



TEST REPORT

Product Name: Smartphone
FCC ID: 2BM5D-C25UITRA
Trademark: N/A
Model Number: C25 Ultra, C25, C24, C24 Ultra, S24 Ultra, S25 Ultra, S24, S25
Prepared For: Shenzhen Baitai Network Technology Co., Ltd
Address: Room 1901, 19th Floor, City Shanhaipingji Center, No. 51 Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen
Manufacturer: Shenzhen Runsui Technology Co., Ltd
Address: 401, Building B, No. 8 Chuangye Road, Dakang Community, Yuanshan Street, Longgang District, Shenzhen City, Guangdong Province
Prepared By: Shenzhen CTB Testing Technology Co., Ltd.
Address: 1&2/F., Building A, No.26, Xinhe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date: Nov. 18, 2024
Sample tested Date: Nov. 18, 2024 to Dec. 04, 2024
Issue Date: Dec. 04, 2024
Report No.: CTB24111805701RF07
Test Standards: FCC Part 2, 22, 24E, 27
Test Results: PASS
Remark: This is LTE radio test report.

Compiled by:

Zhou kui

Zhou Kui

Reviewed by:

Arron Liu

Arron Liu

Approved by:

Bin Mei / Director

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

TABLE OF CONTENT

Test Report Declaration	Page
1. VERSION	3
2. TEST SUMMARY	4
3. MEASUREMENT UNCERTAINTY	5
4. PRODUCT INFORMATION AND TEST SETUP	6
4.1 Product Information	6
4.2 Test Setup Configuration	7
4.3 Support Equipment	7
4.4 Test Mode	7
4.5 Test Environment	7
5. TEST FACILITY AND TEST INSTRUMENT USED	8
5.1 Test Facility	8
5.2 Test Instrument Used	8
6. RF EXPOSURE	10
6.1 Standard Applicable	10
6.2 Test Result	10
7. RF OUTPUT POWER	11
7.1 Standard Applicable	11
7.2 Test Procedure	11
7.3 Summary of Test Results/Plots	12
8. PEAK-TO-AVERAGE RATIO (PAR) OF TRANSMITTER	13
8.1 Standard Applicable	13
8.2 Test Procedure	13
8.3 Summary of Test Results	13
9. EMISSION BANDWIDTH	14
9.1 Standard Applicable	14
9.2 Test Procedure	14
9.3 Summary of Test Results/Plots	14
10. OUT OF BAND EMISSIONS AT ANTENNA TERMINAL	15
10.1 Standard Applicable	15
10.2 Test Procedure	15
10.3 Summary of Test Results/Plots	16
11. SPURIOUS RADIATED EMISSIONS	17
11.1 Standard Applicable	17
11.2 Test Procedure	18
11.3 Summary of Test Results/Plots	18
12. FREQUENCY STABILITY	34
12.1 Standard Applicable	34
12.2 Test Procedure	34
12.3 Summary of Test Results/Plots	34

(Note: N/A means not applicable)



1. **VERSION**

Report No.	Issue Date	Description	Approved
CTB24111805701RF07	Dec. 04, 2024	Original	Valid

2. TEST SUMMARY

The Product has been tested according to the following specifications:

Test Item	Test Requirement	Test method	Result
Conducted output power	Part 2.1046(a)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 22.913(a)(5)/Part27.50(h)(2)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 27.50(d)	KDB 971168 D01v03r01	PASS
99% & 26dB Occupied Bandwidth	Part 2.1049(h)	KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 22.917(a)/Part 27.53(m) (4)	KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 22.917(a)/Part 27.53(m) (4)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053/ Part 22.917(a)/Part 27.53(m) (4)	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Frequency stability	Part 2.1055/Part 27.54	TIA-603-E-2016 & KDB 971168 D01v03r01	PASS

3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Item	Uncertainty
Occupancy bandwidth	54.3kHz
Conducted output power Above 1G	0.9dB
Conducted output power below 1G	0.9dB
Power Spectral Density , Conduction	0.9dB
Conduction spurious emissions	2.0dB
Out of band emission	2.0dB
3m chamber Radiated spurious emission(30MHz-1GHz)	4.6dB
3m chamber Radiated spurious emission(1GHz-18GHz)	5.1dB
3m chamber Radiated spurious emission(18GHz-40GHz)	3.4dB
Receiver Reference Sensitivity level	1.9dB
humidity uncertainty	5.5%
Temperature uncertainty	0.63°C
frequency	1×10 ⁻⁷

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s):	C25 Ultra, C25, C24, C24 Ultra, S24 Ultra, S25 Ultra, S24, S25
Model Description:	All the model are the same circuit and RF module, only the model and appearance are different. Test sample model: C25 Ultra
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
Max. RF output power:	FDD-LTE BAND 2: 19.81dBm FDD-LTE BAND 4: 20.84dBm FDD-LTE BAND 5: 22.23dBm FDD-LTE BAND 7: 20.56dBm FDD-LTE BAND 12: 23.07dBm
Type of Modulation:	QPSK, 16QAM
Antenna installation:	Internal antenna
Antenna Gain:	FDD-LTE BAND 2: -0.6dBi FDD-LTE BAND 4: 0.7dBi FDD-LTE BAND 5: 0.2dBi FDD-LTE BAND 7: 0.5dBi FDD-LTE BAND 12: -0.1dBi
Ratings:	DC 5V, 2A DC 3.7V by battery

