

TEST REPORT

Product Name: Elara RTU
FCC ID: 2A7MV-100-EIARA
Trademark: Galooli LTD
Model Number: 100-Elara001BB-2022-GLOBAL
Prepared For: Galooli LTD
Address: 52 Menachem begin street , Tel Aviv, Israel
Manufacturer: Galooli LTD
Address: 52 Menachem begin street , Tel Aviv, Israel
Prepared By: Shenzhen CTB Testing Technology Co., Ltd.
Address: Floor 1&2, Building A, No. 26 of Xinhe Road, Xinqiao Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong China
Sample Received Date: May. 18, 2022
Sample tested Date: May. 18, 2022 to Jun. 20, 2022
Issue Date: Jun. 20, 2022
Report No.: CTB220620003RFX
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

Compiled by:

Arron Liu

Reviewed by:

Bin Mei

Approved by:

Rita Xiao / Director

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.

TABLE OF CONTENT

Test Report Declaration	Page
1. VERSION	4
2. TEST SUMMARY	5
3. MEASUREMENT UNCERTAINTY	6
4. PRODUCT INFORMATION AND TEST SETUP	7
4.1 Product Information	7
4.2 Test Setup Configuration.....	8
4.3 Support Equipment.....	8
4.4 Test Mode	8
4.5 Test Environment	8
5. TEST FACILITY AND TEST INSTRUMENT USED	9
5.1 Test Facility	9
5.2 Test Instrument Used	9
6. RF EXPOSURE	11
6.1 Standard Applicable.....	11
6.2 Test Result.....	11
7. RF OUTPUT POWER	12
7.1 Standard Applicable.....	12
7.2 Test Procedure.....	12
7.3 Summary of Test Results/Plots.....	13
8. PEAK-TO-AVERAGE RATIO (PAR) OF TRANSMITTER	14
8.1 Standard Applicable.....	14
8.2 Test Procedure.....	14
8.3 Summary of Test Results	14
9. EMISSION BANDWIDTH	15
9.1 Standard Applicable.....	15
9.2 Test Procedure.....	15
9.3 Summary of Test Results/Plots.....	15
10. OUT OF BAND EMISSIONS AT ANTENNA TERMINAL	16
10.1 Standard Applicable.....	16
10.2 Test Procedure.....	17
10.3 Summary of Test Results/Plots.....	17

11. SPURIOUS RADIATED EMISSIONS.....	18
11.1 Standard Applicable.....	18
11.2 Test Procedure.....	19
11.3 Summary of Test Results/Plots.....	20
12. FREQUENCY STABILITY.....	45
12.1 Standard Applicable.....	45
12.2 Test Procedure.....	45
12.3 Summary of Test Results/Plots.....	45

(Note: N/A means not applicable)

1. VERSION

Report No.	Issue Date	Description	Approved
CTB220620003RFX	Jun. 20, 2022	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°C
frequency	1×10^{-7}

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s): 100-Elara001BB-2022-GLOBAL

Model Description: N/A

Hardware Version: V1.0

Software Version: V1.0

Operation Frequency: FDD-LTE BAND 2: 1850-1910MHz
FDD-LTE BAND 4: 1710-1755MHz
FDD-LTE BAND 5: 824-849MHz
FDD-LTE BAND 7: 2500-2570MHz
FDD-LTE BAND 12: 699-716MHz
FDD-LTE BAND 13: 779-785MHz
FDD-LTE BAND 25: 1850-1915MHz
TDD-LTEBAND 38: 2570-2620MHz
TDD-LTEBAND 41: 2555-2655MHz

Type of Modulation: QPSK, 16QAM

Antenna installation: External antenna

Antenna Gain: FDD-LTE BAND 2: 1.59dBi
FDD-LTE BAND 4: 4.2dBi
FDD-LTE BAND 5: 2.29dBi
FDD-LTE BAND 7: 1.59dBi
FDD-LTE BAND 12: 3.26dBi
FDD-LTE BAND 13: 4.45dBi
FDD-LTE BAND 25: 1.59dBi
TDD-LTEBAND 38: 2.06dBi
TDD-LTEBAND 41: 3.0dBi

Ratings: DC12.0V

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

Notes:

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

4.4 Test Mode

Test Mode List		
Test Mode	Description	Remark
TM1	FDD-LTE BAND 2	Low, Middle, High Channels
TM2	FDD-LTE BAND 4	Low, Middle, High Channels
TM3	FDD-LTE BAND 5	Low, Middle, High Channels
TM4	FDD-LTE BAND 7	Low, Middle, High Channels
TM5	FDD-LTE BAND 12	Low, Middle, High Channels
TM6	FDD-LTE BAND 13	Low, Middle, High Channels
TM7	FDD-LTE BAND 25	Low, Middle, High Channels
TM8	FDD-LTE BAND 38	Low, Middle, High Channels
TM9	FDD-LTE BAND 41	Low, Middle, High Channels

4.5 Test Environment

Humidity(%):	55
Atmospheric Pressure(kPa):	101.1
Normal Voltage(DC):	12V
Normal Temperature(°C)	25
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 Floor 1&2, Building A, No. 26 of Xinhe Road, Xinqiao Street, Baoan District, Shenzhen 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	Model No.	Serial No.	Calibrated date	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	2021.09.27	2022.08.05
2	Power Sensor	Agilent	U2021XA	MY56120032	2021.09.27	2022.08.05
3	Power Sensor	Agilent	U2021XA	MY56120034	2021.09.27	2022.08.05
4	Communication test set	R&S	CMW500	108058	2021.09.27	2022.08.05
5	Spectrum Analyzer	R&S	FSP40	100550	2021.09.27	2022.08.05
6	Signal Generator	Agilent	N5181A	MY49060920	2021.09.27	2022.08.16
7	Signal Generator	Agilent	N5182A	MY47420195	2021.09.27	2022.08.05
8	Communication test set	Agilent	E5515C	MY50102567	2021.09.27	2022.08.16
9	band rejection filter	Shenxiang	MSF2400-2483.5MS-1154	20181015001	2021.09.27	2022.08.05
10	band rejection filter	Shenxiang	MSF5150-5850MS-1155	20181015001	2021.09.27	2022.08.05
11	band rejection filter	Xingbo	XBLBQ-DZA120	190821-1-1	2021.09.27	2022.08.05
12	BT&WIFI Automatic test software	Microwave	MTS8310	Ver. 2.0.0.0	2021.09.27	2022.08.05
13	Rohde & Schwarz SFU Broadcast Test System	R&S	SFU	101017	2021.09.27	2022.08.05
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	2021.09.27	2022.08.05
15	234G Automatic test software	Microwave	MTS8200	Ver. 2.0.0.0	2021.09.27	2022.08.05

16	966 chamber	C.R.T.	966 Room	966	2021.09.27	2024.08.11
17	Receiver	R&S	ESPI	100362	2021.09.27	2022.08.05
18	Amplifier	HP	8447E	2945A02747	2021.09.27	2022.08.05
19	Amplifier	Agilent	8449B	3008A01838	2021.09.27	2022.08.05
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	869	2021.09.27	2022.08.07
21	Horn Antenna	Schwarzbeck	BBHA9120D	1911	2021.09.27	2022.08.08
22	Software	Fala	EZ-EMC	FA-03A2 RE	2021.09.27	2022.08.05
23	3-Loop Antenna	Daze	ZN30401	17014	2021.09.27	2022.08.05
24	loop antenna	ZHINAN	ZN30900A	/	2021.09.27	2022.08.05
25	Horn antenna	A/H/System	SAS-574	588	2021.09.27	2022.08.05
26	Amplifier	AEROFLEX	/	S/N/ 097	2021.09.27	2022.08.05

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.

