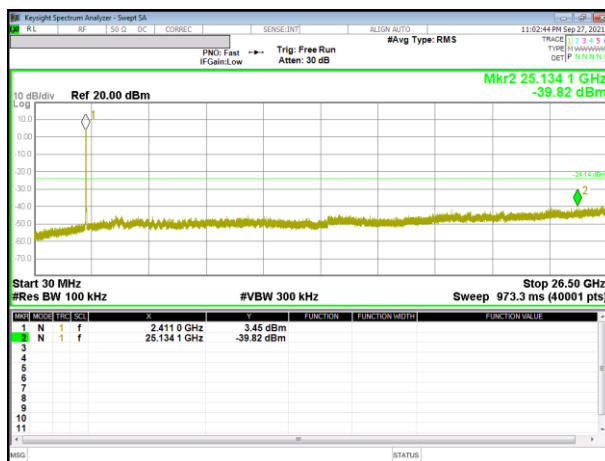


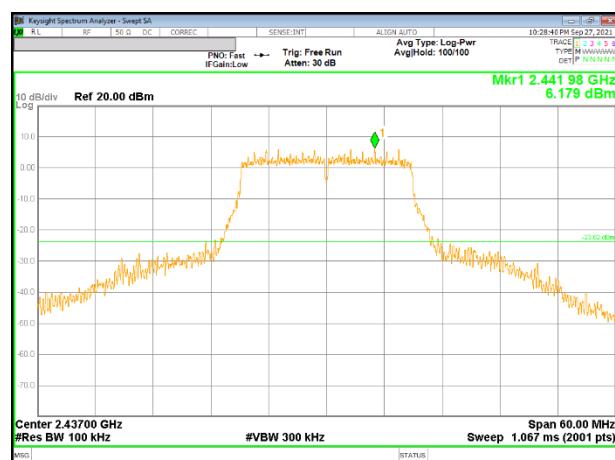
2TX Antenna 2



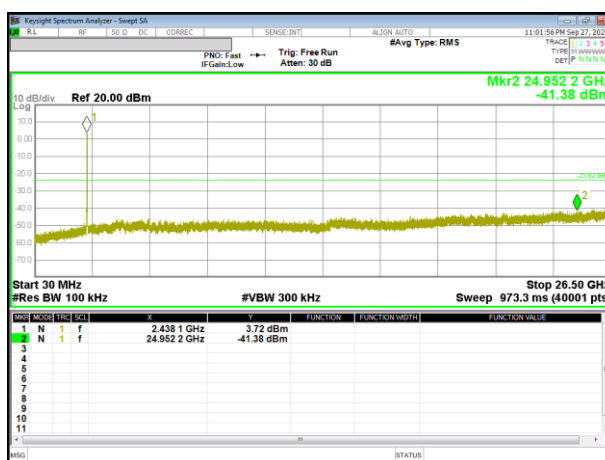
2 Channel Band-edge



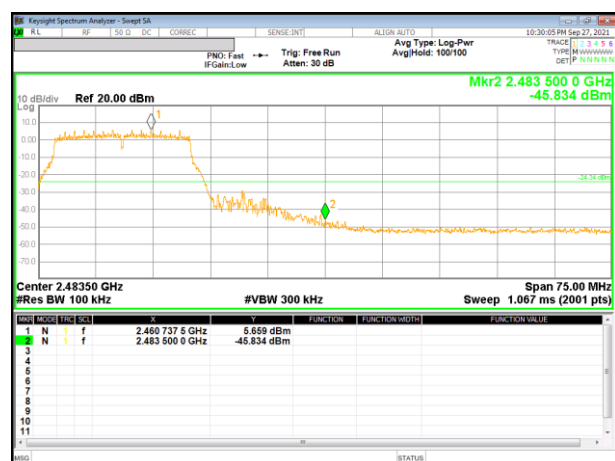
Out-Of-Band 2 Channel



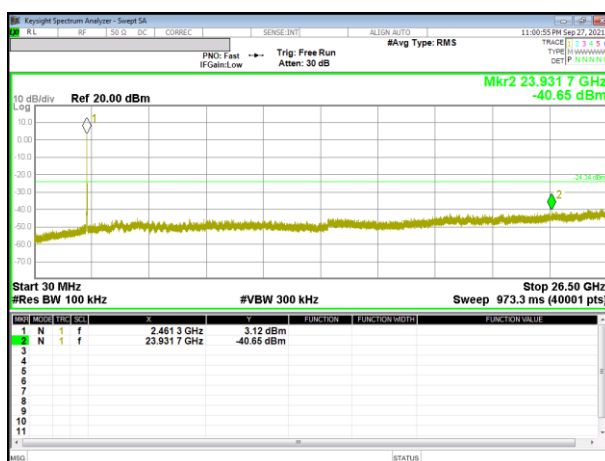
In-Band Reference Level



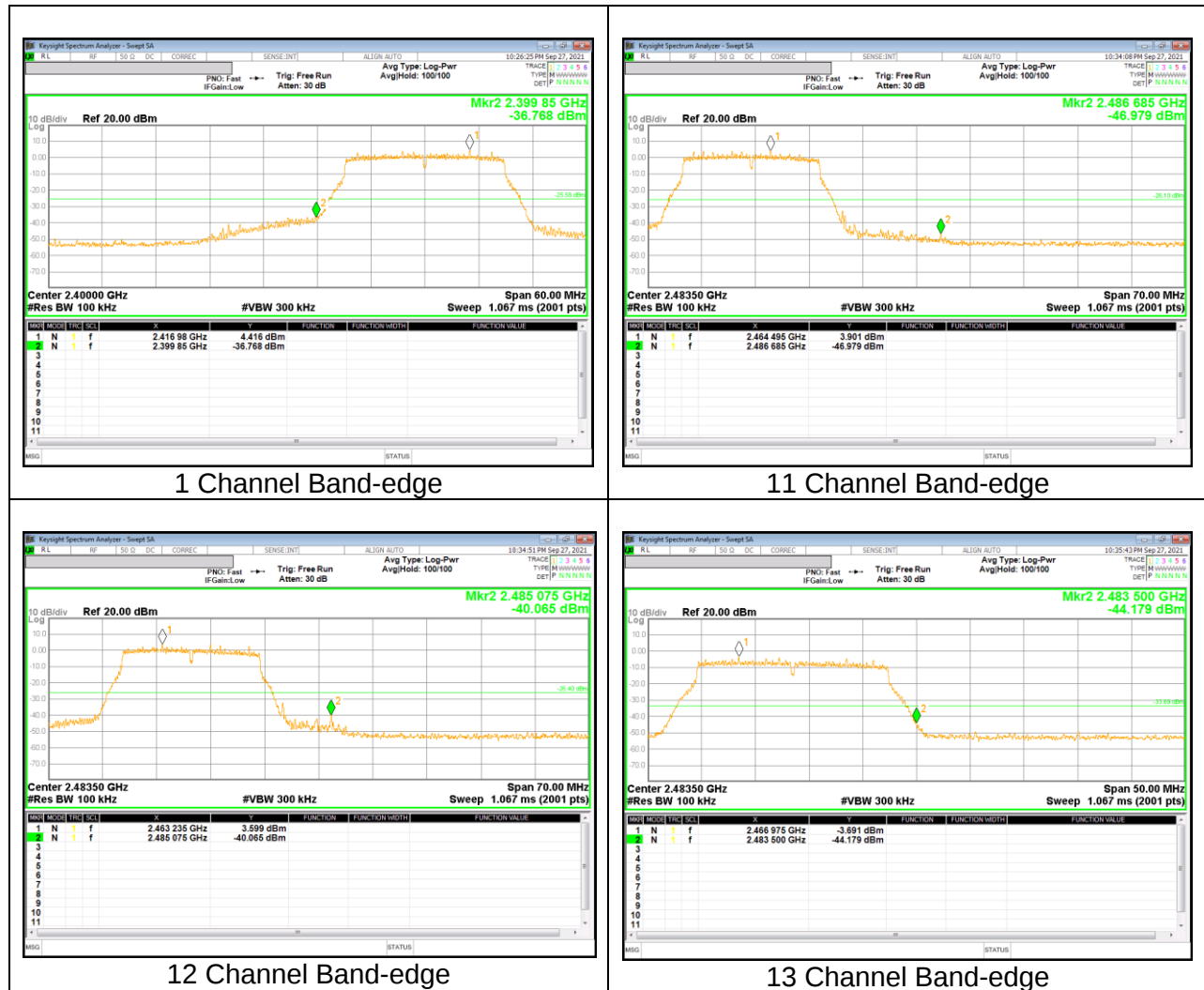
Out-Of-Band 6 Channel



10 Channel Band-edge

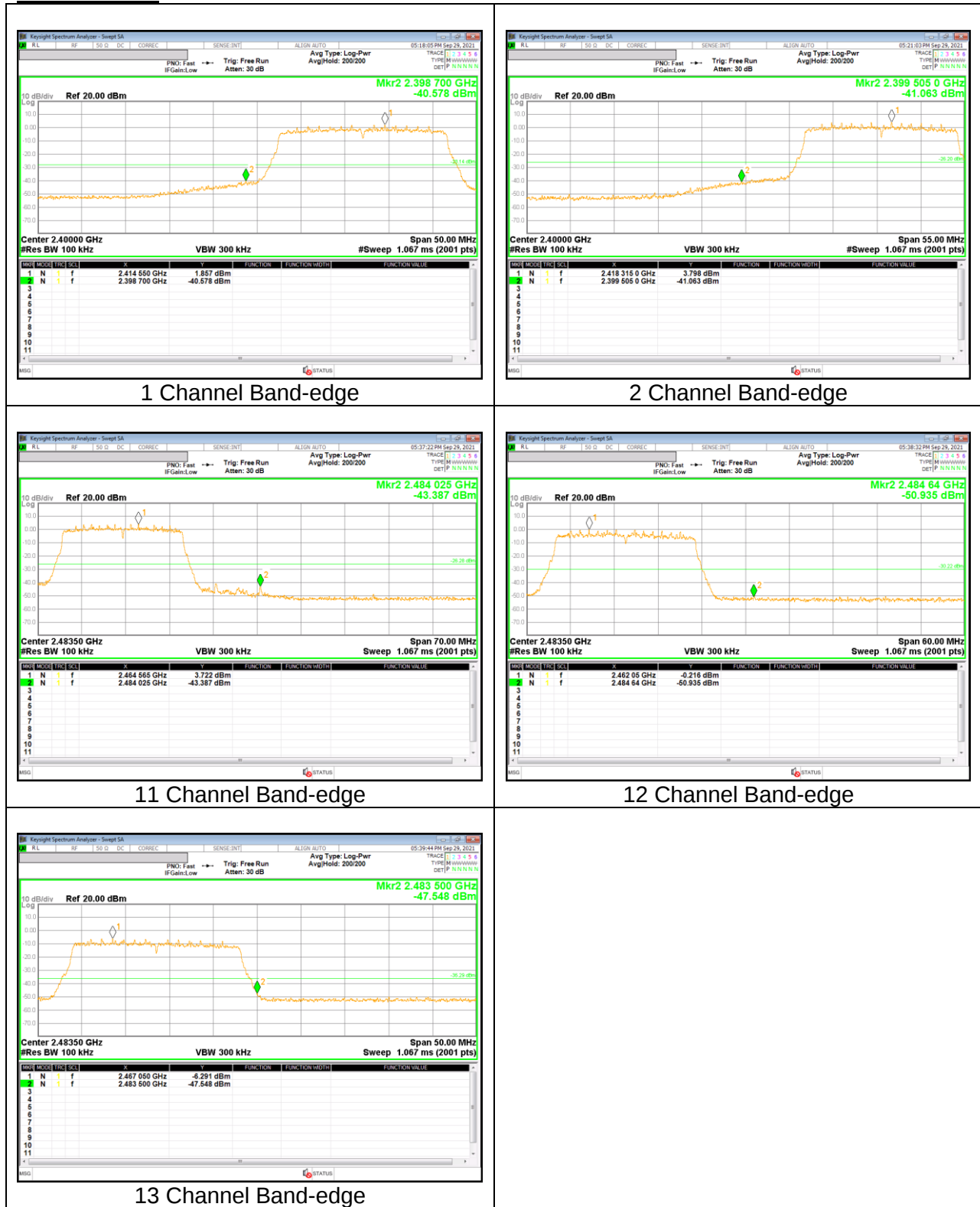


Out-Of-Band 10 Channel

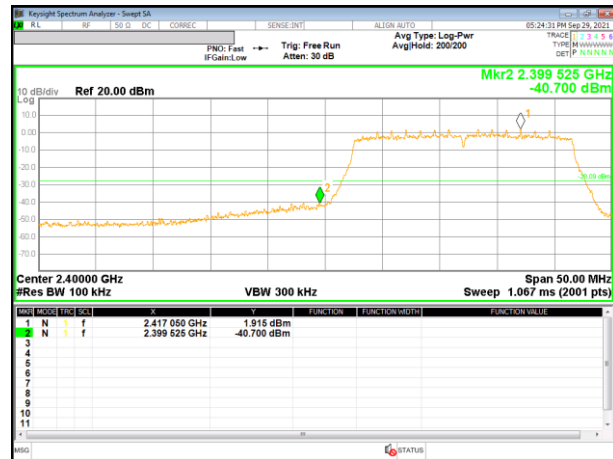


9.5.4. 802.11ax HE20(SU) MODE

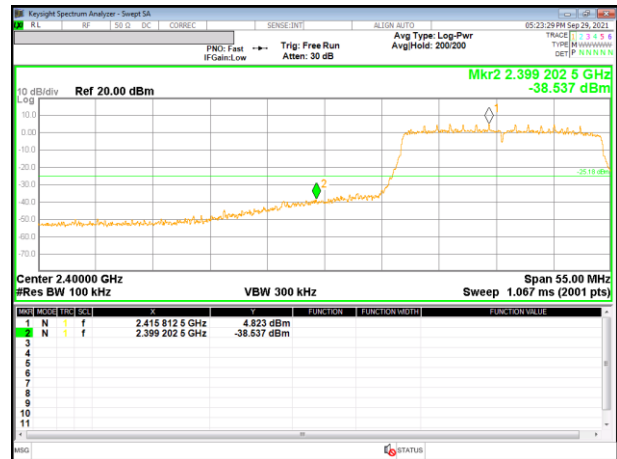
2TX Antenna 1



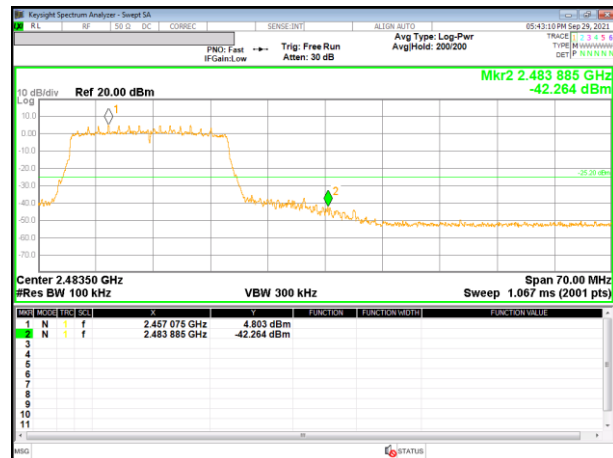
2TX Antenna 2



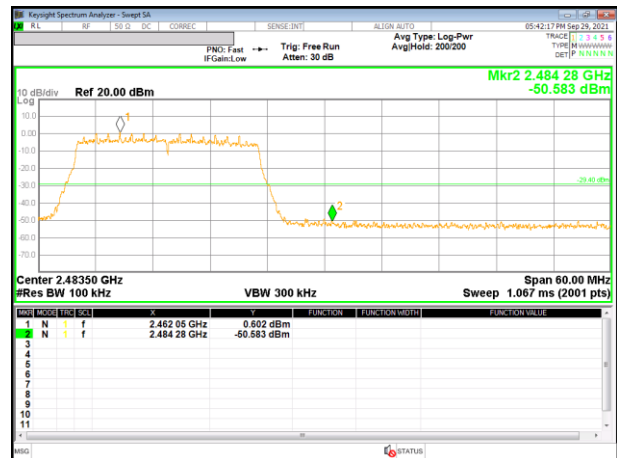
1 Channel Band-edge



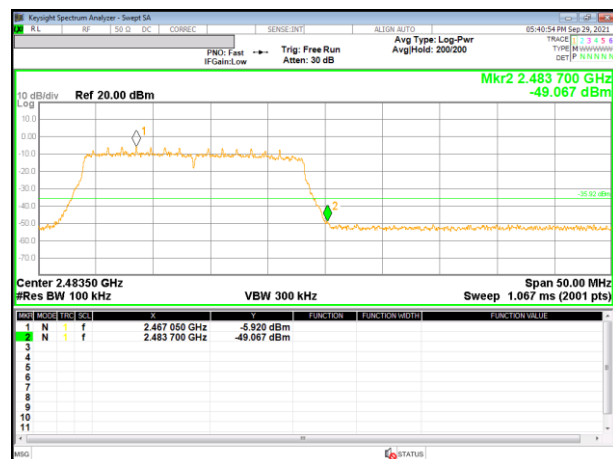
2 Channel Band-edge



11 Channel Band-edge



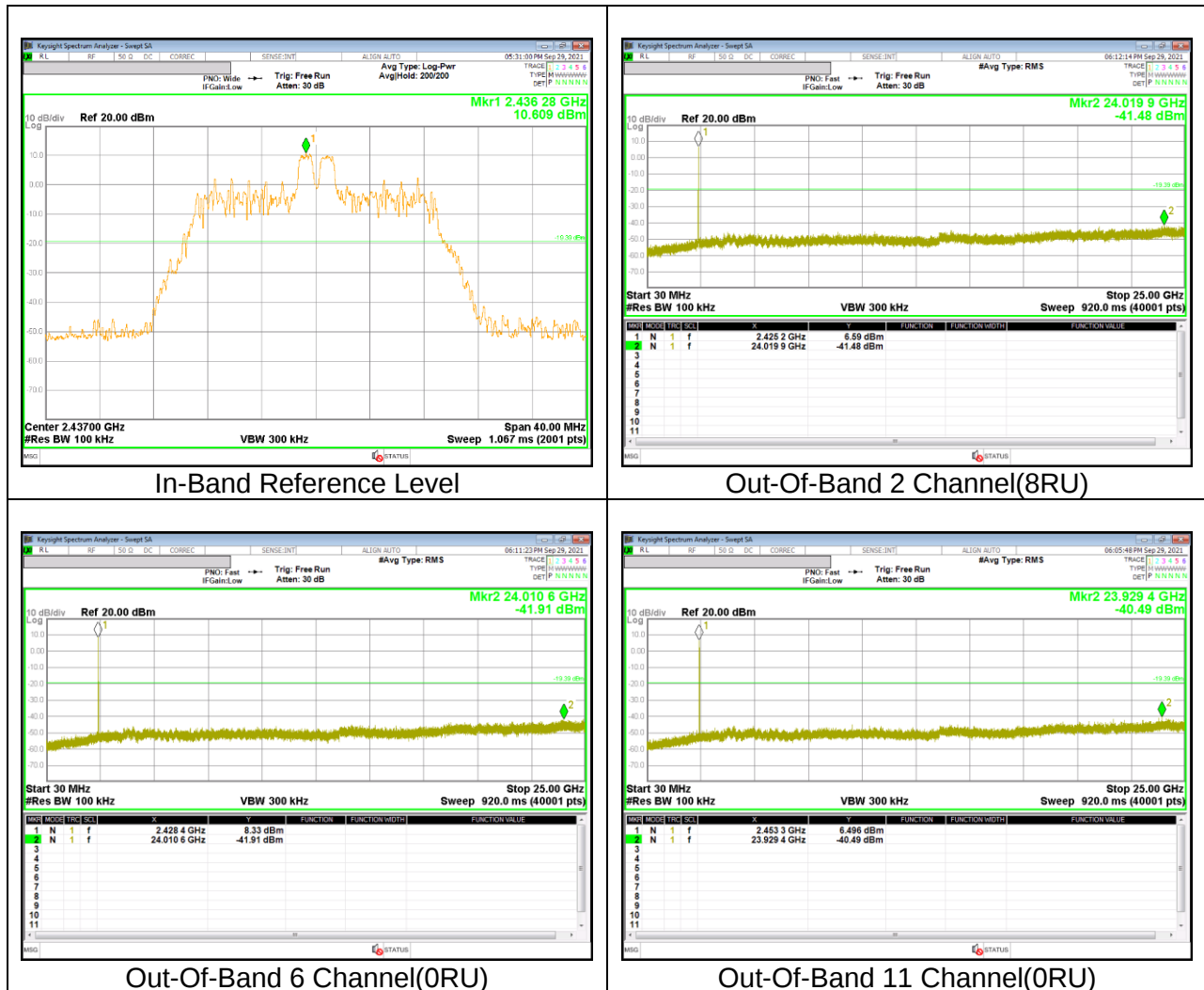
12 Channel Band-edge



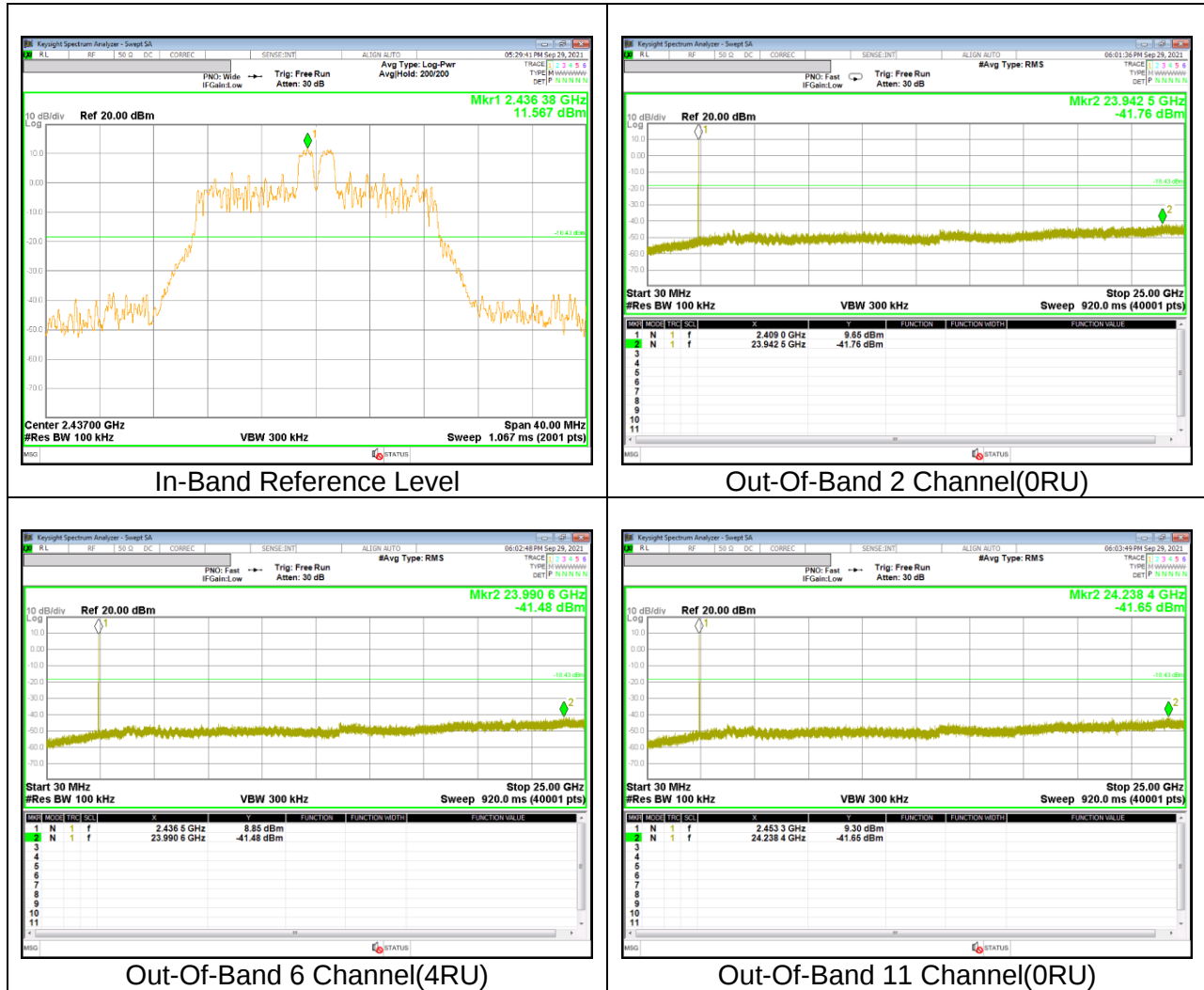
13 Channel Band-edge

9.5.5. 802.11ax HE20(RU) MODE

2TX Antenna 1 MODE



2TX Antenna 2 MODE



10. RADIATED TEST RESULTS

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 ~	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.52525	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	156.7 ~ 156.9	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	162.0125 ~	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	167.17	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	167.72 ~ 173.2	2655 ~ 2900		
