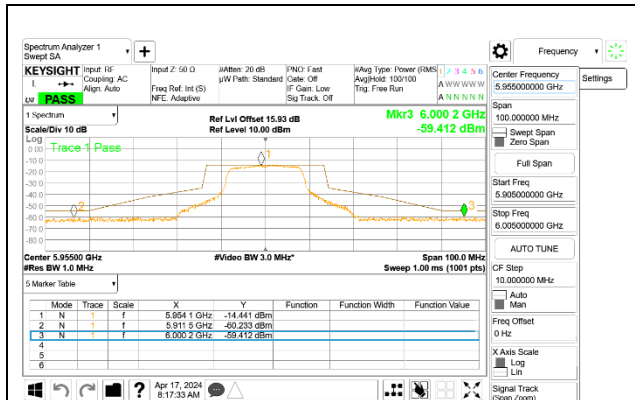
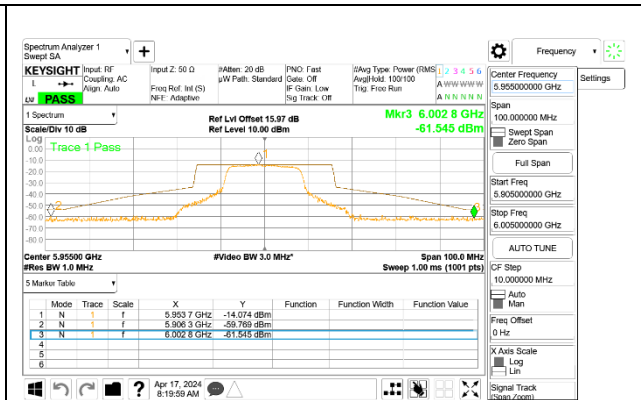


9.5.1. 802.11a MODE 2TX IN THE UNII-5 BAND

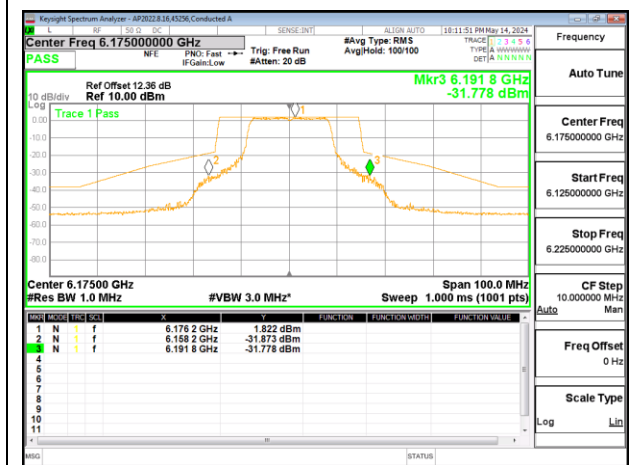
2TX Antenna 2 + Antenna 4 CDD MODE:



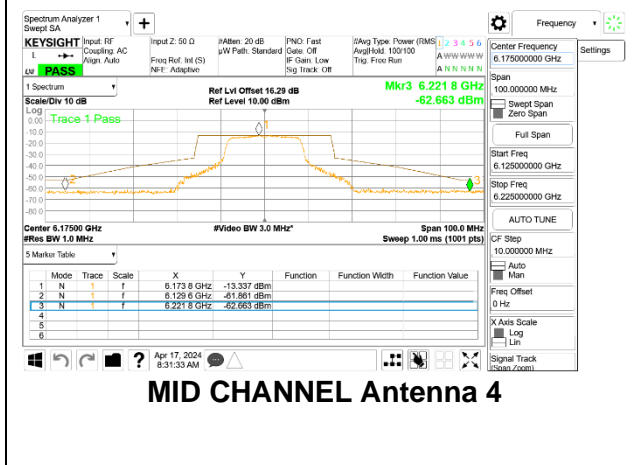
LOW CHANNEL Antenna 2



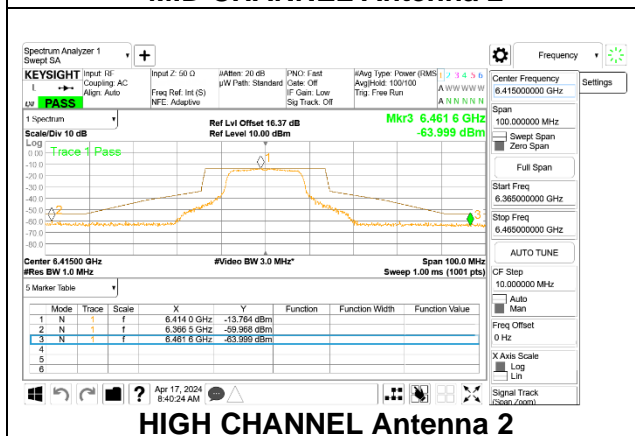
LOW CHANNEL Antenna 4



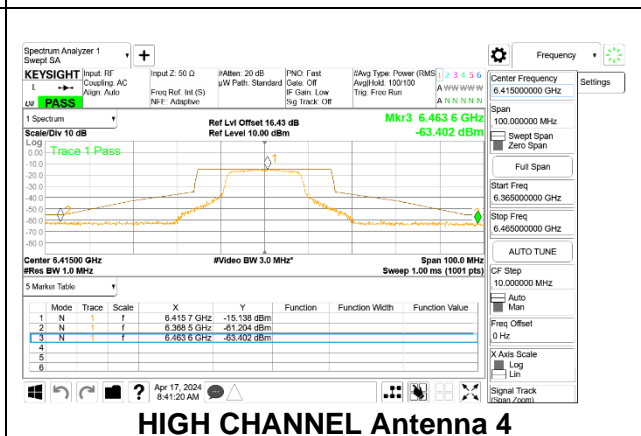
MID CHANNEL Antenna 2



MID CHANNEL Antenna 4



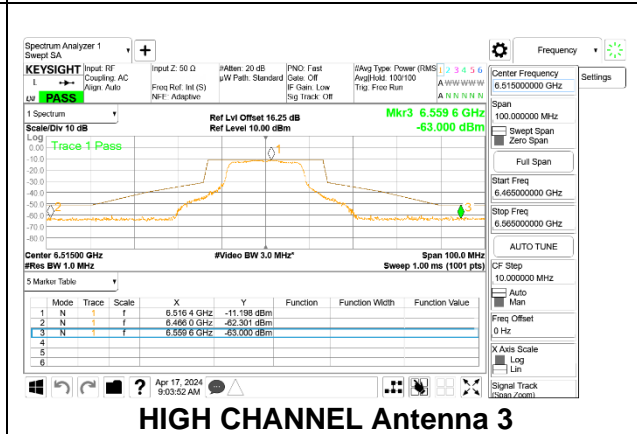
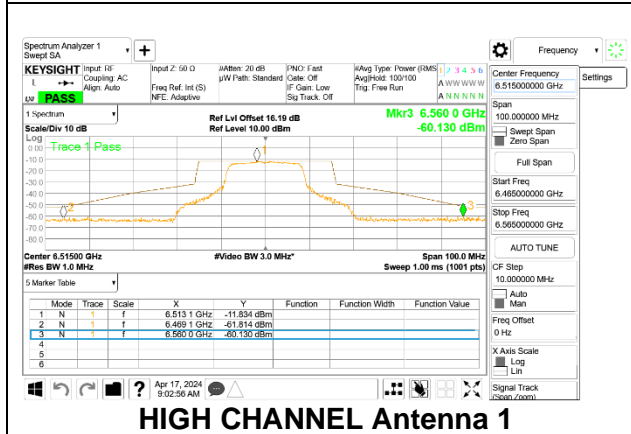
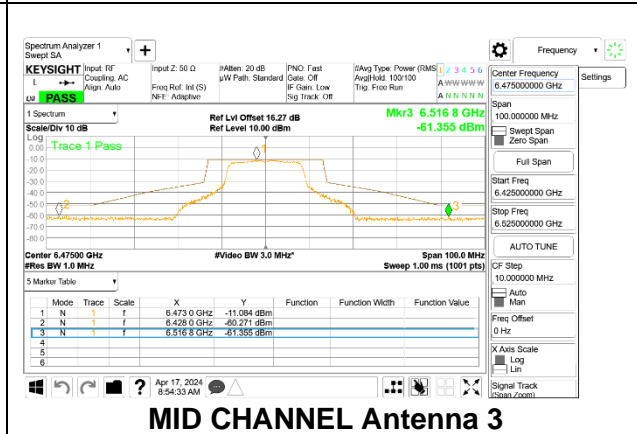
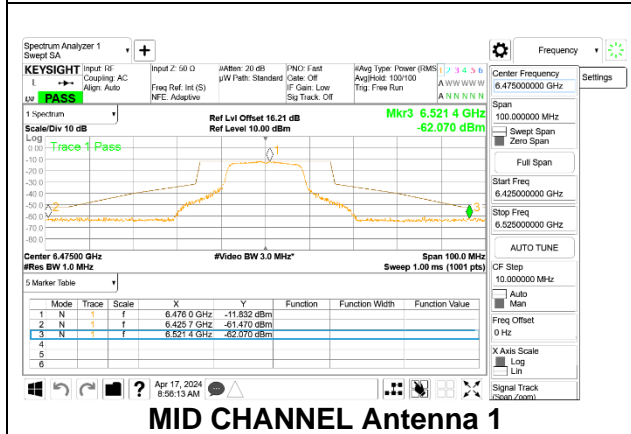
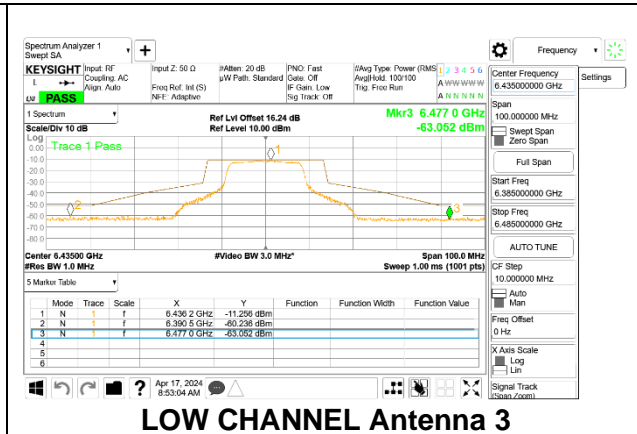
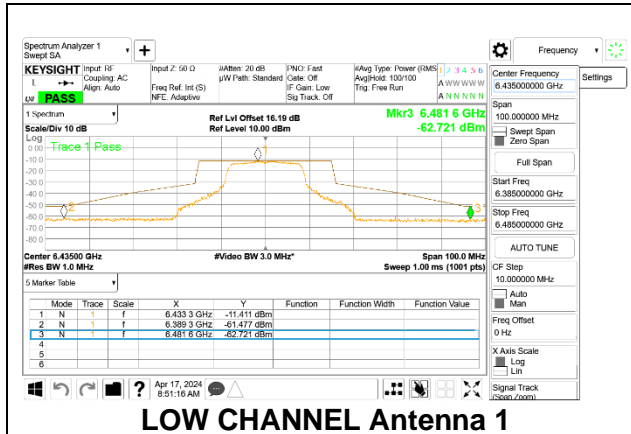
HIGH CHANNEL Antenna 2



HIGH CHANNEL Antenna 4

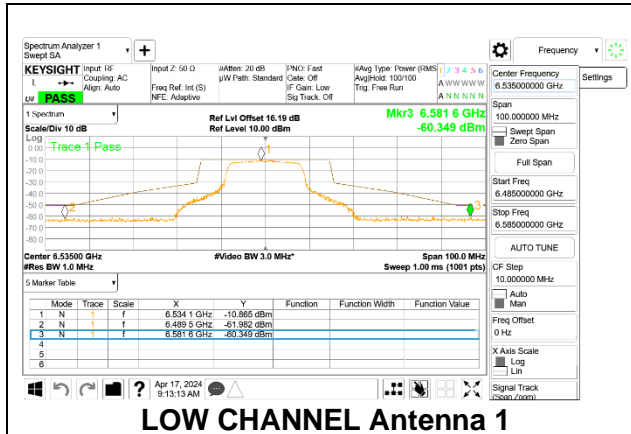
9.5.2. 802.11a MODE 2TX IN THE UNII-6 BAND

2TX Antenna 1 + Antenna 3 CDD MODE:

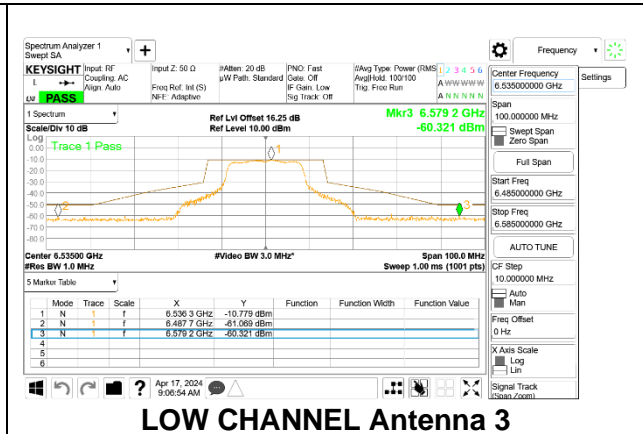


9.5.3. 802.11a MODE 2TX IN THE UNII-7 BAND

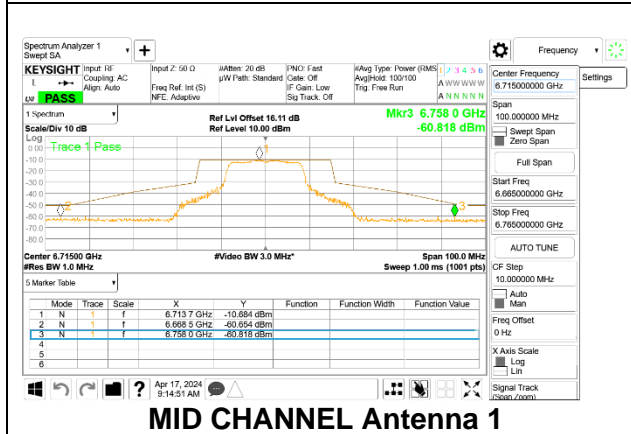
2TX Antenna 1 + Antenna 3 CDD MODE:



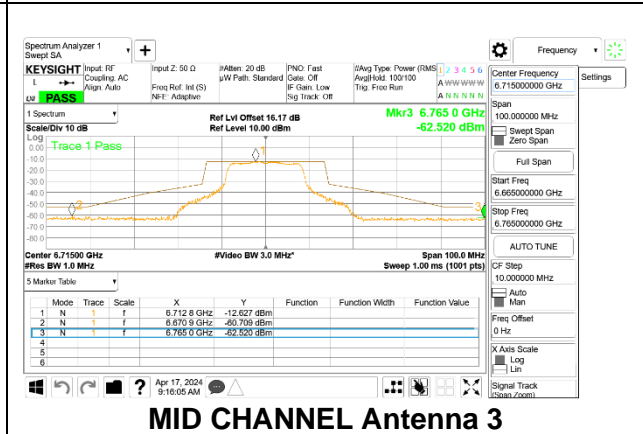
LOW CHANNEL Antenna 1



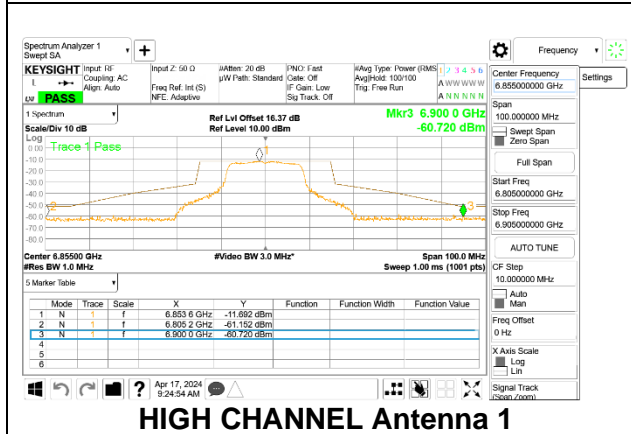
LOW CHANNEL Antenna 3



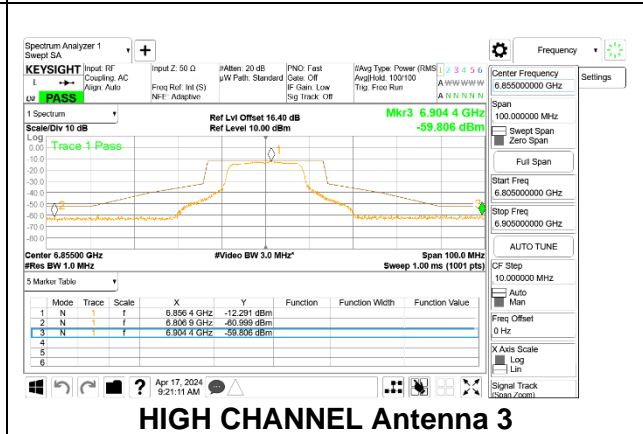
MID CHANNEL Antenna 1



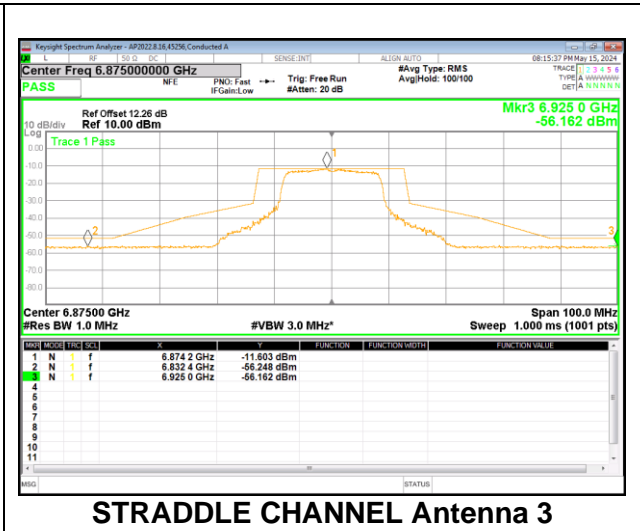
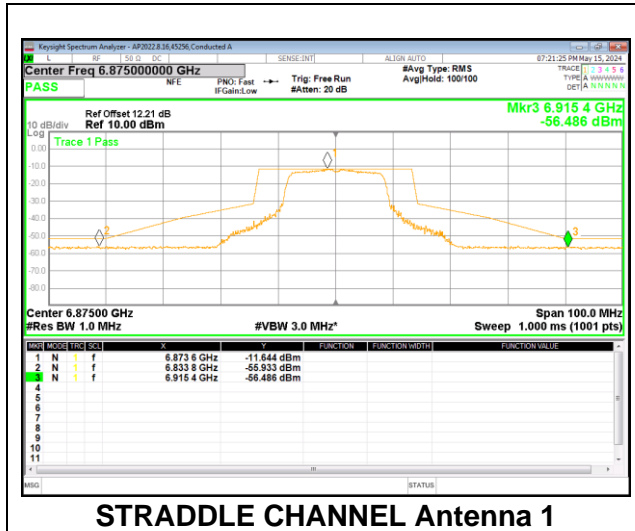
MID CHANNEL Antenna 3



