



TEST REPORT

Product Name: Portable reader
FCC ID: VUJ-AT909
Trademark: N/A
Model Number: AT909
Prepared For: ATID Co., Ltd
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Sample Received Date: Jan. 21, 2025
Sample tested Date: Jan. 21, 2025 to Apr. 21, 2025
Issue Date: Apr. 21, 2025
Report No.: CTB25012101303RF07
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

Compiled by:

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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
CTB25012101303RF07	Apr. 21, 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&ANSI C63.26	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 22.913(a)(5)/Part27.50(h)(2)/ 24.232 (c)	TIA-603-E-2016 & KDB 971168 D01v03r01&ANSI C63.26	PASS
peak-to-average ratio	Part 27.50(d)/ 24.232 (d)	KDB 971168 D01v03r01&ANSI C63.26	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01&ANSI C63.26	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 22.917(a)/Part 27.53(m) (4)/ 24.238 (a)	KDB 971168 D01v03r01&ANSI C63.26	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 22.917(a)/Part 27.53(m) (4)/ 24.238 (a)	TIA-603-E-2016 & KDB 971168 D01v03r01&ANSI C63.26	PASS
Field strength of spurious radiation	Part 2.1053/ Part 22.917(a)/Part 27.53(m) (4)/ 24.238 (a)	TIA-603-E-2016 & KDB 971168 D01v03r01&ANSI C63.26	PASS
Frequency stability	Part 2.1055/Part 27.54/Part 24.235/Part 22.355	TIA-603-E-2016 & KDB 971168 D01v03r01&ANSI C63.26	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℃
frequency	1×10 ⁻⁷

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s):	AT909
Model Description:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
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 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: 2545-2655MHz
Max. RF output power:	FDD-LTE BAND 2: 23.77dBm FDD-LTE BAND 4: 23.98dBm FDD-LTE BAND 5: 24.53dBm FDD-LTE BAND 7: 22.13dBm FDD-LTE BAND 12: 24.25dBm FDD-LTE BAND 17: 24.47dBm TDD-LTE BAND 38: 24.44 dBm TDD-LTE BAND 40A: 24.07dBm TDD-LTE BAND 40B: 24.13dBm TDD-LTE BAND 41: 24.81dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	Internal antenna
Antenna Gain:	FDD-LTE BAND 2: 1.92dBi FDD-LTE BAND 4: 1.6dBi FDD-LTE BAND 5: -1.8dBi FDD-LTE BAND 7: 1.28dBi FDD-LTE BAND 12: -2.8dBi FDD-LTE BAND 17: -2.8dBi TDD-LTE BAND 38: 0.76dBi TDD-LTE BAND 40A: 0.86dBi TDD-LTE BAND 40B: 0.92dBi TDD-LTE BAND 41: 1.02dBi
Ratings:	DC 5V charging from adapter DC 3.8V 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

Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
Adapter	JIYIN	JY-05100C	/	AE
Cable	ATID Co., Ltd	AT909	/	AE

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 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

Note: Supports the Band 41 sub-band of 2545-2655 MHz, covering its actual deployed spectrum range. Due to the limitations of the antenna and RF front-end optimization design, it has not been extended to the full frequency band of 2496-2690 MHz for the time being

4.5 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	3.8V
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, Xinhua 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.

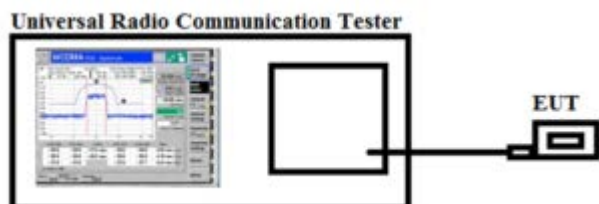
According to §27.50(c)(10), portable stations (hand-held devices) in the 698-746 MHz band are limited to 3 watts ERP.

According to §27.50(h)(2), The following power limits shall apply in the BRS and EBS: Mobile and other user stations. 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(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. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

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 §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(B), 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

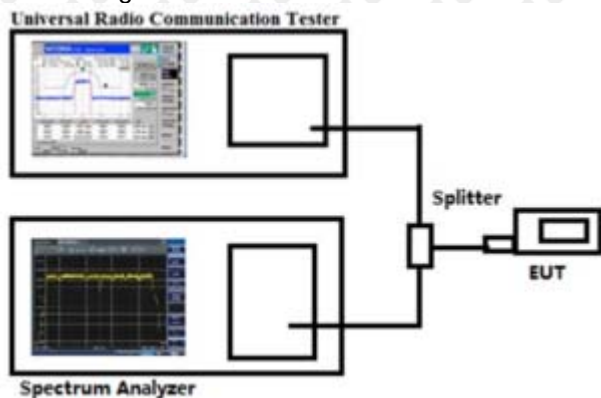
corresponding to the highest PAPR expected during periods of continuous transmission.

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(a), 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.

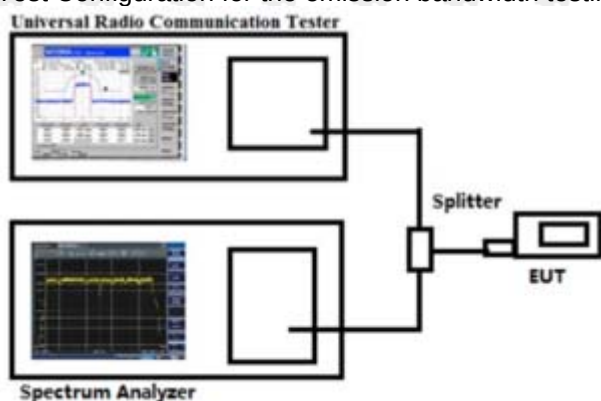
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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(a), 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: 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(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.

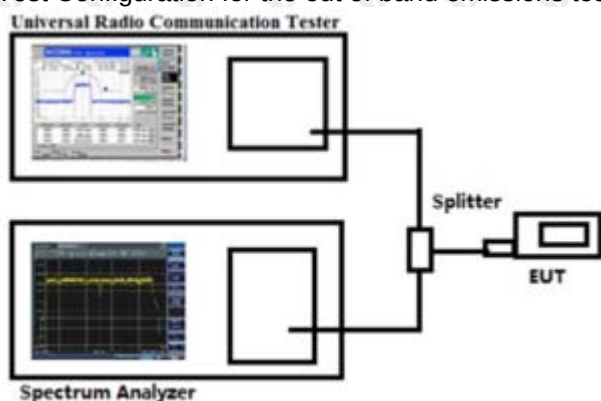
According to §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$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

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 & Out-of-band emissions
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(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) 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 §27.53a, for operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

- (4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:
 - (i) 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, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;
 - (ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;
 - (iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 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 = $43 + 10 \log_{10}(\text{power out in Watts})$

