Radio Test Report

Report No.: CTA231114011W03

Issued for

Buddi Limited

Talbot House 17 Church Street Rickmansworth, WD3 1DE
United Kingdom

Product Name:	Smart ID
Brand Name:	Buddi Limited
Model Name:	S10-BUD-A-TEEU-SID
Series Model(s):	7630001
FCC ID:	ZDLST9
Test Standards:	47 CFR Part 2, 22, 24, 27, 90

TEST REPORT

Applicant's Name ..... :	Buddi Limited
Address ..... :	Talbot House 17 Church Street Rickmansworth, WD3 1DE United Kingdom
Manufacturer's Name ..... :	Buddi Limited
Address ..... :	Talbot House 17 Church Street Rickmansworth, WD3 1DE United Kingdom

Product Description

Product Name ..... :	Smart ID
Brand Name ..... :	Buddi Limited
Model Name ..... :	S10-BUD-A-TEEU-SID
Series Model(s) ..... :	7630001
Test Standards ..... :	47 CFR Part 2, 22, 24, 27, 90
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 ..... :	20 Oct. 2023
Date (s) of performance of tests :	20 Oct. 2023 ~06 Nov. 2023
Date of Issue ..... :	06 Nov. 2023
Test Result ..... :	Pass

Testing Engineer : Zoey Cao

(Zoey Cao)

Technical Manager : Amy Wen

(Amy Wen)

Authorized Signatory : Eric Wang

(Eric Wang)

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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	06 Nov. 2023	CTA231114011W04	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	22.913	B5	ERP < 7 Watt	PASS
	24.232(c)	B2	EIRP < 2Watt	
	27.50(c)	B12	ERP < 3 Watt	
Peak-to-Average Ratio	22.913(d)	B5	< 13 dB	PASS
	24.232(d)	B2		
	27.50	B12		
Occupied Bandwidth	2.1049	/	Reporting Only	PASS
Frequency Stability	2.1055	/	< 2.5 ppm	PASS
	22.355	B5		
	24.235	B2		
	27.54	B12		
Spurious Emission at Antenna Terminals	2.1051	/	< 43+10log10(P[Watts])	PASS
	22.917	B5		
	24.238(a)	B2		
	27.53(g)	B12		
Band Edge	2.1051	/	Please refer to standard	PASS
	22.917	B5		
	24.238(a)	B2		
	27.53(g)	B12		
Field Strength of Spurious Radiation	2.1053	/	< 43+10log10(P[Watts])	PASS
	22.917	B5		
	24.238(a)	B2		
	27.53(g)	B12		

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 ofANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 toindicate a 95% level of confidence. The measurement data shown herein meets or exceeds the UCISPRmeasurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly tospecified 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	Smart ID
Brand Name	Buddi Limited
Model Name	S10-BUD-A-TEEU-SID
Series Model(s)	7630001
Model Difference	The difference only in the model name.
Tx Frequency:	GPRS/EDGE: 850: 824 MHz ~ 849MHz 1900: 1850 MHz ~ 1910MHz WCDMA: Band V: 824 MHz ~ 849 MHz Band II: 1850 MHz ~ 1910 MHz LTE Band 2:1850~1910MHz LTE Band 5:824~849MHz LTE Band 12:699~716MHz
Rx Frequency:	GPRS/EDGE: 850: 869 MHz ~ 894 MHz 1900: 1930 MHz ~ 1990MHz WCDMA: Band V: 869 MHz~ 894 MHz Band II: 1930 MHz ~ 1990 MHz LTE Band 2:1930 ~1990MHz LTE Band 5:869~894MHz LTE Band 12:729~746MHz
Max RF Output Power:	GSM850:28.89dBm, PCS1900:28.29dBm WCDMA Band V:22.57dBm, WCDMA Band II:21.93dBm LTE Band 2:22.64 dBm LTE Band 5:22.90 dBm LTE Band 12: 22.40dBm
Modulation Characteristics:	GMSK for GPRS; GMSK and 8PSK for EDGE WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK LTE: QPSK /16QAM
SIM Card:	Only support single SIM Card.
Antenna:	SMD
Antenna gain:	GSM850:1dBi,PCS1900: 2.5dBi WCDMA-B2: 2.5dBi,WCDNA-B5: 1dBi LTE-B2:2.5dBi, LTE-B5:1dBi, LTE-B12:0.5dBi
Battery parameter:	Rated Voltage: 3.7V Charge Limit Voltage: 4.2V Capacity: 2650mAh
Adapter:	Smart ID Dock (without battery) : Input: DC 5V, 1.2A Output: DC 5V, 1.2A Charging head: Input: 100-240V~, 50/60Hz, 0.3A Output: DC 5V 1.2A
GPRS/EDGE Class:	Multi-Class12
Extreme Vol. Limits:	DC 3.5V~ DC 4.2V(Normal: DC 4V)
Extreme Temp. Tolerance:	-30℃ to +50℃
Hardware version number:	V14.0

