



TEST REPORT

Product Name: public network intercom
FCC ID: 2BK59-M12
Trademark: N/A
Model Number: M12, M01, M02, M03, M05, M06, M07, M08, M09, M10, M11, M13, M14, M15, M16, M22, M77, D10, G5
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Sample Received Date: Feb. 17, 2025
Sample tested Date: Feb. 17, 2025 to Apr. 19, 2025
Issue Date: Apr. 19, 2025
Report No.: CTB25021701103RF02
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

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(Note: N/A means not applicable)

1. VERSION

Report No.	Issue Date	Description	Approved
CTB25021701103RF02	Apr. 19, 2025	Original	Valid

2. TEST SUMMARY

The Product has been tested according to the following specifications:

Test Item	Test Requirement	Test method	Result
Conducted output power	Part 2.1046(a)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 22.913(a)(2)/ Part 24.232(c)/Part27.50(h)(2)/ Part27.50(d)(4)/ Part27.50(c)(10)/ Part27.50(b)(10)/ Part27.50(a)(3)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 22.913(d)/Part 27.50(d) /Part 27.50(a) (1)	KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 24.238(a)/Part 27.53(g) (1) Part 22.917(a)/Part 27.53(i) (4)/ Part 27.53(c) /Part 27.253(f)/Part 27.53(a) (2)	KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 24.238(a)/Part 27.53(g) (1) Part 22.917(a)/Part 27.53(i) (4)/ Part 27.53(c) /Part 27.253(f)/Part 27.53(a) (2)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1051/ Part 24.238(a)/Part 27.53(g) (1) Part 22.917(a)/Part 27.53(i) (4)/ Part 27.53(c) /Part 27.253(f)/Part 27.53(a) (2)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Frequency stability	Part 2.1055/Part 27.54/ Part 22.355	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS

3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Item	Uncertainty
Occupancy bandwidth	54.3kHz
Conducted output power Above 1G	0.9dB
Conducted output power below 1G	0.9dB
Power Spectral Density , Conduction	0.9dB
Conduction spurious emissions	2.0dB
Out of band emission	2.0dB
3m camber Radiated spurious emission(30MHz-1GHz)	4.6dB
3m chamber Radiated spurious emission(1GHz-18GHz)	5.1dB
3m chamber Radiated spurious emission(18GHz-40GHz)	3.4dB
Receiver Reference Sensitivity level	1.9dB
humidity uncertainty	5.5%
Temperature uncertainty	0.63°C
frequency	1×10 ⁻⁷

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s):	M12, M01, M02, M03, M05, M06, M07, M08, M09, M10, M11, M13, M14, M15, M16, M22, M77, D10, G5
Model Description:	All the model are the same circuit and RF module, only the model names are different. Test sample model: M12
Hardware Version:	V0.1A
Software Version:	V008_1.011.069
Operation Frequency:	FDD-LTE BAND 2: 1850-1910MHz FDD-LTE BAND 4: 1710-1755MHz FDD-LTE BAND 5: 824-849MHz FDD-LTE BAND 7: 2500-2570MHz FDD-LTE BAND 12: 699-716MHz FDD-LTE BAND 13: 777-787MHz FDD-LTE BAND 17: 704-716MHz TDD-LTE BAND 38: 2570-2620MHz TDD-LTE BAND 40a: 2305-2315MHz TDD-LTE BAND 40b: 2350-2360MHz TDD-LTE BAND 41: 2496-2690 MHz FDD-LTE BAND 66: 1710-1780MHz
Max. RF output power:	FDD-LTE BAND 2: 24.5dBm FDD-LTE BAND 4: 24.93dBm FDD-LTE BAND 5: 24.71dBm FDD-LTE BAND 7: 24.81dBm FDD-LTE BAND 12: 24.46dBm FDD-LTE BAND 13: 24.45dBm FDD-LTE BAND 17: 24.55dBm TDD-LTE BAND 38: 26.3dBm TDD-LTE BAND 40a: 21.06dBm TDD-LTE BAND 40b: 21.91dBm TDD-LTE BAND 41: 26.17dBm FDD-LTE BAND 66: 26.35dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	External antenna
Antenna Gain:	FDD-LTE BAND 2: 1.51dBi FDD-LTE BAND 4: 1.51dBi FDD-LTE BAND 5: 1.0dBi FDD-LTE BAND 7: 1.78dBi FDD-LTE BAND 12: 0.75dBi FDD-LTE BAND 13: 0.75dBi FDD-LTE BAND 17: 0.75dBi TDD-LTE BAND 38: 1.78dBi

TDD-LTE BAND 40a: 1.64dBi

TDD-LTE BAND 40b: 1.64dBi

TDD-LTE BAND 41: 1.78dBi

FDD-LTE BAND 66: 1.75dBi

ADAPTER: Input: AC 100-240V 50/60Hz

Ratings:

Output: DC 5.0V === 1.0A Max

DC 4.2V === 3000mAh by battery

4.2 Test Setup Configuration

See test photographs attached in EUT TEST SETUP PHOTOGRAPHS for the actual connections between Product and support equipment.

4.3 Support Equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1.	POWER ADAPTER	/	N-01	/	EUT

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Test Mode

Test Mode List		
Test Mode	Description	Remark
TM1	FDD-LTE BAND 2	Low, Middle, High Channels
TM2	FDD-LTE BAND 4	Low, Middle, High Channels
TM3	FDD-LTE BAND 5	Low, Middle, High Channels
TM4	FDD-LTE BAND 7	Low, Middle, High Channels
TM5	FDD-LTE BAND 12	Low, Middle, High Channels
TM6	FDD-LTE BAND 13	Low, Middle, High Channels
TM7	FDD-LTE BAND 17	Low, Middle, High Channels
TM8	TDD-LTE BAND 38	Low, Middle, High Channels
TM9	TDD-LTE BAND 40a	Low, Middle, High Channels
TM10	TDD-LTE BAND 40b	Low, Middle, High Channels
TM11	TDD-LTE BAND 41	Low, Middle, High Channels
TM12	FDD-LTE BAND 66	Low, Middle, High Channels

LTE BAND 2

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 2	Low Range	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Mid Range	1.4/3/5/10/15/20	18900	1880
	High Range	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900

LTE BAND 4

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 4	Low Range	1.4	19957	1710.7
		3	19965	1711.5
		5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Mid Range	1.4/3/5/10/15/20	20175	1732.5
	High Range	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
		20	20300	1745

LTE BAND 5

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 5	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Mid Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844

LTE BAND 7

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 7	Low Range	5	20775	2502.5
		10	20800	2505
		15	20825	2507.5
		20	20850	2510
	Mid Range	5/10/15/20	21100	2535
	High Range	5	21425	2567.5
		10	21400	2565
		15	21375	2562.5
		20	21350	2560

LTE BAND 12

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 12	Low Range	1.4	23017	699.7
		3	23025	700.5
		5	23035	701.5
		10	23060	704
	Mid Range	1.4/3/5/10	23095	707.5
	High Range	1.4	23173	715.3
		3	23165	714.5
		5	23155	713.5
		10	23130	711

LTE BAND 13

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 13	Low Range	5	23025	779.5
		10	23230	782
	Mid Range	5/10	23230	782
	High Range	5	23255	784.5
		10	23230	782

LTE BAND 17

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 17	Low Range	5	23755	706.5
		10	23780	709
	Mid Range	5/10	23790	710
	High Range	5	23825	713.5
		10	23800	711

LTE BAND 38

Test Mode	Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency (UL and DL) (MHz)
TDD band 38 TX/RX 2570– 2620 MHz	Low Range	5	37775	2572.5
		10	37800	2575
		15	37825	2577.5
		20	37850	2580
	Mid Range	5/10/15/20	38000	2595
	High Range	5	38225	2617.5
		10	38200	2615
		15	38175	2612.5
		20	38150	2610

LTE BAND 40 a

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 40a	Low Range	5	38725	2307.5
	Mid Range	5/10	38750	2310
	High Range	5	38775	2312.5

LTE BAND 40 b

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 40b	Low Range	5	39175	2352.5
	Mid Range	5/10	39200	2355
	High Range	5	39200	2357.5

LTE BAND 41

Test Mode	Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency of Uplink(MHz)
TDD band 41 TX/RX 2495– 2690 MHz	Low Range	5	39675	2498.5
		10	39700	2501
		15	39725	2503.5
		20	39750	2506
	Mid Range	5/10/15/20	40620	2593
	High Range	5	41656	2687.5
		10	41540	2685
		15	41515	2682.5
		20	41490	2680

LTE BAND 66

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)
LTE band 66	Low Range	1.4	66443	2110.7
		3	66451	2111.5
		5	66461	2112.5
		10	66486	2115
		15	66511	2117.5
		20	66536	2120
	Mid Range TX ¹	1.4/3/5/10/15/20	66786	2145
	Mid Range	1.4/3/5/10/15/20	66886	2155
	Paired High Range ²	1.4	67129	2179.3
		3	67121	2178.5
		5	67111	2177.5
		10	67086	2175
		15	67061	2172.5
		20	67036	2170
	High Range ³	1.4	67329	2199.3
		3	67321	2198.5
		5	67311	2197.5
		10	67286	2195
		15	67261	2192.5
		20	67236	2190

Note: EUT is UE category 1, 16QAM Modulation of 10MHz/15MHz/20MHz for all bands FULL RB size is not supported.

