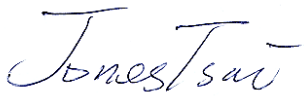
FCC RF Test Report

APPLICANT	:	Doro AB
EQUIPMENT	:	GSM/WCDMA/LTE Mobile Telephone
BRAND NAME	:	doro
MODEL NAME	:	Doro 824
FCC ID	:	WS5DORO824U
STANDARD	:	47 CFR Part 2, 22(H), 24(E), 27(L), 27(H)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Mar. 30, 2015 and completely tested on Jun. 23, 2015. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager

Testing Laboratory
2627

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG533002-01B	Rev. 01	Initial issue of report	Jul. 30, 2015

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	99% Occupied Bandwidth and 26dB Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 17)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(g)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 17)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22 within authorized band	PASS	-

4.4	§22.913(a)(2)	Effective Radiated Power (Band 5)	ERP < 7 Watt	PASS	-
	§27.50(c)(10)	Effective Radiated Power (Band 17)	ERP < 3 Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
4.5	§2.1053 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 17)	< $43+10\log_{10}(P[Watts])$	PASS	Under limit 6.01 dB at 5133.000 MHz

1 General Description

1.1 Applicant

Doro AB
Magistratsvägen 10 SE-226 43 Lund Sweden

1.2 Manufacturer

BYD PRECISION MFR CO., LTD
No. 3001, Baohe Road, Baolong Industrial, Longgang, Shenzhen, 518116, P. R. China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	GSM/WCDMA/LTE Mobile Telephone
Brand Name	doro
Model Name	Doro 824
FCC ID	WS5DORO824U
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/ DC-HSDPA/HSPA+(Downlink Only)/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/ Bluetooth v3.0+EDR/Bluetooth v4.1 LE
HW Version	Doro_DVT2
SW Version	824A_US_AT_00.31.02_USER_150722
EUT Stage	Identical Prototype

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz
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 17 : 5MHz / 10MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.47 dBm LTE Band 4 : 24.13 dBm LTE Band 5 : 23.40 dBm LTE Band 17 : 23.44 dBm
Antenna Type	PIFA Antenna
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum Emission Designator, Frequency Tolerance, and ERP/EIRP Power

LTE Band 2	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M10G7D	-	0.6982	1M10W7D	-	0.5546
3	2M73G7D	-	0.6950	2M73W7D	-	0.6152
5	4M51G7D	-	0.6792	4M51W7D	-	0.5728
10	9M11G7D	0.0023	0.6982	9M07W7D	-	0.6457
15	13M5G7D	-	0.7295	13M5W7D	-	0.6353
20	18M5G7D	-	0.6808	18M3W7D	-	0.5508
LTE Band 4	**QPSK**			**16QAM**		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M10G7D	-	0.5636	1M10W7D	-	0.5370
3	2M73G7D	-	0.5984	2M73W7D	-	0.5140
5	4M51G7D	-	0.5834	4M50W7D	-	0.4842
10	9M11G7D	0.0127	0.6081	9M05W7D	-	0.5105
15	13M5G7D	-	0.5808	13M5W7D	-	0.5212
20	18M5G7D	-	0.5675	18M5W7D	-	0.4742

LTE Band 5	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	1M10G7D	-	0.1545	1M10W7D	-	0.1462
3	2M73G7D	-	0.1690	2M73W7D	-	0.1476
5	4M50G7D	-	0.1687	4M51W7D	-	0.1396
10	9M09G7D	0.0430	0.1820	9M09W7D	-	0.1524
LTE Band 17	**QPSK**			**16QAM**		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	4M52G7D	-	0.0869	4M51W7D	-	0.0752
10	9M15G7D	0.0041	0.0859	9M09W7D	-	0.0766

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	**Sporton Site No.**		**FCC/IC Registration No.**
	TH01-KS	03CH02-KS	418269/4086E

Note: The test site complies with ANSI C63.4 2009 requirement.

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H)
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

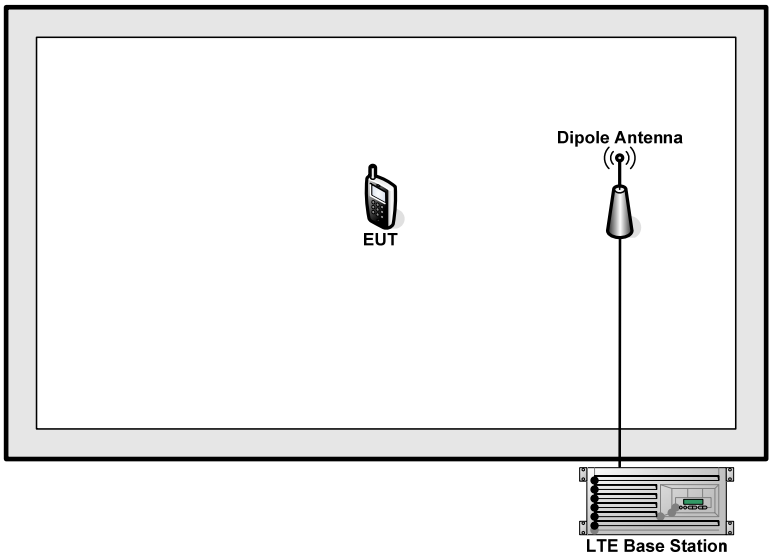
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	2						v	v	v	v		v	v	v	v
	4						v	v	v	v		v	v	v	v
	5				v	-	-	v	v	v		v	v	v	v
	17	-	-		v	-	-	v	v	v		v	v	v	v
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v			v	v	v	v
	4	v	v	v	v	v	v	v	v			v	v	v	v
	5	v	v	v	v	-	-	v	v			v	v	v	v
	17	-	-	v	v	-	-	v	v			v	v	v	v
Conducted Band Edge	2	v	v	v	v	v	v	v	v	v		v	v		v
	4	v	v	v	v	v	v	v	v	v		v	v		v
	5	v	v	v	v	-	-	v	v	v		v	v		v
	17	-	-	v	v	-	-	v	v	v		v	v		v

