

Radio Test Report

Report No.: CTA231114009W01

Issued for

spaceti s.r.o.

Italska 2581/67, 120 00 Prague 2, Czech Republic

Product Name: Sensor Gateway

Brand Name: Spaceti

Model Name: SHU1M1A200

Series Model(s): N/A

FCC ID: 2APJ3SHU1M1A200

Test Standards: 47 CFR Part 2, 24, 27

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen CTA Test Services Co., Ltd.



TEST REPORT**Applicant's Name** spaceti s.r.o.

Address..... Italska 2581/67, 120 00 Prague 2, Czech Republic

Manufacturer's Name spaceti s.r.o.

Address..... Italska 2581/67, 120 00 Prague 2, Czech Republic

Product Description

Product Name Sensor Gateway

Brand Name Spaceti

Model Name SHU1M1A200

Series Model(s) N/A

Test Standards..... 47 CFR Part 2, 24, 27

Test Procedure KDB 971168 D01 v03r01,ANSI C63.26(2015)

This device described above has been tested by CTA, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test.....

Date of receipt of test item 11 Sept. 2023

Date (s) of performance of tests : 11 Sept. 2023 ~ 11 Dec. 2023

Date of Issue 11 Dec. 2023

Test Result Pass

Testing Engineer :



(Zoey Cao)

Technical Manager :



(Amy Wen)

Authorized Signatory :



(Eric Wang)

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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	11 Dec. 2023	CTA231114009W01	ALL	Initial Issue

SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

The radiated emission testing was performed according to the procedures of KDB 971168 D01 v03r01 and ANSI C63.26(2015)

Test Description	FCC Rules	Band	Test Limit	Test Result
Conducted Output Power	2.1046	/	Reporting Only	PASS
Transmitter Radiated Power	24.232(c)	B2	EIRP < 2Watt	
	27.50(c)	B12	ERP < 3 Watt	
	27.50(d)	B4	EIRP < 1Watt	
	24.232(d)	B2		
	27.50	B4, B12		
Occupied Bandwidth	2.1049	/	Reporting Only	PASS
Frequency Stability	2.1055	/	< 2.5 ppm	PASS
	24.235	B2		
	27.54	B4, B12		
Spurious Emission at Antenna Terminals	2.1051	/	< 43+10log10(P[Watts])	PASS
	24.238(a)	B2		
	27.53(g)	B12		
	27.53(h)	B4		
Band Edge	2.1051	/	Please refer to standard	PASS
	24.238(a)	B2		
	27.53(g)	B12		
	27.53(h)	B4		
Field Strength of Spurious Radiation	2.1053	/	< 43+10log10(P[Watts])	PASS
	24.238(a)	B2		
	27.53(g)	B12		
	27.53(h)	B4		

1 INTRODUCTION

1.1 TEST FACTORY

SHENZHEN CTA TESTING TECHNOLOGY CO., LTD.

ROOM 106, BUILDING 1, YIBAOLAI INDUSTRIAL PARK, QIAOTOU COMMUNITY, FUHAI STREET, BAO'AN DISTRICT, SHENZHEN, CHINA

FCC TEST FIRM REGISTRATION NUMBER: 517856

IC TEST FIRM REGISTRATION NUMBER: 27890

A2LA CERTIFICATE NO.: 6534.01

IC CAB ID: CN0127

1.2 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. The measurement data shown herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Test	Range	Measurement Uncertainty
Radiated Emission	30~1000MHz	4.06 dB
Radiated Emission	1~18GHz	5.14 dB
Radiated Emission	18-40GHz	5.38 dB
Conducted Disturbance	0.15~30MHz	2.14 dB
Output Peak power	30MHz~18GHz	0.55 dB
Power spectral density	/	0.57 dB
Spectrum bandwidth	/	1.1%
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.10 dB
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.32 dB
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.54 dB

2 PRODUCT INFORMATION

Product Name	Sensor Gateway
Brand Name	Spaceti
Model Name	SHU1M1A200
Series Model(s)	N/A
Model Difference	N/A
Tx Frequency:	WCDMA: Band 2: 1850-1910 MHz Band 5: 824-849 MHz LTE: Band 2:1850~1910 MHz Band 4:1710~1755 MHz Band 12:699~716 MHz
Rx Frequency:	WCDMA: Band 2: 1930-1990 MHz Band 5: 869-894 MHz LTE: Band 2:1930~1990 MHz Band 4:2110~2155 MHz Band 12:729~746 MHz
Max RF Output Power:	WCDMA: Band 2:22.28 dBm Band 5:24.38dBm LTE: Band 2: 22.67 dBm Band 4: 22.18 dBm Band 12: 24.16 dBm
Modulation Characteristics:	WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK LTE:QPSK, 16QAM, 64QAM
SIM Card:	Only support single SIM Card
Antenna:	PIFA
Antenna gain:	WCDMA: Band2:3.4 dBi Band5:1.0 dBi LTE: Band2 : 3.4 dBi Band4 : 3.4 dBi Band12 : 1.0 dBi
Rating:	Input: DC5V, 12.5W
Extreme Vol. Limits:	DC 4.5V~ DC 5.5V(Normal: DC 5V)
Extreme Temp. Tolerance:	5°C to +40°C
Hardware version number:	02
Software version number:	1.0.0

**** Note:** The High Voltage 5.5V and Low Voltage 4.5V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage, the antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power.

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

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 10th harmonic for GSM850 and WCDMA Band V.
2. 30 MHz to 10th harmonic for WCDMA Band IV.
3. 30 MHz to 10th harmonic for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

	TEST MODES	
	RADIATED TCS	CONDUCTED TCS
BAND		
WCDMA BAND V	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK
WCDMA BAND II	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK

LTE:

ITEMS	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	4	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	12	V	V	V	V			V	V	V	V	V	V	V	V
Peak&Avera Ratio	2	V	V	V	V	V	V	V	V	V			V	V	V
	4	V	V	V	V	V	V	V	V	V			V	V	V
	12	V	V	V	V			V	V	V			V	V	V
26dB&99% Bandwidth	2	V	V	V	V	V	V	V	V			V	V	V	V
	4	V	V	V	V	V	V	V	V			V	V	V	V
	12	V	V	V	V			V	V			V	V	V	V
Conducted Band Edge	2	V	V	V	V	V	V	V	V			V	V		V
	4	V	V	V	V	V	V	V	V			V	V		V
	12	V	V	V	V			V	V			V	V		V
Conducted Spurious Emission	2	V	V	V	V	V	V	V	V	V		V	V	V	V
	4	V	V	V	V	V	V	V	V	V		V	V	V	V
	12	V	V	V	V			V	V	V		V	V	V	V
Frequency Stability	2				V			V				V		V	
	4				V			V				V		V	
	12				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	V
	4	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	12	V	V	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
	4	V	V	V	V	V	V	V		V			V	V	V
	12	V	V	V	V			V		V			V	V	V

4 MEASUREMENT INSTRUMENTS

Test Equipment	Manufacturer	Model No.	Equipment No.	Calibration Date	Calibration Due Date
LISN	R&S	ENV216	CTA-308	2023/08/02	2024/08/01
LISN	R&S	ENV216	CTA-314	2023/08/02	2024/08/01
EMI Test Receiver	R&S	ESPI	CTA-307	2023/08/02	2024/08/01
EMI Test Receiver	R&S	ESCI	CTA-306	2023/08/02	2024/08/01
Spectrum Analyzer	Agilent	N9020A	CTA-301	2023/08/02	2024/08/01
Spectrum Analyzer	R&S	FSP	CTA-337	2023/08/02	2024/08/01
Vector Signal generator	Agilent	N5182A	CTA-305	2023/08/02	2024/08/01
Analog Signal Generator	R&S	SML03	CTA-304	2023/08/02	2024/08/01
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	R&S	CTA-302	2023/08/02	2024/08/01
Temperature and humidity meter	Chigo	ZG-7020	CTA-326	2023/08/02	2024/08/01
Ultra-Broadband Antenna	Schwarzbeck	VULB9163	CTA-310	2023/10/17	2024/10/16
Horn Antenna	Schwarzbeck	BBHA 9120D	CTA-309	2023/10/13	2024/10/12
Loop Antenna	Zhinan	ZN30900C	CTA-311	2023/10/17	2024/10/16
Horn Antenna	Beijing Hangwei Dayang	OBH100400	CTA-336	2021/08/07	2024/08/06
Amplifier	Schwarzbeck	BBV 9745	CTA-312	2023/08/02	2024/08/01
Amplifier	Taiwan chengyi	EMC051845B	CTA-313	2023/08/02	2024/08/01
Directional coupler	NARDA	4226-10	CTA-303	2023/08/02	2024/08/01
High-Pass Filter	XingBo	XBLBQ-GTA18	CTA-402	2023/08/02	2024/08/01
High-Pass Filter	XingBo	XBLBQ-GTA27	CTA-403	2023/08/02	2024/08/01
Automated filter bank	Tonscend	JS0806-F	CTA-404	2023/08/02	2024/08/01
Power Sensor	Agilent	U2021XA	CTA-405	2023/08/02	2024/08/01

Amplifier	Schwarzbeck	BBV9719	CTA-406	2023/08/02	2024/08/01
Test Equipment	Manufacturer	Model No.	Version number	Calibration Date	Calibration Due Date
EMI Test Software	Tonscend	TS®JS32-RE	5.0.0.2	N/A	N/A
EMI Test Software	Tonscend	TS®JS32-CE	5.0.0.1	N/A	N/A
RF Test Software	Tonscend	TS®JS1120-3	3.1.65	N/A	N/A
RF Test Software	Tonscend	TS®JS1120	3.1.46	N/A	N/A

5 TEST ITEMS

5.1 CONDUCTED OUTPUT POWER&TRANSMITTER RADIATED POWER

TEST OVERVIEW

CONDUCTED OUTPUT POWER:

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

TRANSMITTER RADIATED POWER (EIRP/ERP)

Determining ERP and/or EIRP from conducted RF output power measurements according to ANSI C63.26 2015 Section 5.2.5.5.

In many cases, RF output power limits are specified in terms of the ERP or the EIRP. Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are defined as the product of the power supplied to the antenna and its gain (relative to a dipole antenna in the case of ERP, and relative to an isotropic antenna in the case of EIRP); however, when working in decibels (i.e., logarithmic scale), the ERP and EIRP represent the sum of the transmit antenna gain (in dBd or dBi, respectively) and the conducted RF output power (expressed in dB relative to watts or milliwatts).

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

$$(1) \text{ ERP or EIRP} = P_{\text{Meas}} + GT$$

$$\text{ERP} = \text{EIRP} - 2.15$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

GT gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

For devices utilizing multiple antennas, see 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.

The following equations demonstrate the mathematical relationship between ERP and EIRP:

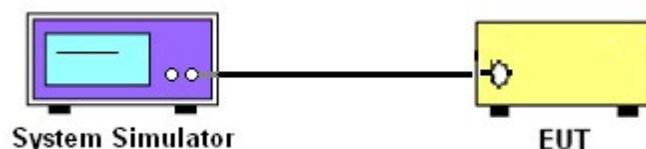
a) $\text{ERP} = \text{EIRP} - 2.15$, where ERP and EIRP are expressed in consistent units.

b) $\text{EIRP} = \text{ERP} + 2.15$, where ERP and EIRP are expressed in consistent units.

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.

TEST SETUP



TEST RESULT

Radiated Power (EIRP) for WCDMA Band 2							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit (dBm)	Conclusion
WCDMA	1852.40	22.26	3.40	25.66	2.00	33.01	PASS
	1880.00	22.28	3.40	25.68	2.00	33.01	PASS
	1907.60	22.28	3.40	25.68	2.00	33.01	PASS
HSDPA Subtest 1	1852.40	21.26	3.40	24.66	2.00	33.01	PASS
	1880.00	20.96	3.40	24.36	2.00	33.01	PASS
	1907.60	20.03	3.40	23.43	2.00	33.01	PASS
HSDPA Subtest 2	1852.40	20.02	3.40	23.42	2.00	33.01	PASS
	1880.00	21.53	3.40	24.93	2.00	33.01	PASS
	1907.60	21.13	3.40	24.53	2.00	33.01	PASS
HSDPA Subtest 3	1852.40	19.94	3.40	23.34	2.00	33.01	PASS
	1880.00	20.02	3.40	23.42	2.00	33.01	PASS
	1907.60	21.55	3.40	24.95	2.00	33.01	PASS
HSDPA Subtest 4	1852.40	21.33	3.40	24.73	2.00	33.01	PASS
	1880.00	20.09	3.40	23.49	2.00	33.01	PASS
	1907.60	19.98	3.40	23.38	2.00	33.01	PASS
HSUPA Subtest 1	1852.40	20.45	3.40	23.85	2.00	33.01	PASS
	1880.00	21.38	3.40	24.78	2.00	33.01	PASS
	1907.60	20.67	3.40	24.07	2.00	33.01	PASS
HSUPA Subtest 2	1852.40	21.43	3.40	24.83	2.00	33.01	PASS
	1880.00	20.61	3.40	24.01	2.00	33.01	PASS
	1907.60	20.76	3.40	24.16	2.00	33.01	PASS
HSUPA Subtest 3	1852.40	21.55	3.40	24.95	2.00	33.01	PASS
	1880.00	21.07	3.40	24.47	2.00	33.01	PASS
	1907.60	21.51	3.40	24.91	2.00	33.01	PASS
HSUPA Subtest 4	1852.40	20.86	3.40	24.26	2.00	33.01	PASS
	1880.00	20.61	3.40	24.01	2.00	33.01	PASS
	1907.60	21.39	3.40	24.79	2.00	33.01	PASS
HSUPA Subtest 5	1852.40	20.87	3.40	24.27	2.00	33.01	PASS
	1880.00	21.38	3.40	24.78	2.00	33.01	PASS
	1907.60	20.48	3.40	23.88	2.00	33.01	PASS

