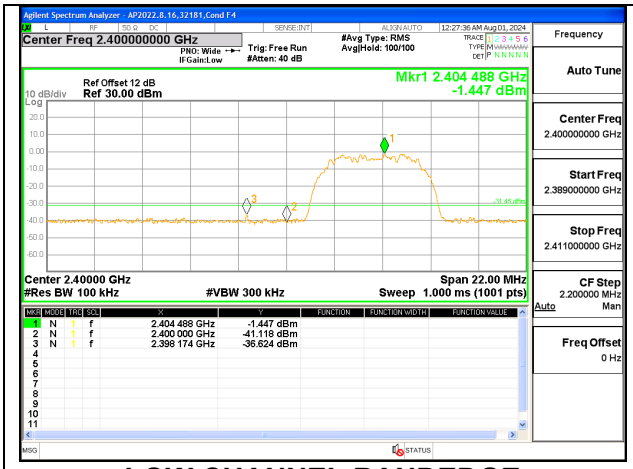
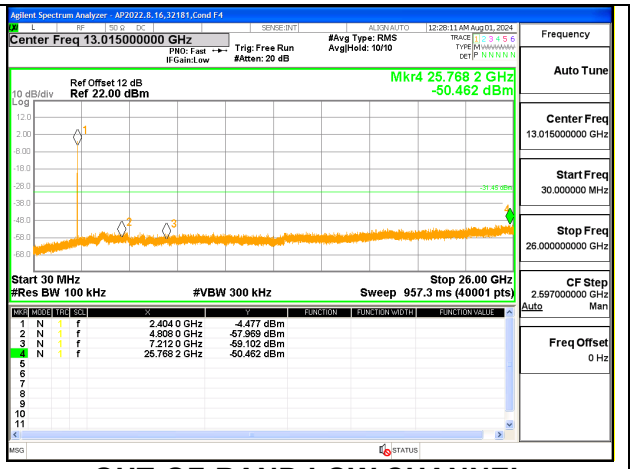
9.7.7. LOW POWER HDR (HDR8)

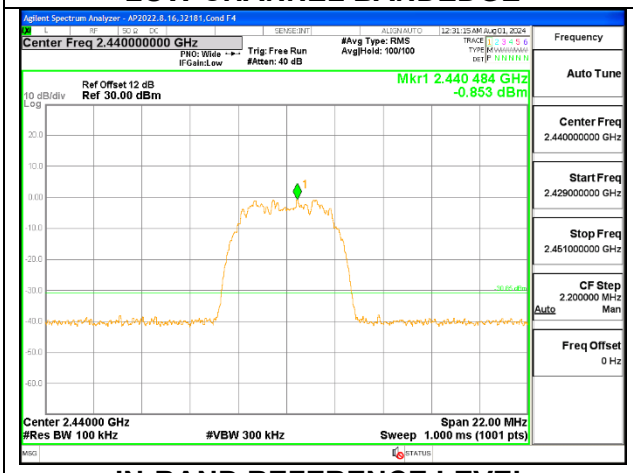
ANT 4



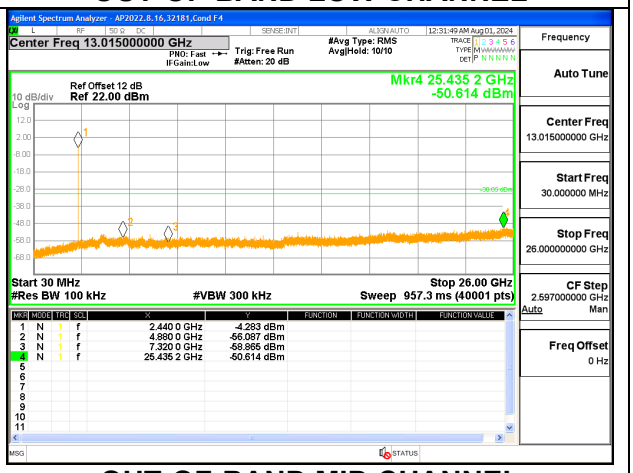
LOW CHANNEL BANDEDGE



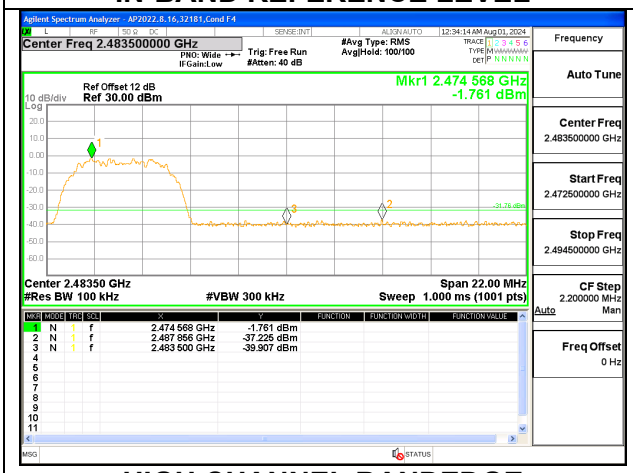
OUT-OF-BAND LOW CHANNEL



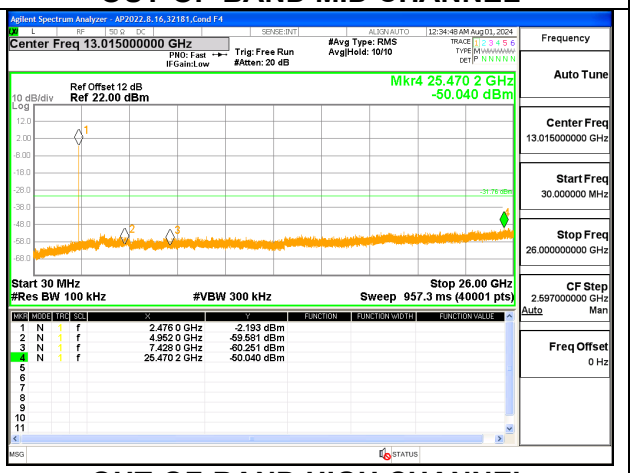
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE

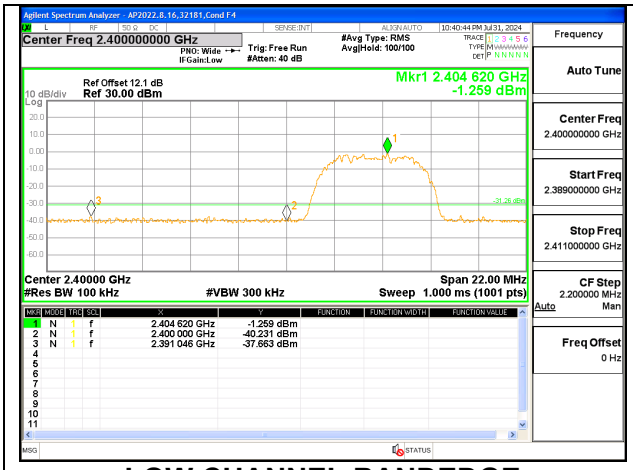


OUT-OF-BAND HIGH CHANNEL

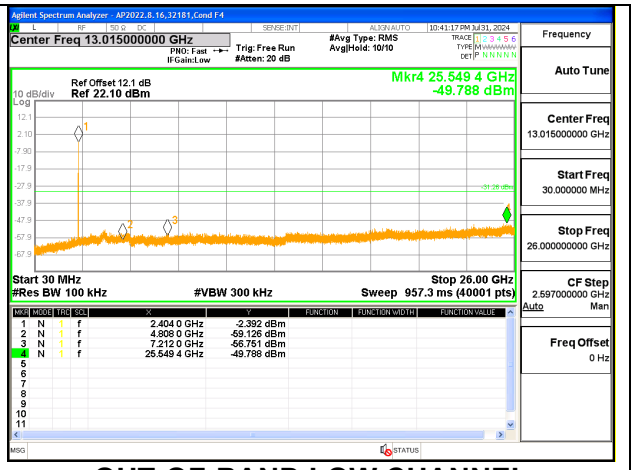
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888

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

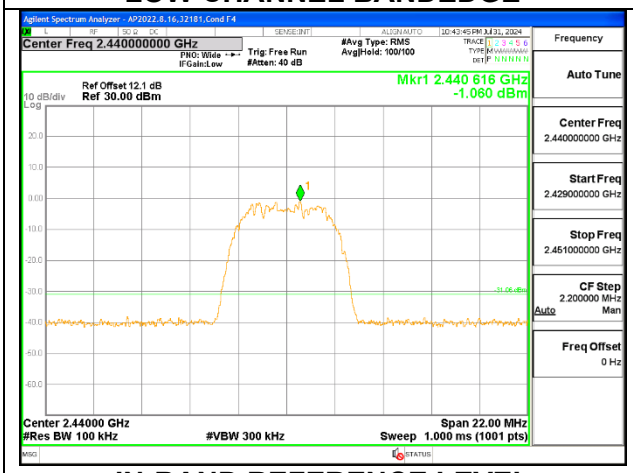
ANT 3



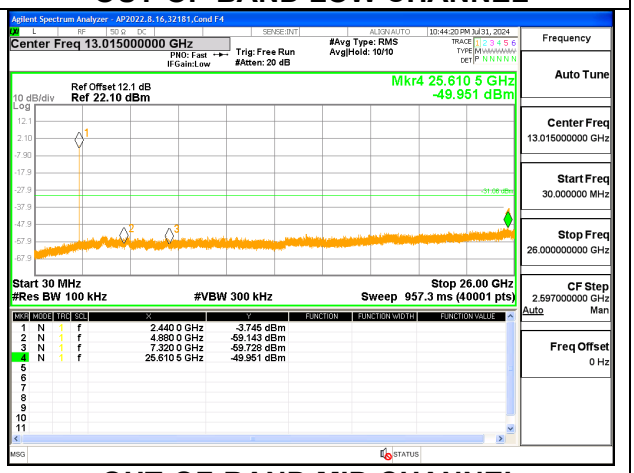
LOW CHANNEL BANDEDGE



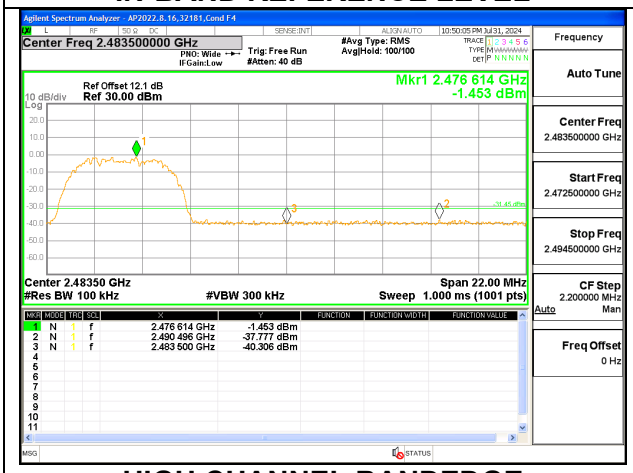
OUT-OF-BAND LOW CHANNEL



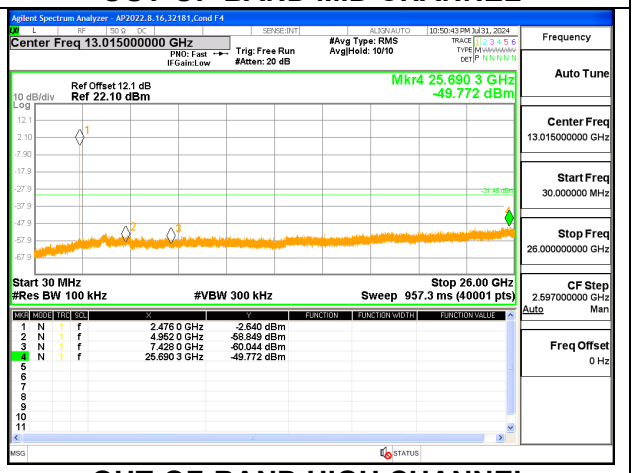
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



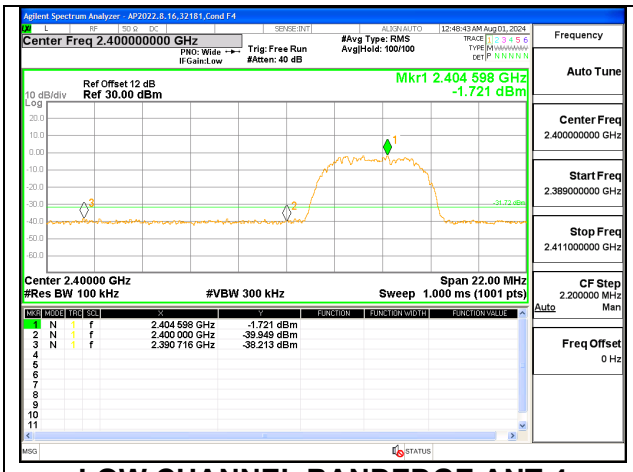
OUT-OF-BAND HIGH CHANNEL

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

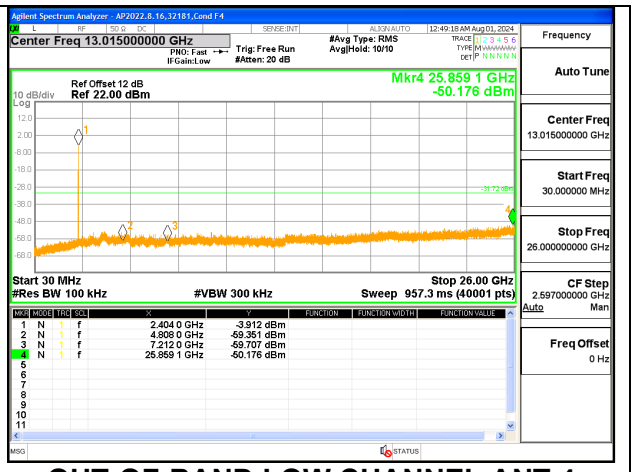
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

9.7.8. LOW POWER HDR TXBF (HDR8)

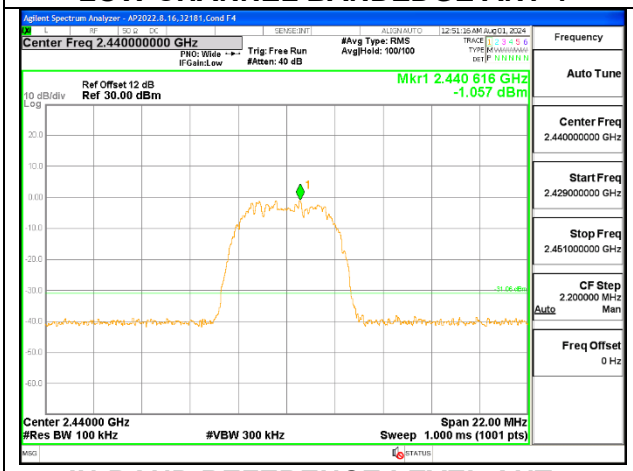
ANT 4



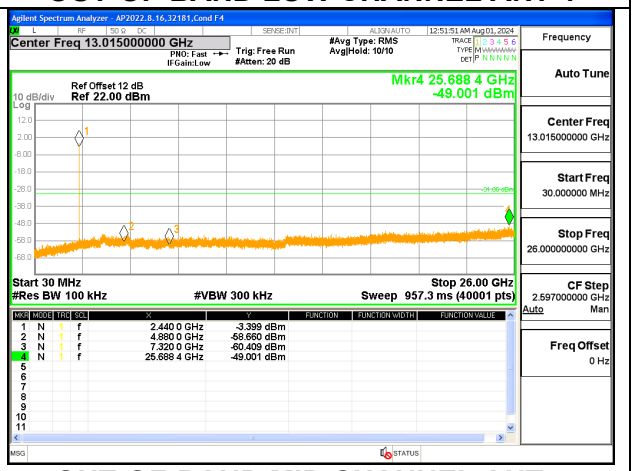
LOW CHANNEL BANDEDGE ANT 4



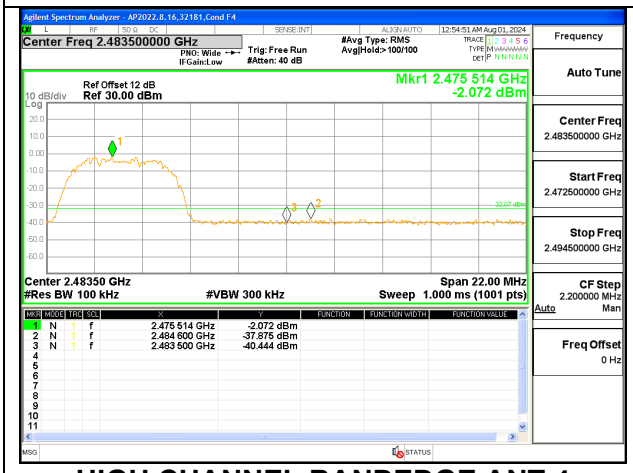
OUT-OF-BAND LOW CHANNEL ANT 4



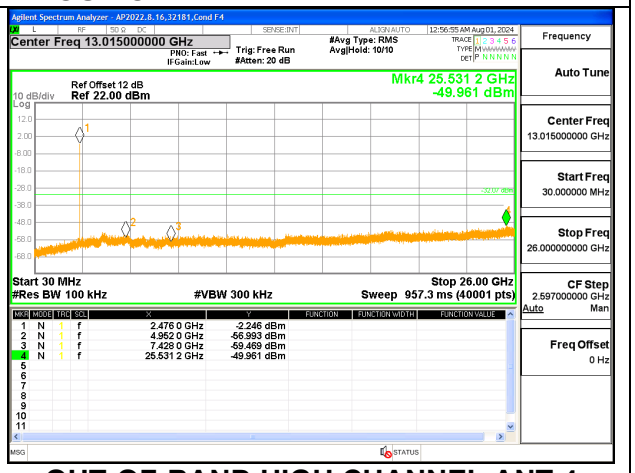
IN-BAND REFERENCE LEVEL ANT 4



OUT-OF-BAND MID CHANNEL ANT 4



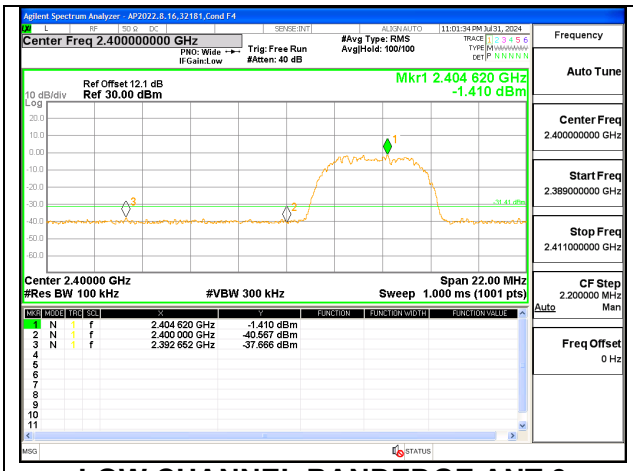
HIGH CHANNEL BANDEDGE ANT 4



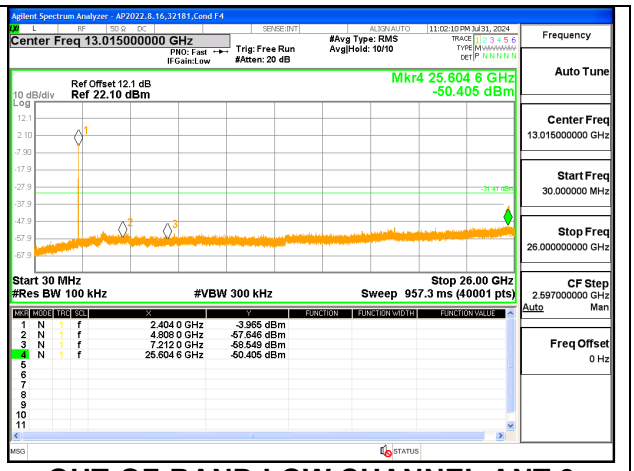
OUT-OF-BAND HIGH CHANNEL ANT 4

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.

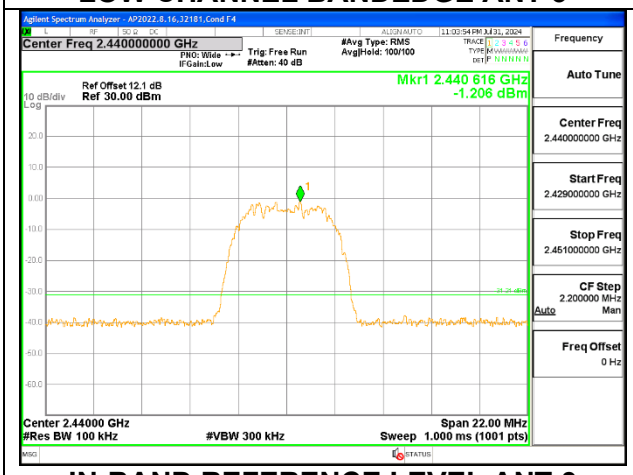
ANT 3



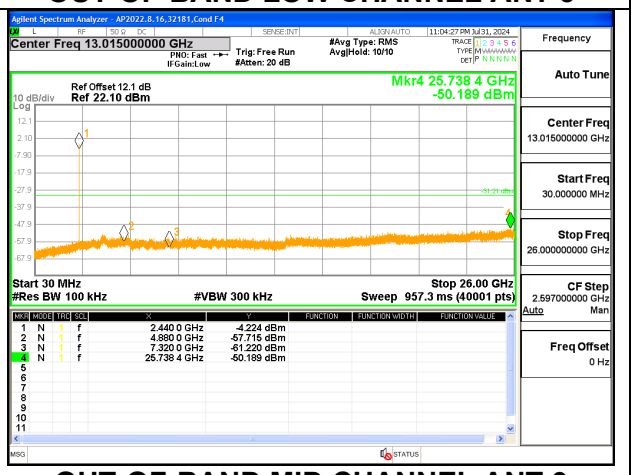
LOW CHANNEL BANDEDGE ANT 3



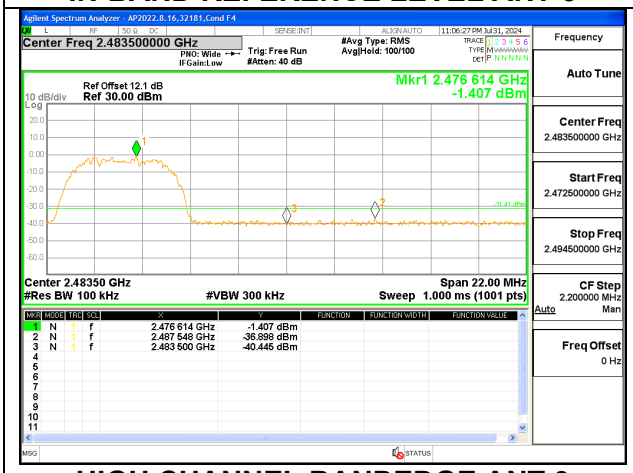
OUT-OF-BAND LOW CHANNEL ANT 3



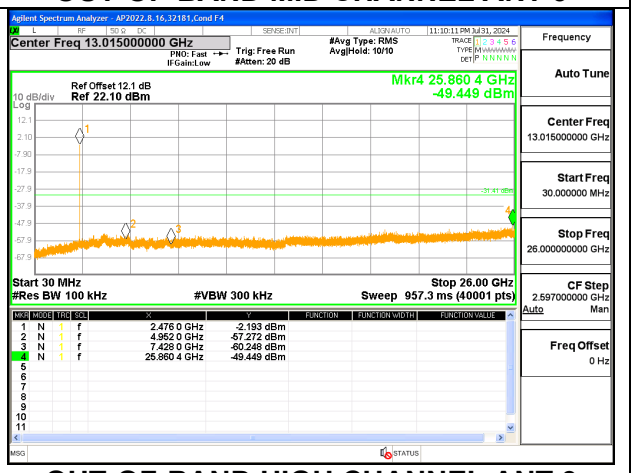
IN-BAND REFERENCE LEVEL ANT 3



OUT-OF-BAND MID CHANNEL ANT 3



HIGH CHANNEL BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL ANT 3

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

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209
RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

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

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

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

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

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

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

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.

Note: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as report in the table) using free space impedance of 377 Ohms. For example, the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.
In addition:

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

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

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

RESULTS:

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.

10.2. TRANSMITTER ABOVE 1 GHz

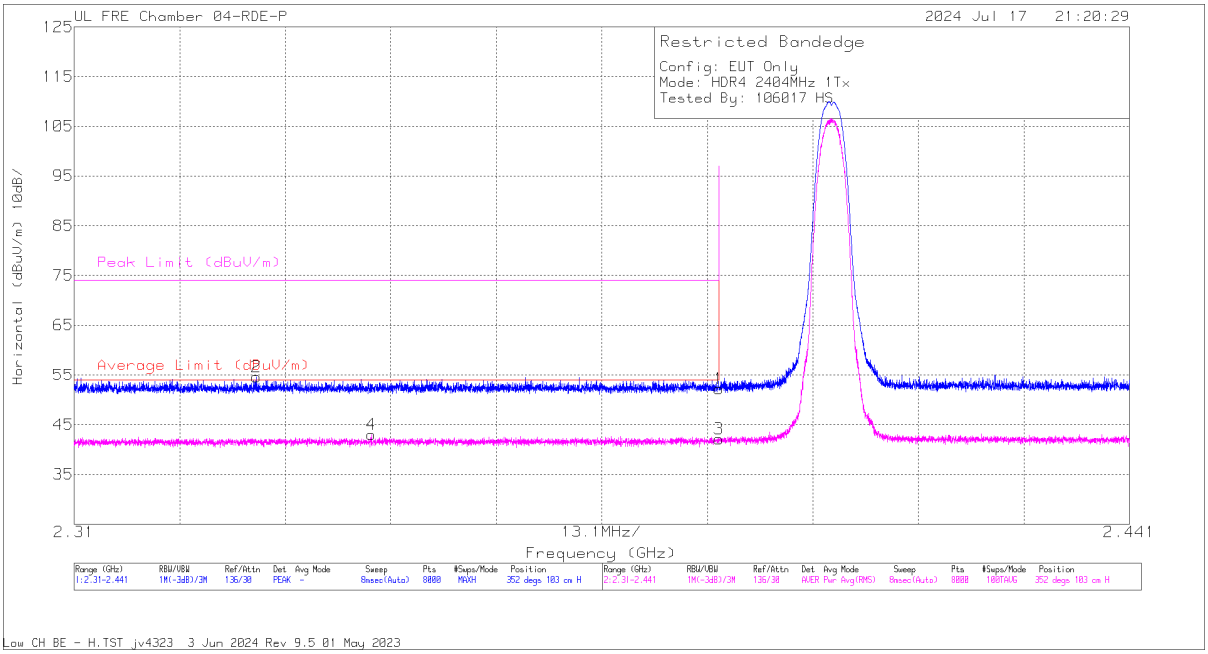
10.2.1.

