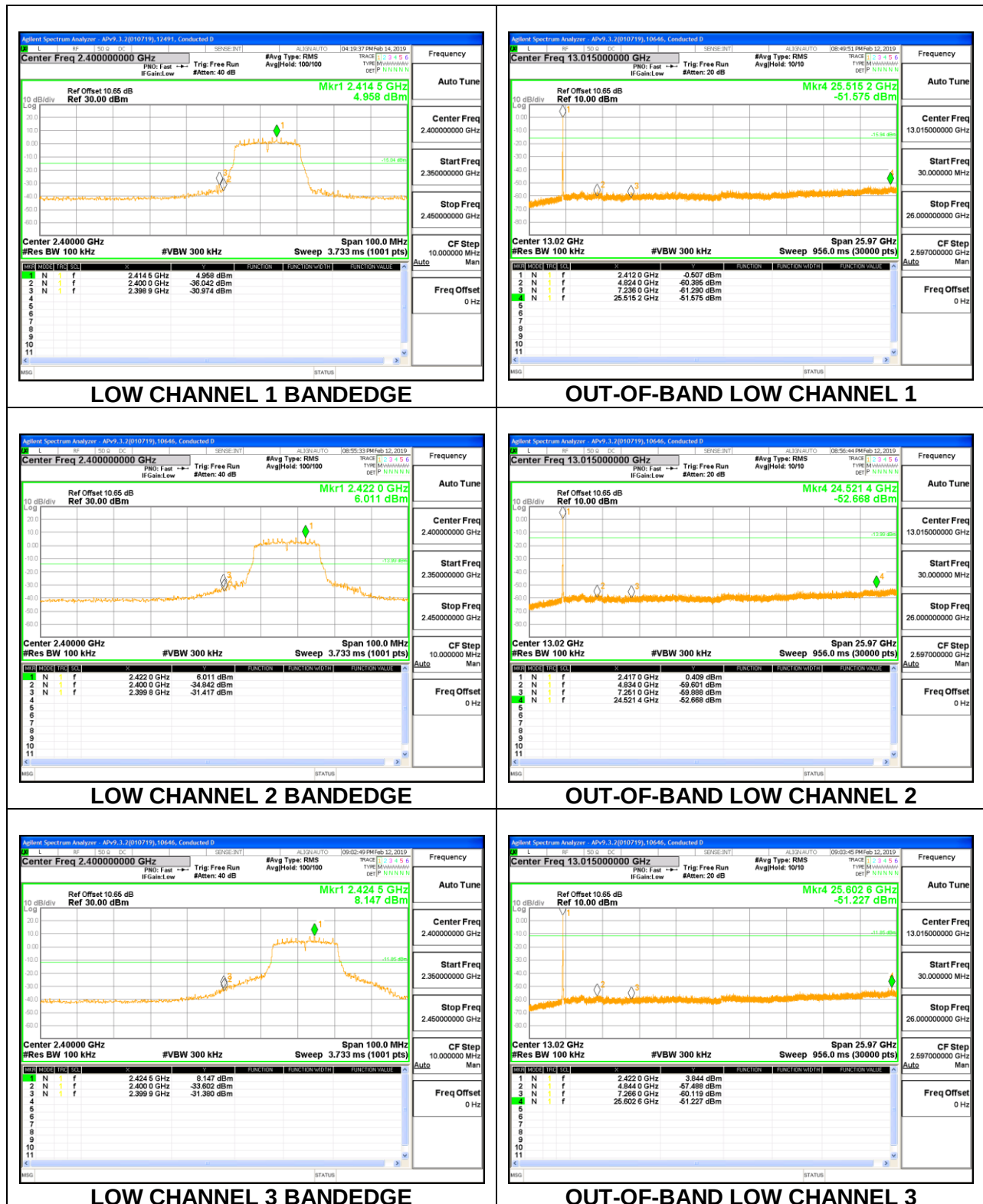
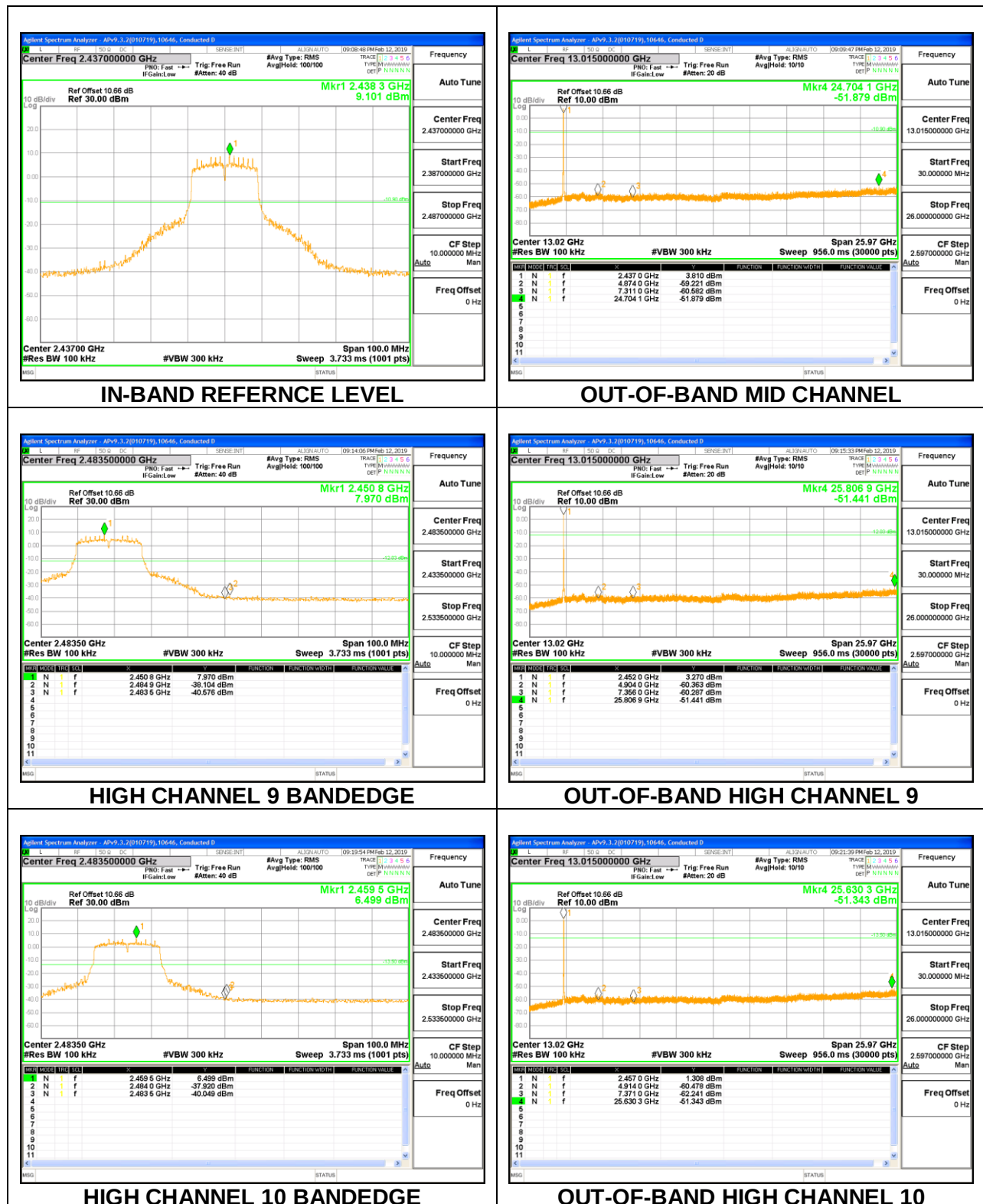
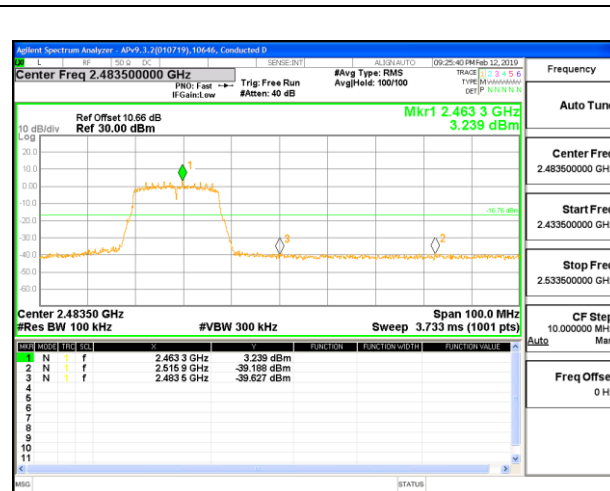


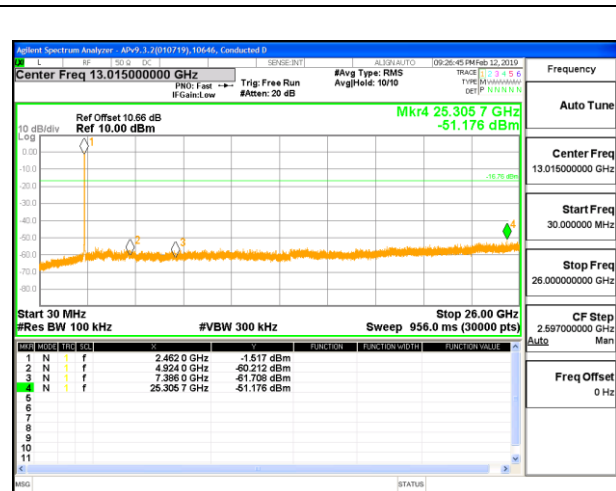
8.7.2. 802.11n HT20 MODE



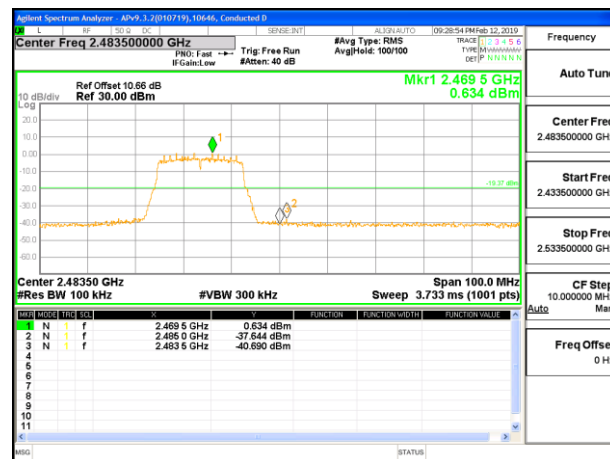




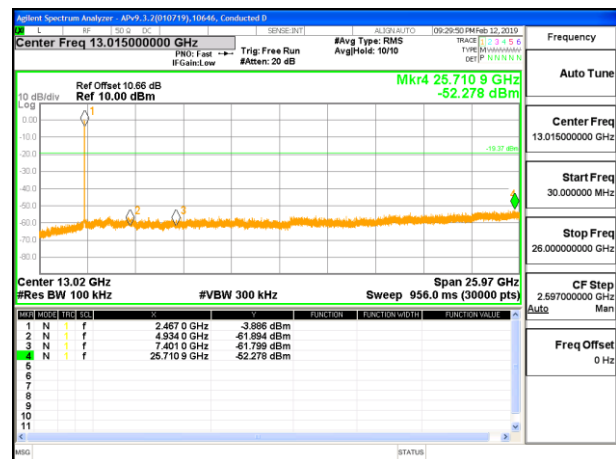
HIGH CHANNEL 11 BANDEDGE



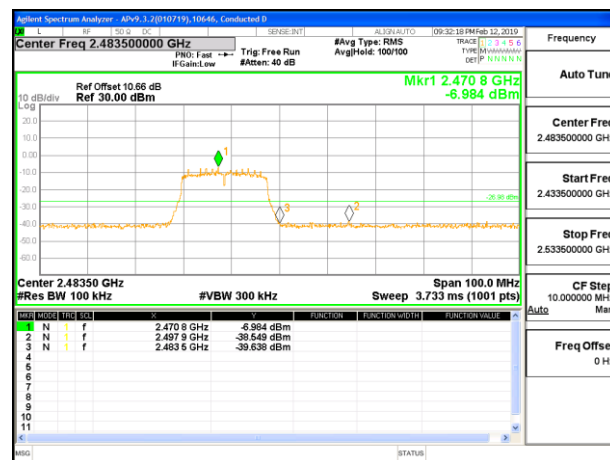
OUT-OF-BAND HIGH CHANNEL 11



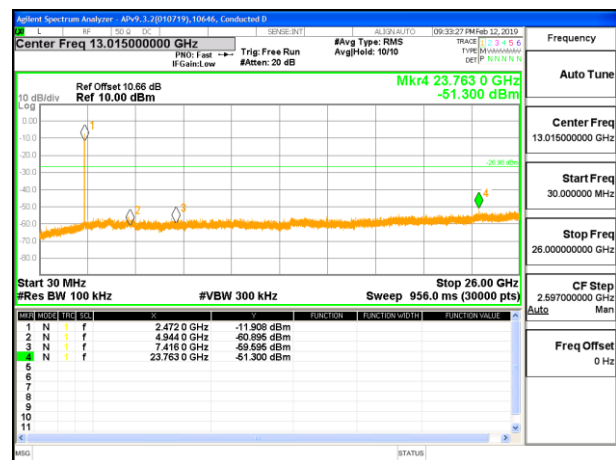
HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12



HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

9. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10

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

TEST PROCEDURE

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

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

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

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

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

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

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

KDB 414788 OATS 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.

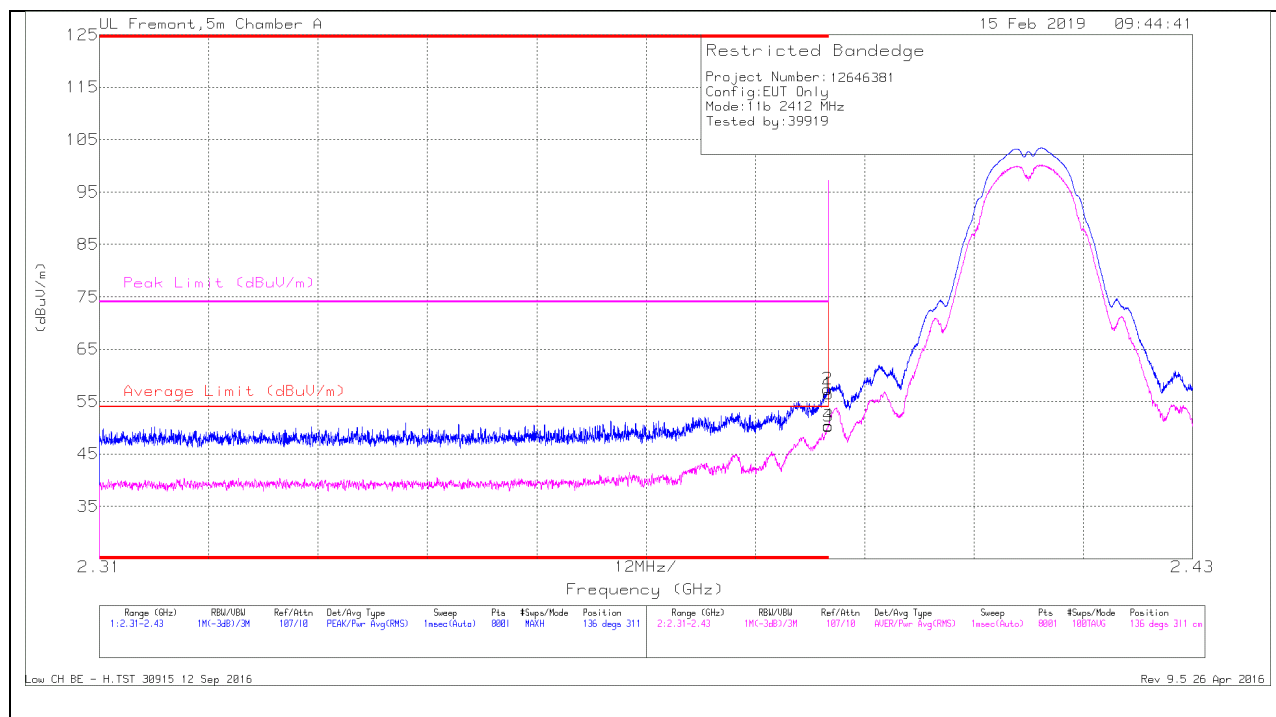
Open field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

9.1. TRANSMITTER ABOVE 1 GHz

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

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



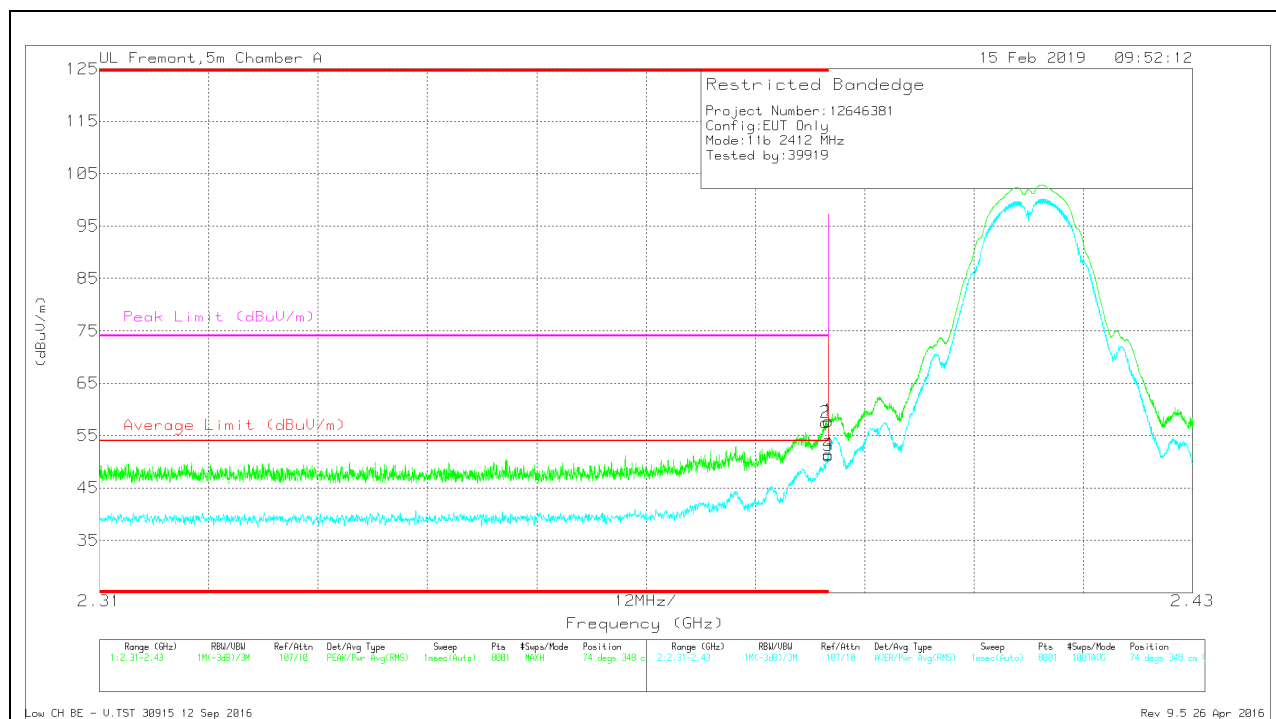
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	47.51	Pk	32	-23	56.51	-	-	74	-17.49	136	311	H
2	* 2.39	48.41	Pk	32	-23	57.41	-	-	74	-16.59	136	311	H
3	* 2.39	41.26	RMS	32	-23	50.26	54	-3.74	-	-	136	311	H
4	* 2.39	41.38	RMS	32	-23	50.38	54	-3.62	-	-	136	311	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.39	48.8	Pk	32	-23	57.8	-	-	74	-16.2	74	348	V
2	* 2.39	48.47	Pk	32	-23	57.47	-	-	74	-16.53	74	348	V
3	* 2.39	42.17	RMS	32	-23	51.17	54	-2.83	-	-	74	348	V
4	* 2.39	42.41	RMS	32	-23	51.41	54	-2.59	-	-	74	348	V

