-62.91	Pk	35.2	11.8	0	-23.36	-39.27	-	-	-7	-32.27	325	101	H
			5.925	-74.17	RMS	35.2	11.8	0.7	-23.36	-49.83	-27	-22.83	-	-	325	100	H
			5.881001	-61.22	Pk	35.1	11.8	0	-23.29	-37.61	-	-	-7	-30.61	322	101	V
			5.895735	-72.99	RMS	35.2	11.8	0.7	-23.19	-48.48	-27	-21.48	-	-	322	100	V
LE2M	6106	6 + 5	5.925	-63.75	Pk	35.2	11.8	0	-23.36	-40.11	-	-	-7	-33.11	322	101	V
			5.925	-73.74	RMS	35.2	11.8	0.7	-23.36	-49.4	-27	-22.4	-	-	322	100	V
			5.871735	-48.59	Pk	35.2	11.8	0	-36.65	-38.24	-	-	-7	-31.24	121	231	H
			5.892535	-60.44	RMS	35.2	11.8	2.41	-36.65	-47.68	-27	-20.68	-	-	121	231	H
			5.925	-50.82	Pk	35.2	11.8	0	-36.51	-40.33	-	-	-7	-33.33	121	231	H
			5.925	-61.37	RMS	35.2	11.8	2.41	-36.51	-48.47	-27	-21.47	-	-	121	231	H
			5.780467	-47.72	Pk	35	11.8	0	-37.02	-37.94	-	-	-7	-30.94	115	189	V
HDT4	6106	6 + 5	5.914601	-60.3	RMS	35.2	11.8	2.41	-36.58	-47.47	-27	-20.47	-	-	115	189	V
			5.925	-50.83	Pk	35.2	11.8	0	-36.51	-40.34	-	-	-7	-33.34	115	189	V
			5.925	-61.9	RMS	35.2	11.8	2.41	-36.51	-49	-27	-22	-	-	115	189	V
			5.901801	-47.99	Pk	35.1	11.8	0	-36.64	-37.73	-	-	-7	-30.73	2	224	H
			5.923668	-60.8	RMS	35.2	11.8	0.29	-36.51	-50.02	-27	-23.02	-	-	2	224	H
			5.925	-50.92	Pk	35.2	11.8	0	-36.54	-40.46	-	-	-7	-33.46	2	224	H
			5.925	-61.75	RMS	35.2	11.8	0.29	-36.54	-51	-27	-24	-	-	2	224	H
HDR4	6106	6 + 5	5.757001	-60.06	RMS	34.8	11.8	0.29	-36.78	-49.95	-27	-22.95	-	-	54	195	V
			5.891601	-48.88	Pk	35.1	11.8	0	-36.61	-38.59	-	-	-7	-31.59	54	195	V
			5.925	-50.82	Pk	35.2	11.8	0	-36.54	-40.36	-	-	-7	-33.36	54	195	V
			5.925	-61.87	RMS	35.2	11.8	0.29	-36.54	-51.12	-27	-24.12	-	-	54	195	V
			5.884201	-78.78	RMS	35	11.8	1.3	-16.3	-46.98	-27	-19.98	-	-	58	110	H
			5.913535	-67.53	Pk	35.1	11.8	0	-16.2	-36.83	-	-	-7	-29.83	58	110	H
			5.925	-70.87	Pk	35.1	11.8	0	-16.2	-40.17	-	-	-7	-33.17	58	110	H
XHDRP52	6106	6 + 5	5.925	-79.71	RMS	35.1	11.8	1.3	-16.2	-47.71	-27	-20.71	-	-	58	110	H
			5.774201	-65.94	Pk	34.6	11.8	0	-17.1	-36.64	-	-	-7	-29.64	295	149	V
			5.845534	-78.62	RMS	34.9	11.8	1.3	-16.4	-47.02	-27	-20.02	-	-	295	149	V
			5.925	-70.01	Pk	35.1	11.8	0	-16.2	-39.31	-	-	-7	-32.31	295	149	V
			5.925	-80.08	RMS	35.1	11.8	1.3	-16.2	-48.08	-27	-21.08	-	-	295	149	V
			5.841334	-47.31	Pk	35.1	11.8	0	-36.76	-37.17	-	-	-7	-30.17	121	248	H
			5.910135	-60.61	RMS	35.2	11.8	0	-36.63	-50.24	-27	-23.24	-	-	121	248	H
HDRPM8	6107	6 + 5	5.925	-51.22	Pk	35.2	11.8	0	-36.51	-40.73	-	-	-7	-33.73	121	248	H
			5.925	-61.82	RMS	35.2	11.8	0	-36.51	-51.33	-27	-24.33	-	-	121	248	H
			5.848134	-60.13	RMS	35.1	11.8	0	-36.79	-50.02	-27	-23.02	-	-	134	215	V
			5.879335	-47.56	Pk	35.2	11.8	0	-36.68	-37.24	-	-	-7	-30.24	134	215	V
			5.925	-50.69	Pk	35.2	11.8	0	-36.51	-40.2	-	-	-7	-33.2	134	215	V
			5.925	-60.98	RMS	35.2	11.8	0	-36.51	-50.49	-27	-23.49	-	-	134	215	V
			5.826668	-47.99	Pk	35.1	11.8	0	-36.85	-37.94	-	-	-7	-30.94	122	228	H
XHDRPL16	6109	6 + 5	5.916268	-60.67	RMS	35.2	11.8	0.3	-36.55	-49.92	-27	-22.92	-	-	122	228	H
			5.925	-51.35	Pk	35.2	11.8	0	-36.51	-40.86	-	-	-7	-33.86	122	228	H
			5.925	-61.72	RMS	35.2	11.8	0.3	-36.51	-50.93	-27	-23.93	-	-	122	228	H
			5.730201	-47.79	Pk	35	11.8	0	-37.21	-38.2	-	-	-7	-31.2	167	230	V
			5.858935	-60.29	RMS	35.1	11.8	0.3	-36.74	-49.83	-27	-22.83	-	-	167	230	V
			5.925	-50.75	Pk	35.2	11.8	0	-36.51	-40.26	-	-	-7	-33.26	167	230	V
			5.925	-61.39	RMS	35.2	11.8	0.3	-36.51	-50.6	-27	-23.6	-	-	167	230	V
XHDRPL16	6109	6 + 5	5.859801	-47.7	Pk	35	11.8	0	-36.88	-37.78	-	-	-7	-30.78	172	118	H
			5.910801	-59.98	RMS	35.2	11.8	0.2	-36.62	-49.4	-27	-22.4	-	-	172	118	H
			5.925	-50.16	Pk	35.2	11.8	0	-36.6	-39.76	-	-	-7	-32.76	172	118	H
			5.925	-60.83	RMS	35.2	11.8	0.2	-36.6	-50.23	-27	-23.23	-	-	172	118	H
			5.889001	-48.26	Pk	35.1	11.8	0	-36.7	-38.06	-	-	-7	-31.06	153	118	V
			5.923801	-60.19	RMS	35.2	11.8	0.2	-36.6	-49.59	-27	-22.59	-	-	153	118	V
			5.925	-50.61	Pk	35.2	11.8	0	-36.6	-40.21	-	-	-7	-33.21	153	118	V
XHDRPL16	6109	6 + 5	5.925	-60.39	RMS	35.2	11.8	0.2	-36.6	-49.79	-27	-22.79	-	-	153	118	V

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

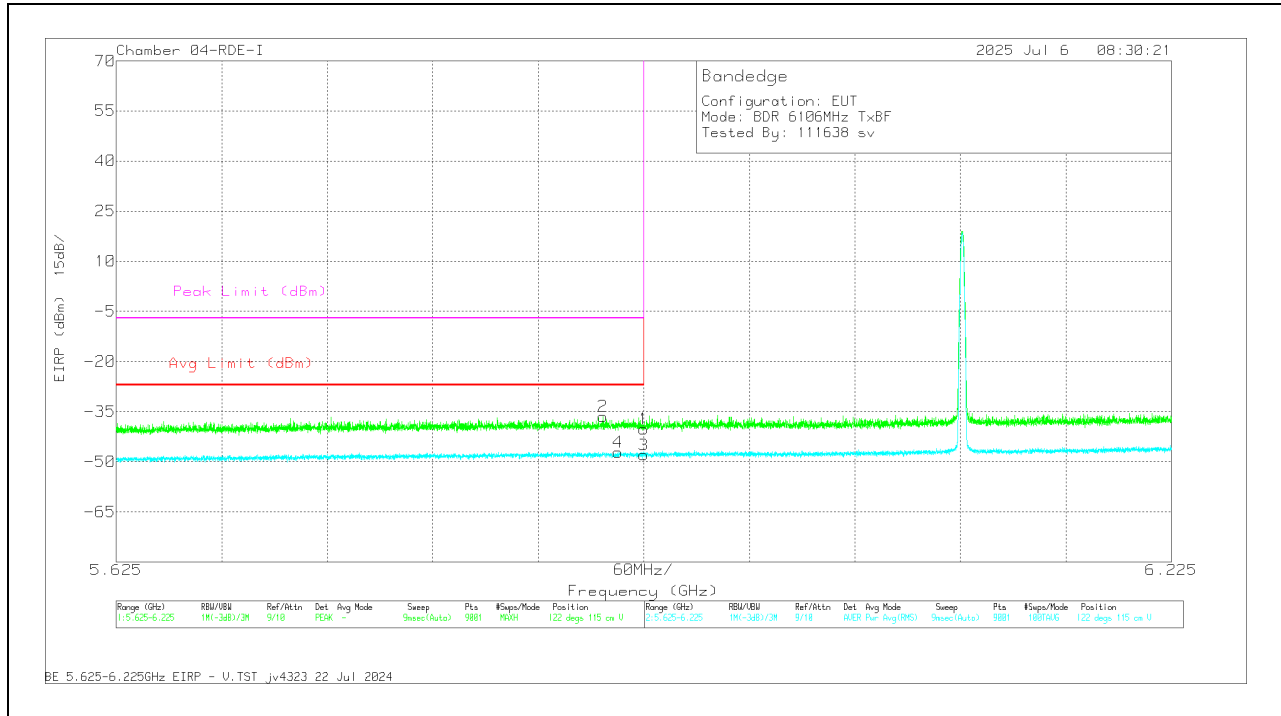
Pk - Peak detector

RMS - RMS detection

2TX Antennas 6 + 5:**BANDEDGE (LOW CHANNEL / 6106MHz)****HORIZONTAL RESULT**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP (dBm)	Avg Limit (dBm)	RMS Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.747534	-65.96	Pk	34.6	-17.2	11.8	0	-36.76	-	-	-7	-29.76	69	108	H
4	5.852001	-78.24	RMS	34.9	-16.4	11.8	1.15	-46.79	-27	-19.79	-	-	69	108	H
1	5.925	-70.64	Pk	35.1	-16.2	11.8	0	-39.94	-	-	-7	-32.94	69	108	H
3	5.925	-79.62	RMS	35.1	-16.2	11.8	1.15	-47.77	-27	-20.77	-	-	69	108	H

Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	222740 ACF (dB/m)	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP (dBm)	Avg Limit (dBm)	RMS Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.901735	-66.98	PK	35	-16.2	11.8	0	-36.38	-	-	-7	-29.38	122	115	V
4	5.910201	-78.76	RMS	35	-16.3	11.8	1.15	-47.11	-27	-20.11	-	-	122	115	V
1	5.925	-70.83	PK	35.1	-16.2	11.8	0	-40.13	-	-	-7	-33.13	122	115	V
3	5.925	-79.84	RMS	35.1	-16.2	11.8	1.15	-47.99	-27	-20.99	-	-	122	115	V

