

Product Name: Tablet	Report No: ITEZA202300349RF7
Product Model: R08, R08 Pro, R08S, R08T, R08 Max, R08 Ultra	Security Classification: Open
Version: V1.0	Total Page: 48

TIRT Testing Report

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RF TEST REPORT

FCC ID: 2AX4YR08

According to

FCC CFR Title 47 Part 2

FCC CFR Title 47 Part 22 Subpart H

FCC CFR Title 47 Part 24 Subpart E

FCC CFR Title 47 Part 27 Subpart C

FCC CFR Title 47 Part 90 Subpart S

ANSI C63.26:2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

Equipment : Tablet
Model No. : R08, R08 Pro, R08S, R08T, R08 Max, R08 Ultra
Trademark : DOOGEE
Applicant : Shenzhen DOOGEE Hengtong Technology CO.,LTD
B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22,
Longhua New District, Shenzhen, China

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.
- Test date: 2023/11/07~2023/11/20

Lab: Beijing TIRT Technology Service Co.,Ltd Shenzhen

Add: 104 Building C, Xinmingsheng Industrial Park No.132, Zhangge Old Village East
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History of this test report

Original Report Issue Date: 2023.11.23

- No additional attachment
- Additional attachments were issued following record

Attachment No.	Issue Date	Description

1 Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Pass*(Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 22.913(a) Part 24.232(b) Part 27.50(b) Part 27.50(c) Part 27.50(d) Part 27.50(h) Part 90.635	Pass
Peak-To-Average Ratio	Part 2.1046 Part 22.913(d) Part 24.232 (d) Part 27.50(d)	Pass
Modulation Characteristics	Part 2.1047	N/A
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917 Part 24.238 Part 27.53(a)	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 22.917 Part 24.238 Part 27.53(c)(f) Part 27.53(g) Part 27.53(h) Part 27.53(m) Part 90.691	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917 Part 24.238 Part 27.53(c)(f) Part 27.53(g) Part 27.53(h) Part 27.53(m) Part 90.691	Pass
Out of band emission, Band Edge	Part 2.1051 Part 22.917 Part 24.238 Part 27.53(c)(f) Part 27.53(g) Part 27.53(h) Part 27.53(m) Part 90.691	Pass
Frequency stability vs. temperature	Part 2.1055(a)(1)(b) Part 22.355 Part 24.235 Part 27.54 Part 90.213	Pass

Frequency stability vs. voltage	Part 2.1055(d)(1)(2) Part 22.355 Part 24.235 Part 27.54 Part 90.213	Pass
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Note: 1. Pass: The EUT complies with the essential requirements in the standard.

2. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.

2 General Information

2.1 General Description of EUT

Description of Device (EUT)

EUT Name	:	Tablet
Model No.	:	R08, R08 Pro, R08S, R08T, R08 Max, R08 Ultra
DIFF.	:	There is no difference except the name of the model. All tests are made with the R10 model.
Power supply	:	DC 3.8V from battery or DC 5V from adapter

Support Bands	:	LTE Band 2/4/5/7/12/17/25/26/38/40/41/66
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Channel Bandwidth	:	LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
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TX Frequency	:	LTE Band 2: 1850 ~ 1910 MHz LTE Band 4: 1710 ~ 1755 MHz LTE Band 5: 824 ~ 849 MHz LTE Band 7: 2500 ~ 2570 MHz LTE Band 12: 699MHz ~ 716MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2670 MHz LTE Band 66: 1710 MHz ~ 1780 MHz
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Modulation type	:	QPSK, 16QAM
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Antenna Type	:	Internal antenna, LTE Band 2: Maximum Gain is 0.8dBi. LTE Band 4: Maximum Gain is 1.1dBi. LTE Band 5: Maximum Gain is -2.1dBi. LTE Band 7: Maximum Gain is 0.5dBi. LTE Band 12: Maximum Gain is -3.2dBi. LTE Band 17: Maximum Gain is -3.2dBi. LTE Band 25: Maximum Gain is 0.8dBi. LTE Band 26: Maximum Gain is -2.1dBi. LTE Band 38: Maximum Gain is 0.5dBi. LTE Band 41: Maximum Gain is 0.5dBi. LTE Band 66: Maximum Gain is 1.1dBi. Antenna information is provided by applicant. There is WWAN diversity antenna inside the product, which is only for receiving function.
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Software version : DOOGEE-R08-EEA-Android13.0-20231109

Hardware version : WT_P101_8788_BJ _MB_V0.1_20230920

Remark 1: The worst-case simultaneous transmission configuration was evaluated with no non-compliance found. Results in this report are only for 4G function, and there is no other transmitter involved.

2.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

2.3 Test Facility

Company:	Beijing TIRT Technology Service Co.,Ltd Shenzhen
Address:	104 Building C, Xinmingsheng Industrial Park No.132, Zhangge Old Village East Zone, Zhangge Community, Fucheng Street, Longhua District, Shenzhen, Guangdong, P. R. China
CNAS Registration Number:	CNAS L14158
A2LA Registration Number:	6049.01
FCC Accredited Lab. Designation Number:	CN1366
FCC Test Firm Registration Number:	820690
Telephone:	+86-0755-27087573

2.4 Accessories of Device (EUT)

Accessories : Adapter
 Model : DGCDQ-BC023-02
 Ratings : Input: 100-240V,50/60Hz 0.35A Max
 Output: 5.0V 2.0A 10.0W

2.5 Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDoC
1	N/A	N/A	N/A	N/A	N/A

2.6 Test Conditions

Items	Required	Actual
Temperature range:	15-35°C	24°C
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa

2.7 Measurement Uncertainty

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	± 142.12 KHz
RF power conducted	± 0.74 dB
RF power radiated	± 3.25 dB
Spurious emissions, conducted	± 1.78 dB
Spurious emissions, radiated (9KHz~30MHz)	± 2.56 dB
Spurious emissions, radiated (30MHz~1GHz)	± 4.6 dB
Spurious emissions, radiated (Above 1GHz)	± 4.9 dB
Conduction Emissions(150kHz~30MHz)	± 3.1 dB
Humidity	$\pm 4.6\%$
Temperature	$\pm 0.7^{\circ}\text{C}$
Time	$\pm 1.25\%$

