



FCC RADIO TEST REPORT

FCC ID : 2AJN7-TP00110B Equipment : Notebook Computer

Brand Name : Lenovo Model Name : TP00110B

Marketing Name ThinkPad X1 Yoga Gen 5

Applicant : LC Future Center

7F., No.780, Bei'an Rd., Zhongshan Dist.,

Taipei City 104, Taiwan

Manufacturer : LC Future Center Limited Taiwan Branch

7F., No.780, Bei'an Rd., Zhongshan Dist.,

Taipei City 104, Taiwan

Standard : 47 CFR Part 2, 22(H), 24(E), 27

Equipment: Fibocom L850-GL and Intel AX201D2W tested inside of Lenovo Notebook Computer.

The product was received on Oct. 11, 2019 and testing was started from Nov. 03, 2019 and completed on Nov. 23, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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History of this test report

Report No. : FG9O1139-02B

Report No.	Version	Description	Issued Date		
FG9O1139-02B	01	Initial issue of report	Dec. 30, 2019		
FG9O1139-02B	02	Revise applicant information	Feb. 25, 2019		

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Summary of Test Result

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Report	Ref Std.	Test Items	Result	Remark
Clause	Clause	10011101110	(PASS/FAIL)	110
	§2.1046	Conducted Output Power	Reporting only	
	§22.913 (a)(2)	Effective Radiated Power (Band 5) (Band 26)		
0.0	§27.50 (b)(10)	Effective Radiated Power		
3.2	§27.50 (c)(10)	(Band 12) (Band 13) (Band 17)	Dana	-
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 7) (Band 41)	Pass	
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)		
-	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	Not Required	-
-	§2.1049	Occupied Bandwidth	Not Required	-
-	\$2.1051 \$22.917 (a) \$24.238 (a) \$27.53 (c)(2)(4) \$27.53 (g) \$27.53 (h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 66)	Not Required	-
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7) (Band 41)		
-	\$2.1051 \$22.917 (a) \$24.238 (a) \$27.53 (c)(2) \$27.53 (g) \$27.53 (h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 66)	Not Required	-
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7) (Band 41)		
-	\$2.1055 \$22.355 \$24.235 \$27.54	Frequency Stability Temperature & Voltage	Not Required	-

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
4.2	\$2.1053 \$22.917 (a) \$24.238 (a) \$27.53 (c)(2) \$27.53 (f) \$27.53 (g) \$27.53 (h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 66)	Pass	Under limit 0.30 dB at 11520.000 MHz
	§2.1051	Radiated Spurious Emission		
	§27.53 (m)(4)	(Band 7) (Band 41)		

Remark:

- 1. Not required means after assessing, test items are not necessary to carry out.
- This is a variant report which can be referred Product Equality Declaration. All the test cases
 were performed on original report (FCC ID: 2AJN7-TP00110A). Based on the original report,
 the test cases were verified.

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Tina Chuang

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General Description

1.1 Product Feature of Equipment Under Test

	Product Feature									
Equipment	Notebook Computer									
Brand Name	Lenovo									
Model Name	TP00110B									
Marketing Name	ThinkPad X1 Yoga Gen 5									
FCC ID	2AJN7-TP00110B									
Sample 1	EUT with Amphenol Antenna									
Sample 2	EUT with SPEEDWIRE Antenna									
EUT supports Radios application	WCDMA/HSPA/LTE/GNSS									
EUT Stage	Production Unit									

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Remark:

- 1. The above EUT's information was declared by manufacturer.
- 2. Equipment: Fibocom L860-GL and Intel AX201D2W tested inside of Lenovo Notebook Computer.

	Antenna Information											
WWAN	WWAN 3G<E (dBi)											
Antonno 1	Manufacturer	Amphenol	Peak gain	2.30								
Antenna 1	Part number	LXA113-16-000-C	Туре	PIFA								
Antonno 2	Manufacturer	SPEEDWIRE	Peak gain	2.07								
Antenna 2	Part number	F.0G.ZV-0009-001-00	Туре	PIFA								

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1.2 Product Specification subjective to this standard

S	tandards-related Product Specification
	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 7: 2502.5 MHz ~ 2567.5 MHz
Tx Frequency	LTE Band 12: 699.7 MHz ~ 715.3 MHz
	LTE Band 13: 779.5 MHz ~ 784.5 MHz
	LTE Band 17: 706.5 MHz ~ 713.5 MHz
	LTE Band 26: 824.7 MHz ~ 848.3 MHz
	LTE Band 41: 2498.5 MHz ~ 2687.5 MHz
	LTE Band 66: 1710.7 MHz ~ 1779.3 MHz
	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 7: 2622.5MHz ~ 2687.5 MHz
Rx Frequency	LTE Band 12: 729.7 MHz ~ 745.3 MHz
	LTE Band 13: 748.5 MHz ~ 753.5 MHz
	LTE Band 17: 736.5 MHz ~ 743.5 MHz
	LTE Band 26: 869.7 MHz ~ 893.3 MHz
	LTE Band 41: 2498.5 MHz ~ 2687.5 MHz
	LTE Band 66: 2110.7 MHz ~ 2199.3 MHz
	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
	LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
	LTE Band 5: 1.4MHz/3MHz/5MHz/10MHz
	LTE Band 7: 5MHz/10MHz/15MHz/20MHz
Bandwidth	LTE Band 12: 1.4MHz/3MHz/5MHz/10MHz
	LTE Band 13: 5MHz / 10MHz
	LTE Band 17: 5MHz / 10MHz
	LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz
	LTE Band 41: 5MHz / 10MHz / 15MHz / 20MHz
	LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
	LTE Band 2: 23.26 dBm
	LTE Band 4: 23.48 dBm
	LTE Band 5: 22.93 dBm
	LTE Band 7: 23.06 dBm
Maximum Output Power to	LTE Band 12 : 22.93 dBm
Antenna	LTE Band 13 : 23.14 dBm
	LTE Band 17 : 22.94 dBm
	LTE Band 26 : 22.91 dBm
	LTE Band 41 : 22.91 dBm
	LTE Band 66 : 22.85dBm
Type of Modulation	QPSK / 16QAM

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1.3 Modification of EUT

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

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1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory				
Test Site Location No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)					
Test Site No.	Sporton Site No.				
rest site No.	TH05-HY				
Test Engineer	Jacky Wang				
Temperature	23~25℃				
Relative Humidity	52~55%				

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Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory							
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Faoyuan City, Taiwan (R.O.C.)							
Took Site No	Sporton Site No.							
Test Site No.	03CH12-HY	03CH13-HY						
Test Engineer	Lance Chiang,Wei Chuan Chu	JC Liang、Wilson Wu						
Temperature	22~26°C 21.5~23.5°C							
Relative Humidity	58~66%	46.9~49.5%						

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW0007

1.5 Applicable Standards

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

- ANSI C63.26-2015
- ANSI / TIA-603-E
- 47 CFR Part 2, 22(H), 24(E), 27
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

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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 v03r01 with maximum output power.

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For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z, and Notebook Mode. The worst cases (Y plane with Tablet Mode for Band 13; Notebook Mode for Band 7) were recorded in this report.

Test Items	Band		E	Bandw	idth (M	Hz)		ı	Modulatio	n		RB#			Test hanne	el
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	М	н
	2	V	٧	>	٧	٧	v	v	v		>	v	v	>	v	v
	4	v	٧	٧	v	v	v	v	v		٧	v	v	٧	v	v
	5	v	V	v	v	-	-	v	v		٧	v	v	v	v	v
	7	-	-	v	v	v	v	v	v		٧	v	v	v	v	v
Max. Output	12	v	V	v	v	-	-	v	v		٧	v	v	v	v	٧
Power	13	-	•	٧	v	-	-	v	v		٧	v	v	٧	v	v
	17	-	•	٧	v	-	-	v	v		٧	v	v	٧	v	v
	26	v	٧	٧	v	v	-	v	v		٧	v	v	٧	v	v
	41	-	•	٧	v	v	v	v	v		٧	v	v	٧	v	v
	66	v	٧	>	٧	٧	v	v	v		>	v	v	>	v	v
	2	V	٧	>	٧	٧	v	v	v		>	v		>	v	v
	4	v	٧	>	v	v	v	v	v		>	v		>	v	v
	5	v	٧	>	٧	•	-	v	v		>	v		>	v	v
	7	•	•	>	٧	٧	v	v	v		>	v		>	v	v
E.R.P/	12	v	v	v	v	-	-	v	v		v	v		v	v	٧
E.I.R.P	13		-	v	v	-	-	v	v		٧	v		v	٧	<
	17	-	-	v	v	-	-	v	v		٧			v	v	٧
	26	v	٧	v	v	v	-	v	v		٧			v	v	٧
	41	-	-	v	v	v	v	v	v		٧	v		v	v	٧
	66	v	v	v	v	v	v	v	v		٧		v	v	v	v

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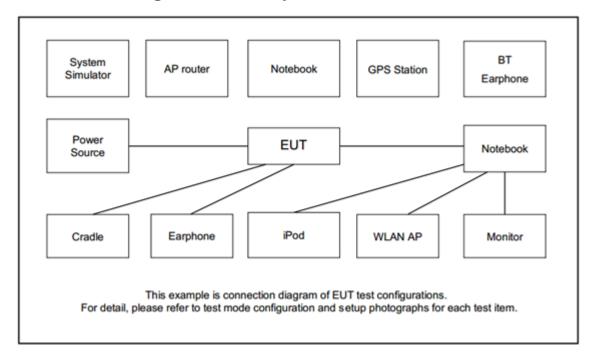
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Test Items	Bandwidth (MHz) Modulation RB #										Test Channel						
Tool Home			1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	М	н
Radiated	7	,		Worst Case										٧	٧	٧	
Spurious Emission	1	3	Worst Case									٧	٧	٧			
Remark	1. 2. 3.	The The diffe	e mark device erent R orted.	"-" mea e is inv :B size/	ans that estigate offset a	this ba ed from and mo	andwidt 30MH: dulatior	h is not su z to 10 tim ns in explo	nes of fund oratory tes	damental s t. Subsequ	signal for ra						der
	4.	All t	he rad	iated te	est case	es were	perfor	med with	Adapter 4	and Samp	ole 1.						