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 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.
1403.37	154	290	-59.48	-25	-34.48	Pass	H
1646.17	151	55	-48.71	-25	-23.71	Pass	H
3807.75	145	217	-51.86	-25	-26.86	Pass	H
5921.68	153	245	-43.55	-25	-18.55	Pass	H
6556.39	151	119	-41.63	-25	-16.63	Pass	H
8010.73	150	206	-41.51	-25	-16.51	Pass	H
1170.36	154	76	-56.01	-25	-31.01	Pass	V
1435.38	146	256	-55.30	-25	-30.30	Pass	V
3613.72	153	163	-51.35	-25	-26.35	Pass	V
3913.83	147	54	-50.07	-25	-25.07	Pass	V
5890.01	151	211	-46.61	-25	-21.61	Pass	V
6630.32	146	174	-49.37	-25	-24.37	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.
1379.30	145	83	-56.02	-25	-31.02	Pass	H
1811.43	145	100	-51.12	-25	-26.12	Pass	H
3912.16	152	206	-48.37	-25	-23.37	Pass	H
6002.06	154	51	-42.33	-25	-17.33	Pass	H
6542.21	147	346	-43.65	-25	-18.65	Pass	H
8083.48	145	302	-46.56	-25	-21.56	Pass	H
1163.69	149	107	-56.07	-25	-31.07	Pass	V
1323.03	150	128	-57.12	-25	-32.12	Pass	V
3442.53	152	137	-51.32	-25	-26.32	Pass	V
3856.37	149	99	-49.94	-25	-24.94	Pass	V
5849.61	148	22	-42.96	-25	-17.96	Pass	V
6513.70	152	350	-43.62	-25	-18.62	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.
1240.49	147	97	-52.48	-25	-27.48	Pass	H
1777.67	151	207	-48.52	-25	-23.52	Pass	H
3943.37	152	215	-46.51	-25	-21.51	Pass	H
5807.96	145	66	-43.61	-25	-18.61	Pass	H
6499.59	154	81	-44.16	-25	-19.16	Pass	H
8104.47	153	354	-43.28	-25	-18.28	Pass	H
1170.23	151	306	-56.76	-25	-31.76	Pass	V
1474.73	149	355	-57.01	-25	-32.01	Pass	V
3523.91	152	160	-47.99	-25	-22.99	Pass	V
3897.12	149	341	-45.54	-25	-20.54	Pass	V
5810.65	147	9	-44.41	-25	-19.41	Pass	V
6657.84	153	60	-44.99	-25	-19.99	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.
1371.35	152	169	-56.57	-25	-31.57	Pass	H
1709.04	155	227	-54.86	-25	-29.86	Pass	H
3938.80	145	238	-46.52	-25	-21.52	Pass	H
5913.18	148	28	-44.67	-25	-19.67	Pass	H
6517.56	154	305	-45.66	-25	-20.66	Pass	H
7952.84	146	55	-45.24	-25	-20.24	Pass	H
1305.04	150	271	-56.52	-25	-31.52	Pass	V
1443.92	153	299	-57.95	-25	-32.95	Pass	V
3641.27	153	229	-48.64	-25	-23.64	Pass	V
3909.98	150	344	-50.52	-25	-25.52	Pass	V
5814.77	150	111	-45.06	-25	-20.06	Pass	V
6498.77	153	145	-47.67	-25	-22.67	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.
1284.10	145	254	-57.93	-25	-32.93	Pass	H
1618.97	149	335	-53.83	-25	-28.83	Pass	H
3957.99	148	146	-47.80	-25	-22.80	Pass	H
5908.32	149	27	-46.11	-25	-21.11	Pass	H
6449.89	145	309	-50.15	-25	-25.15	Pass	H
8105.14	154	194	-46.77	-25	-21.77	Pass	H
1235.35	153	183	-55.67	-25	-30.67	Pass	V
1461.30	152	304	-59.79	-25	-34.79	Pass	V
3647.57	153	33	-51.95	-25	-26.95	Pass	V
3994.01	150	329	-54.47	-25	-29.47	Pass	V
5838.46	148	152	-54.52	-25	-29.52	Pass	V
6521.53	149	54	-51.79	-25	-26.79	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.
1265.26	154	22	-56.68	-25	-31.68	Pass	H
1660.19	154	271	-52.94	-25	-27.94	Pass	H
3803.10	149	6	-44.46	-25	-19.46	Pass	H
5892.34	150	287	-40.05	-25	-15.05	Pass	H
6478.47	149	305	-43.45	-25	-18.45	Pass	H
7974.36	149	345	-49.04	-25	-24.04	Pass	H
1255.80	148	167	-55.43	-25	-30.43	Pass	V
1317.25	151	73	-49.99	-25	-24.99	Pass	V
3506.40	151	254	-52.93	-25	-27.93	Pass	V
3862.28	151	169	-49.55	-25	-24.55	Pass	V
5696.49	155	24	-44.73	-25	-19.73	Pass	V
6501.80	146	317	-48.84	-25	-23.84	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.
1258.42	142	76	-55.17	-13	-42.17	Pass	H
1636.73	159	246	-47.10	-13	-34.10	Pass	H
3887.85	160	25	-48.04	-13	-35.04	Pass	H
5945.36	146	276	-42.55	-13	-29.55	Pass	H
6604.37	140	337	-43.94	-13	-30.94	Pass	H
8003.11	160	275	-42.72	-13	-29.72	Pass	H
1180.83	154	166	-54.89	-13	-41.89	Pass	V
1443.74	153	106	-57.02	-13	-44.02	Pass	V
3447.02	142	315	-48.69	-13	-35.69	Pass	V
3870.10	142	244	-53.82	-13	-40.82	Pass	V
5824.23	156	22	-48.94	-13	-35.94	Pass	V
6580.78	143	133	-45.79	-13	-32.79	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.
1354.64	150	210	-58.50	-13	-45.50	Pass	H
1732.80	146	187	-52.15	-13	-39.15	Pass	H
3961.81	150	40	-49.67	-13	-36.67	Pass	H
5775.59	146	296	-47.67	-13	-34.67	Pass	H
6419.51	149	202	-47.24	-13	-34.24	Pass	H
8058.98	151	303	-47.23	-13	-34.23	Pass	H
1232.92	149	217	-56.52	-13	-43.52	Pass	V
1376.76	148	352	-58.37	-13	-45.37	Pass	V
3555.38	147	137	-56.59	-13	-43.59	Pass	V
3859.60	148	83	-51.96	-13	-38.96	Pass	V
5791.25	150	332	-46.66	-13	-33.66	Pass	V
6458.58	150	181	-48.82	-13	-35.82	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.
1344.72	152	186	-57.22	-13	-44.22	Pass	H
1659.78	150	129	-53.67	-13	-40.67	Pass	H
3888.95	150	335	-46.15	-13	-33.15	Pass	H
5850.43	155	298	-38.12	-13	-25.12	Pass	H
6509.21	153	259	-41.07	-13	-28.07	Pass	H
7919.64	145	126	-45.01	-13	-32.01	Pass	H
1241.39	153	299	-55.55	-13	-42.55	Pass	V
1434.53	149	234	-54.14	-13	-41.14	Pass	V
3578.88	151	216	-51.94	-13	-38.94	Pass	V
3971.62	148	299	-48.46	-13	-35.46	Pass	V
5790.06	147	112	-45.87	-13	-32.87	Pass	V
6488.62	151	106	-50.58	-13	-37.58	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.
1382.26	147	48	-61.21	-13	-48.21	Pass	H
1696.73	154	271	-49.11	-13	-36.11	Pass	H
3945.39	152	173	-46.84	-13	-33.84	Pass	H
5910.63	149	56	-46.49	-13	-33.49	Pass	H
6490.77	151	212	-46.97	-13	-33.97	Pass	H
7902.92	151	28	-43.31	-13	-30.31	Pass	H
1102.33	148	325	-53.19	-13	-40.19	Pass	V
1436.97	148	352	-56.56	-13	-43.56	Pass	V
3646.36	146	219	-49.76	-13	-36.76	Pass	V
3872.05	148	111	-49.67	-13	-36.67	Pass	V
5888.11	145	200	-45.48	-13	-32.48	Pass	V
6561.80	154	72	-47.51	-13	-34.51	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.
1376.45	152	209	-51.01	-13	-41.45	Pass	H
1739.24	154	92	-48.21	-13	-37.85	Pass	H
3874.85	147	12	-44.25	-13	-35.2	Pass	H
5835.15	146	230	-41.47	-13	-30.39	Pass	H
6589.68	145	348	-46.39	-13	-32.24	Pass	H
7965.04	153	83	-44.49	-13	-30.22	Pass	H
1260.60	146	176	-57.43	-13	-44.9	Pass	V
1445.59	154	329	-57.30	-13	-43.63	Pass	V
3446.12	148	182	-48.04	-13	-35.94	Pass	V
3867.17	145	205	-49.79	-13	-36.01	Pass	V
5790.48	151	85	-48.59	-13	-33.75	Pass	V
6569.25	149	294	-46.75	-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.
1254.27	153	105	-57.48	-13	-44.48	Pass	H
1672.39	147	265	-46.79	-13	-33.79	Pass	H
3919.08	150	192	-45.21	-13	-32.21	Pass	H
5948.75	148	147	-43.10	-13	-30.10	Pass	H
6587.50	152	26	-38.05	-13	-25.05	Pass	H
8028.57	154	358	-46.73	-13	-33.73	Pass	H
1218.88	152	193	-52.01	-13	-39.01	Pass	V
1492.61	150	301	-59.64	-13	-46.64	Pass	V
3630.13	154	324	-47.32	-13	-34.32	Pass	V
3820.27	152	172	-52.04	-13	-39.04	Pass	V
5707.42	148	28	-46.93	-13	-33.93	Pass	V
6505.02	152	206	-46.79	-13	-33.79	Pass	V