Pk - Peak detector

RMS - RMS detection

11.1.3. UNII-5 BAND MIMO TXBF MODE - SPURIOUS EMISSIONS – HIGH POWER

UNII-5 (MIMO TXBF)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
BDR	6106	6 + 5	* 2.707566	59.1	PK-U	32.4	-48.18	0	43.32	-	-	74	-30.68	308	265	H
			* 2.707033	46.56	ADR	32.4	-48.19	1.15	31.92	54	-22.08	-	-	308	265	H
			* 2.709774	58.49	PK-U	32.4	-48.16	0	42.73	-	-	74	-31.27	168	370	V
			* 2.70831	46.64	ADR	32.4	-48.17	1.15	32.02	54	-21.98	-	-	168	370	V
			* 9.119804	56.42	PK-U	36.4	-44.27	0	48.55	-	-	74	-25.45	325	245	H
			* 9.120828	45.01	ADR	36.4	-44.27	1.15	38.29	54	-15.71	-	-	325	245	H
			* 11.904885	55.22	PK-U	38.7	-41.56	0	52.36	-	-	74	-21.64	21	145	H
			* 11.905047	42.95	ADR	38.7	-41.55	1.15	41.25	54	-12.75	-	-	21	145	H
			* 9.112724	56.51	PK-U	36.4	-44.34	0	48.57	-	-	74	-25.43	316	374	V
			* 9.112213	45.08	ADR	36.4	-44.35	1.15	38.28	54	-15.72	-	-	316	374	V
			* 11.826085	54.96	PK-U	38.7	-42.07	0	51.59	-	-	74	-22.41	36	133	V
			* 11.825248	43.14	ADR	38.7	-42.1	1.15	40.89	54	-13.11	-	-	36	133	V
	6265	6 + 5	* 8.346526	55.67	PK-U	36.1	-43.45	0	48.32	-	-	74	-25.68	272	387	H
			* 8.334411	43.31	ADR	36.1	-43.6	1.15	36.96	54	-17.04	-	-	272	387	H
			* 12.52991	53.35	PK-U	39.2	-41.48	0	51.07	-	-	74	-22.93	299	252	H
			* 12.532593	41.21	ADR	39.2	-41.54	1.15	40.02	54	-13.98	-	-	299	252	H
			* 8.34201	55.65	PK-U	36.1	-43.5	0	48.25	-	-	74	-25.75	183	328	V
			* 8.330276	43.14	ADR	36.1	-43.6	1.15	36.79	54	-17.21	-	-	183	328	V
			* 12.548332	52.84	PK-U	39.2	-41.6	0	50.44	-	-	74	-23.56	19	117	V
			* 12.528042	41.2	ADR	39.2	-41.4	1.15	40.15	54	-13.85	-	-	19	117	V
			3.114503	46.88	ADR	33.3	-47.3	1.15	34.03	68.2	-34.17	-	-	129	172	V
			3.11461	58.62	PK-U	33.3	-47.3	0	44.62	-	-	88.2	-43.58	129	172	V
			3.115303	46.78	ADR	33.3	-47.3	1.15	33.93	68.2	-34.27	-	-	98	358	H
			3.116112	58.39	PK-U	33.3	-47.3	0	44.39	-	-	88.2	-43.81	98	358	H
	6420	6 + 5	2.138632	57.99	PK-U	31.8	-46.5	0	43.29	-	-	88.2	-44.91	248	214	H
			2.139498	46.19	ADR	31.8	-46.45	1.15	32.69	68.2	-35.51	-	-	248	214	H
			3.21283	55.79	PK-U	33	-45.38	0	43.41	-	-	88.2	-44.79	232	141	H
			3.21133	43.99	ADR	33	-45.3	1.15	32.84	68.2	-35.36	-	-	232	141	H
			2.142236	57.86	PK-U	31.8	-46.4	0	43.26	-	-	88.2	-44.94	279	341	V
			2.141216	46.32	ADR	31.8	-46.4	1.15	32.87	68.2	-35.33	-	-	279	341	V
			3.207021	55.61	PK-U	33	-45.4	0	43.21	-	-	88.2	-44.99	236	168	V
			3.207577	43.92	ADR	33	-45.34	1.15	32.73	68.2	-35.47	-	-	236	168	V
			12.83701	52.34	PK-U	38.9	-41.2	0	50.04	-	-	88.2	-38.16	122	170	H
			12.837985	40.86	ADR	38.9	-41.1	1.15	39.81	68.2	-28.39	-	-	122	170	H
			12.839945	52.69	PK-U	38.9	-41.1	0	50.49	-	-	88.2	-37.71	83	138	V
			12.837985	40.86	ADR	38.9	-41.1	1.15	39.81	68.2	-28.39	-	-	83	138	V
LE1M	6106	6 + 5	3.182967	56.31	PK-U	33	-46.22	0	43.09	-	-	88.2	-45.11	360	101	H
			3.183722	55.95	PK-U	33	-46.23	0	42.72	-	-	88.2	-45.48	360	198	V
			3.185943	44.28	ADR	33	-46.18	0.7	31.8	68.2	-36.4	-	-	360	198	V
			3.186645	44.69	ADR	33	-46.18	0.7	32.21	68.2	-35.99	-	-	360	101	H
			9.700459	45.48	ADR	37	-44.24	0.7	38.94	68.2	-29.26	-	-	360	199	H
			9.700849	45.45	ADR	37	-44.23	0.7	38.92	68.2	-29.28	-	-	360	199	V
			9.700975	57.2	PK-U	37	-44.23	0	49.97	-	-	88.2	-38.23	360	199	H
			9.702191	56.69	PK-U	37	-44.23	0	49.46	-	-	88.2	-38.74	360	199	V
			12.833564	44.7	ADR	39.3	-44.03	0.7	40.67	68.2	-27.53	-	-	360	101	H
			12.833683	56.01	PK-U	39.3	-44.02	0	51.29	-	-	88.2	-36.91	360	101	H
			12.833729	44.8	ADR	39.3	-44.02	0.7	40.78	68.2	-27.42	-	-	360	101	V
			12.834094	57.13	PK-U	39.3	-44	0	52.43	-	-	88.2	-35.77	360	101	V
	6265	6 + 5	3.140587	56.93	PK-U	32.9	-46.43	0	43.4	-	-	88.2	-44.8	360	101	H
			3.14104	45.09	ADR	32.9	-46.43	0.7	32.26	68.2	-35.94	-	-	360	101	V
			3.141629	56.33	PK-U	32.9	-46.42	0	42.81	-	-	88.2	-45.39	360	101	V
			3.142065	45.14	ADR	32.9	-46.41	0.7	32.33	68.2	-35.87	-	-	360	101	H
			9.767093	57.36	PK-U	37.1	-44.36	0	50.1	-	-	88.2	-38.1	360	101	H
			9.767379	57.48	PK-U	37.1	-44.36	0	50.22	-	-	88.2	-37.98	360	101	V
			9.767672	45.68	ADR	37.1	-44.36	0.7	39.12	68.2	-29.08	-	-	360	101	H
			9.769226	45.84	ADR	37.1	-44.38	0.7	39.26	68.2	-28.94	-	-	360	101	V
			13.010652	46.63	ADR	39.3	-44.76	0.7	41.87	68.2	-26.33	-	-	360	101	V
			13.011441	58.84	PK-U	39.3	-44.76	0	53.38	-	-	88.2	-34.82	360	101	V
			13.011754	46.56	ADR	39.3	-44.77	0.7	41.79	68.2	-26.41	-	-	360	101	H
			13.013329	57.98	PK-U	39.3	-44.8	0	52.48	-	-	88.2	-35.72	360	101	H
	6420	6 + 5	2.147321	60.89	PK-U	31.6	-50.51	0	41.98	-	-	88.2	-46.22	266	239	V
			2.147691	49.28	ADR	31.6	-50.51	0.7	31.07	68.2	-37.13	-	-	266	239	V
			2.149719	60.83	PK-U	31.7	-50.51	0	42.02	-	-	88.2	-46.18	299	112	H
			2.150593	49.43	ADR	31.7	-50.5	0.7	31.33	68.2	-36.87	-	-	299	112	H
			3.210517	58.77	PK-U	33.3	-48.38	0	43.69	-	-	88.2	-44.51	304	344	V
			3.211401	47.16	ADR	33.3	-48.36	0.7	32.8	68.2	-35.4	-	-	304	344	V
			3.212645	59.05	PK-U	33.3	-48.36	0	43.99	-	-	88.2	-44.21	131	195	H
			3.213491	47.18	ADR	33.3	-48.36	0.7	32.82	68.2	-35.38	-	-	131	195	H
			12.483327	55.87	PK-U	39	-44.19	0	50.68	-	-	74	-23.32	264	208	V
			12.484649	43.55	ADR	39	-44.17	0.7	39.08	54	-14.92	-	-	264	208	V
			12.48854	43.38	ADR	39	-44.12	0.7	38.96	54	-15.04	-	-	327	167	H
			12.48877	55.52	PK-U	39	-44.12	0	50.4	-	-	74	-23.6	327	167	H

