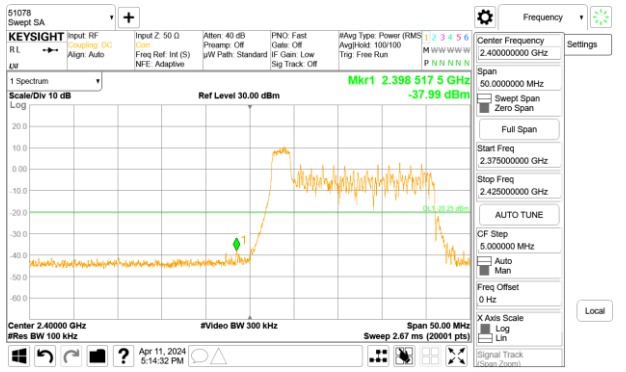
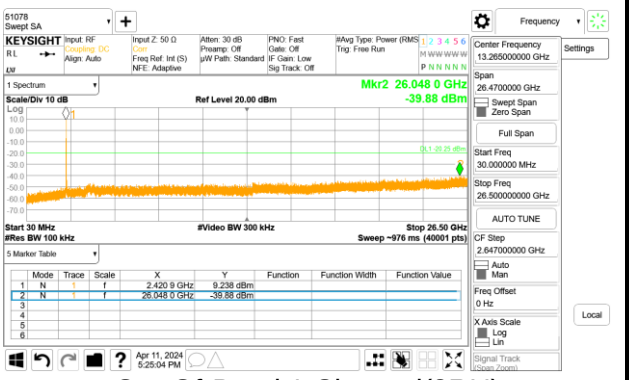
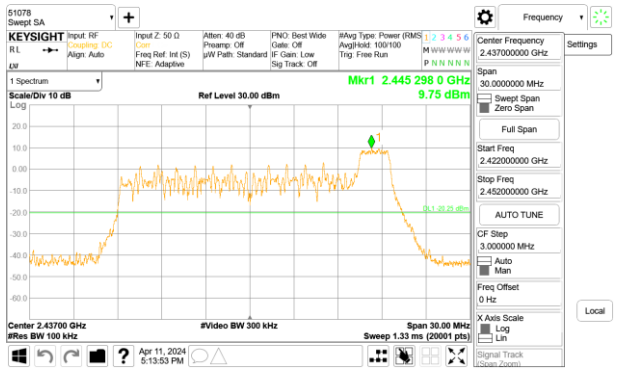
2TX Antenna 2 MODE



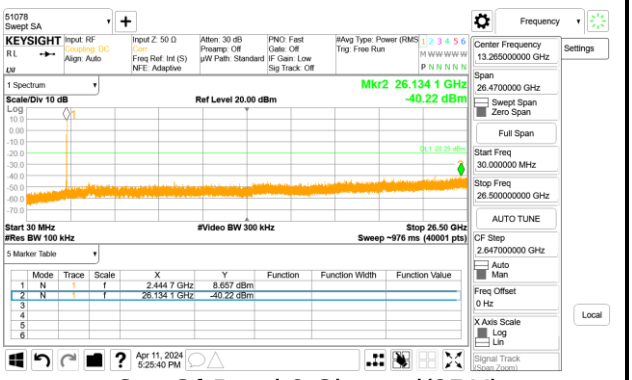
1 Channel Band-edge(0RU)



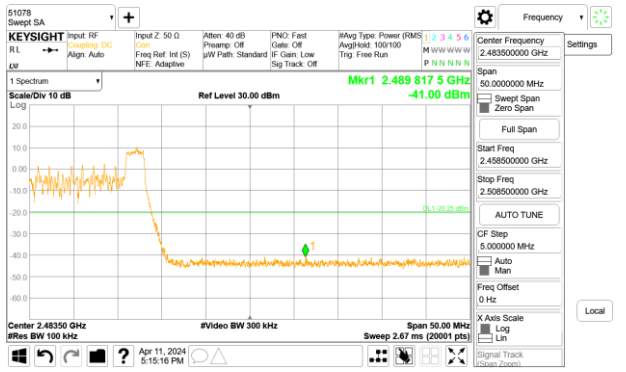
Out-Of-Band 1 Channel(8RU)



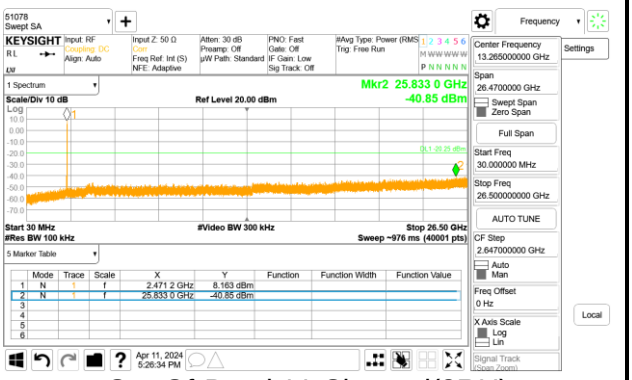
6 Channel Reference level(8RU)



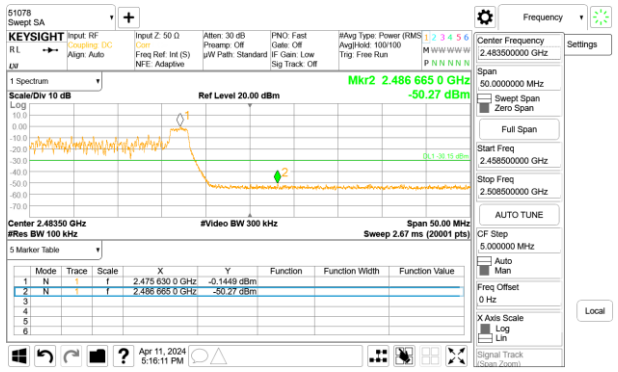
Out-Of-Band 6 Channel(8RU)



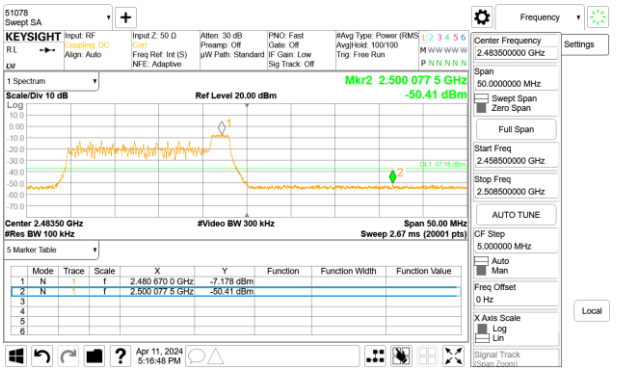
11 Channel Band-edge(8RU)



Out-Of-Band 11 Channel(8RU)



12 Channel Band-edge(8RU)



13 Channel Band-edge(8RU)

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.
(Restriced bandedge, Final detection of spurious harmonic emissions)

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

802.11b MIMO mode = 0 dB (duty cycle > 98%);
802.11g MIMO mode = 0.16 dB (96.29%);
802.11n(HT20) MIMO mode = 0.09 dB (97.96%);
802.11ax(HE20) MIMO SU mode = 0 dB (duty cycle > 98%);
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 are 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.

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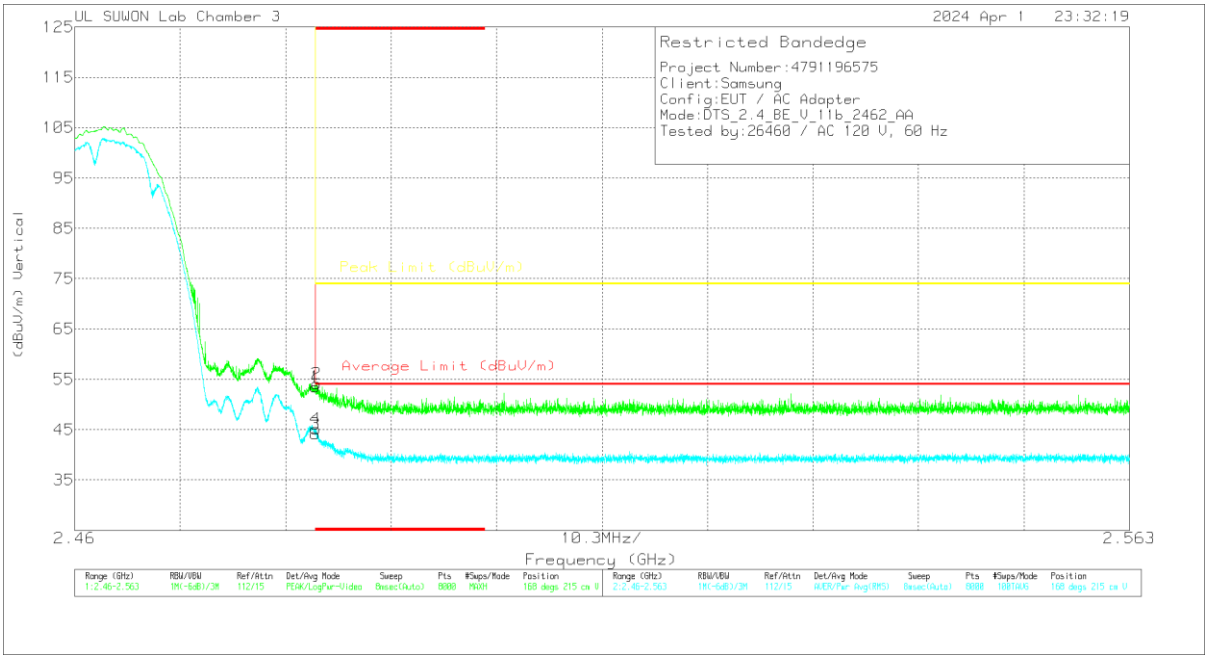
10.1. TRANSMITTER ABOVE 1 GHz

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

2TX Antenna 1 + Antenna 2

BANDEDGE (WORST CASE: 11 CHANNEL)

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_957_Factor(dB)	10dB_Path Loss(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	* 2.4835	45.9	Pk	32.4	-24.8	0	53.5	-	-	74	-20.5	168	215	V
2	* 2.48359	46.54	Pk	32.4	-24.8	0	54.14	-	-	74	-19.86	168	215	V
3	* 2.4835	36.5	RMS	32.4	-24.8	0	44.1	54	-9.9	-	-	168	215	V
4	* 2.48353	37.56	RMS	32.4	-24.8	0	45.16	54	-8.84	-	-	168	215	V