4.5 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	4.2V
Normal Temperature(°C)	23
Low Temperature(°C)	0
High Temperature(°C)	40

5. TEST FACILITY AND TEST INSTRUMENT USED

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at 1&2F., Building A, No. 26, Xinghe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

No.	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	A.14.16	2025/6/28
2	Power Sensor	Agilent	U2021XA	MY56120032	/	2025/6/28
3	Power Sensor	Agilent	U2021XA	MY56120034	/	2025/6/28
4	Communication test set	R&S	CMW500	108058	V3.5.80	2025/6/28
5	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2025/6/28
6	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2025/6/28
7	Vector signal generator	Agilent	N5182A	MY47420195	A.01.87	2025/6/28
8	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2025/6/28
9	2.4 GHz Filter	Shenxiang	MSF2400-24 83.5MS-1154	20181015001	/	2025/6/30
10	5 GHz Filter	Shenxiang	MSF5150-58 50MS-1155	20181015001	/	2025/6/30
11	Filter	Xingbo	XBLBQ-DZA 120	190821-1-1	/	2025/6/30
12	BT&WI-FI Automatic test software	Microwave	MTS8310	Ver. 2.0.0.0	/	/
13	Rohde & Schwarz SFU Broadcast Test System	R&S	SFU	101017	/	2025/6/28
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	/	2025/6/28
15	234G Automatic test software	Microwave	MTS8200	Ver. 2.0.0.0	/	/
16	966 chamber	C.R.T.	966	/	/	2027/6/21
17	Receiver	R&S	ESPI	100362	RF_ATTEN_7 (104489/003)	2025/6/28
18	Amplifier	HP	8447E	2945A02747	/	2025/6/28
19	Amplifier	Agilent	8449B	3008A01838	/	2025/6/28
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2025/6/28
21	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA9120D	01911	/	2025/6/28

22	EMI test software	Fala	EZ-EMC	FA-03A2 RE	/	/
23	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2025/6/28
24	loop antenna	ZHINAN	ZN30900A	GTS534	/	/
25	40G Horn antenna	A/H/System	SAS-574	588	/	2025/6/28
26	Amplifier	AEROFLEX	Aeroflex	097	/	2025/6/28
27	Power Metter	KEYSIGHT	N1912AP	N/A	A.05.00	2025/6/28

6. RF EXPOSURE

6.1 Standard Applicable

According to §1.1307 and §2.1091, §2.1093, the portable transmitter must comply the RF exposure requirements.

6.2 Test Result

This product complied with the requirement of the RF exposure, please see the RF Exposure report.

7. RF OUTPUT POWER

7.1 Standard Applicable

According to §22.913(a)(2), the ERP of mobile and portable stations transmitters and auxiliary test transmitters must not exceed 7 Watts.

According to §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

According to §27.50(c)(10), portable stations (hand-held devices) in the 698-746 MHz band are limited to 3 watts ERP.

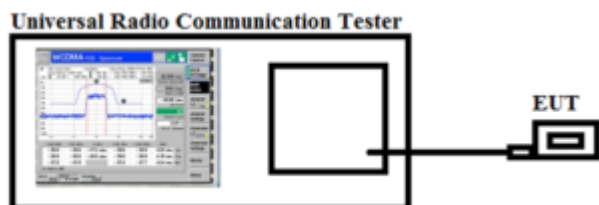
According to §27.50(h)(2), Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

According to §27.50(b)(10), Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

According to §27.50(a)(3), For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, *except that* for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

7.2 Test Procedure

Conducted output power test method:



Radiated power test method:

1. The setup of EUT is according with per ANSI/TIA Standard 603E and ANSI C63.26 measurement procedure.
2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

7.3 Summary of Test Results/Plots

Please refer to Appendix 1: Conducted output power

Test result: Pass

8. PEAK-TO-AVERAGE RATIO (PAR) OF TRANSMITTER

8.1 Standard Applicable

According to §22.913(d), Power measurement. Measurement of the ERP of Cellular base transmitters and repeaters must be made using an average power measurement technique. The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51, in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

According to §27.50(d), the peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal.

According to §27.50(a) (1), For base and fixed stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

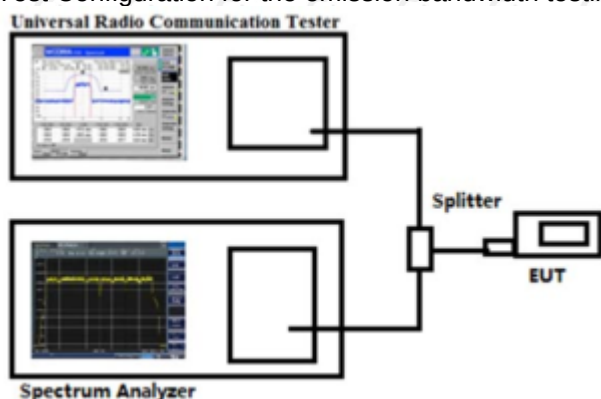
corresponding to the highest PAPR expected during periods of continuous transmission.

8.2 Test Procedure

According with KDB 971168

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal " RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the " on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Configuration for the emission bandwidth testing:



8.3 Summary of Test Results

Please refer to Appendix 3: Peak-to-Average Ratio

Test result: Pass

9. EMISSION BANDWIDTH

9.1 Standard Applicable

According to §22.917(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

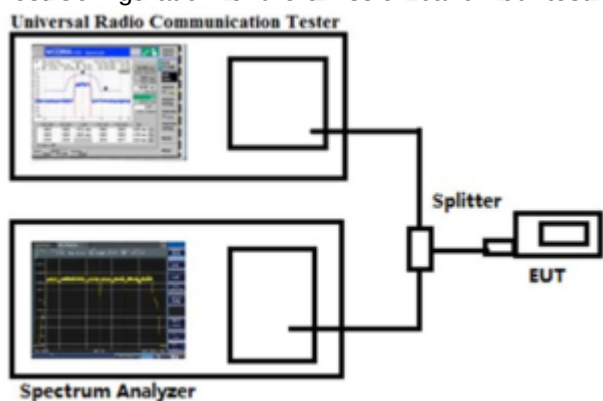
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

According to §27.53, the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

9.2 Test Procedure

According to §22.917(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Test Configuration for the emission bandwidth testing:



9.3 Summary of Test Results/Plots

Please refer to Appendix 4: 26dB Bandwidth and Occupied Bandwidth

Test result: Pass

10. OUT OF BAND EMISSIONS AT ANTENNA TERMINAL

10.1 Standard Applicable

According to §22.917(a), the power of any emissions 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.

According to §24.238(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.

According to §27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

According to §27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

According to §27.53(h), 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 §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB.

According to §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.

According to §27.53(a)(2), For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

(1) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than

75 + 10 log (P) dB on all frequencies between 2320 and 2345 MHz;

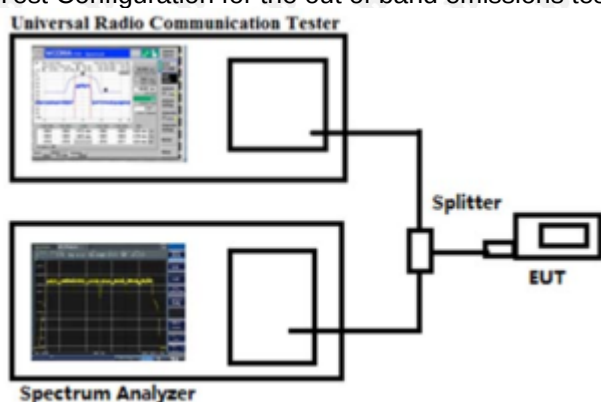
(2) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 70 + 10 log (P) dB on all frequencies between 2287.5 and 2300 MHz, 72 + 10 log (P) dB on all frequencies between 2285 and 2287.5 MHz, and 75 + 10 log (P) dB below 2285 MHz;

(3) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2362.5 MHz, 55 + 10 log (P) dB on all frequencies between 2362.5 and 2365 MHz, 70 + 10 log (P) dB on all frequencies between 2365 and 2367.5 MHz, 72 + 10 log (P) dB on all frequencies between 2367.5 and 2370 MHz, and 75 + 10 log (P) dB above 2370 MHz.

10.2 Test Procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 100kHz and 1MHz for the scan frequency from 30MHz to 1GHz and the scan frequency from 1GHz to up to 10 th harmonic.

Test Configuration for the out of band emissions testing:



10.3 Summary of Test Results/Plots

Please refer to Appendix 5 & 6: Band Edge & Conducted Spurious Emission

Test result: Pass

11. SPURIOUS RADIATED EMISSIONS

11.1 Standard Applicable

According to §22.917(a), the power of any emissions 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.

According to §24.238(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.

According to §27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(6) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(7) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(8) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(9) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(10) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

According to §27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

According to §27.53(h), 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 §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB.

According to §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.

According to §27.53(a)(2), For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

(1) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than $75 + 10 \log (P)$ dB on all frequencies between 2320 and 2345 MHz;

(2) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2287.5 and 2300 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2285 and 2287.5 MHz, and $75 + 10 \log (P)$ dB below 2285 MHz;

(3) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2362.5 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2362.5 and 2365 MHz, $70 + 10 \log (P)$ dB on all frequencies between 2365 and 2367.5 MHz, $72 + 10 \log (P)$ dB on all frequencies between 2367.5 and 2370 MHz, and $75 + 10 \log (P)$ dB above 2370 MHz.

11.2 Test Procedure

1. The setup of EUT is according with per ANSI/TIA-603-E and ANSI C63.4-2014 measurement procedure.
2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious attenuation limit in dB = $43 + 10 \log 10$ (power out in Watts)

11.3 Summary of Test Results/Plots

Note: 1. this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

2. All test modes (different bandwidth and different modulation) are performed, but only the worst case is recorded in this report.