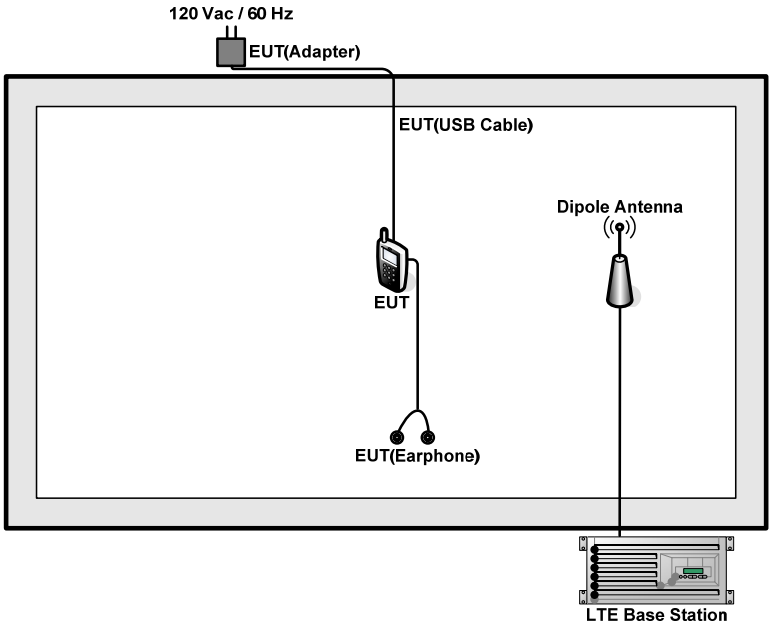
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Conducted Spurious Emission	2	v	v	v	v	v	v	v	v	v	v		v	v	v
	4	v	v	v	v	v	v	v	v	v	v		v	v	v
	5	v	v	v	v	-	-	v	v	v	v		v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
Frequency Stability	2				v			v				v		v	
	4				v			v				v		v	
	5				v	-	-	v				v		v	
	17	-	-		v	-	-	v				v		v	
E.R.P./ E.I.R.P.	2	v	v	v	v	v	v	v	v	v	v		v	v	v
	4	v	v	v	v	v	v	v	v	v	v		v	v	v
	5	v	v	v	v	-	-	v	v	v	v		v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v			v	v	v
	4	v	v	v	v	v	v	v		v			v	v	v
	5	v	v	v	v	-	-	v		v			v	v	v
	17	-	-	v	v	-	-	v		v			v	v	v
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.														

2.2 Connection Diagram of Test System

For 24E/27L



For 22H/27H



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW INSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 5.0 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 5.0 (dB)

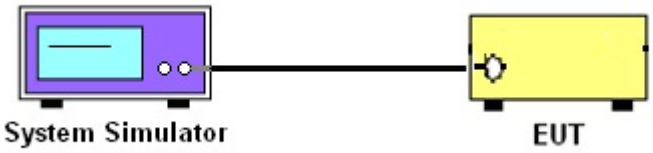
3 Conducted Test Items

3.1 Measuring Instruments

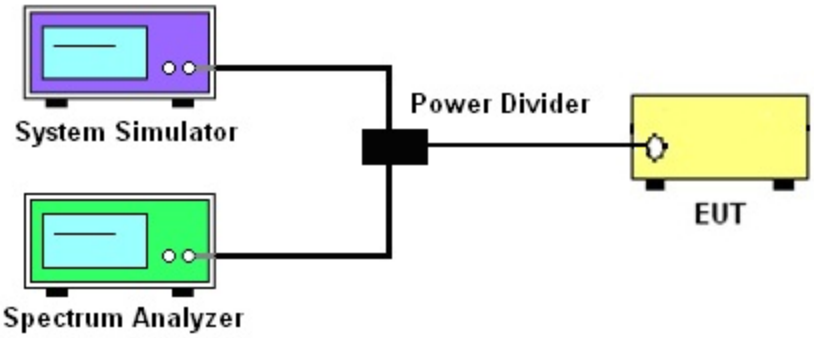
See list of measuring instruments of this test report.

3.2 Test Setup

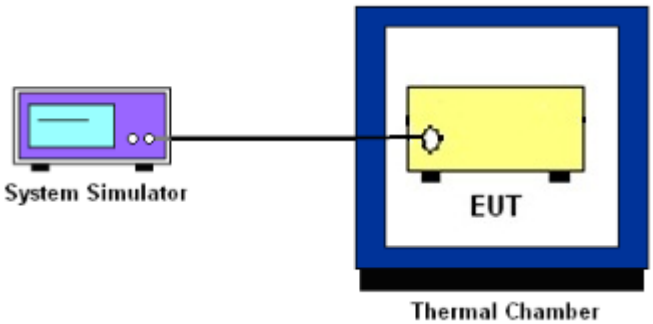
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power

3.4.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.4.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. 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.

3.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.7.1.
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.6.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a) for Band 5

For operations in the 824 – 849 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a) for Band 2

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (g) for Band 17

For operations in the 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h) for Band 4

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.7.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