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)			
1369.13	145	111	-51.84	-25	-26.84	Pass	H
1800.02	152	314	-48.08	-25	-23.08	Pass	H
3992.85	150	166	-47.42	-25	-22.42	Pass	H
5832.84	150	45	-37.98	-25	-12.98	Pass	H
6434.99	147	268	-45.98	-25	-20.98	Pass	H
8156.65	148	221	-47.54	-25	-22.54	Pass	H
1131.12	145	142	-52.09	-25	-27.09	Pass	V
1446.07	149	58	-58.47	-25	-33.47	Pass	V
3452.67	154	237	-52.09	-25	-27.09	Pass	V
3928.34	149	69	-52.26	-25	-27.26	Pass	V
5848.56	148	221	-47.36	-25	-22.36	Pass	V
6479.41	153	116	-44.03	-25	-19.03	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)			
1379.17	146	33	-59.34	-25	-34.34	Pass	H
1734.34	148	112	-43.89	-25	-18.89	Pass	H
3972.52	145	191	-47.46	-25	-22.46	Pass	H
5912.65	145	141	-46.23	-25	-21.23	Pass	H
6462.05	147	190	-43.71	-25	-18.71	Pass	H
8053.35	150	76	-41.83	-25	-16.83	Pass	H
1245.18	150	97	-56.23	-25	-31.23	Pass	V
1537.47	146	70	-58.42	-25	-33.42	Pass	V
3465.29	154	259	-48.05	-25	-23.05	Pass	V
3923.52	150	262	-48.87	-25	-23.87	Pass	V
5743.00	153	254	-48.04	-25	-23.04	Pass	V
6508.50	152	35	-45.67	-25	-20.67	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)			
1421.52	148	319	-57.08	-25	-32.08	Pass	H
1752.59	154	333	-51.34	-25	-26.34	Pass	H
3913.86	146	338	-45.12	-25	-20.12	Pass	H
5978.35	151	251	-42.76	-25	-17.76	Pass	H
6504.12	152	166	-40.49	-25	-15.49	Pass	H
8107.72	148	338	-46.03	-25	-21.03	Pass	H
1303.11	151	146	-50.73	-25	-25.73	Pass	V
1522.89	149	258	-54.74	-25	-29.74	Pass	V

3581.60	148	52	-51.25	-25	-26.25	Pass	V
3830.35	145	122	-48.22	-25	-23.22	Pass	V
5877.93	150	263	-48.23	-25	-23.23	Pass	V
6518.72	146	327	-45.60	-25	-20.60	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)			
1345.15	149	155	-52.21	-25	-27.21	Pass	H
1707.95	148	80	-46.73	-25	-21.73	Pass	H
3812.28	145	259	-46.23	-25	-21.23	Pass	H
5807.83	146	319	-40.57	-25	-15.57	Pass	H
6494.49	145	274	-43.44	-25	-18.44	Pass	H
8019.07	153	187	-43.04	-25	-18.04	Pass	H
1267.60	145	223	-52.37	-25	-27.37	Pass	V
1558.12	146	66	-58.16	-25	-33.16	Pass	V
3484.40	154	89	-51.72	-25	-26.72	Pass	V
3894.05	148	305	-48.03	-25	-23.03	Pass	V
5793.54	152	71	-46.91	-25	-21.91	Pass	V
6623.73	154	234	-50.46	-25	-25.46	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)			
1284.50	146	112	-53.18	-25	-28.18	Pass	H
1638.44	152	48	-45.23	-25	-20.23	Pass	H
3803.75	153	79	-42.73	-25	-17.73	Pass	H
5851.19	151	224	-40.17	-25	-15.17	Pass	H
6599.17	151	96	-43.15	-25	-18.15	Pass	H
8026.52	149	288	-44.18	-25	-19.18	Pass	H
1162.84	153	191	-50.97	-25	-25.97	Pass	V
1380.63	147	224	-58.77	-25	-33.77	Pass	V
3444.99	145	87	-53.80	-25	-28.80	Pass	V
3887.83	153	182	-48.04	-25	-23.04	Pass	V
5744.61	150	132	-45.83	-25	-20.83	Pass	V
6629.32	150	300	-44.05	-25	-19.05	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)			
1344.82	148	63	-60.27	-25	-35.27	Pass	H
1692.29	148	182	-46.58	-25	-21.58	Pass	H
3932.15	149	326	-46.76	-25	-21.76	Pass	H
5803.41	152	132	-37.94	-25	-12.94	Pass	H
6529.02	155	223	-43.03	-25	-18.03	Pass	H
8075.38	146	235	-42.64	-25	-17.64	Pass	H
1262.10	145	70	-50.72	-25	-25.72	Pass	V
1558.45	146	357	-53.91	-25	-28.91	Pass	V
3585.52	149	344	-50.52	-25	-25.52	Pass	V
3734.16	151	92	-48.97	-25	-23.97	Pass	V
5813.27	154	318	-49.71	-25	-24.71	Pass	V
6572.24	154	213	-47.68	-25	-22.68	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 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)			
1400.22	151	72	-54.89	-25	-29.89	Pass	H
1689.07	154	81	-44.63	-25	-19.63	Pass	H
3858.47	145	37	-52.87	-25	-27.87	Pass	H
5892.55	150	58	-44.58	-25	-19.58	Pass	H
6523.58	153	289	-50.75	-25	-25.75	Pass	H
8042.34	148	329	-45.34	-25	-20.34	Pass	H
1259.33	151	49	-61.84	-25	-36.84	Pass	V
1435.28	152	77	-55.81	-25	-30.81	Pass	V
3530.05	149	117	-46.07	-25	-21.07	Pass	V
3863.61	154	271	-51.85	-25	-26.85	Pass	V
5899.58	146	96	-42.92	-25	-17.92	Pass	V
6492.33	154	325	-47.01	-25	-22.01	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)			
1235.24	148	35	-53.93	-25	-28.93	Pass	H
1626.32	147	58	-51.93	-25	-26.93	Pass	H
3802.05	147	231	-50.88	-25	-25.88	Pass	H
5758.22	149	121	-46.92	-25	-21.92	Pass	H
6397.79	154	313	-43.08	-25	-18.08	Pass	H
7897.60	154	81	-45.08	-25	-20.08	Pass	H
1120.75	146	283	-57.33	-25	-32.33	Pass	V
1340.36	150	92	-59.66	-25	-34.66	Pass	V
3470.20	150	138	-44.57	-25	-19.57	Pass	V
3738.40	154	101	-49.82	-25	-24.82	Pass	V
5703.25	149	15	-46.84	-25	-21.84	Pass	V
6454.49	149	28	-46.94	-25	-21.94	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)			
1378.83	151	292	-56.09	-25	-31.09	Pass	H
1792.81	151	227	-47.67	-25	-22.67	Pass	H
3942.46	146	17	-50.31	-25	-25.31	Pass	H
5872.36	154	96	-46.30	-25	-21.30	Pass	H
6500.66	147	246	-45.29	-25	-20.29	Pass	H
8087.68	146	267	-44.59	-25	-19.59	Pass	H