3 Test Instruments list

No.	Equipment	Manufacturer	Type No.	Serial No.	Cal. date (yyyy/mm/dd)	Cal. Due date (yyyy/mm/dd)
1	EMI Receiver	Rohde&Schwarz	ESCI	100718	2023/11/09	2024/11/10
2	AMN	Rohde&Schwarz	ENV216	100075	2023/11/09	2024/11/10
3	AMN	Schwarzbeck	NSLK8127	#829	2023/11/09	2024/11/10
4	ECSI RF IN RF Cable	Rohde&Schwarz	RP-X1	\	2023/11/17	2024/11/16
5	ECSI RF IN RF Cable	Rohde&Schwarz	Sapre sm	\	2023/11/09	2024/11/10
6	EMI Receiver	Rohde&Schwarz	ESR7	102013	2023/11/09	2024/11/10
7	Spectrum analyzer	Rohde&Schwarz	FSV30	103741	2023/11/09	2024/11/10
8	Spectrum analyzer	KEYSIGHT	N9010A	MY51440158	2023/11/09	2024/11/10
9	Integral Antenna	Schwarzbeck	VULB 9163	9163-868	2023/12/25	2024/12/24
10	Integral Antenna	Schwarzbeck	BBHA 9120D	BBHA 9120D 1201	2023/11/09	2024/11/10
11	Integral Antenna	Schwarzbeck	BBHA 9170	9170#685	2023/11/06	2024/11/10
12	Preamplifier	CD Systems Inc	PAP-03036- 30	85060000	2023/11/09	2024/11/10
13	Preamplifier	Schwarzbeck	BBV9721	9721-019	2023/11/09	2024/11/10
14	Preamplifier	emci	EMC012645 SE	980417	2023/11/09	2024/11/10
15	ECSI RF IN RF Cable	Rohde&Schwarz	AP-X1	\	2023/11/09	2024/11/10
16	Spectrum Analyzer	Agilent	N9010A	MY52221119	2023/11/09	2024/11/10
17	Power Collection Unit	Tonscend	JS0806-2	188060134	2023/09/12	2024/09/11
18	Tonscend Test System	Tonscend	2.6.77.0518	NA	NA	NA
19	Power Sensor	Agilent	U2021XA	MY55410011	2023/09/12	2024/09/11
20	Power Sensor	Agilent	U2021XA	MY55410012	2023/09/12	2024/09/11
21	Power Sensor	Agilent	U2021XA	MY55410018	2023/09/12	2024/09/11
22	Power Sensor	Agilent	U2021XA	MY55410019	2023/09/12	2024/09/11
23	Temp&Humidity Recorder	Anymetre	JR900	NA	2023/11/03	2024/11/02
24	Temp&Humidity Chamber	ETOMA	NTH1100- 30A	16080628	2023/09/01	2024/08/30

4 System test configuration

4.1 Test mode

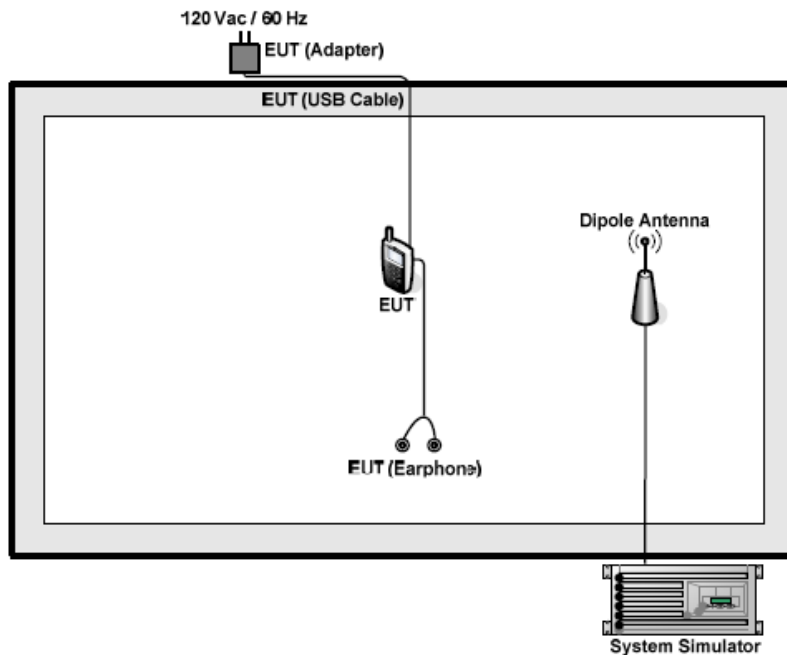
During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Test modes		
Band	Radiated	Conducted
LTE Band 2	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 4	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 5	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 7	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 12	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 17	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 25	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 26	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 38	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 41	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link
LTE Band 66	■ QPSK link, 16QAM link	■ QPSK link, 16QAM link

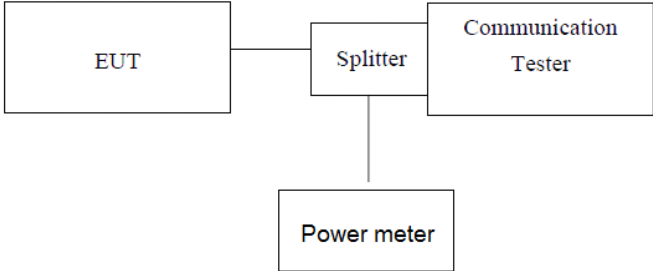
Note: Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas License Digital Systems v03r1 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

4.2 Configuration of Tested System

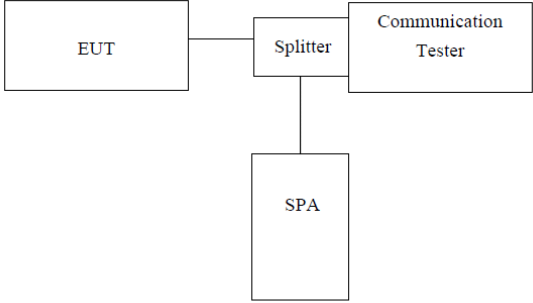


4.3 Conducted Output Power

Test Requirement:	Part 2.1046, Part 22.913(a), Part 24.232(c), Part 27.50(b), Part 27.50(c), Part 27.50(d), Part 27.50(h), Part 90.635
Test Method:	ANSI C63.26:2015
Limit:	LTE Band 2: 2W LTE Band 4: 1W LTE Band 5: 7W LTE Band 7: 2W LTE Band 12: 3W LTE Band 17: 3W LTE Band 25: 2W LTE Band 26: 100W LTE Band 38: 2W LTE Band 41: 2W LTE Band 66: 1W
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1. The transmitter output port was connected to base station. 2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement. 3. Set EUT at maximum power through base station. 4. Select lowest, middle, and highest channels for each band and different modulation. 5. Measure the maximum burst average power.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

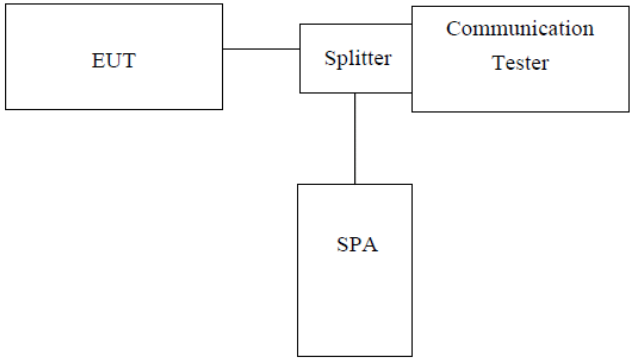
Note: Please refer to Appendix A of the Appendix Test Data.

