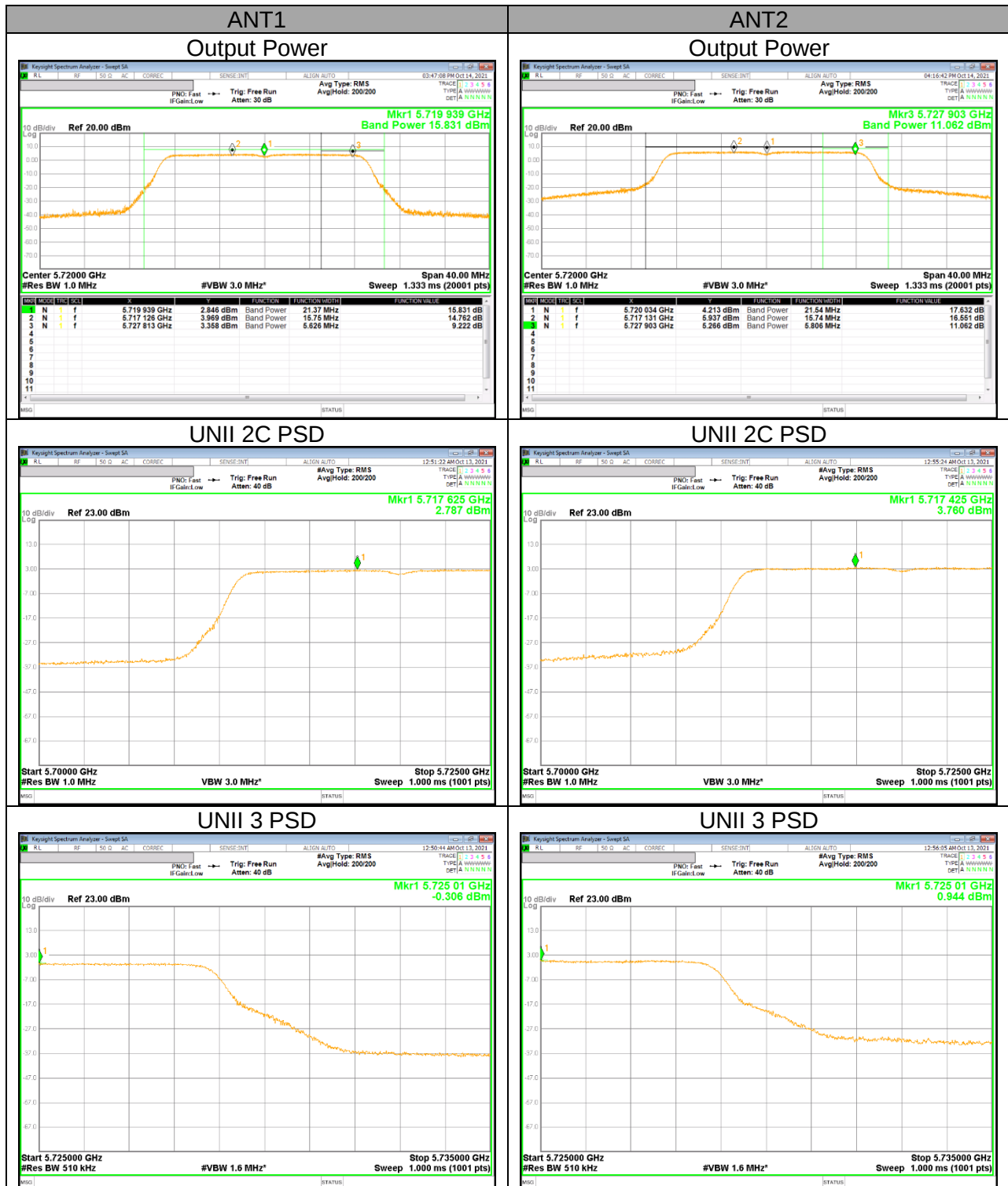
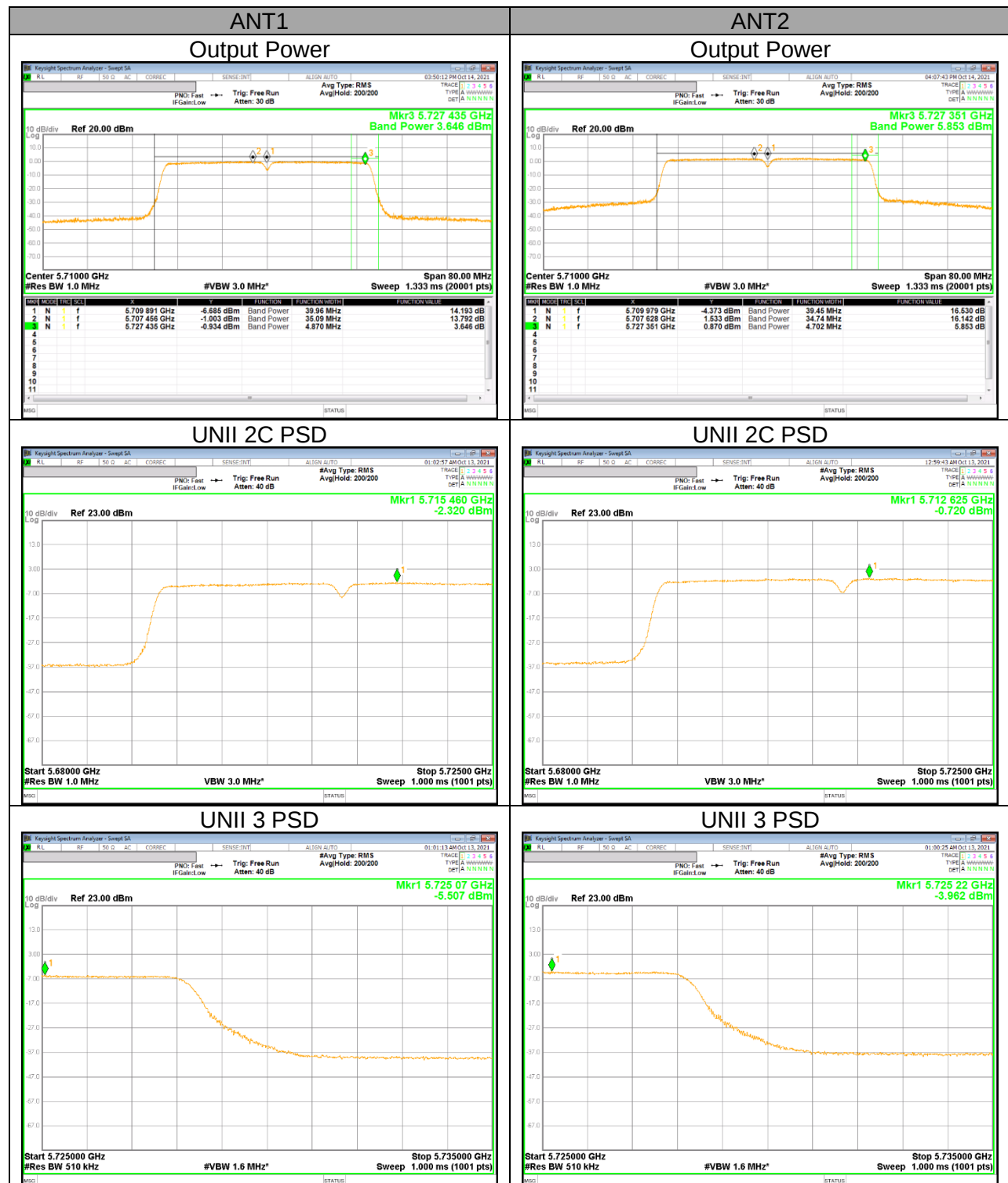


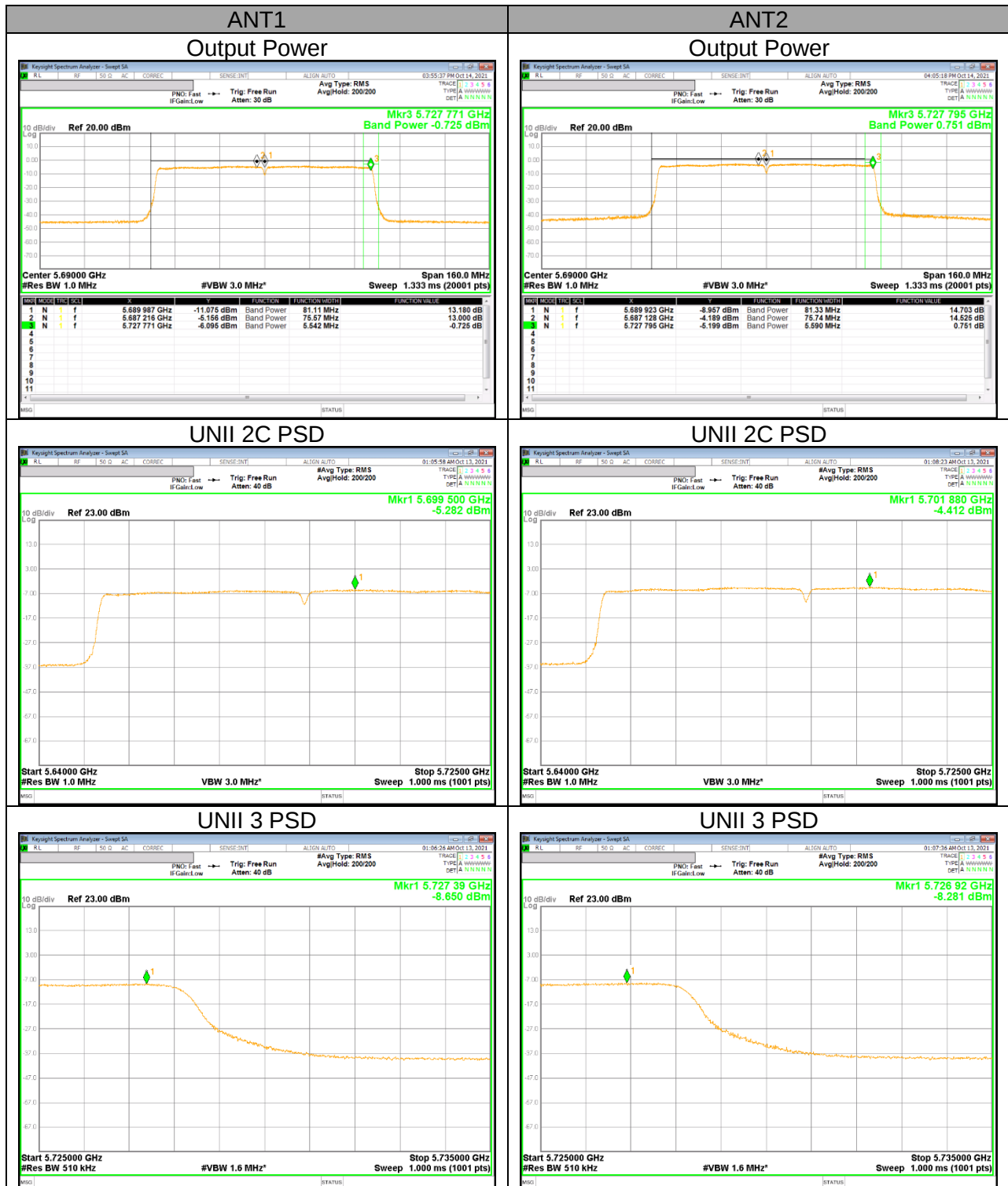
UNII Straddle Ch. IEEE 802.11n HT20 mode Output Power and PSD



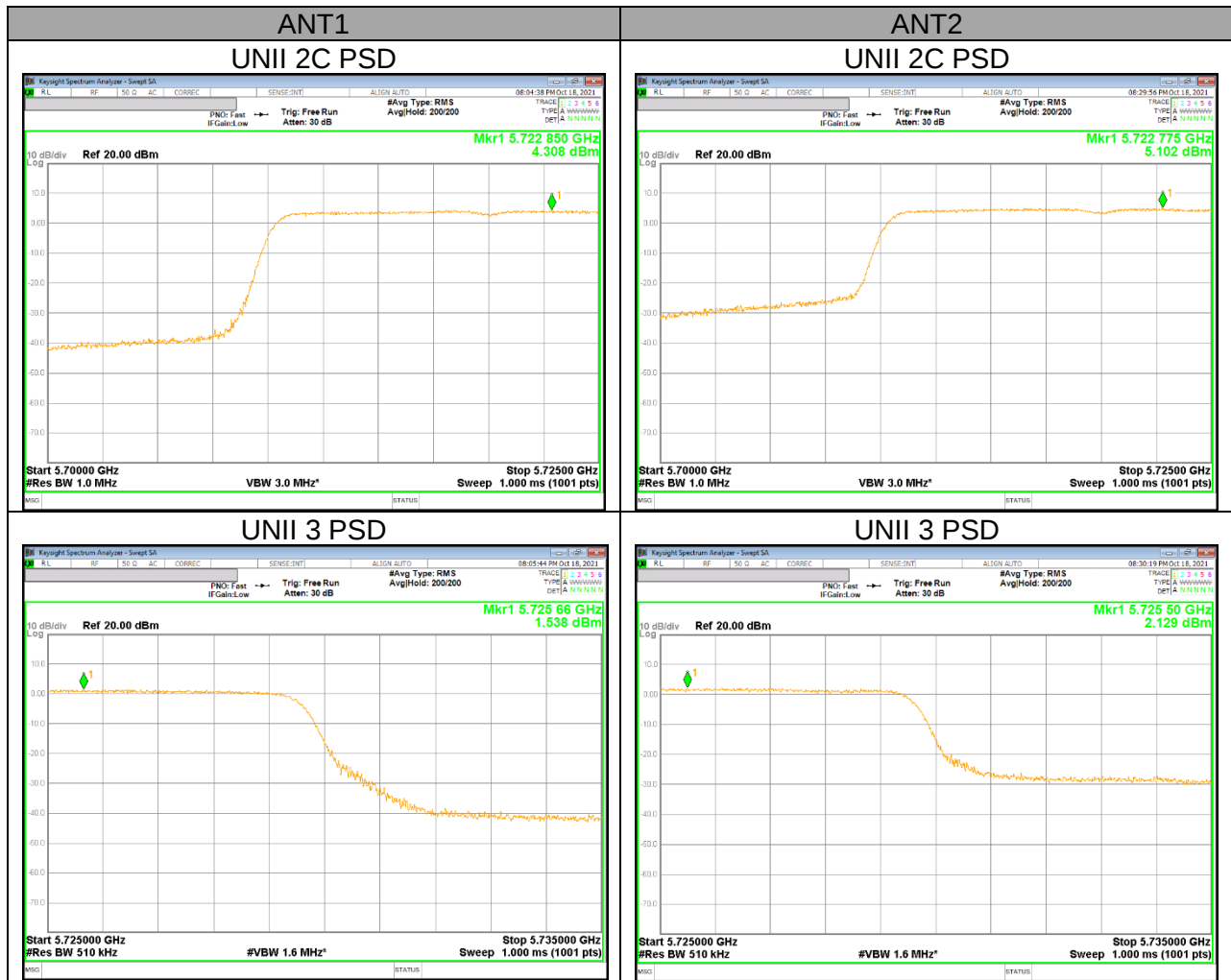
UNII Straddle Ch. IEEE 802.11n HT40 mode Output Power and PSD



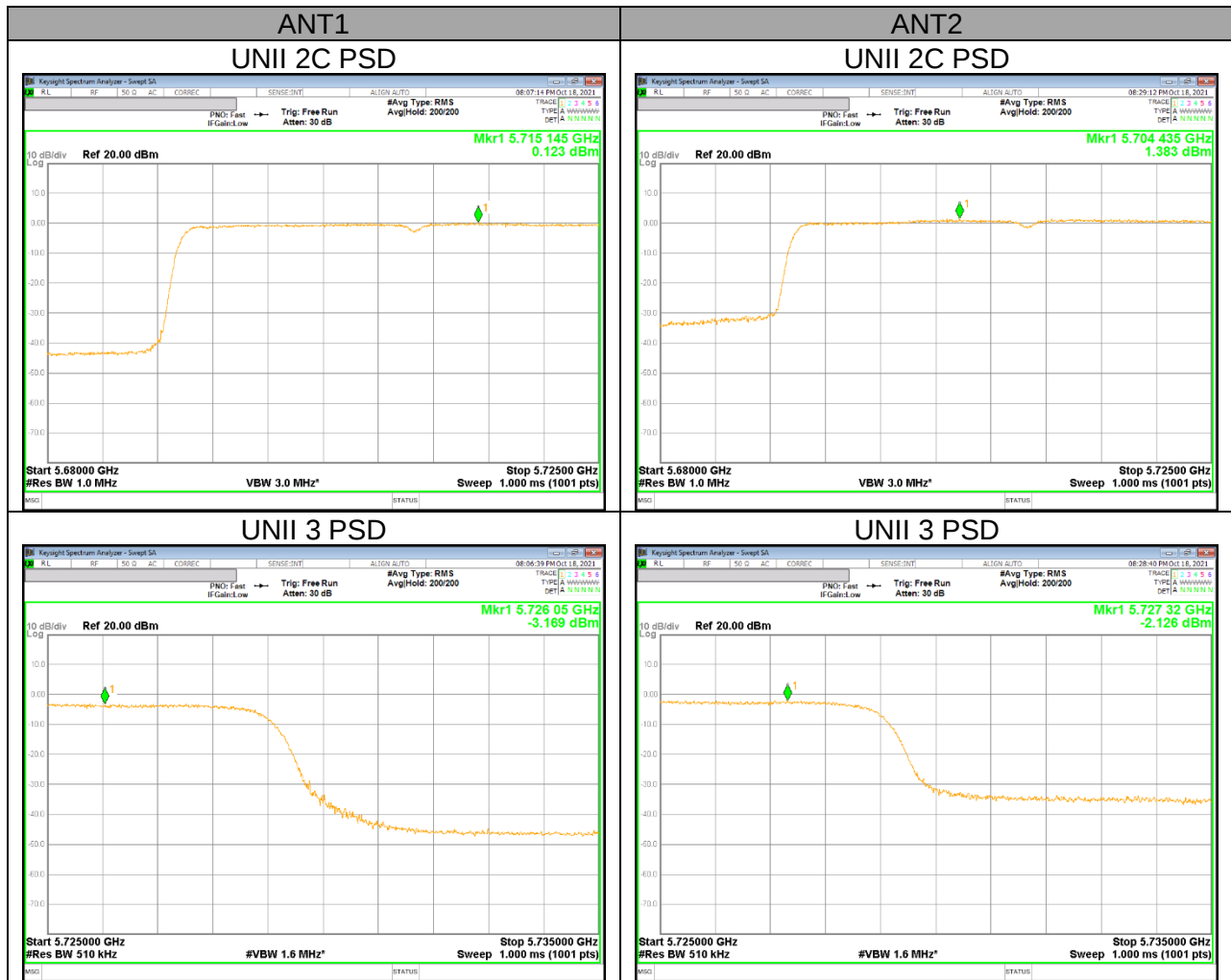
UNII Straddle Ch. IEEE 802.11ac VHT80 mode Output Power and PSD



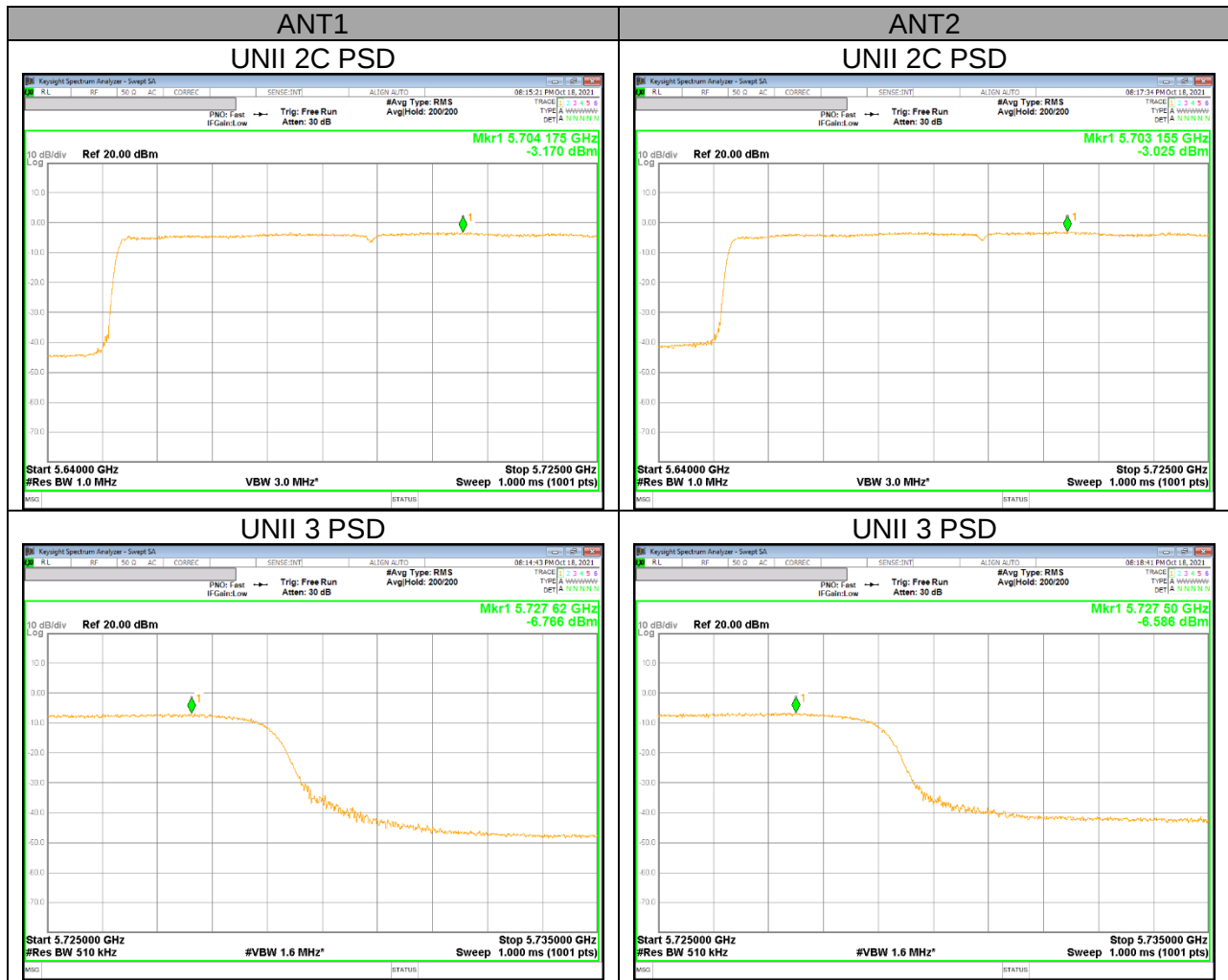
UNII Straddle Ch. IEEE 802.11ax HE20(SU) mode PSD