1126.24	154	18	-55.55	-25	-30.55	Pass	V
1532.26	149	48	-58.24	-25	-33.24	Pass	V
3619.77	154	155	-49.72	-25	-24.72	Pass	V
3863.70	149	313	-49.00	-25	-24.00	Pass	V
5900.23	147	250	-44.56	-25	-19.56	Pass	V
6559.11	150	85	-50.80	-25	-25.80	Pass	V
16QAM							
Band 38 37775 channel/BW 5(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1305.32	148	357	-53.18	-25	-28.18	Pass	H
1772.32	150	346	-51.04	-25	-26.04	Pass	H
3861.72	151	279	-48.90	-25	-23.90	Pass	H
5886.11	155	190	-49.70	-25	-24.70	Pass	H
6497.69	155	122	-43.41	-25	-18.41	Pass	H
7930.75	155	63	-45.64	-25	-20.64	Pass	H
1175.35	146	7	-61.77	-25	-36.77	Pass	V
1528.57	155	203	-53.35	-25	-28.35	Pass	V
3525.39	148	78	-52.08	-25	-27.08	Pass	V
3894.15	153	97	-48.18	-25	-23.18	Pass	V
5787.26	152	166	-46.39	-25	-21.39	Pass	V
6469.81	154	128	-53.69	-25	-28.69	Pass	V
Band 38 38000 channel/BW 5(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1347.59	155	177	-56.81	-25	-31.81	Pass	H
1635.35	153	335	-50.15	-25	-25.15	Pass	H
3951.14	150	146	-50.28	-25	-25.28	Pass	H
5768.02	155	79	-47.40	-25	-22.40	Pass	H
6581.13	154	131	-49.11	-25	-24.11	Pass	H
8065.64	152	309	-41.16	-25	-16.16	Pass	H
1136.73	148	352	-57.98	-25	-32.98	Pass	V
1512.07	151	132	-57.73	-25	-32.73	Pass	V
3513.30	151	134	-52.59	-25	-27.59	Pass	V
3766.87	151	136	-50.40	-25	-25.40	Pass	V
5806.10	149	126	-47.33	-25	-22.33	Pass	V
6508.82	149	35	-49.04	-25	-24.04	Pass	V
Band 38 38225 channel/BW 5(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1251.56	148	332	-56.13	-25	-31.13	Pass	H
1633.90	151	317	-50.34	-25	-25.34	Pass	H

3868.76	148	84	-51.52	-25	-26.52	Pass	H
5764.96	152	297	-44.88	-25	-19.88	Pass	H
6575.12	146	251	-50.93	-25	-25.93	Pass	H
7922.25	148	100	-44.41	-25	-19.41	Pass	H
1188.66	154	20	-63.43	-25	-38.43	Pass	V
1466.55	154	314	-55.26	-25	-30.26	Pass	V
3512.62	145	180	-50.31	-25	-25.31	Pass	V
3909.65	152	302	-54.00	-25	-29.00	Pass	V
5886.97	149	154	-48.21	-25	-23.21	Pass	V
6647.14	152	358	-53.06	-25	-28.06	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 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)			
1340.18	153	339	-57.90	-40	-17.90	Pass	H
1719.25	153	88	-48.25	-40	-8.25	Pass	H
3871.33	147	246	-50.89	-40	-10.89	Pass	H
5903.68	151	106	-39.03	-40	0.97	Pass	H
6494.89	155	61	-43.01	-40	-3.01	Pass	H
7986.29	145	338	-41.78	-40	-1.78	Pass	H
1220.95	150	24	-54.17	-40	-14.17	Pass	V
1305.44	148	163	-61.22	-40	-21.22	Pass	V
3450.31	148	50	-47.52	-40	-7.52	Pass	V
3947.94	149	49	-46.04	-40	-6.04	Pass	V
5835.98	148	46	-44.74	-40	-4.74	Pass	V
6502.50	147	62	-43.69	-40	-3.69	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)			
1319.20	151	193	-59.23	-40	-19.23	Pass	H
1814.05	146	21	-51.14	-40	-11.14	Pass	H
3813.84	148	58	-49.92	-40	-9.92	Pass	H
6000.45	155	114	-47.14	-40	-7.14	Pass	H
6508.86	153	58	-48.12	-40	-8.12	Pass	H
7990.00	147	144	-43.15	-40	-3.15	Pass	H
1173.63	152	290	-59.34	-40	-19.34	Pass	V
1378.17	151	358	-57.31	-40	-17.31	Pass	V
3633.36	152	322	-52.02	-40	-12.02	Pass	V
3886.55	148	353	-47.99	-40	-7.99	Pass	V
5872.65	149	162	-49.37	-40	-9.37	Pass	V
6590.25	154	98	-42.92	-40	-2.92	Pass	V
Band 40A 38775 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1414.86	149	206	-54.21	-40	-14.21	Pass	H
1785.52	146	135	-48.99	-40	-8.99	Pass	H
3863.03	155	71	-51.52	-40	-11.52	Pass	H
5906.46	152	301	-45.17	-40	-5.17	Pass	H
6594.86	154	196	-43.96	-40	-3.96	Pass	H
7965.24	148	321	-47.65	-40	-7.65	Pass	H
1107.66	148	175	-61.14	-40	-21.14	Pass	V

