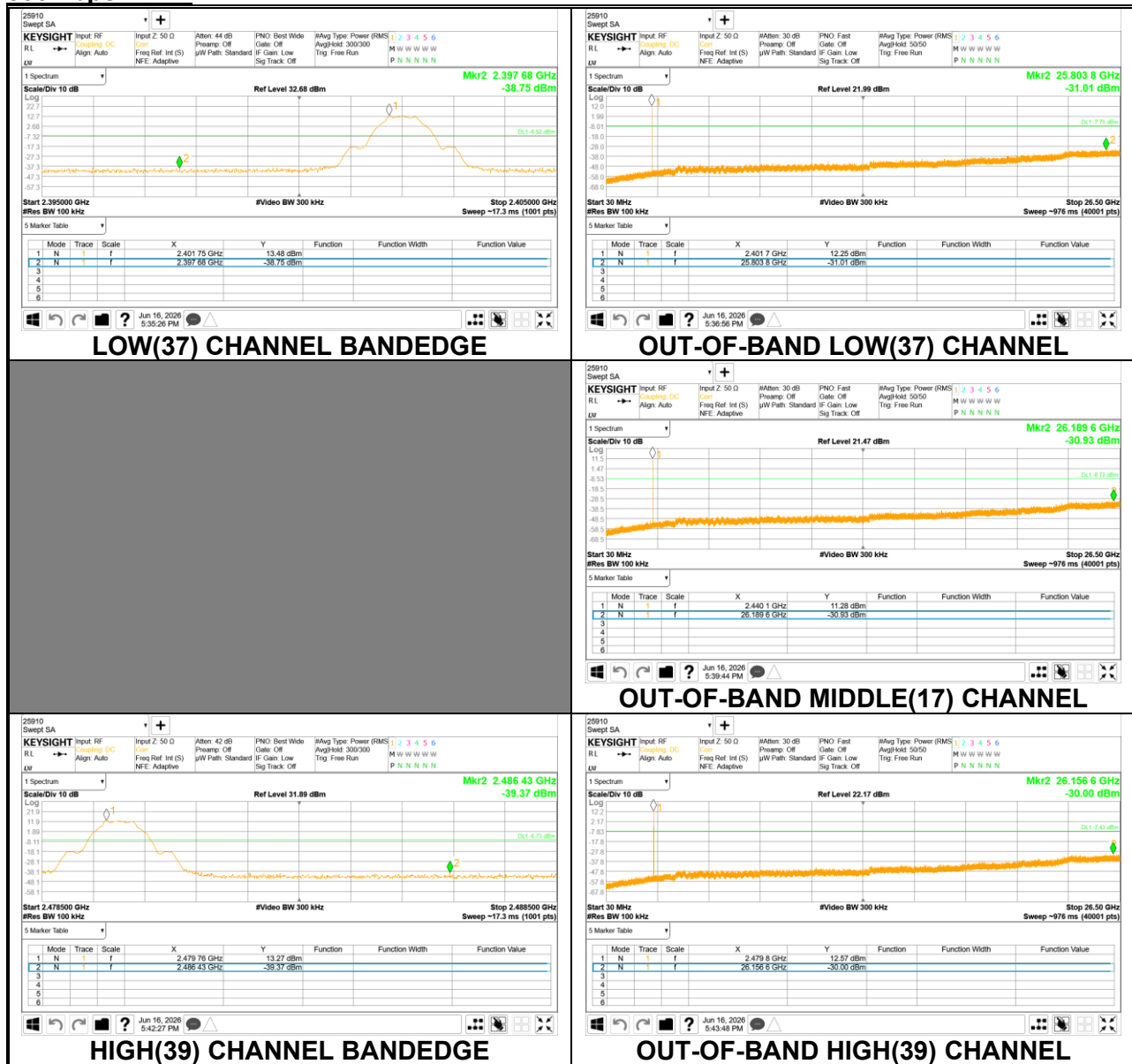
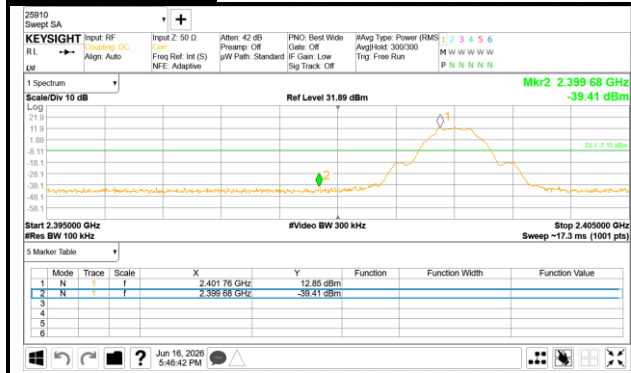


