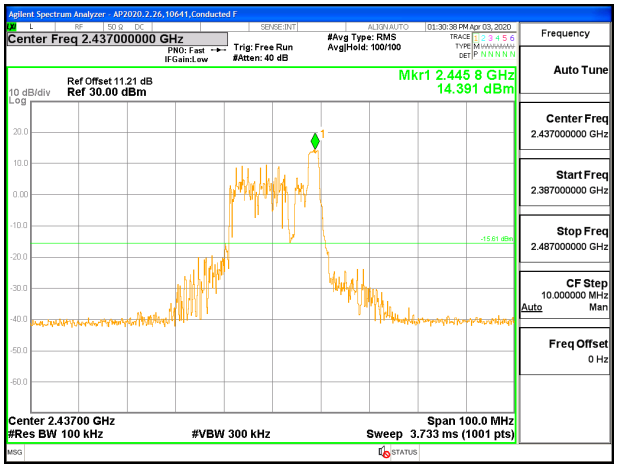
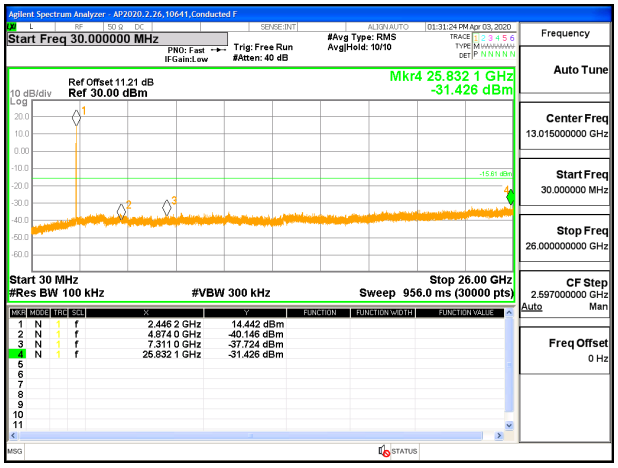
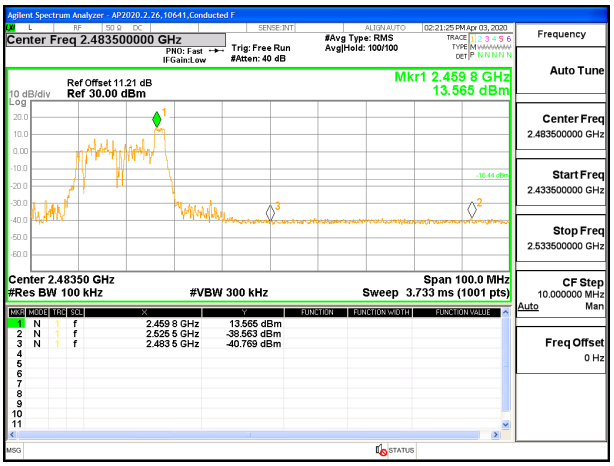


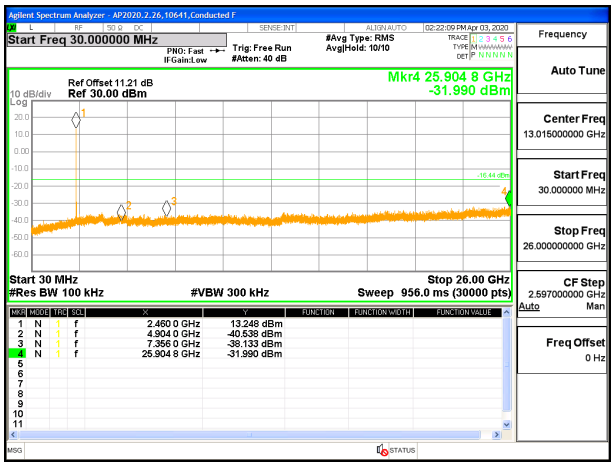
MID CHANNEL REFERENCE LEVEL ANT 3



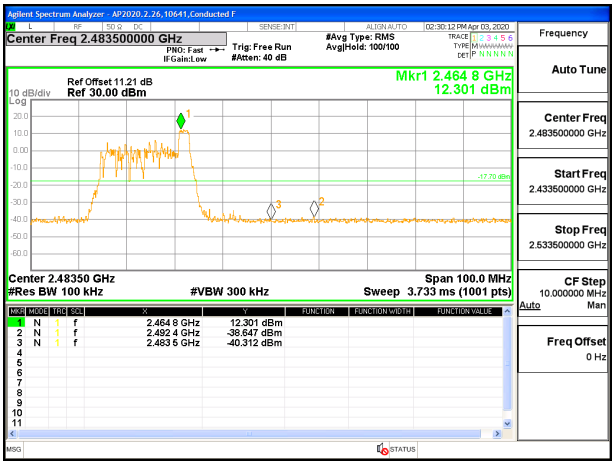
OUT-OF-BAND MID CHANNEL ANT 3



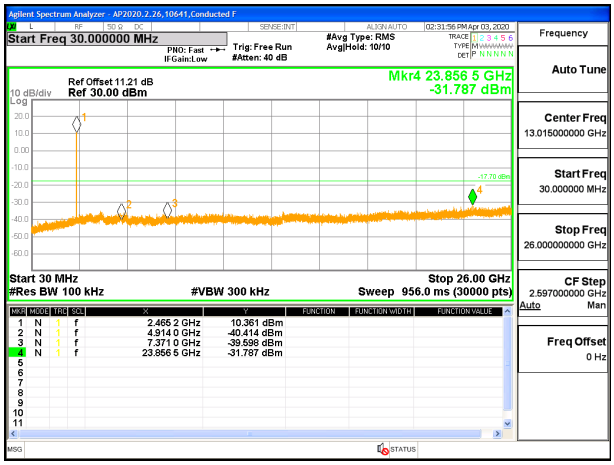
HIGH CHANNEL 9 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 9 ANT 3



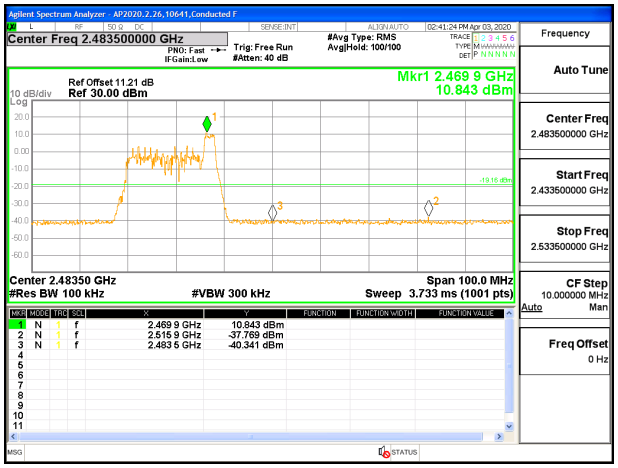
HIGH CHANNEL 10 BANDEDGE ANT 3



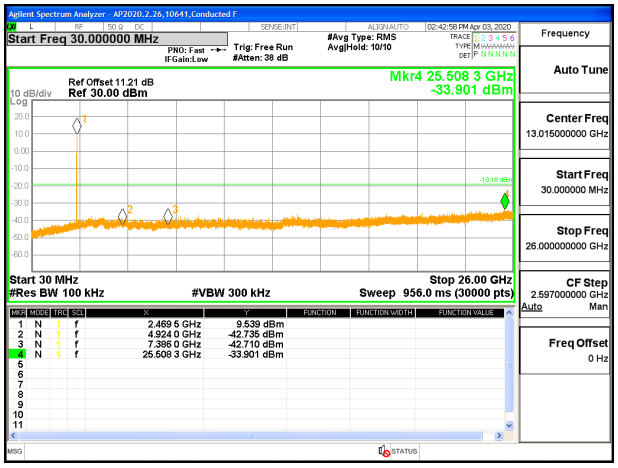
OUT-OF-BAND HIGH CHANNEL 10 ANT 3

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

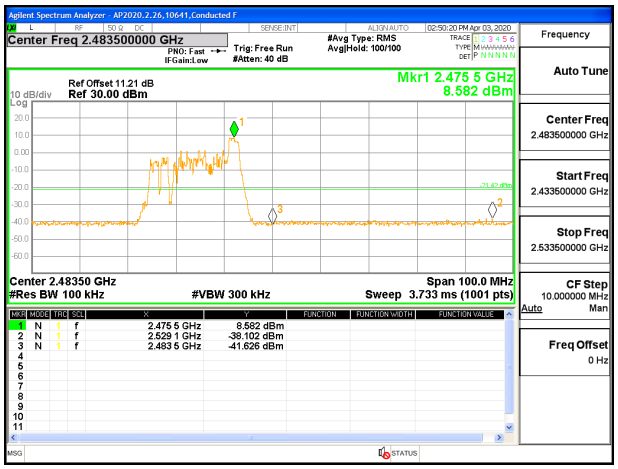
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



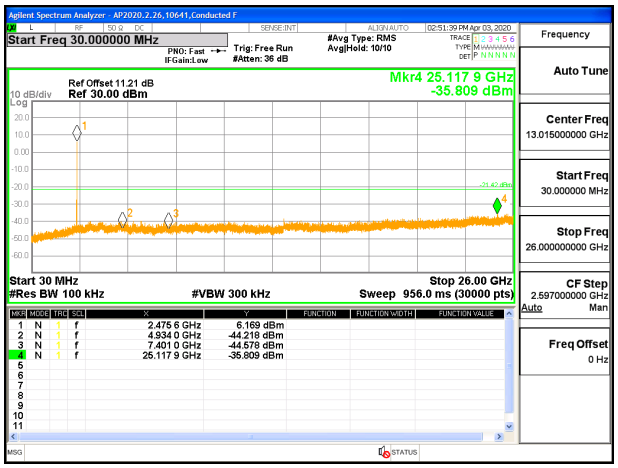
HIGH CHANNEL 11 BANDEDGE ANT 3



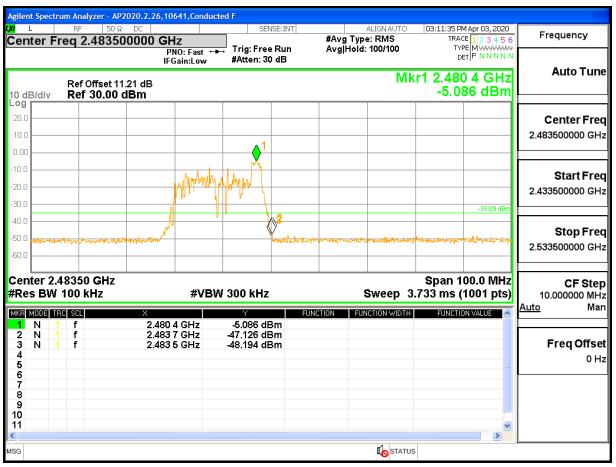
OUT-OF-BAND HIGH CHANNEL 11 ANT 3



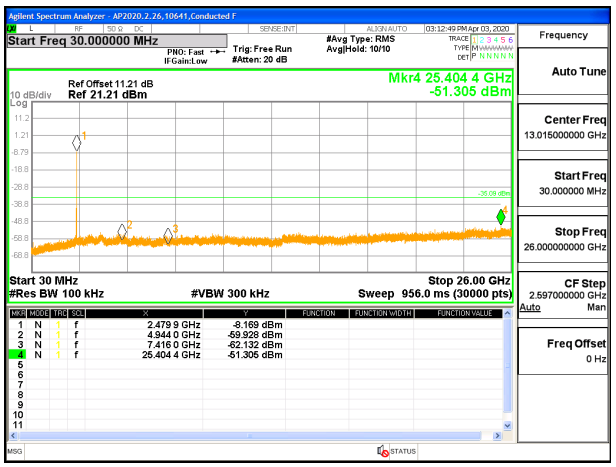
HIGH CHANNEL 12 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 12 ANT 3



HIGH CHANNEL 13 BANDEDGE ANT 3

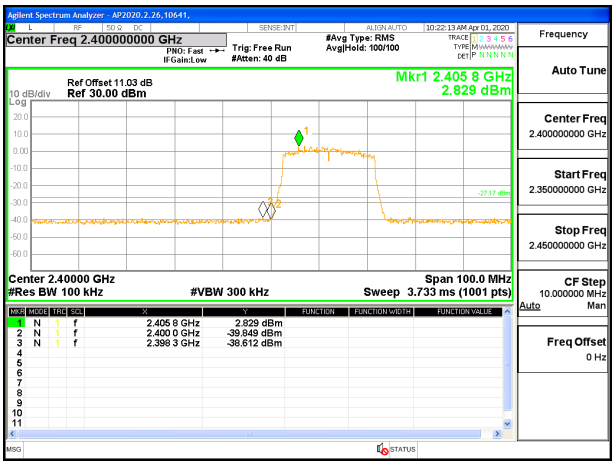


OUT-OF-BAND HIGH CHANNEL 13 ANT 3

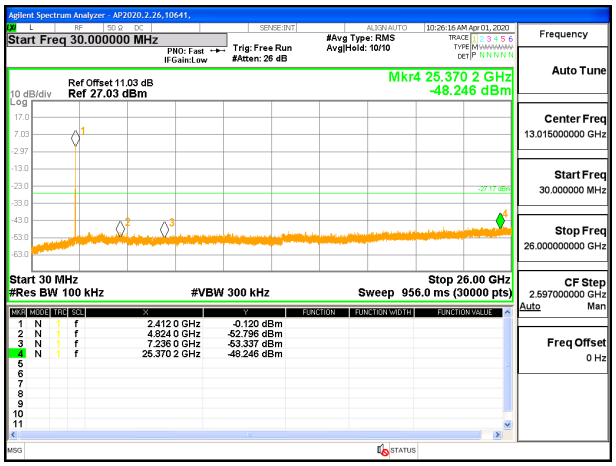
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

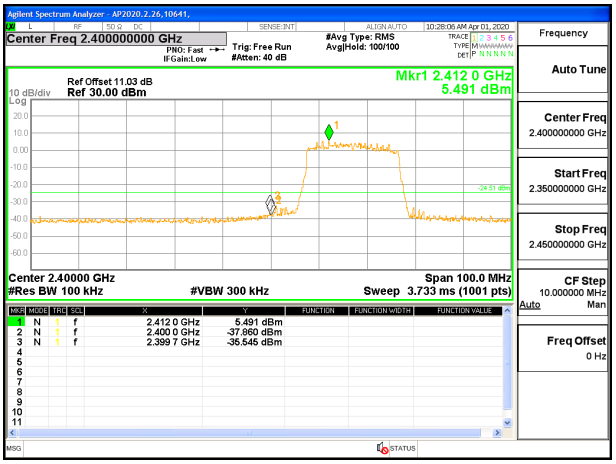
ANT 4 + ANT 3: 242-Tones, RU Index 61



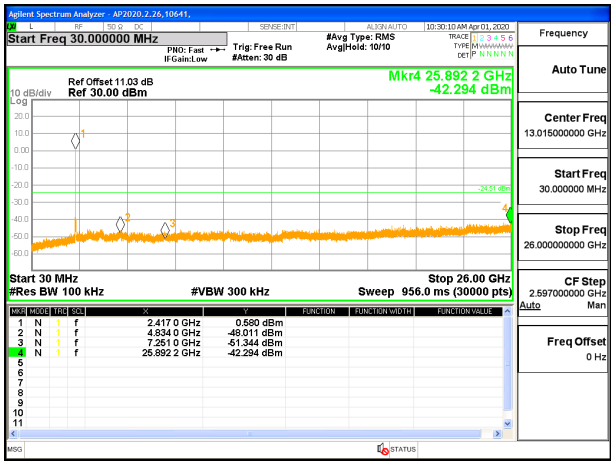
LOW CHANNEL 1 BANDEDGE ANT 4



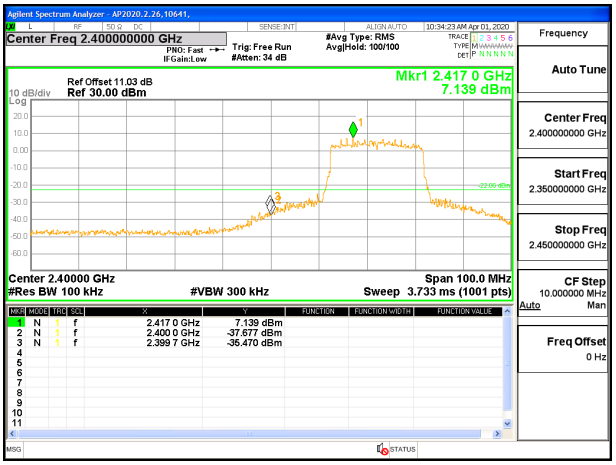
OUT-OF-BAND LOW CHANNEL 1 ANT 4



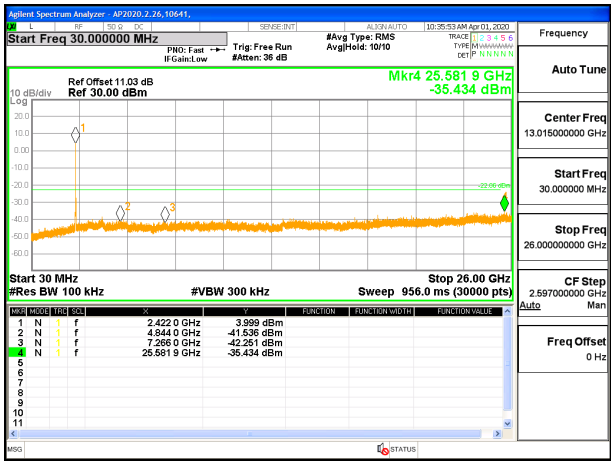
LOW CHANNEL 2 BANDEDGE ANT 4



OUT-OF-BAND LOW CHANNEL 2 ANT 4



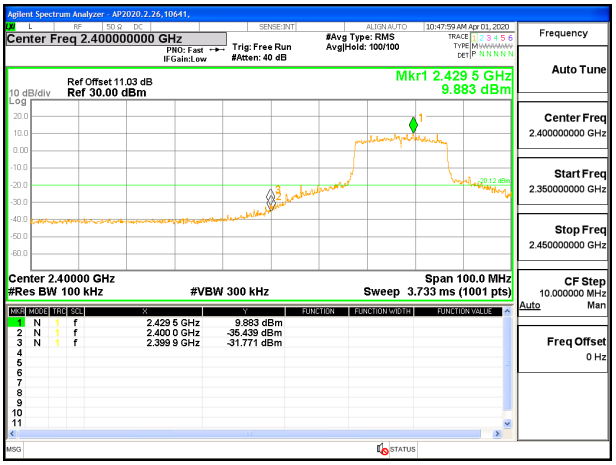
LOW CHANNEL 3 BANDEDGE ANT 4



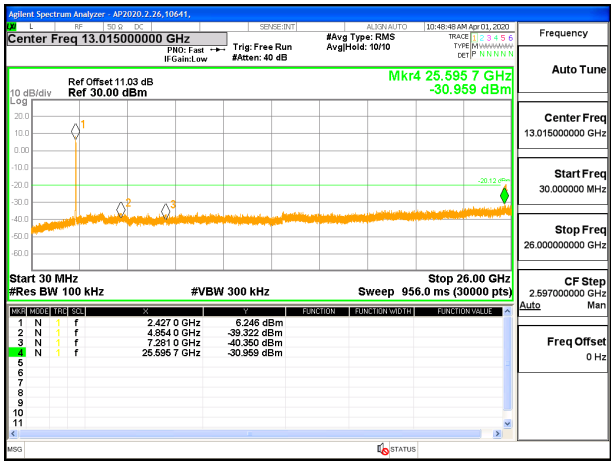
OUT-OF-BAND LOW CHANNEL 3 ANT 4

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

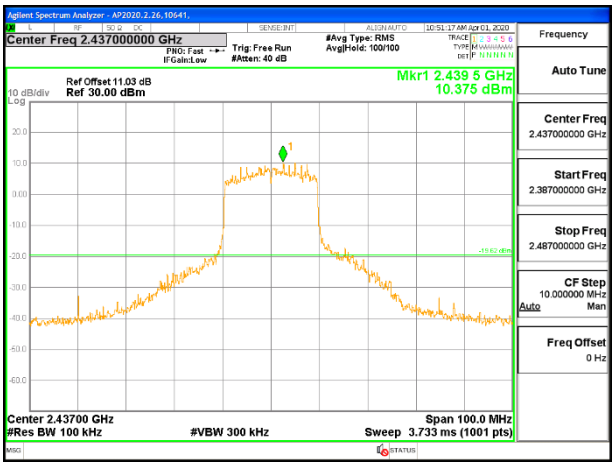
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



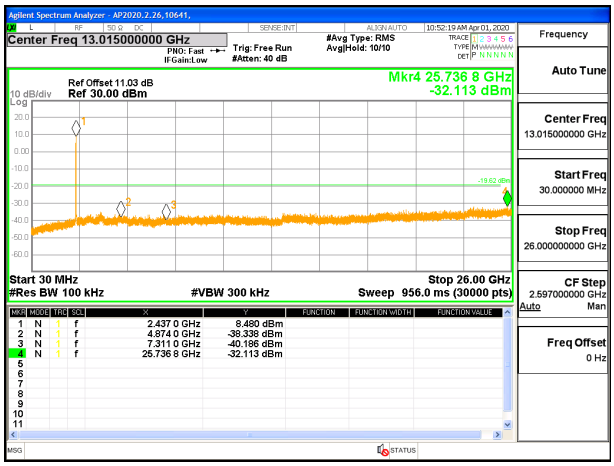
LOW CHANNEL 4 BANDEDGE ANT 4



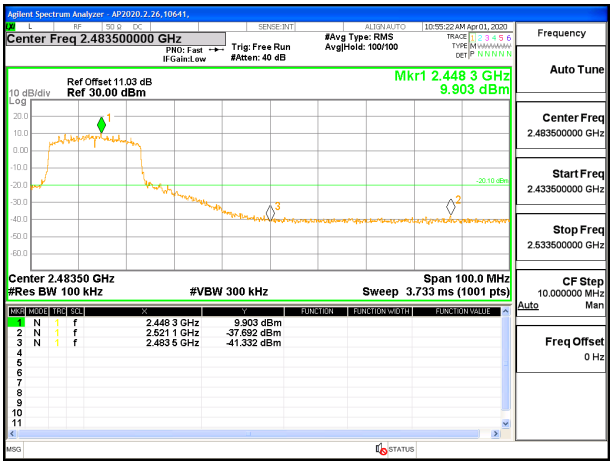
OUT-OF-BAND LOW CHANNEL 4 ANT 4



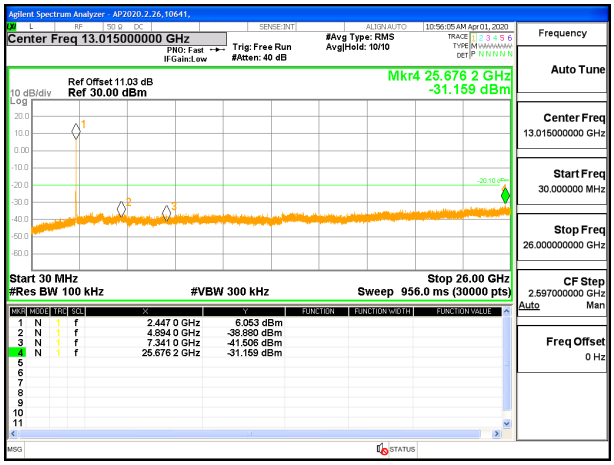
MID CHANNEL REFERENCE LEVEL ANT 4



OUT-OF-BAND MID CHANNEL ANT 4



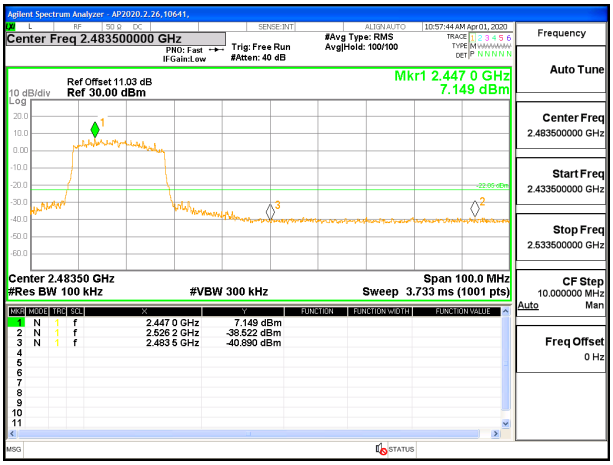
HIGH CHANNEL 8 BANDEDGE ANT 4



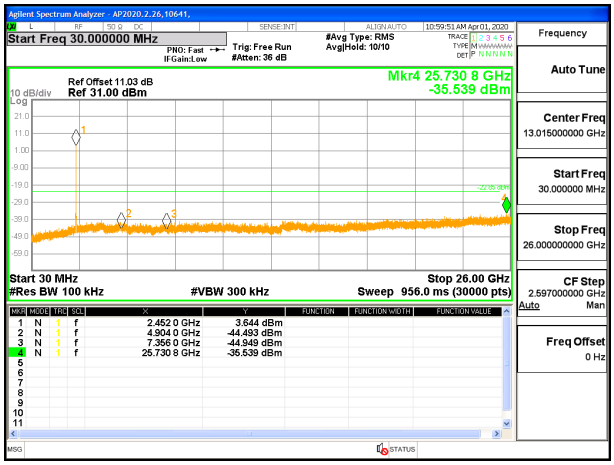
OUT-OF-BAND HIGH CHANNEL 8 ANT 4

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

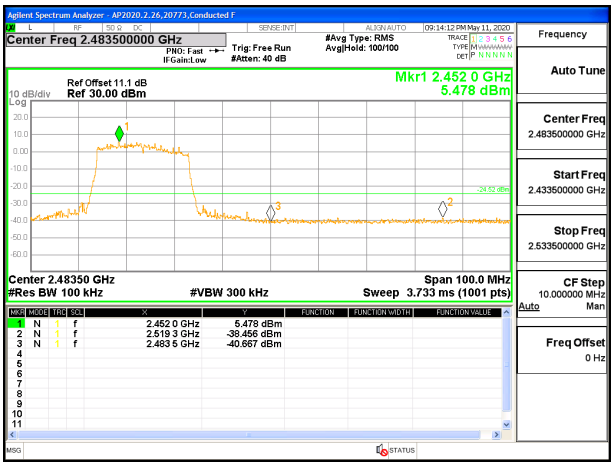
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



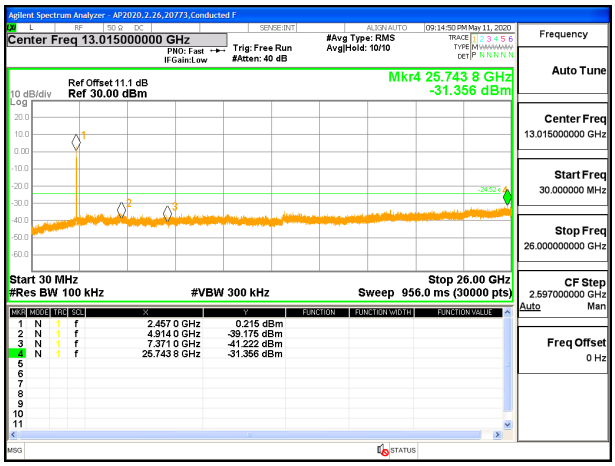
HIGH CHANNEL 9 BANDEDGE ANT 4



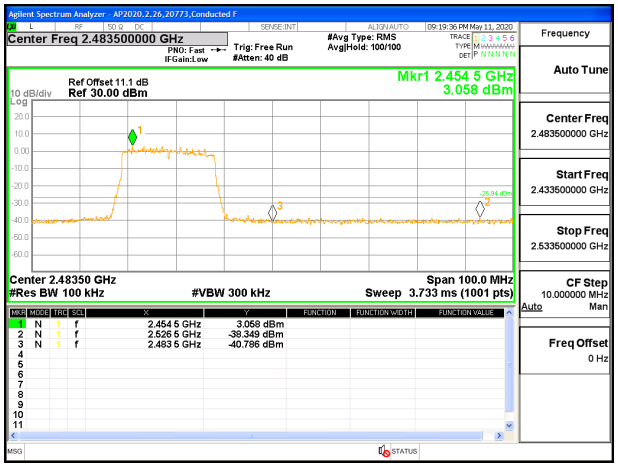
OUT-OF-BAND HIGH CHANNEL 9 ANT 4



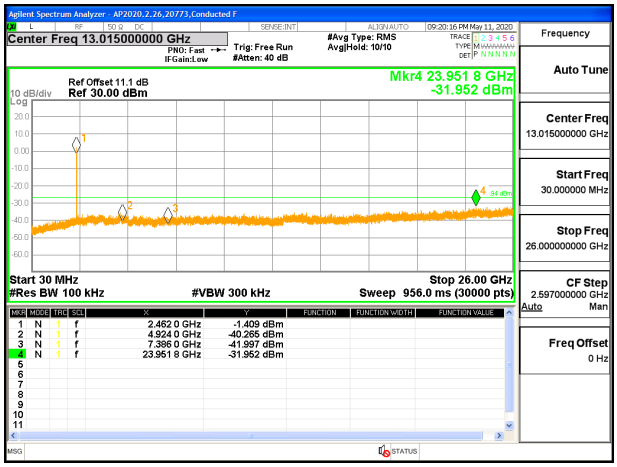
HIGH CHANNEL 10 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 10 ANT 4



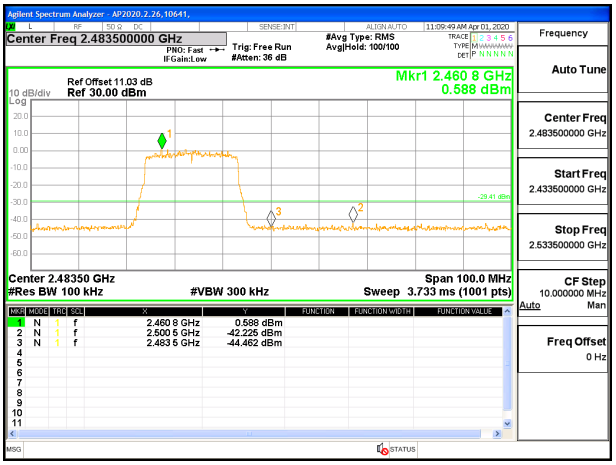
HIGH CHANNEL 11 BANDEDGE ANT 4



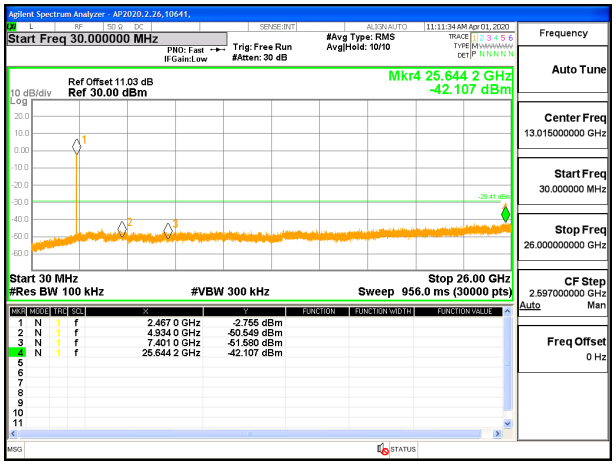
OUT-OF-BAND HIGH CHANNEL 11 ANT 4

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

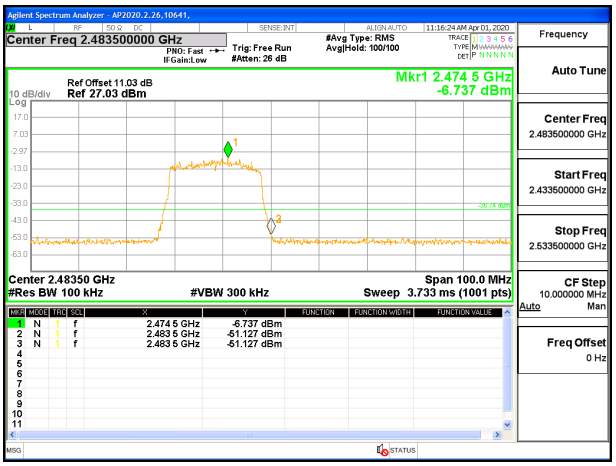
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



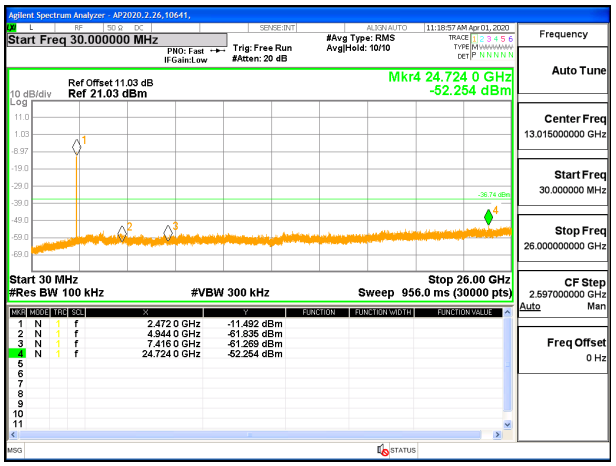
HIGH CHANNEL 12 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 12 ANT 4