Test Data:
QPSK

Band 2 18607 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1303.54	157	271	-55.14	-13	-42.14	Pass	H
1657.06	149	308	-48.13	-13	-35.13	Pass	H
3938.78	142	162	-47.23	-13	-34.23	Pass	H
5831.79	152	284	-42.27	-13	-29.27	Pass	H
6538.87	150	59	-43.63	-13	-30.63	Pass	H
7987.21	144	252	-42.65	-13	-29.65	Pass	H
1256.90	141	109	-52.96	-13	-39.96	Pass	V
1370.43	142	163	-58.73	-13	-45.73	Pass	V
3598.73	156	290	-52.53	-13	-39.53	Pass	V
3890.51	151	43	-52.29	-13	-39.29	Pass	V
5876.43	153	103	-50.52	-13	-37.52	Pass	V
6560.09	142	8	-47.02	-13	-34.02	Pass	V
Band 2 18900 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1393.84	150	82	-54.20	-13	-41.20	Pass	H
1636.64	146	203	-49.39	-13	-36.39	Pass	H
3970.42	150	7	-50.14	-13	-37.14	Pass	H
5840.87	146	294	-47.18	-13	-34.18	Pass	H
6385.57	149	14	-50.49	-13	-37.49	Pass	H
8078.31	151	232	-51.25	-13	-38.25	Pass	H
1183.89	149	275	-54.81	-13	-41.81	Pass	V
1458.57	148	64	-61.84	-13	-48.84	Pass	V
3643.19	147	42	-53.35	-13	-40.35	Pass	V
3915.00	148	356	-50.52	-13	-37.52	Pass	V
5885.58	150	354	-46.75	-13	-33.75	Pass	V
6503.58	150	177	-46.12	-13	-33.12	Pass	V

Band 2 19193 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1301.85	150	145	-57.31	-13	-44.31	Pass	H
1652.05	151	264	-49.15	-13	-36.15	Pass	H
3936.26	152	48	-43.86	-13	-30.86	Pass	H
5945.69	149	284	-39.23	-13	-26.23	Pass	H
6516.25	146	86	-45.13	-13	-32.13	Pass	H
8047.98	152	177	-45.26	-13	-32.26	Pass	H
1207.54	151	312	-55.73	-13	-42.73	Pass	V
1478.50	146	48	-59.84	-13	-46.84	Pass	V
3447.50	151	229	-51.91	-13	-38.91	Pass	V
3976.92	151	300	-48.71	-13	-35.71	Pass	V
5796.17	154	216	-45.15	-13	-32.15	Pass	V
6643.58	147	21	-47.25	-13	-34.25	Pass	V

16QAM

Band 2 18607 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1335.61	145	261	-59.50	-13	-46.50	Pass	H
1761.72	155	270	-49.69	-13	-36.69	Pass	H
3842.10	149	252	-46.02	-13	-33.02	Pass	H
5947.35	151	31	-45.79	-13	-32.79	Pass	H
6510.77	146	94	-44.07	-13	-31.07	Pass	H
8024.64	154	279	-40.74	-13	-27.74	Pass	H
1278.89	152	92	-51.12	-13	-38.12	Pass	V
1370.20	153	114	-54.46	-13	-41.46	Pass	V
3624.22	148	199	-53.14	-13	-40.14	Pass	V
3913.64	147	115	-50.19	-13	-37.19	Pass	V
5905.22	153	260	-46.06	-13	-33.06	Pass	V
6603.43	148	95	-49.97	-13	-36.97	Pass	V

Band 2 18900 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1384.41	149	188	-52.59	-13	-41.45	Pass	H
1671.91	149	206	-47.25	-13	-37.85	Pass	H
3871.00	148	261	-48.57	-13	-35.2	Pass	H
6006.01	155	132	-39.75	-13	-30.39	Pass	H
6508.07	148	243	-44.15	-13	-32.24	Pass	H
8106.12	155	278	-43.01	-13	-30.22	Pass	H
1245.49	149	154	-56.56	-13	-44.9	Pass	V
1399.33	145	113	-53.68	-13	-43.63	Pass	V
3458.28	151	137	-50.25	-13	-35.94	Pass	V
3778.44	152	242	-47.13	-13	-36.01	Pass	V
5780.46	152	307	-44.85	-13	-33.75	Pass	V
6511.12	151	240	-44.96	-13	-32.41	Pass	V
Band 2 19193 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1233.74	153	220	-55.80	-13	-42.80	Pass	H
1704.34	151	202	-46.75	-13	-33.75	Pass	H
3960.51	147	121	-42.95	-13	-29.95	Pass	H
5850.58	147	278	-43.58	-13	-30.58	Pass	H
6425.97	147	10	-40.24	-13	-27.24	Pass	H
8016.90	153	119	-48.86	-13	-35.86	Pass	H
1210.49	146	238	-55.52	-13	-42.52	Pass	V
1476.39	151	222	-56.15	-13	-43.15	Pass	V
3602.64	152	175	-50.97	-13	-37.97	Pass	V
3874.79	154	125	-48.30	-13	-35.30	Pass	V
5795.52	145	25	-48.06	-13	-35.06	Pass	V
6619.77	153	197	-45.58	-13	-32.58	Pass	V

Note:

- 1) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK

Band 4 19957 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1236.95	149	48	-58.51	-13	-45.51	Pass	H
1765.38	147	94	-50.19	-13	-37.19	Pass	H
3855.15	158	318	-49.03	-13	-36.03	Pass	H
5905.09	155	166	-43.46	-13	-30.46	Pass	H
6497.18	152	289	-44.50	-13	-31.50	Pass	H
8039.62	151	235	-44.02	-13	-31.02	Pass	H
1297.43	157	277	-56.54	-13	-43.54	Pass	V
1376.93	157	296	-59.53	-13	-46.53	Pass	V
3484.89	151	45	-50.44	-13	-37.44	Pass	V
3799.21	153	191	-49.12	-13	-36.12	Pass	V
5870.02	142	280	-50.10	-13	-37.10	Pass	V
6461.15	143	94	-47.00	-13	-34.00	Pass	V
Band 4 20175 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1205.26	150	38	-57.75	-13	-44.75	Pass	H
1658.88	146	159	-49.21	-13	-36.21	Pass	H
3945.91	150	145	-51.51	-13	-38.51	Pass	H
5778.58	146	305	-44.60	-13	-31.60	Pass	H
6437.29	149	297	-48.71	-13	-35.71	Pass	H
8115.65	151	94	-49.35	-13	-36.35	Pass	H
1240.53	149	134	-53.28	-13	-40.28	Pass	V
1454.53	148	313	-61.85	-13	-48.85	Pass	V
3541.85	147	219	-51.83	-13	-38.83	Pass	V
3828.53	148	254	-49.46	-13	-36.46	Pass	V
5811.41	150	246	-46.71	-13	-33.71	Pass	V
6567.95	150	94	-46.82	-13	-33.82	Pass	V

Band 4 20393 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1281.21	153	80	-58.27	-13	-45.27	Pass	H
1660.27	146	82	-50.23	-13	-37.23	Pass	H
3924.28	151	201	-46.25	-13	-33.25	Pass	H
5909.11	147	345	-42.27	-13	-29.27	Pass	H
6582.01	147	27	-42.24	-13	-29.24	Pass	H
8095.61	154	157	-43.58	-13	-30.58	Pass	H
1294.87	150	268	-54.22	-13	-41.22	Pass	V
1447.91	146	71	-59.03	-13	-46.03	Pass	V
3460.12	155	5	-52.62	-13	-39.62	Pass	V
3903.13	149	333	-46.16	-13	-33.16	Pass	V
5883.47	151	106	-43.32	-13	-30.32	Pass	V
6477.31	151	269	-48.12	-13	-35.12	Pass	V

16QAM

Band 4 19957 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1256.74	153	305	-57.57	-13	-44.57	Pass	H
1605.35	150	74	-46.52	-13	-33.52	Pass	H
3858.33	153	42	-51.88	-13	-38.88	Pass	H
5964.77	153	23	-42.03	-13	-29.03	Pass	H
6543.62	146	97	-43.97	-13	-30.97	Pass	H
8047.11	148	193	-40.49	-13	-27.49	Pass	H
1212.68	148	320	-52.41	-13	-39.41	Pass	V
1329.24	147	315	-55.73	-13	-42.73	Pass	V
3684.11	150	46	-52.24	-13	-39.24	Pass	V
3856.01	152	125	-53.29	-13	-40.29	Pass	V
5929.91	152	61	-44.20	-13	-31.20	Pass	V
6618.76	151	116	-50.72	-13	-37.72	Pass	V

Band 4 20175 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1428.25	153	85	-50.82	-13	-41.45	Pass	H
1638.50	147	174	-49.29	-13	-37.85	Pass	H
3906.45	148	207	-47.62	-13	-35.2	Pass	H
5983.52	152	231	-43.55	-13	-30.39	Pass	H
6506.39	149	196	-42.21	-13	-32.24	Pass	H
8103.89	151	244	-42.93	-13	-30.22	Pass	H
1232.92	152	270	-53.99	-13	-44.9	Pass	V
1387.96	148	215	-55.41	-13	-43.63	Pass	V
3583.13	149	41	-51.68	-13	-35.94	Pass	V
3797.68	150	220	-51.12	-13	-36.01	Pass	V
5783.29	150	133	-46.17	-13	-33.75	Pass	V
6472.65	152	287	-41.82	-13	-32.41	Pass	V
Band 4 20393 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1238.56	151	208	-57.46	-13	-44.46	Pass	H
1784.50	155	359	-51.22	-13	-38.22	Pass	H
3904.78	153	345	-43.23	-13	-30.23	Pass	H
5947.61	146	263	-38.93	-13	-25.93	Pass	H
6531.96	154	310	-38.85	-13	-25.85	Pass	H
7998.08	150	249	-47.80	-13	-34.80	Pass	H
1302.18	151	346	-55.39	-13	-42.39	Pass	V
1493.73	152	264	-62.13	-13	-49.13	Pass	V
3569.76	150	207	-49.57	-13	-36.57	Pass	V
3884.82	148	119	-52.52	-13	-39.52	Pass	V
5807.98	151	289	-48.37	-13	-35.37	Pass	V
6553.12	145	53	-47.08	-13	-34.08	Pass	V

Note:

3) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

4) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK

Band 5 20407 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1419.24	157	258	-55.36	-13	-42.36	Pass	H
1783.86	144	74	-47.36	-13	-34.36	Pass	H
3956.10	153	111	-44.88	-13	-31.88	Pass	H
5894.63	140	303	-46.69	-13	-33.69	Pass	H
6593.09	157	290	-45.98	-13	-32.98	Pass	H
8089.91	158	311	-42.60	-13	-29.60	Pass	H
1203.57	142	289	-56.65	-13	-43.65	Pass	V
1391.90	151	225	-56.86	-13	-43.86	Pass	V
3574.63	140	25	-49.35	-13	-36.35	Pass	V
3786.36	149	189	-51.27	-13	-38.27	Pass	V
5814.57	144	208	-47.31	-13	-34.31	Pass	V
6621.70	160	231	-47.38	-13	-34.38	Pass	V
Band 5 20525 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1246.72	150	65	-55.62	-13	-42.62	Pass	H
1738.86	146	2	-52.10	-13	-39.10	Pass	H
3853.98	150	253	-52.52	-13	-39.52	Pass	H
5787.98	146	309	-48.22	-13	-35.22	Pass	H
6458.53	149	17	-50.22	-13	-37.22	Pass	H
8014.37	151	37	-46.64	-13	-33.64	Pass	H
1312.77	149	10	-53.09	-13	-40.09	Pass	V
1450.43	148	235	-60.35	-13	-47.35	Pass	V
3567.29	147	60	-55.87	-13	-42.87	Pass	V
4014.97	148	127	-48.38	-13	-35.38	Pass	V
5747.09	150	155	-46.93	-13	-33.93	Pass	V
6449.07	150	186	-46.97	-13	-33.97	Pass	V

