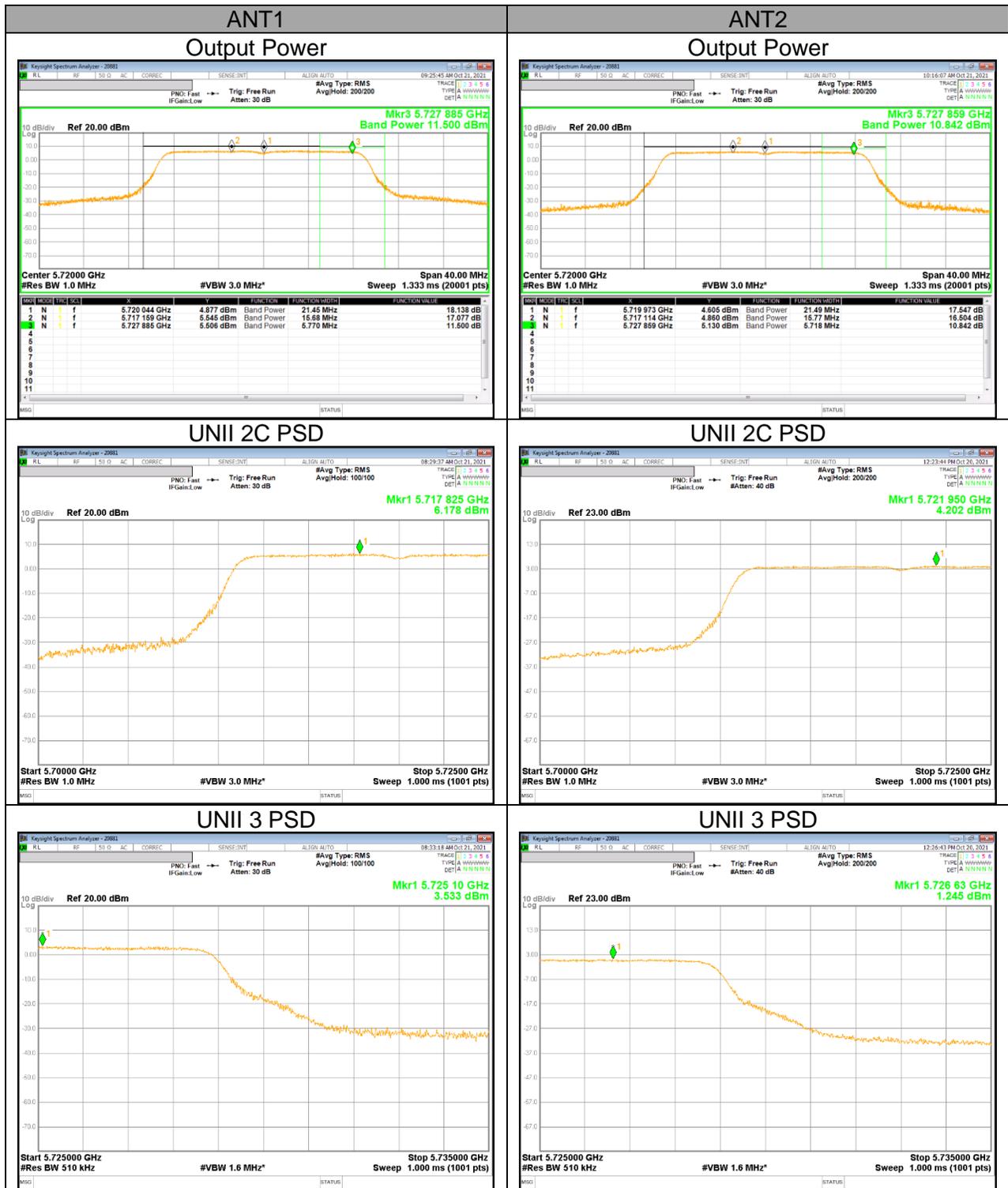
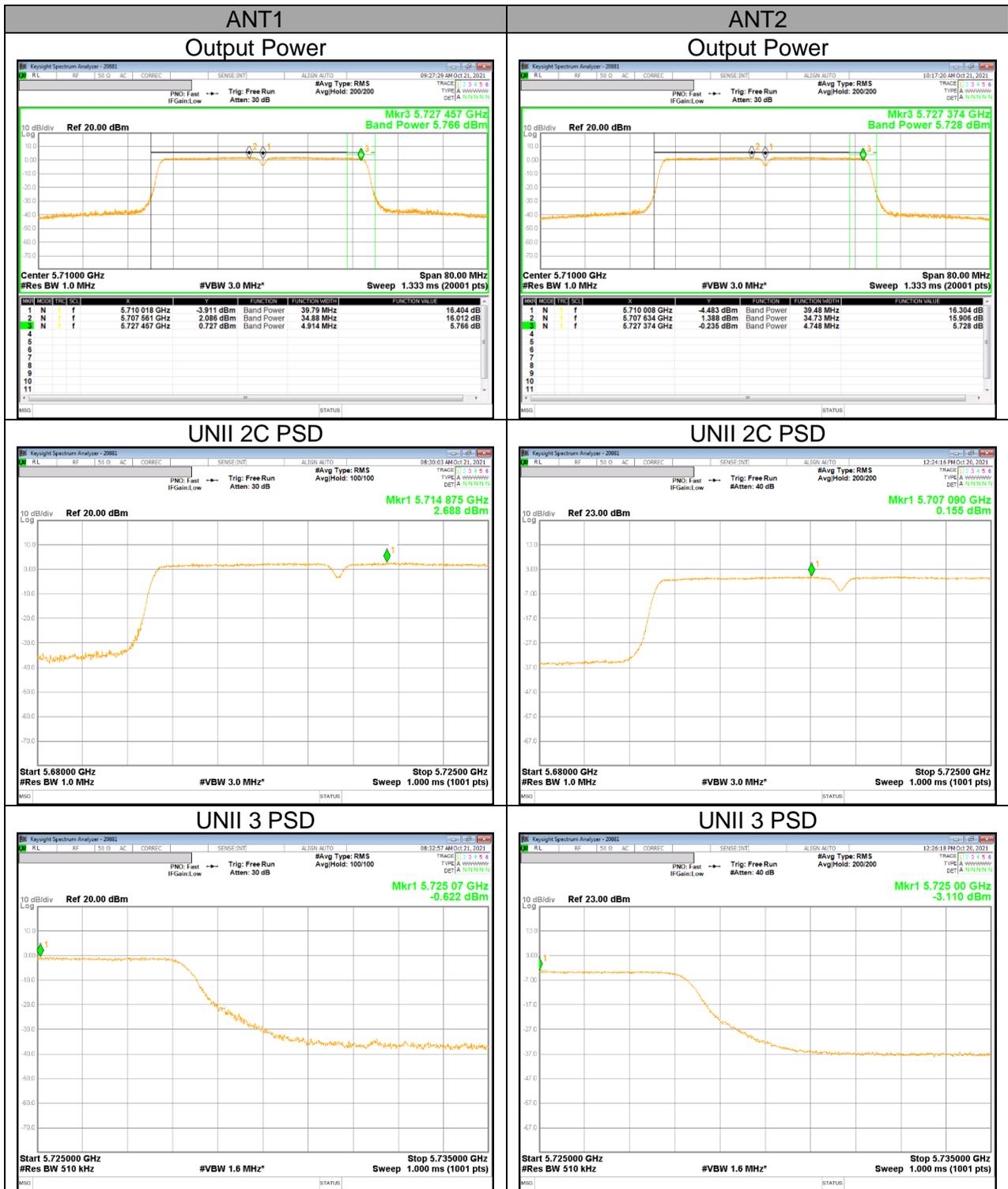


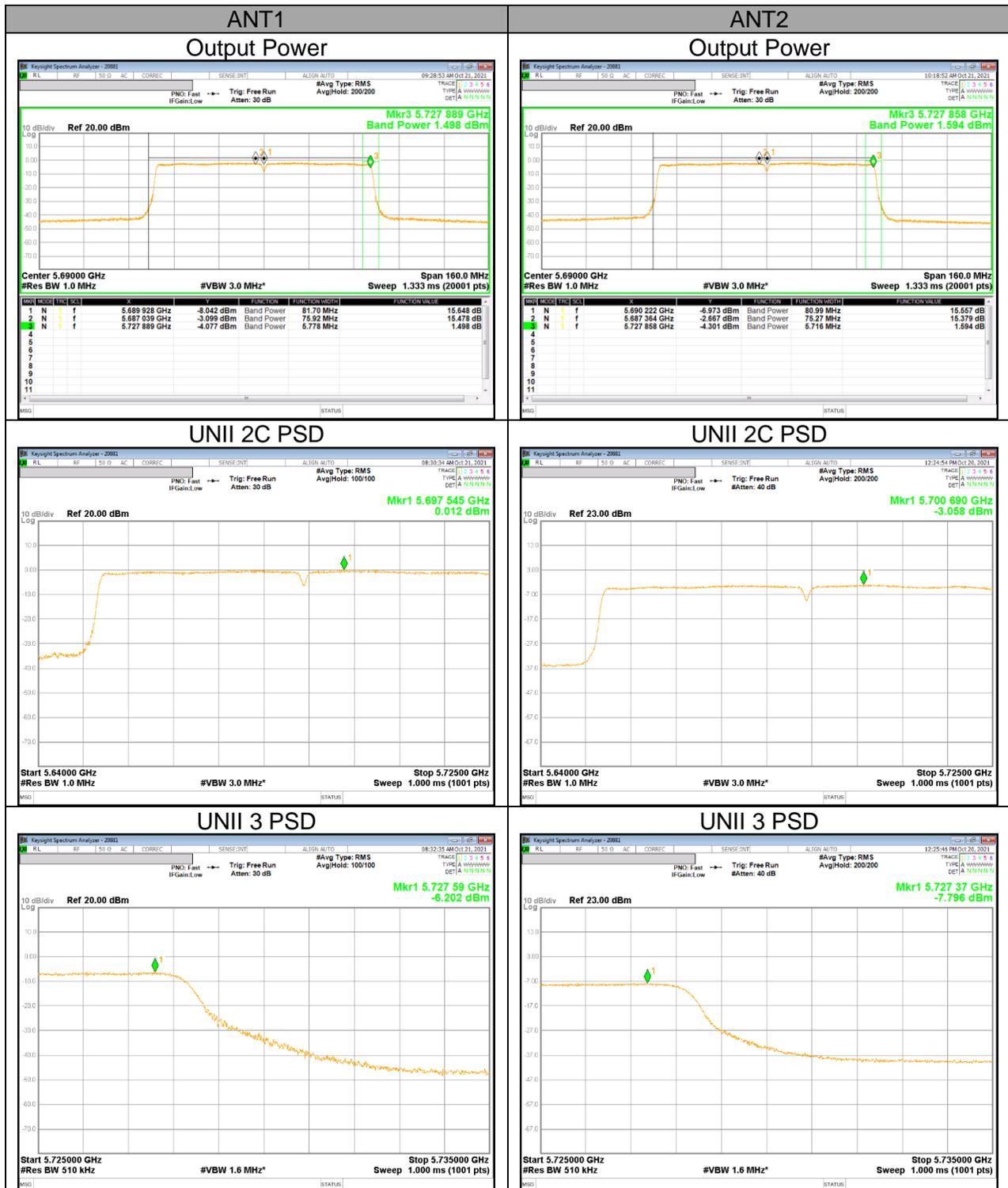
UNII Straddle Ch. IEEE 802.11n HT20 mode Output Power and PSD