Software version number:	1.41.2
*** Note: The High Voltage 4.2V and Low Voltage 3.5V 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.*	

2.1 EMISSION DESIGNATOR

Mode	Emission Designator (99%OBW)
GPRS850	246KGXW
EGPRS850	250KG7W
GPRS1900	248KGXW
EGPRS1900	247KG7W

Mode	Emission Designator (99%OBW)
WCDMA 850	4M16F9W
WCDMA 1900	4M14F9W

LTE Band 2	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	2M72G7D	2M71W7D
5	4M53G7D	4M53W7D
10	9M00G7D	N/A
15	13M5G7D	N/A
20	18M0G7D	N/A
LTE Band 5	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	2M71G7D	2M70W7D
5	4M52G7D	4M52W7D
10	9M00G7D	N/A
LTE Band 12	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	2M71G7D	2M70W7D
5	4M51G7D	4M53W7D
10	9M04G7D	N/A

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	
BAND	RADIATED TCS	CONDUCTED TCS
GSM 850	GSM LINK GPRS/EDGE CLASS 12 LINK	GSM LINK GPRS/EDGE CLASS 12 LINK
GSM 1900	GSM LINK GPRS/EDGE CLASS 12 LINK	GSM LINK GPRS/EDGE CLASS 12 LINK
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
	5	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
	5	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
	5	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
	5	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
	5	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	
	5				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
	5	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
	5	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 COMMUNICATIO N 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) ERP or EIRP = PMeas + GT
ERP= EIRP-2.15
where
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as PMeas, e.g., dBm or dBW)
PMeas 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) ERP = EIRP − 2.15, where ERP and EIRP are expressed in consistent units.
b) EIRP = ERP + 2.15, where ERP and EIRP are expressed in consistent units.

TEST PROCEDURES

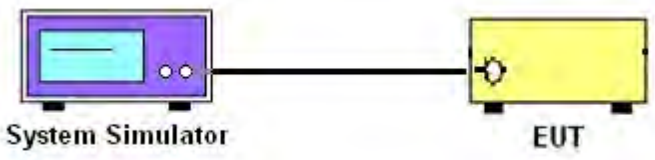
1. The transmitter output port was connected to the system simulator.

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

GSM 850							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain（dBi）	ERP (dBm)	ERP Limit (W)	ERP Limit (dBm)	Conclusion
GPRS (GMSK,1-Slot)	824.2	31.68	1.00	30.53	7.00	38.45	PASS
	836.6	32.26	1.00	31.11	7.00	38.45	PASS
	848.8	32.54	1.00	31.39	7.00	38.45	PASS
GPRS (GMSK,2-Slot)	824.2	31.39	1.00	30.24	7.00	38.45	PASS
	836.6	32.00	1.00	30.85	7.00	38.45	PASS
	848.8	32.28	1.00	31.13	7.00	38.45	PASS
GPRS (GMSK,3-Slot)	824.2	30.75	1.00	29.60	7.00	38.45	PASS
	836.6	31.33	1.00	30.18	7.00	38.45	PASS
	848.8	31.73	1.00	30.58	7.00	38.45	PASS
GPRS (GMSK,4-Slot)	824.2	28.58	1.00	27.43	7.00	38.45	PASS
	836.6	29.23	1.00	28.08	7.00	38.45	PASS
	848.8	29.68	1.00	28.53	7.00	38.45	PASS
EGPRS (8PSK,1-Slot)	824.2	31.36	1.00	30.21	7.00	38.45	PASS
	836.6	31.94	1.00	30.79	7.00	38.45	PASS
	848.8	32.16	1.00	31.01	7.00	38.45	PASS
EGPRS (8PSK,2-Slot)	824.2	31.10	1.00	29.95	7.00	38.45	PASS
	836.6	31.67	1.00	30.52	7.00	38.45	PASS
	848.8	31.89	1.00	30.74	7.00	38.45	PASS
EGPRS (8PSK,3-Slot)	824.2	30.34	1.00	29.19	7.00	38.45	PASS
	836.6	30.93	1.00	29.78	7.00	38.45	PASS
	848.8	31.27	1.00	30.12	7.00	38.45	PASS
EGPRS (8PSK,4-Slot)	824.2	28.22	1.00	27.07	7.00	38.45	PASS
	836.6	28.94	1.00	27.79	7.00	38.45	PASS
	848.8	29.32	1.00	28.17	7.00	38.45	PASS