8.291 ~ 8.294	37.5 ~ 38.25	240 ~ 285	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	322 ~ 335.4	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	399.90 ~ 410	3345.8 ~ 3358		
		608 ~ 614	3600 ~ 4400		
		960 ~ 1240			

▪ 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.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz and 150 cm for above 1 GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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

For 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 for average measurements. (Restricted bandedge, Final detection of spurious harmonic emissions)

Duty cycle factor = $10\log(1/x)$ For this sample:

802.11b SISO mode = 0 dB (duty cycle > 98%);
802.11g MIMO mode = 0.16 dB (96.43%);
802.11n(HT20) MIMO mode = 0.17 dB (96.06%);
802.11ax(HE20) MIMO SU mode = 0.42 dB (90.84%);
802.11ax(HE20) MIMO 26 Tone mode = 0 dB (duty cycle > 98%).

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 1 GHz to 26 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.

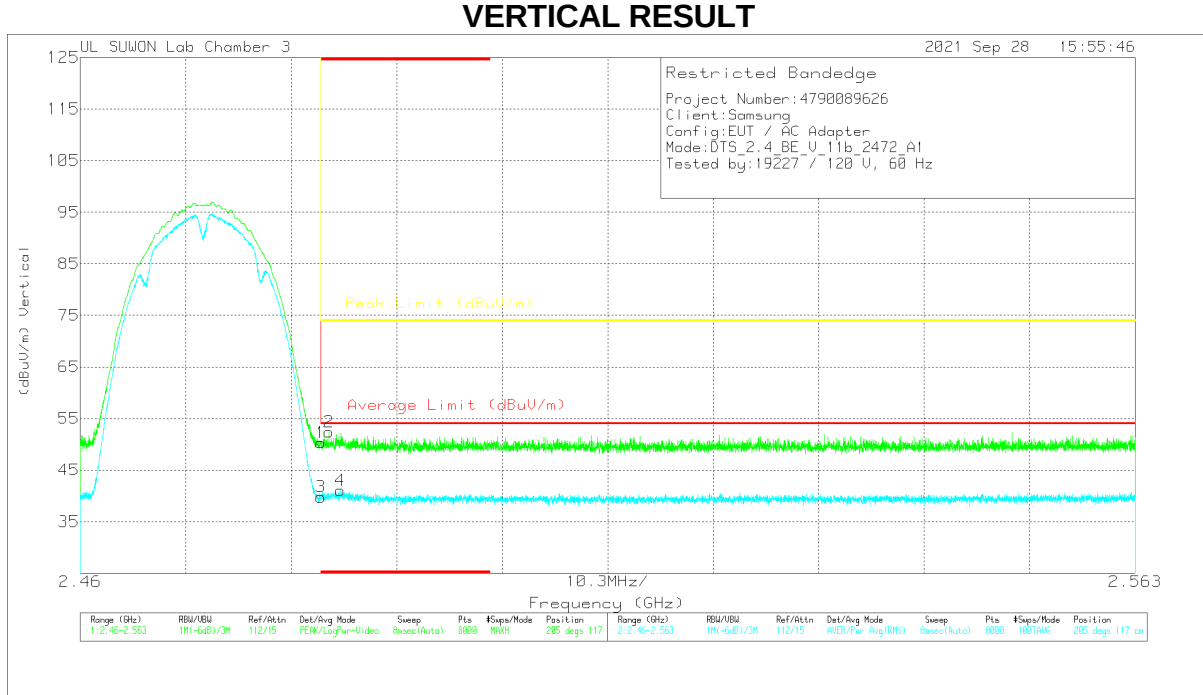
Note : Emission was pre-scanned from 9 kHz to 30 MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

Although these tests were performed other than open area 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.

