

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.

RESULTS:

High Power Beamforming HDR 4Mbps mode is 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.

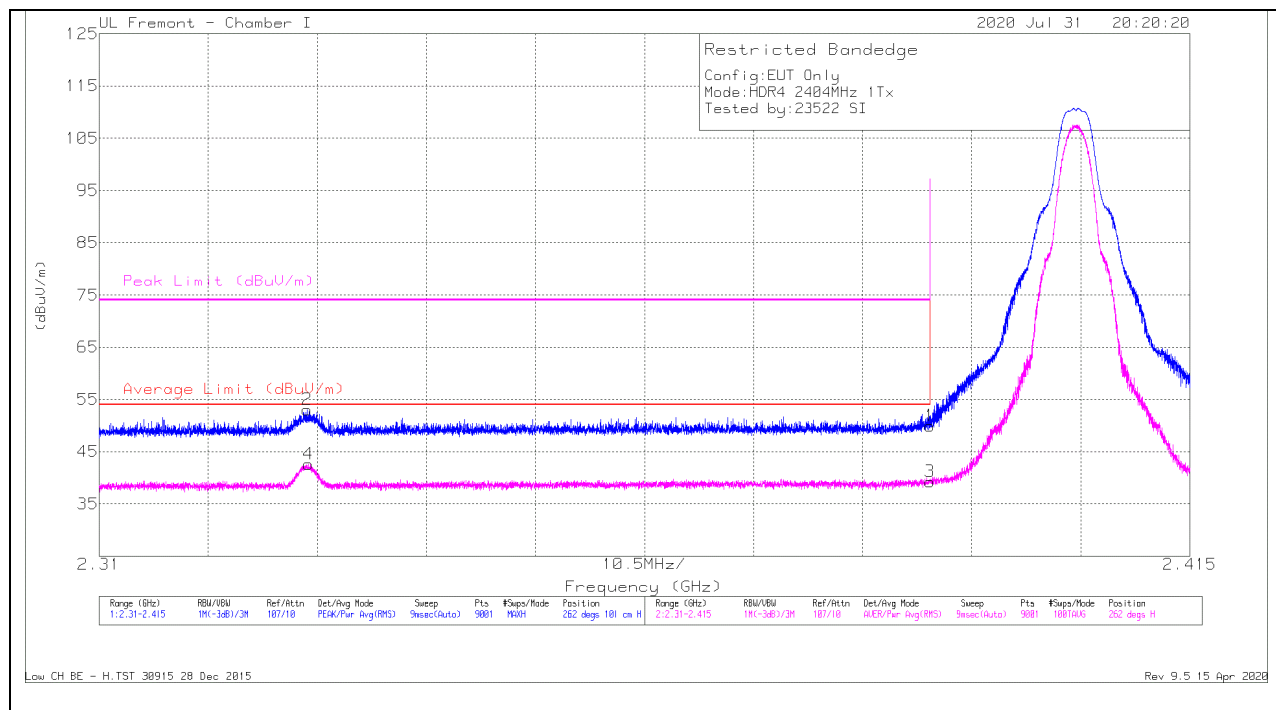
10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. HIGH POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	35.31	Pk	31.9	-17.3	49.91	-	-	74	-24.09	262	101	H
2	* 2.33004	38.74	Pk	31.5	-17.2	53.04	-	-	74	-20.96	262	101	H
3	* 2.38999	24.61	RMS	31.9	-17.3	39.21	54	-14.79	-	-	262	101	H
4	* 2.33013	28.28	RMS	31.5	-17.2	42.58	54	-11.42	-	-	262	101	H

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

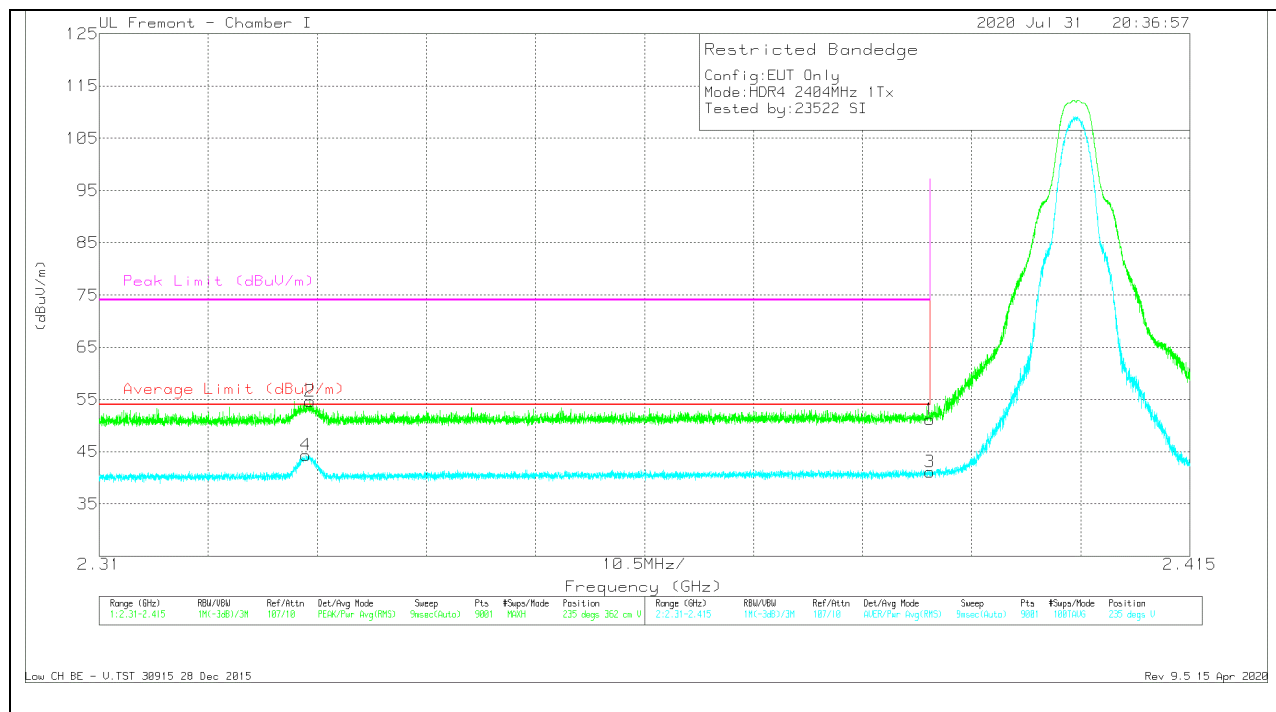
PK - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	36.52	Pk	31.9	-17.3	51.12	-	-	74	-22.88	235	362	V
2	* 2.3303	40.39	Pk	31.5	-17.2	54.69	-	-	74	-19.31	235	362	V
3	* 2.38999	26.51	RMS	31.9	-17.3	41.11	54	-12.89	-	-	235	362	V
4	* 2.32989	29.99	RMS	31.5	-17.2	44.29	54	-9.71	-	-	235	362	V

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

Pk - Peak detector

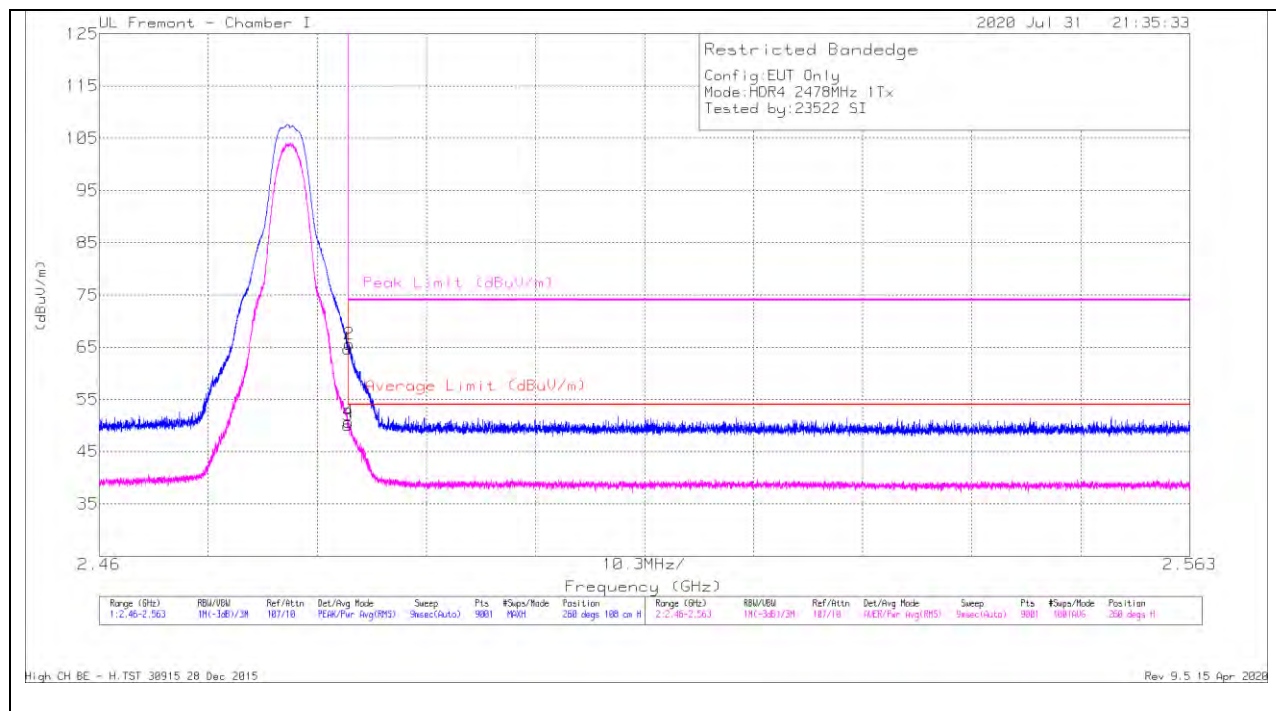
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

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BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	49.95	Pk	32.4	-17.7	64.65	-	-	74	-9.35	260	108	H
2	* 2.48363	50.89	Pk	32.4	-17.7	65.59	-	-	74	-8.41	260	108	H
3	* 2.48351	35.36	RMS	32.4	-17.7	50.06	54	-3.94	-	-	260	108	H
4	* 2.48354	35.98	RMS	32.4	-17.7	50.68	54	-3.32	-	-	260	108	H

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

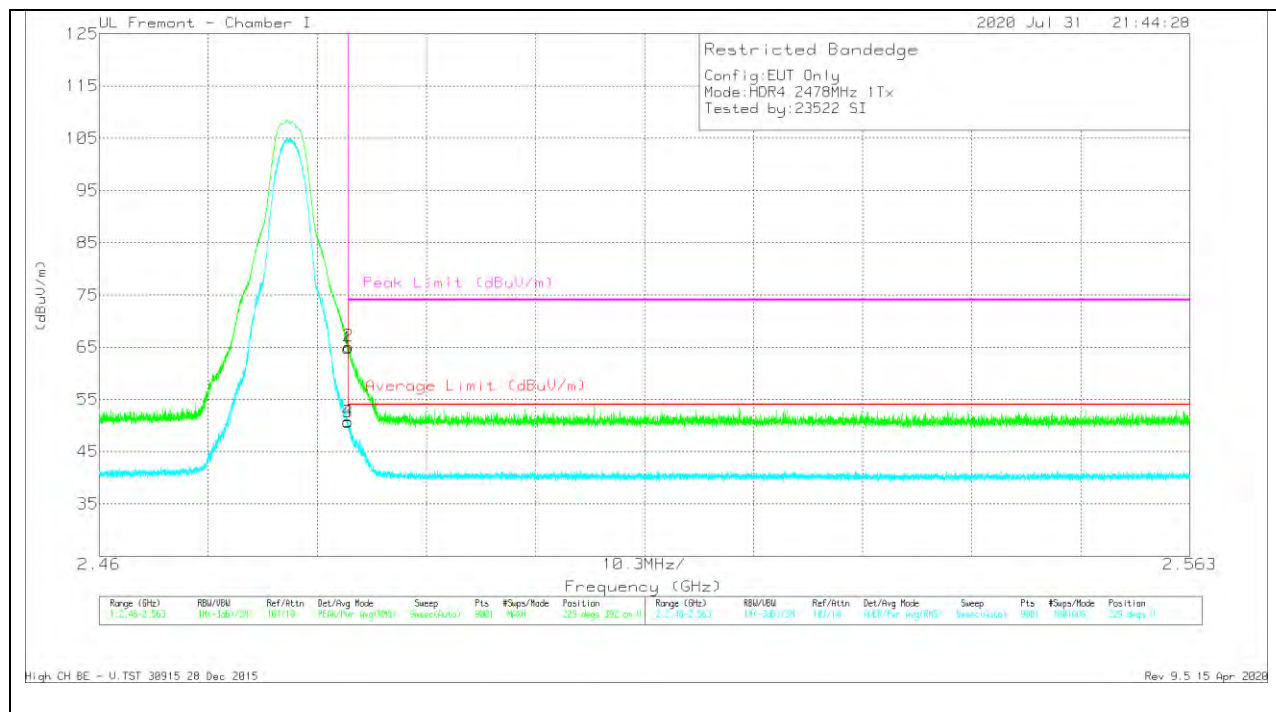
Pk - Peak detector

RMS - RMS detection

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	50.16	Pk	32.4	-17.7	64.86	-	-	74	-9.14	229	392	V
2	* 2.48355	50.43	Pk	32.4	-17.7	65.13	-	-	74	-8.87	229	392	V
3	* 2.48351	35.99	RMS	32.4	-17.7	50.69	54	-3.31	-	-	229	392	V
4	* 2.48352	36.09	RMS	32.4	-17.7	50.79	54	-3.21	-	-	229	392	V

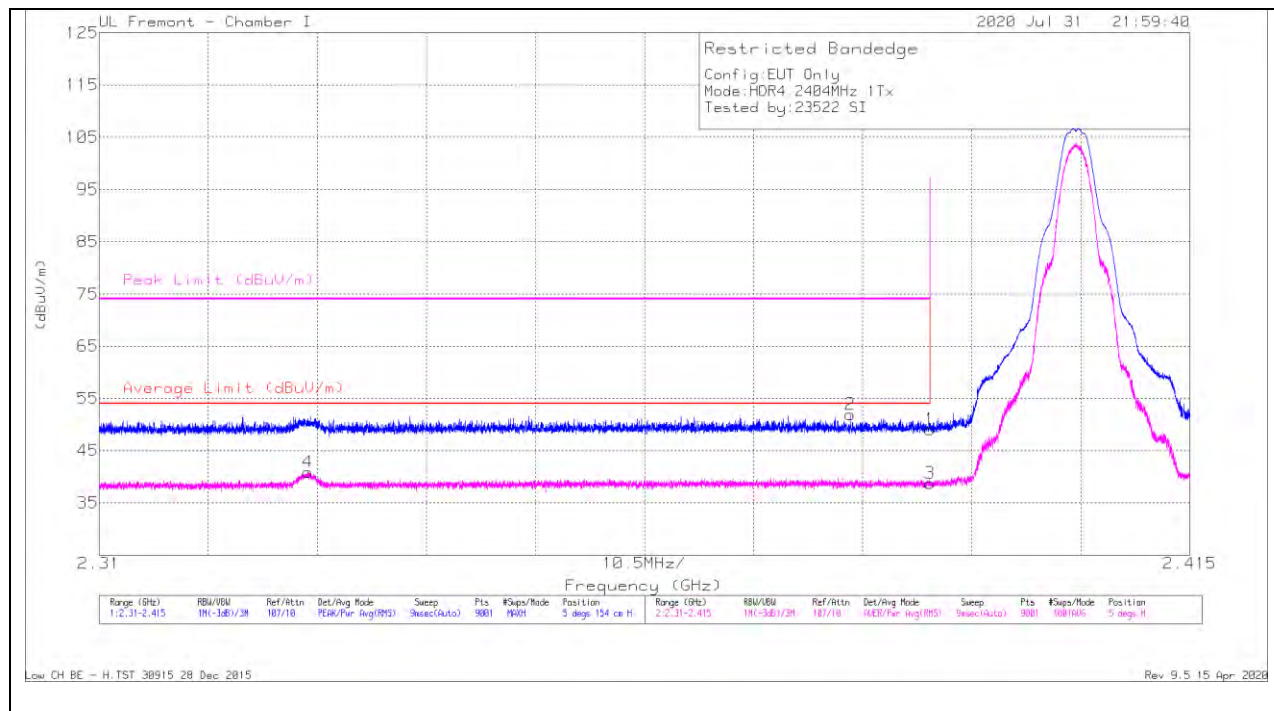
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

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ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/CbI/Ftr/Pa d (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	34.45	Pk	31.9	-17.3	49.05	-	-	74	-24.95	5	154	H
2	* 2.38231	37.3	Pk	31.9	-17.3	51.9	-	-	74	-22.1	5	154	H
3	* 2.38999	24.12	RMS	31.9	-17.3	38.72	54	-15.28	-	-	5	154	H
4	* 2.33007	26.61	RMS	31.5	-17.2	40.91	54	-13.09	-	-	5	154	H

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

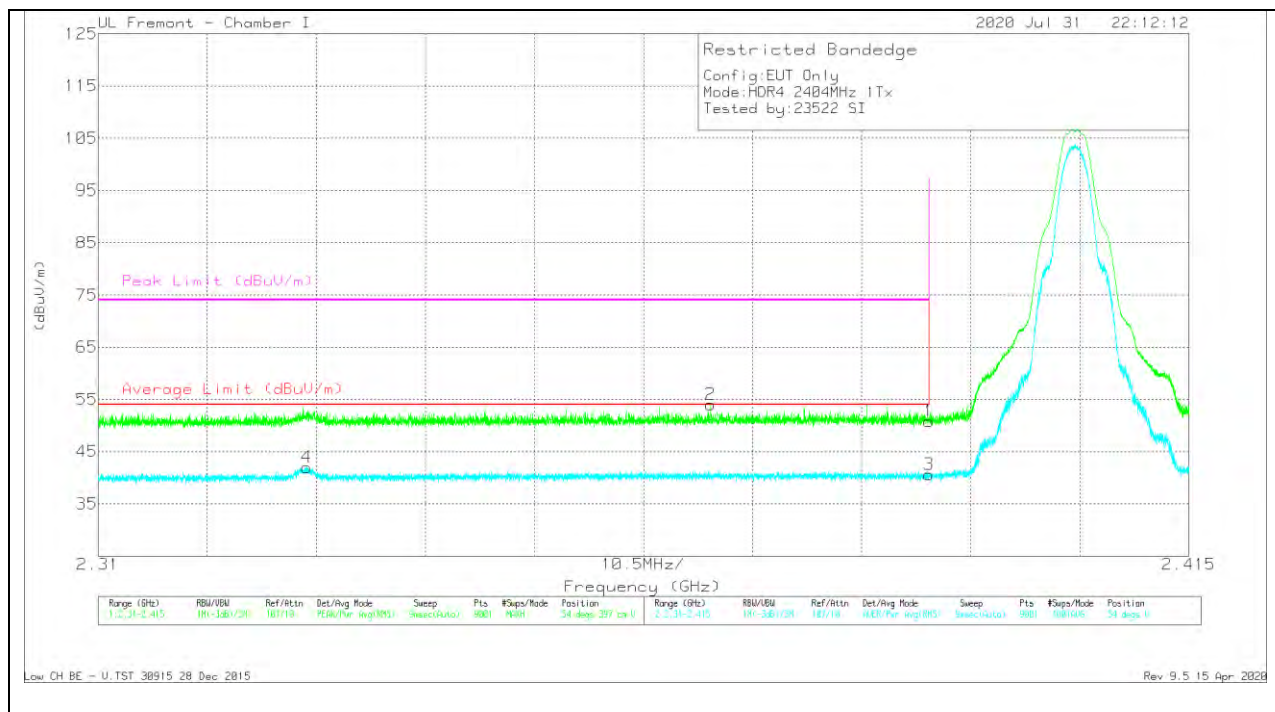
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/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	36.19	Pk	31.9	-17.3	50.79	-	-	74	-23.21	54	397	V
2	* 2.36898	39.38	Pk	31.9	-17.3	53.98	-	-	74	-20.02	54	397	V
3	* 2.38999	26.01	RMS	31.9	-17.3	40.61	54	-13.39	-	-	54	397	V
4	* 2.33007	27.72	RMS	31.5	-17.2	42.02	54	-11.98	-	-	54	397	V

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

Pk - Peak detector

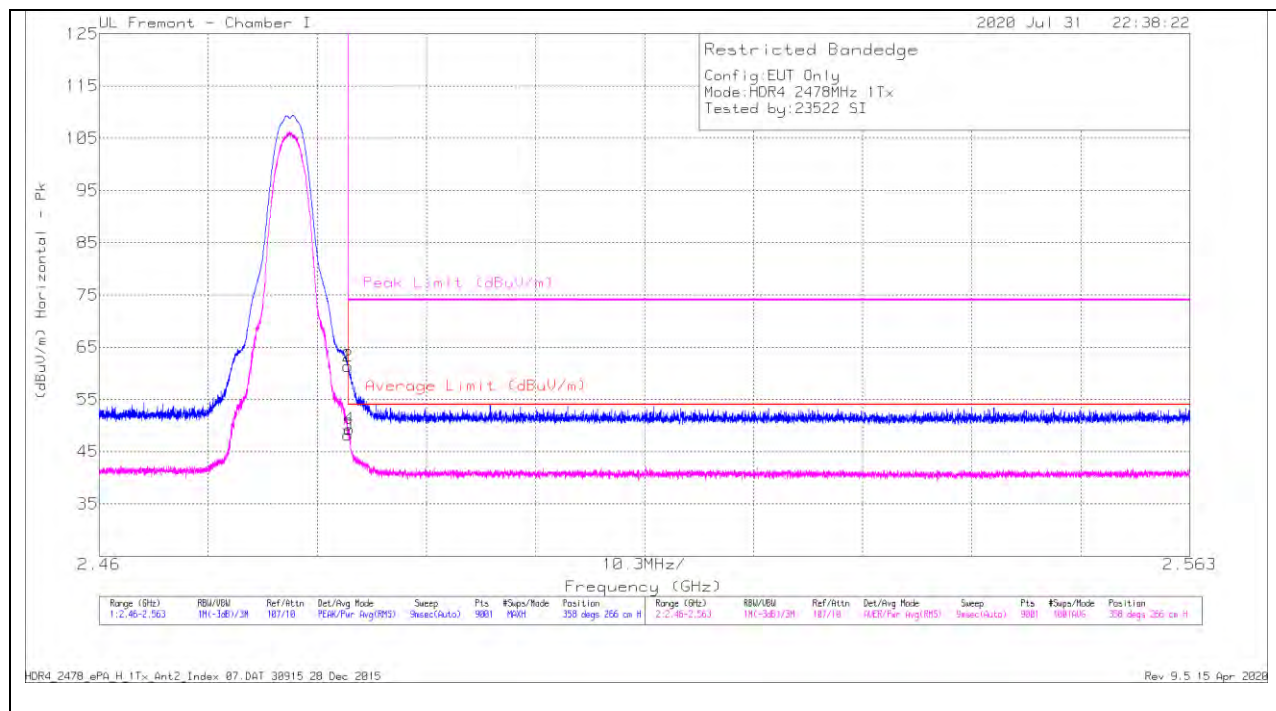
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	46.67	Pk	32.4	-17.7	61.37	-	-	74	-12.63	358	266	H
2	* 2.48352	46.68	Pk	32.4	-17.7	61.38	-	-	74	-12.62	358	266	H
3	* 2.48351	33.52	RMS	32.4	-17.7	48.22	54	-5.78	-	-	358	266	H
4	* 2.48361	34.56	RMS	32.4	-17.7	49.26	54	-4.74	-	-	358	266	H

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

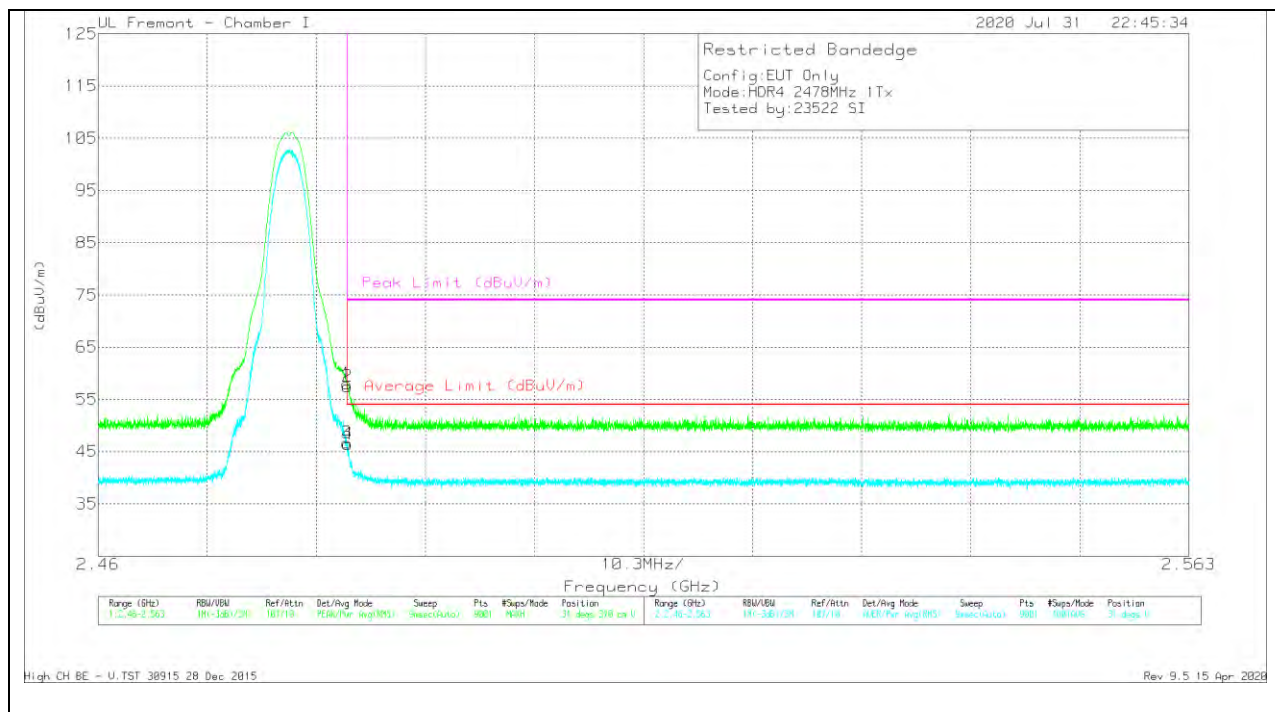
Pk - Peak detector

RMS - RMS detection

HDR4_2478_ePA_H_1Tx_Ant2_Index 07.DAT 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	43.25	Pk	32.4	-17.7	57.95	-	-	74	-16.05	31	370	V
2	* 2.48357	42.75	Pk	32.4	-17.7	57.45	-	-	74	-16.55	31	370	V
3	* 2.48351	31.94	RMS	32.4	-17.7	46.64	54	-7.36	-	-	31	370	V
4	* 2.48354	31.75	RMS	32.4	-17.7	46.45	54	-7.55	-	-	31	370	V