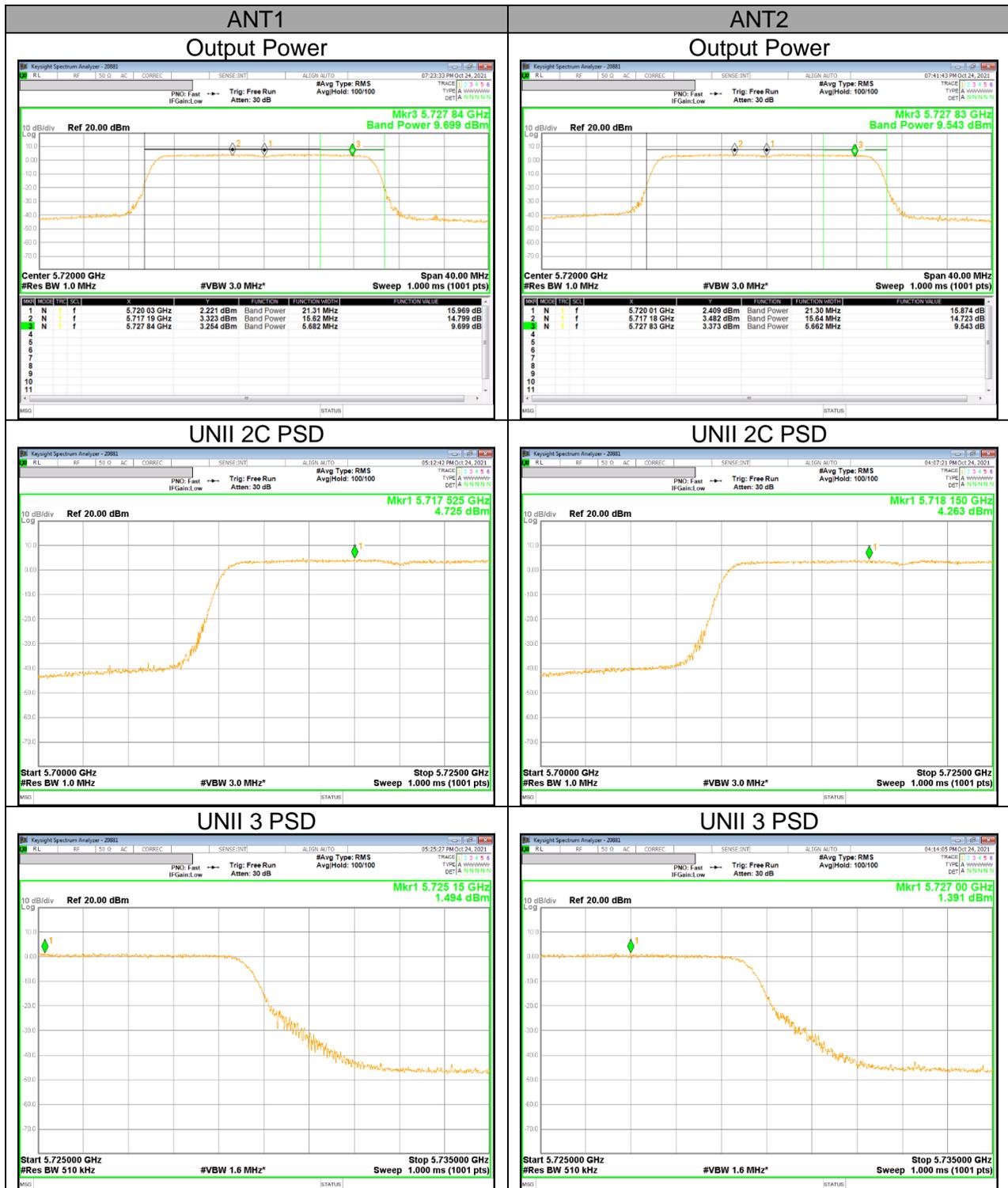
UNII Straddle Ch. IEEE 802.11n HT40 mode Output Power and PSD



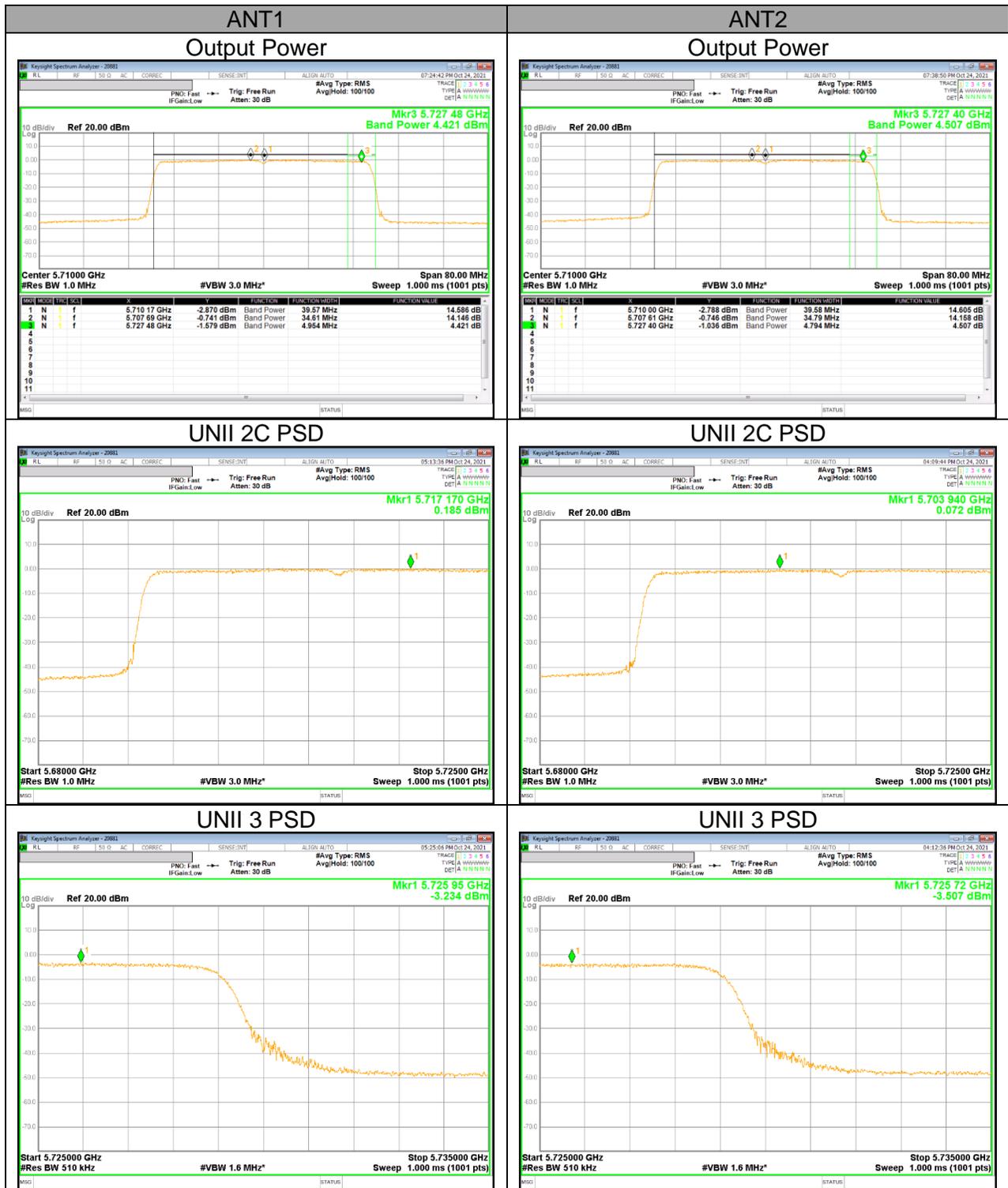
UNII Straddle Ch. IEEE 802.11ac VHT80 mode Output Power and PSD



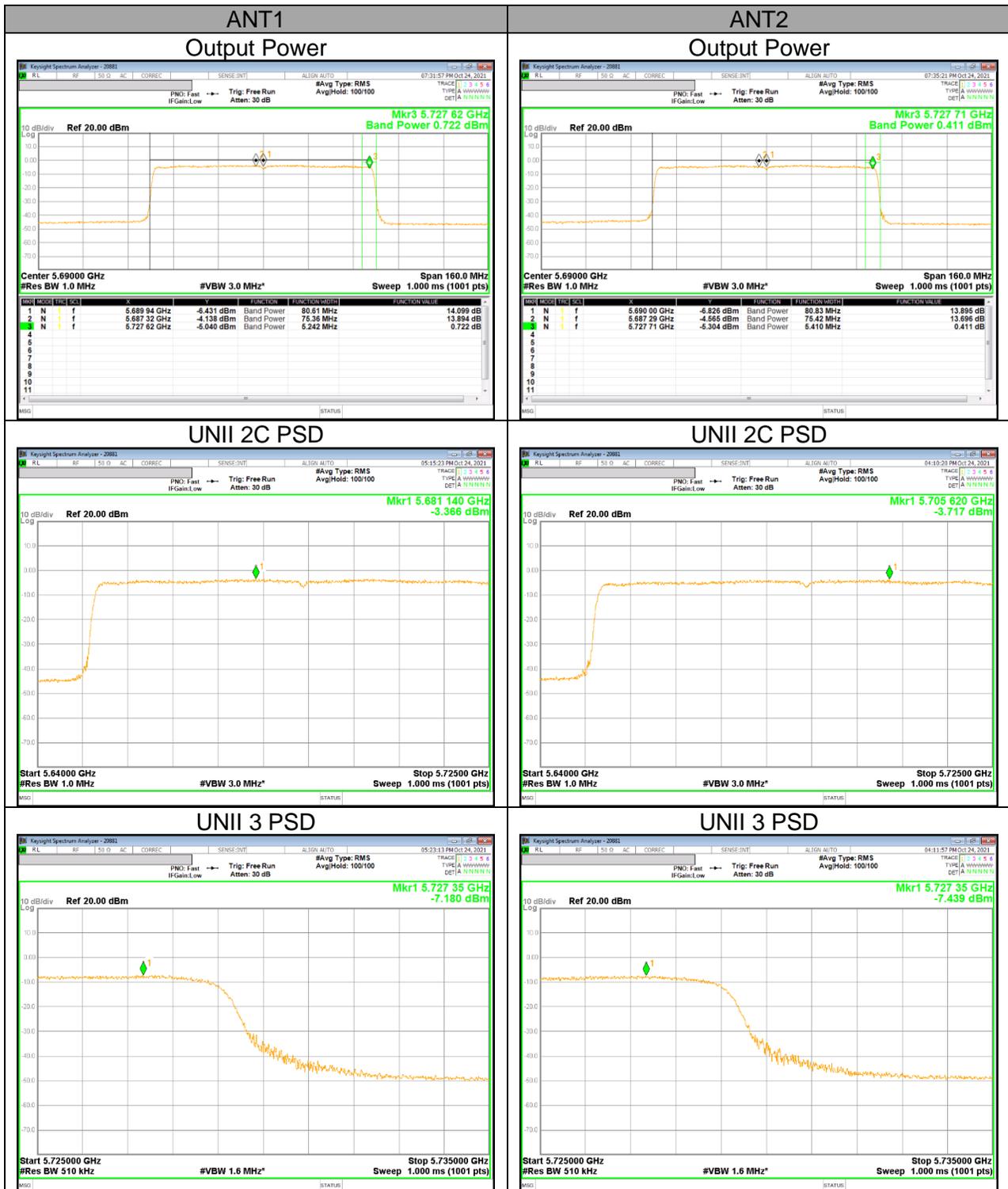
UNII Straddle Ch. IEEE 802.11ax HE20(SU) mode PSD



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



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



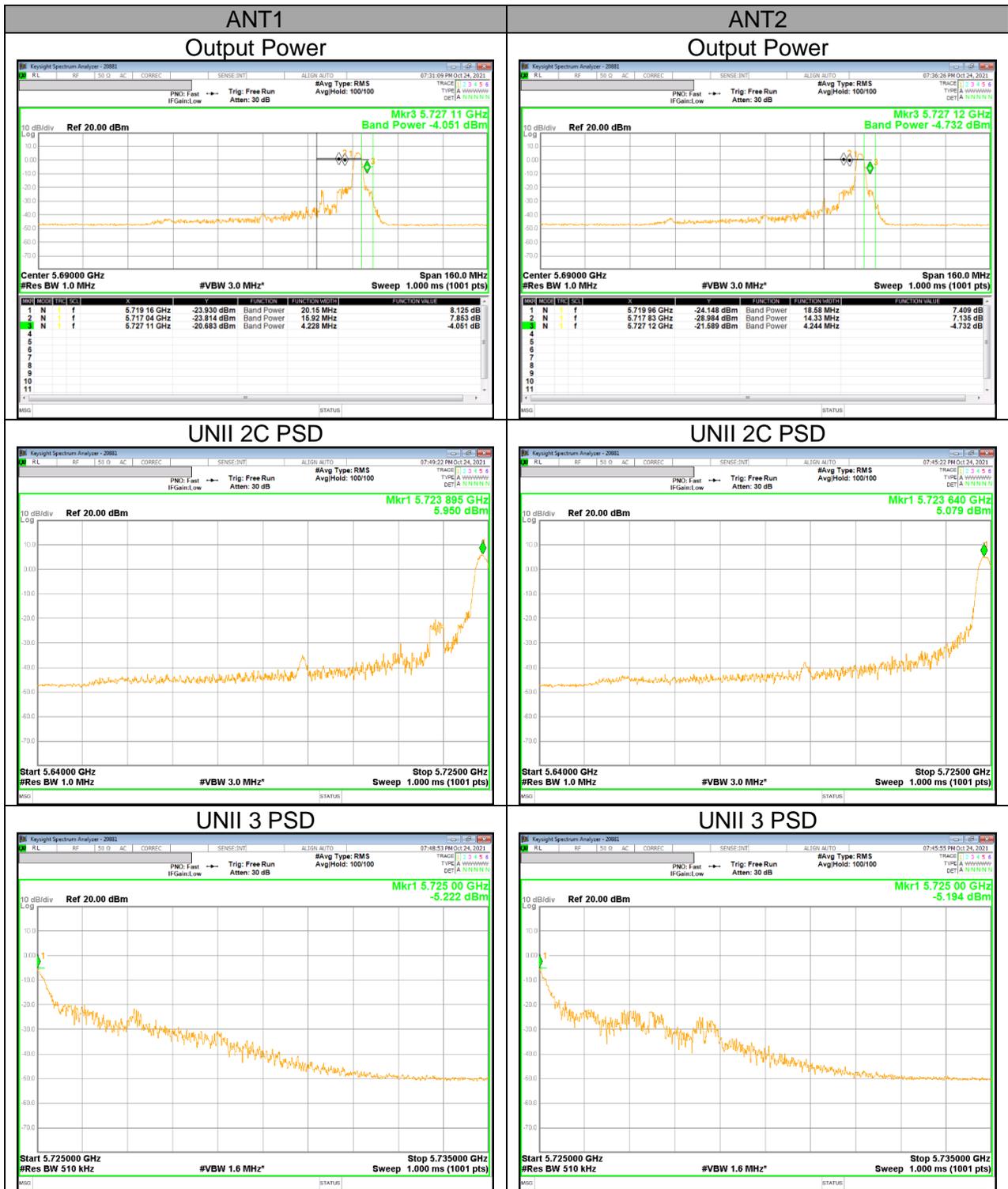
UNII Straddle Ch. IEEE 802.11ax HE20(6RU) mode PSD



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.

