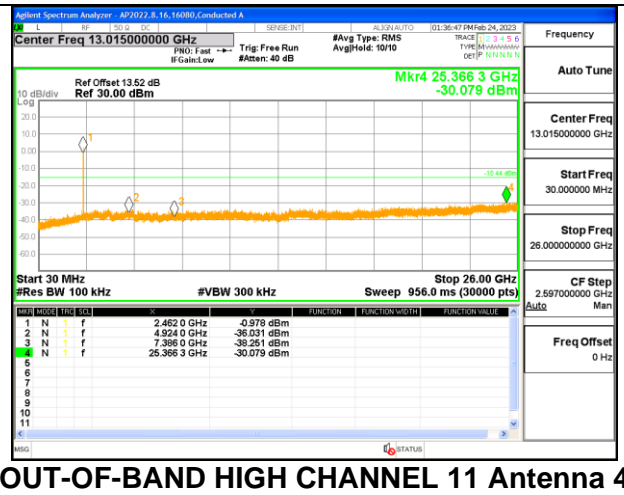


HIGH CHANNEL 11 BANDEDGE Antenna 4



OUT-OF-BAND HIGH CHANNEL 11 Antenna 4

10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10

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

TEST PROCEDURE

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

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

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 30MHz, 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.

2D antenna use - 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.

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

Based 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.

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

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

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

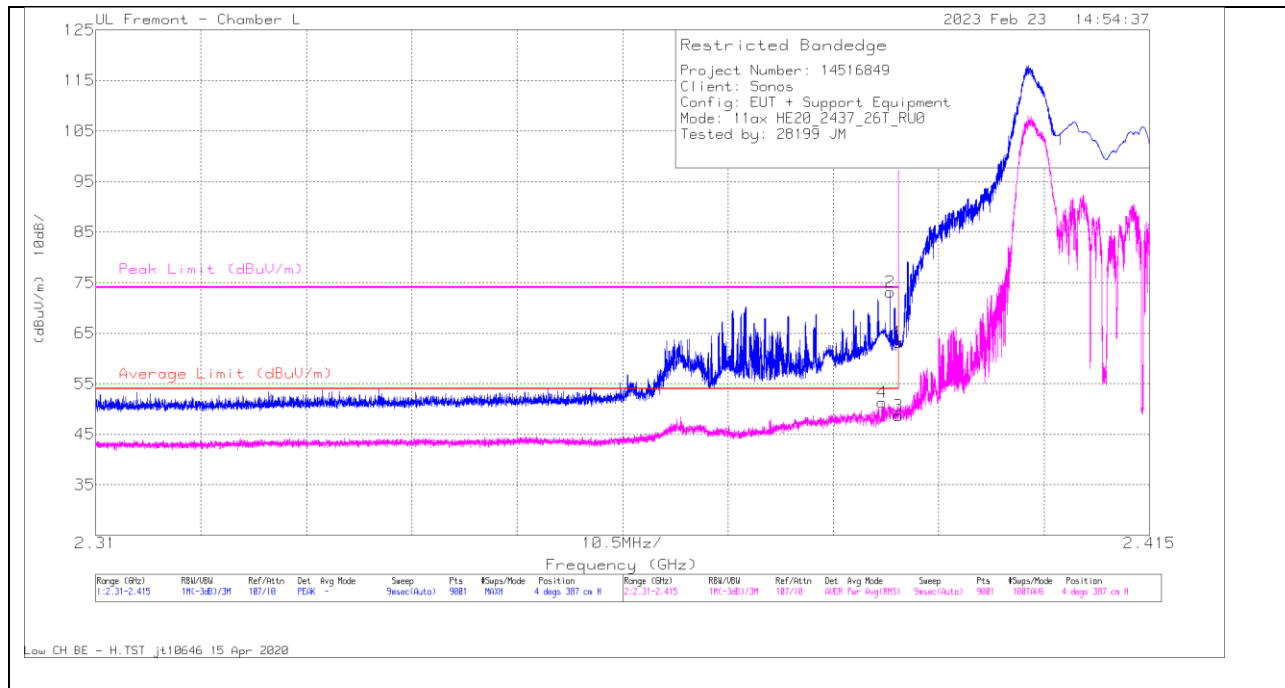
10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. TX ABOVE 1 GHz 802.11ax HE20 MODE IN THE 2.4GHz BAND

2TX Antenna 1 + Antenna 4 OFDMA MODE: 26-Tones, RU Index 0

BANDEDGE (LOW CHANNEL 1)

HORIZONTAL RESULT

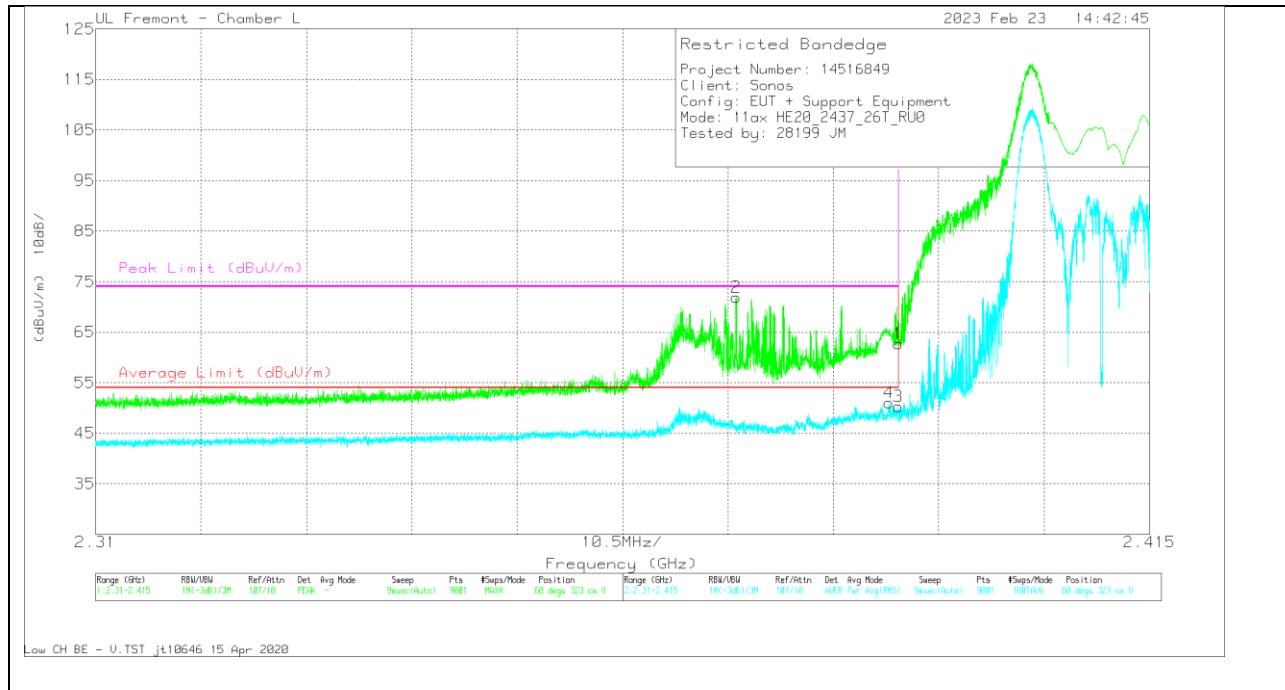


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	50.85	Pk	32.5	-20.1	0	63.25	-	-	74	-10.75	4	387	H
2	* 2.389184	60.69	PK	32.5	-20.1	0	73.09	-	-	74	-9.1	4	387	H
3	* 2.39	33.14	RMS	32.5	-20.1	3.13	48.69	54	-5.31	-	-	4	387	H
4	* 2.388379	35.77	RMS	32.5	-20.1	3.13	51.32	54	-2.68	-	-	4	387	H

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

VERTICAL RESULT



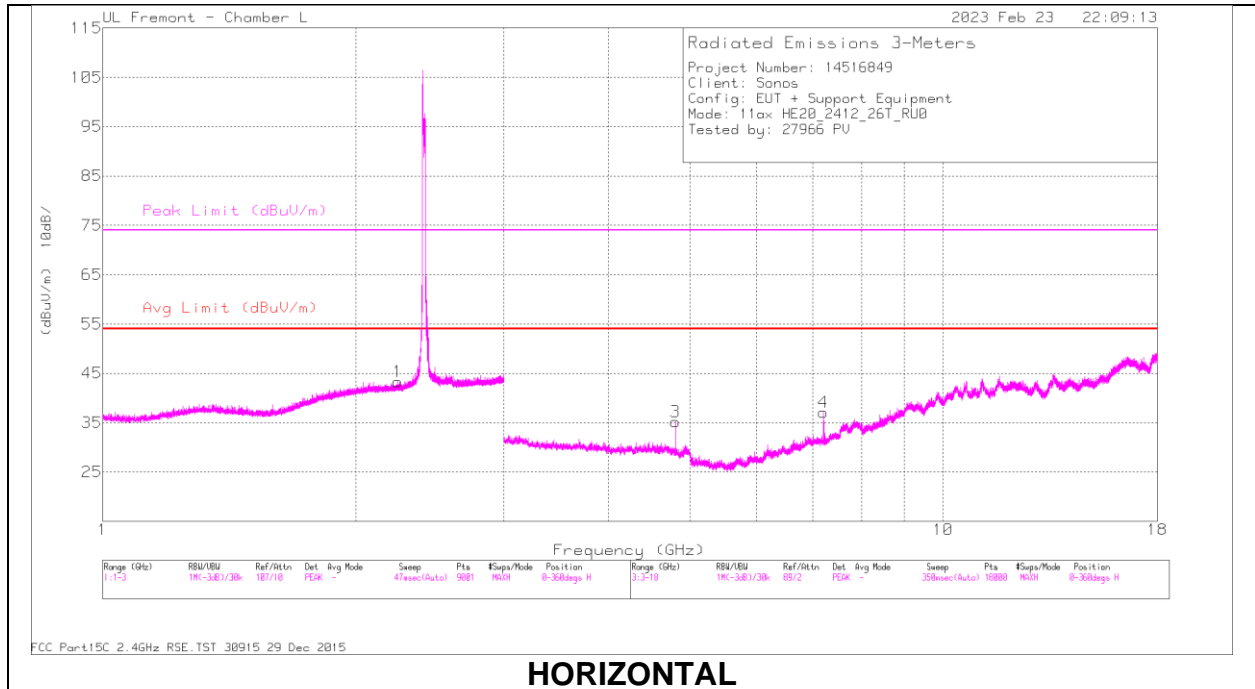
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	50.28	Pk	32.5	-20.1	0	62.68	-	-	74	-11.32	68	323	V
2	* 2.373807	59.55	Pk	32.5	-20.1	0	71.95	-	-	74	-2.05	68	323	V
3	* 2.39	34.81	RMS	32.5	-20.1	3.13	50.34	54	-3.66	-	-	68	323	V
4	* 2.389021	35.47	RMS	32.5	-20.1	3.13	51	54	-3	-	-	68	323	V

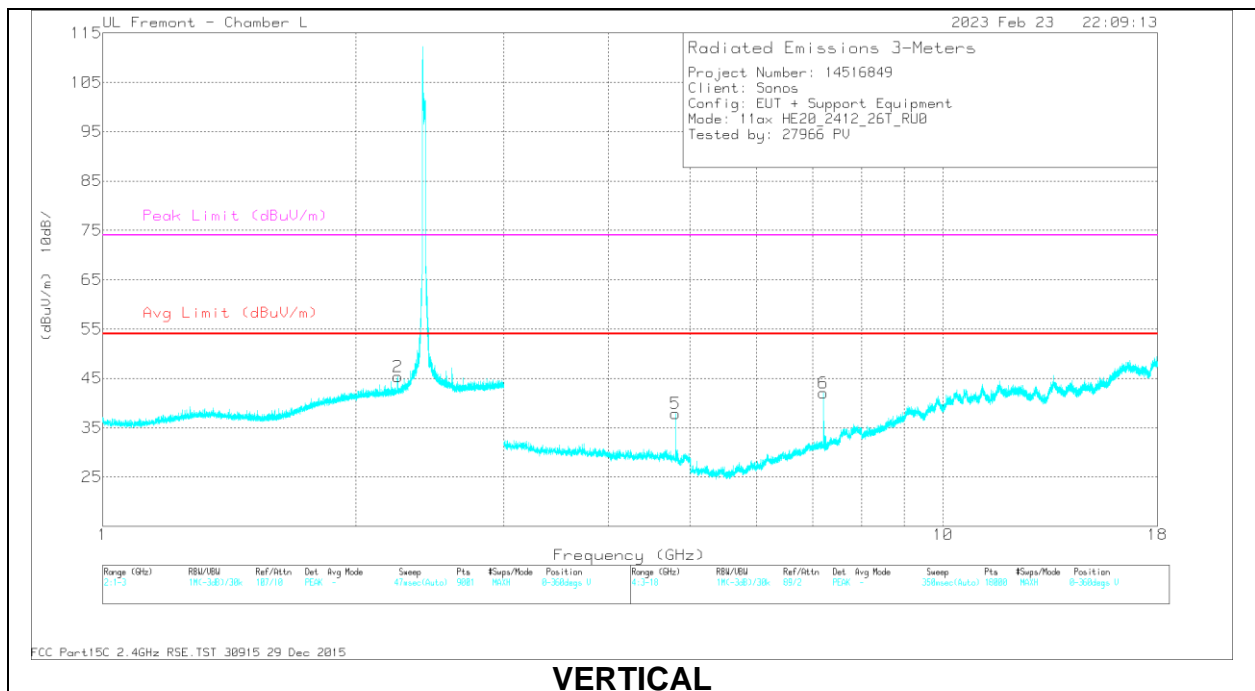
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL 1 RESULTS



HORIZONTAL



VERTICAL

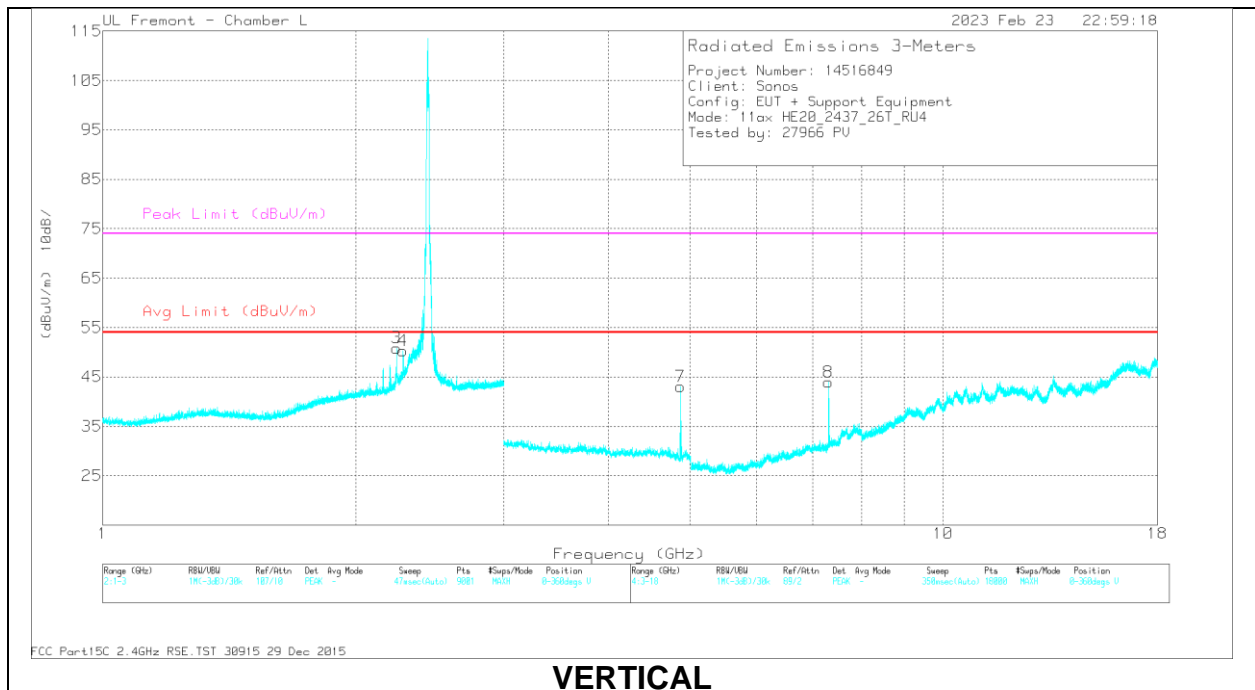
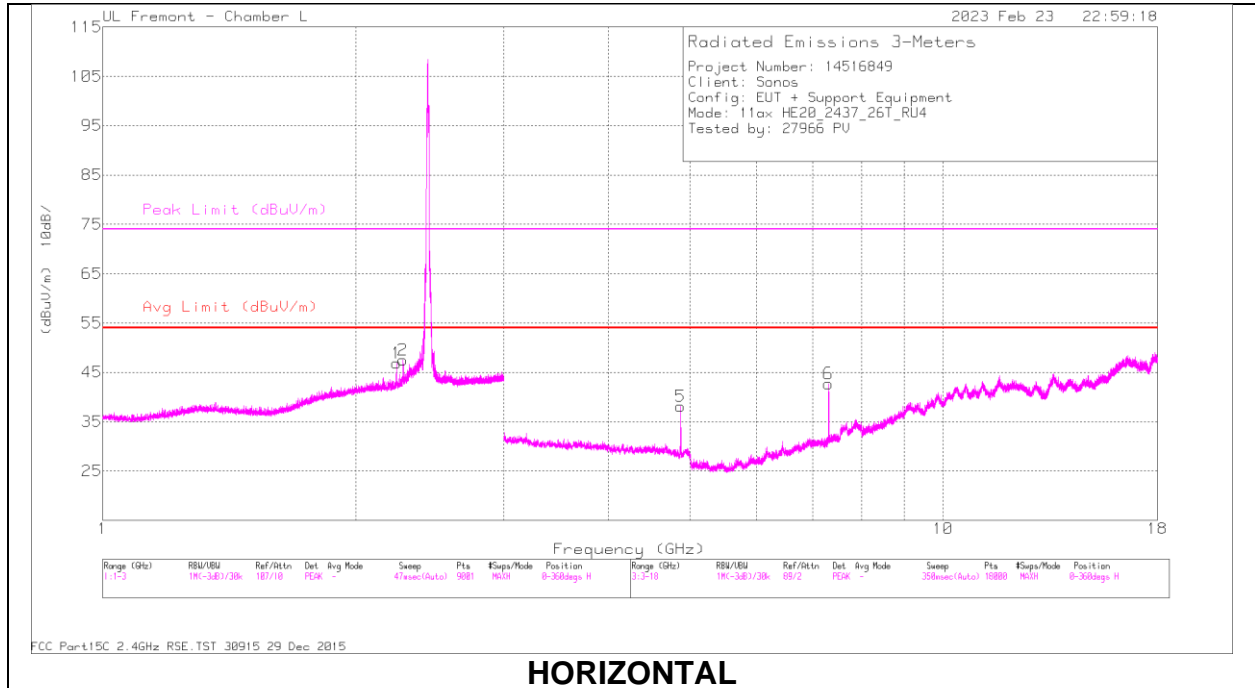
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Filtr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.244523	40.86	PK2	32.2	-20.5	0	52.56	-	-	74	-21.44	194	121	H
	* 2.243825	29.15	MAv1	32.2	-20.4	3.13	44.08	54	-9.92	-	-	194	121	H
2	* 2.242921	44.16	PK2	32.2	-20.4	0	55.96	-	-	74	-18.04	257	199	V
	* 2.24328	31.57	MAv1	32.2	-20.4	3.13	46.5	54	-7.5	-	-	257	199	V
3	* 4.807055	42.47	PK2	34.5	-26.6	0	50.37	-	-	74	-23.63	65	310	H
	* 4.806924	29.2	MAv1	34.5	-26.5	3.13	40.33	54	-13.67	-	-	65	310	H
4	7.209373	49.52	PK2	35.9	-23	0	62.42	-	-	-	-	154	102	H
	7.209748	28.93	MAv1	35.9	-23	3.13	44.96	-	-	-	-	154	102	H
5	* 4.807544	43.42	PK2	34.5	-26.6	0	51.32	-	-	74	-22.68	204	111	V
	* 4.807214	29.66	MAv1	34.5	-26.6	3.13	40.69	54	-13.31	-	-	204	111	V
6	7.209802	46.96	PK2	35.9	-23	0	59.86	-	-	-	-	238	213	V
	7.209577	25.66	MAv1	35.9	-23	3.13	41.69	-	-	-	-	238	213	V

