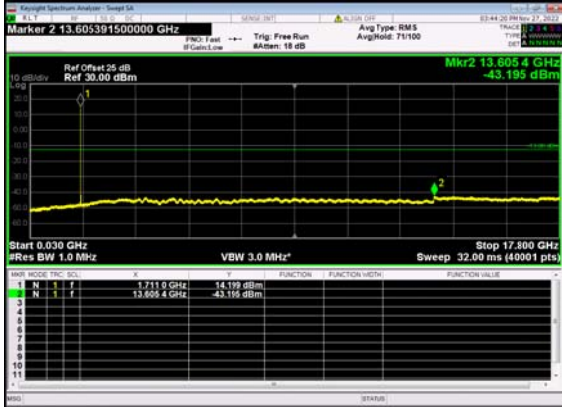
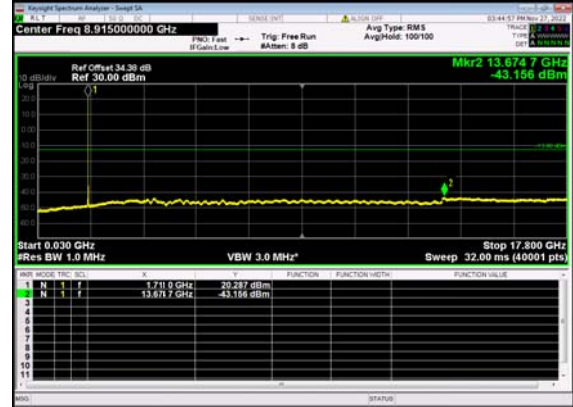
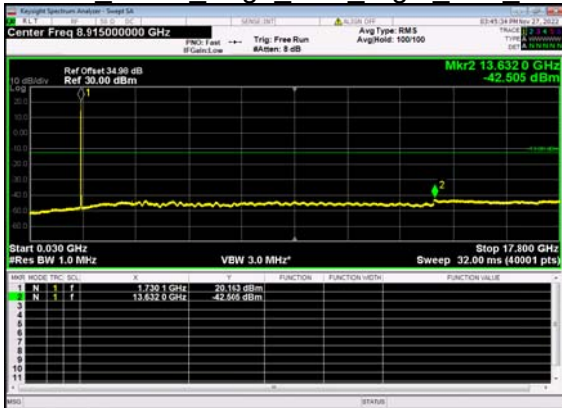
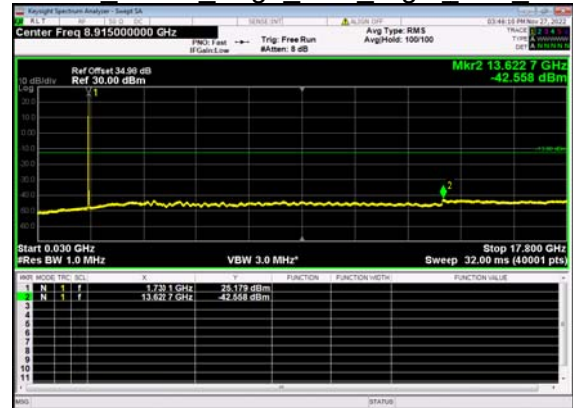
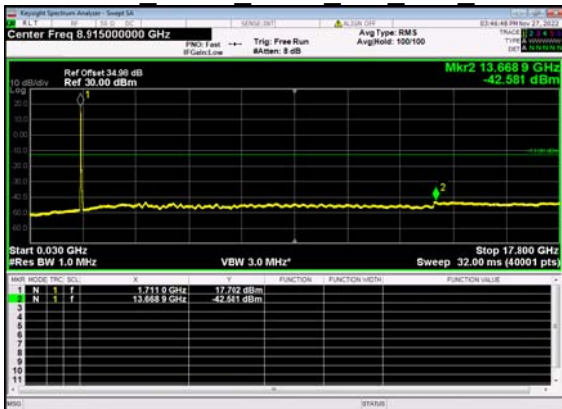
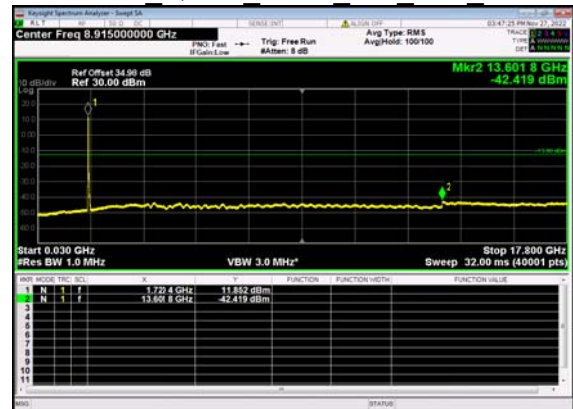
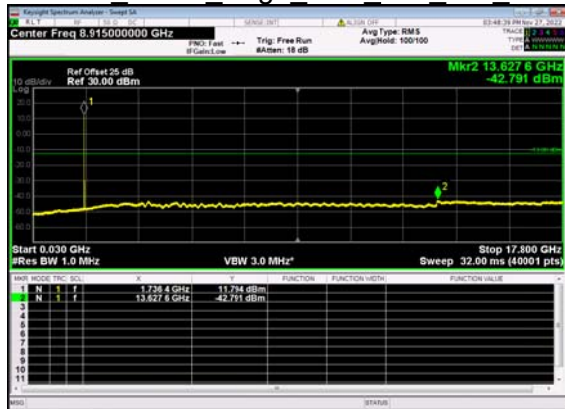
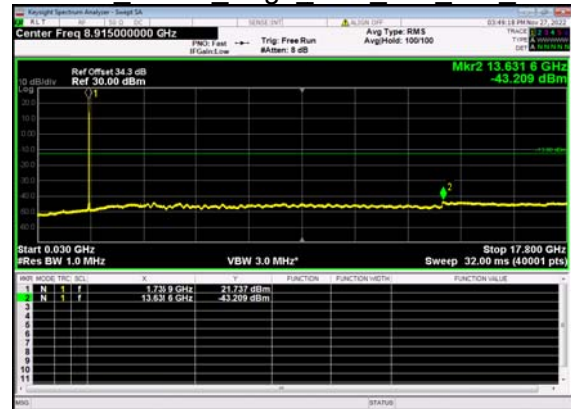


N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Left Low CHN66(20M)_DFT-s-
OFDM QPSK Edge 1RB Left Low CHN66(20M)_DFT-s-
OFDM BPSK Edge 1RB Right Low CHN66(20M)_DFT-s-
OFDM QPSK Edge 1RB Right Low CHN66(20M)_DFT-s-
OFDM BPSK Outer Full Low CHN66(20M)_DFT-s-
OFDM QPSK Outer Full Low CH

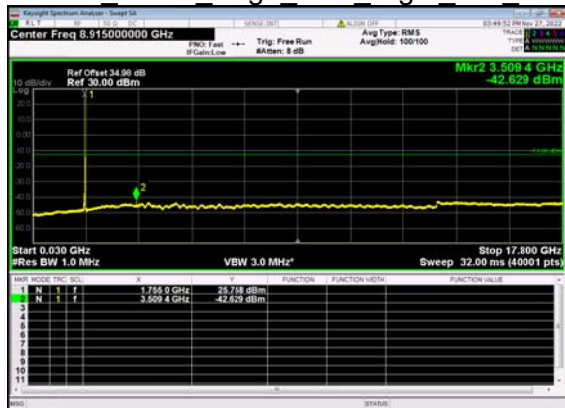
N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Left Mid CH



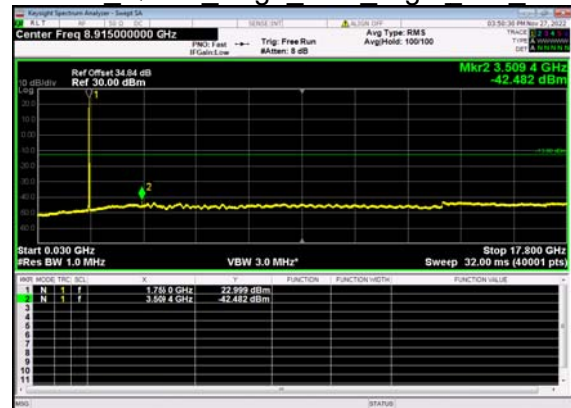
N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Left Mid CH



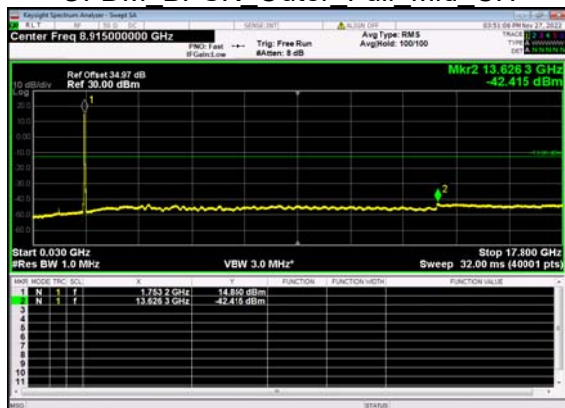
N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Right Mid CH



