

TEST REPORT

Product Name: walkie talkie
FCC ID: 2BO5B-TDC68
Trademark: N/A
Model Number: TD-C68, QG-C65, AI-65, AD-68, NC810, OMI-C65, OMI-C68, POC-68, G360, UV65, MT68, PN008, PN007
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Sample Received Date: Apr. 15, 2025
Sample tested Date: Apr. 15, 2025 to May. 28 2025
Issue Date: May. 28 2025
Report No.: CTB25041507103RF01
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

Compiled by:

Reviewed by:

Approved by:

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Bin Mei / Director

Note: If there is any objection to the inspection results in this report, please submit a written report to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen CTB Testing Technology Co., Ltd. this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client. "*" indicates the testing items were fulfilled by subcontracted lab. "#" indicates the items are not in CNAS accreditation scope.

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(Note: N/A means not applicable)



1. VERSION

Report No.	Issue Date	Description	Approved
CTB25041507103RF01	May. 28 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):	TD-C68, QG-C65, AI-65, AD-68, NC810, OMI-C65, OMI-C68, POC-68, G360, UV65, MT68, PN008, PN007
Model Description:	All the model are the same circuit and RF module, It's just a different color. Test sample model: TD-C68
Hardware Version:	V2
Software Version:	V1.0
Operation Frequency:	FDD-LTE BAND 2: 1850-1910MHz FDD-LTE BAND 4: 1710-1755MHz 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: 21.24dBm FDD-LTE BAND 4: 21.68dBm FDD-LTE BAND 7: 21.34dBm FDD-LTE BAND 12: 22.09dBm FDD-LTE BAND 13: 22.13dBm FDD-LTE BAND 17: 22.18dBm TDD-LTE BAND 38: 21.08dBm TDD-LTE BAND 40a: 21.91dBm TDD-LTE BAND 40b: 21.3dBm TDD-LTE BAND 41: 20.99dBm FDD-LTE BAND 66: 21.40dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	FPC antenna
Antenna Gain:	FDD-LTE BAND 2: 0.72dBi FDD-LTE BAND 4: 0.32dBi FDD-LTE BAND 7: 0.64dBi FDD-LTE BAND 12: 0.36dBi FDD-LTE BAND 13: 0.82dBi FDD-LTE BAND 17: 0.53dBi TDD-LTE BAND 38: 0.87dBi TDD-LTE BAND 40a: 0.63dBi TDD-LTE BAND 40b: 0.63dBi TDD-LTE BAND 41: 0.81dBi

FDD-LTE BAND 66: 0.75dBi

Input: AC100-240V

Ratings:

Output: DC 5V

DC 4.2V 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/TypeNo.	SeriesNo.	Note

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 7	Low, Middle, High Channels
TM4	FDD-LTE BAND 12	Low, Middle, High Channels
TM5	FDD-LTE BAND 13	Low, Middle, High Channels
TM6	FDD-LTE BAND 17	Low, Middle, High Channels
TM7	TDD-LTE BAND 38	Low, Middle, High Channels
TM8	TDD-LTE BAND 40a	Low, Middle, High Channels
TM9	TDD-LTE BAND 40b	Low, Middle, High Channels
TM10	TDD-LTE BAND 41	Low, Middle, High Channels
TM11	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 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.

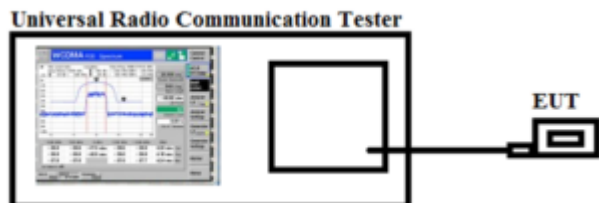
According to §27.50(h)(2), Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

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.

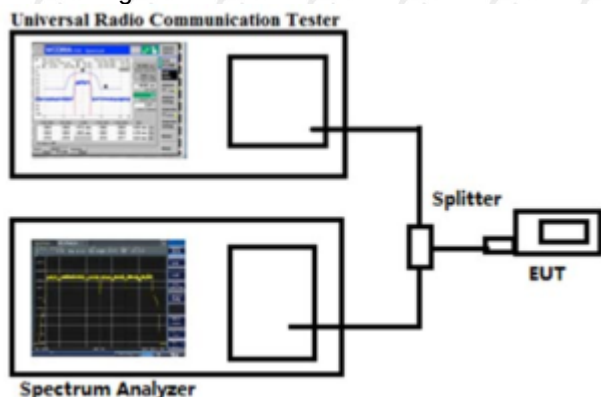
corresponding to the highest PAPR expected during periods of continuous transmission.

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.

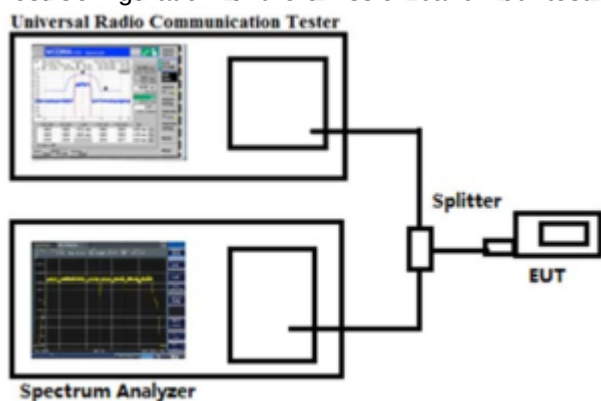
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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;

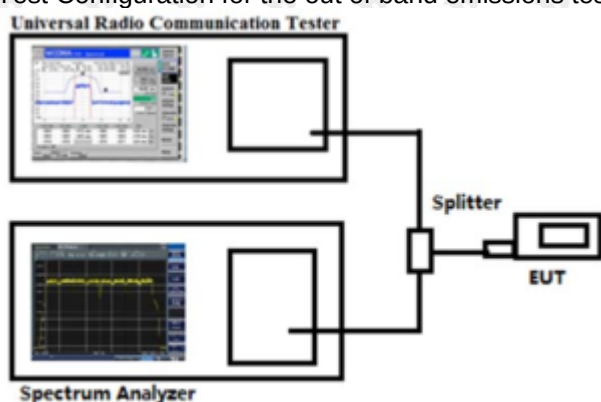
(2) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 70 + 10 log (P) dB on all frequencies between 2287.5 and 2300 MHz, 72 + 10 log (P) dB on all frequencies between 2285 and 2287.5 MHz, and 75 + 10 log (P) dB below 2285 MHz;

