

TEST REPORT

Product Name: Handheld Terminal
FCC ID: 2BMVS-N77
Trademark: Rayoungtek
Model Number: N77, N77S, N77-DB
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Sample Received Date: Jan. 13, 2025
Sample tested Date: Jan. 13, 2025 to Feb. 06, 2025
Issue Date: Feb. 06, 2025
Report No.: CTB25012000103RF05
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

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(Note: N/A means not applicable)



1. VERSION

Report No.	Issue Date	Description	Approved
CTB25012000103RF05	Feb. 06, 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)(5)/Part27.50(h)(2)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 27.50(d)	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 22.917(a)/Part 27.53(m) (4)	KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 22.917(a)/Part 27.53(m) (4)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053/ Part 22.917(a)/Part 27.53(m) (4)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Frequency stability	Part 2.1055/Part 27.54	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 chamber 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):	N77, N77S, N77-DB
Model Description:	All the model are the same circuit and RF module, only different in appearance. Test sample model: N77
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	FDD-LTE BAND 4: 1710-1755MHz 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
Max. RF output power:	FDD-LTE BAND 4: 21.8dBm TDD-LTE BAND 38: 21.76dBm TDD-LTE BAND 40a: 19.63dBm TDD-LTE BAND 40b: 19.15dBm TDD-LTE BAND 41: 21.75dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	Internal antenna
Antenna Gain:	FDD-LTE BAND 4: -0.3dBi TDD-LTE BAND 38: 1.2dBi TDD-LTE BAND 40a: 1.8dBi TDD-LTE BAND 40b: 1.8dBi TDD-LTE BAND 41: 1.0dBi
Ratings:	Power input:100-240V 50/60Hz 1.0A Product input: 5V 2000mA DC 3.85V 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

No.	Device Type	Brand	Model	Series No.	Note
1.	Adapter	JIYIN	JY-05100C	/	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 4	Low, Middle, High Channels
TM2	TDD-LTE BAND 38	Low, Middle, High Channels
TM3	TDD-LTE BAND 40a	Low, Middle, High Channels
TM4	TDD-LTE BAND 40b	Low, Middle, High Channels
TM5	TDD-LTE BAND 41	Low, Middle, High Channels

4.5 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	3.85V
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, Xinhe 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	Calibration Last	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	A.14.16	2024/6/28	2025/6/28
2	Power Sensor	Agilent	U2021XA	MY56120032	/	2024/6/28	2025/6/28
3	Power Sensor	Agilent	U2021XA	MY56120034	/	2024/6/28	2025/6/28
4	Communication test set	R&S	CMW500	108058	V3.5.80	2024/6/28	2025/6/28
5	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2024/6/28	2025/6/28
6	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2024/6/28	2025/6/28
7	Vector signal generator	Agilent	N5182A	MY47420195	A.01.87	2024/6/28	2025/6/28
8	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2024/6/28	2025/6/28
9	2.4 GHz Filter	Shenxiang	MSF2400-24 83.5MS-1154	20181015001	/	2024/6/30	2025/6/30
10	5 GHz Filter	Shenxiang	MSF5150-58 50MS-1155	20181015001	/	2024/6/30	2025/6/30
11	Filter	Xingbo	XBLBQ-DZA 120	190821-1-1	/	2024/6/30	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	/	2024/6/28	2025/6/28
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	/	2024/6/28	2025/6/28
15	234G Automatic test	Microwave	MTS8200	Ver. 2.0.0.0	/	/	/

	software						
16	966 chamber	C.R.T.	966	/	/	2024/6/21	2027/6/21
17	Receiver	R&S	ESPI	100362	RF_ATTEN_7 (104489/003)	2024/6/28	2025/6/28
18	Amplifier	HP	8447E	2945A02747	/	2024/6/28	2025/6/28
19	Amplifier	Agilent	8449B	3008A01838	/	2024/6/28	2025/6/28
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2024/6/28	2025/6/28
21	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA9120D	01911	/	2024/6/28	2025/6/28
22	EMI test software	Fala	EZ-EMC	FA-03A2 RE	/	/	/
23	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2024/6/28	2025/6/28
24	loop antenna	ZHINAN	ZN30900A	GTS534	/	/	/
25	40G Horn antenna	A/H/System	SAS-574	588	/	2024/6/28	2025/6/28
26	Amplifier	AEROFLEX	Aeroflex	097	/	2024/6/28	2025/6/28
27	Power Metter	KEYSIGHT	N1912AP	N/A	A.05.00	2024/6/28	2025/6/28
28	Temperature chamber	Shima	AR867	N/A	/	2024/6/28	2025/6/28
29	controller	Mai Wei	MW200-RFC B	N/A	/	/	/

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.