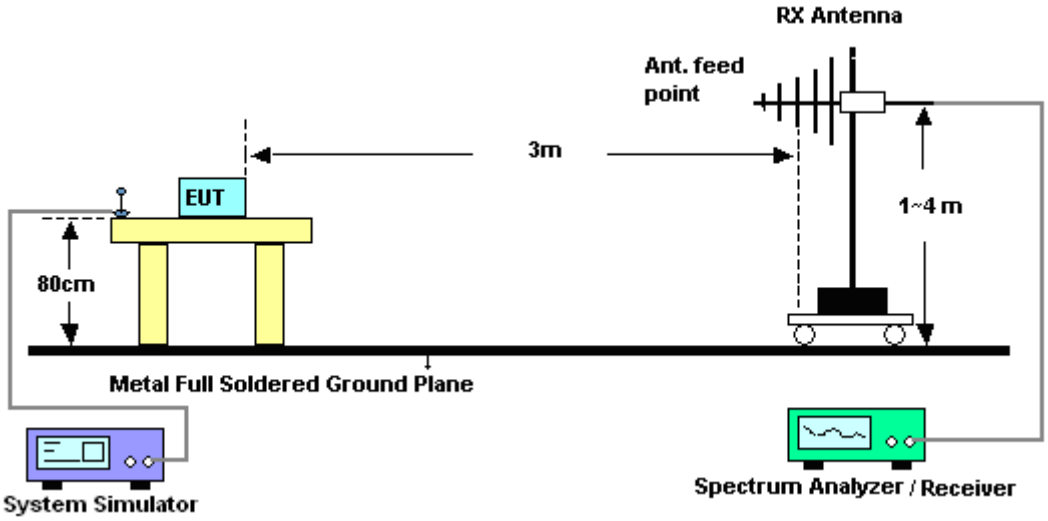
4 Radiated Test Items

4.1 Measuring Instruments

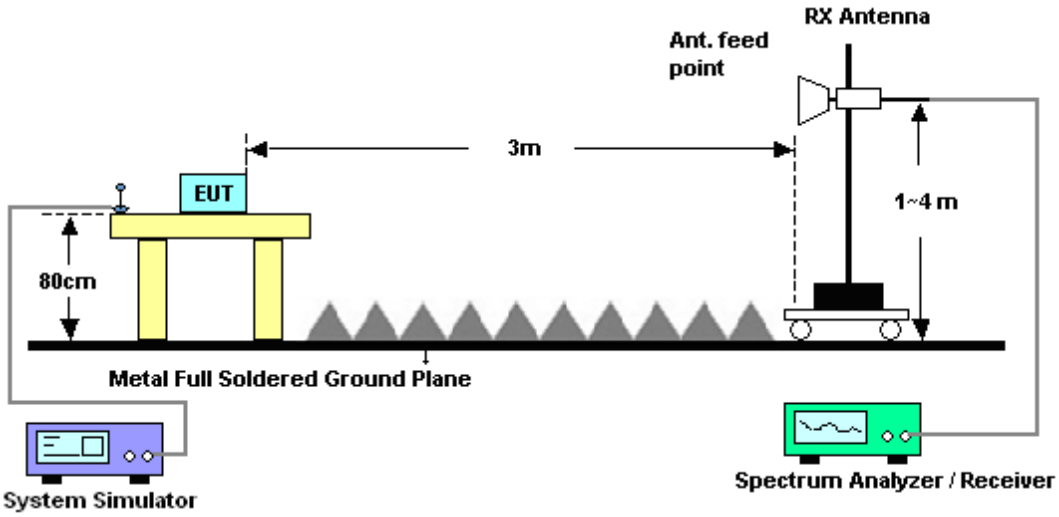
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Effective Radiated Power and Effective Isotropic Radiated Power

4.4.1 Description of the ERP/EIRP Measurement

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 and 3 watts with LTE band 17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 and 1 watt with LTE band 4.

4.4.2 Test Procedures

1. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
2. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP = LVL + Correction factor and ERP = EIRP - 2.15. Take the record of the output power at substitution antenna.

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	100kHz	100kHz	300kHz	300kHz	300kHz
VBW	100kHz	300kHz	300kHz	1MHz	1MHz	1MHz
Detector	RMS	RMS	RMS	RMS	RMS	RMS
Trace	Average	Average	Average	Average	Average	Average
Average Type	Power	Power	Power	Power	Power	Power
Sweep Count	100	100	100	100	100	100

4.5 Radiated Spurious Emission

4.5.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE Band 17

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.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
12. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
13. ERP (dBm) = EIRP - 2.15

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV30	101338	9kHz~30GHz	May 04, 2015	Jun. 11, 2015~ Jun. 12, 2015	May 03, 2016	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 25, 2014	Jun. 11, 2015~ Jun. 12, 2015	Oct. 24, 2015	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Sep. 29, 2014	Jun. 21, 2015~ Jun. 23, 2015	Sep. 28, 2015	Radiation (03CH02-KS)
Spectrum Analyzer	R&S	FSV40	101040	10kHz~40GHz;Max 30dBm	Sep. 25, 2014	Jun. 21, 2015~ Jun. 23, 2015	Sep. 24, 2015	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz-2GHz	Sep. 13, 2014	Jun. 21, 2015~ Jun. 23, 2015	Sep. 12, 2015	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 08, 2014	Jun. 21, 2015~ Jun. 23, 2015	Nov. 07, 2015	Radiation (03CH02-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz~18GHz	Nov. 08, 2014	Jun. 21, 2015~ Jun. 23, 2015	Nov. 07, 2015	Radiation (03CH02-KS)
SHF-EHF Horn	com-power	AH-840	101070	18GHz~40GHz	Sep. 04, 2014	Jun. 21, 2015~ Jun. 23, 2015	Sep. 03, 2015	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz ~1000MHz / 32 dB	May 04, 2015	Jun. 21, 2015~ Jun. 23, 2015	May 03, 2016	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1-26.5GHz Gain 30dB	Oct. 28, 2014	Jun. 21, 2015~ Jun. 23, 2015	Oct. 27, 2015	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jun. 21, 2015~ Jun. 23, 2015	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jun. 21, 2015~ Jun. 23, 2015	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jun. 21, 2015~ Jun. 23, 2015	NCR	Radiation (03CH02-KS)

6 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1 dB**

Appendix B. Test Results of Radiated Test

ERP/EIRP

LTE Band 2 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	2	28.44	0.6982	23.64	0.2312
Middle		3	1	25.64	0.3664	21.51	0.1416
Highest		3	1	25.64	0.3664	22.25	0.1679
Lowest	16QAM	1	2	27.44	0.5546	22.77	0.1892
Middle		1	0	27.12	0.5152	22.94	0.1968
Highest		1	0	27.18	0.5224	23.59	0.2286
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	7	28.42	0.6950	23.59	0.2286
Middle		1	7	27.86	0.6109	23.69	0.2339
Highest		1	0	27.92	0.6194	24.30	0.2692
Lowest	16QAM	1	7	27.89	0.6152	23.00	0.1995
Middle		1	0	27.41	0.5508	23.37	0.2173
Highest		1	0	27.12	0.5152	23.66	0.2323
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	28.32	0.6792	23.48	0.2228
Middle		1	24	27.57	0.5715	23.50	0.2239
Highest		1	0	27.58	0.5728	23.67	0.2328
Lowest	16QAM	1	24	27.58	0.5728	22.84	0.1923
Middle		1	0	27.08	0.5105	23.05	0.2018
Highest		1	0	26.66	0.4634	23.14	0.2061
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	28.44	0.6982	23.54	0.2259
Middle		1	0	28.13	0.6501	23.68	0.2333
Highest		1	24	27.72	0.5916	24.06	0.2547
Lowest	16QAM	1	0	28.10	0.6457	23.12	0.2051
Middle		1	0	27.33	0.5408	22.91	0.1954
Highest		1	0	7.81	0.0060	4.63	0.0029
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	28.63	0.7295	23.89	0.2449
Middle		1	0	28.02	0.6339	23.76	0.2377
Highest		1	0	27.83	0.6067	23.91	0.2460
Lowest	16QAM	1	0	28.03	0.6353	23.26	0.2118
Middle		1	0	27.41	0.5508	23.37	0.2173
Highest		1	0	27.11	0.5140	23.29	0.2133
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	28.19	0.6592	23.46	0.2218
Middle		1	0	28.33	0.6808	23.97	0.2495
Highest		1	0	27.84	0.6081	24.02	0.2523
Lowest	16QAM	1	49	27.41	0.5508	22.91	0.1954
Middle		1	49	27.03	0.5047	23.11	0.2046
Highest		1	49	27.19	0.5236	23.16	0.2070
Limit	EIRP < 2W			Result		PASS	

