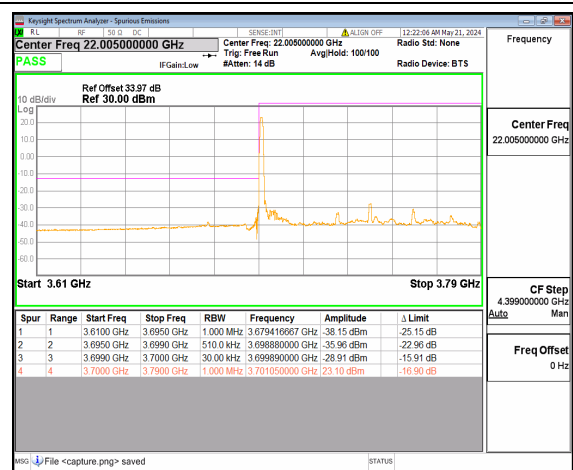
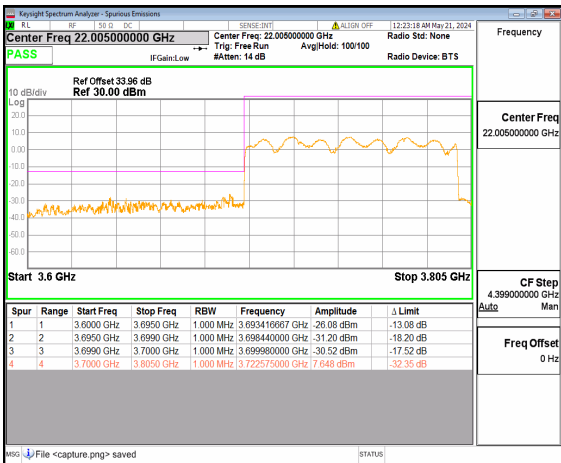


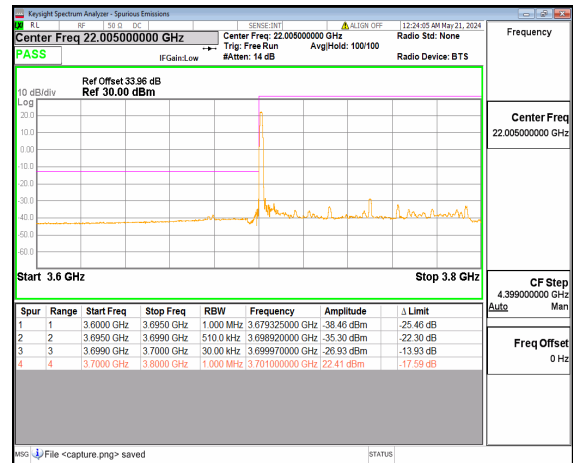
n77(3700-3980MHz) 90M DFT-s-OFDM QPSK Outer_Full Low



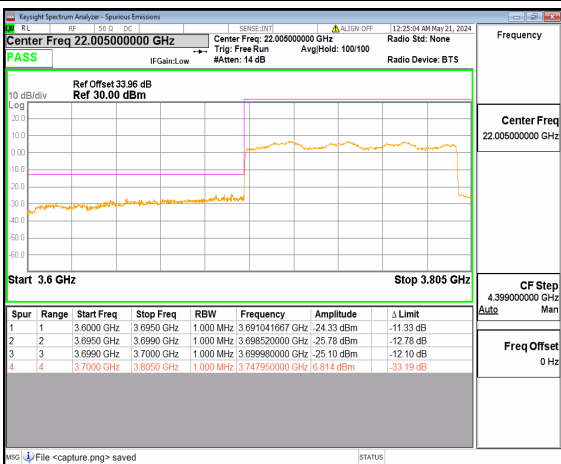
n77(3700-3980MHz) 90M DFT-s-OFDM QPSK Edge_1RB_Left Low



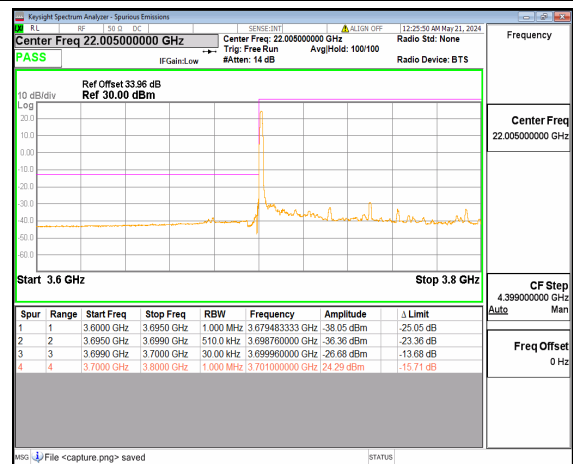
n77(3700-3980MHz) 100M DFT-s-OFDM BPSK Outer_Full Low



n77(3700-3980MHz) 100M DFT-s-OFDM BPSK Edge_1RB_Left Low



n77(3700-3980MHz) 100M DFT-s-OFDM QPSK Outer_Full Low



n77(3700-3980MHz) 100M DFT-s-OFDM QPSK Edge_1RB_Left Low



2.7. Radiated Spurious Emissions

2.7.1. Requirement

According to FCC section 2.1051, section 22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10*\log(P)$ dB. This calculated to be -13dBm.

According to FCC section 27.53(m)(4) for n41, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. This calculated to be -25dBm.

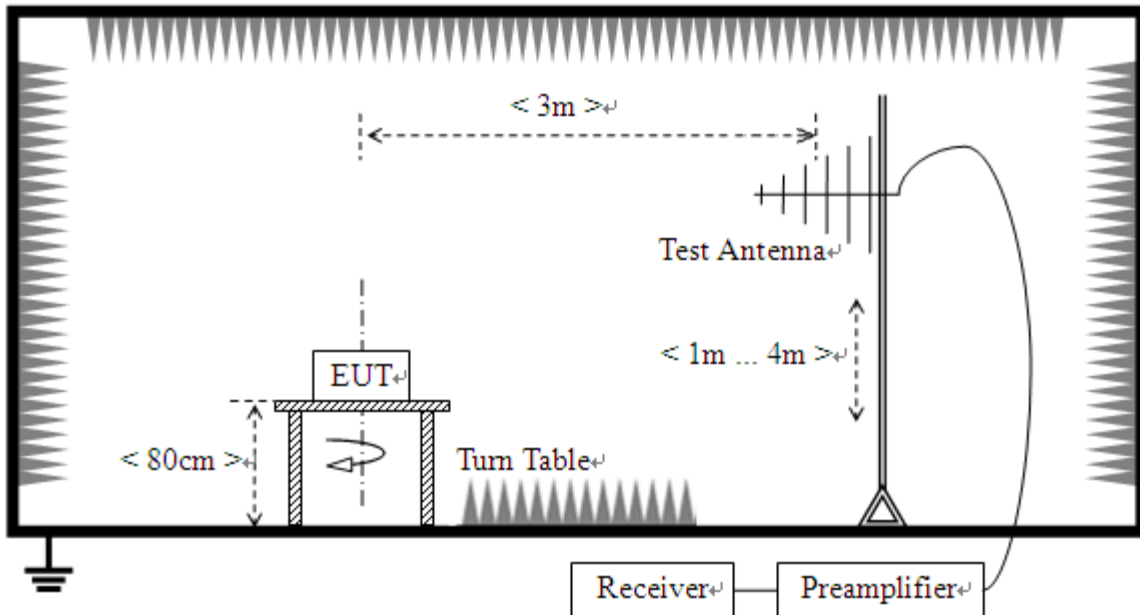
According to FCC section 96.41(e) for n48, the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

According to FCC section 27.53(h) for n66, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

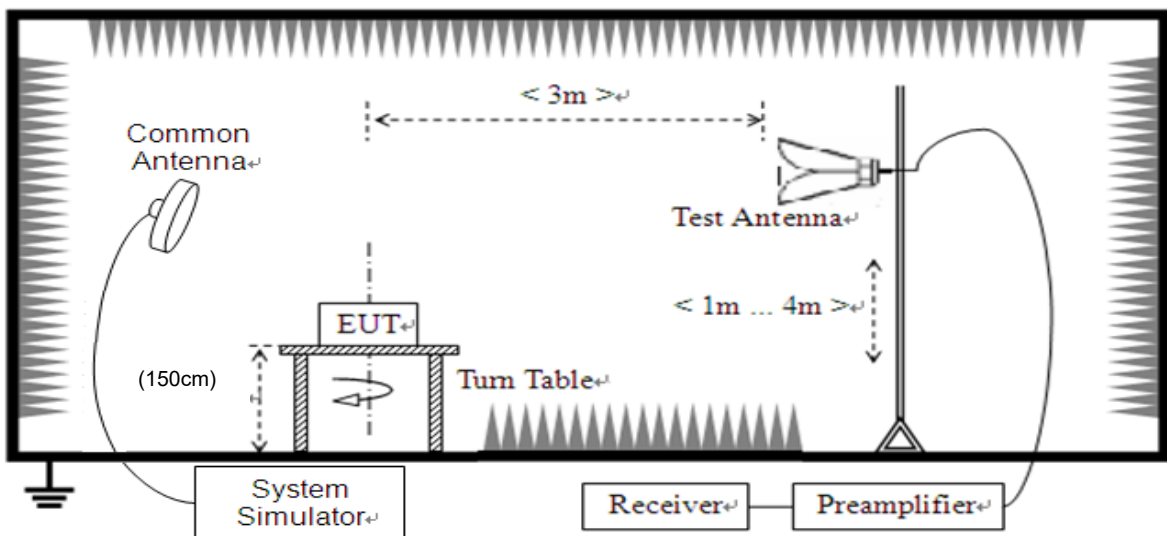
According to FCC section 27.53(l)(2) for n77, n78, for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

According to FCC section 27.53(n)(2) for n77, n78, for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

2.7.2. Test Description



(For the test frequency from 30MHz to 1GHz)



(For the test frequency above 1GHz)

The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.



In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

Note: When doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.7.3. Test procedure

KDB 971168 D01v03 Section 5.8 and ANSI/TIA-603-E-2016.

2.7.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. Test Antenna height is varied from 1m to 4m above the ground, and the Turn Table is actuated to turn from 0° to 360°, both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

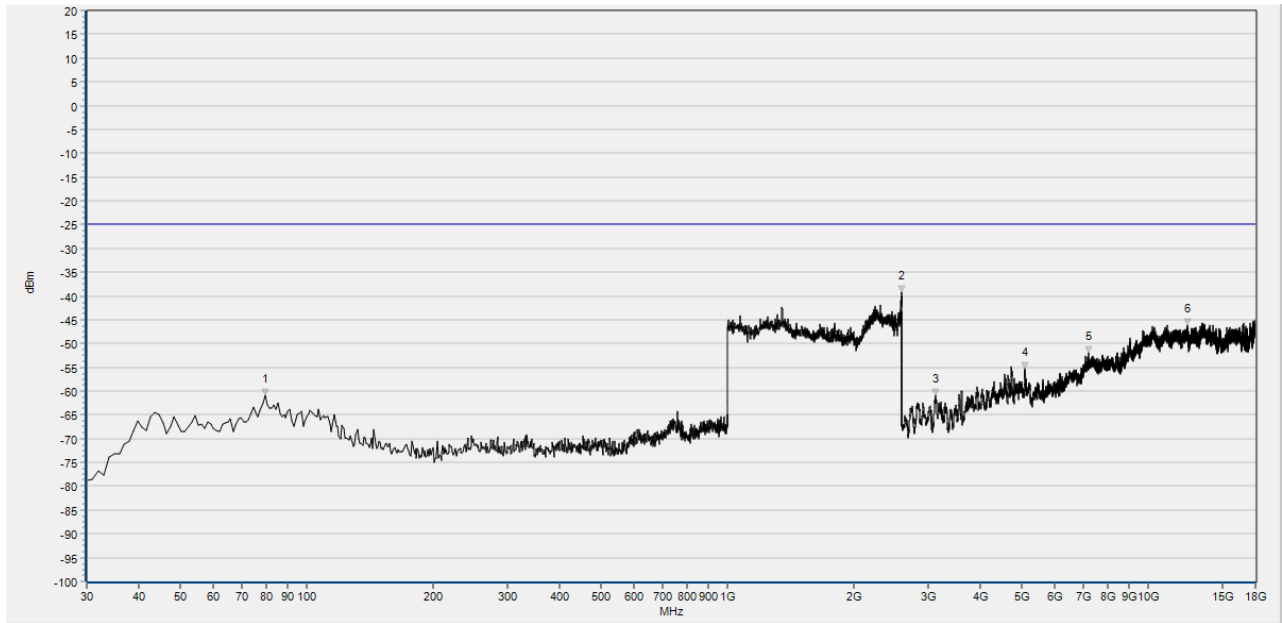
During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT} .

Note1: The power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

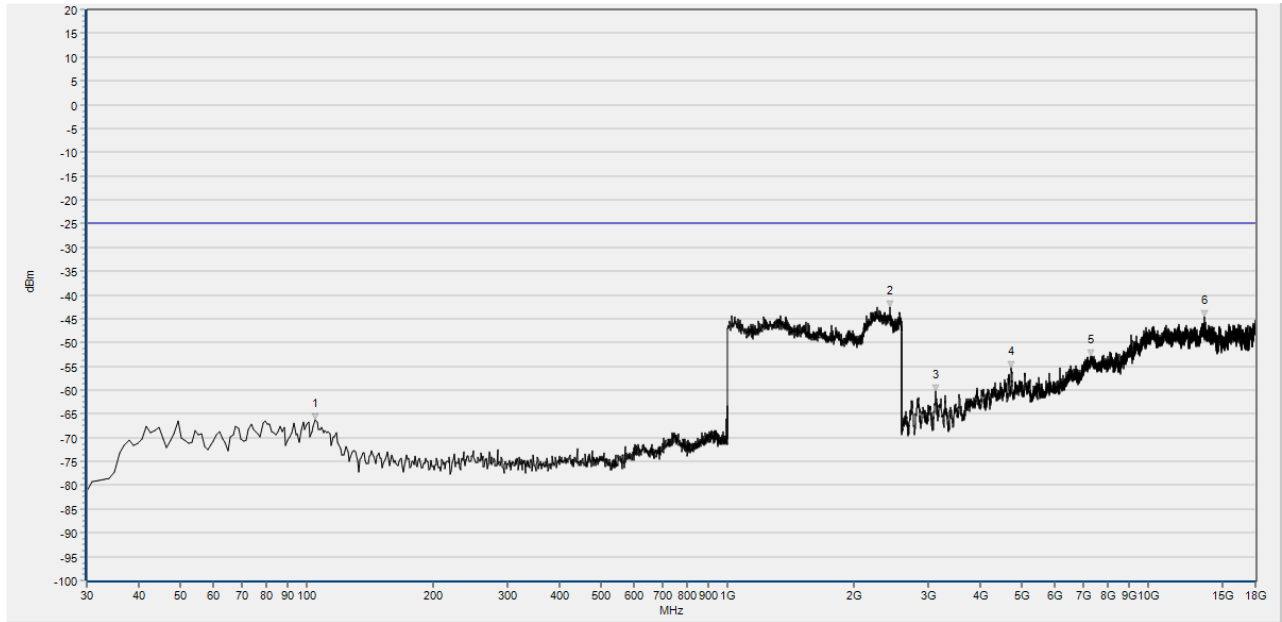


Note3: All bandwidth and modulation were considered and evaluated respectively by performing full test for each band; only the worst cases (Max Bandwidth and QPSK mode) were recorded in this test report.