PCS 1900							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain（dBi）	EIRP (dBm)	EIRP Limit (W)	EIRP Limit (dBm)	Conclusion
GPRS (GMSK,1-Slot)	1850.2	29.55	2.50	32.05	2.00	33.01	PASS
	1880.0	29.64	2.50	32.14	2.00	33.01	PASS
	1909.8	29.79	2.50	32.29	2.00	33.01	PASS
GPRS (GMSK,2-Slot)	1850.2	29.43	2.50	31.93	2.00	33.01	PASS
	1880.0	29.53	2.50	32.03	2.00	33.01	PASS
	1909.8	29.63	2.50	32.13	2.00	33.01	PASS
GPRS (GMSK,3-Slot)	1850.2	29.19	2.50	31.69	2.00	33.01	PASS
	1880.0	29.32	2.50	31.82	2.00	33.01	PASS
	1909.8	29.20	2.50	31.70	2.00	33.01	PASS
GPRS (GMSK,4-Slot)	1850.2	28.24	2.50	30.74	2.00	33.01	PASS
	1880.0	28.38	2.50	30.88	2.00	33.01	PASS
	1909.8	28.30	2.50	30.80	2.00	33.01	PASS
EGPRS (8PSK,1-Slot)	1850.2	29.66	2.50	32.16	2.00	33.01	PASS
	1880.0	29.65	2.50	32.15	2.00	33.01	PASS
	1909.8	29.73	2.50	32.23	2.00	33.01	PASS
EGPRS (8PSK,2-Slot)	1850.2	29.60	2.50	32.10	2.00	33.01	PASS
	1880.0	29.70	2.50	32.20	2.00	33.01	PASS
	1909.8	29.63	2.50	32.13	2.00	33.01	PASS
EGPRS (8PSK,3-Slot)	1850.2	29.13	2.50	31.63	2.00	33.01	PASS
	1880.0	29.27	2.50	31.77	2.00	33.01	PASS
	1909.8	29.11	2.50	31.61	2.00	33.01	PASS
EGPRS (8PSK,4-Slot)	1850.2	28.14	2.50	30.64	2.00	33.01	PASS
	1880.0	28.35	2.50	30.85	2.00	33.01	PASS
	1909.8	28.28	2.50	30.78	2.00	33.01	PASS