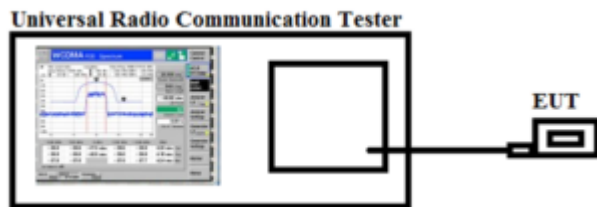
According to §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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.

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

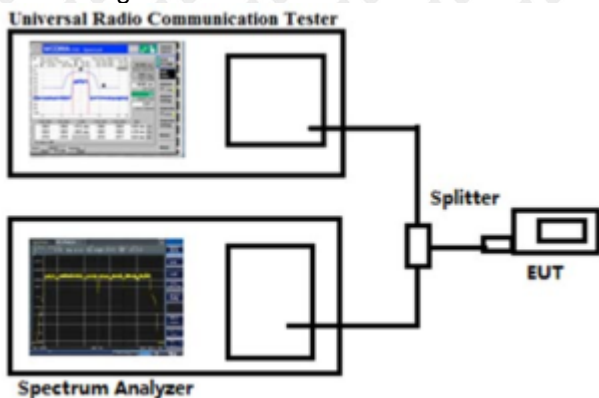
corresponding to the highest PAPR expected during periods of continuous transmission.

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(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.

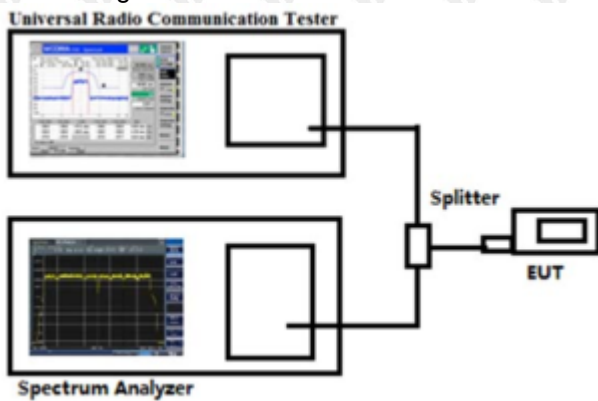
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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.

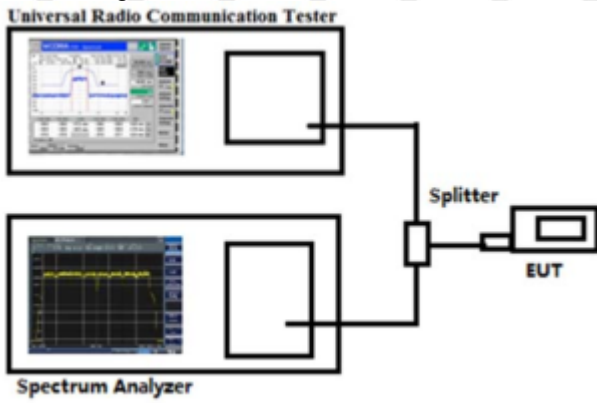
According to §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$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

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:

- (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) 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.

