



TEST REPORT

Product Name: GNSS RECEIVER
FCC ID: 2BSNM-MATRIXVI
Trademark: α-GEO
Model Number: Matrix VI, Matrix Ultra, Matrix III, Matrix II, Matrix Mi, L100, GeoPuls, L2 Plus, L2, NetBOX2, A-Tab
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Sample Received Date: Aug. 14, 2025
Sample tested Date: Aug. 14, 2025 to Sep. 23, 2025
Issue Date: Sep. 23, 2025
Report No.: CTB25081401001RF04
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

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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
CTB25081401001RF04	Sep. 23, 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 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):	Matrix VI, Matrix Ultra, Matrix III, Matrix II, Matrix Mi, L100, GeoPuls, L2 Plus, L2, NetBOX2, A-Tab
Model Description:	All the model are the same circuit and RF module, only the model names are different. Test sample model: Matrix VI
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	FDD-LTE BAND 5: 824-849MHz FDD-LTE BAND 7: 2500-2570MHz 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 5: 21.69dBm FDD-LTE BAND 7: 22.33dBm TDD-LTE BAND 38: 22.61dBm TDD-LTE BAND 40A: 19.87dBm TDD-LTE BAND 40B: 20.09dBm TDD-LTE BAND 41: 20.67dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	Internal antenna
Antenna Gain:	FDD-LTE BAND 5: -2.9dBi FDD-LTE BAND 7: -2.6dBi TDD-LTE BAND 38: -2.3dBi TDD-LTE BAND 40A: -3dBi TDD-LTE BAND 40B: -3.9dBi TDD-LTE BAND 41: -2.1dBi
Ratings:	DC 5V charging from adapter DC 7.4V by Battery

4.2 Test Setup Configuration

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

4.3 Support Equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1.	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 5	Low, Middle, High Channels
TM2	FDD-LTE BAND 7	Low, Middle, High Channels
TM3	TDD-LTE BAND 38	Low, Middle, High Channels
TM4	TDD-LTE BAND 40A	Low, Middle, High Channels
TM5	TDD-LTE BAND 40B	Low, Middle, High Channels
TM6	TDD-LTE BAND 41	Low, Middle, High Channels

4.5 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	7.4V
Normal Temperature(°C)	23
Low Temperature(°C)	0
High Temperature(°C)	40

5. TEST FACILITY AND TEST INSTRUMENT USED

5.1 Test Facility

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

FCC Test Firm Registration Number: CN1276

5.2 Test Instrument Used

No.	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Calibrated Date	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	A.14.16	2025/5/23	2026/5/22
2	Power Sensor	Agilent	U2021XA	MY56120032	/	2025/5/23	2026/5/22
3	Power Sensor	Agilent	U2021XA	MY56120034	/	2025/5/23	2026/5/22
4	Communication test set	R&S	CMW500	108058	V3.5.80	2025/5/23	2026/5/22
5	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2025/5/23	2026/5/22
6	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2025/5/22	2026/5/21
7	Vector signal generator	Agilent	N5182A	MY47420195	A.01.87	2025/5/22	2026/5/21
8	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2025/5/22	2026/5/21
9	2.4 GHz Filter	Shenxiang	MSF2400-2483. 5MS-1154	20181015001	/	2025/6/18	2026/6/17
10	5 GHz Filter	Shenxiang	MSF5150-5850 MS-1155	20181015001	/	2025/6/18	2026/6/17
11	Filter	Xingbo	XBLBQ-DZA120	190821-1-1	/	2025/5/24	2026/5/23
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	/	2024/10/31	2025/10/30
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	/	2025/5/22	2026/5/21
15	234G Automatic test software	Microwave	MTS8200	Ver. 2.0.0.0	/	/	/
16	966 chamber	C.R.T.	966	/	/	2024/6/23	2027/6/22
17	Receiver	R&S	ESPI	100362	RF_ATTEN_7 (104489/003)	2025/5/23	2026/5/22
18	Amplifier	HP	8447E	2945A02747	/	2025/5/23	2026/5/22

19	Amplifier	Agilent	8449B	3008A01838	/	2025/6/2	2026/6/1
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2025/6/29	2026/6/28
21	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA9120D	01911	/	2025/6/1	2026/5/31
22	EMI test software	Fala	EZ-EMC	FA-03A2 RE	/	/	/
23	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2025/6/2	2026/6/1
24	loop antenna	ZHINAN	ZN30900A	GTS534	/	/	/
25	40G Horn antenna	A/H/System	SAS-574	588	/	2025/6/2	2026/6/1
26	Amplifier	AEROFLEX	Aeroflex	097	/	2025/6/2	2026/6/1
27	Power Metter	KEYSIGHT	N1912AP	N/A	A.05.00	2025/6/2	2026/6/1

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.