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

Pk - Peak detector

RMS - RMS detection

UNII-5 (MIMO TXBF)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
LE2M	6106	6 + 5	* 9.138139	56.64	PK-U	36.4	-44.07	0	48.97	-	-	74	-25.03	360	101	H
			* 9.135335	44.95	ADR	36.4	-44.1	2.41	39.66	54	-14.34	-	-	360	101	H
			* 12.6585	56.66	PK-U	39.2	-43.74	0	52.12	-	-	74	-21.88	360	199	H
			* 12.658267	44.65	ADR	39.2	-43.75	2.41	42.51	54	-11.49	-	-	360	199	H
			* 9.135062	56.82	PK-U	36.4	-44.1	0	49.12	-	-	74	-24.88	360	101	V
			* 9.134711	44.94	ADR	36.4	-44.1	2.41	39.65	54	-14.35	-	-	360	101	V
			* 12.65727	56.59	PK-U	39.2	-43.77	0	52.02	-	-	74	-21.98	360	198	V
			* 12.65782	44.51	ADR	39.2	-43.76	2.41	42.36	54	-11.64	-	-	360	198	V
			3.177182	44.42	ADR	33	-46.18	2.41	33.65	68.2	-34.55	-	-	360	101	V
			3.177586	56.45	PK-U	33	-46.19	0	43.26	-	-	88.2	-44.94	360	199	H
			3.180174	44.23	ADR	33	-46.21	2.41	33.43	68.2	-34.77	-	-	360	199	H
			3.180562	56	PK-U	33	-46.21	0	42.79	-	-	88.2	-45.41	360	101	V
	6265	6 + 5	* 9.134867	56.59	PK-U	36.4	-44.1	0	48.89	-	-	74	-25.11	360	101	H
			* 9.136168	44.85	ADR	36.4	-44.1	2.41	39.56	54	-14.44	-	-	360	101	H
			* 9.136504	57.87	PK-U	36.4	-44.09	0	50.18	-	-	74	-23.82	360	101	V
			* 9.135506	44.97	ADR	36.4	-44.1	2.41	39.68	54	-14.32	-	-	360	101	V
			3.146803	56.31	PK-U	32.9	-46.35	0	42.86	-	-	88.2	-45.34	360	101	H
			3.147607	44.22	ADR	32.9	-46.36	2.41	33.17	68.2	-35.03	-	-	360	199	V
			3.147739	56.49	PK-U	32.9	-46.36	0	43.03	-	-	88.2	-45.17	360	199	V
			3.147964	44.41	ADR	32.9	-46.36	2.41	33.36	68.2	-34.84	-	-	360	101	H
			12.810584	44.33	ADR	39.3	-43.91	2.41	42.13	68.2	-26	-	-	360	200	V
			12.810896	56.01	PK-U	39.3	-43.92	0	51.39	-	-	88.2	-36.81	360	199	H
			12.812807	44.31	ADR	39.3	-43.92	2.41	42.1	68.2	-26.1	-	-	360	199	H
			12.813156	56.09	PK-U	39.3	-43.92	0	51.47	-	-	88.2	-36.73	360	200	V
	6420	6 + 5	* 9.104964	56.55	PK-U	36.4	-44.43	0	48.52	-	-	74	-25.48	360	199	H
			* 9.106558	44.75	ADR	36.4	-44.44	2.41	39.12	54	-14.88	-	-	360	199	H
			* 9.10342	57.31	PK-U	36.4	-44.43	0	49.28	-	-	74	-24.72	360	101	V
			* 9.104574	45.08	ADR	36.4	-44.43	2.41	39.46	54	-14.54	-	-	360	101	V
			3.173212	44.5	ADR	33	-46.21	2.41	33.7	68.2	-34.5	-	-	360	101	H
			3.174028	57.38	PK-U	33	-46.19	0	44.19	-	-	88.2	-44.01	360	101	V
			3.17421	44.57	ADR	33	-46.19	2.41	33.79	68.2	-34.41	-	-	360	101	V
			3.175297	56.74	PK-U	33	-46.18	0	43.56	-	-	88.2	-44.64	360	101	H
			12.855222	44.86	ADR	39.3	-43.88	2.41	42.69	68.2	-25.51	-	-	360	101	V
			12.856296	56.84	PK-U	39.3	-43.85	0	52.29	-	-	88.2	-35.91	360	101	H
			12.856298	44.75	ADR	39.3	-43.85	2.41	42.61	68.2	-25.59	-	-	360	101	H
			12.857595	57.37	PK-U	39.3	-43.83	0	52.84	-	-	88.2	-35.36	360	101	V
HDT4	6106	6 + 5	2.196628	61.54	PK-U	31.8	-50.29	0	43.05	-	-	88.2	-45.15	0	101	H
			2.1676	49.47	ADR	31.7	-50.38	0.29	31.08	68.2	-37.12	-	-	0	101	H
			2.161072	61.05	PK-U	31.7	-50.31	0	42.44	-	-	88.2	-45.76	0	101	V
			2.164947	49.37	ADR	31.7	-50.39	0.29	30.97	68.2	-37.23	-	-	0	101	V
			10.636132	56.84	PK-U	37.6	-45.47	0	48.97	-	-	74	-25.03	0	101	H
			10.646187	44.86	ADR	37.6	-45.57	0.29	37.18	54	-16.82	-	-	0	101	H
			15.397966	53.86	PK-U	40.6	-42.41	0	52.05	-	-	74	-21.95	0	101	H
			15.406613	42.11	ADR	40.7	-42.57	0.29	40.53	54	-13.47	-	-	0	101	H
			10.627817	56.73	PK-U	37.7	-45.75	0	48.68	-	-	74	-25.32	0	101	V
			10.645035	44.88	ADR	37.6	-45.6	0.29	37.17	54	-16.83	-	-	0	101	V
			15.41574	54.62	PK-U	40.8	-42.47	0	52.95	-	-	74	-21.05	0	101	V
			15.410877	42.3	ADR	40.8	-42.61	0.29	40.78	54	-13.22	-	-	0	101	V
	6265	6 + 5	2.209636	61.04	PK-U	31.8	-50.3	0	42.54	-	-	74	-31.46	0	101	H
			2.209423	49.22	ADR	31.8	-50.29	0.29	31.02	54	-22.98	-	-	0	101	H
			2.193991	61.11	PK-U	31.8	-50.28	0	42.63	-	-	88.2	-45.57	0	101	V
			2.2141	49.58	ADR	31.8	-50.31	0.29	31.36	54	-22.64	-	-	0	101	V
			10.664986	56.77	PK-U	37.7	-45.6	0	48.87	-	-	74	-25.13	0	101	H
			10.664518	45	ADR	37.7	-45.61	0.29	37.38	54	-16.62	-	-	0	101	H
			15.467066	54.14	PK-U	40.9	-42.11	0	52.93	-	-	74	-21.07	0	101	H
			15.459447	42.13	ADR	40.8	-42.15	0.29	41.07	54	-12.93	-	-	0	101	H
			10.662118	57.61	PK-U	37.7	-45.6	0	49.71	-	-	74	-24.29	0	101	V
			10.661462	45.15	ADR	37.7	-45.61	0.29	37.53	54	-16.47	-	-	0	101	V
			15.463462	53.89	PK-U	40.9	-42.11	0	52.68	-	-	74	-21.32	0	101	V
			15.431873	42.46	ADR	40.8	-42.39	0.29	41.16	54	-12.84	-	-	0	101	V
	6420	6 + 5	2.189736	60.98	PK-U	31.8	-50.29	0	42.49	-	-	88.2	-45.71	0	101	H
			2.200357	49.27	ADR	31.8	-50.25	0.29	31.11	54	-22.89	-	-	0	101	H
			2.182401	61.38	PK-U	31.7	-50.36	0	42.72	-	-	88.2	-45.48	0	101	V
			2.212469	49.54	ADR	31.8	-50.31	0.29	31.32	54	-22.68	-	-	0	101	V
			10.672755	56.99	PK-U	37.7	-45.66	0	49.03	-	-	74	-24.97	0	101	H
			10.69808	45.24	ADR	37.7	-45.5	0.29	37.73	54	-16.27	-	-	0	101	H
			15.278991	54.1	PK-U	40.6	-42.49	0	52.21	-	-	88.2	-35.99	0	101	H
			15.279299	41.53	ADR	40.6	-42.5	0.29	39.92	68.2	-28.28	-	-	0	101	H
			10.674135	57.76	PK-U	37.7	-45.63	0	49.83	-	-	74	-24.17	0	101	V
			10.690037	45.21	ADR	37.7	-45.58	0.29	37.62	54	-16.38	-	-	0	101	V
			15.26738	53.06	PK-U	40.5	-42.43	0	51.13	-	-	88.2	-37.07	0	101	V
			15.283399	41.52	ADR	40.6	-42.44	0.29	39.97	68.2	-28.23	-	-	0	101	V

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

Pk - Peak detector

RMS - RMS detection

UNII-5 (MIMO TXBF)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
HDR4	6106	6 + 5	2.13982	57.87	PK-U	31.8	-46.42	0	43.25	-	-	88.2	-44.95	231	379	H
			2.139694	46.25	ADR	31.8	-46.43	1.3	32.92	68.2	-35.28	-	-	231	379	H
			3.0505	56.29	PK-U	32.9	-46.4	0	42.79	-	-	88.2	-45.41	47	327	H
			3.048397	44.88	ADR	32.9	-46.5	1.3	32.58	68.2	-35.62	-	-	47	327	H
			2.132677	58.43	PK-U	31.8	-46.53	0	43.7	-	-	88.2	-44.5	345	122	V
			2.134329	45.97	ADR	31.8	-46.53	1.3	32.54	68.2	-35.66	-	-	345	122	V
			3.048786	56.42	PK-U	32.9	-46.5	0	42.82	-	-	88.2	-45.38	165	269	V
			3.051622	44.76	ADR	32.9	-46.4	1.3	32.56	68.2	-35.64	-	-	165	269	V
			* 12.224361	52.97	PK-U	38.7	-41.44	0	50.23	-	-	74	-23.77	176	102	H
			* 12.225444	41.39	ADR	38.7	-41.5	1.3	39.89	54	-14.11	-	-	176	102	H
			* 12.20656	53.08	PK-U	38.7	-41.4	0	50.38	-	-	74	-23.62	123	143	V
			* 12.203801	41.35	ADR	38.7	-41.48	1.3	39.87	54	-14.13	-	-	123	143	V
	6265	6 + 5	2.66051	60.53	PK-U	32.7	-49.53	0	43.7	-	-	88.2	-44.5	360	101	H
			2.658737	48.45	ADR	32.7	-49.52	1.3	32.93	68.2	-35.27	-	-	360	101	H
			2.662227	59.9	PK-U	32.7	-49.51	0	43.09	-	-	88.2	-45.11	360	101	V
			2.661089	48.42	ADR	32.7	-49.52	1.3	32.9	68.2	-35.3	-	-	360	101	V
			10.57355	56.21	PK-U	37.8	-45.65	0	48.36	-	-	88.2	-39.84	360	101	H
			10.544617	43.95	ADR	37.8	-45.61	1.3	37.44	68.2	-30.76	-	-	360	101	H
			15.565585	53.21	PK-U	41	-42.21	0	52	-	-	74	-22	360	101	H
			15.538052	41.5	ADR	41	-41.99	1.3	41.81	54	-12.19	-	-	360	101	H
			10.547481	56.12	PK-U	37.8	-45.71	0	48.21	-	-	88.2	-39.99	360	101	V
			10.569879	43.89	ADR	37.8	-45.71	1.3	37.28	68.2	-30.92	-	-	360	101	V
			15.551675	53.77	PK-U	41.1	-42.08	0	52.79	-	-	74	-21.21	360	101	V
			15.538656	41.54	ADR	41	-41.96	1.3	41.88	54	-12.12	-	-	360	101	V
	6420	6 + 5	2.211667	61.14	PK-U	31.8	-50.31	0	42.63	-	-	74	-31.37	360	101	H
			2.213529	49.49	ADR	31.8	-50.31	1.3	32.28	54	-21.72	-	-	360	101	H
			3.557988	57.44	PK-U	33.2	-47.58	0	43.06	-	-	88.2	-45.14	360	101	H
			3.593087	45.96	ADR	33.7	-47.67	1.3	33.29	68.2	-34.91	-	-	360	101	H
			2.21887	61.05	PK-U	31.8	-50.32	0	42.53	-	-	74	-31.47	360	101	V
			2.219159	49.18	ADR	31.8	-50.32	1.3	31.96	54	-22.04	-	-	360	101	V
			3.57749	58.06	PK-U	33.5	-47.65	0	43.91	-	-	88.2	-44.29	360	101	V
			3.585969	45.88	ADR	33.7	-47.66	1.3	33.22	68.2	-34.98	-	-	360	101	V
			10.610909	56.25	PK-U	37.7	-45.87	0	48.08	-	-	74	-25.92	360	101	H
			10.623496	44.21	ADR	37.7	-45.74	1.3	37.47	54	-16.53	-	-	360	101	H
			10.60465	56.38	PK-U	37.7	-45.81	0	48.27	-	-	74	-25.73	360	101	V
			10.611621	44.41	ADR	37.7	-45.86	1.3	37.55	54	-16.45	-	-	360	101	V
XHDRPS2	6106	6 + 5	3.053461	58.86	PK-U	33.1	-48.39	0	43.57	-	-	88.2	-44.63	344	229	H
			3.045893	47.5	ADR	33	-48.37	0	32.13	68.2	-36.07	-	-	344	229	H
			2.055872	61.12	PK-U	32	-50.05	0	43.07	-	-	88.2	-45.13	326	372	H
			2.05457	49.59	ADR	32	-50.03	0	31.56	68.2	-36.64	-	-	326	372	H
			3.033346	58.89	PK-U	33	-48.33	0	43.56	-	-	88.2	-44.64	288	333	V
			3.041558	47.19	ADR	33	-48.35	0	31.84	68.2	-36.36	-	-	288	333	V
			2.058518	49.38	ADR	32	-50.06	0	31.32	68.2	-36.88	-	-	336	250	V
			2.056438	61.33	PK-U	32	-50.05	0	43.28	-	-	88.2	-44.92	336	250	V
			12.201368	55.72	PK-U	39	-43.69	0	51.03	-	-	74	-22.97	359	297	H
			12.201468	43.48	ADR	39	-43.69	0	38.79	54	-15.21	-	-	359	297	H
			12.193919	55.43	PK-U	39	-43.66	0	50.77	-	-	74	-23.23	360	388	V
			12.203574	43.59	ADR	39	-43.68	0	38.91	54	-15.09	-	-	360	388	V
	6265	6 + 5	2.065802	61.46	PK-U	31.9	-50.06	0	43.3	-	-	88.2	-44.9	86	128	H
			2.164041	49.55	ADR	31.7	-50.38	0	30.87	68.2	-37.33	-	-	86	128	H
			2.825463	60.04	PK-U	32.7	-49.25	0	43.49	-	-	74	-30.51	5	148	V
			2.825792	47.89	ADR	32.6	-49.26	0	31.23	54	-22.77	-	-	5	148	V
			3.114641	58.9	PK-U	33.2	-48.17	0	43.93	-	-	88.2	-44.27	232	258	H
			3.116756	46.61	ADR	33.2	-48.17	0	31.64	68.2	-36.56	-	-	232	258	H
			3.126488	58.02	PK-U	33.3	-48.11	0	43.21	-	-	88.2	-44.99	232	258	V
			3.116183	46.58	ADR	33.2	-48.18	0	31.6	68.2	-36.6	-	-	232	258	V
			12.551752	54.72	PK-U	38.9	-43.25	0	50.37	-	-	74	-23.63	293	298	H
			12.547961	43.17	ADR	38.9	-43.28	0	38.79	54	-15.21	-	-	293	298	H
			12.524739	54.75	PK-U	38.8	-43.42	0	50.13	-	-	74	-23.87	113	288	V
			12.5498	43.39	ADR	38.9	-43.3	0	38.99	54	-15.01	-	-	113	288	V
	6420	6 + 5	2.140441	58.12	PK-U	31.8	-46.4	0	43.52	-	-	88.2	-44.68	275	312	H
			2.143247	46.49	ADR	31.8	-46.42	0	31.87	68.2	-36.33	-	-	275	312	H
			3.211476	55.65	PK-U	33	-45.3	0	43.35	-	-	88.2	-44.85	200	370	H
			3.214759	44.19	ADR	32.9	-45.4	0	31.69	68.2	-36.51	-	-	200	370	H
			2.139005	57.68	PK-U	31.8	-46.5	0	42.98	-	-	88.2	-45.22	198	130	V
			2.140478	46.58	ADR	31.8	-46.4	0	31.98	68.2	-36.22	-	-	198	130	V
			3.208025	55.45	PK-U	33	-45.3	0	43.15	-	-	88.2	-45.05	15	107	V
			3.206427	44.19	ADR	33	-45.4	0	31.79	68.2	-36.41	-	-	15	107	V
			12.829907	52.47	PK-U	38.9	-40.7	0	50.67	-	-	88.2	-37.53	357	165	H
			12.832326	40.94	ADR	38.9	-40.83	0	39.01	68.2	-29.19	-	-	357	165	H
			12.834137	52.55	PK-U	38.9	-41	0	50.45	-	-	88.2	-37.75	321	208	V
			12.832948	40.89	ADR	38.9	-40.89	0	38.9	68.2	-29.3	-	-	321	208	V