HIGH CHANNEL Antenna 1

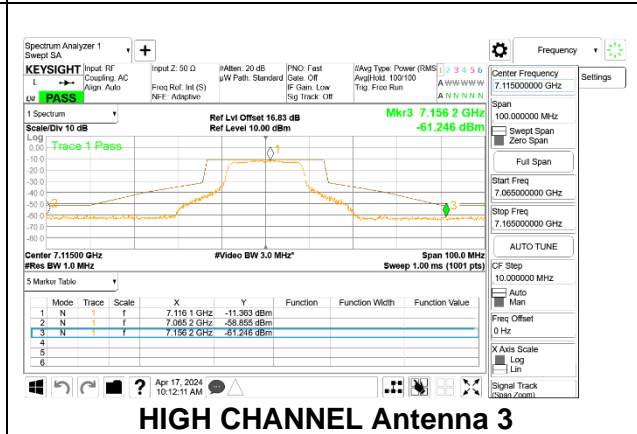
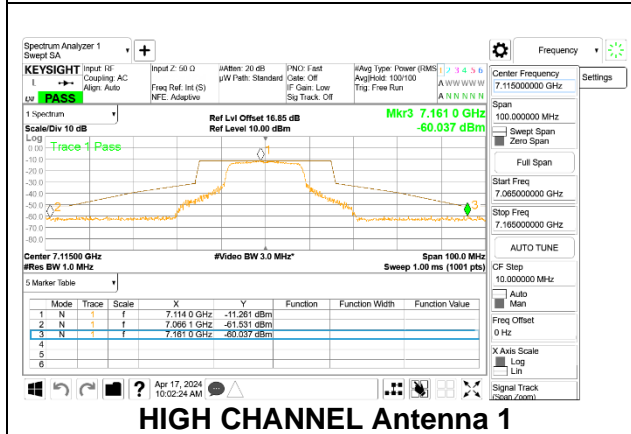
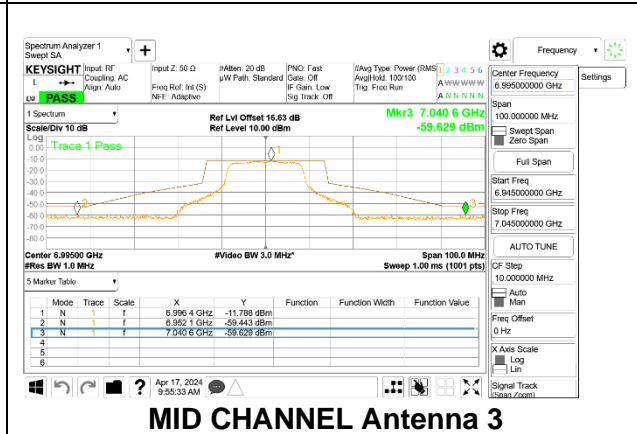
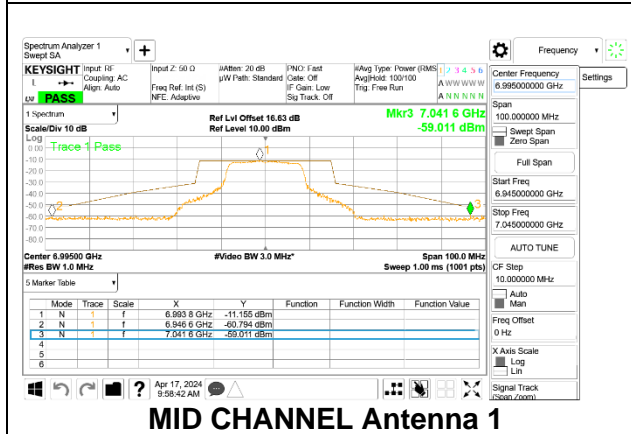
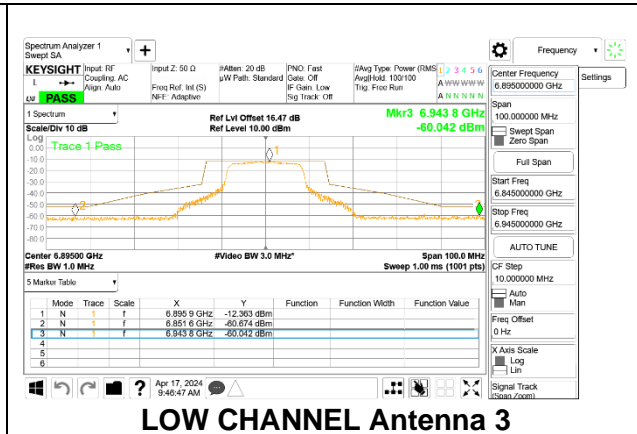
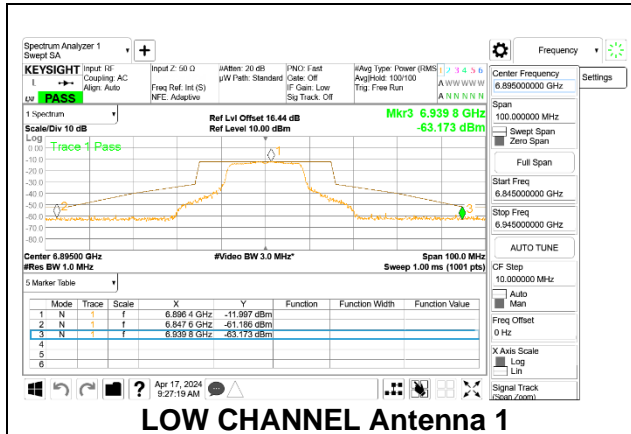


HIGH CHANNEL Antenna 3



9.5.4. 802.11a MODE 2TX IN THE UNII-8 BAND

2TX Antenna 1 + Antenna 3 CDD MODE:



10. RADIATED TEST RESULTS

LIMITS

FCC §15.35(b)
FCC §15.205 Restrict bands
FCC §15.209 and FCC §15.407(b)(6) -Un-Restrict bands

RSS 248 Issue 2, section 4.6.2a

Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27dBm/MHz rms and -7dBm/MHz Peak.

General field strength limits at frequencies above 30 MHz;

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
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 30 MHz to 1GHz and 18GHz to 40 GHz is investigated with the transmitter set to transmit at the channel with highest output power as worst-case scenario. 1GHz to 18GHz was set to the lowest, middle, and highest channels in the 6 GHz bands.

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. Blue color trace on plots: Parallel orientation. Green color trace on plots: Perpendicular orientation.

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 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.

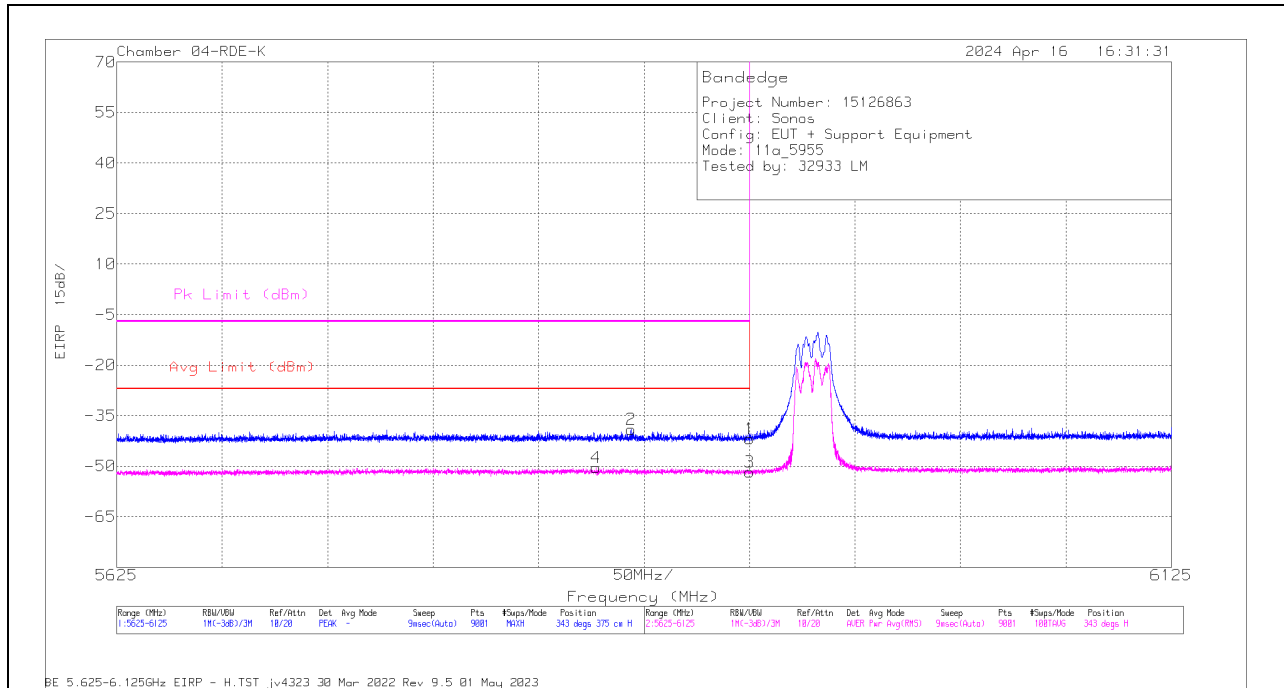
10.1. TRANSMITTER OUTSIDE 5.925-7.125 GHz , 1- 18GHz

10.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE UNII-5 BAND

2TX Antenna 2 + Antenna 4 CDD MODE:

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT

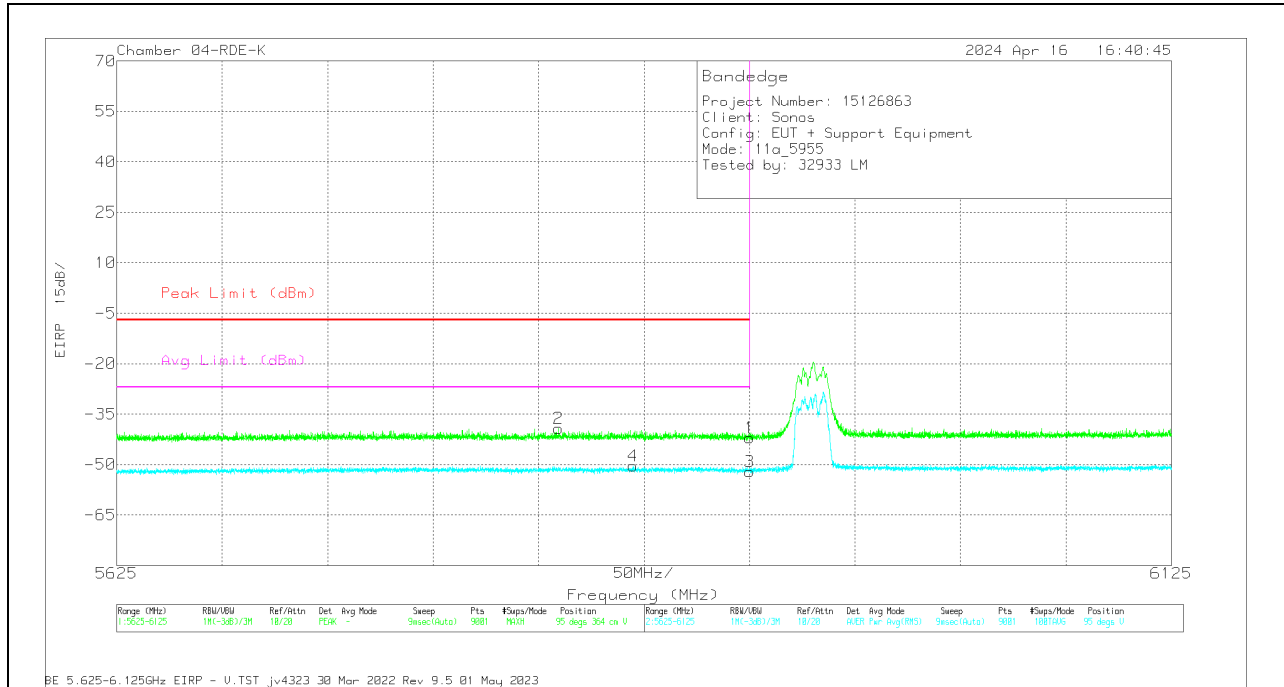


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP	Avg Limit (dBm)	RMS Margin (dB)	Pk Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	5852.224	-67.92	RMS	35.1	-30.4	11.8	.94	-50.48	-27	-23.48	-	-	343	375	H
2	5868.78	-55.51	Pk	35.1	-30.4	11.8	0	-39.01	-	-	-7	-32.01	343	375	H
1	5925	-58.46	Pk	35.1	-30.3	11.8	0	-41.86	-	-	-7	-34.86	343	375	H
3	5925	-69.37	RMS	35.1	-30.3	11.8	.94	-51.83	-27	-24.83	-	-	343	375	H

Pk - Peak detector
 RMS - RMS detection

VERTICAL RESULT



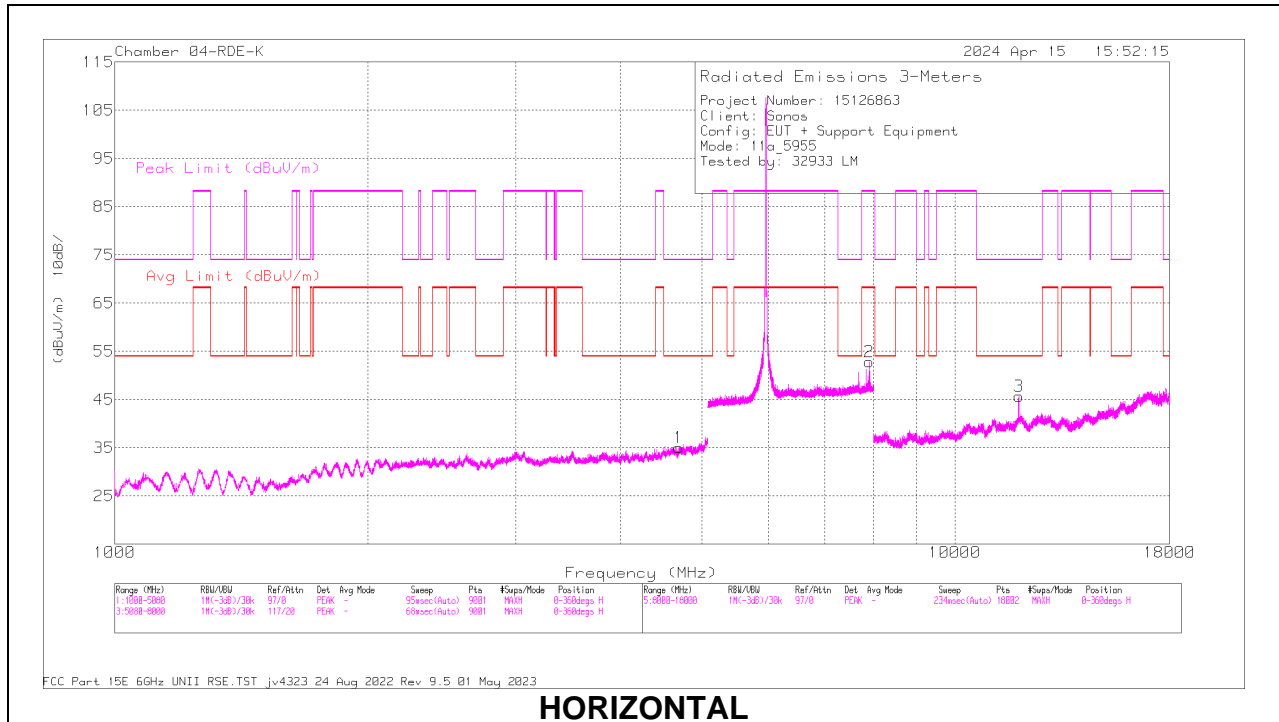
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Avg Limit (dBm)	RMS Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5834.446	-55.81	Pk	35.1	-30.4	11.8	0	-39.31	-7	-32.31	-	-	95	364	V
4	5869.669	-67.91	RMS	35.1	-30.4	11.8	.94	-50.47	-	-	-27	-23.47	95	364	V
1	5925	-58.58	Pk	35.1	-30.3	11.8	0	-41.98	-7	-34.98	-	-	95	364	V
3	5925	-69.68	RMS	35.1	-30.3	11.8	.94	-52.14	-	-	-27	-25.14	95	364	V

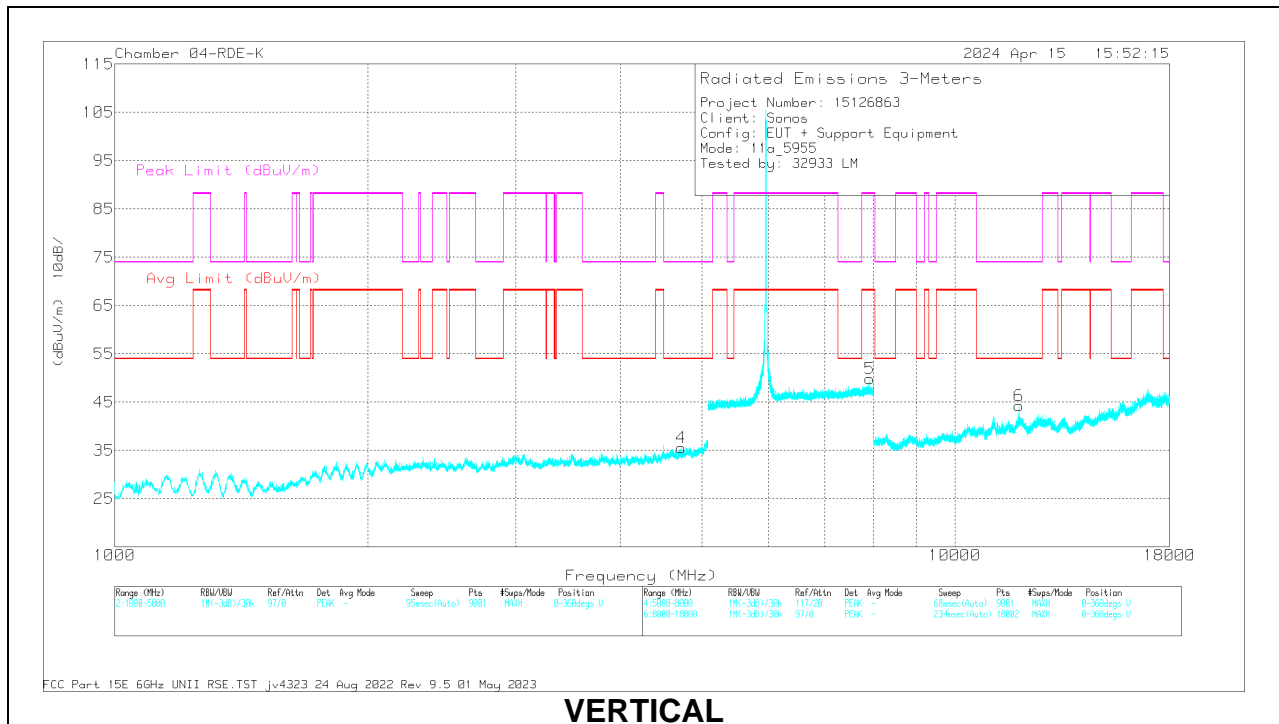
Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

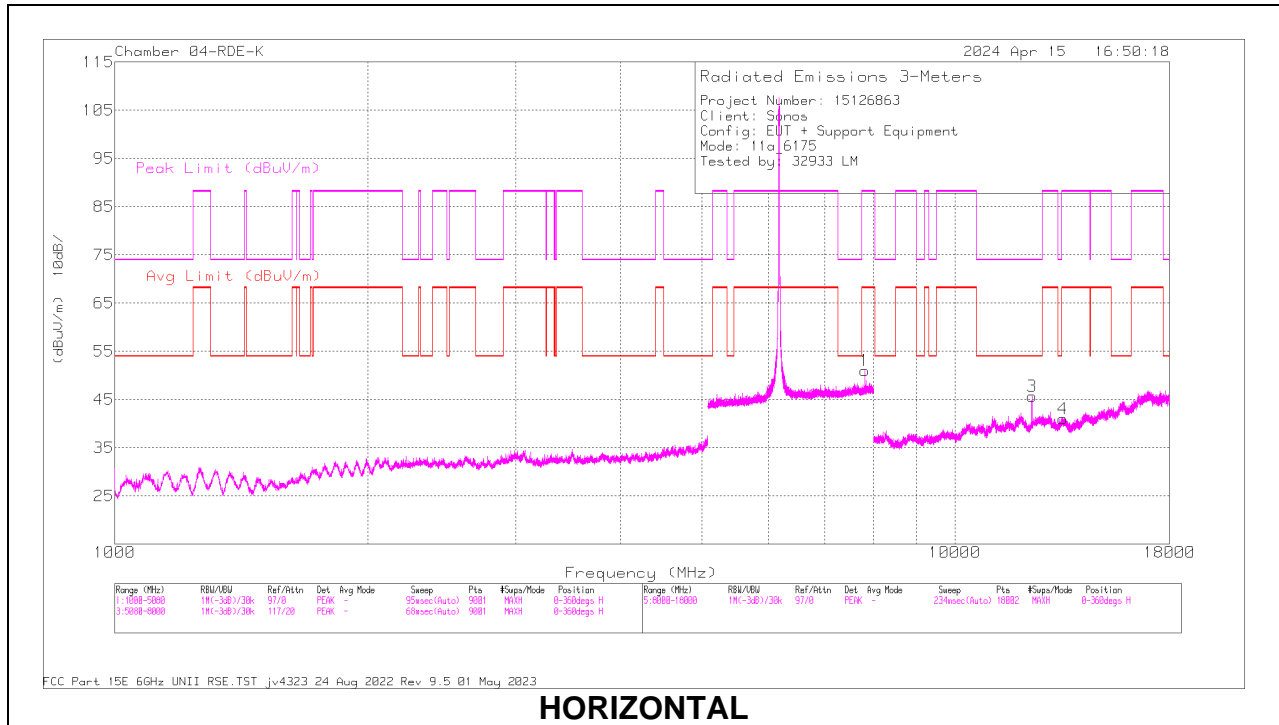
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Filtr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4690.886	51.06	PK-U	34.7	-41.2	0	44.56	-	-	74	-29.44	319	168	H
	* 4690.902	39.54	ADR	34.7	-41.2	.94	33.98	54	-20.02	-	-	319	168	H
4	* 4723.979	51.02	PK-U	34.7	-41.2	0	44.52	-	-	74	-29.48	134	248	V
	* 4722.53	39.65	ADR	34.7	-41.2	.94	34.09	54	-19.91	-	-	134	248	V
3	* 11911.245	50.55	PK-U	38.7	-35.6	0	53.65	-	-	74	-20.35	145	232	H
	* 11911.167	40.29	ADR	38.7	-35.6	.94	44.33	54	-9.67	-	-	145	232	H
6	* 11911.219	49.17	PK-U	38.7	-35.6	0	52.27	-	-	74	-21.73	202	189	V
	* 11911.367	37.81	ADR	38.7	-35.6	.94	41.85	54	-12.15	-	-	202	189	V
2	7902.08	50.12	PK-U	36	-28.2	0	57.92	-	-	88.2	-30.28	341	252	H
	7904.032	38.37	ADR	36	-28.2	.94	47.11	68.2	-21.09	-	-	341	252	H
5	7917.934	38.33	ADR	35.9	-28.2	.94	46.97	68.2	-21.23	-	-	237	204	V
	7920.901	49.74	PK-U	35.9	-28.2	0	57.44	-	-	88.2	-30.76	237	204	V