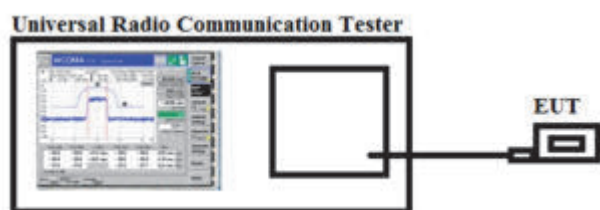
According to §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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

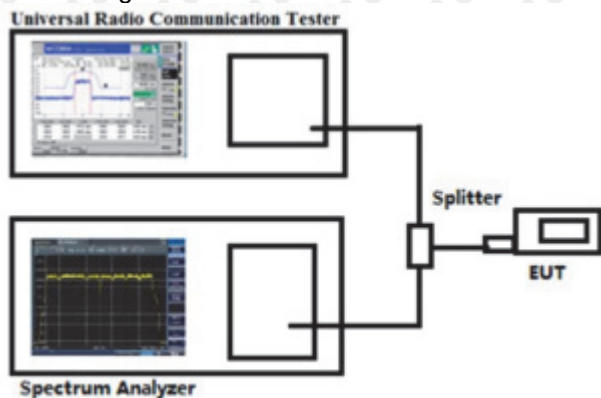
corresponding to the highest PAPR expected during periods of continuous transmission.

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.

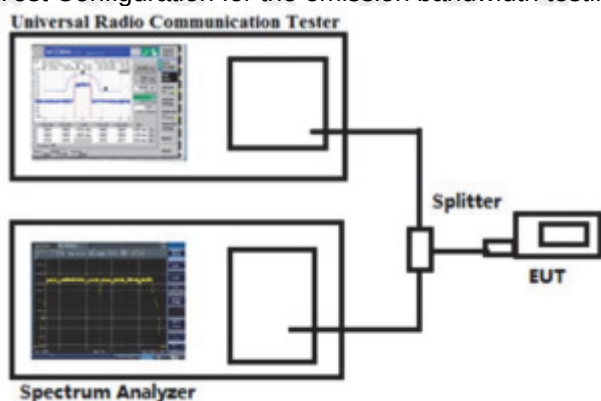
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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.

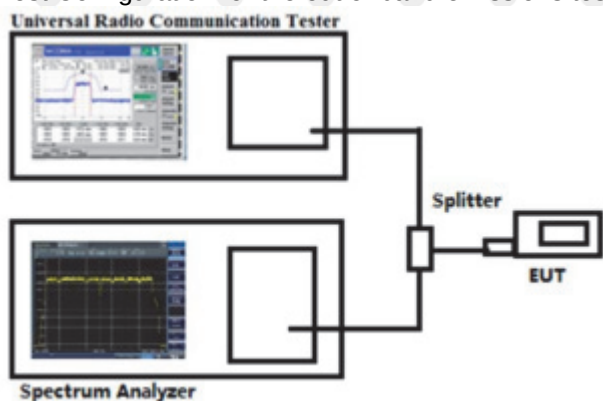
According to §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$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