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8		
''	Cystem curidiator	7 tilliou	100200	14/7	14/7	m		
2.	Earphone	Ziya	N/A	N/A	Unshielded, 1.2 m	N/A		
3.	Base Station	Anritsu	8821C	N/A	N/A	N/A		

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2.4 Frequency List of Low/Middle/High Channels

Channel

Frequency Channel

Frequency

	LTE Band 2 Cha	nnel and Frequen	cy List				
BW [MHz]	Channel/Frequency(MHz) Lowest Middle F						
20	Channel	18700	18900	19100			
20	Frequency	1860	1880	1900			
45	Channel	18675	18900	19125			
15	Frequency	1857.5	1880	1902.5			
40	Channel	18650	18900	19150			
10	Frequency	1855	1880	1905			
5	Channel	18625	18900	19175			
5	Frequency	1852.5	1880	1907.5			
3	Channel	18615	18900	19185			
	Frequency	1851.5	1880	1908.5			
4.4	Channel	18607	18900	19193			
1.4 Frequency		1850.7	1880	1909.3			
	LTE Band 4 Cha	nnel and Frequen	cy List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest			
20	Channel	20050	20175	20300			
20	Frequency	1720	1732.5	1745			
15	Channel	20025	20175	20325			
15	Frequency	1717.5	1732.5	1747.5			
10	Channel	20000	20175	20350			
10	Frequency	1715	1732.5	1750			
F	Channel	19975	20175	20375			
5	Frequency	1712.5	1732.5	1752.5			

19965

1711.5

19957

1710.7

20175

1732.5

20175

1732.5

20385

1753.5

20393

1754.3

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1.4

LTE Band 5 Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
40	Channel	20450	20525	20600		
10	Frequency	829	836.5	844		
	Channel	20425	20525	20625		
5	Frequency	826.5	836.5	846.5		
0	Channel	20415	20525	20635		
3	Frequency	825.5	836.5	847.5		
4.4	Channel	20407	20525	20643		
1.4	Frequency	824.7	836.5	848.3		
	LTE Band 7 Cha	nnel and Frequenc	cy List			
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
20	Channel	20850	21100	21350		
20	Frequency	2510	2535	2560		
	Channel	20825	21100	21375		
15	Frequency	2507.5	2535	2562.5		
10	Channel	20800	21100	21400		
10	Frequency	2505	2535	2565		
-	Channel	20775	21100	21425		
5	Frequency	2502.5	2535	2567.5		
	LTE Band 12 Cha	annel and Frequen	cy List			
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
10	Channel	23060	23095	23130		
10	Frequency	704	707.5	711		
F	Channel	23035	23095	23155		
5	Frequency	701.5	707.5	713.5		
2	Channel	23025	23095	23165		
3	Frequency	700.5	707.5	714.5		
4.4	Channel	23017	23095	23173		
1.4	Frequency	699.7	707.5	715 3		

715.3

707.5

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Frequency

LTE Band 13 Channel and Frequency List							
BW [MHz]	Channel/Frequency(MHz) Lowest Middle Highest						
10	Channel	-	23230	-			
10	Frequency	-	782	-			
	Channel	23205	23230	23255			
5	Frequency	779.5	782	784.5			

LTE Band 17 Channel and Frequency List							
BW [MHz]	Channel/Frequency(MHz) Lowest Middle Highest						
10	Channel	23780	23790	23800			
10	Frequency	709	710	711			
5	Channel	23755	23790	23825			
	Frequency	706.5	710	713.5			

LTE Band 26 Channel and Frequency List								
BW [MHz]	Channel/Frequency(MHz) Lowest Middle Highest							
15	Channel	26865	26915	26965				
15	Frequency	831.5	836.5	841.5				
10	Channel	26840	26915	26990				
10	Frequency	829.0	836.5	844.0				
5	Channel	26815	26915	27015				
	Frequency	826.5	836.5	846.5				
3	Channel	26805	26915	27025				
3	Frequency	825.5	836.5	847.5				
4.4	Channel	26797	26915	27033				
1.4	Frequency	824.7	836.5	848.3				

LTE Band 41 Channel and Frequency List								
BW [MHz]	Channel/Frequency(MHz) Lowest Middle Higher							
20	Channel	39750	40620	41490				
20	Frequency	2506.0	2593.0	2680.0				
15	Channel	39725	40620	41515				
	Frequency	2503.5	2593.0	2682.5				
10	Channel	39700	40620	41540				
10	Frequency	2501.0	2593.0	2685.0				
-	Channel	39675	40620	41565				
5	Frequency	2498.5	2593.0	2687.5				

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LTE Band 66 Channel and Frequency List									
BW [MHz]	Channel/Frequency(MHz) Lowest Middle Highest								
20	Channel	132072	132322	132572					
20	Frequency	1720	1745	1770					
4.5	Channel	132047	132322	132597					
15	Frequency	1717.5	1745	1772.5					
40	Channel	132022	132322	132622					
10	Frequency	1715	1745	1775					
-	Channel	131997	132322	132647					
5	Frequency	1712.5	1745	1777.5					
•	Channel	131987	132322	132657					
3	Frequency	1711.5	1745	1778.5					
4.4	Channel	131979	132322	132665					
1.4	Frequency	1710.7	1745	1779.3					

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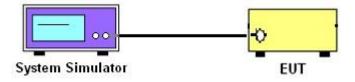
Conducted Test Items 3

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



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3.1.3 Test Result of Conducted Test

Please refer to Appendix A.

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3.2 Conducted Output Power and ERP/EIRP

3.2.1 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.

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The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12 and Band 13 and Band 17

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 7 and Band 41

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66

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

3.2.2 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.

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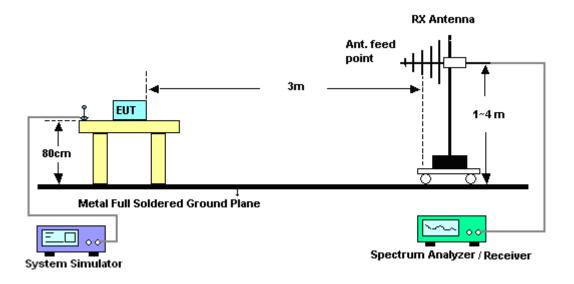
Radiated Test Items 4

4.1 Measuring Instruments

See list of measuring instruments of this test report.

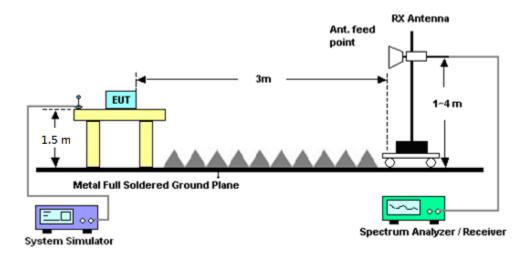
4.1.1 Test Setup

For radiated test from 30MHz to 1GHz



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For radiated test above 1GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

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4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

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

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For LTE Band 7, 41

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.

For LTE Band 13

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.

4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

- 1. 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.
- 2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. 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.
- 5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 8. Taking the record of output power at antenna port.
- 9. Repeat step 7 to step 8 for another polarization.
- 10. 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)

For LTE Band 7, 41

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

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List of Measuring Equipment 5

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201107509	-	Jul. 03, 2019	Nov. 04, 2019	Jul. 02, 2020	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 07, 2019	Nov. 22, 2019~ Nov. 23, 2019	Jan. 06, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00802 N1D01N-06	35413&02	30MHz to 1GHz	Feb. 12, 2019	Nov. 22, 2019~ Nov. 23, 2019	Feb. 11, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120D	9120D-02037	1GHz ~ 18GHz	Oct. 28, 2019	Nov. 22, 2019~ Nov. 23, 2019	Oct. 27, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 09, 2019	Nov. 22, 2019~ Nov. 23, 2019	Nov. 08, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917058 4	18GHz ~ 40GHz	Dec. 05, 2018	Nov. 22, 2019~ Nov. 23, 2019	Dec. 04, 2019	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2019	Nov. 22, 2019~ Nov. 23, 2019	Mar. 24, 2020	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5Ghz	May 28, 2018	Nov. 22, 2019~ Nov. 23, 2019	May 26, 2020	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	Nov. 22, 2019~ Nov. 23, 2019	Dec. 05, 2019	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 26, 2018	Nov. 22, 2019~ Nov. 23, 2019	Dec. 25, 2019	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY53470118	10Hz~44GHz	Apr. 18, 2019	Nov. 22, 2019~ Nov. 23, 2019	Apr. 17, 2020	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMB100A	101107	100kHz~40GHz	Aug. 27, 2019	Nov. 22, 2019~ Nov. 23, 2019	Aug. 26, 2020	Radiation (03CH12-HY)
Base Station	Anritsu	MT8821C	6201432816	GSM / GPRS /WCDMA / LTE FDD/TDD with 44) /LTE-3CC DLCA,2CC ULCA	May 05, 2019	Nov. 22, 2019~ Nov. 23, 2019	May 04, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Mar. 13, 2019	Nov. 22, 2019~ Nov. 23, 2019	Mar. 12, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 26, 2018	Nov. 22, 2019~ Nov. 23, 2019	Feb. 25, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Feb. 26, 2018	Nov. 22, 2019~ Nov. 23, 2019	Feb. 25, 2020	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 22, 2019~ Nov. 23, 2019	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 22, 2019~ Nov. 23, 2019	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 22, 2019~ Nov. 23, 2019	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Nov. 22, 2019~ Nov. 23, 2019	N/A	Radiation (03CH12-HY)

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Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	40103 & 07	30MHz~1GHz	Apr. 30, 2019	Nov. 03, 2019~ Nov. 19, 2019	Apr. 29, 2020	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00802 N1D01N-06	54682 & AT-N0603	30MHz~1GHz	Sep. 26, 2019	Nov. 03, 2019~ Nov. 19, 2019	Sep. 25, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Jul. 02, 2019	Nov. 03, 2019~ Nov. 19, 2019	Jul. 01, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 14, 2019	Nov. 03, 2019~ Nov. 19, 2019	May 13, 2020	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917057 6	18GHz~40GHz	May 14, 2019	Nov. 03, 2019~ Nov. 19, 2019	May 13, 2020	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917058 4	18GHz~40GHz	Dec. 05, 2018	Nov. 03, 2019~ Nov. 19, 2019	Dec. 04, 2019	Radiation (03CH13-HY)
Amplifier	SONOMA	310N	187282	9kHz~1GHz	Dec. 18, 2018	Nov. 03, 2019~ Nov. 19, 2019	Dec. 17, 2019	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 20, 2019	Nov. 03, 2019~ Nov. 19, 2019	May 19, 2020	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 06, 2018	Nov. 03, 2019~ Nov. 19, 2019	Dec. 05, 2019	Radiation (03CH13-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	May 27, 2019	Nov. 03, 2019~ Nov. 19, 2019	May 26, 2020	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 19, 2019	Nov. 03, 2019~ Nov. 19, 2019	Mar. 18, 2020	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 03, 2019~ Nov. 19, 2019	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 03, 2019~ Nov. 19, 2019	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 03, 2019~ Nov. 19, 2019	N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-000992	N/A	N/A	Nov. 03, 2019~ Nov. 19, 2019	N/A	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP157151	N/A	Jun. 17, 2019	Nov. 03, 2019~ Nov. 19, 2019	Jun. 16, 2020	Radiation (03CH13-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Aug. 27, 2019	Nov. 03, 2019~ Nov. 19, 2019	Aug. 26, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SF102/2*11SK 252	MY4278/2	9kHz~40GHz	May 16, 2019	Nov. 03, 2019~ Nov. 19, 2019	May 15, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 13, 2019	Nov. 03, 2019~ Nov. 19, 2019	Feb. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 13, 2019	Nov. 03, 2019~ Nov. 19, 2019	Mar. 12, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0SS	SN2	3GHz High Pass Filter	Jul. 14, 2019	Nov. 03, 2019~ Nov. 19, 2019	Jul. 13, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-1080 -1200-15000-6 0SS	SN3	1.2GHz High Pass Filter	Jul. 03, 2019	Nov. 03, 2019~ Nov. 19, 2019	Jul. 02, 2020	Radiation (03CH13-HY)