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

2TX Antenna 1 + Antenna 4 OFDMA MODE: 26-Tones, RU Index 4

MID CHANNEL 6 RESULTS



RADIATED EMISSIONS

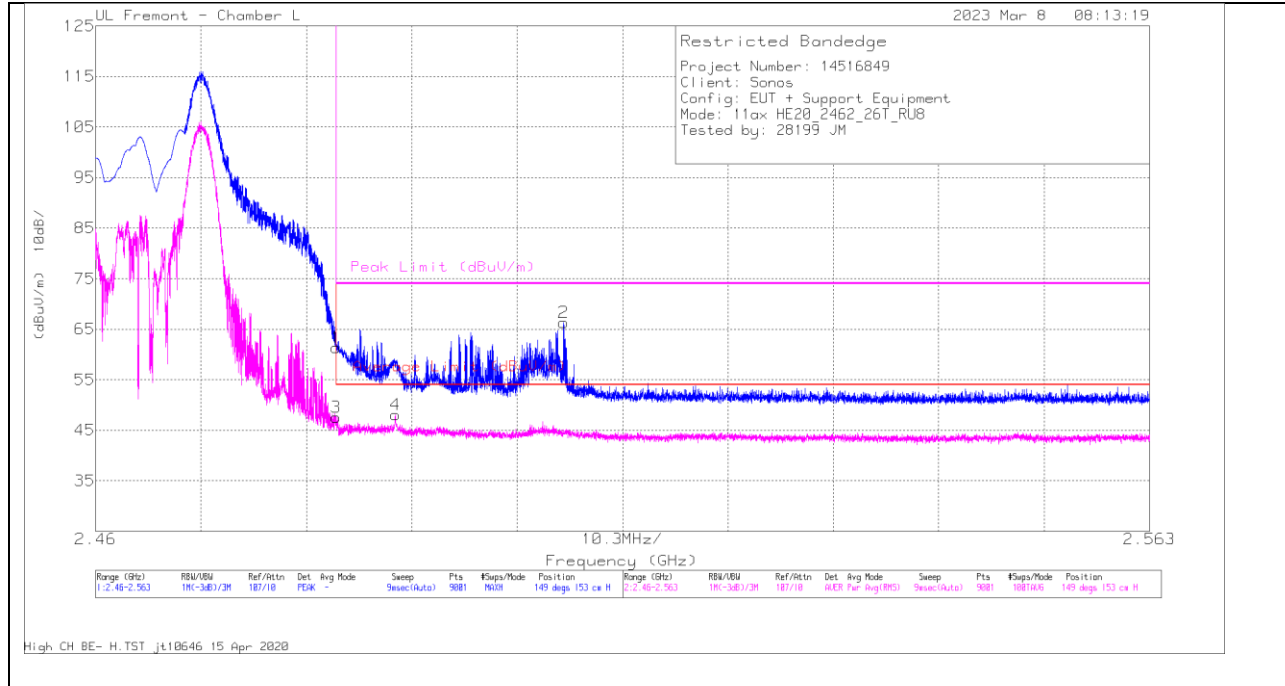
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.237565	45.53	PK2	32.2	-20.5	0	57.23	-	-	74	-16.77	282	107	H
	* 2.237733	34.26	MAv1	32.2	-20.5	3.13	49.09	54	-4.91	-	-	282	107	H
2	* 2.276756	45.11	PK2	32.3	-20.4	0	57.01	-	-	74	-16.99	282	115	H
	* 2.27781	33.25	MAv1	32.3	-20.4	3.13	48.28	54	-5.72	-	-	282	115	H
3	* 2.237868	48.15	PK2	32.2	-20.5	0	59.85	-	-	74	-14.15	252	230	V
	* 2.237672	36.6	MAv1	32.2	-20.5	3.13	51.43	54	-2.57	-	-	252	230	V
4	* 2.2775	47.8	PK2	32.3	-20.4	0	59.7	-	-	74	-14.3	259	203	V
	* 2.276275	35.2	MAv1	32.3	-20.4	3.13	50.23	54	-3.77	-	-	259	203	V
5	* 7.30884	50.38	PK2	35.9	-22.8	0	63.48	-	-	74	-10.52	189	153	H
	* 7.311058	32.01	MAv1	35.9	-22.9	3.13	48.14	54	-5.86	-	-	189	153	H
6	* 4.872616	41.63	PK2	34.4	-26.5	0	49.53	-	-	74	-24.47	175	239	H
	* 4.872506	27.74	MAv1	34.4	-26.5	3.13	38.77	54	-15.23	-	-	175	239	H
7	* 4.872326	43.44	PK2	34.4	-26.5	0	51.34	-	-	74	-22.66	197	345	V
	* 4.873882	28.32	MAv1	34.4	-26.4	3.13	39.45	54	-14.55	-	-	197	345	V
8	* 7.309129	49.12	PK2	35.9	-22.8	0	62.22	-	-	74	-11.78	148	138	V
	* 7.311232	31.5	MAv1	35.9	-22.9	3.13	47.63	54	-6.37	-	-	148	138	V

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

2TX Antenna 1 + Antenna 4 OFDMA MODE: 26-Tones, RU Index 8

BANDEDGE (HIGH CHANNEL 11)

HORIZONTAL RESULT

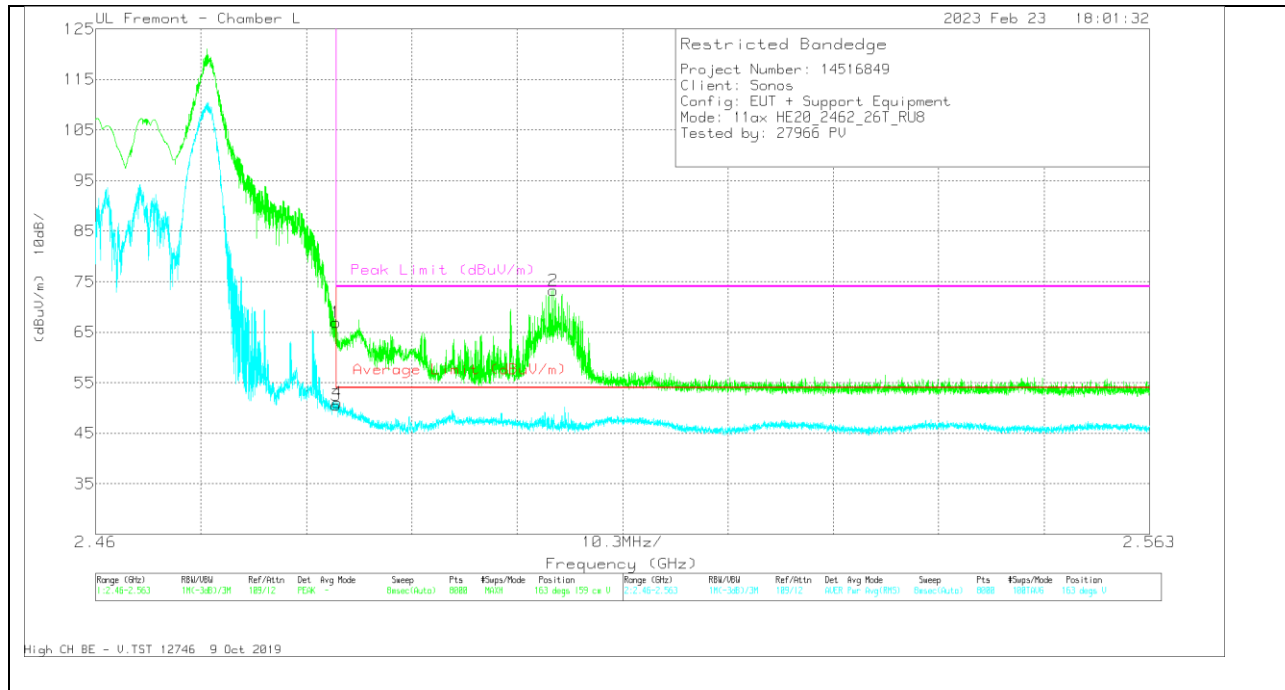


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	48.8	Pk	32.5	-19.9	0	61.4	-	-	74	-12.6	149	153	H
2	2.505742	53.74	Pk	32.5	-19.9	0	66.34	-	-	74	-7.66	149	153	H
3	* 2.4835	31.82	RMS	32.5	-19.9	3.13	47.55	54	-6.45	-	-	149	153	H
4	* 2.489297	32.27	RMS	32.5	-19.9	3.13	48	54	-6	-	-	149	153	H

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

VERTICAL RESULT



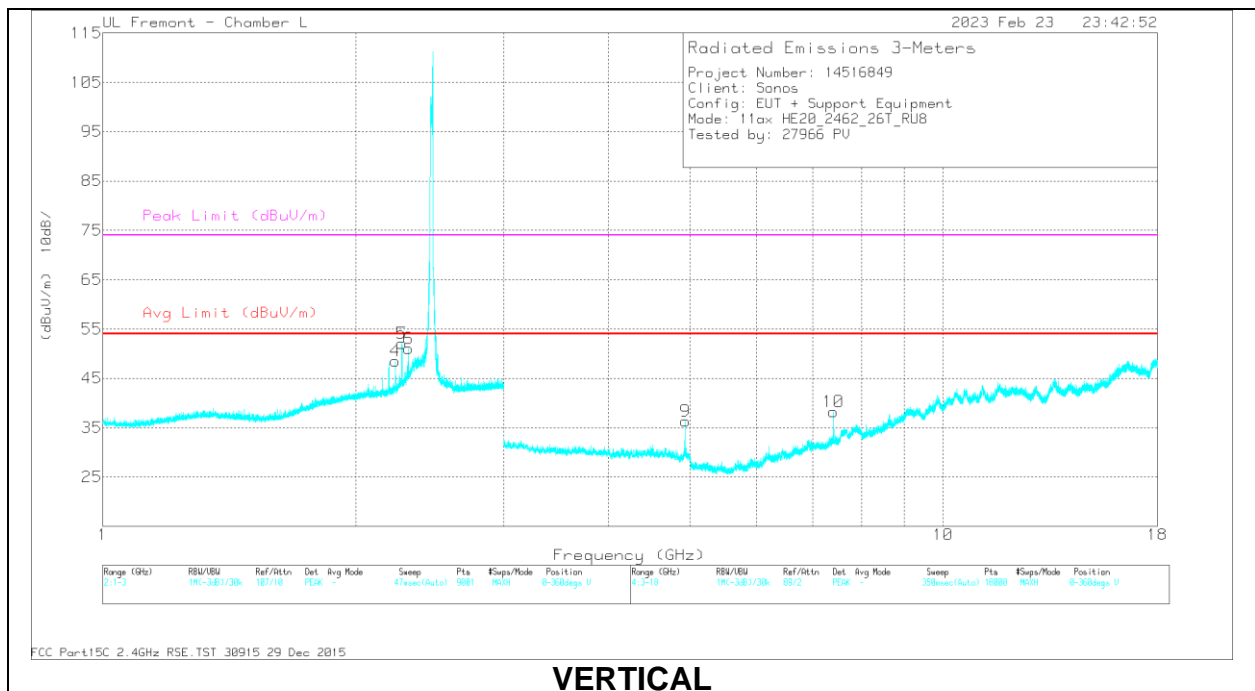
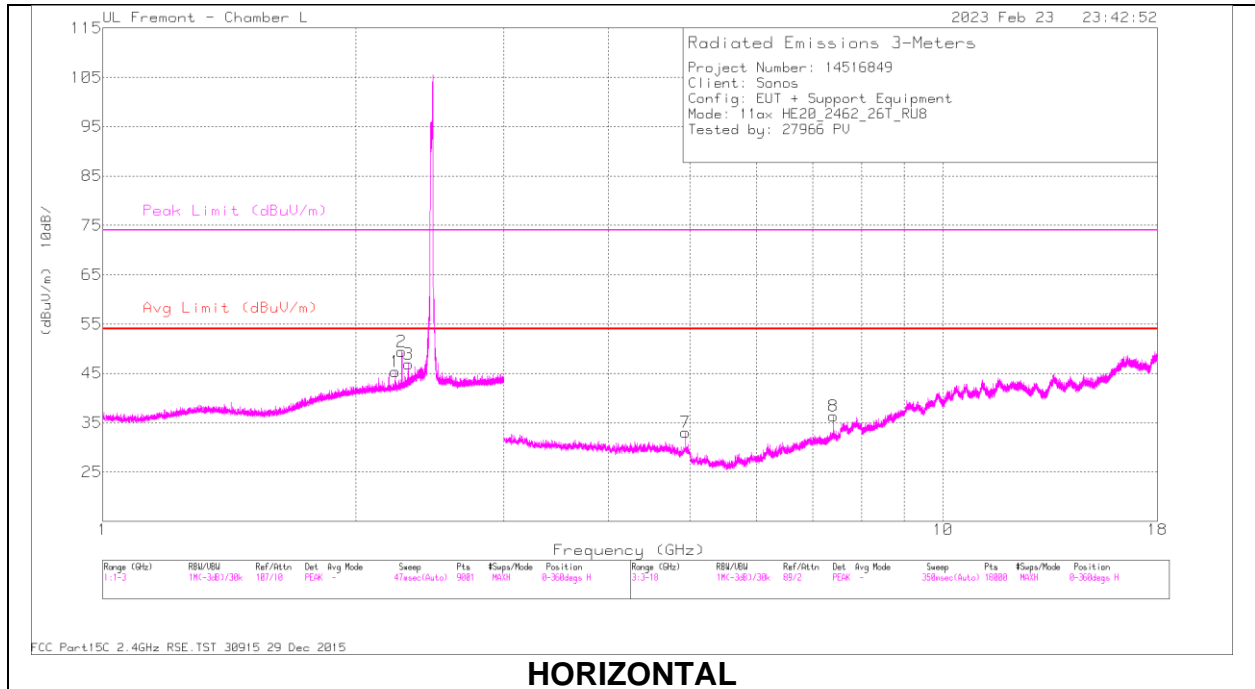
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	46.92	Pk	32.5	-12.5	0	66.92	-	-	74	-7.08	163	159	V
2	2.504709	53.13	Pk	32.5	-12.4	0	73.23	-	-	74	-7.77	163	159	V
3	* 2.4835	27.39	RMS	32.5	-12.5	3.13	50.52	54	-3.48	-	-	163	159	V
4	* 2.483642	27.93	RMS	32.5	-12.5	3.13	51.06	54	-2.94	-	-	163	159	V

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

HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL 11 RESULTS



RADIATED EMISSIONS

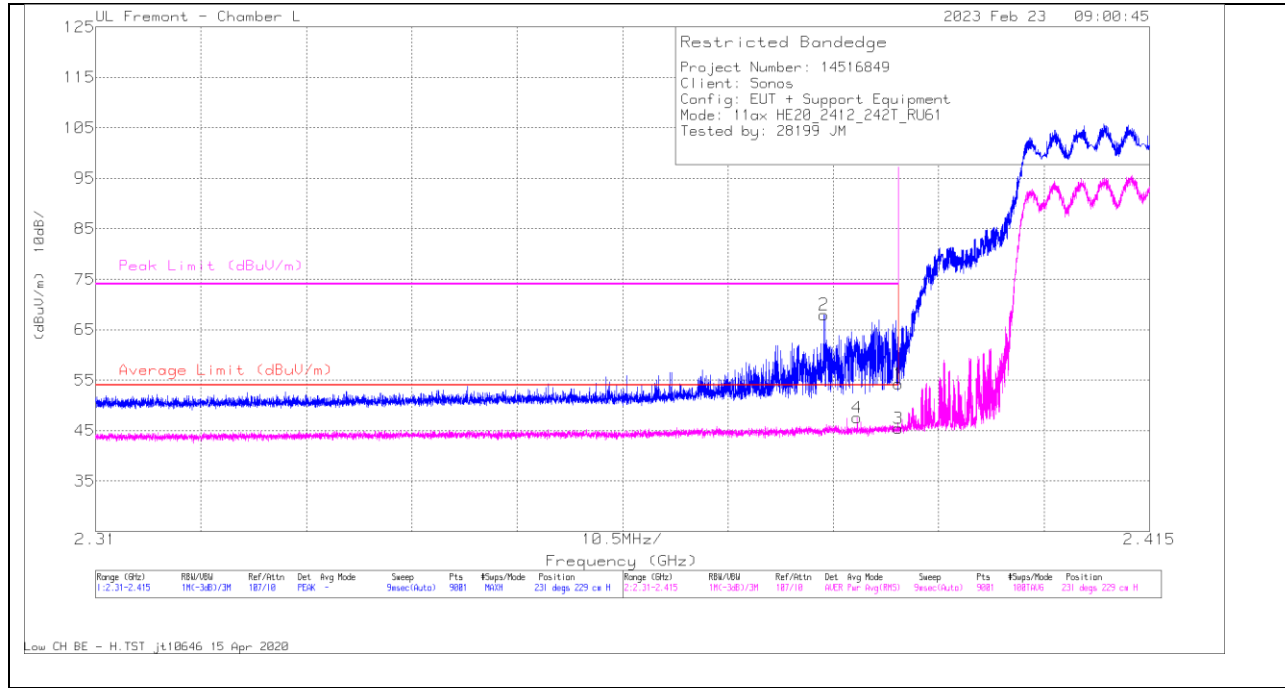
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.230589	43.41	PK2	32.2	-20.5	0	55.11	-	-	74	-18.89	28	169	H
	* 2.230881	31.79	MAv1	32.2	-20.5	3.13	46.62	54	-7.38	-	-	28	169	H
2	* 2.271102	46.46	PK2	32.3	-20.4	0	58.36	-	-	74	-15.64	284	111	H
	* 2.270535	35.03	MAv1	32.3	-20.4	3.13	50.06	54	-3.94	-	-	284	111	H
3	* 2.310374	44.85	PK2	32.4	-20.3	0	56.95	-	-	74	-17.05	287	112	H
	* 2.31032	33.25	MAv1	32.4	-20.3	3.13	48.48	54	-5.52	-	-	287	112	H
4	* 2.230607	46.28	PK2	32.2	-20.5	0	57.98	-	-	74	-16.02	255	227	V
	* 2.230449	34.44	MAv1	32.2	-20.5	3.13	49.27	54	-4.73	-	-	255	227	V
5	* 2.271066	48.94	PK2	32.3	-20.4	0	60.84	-	-	74	-13.16	258	206	V
	* 2.270396	38.2	MAv1	32.3	-20.4	3.13	53.23	54	-.77	-	-	258	206	V
6	* 2.310785	49.48	PK2	32.4	-20.3	0	61.58	-	-	74	-12.42	212	185	V
	* 2.310445	37.65	MAv1	32.4	-20.3	3.13	52.88	54	-1.12	-	-	212	185	V
7	* 4.941967	32.39	PK2	34.4	-25.3	0	41.49	-	-	74	-32.51	292	330	H
	* 4.941066	19.96	MAv1	34.4	-25.3	3.13	32.19	54	-21.81	-	-	292	330	H
8	* 7.410514	44.68	PK2	36	-22.3	0	58.38	-	-	74	-15.62	190	102	H
	* 7.412029	23.45	MAv1	36	-22.3	3.13	40.28	54	-13.72	-	-	190	102	H
9	* 4.94216	43.69	PK2	34.4	-25.3	0	52.79	-	-	74	-21.21	116	108	V
	* 4.942024	28.75	MAv1	34.4	-25.3	3.13	40.98	54	-13.02	-	-	116	108	V
10	* 7.410111	45.39	PK2	36	-22.3	0	59.09	-	-	74	-14.91	246	106	V
	* 7.412325	24.5	MAv1	36	-22.3	3.13	41.33	54	-12.67	-	-	246	106	V

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

4TX Antenna 1 + Antenna 2 + Antenna 3 + Antenna 4 OFDMA MODE: 242-Tones, RU Index 61

BANDEDGE (LOW CHANNEL 1)