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

Pk - Peak detector

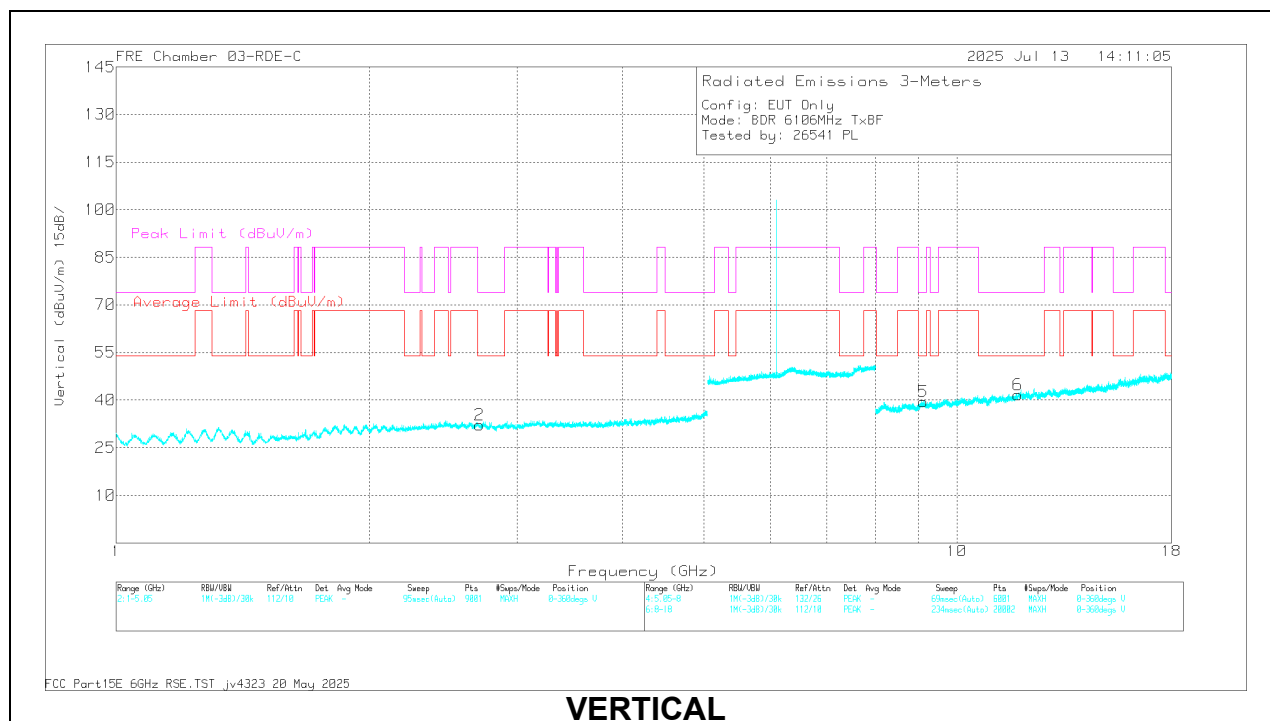
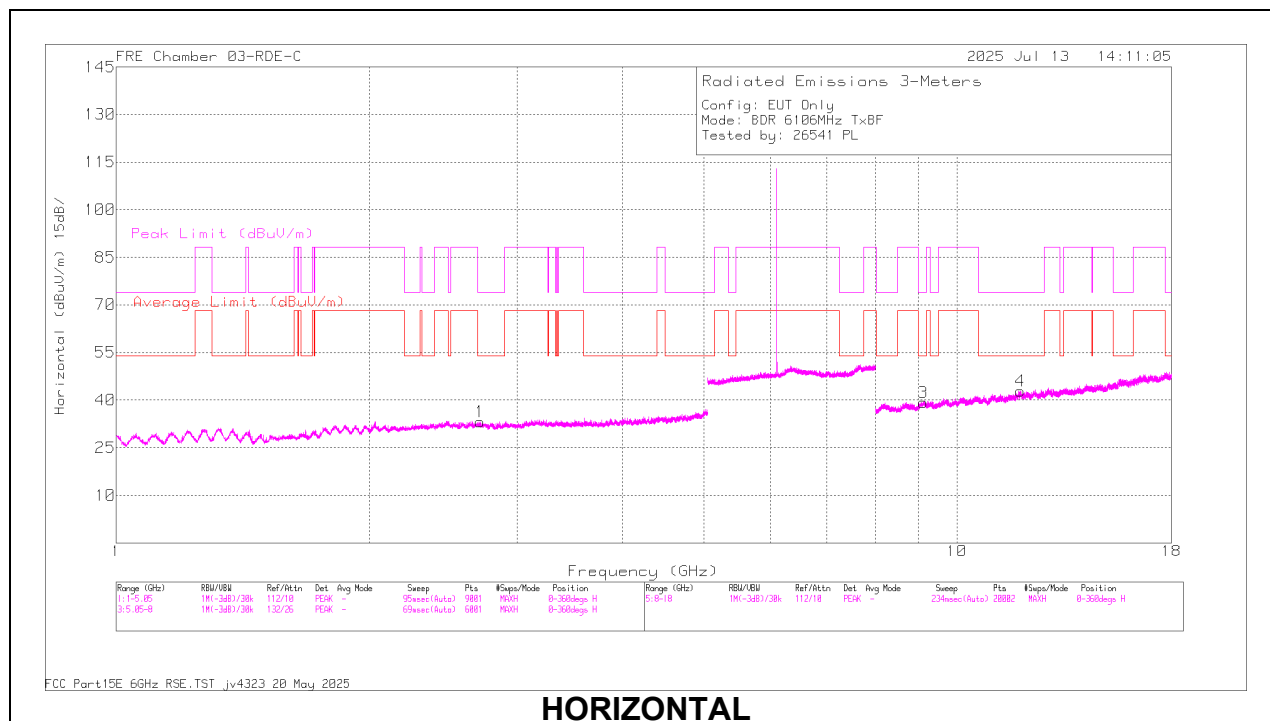
RMS - RMS detection

UNII-5 (MIMO TXBF)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
HDRPM8	6107	6 + 5	2.593875	45.94	PK-U	32.5	-26.19	0	52.25	-	-	88.2	-35.95	20	193	V
			2.594135	34.89	ADR	32.5	-26.19	0.3	41.5	68.2	-26.7	-	-	354	203	H
			2.596166	34.45	ADR	32.5	-26.19	0.3	41.06	68.2	-27.14	-	-	20	193	V
			2.604054	46.5	PK-U	32.5	-26.22	0	52.78	-	-	88.2	-35.42	354	203	H
			10.470307	58.19	PK-U	37.6	-45.46	0	50.33	-	-	88.2	-37.87	235	399	H
			10.471743	56.38	PK-U	37.6	-45.41	0	48.57	-	-	88.2	-39.63	82	178	V
			10.488758	45.56	ADR	37.6	-45.29	0.3	38.17	68.2	-30.03	-	-	235	399	H
			10.498237	44.93	ADR	37.6	-45.37	0.3	37.46	68.2	-30.74	-	-	82	178	V
			17.023125	55.36	PK-U	40.6	-42.9	0	53.06	-	-	88.2	-35.14	13	173	H
			17.041857	43.79	ADR	40.6	-42.8	0.3	41.89	68.2	-26.31	-	-	171	147	V
			17.044293	54.8	PK-U	40.6	-42.74	0	52.66	-	-	88.2	-35.54	171	147	V
			17.049456	43.83	ADR	40.6	-42.78	0.3	41.95	68.2	-26.25	-	-	13	173	H
	6265	6 + 5	2.939158	35.02	ADR	32.6	-25.69	0.3	42.23	68.2	-25.97	-	-	90	230	H
			2.961773	46.88	PK-U	32.7	-25.81	0	53.77	-	-	88.2	-34.43	90	230	H
			2.972322	34.74	ADR	32.8	-25.69	0.3	42.15	68.2	-26.05	-	-	203	137	V
			2.977164	46.32	PK-U	32.8	-25.73	0	53.39	-	-	88.2	-34.81	203	137	V
			8.740305	45.14	ADR	36.2	-45.36	0.3	36.28	68.2	-31.92	-	-	3	289	V
			8.74516	56.43	PK-U	36.2	-45.43	0	47.2	-	-	88.2	-41	3	289	V
			8.7517	44.61	ADR	36.2	-45.36	0.3	35.75	68.2	-32.45	-	-	6	217	H
			8.762955	56.72	PK-U	36.2	-45.43	0	47.49	-	-	88.2	-40.71	6	217	H
			9.807448	45.65	ADR	37.3	-45.56	0.3	37.69	68.2	-30.51	-	-	344	384	V
			9.808212	57.39	PK-U	37.3	-45.57	0	49.12	-	-	88.2	-39.08	344	384	V
			9.815221	45.48	ADR	37.3	-45.51	0.3	37.57	68.2	-30.63	-	-	129	291	H
			9.826009	57.59	PK-U	37.2	-45.52	0	49.27	-	-	88.2	-38.93	129	291	H
	6420	6 + 5	4.399884	34.71	ADR	33.8	-25.17	0.3	43.64	54	-10.36	-	-	31	154	H
			4.427119	46.71	PK-U	33.8	-24.85	0	55.66	-	-	88.2	-32.54	31	154	H
			4.429451	46.66	PK-U	33.8	-24.9	0	55.56	-	-	88.2	-32.64	147	303	V
			4.452066	34.75	ADR	33.8	-24.99	0.3	43.86	68.2	-24.34	-	-	147	303	V
			13.042415	44.04	ADR	38.9	-43.82	0.3	39.42	68.2	-28.78	-	-	266	148	H
			13.047355	56.2	PK-U	38.9	-43.86	0	51.24	-	-	88.2	-36.96	266	148	H
			13.088657	43.91	ADR	38.9	-43.21	0.3	39.9	68.2	-28.3	-	-	92	147	V
			13.110126	56.29	PK-U	38.9	-43.73	0	51.46	-	-	88.2	-36.74	92	147	V
			14.644396	57.12	PK-U	39.6	-44.56	0	52.16	-	-	88.2	-36.04	41	395	H
			14.66276	45.5	ADR	39.6	-44.37	0.3	41.03	68.2	-27.17	-	-	41	395	H
			14.764783	56.19	PK-U	39.7	-43.76	0	52.13	-	-	88.2	-36.07	282	167	V
			14.784577	44.74	ADR	39.8	-44.11	0.3	40.73	68.2	-27.47	-	-	282	167	V
XHDPRL16	6109	6 + 5	3.041208	59.37	PK-U	33	-47.82	0	44.55	-	-	88.2	-43.65	44	372	H
			3.050731	59.2	PK-U	33.1	-47.86	0	44.44	-	-	88.2	-43.76	14	170	V
			3.05834	47.7	ADR	33.1	-47.76	0.2	33.24	68.2	-34.96	-	-	44	372	H
			3.060459	47.59	ADR	33.1	-47.79	0.2	33.1	68.2	-35.1	-	-	14	170	V
			9.125261	57.7	PK-U	36.3	-44.03	0	49.97	-	-	74	-24.03	151	147	H
			9.127005	45.78	ADR	36.3	-43.98	0.2	38.3	54	-15.7	-	-	151	147	H
			9.142865	57.81	PK-U	36.4	-44.23	0	49.98	-	-	74	-24.02	93	141	V
			9.151392	45.68	ADR	36.4	-44.18	0.2	38.1	54	-15.9	-	-	93	141	V
			12.190244	46.59	ADR	39	-43.97	0.2	41.82	54	-12.18	-	-	245	265	V
			12.210814	58.9	PK-U	39	-44.05	0	53.85	-	-	74	-20.15	245	265	V
			12.228422	58.49	PK-U	39	-43.96	0	53.53	-	-	74	-20.47	237	198	H
			12.232333	46.53	ADR	39	-43.83	0.2	41.9	54	-12.1	-	-	237	198	H
	6265	6 + 5	* 1.539227	57.51	PK-U	28.1	-46.3	0	39.31	-	-	74	-34.69	360	101	H
			* 1.540409	45.9	ADR	28.1	-46.3	0.2	27.9	54	-26.1	-	-	360	101	H
			* 4.106872	55.58	PK-U	33.5	-45.89	0	43.19	-	-	74	-30.81	360	101	H
			* 4.109002	44.03	ADR	33.5	-45.9	0.2	31.83	54	-22.17	-	-	360	101	H
			* 1.543446	57.3	PK-U	28.1	-46.2	0	39.2	-	-	74	-34.8	360	101	V
			* 1.543531	46.06	ADR	28.1	-46.2	0.2	28.16	54	-25.84	-	-	360	101	V
			* 4.105998	55.69	PK-U	33.5	-45.8	0	43.39	-	-	74	-30.61	360	101	V
			* 4.105558	44.11	ADR	33.5	-45.8	0.2	32.01	54	-21.99	-	-	360	101	V
			* 11.80609	53.94	PK-U	38.5	-41.52	0	50.92	-	-	74	-23.08	360	101	H
			* 11.8043	41.95	ADR	38.5	-41.5	0.2	39.15	54	-14.85	-	-	360	101	H
			* 11.805105	53.63	PK-U	38.5	-41.5	0	50.63	-	-	74	-23.37	360	101	V
			* 11.806702	41.9	ADR	38.5	-41.64	0.2	38.96	54	-15.04	-	-	360	101	V
	6417	6 + 5	* 1.552567	57.52	PK-U	28.1	-46.1	0	39.52	-	-	74	-34.48	360	101	H
			* 1.552585	45.75	ADR	28.1	-46.1	0.2	27.95	54	-26.05	-	-	360	101	H
			* 4.183279	56.11	PK-U	33.6	-45.83	0	43.88	-	-	74	-30.12	360	101	H
			* 4.181145	44.28	ADR	33.6	-45.81	0.2	32.27	54	-21.73	-	-	360	101	H
			* 1.552923	57.53	PK-U	28.1	-46.1	0	39.53	-	-	74	-34.47	360	101	V
			* 1.551086	45.91	ADR	28.1	-46.28	0.2	27.93	54	-26.07	-	-	360	101	V
			* 4.180494	55.98	PK-U	33.6	-45.8	0	43.78	-	-	74	-30.22	360	101	V
			* 4.17773	44.16	ADR	33.6	-45.93	0.2	32.03	54	-21.97	-	-	360	101	V
			* 12.110774	53.99	PK-U	38.7	-40.98	0	51.71	-	-	74	-22.29	360	101	H
			* 12.112776	41.8	ADR	38.7	-40.98	0.2	39.72	54	-14.28	-	-	360	101	H
			* 12.112232	53.18	PK-U	38.7	-40.92	0	50.96	-	-	74	-23.04	360	101	V
			* 12.111218	41.63	ADR	38.7	-40.98	0.2	39.55	54	-14.45	-	-	360	101	V