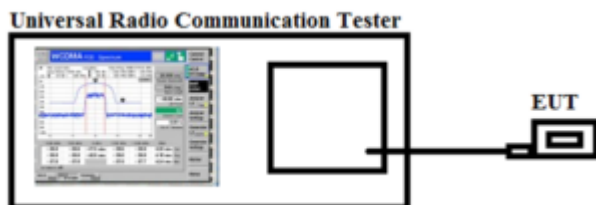
According to §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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 FCC-ID: XMR201906EG21G
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.

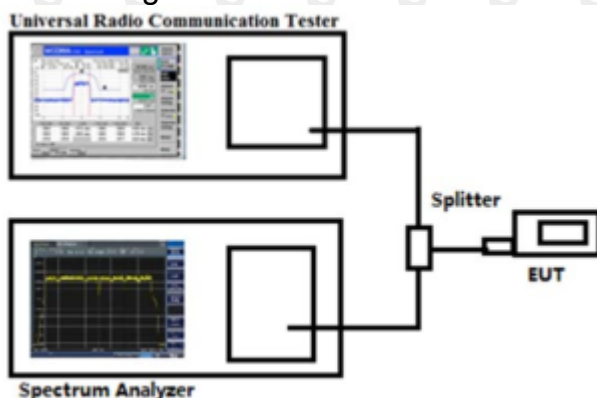
According to §27.50(B), the peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for 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 Please refer to FCC-ID: XMR201906EG21G
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.

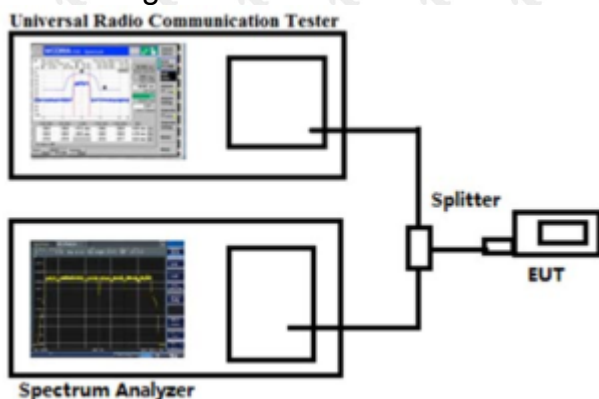
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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 FCC-ID: XMR201906EG21G
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,

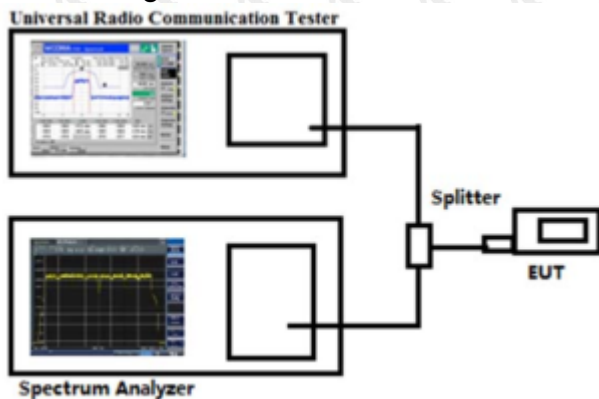
measured in watts, by at least $43 + 10 \log (P)$ dB.

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 that $43 + 10 \log (P)$ 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 Please refer to FCC-ID: XMR201906EG21G

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 $= 43 + 10 \log 10$ (power out in Watts)

11.3 Summary of Test Results/Plots

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

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

Test Data:

QPSK

Band 2 BW 20(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1406.63	145	139	-56.20	-13	-43.20	Pass	H
1750.24	142	344	-48.69	-13	-35.69	Pass	H
3818.54	144	137	-49.07	-13	-36.07	Pass	H
5795.75	152	125	-43.88	-13	-30.88	Pass	H
6444.50	142	13	-43.06	-13	-30.06	Pass	H
7968.19	148	58	-46.81	-13	-33.81	Pass	H
1261.89	148	321	-57.56	-13	-44.56	Pass	V
1487.41	142	23	-58.42	-13	-45.42	Pass	V
3471.95	151	220	-52.04	-13	-39.04	Pass	V
3915.09	142	350	-49.65	-13	-36.65	Pass	V
5899.36	157	88	-43.73	-13	-30.73	Pass	V
6507.55	149	301	-50.56	-13	-37.56	Pass	V

Band 2 BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1223.83	150	308	-54.64	-13	-41.64	Pass	H
1708.32	146	22	-54.15	-13	-41.15	Pass	H
3936.93	150	246	-52.50	-13	-39.50	Pass	H
5940.99	146	23	-47.50	-13	-34.50	Pass	H
6492.78	149	157	-50.07	-13	-37.07	Pass	H
8059.12	151	162	-51.21	-13	-38.21	Pass	H
1146.01	149	76	-53.70	-13	-40.70	Pass	V
1456.40	148	18	-59.09	-13	-46.09	Pass	V
3614.13	147	167	-54.27	-13	-41.27	Pass	V
4007.87	148	63	-52.09	-13	-39.09	Pass	V
5890.82	150	192	-46.83	-13	-33.83	Pass	V
6545.11	150	192	-50.42	-13	-37.42	Pass	V

Band 2 channel/BW 20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1294.44	150	263	-54.09	-13	-41.09	Pass	H
1807.33	146	163	-49.06	-13	-36.06	Pass	H
3877.09	150	106	-49.76	-13	-36.76	Pass	H
5797.39	146	249	-45.06	-13	-32.06	Pass	H
6398.38	149	228	-49.36	-13	-36.36	Pass	H
8036.83	151	251	-47.64	-13	-34.64	Pass	H
1280.66	149	325	-51.50	-13	-38.50	Pass	V
1467.27	148	328	-60.70	-13	-47.70	Pass	V
3505.34	147	192	-53.79	-13	-40.79	Pass	V
3848.44	148	330	-48.51	-13	-35.51	Pass	V
5745.39	150	93	-46.47	-13	-33.47	Pass	V
6557.38	150	167	-45.58	-13	-32.58	Pass	V