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6 Uncertainty of Evaluation

<03CH12-HY>

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

Measuring Uncertainty for a Level of	3.24
Confidence of 95% (U = 2Uc(y))	3.24

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

Measuring Uncertainty for a Level of	2.00
Confidence of 95% (U = 2Uc(y))	3.62

<u>Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)</u>

	_
Measuring Uncertainty for a Level of	4.06
Confidence of 95% (U = 2Uc(y))	4.00

<03CH13-HY>

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.21
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<u>Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)</u>

Measuring Uncertainty for a Level of	3.24
Confidence of 95% (U = 2Uc(y))	3.24

<u>Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)</u>

Measuring Uncertainty for a Level of	3.99
Confidence of 95% (U = 2Uc(y))	3.99

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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		22.95	23.26	22.95		
20	1	49		22.79	23.04	22.86		
20	1	99		22.99	22.96	22.73		
20	50	0	QPSK	21.85	22.09	21.86		
20	50	24		21.82	22.05	21.87		
20	50	50		21.89	22.05	21.86		
20	100	0		22.01	22.14	22.10		
20	1	0		22.17	22.37	22.19		
20	1	49		22.12	22.25	22.02		
20	1	99		22.18	22.27	22.03		
20	50	0	16-QAM	20.92	21.15	20.90		
20	50	24		20.88	21.10	20.91		
20	50	50		20.93	21.11	20.95		
20	100	0		21.03	21.20	21.20		
15	1	0		23.03	23.19	22.85		
15	1	37		22.97	23.13	22.81		
15	1	74		23.03	23.13	22.70		
15	36	0	QPSK	21.96	22.18	21.89		
15	36	20		21.95	22.15	21.87		
15	36	39		21.99	22.14	21.86		
15	75	0		22.00	22.17	21.97		
15	1	0		22.31	22.40	22.05		
15	1	37		22.12	22.35	22.03		
15	1	74		22.20	22.40	21.92		
15	36	0	16-QAM	21.04	21.19	20.96		
15	36	20		21.05	21.17	20.90		
15	36	39		21.04	21.16	20.87		
15	75	0		21.02	21.15	20.99		



LTE Band 2 Maximum Average Power [dBm]								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest		
10	1	0		23.04	23.16	22.93		
10	1	25		22.92	23.09	22.84		
10	1	49		23.02	23.14	22.68		
10	25	0	QPSK	22.02	22.20	21.86		
10	25	12		21.96	22.15	21.85		
10	25	25		21.99	22.16	21.82		
10	50	0		21.93	22.12	21.87		
10	1	0		22.43	22.38	22.09		
10	1	25		22.32	22.36	22.07		
10	1	49		22.36	22.45	21.91		
10	25	0	16-QAM	21.10	21.21	20.88		
10	25	12		21.04	21.14	20.87		
10	25	25		21.07	21.20	20.84		
10	50	0		20.97	21.19	20.92		
5	1	0		23.05	23.22	22.86		
5	1	12		22.95	23.13	22.93		
5	1	24		22.96	23.06	22.61		
5	12	0	QPSK	22.05	22.13	21.82		
5	12	7		21.89	22.13	21.76		
5	12	13		22.09	22.10	21.90		
5	25	0		21.84	22.02	21.81		
5	1	0		22.49	22.41	22.13		
5	1	12		22.32	22.45	22.03		
5	1	24		22.29	22.42	21.85		
5	12	0	16-QAM	21.08	21.26	20.97		
5	12	7		21.11	21.18	20.83		
5	12	13		21.07	21.29	20.78		
5	25	0		21.04	21.09	20.91		

LTE Band 2 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
3	1	0		23.06	23.19	22.96	
3	1	8		22.91	23.20	22.80	
3	1	14		22.91	22.98	22.73	
3	8	0	QPSK	22.04	22.22	21.87	
3	8	4		21.85	22.14	21.75	
3	8	7		21.99	22.10	21.92	
3	15	0		21.92	21.95	21.90	
3	1	0		22.49	22.43	22.16	
3	1	8		22.27	22.52	22.13	
3	1	14		22.38	22.51	21.81	
3	8	0	16-QAM	21.10	21.21	20.95	
3	8	4		21.09	21.10	20.92	
3	8	7		21.13	21.37	20.77	
3	15	0		21.04	21.10	20.82	
1.4	1	0		23.04	23.16	22.91	
1.4	1	3		22.97	23.04	22.93	
1.4	1	5		22.93	23.07	22.71	
1.4	3	0	QPSK	22.95	22.91	22.76	
1.4	3	1		22.86	22.85	22.84	
1.4	3	3		22.96	22.90	22.80	
1.4	6	0		21.87	22.01	21.85	
1.4	1	0		22.56	22.40	21.99	
1.4	1	3		22.25	22.52	22.02	
1.4	1	5		22.38	22.47	21.91	
1.4	3	0	16-QAM	21.98	22.29	21.81	
1.4	3	1		22.19	22.16	21.96	
1.4	3	3		22.11	22.39	21.79	
1.4	6	0		20.95	21.02	20.94	

LTE Band 4 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
20	1	0		23.10	23.48	23.29	
20	1	49		23.27	23.08	23.06	
20	1	99		23.17	23.47	23.27	
20	50	0	QPSK	22.23	22.33	22.12	
20	50	24		22.26	22.07	22.12	
20	50	50		22.20	22.11	22.04	
20	100	0		22.13	22.17	22.04	
20	1	0		22.35	22.47	22.45	
20	1	49		22.49	22.35	22.39	
20	1	99		22.54	22.37	22.67	
20	50	0	16-QAM	21.33	21.18	21.17	
20	50	24		21.32	21.19	21.14	
20	50	50		21.25	21.21	21.45	
20	100	0		21.43	21.25	21.39	
15	1	0		23.09	23.16	23.07	
15	1	37		23.30	23.13	23.29	
15	1	74		23.16	23.08	23.42	
15	36	0	QPSK	22.18	22.11	22.00	
15	36	20		22.29	22.10	22.31	
15	36	39		22.27	22.15	22.35	
15	75	0		22.32	22.10	22.37	
15	1	0		22.31	22.40	22.30	
15	1	37		22.51	22.41	22.52	
15	1	74		22.38	22.32	22.54	
15	36	0	16-QAM	21.22	21.20	21.06	
15	36	20		21.37	21.18	21.34	
15	36	39		21.35	21.22	21.37	
15	75	0	_	21.40	21.15	21.37	

LTE Band 4 Maximum Average Power [dBm]								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest		
10	1	0		23.08	23.19	23.17		
10	1	25		23.20	23.07	23.37		
10	1	49		23.29	23.14	23.48		
10	25	0	QPSK	22.21	22.16	22.38		
10	25	12		22.24	22.17	22.43		
10	25	25		22.32	22.19	22.46		
10	50	0		22.25	22.15	22.43		
10	1	0		22.33	22.52	22.49		
10	1	25		22.45	22.42	22.63		
10	1	49		22.50	22.51	22.61		
10	25	0	16-QAM	21.25	21.24	21.41		
10	25	12		21.29	21.25	21.44		
10	25	25		21.36	21.24	21.46		
10	50	0		21.33	21.18	21.44		
5	1	0		23.06	23.25	23.21		
5	1	12		23.23	22.97	23.40		
5	1	24		23.35	23.09	23.08		
5	12	0	QPSK	22.29	22.10	22.48		
5	12	7		22.22	22.23	22.40		
5	12	13		22.41	22.27	22.51		
5	25	0		22.25	22.08	22.33		
5	1	0		22.26	22.51	22.39		
5	1	12		22.48	22.43	22.56		
5	1	24		22.44	22.46	22.71		
5	12	0	16-QAM	21.23	21.34	21.36		
5	12	7		21.30	21.32	21.44		
5	12	13		21.33	21.18	21.49		
5	25	0		21.40	21.25	21.39		

LTE Band 4 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
3	1	0		23.15	23.13	23.14	
3	1	8		23.34	23.41	23.33	
3	1	14		23.48	23.37	23.39	
3	8	0	QPSK	22.37	22.44	22.34	
3	8	4		22.44	22.37	22.41	
3	8	7		22.56	22.48	22.52	
3	15	0		22.52	22.48	22.50	
3	1	0		22.41	22.57	22.54	
3	1	8		22.55	22.68	22.54	
3	1	14		22.69	22.66	22.69	
3	8	0	16-QAM	21.35	21.51	21.51	
3	8	4		21.38	21.36	21.48	
3	8	7		21.54	21.44	21.50	
3	15	0		21.54	21.44	21.50	
1.4	1	0		23.18	23.17	23.10	
1.4	1	3		23.44	23.43	23.37	
1.4	1	5		22.96	22.97	22.97	
1.4	3	0	QPSK	23.12	23.41	23.32	
1.4	3	1		23.38	23.39	23.33	
1.4	3	3		23.29	23.39	23.35	
1.4	6	0		22.48	22.48	22.49	
1.4	1	0		22.57	22.45	22.46	
1.4	1	3		22.71	22.58	22.53	
1.4	1	5		22.63	22.69	22.62	
1.4	3	0	16-QAM	22.39	22.39	22.36	
1.4	3	1		22.45	22.50	22.52	
1.4	3	3		22.36	22.38	22.45	
1.4	6	0		21.49	21.43	21.52	