4.2 Test Setup Configuration

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

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
1	Adapter	JYIN	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 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

4.5 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	3.7V
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, Xinxhe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

No.	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	A.14.16	2025/6/28
2	Power Sensor	Agilent	U2021XA	MY56120032	/	2025/6/28
3	Power Sensor	Agilent	U2021XA	MY56120034	/	2025/6/28
4	Communication test set	R&S	CMW500	108058	V3.5.80	2025/6/28
5	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2025/6/28
6	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2025/6/28
7	Vector signal generator	Agilent	N5182A	MY47420195	A.01.87	2025/6/28
8	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2025/6/28
9	2.4 GHz Filter	Shenxiang	MSF2400-24 83.5MS-1154	20181015001	/	2025/6/30
10	5 GHz Filter	Shenxiang	MSF5150-58 50MS-1155	20181015001	/	2025/6/30
11	Filter	Xingbo	XBLBQ-DZA 120	190821-1-1	/	2025/6/30
12	BT&WI-FI Automatic test software	Microwave	MTS8310	Ver. 2.0.0.0	/	/
13	Rohde & Schwarz SFU Broadcast Test System	R&S	SFU	101017	/	2025/6/28
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	/	2025/6/28
15	234G Automatic test software	Microwave	MTS8200	Ver. 2.0.0.0	/	/
16	966 chamber	C.R.T.	966	/	/	2027/6/21
17	Receiver	R&S	ESPI	100362	RF_ATTEN_7 (104489/003)	2025/6/28
18	Amplifier	HP	8447E	2945A02747	/	2025/6/28
19	Amplifier	Agilent	8449B	3008A01838	/	2025/6/28
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2025/6/28
21	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA9120D	01911	/	2025/6/28

22	EMI test software	Fala	EZ-EMC	FA-03A2 RE	/	/
23	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2025/6/28
24	loop antenna	ZHINAN	ZN30900A	GTS534	/	/
25	40G Horn antenna	A/H/System	SAS-574	588	/	2025/6/28
26	Amplifier	AEROFLEX	Aeroflex	097	/	2025/6/28
27	Power Metter	KEYSIGHT	N1912AP	N/A	A.05.00	2025/6/28

6. RF EXPOSURE

6.1 Standard Applicable

According to §1.1307 and §2.1091, §2.1093, the portable transmitter must comply the RF exposure requirements.

6.2 Test Result

This product complied with the requirement of the RF exposure, please see the RF Exposure report.

7. RF OUTPUT POWER

7.1 Standard Applicable

According to §22.913(a)(2), the ERP of mobile and portable stations transmitters and auxiliary test transmitters must not exceed 7 Watts.

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

According to §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

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

7.2 Test Procedure

Conducted output power test method:



Radiated power test method:

1. The setup of EUT is according with per ANSI/TIA Standard 603E and ANSI C63.26 measurement procedure.
2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

7.3 Summary of Test Results/Plots

Please refer to Appendix 1: Conducted output power

Test result: Pass

8. PEAK-TO-AVERAGE RATIO (PAR) OF TRANSMITTER

8.1 Standard Applicable

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51, in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

According to §27.50(B), the peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal

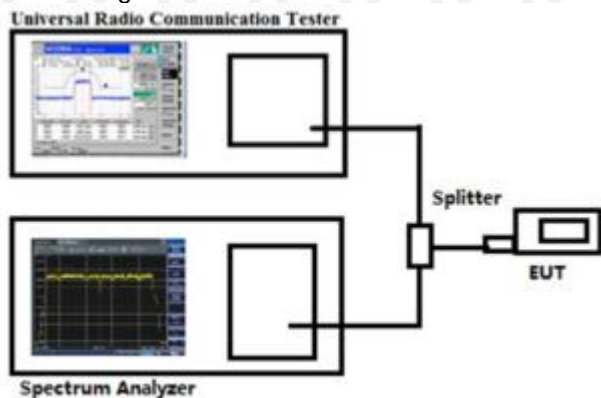
corresponding to the highest PAPR expected during periods of continuous transmission.