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	21.83	1.00	24.33	2.00	33.01	PASS
	1880.00	21.93	1.00	24.43	2.00	33.01	PASS
	1907.60	21.73	1.00	24.23	2.00	33.01	PASS
HSDPA Subtest 1	1852.40	20.86	1.00	23.36	2.00	33.01	PASS
	1880.00	20.63	1.00	23.13	2.00	33.01	PASS
	1907.60	19.89	1.00	22.39	2.00	33.01	PASS
HSDPA Subtest 2	1852.40	19.52	1.00	22.02	2.00	33.01	PASS
	1880.00	20.62	1.00	23.12	2.00	33.01	PASS
	1907.60	20.76	1.00	23.26	2.00	33.01	PASS
HSDPA Subtest 3	1852.40	19.73	1.00	22.23	2.00	33.01	PASS
	1880.00	19.74	1.00	22.24	2.00	33.01	PASS
	1907.60	20.73	1.00	23.23	2.00	33.01	PASS
HSDPA Subtest 4	1852.40	20.61	1.00	23.11	2.00	33.01	PASS
	1880.00	19.82	1.00	22.32	2.00	33.01	PASS
	1907.60	19.21	1.00	21.71	2.00	33.01	PASS
HSUPA Subtest 1	1852.40	20.21	1.00	22.71	2.00	33.01	PASS
	1880.00	20.55	1.00	23.05	2.00	33.01	PASS
	1907.60	20.29	1.00	22.79	2.00	33.01	PASS
HSUPA Subtest 2	1852.40	20.84	1.00	23.34	2.00	33.01	PASS
	1880.00	20.10	1.00	22.60	2.00	33.01	PASS
	1907.60	20.02	1.00	22.52	2.00	33.01	PASS
HSUPA Subtest 3	1852.40	20.60	1.00	23.10	2.00	33.01	PASS
	1880.00	20.10	1.00	22.60	2.00	33.01	PASS
	1907.60	20.84	1.00	23.34	2.00	33.01	PASS
HSUPA Subtest 4	1852.40	19.86	1.00	22.36	2.00	33.01	PASS
	1880.00	19.87	1.00	22.37	2.00	33.01	PASS
	1907.60	20.44	1.00	22.94	2.00	33.01	PASS
HSUPA Subtest 5	1852.40	19.97	1.00	22.47	2.00	33.01	PASS
	1880.00	20.70	1.00	23.20	2.00	33.01	PASS
	1907.60	19.93	1.00	22.43	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	22.09	1.00	20.94	7.00	38.45	PASS
	836.40	22.57	1.00	21.42	7.00	38.45	PASS
	846.60	22.38	1.00	21.23	7.00	38.45	PASS
HSDPA Subtest 1	826.40	20.90	1.00	19.75	7.00	38.45	PASS
	836.40	20.71	1.00	19.56	7.00	38.45	PASS
	846.60	19.54	1.00	18.39	7.00	38.45	PASS
HSDPA Subtest 2	826.40	19.44	1.00	18.29	7.00	38.45	PASS
	836.40	21.26	1.00	20.11	7.00	38.45	PASS
	846.60	21.03	1.00	19.88	7.00	38.45	PASS
HSDPA Subtest 3	826.40	19.96	1.00	18.81	7.00	38.45	PASS
	836.40	20.05	1.00	18.90	7.00	38.45	PASS
	846.60	21.24	1.00	20.09	7.00	38.45	PASS
HSDPA Subtest 4	826.40	21.07	1.00	19.92	7.00	38.45	PASS
	836.40	20.15	1.00	19.00	7.00	38.45	PASS
	846.60	20.14	1.00	18.99	7.00	38.45	PASS
HSUPA Subtest 1	826.40	19.55	1.00	18.40	7.00	38.45	PASS
	836.40	20.58	1.00	19.43	7.00	38.45	PASS
	846.60	20.02	1.00	18.87	7.00	38.45	PASS
HSUPA Subtest 2	826.40	20.89	1.00	19.74	7.00	38.45	PASS
	836.40	20.24	1.00	19.09	7.00	38.45	PASS
	846.60	20.34	1.00	19.19	7.00	38.45	PASS
HSUPA Subtest 3	826.40	20.96	1.00	19.81	7.00	38.45	PASS
	836.40	20.41	1.00	19.26	7.00	38.45	PASS
	846.60	21.27	1.00	20.12	7.00	38.45	PASS
HSUPA Subtest 4	826.40	20.47	1.00	19.32	7.00	38.45	PASS
	836.40	20.44	1.00	19.29	7.00	38.45	PASS
	846.60	20.92	1.00	19.77	7.00	38.45	PASS
HSUPA Subtest 5	826.40	20.67	1.00	19.52	7.00	38.45	PASS
	836.40	21.28	1.00	20.13	7.00	38.45	PASS
	846.60	20.69	1.00	19.54	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	21.76	2.5	24.26	2.00	33.01	PASS
		1	2		21.90	2.5	24.40	2.00	33.01	PASS
		1	5		21.78	2.5	24.28	2.00	33.01	PASS
		3	0		22.14	2.5	24.64	2.00	33.01	PASS