(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.
1406.55	153	54	-56.17	-13	-43.17	Pass	H
1722.70	154	286	-51.30	-13	-38.30	Pass	H
3840.03	155	128	-48.78	-13	-35.78	Pass	H
5876.67	141	55	-42.80	-13	-29.80	Pass	H
6508.00	141	114	-41.77	-13	-28.77	Pass	H
8112.89	149	358	-42.17	-13	-29.17	Pass	H
1109.14	155	108	-52.97	-13	-39.97	Pass	V
1489.49	149	191	-60.27	-13	-47.27	Pass	V
3618.48	157	16	-48.15	-13	-35.15	Pass	V
3922.08	151	18	-53.53	-13	-40.53	Pass	V
5874.50	153	218	-46.06	-13	-33.06	Pass	V
6569.85	146	124	-45.89	-13	-32.89	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.
1307.67	150	27	-55.60	-13	-42.60	Pass	H
1778.63	146	214	-52.63	-13	-39.63	Pass	H
3896.63	150	154	-52.82	-13	-39.82	Pass	H
5787.82	146	32	-45.29	-13	-32.29	Pass	H
6496.43	149	181	-51.22	-13	-38.22	Pass	H
8089.27	151	249	-45.92	-13	-32.92	Pass	H
1264.85	149	200	-55.42	-13	-42.42	Pass	V
1448.71	148	216	-61.80	-13	-48.80	Pass	V
3649.67	147	291	-53.81	-13	-40.81	Pass	V
3908.72	148	176	-49.16	-13	-36.16	Pass	V
5824.14	150	50	-47.38	-13	-34.38	Pass	V
6510.91	150	265	-48.05	-13	-35.05	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.
1394.72	154	339	-57.98	-13	-44.98	Pass	H
1735.28	148	324	-50.95	-13	-37.95	Pass	H
3883.56	146	344	-43.90	-13	-30.90	Pass	H
6000.54	150	195	-40.87	-13	-27.87	Pass	H
6547.59	148	1	-41.50	-13	-28.50	Pass	H
8030.78	151	52	-47.62	-13	-34.62	Pass	H
1352.67	147	126	-55.74	-13	-42.74	Pass	V
1376.30	151	103	-59.08	-13	-46.08	Pass	V
3619.70	155	205	-54.20	-13	-41.20	Pass	V
3950.09	146	164	-49.37	-13	-36.37	Pass	V
5844.15	150	311	-45.54	-13	-32.54	Pass	V
6560.49	154	243	-48.02	-13	-35.02	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.
1314.84	151	114	-60.56	-13	-47.56	Pass	H
1702.67	152	197	-50.01	-13	-37.01	Pass	H
3886.95	152	85	-50.26	-13	-37.26	Pass	H
5939.52	153	107	-44.91	-13	-31.91	Pass	H
6555.74	152	144	-44.26	-13	-31.26	Pass	H
7952.66	151	174	-39.69	-13	-26.69	Pass	H
1146.18	153	111	-52.99	-13	-39.99	Pass	V
1349.98	152	190	-53.62	-13	-40.62	Pass	V
3538.75	154	220	-52.87	-13	-39.87	Pass	V
3901.30	154	95	-50.46	-13	-37.46	Pass	V
5832.69	151	188	-42.55	-13	-29.55	Pass	V
6505.11	154	89	-46.79	-13	-33.79	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.
1351.39	150	203	-55.57	-13	-41.45	Pass	H
1658.68	154	183	-49.85	-13	-37.85	Pass	H
3883.49	147	346	-49.61	-13	-35.2	Pass	H
6007.21	152	60	-44.72	-13	-30.39	Pass	H
6524.40	146	33	-42.21	-13	-32.24	Pass	H
7964.03	152	76	-42.50	-13	-30.22	Pass	H
1270.64	145	303	-59.76	-13	-44.9	Pass	V
1369.63	152	327	-52.88	-13	-43.63	Pass	V
3604.93	148	196	-47.25	-13	-35.94	Pass	V
3878.18	148	144	-49.64	-13	-36.01	Pass	V
5886.62	145	289	-47.42	-13	-33.75	Pass	V
6561.59	150	186	-41.64	-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.
1346.66	154	132	-59.22	-13	-46.22	Pass	H
1611.32	148	24	-48.05	-13	-35.05	Pass	H
3856.14	146	343	-47.17	-13	-34.17	Pass	H
5824.19	145	54	-42.62	-13	-29.62	Pass	H
6608.17	148	111	-38.59	-13	-25.59	Pass	H
8158.94	145	75	-42.02	-13	-29.02	Pass	H
1215.53	148	31	-52.18	-13	-39.18	Pass	V
1473.51	147	346	-60.63	-13	-47.63	Pass	V
3636.24	153	281	-46.59	-13	-33.59	Pass	V
3926.87	146	335	-50.49	-13	-37.49	Pass	V
5827.31	151	147	-45.59	-13	-32.59	Pass	V
6624.84	154	87	-47.32	-13	-34.32	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.
1331.54	152	127	-57.91	-13	-44.91	Pass	H
1744.37	154	132	-43.81	-13	-30.81	Pass	H
3822.53	146	100	-52.55	-13	-39.55	Pass	H
5831.45	152	105	-47.49	-13	-34.49	Pass	H
6589.18	149	13	-47.76	-13	-34.76	Pass	H
7926.05	150	225	-38.93	-13	-25.93	Pass	H
1166.42	151	135	-53.54	-13	-40.54	Pass	V
1422.60	148	95	-56.02	-13	-43.02	Pass	V
3695.72	151	199	-53.18	-13	-40.18	Pass	V
3909.10	155	278	-47.87	-13	-34.87	Pass	V
5756.60	146	287	-42.07	-13	-29.07	Pass	V
6501.06	152	215	-45.64	-13	-32.64	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.
1395.94	152	345	-51.88	-13	-38.88	Pass	H
1744.66	152	75	-48.36	-13	-35.36	Pass	H
3822.27	153	310	-45.56	-13	-32.56	Pass	H
5966.11	154	319	-41.82	-13	-28.82	Pass	H
6563.79	154	37	-46.14	-13	-33.14	Pass	H
8068.45	151	92	-43.88	-13	-30.88	Pass	H
1136.09	150	355	-54.42	-13	-41.42	Pass	V
1366.35	149	255	-60.97	-13	-47.97	Pass	V
3550.27	146	312	-51.10	-13	-38.10	Pass	V
3825.89	146	280	-44.56	-13	-31.56	Pass	V
5803.65	152	342	-46.88	-13	-33.88	Pass	V
6562.53	154	317	-47.92	-13	-34.92	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.
1273.25	151	24	-54.29	-13	-41.29	Pass	H
1794.66	153	192	-46.59	-13	-33.59	Pass	H
3833.20	147	85	-43.66	-13	-30.66	Pass	H
5962.44	147	282	-41.46	-13	-28.46	Pass	H
6426.19	151	228	-44.70	-13	-31.70	Pass	H
8140.51	154	115	-39.43	-13	-26.43	Pass	H
1213.44	151	71	-52.71	-13	-39.71	Pass	V
1422.99	145	172	-55.55	-13	-42.55	Pass	V
3625.05	150	93	-52.37	-13	-39.37	Pass	V
3917.13	150	134	-47.23	-13	-34.23	Pass	V
5901.30	146	287	-46.56	-13	-33.56	Pass	V
6587.87	145	120	-44.91	-13	-31.91	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.
1390.13	153	275	-53.03	-13	-40.03	Pass	H
1661.42	153	158	-54.35	-13	-41.35	Pass	H
3971.23	152	156	-47.47	-13	-34.47	Pass	H
5820.10	149	162	-43.89	-13	-30.89	Pass	H
6565.28	149	86	-48.94	-13	-35.94	Pass	H
8061.22	147	209	-47.79	-13	-34.79	Pass	H
1229.78	151	18	-55.21	-13	-42.21	Pass	V
1376.80	152	96	-52.95	-13	-39.95	Pass	V
3488.44	154	5	-47.23	-13	-34.23	Pass	V
3757.87	154	148	-46.92	-13	-33.92	Pass	V
5867.89	155	314	-42.71	-13	-29.71	Pass	V
6651.18	149	100	-48.40	-13	-35.40	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.
1230.54	147	234	-58.90	-13	-45.90	Pass	H
1670.51	152	28	-50.32	-13	-37.32	Pass	H
3803.38	152	117	-49.06	-13	-36.06	Pass	H
5781.01	147	251	-47.20	-13	-34.20	Pass	H
6426.37	146	170	-50.65	-13	-37.65	Pass	H
8081.79	154	134	-45.58	-13	-32.58	Pass	H
1280.90	149	354	-52.41	-13	-39.41	Pass	V
1475.49	149	203	-59.71	-13	-46.71	Pass	V
3682.76	153	224	-50.26	-13	-37.26	Pass	V
3894.21	148	4	-55.12	-13	-42.12	Pass	V
5918.46	147	46	-52.20	-13	-39.20	Pass	V
6452.88	154	127	-51.23	-13	-38.23	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.
1239.08	147	122	-53.75	-13	-40.75	Pass	H