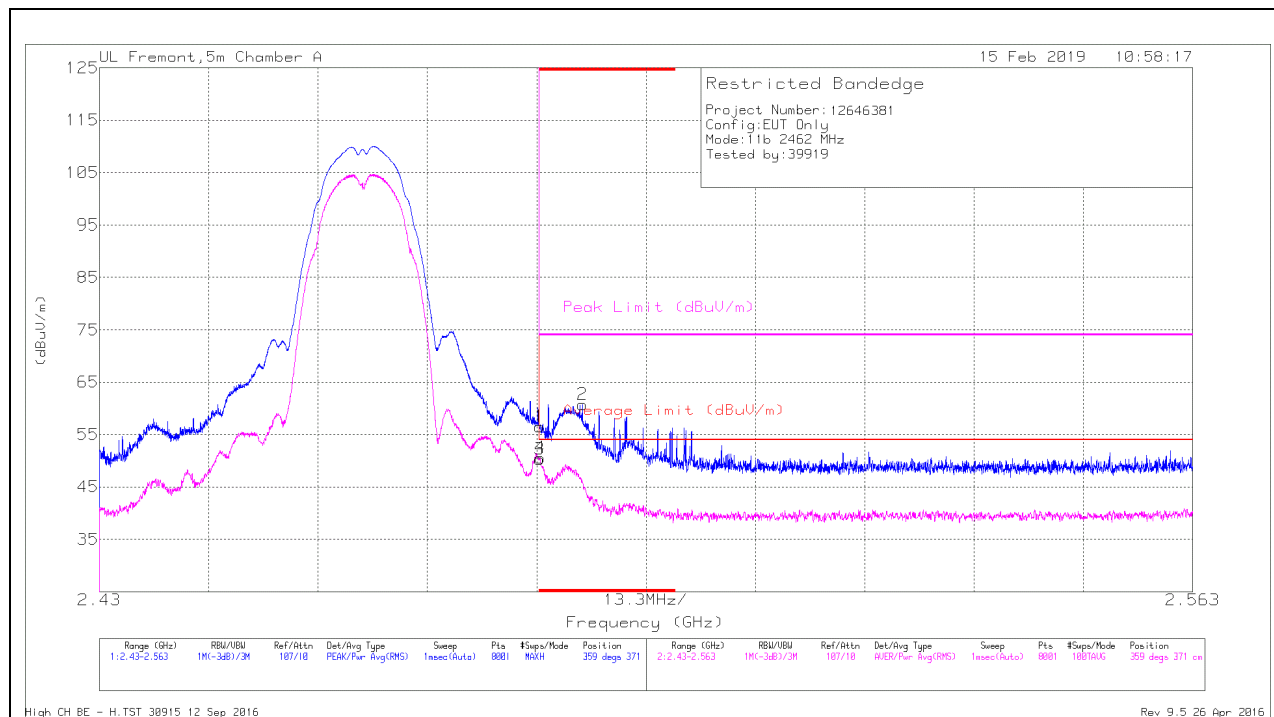
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



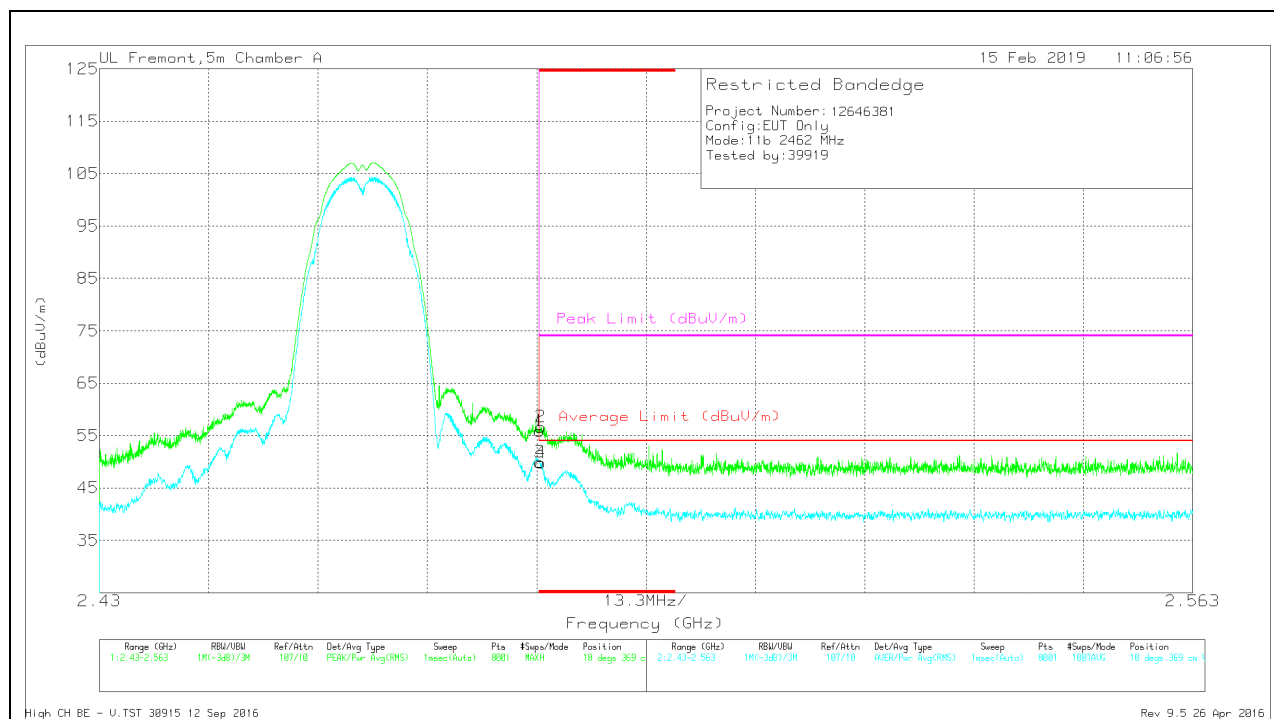
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	46.8	Pk	32.4	-22.7	56.5	-	-	74	-17.5	359	371	H
2	* 2.489	51.06	Pk	32.4	-22.7	60.76	-	-	74	-13.24	359	371	H
3	* 2.484	40.57	RMS	32.4	-22.7	50.27	54	-3.73	-	-	359	371	H
4	* 2.484	40.82	RMS	32.4	-22.7	50.52	54	-3.48	-	-	359	371	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Fltr/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	* 2.484	46.2	Pk	32.4	-22.7	55.9	-	-	74	-18.1	18	369	V
2	* 2.484	46.97	Pk	32.4	-22.7	56.67	-	-	74	-17.33	18	369	V
3	* 2.484	40.21	RMS	32.4	-22.7	49.91	54	-4.09	-	-	18	369	V
4	* 2.484	40.13	RMS	32.4	-22.7	49.83	54	-4.17	-	-	18	369	V

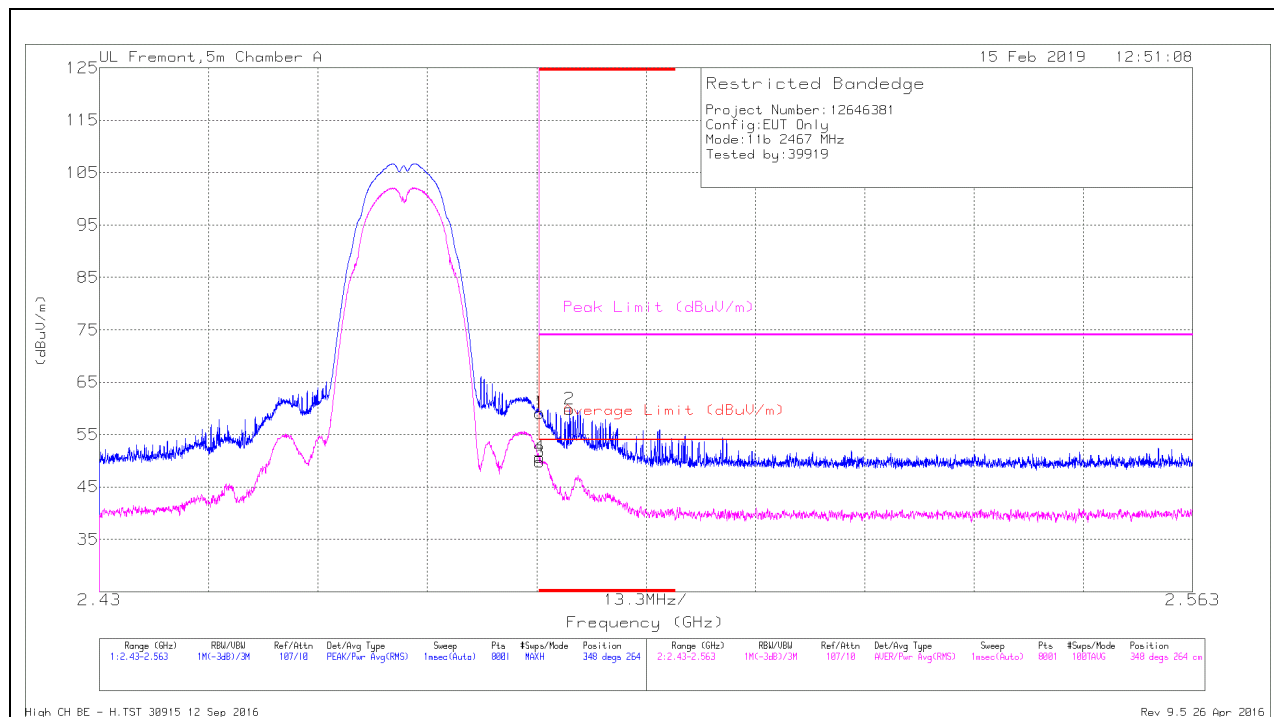
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



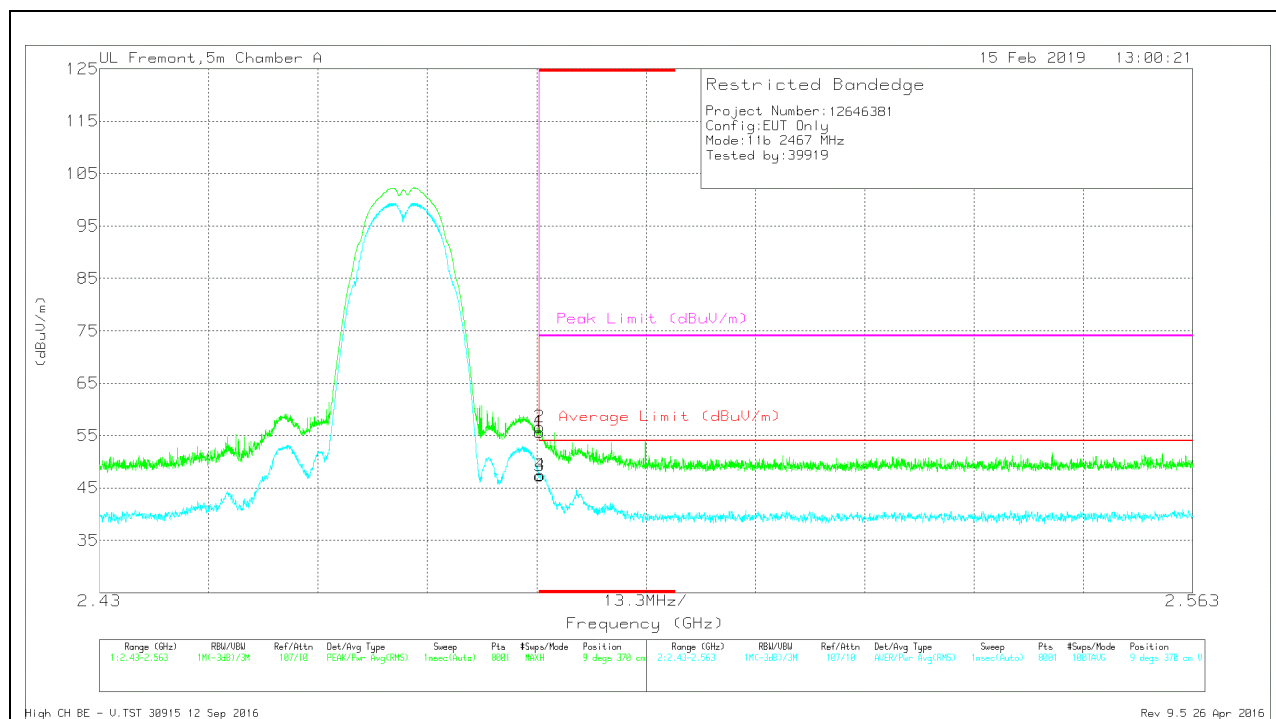
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.37	Pk	32.4	-22.7	59.07	-	-	74	-14.93	348	264	H
2	* 2.487	50.18	Pk	32.4	-22.7	59.88	-	-	74	-14.12	348	264	H
3	* 2.484	40.07	RMS	32.4	-22.7	49.77	54	-4.23	-	-	348	264	H
4	* 2.484	40.98	RMS	32.4	-22.7	50.68	54	-3.32	-	-	348	264	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	45.98	Pk	32.4	-22.7	55.68	-	-	74	-18.32	9	370	V
2	* 2.484	46.97	Pk	32.4	-22.7	56.67	-	-	74	-17.33	9	370	V
3	* 2.484	37.64	RMS	32.4	-22.7	47.34	54	-6.66	-	-	9	370	V
4	* 2.484	37.72	RMS	32.4	-22.7	47.42	54	-6.58	-	-	9	370	V

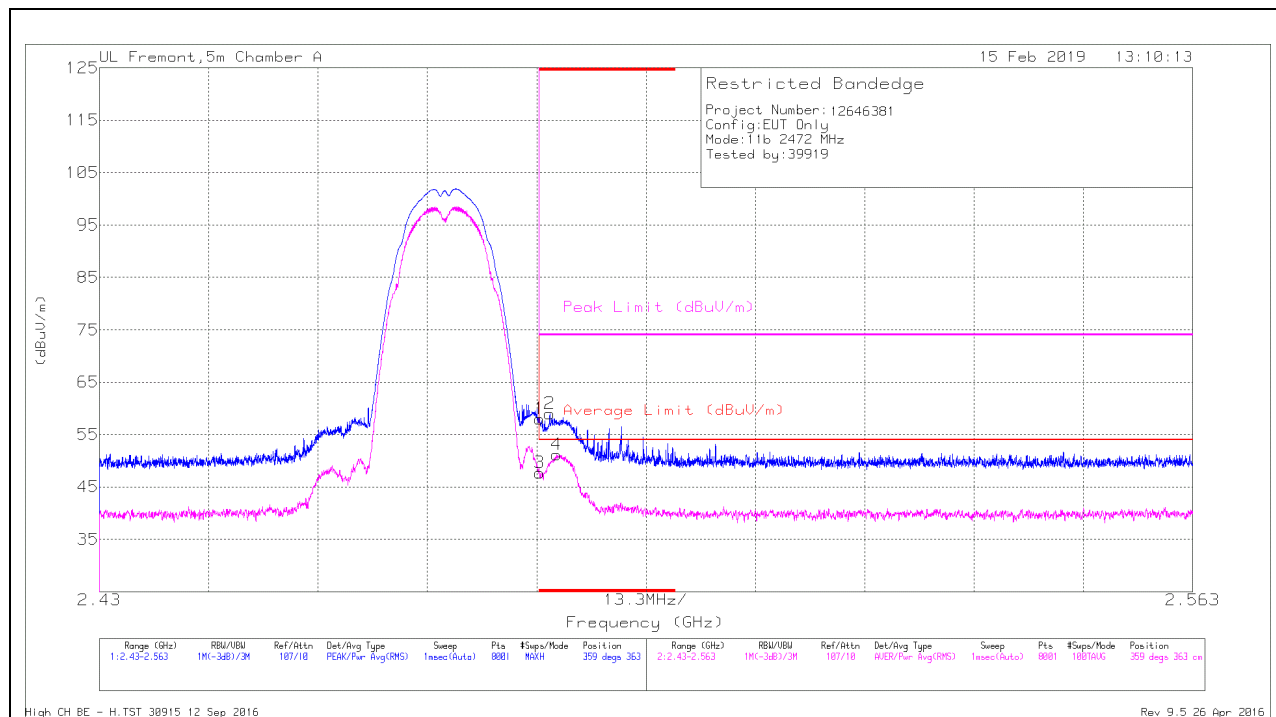
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



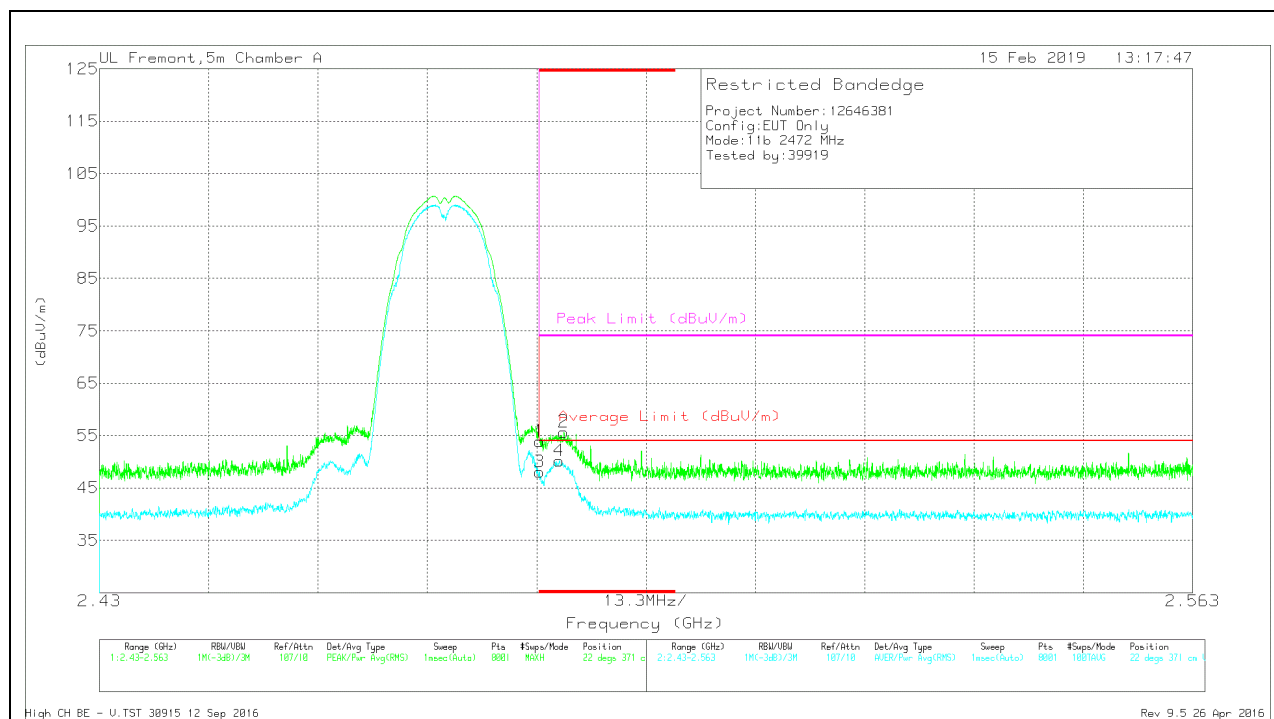
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.28	Pk	32.4	-22.7	57.98	-	-	74	-16.02	359	363	H
2	* 2.485	49.26	Pk	32.4	-22.7	58.96	-	-	74	-15.04	359	363	H
3	* 2.484	37.98	RMS	32.4	-22.7	47.68	54	-6.32	-	-	359	363	H
4	* 2.486	41.49	RMS	32.4	-22.7	51.19	54	-2.81	-	-	359	363	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	44.17	Pk	32.4	-22.7	53.87	-	-	74	-20.13	22	371	V
2	* 2.487	45.99	Pk	32.4	-22.7	55.69	-	-	74	-18.31	22	371	V
3	* 2.484	38.39	RMS	32.4	-22.7	48.09	54	-5.91	-	-	22	371	V
4	* 2.486	40.44	RMS	32.4	-22.7	50.14	54	-3.86	-	-	22	371	V