* - 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 [dB/m]	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	42.64	Pk	32.10	-24.80	0.00	49.94	-	-	74.00	-24.06	208	271	H
		* 2.38872	43.98	Pk	32.10	-24.80	0.00	51.28	-	-	74.00	-22.72	208	271	H
		* 2.39	32.14	RMS	32.10	-24.80	0.00	39.44	54.00	-14.56	-	-	208	271	H
		* 2.38817	33.18	RMS	32.10	-24.80	0.00	40.48	54.00	-13.52	-	-	208	271	H
		* 2.39	43.77	Pk	32.10	-24.80	0.00	51.07	-	-	74.00	-22.93	260	221	V
		* 2.35588	45.98	Pk	32.00	-24.90	0.00	53.08	-	-	74.00	-20.92	260	221	V
		* 2.39	34.67	RMS	32.10	-24.80	0.00	41.97	54.00	-12.03	-	-	260	221	V
		* 2.38965	35.61	RMS	32.10	-24.80	0.00	42.91	54.00	-11.09	-	-	260	221	V
2462	MIMO	* 2.4835	44.06	Pk	32.40	-24.80	0.00	51.66	-	-	74.00	-22.34	38	338	H
		* 2.48362	45.01	Pk	32.40	-24.80	0.00	52.61	-	-	74.00	-21.39	38	338	H
		* 2.4835	35.38	RMS	32.40	-24.80	0.00	42.98	54.00	-11.02	-	-	38	338	H
		* 2.48351	36.37	RMS	32.40	-24.80	0.00	43.97	54.00	-10.03	-	-	38	338	H
		* 2.4835	45.90	Pk	32.40	-24.80	0.00	53.50	-	-	74.00	-20.50	168	215	V
		* 2.48359	46.54	Pk	32.40	-24.80	0.00	54.14	-	-	74.00	**-19.86**	168	215	V
		* 2.4835	36.50	RMS	32.40	-24.80	0.00	44.10	54.00	-9.90	-	-	168	215	V
		* 2.48353	37.56	RMS	32.40	-24.80	0.00	45.16	54.00	**-8.84**	-	-	168	215	V
2467	MIMO	* 2.4835	41.29	Pk	32.40	-24.80	0.00	48.89	-	-	74.00	-25.11	199	139	H
		2.538	44.38	Pk	32.40	-24.70	0.00	52.08	-	-	74.00	-21.92	199	139	H
		* 2.4835	31.06	RMS	32.40	-24.80	0.00	38.66	54.00	-15.34	-	-	199	139	H
		2.560	33.04	RMS	32.40	-24.70	0.00	40.74	54.00	-13.26	-	-	199	139	H
		* 2.4835	43.02	Pk	32.40	-24.80	0.00	50.62	-	-	74.00	-23.38	206	213	V
		2.557	44.52	Pk	32.40	-24.70	0.00	52.22	-	-	74.00	-21.78	206	213	V
		* 2.4835	31.74	RMS	32.40	-24.80	0.00	39.34	54.00	-14.66	-	-	206	213	V
		2.559	33.22	RMS	32.40	-24.70	0.00	40.92	54.00	-13.08	-	-	206	213	V
2472	MIMO	* 2.4835	40.93	Pk	32.40	-24.80	0.00	48.53	-	-	74.00	-25.47	198	177	H
		2.539	44.51	Pk	32.40	-24.70	0.00	52.21	-	-	74.00	-21.79	198	177	H
		* 2.4835	31.90	RMS	32.40	-24.80	0.00	39.50	54.00	-14.50	-	-	198	177	H
		2.553	33.20	RMS	32.40	-24.70	0.00	40.90	54.00	-13.10	-	-	198	177	H
		* 2.4835	42.44	Pk	32.40	-24.80	0.00	50.04	-	-	74.00	-23.96	187	261	V
		2.520	45.16	Pk	32.40	-24.80	0.00	52.76	-	-	74.00	-21.24	187	261	V
		* 2.4835	32.32	RMS	32.40	-24.80	0.00	39.92	54.00	-14.08	-	-	187	261	V
		2.551	33.02	RMS	32.40	-24.70	0.00	40.72	54.00	-13.28	-	-	187	261	V

Note1. Pk - Peak detector, RMS - RMS detectior
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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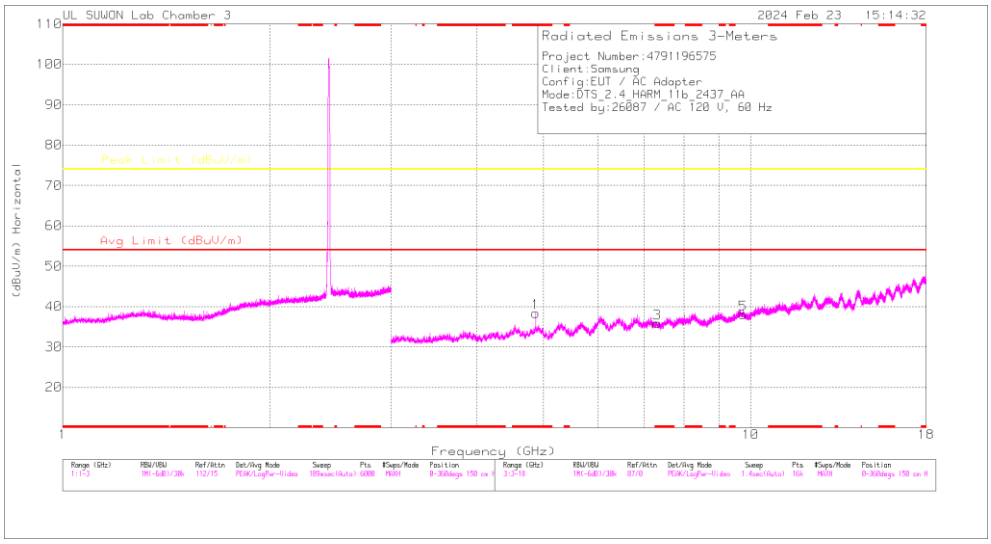
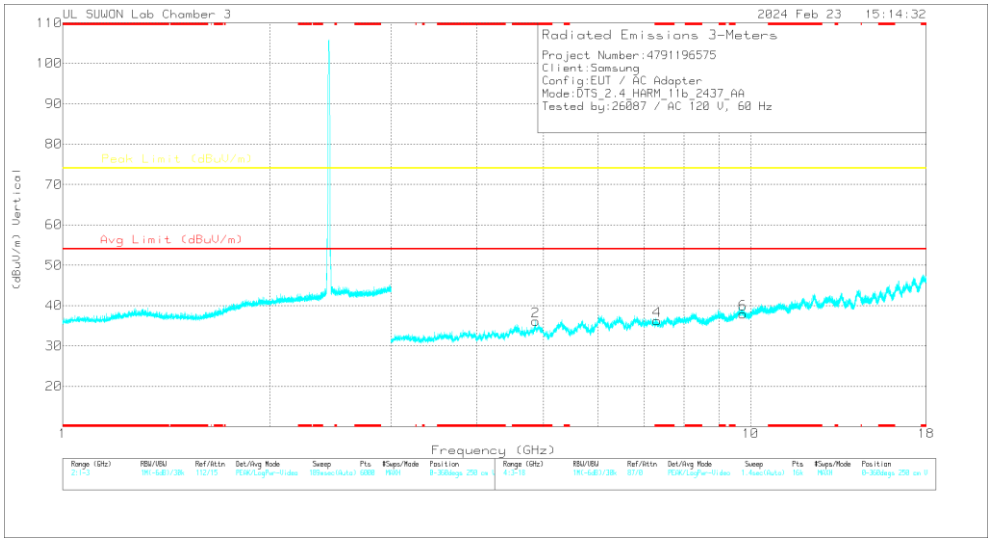
HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 6 CHANNEL)

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	Antenna_957_ Factor(dB/m)	3GHz_HP_Pat h Loss(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
* 4.87389	42.28	PK2	34.2	-29.8	0	46.68	-	-	74	-27.32	124	107	H
* 4.87403	34.66	MAv1	34.2	-29.8	0	39.06	54	-14.94	-	-	124	107	H
* 4.87376	41.82	PK2	34.2	-29.8	0	46.22	-	-	74	-27.78	173	100	V
* 4.87401	33.77	MAv1	34.2	-29.8	0	38.17	54	-15.83	-	-	173	100	V
* 7.31678	35.27	PK2	35.8	-25.5	0	45.57	-	-	74	-28.43	0	100	H
* 7.31364	35.94	PK2	35.8	-25.5	0	46.24	-	-	74	-27.76	0	100	V
9.74737	33.04	PK2	36.9	-21.6	0	48.34	-	-	74	-25.66	109	151	H
9.75277	33.36	PK2	36.9	-21.6	0	48.66	-	-	74	-25.34	172	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 [dB/m]	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	* 4.82379	40.42	PK2	34.30	-30.10	0.00	44.62	-	-	74.00	-29.38	116	199	H
		* 4.82394	31.23	MAv1	34.30	-30.10	0.00	35.43	54.00	-18.57	-	-	116	199	H
		* 4.82426	40.79	PK2	34.30	-30.10	0.00	44.99	-	-	74.00	-29.01	214	161	V
		* 4.82402	31.02	MAv1	34.30	-30.10	0.00	35.22	54.00	-18.78	-	-	214	161	V
		7.234	36.65	PK2	35.80	-25.80	0.00	46.65	-	-	74.00	-27.35	0	100	H
		7.232	36.10	PK2	35.80	-25.80	0.00	46.10	-	-	74.00	-27.90	0	100	V
		9.647	32.79	PK2	36.80	-21.70	0.00	47.89	-	-	74.00	-26.11	0	100	H
		9.647	33.23	PK2	36.80	-21.70	0.00	48.33	-	-	74.00	-25.67	0	100	V
2437	MIMO	* 4.87389	42.28	PK2	34.20	-29.80	0.00	46.68	-	-	74.00	-27.32	124	107	H
		* 4.87403	34.66	MAv1	34.20	-29.80	0.00	39.06	54.00	**-14.94**	-	-	124	107	H
		* 4.87376	41.82	PK2	34.20	-29.80	0.00	46.22	-	-	74.00	-27.78	173	100	V
		* 4.87401	33.77	MAv1	34.20	-29.80	0.00	38.17	54.00	-15.83	-	-	173	100	V
		* 7.31678	35.27	PK2	35.80	-25.50	0.00	45.57	-	-	74.00	-28.43	0	100	H
		* 7.31364	35.94	PK2	35.80	-25.50	0.00	46.24	-	-	74.00	-27.76	0	100	V
		9.747	33.04	PK2	36.90	-21.60	0.00	48.34	-	-	74.00	-25.66	109	151	H
		9.753	33.36	PK2	36.90	-21.60	0.00	48.66	-	-	74.00	**-25.34**	172	100	V
2462	MIMO	* 4.92394	42.42	PK2	34.20	-30.00	0.00	46.62	-	-	74.00	-27.38	118	100	H
		* 4.92404	34.86	MAv1	34.20	-30.00	0.00	39.06	54.00	**-14.94**	-	-	118	100	H
		* 4.92393	41.91	PK2	34.20	-30.00	0.00	46.11	-	-	74.00	-27.89	159	104	V
		* 4.924	33.78	MAv1	34.20	-30.00	0.00	37.98	54.00	-16.02	-	-	159	104	V
		* 7.38382	34.57	PK2	35.70	-25.40	0.00	44.87	-	-	74.00	-29.13	0	100	H
		* 7.38621	34.72	PK2	35.70	-25.40	0.00	45.02	-	-	74.00	-28.98	0	100	V
		9.849	32.16	PK2	37.10	-21.40	0.00	47.86	-	-	74.00	-26.14	155	177	H
		9.849	31.60	PK2	37.10	-21.40	0.00	47.30	-	-	74.00	-26.70	0	100	V

