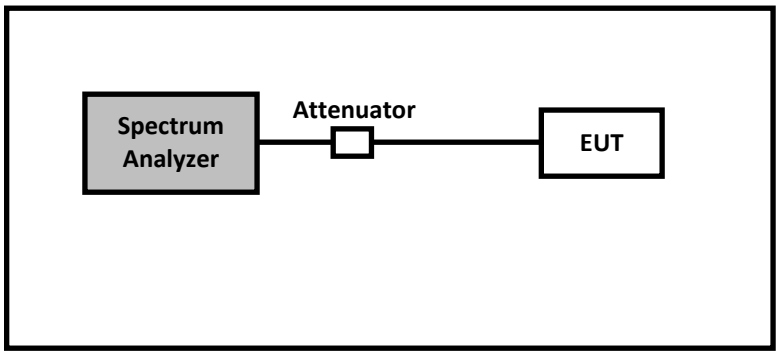
6.2 Test Procedure

Please refer to KDB 971168 D01 v03r01 Section 6 and ETSI EN 300 422-1 V2.2.1 (2021-11) Section 5.4.4.

6.3 Test Setup Block Diagram



6.4 Test Equipment List and Details

BACL No.	Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Interval
912	Rohde & Schwarz	Signal Analyzer	FSV40	1321.3008k39 -101203-UW	2024-07-25	1 year
-	-	10dB Attenuator	-	-	Each time[1]	Each time[1]
-	-	RF Cable	-	-	Each time[1]	Each time[1]

Note[1]: cable and attenuator included in the test set-up were checked each time before testing.

Statement of Traceability: BACL Corp. *attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with the latest version of A2LA policy P102 "A2LA Policy on Metrological Traceability".*

6.5 Test Environmental Conditions

Temperature:	17 to 19 ºC
Relative Humidity:	47.2 to 51.7 %
ATM Pressure:	101.2 to 101.7 kPa

The testing was performed by Arturo Reyes from 2024-12-04 to 2024-12-20 at RF test site.

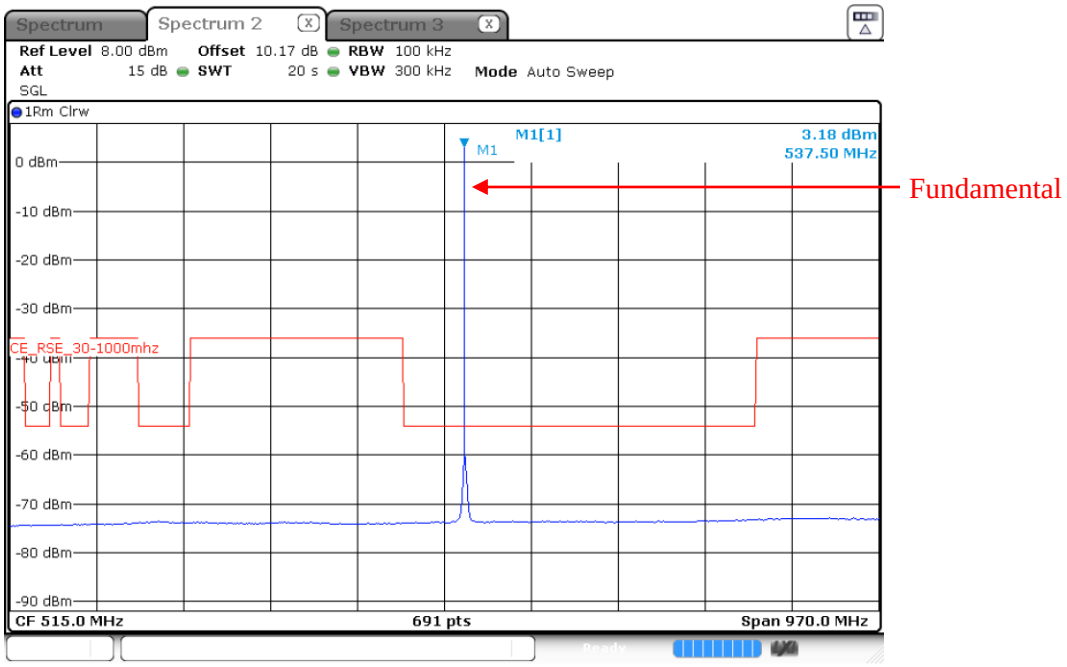
6.6 Test Results

Test Result: Pass

Please refer to Section 6.7 for detailed Spurious Emissions at Antenna Port plots.

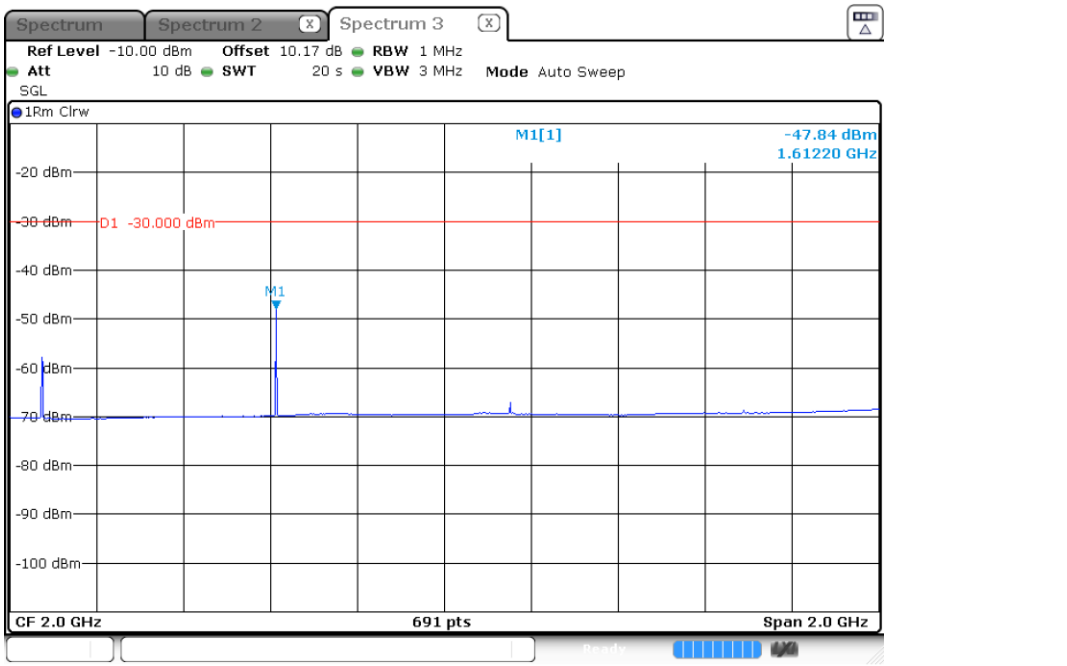
6.7 Spurious Emissions at Antenna Port Test Plots

