FCC RF Test Report

APPLICANT	:	**Sony Mobile Communications Inc.**
EQUIPMENT	:	**GSM/WCDMA/LTE Phone+Bluetooth, DTS/UNII a/b/g/n and NFC**
BRAND NAME	:	**Sony**
FCC ID	:	**PY7-87507S**
STANDARD	:	**47 CFR Part 2, 22(H), 24(E), 27**
CLASSIFICATION	:	**PCS Licensed Transmitter Held to Ear (PCE)**

This is a variant report which is only valid together with the original test report. The product was received on Aug. 22, 2017 and completely tested on Sep. 01, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E-2016 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 INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory
1190

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG782203B	Rev. 01	Initial issue of report	Nov. 01, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(2)	Effective Radiated Power (Band 5)	ERP < 7 Watt		
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 7)	EIRP < 2Watt		
4.4	§2.1053 §22.917(a) §24.238(a)	Radiated Spurious Emission (Band 2) (Band 5)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 20.17 dB at 10248.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	< $55+10\log_{10}$(P[Watts])		

1 General Description

1.1 Applicant

Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

1.2 Manufacturer

Sony Mobile Communications Inc.
4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

1.3 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n, FM Receiver, NFC, and GPS.

Standards-related Product Specification	
Antenna Type	PIFA Antenna

Remark: This is a variant report. All the test cases were performed on original report which can be referred to Sporton Report Number FG782113B.

EUT Information List			
HW Version	SW Version	S/N	Performed Test Item
A	1.8	WUJ01Q22N7	Conducted Measurement
			ERP/EIRP Test
		WUJ01Q23RX	Radiated Spurious Emission

Accessory List	
AC Adapter	Model Name: EP800
	S/N: 3013W45408581
Earphone	Model Name: MH410c
	S/N: N/A
USB Cable	Model Name: UCB20
	S/N: 3015W42100446

Note:

1. Above EUT list and accessory list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test.
3. For other wireless features of this EUT, test report will be issued separately.

1.4 Modification of EUT

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

1.5 Emission Designator

LTE Band 2		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1850.7 ~ 1909.3	0.1660	0.1403
3	1851.5 ~ 1908.5	0.1641	0.1349
5	1852.5 ~ 1907.5	0.1663	0.1413
10	1855.0 ~ 1905.0	0.1671	0.1396
15	1857.5 ~ 1902.5	0.1675	0.1393
20	1860.0 ~ 1900.0	0.1679	0.1413
LTE Band 5		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	824.7 ~ 848.3	0.1164	0.0971
3	825.5 ~ 847.5	0.1151	0.0962
5	826.5 ~ 846.5	0.1153	0.0989
10	829.0 ~ 844.0	0.1178	0.0957
LTE Band 7		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
5	2502.5 ~ 2567.5	0.2004	0.1702
10	2505.0 ~ 2565.0	0.2004	0.1698
15	2507.5 ~ 2562.5	0.2037	0.1698
20	2510.0 ~ 2560.0	0.2042	0.1698

1.6 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH05-HY

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH11-HY

1.7 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
- ANSI / TIA-603-E-2016
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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

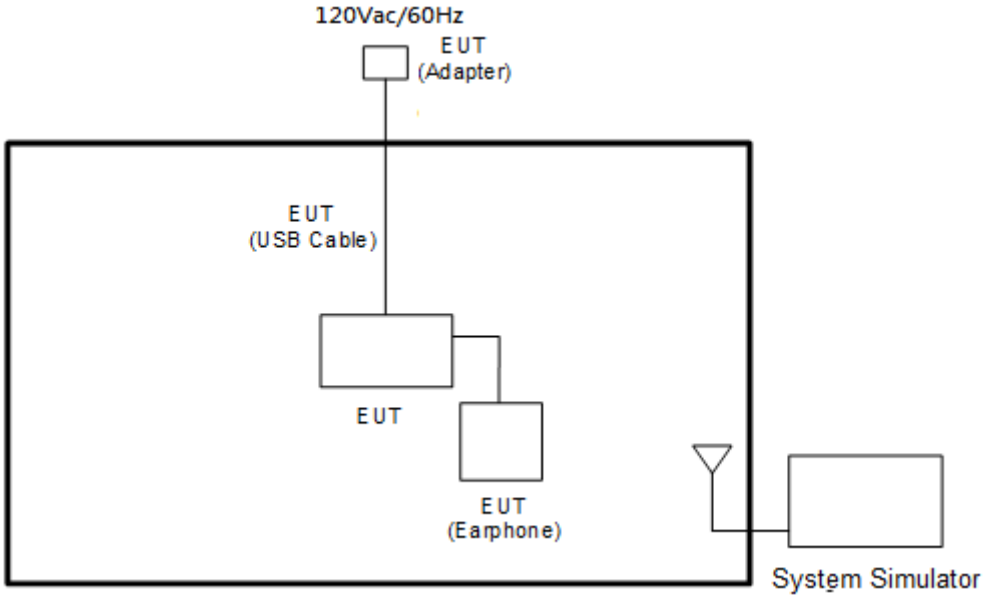
2.1 Test Mode

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
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	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
	5	v	v	v	v	-	-	v	v	v	v		v	v	v
	7	-	-	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v			v	v	v
	5	v	v	v	v	-	-	v		v			v	v	v
	7	-	-	v	v	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