1459.42	154	288	-61.98	-40	-21.98	Pass	V
3439.32	151	208	-50.41	-40	-10.41	Pass	V
3795.50	154	335	-52.39	-40	-12.39	Pass	V
5810.14	145	210	-48.70	-40	-8.70	Pass	V
6510.77	151	6	-47.75	-40	-5.68	Pass	V

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Band 40A 38725 channel/BW 5(lowest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1410.71	155	26	-54.20	-40	-14.20	Pass	H
1774.80	151	357	-49.80	-40	-9.80	Pass	H
3920.47	150	329	-49.53	-40	-9.53	Pass	H
6020.11	146	26	-47.93	-40	-7.93	Pass	H
6450.55	146	170	-46.91	-40	-6.91	Pass	H
8020.64	147	85	-43.93	-40	-3.93	Pass	H
1277.85	152	58	-59.29	-40	-19.29	Pass	V
1301.31	149	173	-59.04	-40	-19.04	Pass	V
3580.59	149	28	-52.49	-40	-12.49	Pass	V
3936.35	150	159	-50.43	-40	-10.43	Pass	V
5734.12	154	217	-48.70	-40	-8.70	Pass	V
6435.14	145.93	296.76	-45.75	-40	-5.75	Pass	V

Band 40A 38750channel/BW 5(middle channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1240.12	153	43	-57.31	-40	-17.31	Pass	H
1653.76	149	236	-47.87	-40	-7.87	Pass	H
3946.45	155	203	-49.63	-40	-9.63	Pass	H
5994.01	145	209	-44.29	-40	-4.29	Pass	H
6452.26	148	155	-44.92	-40	-4.92	Pass	H
7960.41	154	98	-44.25	-40	-4.25	Pass	H
1264.86	154	333	-55.80	-40	-15.80	Pass	V
1368.67	147	90	-61.45	-40	-21.45	Pass	V
3554.65	151	68	-51.55	-40	-11.55	Pass	V
3820.31	147	217	-49.40	-40	-9.40	Pass	V
5912.08	148	226	-44.38	-40	-4.38	Pass	V
6505.82	154	159	-46.41	-40	-6.41	Pass	V

Band 40A 38875 channel/BW 5(highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1331.06	153	278	-58.36	-40	-18.36	Pass	H
1808.71	149	316	-49.18	-40	-9.18	Pass	H
3915.46	153	5	-48.56	-40	-8.56	Pass	H

5952.44	154	84	-47.44	-40	-7.44	Pass	H
6565.73	148	72	-44.79	-40	-4.79	Pass	H
8085.89	147	241	-42.52	-40	-2.52	Pass	H
1268.60	154	307	-55.40	-40	-15.40	Pass	V
1465.77	149	277	-59.69	-40	-19.69	Pass	V
3550.11	152	34	-48.82	-40	-8.82	Pass	V
3761.18	150	48	-46.25	-40	-6.25	Pass	V
5876.18	153	197	-44.14	-40	-4.14	Pass	V
6557.90	147	22	-47.96	-40	-7.96	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.

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)			
1318.32	148	327	-56.26	-40	-16.26	Pass	H
1816.94	150	297	-51.47	-40	-11.47	Pass	H
3839.82	153	159	-47.27	-40	-7.27	Pass	H
5999.37	150	253	-43.42	-40	-3.42	Pass	H
6520.87	153	311	-46.39	-40	-6.39	Pass	H
8154.26	151	196	-46.59	-40	-6.59	Pass	H
1273.21	151	339	-55.74	-40	-15.74	Pass	V
1425.22	152	64	-61.95	-40	-21.95	Pass	V
3591.88	148	60	-49.53	-40	-9.53	Pass	V
3887.37	152	157	-48.84	-40	-8.84	Pass	V
5778.44	153	2	-45.65	-40	-5.65	Pass	V
6514.70	147	96	-45.78	-40	-5.78	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)			
1268.38	151	16	-55.03	-40	-15.03	Pass	H
1748.66	146	287	-48.28	-40	-8.28	Pass	H
3927.52	145	20	-48.42	-40	-8.42	Pass	H
5982.83	147	258	-46.60	-40	-6.60	Pass	H
6583.37	151	46	-45.04	-40	-5.04	Pass	H
7982.63	148	20	-44.94	-40	-4.94	Pass	H
1285.74	151	285	-55.33	-40	-15.33	Pass	V
1340.09	151	234	-57.30	-40	-17.30	Pass	V
3590.05	145	235	-49.25	-40	-9.25	Pass	V
3790.32	146	191	-53.38	-40	-13.38	Pass	V
5748.93	153	214	-45.42	-40	-5.42	Pass	V
6425.43	155	311	-48.41	-40	-8.41	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)			
1413.29	146	33	-57.89	-40	-17.89	Pass	H
1731.54	146	300	-51.27	-40	-11.27	Pass	H
3857.08	146	324	-49.42	-40	-9.42	Pass	H
6013.76	149	264	-44.85	-40	-4.85	Pass	H
6603.79	149	49	-47.19	-40	-7.19	Pass	H
8099.69	155	60	-44.42	-40	-4.42	Pass	H
1167.98	146	144	-57.32	-40	-17.32	Pass	V

1463.62	154	143	-59.63	-40	-19.63	Pass	V
3437.25	154	346	-50.68	-40	-10.68	Pass	V
3821.70	146	20	-50.46	-40	-10.46	Pass	V
5729.39	152	36	-46.34	-40	-6.34	Pass	V
6617.39	150	167	-45.12	-40	-5.12	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)			
1266.19	150	7	-53.47	-40	-13.47	Pass	H
1635.40	154	170	-48.20	-40	-8.20	Pass	H
3911.41	145	97	-49.90	-40	-9.90	Pass	H
5888.85	148	46	-45.86	-40	-5.86	Pass	H
6595.40	153	195	-46.63	-40	-6.63	Pass	H
8108.64	146	4	-46.41	-40	-6.41	Pass	H
1160.03	155	60	-57.79	-40	-17.79	Pass	V
1311.77	146	288	-62.03	-40	-22.03	Pass	V
3551.30	153	307	-53.30	-40	-13.30	Pass	V
3838.64	152	5	-48.08	-40	-8.08	Pass	V
5851.12	150	141	-46.68	-40	-6.68	Pass	V
6467.60	154	219	-46.74	-40	-6.74	Pass	V
Band 40B 39200channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1327.61	145	123	-52.35	-40	-12.35	Pass	H
1720.38	146	274	-48.84	-40	-8.84	Pass	H
3896.02	145	267	-49.68	-40	-9.68	Pass	H
5906.33	146	190	-45.18	-40	-5.18	Pass	H
6577.79	146	62	-45.46	-40	-5.46	Pass	H
8135.24	146	209	-46.94	-40	-6.94	Pass	H
1245.69	145	338	-58.22	-40	-18.22	Pass	V
1400.20	146	221	-60.78	-40	-20.78	Pass	V
3481.19	146	164	-52.78	-40	-12.78	Pass	V
3930.56	146	277	-51.84	-40	-11.84	Pass	V
5734.50	145	256	-47.09	-40	-7.09	Pass	V
6619.02	145	23	-44.40	-40	-4.40	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)			
1434.00	152	272	-52.38	-40	-12.38	Pass	H
1761.13	151	180	-51.42	-40	-11.42	Pass	H
3883.01	148	177	-48.30	-40	-8.30	Pass	H