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

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL / 6106MHZ)

RADIATED EMISSIONS

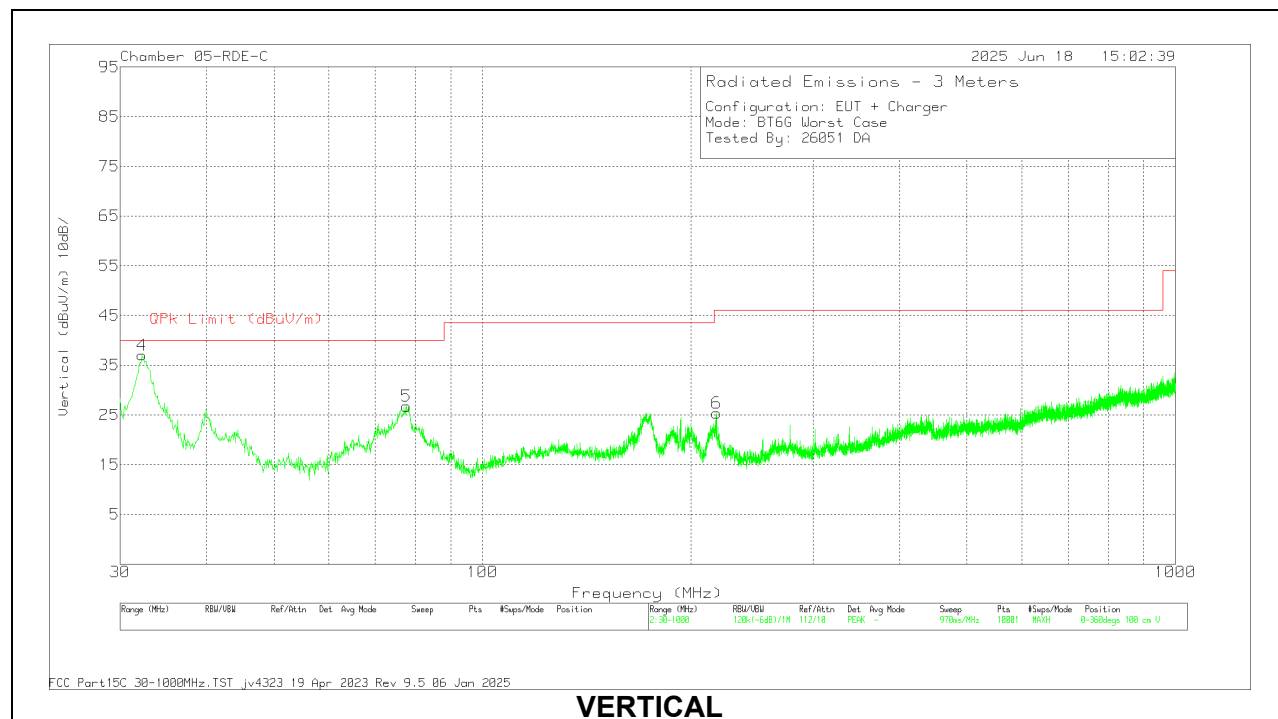
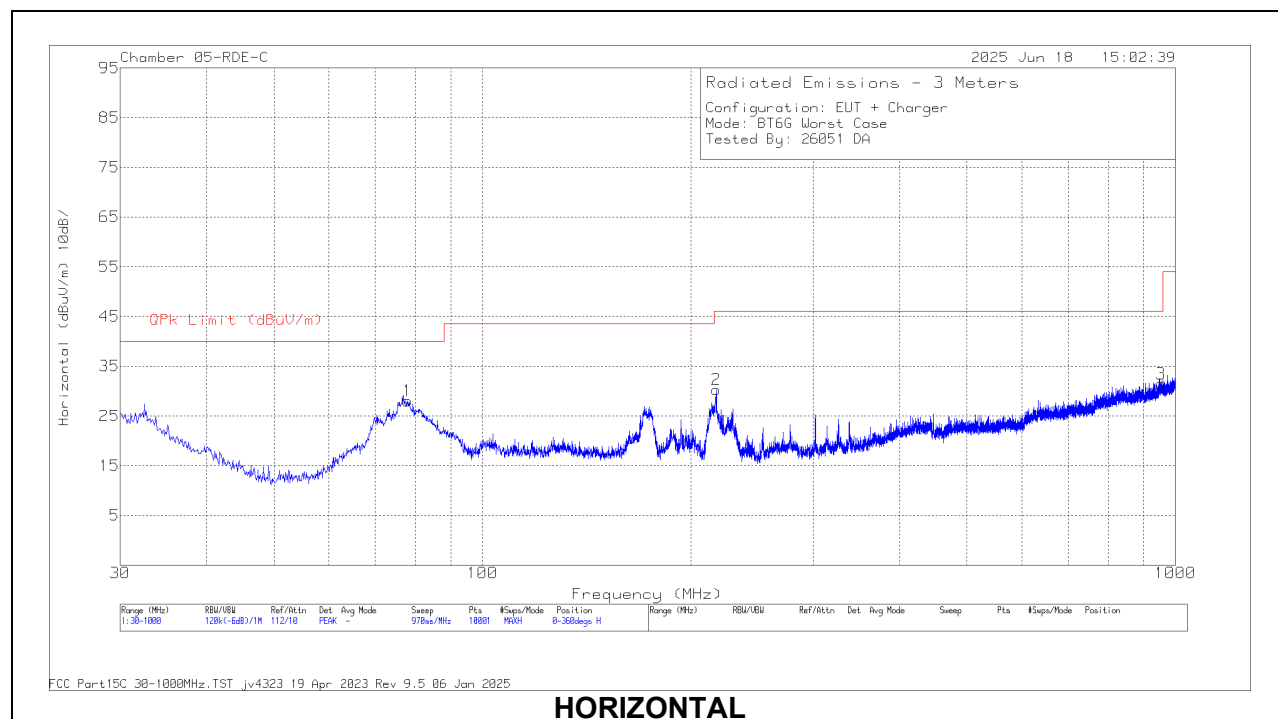
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.707566	59.1	PK-U	32.4	-48.18	0	43.32	-	-	74	-30.68	308	265	H
1	* 2.707033	46.56	ADR	32.4	-48.19	1.15	31.92	54	-22.08	-	-	308	265	H
2	* 2.709774	58.49	PK-U	32.4	-48.16	0	42.73	-	-	74	-31.27	168	370	V
2	* 2.70831	46.64	ADR	32.4	-48.17	1.15	32.02	54	-21.98	-	-	168	370	V
3	* 9.119804	56.42	PK-U	36.4	-44.27	0	48.55	-	-	74	-25.45	325	245	H
3	* 9.120828	45.01	ADR	36.4	-44.27	1.15	38.29	54	-15.71	-	-	325	245	H
4	* 11.904885	55.22	PK-U	38.7	-41.56	0	52.36	-	-	74	-21.64	21	145	H
4	* 11.905047	42.95	ADR	38.7	-41.55	1.15	41.25	54	-12.75	-	-	21	145	H
5	* 9.112724	56.51	PK-U	36.4	-44.34	0	48.57	-	-	74	-25.43	316	374	V
5	* 9.112213	45.08	ADR	36.4	-44.35	1.15	38.28	54	-15.72	-	-	316	374	V
6	* 11.826085	54.96	PK-U	38.7	-42.07	0	51.59	-	-	74	-22.41	36	133	V
6	* 11.825248	43.14	ADR	38.7	-42.1	1.15	40.89	54	-13.11	-	-	36	133	V

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

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1. WORST CASE BELOW 1 GHz – HIGH POWER