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 5 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

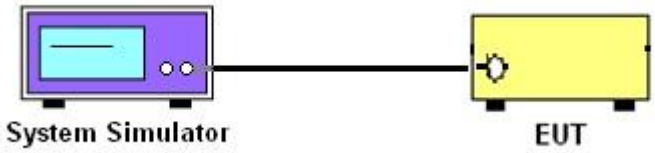
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP 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.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 7

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

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.

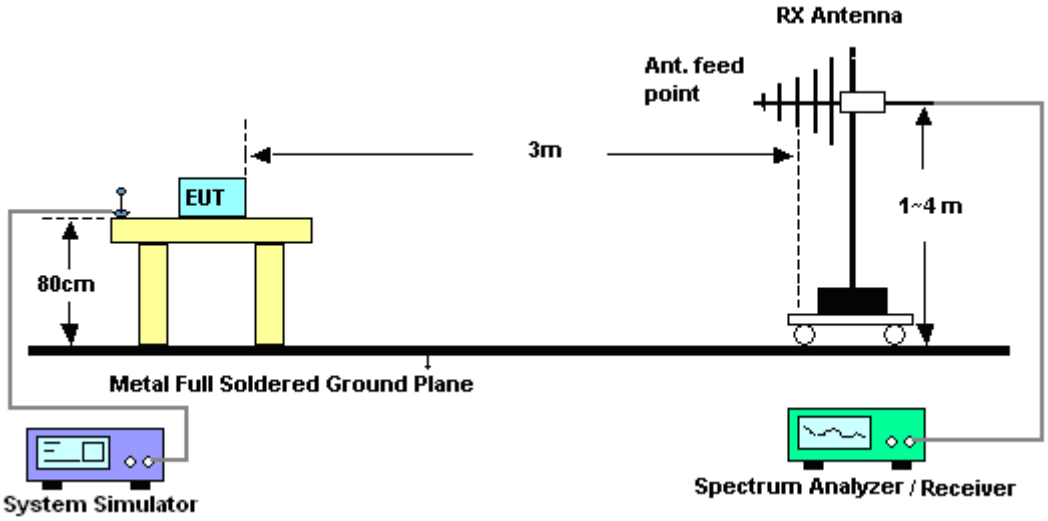
4 Radiated Test Items

4.1 Measuring Instruments

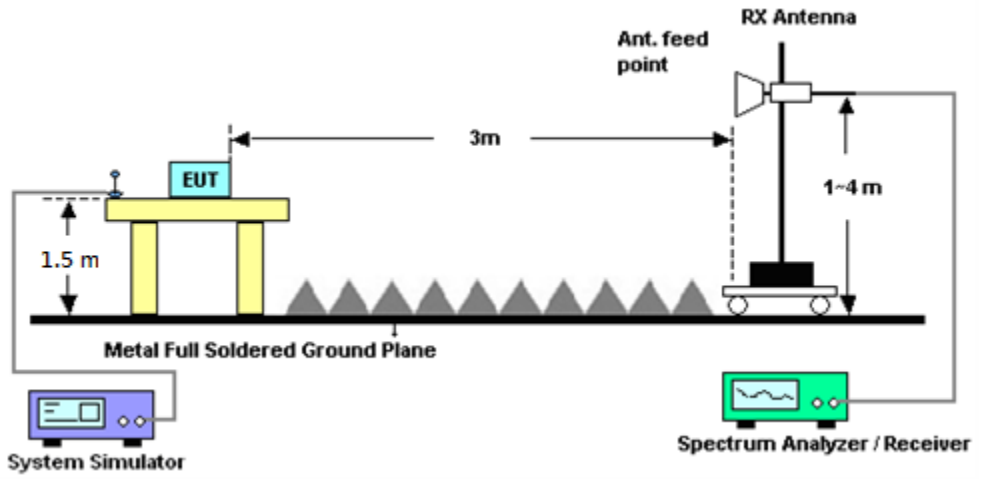
See list of measuring instruments of this test report.