9.6.1. Test plot

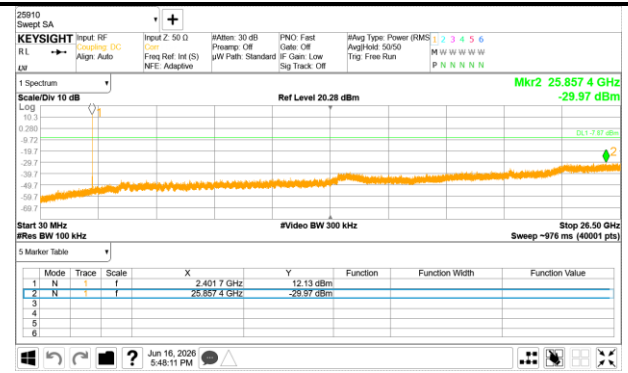
500 kbps ANT1



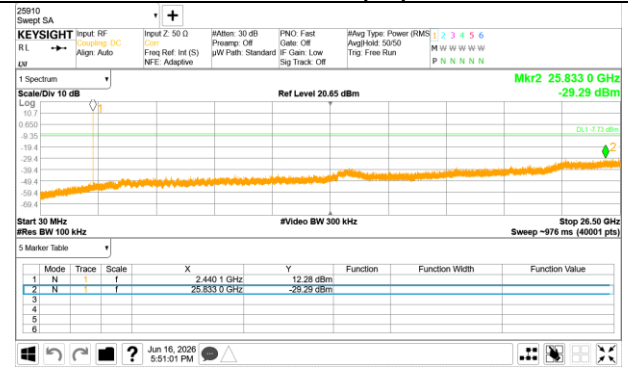
500 kbps ANT2



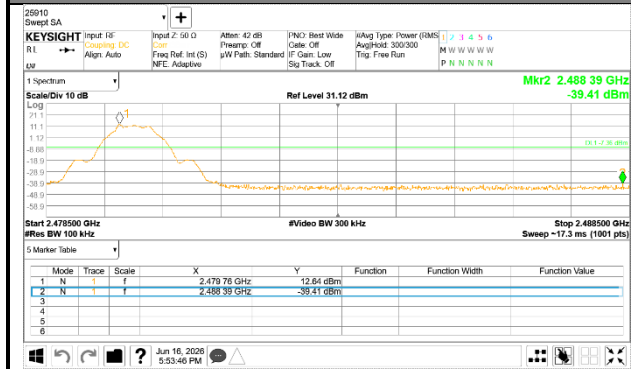
LOW(37) CHANNEL BANDEDGE



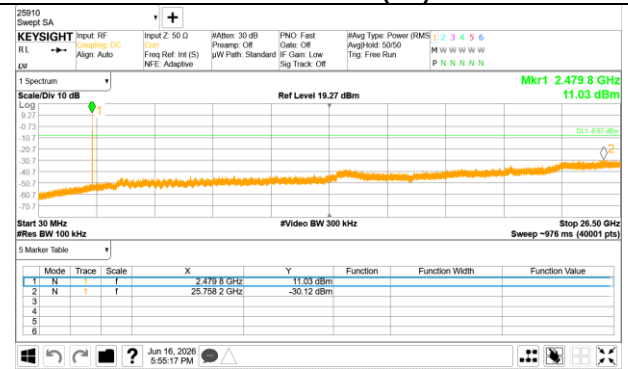
OUT-OF-BAND LOW(37) CHANNEL



OUT-OF-BAND MIDDLE(17) CHANNEL

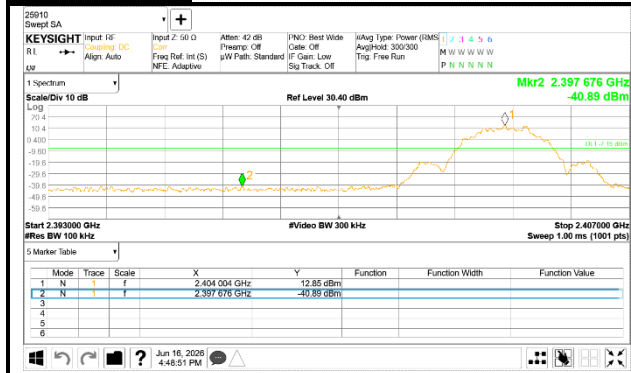


HIGH(39) CHANNEL BANDEDGE

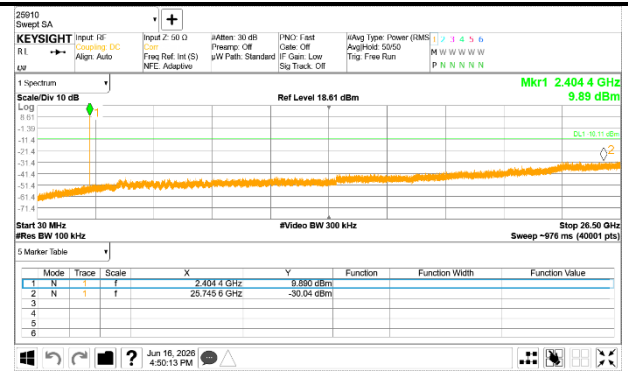


OUT-OF-BAND HIGH(39) CHANNEL

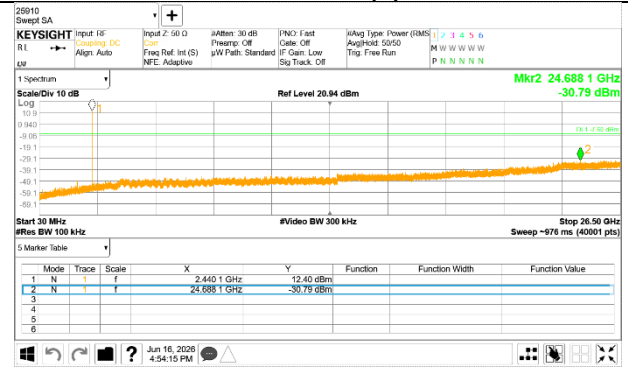
2 Mbps ANT1



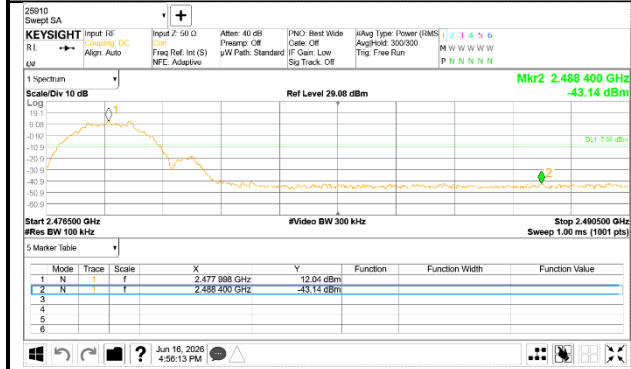
LOW(0) CHANNEL BANDEDGE



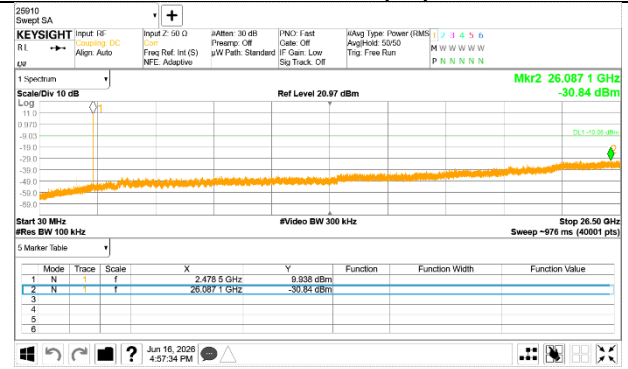
OUT-OF-BAND LOW(0) CHANNEL



OUT-OF-BAND MIDDLE(17) CHANNEL

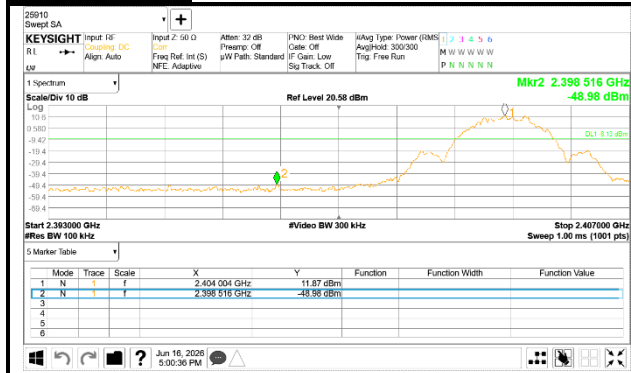


HIGH(36) CHANNEL BANDEDGE

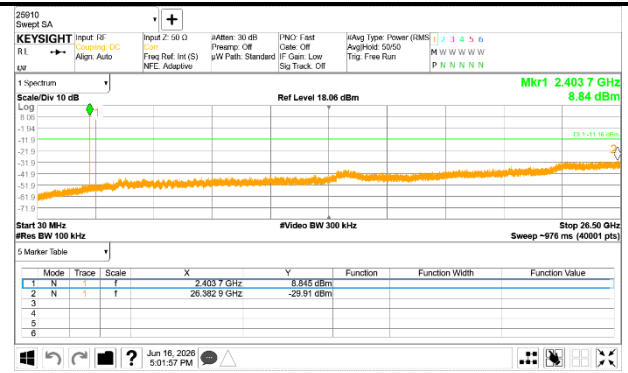


OUT-OF-BAND HIGH(36) CHANNEL

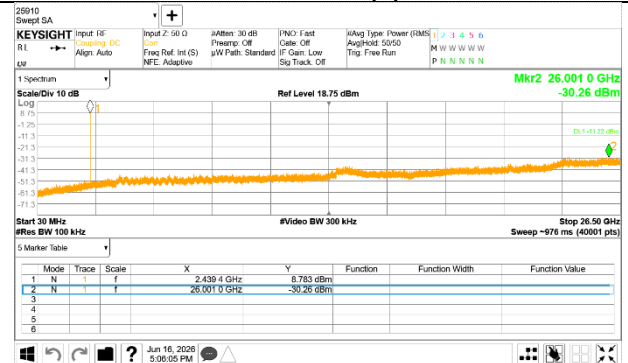
2 Mbps ANT2



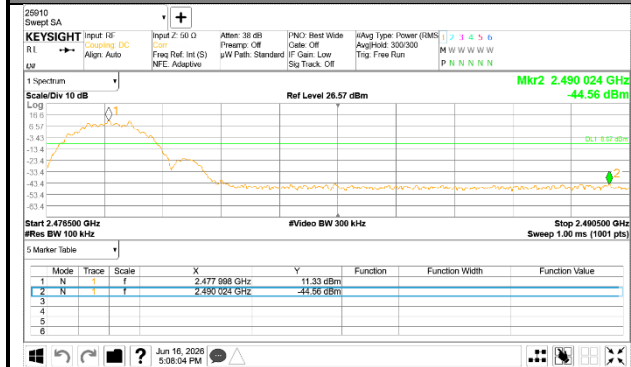
LOW(0) CHANNEL BANDEDGE



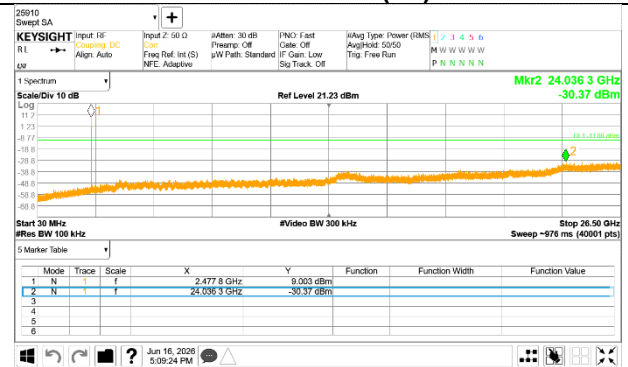
OUT-OF-BAND LOW(0) CHANNEL



OUT-OF-BAND MIDDLE(17) CHANNEL



HIGH(36) CHANNEL BANDEDGE



OUT-OF-BAND HIGH(36) CHANNEL

10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

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.

TEST PROCEDURE

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

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. (Restricted band-edge, Final detection of spurious harmonic emissions)

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

Mode	Duty cycle x [Linear]	Duty Cycle Correction Factor [dB]	Antenna
500 kbps [255pkt]	0.9052	0.4324	Antenna 1, 2 and Dual mode
1 Mbps [255pkt]	0.8479	0.7164	Antenna 1, 2 and Dual mode
2 Mbps [255pkt]	0.5680	2.4565	Antenna 1, 2 and Dual mode

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 the 2.4 GHz band.
(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

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

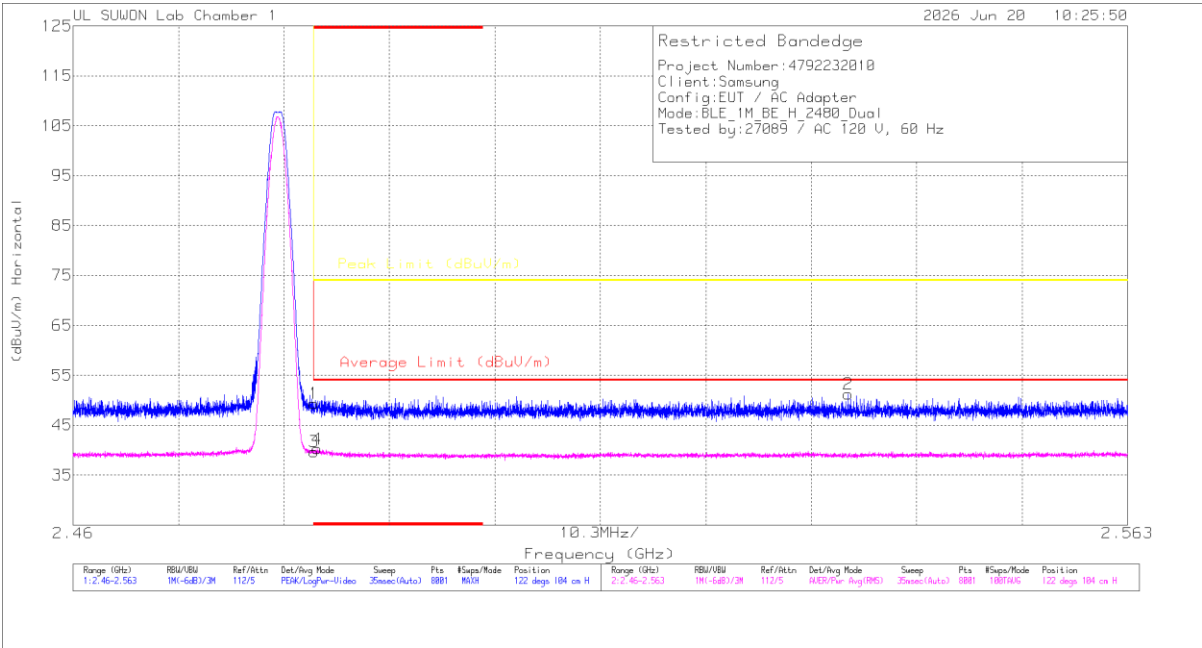
Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open are test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. TX ABOVE 1 GHz BLUETOOTH LE 500Kbps, 1 Mbps