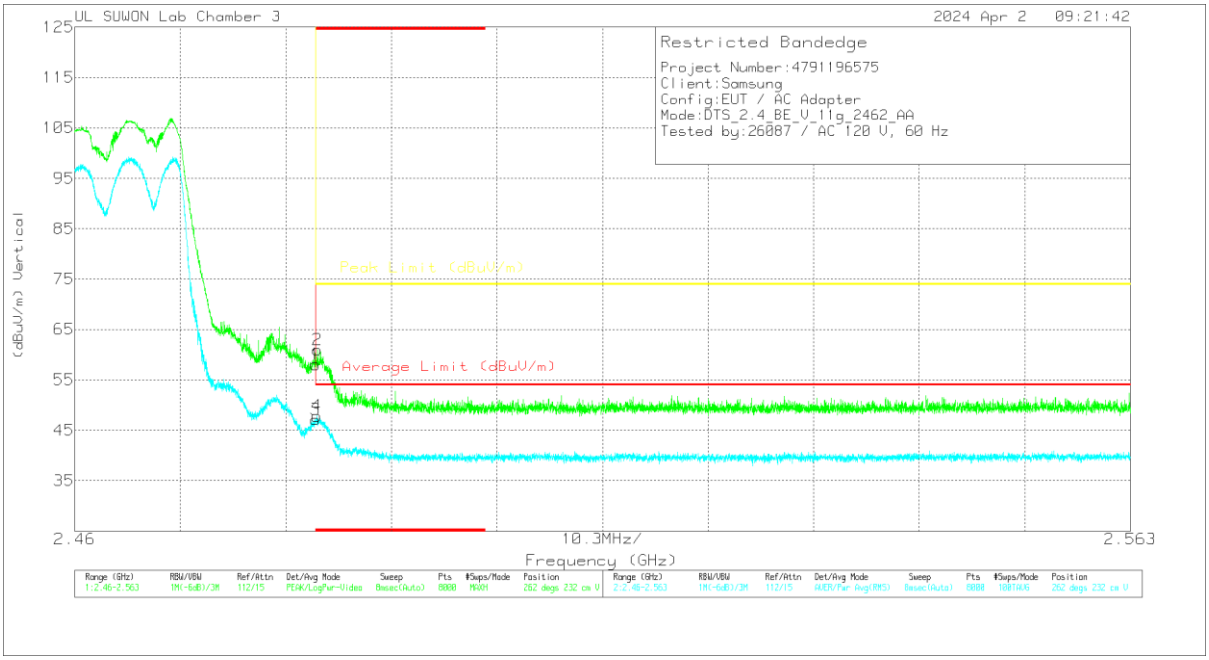
Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

2TX Antenna 1 + Antenna 2

BANDEDGE (WORST CASE: 11 CHANNEL)

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_957_Factor(dB)	10dB_Path Loss(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	* 2.4835	50.45	Pk	32.4	-24.8	0	58.05	-	-	74	-15.95	262	232	V
2	* 2.48368	53.41	Pk	32.4	-24.8	0	61.01	-	-	74	-12.99	262	232	V
3	* 2.4835	39.37	RMS	32.4	-24.8	.16	47.13	54	-6.87	-	-	262	232	V
4	* 2.4836	40.07	RMS	32.4	-24.8	.16	47.83	54	-6.17	-	-	262	232	V

* - 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 [dB/m]	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	52.40	Pk	32.10	-24.80	0.00	59.70	-	-	74.00	-14.30	138	149	H
		* 2.38958	52.97	Pk	32.10	-24.80	0.00	60.27	-	-	74.00	-13.73	138	149	H
		* 2.39	38.80	RMS	32.10	-24.80	0.16	46.26	54.00	-7.74	-	-	138	149	H
		* 2.38998	39.64	RMS	32.10	-24.80	0.16	47.10	54.00	-6.90	-	-	138	149	H
		* 2.39	49.55	Pk	32.10	-24.80	0.00	56.85	-	-	74.00	-17.15	205	220	V
		* 2.38895	51.58	Pk	32.10	-24.80	0.00	58.88	-	-	74.00	-15.12	205	220	V
		* 2.39	37.76	RMS	32.10	-24.80	0.16	45.22	54.00	-8.78	-	-	205	220	V
		* 2.38942	38.87	RMS	32.10	-24.80	0.16	46.33	54.00	-7.67	-	-	205	220	V
2457	MIMO	* 2.4835	45.52	Pk	32.40	-24.80	0.00	53.12	-	-	74.00	-20.88	29	247	H
		* 2.48563	45.89	Pk	32.40	-24.80	0.00	53.49	-	-	74.00	-20.51	29	247	H
		* 2.4835	33.81	RMS	32.40	-24.80	0.16	41.57	54.00	-12.43	-	-	29	247	H
		* 2.48355	34.88	RMS	32.40	-24.80	0.16	42.64	54.00	-11.36	-	-	29	247	H
		* 2.4835	48.73	Pk	32.40	-24.80	0.00	56.33	-	-	74.00	-17.67	260	234	V
		* 2.48431	52.65	Pk	32.40	-24.80	0.00	60.25	-	-	74.00	-13.75	260	234	V
		* 2.4835	36.47	RMS	32.40	-24.80	0.16	44.23	54.00	-9.77	-	-	260	234	V
		* 2.48407	37.57	RMS	32.40	-24.80	0.16	45.33	54.00	-8.67	-	-	260	234	V
2462	MIMO	* 2.4835	46.18	Pk	32.40	-24.80	0.00	53.78	-	-	74.00	-20.22	156	377	H
		* 2.48353	47.54	Pk	32.40	-24.80	0.00	55.14	-	-	74.00	-18.86	156	377	H
		* 2.4835	35.05	RMS	32.40	-24.80	0.16	42.81	54.00	-11.19	-	-	156	377	H
		* 2.48355	35.59	RMS	32.40	-24.80	0.16	43.35	54.00	-10.65	-	-	156	377	H
		* 2.4835	50.45	Pk	32.40	-24.80	0.00	58.05	-	-	74.00	-15.95	262	232	V
		* 2.48368	53.41	Pk	32.40	-24.80	0.00	61.01	-	-	74.00	**-12.99**	262	232	V
		* 2.4835	39.37	RMS	32.40	-24.80	0.16	47.13	54.00	-6.87	-	-	262	232	V
		* 2.4836	40.07	RMS	32.40	-24.80	0.16	47.83	54.00	**-6.17**	-	-	262	232	V
2467	MIMO	* 2.4835	41.07	Pk	32.40	-24.80	0.00	48.67	-	-	74.00	-25.33	140	376	H
		2.519	45.20	Pk	32.40	-24.80	0.00	52.80	-	-	74.00	-21.20	140	376	H
		* 2.4835	32.63	RMS	32.40	-24.80	0.16	40.39	54.00	-13.61	-	-	140	376	H
		* 2.48472	33.10	RMS	32.40	-24.80	0.16	40.86	54.00	-13.14	-	-	140	376	H
		* 2.4835	42.07	Pk	32.40	-24.80	0.00	49.67	-	-	74.00	-24.33	247	283	V
		2.531	44.51	Pk	32.40	-24.80	0.00	52.11	-	-	74.00	-21.89	247	283	V
		* 2.4835	32.51	RMS	32.40	-24.80	0.16	40.27	54.00	-13.73	-	-	247	283	V
		* 2.48534	33.08	RMS	32.40	-24.80	0.16	40.84	54.00	-13.16	-	-	247	283	V
2472	MIMO	* 2.4835	41.30	Pk	32.40	-24.80	0.00	48.90	-	-	74.00	-25.10	201	142	H
		2.559	44.32	Pk	32.40	-24.70	0.00	52.02	-	-	74.00	-21.98	201	142	H
		* 2.4835	32.41	RMS	32.40	-24.80	0.16	40.17	54.00	-13.83	-	-	201	142	H
		* 2.49853	33.11	RMS	32.40	-24.80	0.16	40.87	54.00	-13.13	-	-	201	142	H
		* 2.4835	42.65	Pk	32.40	-24.80	0.00	50.25	-	-	74.00	-23.75	247	283	V
		2.543	44.69	Pk	32.40	-24.70	0.00	52.39	-	-	74.00	-21.61	247	283	V
		* 2.4835	31.78	RMS	32.40	-24.80	0.16	39.54	54.00	-14.46	-	-	247	283	V
		* 2.49197	33.31	RMS	32.40	-24.80	0.16	41.07	54.00	-12.93	-	-	247	283	V