Radiated Power (ERP) for WCDMA Band 5							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain (dBi)	ERP (dBm)	ERP Limit(W)	ERP Limit (dBm)	Conclusion
WCDMA	826.40	24.32	1.00	23.17	7.00	38.45	PASS
	836.40	24.38	1.00	23.23	7.00	38.45	PASS
	846.60	24.23	1.00	23.08	7.00	38.45	PASS
HSDPA Subtest 1	826.40	23.21	1.00	22.06	7.00	38.45	PASS
	836.40	22.95	1.00	21.80	7.00	38.45	PASS
	846.60	21.66	1.00	20.51	7.00	38.45	PASS
HSDPA Subtest 2	826.40	22.00	1.00	20.85	7.00	38.45	PASS
	836.40	23.66	1.00	22.51	7.00	38.45	PASS
	846.60	23.35	1.00	22.20	7.00	38.45	PASS
HSDPA Subtest 3	826.40	22.09	1.00	20.94	7.00	38.45	PASS
	836.40	22.51	1.00	21.36	7.00	38.45	PASS
	846.60	23.34	1.00	22.19	7.00	38.45	PASS
HSDPA Subtest 4	826.40	22.82	1.00	21.67	7.00	38.45	PASS
	836.40	21.62	1.00	20.47	7.00	38.45	PASS
	846.60	21.95	1.00	20.80	7.00	38.45	PASS
HSUPA Subtest 1	826.40	22.49	1.00	21.34	7.00	38.45	PASS
	836.40	23.43	1.00	22.28	7.00	38.45	PASS
	846.60	22.57	1.00	21.42	7.00	38.45	PASS
HSUPA Subtest 2	826.40	23.52	1.00	22.37	7.00	38.45	PASS
	836.40	22.72	1.00	21.57	7.00	38.45	PASS
	846.60	22.78	1.00	21.63	7.00	38.45	PASS
HSUPA Subtest 3	826.40	23.46	1.00	22.31	7.00	38.45	PASS
	836.40	23.03	1.00	21.88	7.00	38.45	PASS
	846.60	23.61	1.00	22.46	7.00	38.45	PASS
HSUPA Subtest 4	826.40	22.70	1.00	21.55	7.00	38.45	PASS
	836.40	22.65	1.00	21.50	7.00	38.45	PASS
	846.60	23.33	1.00	22.18	7.00	38.45	PASS
HSUPA Subtest 5	826.40	22.77	1.00	21.62	7.00	38.45	PASS
	836.40	23.31	1.00	22.16	7.00	38.45	PASS
	846.60	22.41	1.00	21.26	7.00	38.45	PASS

Radiated Power (EIRP) for LTE Band 2 /1.4M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
1.4	Lowest	1	0	QPSK	21.93	3.4	25.33	2.00	33.01	PASS
		1	2		22.03	3.4	25.43	2.00	33.01	PASS
		1	5		21.86	3.4	25.26	2.00	33.01	PASS
		3	0		21.94	3.4	25.34	2.00	33.01	PASS
		3	1		21.88	3.4	25.28	2.00	33.01	PASS
		3	2		21.73	3.4	25.13	2.00	33.01	PASS
		6	0		20.75	3.4	24.15	2.00	33.01	PASS
		1	0	16QAM	20.48	3.4	23.88	2.00	33.01	PASS
		1	2		20.56	3.4	23.96	2.00	33.01	PASS
		1	5		20.39	3.4	23.79	2.00	33.01	PASS
		3	0		20.70	3.4	24.10	2.00	33.01	PASS
		3	1		20.87	3.4	24.27	2.00	33.01	PASS
		3	2		20.83	3.4	24.23	2.00	33.01	PASS
		6	0		20.02	3.4	23.42	2.00	33.01	PASS
	Middle	1	0	QPSK	21.87	3.4	25.27	2.00	33.01	PASS
		1	2		21.94	3.4	25.34	2.00	33.01	PASS
		1	5		21.84	3.4	25.24	2.00	33.01	PASS
		3	0		21.85	3.4	25.25	2.00	33.01	PASS
		3	1		21.89	3.4	25.29	2.00	33.01	PASS
		3	2		21.85	3.4	25.25	2.00	33.01	PASS
		6	0		20.97	3.4	24.37	2.00	33.01	PASS
		1	0	16QAM	20.60	3.4	24.00	2.00	33.01	PASS
		1	2		20.75	3.4	24.15	2.00	33.01	PASS
		1	5		20.78	3.4	24.18	2.00	33.01	PASS
		3	0		20.89	3.4	24.29	2.00	33.01	PASS
		3	1		20.84	3.4	24.24	2.00	33.01	PASS
		3	2		20.76	3.4	24.16	2.00	33.01	PASS
		6	0		20.06	3.4	23.46	2.00	33.01	PASS
	Highest	1	0	QPSK	21.92	3.4	25.32	2.00	33.01	PASS
		1	2		22.04	3.4	25.44	2.00	33.01	PASS
		1	5		22.01	3.4	25.41	2.00	33.01	PASS
		3	0		21.99	3.4	25.39	2.00	33.01	PASS
		3	1		22.01	3.4	25.41	2.00	33.01	PASS
		3	2		21.96	3.4	25.36	2.00	33.01	PASS
		6	0		20.85	3.4	24.25	2.00	33.01	PASS
		1	0	16QAM	21.20	3.4	24.60	2.00	33.01	PASS
		1	2		21.13	3.4	24.53	2.00	33.01	PASS
		1	5		21.07	3.4	24.47	2.00	33.01	PASS
		3	0		20.76	3.4	24.16	2.00	33.01	PASS
		3	1		20.79	3.4	24.19	2.00	33.01	PASS
		3	2		20.93	3.4	24.33	2.00	33.01	PASS
		6	0		19.80	3.4	23.20	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 2 /3M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
3	Lowest	1	0	QPSK	21.92	3.4	25.32	2.00	33.01	PASS
		1	7		22.05	3.4	25.45	2.00	33.01	PASS
		1	14		22.02	3.4	25.42	2.00	33.01	PASS
		8	0		20.79	3.4	24.19	2.00	33.01	PASS
		8	4		20.85	3.4	24.25	2.00	33.01	PASS
		8	7		20.87	3.4	24.27	2.00	33.01	PASS
		15	0		20.80	3.4	24.20	2.00	33.01	PASS
		1	0	16QAM	20.93	3.4	24.33	2.00	33.01	PASS
		1	7		21.02	3.4	24.42	2.00	33.01	PASS
		1	14		21.02	3.4	24.42	2.00	33.01	PASS
		8	0		19.70	3.4	23.10	2.00	33.01	PASS
		8	4		19.78	3.4	23.18	2.00	33.01	PASS
		8	7		19.77	3.4	23.17	2.00	33.01	PASS
		15	0		19.50	3.4	22.90	2.00	33.01	PASS
	Middle	1	0	QPSK	21.93	3.4	25.33	2.00	33.01	PASS
		1	7		22.12	3.4	25.52	2.00	33.01	PASS
		1	14		21.95	3.4	25.35	2.00	33.01	PASS
		8	0		21.00	3.4	24.40	2.00	33.01	PASS
		8	4		21.02	3.4	24.42	2.00	33.01	PASS
		8	7		21.01	3.4	24.41	2.00	33.01	PASS
		15	0		20.97	3.4	24.37	2.00	33.01	PASS
		1	0	16QAM	20.86	3.4	24.26	2.00	33.01	PASS
		1	7		20.96	3.4	24.36	2.00	33.01	PASS
		1	14		20.79	3.4	24.19	2.00	33.01	PASS
		8	0		19.87	3.4	23.27	2.00	33.01	PASS
		8	4		19.82	3.4	23.22	2.00	33.01	PASS
		8	7		19.79	3.4	23.19	2.00	33.01	PASS
		15	0		19.82	3.4	23.22	2.00	33.01	PASS
	Highest	1	0	QPSK	21.86	3.4	25.26	2.00	33.01	PASS
		1	7		21.89	3.4	25.29	2.00	33.01	PASS
		1	14		21.84	3.4	25.24	2.00	33.01	PASS
		8	0		20.90	3.4	24.30	2.00	33.01	PASS
		8	4		20.89	3.4	24.29	2.00	33.01	PASS
		8	7		20.83	3.4	24.23	2.00	33.01	PASS
		15	0		20.84	3.4	24.24	2.00	33.01	PASS
		1	0	16QAM	21.18	3.4	24.58	2.00	33.01	PASS
		1	7		21.10	3.4	24.50	2.00	33.01	PASS
		1	14		20.96	3.4	24.36	2.00	33.01	PASS
		8	0		19.75	3.4	23.15	2.00	33.01	PASS
		8	4		19.76	3.4	23.16	2.00	33.01	PASS
		8	7		19.69	3.4	23.09	2.00	33.01	PASS
		15	0		19.90	3.4	23.30	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 2 /5M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
5	Lowest	1	0	QPSK	21.70	3.4	25.10	2.00	33.01	PASS
		1	12		22.03	3.4	25.43	2.00	33.01	PASS
		1	24		21.80	3.4	25.20	2.00	33.01	PASS
		12	0		20.67	3.4	24.07	2.00	33.01	PASS
		12	6		20.77	3.4	24.17	2.00	33.01	PASS
		12	11		20.71	3.4	24.11	2.00	33.01	PASS
		25	0		20.71	3.4	24.11	2.00	33.01	PASS
		1	0	16QAM	20.13	3.4	23.53	2.00	33.01	PASS
		1	12		20.48	3.4	23.88	2.00	33.01	PASS
		1	24		20.24	3.4	23.64	2.00	33.01	PASS
		12	0		19.32	3.4	22.72	2.00	33.01	PASS
		12	6		19.31	3.4	22.71	2.00	33.01	PASS
		12	11		19.25	3.4	22.65	2.00	33.01	PASS
		25	0		19.60	3.4	23.00	2.00	33.01	PASS
	Middle	1	0	QPSK	21.57	3.4	24.97	2.00	33.01	PASS
		1	12		22.07	3.4	25.47	2.00	33.01	PASS
		1	24		21.92	3.4	25.32	2.00	33.01	PASS
		12	0		20.95	3.4	24.35	2.00	33.01	PASS
		12	6		20.90	3.4	24.30	2.00	33.01	PASS
		12	11		20.88	3.4	24.28	2.00	33.01	PASS
		25	0		20.82	3.4	24.22	2.00	33.01	PASS
		1	0	16QAM	20.30	3.4	23.70	2.00	33.01	PASS
		1	12		20.51	3.4	23.91	2.00	33.01	PASS
		1	24		20.37	3.4	23.77	2.00	33.01	PASS
		12	0		19.57	3.4	22.97	2.00	33.01	PASS
		12	6		19.62	3.4	23.02	2.00	33.01	PASS
		12	11		19.60	3.4	23.00	2.00	33.01	PASS
		25	0		19.82	3.4	23.22	2.00	33.01	PASS
	Highest	1	0	QPSK	21.77	3.4	25.17	2.00	33.01	PASS
		1	12		21.89	3.4	25.29	2.00	33.01	PASS
		1	24		21.85	3.4	25.25	2.00	33.01	PASS
		12	0		20.86	3.4	24.26	2.00	33.01	PASS
		12	6		20.83	3.4	24.23	2.00	33.01	PASS
		12	11		20.72	3.4	24.12	2.00	33.01	PASS
		25	0		20.84	3.4	24.24	2.00	33.01	PASS
		1	0	16QAM	20.25	3.4	23.65	2.00	33.01	PASS
		1	12		20.53	3.4	23.93	2.00	33.01	PASS
		1	24		20.22	3.4	23.62	2.00	33.01	PASS
		12	0		19.78	3.4	23.18	2.00	33.01	PASS
		12	6		19.84	3.4	23.24	2.00	33.01	PASS
		12	11		19.73	3.4	23.13	2.00	33.01	PASS
		25	0		19.75	3.4	23.15	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 2 /10M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
10	Lowest	1	0	QPSK	21.97	3.4	25.37	2.00	33.01	PASS
		1	24		22.00	3.4	25.40	2.00	33.01	PASS
		1	49		21.72	3.4	25.12	2.00	33.01	PASS
		25	0		20.70	3.4	24.10	2.00	33.01	PASS
		25	12		20.70	3.4	24.10	2.00	33.01	PASS
		25	24		20.58	3.4	23.98	2.00	33.01	PASS
		50	0		20.60	3.4	24.00	2.00	33.01	PASS
		1	0	16QAM	20.28	3.4	23.68	2.00	33.01	PASS
		1	24		20.30	3.4	23.70	2.00	33.01	PASS
		1	49		20.25	3.4	23.65	2.00	33.01	PASS
		25	0		19.82	3.4	23.22	2.00	33.01	PASS
		25	12		19.93	3.4	23.33	2.00	33.01	PASS
		25	24		19.83	3.4	23.23	2.00	33.01	PASS
		50	0		19.68	3.4	23.08	2.00	33.01	PASS
	Middle	1	0	QPSK	21.73	3.4	25.13	2.00	33.01	PASS
		1	24		22.03	3.4	25.43	2.00	33.01	PASS
		1	49		21.79	3.4	25.19	2.00	33.01	PASS
		25	0		20.97	3.4	24.37	2.00	33.01	PASS
		25	12		21.04	3.4	24.44	2.00	33.01	PASS
		25	24		20.86	3.4	24.26	2.00	33.01	PASS
		50	0		20.87	3.4	24.27	2.00	33.01	PASS
		1	0	16QAM	20.75	3.4	24.15	2.00	33.01	PASS
		1	24		21.50	3.4	24.90	2.00	33.01	PASS
		1	49		20.83	3.4	24.23	2.00	33.01	PASS
		25	0		20.17	3.4	23.57	2.00	33.01	PASS
		25	12		20.07	3.4	23.47	2.00	33.01	PASS
		25	24		19.85	3.4	23.25	2.00	33.01	PASS
		50	0		19.87	3.4	23.27	2.00	33.01	PASS
	Highest	1	0	QPSK	21.93	3.4	25.33	2.00	33.01	PASS
		1	24		22.23	3.4	25.63	2.00	33.01	PASS
		1	49		21.91	3.4	25.31	2.00	33.01	PASS
		25	0		20.82	3.4	24.22	2.00	33.01	PASS
		25	12		20.79	3.4	24.19	2.00	33.01	PASS
		25	24		20.73	3.4	24.13	2.00	33.01	PASS
		50	0		20.75	3.4	24.15	2.00	33.01	PASS
		1	0	16QAM	21.09	3.4	24.49	2.00	33.01	PASS
		1	24		20.79	3.4	24.19	2.00	33.01	PASS
		1	49		20.52	3.4	23.92	2.00	33.01	PASS
		25	0		20.01	3.4	23.41	2.00	33.01	PASS
		25	12		19.89	3.4	23.29	2.00	33.01	PASS
		25	24		19.73	3.4	23.13	2.00	33.01	PASS
		50	0		19.68	3.4	23.08	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 2 /15M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
15	Lowest	1	0	QPSK	21.70	3.4	25.10	2.00	33.01	PASS
		1	37		22.11	3.4	25.51	2.00	33.01	PASS
		1	74		21.67	3.4	25.07	2.00	33.01	PASS
		36	0		20.63	3.4	24.03	2.00	33.01	PASS
		36	18		20.61	3.4	24.01	2.00	33.01	PASS
		36	39		20.62	3.4	24.02	2.00	33.01	PASS
		75	0		20.59	3.4	23.99	2.00	33.01	PASS
		1	0	16QAM	20.40	3.4	23.80	2.00	33.01	PASS
		1	37		20.40	3.4	23.80	2.00	33.01	PASS
		1	74		20.13	3.4	23.53	2.00	33.01	PASS
		36	0		19.37	3.4	22.77	2.00	33.01	PASS
		36	18		19.77	3.4	23.17	2.00	33.01	PASS
		36	39		19.49	3.4	22.89	2.00	33.01	PASS
		75	0		19.45	3.4	22.85	2.00	33.01	PASS
	Middle	1	0	QPSK	21.55	3.4	24.95	2.00	33.01	PASS
		1	37		22.06	3.4	25.46	2.00	33.01	PASS
		1	74		21.73	3.4	25.13	2.00	33.01	PASS
		36	0		20.80	3.4	24.20	2.00	33.01	PASS
		36	18		20.91	3.4	24.31	2.00	33.01	PASS
		36	39		20.68	3.4	24.08	2.00	33.01	PASS
		75	0		20.73	3.4	24.13	2.00	33.01	PASS
		1	0	16QAM	20.38	3.4	23.78	2.00	33.01	PASS
		1	37		20.96	3.4	24.36	2.00	33.01	PASS
		1	74		20.59	3.4	23.99	2.00	33.01	PASS
		36	0		19.89	3.4	23.29	2.00	33.01	PASS
		36	18		19.99	3.4	23.39	2.00	33.01	PASS
		36	39		19.77	3.4	23.17	2.00	33.01	PASS
		75	0		19.69	3.4	23.09	2.00	33.01	PASS
	Highest	1	0	QPSK	21.92	3.4	25.32	2.00	33.01	PASS
		1	37		22.65	3.4	26.05	2.00	33.01	PASS
		1	74		21.78	3.4	25.18	2.00	33.01	PASS
		36	0		20.81	3.4	24.21	2.00	33.01	PASS
		36	18		20.83	3.4	24.23	2.00	33.01	PASS
		36	39		20.80	3.4	24.20	2.00	33.01	PASS
		75	0		20.83	3.4	24.23	2.00	33.01	PASS
		1	0	16QAM	20.99	3.4	24.39	2.00	33.01	PASS
		1	37		21.46	3.4	24.86	2.00	33.01	PASS
		1	74		20.92	3.4	24.32	2.00	33.01	PASS
		36	0		19.88	3.4	23.28	2.00	33.01	PASS
		36	18		19.91	3.4	23.31	2.00	33.01	PASS
		36	39		19.65	3.4	23.05	2.00	33.01	PASS
		75	0		19.74	3.4	23.14	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 2 /20M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
20	Lowest	1	0	QPSK	21.23	3.4	24.63	2.00	33.01	PASS
		1	49		21.90	3.4	25.30	2.00	33.01	PASS
		1	99		21.44	3.4	24.84	2.00	33.01	PASS
		50	0		20.70	3.4	24.10	2.00	33.01	PASS
		50	24		20.72	3.4	24.12	2.00	33.01	PASS
		50	49		20.65	3.4	24.05	2.00	33.01	PASS
		100	0		20.63	3.4	24.03	2.00	33.01	PASS
		1	0	16QAM	20.51	3.4	23.91	2.00	33.01	PASS
		1	49		20.58	3.4	23.98	2.00	33.01	PASS
		1	99		20.28	3.4	23.68	2.00	33.01	PASS
		50	0		19.82	3.4	23.22	2.00	33.01	PASS
		50	24		19.91	3.4	23.31	2.00	33.01	PASS
		50	49		19.63	3.4	23.03	2.00	33.01	PASS
		100	0		19.74	3.4	23.14	2.00	33.01	PASS
	Middle	1	0	QPSK	21.83	3.4	25.23	2.00	33.01	PASS
		1	49		22.67	3.4	26.07	2.00	33.01	PASS
		1	99		21.82	3.4	25.22	2.00	33.01	PASS
		50	0		20.83	3.4	24.23	2.00	33.01	PASS
		50	24		20.95	3.4	24.35	2.00	33.01	PASS
		50	49		20.78	3.4	24.18	2.00	33.01	PASS
		100	0		20.71	3.4	24.11	2.00	33.01	PASS
		1	0	16QAM	21.10	3.4	24.50	2.00	33.01	PASS
		1	49		21.66	3.4	25.06	2.00	33.01	PASS
		1	99		21.09	3.4	24.49	2.00	33.01	PASS
		50	0		20.02	3.4	23.42	2.00	33.01	PASS
		50	24		20.15	3.4	23.55	2.00	33.01	PASS
		50	49		19.97	3.4	23.37	2.00	33.01	PASS
		100	0		19.89	3.4	23.29	2.00	33.01	PASS
	Highest	1	0	QPSK	21.76	3.4	25.16	2.00	33.01	PASS
		1	49		21.97	3.4	25.37	2.00	33.01	PASS
		1	99		21.73	3.4	25.13	2.00	33.01	PASS
		50	0		20.96	3.4	24.36	2.00	33.01	PASS
		50	24		20.91	3.4	24.31	2.00	33.01	PASS
		50	49		20.81	3.4	24.21	2.00	33.01	PASS
		100	0		20.82	3.4	24.22	2.00	33.01	PASS
		1	0	16QAM	20.75	3.4	24.15	2.00	33.01	PASS
		1	49		20.88	3.4	24.28	2.00	33.01	PASS
		1	99		20.77	3.4	24.17	2.00	33.01	PASS
		50	0		20.02	3.4	23.42	2.00	33.01	PASS
		50	24		19.94	3.4	23.34	2.00	33.01	PASS
		50	49		19.83	3.4	23.23	2.00	33.01	PASS
		100	0		19.94	3.4	23.34	2.00	33.01	PASS