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 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E-2016. 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 Band 7:

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 55 + 10 log (P) dB.

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

4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-E-2016.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively 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)
12. For Band 7:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
    ERP (dBm) = EIRP - 2.15

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H2	41410069	N/A	Aug. 21, 2017	Aug. 31, 2017~ Sep. 01, 2017	Aug. 20, 2018	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~5A	Oct. 03, 2016	Aug. 31, 2017~ Sep. 01, 2017	Oct. 02, 2017	Conducted (TH05-HY)
LTE Base Station	Anritsu	MT8820C	6201432821	GSM/GPRS /WCDMA/LTE	Oct. 11, 2016	Aug. 31, 2017~ Sep. 01, 2017	Oct. 10, 2017	Conducted (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY84209521	1GHz~26GHz	Dec. 02, 2016	Aug. 31, 2017~ Sep. 01, 2017	Dec. 01, 2017	Conducted (TH05-HY)
Bilog Antenna	TESEQ	CBL 6111D&N-6-	35414&AT-N06 02	30MHz~1GHz	Oct. 15, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Oct. 14, 2017	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 07, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Oct. 06, 2017	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1GHz ~ 18GHz	Mar. 17, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	Mar. 16, 2018	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 07, 2017	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 27, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	Apr. 26, 2018	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 10, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz,VS WR : 2.5:1 max	Jul. 18, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	Jul. 17, 2018	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 09, 2017	Radiation (03CH11-HY)
Preamplifier	MITEQ	AMF-7D-00 101800-30-1	1902247	1GHz~18GHz	Jun. 23, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	Jun. 22, 2018	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHz	Oct. 12, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Oct. 11, 2017	Radiation (03CH11-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 31, 2017 ~ Sep. 01, 2017	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 31, 2017 ~ Sep. 01, 2017	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Aug. 31, 2017 ~ Sep. 01, 2017	N/A	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTN-303B	TP140325	N/A	Nov. 14, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 13, 2017	Radiation (03CH11-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 22, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	May 21, 2018	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 MY28419/4MY	25GHz~40GHz	Sep. 12, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Sep. 11, 2017	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 MY28419/4MY	30MHz~1GHz	Sep. 12, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Sep. 11, 2017	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 MY28419/4MY	1GHz~25GHz	Sep. 12, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Sep. 11, 2017	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3000-180	SN2	3 GHz High Pass	Nov. 22, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 21, 2017	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-1080-1200-150	SN1	1.2 GHz High Pass	Sep. 19, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Sep. 18, 2017	Radiation (03CH11-HY)
Filter	Wainwright	WLKS1200-12SS	SN2	1.2G Low Pass	Sep. 19, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Sep. 18, 2017	Radiation (03CH11-HY)
Notch Filter	Wainwright	WRCT/800/960-0.2/40-8	SN11	GSM850	Nov. 22, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 21, 2016	Radiation (03CH11-HY)
Notch Filter	Wainwright	WRCT1850/1910-40/8S	SN21	1900	Nov. 22, 2016	Aug. 31, 2017 ~ Sep. 01, 2017	Nov. 21, 2017	Radiation (03CH11-HY)
Notch Filter	Wainwright	WRCT2500/2570-10/40-	SN1 R	LTE Band7	Aug. 24, 2017	Aug. 31, 2017 ~ Sep. 01, 2017	Aug. 23, 2018	Radiation (03CH11-HY)
Test Software	N/A	E3	6.2009-8-24	N/A	N/A	Aug. 31, 2017 ~ Sep. 01, 2017	N/A	Radiation (03CH11-HY)

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))	**3.37**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.67**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.03**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	**22.25**	22.05	22.01
20	1	49		22.10	22.00	22.01
20	1	99		22.03	22.01	21.99
20	50	0		21.29	21.12	20.92
20	50	24		21.22	21.02	20.89
20	50	50		21.22	21.03	20.96
20	100	0		21.24	21.05	20.92
20	1	0	16-QAM	21.50	21.44	21.25
20	1	49		21.46	21.30	21.15
20	1	99		21.45	21.25	21.19
20	50	0		20.30	20.11	19.93
20	50	24		20.23	20.02	19.91
20	50	50		20.22	20.02	19.96
20	100	0		20.24	20.04	19.92
15	1	0	QPSK	22.24	22.01	22.09
15	1	37		22.07	21.82	22.02
15	1	74		22.14	22.01	22.02
15	36	0		21.34	21.15	20.98
15	36	20		21.14	21.21	21.11
15	36	39		21.26	21.08	21.08
15	75	0		21.34	21.05	21.11
15	1	0	16-QAM	21.44	21.44	21.05
15	1	37		21.22	21.24	21.19
15	1	74		21.19	21.09	21.25
15	36	0		20.11	20.21	19.99
15	36	20		20.10	20.09	20.07
15	36	39		20.10	19.99	20.03
15	75	0		20.22	20.16	20.04

