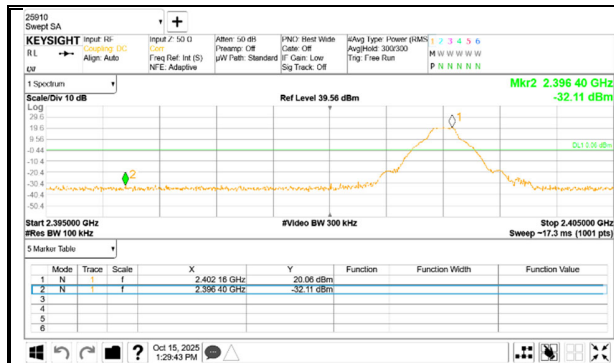
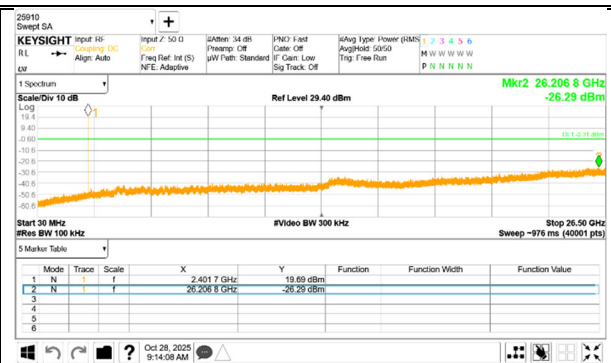


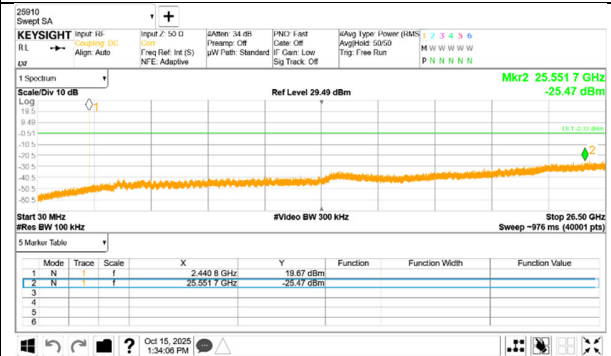
SPURIOUS EMISSIONS, NON-HOPPING – ANT2



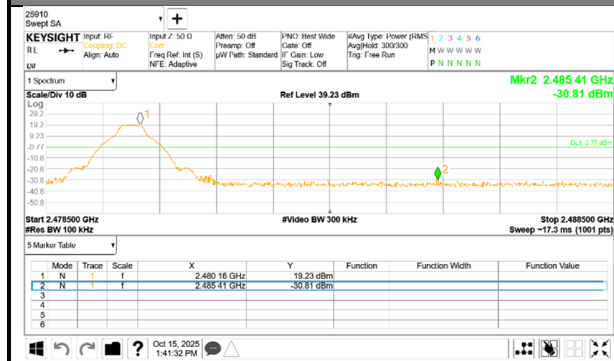
0 CHANNEL BANDEDGE



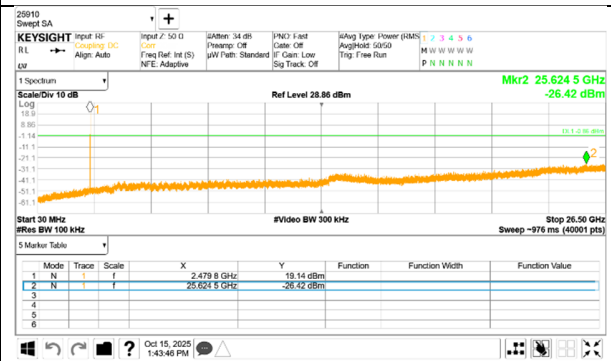
OUT-OF-BAND 0 CHANNEL



OUT-OF-BAND 39 CHANNEL

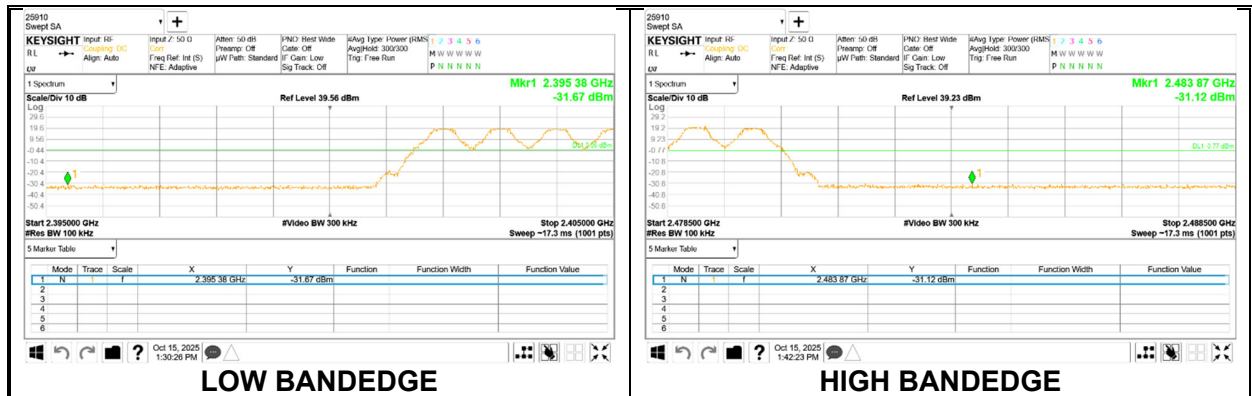


78 CHANNEL BANDEDGE



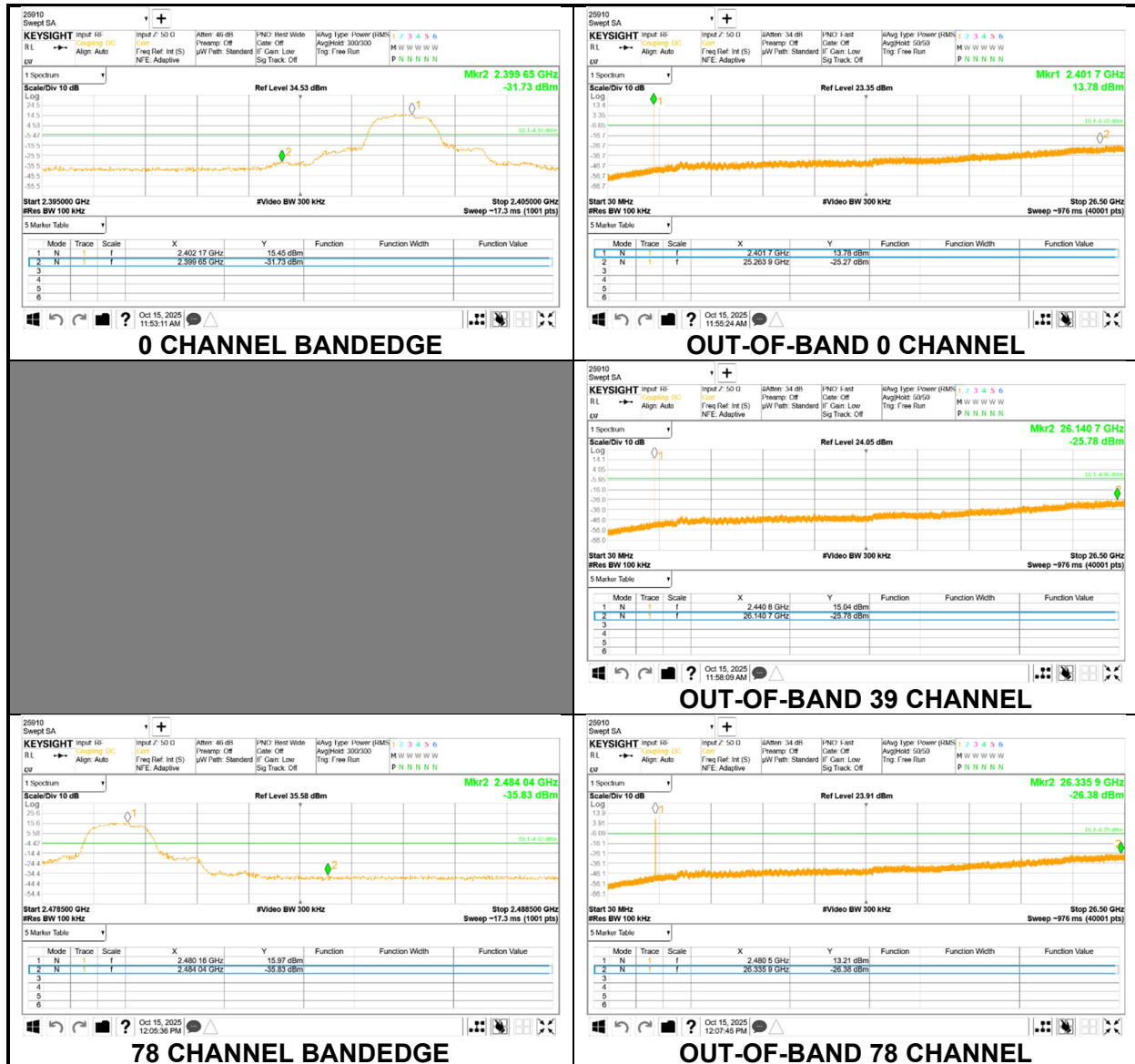
OUT-OF-BAND 78 CHANNEL

SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON – ANT2

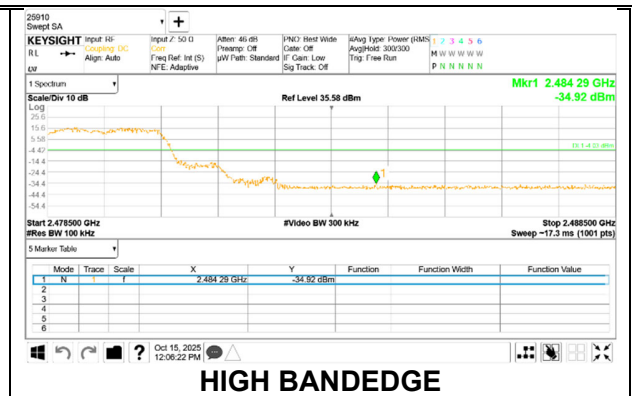
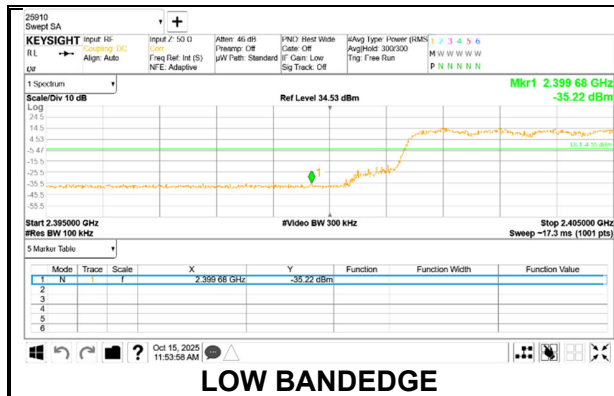