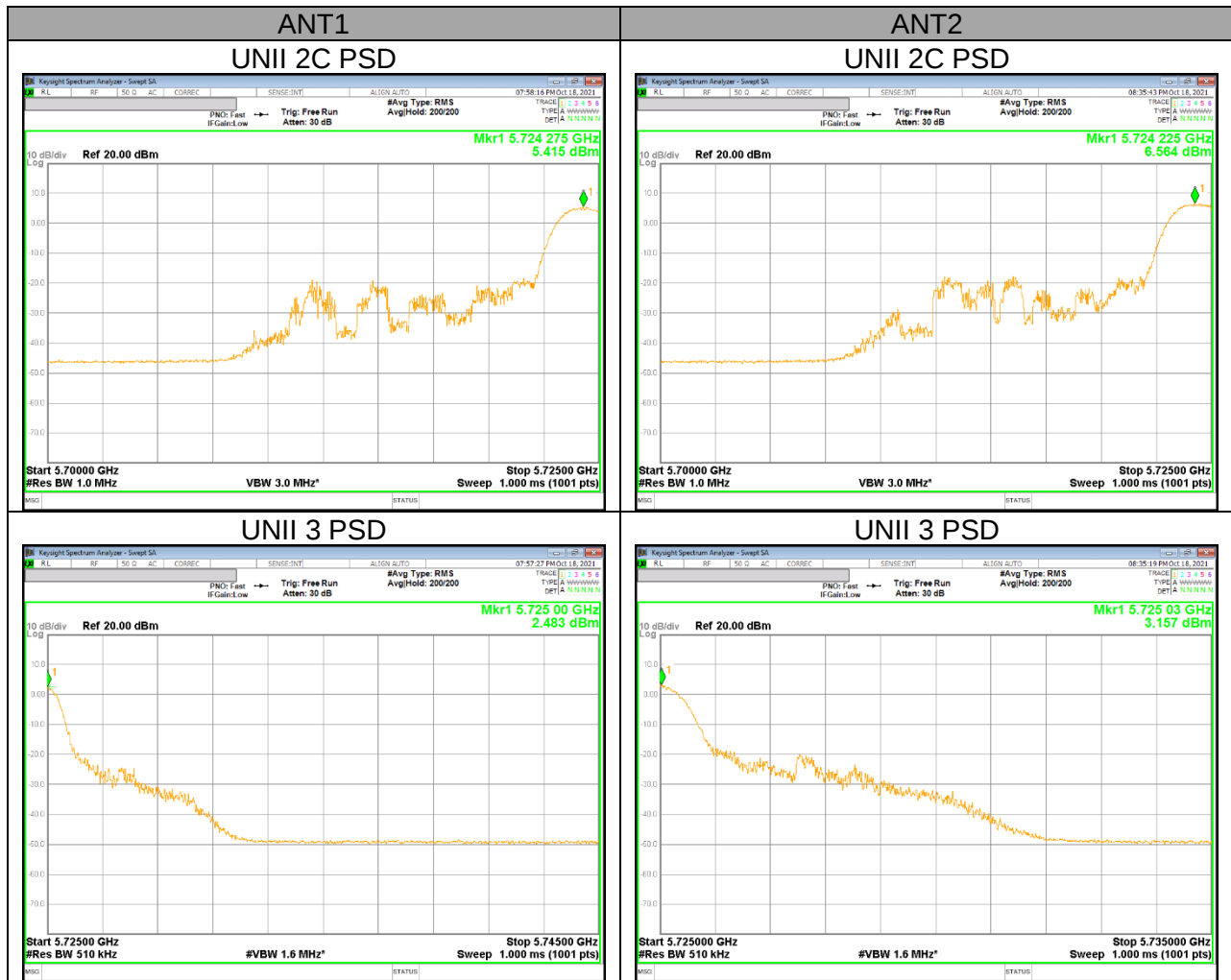
UNII Straddle Ch. IEEE 802.11ax HE40(SU) mode PSD



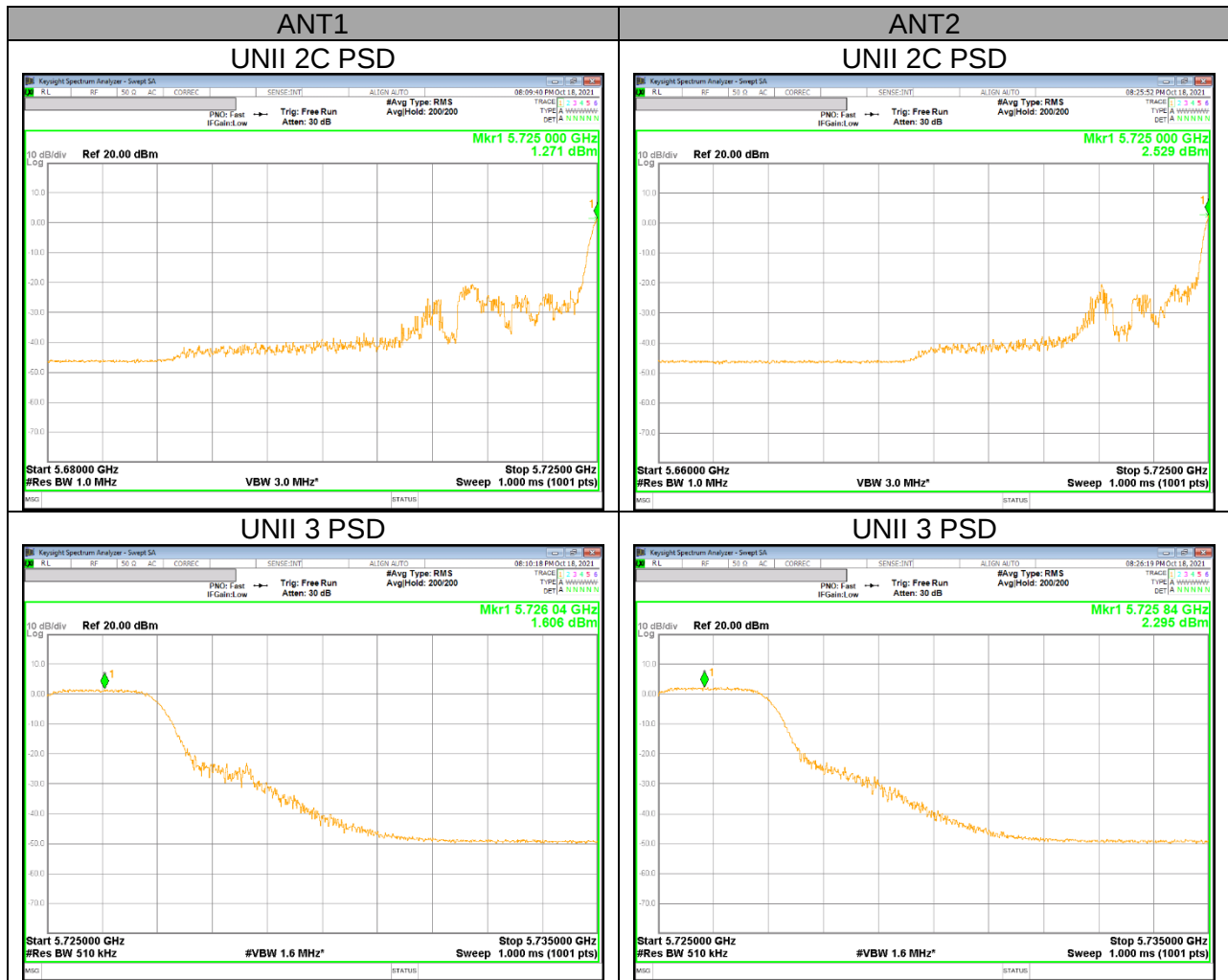
UNII Straddle Ch. IEEE 802.11ax HE80(SU) mode PSD



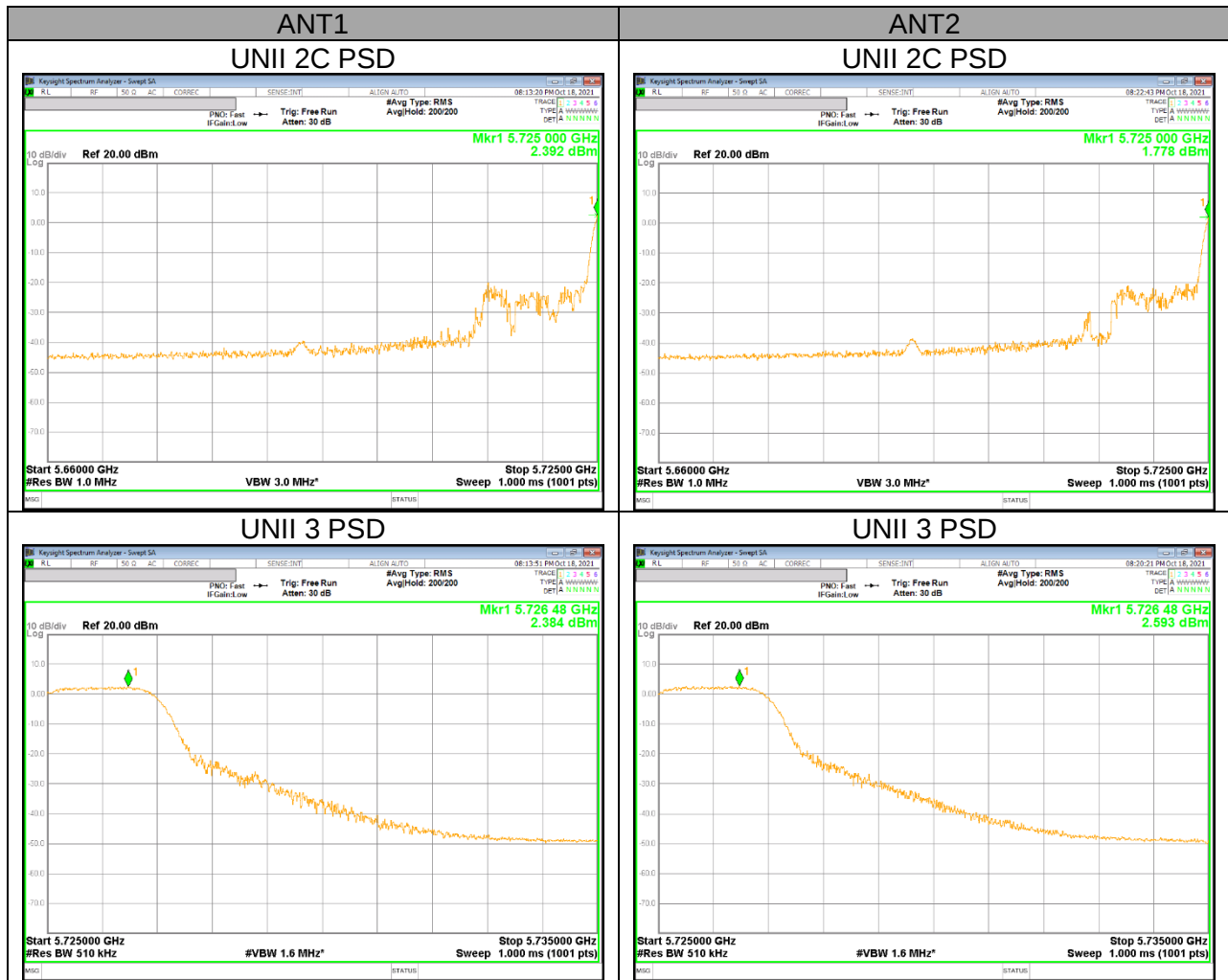
UNII Straddle Ch. IEEE 802.11ax HE20(6RU) mode PSD



UNII Straddle Ch. IEEE 802.11ax HE40(15RU) mode PSD



UNII Straddle Ch. IEEE 802.11ax HE80(34RU) mode PSD



11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 – 216	150**	3
216 – 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

FCC Part 15.205 (a) : Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~ 156.52525	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.7 ~ 156.9	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	162.0125 ~ 167.17	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	167.72 ~ 173.2	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	240 ~ 285	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	322 ~ 335.4	2655 ~ 2900		
8.291 ~ 8.294	37.5 ~ 38.25	399.90 ~ 410	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	608 ~ 614	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	960 ~ 1240	3345.8 ~ 3358		
			3600 ~ 4400		

▪ FCC Part 15.205(b) : The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

FCC §15.407 (b)

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating solely in the 5.850-5.895 GHz band or operating on a channel that spans across 5.725-5.895 GHz:
 - (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary,
provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Note

- Limit translation to field strength level (FCC §15.407)

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -27\text{dBm} + 95.2 = 68.2\text{dBuV/m}$$

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -17\text{dBm} + 95.2 = 78.2\text{dBuV/m}$$

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 100 cm for 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.

Reference to KDB 789033 D02 v02r01 UNII part G) 6) c) Method AD:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements. In UNII-4, unwanted emissions outside of restricted bands are measured with an RMS detector.

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for peak measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

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.

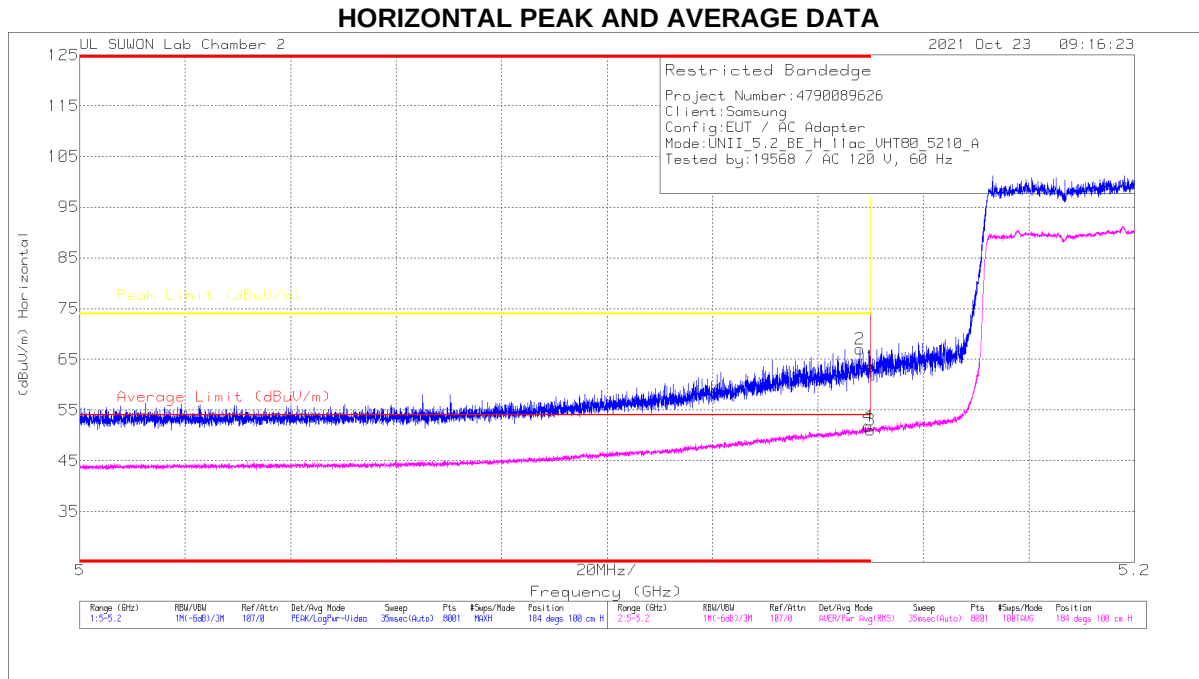
Note : Emission was pre-scanned from 9kHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open area test site.

Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

11.1. TX ABOVE 1GHz 2Tx MODE IN THE 5.2GHz BAND

BANDEDGE (WORST CASE: 802.11ac VHT80 / 5210 MHz)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT(dB)	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	47.18	Pk	34.4	-18	0	63.58	-	-	74	-10.42	184	100	H
2	* 5.14795	50.66	Pk	34.4	-18	0	67.06	-	-	74	-6.94	184	100	H
3	* 5.15	34.44	RMS	34.4	-18	25	51.09	54	-2.91	-	-	184	100	H
4	* 5.14953	35.11	RMS	34.4	-18	25	51.76	54	-2.24	-	-	184	100	H

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

Pk - Peak detector

RMS - RMS detection

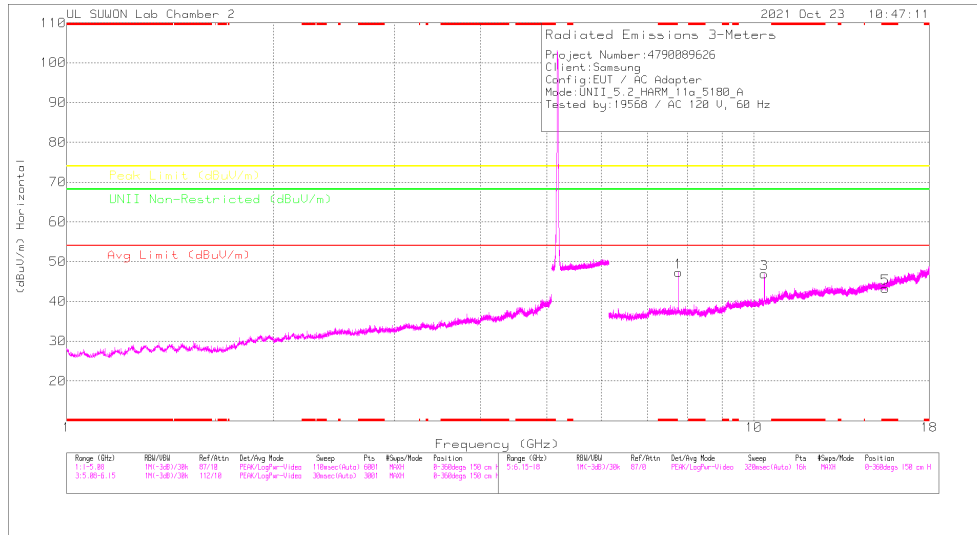
BANDEDGE TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5180	MIMO	* 5.15	44.97	Pk	34.40	-18.00	0.00	61.37	-	-	74.00	-12.63	182	100	H
			* 5.14985	45.63	Pk	34.40	-18.00	0.00	62.03	-	-	74.00	-11.97	182	100	H
			* 5.15	30.78	RMS	34.40	-18.00	0.16	47.34	54.00	-6.66	-	-	182	100	H
			* 5.14893	31.28	RMS	34.40	-18.00	0.16	47.84	54.00	-6.16	-	-	182	100	H
			* 5.15	44.33	Pk	34.40	-18.00	0.00	60.73	-	-	74.00	-13.27	179	109	V
			* 5.14958	45.33	Pk	34.40	-18.00	0.00	61.73	-	-	74.00	-12.27	179	109	V
			* 5.15	30.33	RMS	34.40	-18.00	0.16	46.89	54.00	-7.11	-	-	179	109	V
			* 5.1496	30.83	RMS	34.40	-18.00	0.16	47.39	54.00	-6.61	-	-	179	109	V
			* 5.15	43.37	Pk	34.40	-18.00	0.00	59.77	-	-	74.00	-14.23	177	108	H
			* 5.14958	47.10	Pk	34.40	-18.00	0.00	63.50	-	-	74.00	-10.50	177	108	H
802.11n (HT20)	5180	MIMO	* 5.15	30.76	RMS	34.40	-18.00	0.17	47.33	54.00	-6.67	-	-	177	108	H
			* 5.14953	32.38	RMS	34.40	-18.00	0.17	48.95	54.00	-5.05	-	-	177	108	H
			* 5.15	41.94	Pk	34.40	-18.00	0.00	58.34	-	-	74.00	-15.66	187	100	V
			* 5.14748	47.76	Pk	34.40	-18.10	0.00	64.06	-	-	74.00	-9.94	187	100	V
			* 5.15	32.01	RMS	34.40	-18.00	0.17	48.58	54.00	-5.42	-	-	187	100	V
			* 5.1499	32.22	RMS	34.40	-18.00	0.17	48.79	54.00	-5.21	-	-	187	100	V
			* 5.15	44.36	Pk	34.40	-18.00	0.00	60.76	-	-	74.00	-13.24	176	111	H
			* 5.14943	51.87	Pk	34.40	-18.00	0.00	68.27	-	-	74.00	-5.73	176	111	H
			* 5.15	32.83	RMS	34.40	-18.00	0.21	49.44	54.00	-4.56	-	-	176	111	H
			* 5.14925	33.97	RMS	34.40	-18.00	0.21	50.58	54.00	-3.42	-	-	176	111	H
802.11n (HT40)	5190	MIMO	* 5.15	51.82	Pk	34.40	-18.00	0.00	68.22	-	-	74.00	-5.78	183	100	V
			* 5.14815	52.34	Pk	34.40	-18.00	0.00	68.74	-	-	74.00	-5.26	183	100	V
			* 5.15	34.08	RMS	34.40	-18.00	0.21	50.69	54.00	-3.31	-	-	183	100	V
			* 5.1498	34.03	RMS	34.40	-18.00	0.21	50.64	54.00	-3.36	-	-	183	100	V
			* 5.15	47.18	Pk	34.40	-18.00	0.00	63.58	-	-	74.00	-10.42	184	100	H
			* 5.14795	50.66	Pk	34.40	-18.00	0.00	67.06	-	-	74.00	-6.94	184	100	H
			* 5.15	34.44	RMS	34.40	-18.00	0.25	51.09	54.00	-2.91	-	-	184	100	H
			* 5.14953	35.11	RMS	34.40	-18.00	0.25	51.76	54.00	-2.24	-	-	184	100	H
			* 5.15	51.04	Pk	34.40	-18.00	0.00	67.44	-	-	74.00	-6.56	195	105	V
			* 5.14353	53.48	Pk	34.40	-18.00	0.00	69.88	-	-	74.00	-4.12	195	105	V
802.11ac (VHT80)	5210	MIMO	* 5.15	33.87	RMS	34.40	-18.00	0.25	50.52	54.00	-3.48	-	-	195	105	V
			* 5.1496	34.66	RMS	34.40	-18.00	0.25	51.31	54.00	-2.69	-	-	195	105	V
			* 5.15	43.86	Pk	34.40	-18.00	0.00	60.26	-	-	74.00	-13.74	175	111	H
			* 5.13898	49.93	Pk	34.30	-18.00	0.00	66.23	-	-	74.00	-7.77	175	111	H
			* 5.15	30.48	RMS	34.40	-18.00	0.32	47.20	54.00	-6.80	-	-	175	111	H
			* 5.14355	31.29	RMS	34.40	-18.00	0.32	48.01	54.00	-5.99	-	-	175	111	H
			* 5.15	40.28	Pk	34.40	-18.00	0.00	56.68	-	-	74.00	-17.32	176	100	V
			* 5.1411	50.61	Pk	34.30	-18.00	0.00	66.91	-	-	74.00	-7.09	176	100	V
			* 5.15	30.53	RMS	34.40	-18.00	0.32	47.25	54.00	-6.75	-	-	176	100	V
			* 5.13948	31.88	RMS	34.30	-18.00	0.32	48.50	54.00	-5.50	-	-	176	100	V
802.11ax (HE20)	5180	MIMO	* 5.15	41.21	Pk	34.40	-18.00	0.00	57.61	-	-	74.00	-16.39	190	108	H
			* 5.1456	43.30	Pk	34.40	-18.00	0.00	59.70	-	-	74.00	-14.30	190	108	H
			* 5.15	29.63	RMS	34.40	-18.00	0.41	46.44	54.00	-7.56	-	-	190	108	H
			* 5.14968	30.04	RMS	34.40	-18.00	0.41	46.85	54.00	-7.15	-	-	190	108	H
			* 5.15	42.80	Pk	34.40	-18.00	0.00	59.20	-	-	74.00	-14.80	190	100	V
			* 5.14858	46.13	Pk	34.40	-18.00	0.00	62.53	-	-	74.00	-11.47	190	100	V
			* 5.15	31.75	RMS	34.40	-18.00	0.41	48.56	54.00	-5.44	-	-	190	100	V
			* 5.14998	32.01	RMS	34.40	-18.00	0.41	48.82	54.00	-5.18	-	-	190	100	V
			* 5.15	43.41	Pk	34.40	-18.00	0.00	59.81	-	-	74.00	-14.19	187	106	H
			* 5.14878	48.54	Pk	34.40	-18.00	0.00	64.94	-	-	74.00	-9.06	187	106	H
802.11ax (HE40)	5190	MIMO	* 5.15	30.14	RMS	34.40	-18.00	0.41	46.95	54.00	-7.05	-	-	187	106	H
			* 5.1499	30.87	RMS	34.40	-18.00	0.41	47.68	54.00	-6.32	-	-	187	106	H
			* 5.15	44.32	Pk	34.40	-18.00	0.00	60.72	-	-	74.00	-13.28	190	100	V
			* 5.14683	49.22	Pk	34.40	-18.10	0.00	65.52	-	-	74.00	-8.48	190	100	V
			* 5.15	32.34	RMS	34.40	-18.00	0.41	49.15	54.00	-4.85	-	-	190	100	V
			* 5.14993	32.49	RMS	34.40	-18.00	0.41	49.30	54.00	-4.70	-	-	190	100	V
			* 5.15	43.17	Pk	34.40	-18.00	0.00	59.57	-	-	74.00	-14.43	234	100	H
			* 5.1439	48.17	Pk	34.40	-18.00	0.00	64.57	-	-	74.00	-9.43	234	100	H
			* 5.15	31.41	RMS	34.40	-18.00	0.30	48.11	54.00	-5.89	-	-	234	100	H
			* 5.14763	31.79	RMS	34.40	-18.00	0.30	48.49	54.00	-5.51	-	-	234	100	H
802.11ax (HE80)	5210	MIMO	* 5.15	42.10	Pk	34.40	-18.00	0.00	58.50	-	-	74.00	-15.50	197	100	V
			* 5.1372	48.71	Pk	34.30	-18.00	0.00	65.01	-	-	74.00	-8.99	197	100	V
			* 5.15	31.54	RMS	34.40	-18.00	0.30	48.24	54.00	-5.76	-	-	197	100	V
			* 5.14938	32.11	RMS	34.40	-18.00	0.30	48.81	54.00	-5.19	-	-	197	100	V
			* 5.15	39.94	Pk	34.40	-18.00	0.00	56.34	-	-	74.00	-17.66	0	141	H
			* 5.1431	45.17	Pk	34.40	-18.00	0.00	61.57	-	-	74.00	-12.43	0	141	H
			* 5.15	28.57	RMS	34.40	-18.00	0.34	45.31	54.00	-8.69	-	-	0	141	H
			* 5.14823	29.70	RMS	34.40	-18.00	0.34	46.44	54.00	-7.56	-	-	0	141	H
			* 5.15	38.00	Pk	34.40	-18.00	0.00	54.40	-	-	74.00	-19.40	9	100	V
			* 5.1419	45.20	Pk	34.40	-18.00	0.00	61.60	-	-	74.00	-12.40	9	100	V
802.11ax (HE160)	5250 Lower	MIMO	* 5.15	29.67	RMS	34.40	-18.00	0.34	46.41	54.00	-7.59	-	-	9	100	V
			* 5.0948	30.52	RMS	34.30	-18.00	0.34	47.16	54.00	-6.84	-	-	9	100	V