16QAM

Band 2 20775 channel/BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1241.26	152	344	-56.82	-13	-43.82	Pass	H
1697.44	154	141	-47.42	-13	-34.42	Pass	H
3802.85	151	60	-51.08	-13	-38.08	Pass	H
5880.64	149	253	-44.53	-13	-31.53	Pass	H
6536.24	151	72	-41.83	-13	-28.83	Pass	H
7911.50	155	79	-43.89	-13	-30.89	Pass	H
1215.47	145	264	-54.83	-13	-41.83	Pass	V
1446.73	155	221	-57.50	-13	-44.50	Pass	V
3676.18	149	250	-49.55	-13	-36.55	Pass	V
3814.54	151	250	-49.24	-13	-36.24	Pass	V
5875.90	146	3	-42.55	-13	-29.55	Pass	V
6602.77	151	249	-51.99	-13	-38.99	Pass	V

Band 2 20775 channel/BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1422.73	148	265	-51.62	-13	-41.45	Pass	H
1813.79	155	330	-53.29	-13	-37.85	Pass	H
3870.08	154	310	-45.94	-13	-35.2	Pass	H
5890.08	150	10	-40.20	-13	-30.39	Pass	H
6492.10	147	353	-47.00	-13	-32.24	Pass	H
8085.87	154	339	-39.69	-13	-30.22	Pass	H
1161.27	154	37	-59.56	-13	-44.9	Pass	V
1423.03	146	129	-56.27	-13	-43.63	Pass	V
3581.66	153	252	-51.33	-13	-35.94	Pass	V
3780.50	149	77	-45.79	-13	-36.01	Pass	V
5842.30	147	57	-44.87	-13	-33.75	Pass	V
6459.79	148	20	-46.54	-13	-32.41	Pass	V

Band 2 20775 channel/BW 20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1363.87	150	138	-58.02	-13	-45.02	Pass	H
1763.30	147	13	-47.32	-13	-34.32	Pass	H
3893.32	155	235	-47.71	-13	-34.71	Pass	H
6018.20	153	342	-47.11	-13	-34.11	Pass	H
6626.94	148	229	-41.41	-13	-28.41	Pass	H
7984.03	155	46	-40.64	-13	-27.64	Pass	H
1101.47	153	11	-53.31	-13	-40.31	Pass	V
1454.68	151	263	-55.97	-13	-42.97	Pass	V
3614.06	148	249	-48.83	-13	-35.83	Pass	V
3834.89	152	89	-53.78	-13	-40.78	Pass	V
5890.22	146	294	-47.79	-13	-34.79	Pass	V
6503.78	152	87	-49.14	-13	-36.14	Pass	V

QPSK

Band 4/BW20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1285.52	150	16	-60.45	-13	-44.67	Pass	H
1725.48	146	228	-47.42	-13	-34.41	Pass	H
3914.04	152	60	-51.92	-13	-36.9	Pass	H
5884.37	153	108	-44.84	-13	-33.07	Pass	H
6521.39	150	86	-45.51	-13	-31.79	Pass	H
8042.12	148	20	-39.81	-13	-28.84	Pass	H
1221.32	147	300	-55.29	-13	-41.24	Pass	V
1421.19	149	348	-53.29	-13	-43.57	Pass	V
3626.07	145	13	-51.04	-13	-37.85	Pass	V
3826.40	148	216	-53.16	-13	-38.46	Pass	V
5937.30	154	27	-43.42	-13	-32.52	Pass	V
6659.82	151	212	-50.63	-13	-35.32	Pass	V

Band 4/BW20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1242.96	151	92	-57.49	-13	-44.49	Pass	H
1774.18	149	129	-51.73	-13	-38.73	Pass	H
3915.27	150	352	-45.15	-13	-32.15	Pass	H
5901.71	148	276	-44.96	-13	-31.96	Pass	H
6548.49	147	112	-41.33	-13	-28.33	Pass	H
8132.41	148	25	-44.02	-13	-31.02	Pass	H
1110.08	150	8	-53.70	-13	-40.70	Pass	V
1319.21	146	320	-62.16	-13	-49.16	Pass	V
3510.21	149	174	-51.84	-13	-38.84	Pass	V
3840.81	155	12	-48.07	-13	-35.07	Pass	V
5795.23	153	313	-45.45	-13	-32.45	Pass	V
6498.77	152	307	-44.94	-13	-31.94	Pass	V

Band 4/BW20 (highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1386.76	150	302	-55.33	-13	-42.33	Pass	H
1740.70	147	15	-49.31	-13	-36.31	Pass	H
3810.37	150	241	-46.03	-13	-33.03	Pass	H
5926.80	152	220	-44.00	-13	-31.00	Pass	H
6417.77	151	123	-44.20	-13	-31.20	Pass	H
7970.55	146	39	-47.50	-13	-34.50	Pass	H
1139.48	149	157	-53.79	-13	-40.79	Pass	V
1393.06	153	69	-62.44	-13	-49.44	Pass	V
3604.52	155	326	-47.81	-13	-34.81	Pass	V
3772.49	151	195	-48.55	-13	-35.55	Pass	V
5727.82	151	360	-46.46	-13	-33.46	Pass	V
6612.44	151	307	-42.89	-13	-29.89	Pass	V

16QAM

Band 4/BW20 (lowest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1419.82	151	199	-58.46	-13	-44.67	Pass	H
1736.29	152	226	-44.11	-13	-34.41	Pass	H
3768.15	151	226	-48.27	-13	-36.9	Pass	H
5882.25	152	246	-46.17	-13	-33.07	Pass	H
6517.61	154	330	-44.33	-13	-31.79	Pass	H
8028.45	148	103	-42.19	-13	-28.84	Pass	H
1124.43	153	7	-55.41	-13	-41.24	Pass	V
1436.27	150	58	-56.53	-13	-43.57	Pass	V
3679.31	146	277	-49.70	-13	-37.85	Pass	V
3937.27	150	77	-50.49	-13	-38.46	Pass	V
5924.54	150	351	-47.53	-13	-32.52	Pass	V
6574.41	147	253	-45.70	-13	-35.32	Pass	V

Band 4/BW20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1435.68	149	247	-56.75	-13	-44.67	Pass	H
1647.67	152	318	-47.77	-13	-34.41	Pass	H
3799.87	153	196	-51.81	-13	-36.9	Pass	H
5989.71	147	332	-46.36	-13	-33.07	Pass	H
6629.76	148	261	-46.20	-13	-31.79	Pass	H
8009.45	150	30	-38.19	-13	-28.84	Pass	H
1129.71	146	248	-53.77	-13	-41.24	Pass	V
1404.45	153	23	-53.48	-13	-43.57	Pass	V
3577.79	145	273	-50.07	-13	-37.85	Pass	V
3960.03	153	222	-52.15	-13	-38.46	Pass	V
5899.46	151	266	-45.21	-13	-32.52	Pass	V
6492.64	154	330	-45.96	-13	-35.32	Pass	V