10.2.2. HIGH POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

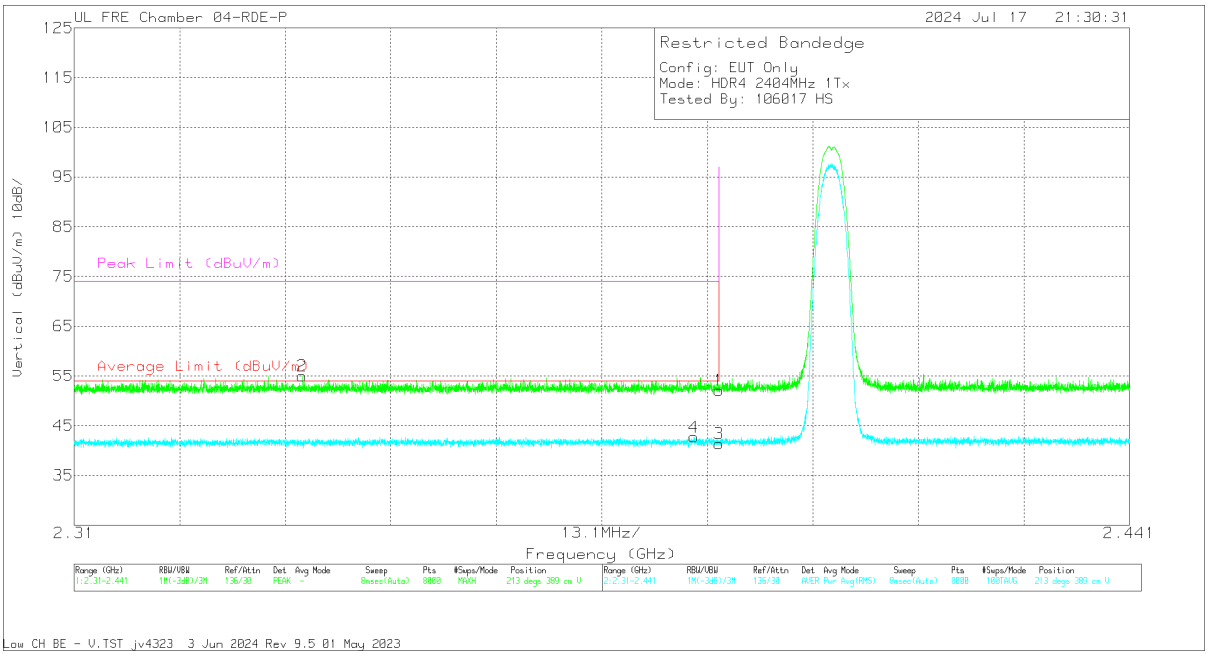


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.3326	63.55	Pk	31.9	0	-40.79	54.66	-	-	74	-19.34	352	103	H
4	2.346897	51.86	RMS	31.9	0	-40.78	42.98	54	-11.02	-	-	352	103	H
1	2.39	60.97	Pk	32	0	-40.75	52.22	-	-	74	-21.78	352	103	H
3	2.39	50.83	RMS	32	0	-40.75	42.08	54	-11.92	-	-	352	103	H

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



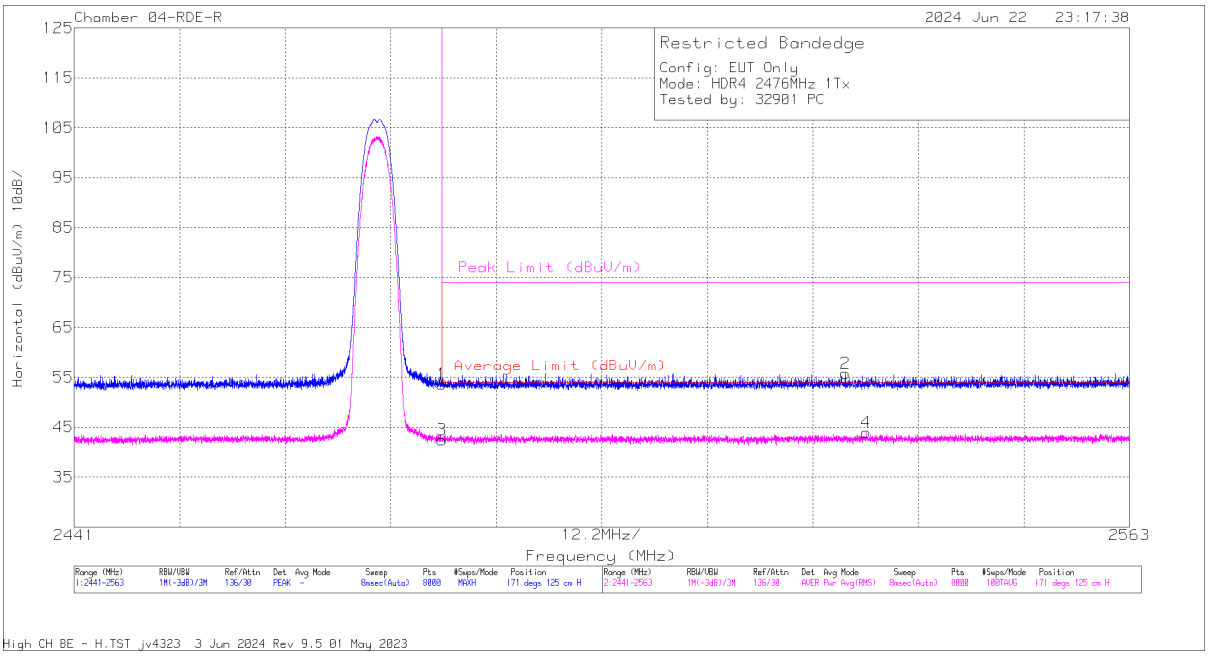
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.338316	63.94	Pk	31.9	0	-40.79	55.05	-	-	74	-18.95	213	389	V
4	2.386939	51.45	RMS	32	0	-40.75	42.7	54	-11.3	-	-	213	389	V
1	2.39	60.83	Pk	32	0	-40.75	52.08	-	-	74	-21.92	213	389	V
3	2.39	50.08	RMS	32	0	-40.75	41.33	54	-12.67	-	-	213	389	V

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)

HORIZONTAL RESULT

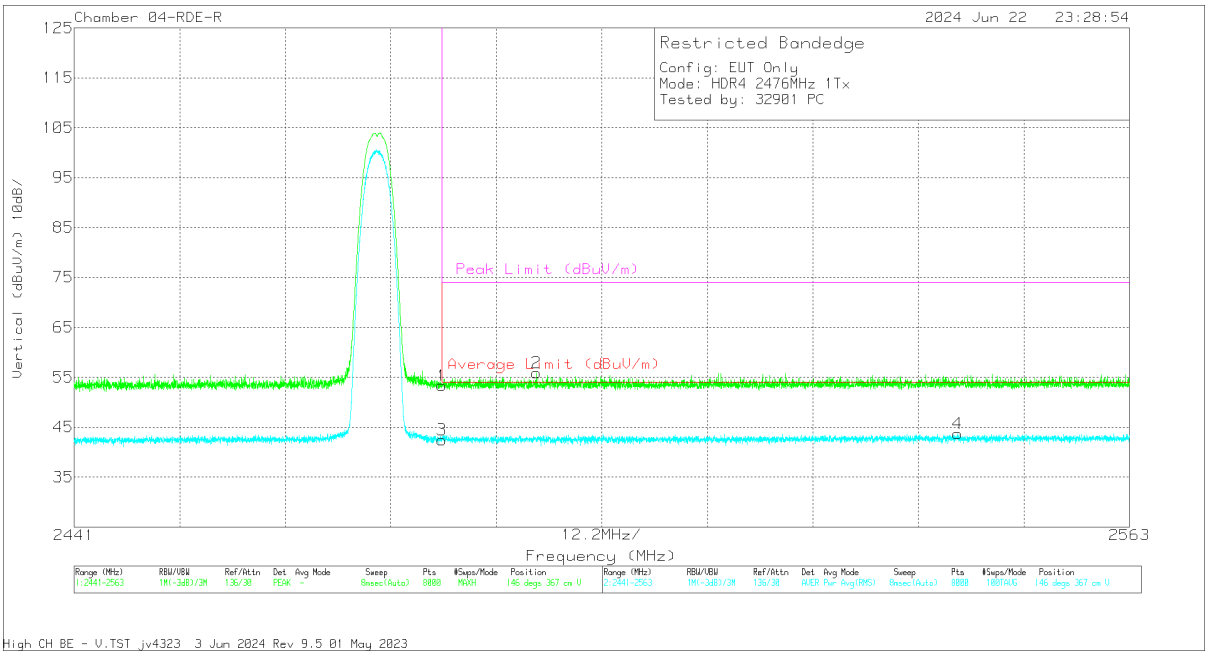


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.41	Pk	32.3	-40.12	53.59	-	-	74	-20.41	171	125	H
3	2483.5	50.29	RMS	32.3	-40.12	42.47	54	-11.53	-	-	171	125	H
2	2530.178	63.27	Pk	32.4	-39.88	55.79	-	-	74	-18.21	171	125	H
4	2532.558	51.44	RMS	32.4	-39.92	43.92	54	-10.08	-	-	171	125	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.15	Pk	32.3	-40.12	53.33	-	-	74	-20.67	146	367	V
3	2483.5	50.22	RMS	32.3	-40.12	42.4	54	-11.6	-	-	146	367	V
2	2494.428	63.64	Pk	32.3	-40.09	55.85	-	-	74	-18.15	146	367	V
4	2543.112	51.26	RMS	32.4	-39.93	43.73	54	-10.27	-	-	146	367	V

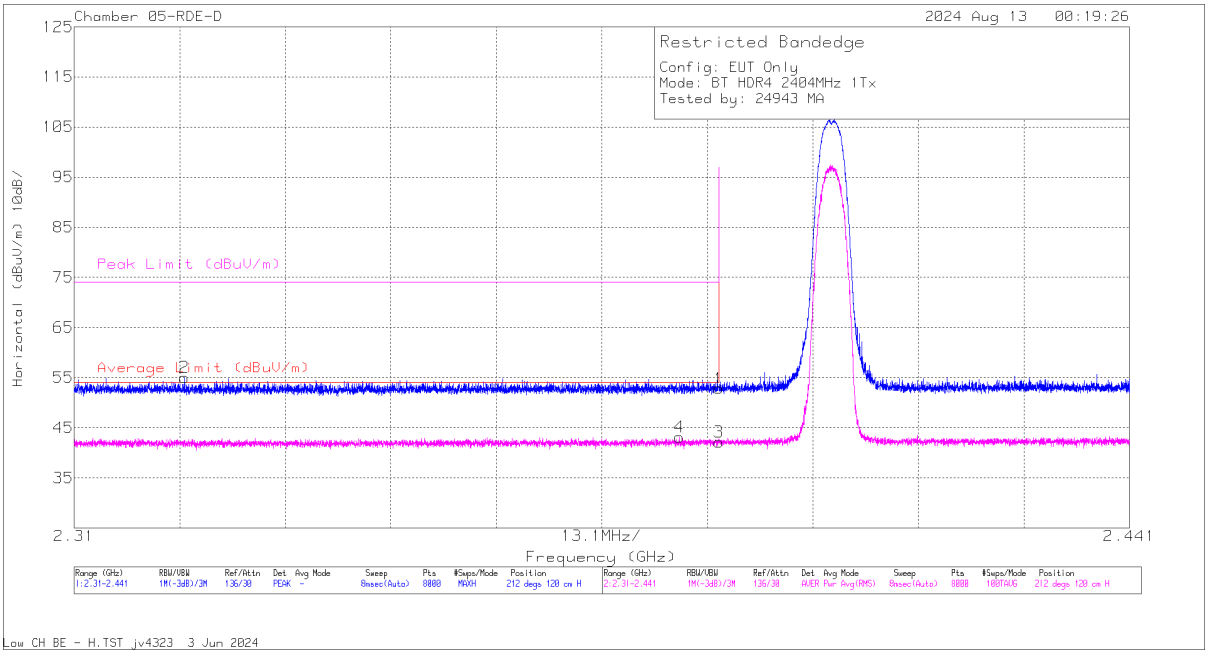
Pk - Peak detector
RMS - RMS detection

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)

HORIZONTAL RESULT

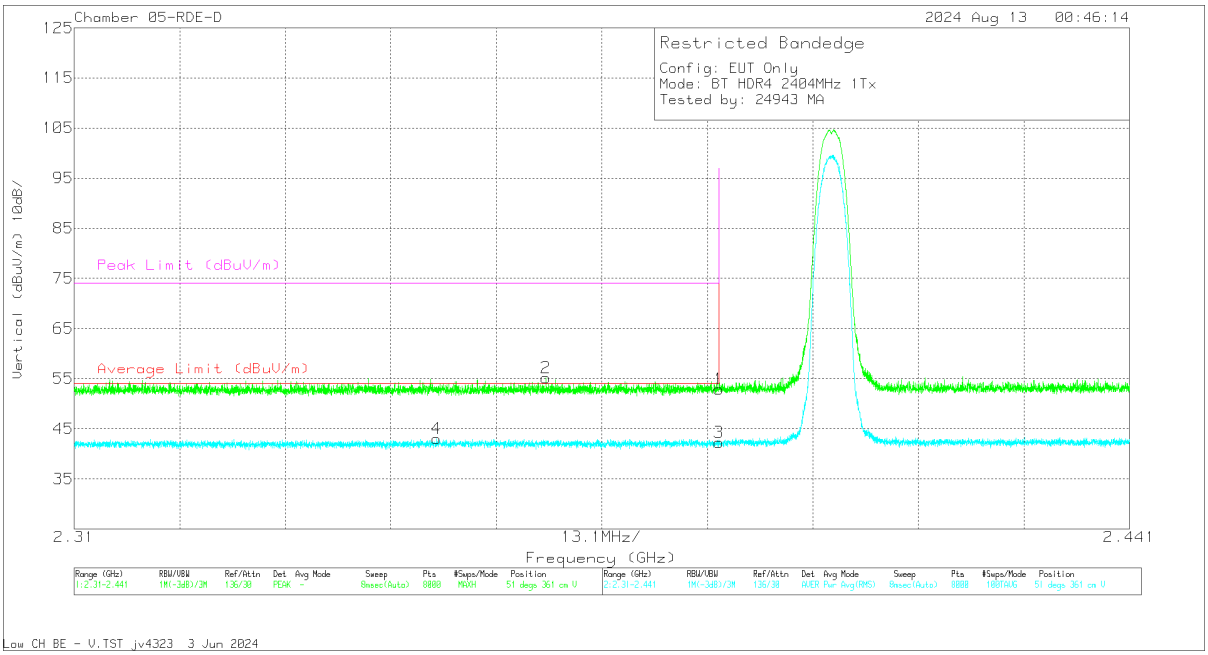


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.323708	64.07	Pk	32.1	0	-41.14	55.03	-	-	74	-18.97	212	120	H
4	2.385105	52.11	RMS	32.1	0	-41.05	43.16	54	-10.84	-	-	212	120	H
1	2.39	61.67	Pk	32.2	0	-41.02	52.85	-	-	74	-21.15	212	120	H
3	2.39	50.94	RMS	32.2	0	-41.02	42.12	54	-11.88	-	-	212	120	H

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



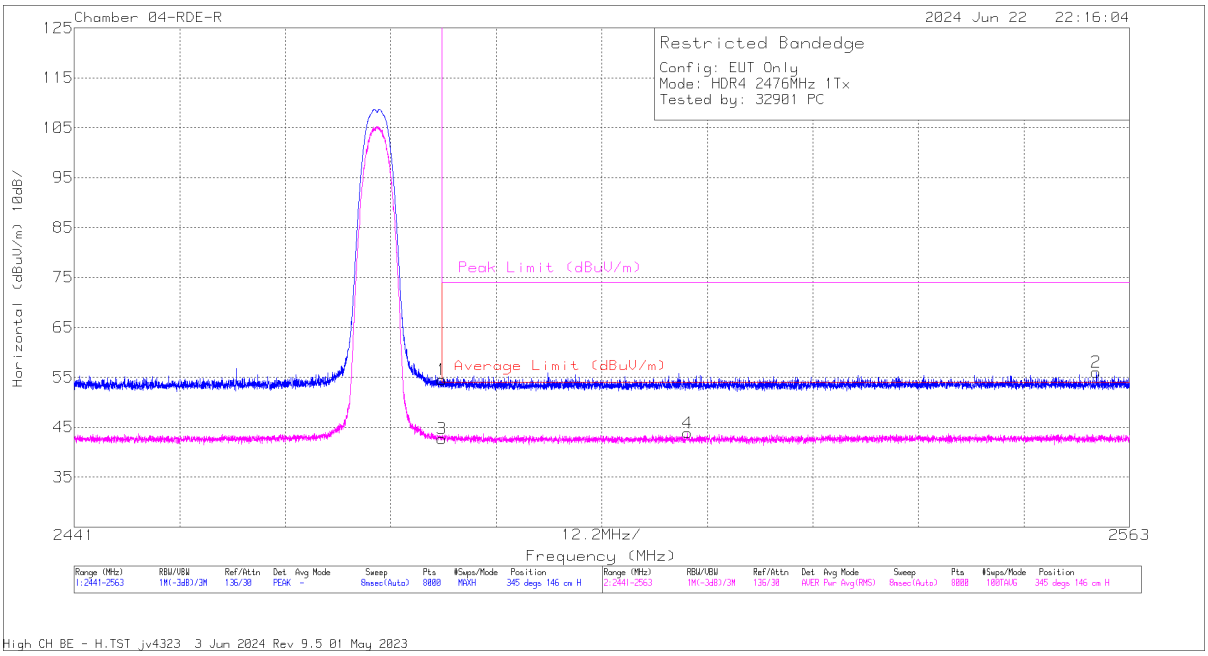
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.354988	51.97	RMS	32.1	0	-41.1	42.97	54	-11.03	-	-	51	361	V
2	2.368548	64.04	Pk	32.1	0	-41.03	55.11	-	-	74	-18.89	51	361	V
1	2.39	61.68	Pk	32.2	0	-41.02	52.86	-	-	74	-21.14	51	361	V
3	2.39	51.14	RMS	32.2	0	-41.02	42.32	54	-11.68	-	-	51	361	V

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)

HORIZONTAL RESULT

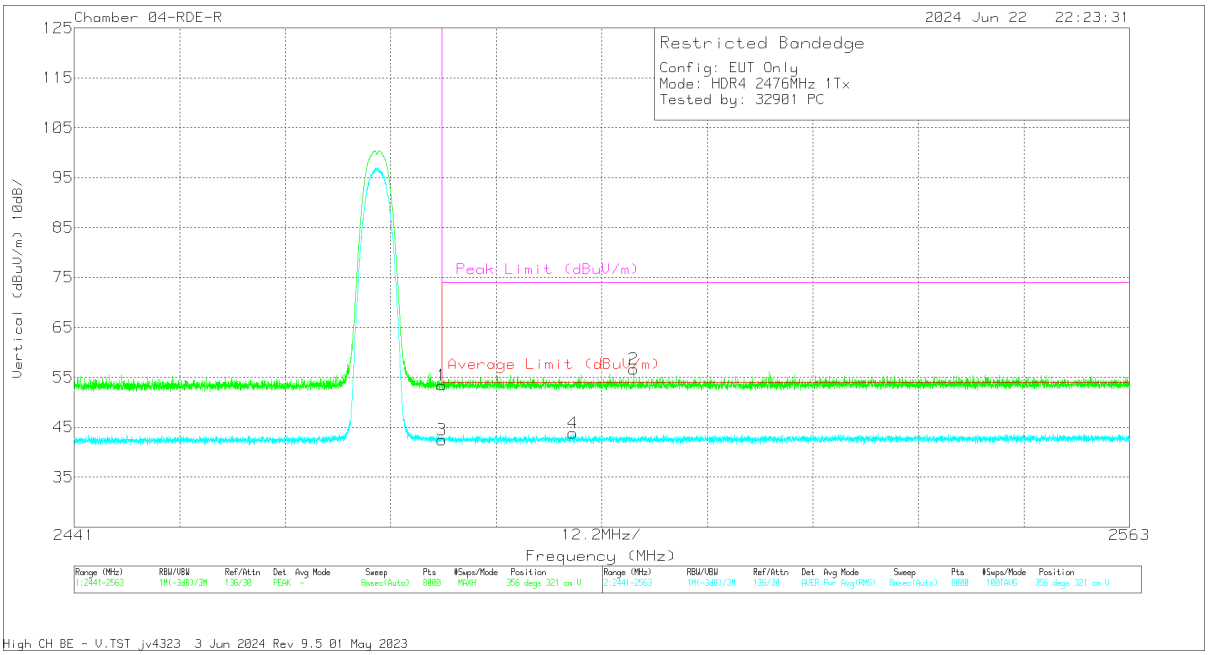


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	62.29	Pk	32.3	-40.12	54.47	-	-	74	-19.53	345	146	H
3	2483.5	50.54	RMS	32.3	-40.12	42.72	54	-11.28	-	-	345	146	H
4	2511.907	51.56	RMS	32.3	-39.97	43.89	54	-10.11	-	-	345	146	H
2	2559.188	63.55	Pk	32.3	-39.86	55.99	-	-	74	-18.01	345	146	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.26	Pk	32.3	-40.12	53.44	-	-	74	-20.56	356	321	V
3	2483.5	50.31	RMS	32.3	-40.12	42.49	54	-11.51	-	-	356	321	V
4	2498.637	51.56	RMS	32.3	-40.03	43.83	54	-10.17	-	-	356	321	V
2	2505.684	64.36	Pk	32.3	-40.05	56.61	-	-	74	-17.39	356	321	V

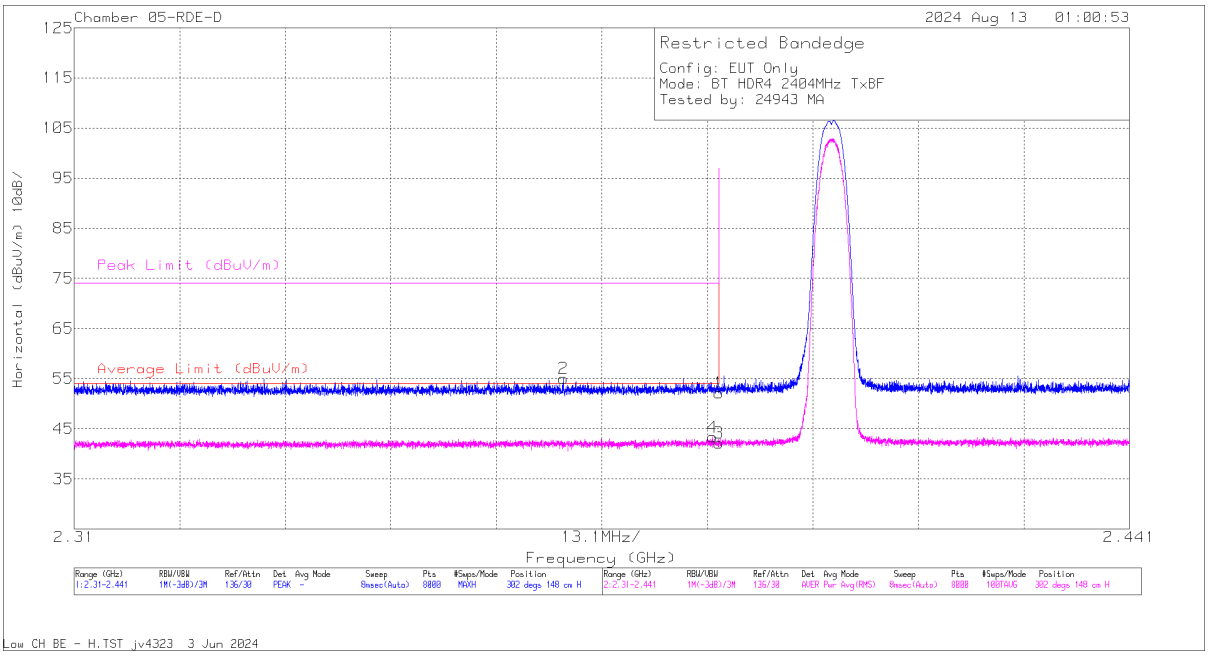
Pk - Peak detector
RMS - RMS detection

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.