Note1. Pk - Peak detector, RMS - RMS detectior
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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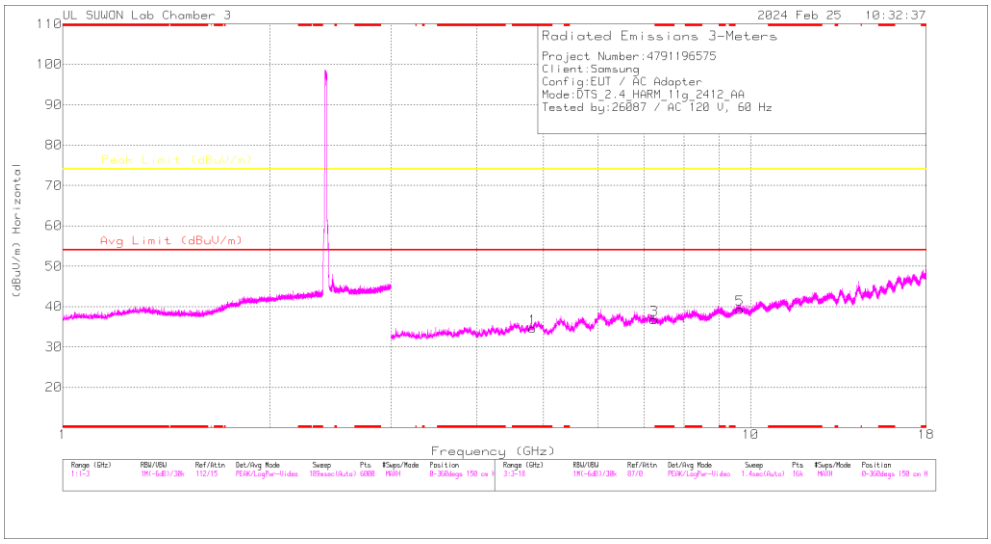
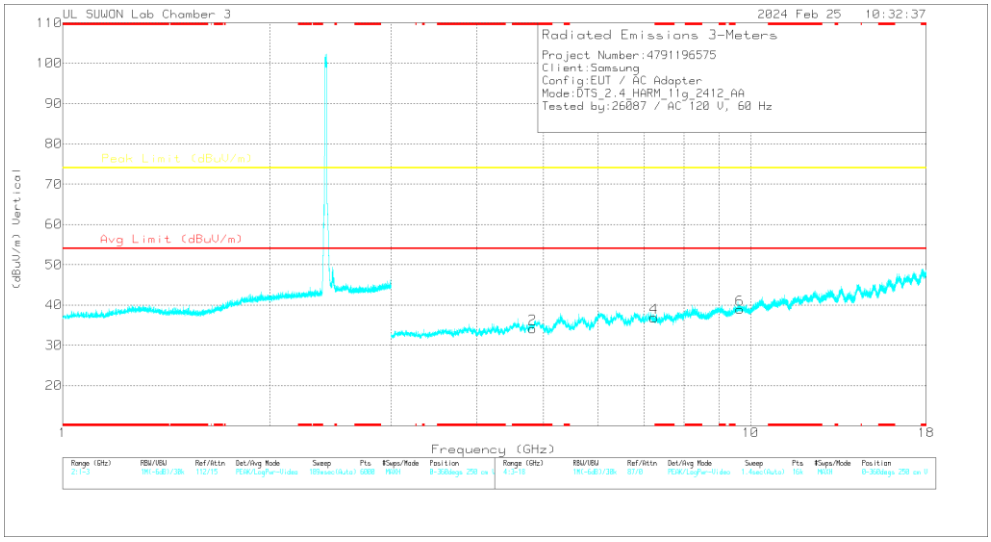
HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 1 CHANNEL)

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	Antenna_957_Factor(dB/m)	3GHz_HP_Path Loss(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
* 4.82344	40.27	PK2	34.3	-30.1	0	44.47	-	-	74	-29.53	0	100	H
* 4.82455	40.57	PK2	34.3	-30.1	0	44.77	-	-	74	-29.23	0	100	V
7.23441	36.99	PK2	35.8	-25.8	0	46.99	-	-	74	-27.01	0	100	H
7.23713	36.73	PK2	35.8	-25.7	0	46.83	-	-	74	-27.17	0	100	V
9.64695	33.69	PK2	36.8	-21.7	0	48.79	-	-	74	-25.21	0	100	H
9.64976	33.92	PK2	36.8	-21.7	0	49.02	-	-	74	-24.98	0	100	V

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

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HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	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	* 4.82344	40.27	PK2	34.30	-30.10	0.00	44.47	-	-	74.00	-29.53	0	100	H
		* 4.82455	40.57	PK2	34.30	-30.10	0.00	44.77	-	-	74.00	-29.23	0	100	V
		7.234	36.99	PK2	35.80	-25.80	0.00	46.99	-	-	74.00	-27.01	0	100	H
		7.237	36.73	PK2	35.80	-25.70	0.00	46.83	-	-	74.00	-27.17	0	100	V
		9.647	33.69	PK2	36.80	-21.70	0.00	48.79	-	-	74.00	-25.21	0	100	H
		9.650	33.92	PK2	36.80	-21.70	0.00	49.02	-	-	74.00	**-24.98**	0	100	V
2437	MIMO	* 4.87426	40.76	PK2	34.20	-29.80	0.00	45.16	-	-	74.00	-28.84	0	100	H
		* 4.87174	41.42	PK2	34.20	-29.90	0.00	45.72	-	-	74.00	-28.28	0	100	V
		* 7.31276	35.81	PK2	35.80	-25.50	0.00	46.11	-	-	74.00	-27.89	0	100	H
		* 7.3103	36.14	PK2	35.80	-25.50	0.00	46.44	-	-	74.00	-27.56	0	100	V
		9.750	33.45	PK2	36.90	-21.50	0.00	48.85	-	-	74.00	-25.15	0	100	H
		9.750	33.21	PK2	36.90	-21.50	0.00	48.61	-	-	74.00	-25.39	0	100	V
2457	MIMO	* 4.92182	39.92	PK2	34.20	-29.90	0.00	44.22	-	-	74.00	-29.78	0	100	H
		* 4.92162	40.61	PK2	34.20	-29.90	0.00	44.91	-	-	74.00	-29.09	0	100	V
		* 7.38224	34.64	PK2	35.70	-25.40	0.00	44.94	-	-	74.00	-29.06	0	100	H
		* 7.38659	34.55	PK2	35.70	-25.40	0.00	44.85	-	-	74.00	-29.15	0	100	V
		9.847	32.13	PK2	37.10	-21.40	0.00	47.83	-	-	74.00	-26.17	0	100	H
		9.848	32.13	PK2	37.10	-21.40	0.00	47.83	-	-	74.00	-26.17	0	100	V

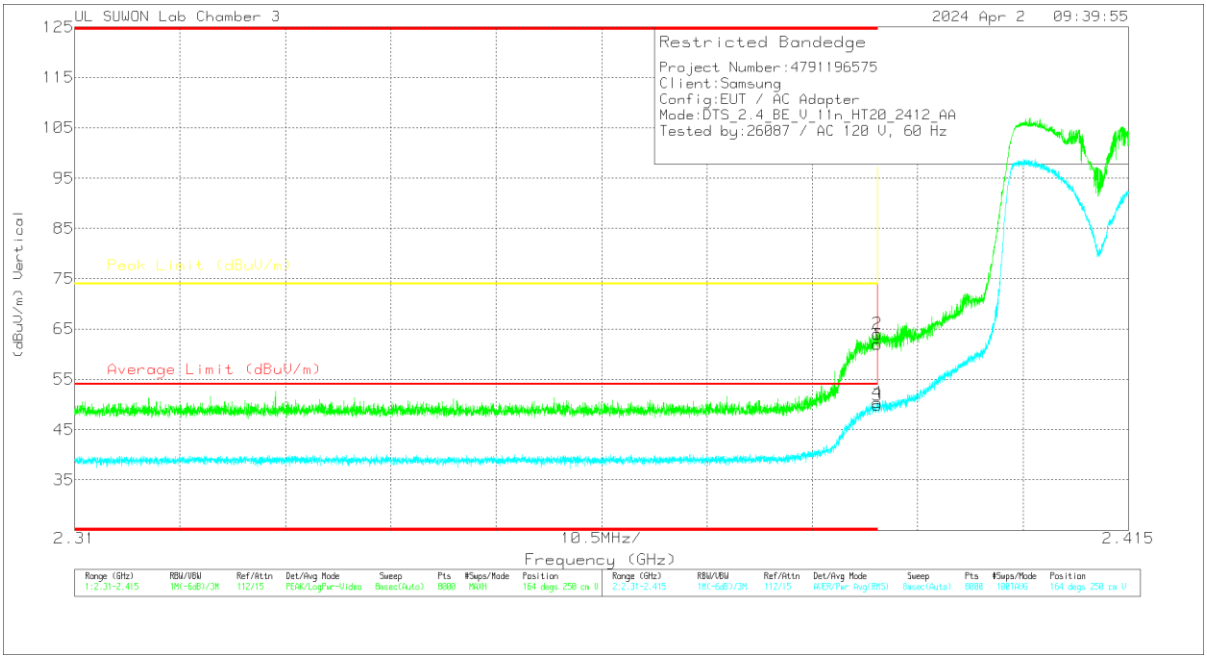
Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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)

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_957_Factor(dB)	10dB_Path Loss(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	* 2.39	54.65	Pk	32.1	-24.8	0	61.95	-	-	74	-12.05	164	250	V
2	* 2.38998	56.73	Pk	32.1	-24.8	0	64.03	-	-	74	-9.97	164	250	V
3	* 2.39	42.49	RMS	32.1	-24.8	.09	49.88	54	-4.12	-	-	164	250	V
4	* 2.38996	42.95	RMS	32.1	-24.8	.09	50.34	54	-3.66	-	-	164	250	V