4.4 Peak-to-Average Ratio

Test Requirement:	Part 22.913(d), FCC part24.232(d) and FCC part27.50(d)(5)
Test Method:	ANSI C63.26:2015
Test Limit:	Used complementary cumulative distribution function (CCDF) of analyzer to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.7 2. The EUT was connected to spectrum and system simulator via a power divider 3. Using the CCDF measurement of spectrum analyzer; 4. Set RBW$\geq$OBW or specified reference bandwidth; 5. Set the number of counts to a value that stabilizes the measured CCDF curve; 6. Set the measurement interval as 1ms 7. Record the maximum PAPR level associated with a probability of 0.1%.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Note: Please refer to Appendix A of the Appendix Test Data.

4.5 Occupy Bandwidth

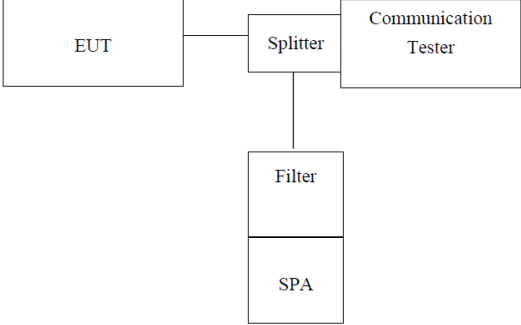
Test Requirement:	FCC part22.913(a), FCC part24.232(b) and FCC part27.53(a), FCC part 90.209
Test Method:	ANSI C63.26:2015
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer, set center frequency to channel center frequency. 2. RBW was set to about 1%-5% of emission OBW, VBW$\geq$ 3 X RBW. 3. Set spectrum analyzer detection mode to peak, and the trace mode to max hold. 4. Use the 99% OBW function, The 99% power OBW can be found on the plot, determine the "-26dB amplitude" as equal to reference value -26dB.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Note: Please refer to Appendix A of the Appendix Test Data.

4.6 MODULATION CHARACTERISTIC

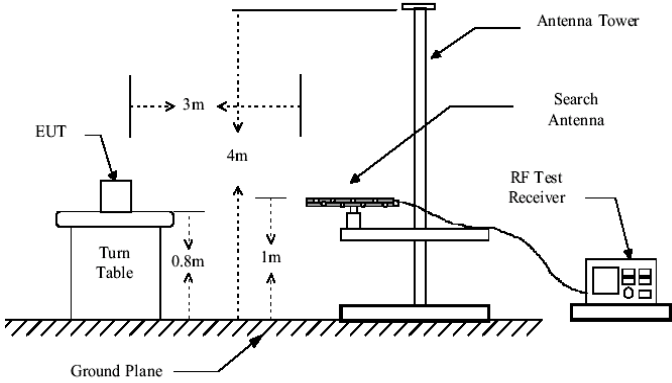
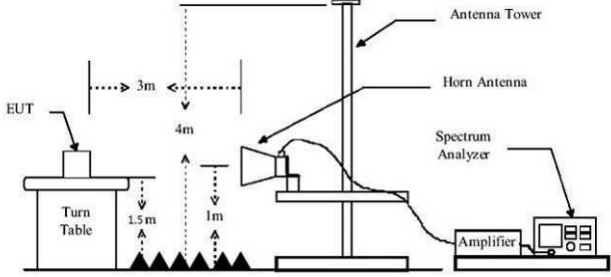
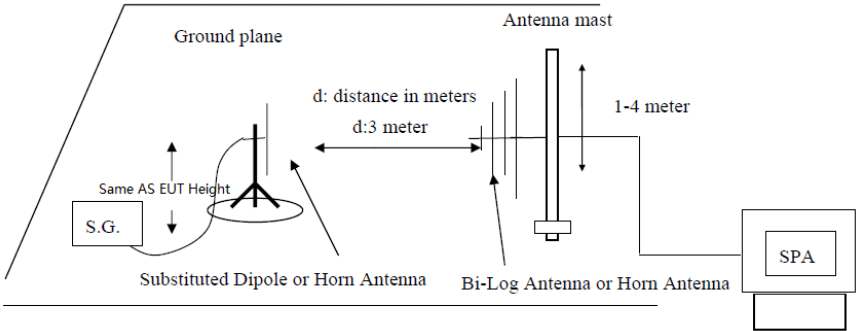
According to FCC § 2.1047(d), Part 24E & Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

4.7 Out of band emission at antenna terminals

Test Requirement:	Part 2.1051 Part 22.917 Part 24.238 Part 27.53(c)(f) Part 27.53(g) Part 27.53(h) Part 27.53(m) Part 90.691
Test Method:	ANSI C63.26:2015
Limit:	$\leq -13\text{dBm}(\text{LTE Band 5,26}(824\text{-}849\text{MHz}))$ $\leq -13\text{dBm}(\text{LTE Band 2,25})$ $\leq -13\text{dBm}(\text{LTE Band 12, 17, 71})$ $\leq -13\text{dBm}(\text{LTE Band 4,66})$ $\leq -25\text{dBm}(\text{LTE Band 7, 38, 41})$ $\leq -13\text{dBm}(\text{LTE Band 26}(814\text{-}824\text{MHz}))$
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic. 3 For the out of band: Set the RBW=1MHz, VBW = 3MHz, Start=30MHz, Stop= 10th harmonic. 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Note: Please refer to Appendix A of the Appendix Test Data.

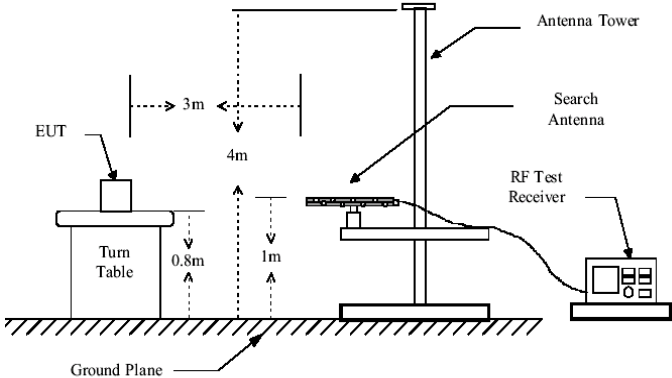
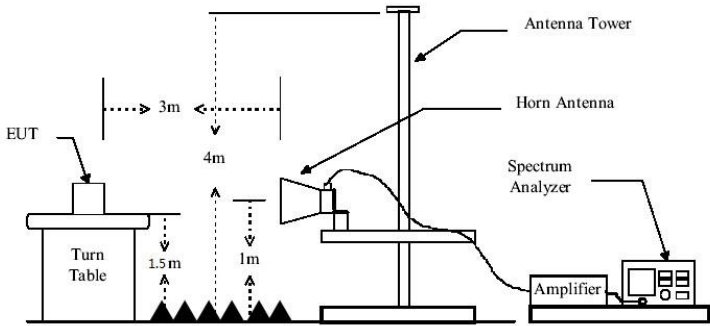
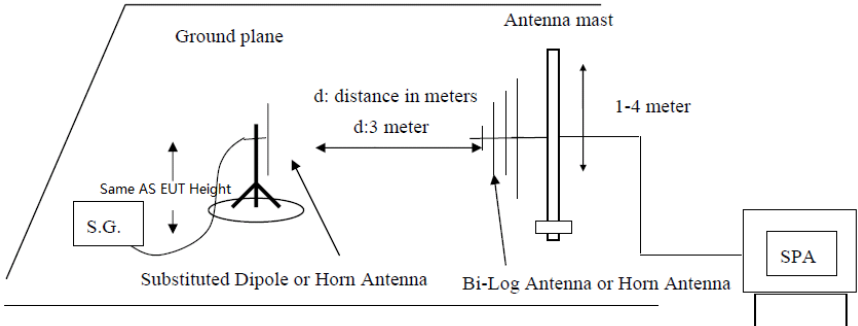
4.8 ERP, EIRP Measurement