9.8.2. BLUETOOTH ENHANCED DATA RATE 8DPSK MODULATION

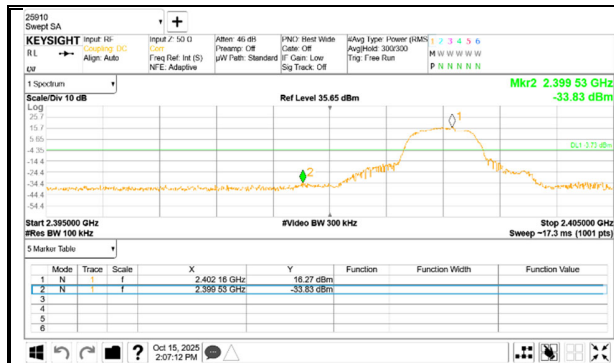
SPURIOUS EMISSIONS, NON-HOPPING – ANT1



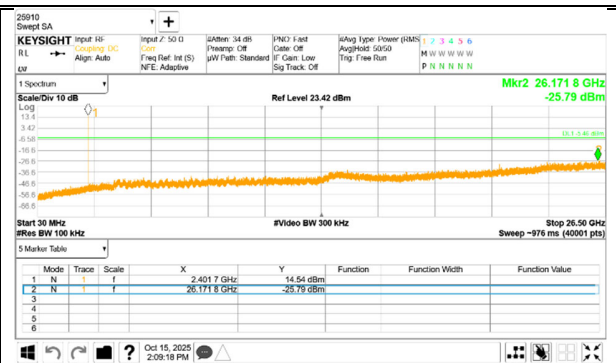
SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON – ANT1



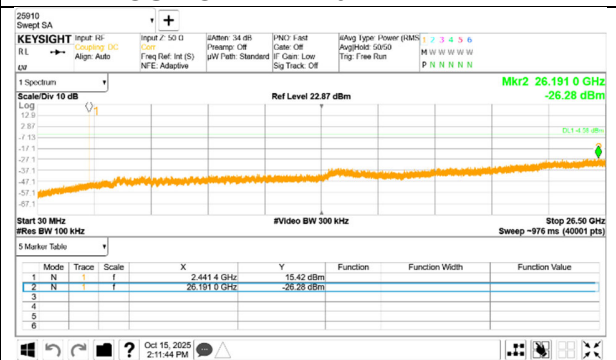
SPURIOUS EMISSIONS, NON-HOPPING – ANT2



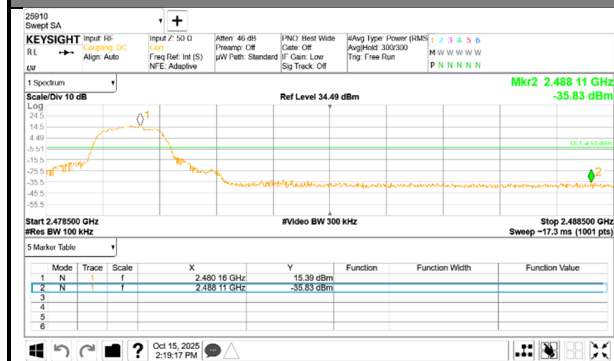
0 CHANNEL BANDEDGE



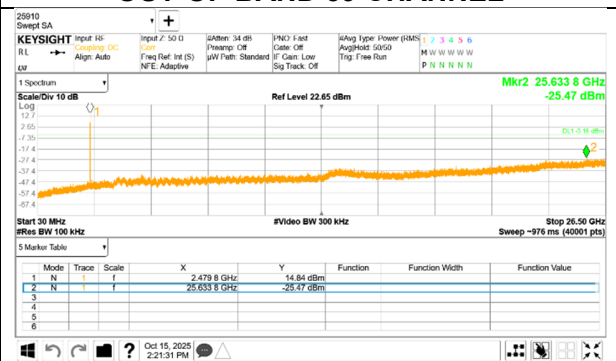
OUT-OF-BAND 0 CHANNEL



OUT-OF-BAND 39 CHANNEL

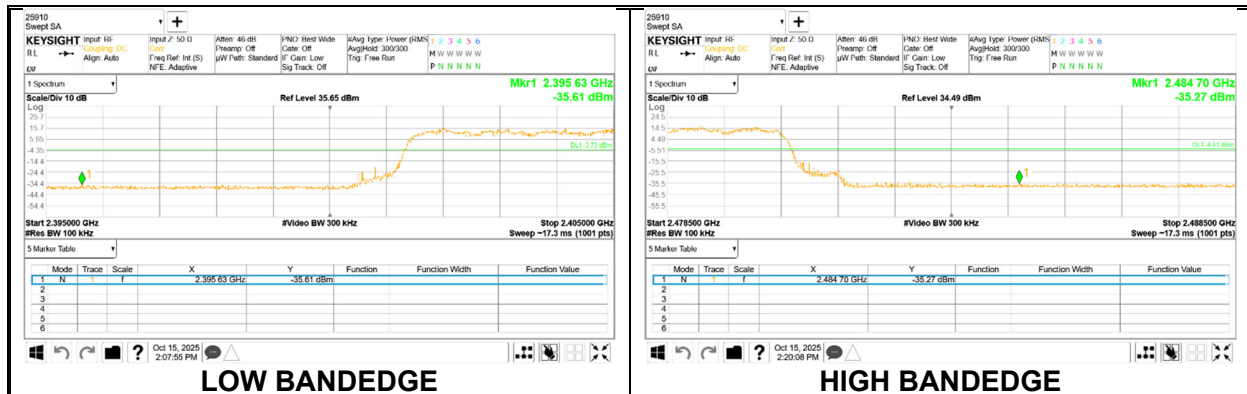


78 CHANNEL BANDEDGE



OUT-OF-BAND 78 CHANNEL

SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON – ANT2



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 1GHz and 150 cm for above 1GHz. 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. (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.)

For band edge 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 1/T (on time) for average measurement.

$GFSK = 1/T = 1 / 0.00288s = 0.35 \text{ kHz}$.

The minimum VBW was 347Hz, but test receiver(ESU40) couldn't set value 347Hz. Due to this reason, testing VBW was set to 500Hz(Worst cases).

The spectrum from 1GHz 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.

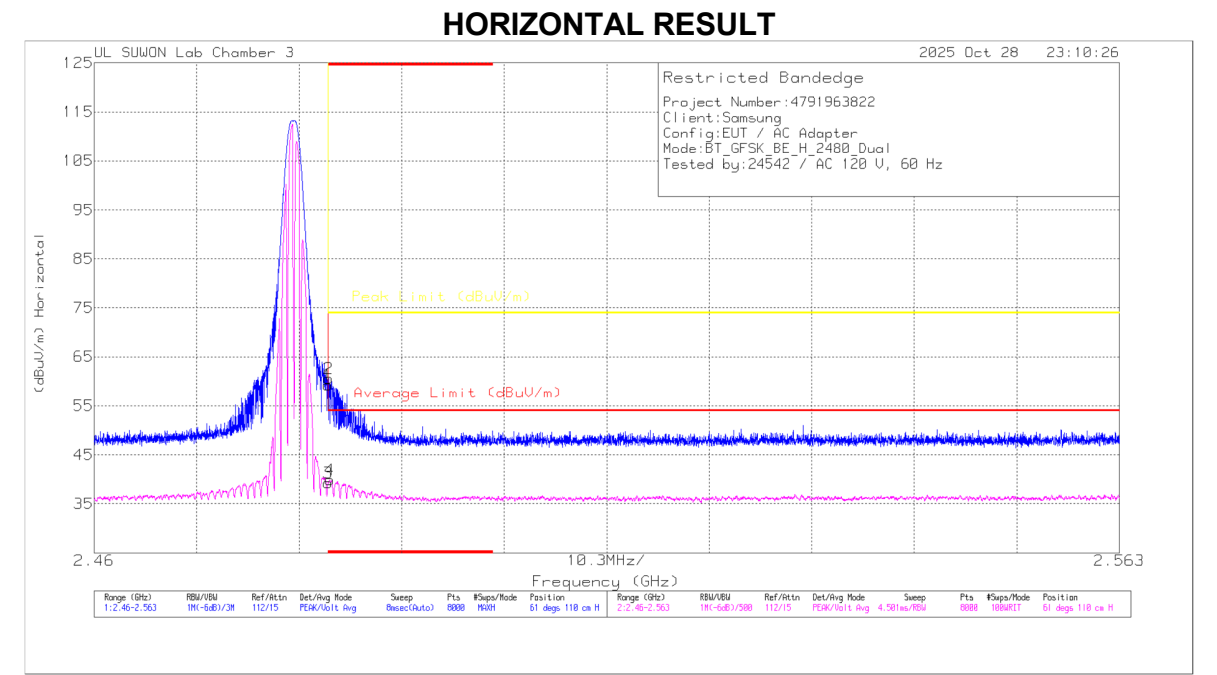
Note : Emission was pre-scanned from 9kHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

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.