8.2 Test Procedure

According with KDB 971168

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Configuration for the emission bandwidth testing:



8.3 Summary of Test Results

Please refer to Appendix 3: Peak-to-Average Ratio

Test result: Pass

9. EMISSION BANDWIDTH

9.1 Standard Applicable

According to §22.917(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

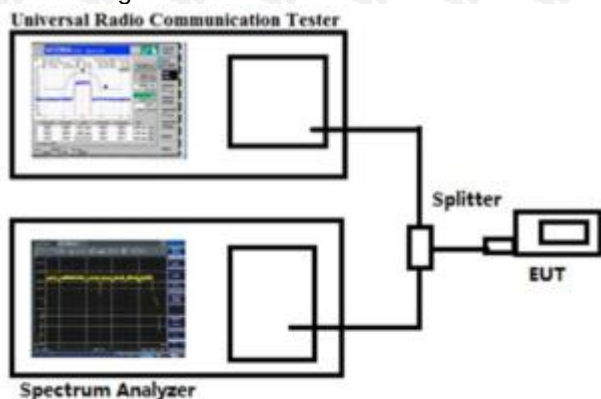
According to §24.238(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

According to §27.53, the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

9.2 Test Procedure

According to §22.917(b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Test Configuration for the emission bandwidth testing:



9.3 Summary of Test Results/Plots

Please refer to Appendix 4: 26dB Bandwidth and Occupied Bandwidth
Test result: Pass

10. OUT OF BAND EMISSIONS AT ANTENNA TERMINAL

10.1 Standard Applicable

According to §22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

According to §27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

According to §27.53(h), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

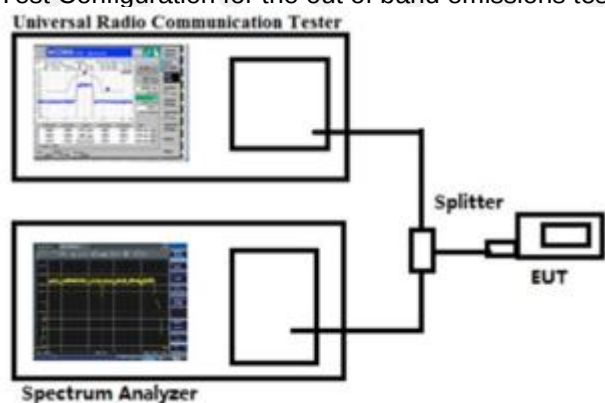
According to §27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$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

According to §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.

10.2 Test Procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 100kHz and 1MHz for the scan frequency from 30MHz to 1GHz and the scan frequency from 1GHz to up to 10 th harmonic.

Test Configuration for the out of band emissions testing:



10.3 Summary of Test Results/Plots

Please refer to Appendix 5 & 6: Band Edge & Conducted Spurious Emission

Test result: Pass

11. SPURIOUS RADIATED EMISSIONS

11.1 Standard Applicable

According to §22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

According to §27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

According to §27.53(h), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

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

11.2 Test Procedure

1. The setup of EUT is according with per ANSI/TIA-603-E and ANSI C63.4-2014 measurement procedure.
 2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
 3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
 4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
- Spurious attenuation limit in dB = $43 + 10 \log_{10}(\text{power out in Watts})$

11.3 Summary of Test Results/Plots

- Note: 1. this EUT was tested in 3 orthogonal positions and the worst case position data was reported.
2. All test modes (different bandwidth and different modulation) are performed, but only the worst case is recorded in this report.

Test Data:
QPSK

Band 2 18607 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1238.78	142	295	-57.28	-13	-44.28	Pass	H
1675.24	140	0	-47.59	-13	-34.59	Pass	H
3845.67	158	133	-45.00	-13	-32.00	Pass	H
5840.03	150	213	-42.94	-13	-29.94	Pass	H
6544.30	153	294	-44.95	-13	-31.95	Pass	H
7990.60	159	44	-44.02	-13	-31.02	Pass	H
1125.38	143	44	-52.17	-13	-39.17	Pass	V
1487.35	151	55	-55.56	-13	-42.56	Pass	V
3485.90	143	200	-48.07	-13	-35.07	Pass	V
3754.45	147	140	-53.31	-13	-40.31	Pass	V
5802.85	148	95	-48.78	-13	-35.78	Pass	V
6568.48	158	65	-47.82	-13	-34.82	Pass	V
Band 2 18900 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1304.08	150	278	-54.62	-13	-41.62	Pass	H
1760.02	146	87	-49.04	-13	-36.04	Pass	H
3851.28	150	238	-52.09	-13	-39.09	Pass	H
5868.10	146	15	-44.76	-13	-31.76	Pass	H
6395.45	149	4	-46.92	-13	-33.92	Pass	H
7931.57	151	135	-50.10	-13	-37.10	Pass	H
1217.39	149	264	-51.83	-13	-38.83	Pass	V
1336.53	148	9	-59.88	-13	-46.88	Pass	V
3533.41	147	106	-55.70	-13	-42.70	Pass	V
3929.48	148	217	-49.93	-13	-36.93	Pass	V
5908.12	150	318	-51.15	-13	-38.15	Pass	V
6529.37	150	31	-49.65	-13	-36.65	Pass	V