Band 4/BW20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1304.49	153	340	-56.68	-13	-43.68	Pass	H
1673.88	153	56	-46.43	-13	-33.43	Pass	H
3944.07	153	118	-48.00	-13	-35.00	Pass	H
5943.80	149	171	-41.86	-13	-28.86	Pass	H
6469.41	149	216	-45.68	-13	-32.68	Pass	H
7962.10	148	77	-44.69	-13	-31.69	Pass	H
1164.77	148	19	-59.73	-13	-46.73	Pass	V
1334.89	147	226	-57.53	-13	-44.53	Pass	V
3453.89	154	242	-49.75	-13	-36.75	Pass	V
3809.10	153	167	-46.13	-13	-33.13	Pass	V
5871.13	149	86	-44.65	-13	-31.65	Pass	V
6509.21	149	261	-45.80	-13	-32.80	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.

QPSK

Band 5 /BW 10 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1313.63	150	78	-59.05	-13	-46.05	1313.63	H
1712.53	149	291	-49.32	-13	-36.32	1712.53	H
3806.30	151	213	-46.95	-13	-33.95	3806.30	H
5846.98	150	89	-42.95	-13	-29.95	5846.98	H
6539.74	151	329	-45.94	-13	-32.94	6539.74	H
7969.35	148	138	-45.18	-13	-32.18	7969.35	H
1119.79	149	99	-54.61	-13	-41.61	1119.79	V
1390.00	148	217	-56.55	-13	-43.55	1390.00	V
3585.59	150	12	-52.79	-13	-39.79	3585.59	V
3794.27	150	137	-45.77	-13	-32.77	3794.27	V
5781.01	146	356	-42.57	-13	-29.57	5781.01	V
6521.02	146	95	-50.59	-13	-37.59	6521.02	V

Band 5 /BW 10 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1281.26	150	142	-55.11	-13	-42.11	Pass	H
1710.82	146	280	-50.96	-13	-37.96	Pass	H
3786.42	150	330	-51.40	-13	-38.40	Pass	H
5783.49	146	194	-46.36	-13	-33.36	Pass	H
6541.43	149	260	-52.57	-13	-39.57	Pass	H
8049.16	151	31	-45.20	-13	-32.20	Pass	H
1147.04	149	4	-50.76	-13	-37.76	Pass	V
1312.34	148	257	-63.61	-13	-50.61	Pass	V
3610.94	147	55	-54.37	-13	-41.37	Pass	V
3954.04	148	273	-55.41	-13	-42.41	Pass	V
5778.96	150	136	-49.79	-13	-36.79	Pass	V
6560.74	150	16	-51.65	-13	-38.65	Pass	V

Band 5 /BW 10 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1229.81	150	256	-55.35	-13	-42.35	Pass	H
1705.66	146	220	-53.19	-13	-40.19	Pass	H
3950.80	150	327	-49.31	-13	-36.31	Pass	H
5838.50	146	174	-43.20	-13	-30.20	Pass	H
6381.97	149	8	-51.60	-13	-38.60	Pass	H
8054.00	151	6	-50.87	-13	-37.87	Pass	H
1247.22	149	14	-56.47	-13	-43.47	Pass	V
1452.18	148	279	-59.45	-13	-46.45	Pass	V
3521.50	147	186	-53.53	-13	-40.53	Pass	V
3926.62	148	338	-53.16	-13	-40.16	Pass	V
5737.32	150	214	-49.05	-13	-36.05	Pass	V
6614.98	150	254	-47.93	-13	-34.93	Pass	V

16QAM

Band 5 /BW 10 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1321.58	150	239	-59.07	-13	-46.07	Pass	H
1776.01	146	246	-50.62	-13	-37.62	Pass	H
3956.73	150	181	-53.20	-13	-40.20	Pass	H
5797.99	146	26	-44.84	-13	-31.84	Pass	H
6470.44	149	233	-51.54	-13	-38.54	Pass	H
8024.93	151	165	-50.96	-13	-37.96	Pass	H
1188.86	149	147	-56.44	-13	-43.44	Pass	V
1445.67	148	287	-59.73	-13	-46.73	Pass	V
3569.37	147	170	-52.64	-13	-39.64	Pass	V
3902.23	148	349	-48.40	-13	-35.40	Pass	V
5895.79	150	122	-47.03	-13	-34.03	Pass	V
6553.21	150	65	-47.52	-13	-34.52	Pass	V

Band 5 /BW 10 (middle channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1379.58	150	311	-54.43	-13	-41.43	Pass	H
1619.02	146	44	-52.50	-13	-39.50	Pass	H
3831.43	150	264	-47.93	-13	-34.93	Pass	H
5771.44	146	301	-43.57	-13	-30.57	Pass	H
6458.22	149	283	-48.28	-13	-35.28	Pass	H
8080.96	151	99	-46.33	-13	-33.33	Pass	H
1141.53	149	134	-53.98	-13	-40.98	Pass	V
1303.23	148	168	-57.15	-13	-44.15	Pass	V
3572.38	147	166	-51.81	-13	-38.81	Pass	V
3849.37	148	289	-49.07	-13	-36.07	Pass	V
5904.99	150	100	-48.31	-13	-35.31	Pass	V
6527.55	150	143	-49.70	-13	-36.70	Pass	V

Band 5 /BW 10 (highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1343.46	150	309	-54.75	-13	-41.75	Pass	H
1679.75	146	130	-52.74	-13	-39.74	Pass	H
3941.35	150	270	-48.83	-13	-35.83	Pass	H
5804.10	146	117	-46.96	-13	-33.96	Pass	H
6358.89	149	38	-47.12	-13	-34.12	Pass	H
8032.90	151	115	-47.01	-13	-34.01	Pass	H
1287.38	149	300	-54.88	-13	-41.88	Pass	V
1409.70	148	70	-60.19	-13	-47.19	Pass	V
3552.54	147	169	-53.83	-13	-40.83	Pass	V
3950.45	148	130	-51.17	-13	-38.17	Pass	V
5860.80	150	259	-50.25	-13	-37.25	Pass	V
6520.87	150	103	-45.30	-13	-32.30	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.