HORIZONTAL RESULT

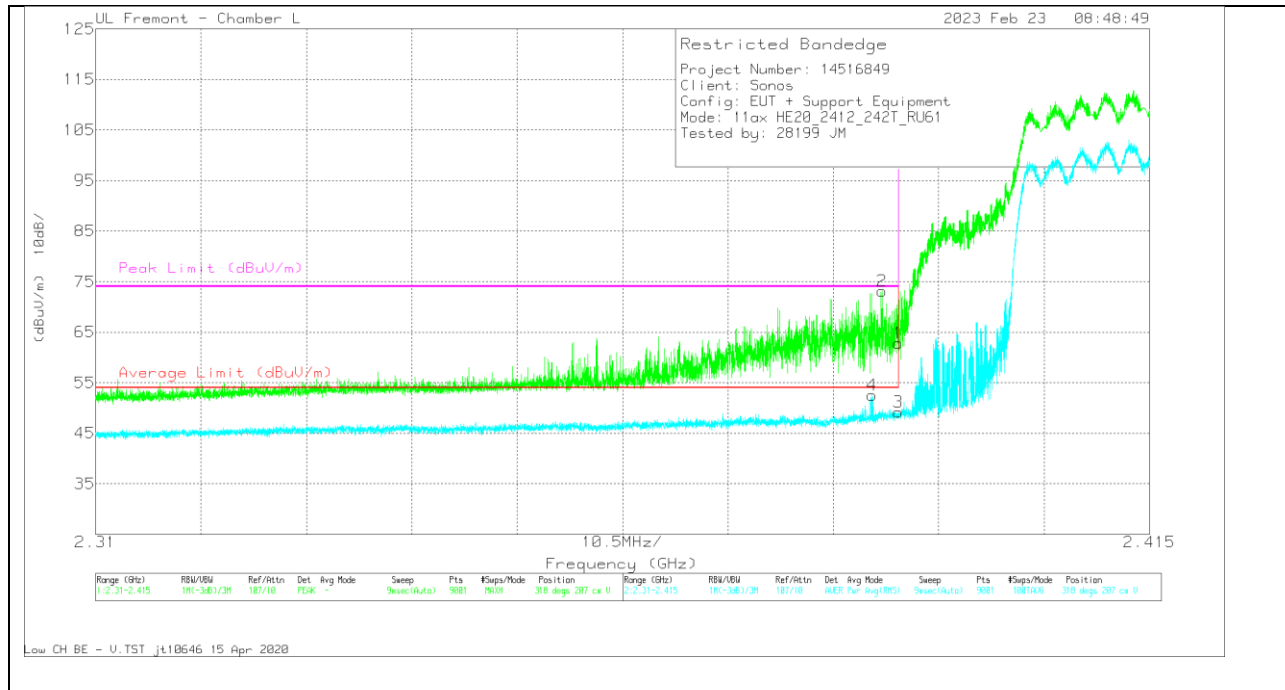


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	41.84	Pk	32.5	-20.1	0	54.24	-	-	74	-19.76	231	229	H
2	* 2.382545	55.58	Pk	32.5	-20.1	0	67.98	-	-	74	-6.02	231	229	H
3	* 2.39	28.91	RMS	32.5	-20.1	4.15	45.46	54	-8.54	-	-	231	229	H
4	* 2.385882	31.01	RMS	32.5	-20.1	4.15	47.56	54	-6.44	-	-	231	229	H

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

VERTICAL RESULT



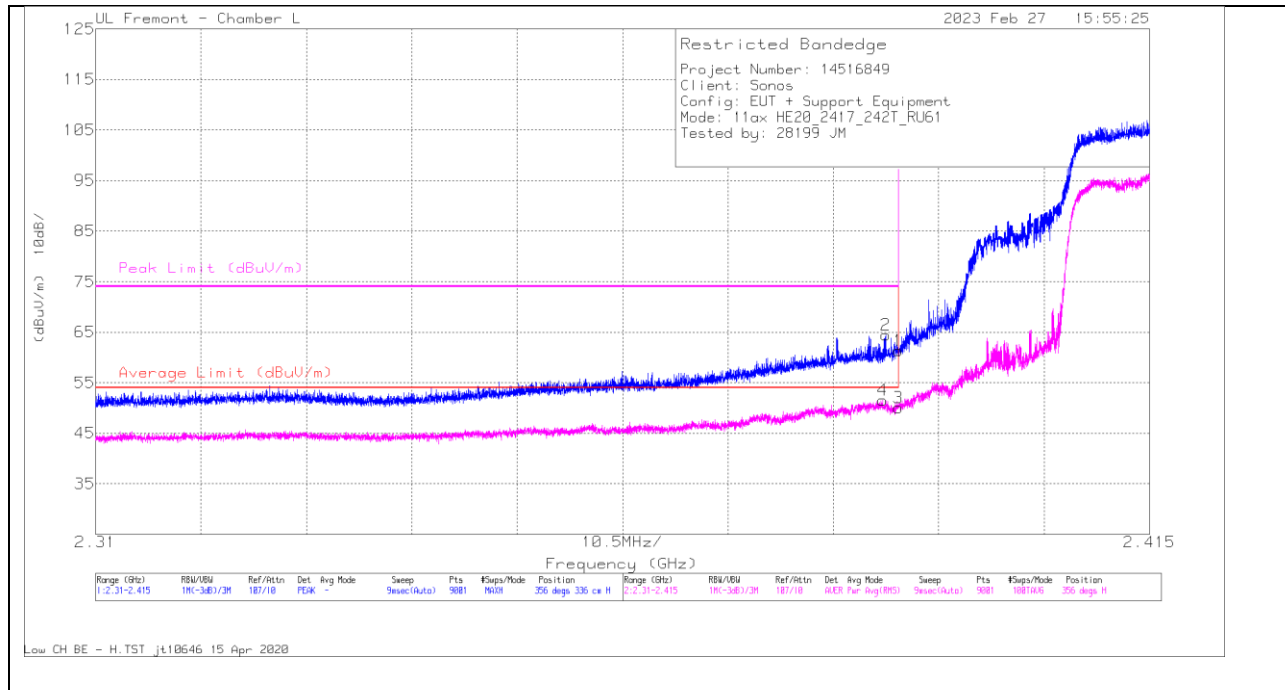
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	50.47	Pk	32.5	-20.1	0	62.87	-	-	74	-11.13	318	207	V
2	* 2.388379	60.79	Pk	32.5	-20.1	0	73.19	-	-	74	-81	318	207	V
3	* 2.39	32.61	RMS	32.5	-20.1	4.15	49.16	54	-4.84	-	-	318	207	V
4	* 2.387352	35.93	RMS	32.5	-20.1	4.15	52.48	54	-1.52	-	-	318	207	V

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

BANDEDGE (LOW CHANNEL 2)

HORIZONTAL RESULT

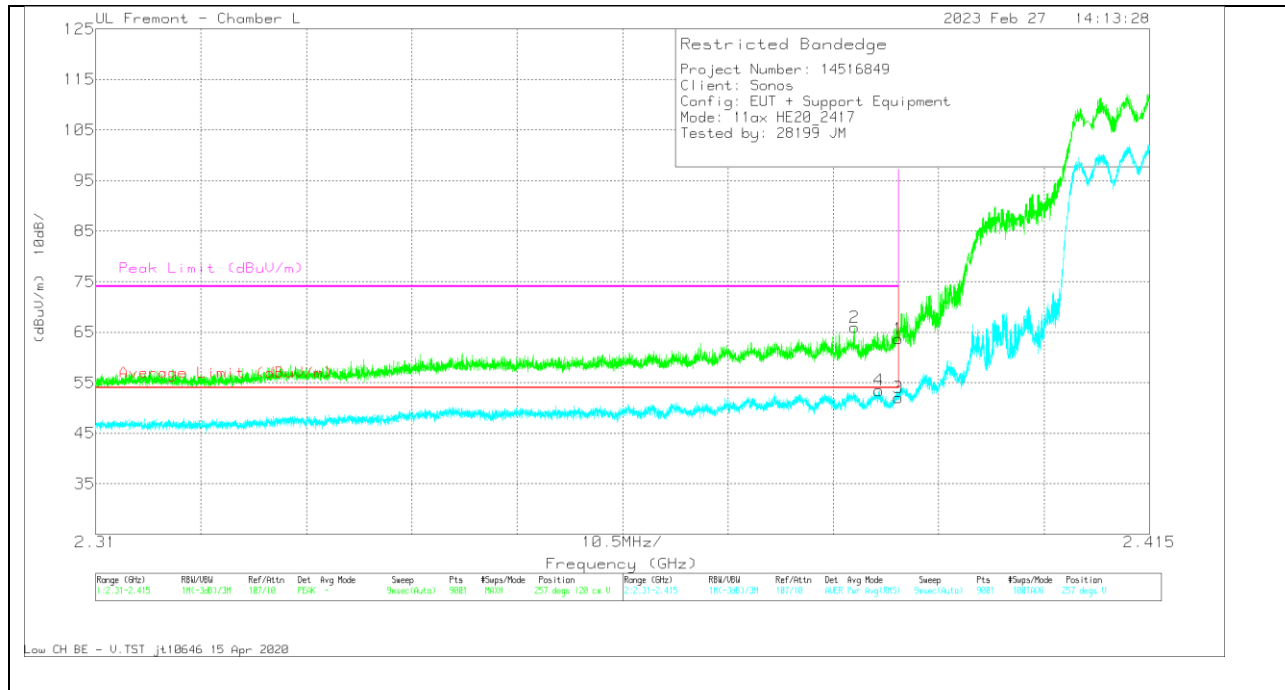


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	48.89	Pk	32.5	-20.1	0	61.29	-	-	74	-12.71	356	336	H
2	* 2.388717	52.1	Pk	32.5	-20.1	0	64.5	-	-	74	-9.5	356	336	H
3	* 2.39	33.47	RMS	32.5	-20.1	4.15	50.02	54	-3.98	-	-	356	336	H
4	* 2.388437	35.03	RMS	32.5	-20.1	4.15	51.58	54	-2.42	-	-	356	336	H

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

VERTICAL RESULT



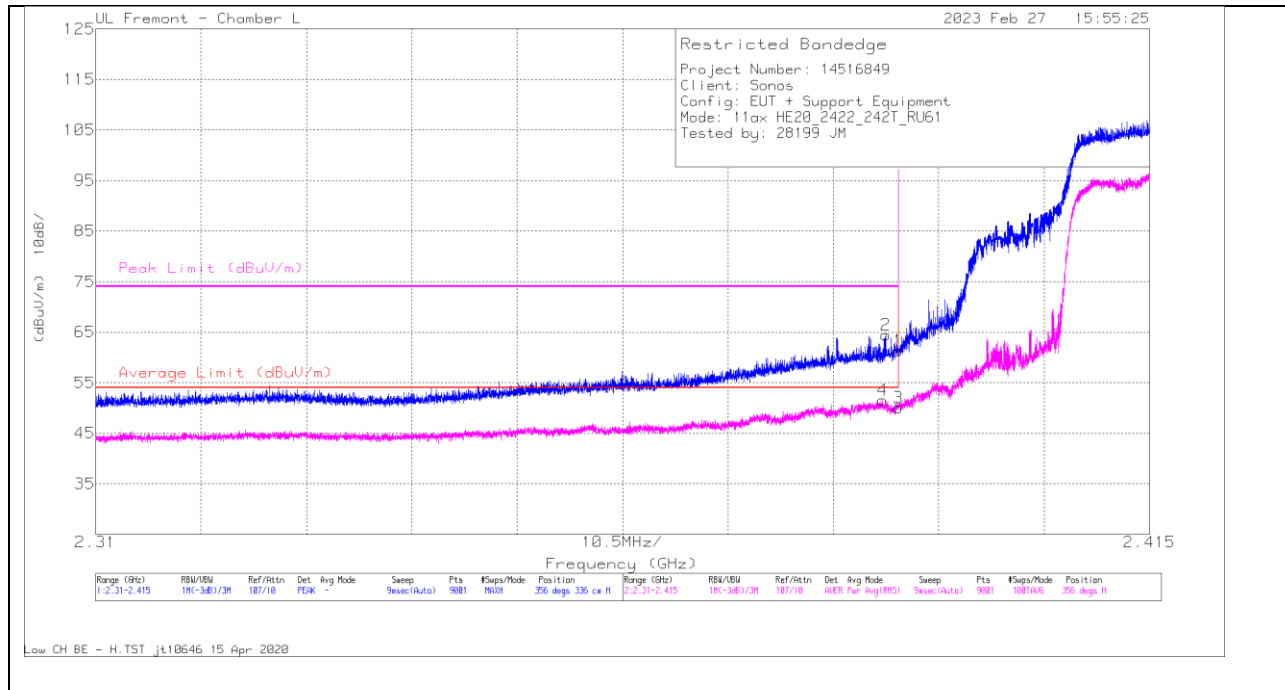
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	51.33	PK	32.5	-20.1	0	63.73	-	-	74	-10.27	257	120	V
2	* 2.385625	53.58	PK	32.5	-20.1	0	65.98	-	-	74	-8.02	257	120	V
3	* 2.39	35.46	RMS	32.5	-20.1	4.15	52.01	54	-1.99	-	-	257	120	V
4	* 2.388041	36.91	RMS	32.5	-20.1	4.15	53.46	54	-.54	-	-	257	120	V

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

BANDEDGE (LOW CHANNEL 3)

HORIZONTAL RESULT

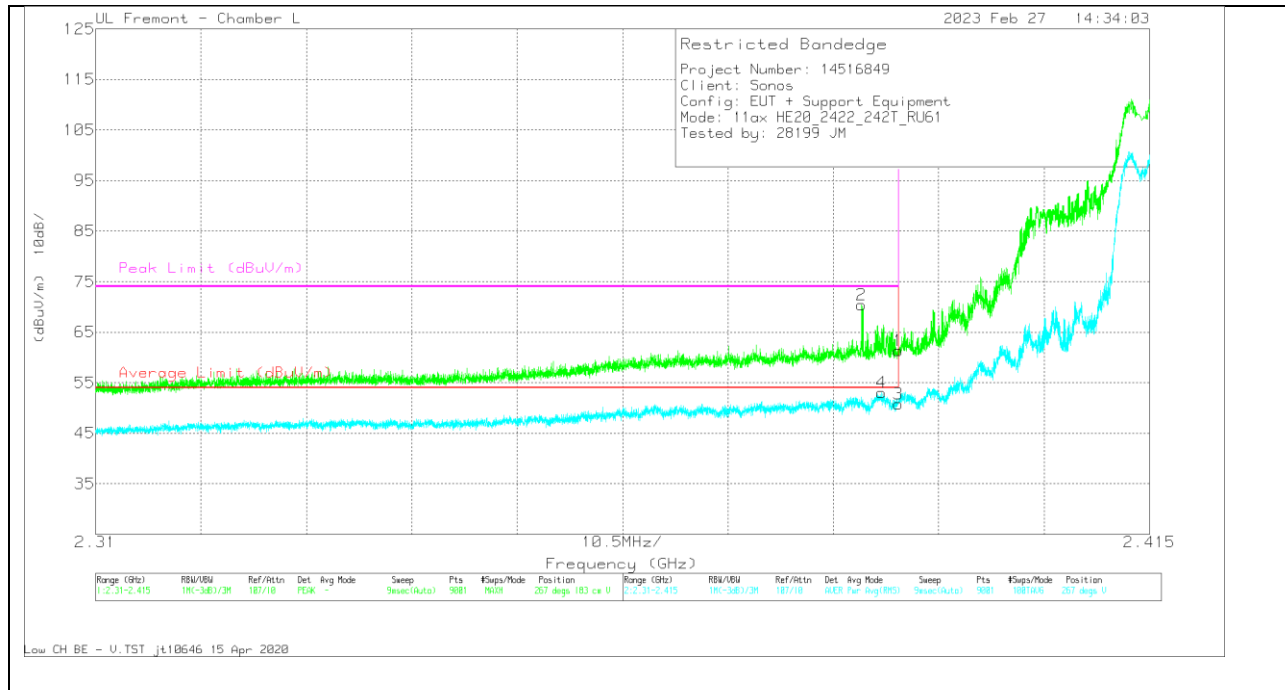


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	48.89	Pk	32.5	-20.1	0	61.29	-	-	74	-12.71	356	336	H
2	* 2.388717	52.1	Pk	32.5	-20.1	0	64.5	-	-	74	-9.5	356	336	H
3	* 2.39	33.47	RMS	32.5	-20.1	4.15	50.02	54	-3.98	-	-	356	336	H
4	* 2.388437	35.03	RMS	32.5	-20.1	4.15	51.58	54	-2.42	-	-	356	336	H

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

VERTICAL RESULT



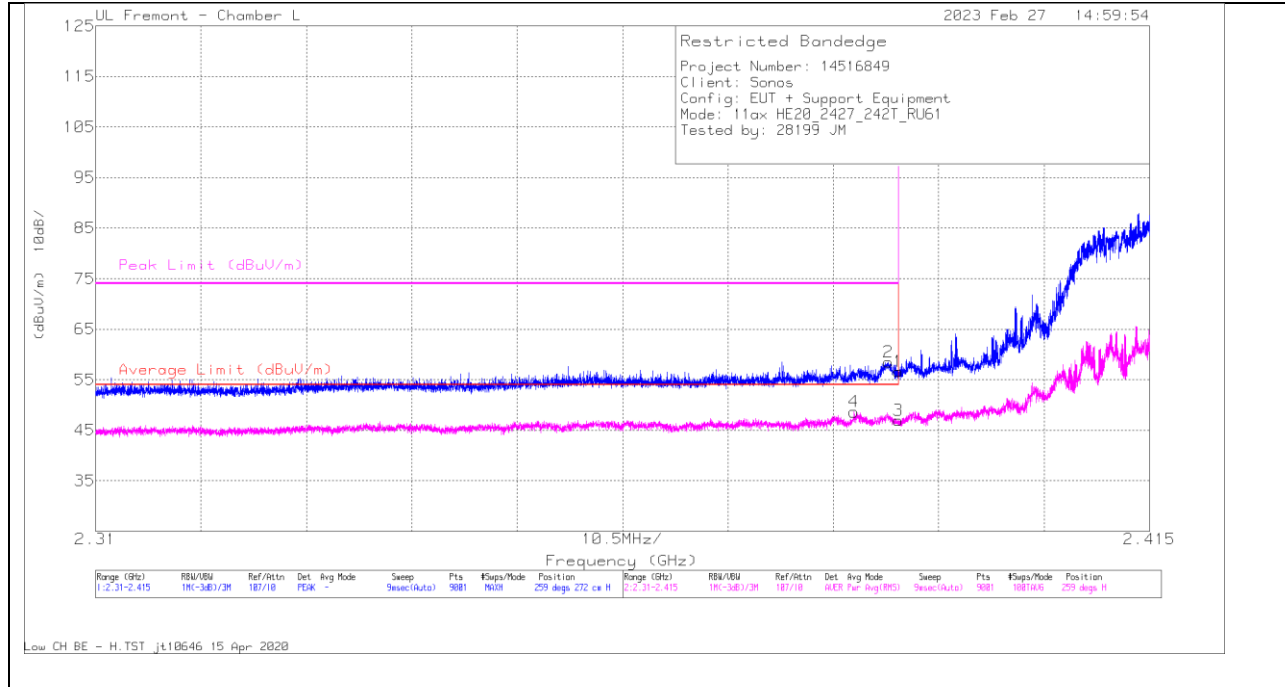
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	48.95	PK	32.5	-20.1	0	61.35	-	-	74	-12.65	267	183	V
2	* 2.386326	58.01	PK	32.5	-20.1	0	70.41	-	-	74	-3.59	267	183	V
3	* 2.39	34.27	RMS	32.5	-20.1	4.15	50.82	54	-3.18	-	-	267	183	V
4	* 2.388286	36.49	RMS	32.5	-20.1	4.15	53.04	54	-96	-	-	267	183	V

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

BANDEDGE (LOW CHANNEL 4)

HORIZONTAL RESULT

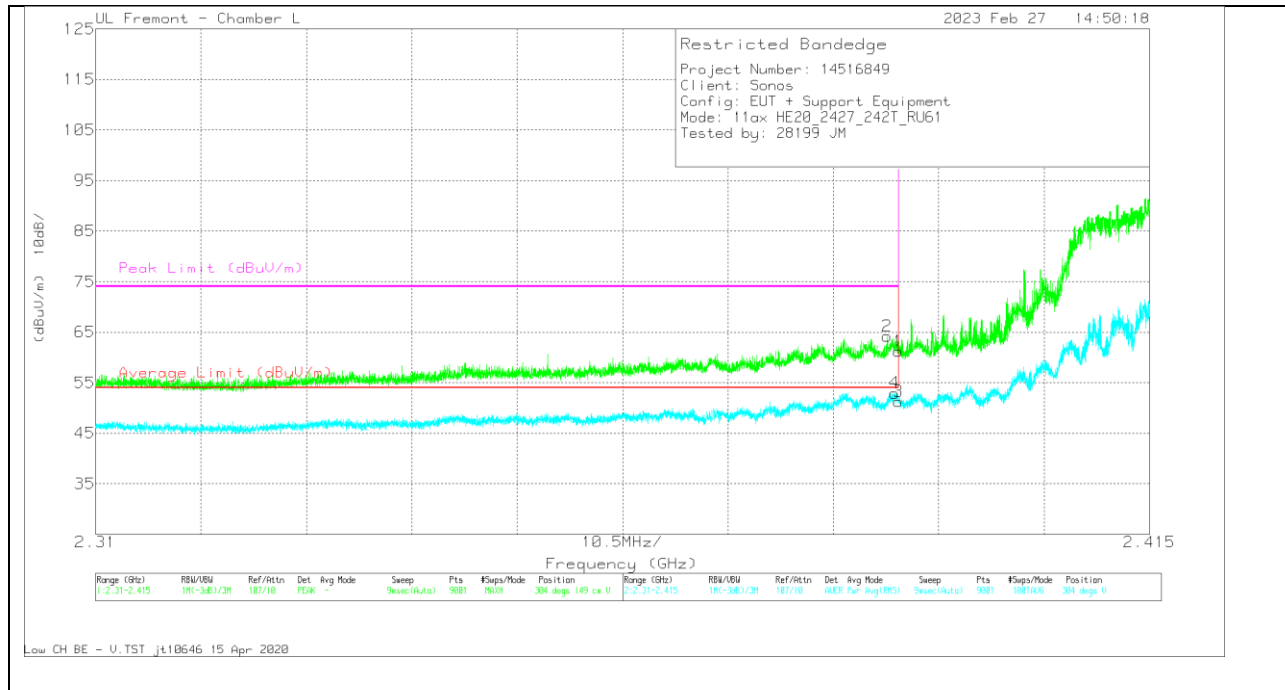


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (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	44.27	Pk	32.5	-20.1	0	56.67	-	-	74	-17.33	259	272	H
2	* 2.388951	46.08	Pk	32.5	-20.1	0	58.48	-	-	74	-15.52	259	272	H
3	* 2.39	30.44	RMS	32.5	-20.1	4.15	46.99	54	-7.01	-	-	259	272	H
4	* 2.385579	32.07	RMS	32.5	-20.1	4.15	48.62	54	-5.38	-	-	259	272	H