1598.79	147	330	-54.62	-13	-41.62	Pass	H
3775.61	146	161	-48.36	-13	-35.36	Pass	H
5873.87	149	81	-39.89	-13	-26.89	Pass	H
6460.79	153	174	-43.06	-13	-30.06	Pass	H
7927.94	153	77	-47.52	-13	-34.52	Pass	H
1211.75	155	332	-55.83	-13	-42.83	Pass	V
1318.35	150	43	-50.07	-13	-37.07	Pass	V
3501.48	155	268	-51.81	-13	-38.81	Pass	V
3864.34	147	233	-47.40	-13	-34.40	Pass	V
5707.04	153	339	-43.08	-13	-30.08	Pass	V
6562.64	154	24	-43.49	-13	-30.49	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 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.
1315.65	149	292	-55.41	-13	-42.41	Pass	H
1672.31	147	111	-48.69	-13	-35.69	Pass	H
3877.74	155	87	-50.67	-13	-37.67	Pass	H
5994.05	146	29	-48.48	-13	-35.48	Pass	H
6584.32	153	290	-43.41	-13	-30.41	Pass	H
8005.62	153	317	-44.63	-13	-31.63	Pass	H
1231.48	147	156	-52.48	-13	-39.48	Pass	V
1441.18	146	131	-53.91	-13	-40.91	Pass	V
3643.25	155	182	-49.37	-13	-36.37	Pass	V
3910.82	151	103	-49.95	-13	-36.95	Pass	V
5752.05	153	185	-46.29	-13	-33.29	Pass	V
6573.27	148	272	-44.80	-13	-31.80	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.
1238.90	150	82	-55.17	-13	-42.17	Pass	H
1767.55	145	248	-50.49	-13	-37.49	Pass	H
3868.29	151	180	-45.77	-13	-32.77	Pass	H
5832.42	147	50	-44.45	-13	-31.45	Pass	H
6585.28	150	240	-40.73	-13	-27.73	Pass	H
8114.59	151	337	-42.00	-13	-29.00	Pass	H
1239.27	147	11	-56.25	-13	-43.25	Pass	V
1333.99	149	165	-58.13	-13	-45.13	Pass	V
3579.58	145	216	-46.86	-13	-33.86	Pass	V
3921.25	152	202	-46.51	-13	-33.51	Pass	V
5835.41	149	265	-44.96	-13	-31.96	Pass	V
6546.94	148	173	-44.54	-13	-31.54	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.
1350.84	147	111	-51.64	-13	-38.64	Pass	H
1690.06	151	151	-45.95	-13	-32.95	Pass	H
3857.80	147	196	-44.74	-13	-31.74	Pass	H
5839.55	149	169	-37.72	-13	-24.72	Pass	H
6428.05	146	167	-43.14	-13	-30.14	Pass	H
8167.42	151	300	-40.73	-13	-27.73	Pass	H
1181.40	147	120	-56.98	-13	-43.98	Pass	V
1419.76	151	261	-53.31	-13	-40.31	Pass	V
3629.91	152	196	-50.56	-13	-37.56	Pass	V
3748.02	151	312	-44.86	-13	-31.86	Pass	V
5829.93	153	158	-50.06	-13	-37.06	Pass	V
6637.02	152	8	-49.52	-13	-36.52	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.
1278.49	146	279	-57.49	-13	-44.49	Pass	H
1766.47	148	108	-52.41	-13	-39.41	Pass	H
3877.85	152	200	-48.73	-13	-35.73	Pass	H
5872.64	147	228	-48.30	-13	-35.30	Pass	H
6553.49	146	51	-45.28	-13	-32.28	Pass	H
7937.67	153	354	-48.88	-13	-35.88	Pass	H
1252.13	147	335	-55.25	-13	-42.25	Pass	V
1352.66	151	337	-56.83	-13	-43.83	Pass	V
3602.68	152	185	-49.46	-13	-36.46	Pass	V
3915.18	148	329	-50.82	-13	-37.82	Pass	V
5773.47	154	1	-45.96	-13	-32.96	Pass	V
6516.41	155	247	-44.69	-13	-31.69	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.
1310.95	145	174	-53.43	-13	-40.43	Pass	H
1625.02	152	1	-52.26	-13	-39.26	Pass	H
3802.77	147	237	-46.10	-13	-33.10	Pass	H
5882.41	150	232	-47.50	-13	-34.50	Pass	H
6389.41	145	277	-46.65	-13	-33.65	Pass	H
7987.51	147	29	-45.31	-13	-32.31	Pass	H
1332.12	148	218	-50.47	-13	-37.47	Pass	V
1489.33	150	138	-64.78	-13	-51.78	Pass	V
3568.62	145	153	-54.06	-13	-41.06	Pass	V
3997.62	154	280	-55.48	-13	-42.48	Pass	V
5781.29	149	146	-51.06	-13	-38.06	Pass	V
6469.49	150	73	-47.05	-13	-34.05	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.
1249.30	152	188	-59.95	-13	-46.95	Pass	H
1628.38	154	146	-52.34	-13	-39.34	Pass	H
3819.69	149	325	-43.98	-13	-30.98	Pass	H
5839.44	153	241	-43.12	-13	-30.12	Pass	H
6442.40	151	90	-41.50	-13	-28.50	Pass	H
7950.97	149	257	-46.27	-13	-33.27	Pass	H
1215.22	145	301	-50.96	-13	-37.96	Pass	V
1309.02	147	203	-55.30	-13	-42.30	Pass	V
3445.22	150	121	-48.45	-13	-35.45	Pass	V
3834.64	149	147	-43.94	-13	-30.94	Pass	V
5761.82	154	75	-41.55	-13	-28.55	Pass	V
6551.35	152	325	-50.21	-13	-37.21	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 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.
1301.84	158	243	-56.47	-13	-43.47	Pass	H
1766.33	142	58	-49.44	-13	-36.44	Pass	H
3922.50	156	163	-47.10	-13	-34.10	Pass	H
5955.96	148	189	-46.10	-13	-33.10	Pass	H
6482.84	157	229	-43.21	-13	-30.21	Pass	H
8122.94	158	166	-42.88	-13	-29.88	Pass	H
1117.76	143	187	-56.68	-13	-43.68	Pass	V
1418.37	151	249	-57.55	-13	-44.55	Pass	V
3495.24	148	104	-49.55	-13	-36.55	Pass	V
3758.38	158	228	-52.60	-13	-39.60	Pass	V
5852.14	159	349	-48.96	-13	-35.96	Pass	V
6631.88	146	49	-44.73	-13	-31.73	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.
1247.11	150	218	-58.36	-13	-45.36	Pass	H
1746.69	146	307	-53.90	-13	-40.90	Pass	H
3820.18	150	353	-51.47	-13	-38.47	Pass	H
5963.98	146	63	-45.44	-13	-32.44	Pass	H
6538.95	149	107	-51.69	-13	-38.69	Pass	H
8030.52	151	260	-49.33	-13	-36.33	Pass	H
1299.56	149	343	-51.46	-13	-38.46	Pass	V
1478.68	148	276	-58.30	-13	-45.30	Pass	V
3553.04	147	164	-53.54	-13	-40.54	Pass	V
3879.70	148	126	-51.84	-13	-38.84	Pass	V
5924.57	150	63	-47.00	-13	-34.00	Pass	V
6472.51	150	140	-48.57	-13	-35.57	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.
1438.66	148	3	-57.67	-13	-44.67	Pass	H
1735.67	153	326	-50.00	-13	-37.00	Pass	H
3808.61	146	205	-42.77	-13	-29.77	Pass	H
5809.50	153	246	-41.08	-13	-28.08	Pass	H
6437.36	154	238	-41.47	-13	-28.47	Pass	H
7921.77	150	85	-41.96	-13	-28.96	Pass	H
1325.25	152	100	-55.24	-13	-42.24	Pass	V
1347.10	146	223	-57.66	-13	-44.66	Pass	V
3593.68	152	162	-49.95	-13	-36.95	Pass	V
3968.96	149	148	-49.90	-13	-36.90	Pass	V
5789.16	154	151	-42.85	-13	-29.85	Pass	V
6620.68	154	129	-46.25	-13	-33.25	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.
1382.14	151	238	-55.58	-13	-42.58	Pass	H
1709.59	155	291	-49.98	-13	-36.98	Pass	H
3904.58	147	168	-48.62	-13	-35.62	Pass	H
5962.57	150	177	-46.94	-13	-33.94	Pass	H
6568.73	145	210	-45.84	-13	-32.84	Pass	H
8014.45	148	83	-44.44	-13	-31.44	Pass	H
1227.23	154	226	-52.81	-13	-39.81	Pass	V
1416.84	149	156	-52.74	-13	-39.74	Pass	V
3630.28	149	286	-53.15	-13	-40.15	Pass	V
3838.01	150	195	-50.37	-13	-37.37	Pass	V
5807.18	148	335	-43.20	-13	-30.20	Pass	V
6607.30	153	321	-49.14	-13	-36.14	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.