QPSK

Band 7 /BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1309.43	150	142	-57.71	-13	-44.71	Pass	H
1788.41	146	280	-55.52	-13	-42.52	Pass	H
3806.77	150	330	-46.30	-13	-33.30	Pass	H
5866.33	146	194	-42.57	-13	-29.57	Pass	H
6508.61	149	260	-49.21	-13	-36.21	Pass	H
8086.20	151	31	-45.32	-13	-32.32	Pass	H
1173.47	149	4	-56.08	-13	-43.08	Pass	V
1485.82	148	257	-61.12	-13	-48.12	Pass	V
3523.51	147	55	-50.09	-13	-37.09	Pass	V
3814.78	148	273	-50.90	-13	-37.90	Pass	V
5740.74	150	136	-48.10	-13	-35.10	Pass	V
6465.54	150	16	-47.08	-13	-34.08	Pass	V

Band 7 /BW 20 channel/BW 5(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1207.67	150	142	-57.34	-13	-44.34	Pass	H
1623.92	146	280	-56.06	-13	-43.06	Pass	H
3976.12	150	330	-46.46	-13	-33.46	Pass	H
5926.23	146	194	-45.62	-13	-32.62	Pass	H
6532.91	149	260	-52.34	-13	-39.34	Pass	H
8082.97	151	31	-44.99	-13	-31.99	Pass	H
1243.60	149	4	-52.01	-13	-39.01	Pass	V
1356.87	148	257	-63.26	-13	-50.26	Pass	V
3505.39	147	55	-54.32	-13	-41.32	Pass	V
3973.06	148	273	-55.25	-13	-42.25	Pass	V
5827.37	150	136	-50.22	-13	-37.22	Pass	V
6514.96	150	16	-48.16	-13	-35.16	Pass	V

Band 7 /BW 20 channel/BW 5(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1239.30	149	156	-57.28	-13	-44.28	Pass	H
1604.82	149	170	-53.16	-13	-40.16	Pass	H
3758.57	149	127	-45.48	-13	-32.48	Pass	H
5827.31	146	42	-41.82	-13	-28.82	Pass	H
6507.06	147	69	-39.51	-13	-26.51	Pass	H
7948.35	151	110	-48.96	-13	-35.96	Pass	H
1211.50	148	61	-51.47	-13	-38.47	Pass	V
1371.82	147	266	-53.15	-13	-40.15	Pass	V
3458.24	148	303	-50.52	-13	-37.52	Pass	V
3808.58	149	195	-46.52	-13	-33.52	Pass	V
5735.54	147	323	-46.34	-13	-33.34	Pass	V
6527.84	146	325	-47.23	-13	-34.23	Pass	V

16QAM

Band 7 /BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1198.00	150	142	-55.16	-13	-42.16	Pass	H
1733.62	146	280	-55.66	-13	-42.66	Pass	H
3886.15	150	330	-45.73	-13	-32.73	Pass	H
5794.34	146	194	-44.23	-13	-31.23	Pass	H
6391.87	149	260	-52.00	-13	-39.00	Pass	H
8101.10	151	31	-44.91	-13	-31.91	Pass	H
1214.11	149	4	-50.84	-13	-37.84	Pass	V
1410.85	148	257	-59.85	-13	-46.85	Pass	V
3510.53	147	55	-53.67	-13	-40.67	Pass	V
3921.39	148	273	-49.63	-13	-36.63	Pass	V
5899.25	150	136	-51.98	-13	-38.98	Pass	V
6464.53	150	16	-47.05	-13	-34.05	Pass	V

Band 7 /BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1323.37	149	156	-55.98	-13	-42.98	Pass	H
1599.79	149	170	-50.98	-13	-37.98	Pass	H
3831.98	149	127	-46.67	-13	-33.67	Pass	H
5910.82	146	42	-39.25	-13	-26.25	Pass	H
6509.54	147	69	-40.83	-13	-27.83	Pass	H
7984.27	151	110	-48.74	-13	-35.74	Pass	H
1185.40	148	61	-53.68	-13	-40.68	Pass	V
1373.74	147	266	-51.40	-13	-38.40	Pass	V
3499.33	148	303	-49.23	-13	-36.23	Pass	V
3826.18	149	195	-45.01	-13	-32.01	Pass	V
5721.20	147	323	-47.57	-13	-34.57	Pass	V
6538.39	146	325	-44.66	-13	-31.66	Pass	V

Band 7 /BW 20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1295.11	149	156	-59.76	-13	-46.76	Pass	H
1650.91	149	170	-53.09	-13	-40.09	Pass	H
3833.34	149	127	-48.17	-13	-35.17	Pass	H
5833.89	146	42	-42.01	-13	-29.01	Pass	H
6438.66	147	69	-45.55	-13	-32.55	Pass	H
7904.96	151	110	-44.71	-13	-31.71	Pass	H
1208.86	148	61	-50.04	-13	-37.04	Pass	V
1368.23	147	266	-52.17	-13	-39.17	Pass	V
3439.58	148	303	-48.37	-13	-35.37	Pass	V
3860.41	149	195	-45.84	-13	-32.84	Pass	V
5755.00	147	323	-46.99	-13	-33.99	Pass	V
6577.43	146	325	-44.11	-13	-31.11	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.

QPSK

Band 12 BW 10 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1334.82	150	3	-58.71	-13	-45.71	Pass	H
1627.68	146	72	-48.86	-13	-35.86	Pass	H
3811.42	150	210	-53.26	-13	-40.26	Pass	H
5949.67	146	53	-47.05	-13	-34.05	Pass	H
6363.23	149	153	-50.37	-13	-37.37	Pass	H
8024.33	151	10	-49.66	-13	-36.66	Pass	H
1222.91	149	250	-52.99	-13	-39.99	Pass	V
1378.14	148	219	-61.12	-13	-48.12	Pass	V
3575.52	147	86	-52.54	-13	-39.54	Pass	V
3934.21	148	122	-49.32	-13	-36.32	Pass	V
5783.91	150	312	-47.09	-13	-34.09	Pass	V
6446.57	150	317	-50.80	-13	-37.80	Pass	V

Band 12 BW 10 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1238.34	153	21	-59.80	-13	-46.80	Pass	H
1697.29	151	57	-48.51	-13	-35.51	Pass	H
3795.58	152	332	-47.78	-13	-34.78	Pass	H
5953.54	149	237	-46.52	-13	-33.52	Pass	H
6639.82	148	355	-44.88	-13	-31.88	Pass	H
8024.56	151	207	-41.22	-13	-28.22	Pass	H
1235.21	152	206	-51.65	-13	-38.65	Pass	V
1500.53	147	235	-54.52	-13	-41.52	Pass	V
3606.35	146	57	-52.68	-13	-39.68	Pass	V
3883.77	147	139	-52.91	-13	-39.91	Pass	V
5781.96	153	64	-47.28	-13	-34.28	Pass	V
6605.04	151	317	-50.78	-13	-37.78	Pass	V