Radiated Power (EIRP) for LTE Band 4 /1.4M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
1.4	Lowest	1	0	QPSK	21.03	3.4	24.43	1.00	30.00	PASS
		1	2		20.93	3.4	24.33	1.00	30.00	PASS
		1	5		20.96	3.4	24.36	1.00	30.00	PASS
		3	0		20.49	3.4	23.89	1.00	30.00	PASS
		3	1		20.54	3.4	23.94	1.00	30.00	PASS
		3	2		20.52	3.4	23.92	1.00	30.00	PASS
		6	0		19.55	3.4	22.95	1.00	30.00	PASS
		1	0	16QAM	19.66	3.4	23.06	1.00	30.00	PASS
		1	2		19.34	3.4	22.74	1.00	30.00	PASS
		1	5		19.28	3.4	22.68	1.00	30.00	PASS
		3	0		19.43	3.4	22.83	1.00	30.00	PASS
		3	1		19.34	3.4	22.74	1.00	30.00	PASS
		3	2		19.39	3.4	22.79	1.00	30.00	PASS
		6	0		18.37	3.4	21.77	1.00	30.00	PASS
	Middle	1	0	QPSK	20.96	3.4	24.36	1.00	30.00	PASS
		1	2		21.07	3.4	24.47	1.00	30.00	PASS
		1	5		21.04	3.4	24.44	1.00	30.00	PASS
		3	0		21.11	3.4	24.51	1.00	30.00	PASS
		3	1		21.16	3.4	24.56	1.00	30.00	PASS
		3	2		21.13	3.4	24.53	1.00	30.00	PASS
		6	0		19.97	3.4	23.37	1.00	30.00	PASS
		1	0	16QAM	19.55	3.4	22.95	1.00	30.00	PASS
		1	2		19.59	3.4	22.99	1.00	30.00	PASS
		1	5		19.58	3.4	22.98	1.00	30.00	PASS
		3	0		19.78	3.4	23.18	1.00	30.00	PASS
		3	1		19.97	3.4	23.37	1.00	30.00	PASS
		3	2		19.93	3.4	23.33	1.00	30.00	PASS
		6	0		19.13	3.4	22.53	1.00	30.00	PASS
	Highest	1	0	QPSK	21.13	3.4	24.53	1.00	30.00	PASS
		1	2		21.14	3.4	24.54	1.00	30.00	PASS
		1	5		21.07	3.4	24.47	1.00	30.00	PASS
		3	0		21.15	3.4	24.55	1.00	30.00	PASS
		3	1		21.36	3.4	24.76	1.00	30.00	PASS
		3	2		21.19	3.4	24.59	1.00	30.00	PASS
		6	0		20.13	3.4	23.53	1.00	30.00	PASS
		1	0	16QAM	19.94	3.4	23.34	1.00	30.00	PASS
		1	2		19.99	3.4	23.39	1.00	30.00	PASS
		1	5		19.95	3.4	23.35	1.00	30.00	PASS
		3	0		20.15	3.4	23.55	1.00	30.00	PASS
		3	1		20.17	3.4	23.57	1.00	30.00	PASS
		3	2		20.06	3.4	23.46	1.00	30.00	PASS
		6	0		19.24	3.4	22.64	1.00	30.00	PASS

Radiated Power (EIRP) for LTE Band 4 /3M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
3	Lowest	1	0	QPSK	20.63	3.4	24.03	1.00	30.00	PASS
		1	7		20.68	3.4	24.08	1.00	30.00	PASS
		1	14		20.64	3.4	24.04	1.00	30.00	PASS
		8	0		19.60	3.4	23.00	1.00	30.00	PASS
		8	4		19.49	3.4	22.89	1.00	30.00	PASS
		8	7		19.40	3.4	22.80	1.00	30.00	PASS
		15	0		19.48	3.4	22.88	1.00	30.00	PASS
		1	0	16QAM	19.11	3.4	22.51	1.00	30.00	PASS
		1	7		19.10	3.4	22.50	1.00	30.00	PASS
		1	14		19.06	3.4	22.46	1.00	30.00	PASS
		8	0		18.65	3.4	22.05	1.00	30.00	PASS
		8	4		18.65	3.4	22.05	1.00	30.00	PASS
		8	7		18.56	3.4	21.96	1.00	30.00	PASS
		15	0		18.49	3.4	21.89	1.00	30.00	PASS
	Middle	1	0	QPSK	20.88	3.4	24.28	1.00	30.00	PASS
		1	7		21.19	3.4	24.59	1.00	30.00	PASS
		1	14		21.10	3.4	24.50	1.00	30.00	PASS
		8	0		19.95	3.4	23.35	1.00	30.00	PASS
		8	4		20.03	3.4	23.43	1.00	30.00	PASS
		8	7		20.07	3.4	23.47	1.00	30.00	PASS
		15	0		20.01	3.4	23.41	1.00	30.00	PASS
		1	0	16QAM	19.79	3.4	23.19	1.00	30.00	PASS
		1	7		20.04	3.4	23.44	1.00	30.00	PASS
		1	14		20.04	3.4	23.44	1.00	30.00	PASS
		8	0		18.78	3.4	22.18	1.00	30.00	PASS
		8	4		18.86	3.4	22.26	1.00	30.00	PASS
		8	7		18.89	3.4	22.29	1.00	30.00	PASS
		15	0		18.85	3.4	22.25	1.00	30.00	PASS
	Highest	1	0	QPSK	21.20	3.4	24.60	1.00	30.00	PASS
		1	7		21.20	3.4	24.60	1.00	30.00	PASS
		1	14		21.19	3.4	24.59	1.00	30.00	PASS
		8	0		20.16	3.4	23.56	1.00	30.00	PASS
		8	4		20.22	3.4	23.62	1.00	30.00	PASS
		8	7		20.13	3.4	23.53	1.00	30.00	PASS
		15	0		20.20	3.4	23.60	1.00	30.00	PASS
		1	0	16QAM	20.51	3.4	23.91	1.00	30.00	PASS
		1	7		20.42	3.4	23.82	1.00	30.00	PASS
		1	14		20.32	3.4	23.72	1.00	30.00	PASS
		8	0		19.01	3.4	22.41	1.00	30.00	PASS
		8	4		19.10	3.4	22.50	1.00	30.00	PASS
		8	7		19.00	3.4	22.40	1.00	30.00	PASS
		15	0		19.28	3.4	22.68	1.00	30.00	PASS

Radiated Power (EIRP) for LTE Band 4 /5M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
5	Lowest	1	0	QPSK	20.52	3.4	23.92	1.00	30.00	PASS
		1	12		20.82	3.4	24.22	1.00	30.00	PASS
		1	24		20.60	3.4	24.00	1.00	30.00	PASS
		12	0		19.62	3.4	23.02	1.00	30.00	PASS
		12	6		19.57	3.4	22.97	1.00	30.00	PASS
		12	11		19.50	3.4	22.90	1.00	30.00	PASS
		25	0		19.63	3.4	23.03	1.00	30.00	PASS
		1	0	16QAM	18.97	3.4	22.37	1.00	30.00	PASS
		1	12		19.20	3.4	22.60	1.00	30.00	PASS
		1	24		18.98	3.4	22.38	1.00	30.00	PASS
		12	0		18.49	3.4	21.89	1.00	30.00	PASS
		12	6		18.55	3.4	21.95	1.00	30.00	PASS
		12	11		18.55	3.4	21.95	1.00	30.00	PASS
		25	0		18.62	3.4	22.02	1.00	30.00	PASS
	Middle	1	0	QPSK	20.70	3.4	24.10	1.00	30.00	PASS
		1	12		21.12	3.4	24.52	1.00	30.00	PASS
		1	24		21.20	3.4	24.60	1.00	30.00	PASS
		12	0		19.94	3.4	23.34	1.00	30.00	PASS
		12	6		20.09	3.4	23.49	1.00	30.00	PASS
		12	11		20.06	3.4	23.46	1.00	30.00	PASS
		25	0		19.96	3.4	23.36	1.00	30.00	PASS
		1	0	16QAM	19.71	3.4	23.11	1.00	30.00	PASS
		1	12		20.06	3.4	23.46	1.00	30.00	PASS
		1	24		19.73	3.4	23.13	1.00	30.00	PASS
		12	0		18.69	3.4	22.09	1.00	30.00	PASS
		12	6		18.85	3.4	22.25	1.00	30.00	PASS
		12	11		18.81	3.4	22.21	1.00	30.00	PASS
		25	0		18.79	3.4	22.19	1.00	30.00	PASS
	Highest	1	0	QPSK	21.11	3.4	24.51	1.00	30.00	PASS
		1	12		21.25	3.4	24.65	1.00	30.00	PASS
		1	24		21.39	3.4	24.79	1.00	30.00	PASS
		12	0		20.38	3.4	23.78	1.00	30.00	PASS
		12	6		20.38	3.4	23.78	1.00	30.00	PASS
		12	11		20.32	3.4	23.72	1.00	30.00	PASS
		25	0		20.33	3.4	23.73	1.00	30.00	PASS
		1	0	16QAM	19.58	3.4	22.98	1.00	30.00	PASS
		1	12		20.10	3.4	23.50	1.00	30.00	PASS
		1	24		19.80	3.4	23.20	1.00	30.00	PASS
		12	0		19.39	3.4	22.79	1.00	30.00	PASS
		12	6		19.32	3.4	22.72	1.00	30.00	PASS
		12	11		19.34	3.4	22.74	1.00	30.00	PASS
		25	0		19.37	3.4	22.77	1.00	30.00	PASS