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.11	22.12	22.03
10	1	25		22.23	22.01	22.10
10	1	49		21.97	22.02	21.93
10	25	0		21.37	21.23	21.23
10	25	12		21.12	21.13	21.31
10	25	25		21.02	21.05	21.18
10	50	0		21.31	21.26	21.21
10	1	0	16-QAM	21.45	21.25	21.11
10	1	25		21.19	21.21	21.35
10	1	49		21.36	21.22	21.05
10	25	0		20.04	20.01	19.97
10	25	12		20.26	20.01	20.01
10	25	25		20.09	19.91	20.12
10	50	0		20.10	20.20	20.02
5	1	0	QPSK	22.18	22.18	22.20
5	1	12		22.09	22.21	22.05
5	1	24		22.19	21.94	21.83
5	12	0		21.36	21.17	21.10
5	12	7		21.21	21.08	21.05
5	12	13		21.18	21.05	20.98
5	25	0		21.19	21.15	21.23
5	1	0	16-QAM	21.45	21.37	21.37
5	1	12		21.50	21.20	21.04
5	1	24		21.30	21.16	20.97
5	12	0		20.29	20.02	20.04
5	12	7		20.11	20.16	20.01
5	12	13		20.24	20.08	19.90
5	25	0		20.31	19.99	20.15

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.15	21.96	21.93
3	1	8		22.11	21.99	21.87
3	1	14		22.06	21.89	21.82
3	8	0		21.31	21.19	20.97
3	8	4		21.08	21.17	20.91
3	8	7		21.27	21.17	21.10
3	15	0		21.32	21.04	21.05
3	1	0	16-QAM	21.22	21.29	21.09
3	1	8		21.30	21.20	21.04
3	1	14		21.26	21.04	21.00
3	8	0		20.10	20.14	19.90
3	8	4		20.15	20.09	20.10
3	8	7		20.13	20.18	19.84
3	15	0		20.21	19.95	20.24
1.4	1	0	QPSK	22.19	22.13	21.84
1.4	1	3		22.09	22.12	21.94
1.4	1	5		21.92	21.91	22.05
1.4	3	0		22.20	22.11	22.05
1.4	3	1		22.17	21.95	21.98
1.4	3	3		22.14	22.01	22.13
1.4	6	0		21.37	21.09	21.06
1.4	1	0	16-QAM	21.38	21.14	21.06
1.4	1	3		21.47	21.33	21.00
1.4	1	5		21.31	21.24	21.17
1.4	3	0		21.12	21.05	20.86
1.4	3	1		21.12	20.83	20.90
1.4	3	3		21.25	20.88	20.89
1.4	6	0		20.15	20.05	20.04

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	24.75	**24.76**	24.67
10	1	25		24.58	24.36	24.47
10	1	49		24.41	24.33	24.66
10	25	0		23.62	23.55	23.50
10	25	12		23.54	23.63	23.59
10	25	25		23.52	23.41	23.56
10	50	0		23.49	23.56	23.47
10	1	0	16-QAM	23.81	23.78	23.86
10	1	25		23.74	23.79	23.77
10	1	49		23.70	23.81	23.86
10	25	0		22.62	22.59	22.59
10	25	12		22.65	22.72	22.45
10	25	25		22.52	22.42	22.57
10	50	0		22.74	22.74	22.70
5	1	0	QPSK	24.56	24.42	24.47
5	1	12		24.58	24.45	24.64
5	1	24		24.66	24.33	24.67
5	12	0		23.53	23.47	23.55
5	12	7		23.70	23.43	23.70
5	12	13		23.74	23.63	23.69
5	25	0		23.64	23.50	23.54
5	1	0	16-QAM	24.00	23.80	23.78
5	1	12		23.93	23.75	23.95
5	1	24		23.68	23.54	23.91
5	12	0		22.63	22.57	22.70
5	12	7		22.75	22.65	22.58
5	12	13		22.66	22.60	22.64
5	25	0		22.65	22.73	22.50