QPSK

Band 5 20407 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1385.86	143	252	-56.98	-13	-43.98	Pass	H
1788.73	149	110	-50.31	-13	-37.31	Pass	H
3905.04	143	296	-44.89	-13	-31.89	Pass	H
5969.64	152	241	-42.68	-13	-29.68	Pass	H
6498.91	146	18	-45.95	-13	-32.95	Pass	H
8059.50	149	244	-45.28	-13	-32.28	Pass	H
1230.95	144	234	-54.05	-13	-41.05	Pass	V
1557.56	152	343	-58.58	-13	-45.58	Pass	V
3600.28	145	313	-51.77	-13	-38.77	Pass	V
3752.57	149	146	-51.50	-13	-38.50	Pass	V
5889.90	144	7	-49.07	-13	-36.07	Pass	V
6630.47	148	174	-48.60	-13	-35.60	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.
1350.23	150	293	-56.65	-13	-43.65	Pass	H
1705.05	146	209	-52.56	-13	-39.56	Pass	H
3799.17	150	232	-51.31	-13	-38.31	Pass	H
5903.14	146	220	-45.30	-13	-32.30	Pass	H
6458.71	149	226	-51.63	-13	-38.63	Pass	H
7956.81	151	7	-50.13	-13	-37.13	Pass	H
1276.76	149	178	-51.49	-13	-38.49	Pass	V
1372.50	148	127	-61.26	-13	-48.26	Pass	V
3677.99	147	340	-52.62	-13	-39.62	Pass	V
3926.06	148	41	-53.14	-13	-40.14	Pass	V
5830.05	150	291	-51.50	-13	-38.50	Pass	V
6531.66	150	165	-46.53	-13	-33.53	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.
1262.37	154	261	-56.50	-13	-43.50	Pass	H
1712.39	152	101	-53.36	-13	-40.36	Pass	H
3902.03	153	256	-45.51	-13	-32.51	Pass	H
5836.96	148	28	-38.80	-13	-25.80	Pass	H
6547.41	154	168	-45.30	-13	-32.30	Pass	H
8085.09	149	342	-43.50	-13	-30.50	Pass	H
1311.01	146	299	-56.02	-13	-43.02	Pass	V
1311.52	149	336	-54.88	-13	-41.88	Pass	V
3474.67	155	264	-51.74	-13	-38.74	Pass	V
3872.49	146	17	-49.39	-13	-36.39	Pass	V
5767.69	150	63	-41.69	-13	-28.69	Pass	V
6526.98	154	70	-45.30	-13	-32.30	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.
1400.71	145	241	-58.30	-13	-45.30	Pass	H
1686.48	152	359	-45.99	-13	-32.99	Pass	H
3807.28	151	1	-49.59	-13	-36.59	Pass	H
5995.75	145	354	-42.15	-13	-29.15	Pass	H
6626.53	151	326	-42.30	-13	-29.30	Pass	H
8056.74	153	97	-43.82	-13	-30.82	Pass	H
1167.88	154	227	-54.89	-13	-41.89	Pass	V
1525.73	154	212	-56.22	-13	-43.22	Pass	V
3508.08	149	293	-49.22	-13	-36.22	Pass	V
3848.54	149	66	-52.56	-13	-39.56	Pass	V
5937.26	153	127	-46.09	-13	-33.09	Pass	V
6616.28	150	185	-47.59	-13	-34.59	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.
1254.62	149	119	-53.06	-13	-41.45	Pass	H
1769.74	153	182	-50.51	-13	-37.85	Pass	H
3892.39	149	26	-47.09	-13	-35.2	Pass	H
5972.21	150	291	-40.68	-13	-30.39	Pass	H
6546.46	146	55	-42.31	-13	-32.24	Pass	H
8099.48	151	50	-40.03	-13	-30.22	Pass	H
1095.64	146	239	-56.15	-13	-44.9	Pass	V
1462.13	148	336	-58.52	-13	-43.63	Pass	V
3471.16	146	172	-49.06	-13	-35.94	Pass	V
3884.91	149	83	-48.93	-13	-36.01	Pass	V
5744.03	151	27	-43.66	-13	-33.75	Pass	V
6512.87	153	266	-42.07	-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.
1292.92	148	151	-57.61	-13	-44.61	Pass	H
1743.35	147	234	-53.53	-13	-40.53	Pass	H
3930.33	154	243	-47.86	-13	-34.86	Pass	H
5962.46	154	41	-42.00	-13	-29.00	Pass	H
6498.05	148	260	-44.99	-13	-31.99	Pass	H
7928.87	147	190	-47.18	-13	-34.18	Pass	H
1236.46	146	258	-55.43	-13	-42.43	Pass	V
1386.98	146	328	-57.27	-13	-44.27	Pass	V
3593.79	148	230	-51.80	-13	-38.80	Pass	V
3917.50	148	184	-46.08	-13	-33.08	Pass	V
5837.29	148	134	-41.79	-13	-28.79	Pass	V
6512.61	151	267	-45.82	-13	-32.82	Pass	V

Note:

- 1) Scan from 9kHz to 25GHz, 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.