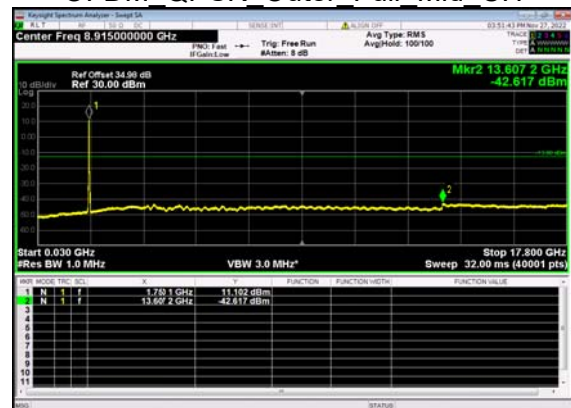
N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Right Mid CH



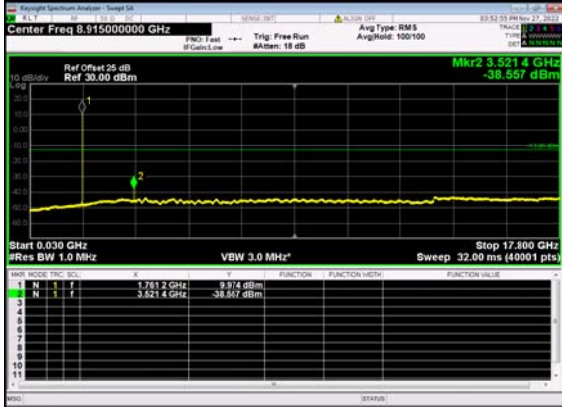
N66(20M)_DFT-s-
OFDM BPSK Outer Full Mid CH



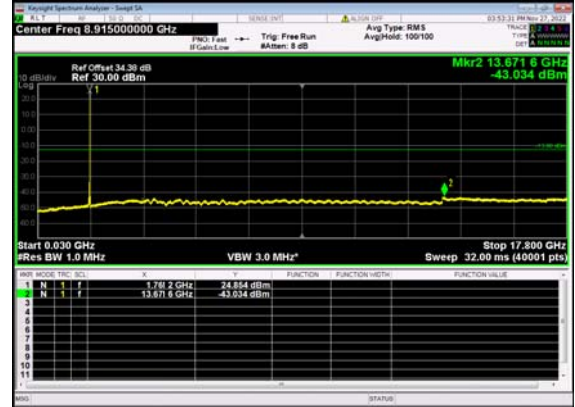
N66(20M)_DFT-s-
OFDM QPSK Outer Full Mid CH



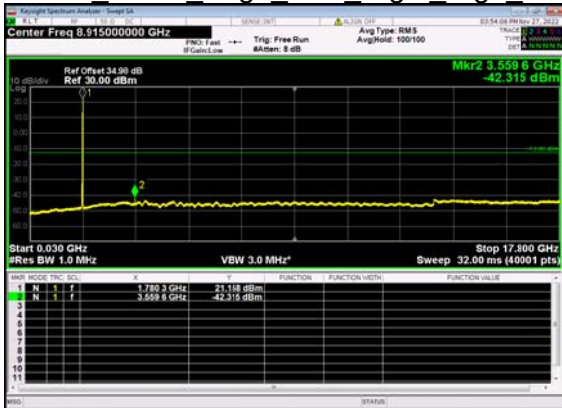
N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Left High CH



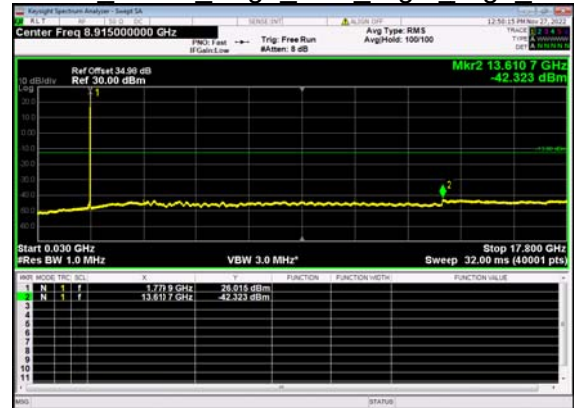
N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Left High CH



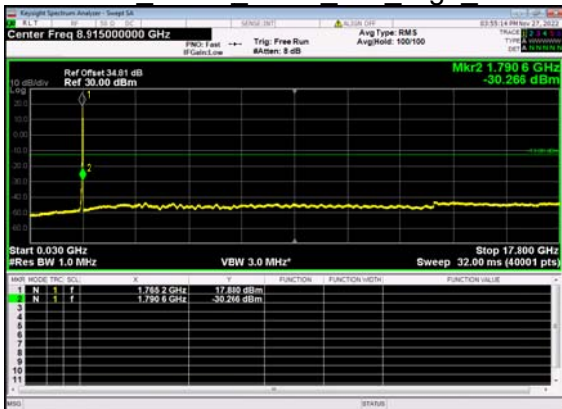
N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Right High CH



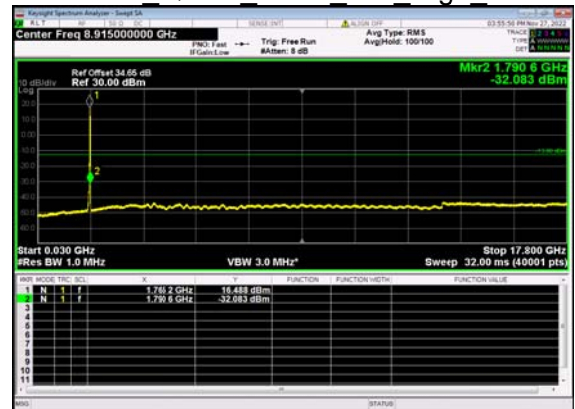
N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Right High CH



N66(20M)_DFT-s-
OFDM BPSK Outer Full High CH



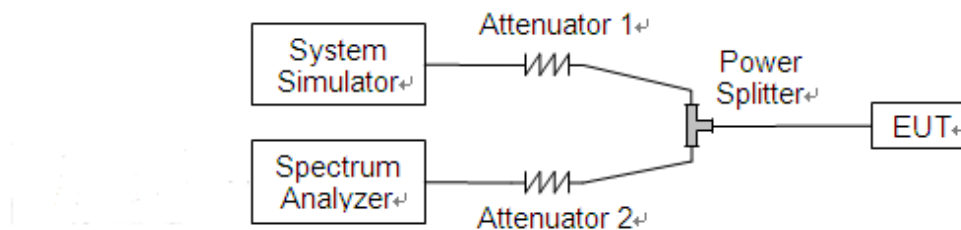
N66(20M)_DFT-s-
OFDM QPSK Outer Full High CH



2.6. Band Edge

2.6.1.Requirement

According to FCC section 2.1051, section 27.53(h), 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.



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.6.2.Test procedure

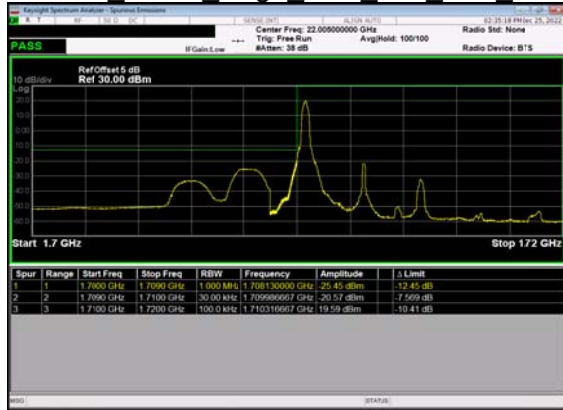
KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

2.6.3.Test Result

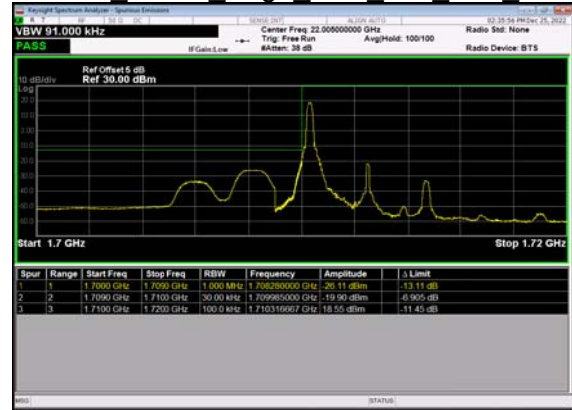
The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

Note: In the same NR frequency band, The measured power in SA mode is higher than that in NSA mode, SA mode is selected to test all test cases.