BANDEDGE (WORST CASE: 1Mbps, 2480 MHz, DUAL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dBm)	10dB_Path Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Acimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	43.52	Pk	32	-26.2	0	49.32	-	-	74	-24.68	122	104	H
2	2.53569	45.32	Pk	32	-26.1	0	51.22	-	-	74	-22.78	122	104	H
3	* 2.48351	33.21	RMS	32	-26.2	.72	39.73	54	-14.27	-	-	122	104	H
4	* 2.48386	33.73	RMS	32	-26.2	.72	40.25	54	-13.75	-	-	122	104	H

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

Pk - Peak detector
RMS - RMS detection

BANDEDGE TEST DATA

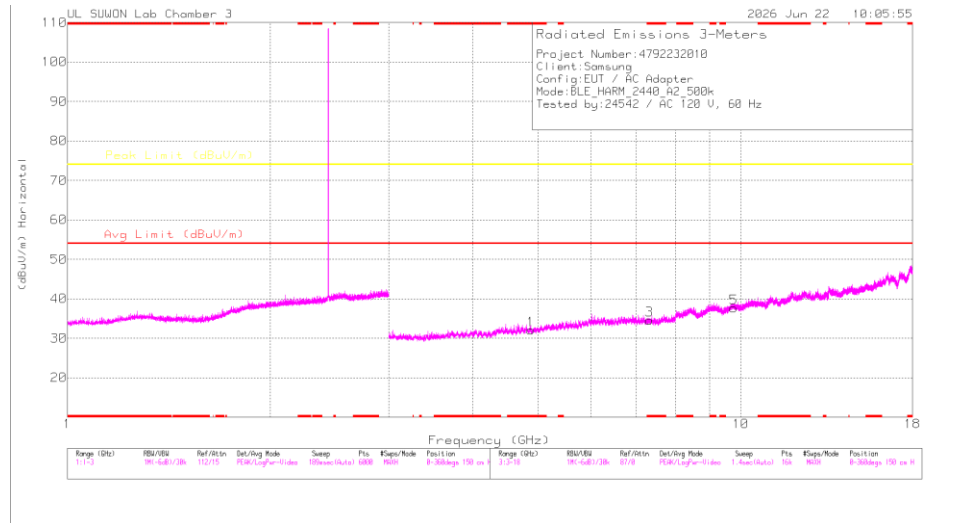
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT1	* 2.39	39.80	Pk	32.10	-24.90	0.00	47.00	-	-	74.00	-27.00	153	126	H
		* 2.32566	42.00	Pk	31.90	-24.90	0.00	49.00	-	-	74.00	-25.00	153	126	H
		* 2.39	29.61	RMS	32.10	-24.90	0.43	37.24	54.00	-16.76	-	-	153	126	H
		* 2.38123	30.85	RMS	32.10	-25.10	0.43	38.28	54.00	-15.72	-	-	153	126	H
		* 2.39	39.12	Pk	32.10	-24.90	0.00	46.32	-	-	74.00	-27.68	192	312	V
		* 2.32319	42.35	Pk	31.90	-24.90	0.00	49.35	-	-	74.00	-24.65	192	312	V
		* 2.39	29.62	RMS	32.10	-24.90	0.43	37.25	54.00	-16.75	-	-	192	312	V
		* 2.31881	30.78	RMS	31.90	-25.00	0.43	38.11	54.00	-15.89	-	-	192	312	V
		* 2.4835	39.89	Pk	32.40	-24.90	0.00	47.39	-	-	74.00	-26.61	155	100	H
		* 2.555	41.94	Pk	32.40	-24.80	0.00	49.54	-	-	74.00	-24.46	155	100	H
2480	ANT1	* 2.4835	30.43	RMS	32.40	-24.90	0.43	38.36	54.00	-15.64	-	-	155	100	H
		* 2.48505	30.94	RMS	32.40	-24.90	0.43	38.87	54.00	-15.13	-	-	155	100	H
		* 2.4835	40.06	Pk	32.40	-24.90	0.00	47.56	-	-	74.00	-26.44	201	296	V
		* 2.48467	42.90	Pk	32.40	-24.90	0.00	50.40	-	-	74.00	-23.60	201	296	V
		* 2.4835	30.28	RMS	32.40	-24.90	0.43	38.21	54.00	-15.79	-	-	201	296	V
		* 2.48359	31.39	RMS	32.40	-24.90	0.43	39.32	54.00	-14.68	-	-	201	296	V
		* 2.39	40.04	Pk	32.10	-24.90	0.00	47.24	-	-	74.00	-26.76	205	114	H
		* 2.34204	42.25	Pk	32.00	-25.00	0.00	49.25	-	-	74.00	-24.75	205	114	H
		* 2.39	29.38	RMS	32.10	-24.90	0.43	37.01	54.00	-16.99	-	-	205	114	H
		* 2.32822	30.78	RMS	31.90	-25.00	0.43	38.11	54.00	-15.89	-	-	205	114	H
2402	ANT2	* 2.39	39.60	Pk	32.10	-24.90	0.00	46.80	-	-	74.00	-27.20	166	285	V
		* 2.36936	42.36	Pk	32.00	-25.00	0.00	49.36	-	-	74.00	-24.64	166	285	V
		* 2.39	30.07	RMS	32.10	-24.90	0.43	37.70	54.00	-16.30	-	-	166	285	V
		* 2.35875	30.78	RMS	32.00	-25.00	0.43	38.21	54.00	-15.79	-	-	166	285	V
		* 2.4835	40.91	Pk	32.40	-24.90	0.00	48.41	-	-	74.00	-25.59	207	121	H
		* 2.547	42.15	Pk	32.40	-24.70	0.00	49.85	-	-	74.00	-24.15	207	121	H
		* 2.4835	30.67	RMS	32.40	-24.90	0.43	38.60	54.00	-15.40	-	-	207	121	H
		* 2.48381	31.35	RMS	32.40	-24.90	0.43	39.28	54.00	-14.72	-	-	207	121	H
		* 2.4835	40.44	Pk	32.40	-24.90	0.00	47.94	-	-	74.00	-26.06	168	301	V
		* 2.48381	42.63	Pk	32.40	-24.90	0.00	50.13	-	-	74.00	-23.87	168	301	V
2480	ANT2	* 2.4835	30.37	RMS	32.40	-24.90	0.43	38.30	54.00	-15.70	-	-	168	301	V
		* 2.48386	31.51	RMS	32.40	-24.90	0.43	39.44	54.00	-14.56	-	-	168	301	V
		* 2.39	43.30	Pk	31.70	-26.20	0.00	48.80	-	-	74.00	-25.20	59	106	H
		* 2.35684	44.71	Pk	31.70	-26.20	0.00	50.21	-	-	74.00	-23.79	59	106	H
		* 2.39	32.46	RMS	31.70	-26.20	0.72	38.68	54.00	-15.32	-	-	59	106	H
		* 2.38645	33.09	RMS	31.70	-26.10	0.72	39.41	54.00	-14.59	-	-	59	106	H
		* 2.39	42.05	Pk	31.70	-26.20	0.00	47.55	-	-	74.00	-26.45	171	318	V
		* 2.38286	45.77	Pk	31.70	-26.20	0.00	51.27	-	-	74.00	-22.73	171	318	V
		* 2.39	32.19	RMS	31.70	-26.20	0.72	38.41	54.00	-15.59	-	-	171	318	V
		* 2.38593	33.03	RMS	31.70	-26.10	0.72	39.35	54.00	-14.65	-	-	171	318	V
2402	DUAL	* 2.48351	43.52	Pk	32.00	-26.20	0.00	49.32	-	-	74.00	-24.68	122	104	H
		* 2.536	45.32	Pk	32.00	-26.10	0.00	51.22	-	-	74.00	-22.78	122	104	H
		* 2.48351	33.21	RMS	32.00	-26.20	0.72	39.73	54.00	-14.27	-	-	122	104	H
		* 2.48386	33.73	RMS	32.00	-26.20	0.72	40.25	54.00	-13.75	-	-	122	104	H
		* 2.48351	41.55	Pk	32.00	-26.20	0.00	47.35	-	-	74.00	-26.65	171	299	V
		* 2.545	44.85	Pk	32.10	-26.10	0.00	50.85	-	-	74.00	-23.15	171	299	V
		* 2.48351	33.18	RMS	32.00	-26.20	0.72	39.70	54.00	-14.30	-	-	171	299	V
		* 2.48427	33.63	RMS	32.00	-26.20	0.72	40.15	54.00	-13.85	-	-	171	299	V