1359.54	155	9	-55.66	-13	-41.45	Pass	H
1723.62	149	156	-49.29	-13	-37.85	Pass	H
3940.44	153	66	-49.71	-13	-35.2	Pass	H
5962.03	151	152	-46.39	-13	-30.39	Pass	H
6545.73	153	209	-46.18	-13	-32.24	Pass	H
8068.48	151	103	-39.46	-13	-30.22	Pass	H
1113.89	150	222	-60.59	-13	-44.9	Pass	V
1468.78	153	134	-54.73	-13	-43.63	Pass	V
3579.29	145	246	-51.80	-13	-35.94	Pass	V
3840.23	152	15	-48.25	-13	-36.01	Pass	V
5811.87	150	71	-46.66	-13	-33.75	Pass	V
6607.70	154	133	-43.39	-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.
1403.30	149	207	-57.43	-13	-44.43	Pass	H
1700.75	147	108	-48.06	-13	-35.06	Pass	H
3885.88	152	205	-46.61	-13	-33.61	Pass	H
5956.77	153	44	-44.91	-13	-31.91	Pass	H
6588.53	147	245	-43.31	-13	-30.31	Pass	H
8124.14	150	270	-42.51	-13	-29.51	Pass	H
1179.15	150	133	-56.24	-13	-43.24	Pass	V
1527.80	154	198	-55.76	-13	-42.76	Pass	V
3542.96	152	26	-52.65	-13	-39.65	Pass	V
3790.60	155	112	-53.50	-13	-40.50	Pass	V
5800.93	155	274	-46.24	-13	-33.24	Pass	V
6602.45	155	113	-46.10	-13	-33.10	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 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.
1374.74	149	105	-57.38	-25	-32.38	Pass	H
1733.08	153	221	-51.09	-25	-26.09	Pass	H
3944.40	147	16	-48.61	-25	-23.61	Pass	H
5807.16	147	309	-41.13	-25	-16.13	Pass	H
6478.21	147	253	-42.96	-25	-17.96	Pass	H
8023.36	155	106	-46.18	-25	-21.18	Pass	H
1234.46	155	177	-56.16	-25	-31.16	Pass	V
1403.96	154	322	-62.65	-25	-37.65	Pass	V
3602.27	149	322	-52.50	-25	-27.50	Pass	V
3826.72	155	83	-50.92	-25	-25.92	Pass	V
5883.34	146	279	-43.39	-25	-18.39	Pass	V
6525.72	146	220	-43.94	-25	-18.94	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.
1275.07	153	282	-54.25	-25	-29.25	Pass	H
1744.67	154	83	-44.46	-25	-19.46	Pass	H
3990.59	146	181	-49.41	-25	-24.41	Pass	H
5802.07	150	245	-44.79	-25	-19.79	Pass	H
6499.06	145	169	-43.38	-25	-18.38	Pass	H
8173.22	150	170	-44.16	-25	-19.16	Pass	H
1230.58	153	304	-58.57	-25	-33.57	Pass	V
1366.68	151	169	-55.62	-25	-30.62	Pass	V
3504.25	146	328	-47.13	-25	-22.13	Pass	V
3861.42	151	289	-49.84	-25	-24.84	Pass	V
5887.33	147	120	-49.98	-25	-24.98	Pass	V
6520.64	148	142	-42.33	-25	-17.33	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.
1430.15	145	347	-56.52	-25	-31.52	Pass	H
1781.82	150	309	-51.41	-25	-26.41	Pass	H
3921.22	152	142	-43.71	-25	-18.71	Pass	H
5796.18	148	52	-43.06	-25	-18.06	Pass	H
6592.06	150	282	-44.09	-25	-19.09	Pass	H
8162.68	155	88	-42.58	-25	-17.58	Pass	H
1287.94	154	282	-51.41	-25	-26.41	Pass	V
1479.45	146	61	-54.28	-25	-29.28	Pass	V
3623.41	151	26	-50.12	-25	-25.12	Pass	V
3858.15	148	225	-48.68	-25	-23.68	Pass	V
5717.29	153	236	-42.94	-25	-17.94	Pass	V
6498.70	148	204	-47.66	-25	-22.66	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.
1356.93	149	337	-56.67	-25	-31.67	Pass	H
1770.61	150	249	-47.34	-25	-22.34	Pass	H
3819.90	152	180	-49.98	-25	-24.98	Pass	H
5896.23	152	159	-42.37	-25	-17.37	Pass	H
6602.19	152	140	-46.85	-25	-21.85	Pass	H
7984.38	154	262	-47.03	-25	-22.03	Pass	H
1193.15	147	134	-50.68	-25	-25.68	Pass	V
1544.77	146	293	-59.47	-25	-34.47	Pass	V
3600.79	153	297	-51.73	-25	-26.73	Pass	V
3883.91	153	311	-52.24	-25	-27.24	Pass	V
5772.18	148	309	-47.08	-25	-22.08	Pass	V
6519.90	152	109	-49.20	-25	-24.20	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.
1319.99	152	23	-52.31	-25	-27.31	Pass	H
1777.25	150	304	-50.22	-25	-25.22	Pass	H
3916.60	154	288	-41.54	-25	-16.54	Pass	H
5910.91	153	343	-39.70	-25	-14.70	Pass	H
6417.66	148	21	-41.83	-25	-16.83	Pass	H
8053.97	145	212	-40.80	-25	-15.80	Pass	H
1165.32	148	330	-52.70	-25	-27.70	Pass	V
1473.17	155	353	-60.66	-25	-35.66	Pass	V
3626.07	153	193	-48.97	-25	-23.97	Pass	V
3734.68	153	200	-49.34	-25	-24.34	Pass	V
5838.84	146	342	-49.17	-25	-24.17	Pass	V
6512.64	151	246	-47.25	-25	-22.25	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.
1276.65	154	320	-57.03	-25	-32.03	Pass	H
1738.28	148	286	-45.86	-25	-20.86	Pass	H
3817.49	149	353	-42.48	-25	-17.48	Pass	H
5928.20	151	38	-38.77	-25	-13.77	Pass	H
6497.43	151	145	-39.22	-25	-14.22	Pass	H
7996.42	150	119	-38.94	-25	-13.94	Pass	H
1130.05	148	344	-53.68	-25	-28.68	Pass	V
1461.54	153	172	-53.42	-25	-28.42	Pass	V
3567.89	154	234	-49.36	-25	-24.36	Pass	V
3787.05	149	3	-51.22	-25	-26.22	Pass	V
5831.96	151	84	-46.26	-25	-21.26	Pass	V
6541.15	151	317	-49.29	-25	-24.29	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 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.
1420.73	150	161	-57.08	-13	-44.08	Pass	H
1760.12	156	19	-50.71	-13	-37.71	Pass	H
3956.65	142	151	-46.91	-13	-33.91	Pass	H
5897.40	148	32	-46.13	-13	-33.13	Pass	H
6413.05	154	357	-43.78	-13	-30.78	Pass	H
8157.20	157	353	-42.92	-13	-29.92	Pass	H
1204.23	150	276	-56.85	-13	-43.85	Pass	V
1512.07	143	223	-59.98	-13	-46.98	Pass	V
3480.27	141	277	-48.49	-13	-35.49	Pass	V
3824.42	153	307	-50.04	-13	-37.04	Pass	V
5819.54	145	161	-49.23	-13	-36.23	Pass	V
6593.05	146	152	-44.94	-13	-31.94	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.
1262.86	150	244	-58.16	-13	-45.16	Pass	H
1733.70	146	217	-52.97	-13	-39.97	Pass	H
3817.00	150	160	-49.44	-13	-36.44	Pass	H
5829.16	146	225	-47.64	-13	-34.64	Pass	H
6417.65	149	236	-47.80	-13	-34.80	Pass	H
8004.88	151	62	-48.38	-13	-35.38	Pass	H
1262.06	149	56	-56.47	-13	-43.47	Pass	V
1466.15	148	209	-56.35	-13	-43.35	Pass	V
3542.58	147	325	-56.00	-13	-43.00	Pass	V
3938.47	148	74	-48.35	-13	-35.35	Pass	V
5760.94	150	274	-50.91	-13	-37.91	Pass	V
6571.96	150	213	-50.98	-13	-37.98	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.
1348.61	151	197	-59.09	-13	-46.09	Pass	H
1769.66	151	112	-54.19	-13	-41.19	Pass	H
3821.30	155	94	-46.32	-13	-33.32	Pass	H
5879.01	154	245	-42.54	-13	-29.54	Pass	H
6532.12	155	336	-40.88	-13	-27.88	Pass	H
7974.37	146	66	-43.58	-13	-30.58	Pass	H
1170.18	153	70	-56.08	-13	-43.08	Pass	V
1316.85	149	74	-56.07	-13	-43.07	Pass	V
3539.06	145	33	-55.57	-13	-42.57	Pass	V
3926.91	146	92	-51.14	-13	-38.14	Pass	V
5791.90	152	120	-43.33	-13	-30.33	Pass	V
6590.04	151	206	-48.74	-13	-35.74	Pass	V