N66(5M)_DFT-s-
OFDM BPSK Edge 1RB Left Low CH



N66(5M)_DFT-s-
OFDM QPSK Edge 1RB Left Low CH



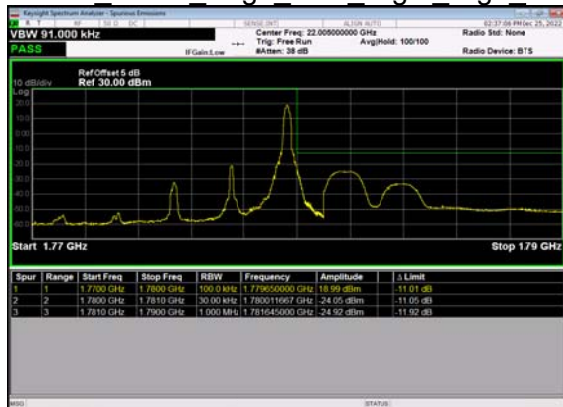
N66(5M)_DFT-s-
OFDM BPSK Outer Full Low CH



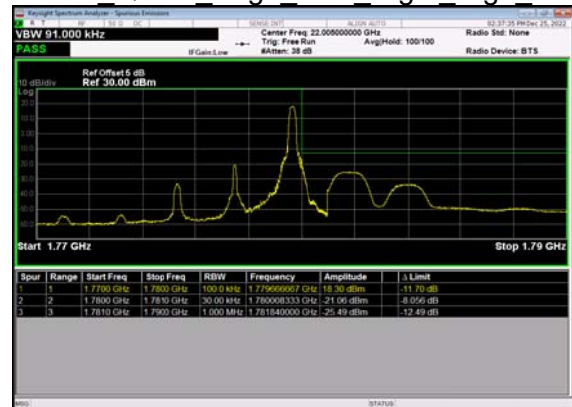
N66(5M)_DFT-s-
OFDM QPSK Outer Full Low CH



N66(5M)_DFT-s-
OFDM BPSK Edge 1RB Right High CH



N66(5M)_DFT-s-
OFDM QPSK Edge 1RB Right High CH



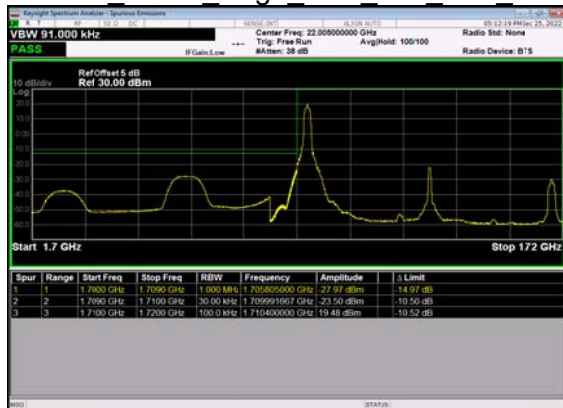
N66(5M)_DFT-s-OFDM BPSK Outer Full High CH



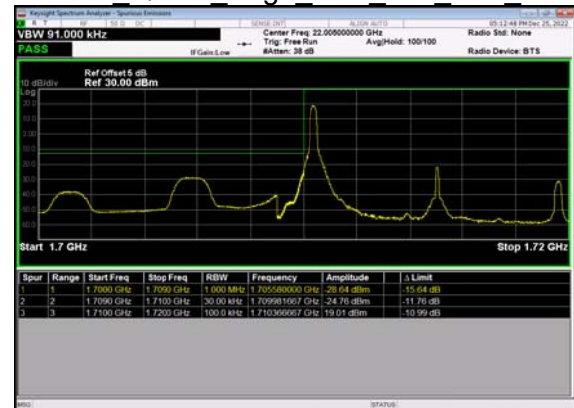
N66(5M)_DFT-s-OFDM QPSK Outer Full High CH



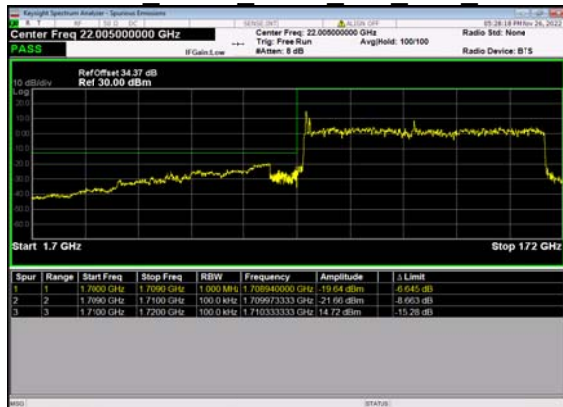
N66(10M)_DFT-s-OFDM BPSK Edge 1RB Left Low CH



N66(10M)_DFT-s-OFDM QPSK Edge 1RB Left Low CH



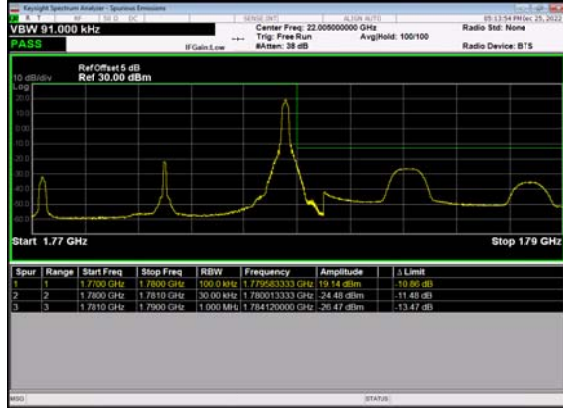
N66(10M)_DFT-s-OFDM BPSK Outer Full Low CH



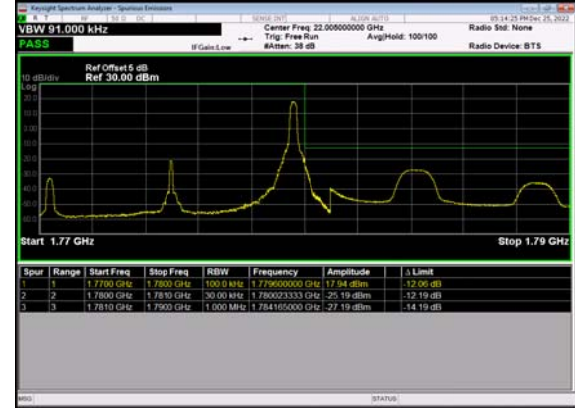
N66(10M)_DFT-s-OFDM QPSK Outer Full Low CH



N66(10M)_DFT-s-
OFDM BPSK Edge 1RB Right High CH



N66(10M)_DFT-s-
OFDM QPSK Edge 1RB Right High CH



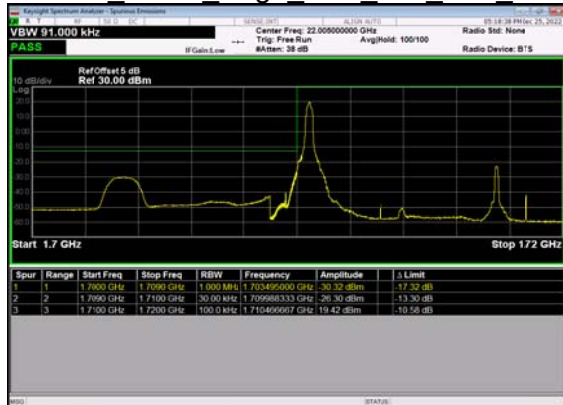
N66(10M)_DFT-s-
OFDM BPSK Outer Full High CH



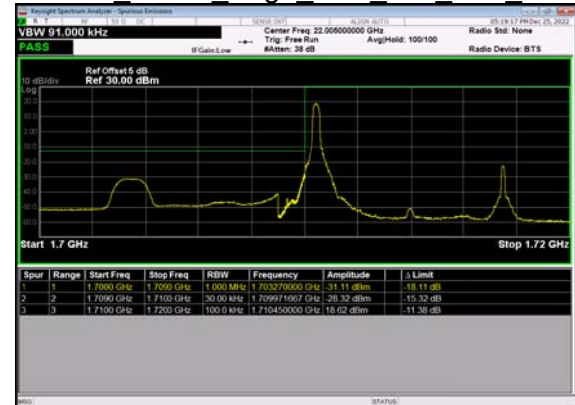
N66(10M)_DFT-s-
OFDM QPSK Outer Full High CH



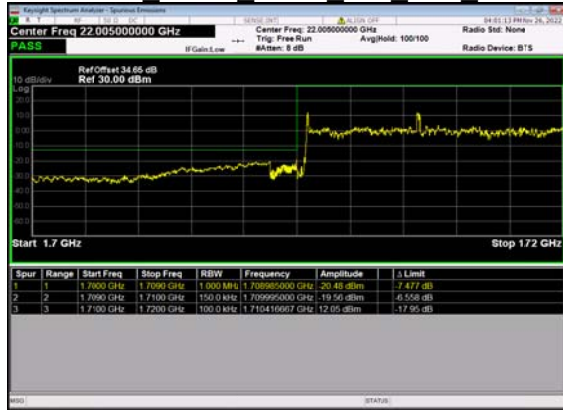
N66(15M)_DFT-s-
OFDM BPSK Edge 1RB Left Low CH