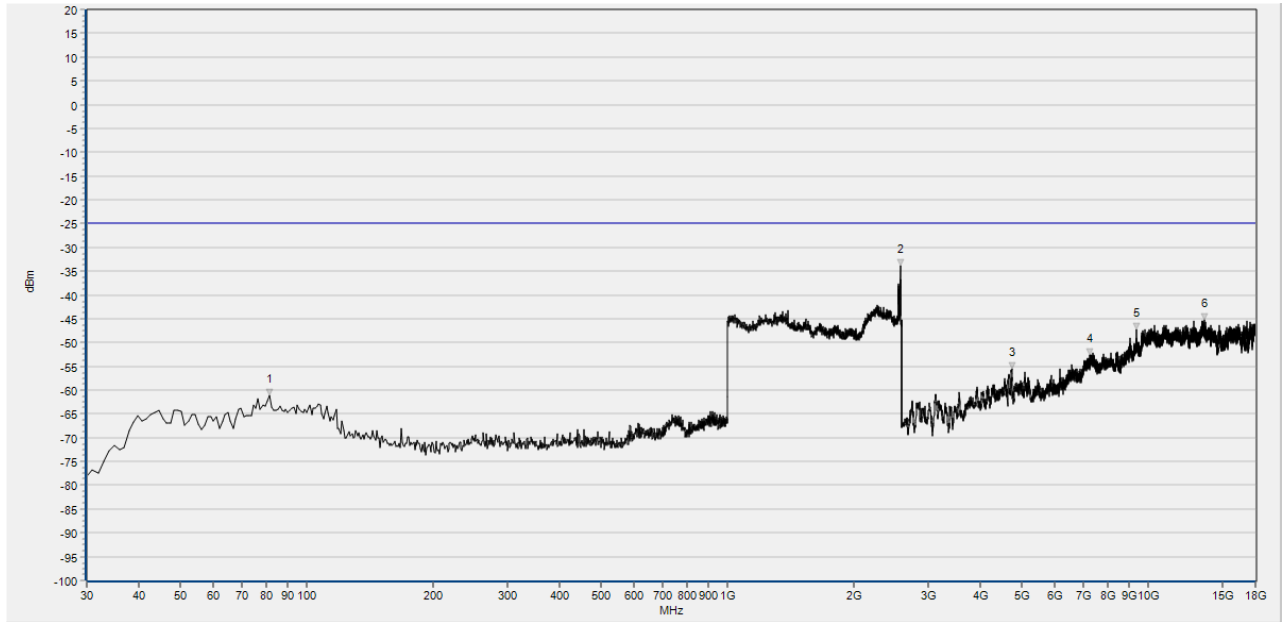
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.520	-60.83	-25.00	360.0	H	PASS
2	2593.594	-39.28	-25.00	360.0	H	NA
3	3117.544	-60.99	-25.00	152.2	H	PASS
4	5101.460	-55.39	-25.00	328.9	H	PASS
5	7205.521	-51.91	-25.00	272.3	H	PASS
6	12405.601	-46.09	-25.00	33.1	H	PASS

N41 504201 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



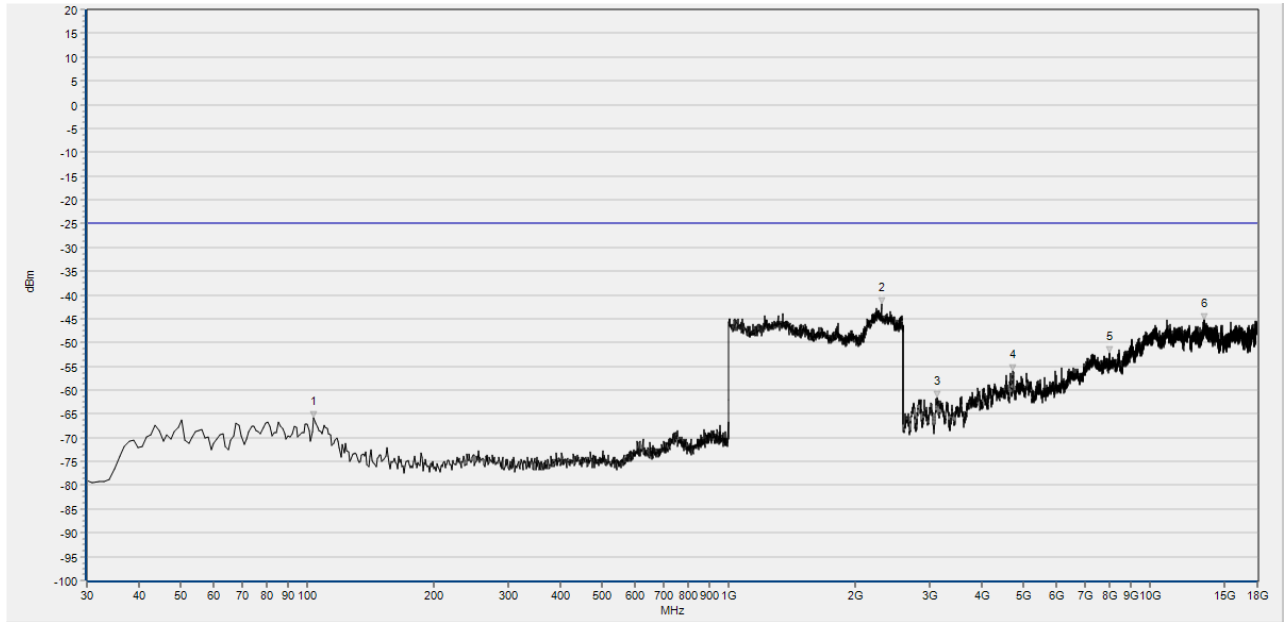
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	104.765	-66.30	-25.00	360.0	V	PASS
2	2431.832	-42.66	-25.00	360.0	V	PASS
3	3129.866	-60.26	-25.00	266.6	V	PASS
4	4734.867	-55.32	-25.00	10.1	V	PASS
5	7310.262	-52.88	-25.00	134.6	V	PASS
6	13600.880	-44.60	-25.00	49.4	V	PASS

N41 504201 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



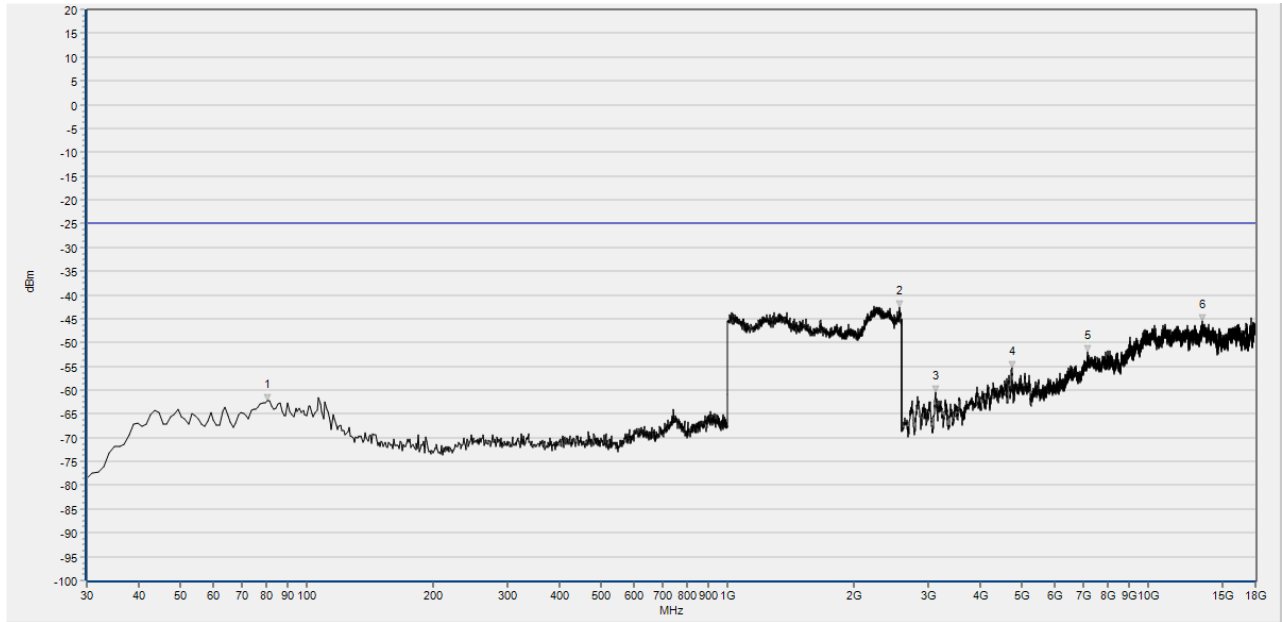
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.461	-61.01	-25.00	360.0	H	PASS
2	2574.374	-33.86	-25.00	42.4	H	NA
3	4741.028	-55.63	-25.00	194.4	H	PASS
4	7248.650	-52.69	-25.00	178.8	H	PASS
5	9374.275	-47.35	-25.00	39.5	H	PASS
6	13582.396	-45.30	-25.00	218.9	H	PASS

N41 518601 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



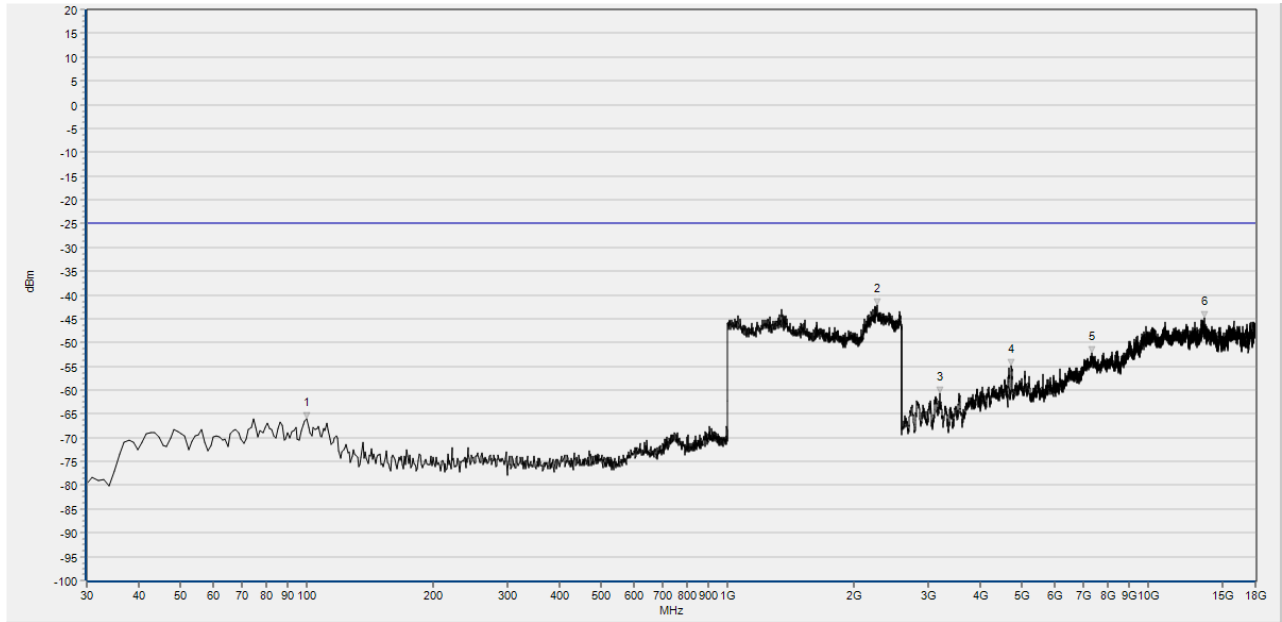
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	103.794	-65.74	-25.00	0.0	V	PASS
2	2305.305	-41.87	-25.00	0.0	V	PASS
3	3132.947	-61.61	-25.00	111.8	V	PASS
4	4737.948	-56.04	-25.00	111.8	V	PASS
5	8028.046	-52.16	-25.00	339.7	V	PASS
6	13434.527	-45.22	-25.00	150.9	V	PASS

N41 518601 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



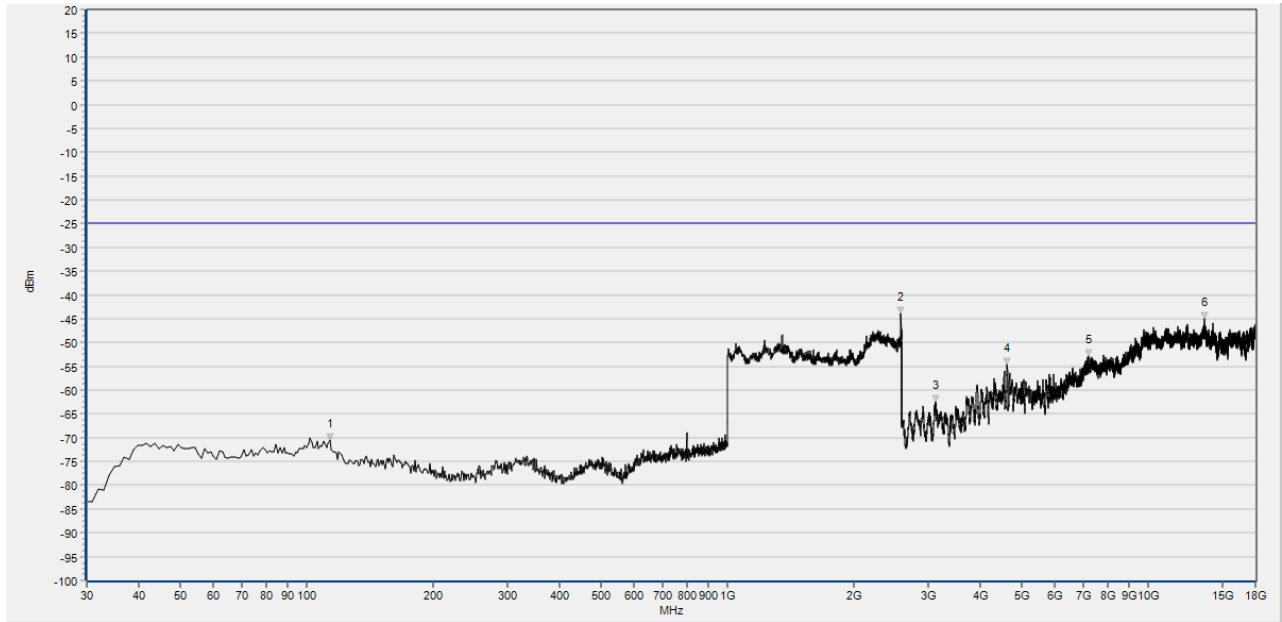
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-62.18	-25.00	360.0	H	PASS
2	2566.366	-42.68	-25.00	271.7	H	PASS
3	3120.624	-60.41	-25.00	127.4	H	PASS
4	4741.028	-55.36	-25.00	15.8	H	PASS
5	7199.360	-52.04	-25.00	79.3	H	PASS
6	13468.414	-45.45	-25.00	343.1	H	PASS

N41 532998 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



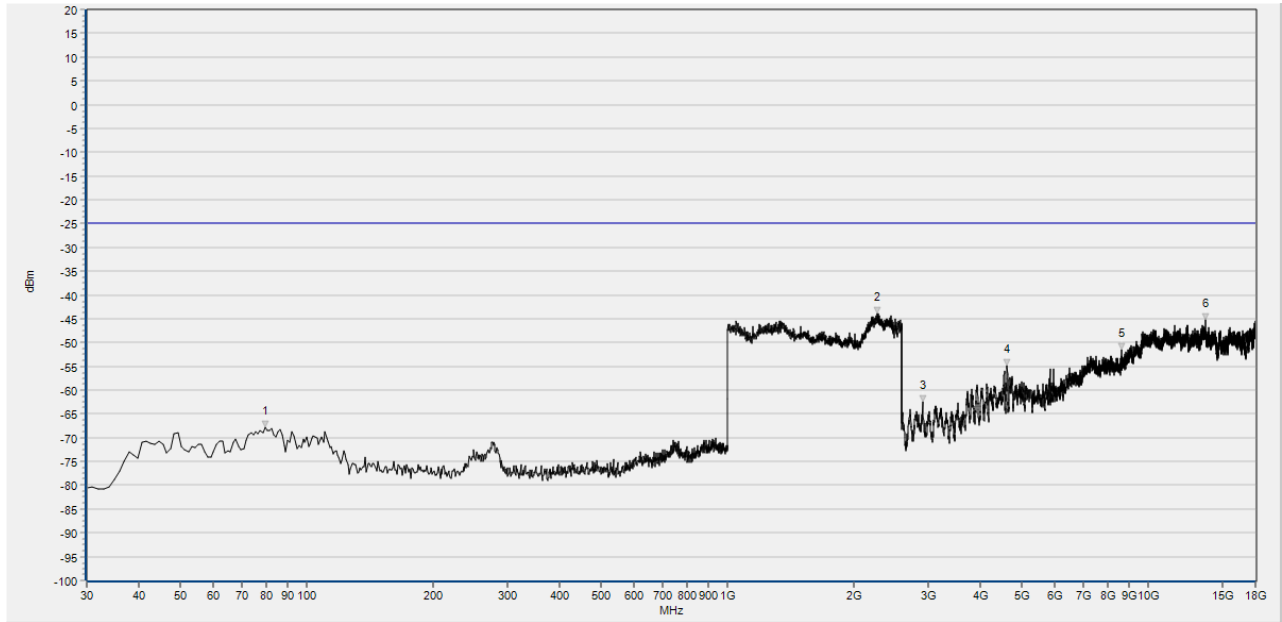
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	99.910	-66.13	-25.00	360.0	V	PASS
2	2266.867	-42.16	-25.00	360.0	V	PASS
3	3194.559	-60.60	-25.00	28.8	V	PASS
4	4737.948	-54.92	-25.00	217.2	V	PASS
5	7341.068	-52.26	-25.00	169.7	V	PASS
6	13603.961	-44.85	-25.00	114.8	V	PASS