LTE Band 4 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	1	26.29	0.4256	23.91	0.2460
Middle		1	2	27.07	0.5093	24.42	0.2767
Highest		3	1	27.51	0.5636	24.24	0.2655
Lowest	16QAM	1	0	25.63	0.3656	23.60	0.2291
Middle		1	0	26.63	0.4603	24.16	0.2606
Highest		1	5	27.30	0.5370	23.87	0.2438
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	14	26.43	0.4395	24.07	0.2553
Middle		1	0	26.84	0.4831	24.50	0.2818
Highest		1	0	27.77	0.5984	24.57	0.2864
Lowest	16QAM	1	14	25.86	0.3855	23.59	0.2286
Middle		1	0	26.46	0.4426	24.12	0.2582
Highest		1	0	27.11	0.5140	23.96	0.2489
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.49	0.4457	24.15	0.2600
Middle		1	12	27.00	0.5012	24.68	0.2938
Highest		1	12	27.66	0.5834	24.54	0.2844
Lowest	16QAM	1	12	25.76	0.3767	23.51	0.2244
Middle		1	12	26.00	0.3981	23.69	0.2339
Highest		1	0	26.85	0.4842	23.83	0.2415
Limit	EIRP < 1W			Result		PASS	

LTE Band 4/ 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.59	0.4560	24.46	0.2793
Middle		1	0	27.16	0.5200	24.74	0.2979
Highest		1	0	27.84	0.6081	24.67	0.2931
Lowest	16QAM	1	0	26.07	0.4046	23.81	0.2404
Middle		1	0	26.40	0.4365	24.29	0.2685
Highest		1	0	27.08	0.5105	23.88	0.2443
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.88	0.4875	24.33	0.2710
Middle		1	0	27.18	0.5224	25.08	0.3221
Highest		1	0	27.64	0.5808	24.96	0.3133
Lowest	16QAM	1	0	26.20	0.4169	23.94	0.2477
Middle		1	0	26.62	0.4592	24.17	0.2612
Highest		1	0	27.17	0.5212	24.48	0.2805
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.83	0.4819	24.52	0.2831
Middle		1	0	27.01	0.5023	24.36	0.2729
Highest		1	0	27.54	0.5675	24.91	0.3097
Lowest	16QAM	1	0	26.17	0.4140	23.88	0.2443
Middle		1	0	25.98	0.3963	23.58	0.2280
Highest		1	0	26.76	0.4742	24.12	0.2582
Limit	EIRP < 1W			Result		PASS	

LTE Band 5 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	3	2	21.89	0.1545	8.63	0.0073
Middle		3	0	21.68	0.1472	8.90	0.0078
Highest		3	0	21.72	0.1486	9.35	0.0086
Lowest	16QAM	1	5	21.65	0.1462	8.46	0.0070
Middle		1	5	21.43	0.1390	8.79	0.0076
Highest		1	0	21.64	0.1459	9.26	0.0084
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	7	22.14	0.1637	8.86	0.0077
Middle		1	14	22.28	0.1690	9.57	0.0091
Highest		1	0	22.17	0.1648	9.69	0.0093
Lowest	16QAM	1	14	21.69	0.1476	8.42	0.0070
Middle		1	0	21.58	0.1439	9.08	0.0081
Highest		1	0	21.56	0.1432	8.91	0.0078
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.27	0.1687	9.00	0.0079
Middle		1	0	22.12	0.1629	9.33	0.0086
Highest		1	12	22.23	0.1671	9.89	0.0097
Lowest	16QAM	1	0	21.01	0.1262	8.41	0.0069
Middle		1	24	21.45	0.1396	9.27	0.0085
Highest		1	0	21.44	0.1393	9.04	0.0080
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.60	0.1820	9.34	0.0086
Middle		1	0	22.47	0.1766	9.76	0.0095
Highest		1	0	22.28	0.1690	9.94	0.0099
Lowest	16QAM	1	0	21.83	0.1524	8.67	0.0074
Middle		1	0	21.60	0.1445	8.77	0.0075
Highest		1	0	21.62	0.1452	9.31	0.0085
Limit	ERP < 7W			Result		PASS	

LTE Band 17 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	12	18.82	0.0762	5.48	0.0035
Middle		1	0	19.11	0.0815	6.04	0.0040
Highest		1	12	19.39	0.0869	6.87	0.0049
Lowest	16QAM	1	0	17.99	0.0630	4.65	0.0029
Middle		1	24	18.70	0.0741	6.23	0.0042
Highest		1	0	18.76	0.0752	5.87	0.0039
Limit	ERP < 3W			Result		PASS	

LTE Band 17 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	18.87	0.0771	4.26	0.0027
Middle		1	0	18.85	0.0767	4.34	0.0027
Highest		1	0	19.34	0.0859	4.36	0.0027
Lowest	16QAM	1	0	18.34	0.0682	3.82	0.0024
Middle		1	49	18.65	0.0733	4.94	0.0031
Highest		1	0	18.84	0.0766	3.67	0.0023
Limit	ERP < 3W			Result		PASS	