		3	1		22.11	2.5	24.61	2.00	33.01	PASS
		3	2		21.96	2.5	24.46	2.00	33.01	PASS
		6	0		21.10	2.5	23.60	2.00	33.01	PASS
		1	0	16QAM	20.80	2.5	23.30	2.00	33.01	PASS
		1	2		20.97	2.5	23.47	2.00	33.01	PASS
		1	5		20.62	2.5	23.12	2.00	33.01	PASS
		3	0		20.90	2.5	23.40	2.00	33.01	PASS
		3	1		20.88	2.5	23.38	2.00	33.01	PASS
		3	2		20.81	2.5	23.31	2.00	33.01	PASS
		6	0		20.15	2.5	22.65	2.00	33.01	PASS
	Middle	1	0	QPSK	22.05	2.5	24.55	2.00	33.01	PASS
		1	2		22.09	2.5	24.59	2.00	33.01	PASS
		1	5		22.08	2.5	24.58	2.00	33.01	PASS
		3	0		22.08	2.5	24.58	2.00	33.01	PASS
		3	1		22.09	2.5	24.59	2.00	33.01	PASS
		3	2		22.02	2.5	24.52	2.00	33.01	PASS
		6	0		21.06	2.5	23.56	2.00	33.01	PASS
		1	0	16QAM	21.17	2.5	23.67	2.00	33.01	PASS
		1	2		21.25	2.5	23.75	2.00	33.01	PASS
		1	5		21.03	2.5	23.53	2.00	33.01	PASS
		3	0		20.92	2.5	23.42	2.00	33.01	PASS
		3	1		21.04	2.5	23.54	2.00	33.01	PASS
		3	2		21.00	2.5	23.50	2.00	33.01	PASS
		6	0		20.14	2.5	22.64	2.00	33.01	PASS
	Highest	1	0	QPSK	21.74	2.5	24.24	2.00	33.01	PASS
		1	2		21.80	2.5	24.30	2.00	33.01	PASS
		1	5		21.82	2.5	24.32	2.00	33.01	PASS
		3	0		21.92	2.5	24.42	2.00	33.01	PASS
		3	1		21.84	2.5	24.34	2.00	33.01	PASS
		3	2		21.59	2.5	24.09	2.00	33.01	PASS
		6	0		20.93	2.5	23.43	2.00	33.01	PASS
		1	0	16QAM	20.52	2.5	23.02	2.00	33.01	PASS
		1	2		20.51	2.5	23.01	2.00	33.01	PASS
		1	5		20.39	2.5	22.89	2.00	33.01	PASS
		3	0		20.88	2.5	23.38	2.00	33.01	PASS
		3	1		20.94	2.5	23.44	2.00	33.01	PASS
		3	2		20.95	2.5	23.45	2.00	33.01	PASS
		6	0		20.07	2.5	22.57	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	22.32	2.5	24.82	2.00	33.01	PASS
		1	7		22.07	2.5	24.57	2.00	33.01	PASS
		1	14		22.08	2.5	24.58	2.00	33.01	PASS
		8	0		21.25	2.5	23.75	2.00	33.01	PASS
		8	4		21.14	2.5	23.64	2.00	33.01	PASS
		8	7		21.06	2.5	23.56	2.00	33.01	PASS
		15	0		21.20	2.5	23.70	2.00	33.01	PASS
		1	0	16QAM	20.94	2.5	23.44	2.00	33.01	PASS
		1	7		20.78	2.5	23.28	2.00	33.01	PASS
		1	14		20.40	2.5	22.90	2.00	33.01	PASS
		8	0		20.07	2.5	22.57	2.00	33.01	PASS
		8	4		19.97	2.5	22.47	2.00	33.01	PASS
		8	7		19.88	2.5	22.38	2.00	33.01	PASS
		15	0		19.97	2.5	22.47	2.00	33.01	PASS
	Middle	1	0	QPSK	21.79	2.5	24.29	2.00	33.01	PASS
		1	7		21.94	2.5	24.44	2.00	33.01	PASS
		1	14		21.71	2.5	24.21	2.00	33.01	PASS
		8	0		21.00	2.5	23.50	2.00	33.01	PASS
		8	4		21.01	2.5	23.51	2.00	33.01	PASS
		8	7		21.04	2.5	23.54	2.00	33.01	PASS
		15	0		21.04	2.5	23.54	2.00	33.01	PASS
		1	0	16QAM	20.90	2.5	23.40	2.00	33.01	PASS
		1	7		20.90	2.5	23.40	2.00	33.01	PASS
		1	14		20.73	2.5	23.23	2.00	33.01	PASS
		8	0		20.06	2.5	22.56	2.00	33.01	PASS
		8	4		20.04	2.5	22.54	2.00	33.01	PASS
		8	7		19.87	2.5	22.37	2.00	33.01	PASS
		15	0		19.99	2.5	22.49	2.00	33.01	PASS
	Highest	1	0	QPSK	21.85	2.5	24.35	2.00	33.01	PASS
		1	7		21.97	2.5	24.47	2.00	33.01	PASS
		1	14		21.71	2.5	24.21	2.00	33.01	PASS
		8	0		20.89	2.5	23.39	2.00	33.01	PASS
		8	4		20.70	2.5	23.20	2.00	33.01	PASS
		8	7		20.71	2.5	23.21	2.00	33.01	PASS
		15	0		20.77	2.5	23.27	2.00	33.01	PASS
		1	0	16QAM	21.03	2.5	23.53	2.00	33.01	PASS