Band 2 19193 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1274.23	153	225	-58.73	-13	-45.73	Pass	H
1703.90	145	308	-50.01	-13	-37.01	Pass	H
3754.98	154	288	-46.95	-13	-33.95	Pass	H
5827.96	147	9	-42.98	-13	-29.98	Pass	H
6443.65	145	284	-44.34	-13	-31.34	Pass	H
7918.61	151	102	-42.55	-13	-29.55	Pass	H
1263.46	152	201	-54.97	-13	-41.97	Pass	V
1352.87	147	79	-58.11	-13	-45.11	Pass	V
3590.26	148	338	-53.20	-13	-40.20	Pass	V
3893.22	155	352	-50.07	-13	-37.07	Pass	V
5745.45	146	131	-44.60	-13	-31.60	Pass	V
6673.68	154	337	-45.25	-13	-32.25	Pass	V

16QAM

Band 2 18607 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1421.33	153	187	-60.39	-13	-47.39	Pass	H
1674.36	148	22	-50.06	-13	-37.06	Pass	H
3849.53	152	11	-49.00	-13	-36.00	Pass	H
5861.59	147	273	-43.14	-13	-30.14	Pass	H
6649.00	150	117	-42.26	-13	-29.26	Pass	H
8017.44	145	194	-44.90	-13	-31.90	Pass	H
1271.68	146	194	-54.42	-13	-41.42	Pass	V
1500.15	149	134	-56.26	-13	-43.26	Pass	V
3579.45	150	269	-51.25	-13	-38.25	Pass	V
3928.92	145	23	-53.63	-13	-40.63	Pass	V
5938.77	146	314	-44.69	-13	-31.69	Pass	V
6550.82	148	138	-51.60	-13	-38.60	Pass	V

Band 2 18900 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1302.72	146	141	-53.51	-13	-41.45	Pass	H
1628.79	154	77	-52.20	-13	-37.85	Pass	H
3784.55	146	250	-49.55	-13	-35.2	Pass	H
5956.26	151	79	-44.10	-13	-30.39	Pass	H
6484.51	153	178	-41.62	-13	-32.24	Pass	H
8151.79	146	267	-43.86	-13	-30.22	Pass	H
1181.51	148	328	-57.89	-13	-44.9	Pass	V
1433.30	153	303	-53.61	-13	-43.63	Pass	V
3436.98	150	55	-49.17	-13	-35.94	Pass	V
3867.93	152	66	-45.53	-13	-36.01	Pass	V
5795.05	146	304	-49.27	-13	-33.75	Pass	V
6610.37	148	233	-45.21	-13	-32.41	Pass	V
Band 2 19193 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1338.66	154	261	-54.35	-13	-41.35	Pass	H
1689.03	146	288	-46.53	-13	-33.53	Pass	H
3830.46	152	40	-41.66	-13	-28.66	Pass	H
5923.69	155	312	-39.11	-13	-26.11	Pass	H
6466.65	149	23	-41.13	-13	-28.13	Pass	H
8121.45	151	138	-48.50	-13	-35.50	Pass	H
1227.99	148	14	-56.65	-13	-43.65	Pass	V
1551.40	152	191	-61.91	-13	-48.91	Pass	V
3509.14	151	58	-48.00	-13	-35.00	Pass	V
3875.47	145	5	-53.43	-13	-40.43	Pass	V
5839.38	150	220	-48.45	-13	-35.45	Pass	V
6556.44	147	260	-42.82	-13	-29.82	Pass	V

Note:

- 1) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK

Band 4 19957 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1287.43	143	153	-58.56	-13	-45.56	Pass	H
1672.42	149	359	-48.37	-13	-35.37	Pass	H
3862.02	145	187	-49.21	-13	-36.21	Pass	H
5813.41	158	109	-43.91	-13	-30.91	Pass	H
6429.76	157	216	-43.97	-13	-30.97	Pass	H
8116.92	142	179	-41.39	-13	-28.39	Pass	H
1188.43	142	105	-54.54	-13	-41.54	Pass	V
1504.56	156	262	-60.38	-13	-47.38	Pass	V
3600.64	144	7	-50.09	-13	-37.09	Pass	V
3822.02	154	284	-52.38	-13	-39.38	Pass	V
5809.23	155	237	-46.17	-13	-33.17	Pass	V
6483.97	145	208	-44.68	-13	-31.68	Pass	V
Band 4 20175 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1335.66	150	17	-53.60	-13	-40.60	Pass	H
1773.62	146	9	-52.35	-13	-39.35	Pass	H
3886.55	150	100	-51.80	-13	-38.80	Pass	H
5967.43	146	103	-48.12	-13	-35.12	Pass	H
6519.35	149	123	-51.25	-13	-38.25	Pass	H
7925.49	151	88	-50.72	-13	-37.72	Pass	H
1181.11	149	244	-54.49	-13	-41.49	Pass	V
1389.07	148	297	-60.77	-13	-47.77	Pass	V
3639.07	147	76	-53.82	-13	-40.82	Pass	V
3909.68	148	0	-48.64	-13	-35.64	Pass	V
5744.35	150	69	-50.35	-13	-37.35	Pass	V
6592.39	150	94	-49.88	-13	-36.88	Pass	V