10.1. TRANSMITTER ABOVE 1 GHz

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

BANDEDGE(ANT1 WORST CASE: 13 CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.4835	42.7	PK	32.9	-25.3	0	50.3	-	-	74	-23.7	205	117	V
2	* 2.48429	44.78	PK	32.9	-25.3	0	52.38	-	-	74	-21.62	205	117	V
3	* 2.4835	32.19	RMS	32.9	-25.3	0	39.79	54	-14.21	-	-	205	117	V
4	* 2.48538	33.45	RMS	32.9	-25.3	0	41.05	54	-12.95	-	-	205	117	V

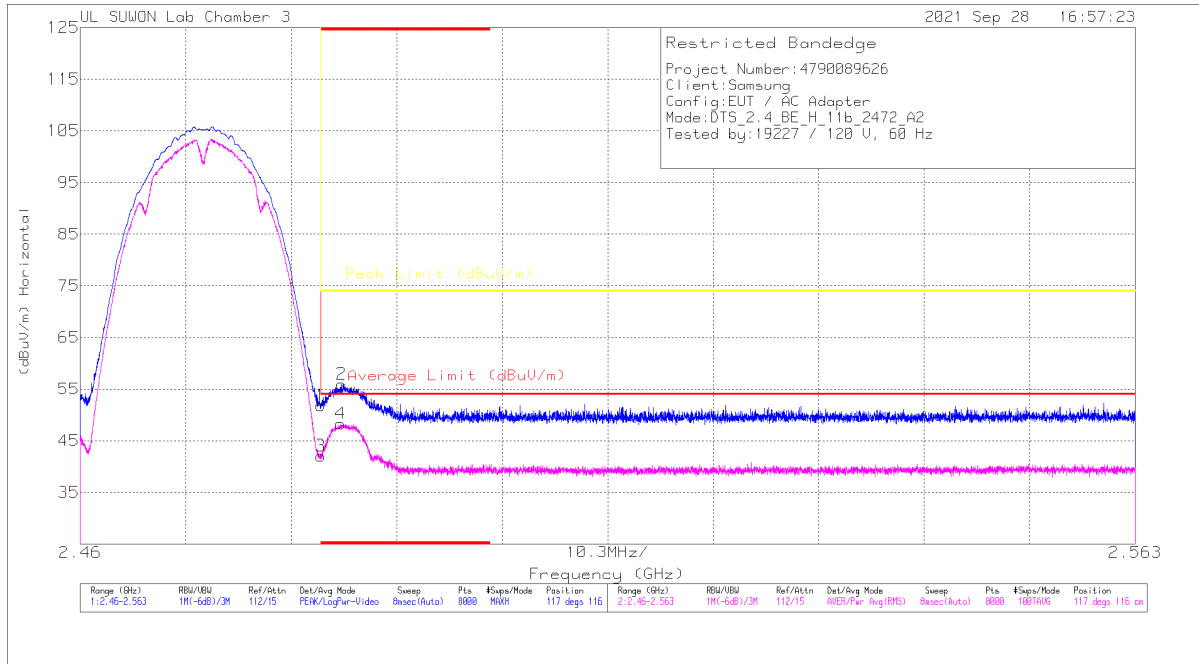
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

BANDEDGE(ANT2 WORST CASE: 13 CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBu)	Det	3117_00218957	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBu/m)	Average Limit (dBu/m)	Margin (dB)	Peak Limit (dBu/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.4835	44.27	PK	32.9	-25.3	0	51.87	-	-	74	-22.13	117	116	H
2	* 2.4852	48.35	PK	32.9	-25.3	0	55.95	-	-	74	-18.05	117	116	H
3	* 2.4835	34.44	RMS	32.9	-25.3	0	42.04	54	-11.96	-	-	117	116	H
4	* 2.48542	40.71	RMS	32.9	-25.3	0	48.31	54	-5.69	-	-	117	116	H

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

BANDEDGE TEST DATA

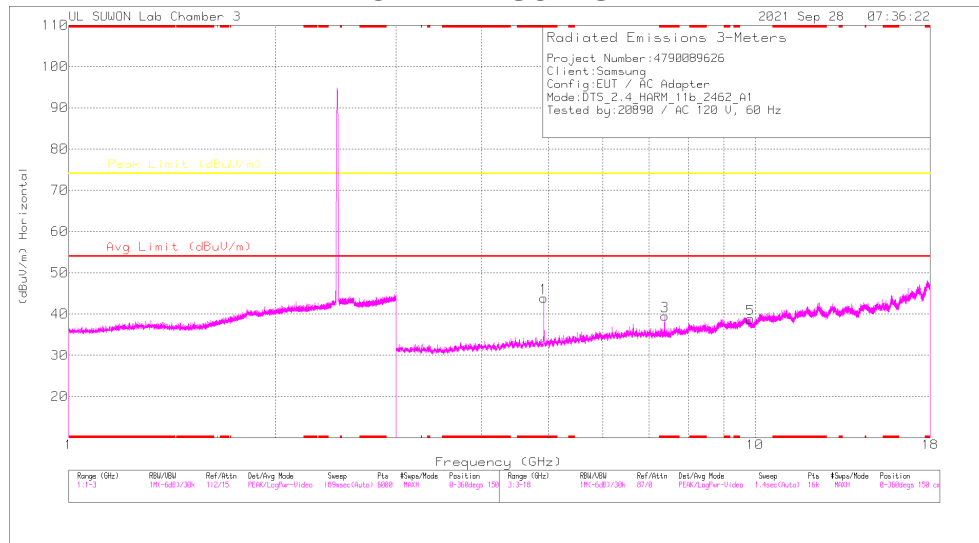
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2412	ANT1	* 2.39	43.18	Pk	32.80	-25.40	0.00	50.58	-	-	74.00	-23.42	125	101	H
		* 2.32982	44.74	Pk	32.50	-25.40	0.00	51.84	-	-	74.00	-22.16	125	101	H
		* 2.39	31.49	RMS	32.80	-25.40	0.00	38.89	54.00	-15.11	-	-	125	100	H
		* 2.38792	32.66	RMS	32.80	-25.30	0.00	40.16	54.00	-13.84	-	-	125	100	H
		* 2.39	40.87	Pk	32.80	-25.40	0.00	48.27	-	-	74.00	-25.73	180	102	V
		* 2.32802	44.18	Pk	32.50	-25.40	0.00	51.28	-	-	74.00	-22.72	180	102	V
		* 2.39	30.91	RMS	32.80	-25.40	0.00	38.31	54.00	-15.69	-	-	180	102	V
		* 2.38454	32.93	RMS	32.70	-25.40	0.00	40.23	54.00	-13.77	-	-	180	102	V
		* 2.4835	41.58	Pk	32.90	-25.30	0.00	49.18	-	-	74.00	-24.82	290	110	H
		* 2.49949	44.79	Pk	32.90	-25.20	0.00	52.49	-	-	74.00	-21.51	290	110	H
2462	ANT1	* 2.4835	31.51	RMS	32.90	-25.30	0.00	39.11	54.00	-14.89	-	-	290	110	H
		2.552	33.02	RMS	32.90	-25.20	0.00	40.72	54.00	-13.28	-	-	290	110	H
		* 2.4835	42.01	Pk	32.90	-25.30	0.00	49.61	-	-	74.00	-24.39	204	159	V
		* 2.49951	44.91	Pk	32.90	-25.20	0.00	52.61	-	-	74.00	-21.39	204	159	V
		* 2.4835	31.50	RMS	32.90	-25.30	0.00	39.10	54.00	-14.90	-	-	204	159	V
		2.553	33.01	RMS	32.90	-25.10	0.00	40.81	54.00	-13.19	-	-	204	159	V
		* 2.4835	43.02	Pk	32.90	-25.30	0.00	50.62	-	-	74.00	-23.38	158	100	H
		* 2.49579	44.92	Pk	32.90	-25.30	0.00	52.52	-	-	74.00	-21.48	158	100	H
		* 2.4835	32.56	RMS	32.90	-25.30	0.00	40.16	54.00	-13.84	-	-	158	100	H
		2.528	32.88	RMS	32.90	-25.20	0.00	40.58	54.00	-13.42	-	-	158	100	H
2467	ANT1	* 2.4835	41.73	Pk	32.90	-25.30	0.00	49.33	-	-	74.00	-24.67	202	155	V
		2.504	44.19	Pk	32.90	-25.20	0.00	51.89	-	-	74.00	-22.11	202	155	V
		* 2.4835	32.19	RMS	32.90	-25.30	0.00	39.79	54.00	-14.21	-	-	202	155	V
		2.540	33.20	RMS	32.90	-25.20	0.00	40.90	54.00	-13.10	-	-	202	155	V
		* 2.4835	42.28	Pk	32.90	-25.30	0.00	49.88	-	-	74.00	-24.12	200	100	H
		* 2.48372	44.99	Pk	32.90	-25.30	0.00	52.59	-	-	74.00	-21.41	200	100	H
		* 2.4835	32.11	RMS	32.90	-25.30	0.00	39.71	54.00	-14.29	-	-	200	100	H
		* 2.48411	33.19	RMS	32.90	-25.30	0.00	40.79	54.00	-13.21	-	-	200	100	H
		* 2.4835	42.70	Pk	32.90	-25.30	0.00	50.30	-	-	74.00	-23.70	205	117	V
		* 2.48429	44.78	Pk	32.90	-25.30	0.00	52.38	-	-	74.00	-21.62	205	117	V
2472	ANT1	* 2.4835	32.19	RMS	32.90	-25.30	0.00	39.79	54.00	-14.21	-	-	205	117	V
		* 2.48538	33.45	RMS	32.90	-25.30	0.00	41.05	54.00	-12.95	-	-	205	117	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
2412	ANT2	* 2.39	41.42	Pk	32.80	-25.40	0.00	48.82	-	-	74.00	-25.18	108	100	H
		* 2.33557	44.52	Pk	32.50	-25.40	0.00	51.62	-	-	74.00	-22.38	108	100	H
		* 2.39	32.03	RMS	32.80	-25.40	0.00	39.43	54.00	-14.57	-	-	108	100	H
		* 2.38673	32.91	RMS	32.70	-25.40	0.00	40.21	54.00	-13.79	-	-	108	100	H
		* 2.39	41.92	Pk	32.80	-25.40	0.00	49.32	-	-	74.00	-24.68	215	388	V
		* 2.38792	44.47	Pk	32.80	-25.30	0.00	51.97	-	-	74.00	-22.03	215	388	V
		* 2.39	32.08	RMS	32.80	-25.40	0.00	39.48	54.00	-14.52	-	-	215	388	V
		* 2.38842	32.73	RMS	32.80	-25.30	0.00	40.23	54.00	-13.77	-	-	215	388	V
		* 2.4835	41.51	Pk	32.90	-25.30	0.00	49.11	-	-	74.00	-24.89	127	155	H
		2.556	44.40	Pk	32.90	-25.20	0.00	52.10	-	-	74.00	-21.90	127	155	H
2462	ANT2	* 2.4835	31.94	RMS	32.90	-25.30	0.00	39.54	54.00	-14.46	-	-	127	155	H
		2.533	32.94	RMS	32.90	-25.20	0.00	40.64	54.00	-13.36	-	-	127	155	H
		* 2.4835	40.97	Pk	32.90	-25.30	0.00	48.57	-	-	74.00	-25.43	204	366	V
		* 2.49254	44.82	Pk	32.90	-25.30	0.00	52.42	-	-	74.00	-21.58	204	366	V
		* 2.4835	32.50	RMS	32.90	-25.30	0.00	40.10	54.00	-13.90	-	-	204	366	V
		2.558	32.86	RMS	32.90	-25.10	0.00	40.66	54.00	-13.34	-	-	204	366	V
		* 2.4835	46.00	Pk	32.90	-25.30	0.00	53.60	-	-	74.00	-20.40	125	111	H
		* 2.48384	46.44	Pk	32.90	-25.30	0.00	54.04	-	-	74.00	-19.96	125	111	H
		* 2.4835	35.88	RMS	32.90	-25.30	0.00	43.48	54.00	-10.52	-	-	125	111	H
		* 2.48407	37.49	RMS	32.90	-25.30	0.00	45.09	54.00	-8.91	-	-	125	111	H
2467	ANT2	* 2.4835	44.39	Pk	32.90	-25.30	0.00	51.99	-	-	74.00	-22.01	223	361	V
		* 2.48381	45.10	Pk	32.90	-25.30	0.00	52.70	-	-	74.00	-21.30	223	361	V
		* 2.4835	33.56	RMS	32.90	-25.30	0.00	41.16	54.00	-12.84	-	-	223	361	V
		* 2.48416	35.45	RMS	32.90	-25.30	0.00	43.05	54.00	-10.95	-	-	223	361	V
		* 2.4835	44.27	Pk	32.90	-25.30	0.00	51.87	-	-	74.00	-22.13	117	116	H
		* 2.48552	48.35	Pk	32.90	-25.30	0.00	55.95	-	-	74.00	-18.05	117	116	H
		* 2.4835	34.44	RMS	32.90	-25.30	0.00	42.04	54.00	-11.96	-	-	117	116	H
		* 2.48542	40.71	RMS	32.90	-25.30	0.00	48.31	54.00	-5.69	-	-	117	116	H
		* 2.4835	43.94	Pk	32.90	-25.30	0.00	51.54	-	-	74.00	-22.46	221	356	V
		* 2.48355	45.71	Pk	32.90	-25.30	0.00	53.31	-	-	74.00	-20.69	221	356	V
2472	ANT2	* 2.4835	32.83	RMS	32.90	-25.30	0.00	40.43	54.00	-13.57	-	-	221	356	V
		* 2.48579	36.01	RMS	32.90	-25.30	0.00	43.61	54.00	-10.39	-	-	221	356	V