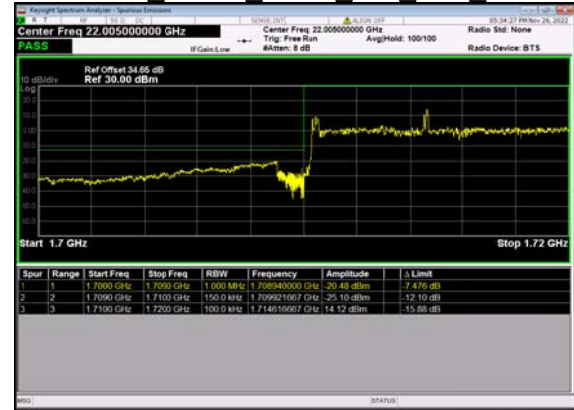
N66(15M)_DFT-s-
OFDM QPSK Edge 1RB Left Low CH



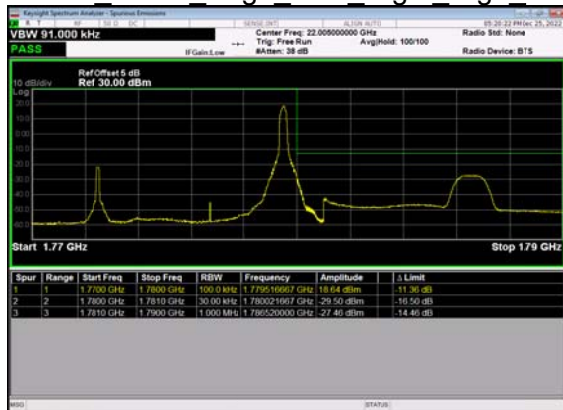
N66(15M)_DFT-s-OFDM BPSK Outer Full Low CH



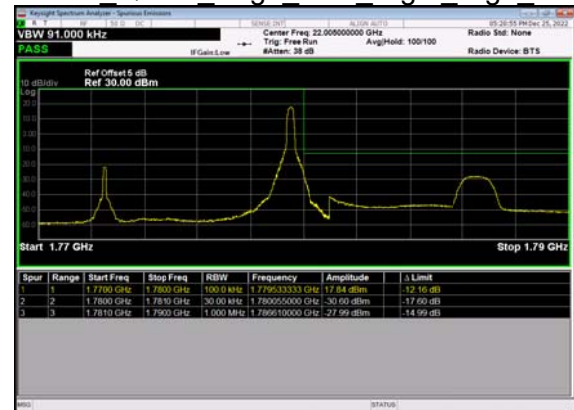
N66(15M)_DFT-s-OFDM QPSK Outer Full Low CH



N66(15M)_DFT-s-OFDM BPSK Edge 1RB Right High CH



N66(15M)_DFT-s-OFDM QPSK Edge 1RB Right High CH



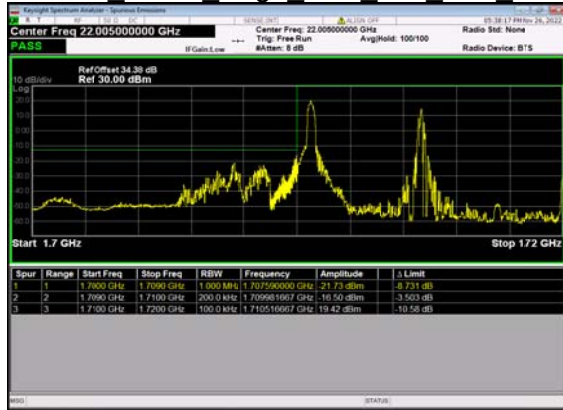
N66(15M)_DFT-s-OFDM BPSK Outer Full High CH



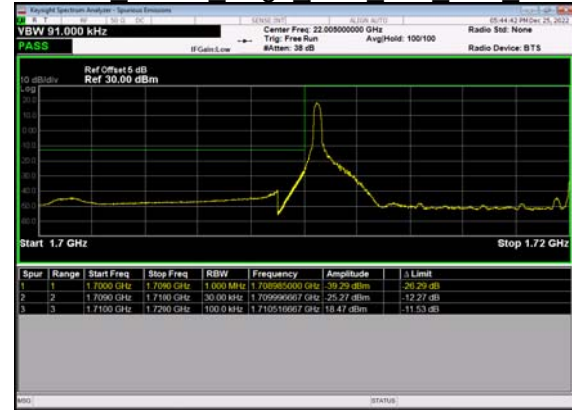
N66(15M)_DFT-s-OFDM QPSK Outer Full High CH



N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Left Low CH



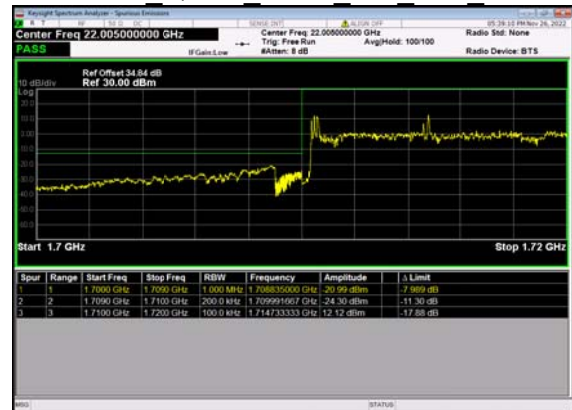
N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Left Low CH



N66(20M)_DFT-s-
OFDM BPSK Outer Full Low CH



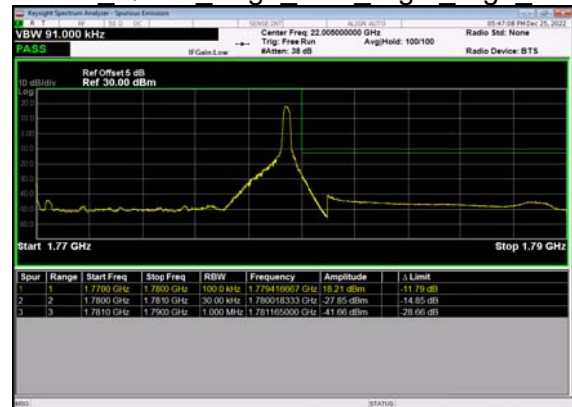
N66(20M)_DFT-s-
OFDM QPSK Outer Full Low CH