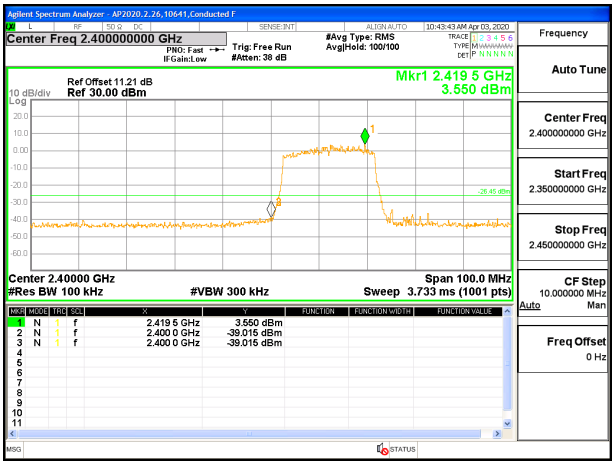
HIGH CHANNEL 13 BANDEDGE ANT 4



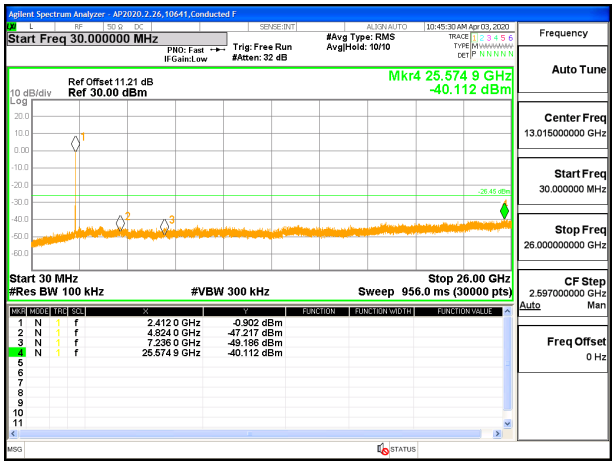
OUT-OF-BAND HIGH CHANNEL 13 ANT 4

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

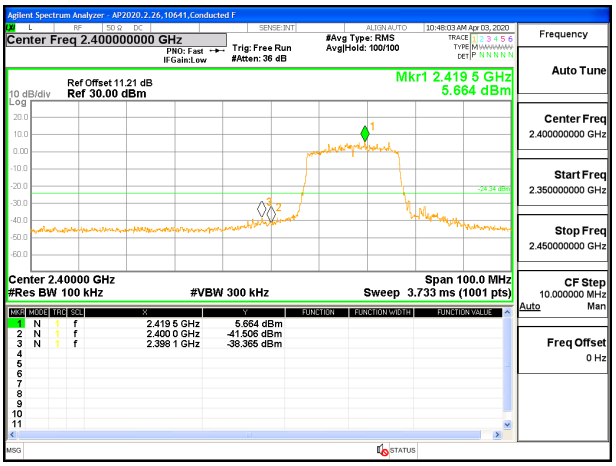
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



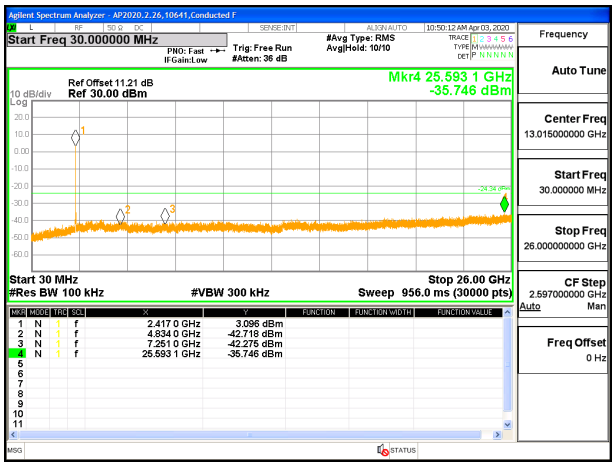
LOW CHANNEL 1 BANDEDGE ANT 3



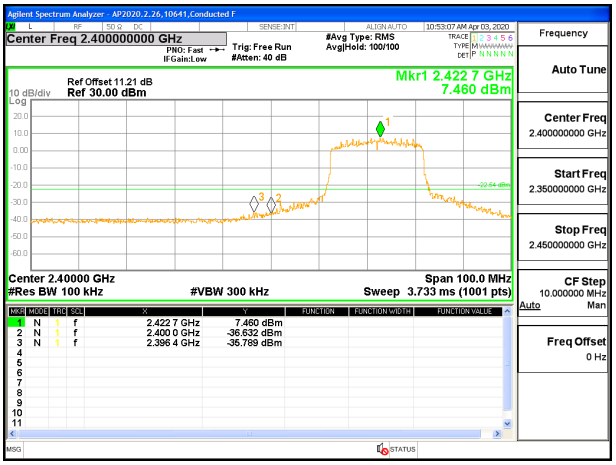
OUT-OF-BAND LOW CHANNEL 1 ANT 3



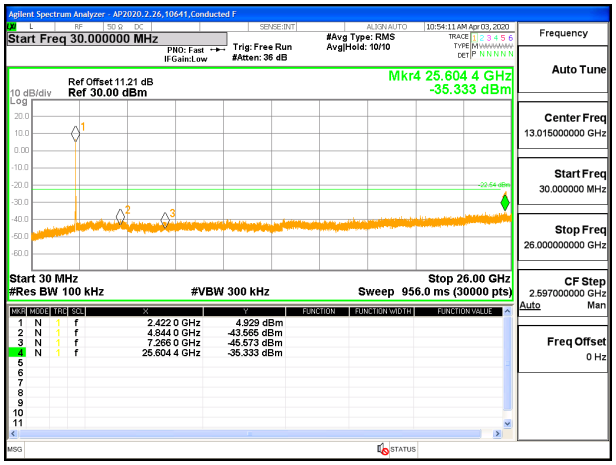
LOW CHANNEL 2 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 2 ANT 3



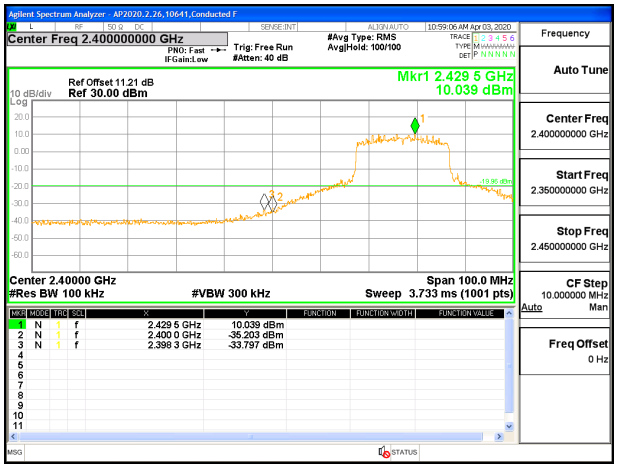
LOW CHANNEL 3 BANDEDGE ANT 3



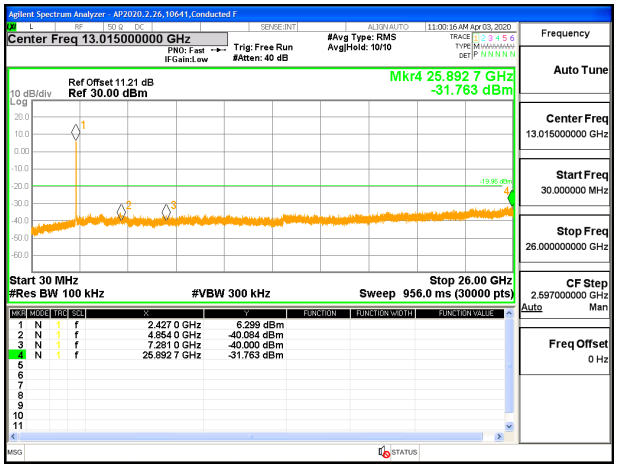
OUT-OF-BAND LOW CHANNEL 3 ANT 3

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

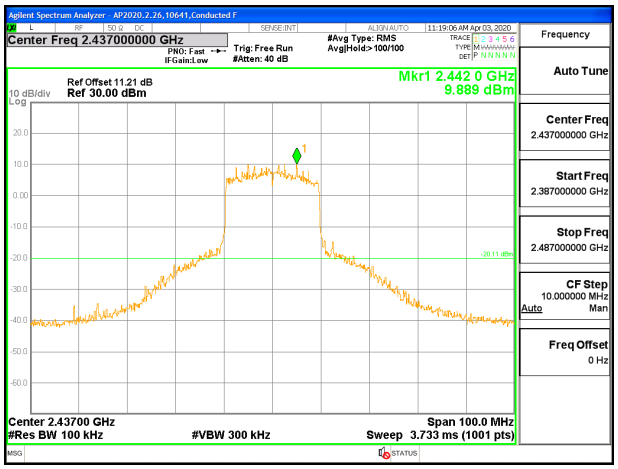
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



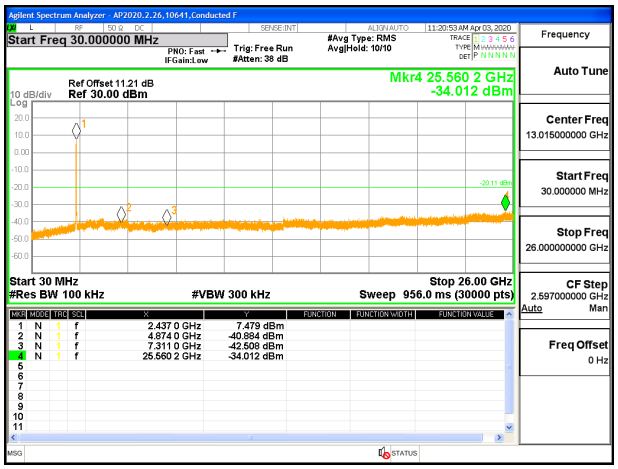
LOW CHANNEL 4 BANDEDGE ANT 3



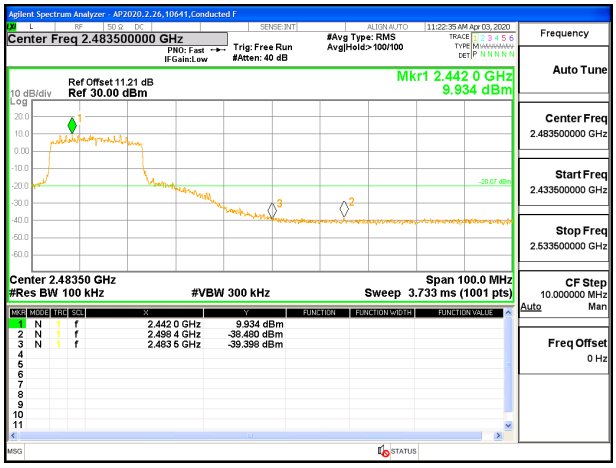
OUT-OF-BAND LOW CHANNEL 4 ANT 3



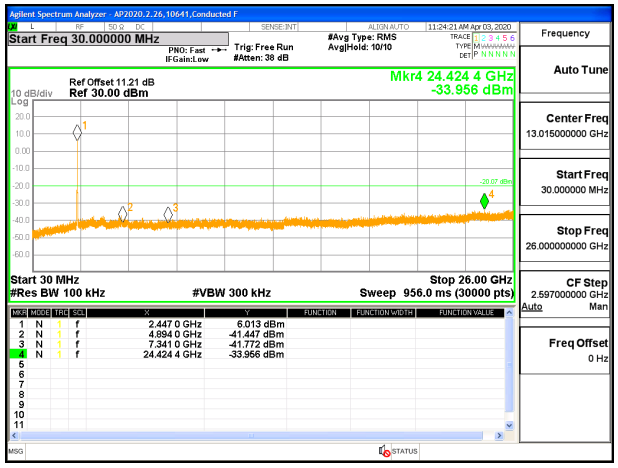
MID CHANNEL REFERENCE LEVEL ANT 3



OUT-OF-BAND MID CHANNEL ANT 3



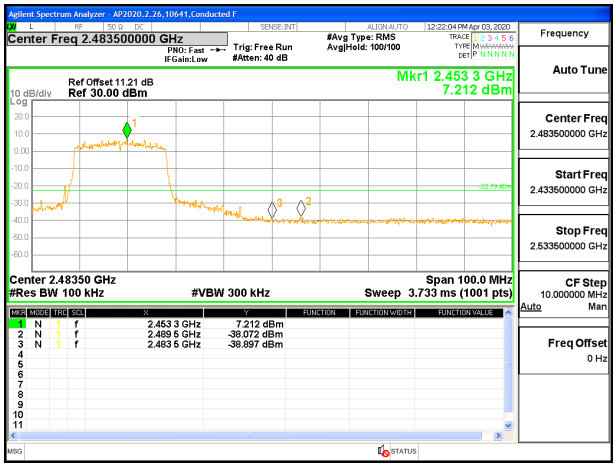
HIGH CHANNEL 8 BANDEDGE ANT 3



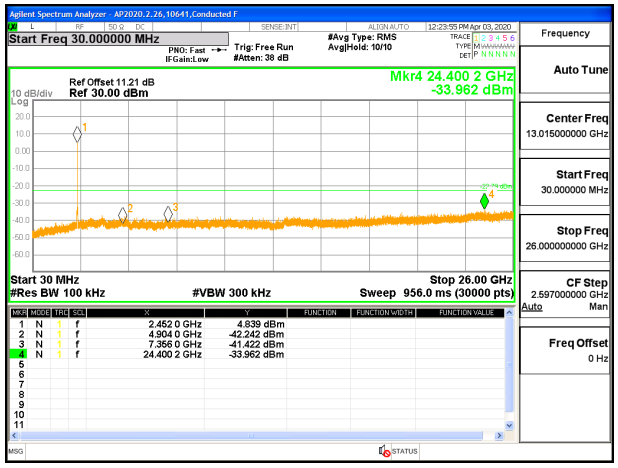
OUT-OF-BAND HIGH CHANNEL 8 ANT 3

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

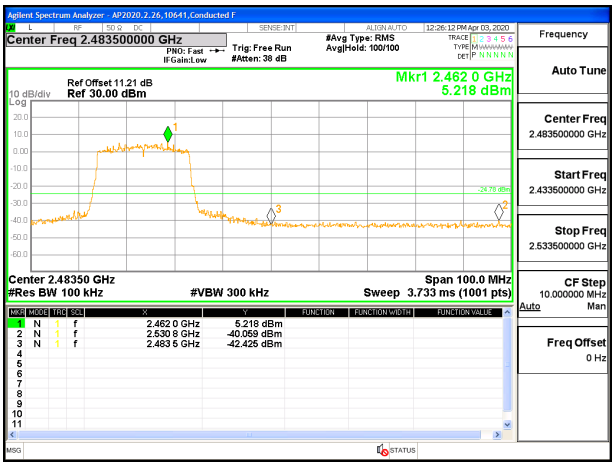
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



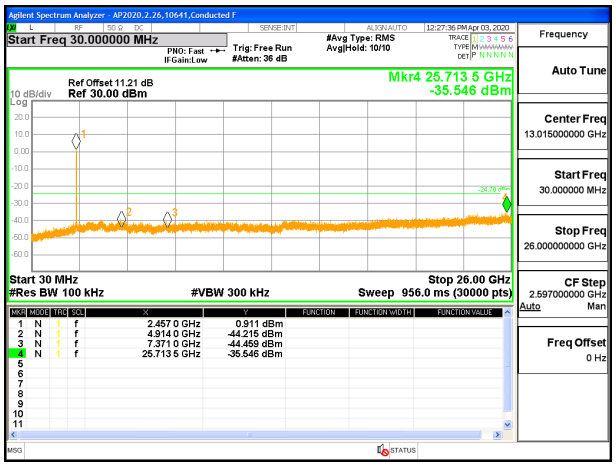
HIGH CHANNEL 9 BANDEDGE ANT 3



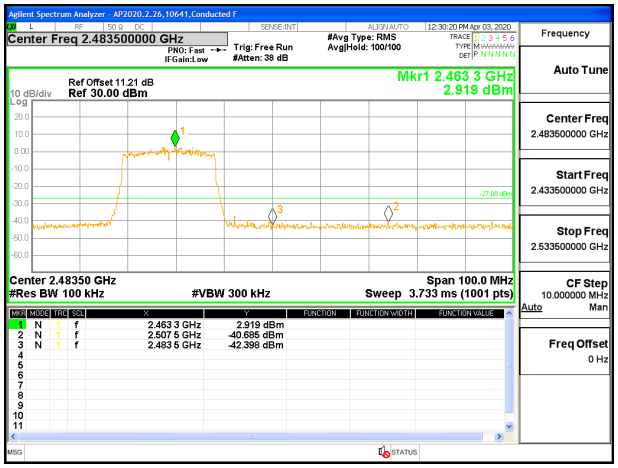
OUT-OF-BAND HIGH CHANNEL 9 ANT 3



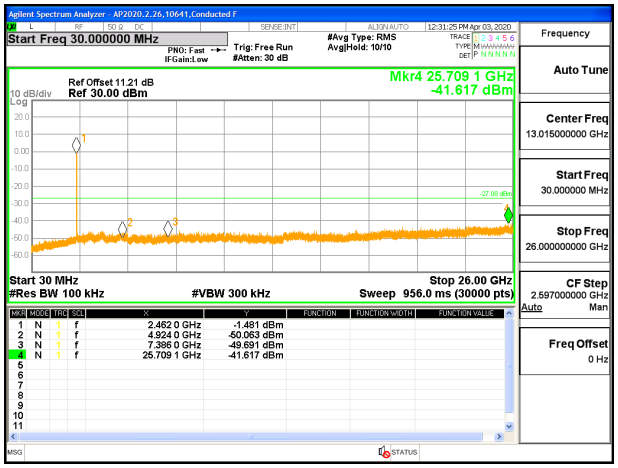
HIGH CHANNEL 10 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 10 ANT 3



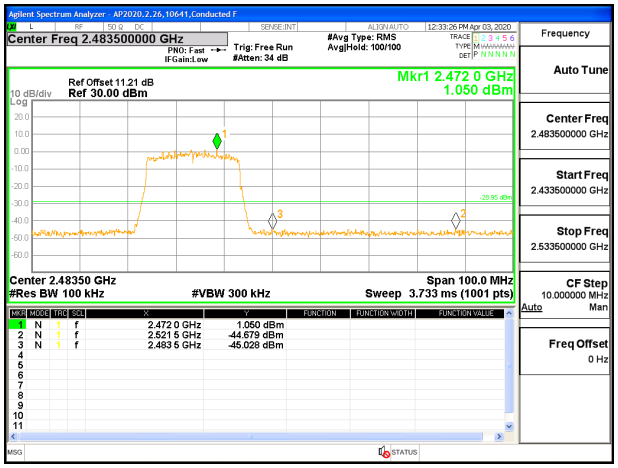
HIGH CHANNEL 11 BANDEDGE ANT 3



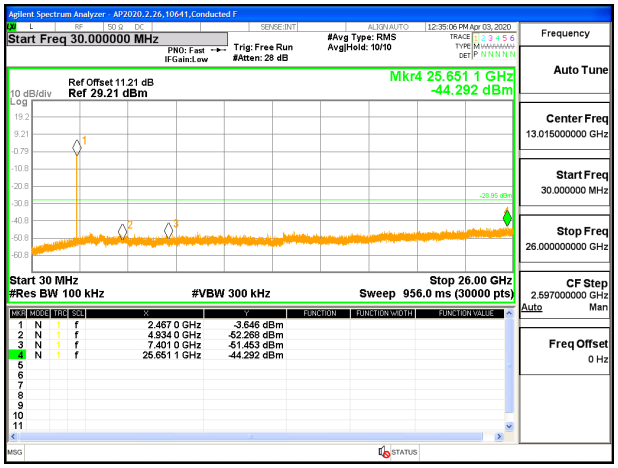
OUT-OF-BAND HIGH CHANNEL 11 ANT 3

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

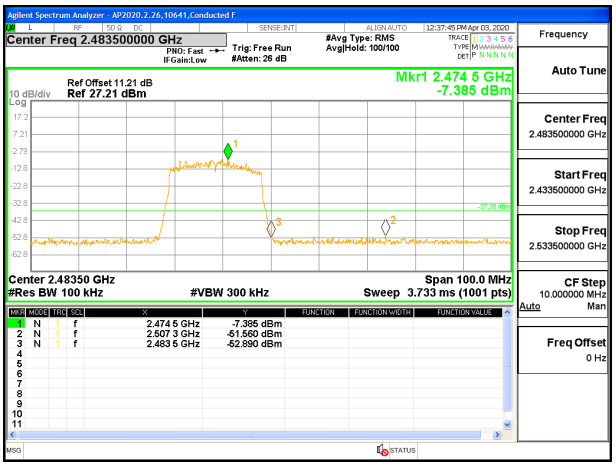
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.



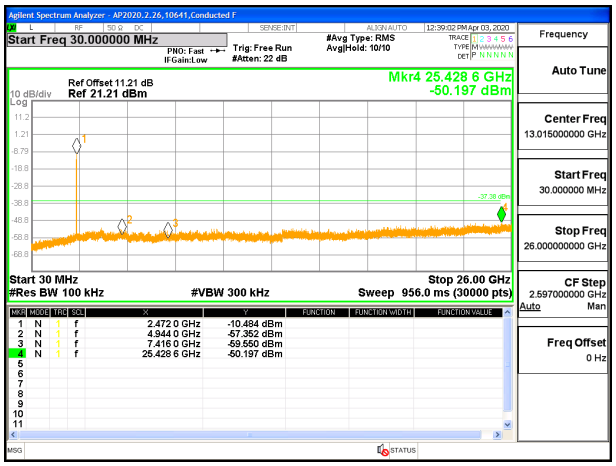
HIGH CHANNEL 12 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 12 ANT 3



HIGH CHANNEL 13 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 13 ANT 3

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

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 and as applicable for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

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.

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

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

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

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

RESULTS

Besides 802.11b 2TX and 802.11n HT20 CDD, for 802.11ax OFDMA modes use mode with highest PSD and mode with highest total power only within each band.

802.11n HT20 CDD, 802.11ax OFDMA modes are set to maximum power per chain to cover both SISO and MIMO modes to complies with radiated spurious emissions limits in the restricted bands between 1GHz and 18GHz low/mid/high channel (except the band edge).

Spurious emissions for frequencies below 1GHz and above 18GHz were limited to the middle channel as preliminary testing indicated that changing the operating frequency had no significant impact on the emissions in those frequency bands.

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

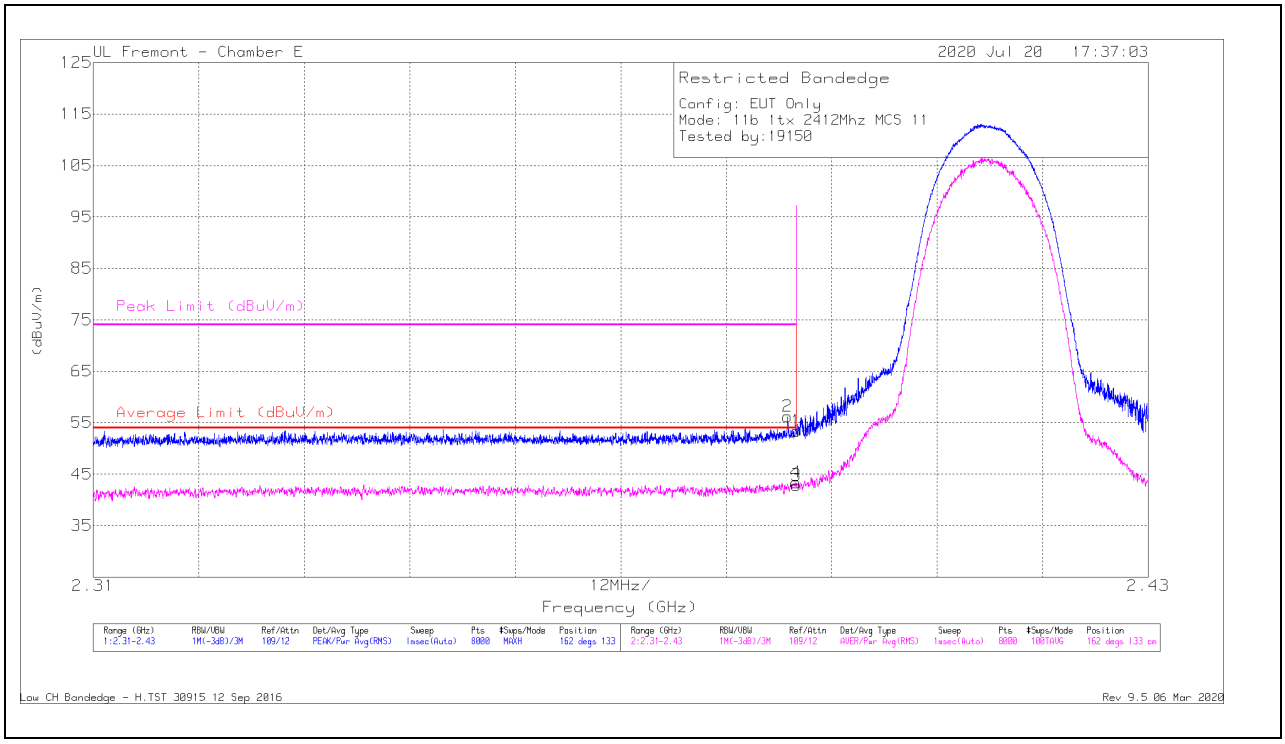
10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

ANT 4

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT

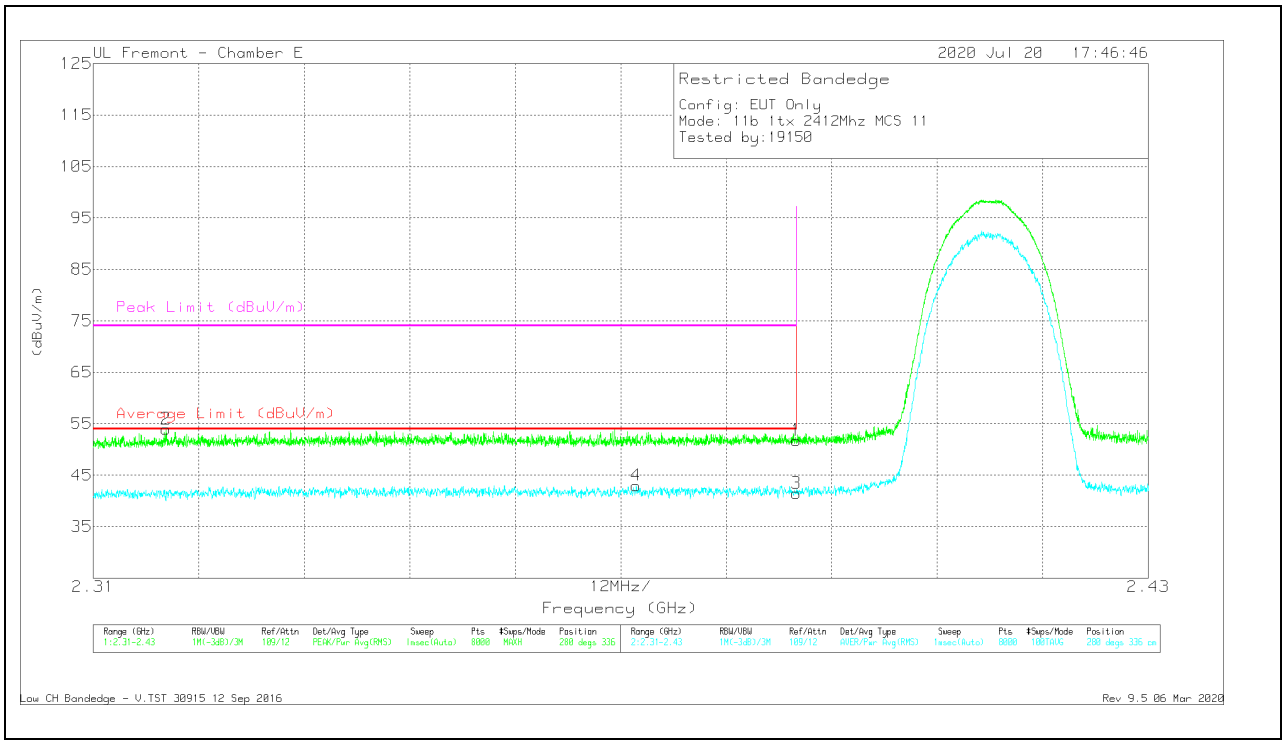


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	39.61	Pk	32.2	-18.4	53.41	-	-	74	-20.59	162	133	H
2	* 2.38897	42.42	Pk	32.2	-18.4	56.22	-	-	74	-17.78	162	133	H
3	* 2.38999	29.03	RMS	32.2	-18.4	42.83	54	-11.17	-	-	162	133	H
4	* 2.38993	29.58	RMS	32.2	-18.4	43.38	54	-10.62	-	-	162	133	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



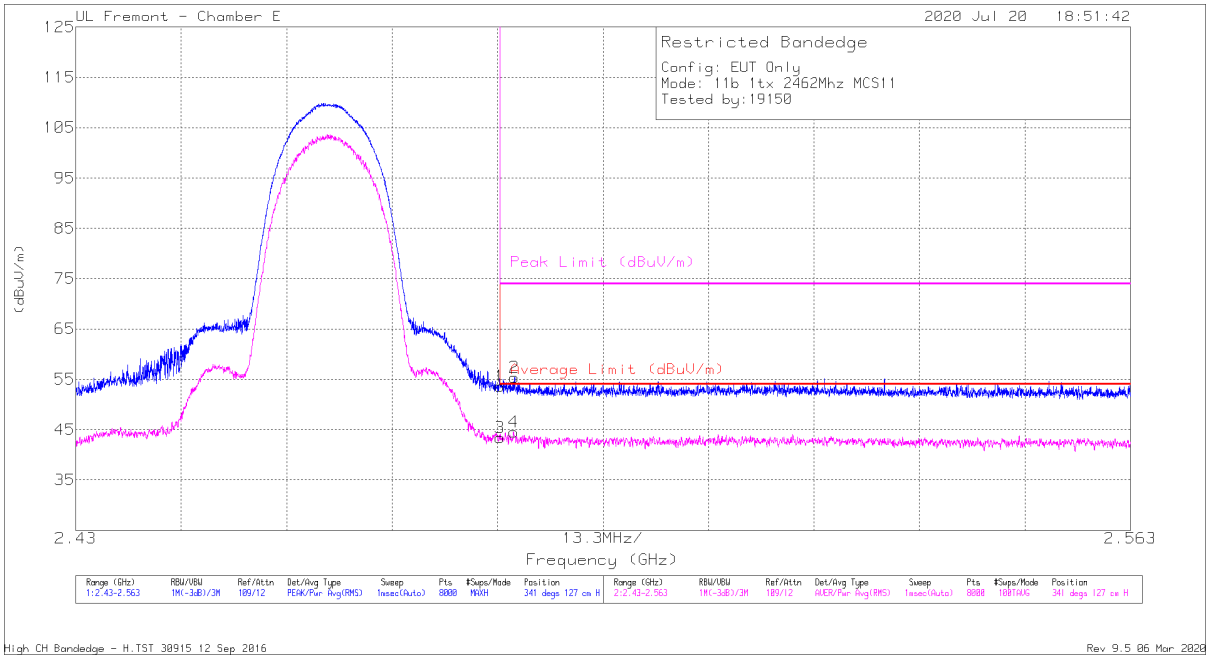
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	38	Pk	32.2	-18.4	51.8	-	-	74	-22.2	280	336	V
2	* 2.3183	40.28	Pk	32.1	-18.4	53.98	-	-	74	-20.02	280	336	V
3	* 2.38999	27.7	RMS	32.2	-18.4	41.5	54	-12.5	-	-	280	336	V
4	* 2.37175	29.31	RMS	32.1	-18.4	43.01	54	-10.99	-	-	280	336	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT

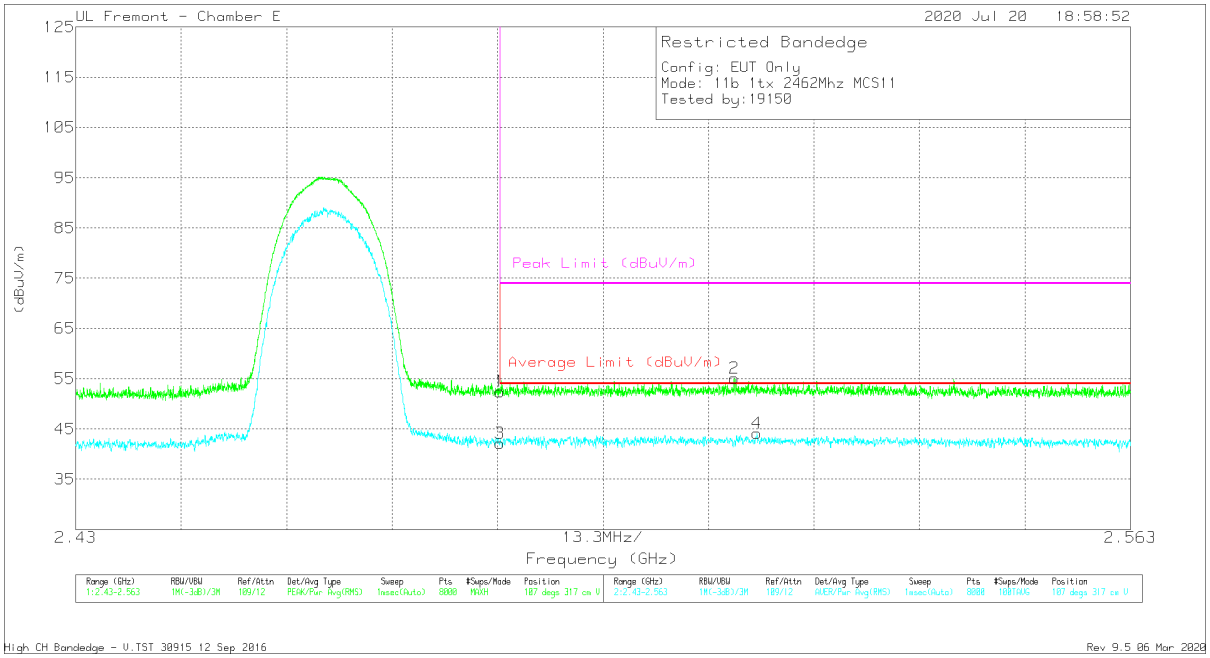


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.22	Pk	32.8	-18.4	53.62	-	-	74	-20.38	341	127	H
3	* 2.48351	28.97	RMS	32.8	-18.4	43.37	54	-10.63	-	-	341	127	H
4	* 2.4852	30.15	RMS	32.8	-18.4	44.55	54	-9.45	-	-	341	127	H
2	* 2.48533	41.01	Pk	32.8	-18.4	55.41	-	-	74	-18.59	341	127	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



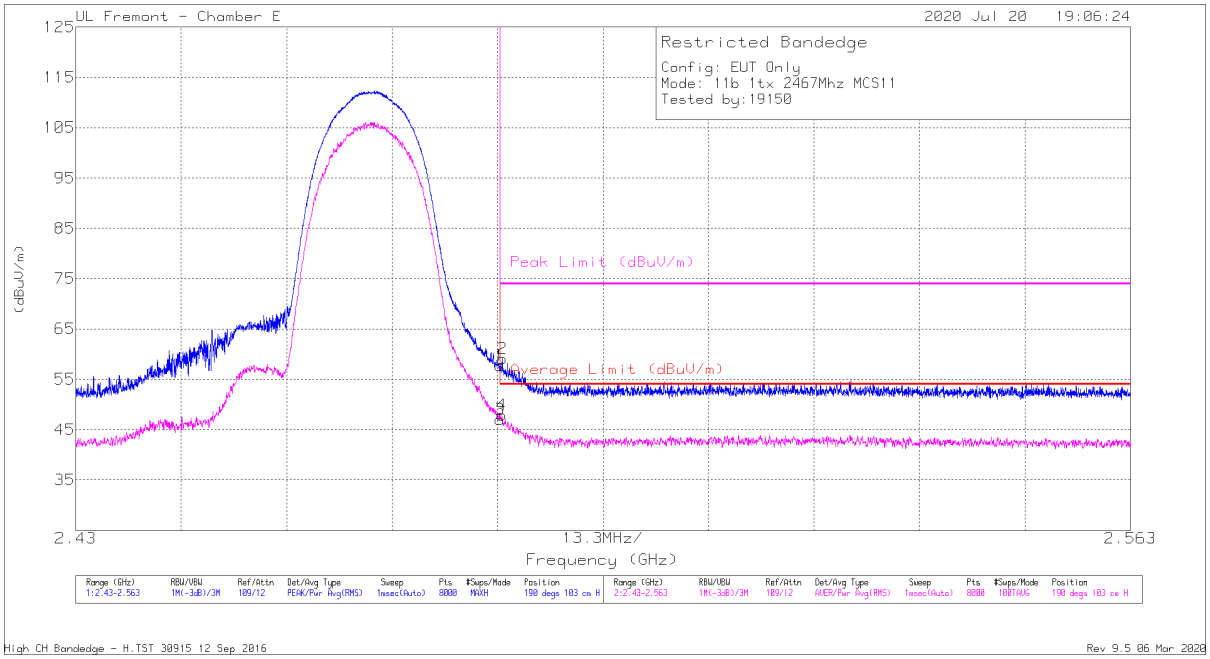
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.04	Pk	32.8	-18.4	52.44	-	-	74	-21.56	107	317	V
3	* 2.48351	27.76	RMS	32.8	-18.4	42.16	54	-11.84	-	-	107	317	V
2	2.51302	40.46	Pk	32.9	-18.3	55.06	-	-	74	-18.94	107	317	V
4	2.51591	29.62	RMS	32.9	-18.4	44.12	54	-9.88	-	-	107	317	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT

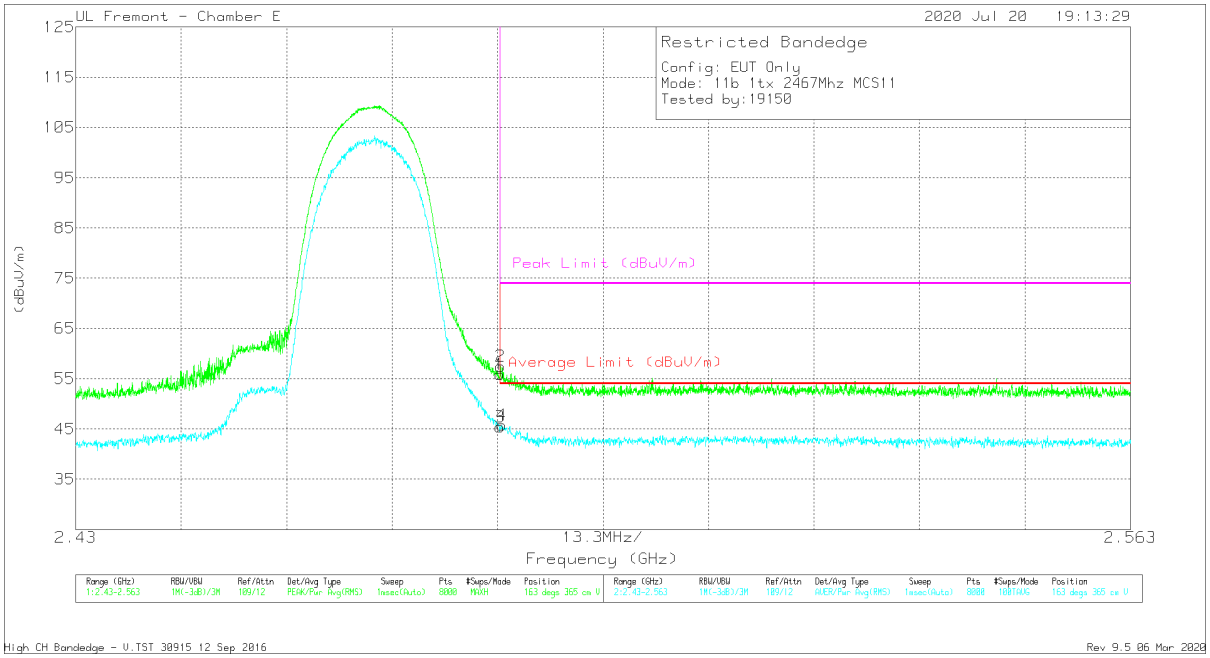


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	43.36	Pk	32.8	-18.4	57.76	-	-	74	-16.24	190	103	H
3	* 2.48351	32.63	RMS	32.8	-18.4	47.03	54	-6.97	-	-	190	103	H
4	* 2.48374	33.54	RMS	32.8	-18.4	47.94	54	-6.06	-	-	190	103	H
2	* 2.48381	44.72	Pk	32.8	-18.4	59.12	-	-	74	-14.88	190	103	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	41.41	Pk	32.8	-18.4	55.81	-	-	74	-18.19	163	365	V
3	* 2.48351	31.03	RMS	32.8	-18.4	45.43	54	-8.57	-	-	163	365	V
2	* 2.48357	43.11	Pk	32.8	-18.4	57.51	-	-	74	-16.49	163	365	V
4	* 2.48372	31.37	RMS	32.8	-18.4	45.77	54	-8.23	-	-	163	365	V

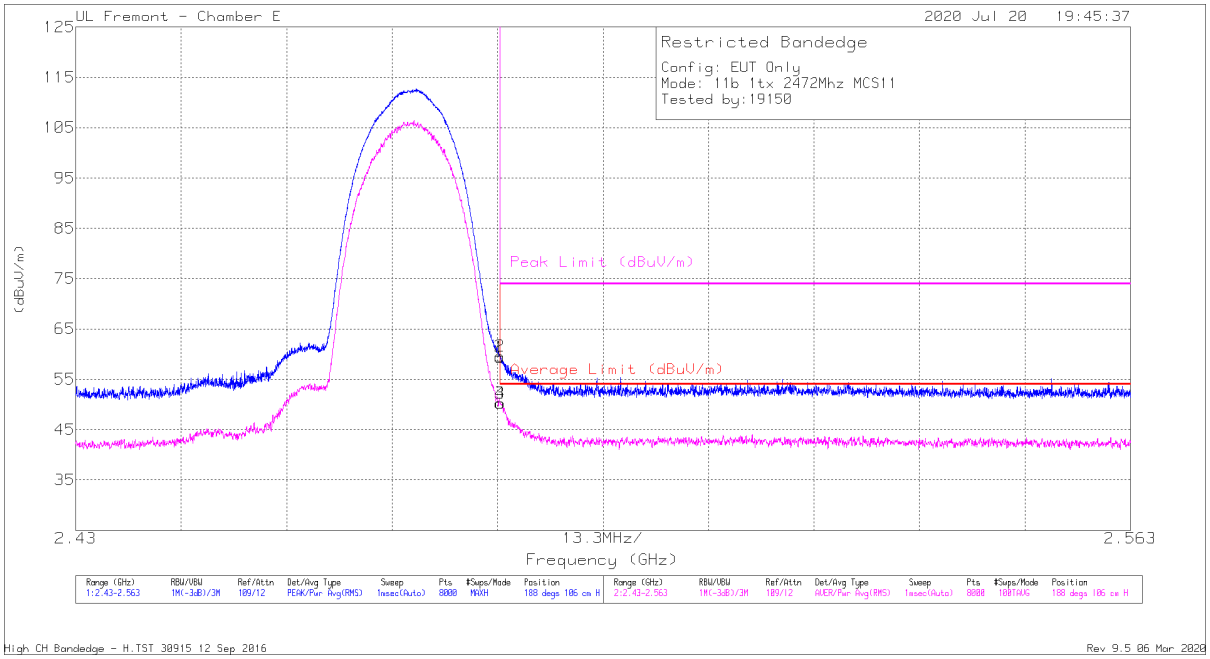
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT

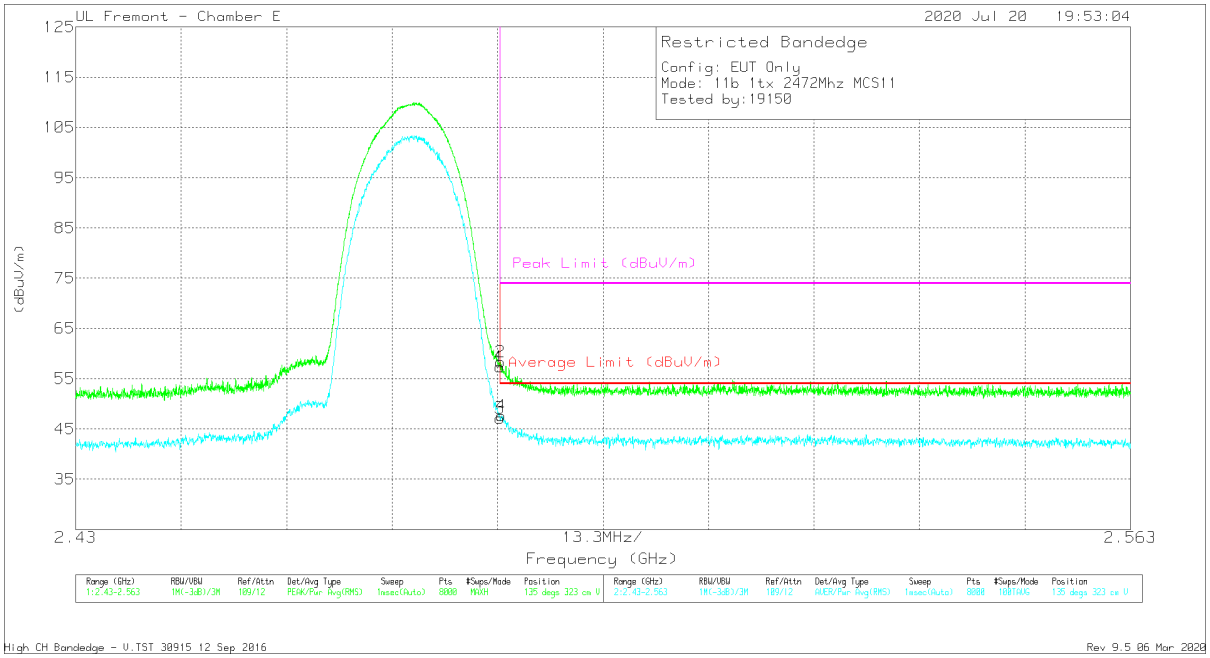


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	44.9	Pk	32.8	-18.4	59.3	-	-	74	-14.7	188	106	H
3	* 2.48351	35.83	RMS	32.8	-18.4	50.23	54	-3.77	-	-	188	106	H
2	* 2.48352	45.15	Pk	32.8	-18.4	59.55	-	-	74	-14.45	188	106	H
4	* 2.48354	35.91	RMS	32.8	-18.4	50.31	54	-3.69	-	-	188	106	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	42.99	Pk	32.8	-18.4	57.39	-	-	74	-16.61	135	323	V
3	* 2.48351	32.8	RMS	32.8	-18.4	47.2	54	-6.8	-	-	135	323	V
2	* 2.48357	43.97	Pk	32.8	-18.4	58.37	-	-	74	-15.63	135	323	V
4	* 2.48367	33.28	RMS	32.8	-18.4	47.68	54	-6.32	-	-	135	323	V

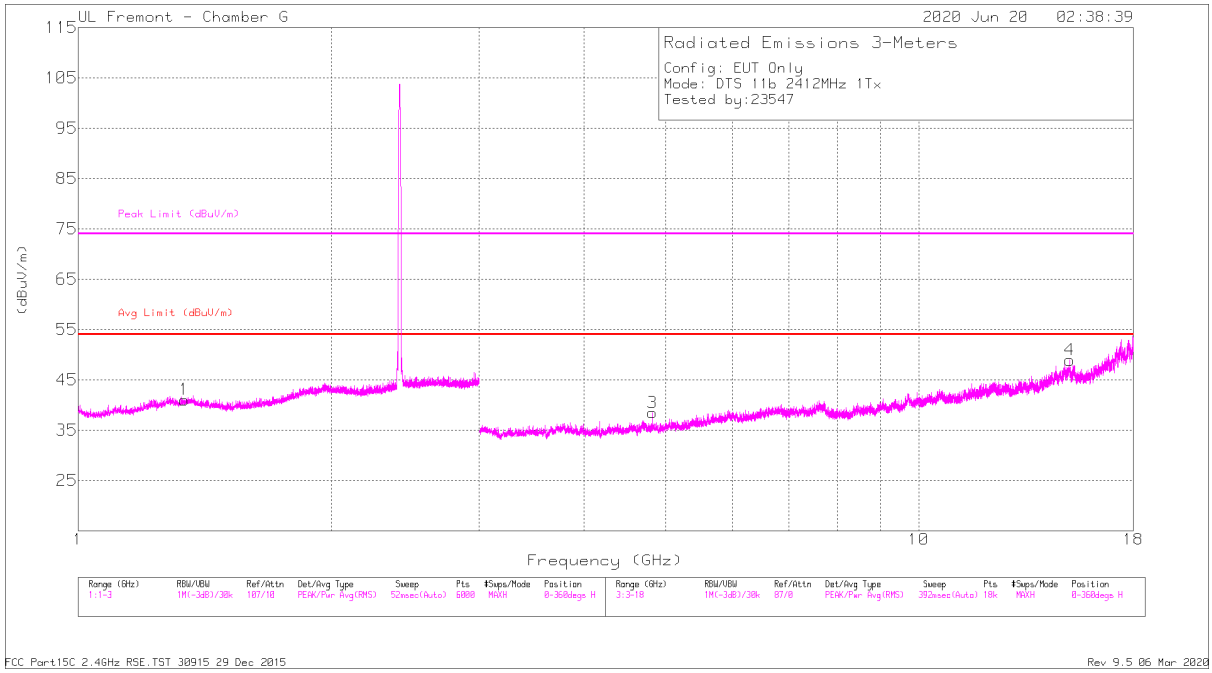
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

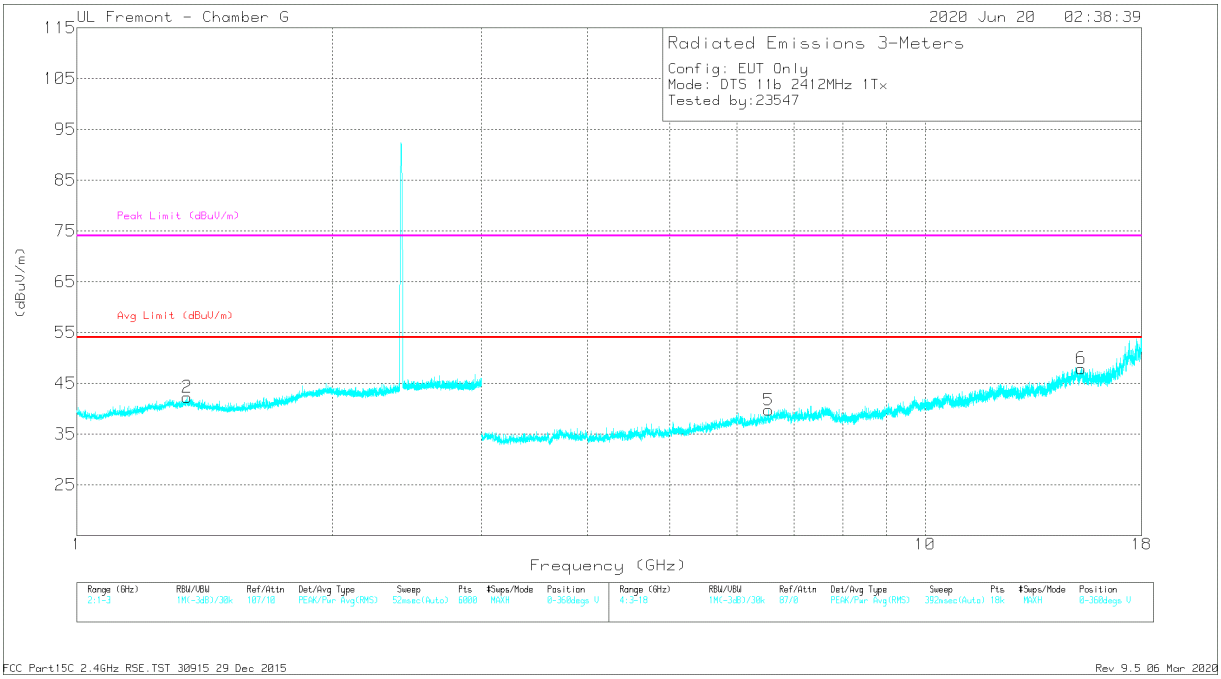
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

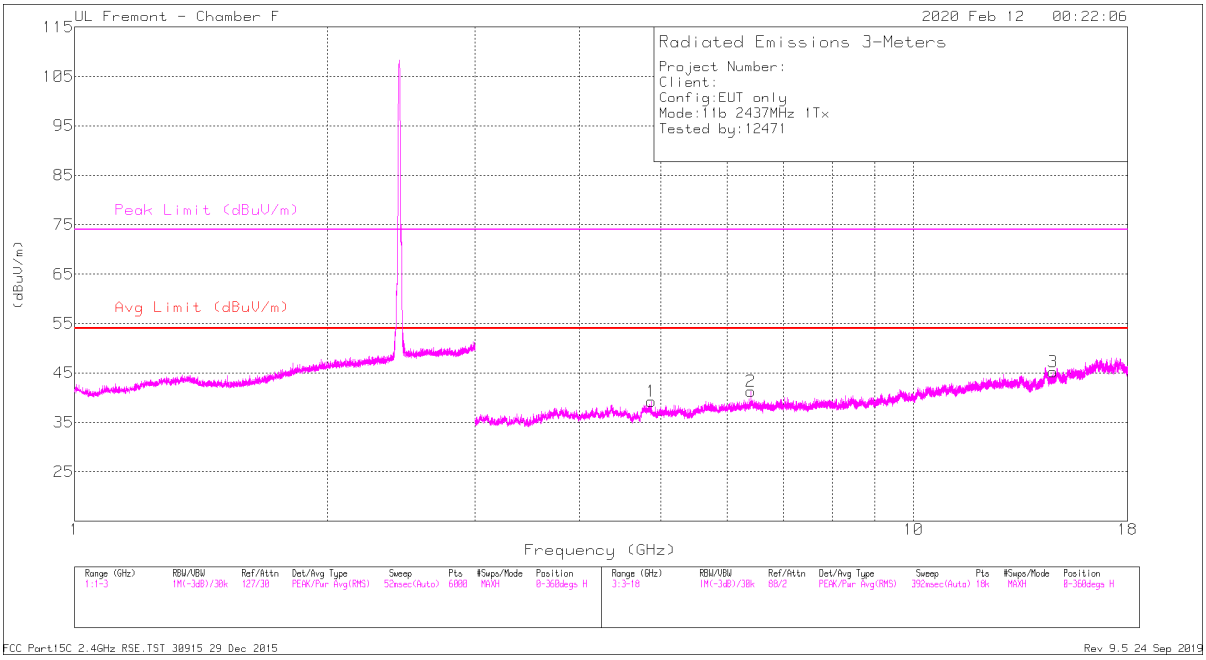
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.33864	43.79	PK2	29.6	-24.6	48.79	-	-	74	-25.21	203	101	H
	* 1.33871	30.82	MAv1	29.6	-24.6	35.82	54	-18.18	-	-	203	101	H
2	* 1.34861	44.09	PK2	29.7	-24.6	49.19	-	-	74	-24.81	81	160	V
	* 1.34866	31.25	MAv1	29.7	-24.6	36.35	54	-17.65	-	-	81	160	V
3	* 4.8239	42.61	PK2	34.2	-31.1	45.71	-	-	74	-28.29	335	104	H
	* 4.82399	33.81	MAv1	34.2	-31.1	36.91	54	-17.09	-	-	335	104	H
5	6.54087	39.27	PK2	36.1	-30	45.37	-	-	-	-	344	107	V
4	15.12067	37.86	PK2	40.3	-22.2	55.96	-	-	-	-	170	148	H
6	15.27159	36.99	PK2	40.8	-22.3	55.49	-	-	-	-	96	273	V

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

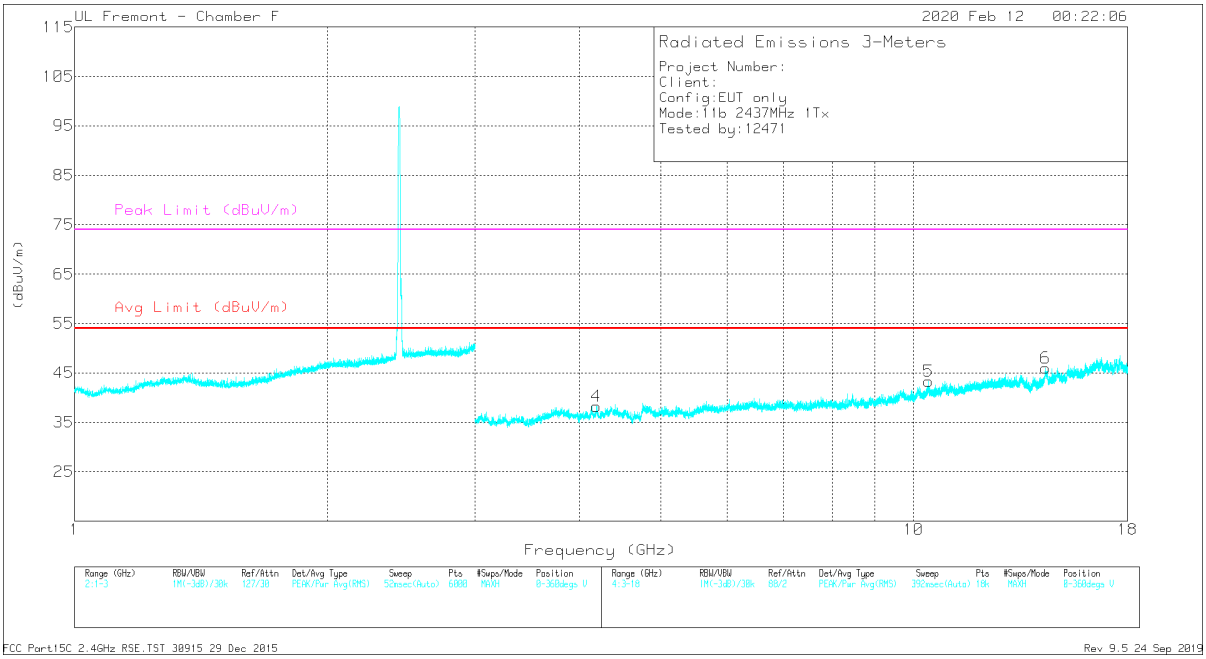
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

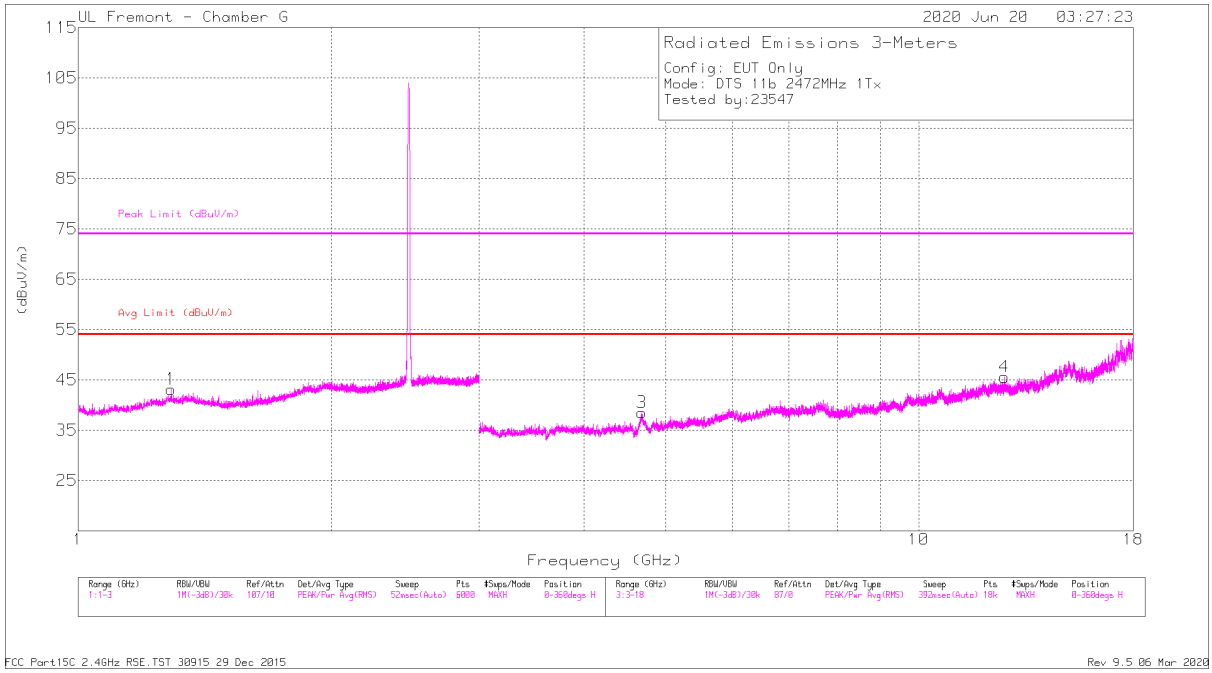
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.87371	55.41	PK2	34.1	-43.5	46.01	-	-	74	-27.99	165	148	H
	* 4.87402	45.58	MAv1	34.1	-43.5	36.18	54	-17.82	-	-	165	148	H
2	6.40073	51.14	PK2	35.6	-40.7	46.04	-	-	-	-	39	272	H
3	14.67887	49.86	PK2	39.7	-38.1	51.46	-	-	-	-	69	341	H
4	* 4.18745	55.21	PK2	33.6	-44	44.81	-	-	74	-29.19	188	363	V
	* 4.18921	43.2	MAv1	33.6	-44	32.8	54	-21.2	-	-	188	363	V
5	10.41662	49.98	PK2	37.6	-38.7	48.88	-	-	-	-	33	154	V
6	14.37517	50.02	PK2	39.2	-36.5	52.72	-	-	-	-	264	289	V

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

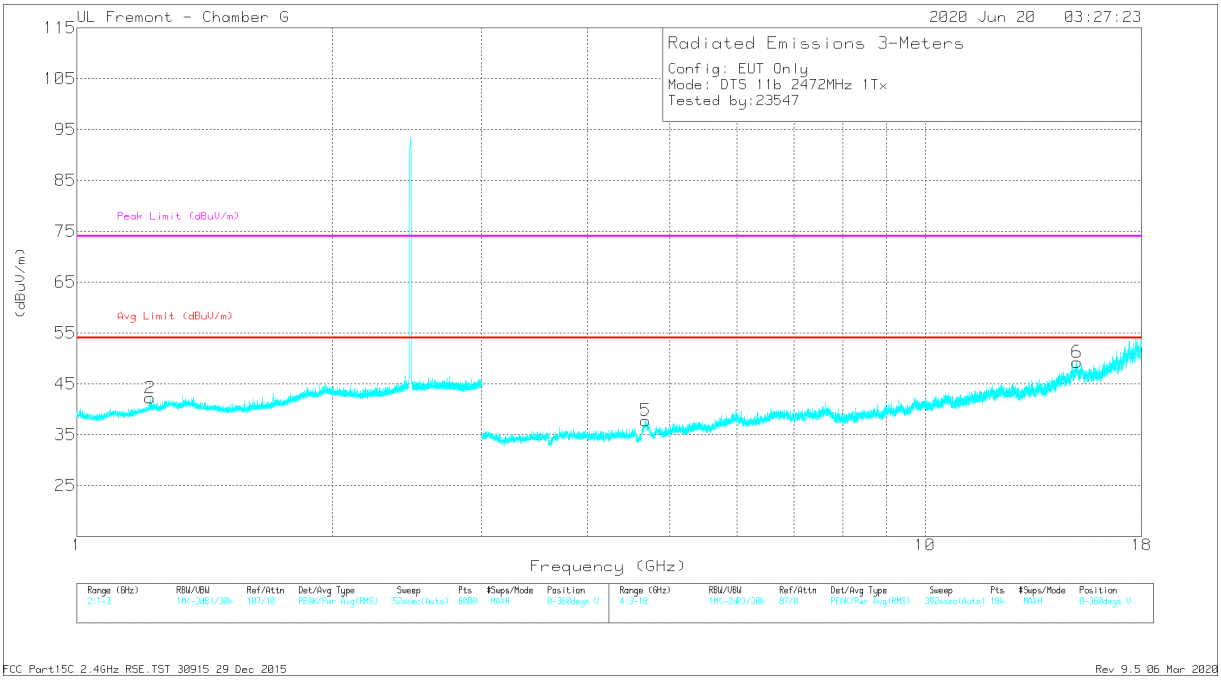
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

HIGH CHANNEL, CH 13 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.28825	44.25	PK2	29.6	-24.7	49.15	-	-	74	-24.85	159	164	H
	* 1.29143	31.55	MAv1	29.7	-24.7	36.55	54	-17.45	-	-	159	164	H
2	* 1.22151	44.56	PK2	28.9	-24.7	48.76	-	-	74	-25.24	301	101	V
	* 1.2192	31.59	MAv1	28.9	-24.7	35.79	54	-18.21	-	-	301	101	V
3	* 4.68705	40.1	PK2	34	-30.9	43.2	-	-	74	-30.8	253	184	H
	* 4.6848	27.66	MAv1	34	-30.9	30.76	54	-23.24	-	-	253	184	H
4	* 12.64655	36.4	PK2	39	-23.8	51.6	-	-	74	-22.4	337	252	H
	* 12.64546	23.86	MAv1	39	-23.8	39.06	54	-14.94	-	-	337	252	H
5	* 4.68361	39.99	PK2	34	-30.9	43.09	-	-	74	-30.91	115	155	V
	* 4.6841	27.77	MAv1	34	-30.9	30.87	54	-23.13	-	-	115	155	V
6	15.10721	37.7	PK2	40.2	-22	55.9	-	-	-	-	0	206	V