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

VERTICAL RESULT



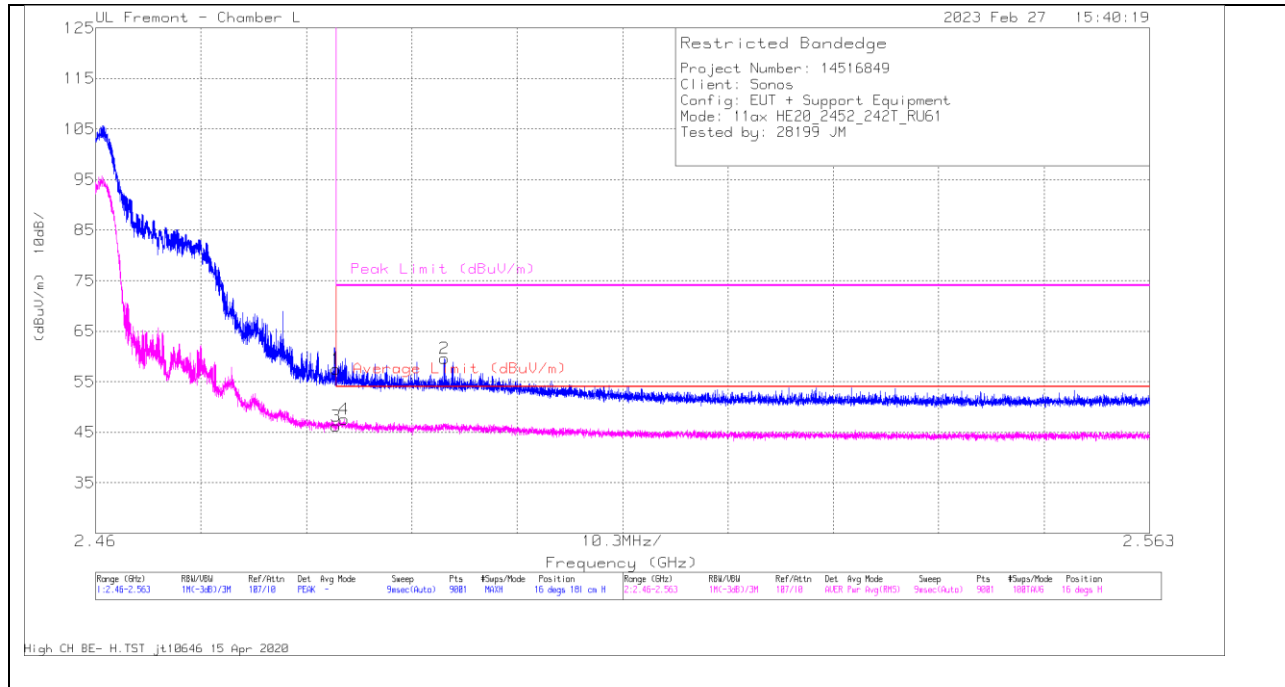
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBu)	Det	Horn limit	AmpChl/Pad (dB)	DCCF (dB)	Corrected Reading (dBu/m)	Average Limit (dBu/m)	Margin (dB)	Peak Limit (dBu/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	48.77	Pk	32.5	-20.1	0	61.17	-	-	74	-12.83	304	149	V
2	* 2.388846	51.83	Pk	32.5	-20.1	0	64.23	-	-	74	-9.77	304	149	V
3	* 2.39	34.69	RMS	32.5	-20.1	4.15	51.24	54	-2.76	-	-	304	149	V
4	* 2.389581	36.41	RMS	32.5	-20.1	4.15	52.96	54	-1.04	-	-	304	149	V

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

BANDEDGE (HIGH CHANNEL 9)

HORIZONTAL RESULT

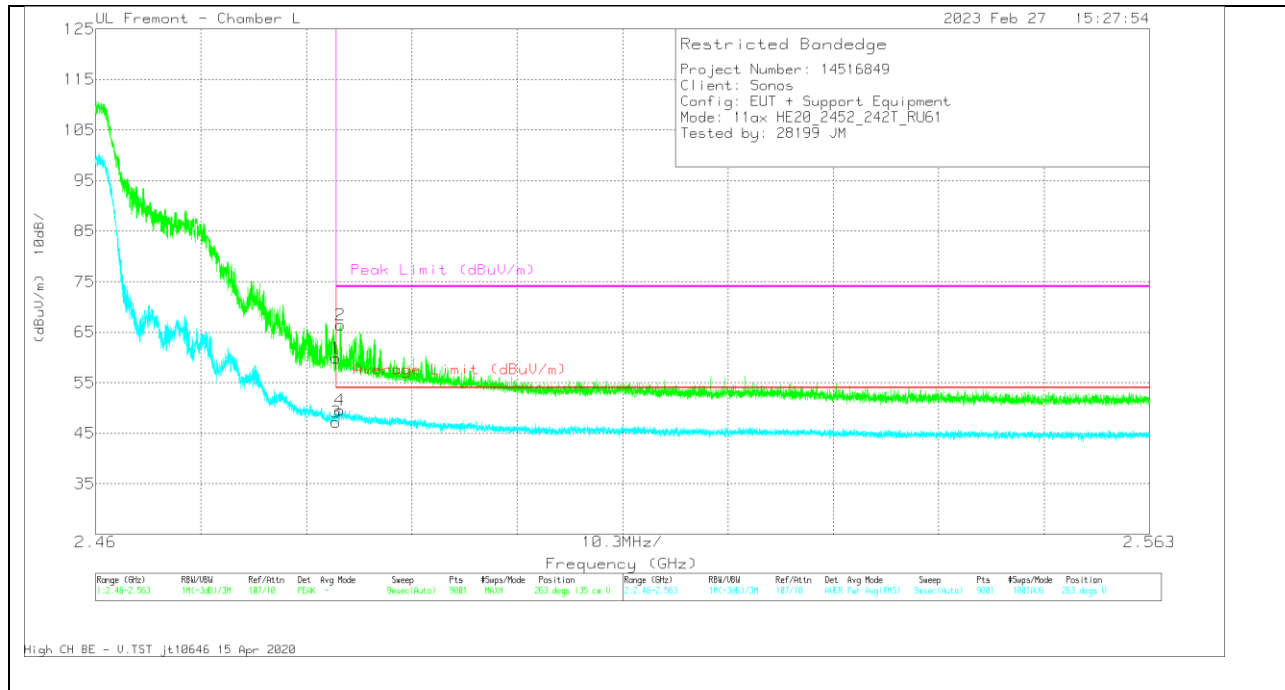


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.4835	44.88	PK	32.5	-19.9	0	57.48	-	-	74	-16.52	16	181	H
2	*2.494069	47.05	PK	32.5	-19.9	0	59.65	-	-	74	-14.35	16	181	H
3	*2.4835	29.45	RMS	32.5	-19.9	4.15	46.2	54	-7.8	-	-	16	181	H
4	*2.484261	30.86	RMS	32.5	-19.9	4.15	47.61	54	-6.39	-	-	16	181	H

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

VERTICAL RESULT



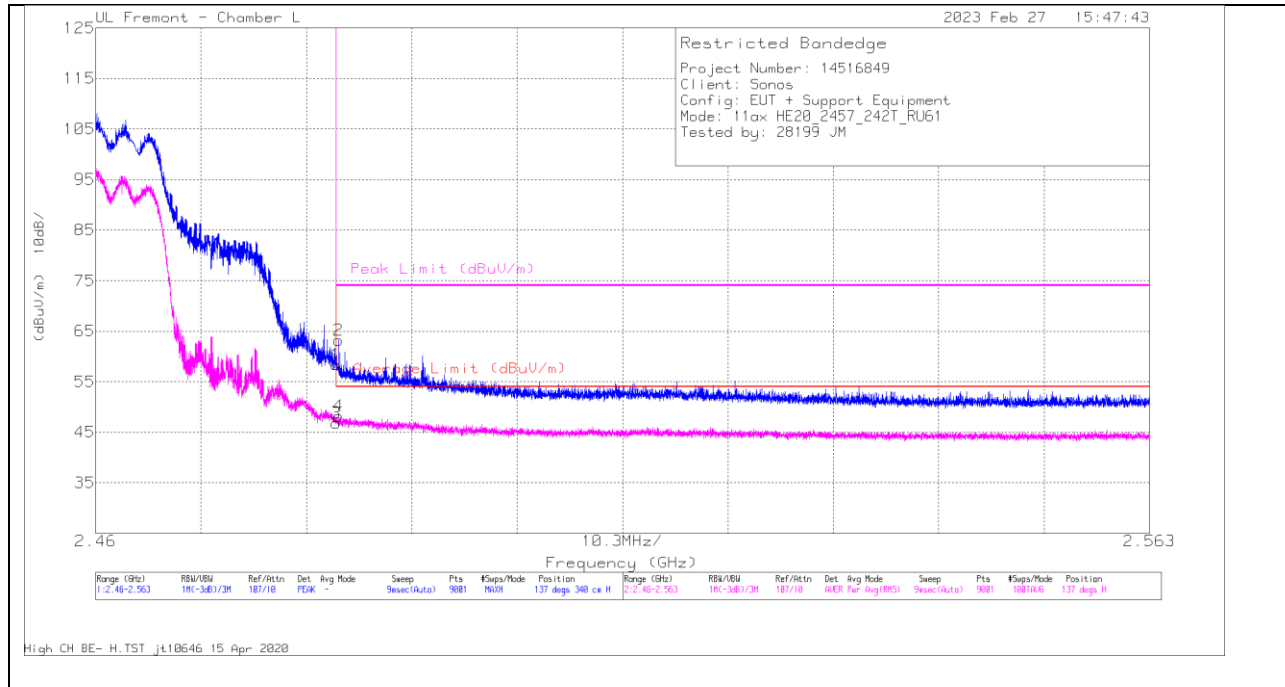
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mst	Amp/Chl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	47.26	Pk	32.5	-19.9	0	59.86	-	-	74	-14.14	263	135	V
2	* 2.483918	53.88	Pk	32.5	-19.9	0	66.48	-	-	74	-7.52	263	135	V
3	* 2.4835	30.48	RMS	32.5	-19.9	4.15	47.23	54	-6.77	-	-	263	135	V
4	* 2.483872	32.76	RMS	32.5	-19.9	4.15	49.51	54	-4.49	-	-	263	135	V

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

BANDEDGE (HIGH CHANNEL 10)

HORIZONTAL RESULT

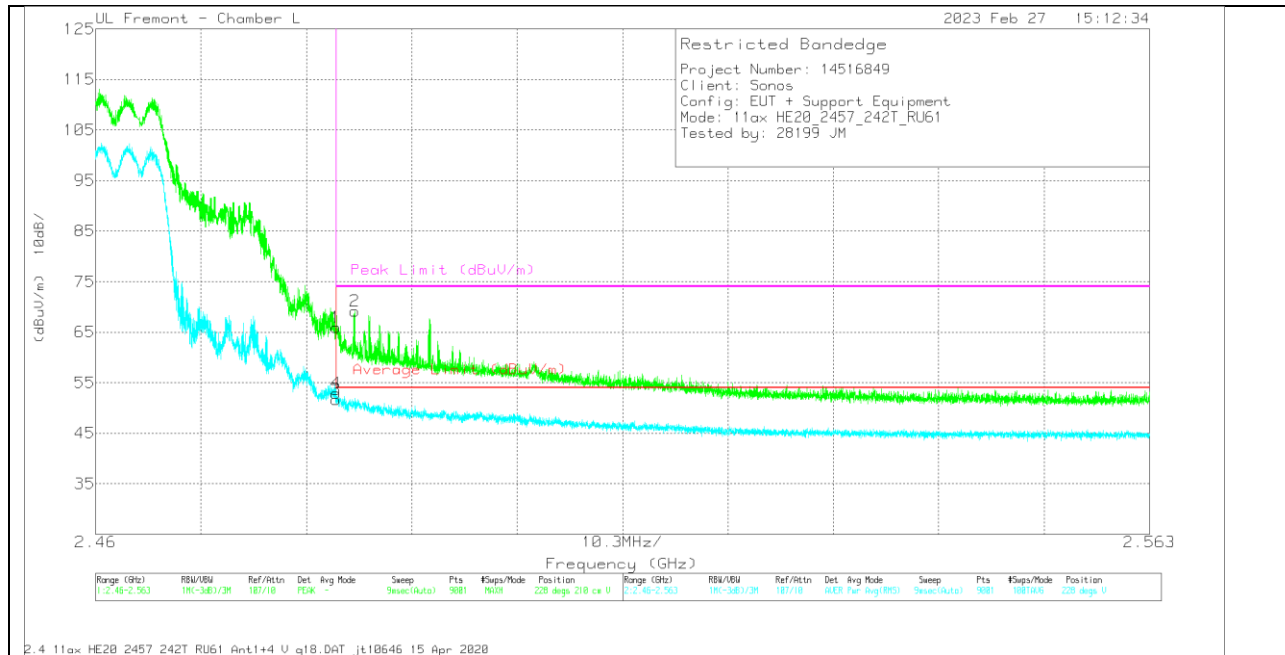


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mHt	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	45.75	PK	32.5	-19.9	0	58.35	-	-	74	-15.65	137	340	H
2	* 2.483758	50.56	PK	32.5	-19.9	0	63.16	-	-	74	-10.84	137	340	H
3	* 2.4835	30.09	RMS	32.5	-19.9	4.15	46.84	54	-7.16	-	-	137	340	H
4	* 2.483735	31.45	RMS	32.5	-19.9	4.15	48.2	54	-5.8	-	-	137	340	H

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

VERTICAL RESULT



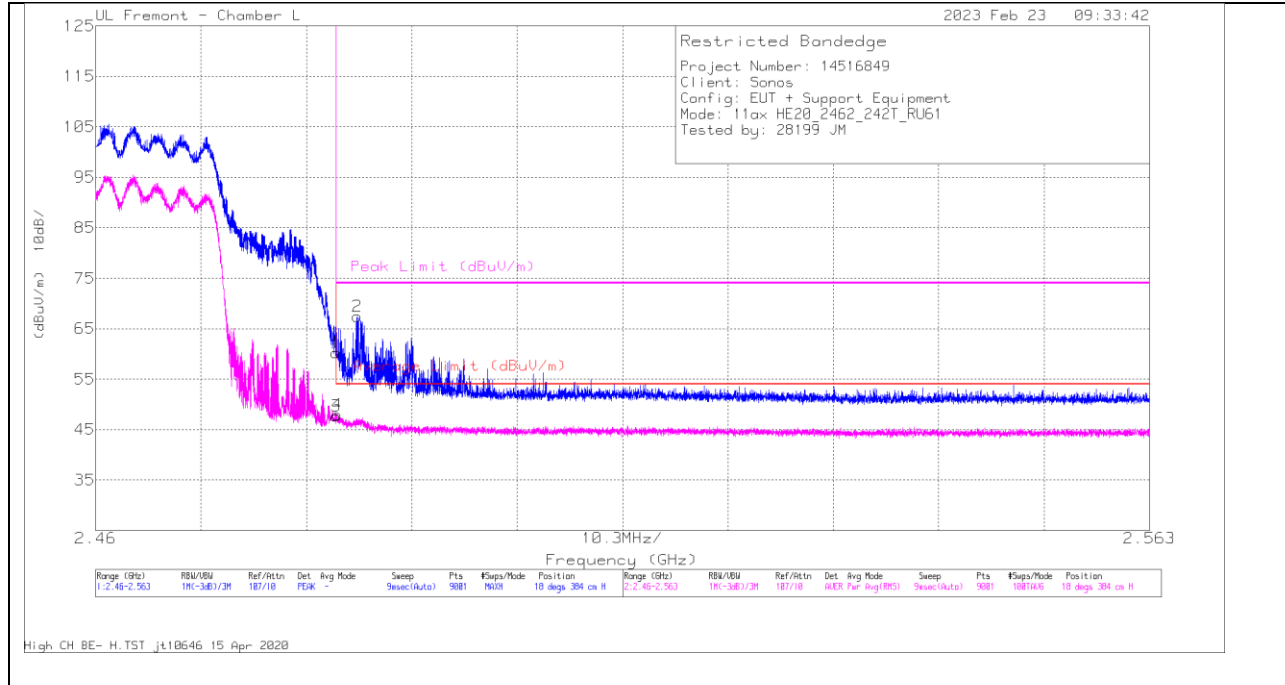
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBu/m)	Det	Horn tmnt	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBu/m)	Average Limit (dBu/m)	Margin (dB)	Peak Limit (dBu/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	53.31	Pk	32.5	-19.9	0	65.91	-	-	74	-8.09	228	210	V
2	* 2.485337	56.59	Pk	32.5	-19.9	0	69.19	-	-	74	-4.81	228	210	V
3	* 2.4835	34.88	RMS	32.5	-19.9	4.15	51.63	54	-2.37	-	-	228	210	V
4	* 2.483517	36.18	RMS	32.5	-19.9	4.15	52.93	54	-1.07	-	-	228	210	V

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

BANDEDGE (HIGH CHANNEL 11)

HORIZONTAL RESULT

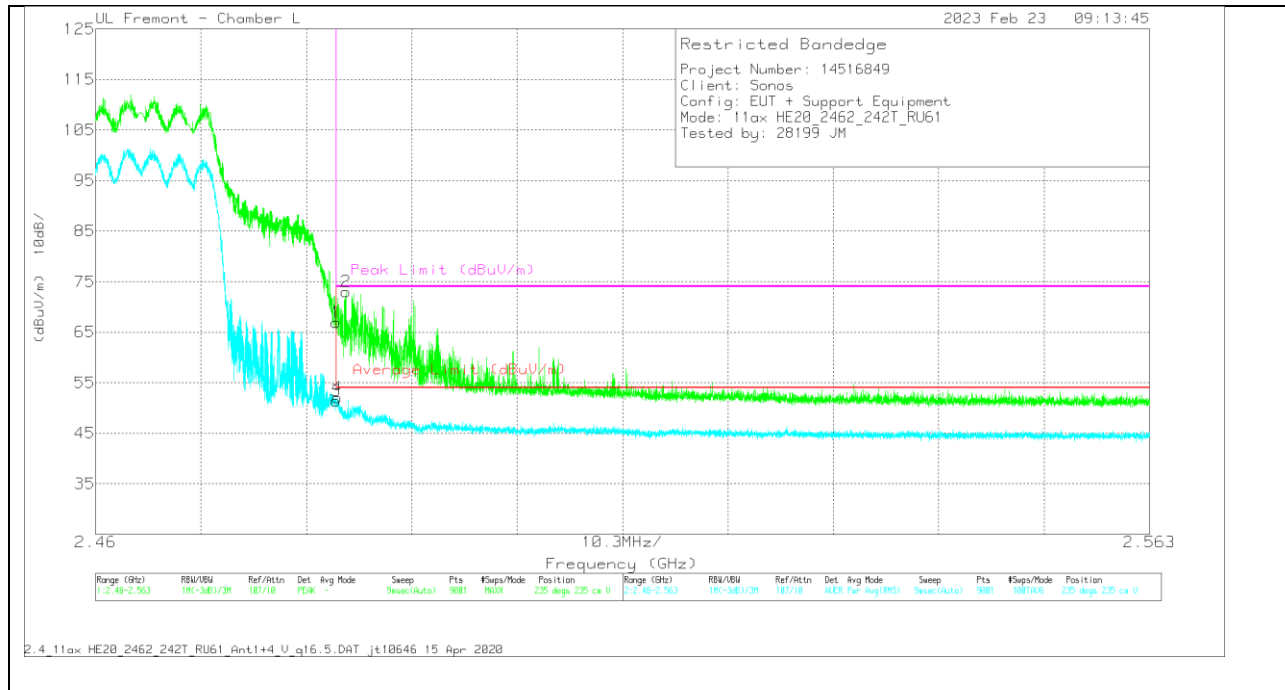


TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn tmH	Amp/Cbl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	47.66	PK	32.5	-19.9	0	60.26	-	-	74	-13.74	18	384	H
2	* 2.483554	54.84	PK	32.5	-19.9	0	67.44	-	-	74	-6.56	18	384	H
3	* 2.4835	30.94	RMS	32.5	-19.9	4.15	47.69	54	-6.31	-	-	18	384	H
4	* 2.483609	31.23	RMS	32.5	-19.9	4.15	47.98	54	-6.02	-	-	18	384	H