	LTE Band 5 Maximum Average Power [dBm]								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest			
10	1	0		22.83	22.92	22.76			
10	1	25		22.80	22.79	22.68			
10	1	49		22.83	22.66	22.66			
10	25	0	QPSK	21.89	21.96	21.68			
10	25	12		21.85	21.88	21.64			
10	25	25		21.87	21.79	21.65			
10	50	0		21.82	21.89	21.77			
10	1	0		22.13	22.15	22.07			
10	1	25		22.15	22.14	21.91			
10	1	49		22.11	22.00	22.04			
10	25	0	16-QAM	20.99	20.89	20.73			
10	25	12		20.91	20.93	20.69			
10	25	25		20.89	20.86	20.71			
10	50	0		20.97	20.95	20.82			
5	1	0		22.88	22.89	22.84			
5	1	12		22.76	22.82	22.58			
5	1	24		22.89	22.63	22.61			
5	12	0	QPSK	21.86	21.87	21.69			
5	12	7		21.89	21.96	21.69			
5	12	13		21.86	21.76	21.68			
5	25	0		21.89	21.86	21.87			
5	1	0		22.09	22.13	22.07			
5	1	12		22.07	22.13	22.00			
5	1	24		22.14	22.02	22.03			
5	12	0	16-QAM	20.91	20.91	20.67			
5	12	7		20.91	20.97	20.70			
5	12	13		20.92	20.87	20.61			
5	25	0		21.05	20.98	20.81			

	LTE Band 5 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest		
3	1	0		22.80	22.75	22.75		
3	1	8		22.79	22.84	22.65		
3	1	14		22.75	22.64	22.63		
3	8	0	QPSK	21.92	21.94	21.73		
3	8	4		21.83	21.97	21.61		
3	8	7		21.88	21.73	21.68		
3	15	0		21.95	21.79	21.86		
3	1	0		22.06	22.09	21.99		
3	1	8		22.08	22.04	21.90		
3	1	14		22.10	21.98	21.96		
3	8	0	16-QAM	21.06	20.87	20.73		
3	8	4		20.84	20.83	20.66		
3	8	7		20.89	20.81	20.74		
3	15	0		20.90	20.99	20.73		
1.4	1	0		22.93	22.75	22.74		
1.4	1	3		22.80	22.80	22.66		
1.4	1	5		22.93	22.75	22.60		
1.4	3	0	QPSK	22.86	22.88	22.58		
1.4	3	1		22.85	22.93	22.70		
1.4	3	3		22.81	22.85	22.66		
1.4	6	0		21.83	21.80	21.82		
1.4	1	0		22.07	22.07	21.99		
1.4	1	3		22.10	22.12	21.83		
1.4	1	5		22.10	21.98	21.97		
1.4	3	0	16-QAM	22.02	21.80	21.79		
1.4	3	1		21.92	21.93	21.66		
1.4	3	3		21.95	21.83	21.64		
1.4	6	0		21.02	21.02	20.80		



LTE Band 7 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
20	1	0		23.00	23.06	22.79	
20	1	49		22.83	22.69	22.85	
20	1	99		22.88	22.74	22.97	
20	50	0	QPSK	21.95	22.00	21.92	
20	50	24		21.94	21.83	21.91	
20	50	50		21.92	21.79	21.90	
20	100	0		21.92	21.96	21.91	
20	1	0		22.14	22.15	22.08	
20	1	49		21.98	21.90	22.17	
20	1	99		22.03	21.92	22.24	
20	50	0	16-QAM	21.02	20.91	20.91	
20	50	24		20.93	20.86	20.98	
20	50	50		20.95	20.81	21.06	
20	100	0		21.03	20.99	21.14	
15	1	0		22.95	22.83	22.83	
15	1	37		22.90	22.73	22.94	
15	1	74		22.91	22.77	22.99	
15	36	0	QPSK	22.01	21.87	21.97	
15	36	20		21.97	21.86	22.02	
15	36	39		21.93	21.82	22.07	
15	75	0		22.00	21.92	22.08	
15	1	0		22.13	22.01	22.04	
15	1	37		22.11	21.96	22.10	
15	1	74		22.11	22.03	22.20	
15	36	0	16-QAM	21.07	20.89	20.98	
15	36	20		21.04	20.86	21.03	
15	36	39		21.00	20.83	21.08	
15	75	0		21.04	20.90	21.10	



LTE Band 7 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
10	1	0		23.02	22.77	22.95	
10	1	25		22.96	22.71	23.00	
10	1	49		22.92	22.73	23.05	
10	25	0	QPSK	22.11	21.87	22.07	
10	25	12		22.08	21.84	22.08	
10	25	25		22.07	21.84	22.11	
10	50	0		22.08	21.87	22.10	
10	1	0		22.20	21.99	22.22	
10	1	25		22.18	21.90	22.17	
10	1	49		22.07	21.99	22.31	
10	25	0	16-QAM	21.11	20.88	21.13	
10	25	12		21.08	20.86	21.13	
10	25	25		21.02	20.85	21.16	
10	50	0		21.04	20.88	21.13	
5	1	0	-	22.95	22.71	23.03	
5	1	12		23.01	22.65	22.87	
5	1	24		22.97	22.75	23.01	
5	12	0	QPSK	22.07	21.79	22.04	
5	12	7		22.01	21.90	22.06	
5	12	13		22.00	21.84	22.03	
5	25	0		22.05	21.84	22.05	
5	1	0		22.29	22.01	22.29	
5	1	12		22.10	21.91	22.24	
5	1	24		22.04	21.91	22.32	
5	12	0	16-QAM	21.18	20.90	21.13	
5	12	7		21.07	20.87	21.19	
5	12	13		21.12	20.75	21.23	
5	25	0		21.11	20.91	21.03	



LTE Band 12 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
10	1	0		22.77	22.92	22.84	
10	1	25		22.74	22.80	22.84	
10	1	49		22.71	22.82	22.80	
10	25	0	QPSK	21.91	21.95	21.93	
10	25	12		21.84	21.92	21.94	
10	25	25		21.77	21.90	21.93	
10	50	0		21.90	21.94	21.92	
10	1	0		22.15	22.24	22.18	
10	1	25		22.04	22.10	22.15	
10	1	49		21.94	22.14	22.22	
10	25	0	16-QAM	20.99	20.97	21.01	
10	25	12		20.96	20.99	20.98	
10	25	25		20.93	20.98	20.99	
10	50	0		21.04	21.01	21.09	
5	1	0		22.76	22.86	22.88	
5	1	12		22.73	22.80	22.89	
5	1	24		22.81	22.88	22.75	
5	12	0	QPSK	21.96	21.94	22.02	
5	12	7		21.85	21.90	21.98	
5	12	13		21.75	21.83	21.95	
5	25	0		21.87	21.87	21.99	
5	1	0		22.10	22.25	22.19	
5	1	12		22.13	22.20	22.24	
5	1	24		22.04	22.19	22.25	
5	12	0	16-QAM	21.05	21.07	20.94	
5	12	7		20.90	21.04	20.90	
5	12	13		21.03	20.95	21.04	
5	25	0		20.96	20.93	21.15	

LTE Band 12 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
3	1	0		22.67	22.84	22.91	
3	1	8		22.76	22.71	22.88	
3	1	14		22.62	22.91	22.71	
3	8	0	QPSK	21.91	22.01	21.84	
3	8	4		21.84	21.93	22.02	
3	8	7		21.81	21.95	21.92	
3	15	0		22.00	21.90	21.96	
3	1	0		22.19	22.25	22.20	
3	1	8		22.11	22.09	22.15	
3	1	14		21.89	22.14	22.27	
3	8	0	16-QAM	21.04	21.02	20.91	
3	8	4		20.99	21.04	20.90	
3	8	7		20.91	20.99	21.06	
3	15	0		21.12	20.99	21.19	
1.4	1	0		22.84	22.91	22.93	
1.4	1	3		22.75	22.79	22.79	
1.4	1	5		22.68	22.75	22.72	
1.4	3	0	QPSK	22.93	22.81	22.91	
1.4	3	1		22.85	22.90	22.84	
1.4	3	3		22.77	22.84	22.91	
1.4	6	0		21.86	21.89	22.10	
1.4	1	0		22.15	22.30	22.09	
1.4	1	3		22.13	22.16	22.06	
1.4	1	5		21.86	22.11	22.30	
1.4	3	0	16-QAM	21.97	21.97	22.09	
1.4	3	1		21.86	21.99	22.01	
1.4	3	3		22.01	21.94	22.00	
1.4	6	0		20.96	21.07	21.12	

	LTE Band 13 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest		
10	1	0			23.14			
10	1	25			23.06			
10	1	49			23.10			
10	25	0	QPSK		22.22			
10	25	12			22.07			
10	25	25			22.12			
10	50	0			22.26			
10	1	0		-	22.33	-		
10	1	25			22.30			
10	1	49			22.34			
10	25	0	16-QAM		21.27			
10	25	12			21.14			
10	25	25			21.18			
10	50	0			21.30			
5	1	0		23.08	23.10	23.06		
5	1	12		23.13	23.05	23.14		
5	1	24		23.13	22.83	23.10		
5	12	0	QPSK	22.13	22.30	22.30		
5	12	7		22.14	22.01	22.12		
5	12	13		22.07	22.11	22.11		
5	25	0		22.17	22.30	22.21		
5	1	0		22.28	22.26	22.33		
5	1	12		22.34	22.34	22.27		
5	1	24	16-QAM	22.33	22.33	22.30		
5	12	0		21.26	21.26	21.21		
5	12	7		21.18	21.04	21.13		
5	12	13		21.11	21.13	21.13		
5	25	0		21.27	21.23	21.30		

LTE Band 17 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
10	1	0		22.83	22.94	22.76	
10	1	25		22.75	22.78	22.74	
10	1	49		22.77	22.73	22.71	
10	25	0	QPSK	21.81	21.83	21.77	
10	25	12		21.81	21.79	21.75	
10	25	25		21.87	21.82	21.72	
10	50	0		21.73	21.81	21.69	
10	1	0		22.16	22.12	22.00	
10	1	25		21.93	22.07	22.09	
10	1	49		22.04	21.94	21.97	
10	25	0	16-QAM	20.92	20.93	20.89	
10	25	12		20.92	20.87	20.86	
10	25	25		20.98	20.89	20.85	
10	50	0		20.87	20.97	21.04	
5	1	0		22.89	22.84	22.83	
5	1	12		22.82	22.86	22.73	
5	1	24		22.85	22.63	22.68	
5	12	0	QPSK	21.81	21.84	21.73	
5	12	7		21.75	21.79	21.92	
5	12	13		21.91	21.78	21.88	
5	25	0		21.77	21.93	21.93	
5	1	0		22.21	22.12	21.92	
5	1	12		21.94	22.03	22.15	
5	1	24		22.02	21.90	21.91	
5	12	0	16-QAM	21.00	20.86	20.92	
5	12	7		20.95	20.81	20.79	
5	12	13		21.06	20.83	20.75	
5	25	0		20.91	21.06	21.03	