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

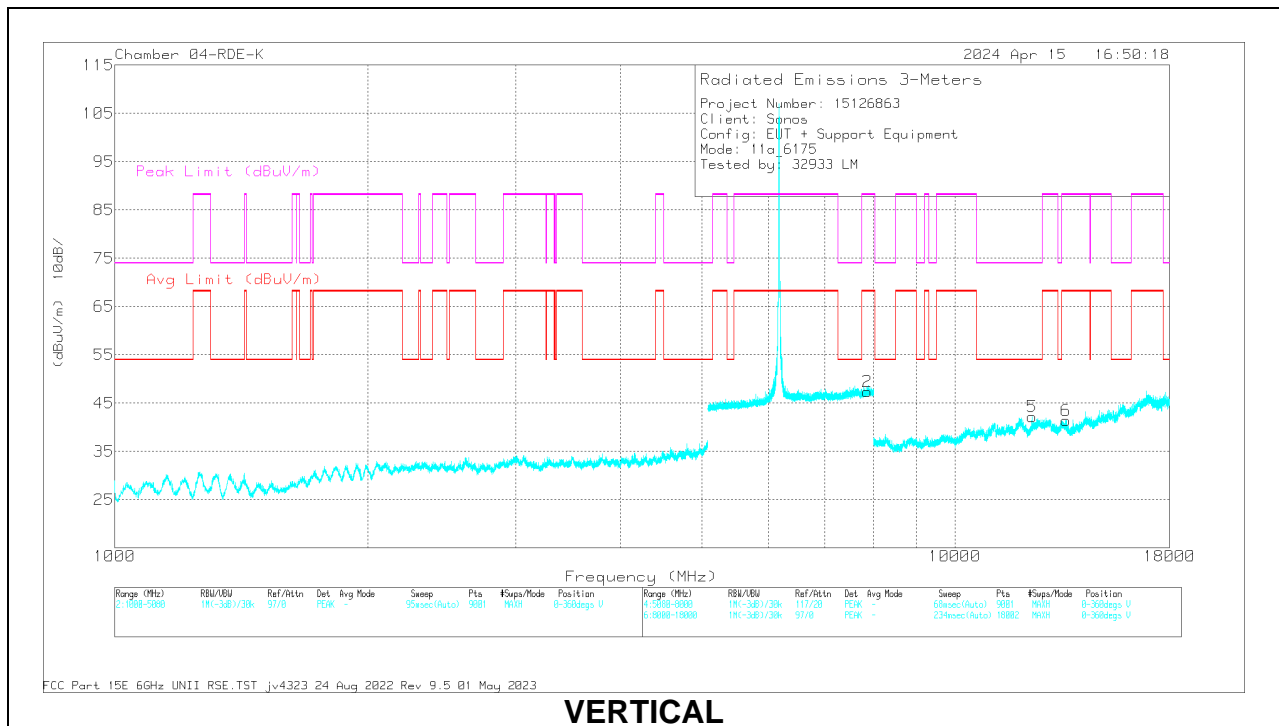
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

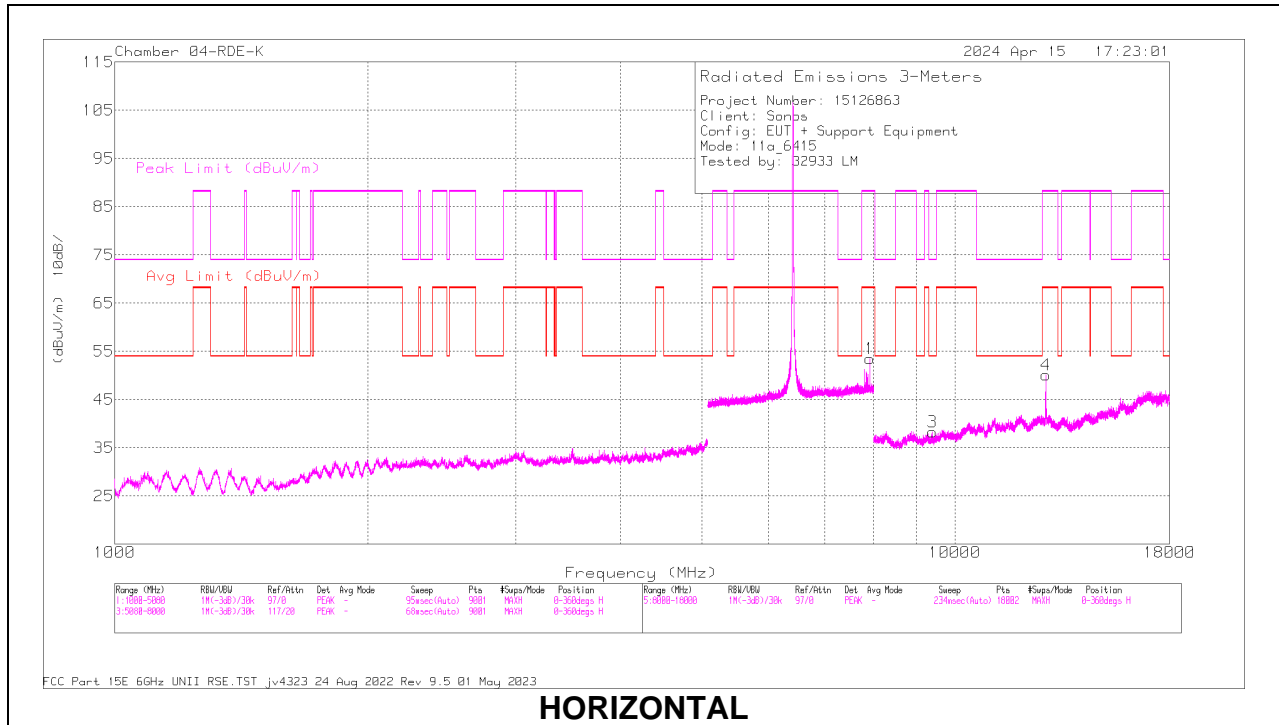
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Filtr (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	7812.437	50.36	PK-U	36.1	-28.5	0	57.96	-	-	88.2	-30.24	78	231	H
	7815.106	38.62	ADR	36	-28.5	.94	47.06	68.2	-21.14	-	-	78	231	H
2	7859.927	38.46	ADR	36	-28.3	.94	47.1	68.2	-21.1	-	-	57	246	V
	7861.09	49.81	PK-U	36	-28.3	0	57.51	-	-	88.2	-30.69	57	246	V
3	* 12348.246	50.52	PK-U	39	-35.2	0	54.32	-	-	74	-19.68	176	124	H
	* 12348.749	40.82	ADR	38.9	-35.3	.94	45.36	54	-8.64	-	-	176	124	H
4	13430.88	47.17	PK-U	38.9	-35.4	0	50.67	-	-	88.2	-37.53	303	253	H
	13431.047	35.57	ADR	38.9	-35.4	.94	40.01	68.2	-28.19	-	-	303	253	H
5	* 12346.466	49.64	PK-U	38.9	-35.3	0	53.24	-	-	74	-20.76	307	175	V
	* 12346.218	36.71	ADR	38.9	-35.3	.94	41.25	54	-12.75	-	-	307	175	V
6	13548.999	47.01	PK-U	38.7	-35.5	0	50.21	-	-	88.2	-37.99	353	351	V
	13551.623	35.64	ADR	38.7	-35.6	.94	39.68	68.2	-28.52	-	-	353	351	V

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

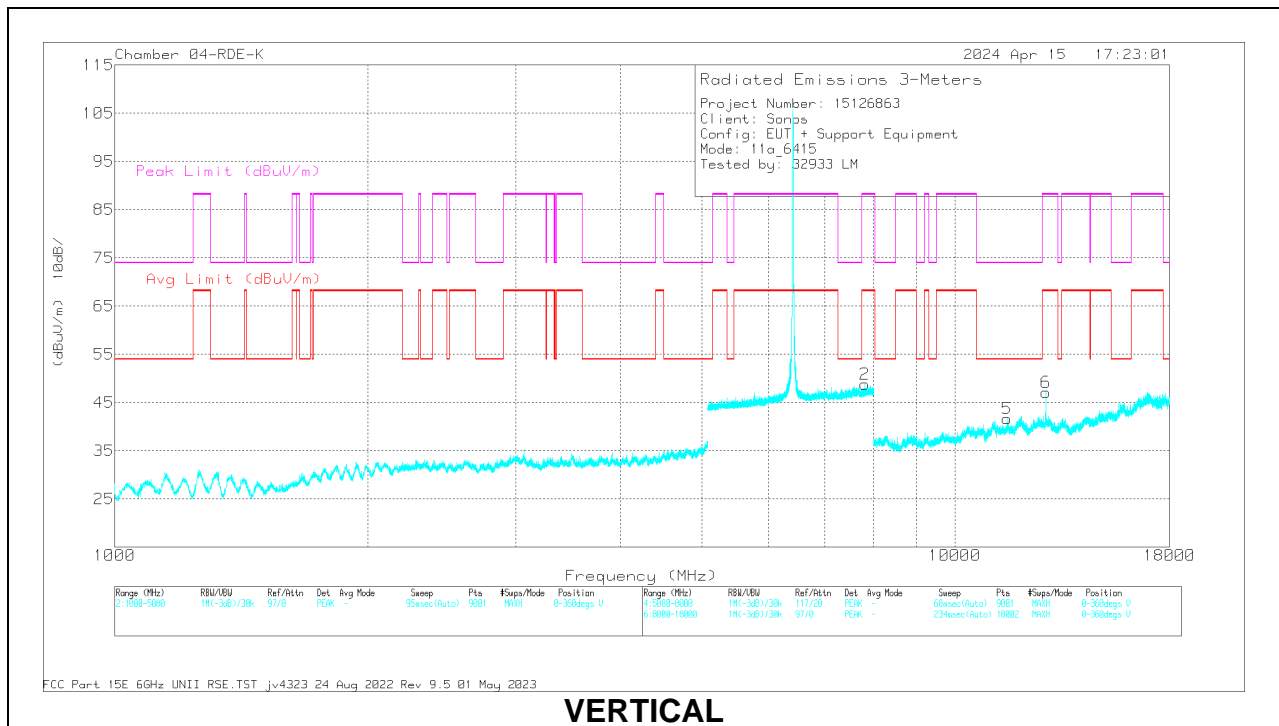
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 9401.734	48.01	PK-U	36.6	-37.2	0	47.41	-	-	74	-26.59	267	182	H
	* 9401.339	36.08	ADR	36.6	-37.2	.94	36.42	54	-17.58	-	-	267	182	H
5	* 11543.666	47.74	PK-U	38.2	-36.3	0	49.64	-	-	74	-24.36	116	337	V
	* 11544.424	35.92	ADR	38.3	-36.3	.94	38.86	54	-15.14	-	-	116	337	V
4	12831.423	52.53	PK-U	39.2	-35.3	0	56.43	-	-	88.2	-31.77	242	194	H
	12831.13	44.05	ADR	39.2	-35.3	.94	48.89	68.2	-19.31	-	-	242	194	H
6	12831.08	38.99	ADR	39.2	-35.3	.94	43.83	68.2	-24.37	-	-	227	330	V
	12831.251	49.36	PK-U	39.2	-35.3	0	53.26	-	-	88.2	-34.94	227	330	V
2	7806.39	49.94	PK-U	36	-28.5	0	57.44	-	-	88.2	-30.76	116	352	V
	7807.59	38.29	ADR	36	-28.5	.94	46.73	68.2	-21.47	-	-	116	352	V
1	7917.237	53.68	PK-U	35.9	-28.2	0	61.38	-	-	88.2	-26.82	238	204	H
	7918.22	38.18	ADR	35.8	-28.2	.94	46.72	68.2	-21.48	-	-	238	204	H

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

PK-U - U-NII: Maximum Peak

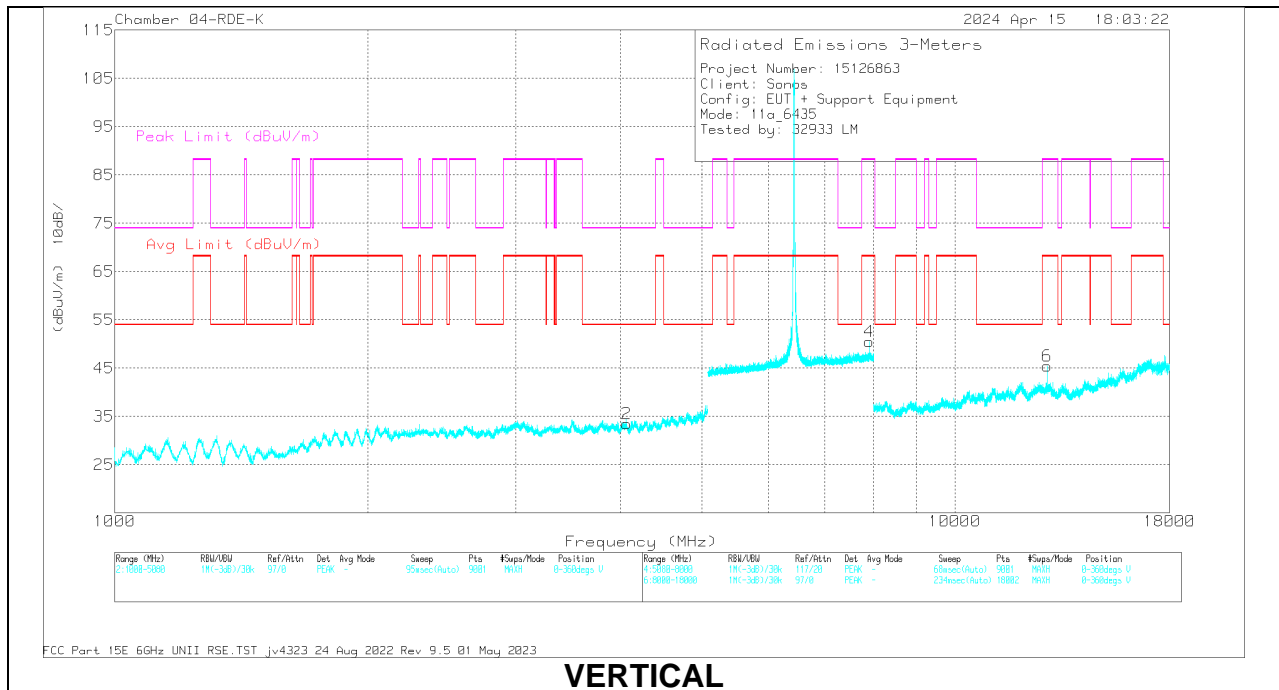
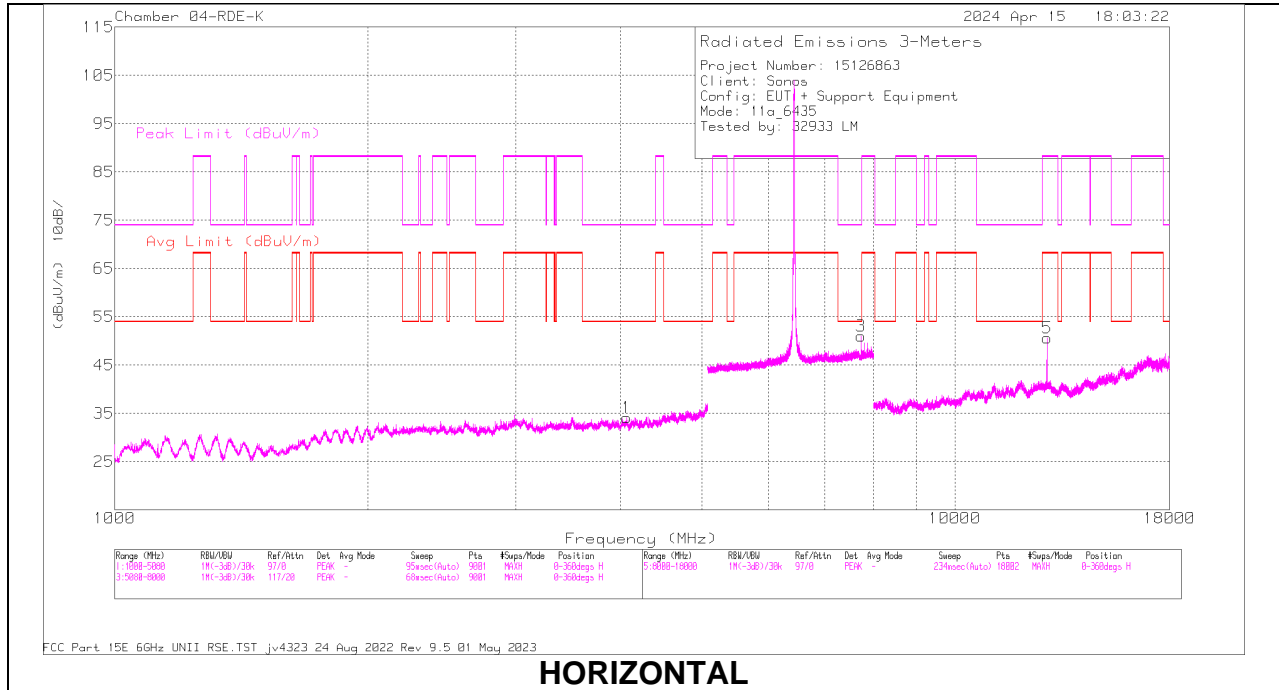
ADR - U-NII AD primary method, RMS average

10.1.2. TX ABOVE 1 GHz 802.11a MODE IN THE UNII-6 BAND

2TX Antenna 1 + Antenna 3 CDD MODE:

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



RADIATED EMISSIONS

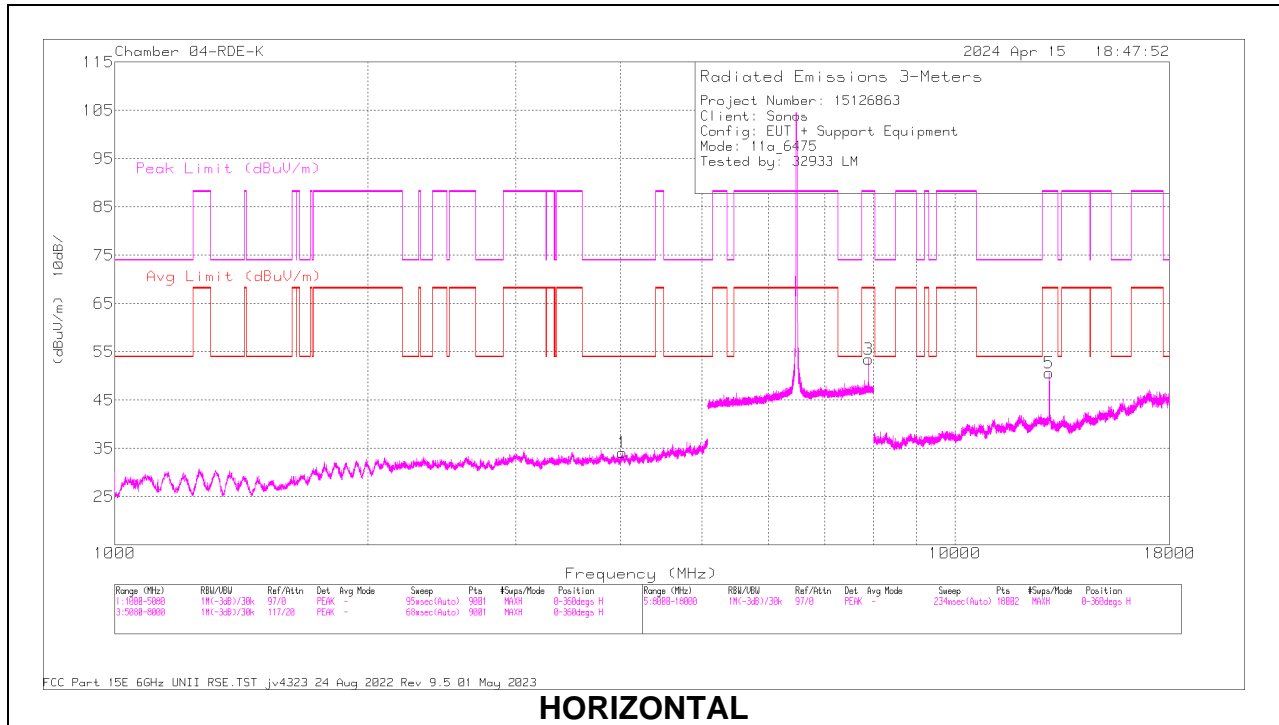
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4069.152	52.51	PK-U	33.8	-42.2	0	44.11	-	-	74	-29.89	350	202	H
	* 4066.525	40.47	ADR	33.9	-42.2	.94	33.11	54	-20.89	-	-	350	202	H
2	* 4068.739	52.28	PK-U	33.8	-42.2	0	43.88	-	-	74	-30.12	148	183	V
	* 4067.838	40.42	ADR	33.8	-42.2	.94	32.96	54	-21.04	-	-	148	183	V
5	12871.188	52.73	PK-U	39.1	-35.2	0	56.63	-	-	88.2	-31.57	292	118	H
	12871.246	43.92	ADR	39.1	-35.2	.94	48.76	68.2	-19.44	-	-	292	118	H
6	12870.986	50.61	PK-U	39.1	-35.2	0	54.51	-	-	88.2	-33.69	204	268	V
	12871.254	41	ADR	39.1	-35.1	.94	45.94	68.2	-22.26	-	-	204	268	V
3	* 7726.054	38.33	ADR	35.9	-28.8	.94	46.37	54	-7.63	-	-	69	309	H
	* 7726.965	50.31	PK-U	35.9	-28.8	0	57.41	-	-	74	-16.59	69	309	H
4	7908.003	38.15	ADR	36	-28.2	.94	46.89	68.2	-21.31	-	-	341	216	V
	7910.529	49.79	PK-U	36	-28.2	0	57.59	-	-	88.2	-30.61	341	216	V