Radiated Power (EIRP) for LTE Band 4 /10M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
10	Lowest	1	0	QPSK	20.74	3.4	24.14	1.00	30.00	PASS
		1	24		21.20	3.4	24.60	1.00	30.00	PASS
		1	49		20.71	3.4	24.11	1.00	30.00	PASS
		25	0		19.67	3.4	23.07	1.00	30.00	PASS
		25	12		19.67	3.4	23.07	1.00	30.00	PASS
		25	24		19.61	3.4	23.01	1.00	30.00	PASS
		50	0		19.76	3.4	23.16	1.00	30.00	PASS
		1	0	16QAM	19.15	3.4	22.55	1.00	30.00	PASS
		1	24		19.34	3.4	22.74	1.00	30.00	PASS
		1	49		19.22	3.4	22.62	1.00	30.00	PASS
		25	0		18.90	3.4	22.30	1.00	30.00	PASS
		25	12		18.81	3.4	22.21	1.00	30.00	PASS
		25	24		18.76	3.4	22.16	1.00	30.00	PASS
		50	0		18.84	3.4	22.24	1.00	30.00	PASS
	Middle	1	0	QPSK	20.78	3.4	24.18	1.00	30.00	PASS
		1	24		21.13	3.4	24.53	1.00	30.00	PASS
		1	49		20.94	3.4	24.34	1.00	30.00	PASS
		25	0		19.89	3.4	23.29	1.00	30.00	PASS
		25	12		20.05	3.4	23.45	1.00	30.00	PASS
		25	24		19.99	3.4	23.39	1.00	30.00	PASS
		50	0		19.90	3.4	23.30	1.00	30.00	PASS
		1	0	16QAM	19.75	3.4	23.15	1.00	30.00	PASS
		1	24		20.63	3.4	24.03	1.00	30.00	PASS
		1	49		20.02	3.4	23.42	1.00	30.00	PASS
		25	0		19.11	3.4	22.51	1.00	30.00	PASS
		25	12		19.26	3.4	22.66	1.00	30.00	PASS
		25	24		19.19	3.4	22.59	1.00	30.00	PASS
		50	0		18.99	3.4	22.39	1.00	30.00	PASS
	Highest	1	0	QPSK	21.27	3.4	24.67	1.00	30.00	PASS
		1	24		21.51	3.4	24.91	1.00	30.00	PASS
		1	49		21.44	3.4	24.84	1.00	30.00	PASS
		25	0		20.31	3.4	23.71	1.00	30.00	PASS
		25	12		20.39	3.4	23.79	1.00	30.00	PASS
		25	24		20.38	3.4	23.78	1.00	30.00	PASS
		50	0		20.46	3.4	23.86	1.00	30.00	PASS
		1	0	16QAM	20.36	3.4	23.76	1.00	30.00	PASS
		1	24		20.44	3.4	23.84	1.00	30.00	PASS
		1	49		20.11	3.4	23.51	1.00	30.00	PASS
		25	0		19.44	3.4	22.84	1.00	30.00	PASS
		25	12		19.57	3.4	22.97	1.00	30.00	PASS
		25	24		19.49	3.4	22.89	1.00	30.00	PASS
		50	0		19.50	3.4	22.90	1.00	30.00	PASS

Radiated Power (EIRP) for LTE Band 4 /15M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
15	Lowest	1	0	QPSK	20.80	3.4	24.20	1.00	30.00	PASS
		1	37		21.31	3.4	24.71	1.00	30.00	PASS
		1	74		20.84	3.4	24.24	1.00	30.00	PASS
		36	0		19.75	3.4	23.15	1.00	30.00	PASS
		36	18		19.78	3.4	23.18	1.00	30.00	PASS
		36	39		19.70	3.4	23.10	1.00	30.00	PASS
		75	0		19.78	3.4	23.18	1.00	30.00	PASS
		1	0	16QAM	19.48	3.4	22.88	1.00	30.00	PASS
		1	37		19.33	3.4	22.73	1.00	30.00	PASS
		1	74		19.25	3.4	22.65	1.00	30.00	PASS
		36	0		18.82	3.4	22.22	1.00	30.00	PASS
		36	18		18.97	3.4	22.37	1.00	30.00	PASS
		36	39		18.57	3.4	21.97	1.00	30.00	PASS
		75	0		18.64	3.4	22.04	1.00	30.00	PASS
	Middle	1	0	QPSK	20.67	3.4	24.07	1.00	30.00	PASS
		1	37		21.25	3.4	24.65	1.00	30.00	PASS
		1	74		21.02	3.4	24.42	1.00	30.00	PASS
		36	0		19.96	3.4	23.36	1.00	30.00	PASS
		36	18		20.06	3.4	23.46	1.00	30.00	PASS
		36	39		20.01	3.4	23.41	1.00	30.00	PASS
		75	0		19.95	3.4	23.35	1.00	30.00	PASS
		1	0	16QAM	19.55	3.4	22.95	1.00	30.00	PASS
		1	37		20.70	3.4	24.10	1.00	30.00	PASS
		1	74		20.21	3.4	23.61	1.00	30.00	PASS
		36	0		19.00	3.4	22.40	1.00	30.00	PASS
		36	18		19.15	3.4	22.55	1.00	30.00	PASS
		36	39		19.11	3.4	22.51	1.00	30.00	PASS
		75	0		19.05	3.4	22.45	1.00	30.00	PASS
	Highest	1	0	QPSK	21.60	3.4	25.00	1.00	30.00	PASS
		1	37		22.17	3.4	25.57	1.00	30.00	PASS
		1	74		21.42	3.4	24.82	1.00	30.00	PASS
		36	0		20.44	3.4	23.84	1.00	30.00	PASS
		36	18		20.31	3.4	23.71	1.00	30.00	PASS
		36	39		20.40	3.4	23.80	1.00	30.00	PASS
		75	0		20.48	3.4	23.88	1.00	30.00	PASS
		1	0	16QAM	20.41	3.4	23.81	1.00	30.00	PASS
		1	37		20.92	3.4	24.32	1.00	30.00	PASS
		1	74		20.50	3.4	23.90	1.00	30.00	PASS
		36	0		19.38	3.4	22.78	1.00	30.00	PASS
		36	18		19.28	3.4	22.68	1.00	30.00	PASS
		36	39		19.39	3.4	22.79	1.00	30.00	PASS
		75	0		19.51	3.4	22.91	1.00	30.00	PASS

Radiated Power (EIRP) for LTE Band 4 /20M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	EIRP (dBm)	EIRP Limit(W)	EIRP Limit(dBm)	Verdict
20	Lowest	1	0	QPSK	20.32	3.4	23.72	1.00	30.00	PASS
		1	49		20.92	3.4	24.32	1.00	30.00	PASS
		1	99		20.74	3.4	24.14	1.00	30.00	PASS
		50	0		19.77	3.4	23.17	1.00	30.00	PASS
		50	24		19.74	3.4	23.14	1.00	30.00	PASS
		50	49		19.88	3.4	23.28	1.00	30.00	PASS
		100	0		19.88	3.4	23.28	1.00	30.00	PASS
		1	0	16QAM	19.19	3.4	22.59	1.00	30.00	PASS
		1	49		19.66	3.4	23.06	1.00	30.00	PASS
		1	99		19.56	3.4	22.96	1.00	30.00	PASS
		50	0		18.91	3.4	22.31	1.00	30.00	PASS
		50	24		18.94	3.4	22.34	1.00	30.00	PASS
		50	49		18.87	3.4	22.27	1.00	30.00	PASS
		100	0		18.76	3.4	22.16	1.00	30.00	PASS
	Middle	1	0	QPSK	21.27	3.4	24.67	1.00	30.00	PASS
		1	49		21.55	3.4	24.95	1.00	30.00	PASS
		1	99		21.37	3.4	24.77	1.00	30.00	PASS
		50	0		19.99	3.4	23.39	1.00	30.00	PASS
		50	24		20.18	3.4	23.58	1.00	30.00	PASS
		50	49		20.13	3.4	23.53	1.00	30.00	PASS
		100	0		20.08	3.4	23.48	1.00	30.00	PASS
		1	0	16QAM	20.31	3.4	23.71	1.00	30.00	PASS
		1	49		20.87	3.4	24.27	1.00	30.00	PASS
		1	99		20.66	3.4	24.06	1.00	30.00	PASS
		50	0		19.10	3.4	22.50	1.00	30.00	PASS
		50	24		19.20	3.4	22.60	1.00	30.00	PASS
		50	49		19.25	3.4	22.65	1.00	30.00	PASS
		100	0		19.06	3.4	22.46	1.00	30.00	PASS
	Highest	1	0	QPSK	21.15	3.4	24.55	1.00	30.00	PASS
		1	49		22.18	3.4	25.58	1.00	30.00	PASS
		1	99		21.34	3.4	24.74	1.00	30.00	PASS
		50	0		20.40	3.4	23.80	1.00	30.00	PASS
		50	24		20.45	3.4	23.85	1.00	30.00	PASS
		50	49		20.49	3.4	23.89	1.00	30.00	PASS
		100	0		20.47	3.4	23.87	1.00	30.00	PASS
		1	0	16QAM	20.16	3.4	23.56	1.00	30.00	PASS
		1	49		20.40	3.4	23.80	1.00	30.00	PASS
		1	99		20.38	3.4	23.78	1.00	30.00	PASS
		50	0		19.49	3.4	22.89	1.00	30.00	PASS
		50	24		19.47	3.4	22.87	1.00	30.00	PASS
		50	49		19.29	3.4	22.69	1.00	30.00	PASS
		100	0		19.36	3.4	22.76	1.00	30.00	PASS

Radiated Power (ERP) for LTE Band 12 /1.4M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	ERP (dBm)	ERP Limit(W)	ERP Limit(dBm)	Verdict
1.4	Lowest	1	0	QPSK	23.33	1	22.18	3.00	34.77	PASS
		1	2		23.48	1	22.33	3.00	34.77	PASS
		1	5		23.44	1	22.29	3.00	34.77	PASS
		3	0		23.35	1	22.20	3.00	34.77	PASS
		3	1		23.41	1	22.26	3.00	34.77	PASS
		3	2		23.40	1	22.25	3.00	34.77	PASS
		6	0		22.37	1	21.22	3.00	34.77	PASS
		1	0	16QAM	22.89	1	21.74	3.00	34.77	PASS
		1	2		22.60	1	21.45	3.00	34.77	PASS
		1	5		22.58	1	21.43	3.00	34.77	PASS
		3	0		22.30	1	21.15	3.00	34.77	PASS
		3	1		22.27	1	21.12	3.00	34.77	PASS
		3	2		22.25	1	21.10	3.00	34.77	PASS
		6	0		21.18	1	20.03	3.00	34.77	PASS
	Middle	1	0	QPSK	23.33	1	22.18	3.00	34.77	PASS
		1	2		23.52	1	22.37	3.00	34.77	PASS
		1	5		23.67	1	22.52	3.00	34.77	PASS
		3	0		23.39	1	22.24	3.00	34.77	PASS
		3	1		23.63	1	22.48	3.00	34.77	PASS
		3	2		23.57	1	22.42	3.00	34.77	PASS
		6	0		22.49	1	21.34	3.00	34.77	PASS
		1	0	16QAM	21.97	1	20.82	3.00	34.77	PASS
		1	2		22.13	1	20.98	3.00	34.77	PASS
		1	5		22.07	1	20.92	3.00	34.77	PASS
		3	0		22.19	1	21.04	3.00	34.77	PASS
		3	1		22.53	1	21.38	3.00	34.77	PASS
		3	2		22.47	1	21.32	3.00	34.77	PASS
		6	0		21.57	1	20.42	3.00	34.77	PASS
	Highest	1	0	QPSK	22.96	1	21.81	3.00	34.77	PASS
		1	2		23.05	1	21.90	3.00	34.77	PASS
		1	5		23.07	1	21.92	3.00	34.77	PASS
		3	0		23.28	1	22.13	3.00	34.77	PASS
		3	1		23.37	1	22.22	3.00	34.77	PASS
		3	2		23.28	1	22.13	3.00	34.77	PASS
		6	0		22.21	1	21.06	3.00	34.77	PASS
		1	0	16QAM	21.93	1	20.78	3.00	34.77	PASS
		1	2		21.92	1	20.77	3.00	34.77	PASS
		1	5		22.12	1	20.97	3.00	34.77	PASS
		3	0		22.27	1	21.12	3.00	34.77	PASS
		3	1		22.19	1	21.04	3.00	34.77	PASS
		3	2		22.22	1	21.07	3.00	34.77	PASS
		6	0		21.55	1	20.40	3.00	34.77	PASS