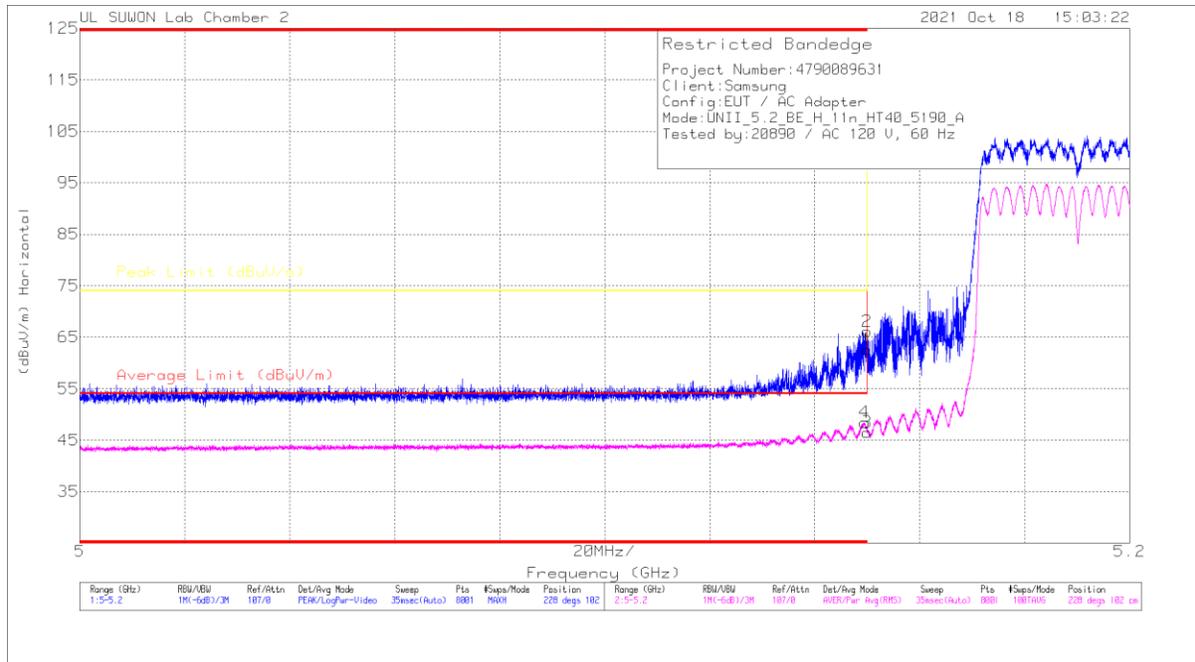
Note : Emission was pre-scanned from 9kHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

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: 802.11n HT40 / 5190 MHz)

HORIZONTAL PEAK AND AVERAGE 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)	Acimuth (Degs)	Height (cm)	Polarity
1	* 5.15	46.23	Pk	34.4	-18	0	62.63	-	-	74	-11.37	228	102	H
2	* 5.14998	49.7	Pk	34.4	-18	0	66.1	-	-	74	-7.9	228	102	H
3	* 5.15	29.91	RMS	34.4	-18	-18	46.49	54	-7.51	-	-	228	102	H
4	* 5.14863	31.87	RMS	34.4	-18	-18	48.45	54	-5.55	-	-	228	102	H

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

Pk - Peak detector

RMS - RMS detection

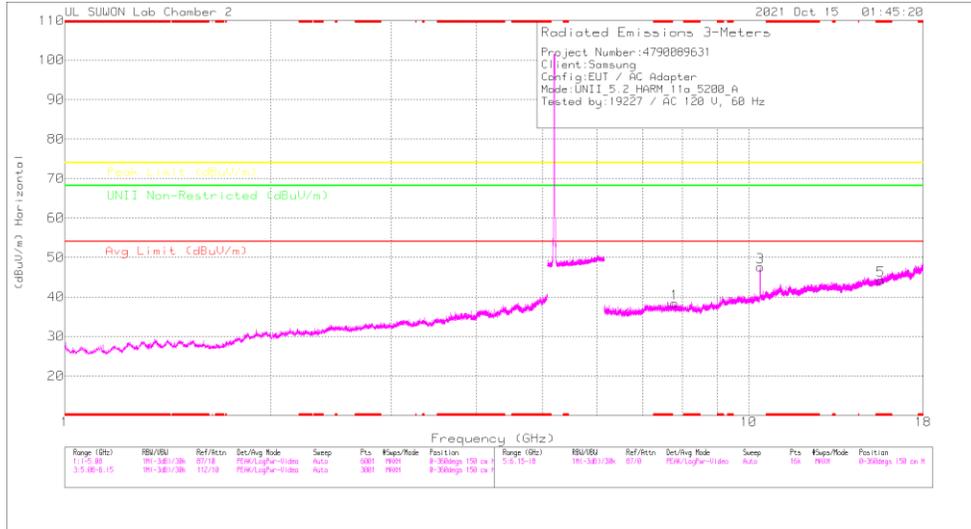
BANDEDGE TEST DATA

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	5180	MIMO	* 5.15	38.47	Pk	34.40	-18.00	0.00	54.87	-	-	74.00	-19.13	164	100	H		
			* 5.14918	45.43	Pk	34.40	-18.00	0.00	61.83	-	-	74.00	-12.17	164	100	H		
			* 5.15	28.19	RMS	34.40	-18.00	0.16	44.75	54.00	-9.25	-	-	-	164	100	H	
			* 5.1485	29.47	RMS	34.40	-18.00	0.16	46.03	54.00	-7.97	-	-	-	164	100	H	
			* 5.15	37.63	Pk	34.40	-18.00	0.00	54.03	-	-	-	-	74.00	-19.97	202	104	V
			* 5.1496	40.08	Pk	34.40	-18.00	0.00	56.48	-	-	-	-	74.00	-17.52	202	104	V
			* 5.15	27.12	RMS	34.40	-18.00	0.16	43.68	54.00	-10.32	-	-	-	-	202	104	V
			* 5.14978	28.01	RMS	34.40	-18.00	0.16	44.57	54.00	-9.43	-	-	-	-	202	104	V
802.11n (HT20)	5180	MIMO	* 5.15	41.56	Pk	34.40	-18.00	0.00	57.96	-	-	74.00	-16.04	167	100	H		
			* 5.14913	49.25	Pk	34.40	-18.00	0.00	65.65	-	-	74.00	-8.35	167	100	H		
			* 5.15	29.21	RMS	34.40	-18.00	0.17	45.78	54.00	-8.22	-	-	-	167	100	H	
			* 5.14898	30.94	RMS	34.40	-18.00	0.17	47.51	54.00	-6.49	-	-	-	167	100	H	
			* 5.15	37.88	Pk	34.40	-18.00	0.00	54.28	-	-	-	-	74.00	-19.72	203	104	V
			* 5.1492	44.29	Pk	34.40	-18.00	0.00	60.69	-	-	-	-	74.00	-13.31	203	104	V
			* 5.15	27.86	RMS	34.40	-18.00	0.17	44.43	54.00	-9.57	-	-	-	-	203	104	V
			* 5.14933	28.70	RMS	34.40	-18.00	0.17	45.27	54.00	-8.73	-	-	-	-	203	104	V
802.11n (HT40)	5190	MIMO	* 5.15	46.23	Pk	34.40	-18.00	0.00	62.63	-	-	74.00	-11.37	228	102	H		
			* 5.14998	49.70	Pk	34.40	-18.00	0.00	66.10	-	-	74.00	-7.90	228	102	H		
			* 5.15	29.91	RMS	34.40	-18.00	0.18	46.49	54.00	-7.51	-	-	-	228	102	H	
			* 5.14953	31.87	RMS	34.40	-18.00	0.18	48.45	54.00	-5.55	-	-	-	228	102	H	
			* 5.15	48.54	Pk	34.40	-18.00	0.00	64.94	-	-	-	-	74.00	-9.06	145	320	V
			* 5.14998	50.21	Pk	34.40	-18.00	0.00	66.61	-	-	-	-	74.00	-7.39	145	320	V
			* 5.15	29.98	RMS	34.40	-18.00	0.18	46.56	54.00	-7.44	-	-	-	-	145	320	V
			* 5.14995	30.17	RMS	34.40	-18.00	0.18	46.75	54.00	-7.25	-	-	-	-	145	320	V
802.11ac (VHT80)	5210	MIMO	* 5.15	41.11	Pk	34.40	-18.00	0.00	57.51	-	-	74.00	-16.49	177	101	H		
			* 5.14795	44.71	Pk	34.40	-18.00	0.00	61.11	-	-	74.00	-12.89	177	101	H		
			* 5.15	31.02	RMS	34.40	-18.00	0.25	47.67	54.00	-6.33	-	-	-	177	101	H	
			* 5.1462	31.59	RMS	34.40	-18.10	0.25	48.14	54.00	-5.86	-	-	-	177	101	H	
			* 5.15	41.30	Pk	34.40	-18.00	0.00	57.70	-	-	-	-	74.00	-16.30	86	373	V
			* 5.14395	41.28	Pk	34.40	-18.00	0.00	57.68	-	-	-	-	74.00	-16.32	86	373	V
			* 5.15	28.48	RMS	34.40	-18.00	0.25	45.13	54.00	-8.87	-	-	-	-	86	373	V
			* 5.1482	28.97	RMS	34.40	-18.00	0.25	45.62	54.00	-8.38	-	-	-	-	86	373	V
802.11ac (VHT160)	5250 Lower	MIMO	* 5.15	40.25	Pk	34.40	-18.00	0.00	56.65	-	-	74.00	-17.35	179	100	H		
			* 5.13838	47.81	Pk	34.30	-18.00	0.00	64.11	-	-	74.00	-9.89	179	100	H		
			* 5.15	30.67	RMS	34.40	-18.00	0.32	47.39	54.00	-6.61	-	-	-	179	100	H	
			* 5.1389	31.78	RMS	34.30	-18.00	0.32	48.40	54.00	-5.60	-	-	-	179	100	H	
			* 5.15	39.77	Pk	34.40	-18.00	0.00	56.17	-	-	-	-	74.00	-17.83	178	301	V
			* 5.14103	44.21	Pk	34.30	-18.00	0.00	60.51	-	-	-	-	74.00	-13.49	178	301	V
			* 5.15	28.69	RMS	34.40	-18.00	0.32	45.41	54.00	-8.59	-	-	-	-	178	301	V
			* 5.14083	29.84	RMS	34.30	-18.00	0.32	46.46	54.00	-7.54	-	-	-	-	178	301	V
802.11ax (HE20)	5180	MIMO	* 5.15	39.70	Pk	34.40	-18.00	0.00	56.10	-	-	74.00	-17.90	159	111	H		
			* 5.1496	43.41	Pk	34.40	-18.00	0.00	59.81	-	-	74.00	-14.19	159	111	H		
			* 5.15	28.55	RMS	34.40	-18.00	0.41	45.36	54.00	-8.64	-	-	-	159	111	H	
			* 5.14995	28.80	RMS	34.40	-18.00	0.41	45.61	54.00	-8.39	-	-	-	159	111	H	
			* 5.15	38.97	Pk	34.40	-18.00	0.00	55.37	-	-	-	-	74.00	-18.63	140	333	V
			* 5.14835	40.29	Pk	34.40	-18.00	0.00	56.69	-	-	-	-	74.00	-17.31	140	333	V
			* 5.15	27.56	RMS	34.40	-18.00	0.41	44.37	54.00	-9.63	-	-	-	-	140	333	V
			* 5.1498	27.89	RMS	34.40	-18.00	0.41	44.70	54.00	-9.30	-	-	-	-	140	333	V
802.11ax (HE40)	5190	MIMO	* 5.15	40.68	Pk	34.40	-18.00	0.00	57.08	-	-	74.00	-16.92	168	101	H		
			* 5.14918	46.05	Pk	34.40	-18.00	0.00	62.45	-	-	74.00	-11.55	168	101	H		
			* 5.15	29.25	RMS	34.40	-18.00	0.42	46.07	54.00	-7.93	-	-	-	168	100	H	
			* 5.14823	29.70	RMS	34.40	-18.00	0.42	46.52	54.00	-7.48	-	-	-	168	100	H	
			* 5.15	36.93	Pk	34.40	-18.00	0.00	53.33	-	-	-	-	74.00	-20.67	86	375	V
			* 5.14618	39.92	Pk	34.40	-18.10	0.00	56.22	-	-	-	-	74.00	-17.78	86	375	V
			* 5.15	27.52	RMS	34.40	-18.00	0.42	44.34	54.00	-9.66	-	-	-	-	86	375	V
			* 5.1483	27.92	RMS	34.40	-18.00	0.42	44.74	54.00	-9.26	-	-	-	-	86	375	V
802.11ax (HE80)	5210	MIMO	* 5.15	40.20	Pk	34.40	-18.00	0.00	56.60	-	-	74.00	-17.40	169	100	H		
			* 5.14625	42.78	Pk	34.40	-18.10	0.00	59.08	-	-	74.00	-14.92	169	100	H		
			* 5.15	29.90	RMS	34.40	-18.00	0.30	46.60	54.00	-7.40	-	-	-	169	100	H	
			* 5.14818	30.71	RMS	34.40	-18.00	0.30	47.41	54.00	-6.59	-	-	-	169	100	H	
			* 5.15	38.83	Pk	34.40	-18.00	0.00	55.23	-	-	-	-	74.00	-18.77	88	338	V
			* 5.1447	40.00	Pk	34.40	-18.00	0.00	56.40	-	-	-	-	74.00	-17.60	88	338	V
			* 5.15	28.02	RMS	34.40	-18.00	0.30	44.72	54.00	-9.28	-	-	-	-	88	338	V
			* 5.13975	28.72	RMS	34.30	-18.00	0.30	45.32	54.00	-8.68	-	-	-	-	88	338	V
802.11ax (HE160)	5250 Lower	MIMO	* 5.15	39.71	Pk	34.40	-18.00	0.00	56.11	-	-	74.00	-17.89	176	103	H		
			* 5.1421	44.56	Pk	34.40	-18.00	0.00	60.96	-	-	74.00	-13.04	176	103	H		
			* 5.15	29.95	RMS	34.40	-18.00	0.35	46.70	54.00	-7.30	-	-	-	176	103	H	
			* 5.14293	30.66	RMS	34.40	-18.00	0.35	47.41	54.00	-6.59	-	-	-	176	103	H	
			* 5.15	37.26	Pk	34.40	-18.00	0.00	53.66	-	-	-	-	74.00	-20.34	111	378	V
			* 5.13273	40.63	Pk	34.30	-18.00	0.00	56.93	-	-	-	-	74.00	-17.07	111	378	V
			* 5.15	27.57	RMS	34.40	-18.00	0.35	44.32	54.00	-9.68	-	-	-	-	111	378	V
			* 5.14948	28.51	RMS	34.40	-18.00	0.35	45.26	54.00	-8.74	-	-	-	-	111	378	V