Band 12 BW 10 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1331.88	146	92	-53.19	-13	-41.45	Pass	H
1667.81	152	336	-48.57	-13	-37.85	Pass	H
3897.36	148	327	-47.71	-13	-35.2	Pass	H
5893.37	146	137	-45.56	-13	-30.39	Pass	H
6539.94	145	347	-47.86	-13	-32.24	Pass	H
8125.80	151	302	-44.01	-13	-30.22	Pass	H
1166.32	150	6	-56.53	-13	-44.9	Pass	V
1287.90	152	190	-58.27	-13	-43.63	Pass	V
3505.44	151	49	-48.29	-13	-35.94	Pass	V
3907.91	148	286	-47.31	-13	-36.01	Pass	V
5855.98	146	280	-44.35	-13	-33.75	Pass	V
6572.75	150	61	-44.41	-13	-32.41	Pass	V

16QAM

Band 12 BW 10 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1403.97	147	13	-54.45	-13	-41.45	Pass	H
1791.55	152	151	-48.87	-13	-35.87	Pass	H
3860.23	147	134	-42.82	-13	-29.82	Pass	H
5863.08	146	250	-44.85	-13	-31.85	Pass	H
6497.05	150	118	-42.20	-13	-29.20	Pass	H
8013.15	152	168	-41.93	-13	-28.93	Pass	H
1173.31	154	184	-52.63	-13	-39.63	Pass	V
1418.05	147	173	-61.30	-13	-48.30	Pass	V
3454.18	148	96	-48.49	-13	-35.49	Pass	V
3889.71	149	243	-49.71	-13	-36.71	Pass	V
5872.76	155	120	-49.00	-13	-36.00	Pass	V
6654.53	145	35	-46.95	-13	-33.95	Pass	V

Band 12 BW 10 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1355.36	146	99	-57.63	-13	-44.67	Pass	H
1659.90	151	229	-44.76	-13	-34.41	Pass	H
3821.19	148	243	-46.62	-13	-36.9	Pass	H
5876.11	148	39	-42.08	-13	-33.07	Pass	H
6636.46	153	198	-46.88	-13	-31.79	Pass	H
7985.40	151	174	-39.82	-13	-28.84	Pass	H
1260.61	154	265	-52.56	-13	-41.24	Pass	V
1440.33	151	189	-56.90	-13	-43.57	Pass	V
3681.99	150	337	-51.08	-13	-37.85	Pass	V
3997.36	148	216	-53.24	-13	-38.46	Pass	V
5931.93	154	203	-46.23	-13	-32.52	Pass	V
6599.65	149	255	-50.52	-13	-35.32	Pass	V

Band 12 BW 10 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1301.85	150	219	-56.07	-13	-44.67	Pass	H
1702.44	150	93	-46.71	-13	-34.41	Pass	H
3902.44	149	227	-52.04	-13	-36.9	Pass	H
5918.32	153	272	-46.85	-13	-33.07	Pass	H
6521.35	150	346	-41.29	-13	-31.79	Pass	H
8012.12	150	72	-38.24	-13	-28.84	Pass	H
1268.33	153	86	-56.17	-13	-41.24	Pass	V
1425.07	147	264	-55.09	-13	-43.57	Pass	V
3641.20	152	192	-47.86	-13	-37.85	Pass	V
3926.29	151	103	-49.07	-13	-38.46	Pass	V
5850.63	154	136	-42.01	-13	-32.52	Pass	V
6577.86	148	110	-51.14	-13	-35.32	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.

QPSK

Band 13 BW 10 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1407.87	147	100	-59.56	-13	-44.67	Pass	H
1728.97	147	204	-49.91	-13	-34.41	Pass	H
3891.02	148	254	-49.96	-13	-36.9	Pass	H
5890.78	153	177	-48.91	-13	-33.07	Pass	H
6612.85	147	296	-41.49	-13	-31.79	Pass	H
7937.22	151	92	-44.77	-13	-28.84	Pass	H
1092.66	145	342	-52.15	-13	-41.24	Pass	V
1457.45	149	316	-54.40	-13	-43.57	Pass	V
3626.69	155	209	-51.62	-13	-37.85	Pass	V
3807.65	151	251	-51.65	-13	-38.46	Pass	V
5765.59	145	14	-46.93	-13	-32.52	Pass	V
6564.55	150	279	-49.05	-13	-35.32	Pass	V

16QAM

Band 13 BW 10 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1368.42	145	166	-56.68	-13	-44.67	Pass	H
1779.16	147	27	-50.03	-13	-34.41	Pass	H
3798.97	155	325	-52.36	-13	-36.9	Pass	H
5956.27	149	271	-48.85	-13	-33.07	Pass	H
6551.68	150	72	-41.85	-13	-31.79	Pass	H
8036.86	153	265	-38.84	-13	-28.84	Pass	H
1255.73	146	345	-52.69	-13	-41.24	Pass	V
1509.27	146	195	-55.41	-13	-43.57	Pass	V
3496.56	152	107	-50.86	-13	-37.85	Pass	V
3872.38	151	167	-49.54	-13	-38.46	Pass	V
5895.21	154	349	-41.62	-13	-32.52	Pass	V
6674.62	155	146	-46.59	-13	-35.32	Pass	V

QPSK

Band 25 BW20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1412.47	150	23	-57.90	-13	-44.67	Pass	H
1782.21	154	197	-47.24	-13	-34.41	Pass	H
3804.95	152	282	-49.37	-13	-36.9	Pass	H
5884.64	150	281	-45.74	-13	-33.07	Pass	H
6534.10	153	219	-44.02	-13	-31.79	Pass	H
7963.84	146	176	-44.06	-13	-28.84	Pass	H
1218.24	149	137	-50.86	-13	-41.24	Pass	V
1455.01	152	161	-58.08	-13	-43.57	Pass	V
3591.73	155	359	-47.27	-13	-37.85	Pass	V
3848.17	147	339	-54.14	-13	-38.46	Pass	V
5795.31	154	234	-45.59	-13	-32.52	Pass	V
6607.02	145	179	-49.15	-13	-35.32	Pass	V

Band 25 BW20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1326.10	150	207	-53.80	-13	-44.67	Pass	H
1626.66	152	54	-48.51	-13	-34.41	Pass	H
3960.42	152	304	-46.06	-13	-36.9	Pass	H
5898.25	147	131	-48.70	-13	-33.07	Pass	H
6539.16	149	98	-43.85	-13	-31.79	Pass	H
7969.91	150	180	-43.83	-13	-28.84	Pass	H
1218.98	149	222	-56.17	-13	-41.24	Pass	V
1414.36	153	10	-57.12	-13	-43.57	Pass	V
3502.56	151	55	-49.89	-13	-37.85	Pass	V
4000.12	149	260	-49.37	-13	-38.46	Pass	V
5782.20	146	54	-44.09	-13	-32.52	Pass	V
6663.24	146	347	-46.13	-13	-35.32	Pass	V