* - 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 [dB/m]	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	53.58	Pk	32.10	-24.80	0.00	60.88	-	-	74.00	-13.12	135	148	H
		* 2.38973	53.66	Pk	32.10	-24.80	0.00	60.96	-	-	74.00	-13.04	135	148	H
		* 2.39	39.70	RMS	32.10	-24.80	0.09	47.09	54.00	-6.91	-	-	135	148	H
		* 2.38973	39.99	RMS	32.10	-24.80	0.09	47.38	54.00	-6.62	-	-	135	148	H
		* 2.39	54.65	Pk	32.10	-24.80	0.00	61.95	-	-	74.00	-12.05	164	250	V
		* 2.38998	56.73	Pk	32.10	-24.80	0.00	64.03	-	-	74.00	**-9.97**	164	250	V
		* 2.39	42.49	RMS	32.10	-24.80	0.09	49.88	54.00	-4.12	-	-	164	250	V
		* 2.38996	42.95	RMS	32.10	-24.80	0.09	50.34	54.00	**-3.66**	-	-	164	250	V
2457	MIMO	* 2.4835	47.11	Pk	32.40	-24.80	0.00	54.71	-	-	74.00	-19.29	144	103	H
		* 2.48356	48.22	Pk	32.40	-24.80	0.00	55.82	-	-	74.00	-18.18	144	103	H
		* 2.4835	35.23	RMS	32.40	-24.80	0.09	42.92	54.00	-11.08	-	-	144	103	H
		* 2.4836	35.95	RMS	32.40	-24.80	0.09	43.64	54.00	-10.36	-	-	144	103	H
		* 2.4835	49.41	Pk	32.40	-24.80	0.00	57.01	-	-	74.00	-16.99	260	102	V
		* 2.48363	50.06	Pk	32.40	-24.80	0.00	57.66	-	-	74.00	-16.34	260	102	V
		* 2.4835	35.43	RMS	32.40	-24.80	0.09	43.12	54.00	-10.88	-	-	260	102	V
		* 2.48359	36.70	RMS	32.40	-24.80	0.09	44.39	54.00	-9.61	-	-	260	102	V
2462	MIMO	* 2.4835	50.68	Pk	32.40	-24.80	0.00	58.28	-	-	74.00	-15.72	137	106	H
		* 2.48363	53.58	Pk	32.40	-24.80	0.00	61.18	-	-	74.00	-12.82	137	106	H
		* 2.4835	39.09	RMS	32.40	-24.80	0.09	46.78	54.00	-7.22	-	-	137	106	H
		* 2.48381	40.50	RMS	32.40	-24.80	0.09	48.19	54.00	-5.81	-	-	137	106	H
		* 2.4835	50.19	Pk	32.40	-24.80	0.00	57.79	-	-	74.00	-16.21	263	233	V
		* 2.48515	54.52	Pk	32.40	-24.80	0.00	62.12	-	-	74.00	-11.88	263	233	V
		* 2.4835	37.17	RMS	32.40	-24.80	0.09	44.86	54.00	-9.14	-	-	263	233	V
		* 2.48545	40.14	RMS	32.40	-24.80	0.09	47.83	54.00	-6.17	-	-	263	233	V
2467	MIMO	* 2.4835	41.78	Pk	32.40	-24.80	0.00	49.38	-	-	74.00	-24.62	134	106	H
		* 2.48364	45.36	Pk	32.40	-24.80	0.00	52.96	-	-	74.00	-21.04	134	106	H
		* 2.4835	31.24	RMS	32.40	-24.80	0.09	38.93	54.00	-15.07	-	-	134	106	H
		2.539	32.98	RMS	32.40	-24.70	0.09	40.77	54.00	-13.23	-	-	134	106	H
		* 2.4835	42.38	Pk	32.40	-24.80	0.00	49.98	-	-	74.00	-24.02	264	125	V
		2.546	44.55	Pk	32.40	-24.60	0.00	52.35	-	-	74.00	-21.65	264	125	V
		* 2.4835	31.96	RMS	32.40	-24.80	0.09	39.65	54.00	-14.35	-	-	264	125	V
		2.546	32.99	RMS	32.40	-24.60	0.09	40.88	54.00	-13.12	-	-	264	125	V
2472	MIMO	* 2.4835	42.03	Pk	32.40	-24.80	0.00	49.63	-	-	74.00	-24.37	136	105	H
		2.541	44.55	Pk	32.40	-24.70	0.00	52.25	-	-	74.00	-21.75	136	105	H
		* 2.4835	32.12	RMS	32.40	-24.80	0.09	39.81	54.00	-14.19	-	-	136	105	H
		2.512	33.31	RMS	32.40	-24.80	0.09	41.00	54.00	-13.00	-	-	136	105	H
		* 2.4835	42.87	Pk	32.40	-24.80	0.00	50.47	-	-	74.00	-23.53	262	186	V
		* 2.48528	44.85	Pk	32.40	-24.80	0.00	52.45	-	-	74.00	-21.55	262	186	V
		* 2.4835	32.42	RMS	32.40	-24.80	0.09	40.11	54.00	-13.89	-	-	262	186	V
		2.530	33.01	RMS	32.40	-24.70	0.09	40.80	54.00	-13.20	-	-	262	186	V

Note1. Pk - Peak detector, RMS - RMS detectior
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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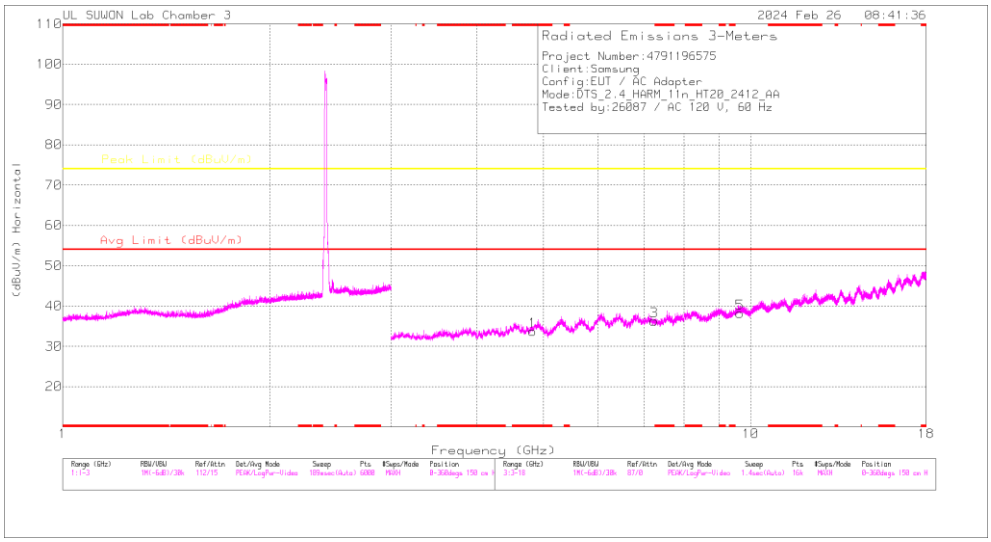
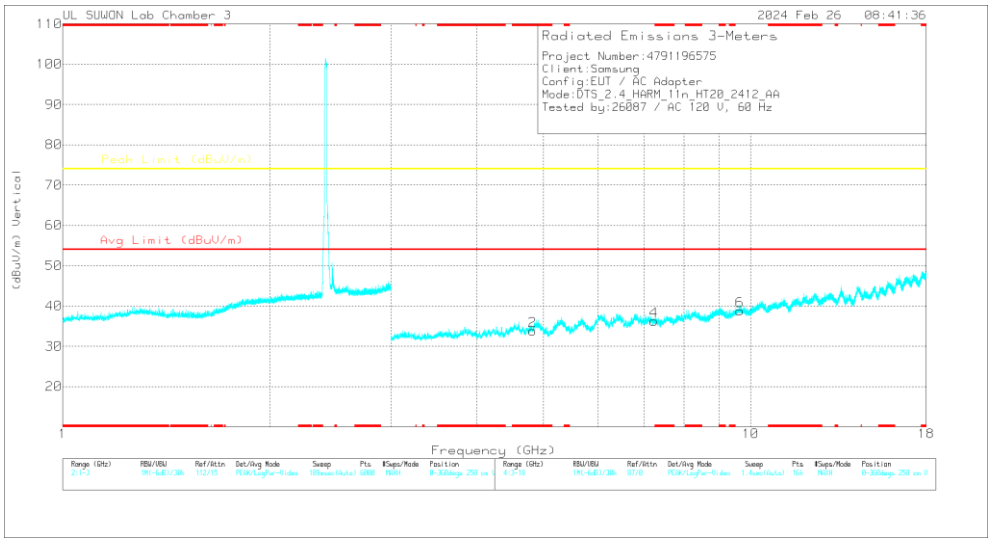
HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 1 CHANNEL)

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	Antenna_957_Factor(dB/m)	3GHz_HP_Path Loss(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
* 4.82614	40.18	PK2	34.2	-30	0	44.38	-	-	74	-29.62	0	100	H
* 4.82843	40.18	PK2	34.2	-30	0	44.38	-	-	74	-29.62	0	100	V
7.23744	36.48	PK2	35.8	-25.7	0	46.58	-	-	74	-27.42	0	100	H
7.23771	36.25	PK2	35.8	-25.7	0	46.35	-	-	74	-27.65	0	100	V
9.6438	34.02	PK2	36.8	-21.8	0	49.02	-	-	74	-24.98	0	100	H
9.64451	35.06	PK2	36.8	-21.8	0	50.06	-	-	74	-23.94	0	100	V

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

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HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	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	* 4.82614	40.18	PK2	34.20	-30.00	0.00	44.38	-	-	74.00	-29.62	0	100	H
		* 4.82843	40.18	PK2	34.20	-30.00	0.00	44.38	-	-	74.00	-29.62	0	100	V
		7.237	36.48	PK2	35.80	-25.70	0.00	46.58	-	-	74.00	-27.42	0	100	H
		7.238	36.25	PK2	35.80	-25.70	0.00	46.35	-	-	74.00	-27.65	0	100	V
		9.644	34.02	PK2	36.80	-21.80	0.00	49.02	-	-	74.00	-24.98	0	100	H
		9.645	35.06	PK2	36.80	-21.80	0.00	50.06	-	-	74.00	**-23.94**	0	100	V
2437	MIMO	* 4.87634	40.76	PK2	34.20	-29.90	0.00	45.06	-	-	74.00	-28.94	0	100	H
		* 4.87138	41.13	PK2	34.20	-29.90	0.00	45.43	-	-	74.00	-28.57	0	100	V
		* 7.31036	36.12	PK2	35.80	-25.50	0.00	46.42	-	-	74.00	-27.58	0	100	H
		* 7.30715	35.79	PK2	35.80	-25.50	0.00	46.09	-	-	74.00	-27.91	0	100	V
		9.749	33.72	PK2	36.90	-21.60	0.00	49.02	-	-	74.00	-24.98	0	100	H
		9.747	33.27	PK2	36.90	-21.60	0.00	48.57	-	-	74.00	-25.43	0	100	V
2457	MIMO	* 4.92581	40.62	PK2	34.30	-30.00	0.00	44.92	-	-	74.00	-29.08	0	100	H
		* 4.92448	40.79	PK2	34.20	-30.00	0.00	44.99	-	-	74.00	-29.01	0	100	V
		* 7.38373	35.11	PK2	35.70	-25.40	0.00	45.41	-	-	74.00	-28.59	0	100	H
		* 7.38633	35.11	PK2	35.70	-25.40	0.00	45.41	-	-	74.00	-28.59	0	100	V
		9.848	31.94	PK2	37.10	-21.40	0.00	47.64	-	-	74.00	-26.36	0	100	H
		9.848	32.35	PK2	37.10	-21.40	0.00	48.05	-	-	74.00	-25.95	0	100	V

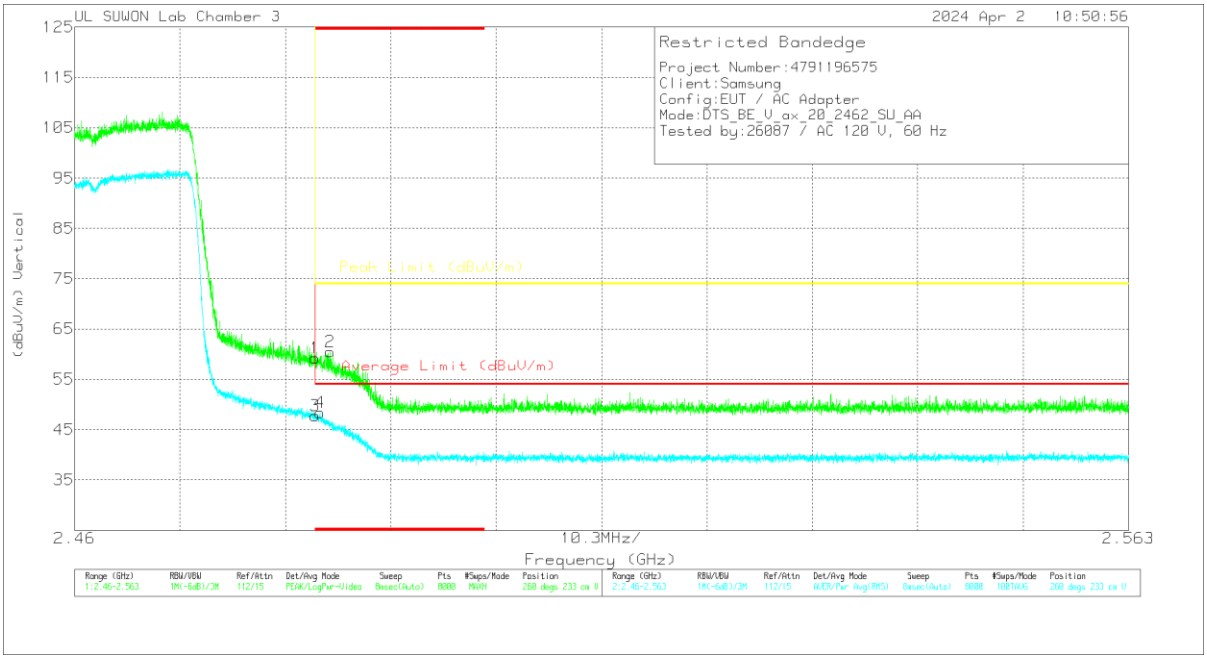
Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