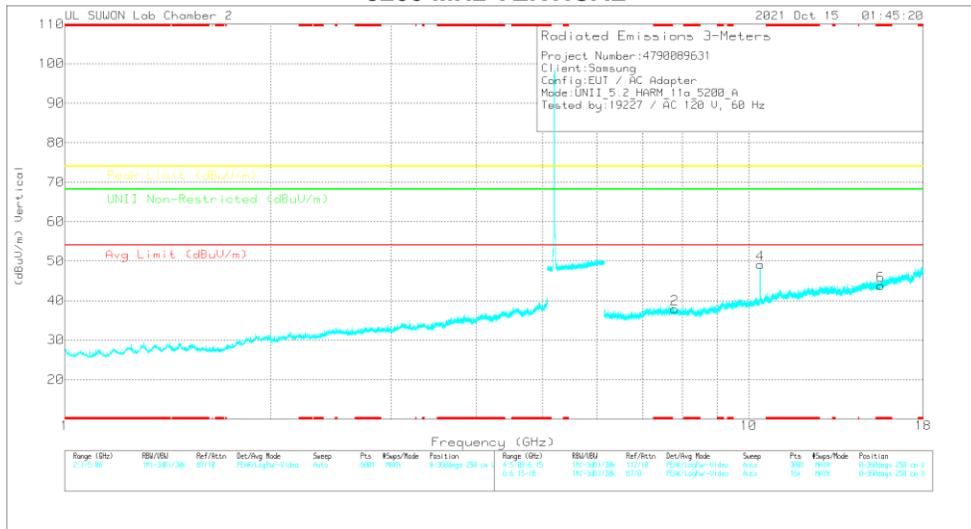
Note1. Pk - Peak detector, RMS - RMS detector

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

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5200 MHz)
5200 MHz HORIZONTAL



5200 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.

5200 MHz DATA

Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	317_00168724	60Hz_HF[dB]	DC Corr (dB)	Corrected Reading (dBuV)	Avg Limit (dBuV/m)	Margn (dB)	Peak Limit (dBuV/m)	Margn (dB)	UNII Non-Restricted (dBuV/m)	Margn (dB)	Asmth (Degs)	Height (cm)	Polarity
7.80013	35.99	PK-U	36	-23.9	0	48.09	-	-	-	-	68.2	-20.11	360	100	H
7.79864	35.55	PK-U	36	-23.9	0	47.65	-	-	-	-	68.2	-20.55	360	100	V
10.3892	45.29	PK-U	37.7	-20.9	0	62.09	-	-	-	-	68.2	-6.11	116	102	H
10.40035	33.02	ADR	37.7	-20.9	-16	49.98	-	-	-	-	-	-	116	102	H
10.39916	43.16	PK-U	37.7	-20.9	0	59.96	-	-	-	-	68.2	-8.24	181	104	V
10.40328	29.77	ADR	37.7	-20.9	-16	46.73	-	-	-	-	-	-	181	104	V
* 15.59988	34.59	PK-U	40	-19.9	0	54.69	-	-	74	-19.31	-	-	0	100	H
* 15.59926	35.16	PK-U	40	-19.9	0	55.26	-	-	74	-18.74	-	-	0	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

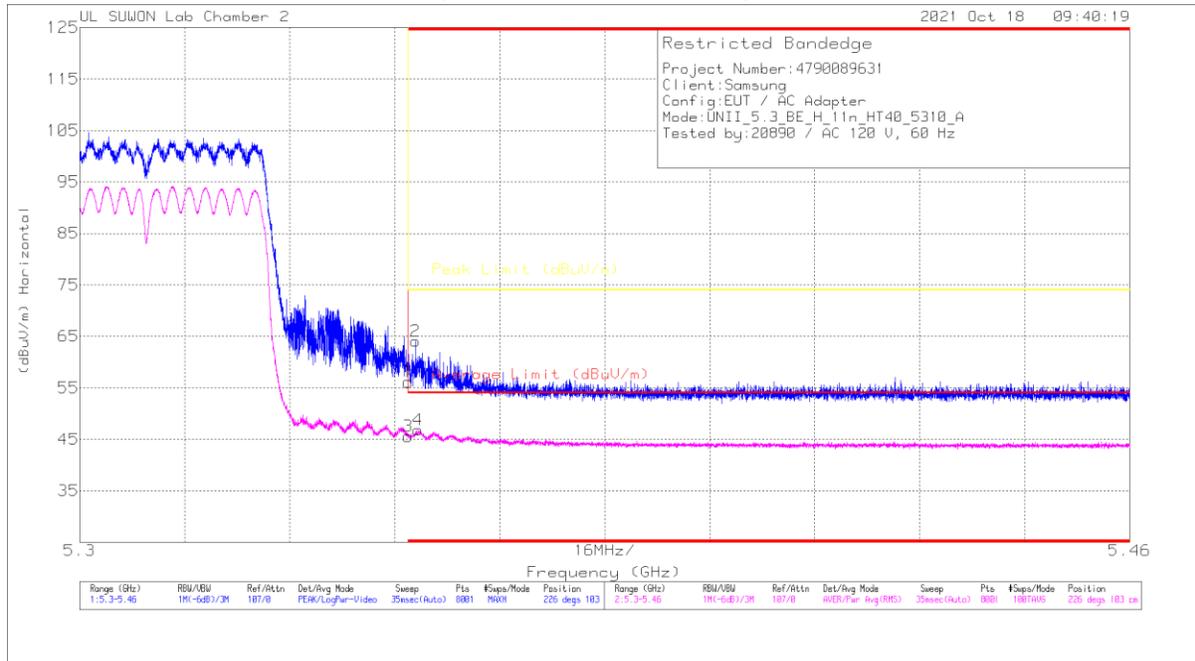
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity	
802.11a	5180	MIMO	7.770	37.42	PK-U	36.00	-23.60	0.00	49.82	-	-	-	-	68.20	-18.38	200	100	H	
			7.772	35.99	PK-U	36.00	-23.60	0.00	48.39	-	-	-	-	68.20	-19.81	268	113	V	
			10.359	45.26	PK-U	37.70	-20.90	0.00	62.06	-	-	-	-	68.20	-6.14	119	100	H	
			10.360	32.47	ADR	37.70	-20.90	0.16	49.43	-	-	-	-	-	-	-	119	100	H
			10.358	43.99	PK-U	37.70	-20.90	0.00	60.79	-	-	-	-	68.20	-7.41	202	159	V	
			10.360	30.65	ADR	37.70	-20.90	0.16	47.61	-	-	-	-	-	-	-	202	159	V
				* 15.54027	34.49	PK-U	40.00	-19.70	0.00	54.79	-	-	74.00	-19.21	-	0	100	H	
				* 15.53867	33.85	PK-U	40.00	-19.60	0.00	54.25	-	-	74.00	-19.75	-	0	100	V	
		5200	MIMO	7.800	35.99	PK-U	36.00	-23.90	0.00	48.09	-	-	-	-	68.20	-20.11	360	100	H
	7.800			35.55	PK-U	36.00	-23.90	0.00	47.65	-	-	-	-	68.20	-20.55	360	100	V	
	10.399			45.29	PK-U	37.70	-20.90	0.00	62.09	-	-	-	-	68.20	-6.11	116	102	H	
	10.400			33.02	ADR	37.70	-20.90	0.16	49.98	-	-	-	-	-	-	-	116	102	H
	10.399			43.16	PK-U	37.70	-20.90	0.00	59.96	-	-	-	-	68.20	-8.24	181	104	V	
	10.400			29.77	ADR	37.70	-20.90	0.16	46.73	-	-	-	-	-	-	-	181	104	V
				* 15.59888	34.59	PK-U	40.00	-19.90	0.00	54.69	-	-	74.00	-19.31	-	0	100	H	
				* 15.59926	35.16	PK-U	40.00	-19.90	0.00	55.26	-	-	74.00	-18.74	-	0	100	V	
		5240	MIMO	7.858	36.13	PK-U	36.00	-24.40	0.00	47.73	-	-	-	-	68.20	-20.47	0	100	H
	7.860			36.79	PK-U	36.00	-24.40	0.00	48.39	-	-	-	-	68.20	-19.81	0	100	V	
10.479	44.76			PK-U	37.80	-20.60	0.00	61.96	-	-	-	-	68.20	-6.24	118	100	H		
10.480	31.65			ADR	37.80	-20.70	0.16	48.91	-	-	-	-	-	-	-	118	100	H	
10.479	42.53			PK-U	37.80	-20.60	0.00	59.73	-	-	-	-	68.20	-8.47	179	104	V		
10.480	29.42			ADR	37.80	-20.70	0.16	46.68	-	-	-	-	-	-	-	179	104	V	
			* 15.72101	34.37	PK-U	40.20	-19.60	0.00	54.97	-	-	74.00	-19.03	-	0	100	H		
			* 15.72324	34.70	PK-U	40.20	-19.60	0.00	55.30	-	-	74.00	-18.70	-	0	100	V		
802.11ax (HE20) 8RU Spot-Check	5200	MIMO	7.800	42.32	PK-U	36.80	-26.00	0.00	52.12	-	-	-	-	68.20	-16.08	143	100	H	
			7.800	39.82	PK-U	36.80	-26.00	0.00	49.62	-	-	-	68.20	-18.58	164	274	V		
			10.417	43.74	PK-U	37.80	-21.50	0.00	60.04	-	-	-	68.20	-8.16	208	200	H		
			10.416	37.10	PK-U	37.80	-21.40	0.00	53.50	-	-	-	68.20	-14.70	141	100	V		
			* 15.60117	36.85	PK-U	40.10	-21.10	0.00	55.85	-	-	74.00	-18.15	-	-	360	100	H	
			* 15.59237	36.60	PK-U	40.10	-21.10	0.00	55.60	-	-	74.00	-18.40	-	-	360	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: 802.11n HT40 / 5310 MHz)