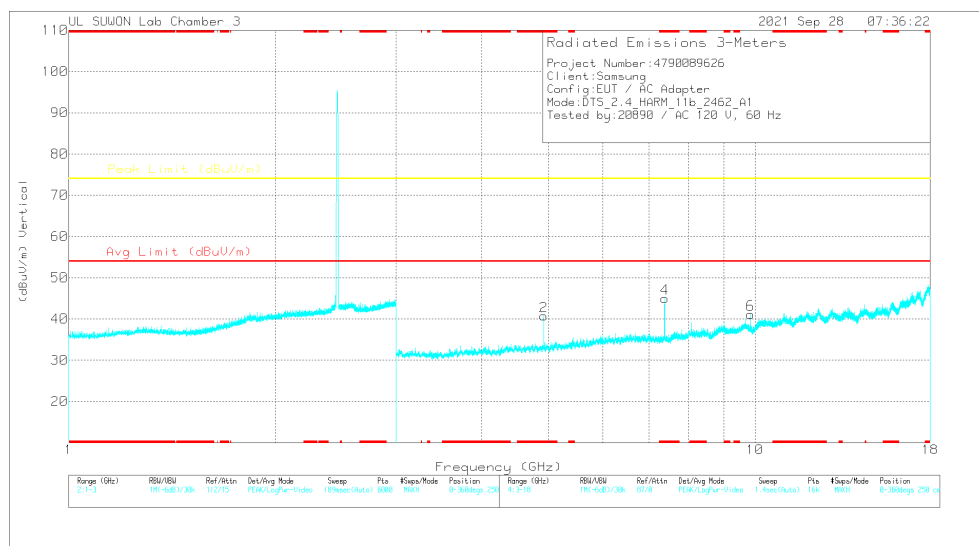
Note1. Pk - Peak detector, RMS - RMS detector

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

HARMONICS AND SPURIOUS EMISSIONS(ANT1 WORST CASE: 11 CHANNEL) CH 11 RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

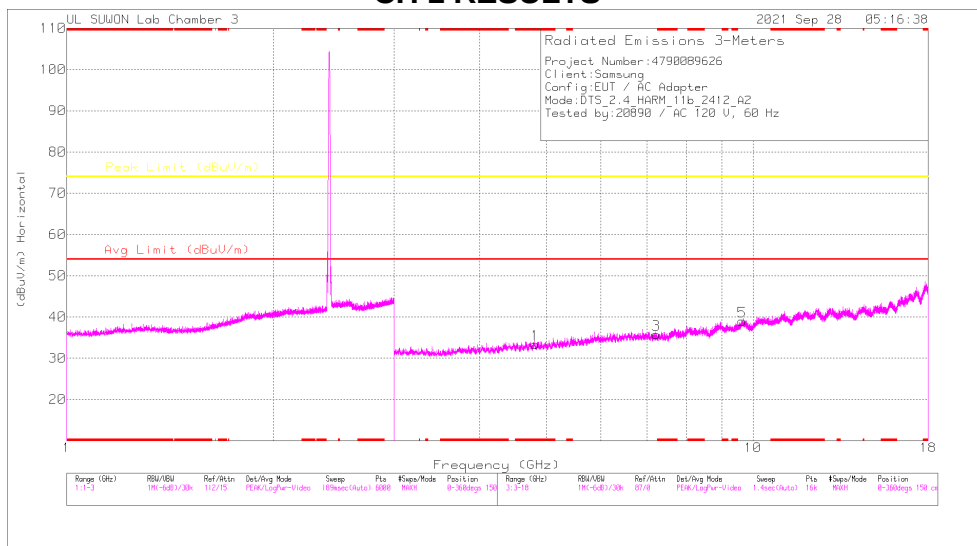
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.92413	45.49	PK2	34.7	-31.2	0	48.99	-	-	74	-25.01	114	224	H
* 4.92397	40.54	MAV1	34.7	-31.2	0	44.04	54	-9.96	-	-	114	224	H
* 4.92391	43.96	PK2	34.7	-31.2	0	47.46	-	-	74	-26.54	80	110	V
* 4.92397	37.37	MAV1	34.7	-31.2	0	40.87	54	-13.13	-	-	80	110	V
* 7.38361	37.26	PK2	36	-25	0	48.26	-	-	74	-25.74	74	100	H
* 7.38513	27.42	MAV1	36	-25	0	38.42	54	-15.58	-	-	74	100	H
* 7.38539	40.21	PK2	36	-25	0	51.21	-	-	74	-22.79	174	226	V
* 7.38507	34.27	MAV1	36	-25	0	45.27	54	-8.73	-	-	174	226	V
9.84788	32.23	PK2	37.7	-21.9	0	48.03	-	-	74	-25.97	182	105	H
9.84794	22.54	MAV1	37.7	-21.9	0	38.34	-	-	-	-	182	105	H
9.84801	33.88	PK2	37.7	-21.9	0	49.68	-	-	74	-24.32	172	217	V
9.848	25.97	MAV1	37.7	-21.9	0	41.77	-	-	-	-	172	217	V

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

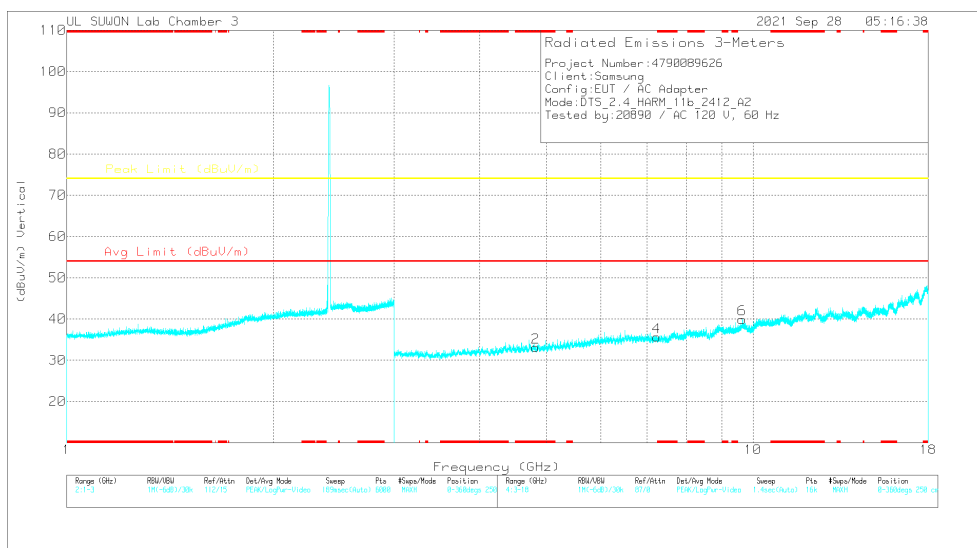
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS(ANT2 WORST CASE: 1 CHANNEL) **CH 1 RESULTS**



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.8095	39.52	PK2	34.6	-30.5	0	43.62	-	-	74	-30.38	0	100	H
* 4.80772	39.14	PK2	34.6	-30.5	0	43.24	-	-	74	-30.76	0	100	V
7.21899	35.1	PK2	36.1	-26.1	0	45.1	-	-	74	-28.9	0	100	H
7.2381	35.95	PK2	36	-26.1	0	45.85	-	-	74	-28.15	0	100	V
9.63991	33.1	PK2	37.4	-22	0	48.5	-	-	74	-25.5	0	100	H
9.64525	33.19	PK2	37.4	-21.9	0	48.69	-	-	74	-25.31	0	100	V

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

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

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
2412	ANT1	* 4.82385	41.74	PK2	34.60	-30.70	0.00	45.64	-	-	74.00	-28.36	200	152	H
		* 4.82399	35.26	MAV1	34.60	-30.70	0.00	39.16	54.00	-14.84	-	-	200	152	H
		* 4.82403	40.31	PK2	34.60	-30.70	0.00	44.21	-	-	74.00	-29.79	85	103	V
		* 4.82403	32.46	MAV1	34.60	-30.70	0.00	36.36	54.00	-17.64	-	-	85	103	V
		7.235	36.55	PK2	36.00	-26.10	0.00	46.45	-	-	74.00	-27.55	71	100	H
		7.236	40.33	PK2	36.00	-26.10	0.00	50.23	-	-	74.00	-23.77	174	233	V
		9.633	32.95	PK2	37.40	-22.00	0.00	48.35	-	-	74.00	-25.65	0	100	H
		9.651	32.66	PK2	37.40	-21.90	0.00	48.16	-	-	74.00	-25.84	0	100	V
		* 4.87394	42.44	PK2	34.60	-31.10	0.00	45.94	-	-	74.00	-28.06	200	132	H
		* 4.874	36.41	MAV1	34.60	-31.10	0.00	39.91	54.00	-14.09	-	-	200	132	H
2437	ANT1	* 4.87404	43.12	PK2	34.60	-31.10	0.00	46.62	-	-	74.00	-27.38	158	327	V
		* 4.87392	36.98	MAV1	34.60	-31.10	0.00	40.48	54.00	-13.52	-	-	158	327	V
		* 7.3124	36.46	PK2	36.00	-25.60	0.00	46.86	-	-	74.00	-27.14	71	100	H
		* 7.31034	26.54	MAV1	36.00	-25.70	0.00	36.84	54.00	-17.16	-	-	71	100	H
		* 7.31008	39.33	PK2	36.00	-25.70	0.00	49.63	-	-	74.00	-24.37	173	239	V
		* 7.31008	32.77	MAV1	36.00	-25.70	0.00	43.07	54.00	-10.93	-	-	173	239	V
		9.742	32.55	PK2	37.50	-21.70	0.00	48.35	-	-	74.00	-25.65	0	100	H
		9.748	32.73	PK2	37.50	-21.70	0.00	48.53	-	-	74.00	-25.47	0	100	V
		* 4.92413	45.49	PK2	34.70	-31.20	0.00	48.99	-	-	74.00	-25.01	114	224	H
		* 4.92397	40.54	MAV1	34.70	-31.20	0.00	44.04	54.00	-9.96	-	-	114	224	H
2462	ANT1	* 4.92391	43.96	PK2	34.70	-31.20	0.00	47.46	-	-	74.00	-26.54	80	110	V
		* 4.92397	37.37	MAV1	34.70	-31.20	0.00	40.87	54.00	-13.13	-	-	80	110	V
		* 7.38361	37.26	PK2	36.00	-25.00	0.00	48.26	-	-	74.00	-25.74	74	100	H
		* 7.38513	27.42	MAV1	36.00	-25.00	0.00	38.42	54.00	-15.58	-	-	74	100	H
		* 7.38539	40.21	PK2	36.00	-25.00	0.00	51.21	-	-	74.00	-22.79	174	226	V
		* 7.38507	34.27	MAV1	36.00	-25.00	0.00	45.27	54.00	-8.73	-	-	174	226	V
		9.848	32.23	PK2	37.70	-21.90	0.00	48.03	-	-	74.00	-25.97	182	105	H
		9.848	22.54	MAV1	37.70	-21.90	0.00	38.34	-	-	-	-	182	105	H
		9.848	33.88	PK2	37.70	-21.90	0.00	49.68	-	-	74.00	-24.32	172	217	V
		9.848	25.97	MAV1	37.70	-21.90	0.00	41.77	-	-	-	-	172	217	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
2412	ANT2	* 4.8095	39.52	PK2	34.60	-30.50	0.00	43.62	-	-	74.00	-30.38	0	100	H
		* 4.80772	39.14	PK2	34.60	-30.50	0.00	43.24	-	-	74.00	-30.76	0	100	V
		7.219	35.10	PK2	36.10	-26.10	0.00	45.10	-	-	74.00	-28.90	0	100	H
		7.238	35.95	PK2	36.00	-26.10	0.00	45.85	-	-	74.00	-28.15	0	100	V
		9.640	33.10	PK2	37.40	-22.00	0.00	48.50	-	-	74.00	-25.50	0	100	H
		9.645	33.19	PK2	37.40	-21.90	0.00	48.69	-	-	74.00	-25.31	0	100	V
2437	ANT2	* 4.87249	39.59	PK2	34.60	-31.10	0.00	43.09	-	-	74.00	-30.91	1	100	H
		* 4.86528	39.54	PK2	34.60	-31.00	0.00	43.14	-	-	74.00	-30.86	1	100	V
		* 7.30196	34.96	PK2	36.00	-25.80	0.00	45.16	-	-	74.00	-28.84	1	100	H
		* 7.30316	35.04	PK2	36.00	-25.70	0.00	45.34	-	-	74.00	-28.66	1	100	V
		9.744	32.36	PK2	37.50	-21.70	0.00	48.16	-	-	74.00	-25.84	0	100	H
		9.745	32.28	PK2	37.50	-21.70	0.00	48.08	-	-	74.00	-25.92	0	100	V
2462	ANT2	* 4.92281	39.93	PK2	34.70	-31.30	0.00	43.33	-	-	74.00	-30.67	360	100	H
		* 4.92718	39.81	PK2	34.70	-31.30	0.00	43.21	-	-	74.00	-30.79	360	100	V
		* 7.40321	34.93	PK2	36.00	-25.00	0.00	45.93	-	-	74.00	-28.07	360	100	H
		* 7.38695	34.53	PK2	36.00	-25.00	0.00	45.53	-	-	74.00	-28.47	360	100	V
		9.842	31.96	PK2	37.70	-21.90	0.00	47.76	-	-	74.00	-26.24	360	100	H
		9.852	31.45	PK2	37.70	-21.90	0.00	47.25	-	-	74.00	-26.75	360	100	V

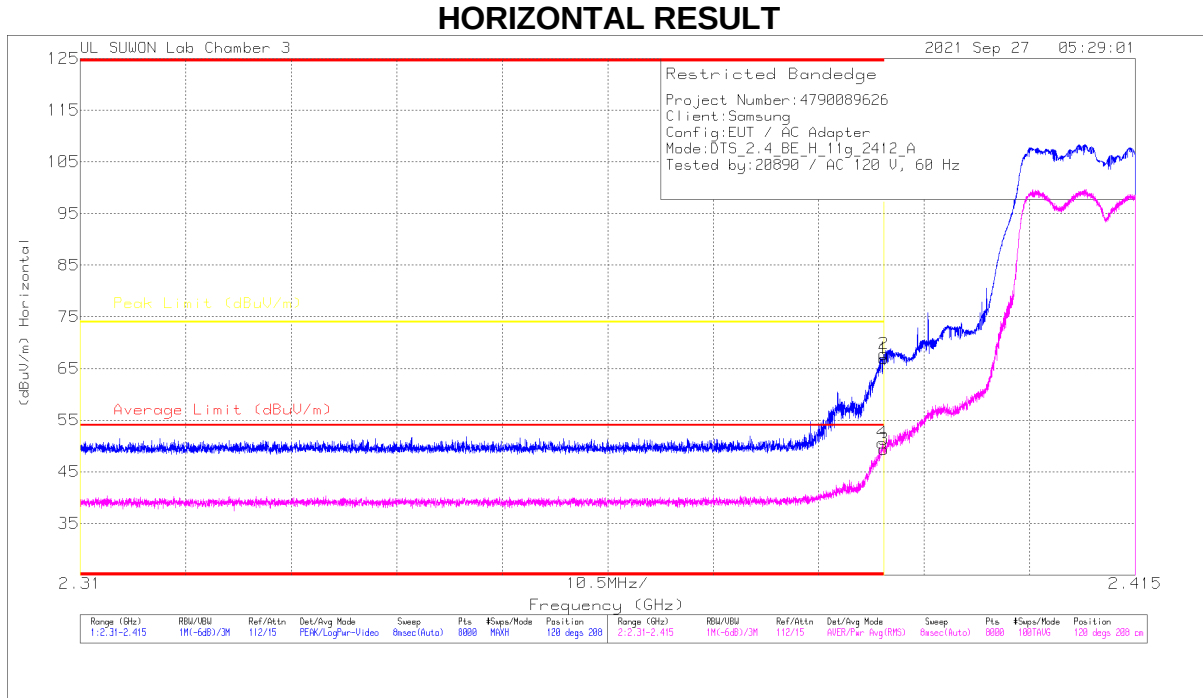
Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