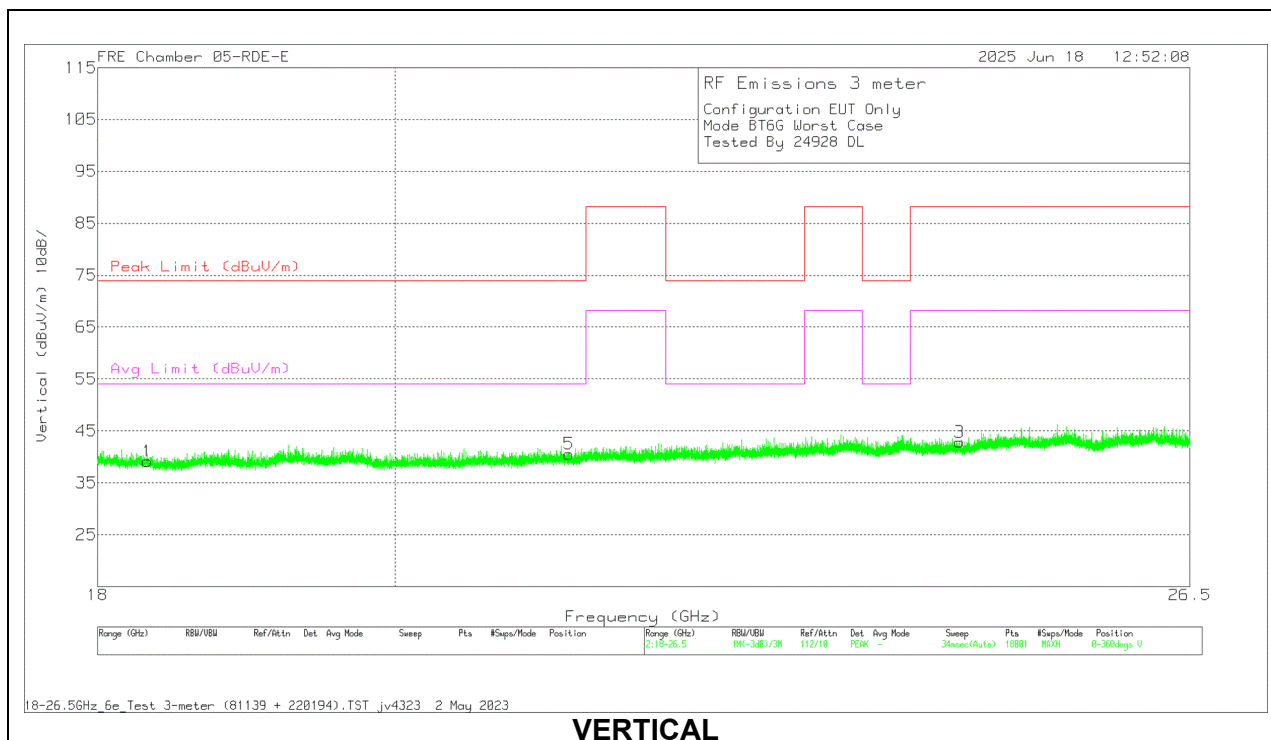
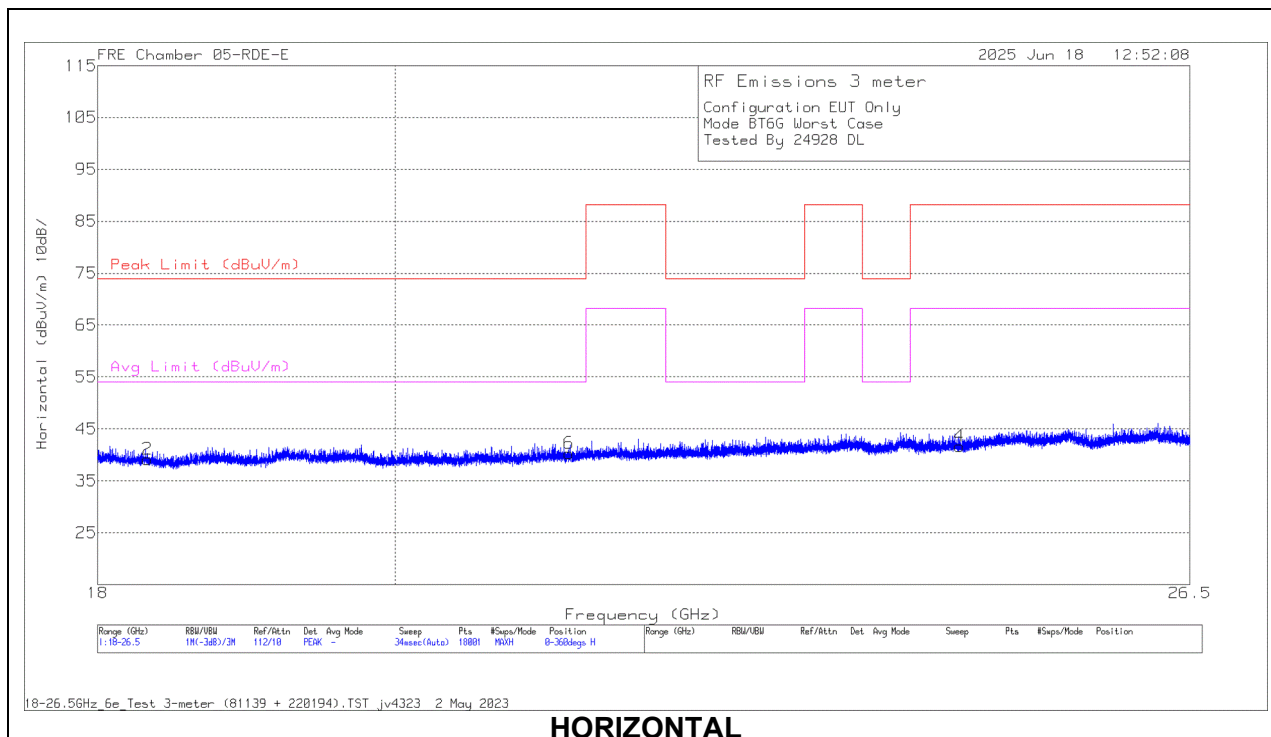


RADIATED EMISSIONS

Frequency (MHz)	Meter Reading (dBuV)	Det	171863 ACF (dB/m)	CBL AMP (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
32.6261	39.28	Qp	25	-31	33.28	40	-6.72	128	100	V
76.2796	40.34	Qp	13.9	-30.3	23.94	40	-16.06	100	202	V
77.0998	43.43	Qp	13.9	-30.5	26.83	40	-13.17	178	213	H
217.457	43.4	Qp	16.4	-30.2	29.6	46.02	-16.42	54	144	H
217.458	37.85	Qp	16.4	-30.2	24.05	46.02	-21.97	101	149	V
948.238	20.05	Qp	28.5	-27	21.55	46.02	-24.47	325	280	H

Qp - Quasi-Peak detector

11.2. WORST CASE 18-26 GHz – HIGH POWER



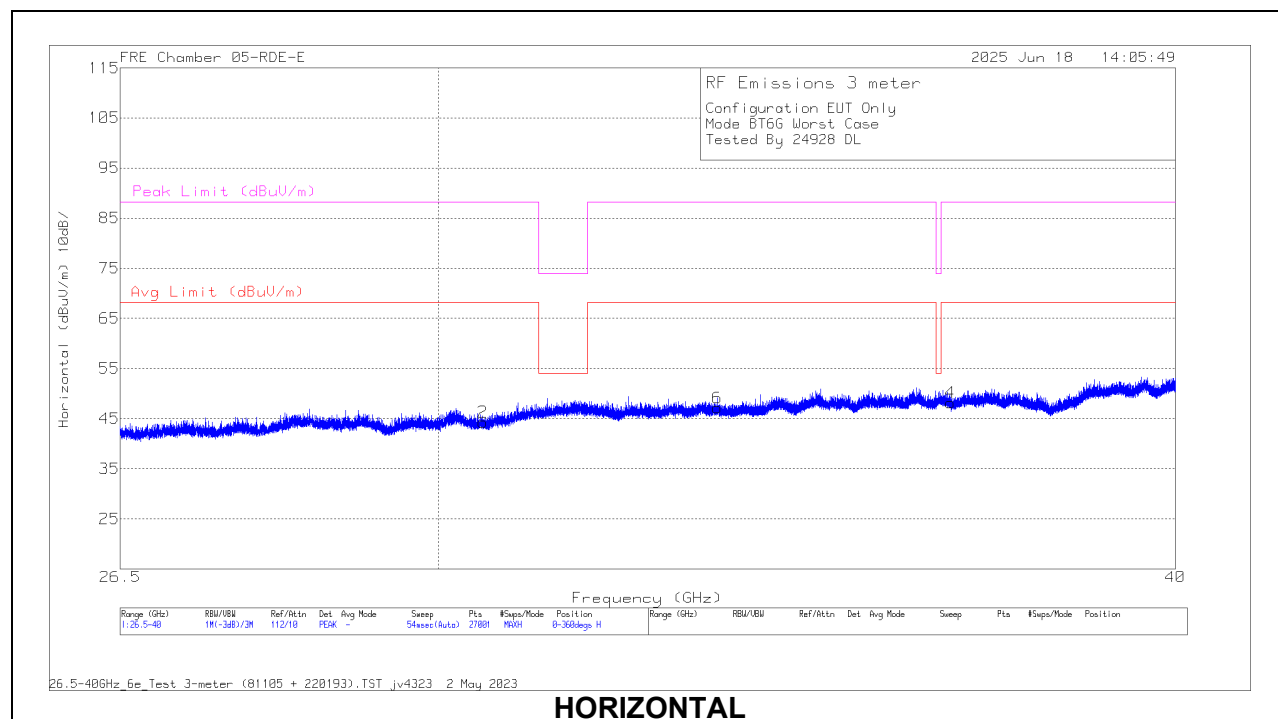
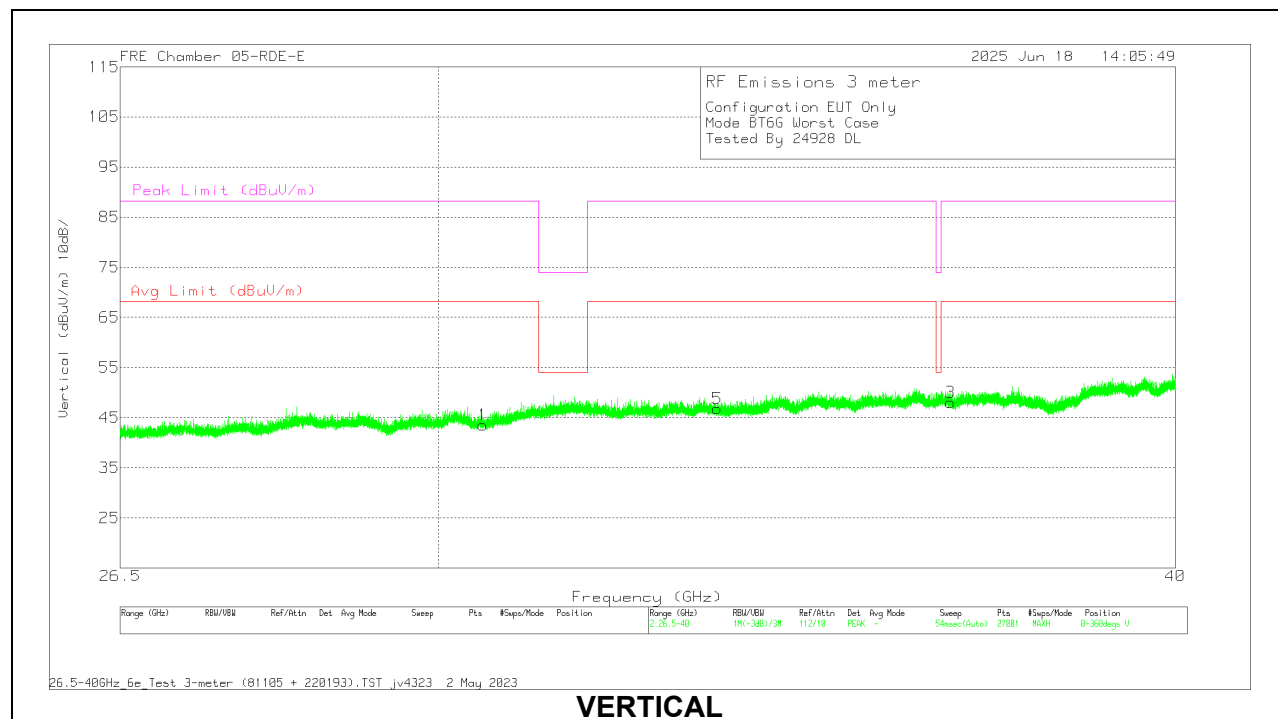
RADIATED EMISSIONS