VERTICAL PEAK AND AVERAGE 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	* 5.35002	39.64	Pk	34.5	-18	0	56.14	-	-	74	-17.86	226	103	H
2	* 5.35116	47.55	Pk	34.5	-18	0	64.05	-	-	74	-9.95	226	103	H
3	* 5.35002	28.89	RMS	34.5	-18	.18	45.57	54	-8.43	-	-	226	103	H
4	* 5.35156	30.14	RMS	34.5	-18	.18	46.82	54	-7.18	-	-	226	103	H

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

Pk - Peak detector

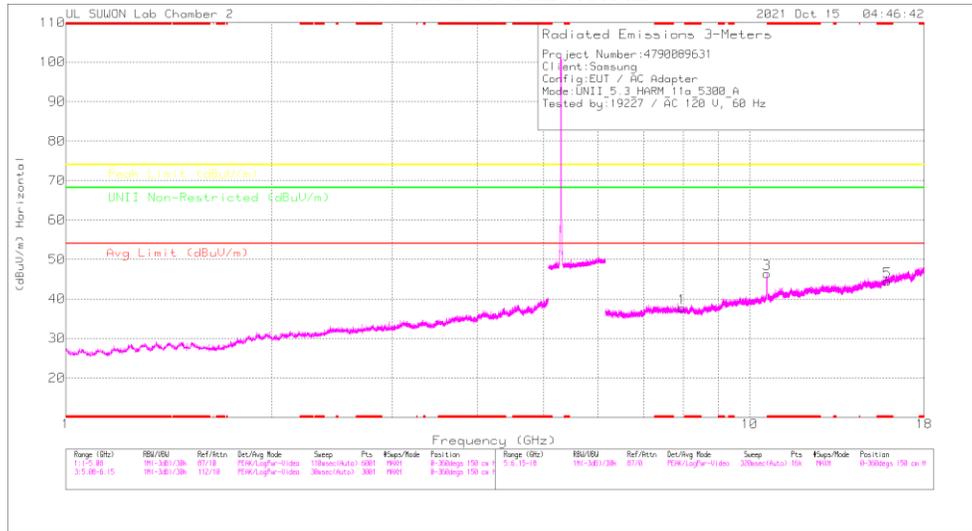
RMS - RMS detection

BANDEDGE TEST DATA

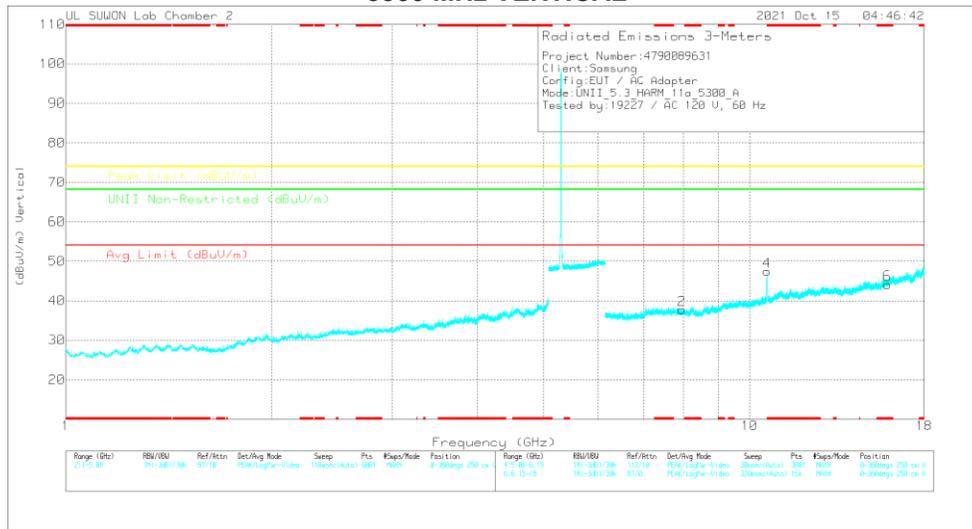
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a	5320	MIMO	* 5.35002	38.84	Pk	34.50	-18.00	0.00	55.34	-	-	74.00	-18.66	229	103	H
			* 5.35112	42.68	Pk	34.50	-18.00	0.00	59.18	-	-	74.00	-14.82	229	103	H
			* 5.35002	28.63	RMS	34.50	-18.00	0.16	45.29	54.00	-8.71	-	-	229	103	H
			* 5.35156	29.19	RMS	34.50	-18.00	0.16	45.85	54.00	-8.15	-	-	229	103	H
			* 5.35002	38.04	Pk	34.50	-18.00	0.00	54.54	-	-	74.00	-19.46	115	130	V
			* 5.351	40.98	Pk	34.50	-18.00	0.00	57.48	-	-	74.00	-16.52	115	130	V
			* 5.35002	27.33	RMS	34.50	-18.00	0.16	43.99	54.00	-10.01	-	-	115	130	V
802.11n (HT20)	5320	MIMO	* 5.35002	37.75	Pk	34.50	-18.00	0.00	54.25	-	-	74.00	-19.75	177	141	H
			* 5.35108	44.28	Pk	34.50	-18.00	0.00	60.78	-	-	74.00	-13.22	177	141	H
			* 5.35002	28.24	RMS	34.50	-18.00	0.17	44.91	54.00	-9.09	-	-	177	141	H
			* 5.35102	28.99	RMS	34.50	-18.00	0.17	45.66	54.00	-8.34	-	-	177	141	H
			* 5.35002	38.41	Pk	34.50	-18.00	0.00	54.91	-	-	74.00	-19.09	93	103	V
			* 5.35058	40.35	Pk	34.50	-18.00	0.00	56.85	-	-	74.00	-17.15	93	103	V
			* 5.35002	27.78	RMS	34.50	-18.00	0.17	44.45	54.00	-9.55	-	-	93	103	V
802.11n (HT40)	5310	MIMO	* 5.35064	28.38	RMS	34.50	-18.00	0.17	45.05	54.00	-8.95	-	-	93	103	V
			* 5.35002	39.64	Pk	34.50	-18.00	0.00	56.14	-	-	74.00	-17.86	226	103	H
			* 5.35116	47.55	Pk	34.50	-18.00	0.00	64.05	-	-	74.00	-9.95	226	103	H
			* 5.35002	28.89	RMS	34.50	-18.00	0.18	45.57	54.00	-8.43	-	-	226	103	H
			* 5.35156	30.14	RMS	34.50	-18.00	0.18	46.82	54.00	-7.18	-	-	226	103	H
			* 5.35002	39.68	Pk	34.50	-18.00	0.00	56.18	-	-	74.00	-17.82	89	394	V
			* 5.35052	43.70	Pk	34.50	-18.00	0.00	60.20	-	-	74.00	-13.80	89	394	V
802.11ac (VHT80)	5290	MIMO	* 5.35002	28.23	RMS	34.50	-18.00	0.18	44.91	54.00	-9.09	-	-	89	394	V
			* 5.35036	28.81	RMS	34.50	-18.00	0.18	45.49	54.00	-8.51	-	-	89	394	V
			* 5.35002	41.75	Pk	34.50	-18.00	0.00	58.25	-	-	74.00	-15.75	184	100	H
			* 5.35214	43.15	Pk	34.50	-18.00	0.00	59.65	-	-	74.00	-14.35	184	100	H
			* 5.35002	28.54	RMS	34.50	-18.00	0.25	45.29	54.00	-8.71	-	-	184	100	H
			* 5.35216	28.98	RMS	34.50	-18.00	0.25	45.73	54.00	-8.27	-	-	184	100	H
			* 5.35002	38.23	Pk	34.50	-18.00	0.00	54.73	-	-	74.00	-19.27	123	243	V
802.11ac (VHT160)	5250 Upper	MIMO	* 5.36252	43.59	Pk	34.50	-18.00	0.00	60.09	-	-	74.00	-13.91	123	243	V
			* 5.35002	27.68	RMS	34.50	-18.00	0.25	44.43	54.00	-9.57	-	-	123	243	V
			* 5.35062	28.41	RMS	34.50	-18.00	0.25	45.16	54.00	-8.84	-	-	123	243	V
			* 5.35002	37.63	Pk	34.50	-18.00	0.00	54.13	-	-	74.00	-19.87	184	100	H
			* 5.35884	42.58	Pk	34.50	-18.00	0.00	59.08	-	-	74.00	-14.92	184	100	H
			* 5.35002	27.89	RMS	34.50	-18.00	0.32	44.71	54.00	-9.29	-	-	184	100	H
			* 5.35331	28.51	RMS	34.50	-18.00	0.32	45.33	54.00	-8.67	-	-	184	100	H
802.11ax (HE20)	5320	MIMO	* 5.35002	39.18	Pk	34.50	-18.00	0.00	55.68	-	-	74.00	-18.32	119	167	V
			* 5.42178	40.38	Pk	34.60	-18.10	0.00	56.88	-	-	74.00	-17.12	119	167	V
			* 5.35002	27.18	RMS	34.50	-18.00	0.32	44.00	54.00	-10.00	-	-	119	167	V
			* 5.35344	28.27	RMS	34.50	-18.00	0.32	45.09	54.00	-8.91	-	-	119	167	V
			* 5.35002	40.28	Pk	34.50	-18.00	0.00	56.78	-	-	74.00	-17.22	177	101	H
			* 5.35005	41.57	Pk	34.50	-18.00	0.00	58.07	-	-	74.00	-15.93	177	101	H
			* 5.35002	28.37	RMS	34.50	-18.00	0.41	45.28	54.00	-8.72	-	-	177	100	H
802.11ax (HE40)	5310	MIMO	* 5.35026	28.54	RMS	34.50	-18.00	0.41	45.45	54.00	-8.55	-	-	177	100	H
			* 5.35002	38.86	Pk	34.50	-18.00	0.00	55.36	-	-	74.00	-18.64	126	186	V
			* 5.3522	41.02	Pk	34.50	-18.00	0.00	57.52	-	-	74.00	-16.48	126	186	V
			* 5.35002	27.88	RMS	34.50	-18.00	0.41	44.79	54.00	-9.21	-	-	126	186	V
			* 5.35748	28.05	RMS	34.50	-18.00	0.41	44.96	54.00	-9.04	-	-	126	186	V
			* 5.35002	37.83	Pk	34.50	-18.00	0.00	54.33	-	-	74.00	-19.67	177	100	H
			* 5.35066	41.41	Pk	34.50	-18.00	0.00	57.91	-	-	74.00	-16.09	177	100	H
802.11ax (HE80)	5290	MIMO	* 5.35002	27.85	RMS	34.50	-18.00	0.42	44.77	54.00	-9.23	-	-	177	100	H
			* 5.35006	28.75	RMS	34.50	-18.00	0.42	45.67	54.00	-8.33	-	-	177	100	H
			* 5.35002	37.67	Pk	34.50	-18.00	0.00	54.17	-	-	74.00	-19.83	117	184	V
			* 5.35094	41.14	Pk	34.50	-18.00	0.00	57.64	-	-	74.00	-16.36	117	184	V
			* 5.35002	27.89	RMS	34.50	-18.00	0.42	44.81	54.00	-9.19	-	-	117	184	V
			* 5.35034	28.22	RMS	34.50	-18.00	0.42	45.14	54.00	-8.86	-	-	117	184	V
			* 5.35002	38.04	Pk	34.50	-18.00	0.00	54.54	-	-	74.00	-19.46	178	100	H
802.11ax (HE160)	5250 Upper	MIMO	* 5.35302	40.79	Pk	34.50	-18.00	0.00	57.29	-	-	74.00	-16.71	178	100	H
			* 5.35002	27.82	RMS	34.50	-18.00	0.30	44.62	54.00	-9.38	-	-	178	100	H
			* 5.35392	28.36	RMS	34.50	-18.00	0.30	45.16	54.00	-8.84	-	-	178	100	H
			* 5.35002	38.64	Pk	34.50	-18.00	0.00	55.14	-	-	74.00	-18.86	121	216	V
			* 5.39364	39.66	Pk	34.50	-18.00	0.00	56.16	-	-	74.00	-17.84	121	216	V
			* 5.35002	27.66	RMS	34.50	-18.00	0.30	44.46	54.00	-9.54	-	-	121	216	V
			* 5.35003	28.10	RMS	34.50	-18.00	0.30	44.90	54.00	-9.10	-	-	121	216	V
802.11ax (HE160)	5250 Upper	MIMO	* 5.35001	38.58	Pk	35.10	-20.70	0.00	52.98	-	-	74.00	-21.02	185	100	H
			* 5.37847	41.74	Pk	35.20	-20.70	0.00	56.24	-	-	74.00	-17.76	185	100	H
			* 5.35001	28.03	RMS	35.10	-20.70	0.35	42.78	54.00	-11.22	-	-	185	100	H
			* 5.38369	28.94	RMS	35.20	-20.70	0.35	43.79	54.00	-10.21	-	-	185	100	H
			* 5.35001	37.86	Pk	35.10	-20.70	0.00	52.26	-	-	74.00	-21.74	130	126	V
			* 5.35135	40.84	Pk	35.10	-20.80	0.00	55.14	-	-	74.00	-18.86	130	126	V
			* 5.35001	27.23	RMS	35.10	-20.70	0.35	41.98	54.00	-12.02	-	-	130	126	V
* 5.41146	28.81	RMS	35.20	-20.60	0.35	43.76	54.00	-10.24	-	-	130	126	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 / 5300 MHz)
5300 MHz HORIZONTAL



5300 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.