10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. BLUETOOTH BASIC DATA RATE GFSK MODULATION

BANDEDGE (WORST CASE: 78 CHANNEL, DUAL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	10dB_Path Loss(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	51.73	Pk	32.4	-24.9	59.23	-	-	74	-14.77	61	110	H
2	* 2.48356	53.09	Pk	32.4	-24.9	60.59	-	-	74	-13.41	61	110	H
3	* 2.4835	31.79	VA1T	32.4	-24.9	39.29	54	-14.71	-	-	61	110	H
4	* 2.48366	32.37	VA1T	32.4	-24.9	39.87	54	-14.13	-	-	61	110	H

* - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

BANDEDGE TEST DATA

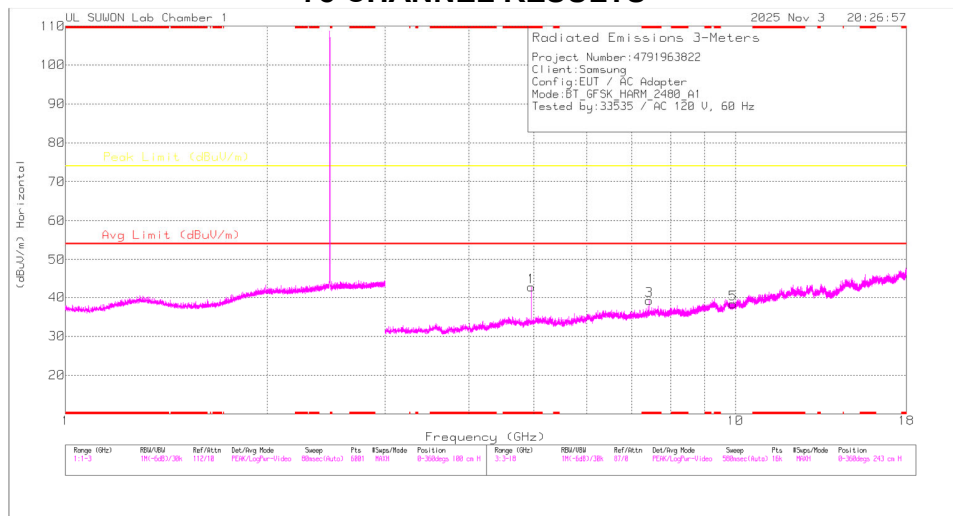
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT1	* 2.39	40.44	Pk	32.10	-24.90	47.64	-	-	74.00	-26.36	237	139	H
		* 2.34989	42.70	Pk	32.00	-24.90	49.80	-	-	74.00	-24.20	237	139	H
		* 2.39	28.22	VA1T	32.10	-24.90	35.42	54.00	-18.58	-	-	237	139	H
		* 2.38435	28.62	VA1T	32.10	-25.00	35.72	54.00	-18.28	-	-	237	139	H
		* 2.39	39.37	Pk	32.10	-24.90	46.57	-	-	74.00	-27.43	255	100	V
		* 2.32428	42.89	Pk	31.90	-24.90	49.89	-	-	74.00	-24.11	255	100	V
		* 2.39	27.84	VA1T	32.10	-24.90	35.04	54.00	-18.96	-	-	255	100	V
		* 2.35373	28.77	VA1T	32.00	-25.00	35.77	54.00	-18.23	-	-	255	100	V
2480	ANT1	* 2.4835	40.68	Pk	32.40	-24.90	48.18	-	-	74.00	-25.82	237	132	H
		* 2.48351	43.88	Pk	32.40	-24.90	51.38	-	-	74.00	-22.62	237	132	H
		* 2.4835	29.40	VA1T	32.40	-24.90	36.90	54.00	-17.10	-	-	237	132	H
		* 2.48358	29.56	VA1T	32.40	-24.90	37.06	54.00	-16.94	-	-	237	132	H
		* 2.4835	39.98	Pk	32.40	-24.90	47.48	-	-	74.00	-26.52	219	122	V
		* 2.517	43.25	Pk	32.40	-24.70	50.95	-	-	74.00	-23.05	219	122	V
		* 2.4835	28.47	VA1T	32.40	-24.90	35.97	54.00	-18.03	-	-	219	122	V
		* 2.562	29.12	VA1T	32.40	-24.60	36.92	54.00	-17.08	-	-	219	122	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT2	* 2.39	39.94	Pk	32.10	-24.90	47.14	-	-	74.00	-26.86	61	186	H
		* 2.38347	42.96	Pk	32.10	-25.00	50.06	-	-	74.00	-23.94	61	186	H
		* 2.39	27.94	VA1T	32.10	-24.90	35.14	54.00	-18.86	-	-	61	186	H
		* 2.32792	28.90	VA1T	31.90	-25.00	35.80	54.00	-18.20	-	-	61	186	H
		* 2.39	39.92	Pk	32.10	-24.90	47.12	-	-	74.00	-26.88	233	104	V
		* 2.37607	43.14	Pk	32.10	-25.00	50.24	-	-	74.00	-23.76	233	104	V
		* 2.39	28.31	VA1T	32.10	-24.90	35.51	54.00	-18.49	-	-	233	104	V
		* 2.38853	28.75	VA1T	32.10	-24.90	35.95	54.00	-18.05	-	-	233	104	V
2480	ANT2	* 2.4835	48.26	Pk	32.40	-24.90	55.76	-	-	74.00	-18.24	61	108	H
		* 2.48376	52.14	Pk	32.40	-24.90	59.64	-	-	74.00	-14.36	61	108	H
		* 2.4835	31.94	VA1T	32.40	-24.90	39.44	54.00	-14.56	-	-	61	108	H
		* 2.48354	32.29	VA1T	32.40	-24.90	39.79	54.00	-14.21	-	-	61	108	H
		* 2.4835	50.43	Pk	32.40	-24.90	57.93	-	-	74.00	-16.07	255	117	V
		* 2.48376	51.66	Pk	32.40	-24.90	59.16	-	-	74.00	-14.84	255	117	V
		* 2.4835	30.84	VA1T	32.40	-24.90	38.34	54.00	-15.66	-	-	255	117	V
		* 2.48375	31.51	VA1T	32.40	-24.90	39.01	54.00	-14.99	-	-	255	117	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	Dual	* 2.39	40.41	Pk	32.10	-24.90	47.61	-	-	74.00	-26.39	59	124	H
		* 2.38994	43.21	Pk	32.10	-24.90	50.41	-	-	74.00	-23.59	59	124	H
		* 2.39	28.18	VA1T	32.10	-24.90	35.38	54.00	-18.62	-	-	59	124	H
		* 2.38849	28.63	VA1T	32.10	-24.90	35.83	54.00	-18.17	-	-	59	124	H
		* 2.39	40.75	Pk	32.10	-24.90	47.95	-	-	74.00	-26.05	97	345	V
		* 2.38066	43.11	Pk	32.10	-25.10	50.11	-	-	74.00	-23.89	97	345	V
		* 2.39	28.43	VA1T	32.10	-24.90	35.63	54.00	-18.37	-	-	97	345	V
		* 2.3749	28.86	VA1T	32.00	-25.00	35.86	54.00	-18.14	-	-	97	345	V
2480	Dual	* 2.4835	51.73	Pk	32.40	-24.90	59.23	-	-	74.00	-14.77	61	110	H
		* 2.48356	53.09	Pk	32.40	-24.90	60.59	-	-	74.00	-13.41	61	110	H
		* 2.4835	31.79	VA1T	32.40	-24.90	39.29	54.00	-14.71	-	-	61	110	H
		* 2.48366	32.37	VA1T	32.40	-24.90	39.87	54.00	-14.13	-	-	61	110	H
		* 2.4835	50.43	Pk	32.40	-24.90	57.93	-	-	74.00	-16.07	97	361	V
		* 2.48354	51.14	Pk	32.40	-24.90	58.64	-	-	74.00	-15.36	97	361	V
		* 2.4835	31.73	VA1T	32.40	-24.90	39.23	54.00	-14.77	-	-	97	361	V
		* 2.48354	31.75	VA1T	32.40	-24.90	39.25	54.00	-14.75	-	-	97	361	V

Note1. Pk - Peak detector, VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

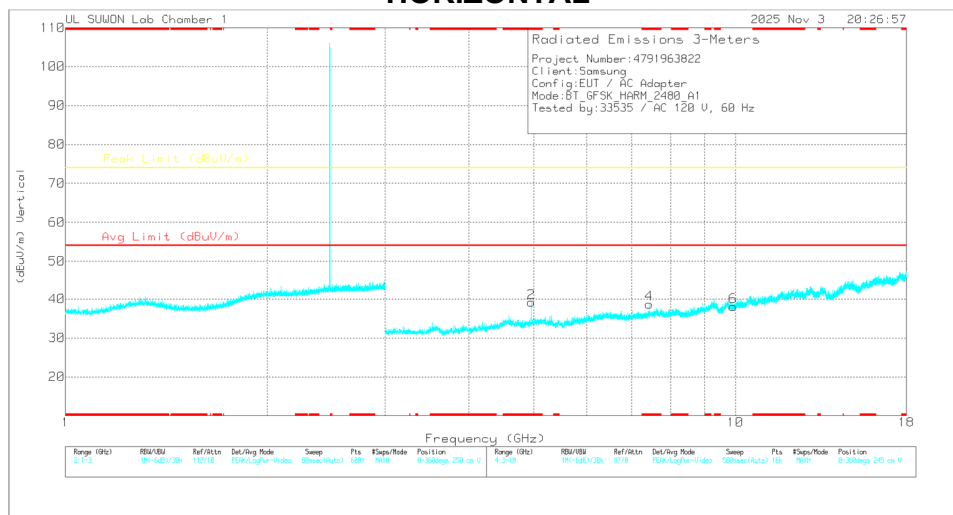
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE – ANT1)