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 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.
1284.41	141	306	-56.50	-13	-43.50	Pass	H
1641.93	156	81	-46.45	-13	-33.45	Pass	H
3888.42	149	17	-49.14	-13	-36.14	Pass	H
5831.63	155	103	-45.81	-13	-32.81	Pass	H
6422.81	141	299	-43.77	-13	-30.77	Pass	H
8087.42	145	35	-42.54	-13	-29.54	Pass	H
1298.98	154	61	-52.91	-13	-39.91	Pass	V
1497.28	154	353	-57.26	-13	-44.26	Pass	V
3609.98	156	117	-50.03	-13	-37.03	Pass	V
3875.83	152	300	-52.29	-13	-39.29	Pass	V
5728.95	152	290	-48.95	-13	-35.95	Pass	V
6504.36	157	11	-45.40	-13	-32.40	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.
1268.71	150	162	-57.41	-13	-44.41	Pass	H
1719.42	146	270	-52.40	-13	-39.40	Pass	H
3874.21	150	219	-50.94	-13	-37.94	Pass	H
5838.59	146	297	-47.31	-13	-34.31	Pass	H
6400.08	149	315	-49.20	-13	-36.20	Pass	H
8035.35	151	167	-51.01	-13	-38.01	Pass	H
1201.90	149	226	-53.62	-13	-40.62	Pass	V
1311.36	148	62	-60.31	-13	-47.31	Pass	V
3514.64	147	311	-55.01	-13	-42.01	Pass	V
3967.79	148	268	-50.24	-13	-37.24	Pass	V
5778.69	150	138	-48.37	-13	-35.37	Pass	V
6461.40	150	271	-49.86	-13	-36.86	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.
1371.83	148	90	-56.97	-13	-43.97	Pass	H
1760.40	149	137	-51.32	-13	-38.32	Pass	H
3787.59	152	78	-46.29	-13	-33.29	Pass	H
5846.28	152	150	-42.26	-13	-29.26	Pass	H
6488.09	149	272	-45.30	-13	-32.30	Pass	H
7915.00	147	226	-46.04	-13	-33.04	Pass	H
1159.44	151	317	-55.90	-13	-42.90	Pass	V
1326.18	151	333	-55.36	-13	-42.36	Pass	V
3504.99	149	271	-53.29	-13	-40.29	Pass	V
3907.17	146	174	-48.27	-13	-35.27	Pass	V
5857.80	150	83	-42.80	-13	-29.80	Pass	V
6477.30	148	234	-46.58	-13	-33.58	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.
1404.42	146	267	-61.50	-13	-48.50	Pass	H
1669.60	154	247	-45.81	-13	-32.81	Pass	H
3878.05	152	27	-46.75	-13	-33.75	Pass	H
5891.26	146	31	-47.18	-13	-34.18	Pass	H
6507.03	153	351	-45.08	-13	-32.08	Pass	H
7937.30	150	149	-39.88	-13	-26.88	Pass	H
1087.04	148	215	-49.58	-13	-36.58	Pass	V
1377.63	147	168	-56.34	-13	-43.34	Pass	V
3617.53	153	27	-48.87	-13	-35.87	Pass	V
3973.74	151	108	-49.30	-13	-36.30	Pass	V
5808.74	151	347	-47.34	-13	-34.34	Pass	V
6580.13	149	111	-49.91	-13	-36.91	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.
1302.24	154	97	-57.05	-13	-41.45	Pass	H
1641.34	147	34	-53.55	-13	-37.85	Pass	H
3932.46	147	48	-48.69	-13	-35.2	Pass	H
5871.25	153	231	-42.03	-13	-30.39	Pass	H
6500.05	147	359	-43.93	-13	-32.24	Pass	H
8001.98	152	337	-45.75	-13	-30.22	Pass	H
1255.40	146	30	-56.26	-13	-44.9	Pass	V
1361.38	153	56	-53.84	-13	-43.63	Pass	V
3515.90	147	234	-49.36	-13	-35.94	Pass	V
3778.72	146	134	-45.72	-13	-36.01	Pass	V
5790.09	155	128	-45.10	-13	-33.75	Pass	V
6462.84	148	173	-42.85	-13	-32.41	Pass	V
Band 4 20393 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1372.06	149	112	-57.04	-13	-44.04	Pass	H
1635.96	153	234	-46.60	-13	-33.60	Pass	H
3864.20	145	321	-44.55	-13	-31.55	Pass	H
5790.50	155	28	-44.35	-13	-31.35	Pass	H
6458.02	149	348	-38.49	-13	-25.49	Pass	H
8031.79	150	31	-46.61	-13	-33.61	Pass	H
1244.43	147	338	-54.47	-13	-41.47	Pass	V
1453.19	149	212	-57.04	-13	-44.04	Pass	V
3587.41	150	271	-53.17	-13	-40.17	Pass	V
3750.94	149	193	-53.66	-13	-40.66	Pass	V
5853.31	150	183	-51.46	-13	-38.46	Pass	V
6477.36	146	23	-48.61	-13	-35.61	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	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1325.11	147	259	-52.33	-25	-27.33	Pass	H
1639.52	153	223	-48.45	-25	-23.45	Pass	H
3966.47	151	214	-47.12	-25	-22.12	Pass	H
5798.69	151	159	-41.61	-25	-16.61	Pass	H
6513.93	149	286	-52.18	-25	-27.18	Pass	H
7995.00	153	45	-46.07	-25	-21.07	Pass	H
1255.61	148	162	-62.16	-25	-37.16	Pass	V
1498.98	146	216	-52.57	-25	-27.57	Pass	V
3550.90	147	204	-50.05	-25	-25.05	Pass	V
3797.81	150	69	-48.52	-25	-23.52	Pass	V
5724.15	150	271	-45.09	-25	-20.09	Pass	V
6511.53	147	343	-46.85	-25	-21.85	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)		
1234.95	149	297	-55.12	-25	-30.12	Pass	H
1625.79	151	17	-51.95	-25	-26.95	Pass	H
3802.07	153	144	-46.91	-25	-21.91	Pass	H
5758.25	148	177	-49.30	-25	-24.30	Pass	H
6398.23	148	140	-41.24	-25	-16.24	Pass	H
7897.82	145	77	-45.02	-25	-20.02	Pass	H
1121.51	154	153	-57.82	-25	-32.82	Pass	V
1339.91	152	196	-56.60	-25	-31.60	Pass	V
3470.08	154	144	-47.04	-25	-22.04	Pass	V
3738.10	147	176	-53.46	-25	-28.46	Pass	V
5703.72	151	123	-46.40	-25	-21.40	Pass	V
6453.97	149	291	-44.48	-25	-19.48	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)		
1261.34	150	240	-53.41	-25	-28.41	Pass	H
1667.21	149	206	-51.24	-25	-26.24	Pass	H
3829.96	148	314	-52.66	-25	-27.66	Pass	H
5884.70	150	254	-40.05	-25	-15.05	Pass	H
6439.00	150	64	-40.29	-25	-15.29	Pass	H
8063.10	154	235	-47.30	-25	-22.30	Pass	H
1297.44	150	206	-57.55	-25	-32.55	Pass	V