5300 MHz DATA

Radiated Emissions

Frequency (GHz)	Meas Reading (dBuV)	Det	317_00168724	6GHz_HPS(B)	DC Corr (dB)	Consolid 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 (m)	Polarity
7.95803	35.86	PK-U	36	-23.8	0	48.06	-	-	-	-	68.2	-20.14	0	100	H
7.95645	36.73	PK-U	36	-23.8	0	48.93	-	-	-	-	68.2	-19.27	0	100	V
*10.60586	41.76	PK-U	37.9	-19.5	0	60.16	-	74	-	-13.84	-	-	183	100	H
*10.60125	29.08	ADR	37.9	-19.5	-16	47.64	54	-6.38	-	-	-	-	183	100	H
*10.60241	40.69	PK-U	37.9	-19.5	0	59.09	-	74	-	-14.91	-	-	179	106	V
*10.60089	27.44	ADR	37.9	-19.5	-16	46	54	-8	-	-	-	-	179	106	V
*15.8998	34.08	PK-U	40.5	-19.2	0	55.38	-	74	-	-18.62	-	-	0	100	H
*15.89922	33.77	PK-U	40.5	-19.2	0	55.07	-	74	-	-18.93	-	-	0	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

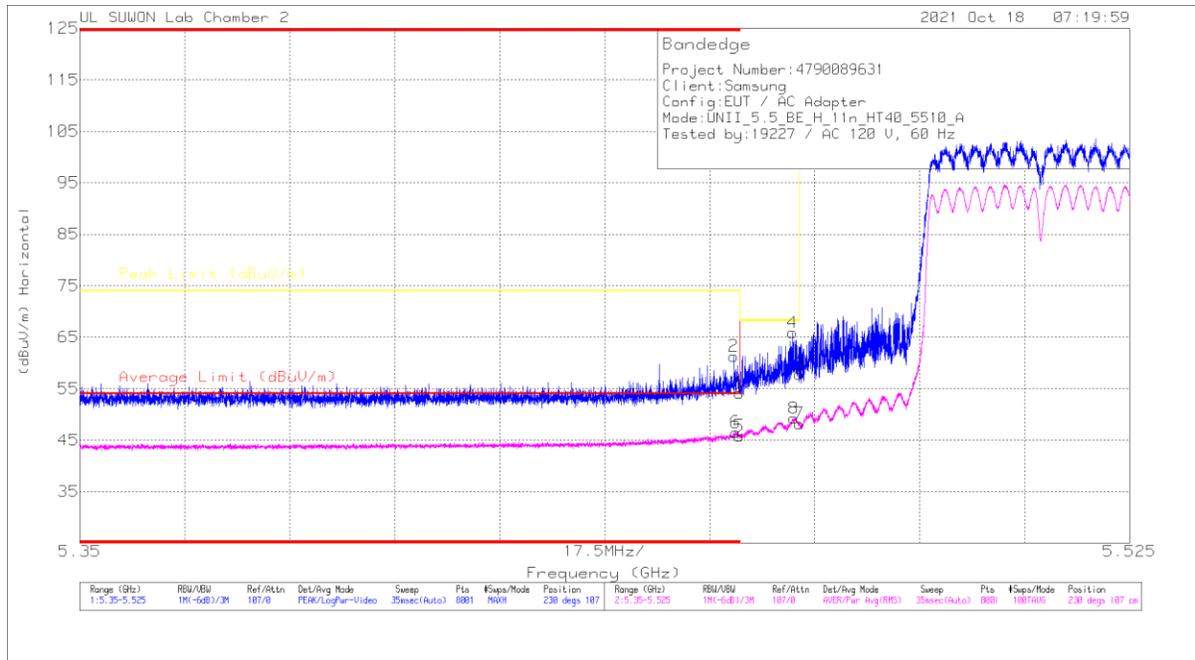
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity				
802.11a	5260	MIMO	7.904	36.47	PK-U	36.00	-24.00	0.00	48.47	-	-	-	-	-	68.20	-19.73	0	100	H			
			7.905	36.51	PK-U	36.00	-24.00	0.00	48.51	-	-	-	-	-	-	68.20	-19.69	0	100	V		
			10.519	43.61	PK-U	37.80	-20.60	0.00	60.81	-	-	-	-	-	-	68.20	-7.39	123	101	H		
			10.521	30.63	ADR	37.80	-20.60	0.16	47.99	-	-	-	-	-	-	-	-	123	101	H		
			10.518	42.18	PK-U	37.80	-20.60	0.00	59.38	-	-	-	-	-	-	68.20	-8.82	180	103	V		
			10.521	29.14	ADR	37.80	-20.60	0.16	46.50	-	-	-	-	-	-	-	-	180	103	V		
			* 15.80786	34.73	PK-U	40.40	-19.80	0.00	55.33	-	-	-	-	74.00	-18.67	-	-	0	101	H		
			* 15.80879	34.32	PK-U	40.40	-19.70	0.00	55.02	-	-	-	-	74.00	-18.96	-	-	0	101	V		
	5300	MIMO	7.958	35.86	PK-U	36.00	-23.80	0.00	48.06	-	-	-	-	-	68.20	-20.14	0	100	H			
			7.956	36.73	PK-U	36.00	-23.80	0.00	48.93	-	-	-	-	-	68.20	-19.27	0	100	V			
			* 10.60586	41.76	PK-U	37.90	-19.50	0.00	60.16	-	-	-	-	74.00	-13.84	-	-	183	100	H		
			* 10.60125	29.08	ADR	37.90	-19.50	0.16	47.64	54.00	-6.36	-	-	-	-	-	-	183	100	H		
			* 10.60241	40.69	PK-U	37.90	-19.50	0.00	59.09	-	-	-	-	74.00	-14.91	-	-	179	106	V		
			* 10.60089	27.44	ADR	37.90	-19.50	0.16	46.00	54.00	-8.00	-	-	-	-	-	-	179	106	V		
			* 15.8998	34.08	PK-U	40.50	-19.20	0.00	55.38	-	-	-	-	74.00	-18.62	-	-	0	100	H		
			* 15.89922	33.77	PK-U	40.50	-19.20	0.00	55.07	-	-	-	-	74.00	-18.93	-	-	0	100	V		
			5320	MIMO	7.982	36.03	PK-U	36.00	-23.90	0.00	48.13	-	-	-	-	-	68.20	-20.07	0	100	H	
					7.978	36.17	PK-U	36.00	-23.90	0.00	48.27	-	-	-	-	-	68.20	-19.93	0	100	V	
					* 10.64569	41.26	PK-U	37.90	-19.70	0.00	59.46	-	-	-	-	74.00	-14.54	-	-	184	102	H
					* 10.64121	28.69	ADR	37.90	-19.60	0.16	47.15	54.00	-6.85	-	-	-	-	-	-	184	102	H
	* 10.64553	41.22			PK-U	37.90	-19.70	0.00	59.42	-	-	-	-	74.00	-14.58	-	-	198	111	V		
	* 10.64081	28.38			ADR	37.90	-19.60	0.16	46.84	54.00	-7.16	-	-	-	-	-	-	198	111	V		
	802.11ax (HE20) 4RU Spot-Check	5300	MIMO	* 15.9617	34.79	PK-U	40.60	-19.30	0.00	56.09	-	-	-	-	74.00	-17.91	-	0	100	H		
				* 15.96026	33.74	PK-U	40.60	-19.30	0.00	55.04	-	-	-	-	74.00	-18.96	-	-	0	100	V	
7.950				42.91	PK-U	36.00	-25.90	0.00	53.01	-	-	-	-	-	68.20	-15.19	171	101	H			
7.950				39.99	PK-U	36.00	-25.90	0.00	50.09	-	-	-	-	-	68.20	-18.11	200	165	V			
* 10.60014				36.11	PK-U	38.00	-22.30	0.00	51.81	-	-	-	-	74.00	-22.19	-	-	0	100	H		
* 10.60166				36.09	PK-U	38.00	-22.30	0.00	51.79	-	-	-	-	74.00	-22.21	-	-	0	100	V		
* 15.89976	36.51	PK-U	40.30	-20.80	0.00	56.01	-	-	-	-	74.00	-17.99	-	-	0	100	H					
* 15.90121	36.46	PK-U	40.30	-20.80	0.00	55.96	-	-	-	-	74.00	-18.04	-	-	0	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: 802.11n HT40 / 5510 MHz)