N41 532998 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



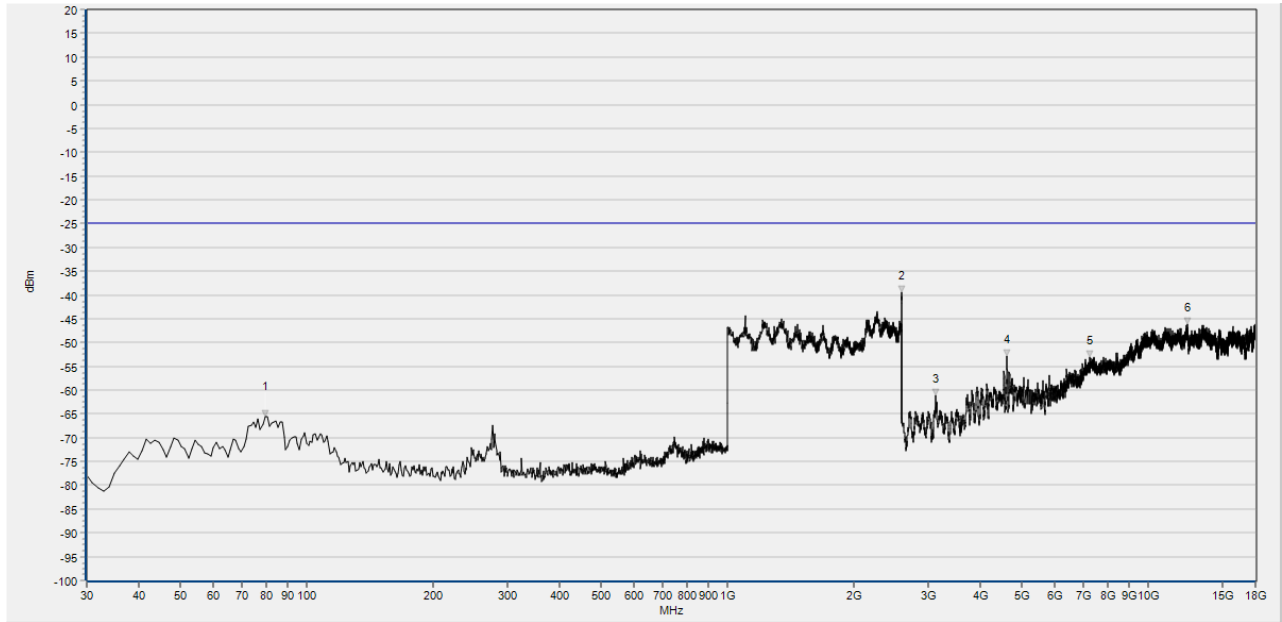
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	113.504	-70.57	-25.00	0.0	H	PASS
2	2587.187	-44.02	-25.00	229.3	H	NA
3	3129.866	-62.44	-25.00	314.8	H	PASS
4	4627.045	-54.63	-25.00	89.2	H	PASS
5	7239.408	-52.90	-25.00	291.3	H	PASS
6	13616.283	-45.06	-25.00	205.1	H	PASS

N41 509202 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



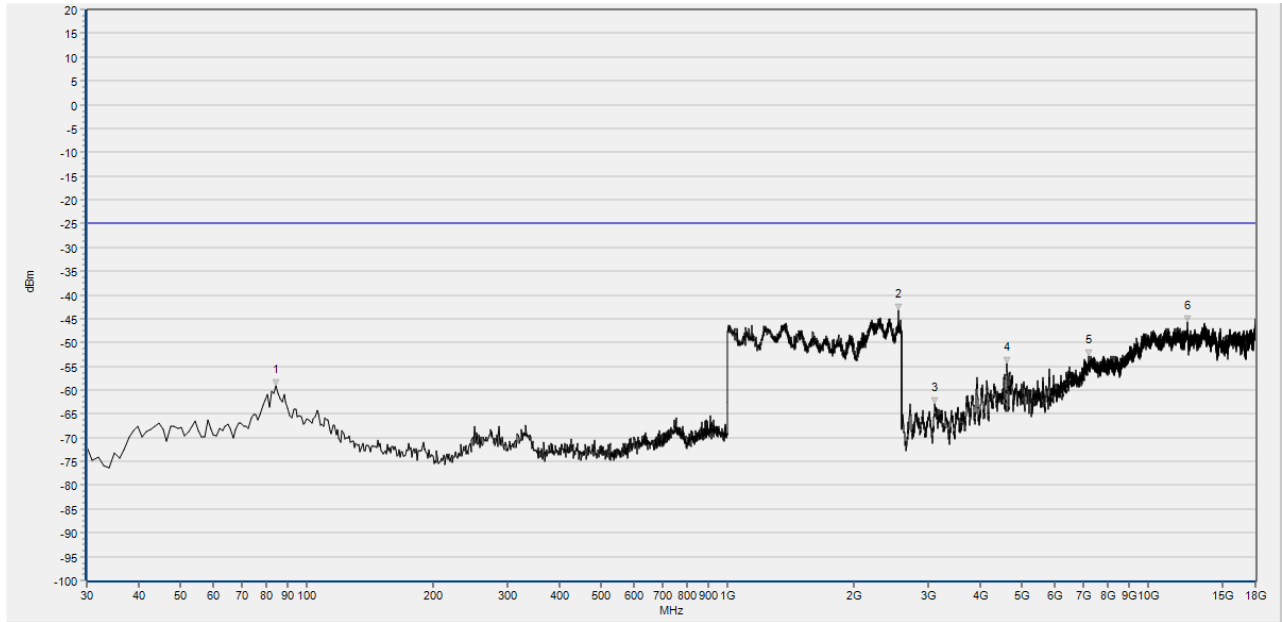
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.520	-67.82	-25.00	360.0	V	PASS
2	2271.672	-43.80	-25.00	338.3	V	PASS
3	2908.062	-62.39	-25.00	333.7	V	PASS
4	4623.965	-54.96	-25.00	1.9	V	PASS
5	8665.733	-51.55	-25.00	193.6	V	PASS
6	13730.266	-45.35	-25.00	325.5	V	PASS

N41 509202 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



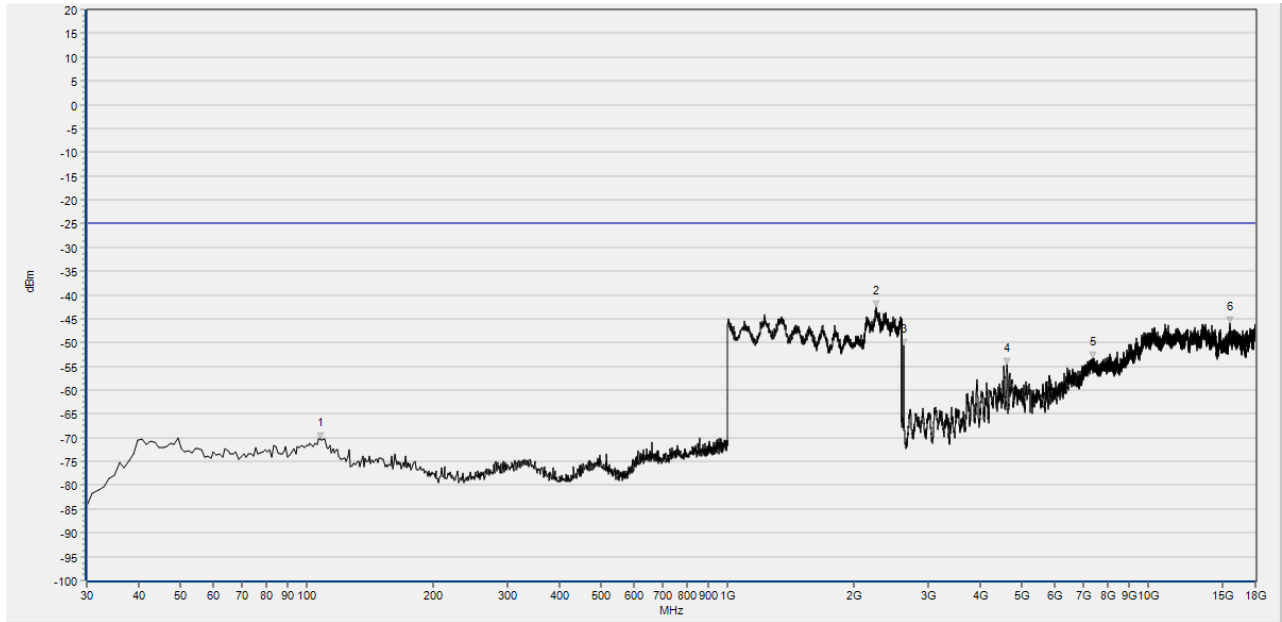
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.520	-65.55	-25.00	360.0	H	PASS
2	2598.398	-39.44	-25.00	360.0	H	NA
3	3120.624	-61.01	-25.00	72.8	H	PASS
4	4623.965	-52.79	-25.00	197.6	H	PASS
5	7248.650	-53.17	-25.00	135.1	H	PASS
6	12390.198	-46.09	-25.00	96.1	H	PASS

N41 518598 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



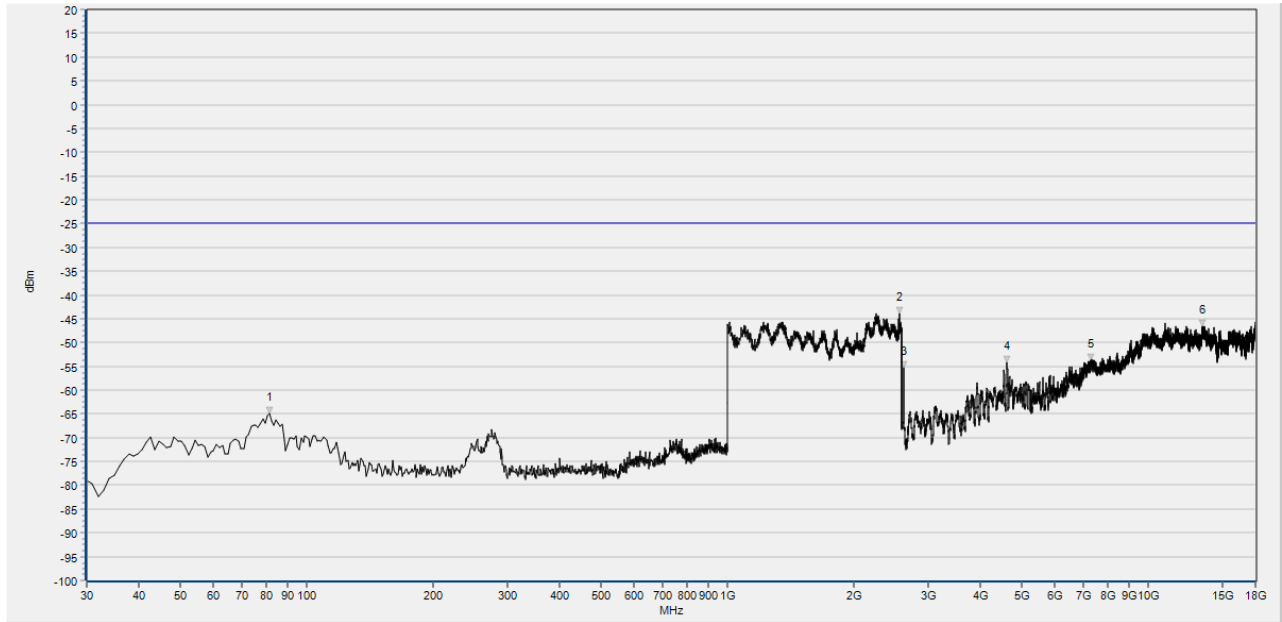
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	84.374	-59.21	-25.00	360.0	V	PASS
2	2595.155	-43.20	-25.00	360.0	V	NA
3	3114.463	-62.96	-25.00	46.4	V	PASS
4	4623.965	-54.36	-25.00	358.1	V	PASS
5	7233.247	-52.75	-25.00	328.9	V	PASS
6	12380.956	-45.71	-25.00	31.1	V	PASS

N41 518598 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



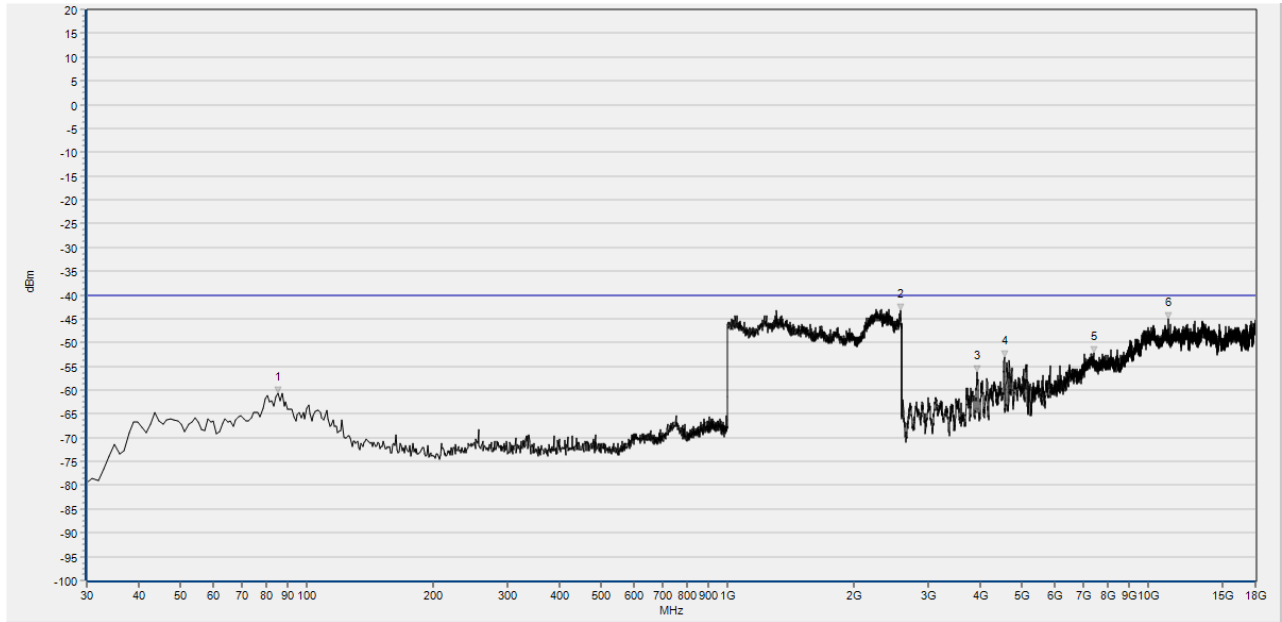
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	107.678	-70.36	-25.00	0.0	H	PASS
2	2263.664	-42.65	-25.00	236.7	H	PASS
3	2621.564	-50.56	-25.00	58.5	H	NA
4	4627.045	-54.74	-25.00	298.5	H	PASS
5	7405.761	-53.23	-25.00	275.0	H	PASS
6	15624.845	-45.92	-25.00	329.6	H	PASS

N41 528000 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



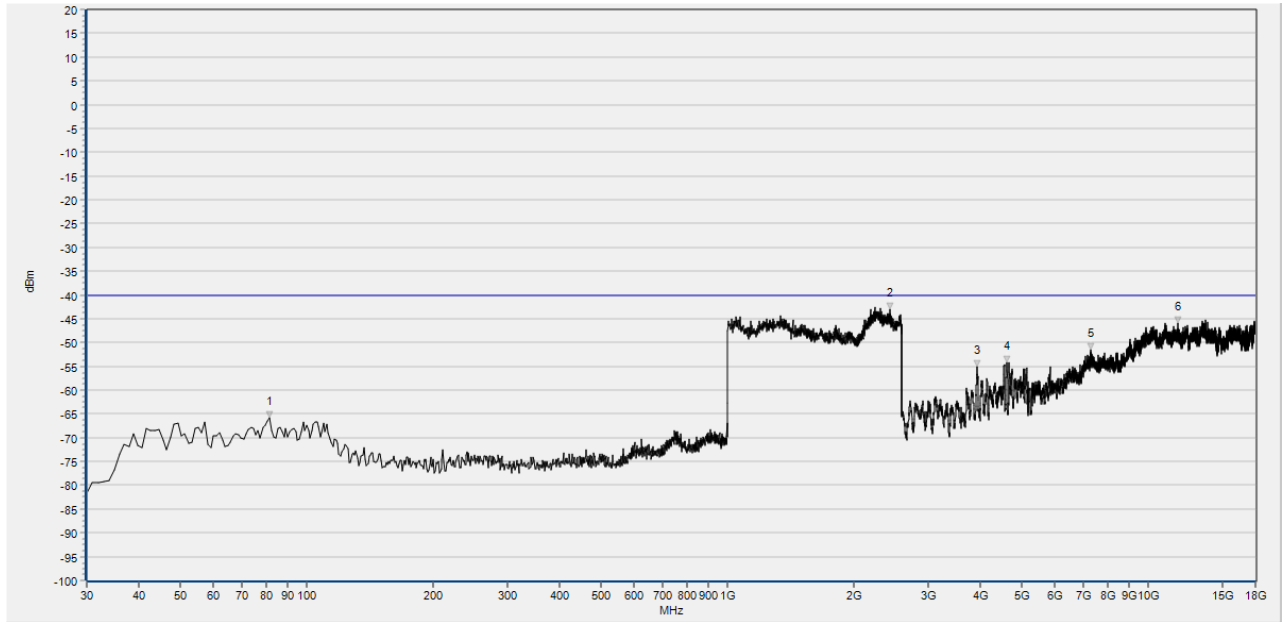
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.461	-64.96	-25.00	0.0	V	PASS
2	2566.366	-43.99	-25.00	0.0	V	PASS
3	2621.564	-55.39	-25.00	92.9	V	NA
4	4623.965	-54.22	-25.00	146.5	V	PASS
5	7307.181	-53.83	-25.00	254.5	V	PASS
6	13431.446	-46.66	-25.00	169.4	V	PASS