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

VERTICAL RESULT



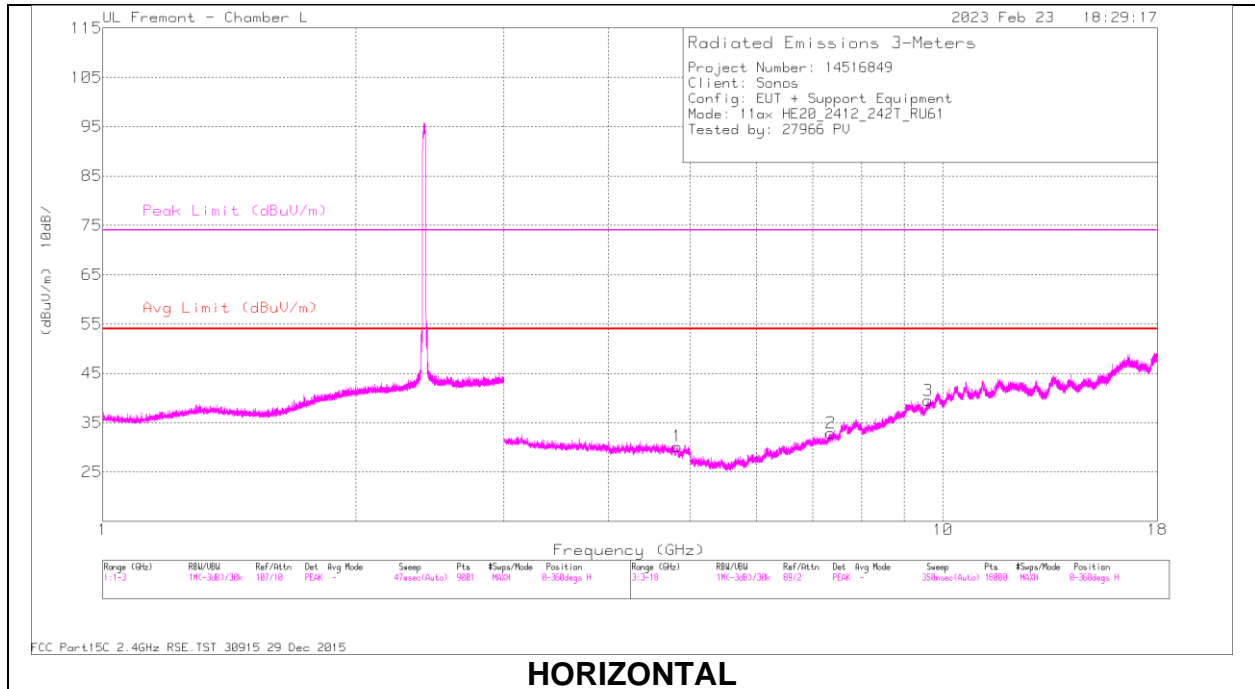
TRACE MARKER

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mst	Amp/Chl/Pad (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	54.34	Pk	32.5	-19.9	0	66.94	-	-	74	-7.06	235	235	V
2	* 2.484502	60.36	Pk	32.5	-19.9	0	72.96	-	-	74	-1.04	235	235	V
3	* 2.4835	34.64	RMS	32.5	-19.9	4.15	51.39	54	-2.61	-	-	235	235	V
4	* 2.483643	35.32	RMS	32.5	-19.9	4.15	52.07	54	-1.93	-	-	235	235	V

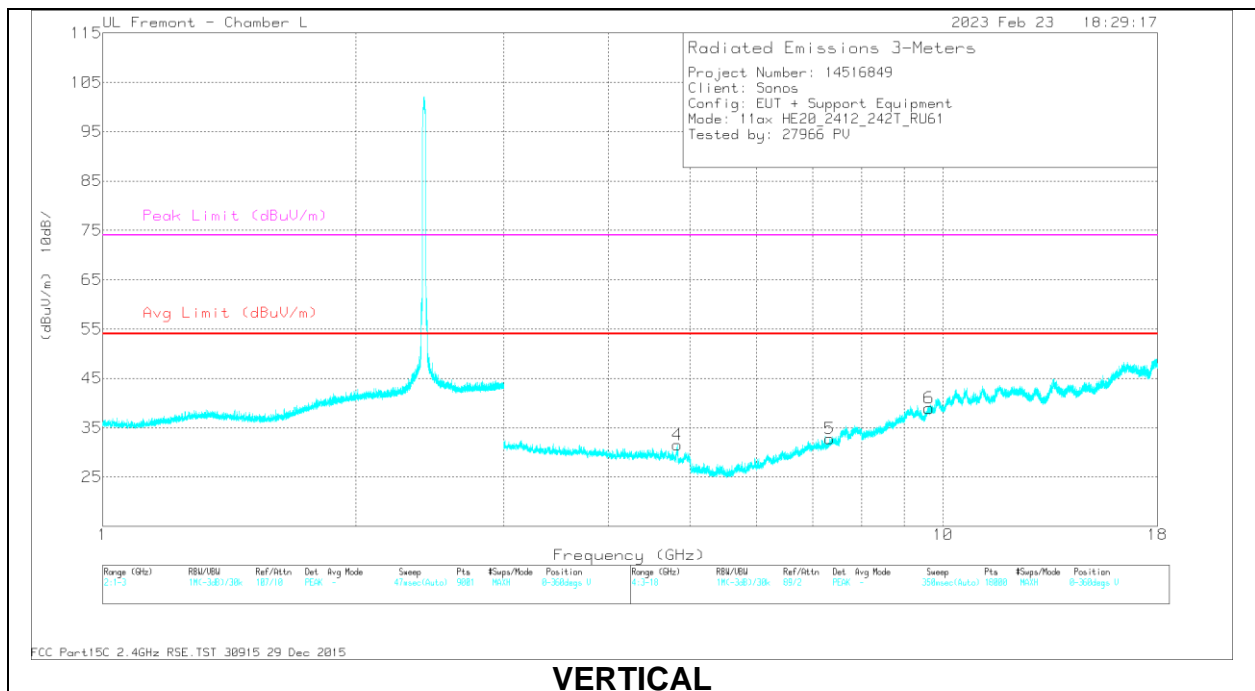
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL 1 RESULTS



HORIZONTAL



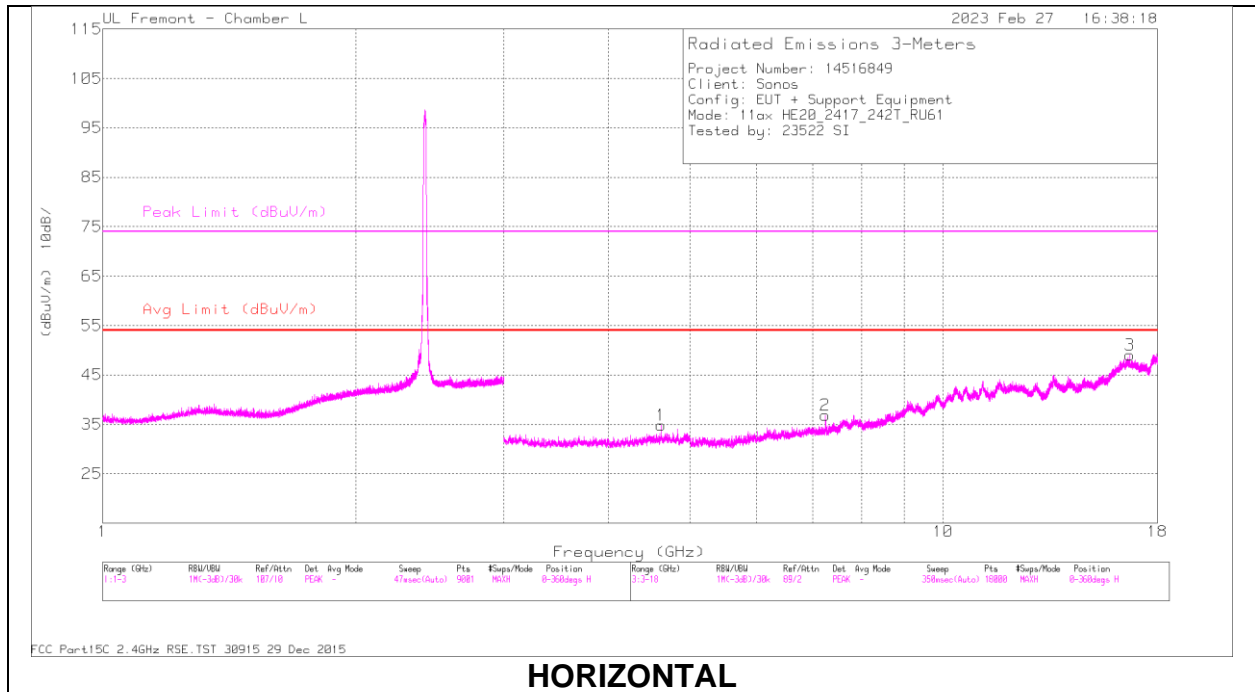
VERTICAL

RADIATED EMISSIONS

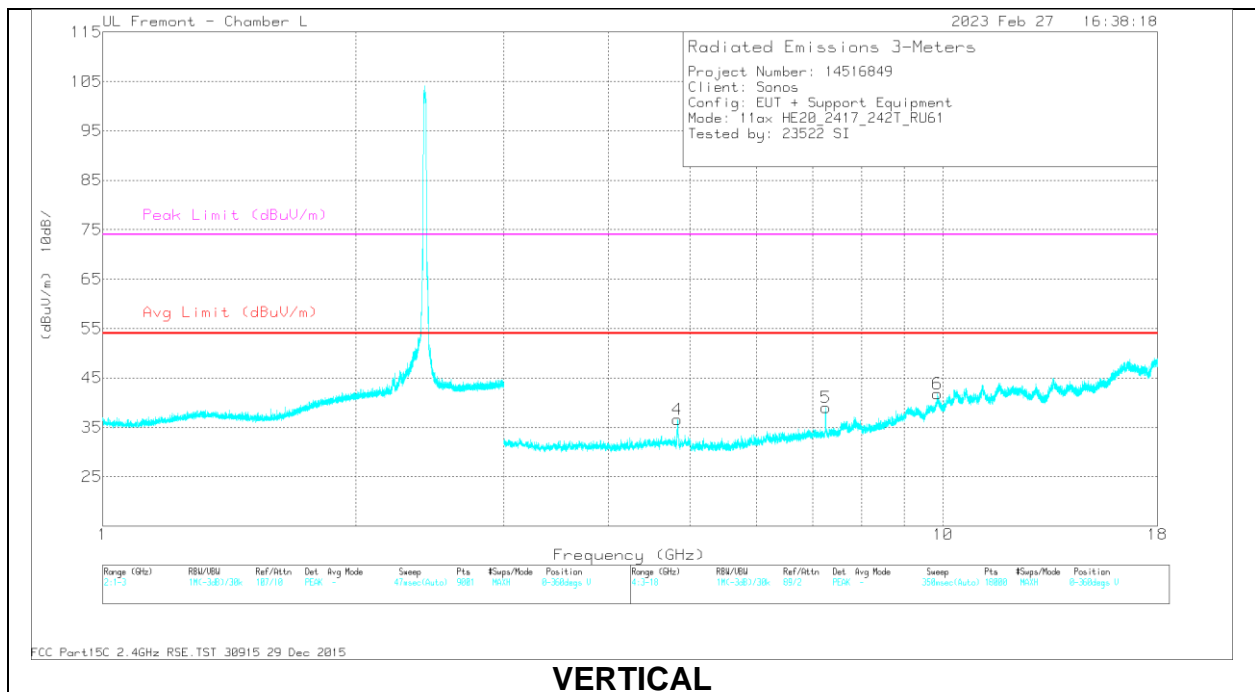
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cb/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.830527	33.45	PK2	34.5	-26.5	0	41.45	-	-	74	-32.55	68	278	H
	* 4.829559	22	MAv1	34.5	-26.5	4.15	34.15	54	-19.85	-	-	68	278	H
2	* 7.35077	29.12	PK2	35.9	-22.5	0	42.52	-	-	74	-31.48	73	161	H
	* 7.355607	17.45	MAv1	35.9	-22.4	4.15	35.1	54	-18.9	-	-	73	161	H
3	9.603029	29.46	PK2	37.2	-18.2	0	48.46	-	-	-	-	73	199	H
	9.601608	18.26	MAv1	37.2	-18.2	4.15	41.41	-	-	-	-	73	199	H
4	* 4.829704	40.49	PK2	34.5	-26.5	0	48.49	-	-	74	-25.51	201	101	V
	* 4.82726	26.49	MAv1	34.5	-26.5	4.15	38.64	54	-15.36	-	-	201	101	V
5	* 7.336617	29.72	PK2	35.9	-22.5	0	43.12	-	-	74	-30.88	22	215	V
	* 7.336843	18.24	MAv1	35.9	-22.5	4.15	35.79	54	-18.21	-	-	22	215	V
6	9.625979	29.68	PK2	37.2	-18.4	0	48.48	-	-	-	-	201	199	V
	9.627392	18.41	MAv1	37.2	-18.4	4.15	41.36	-	-	-	-	201	199	V

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

LOW CHANNEL 2 RESULTS



HORIZONTAL



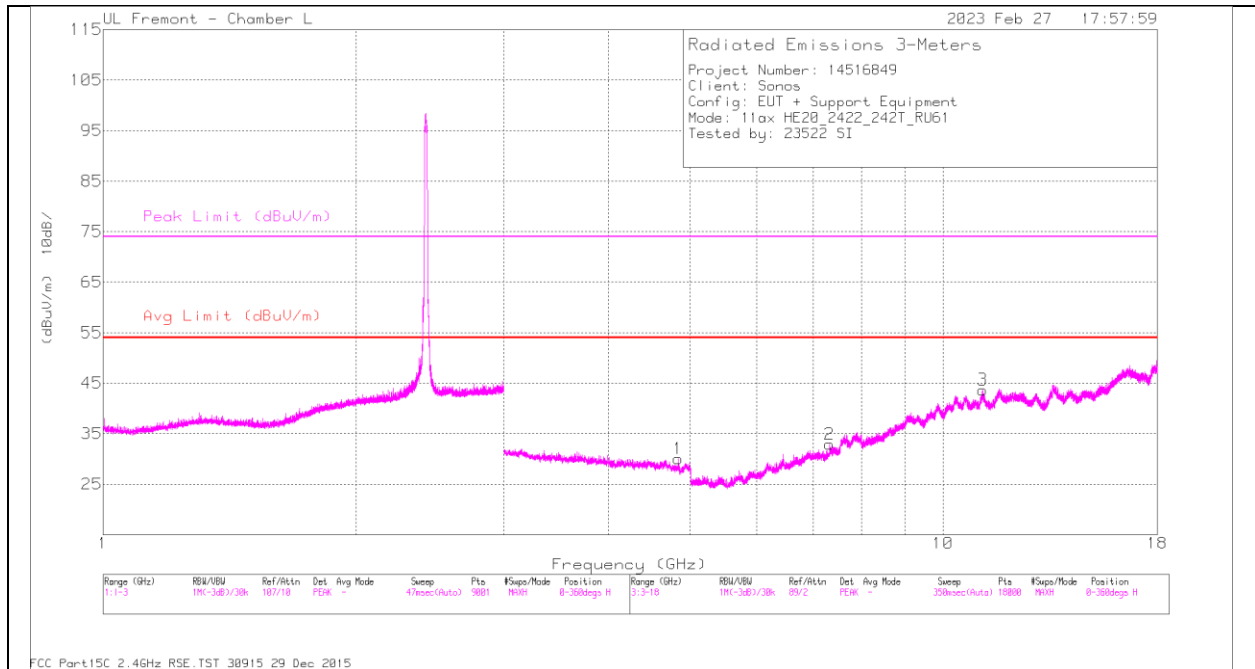
VERTICAL

RADIATED EMISSIONS

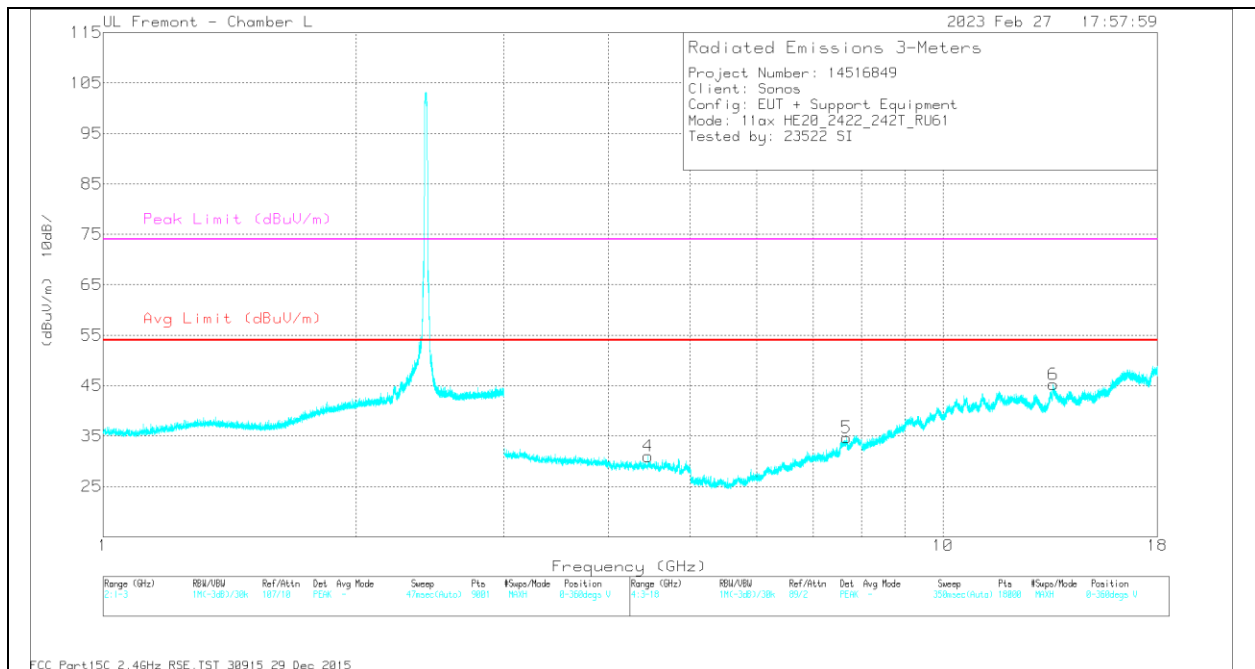
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.617048	34.05	PK2	34.6	-26.9	0	41.75	-	-	74	-32.25	254	305	H
	* 4.617746	22.54	MAv1	34.6	-26.9	4.15	34.39	54	-19.61	-	-	254	305	H
2	7.243029	32.64	PK2	35.9	-23.2	0	45.34	-	-	-	-	135	130	H
	7.243489	18.14	MAv1	35.9	-23.2	4.15	34.99	-	-	-	-	135	130	H
3	16.684902	31.02	PK2	42.1	-15.6	0	57.52	-	-	-	-	8	215	H
	16.686336	19.31	MAv1	42.1	-15.6	4.15	49.96	-	-	-	-	8	215	H
4	* 4.832285	35.06	PK2	34.5	-26.5	0	43.06	-	-	74	-30.94	191	329	V
	* 4.832318	22.07	MAv1	34.5	-26.5	4.15	34.22	54	-19.78	-	-	191	329	V
5	* 7.253582	36.77	PK2	35.9	-23.2	0	49.47	-	-	74	-24.53	235	107	V
	* 7.253682	19.18	MAv1	35.9	-23.2	4.15	36.03	54	-17.97	-	-	235	107	V
6	9.860054	30.93	PK2	37.8	-18.1	0	50.63	-	-	-	-	55	217	V
	9.859406	19.14	MAv1	37.8	-18.1	4.15	42.99	-	-	-	-	55	217	V