HORIZONTAL PEAK AND AVERAGE 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	* 5.45999	37.58	PK	34.6	-18	0	54.18	-	-	74	-19.82	230	107	H
2	* 5.45998	44.81	PK	34.6	-18.1	0	61.31	-	-	74	-12.69	230	107	H
3	5.46998	41.2	PK	34.6	-18	0	57.3	-	-	68.2	-10.4	230	107	H
4	5.4698	49.27	PK	34.6	-18	0	65.87	-	-	68.2	-2.33	230	107	H
5	* 5.45999	28.97	RMS	34.6	-18	-18	45.75	54	-8.25	-	-	230	107	H
6	* 5.45935	29.81	RMS	34.6	-18.1	-18	46.49	54	-7.51	-	-	230	107	H
7	5.46998	31.44	RMS	34.6	-18	-18	48.22	-	-	-	-	230	107	H
8	5.46904	32.48	RMS	34.6	-18	-18	49.26	-	-	-	-	230	107	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	37.20	Pk	34.60	-18.00	0.00	53.80	-	-	74.00	-20.20	193	106	H	
			* 5.38787	40.59	Pk	34.50	-18.10	0.00	56.99	-	-	74.00	-17.01	193	106	H	
			5.46998	40.91	Pk	34.60	-18.00	0.00	57.51	-	-	68.20	-10.69	193	106	H	
			5.46834	46.36	Pk	34.60	-18.00	0.00	62.96	-	-	68.20	-5.24	193	106	H	
			* 5.45999	27.94	RMS	34.60	-18.00	0.16	44.70	54.00	-9.30	-	-	-	193	106	H
			* 5.45996	28.48	RMS	34.60	-18.10	0.16	45.14	54.00	-8.86	-	-	-	193	106	H
			5.46998	30.11	RMS	34.60	-18.00	0.16	46.87	-	-	-	-	-	193	106	H
			5.46933	30.82	RMS	34.60	-18.00	0.16	47.58	-	-	-	-	-	193	106	H
			* 5.45999	39.30	Pk	34.60	-18.00	0.00	55.90	-	-	74.00	-18.10	125	100	V	
			* 5.374	40.70	Pk	34.50	-18.00	0.00	57.20	-	-	74.00	-16.80	125	100	V	
	5.46998	43.90	Pk	34.60	-18.00	0.00	60.50	-	-	68.20	-7.70	125	100	V			
	5.46784	46.90	Pk	34.60	-18.10	0.00	63.40	-	-	68.20	-4.80	125	100	V			
	* 5.45999	27.24	RMS	34.60	-18.00	0.16	44.00	54.00	-10.00	-	-	-	125	100	V		
	* 5.45894	28.18	RMS	34.60	-18.10	0.16	44.84	54.00	-9.16	-	-	-	125	100	V		
	5.46998	29.82	RMS	34.60	-18.00	0.16	46.58	-	-	-	-	-	125	100	V		
	5.46963	30.37	RMS	34.60	-18.00	0.16	47.13	-	-	-	-	-	125	100	V		
	5.72502	43.41	Pk	34.70	-17.40	0.00	60.71	-	-	68.20	-7.49	199	100	H			
	5.72516	45.03	Pk	34.70	-17.40	0.00	62.33	-	-	68.20	-5.87	199	100	H			
	5.72502	43.72	Pk	34.70	-17.40	0.00	61.02	-	-	68.20	-7.18	128	100	V			
	5.72550	43.63	Pk	34.70	-17.40	0.00	60.93	-	-	68.20	-7.27	128	100	V			
802.11n (HT20)	5500	MIMO	* 5.45999	34.94	Pk	34.60	-18.00	0.00	51.54	-	-	74.00	-22.46	227	113	H	
			* 5.45535	43.54	Pk	34.60	-18.10	0.00	60.04	-	-	74.00	-13.96	227	113	H	
			5.46998	38.79	Pk	34.60	-18.00	0.00	55.39	-	-	68.20	-12.81	227	113	H	
			5.46784	48.01	Pk	34.60	-18.10	0.00	64.51	-	-	68.20	-3.69	227	113	H	
			* 5.45999	28.49	RMS	34.60	-18.00	0.17	45.26	54.00	-8.74	-	-	227	113	H	
			* 5.45664	28.83	RMS	34.60	-18.10	0.17	45.50	54.00	-8.50	-	-	227	113	H	
			5.46998	31.81	RMS	34.60	-18.00	0.17	48.58	-	-	-	-	227	113	H	
			5.46953	32.40	RMS	34.60	-18.00	0.17	49.17	-	-	-	-	227	113	H	
			* 5.45999	38.31	Pk	34.60	-18.00	0.00	54.91	-	-	74.00	-19.09	123	108	V	
			* 5.45741	43.09	Pk	34.60	-18.00	0.00	59.69	-	-	74.00	-14.31	123	108	V	
	5.46998	43.38	Pk	34.60	-18.00	0.00	59.98	-	-	68.20	-8.22	123	108	V			
	5.46992	47.08	Pk	34.60	-18.00	0.00	63.68	-	-	68.20	-4.52	123	108	V			
	* 5.45999	27.61	RMS	34.60	-18.00	0.17	44.38	54.00	-9.62	-	-	123	108	V			
	* 5.45327	28.30	RMS	34.60	-18.10	0.17	44.97	54.00	-9.03	-	-	123	108	V			
	5.46998	30.87	RMS	34.60	-18.00	0.17	47.64	-	-	-	-	123	108	V			
	5.46985	30.80	RMS	34.60	-18.00	0.17	47.57	-	-	-	-	123	108	V			
	5.72502	43.87	Pk	34.70	-17.40	0.00	61.17	-	-	68.20	-7.03	187	101	H			
	5.72519	46.19	Pk	34.70	-17.40	0.00	63.49	-	-	68.20	-4.71	187	101	H			
	5.72502	43.88	Pk	34.70	-17.40	0.00	61.18	-	-	68.20	-7.02	132	101	V			
	5.72539	45.67	Pk	34.70	-17.40	0.00	62.97	-	-	68.20	-5.23	132	101	V			
802.11n (HT40)	5510	MIMO	* 5.45999	37.58	Pk	34.60	-18.00	0.00	54.18	-	-	74.00	-19.82	230	107	H	
			* 5.45898	44.81	Pk	34.60	-18.10	0.00	61.31	-	-	74.00	-12.69	230	107	H	
			5.46998	41.20	Pk	34.60	-18.00	0.00	57.80	-	-	68.20	-10.40	230	107	H	
			5.46880	49.27	Pk	34.60	-18.00	0.00	65.87	-	-	68.20	-2.33	230	107	H	
			* 5.45999	28.97	RMS	34.60	-18.00	0.18	45.75	54.00	-8.25	-	-	230	107	H	
			* 5.45935	29.81	RMS	34.60	-18.10	0.18	46.49	54.00	-7.51	-	-	230	107	H	
			5.46998	31.44	RMS	34.60	-18.00	0.18	48.22	-	-	-	-	230	107	H	
			5.46904	32.48	RMS	34.60	-18.00	0.18	49.26	-	-	-	-	230	107	H	
			* 5.45999	39.18	Pk	34.60	-18.00	0.00	55.78	-	-	74.00	-18.22	126	108	V	
			* 5.45857	43.15	Pk	34.60	-18.10	0.00	59.65	-	-	74.00	-14.35	126	108	V	
	5.46998	42.08	Pk	34.60	-18.00	0.00	58.68	-	-	68.20	-9.52	126	108	V			
	5.46926	46.35	Pk	34.60	-18.00	0.00	62.95	-	-	68.20	-5.25	126	108	V			
	* 5.45999	28.35	RMS	34.60	-18.00	0.18	45.13	54.00	-8.87	-	-	126	108	V			
	* 5.45813	28.49	RMS	34.60	-18.10	0.18	45.17	54.00	-8.83	-	-	126	108	V			
	5.46998	29.27	RMS	34.60	-18.00	0.18	46.05	-	-	-	-	126	108	V			
	5.46981	30.24	RMS	34.60	-18.00	0.18	47.02	-	-	-	-	126	108	V			
	5.72502	36.92	Pk	34.70	-17.40	0.00	54.22	-	-	68.20	-13.98	189	106	H			
	5.73430	40.38	Pk	34.70	-17.40	0.00	57.69	-	-	68.20	-10.51	189	106	H			
	5.72502	36.73	Pk	34.70	-17.40	0.00	54.03	-	-	68.20	-14.17	139	100	V			
	5.76613	39.83	Pk	34.80	-17.30	0.00	57.33	-	-	68.20	-10.87	139	100	V			
802.11ac (VHT80)	5530	MIMO	* 5.45999	41.90	Pk	34.60	-18.00	0.00	58.50	-	-	74.00	-15.50	229	111	H	
			* 5.45743	46.27	Pk	34.60	-18.00	0.00	62.87	-	-	74.00	-11.13	229	111	H	
			5.46998	43.42	Pk	34.60	-18.00	0.00	60.02	-	-	68.20	-8.18	229	111	H	
			5.46605	48.95	Pk	34.60	-18.10	0.00	65.45	-	-	68.20	-2.75	229	111	H	
			* 5.45999	32.64	RMS	34.60	-18.00	0.25	49.49	54.00	-4.51	-	-	229	111	H	
			* 5.45773	33.68	RMS	34.60	-18.10	0.25	50.43	54.00	-3.57	-	-	229	111	H	
			5.46998	33.53	RMS	34.60	-18.00	0.25	50.38	-	-	-	-	229	111	H	
			5.46850	34.43	RMS	34.60	-18.00	0.25	51.28	-	-	-	-	229	111	H	
			* 5.45999	41.47	Pk	34.60	-18.00	0.00	58.07	-	-	74.00	-15.93	126	151	V	
			* 5.45841	46.12	Pk	34.60	-18.10	0.00	62.62	-	-	74.00	-11.38	126	151	V	
	5.46998	43.78	Pk	34.60	-18.00	0.00	60.38	-	-	68.20	-7.82	126	151	V			
	5.46681	48.62	Pk	34.60	-18.10	0.00	65.12	-	-	68.20	-3.08	126	151	V			
	* 5.45999	31.12	RMS	34.60	-18.00	0.25	47.97	54.00	-6.03	-	-	126	151	V			
	* 5.45795	32.15	RMS	34.60	-18.10	0.25	48.90	54.00	-5.10	-	-	126	151	V			
	5.46998	32.38	RMS	34.60	-18.00	0.25	49.23	-	-	-	-	126	151	V			
	5.46990	32.99	RMS	34.60	-18.00	0.25	49.84	-	-	-	-	126	151	V			
	5.72502	36.12	Pk	34.70	-17.40	0.00	53.42	-	-	68.20	-14.78	186	100	H			
	5.79359	39.97	Pk	34.80	-17.30	0.00	57.47	-	-	68.20	-10.73	186	100	H			
	5.72502	36.57	Pk	34.70	-17.40	0.00	53.87	-	-	68.20	-14.33	127	101	V			
	5.73380	40.20	Pk	34.70	-17.40	0.00	57.50	-	-	68.20	-10.70	127	101	V			