Note1. Pk - Peak detector, RMS - RMS detector

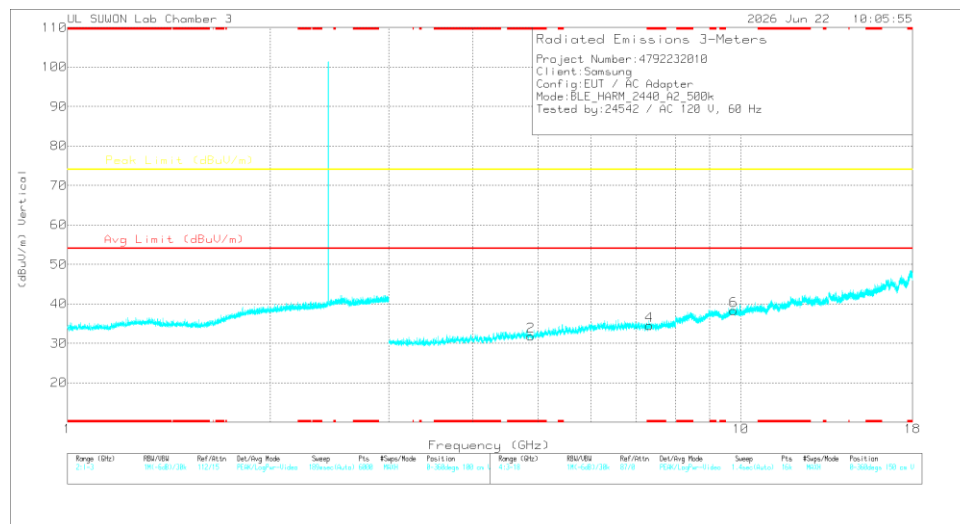
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE:500kbps, 2440 MHz, ANT2)

2440 MHz 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 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
* 4.87902	39.04	PK2	34.2	-30.8	0	42.44	-	-	74	-31.56	0	100	H
* 4.88006	38.92	PK2	34.2	-30.8	0	42.32	-	-	74	-31.68	0	100	V
* 7.31936	35.1	PK2	35.8	-25.3	0	45.6	-	-	74	-28.4	171	106	H
* 7.31946	24.12	MAV1	35.8	-25.3	.43	35.05	54	-18.95	-	-	171	106	H
* 7.31934	34.84	PK2	35.8	-25.3	0	45.34	-	-	74	-28.66	90	100	V
* 7.31946	24	MAV1	35.8	-25.3	.43	34.93	54	-19.07	-	-	90	100	V
9.76049	32.59	PK2	36.9	-21.3	0	48.19	-	-	74	-25.81	0	100	H
9.75879	32.3	PK2	36.9	-21.3	0	47.9	-	-	74	-26.1	0	100	V

* - indicates frequency in 47 CFR 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
2402	ANT1	* 4.80258	38.47	PK2	34.30	-30.20	0.00	42.57	-	-	74.00	-31.43	71	252	H
		* 4.80361	26.99	MAv1	34.30	-30.10	0.43	31.62	54.00	-22.38	-	-	71	252	H
		* 4.80498	38.28	PK2	34.30	-30.10	0.00	42.48	-	-	74.00	-31.52	337	200	V
		* 4.80446	27.18	MAv1	34.30	-30.10	0.43	31.81	54.00	-22.19	-	-	337	200	V
		7.202	34.18	PK2	35.80	-25.80	0.00	44.18	-	-	74.00	-29.82	0	100	H
		7.202	33.77	PK2	35.80	-25.80	0.00	43.77	-	-	74.00	-30.23	0	100	V
		9.613	32.64	PK2	36.70	-21.70	0.00	47.64	-	-	74.00	-26.36	0	100	H
		9.608	31.93	PK2	36.70	-21.70	0.00	46.93	-	-	74.00	-27.07	0	100	V
2440	ANT1	* 4.8761	38.68	PK2	34.20	-30.70	0.00	42.18	-	-	74.00	-31.82	0	100	H
		* 4.87965	39.29	PK2	34.20	-30.80	0.00	42.69	-	-	74.00	-31.31	0	125	V
		* 4.88033	27.68	MAv1	34.20	-30.80	0.43	31.51	54.00	-22.49	-	-	0	125	V
		* 7.32171	34.18	PK2	35.80	-25.20	0.00	44.78	-	-	74.00	-29.22	0	100	H
		* 7.32068	34.01	PK2	35.80	-25.20	0.00	44.61	-	-	74.00	-29.39	0	100	V
		9.757	32.10	PK2	36.90	-21.30	0.00	47.70	-	-	74.00	-26.30	0	100	H
		9.764	32.62	PK2	36.90	-21.30	0.00	48.22	-	-	74.00	-25.78	0	100	V
2480	ANT1	* 4.95796	38.36	PK2	34.30	-30.40	0.00	42.26	-	-	74.00	-31.74	71	244	H
		* 4.9597	26.56	MAv1	34.30	-30.40	0.43	30.89	54.00	-23.11	-	-	71	244	H
		* 4.95946	38.69	PK2	34.30	-30.40	0.00	42.59	-	-	74.00	-31.41	3	127	V
		* 4.95985	27.51	MAv1	34.30	-30.40	0.43	31.84	54.00	-22.16	-	-	3	127	V
		* 7.43986	34.32	PK2	35.70	-25.00	0.00	45.02	-	-	74.00	-28.98	0	100	H
		* 7.44161	34.18	PK2	35.70	-25.00	0.00	44.88	-	-	74.00	-29.12	0	100	V
		9.922	31.53	PK2	37.10	-21.40	0.00	47.23	-	-	74.00	-26.77	0	100	H
		9.919	32.00	PK2	37.10	-21.50	0.00	47.60	-	-	74.00	-26.40	0	100	V
2402	ANT2	* 4.80409	38.24	PK2	34.30	-30.10	0.00	42.44	-	-	74.00	-31.56	0	100	H
		* 4.79945	38.36	PK2	34.30	-30.00	0.00	42.66	-	-	74.00	-31.34	0	100	V
		7.207	34.67	PK2	35.80	-25.80	0.00	44.67	-	-	74.00	-29.33	174	100	H
		7.207	34.38	PK2	35.80	-25.70	0.00	44.48	-	-	74.00	-29.52	0	100	V
		9.609	32.34	PK2	36.70	-21.70	0.00	47.34	-	-	74.00	-26.66	0	100	H
		9.605	32.23	PK2	36.70	-21.70	0.00	47.23	-	-	74.00	-26.77	0	100	V
2440	ANT2	* 4.87902	39.04	PK2	34.20	-30.80	0.00	42.44	-	-	74.00	-31.56	0	100	H
		* 4.88006	38.92	PK2	34.20	-30.80	0.00	42.32	-	-	74.00	-31.68	0	100	V
		* 7.31936	35.10	PK2	35.80	-25.30	0.00	45.60	-	-	74.00	-28.40	171	106	H
		* 7.31946	24.12	MAv1	35.80	-25.30	0.43	35.05	54.00	-18.95	-	-	171	106	H
		* 7.31934	34.84	PK2	35.80	-25.30	0.00	45.34	-	-	74.00	-28.66	90	100	V
		* 7.31946	24.00	MAv1	35.80	-25.30	0.43	34.93	54.00	-19.07	-	-	90	100	V
		9.760	32.59	PK2	36.90	-21.30	0.00	48.19	-	-	74.00	-25.81	0	100	H
		9.759	32.30	PK2	36.90	-21.30	0.00	47.90	-	-	74.00	-26.10	0	100	V
2480	ANT2	* 4.95871	38.23	PK2	34.30	-30.40	0.00	42.13	-	-	74.00	-31.87	0	100	H
		* 4.95966	37.94	PK2	34.30	-30.40	0.00	41.84	-	-	74.00	-32.16	0	100	V
		* 7.4392	34.44	PK2	35.70	-25.00	0.00	45.14	-	-	74.00	-28.86	167	101	H
		* 7.43948	23.27	MAv1	35.70	-25.00	0.43	34.40	54.00	-19.60	-	-	167	101	H
		* 7.44098	35.06	PK2	35.70	-25.00	0.00	45.76	-	-	74.00	-28.24	94	100	V
		* 7.43917	23.65	MAv1	35.70	-25.00	0.43	34.78	54.00	-19.22	-	-	94	100	V
		9.918	31.84	PK2	37.10	-21.40	0.00	47.54	-	-	74.00	-26.46	0	100	H
		9.922	31.90	PK2	37.10	-21.40	0.00	47.60	-	-	74.00	-26.40	0	100	V
2402	DUAL	* 4.8015	42.38	PK2	34.20	-33.00	0.00	43.58	-	-	74.00	-30.42	263	137	H
		* 4.80279	30.17	MAv1	34.20	-33.00	0.72	32.09	54.00	-21.91	-	-	263	137	H
		* 4.80118	42.32	PK2	34.20	-33.00	0.00	43.52	-	-	74.00	-30.48	355	124	V
		* 4.80354	30.58	MAv1	34.20	-33.00	0.72	32.50	54.00	-21.50	-	-	355	124	V
		7.205	40.35	PK2	35.50	-30.90	0.00	44.95	-	-	74.00	-29.05	0	100	H
		7.208	40.67	PK2	35.50	-30.90	0.00	45.27	-	-	74.00	-28.73	0	100	V
		9.610	37.17	PK2	37.00	-27.10	0.00	47.07	-	-	74.00	-26.93	0	100	H
		9.604	37.10	PK2	37.00	-27.10	0.00	47.00	-	-	74.00	-27.00	0	100	V
2440	DUAL	* 4.87807	42.51	PK2	34.20	-33.00	0.00	43.71	-	-	74.00	-30.29	22	257	H
		* 4.87976	30.79	MAv1	34.20	-33.00	0.72	32.71	54.00	-21.29	-	-	22	257	H
		* 4.88004	42.75	PK2	34.20	-33.00	0.00	43.95	-	-	74.00	-30.05	18	149	V
		* 4.8804	31.29	MAv1	34.20	-33.00	0.72	33.21	54.00	-20.79	-	-	18	149	V
		* 7.32103	40.45	PK2	35.50	-30.70	0.00	45.25	-	-	74.00	-28.75	0	100	H
		* 7.32164	40.42	PK2	35.50	-30.70	0.00	45.22	-	-	74.00	-28.78	0	100	V
		9.764	37.01	PK2	37.20	-26.60	0.00	47.61	-	-	74.00	-26.39	0	100	H
		9.762	36.50	PK2	37.20	-26.40	0.00	47.30	-	-	74.00	-26.70	0	100	V
2480	DUAL	* 4.96043	30.74	MAv1	34.20	-32.90	0.72	32.76	54.00	-21.24	-	-	285	198	H
		* 4.96376	42.94	PK2	34.20	-32.90	0.00	44.24	-	-	74.00	-29.76	285	198	H
		* 4.96044	31.09	MAv1	34.20	-32.90	0.72	33.11	54.00	-20.89	-	-	17	138	V
		* 4.95996	43.02	PK2	34.20	-32.90	0.00	44.32	-	-	74.00	-29.68	17	138	V
		* 7.43869	39.88	PK2	35.60	-30.30	0.00	45.18	-	-	74.00	-28.82	0	100	H
		* 7.4388	39.93	PK2	35.60	-30.30	0.00	45.23	-	-	74.00	-28.77	0	100	V
		9.919	36.75	PK2	37.40	-27.10	0.00	47.05	-	-	74.00	-26.95	0	100	H
		9.920	37.23	PK2	37.40	-27.10	0.00	47.53	-	-	74.00	-26.47	0	100	V