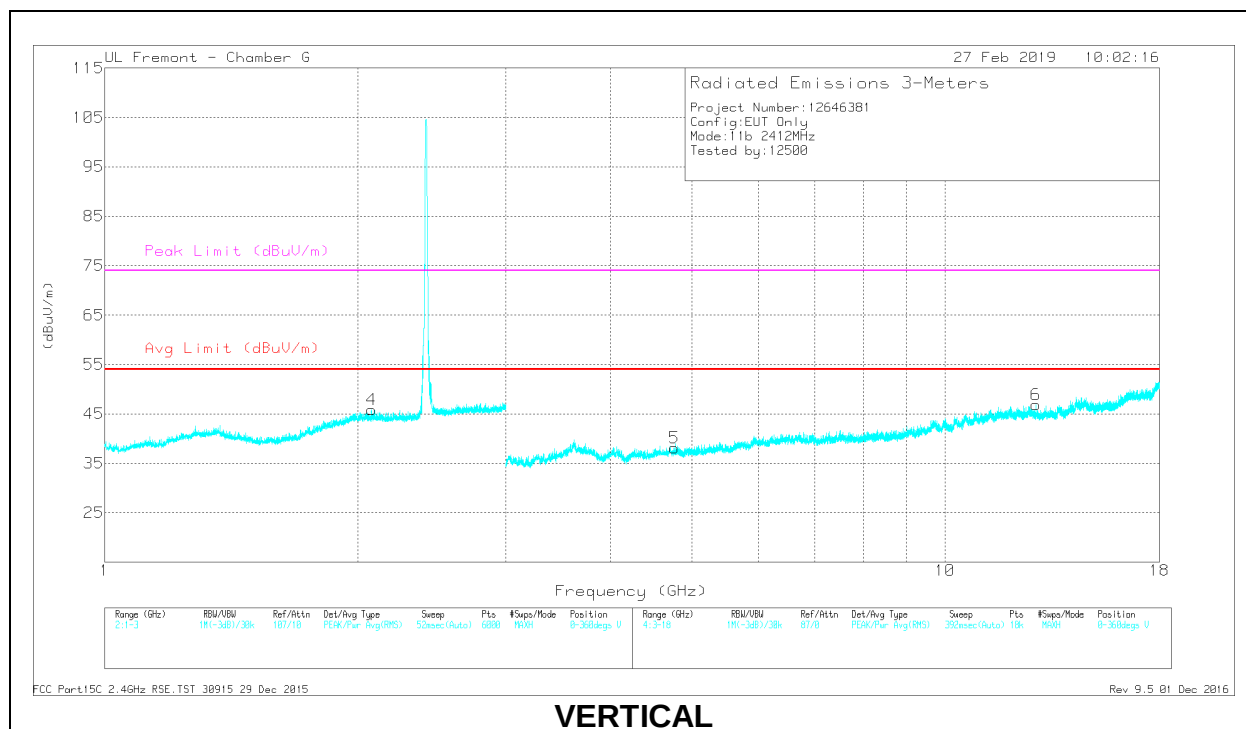
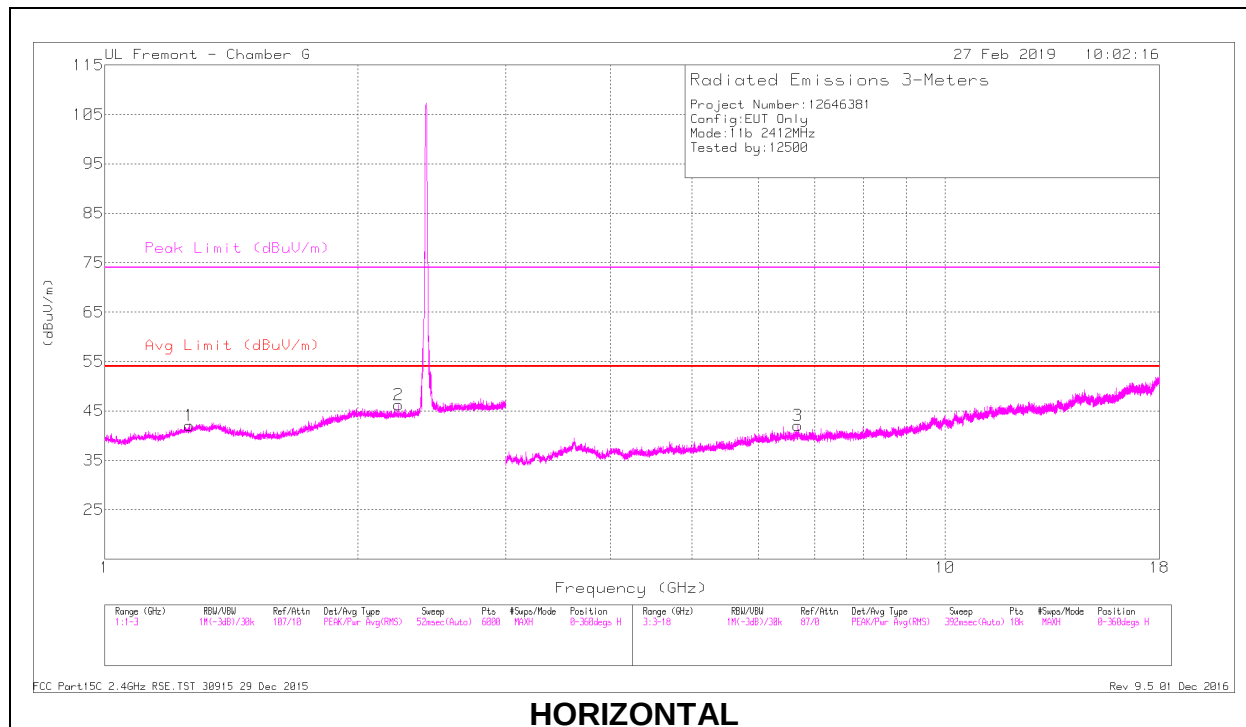
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

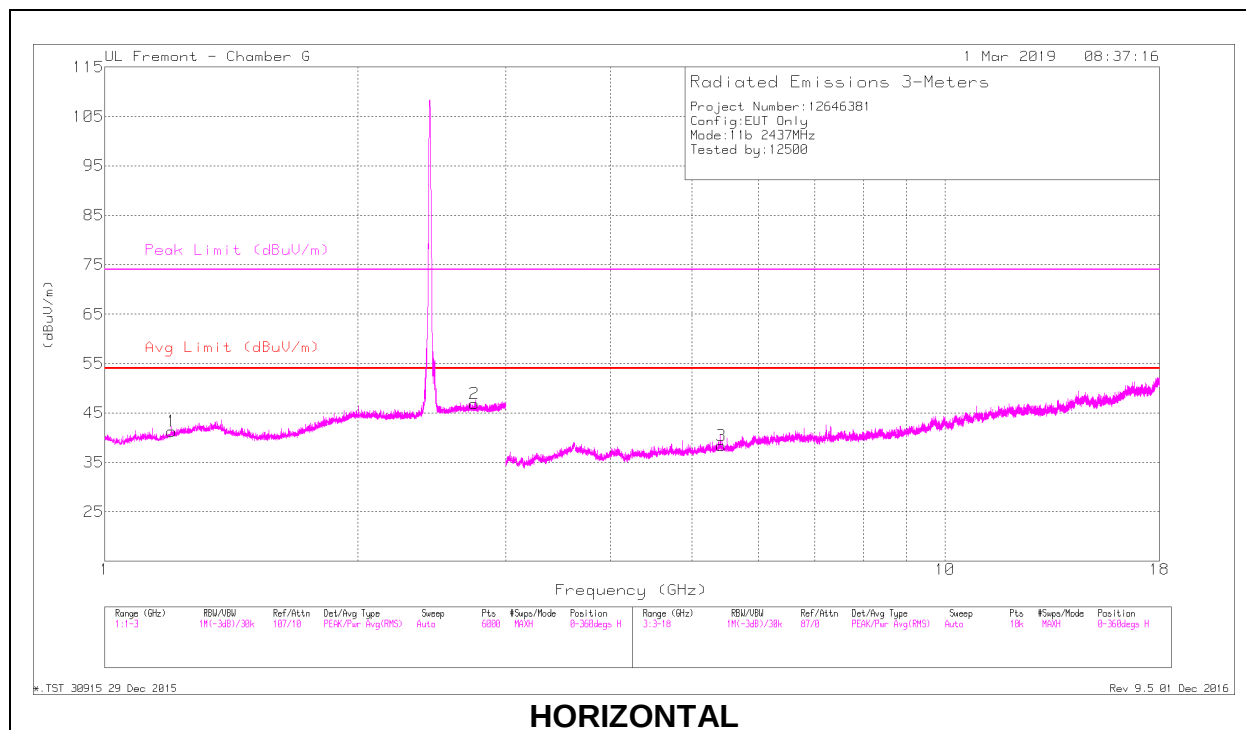
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.259	44.46	PK2	29.3	-23.9	49.86	-	-	74	-24.14	7	243	H
	* 1.259	32.09	MAv1	29.3	-23.9	37.49	54	-16.51	-	-	7	243	H
2	* 2.236	42.86	PK2	31.9	-22.5	52.26	-	-	74	-21.74	148	102	H
	* 2.236	30.85	MAv1	31.9	-22.5	40.25	54	-13.75	-	-	148	102	H
5	* 4.766	41.36	PK2	34.2	-29.6	45.96	-	-	74	-28.04	216	165	V
	* 4.766	29.34	MAv1	34.2	-29.7	33.84	54	-20.16	-	-	216	165	V
4	2.078	43.53	PK2	31.9	-22.6	52.83	-	-	-	-	290	400	V
3	6.687	39.52	PK2	36.1	-28	47.62	-	-	-	-	131	185	H
6	12.83	36.18	PK2	39.6	-23.5	52.28	-	-	-	-	346	304	V

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

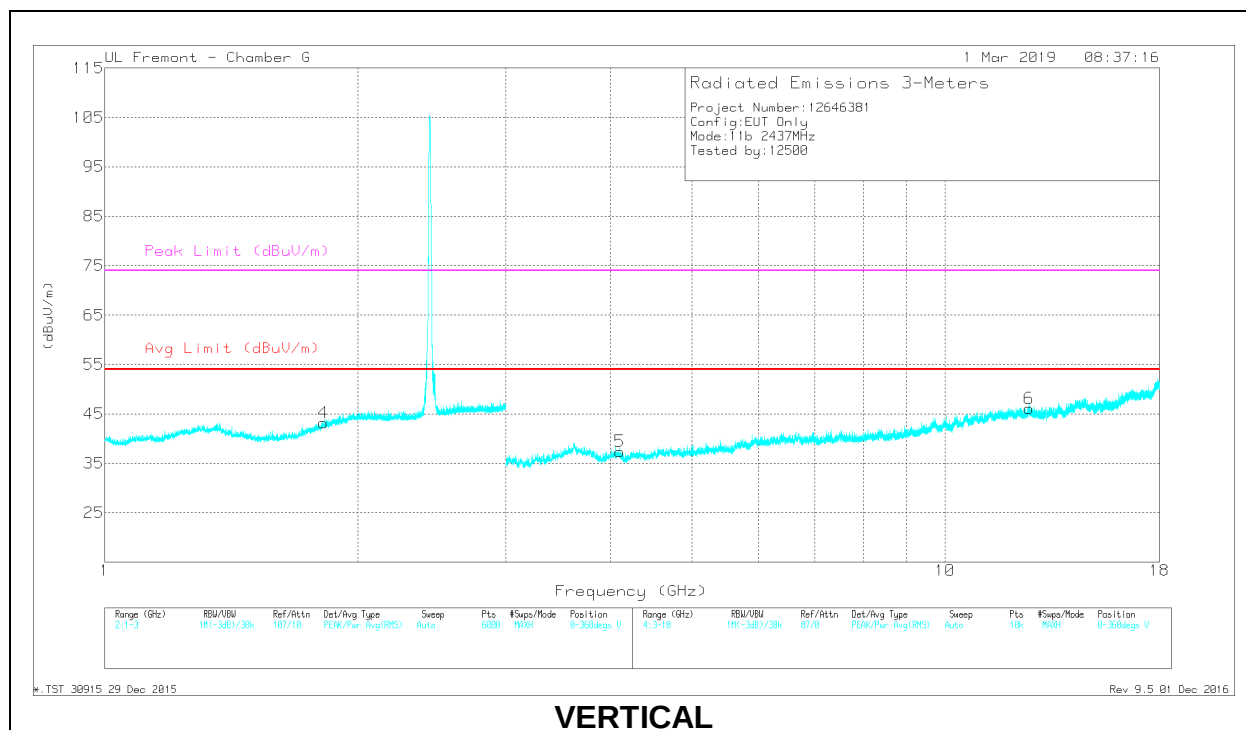
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

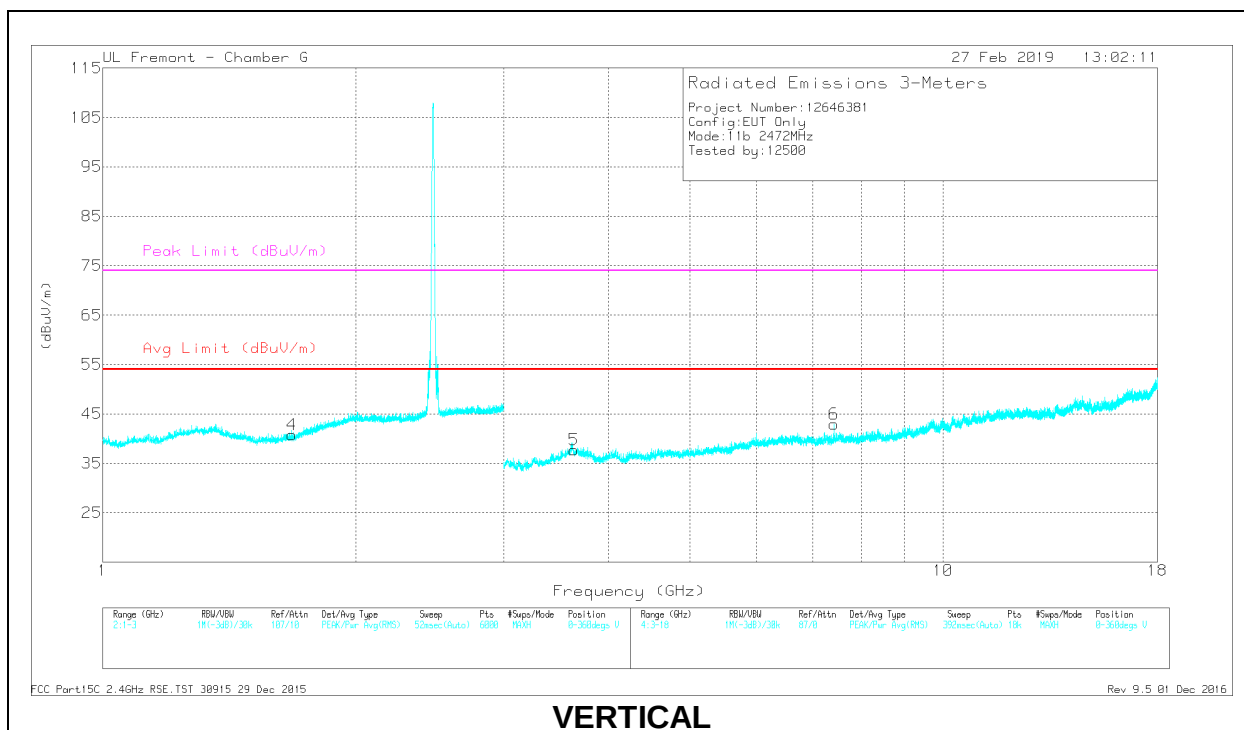
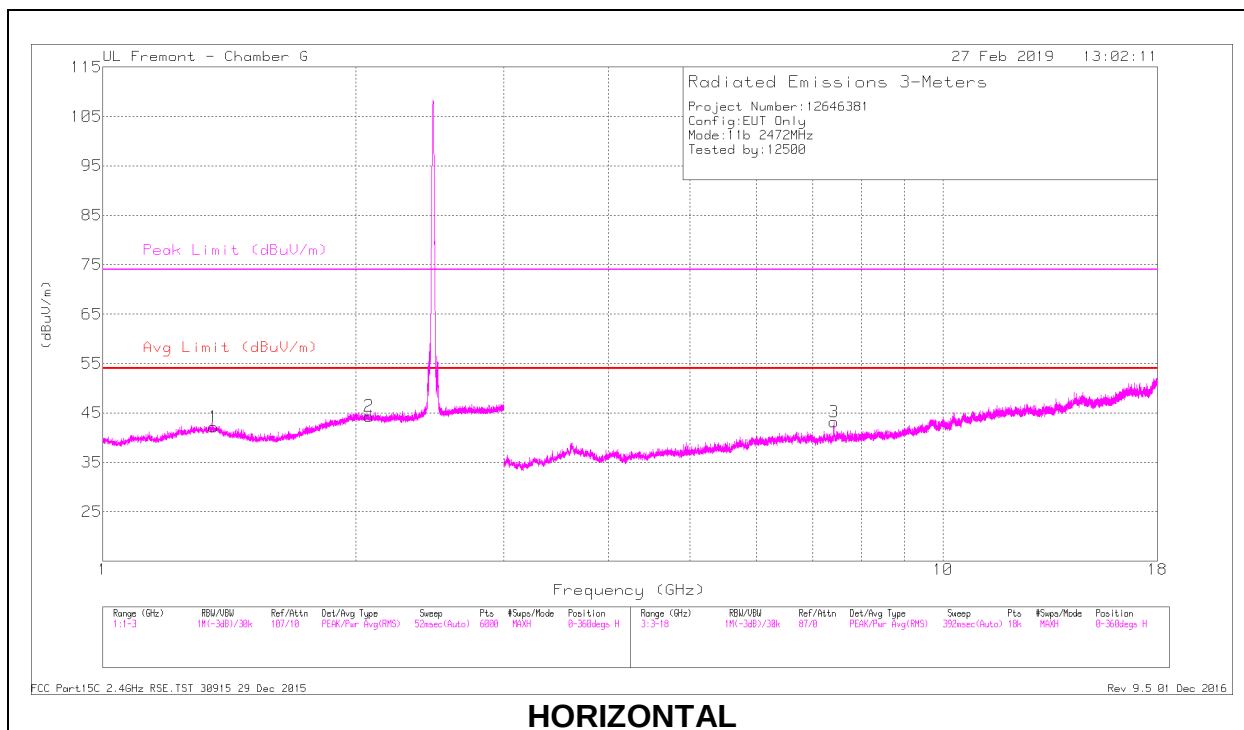
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.202	44.43	PK2	28.6	-23.9	49.13	-	-	74	-24.87	119	257	H
	* 1.201	32.02	MAv1	28.6	-23.9	36.72	54	-17.28	-	-	119	257	H
2	* 2.756	43.27	PK2	32.7	-22.1	53.87	-	-	74	-20.13	154	286	H
	* 2.753	31.51	MAv1	32.7	-22.1	42.11	54	-11.89	-	-	154	286	H
3	* 5.413	40.05	PK2	34.7	-29	45.75	-	-	74	-28.25	142	180	H
	* 5.413	28.4	MAv1	34.7	-29	34.1	54	-19.9	-	-	142	180	H
5	* 4.101	41	PK2	33.8	-30	44.8	-	-	74	-29.2	31	204	V
	* 4.098	29.21	MAv1	33.8	-29.9	33.11	54	-20.89	-	-	31	204	V
6	* 12.594	36.45	PK2	39.6	-22.7	53.35	-	-	74	-20.65	124	191	V
	* 12.595	24.87	MAv1	39.7	-22.7	41.87	54	-12.13	-	-	124	191	V
4	1.821	43.82	PK2	30.6	-23	51.42	-	-	-	-	202	173	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, CH 13 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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	* 1.355	43.82	PK2	30	-23.7	50.12	-	-	74	-23.88	249	257	H
	* 1.354	32.03	MAv1	30	-23.7	38.33	54	-15.67	-	-	249	257	H
4	* 1.68	43.86	PK2	28.3	-23.1	49.06	-	-	74	-24.94	272	266	V
	* 1.68	31.57	MAv1	28.3	-23.1	36.77	54	-17.23	-	-	272	266	V
3	* 7.417	39.87	PK2	36	-28.1	47.77	-	-	74	-26.23	5	204	H
	* 7.415	28.61	MAv1	36	-28.2	36.41	54	-17.59	-	-	5	204	H
5	* 3.638	40.63	PK2	34.7	-29.7	45.63	-	-	74	-28.37	321	162	V
	* 3.637	28.92	MAv1	34.7	-29.7	33.92	54	-20.08	-	-	321	162	V
6	* 7.415	40.58	PK2	36	-28.2	48.38	-	-	74	-25.62	313	133	V
	* 7.415	29	MAv1	36	-28.2	36.8	54	-17.2	-	-	313	133	V
2	2.072	42.47	PK2	31.9	-22.6	51.77	-	-	-	-	298	101	H