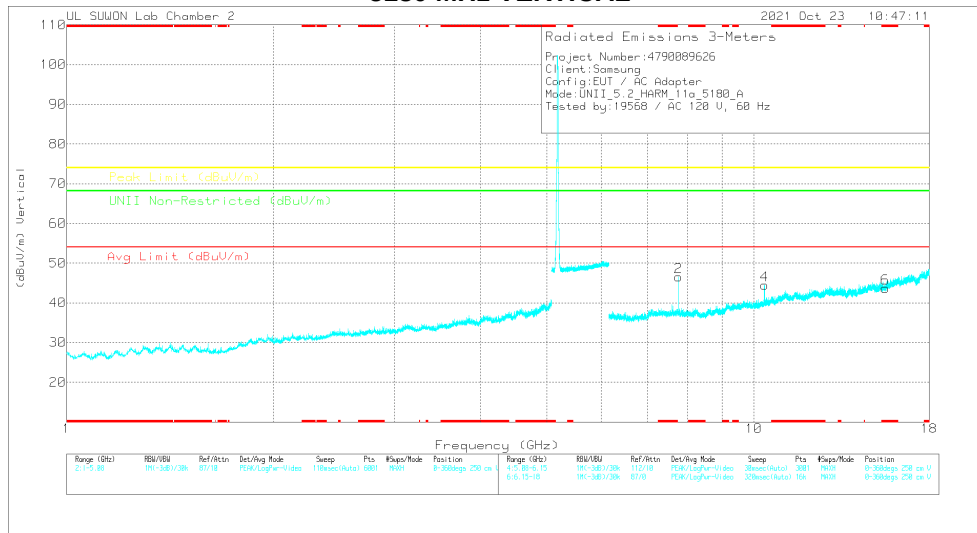
Note1. Pk - Peak detector, RMS - RMS detector

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5180 MHz) **5180 MHz HORIZONTAL**



5180 MHz VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

5180 MHz DATA

Radiated Emissions

Frequency (GHz)	Meas Reading (dBm)	Det	3117_00168724	6GHz_HFp(dB)	DC Cor (dB)	Corrected Reading (dBm)	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	Margin (dB)	Unit Non-Restricted (dBm)	Margin (dB)	Antenna (dBi)	Height (cm)	Polarity
7.77017	41.2	PK-U	36	-23.6	0	53.6	-	-	-	-	68.2	-14.6	224	100	H
7.77019	42.25	PK-U	36	-23.6	0	54.65	-	-	-	-	68.2	-13.55	177	100	V
10.35907	44.19	PK-U	37.7	-20.9	0	60.99	-	-	-	-	68.2	-7.21	205	101	H
10.35865	38.92	PK-U	37.7	-20.9	0	55.72	-	-	-	-	68.2	-12.48	205	118	V
* 15.54033	33.88	PK-U	40	-19.7	0	54.18	-	-	74	-19.82	-	-	360	100	H
* 15.54119	34.18	PK-U	40	-19.7	0	54.48	-	-	74	-19.52	-	-	360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

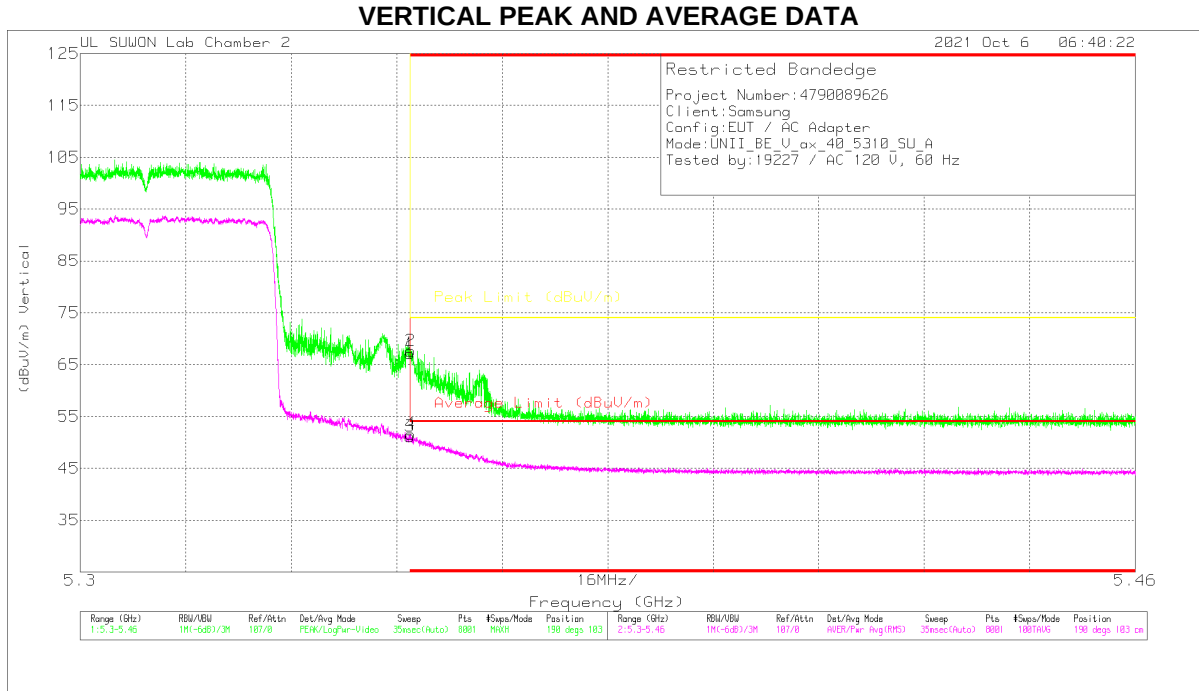
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5180	MIMO	7.770	41.20	PK-U	36.00	-23.60	0.00	53.60	-	-	-	-	68.20	-14.60	224	100	H
			7.770	42.25	PK-U	36.00	-23.60	0.00	54.65	-	-	-	-	68.20	-13.55	177	100	V
			10.359	44.19	PK-U	37.70	-20.90	0.00	60.99	-	-	-	-	68.20	-7.21	205	101	H
			10.359	38.92	PK-U	37.70	-20.90	0.00	55.72	-	-	-	-	68.20	-12.48	205	118	V
			* 15.54033	33.88	PK-U	40.00	-19.70	0.00	54.18	-	-	74.00	-19.82	-	-	360	100	H
			* 15.5419	34.18	PK-U	40.00	-19.70	0.00	54.48	-	-	74.00	-19.52	-	-	360	100	V
	5200	MIMO	10.399	42.55	PK-U	37.70	-20.90	0.00	59.35	-	-	-	-	68.20	-8.85	206	100	H
			10.403	39.02	PK-U	37.70	-20.90	0.00	55.82	-	-	-	-	68.20	-12.38	175	359	V
			7.800	42.66	PK-U	36.00	-23.90	0.00	54.76	-	-	-	-	68.20	-13.44	240	100	H
			7.800	42.62	PK-U	36.00	-23.90	0.00	54.92	-	-	-	-	68.20	-13.28	184	100	V
			* 15.61044	34.38	PK-U	40.00	-19.90	0.00	54.48	-	-	74.00	-19.52	-	-	360	100	H
			* 15.60921	34.78	PK-U	40.00	-19.90	0.00	54.88	-	-	74.00	-19.12	-	-	360	100	V
	5240	MIMO	7.860	42.52	PK-U	36.00	-24.40	0.00	54.12	-	-	-	-	68.20	-14.08	225	101	H
			7.860	42.99	PK-U	36.00	-24.40	0.00	54.59	-	-	-	-	68.20	-13.61	182	100	V
			10.479	40.69	PK-U	37.80	-20.60	0.00	57.89	-	-	-	-	68.20	-10.31	206	164	H
			10.483	37.10	PK-U	37.80	-20.70	0.00	54.20	-	-	-	-	68.20	-14.00	207	143	V
			* 15.71323	35.12	PK-U	40.20	-19.60	0.00	55.72	-	-	74.00	-18.28	-	-	0	100	H
			* 15.71511	35.00	PK-U	40.20	-19.60	0.00	55.60	-	-	74.00	-18.40	-	-	360	100	V
802.11ax (HE20) 8RU Spot-Check	5200	MIMO	7.800	38.11	PK-U	36.00	-23.90	0.00	50.21	-	-	-	-	68.20	-17.99	305	100	H
			10.411	33.31	PK-U	37.70	-20.90	0.00	50.11	-	-	-	-	68.20	-18.09	0	100	H
			* 15.63579	34.18	PK-U	40.10	-20.00	0.00	54.28	-	-	74.00	-19.72	-	-	0	100	H
			7.800	37.98	PK-U	36.00	-23.90	0.00	50.08	-	-	-	-	68.20	-18.12	176	100	V
			10.422	34.09	PK-U	37.70	-20.80	0.00	50.99	-	-	-	-	68.20	-17.21	0	100	V
			* 15.64274	34.48	PK-U	40.10	-20.00	0.00	54.58	-	-	74.00	-19.42	-	-	0	100	V

Note1. PK-U - U-NII: Maximum Peak

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

11.2. TX ABOVE 1GHz 2Tx MODE IN THE 5.3GHz BAND

BANDEDGE (WORST CASE: 802.11ax HE40 SU / 5310 MHz)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35002	50.61	PK	34.5	-18	0	67.11	-	-	74	-6.89	190	103	V
2	* 5.35008	51.16	PK	34.5	-18	0	67.66	-	-	74	-6.34	190	103	V
3	* 5.35002	34.25	RMS	34.5	-18	-41	51.16	54	-2.84	-	-	190	103	V
4	* 5.35012	34.67	RMS	34.5	-18	-41	51.58	54	-2.42	-	-	190	103	V

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

PK - Peak detector

RMS - RMS detection

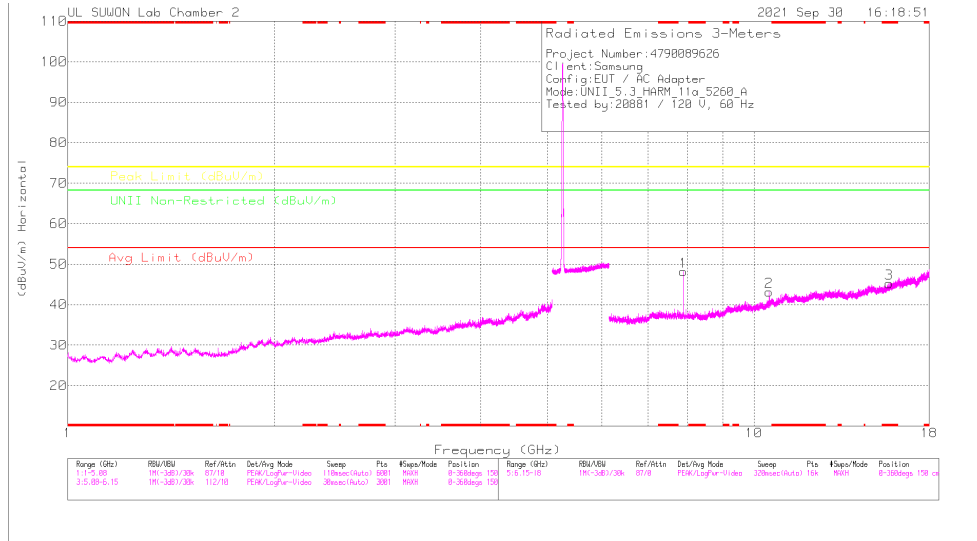
Bandedge Test Data

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5320	MIMO	* 5.35002	40.07	Pk	34.50	-18.00	0.00	56.57	-	-	74.00	-17.43	189	100	H
			* 5.353	43.12	Pk	34.50	-18.00	0.00	59.62	-	-	74.00	-14.38	189	100	H
			* 5.35002	29.78	RMS	34.50	-18.00	0.00	46.44	54.00	-7.56	-	-	189	100	H
			* 5.35004	30.00	RMS	34.50	-18.00	0.16	46.66	54.00	-7.34	-	-	189	100	H
			* 5.35002	43.38	Pk	34.50	-18.00	0.00	59.88	-	-	74.00	-14.12	184	100	V
			* 5.35096	46.07	Pk	34.50	-18.00	0.00	62.57	-	-	74.00	-11.43	184	100	V
			* 5.35002	30.92	RMS	34.50	-18.00	0.16	47.58	54.00	-6.42	-	-	184	100	V
			* 5.35006	31.51	RMS	34.50	-18.00	0.16	48.17	54.00	-5.83	-	-	184	100	V
802.11n (HT20)	5320	MIMO	* 5.35002	41.92	Pk	34.50	-18.00	0.00	58.42	-	-	74.00	-15.58	232	100	H
			* 5.35032	47.17	Pk	34.50	-18.00	0.00	63.67	-	-	74.00	-10.33	232	100	H
			* 5.35002	28.76	RMS	34.50	-18.00	0.17	45.43	54.00	-8.57	-	-	232	100	H
			* 5.35024	29.25	RMS	34.50	-18.00	0.17	45.92	54.00	-8.08	-	-	232	100	H
			* 5.35002	48.90	Pk	34.50	-18.00	0.00	65.40	-	-	74.00	-8.60	185	100	V
			* 5.35004	50.82	Pk	34.50	-18.00	0.00	67.32	-	-	74.00	-6.68	185	100	V
			* 5.35002	31.87	RMS	34.50	-18.00	0.17	48.54	54.00	-5.46	-	-	185	100	V
			* 5.35052	32.38	RMS	34.50	-18.00	0.17	49.05	54.00	-4.95	-	-	185	100	V
802.11n (HT40)	5310	MIMO	* 5.35002	41.40	Pk	34.50	-18.00	0.00	57.90	-	-	74.00	-16.10	228	101	H
			* 5.3527	47.39	Pk	34.50	-18.00	0.00	63.89	-	-	74.00	-10.11	228	101	H
			* 5.35002	29.17	RMS	34.50	-18.00	0.21	45.88	54.00	-8.12	-	-	228	100	H
			* 5.35026	29.80	RMS	34.50	-18.00	0.21	46.51	54.00	-7.49	-	-	228	100	H
			* 5.35002	48.75	Pk	34.50	-18.00	0.00	65.25	-	-	74.00	-8.75	184	100	V
			* 5.35246	52.38	Pk	34.50	-18.00	0.00	68.88	-	-	74.00	-5.12	184	100	V
			* 5.35002	33.20	RMS	34.50	-18.00	0.21	49.91	54.00	-4.09	-	-	184	100	V
			* 5.3501	33.75	RMS	34.50	-18.00	0.21	50.46	54.00	-3.54	-	-	184	100	V
802.11ac (VHT80)	5290	MIMO	* 5.35002	46.18	Pk	34.50	-18.00	0.00	62.68	-	-	74.00	-11.32	189	100	H
			* 5.35056	49.61	Pk	34.50	-18.00	0.00	66.11	-	-	74.00	-7.89	189	100	H
			* 5.35002	32.53	RMS	34.50	-18.00	0.25	49.28	54.00	-4.72	-	-	189	100	H
			* 5.35092	33.53	RMS	34.50	-18.00	0.25	50.28	54.00	-3.72	-	-	189	100	H
			* 5.35002	50.19	Pk	34.50	-18.00	0.00	66.69	-	-	74.00	-7.31	185	100	V
			* 5.35008	49.88	Pk	34.50	-18.00	0.00	66.38	-	-	74.00	-7.62	185	100	V
			* 5.35002	33.01	RMS	34.50	-18.00	0.25	49.76	54.00	-4.24	-	-	185	100	V
			* 5.35042	33.46	RMS	34.50	-18.00	0.25	50.21	54.00	-3.79	-	-	185	100	V
802.11ac (VHT160)	5250 Upper	MIMO	* 5.35002	36.83	Pk	34.50	-18.00	0.00	53.33	-	-	74.00	-20.67	191	119	H
			* 5.37858	44.93	Pk	34.50	-18.10	0.00	61.33	-	-	74.00	-12.67	191	119	H
			* 5.35002	27.51	RMS	34.50	-18.00	0.32	44.33	54.00	-9.67	-	-	191	119	H
			* 5.39372	28.29	RMS	34.50	-18.10	0.32	45.01	54.00	-8.99	-	-	191	119	H
			* 5.35002	41.17	Pk	34.50	-18.00	0.00	57.67	-	-	74.00	-16.33	198	103	V
			* 5.38116	49.58	Pk	34.50	-18.00	0.00	66.08	-	-	74.00	-7.92	198	103	V
			* 5.35002	28.87	RMS	34.50	-18.00	0.32	45.69	54.00	-8.31	-	-	198	103	V
			* 5.38122	31.06	RMS	34.50	-18.00	0.32	47.88	54.00	-6.12	-	-	198	103	V
802.11ax (HE20)	5320	MIMO	* 5.35002	43.72	Pk	34.50	-18.00	0.00	60.22	-	-	74.00	-13.78	251	100	H
			* 5.35904	43.34	Pk	34.50	-18.00	0.00	59.84	-	-	74.00	-14.16	251	100	H
			* 5.35002	28.47	RMS	34.50	-18.00	0.41	45.38	54.00	-8.62	-	-	251	100	H
			* 5.35012	29.15	RMS	34.50	-18.00	0.41	46.06	54.00	-7.94	-	-	251	100	H
			* 5.35002	41.12	Pk	34.50	-18.00	0.00	57.62	-	-	74.00	-16.38	189	102	V
			* 5.35042	44.67	Pk	34.50	-18.00	0.00	61.17	-	-	74.00	-12.83	189	102	V
			* 5.35002	31.06	RMS	34.50	-18.00	0.41	47.97	54.00	-6.03	-	-	189	102	V
			* 5.35042	31.26	RMS	34.50	-18.00	0.41	48.17	54.00	-5.83	-	-	189	102	V
802.11ax (HE40)	5310	MIMO	* 5.35002	41.86	Pk	34.50	-18.00	0.00	58.36	-	-	74.00	-15.64	252	107	H
			* 5.35008	47.07	Pk	34.50	-18.00	0.00	63.57	-	-	74.00	-10.43	252	107	H
			* 5.35002	30.31	RMS	34.50	-18.00	0.41	47.22	54.00	-6.78	-	-	252	107	H
			* 5.3504	30.92	RMS	34.50	-18.00	0.41	47.83	54.00	-6.17	-	-	252	107	H
			* 5.35002	50.61	Pk	34.50	-18.00	0.00	67.11	-	-	74.00	-6.89	190	103	V
			* 5.35008	51.16	Pk	34.50	-18.00	0.00	67.66	-	-	74.00	-6.34	190	103	V
			* 5.35002	34.25	RMS	34.50	-18.00	0.41	51.16	54.00	-2.84	-	-	190	103	V
			* 5.35012	34.67	RMS	34.50	-18.00	0.41	51.58	54.00	-2.42	-	-	190	103	V
802.11ax (HE80)	5290	MIMO	* 5.35002	45.27	Pk	34.50	-18.00	0.00	61.77	-	-	74.00	-12.23	245	100	H
			* 5.35086	47.24	Pk	34.50	-18.00	0.00	63.74	-	-	74.00	-10.26	245	100	H
			* 5.35002	30.92	RMS	34.50	-18.00	0.30	47.72	54.00	-6.28	-	-	245	100	H
			* 5.3501	31.47	RMS	34.50	-18.00	0.30	48.27	54.00	-5.73	-	-	245	100	H
			* 5.35002	43.75	Pk	34.50	-18.00	0.00	60.25	-	-	74.00	-13.75	194	100	V
			* 5.35922	50.80	Pk	34.50	-18.00	0.00	67.30	-	-	74.00	-6.70	194	100	V
			* 5.35002	31.11	RMS	34.50	-18.00	0.30	47.91	54.00	-6.09	-	-	194	100	V
			* 5.35116	32.16	RMS	34.50	-18.00	0.30	48.96	54.00	-5.04	-	-	194	100	V
802.11ax (HE160)	5250 Upper	MIMO	* 5.35002	37.81	Pk	34.50	-18.00	0.00	54.31	-	-	74.00	-19.69	188	110	H
			* 5.37832	45.86	Pk	34.50	-18.10	0.00	62.26	-	-	74.00	-11.74	188	110	H
			* 5.35002	29.20	RMS	34.50	-18.00	0.34	46.04	54.00	-7.96	-	-	188	110	H
			* 5.35042	29.41	RMS	34.50	-18.00	0.34	46.25	54.00	-7.75	-	-	188	110	H
			* 5.35002	42.56	Pk	34.50	-18.00	0.00	59.06	-	-	74.00	-14.94	190	104	V
			* 5.38184	51.07	Pk	34.50	-18.00	0.00	67.57	-	-	74.00	-6.43	190	104	V
			* 5.35002	31.91	RMS	34.50	-18.00	0.34	48.75	54.00	-5.25	-	-	190	104	V
			* 5.35026	32.35	RMS	34.50	-18.00	0.34	49.19	54.00	-4.81	-	-	190	104	V