LTE Band 26 Maximum Average Power [dBm]							
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	
15	1	0		22.85	22.86	22.66	
15	1	37		22.75	22.65	22.50	
15	1	74		22.57	22.55	22.51	
15	36	0	QPSK	21.79	21.89	21.70	
15	36	20		21.76	21.72	21.51	
15	36	39		21.76	21.67	21.63	
15	75	0		21.73	21.85	21.64	
15	1	0		21.95	22.03	21.98	
15	1	37		22.03	22.00	21.80	
15	1	74		21.90	21.96	21.82	
15	36	0	16-QAM	20.95	20.87	20.77	
15	36	20		20.97	20.83	20.62	
15	36	39		20.88	20.78	20.67	
15	75	0		21.03	20.95	20.70	
10	1	0	-	22.77	22.91	22.67	
10	1	25		22.83	22.69	22.61	
10	1	49		22.82	22.73	22.58	
10	25	0	QPSK	21.95	21.81	21.64	
10	25	12		21.96	21.77	21.62	
10	25	25		21.95	21.79	21.65	
10	50	0		21.94	21.79	21.73	
10	1	0		22.04	21.98	21.96	
10	1	25		21.99	21.96	21.89	
10	1	49		21.95	22.04	21.98	
10	25	0	16-QAM	20.96	20.87	20.70	
10	25	12		20.95	20.83	20.65	
10	25	25		21.00	20.86	20.66	
10	50	0		20.97	20.89	20.79	

		LTE	Band 26 Ma	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0		22.76	22.80	22.75
5	1	12		22.75	22.76	22.71
5	1	24		22.66	22.64	22.48
5	12	0	QPSK	21.85	21.82	21.57
5	12	7		21.89	21.85	21.68
5	12	13		21.94	21.86	21.55
5	25	0		21.86	21.72	21.70
5	1	0		22.04	21.98	21.99
5	1	12		21.99	21.94	21.94
5	1	24		21.98	21.95	21.95
5	12	0	16-QAM	21.01	20.85	20.73
5	12	7		20.96	20.88	20.63
5	12	13		21.03	20.83	20.72
5	25	0		21.01	20.83	20.80
3	1	0		22.76	22.90	22.63
3	1	8		22.68	22.60	22.66
3	1	14		22.65	22.71	22.65
3	8	0	QPSK	21.85	21.90	21.55
3	8	4		21.89	21.86	21.57
3	8	7		21.94	21.69	21.62
3	15	0		21.86	21.83	21.77
3	1	0		22.04	22.03	21.95
3	1	8		21.95	22.02	21.96
3	1	14		21.98	21.99	21.96
3	8	0	16-QAM	21.01	20.82	20.64
3	8	4		20.96	20.86	20.63
3	8	7		21.03	20.92	20.75
3	15	0		21.01	20.82	20.73

		LTE	Band 26 Ma	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0		22.76	22.75	22.68
1.4	1	3		22.65	22.67	22.65
1.4	1	5		22.66	22.82	22.59
1.4	3	0	QPSK	22.45	22.39	22.57
1.4	3	1		22.49	22.55	22.58
1.4	3	3		22.54	22.59	22.64
1.4	6	0		21.86	21.85	21.79
1.4	1	0		22.04	22.03	22.04
1.4	1	3		21.95	21.98	21.80
1.4	1	5		21.98	22.02	21.90
1.4	3	0	16-QAM	22.01	21.95	21.69
1.4	3	1		21.96	21.86	21.62
1.4	3	3		22.03	21.83	21.65
1.4	6	0		21.01	20.91	20.69

		LTE	Band 41 Max	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0		22.90	22.57	22.91
20	1	49		22.80	22.64	22.81
20	1	99		22.74	22.73	22.80
20	50	0	QPSK	21.71	21.51	21.73
20	50	24		21.65	21.49	21.70
20	50	50		21.62	21.49	21.70
20	100	0		21.70	21.50	21.66
20	1	0		21.80	21.50	21.84
20	1	49		21.67	21.55	21.85
20	1	99		21.63	21.63	21.88
20	50	0	16-QAM	20.78	20.49	20.75
20	50	24		20.72	20.55	20.77
20	50	50		20.68	20.56	20.85
20	100	0		20.81	20.52	20.82
15	1	0		22.77	22.44	22.64
15	1	37		22.74	22.49	22.65
15	1	74		22.69	22.49	22.63
15	36	0	QPSK	21.76	21.39	21.70
15	36	20		21.75	21.48	21.73
15	36	39		21.70	21.47	21.72
15	75	0		21.74	21.44	21.67
15	1	0		21.84	21.44	21.89
15	1	37		21.78	21.51	21.93
15	1	74		21.71	21.50	21.90
15	36	0	16-QAM	20.85	20.40	20.65
15	36	20		20.82	20.50	20.70
15	36	39		20.76	20.53	20.70
15	75	0		20.77	20.57	20.89



LTE Band 41 Maximum Average Power [dBm] BW [MHz] **RB Size RB Offset** Mod Lowest Middle Highest 10 22.89 22.53 22.77 10 1 25 22.85 22.59 22.74 10 1 49 22.86 22.60 22.76 10 25 0 **QPSK** 21.93 21.49 21.80 10 25 12 21.90 21.60 21.79 10 25 25 21.89 21.61 21.80 10 50 0 21.84 21.58 21.84 10 1 0 22.15 21.72 21.88 10 1 25 22.09 21.80 21.90 10 1 49 22.10 21.84 21.93 10 25 0 16-QAM 20.94 20.63 20.91 10 12 25 20.91 20.69 20.91 10 25 25 20.92 20.70 20.93 10 50 0 20.81 20.58 20.80 5 1 0 22.83 22.52 22.76 5 1 12 22.85 22.50 22.67 24 22.66 5 1 22.84 22.77 5 12 0 QPSK 21.97 21.58 21.79 7 5 12 21.54 21.87 21.76 5 12 13 21.96 21.68 21.77 5 25 0 21.75 21.63 21.84 0 22.16 21.94 5 1 21.63 5 1 12 22.07 21.87 21.83 5 24 1 22.09 21.89 21.92 5 12 0 16-QAM 20.98 20.56 20.88 5 12 7 20.93 20.71 20.96 5 12 13 20.97 20.76 20.91 5 25 0 20.79 20.48 20.80

		LTE	Band 66 Ma	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0		22.65	22.85	22.46
20	1	49		22.65	22.39	22.41
20	1	99		22.51	22.50	22.43
20	50	0	QPSK	21.68	21.71	21.60
20	50	24		21.67	21.66	21.43
20	50	50		21.62	21.59	21.40
20	100	0		21.62	21.69	21.54
20	1	0		21.72	22.07	21.94
20	1	49		21.86	21.62	21.66
20	1	99		21.89	21.85	21.85
20	50	0	16-QAM	20.56	20.35	20.50
20	50	24		20.62	20.39	20.36
20	50	50		20.54	20.69	20.36
20	100	0		20.82	20.65	20.69
15	1	0		22.59	22.75	22.39
15	1	37		22.61	22.38	22.39
15	1	74		22.42	22.47	22.43
15	36	0	QPSK	21.59	21.68	21.57
15	36	20		21.59	21.59	21.37
15	36	39		21.59	21.53	21.37
15	75	0		21.56	21.65	21.50
15	1	0		21.70	22.01	21.86
15	1	37		21.86	21.60	21.66
15	1	74		21.85	21.82	21.75
15	36	0	16-QAM	20.56	20.32	20.40
15	36	20		20.62	20.37	20.27
15	36	39		20.51	20.68	20.36
15	75	0		20.79	20.57	20.64

		LTE	Band 66 Ma	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0		22.56	22.78	22.43
10	1	25		22.64	22.35	22.37
10	1	49		22.41	22.48	22.40
10	25	0	QPSK	21.65	21.65	21.53
10	25	12		21.58	21.59	21.39
10	25	25		21.58	21.59	21.33
10	50	0		21.58	21.65	21.50
10	1	0		21.63	22.02	21.92
10	1	25		21.83	21.59	21.57
10	1	49		21.88	21.85	21.75
10	25	0	16-QAM	20.51	20.31	20.47
10	25	12		20.61	20.31	20.34
10	25	25		20.53	20.60	20.28
10	50	0		20.79	20.56	20.64
5	1	0		22.59	22.79	22.40
5	1	12		22.60	22.39	22.35
5	1	24		22.51	22.44	22.39
5	12	0	QPSK	21.61	21.63	21.51
5	12	7		21.63	21.65	21.33
5	12	13		21.62	21.59	21.37
5	25	0		21.56	21.59	21.52
5	1	0		21.64	22.04	21.92
5	1	12		21.80	21.61	21.65
5	1	24		21.89	21.78	21.80
5	12	0	16-QAM	20.56	20.32	20.49
5	12	7		20.59	20.35	20.26
5	12	13		20.50	20.67	20.35
5	25	0		20.73	20.65	20.65

		LTE	Band 66 Ma	ximum Average Po	wer [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0		22.59	22.83	22.38
3	1	8		22.59	22.31	22.35
3	1	14		22.46	22.49	22.38
3	8	0	QPSK	21.61	21.61	21.52
3	8	4		21.62	21.61	21.37
3	8	7		21.53	21.50	21.30
3	15	0		21.61	21.65	21.53
3	1	0		21.69	22.01	21.88
3	1	8		21.85	21.56	21.66
3	1	14		21.87	21.83	21.79
3	8	0	16-QAM	20.47	20.32	20.40
3	8	4		20.56	20.34	20.29
3	8	7		20.46	20.68	20.35
3	15	0		20.73	20.65	20.66
1.4	1	0		22.62	22.81	22.46
1.4	1	3		22.62	22.33	22.40
1.4	1	5		22.51	22.48	22.35
1.4	3	0	QPSK	22.58	22.56	22.60
1.4	3	1		22.54	22.55	22.37
1.4	3	3		22.53	22.51	22.37
1.4	6	0		21.52	21.67	21.51
1.4	1	0		21.70	22.00	21.85
1.4	1	3		21.79	21.57	21.64
1.4	1	5		21.79	21.85	21.76
1.4	3	0	16-QAM	22.53	22.31	22.46
1.4	3	1		22.61	22.38	22.36
1.4	3	3		22.45	22.61	22.36
1.4	6	0		20.73	20.65	20.59