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

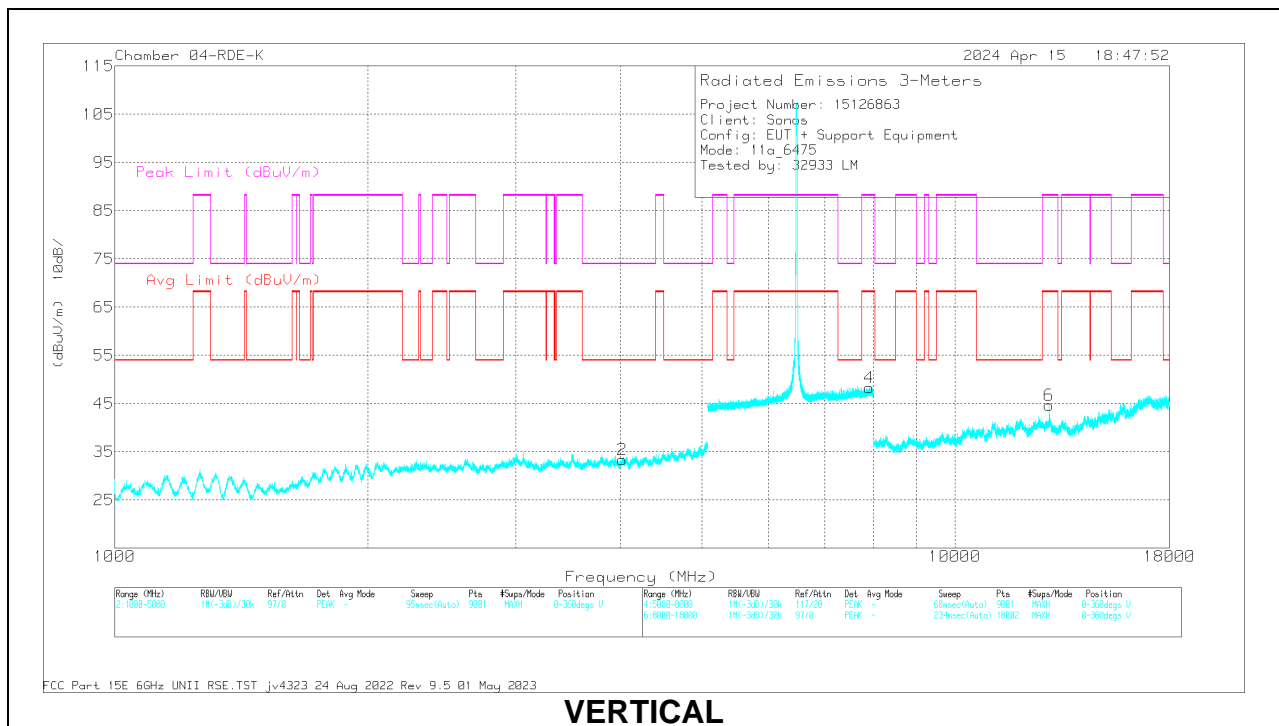
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

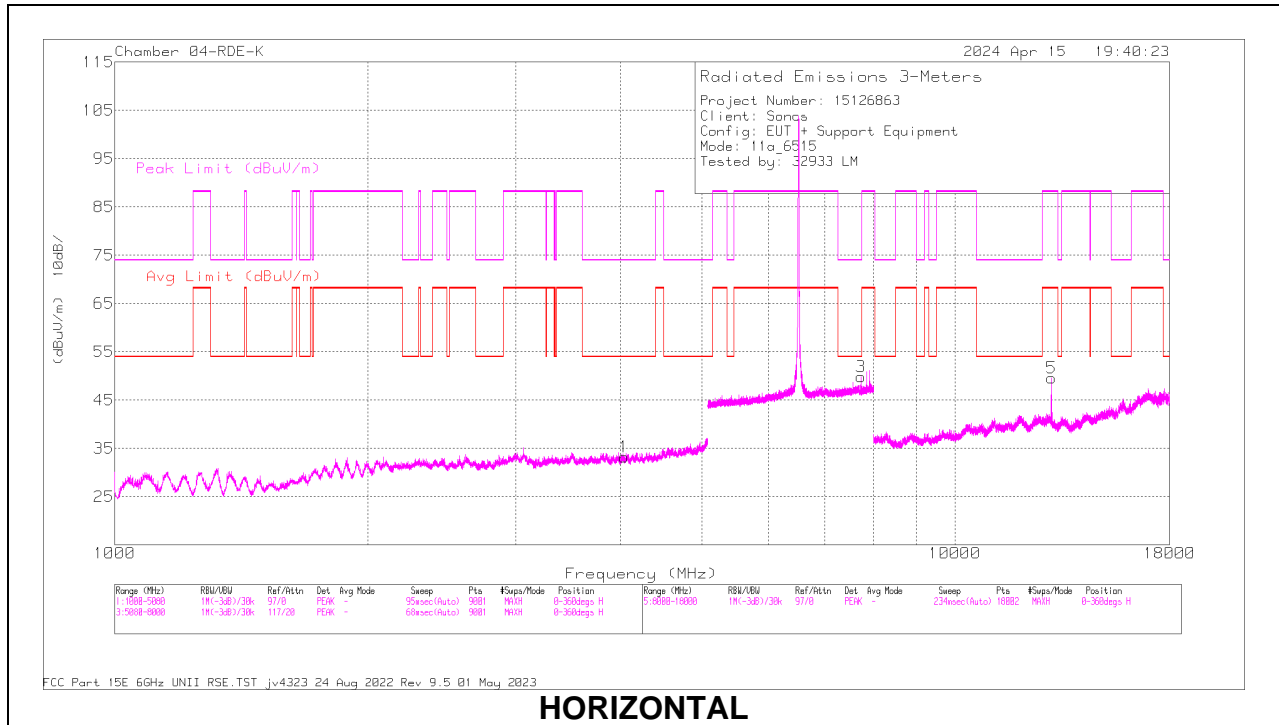
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4021.89	56.57	PK-U	33.7	-42.2	0	48.07	-	-	74	-25.93	7	293	H
	* 4019.961	40.45	ADR	33.7	-42.2	.94	32.89	54	-21.11	-	-	7	293	H
2	* 4019.829	52.61	PK-U	33.7	-42.2	0	44.11	-	-	74	-29.89	219	188	V
	* 4018.503	40.68	ADR	33.7	-42.2	.94	33.12	54	-20.88	-	-	219	188	V
5	12951.045	53.07	PK-U	39.2	-35	0	57.27	-	-	88.2	-30.93	290	130	H
	12951.192	44.33	ADR	39.2	-35	.94	49.47	68.2	-18.73	-	-	290	130	H
6	12951.161	40.4	ADR	39.2	-35	.94	45.54	68.2	-22.66	-	-	234	377	V
	12951.206	50.42	PK-U	39.2	-35	0	54.62	-	-	88.2	-33.58	234	377	V
3	7893.79	38.2	ADR	35.9	-28.2	.94	46.84	68.2	-21.36	-	-	154	178	H
	7896.466	49.89	PK-U	35.8	-28.2	0	57.49	-	-	88.2	-30.71	154	178	H
4	7901.572	50.08	PK-U	36	-28.2	0	57.88	-	-	88.2	-30.32	143	392	V
	7902.052	38.38	ADR	36	-28.2	.94	47.12	68.2	-21.08	-	-	143	392	V

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

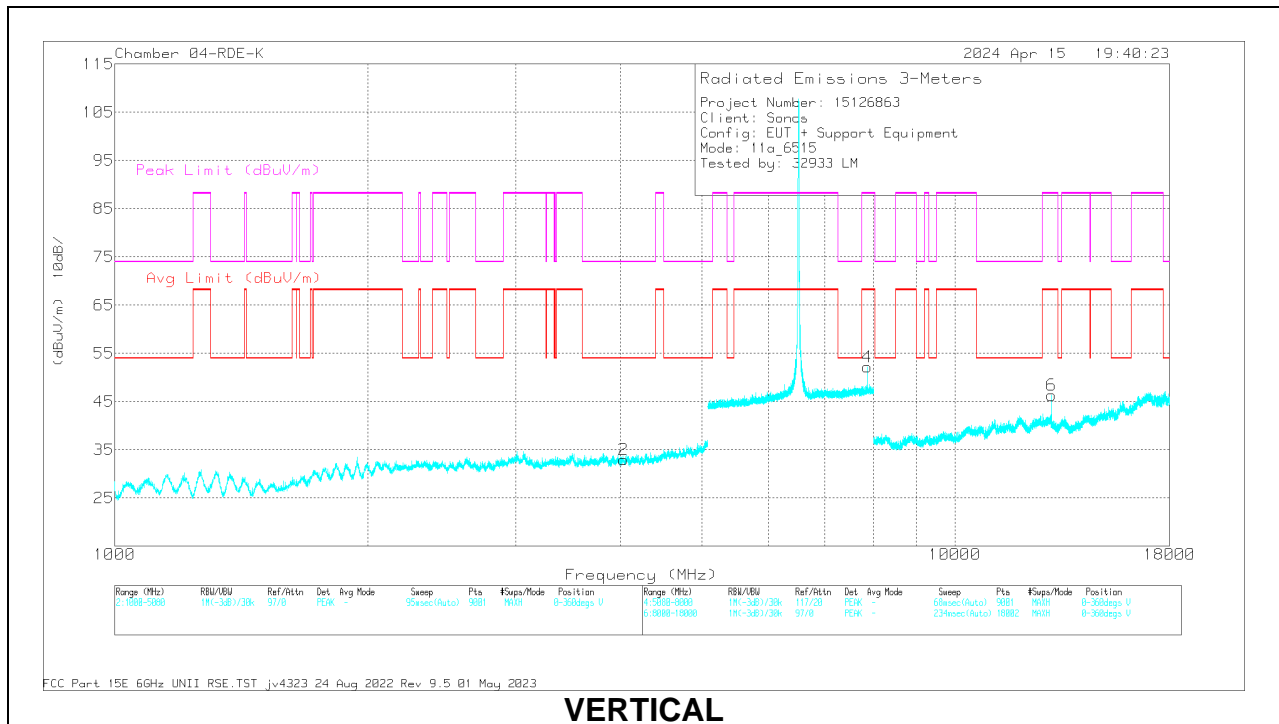
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4037.642	52.17	PK-U	33.7	-42.2	0	43.67	-	-	74	-30.33	355	393	H
	* 4036.821	40.16	ADR	33.7	-42.2	.94	32.6	54	-21.4	-	-	355	393	H
2	* 4030.293	52.28	PK-U	33.7	-42.2	0	43.78	-	-	74	-30.22	205	195	V
	* 4029.313	40.36	ADR	33.8	-42.2	.94	32.9	54	-21.1	-	-	205	195	V
5	13030.869	53.59	PK-U	39.1	-35.2	0	57.49	-	-	88.2	-30.71	243	197	H
	13031.227	45.27	ADR	39.1	-35.2	.94	50.11	68.2	-18.09	-	-	243	197	H
6	13031.124	52.27	PK-U	39.1	-35.2	0	56.17	-	-	88.2	-32.03	214	307	V
	13031.215	43	ADR	39.1	-35.2	.94	47.84	68.2	-20.36	-	-	214	307	V
3	* 7734.56	52.49	PK-U	35.9	-28.8	0	59.59	-	-	74	-14.41	241	321	H
	* 7735.947	38.47	ADR	35.9	-28.8	.94	46.51	54	-7.49	-	-	241	321	H
4	7864.044	38.28	ADR	35.9	-28.3	.94	46.82	68.2	-21.38	-	-	282	340	V
	7865.571	49.9	PK-U	36	-28.3	0	57.6	-	-	88.2	-30.6	282	340	V

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

PK-U - U-NII: Maximum Peak

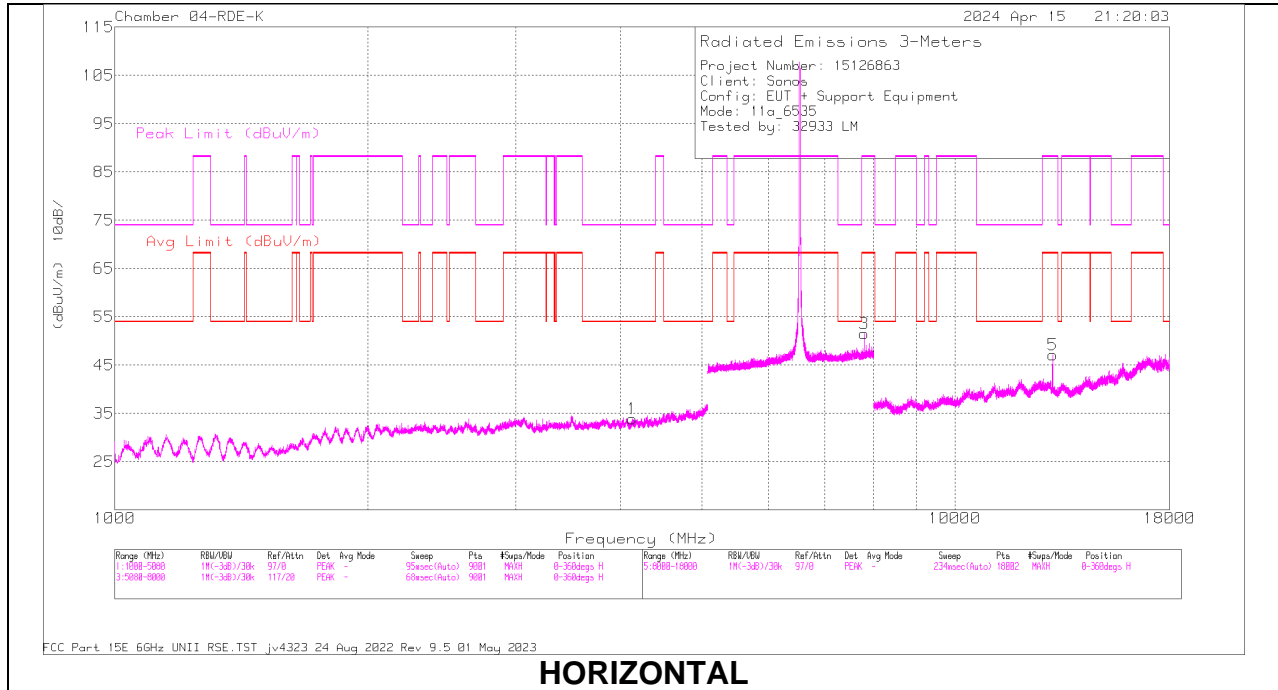
ADR - U-NII AD primary method, RMS average

10.1.3. TX ABOVE 1 GHz 802.11a MODE IN THE UNII-7 BAND

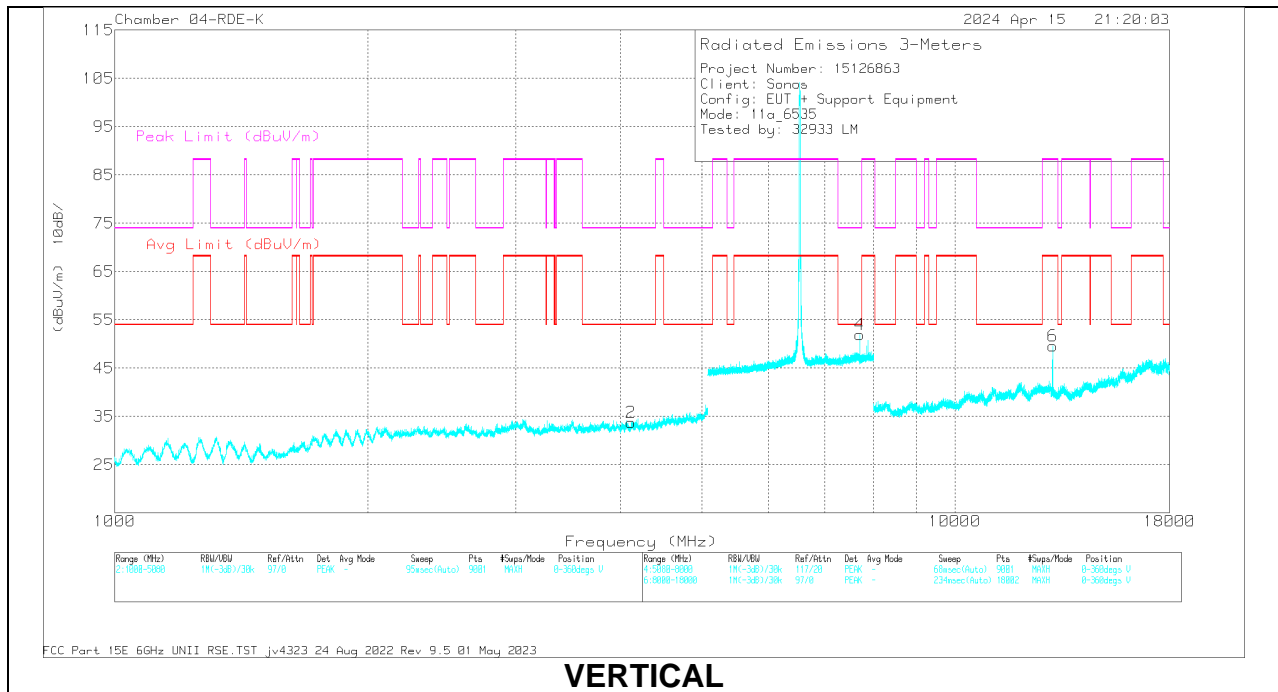
2TX Antenna 1 + Antenna 3 CDD MODE:

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



HORIZONTAL



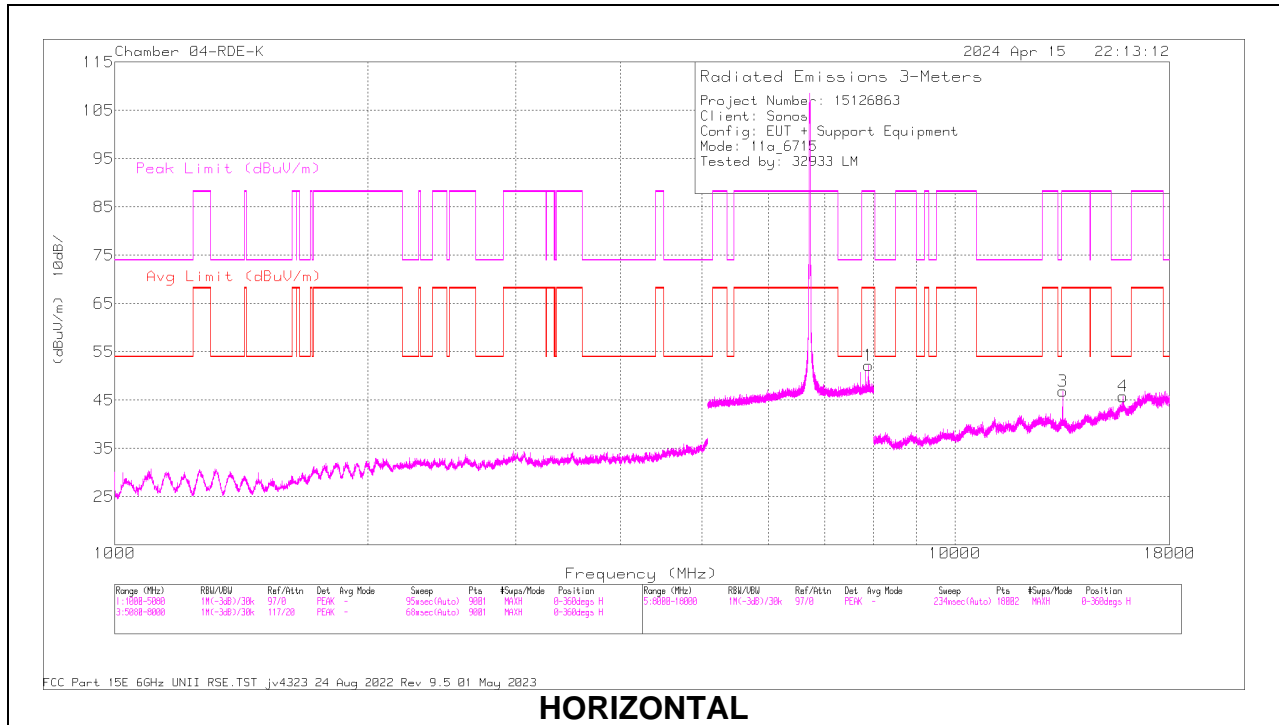
VERTICAL

RADIATED EMISSIONS

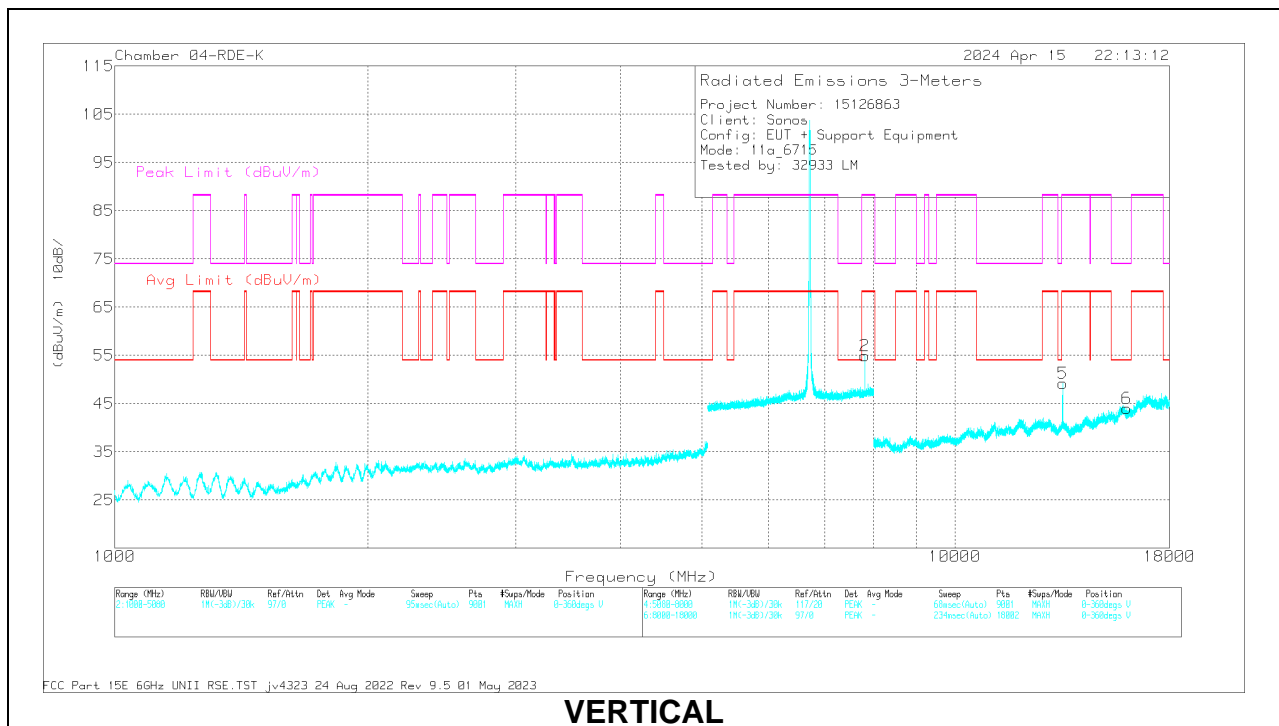
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4132.021	52.28	PK-U	33.7	-42.1	0	43.88	-	-	74	-30.12	8	177	H
	* 4130.598	40.49	ADR	33.7	-42.1	.94	33.03	54	-20.97	-	-	8	177	H
2	* 4119.217	52.18	PK-U	33.6	-42.2	0	43.58	-	-	74	-30.42	83	292	V
	* 4120.284	40.47	ADR	33.6	-42.2	.94	32.81	54	-21.19	-	-	83	292	V
5	13071.082	52.84	PK-U	39.1	-35.1	0	56.84	-	-	88.2	-31.36	232	105	H
	13071.158	44.62	ADR	39.1	-35.1	.94	49.56	68.2	-18.64	-	-	232	105	H
6	13071.218	46.66	ADR	39.1	-35.1	.94	51.6	68.2	-16.6	-	-	330	183	V
	13071.244	54.22	PK-U	39.1	-35.1	0	58.22	-	-	88.2	-29.98	330	183	V
4	* 7707.359	49.97	PK-U	35.9	-28.9	0	56.97	-	-	74	-17.03	322	354	V
	* 7706.561	38.5	ADR	35.9	-28.9	.94	46.44	54	-7.56	-	-	322	354	V
3	7793.265	38.21	ADR	36.1	-28.6	.94	46.65	68.2	-21.55	-	-	328	108	H
	7796.55	49.96	PK-U	36	-28.5	0	57.46	-	-	88.2	-30.74	328	108	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

MID CHANNEL



HORIZONTAL



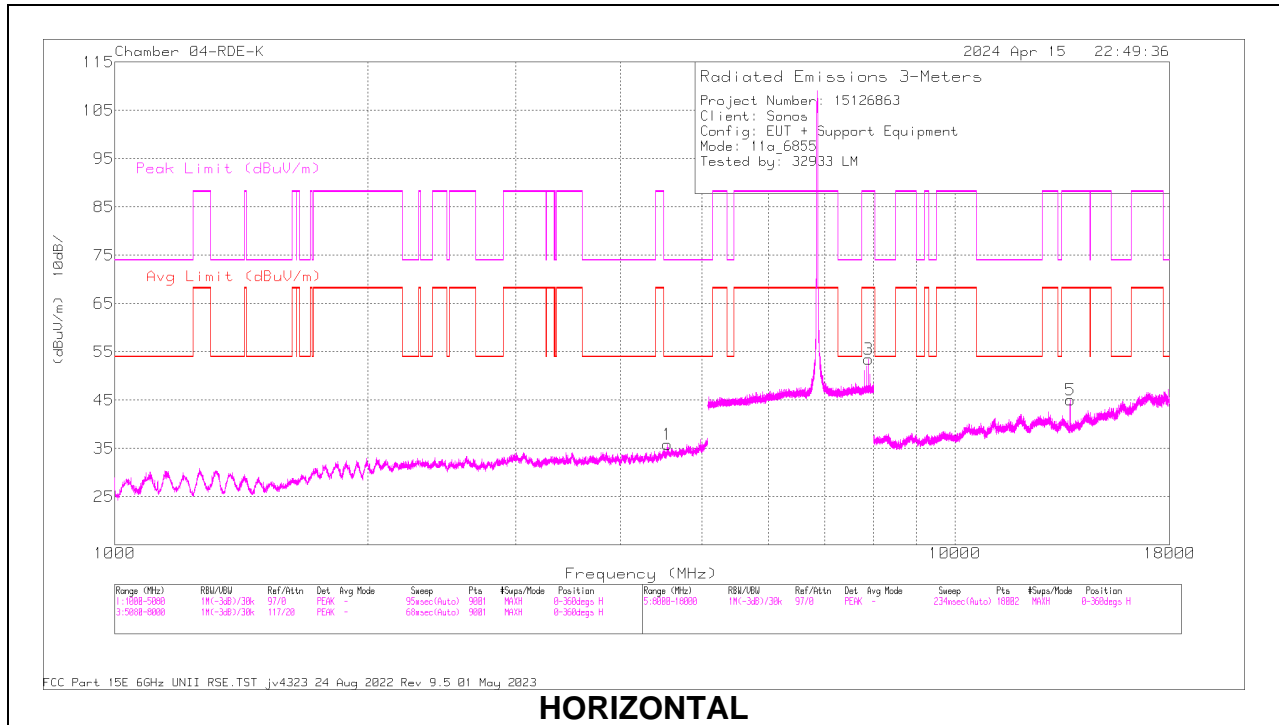
VERTICAL

RADIATED EMISSIONS

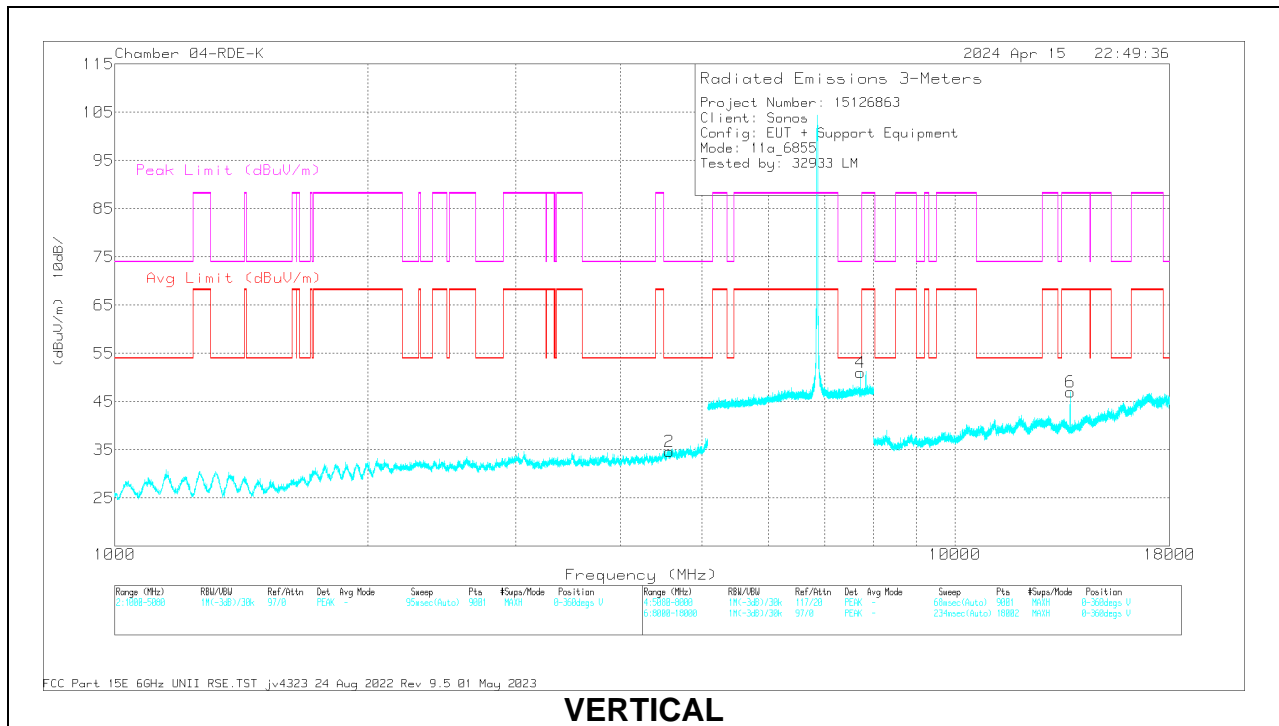
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 15845.895	47.03	PK-U	40.9	-33.6	0	54.33	-	-	74	-19.67	151	289	H
	* 15844.242	35.26	ADR	40.9	-33.7	.94	43.4	54	-10.6	-	-	151	289	H
6	* 16016.83	45.93	PK-U	41.1	-34.4	0	52.63	-	-	74	-21.37	240	192	V
	* 16018.287	34.43	ADR	41.1	-34.4	.94	42.07	54	-11.93	-	-	240	192	V
3	13431.167	44.67	ADR	38.9	-35.4	.94	49.11	68.2	-19.09	-	-	323	171	V
	13431.218	53.81	PK-U	38.9	-35.4	0	57.31	-	-	88.2	-30.89	323	171	V
5	13431.185	42.16	ADR	38.9	-35.4	.94	46.6	68.2	-21.6	-	-	227	109	H
	13431.198	51.25	PK-U	38.9	-35.4	0	54.75	-	-	88.2	-33.45	227	109	H
2	7808.448	49.81	PK-U	36	-28.5	0	57.31	-	-	88.2	-30.89	174	351	V
	7811.089	38.36	ADR	36.1	-28.5	.94	46.9	68.2	-21.3	-	-	174	351	V
1	7896.03	50.19	PK-U	35.8	-28.2	0	57.79	-	-	88.2	-30.41	20	398	H
	7897.571	38.54	ADR	35.9	-28.2	.94	47.18	68.2	-21.02	-	-	20	398	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

HIGH CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

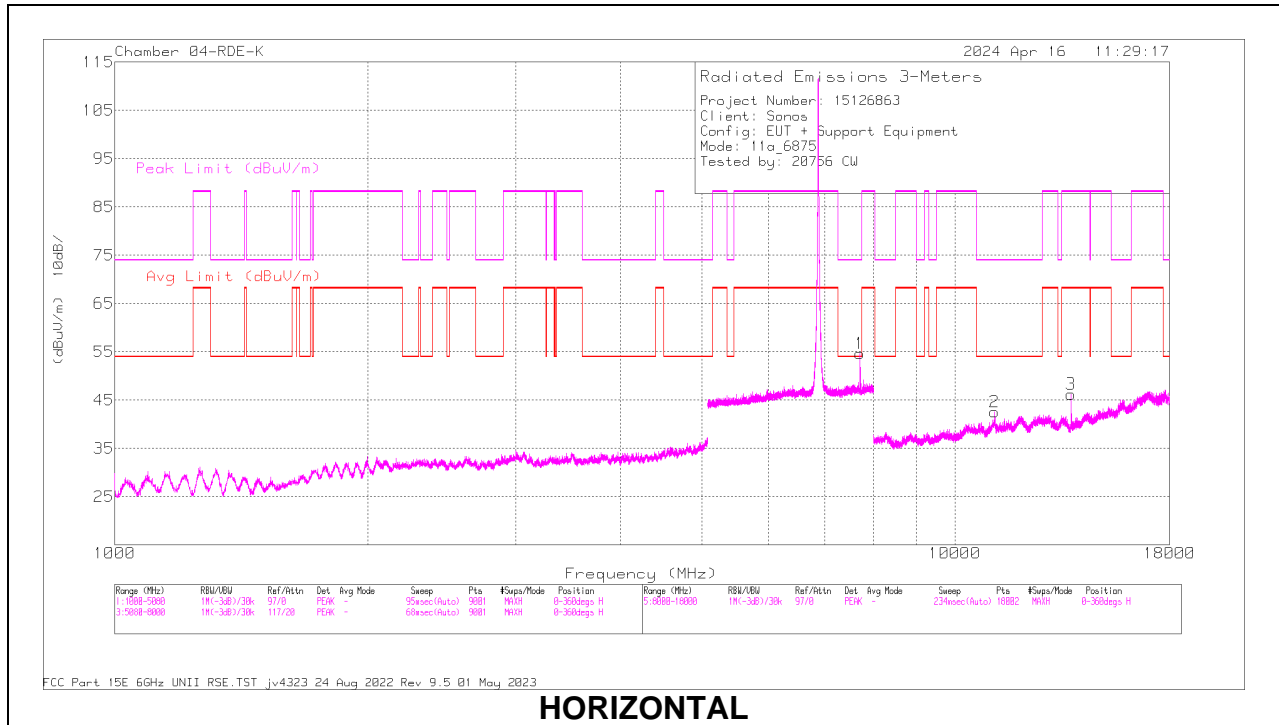
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4543.969	52.06	PK-U	34.4	-41.6	0	44.86	-	-	74	-29.14	222	358	H
	* 4543.506	40.36	ADR	34.4	-41.6	.94	34.1	54	-19.9	-	-	222	358	H
2	* 4570.637	52.06	PK-U	34.4	-41.6	0	44.86	-	-	74	-29.14	272	249	V
	* 4569.837	40.14	ADR	34.4	-41.6	.94	33.88	54	-20.12	-	-	272	249	V
5	13711.103	41.7	ADR	38.6	-35.7	.94	45.54	68.2	-22.66	-	-	231	101	H
	13711.273	51.29	PK-U	38.6	-35.7	0	54.19	-	-	88.2	-34.01	231	101	H
6	13711.176	41.25	ADR	38.6	-35.7	.94	45.09	68.2	-23.11	-	-	266	177	V
	13711.344	51.41	PK-U	38.6	-35.7	0	54.31	-	-	88.2	-33.89	266	177	V
4	* 7719.149	49.84	PK-U	35.9	-28.8	0	56.94	-	-	74	-17.06	256	249	V
	* 7720.227	38.48	ADR	35.8	-28.8	.94	46.42	54	-7.58	-	-	256	249	V
3	7898.131	52.03	PK-U	35.9	-28.2	0	59.73	-	-	88.2	-28.47	17	371	H
	7899.112	38.45	ADR	35.9	-28.2	.94	47.09	68.2	-21.11	-	-	17	371	H

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

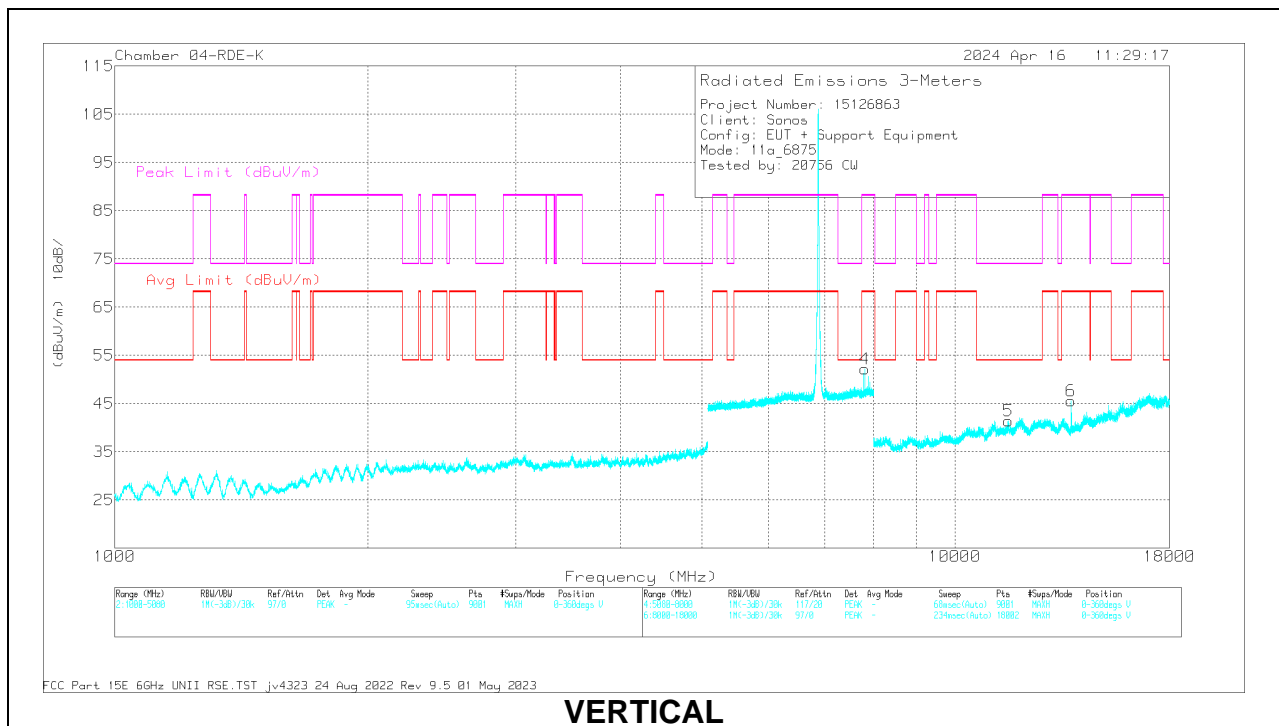
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

STRADDLE CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 11147.595	49	PK-U	38	-36.2	0	50.8	-	-	74	-23.2	322	216	H
	* 11146.782	37.02	ADR	38	-36.2	.94	39.76	54	-14.24	-	-	322	216	H
5	* 11573.142	47.44	PK-U	38.4	-35.6	0	50.24	-	-	74	-23.76	277	240	V
	* 11572.219	35.84	ADR	38.4	-35.6	.94	39.58	54	-14.42	-	-	277	240	V
6	13749.908	53.25	PK-U	38.6	-35.5	0	56.35	-	-	88.2	-31.85	327	164	V
	13750.344	42.07	ADR	38.6	-35.5	.94	46.11	68.2	-22.09	-	-	327	164	V
3	13751.666	53.91	PK-U	38.6	-35.5	0	57.01	-	-	88.2	-31.19	289	129	H
	13752.095	41.99	ADR	38.6	-35.5	.94	46.03	68.2	-22.17	-	-	289	129	H
1	* 7700.471	38.56	ADR	35.9	-28.8	.94	46.6	54	-7.4	-	-	10	143	H
	* 7701.884	50.27	PK-U	35.9	-28.8	0	57.37	-	-	74	-16.63	10	143	H
4	7806.927	49.93	PK-U	36.1	-28.5	0	57.53	-	-	88.2	-30.67	126	204	V
	7808.011	38.4	ADR	36	-28.5	.94	46.84	68.2	-21.36	-	-	126	204	V