10.2.3. HIGH POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

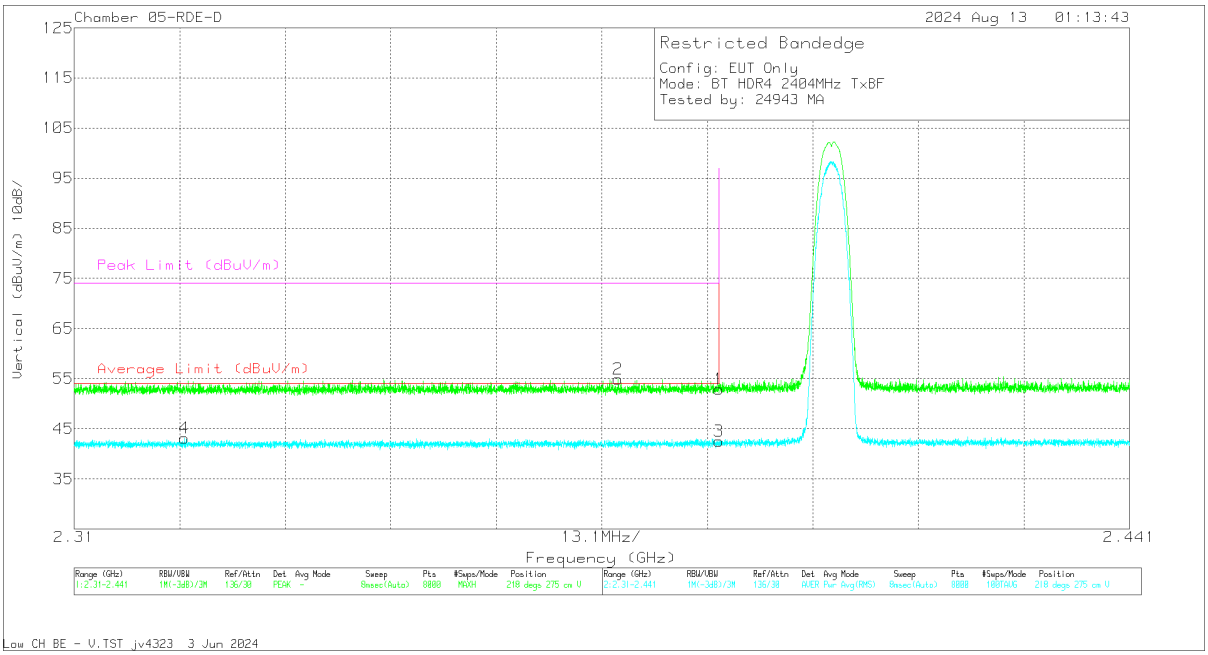


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.370742	63.97	Pk	32.1	0	-41.05	55.02	-	-	74	-18.98	302	148	H
4	2.389232	52.13	RMS	32.2	0	-41	43.33	54	-10.67	-	-	302	148	H
1	2.39	60.98	Pk	32.2	0	-41.02	52.16	-	-	74	-21.84	302	148	H
3	2.39	51.01	RMS	32.2	0	-41.02	42.19	54	-11.81	-	-	302	148	H

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



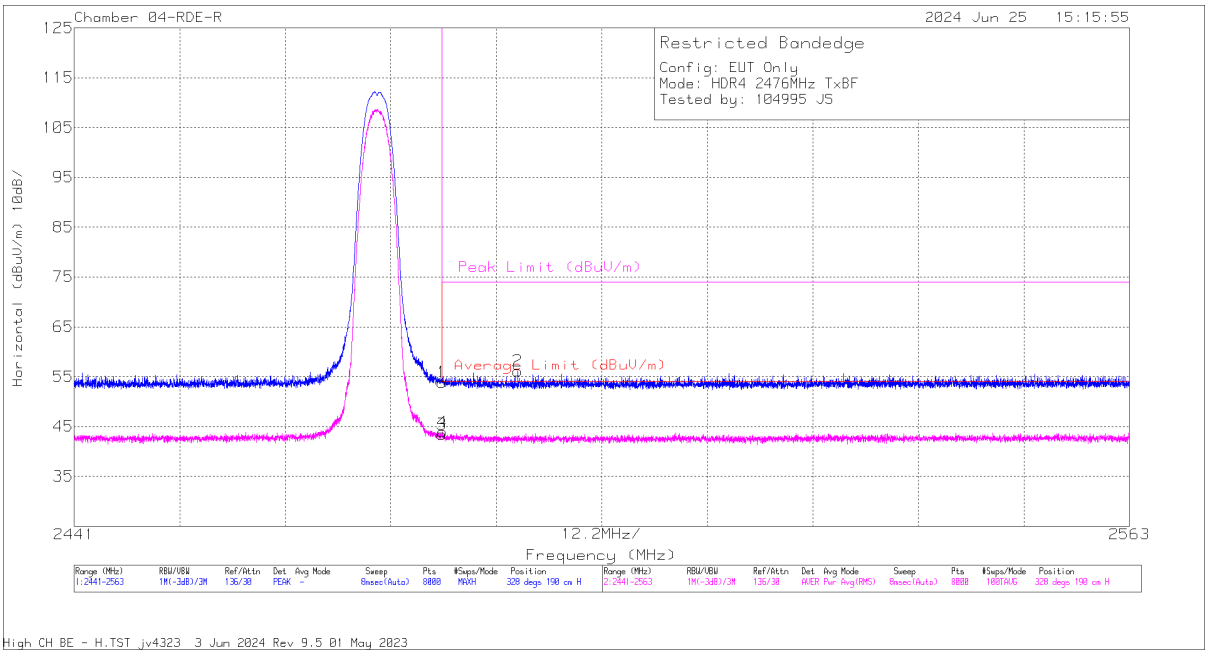
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.323658	52.19	RMS	32.1	0	-41.14	43.15	54	-10.85	-	-	218	275	V
2	2.377506	63.9	Pk	32.1	0	-41.04	54.96	-	-	74	-19.04	218	275	V
1	2.39	61.71	Pk	32.2	0	-41.02	52.89	-	-	74	-21.11	218	275	V
3	2.39	51.33	RMS	32.2	0	-41.02	42.51	54	-11.49	-	-	218	275	V

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)

HORIZONTAL RESULT

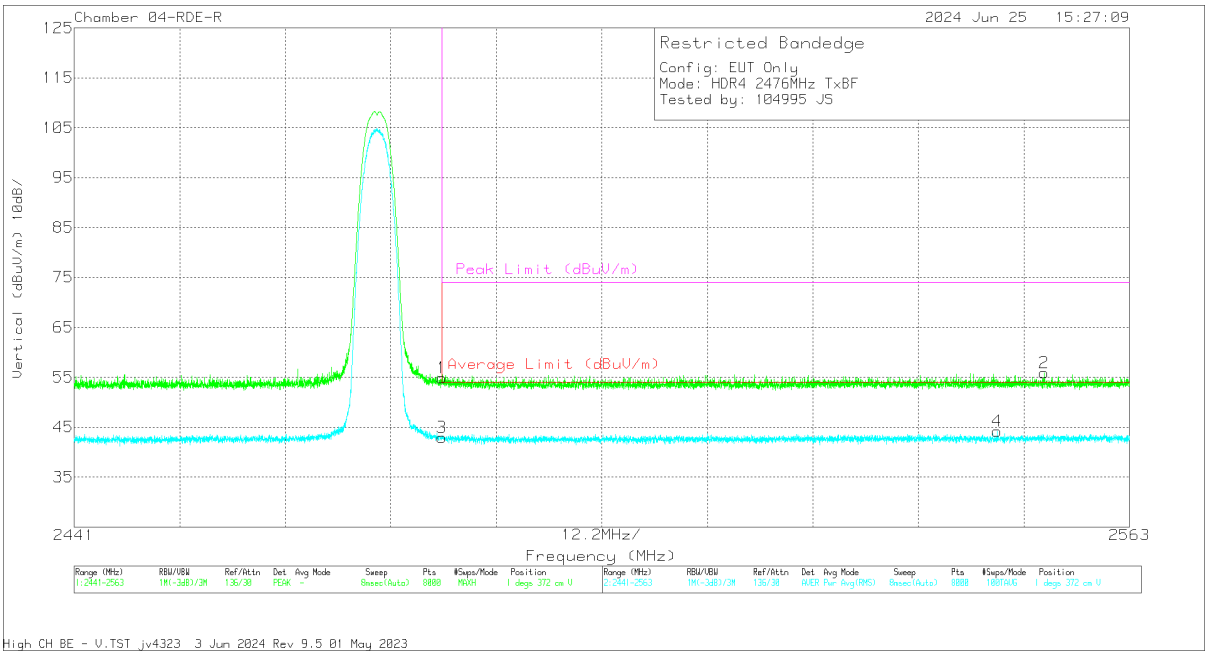


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.74	Pk	32.3	-40.12	53.92	-	-	74	-20.08	328	190	H
3	2483.5	51.33	RMS	32.3	-40.12	43.51	54	-10.49	-	-	328	190	H
4	2483.614	51.72	RMS	32.3	-40.12	43.9	54	-10.1	-	-	328	190	H
2	2492.277	63.92	Pk	32.3	-40.12	56.1	-	-	74	-17.9	328	190	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	62.74	Pk	32.3	-40.12	54.92	-	-	74	-19.08	1	372	V
3	2483.5	50.77	RMS	32.3	-40.12	42.95	54	-11.05	-	-	1	372	V
4	2547.734	51.69	RMS	32.4	-39.91	44.18	54	-9.82	-	-	1	372	V
2	2553.163	63.32	Pk	32.4	-39.84	55.88	-	-	74	-18.12	1	372	V

Pk - Peak detector
RMS - RMS detection

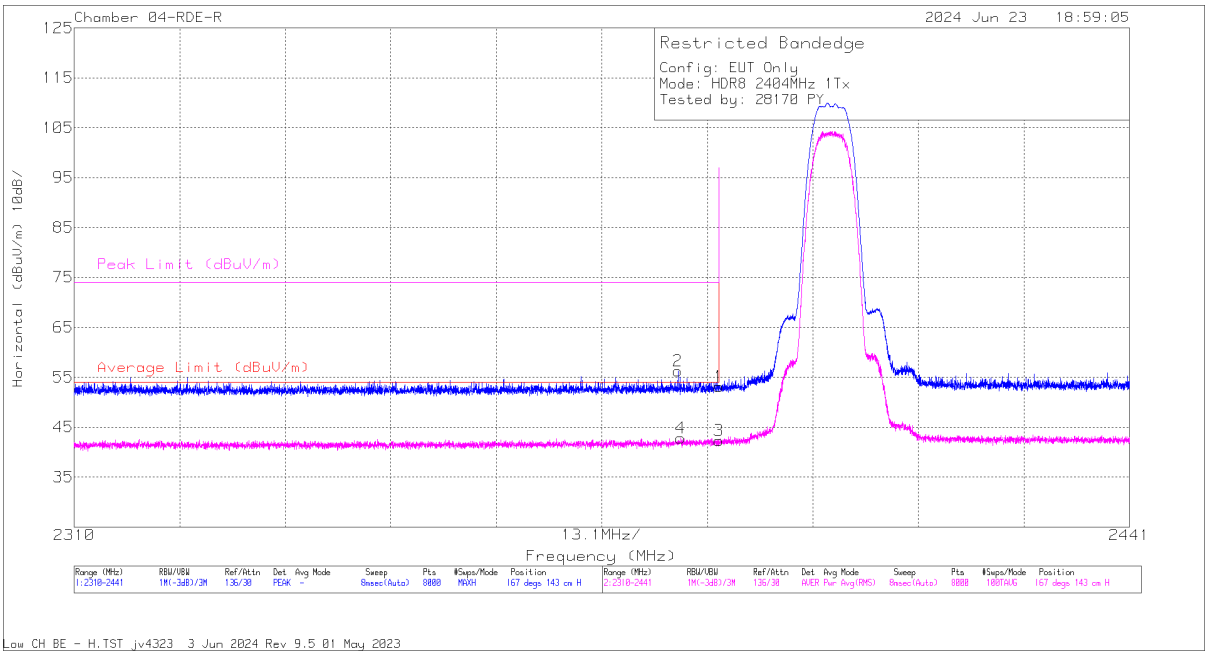
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.2.4. HIGH POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

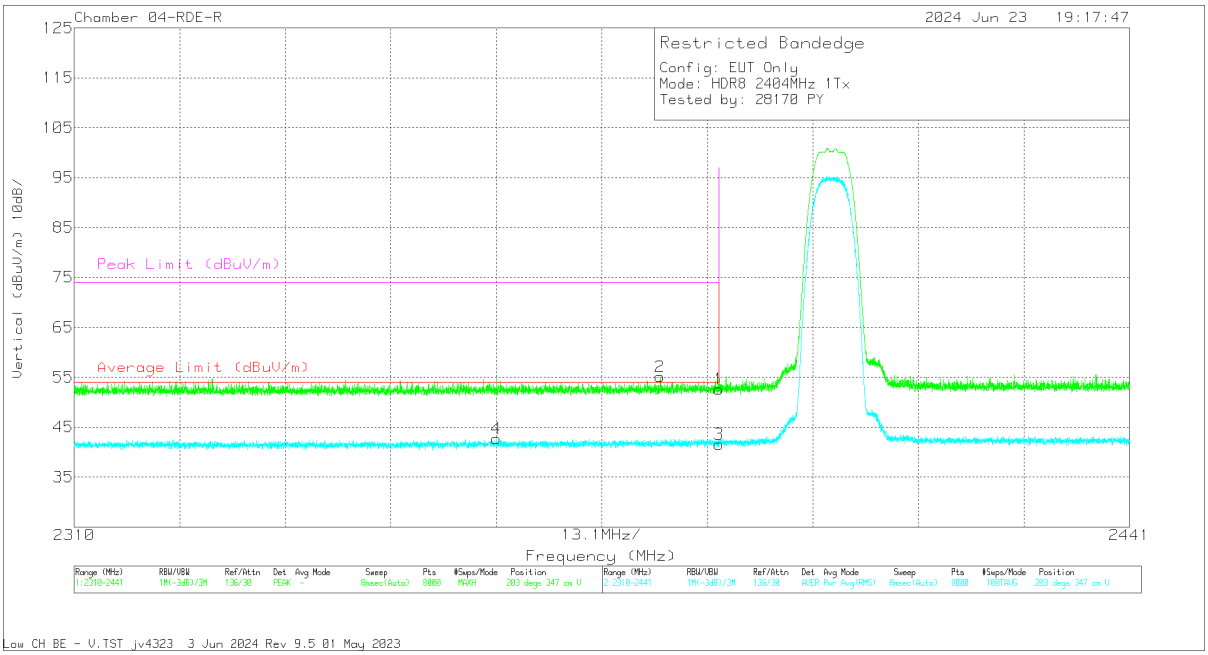


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2384.941	64.8	Pk	31.9	-40.43	56.27	-	-	74	-17.73	167	143	H
4	2385.318	51.39	RMS	31.9	-40.43	42.86	54	-11.14	-	-	167	143	H
1	2390	61.56	Pk	32	-40.44	53.12	-	-	74	-20.88	167	143	H
3	2390	50.8	RMS	32	-40.44	42.36	54	-11.64	-	-	167	143	H

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



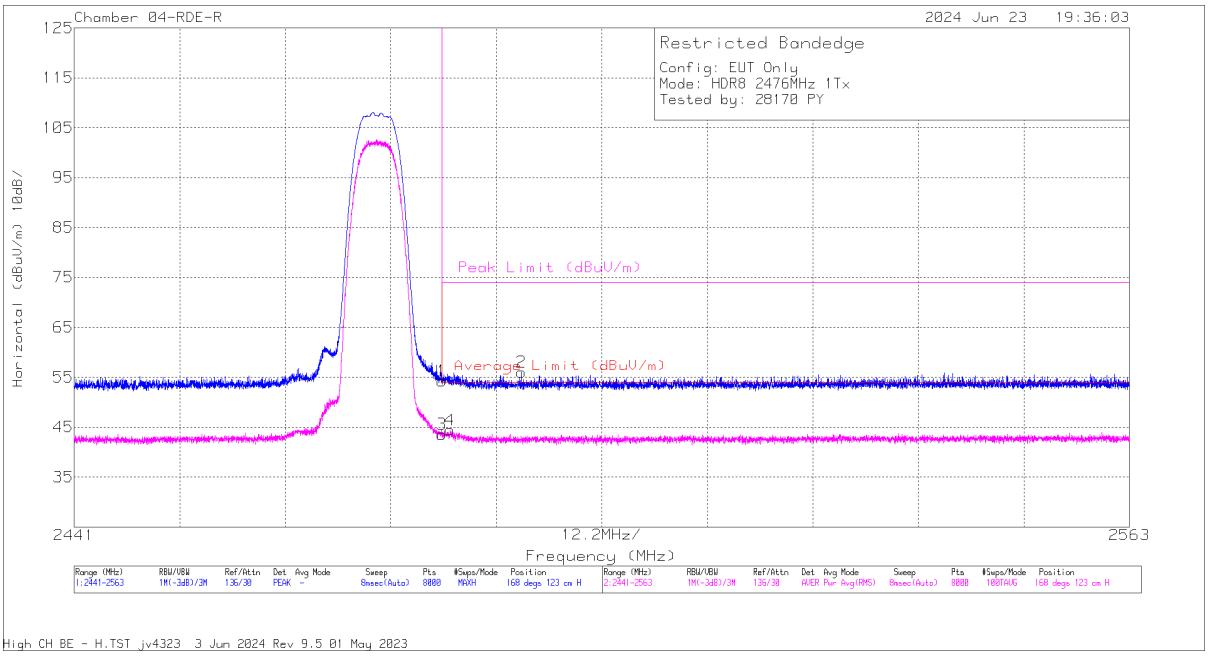
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2362.39	51.44	RMS	31.8	0	-40.54	42.7	54	-11.3	-	-	203	347	V
2	2382.747	63.64	Pk	31.9	0	-40.45	55.09	-	-	74	-18.91	203	347	V
1	2390	61.09	Pk	32	0	-40.44	52.65	-	-	74	-21.35	203	347	V
3	2390	49.98	RMS	32	0	-40.44	41.54	54	-12.46	-	-	203	347	V

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)

HORIZONTAL RESULT

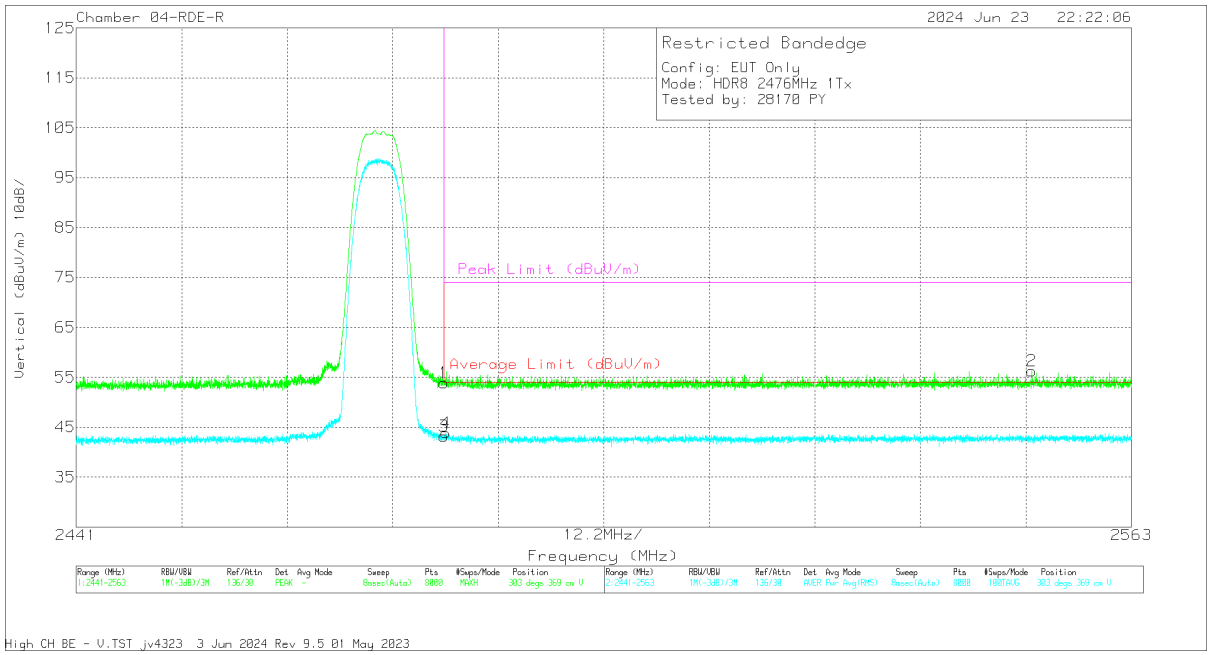


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	62.1	Pk	32.3	-40.12	54.28	-	-	74	-19.72	168	123	H
3	2483.5	51.38	RMS	32.3	-40.12	43.56	54	-10.44	-	-	168	123	H
4	2484.483	52.23	RMS	32.3	-40.12	44.41	54	-9.59	-	-	168	123	H
2	2492.704	63.86	Pk	32.3	-40.11	56.05	-	-	74	-17.95	168	123	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.73	Pk	32.3	-40.12	53.91	-	-	74	-20.09	303	369	V
3	2483.5	51.02	RMS	32.3	-40.12	43.2	54	-10.8	-	-	303	369	V
4	2483.721	51.71	RMS	32.3	-40.12	43.89	54	-10.11	-	-	303	369	V
2	2551.501	63.72	Pk	32.4	-39.86	56.26	-	-	74	-17.74	303	369	V

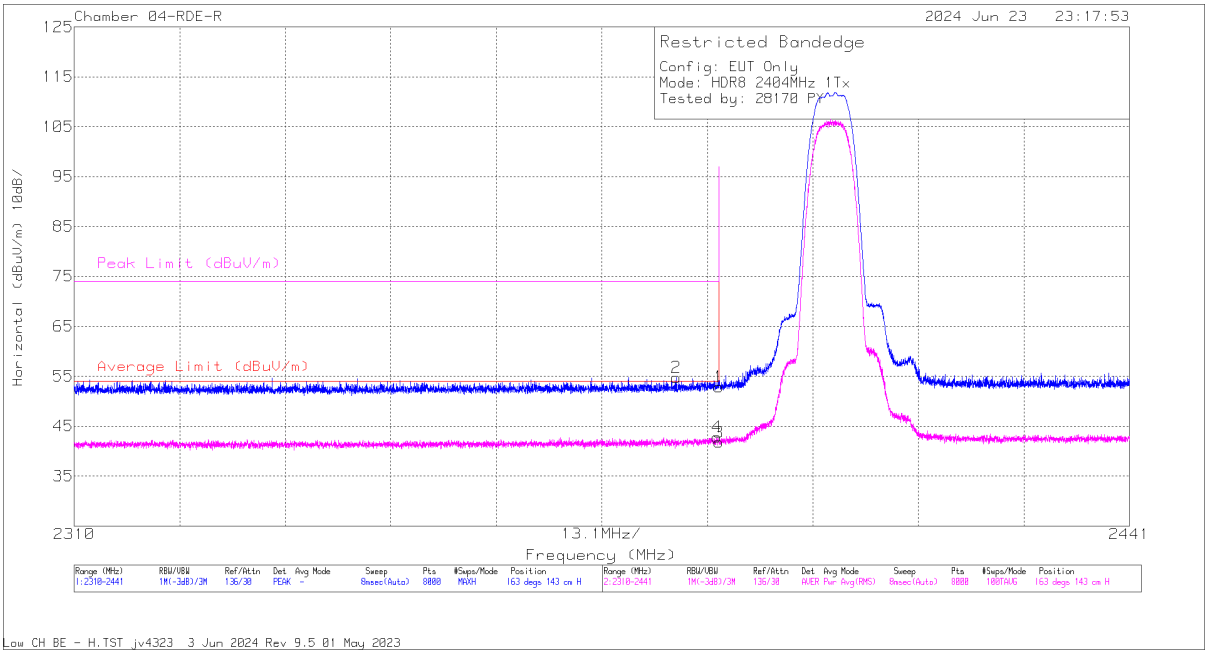
Pk - Peak detector
RMS - RMS detection

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)

HORIZONTAL RESULT

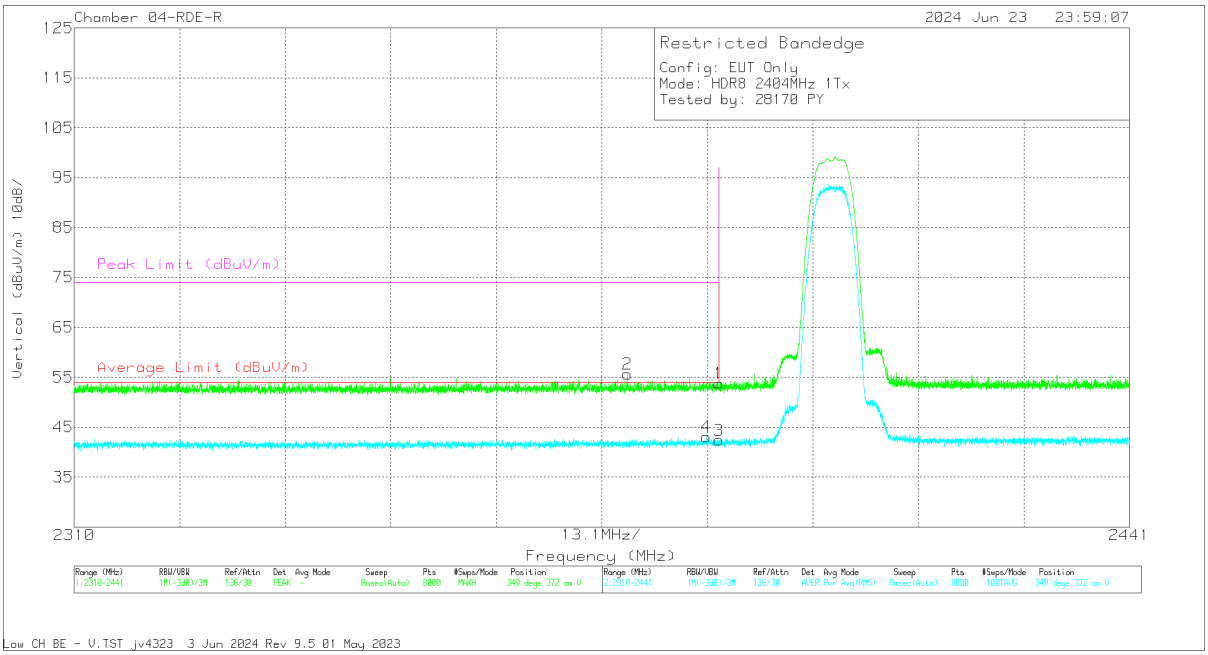


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2384.761	63.25	Pk	31.9	-40.43	54.72	-	-	74	-19.28	163	143	H
4	2389.838	51.24	RMS	32	-40.44	42.8	54	-11.2	-	-	163	143	H
1	2390	61.27	Pk	32	-40.44	52.83	-	-	74	-21.17	163	143	H
3	2390	50.2	RMS	32	-40.44	41.76	54	-12.24	-	-	163	143	H

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



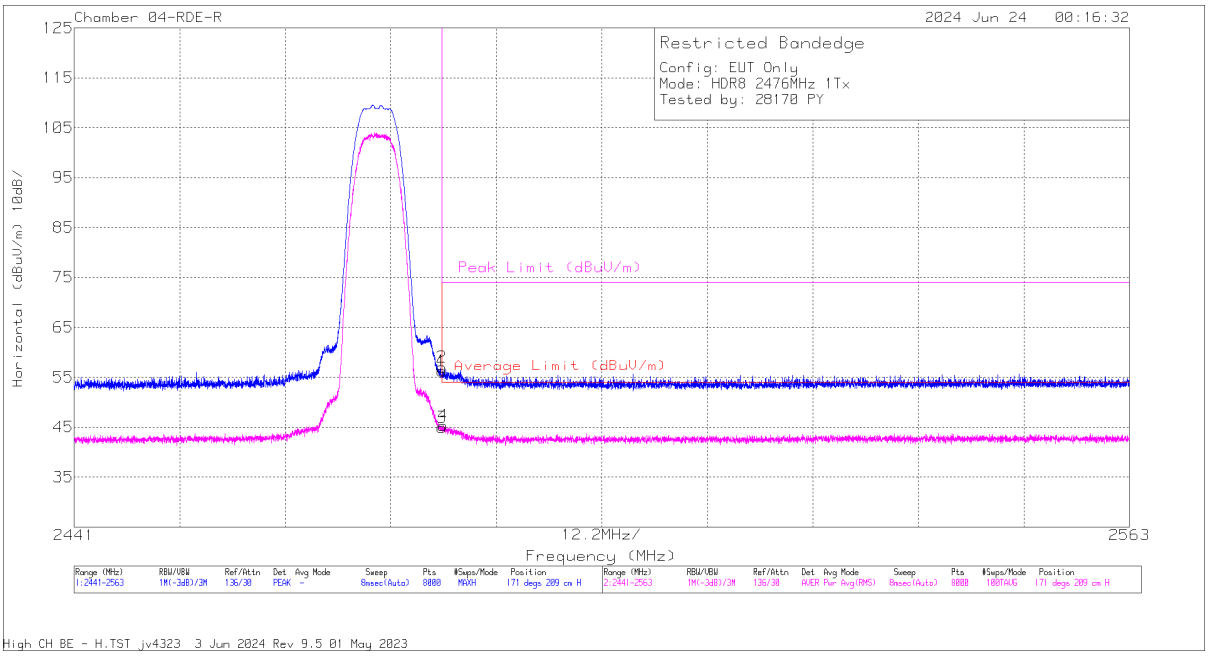
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2378.652	64.24	Pk	31.9	-40.47	55.67	-	-	74	-18.33	349	372	V
4	2388.462	51.54	RMS	32	-40.43	43.11	54	-10.89	-	-	349	372	V
1	2390	62.25	Pk	32	-40.44	53.81	-	-	74	-20.19	349	372	V
3	2390	50.83	RMS	32	-40.44	42.39	54	-11.61	-	-	349	372	V

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)