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

2TX Antenna 1 + Antenna 2

BANDEDGE (11 CHANNEL, SU)

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_957_Factor(dB)	10dB_Path Loss(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	* 2.4835	51.62	Pk	32.4	-24.8	0	59.22	-	-	74	-14.78	260	233	V
2	* 2.48496	52.83	Pk	32.4	-24.8	0	60.43	-	-	74	-13.57	260	233	V
3	* 2.4835	40.21	RMS	32.4	-24.8	0	47.81	54	-6.19	-	-	260	233	V
4	* 2.48396	40.74	RMS	32.4	-24.8	0	48.34	54	-5.66	-	-	260	233	V

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

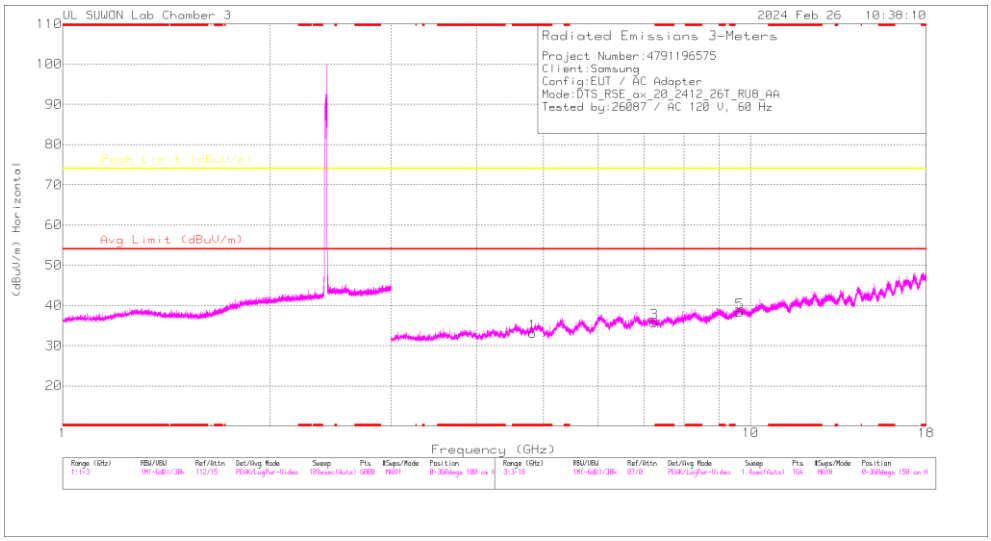
BANDEDGE TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	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 RU mode 26 Tone Offset 0	MIMO	* 2.39	42.89	Pk	32.10	-24.80	0.00	50.19	-	-	74.00	-23.81	202	132	H
		* 2.35415	44.61	Pk	32.00	-24.80	0.00	51.81	-	-	74.00	-22.19	202	132	H
		* 2.39	32.49	RMS	32.10	-24.80	0.00	39.79	54.00	-14.21	-	-	202	132	H
		* 2.38879	33.29	RMS	32.10	-24.80	0.00	40.59	54.00	-13.41	-	-	202	132	H
		* 2.39	43.03	Pk	32.10	-24.80	0.00	50.33	-	-	74.00	-23.67	235	275	V
		* 2.38997	46.18	Pk	32.10	-24.80	0.00	53.48	-	-	74.00	-20.52	235	275	V
		* 2.39	32.59	RMS	32.10	-24.80	0.00	39.89	54.00	-14.11	-	-	235	275	V
		* 2.3891	33.62	RMS	32.10	-24.80	0.00	40.92	54.00	-13.08	-	-	235	275	V
2412 SU mode	MIMO	* 2.39	48.39	Pk	32.10	-24.80	0.00	55.69	-	-	74.00	-18.31	141	149	H
		* 2.38973	48.90	Pk	32.10	-24.80	0.00	56.20	-	-	74.00	-17.80	141	149	H
		* 2.39	36.12	RMS	32.10	-24.80	0.00	43.42	54.00	-10.58	-	-	141	149	H
		* 2.38984	36.24	RMS	32.10	-24.80	0.00	43.54	54.00	-10.46	-	-	141	149	H
		* 2.39	51.47	Pk	32.10	-24.80	0.00	58.77	-	-	74.00	-15.23	262	242	V
		* 2.38968	55.24	Pk	32.10	-24.80	0.00	62.54	-	-	74.00	**-11.46**	262	242	V
		* 2.39	39.32	RMS	32.10	-24.80	0.00	46.62	54.00	-7.38	-	-	262	242	V
		* 2.38998	39.48	RMS	32.10	-24.80	0.00	46.78	54.00	-7.22	-	-	262	242	V
2417 SU mode	MIMO	* 2.39	47.95	Pk	32.10	-24.80	0.00	55.25	-	-	74.00	-18.75	140	148	H
		* 2.38989	48.96	Pk	32.10	-24.80	0.00	56.26	-	-	74.00	-17.74	140	148	H
		* 2.39	34.25	RMS	32.10	-24.80	0.00	41.55	54.00	-12.45	-	-	140	148	H
		* 2.3899	35.23	RMS	32.10	-24.80	0.00	42.53	54.00	-11.47	-	-	140	148	H
		* 2.39	48.28	Pk	32.10	-24.80	0.00	55.58	-	-	74.00	-18.42	262	240	V
		* 2.3899	49.78	Pk	32.10	-24.80	0.00	57.08	-	-	74.00	-16.92	262	240	V
		* 2.39	36.43	RMS	32.10	-24.80	0.00	43.73	54.00	-10.27	-	-	262	240	V
		* 2.38993	37.23	RMS	32.10	-24.80	0.00	44.53	54.00	-9.47	-	-	262	240	V
2457 SU mode	MIMO	* 2.4835	49.33	Pk	32.40	-24.80	0.00	56.93	-	-	74.00	-17.07	140	100	H
		* 2.48353	50.25	Pk	32.40	-24.80	0.00	57.85	-	-	74.00	-16.15	140	100	H
		* 2.4835	36.53	RMS	32.40	-24.80	0.00	44.13	54.00	-9.87	-	-	140	100	H
		* 2.48373	37.59	RMS	32.40	-24.80	0.00	45.19	54.00	-8.81	-	-	140	100	H
		* 2.4835	48.66	Pk	32.40	-24.80	0.00	56.26	-	-	74.00	-17.74	261	234	V
		* 2.48404	51.18	Pk	32.40	-24.80	0.00	58.78	-	-	74.00	-15.22	261	234	V
		* 2.4835	37.88	RMS	32.40	-24.80	0.00	45.48	54.00	-8.52	-	-	261	234	V
		* 2.48372	37.80	RMS	32.40	-24.80	0.00	45.40	54.00	-8.60	-	-	261	234	V
2462 RU mode 26 Tone Offset 8	MIMO	* 2.4835	45.13	Pk	32.40	-24.80	0.00	52.73	-	-	74.00	-21.27	201	106	H
		* 2.48355	47.34	Pk	32.40	-24.80	0.00	54.94	-	-	74.00	-19.06	201	106	H
		* 2.4835	32.41	RMS	32.40	-24.80	0.00	40.01	54.00	-13.99	-	-	201	106	H
		* 2.48586	33.63	RMS	32.40	-24.80	0.00	41.23	54.00	-12.77	-	-	201	106	H
		* 2.4835	47.35	Pk	32.40	-24.80	0.00	54.95	-	-	74.00	-19.05	260	208	V
		* 2.48359	48.13	Pk	32.40	-24.80	0.00	55.73	-	-	74.00	-18.27	260	208	V
		* 2.4835	33.06	RMS	32.40	-24.80	0.00	40.66	54.00	-13.34	-	-	260	208	V
		* 2.4856	33.50	RMS	32.40	-24.80	0.00	41.10	54.00	-12.90	-	-	260	208	V
2462 SU mode	MIMO	* 2.4835	48.87	Pk	32.40	-24.80	0.00	56.47	-	-	74.00	-17.53	141	105	H
		* 2.48367	50.87	Pk	32.40	-24.80	0.00	58.47	-	-	74.00	-15.53	141	105	H
		* 2.4835	38.86	RMS	32.40	-24.80	0.00	46.46	54.00	-7.54	-	-	141	105	H
		* 2.48384	38.70	RMS	32.40	-24.80	0.00	46.30	54.00	-7.70	-	-	141	105	H
		* 2.4835	51.62	Pk	32.40	-24.80	0.00	59.22	-	-	74.00	-14.78	260	233	V
		* 2.48496	52.83	Pk	32.40	-24.80	0.00	60.43	-	-	74.00	-13.57	260	233	V
		* 2.4835	40.21	RMS	32.40	-24.80	0.00	47.81	54.00	-6.19	-	-	260	233	V
		* 2.48396	40.74	RMS	32.40	-24.80	0.00	48.34	54.00	**-5.66**	-	-	260	233	V
2467 RU mode 26 Tone Offset 8	MIMO	* 2.4835	42.63	Pk	32.40	-24.80	0.00	50.23	-	-	74.00	-23.77	35	382	H
		2.529	45.44	Pk	32.40	-24.80	0.00	53.04	-	-	74.00	-20.96	35	382	H
		* 2.4835	32.82	RMS	32.40	-24.80	0.00	40.42	54.00	-13.58	-	-	35	382	H
		* 2.48353	33.69	RMS	32.40	-24.80	0.00	41.29	54.00	-12.71	-	-	35	382	H
		* 2.4835	45.51	Pk	32.40	-24.80	0.00	53.11	-	-	74.00	-20.89	262	187	V
		* 2.48382	48.00	Pk	32.40	-24.80	0.00	55.60	-	-	74.00	-18.40	262	187	V
		* 2.4835	33.10	RMS	32.40	-24.80	0.00	40.70	54.00	-13.30	-	-	262	187	V
		* 2.48396	34.03	RMS	32.40	-24.80	0.00	41.63	54.00	-12.37	-	-	262	187	V
2467 SU mode	MIMO	* 2.4835	43.16	Pk	32.40	-24.80	0.00	50.76	-	-	74.00	-23.24	141	377	H
		* 2.48648	44.70	Pk	32.40	-24.80	0.00	52.30	-	-	74.00	-21.70	141	377	H
		* 2.4835	33.87	RMS	32.40	-24.80	0.00	41.47	54.00	-12.53	-	-	141	377	H
		* 2.48372	34.32	RMS	32.40	-24.80	0.00	41.92	54.00	-12.08	-	-	141	377	H
		* 2.4835	45.14	Pk	32.40	-24.80	0.00	52.74	-	-	74.00	-21.26	258	209	V
		* 2.48444	46.76	Pk	32.40	-24.80	0.00	54.36	-	-	74.00	-19.64	258	209	V
		* 2.4835	34.85	RMS	32.40	-24.80	0.00	42.45	54.00	-11.55	-	-	258	209	V
		* 2.48362	35.70	RMS	32.40	-24.80	0.00	43.30	54.00	-10.70	-	-	258	209	V
2472 RU mode 26 Tone Offset 8	MIMO	* 2.4835	48.54	Pk	32.40	-24.80	0.00	56.14	-	-	74.00	-17.86	202	142	H
		* 2.48355	50.14	Pk	32.40	-24.80	0.00	57.74	-	-	74.00	-16.26	202	142	H
		* 2.4835	33.37	RMS	32.40	-24.80	0.00	40.97	54.00	-13.03	-	-	202	142	H
		* 2.48356	33.96	RMS	32.40	-24.80	0.00	41.56	54.00	-12.44	-	-	202	142	H
		* 2.4835	50.90	Pk	32.40	-24.80	0.00	58.50	-	-	74.00	-15.50	262	187	V
		* 2.48355	51.18	Pk	32.40	-24.80	0.00	58.78	-	-	74.00	-15.22	262	187	V
		* 2.4835	33.28	RMS	32.40	-24.80	0.00	40.88	54.00	-13.12	-	-	262	187	V
		* 2.48354	34.78	RMS	32.40	-24.80	0.00	42.38	54.00	-11.62	-	-	262	187	V
2472 SU mode	MIMO	* 2.4835	44.53	Pk	32.40	-24.80	0.00	52.13	-	-	74.00	-21.87	142	376	H
		* 2.4979	44.92	Pk	32.40	-24.90	0.00	52.42	-	-	74.00	-21.58	142	376	H
		* 2.4835	32.12	RMS	32.40	-24.80	0.00	39.72	54.00	-14.28	-	-	142	376	H
		2.543	33.11	RMS	32.40	-24.70	0.00	40.81	54.00	-13.19	-	-	142	376	H
		* 2.4835	43.97	Pk	32.40	-24.80	0.00	51.57	-	-	74.00	-22.43	261	186	V
		* 2.48353	46.46	Pk	32.40	-24.80	0.00	54.06	-	-	74.00	-19.94	261	186	V
		* 2.4835	32.63	RMS	32.40	-24.80	0.00	40.23	54.00	-13.77	-	-	261	186	V
		2.560	33.18	RMS	32.40	-24.70	0.00	40.88	54.00	-13.12	-	-	261	186	V