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

PK-U - U-NII: Maximum Peak

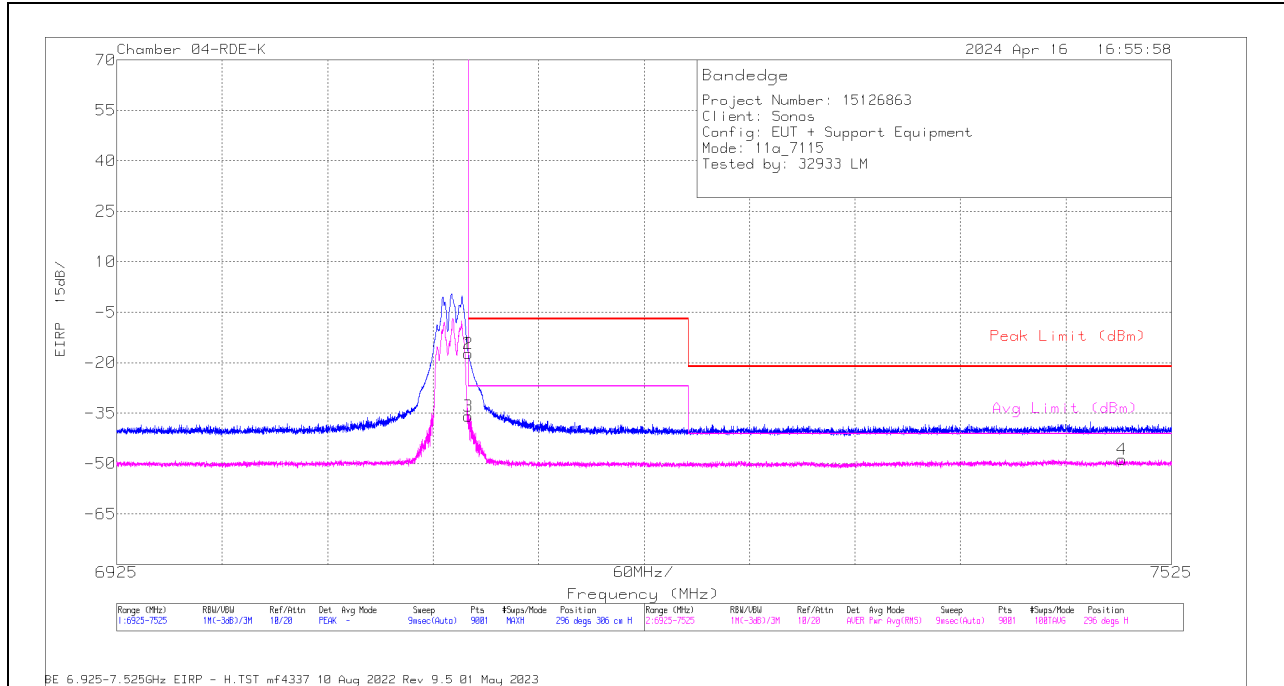
ADR - U-NII AD primary method, RMS average

10.1.4. TX ABOVE 1 GHz 802.11a MODE IN THE UNII-8 BAND

2TX Antenna 1 + Antenna 3 CDD MODE:

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT

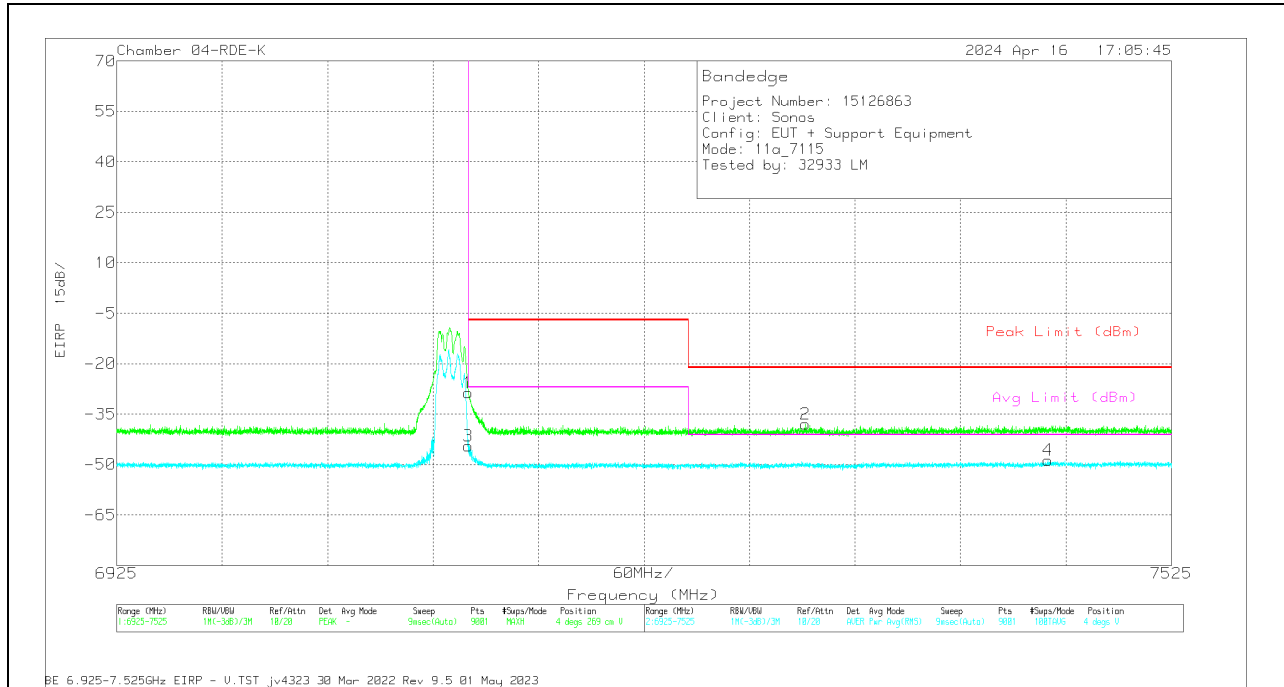


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	80404_ACF(dB/m) -3mH	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Avg Limit (dBm)	RMS Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 7496.936	-69.07	RMS	36.1	-28.6	11.8	.94	-48.83	-	-	-41.2	-7.63	296	306	H
1	7125	-35.83	Pk	35.9	-29.2	11.8	0	-17.33	-7	-10.33	-	-	296	306	H
3	7125	-55.39	RMS	35.9	-29.2	11.8	.94	-35.95	-	-	-27	-8.95	296	306	H
2	7125.001	-35.83	Pk	35.9	-29.2	11.8	0	-17.33	-7	-10.33	-	-	296	306	H

Pk - Peak detector
 RMS - RMS detection

VERTICAL RESULT



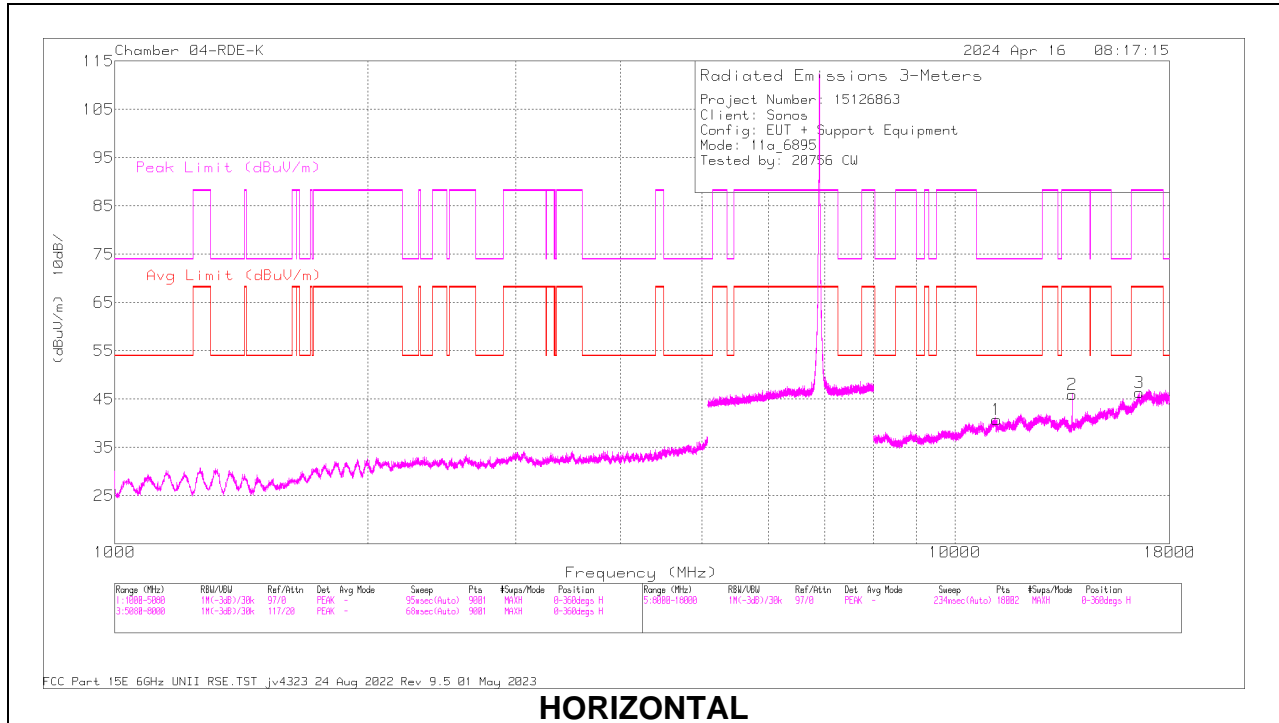
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Pad (dB)	Conversion Factor (dB)	DCCF (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Avg Limit (dBm)	RMS Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 7316.869	-56.94	Pk	36	-28.9	11.8	0	-38.04	-21.2	-16.84	-	-	4	269	V
4	* 7454.803	-68.92	RMS	36.1	-28.6	11.8	.94	-48.68	-	-	-41.2	-7.48	4	269	V
1	7125	-47.08	Pk	35.9	-29.2	11.8	0	-28.58	-7	-21.58	-	-	4	269	V
3	7125	-63.91	RMS	35.9	-29.2	11.8	.94	-44.47	-	-	-27	-17.47	4	269	V

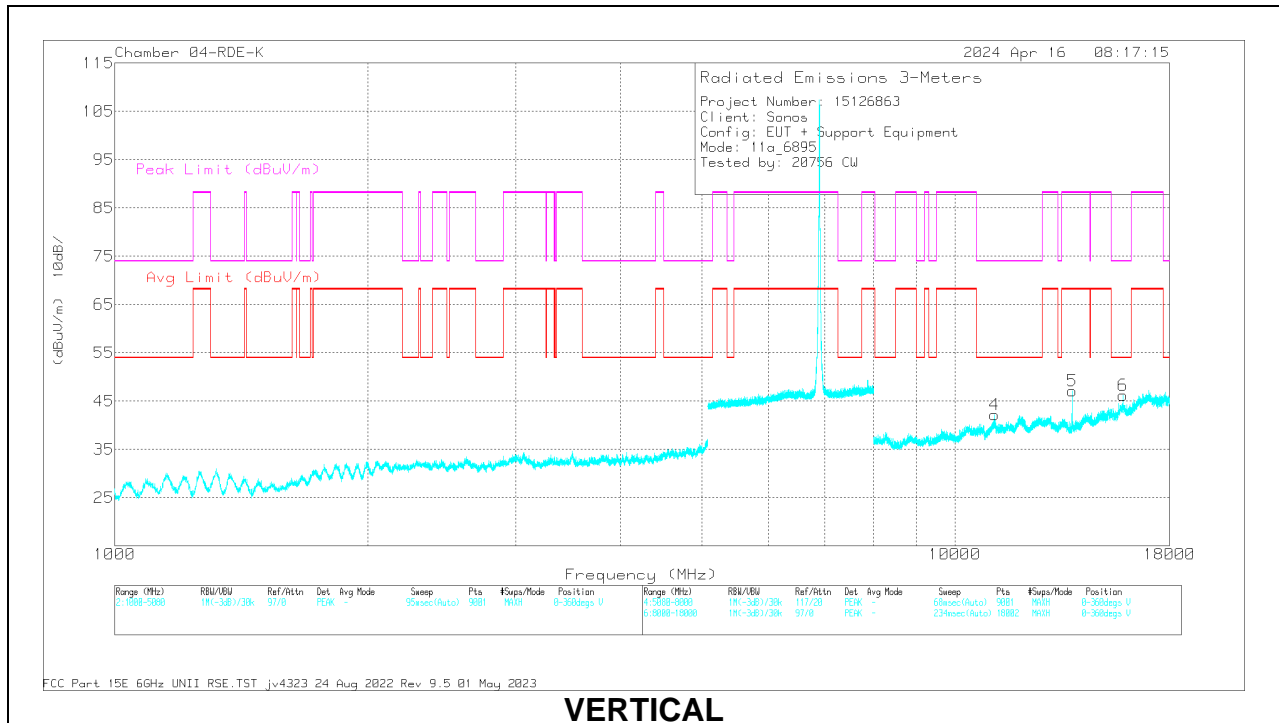
Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

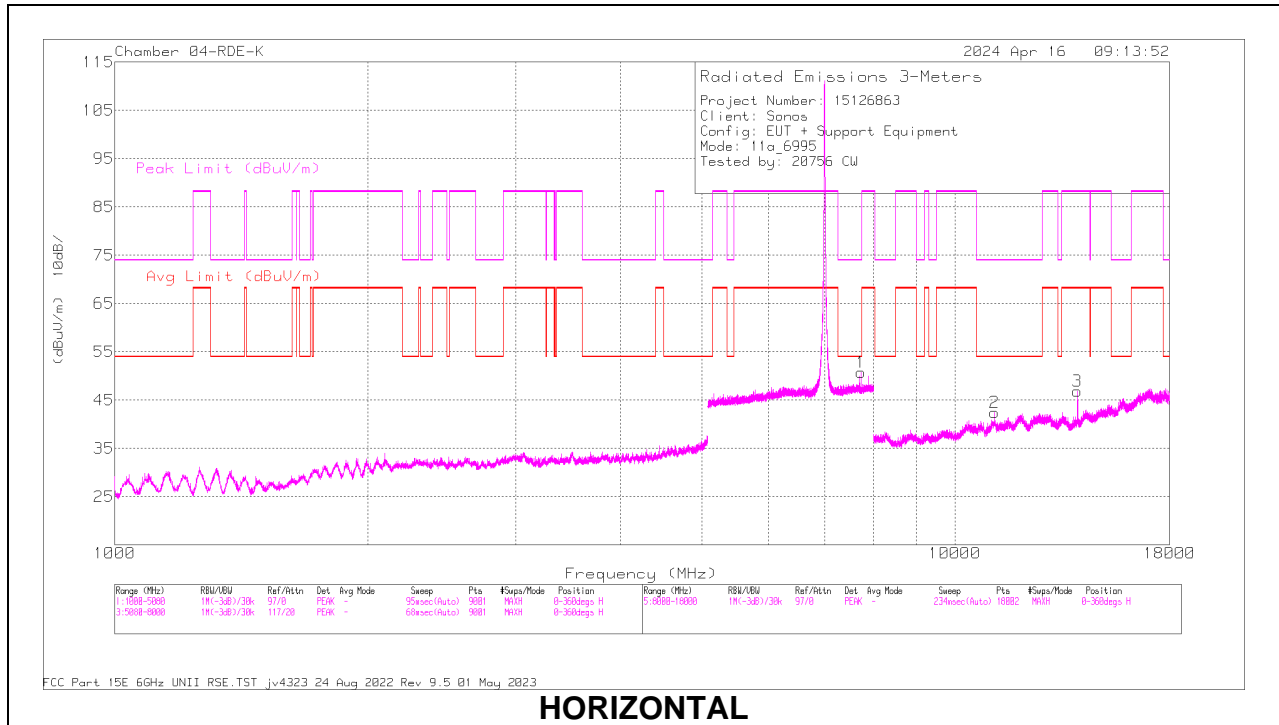
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cbl/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 11218.394	47.76	PK-U	37.9	-36.1	0	49.56	-	-	74	-24.44	230	128	H
	* 11216.745	36.08	ADR	38	-36.1	.94	38.92	54	-15.08	-	-	230	128	H
4	* 11148.226	48.8	PK-U	38	-36.2	0	50.6	-	-	74	-23.4	270	262	V
	* 11147.442	37.27	ADR	38	-36.2	.94	40.01	54	-13.99	-	-	270	262	V
6	* 15845.742	47.87	PK-U	40.9	-33.6	0	55.17	-	-	74	-18.83	39	397	V
	* 15845.727	36.13	ADR	40.9	-33.6	.94	44.37	54	-9.63	-	-	39	397	V
5	13785.567	53.9	PK-U	38.7	-35.4	0	57.2	-	-	88.2	-31	225	201	V
	13785.862	42.63	ADR	38.7	-35.4	.94	46.87	68.2	-21.33	-	-	225	201	V
2	13795.982	39.49	ADR	38.6	-35.4	.94	43.63	68.2	-24.57	-	-	290	125	H
	13795.988	51.7	PK-U	38.6	-35.4	0	54.9	-	-	88.2	-33.3	290	125	H
3	16581.708	35.21	ADR	42.4	-34	.94	44.55	68.2	-23.65	-	-	341	320	H
	16582.084	46.63	PK-U	42.4	-34	0	55.03	-	-	88.2	-33.17	341	320	H

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

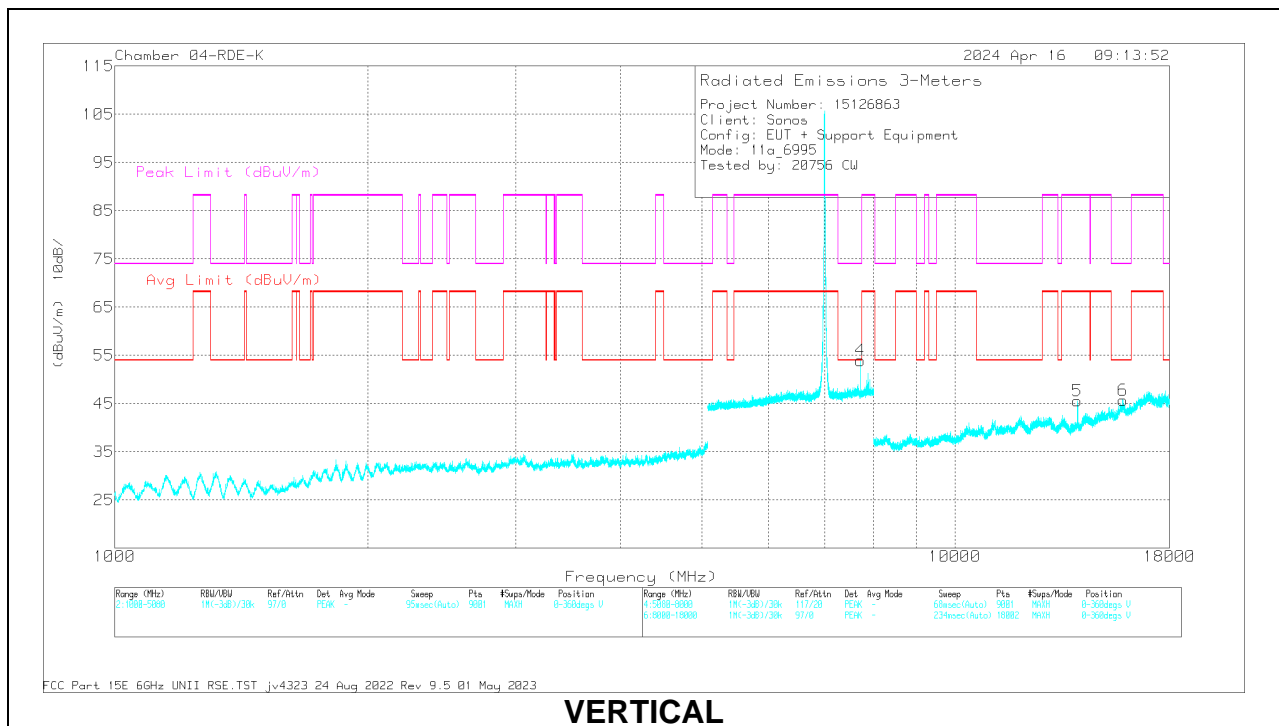
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