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	24.52	24.58	24.49
3	1	8		24.53	24.36	24.66
3	1	14		24.63	24.36	24.65
3	8	0		23.54	23.65	23.74
3	8	4		23.75	23.65	23.61
3	8	7		23.46	23.58	23.78
3	15	0		23.51	23.38	23.76
3	1	0	16-QAM	23.75	23.79	23.74
3	1	8		23.68	23.87	23.88
3	1	14		23.78	23.82	23.64
3	8	0		22.64	22.55	22.77
3	8	4		22.85	22.62	22.65
3	8	7		22.58	22.76	22.72
3	15	0		22.73	22.68	22.59
1.4	1	0	QPSK	24.46	24.33	24.48
1.4	1	3		24.42	24.47	24.53
1.4	1	5		24.66	24.42	24.66
1.4	3	0		24.66	24.44	24.71
1.4	3	1		24.63	24.45	24.53
1.4	3	3		24.43	24.58	24.51
1.4	6	0		23.50	23.56	23.52
1.4	1	0	16-QAM	23.79	23.68	23.92
1.4	1	3		23.81	23.76	23.85
1.4	1	5		23.86	23.69	23.83
1.4	3	0		23.73	23.55	23.64
1.4	3	1		23.71	23.47	23.73
1.4	3	3		23.58	23.58	23.63
1.4	6	0		22.87	22.77	22.81

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.51	22.59	22.64
20	1	49		22.53	22.62	22.62
20	1	99		22.56	**22.80**	22.63
20	50	0		21.54	21.68	21.72
20	50	24		21.52	21.68	21.70
20	50	50		21.57	21.80	21.73
20	100	0		21.54	21.71	21.70
20	1	0	16-QAM	21.68	21.81	21.86
20	1	49		21.67	21.83	21.84
20	1	99		21.79	22.00	21.84
20	50	0		20.53	20.64	20.68
20	50	24		20.49	20.65	20.67
20	50	50		20.54	20.76	20.69
20	100	0		20.50	20.67	20.65
15	1	0	QPSK	22.76	22.47	22.58
15	1	37		22.58	22.65	22.59
15	1	74		22.64	22.79	22.64
15	36	0		21.74	21.68	21.73
15	36	20		21.80	21.74	21.75
15	36	39		21.61	21.71	21.82
15	75	0		21.62	21.93	22.00
15	1	0	16-QAM	21.83	22.00	21.82
15	1	37		21.78	21.79	21.77
15	1	74		21.92	21.92	21.99
15	36	0		20.54	20.56	20.92
15	36	20		20.48	20.61	20.86
15	36	39		20.57	20.59	20.75
15	75	0		20.64	20.61	20.71

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.56	22.52	22.64
10	1	25		22.65	22.65	22.72
10	1	49		22.50	22.70	22.64
10	25	0		21.58	21.64	21.91
10	25	12		21.64	21.86	21.73
10	25	25		21.57	21.63	21.80
10	50	0		21.64	21.59	21.71
10	1	0	16-QAM	21.66	21.72	22.00
10	1	25		21.64	21.73	21.98
10	1	49		21.88	22.00	21.82
10	25	0		20.70	20.68	20.87
10	25	12		20.57	20.70	20.87
10	25	25		20.64	20.69	20.71
10	50	0		20.53	20.80	20.67
5	1	0	QPSK	22.60	22.72	22.65
5	1	12		22.61	22.65	22.68
5	1	24		22.45	22.46	22.69
5	12	0		21.60	21.59	21.85
5	12	7		21.76	21.80	21.84
5	12	13		21.68	21.61	21.81
5	25	0		21.71	21.76	21.68
5	1	0	16-QAM	21.79	21.84	21.95
5	1	12		21.79	21.82	22.01
5	1	24		21.70	21.71	21.96
5	12	0		20.77	20.67	20.80
5	12	7		20.64	20.68	20.81
5	12	13		20.55	20.72	20.63
5	25	0		20.73	20.51	20.60