N41 528000 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



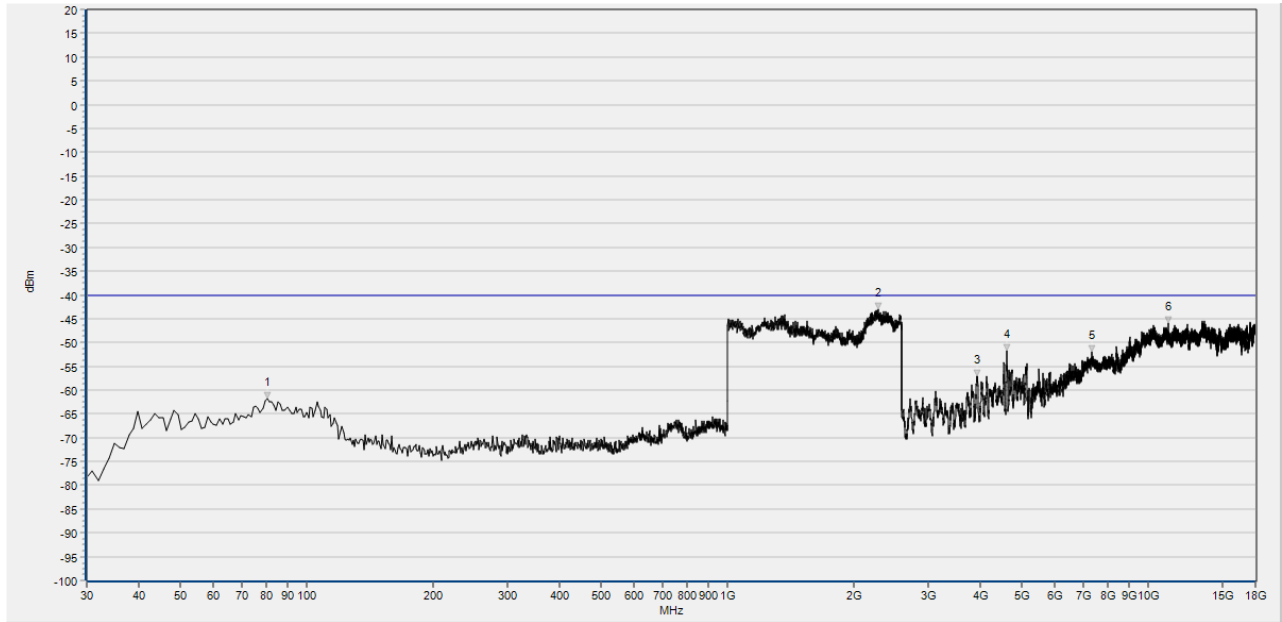
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	85.345	-60.62	-40.00	0.0	H	PASS
2	2577.578	-43.23	-40.00	0.0	H	PASS
3	3924.665	-56.22	-40.00	1.9	H	PASS
4	4550.030	-53.05	-40.00	30.3	H	PASS
5	7418.084	-52.10	-40.00	84.4	H	PASS
6	11167.193	-44.95	-40.00	232.9	H	PASS

N48 638334 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



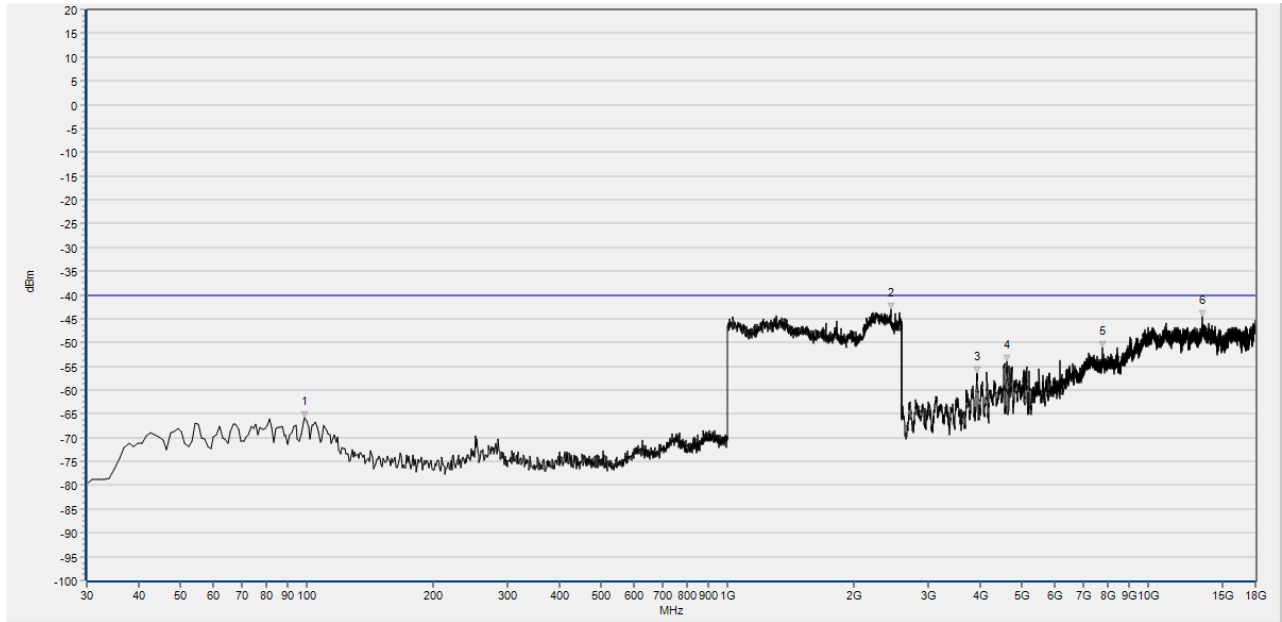
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.461	-65.77	-40.00	360.0	V	PASS
2	2431.832	-43.12	-40.00	360.0	V	PASS
3	3927.746	-55.00	-40.00	78.3	V	PASS
4	4620.884	-54.27	-40.00	140.6	V	PASS
5	7325.665	-51.61	-40.00	24.0	V	PASS
6	11774.075	-45.92	-40.00	31.6	V	PASS

N48 638334 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



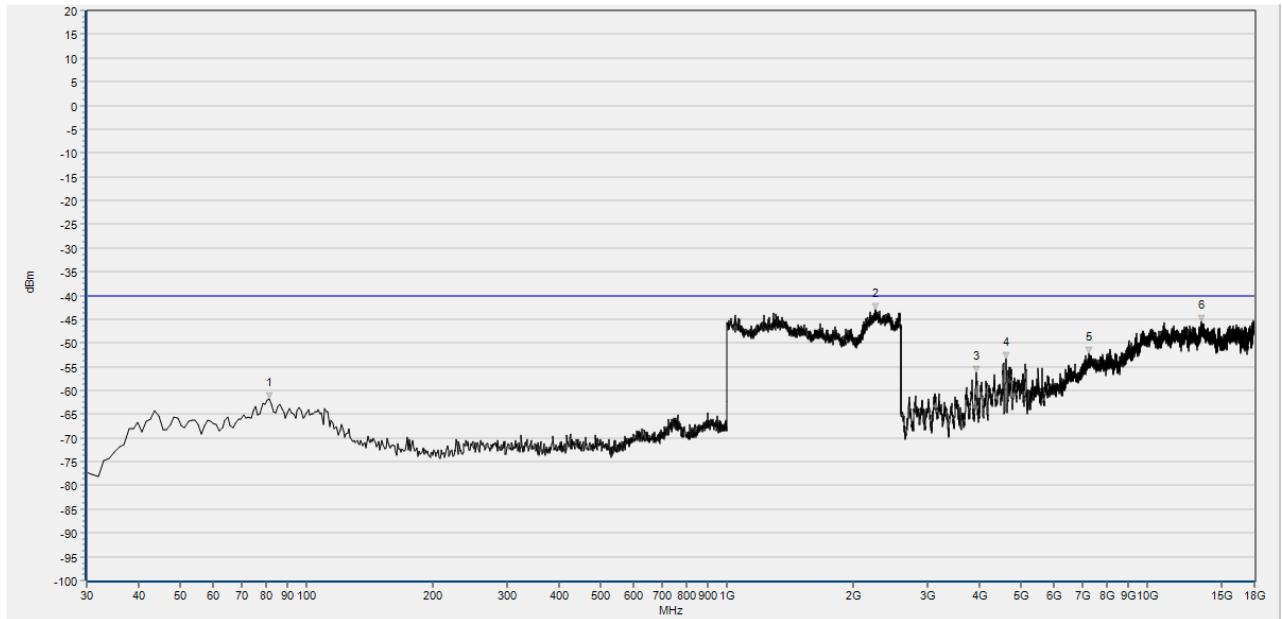
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-61.84	-40.00	360.0	H	PASS
2	2282.883	-43.11	-40.00	360.0	H	PASS
3	3921.584	-57.14	-40.00	8.1	H	PASS
4	4620.884	-51.83	-40.00	282.5	H	PASS
5	7344.149	-51.97	-40.00	196.0	H	PASS
6	11148.710	-46.02	-40.00	180.4	H	PASS

N48 641666 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



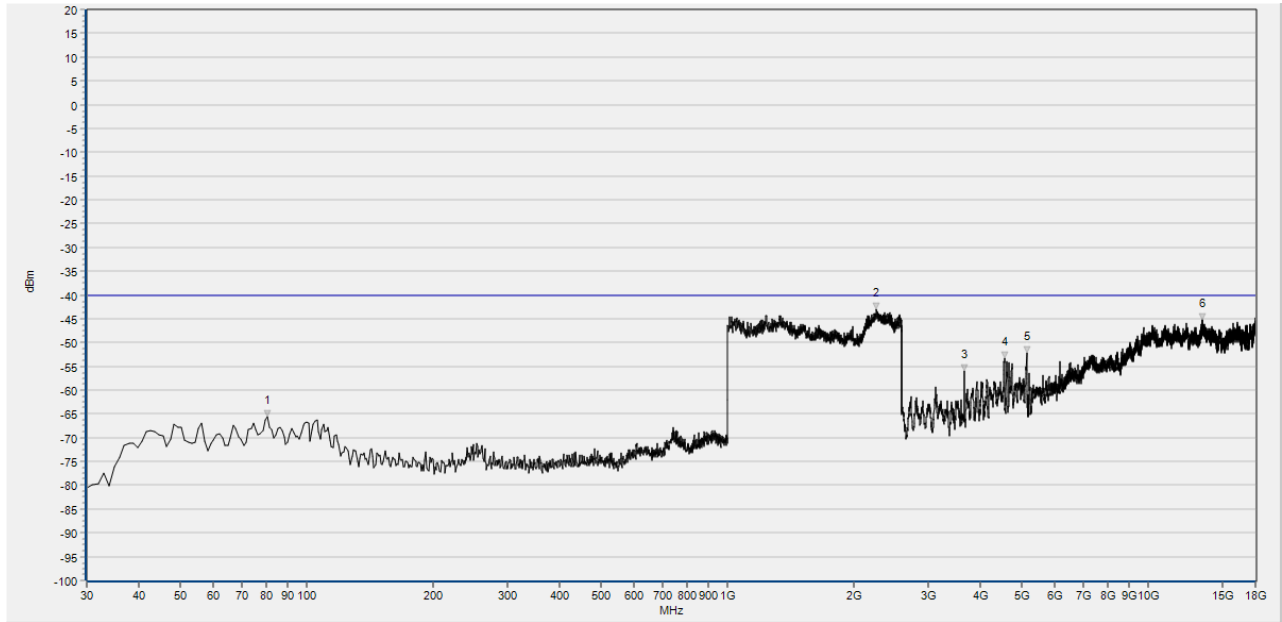
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	98.939	-65.88	-40.00	176.7	V	PASS
2	2446.246	-43.05	-40.00	279.2	V	PASS
3	3930.826	-56.39	-40.00	120.3	V	PASS
4	4623.965	-53.88	-40.00	0.4	V	PASS
5	7796.999	-51.12	-40.00	120.3	V	PASS
6	13474.575	-44.63	-40.00	3.6	V	PASS

N48 641666 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



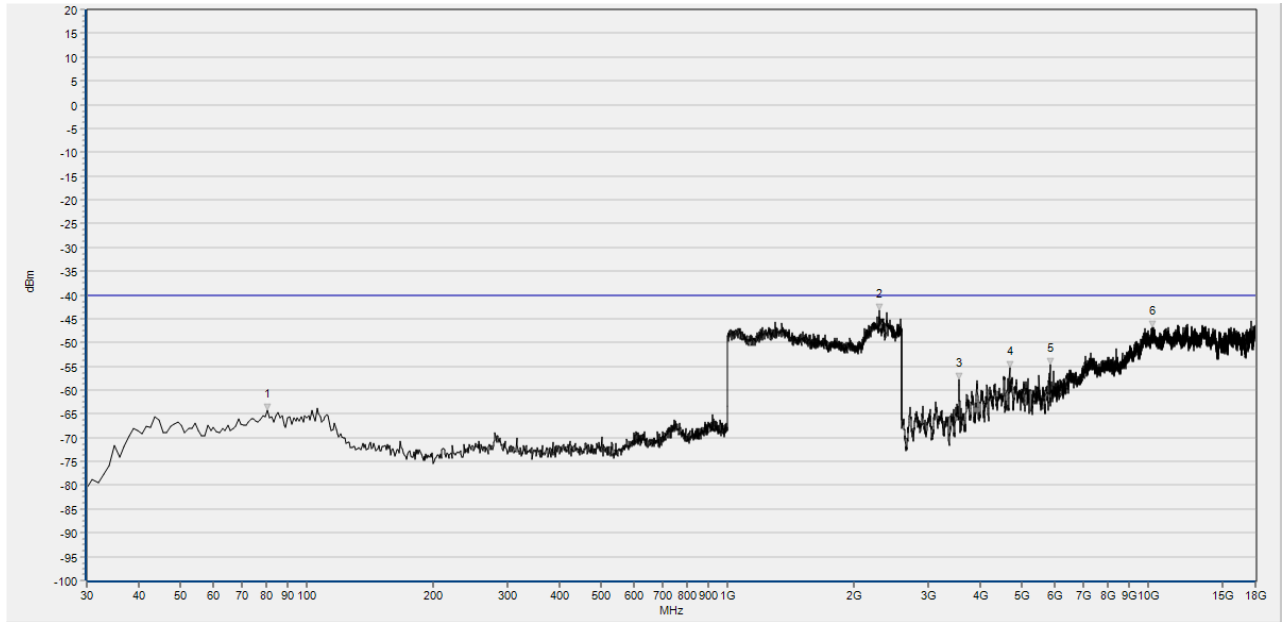
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.461	-61.88	-40.00	360.0	H	PASS
2	2255.656	-43.05	-40.00	360.0	H	PASS
3	3924.665	-56.27	-40.00	109.7	H	PASS
4	4620.884	-53.34	-40.00	329.4	H	PASS
5	7273.295	-52.27	-40.00	23.4	H	PASS
6	13422.204	-45.51	-40.00	212.0	H	PASS

N48 645000 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



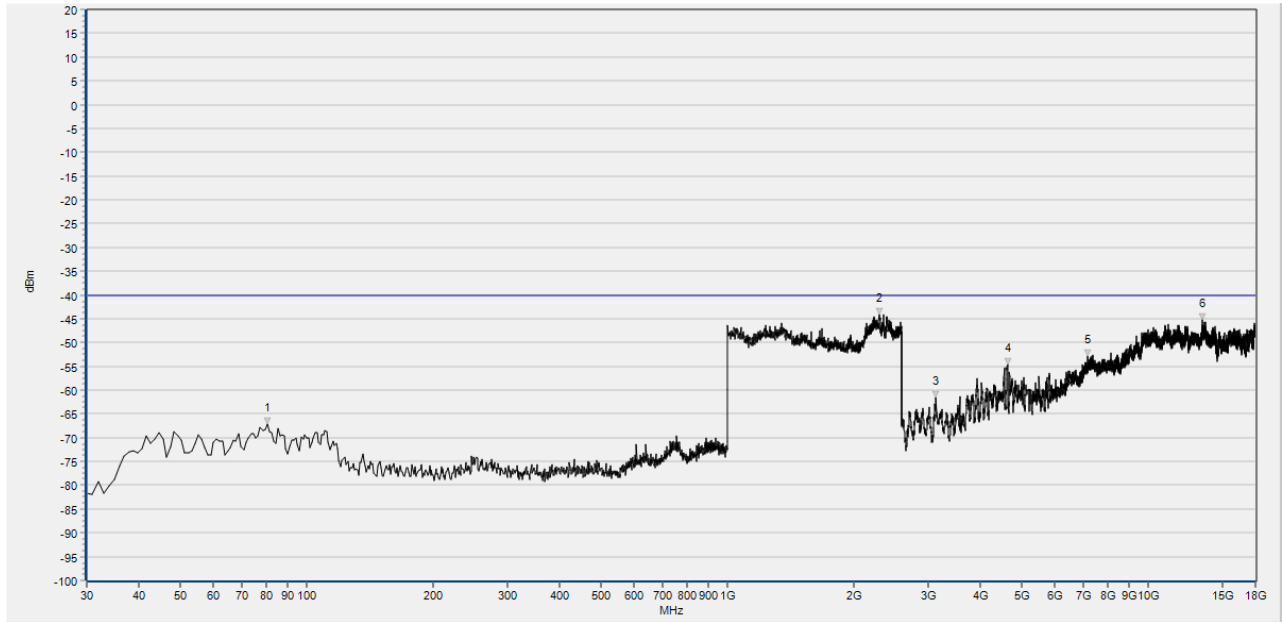
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-65.62	-40.00	0.0	V	PASS
2	2263.664	-43.13	-40.00	0.0	V	PASS
3	3653.571	-56.00	-40.00	79.0	V	NA
4	4553.111	-53.35	-40.00	126.2	V	PASS
5	5141.508	-52.20	-40.00	305.1	V	PASS
6	13449.930	-45.30	-40.00	165.2	V	PASS