Range 1: Horizontal 18 - 26.5GHz															
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 18.318278	45.71	Pk	32.4	-62.3	23.3	0	39.11	74	-34.89	-	-	0-360	199	H
4	24.424108	43.11	Pk	34	-62.9	27.4	0	41.61	-	-	-	-	0-360	199	H
6	* 21.270137	44.05	Pk	33.3	-62.4	25.3	0	40.25	74	-33.75	-	-	0-360	101	H

Range 2: Vertical 18 - 26.5GHz															
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 18.318278	45.69	Pk	32.4	-62.3	23.3	0	39.09	74	-34.91	-	-	0-360	199	V
3	24.424108	44.34	Pk	34	-62.9	27.4	0	42.84	-	-	-	-	0-360	101	V
5	* 21.270137	44.36	Pk	33.3	-62.4	25.3	0	40.56	74	-33.44	-	-	0-360	199	V

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

Pk - Peak detector

11.3. WORST CASE 26-40 GHz – HIGH POWER**HORIZONTAL****VERTICAL**

RADIATED EMISSIONS

Range 1: Horizontal 26.5 - 40GHz															
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81105 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	30.5295	41.29	Pk	36.2	-63.7	30.5	0	44.29	-	-	-	-	0-360	101	H
4	36.636	42.36	Pk	37.4	-65.9	34.3	0	48.16	-	-	-	-	0-360	199	H
6	33.4485	42.21	Pk	36.8	-64.1	32.2	0	47.11	-	-	-	-	0-360	101	H

Range 2: Vertical 26.5 - 40GHz															
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81105 ACF (dB/m)	CBL/AMP (dB)	CBL (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.5295	40.5	Pk	36.2	-63.7	30.5	0	43.5	-	-	-	-	0-360	199	V
3	36.636	42.24	Pk	37.4	-65.9	34.3	0	48.04	-	-	-	-	0-360	199	V
5	33.4485	41.91	Pk	36.8	-64.1	32.2	0	46.81	-	-	-	-	0-360	101	V

Pk - Peak detector

12. 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.

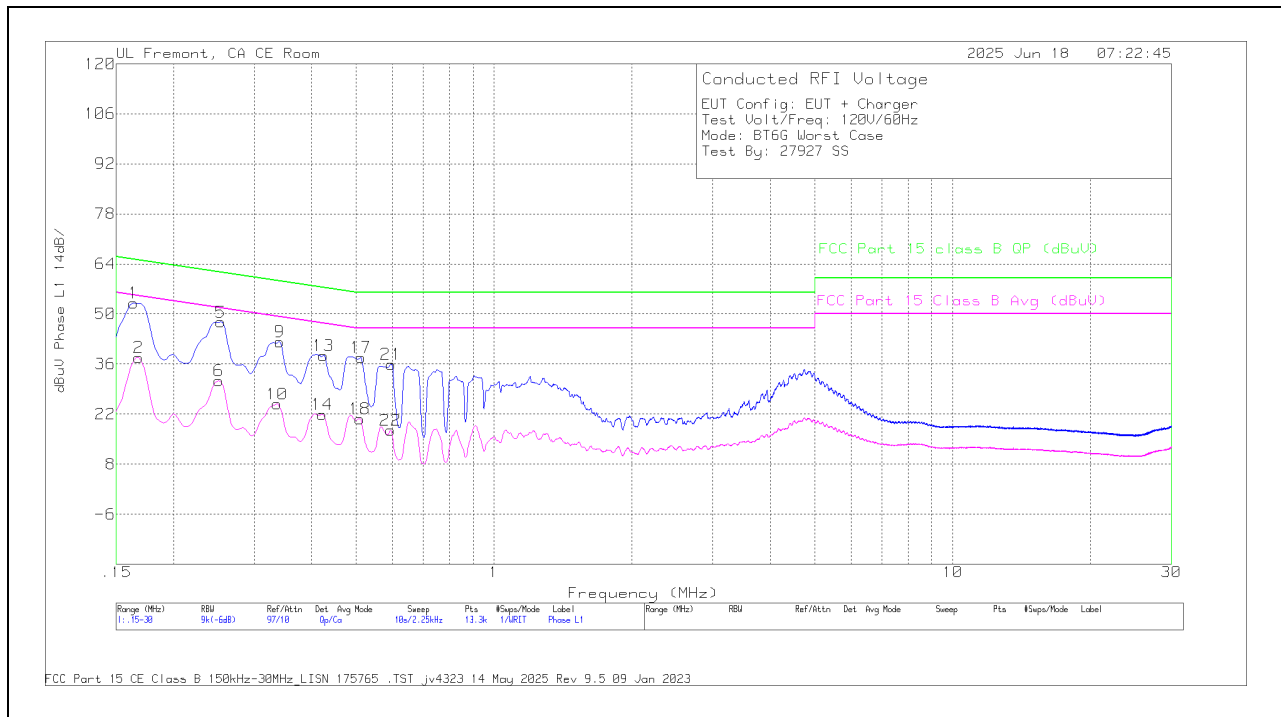
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

12.1. EUT WITH AC ADAPTER

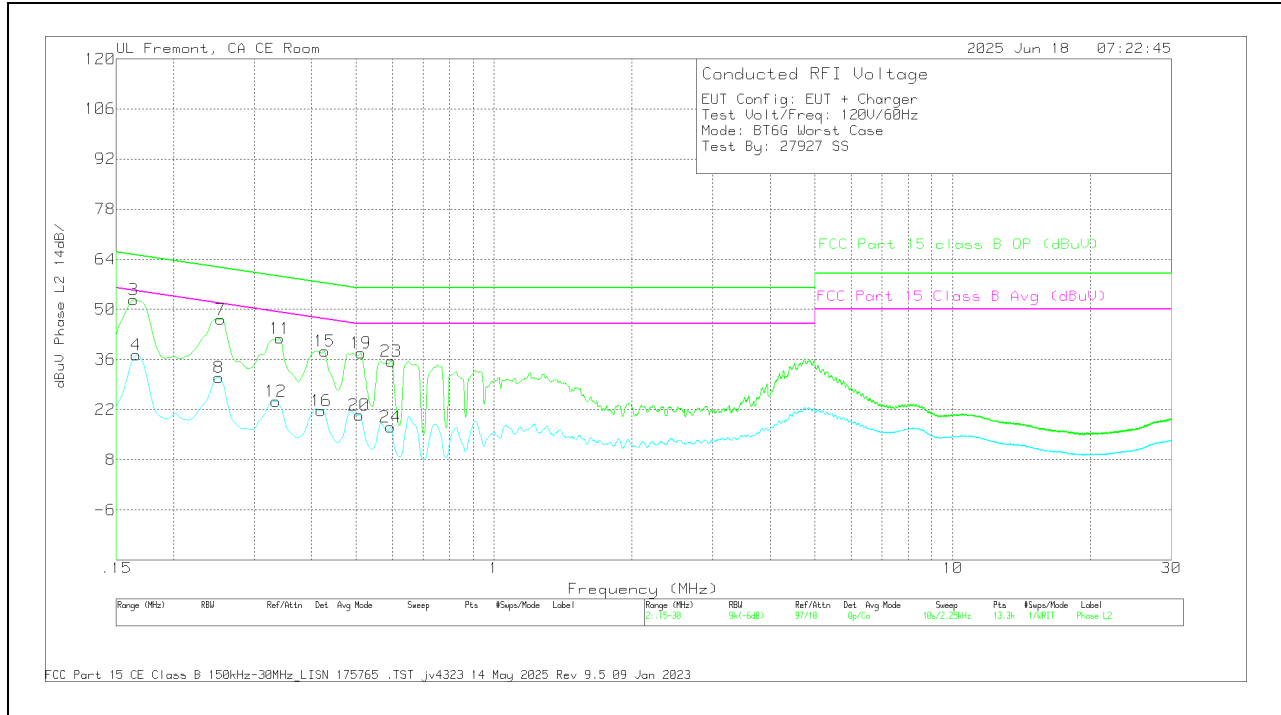
LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 C3_C1_Limiter noPad_UL (dB)	LISN (dB)	10dB Atten (dB)	DCCF (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
2	.168	17.19	Ca	9.4	.1	10	1.15	37.84	55.06	-17.22	-	-
6	.2513	10.81	Ca	9.4	0	10	1.15	31.36	51.72	-20.36	-	-
10	.3368	4.22	Ca	9.4	0	10	1.15	24.77	49.28	-24.51	-	-
14	.4223	1.31	Ca	9.4	0	10	1.15	21.86	47.4	-25.54	-	-
18	.51	.26	Ca	9.3	0	10	1.15	20.71	46	-25.29	-	-
22	.5955	-3.03	Ca	9.3	0	10	1.15	17.42	46	-28.58	-	-
1	.1635	32.4	Qp	9.4	.1	10	1.15	53.05	-	-	65.28	-12.23
5	.2535	27.17	Qp	9.4	0	10	1.15	47.72	-	-	61.64	-13.92
9	.3413	21.7	Qp	9.4	0	10	1.15	42.25	-	-	59.17	-16.92
13	.4245	17.93	Qp	9.3	0	10	1.15	38.38	-	-	57.36	-18.98
17	.5123	17.39	Qp	9.3	0	10	1.15	37.84	-	-	56	-18.16
21	.5966	15.47	Qp	9.3	0	10	1.15	35.92	-	-	56	-20.08

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS



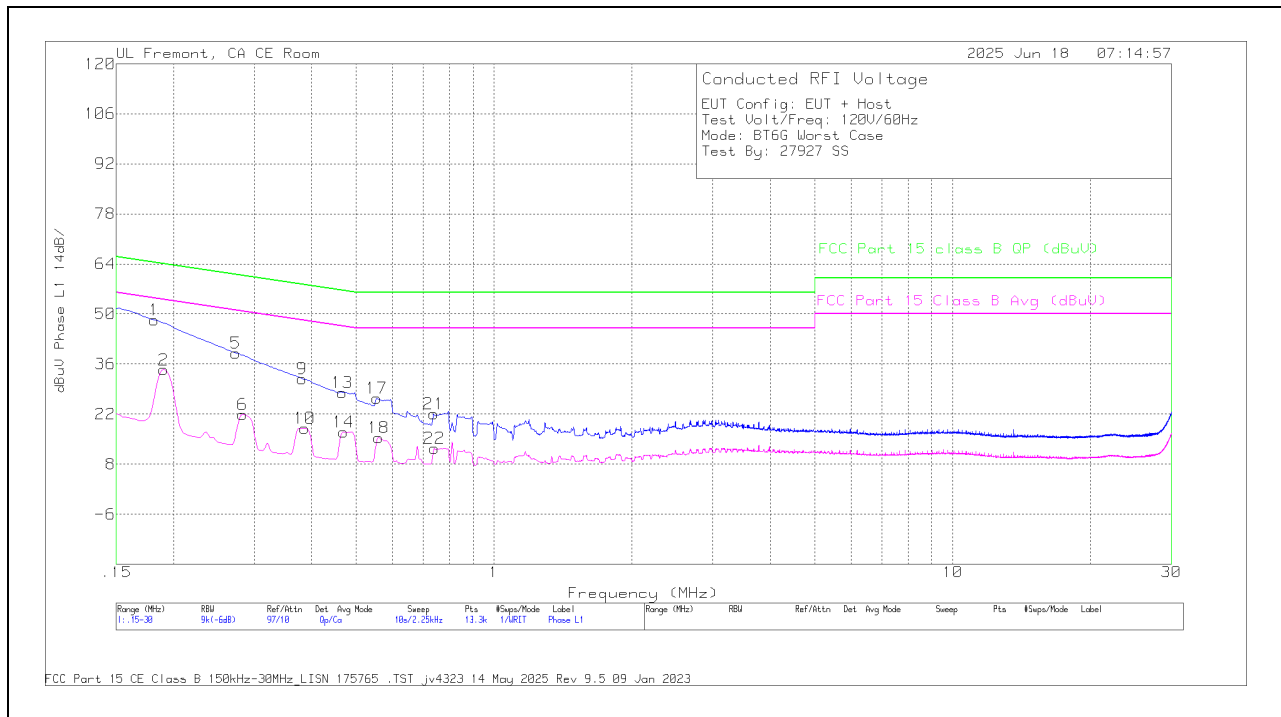
Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 C3_C2 Limiter no Pad_UL (dB)	LISN (dB)	10dB Atten (dB)	DCCF (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
4	.1658	16.62	Ca	9.4	.1	10	1.15	37.27	55.17	-17.9	-	-
8	.2513	10.46	Ca	9.4	0	10	1.15	31.01	51.72	-20.71	-	-
12	.3345	3.89	Ca	9.3	0	10	1.15	24.34	49.34	-25	-	-
16	.42	1.3	Ca	9.3	0	10	1.15	21.75	47.45	-25.7	-	-
20	.5078	0	Ca	9.3	0	10	1.15	20.45	46	-25.55	-	-
24	.5955	-3.26	Ca	9.3	0	10	1.15	17.19	46	-28.81	-	-
3	.1635	32.02	Qp	9.4	.1	10	1.15	52.67	-	-	65.28	-12.61
7	.2535	26.64	Qp	9.4	0	10	1.15	47.19	-	-	61.64	-14.45
11	.3413	21.48	Qp	9.3	0	10	1.15	41.93	-	-	59.17	-17.24
15	.4268	17.9	Qp	9.3	0	10	1.15	38.35	-	-	57.32	-18.97
19	.5123	17.35	Qp	9.3	0	10	1.15	37.8	-	-	56	-18.2
23	.5966	15.15	Qp	9.3	0	10	1.15	35.6	-	-	56	-20.4