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

ERP/EIRP

	LTE Band 2 / 1.4MHz (Average) (GT - LC = 1.44 dB)										
Channel	Mode	R	B	Cond	lucted	EIRP					
Chamilei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	23.04	0.2014	24.48	0.2805				
Middle	QPSK	1	0	23.16	0.2070	24.60	0.2884				
Highest		1	0	22.91	0.1954	24.35	0.2723				
Lowest		1	0	22.56	0.1803	24.00	0.2512				
Middle	16QAM	1	0	22.40	0.1738	23.84	0.2421				
Highest		1	0	21.99	0.1581	23.43	0.2203				
Limit	EIRP <	2W		Result		PASS					

	LTE Band 2 / 3MHz (Average) (GT - LC = 1.44 dB)										
Channel	Mode	RB		Cond	ucted	EIRP					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	8	22.91	0.1954	24.35	0.2723				
Middle	QPSK	1	8	23.20	0.2089	24.64	0.2911				
Highest		1	8	22.80	0.1905	24.24	0.2655				
Lowest		1	8	22.27	0.1687	23.71	0.2350				
Middle	16QAM	1	8	22.52	0.1786	23.96	0.2489				
Highest		1	8	22.13	0.1633	23.57	0.2275				
Limit	EIRP <	EIRP < 2W			sult	PA	SS				

	LTE Band 2 / 5MHz (Average) (GT - LC = 1.44 dB)											
Channel	Mode	R	B	Cond	lucted	EIRP						
Chamilei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	23.05	0.2018	24.49	0.2812					
Middle	QPSK	1	0	23.22	0.2099	24.66	0.2924					
Highest		1	0	22.86	0.1932	24.30	0.2692					
Lowest		1	0	22.49	0.1774	23.93	0.2472					
Middle	16QAM	1	0	22.41	0.1742	23.85	0.2427					
Highest		1	0	22.13	0.1633	23.57	0.2275					
Limit	EIRP <	2W		Re	sult	PA	SS					

	LTE Band 2 / 10MHz (Average) (GT - LC = 1.44 dB)										
Channel	Mode	RB		Cond	lucted	EIRP					
Chamilei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	23.04	0.2014	24.48	0.2805				
Middle	QPSK	1	0	23.16	0.2070	24.60	0.2884				
Highest		1	0	22.93	0.1963	24.37	0.2735				
Lowest		1	49	22.36	0.1722	23.80	0.2399				
Middle	16QAM	1	49	22.45	0.1758	23.89	0.2449				
Highest		1	49	21.91	0.1552	23.35	0.2163				
Limit	EIRP <	2W		Result		PASS					

	LTE Band 2 / 15MHz (Average) (GT - LC = 1.44 dB)										
Channel	Mode	RB		Cond	ucted	EIRP					
Chainlei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	23.03	0.2009	24.47	0.2799				
Middle	QPSK	1	0	23.19	0.2084	24.63	0.2904				
Highest		1	0	22.85	0.1928	24.29	0.2685				
Lowest		1	0	22.31	0.1702	23.75	0.2371				
Middle	16QAM	1	0	22.40	0.1738	23.84	0.2421				
Highest		1	0	22.05	0.1603	23.49	0.2234				
Limit	EIRP <	2W		Result		PASS					

	LTE Band 2 / 20MHz (Average) (GT - LC = 1.44 dB)											
Channel	Mode	RB		Conducted		EIRP						
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	22.95	0.1972	24.39	0.2748					
Middle	QPSK	1	0	23.26	0.2118	24.70	0.2951					
Highest		1	0	22.95	0.1972	24.39	0.2748					
Lowest		1	0	22.17	0.1648	23.61	0.2296					
Middle	16QAM	1	0	22.37	0.1726	23.81	0.2404					
Highest		1	0	22.19	0.1656	23.63	0.2307					
Limit	EIRP <	2W		Result		PASS						

	LTE Band 4 / 1.4MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mada	RB		Cond	lucted	EII	RP					
Chainlei	Mode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	3	23.44	0.2208	24.54	0.2844					
Middle	QPSK	1	3	23.43	0.2203	24.53	0.2838					
Highest		1	3	23.37	0.2173	24.47	0.2799					
Lowest		1	3	22.71	0.1866	23.81	0.2404					
Middle	16QAM	1	3	22.58	0.1811	23.68	0.2333					
Highest		1	3	22.53	0.1791	23.63	0.2307					
Limit	EIRP <	EIRP < 1W			sult	PASS						

	LTE Band 4 / 3MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mode	R	В	Cond	ucted	EII	RP					
Chainlei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	14	23.48	0.2228	24.58	0.2871					
Middle	QPSK	1	14	23.37	0.2173	24.47	0.2799					
Highest		1	14	23.39	0.2183	24.49	0.2812					
Lowest		1	14	22.69	0.1858	23.79	0.2393					
Middle	16QAM	1	14	22.66	0.1845	23.76	0.2377					
Highest		1	14	22.69	0.1858	23.79	0.2393					
Limit	EIRP <	1W		Re	sult	PASS						

	LTE Band 4 / 5MHz (Average) (GT - LC = 1.1 dB)											
Channel	Made	RB		Cond	ucted	EIRP						
Channel	Mode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	12	23.23	0.2104	24.33	0.2710					
Middle	QPSK	1	12	22.97	0.1982	24.07	0.2553					
Highest		1	12	23.40	0.2188	24.50	0.2818					
Lowest		1	24	22.44	0.1754	23.54	0.2259					
Middle	16QAM	1	24	22.46	0.1762	23.56	0.2270					
Highest		1	24	22.71	0.1866	23.81	0.2404					
Limit	EIRP <	: 1W		Re	sult	PASS						

	LTE Band 4 / 10MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mada	R	RB	Cond	lucted	EII	RP					
Chainlei	Mode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	49	23.29	0.2133	24.39	0.2748					
Middle	QPSK	1	49	23.14	0.2061	24.24	0.2655					
Highest		1	49	23.48	0.2228	24.58	0.2871					
Lowest		1	25	22.45	0.1758	23.55	0.2265					
Middle	16QAM	1	25	22.42	0.1746	23.52	0.2249					
Highest		1	25	22.63	0.1832	23.73	0.2360					
Limit	EIRP <	1W		Re	sult	PASS						

	LTE Band 4 / 15MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mode	R	В	Cond	ucted	EII	RP					
Chainlei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	74	23.16	0.2070	24.26	0.2667					
Middle	QPSK	1	74	23.08	0.2032	24.18	0.2618					
Highest		1	74	23.42	0.2198	24.52	0.2831					
Lowest		1	74	22.38	0.1730	23.48	0.2228					
Middle	16QAM	1	74	22.32	0.1706	23.42	0.2198					
Highest		1	74	22.54	0.1795	23.64	0.2312					
Limit	EIRP <	1W		Re	sult	PASS						

	LTE Band 4 / 20MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mode	RB		Conducted		EIRP						
Chainlei		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	23.10	0.2042	24.20	0.2630					
Middle	QPSK	1	0	23.48	0.2228	24.58	0.2871					
Highest		1	0	23.29	0.2133	24.39	0.2748					
Lowest		1	99	22.54	0.1795	23.64	0.2312					
Middle	16QAM	1	99	22.37	0.1726	23.47	0.2223					
Highest		1	99	22.67	0.1849	23.77	0.2382					
Limit	EIRP <	: 1W		Result		PASS						

	LTE Band 5 / 1.4MHz (Average) (GT - LC = 1.17 dB)											
Channel	Mode	R	B	Cond	ucted	EF	₹P					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.93	0.1963	21.95	0.1567					
Middle	QPSK	1	0	22.75	0.1884	21.77	0.1503					
Highest		1	0	22.74	0.1879	21.76	0.1500					
Lowest		1	3	22.10	0.1622	21.12	0.1294					
Middle	16QAM	1	3	22.12	0.1629	21.14	0.1300					
Highest]	1	3	21.83	0.1524	20.85	0.1216					
Limit	ERP <	ERP < 7W			Result							

	LTE Band 5 / 3MHz (Average) (GT - LC = 1.17 dB)											
Channel	Mode	R	В	Cond	ucted	EF	₹P					
Chainlei	Wode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	8	22.79	0.1901	21.81	0.1517					
Middle	QPSK	1	8	22.84	0.1923	21.86	0.1535					
Highest		1	8	22.65	0.1841	21.67	0.1469					
Lowest		1	14	22.10	0.1622	21.12	0.1294					
Middle	16QAM	1	14	21.98	0.1578	21.00	0.1259					
Highest		1	14	21.96	0.1570	20.98	0.1253					
Limit	ERP <	7W		Result		PASS						

	LTE Band 5 / 5MHz (Average) (GT - LC = 1.17 dB)											
Channel	Mode	RB		Conducted		ERP						
Channel		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.88	0.1941	21.90	0.1549					
Middle	QPSK	1	0	22.89	0.1945	21.91	0.1552					
Highest		1	0	22.84	0.1923	21.86	0.1535					
Lowest		1	24	22.14	0.1637	21.16	0.1306					
Middle	16QAM	1	24	22.02	0.1592	21.04	0.1271					
Highest		1	24	22.03	0.1596	21.05	0.1274					
Limit	ERP <	7W		Re	sult	PASS						

	LTE Band 5 / 10MHz (Average) (GT - LC = 1.17 dB)											
Channal	Mada	R	RB	Cond	ucted	El	RP.					
Channel Mode	wode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.83	0.1919	21.85	0.1531					
Middle	QPSK	1	0	22.92	0.1959	21.94	0.1563					
Highest		1	0	22.76	0.1888	21.78	0.1507					
Lowest		1	0	22.13	0.1633	21.15	0.1303					
Middle	16QAM	1	0	22.15	0.1641	21.17	0.1309					
Highest		1	0	22.07	0.1611	21.09	0.1285					
Limit	ERP <	ERP < 7W			sult	PA	SS					

	LTE Band 7 / 5MHz (Average) (GT - LC = 2.05 dB)											
Channel	Mode	R	B	Cond	lucted	EIRP						
	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	22.95	0.1972	25.00	0.3162					
Middle	QPSK	1	0	22.71	0.1866	24.76	0.2992					
Highest		1	0	23.03	0.2009	25.08	0.3221					
Lowest		1	24	22.04	0.1600	24.09	0.2564					
Middle	16QAM	1	24	21.91	0.1552	23.96	0.2489					
Highest		1	24	22.32	0.1706	24.37	0.2735					
Limit	EIRP <	2W		Result		PASS						