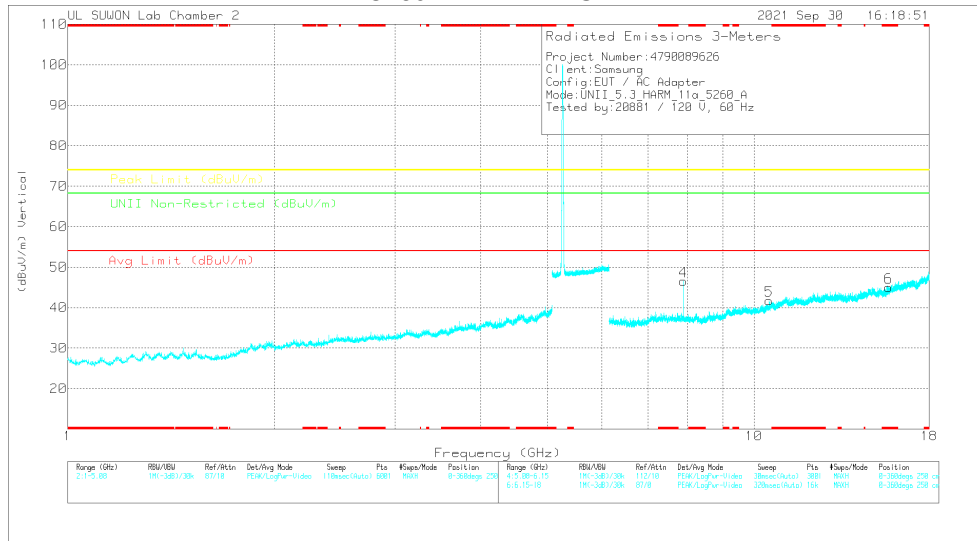
Note1. Pk - Peak detector, RMS - RMS detector

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5260 MHz)
5260 MHz HORIZONTAL



5260 MHz VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

5260 MHz DATA

Radiated Emissions

Frequency (GHz)	Reading (dBuV)	Det	3117_00160724	60Hz HPSDR	DC Corr (dB)	Corrected Reading (dBuV)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (m)	Polarity
7.89002	42.76	PK-U	36	-24.2	0	54.56	-	-	-	-	68.2	-13.64	244	207	H
7.89002	41.31	PK-U	36	-24.2	0	53.11	-	-	-	-	68.2	-15.09	185	103	V
10.52149	37.75	PK-U	37.8	-20.6	0	54.56	-	-	-	-	68.2	-13.22	138	100	H
10.52408	35.96	PK-U	37.8	-20.6	0	53.16	-	-	-	-	68.2	-15.04	192	216	V
* 15.73875	34.53	PK-U	40.2	-19.6	0	55.13	-	-	74	-18.87	-	-	0	100	H
* 15.71427	34.28	PK-U	40.2	-19.6	0	54.88	-	-	74	-19.12	-	-	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5260	MIMO	7.890	42.76	PK-U	36.00	-24.20	0.00	54.56	-	-	-	-	68.20	-13.64	244	207	H
			7.890	41.31	PK-U	36.00	-24.20	0.00	53.11	-	-	-	-	68.20	-15.09	185	101	V
			10.521	37.78	PK-U	37.80	-20.60	0.00	54.98	-	-	-	-	68.20	-13.22	138	100	H
			10.524	35.96	PK-U	37.80	-20.60	0.00	53.16	-	-	-	-	68.20	-15.04	192	216	V
			* 15.73875	34.53	PK-U	40.20	-19.60	0.00	55.13	-	-	74.00	-18.87	-	-	0	100	H
			* 15.71427	34.28	PK-U	40.20	-19.60	0.00	54.88	-	-	74.00	-19.12	-	-	0	100	V
	5300	MIMO	7.950	42.68	PK-U	36.00	-23.80	0.00	54.88	-	-	-	-	68.20	-13.32	246	215	H
			7.950	41.20	PK-U	36.00	-23.80	0.00	53.40	-	-	-	-	68.20	-14.80	196	109	V
			* 12.57715	31.49	PK-U	39.00	-20.40	0.00	50.09	-	-	74.00	-23.91	-	-	360	100	H
			* 10.96671	29.62	PK-U	38.20	-20.40	0.00	47.62	-	-	74.00	-26.38	-	-	360	100	V
			* 15.81163	34.02	PK-U	40.60	-19.20	0.00	55.42	-	-	74.00	-18.58	-	-	360	100	H
			* 15.81421	33.89	PK-U	40.60	-19.20	0.00	55.29	-	-	74.00	-18.71	-	-	360	100	V
	5320	MIMO	7.980	42.50	PK-U	36.00	-23.90	0.00	54.60	-	-	-	-	68.20	-13.60	242	233	H
			7.980	40.35	PK-U	36.00	-23.90	0.00	52.45	-	-	-	-	68.20	-15.75	195	118	V
			* 10.64088	32.99	PK-U	37.90	-19.60	0.00	51.29	-	-	74.00	-22.71	-	-	360	100	H
			* 10.64714	33.60	PK-U	37.90	-19.60	0.00	51.90	-	-	74.00	-22.10	-	-	360	100	V
			* 15.83554	34.26	PK-U	40.60	-19.30	0.00	55.56	-	-	74.00	-18.44	-	-	360	100	H
			* 15.9629	34.18	PK-U	40.60	-19.40	0.00	55.38	-	-	74.00	-18.62	-	-	360	100	V
	5300	MIMO	7.950	40.74	PK-U	36.00	-23.80	0.00	52.94	-	-	-	-	68.20	-15.26	301	113	H
			7.950	40.99	PK-U	36.00	-23.80	0.00	53.19	-	-	-	-	68.20	-15.01	181	100	V
			10.599	35.24	PK-U	37.90	-19.50	0.00	53.64	-	-	-	-	68.20	-14.56	128	101	H
			10.599	34.88	PK-U	37.90	-19.50	0.00	53.28	-	-	-	-	68.20	-14.92	189	101	V
			* 15.99839	35.39	PK-U	40.70	-19.40	0.00	56.69	-	-	74.00	-17.31	-	-	360	100	H
			* 15.88889	33.79	PK-U	40.50	-19.30	0.00	54.99	-	-	74.00	-19.01	-	-	0	100	V
802.11n (HT40) Spot-Check	5310	MIMO	7.965	41.47	PK-U	36.00	-23.90	0.00	53.57	-	-	-	-	68.20	-14.63	242	216	H
			7.965	39.97	PK-U	36.00	-23.90	0.00	52.07	-	-	-	-	68.20	-16.13	179	100	V
			* 10.61169	33.14	PK-U	37.90	-19.40	0.00	51.64	-	-	74.00	-22.36	-	-	0	100	H
			* 10.6209	32.77	PK-U	37.90	-19.40	0.00	51.27	-	-	74.00	-22.73	-	-	0	100	V
			* 15.94038	34.88	PK-U	40.60	-19.30	0.00	56.18	-	-	74.00	-17.82	-	-	0	100	H
			* 15.92571	33.49	PK-U	40.60	-19.20	0.00	54.89	-	-	74.00	-19.11	-	-	0	100	V
802.11ac (VHT80) Spot-Check	5290	MIMO	7.935	38.24	PK-U	36.00	-23.80	0.00	50.44	-	-	-	-	68.20	-17.76	300	104	H
			7.935	38.19	PK-U	36.00	-23.80	0.00	50.39	-	-	-	-	68.20	-17.81	179	101	V
			* 10.61316	33.08	PK-U	37.90	-19.50	0.00	51.48	-	-	74.00	-22.52	-	-	360	100	H
			* 10.61938	33.32	PK-U	37.90	-19.40	0.00	51.82	-	-	74.00	-22.18	-	-	360	100	V
			* 15.87308	34.28	PK-U	40.50	-19.50	0.00	55.28	-	-	74.00	-18.72	-	-	360	100	H
			* 15.88849	34.17	PK-U	40.50	-19.30	0.00	55.37	-	-	74.00	-18.63	-	-	360	100	V
802.11ac (VHT160) Spot-Check	5250	MIMO	7.875	39.81	PK-U	36.00	-24.30	0.00	50.51	-	-	-	-	68.20	-17.69	303	106	H
			7.874	37.53	PK-U	36.00	-24.30	0.00	49.53	-	-	-	-	68.20	-18.67	184	100	V
			10.501	33.48	PK-U	37.80	-20.60	0.00	50.68	-	-	-	-	68.20	-17.52	360	100	H
			10.499	33.62	PK-U	37.80	-20.70	0.00	50.72	-	-	-	-	68.20	-17.48	360	100	V
			* 15.75859	34.79	PK-U	40.30	-19.70	0.00	55.39	-	-	74.00	-18.61	-	-	360	100	H
			* 15.75907	34.11	PK-U	40.30	-19.70	0.00	54.71	-	-	74.00	-19.29	-	-	360	100	V

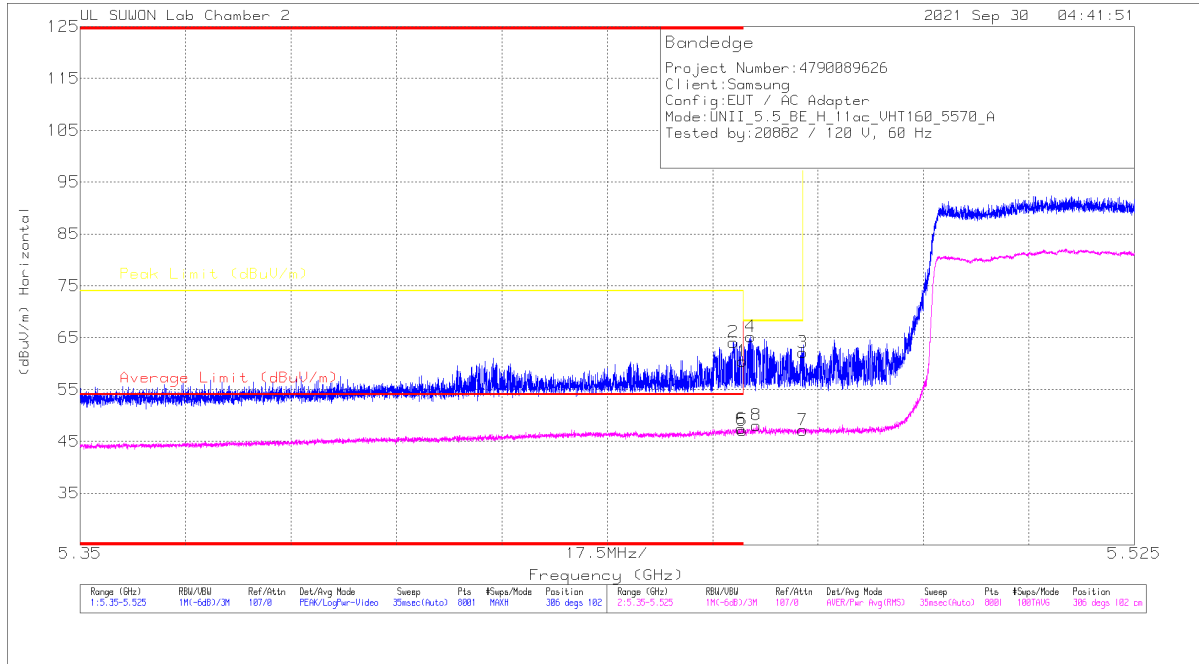
Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

11.3. TX ABOVE 1GHz 2Tx MODE IN THE 5.5 GHz BAND

BANDEDGE (WORST CASE: 802.11ac VHT160 / 5570 MHz LOWER SIDE)

HORIZONTAL PEAK AND AVERAGE DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_50168724	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.45999	43.83	PK	34.6	-18	0	60.43	-	-	74	-13.57	306	102	H
2	* 5.45943	47.63	PK	34.6	-18.1	0	64.13	-	-	74	-9.87	306	102	H
3	5.46998	45.53	PK	34.6	-18	0	62.13	-	-	68.2	-6.07	306	102	H
4	5.46128	48.69	PK	34.6	-18.1	0	65.19	-	-	68.2	-3.01	306	102	H
5	* 5.45999	30.17	RMS	34.6	-18	32	47.09	54	-6.91	-	-	306	102	H
6	* 5.45973	30.62	RMS	34.6	-18.1	32	47.44	54	-6.56	-	-	306	102	H
7	5.46998	30.24	RMS	34.6	-18	32	47.16	-	-	-	-	306	102	H
8	5.46224	31.29	RMS	34.6	-18.1	32	48.11	-	-	-	-	306	102	H

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

PK - Peak detector

RMS - RMS detection

BANDEDGE TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5500	MIMO	* 5.45999	36.17	Pk	34.60	-18.00	0.00	52.77	-	-	74.00	-21.23	313	103	H
			* 5.40963	39.17	Pk	34.60	-18.10	0.00	55.67	-	-	74.00	-18.33	313	103	H
			5.46998	37.33	Pk	34.60	-18.00	0.00	53.93	-	-	68.20	-14.27	313	103	H
			5.46885	42.85	Pk	34.60	-18.00	0.00	59.45	-	-	68.20	-8.75	313	103	H
			* 5.45999	27.22	RMS	34.60	-18.00	0.16	43.98	54.00	-10.02	-	-	313	103	H
			* 5.45749	27.81	RMS	34.60	-18.00	0.16	44.57	54.00	-9.43	-	-	313	103	H
			5.46998	28.72	RMS	34.60	-18.00	0.16	45.48	-	-	-	-	313	103	H
			5.46944	28.55	RMS	34.60	-18.00	0.16	45.31	-	-	-	-	313	103	H
			* 5.45999	37.44	Pk	34.60	-18.00	0.00	54.04	-	-	74.00	-19.96	186	100	V
			* 5.41197	40.92	Pk	34.60	-18.00	0.00	57.52	-	-	74.00	-16.48	186	100	V
			5.46998	38.10	Pk	34.60	-18.00	0.00	54.70	-	-	68.20	-13.50	186	100	V
			5.46981	43.99	Pk	34.60	-18.00	0.00	60.59	-	-	68.20	-7.61	186	100	V
			* 5.45999	28.09	RMS	34.60	-18.00	0.16	44.85	54.00	-9.15	-	-	186	100	V
			* 5.45633	28.38	RMS	34.60	-18.10	0.16	45.04	54.00	-8.96	-	-	186	100	V
			5.46998	30.51	RMS	34.60	-18.00	0.16	47.27	-	-	-	-	186	100	V
			5.46996	30.24	RMS	34.60	-18.00	0.16	47.00	-	-	-	-	186	100	V
			5.72502	39.60	Pk	34.70	-17.40	0.00	56.90	-	-	68.20	-11.30	309	101	H
			5.72564	42.68	Pk	34.70	-17.40	0.00	59.98	-	-	68.20	-8.22	309	101	H
			5.72502	41.43	Pk	34.70	-17.40	0.00	58.73	-	-	68.20	-9.47	206	105	V
			5.72505	41.80	Pk	34.70	-17.40	0.00	59.10	-	-	68.20	-9.10	206	105	V
802.11n (HT20)	5500	MIMO	* 5.45999	36.71	Pk	34.60	-18.00	0.00	53.31	-	-	74.00	-20.69	314	104	H
			* 5.44384	40.09	Pk	34.60	-18.10	0.00	56.59	-	-	74.00	-17.41	314	104	H
			5.46998	38.20	Pk	34.60	-18.00	0.00	54.80	-	-	68.20	-13.40	314	104	H
			5.46813	44.81	Pk	34.60	-18.00	0.00	61.41	-	-	68.20	-6.79	314	104	H
			* 5.45999	27.48	RMS	34.60	-18.00	0.17	44.25	54.00	-9.75	-	-	314	104	H
			* 5.45973	27.89	RMS	34.60	-18.10	0.17	44.56	54.00	-9.44	-	-	314	104	H
			5.46998	28.53	RMS	34.60	-18.00	0.17	45.30	-	-	-	-	314	104	H
			5.46963	29.15	RMS	34.60	-18.00	0.17	45.92	-	-	-	-	314	104	H
			* 5.45999	35.76	Pk	34.60	-18.00	0.00	52.36	-	-	74.00	-21.64	187	100	V
			* 5.39721	39.82	Pk	34.50	-18.10	0.00	56.22	-	-	74.00	-17.78	187	100	V
			5.46998	40.97	Pk	34.60	-18.00	0.00	57.57	-	-	68.20	-10.63	187	100	V
			5.46581	44.58	Pk	34.60	-18.10	0.00	61.08	-	-	68.20	-7.12	187	100	V
			* 5.45999	27.81	RMS	34.60	-18.00	0.17	44.58	54.00	-9.42	-	-	187	100	V
			* 5.45725	28.29	RMS	34.60	-18.00	0.17	45.06	54.00	-9.94	-	-	187	100	V
			5.46998	30.95	RMS	34.60	-18.00	0.17	47.72	-	-	-	-	187	100	V
			5.46996	31.01	RMS	34.60	-18.00	0.17	47.78	-	-	-	-	187	100	V
			5.72502	41.50	Pk	34.70	-17.40	0.00	58.80	-	-	68.20	-9.40	315	101	H
			5.72506	46.73	Pk	34.70	-17.40	0.00	64.03	-	-	68.20	-4.17	315	101	H
			5.72502	38.55	Pk	34.70	-17.40	0.00	56.85	-	-	68.20	-11.35	206	104	H
			5.72538	44.69	Pk	34.70	-17.40	0.00	61.99	-	-	68.20	-6.21	206	104	H
802.11n (HT40)	5510	MIMO	* 5.45999	36.53	Pk	34.60	-18.00	0.00	53.13	-	-	74.00	-20.87	316	104	H
			* 5.45992	41.48	Pk	34.60	-18.00	0.00	58.08	-	-	74.00	-15.92	316	104	H
			5.46998	43.75	Pk	34.60	-18.00	0.00	60.35	-	-	68.20	-7.85	316	104	H
			5.46589	48.01	Pk	34.60	-18.10	0.00	64.51	-	-	68.20	-3.69	316	104	H
			* 5.45999	27.83	RMS	34.60	-18.00	0.21	44.64	54.00	-9.36	-	-	316	104	H
			* 5.45948	28.51	RMS	34.60	-18.10	0.21	45.22	54.00	-9.78	-	-	316	104	H
			5.46998	29.89	RMS	34.60	-18.00	0.21	46.70	-	-	-	-	316	104	H
			5.46972	30.63	RMS	34.60	-18.00	0.21	47.44	-	-	-	-	316	104	H
			* 5.45999	38.92	Pk	34.60	-18.00	0.00	55.52	-	-	74.00	-18.48	185	100	V
			* 5.45887	40.93	Pk	34.60	-18.10	0.00	57.43	-	-	74.00	-16.57	185	100	V
			5.46998	41.47	Pk	34.60	-18.00	0.00	58.07	-	-	68.20	-10.13	185	100	V
			5.46935	44.39	Pk	34.60	-18.00	0.00	60.99	-	-	68.20	-7.21	185	100	V
			* 5.45999	28.85	RMS	34.60	-18.00	0.21	45.66	54.00	-8.34	-	-	185	100	V
			* 5.45784	28.95	RMS	34.60	-18.10	0.21	45.66	54.00	-8.34	-	-	185	100	V
			5.46998	30.99	RMS	34.60	-18.00	0.21	47.80	-	-	-	-	185	100	V
			5.46972	31.29	RMS	34.60	-18.00	0.21	48.10	-	-	-	-	185	100	V
			5.72502	38.10	Pk	34.70	-17.40	0.00	55.40	-	-	68.20	-12.80	310	100	H
			* 5.78452	40.71	Pk	34.80	-17.30	0.00	58.21	-	-	68.20	-9.99	310	100	H
			5.72502	37.65	Pk	34.70	-17.40	0.00	54.95	-	-	68.20	-13.25	206	106	V
			5.72745	41.09	Pk	34.70	-17.30	0.00	58.49	-	-	68.20	-9.71	206	106	V
802.11ac (VHT80)	5530	MIMO	* 5.45999	38.63	Pk	34.60	-18.00	0.00	55.23	-	-	74.00	-18.77	318	101	H
			* 5.45207	43.20	Pk	34.60	-18.10	0.00	59.70	-	-	74.00	-14.30	318	101	H
			5.46998	39.19	Pk	34.60	-18.00	0.00	55.79	-	-	68.20	-12.41	318	101	H
			5.46303	47.71	Pk	34.60	-18.10	0.00	64.21	-	-	68.20	-3.99	318	101	H
			* 5.45999	28.97	RMS	34.60	-18.00	0.25	45.82	54.00	-9.18	-	-	318	100	H
			* 5.45986	29.50	RMS	34.60	-18.00	0.25	46.35	54.00	-7.65	-	-	318	100	H
			5.46998	29.74	RMS	34.60	-18.00	0.25	46.59	-	-	-	-	318	100	H
			5.46972	30.00	RMS	34.60	-18.00	0.25	46.85	-	-	-	-	318	100	H
			* 5.45999	41.33	Pk	34.60	-18.00	0.00	57.93	-	-	74.00	-16.07	187	100	V
			* 5.45594	44.07	Pk	34.60	-18.10	0.00	60.57	-	-	74.00	-13.43	187	100	V
			5.46998	40.97	Pk	34.60	-18.00	0.00	57.57	-	-	68.20	-10.63	187	100	V
			5.46648	43.19	Pk	34.60	-18.10	0.00	59.69	-	-	68.20	-8.51	187	100	V
			* 5.45999	31.27	RMS	34.60	-18.00	0.25	48.12	54.00	-5.88	-	-	187	100	V
			* 5.458	31.63	RMS	34.60	-18.10	0.25	48.38	54.00	-5.62	-	-	187	100	V
			5.46998	31.70	RMS	34.60	-18.00	0.25	48.55	-	-	-	-	187	100	V
			5.46913	32.31	RMS	34.60	-18.00	0.25	49.16	-	-	-	-	187	100	V
			5.72502	37.16	Pk	34.70	-17.40	0.00	54.46	-	-	68.20	-13.74	317	117	H
			5.79070	39.54	Pk	34.80	-17.30	0.00	57.04	-	-	68.20	-11.16	317	117	H
			5.72502	38.10	Pk	34.70	-17.40	0.00	55.40	-	-	68.20	-12.80	206	101	V
			5.81531	40.80	Pk	34.90	-17.30	0.00	58.40	-	-	68.20	-9.80	206	101	V