78 CHANNEL 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_Pat h Loss(dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96001	42.35	VA1T	34.2	-32.9	43.65	54	-10.35	-	-	115	100	H
* 4.95958	47.07	PKFH	34.2	-32.9	48.37	-	-	74	-25.63	115	100	H
* 4.95993	41.86	VA1T	34.2	-32.9	43.16	54	-10.84	-	-	179	192	V
* 4.95984	47.06	PKFH	34.2	-32.9	48.36	-	-	74	-25.64	179	192	V
* 7.44022	30.6	VA1T	35.6	-30.4	35.8	54	-18.2	-	-	126	100	H
* 7.43945	40.4	PKFH	35.6	-30.4	45.6	-	-	74	-28.4	126	100	H
* 7.44012	30.95	VA1T	35.6	-30.4	36.15	54	-17.85	-	-	171	100	V
* 7.4403	40.12	PKFH	35.6	-30.4	45.32	-	-	74	-28.68	171	100	V
9.92232	35.49	PKFH	37.4	-27.1	45.79	-	-	74	-28.21	0	100	H
9.91874	36.31	PKFH	37.4	-27.1	46.61	-	-	74	-27.39	0	100	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [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	* 4.80399	37.53	VA1T	34.20	-33.00	38.73	54.00	-15.27	-	-	125	360	H
		* 4.80377	44.53	PKFH	34.20	-33.00	45.73	-	-	74.00	-28.27	125	360	H
		* 4.80399	37.58	VA1T	34.20	-33.00	38.78	54.00	-15.22	-	-	173	187	V
		* 4.80425	43.94	PKFH	34.20	-33.00	45.14	-	-	74.00	-28.86	173	187	V
		7.207	39.77	PKFH	35.50	-31.00	44.27	-	-	74.00	-29.73	130	107	H
		7.205	40.32	PKFH	35.50	-30.90	44.92	-	-	74.00	-29.08	182	135	V
		9.606	35.13	PKFH	37.00	-27.10	45.03	-	-	74.00	-28.97	0	100	H
		9.609	35.14	PKFH	37.00	-27.10	45.04	-	-	74.00	-28.96	0	100	V
2441	ANT1	* 4.88213	33.93	VA1T	34.20	-33.00	35.13	54.00	-18.87	-	-	115	293	H
		* 4.88198	42.89	PKFH	34.20	-33.00	44.09	-	-	74.00	-29.91	115	293	H
		* 4.88192	33.97	VA1T	34.20	-33.00	35.17	54.00	-18.83	-	-	174	182	V
		* 4.88225	42.45	PKFH	34.20	-33.00	43.65	-	-	74.00	-30.35	174	182	V
		* 7.32293	29.68	VA1T	35.50	-30.80	34.38	54.00	-19.62	-	-	172	106	H
		* 7.32263	40.97	PKFH	35.50	-30.80	45.67	-	-	74.00	-28.33	172	106	H
		* 7.32382	39.83	PKFH	35.50	-30.80	44.53	-	-	74.00	-29.47	180	314	V
		* 7.32304	28.70	VA1T	35.50	-30.80	33.40	54.00	-20.60	-	-	180	314	V
		9.763	35.31	PKFH	37.20	-26.50	46.01	-	-	74.00	-27.99	0	100	H
		9.765	34.67	PKFH	37.20	-26.60	45.27	-	-	74.00	-28.73	0	100	V
2480	ANT1	* 4.96001	42.35	VA1T	34.20	-32.90	43.65	54.00	-10.35	-	-	115	100	H
		* 4.95958	47.07	PKFH	34.20	-32.90	48.37	-	-	74.00	-25.63	115	100	H
		* 4.95993	41.86	VA1T	34.20	-32.90	43.16	54.00	-10.84	-	-	179	192	V
		* 4.95984	47.06	PKFH	34.20	-32.90	48.36	-	-	74.00	-25.64	179	192	V
		* 7.44022	30.60	VA1T	35.60	-30.40	35.80	54.00	-18.20	-	-	126	100	H
		* 7.43945	40.40	PKFH	35.60	-30.40	45.60	-	-	74.00	-28.40	126	100	H
		* 7.44012	30.95	VA1T	35.60	-30.40	36.15	54.00	-17.85	-	-	171	100	V
		* 7.4403	40.12	PKFH	35.60	-30.40	45.32	-	-	74.00	-28.68	171	100	V
		9.922	35.49	PKFH	37.40	-27.10	45.79	-	-	74.00	-28.21	0	100	H
		9.919	36.31	PKFH	37.40	-27.10	46.61	-	-	74.00	-27.39	0	100	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT2	* 4.80386	37.30	VA1T	34.20	-33.00	38.50	54.00	-15.50	-	-	318	102	H
		* 4.80363	44.49	PKFH	34.20	-33.00	45.69	-	-	74.00	-28.31	318	102	H
		* 4.80392	36.34	VA1T	34.20	-33.00	37.54	54.00	-16.46	-	-	92	373	V
		* 4.80406	44.23	PKFH	34.20	-33.00	45.43	-	-	74.00	-28.57	92	373	V
		7.204	38.65	PKFH	35.50	-30.90	43.25	-	-	74.00	-30.75	3	136	H
		7.206	39.50	PKFH	35.50	-31.00	44.00	-	-	74.00	-30.00	252	100	V
		9.609	35.04	PKFH	37.00	-27.10	44.94	-	-	74.00	-29.06	0	100	H
		9.609	35.10	PKFH	37.00	-27.10	45.00	-	-	74.00	-29.00	0	100	V
2441	ANT2	* 4.88208	38.85	VA1T	34.20	-33.00	40.05	54.00	-13.95	-	-	302	102	H
		* 4.88227	44.90	PKFH	34.20	-33.00	46.10	-	-	74.00	-27.90	302	102	H
		* 4.88194	34.92	VA1T	34.20	-33.00	36.12	54.00	-17.88	-	-	12	114	V
		* 4.88247	43.20	PKFH	34.20	-33.00	44.40	-	-	74.00	-29.60	12	114	V
		* 7.32273	28.40	VA1T	35.50	-30.80	33.10	54.00	-20.90	-	-	360	120	H
		* 7.32272	38.70	PKFH	35.50	-30.80	43.40	-	-	74.00	-30.60	360	120	H
		* 7.32261	29.17	VA1T	35.50	-30.80	33.87	54.00	-20.13	-	-	110	101	V
		* 7.32354	39.63	PKFH	35.50	-30.80	44.33	-	-	74.00	-29.67	110	101	V
		9.762	34.70	PKFH	37.20	-26.40	45.50	-	-	74.00	-28.50	0	100	H
		9.765	34.93	PKFH	37.20	-26.50	45.63	-	-	74.00	-28.37	0	100	V
2480	ANT2	* 4.95999	41.36	VA1T	34.20	-32.90	42.66	54.00	-11.34	-	-	287	112	H
		* 4.96016	46.83	PKFH	34.20	-32.90	48.13	-	-	74.00	-25.87	287	112	H
		* 4.95993	38.65	VA1T	34.20	-32.90	39.95	54.00	-14.05	-	-	14	100	V
		* 4.96025	44.84	PKFH	34.20	-32.90	46.14	-	-	74.00	-27.86	14	100	V
		* 7.44027	28.07	VA1T	35.60	-30.40	33.27	54.00	-20.73	-	-	358	114	H
		* 7.43959	38.83	PKFH	35.60	-30.40	44.03	-	-	74.00	-29.97	358	114	H
		* 7.44012	28.92	VA1T	35.60	-30.40	34.12	54.00	-19.88	-	-	116	101	V
		* 7.43941	40.05	PKFH	35.60	-30.40	45.25	-	-	74.00	-28.75	116	101	V
		9.922	35.92	PKFH	37.40	-27.10	46.22	-	-	74.00	-27.78	0	100	H
		9.922	35.76	PKFH	37.40	-27.10	46.06	-	-	74.00	-27.94	0	100	V