	LTE Band 7 / 10MHz (Average) (GT - LC = 2.05 dB)											
Channel	Mode	R	RB	Cond	ucted	EII	RP					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	49	22.92	0.1959	24.97	0.3141					
Middle	QPSK	1	49	22.73	0.1875	24.78	0.3006					
Highest		1	49	23.05	0.2018	25.10	0.3236					
Lowest		1	49	22.07	0.1611	24.12	0.2582					
Middle	16QAM	1	49	21.99	0.1581	24.04	0.2535					
Highest		1	49	22.31	0.1702	24.36	0.2729					
Limit	EIRP <	EIRP < 2W			sult	PASS						

	LTE Band 7 / 15MHz (Average) (GT - LC = 2.05 dB)										
Channel	Mode	RB		Conducted		EIRP					
Chamilei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	74	22.91	0.1954	24.96	0.3133				
Middle	QPSK	1	74	22.77	0.1892	24.82	0.3034				
Highest		1	74	22.99	0.1991	25.04	0.3192				
Lowest		1	74	22.11	0.1626	24.16	0.2606				
Middle	16QAM	1	74	22.03	0.1596	24.08	0.2559				
Highest		1	74	22.20	0.1660	24.25	0.2661				
Limit	EIRP <	2W		Result		PASS					

	LTE Band 7 / 20MHz (Average) (GT - LC = 2.05 dB)											
Channel	Mode	RB		Conducted		EIRP						
Chainlei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	23.00	0.1995	25.05	0.3199					
Middle	QPSK	1	0	23.06	0.2023	25.11	0.3243					
Highest]	1	0	22.79	0.1901	24.84	0.3048					
Lowest		1	99	22.03	0.1596	24.08	0.2559					
Middle	16QAM	1	99	21.92	0.1556	23.97	0.2495					
Highest		1	99	22.24	0.1675	24.29	0.2685					
Limit	EIRP <	2W		Result PASS			SS					

	LTE Band 12 / 1.4MHz (Average) (GT - LC = -1.95 dB)										
Channel	Mode	RB		Conducted		ERP					
Chamilei		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	0	22.84	0.1923	18.74	0.0748				
Middle	QPSK	1	0	22.91	0.1954	18.81	0.0760				
Highest		1	0	22.93	0.1963	18.83	0.0764				
Lowest		1	0	22.15	0.1641	18.05	0.0638				
Middle	16QAM	1	0	22.30	0.1698	18.20	0.0661				
Highest		1	0	22.09	0.1618	17.99	0.0630				
Limit	ERP <	ERP < 3W			Result		PASS				

	LTE Band 12 / 3MHz (Average) (GT - LC = -1.95 dB)										
Channel	Mode	RB		Conducted		ERP					
Chamilei	Wode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	0	22.67	0.1849	18.57	0.0719				
Middle	QPSK	1	0	22.84	0.1923	18.74	0.0748				
Highest		1	0	22.91	0.1954	18.81	0.0760				
Lowest		1	14	21.89	0.1545	17.79	0.0601				
Middle	16QAM	1	14	22.14	0.1637	18.04	0.0637				
Highest		1	14	22.27	0.1687	18.17	0.0656				
Limit	ERP <	3W		Result		PASS					

	LTE Band 12 / 5MHz (Average) (GT - LC = -1.95 dB)										
Channel	Mode	RB		Conducted		ERP					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	12	22.73	0.1875	18.63	0.0729				
Middle	QPSK	1	12	22.80	0.1905	18.70	0.0741				
Highest		1	12	22.89	0.1945	18.79	0.0757				
Lowest		1	0	22.10	0.1622	18.00	0.0631				
Middle	16QAM	1	0	22.25	0.1679	18.15	0.0653				
Highest		1	0	22.19	0.1656	18.09	0.0644				
Limit	ERP <	3W		Result		PASS					

	LTE Band 12 / 10MHz (Average) (GT - LC = -1.95 dB)											
Channel	Mode	R	RB	Cond	ucted	ERP						
Chamilei	annel Mode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.77	0.1892	18.67	0.0736					
Middle	QPSK	1	0	22.92	0.1959	18.82	0.0762					
Highest]	1	0	22.84	0.1923	18.74	0.0748					
Lowest		1	0	22.15	0.1641	18.05	0.0638					
Middle	16QAM	1	0	22.24	0.1675	18.14	0.0652					
Highest]	1	0	22.18	0.1652	18.08	0.0643					
Limit	ERP <	3W		Re	sult	PASS						

	LTE Band 13 / 5MHz (Average) (GT - LC = 0.36 dB)											
Channel	Mode	RB		Conducted		ERP						
Chamilei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	12	23.13	0.2056	21.34	0.1361					
Middle	QPSK	1	12	23.05	0.2018	21.26	0.1337					
Highest		1	12	23.14	0.2061	21.35	0.1365					
Lowest		1	12	22.34	0.1714	20.55	0.1135					
Middle	16QAM	1	12	22.34	0.1714	20.55	0.1135					
Highest		1	12	22.27	0.1687	20.48	0.1117					
Limit	ERP <	3W		Re	sult	PASS						

	LTE Band 13 / 10MHz (Average) (GT - LC = 0.36 dB)											
Channel Mode	Mode	RB		Conducted		ERP						
	Wode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		-	-	-	-	-	-					
Middle	QPSK	1	0	23.14	0.2061	21.35	0.1365					
Highest]	-	-	-	-	-	-					
Lowest		-	-	-	-	-	-					
Middle	16QAM	1	49	22.34	0.1714	20.55	0.1135					
Highest]	-	-	-	-	-	-					
Limit	ERP <	3W		Re	sult	PA	SS					

	LTE Band 17 / 5MHz (Average) (GT - LC = -1.95 dB)											
Channel	Mode	RB		Cond	lucted	ERP						
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.89	0.1945	18.79	0.0757					
Middle	QPSK	1	0	22.84	0.1923	18.74	0.0748					
Highest		1	0	22.83	0.1919	18.73	0.0746					
Lowest		1	0	22.21	0.1663	18.11	0.0647					
Middle	16QAM	1	0	22.12	0.1629	18.02	0.0634					
Highest]	1	0	21.92	0.1556	17.82	0.0605					
Limit	ERP <	3W		Result		PASS						

	LTE Band 17 / 10MHz (Average) (GT - LC = -1.95 dB)											
Channel	Mode	RB		Cond	ucted	ERP						
Chamilei	Chaimer	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.83	0.1919	18.73	0.0746					
Middle	QPSK	1	0	22.94	0.1968	18.84	0.0766					
Highest		1	0	22.76	0.1888	18.66	0.0735					
Lowest		1	0	22.16	0.1644	18.06	0.0640					
Middle	16QAM	1	0	22.12	0.1629	18.02	0.0634					
Highest		1	0	22.00	0.1585	17.90	0.0617					
Limit	ERP < 3W			Result PASS			SS					

	LTE Band 41 / 5MHz (Average) (GT - LC = 2.3 dB)											
Channel	Mode	R	RB	Cond	lucted	EIRP						
Chamilei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	12	22.85	0.1928	25.15	0.3273					
Middle	QPSK	1	12	22.50	0.1778	24.80	0.3020					
Highest		1	12	22.67	0.1849	24.97	0.3141					
Lowest		1	0	22.16	0.1644	24.46	0.2793					
Middle	16QAM	1	0	21.63	0.1455	23.93	0.2472					
Highest		1	0	21.94	0.1563	24.24	0.2655					
Limit	EIRP <	2W		Result		PASS						

	LTE Band 41 / 10MHz (Average) (GT - LC = 2.3 dB)											
Channel	Mode	RB		Cond	ucted	EIRP						
Chamilei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	22.89	0.1945	25.19	0.3304					
Middle	QPSK	1	0	22.53	0.1791	24.83	0.3041					
Highest		1	0	22.77	0.1892	25.07	0.3214					
Lowest		1	0	22.15	0.1641	24.45	0.2786					
Middle	16QAM	1	0	21.72	0.1486	24.02	0.2523					
Highest]	1	0	21.88	0.1542	24.18	0.2618					
Limit	EIRP <	EIRP < 2W			Result F							

	LTE Band 41 / 15MHz (Average) (GT - LC = 2.3 dB)										
Channel	Mode	RB		Cond	lucted	EIRP					
Chamilei		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	22.77	0.1892	25.07	0.3214				
Middle	QPSK	1	0	22.44	0.1754	24.74	0.2979				
Highest		1	0	22.64	0.1837	24.94	0.3119				
Lowest		1	37	21.78	0.1507	24.08	0.2559				
Middle	16QAM	1	37	21.51	0.1416	23.81	0.2404				
Highest		1	37	21.93	0.1560	24.23	0.2649				
Limit	EIRP <	2W		Result		PASS					

	LTE Band 41 / 20MHz (Average) (GT - LC = 2.3 dB)											
Channel	Mode	RB		Cond	ucted	EIRP						
Channel	Mode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	22.90	0.1950	25.20	0.3311					
Middle	QPSK	1	0	22.57	0.1807	24.87	0.3069					
Highest]	1	0	22.91	0.1954	25.21	0.3319					
Lowest		1	99	21.63	0.1455	23.93	0.2472					
Middle	16QAM	1	99	21.63	0.1455	23.93	0.2472					
Highest]	1	99	21.88	0.1542	24.18	0.2618					
Limit	EIRP <	2W		Re	sult	PA	SS					

	LTE Band 26 / 1.4MHz (Average) (GT - LC = 1.39 dB)										
Channel	Mode	RB		Cond	ucted	ERP					
Chamilei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	5	22.66	0.1845	21.90	0.1549				
Middle	QPSK	1	5	22.82	0.1914	22.06	0.1607				
Highest		1	5	22.59	0.1816	21.83	0.1524				
Lowest		1	0	22.04	0.1600	21.28	0.1343				
Middle	16QAM	1	0	22.03	0.1596	21.27	0.1340				
Highest		1	0	22.04	0.1600	21.28	0.1343				
Limit	ERP <	7W		Result		PASS					

	LTE Band 26 / 3MHz (Average) (GT - LC = 1.39 dB)											
Channel	Mode	RB		Cond	ucted	ERP						
Chainlei	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.76	0.1888	22.00	0.1585					
Middle	QPSK	1	0	22.90	0.1950	22.14	0.1637					
Highest		1	0	22.63	0.1832	21.87	0.1538					
Lowest		1	0	22.04	0.1600	21.28	0.1343					
Middle	16QAM	1	0	22.03	0.1596	21.27	0.1340					
Highest		1	0	21.95	0.1567	21.19	0.1315					
Limit	ERP <	7W		Re	sult	PA	SS					