16QAM

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.
1277.79	154	17	-59.36	-13	-46.36	Pass	H
1673.46	149	133	-45.52	-13	-32.52	Pass	H
3837.89	152	87	-47.75	-13	-34.75	Pass	H
5970.34	152	130	-44.81	-13	-31.81	Pass	H
6464.00	154	52	-45.44	-13	-32.44	Pass	H
8039.12	152	20	-45.26	-13	-32.26	Pass	H
1257.47	146	283	-55.08	-13	-42.08	Pass	V
1476.09	152	182	-54.05	-13	-41.05	Pass	V
3559.64	147	151	-53.49	-13	-40.49	Pass	V
4000.20	151	19	-49.43	-13	-36.43	Pass	V
5779.18	146	335	-43.98	-13	-30.98	Pass	V
6678.24	154	318	-48.08	-13	-35.08	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.
1265.67	145	209	-56.34	-13	-41.45	Pass	H
1680.12	154	30	-46.89	-13	-37.85	Pass	H
3870.59	153	345	-47.65	-13	-35.2	Pass	H
5855.46	153	307	-44.48	-13	-30.39	Pass	H
6560.83	148	141	-46.64	-13	-32.24	Pass	H
8091.11	150	164	-41.38	-13	-30.22	Pass	H
1290.69	151	248	-57.58	-13	-44.9	Pass	V
1321.62	154	278	-58.87	-13	-43.63	Pass	V
3629.12	147	352	-46.03	-13	-35.94	Pass	V
3794.22	150	57	-46.36	-13	-36.01	Pass	V
5820.68	149	158	-42.95	-13	-33.75	Pass	V
6527.45	153	309	-42.85	-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.
1342.84	151	40	-58.12	-13	-45.12	Pass	H
1625.63	145	199	-50.67	-13	-37.67	Pass	H
3871.39	152	345	-40.57	-13	-27.57	Pass	H
5988.21	146	91	-42.80	-13	-29.80	Pass	H
6473.67	152	253	-39.82	-13	-26.82	Pass	H
8175.78	152	26	-46.99	-13	-33.99	Pass	H
1141.82	153	205	-55.82	-13	-42.82	Pass	V
1382.58	146	350	-56.68	-13	-43.68	Pass	V
3639.77	148	78	-49.42	-13	-36.42	Pass	V
3857.43	152	36	-53.57	-13	-40.57	Pass	V
5840.15	146	192	-45.32	-13	-32.32	Pass	V
6488.21	148	146	-47.40	-13	-34.40	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.