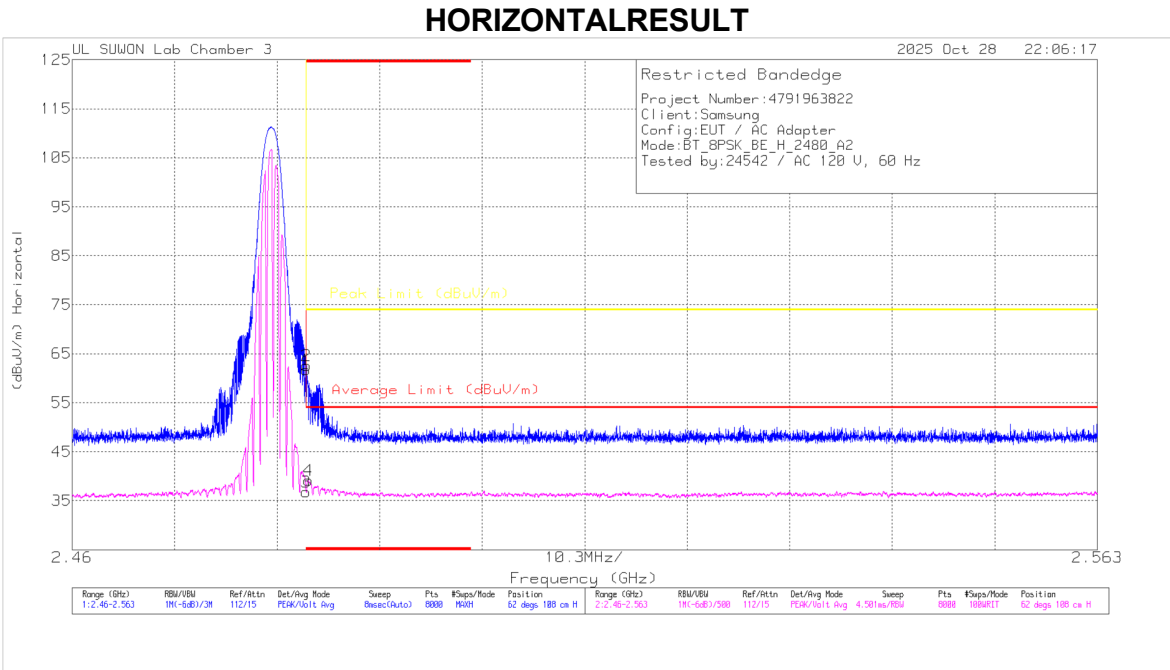
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	DUAL	* 4.80401	37.86	VA1T	34.20	-33.00	39.06	54.00	-14.94	-	-	317	101	H
		* 4.80401	44.55	PKFH	34.20	-33.00	45.75	-	-	74.00	-28.25	317	101	H
		* 4.80394	34.20	VA1T	34.20	-33.00	35.40	54.00	-18.60	-	-	13	151	V
		* 4.80449	42.96	PKFH	34.20	-33.00	44.16	-	-	74.00	-29.84	13	151	V
		7.207	39.99	PKFH	35.50	-31.00	44.49	-	-	74.00	-29.51	0	154	H
		7.206	40.76	PKFH	35.50	-30.90	45.36	-	-	74.00	-28.64	108	104	V
		9.607	36.19	PKFH	37.00	-27.10	46.09	-	-	74.00	-27.91	0	100	H
		9.608	36.99	PKFH	37.00	-27.10	46.89	-	-	74.00	-27.11	0	100	V
2441	DUAL	* 4.88199	39.45	VA1T	34.20	-33.00	40.65	54.00	-13.35	-	-	306	138	H
		* 4.88192	45.58	PKFH	34.20	-33.00	46.78	-	-	74.00	-27.22	306	138	H
		* 4.88192	34.86	VA1T	34.20	-33.00	36.06	54.00	-17.94	-	-	15	105	V
		* 4.88202	42.17	PKFH	34.20	-33.00	43.37	-	-	74.00	-30.63	15	105	V
		* 7.32286	28.54	VA1T	35.50	-30.80	33.24	54.00	-20.76	-	-	3	100	H
		* 7.32502	40.21	PKFH	35.50	-30.80	44.91	-	-	74.00	-29.09	3	100	H
		* 7.32316	29.28	VA1T	35.50	-30.80	33.98	54.00	-20.02	-	-	112	100	V
		* 7.32221	39.77	PKFH	35.50	-30.70	44.57	-	-	74.00	-29.43	112	100	V
		9.766	34.57	PKFH	37.20	-26.50	45.27	-	-	74.00	-28.73	0	100	H
		9.766	36.56	PKFH	37.20	-26.50	47.26	-	-	74.00	-26.74	0	100	V
2480	DUAL	* 4.96006	40.96	VA1T	34.20	-32.90	42.26	54.00	-11.74	-	-	287	110	H
		* 4.96005	46.58	PKFH	34.20	-32.90	47.88	-	-	74.00	-26.12	287	110	H
		* 4.96003	38.25	VA1T	34.20	-32.90	39.55	54.00	-14.45	-	-	10	103	V
		* 4.96028	44.31	PKFH	34.20	-32.90	45.61	-	-	74.00	-28.39	10	103	V
		* 7.43981	28.08	VA1T	35.60	-30.40	33.28	54.00	-20.72	-	-	3	110	H
		* 7.43754	38.92	PKFH	35.60	-30.30	44.22	-	-	74.00	-29.78	3	110	H
		* 7.44023	29.59	VA1T	35.60	-30.40	34.79	54.00	-19.21	-	-	118	104	V
		* 7.43987	39.43	PKFH	35.60	-30.40	44.63	-	-	74.00	-29.37	118	104	V
		9.922	35.58	PKFH	37.40	-27.10	45.88	-	-	74.00	-28.12	0	100	H
		9.920	35.53	PKFH	37.40	-27.10	45.83	-	-	74.00	-28.17	0	100	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.1.2. BLUETOOTH ENHANCED DATA RATE 8DPSK
MODULATION
ANT1
BANDEDGE (WORST CASE: 78 CHANNEL, ANT2)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	10dB_Path Loss(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	54.17	PK	32.4	-24.9	61.67	-	-	74	-12.33	62	108	H
2	* 2.48353	55.15	PK	32.4	-24.9	62.65	-	-	74	-11.35	62	108	H
3	* 2.4835	29.29	VA1T	32.4	-24.9	36.79	54	-17.21	-	-	62	108	H
4	* 2.48373	31.66	VA1T	32.4	-24.9	39.16	54	-14.84	-	-	62	108	H

* - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band
PK - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

BANDEDGE TEST DATA

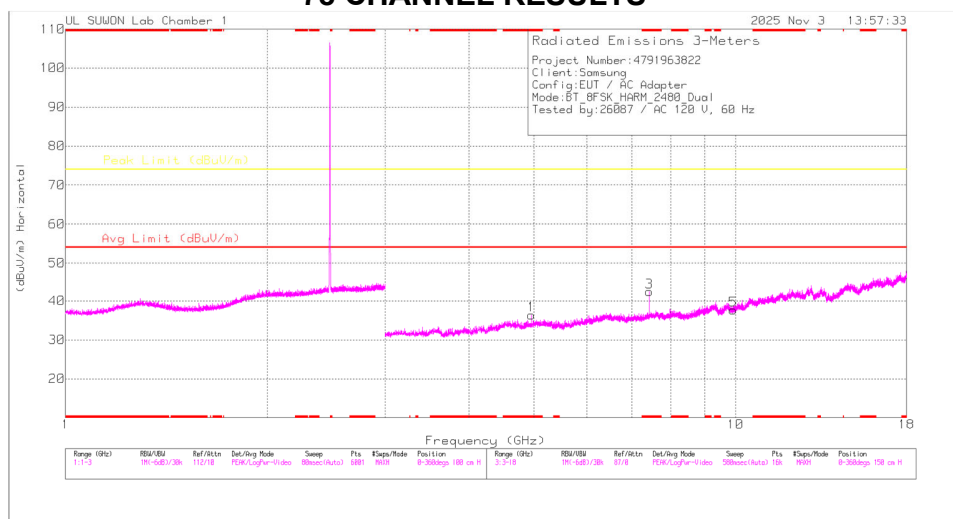
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT1	* 2.39	39.87	Pk	32.10	-24.90	47.07	-	-	74.00	-26.93	237	140	H
		* 2.35018	42.68	Pk	32.00	-24.90	49.78	-	-	74.00	-24.22	237	140	H
		* 2.39	27.71	VA1T	32.10	-24.90	34.91	54.00	-19.09	-	-	237	140	H
		* 2.38968	28.54	VA1T	32.10	-24.90	35.74	54.00	-18.26	-	-	237	140	H
		* 2.39	39.28	Pk	32.10	-24.90	46.48	-	-	74.00	-27.52	255	100	V
		* 2.3887	42.95	Pk	32.10	-24.90	50.15	-	-	74.00	-23.85	255	100	V
		* 2.39	28.23	VA1T	32.10	-24.90	35.43	54.00	-18.57	-	-	255	100	V
		* 2.38948	28.55	VA1T	32.10	-24.90	35.75	54.00	-18.25	-	-	255	100	V
2480	ANT1	* 2.4835	45.64	Pk	32.40	-24.90	53.14	-	-	74.00	-20.86	235	131	H
		* 2.48353	49.75	Pk	32.40	-24.90	57.25	-	-	74.00	-16.75	235	131	H
		* 2.4835	28.52	VA1T	32.40	-24.90	36.02	54.00	-17.98	-	-	235	131	H
		2.557	29.24	VA1T	32.40	-24.70	36.94	54.00	-17.06	-	-	235	131	H
		* 2.4835	45.23	Pk	32.40	-24.90	52.73	-	-	74.00	-21.27	219	122	V
		* 2.48429	43.51	Pk	32.40	-24.90	51.01	-	-	74.00	-22.99	219	122	V
		* 2.4835	28.87	VA1T	32.40	-24.90	36.37	54.00	-17.63	-	-	219	122	V
		2.562	29.12	VA1T	32.40	-24.60	36.92	54.00	-17.08	-	-	219	122	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT2	* 2.39	40.33	Pk	32.10	-24.90	47.53	-	-	74.00	-26.47	61	186	H
		* 2.32541	43.30	Pk	31.90	-24.90	50.30	-	-	74.00	-23.70	61	186	H
		* 2.39	27.76	VA1T	32.10	-24.90	34.96	54.00	-19.04	-	-	61	186	H
		* 2.34108	28.83	VA1T	32.00	-25.00	35.83	54.00	-18.17	-	-	61	186	H
		* 2.39	41.37	Pk	32.10	-24.90	48.57	-	-	74.00	-25.43	232	104	V
		* 2.36537	43.04	Pk	32.00	-25.00	50.04	-	-	74.00	-23.96	232	104	V
		* 2.39	28.53	VA1T	32.10	-24.90	35.73	54.00	-18.27	-	-	232	104	V
		* 2.37927	28.98	VA1T	32.10	-25.10	35.98	54.00	-18.02	-	-	232	104	V
2480	ANT2	* 2.4835	54.17	Pk	32.40	-24.90	61.67	-	-	74.00	-12.33	62	108	H
		* 2.48353	55.15	Pk	32.40	-24.90	62.65	-	-	74.00	-11.35	62	108	H
		* 2.4835	29.29	VA1T	32.40	-24.90	36.79	54.00	-17.21	-	-	62	108	H
		* 2.48373	31.66	VA1T	32.40	-24.90	39.16	54.00	-14.84	-	-	62	108	H
		* 2.4835	46.12	Pk	32.40	-24.90	53.62	-	-	74.00	-20.38	255	117	V
		* 2.48355	52.76	Pk	32.40	-24.90	60.26	-	-	74.00	-13.74	255	117	V
		* 2.4835	29.36	VA1T	32.40	-24.90	36.86	54.00	-17.14	-	-	255	117	V
		* 2.48391	30.64	VA1T	32.40	-24.90	38.14	54.00	-15.86	-	-	255	117	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	Dual	* 2.39	40.57	Pk	32.10	-24.90	47.77	-	-	74.00	-26.23	60	124	H
		* 2.35227	43.43	Pk	32.00	-25.00	50.43	-	-	74.00	-23.57	60	124	H
		* 2.39	28.16	VA1T	32.10	-24.90	35.36	54.00	-18.64	-	-	60	124	H
		* 2.35793	28.79	VA1T	32.00	-25.00	35.79	54.00	-18.21	-	-	60	124	H
		* 2.39	39.86	Pk	32.10	-24.90	47.06	-	-	74.00	-26.94	96	345	V
		* 2.34893	43.63	Pk	32.00	-25.00	50.63	-	-	74.00	-23.37	96	345	V
		* 2.39	28.16	VA1T	32.10	-24.90	35.36	54.00	-18.64	-	-	96	345	V
		* 2.37928	28.98	VA1T	32.10	-25.10	35.98	54.00	-18.02	-	-	96	345	V
2480	Dual	* 2.4835	55.02	Pk	32.40	-24.90	62.52	-	-	74.00	-11.48	62	110	H
		* 2.48362	54.20	Pk	32.40	-24.90	61.70	-	-	74.00	-12.30	62	110	H
		* 2.4835	32.11	VA1T	32.40	-24.90	39.61	54.00	-14.39	-	-	62	110	H
		* 2.48355	32.08	VA1T	32.40	-24.90	39.58	54.00	-14.42	-	-	62	110	H
		* 2.4835	48.29	Pk	32.40	-24.90	55.79	-	-	74.00	-18.21	97	359	V
		* 2.48358	52.45	Pk	32.40	-24.90	59.95	-	-	74.00	-14.05	97	359	V
		* 2.4835	29.60	VA1T	32.40	-24.90	37.10	54.00	-16.90	-	-	97	359	V
		* 2.48385	30.93	VA1T	32.40	-24.90	38.43	54.00	-15.57	-	-	97	359	V