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

Pk - Peak detector

RMS - RMS detection

High CH BE - V.TST 30915 28 Dec 2015

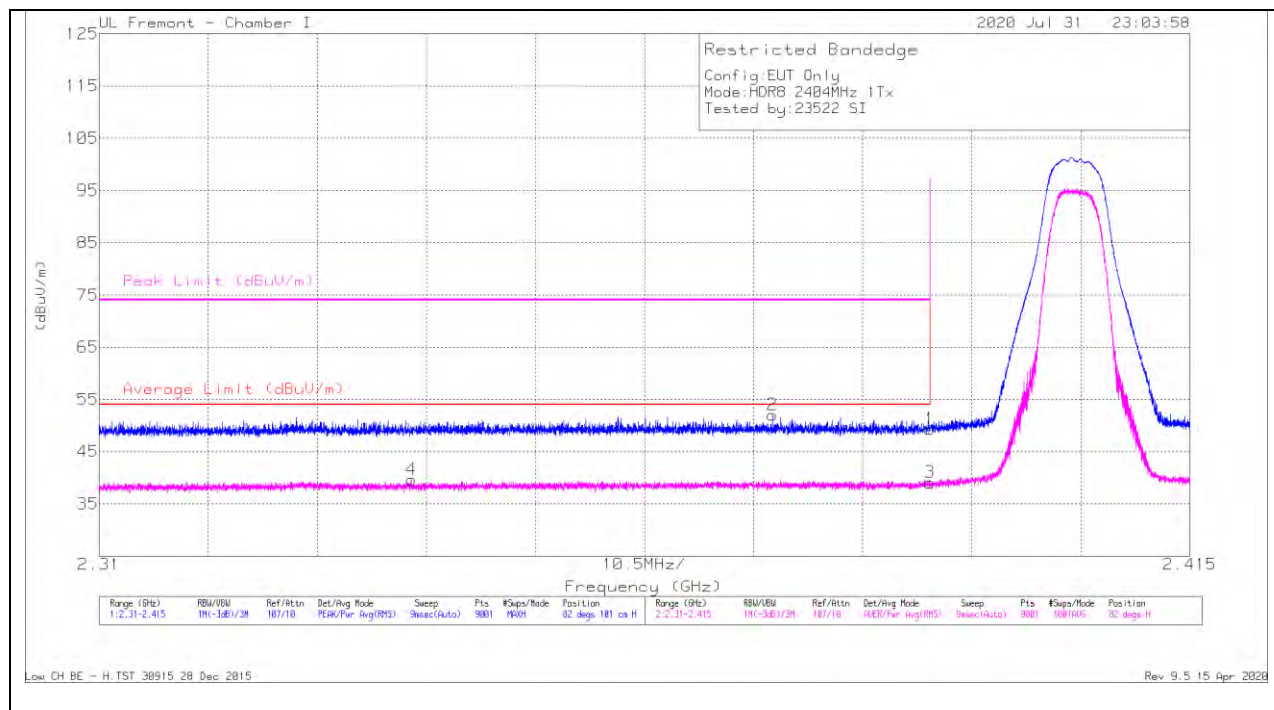
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10.2.2. HIGH POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Psd (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	34.72	Pk	31.9	-17.3	49.32	-	-	74	-24.68	82	101	H
2	* 2.3748	37.47	Pk	31.9	-17.3	52.07	-	-	74	-21.93	82	101	H
3	* 2.38999	24.46	RMS	31.9	-17.3	39.06	54	-14.94	-	-	82	101	H
4	* 2.34008	25.22	RMS	31.6	-17.2	39.62	54	-14.38	-	-	82	101	H

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

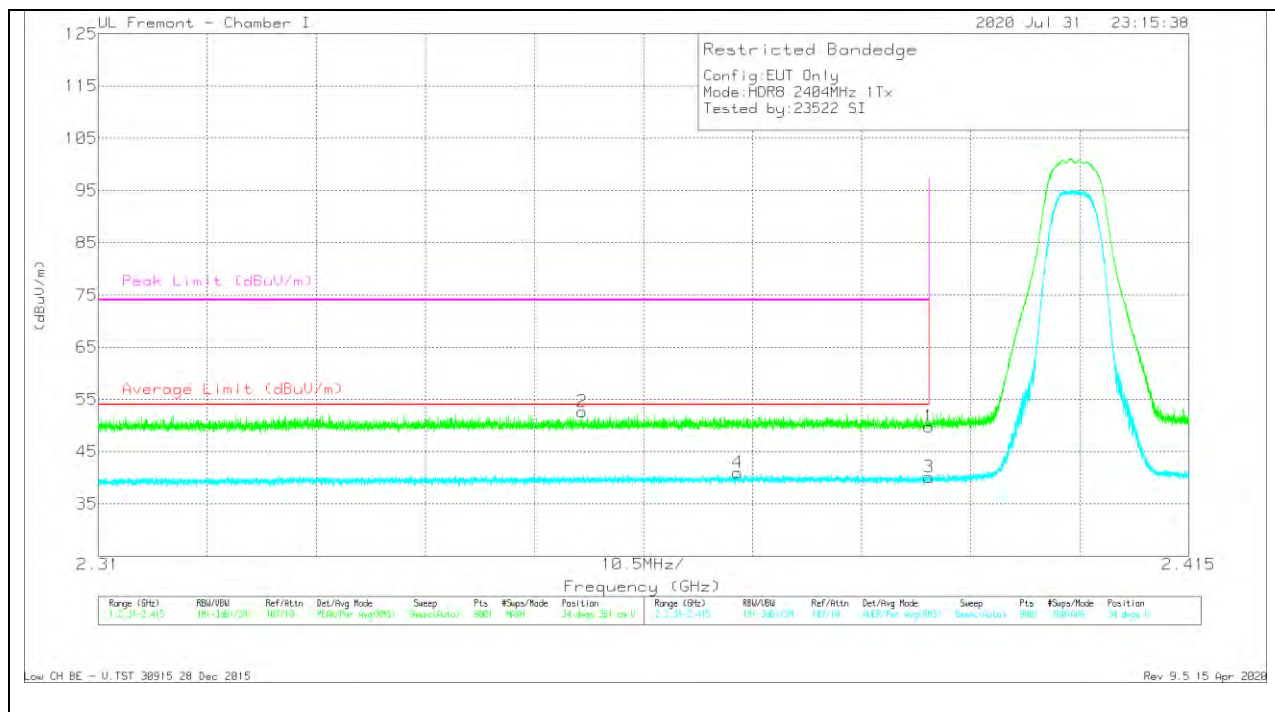
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	35.14	Pk	31.9	-17.3	49.74	-	-	74	-24.26	34	361	V
2	* 2.35659	38.15	Pk	31.8	-17.3	52.65	-	-	74	-21.35	34	361	V
3	* 2.38999	25.51	RMS	31.9	-17.3	40.11	54	-13.89	-	-	34	361	V
4	* 2.37157	26.39	RMS	31.9	-17.3	40.99	54	-13.01	-	-	34	361	V

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

Pk - Peak detector

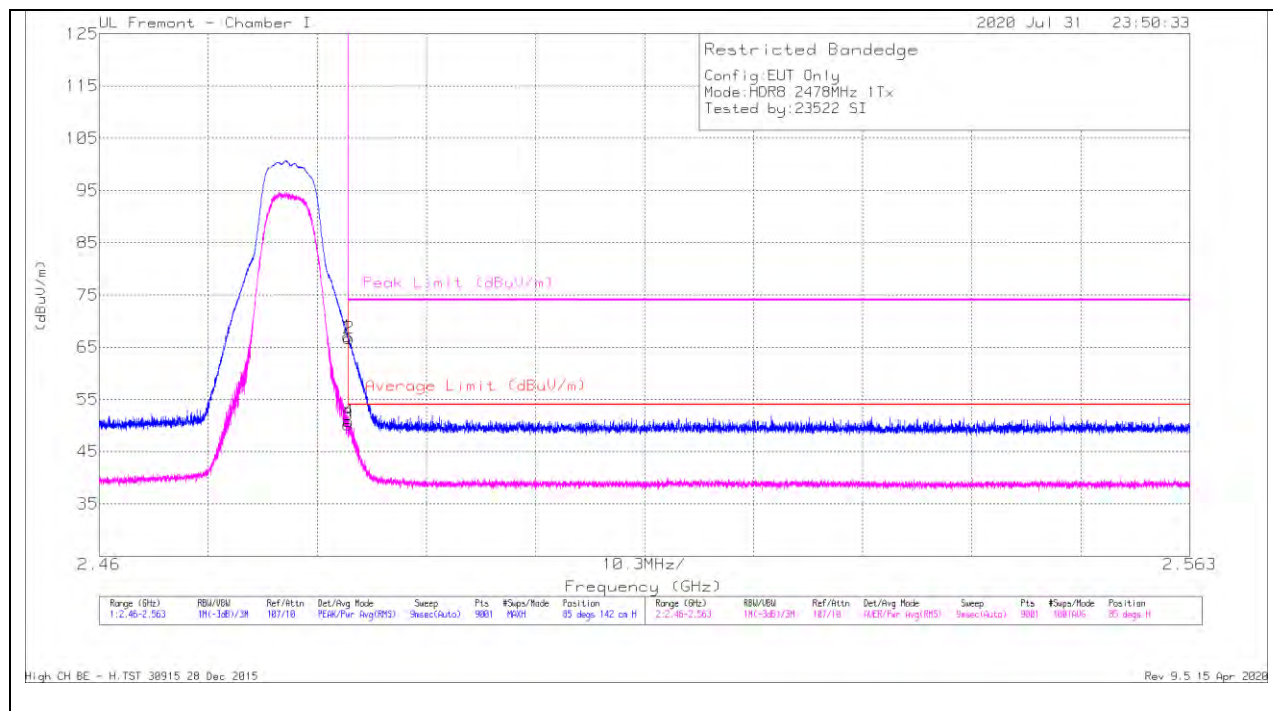
RMS - RMS detection

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BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	52.4	Pk	32.4	-17.7	67.1	-	-	74	-6.9	85	142	H
2	* 2.48359	51.94	Pk	32.4	-17.7	66.64	-	-	74	-7.36	85	142	H
3	* 2.48351	35.47	RMS	32.4	-17.7	50.17	54	-3.83	-	-	85	142	H
4	* 2.48356	36.05	RMS	32.4	-17.7	50.75	54	-3.25	-	-	85	142	H

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

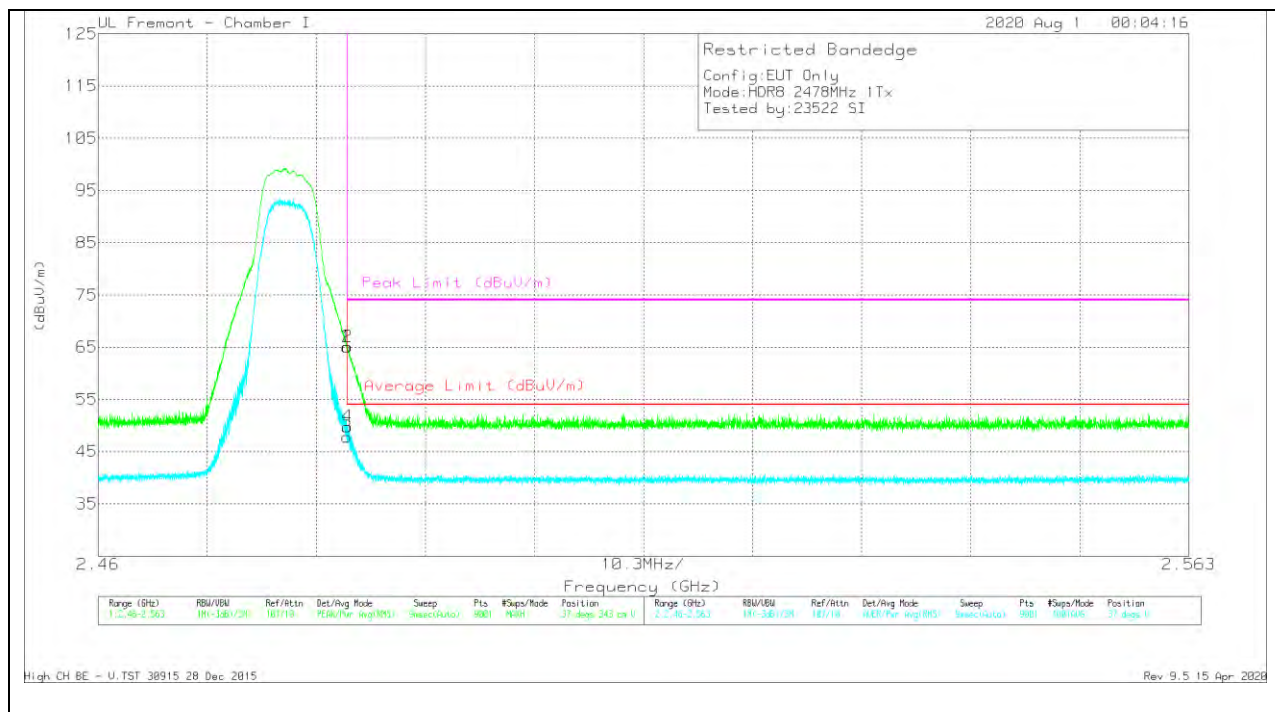
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	50.32	Pk	32.4	-17.7	65.02	-	-	74	-8.98	37	343	V
2	* 2.48353	50.34	Pk	32.4	-17.7	65.04	-	-	74	-8.96	37	343	V
3	* 2.48351	33.1	RMS	32.4	-17.7	47.8	54	-6.2	-	-	37	343	V
4	* 2.48354	35.05	RMS	32.4	-17.7	49.75	54	-4.25	-	-	37	343	V

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

Pk - Peak detector

RMS - RMS detection

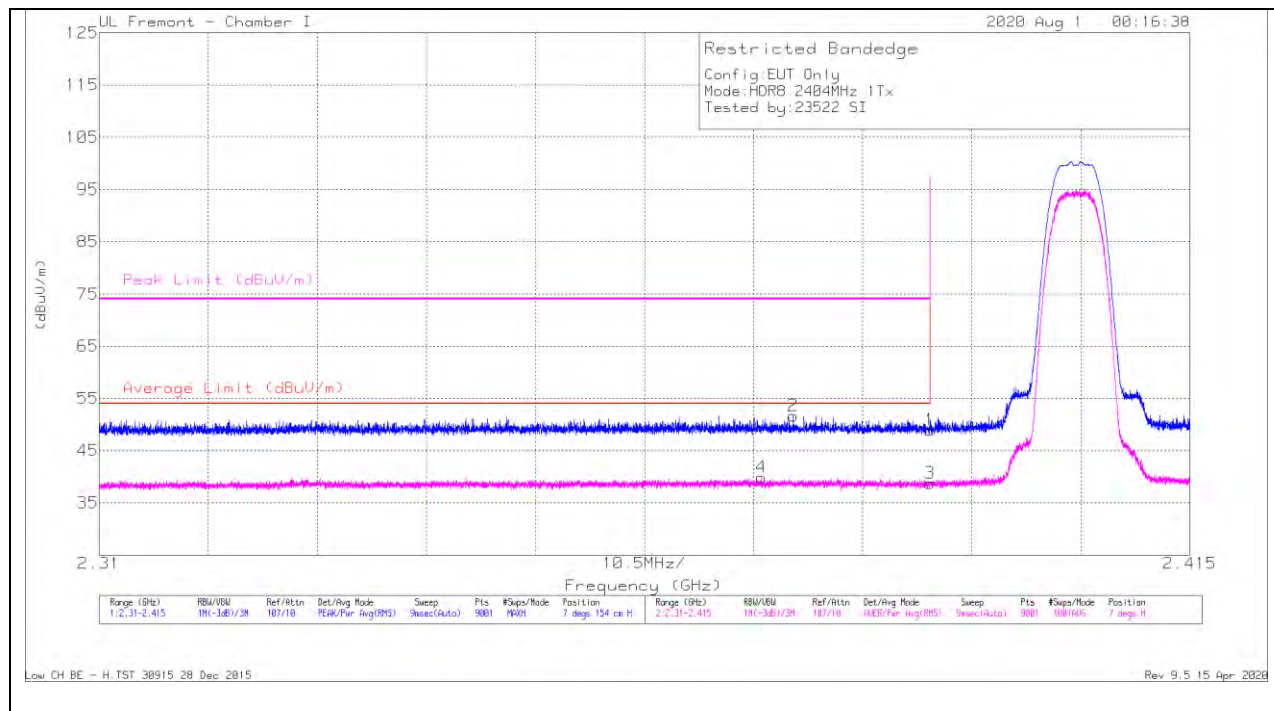
High CH BE - V.TST 30915 28 Dec 2015

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ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Amp/Cbl/Fitr/Pa d (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	34.35	Pk	31.9	-17.3	48.95	-	-	74	-25.05	7	154	H
2	* 2.37681	37.08	Pk	31.9	-17.3	51.68	-	-	74	-22.32	7	154	H
3	* 2.38999	24.2	RMS	31.9	-17.3	38.8	54	-15.2	-	-	7	154	H
4	* 2.37375	25.29	RMS	31.9	-17.3	39.89	54	-14.11	-	-	7	154	H

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

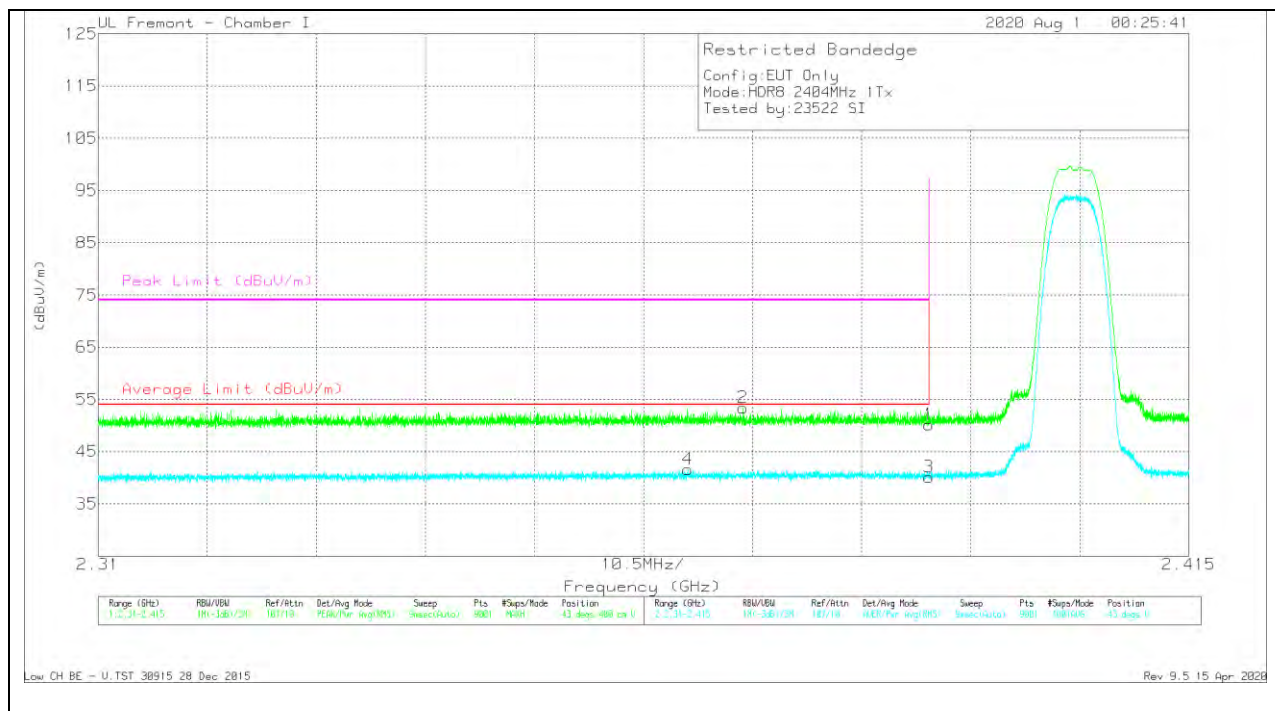
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	35.6	Pk	31.9	-17.3	50.2	-	-	74	-23.8	43	400	V
2	* 2.37208	38.77	Pk	31.9	-17.3	53.37	-	-	74	-20.63	43	400	V
3	* 2.38999	25.49	RMS	31.9	-17.3	40.09	54	-13.91	-	-	43	400	V
4	* 2.36676	27.02	RMS	31.9	-17.3	41.62	54	-12.38	-	-	43	400	V

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

Pk - Peak detector

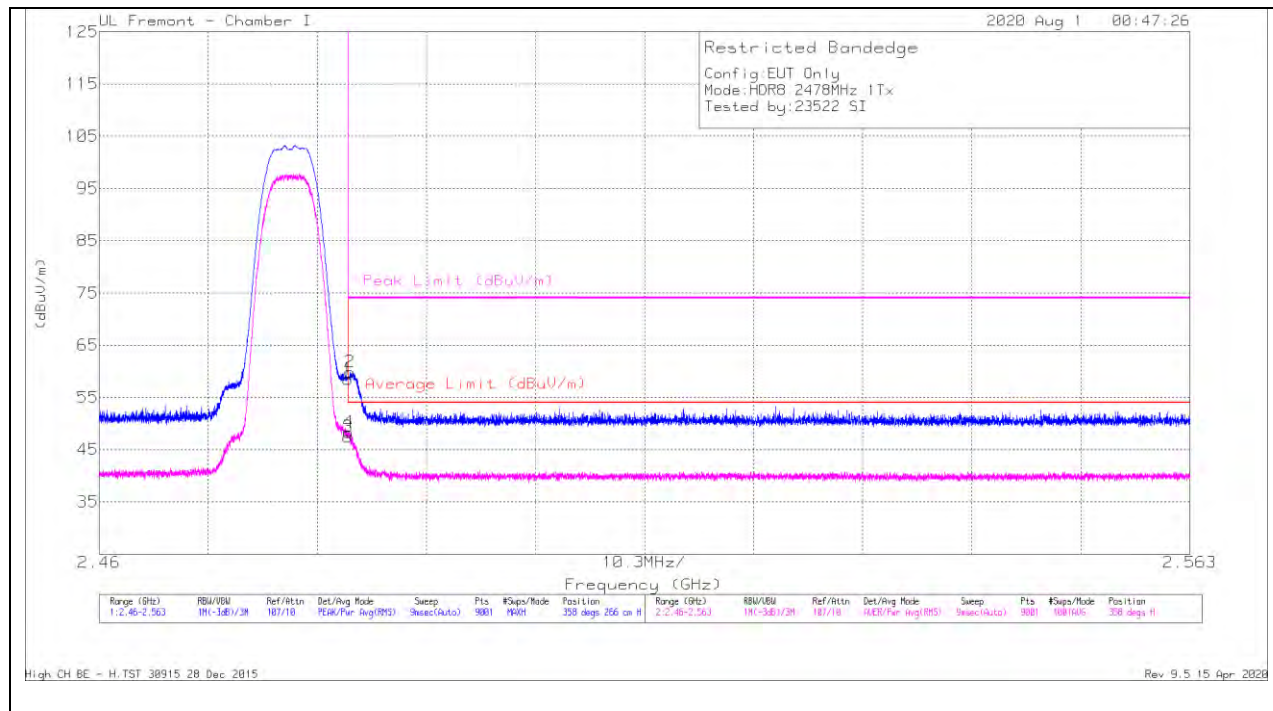
RMS - RMS detection

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BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	43.83	Pk	32.4	-17.7	58.53	-	-	74	-15.47	358	266	H
2	* 2.48369	45.11	Pk	32.4	-17.7	59.81	-	-	74	-14.19	358	266	H
3	* 2.48351	32.68	RMS	32.4	-17.7	47.38	54	-6.62	-	-	358	266	H
4	* 2.48356	33.55	RMS	32.4	-17.7	48.25	54	-5.75	-	-	358	266	H

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

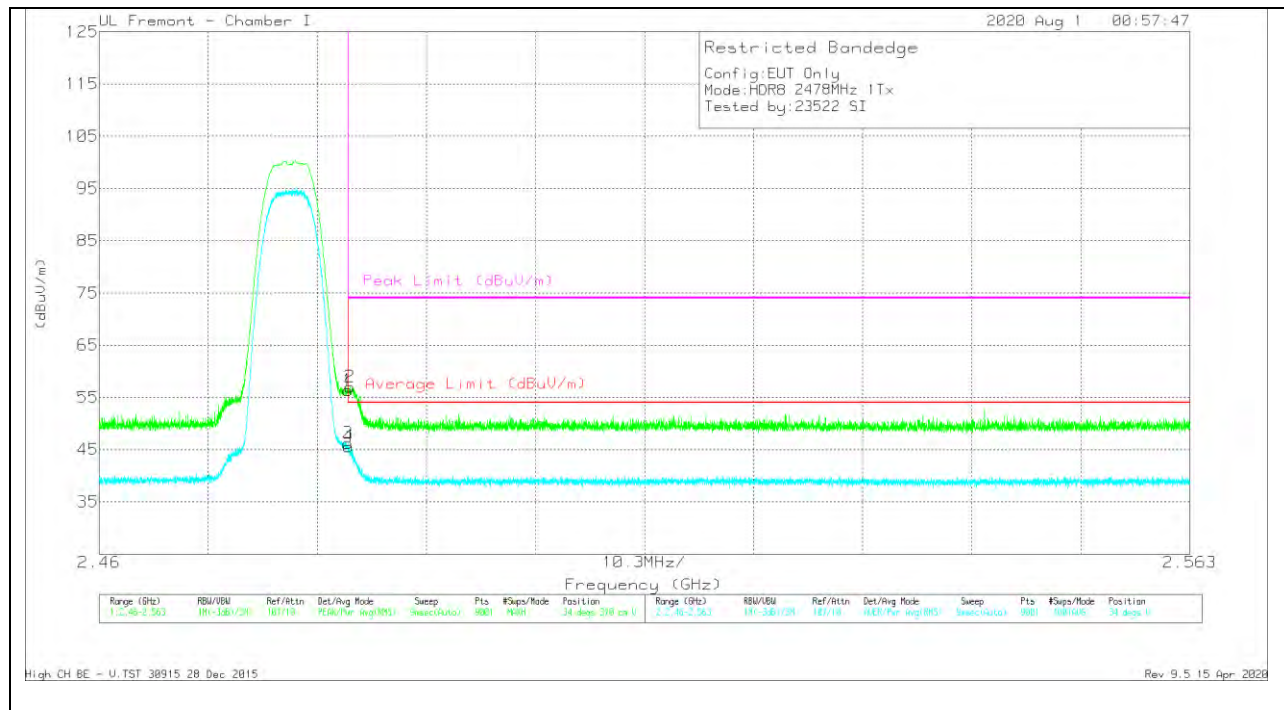
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

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VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	41.73	Pk	32.4	-17.7	56.43	-	-	74	-17.57	34	370	V
2	* 2.48369	42.24	Pk	32.4	-17.7	56.94	-	-	74	-17.06	34	370	V
3	* 2.48351	31.5	RMS	32.4	-17.7	46.2	54	-7.8	-	-	34	370	V
4	* 2.48356	30.87	RMS	32.4	-17.7	45.57	54	-8.43	-	-	34	370	V