Radiated Spurious Emission

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-51.90	-13	-38.90	-66.10	-56.50	3	7.60	H
	5553	-35.90	-13	-22.90	-52.94	-42.16	3.84	10.10	H
	7401	-41.63	-13	-28.63	-61.41	-49.13	4.43	11.93	H
	3699	-53.13	-13	-40.13	-65.62	-57.73	3	7.60	V
	5553	-40.12	-13	-27.12	-55.27	-46.38	3.84	10.10	V
	7401	-44.65	-13	-31.65	-62.44	-52.15	4.43	11.93	V
Middle	3759	-51.33	-13	-38.33	-65.53	-55.93	3	7.60	H
	5640	-34.29	-13	-21.29	-52.06	-40.55	3.84	10.10	H
	7518	-42.63	-13	-29.63	-62.41	-50.13	4.43	11.93	H
	3759	-54.18	-13	-41.18	-66.67	-58.78	3	7.60	V
	5640	-38.44	-13	-25.44	-54.42	-44.70	3.84	10.10	V
	7518	-45.98	-13	-32.98	-63.77	-53.48	4.43	11.93	V
Highest	3816	-49.85	-13	-36.85	-64.05	-54.45	3	7.60	H
	5730	-33.57	-13	-20.57	-51.47	-39.83	3.84	10.10	H
	7635	-42.36	-13	-29.36	-62.14	-49.86	4.43	11.93	H
	3816	-52.03	-13	-39.03	-64.52	-56.63	3	7.60	V
	5727	-37.08	-13	-24.08	-53.71	-43.34	3.84	10.10	V
	7635	-44.26	-13	-31.26	-62.05	-51.76	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-51.59	-13	-38.59	-65.79	-56.19	3	7.60	H
	5553	-37.00	-13	-24.00	-53.65	-43.26	3.84	10.10	H
	7401	-41.82	-13	-28.82	-61.60	-49.32	4.43	11.93	H
	3699	-54.57	-13	-41.57	-67.06	-59.17	3	7.60	V
	5553	-38.26	-13	-25.26	-54.35	-44.52	3.84	10.10	V
	7401	-43.96	-13	-30.96	-61.75	-51.46	4.43	11.93	V
Middle	3757	-51.87	-13	-38.87	-66.07	-56.47	3	7.60	H
	5637	-33.85	-13	-20.85	-51.72	-40.11	3.84	10.10	H
	7515	-42.94	-13	-29.94	-62.72	-50.44	4.43	11.93	H
	3756	-53.31	-13	-40.31	-65.8	-57.91	3	7.60	V
	5636	-40.63	-13	-27.63	-55.61	-46.89	3.84	10.10	V
	7515	-45.22	-13	-32.22	-63.01	-52.72	4.43	11.93	V
Highest	3813	-51.62	-13	-38.62	-65.82	-56.22	3	7.60	H
	5724	-34.60	-13	-21.60	-52.28	-40.86	3.84	10.10	H
	7629	-43.20	-13	-30.20	-62.98	-50.70	4.43	11.93	H
	3813	-54.36	-13	-41.36	-66.85	-58.96	3	7.60	V
	5724	-35.24	-13	-22.24	-52.8	-41.50	3.84	10.10	V
	7629	-44.29	-13	-31.29	-62.08	-51.79	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-51.81	-13	-38.81	-66.01	-56.41	3	7.60	H
	5553	-38.03	-13	-25.03	-54.12	-44.29	3.84	10.10	H
	7401	-41.68	-13	-28.68	-61.46	-49.18	4.43	11.93	H
	3701	-53.91	-13	-40.91	-66.4	-58.51	3	7.60	V
	5553	-39.57	-13	-26.57	-54.95	-45.83	3.84	10.10	V
	7401	-45.30	-13	-32.30	-63.09	-52.80	4.43	11.93	V
Middle	3756	-50.34	-13	-37.34	-64.54	-54.94	3	7.60	H
	5634	-36.04	-13	-23.04	-53.01	-42.30	3.84	10.10	H
	7512	-42.41	-13	-29.41	-62.19	-49.91	4.43	11.93	H
	3756	-54.05	-13	-41.05	-66.54	-58.65	3	7.60	V
	5634	-45.32	-13	-32.32	-57.73	-51.58	3.84	10.10	V
	7512	-45.25	-13	-32.25	-63.04	-52.75	4.43	11.93	V
Highest	3810	-51.00	-13	-38.00	-65.20	-55.60	3	7.60	H
	5718	-37.32	-13	-24.32	-53.80	-43.58	3.84	10.10	H
	7623	-42.88	-13	-29.88	-62.66	-50.38	4.43	11.93	H
	3810	-53.94	-13	-40.94	-66.43	-58.54	3	7.60	V
	5718	-37.49	-13	-24.49	-53.95	-43.75	3.84	10.10	V
	7623	-44.84	-13	-31.84	-62.63	-52.34	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-51.86	-13	-38.86	-66.06	-56.46	3	7.60	H
	5553	-37.95	-13	-24.95	-54.09	-44.21	3.84	10.10	H
	7401	-42.95	-13	-29.95	-62.73	-50.45	4.43	11.93	H
	3702	-53.33	-13	-40.33	-65.82	-57.93	3	7.60	V
	5552	-39.80	-13	-26.80	-55.08	-46.06	3.84	10.10	V
	7402	-44.23	-13	-31.23	-62.02	-51.73	4.43	11.93	V
Middle	3750	-51.48	-13	-38.48	-65.68	-56.08	3	7.60	H
	5628	-33.43	-13	-20.43	-51.35	-39.69	3.84	10.10	H
	7503	-43.01	-13	-30.01	-62.79	-50.51	4.43	11.93	H
	3751	-54.17	-13	-41.17	-66.66	-58.77	3	7.60	V
	5628	-40.39	-13	-27.39	-55.45	-46.65	3.84	10.10	V
	7503	-45.19	-13	-32.19	-62.98	-52.69	4.43	11.93	V
Highest	3801	-50.56	-13	-37.56	-64.76	-55.16	3	7.60	H
	5703	-41.50	-13	-28.50	-55.61	-47.76	3.84	10.10	H
	7602	-43.78	-13	-30.78	-63.56	-51.28	4.43	11.93	H
	3801	-51.78	-13	-38.78	-64.27	-56.38	3	7.60	V
	5703	-44.71	-13	-31.71	-57.12	-50.97	3.84	10.10	V
	7602	-45.41	-13	-32.41	-63.2	-52.91	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-52.53	-13	-39.53	-66.73	-57.13	3	7.60	H
	5553	-43.14	-13	-30.14	-56.93	-49.40	3.84	10.10	H
	7404	-42.58	-13	-29.58	-62.36	-50.08	4.43	11.93	H
	3702	-54.28	-13	-41.28	-66.77	-58.88	3	7.60	V
	5553	-39.44	-13	-26.44	-54.88	-45.70	3.84	10.10	V
	7404	-44.29	-13	-31.29	-62.08	-51.79	4.43	11.93	V
Middle	3747	-52.53	-13	-39.53	-66.73	-57.13	3	7.60	H
	5622	-34.87	-13	-21.87	-52.47	-41.13	3.84	10.10	H
	7494	-42.87	-13	-29.87	-62.65	-50.37	4.43	11.93	H
	3720	-53.75	-13	-40.75	-66.24	-58.35	3	7.60	V