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)			
1252.86	152	340	-56.02	-25	-31.02	Pass	H
1791.99	152	147	-47.58	-25	-22.58	Pass	H
3939.88	148	2	-50.24	-25	-25.24	Pass	H
5978.26	154	107	-42.01	-25	-17.01	Pass	H
6496.59	146	335	-40.88	-25	-15.88	Pass	H
8155.60	152	332	-44.78	-25	-19.78	Pass	H
1219.60	154	318	-54.62	-25	-29.62	Pass	V
1529.82	154	197	-57.08	-25	-32.08	Pass	V
3470.86	153	191	-54.49	-25	-29.49	Pass	V
3758.06	148	143	-47.73	-25	-22.73	Pass	V
5866.69	146	165	-44.46	-25	-19.46	Pass	V
6641.75	149	285	-46.03	-25	-21.03	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)			
1262.90	153	70	-56.38	-25	-31.38	Pass	H
1646.92	150	204	-50.28	-25	-25.28	Pass	H
3877.57	149	154	-43.36	-25	-18.36	Pass	H
5794.37	149	237	-41.89	-25	-16.89	Pass	H
6513.68	152	327	-44.11	-25	-19.11	Pass	H
8174.43	146	240	-47.71	-25	-22.71	Pass	H
1286.74	146	28	-59.20	-25	-34.20	Pass	V
1430.83	149	244	-53.15	-25	-28.15	Pass	V
3492.38	147	73	-48.56	-25	-23.56	Pass	V
3916.04	153	77	-50.88	-25	-25.88	Pass	V
5751.53	149	279	-48.30	-25	-23.30	Pass	V
6640.14	152	105	-45.83	-25	-20.83	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)			
1359.47	146	133	-58.53	-25	-33.53	Pass	H
1710.20	153	324	-48.88	-25	-23.88	Pass	H
3815.31	149	26	-43.98	-25	-18.98	Pass	H
5816.70	149	297	-46.15	-25	-21.15	Pass	H
6505.50	154	252	-47.05	-25	-22.05	Pass	H
8054.02	152	50	-41.25	-25	-16.25	Pass	H
1163.15	145	236	-56.12	-25	-31.12	Pass	V
1466.68	150	159	-59.12	-25	-34.12	Pass	V
3518.57	147	26	-51.63	-25	-26.63	Pass	V
3889.52	147	314	-48.27	-25	-23.27	Pass	V
5881.75	148	106	-44.64	-25	-19.64	Pass	V
6581.35	146	247	-48.45	-25	-23.45	Pass	V
16QAM							
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)			
1336.65	150	214	-52.33	-25	-27.33	Pass	H
1797.34	154	204	-44.62	-25	-19.62	Pass	H
3840.95	152	339	-46.50	-25	-21.50	Pass	H
5854.92	150	204	-41.96	-25	-16.96	Pass	H
6457.73	150	210	-42.56	-25	-17.56	Pass	H
8165.75	145	305	-42.37	-25	-17.37	Pass	H
1232.55	154	278	-52.82	-25	-27.82	Pass	V
1529.99	147	204	-57.99	-25	-32.99	Pass	V
3568.04	150	190	-49.61	-25	-24.61	Pass	V
3926.85	152	133	-53.65	-25	-28.65	Pass	V
5812.18	154	162	-45.49	-25	-20.49	Pass	V
6654.32	148	354	-44.47	-25	-19.47	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)		
1315.41	152	257	-52.60	-25	-27.60	Pass	H
1798.55	146	339	-44.01	-25	-19.01	Pass	H
3949.79	154	307	-41.55	-25	-16.55	Pass	H
5880.71	145	286	-40.02	-25	-15.02	Pass	H
6454.96	154	294	-41.72	-25	-16.72	Pass	H
8040.54	147	58	-46.14	-25	-21.14	Pass	H
1263.13	154	98	-56.85	-25	-31.85	Pass	V
1405.80	154	93	-55.31	-25	-30.31	Pass	V
3539.84	149	221	-52.23	-25	-27.23	Pass	V
3900.42	151	234	-49.28	-25	-24.28	Pass	V
5718.77	150	213	-45.04	-25	-20.04	Pass	V
6582.77	148	41	-48.41	-25	-23.41	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)		
1414.75	155	56	-53.47	-25	-28.47	Pass	H
1692.32	148	252	-44.03	-25	-19.03	Pass	H
3911.50	147	81	-46.96	-25	-21.96	Pass	H
5892.79	150	43	-42.05	-25	-17.05	Pass	H
6461.87	152	336	-43.02	-25	-18.02	Pass	H
8066.39	148	48	-45.30	-25	-20.30	Pass	H
1175.98	152	197	-54.37	-25	-29.37	Pass	V
1438.36	150	18	-56.94	-25	-31.94	Pass	V
3466.21	151	51	-54.45	-25	-29.45	Pass	V
3890.21	148	49	-52.13	-25	-27.13	Pass	V
5734.05	147	148	-49.14	-25	-24.14	Pass	V
6521.98	151	195	-47.59	-25	-22.59	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-B41							
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)			
1358.92	154	7	-54.25	-25	-29.25	Pass	H
1769.73	150	43	-47.33	-25	-22.33	Pass	H
3824.51	152	206	-44.57	-25	-19.57	Pass	H
5834.24	145	72	-38.62	-25	-13.62	Pass	H
6411.90	152	356	-43.73	-25	-18.73	Pass	H
8179.77	152	39	-42.98	-25	-17.98	Pass	H
1304.96	151	113	-52.60	-25	-27.60	Pass	V
1420.66	149	239	-62.31	-25	-37.31	Pass	V
3470.29	148	139	-53.78	-25	-28.78	Pass	V
3733.44	154	253	-48.71	-25	-23.71	Pass	V
5710.36	152	257	-47.75	-25	-22.75	Pass	V
6531.99	148	67	-48.82	-25	-23.82	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)			
1349.37	151	134	-53.40	-25	-28.40	Pass	H
1745.81	148	2	-48.66	-25	-23.66	Pass	H
3882.02	149	178	-46.34	-25	-21.34	Pass	H
5858.21	148	282	-40.79	-25	-15.79	Pass	H
6602.11	147	302	-42.31	-25	-17.31	Pass	H
8134.90	155	319	-43.12	-25	-18.12	Pass	H
1257.17	154	307	-56.05	-25	-31.05	Pass	V
1435.34	152	34	-58.52	-25	-33.52	Pass	V
3605.21	149	108	-51.91	-25	-26.91	Pass	V
3833.85	148	307	-47.83	-25	-22.83	Pass	V
5813.37	150	107	-45.49	-25	-20.49	Pass	V
6607.71	147	336	-46.05	-25	-21.05	Pass	V

Band 41 41215 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1292.23	149	103	-56.41	-25	-31.41	Pass	H
1787.15	145	305	-51.22	-25	-26.22	Pass	H
4001.52	155	259	-46.22	-25	-21.22	Pass	H
5901.16	153	244	-44.63	-25	-19.63	Pass	H
6586.14	152	37	-41.89	-25	-16.89	Pass	H
8078.29	150	246	-46.35	-25	-21.35	Pass	H
1249.25	146	37	-56.28	-25	-31.28	Pass	V
1555.33	154	266	-58.65	-25	-33.65	Pass	V
3507.84	153	37	-46.43	-25	-21.43	Pass	V
3814.27	149	320	-53.15	-25	-28.15	Pass	V
5718.27	148	354	-43.82	-25	-18.82	Pass	V
6510.99	150	110	-47.71	-25	-22.71	Pass	V

16QAM-B41							
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)			
1370.45	146	22	-52.80	-25	-27.80	Pass	H
1727.15	146	1	-49.70	-25	-24.70	Pass	H
3934.78	151	226	-43.35	-25	-18.35	Pass	H
5944.29	149	198	-39.65	-25	-14.65	Pass	H
6558.83	152	152	-41.88	-25	-16.88	Pass	H
8015.53	154	108	-43.65	-25	-18.65	Pass	H
1288.39	151	170	-50.37	-25	-25.37	Pass	V
1423.37	148	222	-57.67	-25	-32.67	Pass	V
3519.22	149	313	-49.84	-25	-24.84	Pass	V
3790.31	151	230	-49.59	-25	-24.59	Pass	V
5736.29	152	340	-45.53	-25	-20.53	Pass	V
6567.82	146	255	-44.42	-25	-19.42	Pass	V

Band 41 40740 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1389.34	149	77	-55.61	-25	-30.61	Pass	H
1680.68	153	321	-45.31	-25	-20.31	Pass	H
3974.95	151	155	-44.86	-25	-19.86	Pass	H
5868.16	152	183	-37.78	-25	-12.78	Pass	H
6602.06	147	126	-43.29	-25	-18.29	Pass	H
8152.83	153	252	-43.77	-25	-18.77	Pass	H
1188.74	155	165	-50.77	-25	-25.77	Pass	V
1415.46	145	256	-59.12	-25	-34.12	Pass	V
3493.63	146	259	-53.81	-25	-28.81	Pass	V
3889.96	153	127	-47.80	-25	-22.80	Pass	V
5757.58	150	43	-44.80	-25	-19.80	Pass	V
6614.92	146	272	-44.80	-25	-19.80	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)		
1425.36	146	86	-59.59	-25	-34.59	Pass	H
1670.09	150	72	-45.30	-25	-20.30	Pass	H
3824.99	155	256	-45.78	-25	-20.78	Pass	H
5861.68	154	345	-39.82	-25	-14.82	Pass	H
6411.53	148	124	-39.47	-25	-14.47	Pass	H
8055.91	146	3	-39.29	-25	-14.29	Pass	H
1153.30	151	112	-54.85	-25	-29.85	Pass	V
1448.82	152	186	-55.09	-25	-30.09	Pass	V
3559.57	151	349	-53.66	-25	-28.66	Pass	V
3735.43	151	269	-47.13	-25	-22.13	Pass	V
5815.98	150	132	-45.42	-25	-20.42	Pass	V
6545.24	152	107	-49.19	-25	-24.19	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.