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

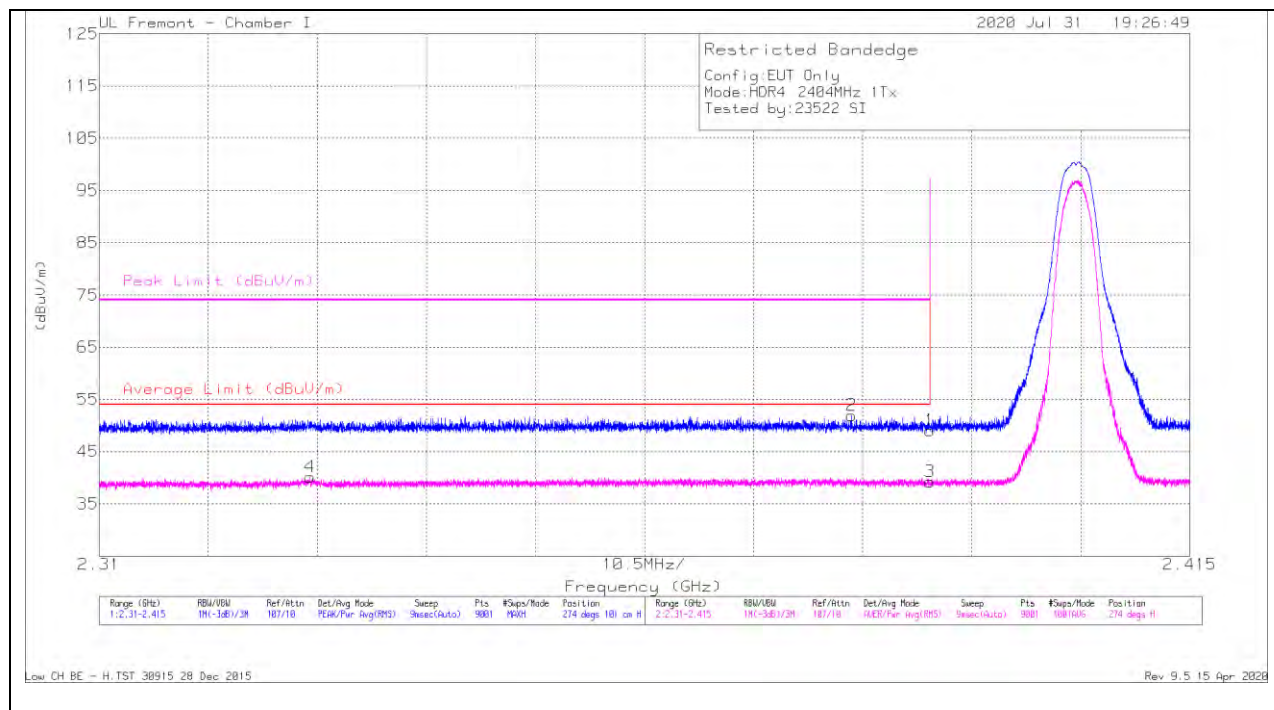
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10.2.3. LOW POWER HDR (HDR4)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Psd (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	34.43	Pk	31.9	-17.3	49.03	-	-	74	-24.97	274	101	H
2	* 2.38242	37.28	Pk	31.9	-17.3	51.88	-	-	74	-22.12	274	101	H
3	* 2.38999	24.63	RMS	31.9	-17.3	39.23	54	-14.77	-	-	274	101	H
4	* 2.3303	25.82	RMS	31.5	-17.2	40.12	54	-13.88	-	-	274	101	H

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

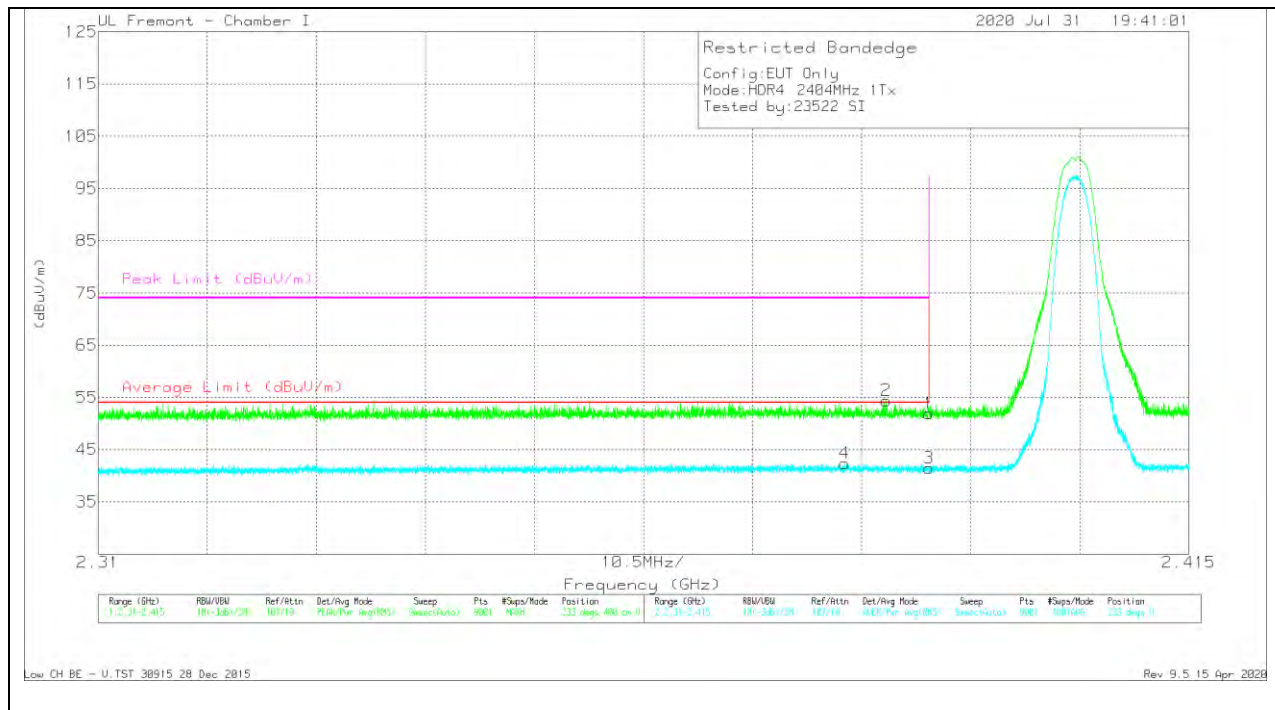
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/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	37.36	Pk	31.9	-17.3	51.96	-	-	74	-22.04	233	400	V
2	* 2.38584	39.82	Pk	31.9	-17.3	54.42	-	-	74	-19.58	233	400	V
3	* 2.38999	26.88	RMS	31.9	-17.3	41.48	54	-12.52	-	-	233	400	V
4	* 2.38186	27.78	RMS	31.9	-17.3	42.38	54	-11.62	-	-	233	400	V

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

Pk - Peak detector

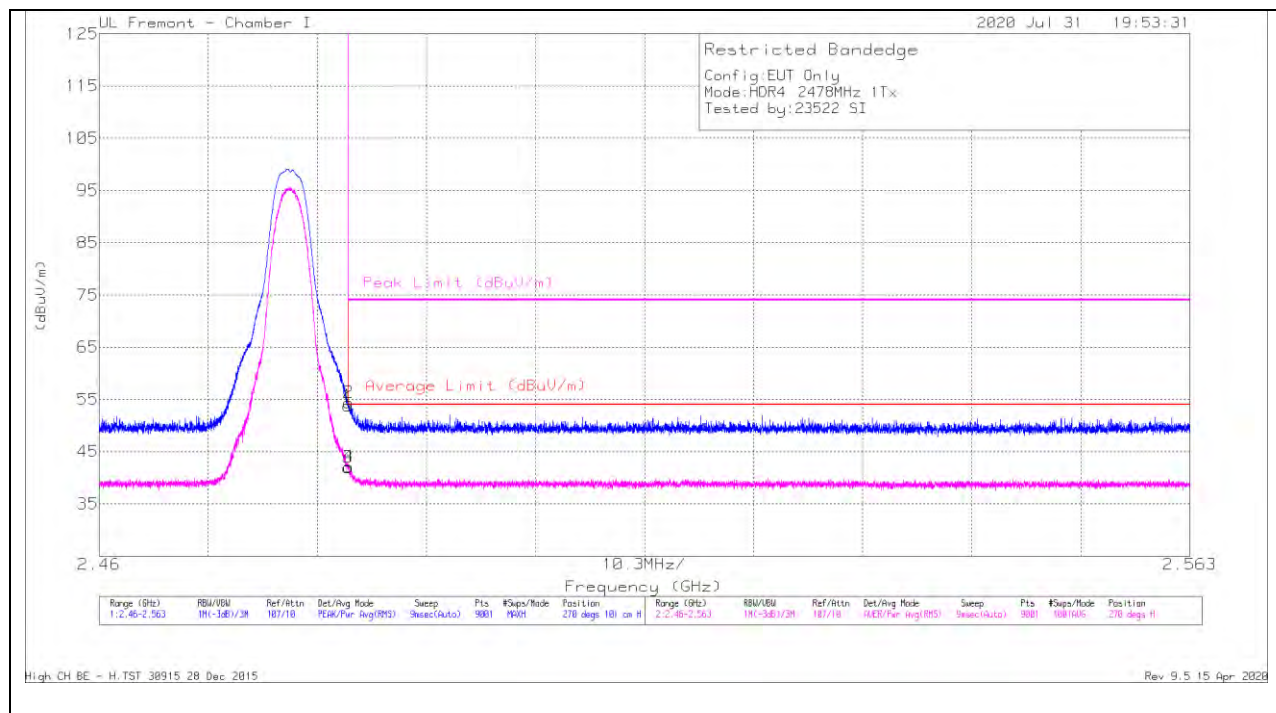
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	39.1	Pk	32.4	-17.7	53.8	-	-	74	-20.2	270	101	H
2	* 2.48355	39.73	Pk	32.4	-17.7	54.43	-	-	74	-19.57	270	101	H
3	* 2.48351	27.28	RMS	32.4	-17.7	41.98	54	-12.02	-	-	270	101	H
4	* 2.48353	27.44	RMS	32.4	-17.7	42.14	54	-11.86	-	-	270	101	H

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

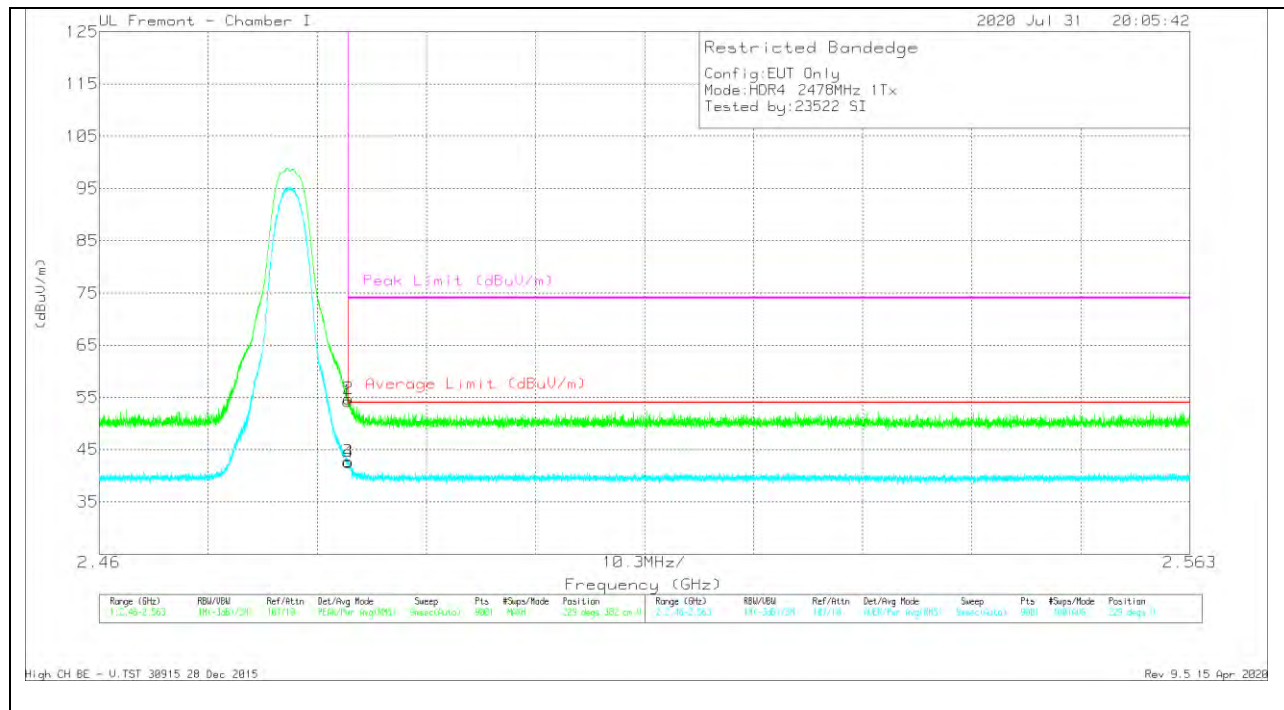
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pa d (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	39.61	Pk	32.4	-17.7	54.31	-	-	74	-19.69	229	382	V
2	* 2.48354	40.1	Pk	32.4	-17.7	54.8	-	-	74	-19.2	229	382	V
3	* 2.48351	28	RMS	32.4	-17.7	42.7	54	-11.3	-	-	229	382	V
4	* 2.48355	27.91	RMS	32.4	-17.7	42.61	54	-11.39	-	-	229	382	V

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

Pk - Peak detector

RMS - RMS detection

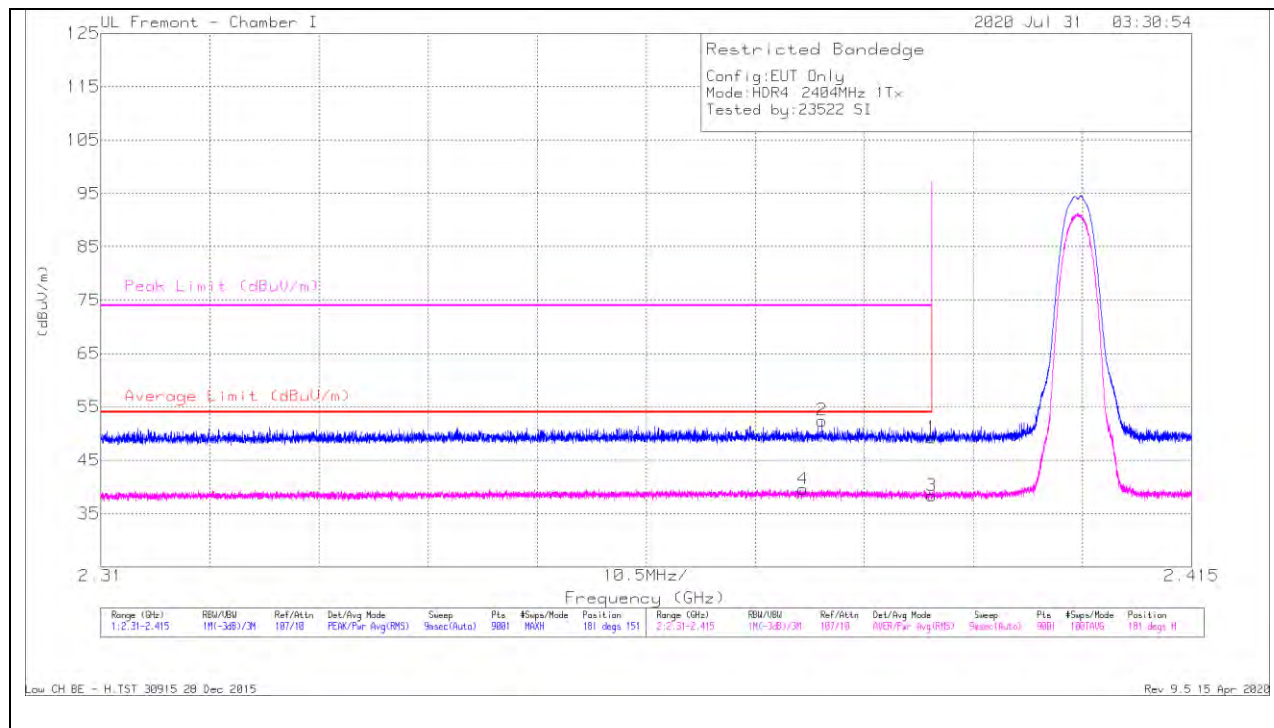
High CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/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	34.6	Pk	31.9	-17.3	49.2	-	-	74	-24.8	181	151	H
2	* 2.37941	37.85	Pk	31.9	-17.3	52.45	-	-	74	-21.55	181	151	H
3	* 2.38999	23.77	RMS	31.9	-17.3	38.37	54	-15.63	-	-	181	151	H
4	* 2.37758	25	RMS	31.9	-17.3	39.6	54	-14.4	-	-	181	151	H

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

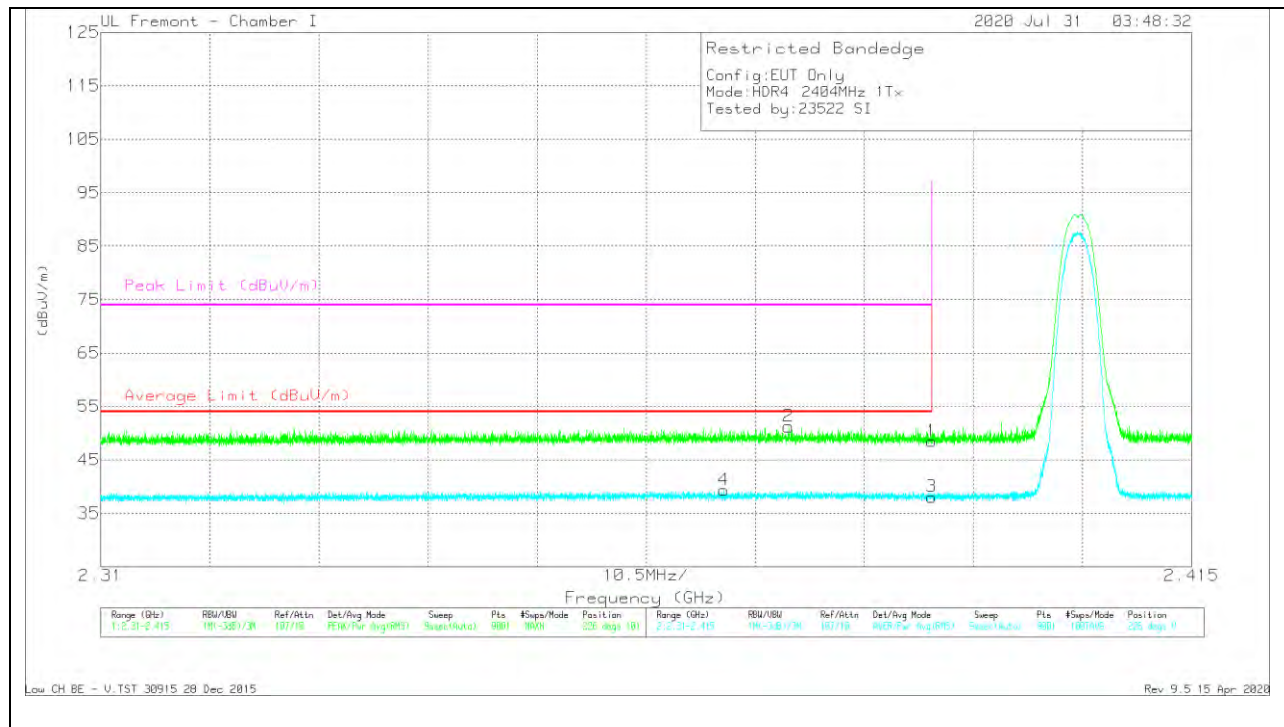
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	33.88	Pk	31.9	-17.3	48.48	-	-	74	-25.52	226	101	V
2	* 2.37619	36.64	Pk	31.9	-17.3	51.24	-	-	74	-22.76	226	101	V
3	* 2.38999	23.47	RMS	31.9	-17.3	38.07	54	-15.93	-	-	226	101	V
4	* 2.36995	24.73	RMS	31.9	-17.3	39.33	54	-14.67	-	-	226	101	V

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

Pk - Peak detector

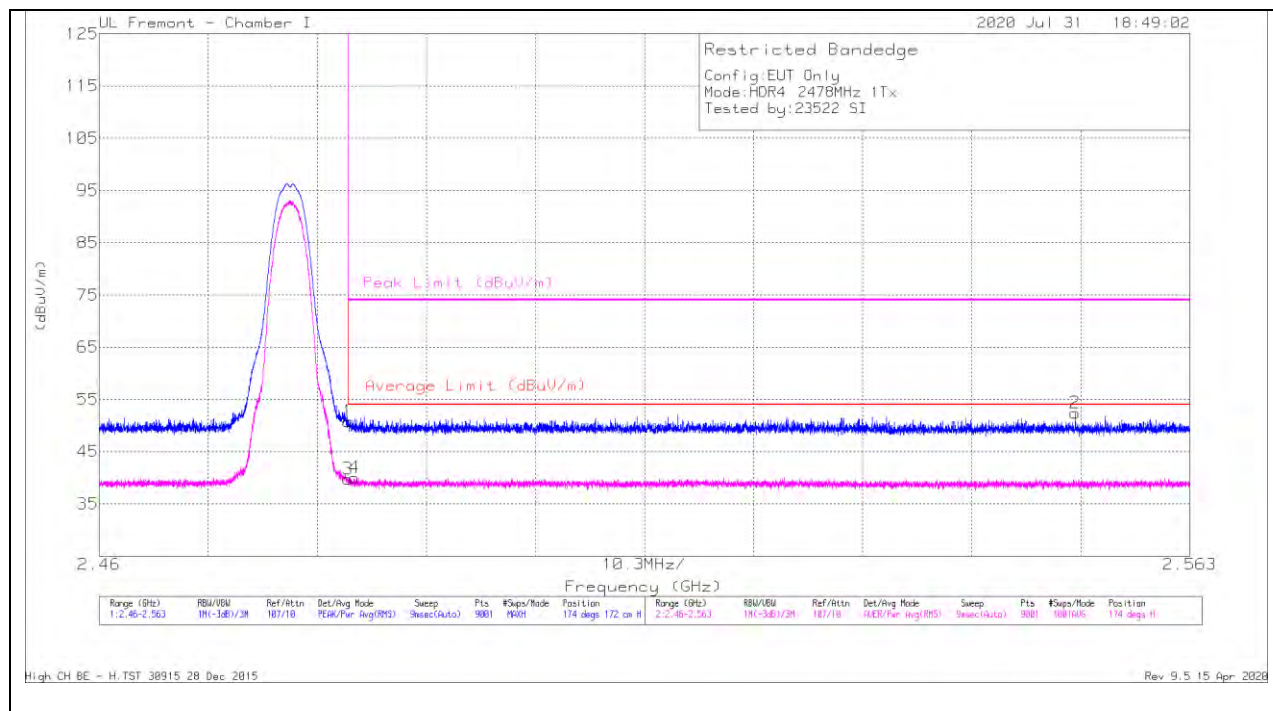
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fibr/Psd (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	36.11	Pk	32.4	-17.7	50.81	-	-	74	-23.19	174	172	H
2	2.55219	37.85	Pk	32.3	-17.8	52.35	-	-	74	-21.65	174	172	H
3	* 2.48351	24.99	RMS	32.4	-17.7	39.69	54	-14.31	-	-	174	172	H
4	* 2.48412	25.28	RMS	32.4	-17.7	39.98	54	-14.02	-	-	174	172	H

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

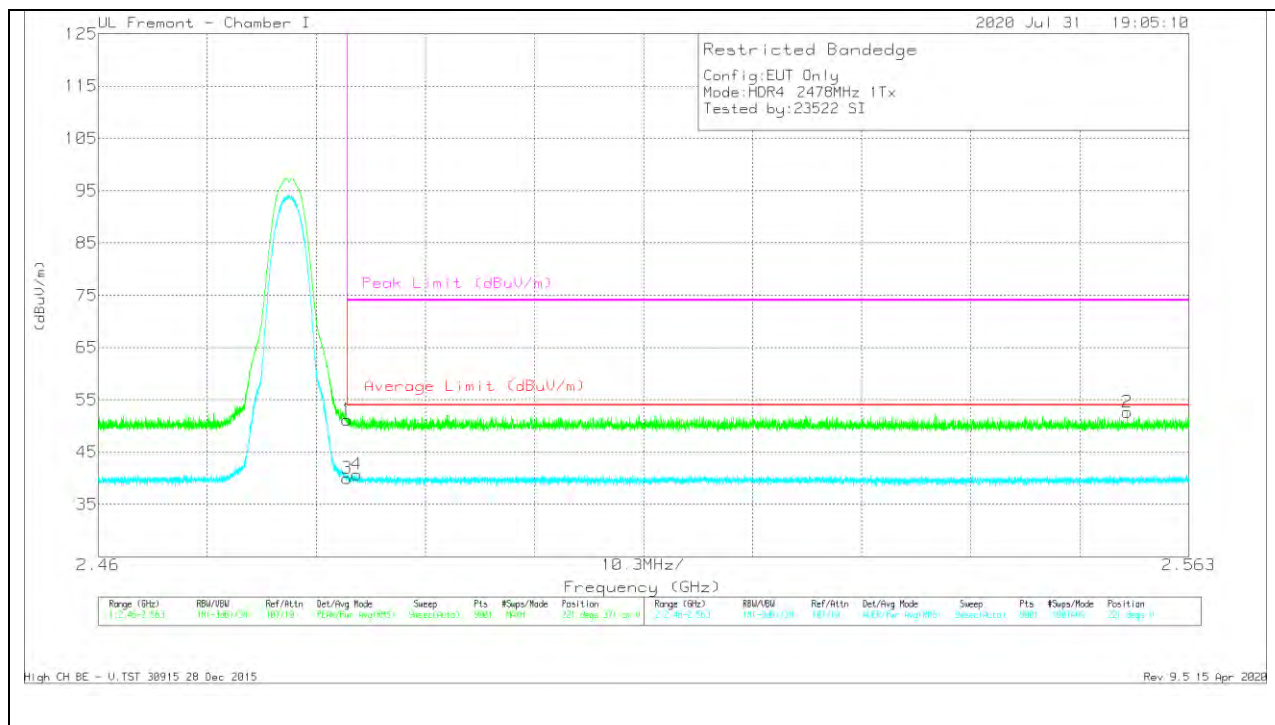
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/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	36.42	Pk	32.4	-17.7	51.12	-	-	74	-22.88	221	371	V
2	2.55719	38.11	Pk	32.3	-17.8	52.61	-	-	74	-21.39	221	371	V
3	* 2.48351	25.31	RMS	32.4	-17.7	40.01	54	-13.99	-	-	221	371	V
4	* 2.48441	25.99	RMS	32.4	-17.7	40.69	54	-13.31	-	-	221	371	V