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

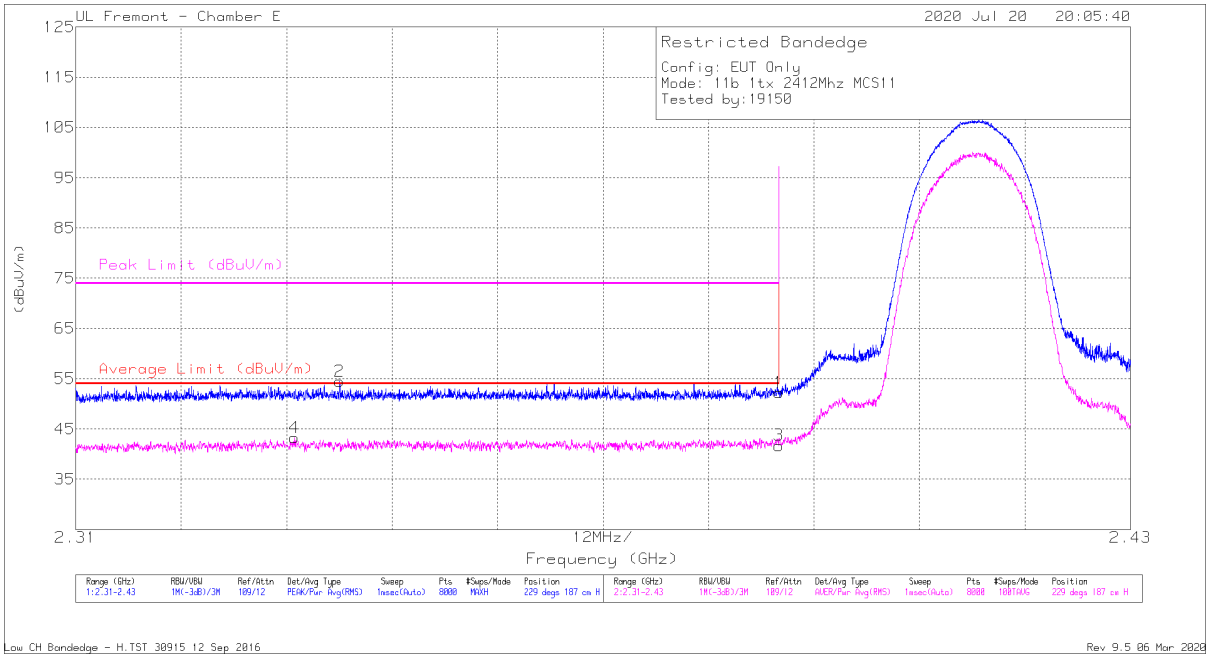
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

ANT 3

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



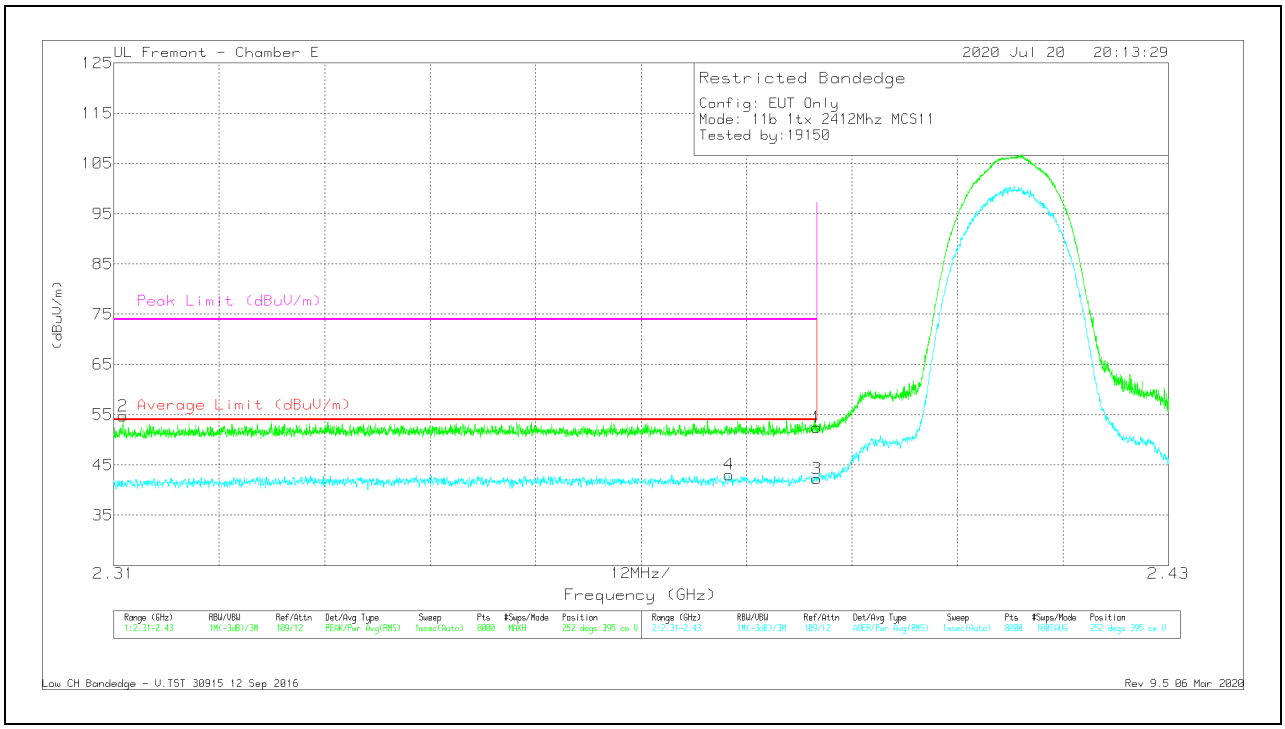
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.33489	29.33	RMS	32.1	-18.2	43.23	54	-10.77	-	-	229	187	H
2	* 2.34003	40.72	Pk	32.1	-18.3	54.52	-	-	74	-19.48	229	187	H
1	* 2.38999	38.5	Pk	32.2	-18.4	52.3	-	-	74	-21.7	229	187	H
3	* 2.38999	27.92	RMS	32.2	-18.4	41.72	54	-12.28	-	-	229	187	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



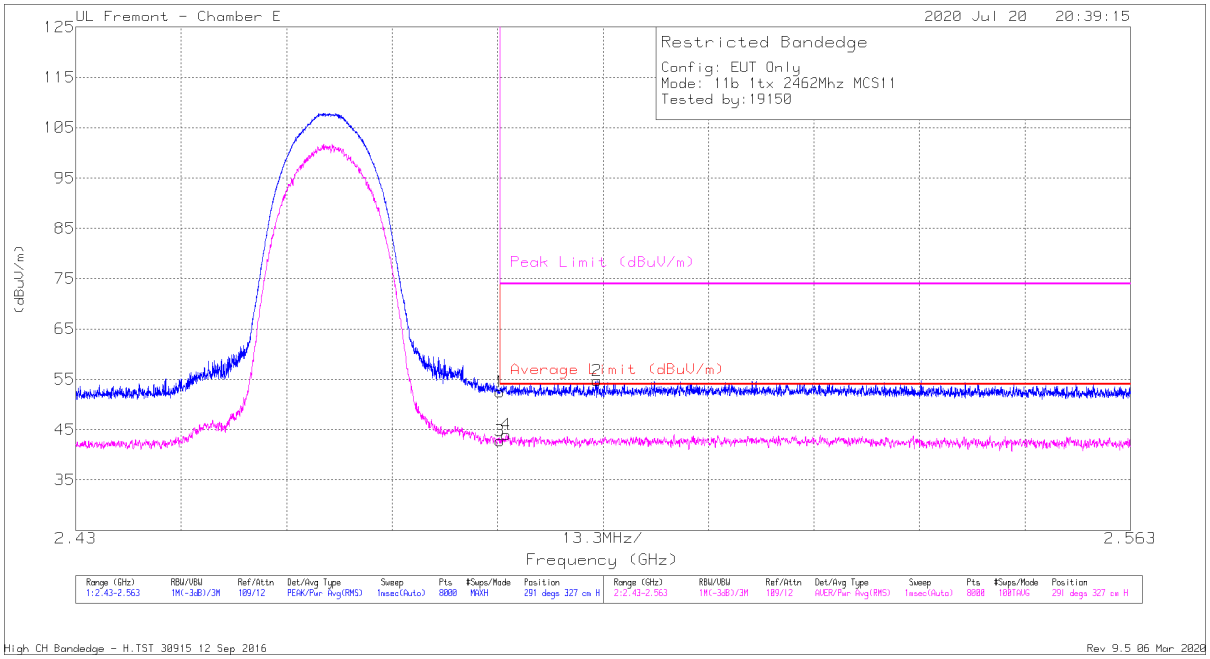
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.31107	41.11	Pk	32	-18.4	54.71	-	-	74	-19.29	252	395	V
4	* 2.38003	29.29	RMS	32.2	-18.4	43.09	54	-10.91	-	-	252	395	V
1	* 2.38999	38.69	Pk	32.2	-18.4	52.49	-	-	74	-21.51	252	395	V
3	* 2.38999	28.53	RMS	32.2	-18.4	42.33	54	-11.67	-	-	252	395	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT

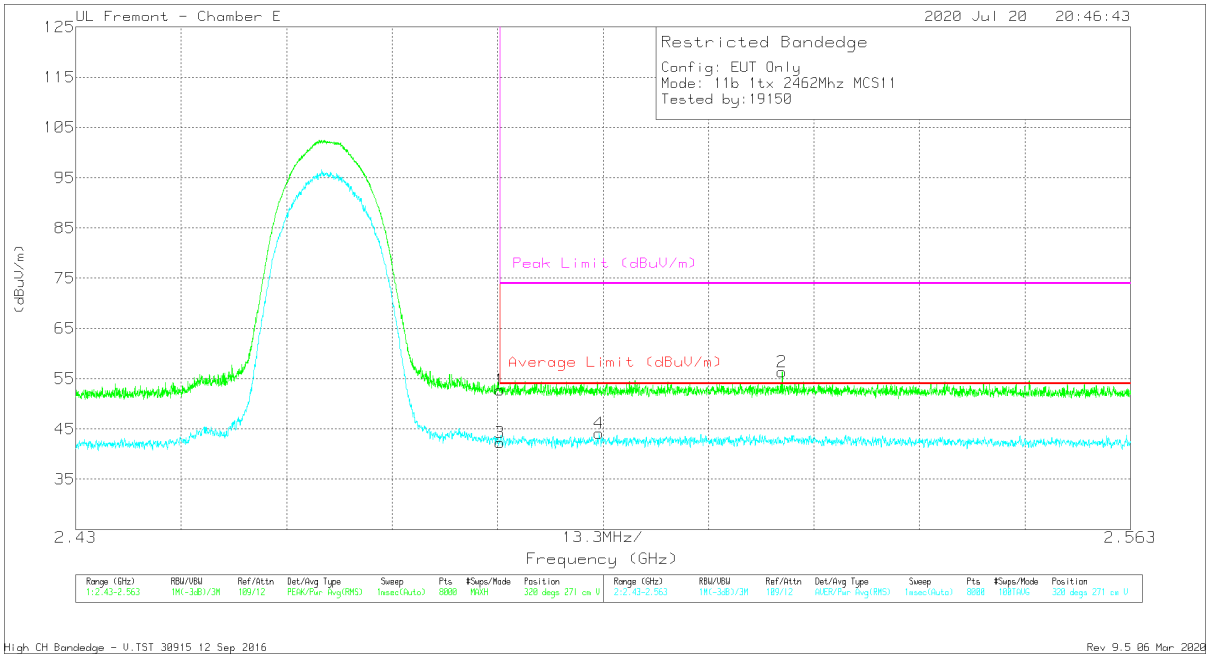


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.15	Pk	32.8	-18.4	52.55	-	-	74	-21.45	291	327	H
3	* 2.48351	28.36	RMS	32.8	-18.4	42.76	54	-11.24	-	-	291	327	H
4	* 2.4843	29.66	RMS	32.8	-18.4	44.06	54	-9.94	-	-	291	327	H
2	* 2.49573	40.37	Pk	32.9	-18.5	54.77	-	-	74	-19.23	291	327	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.33	Pk	32.8	-18.4	52.73	-	-	74	-21.27	320	271	V
3	* 2.48351	27.83	RMS	32.8	-18.4	42.23	54	-11.77	-	-	320	271	V
4	* 2.49599	29.71	RMS	32.9	-18.5	44.11	54	-9.89	-	-	320	271	V
2	2.51909	42	Pk	32.8	-18.4	56.4	-	-	74	-17.6	320	271	V

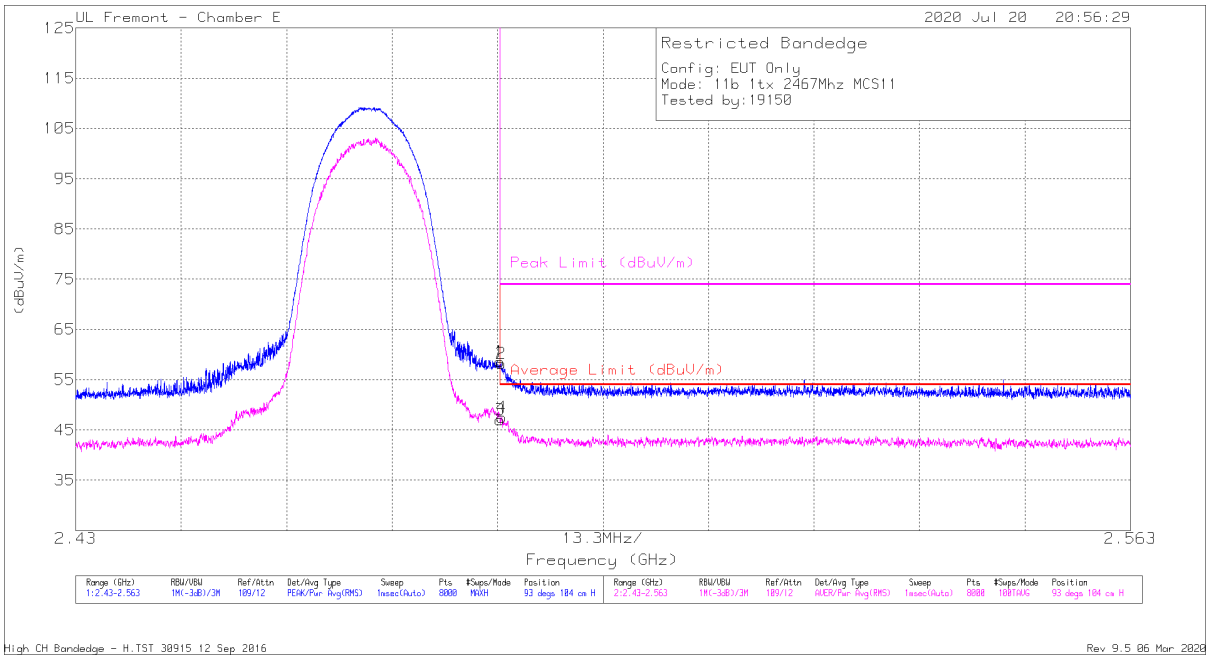
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT

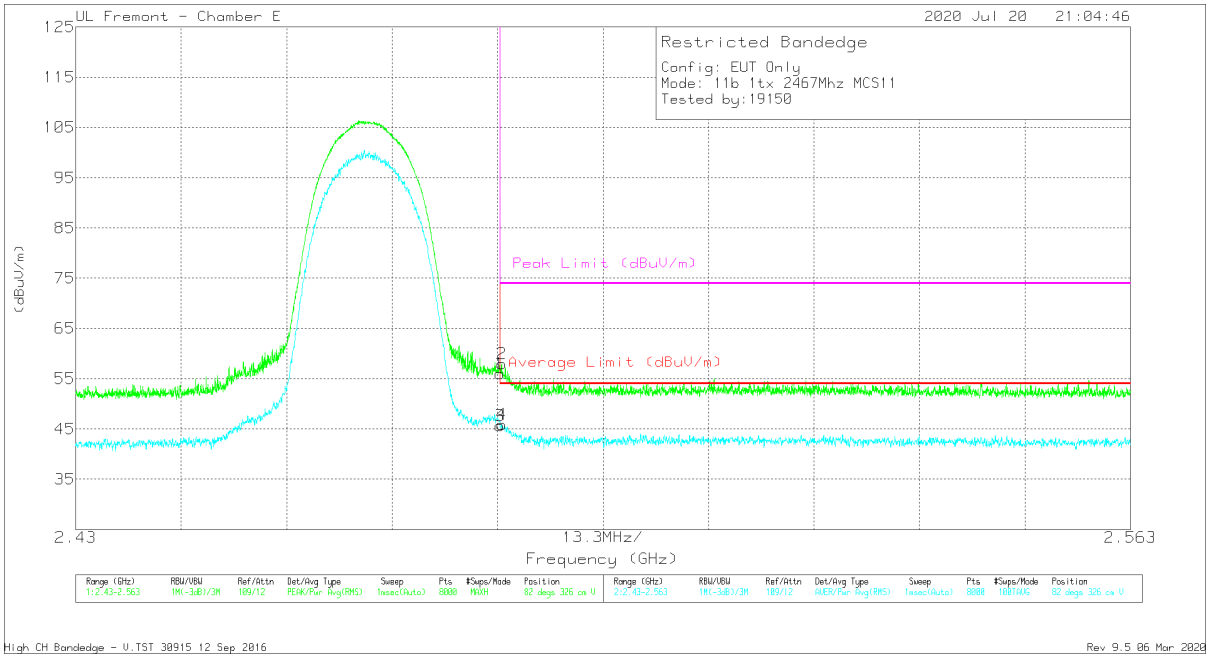


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	44.18	Pk	32.8	-18.4	58.58	-	-	74	-15.42	93	104	H
3	* 2.48351	32.65	RMS	32.8	-18.4	47.05	54	-6.95	-	-	93	104	H
2	* 2.48366	43.79	Pk	32.8	-18.4	58.19	-	-	74	-15.81	93	104	H
4	* 2.48374	33.09	RMS	32.8	-18.4	47.49	54	-6.51	-	-	93	104	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	41.64	Pk	32.8	-18.4	56.04	-	-	74	-17.96	82	326	V
3	* 2.48351	31.27	RMS	32.8	-18.4	45.67	54	-8.33	-	-	82	326	V
2	* 2.48371	43.53	Pk	32.8	-18.4	57.93	-	-	74	-16.07	82	326	V
4	* 2.48371	31.51	RMS	32.8	-18.4	45.91	54	-8.09	-	-	82	326	V

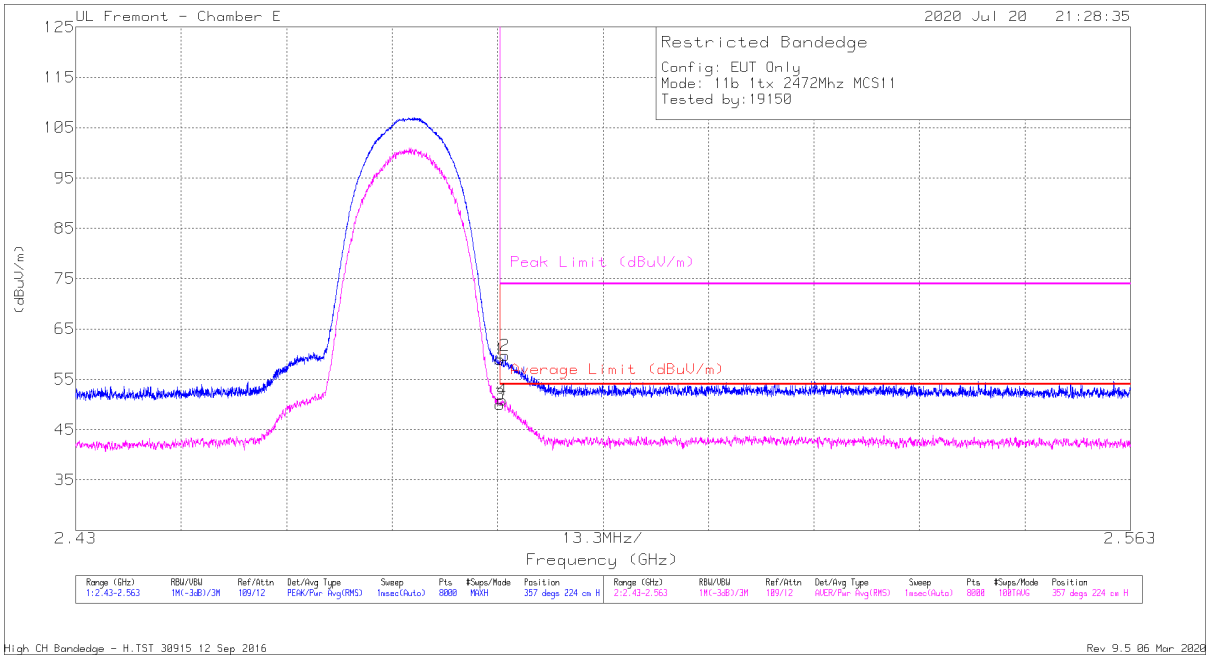
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT

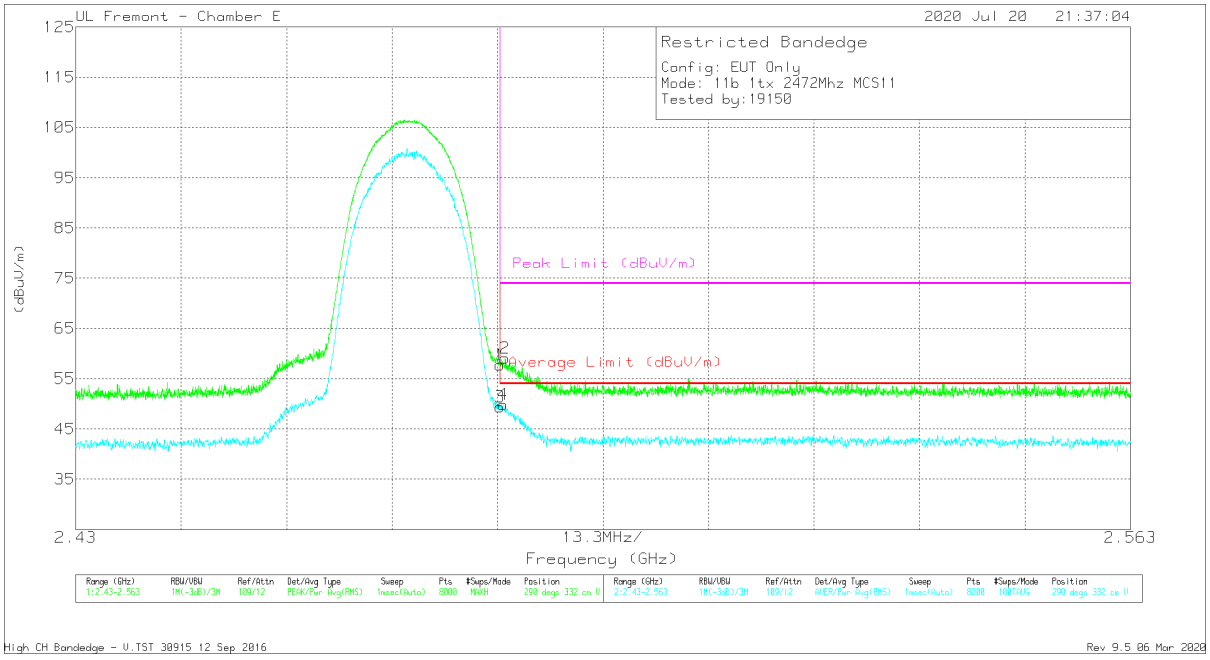


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	44.53	Pk	32.8	-18.4	58.93	-	-	74	-15.07	357	224	H
3	* 2.48351	35.62	RMS	32.8	-18.4	50.02	54	-3.98	-	-	357	224	H
4	* 2.48381	36.43	RMS	32.8	-18.4	50.83	54	-3.17	-	-	357	224	H
2	* 2.48414	45.29	Pk	32.8	-18.4	59.69	-	-	74	-14.31	357	224	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	43.3	Pk	32.8	-18.4	57.7	-	-	74	-16.3	290	332	V
3	* 2.48351	35.02	RMS	32.8	-18.4	49.42	54	-4.58	-	-	290	332	V
4	* 2.48387	35.52	RMS	32.8	-18.4	49.92	54	-4.08	-	-	290	332	V
2	* 2.48415	44.72	Pk	32.8	-18.4	59.12	-	-	74	-14.88	290	332	V

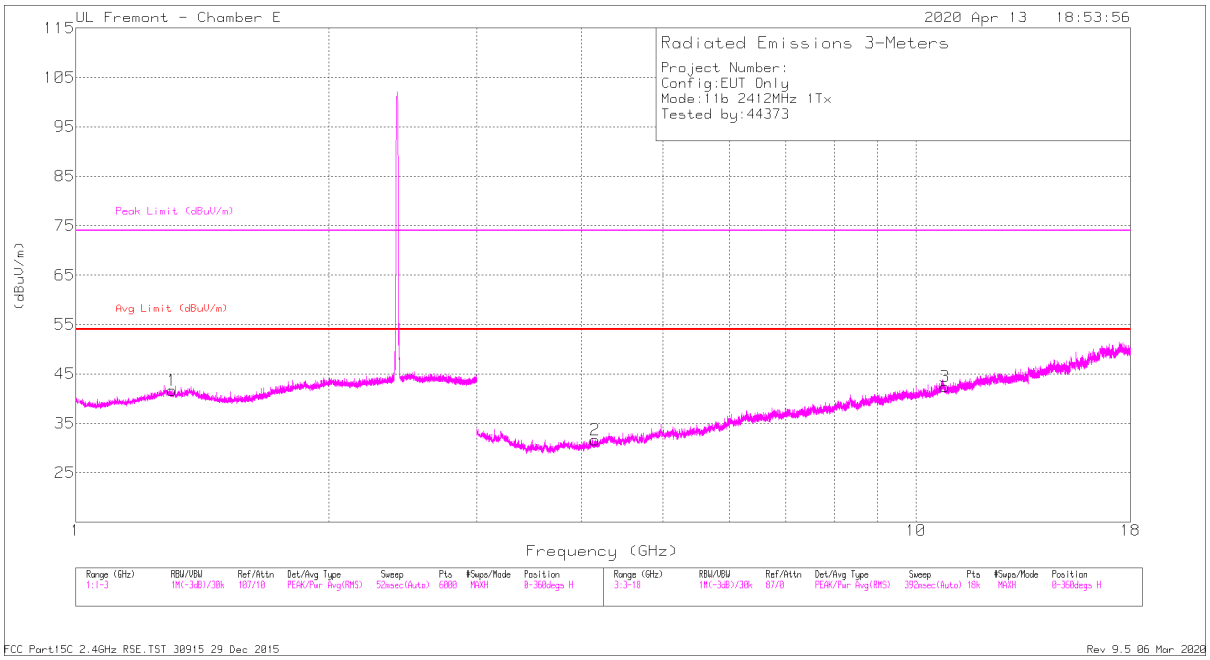
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

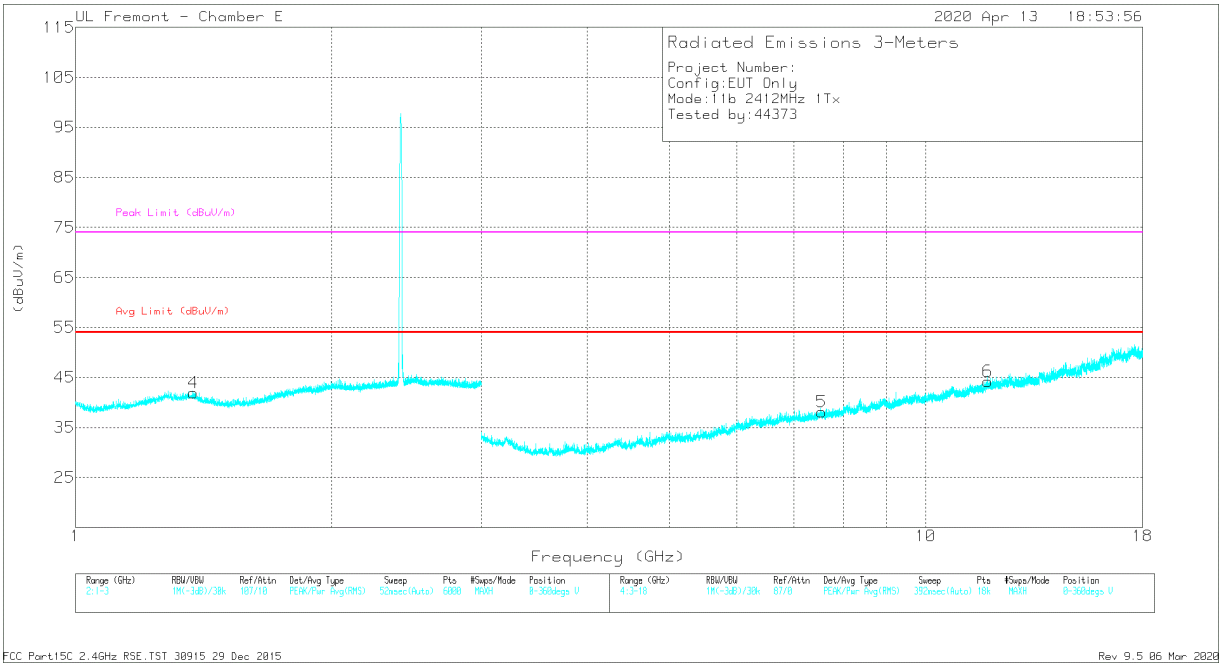
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.3045	45.56	PK2	29.4	-26.4	48.56	-	-	74	-25.44	360	101	H
	* 1.30418	34.1	MAv1	29.4	-26.4	37.1	54	-16.9	-	-	360	101	H
4	* 1.37368	45.58	PK2	29.6	-26.4	48.78	-	-	74	-25.22	360	200	V
	* 1.37362	34.19	MAv1	29.6	-26.4	37.39	54	-16.61	-	-	360	200	V
2	* 4.15078	37.57	PK2	33.5	-32.1	38.97	-	-	74	-35.03	360	101	H
	* 4.1515	26.41	MAv1	33.5	-32.1	27.81	54	-26.19	-	-	360	101	H
3	* 10.82994	37.46	PK2	37.8	-25.2	50.06	-	-	74	-23.94	360	199	H
	* 10.82988	25.93	MAv1	37.8	-25.2	38.53	54	-15.47	-	-	360	199	H
5	* 7.55109	37.34	PK2	35.7	-27.9	45.14	-	-	74	-28.86	360	101	V
	* 7.55165	26.14	MAv1	35.7	-27.9	33.94	54	-20.06	-	-	360	101	V
6	* 11.83618	36.12	PK2	38.4	-22.9	51.62	-	-	74	-22.38	360	101	V
	* 11.83367	24.62	MAv1	38.5	-22.9	40.22	54	-13.78	-	-	360	101	V

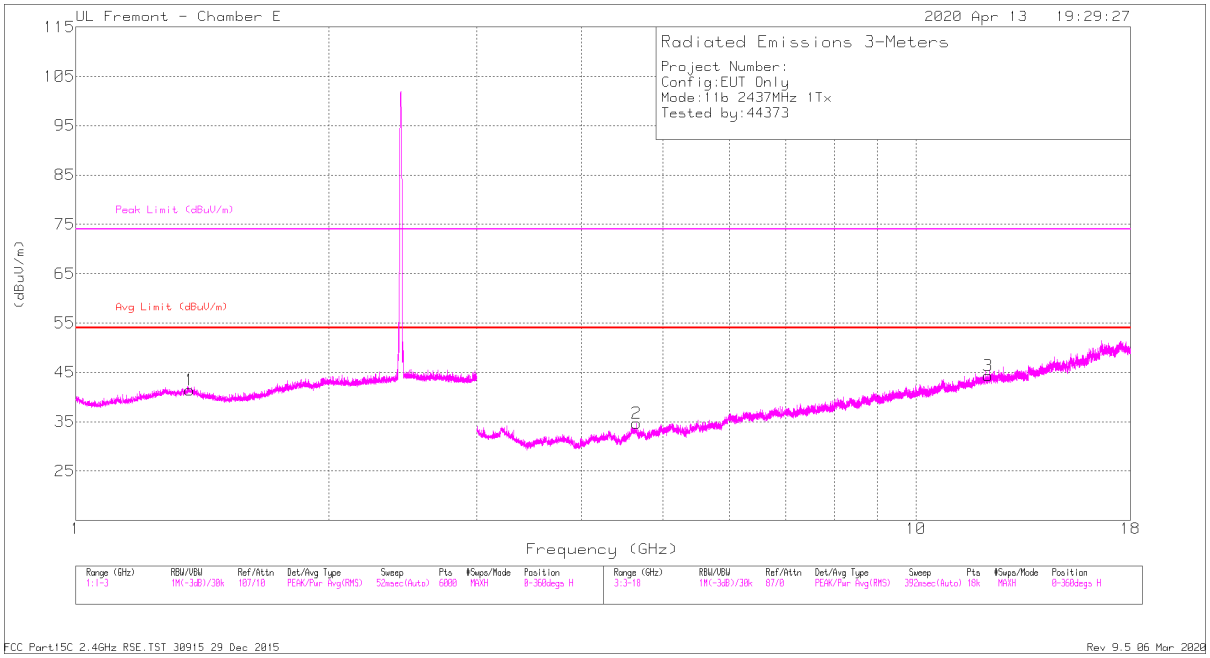
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015
Rev 9.5 06 Mar 2020