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)			
1234.97	153	148	-51.61	-40	-11.61	Pass	H
1755.13	154	233	-47.31	-40	-7.31	Pass	H
3928.16	146	260	-51.12	-40	-11.12	Pass	H
5868.31	154	145	-38.80	-40	1.20	Pass	H
6485.70	152	241	-46.46	-40	-6.46	Pass	H
7983.29	148	193	-46.90	-40	-6.90	Pass	H
1255.14	149	311	-50.97	-40	-10.97	Pass	V
1353.39	147	216	-59.91	-40	-19.91	Pass	V
3589.44	154	349	-50.32	-40	-10.32	Pass	V
3801.97	154	303	-45.85	-40	-5.85	Pass	V
5857.58	148	294	-42.36	-40	-2.36	Pass	V
6599.39	152	163	-43.60	-40	-3.60	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)			
1404.21	154	260	-57.70	-40	-17.70	Pass	H
1656.48	146	126	-51.32	-40	-11.32	Pass	H
3911.97	146	247	-50.38	-40	-10.38	Pass	H
5926.30	149	4	-46.13	-40	-6.13	Pass	H
6416.86	150	157	-47.04	-40	-7.04	Pass	H
8079.13	151	45	-42.52	-40	-2.52	Pass	H
1096.68	146	310	-59.77	-40	-19.77	Pass	V
1406.41	150	336	-59.46	-40	-19.46	Pass	V
3499.83	146	282	-50.98	-40	-10.98	Pass	V
3889.26	152	107	-48.53	-40	-8.53	Pass	V
5896.40	152	301	-48.67	-40	-8.67	Pass	V
6603.70	148	95	-45.40	-40	-5.40	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)		
1264.29	153	268	-54.91	-40	-14.91	Pass	H
1812.01	155	291	-48.55	-40	-8.55	Pass	H
3877.49	150	89	-51.20	-40	-11.20	Pass	H
5944.40	152	226	-45.71	-40	-5.71	Pass	H
6478.47	148	260	-43.89	-40	-3.89	Pass	H
7978.75	148	109	-48.02	-40	-8.02	Pass	H
1199.95	152	41	-61.06	-40	-21.06	Pass	V
1353.92	146	147	-62.97	-40	-22.97	Pass	V
3449.96	148	319	-50.70	-40	-10.70	Pass	V
3803.59	146	85	-52.27	-40	-12.27	Pass	V
5907.51	150	159	-49.76	-40	-9.76	Pass	V
6428.17	150	100	-47.81	-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)		
1280.46	152	64	-54.56	-40	-14.56	Pass	H
1747.46	150	261	-50.14	-40	-10.14	Pass	H
3759.16	149	45	-48.71	-40	-8.71	Pass	H
5982.53	154	248	-47.29	-40	-7.29	Pass	H
6464.74	150	286	-47.45	-40	-7.45	Pass	H
8041.61	147	287	-44.03	-40	-4.03	Pass	H
1153.68	153	203	-57.74	-40	-17.74	Pass	V
1356.99	145	315	-58.22	-40	-18.22	Pass	V
3489.43	150	264	-52.78	-40	-12.78	Pass	V
3795.58	148	177	-50.76	-40	-10.76	Pass	V
5848.84	146	209	-48.52	-40	-8.52	Pass	V
6472.36	152.77	329.93	-45.08	-40	-5.08	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)		
1429.57	145	180	-55.81	-40	-15.81	Pass	H
1668.97	154	51	-47.48	-40	-7.48	Pass	H
3889.07	151	199	-50.08	-40	-10.08	Pass	H
5870.96	153	337	-45.72	-40	-5.72	Pass	H
6596.68	152	322	-45.15	-40	-5.15	Pass	H
8029.24	147	82	-44.82	-40	-4.82	Pass	H
1119.13	146	222	-56.40	-40	-16.40	Pass	V
1428.16	148	264	-60.67	-40	-20.67	Pass	V
3518.59	153	311	-51.57	-40	-11.57	Pass	V
3783.77	151	229	-49.76	-40	-9.76	Pass	V
5776.19	153	258	-45.21	-40	-5.21	Pass	V
6479.57	148	348	-46.19	-40	-6.19	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)		
1292.57	147	230	-58.32	-40	-18.32	Pass	H
1746.04	151	112	-47.14	-40	-7.14	Pass	H
3894.89	153	347	-50.03	-40	-10.03	Pass	H
5951.19	149	280	-47.58	-40	-7.58	Pass	H
6567.88	154	175	-46.96	-40	-6.96	Pass	H
8024.18	151	237	-43.14	-40	-3.14	Pass	H
1109.09	147	353	-54.82	-40	-14.82	Pass	V
1390.60	149	302	-61.71	-40	-21.71	Pass	V
3466.25	153	162	-47.93	-40	-7.93	Pass	V
3845.17	152	65	-46.03	-40	-6.03	Pass	V
5796.47	151	343	-43.80	-40	-3.80	Pass	V
6455.29	146	196	-46.54	-40	-6.54	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 40B 39175channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1242.87	149	264	-53.65	-40	-13.65	Pass	H
1627.15	148	185	-49.27	-40	-9.27	Pass	H
3894.81	152	279	-48.61	-40	-8.61	Pass	H
5937.86	152	34	-44.33	-40	-4.33	Pass	H
6548.90	151	113	-48.41	-40	-8.41	Pass	H
8115.48	147	24	-46.47	-40	-6.47	Pass	H
1209.83	155	288	-56.13	-40	-16.13	Pass	V
1286.24	148	210	-61.90	-40	-21.90	Pass	V
3599.55	147	235	-47.31	-40	-7.31	Pass	V
3902.59	147	248	-51.10	-40	-11.10	Pass	V
5824.51	148	114	-48.55	-40	-8.55	Pass	V
6617.06	147	122	-45.79	-40	-5.79	Pass	V
Band 40B 39200 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1255.75	149	147	-55.38	-40	-15.38	Pass	H
1783.49	147	96	-47.18	-40	-7.18	Pass	H
3754.98	151	250	-48.19	-40	-8.19	Pass	H
6009.08	145	163	-46.03	-40	-6.03	Pass	H
6477.63	152	6	-46.56	-40	-6.56	Pass	H
7981.79	152	277	-45.70	-40	-5.70	Pass	H
1099.83	152	169	-56.94	-40	-16.94	Pass	V
1468.87	149	357	-58.55	-40	-18.55	Pass	V
3507.05	152	152	-49.86	-40	-9.86	Pass	V
3916.34	150	294	-50.07	-40	-10.07	Pass	V
5914.01	149	311	-47.32	-40	-7.32	Pass	V
6421.28	149	185	-46.73	-40	-6.73	Pass	V