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

10.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

2TX Antenna 1 + Antenna 2

BANDEDGE (WORST CASE: 1 CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (m)	Height (cm)	Polarity
1	* 2.39	59.49	PK		-25.4	0	66.89	-	-	74	-7.11	120	208	H
2	* 2.38998	60.41	PK		-25.4	0	67.81	-	-	74	-6.19	120	208	H
3	* 2.39	41.82	RMS		-25.4	.16	49.38	54	-4.62	-	-	120	208	H
4	* 2.38983	43.05	RMS		-25.4	.16	50.61	54	-3.39	-	-	120	208	H

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

PK - Peak detector

RMS - RMS detection

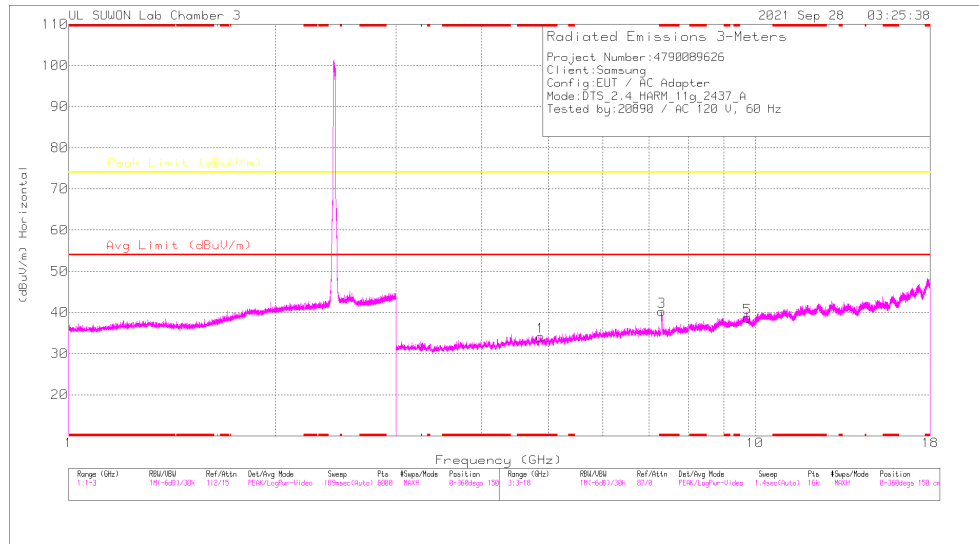
BANDEDGE TEST DATA

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
2412	MIMO	* 2.39	59.49	Pk	32.80	-25.40	0.00	66.89	-	-	74.00	-7.11	120	208	H
		* 2.38998	60.41	Pk	32.80	-25.40	0.00	67.81	-	-	74.00	-6.19	120	208	H
		* 2.39	41.82	RMS	32.80	-25.40	0.16	49.38	54.00	-4.62	-	-	120	208	H
		* 2.38993	43.05	RMS	32.80	-25.40	0.16	50.61	54.00	-3.39	-	-	120	208	H
		* 2.39	51.30	Pk	32.80	-25.40	0.00	58.70	-	-	74.00	-15.30	198	387	V
		* 2.38994	54.47	Pk	32.80	-25.40	0.00	61.87	-	-	74.00	-12.13	198	387	V
		* 2.39	37.84	RMS	32.80	-25.40	0.16	45.40	54.00	-8.60	-	-	198	387	V
		* 2.38992	38.24	RMS	32.80	-25.40	0.16	45.80	54.00	-8.20	-	-	198	387	V
		* 2.39	56.19	Pk	32.80	-25.40	0.00	63.59	-	-	74.00	-10.41	128	139	H
		* 2.38996	57.35	Pk	32.80	-25.40	0.00	64.75	-	-	74.00	-9.25	128	139	H
2417	MIMO	* 2.39	37.93	RMS	32.80	-25.40	0.16	45.49	54.00	-8.51	-	-	128	139	H
		* 2.38993	39.97	RMS	32.80	-25.40	0.16	47.53	54.00	-6.47	-	-	128	139	H
		* 2.39	54.69	Pk	32.80	-25.40	0.00	62.09	-	-	74.00	-11.91	207	381	V
		* 2.38997	53.93	Pk	32.80	-25.40	0.00	61.33	-	-	74.00	-12.67	207	381	V
		* 2.39	36.87	RMS	32.80	-25.40	0.16	44.43	54.00	-9.57	-	-	207	381	V
		* 2.38991	36.93	RMS	32.80	-25.40	0.16	44.49	54.00	-9.51	-	-	207	381	V
		* 2.4835	57.75	Pk	32.90	-25.30	0.00	65.35	-	-	74.00	-8.65	119	134	H
		* 2.48373	59.42	Pk	32.90	-25.30	0.00	67.02	-	-	74.00	-6.98	119	134	H
		* 2.4835	40.26	RMS	32.90	-25.30	0.16	48.02	54.00	-5.98	-	-	119	134	H
		* 2.48376	41.68	RMS	32.90	-25.30	0.16	49.44	54.00	-4.56	-	-	119	134	H
2462	MIMO	* 2.4835	54.34	Pk	32.90	-25.30	0.00	61.94	-	-	74.00	-12.06	203	319	V
		* 2.48393	55.37	Pk	32.90	-25.30	0.00	62.97	-	-	74.00	-11.03	203	319	V
		* 2.4835	35.30	RMS	32.90	-25.30	0.16	43.06	54.00	-10.94	-	-	203	319	V
		* 2.48358	36.96	RMS	32.90	-25.30	0.16	44.72	54.00	-9.28	-	-	203	319	V
		* 2.4835	57.81	Pk	32.90	-25.30	0.00	65.41	-	-	74.00	-8.59	122	110	H
		* 2.48355	57.76	Pk	32.90	-25.30	0.00	65.36	-	-	74.00	-8.64	122	110	H
		* 2.4835	42.08	RMS	32.90	-25.30	0.16	49.84	54.00	-4.16	-	-	122	110	H
		* 2.48351	42.11	RMS	32.90	-25.30	0.16	49.87	54.00	-4.13	-	-	122	110	H
		* 2.4835	50.83	Pk	32.90	-25.30	0.00	58.43	-	-	74.00	-15.57	204	319	V
		* 2.48425	55.84	Pk	32.90	-25.30	0.00	63.44	-	-	74.00	-10.56	204	319	V
2467	MIMO	* 2.4835	36.35	RMS	32.90	-25.30	0.16	44.11	54.00	-9.89	-	-	204	319	V
		* 2.48367	37.04	RMS	32.90	-25.30	0.16	44.80	54.00	-9.20	-	-	204	319	V
		* 2.4835	59.94	Pk	32.90	-25.30	0.00	67.54	-	-	74.00	-6.46	122	110	H
		* 2.48359	59.33	Pk	32.90	-25.30	0.00	66.93	-	-	74.00	-7.07	122	110	H
		* 2.4835	41.79	RMS	32.90	-25.30	0.16	49.55	54.00	-4.45	-	-	122	110	H
		* 2.48351	42.76	RMS	32.90	-25.30	0.16	50.52	54.00	-3.48	-	-	122	110	H
		* 2.4835	57.48	Pk	32.90	-25.30	0.00	65.08	-	-	74.00	-8.92	205	315	V
		* 2.4836	56.30	Pk	32.90	-25.30	0.00	63.90	-	-	74.00	-10.10	205	315	V
		* 2.4835	40.72	RMS	32.90	-25.30	0.16	48.48	54.00	-5.52	-	-	205	315	V
		* 2.48353	41.08	RMS	32.90	-25.30	0.16	48.84	54.00	-5.16	-	-	205	315	V

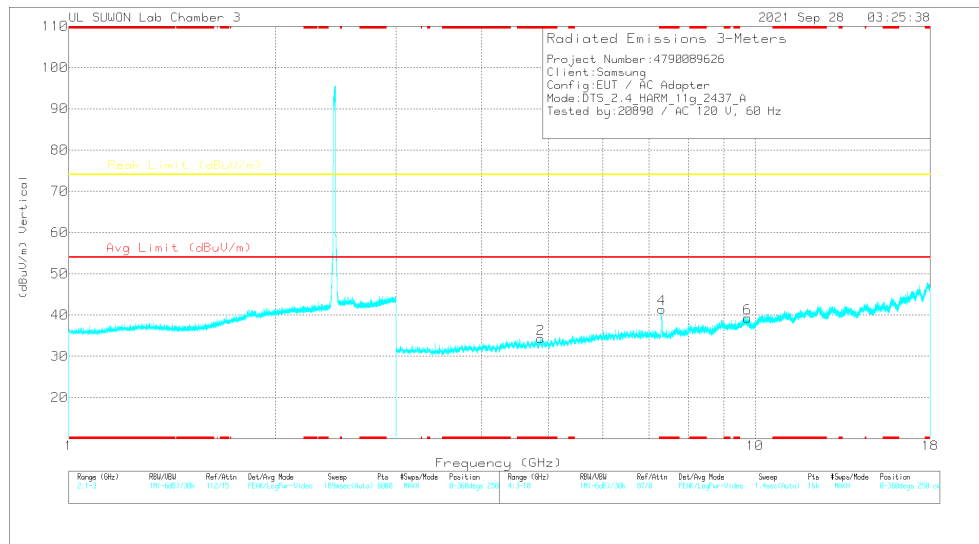
Note1. Pk - Peak detector, RMS - RMS detector

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

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 6 CHANNEL) CH 6 RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.87164	40.62	PK2	34.6	-31.1	0	44.12	-	-	74	-29.88	360	100	H
* 4.86881	41.56	PK2	34.6	-31.1	0	45.06	-	-	74	-28.94	360	100	V
* 7.31201	44.65	PK2	36	-25.6	0	55.05	-	-	74	-18.95	335	103	H
* 7.31251	30.32	MAV1	36	-25.6	.16	40.88	54	-13.12	-	-	335	103	H
* 7.31167	45.55	PK2	36	-25.6	0	55.95	-	-	74	-18.05	282	100	V
* 7.31405	30.91	MAV1	36	-25.6	.16	41.47	54	-12.53	-	-	282	100	V
9.76312	32.59	PK2	37.5	-21.7	0	48.39	-	-	74	-25.61	360	100	H
9.75643	32.9	PK2	37.5	-21.7	0	48.7	-	-	74	-25.3	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

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

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
2417	MIMO	*4.82689	39.60	PK2	34.60	-30.70	0.00	43.50	-	-	74.00	-30.50	360	100	H
		*4.82391	39.08	PK2	34.60	-30.70	0.00	42.98	-	-	74.00	-31.02	360	100	V
		7.248	35.61	PK2	36.00	-26.00	0.00	45.61	-	-	74.00	-28.39	360	100	H
		7.249	35.54	PK2	36.00	-26.00	0.00	45.54	-	-	74.00	-28.46	360	100	V
		9.668	32.71	PK2	37.40	-21.80	0.00	48.31	-	-	74.00	-25.69	360	100	H
		9.668	32.92	PK2	37.40	-21.70	0.00	48.62	-	-	74.00	-25.38	360	100	V
2437	MIMO	*4.87164	40.62	PK2	34.60	-31.10	0.00	44.12	-	-	74.00	-29.88	360	100	H
		*4.86881	41.56	PK2	34.60	-31.10	0.00	45.06	-	-	74.00	-28.94	360	100	V
		*7.31201	44.65	PK2	36.00	-25.60	0.00	55.05	-	-	74.00	-18.95	335	103	H
		*7.31251	30.32	MAV1	36.00	-25.60	0.16	40.88	54.00	-13.12	-	-	335	103	H
		*7.31167	45.55	PK2	36.00	-25.60	0.00	55.95	-	-	74.00	-18.05	282	100	V
		*7.31405	30.91	MAV1	36.00	-25.60	0.16	41.47	54.00	-12.53	-	-	282	100	V
		9.763	32.59	PK2	37.50	-21.70	0.00	48.39	-	-	74.00	-25.61	360	100	H
		9.756	32.90	PK2	37.50	-21.70	0.00	48.70	-	-	74.00	-25.30	360	100	V
		9.852	31.74	PK2	37.70	-21.90	0.00	47.54	-	-	74.00	-26.46	360	100	V
2462	MIMO	*4.92386	40.78	PK2	34.70	-31.20	0.00	44.28	-	-	74.00	-29.72	360	100	H
		*4.92231	41.15	PK2	34.70	-31.30	0.00	44.55	-	-	74.00	-29.45	360	100	V
		*7.3868	39.32	PK2	36.00	-25.00	0.00	50.32	-	-	74.00	-23.68	319	115	H
		*7.38065	25.53	MAV1	36.00	-25.10	0.16	36.59	54.00	-17.41	-	-	319	115	H
		*7.38009	41.89	PK2	36.00	-25.10	0.00	52.79	-	-	74.00	-21.21	247	100	V
		*7.37969	26.49	MAV1	36.00	-25.10	0.16	37.55	54.00	-16.45	-	-	247	100	V
		9.855	31.70	PK2	37.70	-21.90	0.00	47.50	-	-	74.00	-26.50	360	100	H
		9.852	31.74	PK2	37.70	-21.90	0.00	47.54	-	-	74.00	-26.46	360	100	V
		9.852	31.74	PK2	37.70	-21.90	0.00	47.54	-	-	74.00	-26.46	360	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