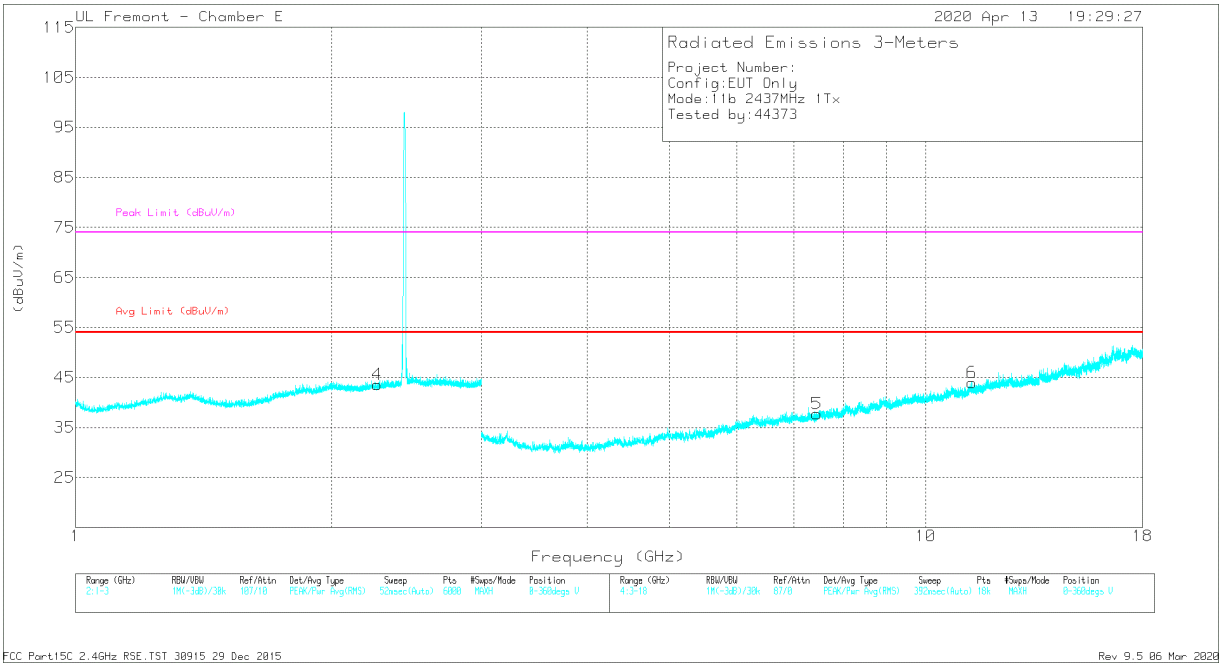
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36766	45.41	PK2	29.8	-26.4	48.81	-	-	74	-25.19	360	101	H
	* 1.36755	34.14	MAv1	29.8	-26.4	37.54	54	-16.46	-	-	360	101	H
4	* 2.26185	45.76	PK2	31.8	-26.5	51.06	-	-	74	-22.94	360	101	V
	* 2.26404	34.02	MAv1	31.8	-26.5	39.32	54	-14.68	-	-	360	101	V
2	* 4.65506	37.92	PK2	34.2	-31.3	40.82	-	-	74	-33.18	360	101	H
	* 4.65427	26.81	MAv1	34.2	-31.3	29.71	54	-24.29	-	-	360	101	H
3	* 12.18467	35.68	PK2	38.8	-23.1	51.38	-	-	74	-22.62	360	101	H
	* 12.18438	24.59	MAv1	38.8	-23.1	40.29	54	-13.71	-	-	360	101	H
5	* 7.45015	37.63	PK2	35.6	-28.2	45.03	-	-	74	-28.97	360	101	V
	* 7.4501	26.14	MAv1	35.6	-28.2	33.54	54	-20.46	-	-	360	101	V
6	* 11.34837	35.64	PK2	37.9	-23.3	50.24	-	-	74	-23.76	360	200	V
	* 11.34984	24.96	MAv1	37.9	-23.3	39.56	54	-14.44	-	-	360	200	V

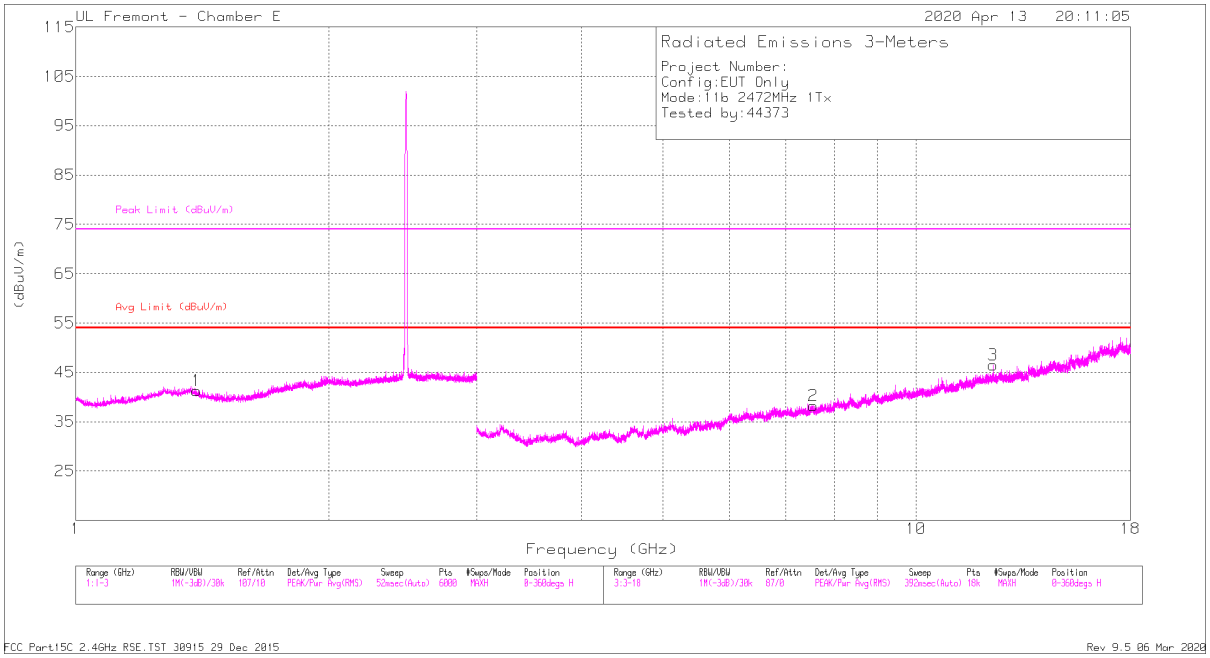
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015
Rev 9.5 06 Mar 2020

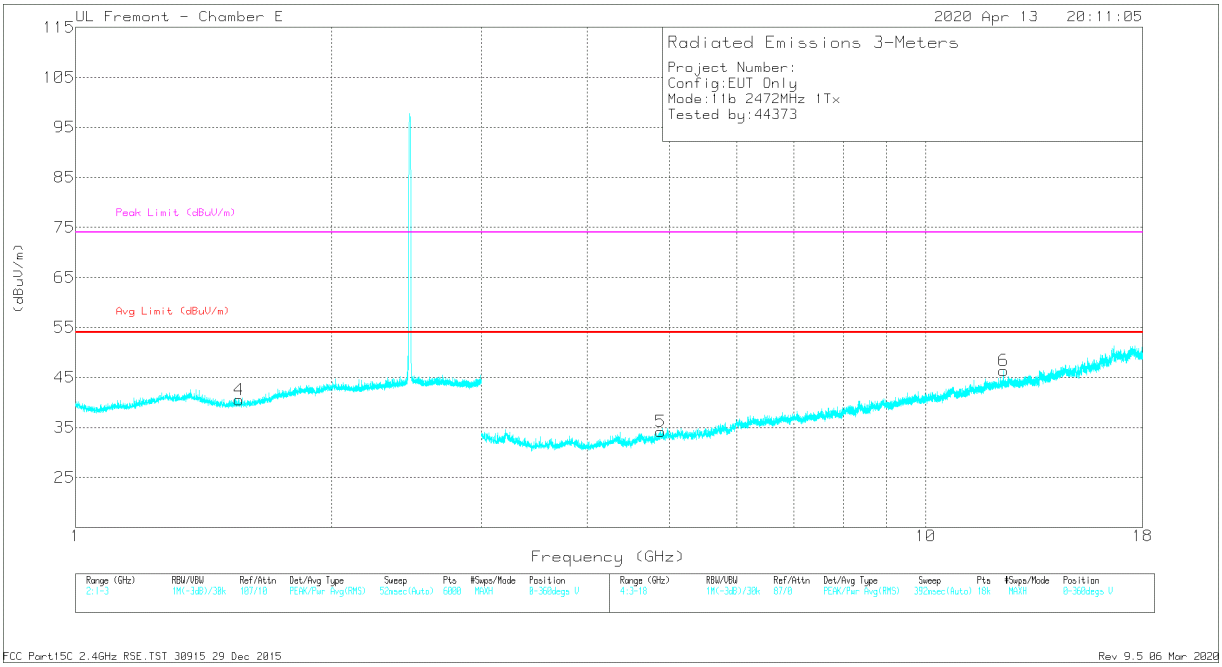
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

HIGH CHANNEL, CH 13 RESULTS



HORIZONTAL



VERTICAL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.39298	45.48	PK2	29.3	-26.4	48.38	-	-	74	-25.62	360	101	H
	* 1.39146	34.07	MAv1	29.3	-26.4	36.97	54	-17.03	-	-	360	101	H
4	* 1.55812	46.23	PK2	28.3	-26.4	48.13	-	-	74	-25.87	360	101	V
	* 1.5571	34.05	MAv1	28.3	-26.4	35.95	54	-18.05	-	-	360	101	V
2	* 7.55316	37.19	PK2	35.7	-27.9	44.99	-	-	74	-29.01	360	200	H
	* 7.55447	26.06	MAv1	35.7	-27.9	33.86	54	-20.14	-	-	360	200	H
3	* 12.3599	36.99	PK2	38.9	-22.9	52.99	-	-	74	-21.01	255	110	H
	* 12.36086	26.07	MAv1	38.9	-22.9	42.07	54	-11.93	-	-	255	110	H
5	* 4.88381	37.85	PK2	34.1	-31.2	40.75	-	-	74	-33.25	360	200	V
	* 4.88279	26.88	MAv1	34.1	-31.2	29.78	54	-24.22	-	-	360	200	V
6	* 12.3611	37.68	PK2	38.9	-22.9	53.68	-	-	74	-20.32	272	117	V
	* 12.36107	27.39	MAv1	38.9	-22.9	43.39	54	-10.61	-	-	272	117	V

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

FCC Part15C 2.4GHz RSE.TST 30915 29 Dec 2015
Rev 9.5 06 Mar 2020

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

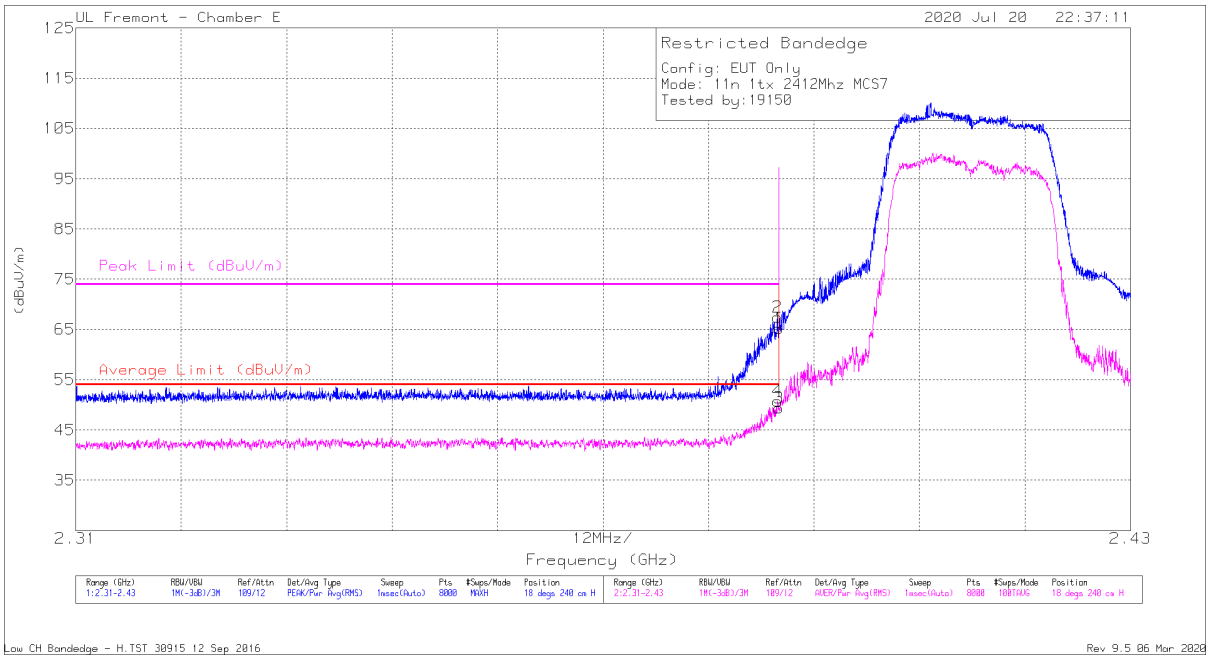
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

ANT 4

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT

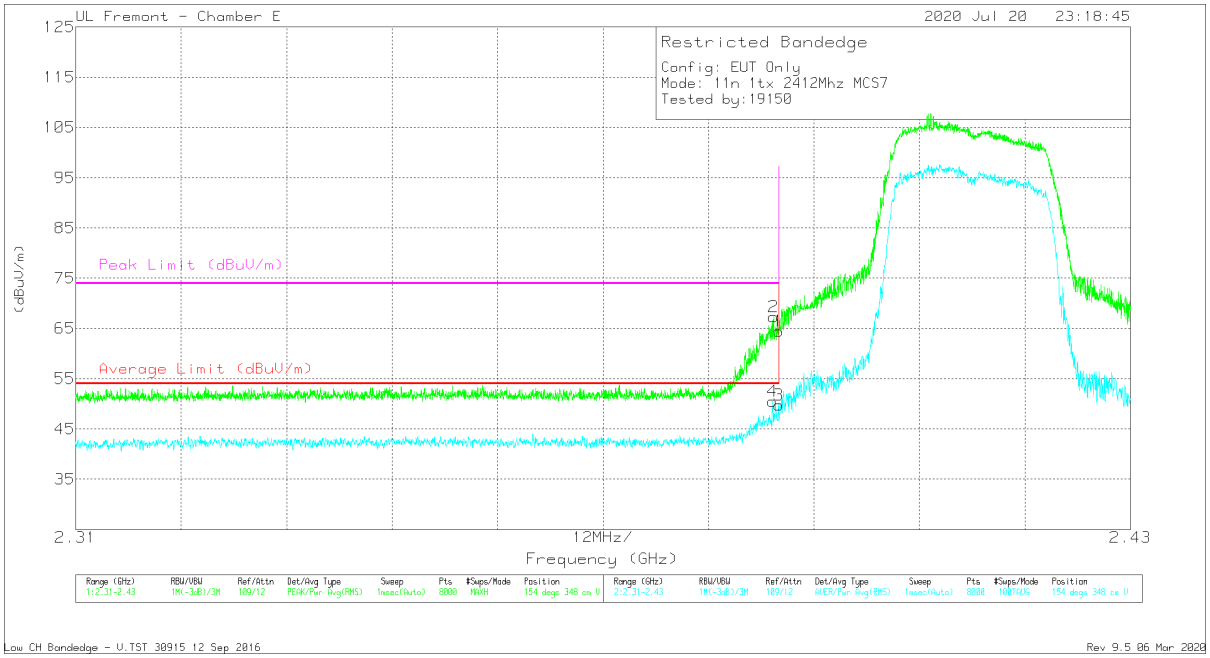


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.38986	53.63	Pk	32.2	-18.4	0	67.43	-	-	74	-6.57	18	240	H
4	* 2.38987	36.31	RMS	32.2	-18.4	.61	50.72	54	-3.28	-	-	18	240	H
1	* 2.38999	51.43	Pk	32.2	-18.4	0	65.23	-	-	74	-8.77	18	240	H
3	* 2.38999	34.93	RMS	32.2	-18.4	.61	49.34	54	-4.66	-	-	18	240	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



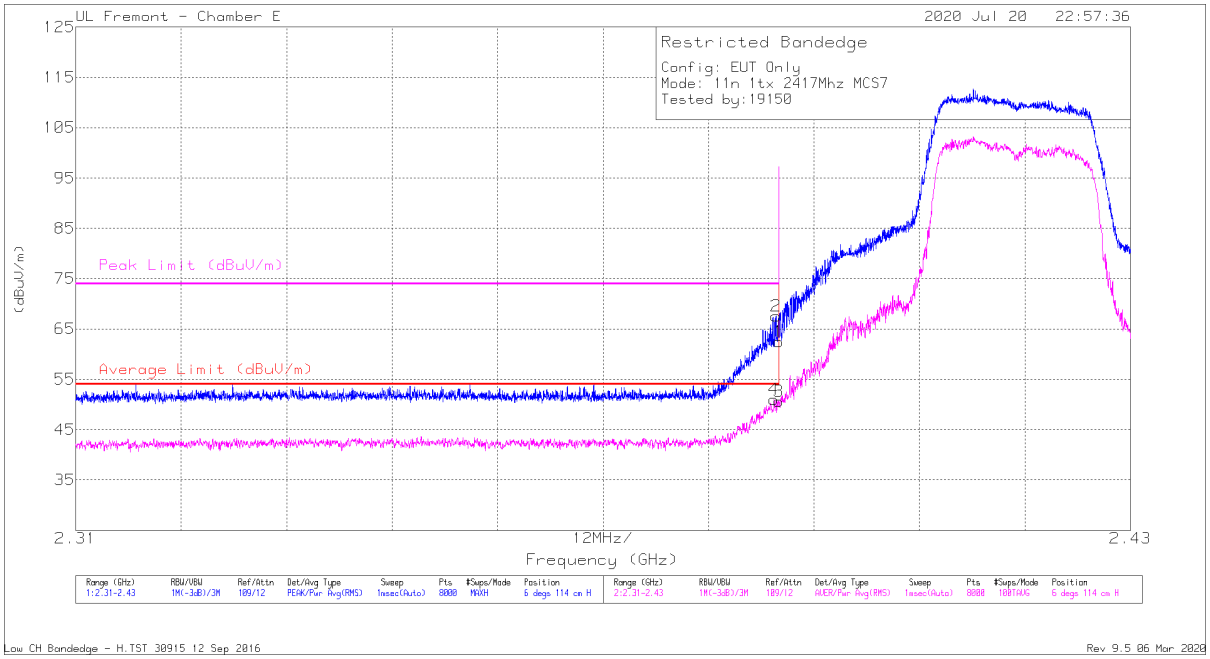
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	50.69	Pk	32.2	-18.4	0	64.49	-	-	74	-9.51	154	348	V
2	* 2.38939	53.48	Pk	32.2	-18.4	0	67.28	-	-	74	-6.72	154	348	V
3	* 2.38999	35.37	RMS	32.2	-18.4	.61	49.78	54	-4.22	-	-	154	348	V
4	* 2.38929	36.13	RMS	32.2	-18.4	.61	50.54	54	-3.46	-	-	154	348	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT

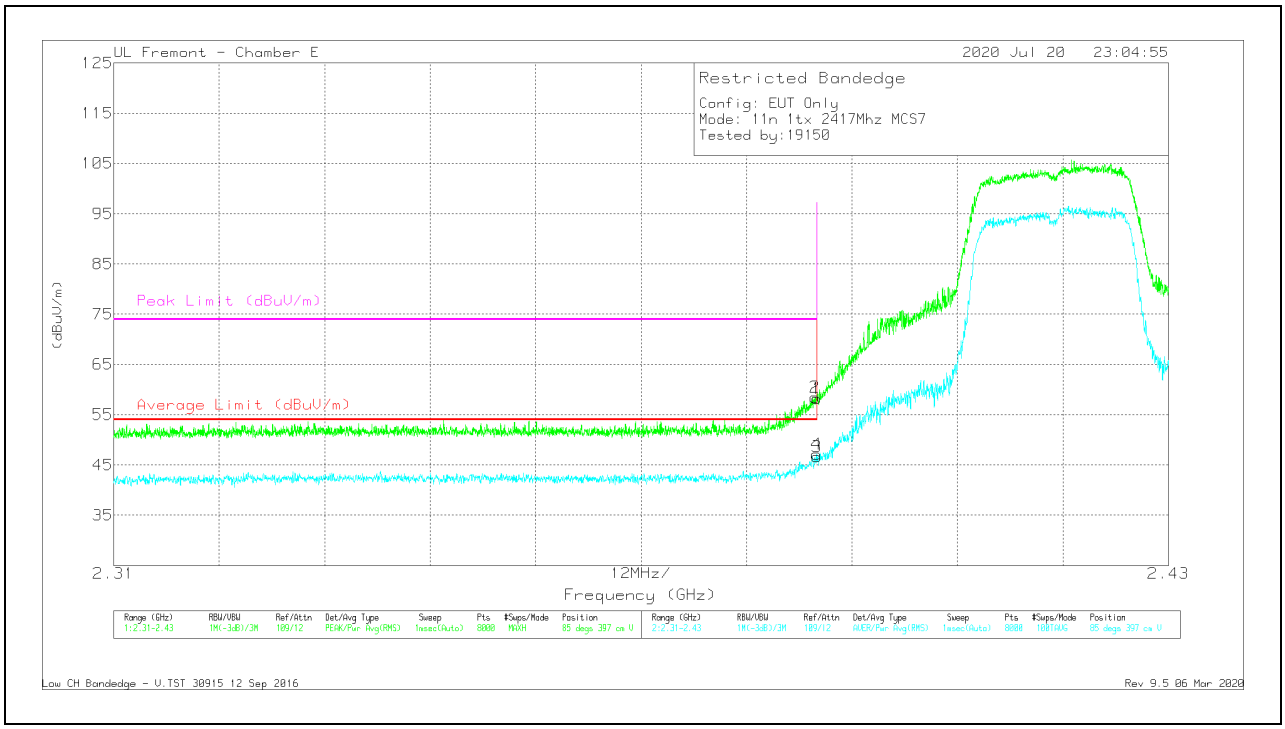


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.38945	36.64	RMS	32.2	-18.4	.61	51.05	54	-2.95	-	-	6	114	H
2	* 2.38968	53.8	Pk	32.2	-18.4	0	67.6	-	-	74	-6.4	6	114	H
1	* 2.38999	48.68	Pk	32.2	-18.4	0	62.48	-	-	74	-11.52	6	114	H
3	* 2.38999	36.17	RMS	32.2	-18.4	.61	50.58	54	-3.42	-	-	6	114	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	44.41	Pk	32.2	-18.4	0	58.21	-	-	74	-15.79	85	397	V
2	* 2.3898	44.72	Pk	32.2	-18.4	0	58.52	-	-	74	-15.48	85	397	V
3	* 2.38999	32.2	RMS	32.2	-18.4	.61	46.61	54	-7.39	-	-	85	397	V
4	* 2.38996	32.7	RMS	32.2	-18.4	.61	47.11	54	-6.89	-	-	85	397	V

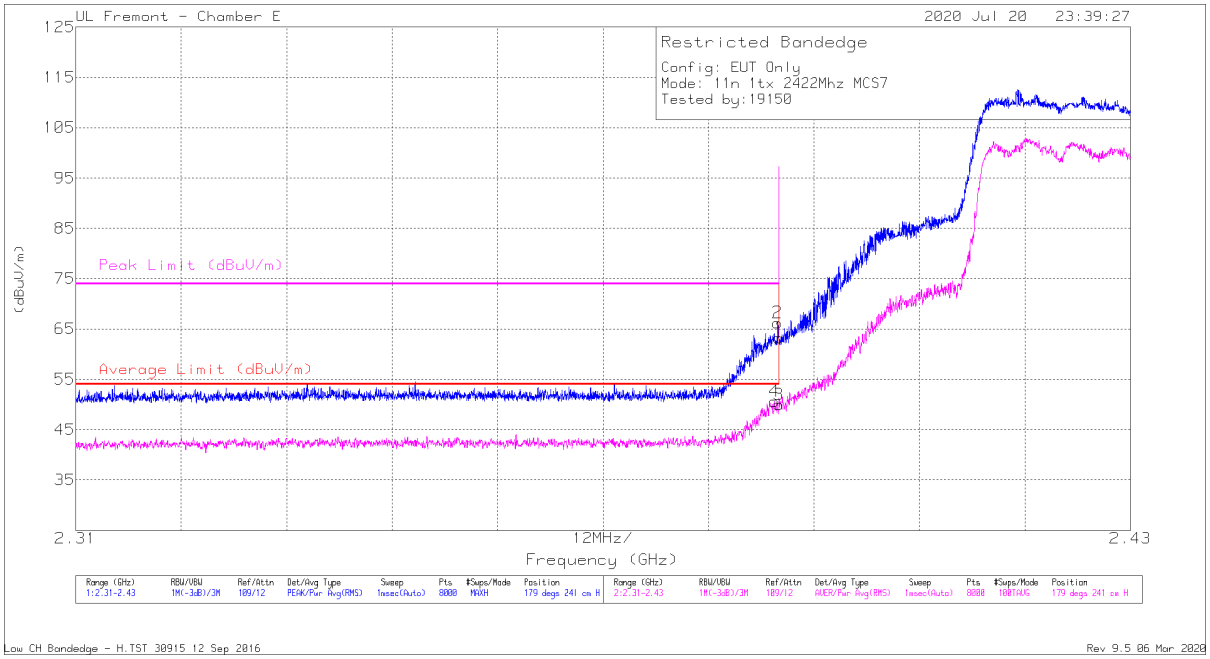
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT

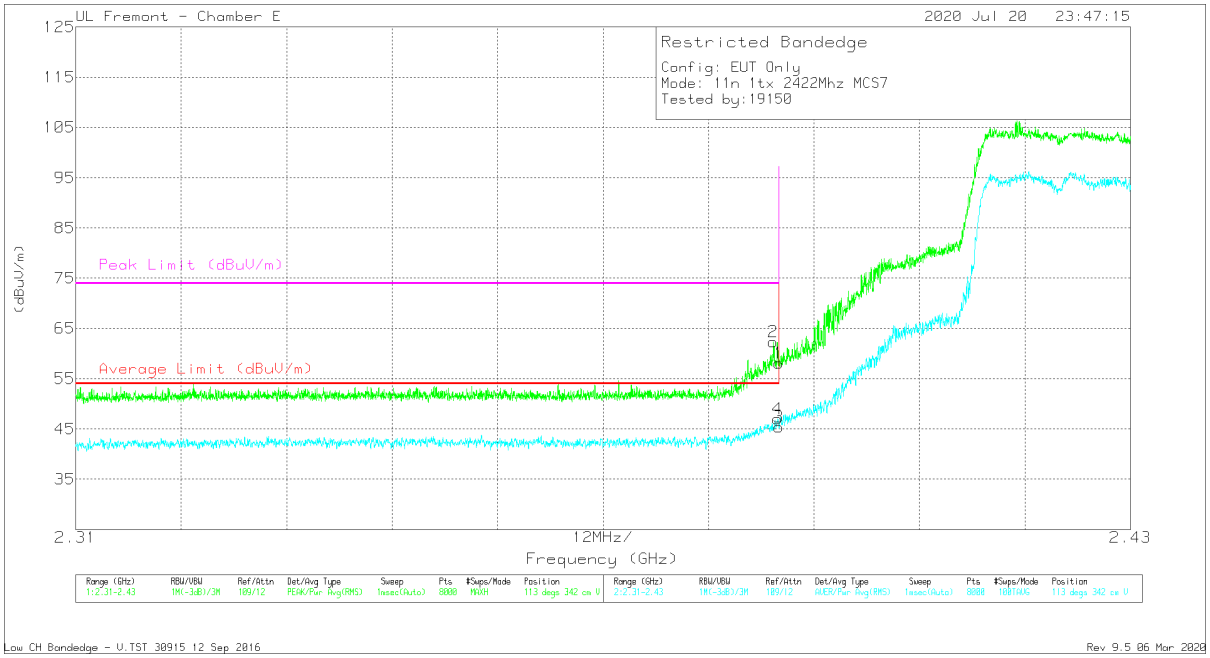


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	49.45	Pk	32.2	-18.4	0	63.25	-	-	74	-10.75	179	241	H
2	* 2.38987	52.47	Pk	32.2	-18.4	0	66.27	-	-	74	-7.73	179	241	H
3	* 2.38999	35.62	RMS	32.2	-18.4	.61	50.03	54	-3.97	-	-	179	241	H
4	* 2.38948	36.21	RMS	32.2	-18.4	.61	50.62	54	-3.38	-	-	179	241	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



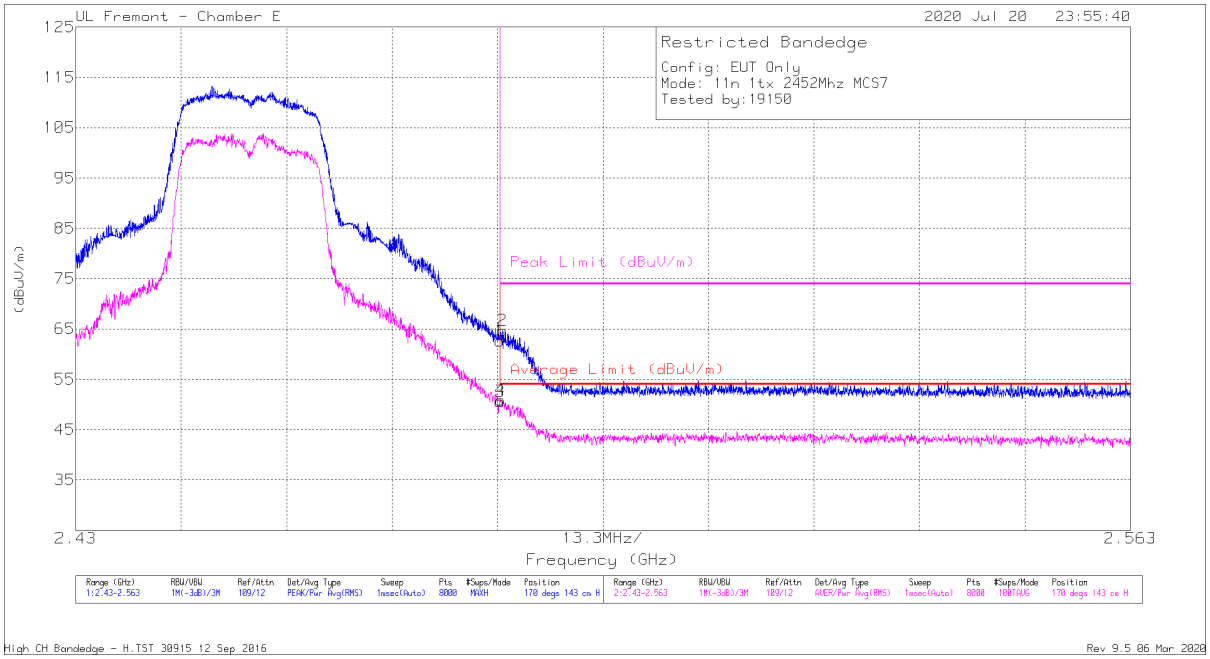
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	44.28	Pk	32.2	-18.4	0	58.08	-	-	74	-15.92	113	342	V
2	* 2.38936	48.59	Pk	32.2	-18.4	0	62.39	-	-	74	-11.61	113	342	V
3	* 2.38999	31.01	RMS	32.2	-18.4	.61	45.42	54	-8.58	-	-	113	342	V
4	* 2.38989	32.61	RMS	32.2	-18.4	.61	47.02	54	-6.98	-	-	113	342	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 9)