D2 mode: 537.600 MHz, 30-1000 MHz



Date: 13.DEC.2024 22:16:01

D2 mode: 537.600 MHz, Above 1 GHz

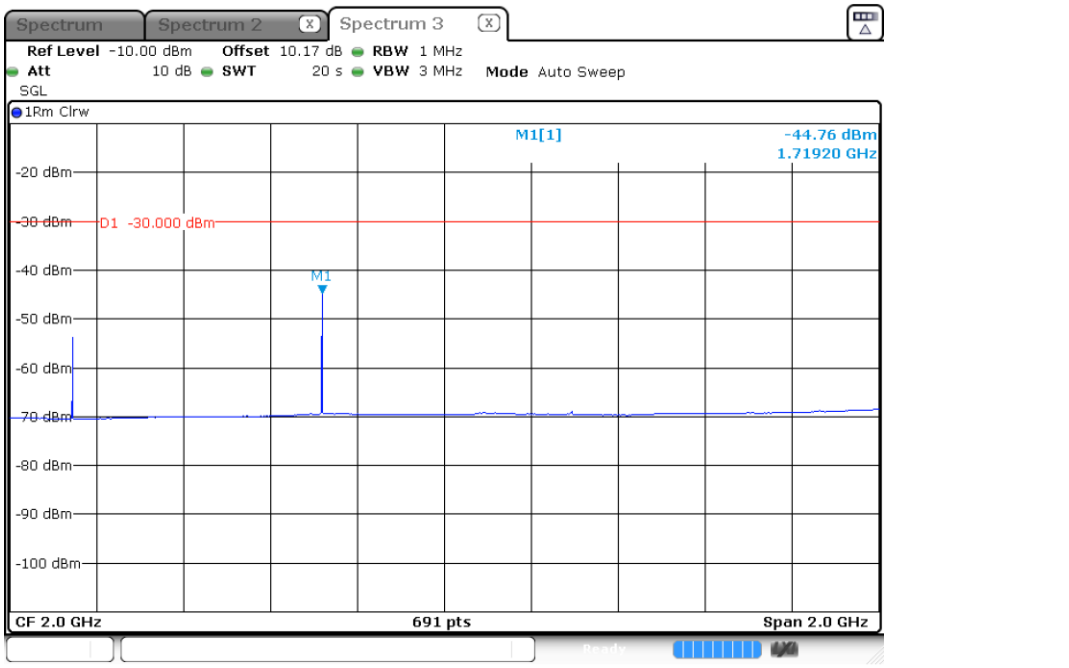


Date: 13.DEC.2024 22:16:41

D2 mode: 572.775 MHz, 30-1000 MHz

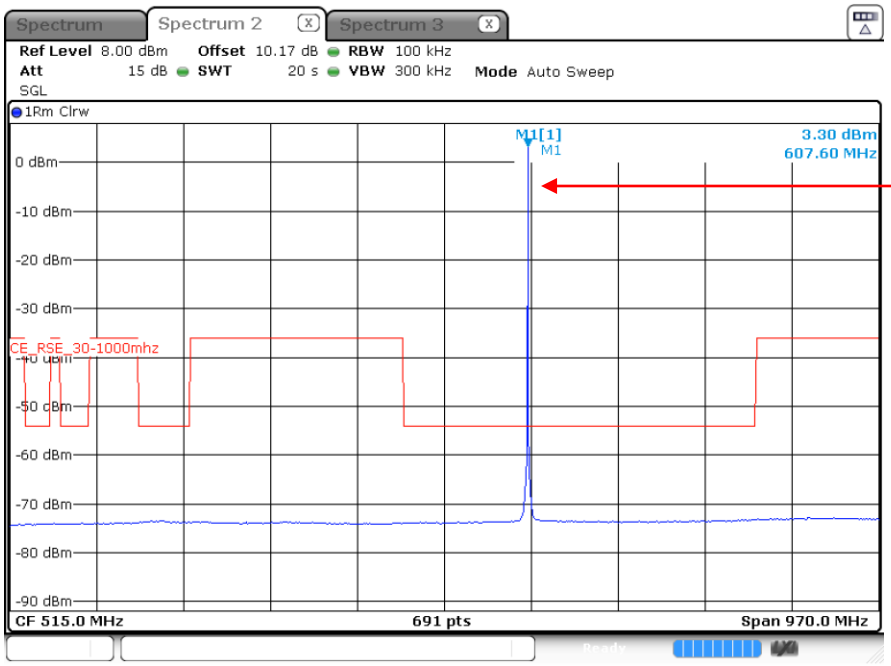
Date: 13.DEC.2024 22:19:48

D2 mode: 572.775 MHz, Above 1 GHz



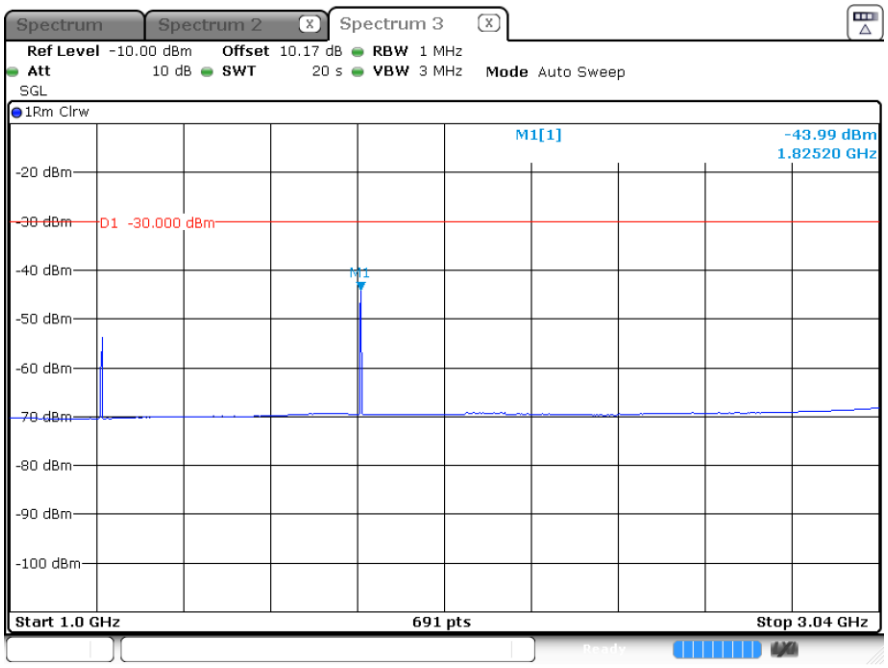
Date: 13.DEC.2024 22:20:56

D2 mode: 607.950 MHz, 30-1000 MHz



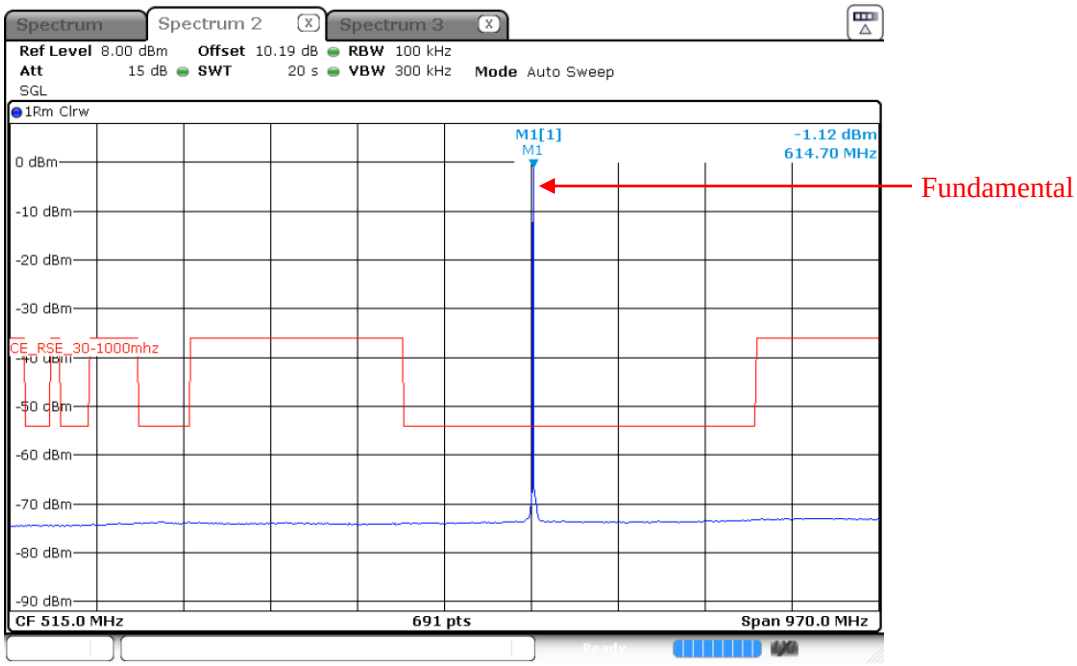
Date: 13.DEC.2024 22:25:34

D2 mode: 607.950 MHz, Above 1 GHz



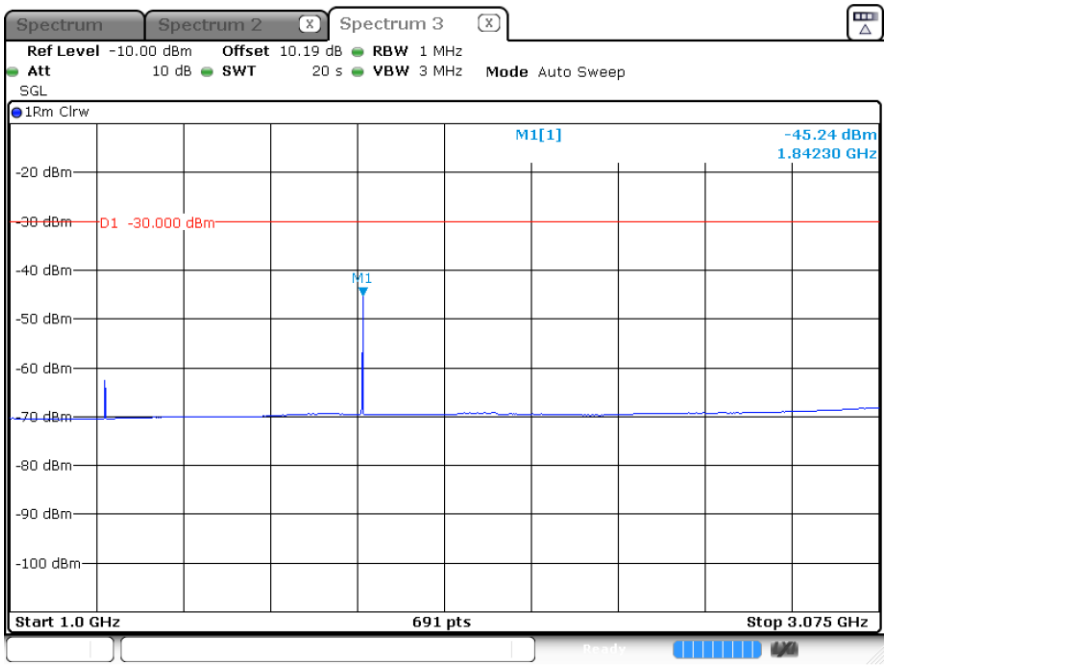
Date: 13.DEC.2024 22:24:41

D2 mode: 614.050 MHz, 30-1000 MHz



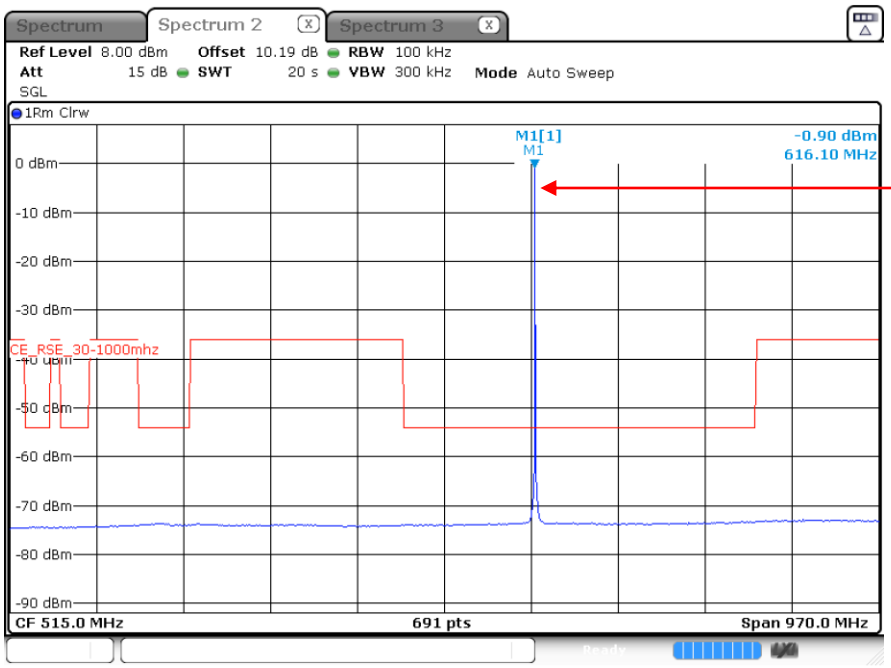
Date: 13.DEC.2024 22:37:05

D2 mode: 614.050 MHz, Above 1 GHz



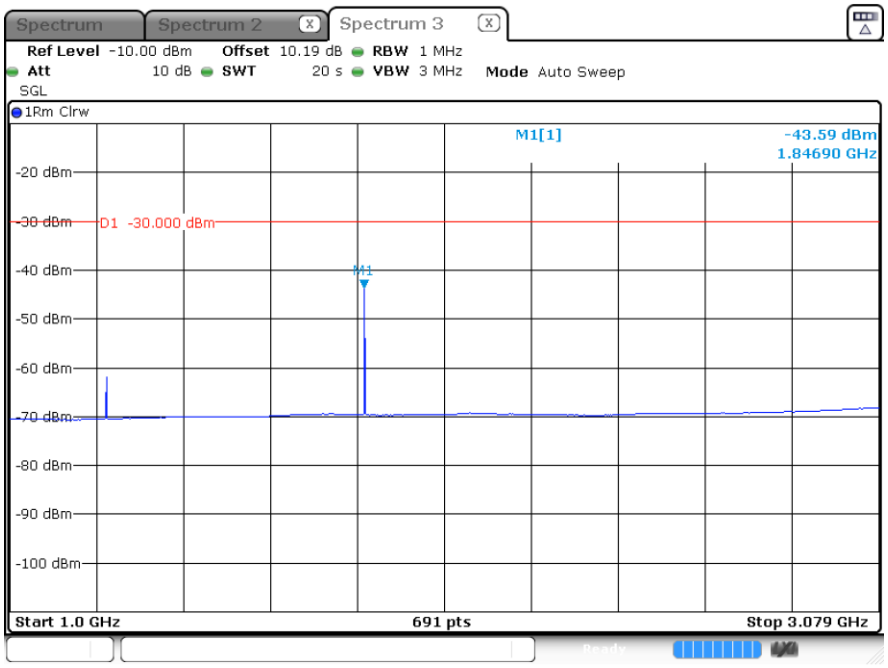
Date: 13.DEC.2024 22:31:46

D2 mode: 615.950 MHz, 30-1000 MHz



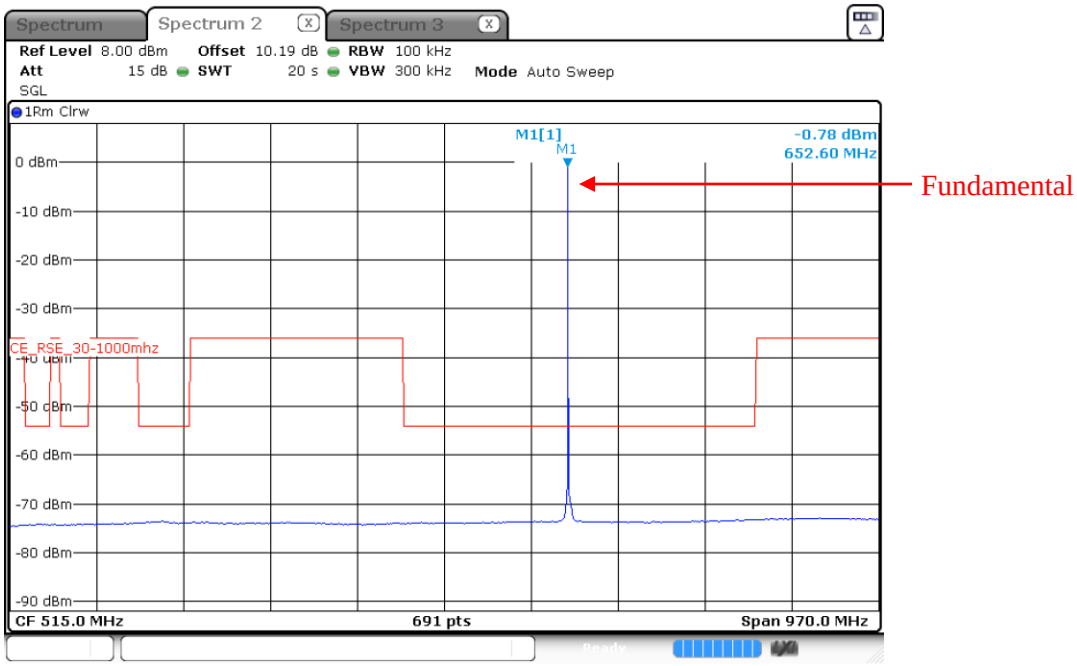
Date: 20.DEC.2024 21:10:37

D2 mode: 615.950 MHz, Above 1 GHz



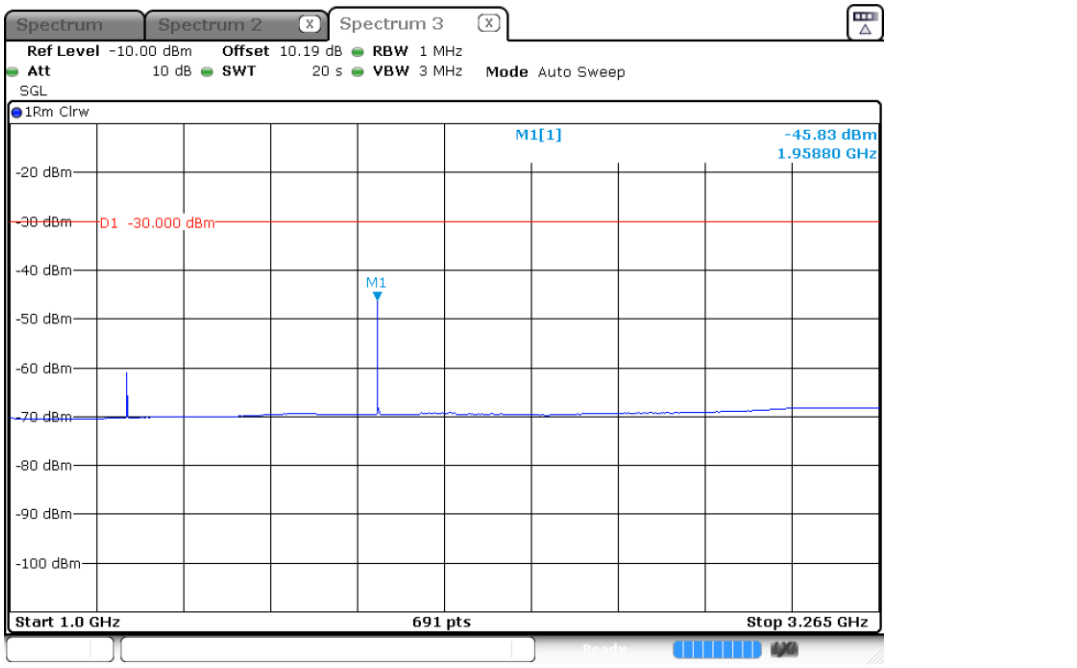
Date: 20.DEC.2024 21:11:48

D2 mode: 653.050 MHz, 30-1000 MHz



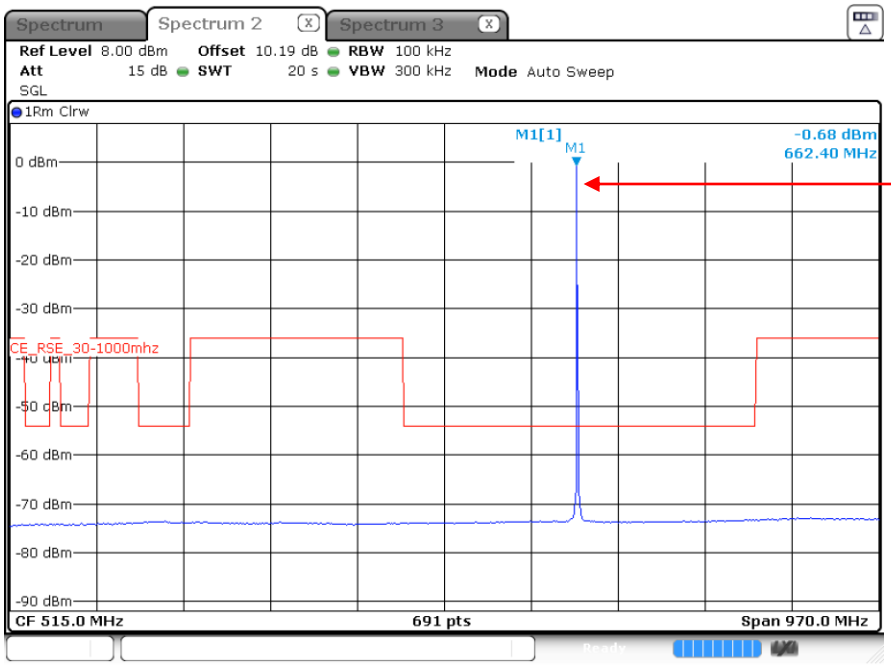
Date: 13.DEC.2024 22:49:12

D2 mode: 653.050 MHz, Above 1 GHz



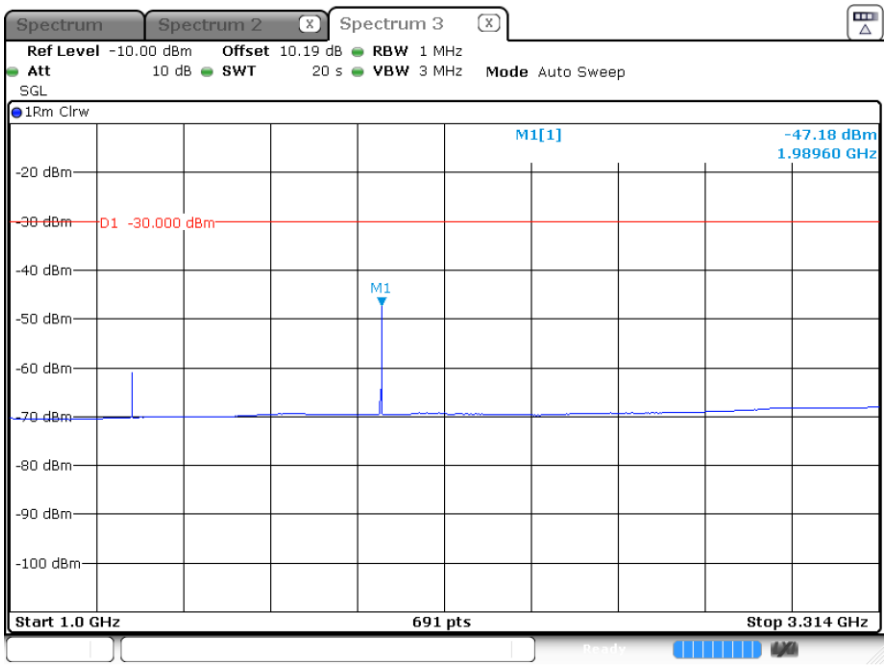
Date: 13.DEC.2024 22:46:31

D2 mode: 662.950 MHz, 30-1000 MHz



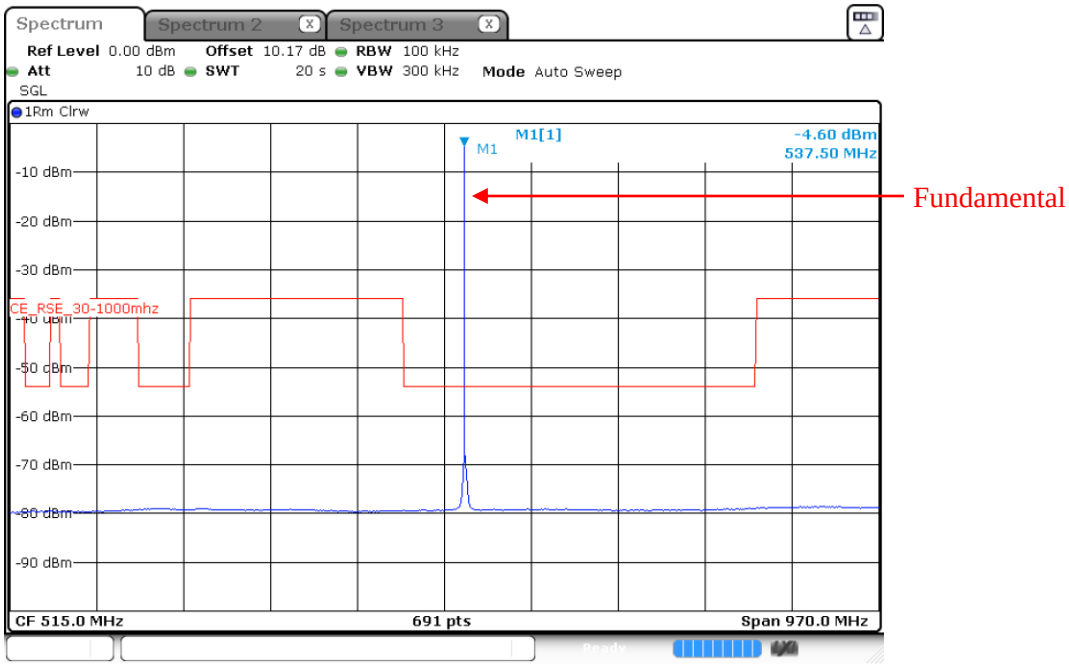
Date: 13.DEC.2024 22:54:11

D2 mode: 662.950 MHz, Above 1 GHz