N48 645000 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



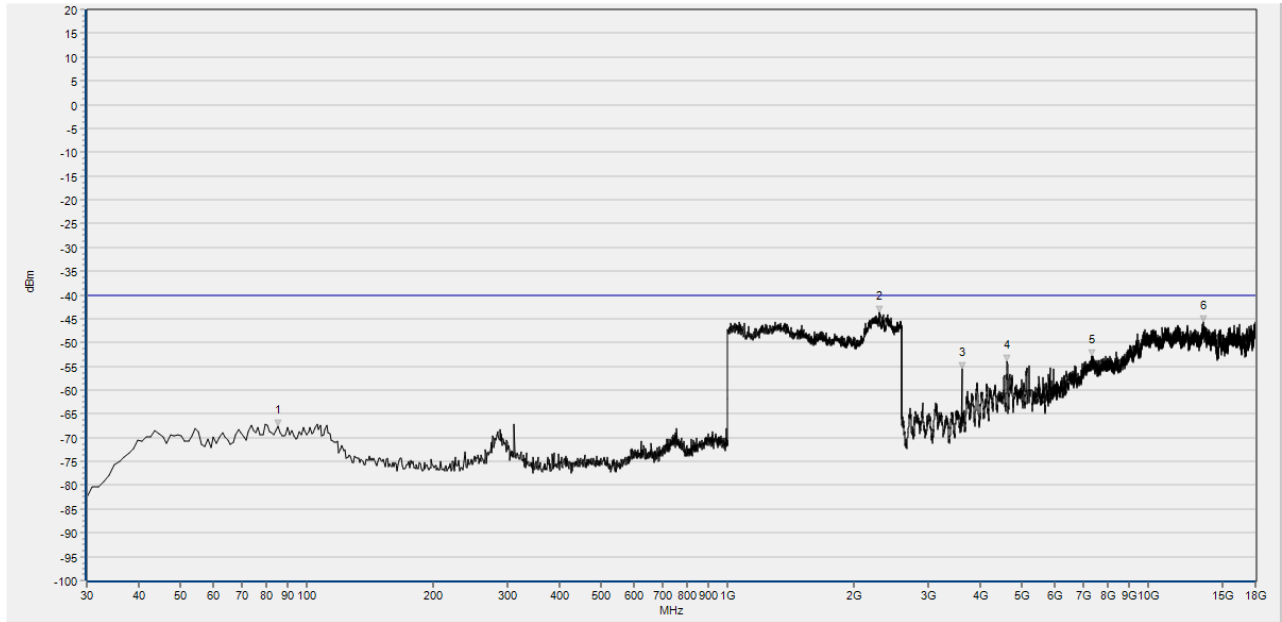
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-64.29	-40.00	360.0	H	PASS
2	2302.102	-43.22	-40.00	360.0	H	PASS
3	3554.991	-57.73	-40.00	312.8	H	NA
4	4685.577	-55.24	-40.00	27.4	H	PASS
5	5843.889	-54.68	-40.00	53.1	H	PASS
6	10252.250	-46.92	-40.00	164.8	H	PASS

N48 638000 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



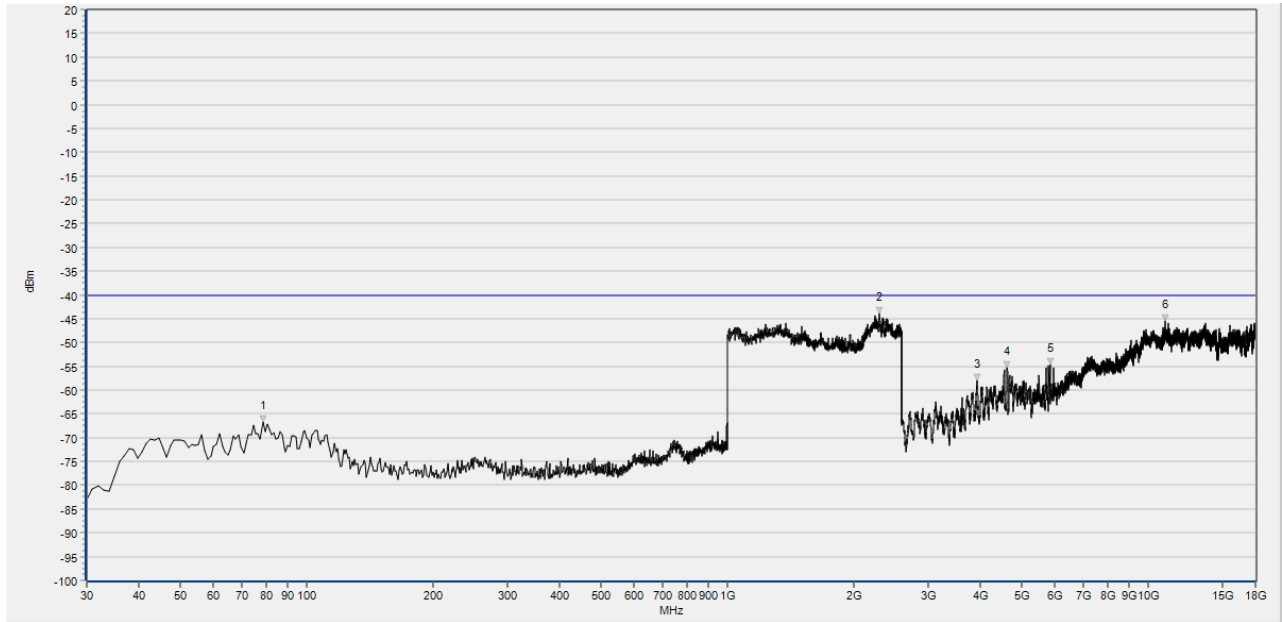
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-67.21	-40.00	0.0	V	PASS
2	2302.102	-44.22	-40.00	0.0	V	PASS
3	3132.947	-61.46	-40.00	251.7	V	PASS
4	4630.126	-54.59	-40.00	125.7	V	PASS
5	7183.957	-52.86	-40.00	321.1	V	PASS
6	13486.897	-45.35	-40.00	180.3	V	PASS

N48 638000 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



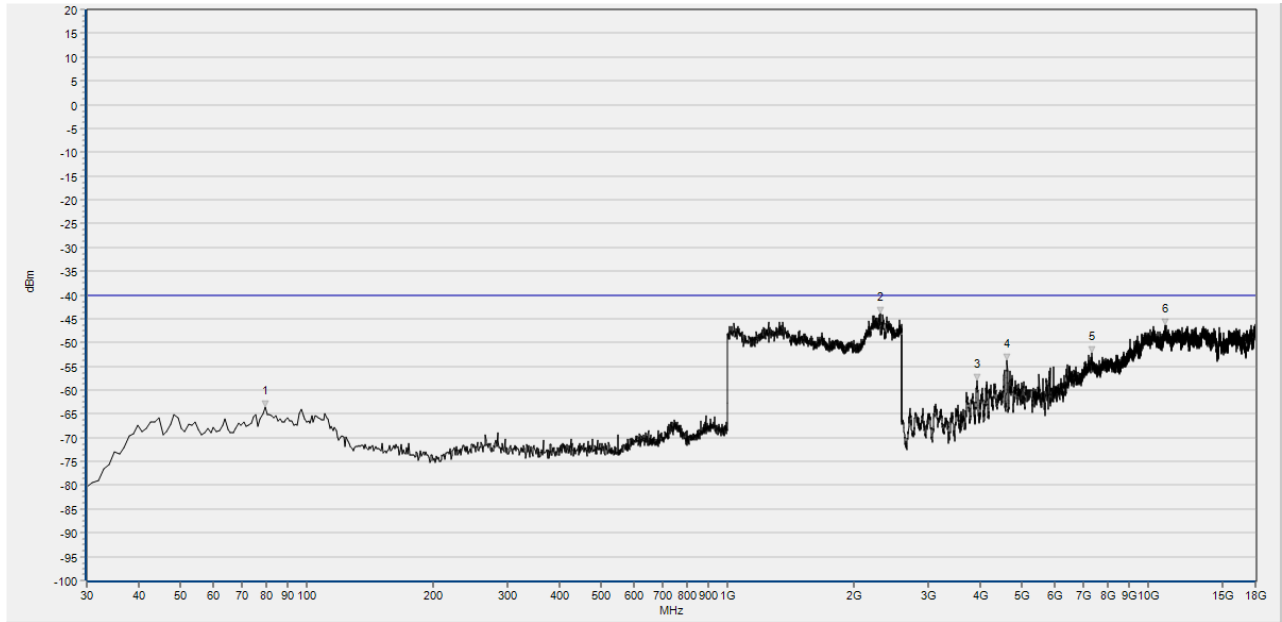
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	85.345	-67.50	-40.00	360.0	H	PASS
2	2298.899	-43.60	-40.00	359.0	H	PASS
3	3607.361	-55.57	-40.00	72.6	H	NA
4	4627.045	-54.02	-40.00	173.9	H	PASS
5	7347.229	-52.80	-40.00	212.4	H	PASS
6	13511.542	-45.68	-40.00	23.2	H	PASS

N48 641666 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



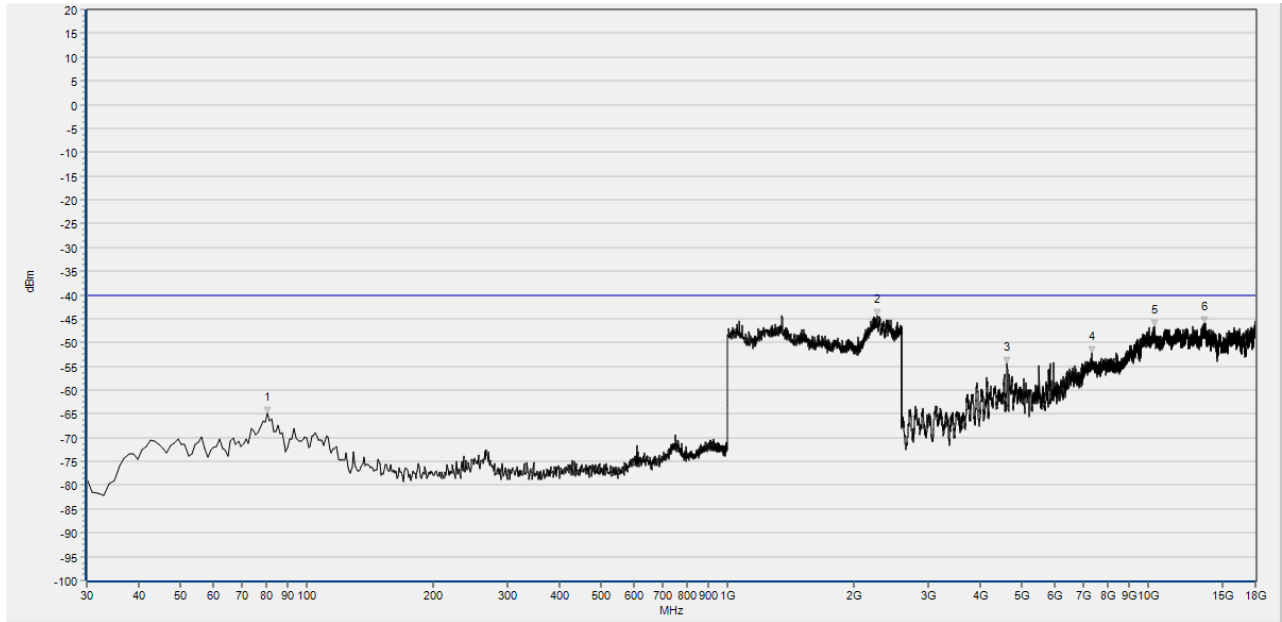
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	78.549	-66.79	-40.00	360.0	V	PASS
2	2295.696	-43.89	-40.00	360.0	V	PASS
3	3918.504	-58.02	-40.00	23.7	V	PASS
4	4627.045	-55.40	-40.00	251.3	V	PASS
5	5843.889	-54.68	-40.00	135.2	V	PASS
6	10982.356	-45.52	-40.00	333.9	V	PASS

N48 641666 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



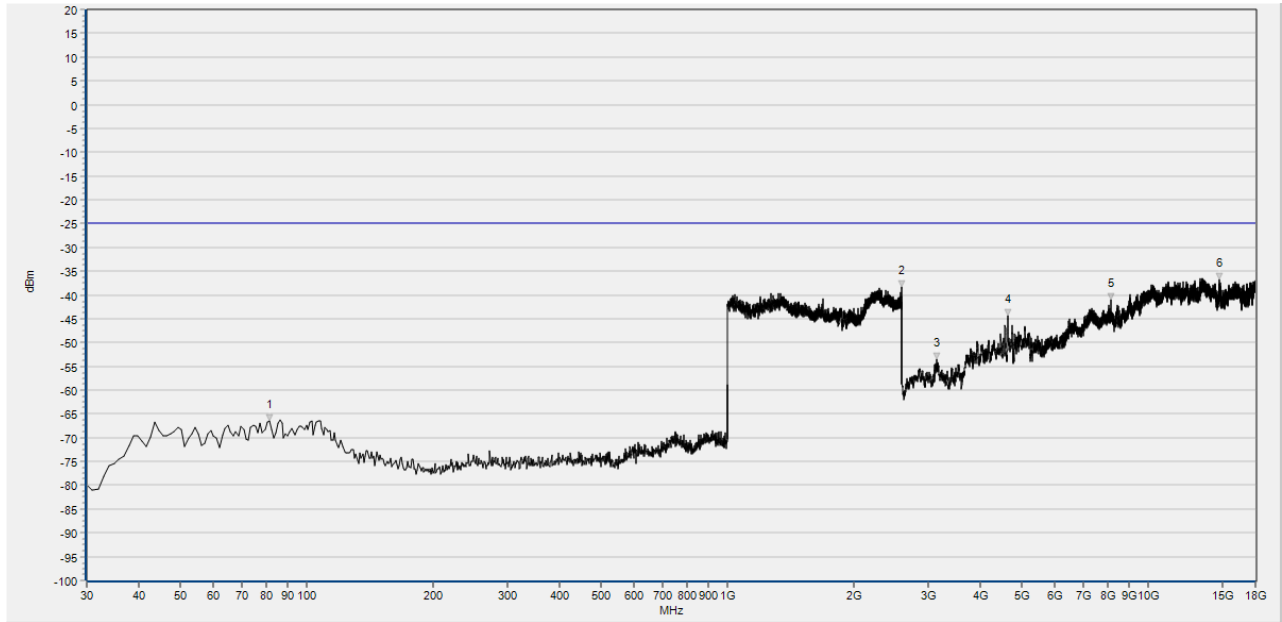
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.520	-63.63	-40.00	360.0	H	PASS
2	2308.509	-43.94	-40.00	360.0	H	PASS
3	3927.746	-58.03	-40.00	250.3	H	PASS
4	4623.965	-53.78	-40.00	313.1	H	PASS
5	7347.229	-52.29	-40.00	21.7	H	PASS
6	10994.679	-46.48	-40.00	258.2	H	PASS

N48 645332 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



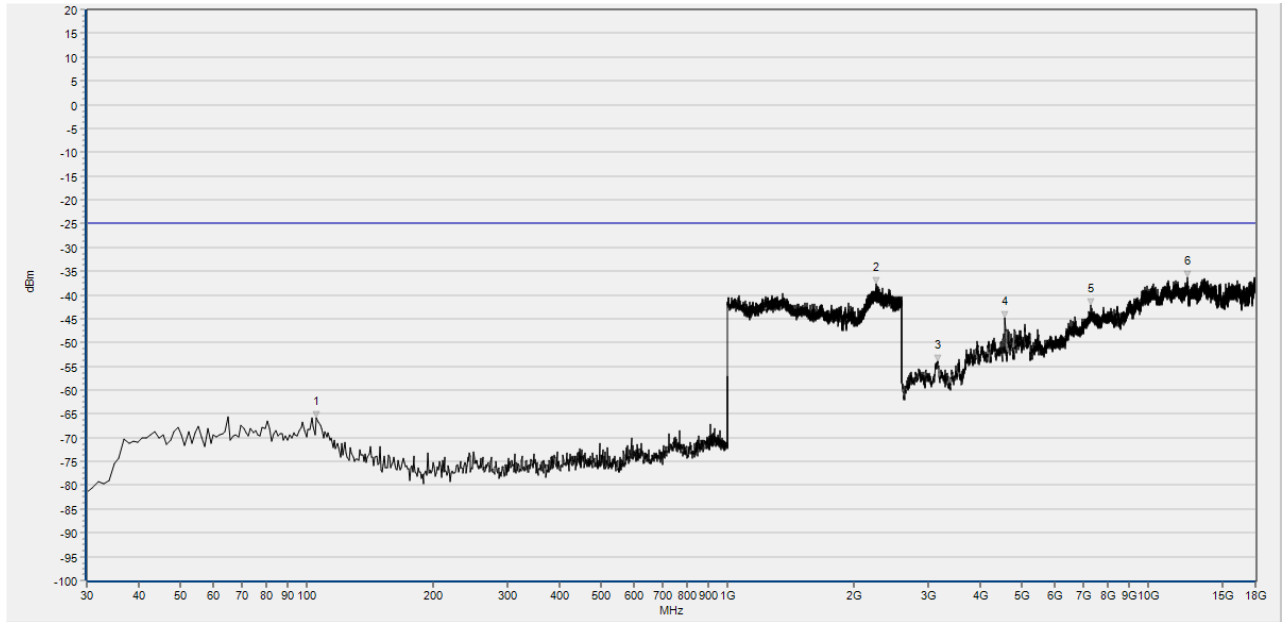
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	80.490	-65.00	-40.00	0.0	V	PASS
2	2268.468	-44.32	-40.00	0.0	V	PASS
3	4620.884	-54.44	-40.00	332.3	V	PASS
4	7334.907	-52.19	-40.00	174.9	V	PASS
5	10360.072	-46.70	-40.00	277.2	V	PASS
6	13579.316	-45.97	-40.00	23.4	V	PASS