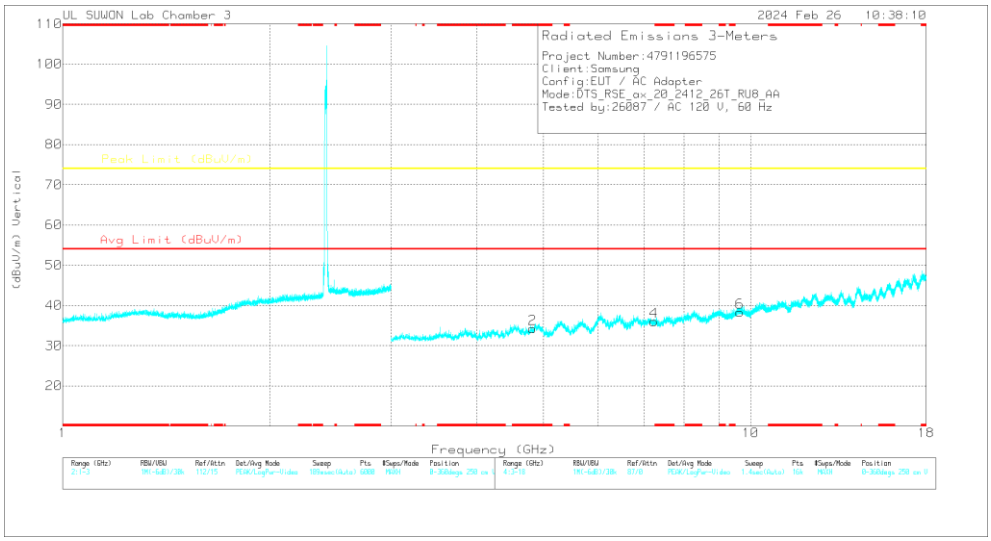
Note1. Pk - Peak detector, RMS - RMS detectior
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 1 CHANNEL, 8RU)

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	Antenna_957_Factor(dB/m)	3GHz_HP_Path Loss(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
* 4.82078	39.78	PK2	34.3	-30	0	44.08	-	-	74	-29.92	0	100	H
* 4.82015	39.72	PK2	34.3	-30	0	44.02	-	-	74	-29.98	0	100	V
7.23477	36.03	PK2	35.8	-25.8	0	46.03	-	-	74	-27.97	0	100	H
7.23561	36.43	PK2	35.8	-25.8	0	46.43	-	-	74	-27.57	0	100	V
9.64561	33.11	PK2	36.8	-21.7	0	48.21	-	-	74	-25.79	0	100	H
9.64731	33.62	PK2	36.8	-21.8	0	48.62	-	-	74	-25.38	0	100	V

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

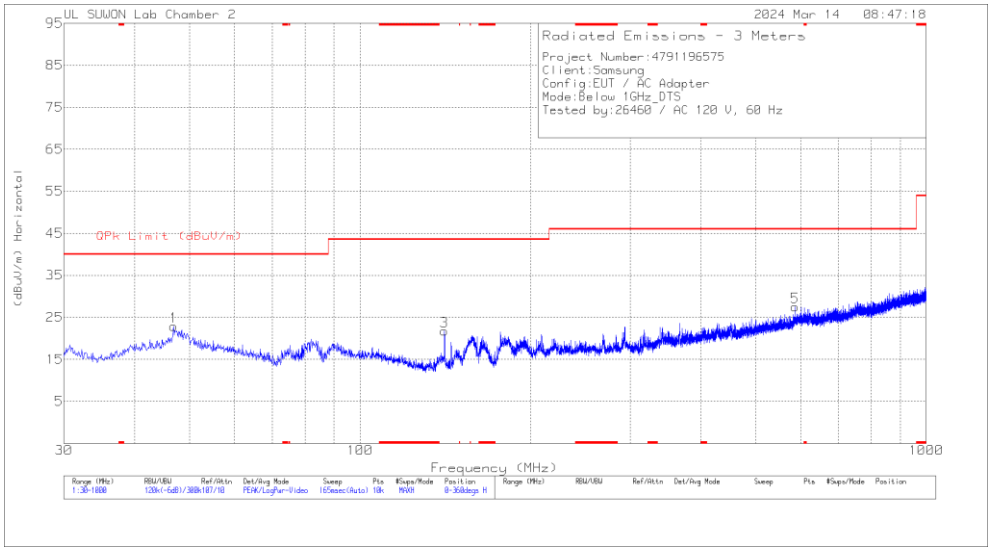
HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	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 RU mode 26 Tone offset 8	MIMO	* 4.82078	39.78	PK2	34.30	-30.00	0.00	44.08	-	-	74.00	-29.92	0	100	H
		* 4.82015	39.72	PK2	34.30	-30.00	0.00	44.02	-	-	74.00	-29.98	0	100	V
		7.235	36.03	PK2	35.80	-25.80	0.00	46.03	-	-	74.00	-27.97	0	100	H
		7.236	36.43	PK2	35.80	-25.80	0.00	46.43	-	-	74.00	-27.57	0	100	V
		9.646	33.11	PK2	36.80	-21.70	0.00	48.21	-	-	74.00	-25.79	0	100	H
		9.647	33.62	PK2	36.80	-21.80	0.00	48.62	-	-	74.00	**-25.38**	0	100	V
2437 RU mode 26 Tone offset 8	MIMO	* 4.87593	40.01	PK2	34.20	-29.80	0.00	44.41	-	-	74.00	-29.59	0	100	H
		* 4.87103	40.14	PK2	34.20	-29.90	0.00	44.44	-	-	74.00	-29.56	0	100	V
		* 7.31363	35.89	PK2	35.80	-25.50	0.00	46.19	-	-	74.00	-27.81	0	100	H
		* 7.30862	35.27	PK2	35.80	-25.50	0.00	45.57	-	-	74.00	-28.43	0	100	V
		9.751	32.75	PK2	36.90	-21.60	0.00	48.05	-	-	74.00	-25.95	0	100	H
		9.753	32.72	PK2	36.90	-21.60	0.00	48.02	-	-	74.00	-25.98	0	100	V
2462 RU mode 26 Tone offset 0	MIMO	* 4.92444	40.79	PK2	34.20	-30.00	0.00	44.99	-	-	74.00	-29.01	0	100	H
		* 4.92486	40.20	PK2	34.20	-30.00	0.00	44.40	-	-	74.00	-29.60	0	100	V
		* 7.38319	35.15	PK2	35.70	-25.40	0.00	45.45	-	-	74.00	-28.55	0	100	H
		* 7.38432	34.83	PK2	35.70	-25.40	0.00	45.13	-	-	74.00	-28.87	0	100	V
		9.845	32.21	PK2	37.10	-21.40	0.00	47.91	-	-	74.00	-26.09	0	100	H
		9.847	32.26	PK2	37.10	-21.40	0.00	47.96	-	-	74.00	-26.04	0	100	V