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

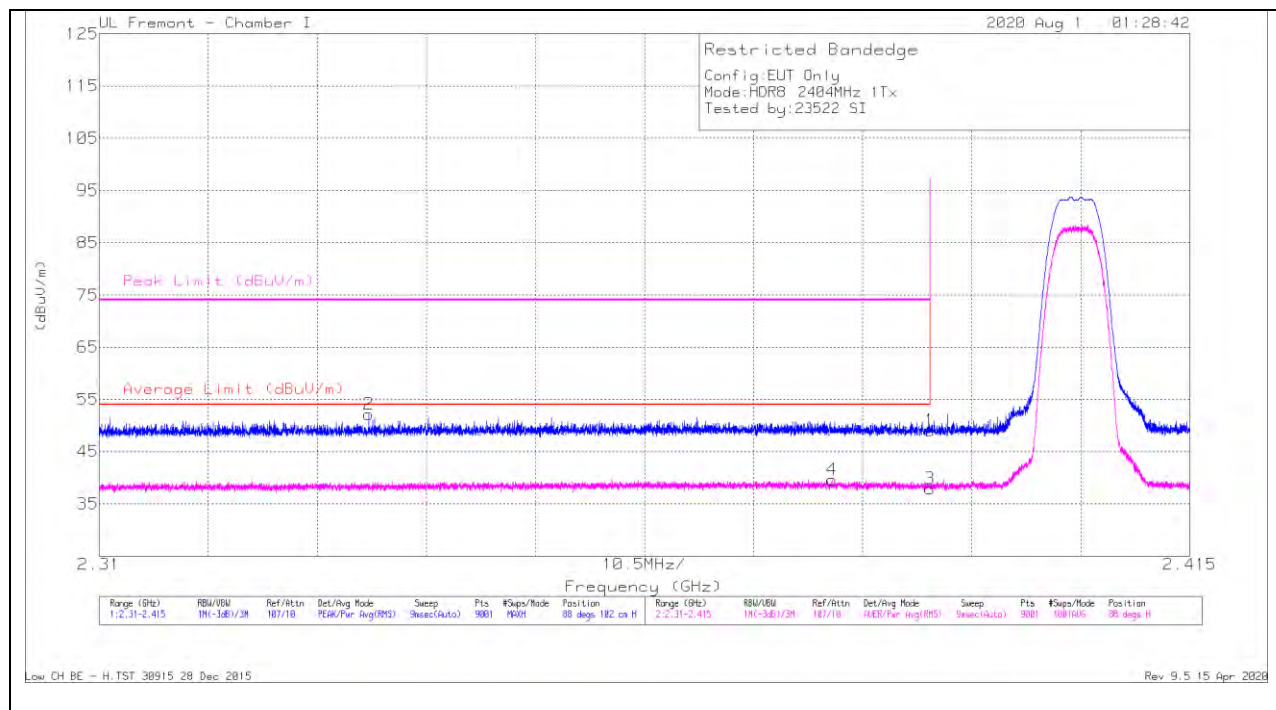
High CH BE - V.TST 30915 28 Dec 2015
Rev 9.5 15 Apr 2020

10.2.4. LOW POWER HDR (HDR8)

ANT 4

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Psd (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	34.44	Pk	31.9	-17.3	49.04	-	-	74	-24.96	88	102	H
2	* 2.33596	37.75	Pk	31.6	-17.2	52.15	-	-	74	-21.85	88	102	H
3	* 2.38999	23.32	RMS	31.9	-17.3	37.92	54	-16.08	-	-	88	102	H
4	* 2.38055	25.03	RMS	31.9	-17.3	39.63	54	-14.37	-	-	88	102	H

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

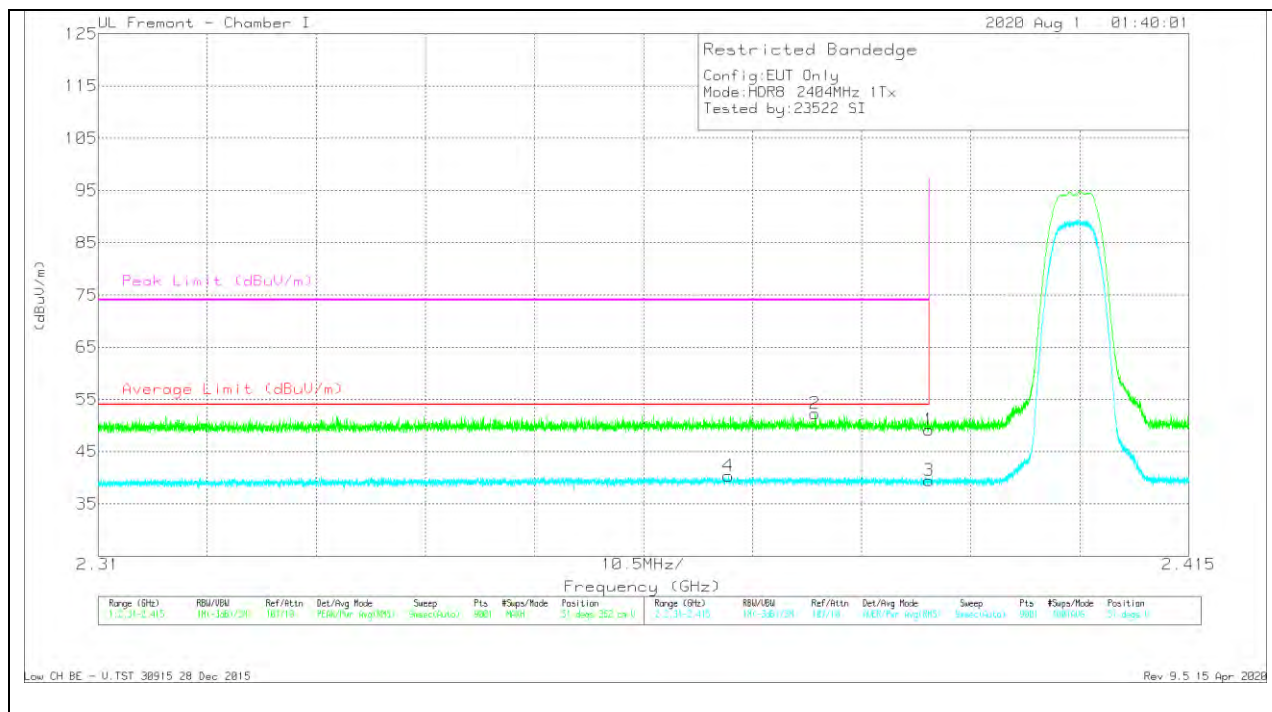
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/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	34.63	Pk	31.9	-17.3	49.23	-	-	74	-24.77	51	362	V
2	* 2.37899	37.72	Pk	31.9	-17.3	52.32	-	-	74	-21.68	51	362	V
3	* 2.38999	24.89	RMS	31.9	-17.3	39.49	54	-14.51	-	-	51	362	V
4	* 2.37067	25.78	RMS	31.9	-17.3	40.38	54	-13.62	-	-	51	362	V

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

Pk - Peak detector

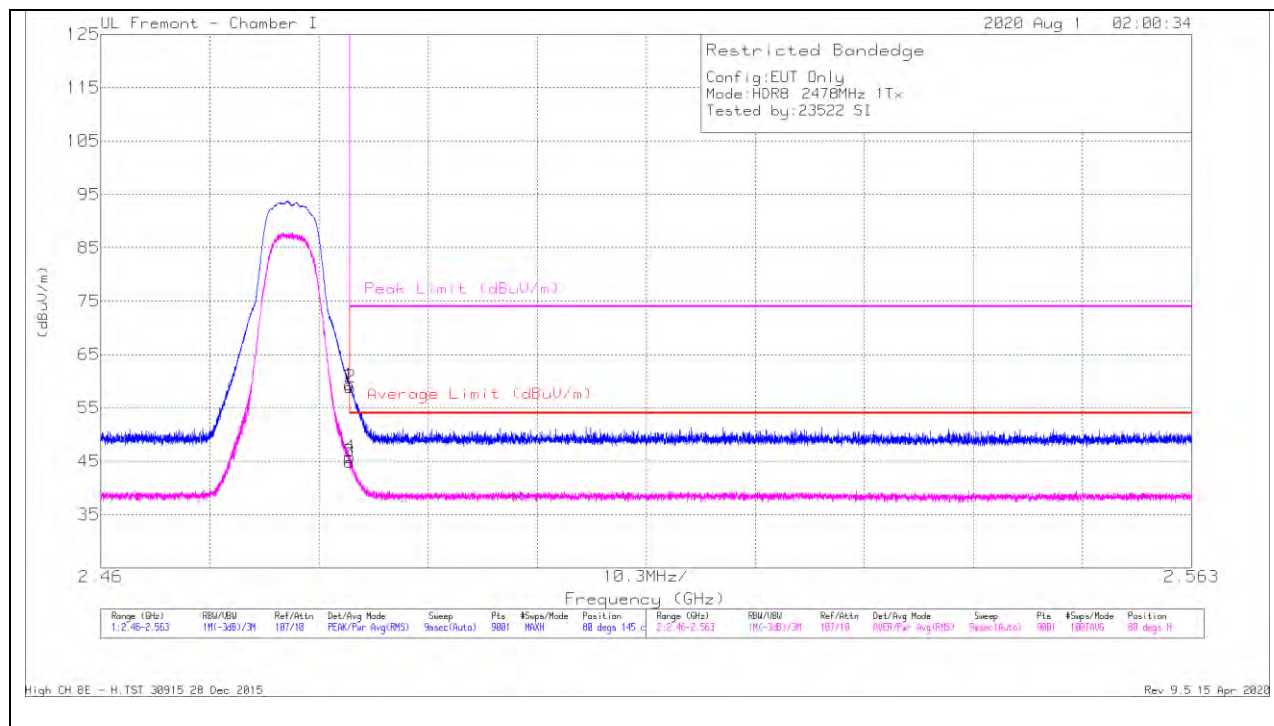
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	44.63	Pk	32.4	-17.7	59.33	-	-	74	-14.67	80	145	H
2	* 2.48357	44.16	Pk	32.4	-17.7	58.86	-	-	74	-15.14	80	145	H
3	* 2.48351	30.19	RMS	32.4	-17.7	44.89	54	-9.11	-	-	80	145	H
4	* 2.48352	31.08	RMS	32.4	-17.7	45.78	54	-8.22	-	-	80	145	H

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

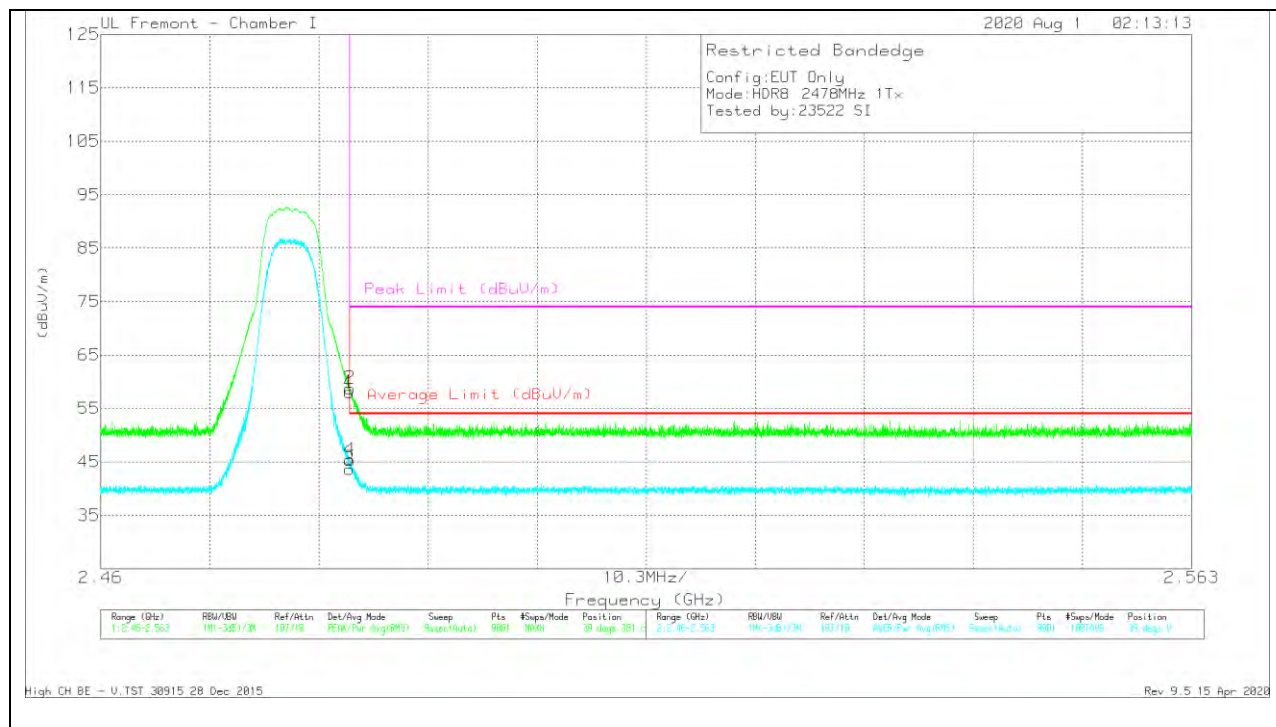
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	32.4	-17.7	58.06	-	-	74	-15.94	39	381	V
2	* 2.48352	44.05	Pk	32.4	-17.7	58.75	-	-	74	-15.25	39	381	V
3	* 2.48351	28.93	RMS	32.4	-17.7	43.63	54	-10.37	-	-	39	381	V
4	* 2.48352	30.67	RMS	32.4	-17.7	45.37	54	-8.63	-	-	39	381	V

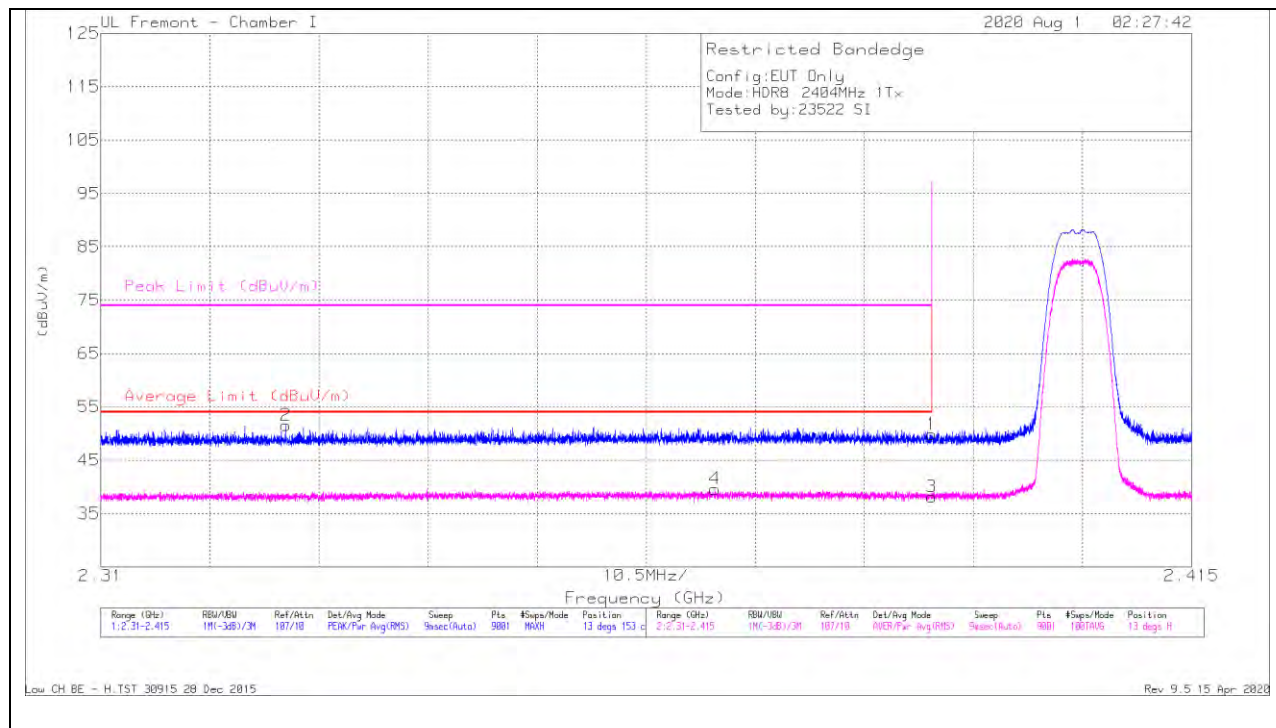
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

High CH BE - V.TST 30915 28 Dec 2015
Rev 9.5 15 Apr 2020

ANT 3

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dBm)	Amp/Cbl/Fitr/Pa d (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	35.2	Pk	31.9	-17.3	49.8	-	-	74	-24.2	13	153	H
2	* 2.32783	37.22	Pk	31.5	-17.2	51.52	-	-	74	-22.48	13	153	H
3	* 2.38999	23.54	RMS	31.9	-17.3	38.14	54	-15.86	-	-	13	153	H
4	* 2.36912	25.02	RMS	31.9	-17.3	39.62	54	-14.38	-	-	13	153	H

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

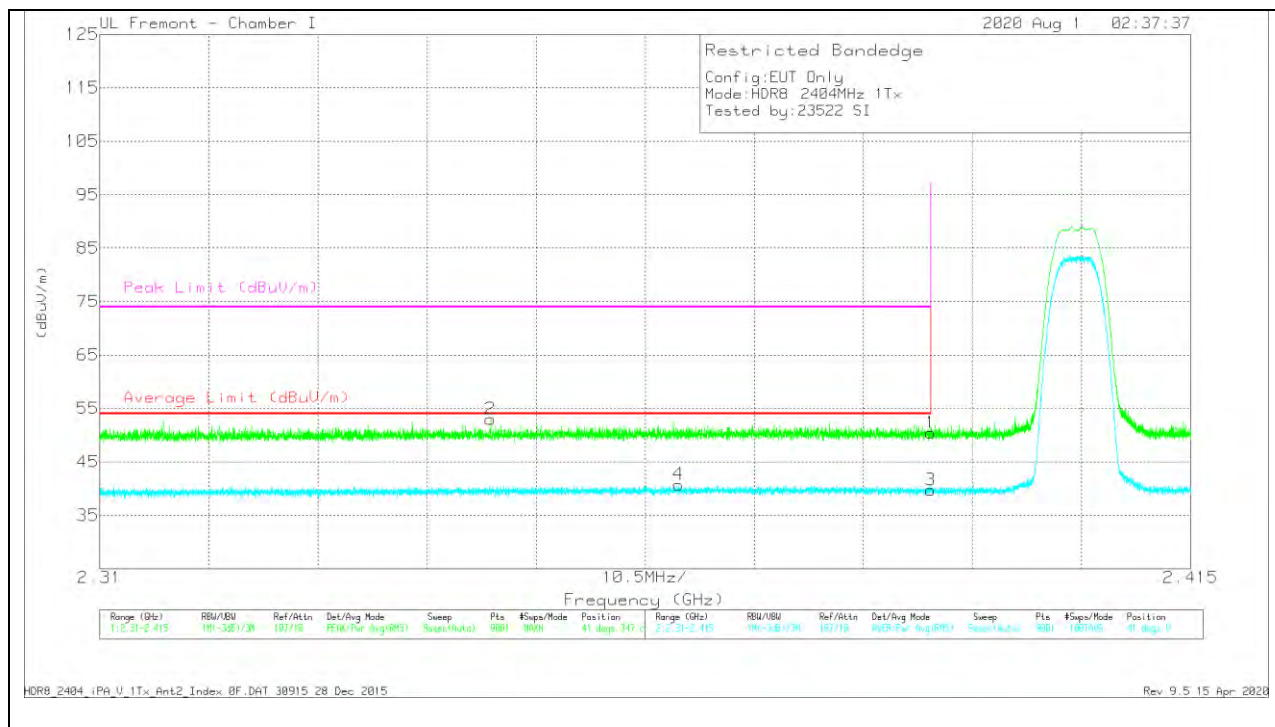
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/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	35.82	Pk	31.9	-17.3	50.42	-	-	74	-23.58	41	347	V
2	* 2.34761	38.47	Pk	31.7	-17.2	52.97	-	-	74	-21.03	41	347	V
3	* 2.38999	25.12	RMS	31.9	-17.3	39.72	54	-14.28	-	-	41	347	V
4	* 2.36572	26.24	RMS	31.8	-17.3	40.74	54	-13.26	-	-	41	347	V

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

Pk - Peak detector

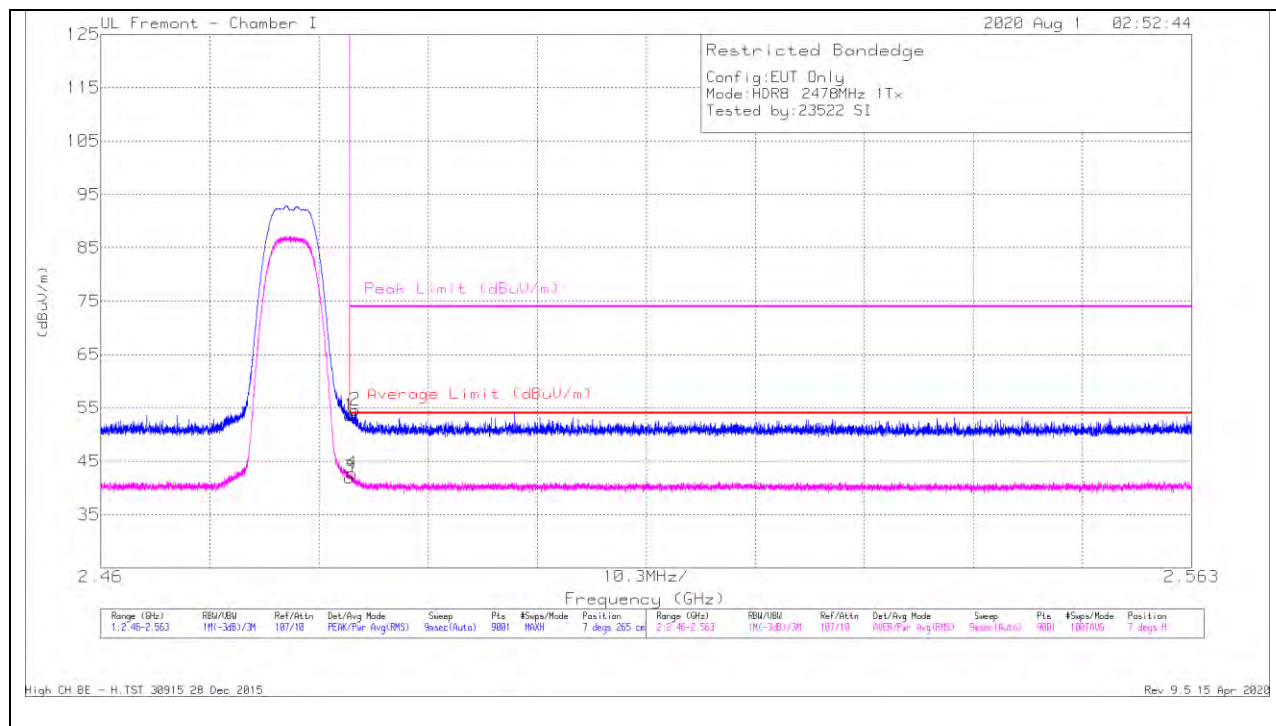
RMS - RMS detection

HDR8_2404_iPA_V_1Tx_Ant2_Index 0F.DAT 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	38.89	Pk	32.4	-17.7	53.59	-	-	74	-20.41	7	265	H
2	* 2.48406	39.92	Pk	32.4	-17.7	54.62	-	-	74	-19.38	7	265	H
3	* 2.48351	27.27	RMS	32.4	-17.7	41.97	54	-12.03	-	-	7	265	H
4	* 2.48371	28.06	RMS	32.4	-17.7	42.76	54	-11.24	-	-	7	265	H

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

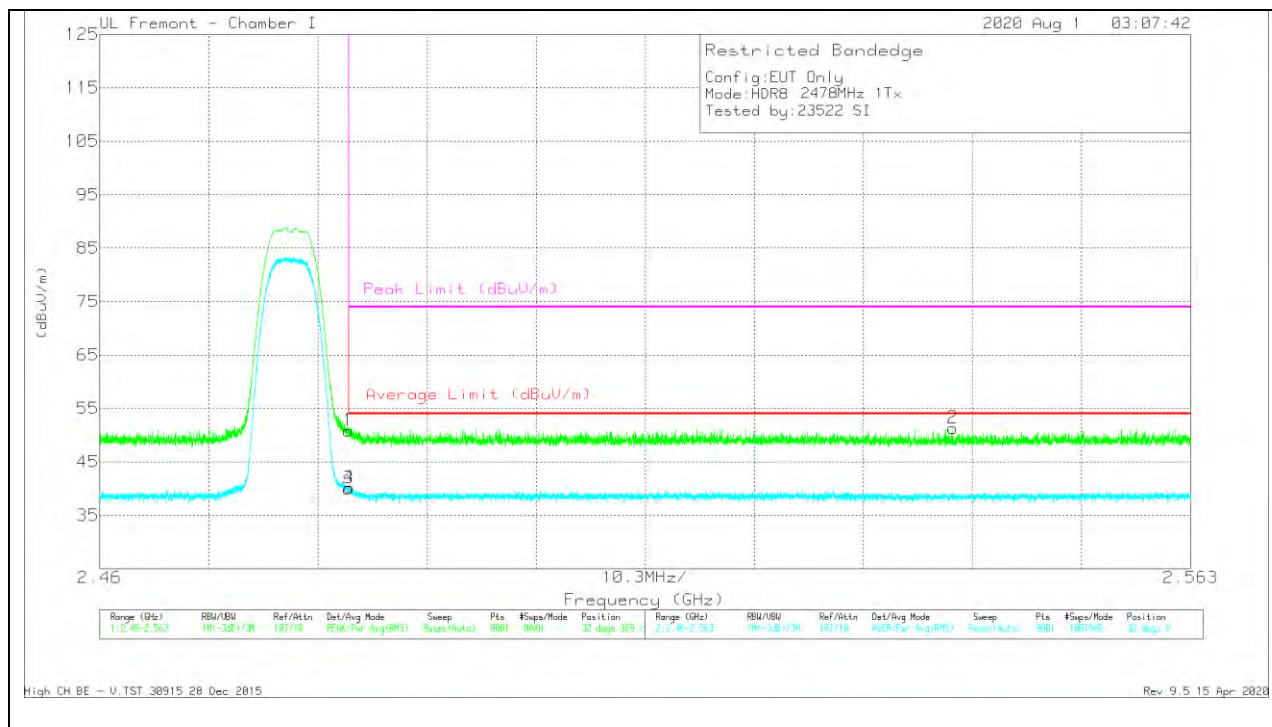
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pa d (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	36.13	Pk	32.4	-17.7	50.83	-	-	74	-23.17	32	369	V
2	2.54053	36.94	Pk	32.2	-17.8	51.34	-	-	74	-22.66	32	369	V
3	* 2.48351	25.33	RMS	32.4	-17.7	40.03	54	-13.97	-	-	32	369	V
4	* 2.48353	25.5	RMS	32.4	-17.7	40.2	54	-13.8	-	-	32	369	V