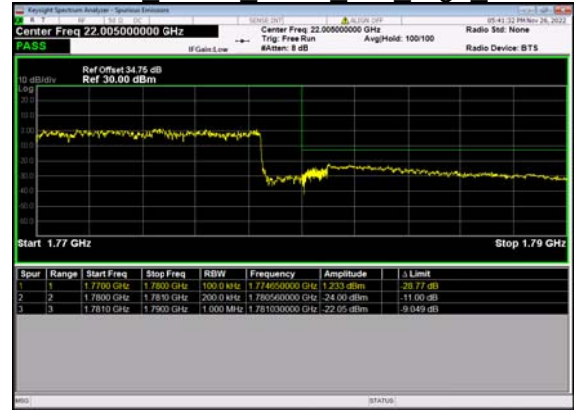


N66(20M)_DFT-s-
OFDM BPSK Edge 1RB Right High CH



N66(20M)_DFT-s-
OFDM QPSK Edge 1RB Right High CH



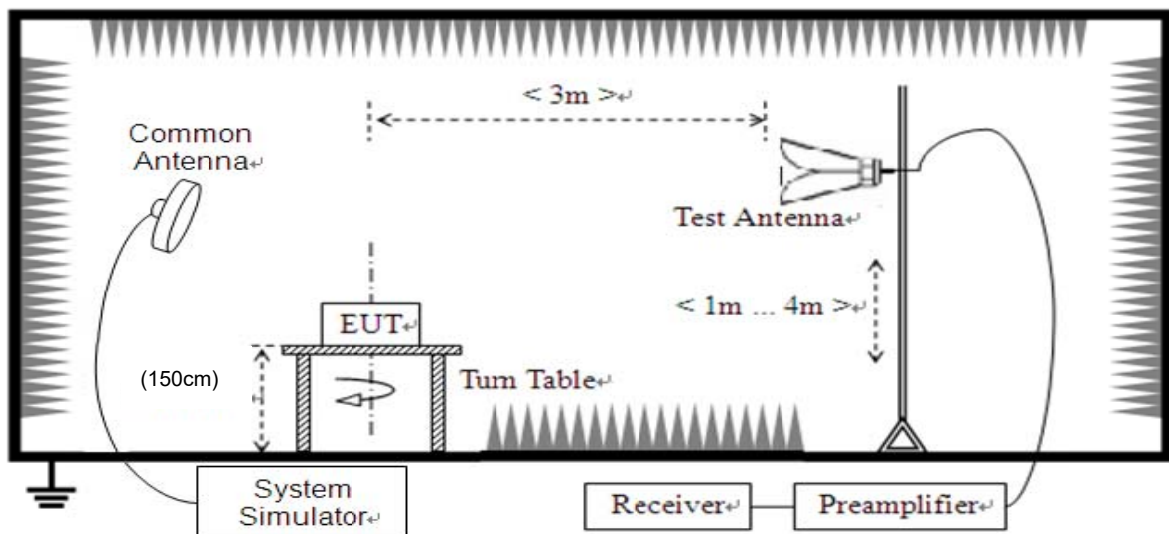
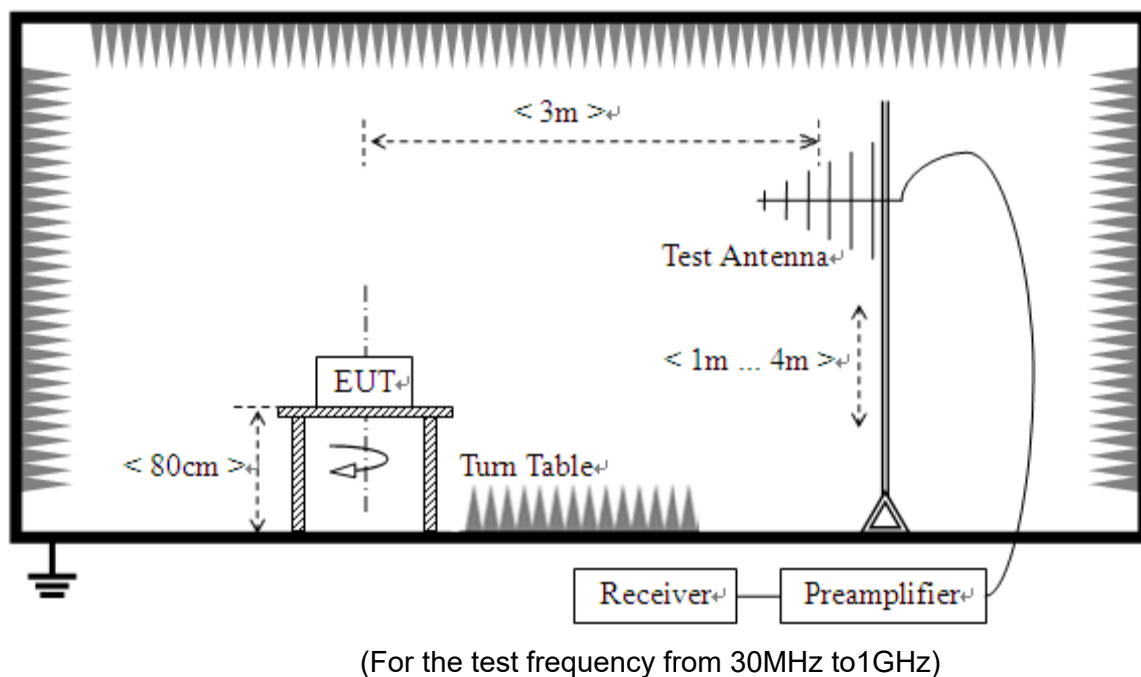
N66(20M)_DFT-s-
OFDM BPSK Outer Full High CHN66(20M)_DFT-s-
OFDM QPSK Outer Full High CH

2.7. Radiated Spurious Emissions

2.7.1.Requirement

According to FCC section 2.1051,section 27.53(h), 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.

2.7.2.Test Description





(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

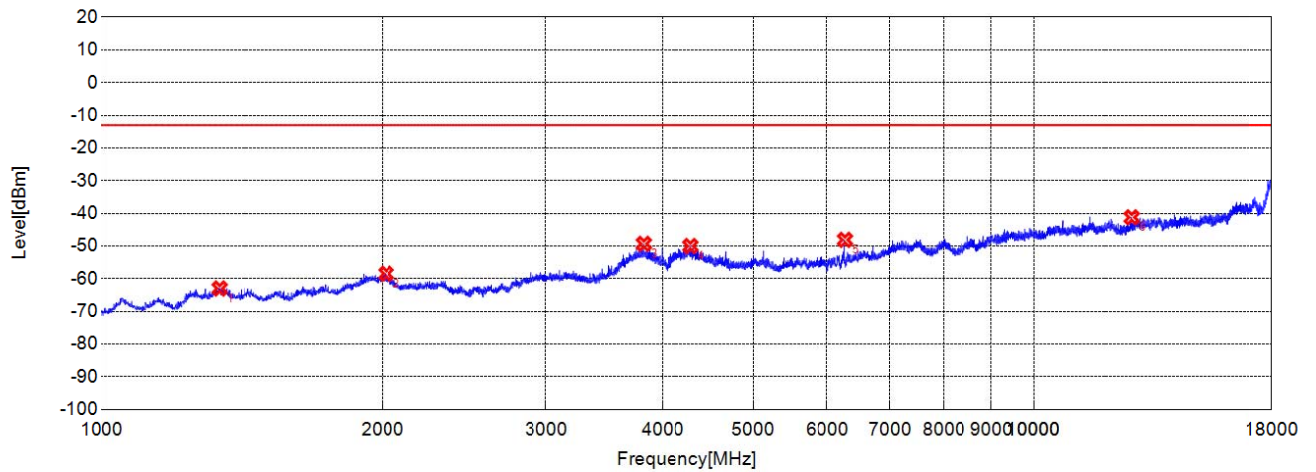
During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT} .

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.

Test Graph



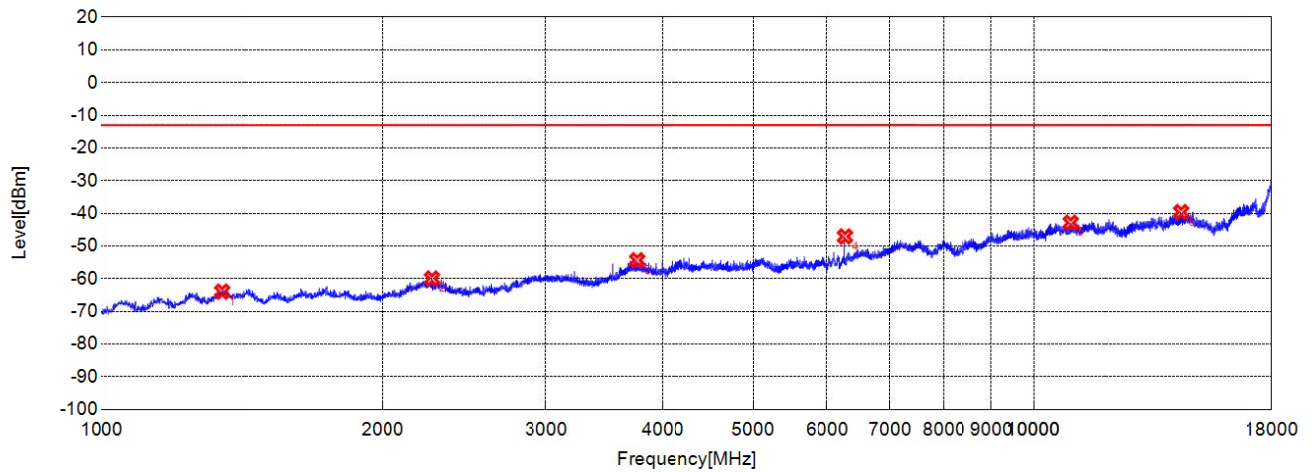
✕ Final Test

Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1337.5560	-63	-13.00	50.00	-13.05	-	37.3	Horiz
2	2017.6700	-58.49	-13.00	45.49	-8.15	-	41.4	Horiz
3	3816.3030	-49.34	-13.00	36.34	-6.90	-	39.5	Horiz
4	4287.2150	-50.02	-13.00	37.02	-6.12	-	39.8	Horiz
5	6276.0310	-48.12	-13.00	35.12	-0.78	-	42.0	Horiz
6	12758.084	-41.24	-13.00	28.24	13.02	-	49.4	Horiz

N66 344000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G H

Test Graph



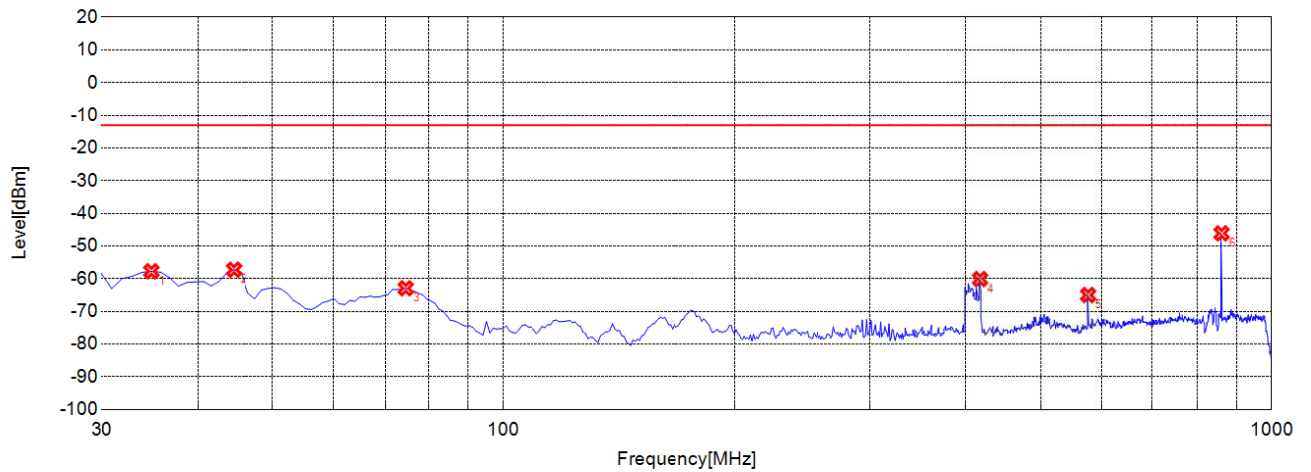
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1345.8910	-63.94	-13.00	50.94	-13.83	-	36.6	Verti
2	2262.7100	-59.95	-13.00	46.95	-10.09	-	39.2	Verti
3	3754.6260	-54.37	-13.00	41.37	-7.56	-	39.0	Verti
4	6276.0310	-47.1	-13.00	34.10	-0.87	-	41.9	Verti
5	10953.884	-42.88	-13.00	29.88	11.58	-	49.4	Verti
6	14398.266	-39.63	-13.00	26.63	15.53	-	50.5	Verti