HORIZONTAL RESULT

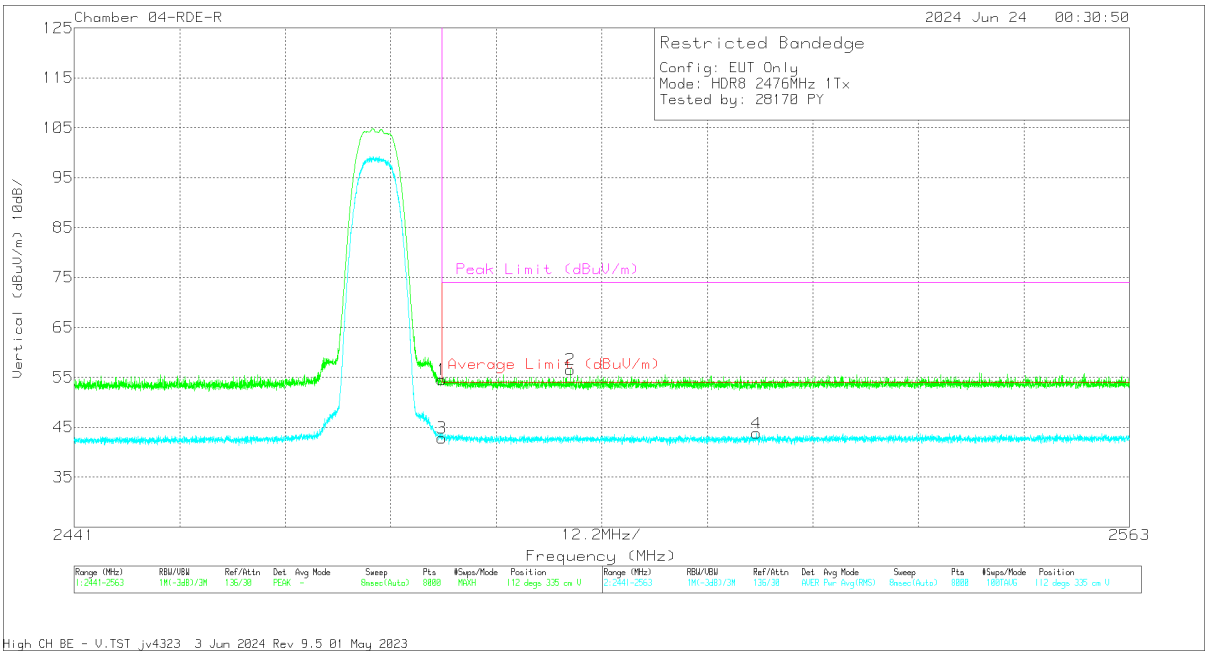


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	64.05	Pk	32.3	-40.12	56.23	-	-	74	-17.77	171	209	H
3	2483.5	52.75	RMS	32.3	-40.12	44.93	54	-9.07	-	-	171	209	H
2	2483.507	64.83	Pk	32.3	-40.12	57.01	-	-	74	-16.99	171	209	H
4	2483.629	53.19	RMS	32.3	-40.12	45.37	54	-8.63	-	-	171	209	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	62.3	Pk	32.3	-40.12	54.48	-	-	74	-19.52	112	335	V
3	2483.5	50.6	RMS	32.3	-40.12	42.78	54	-11.22	-	-	112	335	V
2	2498.363	64.23	Pk	32.3	-40.03	56.5	-	-	74	-17.5	112	335	V
4	2519.853	51.5	RMS	32.3	-40.02	43.78	54	-10.22	-	-	112	335	V

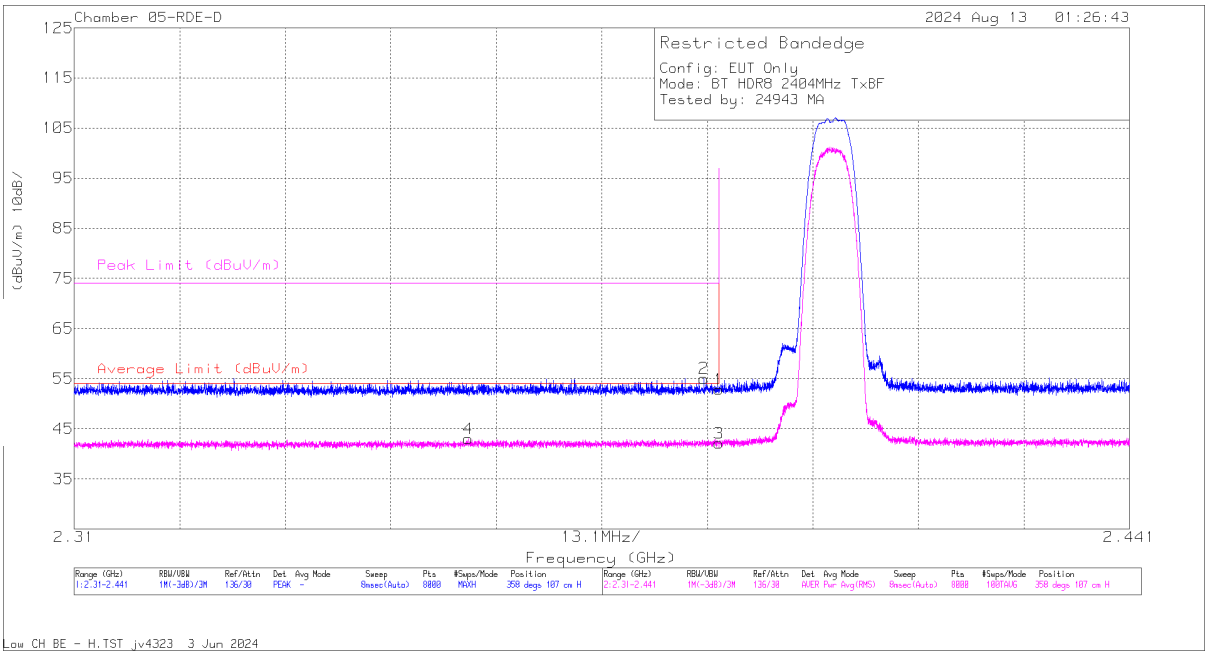
Pk - Peak detector
RMS - RMS detection

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.

10.2.5. HIGH POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

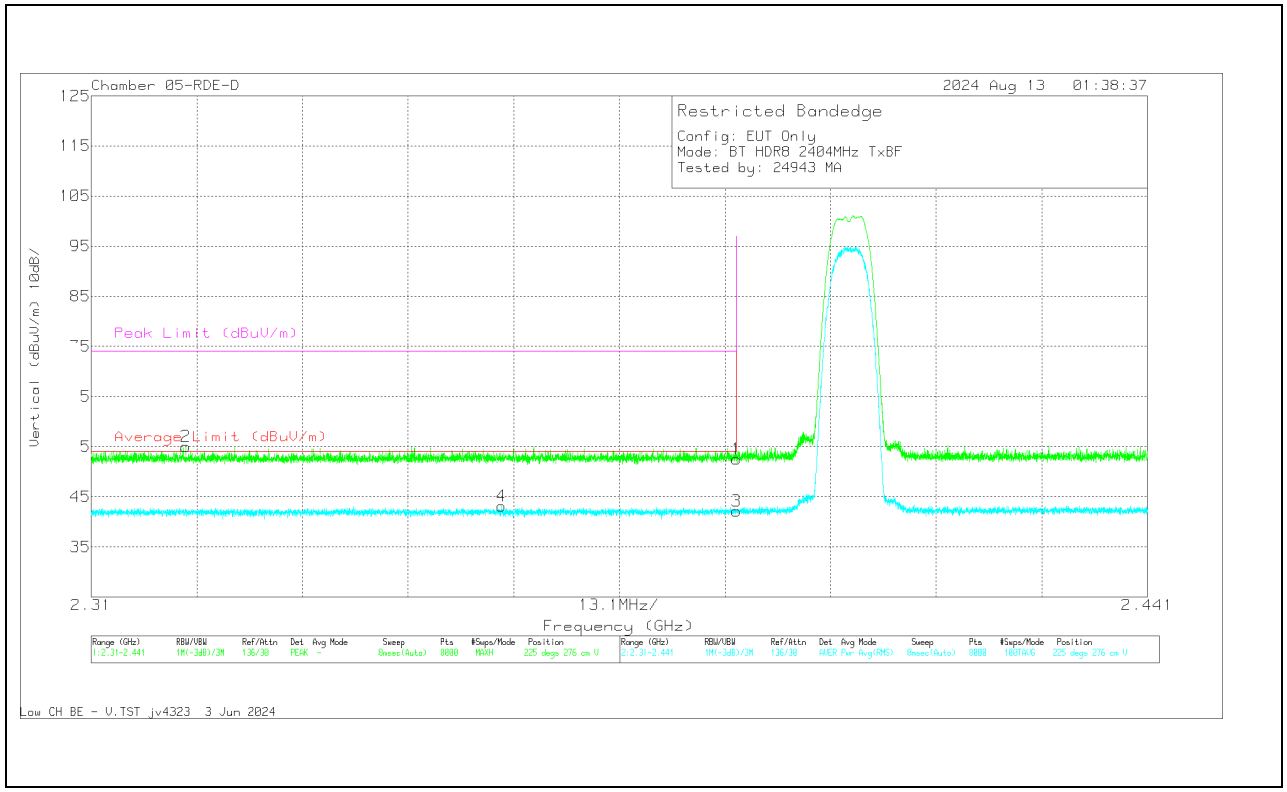


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.358918	51.96	RMS	32.1	0	-41.1	42.96	54	-11.04	-	-	358	107	H
2	2.388151	63.96	Pk	32.1	0	-41	55.06	-	-	74	-18.94	358	107	H
1	2.39	61.66	Pk	32.2	0	-41.02	52.84	-	-	74	-21.16	358	107	H
3	2.39	50.9	RMS	32.2	0	-41.02	42.08	54	-11.92	-	-	358	107	H

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



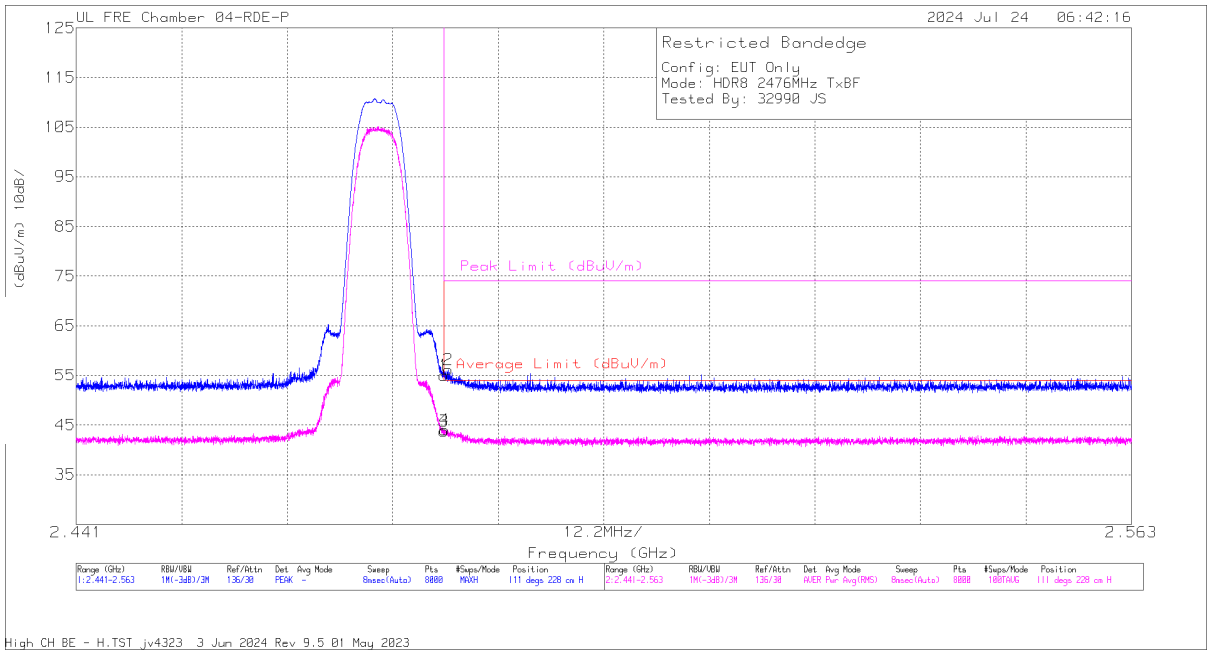
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.32171	64.12	Pk	32.1	0	-41.15	55.07	-	-	74	-18.93	225	276	V
4	2.3609	52.1	RMS	32.1	0	-41.08	43.12	54	-10.88	-	-	225	276	V
1	2.39	61.35	Pk	32.2	0	-41.02	52.53	-	-	74	-21.47	225	276	V
3	2.39	50.97	RMS	32.2	0	-41.02	42.15	54	-11.85	-	-	225	276	V

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)

HORIZONTAL RESULT

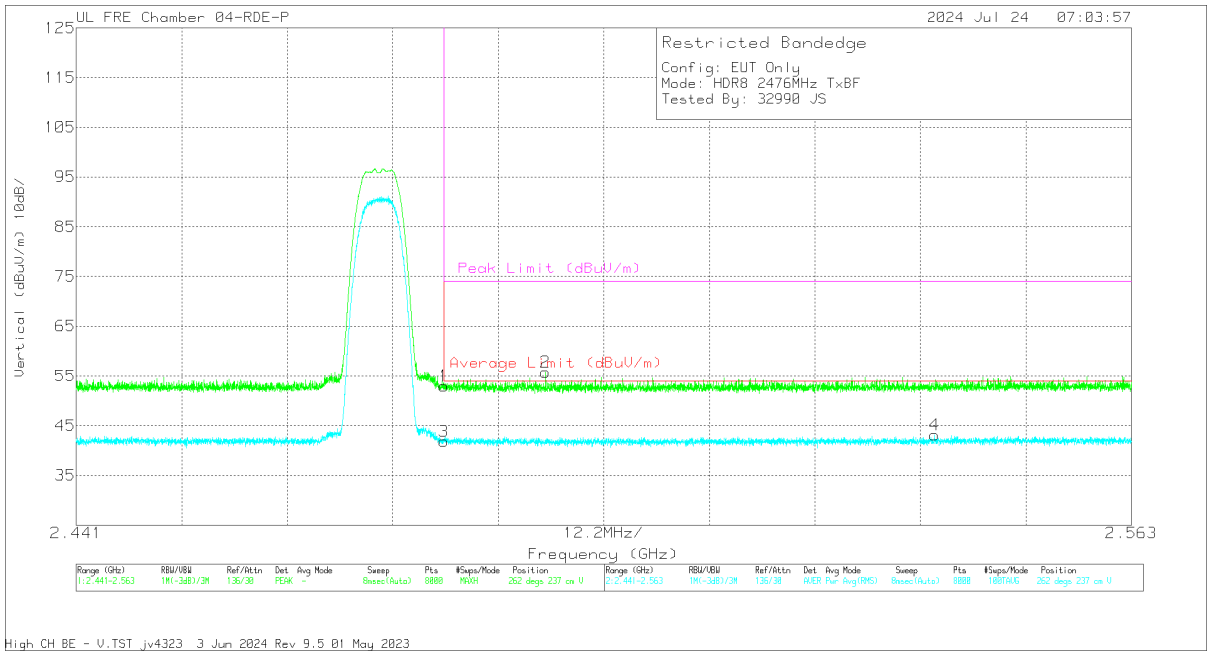


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	63.61	Pk	32.2	-40.83	54.98	-	-	74	-19.02	111	228	H
3	2.4835	52.42	RMS	32.2	-40.83	43.79	54	-10.21	-	-	111	228	H
4	2.483568	52.65	RMS	32.2	-40.83	44.02	54	-9.98	-	-	111	228	H
2	2.484041	64.82	Pk	32.2	-40.83	56.19	-	-	74	-17.81	111	228	H

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	200897 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	61.64	Pk	32.2	-40.83	53.01	-	-	74	-20.99	262	237	V
3	2.4835	50.45	RMS	32.2	-40.83	41.82	54	-12.18	-	-	262	237	V
2	2.495267	64.36	Pk	32.2	-40.83	55.73	-	-	74	-18.27	262	237	V
4	2.540245	51.65	RMS	32.2	-40.69	43.16	54	-10.84	-	-	262	237	V

Pk - Peak detector
RMS - RMS detection

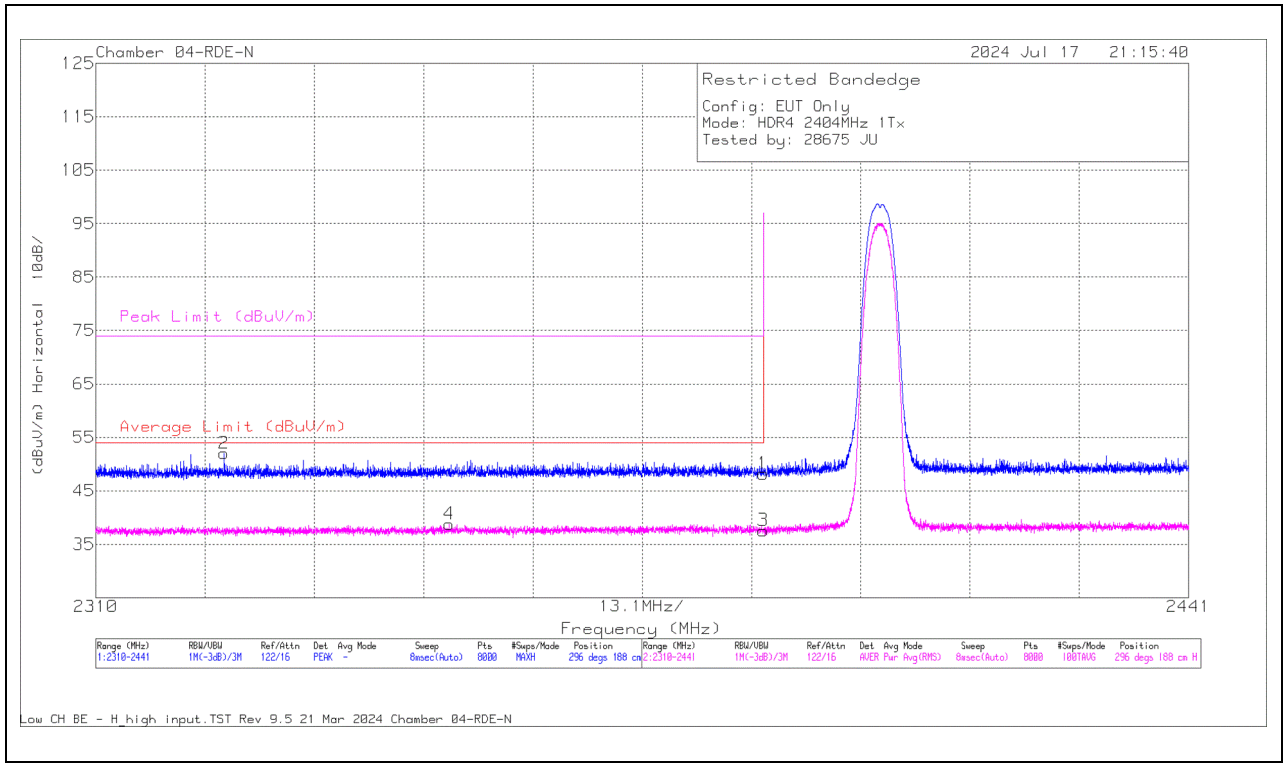
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.2.6. LOW POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

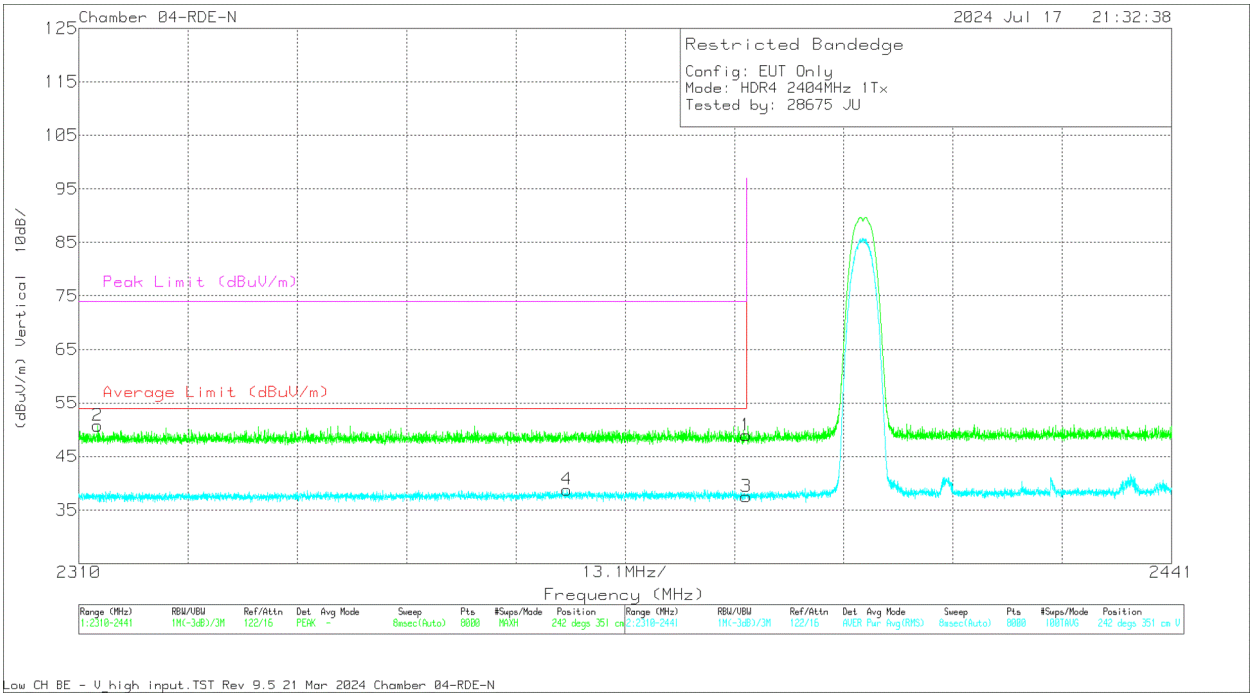


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2325.378	47.67	Pk	31.5	-27.16	52.01	-	-	74	-21.99	296	188	H
4	2352.351	34.23	RMS	31.6	-27.06	38.77	54	-15.23	-	-	296	188	H
1	2390	43.59	Pk	31.8	-27.17	48.22	-	-	74	-25.78	296	188	H
3	2390	32.93	RMS	31.8	-27.17	37.56	54	-16.44	-	-	296	188	H

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



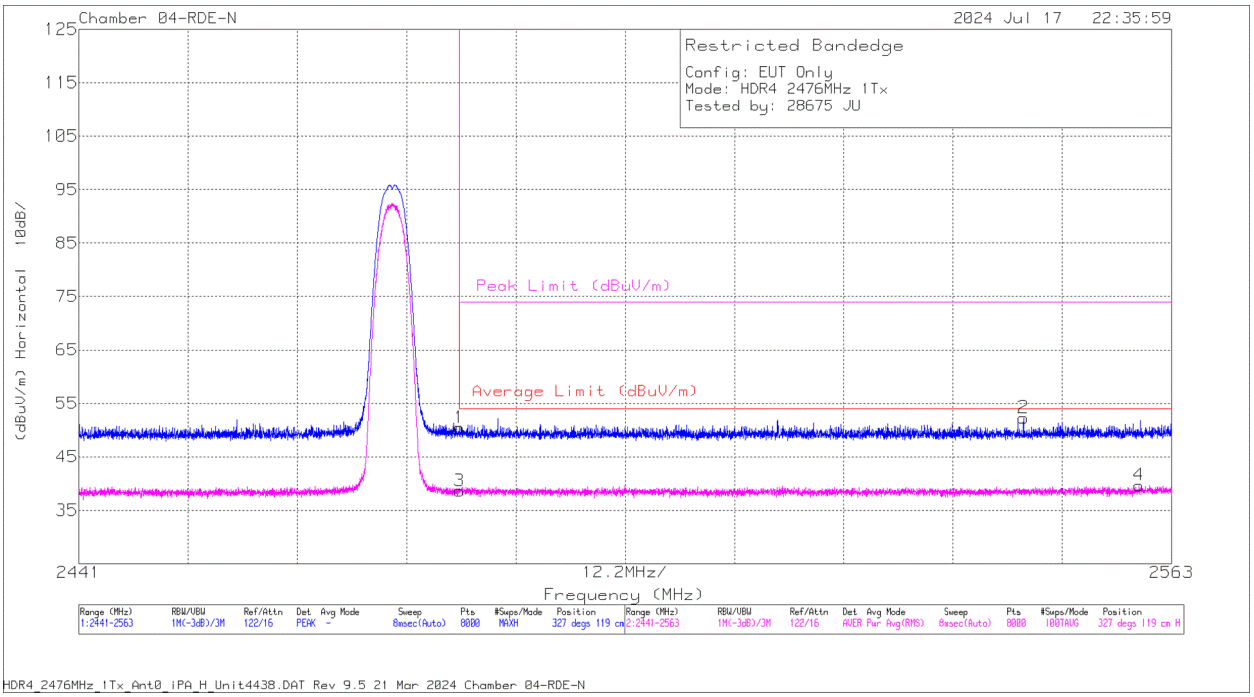
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2312.26	46.5	Pk	31.4	-27.13	50.77	-	-	74	-23.23	242	351	V
4	2368.531	34.11	RMS	31.7	-27.01	38.8	54	-15.2	-	-	242	351	V
1	2390	44.33	Pk	31.8	-27.17	48.96	-	-	74	-25.04	242	351	V
3	2390	32.87	RMS	31.8	-27.17	37.5	54	-16.5	-	-	242	351	V

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)

HORIZONTAL RESULT

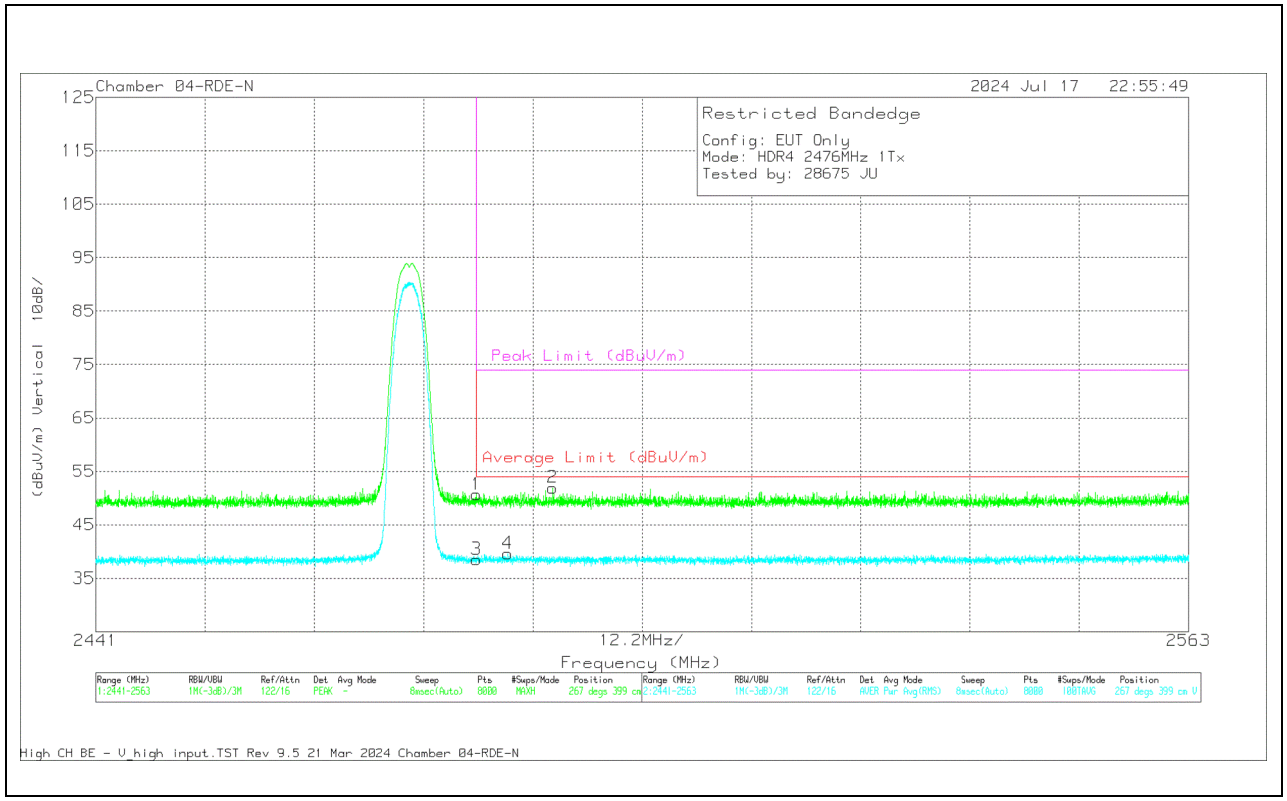


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	45.21	Pk	32.2	-27	50.41	-	-	74	-23.59	327	119	H
3	2483.5	33.42	RMS	32.2	-27	38.62	54	-15.38	-	-	327	119	H
2	2546.468	46.97	Pk	32.2	-26.86	52.31	-	-	74	-21.69	327	119	H
4	2559.356	34.26	RMS	32.2	-26.81	39.65	54	-14.35	-	-	327	119	H