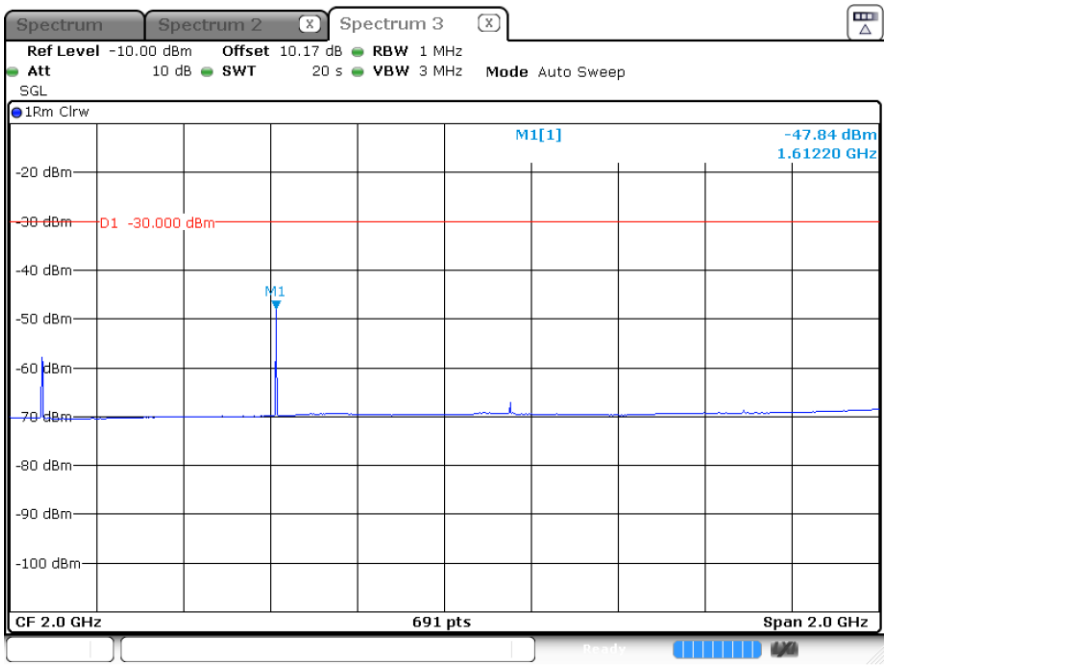
Date: 13.DEC.2024 22:55:41

HDM mode: 537.600 MHz, 30-1000 MHz



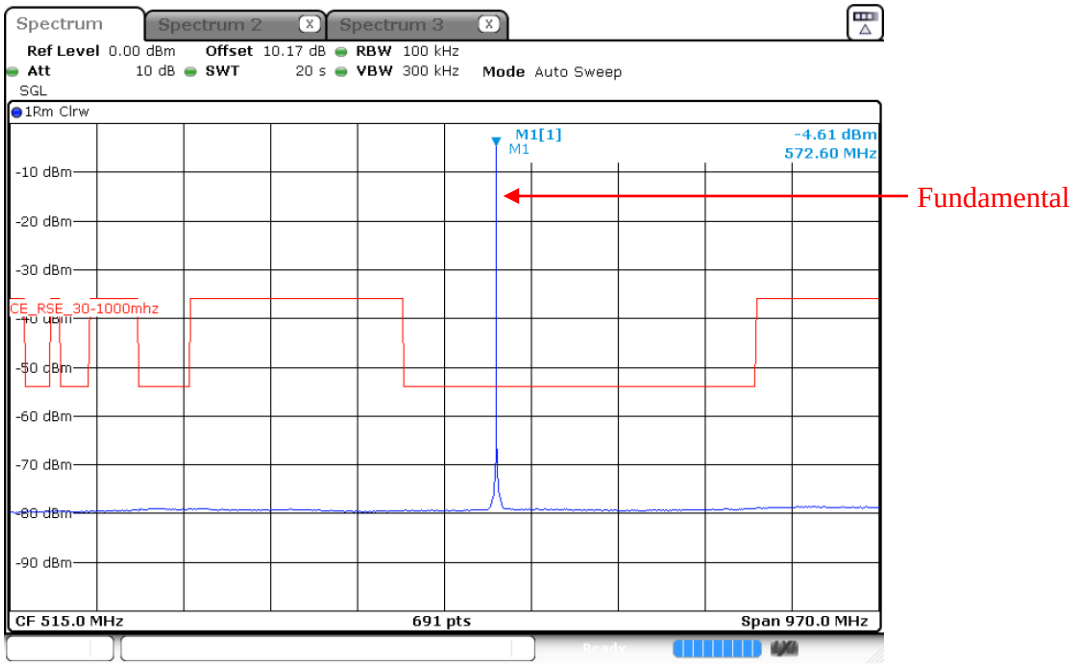
Date: 13.DEC.2024 22:17:38

HDM mode: 537.600 MHz, Above 1 GHz



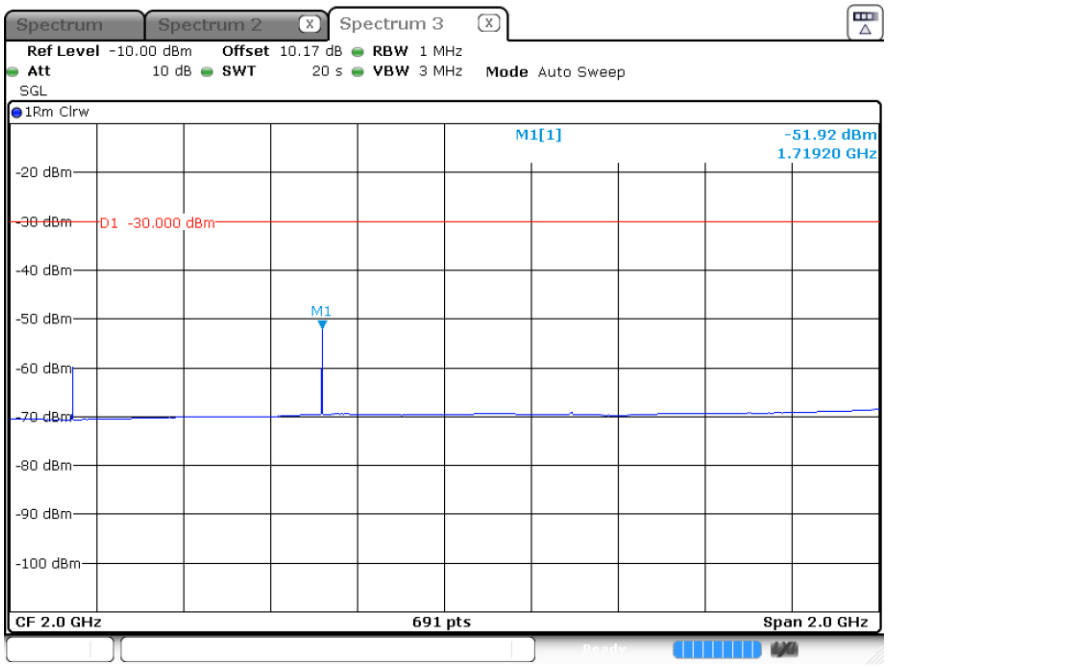
Date: 13.DEC.2024 22:16:57

HDM mode: 572.775 MHz, 30-1000 MHz



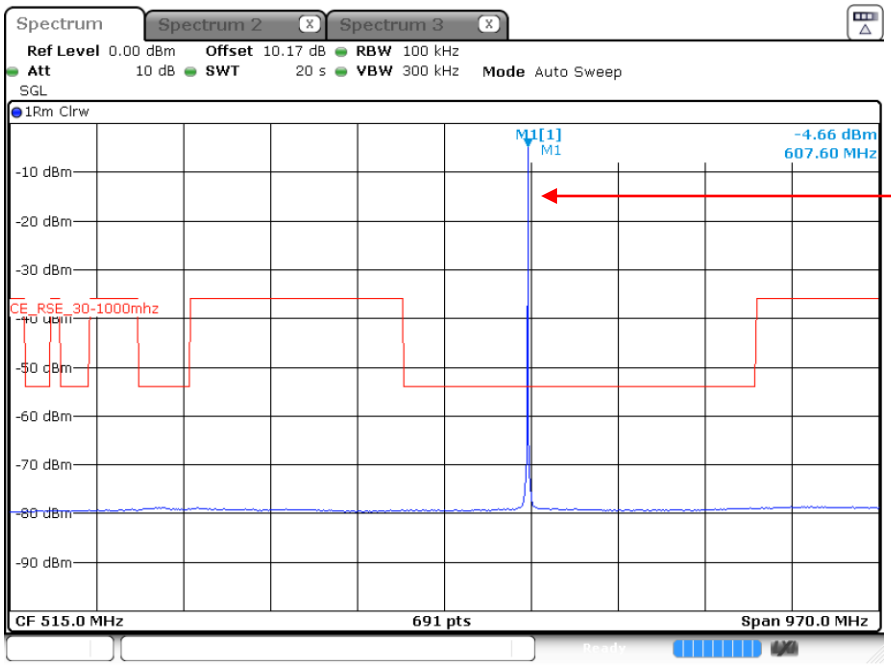
Date: 13.DEC.2024 22:19:16

HDM mode: 572.775 MHz, Above 1 GHz



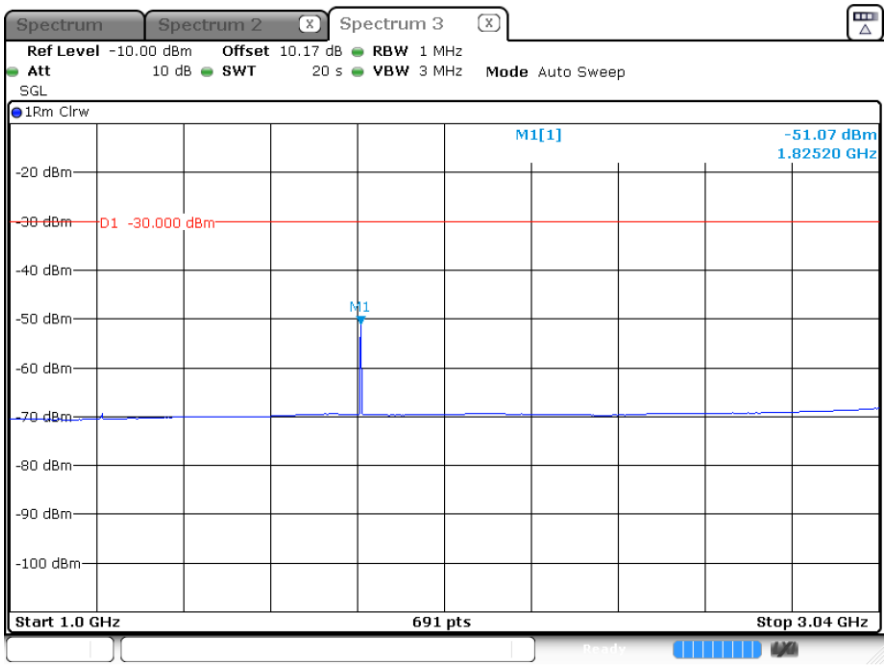
Date: 13.DEC.2024 22:21:28

HDM mode: 607.950 MHz, 30-1000 MHz



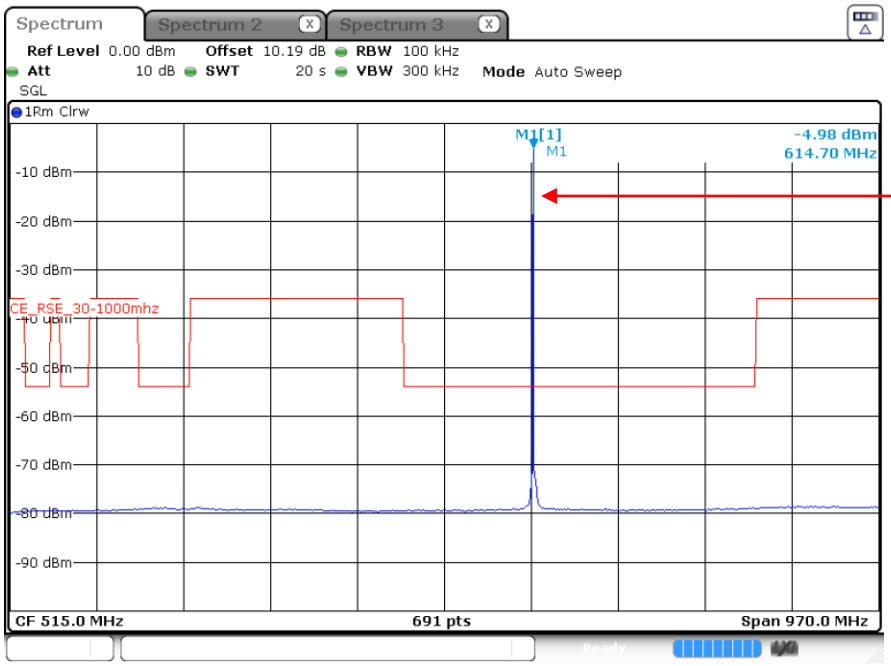
Date: 13.DEC.2024 22:26:21

HDM mode: 607.950 MHz, Above 1 GHz



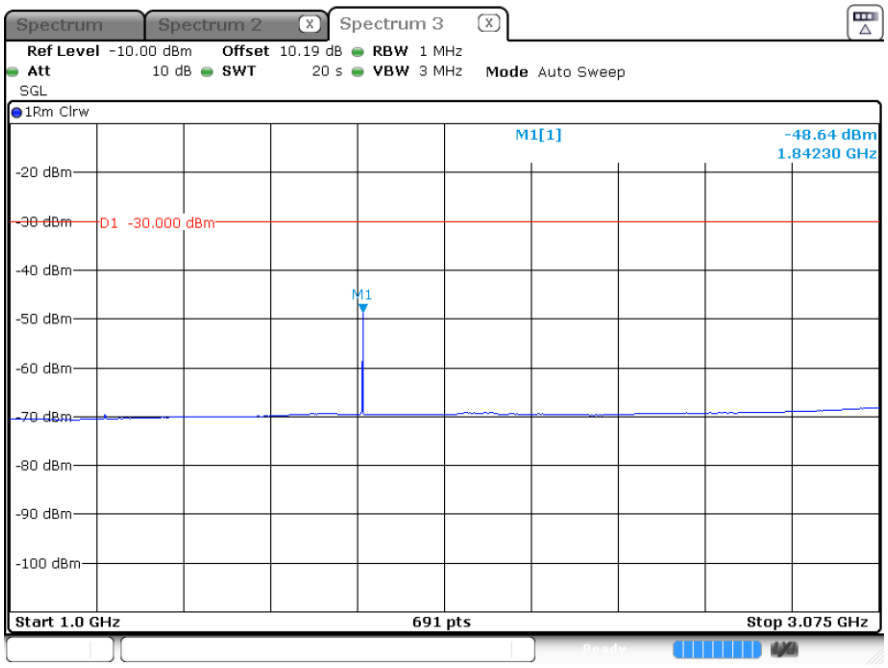
Date: 13.DEC.2024 22:23:45

HDM mode: 614.050 MHz, 30-1000 MHz



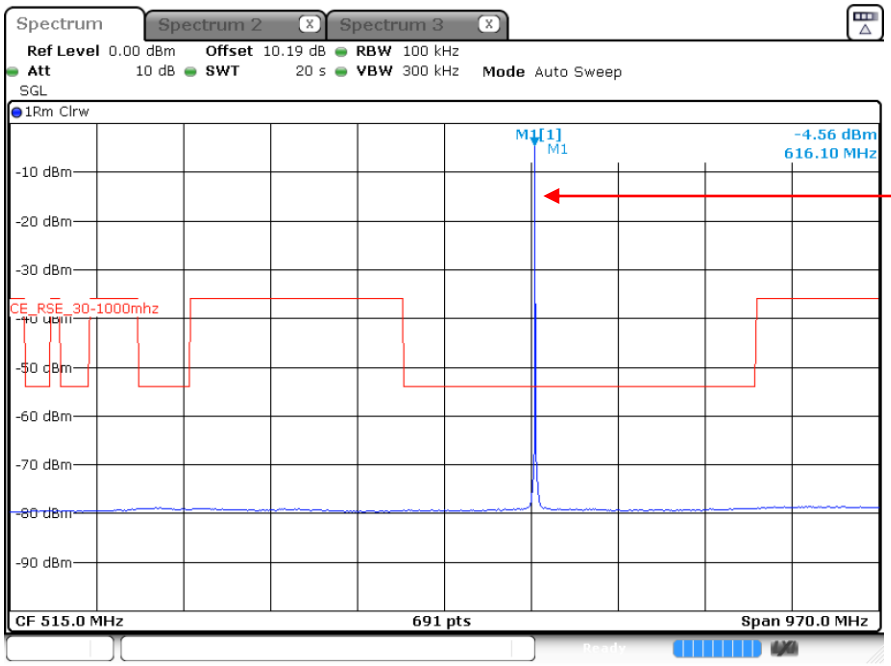
Date: 13.DEC.2024 22:33:37

HDM mode: 614.050 MHz, Above 1 GHz



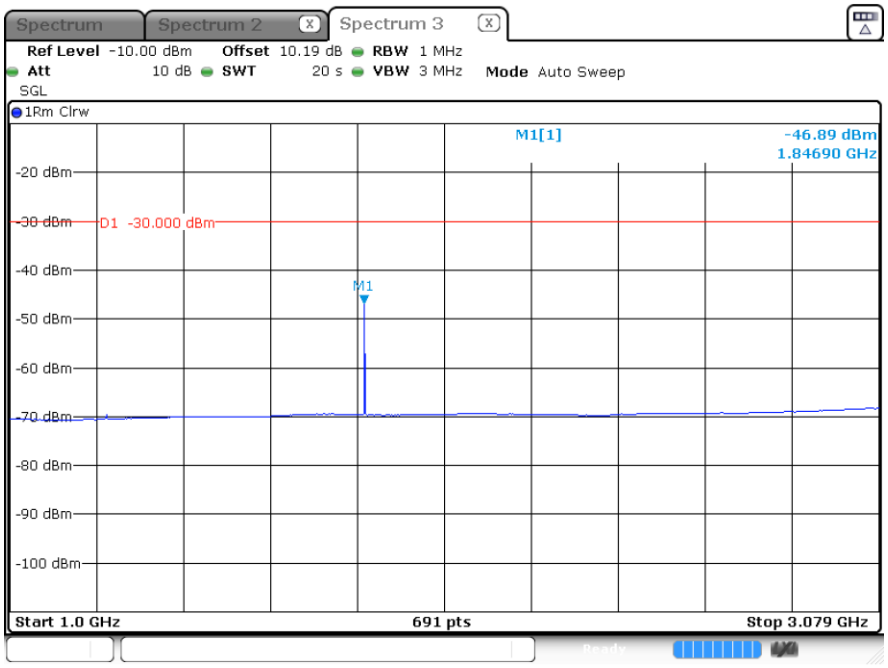
Date: 13.DEC.2024 22:32:31

HDM mode: 615.950 MHz, 30-1000 MHz



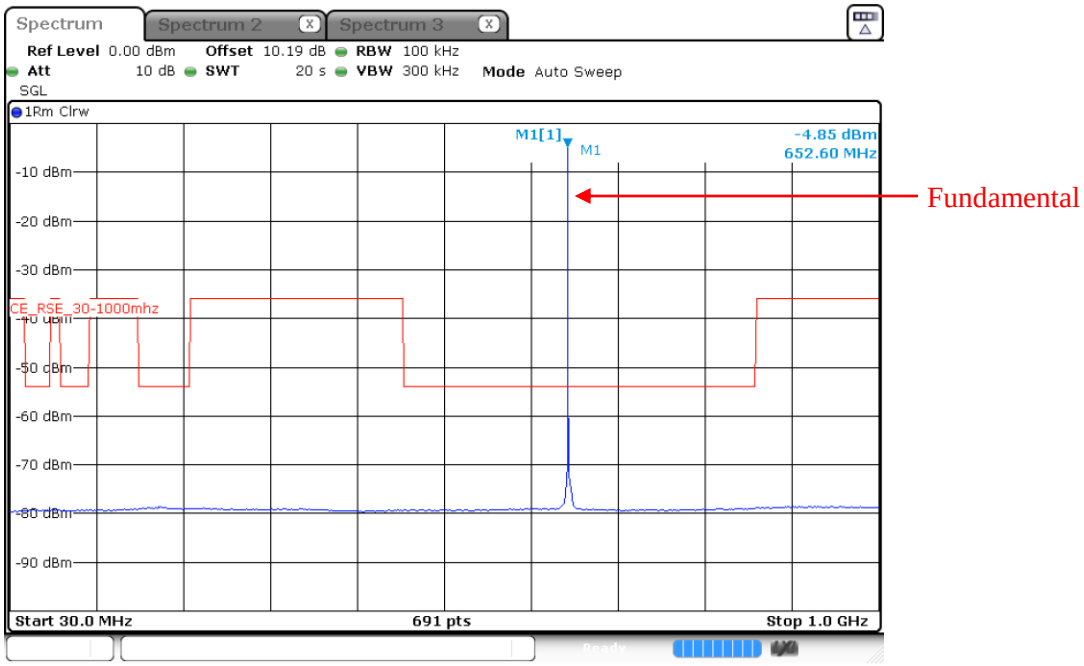
Date: 20.DEC.2024 21:09:33

HDM mode: 615.950 MHz, Above 1 GHz



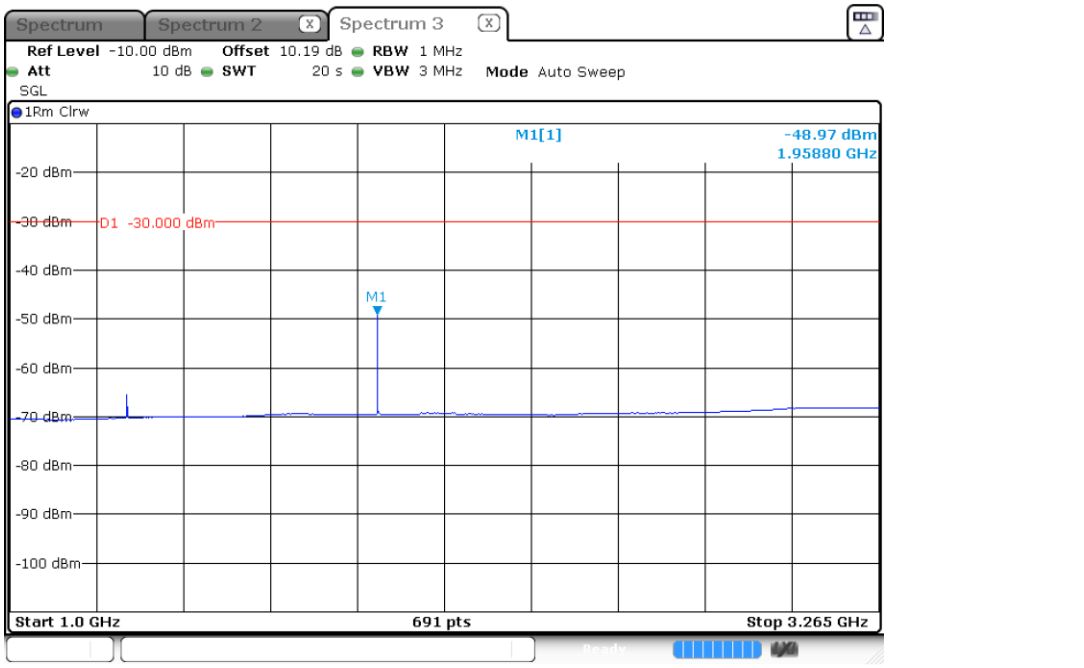
Date: 20.DEC.2024 21:08:45

HDM mode: 653.050 MHz, 30-1000 MHz



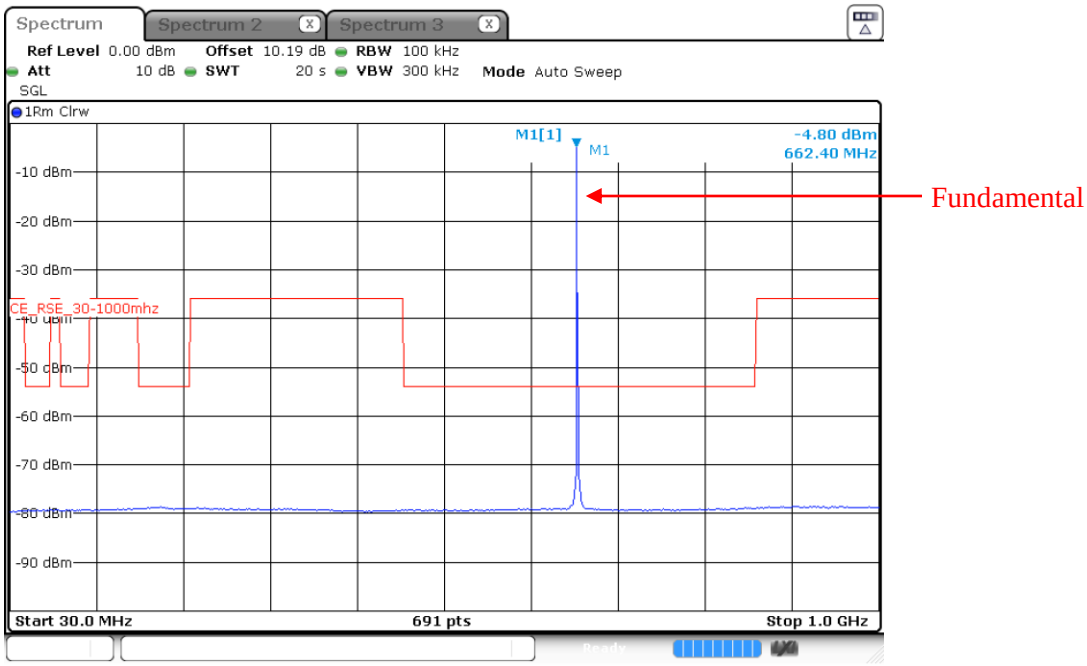
Date: 13.DEC.2024 22:48:31

HDM mode: 653.050 MHz, Above 1 GHz



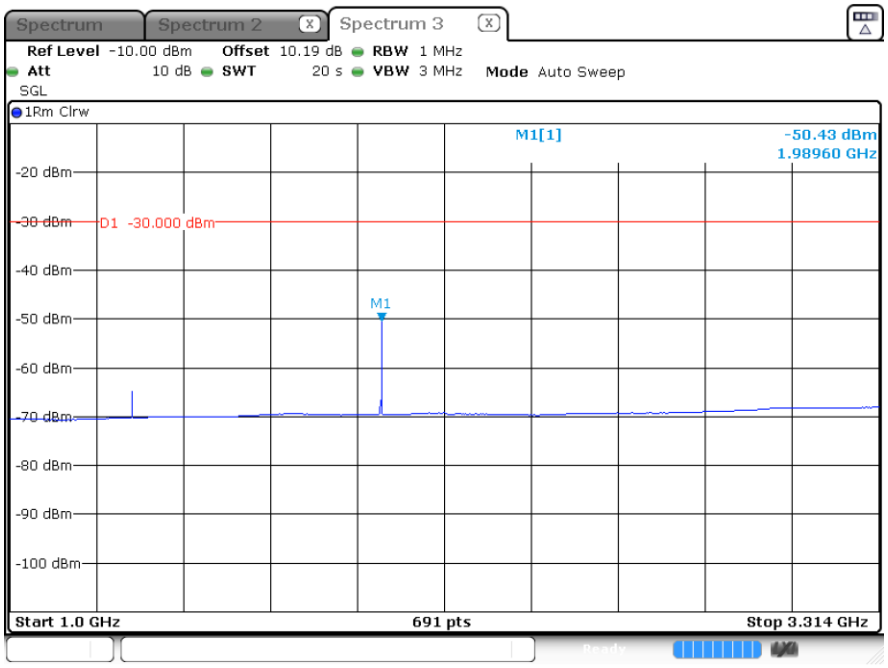
Date: 13.DEC.2024 22:47:16

HDM mode: 662.950 MHz, 30-1000 MHz