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

Pk - Peak detector

RMS - RMS detection

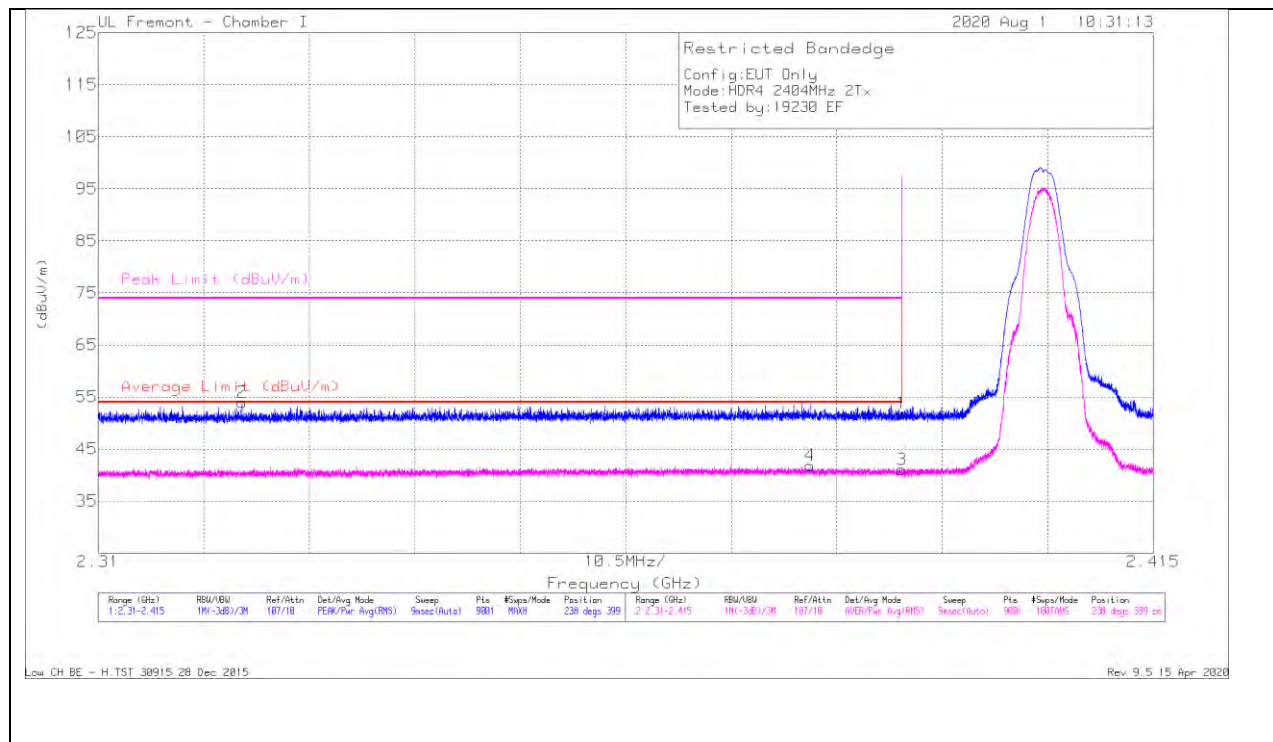
High CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

10.2.5. HIGH POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/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	37.23	Pk	31.9	-17.3	51.83	-	-	74	-22.17	238	399	H
2	* 2.3243	39.66	Pk	31.5	-17.2	53.96	-	-	74	-20.04	238	399	H
3	* 2.38999	26.45	RMS	31.9	-17.3	41.05	54	-12.95	-	-	238	399	H
4	* 2.38085	27.2	RMS	31.9	-17.3	41.8	54	-12.2	-	-	238	399	H

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

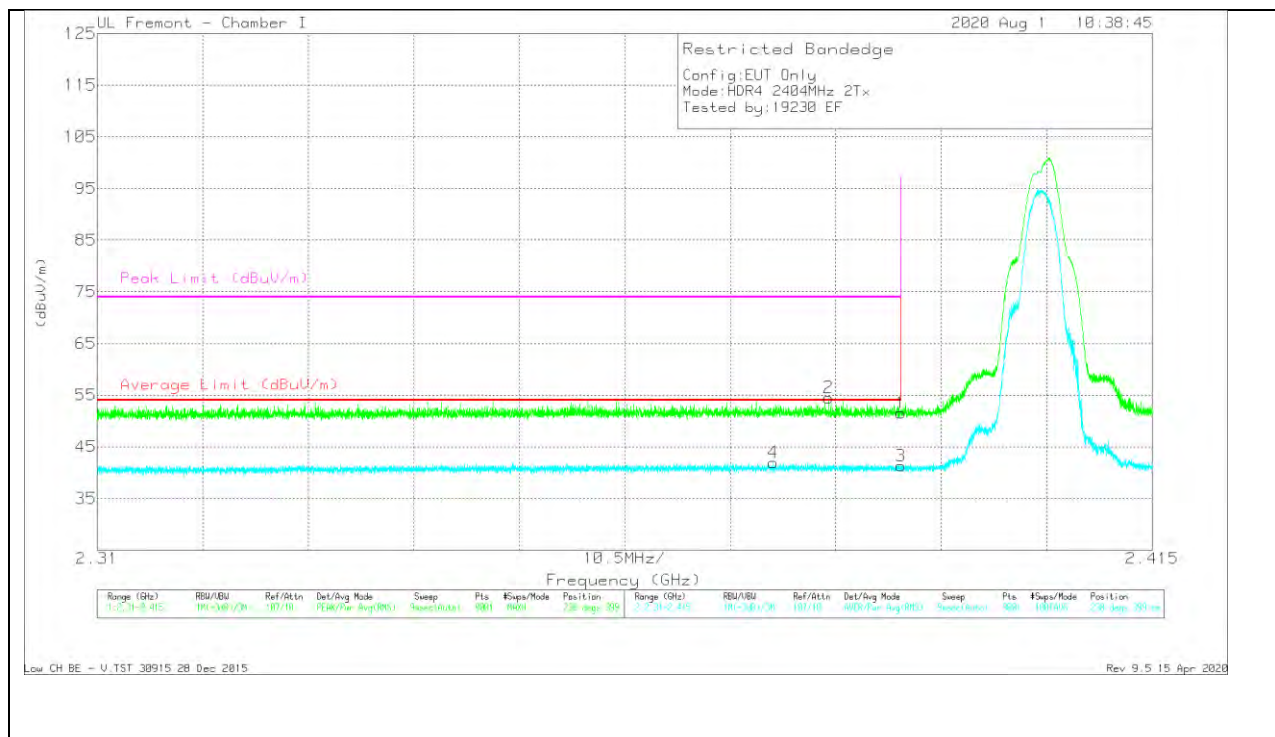
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T562 (dB/m)	Amp/Cbl/Ftr/Psd (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	36.92	Pk	31.9	-17.3	51.52	-	-	74	-22.48	238	399	V
2	* 2.38277	39.89	Pk	31.9	-17.3	54.49	-	-	74	-19.51	238	399	V
3	* 2.38999	26.69	RMS	31.9	-17.3	41.29	54	-12.71	-	-	238	399	V
4	* 2.37726	27.32	RMS	31.9	-17.3	41.92	54	-12.08	-	-	238	399	V

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

Pk - Peak detector

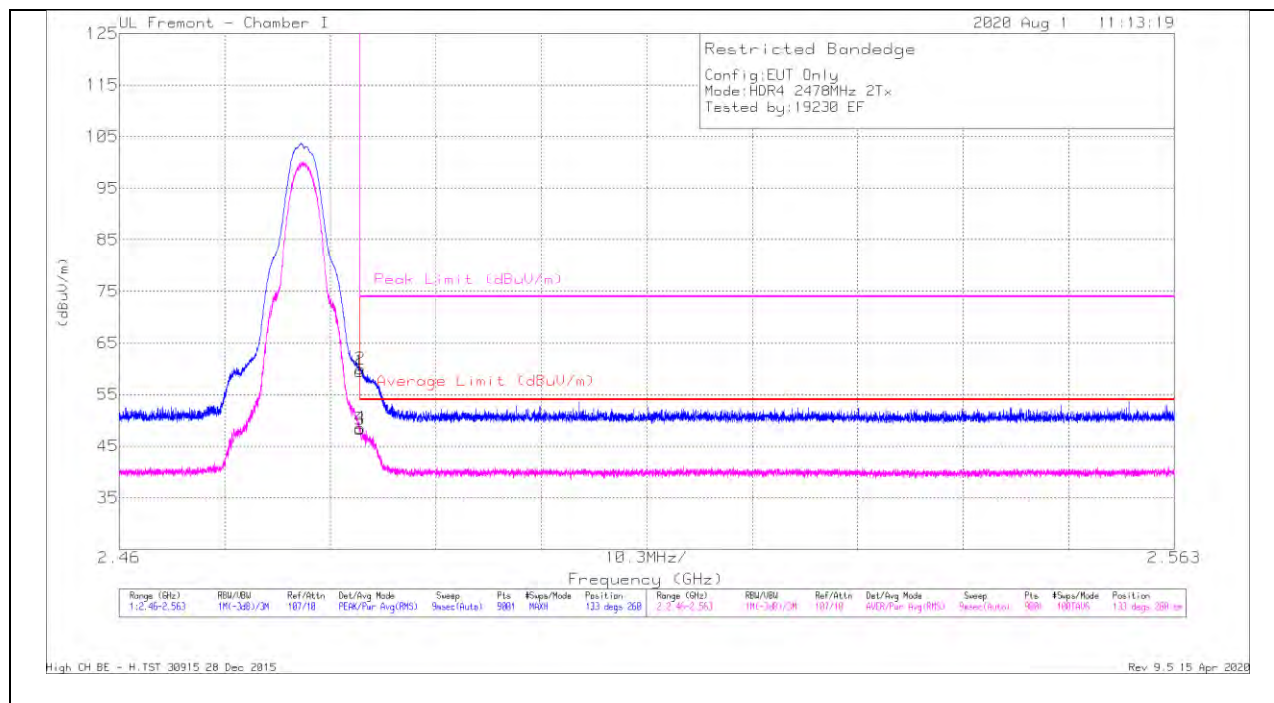
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Chl/Filt/Pa d (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	44.79	Pk	32.4	-17.7	59.49	-	-	74	-14.51	133	260	H
2	* 2.48354	45.28	Pk	32.4	-17.7	59.98	-	-	74	-14.02	133	260	H
3	* 2.48351	33.59	RMS	32.4	-17.7	48.29	54	-5.71	-	-	133	260	H
4	* 2.48352	33.82	RMS	32.4	-17.7	48.52	54	-5.48	-	-	133	260	H

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

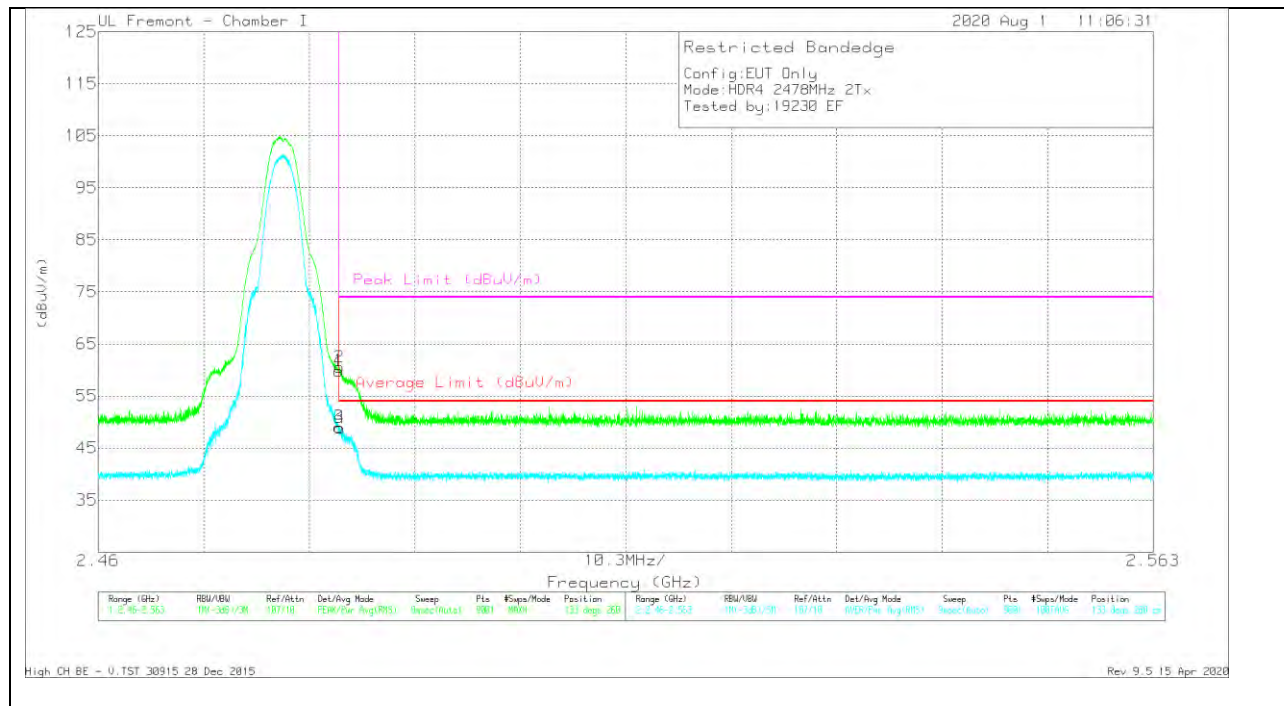
PK - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pa d (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	45.17	Pk	32.4	-17.7	59.87	-	-	74	-14.13	133	260	V
2	* 2.48355	45.83	Pk	32.4	-17.7	60.53	-	-	74	-13.47	133	260	V
3	* 2.48351	34.3	RMS	32.4	-17.7	49	54	-5	-	-	133	260	V
4	* 2.48359	34.19	RMS	32.4	-17.7	48.89	54	-5.11	-	-	133	260	V

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

PK - Peak detector

RMS - RMS detection

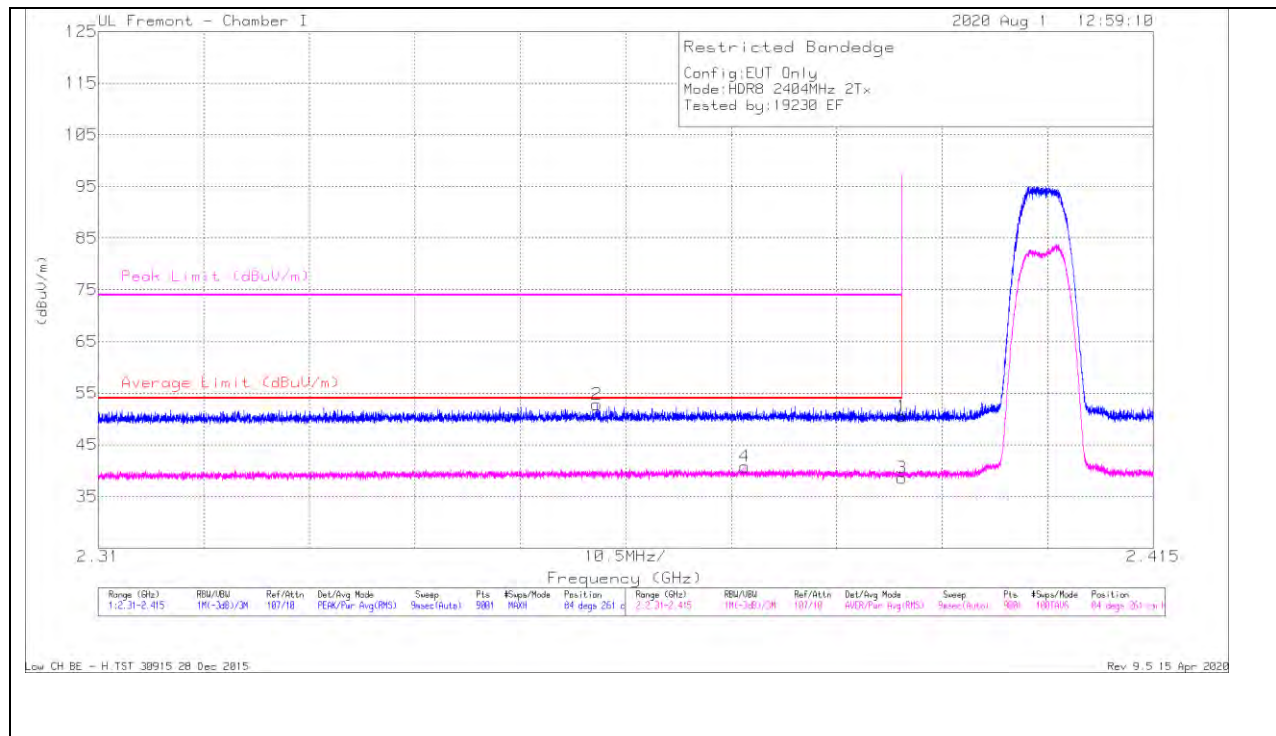
High CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

10.2.6. HIGH POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Filt/Pa d (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	35.93	Pk	31.9	-17.3	50.53	-	-	74	-23.47	84	261	H
2	* 2.35962	38.33	Pk	31.8	-17.3	52.83	-	-	74	-21.17	84	261	H
3	* 2.38999	23.98	RMS	31.9	-17.3	38.58	54	-15.42	-	-	84	261	H
4	* 2.37434	26.17	RMS	31.9	-17.3	40.77	54	-13.23	-	-	84	261	H

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

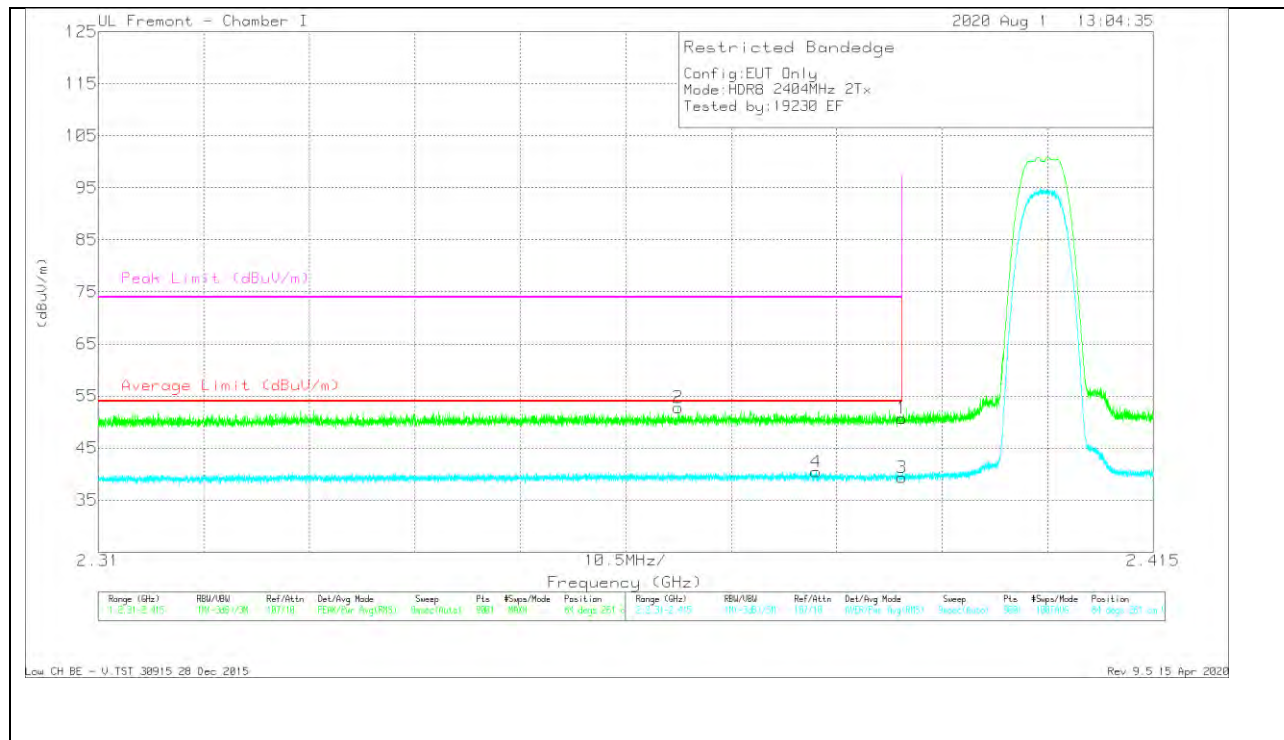
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	36.11	Pk	31.9	-17.3	50.71	-	-	74	-23.29	84	261	V
2	* 2.36773	38.19	Pk	31.9	-17.3	52.79	-	-	74	-21.21	84	261	V
3	* 2.38999	24.74	RMS	31.9	-17.3	39.34	54	-14.66	-	-	84	261	V
4	* 2.38145	25.84	RMS	31.9	-17.3	40.44	54	-13.56	-	-	84	261	V

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

Pk - Peak detector

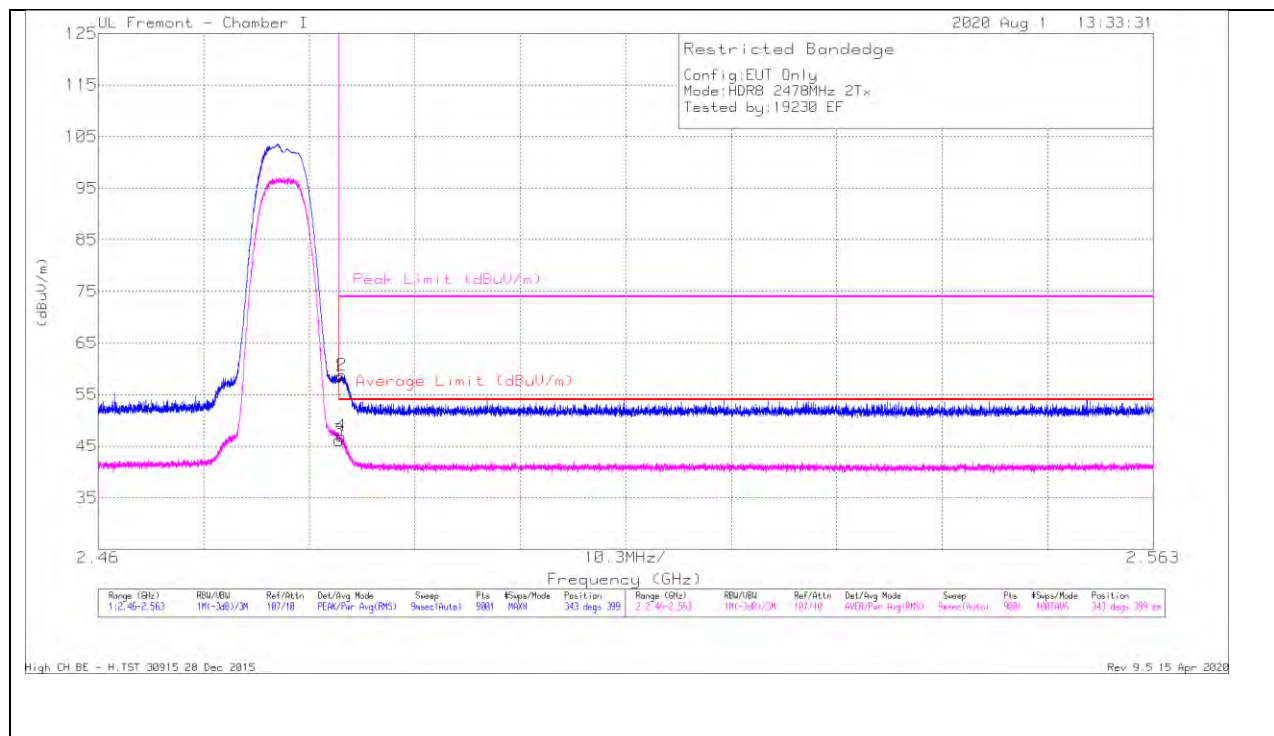
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	43.79	Pk	32.4	-17.7	58.49	-	-	74	-15.51	343	399	H
2	* 2.4838	44.07	Pk	32.4	-17.7	58.77	-	-	74	-15.23	343	399	H
3	* 2.48351	31.43	RMS	32.4	-17.7	46.13	54	-7.87	-	-	343	399	H
4	* 2.48371	32.26	RMS	32.4	-17.7	46.96	54	-7.04	-	-	343	399	H

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

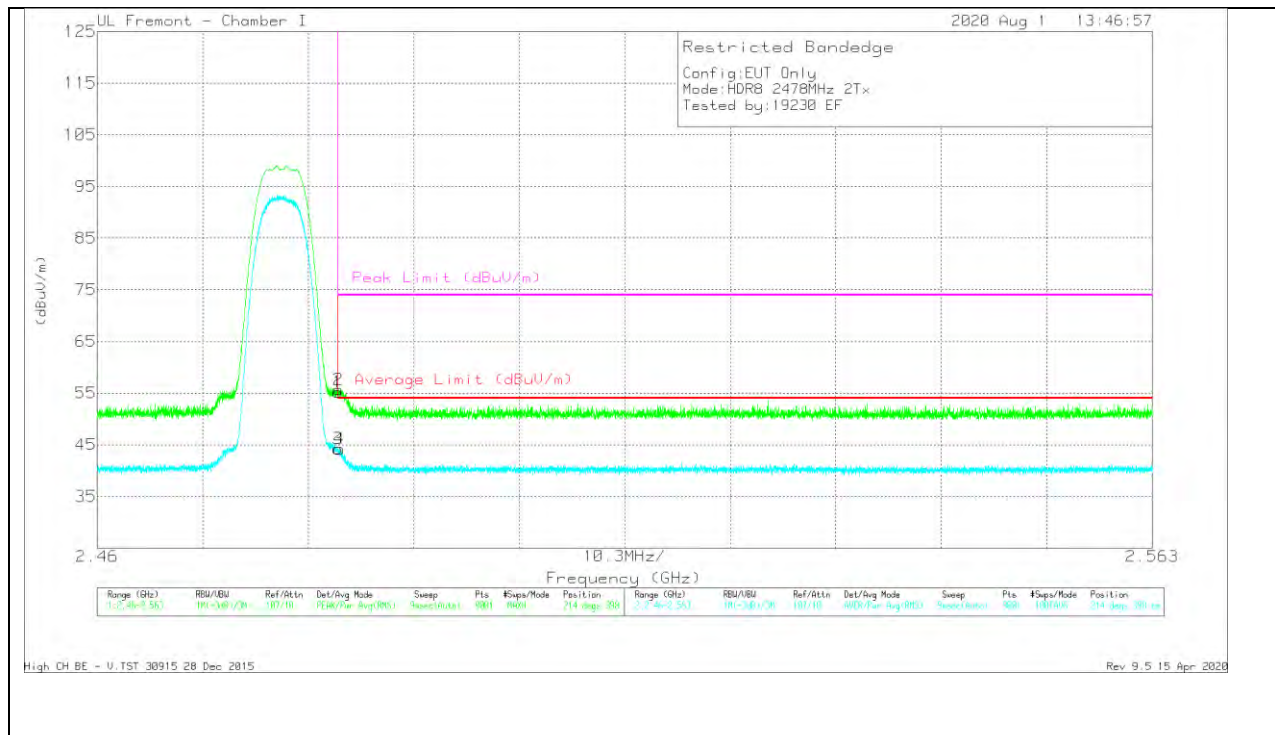
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/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	40.48	Pk	32.4	-17.7	55.18	-	-	74	-18.82	214	398	V
2	* 2.48353	40.98	Pk	32.4	-17.7	55.68	-	-	74	-18.32	214	398	V
3	* 2.48351	29.5	RMS	32.4	-17.7	44.2	54	-9.8	-	-	214	398	V
4	* 2.48364	29.48	RMS	32.4	-17.7	44.18	54	-9.82	-	-	214	398	V