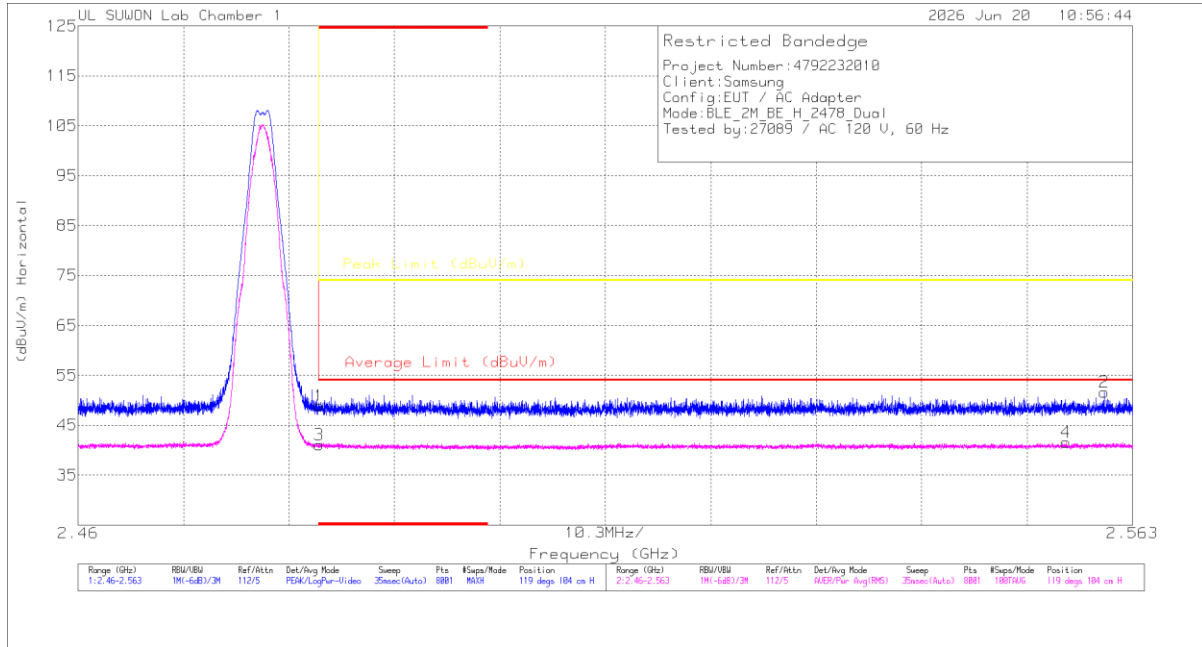
Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average

Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

10.2.2. TX ABOVE 1 GHz BLUETOOTH LE 2 Mbps

BANDEDGE (WORST CASE: 2478 MHz, DUAL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dBm)	10dB_Path Loss (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	* 2.48351	43.13	Pk	32	-26.2	0	48.93	-	-	74	-25.07	119	104	H
2	2.56023	45.47	Pk	32.1	-25.9	0	51.67	-	-	74	-22.33	119	104	H
3	* 2.48351	32.85	RMS	32	-26.2	2.46	41.11	54	-12.89	-	-	119	104	H
4	2.5565	33.01	RMS	32.1	-26	2.46	41.57	54	-12.43	-	-	119	104	H

* - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE TEST DATA

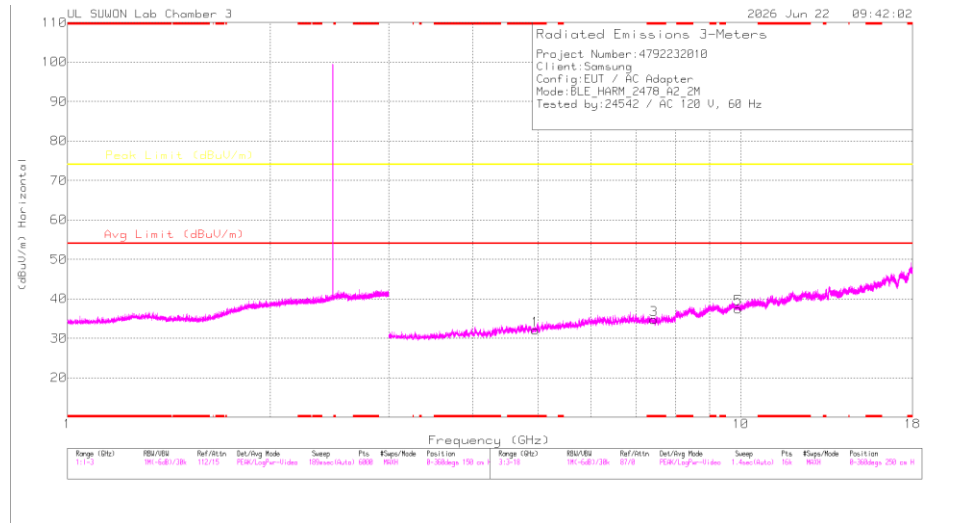
Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
ANT1	* 2.39	39.54	Pk	32.10	-24.90	0.00	46.74	-	-	74.00	-27.26	153	126	H
	* 2.33152	42.31	Pk	31.90	-24.90	0.00	49.31	-	-	74.00	-24.69	153	126	H
	* 2.39	29.18	RMS	32.10	-24.90	2.46	38.84	54.00	-15.16	-	-	153	126	H
	* 2.38044	30.84	RMS	32.10	-25.10	2.46	40.30	54.00	-13.70	-	-	153	126	H
	* 2.39	38.48	Pk	32.10	-24.90	0.00	45.68	-	-	74.00	-28.32	192	312	V
	* 2.35543	42.06	Pk	32.00	-25.00	0.00	49.06	-	-	74.00	-24.94	192	312	V
	* 2.39	27.39	RMS	32.10	-24.90	2.46	37.05	54.00	-16.95	-	-	192	312	V
ANT1	* 2.36734	28.70	RMS	32.00	-24.90	2.46	38.26	54.00	-15.74	-	-	192	312	V
	* 2.4835	40.05	Pk	32.40	-24.90	0.00	47.55	-	-	74.00	-26.45	155	100	H
	* 2.539	42.11	Pk	32.40	-24.60	0.00	49.91	-	-	74.00	-24.09	155	100	H
	* 2.4835	29.65	RMS	32.40	-24.90	2.46	39.61	54.00	-14.39	-	-	155	100	H
	* 2.555	30.79	RMS	32.40	-24.80	2.46	40.85	54.00	-13.15	-	-	155	100	H
	* 2.4835	39.65	Pk	32.40	-24.90	0.00	47.15	-	-	74.00	-26.85	201	296	V
	* 2.542	42.49	Pk	32.40	-24.70	0.00	50.19	-	-	74.00	-23.81	201	296	V
ANT2	* 2.4835	27.84	RMS	32.40	-24.90	2.46	37.80	54.00	-16.20	-	-	201	296	V
	* 2.537	28.92	RMS	32.40	-24.70	2.46	39.08	54.00	-14.92	-	-	201	296	V
	* 2.39	40.16	Pk	32.10	-24.90	0.00	47.36	-	-	74.00	-26.64	205	114	H
	* 2.31646	42.40	Pk	31.90	-25.00	0.00	49.30	-	-	74.00	-24.70	205	114	H
	* 2.39	29.35	RMS	32.10	-24.90	2.46	39.01	54.00	-14.99	-	-	205	114	H
	* 2.35799	30.68	RMS	32.00	-25.00	2.46	40.14	54.00	-13.86	-	-	205	114	H
	* 2.39	39.38	Pk	32.10	-24.90	0.00	46.58	-	-	74.00	-27.42	166	285	V
ANT2	* 2.34064	41.81	Pk	32.00	-25.00	0.00	48.81	-	-	74.00	-25.19	166	285	V
	* 2.39	27.85	RMS	32.10	-24.90	2.46	37.51	54.00	-16.49	-	-	166	285	V
	* 2.38887	28.33	RMS	32.10	-24.90	2.46	37.99	54.00	-16.01	-	-	166	285	V
	* 2.4835	39.80	Pk	32.40	-24.90	0.00	47.30	-	-	74.00	-26.70	207	121	H
	* 2.505	43.23	Pk	32.40	-24.80	0.00	50.83	-	-	74.00	-23.17	207	121	H
	* 2.4835	30.15	RMS	32.40	-24.90	2.46	40.11	54.00	-13.89	-	-	207	121	H
	* 2.544	30.64	RMS	32.40	-24.60	2.46	40.90	54.00	-13.10	-	-	207	121	H
ANT2	* 2.4835	39.87	Pk	32.40	-24.90	0.00	47.37	-	-	74.00	-26.63	168	301	V
	* 2.562	42.63	Pk	32.40	-24.60	0.00	50.43	-	-	74.00	-23.57	168	301	V
	* 2.4835	27.98	RMS	32.40	-24.90	2.46	37.94	54.00	-16.06	-	-	168	301	V
	* 2.48488	29.18	RMS	32.40	-24.90	2.46	39.14	54.00	-14.86	-	-	168	301	V
	* 2.39	41.91	Pk	31.70	-26.20	0.00	47.41	-	-	74.00	-26.59	59	100	H
	* 2.38098	45.04	Pk	31.70	-26.20	0.00	50.54	-	-	74.00	-23.46	59	100	H
	* 2.39	32.49	RMS	31.70	-26.20	2.46	40.45	54.00	-13.55	-	-	59	100	H
DUAL	* 2.3867	33.09	RMS	31.70	-26.20	2.46	41.05	54.00	-12.95	-	-	59	100	H
	* 2.39	41.74	Pk	31.70	-26.20	0.00	47.24	-	-	74.00	-26.76	170	318	V
	* 2.33804	45.07	Pk	31.60	-26.20	0.00	50.47	-	-	74.00	-23.53	170	318	V
	* 2.39	32.12	RMS	31.70	-26.20	2.46	40.08	54.00	-13.92	-	-	170	318	V
	* 2.35119	33.25	RMS	31.60	-26.30	2.46	41.01	54.00	-12.99	-	-	170	318	V
	* 2.48351	43.13	Pk	32.00	-26.20	0.00	48.93	-	-	74.00	-25.07	119	104	H
	* 2.560	45.47	Pk	32.10	-25.90	0.00	51.67	-	-	74.00	-22.33	119	104	H
DUAL	* 2.48351	32.85	RMS	32.00	-26.20	2.46	41.11	54.00	-12.89	-	-	119	104	H
	* 2.557	33.01	RMS	32.10	-26.00	2.46	41.57	54.00	-12.43	-	-	119	104	H
	* 2.48351	42.14	Pk	32.00	-26.20	0.00	47.94	-	-	74.00	-26.06	171	299	V
	* 2.509	45.10	Pk	32.00	-26.20	0.00	50.90	-	-	74.00	-23.10	171	299	V
	* 2.48351	30.94	RMS	32.00	-26.20	2.46	39.20	54.00	-14.80	-	-	171	299	V
	* 2.48399	31.58	RMS	32.00	-26.20	2.46	39.84	54.00	-14.16	-	-	171	299	V

Note1. Pk - Peak detector, RMS - RMS detector

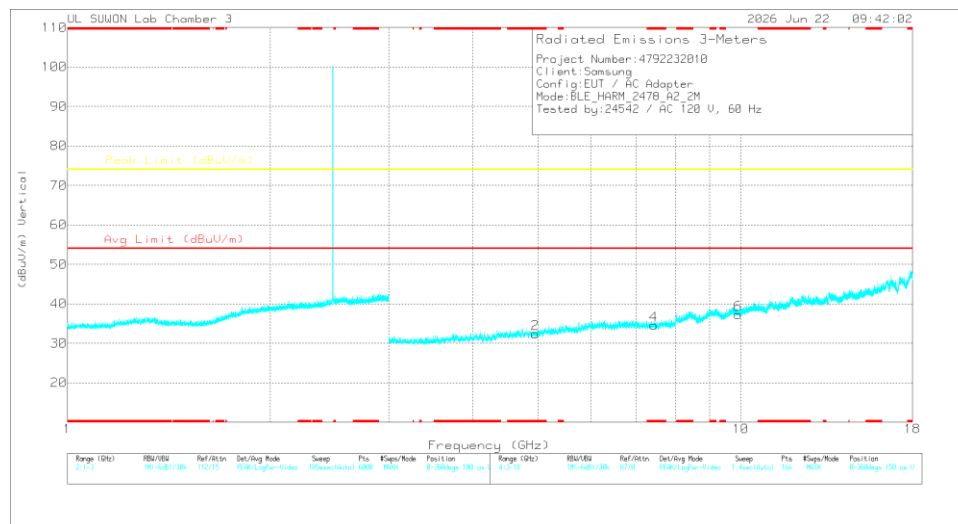
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 2478 MHz, ANT2)

2478 MHz 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 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
* 4.95337	38.04	PK2	34.3	-30.5	0	41.84	-	-	74	-32.16	0	100	H
* 4.96329	38.22	PK2	34.3	-30.3	0	42.22	-	-	74	-31.78	0	100	V
* 7.43324	34.44	PK2	35.7	-24.9	0	45.24	-	-	74	-28.76	167	101	H
* 7.43401	22.62	MAv1	35.7	-25	2.46	35.78	54	-18.22	-	-	167	101	H
* 7.43913	34.87	PK2	35.7	-25	0	45.57	-	-	74	-28.43	94	100	V
* 7.44056	23.67	MAv1	35.7	-25	2.46	36.83	54	-17.17	-	-	94	100	V
9.91185	31.81	PK2	37.1	-21.4	0	47.51	-	-	74	-26.49	0	100	H
9.92064	32.38	PK2	37.1	-21.4	0	48.08	-	-	74	-25.92	0	100	V

* - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

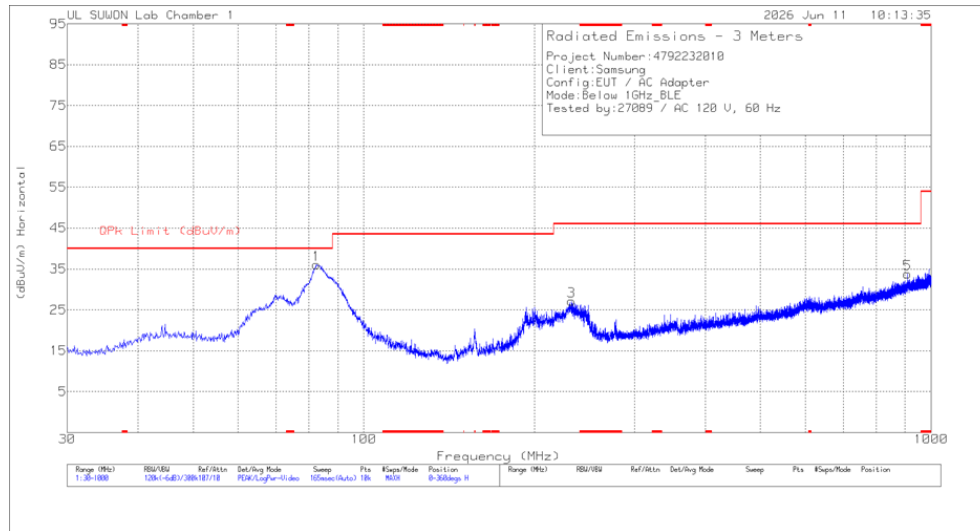
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2404	ANT1	* 4.80912	39.15	PK2	34.30	-30.10	0.00	43.35	-	-	74.00	-30.65	71	252	H
		* 4.80692	27.28	MAv1	34.30	-30.10	2.46	33.94	54.00	-20.06	-	-	71	252	H
		* 4.80734	38.54	PK2	34.30	-30.10	0.00	42.74	-	-	74.00	-31.26	337	200	V
		* 4.80686	26.98	MAv1	34.30	-30.10	2.46	33.64	54.00	-20.36	-	-	337	200	V
		7.207	34.95	PK2	35.80	-25.70	0.00	45.05	-	-	74.00	-28.95	0	100	H
		7.208	34.13	PK2	35.80	-25.70	0.00	44.23	-	-	74.00	-29.77	0	100	V
		9.615	32.56	PK2	36.70	-21.70	0.00	47.56	-	-	74.00	-26.44	0	100	H
		9.619	32.65	PK2	36.70	-21.70	0.00	47.65	-	-	74.00	-26.35	0	100	V
2440	ANT1	* 4.87934	38.48	PK2	34.20	-30.80	0.00	41.88	-	-	74.00	-32.12	0	100	H
		* 4.87547	38.91	PK2	34.20	-30.70	0.00	42.41	-	-	74.00	-31.59	0	125	V
		* 4.88109	27.33	MAv1	34.20	-30.80	2.46	33.19	54.00	-20.81	-	-	0	125	V
		* 7.31625	34.29	PK2	35.80	-25.30	0.00	44.79	-	-	74.00	-29.21	0	100	H
		* 7.31544	34.04	PK2	35.80	-25.30	0.00	44.54	-	-	74.00	-29.46	0	100	V
		9.758	32.44	PK2	36.90	-21.30	0.00	48.04	-	-	74.00	-25.96	0	100	H
		9.762	32.28	PK2	36.90	-21.40	0.00	47.78	-	-	74.00	-26.22	0	100	V
2478	ANT1	* 4.95525	37.94	PK2	34.30	-30.50	0.00	41.74	-	-	74.00	-32.26	71	244	H
		* 4.95764	26.94	MAv1	34.30	-30.40	2.46	33.30	54.00	-20.70	-	-	71	244	H
		* 4.95407	39.04	PK2	34.30	-30.50	0.00	42.84	-	-	74.00	-31.16	3	127	V
		* 4.95528	27.13	MAv1	34.30	-30.50	2.46	33.39	54.00	-20.61	-	-	3	127	V
		* 7.43595	34.35	PK2	35.70	-24.90	0.00	45.15	-	-	74.00	-28.85	0	100	H
		* 7.43758	34.22	PK2	35.70	-24.90	0.00	45.02	-	-	74.00	-28.98	0	100	V
		9.908	32.05	PK2	37.10	-21.40	0.00	47.75	-	-	74.00	-26.25	0	100	H
		9.914	31.88	PK2	37.10	-21.40	0.00	47.58	-	-	74.00	-26.42	0	100	V
2404	ANT2	* 4.80843	38.51	PK2	34.30	-30.10	0.00	42.71	-	-	74.00	-31.29	0	100	H
		* 4.80232	38.48	PK2	34.30	-30.20	0.00	42.58	-	-	74.00	-31.42	0	100	V
		7.210	35.00	PK2	35.80	-25.80	0.00	45.00	-	-	74.00	-29.00	174	100	H
		7.210	34.32	PK2	35.80	-25.80	0.00	44.32	-	-	74.00	-29.68	0	100	V
		9.617	32.52	PK2	36.70	-21.70	0.00	47.52	-	-	74.00	-26.48	0	100	H
		9.607	32.56	PK2	36.70	-21.70	0.00	47.56	-	-	74.00	-26.44	0	100	V
2440	ANT2	* 4.87593	39.29	PK2	34.20	-30.70	0.00	42.79	-	-	74.00	-31.21	0	100	H
		* 4.88085	39.07	PK2	34.20	-30.80	0.00	42.47	-	-	74.00	-31.53	0	100	V
		* 7.31845	34.64	PK2	35.80	-25.30	0.00	45.14	-	-	74.00	-28.86	171	106	H
		* 7.3188	23.31	MAv1	35.80	-25.30	2.46	36.27	54.00	-17.73	-	-	171	106	H
		* 7.32087	35.16	PK2	35.80	-25.20	0.00	45.76	-	-	74.00	-28.24	90	100	V
		* 7.32075	23.47	MAv1	35.80	-25.20	2.46	36.53	54.00	-17.47	-	-	90	100	V
		9.759	32.27	PK2	36.90	-21.30	0.00	47.87	-	-	74.00	-26.13	0	100	H
		9.758	31.86	PK2	36.90	-21.30	0.00	47.46	-	-	74.00	-26.54	0	100	V
2478	ANT2	* 4.95337	38.04	PK2	34.30	-30.50	0.00	41.84	-	-	74.00	-32.16	0	100	H
		* 4.96329	38.22	PK2	34.30	-30.30	0.00	42.22	-	-	74.00	-31.78	0	100	V
		* 7.43324	34.44	PK2	35.70	-24.90	0.00	45.24	-	-	74.00	-28.76	167	101	H
		* 7.43401	22.62	MAv1	35.70	-25.00	2.46	35.78	54.00	-18.22	-	-	167	101	H
		* 7.43913	34.87	PK2	35.70	-25.00	0.00	45.57	-	-	74.00	-28.43	94	100	V
		* 7.44056	23.67	MAv1	35.70	-25.00	2.46	36.83	54.00	-17.17	-	-	94	100	V
		9.912	31.81	PK2	37.10	-21.40	0.00	47.51	-	-	74.00	-26.49	0	100	H
		9.921	32.38	PK2	37.10	-21.40	0.00	48.08	-	-	74.00	-25.92	0	100	V
2404	DUAL	* 4.80395	42.66	PK2	34.20	-33.00	0.00	43.86	-	-	74.00	-30.14	15	267	H
		* 4.80913	30.40	MAv1	34.20	-33.00	2.46	34.06	54.00	-19.94	-	-	15	267	H
		* 4.80346	42.16	PK2	34.20	-33.00	0.00	43.36	-	-	74.00	-30.64	18	133	V
		* 4.80912	30.22	MAv1	34.20	-33.00	2.46	33.88	54.00	-20.12	-	-	18	133	V
		7.212	40.08	PK2	35.60	-30.90	0.00	44.78	-	-	74.00	-29.22	0	100	H
		7.210	40.71	PK2	35.50	-30.90	0.00	45.31	-	-	74.00	-28.69	0	100	V
		9.617	36.83	PK2	37.00	-27.00	0.00	46.83	-	-	74.00	-27.17	0	100	H
		9.618	37.08	PK2	37.00	-27.00	0.00	47.08	-	-	74.00	-26.92	0	100	V
2440	DUAL	* 4.88384	42.55	PK2	34.20	-33.00	0.00	43.75	-	-	74.00	-30.25	0	164	H
		* 4.88046	30.26	MAv1	34.20	-33.00	2.46	33.92	54.00	-20.08	-	-	0	164	H
		* 4.88231	42.52	PK2	34.20	-33.00	0.00	43.72	-	-	74.00	-30.28	15	149	V
		* 4.88078	30.43	MAv1	34.20	-33.00	2.46	34.09	54.00	-19.91	-	-	15	149	V
		* 7.32223	40.46	PK2	35.50	-30.70	0.00	45.26	-	-	74.00	-28.74	0	100	H
		* 7.31916	40.11	PK2	35.50	-30.80	0.00	44.81	-	-	74.00	-29.19	0	100	V
		9.760	36.49	PK2	37.20	-26.40	0.00	47.29	-	-	74.00	-26.71	0	100	H
		9.758	36.61	PK2	37.20	-26.30	0.00	47.51	-	-	74.00	-26.49	0	100	V
2478	DUAL	* 4.95495	42.28	PK2	34.20	-32.90	0.00	43.58	-	-	74.00	-30.42	2	168	H
		* 4.95527	30.44	MAv1	34.20	-33.00	2.46	34.10	54.00	-19.90	-	-	2	168	H
		* 4.96019	42.37	PK2	34.20	-32.90	0.00	43.67	-	-	74.00	-30.33	20	160	V
		* 4.95558	30.44	MAv1	34.20	-33.00	2.46	34.10	54.00	-19.90	-	-	20	160	V
		* 7.43413	39.89	PK2	35.60	-30.30	0.00	45.19	-	-	74.00	-28.81	0	100	H
		* 7.43211	40.38	PK2	35.60	-30.40	0.00	45.58	-	-	74.00	-28.42	0	100	V
		9.913	36.00	PK2	37.40	-27.10	0.00	46.30	-	-	74.00	-27.70	0	100	H
		9.914	36.78	PK2	37.40	-27.10	0.00	47.08	-	-	74.00	-26.92	0	100	V

Note1. PK2 - KDB558074 Method: Maximum Peak / MAv1 - KDB558074 Option 1 Maximum RMS Average

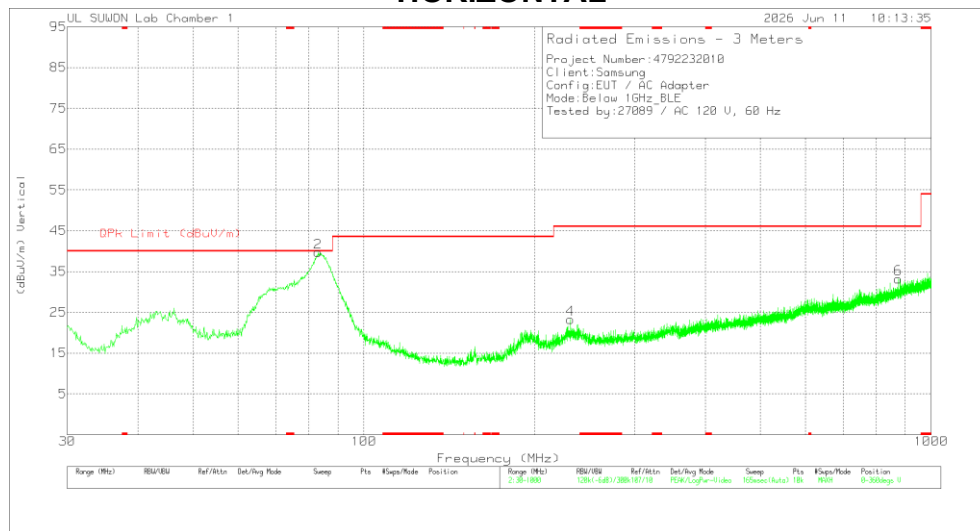
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