N66 344000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G V



Test Graph



✕ Final Test

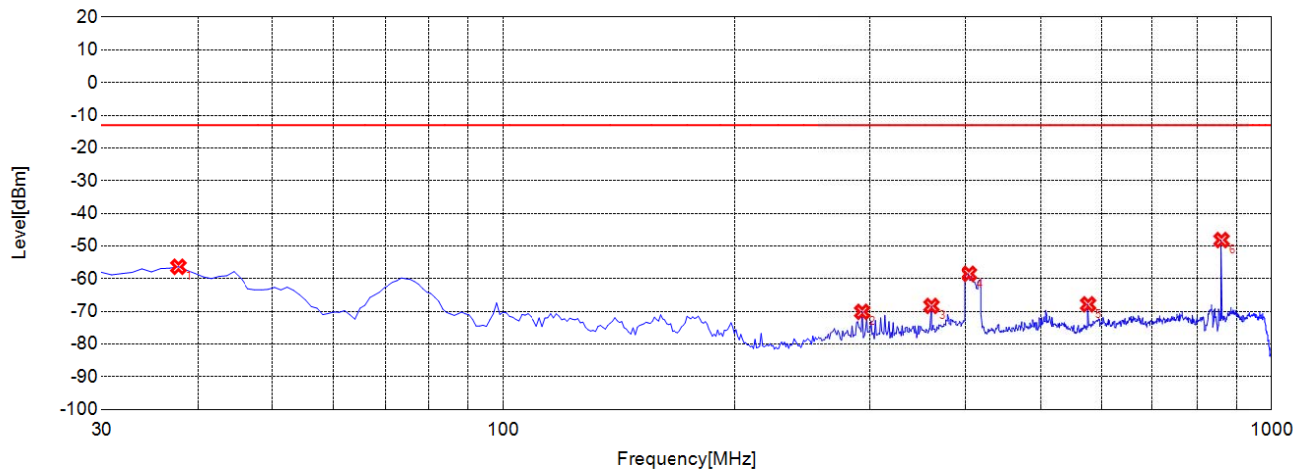
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	34.8550	-57.73	-13.00	44.73	-9.28	-	30.2	Horiz
2	44.5650	-57.26	-13.00	44.26	-7.06	-	32.4	Horiz
3	74.6650	-62.94	-13.00	49.94	-17.28	-	22.2	Horiz
4	417.4170	-60.13	-13.00	47.13	-13.08	-	26.0	Horiz
5	576.6570	-64.99	-13.00	51.99	-10.14	-	28.4	Horiz
6	860.1800	-46.12	-13.00	33.12	-6.55	-	31.7	Horiz

N66 344000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G H



Test Graph



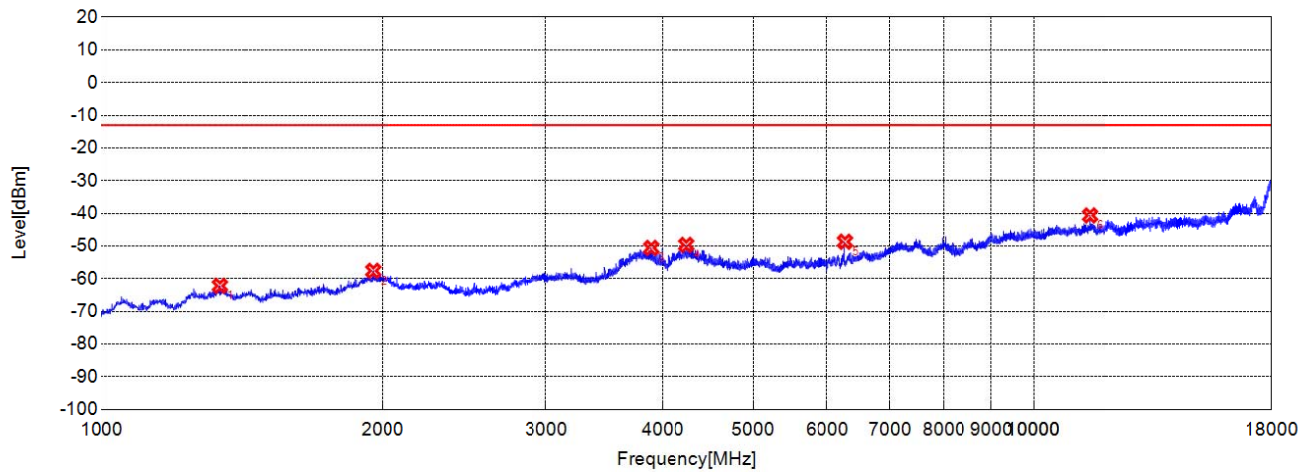
✕ Final Test

Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	37.7680	-56.35	-13.00	43.35	-16.33	-	23.0	Verti
2	293.1330	-70.15	-13.00	57.15	-14.85	-	24.9	Verti
3	360.1300	-68.34	-13.00	55.34	-13.62	-	25.8	Verti
4	403.8240	-58.51	-13.00	45.51	-12.51	-	26.7	Verti
5	576.6570	-67.84	-13.00	54.84	-10.07	-	28.5	Verti
6	860.1800	-48.18	-13.00	35.18	-6.99	-	31.3	Verti

N66 344000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G V

Test Graph



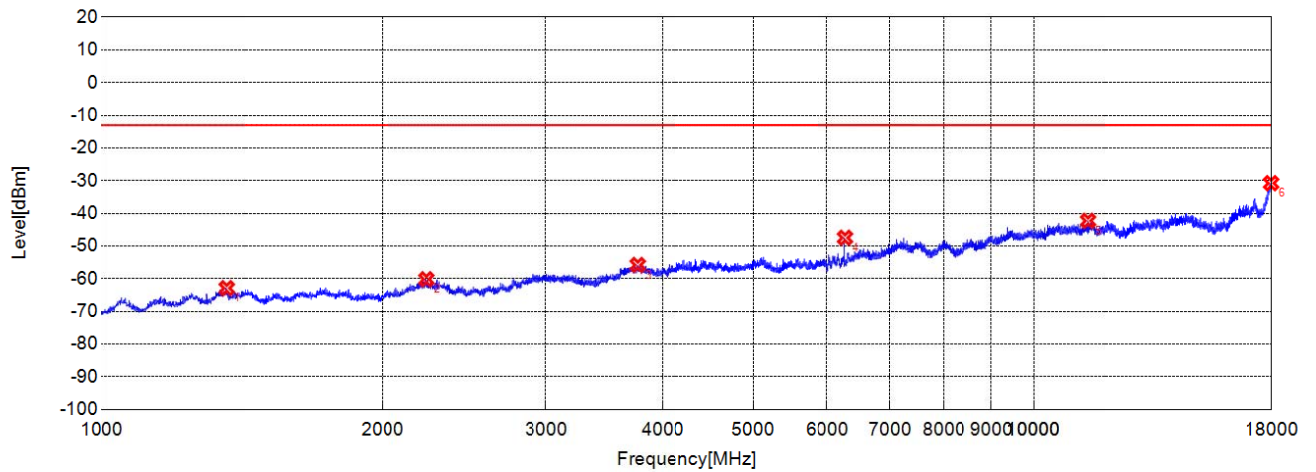
✕ Final Test

Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1338.3900	-62.19	-13.00	49.19	-13.06	-	37.3	Horiz
2	1953.4920	-57.6	-13.00	44.60	-8.30	-	41.3	Horiz
3	3886.3140	-50.58	-13.00	37.58	-6.90	-	39.7	Horiz
4	4243.8740	-49.66	-13.00	36.66	-6.22	-	39.7	Horiz
5	6276.0310	-48.7	-13.00	35.70	-0.78	-	42.0	Horiz
6	11489.943	-40.66	-13.00	27.66	12.05	-	49.8	Horiz