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

Pk - Peak detector

RMS - RMS detection

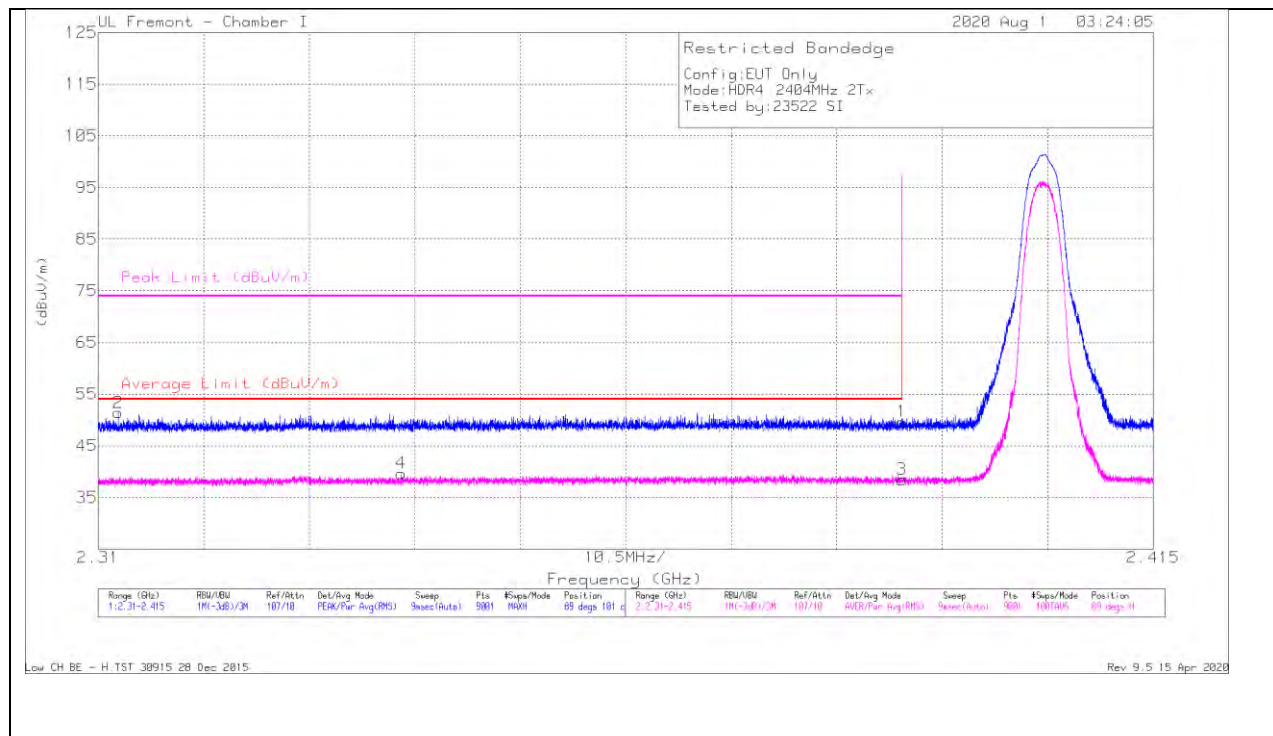
High CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

10.2.7. LOW POWER HDR TXBF (HDR4)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

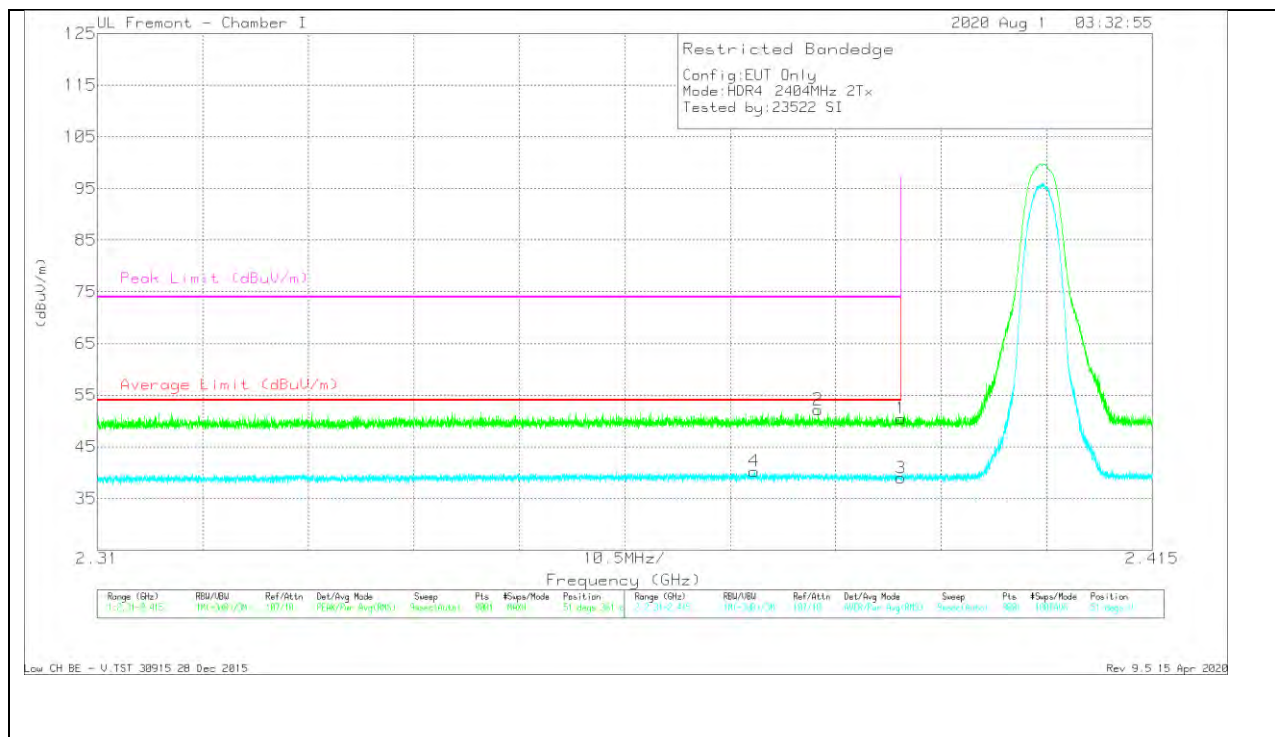


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	35.05	Pk	31.9	-17.3	49.65	-	-	74	-24.35	89	101	H
2	* 2.31197	37.19	Pk	31.4	-17.2	51.39	-	-	74	-22.61	89	101	H
3	* 2.38999	23.85	RMS	31.9	-17.3	38.45	54	-15.55	-	-	89	101	H
4	* 2.34016	25.26	RMS	31.6	-17.2	39.66	54	-14.34	-	-	89	101	H

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

Low CH BE - H.TST 30915 28 Dec 2015
Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T562 (dB/m)	Amp/Cbl/Ftr/Psd (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	35.9	Pk	31.9	-17.3	50.5	-	-	74	-23.5	51	361	V
2	* 2.38173	37.56	Pk	31.9	-17.3	52.16	-	-	74	-21.84	51	361	V
3	* 2.38999	24.39	RMS	31.9	-17.3	38.99	54	-15.01	-	-	51	361	V
4	* 2.37538	25.66	RMS	31.9	-17.3	40.26	54	-13.74	-	-	51	361	V

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

Pk - Peak detector

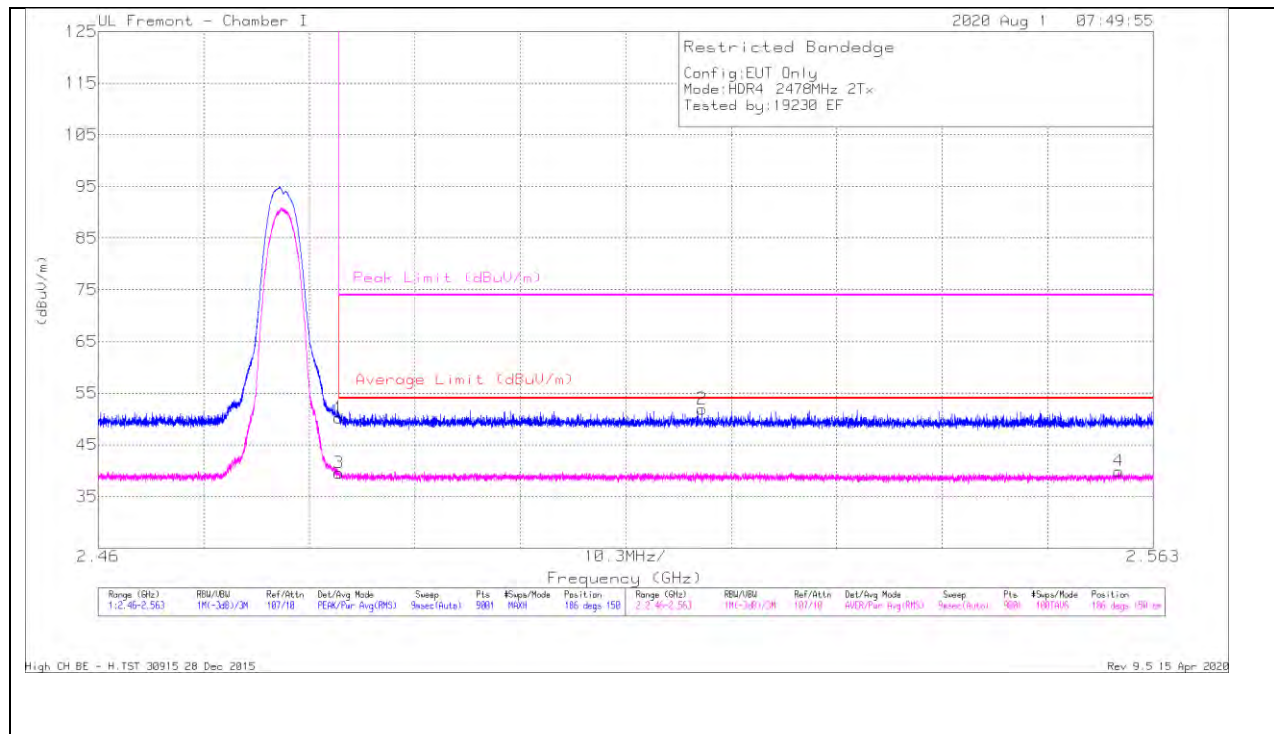
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	35.51	Pk	32.4	-17.7	50.21	-	-	74	-23.79	186	150	H
2	2.51893	37.45	Pk	32.3	-17.8	51.95	-	-	74	-22.05	186	150	H
3	* 2.48351	24.85	RMS	32.4	-17.7	39.55	54	-14.45	-	-	186	150	H
4	2.55962	25.4	RMS	32.3	-17.8	39.9	54	-14.1	-	-	186	150	H

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

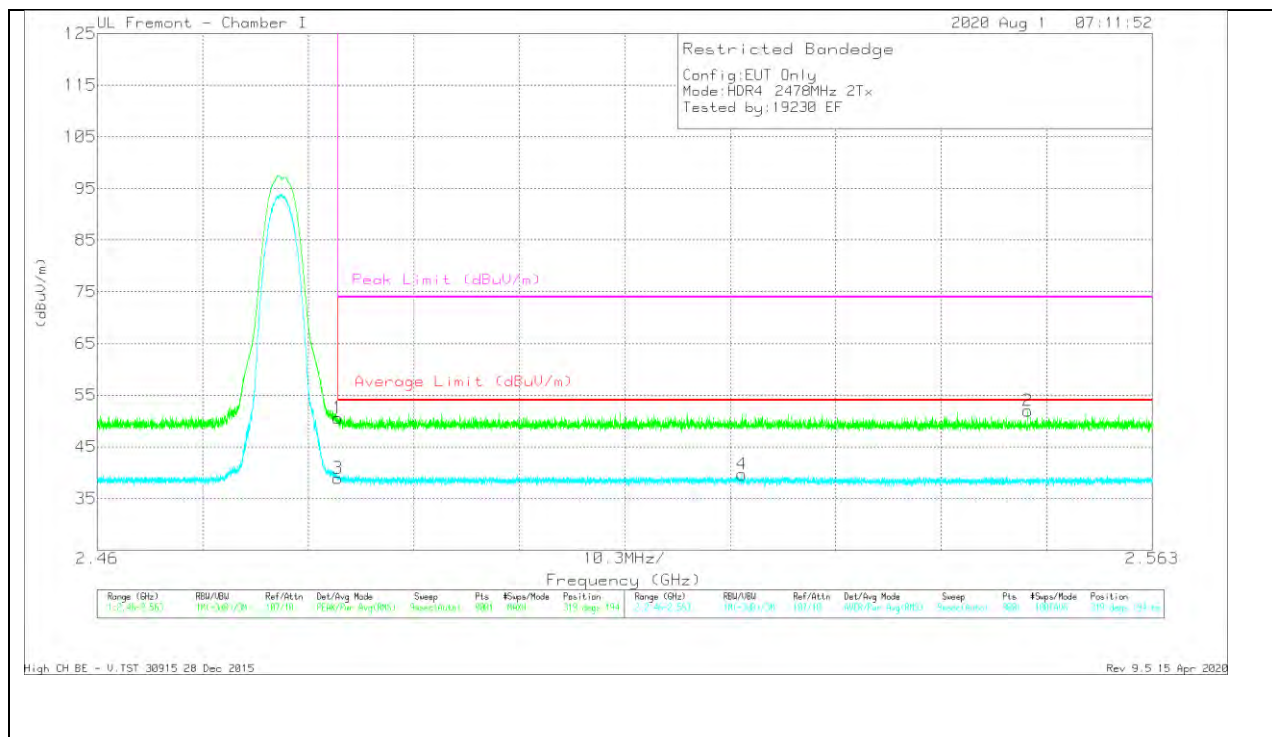
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T562 (dB/m)	Amp/Cbl/Ftr/Psd (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	35.88	Pk	32.4	-17.7	50.58	-	-	74	-23.42	319	194	V
2	2.55083	37.47	Pk	32.3	-17.8	51.97	-	-	74	-22.03	319	194	V
3	* 2.48351	24.21	RMS	32.4	-17.7	38.91	54	-15.09	-	-	319	194	V
4	2.52292	25.17	RMS	32.3	-17.8	39.67	54	-14.33	-	-	319	194	V

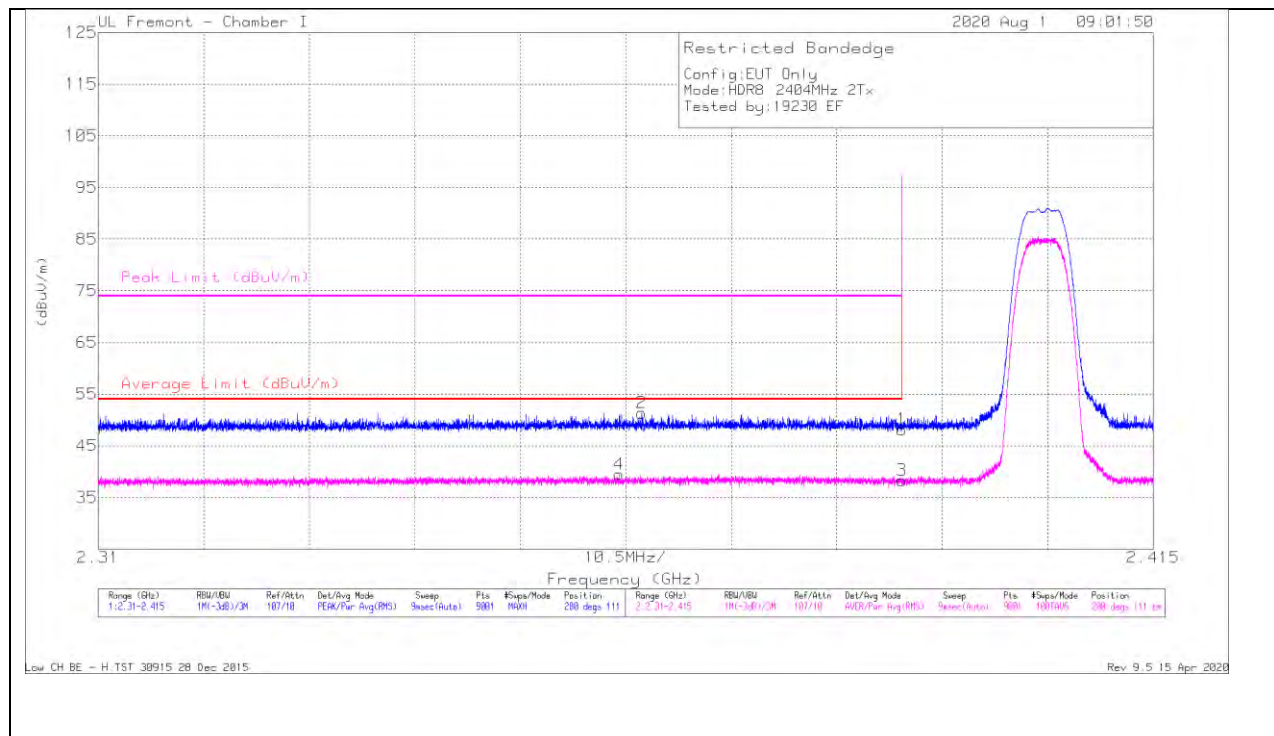
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

High CH BE - V.TST 30915 28 Dec 2015
Rev 9.5 15 Apr 2020

10.2.8. LOW POWER HDR TXBF (HDR8)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pa d (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	33.58	Pk	31.9	-17.3	48.18	-	-	74	-25.82	280	111	H
2	* 2.36408	36.86	Pk	31.8	-17.3	51.36	-	-	74	-22.64	280	111	H
3	* 2.38999	23.69	RMS	31.9	-17.3	38.29	54	-15.71	-	-	280	111	H
4	* 2.36185	24.98	RMS	31.8	-17.3	39.48	54	-14.52	-	-	280	111	H

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

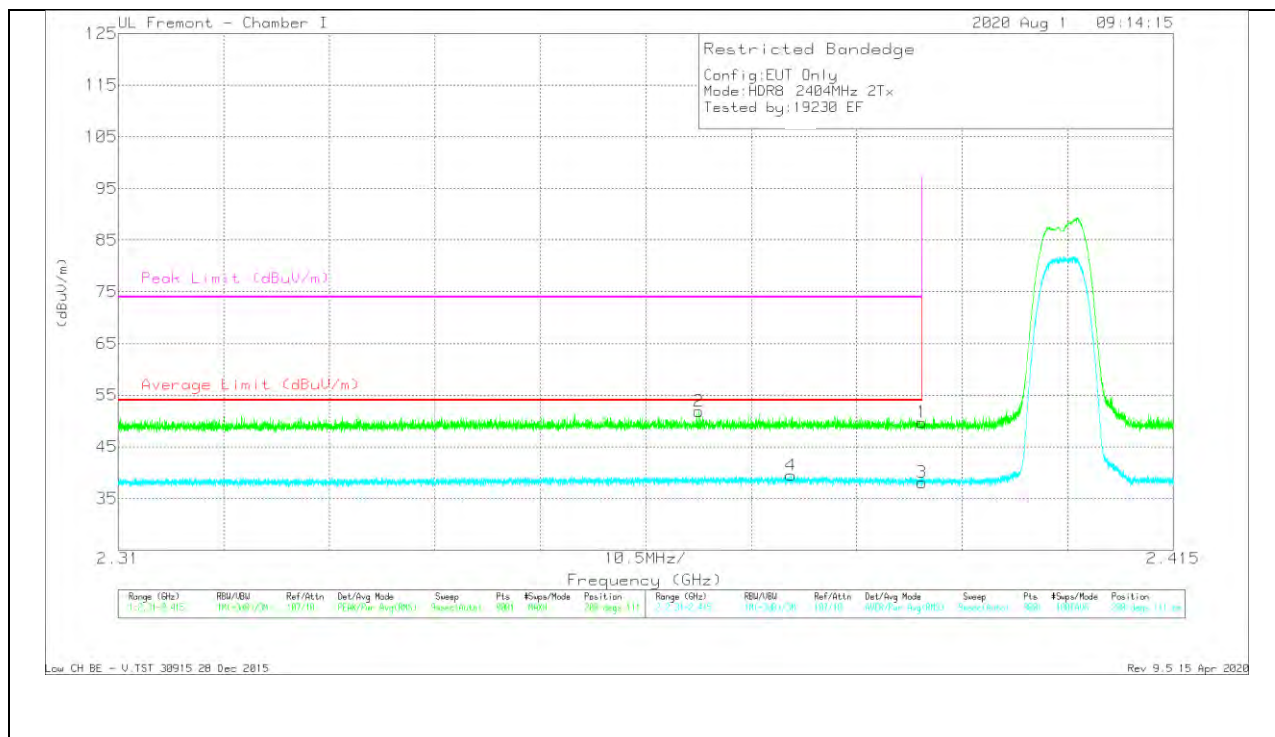
Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T562 (dB/m)	Amp/Cbl/Ftr/Psd (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	35.15	Pk	31.9	-17.3	49.75	-	-	74	-24.25	280	111	V
2	* 2.36779	37.27	Pk	31.9	-17.3	51.87	-	-	74	-22.13	280	111	V
3	* 2.38999	23.5	RMS	31.9	-17.3	38.1	54	-15.9	-	-	280	111	V
4	* 2.37695	24.87	RMS	31.9	-17.3	39.47	54	-14.53	-	-	280	111	V

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

Pk - Peak detector

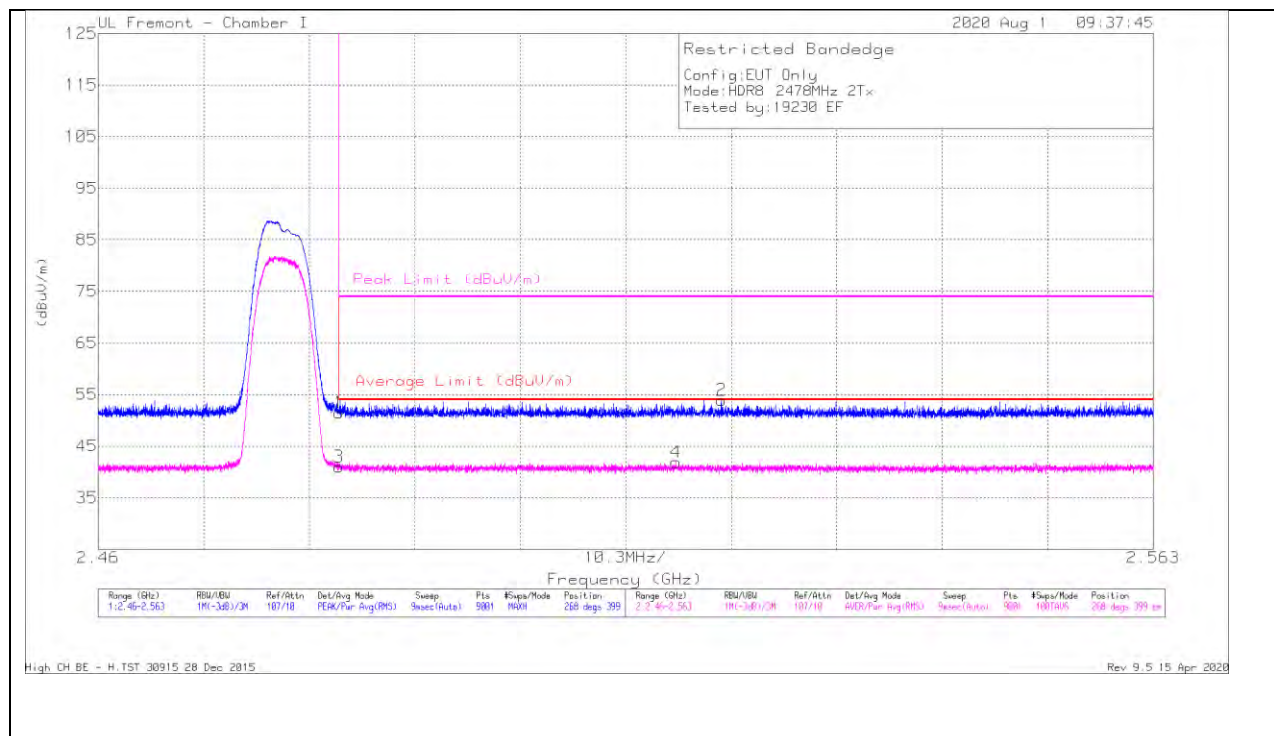
RMS - RMS detection

Low CH BE - V.TST 30915 28 Dec 2015

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BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	36.77	Pk	32.4	-17.7	51.47	-	-	74	-22.53	268	399	H
2	2.52086	39.39	Pk	32.3	-17.8	53.89	-	-	74	-20.11	268	399	H
3	* 2.48351	26.27	RMS	32.4	-17.7	40.97	54	-13.03	-	-	268	399	H
4	2.5164	27.27	RMS	32.4	-17.8	41.87	54	-12.13	-	-	268	399	H