5915.41	148	281	-45.11	-40	-5.11	Pass	H
6557.43	146	13	-47.23	-40	-7.23	Pass	H
8101.19	148	184	-46.47	-40	-6.47	Pass	H
1266.69	151	12	-58.60	-40	-18.60	Pass	V
1370.10	152	323	-61.24	-40	-21.24	Pass	V
3580.88	151	205	-49.70	-40	-9.70	Pass	V
3911.11	146	325	-50.58	-40	-10.58	Pass	V
5829.24	155	157	-49.88	-40	-9.88	Pass	V
6576.80	152	92	-45.15	-40	-5.15	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.

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.
1389.61	158	153	-55.82	-13	-42.82	Pass	H
1674.84	147	20	-50.79	-13	-37.79	Pass	H
3887.62	150	215	-48.51	-13	-35.51	Pass	H
5801.37	141	183	-43.07	-13	-30.07	Pass	H
6417.87	153	14	-43.75	-13	-30.75	Pass	H
8016.10	150	126	-43.80	-13	-30.80	Pass	H
1174.36	156	128	-54.54	-13	-41.54	Pass	V
1477.35	145	249	-55.87	-13	-42.87	Pass	V
3622.61	144	85	-50.86	-13	-37.86	Pass	V
3867.88	154	264	-49.96	-13	-36.96	Pass	V
5722.37	160	143	-46.99	-13	-33.99	Pass	V
6644.06	152	213	-47.56	-13	-34.56	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.
1265.70	150	113	-55.09	-13	-42.09	Pass	H
1666.03	146	89	-49.23	-13	-36.23	Pass	H
3787.34	150	289	-51.39	-13	-38.39	Pass	H
5805.12	146	163	-43.69	-13	-30.69	Pass	H
6467.04	149	186	-48.33	-13	-35.33	Pass	H
7936.61	151	201	-48.27	-13	-35.27	Pass	H
1260.48	149	243	-52.29	-13	-39.29	Pass	V
1378.05	148	79	-57.17	-13	-44.17	Pass	V
3507.88	147	62	-54.56	-13	-41.56	Pass	V
3964.88	148	330	-52.76	-13	-39.76	Pass	V
5808.49	150	265	-51.49	-13	-38.49	Pass	V
6601.93	150	13	-48.86	-13	-35.86	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.
1312.15	151	122	-53.89	-13	-40.89	Pass	H
1629.60	147	142	-52.90	-13	-39.90	Pass	H
3893.87	151	145	-48.32	-13	-35.32	Pass	H
5873.23	154	112	-42.47	-13	-29.47	Pass	H
6590.42	150	276	-42.57	-13	-29.57	Pass	H
8077.53	147	305	-45.52	-13	-32.52	Pass	H
1175.11	149	293	-55.71	-13	-42.71	Pass	V
1477.71	149	237	-55.45	-13	-42.45	Pass	V
3434.29	150	350	-52.40	-13	-39.40	Pass	V
3927.19	149	15	-47.61	-13	-34.61	Pass	V
5724.21	148	266	-43.69	-13	-30.69	Pass	V
6624.32	155	118	-45.82	-13	-32.82	Pass	V

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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.
1403.30	150	62	-59.73	-13	-46.73	Pass	H
1675.55	153	31	-47.00	-13	-34.00	Pass	H
3827.75	148	142	-46.52	-13	-33.52	Pass	H
5887.37	155	302	-43.85	-13	-30.85	Pass	H
6493.06	147	5	-41.93	-13	-28.93	Pass	H
7916.84	151	305	-40.52	-13	-27.52	Pass	H
1243.46	150	347	-55.48	-13	-42.48	Pass	V
1345.60	151	339	-57.30	-13	-44.30	Pass	V
3494.38	146	164	-48.54	-13	-35.54	Pass	V
3951.12	146	265	-51.93	-13	-38.93	Pass	V
5924.54	149	272	-46.77	-13	-33.77	Pass	V
6618.89	150	259	-46.54	-13	-33.54	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.
1258.05	152	227	-53.73	-13	-41.45	Pass	H
1767.44	152	242	-48.80	-13	-37.85	Pass	H
3861.95	151	287	-49.41	-13	-35.2	Pass	H
5843.70	152	353	-42.75	-13	-30.39	Pass	H
6442.75	151	77	-41.74	-13	-32.24	Pass	H
8062.02	150	302	-40.45	-13	-30.22	Pass	H
1131.37	152	286	-58.41	-13	-44.9	Pass	V
1349.82	147	119	-53.90	-13	-43.63	Pass	V
3502.36	152	87	-51.29	-13	-35.94	Pass	V
3765.74	146	245	-48.43	-13	-36.01	Pass	V
5907.06	152	233	-46.57	-13	-33.75	Pass	V
6593.88	153	14	-46.94	-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.
1386.02	146	165	-56.36	-13	-43.36	Pass	H
1690.95	145	226	-45.79	-13	-32.79	Pass	H
3952.26	148	272	-43.81	-13	-30.81	Pass	H
5832.04	149	121	-43.95	-13	-30.95	Pass	H
6470.67	151	303	-39.36	-13	-26.36	Pass	H
8148.11	146	301	-48.47	-13	-35.47	Pass	H
1139.55	155	166	-56.05	-13	-43.05	Pass	V
1486.74	148	287	-57.25	-13	-44.25	Pass	V
3640.73	148	151	-49.63	-13	-36.63	Pass	V
3734.99	146	75	-50.43	-13	-37.43	Pass	V
5775.78	151	196	-48.80	-13	-35.80	Pass	V
6576.71	152	58	-45.10	-13	-32.10	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 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.
1388.61	146	193	-60.66	-13	-47.66	Pass	H
1751.11	149	144	-46.40	-13	-33.40	Pass	H
3789.17	150	9	-48.89	-13	-35.89	Pass	H
5840.16	148	164	-46.23	-13	-33.23	Pass	H
6473.69	152	165	-42.79	-13	-29.79	Pass	H
8077.16	154	332	-41.31	-13	-28.31	Pass	H
1265.75	147	332	-55.51	-13	-42.51	Pass	V
1516.28	148	137	-53.12	-13	-40.12	Pass	V
3525.07	149	13	-50.89	-13	-37.89	Pass	V
3912.74	149	9	-48.27	-13	-35.27	Pass	V
5846.23	152	68	-48.04	-13	-35.04	Pass	V
6646.23	148	231	-44.75	-13	-31.75	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.
1240.50	145	256	-56.07	-13	-43.07	Pass	H
1667.28	145	174	-45.38	-13	-32.38	Pass	H
3837.83	153	249	-46.47	-13	-33.47	Pass	H
5838.88	145	336	-41.47	-13	-28.47	Pass	H
6474.40	155	27	-40.13	-13	-27.13	Pass	H
8066.50	154	174	-41.99	-13	-28.99	Pass	H
1120.26	154	15	-56.07	-13	-43.07	Pass	V
1294.62	146	284	-60.59	-13	-47.59	Pass	V
3451.64	149	217	-46.57	-13	-33.57	Pass	V
3898.10	153	248	-45.44	-13	-32.44	Pass	V
5912.11	155	29	-44.68	-13	-31.68	Pass	V
6564.49	147	113	-46.31	-13	-33.31	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.
1271.62	147	144	-51.75	-13	-38.75	Pass	H
1777.99	155	249	-49.95	-13	-36.95	Pass	H
3943.76	155	317	-44.07	-13	-31.07	Pass	H
5837.87	147	8	-37.82	-13	-24.82	Pass	H
6564.81	148	329	-42.95	-13	-29.95	Pass	H
8004.55	149	237	-44.63	-13	-31.63	Pass	H
1170.28	146	289	-53.18	-13	-40.18	Pass	V
1405.60	152	242	-54.01	-13	-41.01	Pass	V
3594.09	149	266	-47.16	-13	-34.16	Pass	V
3896.27	151	232	-50.88	-13	-37.88	Pass	V
5817.48	150	285	-46.93	-13	-33.93	Pass	V
6578.17	147	54	-49.92	-13	-36.92	Pass	V