N66 349000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G H

Test Graph



✕ Final Test

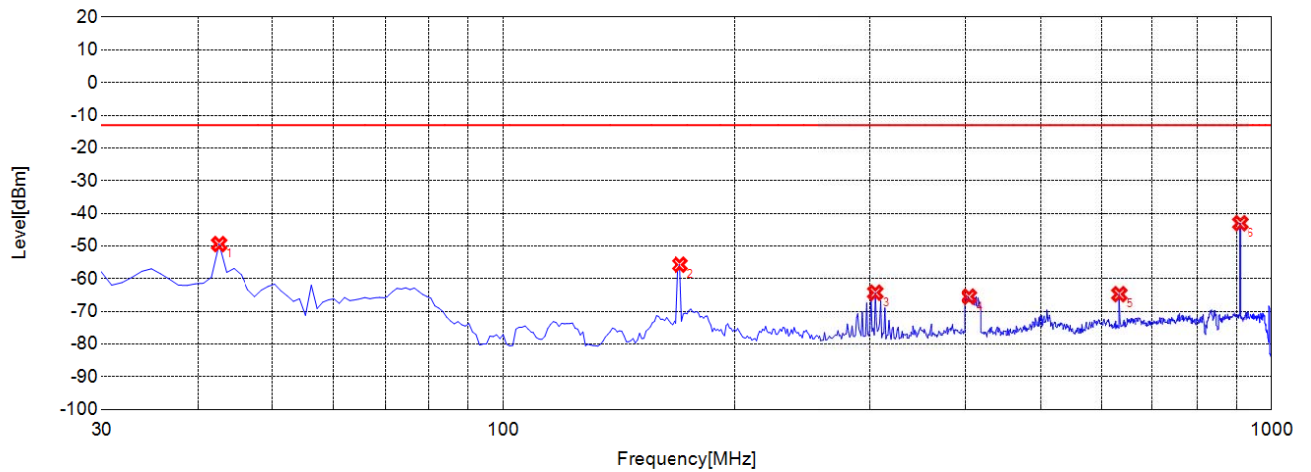
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1360.8930	-62.91	-13.00	49.91	-13.61	-	36.7	Verti
2	2231.0390	-60.17	-13.00	47.17	-9.97	-	39.3	Verti
3	3759.6270	-55.82	-13.00	42.82	-7.53	-	39.0	Verti
4	6276.0310	-47.48	-13.00	34.48	-0.87	-	41.9	Verti
5	11432.604	-42.3	-13.00	29.30	11.67	-	49.4	Verti
6	17986.665	-30.78	-13.00	17.78	24.50	-	56.2	Verti

N66 349000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G V



Test Graph



✕ Final Test

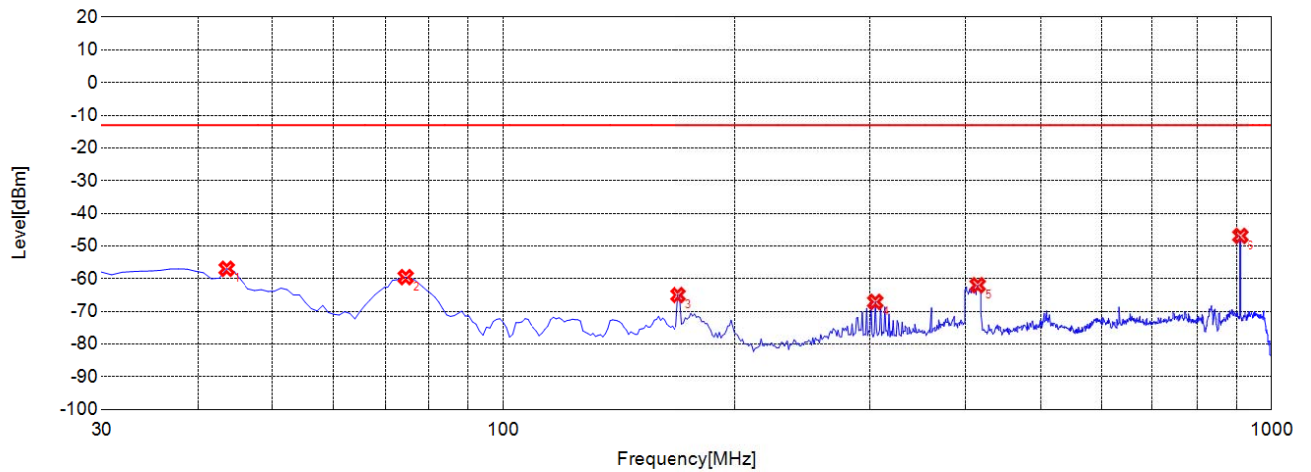
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	42.6230	-49.41	-13.00	36.41	-7.01	-	32.4	Horiz
2	169.8200	-55.71	-13.00	42.71	-20.32	-	19.6	Horiz
3	304.7850	-64.28	-13.00	51.28	-15.03	-	24.6	Horiz
4	403.8240	-65.48	-13.00	52.48	-13.26	-	26.0	Horiz
5	634.9150	-64.74	-13.00	51.74	-9.69	-	29.0	Horiz
6	909.7000	-43.02	-13.00	30.02	-6.25	-	32.0	Horiz

N66 349000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G H



Test Graph



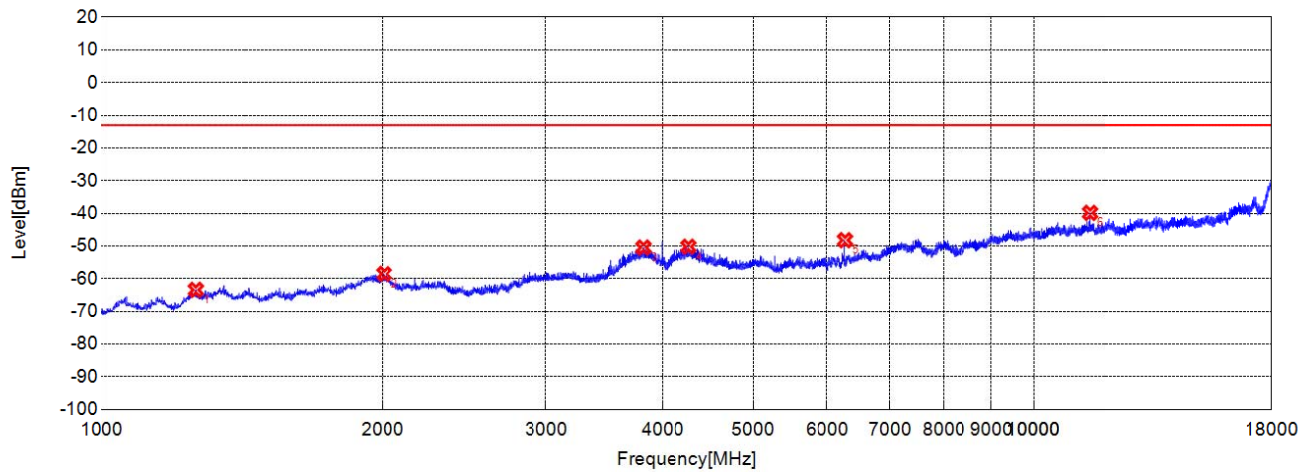
✕ Final Test

Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	43.5940	-56.97	-13.00	43.97	-15.89	-	23.5	Verti
2	74.6650	-59.53	-13.00	46.53	-19.39	-	20.1	Verti
3	168.8490	-65.01	-13.00	52.01	-18.95	-	21.0	Verti
4	304.7850	-67.09	-13.00	54.09	-14.66	-	25.0	Verti
5	414.5050	-62	-13.00	49.00	-12.57	-	26.5	Verti
6	909.7000	-46.91	-13.00	33.91	-6.63	-	31.6	Verti