Date: 13.DEC.2024 22:53:37

HDM mode: 662.950 MHz, Above 1 GHz



Date: 13.DEC.2024 22:56:25

7. FCC §15.205, FCC §15.209, FCC §15.236 (g)(4), RSS-210 Section G.5 & ETSI EN 300 422-1 (4.2.4.1.2) – Field Strength of Spurious Radiation

7.1 Applicable Standards

As Per FCC §15.205 (a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110 0.495 – 0.505 2.1735 – 2.1905 4.125 – 4.128 4.17725 – 4.17775 4.20725 – 4.20775 6.215 – 6.218 6.26775 – 6.26825 6.31175 – 6.31225 8.291 – 8.294 8.362 – 8.366 8.37625 – 8.38675 8.41425 – 8.41475 12.29 – 12.293 12.51975 – 12.52025 12.57675 – 12.57725 13.36 – 13.41	16.42 – 16.423 16.69475 – 16.69525 25.5 – 25.67 37.5 – 38.25 73 – 74.6 74.8 – 75.2 108 – 121.94 123 – 138 149.9 – 150.05 156.52475 – 156.52525 156.7 – 156.9 162.0125 –167.17 167.72 – 173.2 240 – 285 322 – 335.4 399.9 – 410 608 – 614	960 – 1240 1300 – 1427 1435 – 1626.5 1645.5 – 1646.5 1660 – 1710 1718.8 – 1722.2 2200 – 2300 2310 – 2390 2483.5 – 2500 2690 – 2900 3260 – 3267 3.332 – 3.339 3 3458 – 3 358 3.600 – 4.400	4. 5 – 5. 15 5. 35 – 5. 46 7.25 – 7.75 8.025 – 8.5 9.0 – 9.2 9.3 – 9.5 10.6 – 12.7 13.25 – 13.4 14.47 – 14.5 15.35 – 16.2 17.7 – 21.4 22.01 – 23.12 23.6 – 24.0 31.2 – 31.8 36.43 – 36.5 Above 38.6

As per FCC §15.209 (a): Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
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., Sections 15.231 and 15.241.