	LTE Band 26 / 5MHz (Average) (GT - LC = 1.39 dB)										
Channel	Mode	RB		Cond	ucted	ERP					
Channel		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	0	22.76	0.1888	22.00	0.1585				
Middle	QPSK	1	0	22.80	0.1905	22.04	0.1600				
Highest		1	0	22.75	0.1884	21.99	0.1581				
Lowest		1	0	22.04	0.1600	21.28	0.1343				
Middle	16QAM	1	0	21.98	0.1578	21.22	0.1324				
Highest		1	0	21.99	0.1581	21.23	0.1327				
Limit	ERP <	7W		Result		PASS					

	LTE Band 26 / 10MHz (Average) (GT - LC = 1.39 dB)										
Channel	Mode	R	B	Cond	lucted	ERP					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)				
Lowest		1	0	22.77	0.1892	22.01	0.1589				
Middle	QPSK	1	0	22.91	0.1954	22.15	0.1641				
Highest		1	0	22.67	0.1849	21.91	0.1552				
Lowest		1	0	22.04	0.1600	21.28	0.1343				
Middle	16QAM	1	0	21.98	0.1578	21.22	0.1324				
Highest		1	0	21.96	0.1570	21.20	0.1318				
Limit	ERP <	7W		Re	sult	PASS					

	LTE Band 26 / 15MHz (Average) (GT - LC = 1.39 dB)											
Channel	Mode	RB		Cond	ucted	ERP						
	Mode	Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)					
Lowest		1	0	22.85	0.1928	22.09	0.1618					
Middle	QPSK	1	0	22.86	0.1932	22.10	0.1622					
Highest		1	0	22.66	0.1845	21.90	0.1549					
Lowest		1	0	21.95	0.1567	21.19	0.1315					
Middle	16QAM	1	0	22.03	0.1596	21.27	0.1340					
Highest		1	0	21.98	0.1578	21.22	0.1324					
Limit	ERP <	ERP < 7W			sult	PASS						

	LTE Band 66 / 1.4MHz (Average) (GT - LC = 1.1 dB)										
Channel	Mode	RB		Cond	lucted	EIRP					
Channel	Wiode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	22.62	0.1828	23.72	0.2355				
Middle	QPSK	1	0	22.81	0.1910	23.91	0.2460				
Highest		1	0	22.46	0.1762	23.56	0.2270				
Lowest		3	1	22.61	0.1824	23.71	0.2350				
Middle	16QAM	3	1	22.38	0.1730	23.48	0.2228				
Highest		3	1	22.36	0.1722	23.46	0.2218				
Limit	EIRP <	1W		Result PA			SS				

	LTE Band 66 / 3MHz (Average) (GT - LC = 1.1 dB)											
Channel	Mode	RB		Cond	ucted	EIRP						
Chamilei	Wode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)					
Lowest		1	0	22.59	0.1816	23.69	0.2339					
Middle	QPSK	1	0	22.83	0.1919	23.93	0.2472					
Highest		1	0	22.38	0.1730	23.48	0.2228					
Lowest		1	0	21.69	0.1476	22.79	0.1901					
Middle	16QAM	1	0	22.01	0.1589	23.11	0.2046					
Highest		1	0	21.88	0.1542	22.98	0.1986					
Limit	EIRP <	1W		Result		PASS						

	LTE Band 66 / 5MHz (Average) (GT - LC = 1.1 dB)										
Channel	Mode	RB		Cond	ucted	EIRP					
Chamile		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	22.59	0.1816	23.69	0.2339				
Middle	QPSK	1	0	22.79	0.1901	23.89	0.2449				
Highest		1	0	22.40	0.1738	23.50	0.2239				
Lowest		1	0	21.64	0.1459	22.74	0.1879				
Middle	16QAM	1	0	22.04	0.1600	23.14	0.2061				
Highest		1	0	21.92	0.1556	23.02	0.2004				
Limit	EIRP <	1W		Re	sult	PASS					

	LTE Band 66 / 10MHz (Average) (GT - LC = 1.1 dB)										
Channel	Mode	RB		Cond	lucted	EIRP					
Chainlei		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	22.56	0.1803	23.66	0.2323				
Middle	QPSK	1	0	22.78	0.1897	23.88	0.2443				
Highest		1	0	22.43	0.1750	23.53	0.2254				
Lowest		1	0	21.63	0.1455	22.73	0.1875				
Middle	16QAM	1	0	22.02	0.1592	23.12	0.2051				
Highest		1	0	21.92	0.1556	23.02	0.2004				
Limit	EIRP <	1W		Result		PASS					

	LTE Band 66 / 15MHz (Average) (GT - LC = 1.1 dB)										
Channel	Mode	R	В	Cond	Conducted		RP				
Chamilei	Mode	Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)				
Lowest		1	0	22.59	0.1816	23.69	0.2339				
Middle	QPSK	1	0	22.75	0.1884	23.85	0.2427				
Highest		1	0	22.39	0.1734	23.49	0.2234				
Lowest		1	0	21.70	0.1479	22.80	0.1905				
Middle	16QAM	1	0	22.01	0.1589	23.11	0.2046				
Highest		1	0	21.86	0.1535	22.96	0.1977				
Limit	EIRP <	1W		Re	sult	PASS					

LTE Band 66 / 20MHz (Average) (GT - LC = 1.1 dB)									
Channel	Mode	RB		Cond	lucted	EIRP			
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)		
Lowest	QPSK	1	0	22.65	0.1841	23.75	0.2371		
Middle		1	0	22.85	0.1928	23.95	0.2483		
Highest		1	0	22.46	0.1762	23.56	0.2270		
Lowest		1	0	21.72	0.1486	22.82	0.1914		
Middle	16QAM	1	0	22.07	0.1611	23.17	0.2075		
Highest		1	0	21.94	0.1563	23.04	0.2014		
Limit	EIRP < 1W			Re	sult	PASS			

Radiated Spurious Emission

LTE Band 7

Report No.: FG9O1139-02B

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)
	5004	-50.36	-25	-25.36	-43.18	-60.10	2.36	12.10	Н
	10008	-49.81	-25	-24.81	-51.78	-59.80	1.81	11.80	Н
	15011	-56.38	-25	-31.38	-61.84	-66.87	2.66	13.16	Н
Lowest	5004	-46.68	-25	-21.68	-49.16	-56.42	2.36	12.10	V
	10008	-49.51	-25	-24.51	-56.72	-59.50	1.81	11.80	V
	15011	-78.57	-25	-53.57	-61.25	-89.06	2.66	13.16	V
	5052	-51.82	-25	-26.82	-44.84	-61.59	2.34	12.11	Н
	10104	-52.28	-25	-27.28	-54.39	-62.16	1.96	11.84	Н
	15161	-47.63	-25	-22.63	-53.34	-58.96	2.58	13.91	Н
Middle	5052	-49.77	-25	-24.77	-43.36	-59.54	2.34	12.11	V
	10104	-53.37	-25	-28.37	-54.75	-63.25	1.96	11.84	V
	15161	-46.48	-25	-21.48	-53.68	-57.81	2.58	13.91	V
Highest	5100	-51.35	-25	-26.35	-44.5	-61.15	2.32	12.12	Н
	10200	-48.95	-25	-23.95	-51.21	-58.71	2.12	11.88	Н
	15310	-48.03	-25	-23.03	-53.98	-60.18	2.50	14.65	Н
	5100	-51.50	-25	-26.50	-45.24	-61.30	2.32	12.12	V
	10200	-49.47	-25	-24.47	-51.18	-59.23	2.12	11.88	V
	15310	-44.74	-25	-19.74	-51.47	-56.89	2.50	14.65	V

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

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LTE Band 13

Report No. : FG9O1139-02B

LTE Band 13 / 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)
	1560	-46.60	-42.15	-4.45	-56.86	-51.89	0.89	8.33	Н
	2336	-43.50	-13	-30.50	-58.32	-50.71	1.11	10.47	Н
	3120	-49.20	-13	-36.20	-64.98	-57.35	1.29	11.59	Н
Lowest	3896	-46.79	-13	-33.79	-65.13	-55.91	1.46	12.74	Н
Lowest	1560	-49.72	-42.15	-7.57	-59.34	-55.01	0.89	8.33	V
	2336	-44.69	-13	-31.69	-59.08	-51.90	1.11	10.47	V
	3120	-45.99	-13	-32.99	-62.13	-54.14	1.29	11.59	V
	3896	-47.28	-13	-34.28	-65.72	-56.40	1.46	12.74	V
Middle	1568	-46.51	-42.15	-4.36	-56.71	-51.83	0.89	8.36	Н
	2344	-37.99	-13	-24.99	-52.74	-45.21	1.12	10.48	Н
	3128	-52.55	-13	-39.55	-68.35	-60.71	1.29	11.61	Н
	3912	-50.29	-13	-37.29	-68.67	-59.42	1.47	12.75	Н
	1568	-48.11	-42.15	-5.96	-57.72	-53.43	0.89	8.36	V
	2344	-40.38	-13	-27.38	-54.76	-47.60	1.12	10.48	V
	3128	-48.93	-13	-35.93	-65.11	-57.09	1.29	11.61	V
	3912	-48.54	-13	-35.54	-66.98	-57.67	1.47	12.75	V
	1568	-47.69	-42.15	-5.54	-57.89	-53.01	0.89	8.36	Н
Highest	2352	-37.80	-13	-24.80	-52.50	-45.03	1.12	10.49	Н
	3136	-52.13	-13	-39.13	-67.95	-60.31	1.29	11.63	Н
	3920	-51.78	-13	-38.78	-70.18	-60.91	1.47	12.75	Н
	1568	-52.44	-42.15	-10.29	-62.05	-57.76	0.89	8.36	V
	2352	-40.43	-13	-27.43	-54.80	-47.66	1.12	10.49	V
	3136	-49.79	-13	-36.79	-66.00	-57.97	1.29	11.63	V
	3920	-48.26	-13	-35.26	-66.71	-57.39	1.47	12.75	V

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

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FAX: 886-3-328-4978 E-mail: Alex@sporton.com.tw

LTE Band 13 / 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	1555	-40.60	-13	-27.60	-50.89	-45.87	0.89	8.31	Н
	2332	-37.54	-13	-24.54	-52.38	-44.74	1.11	10.46	Н
	3110	-48.40	-13	-35.40	-64.16	-56.52	1.29	11.56	Н
	3887	-48.47	-13	-35.47	-66.79	-57.59	1.46	12.73	Н
	1555	-44.03	-13	-31.03	-53.64	-49.30	0.89	8.31	V
	2332	-37.31	-13	-24.31	-51.7	-44.51	1.11	10.46	V
	3110	-46.41	-13	-33.41	-62.52	-54.53	1.29	11.56	V
	3887	-45.92	-13	-32.92	-64.35	-55.04	1.46	12.73	V

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

TEL: 0800-800005 Page Number: B2-3 of B3

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