Band 4 20393 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1392.02	147	189	-54.64	-13	-41.64	Pass	H
1573.61	150	62	-53.27	-13	-40.27	Pass	H
3785.46	154	77	-45.09	-13	-32.09	Pass	H
5950.81	146	274	-43.44	-13	-30.44	Pass	H
6584.87	150	158	-40.58	-13	-27.58	Pass	H
8094.30	149	113	-44.08	-13	-31.08	Pass	H
1317.04	152	164	-58.31	-13	-45.31	Pass	V
1388.37	152	350	-59.67	-13	-46.67	Pass	V
3552.14	146	314	-54.59	-13	-41.59	Pass	V
3956.86	151	277	-49.85	-13	-36.85	Pass	V
5734.41	155	71	-41.47	-13	-28.47	Pass	V
6550.15	149	232	-48.41	-13	-35.41	Pass	V

16QAM

Band 4 19957 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1331.67	155	159	-60.01	-13	-47.01	Pass	H
1730.38	148	207	-46.08	-13	-33.08	Pass	H
3853.49	153	266	-46.23	-13	-33.23	Pass	H
5943.06	154	10	-47.34	-13	-34.34	Pass	H
6570.70	146	205	-45.34	-13	-32.34	Pass	H
8003.87	151	94	-42.25	-13	-29.25	Pass	H
1159.55	149	284	-55.47	-13	-42.47	Pass	V
1441.07	153	344	-53.40	-13	-40.40	Pass	V
3515.28	149	68	-50.92	-13	-37.92	Pass	V
3844.22	149	348	-49.43	-13	-36.43	Pass	V
5948.70	153	222	-45.94	-13	-32.94	Pass	V
6621.85	147	57	-49.09	-13	-36.09	Pass	V

Band 4 20175 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1361.43	146	73	-56.24	-13	-41.45	Pass	H
1777.04	146	268	-51.21	-13	-37.85	Pass	H
3823.34	154	271	-48.38	-13	-35.2	Pass	H
6006.04	151	313	-45.07	-13	-30.39	Pass	H
6505.73	152	125	-48.22	-13	-32.24	Pass	H
7978.18	147	158	-45.95	-13	-30.22	Pass	H
1193.33	154	173	-59.57	-13	-44.9	Pass	V
1287.18	145	267	-59.26	-13	-43.63	Pass	V
3535.89	150	349	-45.70	-13	-35.94	Pass	V
3917.95	155	344	-45.52	-13	-36.01	Pass	V
5855.33	152	26	-49.56	-13	-33.75	Pass	V
6494.24	146	38	-42.99	-13	-32.41	Pass	V
Band 4 20393 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1377.23	151	135	-58.88	-13	-45.88	Pass	H
1750.68	152	178	-48.54	-13	-35.54	Pass	H
3844.69	146	18	-43.30	-13	-30.30	Pass	H
5863.97	154	68	-40.02	-13	-27.02	Pass	H
6549.74	151	191	-43.00	-13	-30.00	Pass	H
8171.84	147	254	-48.37	-13	-35.37	Pass	H
1241.79	149	51	-52.97	-13	-39.97	Pass	V
1519.67	150	187	-60.15	-13	-47.15	Pass	V
3463.89	150	314	-48.93	-13	-35.93	Pass	V
3736.85	155	161	-49.75	-13	-36.75	Pass	V
5882.49	153	234	-49.72	-13	-36.72	Pass	V
6510.57	149	331	-43.18	-13	-30.18	Pass	V

Note:

3) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

4) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

QPSK

Band 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.
1350.05	152	86	-53.93	-13	-40.93	Pass	H
1743.16	147	289	-48.17	-13	-35.17	Pass	H
3793.94	147	120	-46.69	-13	-33.69	Pass	H
6012.85	147	91	-47.37	-13	-34.37	Pass	H
6577.90	149	118	-43.89	-13	-30.89	Pass	H
7990.95	146	246	-40.34	-13	-27.34	Pass	H
1254.00	147	55	-52.78	-13	-39.78	Pass	V
1326.55	149	55	-55.85	-13	-42.85	Pass	V
3544.30	149	1	-52.48	-13	-39.48	Pass	V
3932.65	149	231	-49.60	-13	-36.60	Pass	V
5886.54	147	273	-45.26	-13	-32.26	Pass	V
6653.91	152	297	-46.41	-13	-33.41	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.
1295.03	153	347	-56.01	-13	-43.01	Pass	H
1794.91	153	15	-50.13	-13	-37.13	Pass	H
3800.63	149	313	-44.93	-13	-31.93	Pass	H
5960.62	154	111	-44.40	-13	-31.40	Pass	H
6498.54	150	327	-45.44	-13	-32.44	Pass	H
8112.54	154	77	-44.40	-13	-31.40	Pass	H
1249.34	152	245	-54.85	-13	-41.85	Pass	V
1400.08	151	107	-60.92	-13	-47.92	Pass	V
3504.40	148	109	-51.42	-13	-38.42	Pass	V
3833.03	153	16	-48.97	-13	-35.97	Pass	V
5812.79	145	299	-46.87	-13	-33.87	Pass	V
6597.92	151	302	-44.89	-13	-31.89	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.
1291.91	148	102	-52.20	-13	-39.20	Pass	H
1648.59	147	89	-51.66	-13	-38.66	Pass	H
3959.36	145	175	-44.19	-13	-31.19	Pass	H
5950.82	145	271	-37.75	-13	-24.75	Pass	H
6605.35	153	112	-43.82	-13	-30.82	Pass	H
8058.39	152	296	-39.96	-13	-26.96	Pass	H
1202.34	154	12	-50.89	-13	-37.89	Pass	V
1455.94	152	325	-53.24	-13	-40.24	Pass	V
3613.51	154	105	-50.60	-13	-37.60	Pass	V
3916.11	150	81	-50.52	-13	-37.52	Pass	V
5879.97	153	244	-45.60	-13	-32.60	Pass	V
6638.43	151	291	-47.68	-13	-34.68	Pass	V