Test Requirement:	Part 2.1046, Part 22.913(a), Part 24.232(b), Part 27.50(b), Part 27.50(c), Part 27.50(d), Part 27.50(h), Part 90.635
Test Method:	ANSI C63.26:2015
Limit:	$ERP \leq 7W(38.45dBm)$ (LTE Band 5,26(824-849MHz)) $EIRP \leq 2W(33.00dBm)$ (LTE Band 2,25) $ERP \leq 3W(34.77dBm)$ (LTE Band 13) $ERP \leq 3W(34.77dBm)$ (LTE Band 12,17,71) $EIRP \leq 1W(30.00dBm)$ (LTE Band 4,66) $EIRP \leq 2W(33.00dBm)$ (LTE Band 7,38,41) $ERP \leq 100W(50.00dBm)$ (LTE Band 26(814-824MHz))
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated. 3. ERP were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows: $\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable Loss (dB)}$ 4. EIRP were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: $\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass
Remark:	H,E1,E2 mean for EUT polarization of X, Y, Z

Note: Please refer to Appendix A of the Appendix Test Data.

4.9 Field strength of spurious radiation measurement

Test Requirement:	Part 2.1053 Part 22.917 Part 24.238 Part 27.53(c)(f) Part 27.53(g) Part 27.53(h) Part 27.53(m) Part 90.691
Test Method:	ANSI C63.26:2015
Limit:	$\leq -13\text{dBm}(\text{LTE Band 5, 26}(824\text{-}849\text{MHz}))$ $\leq -13\text{dBm}(\text{LTE Band 2, 25})$ $\leq -13\text{dBm}(\text{LTE Band 12, 17, 71})$ $\leq -13\text{dBm}(\text{LTE Band 4, 66})$ $\leq -25\text{dBm}(\text{LTE Band 7, 38, 41})$ $\leq -13\text{dBm}(\text{LTE Band 26}(814\text{-}824\text{MHz}))$
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data:

QPSK Mode:

Test mode:	LTE Band 2(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.24	Vertical	-36.57	-13.00	Pass
5552.24	V	-39.36		
7402.56	V	-38.24		
9253.35	V	-43.35		
11104.54	V	---		
3701.38	Horizontal	-39.19	-13.00	Pass
5552.28	H	-42.24		
7402.78	H	-44.25		
9253.42	H	-45.24		
11104.36	H	---		
Test mode:	LTE Band 2(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-37.14	-13.00	Pass
5640.00	V	-39.74		
7520.00	V	-38.36		
9400.00	V	-43.06		
11280.00	V	---		
3760.00	Horizontal	-39.32	-13.00	Pass
5640.00	H	-42.45		
7520.00	H	-45.75		
9400.00	H	-45.53		
11280.00	H	---		
Test mode:	LTE Band 2(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-37.38	-13.00	Pass
5727.90	V	-39.28		
7637.20	V	-38.12		
9546.50	V	-43.02		
11455.80	V	---		
3818.60	Horizontal	-38.02	-13.00	Pass
5727.90	H	-42.74		
7637.20	H	-44.25		
9546.50	H	-45.14		
11455.80	H	---		

Remark :

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 4(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-37.47	-13.00	Pass
5132.10	V	-39.01		
6842.80	V	-38.48		
8553.50	V	-43.39		
10264.20	V	---		
3421.40	Horizontal	-39.25	-13.00	Pass
5132.10	H	-42.15		
6842.80	H	-45.53		
8553.50	H	-45.31		
10264.20	H	---		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-36.24	-13.00	Pass
5197.50	V	-39.47		
6930.00	V	-37.31		
8662.50	V	-43.25		
10395.00	V	---		
3465.00	Horizontal	-38.21	-13.00	Pass
5197.50	H	-42.47		
6930.00	H	-45.35		
8662.50	H	-46.25		
10395.00	H	---		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-36.72	-13.00	Pass
5262.90	V	-39.54		
7017.20	V	-37.47		
8771.50	V	-42.01		
10525.80	V	---		
3508.60	Horizontal	-38.54	-13.00	Pass
5262.90	H	-43.27		
7017.20	H	-44.53		
8771.50	H	-45.14		
10525.80	H	---		

Remark:

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.40	Vertical	-36.45	-13.00	Pass
2474.10	V	-39.00		
3298.80	V	-38.25		
4123.50	V	-43.35		
4948.20	V	---		
1649.40	Horizontal	-38.21	-13.00	Pass
2474.10	H	-42.34		
3298.80	H	-44.25		
4123.50	H	-45.14		
4948.20	H	---		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.00	Vertical	-36.41	-13.00	Pass
2509.50	V	-39.21		
3346.00	V	-38.75		
4182.50	V	-43.45		
5019.00	V	---		
1673.00	Horizontal	-38.47	-13.00	Pass
2509.50	H	-42.35		
3346.00	H	-44.21		
4182.50	H	-46.35		
5019.00	H	---		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.60	Vertical	-37.05	-13.00	Pass
2544.90	V	-39.22		
3393.20	V	-38.24		
4241.50	V	-43.36		
5089.80	V	---		
1696.60	Horizontal	-39.21	-13.00	Pass
2544.90	H	-42.21		
3393.20	H	-44.05		
4241.50	H	-46.25		
5089.80	H	---		

Remark :

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 7(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5040.14	Vertical	-36.15	-25.00	Pass
7868.14	V	-39.25		
10028.31	V	-38.14		
12535.12	V	-43.31		
15028.61	V	---		
5040.14	Horizontal	-39.25	-25.00	Pass
7868.14	H	-42.41		
10028.31	H	-45.37		
12535.12	H	-45.01		
15028.61	H	---		
Test mode:	LTE Band 7(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-36.71	-25.00	Pass
7605.00	V	-39.25		
10140.00	V	-37.01		
12675.00	V	-43.47		
15210.00	V	---		
5070.00	Horizontal	-38.12	-25.00	Pass
7605.00	H	-43.21		
10140.00	H	-44.35		
12675.00	H	-45.45		
15210.00	H	---		
Test mode:	LTE Band 7(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-36.25	-25.00	Pass
7702.50	V	-39.31		
10270.00	V	-37.47		
12837.50	V	-43.02		
15405.00	V	---		
5135.00	Horizontal	-39.24	-25.00	Pass
7702.50	H	-42.25		
10270.00	H	-44.31		
12837.50	H	-46.53		
15405.00	H	---		