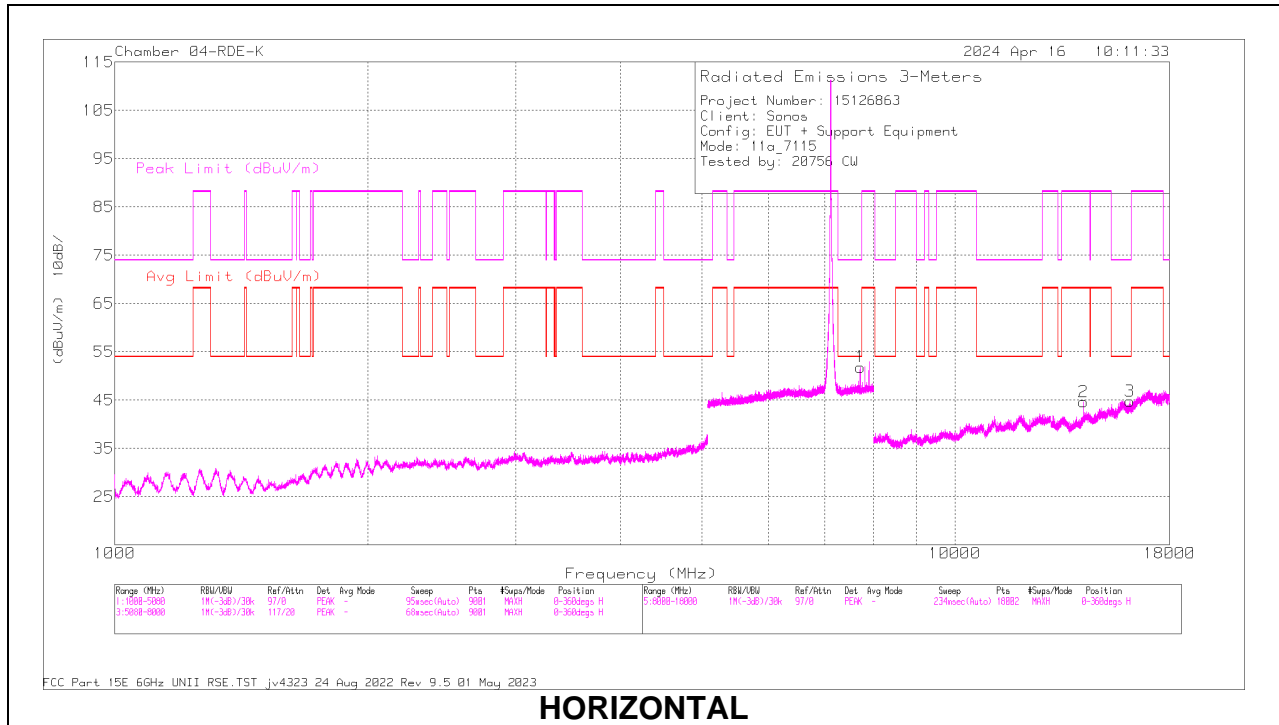
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 11151.936	48.93	PK-U	38	-36.1	0	50.83	-	-	74	-23.17	27	375	H
	* 11150.349	37.26	ADR	38	-36.1	.94	40.1	54	-13.9	-	-	27	375	H
6	* 15849.673	47.84	PK-U	40.9	-33.7	0	55.04	-	-	74	-18.96	155	286	V
	* 15849.647	36.08	ADR	40.9	-33.7	.94	44.22	54	-9.78	-	-	155	286	V
5	13985.819	42.18	ADR	39	-36.2	.94	45.92	68.2	-22.28	-	-	325	184	V
	13986.505	53.76	PK-U	39	-36.2	0	56.56	-	-	88.2	-31.64	325	184	V
3	13990.912	41.37	ADR	38.9	-36.2	.94	45.01	68.2	-23.19	-	-	300	198	H
	13991.038	53.38	PK-U	38.9	-36.2	0	56.08	-	-	88.2	-32.12	300	198	H
4	* 7715.153	38.66	ADR	35.9	-28.8	.94	46.7	54	-7.3	-	-	212	372	V
	* 7718.737	50.46	PK-U	35.9	-28.8	0	57.56	-	-	74	-16.44	212	372	V
1	* 7728.684	50.72	PK-U	35.9	-28.8	0	57.82	-	-	74	-16.18	135	151	H
	* 7729.626	38.55	ADR	35.9	-28.8	.94	46.59	54	-7.41	-	-	135	151	H

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

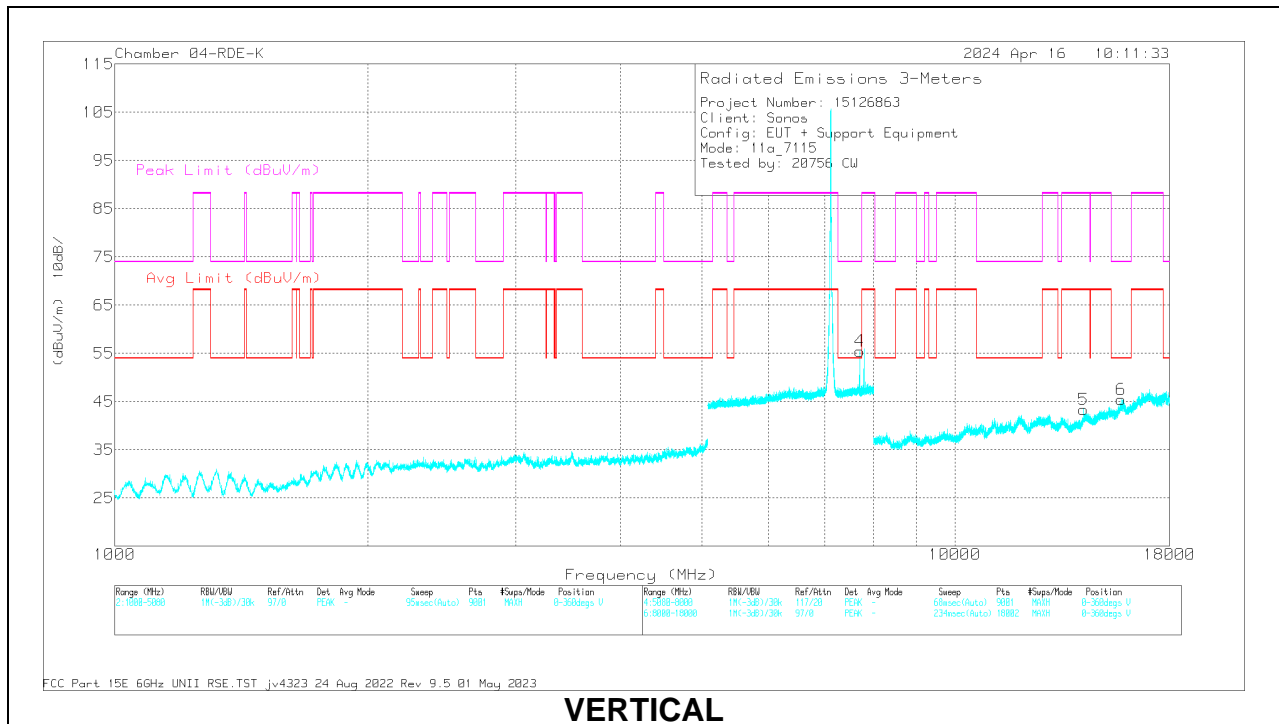
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80404_ACF(dB/m) - 3mH	Amp/Cb/Fitr (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 16146.185	46.79	PK-U	41.5	-34	0	54.29	-	-	74	-19.71	339	143	H
	* 16146.187	34.71	ADR	41.5	-34	.94	43.15	54	-10.85	-	-	339	143	H
6	* 15768.474	48.09	PK-U	40.9	-34.4	0	54.59	-	-	74	-19.41	288	318	V
	* 15768.761	36.41	ADR	40.9	-34.4	.94	43.85	54	-10.15	-	-	288	318	V
2	14229.599	51.69	PK-U	39.2	-35.9	0	54.99	-	-	88.2	-33.21	293	205	H
	14229.764	38.82	ADR	39.2	-35.9	.94	43.06	68.2	-25.14	-	-	315	106	V
5	14229.821	39.3	ADR	39.2	-35.9	.94	43.54	68.2	-24.66	-	-	293	205	H
	14230.796	50.58	PK-U	39.2	-35.9	0	53.88	-	-	88.2	-34.32	315	106	V
4	* 7702.995	51.2	PK-U	35.9	-28.8	0	58.3	-	-	74	-15.7	330	192	V
	* 7704.256	38.61	ADR	36	-28.8	.94	46.75	54	-7.25	-	-	330	192	V
1	* 7717.853	50.21	PK-U	35.9	-28.8	0	57.31	-	-	74	-16.69	262	236	H
	* 7718.485	38.75	ADR	35.9	-28.8	.94	46.79	54	-7.21	-	-	262	236	H

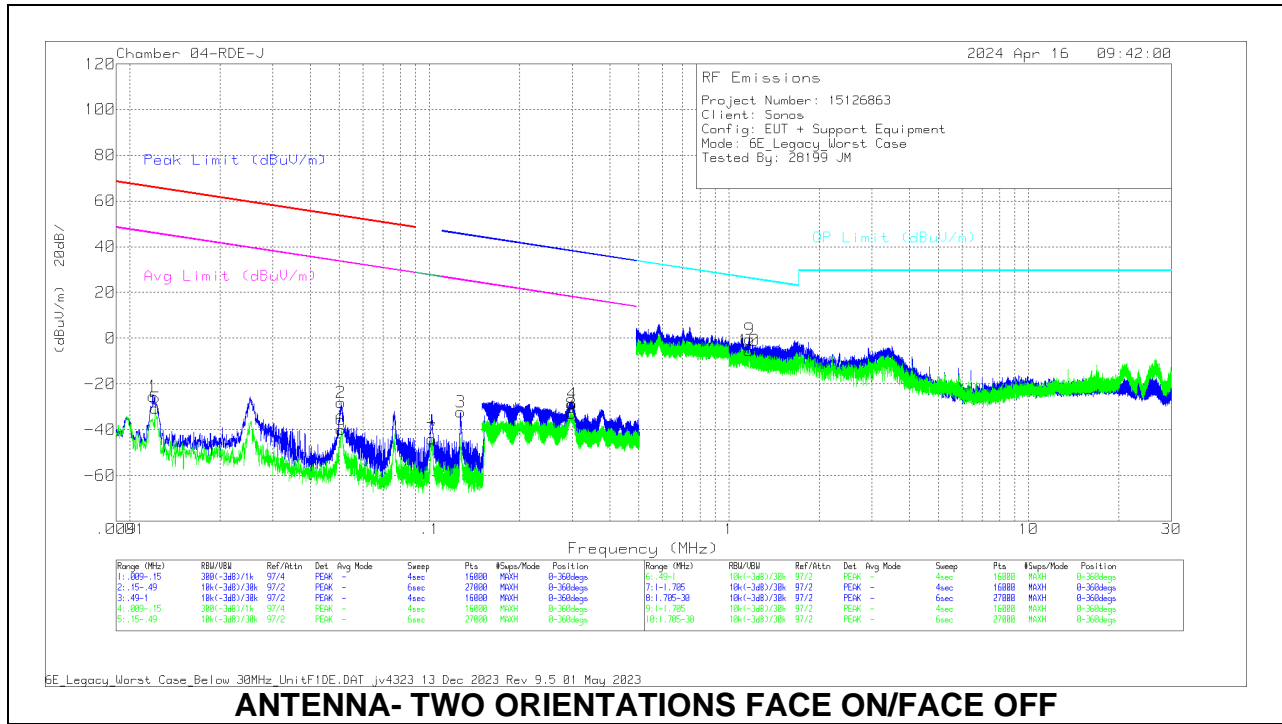
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

10.2. WORST CASE BELOW 30MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



Below 30MHz Data

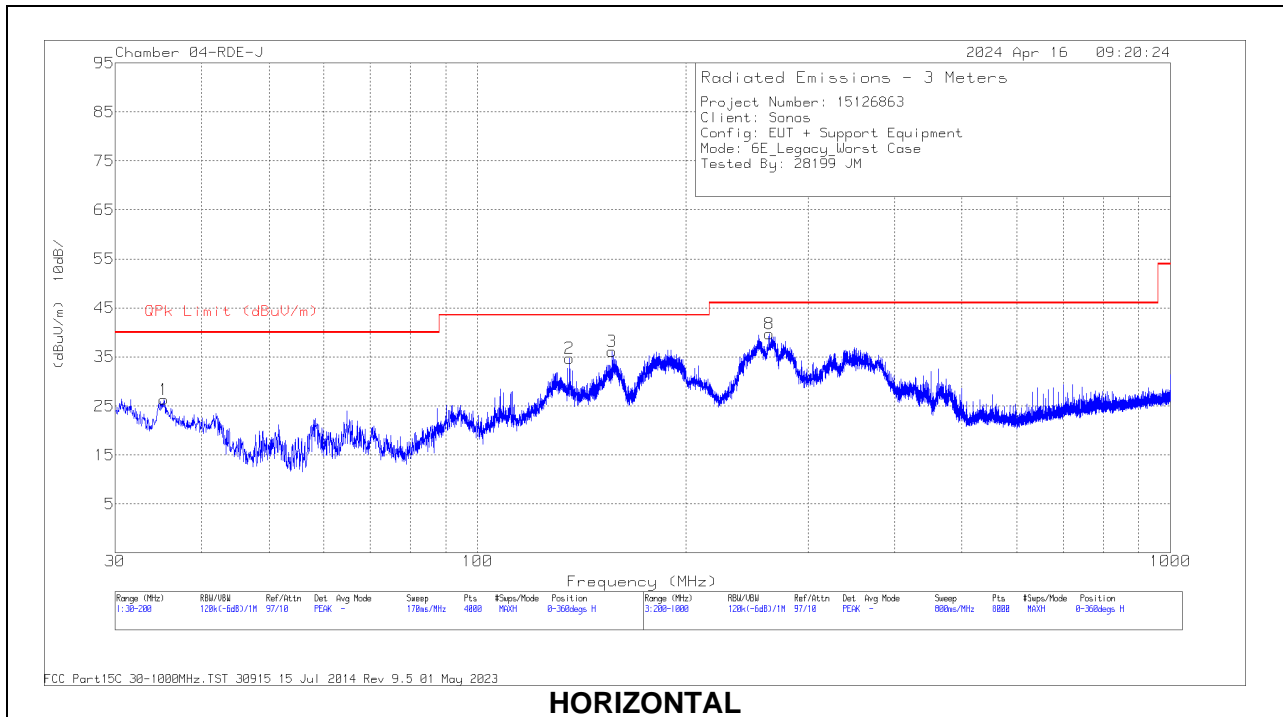
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)(dB/m)	CBL/AMP (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polatity (Degs)
1	.0119	24.95	Pk	60	-30.4	-80	-25.45	66.06	-91.51	46.06	-71.51	-	-	0-360	0-deg
5	.0122	19.81	Pk	60	-30.4	-80	-30.59	65.88	-96.47	45.88	-76.47	-	-	0-360	90-degs
6	.0507	14.95	Pk	56.9	-31.7	-80	-39.85	53.49	-93.34	33.49	-73.34	-	-	0-360	90-degs
2	.0508	26.54	Pk	56.9	-31.7	-80	-28.26	53.47	-81.73	33.47	-61.73	-	-	0-360	0-deg
7	.1018	12.94	Pk	55.5	-32.5	-80	-44.06	-	-	-	-	27.46	-71.52	0-360	90-degs
3	.1271	24.46	Pk	55.7	-32.5	-80	-32.34	45.54	-77.88	25.54	-57.88	-	-	0-360	0-deg
8	.2989	23.03	Pk	56.1	-32.1	-80	-32.97	38.1	-71.07	18.1	-51.07	-	-	0-360	90-degs
4	.3	27.27	Pk	56.1	-32.1	-80	-28.73	38.07	-66.8	18.07	-46.8	-	-	0-360	0-deg

Pk - Peak detector

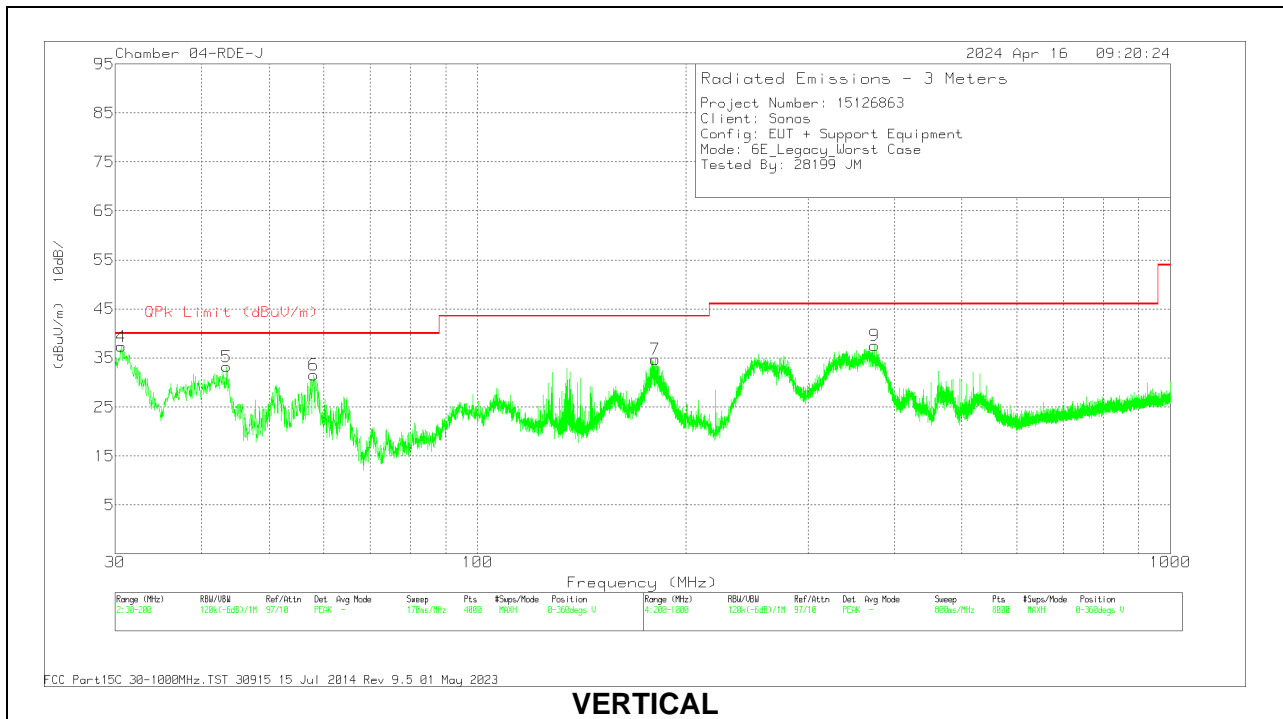
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E (ACF)(dB/m)	CBL/AMP (dB)	Dist Corr 30m 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
10	1.1671	21.12	Pk	45.7	-32.1	-40	-5.28	26.28	-31.56	0-360	90-degs
9	1.1716	25.94	Pk	45.7	-32.1	-40	-4.6	26.25	-26.71	0-360	0-deg