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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.
1305.61	160	274	-57.71	-13	-44.71	Pass	H
1650.82	150	208	-50.23	-13	-37.23	Pass	H
3978.03	143	49	-48.23	-13	-35.23	Pass	H
5803.69	141	45	-44.08	-13	-31.08	Pass	H
6479.57	147	258	-41.99	-13	-28.99	Pass	H
8009.90	151	225	-44.54	-13	-31.54	Pass	H
1196.23	145	339	-53.15	-13	-40.15	Pass	V
1479.63	141	350	-57.96	-13	-44.96	Pass	V
3498.78	149	149	-50.20	-13	-37.20	Pass	V
3778.37	144	147	-49.15	-13	-36.15	Pass	V
5893.47	156	80	-47.85	-13	-34.85	Pass	V
6637.52	143	268	-46.65	-13	-33.65	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.
1247.90	155	133	-57.54	-13	-44.54	Pass	H
1731.50	156	130	-47.49	-13	-34.49	Pass	H
3860.90	152	327	-49.14	-13	-36.14	Pass	H
5952.42	148	314	-44.00	-13	-31.00	Pass	H
6410.04	148	220	-41.32	-13	-28.32	Pass	H
8051.38	144	356	-42.72	-13	-29.72	Pass	H
1167.12	159	267	-53.94	-13	-40.94	Pass	V
1555.88	159	326	-59.60	-13	-46.60	Pass	V
3634.60	150	87	-48.02	-13	-35.02	Pass	V
3841.77	149	242	-51.16	-13	-38.16	Pass	V
5709.17	158	342	-46.82	-13	-33.82	Pass	V
6489.63	141	203	-47.03	-13	-34.03	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.
1310.51	159	139	-55.08	-13	-42.08	Pass	H
1717.28	141	59	-46.54	-13	-33.54	Pass	H
3935.64	146	335	-48.41	-13	-35.41	Pass	H
5938.83	144	116	-44.69	-13	-31.69	Pass	H
6536.91	157	333	-41.44	-13	-28.44	Pass	H
8171.87	158	236	-44.60	-13	-31.60	Pass	H
1274.30	152	284	-55.43	-13	-42.43	Pass	V
1371.03	157	40	-58.69	-13	-45.69	Pass	V
3507.64	158	289	-52.40	-13	-39.40	Pass	V
3811.49	140	129	-50.12	-13	-37.12	Pass	V
5817.42	144	196	-46.07	-13	-33.07	Pass	V
6615.30	157	201	-48.60	-13	-35.60	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.
1384.17	148	135	-57.01	-13	-44.01	Pass	H
1645.79	147	15	-48.30	-13	-35.30	Pass	H
3992.26	158	176	-46.03	-13	-33.03	Pass	H
5840.87	142	294	-43.13	-13	-30.13	Pass	H
6565.15	140	150	-44.14	-13	-31.14	Pass	H
8027.22	145	74	-41.75	-13	-28.75	Pass	H
1298.04	148	316	-54.35	-13	-41.35	Pass	V
1378.75	153	62	-59.33	-13	-46.33	Pass	V
3521.12	148	25	-48.09	-13	-35.09	Pass	V
3787.16	149	286	-51.18	-13	-38.18	Pass	V
5874.48	157	312	-50.71	-13	-37.71	Pass	V
6586.74	143	219	-46.30	-13	-33.30	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.
1323.06	156	76	-59.39	-13	-46.39	Pass	H
1779.84	148	2	-51.32	-13	-38.32	Pass	H
3906.23	144	145	-49.18	-13	-36.18	Pass	H
5830.57	156	25	-46.41	-13	-33.41	Pass	H
6426.40	155	224	-45.35	-13	-32.35	Pass	H
8083.30	141	173	-42.27	-13	-29.27	Pass	H
1255.78	156	194	-55.59	-13	-42.59	Pass	V
1462.67	151	271	-58.47	-13	-45.47	Pass	V
3557.61	155	196	-48.08	-13	-35.08	Pass	V
3830.25	152	23	-51.12	-13	-38.12	Pass	V
5782.53	142	176	-50.21	-13	-37.21	Pass	V
6593.55	147	337	-47.79	-13	-34.79	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.
1329.65	154	148	-58.41	-13	-45.41	Pass	H
1764.98	142	259	-48.18	-13	-35.18	Pass	H
3922.16	146	297	-46.02	-13	-33.02	Pass	H
5910.52	142	274	-44.72	-13	-31.72	Pass	H
6506.96	144	355	-41.39	-13	-28.39	Pass	H
7997.67	153	144	-40.97	-13	-27.97	Pass	H
1230.00	158	315	-54.55	-13	-41.55	Pass	V
1467.24	145	256	-57.11	-13	-44.11	Pass	V
3514.38	146	42	-49.36	-13	-36.36	Pass	V
3826.84	156	42	-52.80	-13	-39.80	Pass	V
5756.60	156	327	-47.76	-13	-34.76	Pass	V
6583.37	159	285	-47.56	-13	-34.56	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)			
1289.42	146	106	-54.71	-25	-29.71	Pass	H
1799.77	153	5	-48.26	-25	-23.26	Pass	H
3941.51	150	357	-46.03	-25	-21.03	Pass	H
5969.40	153	98	-41.73	-25	-16.73	Pass	H
6560.64	154	156	-40.17	-25	-15.17	Pass	H
7980.25	152	137	-47.97	-25	-22.97	Pass	H
1281.52	149	353	-53.89	-25	-28.89	Pass	V
1539.39	152	274	-61.70	-25	-36.70	Pass	V
3456.21	153	357	-53.43	-25	-28.43	Pass	V
3841.09	149	226	-51.91	-25	-26.91	Pass	V
5808.78	148	320	-42.27	-25	-17.27	Pass	V
6552.28	153	335	-47.73	-25	-22.73	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)			
1388.09	155	337	-53.13	-25	-28.13	Pass	H
1713.75	151	54	-52.78	-25	-27.78	Pass	H
3803.37	153	82	-48.89	-25	-23.89	Pass	H
5985.76	150	119	-44.50	-25	-19.50	Pass	H
6541.29	154	167	-44.33	-25	-19.33	Pass	H
8034.69	148	108	-43.07	-25	-18.07	Pass	H
1240.93	152	246	-50.35	-25	-25.35	Pass	V
1522.81	154	323	-56.78	-25	-31.78	Pass	V
3468.29	150	7	-54.66	-25	-29.66	Pass	V
3804.74	149	122	-47.88	-25	-22.88	Pass	V
5764.24	146	85	-43.52	-25	-18.52	Pass	V
6514.89	153	235	-44.22	-25	-19.22	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)			
1386.08	152	305	-55.21	-25	-30.21	Pass	H
1689.44	148	193	-46.17	-25	-21.17	Pass	H
3826.10	148	193	-45.96	-25	-20.96	Pass	H
5933.31	150	123	-41.36	-25	-16.36	Pass	H
6476.46	151	85	-40.03	-25	-15.03	Pass	H
8078.83	154	311	-44.54	-25	-19.54	Pass	H
1194.95	146	329	-54.95	-25	-29.95	Pass	V
1381.62	151	84	-59.09	-25	-34.09	Pass	V
3537.64	150	191	-51.73	-25	-26.73	Pass	V
3895.94	148	220	-48.45	-25	-23.45	Pass	V
5871.53	155	346	-47.28	-25	-22.28	Pass	V
6592.36	146	291	-48.56	-25	-23.56	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)			
1339.06	149	93	-57.62	-25	-32.62	Pass	H
1724.15	154	153	-48.39	-25	-23.39	Pass	H
3912.37	146	248	-43.70	-25	-18.70	Pass	H
5950.11	148	189	-40.35	-25	-15.35	Pass	H
6603.42	151	336	-42.86	-25	-17.86	Pass	H
8059.89	148	343	-43.50	-25	-18.50	Pass	H
1304.70	151	102	-52.18	-25	-27.18	Pass	V
1541.13	152	57	-61.45	-25	-36.45	Pass	V
3539.13	150	73	-52.36	-25	-27.36	Pass	V
3793.45	152	163	-48.31	-25	-23.31	Pass	V
5872.52	148	319	-44.42	-25	-19.42	Pass	V
6531.38	151	336	-49.13	-25	-24.13	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)		
1346.66	153	130	-55.15	-25	-30.15	Pass	H
1767.99	146	288	-46.99	-25	-21.99	Pass	H
4001.01	152	202	-49.28	-25	-24.28	Pass	H
5862.03	154	71	-39.83	-25	-14.83	Pass	H
6553.72	151	128	-45.41	-25	-20.41	Pass	H
8168.59	153	293	-47.27	-25	-22.27	Pass	H
1273.23	150	38	-51.95	-25	-26.95	Pass	V
1529.70	145	233	-56.41	-25	-31.41	Pass	V
3614.05	147	195	-50.75	-25	-25.75	Pass	V
3852.60	146	160	-46.79	-25	-21.79	Pass	V
5856.98	155	194	-44.48	-25	-19.48	Pass	V
6582.92	152	67	-48.12	-25	-23.12	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)		
1400.04	149	218	-57.80	-25	-32.80	Pass	H
1607.06	151	175	-47.74	-25	-22.74	Pass	H
3872.10	151	87	-48.87	-25	-23.87	Pass	H
5823.36	150	265	-43.69	-25	-18.69	Pass	H
6603.08	146	350	-41.71	-25	-16.71	Pass	H
8105.38	147	313	-47.05	-25	-22.05	Pass	H
1138.10	145	174	-53.40	-25	-28.40	Pass	V
1428.74	154	138	-56.93	-25	-31.93	Pass	V
3546.12	151	220	-55.10	-25	-30.10	Pass	V
3891.77	146	53	-52.14	-25	-27.14	Pass	V
5812.32	155	266	-43.90	-25	-18.90	Pass	V
6600.64	149	115	-48.14	-25	-23.14	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.