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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.
1325.48	154	179	-59.28	-13	-46.28	Pass	H
1655.86	147	312	-55.15	-13	-42.15	Pass	H
3920.00	149	312	-53.27	-13	-40.27	Pass	H
5908.84	151	107	-43.74	-13	-30.74	Pass	H
6536.97	151	315	-49.29	-13	-36.29	Pass	H
7995.95	148	275	-46.88	-13	-33.88	Pass	H
1157.94	155	342	-60.27	-13	-47.27	Pass	V
1405.96	145	233	-58.11	-13	-45.11	Pass	V
3593.13	150	216	-49.69	-13	-36.69	Pass	V
3748.41	155	65	-47.40	-13	-34.40	Pass	V
5798.40	147	293	-44.72	-13	-31.72	Pass	V
6493.16	155	140	-44.17	-13	-31.17	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.
1328.36	148	86	-59.42	-13	-46.42	Pass	H
1676.26	154	158	-50.61	-13	-37.61	Pass	H
3779.01	150	162	-51.80	-13	-38.80	Pass	H
5786.31	153	145	-42.02	-13	-29.02	Pass	H
6393.32	151	51	-53.19	-13	-40.19	Pass	H
8029.88	146	97	-45.65	-13	-32.65	Pass	H
1198.22	152	302	-51.90	-13	-38.90	Pass	V
1463.78	153	33	-64.41	-13	-51.41	Pass	V
3631.65	146	117	-53.95	-13	-40.95	Pass	V
3869.84	154	11	-55.21	-13	-42.21	Pass	V
5795.37	151	232	-47.84	-13	-34.84	Pass	V
6605.60	146	288	-48.89	-13	-35.89	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.
1254.90	147	292	-55.08	-13	-42.08	Pass	H
1665.39	149	313	-51.48	-13	-38.48	Pass	H
3804.53	154	283	-42.89	-13	-29.89	Pass	H
5866.31	151	327	-41.78	-13	-28.78	Pass	H
6515.56	145	135	-44.28	-13	-31.28	Pass	H
7917.89	147	239	-45.47	-13	-32.47	Pass	H
1212.35	154	248	-56.04	-13	-43.04	Pass	V
1386.15	148	66	-55.51	-13	-42.51	Pass	V
3508.33	155	9	-49.52	-13	-36.52	Pass	V
3866.88	148	46	-45.06	-13	-32.06	Pass	V
5744.98	149	335	-48.07	-13	-35.07	Pass	V
6576.64	147	114	-44.67	-13	-31.67	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 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.
1322.40	155	269	-59.52	-13	-46.52	Pass	H
1681.99	146	94	-50.43	-13	-37.43	Pass	H
3989.38	143	113	-49.26	-13	-36.26	Pass	H
5845.84	152	137	-42.36	-13	-29.36	Pass	H
6427.43	155	290	-45.10	-13	-32.10	Pass	H
8020.07	144	107	-44.87	-13	-31.87	Pass	H
1202.24	144	114	-54.25	-13	-41.25	Pass	V
1382.12	154	100	-55.87	-13	-42.87	Pass	V
3519.14	147	314	-52.15	-13	-39.15	Pass	V
3824.68	140	82	-51.44	-13	-38.44	Pass	V
5869.90	156	9	-49.32	-13	-36.32	Pass	V
6486.20	149	224	-49.30	-13	-36.30	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.
1237.19	150	151	-56.88	-13	-43.88	Pass	H
1673.27	146	332	-54.75	-13	-41.75	Pass	H
3823.34	150	350	-52.23	-13	-39.23	Pass	H
5886.70	146	28	-44.88	-13	-31.88	Pass	H
6524.40	149	80	-48.76	-13	-35.76	Pass	H
7972.97	151	271	-46.86	-13	-33.86	Pass	H
1324.78	149	285	-53.47	-13	-40.47	Pass	V
1383.37	148	161	-57.86	-13	-44.86	Pass	V
3677.84	147	328	-54.48	-13	-41.48	Pass	V
3860.50	148	28	-48.59	-13	-35.59	Pass	V
5742.76	150	5	-50.89	-13	-37.89	Pass	V
6489.85	150	265	-50.27	-13	-37.27	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.
1406.49	154	315	-58.92	-13	-45.92	Pass	H
1582.74	149	16	-51.09	-13	-38.09	Pass	H
3784.74	147	215	-46.74	-13	-33.74	Pass	H
5972.78	147	100	-39.39	-13	-26.39	Pass	H
6438.58	147	326	-40.56	-13	-27.56	Pass	H
8023.69	149	226	-44.37	-13	-31.37	Pass	H
1308.44	147	181	-54.84	-13	-41.84	Pass	V
1411.31	145	82	-59.15	-13	-46.15	Pass	V
3559.16	148	255	-55.59	-13	-42.59	Pass	V
3944.85	151	218	-48.92	-13	-35.92	Pass	V
5689.93	145	109	-45.81	-13	-32.81	Pass	V
6639.95	148	307	-48.34	-13	-35.34	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.
1315.39	146	309	-59.08	-13	-46.08	Pass	H
1654.91	151	355	-45.64	-13	-32.64	Pass	H
3948.00	149	119	-49.04	-13	-36.04	Pass	H
5869.62	146	20	-46.82	-13	-33.82	Pass	H
6582.04	148	258	-43.85	-13	-30.85	Pass	H
8012.73	148	58	-41.19	-13	-28.19	Pass	H
1276.73	145	186	-54.87	-13	-41.87	Pass	V
1432.47	149	123	-53.67	-13	-40.67	Pass	V
3528.74	154	29	-49.19	-13	-36.19	Pass	V
3965.22	149	29	-50.20	-13	-37.20	Pass	V
5817.49	151	94	-43.63	-13	-30.63	Pass	V
6568.84	150	232	-46.99	-13	-33.99	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.
1260.40	147	308	-55.48	-13	-41.45	Pass	H
1734.81	149	106	-49.30	-13	-37.85	Pass	H
3762.74	154	290	-48.48	-13	-35.2	Pass	H
6026.43	146	213	-44.02	-13	-30.39	Pass	H
6423.45	154	291	-45.28	-13	-32.24	Pass	H
8147.15	151	281	-40.65	-13	-30.22	Pass	H
1265.87	146	305	-60.15	-13	-44.9	Pass	V
1479.99	152	238	-52.97	-13	-43.63	Pass	V
3457.86	149	42	-46.30	-13	-35.94	Pass	V
3934.86	155	345	-46.91	-13	-36.01	Pass	V
5819.63	152	187	-47.32	-13	-33.75	Pass	V
6528.77	150	158	-42.32	-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.
1271.40	155	288	-55.53	-13	-42.53	Pass	H
1766.39	149	32	-47.15	-13	-34.15	Pass	H
3966.68	147	211	-43.06	-13	-30.06	Pass	H
5877.62	155	324	-44.27	-13	-31.27	Pass	H
6429.60	148	360	-39.29	-13	-26.29	Pass	H
8009.96	155	345	-48.19	-13	-35.19	Pass	H
1177.80	152	73	-54.86	-13	-41.86	Pass	V
1371.29	148	257	-58.57	-13	-45.57	Pass	V
3477.58	149	296	-52.33	-13	-39.33	Pass	V
3930.01	154	136	-48.62	-13	-35.62	Pass	V
5886.22	149	352	-49.02	-13	-36.02	Pass	V
6518.96	148	147	-42.11	-13	-29.11	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.