HORIZONTAL RESULT

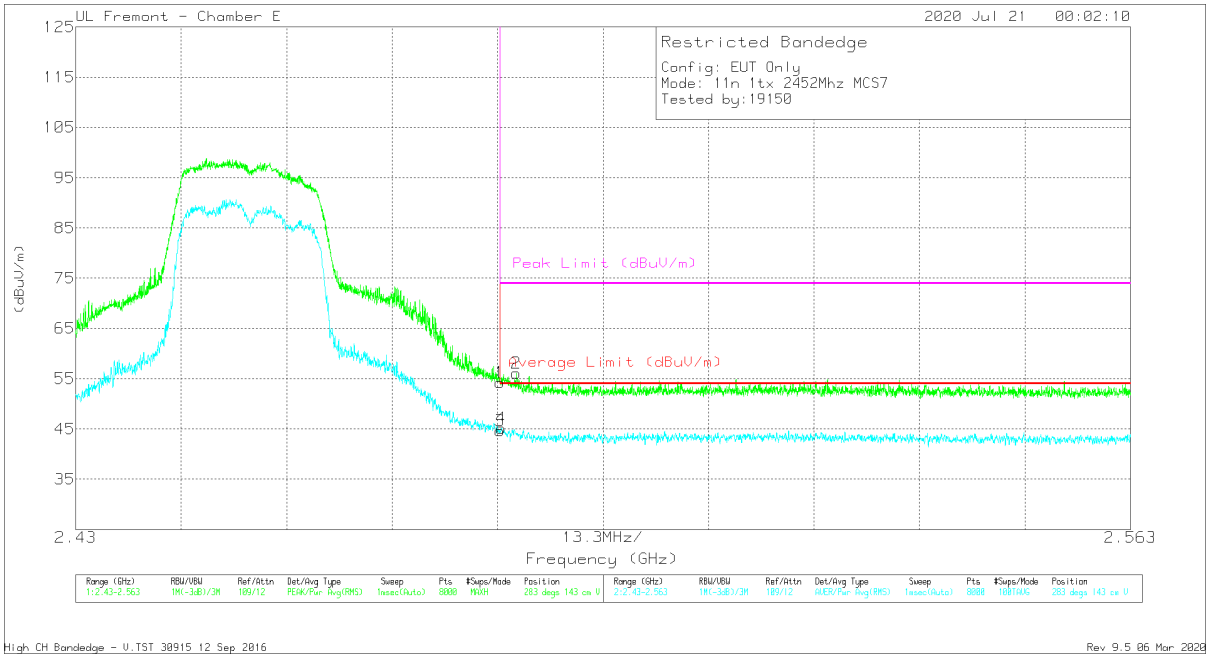


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	48.2	Pk	32.8	-18.4	0	62.6	-	-	74	-11.4	170	143	H
2	* 2.48384	50.36	Pk	32.8	-18.4	0	64.76	-	-	74	-9.24	170	143	H
3	* 2.48351	35.6	RMS	32.8	-18.4	.61	50.61	54	-3.39	-	-	170	143	H
4	* 2.48359	35.86	RMS	32.8	-18.4	.61	50.87	54	-3.13	-	-	170	143	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



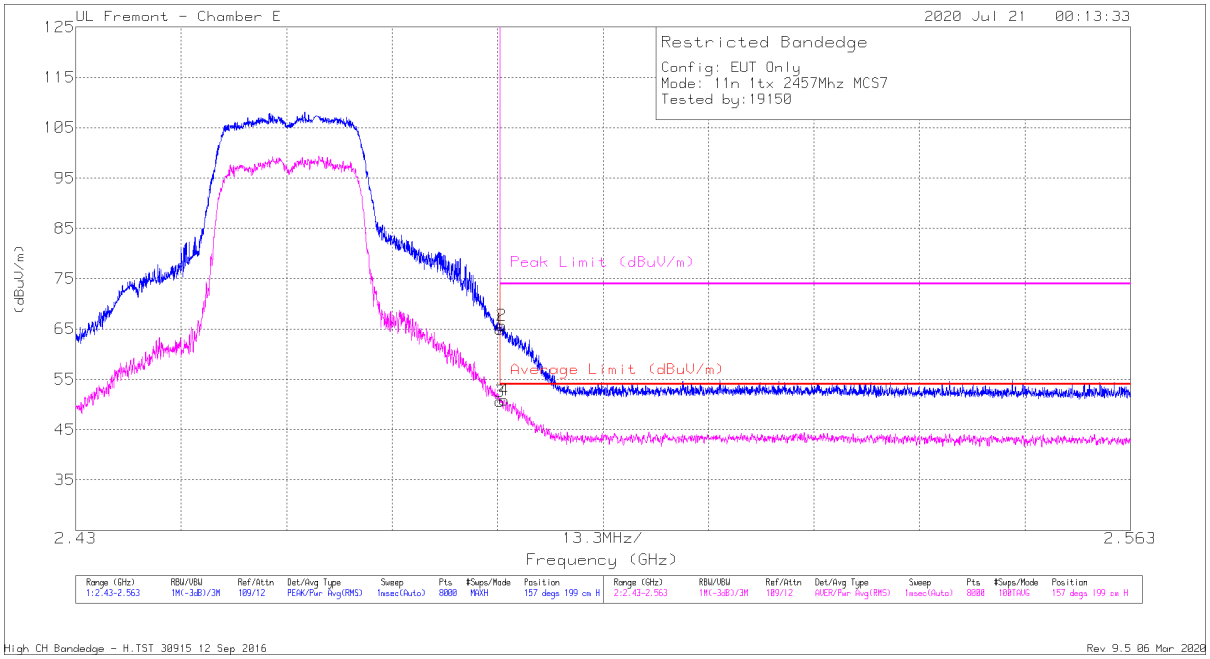
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	39.89	Pk	32.8	-18.4	0	54.29	-	-	74	-19.71	283	143	V
2	* 2.48555	41.66	Pk	32.8	-18.4	0	56.06	-	-	74	-17.94	283	143	V
3	* 2.48351	29.62	RMS	32.8	-18.4	.61	44.63	54	-9.37	-	-	283	143	V
4	* 2.48364	30.17	RMS	32.8	-18.4	.61	45.18	54	-8.82	-	-	283	143	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 10)

HORIZONTAL RESULT

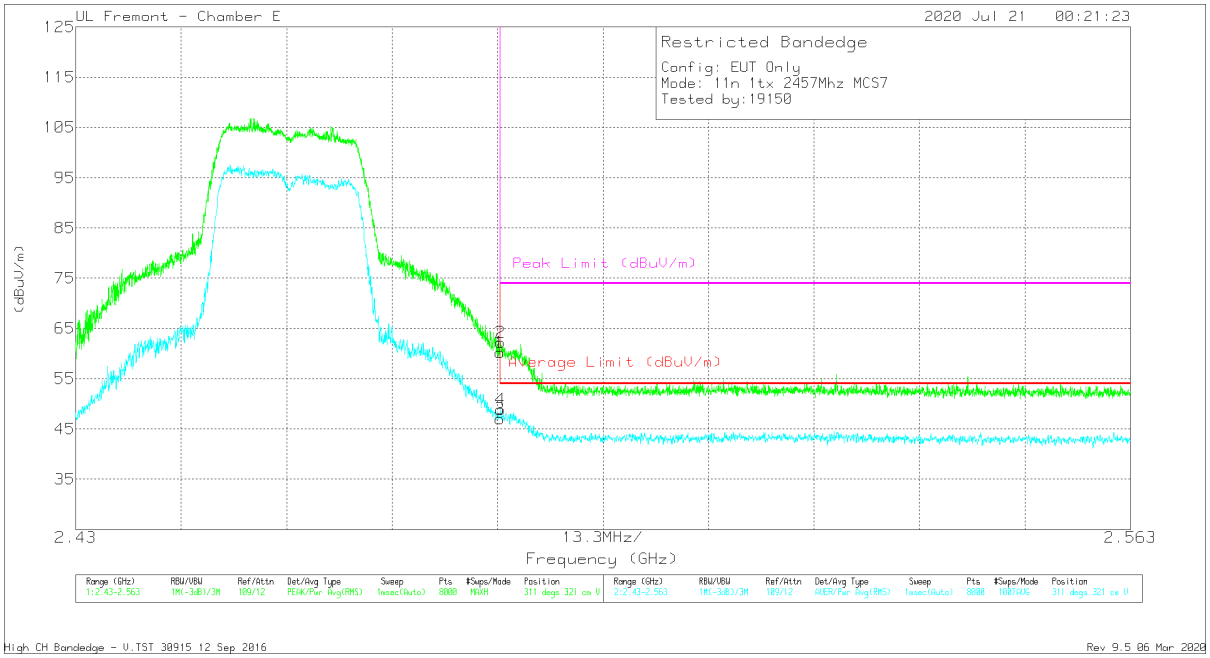


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	50.58	Pk	32.8	-18.4	0	64.98	-	-	74	-9.02	157	199	H
2	* 2.48374	51.26	Pk	32.8	-18.4	0	65.66	-	-	74	-8.34	157	199	H
3	* 2.48351	35.62	RMS	32.8	-18.4	.61	50.63	54	-3.37	-	-	157	199	H
4	* 2.48402	35.83	RMS	32.8	-18.4	.61	50.84	54	-3.16	-	-	157	199	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



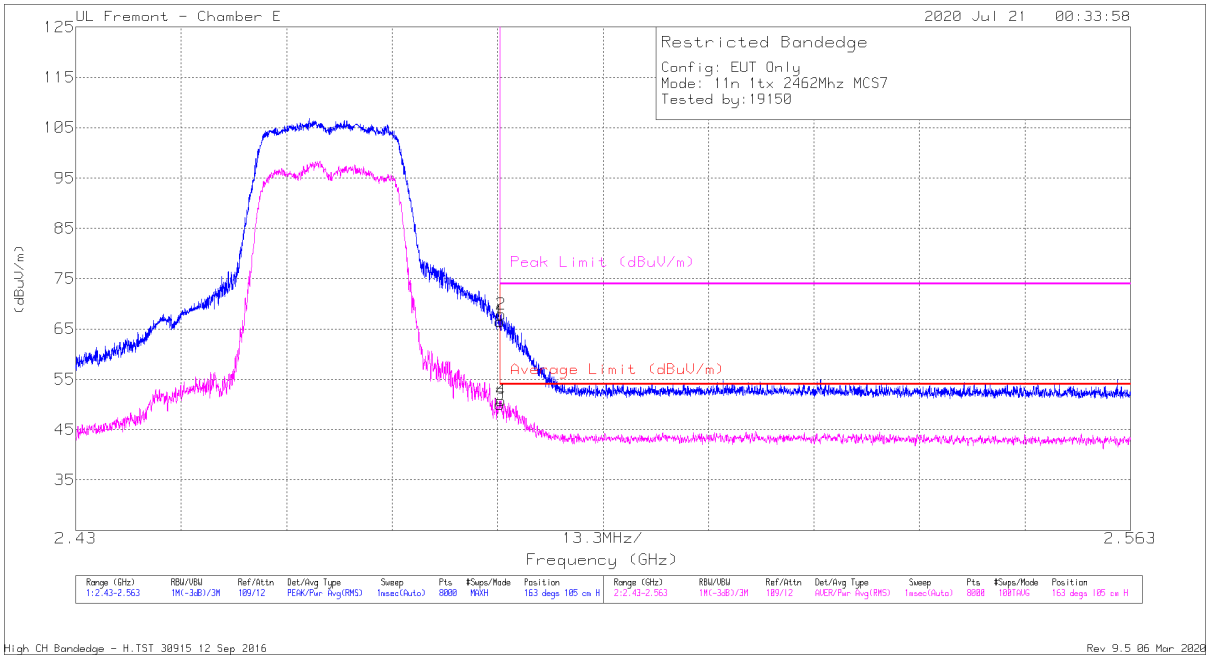
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	45.83	Pk	32.8	-18.4	0	60.23	-	-	74	-13.77	311	321	V
2	* 2.48359	47.85	Pk	32.8	-18.4	0	62.25	-	-	74	-11.75	311	321	V
3	* 2.48351	32.06	RMS	32.8	-18.4	.61	47.07	54	-6.93	-	-	311	321	V
4	* 2.48357	33.92	RMS	32.8	-18.4	.61	48.93	54	-5.07	-	-	311	321	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT

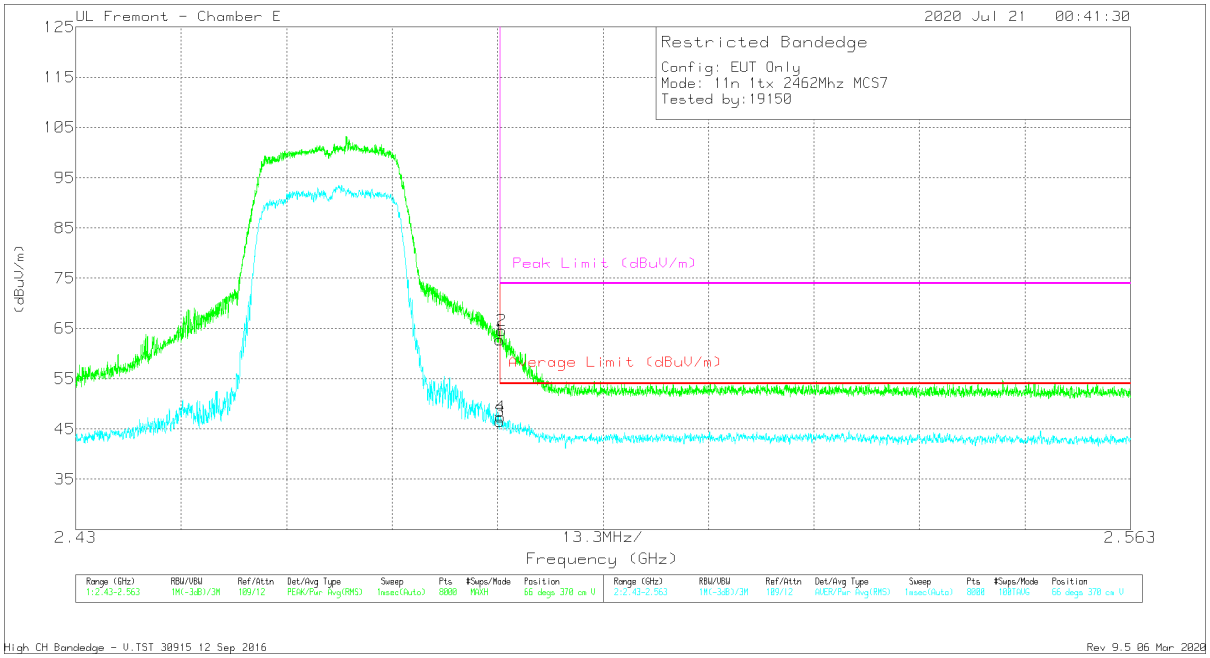


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	52.08	Pk	32.8	-18.4	0	66.48	-	-	74	-7.52	163	105	H
2	* 2.48367	53.53	Pk	32.8	-18.4	0	67.93	-	-	74	-6.07	163	105	H
3	* 2.48351	35.03	RMS	32.8	-18.4	.61	50.04	54	-3.96	-	-	163	105	H
4	* 2.48362	35.74	RMS	32.8	-18.4	.61	50.75	54	-3.25	-	-	163	105	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



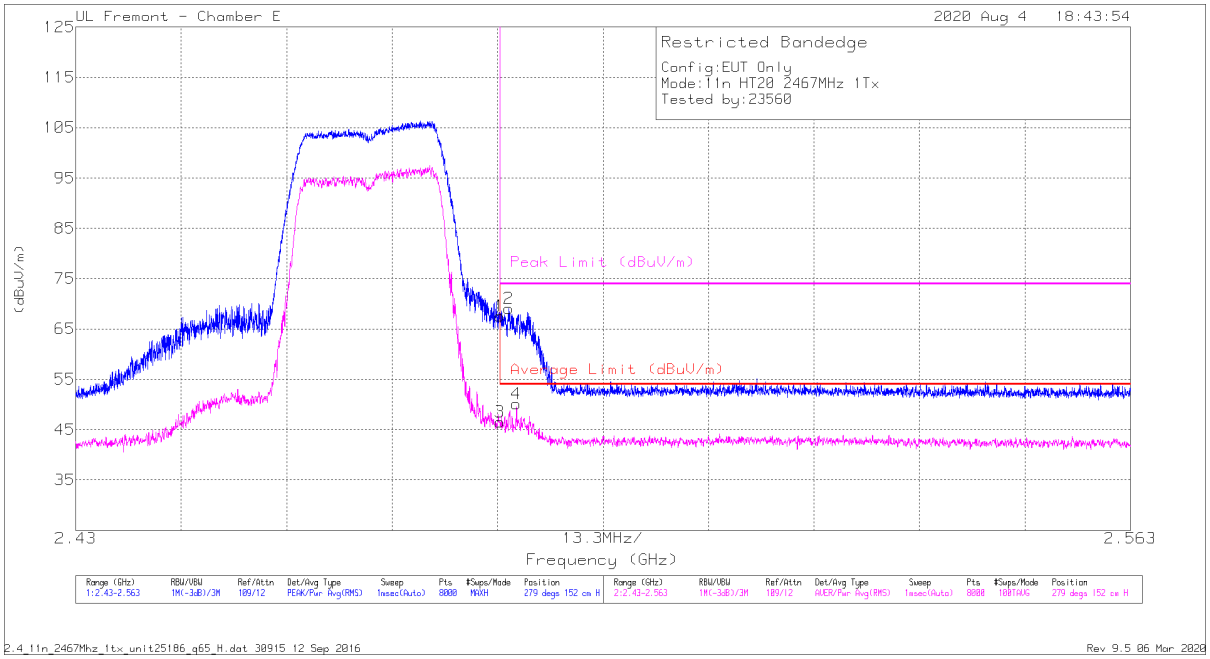
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	48.36	Pk	32.8	-18.4	0	62.76	-	-	74	-11.24	66	370	V
2	* 2.48372	50.24	Pk	32.8	-18.4	0	64.64	-	-	74	-9.36	66	370	V
3	* 2.48351	31.51	RMS	32.8	-18.4	.61	46.52	54	-7.48	-	-	66	370	V
4	* 2.48359	32.41	RMS	32.8	-18.4	.61	47.42	54	-6.58	-	-	66	370	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT

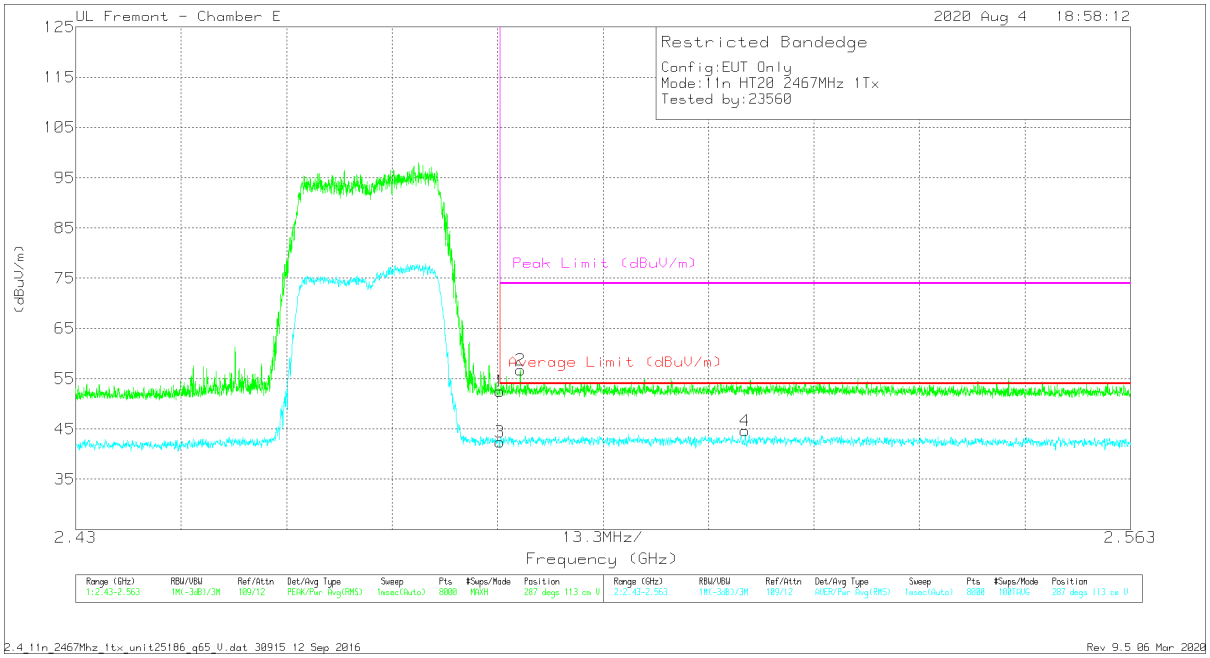


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	53.17	Pk	32.8	-18.4	0	67.57	-	-	74	-6.43	279	152	H
2	* 2.48462	54.63	Pk	32.8	-18.4	0	69.03	-	-	74	-4.97	279	152	H
3	* 2.48351	31.55	RMS	32.8	-18.4	.61	46.56	54	-7.44	-	-	279	152	H
4	* 2.48558	35.09	RMS	32.8	-18.4	.61	50.1	54	-3.9	-	-	279	152	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	38.12	Pk	32.8	-18.4	0	52.52	-	-	74	-21.48	287	113	V
3	* 2.48351	27.45	RMS	32.8	-18.4	.61	42.46	54	-11.54	-	-	287	113	V
2	* 2.48607	42.28	Pk	32.8	-18.4	0	56.68	-	-	74	-17.32	287	113	V
4	2.51443	29.42	RMS	32.9	-18.3	.61	44.63	54	-9.37	-	-	287	113	V

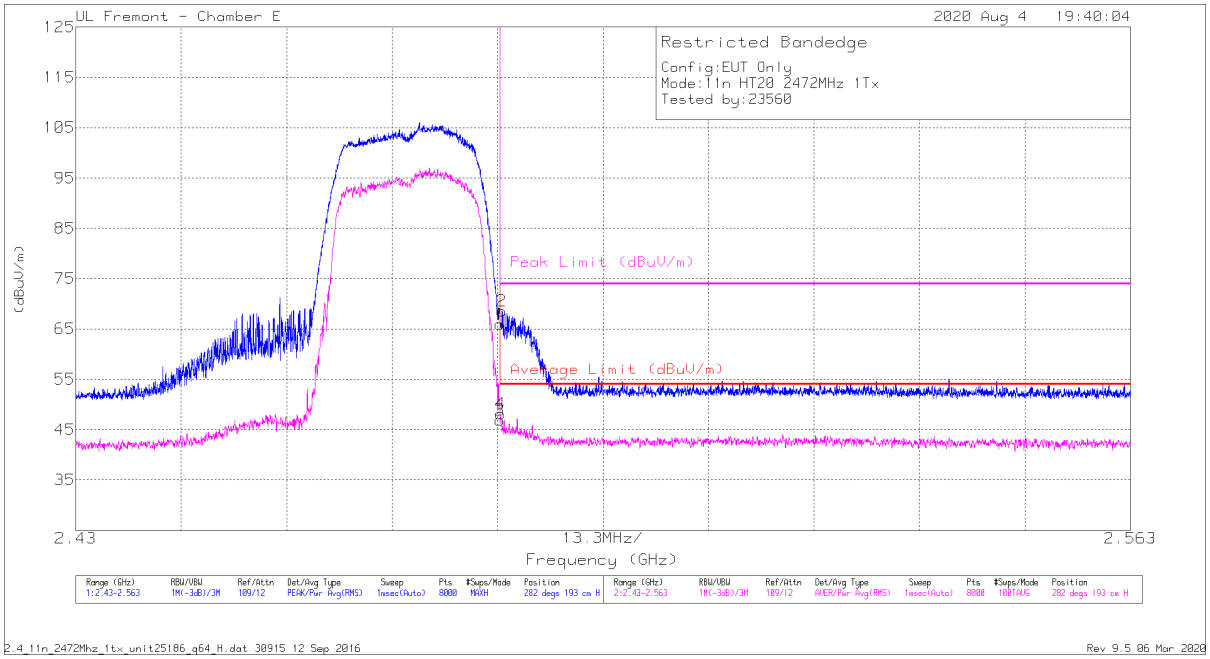
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



Trace Markers

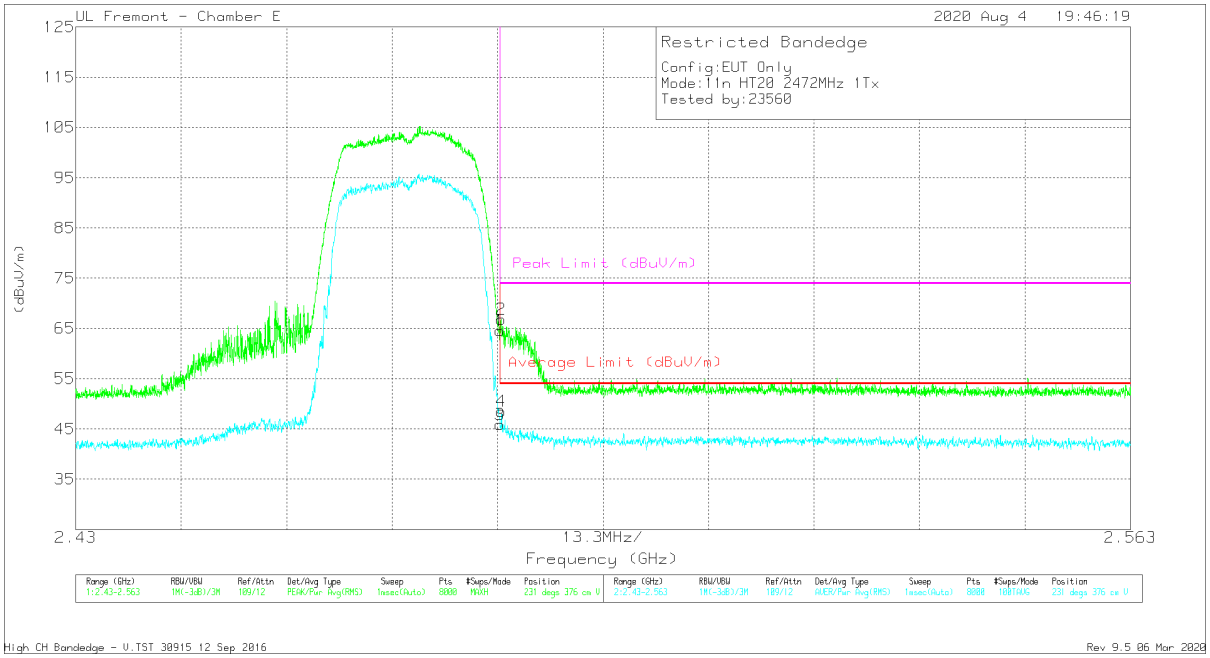
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	51.59	Pk	32.8	-18.4	0	65.99	-	-	74	-8.01	282	193	H
2	* 2.48376	54.2	Pk	32.8	-18.4	0	68.6	-	-	74	-5.4	282	193	H
3	* 2.48351	31.86	RMS	32.8	-18.4	.61	46.87	54	-7.13	-	-	282	193	H
4	* 2.48357	33.07	RMS	32.8	-18.4	.61	48.08	54	-5.92	-	-	282	193	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	50.22	Pk	32.8	-18.4	0	64.62	-	-	74	-9.38	231	376	V
2	* 2.48362	52.38	Pk	32.8	-18.4	0	66.78	-	-	74	-7.22	231	376	V
3	* 2.48351	30.91	RMS	32.8	-18.4	.61	45.92	54	-8.08	-	-	231	376	V
4	* 2.48369	33.47	RMS	32.8	-18.4	.61	48.48	54	-5.52	-	-	231	376	V

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

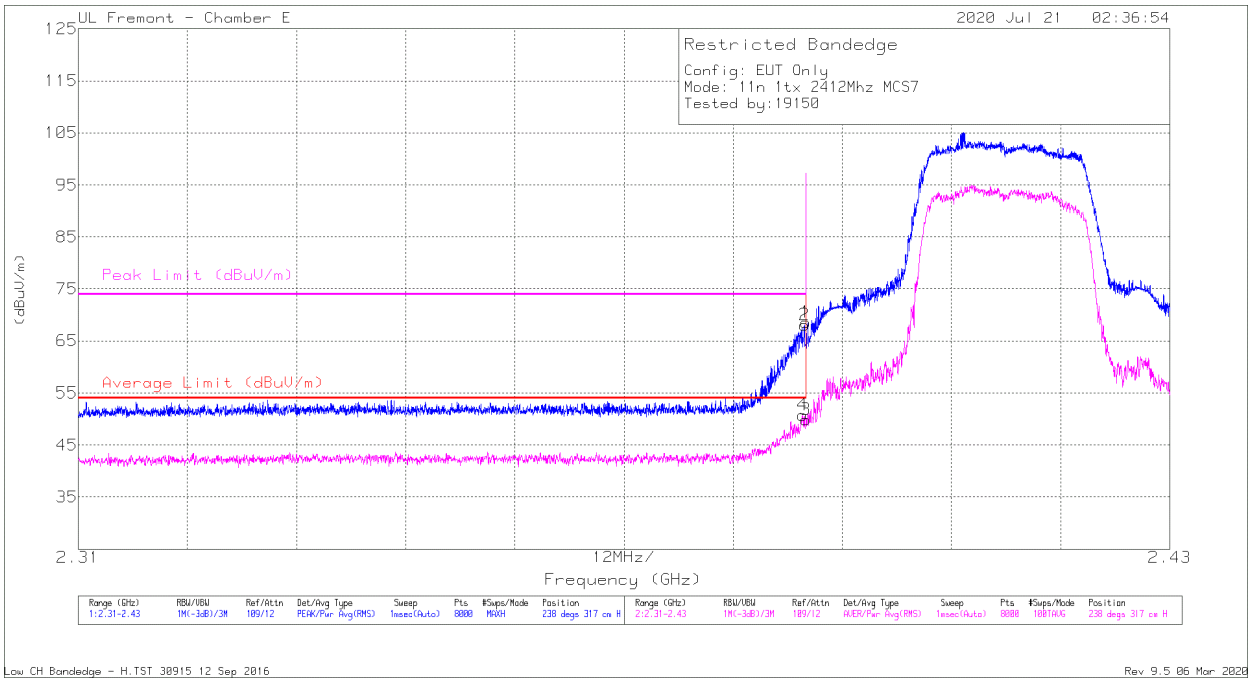
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

ANT 3

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT

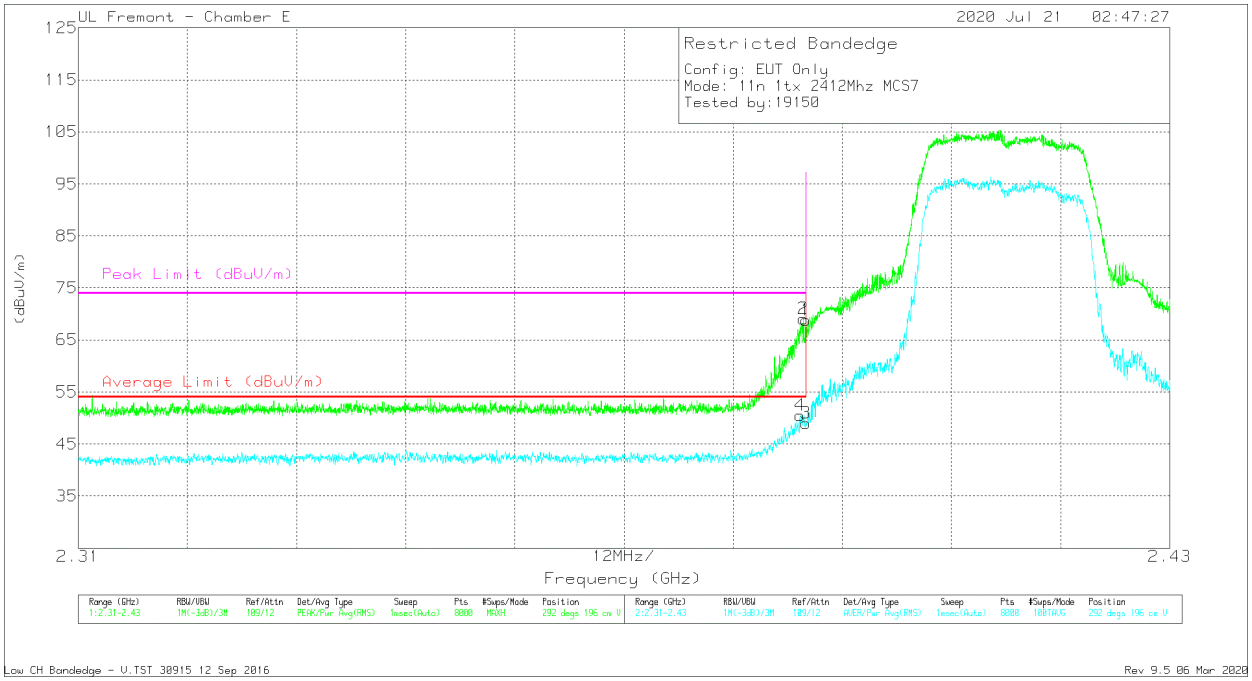


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	54.77	Pk	32.2	-18.4	0	68.57	-	-	74	-5.43	238	317	H
2	* 2.38983	54.3	Pk	32.2	-18.4	0	68.1	-	-	74	-5.9	238	317	H
3	* 2.38999	35.44	RMS	32.2	-18.4	.61	49.85	54	-4.15	-	-	238	317	H
4	* 2.38963	36.31	RMS	32.2	-18.4	.61	50.72	54	-3.28	-	-	238	317	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