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Band 41 40265 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1243.51	150	169	-52.20	-25	-27.20	Pass	H
1632.92	146	119	-51.45	-25	-26.45	Pass	H
3823.32	150	148	-45.94	-25	-20.94	Pass	H
5810.04	148	181	-38.23	-25	-13.23	Pass	H
6426.50	147	83	-44.18	-25	-19.18	Pass	H
8040.69	155	208	-48.62	-25	-23.62	Pass	H
1148.61	149	177	-56.31	-25	-31.31	Pass	V
1413.74	151	236	-57.42	-25	-32.42	Pass	V
3529.19	153	194	-49.30	-25	-24.30	Pass	V
3802.31	148	74	-47.98	-25	-22.98	Pass	V
5704.39	152	226	-44.44	-25	-19.44	Pass	V
6578.05	148	52	-43.37	-25	-18.37	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)			
1273.70	145	335	-53.83	-25	-28.83	Pass	H
1735.25	145	109	-46.73	-25	-21.73	Pass	H
3898.29	150	197	-47.32	-25	-22.32	Pass	H
5913.42	145	40	-43.23	-25	-18.23	Pass	H
6509.94	149	67	-40.93	-25	-15.93	Pass	H
8089.02	152	140	-44.31	-25	-19.31	Pass	H
1291.95	147	180	-54.35	-25	-29.35	Pass	V
1478.67	150	130	-56.78	-25	-31.78	Pass	V
3633.15	155	20	-51.46	-25	-26.46	Pass	V
3732.96	150	189	-46.57	-25	-21.57	Pass	V
5803.38	146	20	-46.55	-25	-21.55	Pass	V
6615.45	145	239	-48.97	-25	-23.97	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)			
1270.13	150	82	-57.02	-25	-32.02	Pass	H
1644.75	147	355	-50.49	-25	-25.49	Pass	H
3925.19	151	196	-47.60	-25	-22.60	Pass	H
5981.35	153	340	-41.57	-25	-16.57	Pass	H
6421.63	152	186	-43.42	-25	-18.42	Pass	H
8032.68	152	193	-46.97	-25	-21.97	Pass	H
1225.24	151	205	-53.96	-25	-28.96	Pass	V
1485.82	146	90	-61.39	-25	-36.39	Pass	V
3604.48	152	307	-54.21	-25	-29.21	Pass	V
3737.99	148	12	-47.21	-25	-22.21	Pass	V
5709.58	153	78	-45.82	-25	-20.82	Pass	V
6524.38	151	285	-49.68	-25	-24.68	Pass	V