Pk - Peak detector

10.3. WORST CASE BELOW 1 GHz



HORIZONTAL



VERTICAL

Below 1 GHz DATA

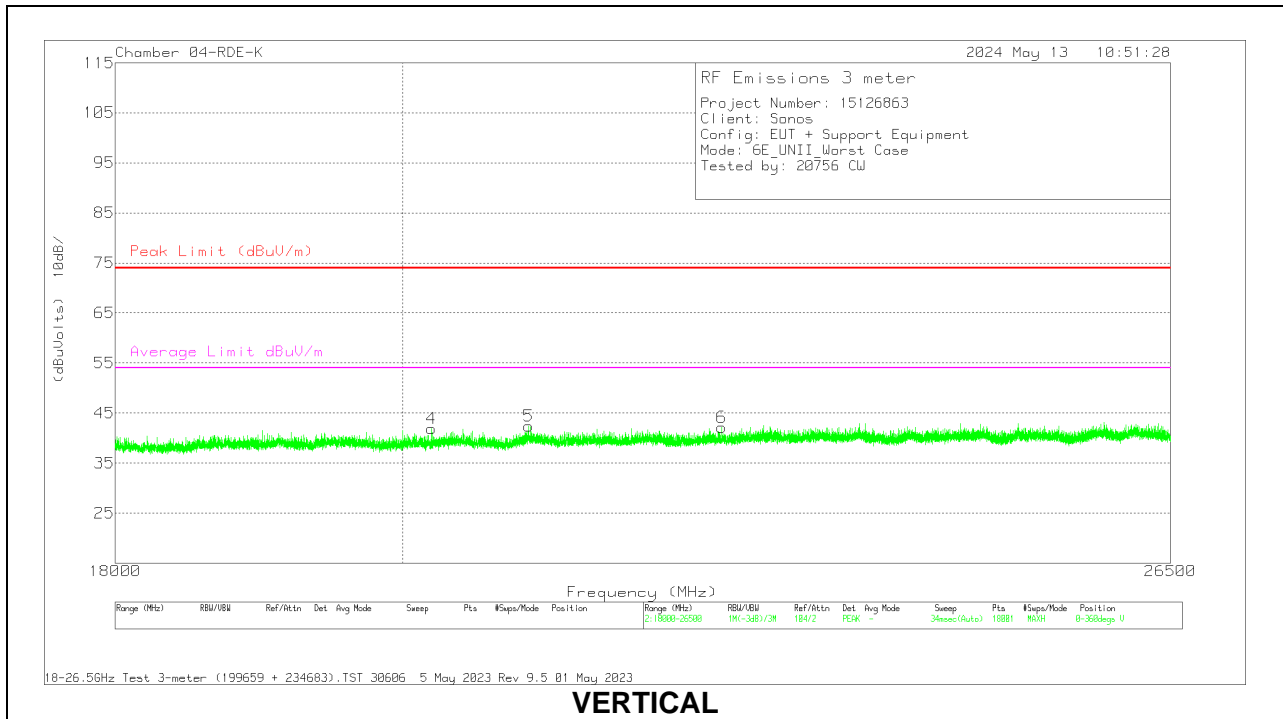
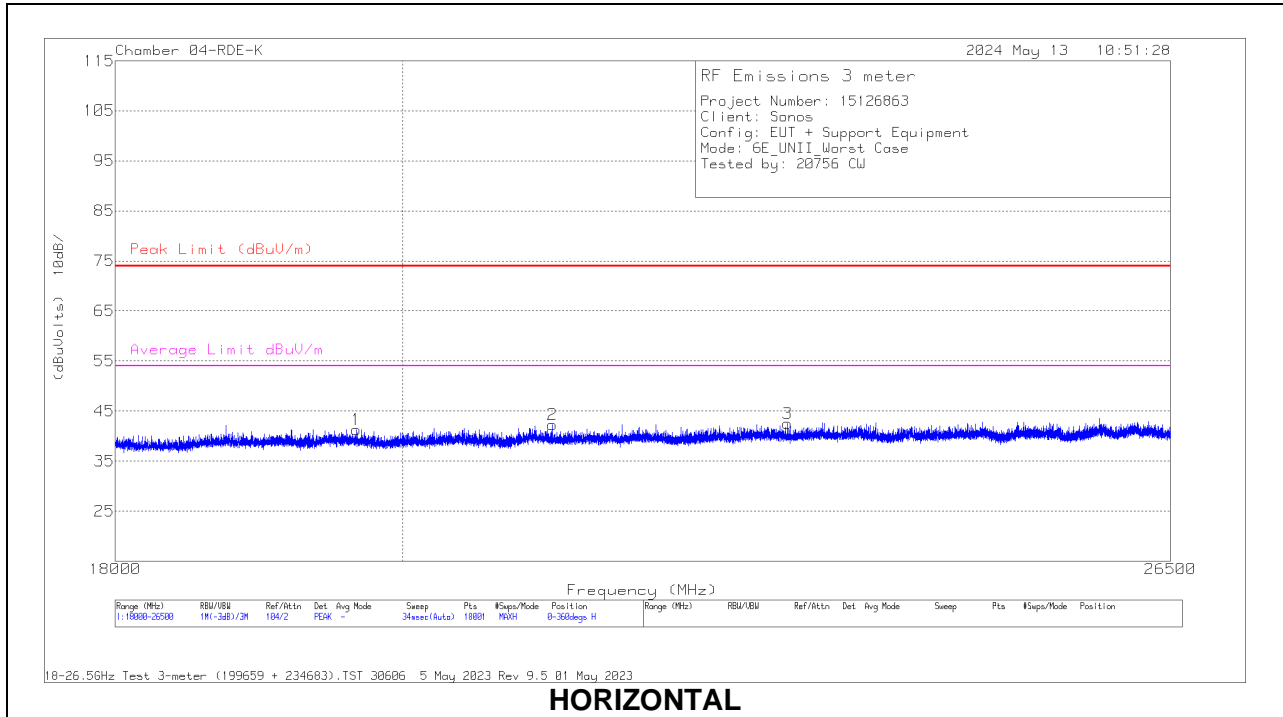
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80293 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	35.2714	35.04	Pk	23	-31.7	26.34	40	-13.66	0-360	99	H
2	* 135.725	46.32	Pk	19.5	-31.1	34.72	43.52	-8.8	0-360	199	H
3	156.47	48.89	Pk	18.2	-31	36.09	43.52	-7.43	0-360	199	H
4	30.6281	43.8	Pk	26.3	-31.8	38.3	40	-1.7	340	124	V
	30.6281	39.87	Qp	26.3	-31.8	34.37	40	-5.63	340	124	V
5	43.476	47.65	Pk	17.3	-31.7	33.25	40	-6.75	0-360	100	V
6	58.0573	49.82	Pk	13.2	-31.5	31.52	40	-8.48	0-360	100	V
7	180.404	48.56	Pk	17	-30.8	34.76	43.52	-8.76	0-360	100	V
8	* 263.508	51.81	Pk	18.4	-30.5	39.71	46.02	-6.31	0-360	99	H
9	374.423	46.74	Pk	20.9	-30.1	37.54	46.02	-8.48	0-360	99	V

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

Pk - Peak detector

Qp - Quasi-Peak detector

10.4. WORST CASE 18-26 GHz

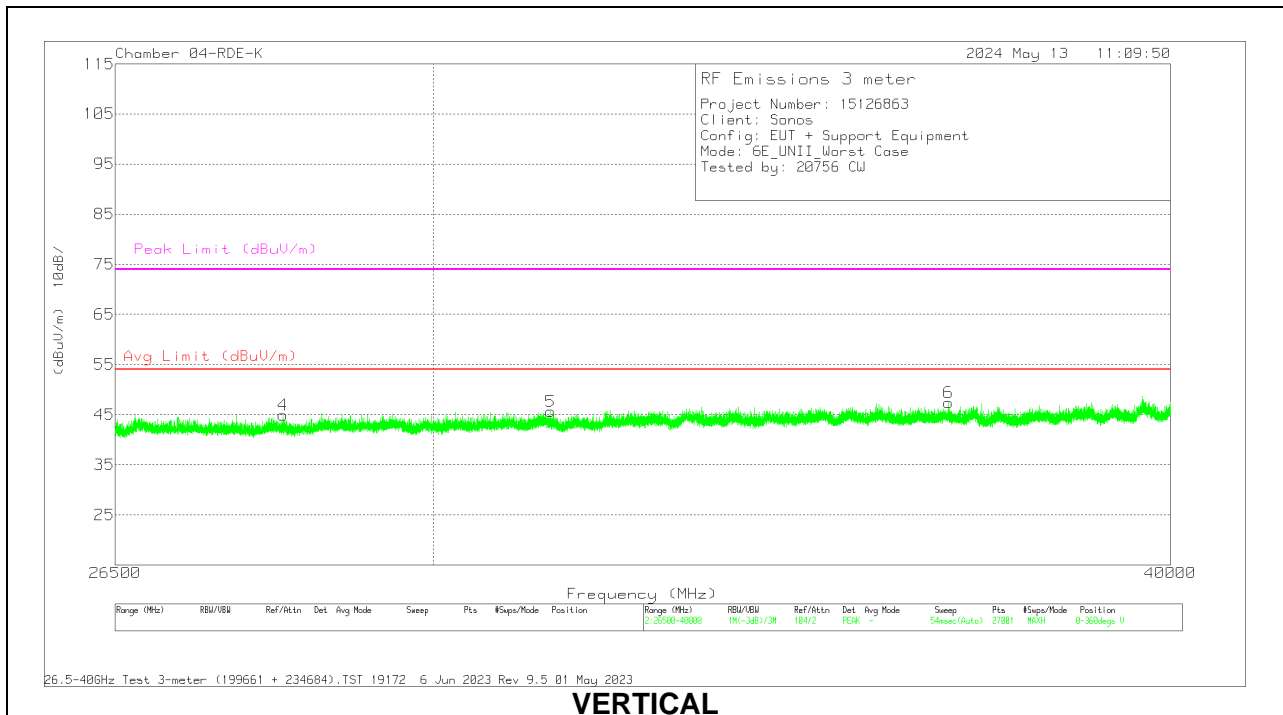
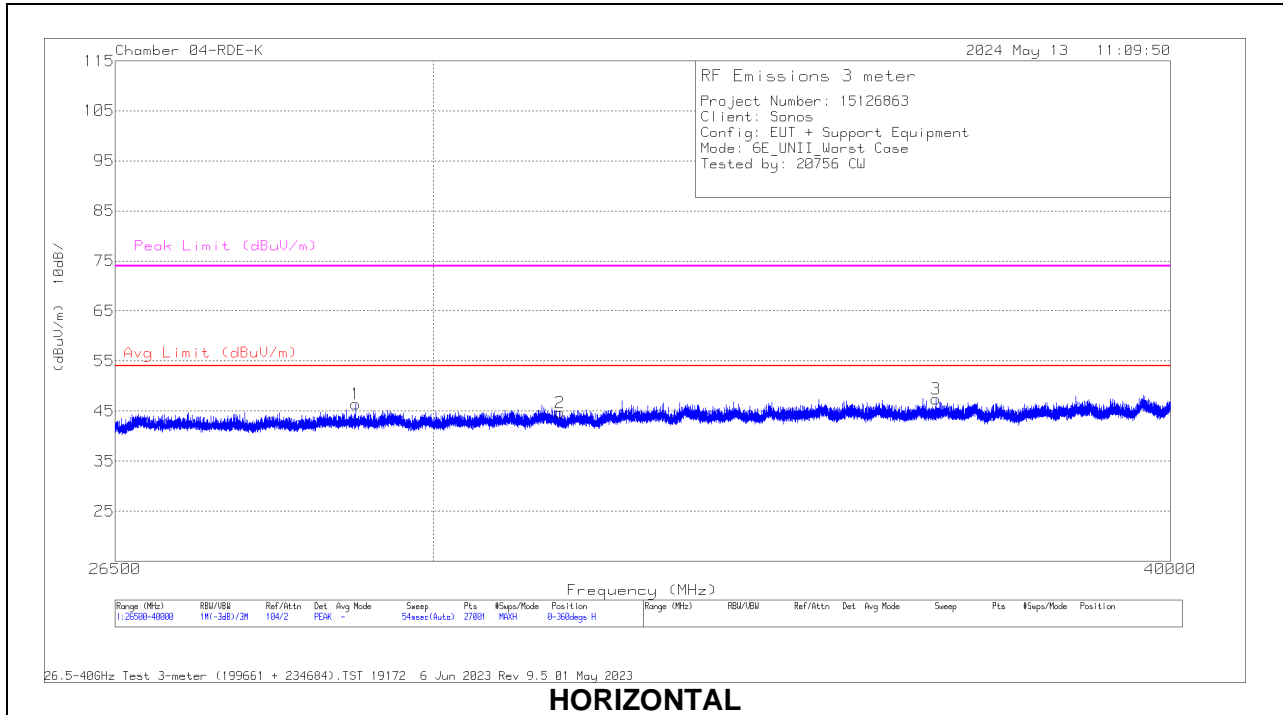


18-26 GHz DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Horn ACF (dB/m)	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	* 19663.638	52.53	Pk	32.7	-62.6	18.6	41.23	74	-32.77	-	-	0-360	101	H
2	* 21128.943	51.6	Pk	33	-61.6	19.3	42.3	74	-31.7	-	-	0-360	200	H
3	* 23031.053	51.38	Pk	33.5	-62.5	20.1	42.48	74	-31.52	-	-	0-360	101	H
4	* 20212.36	52.19	Pk	32.8	-61.9	18.8	41.89	74	-32.11	-	-	0-360	199	V
5	* 20943.832	51.37	Pk	33	-61.2	19.2	42.37	74	-31.63	-	-	0-360	199	V
6	* 22479.026	51.64	Pk	33.3	-62.6	19.8	42.14	74	-31.86	-	-	0-360	101	V

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

10.5. WORST CASE 26-40 GHz



26-40 GHz DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Horn ACF (dB/m)	Amp/Cbl (dB)	Cables (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 31520.5	45.95	Pk	36.6	-61.6	23.7	44.65	-	-	74	-29.35	0-360	101	H
5	* 31408.5	47.1	Pk	36.6	-61.8	23.7	45.6	-	-	74	-26.4	0-360	101	V
4	28293	48.35	Pk	36.2	-62	22.4	44.95	-	-	74	-29.05	0-360	101	V
1	29107.5	47.73	Pk	36.5	-60.5	22.7	46.43	-	-	74	-27.57	0-360	200	H
3	36502.5	46.73	Pk	37.6	-62.9	26	47.43	-	-	74	-26.57	0-360	101	H
6	36684.5	46.4	Pk	37.8	-62.8	26	47.4	-	-	74	-26.6	0-360	200	V

Avg - Video bandwidth < Resolution bandwidth

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.

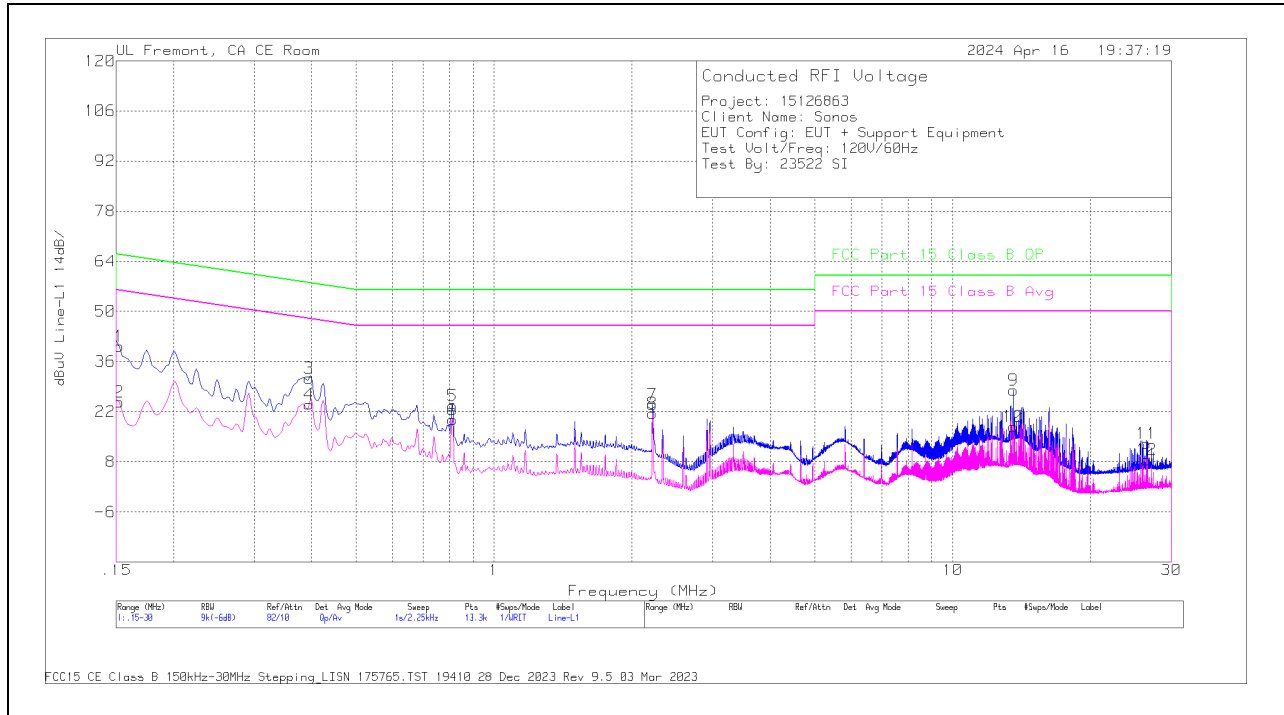
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

AC POWER LINE NORM

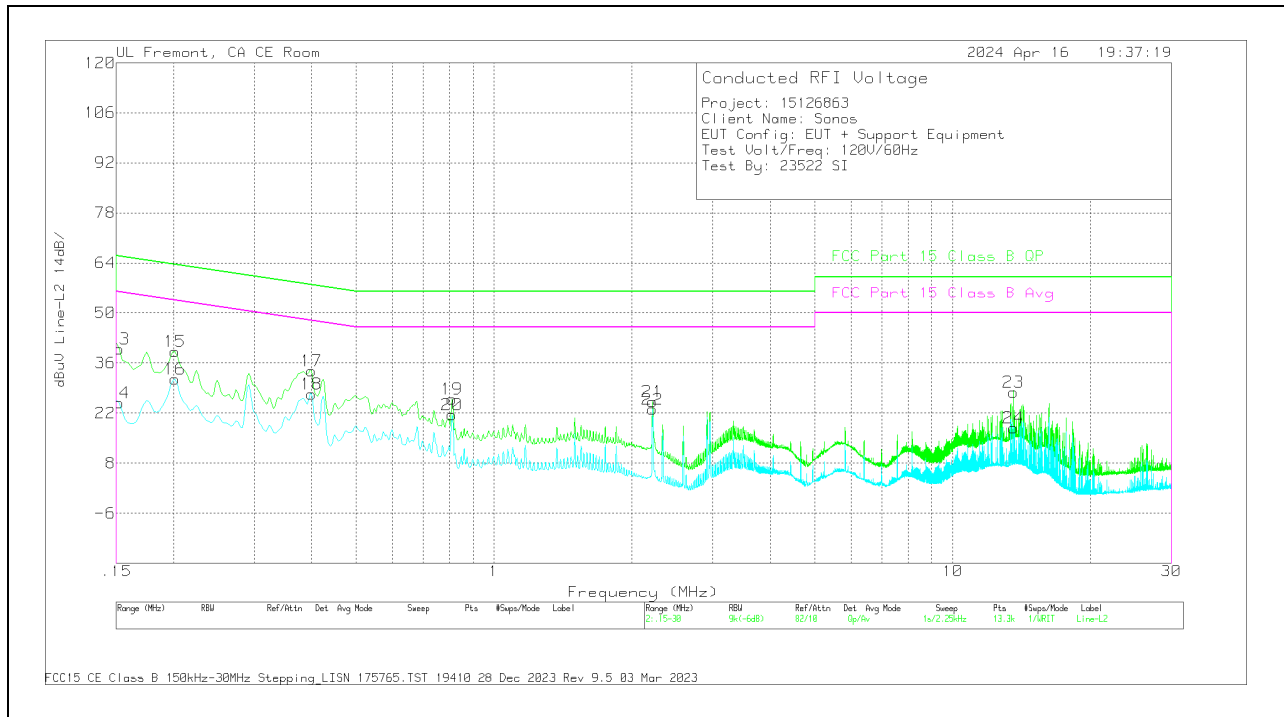
LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B QP	QP Margin (dB)	FCC Part 15 Class B Avg	Av Margin (dB)
2	.1523	15.01	Av	.1	0	9.5	24.61	-	-	55.88	-31.27
4	.3953	14.65	Av	0	0	9.4	24.05	-	-	47.95	-23.9
6	.8115	10.31	Av	0	.1	9.3	19.71	-	-	46	-26.29
8	2.2178	12	Av	0	.1	9.4	21.5	-	-	46	-24.5
10	13.56	7.99	Av	.1	.3	9.5	17.89	-	-	50	-32.11
12	26.4885	-1.39	Av	.2	.3	9.4	8.51	-	-	50	-41.49
1	.1523	30.66	Qp	.1	0	9.5	40.26	65.88	-25.62	-	-
3	.3953	21.89	Qp	0	0	9.4	31.29	57.95	-26.66	-	-
5	.8115	14.22	Qp	0	.1	9.3	23.62	56	-32.38	-	-
7	2.2178	14.44	Qp	0	.1	9.4	23.94	56	-32.06	-	-
9	13.56	18.08	Qp	.1	.3	9.5	27.98	60	-32.02	-	-
11	26.4885	3.23	Qp	.2	.3	9.4	13.13	60	-46.87	-	-

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 (dB)	Cbl (dB)	Trns Limiter (dB)	Corrected Reading dBuV	FCC Part 15 Class B QP	QP Margin (dB)	FCC Part 15 Class B Avg	Av Margin (dB)
14	.1523	15.26	Av	.1	0	9.5	24.86	-	-	55.88	-31.02
16	.2018	21.97	Av	0	.1	9.4	31.47	-	-	53.54	-22.07
18	.3998	17.81	Av	0	.1	9.4	27.31	-	-	47.86	-20.55
20	.8093	12.17	Av	0	0	9.3	21.47	-	-	46	-24.53
22	2.2155	13.52	Av	0	.1	9.4	23.02	-	-	46	-22.98
24	13.5623	8.08	Av	.1	.2	9.5	17.88	-	-	50	-32.12
13	.1523	30.35	Qp	.1	0	9.5	39.95	65.88	-25.93	-	-
15	.2018	29.66	Qp	0	.1	9.4	39.16	63.54	-24.38	-	-
17	.3998	24.27	Qp	0	.1	9.4	33.77	57.86	-24.09	-	-
19	.8093	16.67	Qp	0	0	9.3	25.97	56	-30.03	-	-
21	2.2155	15.72	Qp	0	.1	9.4	25.22	56	-30.78	-	-
23	13.5623	18.07	Qp	.1	.2	9.5	27.87	60	-32.13	-	-

Qp - Quasi-Peak detector
 Ca - CISPR average detection

12. SETUP PHOTOS

Refer to UL Verification Services Inc Report # 15126863-EP1V1.

END OF TEST REPORT