1341.08	153	282	-59.02	-25	-34.02	Pass	V
3544.24	152	191	-54.11	-25	-29.11	Pass	V
3897.00	153	109	-54.91	-25	-29.91	Pass	V
5884.17	153	55	-44.04	-25	-19.04	Pass	V
6512.34	147	15	-49.75	-25	-24.75	Pass	V

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Band 38 37775 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1307.53	150	115	-54.91	-25	-29.91	Pass	H
1632.53	154	127	-49.97	-25	-24.97	Pass	H
3840.21	151	204	-49.67	-25	-24.67	Pass	H
5830.07	153	57	-48.97	-25	-23.97	Pass	H
6557.73	150	205	-41.83	-25	-16.83	Pass	H
7994.92	150	156	-39.15	-25	-14.15	Pass	H
1231.17	153	105	-63.40	-25	-38.40	Pass	V
1461.23	153	53	-52.25	-25	-27.25	Pass	V
3529.91	153	87	-48.54	-25	-23.54	Pass	V
3764.59	147	185	-52.49	-25	-27.49	Pass	V
5874.73	147	162	-43.98	-25	-18.98	Pass	V
6607.00	152	173	-54.26	-25	-29.26	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)			
1340.56	146	305	-57.47	-25	-32.47	Pass	H
1729.95	146	97	-54.25	-25	-29.25	Pass	H
3990.88	153	243	-48.50	-25	-23.50	Pass	H
5861.39	146	14	-49.52	-25	-24.52	Pass	H
6415.43	147	330	-49.74	-25	-24.74	Pass	H
8069.89	148	354	-40.30	-25	-15.30	Pass	H
1156.50	148	358	-55.28	-25	-30.28	Pass	V
1533.79	152	31	-61.38	-25	-36.38	Pass	V
3474.48	153	20	-52.49	-25	-27.49	Pass	V
3808.61	153	93	-51.50	-25	-26.50	Pass	V
5757.50	151	114	-47.52	-25	-22.52	Pass	V
6605.41	150	190	-51.55	-25	-26.55	Pass	V