Appendix B. Test Results of ERP/EIRP and Radiated Test

ERP/EIRP

LTE Band 2 / 1.4MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	0	22.20	0.1660	22.20	0.1660
Middle		3	0	22.11	0.1626	22.11	0.1626
Highest		3	0	22.05	0.1603	22.05	0.1603
Lowest	16QAM	1	3	21.47	0.1403	21.47	0.1403
Middle		1	3	21.33	0.1358	21.33	0.1358
Highest		1	3	21.00	0.1259	21.00	0.1259
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 3MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.15	0.1641	22.15	0.1641
Middle		1	0	21.96	0.1570	21.96	0.1570
Highest		1	0	21.93	0.1560	21.93	0.1560
Lowest	16QAM	1	8	21.30	0.1349	21.30	0.1349
Middle		1	8	21.20	0.1318	21.20	0.1318
Highest		1	8	21.04	0.1271	21.04	0.1271
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 5MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	22.09	0.1618	22.09	0.1618
Middle		1	12	22.21	0.1663	22.21	0.1663
Highest		1	12	22.05	0.1603	22.05	0.1603
Lowest	16QAM	1	12	21.50	0.1413	21.50	0.1413
Middle		1	12	21.20	0.1318	21.20	0.1318
Highest		1	12	21.04	0.1271	21.04	0.1271
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 10MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	22.23	0.1671	22.23	0.1671
Middle		1	25	22.01	0.1589	22.01	0.1589
Highest		1	25	22.10	0.1622	22.10	0.1622
Lowest	16QAM	1	0	21.45	0.1396	21.45	0.1396
Middle		1	0	21.25	0.1334	21.25	0.1334
Highest		1	0	21.11	0.1291	21.11	0.1291
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 15MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.24	0.1675	22.24	0.1675
Middle		1	0	22.01	0.1589	22.01	0.1589
Highest		1	0	22.09	0.1618	22.09	0.1618
Lowest	16QAM	1	0	21.44	0.1393	21.44	0.1393
Middle		1	0	21.44	0.1393	21.44	0.1393
Highest		1	0	21.05	0.1274	21.05	0.1274
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 20MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.25	0.1679	22.25	0.1679
Middle		1	0	22.05	0.1603	22.05	0.1603
Highest		1	0	22.01	0.1589	22.01	0.1589
Lowest	16QAM	1	0	21.50	0.1413	21.50	0.1413
Middle		1	0	21.44	0.1393	21.44	0.1393
Highest		1	0	21.25	0.1334	21.25	0.1334
Limit	EIRP < 2W			Result		PASS	

LTE Band 5 / 1.4MHz (Average) (GT - LC = -1.9 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	3	0	24.66	0.2924	20.61	0.1151
Middle		3	0	24.44	0.2780	20.39	0.1094
Highest		3	0	24.71	0.2958	20.66	0.1164
Lowest	16QAM	1	0	23.79	0.2393	19.74	0.0942
Middle		1	0	23.68	0.2333	19.63	0.0918
Highest		1	0	23.92	0.2466	19.87	0.0971
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 3MHz (Average) (GT - LC = -1.9 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	8	24.53	0.2838	20.48	0.1117
Middle		1	8	24.36	0.2729	20.31	0.1074
Highest		1	8	24.66	0.2924	20.61	0.1151
Lowest	16QAM	1	8	23.68	0.2333	19.63	0.0918
Middle		1	8	23.87	0.2438	19.82	0.0959
Highest		1	8	23.88	0.2443	19.83	0.0962
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 5MHz (Average) (GT - LC = -1.9 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	24.66	0.2924	20.61	0.1151
Middle		1	24	24.33	0.2710	20.28	0.1067
Highest		1	24	24.67	0.2931	20.62	0.1153
Lowest	16QAM	1	0	24.00	0.2512	19.95	0.0989
Middle		1	0	23.80	0.2399	19.75	0.0944
Highest		1	0	23.78	0.2388	19.73	0.0940
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 10MHz (Average) (GT - LC = -1.9 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	24.75	0.2985	20.70	0.1175
Middle		1	0	24.76	0.2992	20.71	0.1178
Highest		1	0	24.67	0.2931	20.62	0.1153
Lowest	16QAM	1	0	23.81	0.2404	19.76	0.0946
Middle		1	0	23.78	0.2388	19.73	0.0940
Highest		1	0	23.86	0.2432	19.81	0.0957
Limit	ERP < 7W			Result		PASS	

LTE Band 7 / 5MHz (Average) (GT - LC = 0.3 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.60	0.1820	22.90	0.1950
Middle		1	0	22.72	0.1871	23.02	0.2004
Highest		1	0	22.65	0.1841	22.95	0.1972
Lowest	16QAM	1	12	21.79	0.1510	22.09	0.1618
Middle		1	12	21.82	0.1521	22.12	0.1629
Highest		1	12	22.01	0.1589	22.31	0.1702
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 10MHz (Average) (GT - LC = 0.3 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	22.65	0.1841	22.95	0.1972
Middle		1	25	22.65	0.1841	22.95	0.1972
Highest		1	25	22.72	0.1871	23.02	0.2004
Lowest	16QAM	1	0	21.66	0.1466	21.96	0.1570
Middle		1	0	21.72	0.1486	22.02	0.1592
Highest		1	0	22.00	0.1585	22.30	0.1698
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 15MHz (Average) (GT - LC = 0.3 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	74	22.64	0.1837	22.94	0.1968
Middle		1	74	22.79	0.1901	23.09	0.2037
Highest		1	74	22.64	0.1837	22.94	0.1968
Lowest	16QAM	1	0	21.83	0.1524	22.13	0.1633
Middle		1	0	22.00	0.1585	22.30	0.1698
Highest		1	0	21.82	0.1521	22.12	0.1629
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 20MHz (Average) (GT - LC = 0.3 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	99	22.56	0.1803	22.86	0.1932
Middle		1	99	22.80	0.1905	23.10	0.2042
Highest		1	99	22.63	0.1832	22.93	0.1963
Lowest	16QAM	1	99	21.79	0.1510	22.09	0.1618
Middle		1	99	22.00	0.1585	22.30	0.1698
Highest		1	99	21.84	0.1528	22.14	0.1637
Limit	EIRP < 2W			Result		PASS	