N66 349000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G V

Test Graph

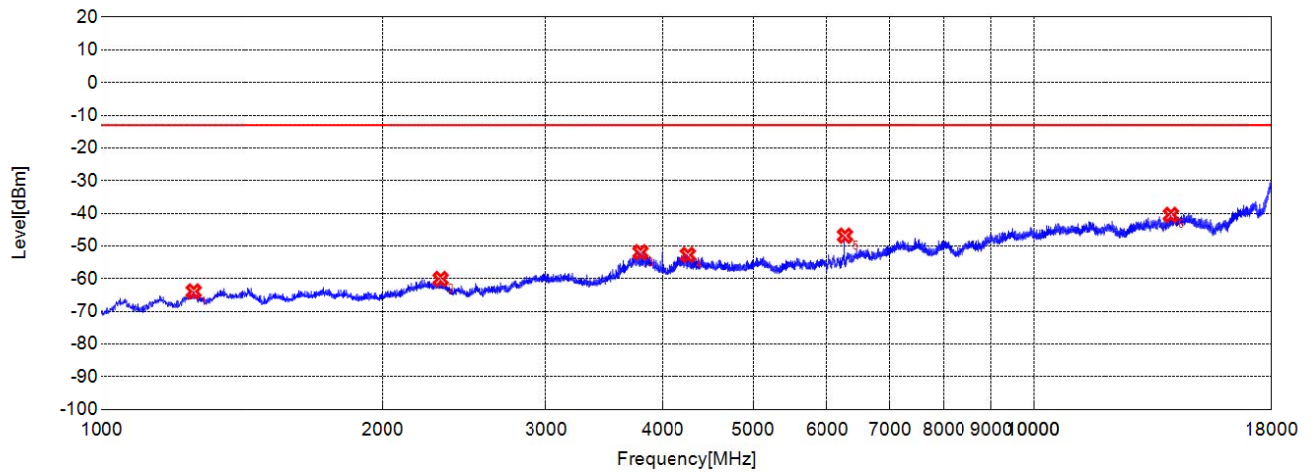


Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1261.7100	-63.42	-13.00	50.42	-14.03	-	36.4	Horiz
2	2007.6680	-58.53	-13.00	45.53	-7.85	-	41.7	Horiz
3	3812.9690	-50.48	-13.00	37.48	-6.91	-	39.5	Horiz
4	4267.2110	-50.22	-13.00	37.22	-6.17	-	39.8	Horiz
5	6276.0310	-48.22	-13.00	35.22	-0.78	-	42.0	Horiz
6	11489.943	-39.87	-13.00	26.87	12.05	-	49.8	Horiz

N66 354000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G H

Test Graph



✕ Final Test

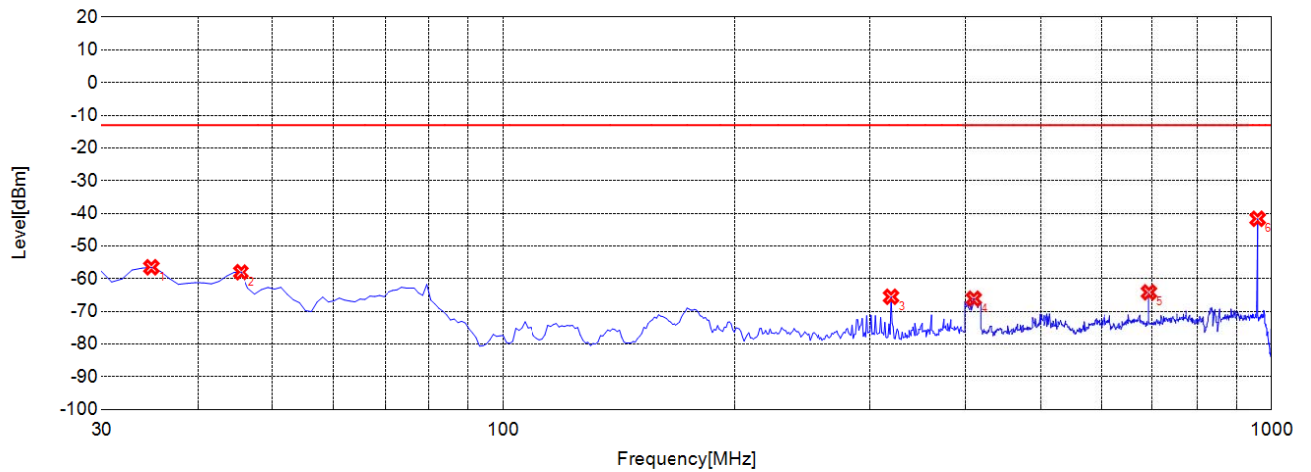
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	1255.0430	-63.91	-13.00	50.91	-14.88	-	35.6	Verti
2	2311.0520	-60.09	-13.00	47.09	-10.45	-	38.8	Verti
3	3784.6310	-51.91	-13.00	38.91	-7.41	-	39.0	Verti
4	4261.3770	-52.72	-13.00	39.72	-6.44	-	39.5	Verti
5	6276.0310	-46.85	-13.00	33.85	-0.87	-	41.9	Verti
6	14043.560	-40.49	-13.00	27.49	14.26	-	49.9	Verti

N66 354000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 1G-18G V



Test Graph



✕ Final Test

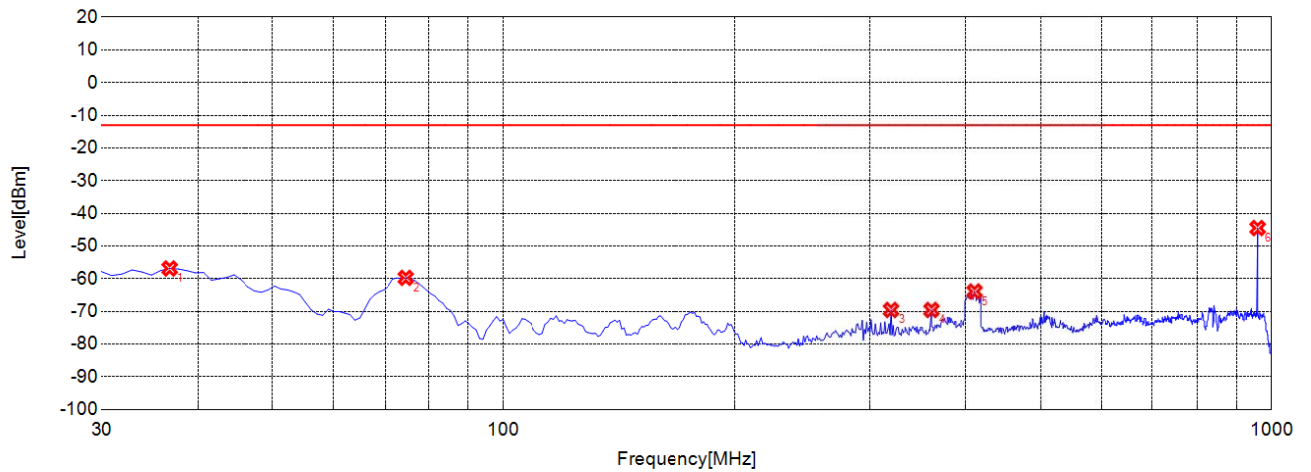
Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	34.8550	-56.51	-13.00	43.51	-9.28	-	30.2	Horiz
2	45.5360	-58	-13.00	45.00	-7.11	-	32.4	Horiz
3	319.3490	-65.53	-13.00	52.53	-15.44	-	24.4	Horiz
4	409.6500	-66.13	-13.00	53.13	-13.22	-	25.9	Horiz
5	693.1730	-64.18	-13.00	51.18	-8.78	-	29.7	Horiz
6	960.1900	-41.67	-13.00	28.67	-5.83	-	32.2	Horiz

N66 354000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G H



Test Graph



✕ Final Test

Suspected List

NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Path [dB]	Air [dB]	Ant. Pol.
1	36.7970	-56.88	-13.00	43.88	-16.49	-	23.0	Verti
2	74.6650	-59.74	-13.00	46.74	-19.39	-	20.1	Verti
3	319.3490	-69.57	-13.00	56.57	-14.40	-	25.4	Verti
4	360.1300	-69.57	-13.00	56.57	-13.62	-	25.8	Verti
5	410.6210	-63.92	-13.00	50.92	-12.43	-	26.7	Verti
6	960.1900	-44.5	-13.00	31.50	-5.58	-	32.4	Verti

N66 354000 20MHz DFT-S-OFDM QPSK RB Size-1 RB Offset-1 SCS 15KHz 30M-1G V



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	2022.10.10	2023.10.09
System Simulator	6262012906	MT8000A	Anritsu	2022.08.15	2023.08.14
System Simulator	6261830572	MT8821C	Anritsu	2022.02.14	2023.02.13
System Simulator	MY58300665	E7515B	Anritsu	2022.01.07	2023.01.06
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	2022.11.18	2023.11.17
Computer	T430i	Think Pad	Lenovo	N/A	N/A
Test system	N/A	WCS FCC V22.02.041801	CeSheng	N/A	N/A

**4.2 Radiated Test Equipment**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal.Due
System Simulator	6262012906	MT8000A	Anritsu	2022.08.15	2023.08.14
System Simulator	6261830572	MT8821C	Anritsu	2022.02.14	2023.02.13
System Simulator	152038	CMW500	R&S	2022.10.11	2023.10.10
Receiver	MY54130016	N9038A	Agilent	2022.07.07	2023.07.06
Receiver	MY56400093	N9038A	KEYSIGHT	2022.03.03	2023.03.02
Test Antenna – Loop	1519-022	FMZB 1519	SCHWARZBECK	2022.02.11	2025.02.10
Test Antenna - Bi-Log	9163-274	VULB 9163	Schwarzbeck	2022.11.07	2025.11.06
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2022.05.25	2025.05.24
Test Antenna - Horn	9120D-963	BBHA 9120D	Schwarzbeck	2022.05.25	2025.05.24
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2022.07.13	2025.07.12
Test system	N/A	TS+ -[JS36-RSE] V2.0.1.3	DongSheng	N/A	N/A
Test system	N/A	MORLAB EMCR V1.2	MORLAB	N/A	N/A

_____ END OF REPORT _____