Band 5 20643 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1303.76	152	116	-55.46	-13	-42.46	Pass	H
1600.73	146	149	-50.84	-13	-37.84	Pass	H
3821.05	150	161	-43.08	-13	-30.08	Pass	H
5953.67	153	166	-43.81	-13	-30.81	Pass	H
6470.47	154	289	-43.45	-13	-30.45	Pass	H
8040.42	153	81	-42.20	-13	-29.20	Pass	H
1224.99	151	75	-58.62	-13	-45.62	Pass	V
1477.35	155	136	-58.75	-13	-45.75	Pass	V
3560.28	154	276	-52.47	-13	-39.47	Pass	V
3924.28	153	29	-47.76	-13	-34.76	Pass	V
5850.28	153	283	-40.07	-13	-27.07	Pass	V
6674.05	149	89	-45.45	-13	-32.45	Pass	V

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Band 5 20407 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1387.03	155	21	-60.19	-13	-47.19	Pass	H
1591.10	154	163	-48.48	-13	-35.48	Pass	H
3872.98	155	292	-48.73	-13	-35.73	Pass	H
5928.04	151	68	-42.03	-13	-29.03	Pass	H
6644.99	147	60	-42.25	-13	-29.25	Pass	H
8041.03	152	34	-40.05	-13	-27.05	Pass	H
1195.55	154	58	-52.72	-13	-39.72	Pass	V
1492.58	151	17	-54.82	-13	-41.82	Pass	V
3630.93	145	303	-49.51	-13	-36.51	Pass	V
3835.60	150	19	-48.63	-13	-35.63	Pass	V
5888.94	152	144	-46.39	-13	-33.39	Pass	V
6560.86	155	348	-49.01	-13	-36.01	Pass	V

Band 5 20525 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1330.35	151	158	-56.52	-13	-41.45	Pass	H
1732.92	152	259	-47.92	-13	-37.85	Pass	H
3824.52	154	258	-50.31	-13	-35.2	Pass	H
5847.49	146	193	-41.18	-13	-30.39	Pass	H
6422.58	151	250	-47.01	-13	-32.24	Pass	H
8138.61	145	2	-40.68	-13	-30.22	Pass	H
1120.49	154	62	-57.55	-13	-44.9	Pass	V
1363.82	154	88	-54.94	-13	-43.63	Pass	V
3609.37	154	79	-50.62	-13	-35.94	Pass	V
3766.47	149	351	-51.60	-13	-36.01	Pass	V
5776.07	152	197	-44.39	-13	-33.75	Pass	V
6452.59	153	11	-44.56	-13	-32.41	Pass	V
Band 5 20643 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1429.39	154	327	-57.93	-13	-44.93	Pass	H
1655.64	146	129	-47.79	-13	-34.79	Pass	H
3883.20	155	339	-43.87	-13	-30.87	Pass	H
5918.29	147	12	-39.78	-13	-26.78	Pass	H
6471.51	152	341	-42.46	-13	-29.46	Pass	H
8043.27	148	84	-48.06	-13	-35.06	Pass	H
1274.42	152	114	-54.16	-13	-41.16	Pass	V
1530.79	155	158	-60.27	-13	-47.27	Pass	V
3590.42	152	95	-47.04	-13	-34.04	Pass	V
3781.43	152	73	-47.17	-13	-34.17	Pass	V
5752.18	150	344	-47.70	-13	-34.70	Pass	V
6541.72	155	130	-47.41	-13	-34.41	Pass	V

Note:

5) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

6) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

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Band 7 20775 channel/BW 5(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1377.47	153	231	-59.66	-13	-46.66	Pass	H
1736.73	154	60	-47.40	-13	-34.40	Pass	H
3798.75	155	316	-47.41	-13	-34.41	Pass	H
5976.78	149	170	-47.60	-13	-34.60	Pass	H
6628.84	147	274	-46.71	-13	-33.71	Pass	H
7932.10	152	67	-43.37	-13	-30.37	Pass	H
1106.61	148	47	-57.14	-13	-44.14	Pass	V
1521.75	148	310	-57.79	-13	-44.79	Pass	V
3686.66	149	268	-53.34	-13	-40.34	Pass	V
3920.05	151	42	-52.14	-13	-39.14	Pass	V
5931.47	153	159	-45.66	-13	-32.66	Pass	V
6524.48	146	9	-47.36	-13	-34.36	Pass	V

Band 7 21100 channel/BW 5 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1325.32	149	220	-54.47	-13	-41.47	Pass	H
1761.03	150	107	-46.68	-13	-33.68	Pass	H
3767.76	147	121	-49.63	-13	-36.63	Pass	H
5984.38	151	20	-44.43	-13	-31.43	Pass	H
6580.48	147	299	-40.17	-13	-27.17	Pass	H
7973.55	150	154	-47.82	-13	-34.82	Pass	H
1151.20	151	49	-59.90	-13	-46.90	Pass	V
1482.20	150	251	-62.28	-13	-49.28	Pass	V
3528.84	150	320	-47.46	-13	-34.46	Pass	V
3892.43	150	243	-46.21	-13	-33.21	Pass	V
5742.73	151	103	-43.03	-13	-30.03	Pass	V
6527.17	146	347	-47.88	-13	-34.88	Pass	V

Band 7 21425 channel/BW 5 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1276.80	153	305	-53.58	-13	-40.58	Pass	H
1782.06	147	18	-45.06	-13	-32.06	Pass	H
3837.61	149	320	-44.96	-13	-31.96	Pass	H
5862.29	149	31	-40.89	-13	-27.89	Pass	H
6475.49	150	38	-44.97	-13	-31.97	Pass	H
8055.83	155	65	-44.99	-13	-31.99	Pass	H
1210.72	148	206	-56.03	-13	-43.03	Pass	V
1437.27	154	208	-53.57	-13	-40.57	Pass	V
3537.41	147	178	-48.54	-13	-35.54	Pass	V
3740.59	150	166	-45.67	-13	-32.67	Pass	V
5846.12	145	32	-48.87	-13	-35.87	Pass	V
6555.01	155	124	-51.37	-13	-38.37	Pass	V

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Band 7 20775 channel/BW 5 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1270.05	146	29	-54.54	-13	-41.54	Pass	H
1705.15	146	249	-50.57	-13	-37.57	Pass	H
3932.52	151	237	-51.53	-13	-38.53	Pass	H
5779.79	149	224	-49.21	-13	-36.21	Pass	H
6456.06	154	283	-46.32	-13	-33.32	Pass	H
7999.63	147	342	-46.88	-13	-33.88	Pass	H
1254.58	149	310	-57.96	-13	-44.96	Pass	V
1360.94	149	63	-51.96	-13	-38.96	Pass	V
3549.86	145	322	-46.88	-13	-33.88	Pass	V
3868.55	147	252	-45.46	-13	-32.46	Pass	V
5858.59	146	183	-42.65	-13	-29.65	Pass	V
6548.90	152	177	-49.81	-13	-36.81	Pass	V

Band 7 21100 channel/BW 5 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1196.92	145	69	-58.71	-13	-45.71	Pass	H
1800.18	150	102	-55.27	-13	-42.27	Pass	H
3905.83	154	105	-46.75	-13	-33.75	Pass	H
5851.72	154	160	-45.44	-13	-32.44	Pass	H
6443.39	151	351	-50.34	-13	-37.34	Pass	H
8001.15	153	282	-47.43	-13	-34.43	Pass	H
1284.69	155	289	-53.02	-13	-40.02	Pass	V
1373.15	152	233	-60.07	-13	-47.07	Pass	V
3661.48	154	32	-50.84	-13	-37.84	Pass	V
3901.36	150	356	-55.83	-13	-42.83	Pass	V
5800.66	155	339	-51.11	-13	-38.11	Pass	V
6594.23	152	247	-45.87	-13	-32.87	Pass	V

Band 7 21425 channel/BW 5 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1278.55	153	256	-57.75	-13	-44.75	Pass	H
1641.54	152	212	-53.46	-13	-40.46	Pass	H
3756.41	146	247	-43.33	-13	-30.33	Pass	H
5854.36	150	193	-44.11	-13	-31.11	Pass	H
6468.84	150	88	-45.34	-13	-32.34	Pass	H
7981.64	150	147	-48.24	-13	-35.24	Pass	H
1237.26	155	264	-54.88	-13	-41.88	Pass	V
1347.05	154	106	-56.14	-13	-43.14	Pass	V
3488.82	152	318	-50.78	-13	-37.78	Pass	V
3838.16	148	4	-42.87	-13	-29.87	Pass	V
5701.85	153	151	-47.76	-13	-34.76	Pass	V
6550.82	150	134	-50.32	-13	-37.32	Pass	V

Note:

7) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

8) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

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Band 12 23017 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1310.56	151	259	-59.73	-13	-46.73	Pass	H
1696.03	152	189	-48.38	-13	-35.38	Pass	H
3816.91	147	182	-47.62	-13	-34.62	Pass	H
5916.01	153	199	-42.37	-13	-29.37	Pass	H
6569.42	148	149	-44.21	-13	-31.21	Pass	H
8144.40	142	332	-44.44	-13	-31.44	Pass	H
1171.93	147	56	-55.52	-13	-42.52	Pass	V
1492.63	143	211	-57.49	-13	-44.49	Pass	V
3471.81	155	198	-51.82	-13	-38.82	Pass	V
3851.68	150	144	-49.42	-13	-36.42	Pass	V
5802.89	143	317	-50.58	-13	-37.58	Pass	V
6593.77	144	141	-49.19	-13	-36.19	Pass	V
Band 12 23095 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1265.25	150	4	-54.05	-13	-41.05	Pass	H
1800.73	146	227	-52.18	-13	-39.18	Pass	H
3868.50	150	319	-53.40	-13	-40.40	Pass	H
5813.98	146	356	-42.86	-13	-29.86	Pass	H
6522.71	149	139	-51.94	-13	-38.94	Pass	H
7942.21	151	321	-48.75	-13	-35.75	Pass	H
1231.95	149	174	-53.90	-13	-40.90	Pass	V
1424.87	148	286	-60.62	-13	-47.62	Pass	V
3599.31	147	261	-55.81	-13	-42.81	Pass	V
3856.90	148	228	-51.80	-13	-38.80	Pass	V
5885.96	150	279	-49.38	-13	-36.38	Pass	V
6609.53	150	286	-48.13	-13	-35.13	Pass	V