16QAM

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.
1387.47	151	217	-54.86	-13	-41.86	Pass	H
1737.90	148	151	-53.88	-13	-40.88	Pass	H
3943.63	150	357	-51.14	-13	-38.14	Pass	H
5824.28	151	181	-49.25	-13	-36.25	Pass	H
6484.26	149	13	-48.00	-13	-35.00	Pass	H
7954.56	153	30	-49.33	-13	-36.33	Pass	H
1130.71	146	175	-55.06	-13	-42.06	Pass	V
1458.98	149	214	-55.28	-13	-42.28	Pass	V
3594.62	151	226	-50.87	-13	-37.87	Pass	V
3905.44	151	27	-46.78	-13	-33.78	Pass	V
5726.76	155	126	-42.84	-13	-29.84	Pass	V
6484.03	150	83	-48.74	-13	-35.74	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.
1264.26	150	235	-58.32	-13	-45.32	Pass	H
1771.79	149	125	-52.09	-13	-39.09	Pass	H
3830.14	152	261	-49.32	-13	-36.32	Pass	H
5836.00	146	150	-41.09	-13	-28.09	Pass	H
6436.25	151	210	-46.79	-13	-33.79	Pass	H
7995.04	148	298	-47.65	-13	-34.65	Pass	H
1319.19	149	29	-57.09	-13	-44.09	Pass	V
1374.95	146	68	-61.15	-13	-48.15	Pass	V
3634.77	147	77	-53.18	-13	-40.18	Pass	V
3815.26	152	315	-52.78	-13	-39.78	Pass	V
5915.23	146	106	-51.12	-13	-38.12	Pass	V
6560.30	150	219	-48.45	-13	-35.45	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.
1245.67	151	190	-54.91	-13	-41.91	Pass	H
1606.24	147	228	-48.97	-13	-35.97	Pass	H
3802.08	152	52	-49.71	-13	-36.71	Pass	H
5882.88	155	225	-42.15	-13	-29.15	Pass	H
6511.58	152	214	-39.44	-13	-26.44	Pass	H
7920.60	146	353	-45.17	-13	-32.17	Pass	H
1255.34	152	197	-52.24	-13	-39.24	Pass	V
1348.39	151	230	-51.52	-13	-38.52	Pass	V
3475.30	151	137	-50.38	-13	-37.38	Pass	V
3835.23	153	132	-46.02	-13	-33.02	Pass	V
5711.38	154	81	-45.25	-13	-32.25	Pass	V
6562.70	146	314	-44.49	-13	-31.49	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 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.
1276.28	149	92	-55.67	-13	-42.67	Pass	H
1607.51	160	295	-47.57	-13	-34.57	Pass	H
3915.85	141	40	-47.80	-13	-34.80	Pass	H
5915.28	158	319	-44.24	-13	-31.24	Pass	H
6508.63	157	254	-45.86	-13	-32.86	Pass	H
8157.30	155	162	-44.46	-13	-31.46	Pass	H
1180.29	143	142	-52.72	-13	-39.72	Pass	V
1515.66	158	9	-57.91	-13	-44.91	Pass	V
3556.40	147	113	-51.80	-13	-38.80	Pass	V
3761.61	157	68	-50.13	-13	-37.13	Pass	V
5853.98	142	110	-48.25	-13	-35.25	Pass	V
6631.06	151	23	-45.43	-13	-32.43	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.
1249.79	150	164	-55.09	-13	-42.09	Pass	H
1665.66	146	278	-52.21	-13	-39.21	Pass	H
3829.37	150	49	-49.09	-13	-36.09	Pass	H
5907.35	146	91	-45.11	-13	-32.11	Pass	H
6434.91	149	164	-47.96	-13	-34.96	Pass	H
7926.25	151	332	-48.66	-13	-35.66	Pass	H
1259.69	149	329	-52.38	-13	-39.38	Pass	V
1384.96	148	173	-58.12	-13	-45.12	Pass	V
3560.81	147	355	-53.59	-13	-40.59	Pass	V
3962.12	148	165	-50.80	-13	-37.80	Pass	V
5853.92	150	71	-47.16	-13	-34.16	Pass	V
6615.27	150	327	-46.87	-13	-33.87	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.
1369.60	151	193	-54.15	-13	-41.15	Pass	H
1602.78	153	144	-54.14	-13	-41.14	Pass	H
3908.57	145	251	-43.39	-13	-30.39	Pass	H
5902.45	155	248	-38.66	-13	-25.66	Pass	H
6524.79	154	233	-45.04	-13	-32.04	Pass	H
7925.81	150	6	-45.26	-13	-32.26	Pass	H
1163.59	151	101	-57.19	-13	-44.19	Pass	V
1457.26	152	5	-54.29	-13	-41.29	Pass	V
3468.16	153	302	-53.41	-13	-40.41	Pass	V
3836.07	147	104	-50.36	-13	-37.36	Pass	V
5747.65	155	203	-41.60	-13	-28.60	Pass	V
6553.93	148	293	-47.38	-13	-34.38	Pass	V