Remark :

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 12(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-36.75	-25.00	Pass
7507.50	V	-39.31		
10010.00	V	-37.75		
12512.50	V	-43.50		
15015.00	V	---		
5005.00	Horizontal	-39.22	-25.00	Pass
7507.50	H	-42.28		
10010.00	H	-44.36		
12512.50	H	-46.24		
15015.00	H	---		
Test mode:	LTE Band 12(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5075.31	Vertical	-37.56	-25.00	Pass
7636.45	V	-38.02		
10131.52	V	-38.24		
12686.14	V	-43.45		
15228.31	V	---		
5075.31	Horizontal	-39.63	-25.00	Pass
7636.45	H	-42.24		
10131.52	H	-45.53		
12686.14	H	-46.14		
15228.31	H	---		
Test mode:	LTE Band 12(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5156.21	Vertical	-36.46	-25.00	Pass
7705.61	V	-39.35		
10259.31	V	-37.02		
12878.86	V	-43.45		
15446.14	V	---		
5156.21	Horizontal	-39.31	-25.00	Pass
7705.61	H	-42.47		
10259.31	H	-45.52		
12878.86	H	-46.25		
15446.14	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 17(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5012.54	Vertical	-36.21	-25.00	Pass
7523.51	V	-39.42		
10058.31	V	-37.02		
12573.21	V	-43.21		
15083.51	V	---		
5012.54	Horizontal	-39.35	-25.00	Pass
7523.51	H	-42.74		
10058.31	H	-44.61		
12573.21	H	-45.21		
15083.51	H	---		
Test mode:	LTE Band 17(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5013.14	Vertical	-36.57	-25.00	Pass
7621.05	V	-39.21		
10176.00	V	-38.01		
12601.00	V	-43.56		
15310.00	V	---		
5013.14	Horizontal	-39.14	-25.00	Pass
7621.05	H	-42.85		
10176.00	H	-44.01		
12601.00	H	-45.21		
15310.00	H	---		
Test mode:	LTE Band 17(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5148.04	Vertical	-36.54	-25.00	Pass
7779.50	V	-39.01		
10245.00	V	-37.53		
12818.50	V	-43.23		
15437.00	V	---		
5148.04	Horizontal	-39.21	-25.00	Pass
7779.50	H	-42.40		
10245.00	H	-45.01		
12818.50	H	-45.47		
15437.00	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 25(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-35.14	-13.00	Pass
7507.50	V	-38.64		
10010.00	V	-39.64		
12512.50	V	-40.31		
15015.00	V	---		
5005.00	Horizontal	-38.15	-13.00	Pass
7507.50	H	-40.25		
10010.00	H	-42.64		
12512.50	H	-43.24		
15015.00	H	---		
Test mode:	LTE Band 25(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-35.54	-13.00	Pass
7605.00	V	-38.64		
10140.00	V	-38.58		
12675.00	V	-42.02		
15210.00	V	---		
5070.00	Horizontal	-35.25	-13.00	Pass
7605.00	H	-41.31		
10140.00	H	-42.57		
12675.00	H	-44.75		
15210.00	H	---		
Test mode:	LTE Band 25(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-35.01	-13.00	Pass
7702.50	V	-38.32		
10270.00	V	-36.12		
12837.50	V	-43.35		
15405.00	V	---		
5135.00	Horizontal	-39.75	-13.00	Pass
7702.50	H	-41.48		
10270.00	H	-44.36		
12837.50	H	-45.73		
15405.00	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3576.56	Vertical	-37.21	-13.00	Pass
7507.50	V	-39.21		
10010.00	V	-37.75		
12512.50	V	-42.76		
15015.00	V	---		
5005.00	Horizontal	-38.02	-13.00	Pass
7507.50	H	-41.52		
10010.00	H	-43.52		
12512.50	H	-45.75		
15015.00	H	---		
Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-35.23	-13.00	Pass
7605.00	V	-36.02		
10140.00	V	-39.25		
12675.00	V	-42.53		
15210.00	V	---		
5070.00	Horizontal	-39.25	-13.00	Pass
7605.00	H	-43.02		
10140.00	H	-44.86		
12675.00	H	-45.78		
15210.00	H	---		
Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-36.78	-13.00	Pass
7702.50	V	-38.28		
10270.00	V	-39.51		
12837.50	V	-42.27		
15405.00	V	---		
5135.00	Horizontal	-38.52	-13.00	Pass
7702.50	H	-41.83		
10270.00	H	-42.67		
12837.50	H	-45.31		
15405.00	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3975.14	Vertical	-36.71	-13.00	Pass
7645.12	V	-39.27		
10078.31	V	-38.09		
12328.25	V	-43.51		
13145.10	V	---		
3975.14	Horizontal	-38.79	-13.00	Pass
7645.12	H	-42.36		
10078.31	H	-44.83		
12328.25	H	-46.30		
13145.10	H	---		
Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3715.85	Vertical	-36.94	-13.00	Pass
7645.31	V	-39.34		
10256.55	V	-37.75		
12573.12	V	-43.62		
15145.31	V	---		
3715.85	Horizontal	-39.51	-13.00	Pass
7645.31	H	-42.14		
10256.55	H	-44.44		
12573.12	H	-45.96		
15145.31	H	---		
Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3828.31	Vertical	-36.91	-13.00	Pass
7862.12	V	-39.09		
10214.36	V	-37.63		
12518.15	V	-43.23		
15536.14	V	---		
3828.31	Horizontal	-39.51	-13.00	Pass
7862.12	H	-42.43		
10214.36	H	-44.97		
12518.15	H	-46.45		
15536.14	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode	LTE Band 38(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2596.61	Vertical	-37.26	-25.00	Pass
5136.54	V	-39.00		
10756.13	V	-37.99		
12847.63	V	-43.20		
13768.31	V	---		
2596.61	Horizontal	-38.82	-25.00	Pass
5136.54	H	-42.84		
10756.13	H	-44.57		
12847.63	H	-46.19		
13768.31	H	---		
Test mode	LTE Band 38(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2686.56	Vertical	-36.93	-25.00	Pass
5386.61	V	-39.46		
10756.25	V	-37.88		
12759.31	V	-43.07		
15259.47	V	---		
2686.56	Horizontal	-39.27	-25.00	Pass
5386.61	H	-42.18		
10756.25	H	-45.19		
12759.31	H	-45.58		
15259.47	H	---		
Test mode	LTE Band 38(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2702.64	Vertical	-36.45	-25.00	Pass
5432.51	V	-39.39		
10857.31	V	-38.31		
12789.12	V	-42.88		
16145.32	V	---		
2702.64	Horizontal	-38.92	-25.00	Pass
5432.51	H	-42.48		
10857.31	H	-44.52		
12789.12	H	-45.67		
16145.32	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode	LTE Band 41(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
4981.12	Vertical	-36.68	-25.00	Pass
9931.25	V	-39.66		
10057.58	V	-38.00		
12157.31	V	-43.65		
13243.58	V	---		
4981.12	Horizontal	-39.32	-25.00	Pass
9931.25	H	-42.53		
10057.58	H	-44.97		
12157.31	H	-46.05		
13243.58	H	---		
Test mode	LTE Band 41(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5014.64	Vertical	-36.81	-25.00	Pass
10031.21	V	-39.26		
12364.61	V	-38.01		
13573.73	V	-42.89		
15248.27	V	---		
5014.64	Horizontal	-39.04	-25.00	Pass
10031.21	H	-42.35		
12364.61	H	-44.88		
13573.73	H	-46.08		
15248.27	H	---		
Test mode	LTE Band 41(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5009.64	Vertical	-37.28	-25.00	Pass
10243.01	V	-39.56		
12104.43	V	-37.78		
13593.15	V	-43.50		
15321.14	V	---		
5009.64	Horizontal	-39.48	-25.00	Pass
10243.01	H	-42.99		
12104.43	H	-44.70		
13593.15	H	-45.79		
15321.14	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 66(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-36.24	-13.00	Pass
5132.10	V	-39.35		
6842.80	V	-38.45		
8553.50	V	-43.23		
10264.20	V	---		
3421.40	Horizontal	-39.12	-13.00	Pass
5132.10	H	-42.84		
6842.80	H	-44.23		
8553.50	H	-46.52		
10264.20	H	---		
Test mode:	LTE Band 66(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-36.47	-13.00	Pass
5197.50	V	-39.41		
6930.00	V	-37.52		
8662.50	V	-43.31		
10395.00	V	---		
3465.00	Horizontal	-39.22	-13.00	Pass
5197.50	H	-42.17		
6930.00	H	-44.38		
8662.50	H	-46.42		
10395.00	H	---		
Test mode:	LTE Band 66(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-36.27	-13.00	Pass
5262.90	V	-39.31		
7017.20	V	-37.52		
8771.50	V	-43.21		
10525.80	V	---		
3508.60	Horizontal	-38.14	-13.00	Pass
5262.90	H	-42.21		
7017.20	H	-45.13		
8771.50	H	-46.76		
10525.80	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst

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Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-36.25	-13.00	Pass
5552.10	V	-39.14		
7402.80	V	-38.35		
9253.50	V	-43.54		
11104.20	V	---		
3701.40	Horizontal	-38.14	-13.00	Pass
5552.10	H	-42.63		
7402.80	H	-44.21		
9253.50	H	-45.66		
11104.20	H	---		
Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-36.53	-13.00	Pass
5640.00	V	-39.31		
7520.00	V	-37.25		
9400.00	V	-43.31		
11280.00	V	---		
3760.00	Horizontal	-39.58	-13.00	Pass
5640.00	H	-42.63		
7520.00	H	-44.74		
9400.00	H	-46.52		
11280.00	H	---		
Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-36.35	-13.00	Pass
5727.90	V	-39.51		
7637.20	V	-37.53		
9546.50	V	-43.74		
11455.80	V	---		
3818.60	Horizontal	-39.35	-13.00	Pass
5727.90	H	-42.21		
7637.20	H	-44.47		
9546.50	H	-45.02		
11455.80	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 4(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-37.12	-13.00	Pass
5132.10	V	-39.25		
6842.80	V	-38.47		
8553.50	V	-43.32		
10264.20	V	---		
3421.40	Horizontal	-39.21	-13.00	Pass
5132.10	H	-42.35		
6842.80	H	-44.41		
8553.50	H	-46.75		
10264.20	H	---		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-36.24	-13.00	Pass
5197.50	V	-39.51		
6930.00	V	-37.65		
8662.50	V	-43.42		
10395.00	V	---		
3465.00	Horizontal	-39.35	-13.00	Pass
5197.50	H	-42.25		
6930.00	H	-44.43		
8662.50	H	-45.15		
10395.00	H	---		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-36.53	-13.00	Pass
5262.90	V	-39.01		
7017.20	V	-38.25		
8771.50	V	-42.47		
10525.80	V	---		
3508.60	Horizontal	-38.41	-13.00	Pass
5262.90	H	-42.02		
7017.20	H	-45.35		
8771.50	H	-45.14		
10525.80	H	---		

Remark:

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.40	Vertical	-37.35	-13.00	Pass
2474.10	V	-39.14		
3298.80	V	-38.53		
4123.50	V	-43.11		
4948.20	V	---		
1649.40	Horizontal	-38.24	-13.00	Pass
2474.10	H	-42.78		
3298.80	H	-44.32		
4123.50	H	-46.21		
4948.20	H	---		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.00	Vertical	-36.35	-13.00	Pass
2509.50	V	-39.51		
3346.00	V	-37.05		
4182.50	V	-42.31		
5019.00	V	---		
1673.00	Horizontal	-39.15	-13.00	Pass
2509.50	H	-42.75		
3346.00	H	-45.02		
4182.50	H	-46.53		
5019.00	H	---		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.60	Vertical	-37.53	-13.00	Pass
2544.90	V	-39.21		
3393.20	V	-37.85		
4241.50	V	-43.25		
5089.80	V	---		
1696.60	Horizontal	-38.53	-13.00	Pass
2544.90	H	-42.01		
3393.20	H	-45.24		
4241.50	H	-45.35		
5089.80	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 7(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-37.58	-25.00	Pass
7507.50	V	-39.12		
10010.00	V	-37.24		
12512.50	V	-43.31		
15015.00	V	---		
5005.00	Horizontal	-39.21	-25.00	Pass
7507.50	H	-42.53		
10010.00	H	-44.01		
12512.50	H	-46.74		
15015.00	H	---		
Test mode:	LTE Band 7(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-36.75	-25.00	Pass
7605.00	V	-39.02		
10140.00	V	-38.52		
12675.00	V	-42.52		
15210.00	V	---		
5070.00	Horizontal	-39.15	-25.00	Pass
7605.00	H	-42.73		
10140.00	H	-44.53		
12675.00	H	-45.01		
15210.00	H	---		
Test mode:	LTE Band 7(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-37.35	-25.00	Pass
7702.50	V	-39.12		
10270.00	V	-38.32		
12837.50	V	-43.05		
15405.00	V	---		
5135.00	Horizontal	-39.52	-25.00	Pass
7702.50	H	-42.14		
10270.00	H	-45.16		
12837.50	H	-45.71		
15405.00	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-36.82	-13.00	Pass
5552.10	V	-39.61		
7402.80	V	-37.24		
9253.50	V	-42.74		
11104.20	V	---		
3701.40	Horizontal	-39.35	-13.00	Pass
5552.10	H	-42.71		
7402.80	H	-44.07		
9253.50	H	-45.24		
11104.20	H	---		
Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-36.01	-13.00	Pass
5640.00	V	-39.74		
7520.00	V	-38.35		
9400.00	V	-43.31		
11280.00	V	---		
3760.00	Horizontal	-39.02	-13.00	Pass
5640.00	H	-42.25		
7520.00	H	-44.74		
9400.00	H	-45.81		
11280.00	H	---		
Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-36.45	-13.00	Pass
5727.90	V	-38.21		
7637.20	V	-38.25		
9546.50	V	-43.72		
11455.80	V	---		
3818.60	Horizontal	-39.21	-13.00	Pass
5727.90	H	-42.01		
7637.20	H	-44.54		
9546.50	H	-45.52		
11455.80	H	---		