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 (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	45.47	Pk	32.2	-27	50.67	-	-	74	-23.33	267	399	V
3	2483.5	33.32	RMS	32.2	-27	38.52	54	-15.48	-	-	267	399	V
4	2486.97	34.33	RMS	32.2	-26.92	39.61	54	-14.39	-	-	267	399	V
2	2492.003	46.72	Pk	32.2	-26.96	51.96	-	-	74	-22.04	267	399	V

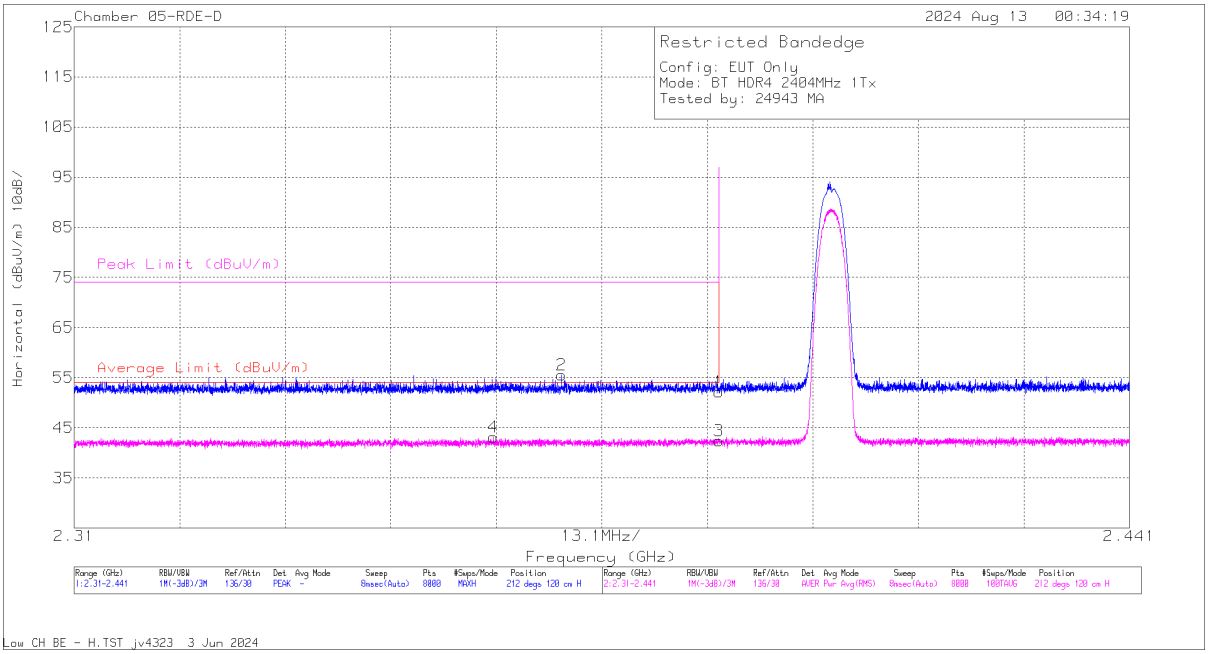
Pk - Peak detector
RMS - RMS detection

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)

HORIZONTAL RESULT

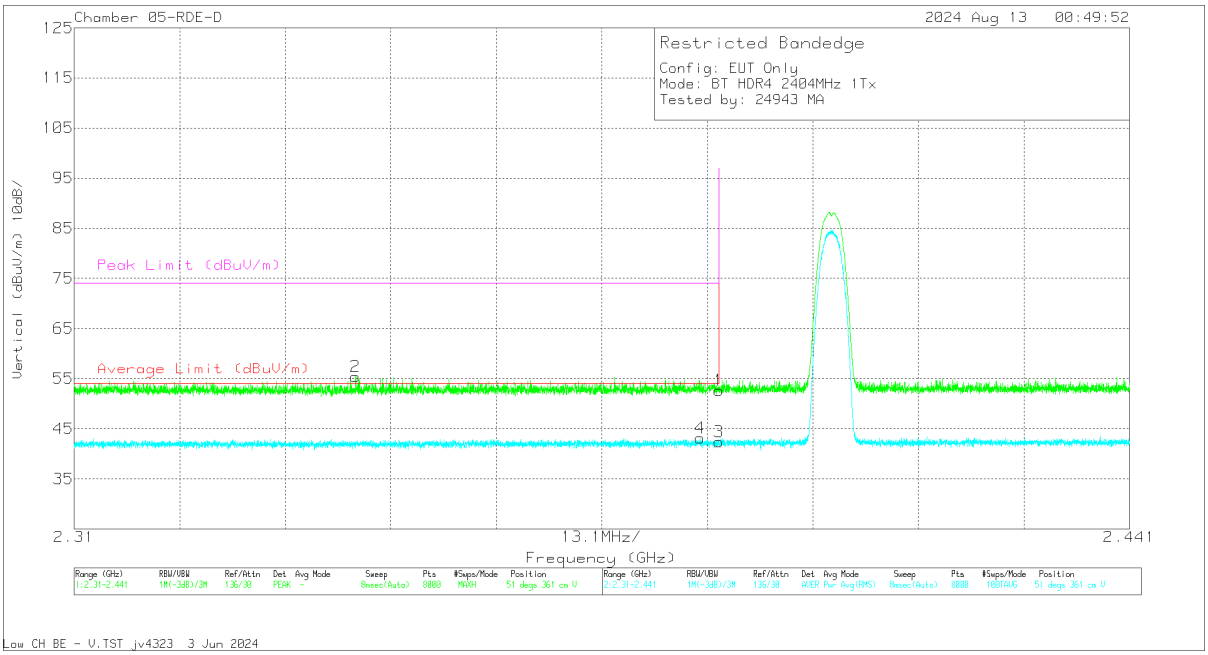


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.362046	52.1	RMS	32.1	0	-41.07	43.13	54	-10.87	-	-	212	120	H
2	2.370513	64.49	Pk	32.1	0	-41.05	55.54	-	-	74	-18.46	212	120	H
1	2.39	60.96	Pk	32.2	0	-41.02	52.14	-	-	74	-21.86	212	120	H
3	2.39	51.25	RMS	32.2	0	-41.02	42.43	54	-11.57	-	-	212	120	H

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



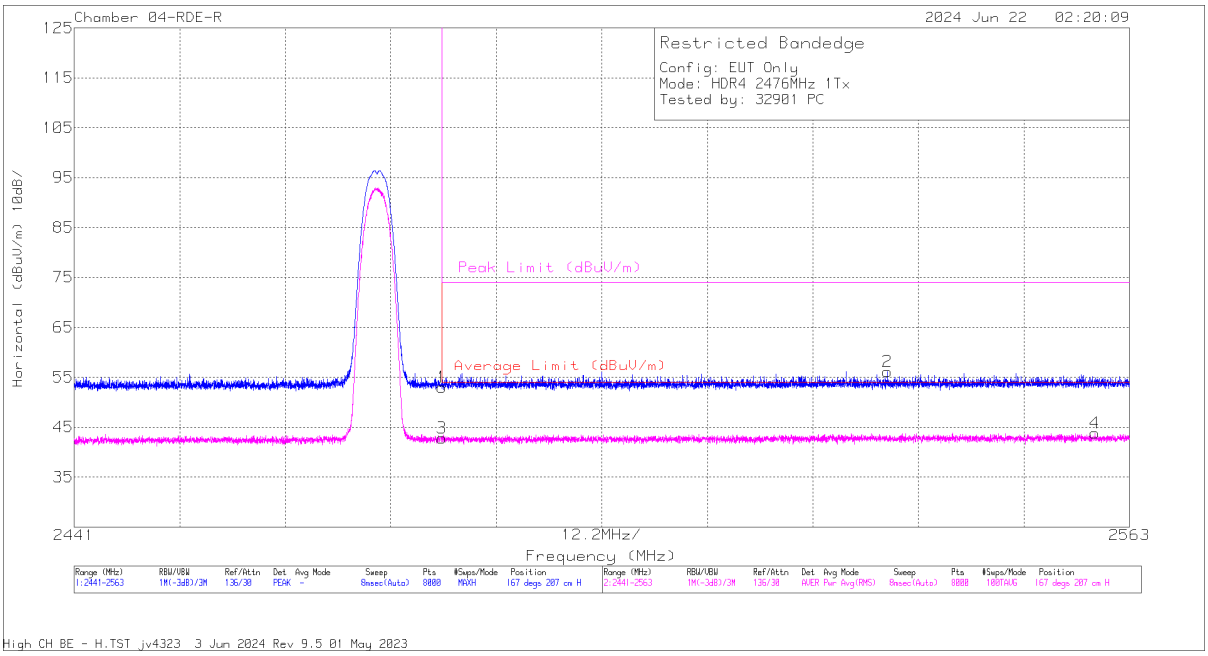
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.344949	64.48	Pk	32.1	0	-41.15	55.43	-	-	74	-18.57	51	361	V
4	2.387709	52.03	RMS	32.1	0	-41.01	43.12	54	-10.88	-	-	51	361	V
1	2.39	61.52	Pk	32.2	0	-41.02	52.7	-	-	74	-21.3	51	361	V
3	2.39	51.2	RMS	32.2	0	-41.02	42.38	54	-11.62	-	-	51	361	V

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)

HORIZONTAL RESULT

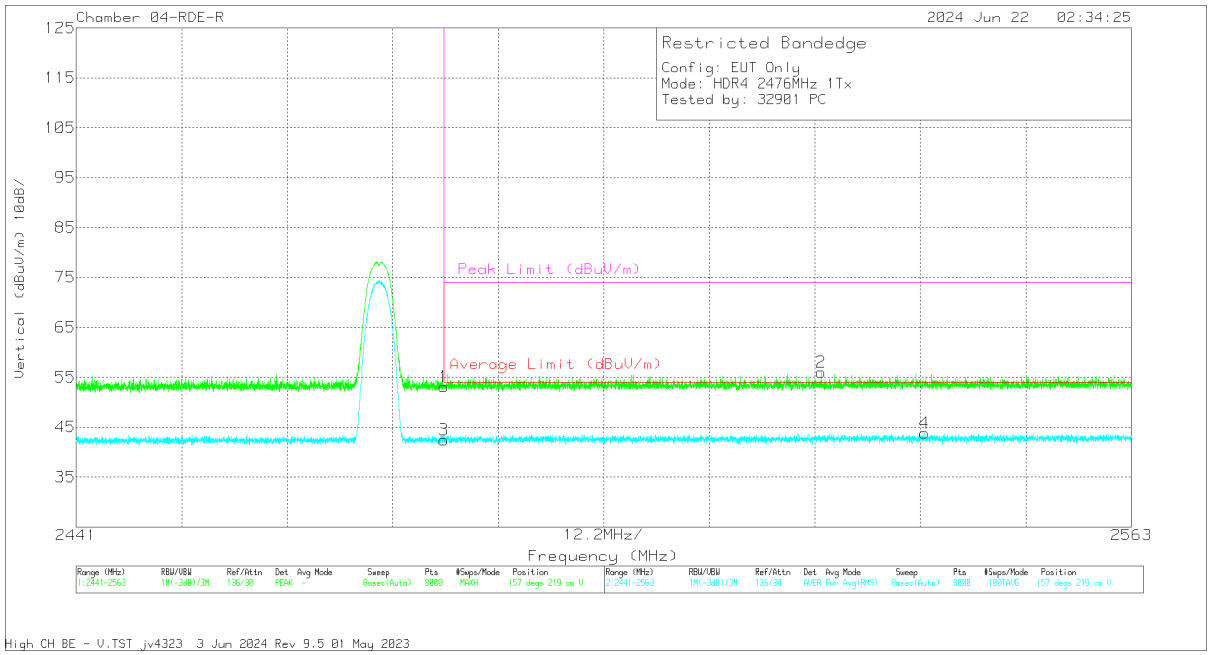


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	60.82	Pk	32.3	-40.12	53	-	-	74	-21	167	207	H
3	2483.5	50.69	RMS	32.3	-40.12	42.87	54	-11.13	-	-	167	207	H
2	2535.044	63.74	Pk	32.4	-39.94	56.2	-	-	74	-17.8	167	207	H
4	2559.005	51.42	RMS	32.3	-39.86	43.86	54	-10.14	-	-	167	207	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	60.99	Pk	32.3	-40.12	53.17	-	-	74	-20.83	157	219	V
3	2483.5	50.24	RMS	32.3	-40.12	42.42	54	-11.58	-	-	157	219	V
2	2527.159	63.47	Pk	32.4	-39.88	55.99	-	-	74	-18.01	157	219	V
4	2539.116	51.36	RMS	32.4	-39.95	43.81	54	-10.19	-	-	157	219	V

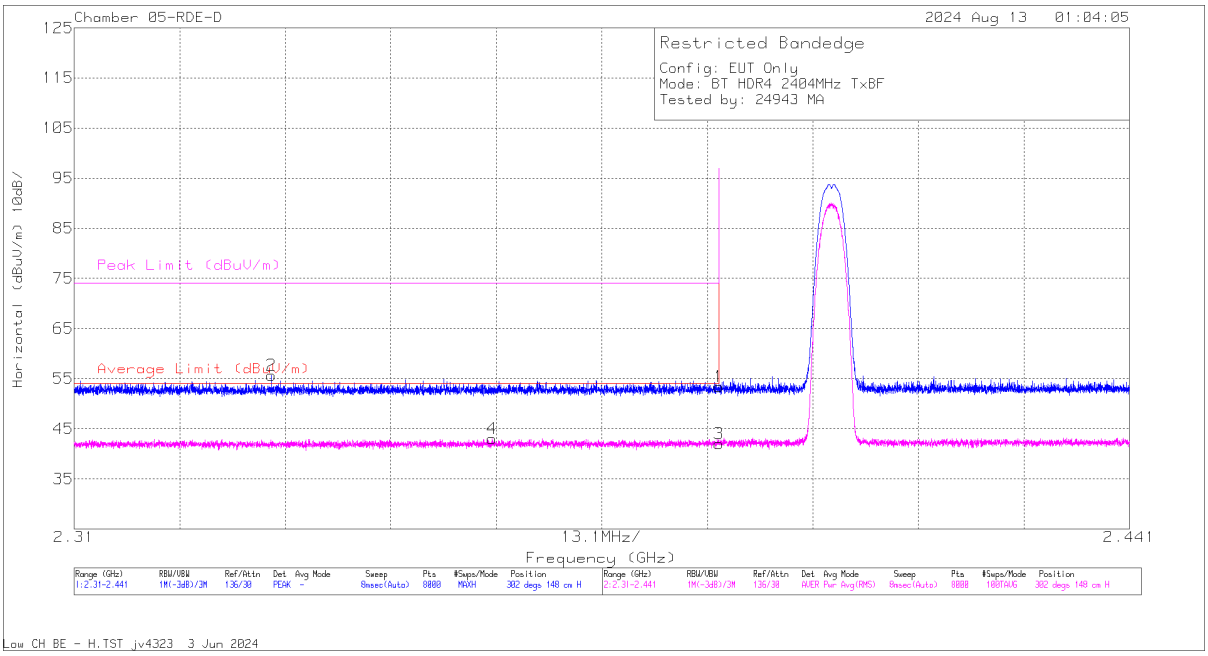
Pk - Peak detector
RMS - RMS detection

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.

10.2.7. LOW POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

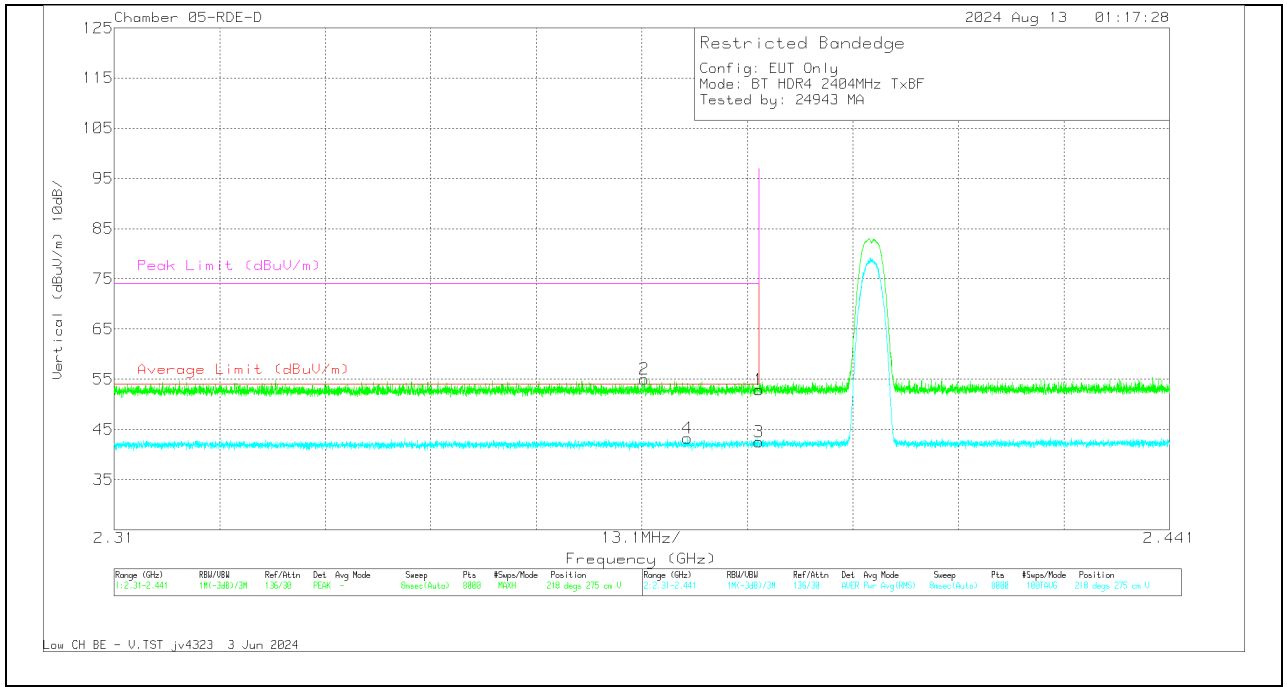


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.334467	64.73	Pk	32.1	0	-41.16	55.67	-	-	74	-18.33	302	148	H
4	2.361899	52.04	RMS	32.1	0	-41.07	43.07	54	-10.93	-	-	302	148	H
1	2.39	62.22	Pk	32.2	0	-41.02	53.4	-	-	74	-20.6	302	148	H
3	2.39	50.81	RMS	32.2	0	-41.02	41.99	54	-12.01	-	-	302	148	H

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



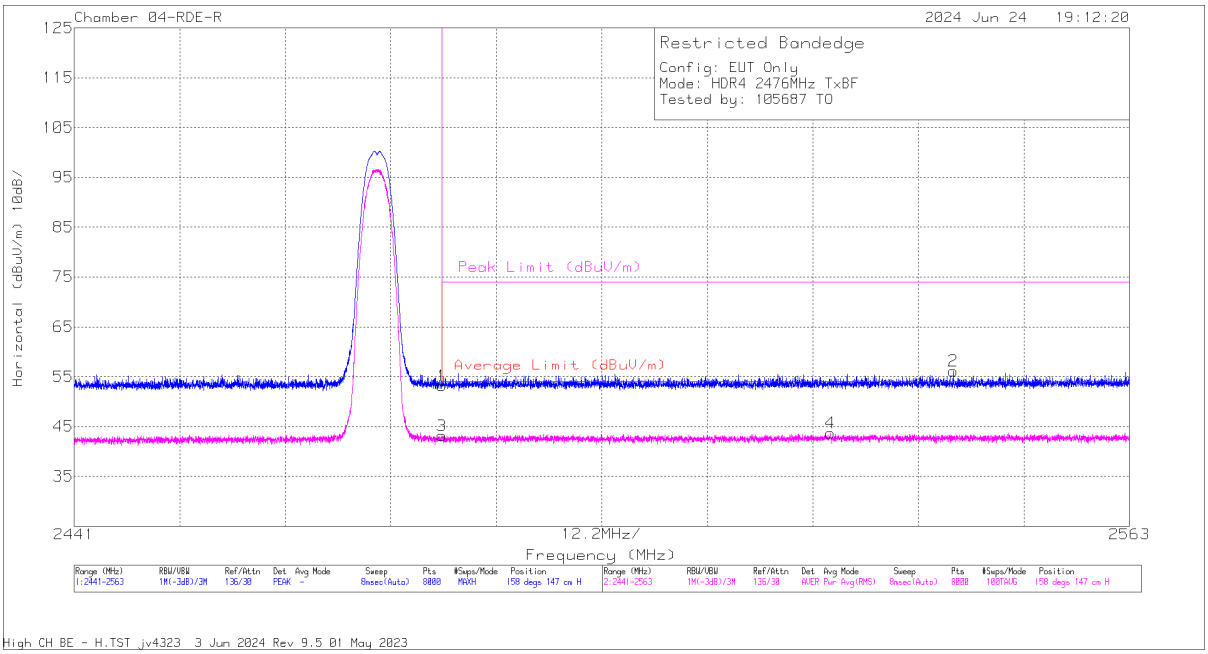
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.375803	63.92	Pk	32.1	0	-41.02	55	-	-	74	-19	218	275	V
4	2.381191	52.24	RMS	32.1	0	-41.03	43.31	54	-10.69	-	-	218	275	V
1	2.39	61.7	Pk	32.2	0	-41.02	52.88	-	-	74	-21.12	218	275	V
3	2.39	51.32	RMS	32.2	0	-41.02	42.5	54	-11.5	-	-	218	275	V

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)

HORIZONTAL RESULT

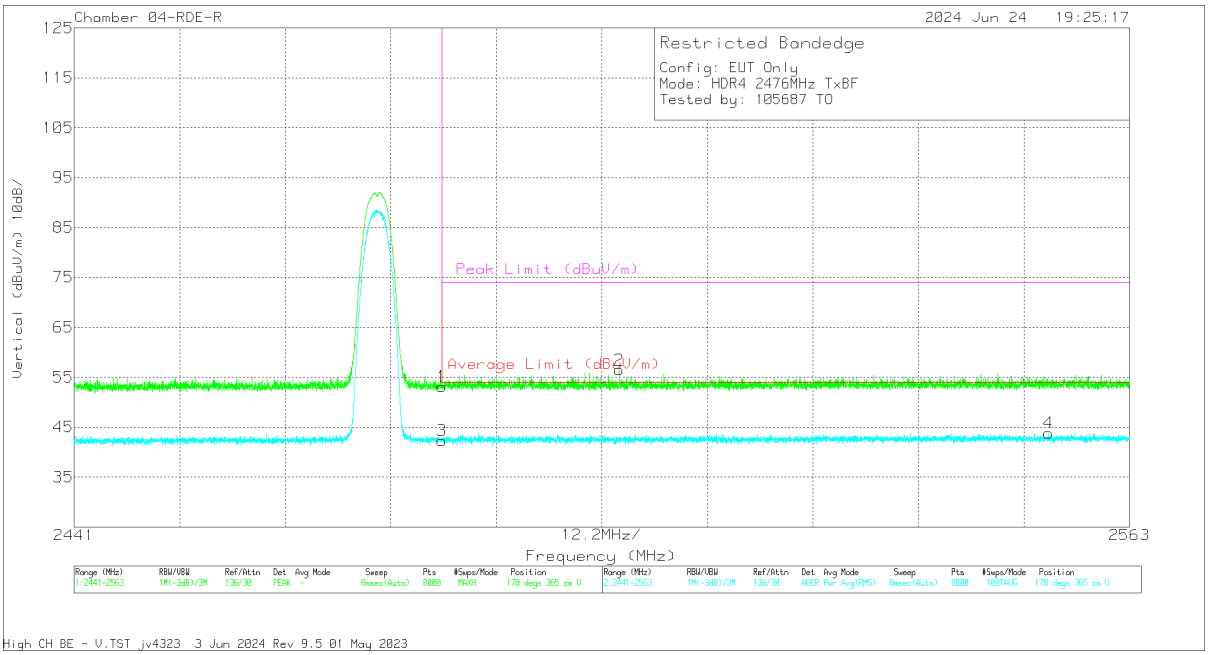


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.01	Pk	32.3	-40.12	53.19	-	-	74	-20.81	158	147	H
3	2483.5	50.97	RMS	32.3	-40.12	43.15	54	-10.85	-	-	158	147	H
4	2528.44	51.19	RMS	32.4	-39.86	43.73	54	-10.27	-	-	158	147	H
2	2542.624	63.68	Pk	32.4	-39.93	56.15	-	-	74	-17.85	158	147	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	60.95	Pk	32.3	-40.12	53.13	-	-	74	-20.87	178	365	V
3	2483.5	50.18	RMS	32.3	-40.12	42.36	54	-11.64	-	-	178	365	V
2	2504.006	64.22	Pk	32.3	-40.06	56.46	-	-	74	-17.54	178	365	V
4	2553.636	51.37	RMS	32.3	-39.84	43.83	54	-10.17	-	-	178	365	V

Pk - Peak detector
RMS - RMS detection

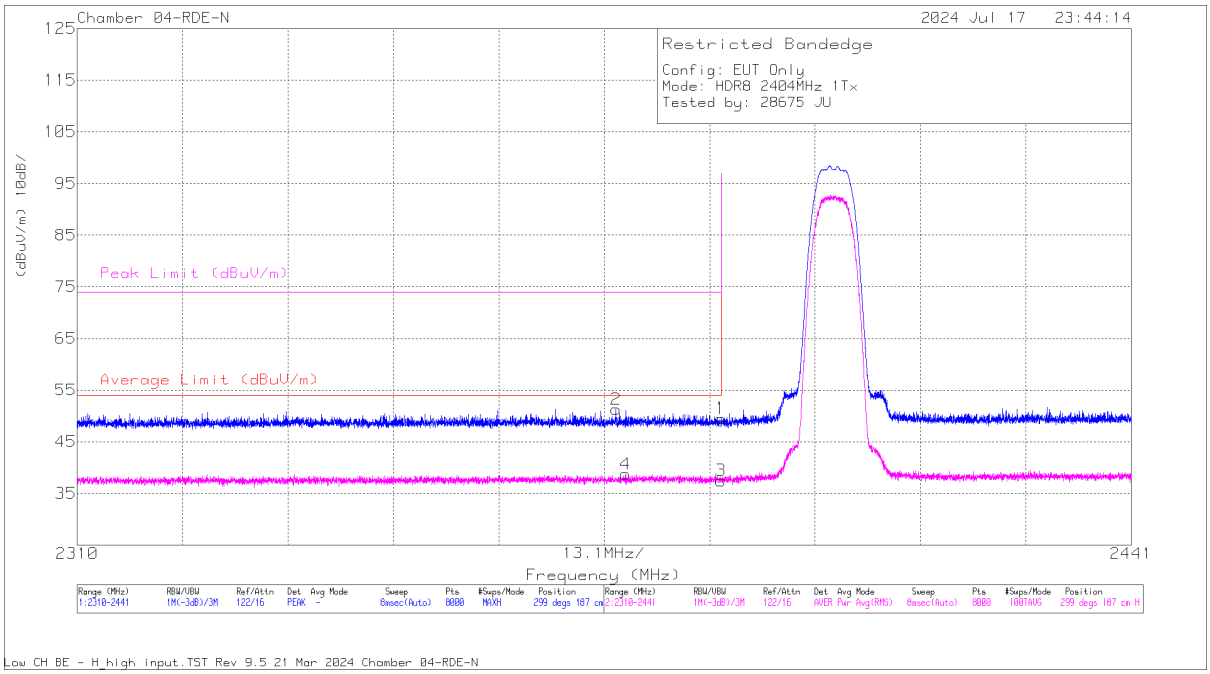
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.2.8. LOW POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