According to FCC §15.236 (g)(4):

Emissions outside of the emission masks listed in paragraphs (g)(1) through (g)(3) shall comply with the limits specified in section 4.2.4.1.2 of ETSI EN 300 422-1 V2.2.1 (2021-11), (incorporated by reference, see § 15.38).

According to RSS-210 Section G.5:

The transmitter unwanted emissions shall meet and be measured according to the requirements in sections 4.2.4.1.2 and 4.2.4.2.2 of ETSI EN 300 422-1.

According to ETSI EN 300 422-1 V2.2.1 (2021-11) Section 4.2.4.1.2:

The level of transmitter unwanted emissions in the spurious domain shall not exceed the limits given in table 4.

Table 4: Transmitter unwanted emission limits (from ERC Recommendation 74-01 [2])

Frequency range	Maximum power	RBW
9 kHz - 150 kHz	-36 dBm	1 kHz
150 kHz - 30 MHz	-36 dBm	10 kHz
30 MHz - 1 GHz	-36 dBm	$F_c + 2,5\ B \le f \le f_c + 4\ B$: 1 kHz $F_c + 4\ B < f \le f_c + 10\ B$: 10 kHz $f > f_c + 10\ B$: 100 kHz $f < f_c - 10\ B$: 100 kHz $f_c - 10\ B \le f < f_c - 4\ B$: 10 kHz $f_c - 4\ B \le f \le f_c - 2,5\ B$: 1 kHz
except:		
47 MHz - 74 MHz 87,5 MHz - 118 MHz	-54 dBm	100 kHz
174 MHz - 230 MHz 470 MHz - 862 MHz	-54 dBm	$F_c + 2,5\ B \le f \le f_c + 4\ B$: 1 kHz $F_c + 4\ B < f \le f_c + 10\ B$: 10 kHz $f > f_c + 10\ B$: 100 kHz $f < f_c - 10\ B$: 100 kHz $f_c - 10\ B \le f < f_c - 4\ B$: 10 kHz $f_c - 4\ B \le f \le f_c - 2,5\ B$: 1 kHz
1 GHz < $f \le F_{upper}$	-30 dBm	$F_c + 2,5\ B \le f \le f_c + 10\ B$: 30 kHz $F_c + 10\ B < f \le f_c + 12\ B$: 300 kHz $f > f_c + 12\ B$: 1 MHz $f < f_c - 12\ B$: 1 MHz $f_c - 12\ B \le f < f_c - 10\ B$: 300 kHz $f_c - 10\ B \le f \le f_c - 2,5\ B$: 30 kHz

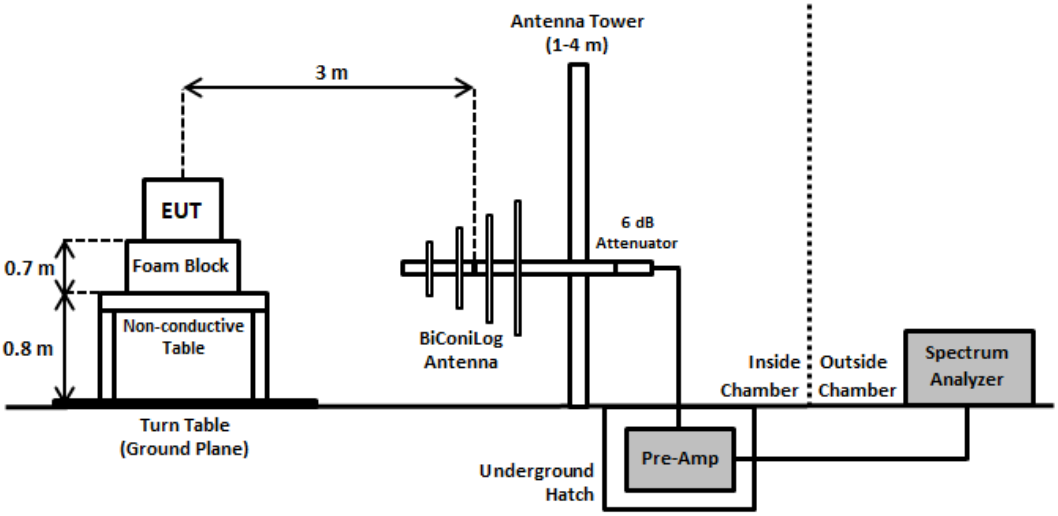
with B being the Declared Channel Bandwidth.

7.2 Test Procedure

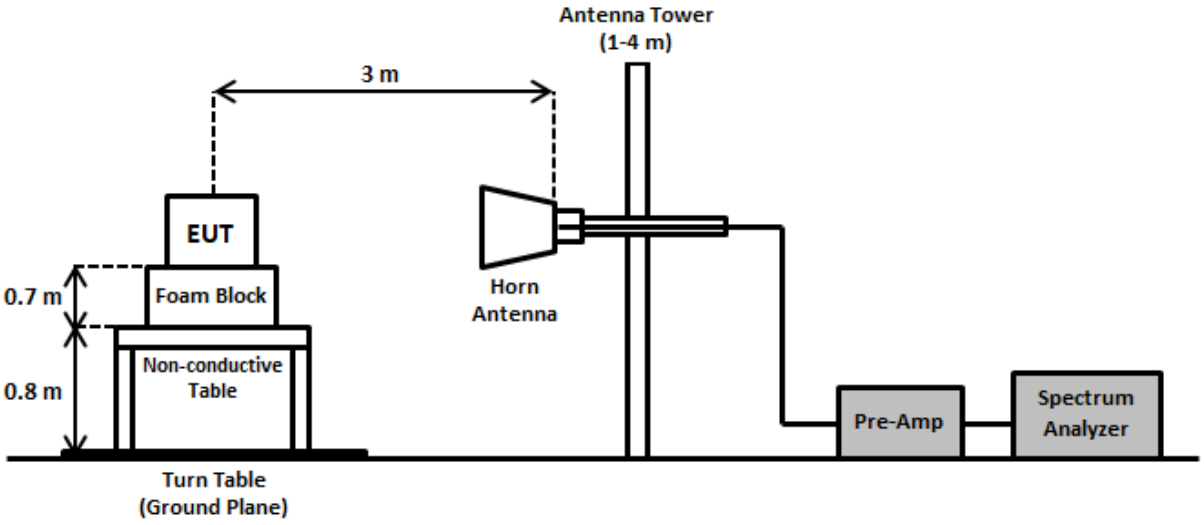
Please refer to KDB 971168 D01 v03r01 Section 7 and ETSI EN 300 422-1 V2.2.1 (2021-11) Section 5.4.4.

7.3 Test Setup Diagram (Substitution)

Below 1 GHz

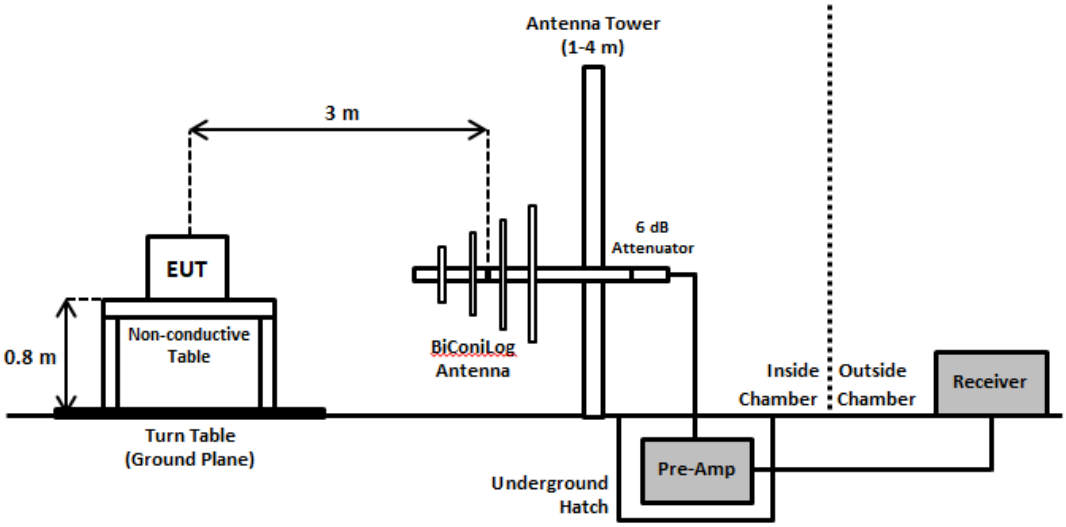


Above 1 GHz

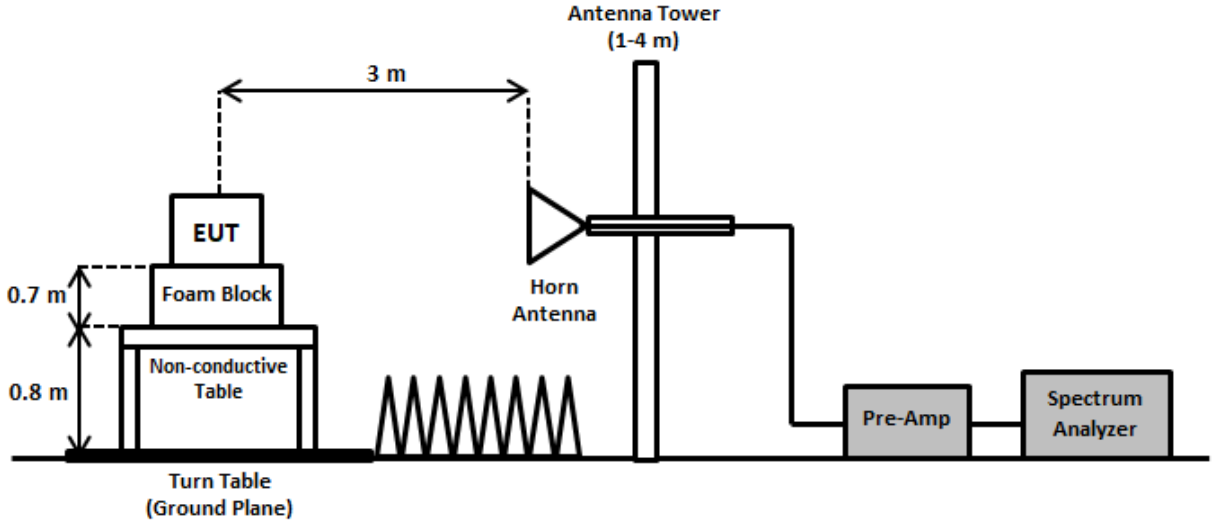


7.4 Test Setup Diagram (Vasona)

Below 1 GHz



Above 1 GHz



7.5 Test Equipment List and Details

BACL No.	Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Interval
1432	Keysight Technologies	MXE EMI Receiver, Multi-touch	N9038B	MY60180008	2024-01-15	1 year
316	Sonoma Instruments	Preamplifier 10 kHz - 2.5 GHz	317	260406	2024-08-30	6 months
321	Sunol Sciences	Biconilog Antenna	JB3	A020106-2; 1504	2023-12-18	2 years
1245	-	Attenuator	PE7390-6	01182018A	2023-12-18	2 years
1248	Pasternack	RG214 COAX Cable	PE3062	NA	2024-10-01	6 months
1249	Time Microwave	LMR-400 Cable Dc-3 GHz	AE13684	2k80612-5 6fts	2024-04-09	1 year
1359	Pasternack	N 600in RF Cable	PE3496LF-600	NA	2024-07-26	6 months
1246	HEWLET PACKARD	RF Limiter	11867A	01734	2024-04-09	1 year
568	Com-Power	Dipole Antenna	AD-100	721033DB1, 721033DB2, 721033DB3, 721032DB4	2023-07-11	2 years
1192	ETS Lindgren	Horn Antenna	3117	00218973	2024-10-23	2 years
1449	BACL	Preamplifier	BACL1313-A100M18G	4052472	2024-08-19	6 months
1295	Carlisle Interconnected Technologies	10m Coaxial Cable	UFB142A-1-3937-200200	64639890912-001	2024-10-16	6 months
1397	Mini Circuit	CBL ASSY 2.92MM PLUG TO PLUG 12"	FL086-12KM+	QN2318110-2318	2024-08-16	6 months
473	EMCO	Horn Antenna	3115	9511-4627	2024-11-26	2 years
1130	Agilent	MXG Analog Signal Generator	N5183A	MY50140453	2024-11-07	1 year

Statement of Traceability: BACL Corp. *attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with the latest version of A2LA policy P102 "A2LA Policy on Metrological Traceability".*

7.6 Test Environmental Conditions

Temperature:	17 to 19 ºC
Relative Humidity:	47.2 to 52.6 %
ATM Pressure:	101.2 to 102.2 kPa

The testing was performed by Arturo Reyes from 2024-12-05 to 2024-12-19 in 5m Chamber 3.

7.7 Test Results (Substitution)

Note: The data below are based on worst case mode (D2) when transmitting at maximum output power.