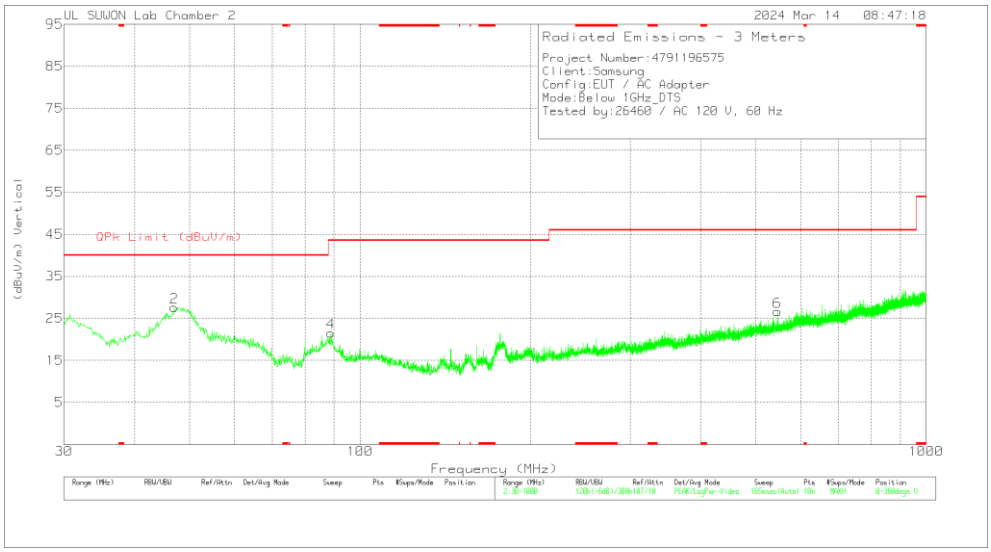
Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

UL KOREA LTD. Suwon Laboratory FORM ID: FCC_15C(05)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

10.2. WORST CASE BELOW 1 GHZ



HORIZONTAL



VERTICAL

Below 1GHz DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_749_Factor(dB/m)	Below_1G_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	46.878	34.56	Pk	20	-31.7	0	22.86	40	-17.14	0-360	300	H
3	141.065	38.73	Pk	13.9	-30.9	0	21.73	43.52	-21.79	0-360	200	H
5	587.168	32.11	Pk	24.6	-29.2	0	27.51	46.02	-18.51	0-360	100	H
2	46.975	39.33	Pk	20	-31.7	0	27.63	40	-12.37	0-360	100	V
4	88.879	37.17	Pk	15.7	-31.3	0	21.57	43.52	-21.95	0-360	100	V
6	546.234	32.71	Pk	23.3	-29.4	0	26.61	46.02	-19.41	0-360	200	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

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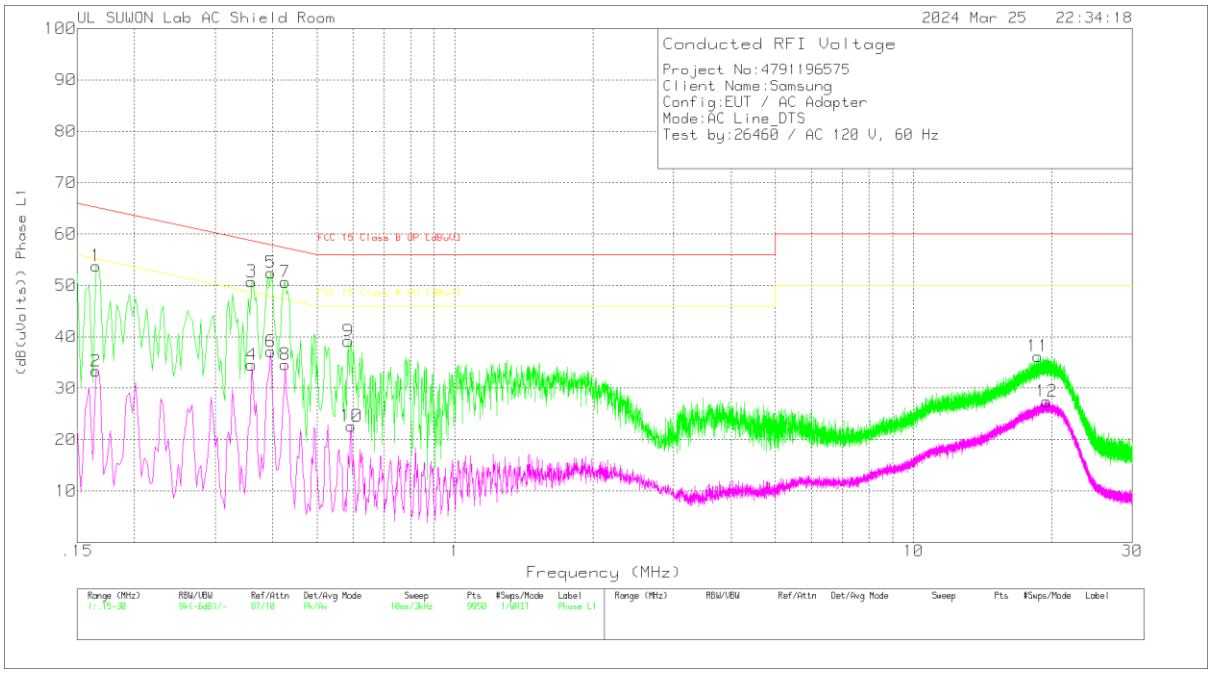
11.1.1. AC Power Line

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1 [dB]	Cable Loss [dB]	Corrected Reading (dBuVolts)	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
1	.165	43.81	Pk	9.9	.1	53.81	65.21	-11.4	-	-
2	.165	23.35	Av	9.9	.1	33.35	-	-	55.21	-21.86
3	.36	40.85	Pk	9.8	.1	50.75	58.73	-7.98	-	-
4	.36	24.63	Av	9.8	.1	34.53	-	-	48.73	-14.2
5	.396	42.58	Pk	9.8	.1	52.48	57.94	-5.46	-	-
6	.396	27.25	Av	9.8	.1	37.15	-	-	47.94	-10.79
7	.426	40.78	Pk	9.8	.1	50.68	57.33	-6.65	-	-
8	.426	24.7	Av	9.8	.1	34.6	-	-	47.33	-12.73
9	.585	29.28	Pk	9.8	.1	39.18	56	-16.82	-	-
10	.594	12.72	Av	9.8	.1	22.62	-	-	46	-23.38
11	18.696	25.83	Pk	10.1	.3	36.23	60	-23.77	-	-
12	19.512	16.95	Av	10.2	.3	27.45	-	-	50	-22.55

Pk - Peak detector
Av - Average detection

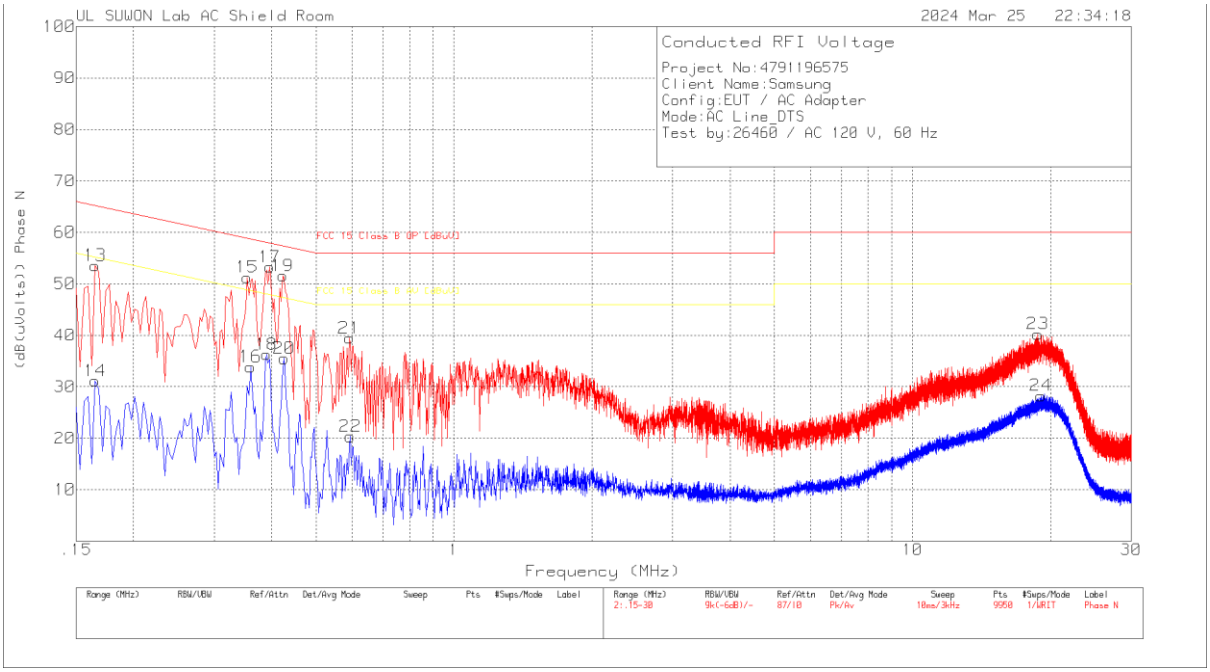
Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_L1 [dB]	Cable Loss [dB]	Corrected Reading (dBuVolts)	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.36	38.56	Qp	9.8	.1	48.46	58.73	-10.27	-	-
.396	40.77	Qp	9.8	.1	50.67	57.94	-7.27	-	-
.426	39.12	Qp	9.8	.1	49.02	57.33	-8.31	-	-

Qp - Quasi-Peak detector

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N [dB]	Cable Loss [dB]	Corrected Reading (dBuVolts)	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
13	.165	43.56	Pk	9.9	.1	53.56	65.21	-11.65	-	-
14	.165	21.13	Av	9.9	.1	31.13	-	-	55.21	-24.08
15	.354	41.36	Pk	9.8	.1	51.26	58.87	-7.61	-	-
16	.36	23.98	Av	9.8	.1	33.88	-	-	48.73	-14.85
17	.396	43.38	Pk	9.8	.1	53.28	57.94	-4.66	-	-
18	.39	26.38	Av	9.8	.1	36.28	-	-	48.06	-11.78
19	.423	41.67	Pk	9.8	.1	51.57	57.39	-5.82	-	-
20	.426	25.62	Av	9.8	.1	35.52	-	-	47.33	-11.81
21	.591	29.56	Pk	9.8	.1	39.46	56	-16.54	-	-
22	.594	10.45	Av	9.8	.1	20.35	-	-	46	-25.65
23	18.765	29.75	Pk	10.2	.3	40.25	60	-19.75	-	-
24	19.071	17.78	Av	10.2	.3	28.28	-	-	50	-21.72

Pk - Peak detector
Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_With EX_N [dB]	Cable Loss [dB]	Corrected Reading (dBuVolts)	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.354	34.23	Qp	9.8	.1	44.13	58.87	-14.74	-	-
.396	41.86	Qp	9.8	.1	51.76	57.94	-6.18	-	-
.423	39.1	Qp	9.8	.1	49	57.39	-8.39	-	-

Qp - Quasi-Peak detector

END OF TEST REPORT

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