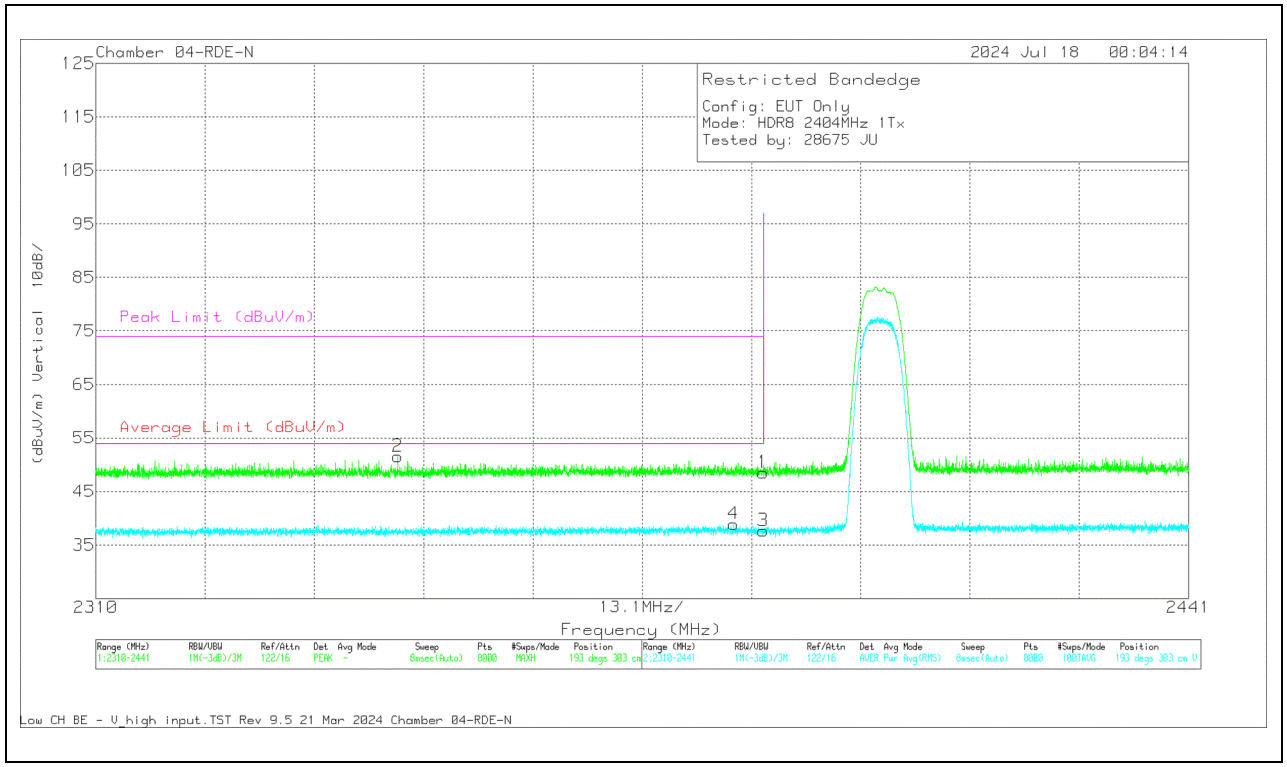


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2376.966	46.71	Pk	31.7	-27.14	51.27	-	-	74	-22.73	299	187	H
4	2378.145	34.16	RMS	31.7	-27.14	38.72	54	-15.28	-	-	299	187	H
1	2390	44.89	Pk	31.8	-27.17	49.52	-	-	74	-24.48	299	187	H
3	2390	32.86	RMS	31.8	-27.17	37.49	54	-16.51	-	-	299	187	H

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



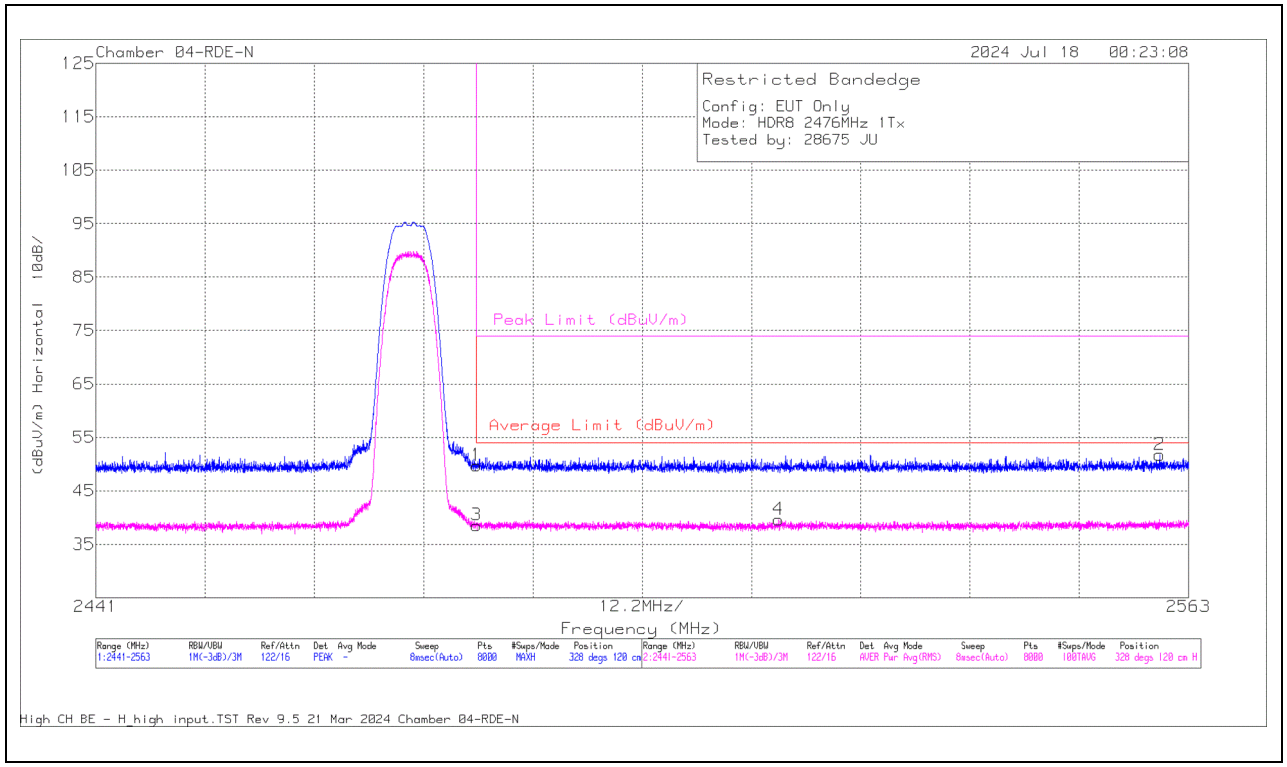
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2346.193	47.16	Pk	31.6	-27.2	51.56	-	-	74	-22.44	193	303	V
4	2386.448	34.24	RMS	31.8	-27.11	38.93	54	-15.07	-	-	193	303	V
1	2390	43.9	Pk	31.8	-27.17	48.53	-	-	74	-25.47	193	303	V
3	2390	33.04	RMS	31.8	-27.17	37.67	54	-16.33	-	-	193	303	V

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)

HORIZONTAL RESULT

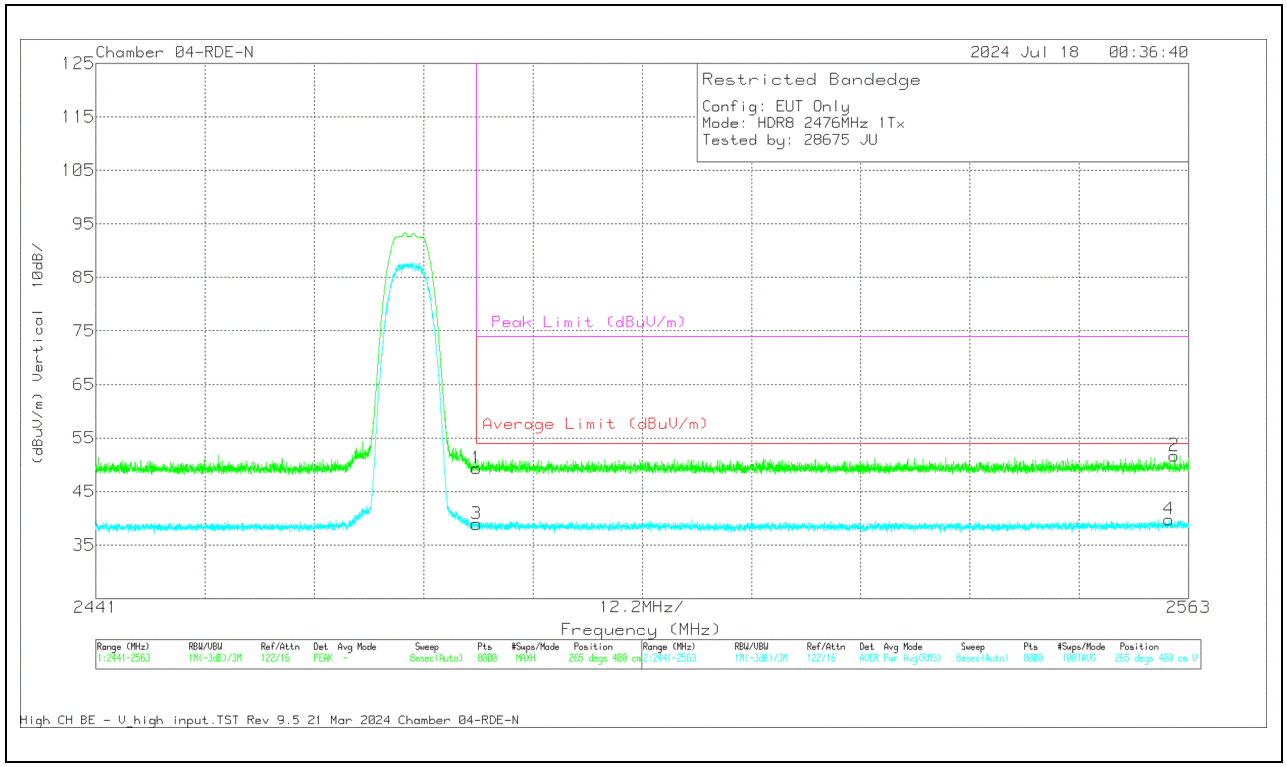


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	44.55	Pk	32.2	-27	49.75	-	-	74	-24.25	328	120	H
3	2483.5	33.37	RMS	32.2	-27	38.57	54	-15.43	-	-	328	120	H
4	2517.214	34.33	RMS	32.2	-26.89	39.64	54	-14.36	-	-	328	120	H
2	2559.767	46.34	Pk	32.2	-26.8	51.74	-	-	74	-22.26	328	120	H

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 (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB/m) 3m	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	44.12	Pk	32.2	-27	49.32	-	-	74	-24.68	265	400	V
3	2483.5	33.75	RMS	32.2	-27	38.95	54	-15.05	-	-	265	400	V
4	2560.82	34.35	RMS	32.2	-26.77	39.78	54	-14.22	-	-	265	400	V
2	2561.415	46.25	Pk	32.2	-26.75	51.7	-	-	74	-22.3	265	400	V

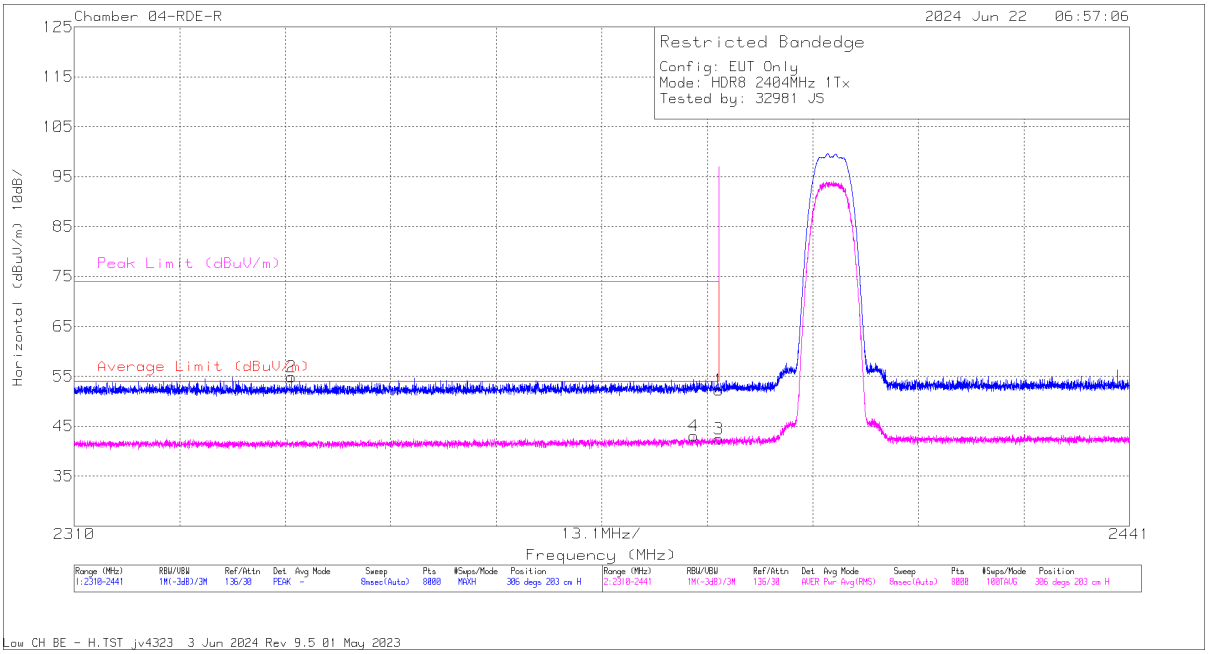
Pk - Peak detector
RMS - RMS detection

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)

HORIZONTAL RESULT

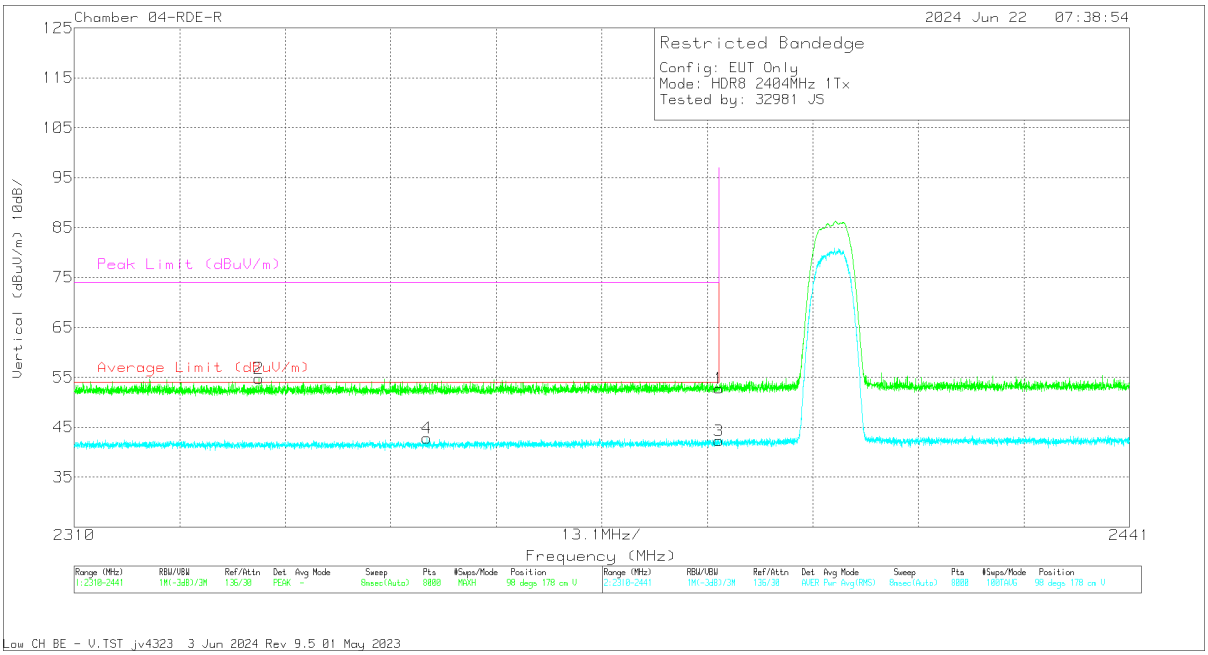


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2336.989	63.64	Pk	31.8	-40.56	54.88	-	-	74	-19.12	306	203	H
4	2386.923	51.45	RMS	32	-40.42	43.03	54	-10.97	-	-	306	203	H
1	2390	60.73	Pk	32	-40.44	52.29	-	-	74	-21.71	306	203	H
3	2390	50.88	RMS	32	-40.44	42.44	54	-11.56	-	-	306	203	H

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



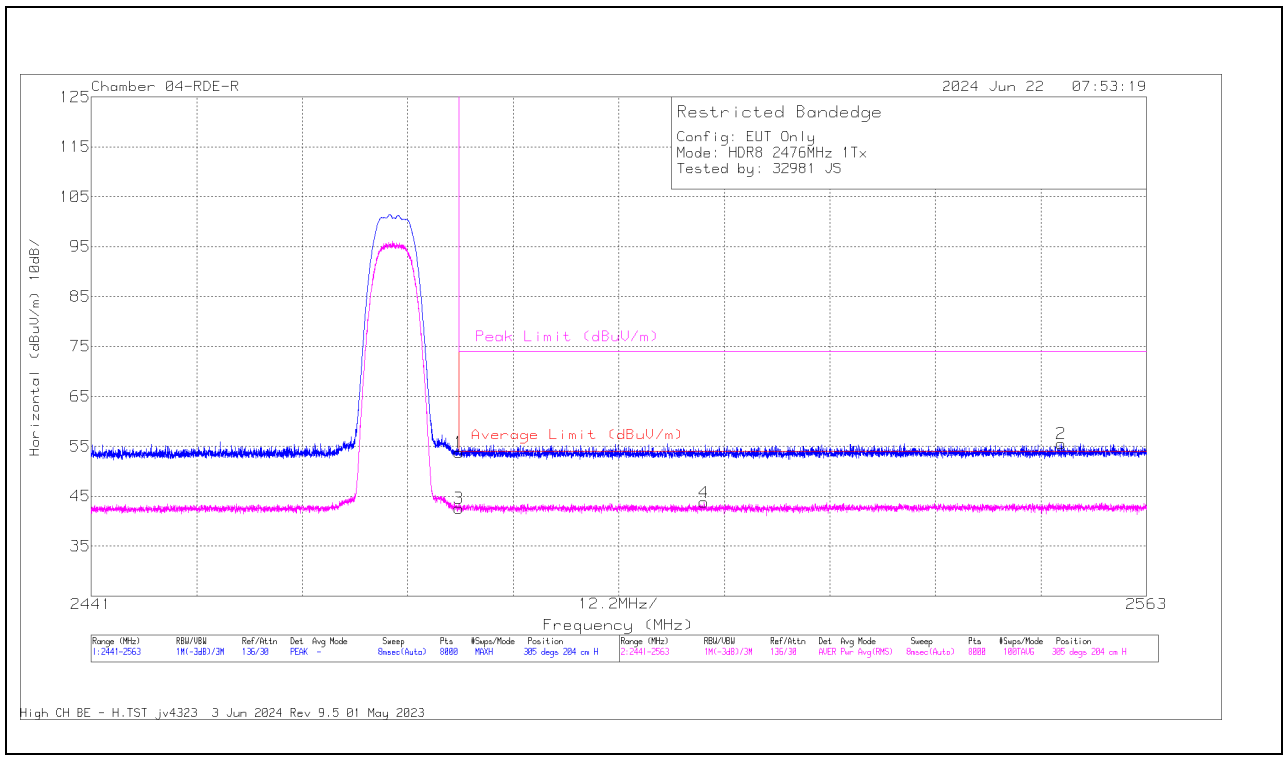
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2332.928	63.56	Pk	31.8	-40.56	54.8	-	-	74	-19.2	98	178	V
4	2353.776	51.57	RMS	31.8	-40.58	42.79	54	-11.21	-	-	98	178	V
1	2390	61.25	Pk	32	-40.44	52.81	-	-	74	-21.19	98	178	V
3	2390	50.71	RMS	32	-40.44	42.27	54	-11.73	-	-	98	178	V

Pk - Peak detector
RMS - RMS detectio

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)

HORIZONTAL RESULT

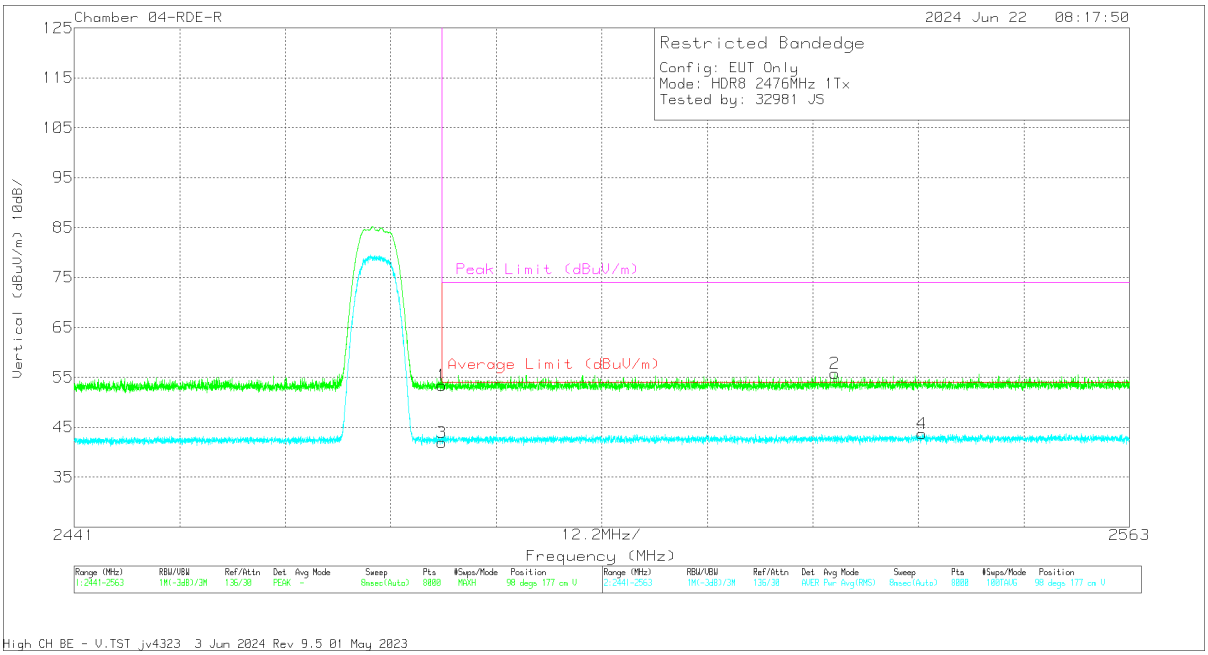


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.56	Pk	32.3	-40.12	53.74	-	-	74	-20.26	305	204	H
3	2483.5	50.43	RMS	32.3	-40.12	42.61	54	-11.39	-	-	305	204	H
4	2511.876	51.44	RMS	32.3	-39.97	43.77	54	-10.23	-	-	305	204	H
2	2553.133	62.95	Pk	32.4	-39.84	55.51	-	-	74	-18.49	305	204	H

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 (MHz)	Meter Reading (dBuV)	Det	41112 3m ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2483.5	61.2	Pk	32.3	-40.12	53.38	-	-	74	-20.62	98	177	V
3	2483.5	49.72	RMS	32.3	-40.12	41.9	54	-12.1	-	-	98	177	V
2	2528.928	63.25	Pk	32.4	-39.87	55.78	-	-	74	-18.22	98	177	V
4	2539.04	51.31	RMS	32.4	-39.95	43.76	54	-10.24	-	-	98	177	V

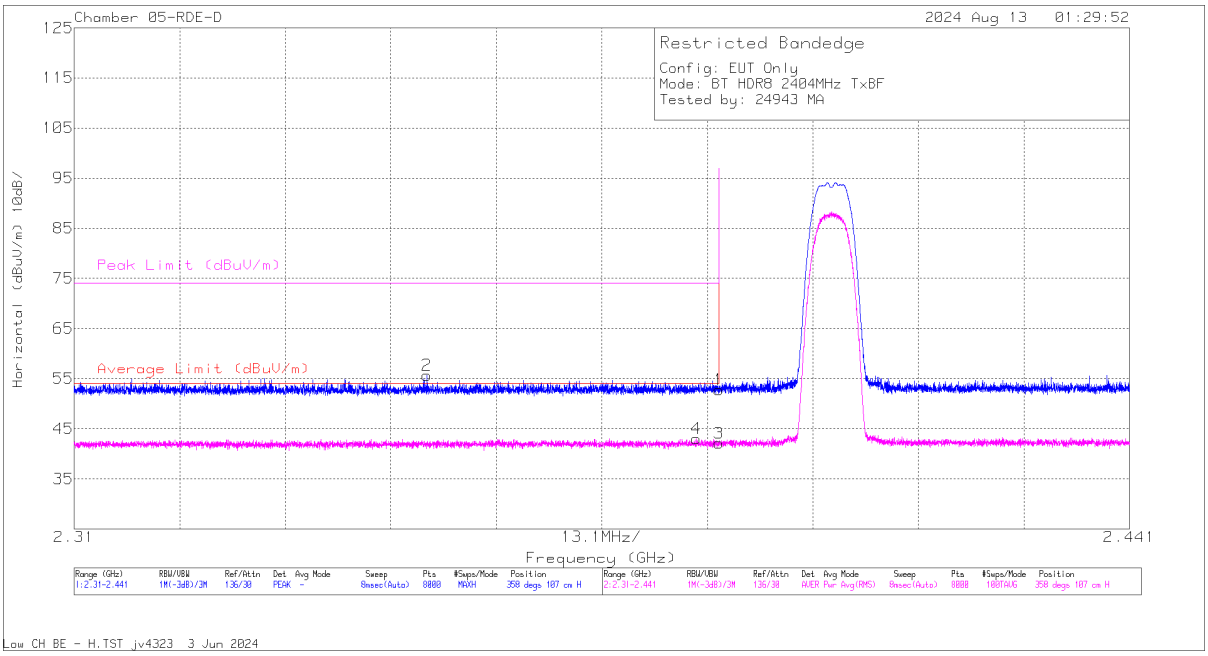
Pk - Peak detector
RMS - RMS detection

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.