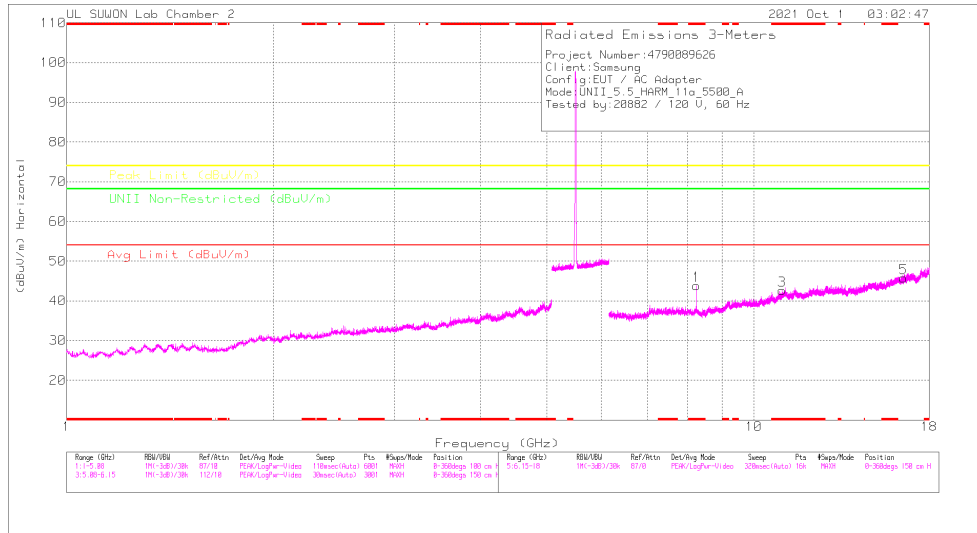
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11ac (VHT160)	5570 Lower	MIMO	* 5.45999	43.83	Pk	34.60	-18.00	0.00	60.43	-	-	74.00	-13.57	306	102	H
			* 5.45843	47.63	Pk	34.60	-18.10	0.00	64.13	-	-	74.00	-9.87	306	102	H
			5.46998	45.53	Pk	34.60	-18.00	0.00	62.13	-	-	68.20	-6.07	306	102	H
			5.46128	48.69	Pk	34.60	-18.10	0.00	65.19	-	-	68.20	-3.01	306	102	H
			* 5.45999	30.17	RMS	34.60	-18.00	0.32	47.09	54.00	-6.91	-	-	306	102	H
			* 5.45973	30.62	RMS	34.60	-18.10	0.32	47.44	54.00	-6.56	-	-	306	102	H
			5.46998	30.24	RMS	34.60	-18.00	0.32	47.16	-	-	-	-	306	102	H
			5.46224	31.29	RMS	34.60	-18.10	0.32	48.11	-	-	-	-	306	102	H
			* 5.45999	41.43	Pk	34.60	-18.00	0.00	58.03	-	-	74.00	-15.97	186	100	V
			* 5.45863	47.86	Pk	34.60	-18.10	0.00	64.36	-	-	74.00	-9.64	186	100	V
			5.46998	41.37	Pk	34.60	-18.00	0.00	57.97	-	-	68.20	-10.23	186	100	V
			5.46113	47.23	Pk	34.60	-18.10	0.00	63.73	-	-	68.20	-4.47	186	100	V
	5570 Upper	MIMO	* 5.45999	31.60	RMS	34.60	-18.00	0.32	48.52	54.00	-5.48	-	-	186	100	V
			* 5.4587	32.32	RMS	34.60	-18.10	0.32	49.14	54.00	-4.86	-	-	186	100	V
			5.46998	31.15	RMS	34.60	-18.00	0.32	48.07	-	-	-	-	186	100	V
			5.46605	32.17	RMS	34.60	-18.10	0.32	48.99	-	-	-	-	186	100	V
			5.72502	39.24	Pk	34.70	-17.40	0.00	56.54	-	-	68.20	-11.66	228	100	H
			5.72633	41.06	Pk	34.70	-17.30	0.00	58.46	-	-	68.20	-9.74	228	100	H
			5.72502	40.03	Pk	34.70	-17.40	0.00	57.33	-	-	68.20	-10.87	188	111	V
			5.72830	42.90	Pk	34.70	-17.40	0.00	60.20	-	-	68.20	-8.00	188	111	V
802.11ax (HE20)	5500	MIMO	* 5.45999	38.62	Pk	34.60	-18.00	0.00	55.22	-	-	74.00	-18.78	312	212	H
			* 5.41991	40.01	Pk	34.60	-18.10	0.00	56.51	-	-	74.00	-17.49	312	212	H
			5.46998	40.42	Pk	34.60	-18.00	0.00	57.02	-	-	68.20	-11.18	312	212	H
			5.46690	41.71	Pk	34.60	-18.10	0.00	58.21	-	-	68.20	-9.99	312	212	H
			* 5.45999	27.01	RMS	34.60	-18.00	0.41	44.02	54.00	-9.98	-	-	312	212	H
			* 5.45596	27.83	RMS	34.60	-18.10	0.41	44.74	54.00	-9.26	-	-	312	212	H
			5.46998	28.49	RMS	34.60	-18.00	0.41	45.50	-	-	-	-	312	212	H
			5.46878	28.64	RMS	34.60	-18.00	0.41	45.65	-	-	-	-	312	212	H
			* 5.45999	37.34	Pk	34.60	-18.00	0.00	53.94	-	-	74.00	-20.06	191	102	V
			* 5.45159	39.89	Pk	34.60	-18.10	0.00	56.39	-	-	74.00	-17.61	191	102	V
			5.46998	38.60	Pk	34.60	-18.00	0.00	55.20	-	-	68.20	-13.00	191	102	V
			5.46845	43.35	Pk	34.60	-18.00	0.00	59.95	-	-	68.20	-8.25	191	102	V
	5700	MIMO	* 5.45999	27.32	RMS	34.60	-18.00	0.41	44.33	54.00	-9.67	-	-	191	102	V
			* 5.45817	28.29	RMS	34.60	-18.10	0.41	45.20	54.00	-8.80	-	-	191	102	V
			5.46998	28.96	RMS	34.60	-18.00	0.41	45.97	-	-	-	-	191	102	V
			5.46977	29.21	RMS	34.60	-18.00	0.41	46.22	-	-	-	-	191	102	V
			5.72502	42.01	Pk	34.70	-17.40	0.00	59.31	-	-	68.20	-8.89	242	107	H
			5.72509	45.15	Pk	34.70	-17.40	0.00	62.45	-	-	68.20	-5.75	242	107	H
			5.72502	40.12	Pk	34.70	-17.40	0.00	57.42	-	-	68.20	-10.78	190	100	V
			5.72564	46.29	Pk	34.70	-17.40	0.00	63.59	-	-	68.20	-4.61	190	100	V
802.11ax (HE40)	5510	MIMO	* 5.45999	37.64	Pk	34.60	-18.00	0.00	54.24	-	-	74.00	-19.76	311	104	H
			* 5.45778	41.81	Pk	34.60	-18.10	0.00	58.31	-	-	74.00	-15.69	311	104	H
			5.46998	46.20	Pk	34.60	-18.00	0.00	62.80	-	-	68.20	-5.40	311	104	H
			5.46992	46.56	Pk	34.60	-18.00	0.00	63.16	-	-	68.20	-5.04	311	104	H
			* 5.45999	27.77	RMS	34.60	-18.00	0.41	44.78	54.00	-9.22	-	-	311	104	H
			* 5.45973	28.29	RMS	34.60	-18.10	0.41	45.20	54.00	-8.80	-	-	311	104	H
			5.46998	30.30	RMS	34.60	-18.00	0.41	47.31	-	-	-	-	311	104	H
			5.46996	30.10	RMS	34.60	-18.00	0.41	47.11	-	-	-	-	311	104	H
			* 5.45999	36.83	Pk	34.60	-18.00	0.00	53.43	-	-	74.00	-20.57	189	102	V
			* 5.4123	40.63	Pk	34.60	-18.00	0.00	57.23	-	-	74.00	-16.77	189	102	V
			5.46998	38.79	Pk	34.60	-18.00	0.00	55.39	-	-	68.20	-12.81	189	102	V
			5.46994	41.44	Pk	34.60	-18.00	0.00	58.04	-	-	68.20	-10.16	189	102	V
	5670	MIMO	* 5.45999	28.15	RMS	34.60	-18.00	0.41	45.16	54.00	-8.84	-	-	189	102	V
			* 5.4578	28.47	RMS	34.60	-18.10	0.41	45.38	54.00	-8.62	-	-	189	102	V
			5.46998	29.58	RMS	34.60	-18.00	0.41	46.59	-	-	-	-	189	102	V
			5.46885	29.77	RMS	34.60	-18.00	0.41	46.78	-	-	-	-	189	102	V
			5.72502	38.68	Pk	34.70	-17.40	0.00	55.98	-	-	68.20	-12.22	308	102	H
			5.73544	40.68	Pk	34.70	-17.30	0.00	58.08	-	-	68.20	-10.12	308	102	H
			5.72502	36.48	Pk	34.70	-17.40	0.00	53.78	-	-	68.20	-14.42	188	152	V
			5.80945	40.19	Pk	34.80	-17.30	0.00	57.69	-	-	68.20	-10.51	188	152	V
802.11ax (HE80)	5530	MIMO	* 5.45999	41.23	Pk	34.60	-18.00	0.00	57.83	-	-	74.00	-16.17	313	104	H
			* 5.45491	43.85	Pk	34.60	-18.10	0.00	60.35	-	-	74.00	-13.65	313	104	H
			5.46998	39.44	Pk	34.60	-18.00	0.00	56.04	-	-	68.20	-12.16	313	104	H
			5.46966	47.82	Pk	34.60	-18.00	0.00	64.42	-	-	68.20	-3.78	313	104	H
			* 5.45999	29.21	RMS	34.60	-18.00	0.30	46.11	54.00	-7.89	-	-	313	104	H
			* 5.45966	29.54	RMS	34.60	-18.10	0.30	46.34	54.00	-7.66	-	-	313	104	H
			5.46998	29.74	RMS	34.60	-18.00	0.30	46.64	-	-	-	-	313	104	H
			5.46898	30.45	RMS	34.60	-18.00	0.30	47.35	-	-	-	-	313	104	H
			* 5.45999	39.92	Pk	34.60	-18.00	0.00	56.52	-	-	74.00	-17.48	188	101	V
			* 5.45585	43.94	Pk	34.60	-18.10	0.00	60.44	-	-	74.00	-13.56	188	101	V
			5.46998	40.11	Pk	34.60	-18.00	0.00	56.71	-	-	68.20	-11.49	188	101	V
			5.46285	43.74	Pk	34.60	-18.10	0.00	60.24	-	-	68.20	-7.96	188	101	V
	5610	MIMO	* 5.45999	30.44	RMS	34.60	-18.00	0.30	47.34	54.00	-6.66	-	-	188	101	V
			* 5.45968	30.87	RMS	34.60	-18.10	0.30	47.67	54.00	-6.33	-	-	188	101	V
			5.46998	30.62	RMS	34.60	-18.00	0.30	47.52	-	-	-	-	188	101	V
			5.46856	31.11	RMS	34.60	-18.00	0.30	48.01	-	-	-	-	188	101	V
			5.72502	37.60	Pk	34.70	-17.40	0.00	54.90	-	-	68.20	-13.30	309	101	H
			5.74973	40.34	Pk	34.70	-17.30	0.00	57.74	-	-	68.20	-10.46	309	101	H
			5.72502	36.79	Pk	34.70	-17.40	0.00	54.09	-	-	68.20	-14.11	189	100	V
			5.79247	39.95	Pk	34.80	-17.30	0.00	57.45	-	-	68.20	-10.75	189	100	V

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11ax (HE160)	5570 Lower	MIMO	* 5.45999	39.56	Pk	34.60	-18.00	0.00	56.16	-	-	74.00	-17.84	312	104	H
			* 5.45719	43.89	Pk	34.60	-18.00	0.00	60.49	-	-	74.00	-13.51	312	104	H
			5.46998	38.91	Pk	34.60	-18.00	0.00	55.51	-	-	68.20	-12.69	312	104	H
			5.46701	44.02	Pk	34.60	-18.10	0.00	60.52	-	-	68.20	-7.68	312	104	H
			* 5.45999	28.54	RMS	34.60	-18.00	0.34	45.48	54.00	-8.52	-	-	312	104	H
			* 5.45605	29.41	RMS	34.60	-18.10	0.34	46.25	54.00	-7.75	-	-	312	104	H
			5.46998	28.99	RMS	34.60	-18.00	0.34	45.93	-	-	-	-	312	104	H
			5.46237	29.72	RMS	34.60	-18.10	0.34	46.56	-	-	-	-	312	104	H
			* 5.45999	39.44	Pk	34.60	-18.00	0.00	56.04	-	-	74.00	-17.96	189	103	V
			* 5.43453	44.39	Pk	34.60	-18.10	0.00	60.89	-	-	74.00	-13.11	189	103	V
			5.46998	40.51	Pk	34.60	-18.00	0.00	57.11	-	-	68.20	-11.09	189	103	V
			5.46478	43.89	Pk	34.60	-18.10	0.00	60.39	-	-	68.20	-7.81	189	103	V
			* 5.45999	30.08	RMS	34.60	-18.00	0.34	47.02	54.00	-6.98	-	-	189	103	V
			* 5.45633	30.75	RMS	34.60	-18.10	0.34	47.59	54.00	-6.41	-	-	189	103	V
			5.46998	29.89	RMS	34.60	-18.00	0.34	46.83	-	-	-	-	189	103	V
			5.46508	30.91	RMS	34.60	-18.10	0.34	47.75	-	-	-	-	189	103	V
	5570 Upper	MIMO	5.72502	37.57	Pk	34.70	-17.40	0.00	54.87	-	-	68.20	-13.33	313	100	H
			5.72672	43.46	Pk	34.70	-17.30	0.00	60.86	-	-	68.20	-7.34	313	100	H
			5.72502	38.39	Pk	34.70	-17.40	0.00	55.69	-	-	68.20	-12.51	190	101	V
			5.72878	41.82	Pk	34.70	-17.40	0.00	59.12	-	-	68.20	-9.08	190	101	V

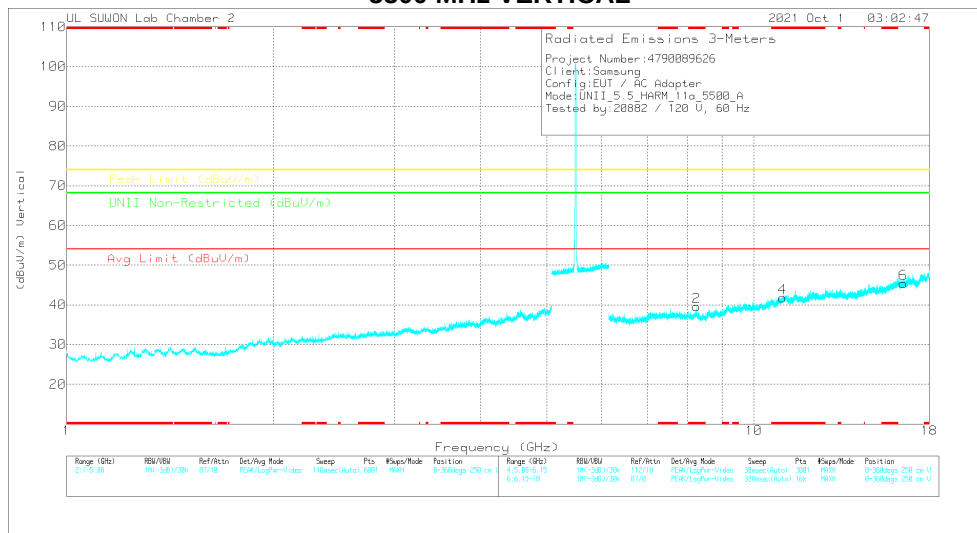
Note1. Pk - Peak detector, RMS - RMS detector

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5500 MHz) **5500 MHz HORIZONTAL**



5500 MHz VERTICAL



Note. Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

5500 MHz DATA

Radiated Emissions

Frequency (GHz)	Meas. Reading (dBm)	Det	317_0016724	6GHz_HF988	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	Margin (dB)	UNII Non-Restricted (dBm)	Margin (dB)	Altitude (m)	Height (m)	Polarity
* 8.25004	39.46	PK-U	35.9	-23.1	0	32.26	-	-	74	-21.74	-	-	204	218	H
* 8.24998	31.49	ADR	35.9	-23.1	-16	44.45	54	-9.55	-	-	-	-	204	218	H
* 8.2502	37.31	PK-U	35.9	-23.1	0	50.11	-	-	74	-23.89	-	-	208	100	V
* 8.25004	27.99	ADR	35.9	-23.1	-16	40.95	54	-13.05	-	-	-	-	208	100	V
* 11.00174	33.9	PK-U	38.2	-20.4	0	51.7	-	-	74	-22.3	-	-	360	100	H
* 10.99595	34.13	PK-U	38.2	-20.4	0	51.93	-	-	74	-22.07	-	-	360	100	V
16.49805	34.74	PK-U	40.8	-19.6	0	55.94	-	-	-	-	68.2	-12.26	360	100	H
16.49334	34.81	PK-U	40.8	-19.7	0	55.91	-	-	-	-	68.2	-12.29	360	100	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