Freq. (MHz)	S.A. Amp. (dBµV)	Table Azimuth (Degrees)	Test Antenna		Substitution				Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Freq. (MHz)	S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
537.600 MHz											
51.787	36.726	360	150	H	51.787	-82.004	0.7	0.83	-82.134	-54	-28.134
50.307	35.628	360	150	V	50.307	-81.712	1.2	0.83	-81.342	-54	-27.342
1052.852	43.35	360	150	H	1052.852	-70.4	5.78	1.35	-65.97	-30	-35.97
1081.664	42.28	360	150	V	1081.664	-71.49	5.78	1.35	-67.06	-30	-37.06
572.775 MHz											
51.159	35.784	360	150	H	51.159	-82.946	0.7	0.83	-83.076	-54	-29.076
51.109	35.27	360	150	V	51.109	-82.07	1.2	0.83	-81.7	-54	-27.7
1052.35	43.53	360	150	H	1052.35	-70.22	5.78	1.35	-65.79	-30	-35.79
1081.096	43.44	360	150	V	1081.096	-70.33	5.78	1.35	-65.9	-30	-35.9
607.950 MHz											
51.568	35.164	360	150	H	51.568	-83.566	0.7	0.83	-83.696	-54	-29.696
51.797	35.597	360	150	V	51.797	-81.743	1.2	0.83	-81.373	-54	-27.373
1070.522	42.91	360	150	H	1070.522	-70.84	5.78	1.35	-66.41	-30	-36.41
1094.373	42.52	360	150	V	1094.373	-71.25	5.78	1.35	-66.82	-30	-36.82
614.050 MHz											
50.593	36.335	360	150	H	50.593	-82.395	0.7	0.83	-82.525	-54	-28.525
50.915	38.421	360	150	V	50.915	-78.919	1.2	0.83	-78.549	-54	-24.549
1068.837	42.84	360	150	H	1068.837	-70.91	5.78	1.35	-66.48	-30	-36.48
1094.778	42.8	360	150	V	1094.778	-70.97	5.78	1.35	-66.54	-30	-36.54
615.950 MHz											
51.876	36.021	360	150	H	51.876	-82.709	0.7	0.83	-82.839	-54	-28.839
50.729	36.824	360	150	V	50.729	-80.516	1.2	0.83	-80.146	-54	-26.146
1050.91	43.17	360	150	H	1050.91	-70.58	5.78	1.35	-66.15	-30	-36.15
1051.539	42.64	360	150	V	1051.539	-71.13	5.78	1.35	-66.7	-30	-36.7
653.050 MHz											
50.711	37.194	360	150	H	50.711	-81.536	0.7	0.83	-81.666	-54	-27.666
50.977	36.744	360	150	V	50.977	-80.596	1.2	0.83	-80.226	-54	-26.226
1058.233	46.98	360	150	H	1058.233	-66.77	5.78	1.35	-62.34	-30	-32.34
1204.874	41.58	360	150	V	1204.874	-72.19	5.78	1.35	-67.76	-30	-37.76

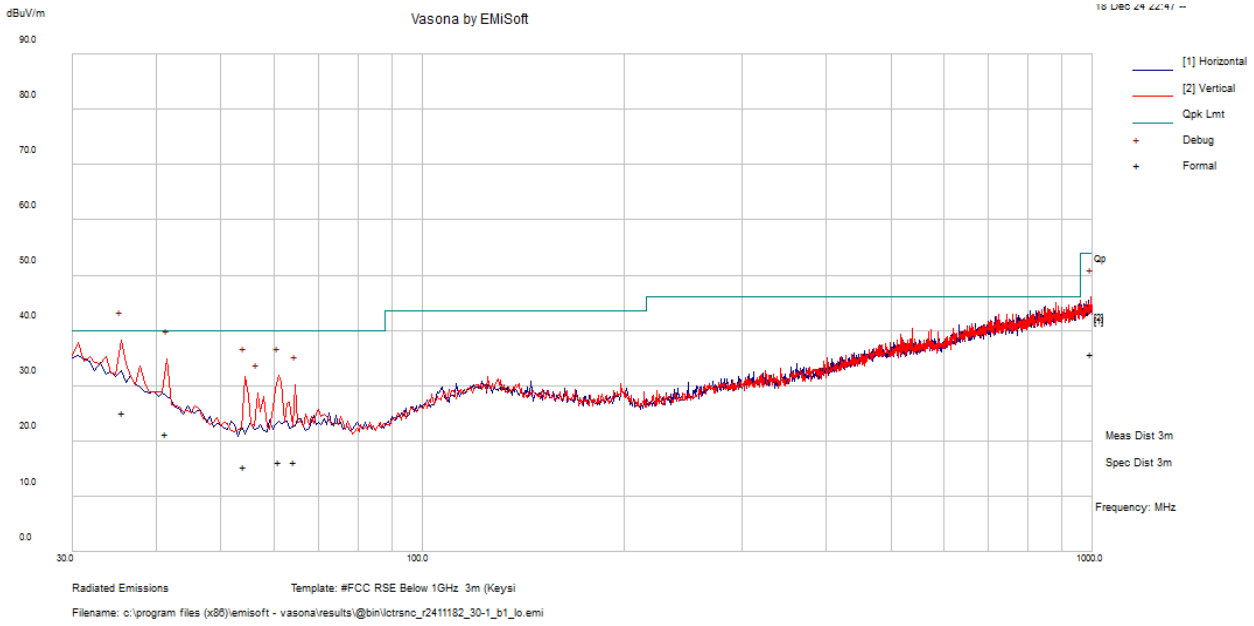
662.950 MHz											
51.82	37.894	360	150	H	51.82	-80.836	0.7	0.83	-80.966	-54	-26.966
51.55	37.004	360	150	V	51.55	-80.336	1.2	0.83	-79.966	-54	-25.966
1060.445	46.42	360	150	H	1060.445	-67.33	5.78	1.35	-62.9	-30	-32.9
1097.917	44.39	360	150	V	1097.917	-69.38	5.78	1.35	-64.95	-30	-34.95

7.8 Test Results (Vasona)

Note 1: The data below are based on worst case mode (D2) when transmitting at maximum output power.
Note 2: The test data presented below are the radiated cabinet emissions. For Conducted Spurious Emissions at Antenna Port test data, please refer to Section 6.7 of this test report.
Note 3: The EUT is not transmitting at below 30 MHz, thus 9 kHz to 30 MHz was not evaluated for Radiated Spurious Emissions.

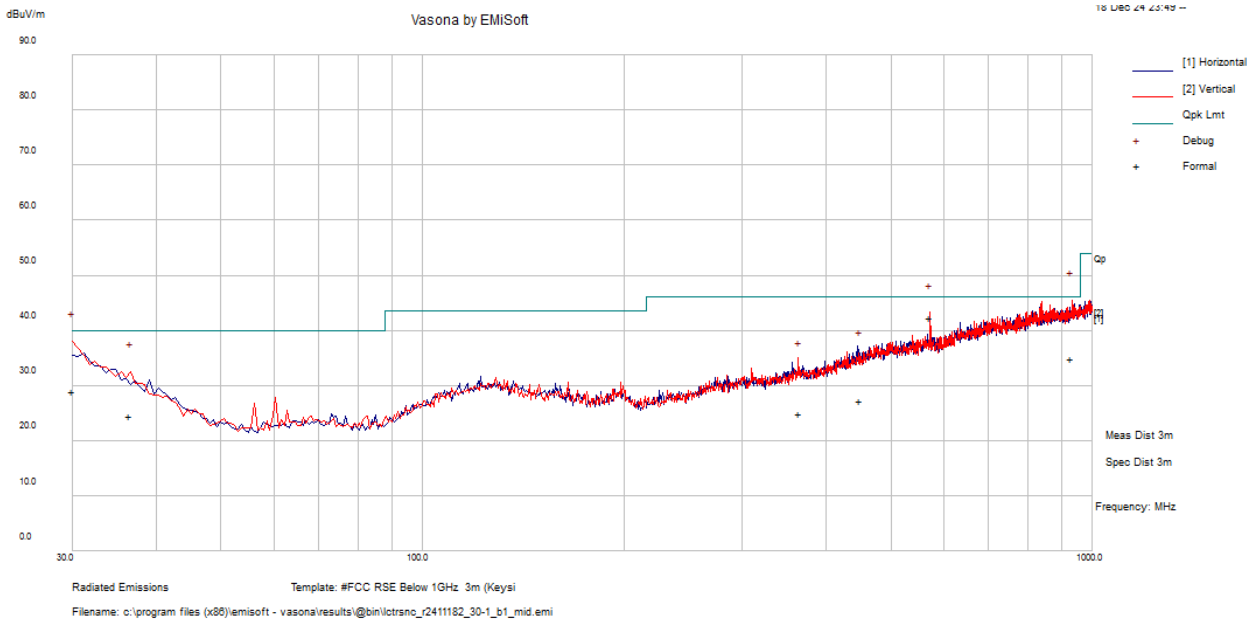
30 MHz – 1 GHz, Measured at 3 meters

537.600 MHz



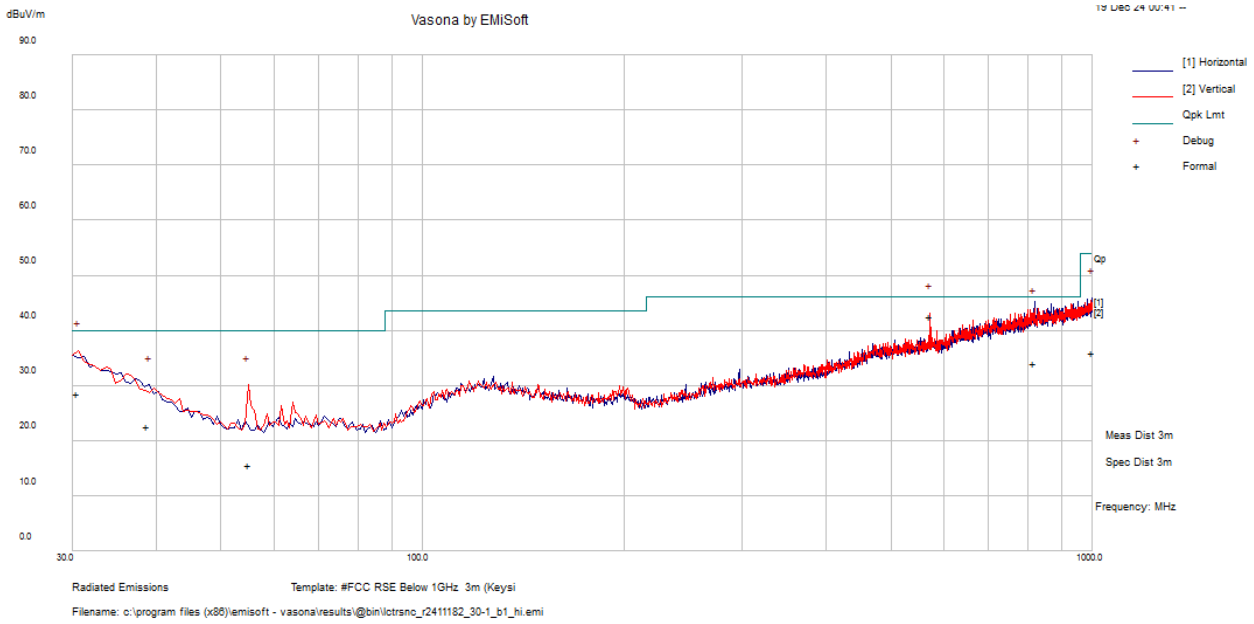
Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
35.644063	29.51	-4.44	25.07	V	260	103	40	-14.93	QP
41.3375	29.63	-8.39	21.24	V	100	320	40	-18.76	QP
994.51969	27.91	7.73	35.64	V	194	306	54	-18.36	QP
61.069063	29.44	-13.34	16.1	V	298	157	40	-23.9	QP
54.175	29.21	-13.8	15.41	V	266	66	40	-24.59	QP
64.34875	29.3	-13.03	16.27	V	244	118	40	-23.73	QP

572.775 MHz



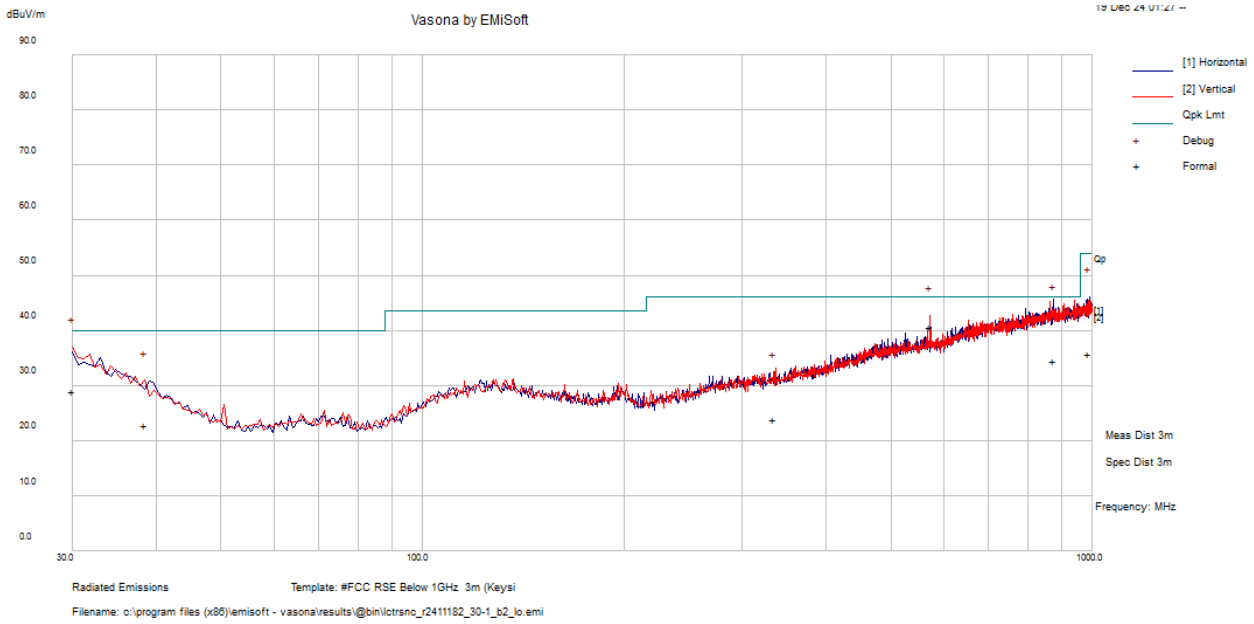
Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
931.51531	28.17	6.63	34.8	V	265	323	46	-11.2	QP
30.0063	29.6	-0.61	28.99	V	110	7	40	-11.01	QP
572.80281	41.04	1.38	42.42	V	181	202	46	-3.58	QP
36.53	29.52	-5.02	24.5	V	110	221	40	-15.5	QP
449.33788	28.49	-1.3	27.19	H	257	161	46	-18.81	QP
364.95244	28.48	-3.61	24.87	H	280	315	46	-21.13	QP

607.950 MHz



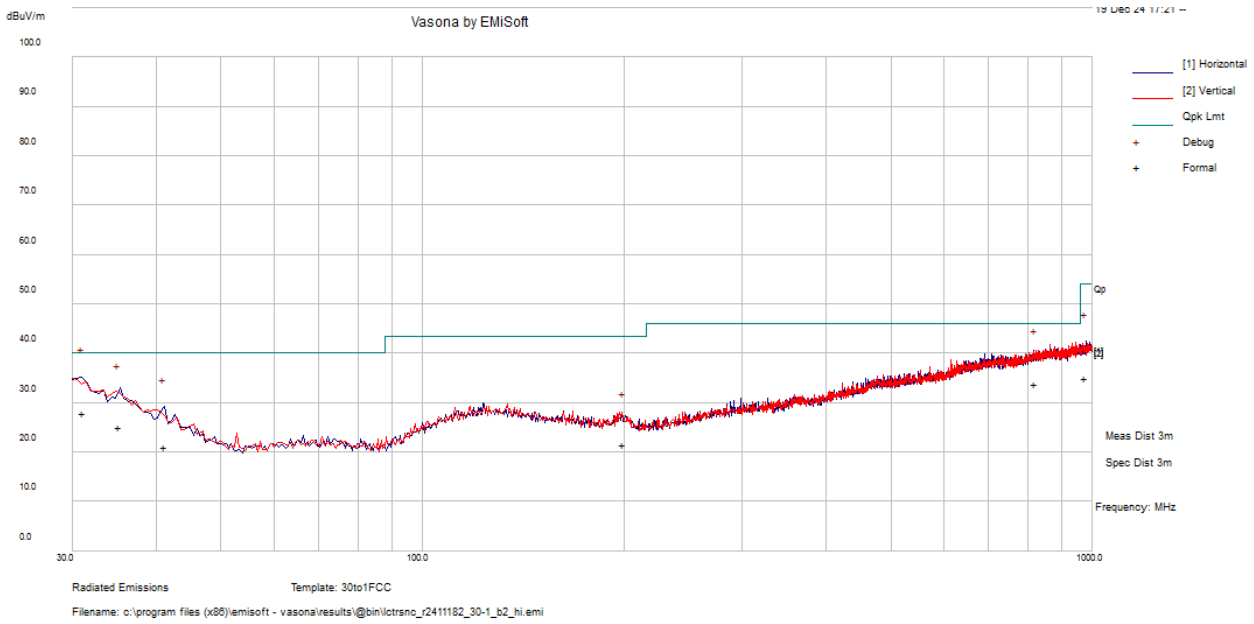
Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
572.8225	41.2	1.38	42.58	V	118	0	46	-3.42	QP
817.39719	28.34	5.66	34	H	272	234	46	-12	QP
30.471875	29.58	-0.97	28.61	V	257	180	40	-11.39	QP
1000	28.02	7.83	35.85	H	301	325	54	-18.15	QP
38.877188	29.15	-6.68	22.47	H	288	32	40	-17.53	QP
55.045625	29.43	-13.81	15.62	V	121	333	40	-24.38	QP