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Band 41 40265 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)		(dBm)			
1247.15	152	210	-54.05	-25	-29.05	Pass	H
1790.55	151	305	-48.57	-25	-23.57	Pass	H
3911.22	146	124	-47.44	-25	-22.44	Pass	H
5917.18	154	342	-40.85	-25	-15.85	Pass	H
6475.02	154	356	-42.47	-25	-17.47	Pass	H
8155.10	146	34	-43.56	-25	-18.56	Pass	H
1298.59	154	170	-50.22	-25	-25.22	Pass	V
1549.64	151	98	-56.98	-25	-31.98	Pass	V
3529.36	151	89	-54.78	-25	-29.78	Pass	V
3875.69	149	2	-52.73	-25	-27.73	Pass	V
5888.69	147	292	-44.31	-25	-19.31	Pass	V
6626.60	147	256	-46.63	-25	-21.63	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)			
1433.21	150	190	-54.23	-25	-29.23	Pass	H
1632.75	149	309	-46.35	-25	-21.35	Pass	H
3929.14	150	192	-46.86	-25	-21.86	Pass	H
5950.65	151	236	-43.24	-25	-18.24	Pass	H
6536.65	149	319	-39.71	-25	-14.71	Pass	H
8119.22	151	343	-46.82	-25	-21.82	Pass	H
1241.95	151	271	-51.87	-25	-26.87	Pass	V
1428.16	149	61	-56.21	-25	-31.21	Pass	V
3508.16	146	230	-51.30	-25	-26.30	Pass	V
3820.18	151	215	-51.59	-25	-26.59	Pass	V
5756.78	153	2	-47.54	-25	-22.54	Pass	V
6491.17	149	77	-43.40	-25	-18.40	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)			
1272.92	149	106	-57.72	-25	-32.72	Pass	H
1687.89	148	23	-47.92	-25	-22.92	Pass	H
3808.96	155	258	-50.13	-25	-25.13	Pass	H
5908.45	155	211	-43.97	-25	-18.97	Pass	H
6430.71	149	190	-42.04	-25	-17.04	Pass	H
8055.09	150	263	-43.96	-25	-18.96	Pass	H
1177.94	149	158	-49.73	-25	-24.73	Pass	V
1401.35	152	184	-62.44	-25	-37.44	Pass	V
3467.62	152	279	-53.56	-25	-28.56	Pass	V
3914.86	146	144	-51.38	-25	-26.38	Pass	V
5739.88	151	156	-47.18	-25	-22.18	Pass	V
6640.95	152	60	-49.40	-25	-24.40	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 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)					
1296.70	155	271	-55.82	-40	-15.82	Pass	H
1765.70	153	111	-44.44	-40	-4.44	Pass	H
3918.23	155	2	-50.05	-40	-10.05	Pass	H
5906.88	150	275	-41.71	-40	-1.71	Pass	H
6534.54	153	324	-44.12	-40	-4.12	Pass	H
8094.32	152	349	-40.76	-40	-0.76	Pass	H
1217.65	147	314	-51.74	-40	-11.74	Pass	V
1334.30	153	303	-57.75	-40	-17.75	Pass	V
3442.57	151	194	-48.15	-40	-8.15	Pass	V
3953.49	148	323	-46.78	-40	-6.78	Pass	V
5835.58	152	157	-47.63	-40	-7.63	Pass	V
6465.59	152	318	-48.31	-40	-8.31	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)					
1309.51	148	38	-57.36	-40	-17.36	Pass	H
1820.04	149	217	-46.84	-40	-6.84	Pass	H
3922.41	151	103	-51.85	-40	-11.85	Pass	H
5982.23	148	176	-43.98	-40	-3.98	Pass	H
6457.63	150	165	-44.92	-40	-4.92	Pass	H
7964.40	154	312	-42.77	-40	-2.77	Pass	H
1222.82	153	112	-50.59	-40	-10.59	Pass	V
1347.02	153	177	-58.51	-40	-18.51	Pass	V
3621.96	150	254	-50.20	-40	-10.20	Pass	V
3838.36	146	214	-47.58	-40	-7.58	Pass	V
5850.70	152	33	-45.28	-40	-5.28	Pass	V
6550.70	152	333	-43.81	-40	-3.81	Pass	V