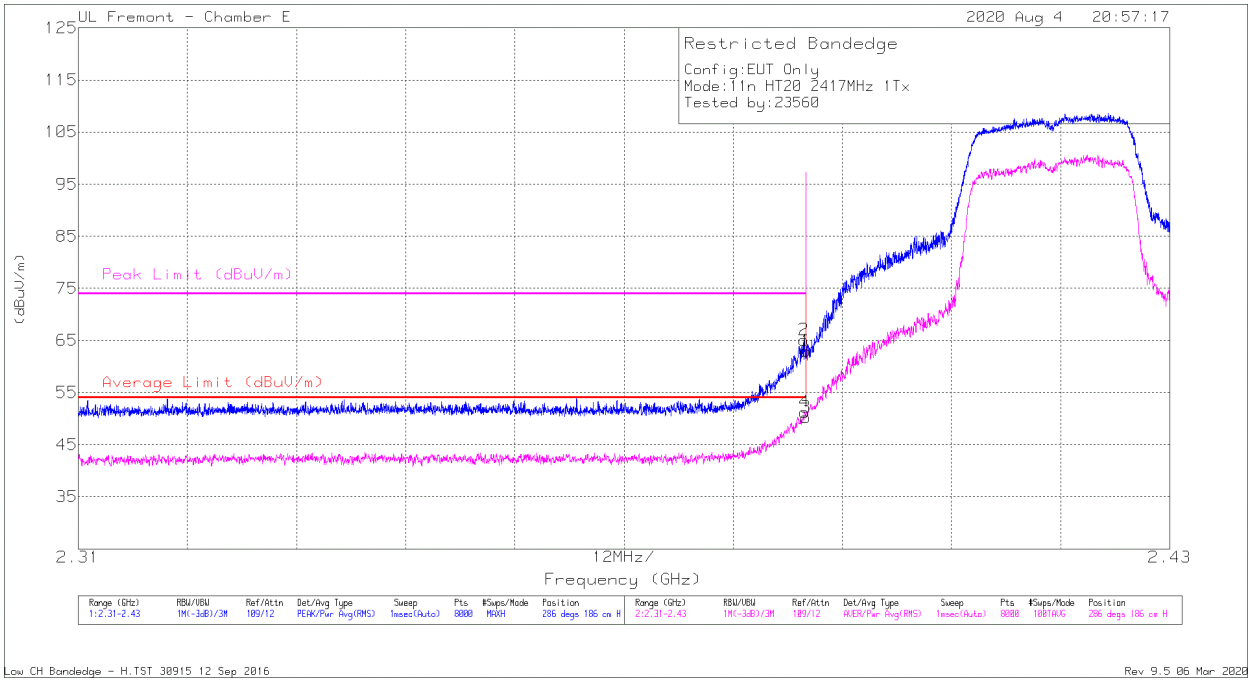
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	55.02	Pk	32.2	-18.4	0	68.82	-	-	74	-5.18	292	196	V
2	* 2.38972	55.3	Pk	32.2	-18.4	0	69.1	-	-	74	-4.9	292	196	V
3	* 2.38999	34.65	RMS	32.2	-18.4	.61	49.06	54	-4.94	-	-	292	196	V
4	* 2.38935	36.14	RMS	32.2	-18.4	.61	50.55	54	-3.45	-	-	292	196	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT

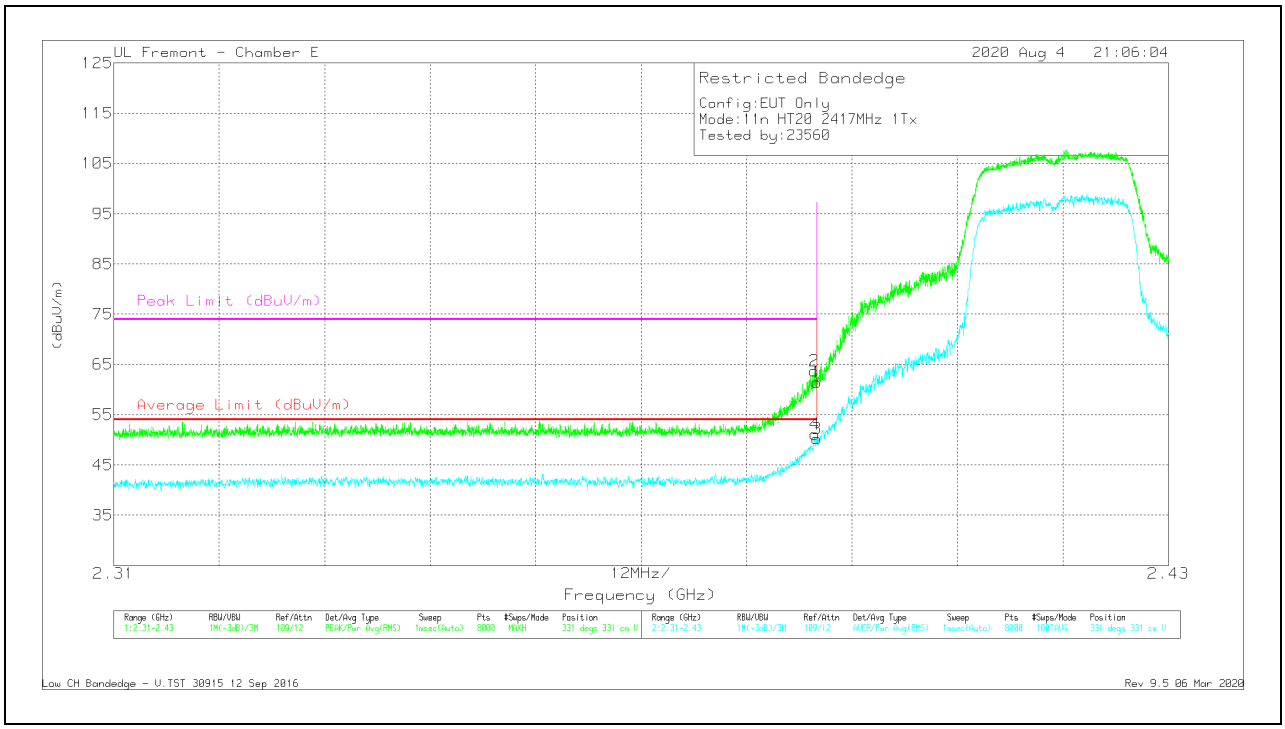


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	49.14	Pk	32.2	-18.4	0	62.94	-	-	74	-11.06	286	186	H
2	* 2.38981	51.27	Pk	32.2	-18.4	0	65.07	-	-	74	-8.93	286	186	H
3	* 2.38999	35.79	RMS	32.2	-18.4	.61	50.2	54	-3.8	-	-	286	186	H
4	* 2.38986	36.81	RMS	32.2	-18.4	.61	51.22	54	-2.78	-	-	286	186	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



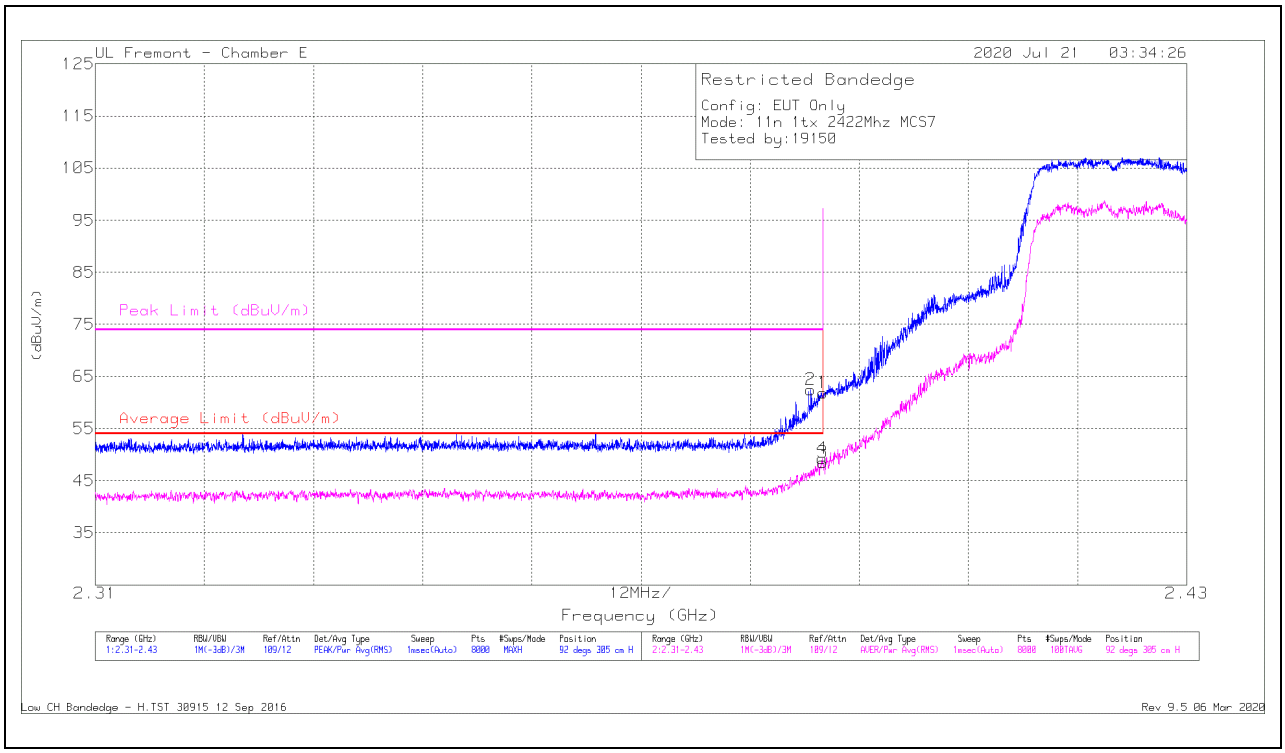
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	47.64	Pk	32.2	-18.4	0	61.44	-	-	74	-12.56	331	331	V
2	* 2.38974	49.87	Pk	32.2	-18.4	0	63.67	-	-	74	-10.33	331	331	V
3	* 2.38999	35.79	RMS	32.2	-18.4	.61	50.2	54	-3.8	-	-	331	331	V
4	* 2.38975	36.71	RMS	32.2	-18.4	.61	51.12	54	-2.88	-	-	331	331	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT

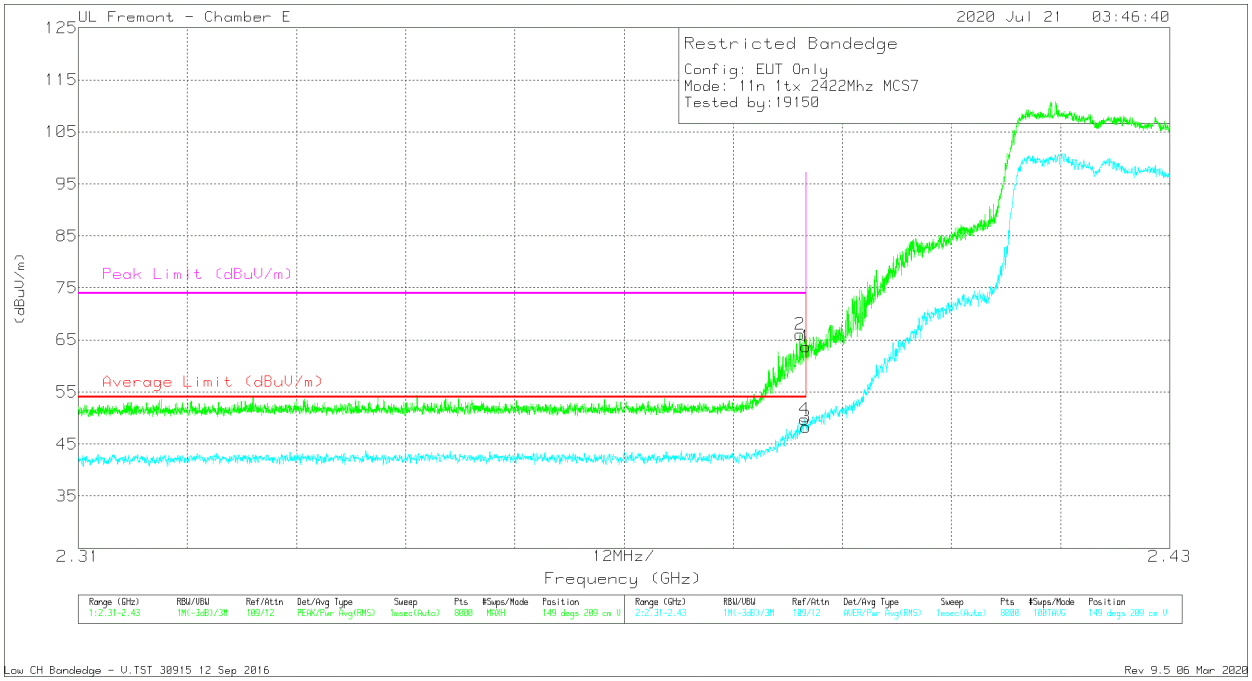


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	47.99	Pk	32.2	-18.4	0	61.79	-	-	74	-12.21	92	305	H
2	* 2.38866	48.71	Pk	32.2	-18.4	0	62.51	-	-	74	-11.49	92	305	H
3	* 2.38999	34.08	RMS	32.2	-18.4	.61	48.49	54	-5.51	-	-	92	305	H
4	* 2.38992	34.83	RMS	32.2	-18.4	.61	49.24	54	-4.76	-	-	92	305	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	49.96	Pk	32.2	-18.4	0	63.76	-	-	74	-10.24	149	209	V
2	* 2.38933	52.27	Pk	32.2	-18.4	0	66.07	-	-	74	-7.93	149	209	V
3	* 2.38999	33.85	RMS	32.2	-18.4	.61	48.26	54	-5.74	-	-	149	209	V
4	* 2.38989	35.31	RMS	32.2	-18.4	.61	49.72	54	-4.28	-	-	149	209	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 9)

HORIZONTAL RESULT

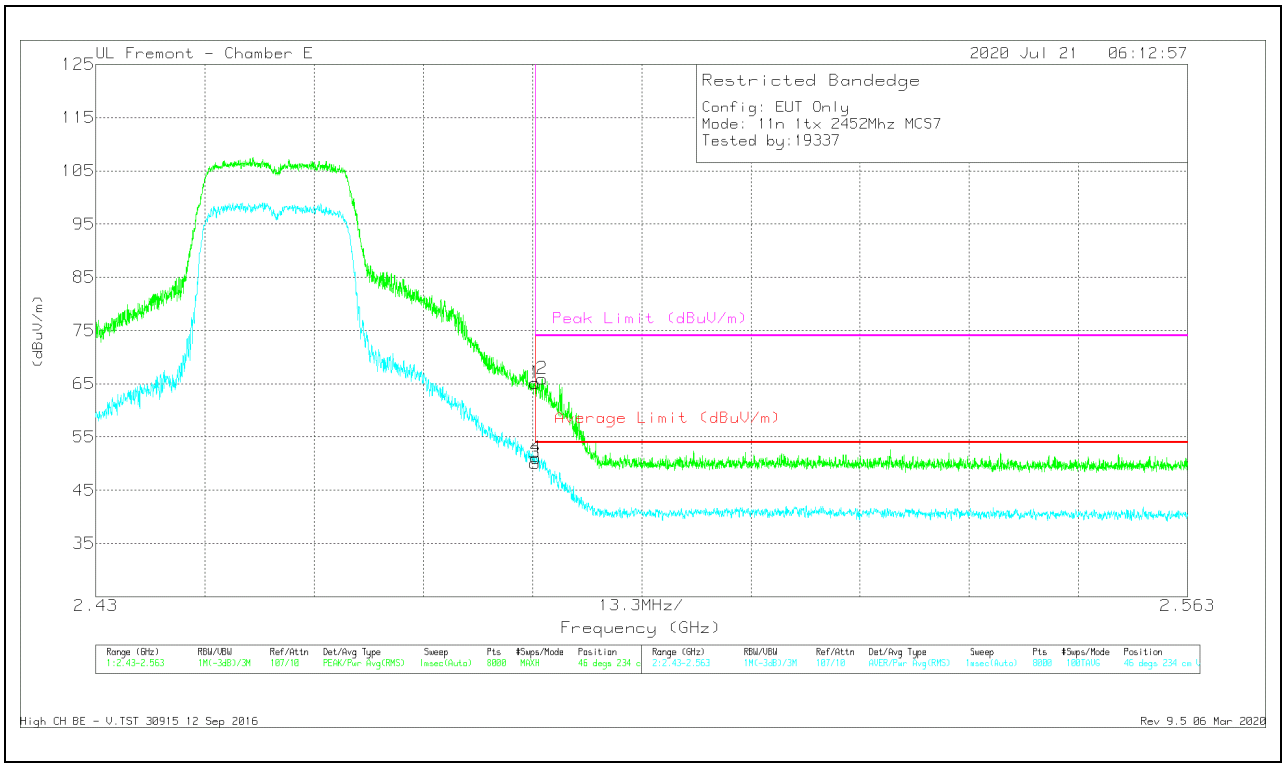
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	56.2	Pk	32.8	-26.5	0	62.5	-	-	74	-11.5	22	221	H
2	* 2.48485	57.47	Pk	32.8	-26.5	0	63.77	-	-	74	-10.23	22	221	H
3	* 2.48351	41.64	RMS	32.8	-26.5	.61	48.55	54	-5.45	-	-	22	221	H
4	* 2.48364	42.8	RMS	32.8	-26.5	.61	49.71	54	-4.29	-	-	22	221	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



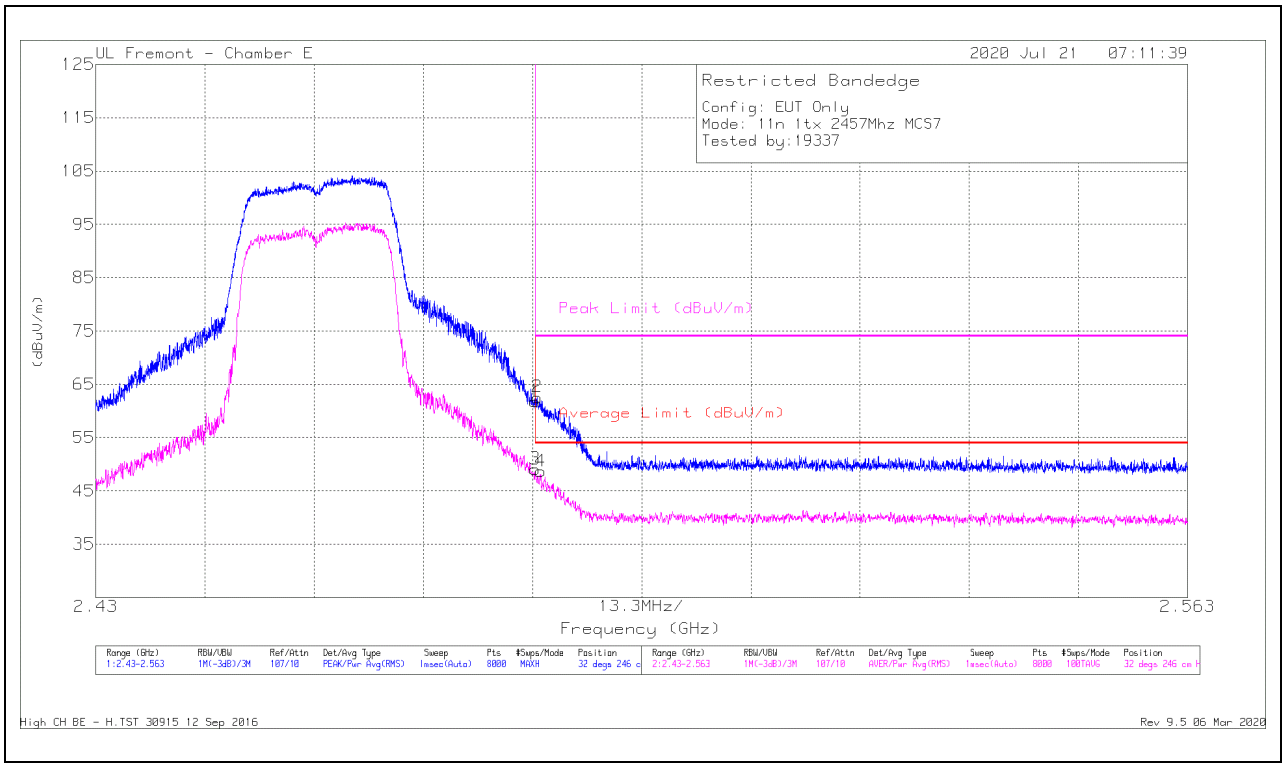
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	58.85	Pk	32.8	-26.5	0	65.15	-	-	74	-8.85	46	234	V
2	* 2.48437	59.64	Pk	32.8	-26.5	0	65.94	-	-	74	-8.06	46	234	V
3	* 2.48351	43.21	RMS	32.8	-26.5	.61	50.12	54	-3.88	-	-	46	234	V
4	* 2.48364	44.18	RMS	32.8	-26.5	.61	51.09	54	-2.91	-	-	46	234	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 10)

HORIZONTAL RESULT

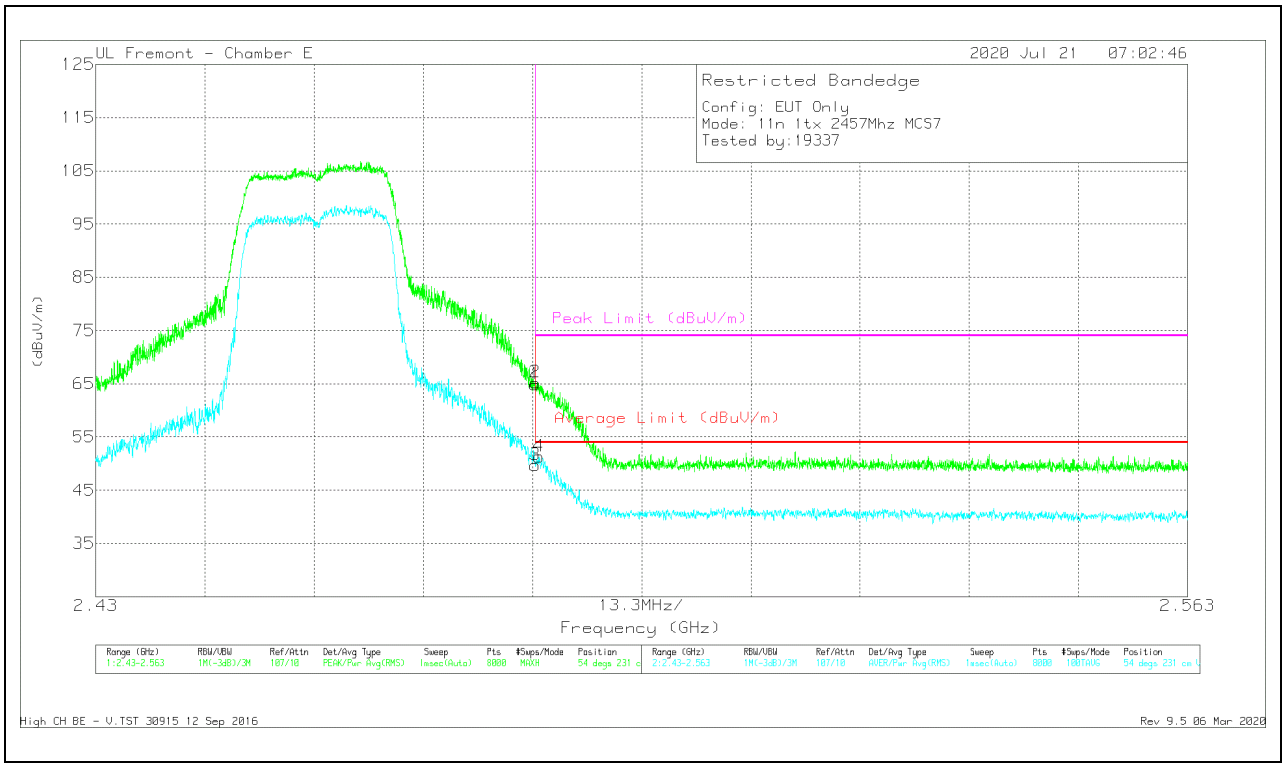


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	55.51	Pk	32.8	-26.5	0	61.81	-	-	74	-12.19	32	246	H
2	* 2.48379	56.26	Pk	32.8	-26.5	0	62.56	-	-	74	-11.44	32	246	H
3	* 2.48351	42.18	RMS	32.8	-26.5	.61	49.09	54	-4.91	-	-	32	246	H
4	* 2.4842	41.76	RMS	32.8	-26.5	.61	48.67	54	-5.33	-	-	32	246	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



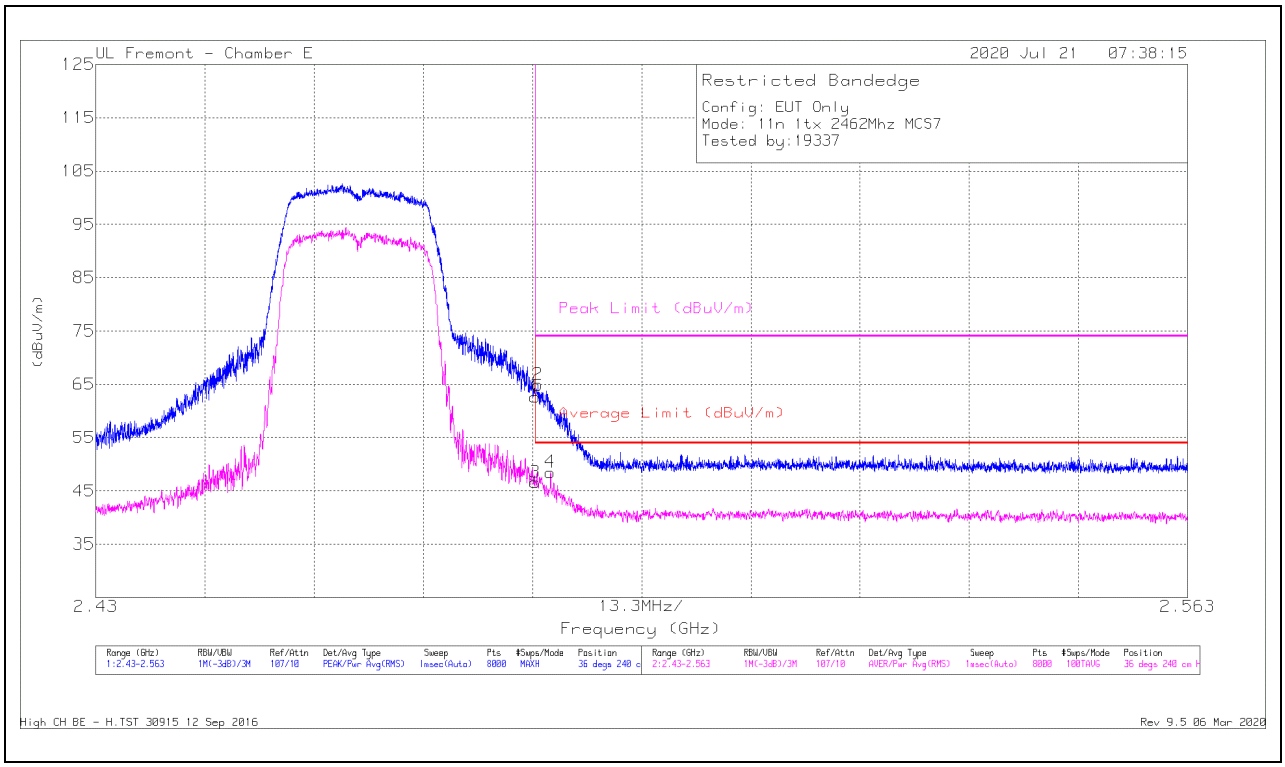
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	58.59	Pk	32.8	-26.5	0	64.89	-	-	74	-9.11	54	231	V
2	* 2.48352	58.95	Pk	32.8	-26.5	0	65.25	-	-	74	-8.75	54	231	V
3	* 2.48351	42.83	RMS	32.8	-26.5	.61	49.74	54	-4.26	-	-	54	231	V
4	* 2.48397	44.42	RMS	32.8	-26.5	.61	51.33	54	-2.67	-	-	54	231	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT

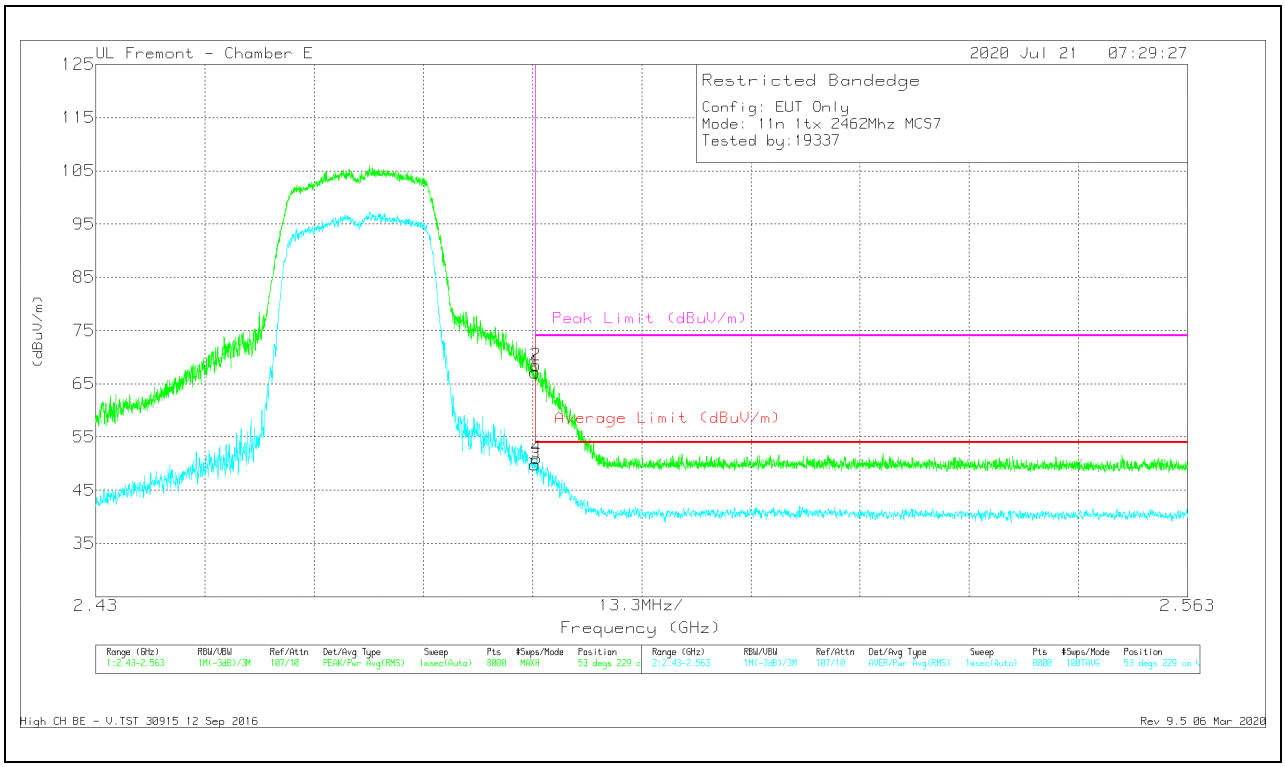


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	56.34	Pk	32.8	-26.5	0	62.64	-	-	74	-11.36	36	240	H
2	* 2.48385	58.62	Pk	32.8	-26.5	0	64.92	-	-	74	-9.08	36	240	H
3	* 2.48351	39.7	RMS	32.8	-26.5	.61	46.61	54	-7.39	-	-	36	240	H
4	* 2.48538	41.58	RMS	32.8	-26.5	.61	48.49	54	-5.51	-	-	36	240	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



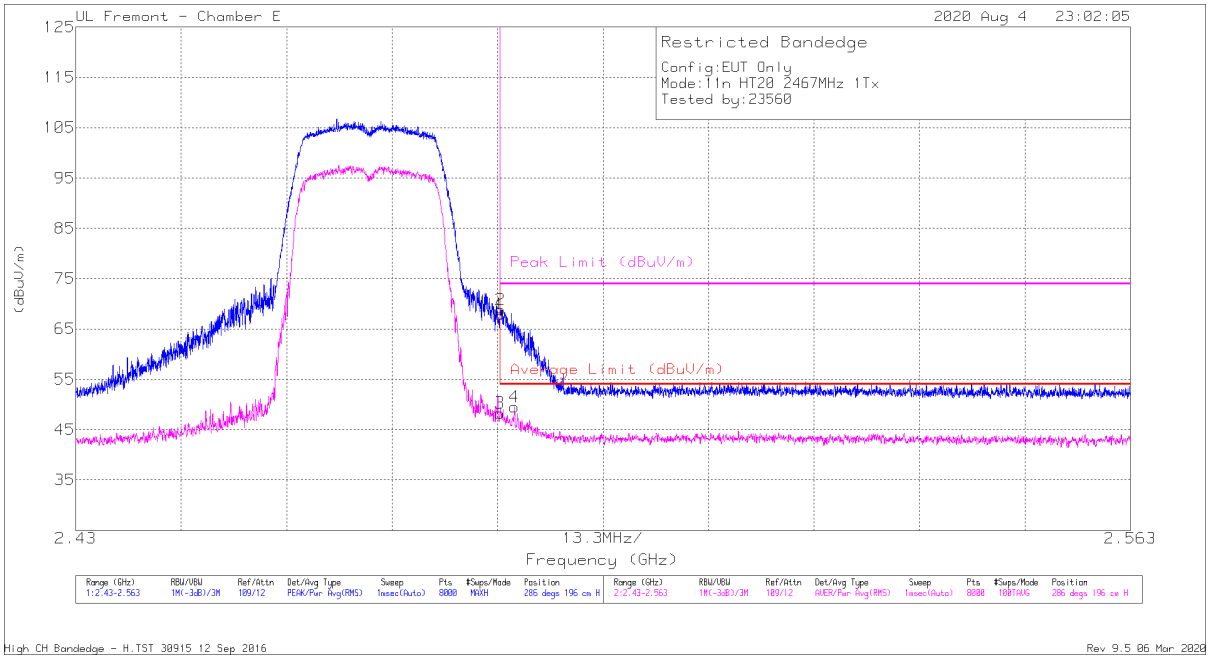
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	60.82	Pk	32.8	-26.5	0	67.12	-	-	74	-6.88	53	229	V
2	* 2.48359	62.17	Pk	32.8	-26.5	0	68.47	-	-	74	-5.53	53	229	V
3	* 2.48351	42.96	RMS	32.8	-26.5	.61	49.87	54	-4.13	-	-	53	229	V
4	* 2.48372	44.17	RMS	32.8	-26.5	.61	51.08	54	-2.92	-	-	53	229	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT

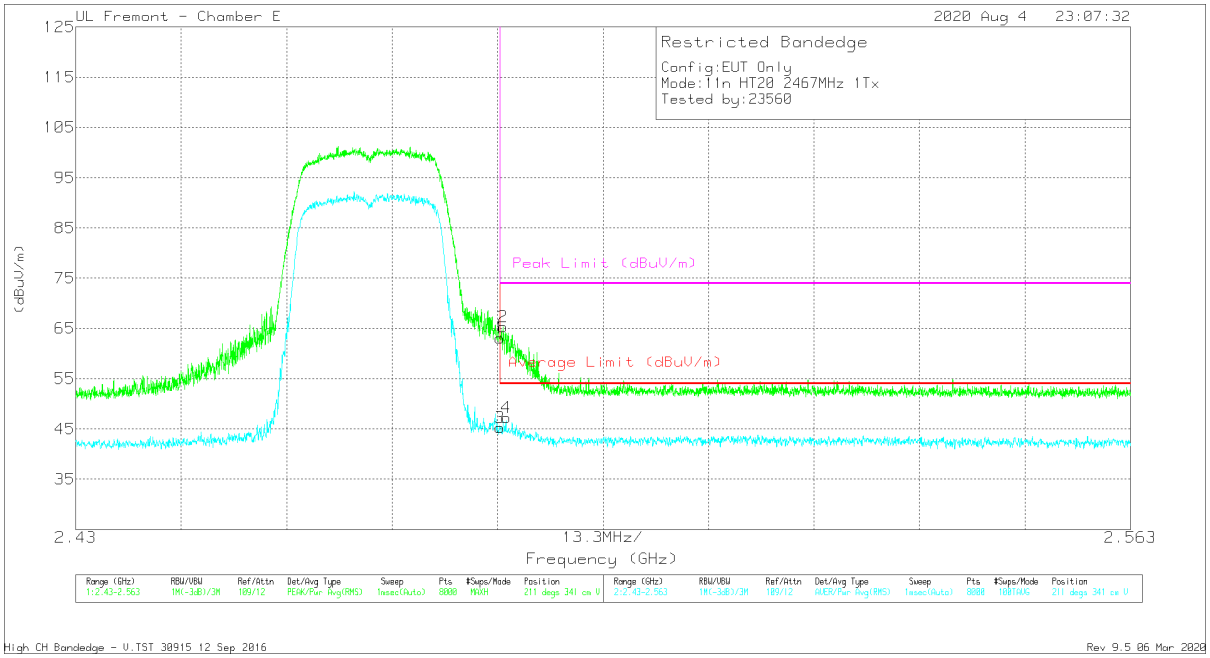


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	53.59	Pk	32.8	-18.4	0	67.99	-	-	74	-6.01	286	196	H
3	* 2.48351	33.31	RMS	32.8	-18.4	.61	48.32	54	-5.68	-	-	286	196	H
2	* 2.48361	54.42	Pk	32.8	-18.4	0	68.82	-	-	74	-5.18	286	196	H
4	* 2.48532	34.48	RMS	32.8	-18.4	.61	49.49	54	-4.51	-	-	286	196	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	48.74	Pk	32.8	-18.4	0	63.14	-	-	74	-10.86	211	341	V
3	* 2.48351	30.23	RMS	32.8	-18.4	.61	45.24	54	-8.76	-	-	211	341	V
2	* 2.48389	50.94	Pk	32.8	-18.4	0	65.34	-	-	74	-8.66	211	341	V
4	* 2.48427	32.25	RMS	32.8	-18.4	.61	47.26	54	-6.74	-	-	211	341	V

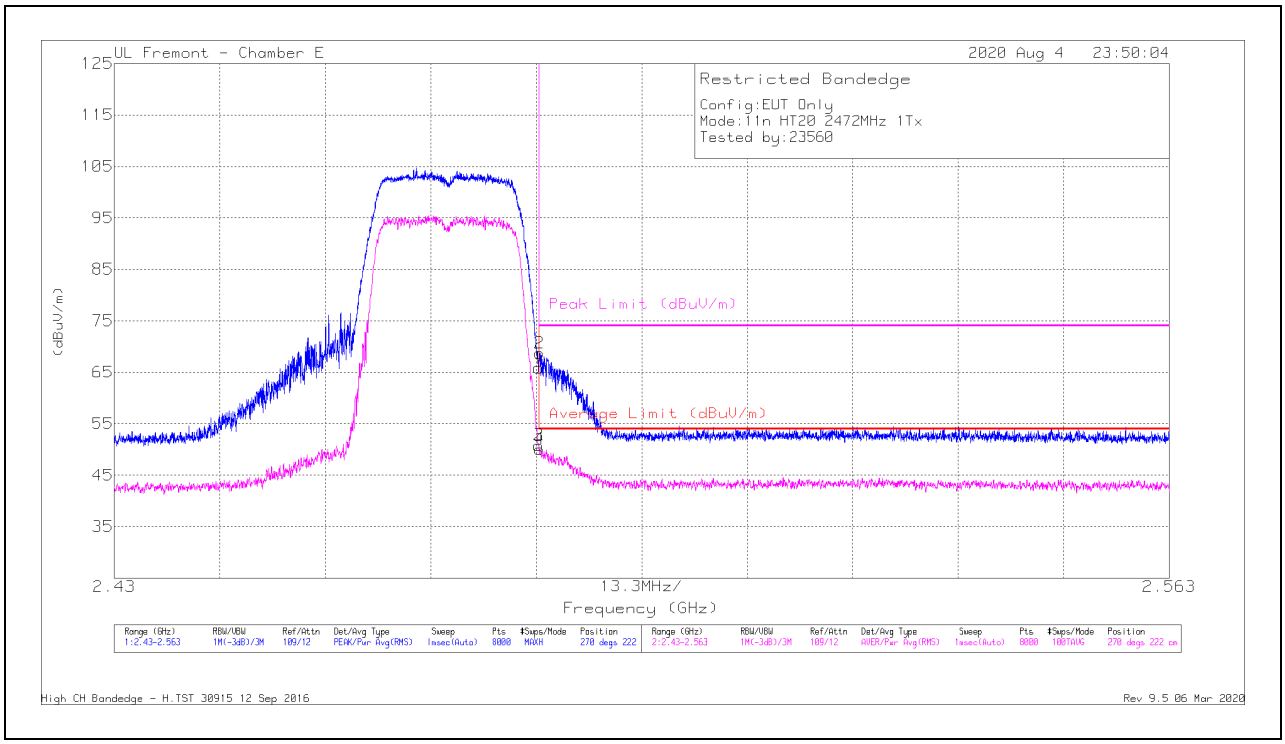
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT

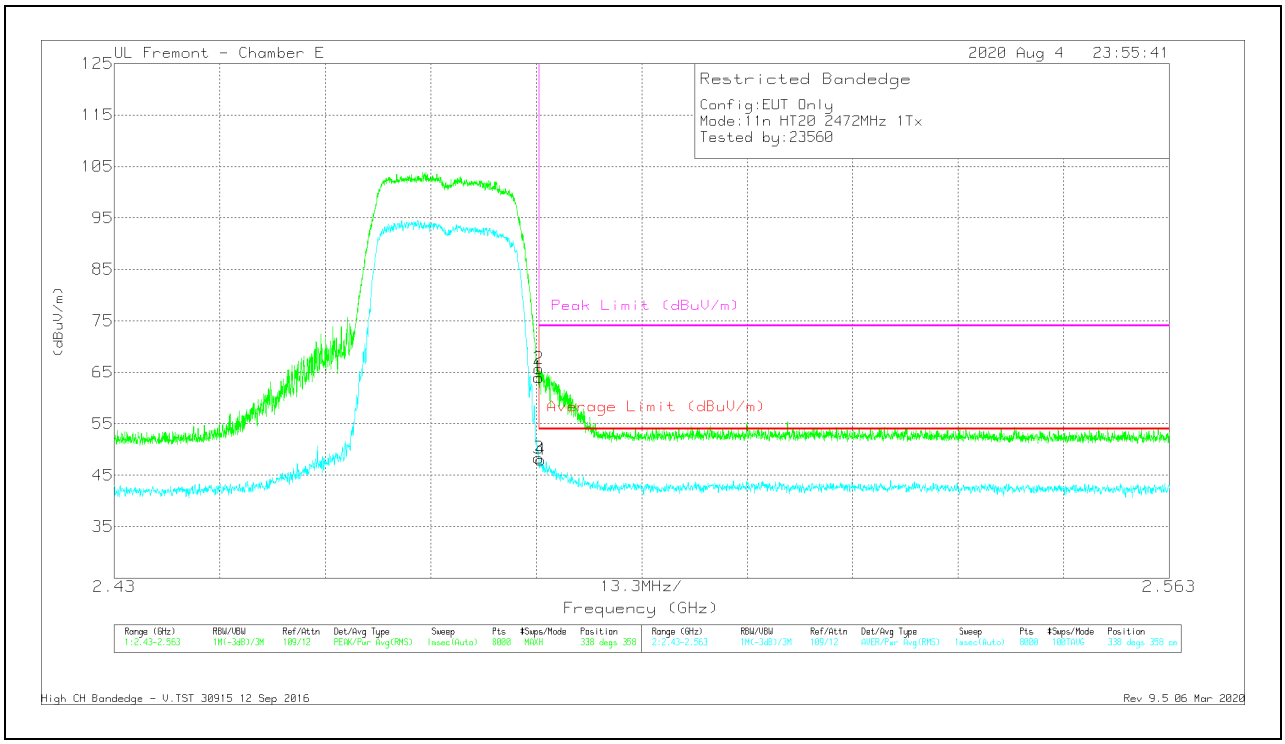


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	51.49	Pk	32.8	-18.4	0	65.89	-	-	74	-8.11	270	222	H
3	* 2.48351	35.79	RMS	32.8	-18.4	.61	50.8	54	-3.2	-	-	270	222	H
4	* 2.48359	35.08	RMS	32.8	-18.4	.61	50.09	54	-3.91	-	-	270	222	H
2	* 2.48364	54.31	Pk	32.8	-18.4	0	68.71	-	-	74	-5.29	270	222	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	49.63	Pk	32.8	-18.4	64.03	-	-	74	-9.97	338	358	V
2	* 2.48354	51.31	Pk	32.8	-18.4	65.71	-	-	74	-8.29	338	358	V
3	* 2.48351	33.96	RMS	32.8	-18.4	48.36	54	-5.64	-	-	338	358	V
4	* 2.48379	33.62	RMS	32.8	-18.4	48.02	54	-5.98	-	-	338	358	V

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

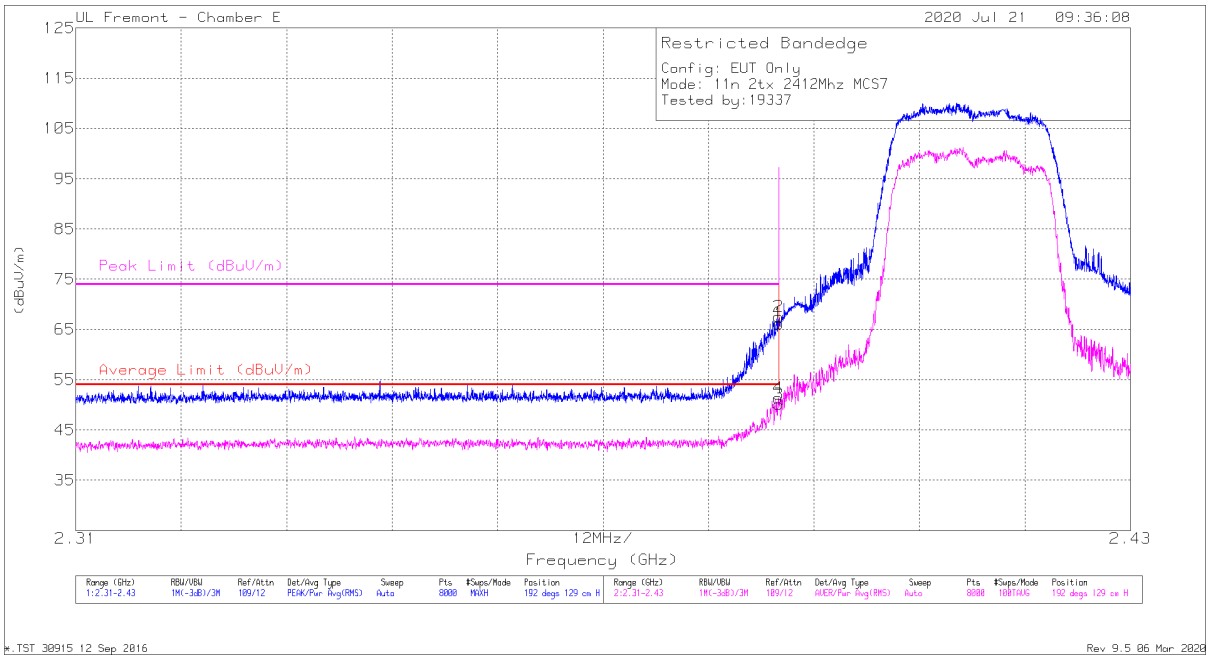
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

ANT 4 + ANT 3: CDD MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



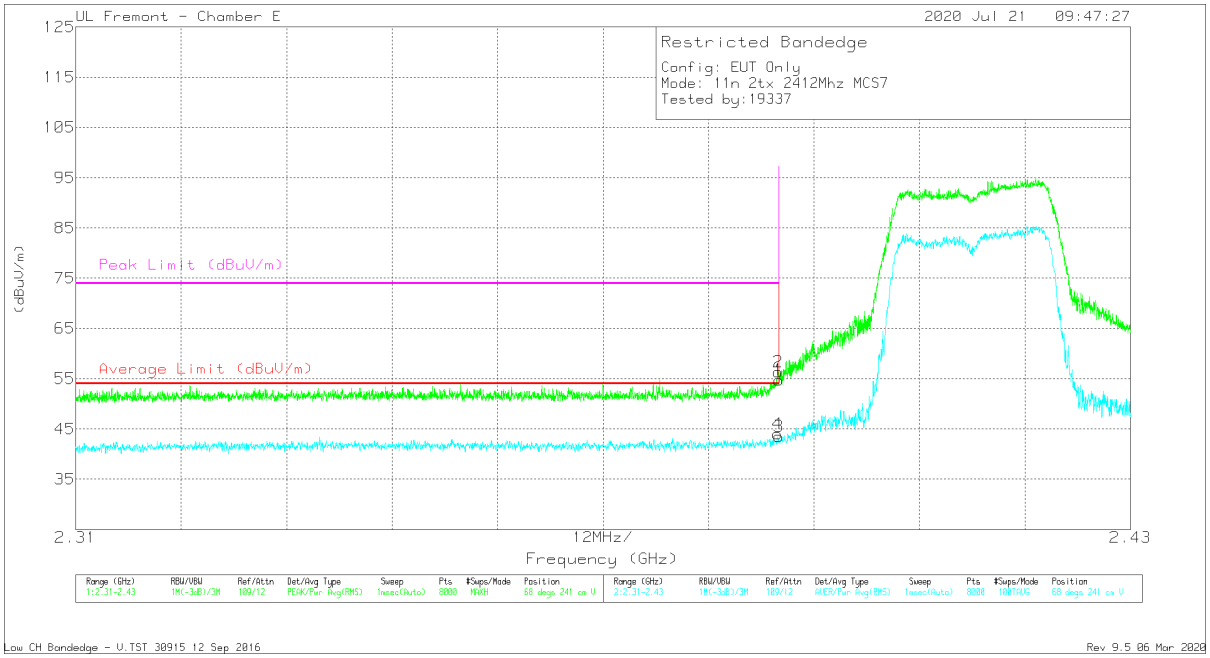
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	52.35	Pk	32.2	-18.4	0	66.15	-	-	74	-7.85	192	129	H
2	* 2.38996	53.74	Pk	32.2	-18.4	0	67.54	-	-	74	-6.46	192	129	H
3	* 2.38999	35.72	RMS	32.2	-18.4	.6	50.12	54	-3.88	-	-	192	129	H
4	* 2.38993	36.98	RMS	32.2	-18.4	.6	51.38	54	-2.62	-	-	192	129	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	41	Pk	32.2	-18.4	0	54.8	-	-	74	-19.2	68	241	V
2	* 2.38992	42.59	Pk	32.2	-18.4	0	56.39	-	-	74	-17.61	68	241	V
3	* 2.38999	29.14	RMS	32.2	-18.4	.6	43.54	54	-10.46	-	-	68	241	V
4	* 2.38987	29.64	RMS	32.2	-18.4	.6	44.04	54	-9.96	-	-	68	241	V

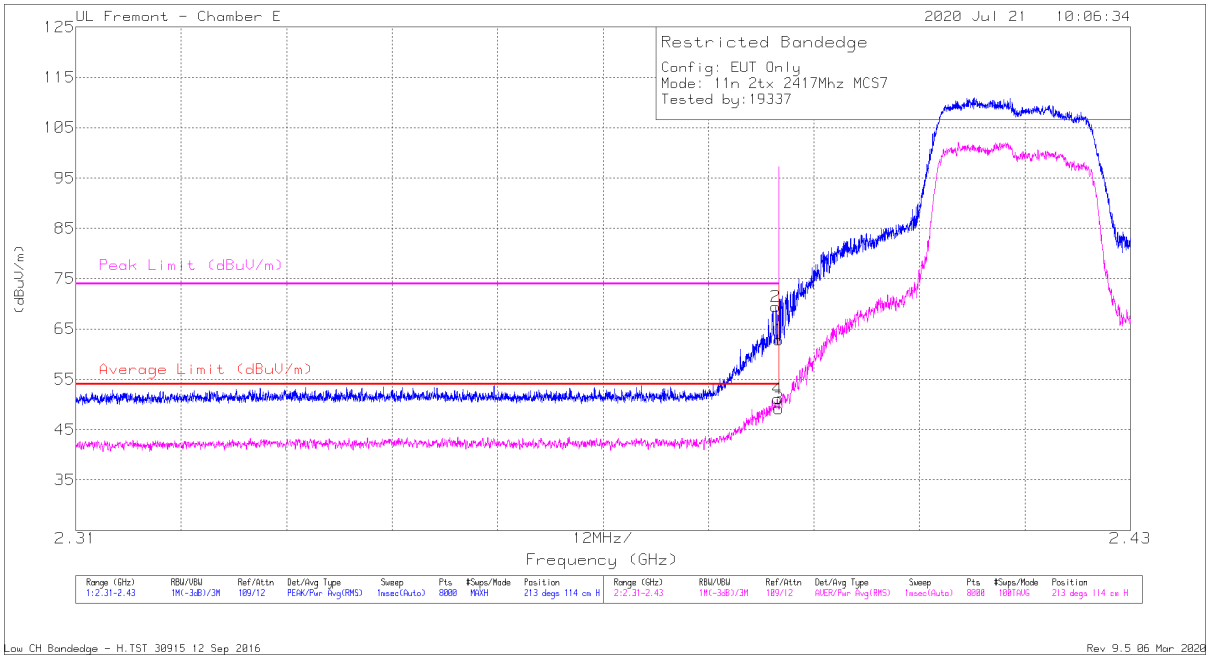
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT

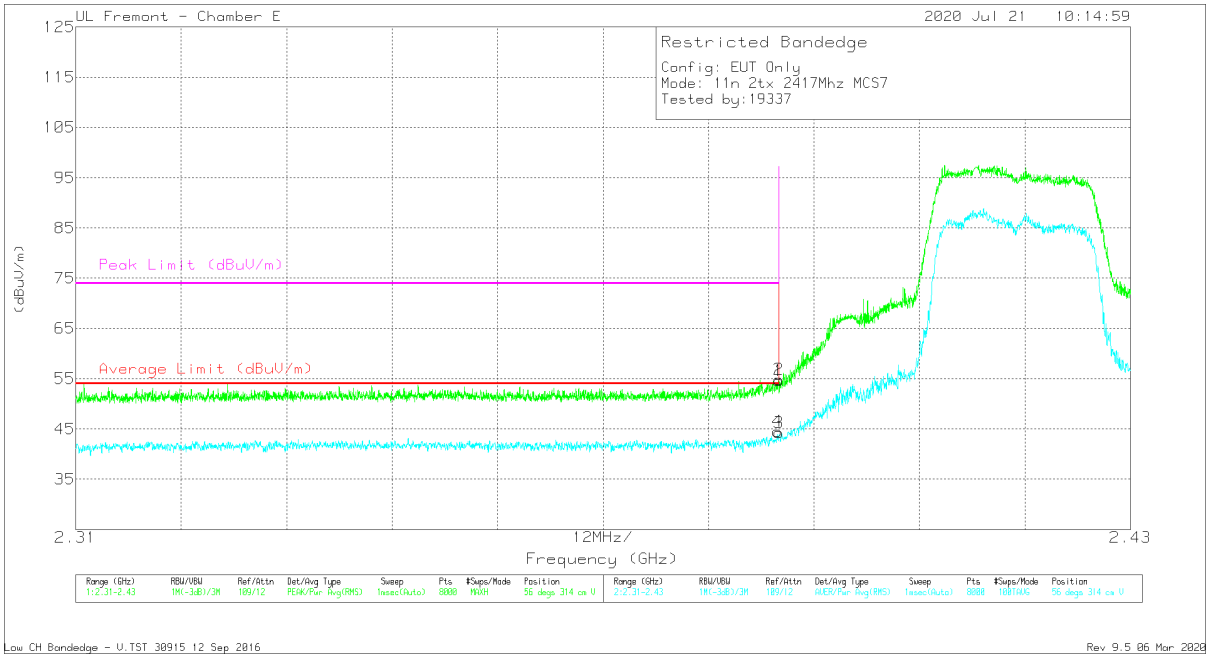


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	49.08	Pk	32.2	-18.4	0	62.88	-	-	74	-11.12	213	114	H
2	* 2.38965	55.62	Pk	32.2	-18.4	0	69.42	-	-	74	-4.58	213	114	H
3	* 2.38999	34.8	RMS	32.2	-18.4	.6	49.2	54	-4.8	-	-	213	114	H
4	* 2.38984	36.72	RMS	32.2	-18.4	.6	51.12	54	-2.88	-	-	213	114	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



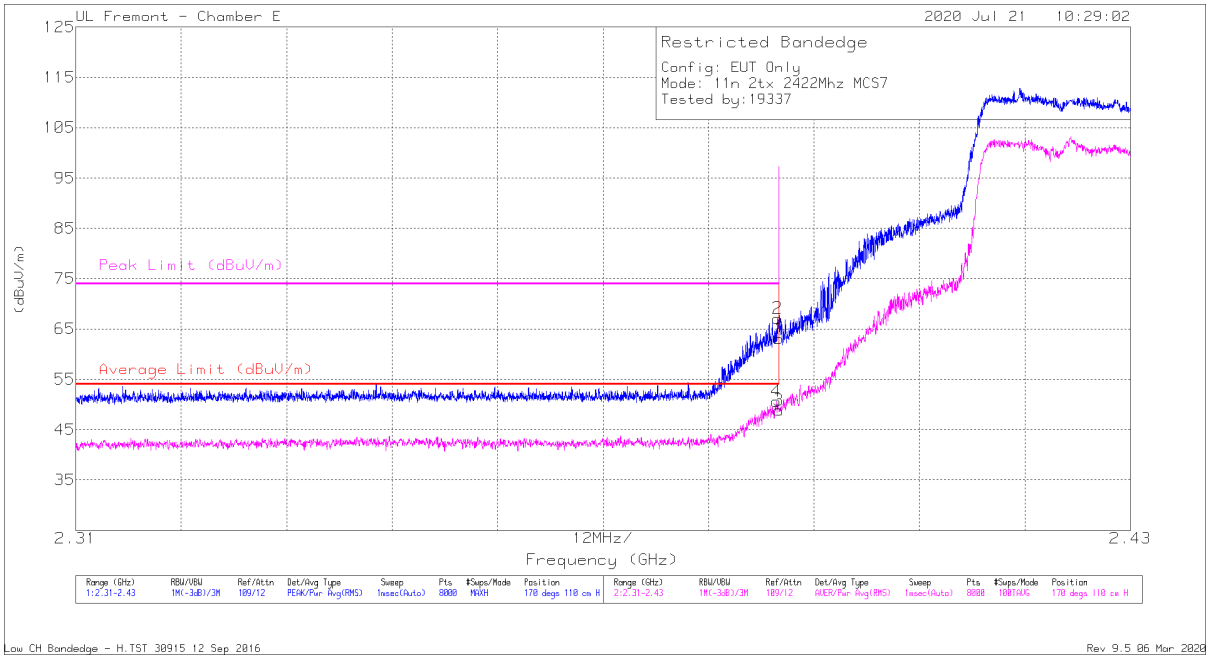
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.38984	30.1	RMS	32.2	-18.4	.6	44.5	54	-9.5	-	-	56	314	V
2	* 2.38998	41.1	Pk	32.2	-18.4	0	54.9	-	-	74	-19.1	56	314	V
1	* 2.38999	40.85	Pk	32.2	-18.4	0	54.65	-	-	74	-19.35	56	314	V
3	* 2.38999	29.89	RMS	32.2	-18.4	.6	44.29	54	-9.71	-	-	56	314	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT

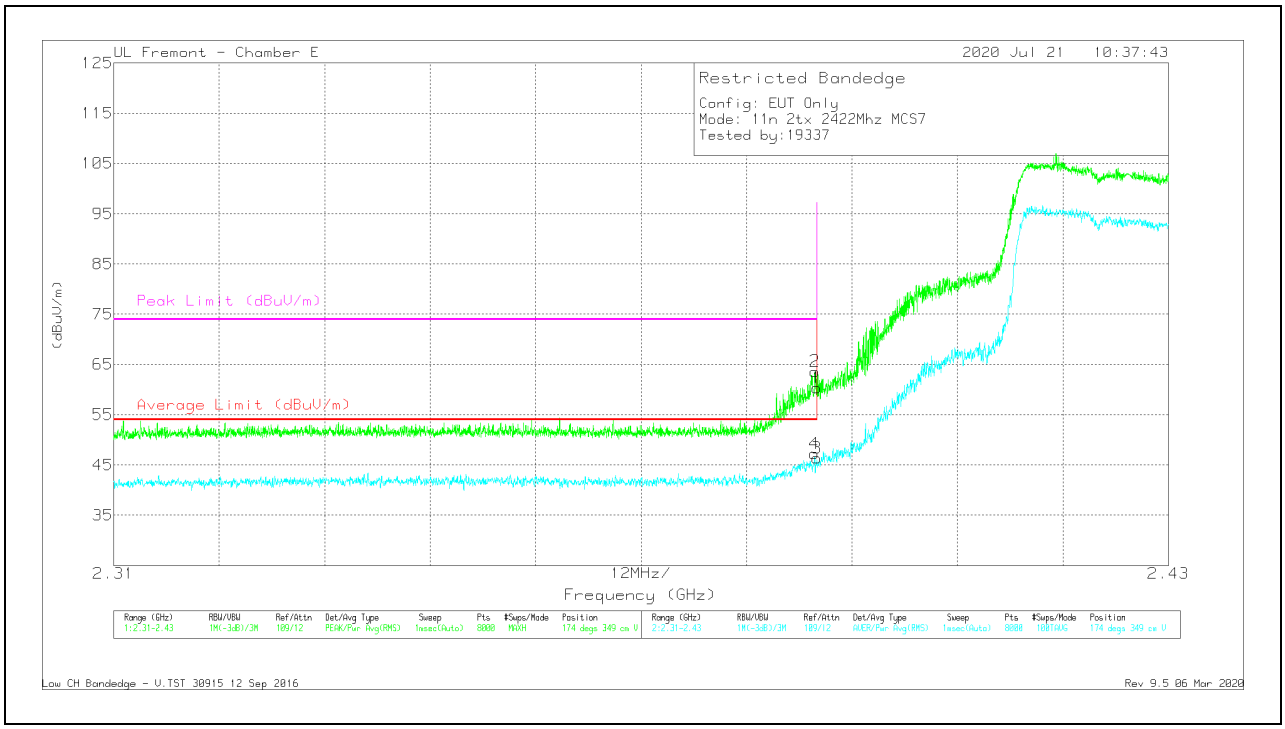


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.38971	36.25	RMS	32.2	-18.4	.6	50.65	54	-3.35	-	-	170	110	H
2	* 2.38986	53.34	Pk	32.2	-18.4	0	67.14	-	-	74	-6.86	170	110	H
1	* 2.38999	49.32	Pk	32.2	-18.4	0	63.12	-	-	74	-10.88	170	110	H
3	* 2.38999	34.54	RMS	32.2	-18.4	.6	48.94	54	-5.06	-	-	170	110	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

VERTICAL RESULT



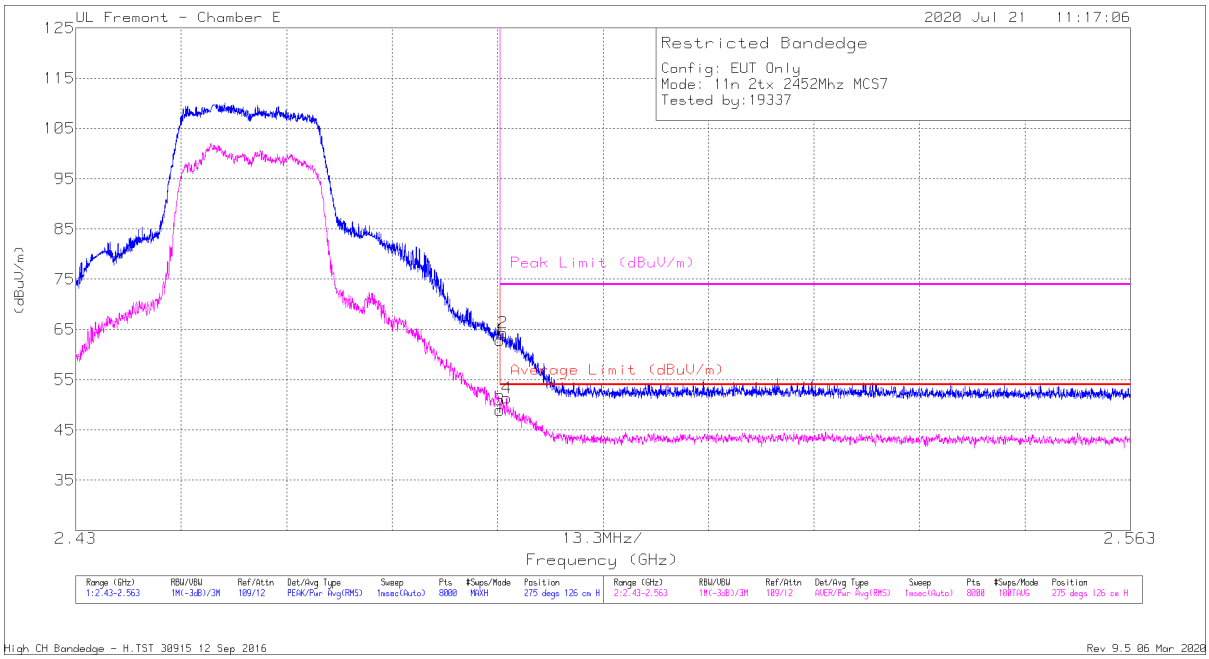
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	46.5	Pk	32.2	-18.4	0	60.3	-	-	74	-13.7	174	349	V
2	* 2.38975	49.85	Pk	32.2	-18.4	0	63.65	-	-	74	-10.35	174	349	V
3	* 2.38999	31.99	RMS	32.2	-18.4	.6	46.39	54	-7.61	-	-	174	349	V
4	* 2.38974	32.9	RMS	32.2	-18.4	.6	47.3	54	-6.7	-	-	174	349	V

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

BANDEDGE (HIGH CHANNEL, CH 9)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	48.47	Pk	32.8	-18.4	0	62.87	-	-	74	-11.13	275	126	H
2	* 2.48385	49.98	Pk	32.8	-18.4	0	64.38	-	-	74	-9.62	275	126	H
3	* 2.48351	33.95	RMS	32.8	-18.4	.6	48.95	54	-5.05	-	-	275	126	H
4	* 2.48434	36.33	RMS	32.8	-18.4	.6	51.33	54	-2.67	-	-	275	126	H

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

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.