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

LOW CHANNEL 3 RESULTS



HORIZONTAL



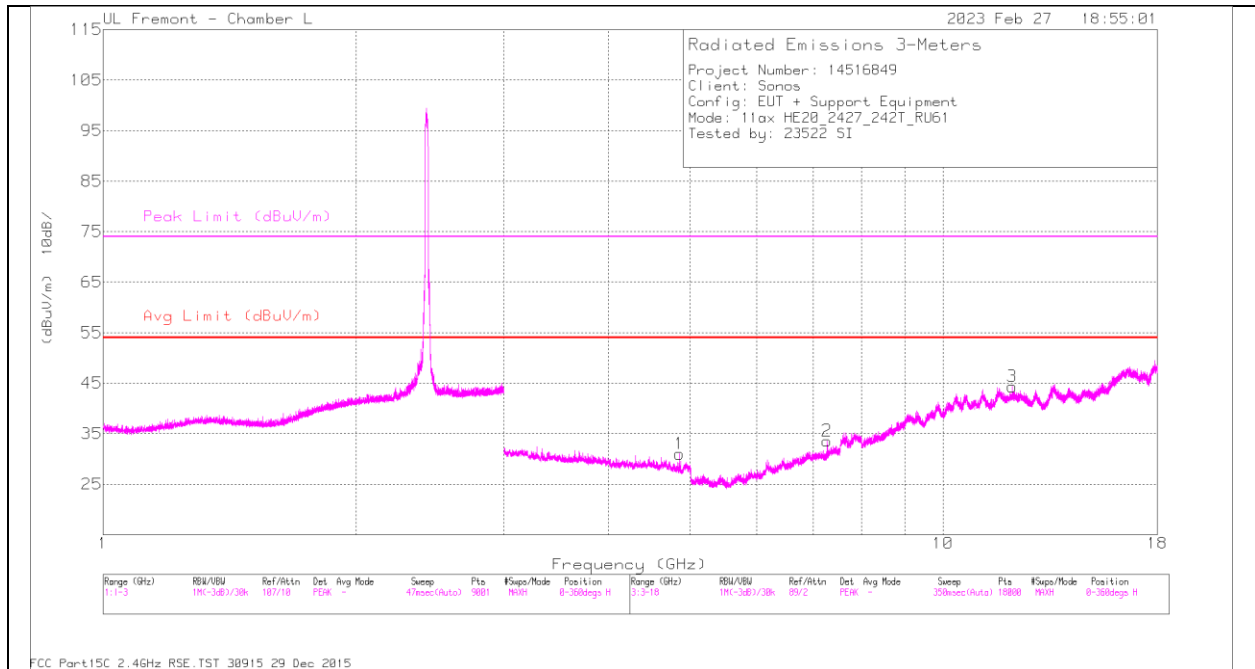
VERTICAL

RADIATED EMISSIONS

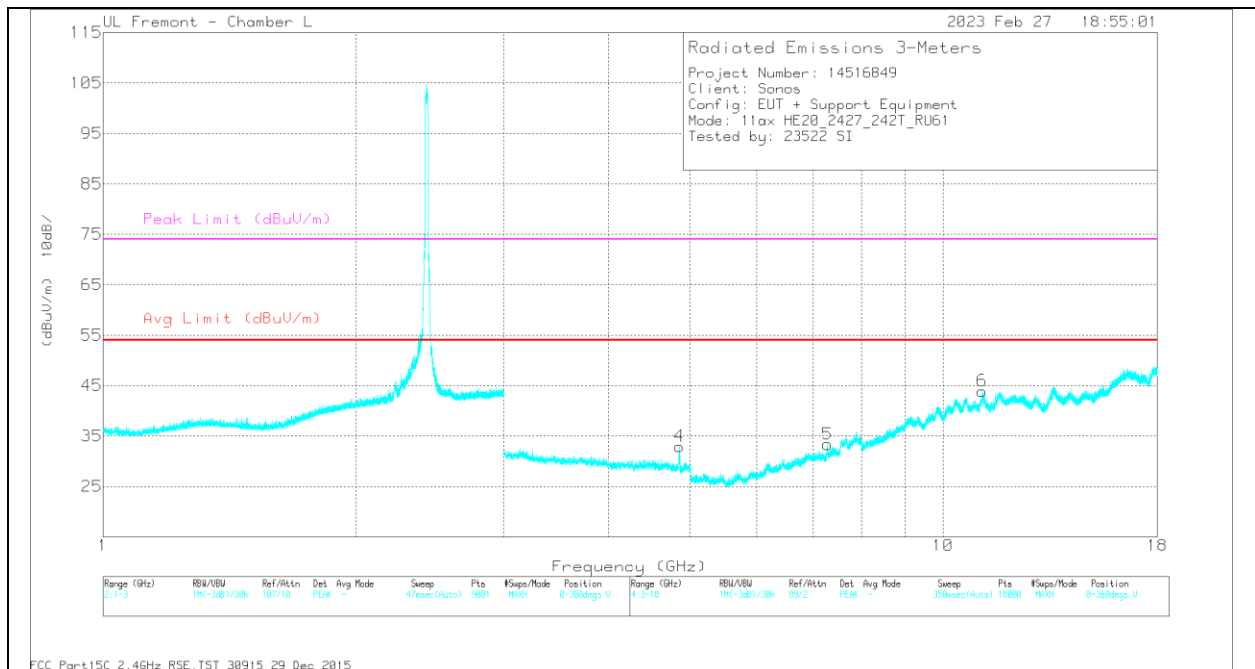
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Filtr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.839005	31.99	PK2	34.5	-26.6	0	39.89	-	-	74	-34.11	172	243	H
	* 4.839865	20.09	MAv1	34.5	-26.6	4.15	32.14	54	-21.86	-	-	172	243	H
	* 7.332517	30.66	PK2	35.9	-22.5	0	44.06	-	-	74	-29.94	200	102	H
2	* 7.331638	18.88	MAv1	35.9	-22.5	4.15	36.43	54	-17.57	-	-	200	102	H
	* 11.148078	30.54	PK2	38.5	-16.3	0	52.74	-	-	74	-21.26	13	281	H
	* 11.146744	19.23	MAv1	38.5	-16.3	4.15	45.58	54	-8.42	-	-	13	281	H
4	4.461203	32.9	PK2	34.2	-26.3	0	40.8	-	-	-	-	318	341	V
	4.459948	21.14	MAv1	34.2	-26.3	4.15	33.19	-	-	-	-	318	341	V
	* 7.673146	28.53	PK2	36.1	-21.7	0	42.93	-	-	74	-31.07	181	216	V
5	* 7.675403	17.15	MAv1	36.1	-21.7	4.15	35.7	54	-18.3	-	-	181	216	V
	13.533261	32.08	PK2	38.8	-17.2	0	53.68	-	-	-	-	107	307	V
	13.534103	20.51	MAv1	38.8	-17.2	4.15	46.26	-	-	-	-	107	307	V

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

LOW CHANNEL 4 RESULTS



HORIZONTAL



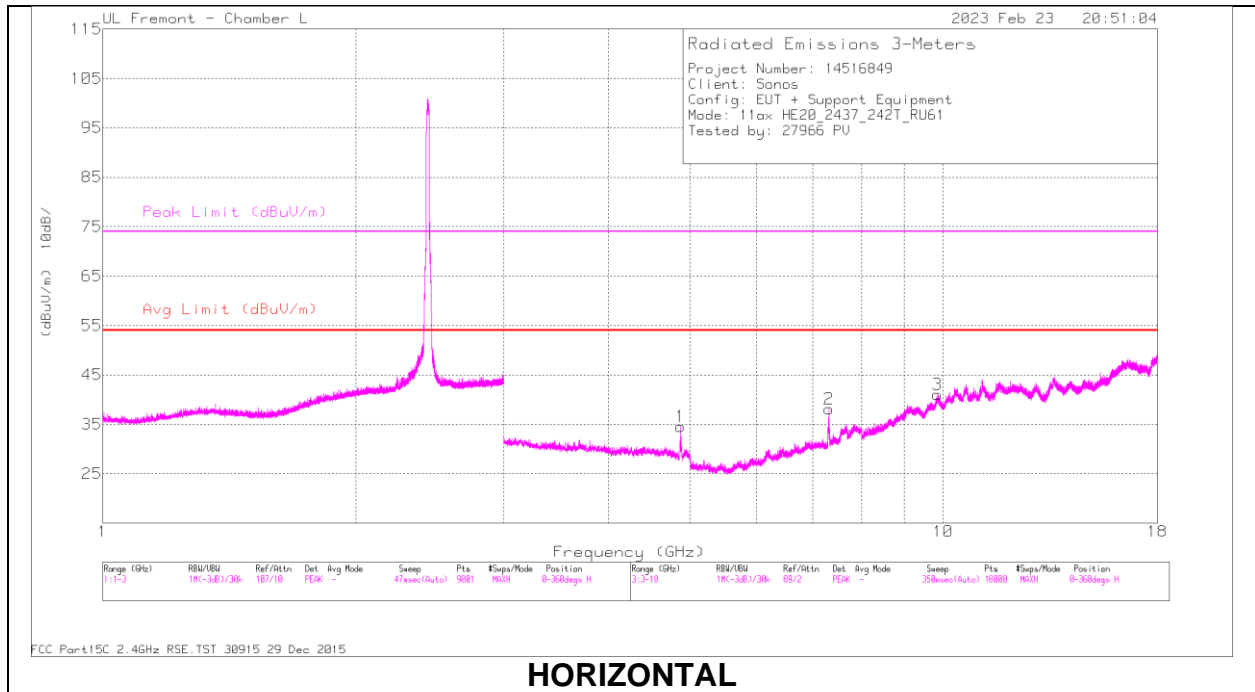
VERTICAL

RADIATED EMISSIONS

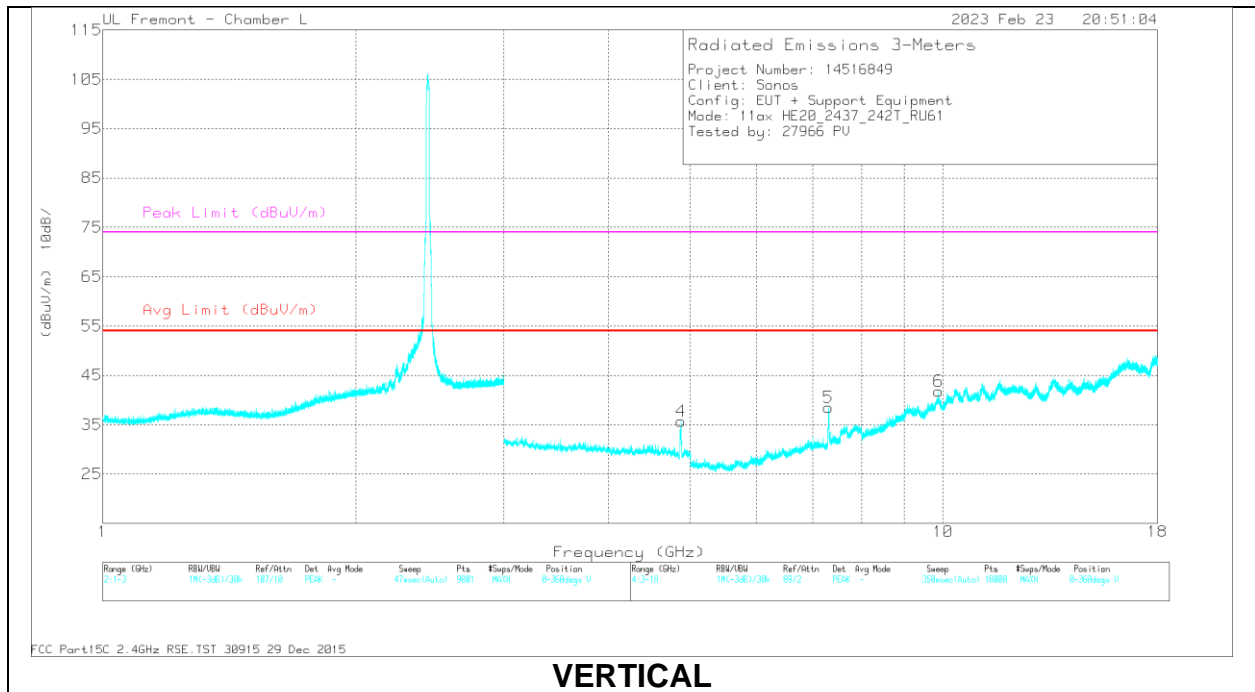
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Filtr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.856929	36.91	PK2	34.4	-26.7	0	44.61	-	-	74	-29.39	167	232	H
	* 4.855118	23.21	MAv1	34.4	-26.8	4.15	34.96	54	-19.04	-	-	167	232	H
2	* 7.280935	36.48	PK2	35.9	-23	0	49.38	-	-	74	-24.62	184	160	H
	* 7.281345	20.13	MAv1	35.9	-23	4.15	37.18	54	-16.82	-	-	184	160	H
3	* 12.094979	31.94	PK2	39.2	-17.9	0	53.24	-	-	74	-20.76	274	207	H
	* 12.094832	20.37	MAv1	39.2	-17.9	4.15	45.82	54	-8.18	-	-	274	207	H
4	* 4.857165	36.29	PK2	34.4	-26.7	0	43.99	-	-	74	-30.01	189	349	V
	* 4.856973	22.55	MAv1	34.4	-26.7	4.15	34.4	54	-19.6	-	-	189	349	V
5	* 7.285834	35.39	PK2	35.9	-22.9	0	48.39	-	-	74	-25.61	191	329	V
	* 7.285755	19.22	MAv1	35.9	-22.9	4.15	36.37	54	-17.63	-	-	191	329	V
6	* 11.139541	31.5	PK2	38.5	-16.3	0	53.7	-	-	74	-20.3	20	153	V
	* 11.14228	19.91	MAv1	38.5	-16.2	4.15	46.36	54	-7.64	-	-	20	153	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 6 RESULTS



HORIZONTAL



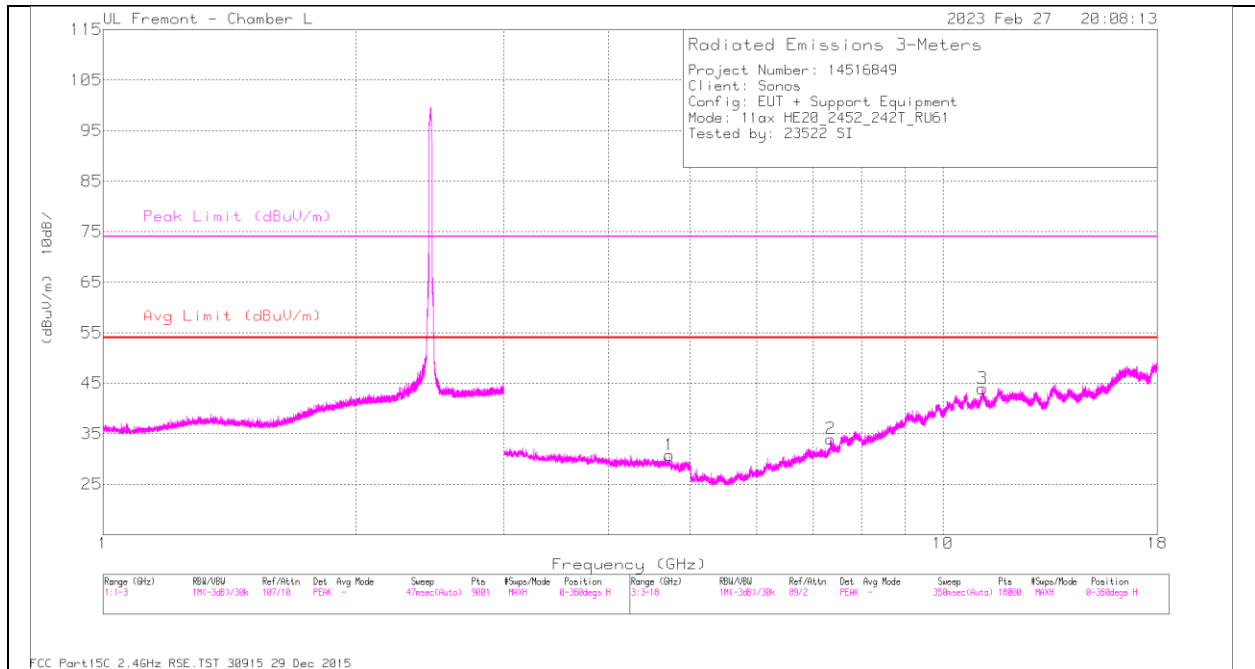
VERTICAL

RADIATED EMISSIONS

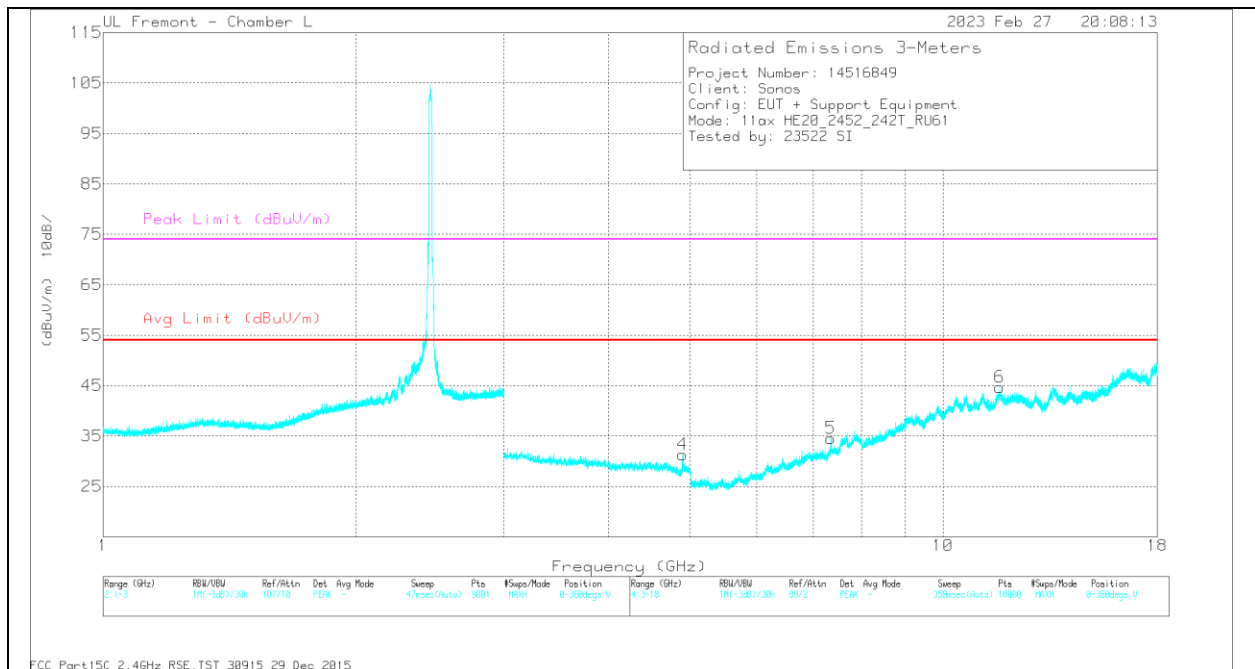
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.869533	35.77	PK2	34.4	-26.6	0	43.57	-	-	74	-30.43	171	215	H
	* 4.869376	22.14	MAv1	34.4	-26.6	4.15	34.09	54	-19.91	-	-	171	215	H
2	* 7.314651	40.23	PK2	35.9	-22.8	0	53.33	-	-	74	-20.67	190	154	H
	* 7.314788	23.32	MAv1	35.9	-22.8	4.15	40.57	54	-13.43	-	-	190	154	H
3	9.845902	30.75	PK2	37.7	-18	0	50.45	-	-	-	-	190	101	H
	9.844376	19.07	MAv1	37.7	-18	4.15	42.92	-	-	-	-	190	101	H
4	* 4.879881	40.46	PK2	34.4	-26.4	0	48.46	-	-	74	-25.54	116	112	V
	* 4.879885	26.33	MAv1	34.4	-26.4	4.15	38.48	54	-15.52	-	-	116	112	V
5	* 7.30744	40.42	PK2	35.9	-22.8	0	53.52	-	-	74	-20.48	171	135	V
	* 7.306934	23.37	MAv1	35.9	-22.8	4.15	40.62	54	-13.38	-	-	171	135	V
6	9.881716	30.5	PK2	37.8	-18.3	0	50	-	-	-	-	116	199	V
	9.881308	19.3	MAv1	37.8	-18.2	4.15	43.05	-	-	-	-	116	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 9 RESULTS