	5621	-43.29	-13	-30.29	-56.29	-49.55	3.84	10.10	V
	7494	-44.51	-13	-31.51	-62.3	-52.01	4.43	11.93	V
Highest	3792	-51.63	-13	-38.63	-65.83	-56.23	3	7.60	H
	5688	-43.14	-13	-30.14	-56.93	-49.40	3.84	10.10	H
	7590	-42.75	-13	-29.75	-62.53	-50.25	4.43	11.93	H
	3792	-52.58	-13	-39.58	-65.07	-57.18	3	7.60	V
	5688	-45.86	-13	-32.86	-58.27	-52.12	3.84	10.10	V
	7584	-44.76	-13	-31.76	-62.55	-52.26	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-51.54	-13	-38.54	-65.74	-56.14	3	7.60	H
	5556	-39.00	-13	-26.00	-54.38	-45.26	3.84	10.10	H
	7404	-42.24	-13	-29.24	-62.02	-49.74	4.43	11.93	H
	3702	-54.42	-13	-41.42	-66.91	-59.02	3	7.60	V
	5556	-37.67	-13	-24.67	-54.06	-43.93	3.84	10.10	V
	7404	-43.35	-13	-30.35	-61.14	-50.85	4.43	11.93	V
Middle	3742	-52.03	-13	-39.03	-66.23	-56.63	3	7.60	H
	5616	-34.56	-13	-21.56	-52.25	-40.82	3.84	10.10	H
	7485	-43.44	-13	-30.44	-63.22	-50.94	4.43	11.93	H
	3741	-53.99	-13	-40.99	-66.48	-58.59	3	7.60	V
	5616	-41.65	-13	-28.65	-56.04	-47.91	3.84	10.10	V
	7485	-45.44	-13	-32.44	-63.23	-52.94	4.43	11.93	V
Highest	3783	-52.12	-13	-39.12	-66.32	-56.72	3	7.60	H
	5676	-44.24	-13	-31.24	-58.03	-50.50	3.84	10.10	H
	7563	-45.60	-13	-32.60	-65.38	-53.10	4.43	11.93	H
	3783	-54.74	-13	-41.74	-67.23	-59.34	3	7.60	V
	5676	-45.46	-13	-32.46	-57.87	-51.72	3.84	10.10	V
	7563	-46.61	-13	-33.61	-64.4	-54.11	4.43	11.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-51.48	-13	-38.48	-65.61	-55.85	3.12	7.49	H
	5133	-23.73	-13	-10.73	-42.62	-29.53	3.65	9.45	H
	6840	-44.93	-13	-31.93	-61.79	-52.13	4.15	11.35	H
	3420	-53.12	-13	-40.12	-65.94	-57.49	3.12	7.49	V
	5133	-19.01	-13	-6.01	-38.86	-24.81	3.65	9.45	V
	6840	-45.38	-13	-32.38	-60.63	-52.58	4.15	11.35	V
Middle	3465	-50.10	-13	-37.10	-64.23	-54.47	3.12	7.49	H
	5196	-33.42	-13	-20.42	-50.37	-39.22	3.65	9.45	H
	6927	-45.02	-13	-32.02	-61.88	-52.22	4.15	11.35	H
	3465	-53.17	-13	-40.17	-65.99	-57.54	3.12	7.49	V
	5196	-26.33	-13	-13.33	-45.45	-32.13	3.65	9.45	V
	6927	-47.41	-13	-34.41	-62.66	-54.61	4.15	11.35	V
Highest	3507	-51.28	-13	-38.28	-65.41	-55.65	3.12	7.49	H
	5262	-30.71	-13	-17.71	-48.48	-36.51	3.65	9.45	H
	7014	-45.03	-13	-32.03	-61.89	-52.23	4.15	11.35	H
	3507	-51.45	-13	-38.45	-64.27	-55.82	3.12	7.49	V
	5262	-30.09	-13	-17.09	-48.57	-35.89	3.65	9.45	V
	7014	-46.12	-13	-33.12	-61.37	-53.32	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-51.87	-13	-38.87	-66.00	-56.24	3.12	7.49	H
	5133	-24.36	-13	-11.36	-43.22	-30.16	3.65	9.45	H
	6840	-43.69	-13	-30.69	-60.55	-50.89	4.15	11.35	H
	3420	-53.19	-13	-40.19	-66.01	-57.56	3.12	7.49	V
	5133	-19.80	-13	-6.80	-39.52	-25.60	3.65	9.45	V
	6840	-44.41	-13	-31.41	-59.66	-51.61	4.15	11.35	V
Middle	3462	-50.70	-13	-37.70	-64.83	-55.07	3.12	7.49	H
	5196	-29.95	-13	-16.95	-47.97	-35.75	3.65	9.45	H
	6924	-46.07	-13	-33.07	-62.93	-53.27	4.15	11.35	H
	3462	-52.31	-13	-39.31	-65.13	-56.68	3.12	7.49	V
	5196	-26.17	-13	-13.17	-45.28	-31.97	3.65	9.45	V
	6924	-46.44	-13	-33.44	-61.69	-53.64	4.15	11.35	V
Highest	3504	-51.70	-13	-38.70	-65.83	-56.07	3.12	7.49	H
	5259	-30.59	-13	-17.59	-48.40	-36.39	3.65	9.45	H
	7008	-43.80	-13	-30.80	-60.66	-51.00	4.15	11.35	H
	3504	-52.38	-13	-39.38	-65.2	-56.75	3.12	7.49	V
	5259	-27.39	-13	-14.39	-46.56	-33.19	3.65	9.45	V
	7008	-46.34	-13	-33.34	-61.59	-53.54	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-51.19	-13	-38.19	-65.32	-55.56	3.12	7.49	H
	5133	-23.69	-13	-10.69	-42.59	-29.49	3.65	9.45	H
	6843	-44.84	-13	-31.84	-61.70	-52.04	4.15	11.35	H
	3420	-52.80	-13	-39.80	-65.62	-57.17	3.12	7.49	V
	5133	-20.07	-13	-7.07	-39.76	-25.87	3.65	9.45	V
	6843	-46.32	-13	-33.32	-61.57	-53.52	4.15	11.35	V
Middle	3462	-50.97	-13	-37.97	-65.10	-55.34	3.12	7.49	H
	5193	-32.95	-13	-19.95	-49.90	-38.75	3.65	9.45	H
	6921	-45.80	-13	-32.80	-62.66	-53.00	4.15	11.35	H
	3462	-52.34	-13	-39.34	-65.16	-56.71	3.12	7.49	V
	5193	-26.29	-13	-13.29	-45.41	-32.09	3.65	9.45	V
	6921	-47.11	-13	-34.11	-62.36	-54.31	4.15	11.35	V
Highest	3501	-52.09	-13	-39.09	-66.22	-56.46	3.12	7.49	H
	5253	-33.58	-13	-20.58	-50.53	-39.38	3.65	9.45	H
	7002	-44.79	-13	-31.79	-61.65	-51.99	4.15	11.35	H
	3501	-53.50	-13	-40.50	-66.32	-57.87	3.12	7.49	V
	5253	-27.72	-13	-14.72	-46.87	-33.52	3.65	9.45	V
	7002	-45.71	-13	-32.71	-60.96	-52.91	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-51.61	-13	-38.61	-65.74	-55.98	3.12	7.49	H
	5133	-24.19	-13	-11.19	-43.06	-29.99	3.65	9.45	H