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5500	MIMO	* 8.25004	39.46	PK-U	35.90	-23.10	0.00	52.26	-	-	74.00	-21.74	-	-	204	218	H
			* 8.24998	31.49	ADR	35.90	-23.10	0.16	44.45	54.00	-9.55	-	-	-	-	204	218	H
			* 8.2502	37.31	PK-U	35.90	-23.10	0.00	50.11	-	-	74.00	-23.89	-	-	208	100	V
			* 8.25004	27.99	ADR	35.90	-23.10	0.16	40.95	54.00	-13.05	-	-	-	-	208	100	V
			* 11.00174	33.90	PK-U	38.20	-20.40	0.00	51.70	-	-	74.00	-22.30	-	-	360	100	H
			* 10.99558	34.13	PK-U	38.20	-20.40	0.00	51.93	-	-	74.00	-22.07	-	-	360	100	V
			16.498	34.74	PK-U	40.80	-19.60	0.00	55.94	-	-	-	-	68.20	-12.26	360	100	H
			16.493	34.81	PK-U	40.80	-19.70	0.00	55.91	-	-	-	-	68.20	-12.29	360	100	V
			* 8.35912	37.51	PK-U	36.00	-23.60	0.00	49.91	-	-	74.00	-24.09	-	-	204	218	H
			* 8.37014	29.12	ADR	36.00	-23.60	0.16	41.68	54.00	-12.32	-	-	-	-	204	218	H
			* 8.37036	36.16	PK-U	36.00	-23.60	0.00	48.55	-	-	74.00	-25.44	-	-	214	104	V
			* 8.36999	26.23	ADR	36.00	-23.60	0.16	38.79	54.00	-15.21	-	-	-	-	214	104	V
	5580	MIMO	* 11.16096	34.08	PK-U	38.30	-19.60	0.00	52.78	-	-	74.00	-21.22	-	-	360	100	H
			* 11.16946	34.12	PK-U	38.30	-19.60	0.00	52.82	-	-	74.00	-21.18	-	-	360	100	V
			16.739	34.34	PK-U	41.10	-19.10	0.00	56.34	-	-	-	-	68.20	-11.86	360	100	H
			16.731	35.02	PK-U	41.10	-19.10	0.00	57.02	-	-	-	-	68.20	-11.18	360	100	V
			8.551	35.29	PK-U	36.10	-22.30	0.00	49.09	-	-	-	-	68.20	-19.11	360	100	H
			8.550	35.19	PK-U	36.10	-22.40	0.00	48.89	-	-	-	-	68.20	-19.31	360	100	V
			* 11.40014	34.50	PK-U	38.30	-20.20	0.00	52.60	-	-	74.00	-21.40	-	-	360	100	H
			* 11.39895	34.33	PK-U	38.30	-20.20	0.00	52.43	-	-	74.00	-21.57	-	-	360	100	V
			17.099	34.31	PK-U	41.00	-18.50	0.00	56.81	-	-	-	-	68.20	-11.39	360	100	H
			17.101	33.89	PK-U	41.00	-18.50	0.00	56.39	-	-	-	-	68.20	-11.81	360	100	V
	5700	MIMO	8.589	34.85	PK-U	36.10	-21.80	0.00	49.15	-	-	-	-	68.20	-19.05	201	111	H
			8.573	34.51	PK-U	36.10	-21.90	0.00	48.71	-	-	-	-	68.20	-19.49	138	162	V
			* 11.43704	34.87	PK-U	38.30	-20.10	0.00	53.07	-	-	74.00	-20.93	-	-	360	100	H
			* 11.44762	34.64	PK-U	38.30	-20.10	0.00	52.84	-	-	74.00	-21.16	-	-	360	100	V
			17.155	33.67	PK-U	40.90	-18.30	0.00	56.27	-	-	-	-	68.20	-11.93	360	100	H
			17.157	34.04	PK-U	40.90	-18.30	0.00	56.64	-	-	-	-	68.20	-11.56	360	100	V
802.11n (HT20) Spot-Check	5500	MIMO	* 8.24996	39.15	PK-U	35.90	-23.10	0.00	51.95	-	-	74.00	-22.05	-	-	203	212	H
			* 8.24966	36.91	PK-U	35.90	-23.10	0.00	49.71	-	-	74.00	-24.29	-	-	205	100	V
			* 8.24996	30.21	ADR	35.90	-23.10	0.00	43.18	54.00	-10.82	-	-	-	-	203	212	H
			* 8.24994	27.87	ADR	35.90	-23.10	0.00	40.84	54.00	-13.16	-	-	-	-	205	100	V
			* 11.04631	34.20	PK-U	38.20	-20.40	0.00	52.00	-	-	74.00	-22.00	-	-	0	100	H
			* 11.04692	34.08	PK-U	38.20	-20.40	0.00	51.88	-	-	74.00	-22.12	-	-	360	100	V
			16.531	34.53	PK-U	40.90	-19.40	0.00	56.03	-	-	-	-	68.20	-12.17	0	100	H
			16.519	35.06	PK-U	40.90	-19.50	0.00	56.46	-	-	-	-	68.20	-11.74	360	100	V
	5500	MIMO	* 8.24911	36.75	PK-U	35.90	-23.10	0.00	49.55	-	-	74.00	-24.45	-	-	0	100	H
			* 8.25137	35.55	PK-U	35.90	-23.00	0.00	48.45	-	-	74.00	-25.55	-	-	0	100	V
			* 11.00877	33.71	PK-U	38.20	-20.40	0.00	51.51	-	-	74.00	-22.49	-	-	0	100	H
			* 11.00728	33.93	PK-U	38.20	-20.40	0.00	51.73	-	-	74.00	-22.27	-	-	0	100	V
			16.502	34.63	PK-U	40.80	-19.60	0.00	55.83	-	-	-	-	68.20	-12.37	0	100	H
			16.502	34.31	PK-U	40.80	-19.60	0.00	55.51	-	-	-	-	68.20	-12.69	0	100	V
802.11ax (HE40) 9RU Spot-Check	5510	MIMO	* 8.26206	34.87	PK-U	35.90	-22.90	0.00	47.87	-	-	74.00	-26.13	-	-	360	100	H
			* 8.25904	35.19	PK-U	35.90	-23.00	0.00	48.09	-	-	74.00	-25.91	-	-	360	100	V
			* 11.0222	33.91	PK-U	38.20	-20.40	0.00	51.71	-	-	74.00	-22.29	-	-	360	100	H
			* 11.02185	34.23	PK-U	38.20	-20.40	0.00	52.03	-	-	74.00	-21.97	-	-	360	100	V
			16.529	34.78	PK-U	40.90	-19.50	0.00	56.18	-	-	-	-	68.20	-12.02	360	100	H
			16.529	34.59	PK-U	40.90	-19.50	0.00	55.99	-	-	-	-	68.20	-12.21	360	100	V
802.11ax (HE80) 0RU Spot-Check	5530	MIMO	* 8.28023	34.93	PK-U	35.90	-22.80	0.00	48.03	-	-	74.00	-25.97	-	-	360	100	H
			* 8.27966	35.41	PK-U	35.90	-22.80	0.00	48.51	-	-	74.00	-25.49	-	-	360	100	V
			* 11.06749	33.76	PK-U	38.20	-20.40	0.00	51.56	-	-	74.00	-22.44	-	-	360	100	H
			* 11.07047	33.90	PK-U	38.20	-20.30	0.00	51.80	-	-	74.00	-22.20	-	-	360	100	V
			16.604	34.23	PK-U	41.00	-19.10	0.00	56.13	-	-	-	-	68.20	-12.07	360	100	H
			16.604	34.51	PK-U	41.00	-19.10	0.00	56.41	-	-	-	-	68.20	-11.79	360	100	V
802.11ax (HE160) 0RU Spot-Check	5570 Lower	MIMO	* 8.35356	35.13	PK-U	36.00	-23.40	0.00	47.73	-	-	74.00	-26.27	-	-	360	100	H
			* 8.3545	34.79	PK-U	36.00	-23.40	0.00	47.39	-	-	74.00	-26.61	-	-	360	100	V
			* 11.14059	34.08	PK-U	38.30	-19.60	0.00	52.78	-	-	74.00	-21.22	-	-	360	100	H
			* 11.14183	33.70	PK-U	38.30	-19.60	0.00	52.40	-	-	74.00	-21.60	-	-	360	100	V
			16.712	34.29	PK-U	41.10	-19.10	0.00	56.29	-	-	-	-	68.20	-11.91	360	100	H
			16.711	34.69	PK-U	41.10	-19.20	0.00	56.59	-	-	-	-	68.20	-11.61	360	100	V
802.11ax (HE160) 0RU Spot-Check	5570 Upper	MIMO	* 8.3562	35.38	PK-U	36.00	-23.50	0.00	47.88	-	-	74.00	-26.12	-	-	360	100	H
			* 8.35478	35.08	PK-U	36.00	-23.40	0.00	47.68	-	-	74.00	-26.32	-	-	360	100	V
			* 11.144018	34.13	PK-U	38.30	-20.10	0.00	52.33	-	-	74.00	-21.67	-	-	360	100	H
			* 11.144152	34.50	PK-U	38.30	-20.10	0.00	52.70	-	-	74.00	-21.30	-	-	360	100	V
			16.709	34.41	PK-U	41.10	-19.10	0.00	56.41	-	-	-	-	68.20	-11.79	360	100	H
			16.711	34.25	PK-U	41.10	-19.10	0.00	56.25	-	-	-	-	68.20	-11.95	360	100	V

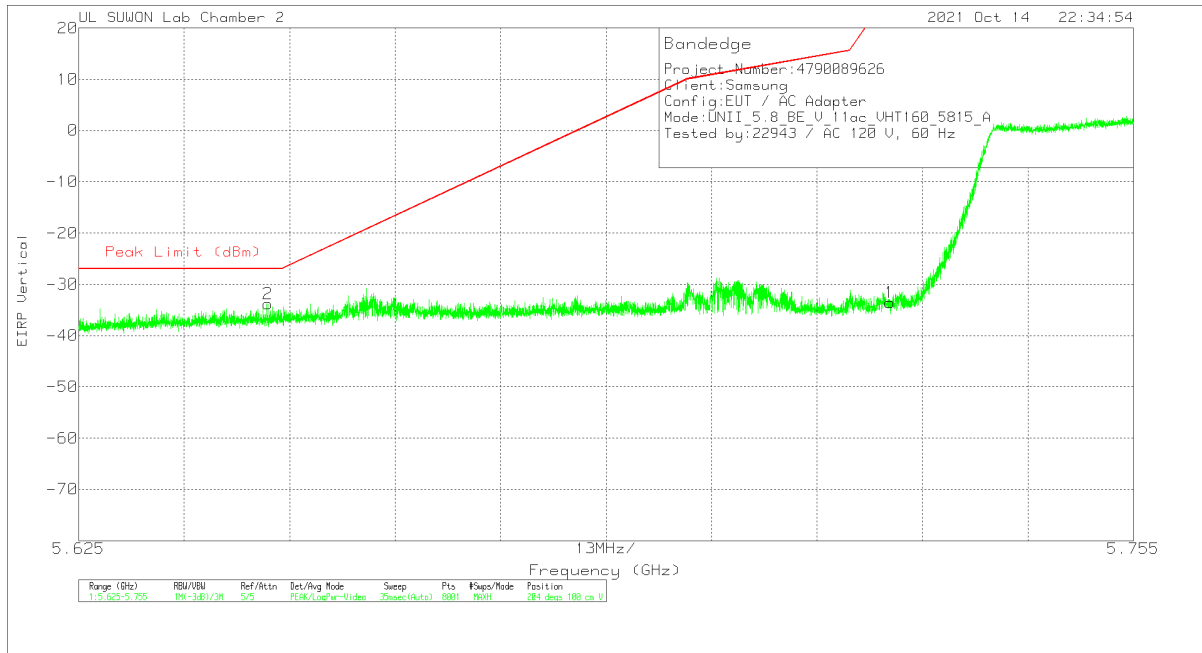
Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

11.4. TX ABOVE 1GHz 2Tx MODE IN THE 5.8 GHz BAND

BANDEDGE (WORST CASE: 802.11ac VHT160 LOWER SIDE / 5815 MHz)

VERTICAL PEAK DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	3117_00168724	10dB_ATT[dB]	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.72499	-62.62	Pk	34.7	-17.4	11.8	0	-33.52	26.97	-60.49	204	100	V
2	5.6483	-62.65	Pk	34.6	-17.5	11.8	0	-33.75	-27	-6.75	204	100	V

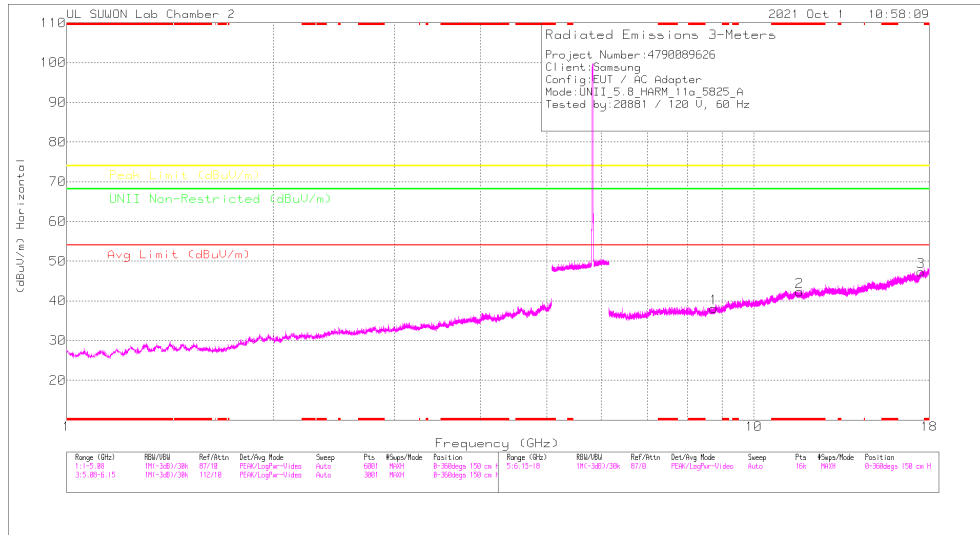
Pk - Peak detector

BANDEDGE TEST DATA

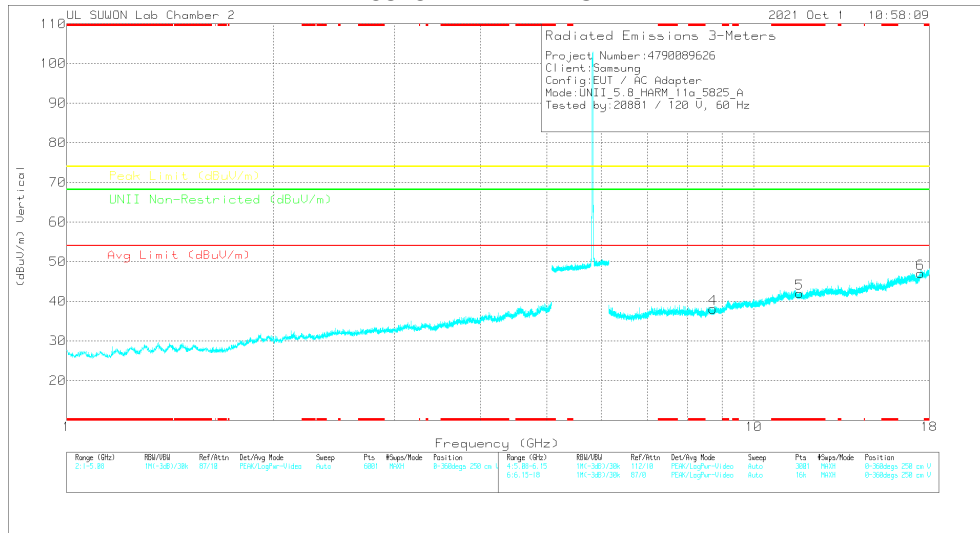
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBm]	Detector Mode	ANT Factor	Loss [dB]	Conv. F [dB]	DC Corr [dB]	Result [dBm]	PK Limit [dBm]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5745	MIMO	5.72499	-59.33	Pk	34.70	-17.40	11.80	0.00	-30.23	26.97	-57.20	239	276	H
			5.63350	-65.94	Pk	34.60	-17.50	11.80	0.00	-37.04	-27.00	-10.04	239	276	H
			5.72499	-53.57	Pk	34.70	-17.40	11.80	0.00	-24.47	26.97	-51.44	202	104	V
			5.64944	-66.00	Pk	34.60	-17.50	11.80	0.00	-37.10	-27.00	-10.10	202	104	V
802.11n (HT20)	5745	MIMO	5.72499	-55.10	Pk	34.70	-17.40	11.80	0.00	-26.00	26.97	-52.97	224	116	H
			5.64275	-66.54	Pk	34.60	-17.50	11.80	0.00	-37.64	-27.00	-10.64	224	116	H
			5.72499	-52.01	Pk	34.70	-17.40	11.80	0.00	-22.91	26.97	-49.88	200	111	V
			5.64666	-66.14	Pk	34.60	-17.50	11.80	0.00	-37.24	-27.00	-10.24	200	111	V
802.11n (HT40)	5755	MIMO	5.72499	-62.00	Pk	34.70	-17.40	11.80	0.00	-32.90	26.97	-59.87	231	102	H
			5.65063	-66.29	Pk	34.60	-17.50	11.80	0.00	-37.39	-26.54	-10.85	231	102	H
			5.72499	-59.65	Pk	34.70	-17.40	11.80	0.00	-30.55	26.97	-57.52	200	100	V
			5.64385	-66.51	Pk	34.60	-17.50	11.80	0.00	-37.61	-27.00	-10.61	200	100	V
802.11ac (VHT80)	5775	MIMO	5.72499	-64.35	Pk	34.70	-17.40	11.80	0.00	-35.25	26.97	-62.22	229	103	H
			5.63803	-66.09	Pk	34.60	-17.60	11.80	0.00	-37.29	-27.00	-10.29	229	103	H
			5.72499	-59.94	Pk	34.70	-17.40	11.80	0.00	-29.84	26.97	-56.81	200	100	V
			5.64151	-66.14	Pk	34.60	-17.50	11.80	0.00	-37.24	-27.00	-10.24	200	100	V
802.11ac (VHT160)	5815 Lower	MIMO	5.72499	-66.76	Pk	34.70	-17.40	11.80	0.00	-37.66	26.97	-64.63	229	101	H
			5.65038	-64.95	Pk	34.60	-17.50	11.80	0.00	-36.05	-26.72	-9.33	229	101	H
			5.72499	-62.62	Pk	34.70	-17.40	11.80	0.00	-33.52	26.97	-60.49	204	100	V
			5.64830	-62.65	Pk	34.60	-17.50	11.80	0.00	-33.75	-27.00	-6.75	204	100	V
802.11ax (HE20)	5745	MIMO	5.72499	-59.50	Pk	34.70	-17.40	11.80	0.00	-30.40	26.97	-57.37	241	104	H
			5.63927	-66.16	Pk	34.60	-17.50	11.80	0.00	-37.26	-27.00	-10.26	241	104	H
			5.72499	-54.96	Pk	34.70	-17.40	11.80	0.00	-25.86	26.97	-52.83	189	108	V
			5.64507	-66.04	Pk	34.60	-17.50	11.80	0.00	-37.14	-27.00	-10.14	189	108	V
802.11ax (HE40)	5755	MIMO	5.72499	-57.69	Pk	34.70	-17.40	11.80	0.00	-28.59	26.97	-55.56	240	104	H
			5.62533	-66.44	Pk	34.60	-17.50	11.80	0.00	-37.54	-27.00	-10.54	240	104	H
			5.72499	-54.50	Pk	34.70	-17.40	11.80	0.00	-25.40	26.97	-52.37	188	100	V
			5.64752	-65.91	Pk	34.60	-17.50	11.80	0.00	-37.01	-27.00	-10.01	188	100	V
802.11ax (HE80)	5775	MIMO	5.72499	-68.32	Pk	34.70	-17.40	11.80	0.00	-39.22	26.97	-66.19	241	104	H
			5.64864	-67.09	Pk	34.60	-17.50	11.80	0.00	-38.19	-27.00	-11.19	241	104	H
			5.72499	-63.15	Pk	34.70	-17.40	11.80	0.00	-34.05	26.97	-61.02	188	100	V
			5.64881	-66.48	Pk	34.60	-17.50	11.80	0.00	-37.58	-27.00	-10.58	188	100	V
802.11ax (HE160)	5815 Lower	MIMO	5.72499	-67.30	Pk	34.70	-17.40	11.80	0.00	-38.20	26.97	-65.17	309	100	H
			5.64460	-64.95	Pk	34.60	-17.50	11.80	0.00	-36.05	-27.00	-9.05	309	100	H
			5.72499	-65.68	Pk	34.70	-17.40	11.80	0.00	-36.58	26.97	-63.55	189	100	V
			5.64796	-64.61	Pk	34.60	-17.50	11.80	0.00	-35.71	-27.00	-8.71	189	100	V

Note. Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5825 MHz) **5825 MHz HORIZONTAL**



5825 MHz VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

5825 MHz DATA

Radiated Emissions

Frequency (GHz)	Marker Reading (dBm)	Det	3127_0058724	6GHz_HF988	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBuV/m)	Magn (dB)	Peak Limit (dBuV/m)	Magn (dB)	UNII Non-Restricted (dBuV/m)	Magn (dB)	Altitude (m)	Height (cm)	Polarity
8.73658	35.61	PK-U	36.2	-23.3	0	48.51	-	-	-	-	68.2	-19.69	0	100	H
8.72088	35.99	PK-U	36.2	-23.3	0	48.89	-	-	-	-	68.2	-19.31	0	100	V
* 11.65347	33.31	PK-U	38.4	-19.7	0	52.01	-	-	74	-21.99	-	-	0	100	H
* 11.65597	33.05	PK-U	38.4	-19.7	0	51.75	-	-	74	-22.25	-	-	0	100	V
17.51195	33.61	PK-U	41.2	-17.5	0	57.21	-	-	-	-	68.2	-10.99	0	100	H
17.48018	34.94	PK-U	41.2	-17.8	0	58.34	-	-	-	-	68.2	-9.86	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5745	MIMO	8.609	34.14	PK-U	36.10	-21.70	0.00	48.54	-	-	-	-	68.20	-19.66	0	100	H
			8.617	34.79	PK-U	36.10	-21.80	0.00	49.09	-	-	-	-	68.20	-19.11	0	100	V
			* 10.92911	34.18	PK-U	38.10	-20.40	0.00	51.88	-	-	74.00	-22.12	-	-	0	100	H
			* 10.90511	34.10	PK-U	38.10	-20.30	0.00	51.90	-	-	74.00	-22.10	-	-	0	100	V
			17.283	34.17	PK-U	40.90	-18.80	0.00	56.27	-	-	-	-	68.20	-11.93	0	100	H
			17.292	34.08	PK-U	40.90	-18.80	0.00	56.18	-	-	-	-	68.20	-12.02	0	100	V
	5785	MIMO	8.695	35.03	PK-U	36.20	-23.00	0.00	48.23	-	-	-	-	68.20	-19.97	0	100	H
			8.725	35.87	PK-U	36.20	-23.30	0.00	48.77	-	-	-	-	68.20	-19.43	0	100	V
			* 11.55845	33.72	PK-U	38.30	-19.60	0.00	52.22	-	-	74.00	-21.78	-	-	0	100	H
			* 11.52535	33.30	PK-U	38.30	-19.70	0.00	51.90	-	-	74.00	-22.10	-	-	0	100	V
			17.346	34.32	PK-U	41.00	-18.70	0.00	56.62	-	-	-	-	68.20	-11.58	0	100	H
			17.301	34.53	PK-U	40.90	-18.80	0.00	56.63	-	-	-	-	68.20	-11.57	0	100	V
	5825	MIMO	8.737	35.61	PK-U	36.20	-23.30	0.00	48.51	-	-	-	-	68.20	-19.69	0	100	H
			8.721	35.99	PK-U	36.20	-23.30	0.00	48.89	-	-	-	-	68.20	-19.31	0	100	V
			* 11.65347	33.31	PK-U	38.40	-19.70	0.00	52.01	-	-	74.00	-21.99	-	-	0	100	H
			* 11.65597	33.05	PK-U	38.40	-19.70	0.00	51.75	-	-	74.00	-22.25	-	-	0	100	V
			17.512	33.61	PK-U	41.20	-17.60	0.00	57.21	-	-	-	-	68.20	-10.99	0	100	H
			17.480	34.94	PK-U	41.20	-17.80	0.00	58.34	-	-	-	-	68.20	-9.86	0	100	V
802.11ax (HE20) 8RU Spot-check	5785	MIMO	8.678	34.88	PK-U	36.20	-22.80	0.00	48.28	-	-	-	-	68.20	-19.92	360	100	H
			8.678	35.34	PK-U	36.20	-22.80	0.00	48.74	-	-	-	-	68.20	-19.46	360	100	V
			* 11.57068	33.82	PK-U	38.30	-19.90	0.00	52.22	-	-	74.00	-21.78	-	-	360	100	V
			* 11.56925	33.52	PK-U	38.30	-19.90	0.00	51.92	-	-	74.00	-22.08	-	-	360	100	H
			17.354	34.37	PK-U	41.00	-18.60	0.00	56.77	-	-	-	-	68.20	-11.43	360	100	H
			17.356	34.65	PK-U	41.00	-18.60	0.00	57.05	-	-	-	-	68.20	-11.15	360	100	V