Radiated Power (ERP) for LTE Band 12 /3M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	ERP (dBm)	ERP Limit(W)	ERP Limit(dBm)	Verdict
3	Lowest	1	0	QPSK	23.49	1	22.34	3.00	34.77	PASS
		1	7		23.44	1	22.29	3.00	34.77	PASS
		1	14		23.24	1	22.09	3.00	34.77	PASS
		8	0		22.34	1	21.19	3.00	34.77	PASS
		8	4		22.33	1	21.18	3.00	34.77	PASS
		8	7		22.29	1	21.14	3.00	34.77	PASS
		15	0		22.43	1	21.28	3.00	34.77	PASS
		1	0	16QAM	22.02	1	20.87	3.00	34.77	PASS
		1	7		22.01	1	20.86	3.00	34.77	PASS
		1	14		21.77	1	20.62	3.00	34.77	PASS
		8	0		21.35	1	20.20	3.00	34.77	PASS
		8	4		21.24	1	20.09	3.00	34.77	PASS
		8	7		21.22	1	20.07	3.00	34.77	PASS
		15	0		21.34	1	20.19	3.00	34.77	PASS
	Middle	1	0	QPSK	23.08	1	21.93	3.00	34.77	PASS
		1	7		24.15	1	23.00	3.00	34.77	PASS
		1	14		23.54	1	22.39	3.00	34.77	PASS
		8	0		22.38	1	21.23	3.00	34.77	PASS
		8	4		22.64	1	21.49	3.00	34.77	PASS
		8	7		22.64	1	21.49	3.00	34.77	PASS
		15	0		22.50	1	21.35	3.00	34.77	PASS
		1	0	16QAM	22.18	1	21.03	3.00	34.77	PASS
		1	7		23.23	1	22.08	3.00	34.77	PASS
		1	14		22.98	1	21.83	3.00	34.77	PASS
		8	0		21.22	1	20.07	3.00	34.77	PASS
		8	4		21.37	1	20.22	3.00	34.77	PASS
		8	7		21.46	1	20.31	3.00	34.77	PASS
		15	0		21.38	1	20.23	3.00	34.77	PASS
	Highest	1	0	QPSK	23.40	1	22.25	3.00	34.77	PASS
		1	7		23.39	1	22.24	3.00	34.77	PASS
		1	14		23.30	1	22.15	3.00	34.77	PASS
		8	0		22.55	1	21.40	3.00	34.77	PASS
		8	4		22.27	1	21.12	3.00	34.77	PASS
		8	7		22.22	1	21.07	3.00	34.77	PASS
		15	0		22.38	1	21.23	3.00	34.77	PASS
		1	0	16QAM	22.58	1	21.43	3.00	34.77	PASS
		1	7		22.45	1	21.30	3.00	34.77	PASS
		1	14		22.24	1	21.09	3.00	34.77	PASS
		8	0		21.50	1	20.35	3.00	34.77	PASS
		8	4		21.25	1	20.10	3.00	34.77	PASS
		8	7		20.98	1	19.83	3.00	34.77	PASS
		15	0		21.33	1	20.18	3.00	34.77	PASS

Radiated Power (ERP) for LTE Band 12 /5M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	ERP (dBm)	ERP Limit(W)	ERP Limit(dBm)	Verdict
5	Lowest	1	0	QPSK	23.35	1	22.20	3.00	34.77	PASS
		1	12		23.54	1	22.39	3.00	34.77	PASS
		1	24		23.20	1	22.05	3.00	34.77	PASS
		12	0		22.54	1	21.39	3.00	34.77	PASS
		12	6		22.22	1	21.07	3.00	34.77	PASS
		12	11		22.28	1	21.13	3.00	34.77	PASS
		25	0		22.34	1	21.19	3.00	34.77	PASS
		1	0	16QAM	22.35	1	21.20	3.00	34.77	PASS
		1	12		22.03	1	20.88	3.00	34.77	PASS
		1	24		21.93	1	20.78	3.00	34.77	PASS
		12	0		21.34	1	20.19	3.00	34.77	PASS
		12	6		20.96	1	19.81	3.00	34.77	PASS
		12	11		20.84	1	19.69	3.00	34.77	PASS
		25	0		21.50	1	20.35	3.00	34.77	PASS
	Middle	1	0	QPSK	22.94	1	21.79	3.00	34.77	PASS
		1	12		23.67	1	22.52	3.00	34.77	PASS
		1	24		23.27	1	22.12	3.00	34.77	PASS
		12	0		22.41	1	21.26	3.00	34.77	PASS
		12	6		22.62	1	21.47	3.00	34.77	PASS
		12	11		22.50	1	21.35	3.00	34.77	PASS
		25	0		22.33	1	21.18	3.00	34.77	PASS
		1	0	16QAM	21.78	1	20.63	3.00	34.77	PASS
		1	12		22.64	1	21.49	3.00	34.77	PASS
		1	24		22.11	1	20.96	3.00	34.77	PASS
		12	0		21.28	1	20.13	3.00	34.77	PASS
		12	6		21.39	1	20.24	3.00	34.77	PASS
		12	11		21.35	1	20.20	3.00	34.77	PASS
		25	0		21.19	1	20.04	3.00	34.77	PASS
	Highest	1	0	QPSK	23.60	1	22.45	3.00	34.77	PASS
		1	12		23.42	1	22.27	3.00	34.77	PASS
		1	24		23.27	1	22.12	3.00	34.77	PASS
		12	0		22.54	1	21.39	3.00	34.77	PASS
		12	6		22.49	1	21.34	3.00	34.77	PASS
		12	11		22.13	1	20.98	3.00	34.77	PASS
		25	0		22.38	1	21.23	3.00	34.77	PASS
		1	0	16QAM	21.84	1	20.69	3.00	34.77	PASS
		1	12		22.21	1	21.06	3.00	34.77	PASS
		1	24		21.49	1	20.34	3.00	34.77	PASS
		12	0		21.43	1	20.28	3.00	34.77	PASS
		12	6		21.40	1	20.25	3.00	34.77	PASS
		12	11		21.21	1	20.06	3.00	34.77	PASS
		25	0		21.26	1	20.11	3.00	34.77	PASS

Radiated Power (ERP) for LTE Band 12 /10M										
BW (MHz)	UL Channel	RB Size	RB offset	Modulation	Conduction AVG Power(dBm)	Ant Gain (dBi)	ERP (dBm)	ERP Limit(W)	ERP Limit(dBm)	Verdict
10	Lowest	1	0	QPSK	23.40	1	22.25	3.00	34.77	PASS
		1	24		23.55	1	22.40	3.00	34.77	PASS
		1	49		24.16	1	23.01	3.00	34.77	PASS
		25	0		22.30	1	21.15	3.00	34.77	PASS
		25	12		22.31	1	21.16	3.00	34.77	PASS
		25	24		22.40	1	21.25	3.00	34.77	PASS
		50	0		22.54	1	21.39	3.00	34.77	PASS
		1	0	16QAM	22.06	1	20.91	3.00	34.77	PASS
		1	24		22.06	1	20.91	3.00	34.77	PASS
		1	49		22.18	1	21.03	3.00	34.77	PASS
		25	0		21.43	1	20.28	3.00	34.77	PASS
		25	12		21.37	1	20.22	3.00	34.77	PASS
		25	24		21.46	1	20.31	3.00	34.77	PASS
		50	0		21.54	1	20.39	3.00	34.77	PASS
	Middle	1	0	QPSK	23.19	1	22.04	3.00	34.77	PASS
		1	24		23.49	1	22.34	3.00	34.77	PASS
		1	49		23.28	1	22.13	3.00	34.77	PASS
		25	0		22.33	1	21.18	3.00	34.77	PASS
		25	12		22.48	1	21.33	3.00	34.77	PASS
		25	24		22.50	1	21.35	3.00	34.77	PASS
		50	0		22.37	1	21.22	3.00	34.77	PASS
		1	0	16QAM	22.31	1	21.16	3.00	34.77	PASS
		1	24		23.03	1	21.88	3.00	34.77	PASS
		1	49		22.36	1	21.21	3.00	34.77	PASS
		25	0		21.16	1	20.01	3.00	34.77	PASS
		25	12		21.58	1	20.43	3.00	34.77	PASS
		25	24		21.58	1	20.43	3.00	34.77	PASS
		50	0		21.38	1	20.23	3.00	34.77	PASS
	Highest	1	0	QPSK	23.34	1	22.19	3.00	34.77	PASS
		1	24		23.69	1	22.54	3.00	34.77	PASS
		1	49		23.28	1	22.13	3.00	34.77	PASS
		25	0		22.39	1	21.24	3.00	34.77	PASS
		25	12		22.44	1	21.29	3.00	34.77	PASS
		25	24		22.38	1	21.23	3.00	34.77	PASS
		50	0		22.40	1	21.25	3.00	34.77	PASS
		1	0	16QAM	22.79	1	21.64	3.00	34.77	PASS
		1	24		22.63	1	21.48	3.00	34.77	PASS
		1	49		22.05	1	20.90	3.00	34.77	PASS
		25	0		21.23	1	20.08	3.00	34.77	PASS
		25	12		21.60	1	20.45	3.00	34.77	PASS
		25	24		21.35	1	20.20	3.00	34.77	PASS
		50	0		21.27	1	20.12	3.00	34.77	PASS

5.2 PEAK TO AVERAGE RATIO

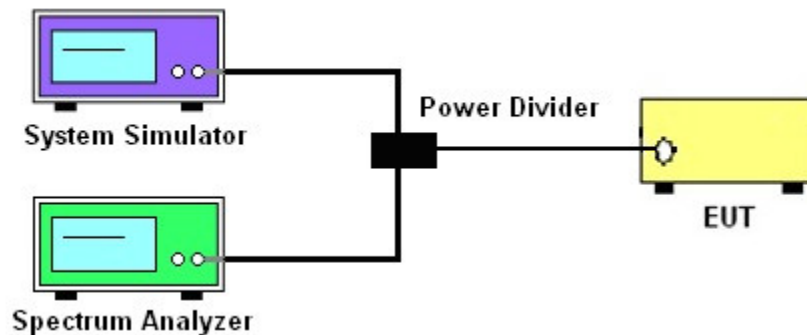
TEST OVERVIEW

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

TEST PROCEDURES

1. The testing follows FCC KDB 971168 v03r01 section.
2. The eut was connected to the peak and av system simulator& spectrum analyzer.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure average power of the spectrum analysis,

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment “STS2309304W01_Appendix WCDMA” and “STS2309304W01_Appendix LTE”.

5.3 OCCUPIED BANDWIDTH

TEST OVERVIEW

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

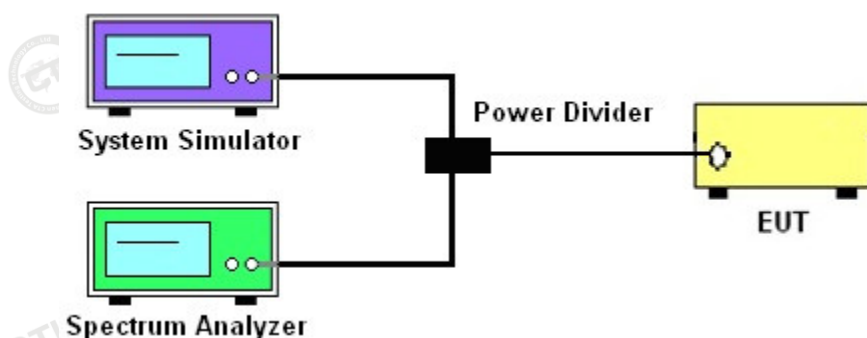
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth)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

All modes of operation were investigated and the worst case configuration results are reported in this section.

TEST PROCEDURE

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment, "STS2309304W01_Appendix WCDMA" and "STS2309304W01_Appendix LTE".

5.4 FREQUENCY STABILITY

TEST OVERVIEW

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26 2015.

The frequency stability of the transmitter is measured by:

- a.) Temperature: The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency. For Part 24 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

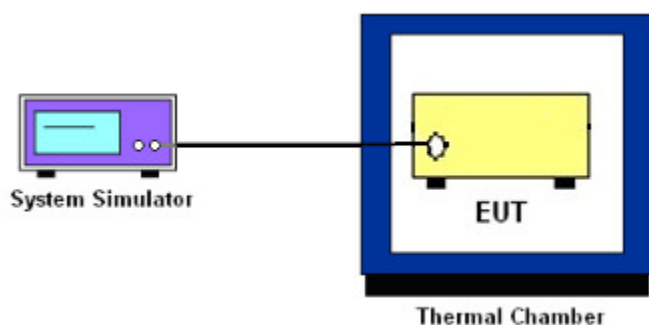
Temperature Variation

1. The testing follows FCC KDB 971168 D01 section 9.0
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Voltage Variation

1. The testing follows FCC KDB 971168 D01 Section 9.0.
2. The EUT was placed in a temperature chamber at $25 \pm 5^\circ \text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

TEST SETUP



TEST RESULT

UMTS Band 2 /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.46	0.009	Within Authorized Band	PASS
40		11.91	0.006		
30		29.57	0.016		
20		35.28	0.019		
10		21.19	0.011		
0		32.04	0.017		
-10		27.98	0.015		
-20		32.41	0.017		
-30		15.27	0.008		
20	Maximum Voltage	24.72	0.013		
20	BEP	21.04	0.011		

HSDPA Band 2 /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.37	0.016	Within Authorized Band	PASS
40		21.65	0.012		
30		30.77	0.016		
20		20.43	0.011		
10		33.81	0.018		
0		30.84	0.016		
-10		12.61	0.007		
-20		27.27	0.015		
-30		22.74	0.012		
20	Maximum Voltage	19.21	0.010		
20	BEP	24.48	0.013		

HSUPA Band 2 /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	15.19	0.008	Within Authorized Band	PASS
40		13.08	0.007		
30		26.93	0.014		
20		23.88	0.013		
10		18.50	0.010		
0		25.96	0.014		
-10		30.62	0.016		
-20		33.48	0.018		
-30		24.64	0.013		
20	Maximum Voltage	21.21	0.011		
20	BEP	12.58	0.007		

UMTS Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.29	0.021	2.5ppm	PASS
40		36.21	0.043		
30		33.88	0.040		
20		25.23	0.030		
10		16.59	0.020		
0		17.03	0.020		
-10		34.79	0.042		
-20		11.66	0.014		
-30		21.99	0.026		
20	Maximum Voltage	27.28	0.033		
20	BEP	36.39	0.043		

HSDPA Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)		(ppm)		
50	Normal Voltage	32.59	0.039	2.5ppm	PASS
40		22.47	0.027		
30		21.85	0.026		
20		20.17	0.024		
10		28.99	0.035		
0		23.21	0.028		
-10		15.65	0.019		
-20		22.77	0.027		
-30		35.26	0.042		
20	Maximum Voltage	23.31	0.028		
20	BEP	27.46	0.033		

HSUPA Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	26.64	0.032	2.5ppm	PASS
40		18.30	0.022		
30		28.74	0.034		
20		35.62	0.043		
10		15.44	0.018		
0		32.64	0.039		
-10		34.43	0.041		
-20		25.35	0.030		
-30		35.19	0.042		
20	Maximum Voltage	16.48	0.020		
20	BEP	21.80	0.026		

LTE Band 2 (QPSK) / 1880MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	16.77	0.009	2.5ppm	PASS
40		22.76	0.012		
30		15.31	0.008		
20		21.57	0.011		
10		12.63	0.007		
0		14.68	0.008		
-10		27.23	0.014		
-20		23.48	0.012		
-30		22.89	0.012		
20	Maximum Voltage	13.26	0.007		
20	BEP	15.02	0.008		

LTE Band 2 (QPSK) / 1880MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	35.37	0.019	2.5ppm	PASS
40		26.77	0.014		
30		15.10	0.008		
20		24.01	0.013		
10		35.87	0.019		
0		15.25	0.008		
-10		16.27	0.009		
-20		26.32	0.014		
-30		14.68	0.008		
20	Maximum Voltage	23.69	0.013		
20	BEP	13.18	0.007		