N48 645332 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



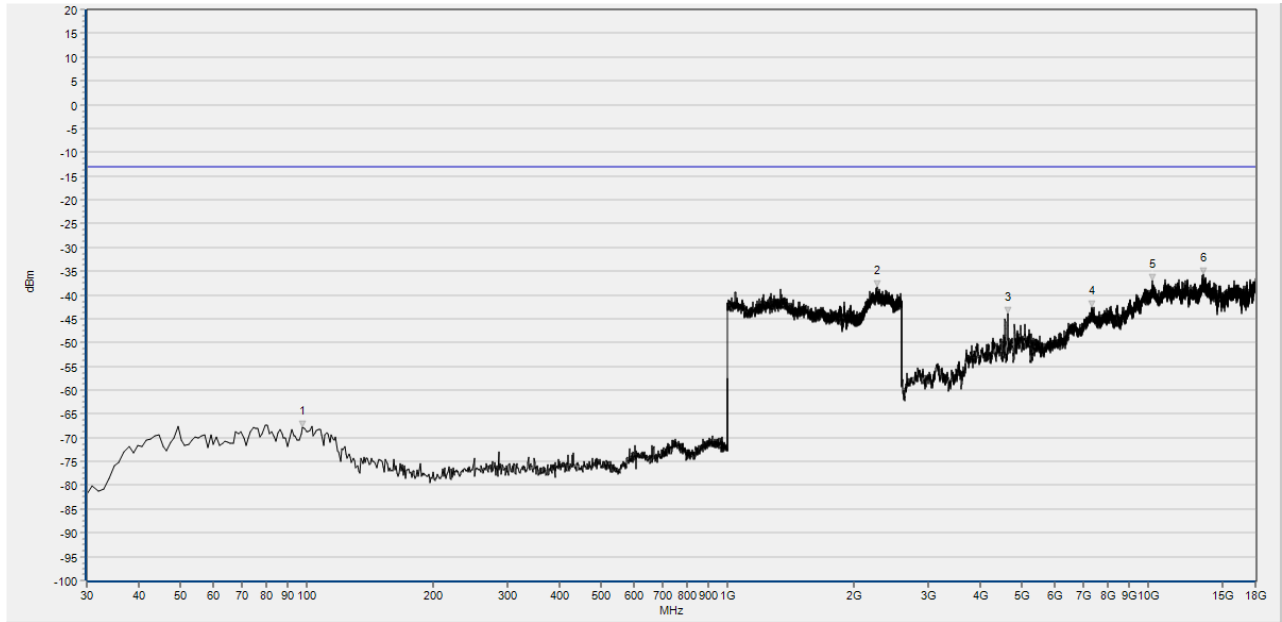
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-66.49	-25.00	0.0	H	PASS
2	2591.036	-38.42	-25.00	0.0	H	PASS
3	3143.299	-53.54	-25.00	100.5	H	PASS
4	4647.172	-44.41	-25.00	328.3	H	PASS
5	8150.609	-41.04	-25.00	226.0	H	PASS
6	14771.013	-36.81	-25.00	205.5	H	PASS

N77 633334(3450-3550) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



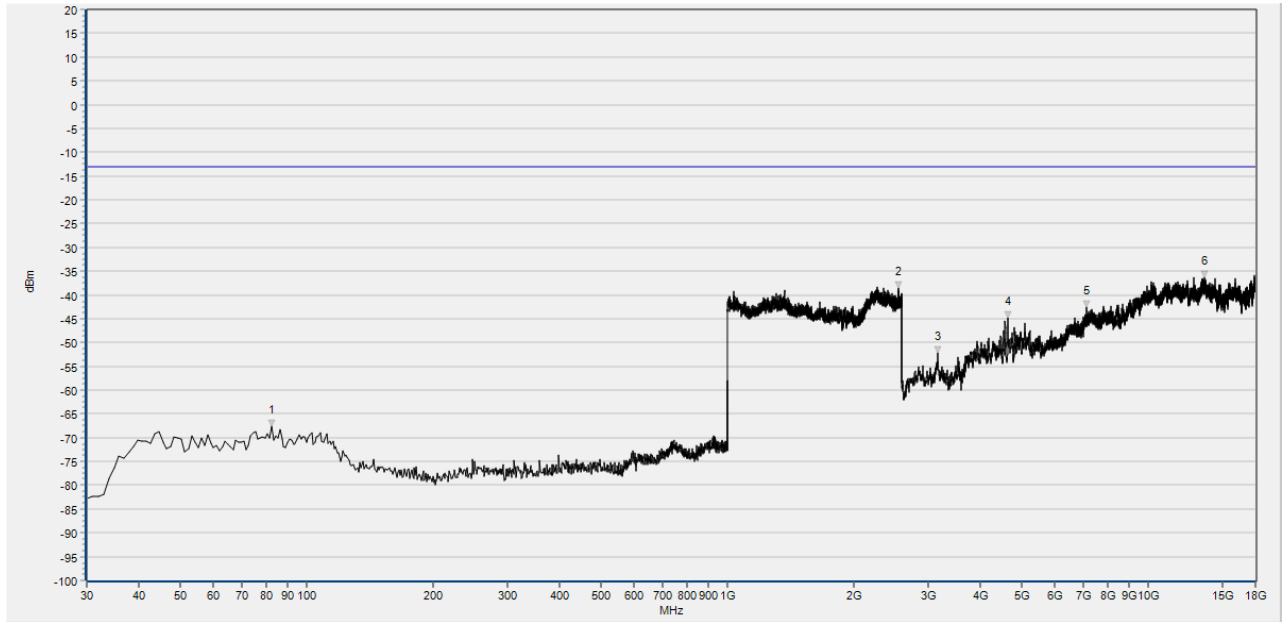
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	105.660	-65.86	-25.00	360.0	V	PASS
2	2260.664	-37.65	-25.00	360.0	V	PASS
3	3157.301	-54.01	-25.00	270.3	V	PASS
4	4574.359	-44.72	-25.00	159.9	V	PASS
5	7321.658	-42.21	-25.00	27.4	V	PASS
6	12387.780	-36.40	-25.00	44.9	V	PASS

N77 633334(3450-3550) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



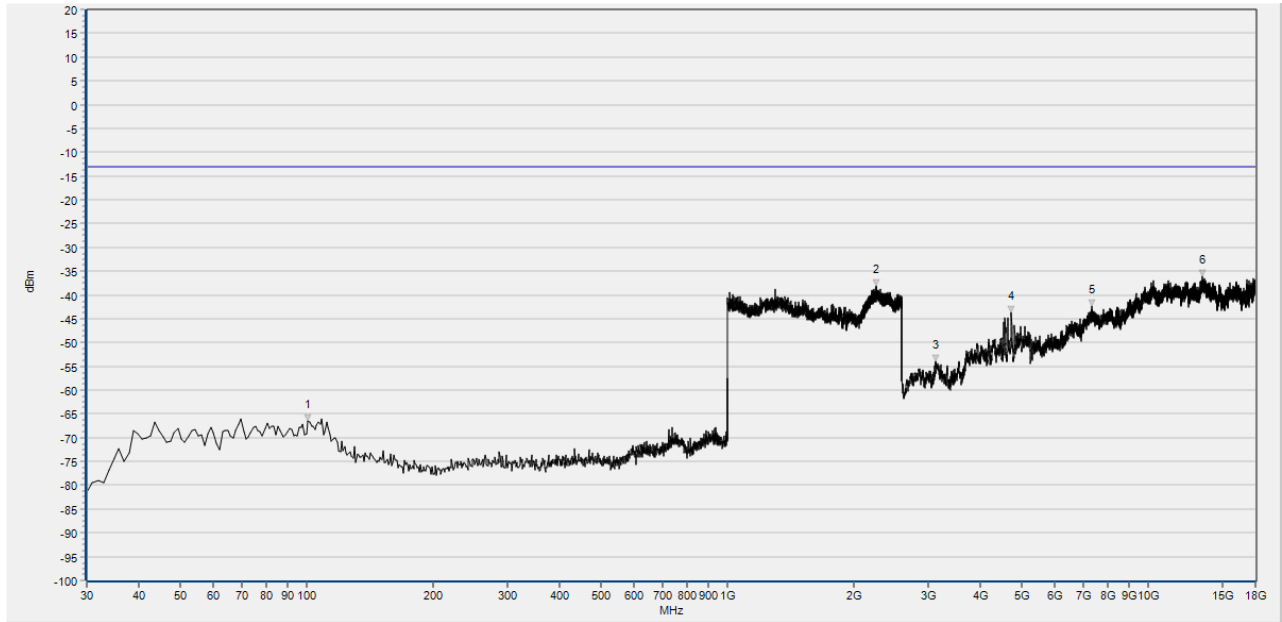
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	97.900	-67.87	-13.00	360.0	H	PASS
2	2264.506	-38.43	-13.00	360.0	H	PASS
3	4647.172	-43.84	-13.00	103.0	H	PASS
4	7363.666	-42.68	-13.00	250.1	H	PASS
5	10217.385	-36.95	-13.00	280.7	H	PASS
6	13516.385	-35.60	-13.00	20.7	H	PASS

N77 650000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



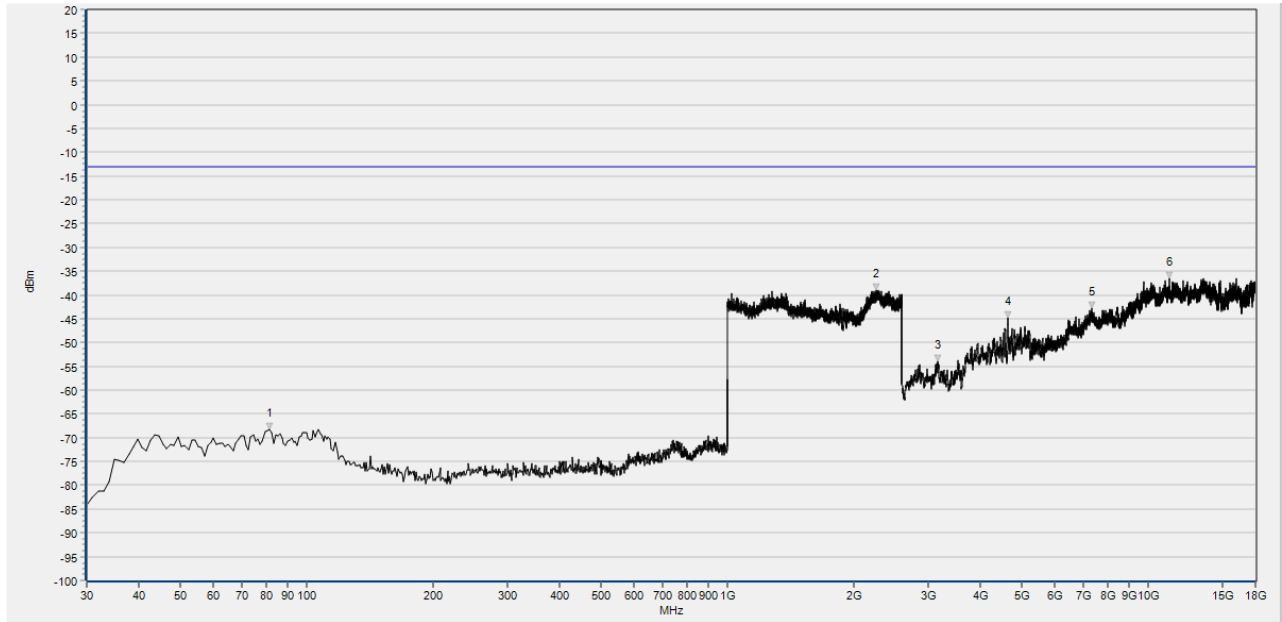
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	82.380	-67.69	-13.00	0.0	V	PASS
2	2548.780	-38.61	-13.00	0.0	V	PASS
3	3165.703	-52.24	-13.00	73.8	V	PASS
4	4644.372	-44.73	-13.00	359.5	V	PASS
5	7128.423	-42.57	-13.00	118.3	V	PASS
6	13586.398	-36.37	-13.00	109.1	V	PASS

N77 650000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



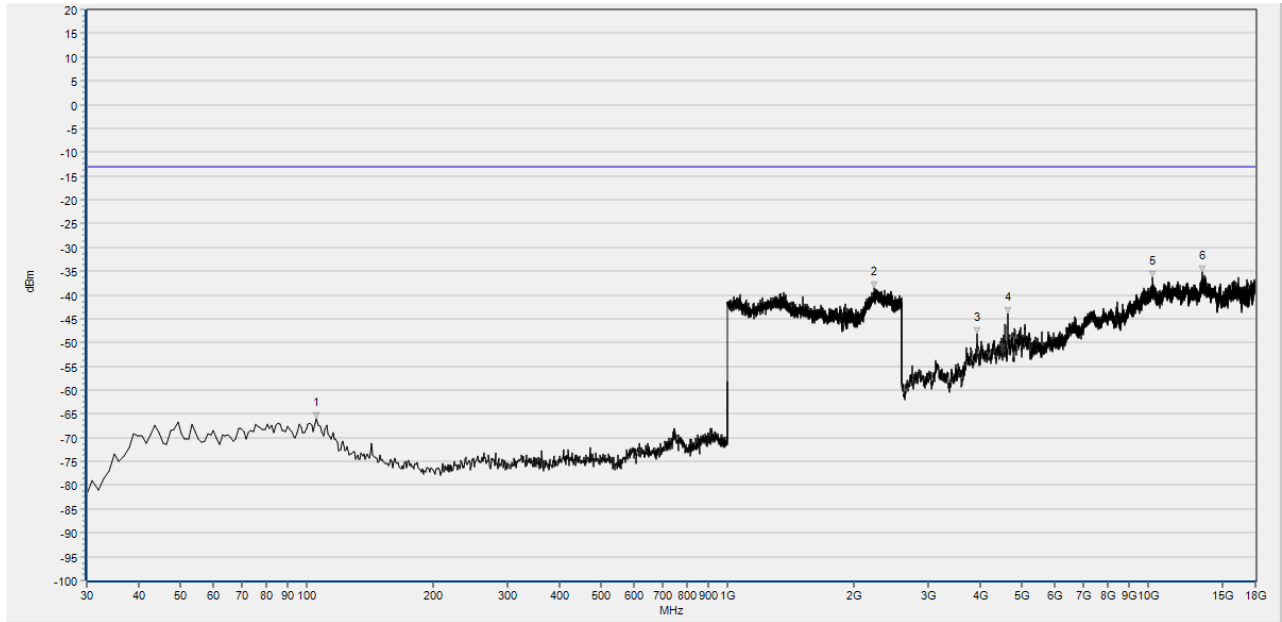
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	100.810	-66.47	-13.00	0.0	H	PASS
2	2260.664	-38.07	-13.00	0.0	H	PASS
3	3129.296	-53.98	-13.00	124.2	H	PASS
4	4733.988	-43.59	-13.00	98.5	H	PASS
5	7344.063	-42.30	-13.00	124.2	H	PASS
6	13477.178	-36.12	-13.00	168.2	H	PASS