Remark :

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 17(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-36.52	-25.00	Pass
7507.50	V	-39.12		
10010.00	V	-37.78		
12512.50	V	-43.71		
15015.00	V	---		
5005.00	Horizontal	-39.23	-25.00	Pass
7507.50	H	-42.54		
10010.00	H	-44.64		
12512.50	H	-45.45		
15015.00	H	---		
Test mode:	LTE Band 17(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-36.05	-25.00	Pass
7605.00	V	-39.53		
10140.00	V	-38.52		
12675.00	V	-43.31		
15210.00	V	---		
5070.00	Horizontal	-39.14	-25.00	Pass
7605.00	H	-42.34		
10140.00	H	-44.21		
12675.00	H	-45.05		
15210.00	H	---		
Test mode:	LTE Band 17(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-36.24	-25.00	Pass
7702.50	V	-39.41		
10270.00	V	-37.53		
12837.50	V	-43.01		
15405.00	V	---		
5135.00	Horizontal	-39.22	-25.00	Pass
7702.50	H	-42.01		
10270.00	H	-45.35		
12837.50	H	-45.58		
15405.00	H	---		

Remark:

- 1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 25(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5004.75	Vertical	-36.99	-13.00	Pass
7506.31	V	-39.94		
10008.13	V	-38.38		
12217.58	V	-42.99		
13563.14	V	---		
5004.75	Horizontal	-39.29	-13.00	Pass
7506.31	H	-42.57		
10008.13	H	-44.88		
12217.58	H	-45.98		
13563.14	H	---		
Test mode:	LTE Band 25(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5058.31	Vertical	-36.37	-13.00	Pass
7601.58	V	-39.63		
10124.33	V	-37.53		
12659.45	V	-42.83		
15365.86	V	---		
5058.31	Horizontal	-39.57	-13.00	Pass
7601.58	H	-42.57		
10124.33	H	-44.46		
12659.45	H	-46.31		
15365.86	H	---		
Test mode:	LTE Band 25(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5205.21	Vertical	-36.74	-13.00	Pass
7778.25	V	-39.68		
10269.21	V	-37.96		
12705.02	V	-43.41		
15386.26	V	---		
5205.21	Horizontal	-38.95	-13.00	Pass
7778.25	H	-42.76		
10269.21	H	-44.78		
12705.02	H	-46.22		
15386.26	H	---		

Remark :

- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3586.31	Vertical	-37.07	-13.00	Pass
7510.15	V	-39.79		
10012.32	V	-37.63		
12503.76	V	-43.54		
15021.15	V	---		
3586.31	Horizontal	-38.93	-13.00	Pass
7510.15	H	-42.23		
10012.32	H	-44.91		
12503.76	H	-46.13		
15021.15	H	---		
Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5059.31	Vertical	-36.51	-13.00	Pass
7635.57	V	-39.42		
10128.61	V	-38.35		
12583.31	V	-43.07		
15227.30	V	---		
5059.31	Horizontal	-39.41	-13.00	Pass
7635.57	H	-43.03		
10128.61	H	-44.74		
12583.31	H	-46.16		
15227.30	H	---		
Test mode (814-824MHz) :	LTE Band 26(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5205.31	Vertical	-36.72	-13.00	Pass
7715.48	V	-39.43		
10286.25	V	-38.32		
12705.47	V	-43.10		
15408.31	V	---		
5205.31	Horizontal	-39.42	-13.00	Pass
7715.48	H	-42.09		
10286.25	H	-44.68		
12705.47	H	-46.45		
15408.31	H	---		

Remark :

- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3925.64	Vertical	-36.35	-13.00	Pass
7658.10	V	-39.70		
10082.51	V	-38.41		
12423.42	V	-42.89		
13178.32	V	---		
3925.64	Horizontal	-38.93	-13.00	Pass
7658.10	H	-42.84		
10082.51	H	-44.57		
12423.42	H	-46.34		
13178.32	H	---		
Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3802.15	Vertical	-37.16	-13.00	Pass
7623.48	V	-39.83		
10261.25	V	-37.70		
12610.45	V	-43.04		
15261.25	V	---		
3802.15	Horizontal	-39.51	-13.00	Pass
7623.48	H	-42.49		
10261.25	H	-44.55		
12610.45	H	-46.28		
15261.25	H	---		
Test mode (824-849MHz) :	LTE Band 26(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3828.48	Vertical	-36.80	-13.00	Pass
7862.01	V	-39.63		
10224.47	V	-37.62		
12520.11	V	-43.80		
15503.47	V	---		
3828.48	Horizontal	-39.40	-13.00	Pass
7862.01	H	-42.33		
10224.47	H	-45.20		
12520.11	H	-46.42		
15503.47	H	---		

Remark :

- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode	LTE Band 38(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2596.86	Vertical	-36.80	-25.00	Pass
5136.01	V	-39.23		
10758.73	V	-38.40		
12801.25	V	-42.96		
13773.40	V	---		
2596.86	Horizontal	-38.81	-25.00	Pass
5136.01	H	-43.05		
10758.73	H	-45.22		
12801.25	H	-45.71		
13773.40	H	---		
Test mode	LTE Band 38(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2698.31	Vertical	-37.11	-25.00	Pass
5395.48	V	-39.29		
10761.30	V	-37.87		
12801.38	V	-43.64		
15274.58	V	---		
2698.31	Horizontal	-39.31	-25.00	Pass
5395.48	H	-42.17		
10761.30	H	-44.72		
12801.38	H	-46.18		
15274.58	H	---		
Test mode	LTE Band 38(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
2708.64	Vertical	-36.84	-25.00	Pass
5432.14	V	-39.60		
10758.82	V	-38.03		
12874.10	V	-43.06		
16384.25	V	---		
2708.64	Horizontal	-39.58	-25.00	Pass
5432.14	H	-42.93		
10758.82	H	-45.05		
12874.10	H	-46.43		
16384.25	H	---		

Remark :

- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode	LTE Band 41(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
4976.31	Vertical	-36.97	-25.00	Pass
9928.31	V	-39.36		
10102.27	V	-38.29		
12168.35	V	-43.56		
13258.31	V	---		
4976.31	Horizontal	-38.78	-25.00	Pass
9928.31	H	-42.42		
10102.27	H	-45.18		
12168.35	H	-46.36		
13258.31	H	---		
Test mode	LTE Band 41(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5028.66	Vertical	-37.09	-25.00	Pass
10004.63	V	-39.75		
12358.47	V	-37.66		
13526.54	V	-42.87		
15238.31	V	---		
5028.66	Horizontal	-38.89	-25.00	Pass
10004.63	H	-42.32		
12358.47	H	-45.12		
13526.54	H	-46.33		
15238.31	H	---		
Test mode	LTE Band 41(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5010.36	Vertical	-37.22	-25.00	Pass
10257.21	V	-39.06		
12203.47	V	-37.87		
13583.28	V	-42.95		
15337.25	V	---		
5010.36	Horizontal	-38.99	-25.00	Pass
10257.21	H	-42.69		
12203.47	H	-45.19		
13583.28	H	-45.88		
15337.25	H	---		