16QAM

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.
1352.49	149	165	-57.92	-13	-44.92	Pass	H
1676.22	153	243	-48.27	-13	-35.27	Pass	H
3897.79	151	104	-49.33	-13	-36.33	Pass	H
5831.67	151	148	-45.56	-13	-32.56	Pass	H
6558.33	154	248	-46.60	-13	-33.60	Pass	H
7943.67	155	178	-42.80	-13	-29.80	Pass	H
1214.46	147	90	-55.37	-13	-42.37	Pass	V
1388.84	146	55	-53.28	-13	-40.28	Pass	V
3681.53	153	319	-50.57	-13	-37.57	Pass	V
3824.59	153	190	-51.19	-13	-38.19	Pass	V
5759.36	153	181	-43.73	-13	-30.73	Pass	V
6646.12	151	252	-51.12	-13	-38.12	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.
1359.60	148	348	-52.50	-13	-41.45	Pass	H
1808.09	150	15	-50.25	-13	-37.85	Pass	H
3844.88	152	354	-45.81	-13	-35.2	Pass	H
5863.16	149	150	-43.79	-13	-30.39	Pass	H
6415.93	150	295	-45.98	-13	-32.24	Pass	H
8006.33	150	323	-39.24	-13	-30.22	Pass	H
1159.01	152	193	-54.76	-13	-44.9	Pass	V
1426.58	146	201	-57.35	-13	-43.63	Pass	V
3628.85	148	305	-44.94	-13	-35.94	Pass	V
3845.38	152	360	-47.00	-13	-36.01	Pass	V
5829.61	154	16	-48.18	-13	-33.75	Pass	V
6600.81	153	2	-48.25	-13	-32.41	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.
1280.09	154	294	-56.00	-13	-43.00	Pass	H
1786.82	151	348	-45.92	-13	-32.92	Pass	H
3916.70	147	119	-44.19	-13	-31.19	Pass	H
5964.94	153	231	-42.96	-13	-29.96	Pass	H
6510.19	145	96	-38.57	-13	-25.57	Pass	H
8065.11	148	59	-42.96	-13	-29.96	Pass	H
1118.96	153	65	-57.24	-13	-44.24	Pass	V
1450.78	155	39	-59.47	-13	-46.47	Pass	V
3466.25	151	76	-50.27	-13	-37.27	Pass	V
3788.18	152	37	-50.73	-13	-37.73	Pass	V
5780.37	152	296	-47.46	-13	-34.46	Pass	V
6565.66	155	198	-48.65	-13	-35.65	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 12 23017 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1390.72	150	224	-57.83	-13	-44.83	Pass	H
1736.56	151	221	-45.32	-13	-32.32	Pass	H
3859.91	147	220	-52.89	-13	-39.89	Pass	H
5918.62	149	185	-43.99	-13	-30.99	Pass	H
6465.10	150	23	-41.74	-13	-28.74	Pass	H
7967.21	148	333	-40.96	-13	-27.96	Pass	H
1150.02	150	36	-51.97	-13	-38.97	Pass	V
1399.76	149	131	-58.88	-13	-45.88	Pass	V
3641.92	145	183	-51.31	-13	-38.31	Pass	V
3809.68	150	252	-50.79	-13	-37.79	Pass	V
5903.25	149	97	-44.27	-13	-31.27	Pass	V
6680.00	147	38	-47.16	-13	-34.16	Pass	V
Band 12 23095 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1367.71	152	24	-57.53	-13	-44.53	Pass	H
1802.74	151	257	-48.11	-13	-35.11	Pass	H
3888.14	153	30	-47.87	-13	-34.87	Pass	H
5914.62	151	182	-38.56	-13	-25.56	Pass	H
6597.92	145	70	-42.53	-13	-29.53	Pass	H
7974.76	152	210	-43.61	-13	-30.61	Pass	H
1101.28	145	170	-57.73	-13	-44.73	Pass	V
1320.00	154	318	-57.57	-13	-44.57	Pass	V
3503.04	150	268	-45.08	-13	-32.08	Pass	V
3843.48	150	325	-50.59	-13	-37.59	Pass	V
5822.10	152	288	-40.29	-13	-27.29	Pass	V
6529.80	147	248	-45.03	-13	-32.03	Pass	V