Note1. Pk - Peak detector, VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

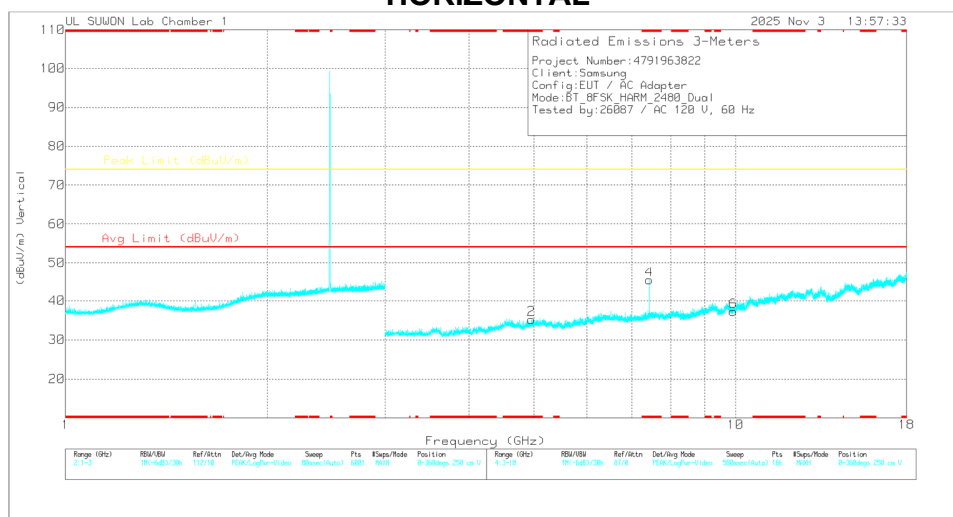
Note2. * - indicates frequency in 47 CFR Pt 15 / IC RSS-Restricted Band

HARMONICS AND SPURIOUS EMISSIONS(WORST CASE – DUAL)

78 CHANNEL 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_Pat h Loss(dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96041	44.34	PKFH	34.2	-32.9	45.64	-	-	74	-28.36	25	207	H
* 4.95993	35.27	VA1T	34.2	-32.9	36.57	54	-17.43	-	-	25	207	H
* 4.95985	41.76	PKFH	34.2	-32.9	43.06	-	-	74	-30.94	24	134	V
* 4.96035	32.08	VA1T	34.2	-32.9	33.38	54	-20.62	-	-	24	134	V
* 7.43979	44.25	PKFH	35.6	-30.4	49.45	-	-	74	-24.55	350	118	H
* 7.43983	35.05	VA1T	35.6	-30.4	40.25	54	-13.75	-	-	350	118	H
* 7.43994	46.55	PKFH	35.6	-30.4	51.75	-	-	74	-22.25	116	100	V
* 7.4401	38.89	VA1T	35.6	-30.4	44.09	54	-9.91	-	-	116	100	V
9.91944	35.9	PKFH	37.4	-27.1	46.2	-	-	74	-27.8	0	100	H
9.91879	34.51	PKFH	37.4	-27.1	44.81	-	-	74	-29.19	0	100	V

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [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	* 4.80411	32.58	VA1T	34.20	-33.00	33.78	54.00	-20.22	-	-	114	106	H
		* 4.80433	42.04	PKFH	34.20	-33.00	43.24	-	-	74.00	-30.76	114	106	H
		* 4.80396	31.38	VA1T	34.20	-33.00	32.58	54.00	-21.42	-	-	222	100	V
		* 4.80407	41.53	PKFH	34.20	-33.00	42.73	-	-	74.00	-31.27	222	100	V
		* 7.205	38.61	PKFH	35.50	-30.90	43.21	-	-	74.00	-30.79	0	100	H
		* 7.207	38.25	PKFH	35.50	-31.00	42.75	-	-	74.00	-31.25	0	100	V
		* 9.608	34.25	PKFH	37.00	-27.10	44.15	-	-	74.00	-29.85	0	100	H
		* 9.610	34.73	PKFH	37.00	-27.10	44.63	-	-	74.00	-29.37	0	100	V
2441	ANT1	* 4.88186	31.00	VA1T	34.20	-33.00	32.20	54.00	-21.80	-	-	113	100	H
		* 4.88144	42.50	PKFH	34.20	-33.00	43.70	-	-	74.00	-30.30	113	100	H
		* 4.88173	29.93	VA1T	34.20	-33.00	31.13	54.00	-22.87	-	-	133	100	V
		* 4.8808	40.98	PKFH	34.20	-33.00	42.18	-	-	74.00	-31.82	133	100	V
		* 7.32231	38.99	PKFH	35.50	-30.80	43.69	-	-	74.00	-30.31	0	100	H
		* 7.3227	38.93	PKFH	35.50	-30.80	43.63	-	-	74.00	-30.37	0	100	V
		* 9.763	34.18	PKFH	37.20	-26.50	44.88	-	-	74.00	-29.12	0	100	H
		* 9.763	35.00	PKFH	37.20	-26.50	45.70	-	-	74.00	-28.30	0	100	V
2480	ANT1	* 4.96037	45.61	PKFH	34.20	-32.90	46.91	-	-	74.00	-27.09	115	100	H
		* 4.96007	37.57	VA1T	34.20	-32.90	38.87	54.00	-15.13	-	-	115	100	H
		* 4.96056	45.61	PKFH	34.20	-32.90	46.91	-	-	74.00	-27.09	179	191	V
		* 4.95982	37.22	VA1T	34.20	-32.90	38.52	54.00	-15.48	-	-	179	191	V
		* 7.43959	39.58	PKFH	35.60	-30.40	44.78	-	-	74.00	-29.22	126	100	H
		* 7.44053	28.56	VA1T	35.60	-30.40	33.76	54.00	-20.24	-	-	126	100	H
		* 7.44003	39.78	PKFH	35.60	-30.40	44.98	-	-	74.00	-29.02	171	191	V
		* 7.44009	29.06	VA1T	35.60	-30.40	34.26	54.00	-19.74	-	-	171	191	V
		* 9.922	35.18	PKFH	37.40	-27.10	45.48	-	-	74.00	-28.52	0	100	H
		* 9.921	35.72	PKFH	37.40	-27.10	46.02	-	-	74.00	-27.98	0	100	V
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	ANT2	* 4.80411	33.10	VA1T	34.20	-33.00	34.30	54.00	-19.70	-	-	318	101	H
		* 4.80399	42.55	PKFH	34.20	-33.00	43.75	-	-	74.00	-30.25	318	101	H
		* 4.80409	30.84	VA1T	34.20	-33.00	32.04	54.00	-21.96	-	-	7	162	V
		* 4.804	41.84	PKFH	34.20	-33.00	43.04	-	-	74.00	-30.96	7	162	V
		* 7.206	38.89	PKFH	35.50	-30.90	43.49	-	-	74.00	-30.51	0	100	H
		* 7.205	39.10	PKFH	35.50	-30.90	43.70	-	-	74.00	-30.30	0	100	V
		* 9.609	35.55	PKFH	37.00	-27.10	45.45	-	-	74.00	-28.55	0	100	H
		* 9.610	35.42	PKFH	37.00	-27.10	45.32	-	-	74.00	-28.68	0	100	V
2441	ANT2	* 4.88228	33.92	VA1T	34.20	-33.00	35.12	54.00	-18.88	-	-	302	103	H
		* 4.88156	43.08	PKFH	34.20	-33.00	44.28	-	-	74.00	-29.72	302	103	H
		* 4.88213	31.52	VA1T	34.20	-33.00	32.72	54.00	-21.28	-	-	10	114	V
		* 4.88213	42.11	PKFH	34.20	-33.00	43.31	-	-	74.00	-30.69	10	114	V
		* 7.32284	39.87	PKFH	35.50	-30.80	44.57	-	-	74.00	-29.43	0	100	H
		* 7.32504	39.73	PKFH	35.50	-30.80	44.43	-	-	74.00	-29.57	0	100	V
		* 9.762	35.63	PKFH	37.20	-26.40	46.43	-	-	74.00	-27.57	0	100	H
		* 9.763	35.52	PKFH	37.20	-26.50	46.22	-	-	74.00	-27.78	0	100	V
2480	ANT2	* 4.96017	35.82	VA1T	34.20	-32.90	37.12	54.00	-16.88	-	-	288	113	H
		* 4.96028	45.03	PKFH	34.20	-32.90	46.33	-	-	74.00	-27.67	288	113	H
		* 4.95984	33.85	VA1T	34.20	-32.90	35.15	54.00	-18.85	-	-	13	113	V
		* 4.96	43.18	PKFH	34.20	-32.90	44.48	-	-	74.00	-29.52	13	113	V
		* 7.44185	38.44	PKFH	35.60	-30.30	43.74	-	-	74.00	-30.26	0	100	H
		* 7.44042	38.52	PKFH	35.60	-30.40	43.72	-	-	74.00	-30.28	0	100	V
		* 9.922	35.70	PKFH	37.40	-27.10	46.00	-	-	74.00	-28.00	0	100	H
		* 9.919	35.45	PKFH	37.40	-27.10	45.75	-	-	74.00	-28.25	0	100	V