Band 12 23173 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1262.04	149	276	-57.19	-13	-44.19	Pass	H
1680.65	152	232	-52.28	-13	-39.28	Pass	H
3823.84	152	217	-45.60	-13	-32.60	Pass	H
5942.88	145	67	-38.11	-13	-25.11	Pass	H
6619.63	151	112	-39.78	-13	-26.78	Pass	H
8012.34	153	47	-42.69	-13	-29.69	Pass	H
1191.88	149	236	-57.97	-13	-44.97	Pass	V
1407.61	145	69	-58.03	-13	-45.03	Pass	V
3445.46	153	287	-50.27	-13	-37.27	Pass	V
3941.16	146	229	-46.84	-13	-33.84	Pass	V
5703.52	149	21	-44.67	-13	-31.67	Pass	V
6491.73	148	204	-47.26	-13	-34.26	Pass	V

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Band 12 23017 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1433.37	153	104	-59.55	-13	-46.55	Pass	H
1637.50	149	154	-50.41	-13	-37.41	Pass	H
3818.20	152	127	-48.77	-13	-35.77	Pass	H
5981.68	148	177	-47.21	-13	-34.21	Pass	H
6486.51	146	284	-41.70	-13	-28.70	Pass	H
7962.42	151	211	-40.21	-13	-27.21	Pass	H
1218.94	148	202	-54.00	-13	-41.00	Pass	V
1432.85	152	320	-58.51	-13	-45.51	Pass	V
3675.44	152	120	-52.67	-13	-39.67	Pass	V
3910.81	152	19	-51.54	-13	-38.54	Pass	V
5920.89	152	191	-46.07	-13	-33.07	Pass	V
6489.04	154	313	-47.54	-13	-34.54	Pass	V

Band 12 23095 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1247.46	146	114	-56.67	-13	-41.45	Pass	H
1724.67	153	194	-52.88	-13	-37.85	Pass	H
3789.99	145	203	-44.39	-13	-35.2	Pass	H
5901.61	155	111	-42.29	-13	-30.39	Pass	H
6506.95	145	176	-47.55	-13	-32.24	Pass	H
8007.27	148	152	-40.80	-13	-30.22	Pass	H
1180.00	152	270	-54.33	-13	-44.9	Pass	V
1360.50	153	80	-57.20	-13	-43.63	Pass	V
3564.38	150	278	-48.97	-13	-35.94	Pass	V
3837.76	151	145	-46.88	-13	-36.01	Pass	V
5731.86	149	272	-43.73	-13	-33.75	Pass	V
6475.73	150	282	-47.33	-13	-32.41	Pass	V
Band 12 23173 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1398.59	149	227	-58.49	-13	-45.49	Pass	H
1787.48	153	202	-48.23	-13	-35.23	Pass	H
3828.17	149	296	-42.11	-13	-29.11	Pass	H
5817.47	152	113	-38.72	-13	-25.72	Pass	H
6472.00	151	171	-42.58	-13	-29.58	Pass	H
8017.26	154	39	-43.00	-13	-30.00	Pass	H
1185.89	145	225	-51.83	-13	-38.83	Pass	V
1367.69	151	186	-58.14	-13	-45.14	Pass	V
3533.94	149	287	-47.67	-13	-34.67	Pass	V
3746.19	152	132	-52.40	-13	-39.40	Pass	V
5802.03	146	177	-48.02	-13	-35.02	Pass	V
6471.53	146	172	-46.92	-13	-33.92	Pass	V

Note:

9) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

10) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

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Band 13 23025 channel/BW 5(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1315.00	146	134	-56.36	-25	-31.36	Pass	H
1754.93	151	92	-48.75	-25	-23.75	Pass	H
3910.48	147	292	-49.74	-25	-24.74	Pass	H
5810.16	150	229	-39.92	-25	-14.92	Pass	H
6423.63	146	96	-39.86	-25	-14.86	Pass	H
8040.97	149	342	-42.57	-25	-17.57	Pass	H
1128.61	148	196	-52.12	-25	-27.12	Pass	V
1470.50	146	203	-56.49	-25	-31.49	Pass	V
3625.95	149	248	-49.37	-25	-24.37	Pass	V
3759.51	152	44	-49.15	-25	-24.15	Pass	V
5886.79	154	27	-46.11	-25	-21.11	Pass	V
6635.26	146	229	-46.34	-25	-21.34	Pass	V
Band 13 23230 channel/BW 5(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1292.35	145	100	-55.42	-25	-30.42	Pass	H
1653.27	153	293	-49.29	-25	-24.29	Pass	H
3821.80	151	356	-48.43	-25	-23.43	Pass	H
5793.89	152	259	-40.07	-25	-15.07	Pass	H
6453.31	146	42	-44.24	-25	-19.24	Pass	H
7998.25	145	275	-44.98	-25	-19.98	Pass	H
1270.02	151	12	-57.17	-25	-32.17	Pass	V
1516.94	152	1	-55.65	-25	-30.65	Pass	V
3483.70	154	63	-51.10	-25	-26.10	Pass	V
3896.79	148	292	-49.20	-25	-24.20	Pass	V
5775.46	152	223	-48.20	-25	-23.20	Pass	V
6584.97	153	80	-42.63	-25	-17.63	Pass	V

Band 13 23255 channel/BW 5(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1412.68	154	44	-56.11	-25	-31.11	Pass	H
1760.56	150	303	-50.07	-25	-25.07	Pass	H
3858.62	151	289	-46.91	-25	-21.91	Pass	H
5791.87	151	163	-45.51	-25	-20.51	Pass	H
6453.06	149	149	-46.67	-25	-21.67	Pass	H
8013.42	146	218	-43.39	-25	-18.39	Pass	H
1200.47	150	39	-51.99	-25	-26.99	Pass	V
1425.07	149	8	-59.89	-25	-34.89	Pass	V
3466.69	150	57	-47.60	-25	-22.60	Pass	V
3872.78	148	188	-49.03	-25	-24.03	Pass	V
5816.10	150	35	-44.51	-25	-19.51	Pass	V
6473.43	150	19	-47.21	-25	-22.21	Pass	V

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Band 13 23025 channel/BW 5(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1418.96	145	270	-51.51	-25	-26.51	Pass	H
1660.43	154	230	-48.75	-25	-23.75	Pass	H
3851.94	155	170	-49.96	-25	-24.96	Pass	H
5953.72	148	45	-44.06	-25	-19.06	Pass	H
6433.21	149	87	-46.91	-25	-21.91	Pass	H
8162.09	147	17	-44.27	-25	-19.27	Pass	H
1276.26	145	75	-51.08	-25	-26.08	Pass	V
1388.95	153	223	-55.24	-25	-30.24	Pass	V
3537.73	152	333	-52.31	-25	-27.31	Pass	V
3871.59	147	14	-49.59	-25	-24.59	Pass	V
5726.11	150	342	-44.87	-25	-19.87	Pass	V
6648.81	152	92	-49.22	-25	-24.22	Pass	V

Band 13 23230 channel/BW 5(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1288.05	150	52	-52.20	-25	-27.20	Pass	H
1736.30	146	219	-44.98	-25	-19.98	Pass	H
3905.90	149	224	-42.92	-25	-17.92	Pass	H
5912.77	153	168	-43.46	-25	-18.46	Pass	H
6428.88	150	115	-40.05	-25	-15.05	Pass	H
8115.66	150	124	-45.08	-25	-20.08	Pass	H
1276.22	152	55	-53.32	-25	-28.32	Pass	V
1382.95	148	286	-59.92	-25	-34.92	Pass	V
3562.23	148	335	-47.84	-25	-22.84	Pass	V
3916.56	155	128	-51.29	-25	-26.29	Pass	V
5889.01	153	9	-44.41	-25	-19.41	Pass	V
6618.42	147	253	-47.54	-25	-22.54	Pass	V
Band 13 23255 channel/BW 5(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1298.68	147	224	-55.52	-25	-30.52	Pass	H
1793.44	147	289	-44.97	-25	-19.97	Pass	H
3850.50	150	163	-47.47	-25	-22.47	Pass	H
5923.73	146	252	-38.57	-25	-13.57	Pass	H
6427.14	146	21	-39.43	-25	-14.43	Pass	H
8035.74	153	194	-41.31	-25	-16.31	Pass	H
1240.56	148	232	-55.56	-25	-30.56	Pass	V
1542.34	148	230	-54.11	-25	-29.11	Pass	V
3535.88	147	334	-53.33	-25	-28.33	Pass	V
3768.71	145	97	-50.89	-25	-25.89	Pass	V
5704.38	145	79	-46.21	-25	-21.21	Pass	V
6564.20	153	279	-44.79	-25	-19.79	Pass	V

Note:

11) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

12) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

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Band 17 23755 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1288.75	147	226	-55.48	-13	-42.48	Pass	H
1671.36	142	322	-50.64	-13	-37.64	Pass	H
3995.77	154	210	-49.12	-13	-36.12	Pass	H
5954.32	154	210	-46.32	-13	-33.32	Pass	H
6417.68	149	124	-42.22	-13	-29.22	Pass	H
8165.83	159	35	-41.68	-13	-28.68	Pass	H
1178.58	150	52	-55.77	-13	-42.77	Pass	V
1526.02	142	323	-57.13	-13	-44.13	Pass	V
3508.52	142	229	-52.01	-13	-39.01	Pass	V
3811.99	151	105	-51.12	-13	-38.12	Pass	V
5865.69	147	224	-50.37	-13	-37.37	Pass	V
6539.02	154	100	-48.46	-13	-35.46	Pass	V