LTE Band 4 (QPSK) / 1733MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	29.40	0.017	2.5ppm	PASS
40		20.30	0.012		
30		20.67	0.012		
20		18.49	0.011		
10		34.54	0.020		
0		12.46	0.007		
-10		18.29	0.011		
-20		11.71	0.007		
-30		35.41	0.020		
20	Maximum Voltage	18.64	0.011		
20	BEP	35.72	0.021		

LTE Band 4 (QPSK) / 1733MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	36.49	0.021	2.5ppm	PASS
40		27.50	0.016		
30		15.67	0.009		
20		31.71	0.018		
10		26.25	0.015		
0		20.16	0.012		
-10		19.00	0.011		
-20		27.45	0.016		
-30		20.57	0.012		
20	Maximum Voltage	34.72	0.020		
20	BEP	29.08	0.017		

LTE Band 12 (QPSK) / 707.5MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	29.17	0.041	2.5ppm	PASS
40		16.64	0.023		
30		14.56	0.021		
20		21.94	0.031		
10		14.35	0.020		
0		17.34	0.024		
-10		26.40	0.004		
-20		33.62	0.047		
-30		32.43	0.046		
20	Maximum Voltage	20.95	0.030		
20	BEP	21.57	0.030		

LTE Band 12 (QPSK) / 707.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	26.58	0.037	2.5ppm	PASS
40		34.48	0.049		
30		31.36	0.044		
20		19.66	0.028		
10		28.52	0.040		
0		14.78	0.021		
-10		20.53	0.003		
-20		30.84	0.043		
-30		18.84	0.027		
20	Maximum Voltage	22.18	0.031		

5.5 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST OVERVIEW

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

For Band 7:

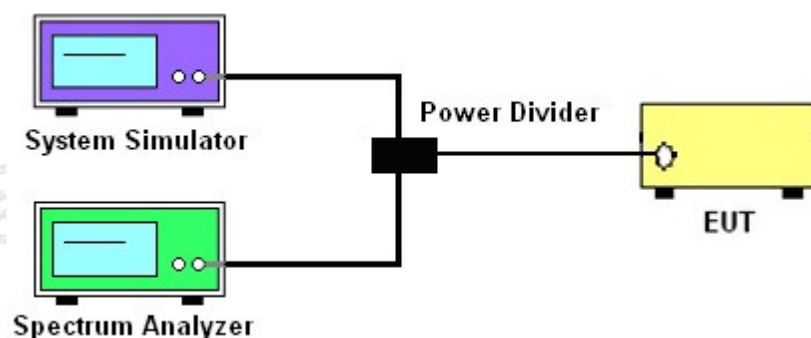
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

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

TEST PROCEDURE

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26-2015-Section 5.7.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13\text{dBm}$.

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment "STS2309304W01_Appendix GSM", "STS2309304W01_Appendix WCDMA" and "STS2309304W01_Appendix LTE".

5.6 BAND EDGE

TEST OVERVIEW

1. §22.917(a)

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

2. §24.238 (a)

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

3. §27.53 (h)

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

4. §27.53(m)(4)

For operations in the 2500 MHz ~ 2570 MHz band this section, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

5. §27.53 (g)

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

TEST PROCEDURE

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26-2015-Section 5.7
 2. Start and stop frequency were set such that the band edge would be placed in the center of the Plot.
 3. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
 4. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator.
- The path loss was compensated to the results for each measurement.
5. The band edges of low and high channels for the highest RF powers were measured.
 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

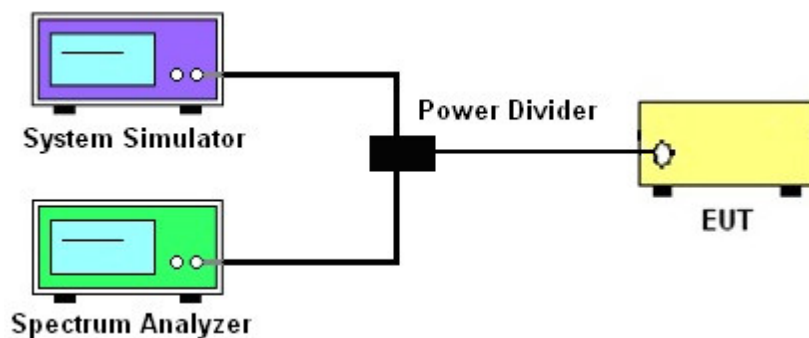
$$= -13\text{dBm}.$$

Band 7:

$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

$$= -25\text{dBm}.$$

TEST SETUP**TEST RESULT**

Note: The test data please reference to attachment “STS2309304W01_Appendix WCDMA” and “STS2309304W01_Appendix LTE”.

5.7 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

TEST OVERVIEW

Radiated spurious emissions measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized horn antennas. All measurements are performed as peak measurements while the EUT is operating at maximum power and at the appropriate frequencies.

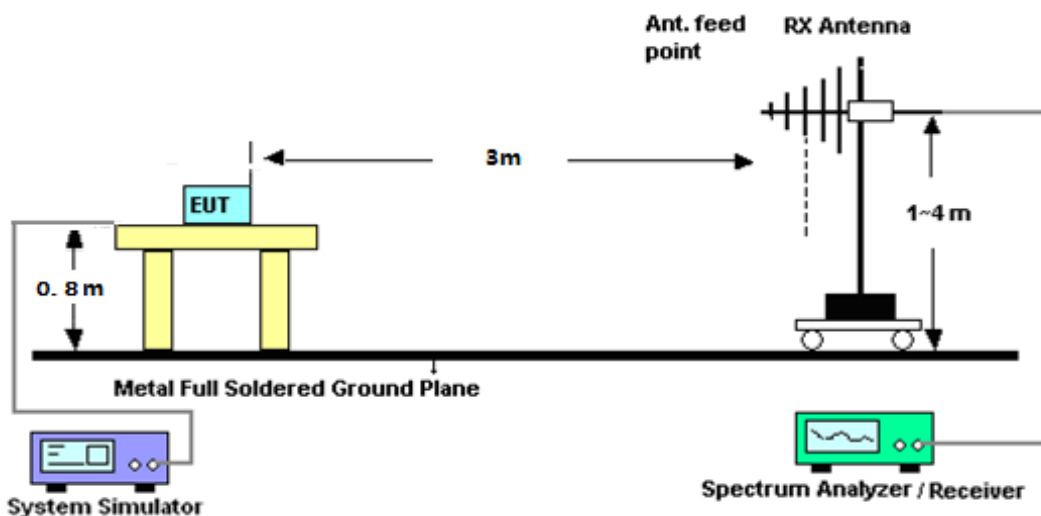
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

TEST PROCEDURE

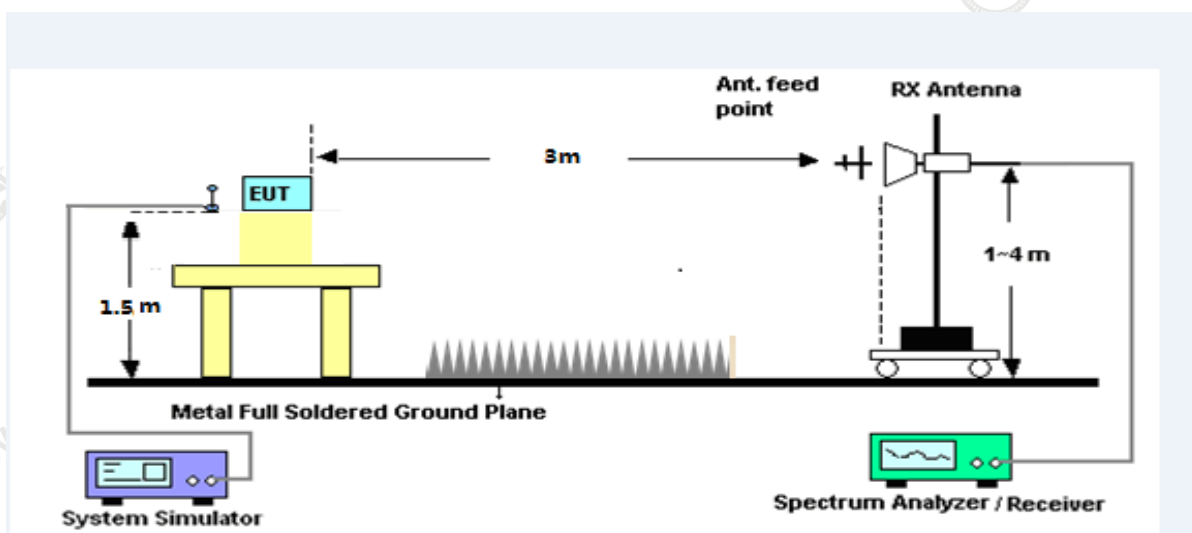
1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
3. VBW $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $> 2 \times$ span/RBW
6. Detector = Peak
7. Trace mode = max hold
8. The trace was allowed to stabilize
9. Effective Isotropic Spurious Radiation was measured by substitution method according to TIA/EIA-603-D. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.
 $P_{Mea} = S.G \text{ Level} + \text{Ant-Cable loss}$; $\text{Margin} = P_{Mea} - \text{Limit}$.

TEST SETUP

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



TEST RESULT

Note: (1) Spurious emissions which are attenuated by more than 20dB below the permissible value for frequency below 1000MHz.

(2) Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value

(3) Test is divided into three directions, X/Y/Z. X pattern for the worst.

WCDMA Band 2: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.05	-34.01	12.60	12.93	-34.34	-13.00	-21.34	H
5557.38	-35.36	13.10	17.11	-39.37	-13.00	-26.37	H
7409.87	-33.39	11.50	22.20	-44.09	-13.00	-31.09	H
3704.05	-34.85	12.60	12.93	-35.18	-13.00	-22.18	V
5557.38	-33.76	13.10	17.11	-37.77	-13.00	-24.77	V
7409.87	-32.28	11.50	22.20	-42.98	-13.00	-29.98	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.07	-34.65	12.60	12.93	-34.98	-13.00	-21.98	H
5640.04	-35.13	13.10	17.11	-39.14	-13.00	-26.14	H
7520.05	-32.64	11.50	22.20	-43.34	-13.00	-30.34	H
3760.07	-35.83	12.60	12.93	-36.16	-13.00	-23.16	V
5640.04	-35.21	13.10	17.11	-39.22	-13.00	-26.22	V
7520.05	-32.57	11.50	22.20	-43.27	-13.00	-30.27	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.56	-33.71	12.60	12.93	-34.04	-13.00	-21.04	H
5722.80	-35.15	13.10	17.11	-39.16	-13.00	-26.16	H
7630.10	-32.40	11.50	22.20	-43.10	-13.00	-30.10	H
3815.56	-35.29	12.60	12.93	-35.62	-13.00	-22.62	V
5722.80	-34.44	13.10	17.11	-38.45	-13.00	-25.45	V
7630.10	-31.78	11.50	22.20	-42.48	-13.00	-29.48	V

WCDMA Band 5: (30-9000)MHz							
The worst testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.90	-40.39	9.40	4.75	-35.74	-13.00	-22.74	H
2479.42	-39.41	10.60	8.39	-37.20	-13.00	-24.20	H
3305.89	-31.33	12.00	11.79	-31.12	-13.00	-18.12	H
1652.90	-43.68	9.40	4.75	-39.03	-13.00	-26.03	V
2479.42	-45.07	10.60	8.39	-42.86	-13.00	-29.86	V
3305.89	-42.62	12.00	11.79	-42.41	-13.00	-29.41	V
The Worst Test Results Channel 4182/836.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.70	-41.42	9.40	4.75	-36.77	-13.00	-23.77	H
2509.19	-39.92	10.60	8.39	-37.71	-13.00	-24.71	H
3345.56	-31.87	12.00	11.79	-31.66	-13.00	-18.66	H
1672.70	-44.03	9.40	4.75	-39.38	-13.00	-26.38	V
2509.19	-44.43	10.60	8.39	-42.22	-13.00	-29.22	V
3345.56	-43.07	12.00	11.79	-42.86	-13.00	-29.86	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.31	-41.51	9.40	4.75	-36.86	-13.00	-23.86	H
2539.86	-39.80	10.60	8.39	-37.59	-13.00	-24.59	H
3386.13	-31.86	12.00	11.79	-31.65	-13.00	-18.65	H
1693.31	-43.43	9.40	4.75	-38.78	-13.00	-25.78	V
2539.86	-44.83	10.60	8.39	-42.62	-13.00	-29.62	V
3386.13	-43.79	12.00	11.79	-43.58	-13.00	-30.58	V

HSUPA Band 2: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.44	-34.11	12.60	12.93	-34.44	-13.00	-21.44	H
5557.49	-34.27	13.10	17.11	-38.28	-13.00	-25.28	H
7409.47	-33.32	11.50	22.20	-44.02	-13.00	-31.02	H
3704.44	-35.41	12.60	12.93	-35.74	-13.00	-22.74	V
5557.49	-34.00	13.10	17.11	-38.01	-13.00	-25.01	V
7409.47	-32.42	11.50	22.20	-43.12	-13.00	-30.12	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.01	-33.74	12.60	12.93	-34.07	-13.00	-21.07	H
5640.09	-35.44	13.10	17.11	-39.45	-13.00	-26.45	H
7520.24	-32.92	11.50	22.20	-43.62	-13.00	-30.62	H
3760.01	-35.29	12.60	12.93	-35.62	-13.00	-22.62	V
5640.09	-34.29	13.10	17.11	-38.30	-13.00	-25.30	V
7520.24	-33.16	11.50	22.20	-43.86	-13.00	-30.86	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.31	-34.04	12.60	12.93	-34.37	-13.00	-21.37	H
5722.67	-34.15	13.10	17.11	-38.16	-13.00	-25.16	H
7630.16	-32.26	11.50	22.20	-42.96	-13.00	-29.96	H
3815.31	-35.08	12.60	12.93	-35.41	-13.00	-22.41	V
5722.67	-35.18	13.10	17.11	-39.19	-13.00	-26.19	V
7630.16	-31.74	11.50	22.20	-42.44	-13.00	-29.44	V