Qp - Quasi-Peak detector

Ca - CISPR average detection

12.2. EUT WITH LAPTOP

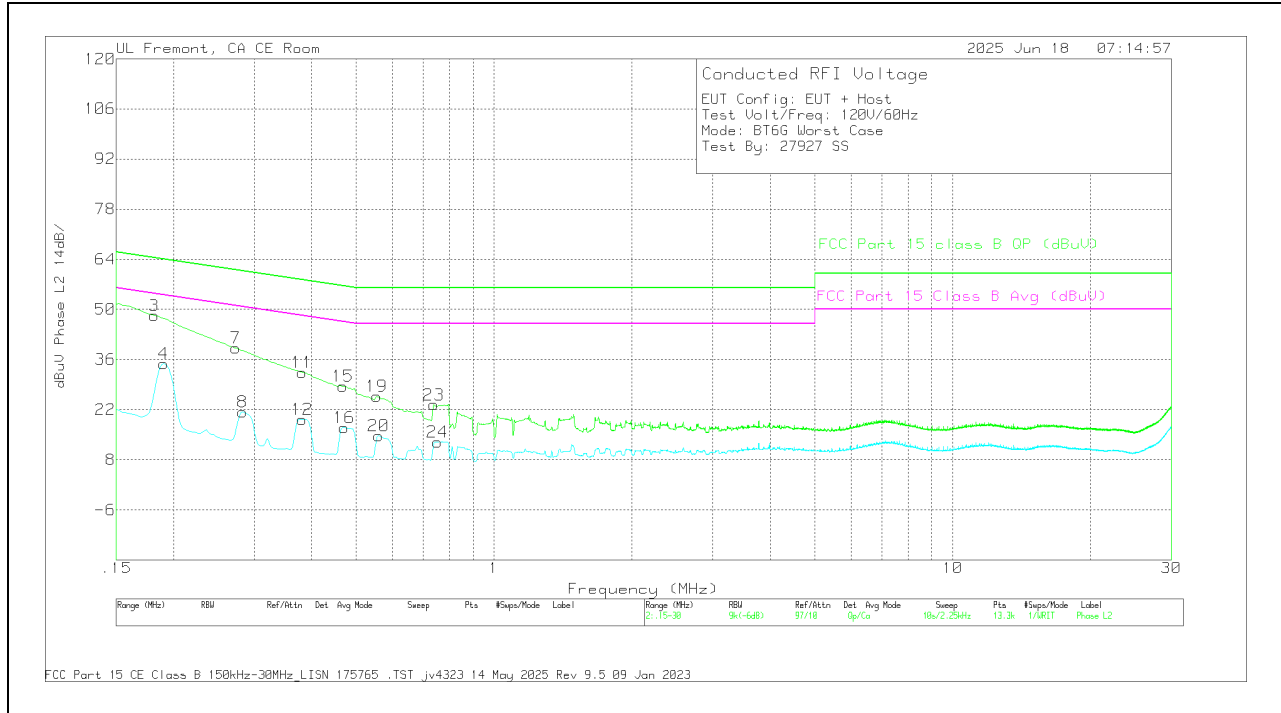
LINE 1 RESULTS



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)	DCCF (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
2	.1905	13.86	Ca	9.4	.1	10	1.04	34.4	54.01	-19.61	-	-
6	.2828	1.45	Ca	9.4	0	10	1.04	21.89	50.73	-28.84	-	-
10	.3863	-2.42	Ca	9.4	0	10	1.04	18.02	48.14	-30.12	-	-
14	.4695	-3.53	Ca	9.4	0	10	1.04	16.91	46.52	-29.61	-	-
18	.5595	-5	Ca	9.3	0	10	1.04	15.34	46	-30.66	-	-
22	.7418	-8.03	Ca	9.4	0	10	1.04	12.41	46	-33.59	-	-
1	.1815	27.74	Qp	9.4	.1	10	1.04	48.28	-	-	64.42	-16.14
5	.2738	18.67	Qp	9.4	0	10	1.04	39.11	-	-	61	-21.89
9	.3818	11.45	Qp	9.4	0	10	1.04	31.89	-	-	58.24	-26.35
13	.4673	7.64	Qp	9.4	0	10	1.04	28.08	-	-	56.56	-28.48
17	.555	6.16	Qp	9.3	0	10	1.04	26.5	-	-	56	-29.5
21	.7395	1.6	Qp	9.4	0	10	1.04	22.04	-	-	56	-33.96

Qp - Quasi-Peak detector
Ca - CISPR average detection

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)	DCCF (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
4	.1905	14.35	Ca	9.4	0	10	1.04	34.79	54.01	-19.22	-	-
8	.2828	.86	Ca	9.4	0	10	1.04	21.3	50.73	-29.43	-	-
12	.3818	-1.12	Ca	9.3	0	10	1.04	19.22	48.24	-29.02	-	-
16	.4706	-3.34	Ca	9.3	0	10	1.04	17	46.5	-29.5	-	-
20	.5606	-5.71	Ca	9.3	0	10	1.04	14.63	46	-31.37	-	-
24	.753	-7.42	Ca	9.3	0	10	1.04	12.92	46	-33.08	-	-
3	.1815	27.82	Qp	9.4	0	10	1.04	48.26	-	-	64.42	-16.16
7	.2738	18.73	Qp	9.4	0	10	1.04	39.17	-	-	61	-21.83
11	.3818	12.1	Qp	9.3	0	10	1.04	32.44	-	-	58.24	-25.8
15	.4684	8.14	Qp	9.3	0	10	1.04	28.48	-	-	56.54	-28.06
19	.555	5.43	Qp	9.3	0	10	1.04	25.77	-	-	56	-30.23
23	.7395	3.02	Qp	9.3	0	10	1.04	23.36	-	-	56	-32.64

Qp - Quasi-Peak detector
Ca - CISPR average detection

13. SETUP PHOTOS

Refer to 15496245-EP1V1 FCC IC Setup_Photo for setup photos

APPENDIX A – SPOT CHECK EVALUATION

MODEL DIFFERENCES

The manufacturer hereby declares the following for models A3522, A3523 and A3524.

Two models have the same PCB layout, design, common components, antennas, antenna locations and housing cases, except feature differences/sim support as indicated below which caused antenna gain changed as documented in section 6.5.1 of the report and disabled/enabled cellular bands via software as shown below.

Model	FCC ID	IC ID	Feature Difference	Sim Support	Reference Model
A3522	BCG-E8957A	579C-E8957A	-Without FR2 -Added B11/21 -No UL MIMO	eSIM	-
A3523	BCG-E8958A	579C-E8958A	-Without FR2 -No LTE/5GNR B14/29/71 -No LTE B11/21 -No UL MIMO	eSIM+pSIM	A3522
A3524	BCG-E8959A	579C-E8959A	-Without FR2 -No LTE/5GNR B14/29/71 -No LTE B11/21 -With UL MIMO (n41/78/79) -No MSS / 5GNR B53	pSIM+pSIM	A3522 and A3523

The spot check plan allows for data reuse from the reference model where the variant models 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 A3523

A3523 SPOT CHECK RESULTS												
Equipment Class / Technology	Frequency (GHz)	Mode	Modulation	Test Item		Channel	Measured Frequency (GHz)	Original Model: A3522	Sub Model: A3523	Delta (dB)	Margin	Remarks
								FCC ID : BCG-E8957A IC : 579C-E8957A	FCC ID : BCG-E8958A IC : 579C-E8958A			
VLP / NB UNII	5925 - 6425 UNII-5	Low Power (ANT 6)	HDT4	EIRP Power (dBm)	Fundamental	Mid	6.265	-3.31	-3.40	-0.09	-17.31	Note 1
		High Power (ANT 6)	XHDRPL16	EIRP Power (dBm)	Fundamental	Mid	6.109	2.19	2.11	-0.08	-11.81	Note 1
		Low Power (ANT 6)	HDRPM8	EIRP Power (dBm)	Fundamental	Low	6.107	-0.94	-0.97	-0.03	-14.94	Note 1
		High Power (ANT 6)	XHDRPL16	Radiated Bandedge (dBuV/m)	Vertical Low Bandedge	Low	5.885401	-48.24	-47.93	0.31	-21.24	Note 1

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

Note 2: Deviation from reference to variant exceeds the value allowed by equation (4) in KDB 484596. Additional tests performed on second channel.

SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3524

A3524 SPOT CHECK RESULTS												
Equipment Class	Frequency (GHz)	Mode	Modulation	Test Item		Channel	Measured Frequency (GHz)	Original Model: A3522	Sub Model: A3524	Delta (dB)	Margin	Remarks
								FCC ID : BCG-E8957A IC : 579C-E8957A	FCC ID : BCG-E8959A IC : 579C-E8959A			
VLP / NB UNII	5925 - 6425 UNII-5	Low Power (ANT 6)	HDT4	EIRP Power (dBm)	Fundamental	Mid	6.265	-3.31	-3.41	-0.10	-17.31	Note 1
		High Power (ANT 6)	XHDRPL16	EIRP Power (dBm)	Fundamental	Mid	6.265	2.19	1.89	-0.30	-11.81	Note 1
		Low Power (ANT 6)	HDRPM8	EIRP Power (dBm)	Fundamental	Low	6.107	-0.94	-0.98	-0.04	-14.94	Note 1

Equipment Class	Frequency (GHz)	Mode	Modulation	Test Item		Channel	Measured Frequency (GHz)	Original Model: A3523	Sub Model: A3524	Delta (dB)	Margin	Remarks
								FCC ID : BCG-E8958A IC : 579C-E8958A	FCC ID : BCG-E8959A IC : 579C-E8959A			
VLP / NB UNII	5925 - 6425 UNII-5	High Power (ANT 5)	LE2M	Avg Radiated Bandedge (dBm)	Horz. low Bandedge	Low	5.872335	-45.61	-46.92	-1.31	-18.61	Note 1
		High power (TXBF)	LE2M	Avg RSE (dBuV/m)	Vertical 1 to 18	Low	12.658267	42.51	40.98	-1.53	-11.49	Note 1

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

Note 2: Deviation from reference to variant exceeds the value allowed by equation (4) in KDB 484596. Additional tests performed on second channel.

END OF TEST REPORT