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

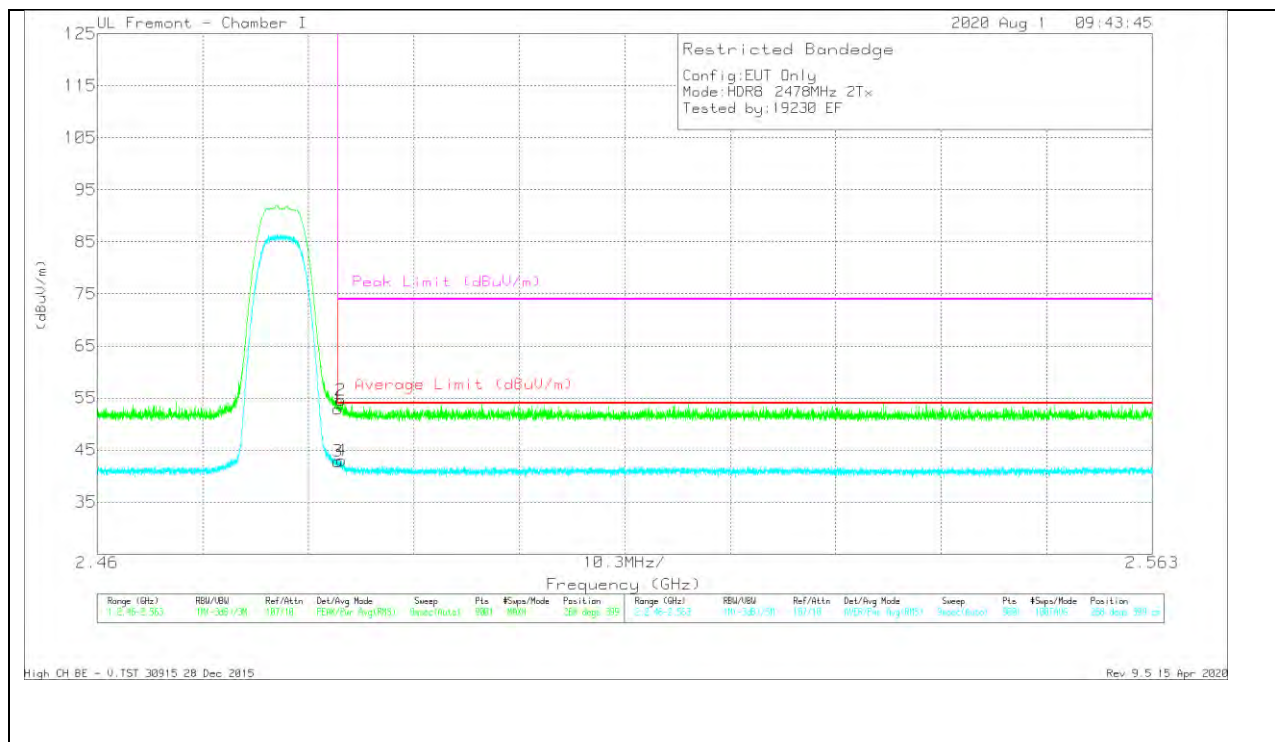
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fitr/Pa d (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	38.19	Pk	32.4	-17.7	52.89	-	-	74	-21.11	268	399	V
2	* 2.4838	39.87	Pk	32.4	-17.7	54.57	-	-	74	-19.43	268	399	V
3	* 2.48351	28.14	RMS	32.4	-17.7	42.84	54	-11.16	-	-	268	399	V
4	* 2.48385	28.29	RMS	32.4	-17.7	42.99	54	-11.01	-	-	268	399	V

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

Pk - Peak detector

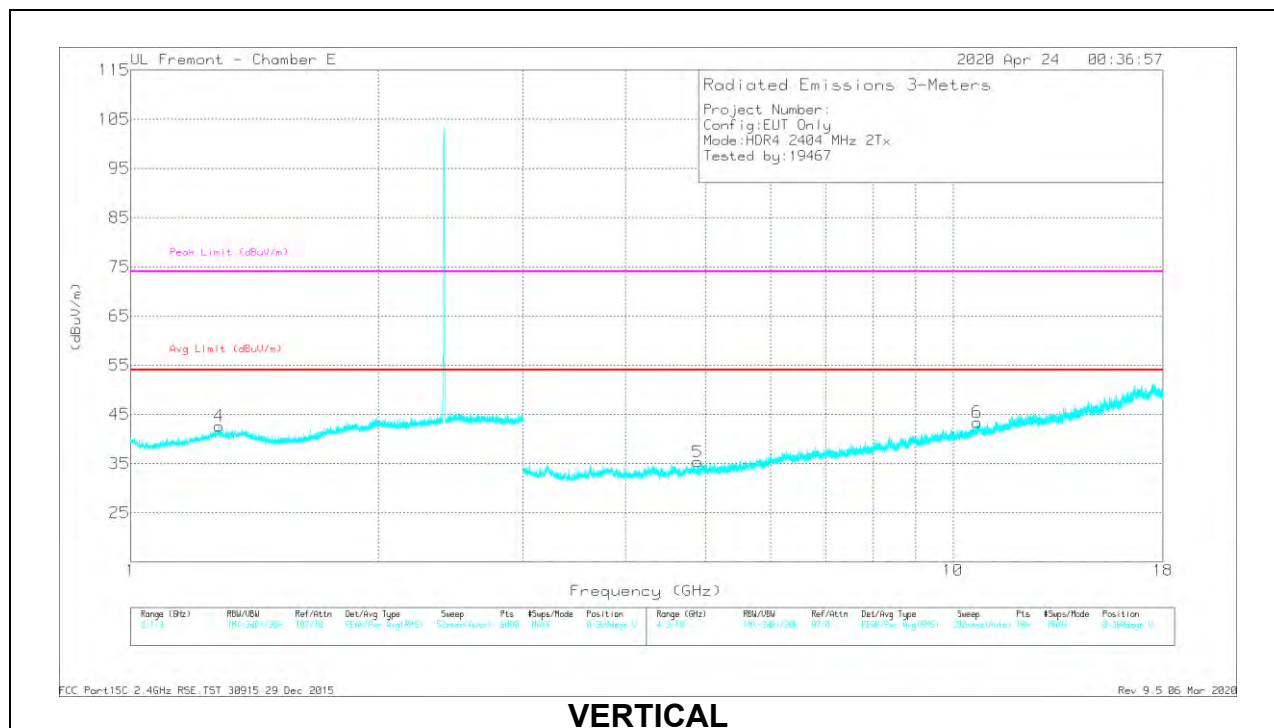
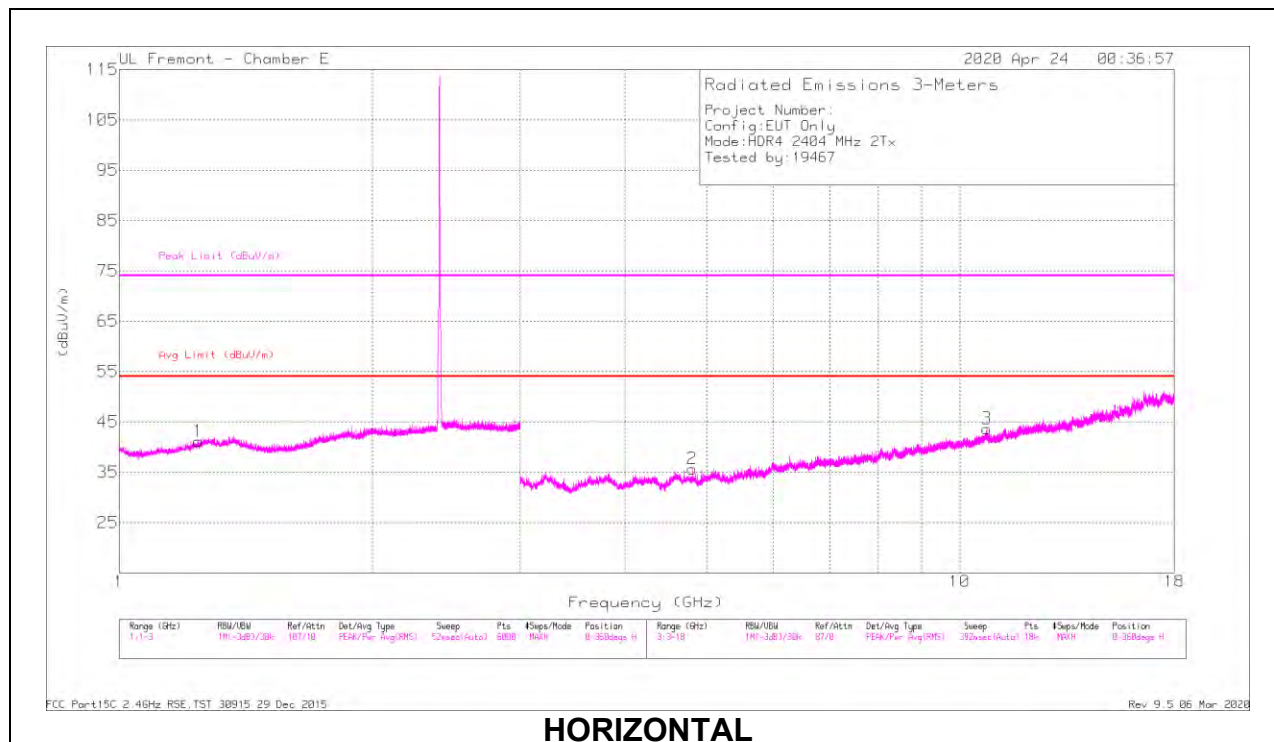
RMS - RMS detection

High CH BE - V.TST 30915 28 Dec 2015

Rev 9.5 15 Apr 2020

10.2.9. 2TX BF HDR4, HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

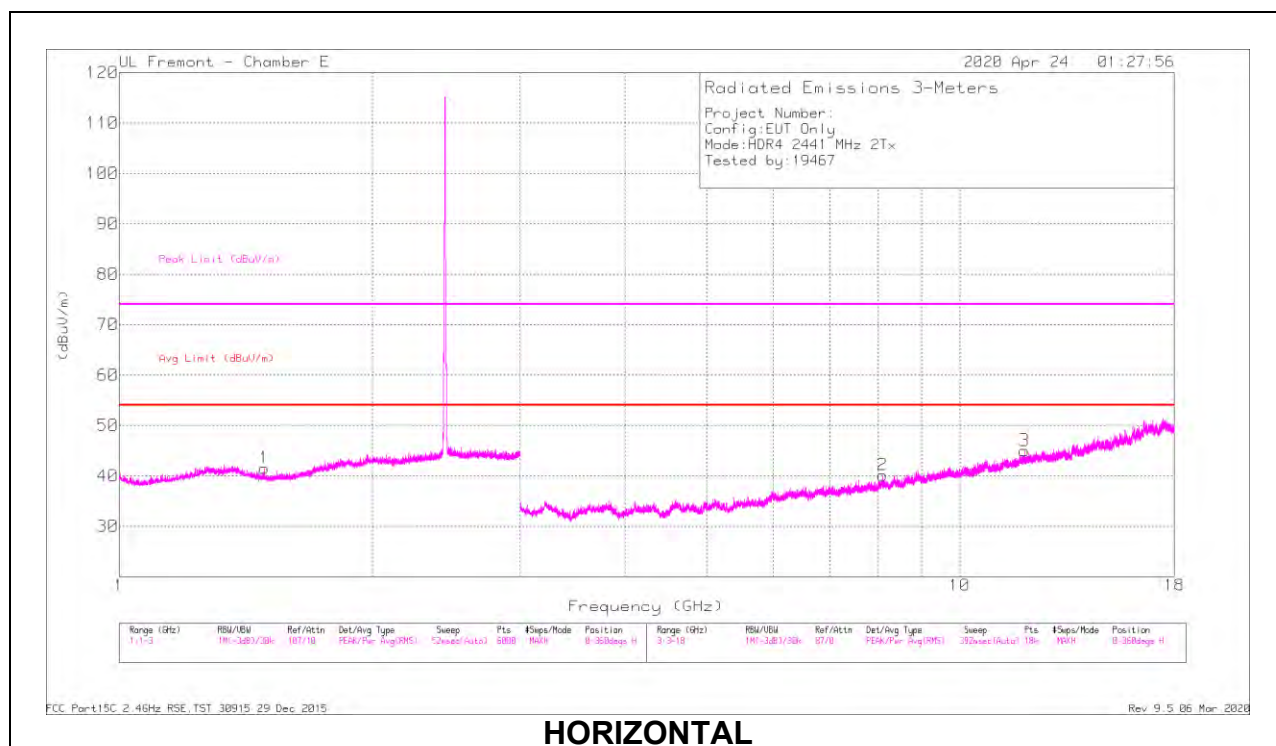
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.24172	45.03	PK2	29	-26.3	47.73	-	-	74	-26.27	65	200	H
	* 1.2411	33.95	MAv1	29	-26.3	36.65	54	-17.35	-	-	65	200	H
4	* 1.2814	45.64	PK2	29.7	-26.3	49.04	-	-	74	-24.96	124	200	V
	* 1.27921	33.94	MAv1	29.7	-26.3	37.34	54	-16.66	-	-	124	200	V
2	* 4.80805	40.1	PK2	34.2	-31.8	42.5	-	-	74	-31.5	306	101	H
	* 4.80776	29.5	MAv1	34.2	-31.8	31.9	54	-22.1	-	-	306	101	H
3	* 10.7744	36.22	PK2	37.8	-24.3	49.72	-	-	74	-24.28	88	101	H
	* 10.77732	25.49	MAv1	37.7	-24.3	38.89	54	-15.11	-	-	88	101	H
5	* 4.8939	38.76	PK2	34.1	-31.2	41.66	-	-	74	-32.34	221	101	V
	* 4.89302	28.05	MAv1	34.1	-31.2	30.95	54	-23.05	-	-	221	101	V
6	* 10.69369	37.2	PK2	37.8	-25.5	49.5	-	-	74	-24.5	196	199	V
	* 10.69434	25.82	MAv1	37.8	-25.5	38.12	54	-15.88	-	-	196	199	V

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

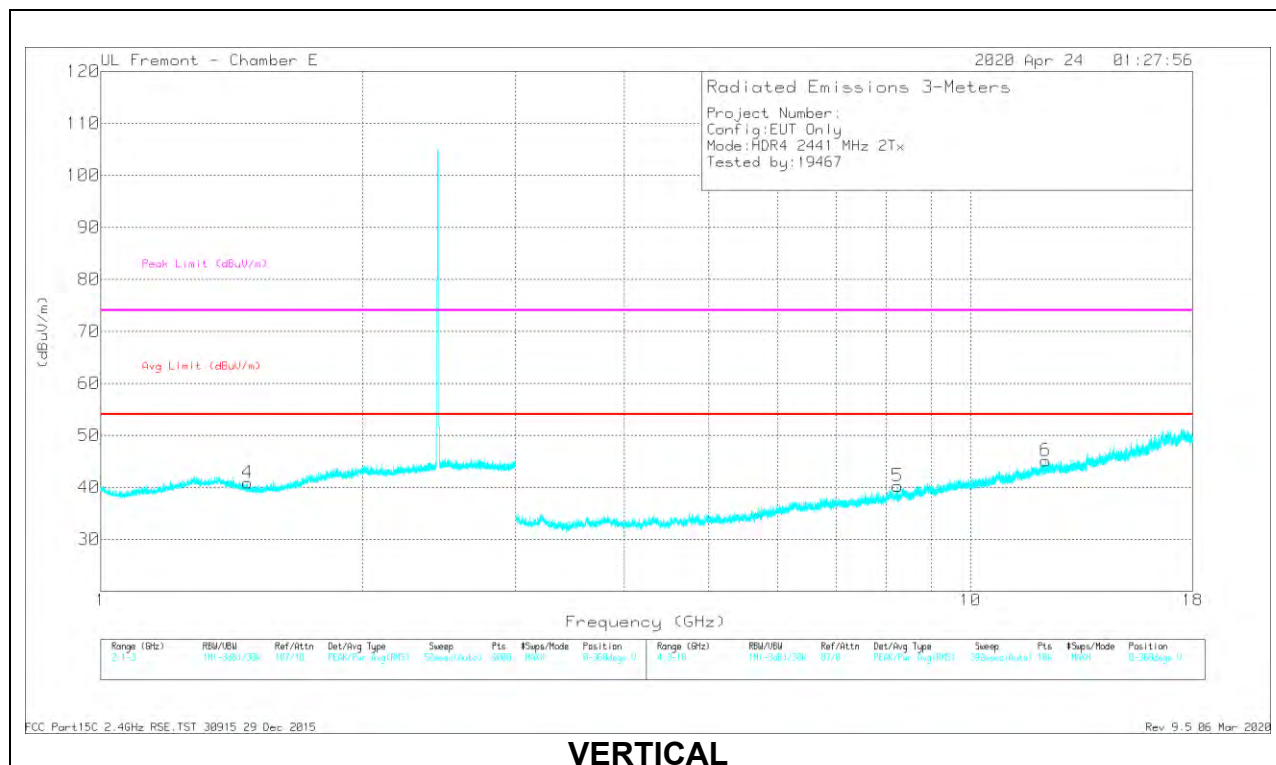
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

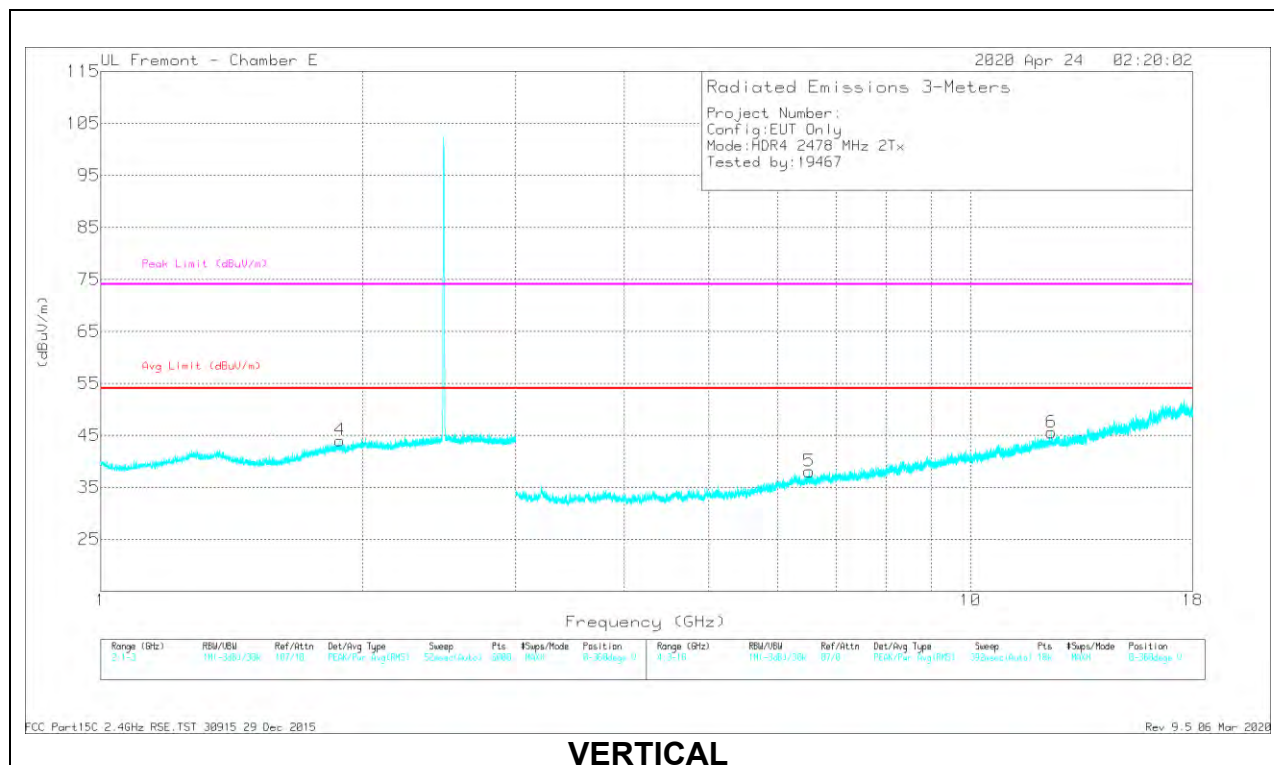
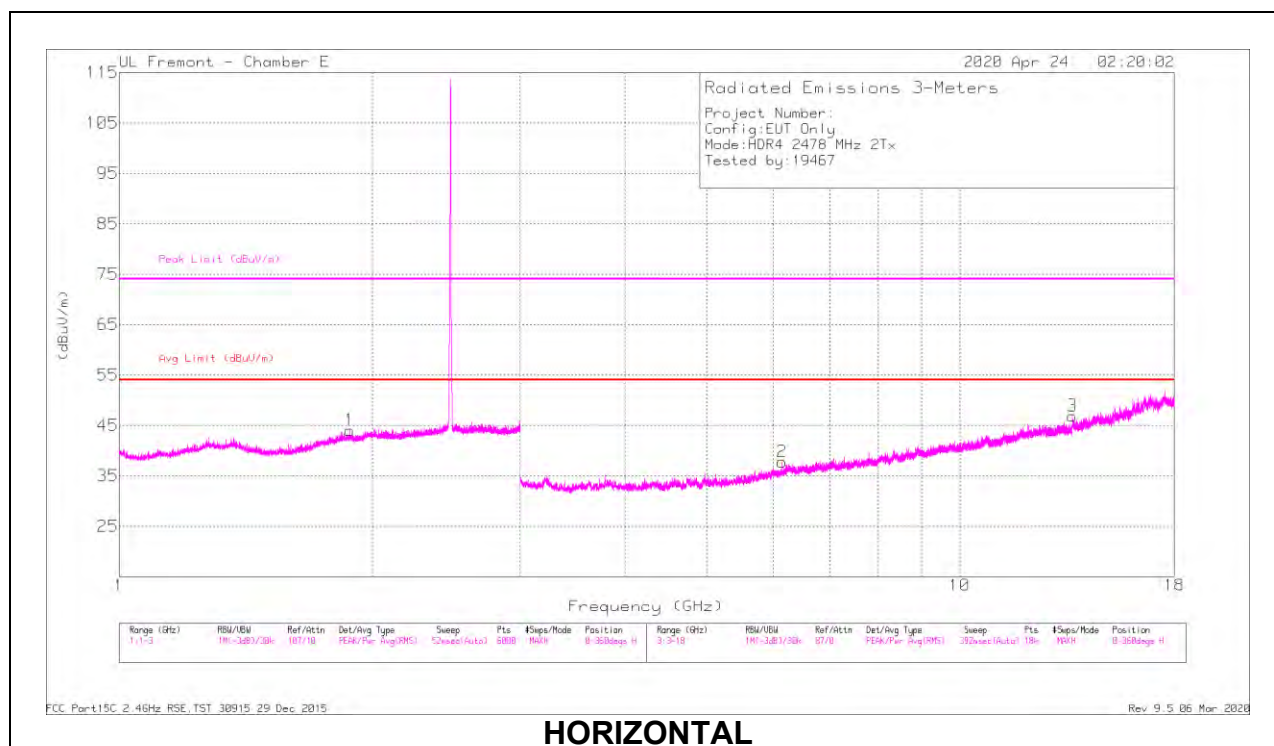
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.48609	46.24	PK2	28.3	-26.4	48.14	-	-	74	-25.86	115	224	H
	* 1.48797	34.04	MAv1	28.3	-26.4	35.94	54	-18.06	-	-	115	224	H
4	* 1.47402	45.4	PK2	28.3	-26.4	47.3	-	-	74	-26.7	260	141	V
	* 1.47395	33.96	MAv1	28.3	-26.4	35.86	54	-18.14	-	-	260	141	V
2	* 8.09932	37.58	PK2	35.8	-27.4	45.98	-	-	74	-28.02	242	107	H
	* 8.0996	26.32	MAv1	35.8	-27.4	34.72	54	-19.28	-	-	242	107	H
3	* 11.93781	35.5	PK2	38.5	-23.2	50.8	-	-	74	-23.2	147	214	H
	* 11.939	24.27	MAv1	38.6	-23.2	39.67	54	-14.33	-	-	147	214	H
5	* 8.24446	37.73	PK2	35.9	-27.7	45.93	-	-	74	-28.07	290	130	V
	* 8.24503	26.24	MAv1	35.9	-27.7	34.44	54	-19.56	-	-	290	130	V
6	* 12.19935	37.27	PK2	38.8	-23.2	52.87	-	-	74	-21.13	56	199	V
	* 12.19951	25.79	MAv1	38.8	-23.2	41.39	54	-12.61	-	-	56	199	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 12.39071	36.69	PK2	38.9	-23.2	52.39	-	-	74	-21.61	167	101	V
	* 12.39021	26.3	MAv1	38.9	-23.2	42	54	-12	-	-	167	101	V
1	1.87797	45.61	PK2	31.1	-26.5	50.21	-	-	-	-	302	165	H
4	1.88344	46.33	PK2	31	-26.5	50.83	-	-	-	-	312	156	V
2	6.14521	40.39	PK2	35.4	-30	45.79	-	-	-	-	58	400	H
5	6.52579	37.58	PK2	35.7	-28.5	44.78	-	-	-	-	167	268	V
3	13.62473	36.21	PK2	38.6	-21.8	53.01	-	-	-	-	97	268	H

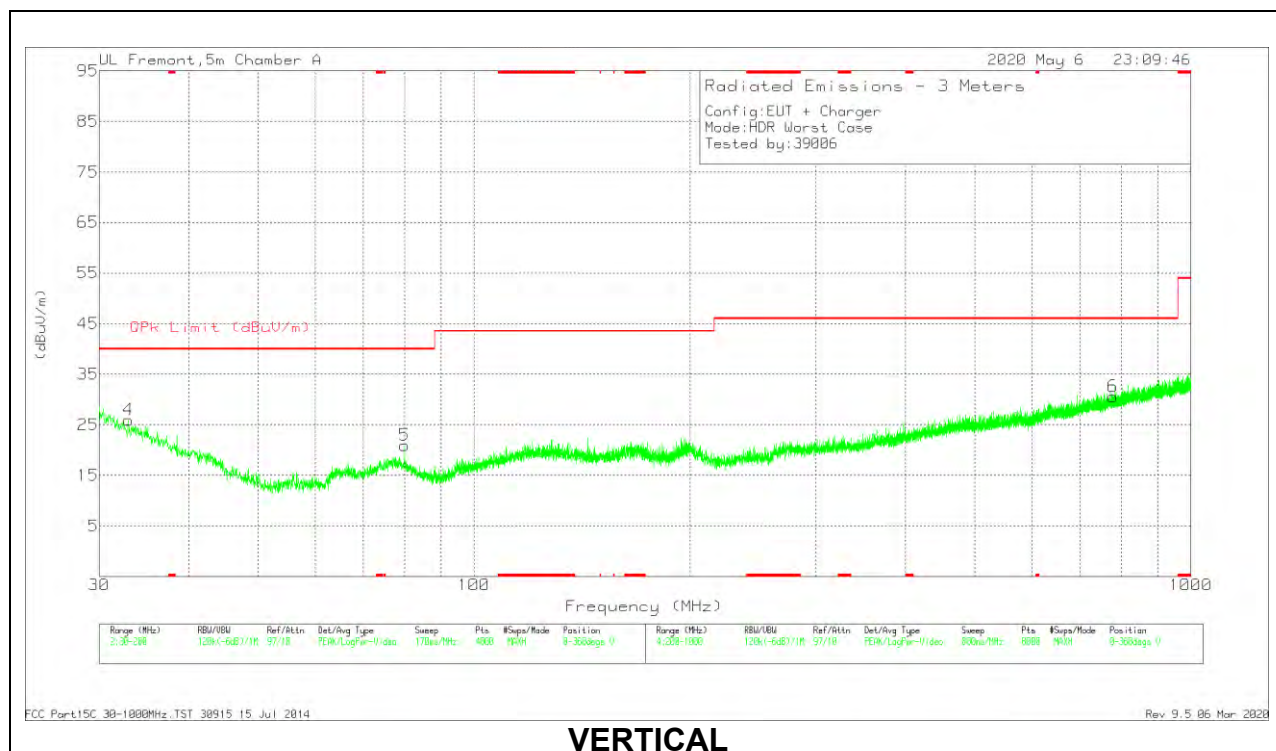
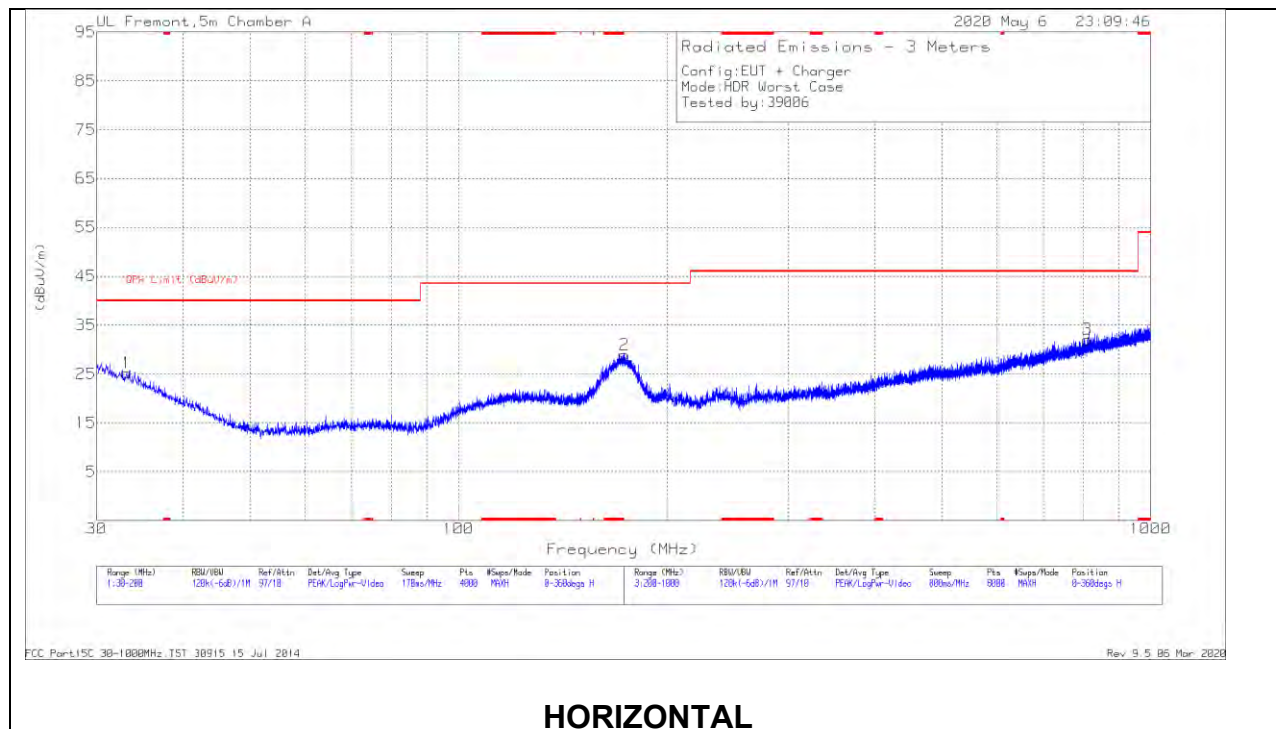
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.3. WORST CASE BELOW 1 GHz