614.050 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
30.017033	29.5	-0.62	28.88	V	259	232	40	-11.12	QP
875.25138	28.21	6.22	34.43	H	155	30	46	-11.57	QP
572.77344	39.27	1.38	40.65	H	136	275	46	-5.35	QP
989.68469	28.01	7.63	35.64	H	107	312	54	-18.36	QP
38.47625	29.21	-6.38	22.83	V	229	108	40	-17.17	QP
334.07419	28.82	-4.93	23.89	H	144	182	46	-22.11	QP

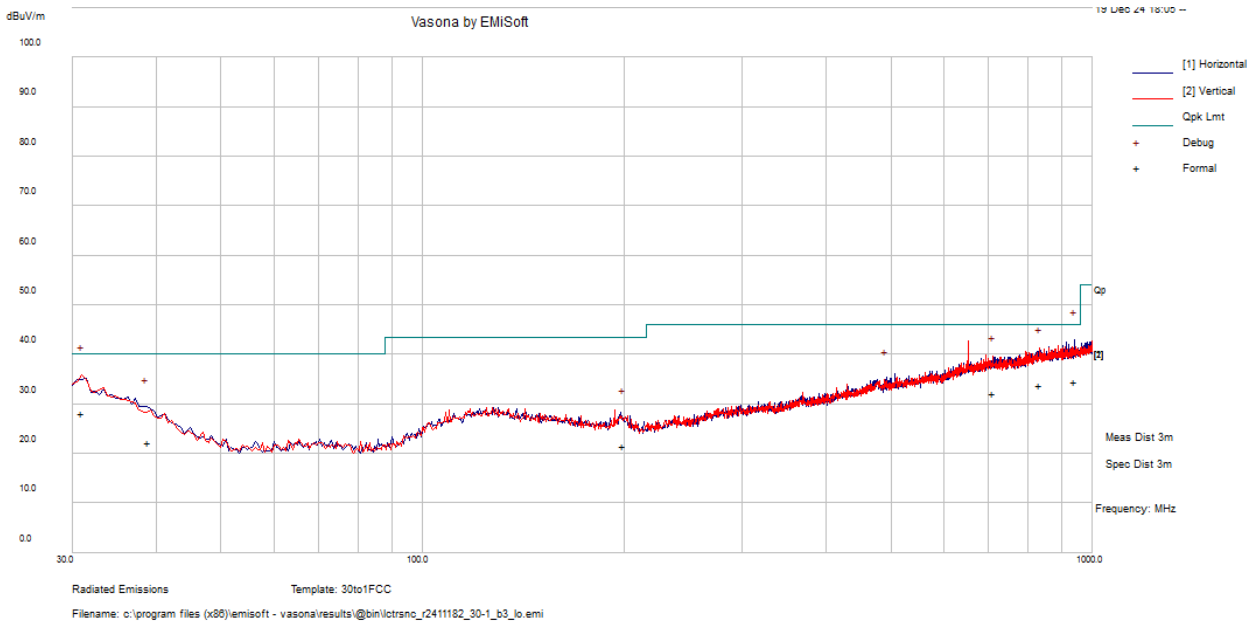
615.950 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
31.165	29.52	-1.5	28.02	H	145	280	40	-11.98	QP
820.256	28.12	5.68	33.8	H	106	310	46	-12.2	QP
35.29875	29.36	-4.22	25.14	H	233	319	40	-14.86	QP
41.196	29.43	-8.29	21.14	H	237	166	40	-18.86	QP
976.9195	27.58	7.38	34.96	H	229	304	54	-19.04	QP
199.208	28.75	-7.31	21.44	H	100	47	43.5	-22.06	QP

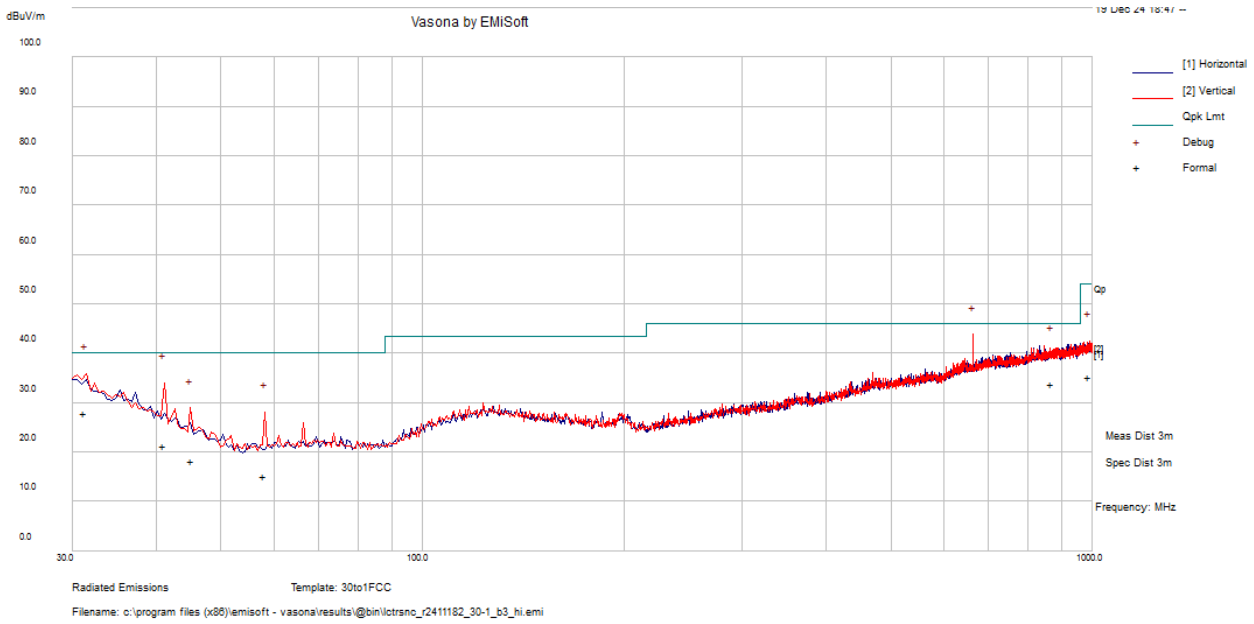
Note: The plot above shows that all peak emissions passed the quasi-peak limits.

653.050 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
940.9085	27.79	6.76	34.55	H	178	307	46	-11.45	QP
30.96825	29.59	-1.36	28.23	V	144	86	40	-11.77	QP
833.216	28.12	5.68	33.8	H	199	102	46	-12.2	QP
710.2405	27.91	4.28	32.19	H	182	317	46	-13.81	QP
38.94425	29.04	-6.73	22.31	H	200	344	40	-17.69	QP
199.17575	28.82	-7.31	21.51	H	242	278	43.5	-21.99	QP

662.950 MHz



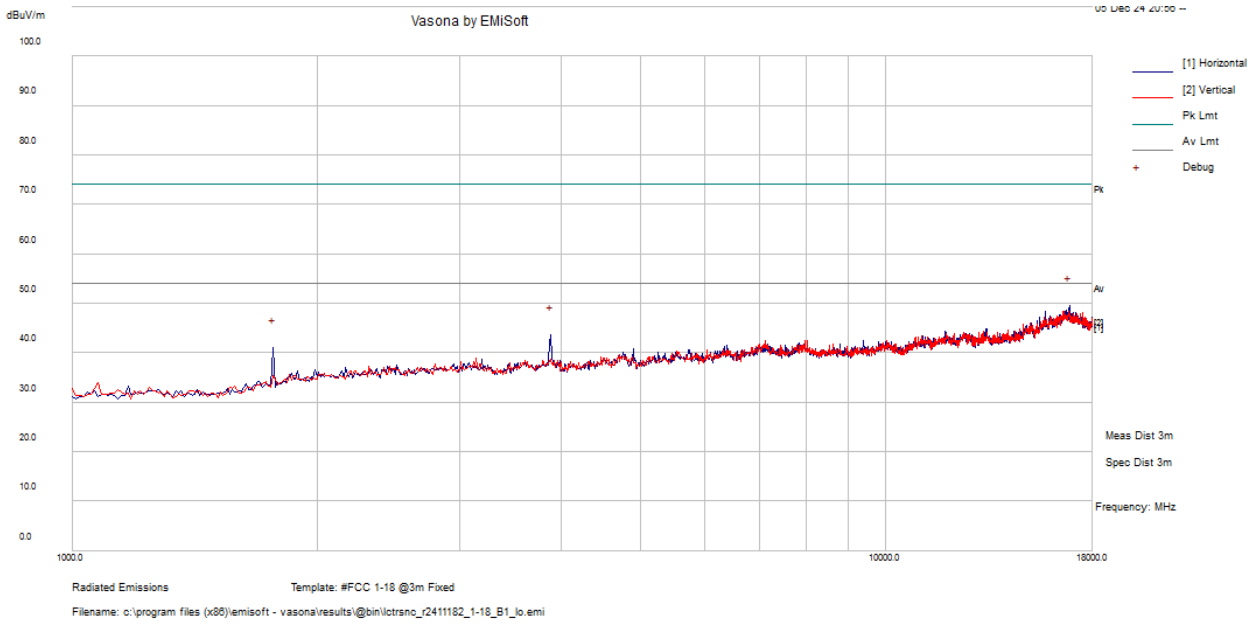
Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
31.273	29.47	-1.59	27.88	V	165	32	40	-12.12	QP
41.07375	29.4	-8.21	21.19	V	135	74	40	-18.81	QP
870.65125	27.73	6.18	33.91	H	215	146	46	-12.09	QP
45.16475	29.18	-11	18.18	V	252	74	40	-21.82	QP
989.204	27.53	7.62	35.15	V	224	353	54	-18.85	QP
57.98475	28.82	-13.59	15.23	V	118	7	40	-24.77	QP

FCC/IC Limits for 1 GHz to 18 GHz			
Applicability	**(dBm)**	**(uV/m at 3meters)**	**(dBuV/m at 3meters)**
Restricted Band Average Limit	-	500	54[2]
Restricted Band Peak Limit[1]	-	-	74

Note 1: Restricted Band Peak Limit is defined to be 20dB higher than Average Limit.
Note 2: Above 1GHz limit calculation:
dBuV/m = 20*log(V/m) + 120 = 20*log((500 [uV/m]/1000000)) + 120 = 54 [dBuV/m]
Note 3: Ports terminated for radiated measurements.

1 GHz to 18 GHz, Measured at 3 meters

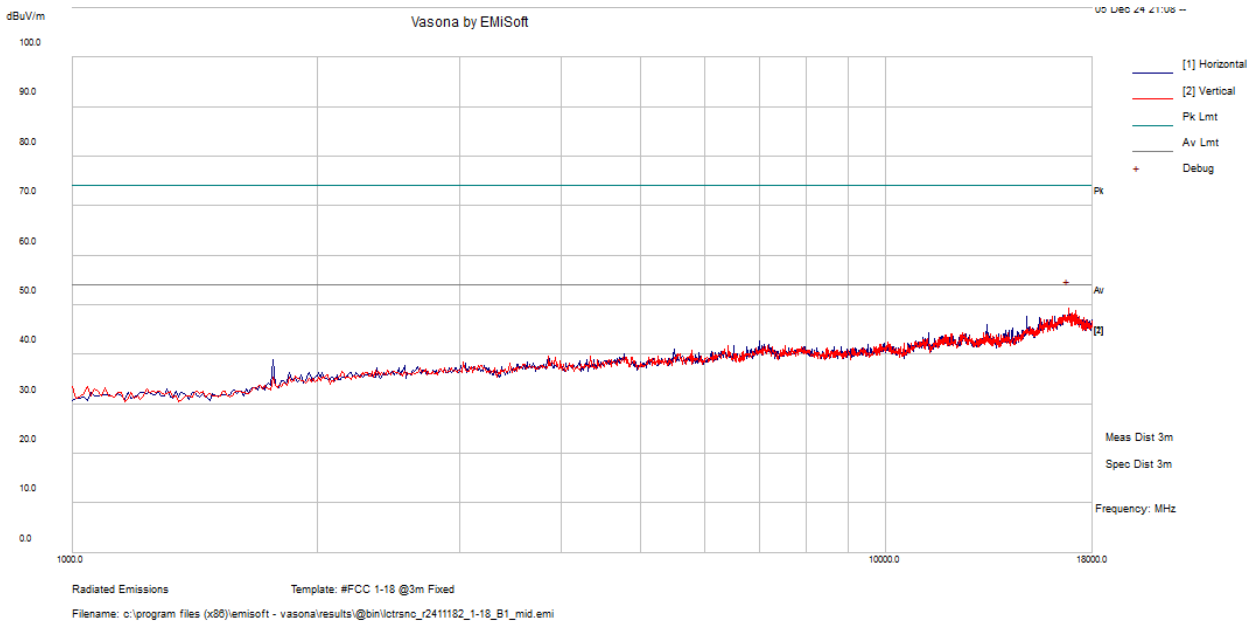
537.600 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16863.125	34.05	15.53	49.58	H	200	0	54	-4.42	Peak
3879.375	45.44	-1.83	43.61	H	100	0	54	-10.39	Peak
1765	48.44	-7.32	41.12	H	100	0	54	-12.88	Peak

Note: The plot above shows that all peak emissions passed the average limits.

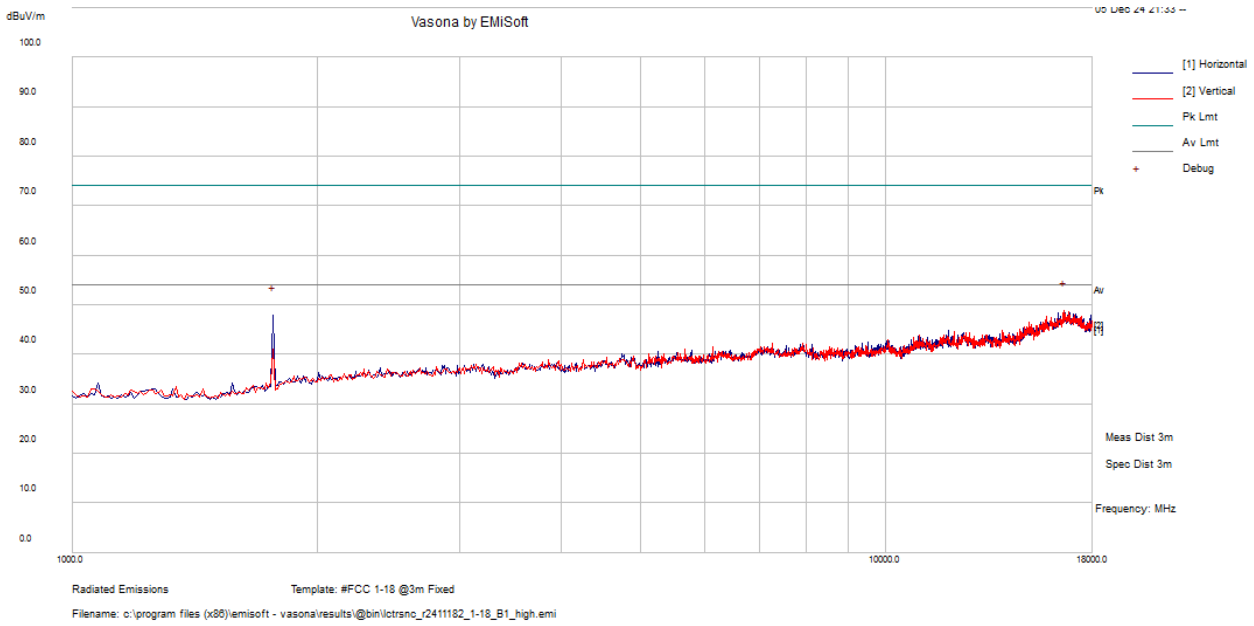
572.775 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16810	38.46	-7.32	31.14	V	100	0	54	-22.86	Peak

Note: The plot above shows that all peak emissions passed the average limits.