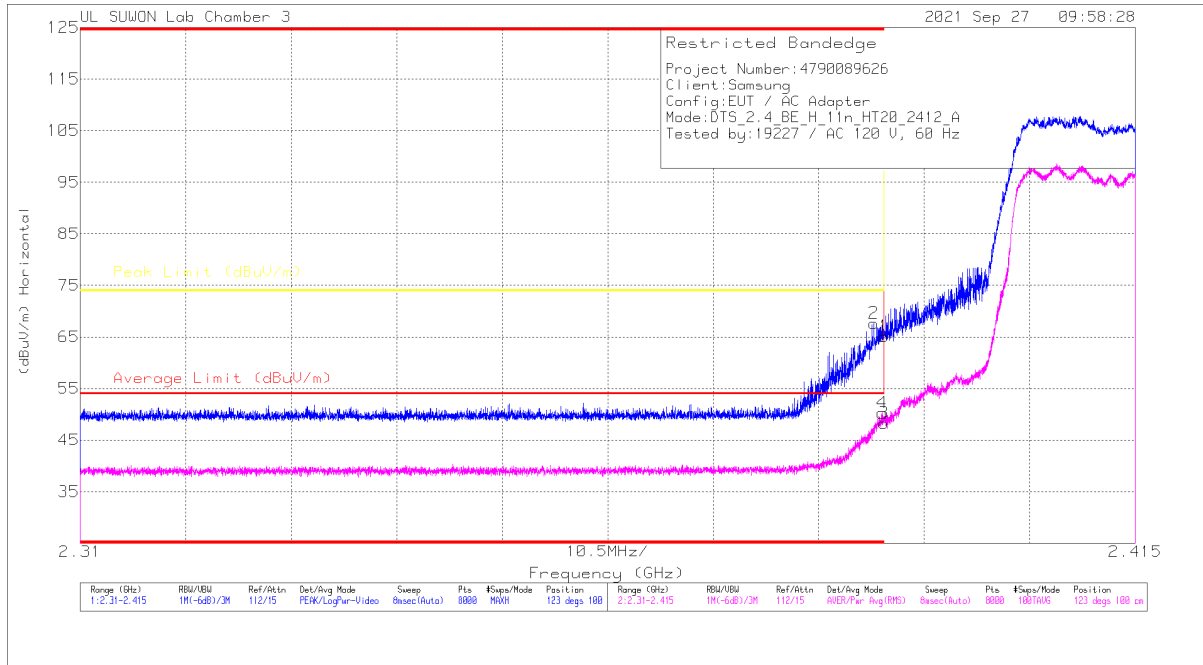
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

2TX Antenna 1 + Antenna 2

BANDEDGE (WORST CASE: 1 CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.39	57.71	Pk		-25.4	0	65.11	-	-	74	-8.89	123	100	H
2	* 2.38996	60.24	Pk		-25.4	0	67.64	-	-	74	-6.36	123	100	H
3	* 2.39	40.71	RMS		-25.4	17	48.28	54	-5.72	-	-	123	100	H
4	* 2.38983	42.71	RMS		-25.4	17	50.28	54	-3.72	-	-	123	100	H

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

Pk - Peak detector

RMS - RMS detection

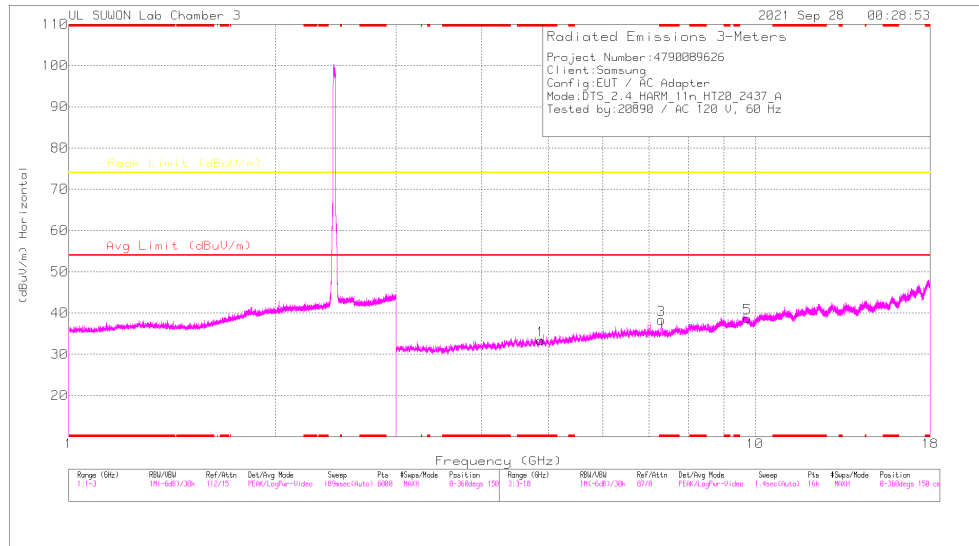
BANDEDGE TEST DATA

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
2412	MIMO	* 2.39	57.71	Pk	32.80	-25.40	0.00	65.11	-	-	74.00	-8.89	123	100	H
		* 2.38896	60.24	Pk	32.80	-25.40	0.00	67.64	-	-	74.00	-6.36	123	100	H
		* 2.39	40.71	RMS	32.80	-25.40	0.17	48.28	54.00	-5.72	-	-	123	100	H
		* 2.38993	42.71	RMS	32.80	-25.40	0.17	50.28	54.00	-3.72	-	-	123	100	H
		* 2.39	56.75	Pk	32.80	-25.40	0.00	64.15	-	-	74.00	-9.85	221	388	V
		* 2.38984	61.25	Pk	32.80	-25.40	0.00	68.65	-	-	74.00	-5.35	221	388	V
		* 2.39	41.01	RMS	32.80	-25.40	0.17	48.58	54.00	-5.42	-	-	221	388	V
		* 2.38992	42.29	RMS	32.80	-25.40	0.17	49.86	54.00	-4.14	-	-	221	388	V
2417	MIMO	* 2.39	54.76	Pk	32.80	-25.40	0.00	62.16	-	-	74.00	-11.84	127	163	H
		* 2.38866	57.53	Pk	32.80	-25.40	0.00	64.93	-	-	74.00	-9.07	127	163	H
		* 2.39	35.98	RMS	32.80	-25.40	0.17	43.55	54.00	-10.45	-	-	127	163	H
		* 2.38942	38.08	RMS	32.80	-25.40	0.17	45.65	54.00	-8.35	-	-	127	163	H
		* 2.39	52.43	Pk	32.80	-25.40	0.00	59.83	-	-	74.00	-14.17	220	389	V
		* 2.3891	54.65	Pk	32.80	-25.40	0.00	62.05	-	-	74.00	-11.95	220	389	V
		* 2.39	38.97	RMS	32.80	-25.40	0.17	46.54	54.00	-7.46	-	-	220	389	V
		* 2.38972	36.83	RMS	32.80	-25.40	0.17	44.40	54.00	-9.60	-	-	220	389	V
2457	MIMO	* 2.4835	45.68	Pk	32.90	-25.30	0.00	53.28	-	-	74.00	-20.72	124	158	H
		* 2.48592	50.92	Pk	32.90	-25.30	0.00	58.52	-	-	74.00	-15.48	124	158	H
		* 2.4835	33.12	RMS	32.90	-25.30	0.17	40.89	54.00	-13.11	-	-	124	158	H
		* 2.48356	34.50	RMS	32.90	-25.30	0.17	42.27	54.00	-11.73	-	-	124	158	H
		* 2.4835	47.95	Pk	32.90	-25.30	0.00	55.55	-	-	74.00	-18.45	216	363	V
		* 2.48368	50.49	Pk	32.90	-25.30	0.00	58.09	-	-	74.00	-15.91	216	363	V
		* 2.4835	32.50	RMS	32.90	-25.30	0.17	40.27	54.00	-13.73	-	-	216	363	V
		* 2.48413	33.78	RMS	32.90	-25.30	0.17	41.55	54.00	-12.45	-	-	216	363	V
2462	MIMO	* 2.4835	53.02	Pk	32.90	-25.30	0.00	60.62	-	-	74.00	-13.38	131	110	H
		* 2.48372	59.92	Pk	32.90	-25.30	0.00	67.52	-	-	74.00	-6.48	131	110	H
		* 2.4835	38.03	RMS	32.90	-25.30	0.17	45.80	54.00	-8.20	-	-	131	110	H
		* 2.4836	40.60	RMS	32.90	-25.30	0.17	48.37	54.00	-5.63	-	-	131	110	H
		* 2.4835	46.21	Pk	32.90	-25.30	0.00	53.81	-	-	74.00	-20.19	225	287	V
		* 2.48423	52.62	Pk	32.90	-25.30	0.00	60.22	-	-	74.00	-13.78	225	287	V
		* 2.4835	33.37	RMS	32.90	-25.30	0.17	41.14	54.00	-12.86	-	-	225	287	V
		* 2.48412	33.62	RMS	32.90	-25.30	0.17	41.39	54.00	-12.61	-	-	225	287	V
2467	MIMO	* 2.4835	56.52	Pk	32.90	-25.30	0.00	64.12	-	-	74.00	-9.88	127	177	H
		* 2.48355	62.19	Pk	32.90	-25.30	0.00	69.79	-	-	74.00	-4.21	127	177	H
		* 2.4835	40.79	RMS	32.90	-25.30	0.17	48.56	54.00	-5.44	-	-	127	177	H
		* 2.48394	41.09	RMS	32.90	-25.30	0.17	48.86	54.00	-5.14	-	-	127	177	H
		* 2.4835	50.31	Pk	32.90	-25.30	0.00	57.91	-	-	74.00	-16.09	219	360	V
		* 2.48356	57.65	Pk	32.90	-25.30	0.00	65.25	-	-	74.00	-8.75	219	360	V
		* 2.4835	37.28	RMS	32.90	-25.30	0.17	45.05	54.00	-8.95	-	-	219	360	V
		* 2.48373	38.51	RMS	32.90	-25.30	0.17	46.28	54.00	-7.72	-	-	219	360	V
2472	MIMO	* 2.48351	55.03	Pk	32.00	-25.10	0.00	61.93	-	-	74.00	-12.07	124	184	H
		* 2.48356	56.13	Pk	32.00	-25.10	0.00	63.03	-	-	74.00	-10.97	124	184	H
		* 2.48351	39.64	RMS	32.00	-25.10	0.17	46.71	54.00	-7.29	-	-	124	184	H
		* 2.48355	39.17	RMS	32.00	-25.10	0.17	46.24	54.00	-7.76	-	-	124	184	H
		* 2.4835	53.98	Pk	32.90	-25.30	0.00	61.58	-	-	74.00	-12.42	223	281	V
		* 2.48351	54.78	Pk	32.90	-25.30	0.00	62.38	-	-	74.00	-11.62	223	281	V
		* 2.4835	38.46	RMS	32.90	-25.30	0.17	46.23	54.00	-7.77	-	-	223	281	V
		* 2.48353	38.82	RMS	32.90	-25.30	0.17	46.59	54.00	-7.41	-	-	223	281	V

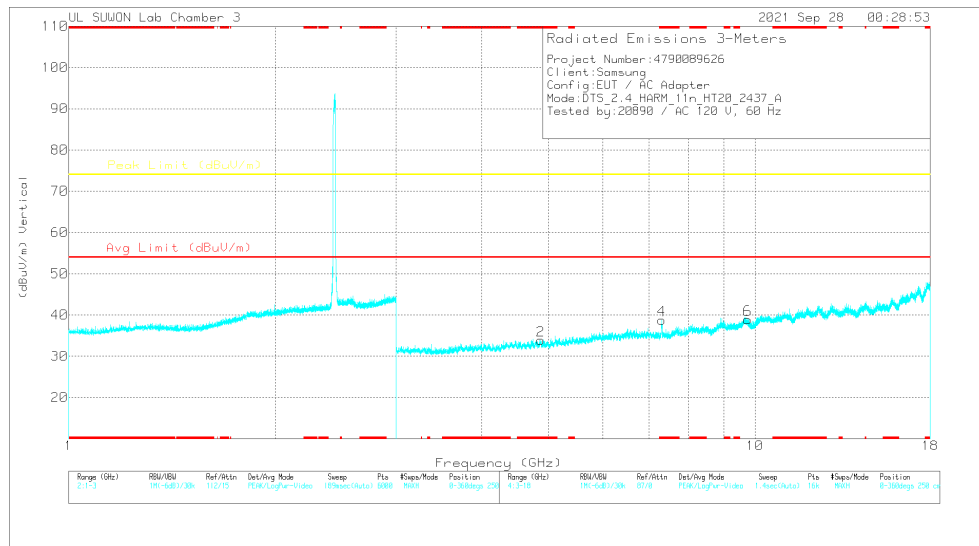
Note1. Pk - Peak detector, RMS - RMS detector

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

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 6 CHANNEL) CH 6 RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.88021	40.11	PK2	34.7	-31.2	0	43.61	-	-	74	-30.39	0	100	H
* 4.8775	42.17	PK2	34.7	-31.1	0	45.77	-	-	74	-28.23	0	100	V
* 7.31358	40.49	PK2	36	-25.6	0	50.89	-	-	74	-23.11	338	139	H
* 7.31504	26.35	MAV1	36	-25.6	17	36.92	54	-17.08	-	-	338	139	H
* 7.31156	42.98	PK2	36	-25.6	0	53.38	-	-	74	-20.62	299	101	V
* 7.31498	28.27	MAV1	36	-25.6	17	38.84	54	-15.16	-	-	299	101	V
9.7554	32.13	PK2	37.5	-21.6	0	48.03	-	-	74	-25.97	360	100	H
9.74984	32.38	PK2	37.5	-21.7	0	48.18	-	-	74	-25.82	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