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



Below 1GHz Data

Trace Markers

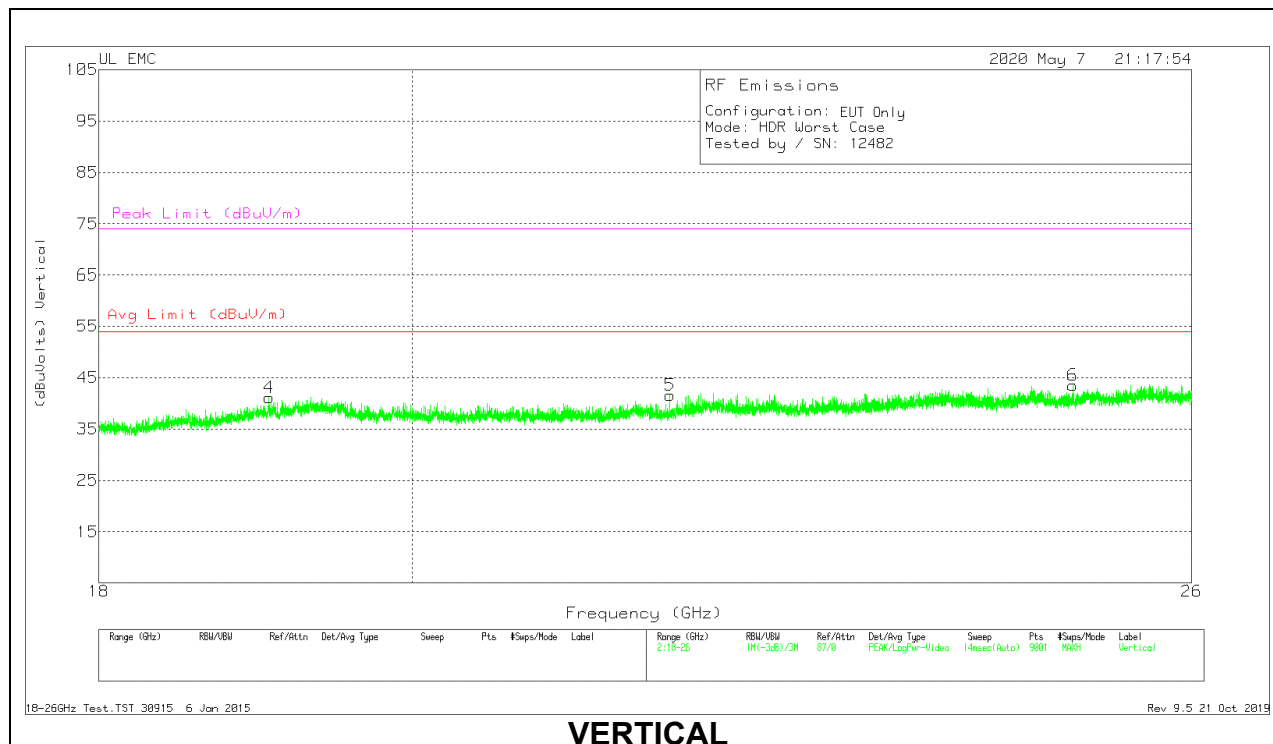
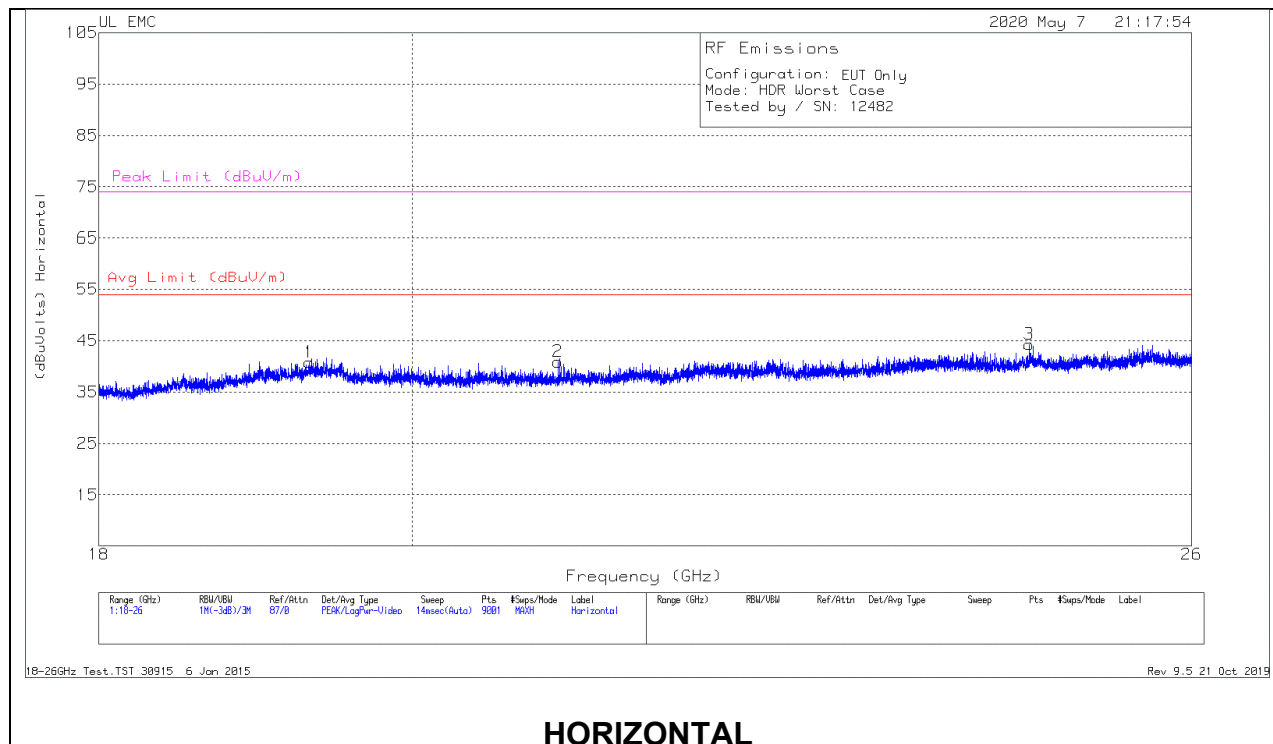
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0181575 (dB)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	32.9333	28.43	Pk	24.7	-27.2	25.93	40	-14.07	0-360	100	V
1	33.1458	27.77	Pk	24.6	-27.2	25.17	40	-14.83	0-360	107	H
5	79.9929	34.05	Pk	13.4	-26.5	20.95	40	-19.05	0-360	100	V
2	173.8572	36.92	Pk	17.4	-25.4	28.92	43.52	-14.6	0-360	107	H
6	778.7752	26.82	Pk	27.1	-23.4	30.52	46.02	-15.5	0-360	291	V
3	810.4794	27.74	Pk	27.5	-23.2	32.04	46.02	-13.98	0-360	295	H

Pk - Peak detector

FCC Part15C 30-1000MHz.TST 30915 15 Jul 2014
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10.4. WORST CASE 18-26 GHZ

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



18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T125 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.32	36.46	Pk	32.7	-18.9	-9.5	40.76	54	-13.24	74	-33.24
2	21.00622	38.49	Pk	33.1	-21.2	-9.5	40.89	54	-13.11	74	-33.11
3	24.61689	38.49	Pk	34.1	-18.8	-9.5	44.29	54	-9.71	74	-29.71
4	19.06044	37.52	Pk	32.7	-19.6	-9.5	41.12	54	-12.88	74	-32.88
5	21.81244	38.59	Pk	33.2	-20.7	-9.5	41.59	54	-12.41	74	-32.41
6	24.98133	38.4	Pk	34.1	-19.5	-9.5	43.5	54	-10.5	74	-30.5

Pk - Peak detector

18-26GHz Test.TST 30915 6 Jan 2015
Rev 9.5 21 Oct 2019

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

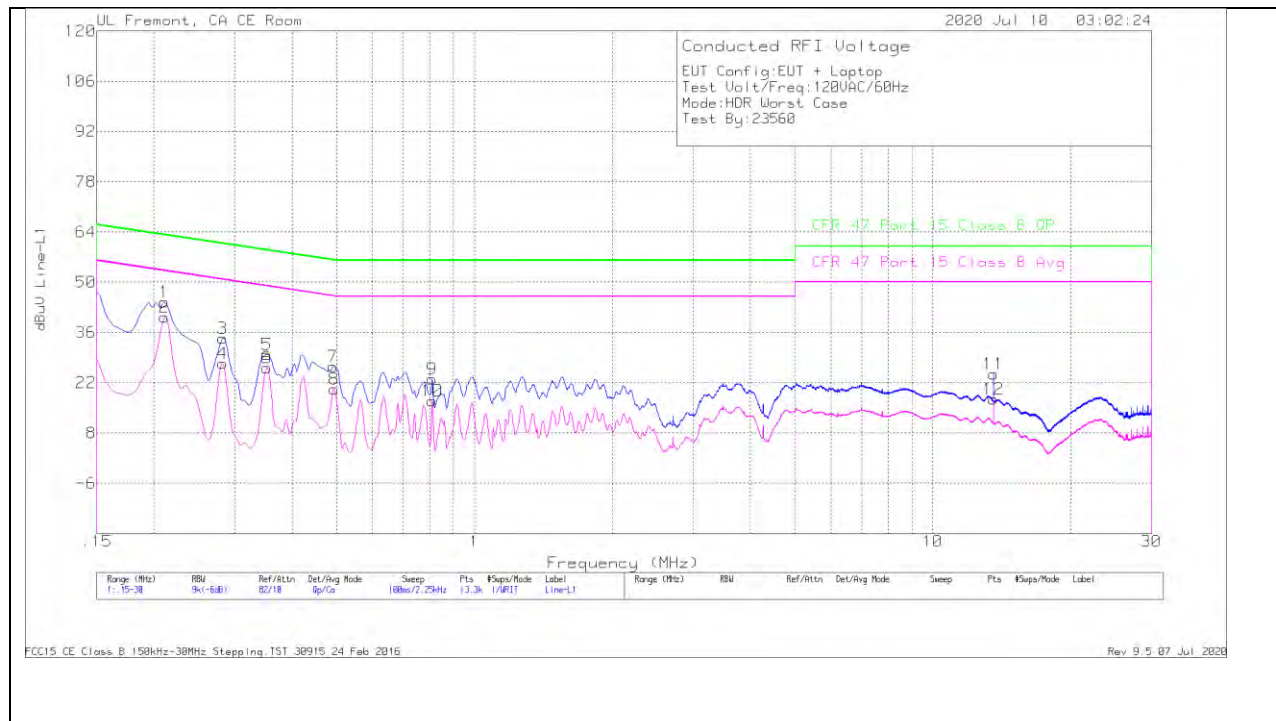
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line With Laptop

LINE 1 RESULTS



Range 1: Line L1 .15 - 30MHz

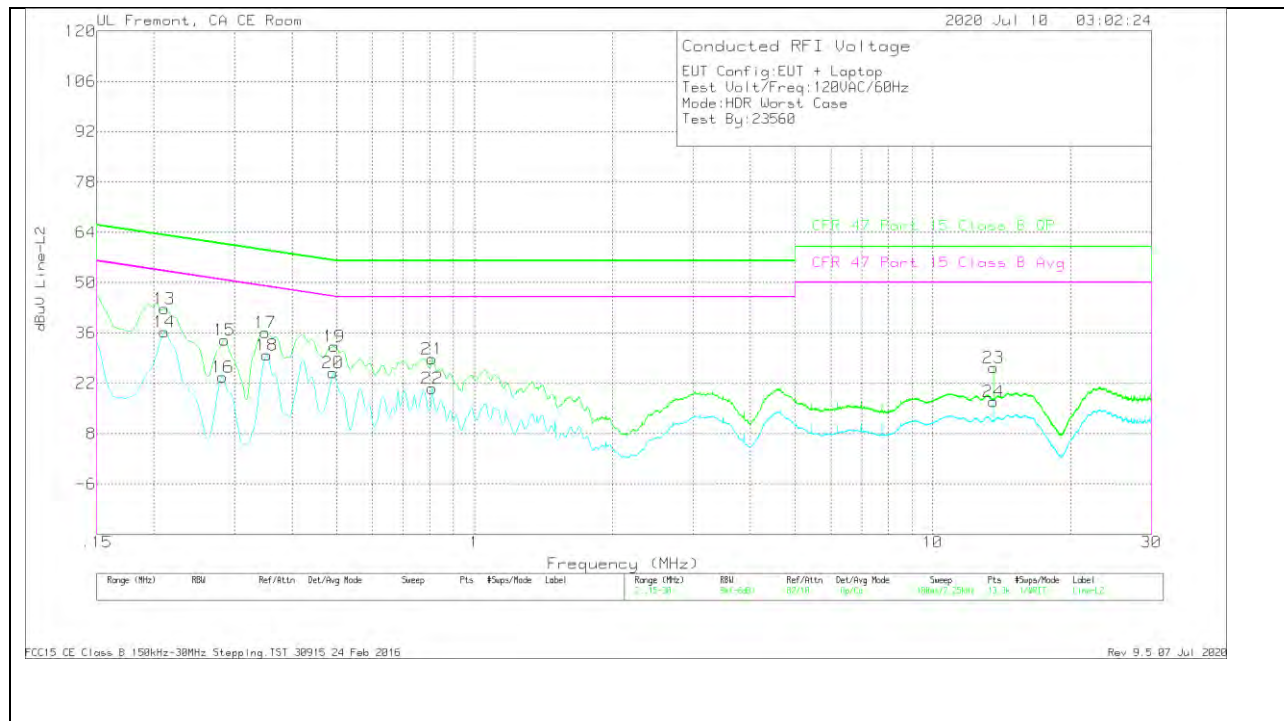
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading (dBuV)	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
1	.21075	34.45	Qp	0	0	10	44.45	63.18	-18.73	-	-
2	.21075	30.29	Ca	0	0	10	40.29	-	-	53.18	-12.89
3	.28275	24.44	Qp	0	0	10	34.44	60.73	-26.29	-	-
4	.28275	17.39	Ca	0	0	10	27.39	-	-	50.73	-23.34
5	.3525	19.91	Qp	0	0	10	29.91	58.9	-28.99	-	-
6	.3525	16.16	Ca	0	0	10	26.16	-	-	48.9	-22.74
7	.492	16.51	Qp	0	0	10	26.51	56.13	-29.62	-	-
8	.49425	10.32	Ca	0	0	10	20.32	-	-	46.1	-25.78
9	.80925	13.07	Qp	0	0	10	23.07	56	-32.93	-	-
10	.80925	7	Ca	0	0	10	17	-	-	46	-29
11	13.56	14.06	Qp	.1	.2	10.1	24.46	60	-35.54	-	-
12	13.56	7.03	Ca	.1	.2	10.1	17.43	-	-	50	-32.57

Qp - Quasi-Peak detector

Ca - CISPR average detection

FCC15 CE Class B 150kHz-30MHz Stepping.TST 30915 24 Feb 2016
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LINE 2 RESULTS



Range 2: Line L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
13	.21075	32.77	Qp	0	0	10	42.77	63.18	-20.41	-	-
14	.21075	26.34	Ca	0	0	10	36.34	-	-	53.18	-16.84
15	.285	23.99	Qp	0	0	10	33.99	60.67	-26.68	-	-
16	.28275	13.74	Ca	0	0	10	23.74	-	-	50.73	-26.99
17	.35025	26.06	Qp	0	0	10	36.06	58.96	-22.9	-	-
18	.3525	19.85	Ca	0	0	10	29.85	-	-	48.9	-19.05
19	.49425	22.25	Qp	0	0	10	32.25	56.1	-23.85	-	-
20	.492	14.9	Ca	0	0	10	24.9	-	-	46.13	-21.23
21	.80925	18.72	Qp	0	0	10	28.72	56	-27.28	-	-
22	.80925	10.67	Ca	0	0	10	20.67	-	-	46	-25.33
23	13.56	15.97	Qp	.1	.2	10.1	26.37	60	-33.63	-	-
24	13.56	6.48	Ca	.1	.2	10.1	16.88	-	-	50	-33.12

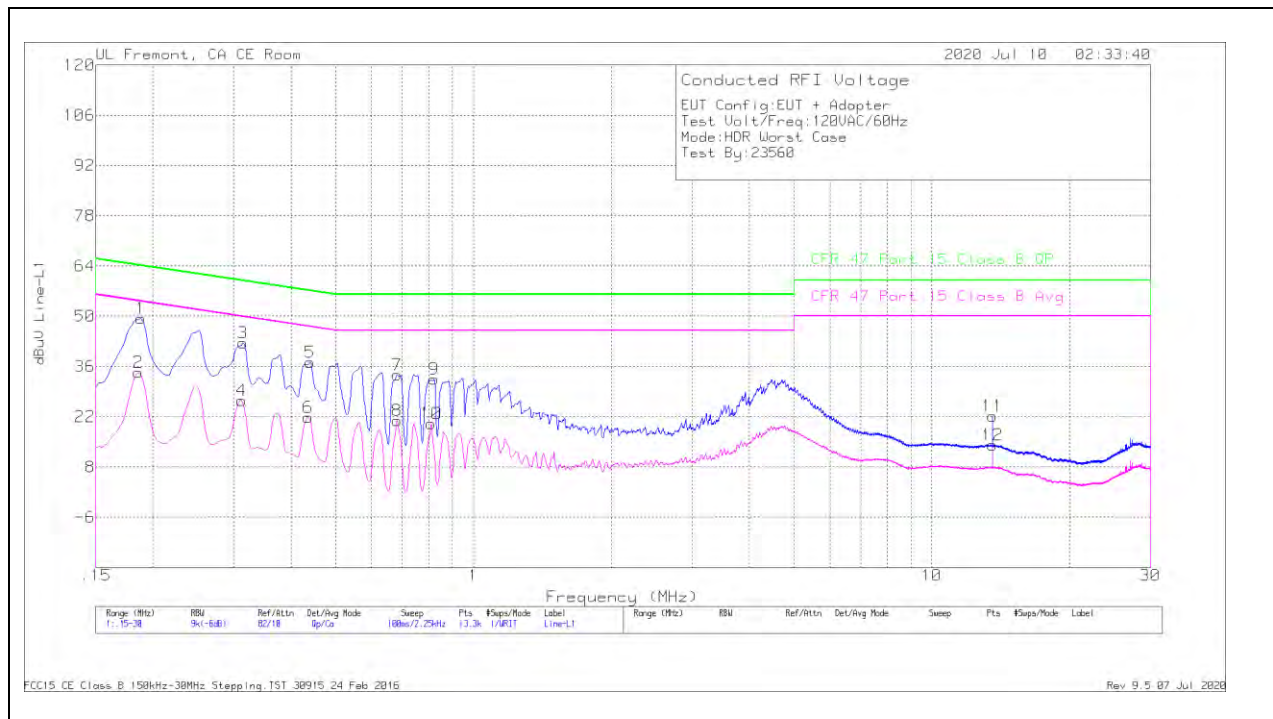
Qp - Quasi-Peak detector

Ca - CISPR average detection

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11.2. AC Power Line With AC/DC Adapter

LINE 1 RESULTS



Range 1: Line-L1 15 - 30MHz

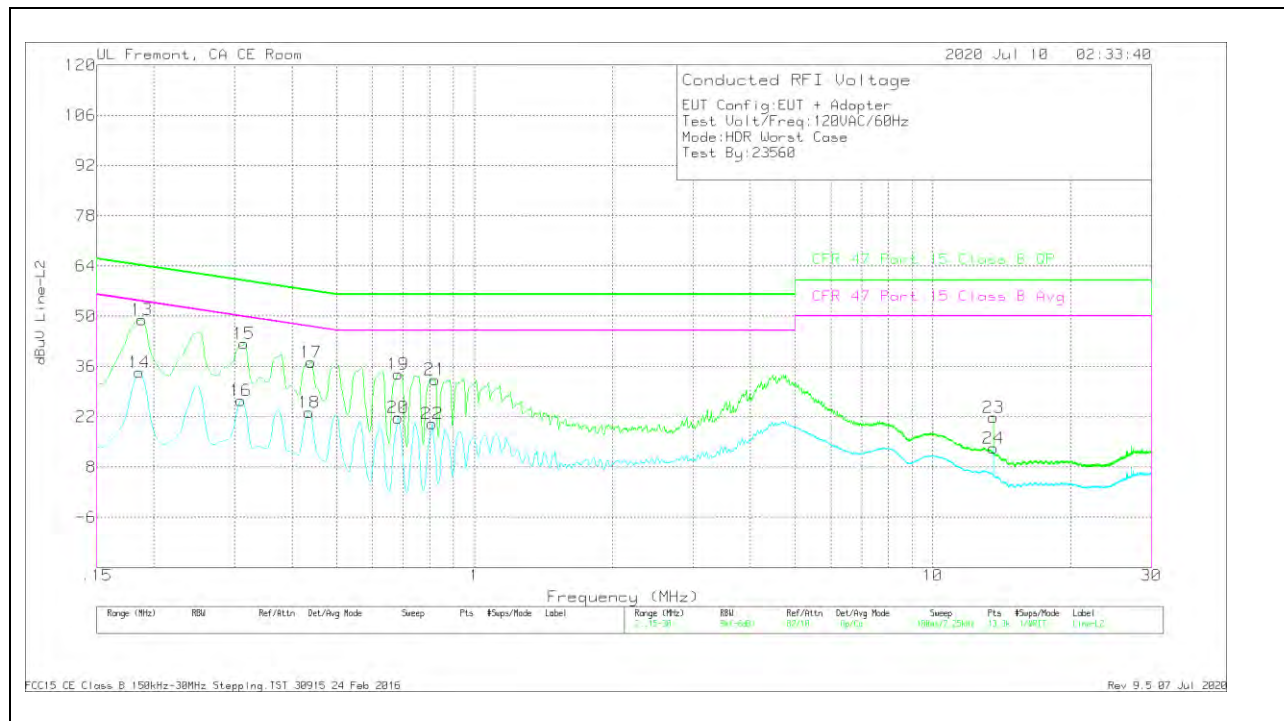
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
1	.18825	39.33	Qp	0	0	10	49.33	64.11	-14.78	-	-
2	.186	24.42	Ca	0	0	10	34.42	-	-	54.21	-19.79
3	.31425	32.51	Qp	0	0	10	42.51	59.86	-17.35	-	-
4	.312	16.53	Ca	0	0	10	26.53	-	-	49.92	-23.39
5	.44025	27.09	Qp	0	0	10	37.09	57.06	-19.97	-	-
6	.43575	11.81	Ca	0	0	10	21.81	-	-	47.14	-25.33
7	.681	23.62	Qp	0	0	10	33.62	56	-22.38	-	-
8	.681	10.96	Ca	0	0	10	20.96	-	-	46	-25.04
9	.8205	22.39	Qp	0	0	10	32.39	56	-23.61	-	-
10	.80925	10.05	Ca	0	0	10	20.05	-	-	46	-25.95
11	13.56	11.7	Qp	.1	.2	10.1	22.1	60	-37.9	-	-
12	13.56	3.75	Ca	.1	.2	10.1	14.15	-	-	50	-35.85

Qp - Quasi-Peak detector

Ca - CISPR average detection

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LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.18825	39.1	Qp	0	0	10	49.1	64.11	-15.01	-	-
14	.186	24.4	Ca	0	0	10	34.4	-	-	54.21	-19.81
15	.31425	32.35	Qp	0	0	10	42.35	59.86	-17.51	-	-
16	.30975	16.45	Ca	0	0	10	26.45	-	-	49.98	-23.53
17	.44025	27.2	Qp	0	0	10	37.2	57.06	-19.86	-	-
18	.43575	13.22	Ca	0	0	10	23.22	-	-	47.14	-23.92
19	.681	23.87	Qp	0	0	10	33.87	56	-22.13	-	-
20	.681	11.73	Ca	0	0	10	21.73	-	-	46	-24.27
21	.8205	22.37	Qp	0	0	10	32.37	56	-23.63	-	-
22	.80925	10.05	Ca	0	0	10	20.05	-	-	46	-25.95
23	13.56	11.34	Qp	.1	.2	10.1	21.74	60	-38.26	-	-
24	13.56	2.94	Ca	.1	.2	10.1	13.34	-	-	50	-36.66

Qp - Quasi-Peak detector
Ca - CISPR average detection

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12. SETUP PHOTOS

Please refer to 13259315-EP1 for setup photos

END OF TEST REPORT

END OF TEST REPORT