	6843	-44.16	-13	-31.16	-61.02	-51.36	4.15	11.35	H
	3420	-50.74	-13	-37.74	-63.56	-55.11	3.12	7.49	V
	5132	-20.92	-13	-7.92	-40.62	-26.72	3.65	9.45	V
	6843	-45.67	-13	-32.67	-60.92	-52.87	4.15	11.35	V
Middle	3456	-51.28	-13	-38.28	-65.41	-55.65	3.12	7.49	H
	5187	-29.22	-13	-16.22	-47.29	-35.02	3.65	9.45	H
	6912	-45.13	-13	-32.13	-61.99	-52.33	4.15	11.35	H
	3456	-52.80	-13	-39.80	-65.62	-57.17	3.12	7.49	V
	5184	-24.36	-13	-11.36	-43.81	-30.16	3.65	9.45	V
	6912	-46.94	-13	-33.94	-62.19	-54.14	4.15	11.35	V
Highest	3492	-51.82	-13	-38.82	-65.95	-56.19	3.12	7.49	H
	5238	-27.26	-13	-14.26	-45.76	-33.06	3.65	9.45	H
	6891	-45.37	-13	-32.37	-62.23	-52.57	4.15	11.35	H
	3492	-53.00	-13	-40.00	-65.82	-57.37	3.12	7.49	V
	5238	-23.36	-13	-10.36	-42.9	-29.16	3.65	9.45	V
	6891	-46.85	-13	-33.85	-62.1	-54.05	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3422	-50.84	-13	-37.84	-64.97	-55.21	3.12	7.49	H
	5133	-23.89	-13	-10.89	-42.77	-29.69	3.65	9.45	H
	6843	-44.30	-13	-31.30	-61.16	-51.50	4.15	11.35	H
	3423	-53.29	-13	-40.29	-66.11	-57.66	3.12	7.49	V
	5133	-20.92	-13	-7.92	-40.62	-26.72	3.65	9.45	V
	6843	-46.63	-13	-33.63	-61.88	-53.83	4.15	11.35	V
Middle	3452	-50.90	-13	-37.90	-65.03	-55.27	3.12	7.49	H
	5178	-29.92	-13	-16.92	-47.94	-35.72	3.65	9.45	H
	6903	-44.41	-13	-31.41	-61.27	-51.61	4.15	11.35	H
	3453	-53.06	-13	-40.06	-65.88	-57.43	3.12	7.49	V
	5178	-23.50	-13	-10.50	-43.02	-29.30	3.65	9.45	V
	6903	-46.13	-13	-33.13	-61.38	-53.33	4.15	11.35	V
Highest	3483	-51.86	-13	-38.86	-65.99	-56.23	3.12	7.49	H
	5223	-29.83	-13	-16.83	-47.86	-35.63	3.65	9.45	H
	6963	-45.16	-13	-32.16	-62.02	-52.36	4.15	11.35	H
	3482	-53.12	-13	-40.12	-65.94	-57.49	3.12	7.49	V
	5223	-24.45	-13	-11.45	-43.9	-30.25	3.65	9.45	V
	6966	-45.89	-13	-32.89	-61.14	-53.09	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3422	-51.17	-13	-38.17	-65.30	-55.54	3.12	7.49	H
	5136	-25.30	-13	-12.30	-44.05	-31.10	3.65	9.45	H
	6843	-44.67	-13	-31.67	-61.53	-51.87	4.15	11.35	H
	3423	-52.75	-13	-39.75	-65.57	-57.12	3.12	7.49	V
	5136	-20.38	-13	-7.38	-40.07	-26.18	3.65	9.45	V
	6843	-45.92	-13	-32.92	-61.17	-53.12	4.15	11.35	V
Middle	3447	-50.78	-13	-37.78	-64.91	-55.15	3.12	7.49	H
	5172	-33.08	-13	-20.08	-50.01	-38.88	3.65	9.45	H
	6894	-45.41	-13	-32.41	-62.27	-52.61	4.15	11.35	H
	3447	-53.69	-13	-40.69	-66.51	-58.06	3.12	7.49	V
	5172	-25.62	-13	-12.62	-44.85	-31.42	3.65	9.45	V
	6894	-45.96	-13	-32.96	-61.21	-53.16	4.15	11.35	V
Highest	3471	-51.70	-13	-38.70	-65.83	-56.07	3.12	7.49	H
	5211	-33.15	-13	-20.15	-50.08	-38.95	3.65	9.45	H
	6945	-44.76	-13	-31.76	-61.62	-51.96	4.15	11.35	H
	3471	-52.52	-13	-39.52	-65.34	-56.89	3.12	7.49	V
	5211	-24.79	-13	-11.79	-44.26	-30.59	3.65	9.45	V
	6945	-46.91	-13	-33.91	-62.16	-54.11	4.15	11.35	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-35.60	-13	-22.60	-42.51	-37.49	1.86	5.90	H
	2474	-51.53	-13	-38.53	-60.56	-53.87	2.31	6.80	H
	3297	-52.12	-13	-39.12	-64.75	-54.52	2.85	7.40	H
	1648	-40.91	-13	-27.91	-46.60	-42.80	1.86	5.90	V
	2472	-53.34	-13	-40.34	-64.31	-55.68	2.31	6.80	V
	3297	-52.56	-13	-39.56	-66.54	-54.96	2.85	7.40	V
Middle	1672	-42.32	-13	-29.32	-47.81	-44.21	1.86	5.90	H
	2508	-53.05	-13	-40.05	-62.08	-55.39	2.31	6.80	H
	3345	-52.42	-13	-39.42	-65.05	-54.82	2.85	7.40	H
	1672	-42.64	-13	-29.64	-47.95	-44.53	1.86	5.90	V
	2508	-52.66	-13	-39.66	-63.63	-55.00	2.31	6.80	V
	3345	-52.40	-13	-39.40	-66.38	-54.80	2.85	7.40	V
Highest	1696	-49.20	-13	-36.20	-52.02	-51.09	1.86	5.90	H
	2544	-54.25	-13	-41.25	-63.28	-56.59	2.31	6.80	H
	3390	-53.97	-13	-40.97	-66.60	-56.37	2.85	7.40	H
	1696	-54.77	-13	-41.77	-54.96	-56.66	1.86	5.90	V
	2544	-52.09	-13	-39.09	-63.06	-54.43	2.31	6.80	V
	3390	-52.36	-13	-39.36	-66.34	-54.76	2.85	7.40	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-34.54	-13	-21.54	-41.55	-36.43	1.86	5.90	H
	2474	-50.46	-13	-37.46	-59.49	-52.80	2.31	6.80	H
	3297	-52.75	-13	-39.75	-65.38	-55.15	2.85	7.40	H
	1648	-40.78	-13	-27.78	-46.53	-42.67	1.86	5.90	V
	2472	-51.88	-13	-38.88	-62.85	-54.22	2.31	6.80	V
	3297	-52.81	-13	-39.81	-66.79	-55.21	2.85	7.40	V
Middle	1670	-36.68	-13	-23.68	-43.40	-38.57	1.86	5.90	H
	2506	-51.37	-13	-38.37	-60.40	-53.71	2.31	6.80	H
	3339	-53.35	-13	-40.35	-65.98	-55.75	2.85	7.40	H
	1670	-42.13	-13	-29.13	-47.69	-44.02	1.86	5.90	V
	2504	-49.13	-13	-36.13	-60.10	-51.47	2.31	6.80	V