Band 12 23173 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1343.07	145	226	-51.66	-13	-38.66	Pass	H
1733.74	154	59	-46.26	-13	-33.26	Pass	H
3862.71	149	11	-40.30	-13	-27.30	Pass	H
5914.06	155	120	-39.89	-13	-26.89	Pass	H
6557.11	151	168	-40.48	-13	-27.48	Pass	H
8122.73	147	313	-42.17	-13	-29.17	Pass	H
1200.17	152	16	-57.42	-13	-44.42	Pass	V
1529.72	146	258	-56.04	-13	-43.04	Pass	V
3504.91	154	204	-49.51	-13	-36.51	Pass	V
3843.34	153	104	-47.20	-13	-34.20	Pass	V
5731.22	153	220	-47.72	-13	-34.72	Pass	V
6548.46	151	219	-48.84	-13	-35.84	Pass	V

16QAM

Band 12 23017 channel/BW1.4(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1392.54	150	259	-59.34	-13	-46.34	Pass	H
1658.40	155	104	-54.60	-13	-41.60	Pass	H
3967.60	148	201	-51.51	-13	-38.51	Pass	H
5810.09	154	333	-46.99	-13	-33.99	Pass	H
6484.73	152	275	-43.92	-13	-30.92	Pass	H
7943.38	153	150	-50.73	-13	-37.73	Pass	H
1213.81	154	209	-59.39	-13	-46.39	Pass	V
1459.20	148	43	-51.61	-13	-38.61	Pass	V
3554.75	146	106	-48.43	-13	-35.43	Pass	V
3915.87	146	351	-50.45	-13	-37.45	Pass	V
5836.83	153	173	-48.12	-13	-35.12	Pass	V
6554.18	148	172	-45.96	-13	-32.96	Pass	V

Band 12 23095 channel/BW1.4(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1355.77	151	93	-58.70	-13	-45.70	Pass	H
1624.70	154	346	-52.77	-13	-39.77	Pass	H
3913.25	150	238	-47.88	-13	-34.88	Pass	H
5944.76	155	41	-44.34	-13	-31.34	Pass	H
6531.35	153	168	-48.51	-13	-35.51	Pass	H
8096.16	152	177	-46.28	-13	-33.28	Pass	H
1256.33	149	210	-50.92	-13	-37.92	Pass	V
1327.79	153	99	-65.28	-13	-52.28	Pass	V
3571.90	147	315	-50.62	-13	-37.62	Pass	V
3951.67	153	290	-51.98	-13	-38.98	Pass	V
5924.03	149	296	-48.42	-13	-35.42	Pass	V
6425.58	152	344	-48.31	-13	-35.31	Pass	V
Band 12 23173 channel/BW1.4(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1273.47	151	29	-60.00	-13	-47.00	Pass	H
1655.25	150	263	-54.11	-13	-41.11	Pass	H
3748.82	150	322	-45.08	-13	-32.08	Pass	H
5870.44	149	262	-41.32	-13	-28.32	Pass	H
6480.45	146	17	-40.39	-13	-27.39	Pass	H
7904.40	152	49	-44.80	-13	-31.80	Pass	H
1236.46	155	294	-55.88	-13	-42.88	Pass	V
1352.48	146	93	-54.79	-13	-41.79	Pass	V
3440.65	145	201	-50.63	-13	-37.63	Pass	V
3833.33	148	259	-44.65	-13	-31.65	Pass	V
5757.72	146	136	-47.52	-13	-34.52	Pass	V
6553.32	149	256	-45.99	-13	-32.99	Pass	V

Note:

9) Scan from 9kHz to 40GHz, the disturbance above 13GHz and below 1GHz are attenuated more than 20 dB below the applicable limit and not required to be reported, the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

10) Tested with all kind of bandwidth, RB Size and RB Offset, Found the 1.4MHz with full RB were the worst case; and then Only the worst case is recorded in the report.

12. FREQUENCY STABILITY

12.1 Standard Applicable

According to §22.355, §24.235, §27.54 the limit is 2.5ppm.

12.2 Test Procedure

According to §2.1055, the following test procedure was performed.

The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.

The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode

12.3 Summary of Test Results/Plots

Note: 1.Normal Voltage NV=DC3.7V; Low Voltage LV=DC3.33; High Voltage HV=DC4.07V

Please refer to Appendix 2: Frequency Stability

Test result: Pass

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