HORIZONTAL



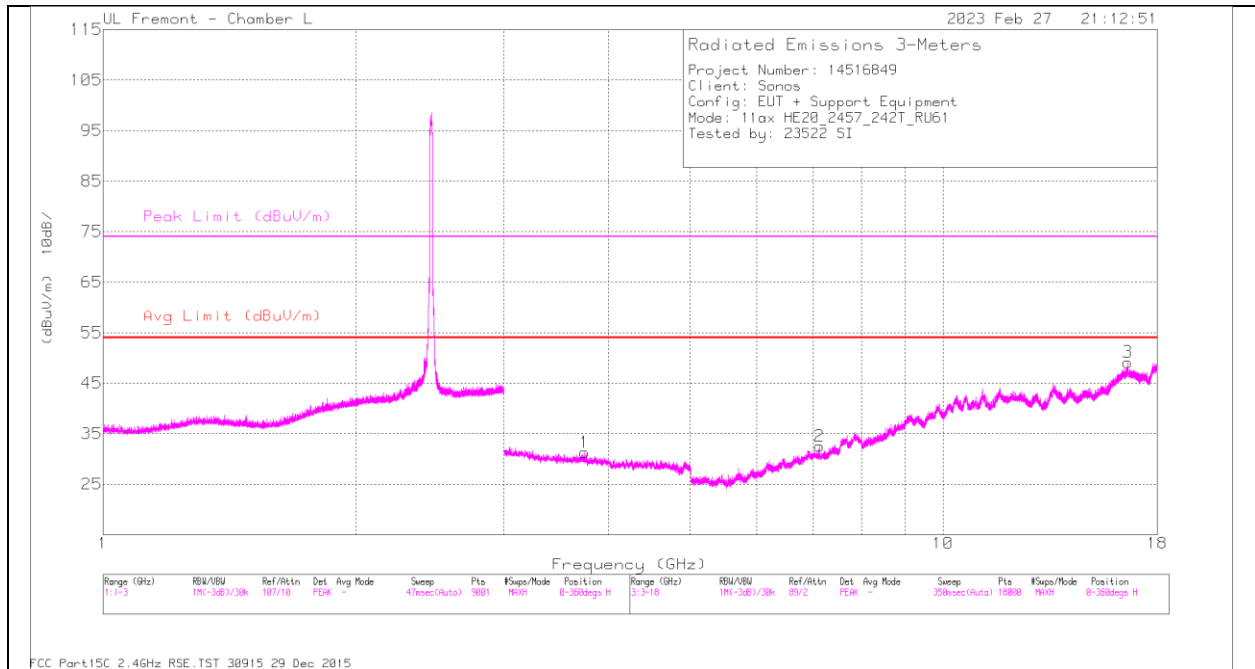
VERTICAL

RADIATED EMISSIONS

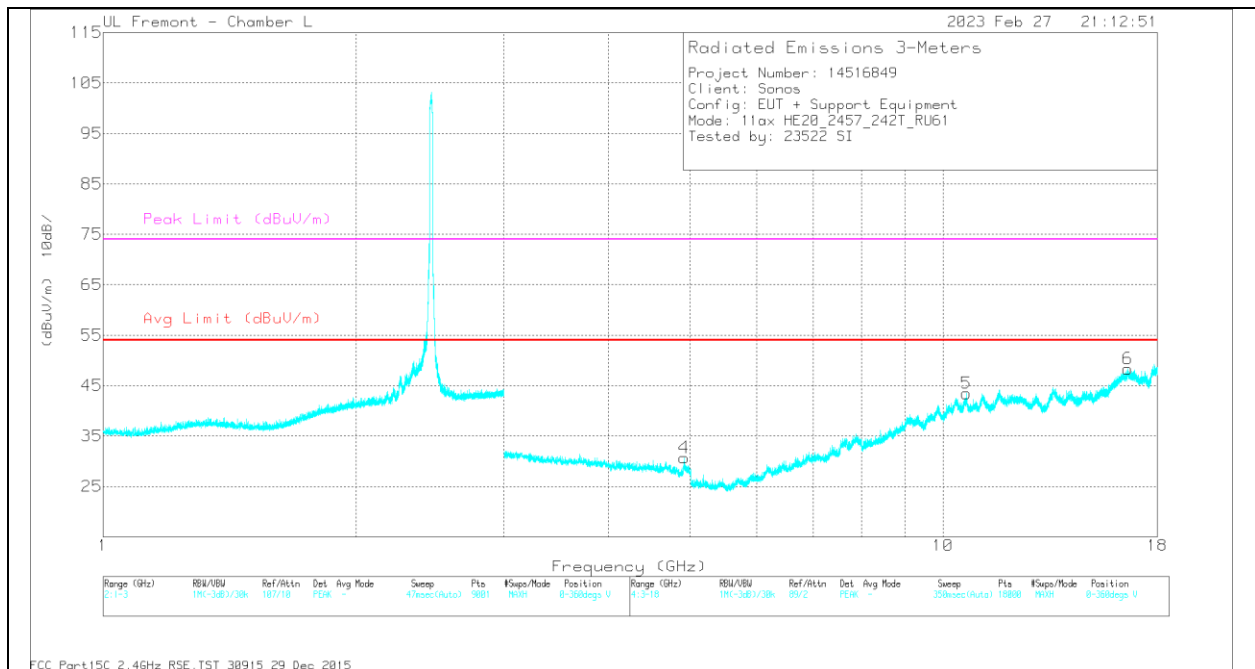
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.720756	31.91	PK2	34.6	-26.2	0	40.31	-	-	74	-33.69	115	337	H
	* 4.720274	20.47	MAv1	34.6	-26.2	4.15	33.02	54	-20.98	-	-	115	337	H
2	* 7.35695	33.27	PK2	35.9	-22.5	0	46.67	-	-	74	-27.33	187	165	H
	* 7.355004	18.41	MAv1	35.9	-22.4	4.15	36.06	54	-17.94	-	-	187	165	H
3	* 11.13919	30.62	PK2	38.5	-16.3	0	52.82	-	-	74	-21.18	14	389	H
	* 11.140356	19.23	MAv1	38.5	-16.2	4.15	45.68	54	-8.32	-	-	14	389	H
4	* 4.901639	39.02	PK2	34.4	-26.1	0	47.32	-	-	74	-26.68	113	101	V
	* 4.899599	25.59	MAv1	34.4	-26.1	4.15	38.04	54	-15.96	-	-	113	101	V
5	* 7.355249	36.17	PK2	35.9	-22.4	0	49.67	-	-	74	-24.33	239	104	V
	* 7.354824	19.18	MAv1	35.9	-22.4	4.15	36.83	54	-17.17	-	-	239	104	V
6	* 11.675621	32.21	PK2	38.7	-17.1	0	53.81	-	-	74	-20.19	100	211	V
	* 11.676462	20.36	MAv1	38.7	-17.1	4.15	46.11	54	-7.89	-	-	100	211	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 10 RESULTS



HORIZONTAL



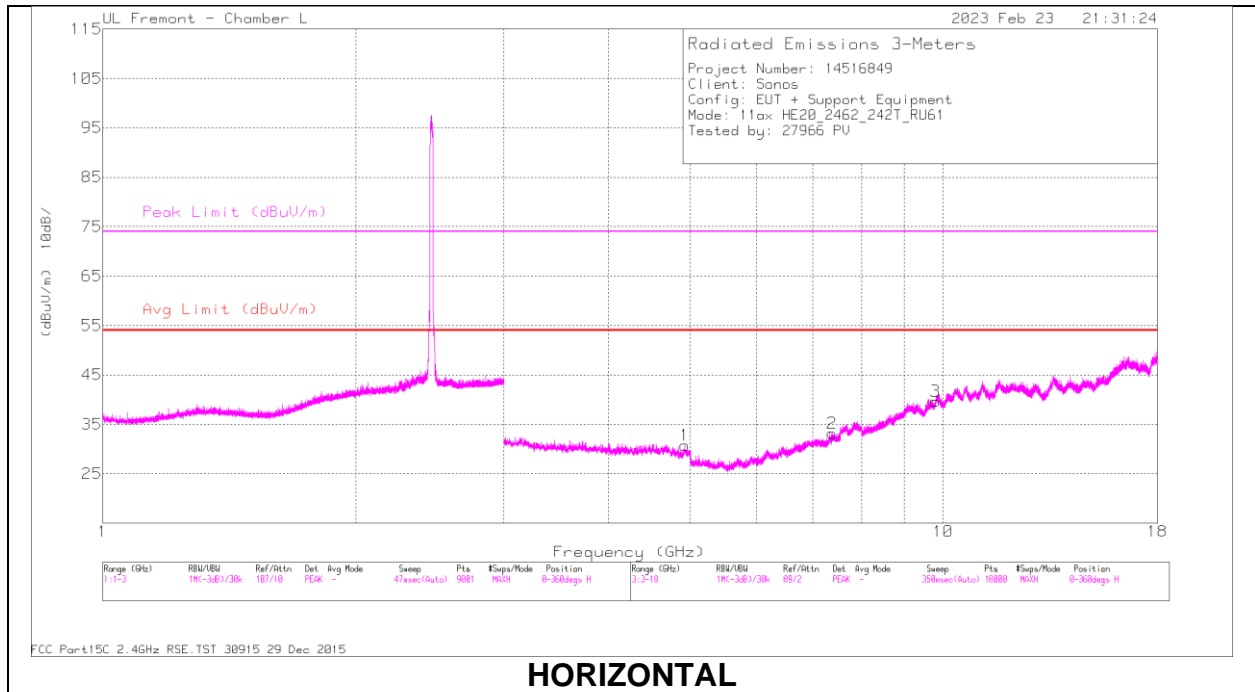
VERTICAL

RADIATED EMISSIONS

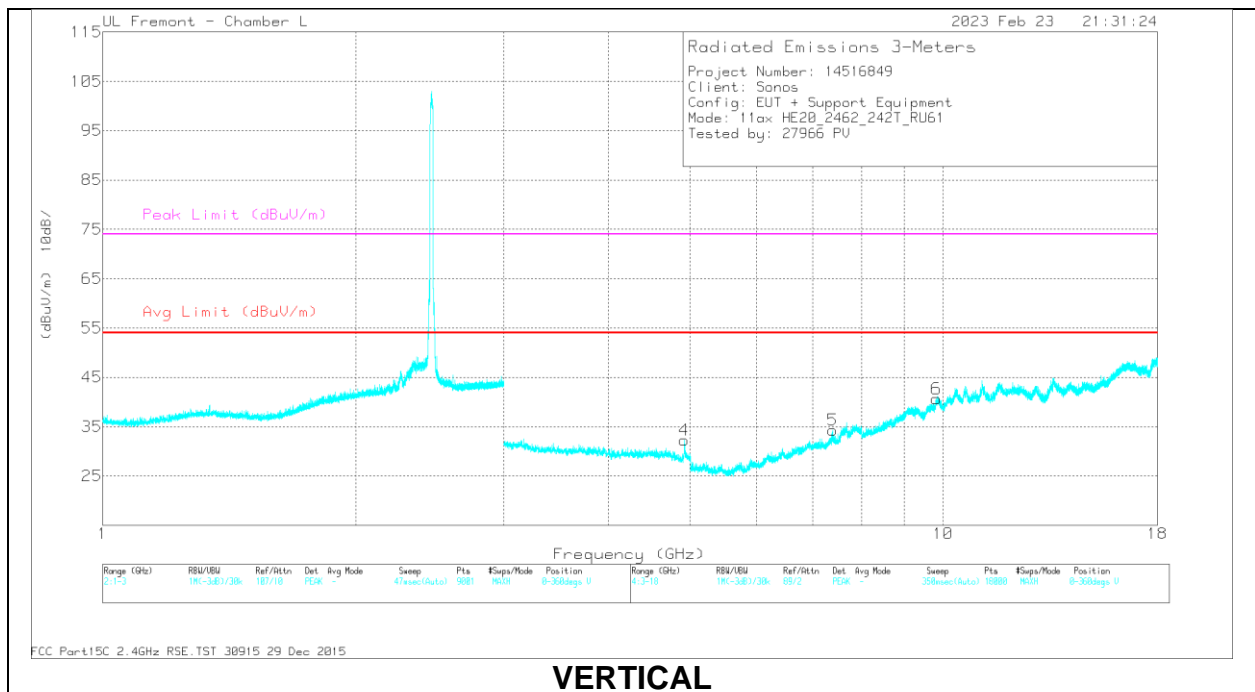
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cbl/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.744768	34.5	PK2	33.6	-27.5	0	40.6	-	-	74	-33.4	325	337	H
	* 3.744834	22.75	MAv1	33.6	-27.5	4.15	33	54	-21	-	-	325	337	H
2	7.124864	28.71	PK2	35.9	-22.7	0	41.91	-	-	-	-	275	168	H
	7.123032	17.05	MAv1	35.9	-22.8	4.15	34.3	-	-	-	-	275	168	H
3	16.602407	32.92	PK2	42	-15.9	0	59.02	-	-	-	-	37	157	H
	16.601531	19.91	MAv1	42	-15.9	4.15	50.16	-	-	-	-	37	157	H
4	* 4.919678	37.51	PK2	34.4	-25.6	0	46.31	-	-	74	-27.69	108	106	V
	* 4.91998	23.81	MAv1	34.4	-25.6	4.15	36.76	54	-17.24	-	-	108	106	V
5	* 10.657204	30.62	PK2	38.3	-16.3	0	52.62	-	-	74	-21.38	5	105	V
	* 10.657057	18.65	MAv1	38.3	-16.3	4.15	44.8	54	-9.2	-	-	5	105	V
6	16.590718	31.63	PK2	42.1	-15.9	0	57.83	-	-	-	-	314	139	V
	16.593498	20.16	MAv1	42	-15.9	4.15	50.41	-	-	-	-	314	139	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 11 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Horn 1mH	Amp/Cb/Fitr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.927691	31.79	PK2	34.4	-25.5	0	40.69	-	-	74	-33.31	260	342	H
	* 4.926734	20.19	MAv1	34.4	-25.5	4.15	33.24	54	-20.76	-	-	260	342	H
2	* 7.381018	32.13	PK2	35.9	-22.5	0	45.53	-	-	74	-28.47	144	105	H
	* 7.383433	17.69	MAv1	35.9	-22.5	4.15	35.24	54	-18.76	-	-	144	105	H
3	9.789217	31.45	PK2	37.6	-19	0	50.05	-	-	-	-	144	199	H
	9.790044	19.6	MAv1	37.7	-19	4.15	42.45	-	-	-	-	144	199	H
4	* 4.925639	31.75	PK2	34.4	-25.5	0	40.65	-	-	74	-33.35	116	304	V
	* 4.925239	20.16	MAv1	34.4	-25.5	4.15	33.21	54	-20.79	-	-	116	304	V
5	* 7.391393	33.43	PK2	35.9	-22.3	0	47.03	-	-	74	-26.97	111	157	V
	* 7.388249	18.7	MAv1	35.9	-22.4	4.15	36.35	54	-17.65	-	-	111	157	V
6	9.825805	31.12	PK2	37.7	-18.1	0	50.72	-	-	-	-	111	199	V
	9.825318	19.43	MAv1	37.7	-18.1	4.15	43.18	-	-	-	-	111	199	V

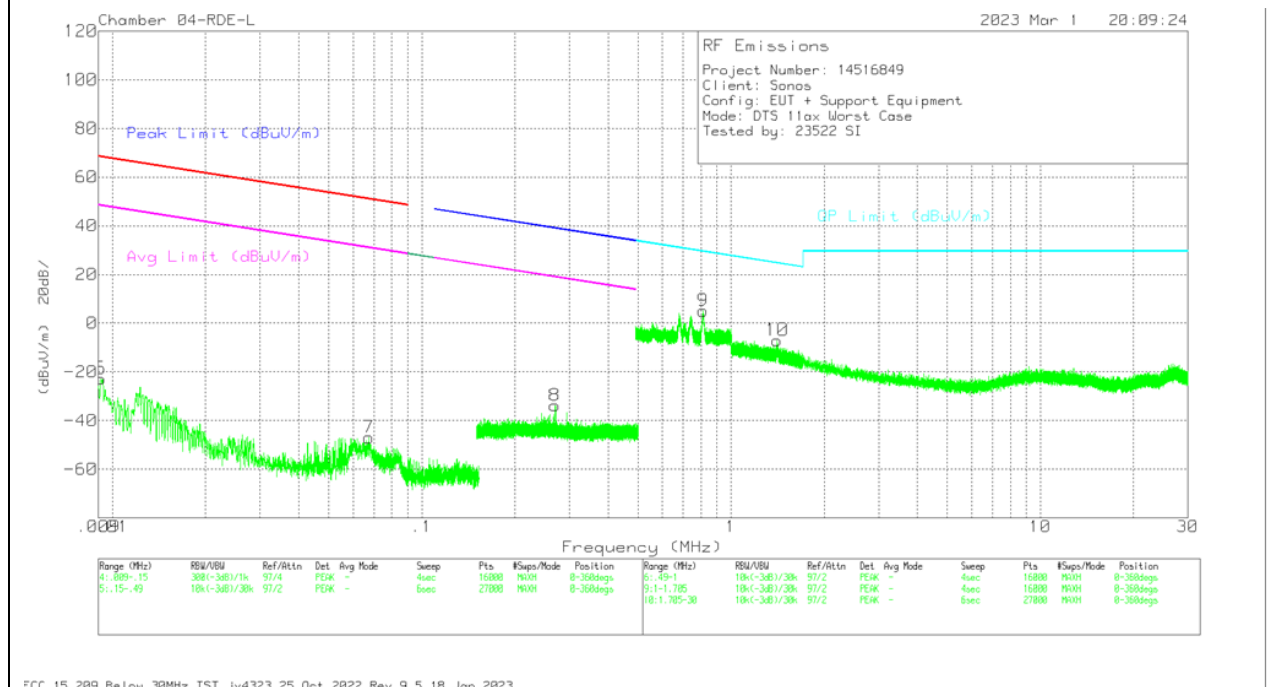
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak
 MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2. Worst Case Below 30MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



FCC 15.209 Below 30MHz.TST jv4323 25 Oct 2022 Rev 9.5 18 Jan 2023



FCC 15.209 Below 30MHz.TST jv4323 25 Oct 2022 Rev 9.5 18 Jan 2023

ANTENNA- TWO ORIENTATIONS FACE ON/FACE OFF

Below 30MHz Data

Range 1: Face On .009 - .15MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)
1	.0122	23.68	Pk	59.8	-29.5	-80	-26.02	65.87	-91.89	45.87	-71.89	-	-
2	.0586	15.18	Pk	56.2	-31.9	-80	-40.52	52.23	-92.75	32.23	-72.75	-	-

Range 2: Face On .15 - .49MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)
3	.2835	28.37	Pk	56	-32	-80	-27.63	-	-	-	-	-	-

Range 3: Face On .49 - 1MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)		
4	.8103	21.22	Pk	56.1	-31.9	-40	5.42	-	-	-	-		

Range 4: Face Off .009 - .15MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)
6	.0092	25	Pk	60.9	-28.7	-80	-22.8	68.35	-91.15	48.35	-71.15	-	-
7	.0675	9.13	Pk	55.9	-32	-80	-46.97	51	-97.97	31	-77.97	-	-

Range 5: Face Off .15 - .49MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)
8	.2693	22.17	Pk	56	-32	-80	-33.83	-	-	-	-	-	-