	3339	-51.83	-13	-38.83	-65.81	-54.23	2.85	7.40	V
Highest	1692	-54.88	-13	-41.88	-57.06	-56.77	1.86	5.90	H
	2538	-55.09	-13	-42.09	-64.12	-57.43	2.31	6.80	H
	3384	-53.45	-13	-40.45	-66.08	-55.85	2.85	7.40	H
	1692	-57.64	-13	-44.64	-56.50	-59.53	1.86	5.90	V
	2538	-53.24	-13	-40.24	-64.21	-55.58	2.31	6.80	V
	3384	-53.23	-13	-40.23	-67.21	-55.63	2.85	7.40	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-35.55	-13	-22.55	-42.46	-37.44	1.86	5.90	H
	2474	-50.15	-13	-37.15	-59.18	-52.49	2.31	6.80	H
	3297	-52.00	-13	-39.00	-64.63	-54.40	2.85	7.40	H
	1648	-40.67	-13	-27.67	-46.47	-42.56	1.86	5.90	V
	2472	-52.79	-13	-39.79	-63.76	-55.13	2.31	6.80	V
	3297	-53.01	-13	-40.01	-66.99	-55.41	2.85	7.40	V
Middle	1668	-36.82	-13	-23.82	-43.51	-38.71	1.86	5.90	H
	2504	-51.24	-13	-38.24	-60.27	-53.58	2.31	6.80	H
	3339	-54.75	-13	-41.75	-67.38	-57.15	2.85	7.40	H
	1668	-41.40	-13	-28.40	-47.04	-43.29	1.86	5.90	V
	2504	-48.27	-13	-35.27	-59.24	-50.61	2.31	6.80	V
	3339	-52.52	-13	-39.52	-66.50	-54.92	2.85	7.40	V
Highest	1688	-54.26	-13	-41.26	-56.44	-56.15	1.86	5.90	H
	2532	-55.50	-13	-42.50	-64.53	-57.84	2.31	6.80	H
	3378	-54.41	-13	-41.41	-67.04	-56.81	2.85	7.40	H
	1688	-54.16	-13	-41.16	-54.77	-56.05	1.86	5.90	V
	2532	-53.41	-13	-40.41	-64.38	-55.75	2.31	6.80	V
	3378	-50.96	-13	-37.96	-64.94	-53.36	2.85	7.40	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-35.80	-13	-22.80	-42.69	-37.69	1.86	5.90	H
	2474	-49.71	-13	-36.71	-58.88	-52.05	2.31	6.80	H
	3297	-51.73	-13	-38.73	-64.36	-54.13	2.85	7.40	H
	1650	-41.23	-13	-28.23	-46.88	-43.12	1.86	5.90	V
	2474	-50.58	-13	-37.58	-61.55	-52.92	2.31	6.80	V
	3297	-51.54	-13	-38.54	-65.52	-53.94	2.85	7.40	V
Middle	1664	-37.27	-13	-24.27	-43.91	-39.16	1.86	5.90	H
	2498	-50.48	-13	-37.48	-59.51	-52.82	2.31	6.80	H
	3327	-52.50	-13	-39.50	-65.13	-54.90	2.85	7.40	H
	1664	-44.51	-13	-31.51	-49.17	-46.40	1.86	5.90	V
	2496	-49.93	-13	-36.93	-60.90	-52.27	2.31	6.80	V
	3327	-52.13	-13	-39.13	-66.11	-54.53	2.85	7.40	V
Highest	1680	-48.74	-13	-35.74	-51.81	-50.63	1.86	5.90	H
	2520	-54.75	-13	-41.75	-63.78	-57.09	2.31	6.80	H
	3357	-53.65	-13	-40.65	-66.28	-56.05	2.85	7.40	H
	1680	-49.03	-13	-36.03	-51.73	-50.92	1.86	5.90	V
	2520	-52.66	-13	-39.66	-63.63	-55.00	2.31	6.80	V
	3357	-52.23	-13	-39.23	-66.21	-54.63	2.85	7.40	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-57.53	-13	-44.53	-53.95	-58.51	1.75	4.88	H
	2112	-54.57	-13	-41.57	-60.58	-56.19	2.16	5.93	H
	2818	-53.33	-13	-40.33	-63.75	-55.36	2.48	6.66	H
	1408	-57.52	-13	-44.52	-56	-58.50	1.75	4.88	V
	2112	-52.59	-13	-39.59	-60.57	-54.21	2.16	5.93	V
	2818	-51.79	-13	-38.79	-63.3	-53.82	2.48	6.66	V
Middle	1416	-52.56	-13	-39.56	-51.63	-53.54	1.75	4.88	H
	2124	-54.50	-13	-41.50	-60.51	-56.12	2.16	5.93	H
	2832	-50.53	-13	-37.53	-60.95	-52.56	2.48	6.66	H
	1416	-55.26	-13	-42.26	-53.73	-56.24	1.75	4.88	V
	2124	-53.75	-13	-40.75	-61.73	-55.37	2.16	5.93	V
	2832	-52.16	-13	-39.16	-63.67	-54.19	2.48	6.66	V
Highest	1422	-52.89	-13	-39.89	-51.86	-53.87	1.75	4.88	H
	2134	-54.78	-13	-41.78	-60.79	-56.40	2.16	5.93	H
	2846	-51.48	-13	-38.48	-61.90	-53.51	2.48	6.66	H
	1422	-51.81	-13	-38.81	-52.74	-52.79	1.75	4.88	V
	2134	-52.04	-13	-39.04	-60.02	-53.66	2.16	5.93	V
	2846	-50.97	-13	-37.97	-62.48	-53.00	2.48	6.66	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-57.40	-13	-44.40	-53.82	-58.38	1.75	4.88	H
	2114	-54.37	-13	-41.37	-60.38	-55.99	2.16	5.93	H
	2818	-52.88	-13	-39.88	-63.30	-54.91	2.48	6.66	H
	1408	-57.10	-13	-44.10	-55.57	-58.08	1.75	4.88	V
	2114	-52.75	-13	-39.75	-60.73	-54.37	2.16	5.93	V
	2818	-52.74	-13	-39.74	-64.25	-54.77	2.48	6.66	V
Middle	1410	-49.21	-13	-36.21	-49.25	-50.19	1.75	4.88	H
	2116	-53.11	-13	-40.11	-59.12	-54.73	2.16	5.93	H
	2824	-51.43	-13	-38.43	-61.85	-53.46	2.48	6.66	H
	1410	-51.67	-13	-38.67	-52.64	-52.65	1.75	4.88	V
	2118	-50.71	-13	-37.71	-58.69	-52.33	2.16	5.93	V
	2824	-51.08	-13	-38.08	-62.59	-53.11	2.48	6.66	V
Highest	1412	-53.73	-13	-40.73	-52.26	-54.71	1.75	4.88	H
	2120	-54.33	-13	-41.33	-60.34	-55.95	2.16	5.93	H
	2826	-53.70	-13	-40.70	-64.12	-55.73	2.48	6.66	H
	1412	-55.21	-13	-42.21	-53.68	-56.19	1.75	4.88	V
	2120	-52.84	-13	-39.84	-60.82	-54.46	2.16	5.93	V
	2826	-53.25	-13	-40.25	-64.76	-55.28	2.48	6.66	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Appendix D. Photographs of EUT

Please refer to Sporton report number EP533002-01 which is issued separately.