N77 656000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



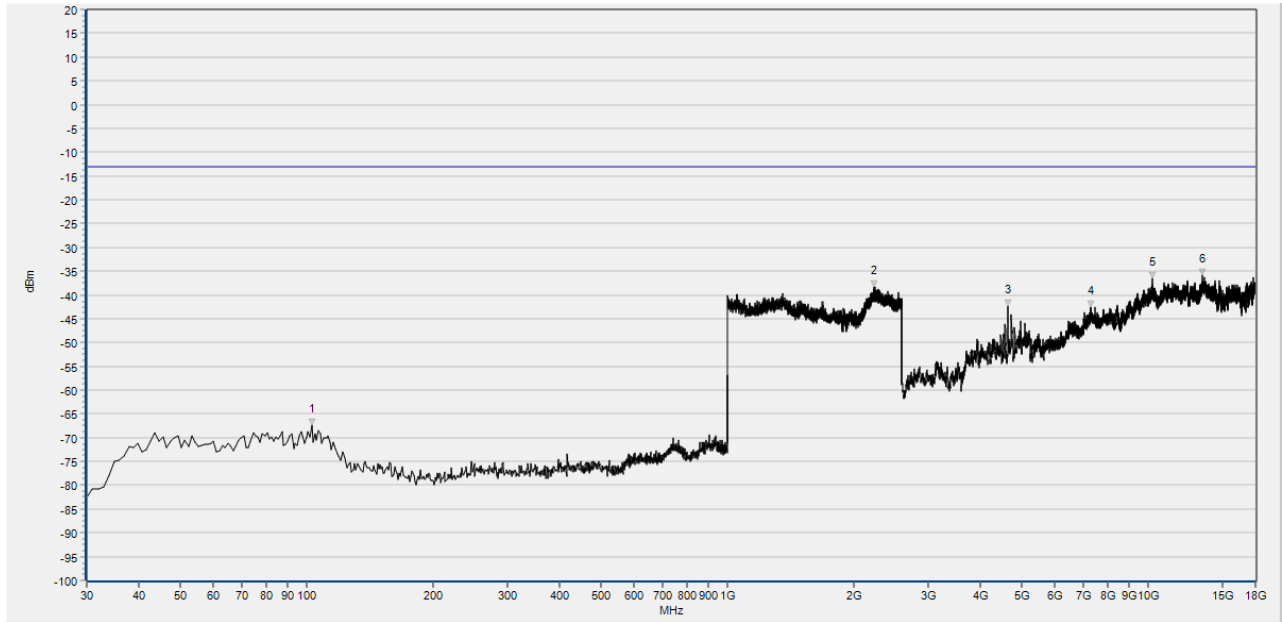
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-68.37	-13.00	360.0	V	PASS
2	2257.463	-39.05	-13.00	360.0	V	PASS
3	3168.503	-53.99	-13.00	3.3	V	PASS
4	4644.372	-44.73	-13.00	94.4	V	PASS
5	7330.060	-42.70	-13.00	57.0	V	PASS
6	11211.566	-36.46	-13.00	231.8	V	PASS

N77 656000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



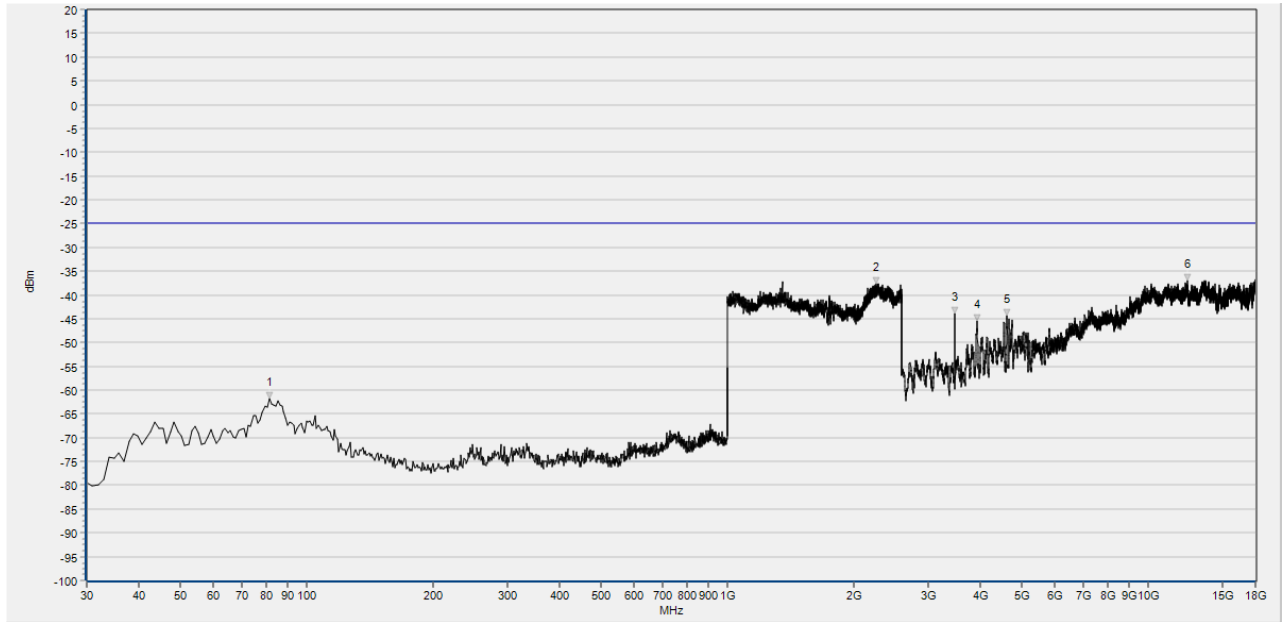
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	105.660	-65.98	-13.00	360.0	H	PASS
2	2237.615	-38.65	-13.00	360.0	H	PASS
3	3919.040	-48.12	-13.00	260.9	H	PASS
4	4647.172	-44.01	-13.00	109.2	H	PASS
5	10267.794	-36.31	-13.00	44.9	H	PASS
6	13468.776	-35.23	-13.00	298.0	H	PASS

N77 662000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



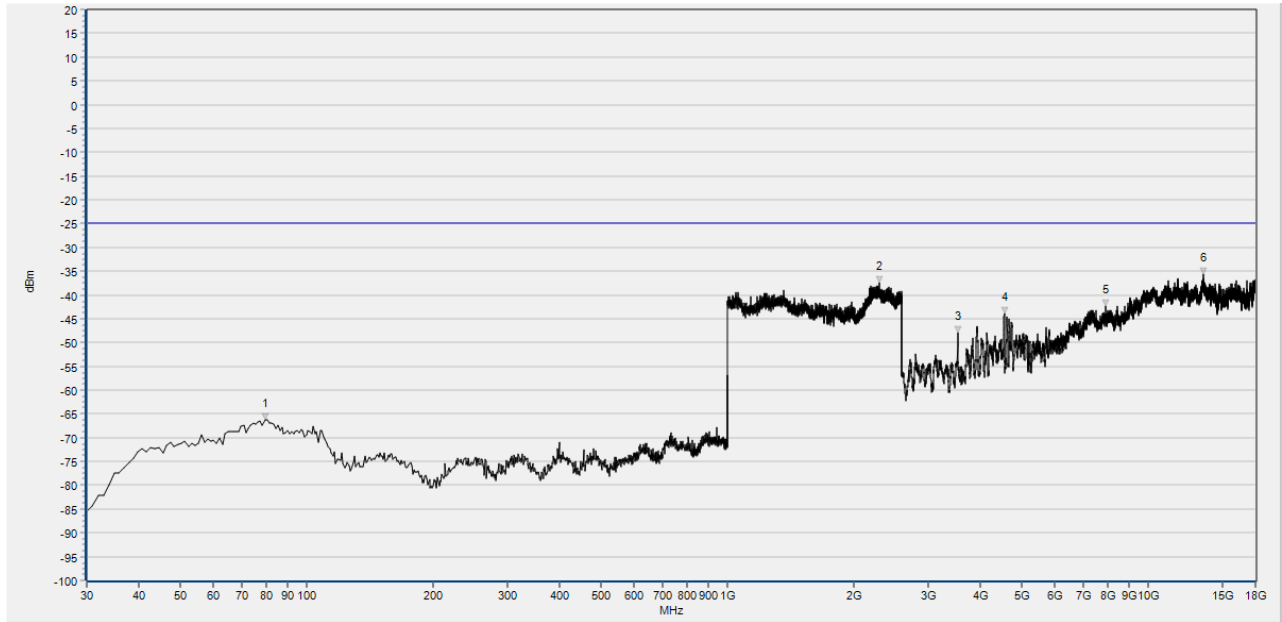
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	102.750	-67.27	-13.00	0.0	V	PASS
2	2234.414	-38.34	-13.00	0.0	V	PASS
3	4644.372	-42.38	-13.00	2.1	V	PASS
4	7302.055	-42.62	-13.00	175.1	V	PASS
5	10214.584	-36.60	-13.00	108.1	V	PASS
6	13471.577	-35.85	-13.00	238.3	V	PASS

N77 662000(3700-3980) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



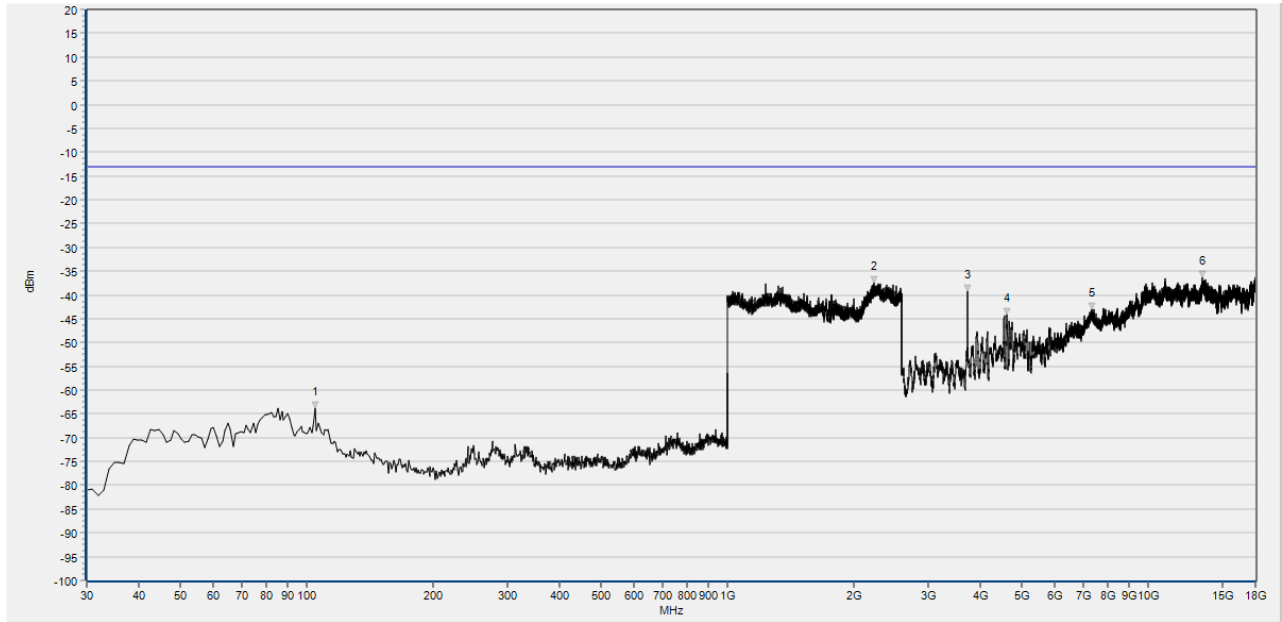
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-61.82	-25.00	0.0	H	PASS
2	2254.262	-37.63	-25.00	0.0	H	PASS
3	3476.559	-43.97	-25.00	47.2	H	NA
4	3927.441	-45.59	-25.00	178.4	H	PASS
5	4624.768	-44.47	-25.00	169.2	H	PASS
6	12412.984	-37.07	-25.00	303.1	H	PASS

N78 636666(3450-3550) 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



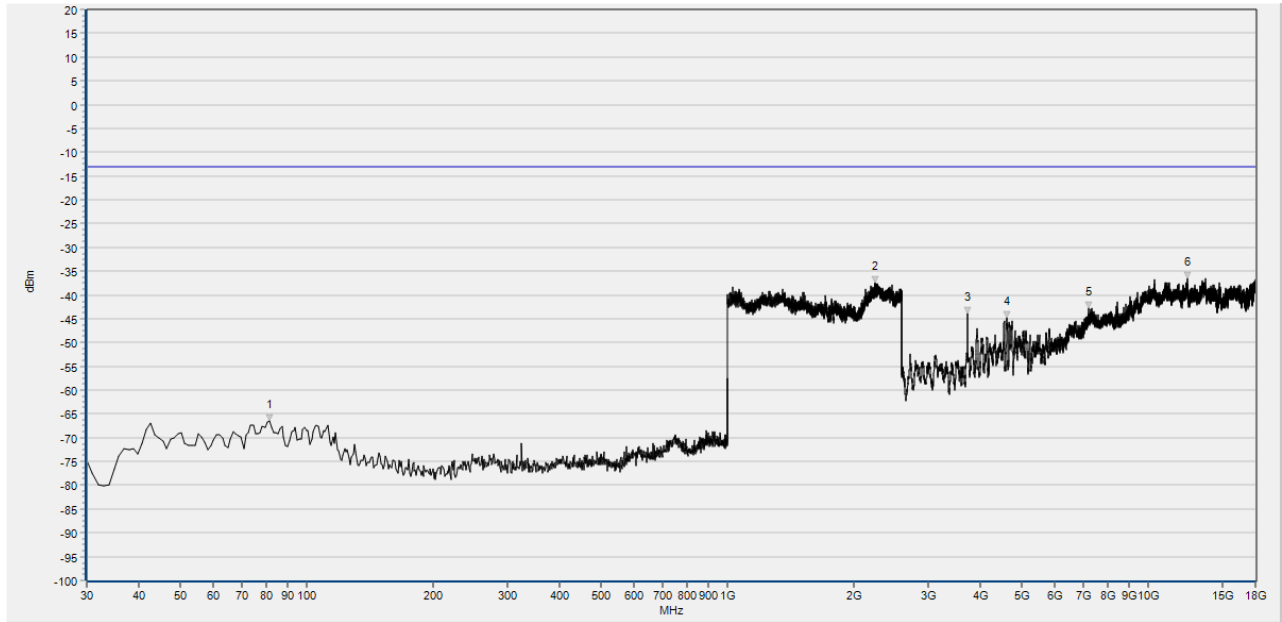
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.470	-66.28	-25.00	360.0	V	PASS
2	2292.677	-37.54	-25.00	360.0	V	PASS
3	3526.969	-48.01	-25.00	85.0	V	NA
4	4551.955	-43.85	-25.00	259.0	V	PASS
5	7920.967	-42.38	-25.00	320.2	V	PASS
6	13563.993	-35.72	-25.00	180.6	V	PASS

N78 636666(3450-3550) 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



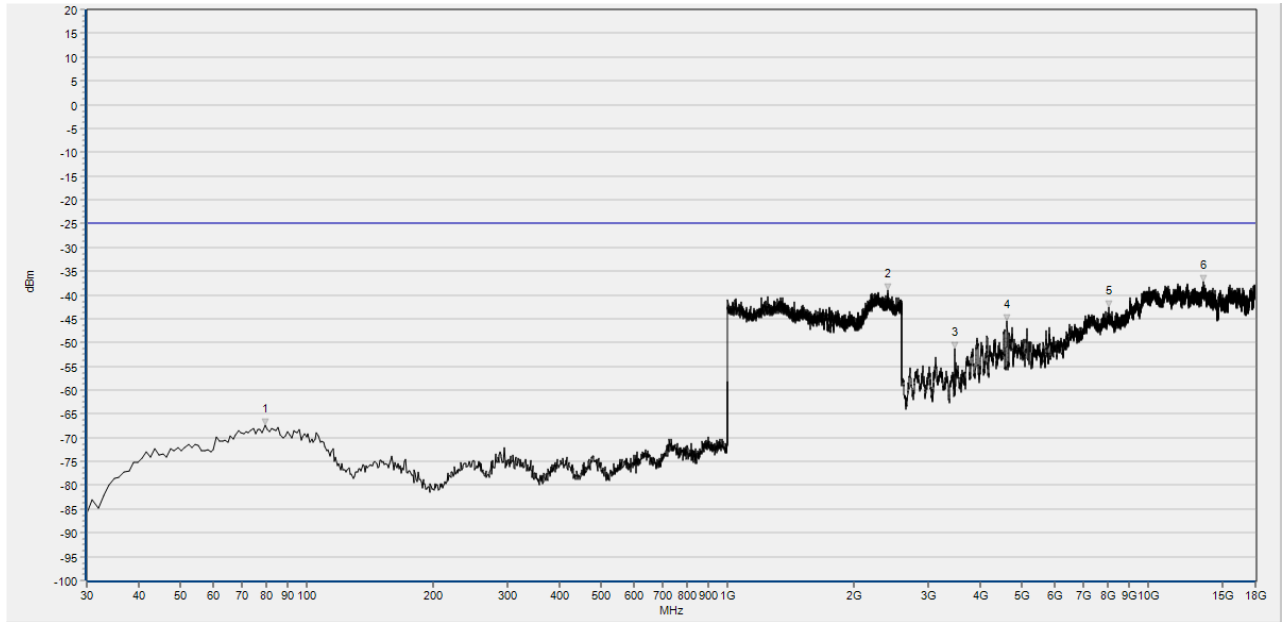
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	104.690	-63.69	-13.00	360.0	H	PASS
2	2229.932	-37.41	-13.00	360.0	H	PASS
3	3725.805	-39.27	-13.00	215.7	H	NA
4	4621.968	-44.11	-13.00	119.3	H	PASS
5	7335.661	-43.02	-13.00	154.9	H	PASS
6	13451.973	-36.21	-13.00	321.0	H	PASS