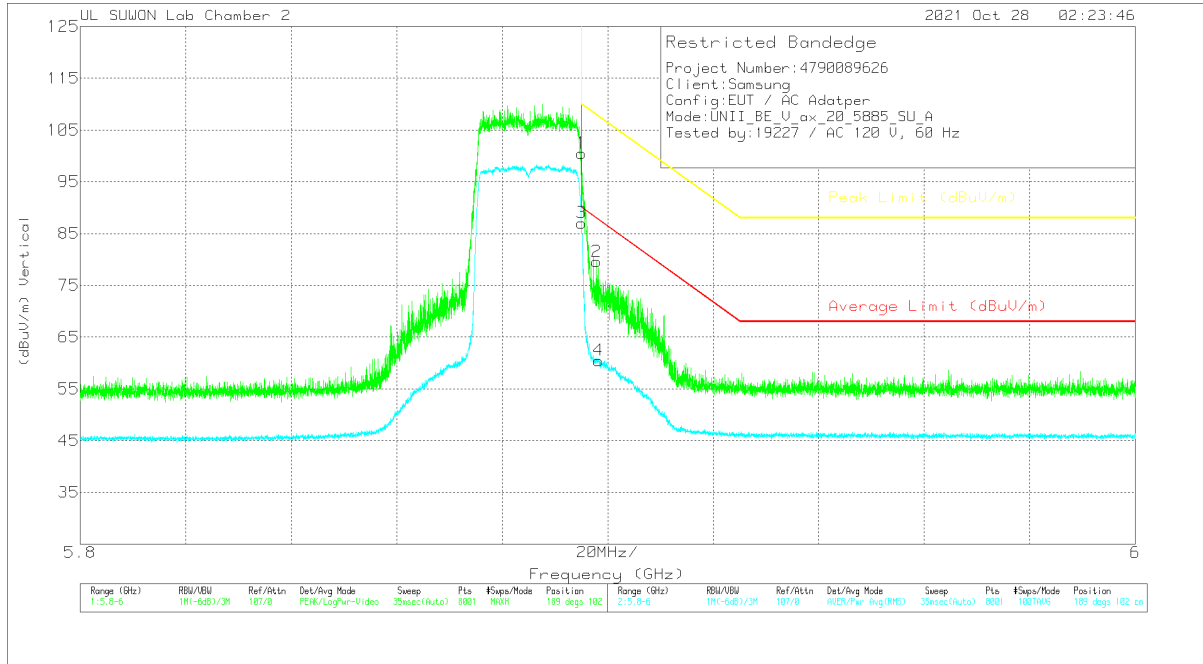
Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

11.5. TX ABOVE 1GHz 2Tx MODE IN THE 5.9 GHz BAND

BANDEDGE (WORST CASE: 802.11ax HE20 / 5885 MHz)

VERTICAL PEAK DATA



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00168724	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.895	92.42	PK	35	-16.9	0	100.52	-	-	110	-9.48	189	102	V
2	5.89788	61.48	PK	35	-16.9	0	79.58	-	-	107.89	-28.31	189	102	V
3	5.895	68.55	RMS	35	-16.9	-41	87.06	90	-2.94	-	-	189	102	V
4	5.89828	41.97	RMS	35	-16.9	-41	60.48	87.6	-27.12	-	-	189	102	V

RMS - RMS detection

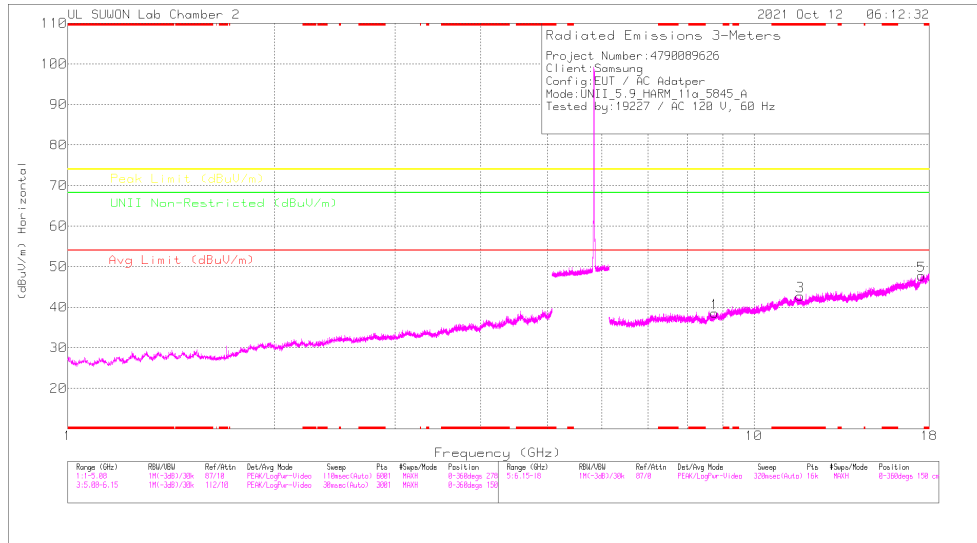
BANDEDGE TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5885	MIMO	5.895	70.28	Pk	35.00	-16.90	0.00	88.38	-	-	110.00	-21.62	241	339	H
			5.898	55.56	Pk	35.00	-16.90	0.00	73.05	-	-	107.84	-34.18	241	339	H
			5.895	50.35	RMS	35.00	-16.90	0.16	68.61	90.00	-21.39	-	-	241	339	H
			5.898	38.80	RMS	35.00	-16.90	0.16	57.06	87.82	-30.76	-	-	241	339	H
			5.895	74.52	Pk	35.00	-16.90	0.00	92.62	-	-	109.93	-17.31	199	100	V
			5.898	61.43	Pk	35.00	-16.90	0.00	79.53	-	-	107.76	-28.23	199	100	V
			5.895	55.38	RMS	35.00	-16.90	0.16	73.64	90.00	-16.36	-	-	199	100	V
			5.898	43.54	RMS	35.00	-16.90	0.16	61.80	87.78	-25.98	-	-	199	100	V
			5.895	70.30	Pk	35.00	-16.90	0.00	88.40	-	-	110.00	-21.60	231	132	H
			5.900	61.73	Pk	35.00	-16.90	0.00	79.83	-	-	106.17	-26.34	231	132	H
802.11n (HT20)	5885	MIMO	5.895	52.90	RMS	35.00	-16.90	0.17	71.17	90.00	-18.83	-	-	231	132	H
			5.900	41.08	RMS	35.00	-16.90	0.17	59.35	86.41	-27.06	-	-	231	132	H
			5.895	75.56	Pk	35.00	-16.90	0.00	93.66	-	-	110.00	-16.34	199	103	V
			5.900	60.80	Pk	35.00	-16.90	0.00	78.90	-	-	106.11	-27.21	199	103	V
			5.895	56.95	RMS	35.00	-16.90	0.17	75.22	90.00	-14.78	-	-	199	103	V
			5.899	43.88	RMS	35.00	-16.90	0.17	62.15	87.23	-25.08	-	-	199	103	V
			5.895	55.50	Pk	35.00	-16.90	0.00	73.60	-	-	110.00	-36.40	229	104	H
			5.905	48.84	Pk	35.00	-16.90	0.00	66.94	-	-	102.45	-35.51	229	104	H
			5.895	39.67	RMS	35.00	-16.90	0.21	57.98	90.00	-32.02	-	-	229	104	H
			5.903	33.29	RMS	35.00	-16.90	0.21	51.60	84.28	-32.68	-	-	229	104	H
802.11n (HT40)	5875	MIMO	5.895	61.98	Pk	35.00	-16.90	0.00	80.08	-	-	110.00	-29.92	199	102	V
			5.902	54.46	Pk	35.00	-16.90	0.00	72.56	-	-	104.56	-32.00	199	102	V
			5.895	43.31	RMS	35.00	-16.90	0.21	61.62	90.00	-28.38	-	-	199	102	V
			5.901	37.34	RMS	35.00	-16.90	0.21	55.65	85.33	-29.68	-	-	199	102	V
			5.895	53.90	Pk	35.00	-16.90	0.00	72.00	-	-	110.00	-38.00	247	233	H
			5.898	45.92	Pk	35.00	-16.90	0.00	64.02	-	-	107.80	-43.78	247	233	H
			5.895	35.88	RMS	35.00	-16.90	0.25	54.23	90.00	-35.77	-	-	247	233	H
			5.898	29.03	RMS	35.00	-16.90	0.25	47.38	87.76	-40.38	-	-	247	233	H
			5.895	59.74	Pk	35.00	-16.90	0.00	77.84	-	-	110.00	-32.16	199	100	V
			5.902	47.59	Pk	35.00	-16.90	0.00	65.69	-	-	105.09	-39.40	199	100	V
802.11ac (VHT80)	5855	MIMO	5.895	42.15	RMS	35.00	-16.90	0.25	60.50	90.00	-29.50	-	-	199	100	V
			5.902	32.96	RMS	35.00	-16.90	0.25	51.31	85.22	-33.91	-	-	199	100	V
			5.895	53.66	Pk	35.00	-16.90	0.00	71.76	-	-	110.00	-38.24	235	278	H
			5.899	44.57	Pk	35.00	-16.90	0.00	62.67	-	-	107.20	-44.53	235	278	H
			5.895	35.76	RMS	35.00	-16.90	0.32	54.18	90.00	-35.82	-	-	235	278	H
			5.898	29.86	RMS	35.00	-16.90	0.32	48.28	87.51	-39.23	-	-	235	278	H
			5.895	57.26	Pk	35.00	-16.90	0.00	75.36	-	-	110.00	-34.64	199	100	V
			5.896	58.06	Pk	35.00	-16.90	0.00	76.16	-	-	109.19	-33.03	199	100	V
			5.895	39.92	RMS	35.00	-16.90	0.32	58.34	90.00	-31.66	-	-	199	100	V
			5.897	35.42	RMS	35.00	-16.90	0.32	53.84	88.75	-34.91	-	-	199	100	V
802.11ac (VHT160)	5815 Upper	MIMO	5.895	76.29	Pk	35.00	-16.90	0.00	94.39	-	-	110.00	-15.61	231	255	H
			5.900	56.16	Pk	35.00	-16.90	0.00	74.26	-	-	106.10	-31.84	231	255	H
			5.895	64.06	RMS	35.00	-16.90	0.41	82.57	90.00	-7.43	-	-	231	255	H
			5.899	38.84	RMS	35.00	-16.90	0.41	57.35	87.27	-29.92	-	-	231	255	H
			5.895	82.42	Pk	35.00	-16.90	0.00	100.52	-	-	110.00	-9.48	189	102	V
			5.898	61.48	Pk	35.00	-16.90	0.00	79.58	-	-	107.89	-28.31	189	102	V
			5.895	68.55	RMS	35.00	-16.90	0.41	87.06	90.00	-2.94	-	-	189	102	V
			5.898	41.97	RMS	35.00	-16.90	0.41	60.48	87.60	-27.12	-	-	189	102	V
			5.895	55.84	Pk	35.00	-16.90	0.00	73.94	-	-	110.00	-36.06	311	104	H
			5.903	47.83	Pk	35.00	-16.90	0.00	65.93	-	-	103.95	-38.02	311	104	H
802.11ax (HE20)	5885	MIMO	5.895	39.11	RMS	35.00	-16.90	0.41	57.62	90.00	-32.38	-	-	311	104	H
			5.911	30.39	RMS	35.00	-16.90	0.41	48.90	78.32	-29.42	-	-	311	104	H
			5.895	65.20	Pk	35.00	-16.90	0.00	83.30	-	-	110.00	-26.70	197	100	V
			5.915	49.94	Pk	35.00	-16.90	0.00	68.04	-	-	95.11	-27.07	197	100	V
			5.895	45.30	RMS	35.00	-16.90	0.41	63.81	90.00	-26.19	-	-	197	100	V
			5.914	32.33	RMS	35.00	-16.80	0.41	50.94	76.42	-25.48	-	-	197	100	V
			5.895	55.03	Pk	35.00	-16.90	0.00	73.13	-	-	110.00	-36.87	310	104	H
			5.908	40.85	Pk	35.00	-16.80	0.00	59.05	-	-	100.43	-41.38	310	104	H
			5.895	35.99	RMS	35.00	-16.90	0.30	54.39	90.00	-35.61	-	-	310	104	H
			5.908	28.09	RMS	35.00	-16.80	0.30	46.59	80.27	-33.68	-	-	310	104	H
802.11ax (HE80)	5855	MIMO	5.895	61.34	Pk	35.00	-16.90	0.00	79.44	-	-	110.00	-30.56	199	100	V
			5.901	44.49	Pk	35.00	-16.90	0.00	62.59	-	-	105.95	-43.36	199	100	V
			5.895	43.28	RMS	35.00	-16.90	0.30	61.68	90.00	-28.32	-	-	199	100	V
			5.901	32.29	RMS	35.00	-16.90	0.30	50.69	85.93	-35.24	-	-	199	100	V
			5.895	51.95	Pk	35.00	-16.90	0.00	70.05	-	-	110.00	-39.95	315	103	H
			5.899	41.01	Pk	35.00	-16.90	0.00	59.11	-	-	106.76	-47.65	315	103	H
			5.895	33.98	RMS	35.00	-16.90	0.34	52.42	90.00	-37.58	-	-	315	103	H
			5.899	28.19	RMS	35.00	-16.90	0.34	46.63	87.10	-40.47	-	-	315	103	H
			5.895	62.71	Pk	35.00	-16.90	0.00	80.81	-	-	110.00	-29.19	200	103	V
			5.897	54.01	Pk	35.00	-17.00	0.00	72.01	-	-	108.48	-36.47	200	103	V
802.11ax (HE160)	5815 Upper	MIMO	5.895	40.32	RMS	35.00	-16.90	0.34	58.76	90.00	-31.24	-	-	200	103	V
			5.897	33.18	RMS	35.00	-17.00	0.34	51.52	88.52	-37.00	-	-	200	103	V

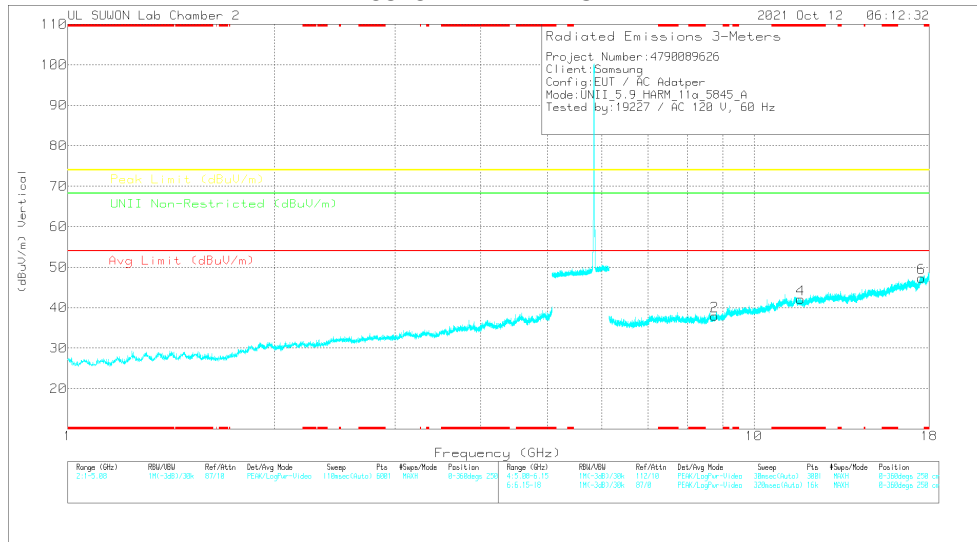
Note1. PK: Maximum Peak / ADR - U-NII AD primary method, RMS average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5845 MHz) **5845 MHz HORIZONTAL**



5845 MHz VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

5845 MHz DATA

Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	31.7_00168724	@GHz_HF@dB	OC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (cm)	Priority
8.76941	34.97	PK-U	36.3	-23	0	48.27	-	-	-	-	68.2	-19.93	360	100	H
8.76791	35.25	PK-U	36.3	-23.1	0	48.45	-	-	-	-	68.2	-19.75	360	100	V
*11.67575	33.58	PK-U	38.5	-18.7	0	52.38	-	-	74	-21.62	-	-	360	100	H
*11.67546	33.19	PK-U	38.5	-18.7	0	51.89	-	-	74	-22.01	-	-	360	100	V
17.53744	33.88	PK-U	41.3	-17.4	0	57.78	-	-	-	-	68.2	-10.42	360	100	H
17.53587	33.91	PK-U	41.3	-17.4	0	57.81	-	-	-	-	68.2	-10.39	360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5845	MIMO	8.769	34.97	PK-U	36.30	-23.00	0.00	48.27	-	-	-	-	68.20	-19.93	360	100	H
			8.768	35.25	PK-U	36.30	-23.10	0.00	48.45	-	-	-	-	68.20	-19.75	360	100	V
			* 11.67575	33.58	PK-U	38.50	-19.70	0.00	52.38	-	-	74.00	-21.62	-	-	360	100	H
			* 11.67546	33.19	PK-U	38.50	-19.70	0.00	51.99	-	-	74.00	-22.01	-	-	360	100	V
			17.537	33.88	PK-U	41.30	-17.40	0.00	57.78	-	-	-	-	68.20	-10.42	360	100	H
			17.536	33.91	PK-U	41.30	-17.40	0.00	57.81	-	-	-	-	68.20	-10.39	360	100	V
	5865	MIMO	7.820	41.01	PK-U	36.00	-24.20	0.00	52.81	-	-	-	-	68.20	-15.39	249	100	H
			7.820	39.66	PK-U	36.00	-24.20	0.00	51.46	-	-	-	-	68.20	-16.74	189	100	V
			* 11.72847	33.73	PK-U	38.50	-20.00	0.00	52.23	-	-	74.00	-21.77	-	-	360	100	H
			* 11.73138	33.91	PK-U	38.50	-20.00	0.00	52.41	-	-	74.00	-21.59	-	-	360	100	V
			17.596	33.60	PK-U	41.40	-17.70	0.00	57.30	-	-	-	-	68.20	-10.90	360	100	H
			17.597	33.98	PK-U	41.40	-17.70	0.00	57.68	-	-	-	-	68.20	-10.52	360	100	V
	5885	MIMO	7.847	42.55	PK-U	36.00	-24.40	0.00	54.15	-	-	-	-	68.20	-14.05	250	100	H
			7.847	40.68	PK-U	36.00	-24.40	0.00	52.28	-	-	-	-	68.20	-15.92	189	100	V
			* 11.76962	33.57	PK-U	38.60	-20.20	0.00	51.97	-	-	74.00	-22.03	-	-	360	100	H
			* 11.76919	33.37	PK-U	38.60	-20.20	0.00	51.77	-	-	74.00	-22.23	-	-	360	100	V
			17.661	34.03	PK-U	41.50	-17.90	0.00	57.63	-	-	-	-	68.20	-10.57	360	100	H
			17.660	33.83	PK-U	41.50	-17.90	0.00	57.43	-	-	-	-	68.20	-10.77	360	100	V

Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

11.6. Spurious Emissions for Simultaneous Transmission

11.6.1. Worst test case RSDB condition

Case 1	2.4 GHz WLAN ANT1	5GHz WLAN ANT1 + ANT2
Mode	802.11b	802.11a
Channel	11	36
Frequency[MHz]	2462	5180
Tone	-	-
RU	-	-
Data Rate	1 Mbps	MCS 0
Axis (Worst)	Y & Z	

Case 2	2.4 GHz WLAN ANT1 + ANT2	5GHz WLAN ANT1 + ANT2
Mode	802.11g	802.11a
Channel	6	36
Frequency[MHz]	2437	5180
Tone	-	-
RU	-	-
Data Rate	6 Mbps	MCS 0
Axis (Worst)	X & Z	

Case 3	2.4 GHz WLAN ANT1 + ANT2	5GHz WLAN ANT1 + ANT2
Mode	802.11ax HE20	802.11ax HE160
Channel	11	114
Frequency[MHz]	2462	5570
Tone	26T	26T
RU	0	0
Data Rate	MCS 0	MCS 0
Axis (Worst)	Z	

NOTE

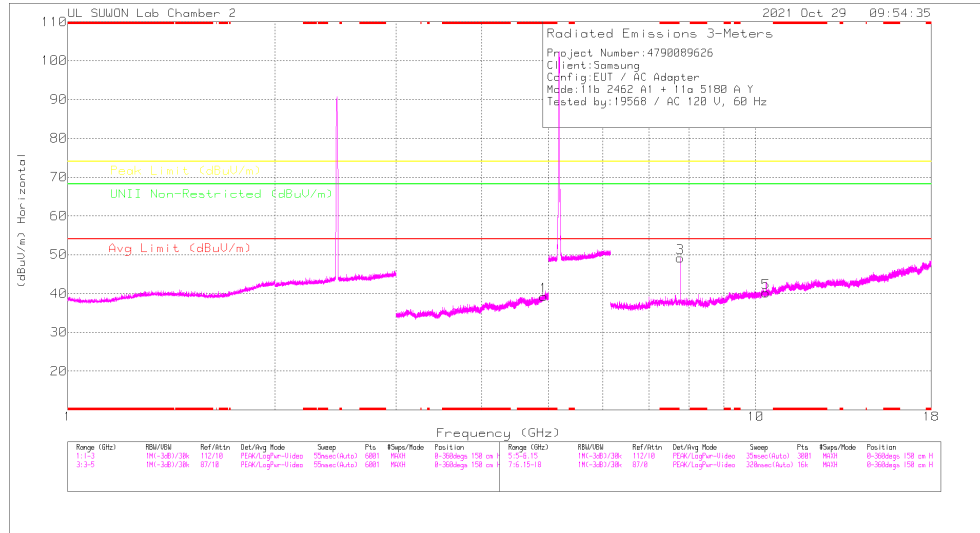
The lowest margin condition among the channels and modes were selected for test. Low, mid, and high channels of 2.4GHz WLAN were tested, and the worst case configuration & data were listed in the test report.