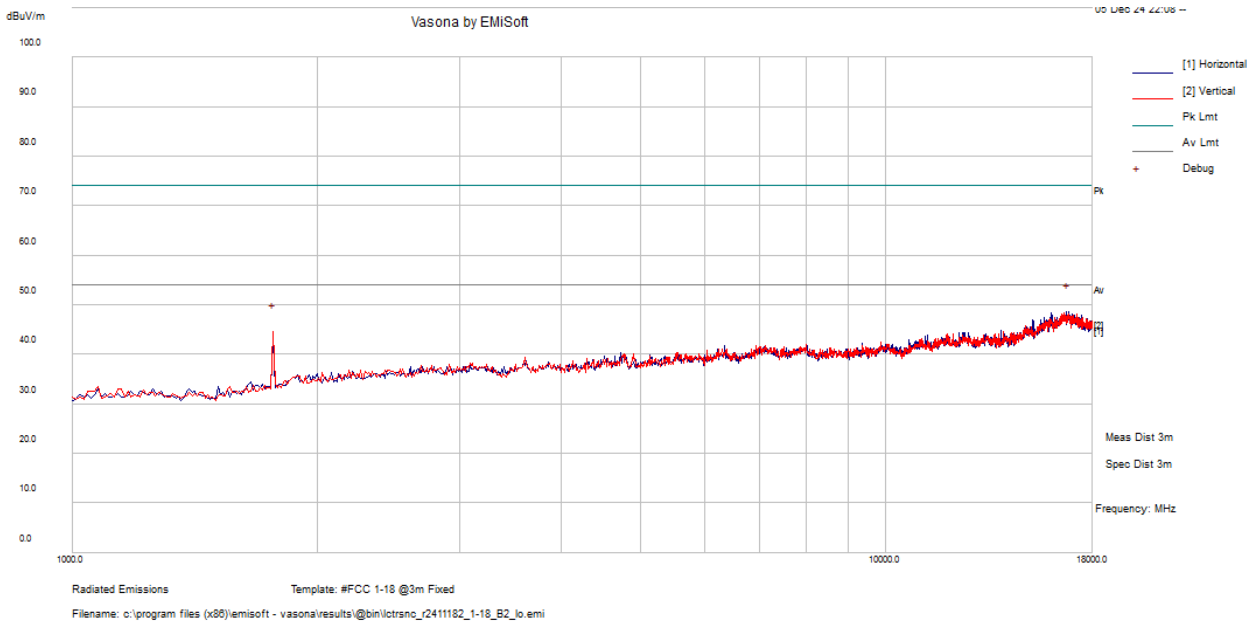
607.950 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16618.75	33.14	15.72	48.86	V	100	0	54	-5.14	Peak
1765	55.31	-7.32	47.99	H	100	0	54	-6.01	Peak

Note: The plot above shows that all peak emissions passed the average limits.

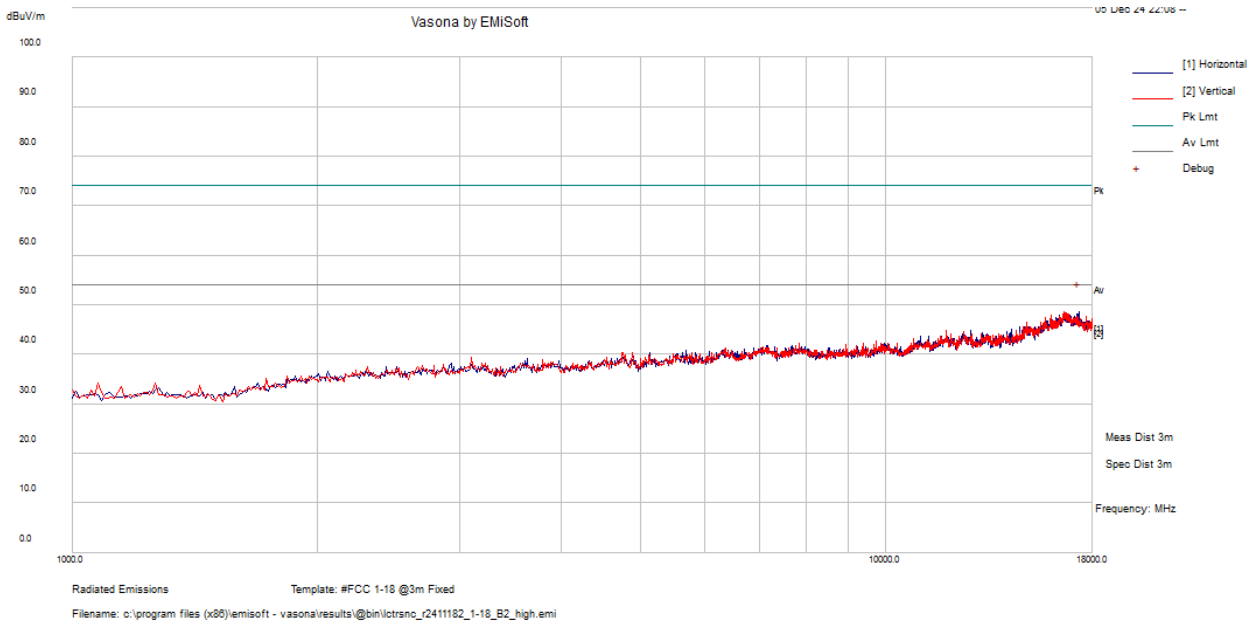
614.050 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16810	32.92	15.59	48.51	H	200	0	54	-5.49	Peak
1765	41.37	-7.32	34.05	V	200	0	54	-19.95	Peak

Note: The plot above shows that all peak emissions passed the average limits.

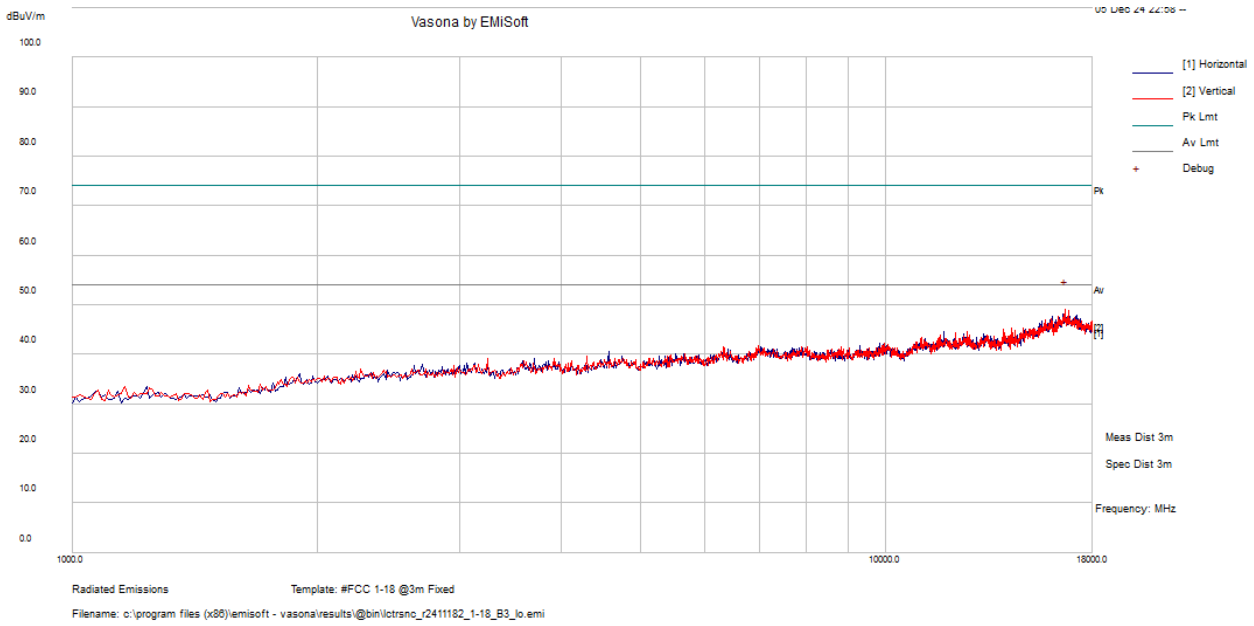
615.950 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
17309.375	34.13	14.58	48.71	H	100	0	54	-5.29	Peak

Note: The plot above shows that all peak emissions passed the average limits.

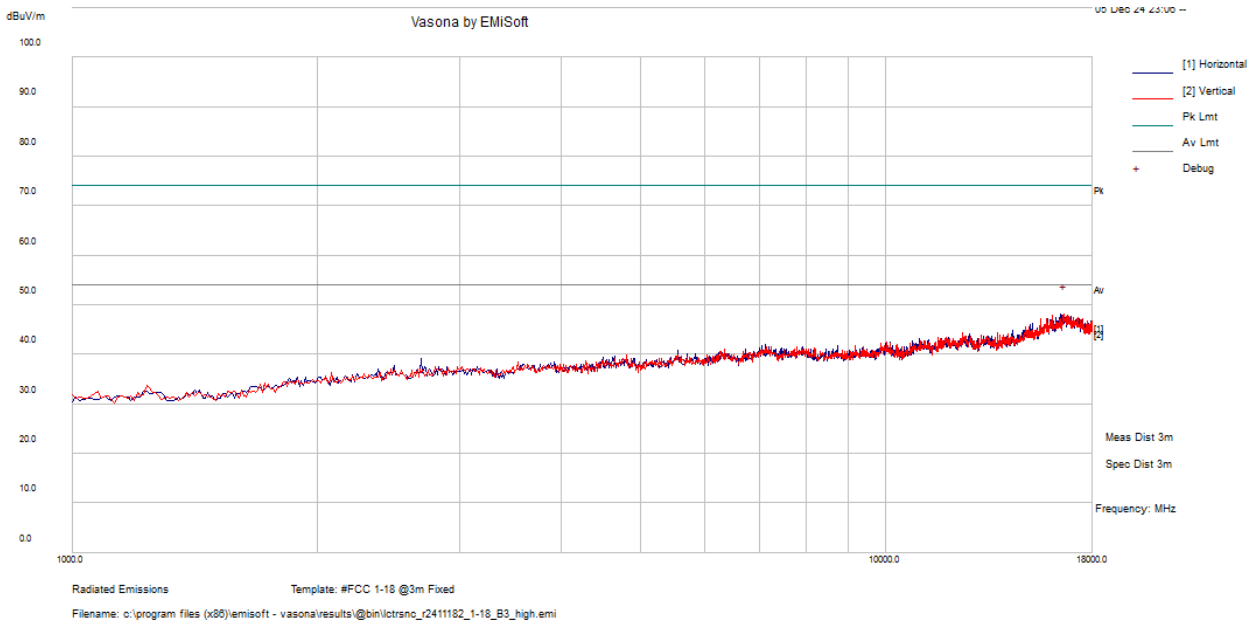
653.050 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16682.5	33.56	15.59	49.15	V	200	0	54	-4.85	Peak

Note: The plot above shows that all peak emissions passed the average limits.

662.950 MHz



Frequency (MHz)	S.A. Reading (dBuV)	Correction Factor (dB/m)	Corrected Amplitude (dBµV/m)	Antenna Polarity (H/V)	Antenna Height (cm)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Detector
16608.125	32.47	15.74	48.21	V	300	0	54	-5.79	Peak

Note: The plot above shows that all peak emissions passed the average limits.

8. FCC §2.1055, FCC §15.236 (f)(1)(iii), RSS-210 Section G.2 & G.2 – Frequency Stability

8.1 Applicable Standards

According to KDB 971168 D01 Section 9:

The frequency stability of the transmitter shall be measured while varying the ambient temperatures and supply voltages over the ranges specified in Section 2.1055. The specific frequency stability limits are provided in the relevant rules section(s).

According to FCC §15.236 (f)(1)(iii):

The frequency tolerance of the carrier signal shall be maintained within ±0.005% of the operating frequency over a temperature variation of −20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. Battery operated equipment shall be tested using a new battery.

According to RSS-210 Section G.2:

The transmit power shall be measured in terms of average value over any period of continuous transmission. The frequency bands, e.i.r.p., authorized bandwidth and frequency stability limits for devices are provided in table G1 for wireless microphones and table G2 for WMAS.

Table G1: Specifications for wireless microphones

Frequency bands (MHz)	e.i.r.p. (mW)	Authorized bandwidth (kHz)	Frequency stability (± ppm)
54-72 76-88 174-216	≤ 50	≤ 200	≤ 50
470-608	≤ 250	≤ 200	≤ 50
614-616 653-663	≤ 20	≤ 200	≤ 50

8.2 Test Procedure

According to FCC 2.1055:

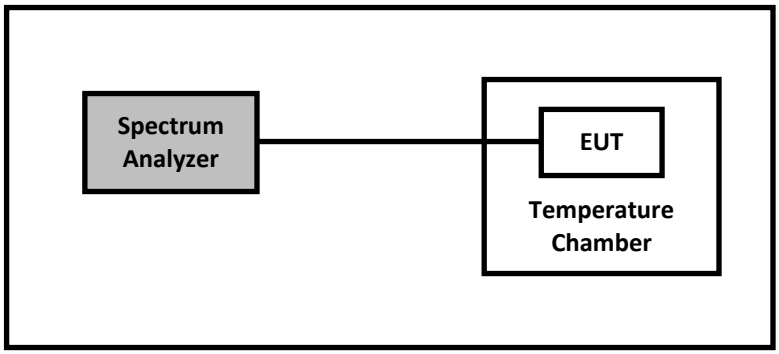
a) The frequency stability shall be measured with variation of ambient temperature as follows:
   1) From −30° to + 50° centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section.
   2) From −20° to + 50° centigrade for equipment to be licensed for use in the Maritime Services under part 80 of this chapter, except for Class A, B, and S Emergency Position Indicating Radio beacons (EPIRBS), and equipment to be licensed for use above 952 MHz at operational fixed stations in all services, stations in the Local Television Transmission Service and Point-to-Point Microwave Radio Service under part 21 of this chapter, equipment licensed for use aboard aircraft in the Aviation Services under part 87 of this chapter, and equipment authorized for use in the Family Radio Service under part 95 of this chapter.
   3) From 0° to + 50° centigrade for equipment to be licensed for use in the Radio Broadcast Services under part 73 of this chapter.

b) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. The short term transient effects on the frequency of the transmitter due to keying (except for broadcast transmitters) and any heating element cycling normally occurring at each ambient temperature level also shall be shown. Only the portion or portions of the transmitter containing the frequency determining and stabilizing circuitry need be subjected to the temperature variation test.

c) The frequency stability shall be measured with variation of primary supply voltage as follows:
   1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
   2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.
   3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.

If an unmodulated carrier is not available, the measurement method shall be described in the test report.

8.3 Test Setup Diagram



8.4 Test Equipment List and Details

BACL No.	Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Interval
912	Rohde & Schwarz	Signal Analyzer	FSV40	1321.3008k39-101203-UW	2024-07-25	1 year
1461	Rohde & Schwarz	Signal Analyzer	FSQ26	200103	2024-08-06	1 year
1060	BACL	Temperature and Humidity Chamber	BTH-150-40	30078	2024-12-03	1 year
-	-	RF Cable	-	-	Each time[1]	N/A

Note[1]: cable included in the test set-up was checked each time before testing.

Statement of Traceability: BACL Corp. *attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with the latest version of A2LA policy P102 "A2LA Policy on Metrological Traceability".*

8.5 Test Environmental Conditions

Temperature:	17 to 19 ºC
Relative Humidity:	47.2 to 51.7 %
ATM Pressure:	101.2 to 101.7 kPa

The testing was performed by Arturo Reyes from 2024-12-04 to 2024-12-27 at RF test site.