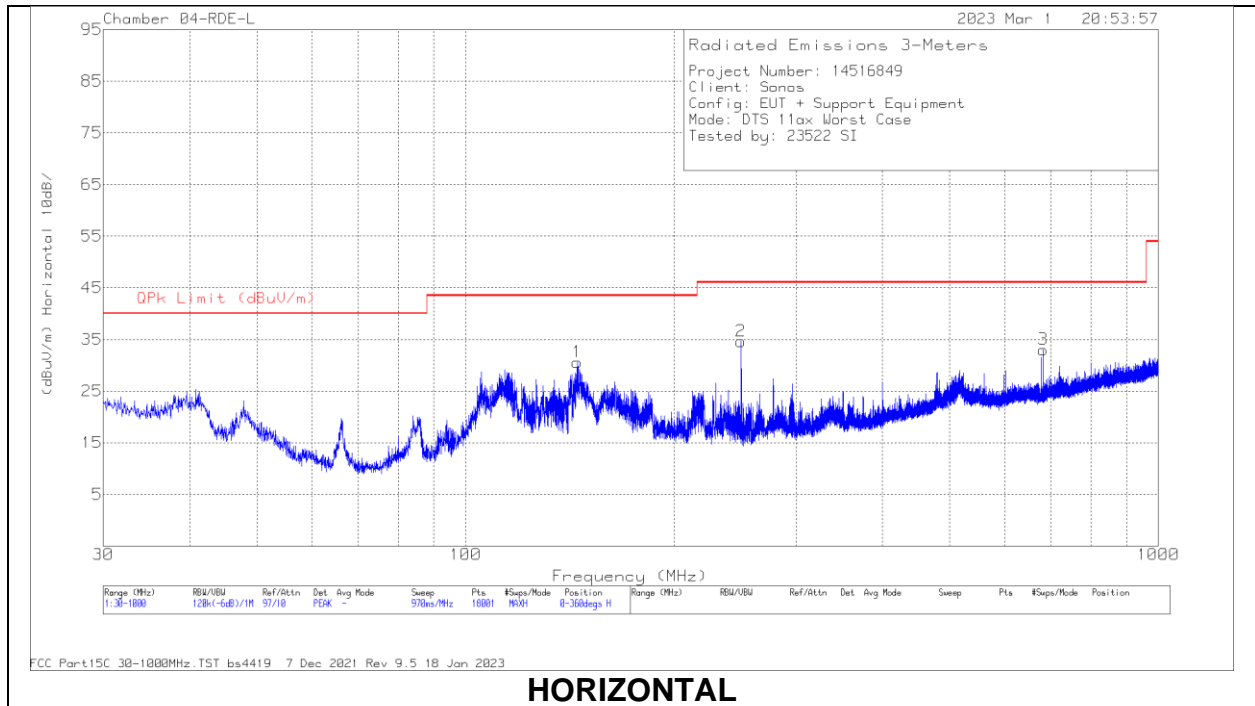
Range 6: Face Off .49 - 1MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)		
9	.8122	20.9	Pk	56.1	-31.9	-40	5.1	-	-	-	-		

Range 8: Face On 1.705 - 30MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)		
5	1.4118	20.97	Pk	44.6	-31.9	-40	-6.33	-	-	-	-		

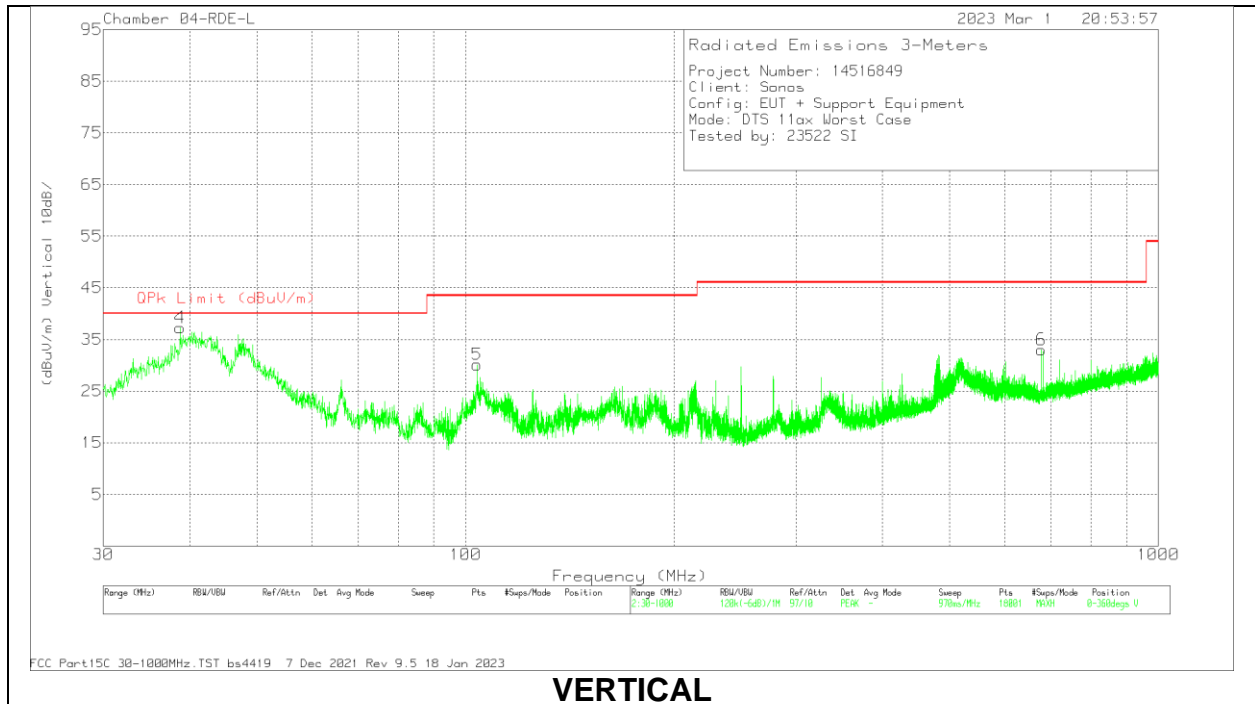
Range 9: Face Off 1 - 1.705MHz													
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (degs)		
10	1.4107	20.24	Pk	44.6	-31.9	-40	-7.06	-	-	-	-		

Pk - Peak detector

10.3. Worst Case Below 1 GHz



HORIZONTAL



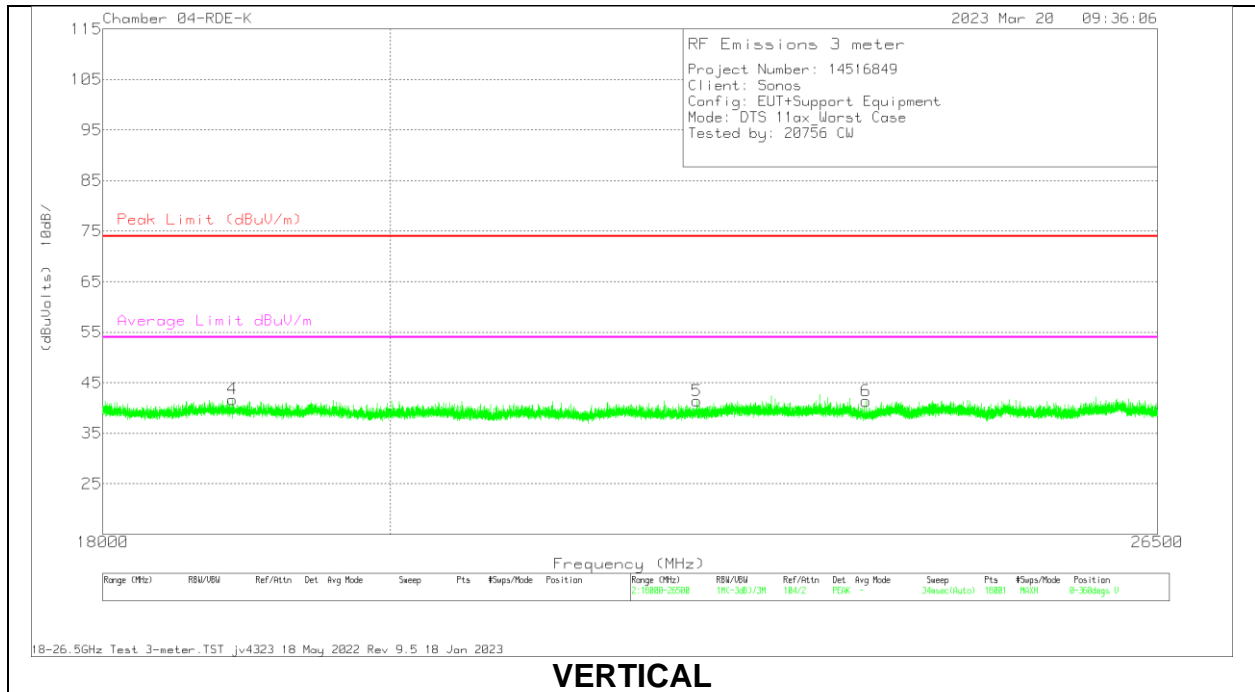
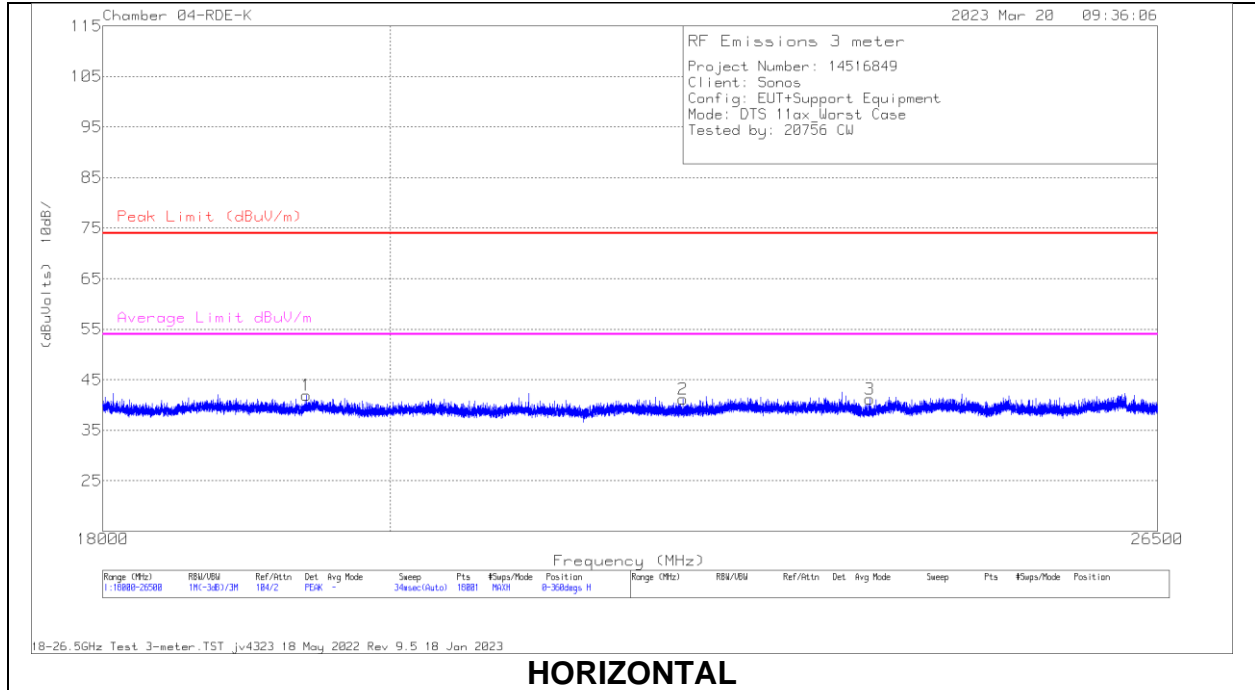
VERTICAL

Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80293 ACF (dB)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	144.999	42.41	Pk	18.5	-30.3	30.61	43.52	-12.91	0-360	299	H
2	249.975	47.15	Pk	17.2	-29.7	34.65	46.02	-11.37	0-360	101	H
3	681.949	35.74	Pk	25.6	-28.3	33.04	46.02	-12.98	0-360	299	H
4	39.3251	43.39	Qp	20.3	-31.2	32.49	40	-7.51	156	137	V
	39.3251	47.81	Pk	20.3	-31.2	36.91	40	-3.09	156	137	V
5	103.99	43.73	Pk	17.1	-30.7	30.13	43.52	-13.39	0-360	101	V
6	678.123	35.9	Pk	25.4	-28.3	33	46.02	-13.02	0-360	101	V

Pk - Peak detector
 Qp - Quasi-Peak detector

10.4. Worst Case 18-26 GHz



18 - 26 GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	199659 ACF (dB)	234683 Amp/Cbl (dB)	Cables (dB)	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 19395.416	52.69	Pk	33.4	-62.7	18.5	41.89	74	-32.11	54	-12.11	0-360	101	H
2	* 22266.526	51.01	Pk	33	-62.6	19.7	41.11	74	-32.89	54	-12.89	0-360	101	H
3	* 23844.219	49.96	Pk	33.3	-62.5	20.4	41.16	74	-32.84	54	-12.84	0-360	200	H
4	* 18876.916	52.42	Pk	33.5	-62.5	18.3	41.72	74	-32.28	54	-12.28	0-360	200	V
5	* 22379.859	51.29	Pk	33	-62.6	19.7	41.39	74	-32.61	54	-12.61	0-360	101	V
6	* 23813.997	50.15	Pk	33.3	-62.5	20.4	41.35	74	-32.65	54	-12.65	0-360	200	V

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

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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.

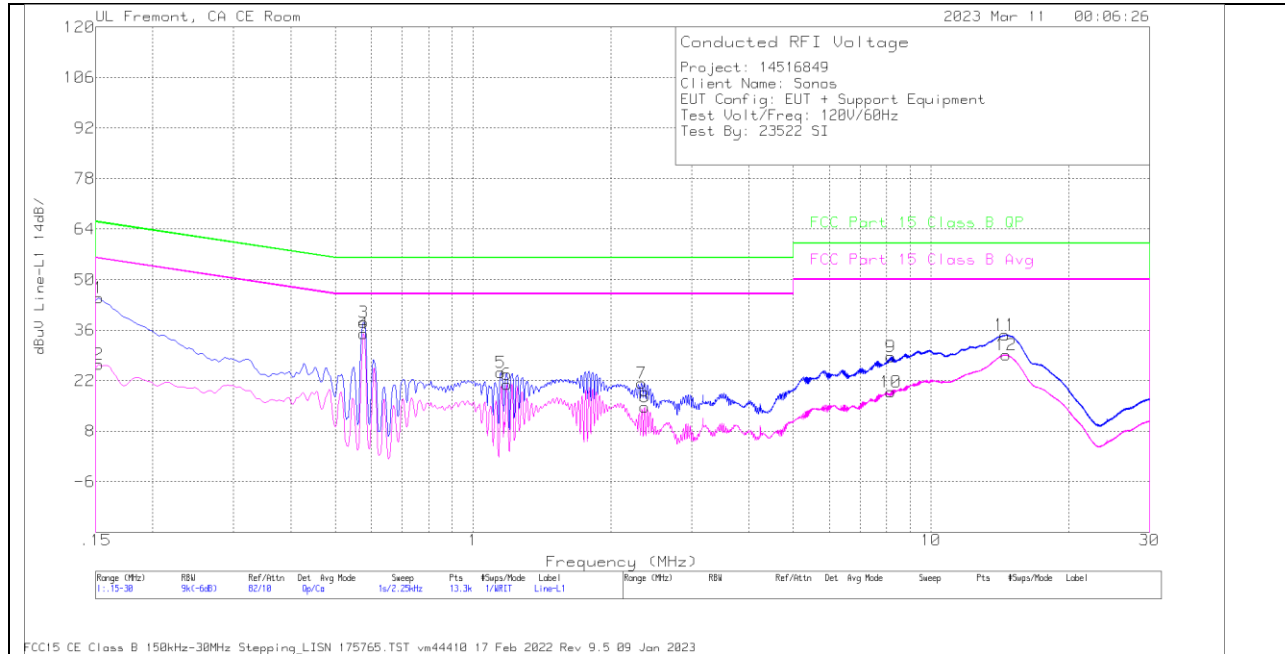
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

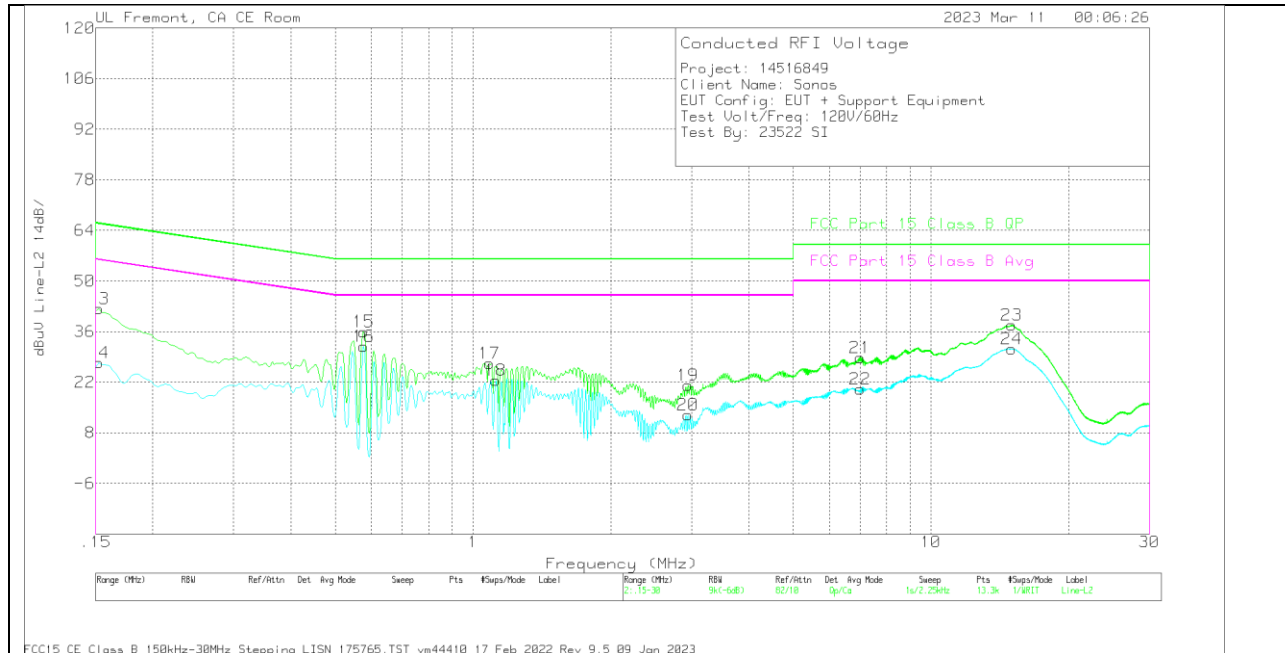
RESULTS

AC Power Line Norm

LINE 1 RESULTS



LINE 2 RESULTS



Trace Markers

Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L1	C1&C3 cable path loss	207996 Limiter with short cabl	Corrected Reading dBuV	FCC Part 15 Class B QP	QP Margin (dB)	FCC Part 15 Class B Avg	Av(CISPR)Margin (dB)
2	.1523	17.09	Ca	.1	0	9.4	26.59	-	-	55.88	-29.29
4	.5775	25.72	Ca	0	.1	9.3	35.12	-	-	46	-10.88
6	1.185	11.62	Ca	0	.1	9.3	21.02	-	-	46	-24.98
8	2.3708	5.32	Ca	0	.1	9.3	14.72	-	-	46	-31.28
10	8.1758	9.4	Ca	0	.2	9.3	18.9	-	-	50	-31.1
12	14.5725	19.55	Ca	.1	.2	9.3	29.15	-	-	50	-20.85
1	.1523	35.52	Qp	.1	0	9.4	45.02	65.88	-20.86	-	-
3	.5775	28.79	Qp	0	.1	9.3	38.19	56	-17.81	-	-
5	1.149	14.8	Qp	0	.1	9.3	24.2	56	-31.8	-	-
7	2.3325	11.85	Qp	0	.1	9.3	21.25	56	-34.75	-	-
9	8.1668	19.05	Qp	0	.2	9.3	28.55	60	-31.45	-	-
11	14.496	25.1	Qp	.1	.2	9.3	34.7	60	-25.3	-	-

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	175765 LISN L2	C2&C3 cable path loss	207996 Limiter with short cabl	Corrected Reading dBuV	FCC Part 15 Class B QP	QP Margin (dB)	FCC Part 15 Class B Avg	Av(CISPR)Margin (dB)
14	.1523	17.96	Ca	.1	0	9.4	27.46	-	-	55.88	-28.42
16	.5775	22.54	Ca	0	.1	9.3	31.94	-	-	46	-14.06
18	1.122	13.06	Ca	0	.1	9.3	22.46	-	-	46	-23.54
20	2.9468	3.62	Ca	0	.1	9.3	13.02	-	-	46	-32.98
22	7.0001	10.71	Ca	0	.1	9.3	20.11	-	-	50	-29.89
24	15.0214	21.63	Ca	.1	.2	9.3	31.23	-	-	50	-18.77
13	.1523	32.8	Qp	.1	0	9.4	42.3	65.88	-23.58	-	-
15	.5775	26.6	Qp	0	.1	9.3	36	56	-20	-	-
17	1.086	17.75	Qp	0	.1	9.3	27.15	56	-28.85	-	-
19	2.949	11.73	Qp	0	.1	9.3	21.13	56	-34.87	-	-
21	6.9968	19.46	Qp	0	.1	9.3	28.86	60	-31.14	-	-
23	15.0225	28.18	Qp	.1	.2	9.3	37.78	60	-22.22	-	-

Qp - Quasi-Peak detector
 Ca - CISPR average detection