Band 38 38225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	Level (dBm)	(dBm)	(dB)		
1356.42	147	202	-53.72	-25	-28.72	Pass	H
1631.48	154	265	-50.62	-25	-25.62	Pass	H
3841.60	149	109	-51.65	-25	-26.65	Pass	H
5917.44	150	92	-46.59	-25	-21.59	Pass	H
6444.67	148	317	-46.26	-25	-21.26	Pass	H
7988.49	155	259	-46.55	-25	-21.55	Pass	H
1142.44	153	208	-63.23	-25	-38.23	Pass	V
1409.68	152	294	-58.78	-25	-33.78	Pass	V
3659.51	150	332	-50.86	-25	-25.86	Pass	V
3925.85	147	234	-52.99	-25	-27.99	Pass	V
5763.37	154	333	-50.02	-25	-25.02	Pass	V
6561.62	151	226	-49.83	-25	-24.83	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 (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1254.46	149	268	-55.16	-40	-15.16	Pass	H
1703.06	152	188	-42.84	-40	-2.84	Pass	H
3836.61	150	236	-49.94	-40	-9.94	Pass	H
6005.14	152	204	-38.73	-40	1.27	Pass	H
6497.88	148	253	-45.13	-40	-5.13	Pass	H
7969.41	146	334	-41.84	-40	-1.84	Pass	H
1185.09	151	95	-55.00	-40	-15.00	Pass	V
1287.26	150	26	-57.73	-40	-17.73	Pass	V
3513.86	153	192	-50.26	-40	-10.26	Pass	V
3809.88	154	36	-48.97	-40	-8.97	Pass	V
5910.53	149	328	-47.02	-40	-7.02	Pass	V
6481.07	154	203	-44.46	-40	-4.46	Pass	V
Band 40A 38750 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1389.44	153	88	-58.84	-40	-18.84	Pass	H
1808.28	149	358	-51.48	-40	-11.48	Pass	H
3820.20	153	307	-48.59	-40	-8.59	Pass	H
5915.17	152	294	-45.35	-40	-5.35	Pass	H
6481.45	151	118	-48.78	-40	-8.78	Pass	H
8019.27	148	10	-42.23	-40	-2.23	Pass	H
1153.42	149	217	-60.58	-40	-20.58	Pass	V
1334.64	147	287	-59.49	-40	-19.49	Pass	V
3476.41	146	0	-51.34	-40	-11.34	Pass	V
3902.40	147	203	-49.69	-40	-9.69	Pass	V
5861.17	153	3	-48.57	-40	-8.57	Pass	V
6597.68	148	321	-43.05	-40	-3.05	Pass	V
Band 40A 38775 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1297.38	155	25	-53.96	-40	-13.96	Pass	H
1791.46	150	184	-49.04	-40	-9.04	Pass	H
3778.82	147	316	-51.38	-40	-11.38	Pass	H
5971.14	148	115	-44.87	-40	-4.87	Pass	H
6595.67	149	309	-43.58	-40	-3.58	Pass	H
8143.41	148	134	-47.91	-40	-7.91	Pass	H
1140.54	154	202	-60.78	-40	-20.78	Pass	V