		1	7		21.23	2.5	23.73	2.00	33.01	PASS
		1	14		20.60	2.5	23.10	2.00	33.01	PASS
		8	0		19.84	2.5	22.34	2.00	33.01	PASS
		8	4		19.77	2.5	22.27	2.00	33.01	PASS
		8	7		19.66	2.5	22.16	2.00	33.01	PASS
		15	0		19.77	2.5	22.27	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	22.03	2.5	24.53	2.00	33.01	PASS
		1	12		22.23	2.5	24.73	2.00	33.01	PASS
		1	24		21.90	2.5	24.40	2.00	33.01	PASS
		12	0		21.22	2.5	23.72	2.00	33.01	PASS
		12	6		21.05	2.5	23.55	2.00	33.01	PASS
		12	11		20.99	2.5	23.49	2.00	33.01	PASS
		25	0		21.12	2.5	23.62	2.00	33.01	PASS
		1	0	16QAM	21.00	2.5	23.50	2.00	33.01	PASS
		1	12		20.61	2.5	23.11	2.00	33.01	PASS
		1	24		20.42	2.5	22.92	2.00	33.01	PASS
		12	0		20.15	2.5	22.65	2.00	33.01	PASS
		12	6		20.08	2.5	22.58	2.00	33.01	PASS
		12	11		19.95	2.5	22.45	2.00	33.01	PASS
		25	0		20.12	2.5	22.62	2.00	33.01	PASS
	Middle	1	0	QPSK	21.68	2.5	24.18	2.00	33.01	PASS
		1	12		21.81	2.5	24.31	2.00	33.01	PASS
		1	24		21.60	2.5	24.10	2.00	33.01	PASS
		12	0		21.09	2.5	23.59	2.00	33.01	PASS
		12	6		21.08	2.5	23.58	2.00	33.01	PASS
		12	11		20.99	2.5	23.49	2.00	33.01	PASS
		25	0		21.02	2.5	23.52	2.00	33.01	PASS
		1	0	16QAM	21.00	2.5	23.50	2.00	33.01	PASS
		1	12		21.11	2.5	23.61	2.00	33.01	PASS
		1	24		20.82	2.5	23.32	2.00	33.01	PASS
		12	0		20.04	2.5	22.54	2.00	33.01	PASS
		12	6		20.04	2.5	22.54	2.00	33.01	PASS
		12	11		19.94	2.5	22.44	2.00	33.01	PASS
		25	0		20.03	2.5	22.53	2.00	33.01	PASS
	Highest	1	0	QPSK	21.86	2.5	24.36	2.00	33.01	PASS
		1	12		21.76	2.5	24.26	2.00	33.01	PASS
		1	24		21.81	2.5	24.31	2.00	33.01	PASS
		12	0		20.99	2.5	23.49	2.00	33.01	PASS
		12	6		20.84	2.5	23.34	2.00	33.01	PASS
		12	11		20.78	2.5	23.28	2.00	33.01	PASS
		25	0		20.90	2.5	23.40	2.00	33.01	PASS
		1	0	16QAM	20.49	2.5	22.99	2.00	33.01	PASS
		1	12		20.69	2.5	23.19	2.00	33.01	PASS
		1	24		19.93	2.5	22.43	2.00	33.01	PASS
		12	0		19.99	2.5	22.49	2.00	33.01	PASS
		12	6		19.94	2.5	22.44	2.00	33.01	PASS
		12	11		19.72	2.5	22.22	2.00	33.01	PASS
		25	0		19.87	2.5	22.37	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	22.32	2.5	24.82	2.00	33.01	PASS
		1	24		22.45	2.5	24.95	2.00	33.01	PASS
		1	49		21.89	2.5	24.39	2.00	33.01	PASS
		25	0		20.96	2.5	23.46	2.00	33.01	PASS
		25	12		21.00	2.5	23.50	2.00	33.01	PASS
		25	24		20.80	2.5	23.30	2.00	33.01	PASS
		50	0		20.93	2.5	23.43	2.00	33.01	PASS
			0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Middle	1	0	QPSK	21.77	2.5	24.27	2.00	33.01	PASS
		1	24		21.88	2.5	24.38	2.00	33.01	PASS
		1	49		21.77	2.5	24.27	2.00	33.01	PASS
		25	0		21.07	2.5	23.57	2.00	33.01	PASS
		25	12		21.07	2.5	23.57	2.00	33.01	PASS
		25	24		20.86	2.5	23.36	2.00	33.01	PASS
		50	0		21.05	2.5	23.55	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Highest	1	0	QPSK	21.84	2.5	24.34	2.00	33.01	PASS
		1	24		22.24	2.5	24.74	2.00	33.01	PASS
		1	49		21.81	2.5	24.31	2.00	33.01	PASS
		25	0		20.82	2.5	23.32	2.00	33.01	PASS
		25	12		20.95	2.5	23.45	2.00	33.01	PASS
		25	24		20.83	2.5	23.33	2.00	33.01	PASS
		50	0		20.77	2.5	23.27	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A