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

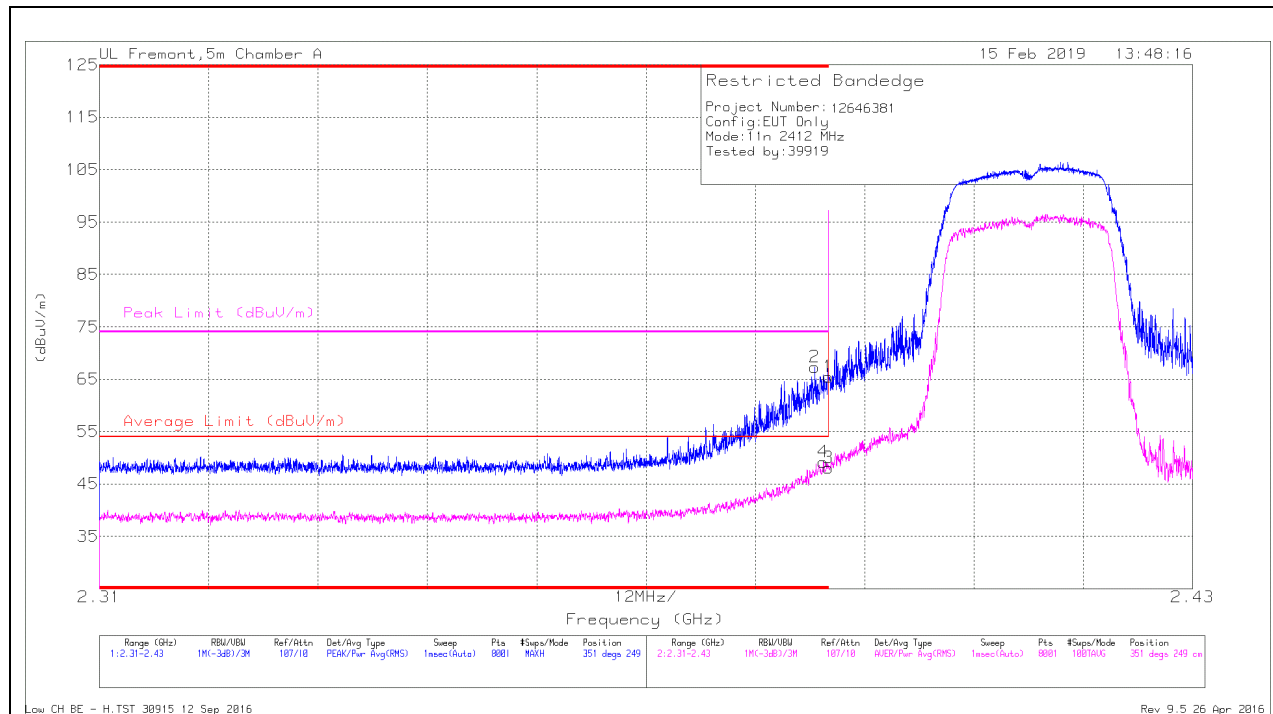
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

BANDEGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



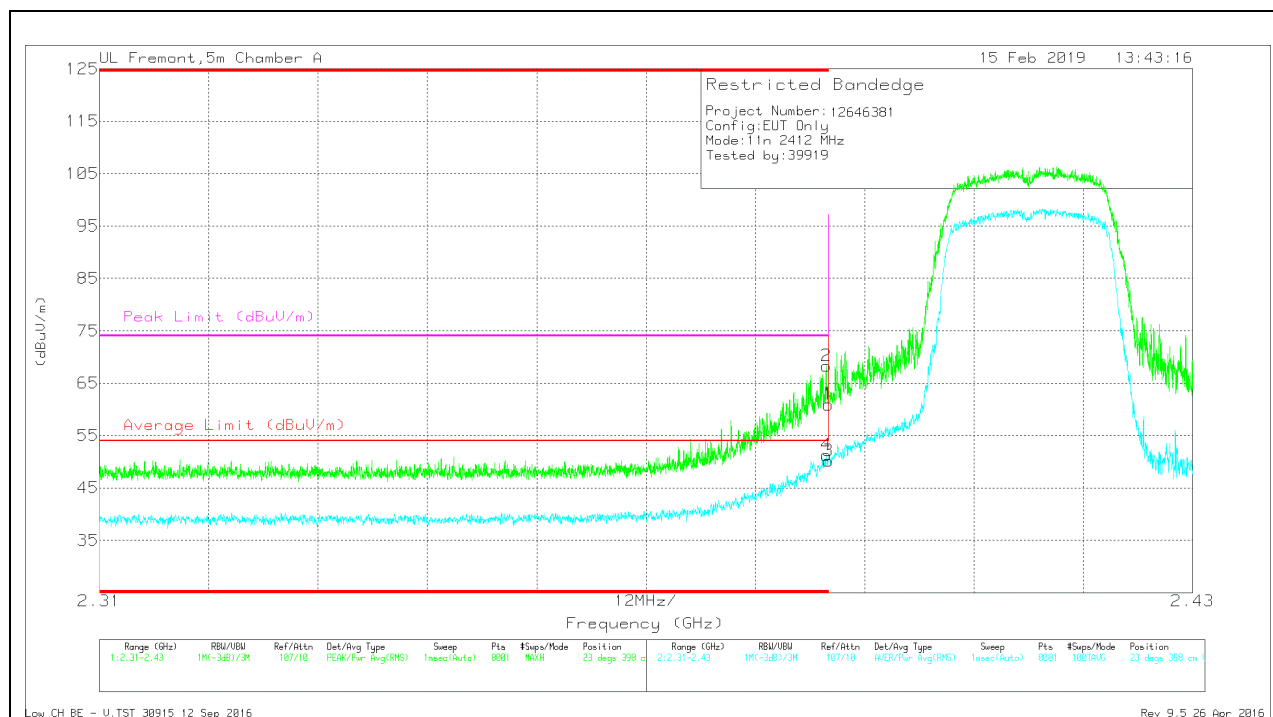
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT345 (dB/m)	Amp/Cb/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	56.48	Pk	32	-23	65.48	-	-	74	-8.52	351	249	H
2	* 2.389	58.3	Pk	32	-23	67.3	-	-	74	-6.7	351	249	H
3	* 2.39	39.1	RMS	32	-23	48.1	54	-5.9	-	-	351	249	H
4	* 2.389	40.19	RMS	32	-23	49.19	54	-4.81	-	-	351	249	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	*2.39	51.91	Pk	32	-23	60.91	-	-	74	-13.09	23	398	V
2	*2.39	59.3	Pk	32	-23	68.3	-	-	74	-5.7	23	398	V
3	*2.39	41.14	RMS	32	-23	50.14	54	-3.86	-	-	23	398	V
4	*2.39	42.3	RMS	32	-23	51.3	54	-2.7	-	-	23	398	V

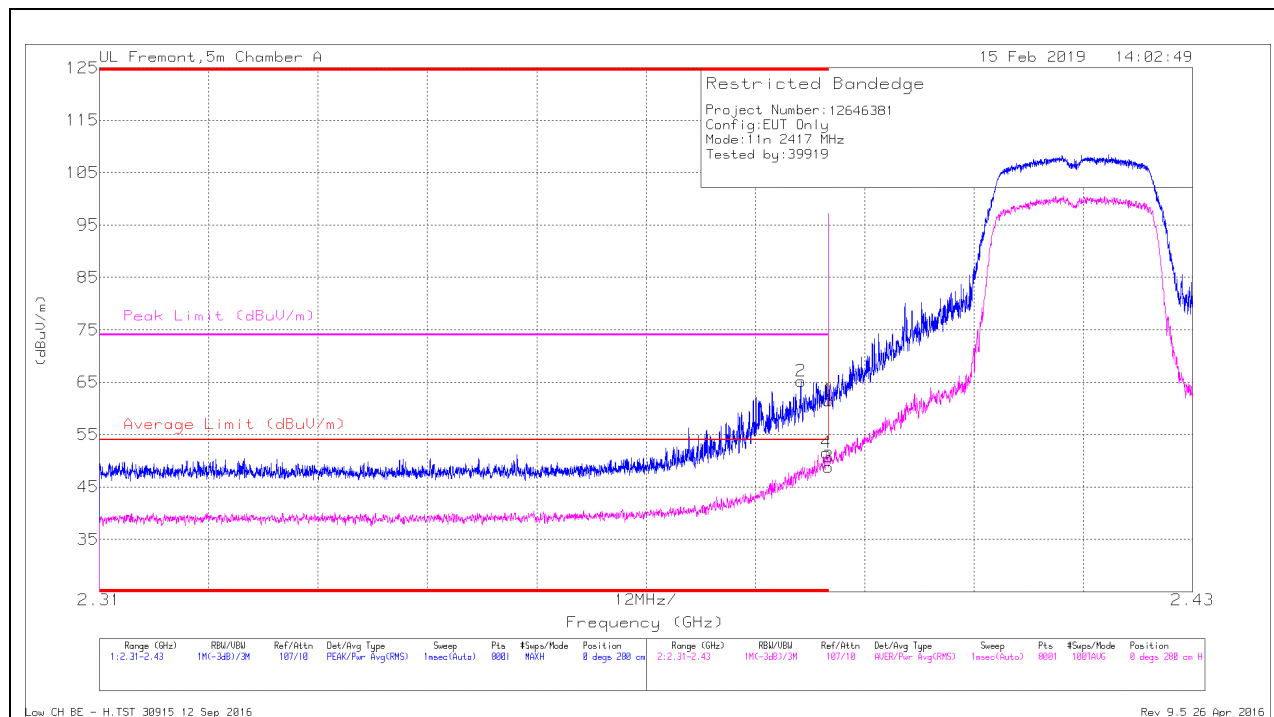
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT



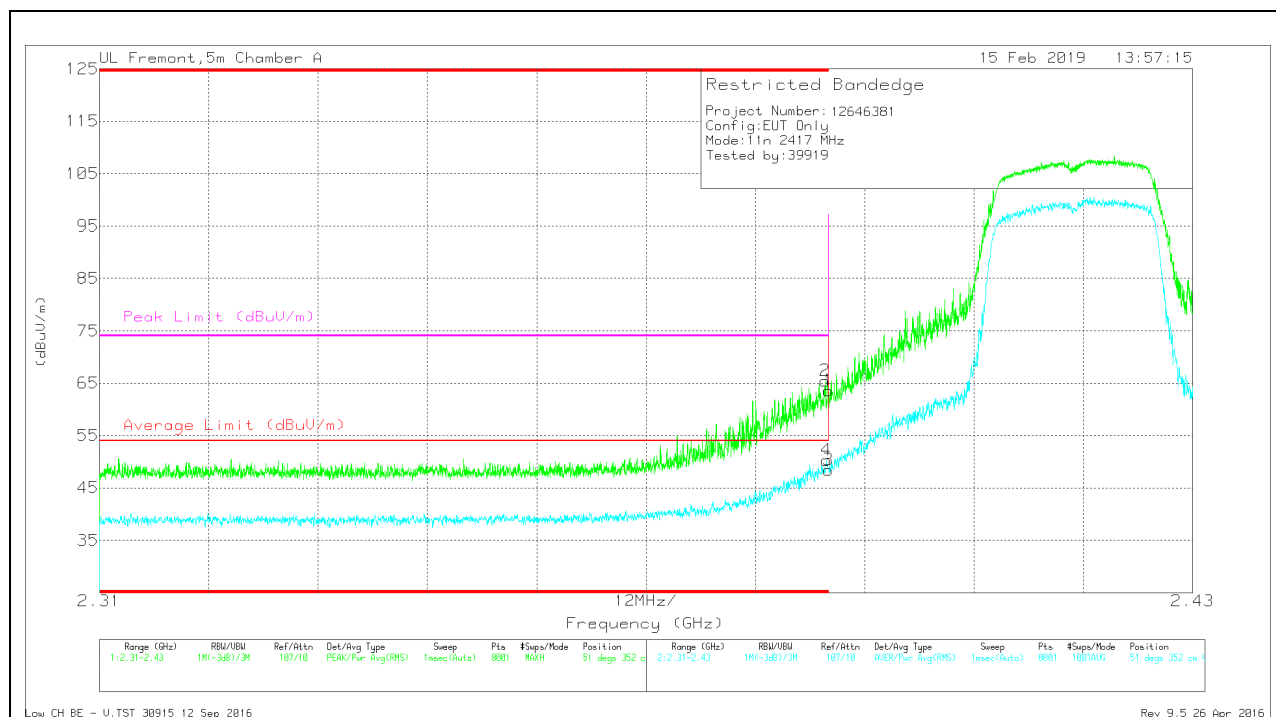
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	52.53	Pk	32	-23	61.53	-	-	74	-12.47	0	280	H
2	* 2.387	56.14	Pk	32	-23	65.14	-	-	74	-8.86	0	280	H
3	* 2.39	39.79	RMS	32	-23	48.79	54	-5.21	-	-	0	280	H
4	* 2.39	42.51	RMS	32	-23	51.51	54	-2.49	-	-	0	280	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.53	Pk	32	-23	63.53	-	-	74	-10.47	51	352	V
2	* 2.39	56.42	Pk	32	-23	65.42	-	-	74	-8.58	51	352	V
3	* 2.39	39.45	RMS	32	-23	48.45	54	-5.55	-	-	51	352	V
4	* 2.39	41.29	RMS	32	-23	50.29	54	-3.71	-	-	51	352	V

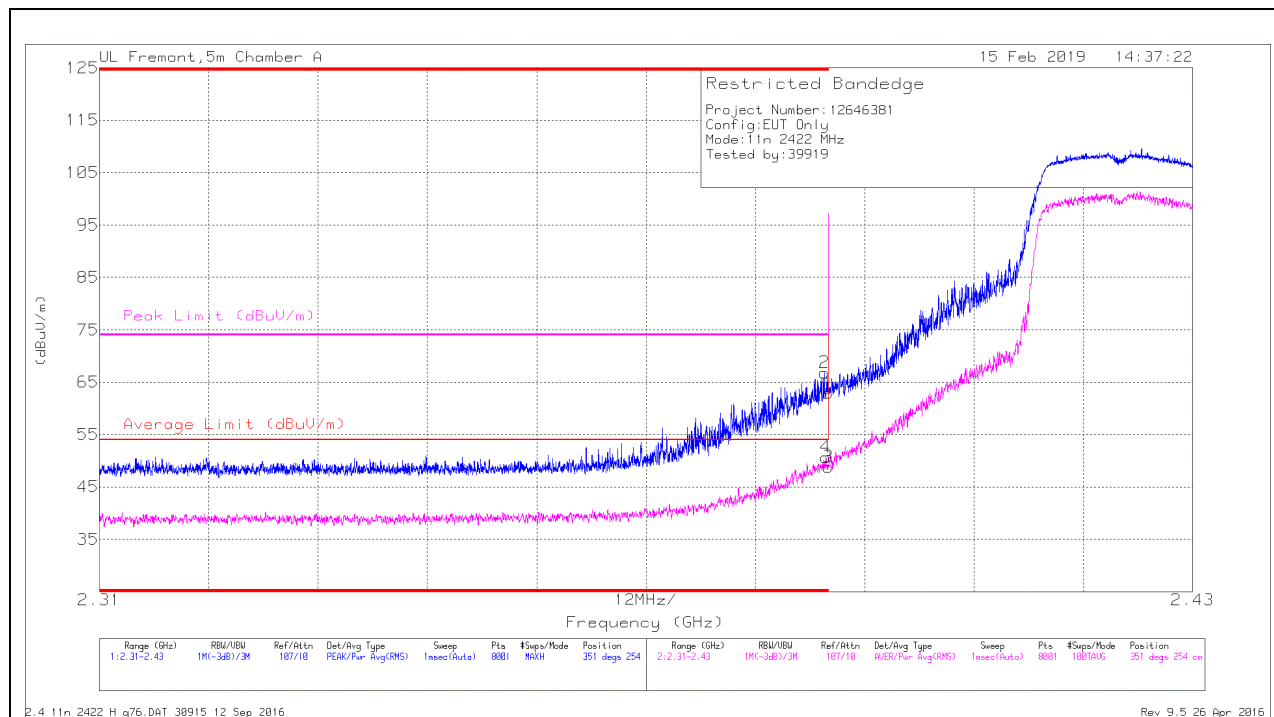
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT



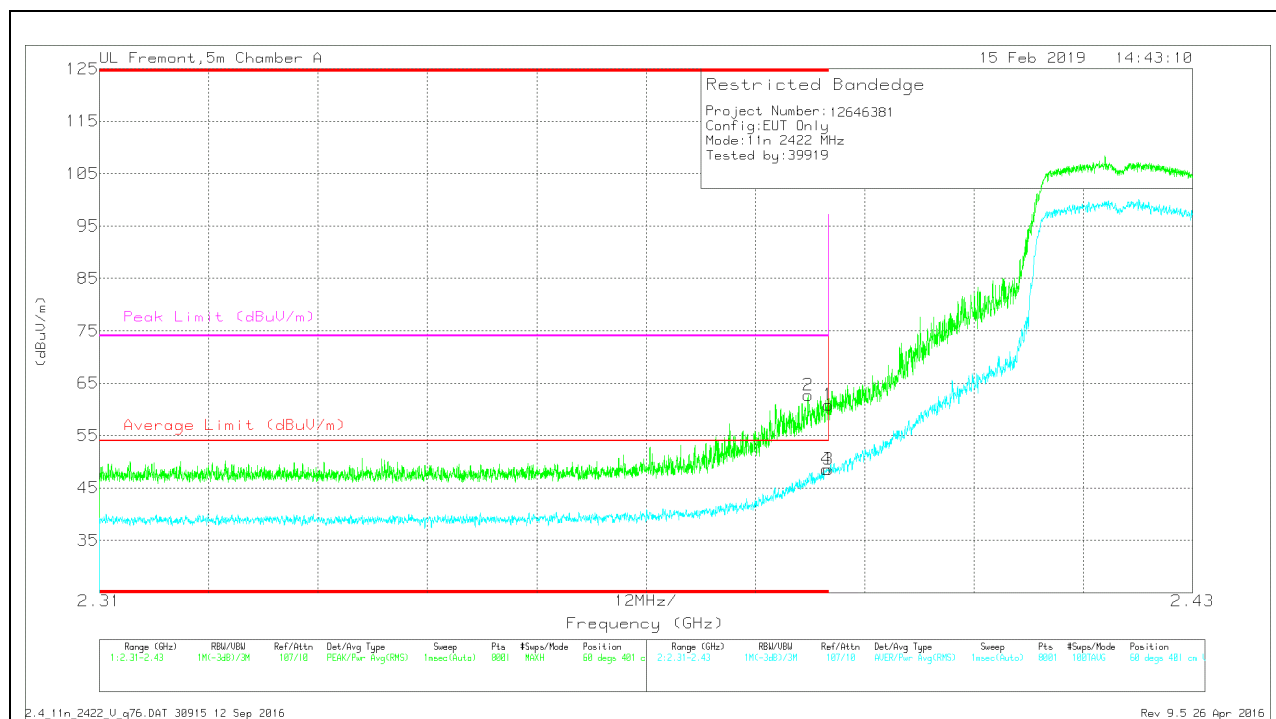
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	53.94	Pk	32	-23	62.94	-	-	74	-11.06	351	254	H
2	* 2.39	57.75	Pk	32	-23	66.75	-	-	74	-7.25	351	254	H
3	* 2.39	39.82	RMS	32	-23	48.82	54	-5.18	-	-	351	254	H
4	* 2.39	41.63	RMS	32	-23	50.63	54	-3.37	-	-	351	254	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.39	51.8	Pk	32	-23	60.8	-	-	74	-13.2	60	401	V
2	* 2.388	53.73	Pk	32	-23	62.73	-	-	74	-11.27	60	401	V
3	* 2.39	39.54	RMS	32	-23	48.54	54	-5.46	-	-	60	401	V
4	* 2.39	39.59	RMS	32	-23	48.59	54	-5.41	-	-	60	401	V

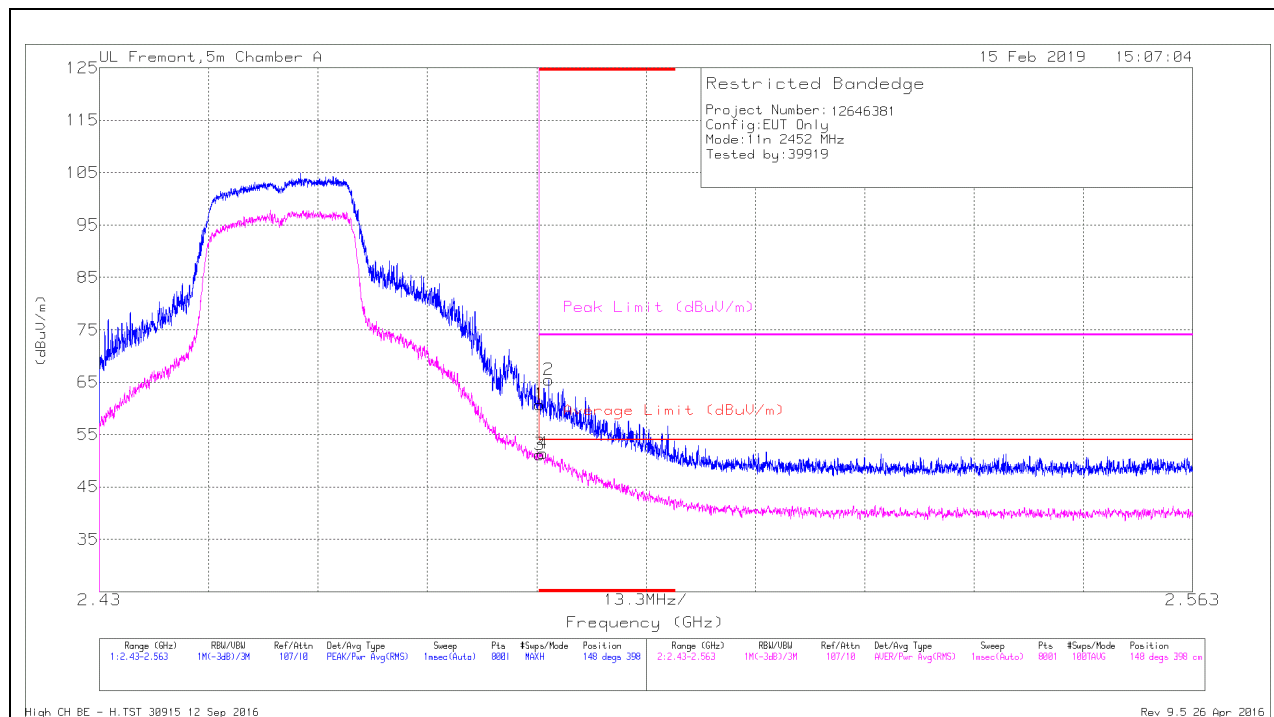
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 9)