1330.45	151	304	-61.99	-40	-21.99	Pass	V
3523.81	145	338	-51.78	-40	-11.78	Pass	V
3951.19	152	272	-52.49	-40	-12.49	Pass	V
5811.85	151	181	-49.43	-40	-9.43	Pass	V
6501.96	149	194	-48.04	-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.
1266.13	150	34	-53.69	-40	-13.69	Pass	H
1631.94	146	131	-50.10	-40	-10.10	Pass	H
3882.55	147	98	-49.34	-40	-9.34	Pass	H
5924.05	154	31	-48.36	-40	-8.36	Pass	H
6497.69	148	153	-47.21	-40	-7.21	Pass	H
7991.94	147	350	-42.82	-40	-2.82	Pass	H
1105.27	146	95	-57.92	-40	-17.92	Pass	V
1297.91	146	178	-58.42	-40	-18.42	Pass	V
3508.96	150	15	-53.53	-40	-13.53	Pass	V
3761.97	148	227	-51.48	-40	-11.48	Pass	V
5732.17	149	37	-48.98	-40	-8.98	Pass	V
6584.60	150.54	355.48	-46.41	-40	-6.41	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.
1274.19	151	48	-57.73	-40	-17.73	Pass	H
1767.30	155	53	-50.70	-40	-10.70	Pass	H
3812.45	148	65	-50.08	-40	-10.08	Pass	H
5957.51	147	175	-45.20	-40	-5.20	Pass	H
6496.29	146	332	-48.00	-40	-8.00	Pass	H
8067.23	151	359	-47.43	-40	-7.43	Pass	H
1262.07	148	343	-56.22	-40	-16.22	Pass	V
1412.54	146	281	-61.08	-40	-21.08	Pass	V
3522.06	147	326	-51.38	-40	-11.38	Pass	V
3876.91	153	91	-51.06	-40	-11.06	Pass	V
5886.83	146	190	-44.73	-40	-4.73	Pass	V
6585.34	148	295	-47.82	-40	-7.82	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.
1334.40	153	113	-55.74	-40	-15.74	Pass	H
1694.30	154	116	-49.93	-40	-9.93	Pass	H
3913.33	148	57	-47.68	-40	-7.68	Pass	H

5970.24	151	347	-47.03	-40	-7.03	Pass	H
6408.42	146	70	-45.07	-40	-5.07	Pass	H
8116.70	148	267	-45.09	-40	-5.09	Pass	H
1179.41	150	74	-57.62	-40	-17.62	Pass	V
1389.10	145	217	-60.37	-40	-20.37	Pass	V
3505.25	147	299	-50.56	-40	-10.56	Pass	V
3799.92	147	203	-48.84	-40	-8.84	Pass	V
5853.37	151	213	-45.36	-40	-5.36	Pass	V
6455.26	147	355	-44.56	-40	-4.56	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 (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1318.99	151	244	-53.69	-40	-13.69	Pass	H
1792.69	147	187	-50.89	-40	-10.89	Pass	H
3787.84	151	24	-49.56	-40	-9.56	Pass	H
6004.84	153	335	-42.38	-40	-2.38	Pass	H
6553.54	153	339	-45.10	-40	-5.10	Pass	H
8003.24	152	269	-48.27	-40	-8.27	Pass	H
1231.86	150	216	-55.69	-40	-15.69	Pass	V
1447.70	152	278	-59.55	-40	-19.55	Pass	V
3592.72	154	119	-47.05	-40	-7.05	Pass	V
3844.17	146	222	-48.34	-40	-8.34	Pass	V
5854.86	153	187	-46.42	-40	-6.42	Pass	V
6503.37	148	193	-43.89	-40	-3.89	Pass	V
Band 40B 39200 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1304.68	149	90	-57.49	-40	-17.49	Pass	H
1812.93	151	154	-51.05	-40	-11.05	Pass	H
3885.91	154	231	-49.96	-40	-9.96	Pass	H
5934.79	154	34	-46.33	-40	-6.33	Pass	H
6545.94	153	237	-47.29	-40	-7.29	Pass	H
8038.04	155	50	-47.06	-40	-7.06	Pass	H
1227.54	154	122	-56.19	-40	-16.19	Pass	V
1382.27	153	146	-57.03	-40	-17.03	Pass	V
3537.92	154	328	-51.74	-40	-11.74	Pass	V
3885.72	148	306	-49.61	-40	-9.61	Pass	V
5875.97	150	68	-46.32	-40	-6.32	Pass	V
6498.24	153	312	-47.16	-40	-7.16	Pass	V
Band 40B 39225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1267.12	148	290	-57.53	-40	-17.53	Pass	H
1784.94	149	336	-50.57	-40	-10.57	Pass	H
3802.29	152	189	-49.27	-40	-9.27	Pass	H
5927.94	146	274	-44.11	-40	-4.11	Pass	H
6560.18	152	4	-49.23	-40	-9.23	Pass	H
8079.86	153	270	-44.14	-40	-4.14	Pass	H
1263.70	146	184	-57.27	-40	-17.27	Pass	V