Remark :

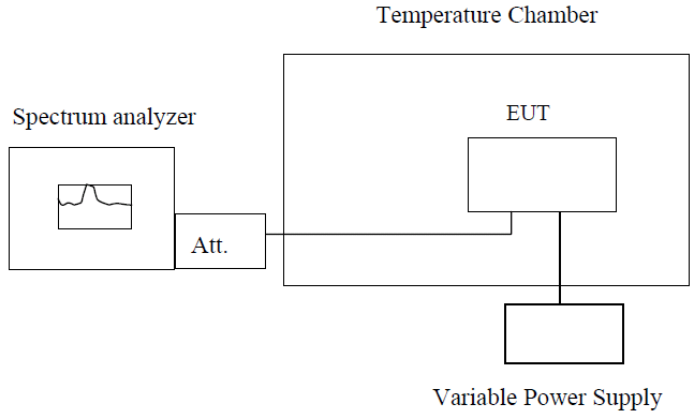
- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 66(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3420.47	Vertical	-36.01	-13.00	Pass
5133.21	V	-39.25		
6847.25	V	-37.74		
8552.15	V	-43.12		
10263.25	V	---		
3420.47	Horizontal	-38.01	-13.00	Pass
5133.21	H	-42.35		
6847.25	H	-44.81		
8552.15	H	-45.12		
10263.25	H	---		
Test mode:	LTE Band 66(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3458.31	Vertical	-36.35	-13.00	Pass
5198.65	V	-39.45		
6929.54	V	-37.73		
8658.31	V	-43.25		
10402.69	V	---		
3458.31	Horizontal	-39.53	-13.00	Pass
5198.65	H	-42.12		
6929.54	H	-45.53		
8658.31	H	-45.48		
10402.69	H	---		
Test mode:	LTE Band 66(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3510.58	Vertical	-36.21	-13.00	Pass
5263.58	V	-39.24		
7023.36	V	-38.62		
8782.31	V	-43.35		
10535.75	V	---		
3510.58	Horizontal	-39.55	-13.00	Pass
5263.58	H	-42.45		
7023.36	H	-45.23		
8782.31	H	-45.81		
10535.75	H	---		

Remark :

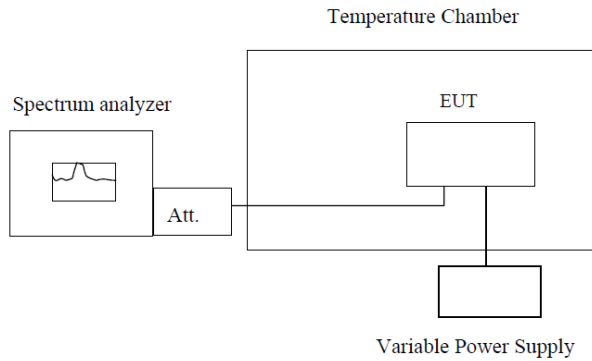
- 4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
- 5 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
- 6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

4.10 Frequency stability V.S. Temperature measurement

Test Requirement:	Part 2.1055(a)(1)(b) Part 22.355 Part 24.235 Part 27.54 Part 90.213
Test Method:	ANSI C63.26:2015
Limit:	2.5ppm(Part 22) Within the authorized bands of operation(Part 24, Part 27)
Test setup:	 Temperature Chamber Spectrum analyzer Att. EUT Variable Power Supply Note : Measurement setup for testing on Antenna connector
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass
Remark:	If all frequencies stability are comply with the lower limit, then all results can be considered qualified

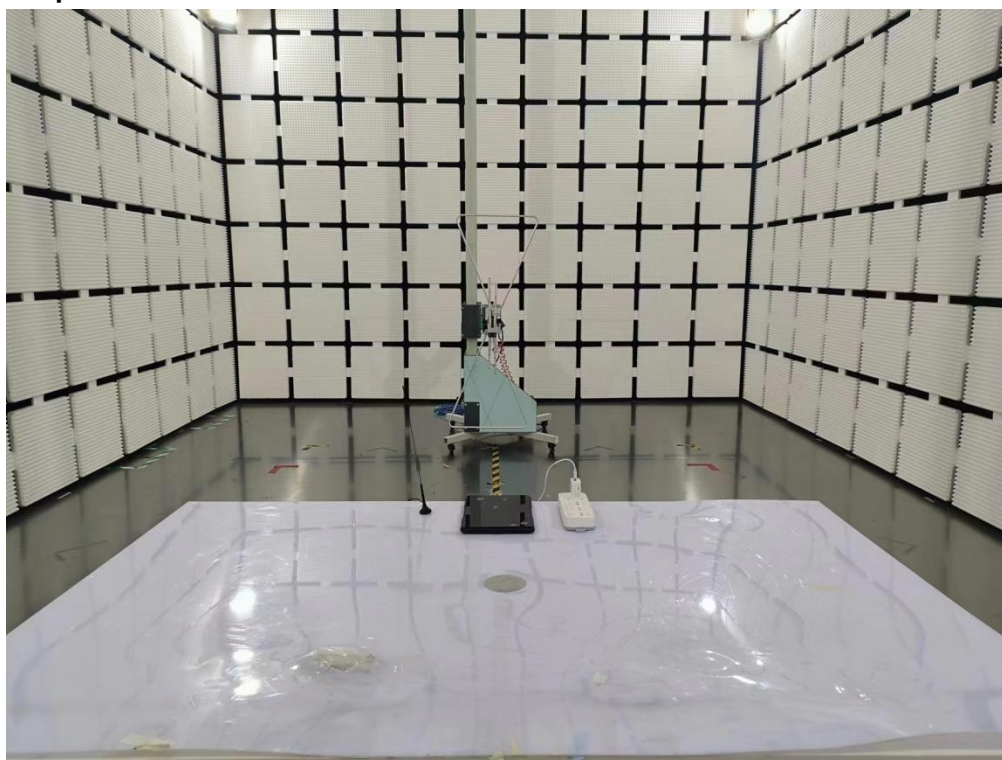
Note: Please refer to Appendix A of the Appendix Test Data.

4.11 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 2.1055(d)(1)(2) Part 22.355 Part 24.235 Part 27.54 Part 90.213
Test Method:	ANSI C63.26:2015
Limit:	2.5ppm Band II & Band VII should be within authorized band.
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 20°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass
Remark:	1. Manufacturer specified the battery operating end point voltage is 3.61VDC, max voltage is 4.18VDC. 2. If all frequencies stability are comply with the lower limit, then all results can be considered qualified

Note: Please refer to Appendix A of the Appendix Test Data.

4.12 Test Setup Photo



-----END OF REPORT-----