HSUPA Band 5: (30-9000)MHz							
The worst testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.51	-41.48	9.40	4.75	-36.83	-13.00	-23.83	H
2479.33	-40.59	10.60	8.39	-38.38	-13.00	-25.38	H
3305.76	-31.14	12.00	11.79	-30.93	-13.00	-17.93	H
1652.51	-43.66	9.40	4.75	-39.01	-13.00	-26.01	V
2479.33	-44.75	10.60	8.39	-42.54	-13.00	-29.54	V
3305.76	-43.18	12.00	11.79	-42.97	-13.00	-29.97	V
The Worst Test Results Channel 4182/836.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.58	-41.09	9.40	4.75	-36.44	-13.00	-23.44	H
2509.06	-39.77	10.60	8.39	-37.56	-13.00	-24.56	H
3345.42	-31.28	12.00	11.79	-31.07	-13.00	-18.07	H
1672.58	-43.16	9.40	4.75	-38.51	-13.00	-25.51	V
2509.06	-44.44	10.60	8.39	-42.23	-13.00	-29.23	V
3345.42	-42.68	12.00	11.79	-42.47	-13.00	-29.47	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.66	-41.48	9.40	4.75	-36.83	-13.00	-23.83	H
2539.56	-40.24	10.60	8.39	-38.03	-13.00	-25.03	H
3386.11	-31.04	12.00	11.79	-30.83	-13.00	-17.83	H
1693.66	-43.15	9.40	4.75	-38.50	-13.00	-25.50	V
2539.56	-45.04	10.60	8.39	-42.83	-13.00	-29.83	V
3386.11	-43.16	12.00	11.79	-42.95	-13.00	-29.95	V

HSDPA Band 2: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.17	-34.76	12.60	12.93	-35.09	-13.00	-22.09	H
5557.46	-34.29	13.10	17.11	-38.30	-13.00	-25.30	H
7409.72	-33.08	11.50	22.20	-43.78	-13.00	-30.78	H
3704.17	-35.51	12.60	12.93	-35.84	-13.00	-22.84	V
5557.46	-35.19	13.10	17.11	-39.20	-13.00	-26.20	V
7409.72	-31.86	11.50	22.20	-42.56	-13.00	-29.56	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.01	-34.22	12.60	12.93	-34.55	-13.00	-21.55	H
5639.86	-34.23	13.10	17.11	-38.24	-13.00	-25.24	H
7519.81	-32.37	11.50	22.20	-43.07	-13.00	-30.07	H
3760.01	-35.58	12.60	12.93	-35.91	-13.00	-22.91	V
5639.86	-34.93	13.10	17.11	-38.94	-13.00	-25.94	V
7519.81	-32.59	11.50	22.20	-43.29	-13.00	-30.29	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.68	-34.27	12.60	12.93	-34.60	-13.00	-21.60	H
5722.90	-35.41	13.10	17.11	-39.42	-13.00	-26.42	H
7630.51	-32.92	11.50	22.20	-43.62	-13.00	-30.62	H
3815.68	-34.80	12.60	12.93	-35.13	-13.00	-22.13	V
5722.90	-34.14	13.10	17.11	-38.15	-13.00	-25.15	V
7630.51	-32.25	11.50	22.20	-42.95	-13.00	-29.95	V

HSDPA Band 5: (30-9000)MHz							
The worst testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.69	-41.25	9.40	4.75	-36.60	-13.00	-23.60	H
2479.29	-40.35	10.60	8.39	-38.14	-13.00	-25.14	H
3305.82	-32.05	12.00	11.79	-31.84	-13.00	-18.84	H
1652.69	-43.23	9.40	4.75	-38.58	-13.00	-25.58	V
2479.29	-44.65	10.60	8.39	-42.44	-13.00	-29.44	V
3305.82	-43.25	12.00	11.79	-43.04	-13.00	-30.04	V
The Worst Test Results Channel 4182/836.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1672.77	-40.51	9.40	4.75	-35.86	-13.00	-22.86	H
2509.11	-40.07	10.60	8.39	-37.86	-13.00	-24.86	H
3345.83	-31.42	12.00	11.79	-31.21	-13.00	-18.21	H
1672.77	-44.28	9.40	4.75	-39.63	-13.00	-26.63	V
2509.11	-44.56	10.60	8.39	-42.35	-13.00	-29.35	V
3345.83	-43.09	12.00	11.79	-42.88	-13.00	-29.88	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.24	-40.40	9.40	4.75	-35.75	-13.00	-22.75	H
2539.96	-40.30	10.60	8.39	-38.09	-13.00	-25.09	H
3386.21	-31.68	12.00	11.79	-31.47	-13.00	-18.47	H
1693.24	-44.19	9.40	4.75	-39.54	-13.00	-26.54	V
2539.96	-45.15	10.60	8.39	-42.94	-13.00	-29.94	V
3386.21	-43.64	12.00	11.79	-43.43	-13.00	-30.43	V

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3701.46	-34.07	12.60	12.93	-34.40	-13.00	-21.40	H
5552.07	-34.90	13.10	17.11	-38.91	-13.00	-25.91	H
7402.49	-32.77	11.50	22.20	-43.47	-13.00	-30.47	H
3701.46	-35.07	12.60	12.93	-35.40	-13.00	-22.40	V
5552.07	-33.86	13.10	17.11	-37.87	-13.00	-24.87	V
7402.49	-32.16	11.50	22.20	-42.86	-13.00	-29.86	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.14	-34.01	12.60	12.93	-34.34	-13.00	-21.34	H
5640.14	-34.65	13.10	17.11	-38.66	-13.00	-25.66	H
7520.04	-33.47	11.50	22.20	-44.17	-13.00	-31.17	H
3760.14	-35.63	12.60	12.93	-35.96	-13.00	-22.96	V
5640.14	-35.04	13.10	17.11	-39.05	-13.00	-26.05	V
7520.04	-33.09	11.50	22.20	-43.79	-13.00	-30.79	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3818.57	-34.23	12.60	12.93	-34.56	-13.00	-21.56	H
5727.91	-34.80	13.10	17.11	-38.81	-13.00	-25.81	H
7636.82	-32.64	11.50	22.20	-43.34	-13.00	-30.34	H
3818.57	-35.43	12.60	12.93	-35.76	-13.00	-22.76	V
5727.91	-34.75	13.10	17.11	-38.76	-13.00	-25.76	V
7636.82	-33.20	11.50	22.20	-43.90	-13.00	-30.90	V

LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3703.10	-33.65	12.60	12.93	-33.98	-13.00	-20.98	H
5554.24	-34.47	13.10	17.11	-38.48	-13.00	-25.48	H
7405.77	-33.30	11.50	22.20	-44.00	-13.00	-31.00	H
3703.10	-35.28	12.60	12.93	-35.61	-13.00	-22.61	V
5554.24	-34.07	13.10	17.11	-38.08	-13.00	-25.08	V
7405.77	-32.11	11.50	22.20	-42.81	-13.00	-29.81	V
LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.03	-33.77	12.60	12.93	-34.10	-13.00	-21.10	H
5640.17	-35.49	13.10	17.11	-39.50	-13.00	-26.50	H
7520.01	-33.48	11.50	22.20	-44.18	-13.00	-31.18	H
3760.03	-34.80	12.60	12.93	-35.13	-13.00	-22.13	V
5640.17	-34.22	13.10	17.11	-38.23	-13.00	-25.23	V
7520.01	-32.94	11.50	22.20	-43.64	-13.00	-30.64	V
LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3816.93	-34.65	12.60	12.93	-34.98	-13.00	-21.98	H
5725.48	-34.84	13.10	17.11	-38.85	-13.00	-25.85	H
7634.13	-33.54	11.50	22.20	-44.24	-13.00	-31.24	H
3816.93	-35.93	12.60	12.93	-36.26	-13.00	-23.26	V
5725.48	-34.01	13.10	17.11	-38.02	-13.00	-25.02	V
7634.13	-31.86	11.50	22.20	-42.56	-13.00	-29.56	V

LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3705.25	-34.12	12.60	12.93	-34.45	-13.00	-21.45	H
5557.19	-35.20	13.10	17.11	-39.21	-13.00	-26.21	H
7409.79	-32.42	11.50	22.20	-43.12	-13.00	-30.12	H
3705.25	-35.38	12.60	12.93	-35.71	-13.00	-22.71	V
5557.19	-34.30	13.10	17.11	-38.31	-13.00	-25.31	V
7409.79	-32.98	11.50	22.20	-43.68	-13.00	-30.68	V
LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.05	-33.85	12.60	12.93	-34.18	-13.00	-21.18	H
5640.27	-34.87	13.10	17.11	-38.88	-13.00	-25.88	H
7519.82	-33.13	11.50	22.20	-43.83	-13.00	-30.83	H
3760.05	-35.34	12.60	12.93	-35.67	-13.00	-22.67	V
5640.27	-34.64	13.10	17.11	-38.65	-13.00	-25.65	V
7519.82	-32.72	11.50	22.20	-43.42	-13.00	-30.42	V
LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.29	-34.70	12.60	12.93	-35.03	-13.00	-22.03	H
5722.13	-34.04	13.10	17.11	-38.05	-13.00	-25.05	H
7630.02	-32.49	11.50	22.20	-43.19	-13.00	-30.19	H
3815.29	-35.60	12.60	12.93	-35.93	-13.00	-22.93	V
5722.13	-34.73	13.10	17.11	-38.74	-13.00	-25.74	V
7630.02	-32.62	11.50	22.20	-43.32	-13.00	-30.32	V

LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3710.20	-34.71	12.60	12.93	-35.04	-13.00	-22.04	H
5565.36	-35.36	13.10	17.11	-39.37	-13.00	-26.37	H
7420.09	-32.83	11.50	22.20	-43.53	-13.00	-30.53	H
3710.20	-34.87	12.60	12.93	-35.20	-13.00	-22.20	V
5565.36	-34.46	13.10	17.11	-38.47	-13.00	-25.47	V
7420.09	-32.47	11.50	22.20	-43.17	-13.00	-30.17	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.18	-34.32	12.60	12.93	-34.65	-13.00	-21.65	H
5639.88	-34.93	13.10	17.11	-38.94	-13.00	-25.94	H
7520.01	-32.97	11.50	22.20	-43.67	-13.00	-30.67	H
3760.18	-35.96	12.60	12.93	-36.29	-13.00	-23.29	V
5639.88	-33.83	13.10	17.11	-37.84	-13.00	-24.84	V
7520.01	-33.20	11.50	22.20	-43.90	-13.00	-30.90	V
LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3810.42	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5714.81	-34.06	13.10	17.11	-38.07	-13.00	-25.07	H
7619.90	-32.49	11.50	22.20	-43.19	-13.00	-30.19	H
3810.42	-35.22	12.60	12.93	-35.55	-13.00	-22.55	V
5714.81	-34.75	13.10	17.11	-38.76	-13.00	-25.76	V
7619.90	-32.64	11.50	22.20	-43.34	-13.00	-30.34	V

LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3715.26	-34.84	12.60	12.93	-35.17	-13.00	-22.17	H
5572.38	-34.50	13.10	17.11	-38.51	-13.00	-25.51	H
7430.83	-32.41	11.50	22.20	-43.11	-13.00	-30.11	H
3715.26	-35.04	12.60	12.93	-35.37	-13.00	-22.37	V
5572.38	-34.34	13.10	17.11	-38.35	-13.00	-25.35	V
7430.83	-32.23	11.50	22.20	-42.93	-13.00	-29.93	V
LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3759.78	-34.60	12.60	12.93	-34.93	-13.00	-21.93	H
5639.88	-35.40	13.10	17.11	-39.41	-13.00	-26.41	H
7519.83	-32.69	11.50	22.20	-43.39	-13.00	-30.39	H
3759.78	-35.58	12.60	12.93	-35.91	-13.00	-22.91	V
5639.88	-34.66	13.10	17.11	-38.67	-13.00	-25.67	V
7519.83	-33.04	11.50	22.20	-43.74	-13.00	-30.74	V
LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3805.20	-34.09	12.60	12.93	-34.42	-13.00	-21.42	H
5707.55	-34.08	13.10	17.11	-38.09	-13.00	-25.09	H
7609.99	-33.62	11.50	22.20	-44.32	-13.00	-31.32	H
3805.20	-35.94	12.60	12.93	-36.27	-13.00	-23.27	V
5707.55	-34.15	13.10	17.11	-38.16	-13.00	-25.16	V
7609.99	-32.15	11.50	22.20	-42.85	-13.00	-29.85	V

LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3720.41	-34.43	12.60	12.93	-34.76	-13.00	-21.76	H
5580.33	-35.04	13.10	17.11	-39.05	-13.00	-26.05	H
7439.75	-32.48	11.50	22.20	-43.18	-13.00	-30.18	H
3720.41	-35.35	12.60	12.93	-35.68	-13.00	-22.68	V
5580.33	-34.30	13.10	17.11	-38.31	-13.00	-25.31	V
7439.75	-32.25	11.50	22.20	-42.95	-13.00	-29.95	V
LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3759.99	-33.68	12.60	12.93	-34.01	-13.00	-21.01	H
5640.06	-34.01	13.10	17.11	-38.02	-13.00	-25.02	H
7520.16	-32.48	11.50	22.20	-43.18	-13.00	-30.18	H
3759.99	-35.76	12.60	12.93	-36.09	-13.00	-23.09	V
5640.06	-33.95	13.10	17.11	-37.96	-13.00	-24.96	V
7520.16	-32.84	11.50	22.20	-43.54	-13.00	-30.54	V
LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3800.13	-34.76	12.60	12.93	-35.09	-13.00	-22.09	H
5700.03	-34.84	13.10	17.11	-38.85	-13.00	-25.85	H
7599.74	-32.26	11.50	22.20	-42.96	-13.00	-29.96	H
3800.13	-35.33	12.60	12.93	-35.66	-13.00	-22.66	V
5700.03	-34.06	13.10	17.11	-38.07	-13.00	-25.07	V
7599.74	-31.84	11.50	22.20	-42.54	-13.00	-29.54	V

LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3421.08	-34.63	12.90	12.56	-34.29	-13.00	-21.29	H
5132.14	-34.66	13.10	16.32	-37.88	-13.00	-24.88	H
6842.45	-32.82	12.33	21.13	-41.62	-13.00	-28.62	H
3421.08	-36.00	12.90	12.56	-35.66	-13.00	-22.66	V
5132.14	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
6842.45	-32.36	12.33	21.13	-41.16	-13.00	-28.16	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.68	-33.81	12.90	12.56	-33.47	-13.00	-20.47	H
5196.62	-34.22	13.10	16.32	-37.44	-13.00	-24.44	H
6930.13	-32.87	12.33	21.13	-41.67	-13.00	-28.67	H
3464.68	-34.59	12.90	12.56	-34.25	-13.00	-21.25	V
5196.62	-34.40	13.10	16.32	-37.62	-13.00	-24.62	V
6930.13	-32.48	12.33	21.13	-41.28	-13.00	-28.28	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3508.41	-34.54	12.90	12.56	-34.20	-13.00	-21.20	H
5262.13	-35.13	13.10	16.32	-38.35	-13.00	-25.35	H
7015.75	-33.36	12.33	21.13	-42.16	-13.00	-29.16	H
3508.41	-35.31	12.90	12.56	-34.97	-13.00	-21.97	V
5262.13	-34.39	13.10	16.32	-37.61	-13.00	-24.61	V
7015.75	-32.84	12.33	21.13	-41.64	-13.00	-28.64	V

LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3423.72	-34.78	12.90	12.56	-34.44	-13.00	-21.44	H
5136.11	-34.10	13.10	16.32	-37.32	-13.00	-24.32	H
6848.74	-33.20	12.33	21.13	-42.00	-13.00	-29.00	H
3423.72	-34.95	12.90	12.56	-34.61	-13.00	-21.61	V
5136.11	-35.23	13.10	16.32	-38.45	-13.00	-25.45	V
6848.74	-32.70	12.33	21.13	-41.50	-13.00	-28.50	V
LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.53	-34.55	12.90	12.56	-34.21	-13.00	-21.21	H
5196.73	-35.47	13.10	16.32	-38.69	-13.00	-25.69	H
6929.95	-32.33	12.33	21.13	-41.13	-13.00	-28.13	H
3464.53	-35.85	12.90	12.56	-35.51	-13.00	-22.51	V
5196.73	-34.52	13.10	16.32	-37.74	-13.00	-24.74	V
6929.95	-33.03	12.33	21.13	-41.83	-13.00	-28.83	V
LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3506.27	-34.41	12.90	12.56	-34.07	-13.00	-21.07	H
5261.55	-35.40	13.10	16.32	-38.62	-13.00	-25.62	H
7012.75	-32.97	12.33	21.13	-41.77	-13.00	-28.77	H
3506.27	-35.35	12.90	12.56	-35.01	-13.00	-22.01	V
5261.55	-33.78	13.10	16.32	-37.00	-13.00	-24.00	V
7012.75	-31.72	12.33	21.13	-40.52	-13.00	-27.52	V

LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3424.60	-34.23	12.90	12.56	-33.89	-13.00	-20.89	H
5136.86	-35.29	13.10	16.32	-38.51	-13.00	-25.51	H
6849.90	-32.80	12.33	21.13	-41.60	-13.00	-28.60	H
3424.60	-35.85	12.90	12.56	-35.51	-13.00	-22.51	V
5136.86	-33.92	13.10	16.32	-37.14	-13.00	-24.14	V
6849.90	-32.84	12.33	21.13	-41.64	-13.00	-28.64	V
LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.37	-34.89	12.90	12.56	-34.55	-13.00	-21.55	H
5196.74	-34.83	13.10	16.32	-38.05	-13.00	-25.05	H
6929.86	-32.44	12.33	21.13	-41.24	-13.00	-28.24	H
3464.37	-34.53	12.90	12.56	-34.19	-13.00	-21.19	V
5196.74	-33.75	13.10	16.32	-36.97	-13.00	-23.97	V
6929.86	-31.99	12.33	21.13	-40.79	-13.00	-27.79	V
LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3505.29	-34.84	12.90	12.56	-34.50	-13.00	-21.50	H
5256.76	-34.19	13.10	16.32	-37.41	-13.00	-24.41	H
7010.17	-33.10	12.33	21.13	-41.90	-13.00	-28.90	H
3505.29	-35.47	12.90	12.56	-35.13	-13.00	-22.13	V
5256.76	-34.07	13.10	16.32	-37.29	-13.00	-24.29	V
7010.17	-32.70	12.33	21.13	-41.50	-13.00	-28.50	V

Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3429.94	-34.14	12.90	12.56	-33.80	-13.00	-20.80	H
5145.08	-34.22	13.10	16.32	-37.44	-13.00	-24.44	H
6860.29	-32.49	12.33	21.13	-41.29	-13.00	-28.29	H
3429.94	-35.94	12.90	12.56	-35.60	-13.00	-22.60	V
5145.08	-34.49	13.10	16.32	-37.71	-13.00	-24.71	V
6860.29	-33.16	12.33	21.13	-41.96	-13.00	-28.96	V
LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.65	-34.26	12.90	12.56	-33.92	-13.00	-20.92	H
5196.59	-34.01	13.10	16.32	-37.23	-13.00	-24.23	H
6929.38	-32.33	12.33	21.13	-41.13	-13.00	-28.13	H
3464.65	-34.59	12.90	12.56	-34.25	-13.00	-21.25	V
5196.59	-34.64	13.10	16.32	-37.86	-13.00	-24.86	V
6929.38	-31.89	12.33	21.13	-40.69	-13.00	-27.69	V
LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3500.47	-33.89	12.90	12.56	-33.55	-13.00	-20.55	H
5250.08	-35.08	13.10	16.32	-38.30	-13.00	-25.30	H
6999.81	-32.21	12.33	21.13	-41.01	-13.00	-28.01	H
3500.47	-34.60	12.90	12.56	-34.26	-13.00	-21.26	V
5250.08	-34.37	13.10	16.32	-37.59	-13.00	-24.59	V
6999.81	-32.39	12.33	21.13	-41.19	-13.00	-28.19	V

LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3434.68	-34.83	12.90	12.56	-34.49	-13.00	-21.49	H
5152.62	-34.28	13.10	16.32	-37.50	-13.00	-24.50	H
6870.41	-33.04	12.33	21.13	-41.84	-13.00	-28.84	H
3434.68	-35.37	12.90	12.56	-35.03	-13.00	-22.03	V
5152.62	-33.98	13.10	16.32	-37.20	-13.00	-24.20	V
6870.41	-32.79	12.33	21.13	-41.59	-13.00	-28.59	V
LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3465.10	-33.55	12.90	12.56	-33.21	-13.00	-20.21	H
5196.66	-34.83	13.10	16.32	-38.05	-13.00	-25.05	H
6930.13	-32.31	12.33	21.13	-41.11	-13.00	-28.11	H
3465.10	-35.59	12.90	12.56	-35.25	-13.00	-22.25	V
5196.66	-34.65	13.10	16.32	-37.87	-13.00	-24.87	V
6930.13	-31.99	12.33	21.13	-40.79	-13.00	-27.79	V
LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3495.19	-34.13	12.90	12.56	-33.79	-13.00	-20.79	H
5242.10	-34.27	13.10	16.32	-37.49	-13.00	-24.49	H
6989.88	-33.15	12.33	21.13	-41.95	-13.00	-28.95	H
3495.19	-34.84	12.90	12.56	-34.50	-13.00	-21.50	V
5242.10	-33.79	13.10	16.32	-37.01	-13.00	-24.01	V
6989.88	-32.43	12.33	21.13	-41.23	-13.00	-28.23	V

LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3439.92	-33.86	12.90	12.56	-33.52	-13.00	-20.52	H
5160.33	-34.64	13.10	16.32	-37.86	-13.00	-24.86	H
6880.79	-32.98	12.33	21.13	-41.78	-13.00	-28.78	H
3439.92	-35.00	12.90	12.56	-34.66	-13.00	-21.66	V
5160.33	-33.81	13.10	16.32	-37.03	-13.00	-24.03	V
6880.79	-32.12	12.33	21.13	-40.92	-13.00	-27.92	V
LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3464.96	-33.78	12.90	12.56	-33.44	-13.00	-20.44	H
5196.64	-34.81	13.10	16.32	-38.03	-13.00	-25.03	H
6929.94	-32.17	12.33	21.13	-40.97	-13.00	-27.97	H
3464.96	-35.14	12.90	12.56	-34.80	-13.00	-21.80	V
5196.64	-34.37	13.10	16.32	-37.59	-13.00	-24.59	V
6929.94	-32.08	12.33	21.13	-40.88	-13.00	-27.88	V
LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3490.36	-33.64	12.90	12.56	-33.30	-13.00	-20.30	H
5235.18	-34.60	13.10	16.32	-37.82	-13.00	-24.82	H
6979.47	-33.64	12.33	21.13	-42.44	-13.00	-29.44	H
3490.36	-35.92	12.90	12.56	-35.58	-13.00	-22.58	V
5235.18	-34.45	13.10	16.32	-37.67	-13.00	-24.67	V
6979.47	-32.25	12.33	21.13	-41.05	-13.00	-28.05	V

LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1399.03	-34.88	8.17	9.34	-36.05	-13.00	-23.05	H
2098.92	-34.97	9.53	10.42	-35.86	-13.00	-22.86	H
2798.34	-32.20	11.27	11.12	-32.05	-13.00	-19.05	H
1399.03	-35.67	8.17	9.34	-36.84	-13.00	-23.84	V
2098.92	-34.74	9.53	10.42	-35.63	-13.00	-22.63	V
2798.34	-32.36	11.27	11.12	-32.21	-13.00	-19.21	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.99	-34.70	8.17	9.34	-35.87	-13.00	-22.87	H
2122.19	-35.04	9.53	10.42	-35.93	-13.00	-22.93	H
2829.62	-33.26	11.27	11.12	-33.11	-13.00	-20.11	H
1414.99	-34.92	8.17	9.34	-36.09	-13.00	-23.09	V
2122.19	-35.03	9.53	10.42	-35.92	-13.00	-22.92	V
2829.62	-32.75	11.27	11.12	-32.60	-13.00	-19.60	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1430.44	-33.79	8.17	9.34	-34.96	-13.00	-21.96	H
2145.81	-34.02	9.53	10.42	-34.91	-13.00	-21.91	H
2861.16	-33.29	11.27	11.12	-33.14	-13.00	-20.14	H
1430.44	-35.78	8.17	9.34	-36.95	-13.00	-23.95	V
2145.81	-34.34	9.53	10.42	-35.23	-13.00	-22.23	V
2861.16	-32.79	11.27	11.12	-32.64	-13.00	-19.64	V

LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1400.91	-34.30	8.17	9.34	-35.47	-13.00	-22.47	H
2101.35	-34.84	9.53	10.42	-35.73	-13.00	-22.73	H
2801.92	-32.57	11.27	11.12	-32.42	-13.00	-19.42	H
1400.91	-34.65	8.17	9.34	-35.82	-13.00	-22.82	V
2101.35	-35.19	9.53	10.42	-36.08	-13.00	-23.08	V
2801.92	-32.41	11.27	11.12	-32.26	-13.00	-19.26	V
LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.83	-34.15	8.17	9.34	-35.32	-13.00	-22.32	H
2122.20	-35.12	9.53	10.42	-36.01	-13.00	-23.01	H
2829.59	-33.35	11.27	11.12	-33.20	-13.00	-20.20	H
1414.83	-35.67	8.17	9.34	-36.84	-13.00	-23.84	V
2122.20	-34.17	9.53	10.42	-35.06	-13.00	-22.06	V
2829.59	-33.19	11.27	11.12	-33.04	-13.00	-20.04	V
LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1428.52	-33.59	8.17	9.34	-34.76	-13.00	-21.76	H
2143.39	-35.27	9.53	10.42	-36.16	-13.00	-23.16	H
2857.84	-33.06	11.27	11.12	-32.91	-13.00	-19.91	H
1428.52	-35.16	8.17	9.34	-36.33	-13.00	-23.33	V
2143.39	-35.08	9.53	10.42	-35.97	-13.00	-22.97	V
2857.84	-32.59	11.27	11.12	-32.44	-13.00	-19.44	V

LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1402.67	-34.13	8.17	9.34	-35.30	-13.00	-22.30	H
2104.35	-34.99	9.53	10.42	-35.88	-13.00	-22.88	H
2805.62	-32.46	11.27	11.12	-32.31	-13.00	-19.31	H
1402.67	-35.76	8.17	9.34	-36.93	-13.00	-23.93	V
2104.35	-33.98	9.53	10.42	-34.87	-13.00	-21.87	V
2805.62	-33.07	11.27	11.12	-32.92	-13.00	-19.92	V
LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.80	-34.39	8.17	9.34	-35.56	-13.00	-22.56	H
2122.10	-35.05	9.53	10.42	-35.94	-13.00	-22.94	H
2829.89	-32.53	11.27	11.12	-32.38	-13.00	-19.38	H
1414.80	-35.36	8.17	9.34	-36.53	-13.00	-23.53	V
2122.10	-34.84	9.53	10.42	-35.73	-13.00	-22.73	V
2829.89	-32.95	11.27	11.12	-32.80	-13.00	-19.80	V
LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1426.76	-33.59	8.17	9.34	-34.76	-13.00	-21.76	H
2140.30	-34.80	9.53	10.42	-35.69	-13.00	-22.69	H
2853.85	-32.64	11.27	11.12	-32.49	-13.00	-19.49	H
1426.76	-34.56	8.17	9.34	-35.73	-13.00	-22.73	V
2140.30	-34.43	9.53	10.42	-35.32	-13.00	-22.32	V
2853.85	-32.00	11.27	11.12	-31.85	-13.00	-18.85	V

LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1407.89	-34.24	8.17	9.34	-35.41	-13.00	-22.41	H
2111.82	-34.82	9.53	10.42	-35.71	-13.00	-22.71	H
2815.51	-33.54	11.27	11.12	-33.39	-13.00	-20.39	H
1407.89	-35.02	8.17	9.34	-36.19	-13.00	-23.19	V
2111.82	-34.66	9.53	10.42	-35.55	-13.00	-22.55	V
2815.51	-32.43	11.27	11.12	-32.28	-13.00	-19.28	V
LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1414.66	-34.82	8.17	9.34	-35.99	-13.00	-22.99	H
2122.43	-34.51	9.53	10.42	-35.40	-13.00	-22.40	H
2829.59	-32.56	11.27	11.12	-32.41	-13.00	-19.41	H
1414.66	-36.00	8.17	9.34	-37.17	-13.00	-24.17	V
2122.43	-34.96	9.53	10.42	-35.85	-13.00	-22.85	V
2829.59	-32.43	11.27	11.12	-32.28	-13.00	-19.28	V
LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1421.91	-34.58	8.17	9.34	-35.75	-13.00	-22.75	H
2132.77	-35.05	9.53	10.42	-35.94	-13.00	-22.94	H
2843.70	-32.52	11.27	11.12	-32.37	-13.00	-19.37	H
1421.91	-34.81	8.17	9.34	-35.98	-13.00	-22.98	V
2132.77	-34.64	9.53	10.42	-35.53	-13.00	-22.53	V
2843.70	-32.38	11.27	11.12	-32.23	-13.00	-19.23	V

APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

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