HORIZONTAL RESULT



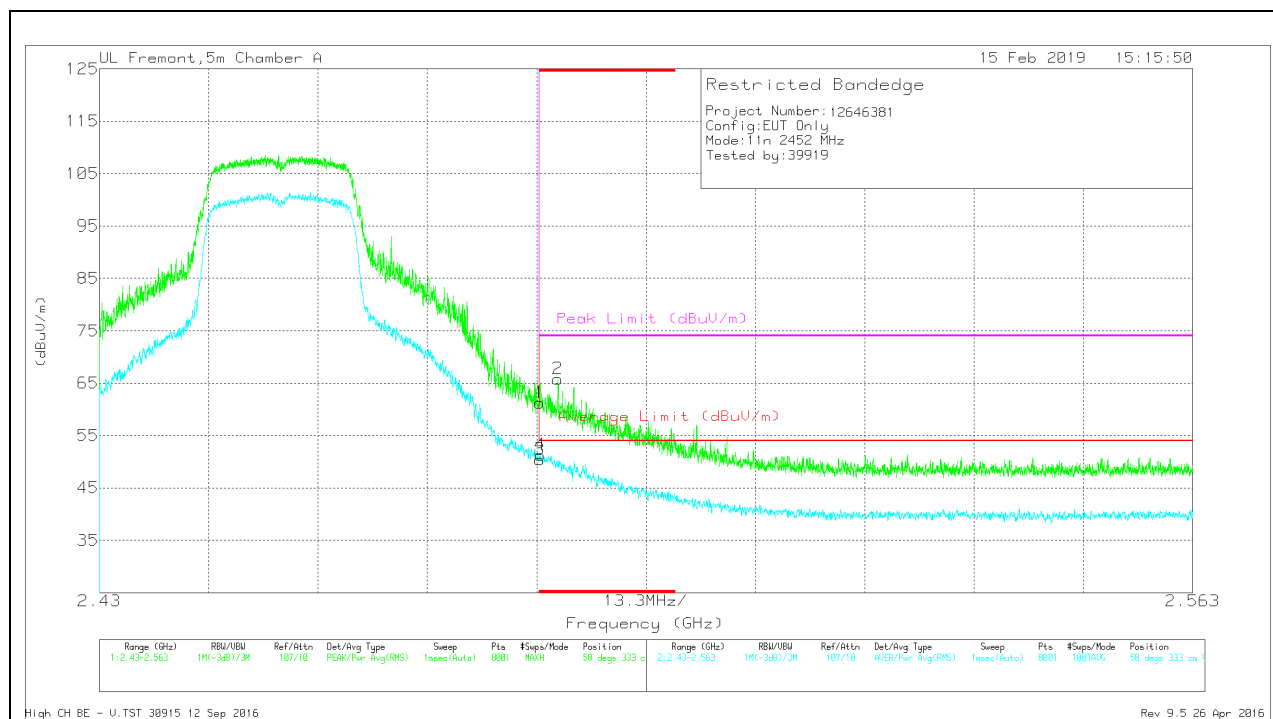
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.99	Pk	32.4	-22.7	60.69	-	-	74	-13.31	148	398	H
2	* 2.485	55.77	Pk	32.4	-22.7	65.47	-	-	74	-8.53	148	398	H
3	* 2.484	41.52	RMS	32.4	-22.7	51.22	54	-2.78	-	-	148	398	H
4	* 2.484	41.74	RMS	32.4	-22.7	51.44	54	-2.56	-	-	148	398	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	51.53	Pk	32.4	-22.7	61.23	-	-	74	-12.77	58	333	V
2	* 2.486	56.15	Pk	32.4	-22.7	65.85	-	-	74	-8.15	58	333	V
3	* 2.484	40.73	RMS	32.4	-22.7	50.43	54	-3.57	-	-	58	333	V
4	* 2.484	41.63	RMS	32.4	-22.7	51.33	54	-2.67	-	-	58	333	V

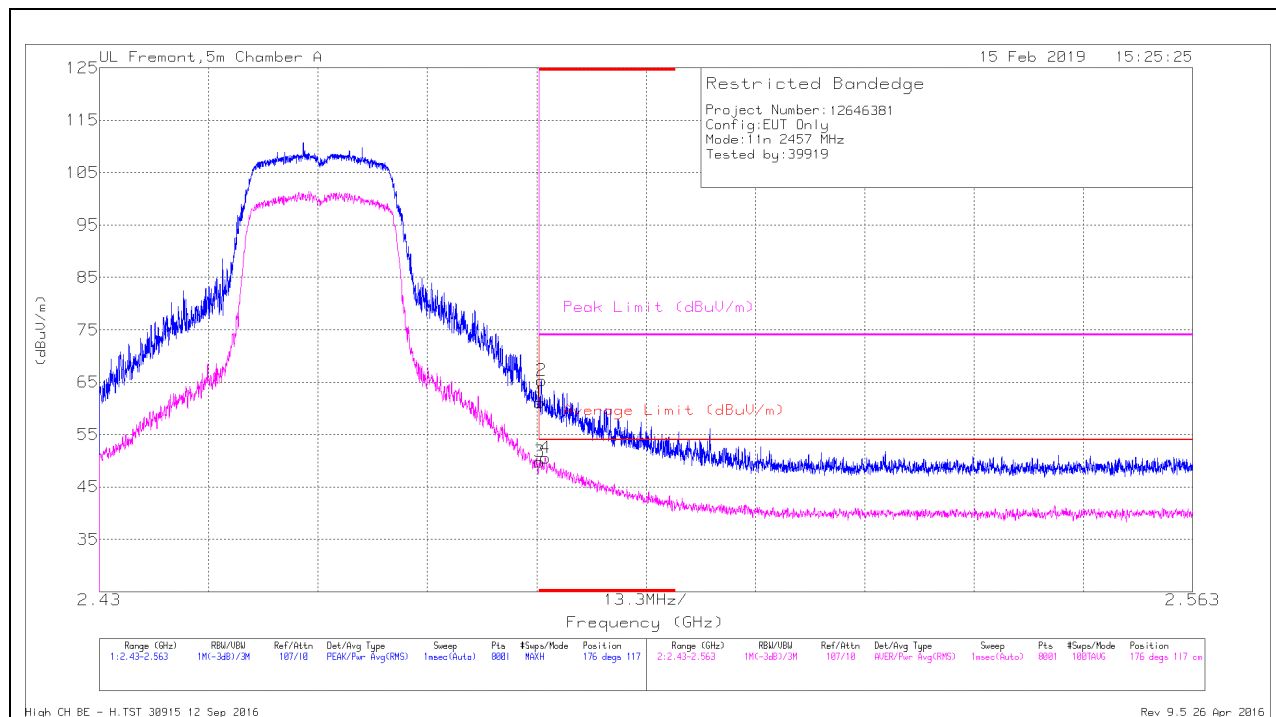
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL, CH 10)

HORIZONTAL RESULT



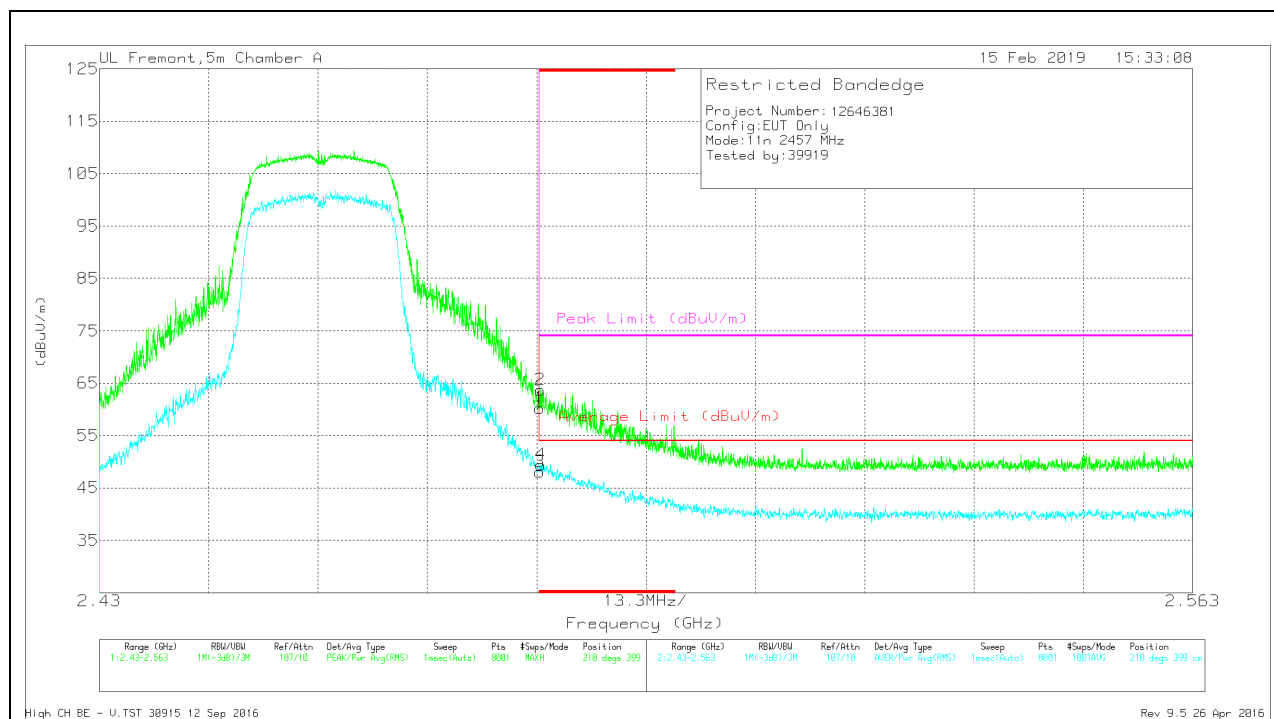
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	51.45	Pk	32.4	-22.7	61.15	-	-	74	-12.85	176	117	H
2	* 2.484	55.67	Pk	32.4	-22.7	65.37	-	-	74	-8.63	176	117	H
3	* 2.484	40.1	RMS	32.4	-22.7	49.8	54	-4.2	-	-	176	117	H
4	* 2.484	40.86	RMS	32.4	-22.7	50.56	54	-3.44	-	-	176	117	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	50.57	Pk	32.4	-22.7	60.27	-	-	74	-13.73	210	399	V
2	* 2.484	54	Pk	32.4	-22.7	63.7	-	-	74	-10.3	210	399	V
3	* 2.484	38.41	RMS	32.4	-22.7	48.11	54	-5.89	-	-	210	399	V
4	* 2.484	39.72	RMS	32.4	-22.7	49.42	54	-4.58	-	-	210	399	V

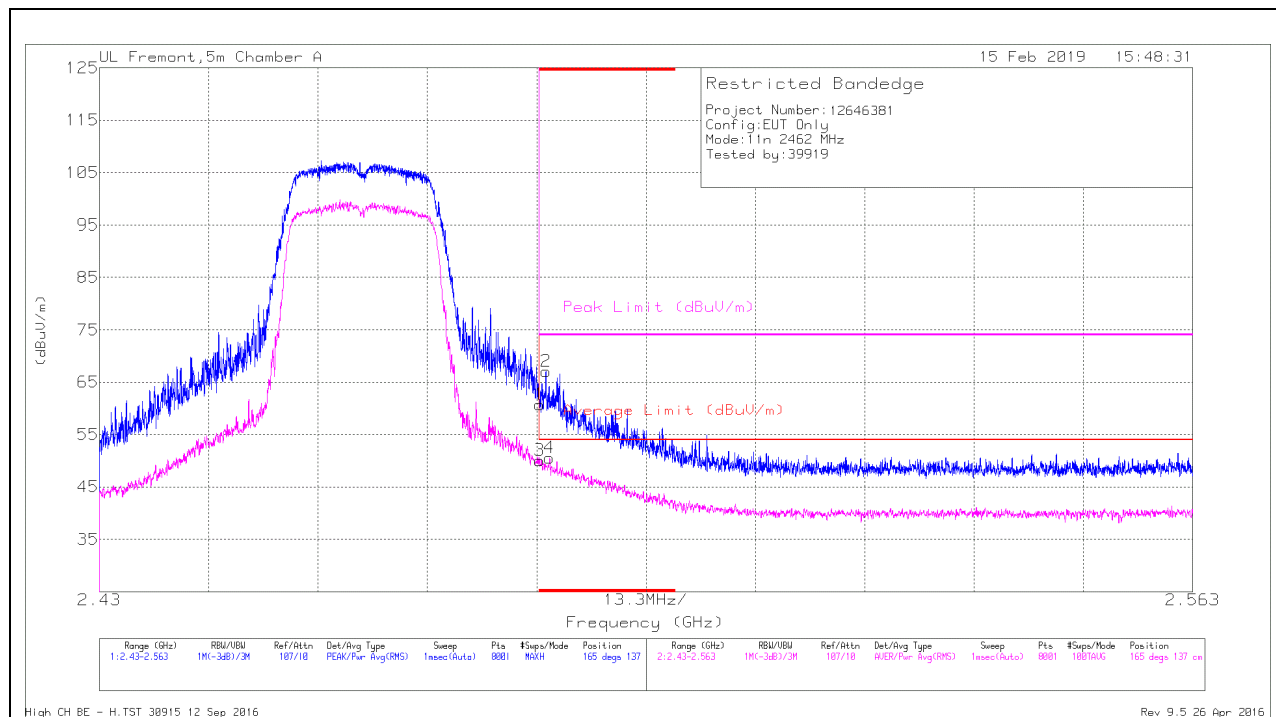
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



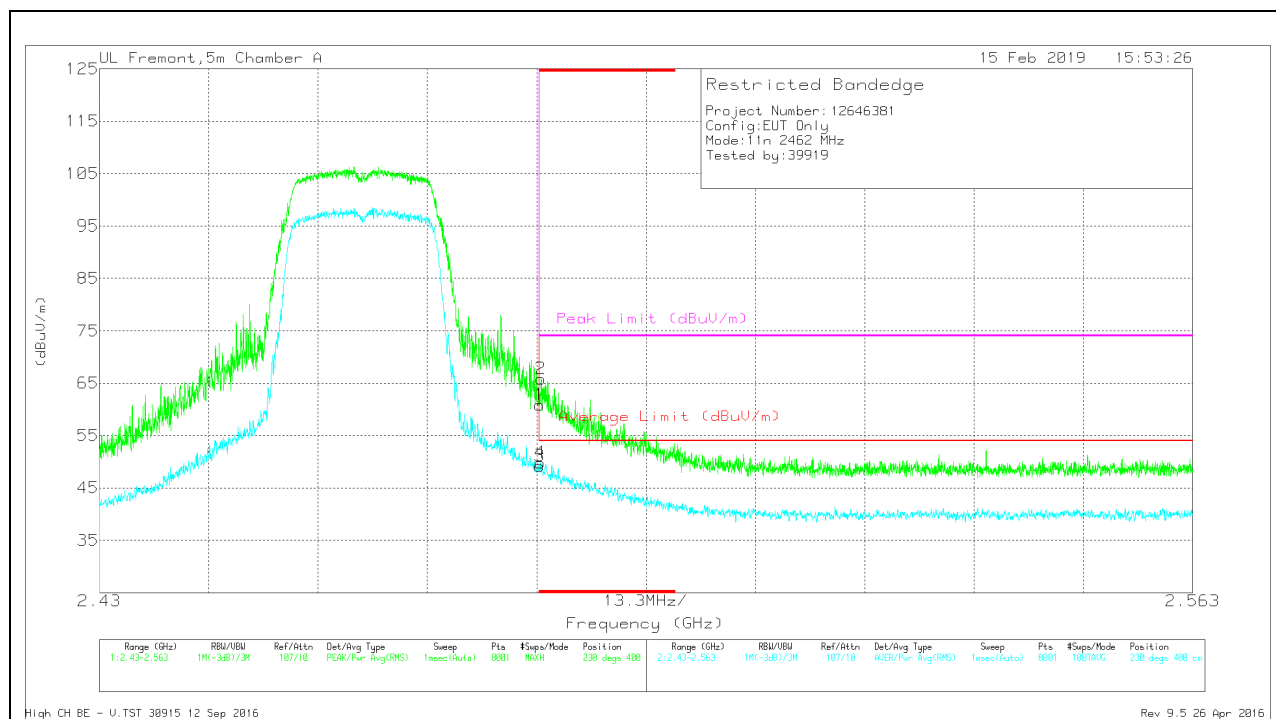
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.99	Pk	32.4	-22.7	60.69	-	-	74	-13.31	165	137	H
2	* 2.484	57.37	Pk	32.4	-22.7	67.07	-	-	74	-6.93	165	137	H
3	* 2.484	40.38	RMS	32.4	-22.7	50.08	54	-3.92	-	-	165	137	H
4	* 2.485	40.84	RMS	32.4	-22.7	50.54	54	-3.46	-	-	165	137	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	51.14	Pk	32.4	-22.7	60.84	-	-	74	-13.16	230	400	V
2	* 2.484	56.1	Pk	32.4	-22.7	65.8	-	-	74	-8.2	230	400	V
3	* 2.484	39.5	RMS	32.4	-22.7	49.2	54	-4.8	-	-	230	400	V
4	* 2.484	40.07	RMS	32.4	-22.7	49.77	54	-4.23	-	-	230	400	V

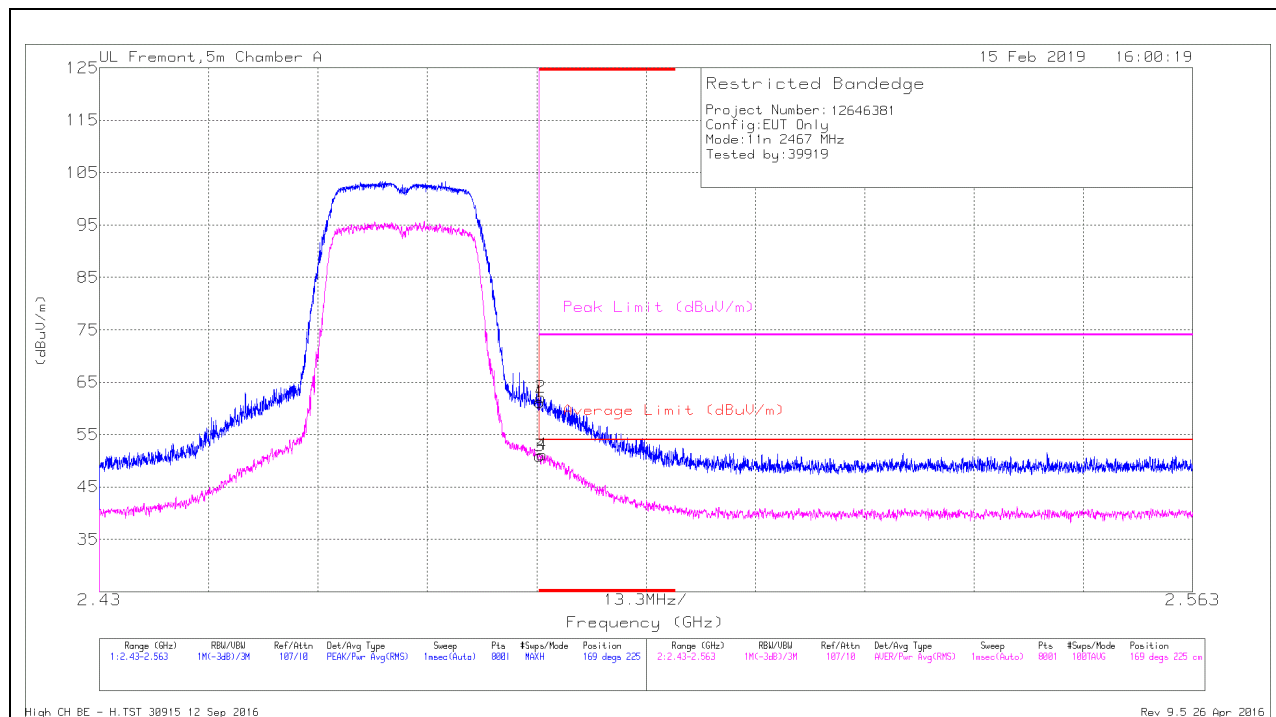
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