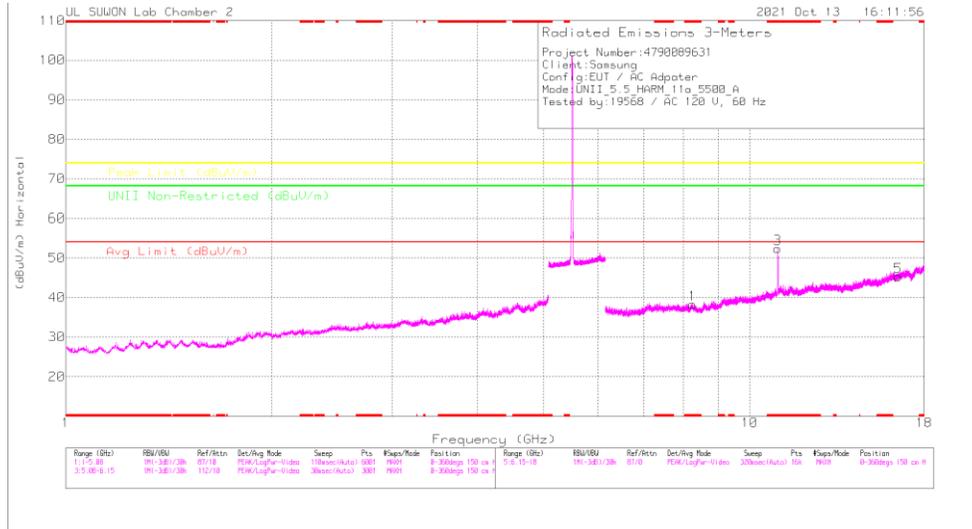
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity		
802.11ac (VHT160)	5570 Lower	MIMO	* 5.45999	42.10	Pk	34.60	-18.00	0.00	58.70	-	-	74.00	-15.30	232	107	H		
			* 5.45833	48.77	Pk	34.60	-18.10	0.00	65.27	-	-	74.00	-8.73	232	107	H		
			5.46998	42.98	Pk	34.60	-18.00	0.00	59.58	-	-	68.20	-8.62	232	107	H		
			5.46360	49.25	Pk	34.60	-18.10	0.00	65.75	-	-	68.20	-2.45	232	107	H		
			* 5.45999	32.99	RMS	34.60	-18.00	0.32	49.91	54.00	-4.09	-	-	-	-	232	107	H
			* 5.45878	33.67	RMS	34.60	-18.10	0.32	50.49	54.00	-3.51	-	-	-	-	232	107	H
			5.46998	32.63	RMS	34.60	-18.00	0.32	49.55	-	-	-	-	-	-	232	107	H
			5.46342	34.19	RMS	34.60	-18.10	0.32	51.01	-	-	-	-	-	-	232	107	H
			* 5.45999	42.42	Pk	34.60	-19.00	0.00	59.02	-	-	74.00	-14.98	125	104	V		
			* 5.45881	45.83	Pk	34.60	-18.10	0.00	62.33	-	-	74.00	-11.67	125	104	V		
			5.46998	41.53	Pk	34.60	-18.00	0.00	58.13	-	-	68.20	-10.07	125	104	V		
			5.46086	46.68	Pk	34.60	-18.10	0.00	63.18	-	-	68.20	-5.02	125	104	V		
	* 5.45999	31.41	RMS	34.60	-18.00	0.32	48.33	54.00	-5.67	-	-	-	-	125	104	V		
	* 5.45997	32.14	RMS	34.60	-18.00	0.32	49.06	54.00	-4.94	-	-	-	-	125	104	V		
	5.46998	31.41	RMS	34.60	-18.00	0.32	48.33	-	-	-	-	-	-	125	104	V		
	5.46753	32.47	RMS	34.60	-18.10	0.32	49.29	-	-	-	-	-	-	125	104	V		
	* 5.72502	35.67	Pk	34.70	-17.40	0.00	52.97	-	-	68.20	-15.23	188	100	H				
	5.73061	40.51	Pk	34.70	-17.40	0.00	57.81	-	-	68.20	-10.39	188	100	H				
	5.72502	36.20	Pk	34.70	-17.40	0.00	53.50	-	-	68.20	-14.70	126	100	V				
	5.74388	41.45	Pk	34.70	-17.40	0.00	58.75	-	-	68.20	-9.45	126	100	V				
	802.11ax (HE20)	5500	MIMO	* 5.45999	38.69	Pk	34.60	-18.00	0.00	55.29	-	-	74.00	-18.71	178	102	H	
				* 5.45507	40.61	Pk	34.60	-18.10	0.00	57.11	-	-	74.00	-16.89	178	102	H	
				5.46998	39.72	Pk	34.60	-18.00	0.00	56.32	-	-	68.20	-11.88	178	102	H	
				5.46931	44.17	Pk	34.60	-18.00	0.00	60.77	-	-	68.20	-7.43	178	102	H	
* 5.45999				27.19	RMS	34.60	-18.00	0.41	44.20	54.00	-9.80	-	-	-	-	178	102	H
* 5.43426				28.20	RMS	34.60	-18.10	0.41	45.11	54.00	-8.89	-	-	-	-	178	102	H
5.46998				28.38	RMS	34.60	-18.00	0.41	45.39	-	-	-	-	-	-	178	102	H
5.46979				28.81	RMS	34.60	-18.00	0.41	45.82	-	-	-	-	-	-	178	102	H
* 5.45999				36.93	Pk	34.60	-18.00	0.00	53.53	-	-	74.00	-20.47	112	101	V		
* 5.3605				40.16	Pk	34.50	-18.00	0.00	56.66	-	-	74.00	-17.34	112	101	V		
5.46998				38.20	Pk	34.60	-18.00	0.00	54.80	-	-	68.20	-13.40	112	101	V		
5.46985				42.64	Pk	34.60	-18.00	0.00	59.24	-	-	68.20	-8.96	112	101	V		
* 5.45999		27.10	RMS	34.60	-18.00	0.41	44.11	54.00	-9.89	-	-	-	-	112	101	V		
* 5.45719		27.71	RMS	34.60	-19.00	0.41	44.72	54.00	-9.28	-	-	-	-	112	101	V		
5.46998		28.23	RMS	34.60	-18.00	0.41	45.24	-	-	-	-	-	-	112	101	V		
5.46793		28.40	RMS	34.60	-18.10	0.41	45.31	-	-	-	-	-	-	112	101	V		
5700		MIMO	5.72550	41.96	Pk	34.70	-17.40	0.00	59.26	-	-	68.20	-8.94	180	101	H		
			5.72559	47.42	Pk	34.70	-17.40	0.00	64.72	-	-	68.20	-3.48	180	101	H		
			5.72502	37.52	Pk	34.70	-17.40	0.00	54.82	-	-	68.20	-13.38	134	101	V		
			5.72552	40.84	Pk	34.70	-17.40	0.00	58.14	-	-	68.20	-10.06	134	101	V		
			* 5.45999	37.72	Pk	34.60	-18.00	0.00	54.32	-	-	74.00	-19.68	177	100	H		
			* 5.45957	40.82	Pk	34.60	-18.10	0.00	57.32	-	-	74.00	-16.68	177	100	H		
802.11ax (HE40)		5510	MIMO	5.46998	41.42	Pk	34.60	-18.00	0.00	58.02	-	-	68.20	-10.18	177	100	H	
				5.46662	42.55	Pk	34.60	-18.10	0.00	59.05	-	-	68.20	-9.15	177	100	H	
	* 5.45999			28.29	RMS	34.60	-18.00	0.42	45.31	54.00	-8.69	-	-	-	177	100	H	
	* 5.45968			28.65	RMS	34.60	-18.10	0.42	45.57	54.00	-8.43	-	-	-	177	100	H	
	5.46998			30.39	RMS	34.60	-18.00	0.42	47.41	-	-	-	-	-	177	100	H	
	5.46972			30.16	RMS	34.60	-18.00	0.42	47.18	-	-	-	-	-	177	100	H	
	* 5.45999			38.73	Pk	34.60	-18.00	0.00	55.33	-	-	74.00	-18.67	125	100	V		
	* 5.38141			40.56	Pk	34.50	-18.00	0.00	57.06	-	-	74.00	-16.94	125	100	V		
	5.46998			38.65	Pk	34.60	-18.00	0.00	55.25	-	-	68.20	-12.95	125	100	V		
	5.46848			42.28	Pk	34.60	-18.00	0.00	58.86	-	-	68.20	-9.34	125	100	V		
	* 5.45999			27.56	RMS	34.60	-18.00	0.42	44.58	54.00	-9.42	-	-	-	-	125	100	V
	* 5.45959			28.09	RMS	34.60	-18.10	0.42	45.01	54.00	-8.99	-	-	-	-	125	100	V
	5.46998	29.51	RMS	34.60	-18.00	0.42	46.53	-	-	-	-	-	-	125	100	V		
	5.46983	29.71	RMS	34.60	-18.00	0.42	46.73	-	-	-	-	-	-	125	100	V		
	5670	MIMO	5.72502	36.81	Pk	34.70	-17.40	0.00	54.11	-	-	68.20	-14.09	189	100	H		
			5.74244	40.35	Pk	34.70	-17.40	0.00	57.65	-	-	68.20	-10.55	189	100	H		
			5.72502	37.26	Pk	34.70	-17.40	0.00	54.56	-	-	68.20	-13.64	127	101	V		
			5.81502	39.82	Pk	34.90	-17.30	0.00	57.42	-	-	68.20	-10.78	127	101	V		
			* 5.45999	41.54	Pk	34.60	-18.00	0.00	58.14	-	-	74.00	-15.86	181	103	H		
			* 5.44706	42.77	Pk	34.60	-18.10	0.00	59.27	-	-	74.00	-14.73	181	103	H		
	802.11ax (HE80)	5530	MIMO	5.46998	41.51	Pk	34.60	-18.00	0.00	58.11	-	-	68.20	-10.09	181	103	H	
				5.46134	43.77	Pk	34.60	-18.10	0.00	60.27	-	-	68.20	-7.93	181	103	H	
				* 5.45999	29.95	RMS	34.60	-18.00	0.30	46.85	54.00	-7.15	-	-	-	181	103	H
				* 5.45931	30.67	RMS	34.60	-18.10	0.30	47.47	54.00	-6.53	-	-	-	181	103	H
5.46998				30.48	RMS	34.60	-18.00	0.30	47.38	-	-	-	-	-	181	103	H	
5.46788				31.18	RMS	34.60	-18.10	0.30	47.98	-	-	-	-	-	181	103	H	
* 5.45999				39.17	Pk	34.60	-18.00	0.00	55.77	-	-	74.00	-18.23	113	101	V		
* 5.45093				42.43	Pk	34.60	-18.10	0.00	58.93	-	-	74.00	-15.07	113	101	V		
5.46998				39.98	Pk	34.60	-18.00	0.00	56.58	-	-	68.20	-11.62	113	101	V		
5.46244				42.73	Pk	34.60	-18.10	0.00	59.23	-	-	68.20	-8.97	113	101	V		
* 5.45999				29.52	RMS	34.60	-18.00	0.30	46.42	54.00	-7.58	-	-	-	113	101	V	
* 5.45997				30.01	RMS	34.60	-18.00	0.30	46.91	54.00	-7.09	-	-	-	113	101	V	
5.46998		30.25	RMS	34.60	-18.00	0.30	47.15	-	-	-	-	-	113	101	V			
5.46891		30.72	RMS	34.60	-18.00	0.30	47.62	-	-	-	-	-	113	101	V			
5610		MIMO	5.72502	36.11	Pk	34.70	-17.40	0.00	53.41	-	-	68.20	-14.79	180	101	H		
			5.77850	39.69	Pk	34.80	-17.40	0.00	57.09	-	-	68.20	-11.11	180	101	H		
			5.72502	36.19	Pk	34.70	-17.40	0.00	53.49	-	-	68.20	-14.71	135	101	V		
			5.78622	40.04	Pk	34.80	-17.30	0.00	57.54	-	-	68.20	-10.66	135	101	V		

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	
5570 Lower	MIMO	* 5.45999	41.74	Pk	34.60	-18.00	0.00	58.34	-	-	74.00	-15.66	180	102	H	
		* 5.43415	46.12	Pk	34.60	-18.10	0.00	62.62	-	-	74.00	-11.38	180	102	H	
		5.46998	41.89	Pk	34.60	-18.00	0.00	58.49	-	-	68.20	-9.71	180	102	H	
		5.46239	46.89	Pk	34.60	-18.10	0.00	63.39	-	-	68.20	-4.81	180	102	H	
		* 5.45999	31.03	RMS	34.60	-18.00	0.35	47.98	54.00	-6.02	-	-	-	180	102	H
		* 5.45262	32.17	RMS	34.60	-18.10	0.35	49.02	54.00	-4.98	-	-	-	180	102	H
		5.46998	30.82	RMS	34.60	-18.00	0.35	47.77	-	-	-	-	-	180	102	H
		5.46340	32.04	RMS	34.60	-18.10	0.35	48.89	-	-	-	-	-	180	102	H
		* 5.45998	44.57	Pk	35.30	-20.60	0.00	59.27	-	-	-	74.00	-14.73	125	100	V
		* 5.45267	44.51	Pk	35.30	-20.60	0.00	59.21	-	-	-	74.00	-14.79	125	100	V
		5.46998	41.44	Pk	35.30	-20.60	0.00	56.14	-	-	-	68.20	-12.06	125	100	V
		5.46226	45.76	Pk	35.30	-20.50	0.00	60.56	-	-	-	68.20	-7.64	125	100	V
		* 5.45998	31.20	RMS	35.30	-20.60	0.35	46.25	54.00	-7.75	-	-	-	125	100	V
		* 5.45762	32.54	RMS	35.30	-20.60	0.35	47.59	54.00	-6.41	-	-	-	125	100	V
		5.46998	30.67	RMS	35.30	-20.60	0.35	45.72	-	-	-	-	-	125	100	V
5.46243	32.19	RMS	35.30	-20.50	0.35	47.34	-	-	-	-	-	125	100	V		
5570 Upper	MIMO	5.72502	36.69	Pk	34.70	-17.40	0.00	53.99	-	-	68.20	-14.21	189	102	H	
		5.81148	39.75	Pk	34.80	-17.30	0.00	57.25	-	-	68.20	-10.95	189	102	H	
		5.72502	37.17	Pk	34.70	-17.40	0.00	54.47	-	-	68.20	-13.73	132	103	V	
		5.77072	39.67	Pk	34.80	-17.40	0.00	57.07	-	-	68.20	-11.13	132	103	V	

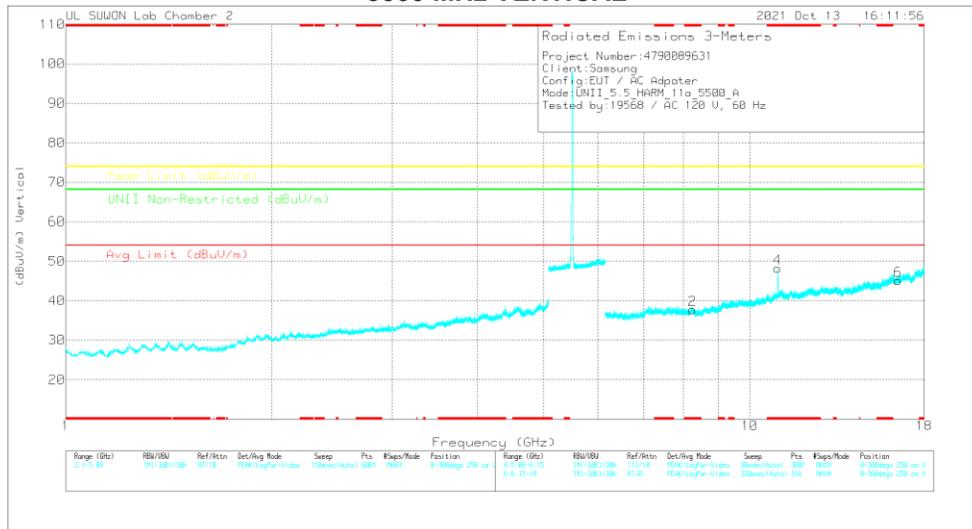
Note1. Pk - Peak detector, RMS - RMS detector

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)	Max Reading (dBuV)	Det	317_00168724	6GHz_HPSdB	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)	Azimuth (Clock)	Height (m)	Polarity
* 8.25369	35.1	PK-U	35.9	-23	0	48	-	-	74	-26	-	-	360	100	H
* 8.25348	35.67	PK-U	35.9	-23	0	48.57	-	-	74	-25.43	-	-	360	100	V
* 10.99858	44.21	PK-U	38.2	-20.4	0	62.01	-	-	74	-11.99	-	-	86	100	H
* 11.00026	32.29	ADR	38.2	-20.4	-16	50.25	54	-3.75	-	-	-	-	86	100	H
* 10.99887	42.52	PK-U	38.2	-20.4	0	60.32	-	-	74	-13.68	-	-	194	100	V
* 11.00181	29.56	ADR	38.2	-20.4	-16	47.52	54	-6.48	-	-	-	-	194	100	V
16.49835	34.72	PK-U	40.8	-19.6	0	55.92	-	-	-	-	68.2	-12.28	360	100	H
16.49866	34.54	PK-U	40.8	-19.6	0	55.74	-	-	-	-	68.2	-12.46	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