10.2.9. LOW POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

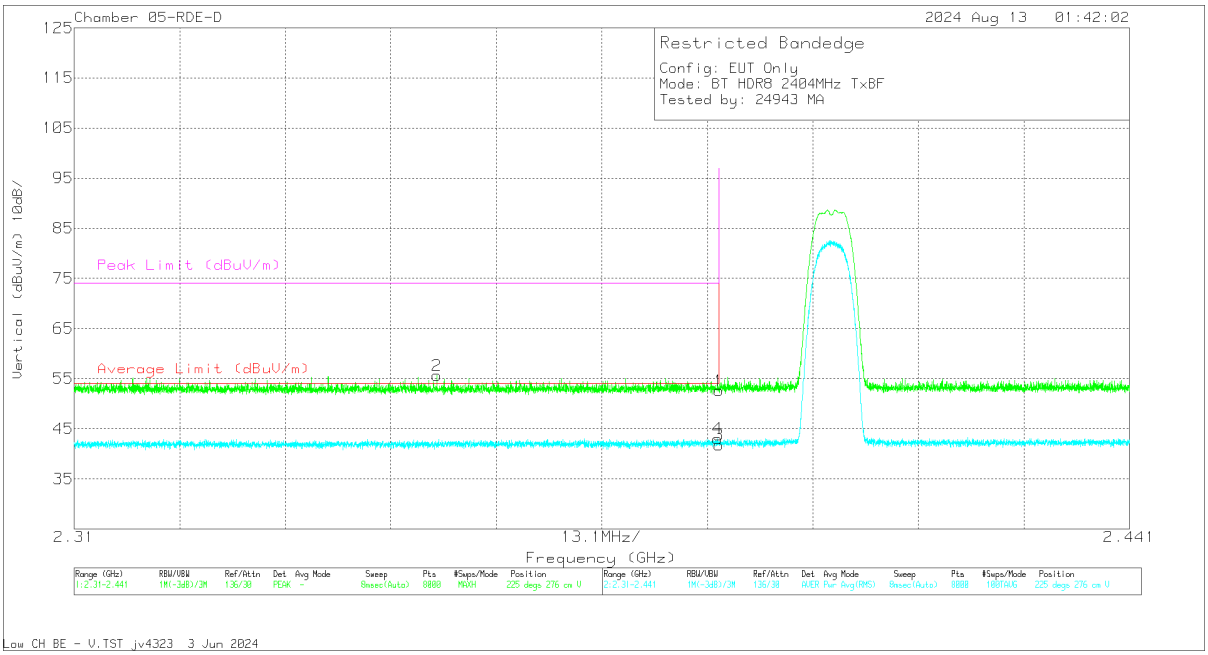


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.353776	64.66	Pk	32.1	0	-41.13	55.63	-	-	74	-18.37	358	107	H
4	2.38725	51.9	RMS	32.1	0	-41.02	42.98	54	-11.02	-	-	358	107	H
1	2.39	61.64	Pk	32.2	0	-41.02	52.82	-	-	74	-21.18	358	107	H
3	2.39	50.91	RMS	32.2	0	-41.02	42.09	54	-11.91	-	-	358	107	H

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



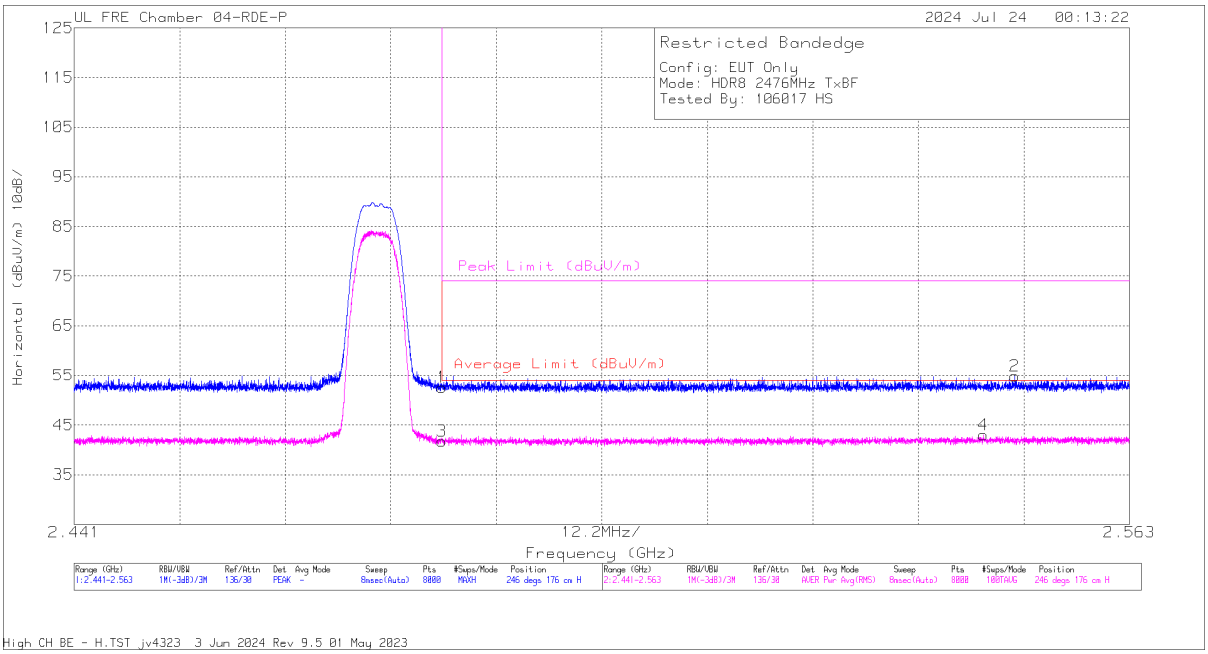
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	230299 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.35502	64.6	Pk	32.1	0	-41.1	55.6	-	-	74	-18.4	225	276	V
4	2.389854	51.84	RMS	32.2	0	-41.02	43.02	54	-10.98	-	-	225	276	V
1	2.39	61.42	Pk	32.2	0	-41.02	52.6	-	-	74	-21.4	225	276	V
3	2.39	50.58	RMS	32.2	0	-41.02	41.76	54	-12.24	-	-	225	276	V

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)

HORIZONTAL RESULT

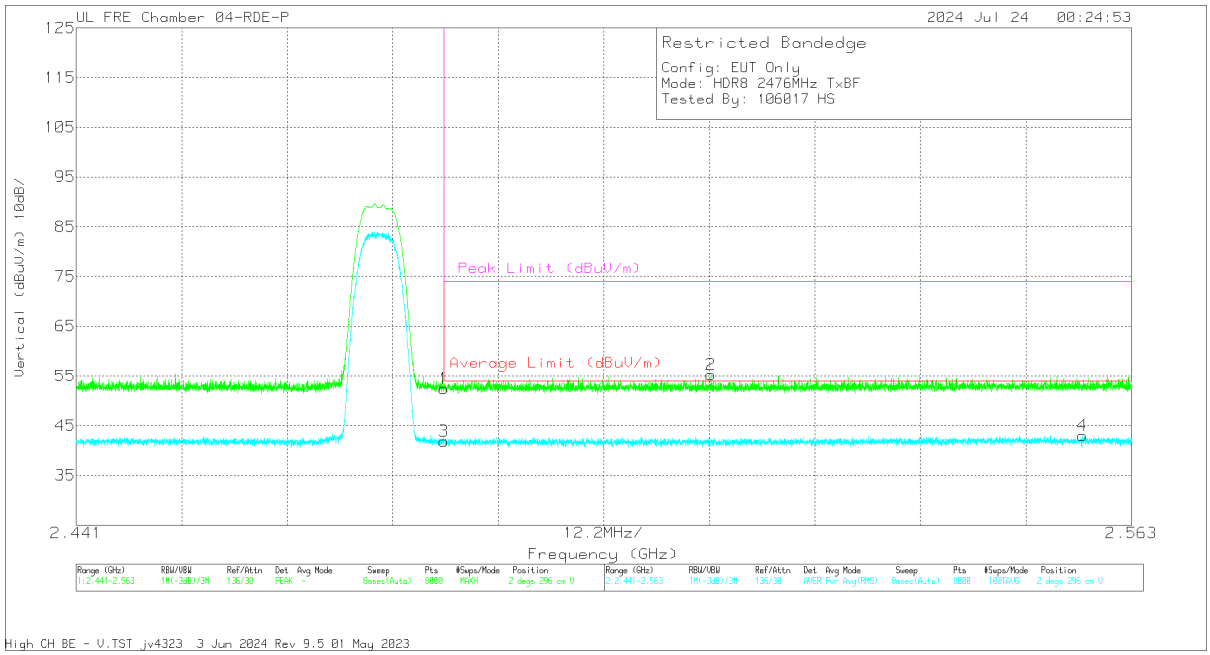


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	61.28	Pk	32.2	0	-40.83	52.65	-	-	74	-21.35	246	176	H
3	2.4835	50.38	RMS	32.2	0	-40.83	41.75	54	-12.25	-	-	246	176	H
4	2.546147	51.44	RMS	32.2	0	-40.66	42.98	54	-11.02	-	-	246	176	H
2	2.549762	63.32	Pk	32.2	0	-40.65	54.87	-	-	74	-19.13	246	176	H

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



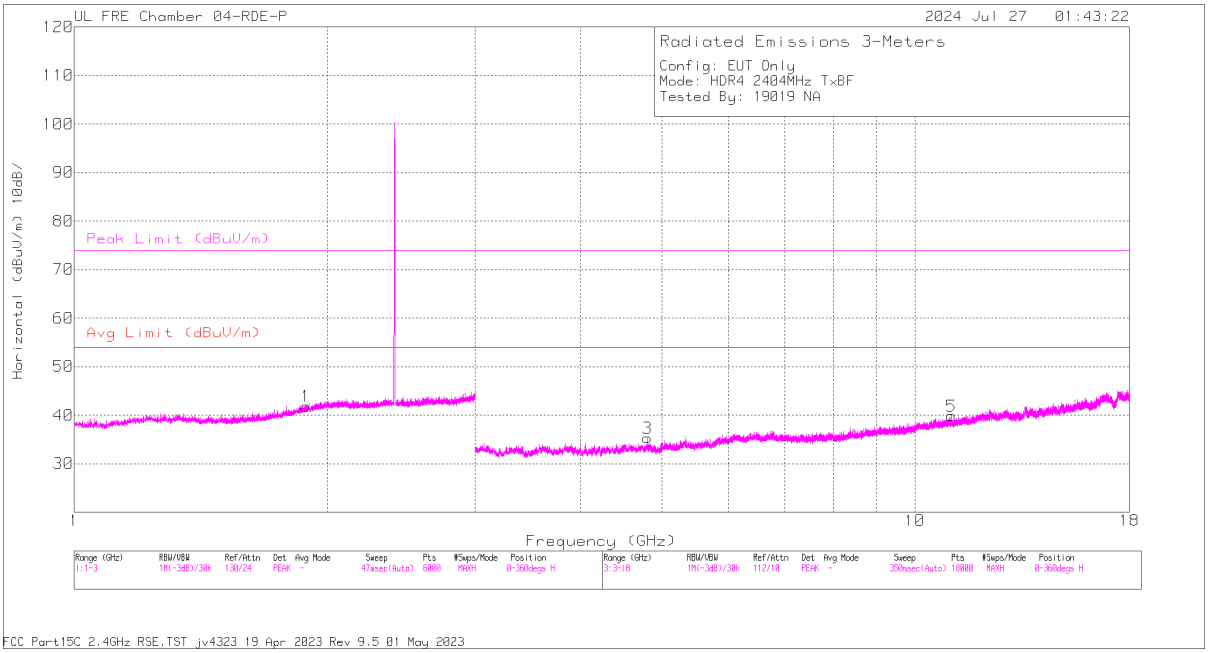
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.4835	61.13	Pk	32.2	0	-40.83	52.5	-	-	74	-21.5	2	296	V
3	2.4835	50.46	RMS	32.2	0	-40.83	41.83	54	-12.17	-	-	2	296	V
2	2.514408	63.87	Pk	32.2	0	-40.77	55.3	-	-	74	-18.7	2	296	V
4	2.557373	51.49	RMS	32.2	0	-40.64	43.05	54	-10.95	-	-	2	296	V

Pk - Peak detector
RMS - RMS detection

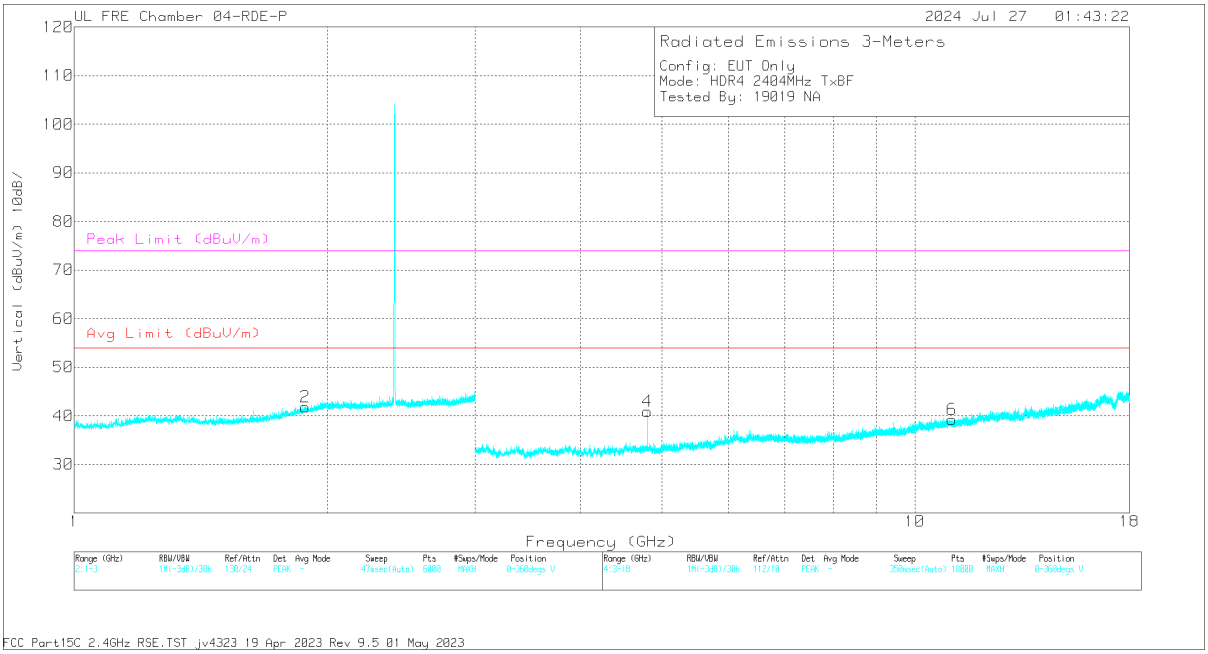
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.2.10. WORST CASE HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL 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.

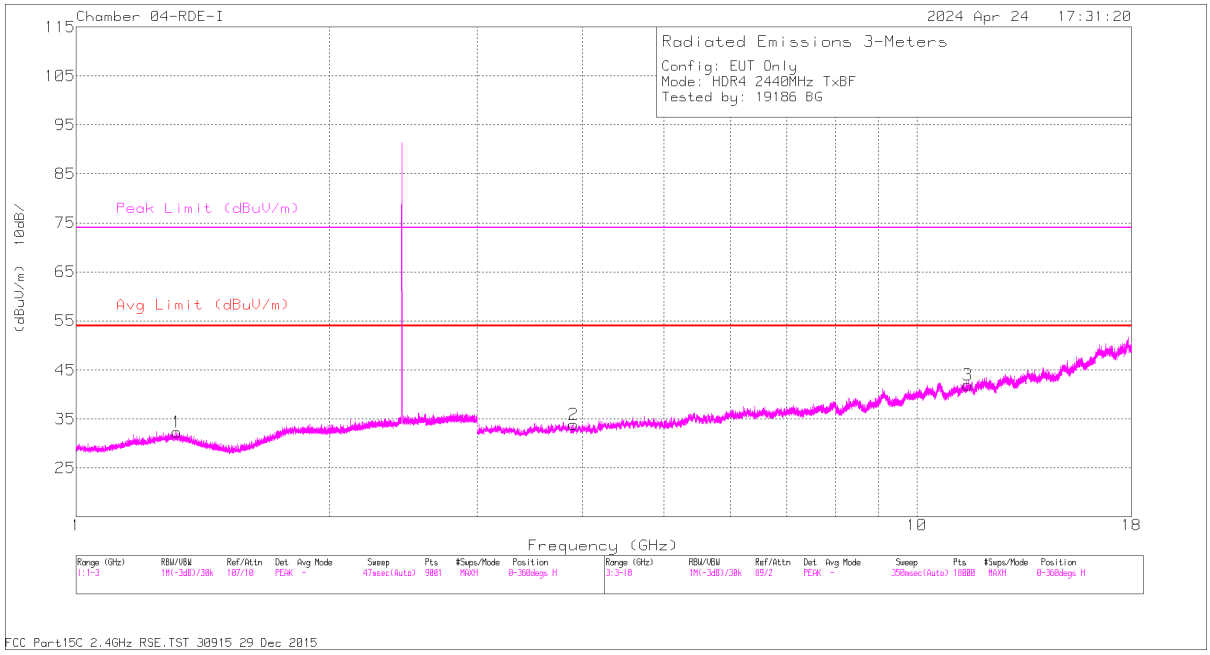
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200897 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 4.807735	59.66	PK2	33.8	-49.52	43.94	-	-	74	-30.06	144	129	H
	* 4.804965	48.03	MAv1	33.9	-49.5	32.43	54	-21.57	-	-	144	129	H
5	* 11.046528	56.51	PK2	37.8	-45.13	49.18	-	-	74	-24.82	240	212	H
	* 11.047742	44.7	MAv1	37.8	-45.12	37.38	54	-16.62	-	-	240	212	H
4	* 4.808531	66.39	PK2	33.8	-49.53	50.66	-	-	74	-23.34	244	191	V
	* 4.80792	58.97	MAv1	33.8	-49.52	43.25	54	-10.75	-	-	244	191	V
6	* 11.072506	56.63	PK2	37.8	-45.22	49.21	-	-	74	-24.79	95	175	V
	* 11.073248	45.09	MAv1	37.8	-45.22	37.67	54	-16.33	-	-	95	175	V
2	1.882717	61.33	PK2	30.7	-40.38	51.65	-	-	74	-22.35	108	254	V
	1.884648	49.73	MAv1	30.7	-40.37	40.06	-	-	-	-	108	254	V
1	1.886472	49.86	MAv1	30.7	-40.37	40.19	-	-	-	-	181	173	H
	1.886822	61.48	PK2	30.7	-40.36	51.82	-	-	74	-22.18	181	173	H

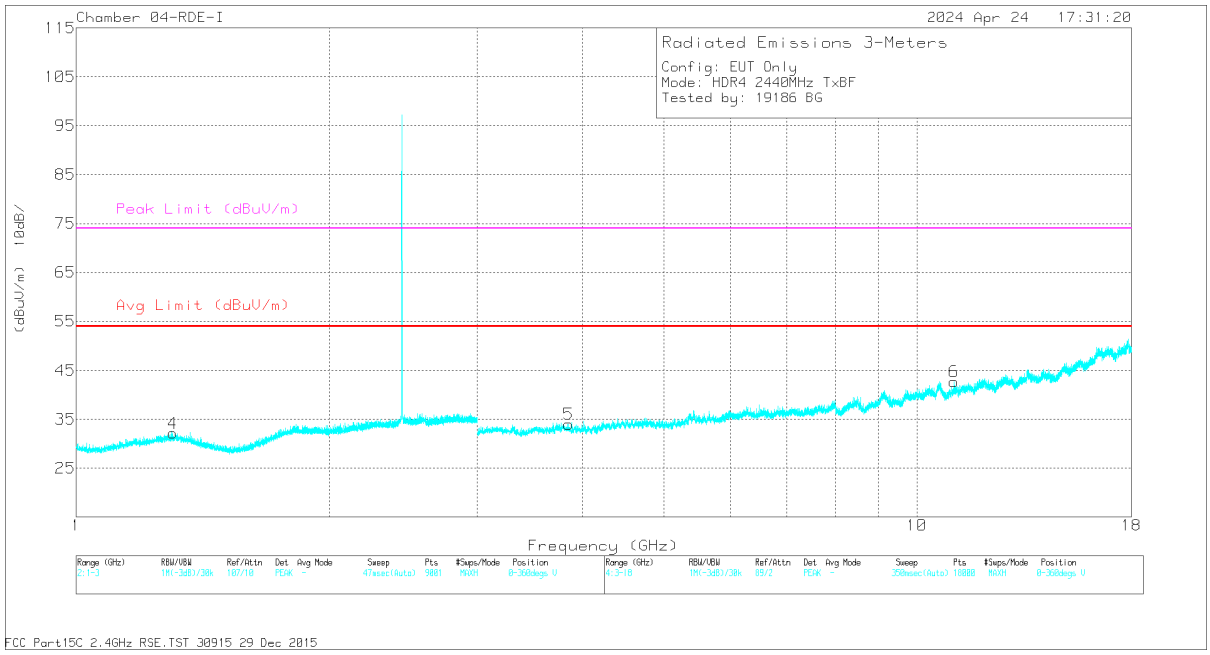
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

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 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.

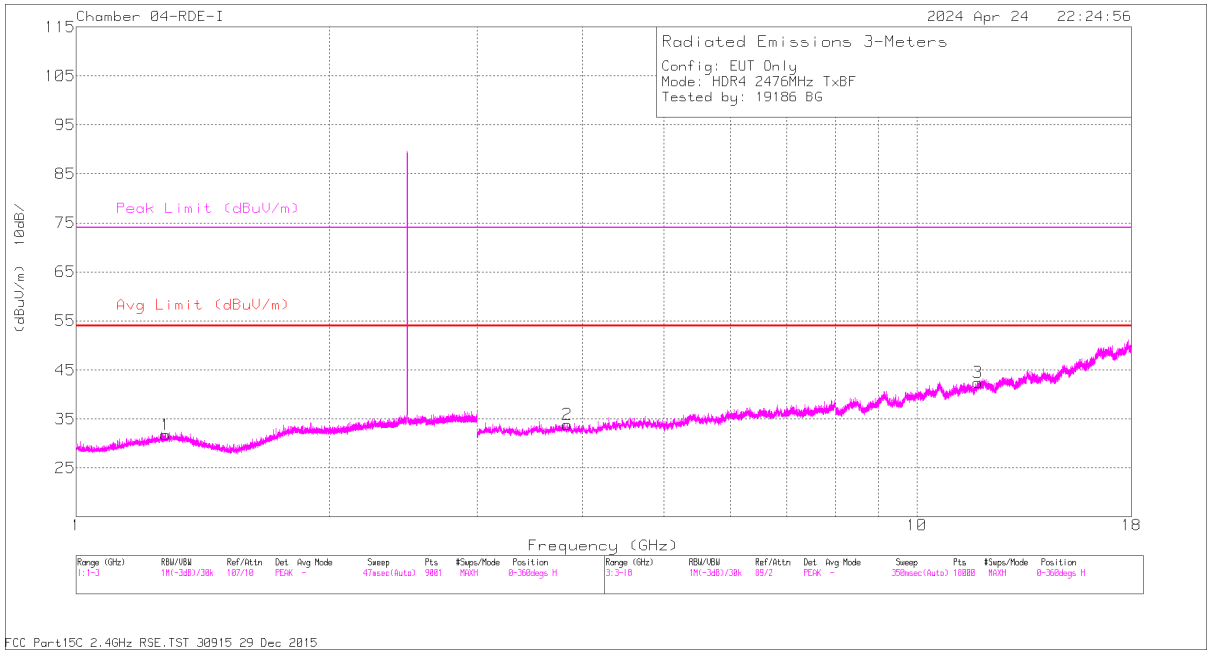
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m) - 3mH	Amp/Cbl/ 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	* 1.318153	42.48	PK2	28.6	-29.8	41.28	-	-	74	-32.72	117	236	H
	* 1.318333	30.78	MAv1	28.6	-29.8	29.58	54	-24.42	-	-	117	236	H
4	* 1.305004	42.19	PK2	28.6	-29.7	41.09	-	-	74	-32.91	195	186	V
	* 1.304295	30.89	MAv1	28.6	-29.7	29.79	54	-24.21	-	-	195	186	V
6	* 11.074034	22.36	MAv1	37.6	-20.5	39.46	54	-14.54	-	-	181	322	V
	* 11.074678	33.64	PK2	37.6	-20.5	50.74	-	-	74	-23.26	181	322	V
3	* 11.499259	22.31	MAv1	38	-20.2	40.11	54	-13.89	-	-	98	103	H
	* 11.500866	34	PK2	38	-20.1	51.9	-	-	74	-22.1	98	103	H
5	* 3.852359	26.48	MAv1	33.2	-27.9	31.78	54	-22.22	-	-	295	260	V
	* 3.854159	38.43	PK2	33.2	-27.8	43.83	-	-	74	-30.17	295	260	V
2	* 3.902593	26.95	MAv1	33.3	-28.4	31.85	54	-22.15	-	-	8	165	H
	* 3.903257	38.78	PK2	33.3	-28.4	43.68	-	-	74	-30.32	8	165	H

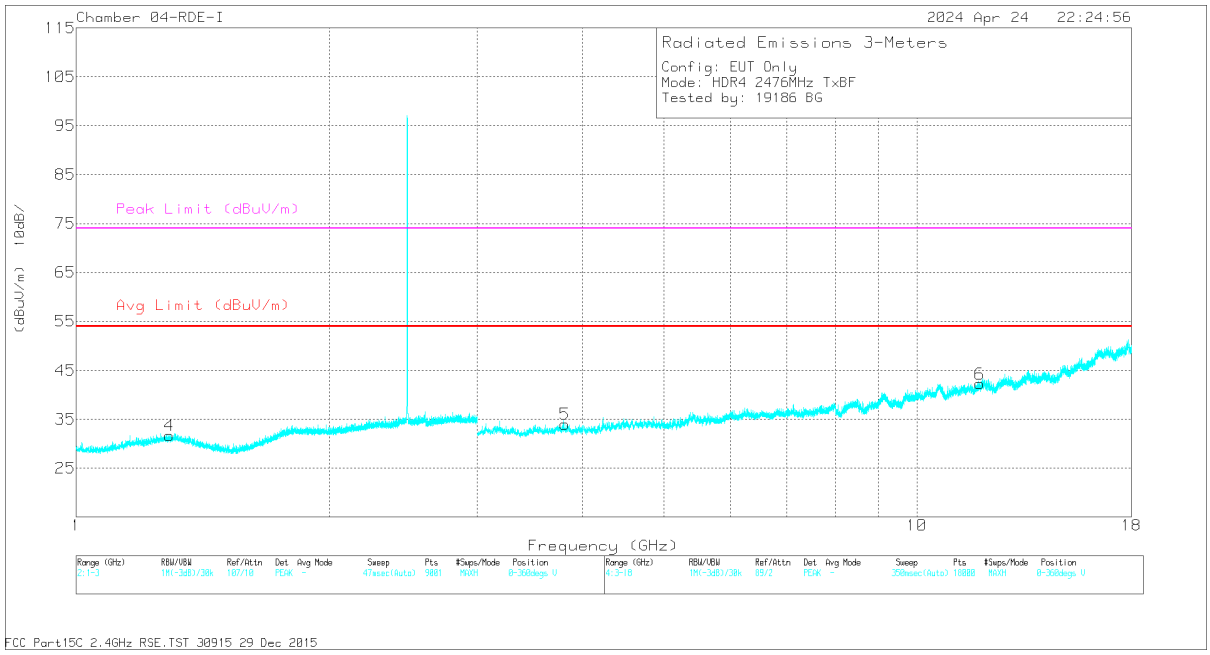
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

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 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.