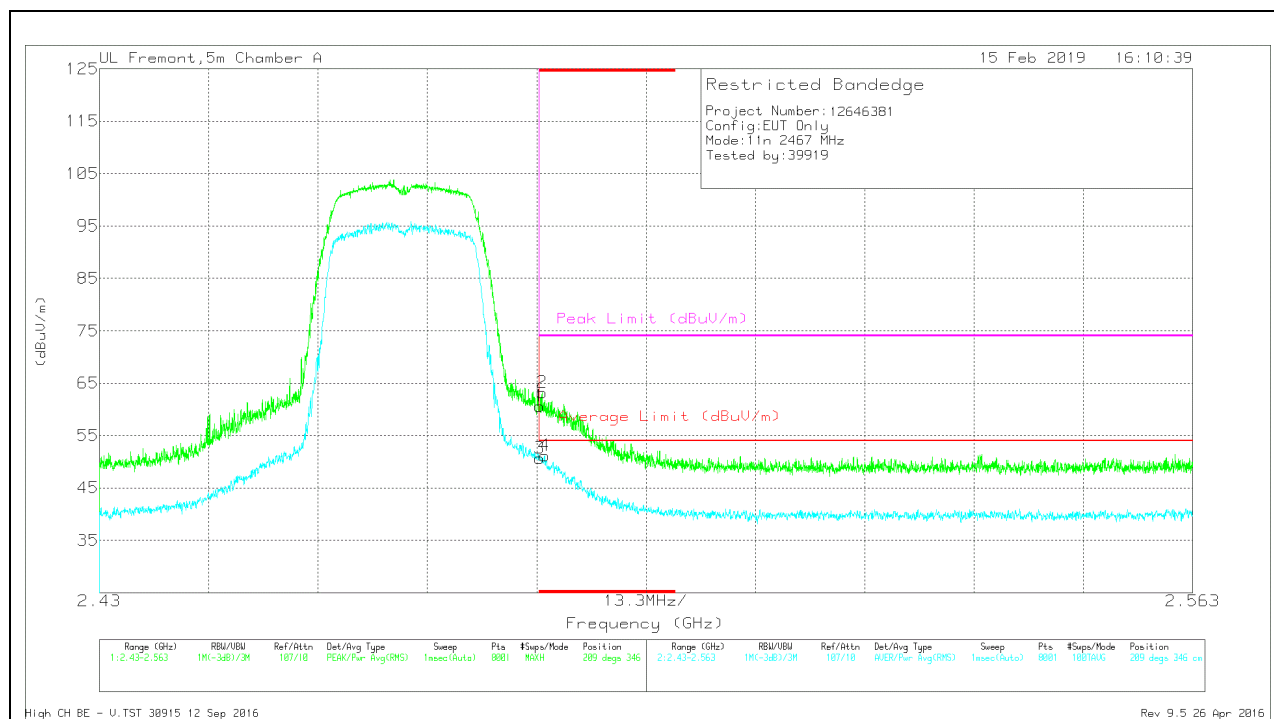
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	51.55	Pk	32.4	-22.7	61.25	-	-	74	-12.75	169	225	H
2	* 2.484	52.42	Pk	32.4	-22.7	62.12	-	-	74	-11.88	169	225	H
3	* 2.484	41.21	RMS	32.4	-22.7	50.91	54	-3.09	-	-	169	225	H
4	* 2.484	41.45	RMS	32.4	-22.7	51.15	54	-2.85	-	-	169	225	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/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	* 2.484	50.87	Pk	32.4	-22.7	60.57	-	-	74	-13.43	209	346	V
2	* 2.484	53.45	Pk	32.4	-22.7	63.15	-	-	74	-10.85	209	346	V
3	* 2.484	41.01	RMS	32.4	-22.7	50.71	54	-3.29	-	-	209	346	V
4	* 2.484	41.43	RMS	32.4	-22.7	51.13	54	-2.87	-	-	209	346	V

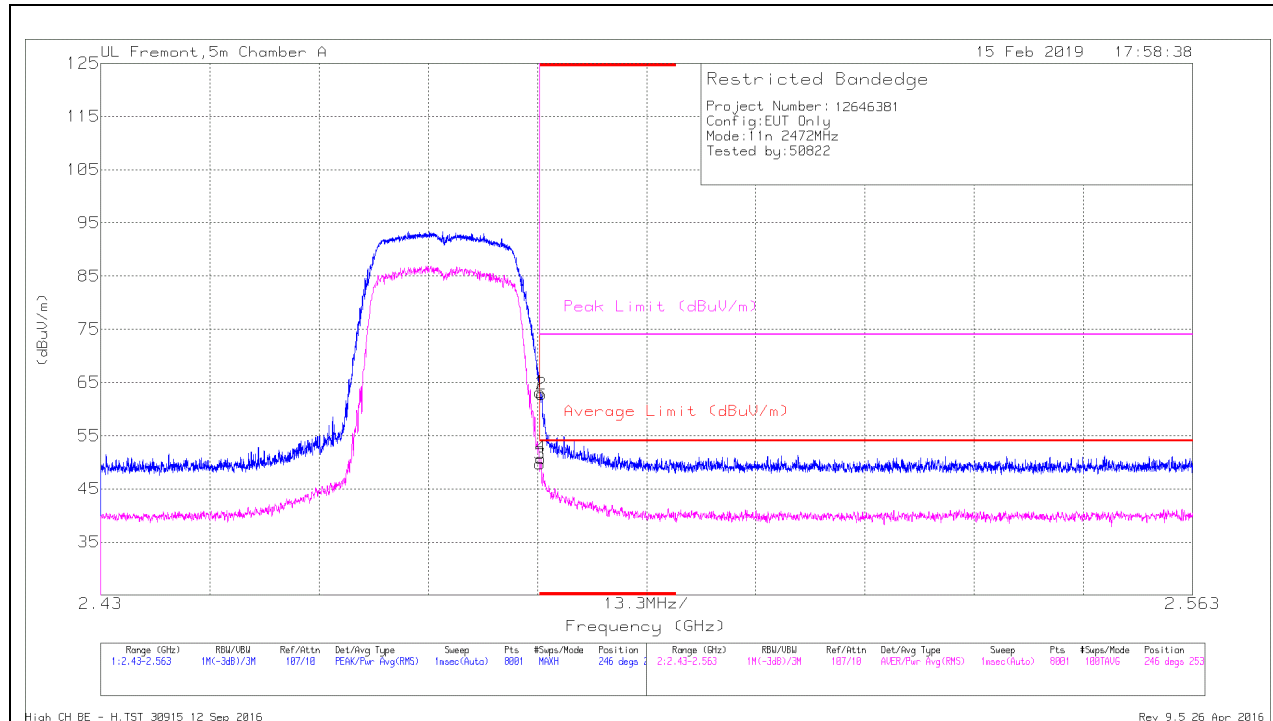
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



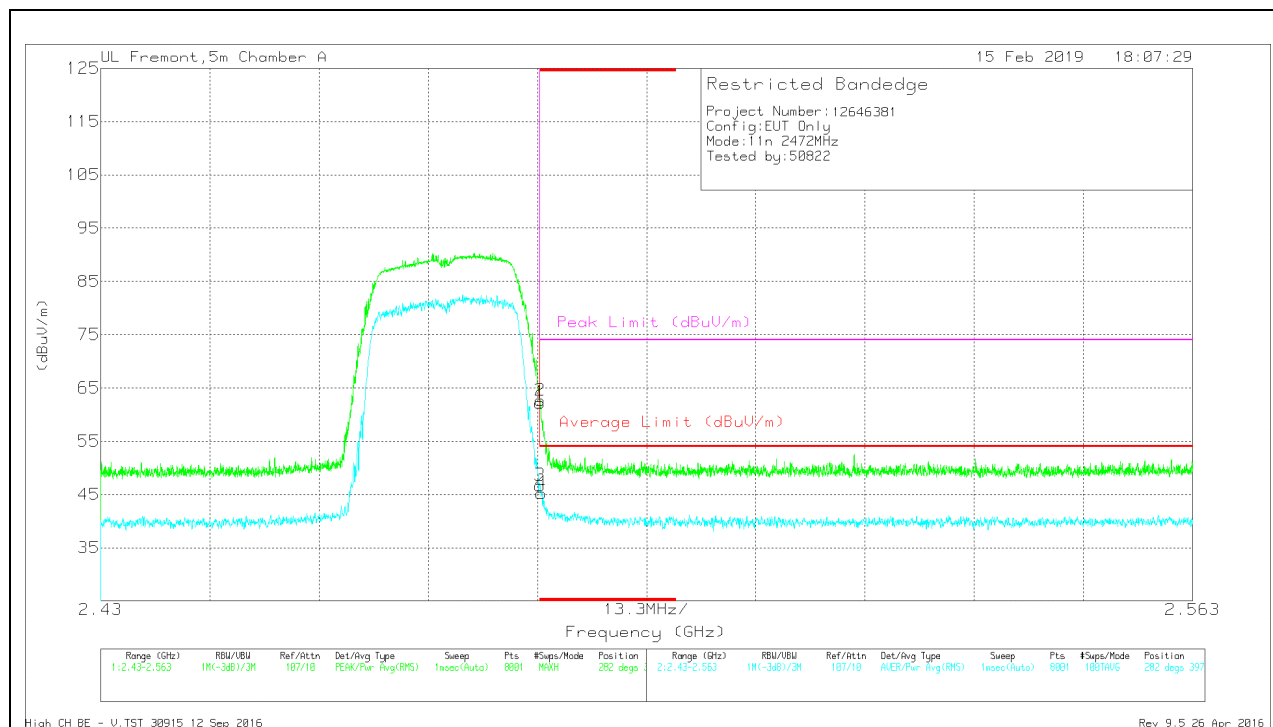
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.44	Pk	32.4	-22.7	63.14	-	-	74	-10.86	246	253	H
2	* 2.484	53.1	Pk	32.4	-22.7	62.8	-	-	74	-11.2	246	253	H
3	* 2.484	40.02	RMS	32.4	-22.7	49.72	54	-4.28	-	-	246	253	H
4	* 2.484	41.04	RMS	32.4	-22.7	50.74	54	-3.26	-	-	246	253	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.484	52.51	Pk	32.4	-22.7	62.21	-	-	74	-11.79	282	397	V
2	* 2.484	52.97	Pk	32.4	-22.7	62.67	-	-	74	-11.33	282	397	V
3	* 2.484	36.98	RMS	32.4	-22.7	46.68	54	-7.32	-	-	282	397	V
4	* 2.484	35.52	RMS	32.4	-22.7	45.22	54	-8.78	-	-	282	397	V

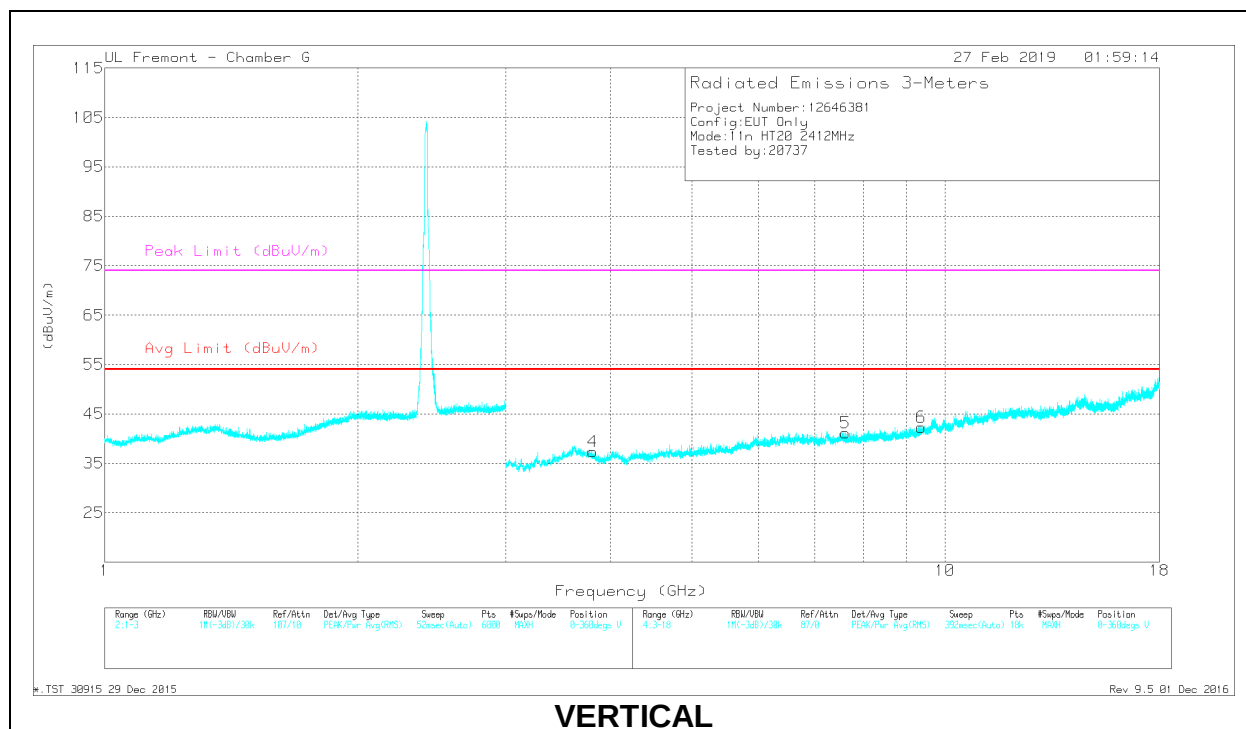
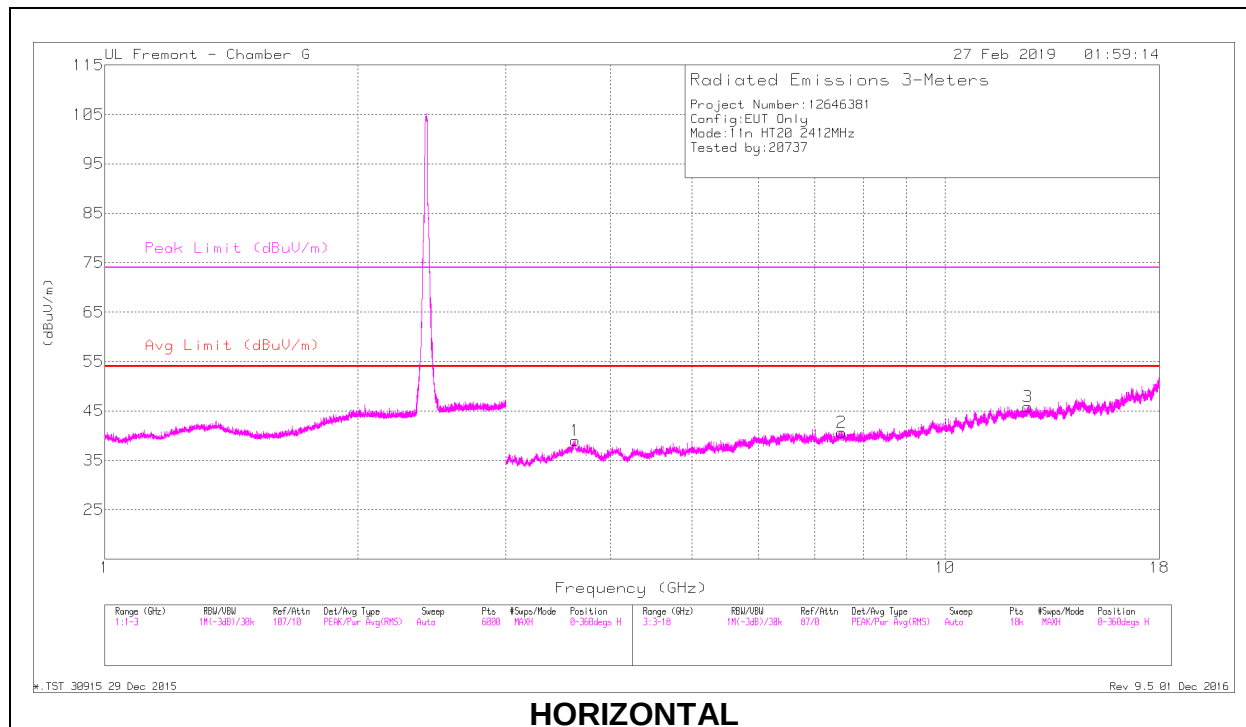
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

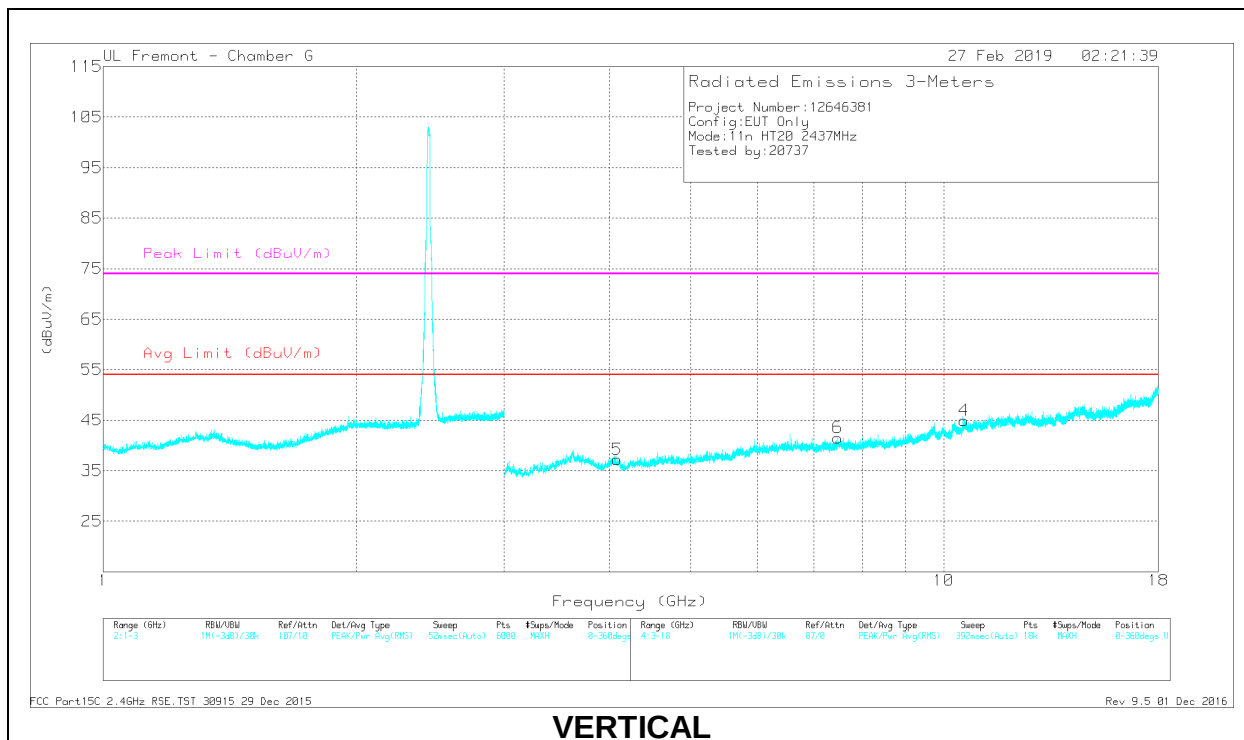
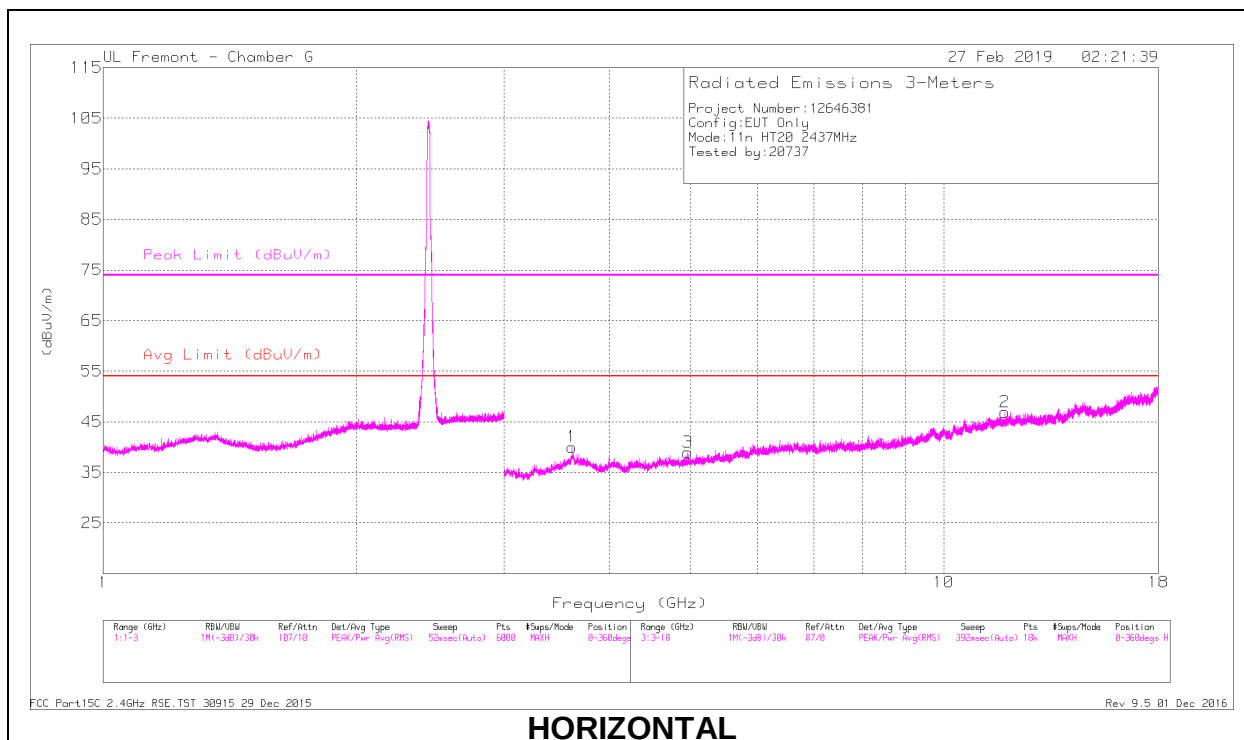
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.631	40.76	PK2	35	-29.9	45.86	-	-	74	-28.14	35	208	H
	* 3.632	29.06	MAv1	34.9	-29.8	34.16	54	-19.84	-	-	35	208	H
2	* 7.541	39.08	PK2	36	-26.8	48.28	-	-	74	-25.72	101	251	H
	* 7.54	27.71	MAv1	36	-26.8	36.91	54	-17.09	-	-	101	251	H
3	* 12.558	36.55	PK2	39.7	-22.9	53.35	-	-	74	-20.65	126	205	H
	* 12.555	25.28	MAv1	39.7	-22.9	42.08	54	-11.92	-	-	126	205	H
4	* 3.811	41.04	PK2	33.8	-30.1	44.74	-	-	74	-29.26	114	136	V
	* 3.811	29.58	MAv1	33.8	-30.2	33.18	54	-20.82	-	-	114	136	V
5	* 7.609	38.84	PK2	36.1	-27.3	47.64	-	-	74	-26.36	64	215	V
	* 7.612	27.57	MAv1	36	-27.3	36.27	54	-17.73	-	-	64	215	V
6	* 9.378	37.48	PK2	36.9	-25.3	49.08	-	-	74	-24.92	249	245	V
	* 9.376	26.73	MAv1	36.9	-25.3	38.33	54	-15.67	-	-	249	245	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, CH 6 RESULTS