Band 25 BW20 (highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1282.63	153	121	-57.03	-13	-44.67	Pass	H
1688.66	153	22	-47.88	-13	-34.41	Pass	H
3954.15	152	249	-51.93	-13	-36.9	Pass	H
5845.83	148	106	-43.66	-13	-33.07	Pass	H
6639.81	150	289	-44.29	-13	-31.79	Pass	H
7997.73	153	236	-38.04	-13	-28.84	Pass	H
1222.77	146	100	-50.42	-13	-41.24	Pass	V
1397.73	152	290	-55.36	-13	-43.57	Pass	V
3636.31	146	9	-50.43	-13	-37.85	Pass	V
3976.50	154	36	-52.60	-13	-38.46	Pass	V
5775.42	147	236	-43.01	-13	-32.52	Pass	V
6505.11	152	116	-48.95	-13	-35.32	Pass	V

16QAM

Band 25 BW20 (lowest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1370.01	152	273	-57.70	-13	-44.67	Pass	H
1721.86	150	320	-45.17	-13	-34.41	Pass	H
3833.19	146	133	-50.55	-13	-36.9	Pass	H
5905.65	150	25	-45.05	-13	-33.07	Pass	H
6598.38	153	63	-41.00	-13	-31.79	Pass	H
8033.61	146	348	-39.35	-13	-28.84	Pass	H
1087.11	148	124	-53.37	-13	-41.24	Pass	V
1410.27	147	88	-58.36	-13	-43.57	Pass	V
3684.62	146	175	-48.58	-13	-37.85	Pass	V
3824.27	147	266	-50.69	-13	-38.46	Pass	V
5867.70	148	165	-44.51	-13	-32.52	Pass	V
6542.19	154	269	-49.09	-13	-35.32	Pass	V

Band 25 BW20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1321.28	150	178	-54.40	-13	-44.67	Pass	H
1768.12	146	10	-48.20	-13	-34.41	Pass	H
3802.93	151	340	-48.05	-13	-36.9	Pass	H
5898.59	146	213	-46.00	-13	-33.07	Pass	H
6632.14	153	16	-45.40	-13	-31.79	Pass	H
8018.95	154	285	-39.90	-13	-28.84	Pass	H
1208.16	149	228	-50.74	-13	-41.24	Pass	V
1354.56	155	280	-55.38	-13	-43.57	Pass	V
3603.97	150	85	-47.00	-13	-37.85	Pass	V
3857.71	154	237	-47.90	-13	-38.46	Pass	V
5826.00	150	228	-45.25	-13	-32.52	Pass	V
6561.39	148	212	-46.30	-13	-35.32	Pass	V

Band 25 BW20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1243.12	147	260	-57.44	-13	-44.67	Pass	H
1751.16	155	74	-44.15	-13	-34.41	Pass	H
3912.45	150	151	-52.14	-13	-36.9	Pass	H
5985.17	146	80	-43.08	-13	-33.07	Pass	H
6538.34	155	211	-44.25	-13	-31.79	Pass	H
7997.18	151	345	-39.14	-13	-28.84	Pass	H
1244.73	148	260	-52.32	-13	-41.24	Pass	V
1420.26	151	29	-58.39	-13	-43.57	Pass	V
3578.81	152	26	-52.22	-13	-37.85	Pass	V
3979.08	151	214	-50.73	-13	-38.46	Pass	V
5879.96	148	55	-45.31	-13	-32.52	Pass	V
6590.53	150	334	-45.39	-13	-35.32	Pass	V

Note:

3) 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.

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 38 /BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1370.12	148	17	-60.34	-13	-44.67	Pass	H
1665.05	152	84	-47.04	-13	-34.41	Pass	H
3940.84	153	228	-52.52	-13	-36.9	Pass	H
5830.46	154	42	-47.64	-13	-33.07	Pass	H
6596.46	150	80	-45.81	-13	-31.79	Pass	H
8050.17	146	353	-42.05	-13	-28.84	Pass	H
1192.57	150	180	-53.75	-13	-41.24	Pass	V
1350.87	149	177	-57.07	-13	-43.57	Pass	V
3511.21	146	359	-49.12	-13	-37.85	Pass	V
3989.19	153	216	-49.35	-13	-38.46	Pass	V
5895.09	150	17	-44.07	-13	-32.52	Pass	V
6629.80	146	133	-45.79	-13	-35.32	Pass	V

Band 38 /BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1367.88	151	56	-56.42	-13	-44.67	Pass	H
1638.30	153	278	-45.95	-13	-34.41	Pass	H
3768.12	151	91	-52.30	-13	-36.9	Pass	H
5979.73	148	282	-45.65	-13	-33.07	Pass	H
6529.42	149	273	-43.16	-13	-31.79	Pass	H
7911.24	155	226	-39.12	-13	-28.84	Pass	H
1156.13	152	280	-54.52	-13	-41.24	Pass	V
1477.09	152	243	-58.02	-13	-43.57	Pass	V
3528.47	146	171	-47.58	-13	-37.85	Pass	V
3811.32	145	350	-52.26	-13	-38.46	Pass	V
5753.28	155	196	-43.15	-13	-32.52	Pass	V
6547.86	153	223	-47.65	-13	-35.32	Pass	V

Band 38 /BW 20 (highest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1357.87	153	85	-57.74	-13	-44.67	Pass	H
1660.20	153	39	-46.73	-13	-34.41	Pass	H
3803.30	155	94	-50.29	-13	-36.9	Pass	H
5988.07	153	30	-49.01	-13	-33.07	Pass	H
6505.99	153	209	-40.89	-13	-31.79	Pass	H
8088.65	149	190	-40.93	-13	-28.84	Pass	H
1245.19	151	280	-53.79	-13	-41.24	Pass	V
1395.37	150	8	-55.37	-13	-43.57	Pass	V
3540.63	149	178	-47.29	-13	-37.85	Pass	V
3941.80	149	7	-53.21	-13	-38.46	Pass	V
5897.31	152	345	-44.08	-13	-32.52	Pass	V
6618.38	148	88	-45.78	-13	-35.32	Pass	V

16QAM

Band 38 /BW 20 (lowest channel)

Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1250.63	147	168	-55.79	-13	-44.67	Pass	H
1741.79	147	60	-48.17	-13	-34.41	Pass	H
3807.77	146	355	-48.42	-13	-36.9	Pass	H
5911.74	153	135	-42.55	-13	-33.07	Pass	H
6468.48	148	193	-43.20	-13	-31.79	Pass	H
8026.74	148	219	-41.50	-13	-28.84	Pass	H
1228.92	151	355	-52.64	-13	-41.24	Pass	V
1424.22	149	125	-53.01	-13	-43.57	Pass	V
3502.34	153	39	-49.30	-13	-37.85	Pass	V
3952.82	148	189	-48.85	-13	-38.46	Pass	V
5879.69	151	173	-45.82	-13	-32.52	Pass	V
6539.91	147	277	-49.95	-13	-35.32	Pass	V