Radiated Spurious Emission

LTE Band 2

LTE Band 2 / 1.4MHz / QPSK									
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	-51.41	-13	-38.41	-68.19	-63.2	0.72	12.52	H
	5550	-46.03	-13	-33.03	-67.85	-58.2	1.00	13.17	H
	7400	-52.70	-13	-39.70	-77.59	-62.1	1.18	10.58	H
	3702	-53.41	-13	-40.41	-70.93	-65.2	0.72	12.52	V
	5550	-49.03	-13	-36.03	-70.36	-61.2	1.00	13.17	V
	7400	-53.10	-13	-40.10	-77.93	-62.5	1.18	10.58	V

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

LTE Band 2 / 3MHz / QPSK									
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	-51.11	-13	-38.11	-68.05	-62.9	0.72	12.52	H
	5550	-46.03	-13	-33.03	-67.44	-58.2	1.00	13.17	H
	7400	-52.70	-13	-39.70	-77.24	-62.1	1.18	10.58	H
	3702	-53.01	-13	-40.01	-70.72	-64.8	0.72	12.52	V
	5550	-48.93	-13	-35.93	-70.53	-61.1	1.00	13.17	V
	7400	-52.80	-13	-39.80	-77.7	-62.2	1.18	10.58	V

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

LTE Band 2 / 5MHz / QPSK									
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	-50.71	-13	-37.71	-67.64	-62.5	0.72	12.52	H
	5550	-44.93	-13	-31.93	-66.48	-57.1	1.00	13.17	H
	7400	-52.90	-13	-39.90	-77.76	-62.3	1.18	10.58	H
	3702	-53.31	-13	-40.31	-71.28	-65.1	0.72	12.52	V
	5550	-48.93	-13	-35.93	-70.71	-61.1	1.00	13.17	V
	7400	-52.80	-13	-39.80	-77.62	-62.2	1.18	10.58	V

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

LTE Band 2 / 10MHz / QPSK									
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)
Highest	3804	-48.09	-13	-35.09	-65	-59.9	0.67	12.48	H
	5700	-44.11	-13	-31.11	-65.25	-56.2	0.99	13.08	H
	7602	-51.60	-13	-38.60	-76.56	-61.1	1.18	10.69	H
	3804	-51.29	-13	-38.29	-69.47	-63.1	0.67	12.48	V
	5700	-47.51	-13	-34.51	-69.17	-59.6	0.99	13.08	V
	7602	-52.00	-13	-39.00	-76.69	-61.5	1.18	10.69	V

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

LTE Band 2 / 15MHz / QPSK									
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	-50.41	-13	-37.41	-67.5	-62.2	0.72	12.52	H
	5550	-46.03	-13	-33.03	-67.37	-58.2	1.00	13.17	H
	7400	-52.80	-13	-39.80	-77.79	-62.2	1.18	10.58	H
									H
									H
									H
									H
	3702	-53.31	-13	-40.31	-70.97	-65.1	0.72	12.52	V
	5550	-50.33	-13	-37.33	-71.25	-62.5	1.00	13.17	V
	7400	-52.90	-13	-39.90	-77.71	-62.3	1.18	10.58	V
									V
									V
									V
									V

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

LTE Band 2 / 20MHz / QPSK									
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	-47.11	-13	-34.11	-63.89	-58.9	0.72	12.52	H
	5556	-45.13	-13	-32.13	-66.37	-57.3	1.00	13.17	H
	7400	-52.70	-13	-39.70	-77.64	-62.1	1.18	10.58	H
	3702	-52.91	-13	-39.91	-71.02	-64.7	0.72	12.52	V
	5556	-47.43	-13	-34.43	-69.28	-59.6	1.00	13.17	V
	7400	-53.10	-13	-40.10	-77.85	-62.5	1.18	10.58	V

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

LTE Band 5

LTE Band 5 / 1.4MHz / QPSK									
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	1648	-56.69	-13	-43.69	-66.6	-63.64	0.53	9.63	H
	2472	-57.70	-13	-44.70	-71.14	-65.68	0.65	10.78	H
	3296	-52.03	-13	-39.03	-68.17	-61.11	0.76	11.99	H
	1648	-61.20	-13	-48.20	-70.82	-68.15	0.53	9.63	V
	2472	-57.50	-13	-44.50	-71.43	-65.48	0.65	10.78	V
	3296	-54.41	-13	-41.41	-70.52	-63.49	0.76	11.99	V