Band 17 23790 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1327.36	150	60	-54.38	-13	-41.38	Pass	H
1710.12	146	177	-51.35	-13	-38.35	Pass	H
3813.86	150	30	-50.68	-13	-37.68	Pass	H
5950.07	146	22	-45.92	-13	-32.92	Pass	H
6543.33	149	278	-49.24	-13	-36.24	Pass	H
7992.00	151	84	-45.89	-13	-32.89	Pass	H
1223.98	149	220	-55.13	-13	-42.13	Pass	V
1365.39	148	238	-61.57	-13	-48.57	Pass	V
3687.49	147	65	-54.68	-13	-41.68	Pass	V
3908.80	148	274	-51.56	-13	-38.56	Pass	V
5827.50	150	202	-50.65	-13	-37.65	Pass	V
6517.94	150	294	-45.69	-13	-32.69	Pass	V

Band 17 23825 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1384.75	148	274	-57.42	-13	-44.42	Pass	H
1611.75	152	32	-54.86	-13	-41.86	Pass	H
3942.03	149	38	-43.79	-13	-30.79	Pass	H
5932.22	155	219	-42.07	-13	-29.07	Pass	H
6435.26	149	154	-40.53	-13	-27.53	Pass	H
8021.29	151	283	-42.81	-13	-29.81	Pass	H
1353.04	149	72	-57.58	-13	-44.58	Pass	V
1468.82	149	343	-58.84	-13	-45.84	Pass	V
3608.14	148	30	-53.94	-13	-40.94	Pass	V
3937.50	154	18	-50.72	-13	-37.72	Pass	V
5707.84	151	203	-43.89	-13	-30.89	Pass	V
6603.53	146	309	-47.41	-13	-34.41	Pass	V

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Band 17 23755 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1313.09	155	221	-58.67	-13	-45.67	Pass	H
1631.04	146	59	-46.27	-13	-33.27	Pass	H
3903.42	154	249	-46.76	-13	-33.76	Pass	H
5980.81	154	188	-42.27	-13	-29.27	Pass	H
6546.57	145	297	-46.35	-13	-33.35	Pass	H
7993.16	151	268	-39.73	-13	-26.73	Pass	H
1167.98	147	161	-53.23	-13	-40.23	Pass	V
1416.59	149	194	-53.57	-13	-40.57	Pass	V
3626.98	148	191	-52.17	-13	-39.17	Pass	V
3983.02	148	203	-52.91	-13	-39.91	Pass	V
5904.37	153	240	-46.76	-13	-33.76	Pass	V
6651.82	148	141	-49.76	-13	-36.76	Pass	V

Band 17 23790 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1394.31	148	322	-50.64	-13	-41.45	Pass	H
1683.65	146	332	-53.62	-13	-37.85	Pass	H
3897.92	154	164	-50.98	-13	-35.2	Pass	H
5968.57	154	199	-41.21	-13	-30.39	Pass	H
6557.63	145	81	-47.11	-13	-32.24	Pass	H
8026.36	153	9	-44.37	-13	-30.22	Pass	H
1285.95	145	180	-58.98	-13	-44.9	Pass	V
1445.46	150	202	-55.55	-13	-43.63	Pass	V
3559.92	152	113	-49.35	-13	-35.94	Pass	V
3884.32	150	145	-47.57	-13	-36.01	Pass	V
5724.99	149	355	-47.22	-13	-33.75	Pass	V
6421.68	152	74	-46.67	-13	-32.41	Pass	V

Band 17 23825 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1426.68	152	16	-56.06	-13	-43.06	Pass	H
1704.52	147	178	-51.13	-13	-38.13	Pass	H
3832.23	148	101	-45.69	-13	-32.69	Pass	H
5852.18	148	21	-40.65	-13	-27.65	Pass	H
6594.12	146	348	-37.46	-13	-24.46	Pass	H
8134.88	150	226	-44.78	-13	-31.78	Pass	H
1123.73	145	139	-55.07	-13	-42.07	Pass	V
1557.95	154	146	-60.52	-13	-47.52	Pass	V
3482.85	154	29	-51.90	-13	-38.90	Pass	V
3914.40	145	296	-52.46	-13	-39.46	Pass	V
5735.72	153	154	-45.06	-13	-32.06	Pass	V
6652.12	152	71	-47.20	-13	-34.20	Pass	V

Note:

13) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

14) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK							
Band 38 37775 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1305.07	154	221	-57.40	-25	-32.40	Pass	H
1798.50	145	230	-50.52	-25	-25.52	Pass	H
3896.43	147	240	-47.97	-25	-22.97	Pass	H
5925.07	150	319	-43.67	-25	-18.67	Pass	H
6412.20	146	112	-43.24	-25	-18.24	Pass	H
8036.60	146	233	-46.52	-25	-21.52	Pass	H
1116.72	147	110	-51.87	-25	-26.87	Pass	V
1422.86	146	313	-58.26	-25	-33.26	Pass	V
3497.19	155	331	-51.85	-25	-26.85	Pass	V
3857.90	147	46	-46.99	-25	-21.99	Pass	V
5798.10	151	202	-42.19	-25	-17.19	Pass	V
6473.78	150	217	-48.91	-25	-23.91	Pass	V
Band 38 38000 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1244.45	152	105	-59.44	-25	-34.44	Pass	H
1666.00	148	204	-49.68	-25	-24.68	Pass	H
3810.03	146	145	-49.21	-25	-24.21	Pass	H
5970.67	149	250	-44.88	-25	-19.88	Pass	H
6482.78	148	79	-42.76	-25	-17.76	Pass	H
8052.52	147	140	-46.90	-25	-21.90	Pass	H
1209.23	149	0	-53.46	-25	-28.46	Pass	V
1525.93	152	12	-54.55	-25	-29.55	Pass	V
3497.41	155	308	-53.30	-25	-28.30	Pass	V
3753.44	146	257	-52.62	-25	-27.62	Pass	V
5781.23	151	229	-46.84	-25	-21.84	Pass	V
6604.50	155	85	-46.48	-25	-21.48	Pass	V

Band 38 38225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1387.73	150	51	-53.62	-25	-28.62	Pass	H
1651.55	146	197	-52.89	-25	-27.89	Pass	H
3990.71	152	35	-45.96	-25	-20.96	Pass	H
5953.18	150	24	-46.90	-25	-21.90	Pass	H
6578.00	150	254	-43.62	-25	-18.62	Pass	H
8115.74	152	133	-45.09	-25	-20.09	Pass	H
1288.27	148	314	-55.49	-25	-30.49	Pass	V
1364.12	150	94	-59.98	-25	-34.98	Pass	V
3484.60	146	258	-46.58	-25	-21.58	Pass	V
3766.66	152	14	-50.84	-25	-25.84	Pass	V
5830.39	145	157	-45.84	-25	-20.84	Pass	V
6497.51	147	97	-50.62	-25	-25.62	Pass	V
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Band 38 37775 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1409.29	153	82	-54.66	-25	-29.66	Pass	H
1800.20	148	266	-46.06	-25	-21.06	Pass	H
3978.06	147	70	-49.26	-25	-24.26	Pass	H
5860.56	148	255	-39.42	-25	-14.42	Pass	H
6477.51	153	272	-42.03	-25	-17.03	Pass	H
8020.83	147	277	-48.14	-25	-23.14	Pass	H
1170.06	146	50	-49.38	-25	-24.38	Pass	V
1401.36	154	171	-60.80	-25	-35.80	Pass	V
3584.77	152	212	-49.87	-25	-24.87	Pass	V
3812.37	148	247	-51.34	-25	-26.34	Pass	V
5883.86	148	294	-47.64	-25	-22.64	Pass	V
6513.10	151	284	-44.65	-25	-19.65	Pass	V

Band 38 38000 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1245.72	151	264	-52.86	-25	-27.86	Pass	H
1636.51	146	196	-49.44	-25	-24.44	Pass	H
3893.07	149	328	-40.62	-25	-15.62	Pass	H
5910.59	148	270	-37.90	-25	-12.90	Pass	H
6517.24	155	56	-44.43	-25	-19.43	Pass	H
8116.58	148	43	-42.81	-25	-17.81	Pass	H
1201.09	146	54	-52.76	-25	-27.76	Pass	V
1405.02	149	342	-59.29	-25	-34.29	Pass	V
3510.74	145	124	-50.66	-25	-25.66	Pass	V
3900.27	148	81	-50.86	-25	-25.86	Pass	V
5797.98	150	152	-50.41	-25	-25.41	Pass	V
6475.47	154	254	-47.03	-25	-22.03	Pass	V
Band 38 38225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1282.44	151	245	-59.73	-25	-34.73	Pass	H
1767.10	148	199	-49.27	-25	-24.27	Pass	H
3947.61	153	186	-40.75	-25	-15.75	Pass	H
5989.38	150	277	-42.03	-25	-17.03	Pass	H
6502.10	147	306	-43.40	-25	-18.40	Pass	H
8098.04	149	354	-40.41	-25	-15.41	Pass	H
1145.54	148	47	-51.02	-25	-26.02	Pass	V
1544.61	147	8	-54.84	-25	-29.84	Pass	V
3602.42	152	157	-51.69	-25	-26.69	Pass	V
3757.65	153	351	-53.68	-25	-28.68	Pass	V
5714.08	146	290	-47.26	-25	-22.26	Pass	V
6592.34	153	35	-47.99	-25	-22.99	Pass	V

Note:

15) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

16) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

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Band 41 40265 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1319.50	149	9	-52.40	-25	-27.40	Pass	H
1633.86	147	131	-50.70	-25	-25.70	Pass	H
3867.90	154	171	-47.75	-25	-22.75	Pass	H
5936.93	151	163	-44.65	-25	-19.65	Pass	H
6505.10	153	140	-41.45	-25	-16.45	Pass	H
8019.51	150	305	-43.29	-25	-18.29	Pass	H
1149.26	148	252	-52.16	-25	-27.16	Pass	V
1424.74	146	140	-55.80	-25	-30.80	Pass	V
3490.52	147	338	-51.74	-25	-26.74	Pass	V
3910.60	149	238	-49.63	-25	-24.63	Pass	V
5748.33	151	90	-46.73	-25	-21.73	Pass	V
6550.23	148	219	-47.31	-25	-22.31	Pass	V
Band 41 40740 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1328.18	147	300	-54.84	-25	-29.84	Pass	H
1744.71	154	315	-49.96	-25	-24.96	Pass	H
3807.73	151	307	-46.35	-25	-21.35	Pass	H
5918.87	150	59	-41.89	-25	-16.89	Pass	H
6499.84	149	250	-40.60	-25	-15.60	Pass	H
8099.79	147	2	-43.19	-25	-18.19	Pass	H
1294.81	149	293	-58.38	-25	-33.38	Pass	V
1396.71	148	258	-57.86	-25	-32.86	Pass	V
3469.56	150	300	-52.36	-25	-27.36	Pass	V
3782.76	146	133	-49.04	-25	-24.04	Pass	V
5889.66	154	227	-43.73	-25	-18.73	Pass	V
6564.95	149	134	-47.63	-25	-22.63	Pass	V

Band 41 41215 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1349.59	150	191	-55.55	-25	-30.55	Pass	H
1660.28	146	308	-51.95	-25	-26.95	Pass	H
3878.33	153	291	-45.26	-25	-20.26	Pass	H
5913.85	147	331	-40.49	-25	-15.49	Pass	H
6414.80	146	37	-47.10	-25	-22.10	Pass	H
8104.84	153	43	-40.03	-25	-15.03	Pass	H
1253.65	154	120	-53.60	-25	-28.60	Pass	V
1401.21	149	305	-60.41	-25	-35.41	Pass	V
3515.66	153	286	-47.15	-25	-22.15	Pass	V
3776.14	147	168	-47.48	-25	-22.48	Pass	V
5827.79	146	74	-46.14	-25	-21.14	Pass	V
6587.45	152	183	-45.65	-25	-20.65	Pass	V

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Band 41 40265 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1385.69	146	279	-51.44	-25	-26.44	Pass	H
1765.26	149	216	-49.23	-25	-24.23	Pass	H
3865.35	152	340	-43.90	-25	-18.90	Pass	H
5814.09	146	317	-45.02	-25	-20.02	Pass	H
6600.91	152	135	-45.65	-25	-20.65	Pass	H
8056.94	146	201	-46.87	-25	-21.87	Pass	H
1152.48	150	257	-55.31	-25	-30.31	Pass	V
1361.32	148	333	-56.13	-25	-31.13	Pass	V
3622.87	153	146	-51.81	-25	-26.81	Pass	V
3827.38	150	164	-48.37	-25	-23.37	Pass	V
5807.14	155	341	-48.99	-25	-23.99	Pass	V
6474.41	152	306	-44.51	-25	-19.51	Pass	V
Band 41 40740 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1400.49	146	89	-50.43	-25	-25.43	Pass	H
1701.55	153	199	-49.13	-25	-24.13	Pass	H
3930.69	153	115	-41.11	-25	-16.11	Pass	H
5851.82	146	339	-39.96	-25	-14.96	Pass	H
6409.18	151	189	-44.68	-25	-19.68	Pass	H
7990.76	154	58	-42.17	-25	-17.17	Pass	H
1113.26	154	320	-51.77	-25	-26.77	Pass	V
1455.04	150	344	-56.28	-25	-31.28	Pass	V
3557.47	149	298	-53.64	-25	-28.64	Pass	V
3929.84	152	212	-51.74	-25	-26.74	Pass	V
5766.98	155	25	-44.67	-25	-19.67	Pass	V
6566.30	152	123	-44.10	-25	-19.10	Pass	V

Band 41 41215 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1433.38	149	329	-58.13	-25	-33.13	Pass	H
1606.34	150	196	-45.51	-25	-20.51	Pass	H
3810.54	150	328	-43.48	-25	-18.48	Pass	H
5827.16	151	72	-40.85	-25	-15.85	Pass	H
6491.23	151	187	-44.98	-25	-19.98	Pass	H
8177.03	151	347	-42.46	-25	-17.46	Pass	H
1122.80	153	297	-56.36	-25	-31.36	Pass	V
1451.37	145	106	-58.99	-25	-33.99	Pass	V
3531.91	154	16	-54.40	-25	-29.40	Pass	V
3795.65	151	140	-51.75	-25	-26.75	Pass	V
5771.55	152	40	-49.12	-25	-24.12	Pass	V
6521.44	155	288	-45.63	-25	-20.63	Pass	V

Note:

17) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

18) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK							
Band 40A 38725 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1427.36	151	124	-53.74	-40	-13.74	Pass	H
1683.97	154	122	-43.18	-40	-3.18	Pass	H
3899.83	148	22	-48.32	-40	-8.32	Pass	H
5996.38	153	206	-39.20	-40	0.80	Pass	H
6547.52	150	12	-44.82	-40	-4.82	Pass	H
8128.57	147	313	-40.94	-40	-0.94	Pass	H
1128.15	154	245	-56.15	-40	-16.15	Pass	V
1315.40	149	19	-59.14	-40	-19.14	Pass	V
3443.72	145	7	-52.65	-40	-12.65	Pass	V
3789.81	154	20	-46.06	-40	-6.06	Pass	V
5742.24	153	57	-47.67	-40	-7.67	Pass	V
6552.58	146	2	-43.33	-40	-3.33	Pass	V
Band 40A 38750 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1290.95	151	5	-59.46	-40	-19.46	Pass	H
1814.98	152	197	-53.49	-40	-13.49	Pass	H
3763.53	146	279	-49.66	-40	-9.66	Pass	H
5877.07	149	131	-46.99	-40	-6.99	Pass	H
6551.67	150	7	-49.22	-40	-9.22	Pass	H
8081.52	152	263	-44.46	-40	-4.46	Pass	H
1221.74	146	159	-61.34	-40	-21.34	Pass	V
1361.62	147	87	-59.50	-40	-19.50	Pass	V
3619.78	148	50	-51.46	-40	-11.46	Pass	V
3882.92	151	16	-48.12	-40	-8.12	Pass	V
5883.39	151	355	-48.80	-40	-8.80	Pass	V
6549.58	153	196	-43.50	-40	-3.50	Pass	V

Band 40A 38775 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1357.98	153	267	-54.89	-40	-14.89	Pass	H
1760.17	146	291	-49.18	-40	-9.18	Pass	H
3803.79	148	278	-50.58	-40	-10.58	Pass	H
5915.69	152	33	-45.72	-40	-5.72	Pass	H
6590.01	146	332	-43.43	-40	-3.43	Pass	H
8129.29	152	198	-46.14	-40	-6.14	Pass	H
1290.98	152	292	-59.72	-40	-19.72	Pass	V
1345.21	147	126	-62.04	-40	-22.04	Pass	V
3498.96	154	184	-50.31	-40	-10.31	Pass	V
3922.30	150	22	-50.63	-40	-10.63	Pass	V
5735.73	148	11	-49.04	-40	-9.04	Pass	V
6561.39	151	54	-48.22	-40	-5.68	Pass	V
16QAM							
Band 40A 38725 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1390.58	150	351	-53.52	-40	-13.52	Pass	H
1725.91	154	344	-49.00	-40	-9.00	Pass	H
3931.32	149	265	-49.85	-40	-9.85	Pass	H
5862.54	153	216	-48.05	-40	-8.05	Pass	H
6572.61	149	355	-48.24	-40	-8.24	Pass	H
8051.01	149	117	-43.39	-40	-3.39	Pass	H
1100.40	148	54	-57.80	-40	-17.80	Pass	V
1360.02	147	128	-58.99	-40	-18.99	Pass	V
3602.38	151	287	-53.20	-40	-13.20	Pass	V
3768.00	154	118	-50.30	-40	-10.30	Pass	V
5742.81	151	149	-48.43	-40	-8.43	Pass	V
6492.33	153.92	281.20	-45.49	-40	-5.49	Pass	V

Band 40A 38750channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1361.50	153	261	-57.25	-40	-17.25	Pass	H
1744.83	152	331	-49.01	-40	-9.01	Pass	H
3879.01	155	30	-50.32	-40	-10.32	Pass	H
5979.89	146	135	-46.31	-40	-6.31	Pass	H
6526.60	149	346	-47.69	-40	-7.69	Pass	H
7963.33	146	356	-45.08	-40	-5.08	Pass	H
1130.51	155	67	-55.61	-40	-15.61	Pass	V
1445.27	148	290	-61.74	-40	-21.74	Pass	V
3523.00	149	74	-51.98	-40	-11.98	Pass	V
3946.99	153	311	-51.02	-40	-11.02	Pass	V
5791.22	154	5	-44.44	-40	-4.44	Pass	V
6611.64	149	119	-47.23	-40	-7.23	Pass	V
Band 40A 38875 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1392.38	153	226	-57.71	-40	-17.71	Pass	H
1810.26	146	237	-49.84	-40	-9.84	Pass	H
3832.60	146	132	-48.60	-40	-8.60	Pass	H
5859.99	145	351	-45.90	-40	-5.90	Pass	H
6499.07	151	319	-45.59	-40	-5.59	Pass	H
8146.84	154	7	-43.30	-40	-3.30	Pass	H
1211.89	146	156	-56.82	-40	-16.82	Pass	V
1323.27	147	39	-61.32	-40	-21.32	Pass	V
3603.90	147	302	-49.78	-40	-9.78	Pass	V
3895.84	148	23	-47.72	-40	-7.72	Pass	V
5728.47	149	231	-43.87	-40	-3.87	Pass	V
6590.93	155	233	-47.79	-40	-7.79	Pass	V

Note:

19) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

20) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK							
Band 40B 39175channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1330.64	155	262	-53.23	-40	-13.23	Pass	H
1671.65	150	25	-49.90	-40	-9.90	Pass	H
3866.12	153	355	-48.22	-40	-8.22	Pass	H
5934.99	154	316	-44.98	-40	-4.98	Pass	H
6467.94	152	329	-47.19	-40	-7.19	Pass	H
8151.05	155	6	-46.14	-40	-6.14	Pass	H
1290.08	147	180	-56.19	-40	-16.19	Pass	V
1422.20	145	130	-58.99	-40	-18.99	Pass	V
3438.27	154	160	-49.65	-40	-9.65	Pass	V
3770.75	150	349	-48.32	-40	-8.32	Pass	V
5732.02	154	16	-48.93	-40	-8.93	Pass	V
6562.28	153	151	-43.99	-40	-3.99	Pass	V
Band 40B 39200 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1388.84	155	229	-54.24	-40	-14.24	Pass	H
1652.95	153	229	-49.29	-40	-9.29	Pass	H
3832.65	146	144	-51.53	-40	-11.53	Pass	H
5979.68	155	42	-44.74	-40	-4.74	Pass	H
6526.25	153	339	-45.46	-40	-5.46	Pass	H
7965.86	149	133	-43.35	-40	-3.35	Pass	H
1166.76	153	24	-57.08	-40	-17.08	Pass	V
1390.17	150	85	-59.04	-40	-19.04	Pass	V
3539.23	147	351	-51.01	-40	-11.01	Pass	V
3908.73	146	31	-49.84	-40	-9.84	Pass	V
5763.54	154	275	-46.30	-40	-6.30	Pass	V
6531.29	153	15	-44.99	-40	-4.99	Pass	V

Band 40B 39225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1287.55	150	292	-57.42	-40	-17.42	Pass	H
1689.18	147	152	-51.26	-40	-11.26	Pass	H
3877.56	149	323	-50.47	-40	-10.47	Pass	H
5830.85	146	223	-44.86	-40	-4.86	Pass	H
6584.41	145	146	-46.95	-40	-6.95	Pass	H
8142.80	150	105	-44.42	-40	-4.42	Pass	H
1280.91	147	355	-56.21	-40	-16.21	Pass	V
1464.39	147	144	-58.11	-40	-18.11	Pass	V
3477.65	151	276	-52.07	-40	-12.07	Pass	V
3918.23	147	31	-48.61	-40	-8.61	Pass	V
5720.94	147	186	-48.46	-40	-8.46	Pass	V
6500.22	148	201	-43.32	-40	-3.32	Pass	V
16QAM							
Band 40B 39175 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1404.08	154	232	-53.07	-40	-13.07	Pass	H
1788.38	154	119	-48.13	-40	-8.13	Pass	H
3929.80	150	144	-47.83	-40	-7.83	Pass	H
5960.47	148	267	-46.35	-40	-6.35	Pass	H
6541.56	148	36	-49.51	-40	-9.51	Pass	H
8002.04	152	106	-44.72	-40	-4.72	Pass	H
1169.64	154	171	-57.73	-40	-17.73	Pass	V
1298.41	149	26	-62.21	-40	-22.21	Pass	V
3598.05	152	115	-53.30	-40	-13.30	Pass	V
3803.81	147	286	-49.26	-40	-9.26	Pass	V
5744.82	151	184	-46.87	-40	-6.87	Pass	V
6552.17	147	176	-46.72	-40	-6.72	Pass	V

Band 40B 39200channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1292.47	145	206	-53.31	-40	-13.31	Pass	H
1671.62	146	18	-45.78	-40	-5.78	Pass	H
3840.07	146	18	-49.92	-40	-9.92	Pass	H
5953.46	145	225	-43.48	-40	-3.48	Pass	H
6534.69	146	27	-43.84	-40	-3.84	Pass	H
7979.47	145	235	-45.13	-40	-5.13	Pass	H
1182.78	145	235	-58.36	-40	-18.36	Pass	V
1432.90	146	245	-57.23	-40	-17.23	Pass	V
3514.54	145	249	-51.39	-40	-11.39	Pass	V
3862.20	146	12	-51.76	-40	-11.76	Pass	V
5888.05	146	78	-48.28	-40	-8.28	Pass	V
6505.85	146	31	-46.86	-40	-6.86	Pass	V
Band 40B 39225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1352.28	149	151	-54.16	-40	-14.16	Pass	H
1677.72	154	317	-48.49	-40	-8.49	Pass	H
3903.66	153	112	-46.92	-40	-6.92	Pass	H
5844.67	153	156	-46.57	-40	-6.57	Pass	H
6487.83	147	286	-49.78	-40	-9.78	Pass	H
8004.57	148	132	-44.20	-40	-4.20	Pass	H
1257.81	155	306	-56.65	-40	-16.65	Pass	V
1456.57	150	56	-58.24	-40	-18.24	Pass	V
3502.07	149	45	-48.65	-40	-8.65	Pass	V
3860.54	146	309	-50.05	-40	-10.05	Pass	V
5766.50	145	27	-49.23	-40	-9.23	Pass	V
6593.62	151	298	-43.92	-40	-3.92	Pass	V

Note:

21) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

22) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK

Band 66 131979 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1404.22	141	255	-55.70	-13	-42.70	Pass	H
1725.62	159	330	-51.18	-13	-38.18	Pass	H
3997.13	151	292	-47.97	-13	-34.97	Pass	H
5805.61	157	158	-45.25	-13	-32.25	Pass	H
6608.23	155	180	-44.11	-13	-31.11	Pass	H
8122.16	157	62	-40.98	-13	-27.98	Pass	H
1207.45	146	70	-52.59	-13	-39.59	Pass	V
1530.34	152	212	-59.81	-13	-46.81	Pass	V
3552.78	153	2	-49.12	-13	-36.12	Pass	V
3902.43	146	291	-49.81	-13	-36.81	Pass	V
5760.02	149	223	-46.72	-13	-33.72	Pass	V
6482.16	148	34	-45.16	-13	-32.16	Pass	V
Band 66 132322 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1255.30	150	248	-53.39	-13	-40.39	Pass	H
1739.19	146	78	-51.41	-13	-38.41	Pass	H
3924.84	150	273	-53.20	-13	-40.20	Pass	H
5801.56	146	258	-45.71	-13	-32.71	Pass	H
6520.43	149	224	-51.90	-13	-38.90	Pass	H
7936.86	151	357	-49.00	-13	-36.00	Pass	H
1178.33	149	245	-51.00	-13	-38.00	Pass	V
1341.42	148	34	-60.37	-13	-47.37	Pass	V
3675.12	147	165	-54.71	-13	-41.71	Pass	V
3830.78	148	143	-53.72	-13	-40.72	Pass	V
5825.54	150	3	-45.93	-13	-32.93	Pass	V
6597.61	150	192	-46.85	-13	-33.85	Pass	V

Band 66 132665 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1373.44	149	92	-57.44	-13	-44.44	Pass	H
1585.45	146	353	-50.26	-13	-37.26	Pass	H
3813.69	154	131	-45.89	-13	-32.89	Pass	H
5832.51	147	214	-42.49	-13	-29.49	Pass	H
6625.58	154	127	-42.58	-13	-29.58	Pass	H
7947.61	153	218	-42.78	-13	-29.78	Pass	H
1317.14	153	175	-59.45	-13	-46.45	Pass	V
1469.62	146	14	-55.26	-13	-42.26	Pass	V
3462.49	149	349	-50.86	-13	-37.86	Pass	V
3946.29	154	122	-46.67	-13	-33.67	Pass	V
5769.86	151	314	-43.88	-13	-30.88	Pass	V
6516.58	152	18	-47.34	-13	-34.34	Pass	V

16QAM

Band 66 131979 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1363.37	153	55	-57.75	-13	-44.75	Pass	H
1637.67	151	213	-50.26	-13	-37.26	Pass	H
3859.66	149	128	-49.40	-13	-36.40	Pass	H
5892.01	151	157	-42.07	-13	-29.07	Pass	H
6480.69	148	307	-41.39	-13	-28.39	Pass	H
8059.50	154	15	-44.55	-13	-31.55	Pass	H
1277.20	149	149	-54.28	-13	-41.28	Pass	V
1440.55	155	146	-56.99	-13	-43.99	Pass	V
3673.14	146	109	-51.00	-13	-38.00	Pass	V
3833.92	155	89	-50.67	-13	-37.67	Pass	V
5768.86	154	81	-42.68	-13	-29.68	Pass	V
6560.09	147	142	-48.06	-13	-35.06	Pass	V

Band 66 132322 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1250.16	147	34	-55.30	-13	-41.45	Pass	H
1808.11	153	70	-47.39	-13	-37.85	Pass	H
3843.84	148	4	-49.67	-13	-35.2	Pass	H
5905.64	149	345	-40.77	-13	-30.39	Pass	H
6525.79	148	136	-47.25	-13	-32.24	Pass	H
8145.07	147	1	-45.83	-13	-30.22	Pass	H
1134.12	148	337	-57.11	-13	-44.9	Pass	V
1355.42	148	185	-53.87	-13	-43.63	Pass	V
3510.10	147	241	-46.24	-13	-35.94	Pass	V
3907.90	150	3	-47.57	-13	-36.01	Pass	V
5898.35	151	306	-44.91	-13	-33.75	Pass	V
6617.91	154	319	-46.05	-13	-32.41	Pass	V
Band 66 132665 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1307.92	149	187	-53.80	-13	-40.80	Pass	H
1656.28	155	130	-50.01	-13	-37.01	Pass	H
3920.98	155	23	-45.71	-13	-32.71	Pass	H
5876.70	148	148	-44.07	-13	-31.07	Pass	H
6572.71	151	296	-39.61	-13	-26.61	Pass	H
8121.27	146	327	-46.60	-13	-33.60	Pass	H
1164.16	150	79	-57.16	-13	-44.16	Pass	V
1405.61	153	105	-61.01	-13	-48.01	Pass	V
3554.98	147	335	-47.38	-13	-34.38	Pass	V
3823.74	147	320	-50.51	-13	-37.51	Pass	V
5747.60	152	98	-49.42	-13	-36.42	Pass	V
6603.86	146	329	-42.81	-13	-29.81	Pass	V

Note:

23) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

24) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

12. FREQUENCY STABILITY

12.1 Standard Applicable

According to §22.355, §24.235, §27.54 the limit is 2.5ppm.

12.2 Test Procedure

According to §2.1055, the following test procedure was performed.

The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.

The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode

12.3 Summary of Test Results/Plots

Note: 1.Normal Voltage NV=DC 4.2V; Low Voltage LV=DC 3.78V; High Voltage HV=DC 4.62V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

***** END OF REPORT *****