1320.00	151	204	-59.76	-40	-19.76	Pass	V
3497.94	155	183	-51.49	-40	-11.49	Pass	V
3834.83	154	220	-49.73	-40	-9.73	Pass	V
5764.98	147	357	-46.50	-40	-6.50	Pass	V
6532.45	153	153	-45.04	-40	-5.04	Pass	V

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Band 40B 39175 channel/BW 5(lowest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1254.66	151	175	-55.11	-40	-15.11	Pass	H
1731.12	153	19	-48.84	-40	-8.84	Pass	H
3871.86	154	144	-47.95	-40	-7.95	Pass	H
5934.76	152	314	-45.96	-40	-5.96	Pass	H
6512.22	147	76	-47.56	-40	-7.56	Pass	H
8036.57	146	249	-47.45	-40	-7.45	Pass	H
1178.08	151	215	-58.35	-40	-18.35	Pass	V
1336.07	152	11	-60.20	-40	-20.20	Pass	V
3509.43	154	48	-53.94	-40	-13.94	Pass	V
3774.90	153	240	-49.38	-40	-9.38	Pass	V
5756.12	153	256	-49.22	-40	-9.22	Pass	V
6517.89	150	130	-47.86	-40	-7.86	Pass	V

Band 40B 39200channel/BW 5(middle channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1405.17	145	33	-52.16	-40	-12.16	Pass	H
1756.38	146	81	-46.38	-40	-6.38	Pass	H
3811.04	146	118	-49.67	-40	-9.67	Pass	H
5958.31	145	193	-46.55	-40	-6.55	Pass	H
6467.50	146	316	-47.06	-40	-7.06	Pass	H
8043.74	145	226	-45.15	-40	-5.15	Pass	H
1284.35	145	11	-57.80	-40	-17.80	Pass	V
1388.72	145	177	-57.98	-40	-17.98	Pass	V
3485.41	146	105	-51.26	-40	-11.26	Pass	V
3922.23	146	14	-50.31	-40	-10.31	Pass	V
5776.17	146	208	-48.95	-40	-8.95	Pass	V
6535.67	146	314	-44.17	-40	-4.17	Pass	V

Band 40B 39225 channel/BW 5(highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1377.40	150	274	-54.65	-40	-14.65	Pass	H
1773.91	147	118	-48.77	-40	-8.77	Pass	H
3755.28	149	70	-46.60	-40	-6.60	Pass	H

5885.78	153	100	-46.85	-40	-6.85	Pass	H
6578.22	155	149	-48.00	-40	-8.00	Pass	H
8070.90	145	117	-45.62	-40	-5.62	Pass	H
1232.21	154	284	-56.18	-40	-16.18	Pass	V
1423.98	154	247	-60.16	-40	-20.16	Pass	V
3586.48	149	251	-49.10	-40	-9.10	Pass	V
3869.54	149	112	-49.85	-40	-9.85	Pass	V
5849.25	145	228	-47.76	-40	-7.76	Pass	V
6491.38	150	45	-44.01	-40	-4.01	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-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)			
1416.16	149	165	-58.27	-25	-33.27	Pass	H
1769.49	146	208	-52.21	-25	-27.21	Pass	H
3863.44	146	4	-43.58	-25	-18.58	Pass	H
5904.10	150	198	-44.55	-25	-19.55	Pass	H
6540.52	146	341	-43.49	-25	-18.49	Pass	H
8139.31	150	235	-47.66	-25	-22.66	Pass	H
1209.61	146	292	-56.03	-25	-31.03	Pass	V
1471.27	150	158	-56.31	-25	-31.31	Pass	V
3623.76	149	55	-50.27	-25	-25.27	Pass	V
3895.33	150	319	-48.93	-25	-23.93	Pass	V
5891.32	146	118	-45.39	-25	-20.39	Pass	V
6463.66	150	155	-50.03	-25	-25.03	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)			
1379.70	149	165	-58.84	-25	-33.84	Pass	H
1635.69	146	208	-50.11	-25	-25.11	Pass	H
3944.70	146	4	-47.23	-25	-22.23	Pass	H
5877.27	150	198	-40.10	-25	-15.10	Pass	H
6569.26	146	341	-42.53	-25	-17.53	Pass	H
7979.48	150	235	-44.41	-25	-19.41	Pass	H
1282.95	146	292	-57.07	-25	-32.07	Pass	V
1478.32	150	158	-54.29	-25	-29.29	Pass	V
3570.97	149	55	-48.90	-25	-23.90	Pass	V
3911.33	150	319	-52.57	-25	-27.57	Pass	V
5895.90	146	118	-48.85	-25	-23.85	Pass	V
6599.41	150	155	-43.62	-25	-18.62	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)			
1306.41	149	165	-55.73	-25	-30.73	Pass	H
1637.62	146	208	-51.17	-25	-26.17	Pass	H
3903.35	146	4	-45.77	-25	-20.77	Pass	H
5916.89	150	198	-45.70	-25	-20.70	Pass	H
6536.56	146	341	-46.82	-25	-21.82	Pass	H
8000.13	150	235	-40.17	-25	-15.17	Pass	H
1189.84	146	292	-51.29	-25	-26.29	Pass	V
1557.84	150	158	-61.03	-25	-36.03	Pass	V