RADIATED EMISSIONS

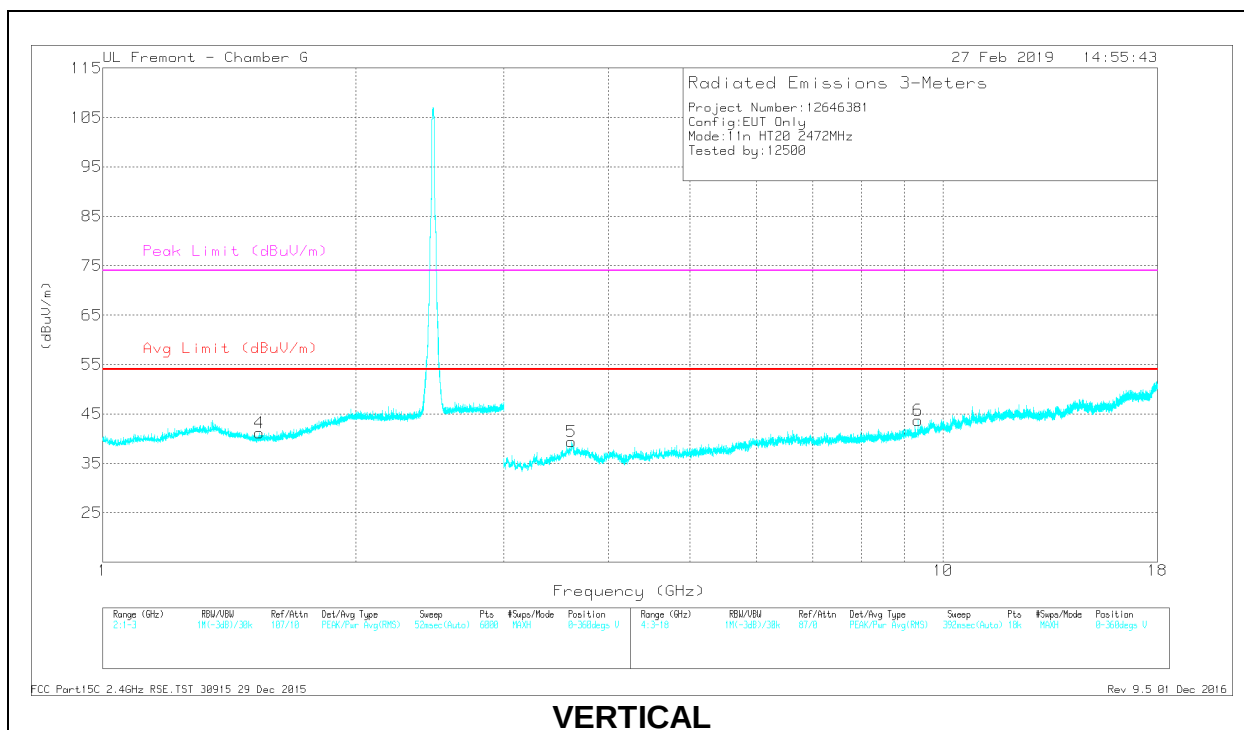
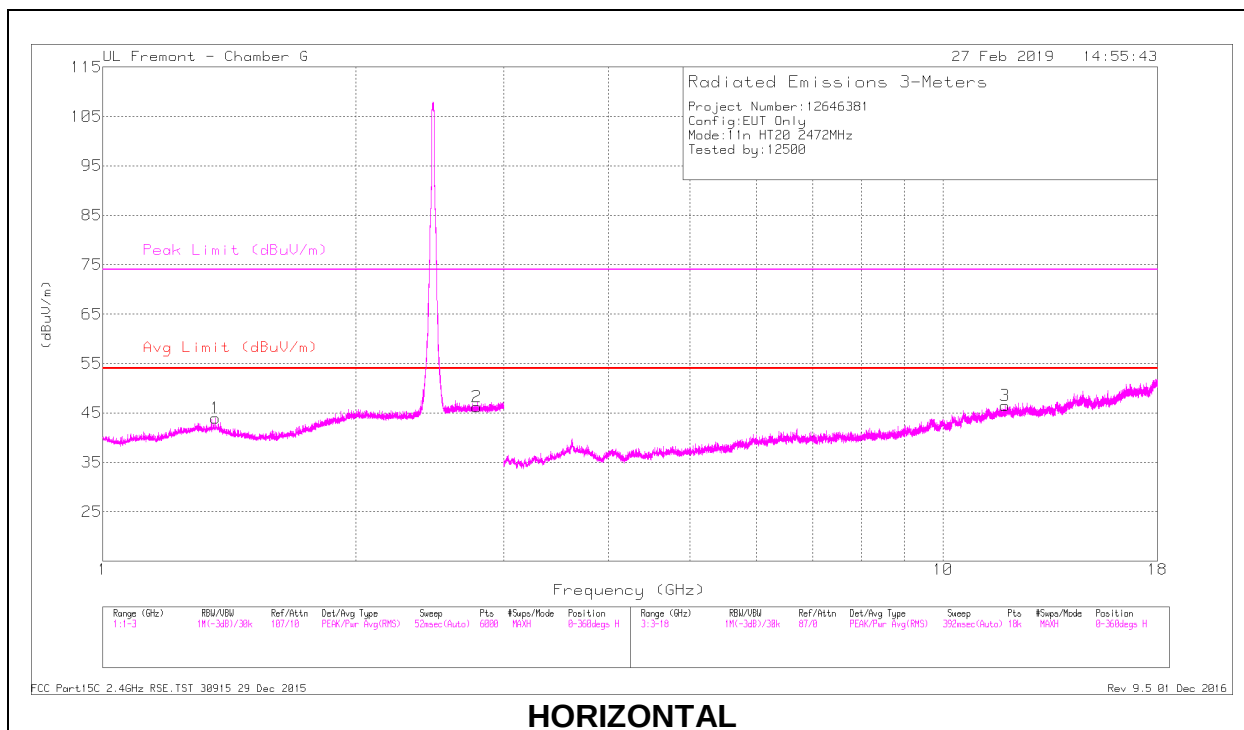
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.608	41.16	PK2	35.1	-30.5	45.76	-	-	74	-28.24	360	183	H
	* 3.609	29.76	MAv1	35.1	-30.4	34.46	54	-19.54	-	-	360	183	H
2	* 11.821	36.92	PK2	39.4	-23.5	52.82	-	-	74	-21.18	340	192	H
	* 11.822	25.59	MAv1	39.4	-23.5	41.49	54	-12.51	-	-	340	192	H
3	* 4.961	40.41	PK2	34.2	-29.7	44.91	-	-	74	-29.09	318	214	H
	* 4.96	29.43	MAv1	34.2	-29.7	33.93	54	-20.07	-	-	318	214	H
5	* 4.087	40.6	PK2	33.7	-29.9	44.4	-	-	74	-29.6	0	211	V
	* 4.086	29.69	MAv1	33.7	-29.9	33.49	54	-20.51	-	-	0	211	V
6	* 7.476	38.91	PK2	36	-27.3	47.61	-	-	74	-26.39	236	100	V
	* 7.479	27.87	MAv1	36	-27.4	36.47	54	-17.53	-	-	236	100	V
7	10.576	25.74	MAv1	38	-23.1	40.64	-	-	-	-	280	245	V
	10.579	37.44	PK2	38	-23.1	52.34	-	-	-	-	280	245	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, CH 13 RESULTS



RADIATED EMISSIONS

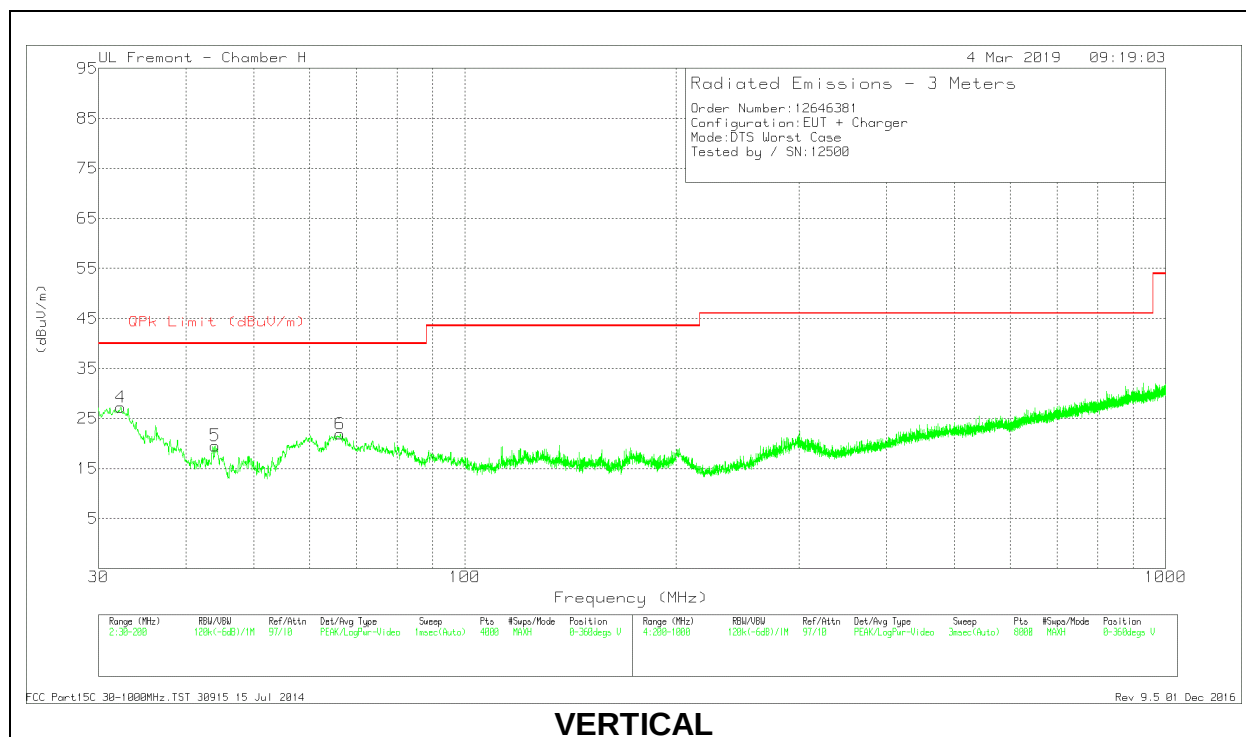
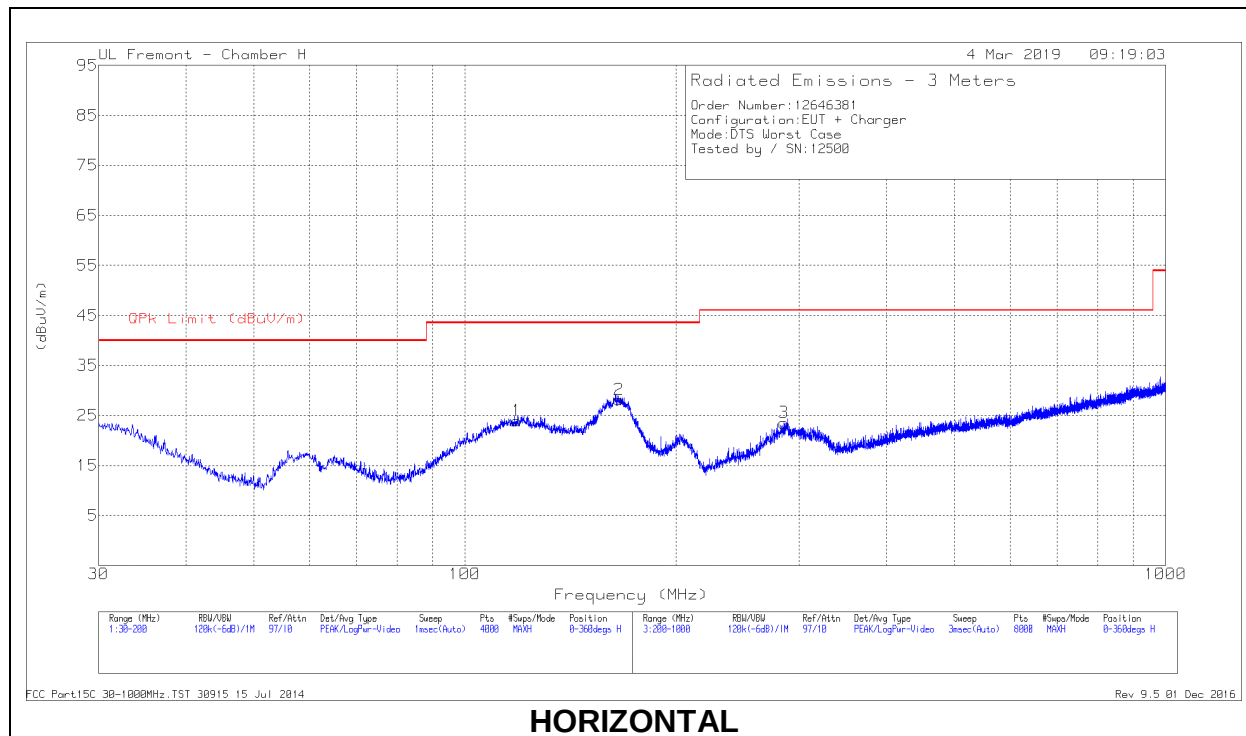
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.361	44.45	PK2	29.9	-23.7	50.65	-	-	74	-23.35	235	298	H
	* 1.363	31.6	MAv1	30	-23.7	37.9	54	-16.1	-	-	235	298	H
2	* 2.788	43.65	PK2	32.8	-22.1	54.35	-	-	74	-19.65	39	303	H
	* 2.789	31.4	MAv1	32.8	-22.1	42.1	54	-11.9	-	-	39	303	H
4	* 1.536	43.89	PK2	27.8	-23.2	48.49	-	-	74	-25.51	266	166	V
	* 1.537	31.71	MAv1	27.8	-23.2	36.31	54	-17.69	-	-	266	166	V
3	* 11.852	36.28	PK2	39.4	-23.2	52.48	-	-	74	-21.52	213	178	H
	* 11.852	24.71	MAv1	39.4	-23.2	40.91	54	-13.09	-	-	213	178	H
5	* 3.613	41.61	PK2	35.4	-30.4	46.61	-	-	74	-27.39	208	370	V
	* 3.616	29.55	MAv1	35.6	-30.3	34.85	54	-19.15	-	-	208	370	V
6	* 9.342	37.86	PK2	36.8	-25.4	49.26	-	-	74	-24.74	168	251	V
	* 9.34	26.04	MAv1	36.8	-25.4	37.44	54	-16.56	-	-	168	251	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2. Worst Case Below 1 GHz

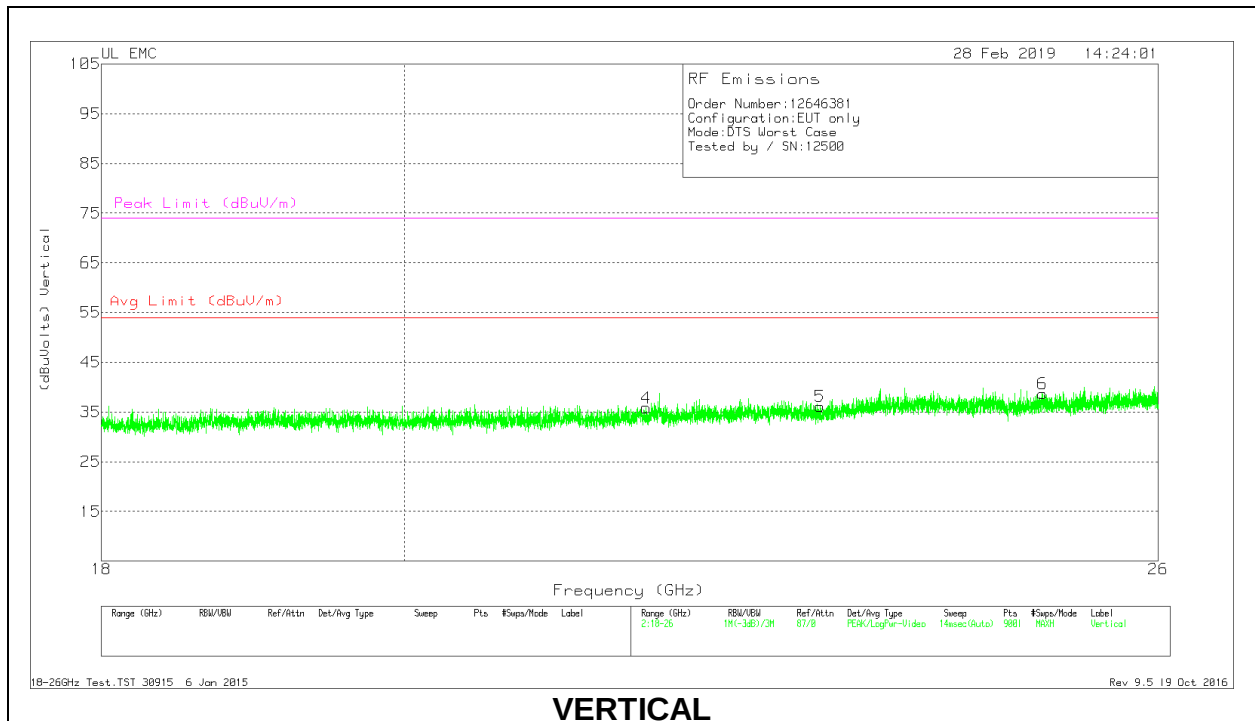
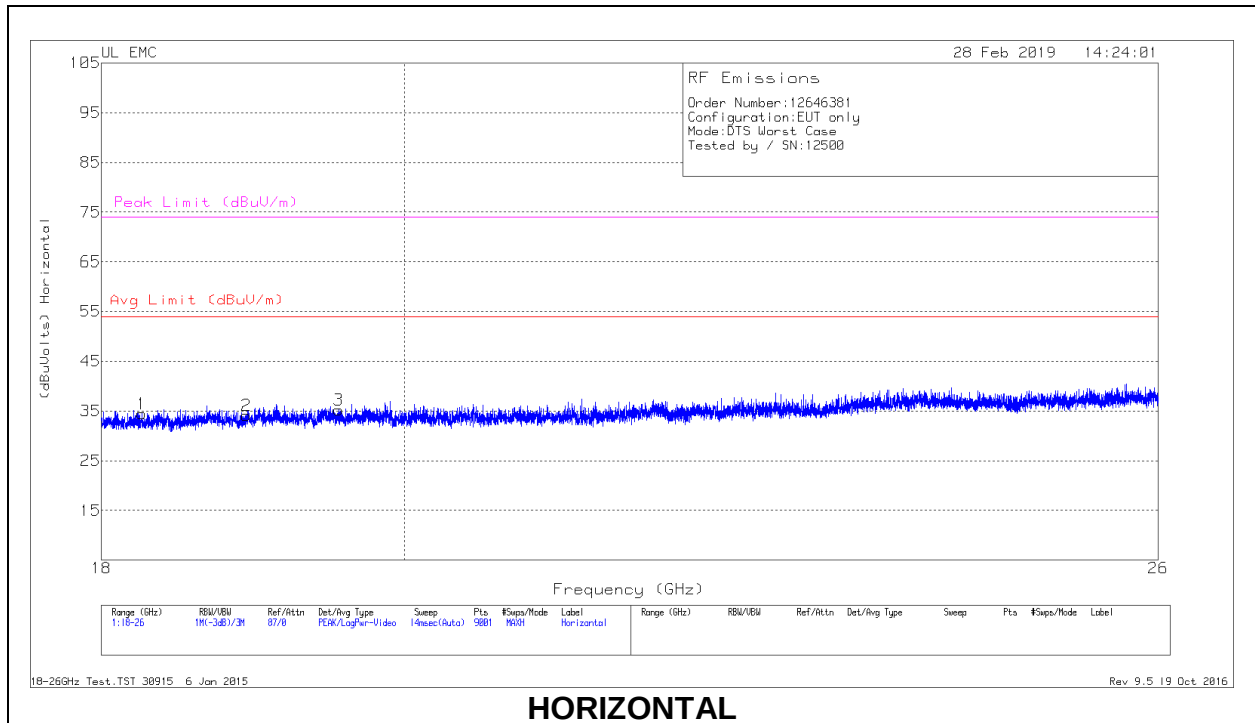