Band 40A 38775 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1302.45	153	66	-54.02	-40	-14.02	Pass	H
1779.43	154	184	-44.07	-40	-4.07	Pass	H
3776.14	152	134	-45.42	-40	-5.42	Pass	H
5835.51	151	218	-40.42	-40	-0.42	Pass	H
6423.43	152	120	-49.44	-40	-9.44	Pass	H
8048.16	154	172	-46.62	-40	-6.62	Pass	H
1153.57	153	262	-56.53	-40	-16.53	Pass	V
1430.19	147	181	-58.26	-40	-18.26	Pass	V
3445.45	154	44	-50.24	-40	-10.24	Pass	V
3787.69	146	342	-43.06	-40	-3.06	Pass	V
5766.70	153	242	-42.78	-40	-2.78	Pass	V
6487.57	151	241	-45.91	-40	-5.91	Pass	V
16QAM							
Band 40A 38725 channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1423.26	153	329	-51.67	-40	-11.67	Pass	H
1761.31	147	247	-45.99	-40	-5.99	Pass	H
3855.46	150	291	-50.94	-40	-10.94	Pass	H
5943.52	148	152	-42.33	-40	-2.33	Pass	H
6422.72	154	315	-49.59	-40	-9.59	Pass	H
7984.35	146	219	-47.05	-40	-7.05	Pass	H
1254.03	152	184	-55.41	-40	-15.41	Pass	V
1307.66	147	106	-60.89	-40	-20.89	Pass	V
3456.70	153	210	-48.41	-40	-8.41	Pass	V
3797.16	149	328	-42.81	-40	-2.81	Pass	V
5743.99	149	357	-42.29	-40	-2.29	Pass	V
6474.87	147	156	-43.24	-40	-3.24	Pass	V