Band 38 /BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1415.04	153	195	-57.14	-13	-44.67	Pass	H
1610.60	148	194	-43.90	-13	-34.41	Pass	H
3796.78	148	126	-47.36	-13	-36.9	Pass	H
5966.47	147	303	-44.20	-13	-33.07	Pass	H
6512.90	154	248	-40.93	-13	-31.79	Pass	H
7955.97	153	337	-42.23	-13	-28.84	Pass	H
1238.72	148	200	-50.36	-13	-41.24	Pass	V
1491.86	148	130	-53.57	-13	-43.57	Pass	V
3666.21	154	250	-47.71	-13	-37.85	Pass	V
3830.56	152	251	-53.20	-13	-38.46	Pass	V
5794.87	154	23	-44.97	-13	-32.52	Pass	V
6562.48	147	270	-47.21	-13	-35.32	Pass	V

Band 38 /BW 20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1335.06	150	51	-55.98	-13	-44.67	Pass	H
1750.28	154	45	-46.99	-13	-34.41	Pass	H
3914.24	146	224	-52.21	-13	-36.9	Pass	H
5966.99	151	313	-45.79	-13	-33.07	Pass	H
6650.85	154	344	-44.59	-13	-31.79	Pass	H
7952.90	150	185	-38.24	-13	-28.84	Pass	H
1157.41	150	164	-51.37	-13	-41.24	Pass	V
1481.11	151	25	-59.48	-13	-43.57	Pass	V
3561.23	154	179	-47.64	-13	-37.85	Pass	V
3996.87	150	193	-53.79	-13	-38.46	Pass	V
5770.01	148	349	-47.56	-13	-32.52	Pass	V
6485.29	147	180	-48.90	-13	-35.32	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.

QPSK

Band 41 BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1237.56	149	165	-53.93	-25	-28.93	Pass	H
1763.10	146	208	-52.83	-25	-27.83	Pass	H
3816.92	146	4	-47.60	-25	-22.60	Pass	H
5854.42	150	198	-39.65	-25	-14.65	Pass	H
6449.76	146	341	-46.09	-25	-21.09	Pass	H
8029.97	150	235	-41.95	-25	-16.95	Pass	H
1191.46	146	292	-52.40	-25	-27.40	Pass	V
1557.65	150	158	-60.07	-25	-35.07	Pass	V
3509.20	149	55	-50.63	-25	-25.63	Pass	V
3780.43	150	319	-50.12	-25	-25.12	Pass	V
5708.15	146	118	-42.79	-25	-17.79	Pass	V
6584.83	150	155	-48.18	-25	-23.18	Pass	V

Band 41 BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1386.96	149	165	-55.01	-25	-30.01	Pass	H
1796.81	146	208	-51.36	-25	-26.36	Pass	H
3827.83	146	4	-50.02	-25	-25.02	Pass	H
5794.02	150	198	-39.89	-25	-14.89	Pass	H
6564.32	146	341	-44.96	-25	-19.96	Pass	H
8102.59	150	235	-48.01	-25	-23.01	Pass	H
1164.46	146	292	-51.38	-25	-26.38	Pass	V
1443.62	150	158	-59.99	-25	-34.99	Pass	V
3457.17	149	55	-50.28	-25	-25.28	Pass	V
3899.81	150	319	-46.17	-25	-21.17	Pass	V
5772.18	146	118	-42.83	-25	-17.83	Pass	V
6621.82	150	155	-49.00	-25	-24.00	Pass	V

Band 41 BW 20 (highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1381.99	149	165	-55.30	-25	-30.30	Pass	H
1778.73	146	208	-51.35	-25	-26.35	Pass	H
3891.83	146	4	-46.13	-25	-21.13	Pass	H
5824.95	150	198	-43.22	-25	-18.22	Pass	H
6522.03	146	341	-43.52	-25	-18.52	Pass	H
8001.22	150	235	-48.66	-25	-23.66	Pass	H
1253.25	146	292	-51.01	-25	-26.01	Pass	V
1468.51	150	158	-60.54	-25	-35.54	Pass	V
3565.70	149	55	-48.21	-25	-23.21	Pass	V
3871.53	150	319	-51.83	-25	-26.83	Pass	V
5779.61	146	118	-45.00	-25	-20.00	Pass	V
6548.04	150	155	-46.53	-25	-21.53	Pass	V

16QAM

Band 41 BW 20 (lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1377.84	149	165	-52.18	-25	-27.18	Pass	H
1689.60	146	208	-49.14	-25	-24.14	Pass	H
3980.52	146	4	-47.08	-25	-22.08	Pass	H
5881.59	150	198	-38.69	-25	-13.69	Pass	H
6484.44	146	341	-43.94	-25	-18.94	Pass	H
8145.33	150	235	-42.26	-25	-17.26	Pass	H
1235.12	146	292	-51.03	-25	-26.03	Pass	V
1362.78	150	158	-57.96	-25	-32.96	Pass	V
3617.20	149	55	-53.42	-25	-28.42	Pass	V
3873.55	150	319	-47.00	-25	-22.00	Pass	V
5854.93	146	118	-45.85	-25	-20.85	Pass	V
6486.38	150	155	-44.58	-25	-19.58	Pass	V

Band 41 BW 20 (middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1279.53	149	165	-54.28	-25	-29.28	Pass	H
1684.22	146	208	-52.42	-25	-27.42	Pass	H
3966.92	146	4	-47.92	-25	-22.92	Pass	H
5916.90	150	198	-44.31	-25	-19.31	Pass	H
6560.28	146	341	-41.02	-25	-16.02	Pass	H
8176.68	150	235	-48.37	-25	-23.37	Pass	H
1110.95	146	292	-51.96	-25	-26.96	Pass	V
1370.51	150	158	-56.07	-25	-31.07	Pass	V
3516.20	149	55	-53.42	-25	-28.42	Pass	V
3756.97	150	319	-45.87	-25	-20.87	Pass	V
5751.83	146	118	-47.95	-25	-22.95	Pass	V
6514.79	150	155	-46.59	-25	-21.59	Pass	V

Band 41 BW 20 /BW 5(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1342.10	149	165	-56.16	-25	-31.16	Pass	H
1639.71	146	208	-50.95	-25	-25.95	Pass	H
3924.41	146	4	-49.79	-25	-24.79	Pass	H
5910.60	150	198	-43.65	-25	-18.65	Pass	H
6454.26	146	341	-41.80	-25	-16.80	Pass	H
8016.42	150	235	-43.11	-25	-18.11	Pass	H
1228.34	146	292	-54.75	-25	-29.75	Pass	V
1537.48	150	158	-60.93	-25	-35.93	Pass	V
3473.73	149	55	-50.81	-25	-25.81	Pass	V
3866.72	150	319	-47.77	-25	-22.77	Pass	V
5791.50	146	118	-43.59	-25	-18.59	Pass	V
6641.56	150	155	-43.72	-25	-18.72	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.

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

Please refer to Please refer to FCC-ID: XMR201906EG21G

Test result: Pass

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