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

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
2417	MIMO	* 4.83813	39.33	PK2	34.60	-30.80	0.00	43.13	-	-	74.00	-30.87	360	100	H
		* 4.83041	39.58	PK2	34.60	-30.70	0.00	43.48	-	-	74.00	-30.52	360	100	V
		7.249	41.75	PK2	36.00	-26.00	0.00	51.75	-	-	74.00	-22.25	329	108	H
		7.249	43.08	PK2	36.00	-26.00	0.00	53.08	-	-	74.00	-20.92	301	104	V
		9.662	33.13	PK2	37.40	-21.80	0.00	48.73	-	-	74.00	-25.27	360	100	H
		9.661	32.42	PK2	37.40	-21.80	0.00	48.02	-	-	74.00	-25.98	360	100	V
2437	MIMO	* 4.88021	40.11	PK2	34.70	-31.20	0.00	43.61	-	-	74.00	-30.39	0	100	H
		* 4.8775	42.17	PK2	34.70	-31.10	0.00	45.77	-	-	74.00	-28.23	0	100	V
		* 7.31358	40.49	PK2	36.00	-25.60	0.00	50.89	-	-	74.00	-23.11	338	139	H
		* 7.31504	26.35	MAV1	36.00	-25.60	0.17	36.92	54.00	-17.08	-	-	338	139	H
		* 7.31156	42.98	PK2	36.00	-25.60	0.00	53.38	-	-	74.00	-20.62	299	101	V
		* 7.31498	28.27	MAV1	36.00	-25.60	0.17	38.84	54.00	-15.16	-	-	299	101	V
		9.755	32.13	PK2	37.50	-21.60	0.00	48.03	-	-	74.00	-25.97	360	100	H
		9.750	32.38	PK2	37.50	-21.70	0.00	48.18	-	-	74.00	-25.82	360	100	V
		* 4.91201	41.08	PK2	34.10	-31.50	0.00	43.68	-	-	74.00	-30.32	0	100	H
		* 4.91297	41.61	PK2	34.10	-31.50	0.00	44.21	-	-	74.00	-29.79	360	100	V
2457	MIMO	* 7.3661	42.51	PK2	35.80	-26.90	0.00	51.41	-	-	74.00	-22.59	328	117	H
		* 7.36862	26.70	MAV1	35.80	-26.80	0.17	35.87	54.00	-18.13	-	-	328	117	H
		* 7.362	43.12	PK2	35.80	-26.90	0.00	52.02	-	-	74.00	-21.98	232	100	V
		* 7.3692	27.06	MAV1	35.80	-26.80	0.17	36.23	54.00	-17.77	-	-	232	100	V
		9.827	35.23	PK2	37.60	-23.20	0.00	49.63	-	-	74.00	-24.37	360	100	H
		9.827	34.80	PK2	37.60	-23.20	0.00	49.20	-	-	74.00	-24.80	360	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

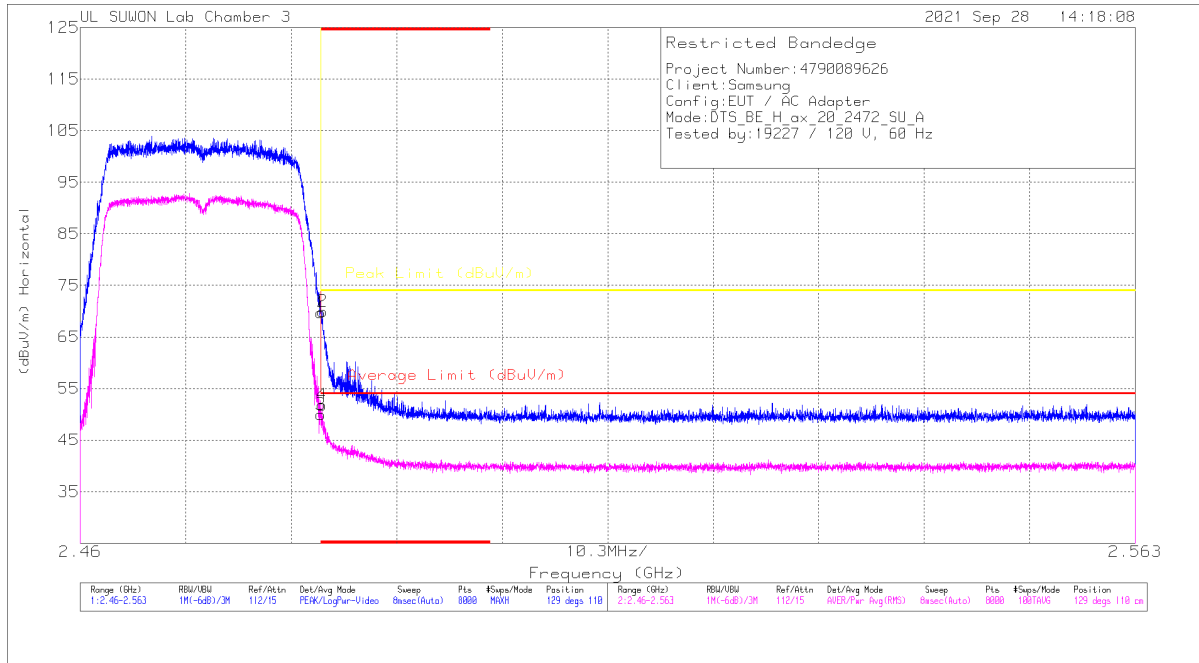
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

2TX Antenna 1 + Antenna 2

BANDEDGE (SPOT-CHECK: 13 CHANNEL, SU MODE)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (m)	Height (m)	Polarity
1	* 2.4835	62.09	PK	32.9	-25.3	0	69.69	-	-	74	-4.31	129	110	H
2	* 2.4836	62.36	PK	32.9	-25.3	0	69.96	-	-	74	-4.04	129	110	H
3	* 2.4835	41.95	RMS	32.9	-25.3	.42	49.97	54	-4.03	-	-	129	110	H
4	* 2.4836	43.82	RMS	32.9	-25.3	.42	51.84	54	-2.16	-	-	129	110	H

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

PK - Peak detector

RMS - RMS detection

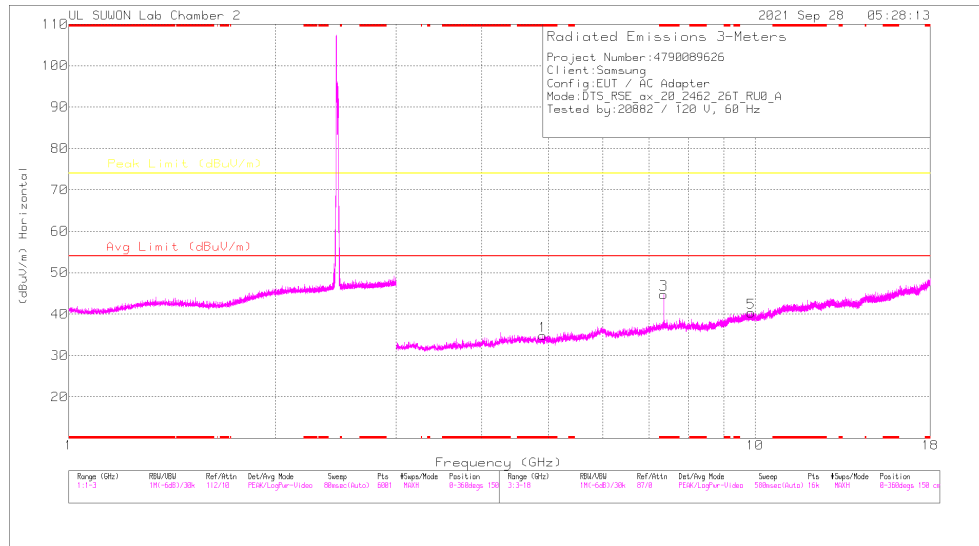
BANDEDGE TEST DATA

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
2412 SU mode	MIMO	* 2.39	58.60	Pk	32.80	-25.40	0.00	66.00	-	-	74.00	-8.00	125	165	H
		* 2.38863	61.65	Pk	32.80	-25.40	0.00	69.05	-	-	74.00	-4.95	125	165	H
		* 2.39	42.22	RMS	32.80	-25.40	0.42	50.04	54.00	-3.96	-	-	125	165	H
		* 2.38996	43.88	RMS	32.80	-25.40	0.42	51.70	54.00	-2.30	-	-	125	165	H
		* 2.39	53.18	Pk	32.80	-25.40	0.00	60.58	-	-	74.00	-13.42	203	387	V
		* 2.38963	56.60	Pk	32.80	-25.40	0.00	64.00	-	-	74.00	-10.00	203	387	V
		* 2.39	39.31	RMS	32.80	-25.40	0.42	47.13	54.00	-6.87	-	-	203	387	V
		* 2.38989	40.49	RMS	32.80	-25.40	0.42	48.31	54.00	-5.69	-	-	203	387	V
2462 SU mode	MIMO	* 2.48351	51.97	Pk	32.00	-20.40	0.00	63.57	-	-	74.00	-10.43	126	182	H
		* 2.48424	58.33	Pk	32.00	-20.40	0.00	69.93	-	-	74.00	-4.07	126	182	H
		* 2.48351	36.63	RMS	32.00	-20.40	0.42	48.65	54.00	-5.35	-	-	126	182	H
		* 2.48359	37.66	RMS	32.00	-20.40	0.42	49.68	54.00	-4.32	-	-	126	182	H
		* 2.48351	50.45	Pk	32.00	-20.40	0.00	62.05	-	-	74.00	-11.95	209	370	V
		* 2.48404	54.62	Pk	32.00	-20.40	0.00	66.22	-	-	74.00	-7.78	209	370	V
		* 2.48351	33.70	RMS	32.00	-20.40	0.42	45.72	54.00	-8.28	-	-	209	370	V
		* 2.48382	34.63	RMS	32.00	-20.40	0.42	46.65	54.00	-7.35	-	-	209	370	V
2467 SU mode	MIMO	* 2.4835	54.27	Pk	32.90	-25.30	0.00	61.87	-	-	74.00	-12.13	128	114	H
		* 2.48353	58.38	Pk	32.90	-25.30	0.00	65.98	-	-	74.00	-8.02	128	114	H
		* 2.4835	40.41	RMS	32.90	-25.30	0.42	48.43	54.00	-5.57	-	-	128	114	H
		* 2.48372	41.42	RMS	32.90	-25.30	0.42	49.44	54.00	-4.56	-	-	128	114	H
		* 2.4835	50.22	Pk	32.90	-25.30	0.00	57.82	-	-	74.00	-16.18	216	361	V
		* 2.48377	53.20	Pk	32.90	-25.30	0.00	60.80	-	-	74.00	-13.20	216	361	V
		* 2.4835	36.52	RMS	32.90	-25.30	0.42	44.54	54.00	-9.46	-	-	216	361	V
		* 2.48363	36.61	RMS	32.90	-25.30	0.42	44.63	54.00	-9.37	-	-	216	361	V
2472 SU mode	MIMO	* 2.4835	62.09	Pk	32.90	-25.30	0.00	69.69	-	-	74.00	-4.31	129	110	H
		* 2.48366	62.36	Pk	32.90	-25.30	0.00	69.96	-	-	74.00	-4.04	129	110	H
		* 2.4835	41.95	RMS	32.90	-25.30	0.42	49.97	54.00	-4.03	-	-	129	110	H
		* 2.4836	43.82	RMS	32.90	-25.30	0.42	51.84	54.00	-2.16	-	-	129	110	H
		* 2.4835	59.73	Pk	32.90	-25.30	0.00	67.33	-	-	74.00	-6.67	208	357	V
		* 2.48353	60.79	Pk	32.90	-25.30	0.00	68.39	-	-	74.00	-5.61	208	357	V
		* 2.4835	37.66	RMS	32.90	-25.30	0.42	45.68	54.00	-8.32	-	-	208	357	V
		* 2.48353	41.87	RMS	32.90	-25.30	0.42	49.89	54.00	-4.11	-	-	208	357	V

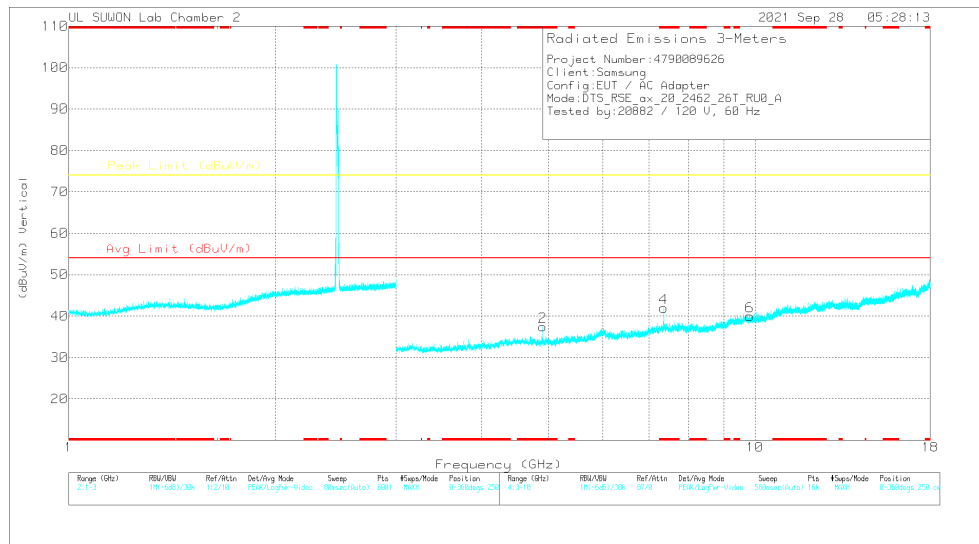
Note1. Pk - Peak detector, RMS - RMS detector

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

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 11 CHANNEL, 0RU) CH 11 RESULTS



HORIZONTAL



VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872 4	3GHz_HP[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.90676	46.06	PK2	34.1	-27.5	0	52.66	-	-	74	-21.34	171	101	H
* 4.90698	27.9	MAV1	34.1	-27.5	0	34.5	54	-19.5	-	-	171	101	H
* 4.90795	48.82	PK2	34.1	-27.5	0	55.42	-	-	74	-18.58	181	108	V
* 4.90699	30.3	MAV1	34.1	-27.5	0	36.9	54	-17.1	-	-	181	108	V
* 7.36049	52.58	PK2	36.1	-24.4	0	64.28	-	-	74	-9.72	336	114	H
* 7.36061	30.5	MAV1	36.1	-24.4	0	42.2	54	-11.8	-	-	336	114	H
* 7.36053	51.49	PK2	36.1	-24.4	0	63.19	-	-	74	-10.81	245	104	V
* 7.36107	30.36	MAV1	36.1	-24.4	0	42.06	54	-11.94	-	-	245	104	V
9.86968	32.47	PK2	37.3	-21.6	0	48.17	-	-	74	-25.83	336	114	H
9.86868	32.72	PK2	37.3	-21.6	0	48.42	-	-	74	-25.58	336	114	V