Band 40A 38750channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1269.75	145	154	-51.89	-40	-11.89	Pass	H
1741.98	148	2	-44.18	-40	-4.18	Pass	H
3846.03	146	129	-45.23	-40	-5.23	Pass	H
5920.61	147	110	-43.27	-40	-3.27	Pass	H
6469.35	146	174	-47.83	-40	-7.83	Pass	H
8103.53	151	196	-43.09	-40	-3.09	Pass	H
1200.22	155	12	-52.15	-40	-12.15	Pass	V
1293.86	154	117	-59.40	-40	-19.40	Pass	V
3598.36	155	216	-50.01	-40	-10.01	Pass	V
3827.50	151	13	-47.03	-40	-7.03	Pass	V
5752.96	148	21	-44.74	-40	-4.74	Pass	V
6523.12	147	43	-49.34	-40	-9.34	Pass	V
Band 40A 38875 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1379.59	152	244	-56.54	-40	-16.54	Pass	H
1764.26	150	40	-44.10	-40	-4.10	Pass	H
3862.43	151	143	-50.57	-40	-10.57	Pass	H
5990.32	152	210	-41.55	-40	-1.55	Pass	H
6570.96	145	219	-44.37	-40	-4.37	Pass	H
8054.12	145	108	-45.21	-40	-5.21	Pass	H
1269.61	152	120	-55.02	-40	-15.02	Pass	V
1429.17	154	203	-59.38	-40	-19.38	Pass	V
3520.43	154	245	-49.34	-40	-9.34	Pass	V
3759.57	146	45	-45.50	-40	-5.50	Pass	V
5772.72	147	291	-42.31	-40	-2.31	Pass	V
6615.46	151	286	-48.71	-40	-8.71	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 40B 39175channel/BW 5(lowest channel)							
Frequency	Height	Azimuth	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)					
1318.93	149	231	-53.63	-40	-13.63	Pass	H
1799.23	146	35	-43.96	-40	-3.96	Pass	H
3757.44	149	243	-47.24	-40	-7.24	Pass	H
5989.09	149	237	-40.45	-40	-0.45	Pass	H
6483.80	150	29	-45.53	-40	-5.53	Pass	H
8127.62	146	18	-42.89	-40	-2.89	Pass	H
1178.53	152	11	-52.36	-40	-12.36	Pass	V
1287.70	151	132	-62.30	-40	-22.30	Pass	V
3593.06	153	201	-48.42	-40	-8.42	Pass	V
3921.73	148	196	-46.50	-40	-6.50	Pass	V
5752.95	153	210	-47.75	-40	-7.75	Pass	V
6547.41	150	330	-44.16	-40	-4.16	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)					
1288.17	153	248	-53.54	-40	-13.54	Pass	H
1632.39	146	236	-47.84	-40	-7.84	Pass	H
3820.72	148	222	-45.36	-40	-5.36	Pass	H
5862.96	145	179	-42.06	-40	-2.06	Pass	H
6532.77	148	275	-48.56	-40	-8.56	Pass	H
8056.36	153	271	-43.41	-40	-3.41	Pass	H
1130.66	153	239	-50.76	-40	-10.76	Pass	V
1380.00	151	122	-56.54	-40	-16.54	Pass	V
3544.27	147	174	-50.02	-40	-10.02	Pass	V
3841.56	149	308	-48.17	-40	-8.17	Pass	V
5786.86	146	274	-47.90	-40	-7.90	Pass	V
6608.01	149	19	-43.43	-40	-3.43	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)			
1426.65	151	288	-52.27	-40	-12.27	Pass	H
1808.73	149	56	-42.72	-40	-2.72	Pass	H
3874.95	154	35	-50.20	-40	-10.20	Pass	H
5831.53	146	244	-43.54	-40	-3.54	Pass	H
6516.06	155	342	-48.88	-40	-8.88	Pass	H
7972.18	150	17	-42.33	-40	-2.33	Pass	H
1275.78	155	111	-50.40	-40	-10.40	Pass	V
1470.22	145	32	-57.76	-40	-17.76	Pass	V
3572.45	151	316	-48.98	-40	-8.98	Pass	V
3768.75	149	320	-47.16	-40	-7.16	Pass	V
5766.25	146	247	-43.75	-40	-3.75	Pass	V
6467.80	149	209	-48.32	-40	-8.32	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)			
1311.55	148	211	-56.02	-40	-16.02	Pass	H
1820.49	155	339	-47.47	-40	-7.47	Pass	H
3930.33	151	340	-48.62	-40	-8.62	Pass	H
5851.67	145	232	-43.15	-40	-3.15	Pass	H
6430.54	152	308	-47.00	-40	-7.00	Pass	H
8060.56	148	86	-40.16	-40	-0.16	Pass	H
1273.19	153	330	-52.07	-40	-12.07	Pass	V
1431.51	145	120	-61.11	-40	-21.11	Pass	V
3586.79	150	201	-50.78	-40	-10.78	Pass	V
3767.23	151	260	-49.03	-40	-9.03	Pass	V
5909.65	155	349	-47.68	-40	-7.68	Pass	V
6575.40	146	166	-44.59	-40	-4.59	Pass	V

Band 40B 39200channel/BW 5(middle channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1346.44	154	342	-52.94	-40	-12.94	Pass	H
1692.40	147	270	-47.67	-40	-7.67	Pass	H
3759.26	151	111	-50.60	-40	-10.60	Pass	H
5854.08	147	328	-42.33	-40	-2.33	Pass	H
6452.19	155	75	-48.62	-40	-8.62	Pass	H
7979.68	150	128	-43.43	-40	-3.43	Pass	H
1165.97	147	113	-51.39	-40	-11.39	Pass	V
1387.83	146	242	-60.92	-40	-20.92	Pass	V
3465.32	154	132	-47.85	-40	-7.85	Pass	V
3808.31	155	71	-46.30	-40	-6.30	Pass	V
5887.36	154	51	-48.76	-40	-8.76	Pass	V
6501.37	149	354	-46.12	-40	-6.12	Pass	V
Band 40B 39225 channel/BW 5(highest channel)							
Frequency	Height	Azimuth	Spurious Emission Level	Limit	Over Limit	Result	Antenna Polaxis.
(MHz)	(cm)	(deg)	(dBm)	(dBm)	(dB)		
1372.51	145	242	-56.38	-40	-16.38	Pass	H
1677.98	152	3	-42.83	-40	-2.83	Pass	H
3784.23	154	175	-45.86	-40	-5.86	Pass	H
5954.53	147	191	-43.99	-40	-3.99	Pass	H
6458.68	154	187	-46.26	-40	-6.26	Pass	H
8144.45	153	51	-44.10	-40	-4.10	Pass	H
1283.91	151	15	-56.89	-40	-16.89	Pass	V
1382.83	148	51	-59.70	-40	-19.70	Pass	V
3473.99	146	134	-49.34	-40	-9.34	Pass	V
3767.22	154	129	-43.21	-40	-3.21	Pass	V
5870.51	153	113	-47.55	-40	-7.55	Pass	V
6572.97	146	277	-44.45	-40	-4.45	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=DC 3.7V; Low Voltage LV=DC 3.33V; High Voltage HV=DC 4.07V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

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