11.6.2. Test Results

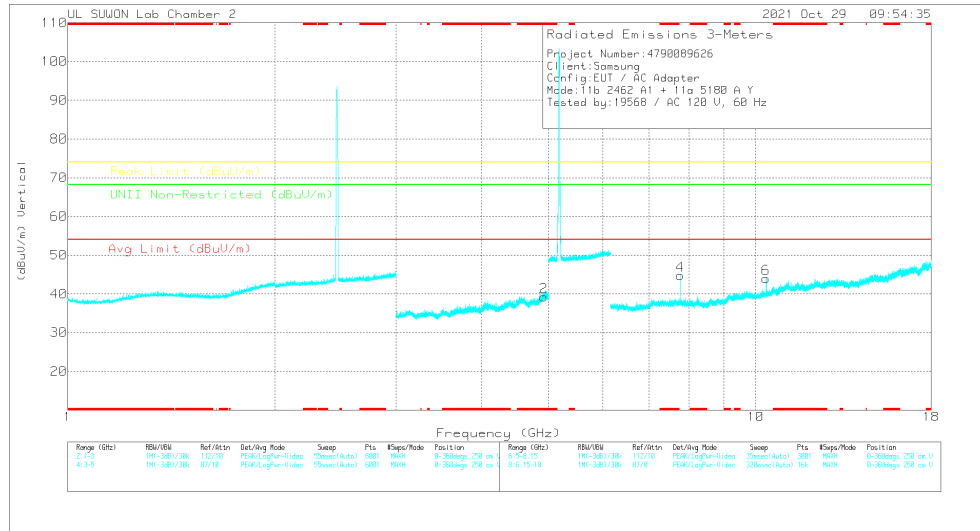
Spurious emission for Simultaneous Transmission

Case1. – Y axis

HORIZONTAL



VERTICAL



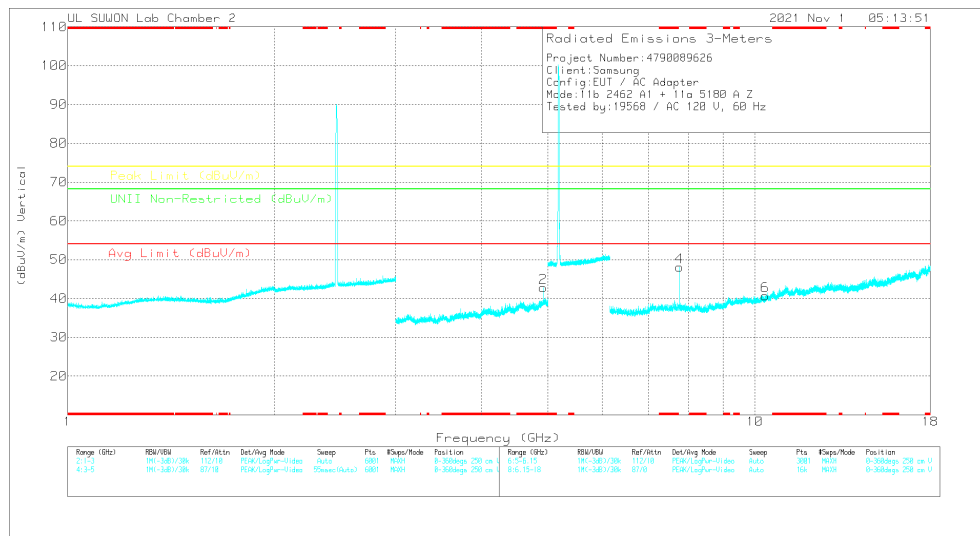
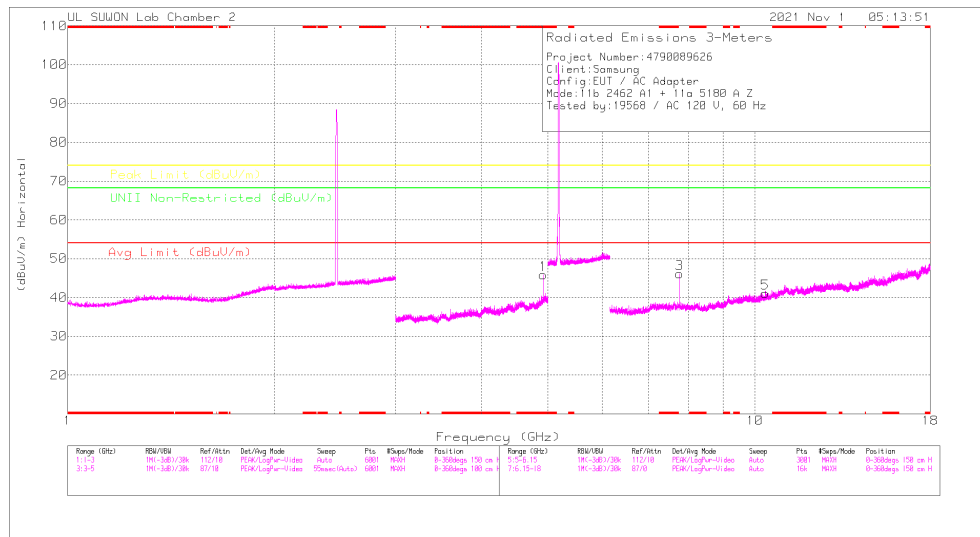
Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	5GHz_LF1(8B)	DTS No1(8B)	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Adm'd (dB)	Height (cm)	Polarity
* 4.92725	42.18	PK2	34.1	-26.2	.5	0	50.58	-	-	74	-23.42	-	-	0	100	H
* 4.91713	41.53	PK2	34.1	-26.3	.5	0	49.83	-	-	74	-24.17	-	-	0	100	H
* 4.929	41.64	PK2	34.1	-26.2	.5	0	50.04	-	-	74	-23.96	-	-	0	100	V
* 4.92045	42.2	PK2	34.1	-26.2	.5	0	50.5	-	-	74	-23.5	-	-	0	100	V

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	5GHz_HF1(8B)	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Adm'd (dB)	Height (cm)	Polarity
7.77017	41.5	PK-U	36	-23.6	0	53.9	-	-	-	-	68.2	-14.3	201	100	H
7.77013	38.52	PK-U	36	-23.6	0	50.92	-	-	-	-	68.2	-17.28	51	124	V
10.36245	37.18	PK-U	37.7	-21	0	53.88	-	-	-	-	68.2	-14.32	128	113	H
10.35937	38.49	PK-U	37.7	-20.9	0	55.29	-	-	-	-	68.2	-12.91	184	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
PK2 - KDB558074 Method: Maximum Peak

Case1. – Z axis



Radiated Emissions

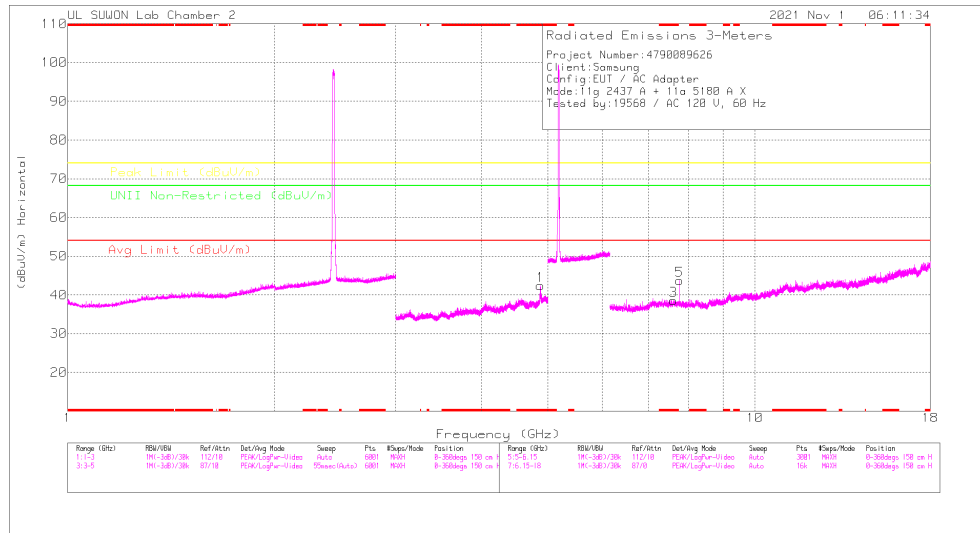
Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	6GHz_LFVdB	DTS Notch (dB)	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (cm)	Polarity
* 4.92409	44.23	PK2	34.1	-26.2	.5	0	52.53	-	-	74	-21.37	-	-	234	123	H
* 4.92412	35.85	MAV1	34.1	-26.2	.5	-16	44.41	54	-9.59	-	-	-	-	234	123	H
* 4.92445	44.31	PK2	34.1	-26.2	.5	0	52.71	-	-	74	-21.29	-	-	184	100	V
* 4.92412	35.35	MAV1	34.1	-26.2	.5	-16	43.92	54	-10.08	-	-	-	-	184	100	V

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	6GHz_HFVdB	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (cm)	Polarity
7.7699	41.02	PK-U	36	-23.6	0	53.42	-	-	-	-	68.2	-14.78	297	106	H
7.77007	41.69	PK-U	36	-23.6	0	54.09	-	-	-	-	68.2	-14.11	180	104	V
10.35633	28.51	PK-U	37.7	-20.9	0	45.71	-	-	-	-	68.2	-22.49	0	100	H
10.35634	29.19	PK-U	37.7	-20.9	0	45.99	-	-	-	-	68.2	-22.21	0	100	V

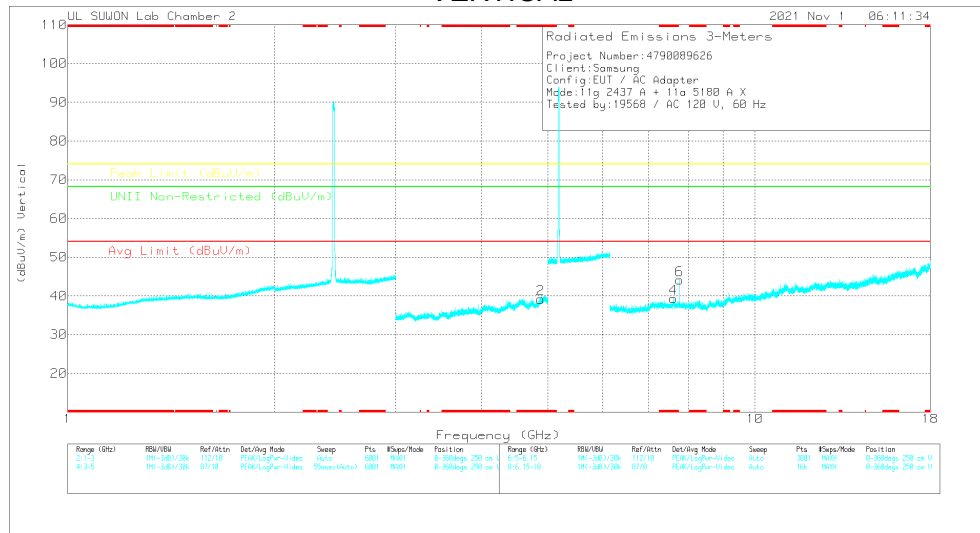
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAV1 - KDB558074 Option 1 Maximum RMS Average
PK-U - U-NII: Maximum Peak

Case2. - X axis

HORIZONTAL



VERTICAL



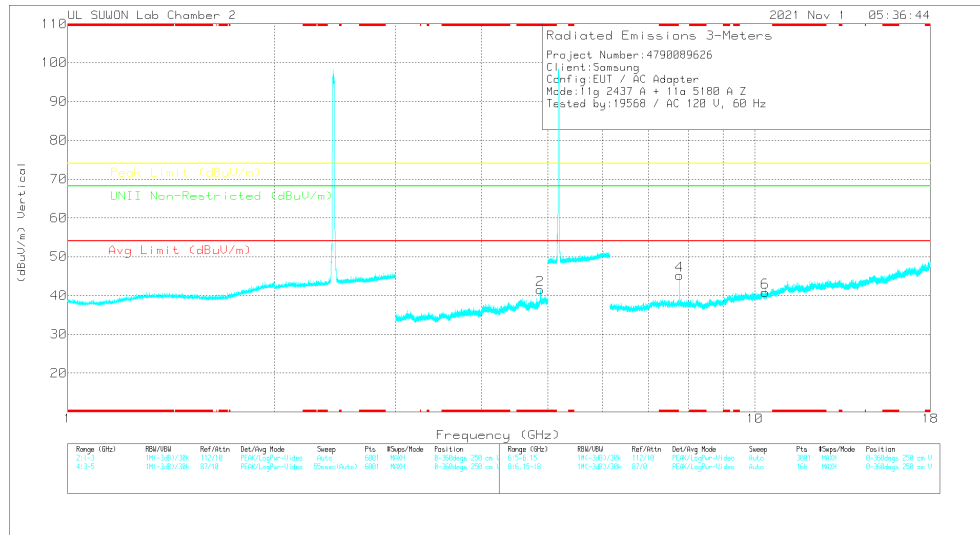
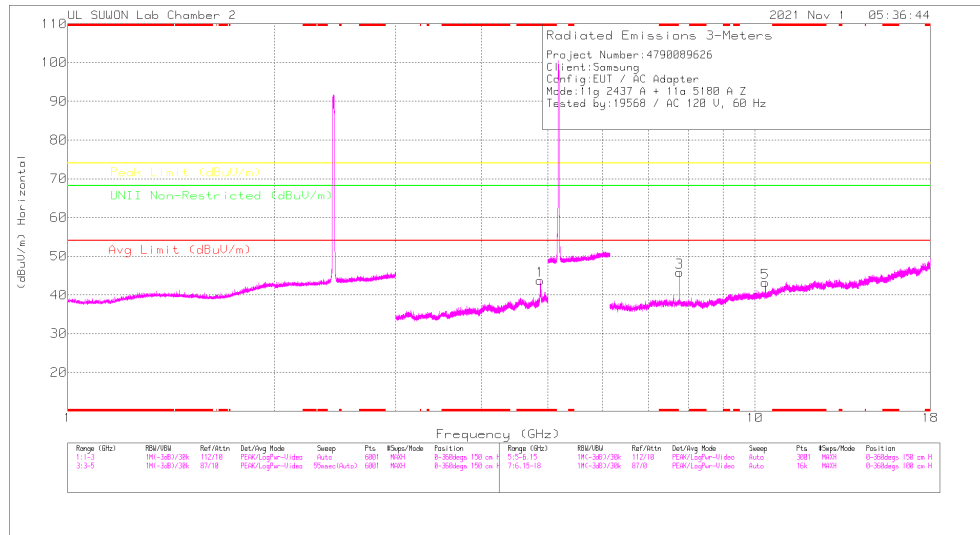
Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	5GHz_LFVdB	DTS Notch(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Acctm (Degs)	Height (cm)	Polarity	
* 4.87637	45.02	PK2	34.1	-26.9	5	0	52.72	-	-	74	-21.28	-	-	-	149	100	H
* 4.87571	32.52	MAV1	34.1	-26.9	5	.16	40.38	54	-13.62	-	-	-	-	-	149	100	H
* 4.87055	43.01	PK2	34.1	-27	5	0	50.61	-	-	74	-23.39	-	-	-	294	101	V
* 4.87596	30.83	MAV1	34.1	-26.9	5	.16	38.69	54	-15.31	-	-	-	-	-	294	101	V

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	5GHz_HFVdB	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Acctm (Degs)	Height (cm)	Polarity	
* 7.61661	37.9	PK-U	35.9	-24.2	0	49.6	-	-	74	-24.4	-	-	-	308	101	H
* 7.61725	25.52	ADR	35.9	-24.2	.16	37.38	54	-16.62	-	-	-	-	-	308	101	H
* 7.61477	39.67	PK-U	35.9	-24.1	0	51.47	-	-	74	-22.53	-	-	-	308	104	V
* 7.61917	27.44	ADR	35.9	-24.1	.16	39.4	54	-14.6	-	-	-	-	-	308	104	V
* 7.77041	38.68	PK-U	36	-23.6	0	51.08	-	-	-	-	68.2	-17.12	-	166	101	H
* 7.77025	39.23	PK-U	36	-23.6	0	51.63	-	-	-	-	68.2	-16.57	-	203	104	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAV1 - KDB558074 Option 1 Maximum RMS Average
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

Case2. – Z axis



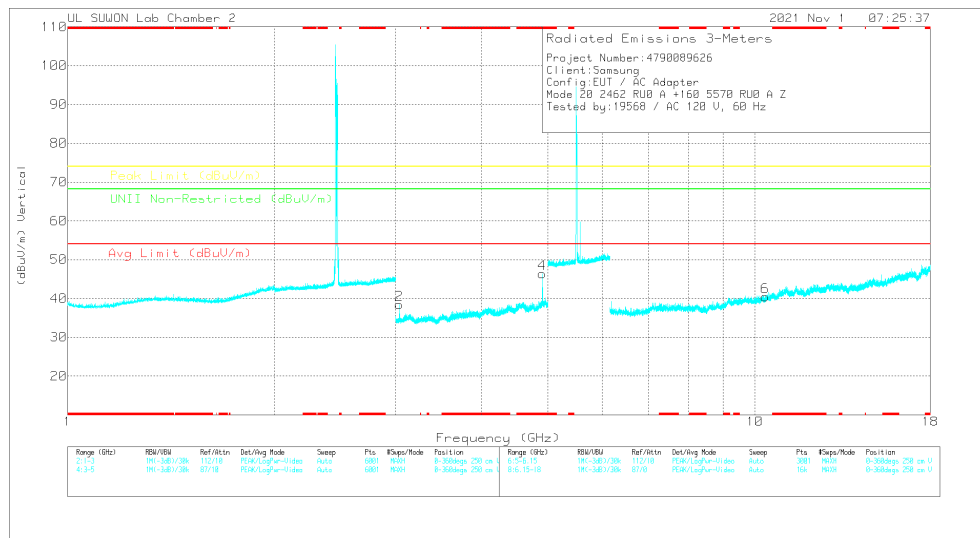
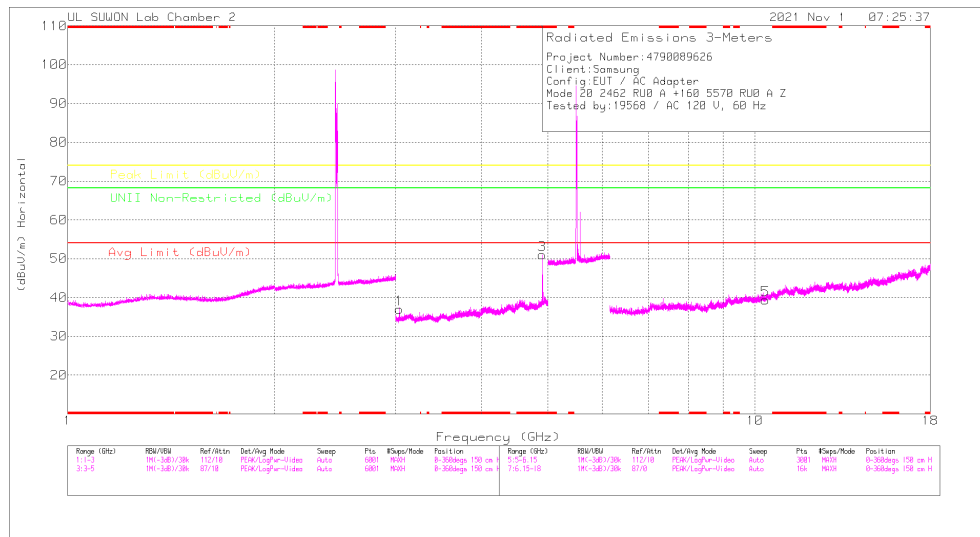
Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	6GHz_LP5dB	DTS Notch (dB)	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (cm)	Polarity
* 4.87637	48.3	PK2	34.1	-26.9	.5	0	56	-	-	74	-18	-	-	233	111	H
* 4.87593	35.73	MAV1	34.1	-26.9	.5	-16	43.59	54	-10.41	-	-	-	-	233	111	H
* 4.87607	45.59	PK2	34.1	-26.9	.5	0	54.29	-	-	74	-19.71	-	-	185	100	V
* 4.87634	33.89	MAV1	34.1	-26.9	.5	-16	41.75	-	-	-	-	-	-	185	100	V

Frequency (GHz)	Meas Reading (dBuV)	Det	3117_00168724	6GHz_LP5dB	DC Cor (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (cm)	Polarity	
7.77021	41.16	PK-U	36	-23.6	0	53.56	-	-	-	-	-	68.2	-14.64	230	101	H
7.77007	40.53	PK-U	36	-23.6	0	52.93	-	-	-	-	-	68.2	-15.27	181	100	V
10.35915	39.39	PK-U	37.7	-20.9	0	56.19	-	-	-	-	-	68.2	-12.01	161	103	H
10.35881	36.03	PK-U	37.7	-20.9	0	52.83	-	-	-	-	-	68.2	-15.37	208	111	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAV1 - KDB558074 Option 1 Maximum RMS Average
PK-U - U-NII: Maximum Peak

Case3. – Z axis



Radiated Emissions

Frequency (GHz)	Mean Reading (dBuV)	Det	3117.00180724	SSRC_HFdB	DTS_Non(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Meters)	Height (m)	Priority
* 4.90669	58.8	PK2	34.1	-26.4	5	0	58.8	54	-3.33	74	-9	-	-	229	100	H
* 4.9071	62.47	MAV1	34.1	-26.4	5	0	62.47	54	-3.33	74	-9	-	-	229	100	H

Frequency (GHz)	Mean Reading (dBuV)	Det	3117.00180724	SSRC_HFdB	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Meters)	Height (m)	Priority	
8.02299	36	PK-U	35.9	-23.8	0	48.1	-	-	-	-	-	68.2	-20.1	360	100	H
8.02285	35.62	PK-U	35.9	-23.8	0	47.72	-	-	-	-	-	68.2	-20.48	360	100	V
10.36852	29.03	PK-U	37.7	-21	0	45.73	-	-	-	-	-	68.2	-22.47	360	100	H
10.35094	33.61	PK-U	37.7	-20.9	0	50.41	-	-	-	-	-	68.2	-17.79	360	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAV1 - KDB558074 Option 1 Maximum RMS Average
PK-U - U-NII: Maximum Peak