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

LTE Band 5 / 3MHz / QPSK									
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)
Highest	1696	-50.07	-13	-37.07	-60.45	-57.12	0.53	9.73	H
	2536	-52.20	-13	-39.20	-65.65	-60.21	0.66	10.82	H
	3384	-50.19	-13	-37.19	-66.49	-59.52	0.77	12.25	H
	1696	-53.83	-13	-40.83	-63.58	-60.88	0.53	9.73	V
	2536	-54.21	-13	-41.21	-68.04	-62.22	0.66	10.82	V
	3384	-53.21	-13	-40.21	-69.1	-62.54	0.77	12.25	V

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

LTE Band 5 / 5MHz / QPSK									
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)
Highest	1688	-51.00	-13	-38.00	-61.25	-58.03	0.53	9.71	H
	2536	-56.93	-13	-43.93	-69.38	-64.94	0.66	10.82	H
	3376	-51.74	-13	-38.74	-68.01	-61.05	0.77	12.23	H
	1688	-55.80	-13	-42.80	-65.55	-62.83	0.53	9.71	V
	2536	-57.00	-13	-44.00	-70.83	-65.01	0.66	10.82	V
	3376	-56.59	-13	-43.59	-72.52	-65.9	0.77	12.23	V

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

LTE Band 5 / 10MHz / QPSK									
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)
Middle	1664	-60.92	-13	-47.92	-70.79	-67.9	0.53	9.66	H
	2496	-58.21	-13	-45.21	-71.47	-66.2	0.65	10.80	H
	3328	-54.83	-13	-41.83	-70.55	-64	0.76	12.08	H
									H
									H
									H
									H
	1664	-62.92	-13	-49.92	-72.14	-69.9	0.53	9.66	V
	2496	-59.31	-13	-46.31	-73.05	-67.3	0.65	10.80	V
	3328	-57.43	-13	-44.43	-72.58	-66.6	0.76	12.08	V
									V
									V
									V
									V

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

LTE Band 7

LTE Band 7 / 5MHz / QPSK									
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)
Highest	5130	-54.69	-25	-29.69	-75.39	-66.18	0.97	12.46	H
	7698	-51.15	-25	-26.15	-76.47	-60.92	1.19	10.95	H
	10260	-45.54	-25	-20.54	-76.49	-55.75	1.39	11.61	H
	5130	-52.05	-25	-27.05	-72.92	-63.54	0.97	12.46	V
	7698	-48.51	-25	-23.51	-73.7	-58.28	1.19	10.95	V
	10260	-45.25	-25	-20.25	-75.98	-55.46	1.39	11.61	V

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

LTE Band 7 / 10MHz / QPSK									
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)
Highest	5124	-53.53	-25	-28.53	-74.2	-65.01	0.97	12.45	H
	7686	-51.09	-25	-26.09	-76.37	-60.82	1.19	10.92	H
	10248	-45.32	-25	-20.32	-76.27	-55.56	1.39	11.63	H
	5124	-50.68	-25	-25.68	-71.52	-62.16	0.97	12.45	V
	7686	-51.26	-25	-26.26	-76.38	-60.99	1.19	10.92	V
	10248	-45.17	-25	-20.17	-75.9	-55.41	1.39	11.63	V

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

LTE Band 7 / 15MHz / QPSK									
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)
Highest	5112	-53.74	-25	-28.74	-74.4	-65.2	0.97	12.42	H
	7668	-51.48	-25	-26.48	-76.72	-61.17	1.19	10.87	H
	10224	-45.35	-25	-20.35	-76.34	-55.64	1.39	11.67	H
	5112	-51.36	-25	-26.36	-72.19	-62.82	0.97	12.42	V
	7668	-50.80	-25	-25.80	-75.85	-60.49	1.19	10.87	V
	10224	-45.80	-25	-20.80	-76.53	-56.09	1.39	11.67	V

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

LTE Band 7 / 20MHz / QPSK									
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)
Highest	5100	-54.76	-25	-29.76	-75.02	-66.2	0.96	12.40	H
	7650	-52.06	-25	-27.06	-76.81	-61.7	1.18	10.82	H
	10200	-45.87	-25	-20.87	-76.57	-56.2	1.39	11.72	H
	5100	-53.46	-25	-28.46	-73.67	-64.9	0.96	12.40	V
	7650	-51.96	-25	-26.96	-76.67	-61.6	1.18	10.82	V
	10200	-45.27	-25	-20.27	-76.67	-55.6	1.39	11.72	V

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

Appendix C. Original Report

Please refer to Sporton report number FG782113B