N78 651666(3700-3800) 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G H



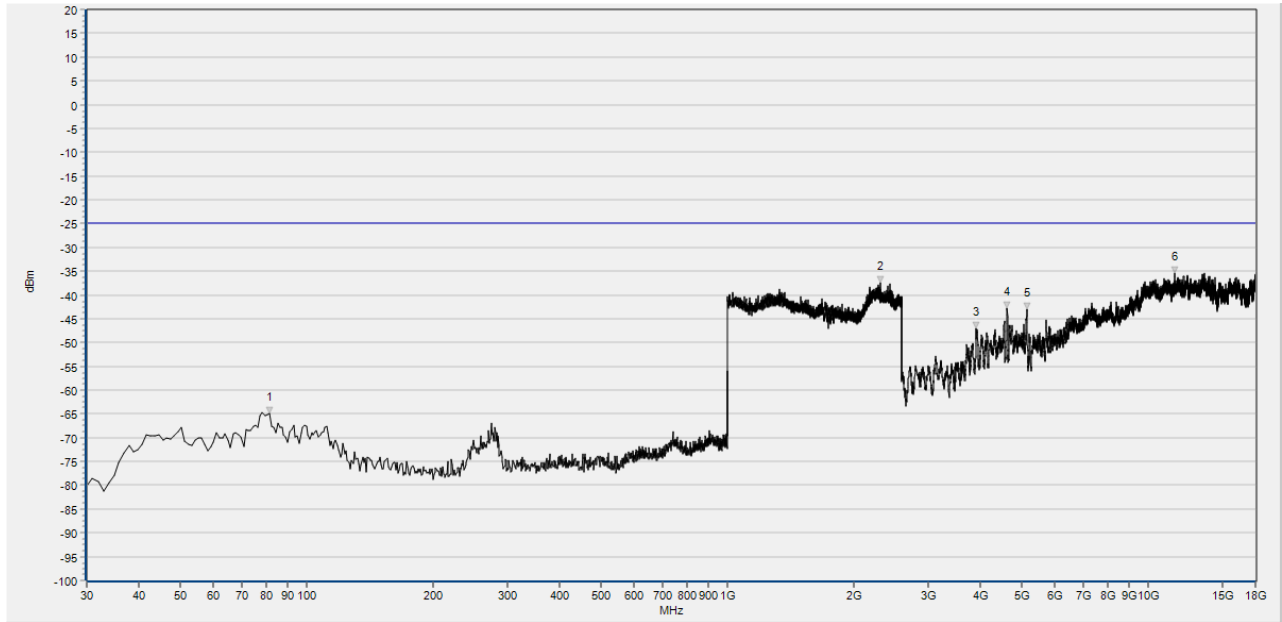
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-66.55	-13.00	0.0	V	PASS
2	2242.737	-37.46	-13.00	0.0	V	PASS
3	3725.805	-43.85	-13.00	107.7	V	NA
4	4621.968	-44.75	-13.00	135.9	V	PASS
5	7218.040	-42.74	-13.00	179.6	V	PASS
6	12384.979	-36.57	-13.00	18.5	V	PASS

N78 651666(3700-3800) 50MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15kHz 30M-18G V



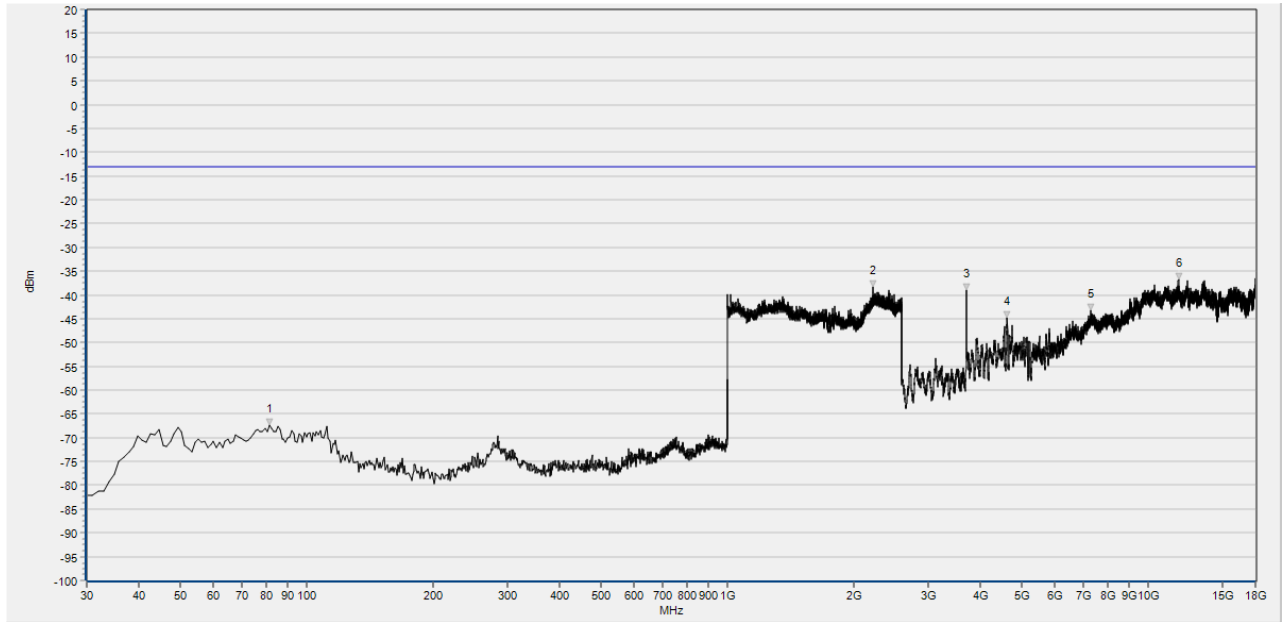
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	79.470	-67.39	-25.00	0.0	H	PASS
2	2407.923	-39.07	-25.00	0.0	H	PASS
3	3465.357	-51.38	-25.00	334.7	H	PASS
4	4624.768	-45.41	-25.00	64.7	H	PASS
5	8086.197	-42.67	-25.00	334.7	H	PASS
6	13547.190	-37.28	-25.00	315.4	H	PASS

N78 633334(3450-3550) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



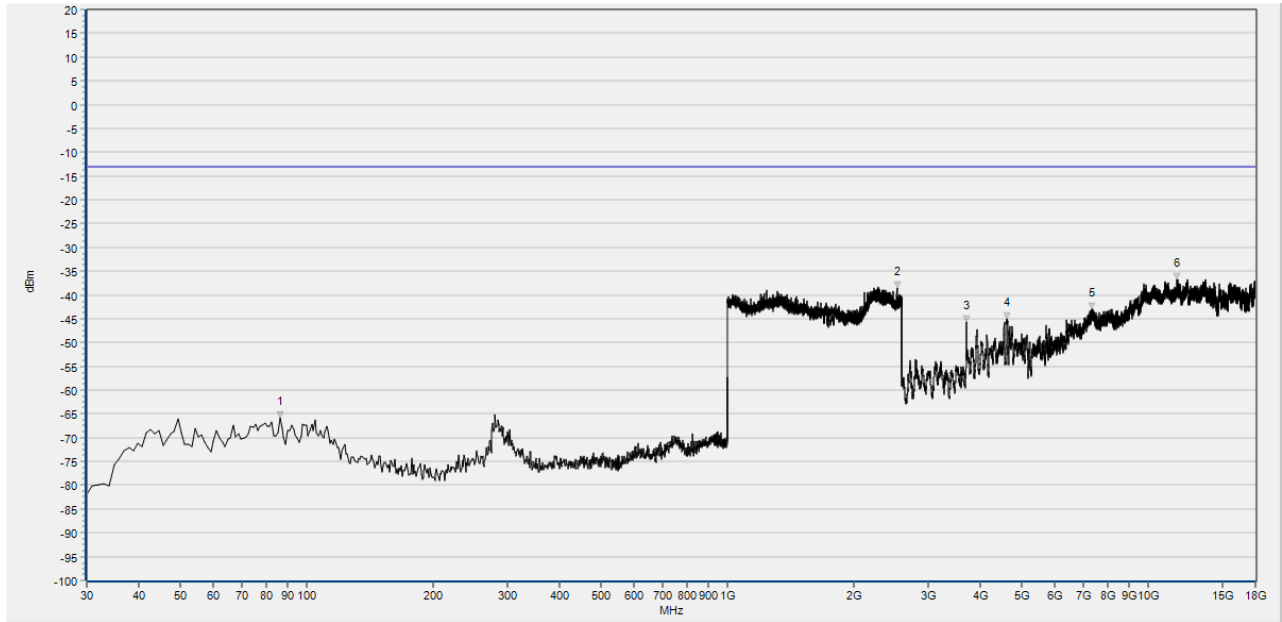
Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-64.97	-25.00	360.0	V	PASS
2	2313.806	-37.51	-25.00	360.0	V	PASS
3	3907.838	-47.08	-25.00	190.5	V	PASS
4	4627.569	-42.70	-25.00	91.4	V	PASS
5	5145.663	-42.94	-25.00	118.9	V	PASS
6	11550.427	-35.45	-25.00	198.9	V	PASS

N78 633334(3450-3550) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	81.410	-67.48	-13.00	360.0	H	PASS
2	2222.889	-38.38	-13.00	360.0	H	PASS
3	3700.600	-39.06	-13.00	237.0	H	NA
4	4627.569	-44.78	-13.00	267.6	H	PASS
5	7313.257	-43.27	-13.00	175.2	H	PASS
6	11808.074	-36.70	-13.00	139.8	H	PASS

N78 650000(3700-3800) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G H



Num	Freq(MHz)	PK	limit PK	Degree	Antenna	Verdict
1	86.260	-65.72	-13.00	0.0	V	PASS
2	2528.932	-38.65	-13.00	0.0	V	PASS
3	3700.600	-45.80	-13.00	105.2	V	NA
4	4619.167	-44.99	-13.00	9.1	V	PASS
5	7330.060	-43.07	-13.00	105.2	V	PASS
6	11684.852	-36.77	-13.00	26.6	V	PASS

N78 650000(3700-3800) 100MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 30kHz 30M-18G V



2.8. End User Device Additional Requirements (CBSD Protocol)

2.8.1. Requirement

According to FCC section Part 96.47,

- (a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.
- (b) Any device operated at higher power than specified for End User Devices in Part 96.41 will be classified as, and subject to, the operational requirements of a CBSD.

2.8.2. Test Description

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During testing, the EUT is connected to a certified CBSD (kingsignal LBS7320 FCC ID: P27-SCE5164-B48) as a companion device to show compliance with Part 96.47. End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. An End User Device must discontinue operations, change frequencies, or change its operation power level within 10 seconds of receiving instructions from its associated CBSD.

2.8.3. Test Procedure

KDB 940660 D01 Part 96 CBRS Eqpt v02.

2.8.4. Test Result

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer
Test Graph 1:

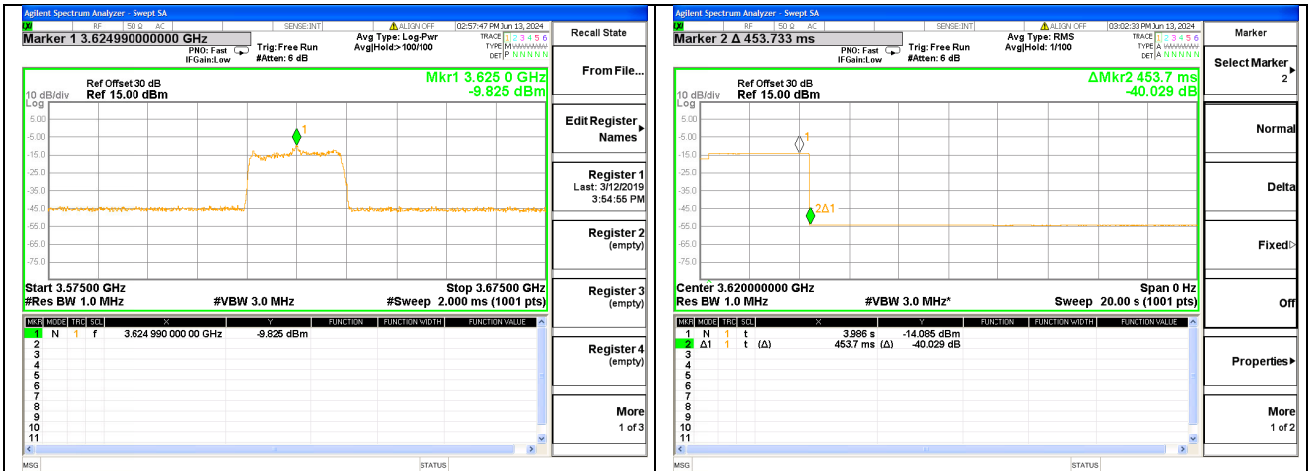
- a. Setup frequency with 3624.99MHz
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

Test Graph 2:

- a. Setup frequency with 3690.00MHz
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s

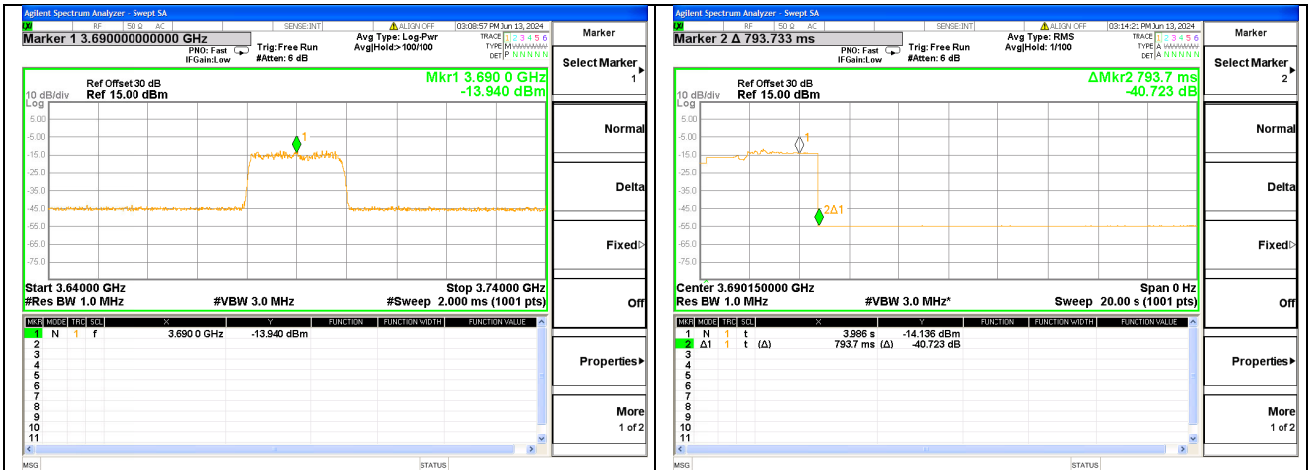


Test Graph 1



Note:
 Marker 1: CBSD sends instructions to discontinue NR operations.
 Marker 2: EUT discontinues operation

Test Graph 2



Note:
 Marker 1: CBSD sends instructions to discontinue NR operations.
 Marker 2: EUT discontinues operation

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Output Power	± 2.22 dB
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	± 2.77 dB
Band Edge	± 2.77 dB
Equivalent Isotropic Radiated Power	± 2.22 dB
Radiated Spurious Emissions	± 6 dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.



4. Test Equipment Utilized

4.1 Conducted Test Equipment

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Power Splitter	NW521	1506A	Weinschel	N/A	N/A
Attenuator 1	(N/A.)	10dB	Resnet	N/A	N/A
Attenuator 2	(N/A.)	3dB	Resnet	N/A	N/A
EXA Signal Analyzer	MY54170556	N9030A	Keysight	2023.10.07	2024.10.06
System Simulator	6262012906	MT8000A	Anritsu	2023.06.27	2024.06.26
System Simulator	6261830572	MT8821C	Anritsu	2023.06.27	2024.06.26
System Simulator	MY58300665	E7515B	Anritsu	2023.10.07	2024.10.06
RF cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial cable	CB02	RF02	Morlab	N/A	N/A
SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Temperature Chamber	S02217710100089001	KMT-36LF1A0	KOMEG	2023.09.19	2024.09.18
Computer	T430i	Think Pad	Lenovo	N/A	N/A
Test system	N/A	WCS FCC V22.02.041801	CeSheng	N/A	N/A
Minitype 5GC	2302M1205	MINIPC-M1	CWWK	N/A	N/A
n48 Integrated microbase station	2209DR6000177	SCE5164-B48	SERCOM	N/A	N/A

**4.2 Radiated Test Equipment**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Bi-Log Antenna	9163-274	VULB 9163	SCHWARZBECK	2023.06.27	2024.06.26
Horn Antenna	9120D-963	BBHA 9120D	SCHWARZBECK	2023.06.27	2024.06.26
Receiver	MY54130016	N9038A	Agilent	2023.06.21	2024.06.20
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2023.06.27	2024.06.26
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2023.06.27	2024.06.26
System Simulator	152038	CMW500	R&S	2023.09.19	2024.09.18
System Simulator	6262148249	MT8000A	anritsu	2023.06.27	2024.06.26
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2023.07.04	2024.07.03
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2023.07.04	2024.07.03
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2023.07.04	2024.07.03

————— END OF REPORT —————