10.3. WORST CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



HORIZONTAL



VERTICAL

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	Below_1G_Path Loss(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	82.574	53.44	Pk	13.1	-30.5	36.04	40	-3.96	0-360	300	H
3	232.342	38.43	Pk	17.7	-29	27.13	46.02	-18.89	0-360	100	H
5	908.917	31.27	Pk	28	-25.5	33.77	46.02	-12.25	0-360	100	H
2	83.059	56.96	Pk	13.2	-30.5	39.66	40	-.34	0-360	100	V
4	231.372	34.54	Pk	17.7	-29	23.24	46.02	-22.78	0-360	100	V
6	875.646	31.39	Pk	27.6	-25.8	33.19	46.02	-12.83	0-360	300	V

Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	Below_1G_Path Loss(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
82.574	51.19	Qp	13.1	-30.5	33.79	40	-6.21	154	221	H
83.059	52.66	Qp	13.2	-30.5	35.36	40	-4.64	142	150	V

Qp - Quasi-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.

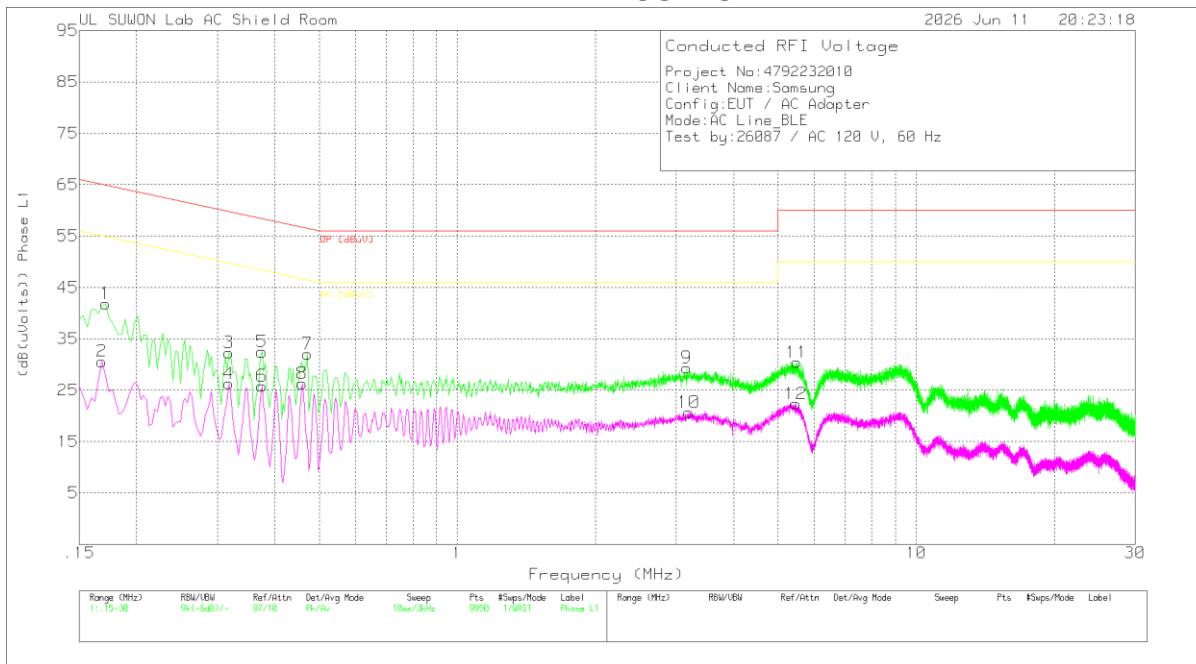
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line

LINE 1 RESULTS



Trace Markers

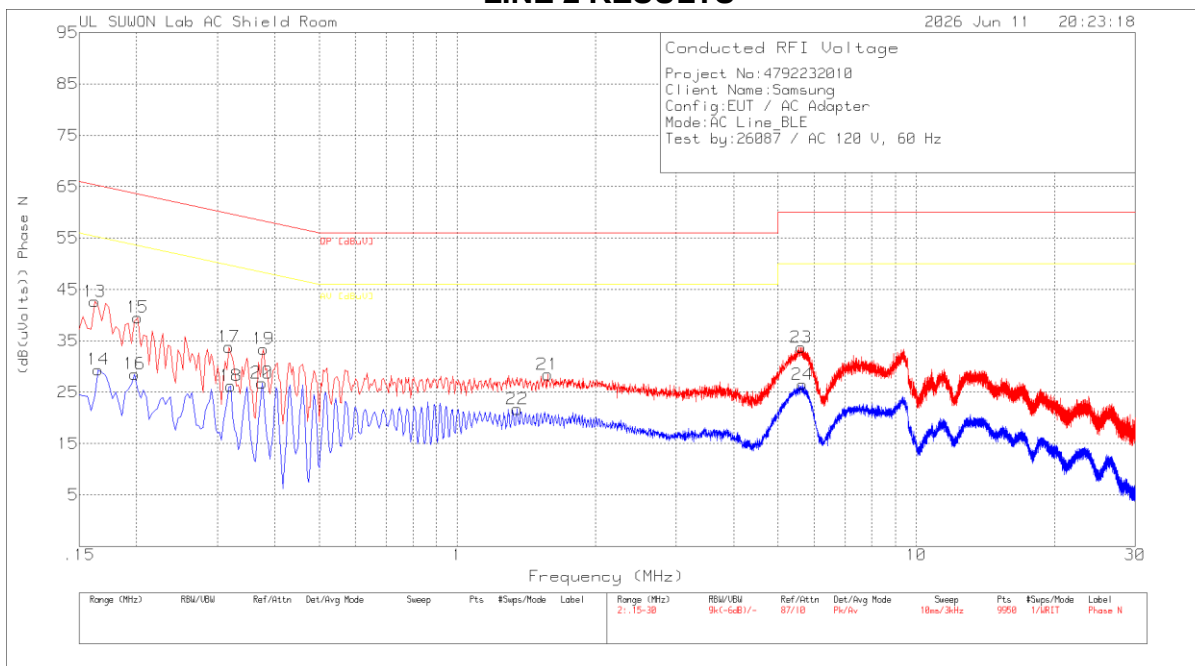
Range 1: Phase L1 .15 - 30MHz

Marker	Frequency [MHz]	Meter Reading [dBuV]	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading [dBuV]	FCC 15 Class B QP [dBuV]	Margin [dB]	FCC 15 Class B AV [dBuV]	Margin [dB]
1	.171	31.74	Pk	10	.1	41.84	64.91	-23.07	-	-
2	.168	20.51	Av	10	.1	30.61	-	-	55.06	-24.45
3	.318	22.5	Pk	9.7	.1	32.3	59.76	-27.46	-	-
4	.318	16.46	Av	9.7	.1	26.26	-	-	49.76	-23.5
5	.375	22.56	Pk	9.8	.1	32.46	58.39	-25.93	-	-
6	.375	15.92	Av	9.8	.1	25.82	-	-	48.39	-22.57
7	.471	22.06	Pk	9.9	.1	32.06	56.5	-24.44	-	-
8	.459	16.4	Av	9.8	.1	26.3	-	-	46.71	-20.41
9	3.159	19.56	Pk	9.7	.1	29.36	56	-26.64	-	-
10	3.195	10.9	Av	9.7	.1	20.7	-	-	46	-25.3
11	5.493	20.43	Pk	9.8	.2	30.43	60	-29.57	-	-
12	5.463	12.34	Av	9.8	.2	22.34	-	-	50	-27.66

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_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading [dBuV]	FCC 15 Class B QP [dBuV]	Margin [dB]	FCC 15 Class B AV [dBuV]	Margin [dB]
13	.162	32.64	Pk	9.9	.1	42.64	65.36	-22.72	-	-
14	.165	19.39	Av	9.9	.1	29.39	-	-	55.21	-25.82
15	.201	29.53	Pk	9.9	.1	39.53	63.57	-24.04	-	-
16	.198	18.54	Av	9.9	.1	28.54	-	-	53.69	-25.15
17	.318	24	Pk	9.7	.1	33.8	59.76	-25.96	-	-
18	.321	16.42	Av	9.7	.1	26.22	-	-	49.68	-23.46
19	.378	23.52	Pk	9.8	.1	33.42	58.32	-24.9	-	-
20	.375	16.87	Av	9.8	.1	26.77	-	-	48.39	-21.62
21	1.572	18.64	Pk	9.7	.1	28.44	56	-27.56	-	-
22	1.35	11.91	Av	9.7	.1	21.71	-	-	46	-24.29
23	5.613	23.71	Pk	9.8	.2	33.71	60	-26.29	-	-
24	5.652	16.52	Av	9.8	.2	26.52	-	-	50	-23.48

Pk - Peak detector

Av - Average detection

END OF TEST REPORT