Band 40B 39225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1234.24	155	63	-57.63	-40	-17.63	Pass	H
1684.65	154	193	-52.34	-40	-12.34	Pass	H
3802.56	145	270	-48.58	-40	-8.58	Pass	H
5869.52	153	26	-45.91	-40	-5.91	Pass	H
6577.77	146	267	-49.63	-40	-9.63	Pass	H
8097.67	150	15	-44.48	-40	-4.48	Pass	H
1286.94	150	190	-58.17	-40	-18.17	Pass	V
1302.79	148	44	-60.19	-40	-20.19	Pass	V
3590.68	148	75	-51.87	-40	-11.87	Pass	V
3853.39	155	325	-50.66	-40	-10.66	Pass	V
5898.59	148	123	-47.05	-40	-7.05	Pass	V
6467.37	150	198	-45.49	-40	-5.49	Pass	V
16QAM							
Band 40B 39175 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1259.09	149	34	-53.39	-40	-13.39	Pass	H
1766.93	153	28	-47.23	-40	-7.23	Pass	H
3887.64	149	240	-48.96	-40	-8.96	Pass	H
5853.86	146	119	-43.90	-40	-3.90	Pass	H
6469.07	147	221	-47.28	-40	-7.28	Pass	H
8048.16	148	356	-44.77	-40	-4.77	Pass	H
1122.57	147	79	-59.79	-40	-19.79	Pass	V
1456.98	152	73	-61.77	-40	-21.77	Pass	V
3544.88	155	29	-53.21	-40	-13.21	Pass	V
3818.74	145	147	-48.17	-40	-8.17	Pass	V
5748.42	151	319	-48.47	-40	-8.47	Pass	V
6589.69	155	251	-49.31	-40	-9.31	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)		
1249.26	146	150	-54.51	-40	-14.51	Pass	H
1676.15	145	39	-46.84	-40	-6.84	Pass	H
3891.41	145	45	-49.39	-40	-9.39	Pass	H
6011.65	145	64	-44.81	-40	-4.81	Pass	H
6514.70	146	131	-47.16	-40	-7.16	Pass	H
7962.10	146	157	-44.95	-40	-4.95	Pass	H
1103.33	146	137	-60.46	-40	-20.46	Pass	V
1377.69	145	46	-61.09	-40	-21.09	Pass	V
3554.62	146	131	-51.95	-40	-11.95	Pass	V
3867.50	145	241	-51.36	-40	-11.36	Pass	V
5911.54	145	202	-48.00	-40	-8.00	Pass	V
6428.63	146	23	-47.40	-40	-7.40	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)		
1376.31	152	170	-53.37	-40	-13.37	Pass	H
1667.33	147	329	-49.60	-40	-9.60	Pass	H
3948.26	151	94	-48.78	-40	-8.78	Pass	H
5879.07	153	141	-47.47	-40	-7.47	Pass	H
6450.70	154	338	-45.90	-40	-5.90	Pass	H
8050.99	148	186	-47.08	-40	-7.08	Pass	H
1258.79	153	252	-59.05	-40	-19.05	Pass	V
1345.20	154	63	-58.16	-40	-18.16	Pass	V
3589.98	152	167	-51.66	-40	-11.66	Pass	V
3816.89	155	167	-49.54	-40	-9.54	Pass	V
5863.46	152	322	-49.82	-40	-9.82	Pass	V
6605.12	155	221	-43.40	-40	-3.40	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 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.
1298.50	144	288	-58.40	-13	-45.40	Pass	H
1767.40	144	267	-49.28	-13	-36.28	Pass	H
3839.75	153	227	-45.12	-13	-32.12	Pass	H
5909.64	156	355	-44.26	-13	-31.26	Pass	H
6595.68	143	10	-42.65	-13	-29.65	Pass	H
8079.97	150	43	-44.15	-13	-31.15	Pass	H
1238.38	147	257	-55.05	-13	-42.05	Pass	V
1419.99	141	3	-60.28	-13	-47.28	Pass	V
3629.51	152	351	-51.11	-13	-38.11	Pass	V
3924.43	156	79	-50.65	-13	-37.65	Pass	V
5708.18	158	111	-47.17	-13	-34.17	Pass	V
6626.75	142	310	-47.86	-13	-34.86	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.
1350.34	150	174	-55.27	-13	-42.27	Pass	H
1652.54	146	197	-53.69	-13	-40.69	Pass	H
3799.08	150	206	-50.72	-13	-37.72	Pass	H
5781.86	146	251	-44.27	-13	-31.27	Pass	H
6422.66	149	332	-51.88	-13	-38.88	Pass	H
7959.32	151	74	-45.53	-13	-32.53	Pass	H
1314.26	149	266	-56.61	-13	-43.61	Pass	V
1366.98	148	95	-58.22	-13	-45.22	Pass	V
3566.53	147	112	-54.00	-13	-41.00	Pass	V
3933.70	148	190	-50.78	-13	-37.78	Pass	V
5839.01	150	73	-50.75	-13	-37.75	Pass	V
6556.55	150	273	-49.56	-13	-36.56	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.
1377.06	150	82	-58.23	-13	-45.23	Pass	H
1635.81	152	87	-50.28	-13	-37.28	Pass	H
3886.83	152	41	-44.54	-13	-31.54	Pass	H
5939.53	155	104	-40.76	-13	-27.76	Pass	H
6479.78	152	121	-44.21	-13	-31.21	Pass	H
7922.87	148	177	-45.10	-13	-32.10	Pass	H
1160.52	155	45	-57.72	-13	-44.72	Pass	V
1381.60	151	49	-55.39	-13	-42.39	Pass	V
3584.72	147	110	-55.11	-13	-42.11	Pass	V
3962.97	152	240	-50.94	-13	-37.94	Pass	V
5882.52	146	218	-44.75	-13	-31.75	Pass	V
6513.85	149	179	-47.11	-13	-34.11	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.
1406.14	154	44	-59.45	-13	-46.45	Pass	H
1781.46	151	298	-49.63	-13	-36.63	Pass	H
3824.80	148	337	-50.68	-13	-37.68	Pass	H
5920.16	146	13	-42.55	-13	-29.55	Pass	H
6533.49	150	98	-43.90	-13	-30.90	Pass	H
7952.71	153	126	-40.23	-13	-27.23	Pass	H
1254.74	151	144	-54.41	-13	-41.41	Pass	V
1411.54	155	129	-54.31	-13	-41.31	Pass	V
3518.69	150	272	-50.12	-13	-37.12	Pass	V
3883.65	146	349	-52.79	-13	-39.79	Pass	V
5767.28	151	232	-43.33	-13	-30.33	Pass	V
6592.25	151	51	-47.19	-13	-34.19	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.
1250.74	152	125	-57.31	-13	-41.45	Pass	H
1625.96	148	164	-53.11	-13	-37.85	Pass	H
3915.02	151	186	-49.55	-13	-35.2	Pass	H
5987.32	154	294	-45.23	-13	-30.39	Pass	H
6469.82	149	263	-46.90	-13	-32.24	Pass	H
8094.53	150	0	-41.94	-13	-30.22	Pass	H
1179.30	150	69	-59.52	-13	-44.9	Pass	V
1349.60	147	262	-55.73	-13	-43.63	Pass	V
3610.30	149	105	-49.44	-13	-35.94	Pass	V
3761.66	153	352	-46.51	-13	-36.01	Pass	V
5840.65	148	164	-47.69	-13	-33.75	Pass	V
6533.75	155	35	-43.65	-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.
1270.09	150	212	-53.25	-13	-40.25	Pass	H
1741.53	149	220	-46.35	-13	-33.35	Pass	H
3816.56	147	142	-40.40	-13	-27.40	Pass	H
5820.69	145	319	-45.48	-13	-32.48	Pass	H
6533.47	150	327	-39.12	-13	-26.12	Pass	H
8129.17	147	55	-47.35	-13	-34.35	Pass	H
1233.07	153	301	-56.76	-13	-43.76	Pass	V
1442.35	153	334	-56.85	-13	-43.85	Pass	V
3587.54	153	221	-46.59	-13	-33.59	Pass	V
3888.47	150	216	-50.77	-13	-37.77	Pass	V
5746.90	150	73	-46.22	-13	-33.22	Pass	V
6530.47	150	248	-47.28	-13	-34.28	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.

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=DC4.2V; Low Voltage LV=DC3.78V; High Voltage HV=DC4.62V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

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