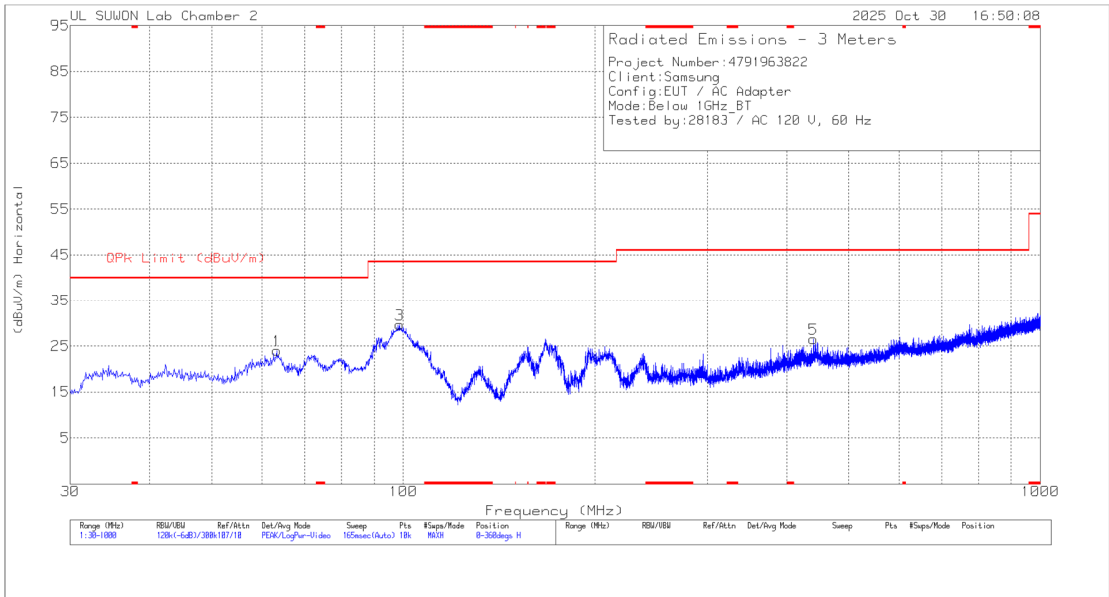
Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB(1/m)]	Loss [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
2402	DUAL	* 4.8046	42.72	PKFH	34.20	-33.00	43.92	-	-	74.00	-30.08	60	145	H
		* 4.80404	32.67	VA1T	34.20	-33.00	33.87	54.00	-20.13	-	-	60	145	H
		* 4.80435	41.66	PKFH	34.20	-33.00	42.86	-	-	74.00	-31.14	100	359	V
		* 4.80398	31.94	VA1T	34.20	-33.00	33.14	54.00	-20.86	-	-	100	359	V
		7.206	45.30	PKFH	35.50	-31.00	49.80	-	-	74.00	-24.20	5	109	H
		7.206	47.87	PKFH	35.50	-31.00	52.37	-	-	74.00	-21.63	244	100	V
		9.610	34.64	PKFH	37.00	-27.10	44.54	-	-	74.00	-29.46	0	100	H
		9.606	35.16	PKFH	37.00	-27.10	45.06	-	-	74.00	-28.94	0	100	V
2441	DUAL	* 4.88197	41.34	PKFH	34.20	-33.00	42.54	-	-	74.00	-31.46	73	112	H
		* 4.88186	31.83	VA1T	34.20	-33.00	33.03	54.00	-20.97	-	-	73	112	H
		* 4.88193	42.68	PKFH	34.20	-33.00	43.88	-	-	74.00	-30.12	104	285	V
		* 4.88215	34.03	VA1T	34.20	-33.00	35.23	54.00	-18.77	-	-	104	285	V
		* 7.32328	43.89	PKFH	35.50	-30.80	48.59	-	-	74.00	-25.41	332	101	H
		* 7.32305	34.93	VA1T	35.50	-30.80	39.63	54.00	-14.37	-	-	332	101	H
		* 7.32296	46.56	PKFH	35.50	-30.80	51.26	-	-	74.00	-22.74	263	105	V
		* 7.32283	38.49	VA1T	35.50	-30.80	43.19	54.00	-10.81	-	-	263	105	V
		9.765	34.78	PKFH	37.20	-26.50	45.48	-	-	74.00	-28.52	0	100	H
		9.763	35.21	PKFH	37.20	-26.50	45.91	-	-	74.00	-28.09	0	100	V
2480	DUAL	* 4.96041	44.34	PKFH	34.20	-32.90	45.64	-	-	74.00	-28.36	25	207	H
		* 4.95993	35.27	VA1T	34.20	-32.90	36.57	54.00	-17.43	-	-	25	207	H
		* 4.95985	41.76	PKFH	34.20	-32.90	43.06	-	-	74.00	-30.94	24	134	V
		* 4.96035	32.08	VA1T	34.20	-32.90	33.38	54.00	-20.62	-	-	24	134	V
		* 7.43979	44.25	PKFH	35.60	-30.40	49.45	-	-	74.00	-24.55	350	118	H
		* 7.43983	35.05	VA1T	35.60	-30.40	40.25	54.00	-13.75	-	-	350	118	H
		* 7.43994	46.55	PKFH	35.60	-30.40	51.75	-	-	74.00	-22.25	116	100	V
		* 7.4401	38.89	VA1T	35.60	-30.40	44.09	54.00	-9.91	-	-	116	100	V
		9.919	35.90	PKFH	37.40	-27.10	46.20	-	-	74.00	-27.80	0	100	H
		9.919	34.51	PKFH	37.40	-27.10	44.81	-	-	74.00	-29.19	0	100	V

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

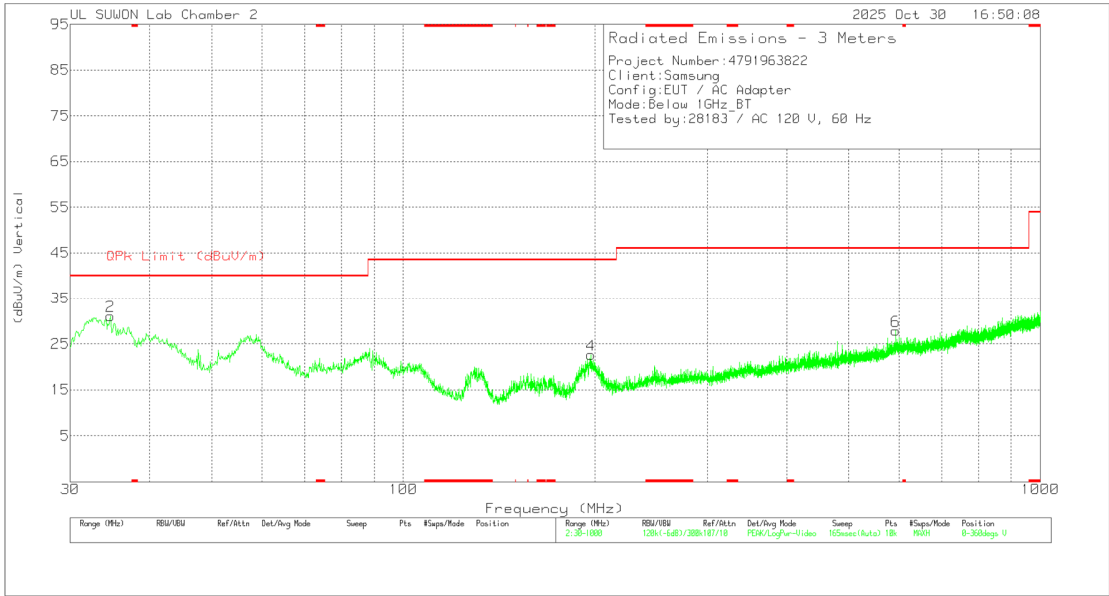
PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

10.2. 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	63.271	37.87	Pk	17.7	-31.6	23.97	40	-16.03	0-360	300	H
2	34.656	46.5	Pk	16.4	-31.9	31	40	-9	0-360	100	V
3	98.676	43.98	Pk	17.2	-31.5	29.68	43.52	-13.84	0-360	200	H
4	197.131	35.87	Pk	17.5	-30.8	22.57	43.52	-20.95	0-360	100	V
5	440.407	34.42	Pk	21.9	-29.8	26.52	46.02	-19.5	0-360	100	H
6	593.085	32.44	Pk	24.9	-29.5	27.84	46.02	-18.18	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 C63.10:2020.