Below 1GHz DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T122 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 118.741	30.63	Qp	19.7	-30.3	20.03	43.52	-23.49	288	306	H
2	* 165.6646	37.67	Qp	17.9	-30	25.57	43.52	-17.95	110	184	H
4	32.3918	24.2	Qp	25.4	-31.3	18.3	40	-21.7	108	373	V
5	44.1373	24.73	Qp	16.7	-31.1	10.33	40	-29.67	341	237	V
6	66.2838	31.2	Qp	13.7	-30.8	14.1	40	-25.9	341	347	V
3	285.1626	29.43	Qp	19.2	-29.2	19.43	46.02	-26.59	43	104	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Qp - Quasi-Peak detector

9.3. Worst Case 18-26 GHz



18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T447 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	18.256	37.18	Pk	32.2	-25.4	-9.5	34.48	54	-19.52	74	-39.52
2	18.93	36.42	Pk	32.5	-25.3	-9.5	34.12	54	-19.88	74	-39.88
3	19.548	37.02	Pk	32.8	-25.1	-9.5	35.22	54	-18.78	74	-38.78
4	21.756	37.25	Pk	33.1	-25	-9.5	35.85	54	-18.15	74	-38.15
5	23.113	37.21	Pk	33.7	-25.3	-9.5	36.11	54	-17.89	74	-37.89
6	24.974	37.97	Pk	34.4	-24.2	-9.5	38.67	54	-15.33	74	-35.33

Pk - Peak detector

10. 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.

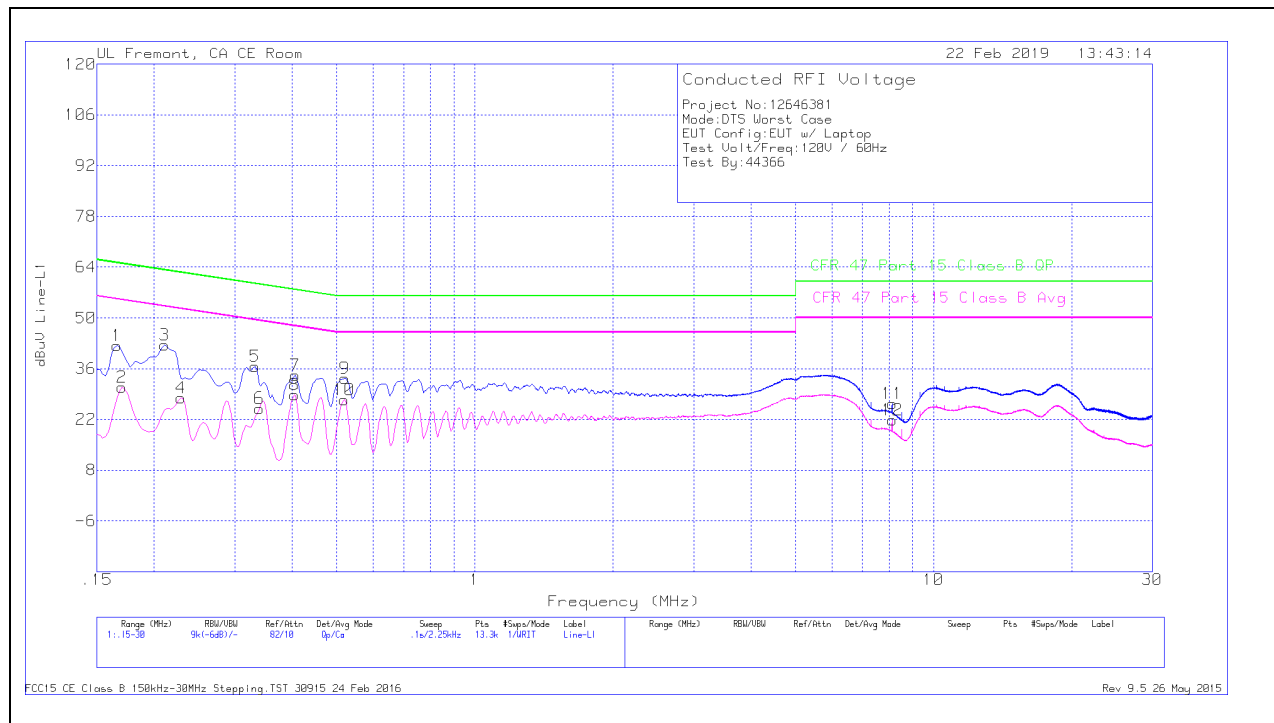
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

10.1.1. AC Power Line Host

LINE 1 RESULTS



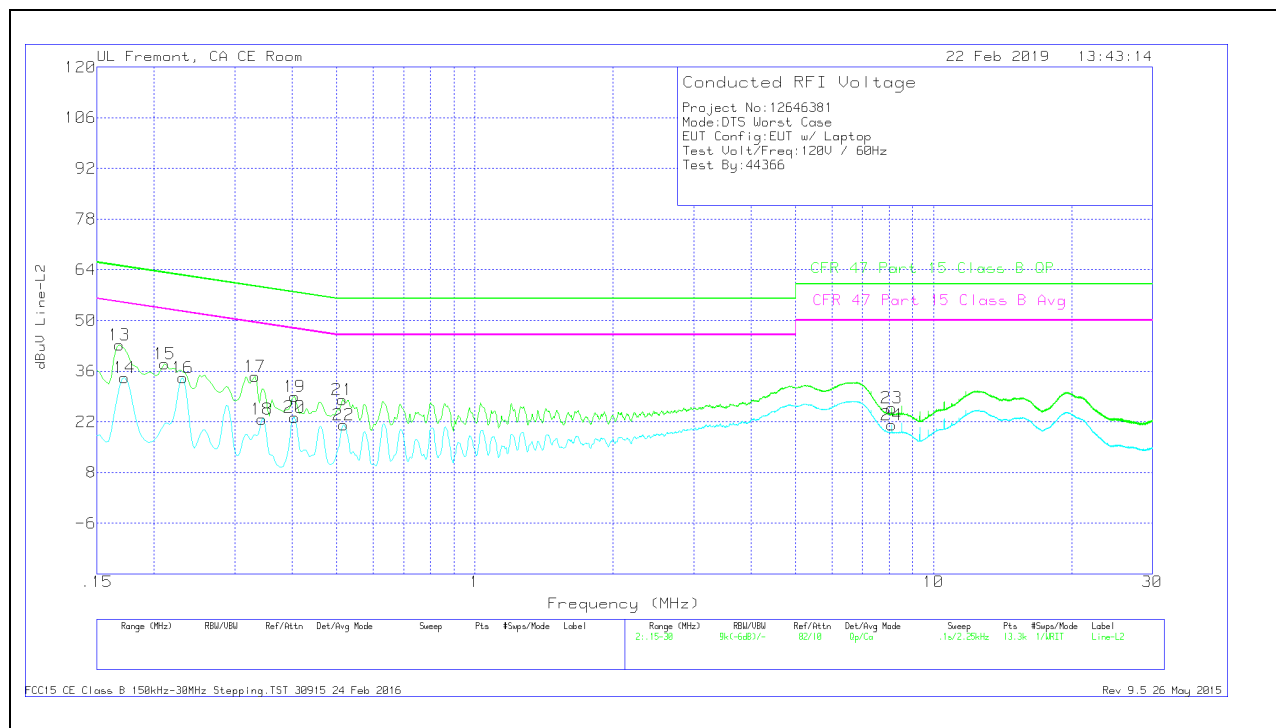
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	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) Margin (dB)
1	.16575	32.11	Qp	.1	0	10.1	42.31	65.17	-22.86	-	-
2	.17025	20.78	Ca	0	0	10.1	30.88	-	-	54.95	-24.07
3	.21075	32.36	Qp	0	0	10.1	42.46	63.18	-20.72	-	-
4	.22875	17.78	Ca	0	0	10.1	27.88	-	-	52.49	-24.61
5	.33225	26.49	Qp	0	0	10.1	36.59	59.39	-22.8	-	-
6	.339	14.95	Ca	0	0	10.1	25.05	-	-	49.23	-24.18
7	.4065	24.07	Qp	0	0	10.1	34.17	57.72	-23.55	-	-
8	.40425	18.7	Ca	0	0	10.1	28.8	-	-	47.77	-18.97
9	.52125	23.26	Qp	0	0	10.1	33.36	56	-22.64	-	-
10	.519	17.33	Ca	0	0	10.1	27.43	-	-	46	-18.57
11	8.12175	15.99	Qp	0	.2	10.2	26.39	60	-33.61	-	-
12	8.12175	11.39	Ca	0	.2	10.2	21.79	-	-	50	-28.21

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

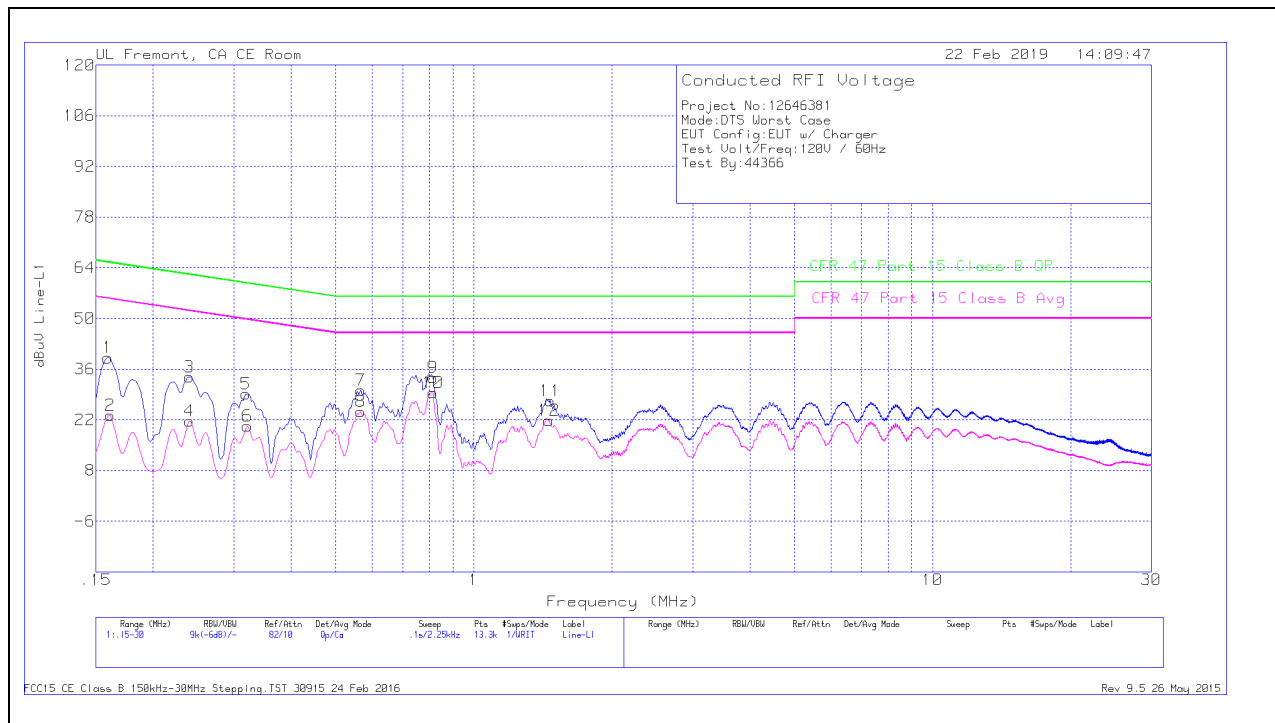
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.168	32.96	Qp	.1	0	10.1	43.16	65.06	-21.9	-	-
14	.1725	24.07	Ca	0	0	10.1	34.17	-	-	54.84	-20.67
15	.21075	27.98	Qp	0	0	10.1	38.08	63.18	-25.1	-	-
16	.231	24.11	Ca	0	0	10.1	34.21	-	-	52.41	-18.2
17	.33225	24.46	Qp	0	0	10.1	34.56	59.39	-24.83	-	-
18	.3435	12.67	Ca	0	0	10.1	22.77	-	-	49.12	-26.35
19	.40425	18.82	Qp	0	0	10.1	28.92	57.77	-28.85	-	-
20	.40425	13.21	Ca	0	0	10.1	23.31	-	-	47.77	-24.46
21	.5145	17.99	Qp	0	0	10.1	28.09	56	-27.91	-	-
22	.51675	11.1	Ca	0	0	10.1	21.2	-	-	46	-24.8
23	8.11275	15.37	Qp	0	.2	10.2	25.77	60	-34.23	-	-
24	8.11275	10.67	Ca	0	.2	10.2	21.07	-	-	50	-28.93

Qp - Quasi-Peak detector

Ca - CISPR average detection

10.1.2. AC Power Line Norm

LINE 1 RESULTS



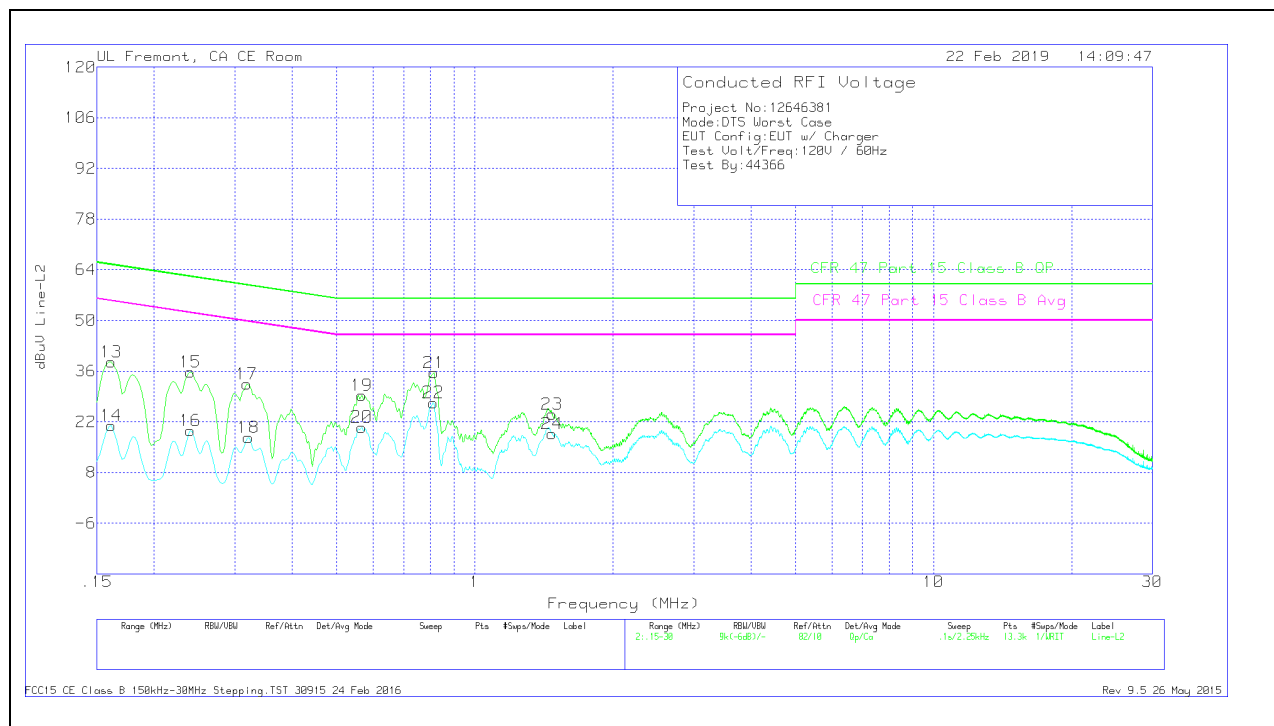
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	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) Margin (dB)
1	.159	28.94	Qp	.1	0	10.1	39.14	65.52	-26.38	-	-
2	.16125	13.04	Ca	.1	0	10.1	23.24	-	-	55.4	-32.16
3	.24	23.8	Qp	0	0	10.1	33.9	62.1	-28.2	-	-
4	.24	11.55	Ca	0	0	10.1	21.65	-	-	52.1	-30.45
5	.31875	18.98	Qp	0	0	10.1	29.08	59.74	-30.66	-	-
6	.321	10.1	Ca	0	0	10.1	20.2	-	-	49.68	-29.48
7	.56625	20.02	Qp	0	0	10.1	30.12	56	-25.88	-	-
8	.56625	14.22	Ca	0	0	10.1	24.32	-	-	46	-21.68
9	.81375	23.48	Qp	0	0	10.1	33.58	56	-22.42	-	-
10	.81375	19.32	Ca	0	0	10.1	29.42	-	-	46	-16.58
11	1.4685	17.02	Qp	0	.1	10.1	27.22	56	-28.78	-	-
12	1.45725	11.61	Ca	0	.1	10.1	21.81	-	-	46	-24.19

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	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	.16125	28.38	Qp	.1	0	10.1	38.58	65.4	-26.82	-	-
14	.16125	10.71	Ca	.1	0	10.1	20.91	-	-	55.4	-34.49
15	.24	25.67	Qp	0	0	10.1	35.77	62.1	-26.33	-	-
16	.24	9.44	Ca	0	0	10.1	19.54	-	-	52.1	-32.56
17	.31875	22.4	Qp	0	0	10.1	32.5	59.74	-27.24	-	-
18	.321	7.62	Ca	0	0	10.1	17.72	-	-	49.68	-31.96
19	.56625	19.27	Qp	0	0	10.1	29.37	56	-26.63	-	-
20	.56625	10.43	Ca	0	0	10.1	20.53	-	-	46	-25.47
21	.81375	25.44	Qp	0	0	10.1	35.54	56	-20.46	-	-
22	.8115	17.21	Ca	0	0	10.1	27.31	-	-	46	-18.69
23	1.47525	13.97	Qp	0	.1	10.1	24.17	56	-31.83	-	-
24	1.47525	8.51	Ca	0	.1	10.1	18.71	-	-	46	-27.29

Qp - Quasi-Peak detector

Ca - CISPR average detection

11. SETUP PHOTOS

Please refer to 12646381-EP1V1 for setup photos

END OF TEST REPORT