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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.
1308.25	145	11	-59.68	-13	-46.68	Pass	H
1777.39	149	292	-50.18	-13	-37.18	Pass	H
3880.64	150	207	-49.45	-13	-36.45	Pass	H
5957.43	150	346	-43.81	-13	-30.81	Pass	H
6497.18	149	302	-42.32	-13	-29.32	Pass	H
7946.17	154	241	-41.41	-13	-28.41	Pass	H
1144.91	147	171	-53.00	-13	-40.00	Pass	V
1454.46	153	164	-58.95	-13	-45.95	Pass	V
3510.80	154	58	-53.84	-13	-40.84	Pass	V
3906.37	152	313	-49.08	-13	-36.08	Pass	V
5917.14	155	233	-44.99	-13	-31.99	Pass	V
6600.47	151	350	-48.51	-13	-35.51	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.
1266.31	145	326	-53.34	-13	-40.34	Pass	H
1641.26	150	172	-46.45	-13	-33.45	Pass	H
3922.25	151	184	-44.87	-13	-31.87	Pass	H
5895.62	149	328	-39.83	-13	-26.83	Pass	H
6489.80	148	109	-45.55	-13	-32.55	Pass	H
8033.57	149	13	-47.93	-13	-34.93	Pass	H
1170.89	154	165	-53.71	-13	-40.71	Pass	V
1411.65	148	103	-60.75	-13	-47.75	Pass	V
3564.53	151	120	-49.20	-13	-36.20	Pass	V
3823.37	148	170	-45.21	-13	-32.21	Pass	V
5777.86	151	267	-44.04	-13	-31.04	Pass	V
6514.74	154	282	-47.85	-13	-34.85	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.
1288.61	151	110	-54.41	-13	-41.41	Pass	H
1796.46	145	307	-48.20	-13	-35.20	Pass	H
3886.33	153	202	-44.02	-13	-31.02	Pass	H
5878.37	154	222	-41.63	-13	-28.63	Pass	H
6485.84	150	265	-45.69	-13	-32.69	Pass	H
8097.60	151	2	-43.37	-13	-30.37	Pass	H
1146.92	154	233	-50.70	-13	-37.70	Pass	V
1445.95	152	244	-52.96	-13	-39.96	Pass	V
3476.58	148	117	-51.14	-13	-38.14	Pass	V
3765.98	149	106	-49.91	-13	-36.91	Pass	V
5874.56	146	354	-46.16	-13	-33.16	Pass	V
6535.77	151	329	-49.74	-13	-36.74	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.
1302.69	145	174	-56.56	-13	-43.56	Pass	H
1809.88	154	256	-51.71	-13	-38.71	Pass	H
3948.37	147	31	-52.13	-13	-39.13	Pass	H
5898.93	151	343	-44.11	-13	-31.11	Pass	H
6423.42	146	293	-45.56	-13	-32.56	Pass	H
7996.77	152	232	-43.84	-13	-30.84	Pass	H
1209.63	148	121	-56.55	-13	-43.55	Pass	V
1446.70	148	118	-52.45	-13	-39.45	Pass	V
3643.17	154	329	-53.24	-13	-40.24	Pass	V
3894.03	146	78	-50.80	-13	-37.80	Pass	V
5857.26	145	292	-45.31	-13	-32.31	Pass	V
6468.34	151	133	-48.48	-13	-35.48	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.
1325.21	153	95	-54.24	-13	-41.24	Pass	H
1671.15	151	261	-51.12	-13	-38.12	Pass	H
3961.71	154	137	-46.00	-13	-33.00	Pass	H
5819.41	154	251	-46.99	-13	-33.99	Pass	H
6538.70	149	156	-52.39	-13	-39.39	Pass	H
8115.31	145	118	-44.08	-13	-31.08	Pass	H
1314.10	146	154	-54.62	-13	-41.62	Pass	V
1338.18	151	254	-60.63	-13	-47.63	Pass	V
3688.47	147	32	-50.02	-13	-37.02	Pass	V
3891.17	154	135	-52.29	-13	-39.29	Pass	V
5728.74	145	341	-50.58	-13	-37.58	Pass	V
6607.01	147	0	-51.38	-13	-38.38	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.
1260.01	152	219	-54.20	-13	-41.20	Pass	H
1599.36	145	214	-54.76	-13	-41.76	Pass	H
3749.25	155	34	-46.07	-13	-33.07	Pass	H
5846.36	149	74	-43.91	-13	-30.91	Pass	H
6506.17	148	309	-44.98	-13	-31.98	Pass	H
7971.99	145	294	-42.23	-13	-29.23	Pass	H
1193.83	146	44	-56.01	-13	-43.01	Pass	V
1328.61	147	122	-53.11	-13	-40.11	Pass	V
3464.91	151	16	-49.73	-13	-36.73	Pass	V
3822.48	148	266	-45.85	-13	-32.85	Pass	V
5722.58	154	222	-46.68	-13	-33.68	Pass	V
6546.20	149	121	-43.68	-13	-30.68	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.

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 3.8V; Low Voltage LV=DC 3.42V; High Voltage HV=DC 4.18V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

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