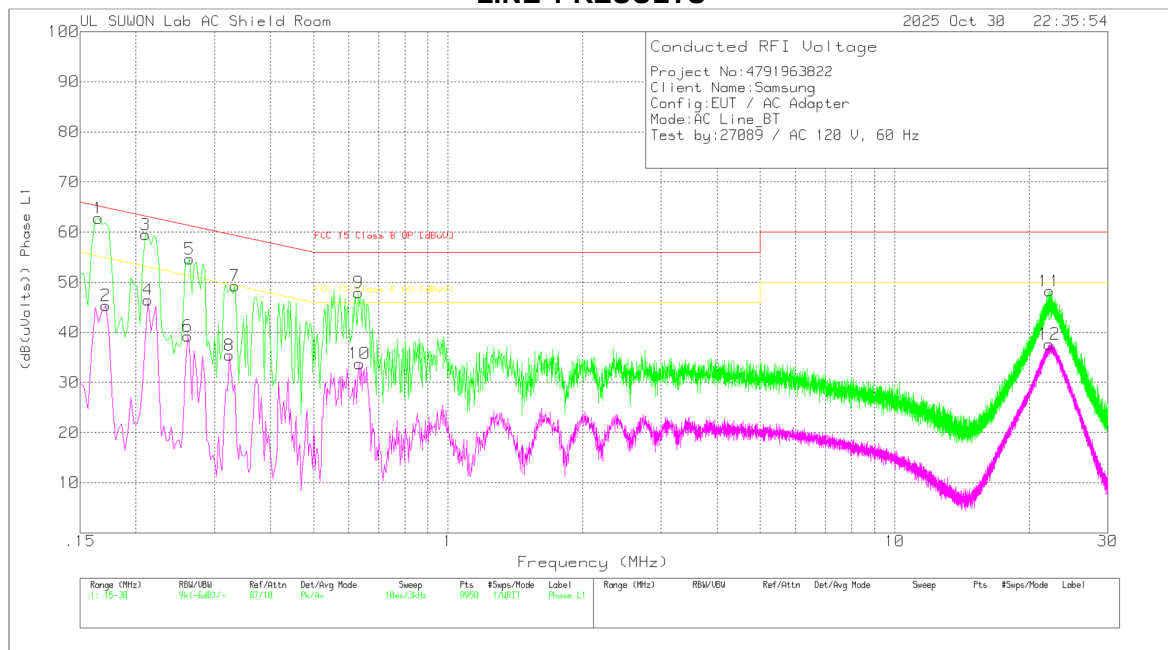
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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_L1 [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
1	.165	52.78	Pk	9.9	.1	62.78	65.21	-2.43	-	-
2	.171	35.26	Av	10	.1	45.36	-	-	54.91	-9.55
3	.21	49.61	Pk	9.8	.1	59.51	63.21	-3.7	-	-
4	.213	36.6	Av	9.8	.1	46.5	-	-	53.09	-6.59
5	.264	44.94	Pk	9.6	.1	54.64	61.3	-6.66	-	-
6	.261	29.55	Av	9.6	.1	39.25	-	-	51.4	-12.15
7	.333	39.5	Pk	9.7	.1	49.3	59.38	-10.08	-	-
8	.324	25.64	Av	9.7	.1	35.44	-	-	49.6	-14.16
9	.63	38.05	Pk	9.8	.1	47.95	56	-8.05	-	-
10	.633	23.87	Av	9.8	.1	33.77	-	-	46	-12.23
11	22.197	37.65	Pk	10.3	.3	48.25	60	-11.75	-	-
12	22.191	27.06	Av	10.3	.3	37.66	-	-	50	-12.34

Pk - Peak detector

Av - Average detection

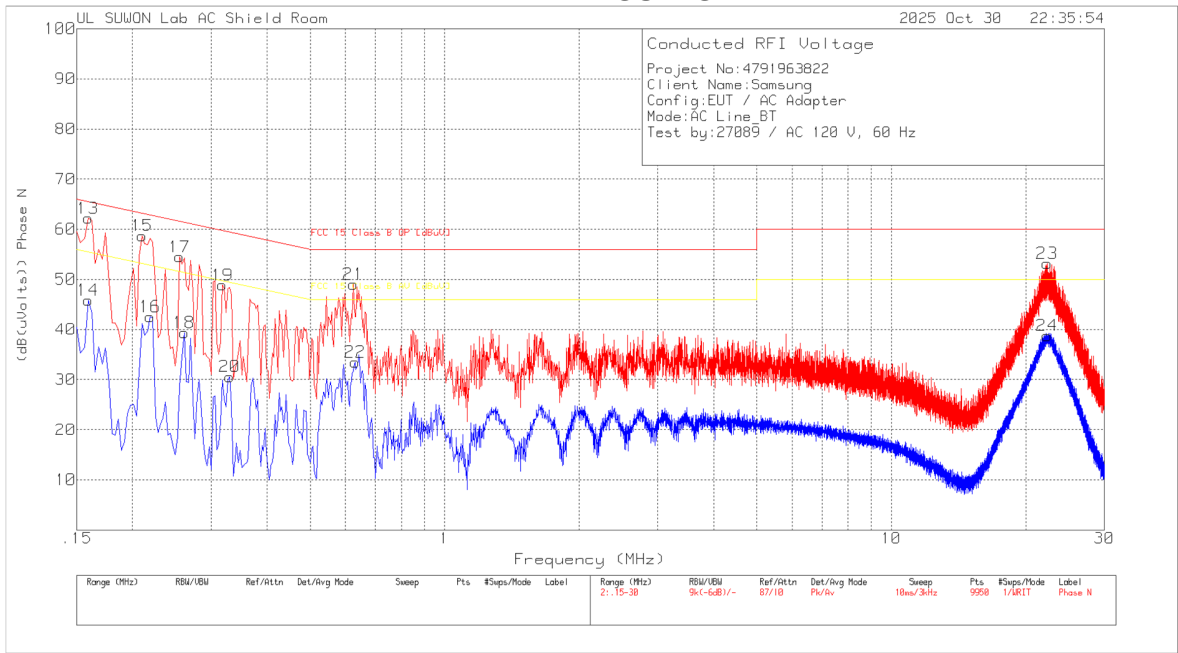
Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1 [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.16425	48.1	Qp	9.9	.1	58.1	65.25	-7.15	-	-
.17025	39.86	Qp	10	.1	49.96	64.95	-14.99	-	-
.21015	46.06	Qp	9.8	.1	55.96	63.2	-7.24	-	-
.21225	45.69	Qp	9.8	.1	55.59	63.12	-7.53	-	-
.26475	41.42	Qp	9.6	.1	51.12	61.28	-10.16	-	-
.63015	35.26	Qp	9.8	.1	45.16	56	-10.84	-	-

Qp - Quasi-Peak detector

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 (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
13	.159	52.31	Pk	9.8	.1	62.21	65.52	-3.31	-	-
14	.159	35.97	Av	9.8	.1	45.87	-	-	55.52	-9.65
15	.21	48.82	Pk	9.8	.1	58.72	63.21	-4.49	-	-
16	.219	32.66	Av	9.8	.1	42.56	-	-	52.86	-10.3
17	.255	44.79	Pk	9.6	.1	54.49	61.59	-7.1	-	-
18	.261	29.67	Av	9.6	.1	39.37	-	-	51.4	-12.03
19	.318	39.05	Pk	9.7	.1	48.85	59.76	-10.91	-	-
20	.33	20.8	Av	9.7	.1	30.6	-	-	49.45	-18.85
21	.624	39.15	Pk	9.8	.1	49.05	56	-6.95	-	-
22	.63	23.61	Av	9.8	.1	33.51	-	-	46	-12.49
23	22.326	42.48	Pk	10.4	.3	53.18	60	-6.82	-	-
24	22.329	28.09	Av	10.4	.3	38.79	-	-	50	-11.21

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.15825	49.78	Qp	9.8	.1	59.68	65.56	-5.88	-	-
.21075	45.62	Qp	9.8	.1	55.52	63.18	-7.66	-	-
.25575	39.89	Qp	9.6	.1	49.59	61.57	-11.98	-	-
.62415	33.08	Qp	9.8	.1	42.98	56	-13.02	-	-
22.3253	35.11	Qp	10.4	.3	45.81	60	-14.19	-	-

Qp - Quasi-Peak detector

END OF TEST REPORT