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

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

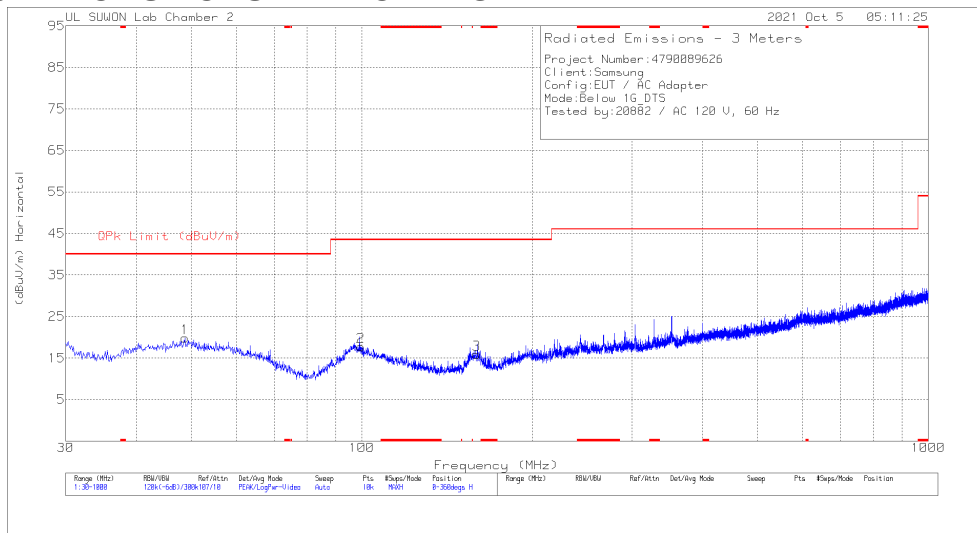
HARMONICS AND SPURIOUS EMISSIONS TEST DATA

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
2412 RU4	MIMO	* 4.81534	36.77	PK2	34.10	-28.00	0.00	42.87	-	-	74.00	-31.13	360	100	H
		* 4.81482	36.90	PK2	34.10	-28.00	0.00	43.00	-	-	74.00	-31.00	360	100	V
		* 7.3247	34.89	PK2	36.10	-24.80	0.00	46.19	-	-	74.00	-27.81	360	100	H
		* 7.32492	35.59	PK2	36.10	-24.90	0.00	46.79	-	-	74.00	-27.21	360	100	V
		9.773	32.91	PK2	37.20	-21.60	0.00	48.51	-	-	74.00	-25.49	360	100	H
		9.773	32.79	PK2	37.20	-21.60	0.00	48.39	-	-	74.00	-25.61	360	100	V
2437 RU4	MIMO	* 4.87428	39.94	PK2	34.10	-27.90	0.00	46.14	-	-	74.00	-27.86	360	100	H
		* 4.87425	42.16	PK2	34.10	-27.90	0.00	48.36	-	-	74.00	-25.64	360	100	V
		* 7.31021	46.00	PK2	36.20	-25.00	0.00	57.20	-	-	74.00	-16.80	360	100	H
		* 7.31188	42.31	PK2	36.20	-25.00	0.00	53.51	-	-	74.00	-20.49	360	100	V
		9.748	32.59	PK2	37.20	-21.40	0.00	48.39	-	-	74.00	-25.61	360	100	H
		9.747	32.74	PK2	37.20	-21.40	0.00	48.54	-	-	74.00	-25.46	360	100	V
2462 RU0	MIMO	* 4.90676	46.06	PK2	34.10	-27.50	0.00	52.66	-	-	74.00	-21.34	171	101	H
		* 4.90698	27.90	MAV1	34.10	-27.50	0.00	34.50	54.00	-19.50	-	-	171	101	H
		* 4.90795	48.82	PK2	34.10	-27.50	0.00	55.42	-	-	74.00	-18.58	181	108	V
		* 4.90699	30.30	MAV1	34.10	-27.50	0.00	36.90	54.00	-17.10	-	-	181	108	V
		* 7.36049	52.58	PK2	36.10	-24.40	0.00	64.28	-	-	74.00	-9.72	336	114	H
		* 7.36061	30.50	MAV1	36.10	-24.40	0.00	42.20	54.00	-11.80	-	-	336	114	H
		* 7.36053	51.49	PK2	36.10	-24.40	0.00	63.19	-	-	74.00	-10.81	245	104	V
		* 7.36107	30.36	MAV1	36.10	-24.40	0.00	42.06	54.00	-11.94	-	-	245	104	V
		9.870	32.47	PK2	37.30	-21.60	0.00	48.17	-	-	74.00	-25.83	336	114	H
		9.869	32.72	PK2	37.30	-21.60	0.00	48.42	-	-	74.00	-25.58	336	114	V

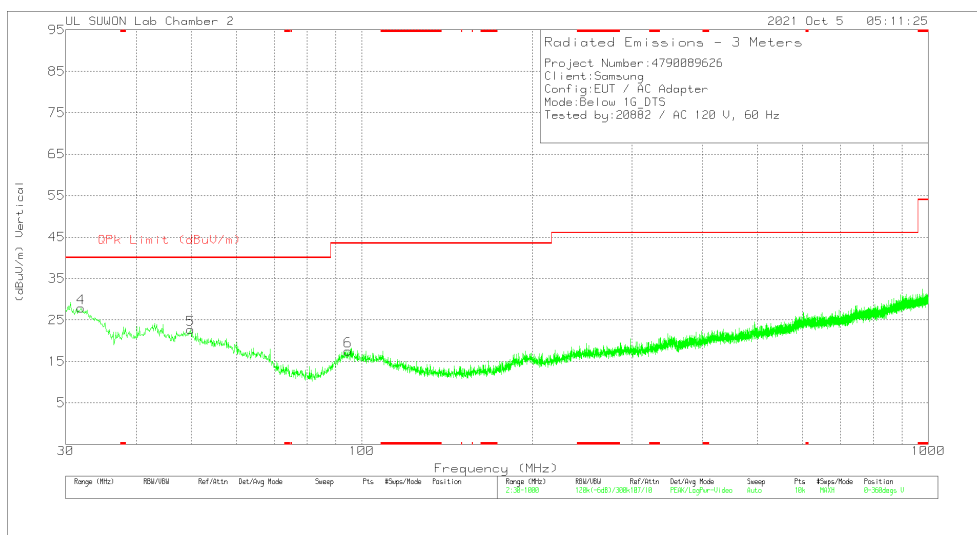
Note1. PK2 - KDB558074 Method: Maximum Peak / MAV1 - KDB558074 Option 1 Maximum RMS Average

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

10.2. WORST CASE BELOW 1 GHZ



HORIZONTAL



VERTICAL

Below 1GHz DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below 1G[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	48.721	31.61	Pk	19.9	-31.7	0	19.81	40	-20.19	0-360	100	H
2	99.549	31.78	Pk	17.4	-31.4	0	17.78	43.52	-25.74	0-360	200	H
3	159.495	32.72	Pk	14.2	-31	0	15.92	43.52	-27.6	0-360	100	H
4	31.94	44.32	Pk	15.4	-31.8	0	27.92	40	-12.08	0-360	100	V
5	49.885	34.49	Pk	19.9	-31.7	0	22.69	40	-17.31	0-360	100	V
6	94.505	32.33	Pk	16.5	-31.3	0	17.53	43.52	-25.99	0-360	100	V

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

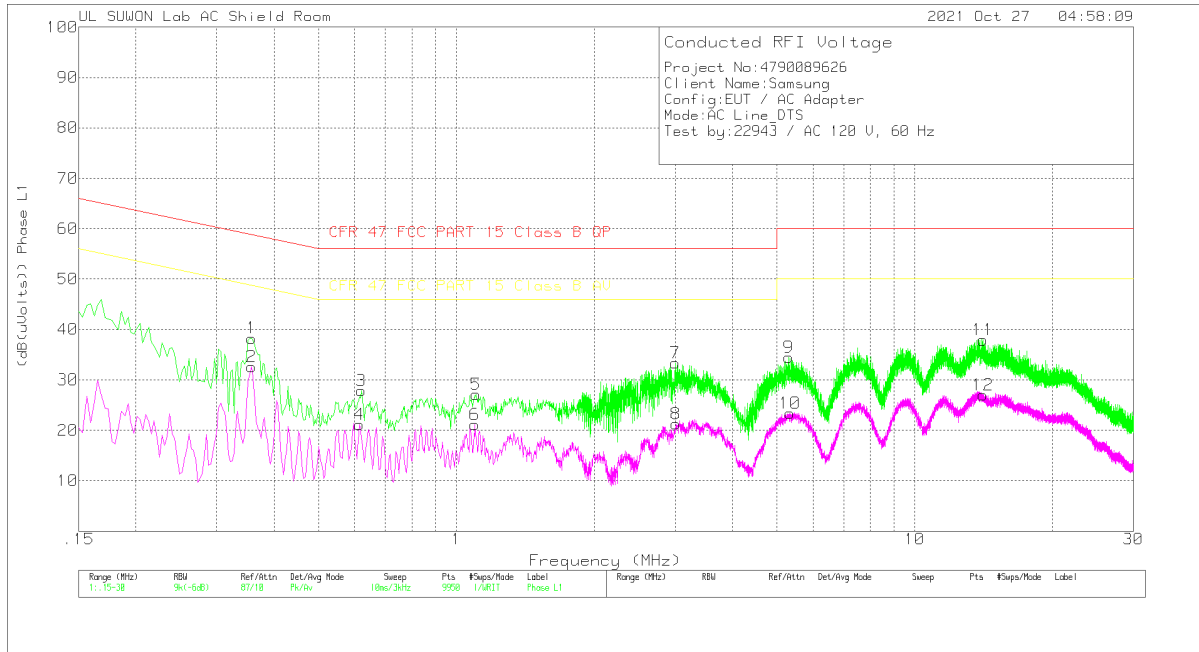
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1.1. AC Power Line

LINE 1 RESULTS



Trace Markers

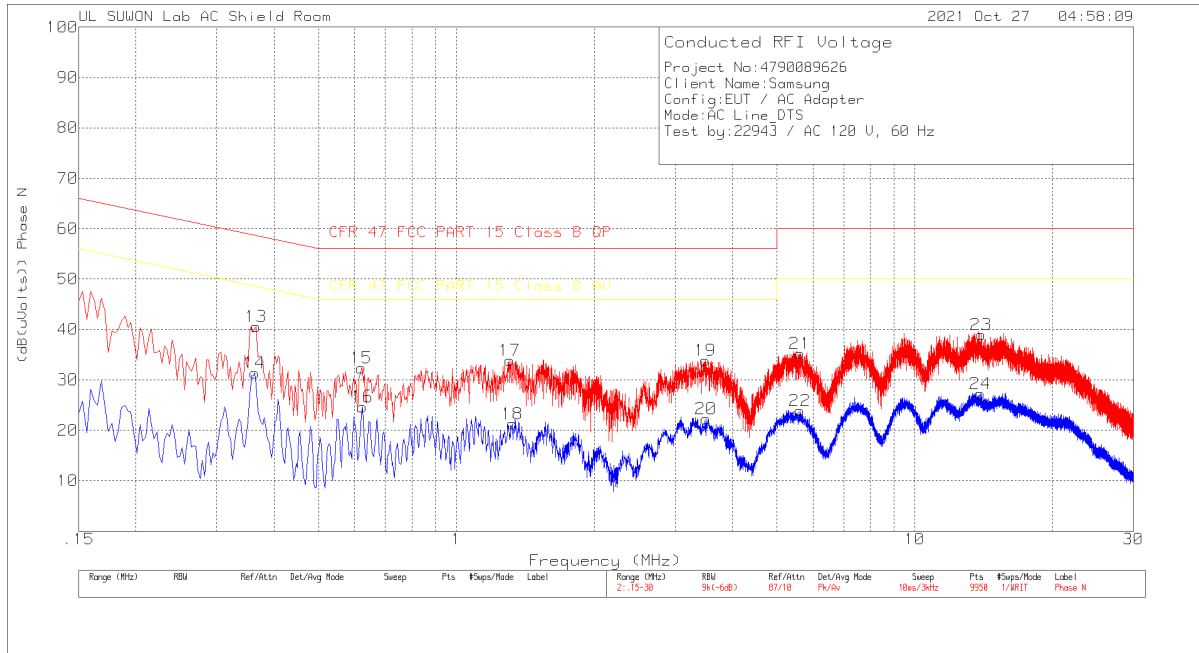
Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.357	28.28	Pk	9.8	.2	38.28	58.8	-20.52	-	-
2	.357	22.63	Av	9.8	.2	32.63	-	-	48.8	-16.17
3	.621	17.88	Pk	9.8	.2	27.88	56	-28.12	-	-
4	.615	11.2	Av	9.8	.2	21.2	-	-	46	-24.8
5	1.104	17.14	Pk	9.7	.3	27.14	56	-28.86	-	-
6	1.098	11.12	Av	9.7	.3	21.12	-	-	46	-24.88
7	3.003	23.39	Pk	9.7	.3	33.39	56	-22.61	-	-
8	3.009	11.26	Av	9.7	.3	21.26	-	-	46	-24.74
9	5.313	24.44	Pk	9.7	.3	34.44	60	-25.56	-	-
10	5.337	13.39	Av	9.7	.3	23.39	-	-	50	-26.61
11	14.085	27.51	Pk	10	.4	37.91	60	-22.09	-	-
12	14.097	16.64	Av	10	.4	27.04	-	-	50	-22.96

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836 With EX_N[dB]	CABLELOSS (dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B OP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.366	30.62	Pk	9.8	.2	40.62	58.59	-17.97	-	-
14	.363	21.38	Av	9.8	.2	31.38	-	-	48.66	-17.28
15	.621	22.39	Pk	9.8	.2	32.39	56	-23.61	-	-
16	.624	14.69	Av	9.8	.2	24.69	-	-	46	-21.31
17	1.308	23.84	Pk	9.7	.3	33.84	56	-22.16	-	-
18	1.323	11.32	Av	9.7	.3	21.32	-	-	46	-24.68
19	3.498	23.81	Pk	9.7	.3	33.81	56	-22.19	-	-
20	3.504	12.27	Av	9.7	.3	22.27	-	-	46	-23.73
21	5.613	25.21	Pk	9.7	.3	35.21	60	-24.79	-	-
22	5.613	13.91	Av	9.7	.3	23.91	-	-	50	-26.09
23	13.956	28.6	Pk	10	.4	39	60	-21	-	-
24	13.923	16.82	Av	10	.4	27.22	-	-	50	-22.78

Pk - Peak detector

Av - Average detection

END OF TEST REPORT