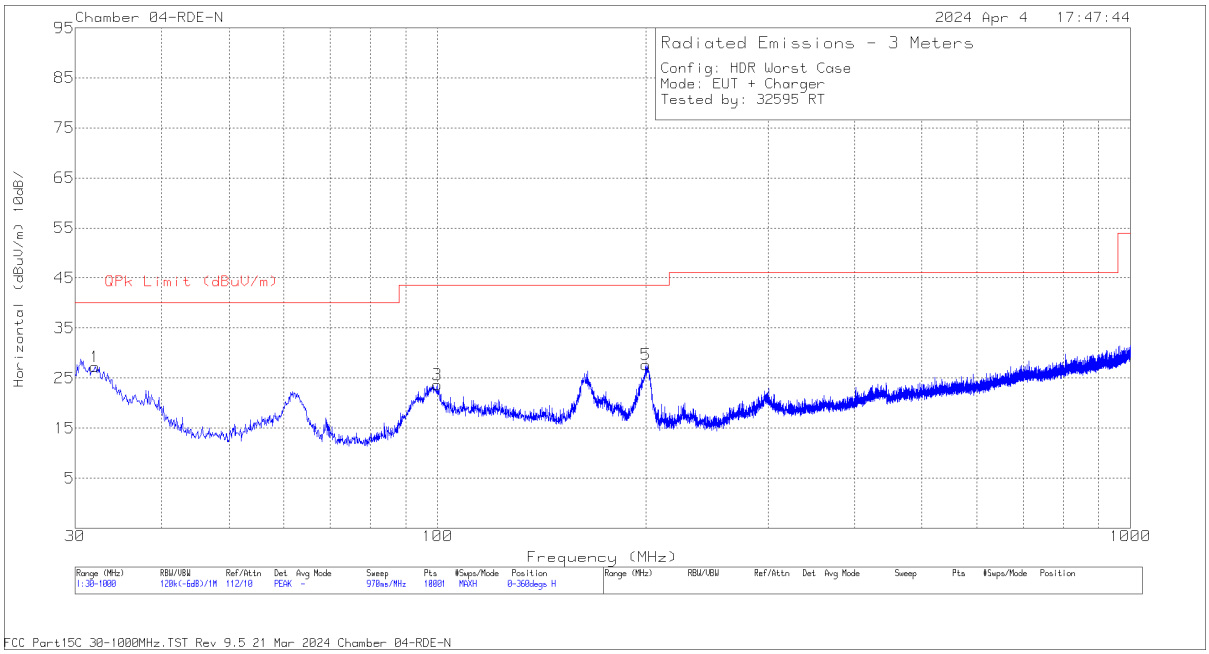
DATA:

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84797 ACF (dB/m) - 3mH	Amp/Cbl/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarit y
1	* 1.276563	42.45	PK2	28.6	-29.8	41.25	-	-	74	-32.75	22	120	H
	* 1.277668	31.06	MAv1	28.6	-29.7	29.96	54	-24.04	-	-	22	120	H
4	* 1.29062	42.79	PK2	28.6	-29.7	41.69	-	-	74	-32.31	206	189	V
	* 1.291693	31.1	MAv1	28.6	-29.7	30	54	-24	-	-	206	189	V
3	* 11.810805	21.88	MAv1	38.4	-20.2	40.08	54	-13.92	-	-	312	157	H
	* 11.81137	33.42	PK2	38.4	-20.2	51.62	-	-	74	-22.38	312	157	H
6	* 11.870161	34.2	PK2	38.5	-20	52.7	-	-	74	-21.3	109	331	V
	* 11.870313	22.31	MAv1	38.5	-20	40.81	54	-13.19	-	-	109	331	V
4	* 3.811852	37.71	PK2	33.2	-27.7	43.21	-	-	74	-30.79	97	168	V
	* 3.81202	26.22	MAv1	33.2	-27.7	31.72	54	-22.28	-	-	97	168	V
2	* 3.840235	38.38	PK2	33.2	-28	43.58	-	-	74	-30.42	162	284	H
	* 3.84201	26.37	MAv1	33.2	-28	31.57	54	-22.43	-	-	162	284	H

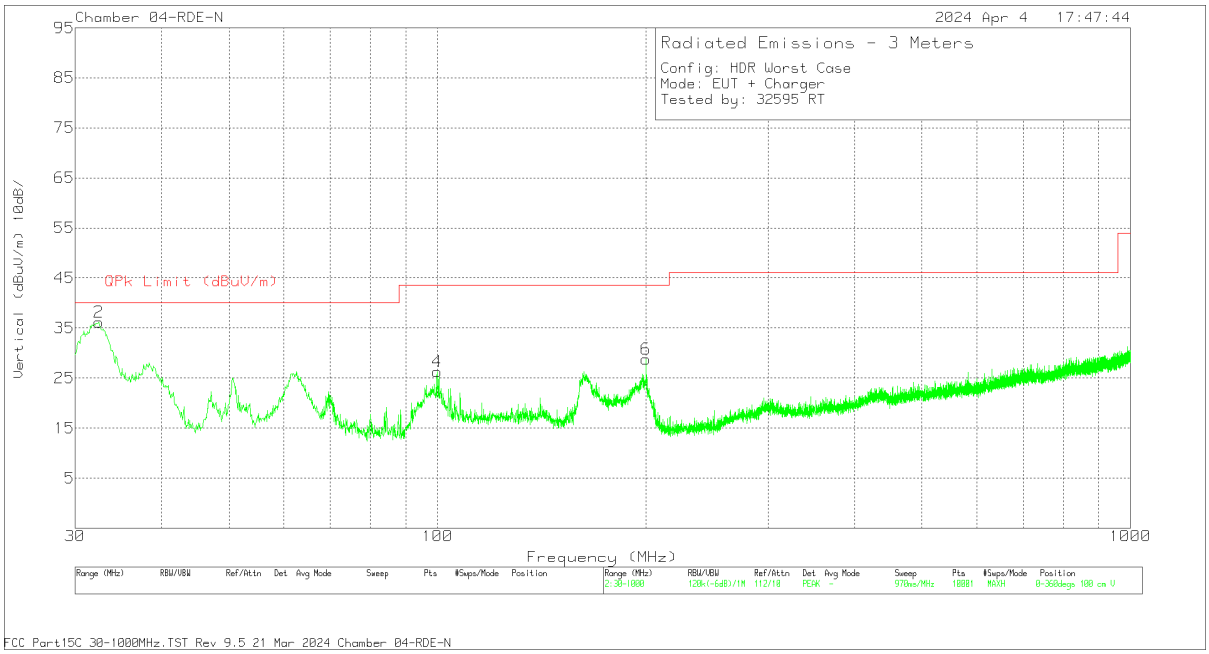
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

10.3. WORST CASE BELOW 1 GHz

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



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.

DATA:

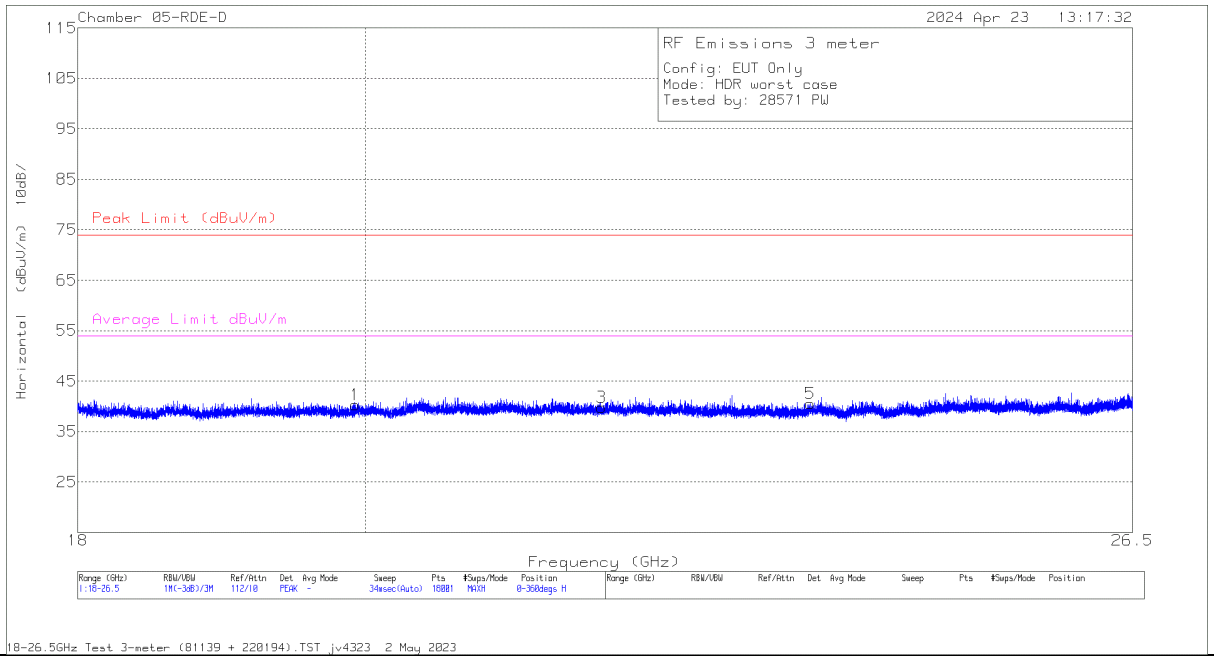
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	222008_ANSI 10m Horizontal (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	32.037	33.93	Pk	25.7	-32.4	27.23	40	-12.77	0-360	100	H
2	32.425	43.2	Pk	25.4	-32.4	36.2	40	-3.8	0-360	100	V
	32.425	39.91	Qp	25.4	-32.4	32.91	40	-7.09	17	114	V
3	99.84	39.18	Pk	16.4	-31.9	23.68	43.52	-19.84	0-360	200	H
4	99.84	41.79	Pk	16.4	-31.9	26.29	43.52	-17.23	0-360	100	V
5	199.944	40.57	Pk	18.4	-31.3	27.67	43.52	-15.85	0-360	100	H
6	199.944	41.74	Pk	18.4	-31.3	28.84	43.52	-14.68	0-360	100	V

Pk - Peak detector
Qp - Quasi-Peak detector

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.

10.4. WORST CASE 18-26 GHz

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.

18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	Amp/Cbl (dB)	Cables (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	19.929971	54.9	Pk	33.1	-61	13.3	40.3	74	-33.7	54	-13.7	0-360	200	H
2	19.956888	54.68	Pk	33.1	-60.9	13.3	40.18	74	-33.82	54	-13.82	0-360	199	V
3	21.810359	53.74	Pk	33.4	-61.1	13.8	39.84	74	-34.16	54	-14.16	0-360	101	H
4	21.839165	55.19	Pk	33.4	-61.1	13.9	41.39	74	-32.61	54	-12.61	0-360	199	V
6	23.535859	55.01	Pk	34	-63	14.4	40.41	74	-33.59	54	-13.59	0-360	101	V
5	23.548136	55.12	Pk	34	-63	14.4	40.52	74	-33.48	54	-13.48	0-360	101	H

Pk - Peak detector

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.

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

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

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

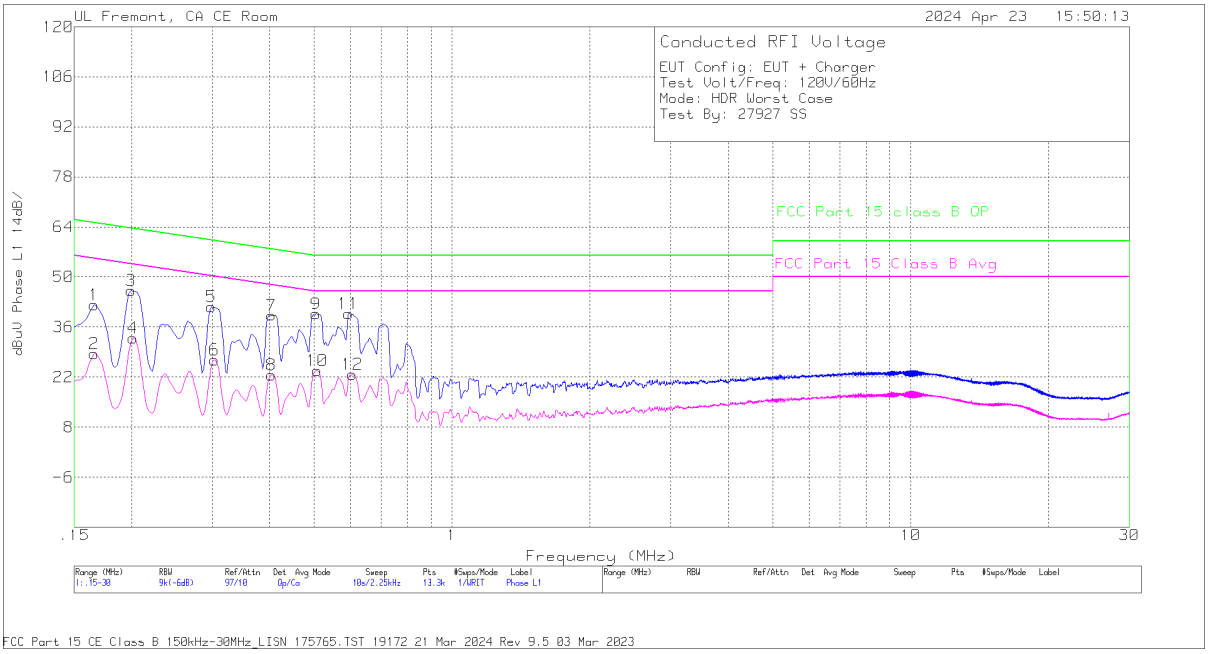
RESULTS

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.

11.1. AC Power Line With AC/DC Adapter

LINE 1 RESULTS

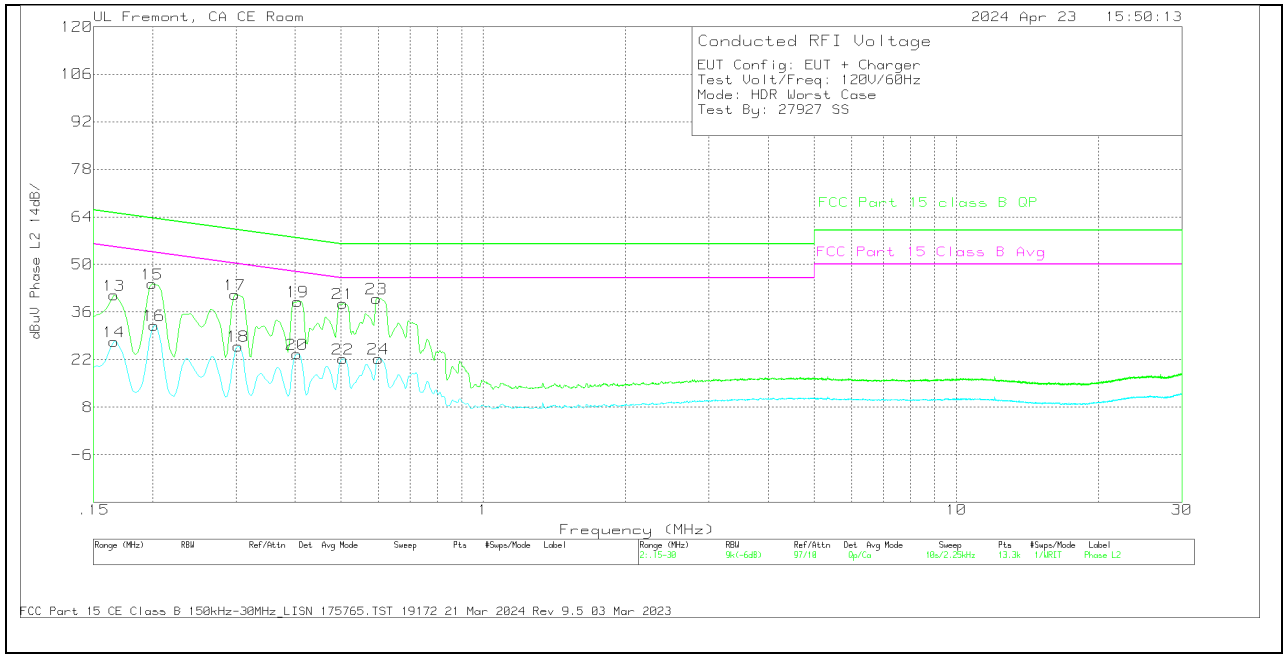


Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Trns Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
2	.1658	8.88	Ca	0	.1	9.5	10	28.48	55.17	-26.69	-	-
4	.2018	13.48	Ca	.1	0	9.4	10	32.98	53.54	-20.56	-	-
6	.303	7.3	Ca	.1	0	9.4	10	26.8	50.16	-23.36	-	-
8	.4043	3.21	Ca	0	0	9.4	10	22.61	47.77	-25.16	-	-
10	.5078	4.45	Ca	0	0	9.3	10	23.75	46	-22.25	-	-
12	.6068	3.3	Ca	0	0	9.4	10	22.7	46	-23.3	-	-
1	.1658	22.67	Qp	0	.1	9.5	10	42.27	-	-	65.17	-22.9
3	.1995	26.57	Qp	.1	.1	9.4	10	46.17	-	-	63.63	-17.46
5	.2985	22.18	Qp	.1	0	9.4	10	41.68	-	-	60.28	-18.6
7	.4043	19.9	Qp	0	0	9.4	10	39.3	-	-	57.77	-18.47
9	.5055	20.37	Qp	0	0	9.3	10	39.67	-	-	56	-16.33
11	.5955	20.34	Qp	0	0	9.4	10	39.74	-	-	56	-16.26

Qp - Quasi-Peak detector
Ca - CISPR average 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.

LINE 2 RESULTS



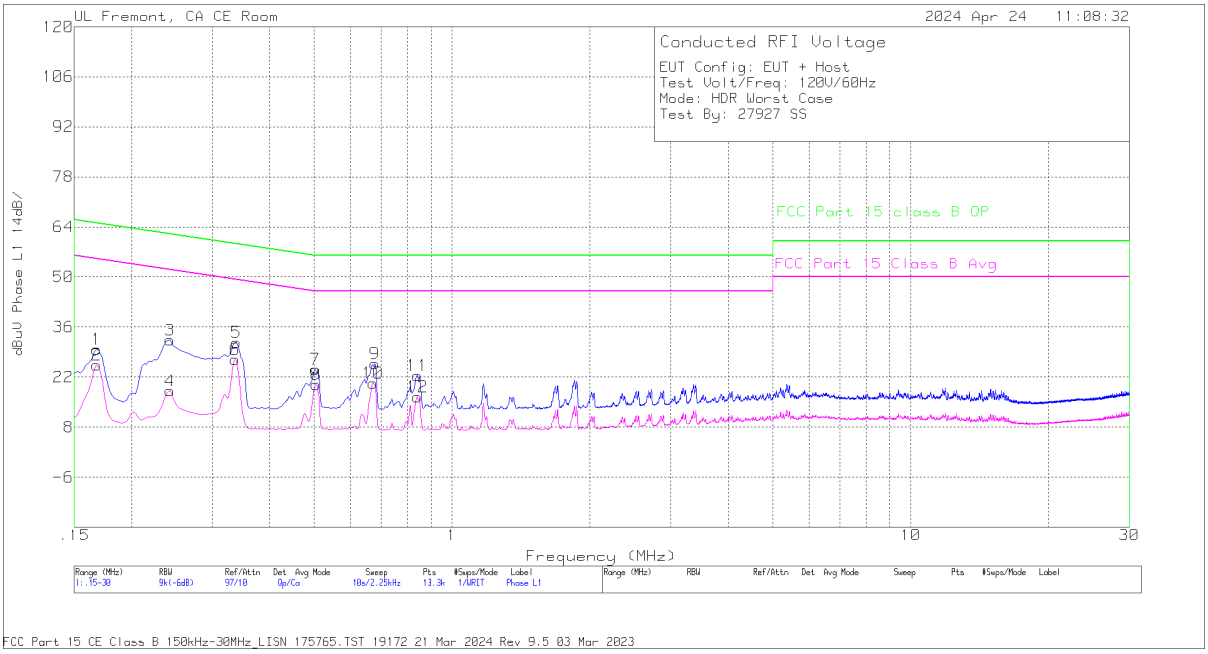
Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Trns Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
14	.1658	7.63	Ca	0	.1	9.5	10	27.23	55.17	-27.94	-	-
16	.2018	12.53	Ca	.1	0	9.4	10	32.03	53.54	-21.51	-	-
18	.303	6.4	Ca	.1	0	9.4	10	25.9	50.16	-24.26	-	-
20	.4043	4.05	Ca	.1	0	9.4	10	23.55	47.77	-24.22	-	-
22	.5055	2.84	Ca	0	0	9.3	10	22.14	46	-23.86	-	-
24	.6	2.71	Ca	.1	0	9.4	10	22.21	46	-23.79	-	-
13	.1658	21.3	Qp	0	.1	9.5	10	40.9	-	-	65.17	-24.27
15	.1995	24.72	Qp	.1	0	9.4	10	44.22	-	-	63.63	-19.41
17	.2985	21.57	Qp	.1	0	9.4	10	41.07	-	-	60.28	-19.21
19	.4054	19.55	Qp	.1	0	9.4	10	39.05	-	-	57.74	-18.69
21	.5055	19.15	Qp	0	0	9.3	10	38.45	-	-	56	-17.55
23	.5955	20.42	Qp	.1	0	9.4	10	39.92	-	-	56	-16.08

Qp - Quasi-Peak detector
Ca - CISPR average 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.

11.2. AC Power Line with Laptop

LINE 1 RESULTS

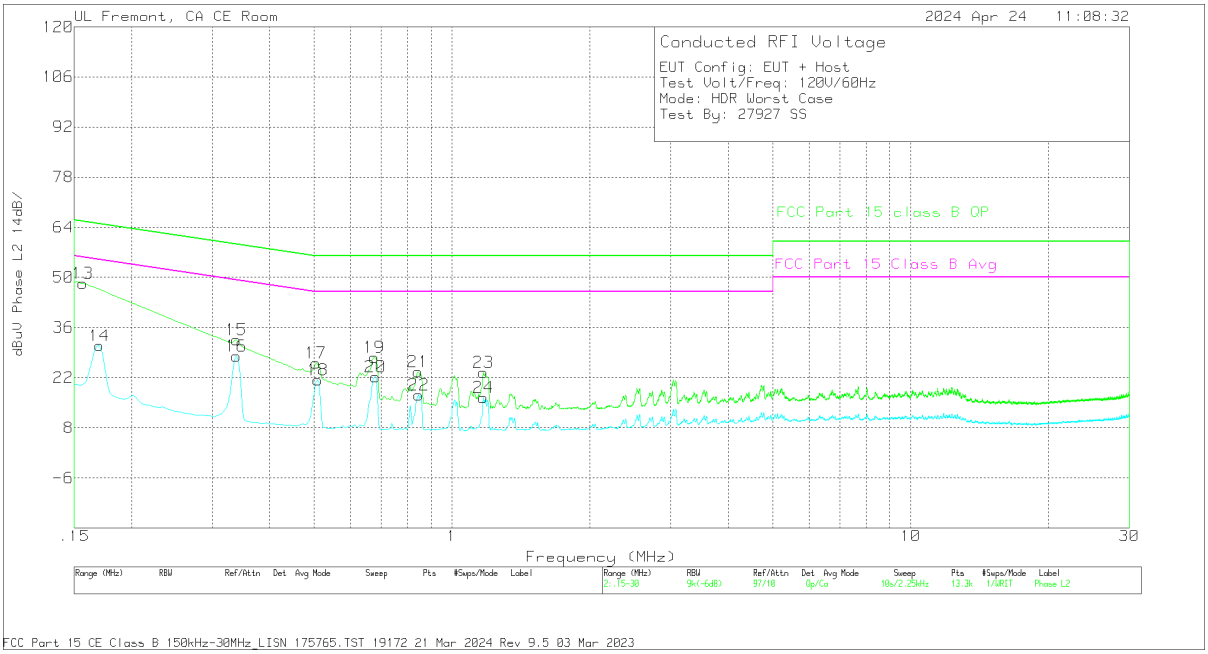


Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Trns Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
2	.168	5.75	Ca	0	.1	9.5	10	25.35	55.06	-29.71	-	-
4	.2423	-1.29	Ca	0	0	9.4	10	18.11	52.02	-33.91	-	-
6	.3368	7.52	Ca	0	0	9.4	10	26.92	49.28	-22.36	-	-
8	.5055	.71	Ca	0	0	9.3	10	20.01	46	-25.99	-	-
10	.672	.78	Ca	.1	0	9.4	10	20.28	46	-25.72	-	-
12	.8408	-3	Ca	.1	0	9.3	10	16.4	46	-29.6	-	-
1	.168	10.09	Qp	0	.1	9.5	10	29.69	-	-	65.06	-35.37
3	.2423	12.91	Qp	0	0	9.4	10	32.31	-	-	62.02	-29.71
5	.339	12.3	Qp	0	0	9.4	10	31.7	-	-	59.23	-27.53
7	.5033	4.92	Qp	0	0	9.3	10	24.22	-	-	56	-31.78
9	.6788	6.29	Qp	.1	0	9.3	10	25.69	-	-	56	-30.31
11	.8408	3.05	Qp	.1	0	9.3	10	22.45	-	-	56	-33.55

Qp - Quasi-Peak detector
Ca - CISPR average 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.

LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	Trns Limiter (dB)	10 dB Pad	Corrected Reading dBuV	FCC Part 15 Class B Avg dBuV	Margin (dB)	FCC Part 15 class B QP dBuV	Margin (dB)
14	.1703	11.41	Ca	0	0	9.5	10	30.91	54.95	-24.04	-	-
16	.339	8.56	Ca	.1	0	9.4	10	28.06	49.23	-21.17	-	-
18	.51	1.99	Ca	0	0	9.3	10	21.29	46	-24.71	-	-
20	.681	2.9	Ca	0	0	9.3	10	22.2	46	-23.8	-	-
22	.8453	-2.21	Ca	0	0	9.3	10	17.09	46	-28.91	-	-
24	1.1715	-3.13	Ca	.2	0	9.4	10	16.47	46	-29.53	-	-
13	.1568	28.69	Qp	0	.1	9.5	10	48.29	-	-	65.63	-17.34
15	.339	13.08	Qp	.1	0	9.4	10	32.58	-	-	59.23	-26.65
17	.5055	6.8	Qp	0	0	9.3	10	26.1	-	-	56	-29.9
19	.6765	8.41	Qp	0	0	9.3	10	27.71	-	-	56	-28.29
21	.843	4.26	Qp	0	0	9.3	10	23.56	-	-	56	-32.44
23	1.1715	3.92	Qp	.2	0	9.4	10	23.52	-	-	56	-32.48

Qp - Quasi-Peak detector
Ca - CISPR average 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.

12. SETUP PHOTOS

Please refer to setup photos 14982489-EP1V1

END OF TEST REPORT

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.