3557.01	149	55	-47.60	-25	-22.60	Pass	V
3794.16	150	319	-53.89	-25	-28.89	Pass	V
5769.21	146	118	-48.30	-25	-23.30	Pass	V
6489.16	150	155	-49.21	-25	-24.21	Pass	V
16QAM-B41							
Band 41 40265 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1295.28	149	165	-52.07	-25	-27.07	Pass	H
1671.42	146	208	-46.53	-25	-21.53	Pass	H
3917.37	146	4	-43.74	-25	-18.74	Pass	H
5874.58	150	198	-43.47	-25	-18.47	Pass	H
6558.22	146	341	-43.36	-25	-18.36	Pass	H
8175.35	150	235	-45.80	-25	-20.80	Pass	H
1223.90	146	292	-52.96	-25	-27.96	Pass	V
1397.31	150	158	-61.13	-25	-36.13	Pass	V
3564.03	149	55	-52.77	-25	-27.77	Pass	V
3760.04	150	319	-52.84	-25	-27.84	Pass	V
5883.30	146	118	-45.93	-25	-20.93	Pass	V
6513.03	150	155	-46.20	-25	-21.20	Pass	V
Band 41 40740 channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1271.85	147	314	-57.07	-25	-32.07	Pass	H
1757.35	152	95	-46.60	-25	-21.60	Pass	H
3957.74	153	9	-44.62	-25	-19.62	Pass	H
5851.07	147	40	-38.74	-25	-13.74	Pass	H
6504.99	154	23	-41.59	-25	-16.59	Pass	H
7981.70	155	318	-44.89	-25	-19.89	Pass	H
1294.63	147	88	-56.70	-25	-31.70	Pass	V
1489.33	155	245	-57.81	-25	-32.81	Pass	V
3624.77	148	309	-53.71	-25	-28.71	Pass	V
3845.17	152	181	-48.68	-25	-23.68	Pass	V
5781.98	146	241	-44.84	-25	-19.84	Pass	V
6603.17	152	330	-46.61	-25	-21.61	Pass	V

Band 41 41215 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	Level (dBm)	(dBm)	(dB)		
1262.53	149	165	-57.06	-25	-32.06	Pass	H
1639.38	146	208	-45.59	-25	-20.59	Pass	H
3803.69	146	4	-45.57	-25	-20.57	Pass	H
5885.17	150	198	-40.60	-25	-15.60	Pass	H
6433.45	146	341	-40.43	-25	-15.43	Pass	H
8097.46	150	235	-39.42	-25	-14.42	Pass	H
1132.66	146	292	-55.28	-25	-30.28	Pass	V
1394.66	150	158	-54.42	-25	-29.42	Pass	V
3463.55	149	55	-50.51	-25	-25.51	Pass	V
3853.96	150	319	-51.64	-25	-26.64	Pass	V
5777.57	146	118	-49.55	-25	-24.55	Pass	V
6575.93	150	155	-44.11	-25	-19.11	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.

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=DC3.85V; Low Voltage LV=DC3.465; High Voltage HV=DC4.235V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

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