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	22.16	2.5	24.66	2.00	33.01	PASS
		1	37		22.23	2.5	24.73	2.00	33.01	PASS
		1	74		21.91	2.5	24.41	2.00	33.01	PASS
		36	0		21.02	2.5	23.52	2.00	33.01	PASS
		36	18		20.94	2.5	23.44	2.00	33.01	PASS
		36	39		20.85	2.5	23.35	2.00	33.01	PASS
		75	0		20.82	2.5	23.32	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	37		N/A	N/A	N/A	N/A	N/A	N/A
		1	74		N/A	N/A	N/A	N/A	N/A	N/A
		36	0		N/A	N/A	N/A	N/A	N/A	N/A
		36	18		N/A	N/A	N/A	N/A	N/A	N/A
		36	39		N/A	N/A	N/A	N/A	N/A	N/A
		75	0		N/A	N/A	N/A	N/A	N/A	N/A
	Middle	1	0	QPSK	21.79	2.5	24.29	2.00	33.01	PASS
		1	37		22.18	2.5	24.68	2.00	33.01	PASS
		1	74		21.58	2.5	24.08	2.00	33.01	PASS
		36	0		20.97	2.5	23.47	2.00	33.01	PASS
		36	18		20.87	2.5	23.37	2.00	33.01	PASS
		36	39		20.88	2.5	23.38	2.00	33.01	PASS
		75	0		20.92	2.5	23.42	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	37		N/A	N/A	N/A	N/A	N/A	N/A
		1	74		N/A	N/A	N/A	N/A	N/A	N/A
		36	0		N/A	N/A	N/A	N/A	N/A	N/A
		36	18		N/A	N/A	N/A	N/A	N/A	N/A
		36	39		N/A	N/A	N/A	N/A	N/A	N/A
		75	0		N/A	N/A	N/A	N/A	N/A	N/A
	Highest	1	0	QPSK	21.86	2.5	24.36	2.00	33.01	PASS
		1	37		22.63	2.5	25.13	2.00	33.01	PASS
		1	74		21.66	2.5	24.16	2.00	33.01	PASS
		36	0		20.73	2.5	23.23	2.00	33.01	PASS
		36	18		20.82	2.5	23.32	2.00	33.01	PASS
		36	39		20.88	2.5	23.38	2.00	33.01	PASS
		75	0		20.74	2.5	23.24	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	37		N/A	N/A	N/A	N/A	N/A	N/A
		1	74		N/A	N/A	N/A	N/A	N/A	N/A
		36	0		N/A	N/A	N/A	N/A	N/A	N/A
		36	18		N/A	N/A	N/A	N/A	N/A	N/A
		36	39		N/A	N/A	N/A	N/A	N/A	N/A
		75	0		N/A	N/A	N/A	N/A	N/A	N/A

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	21.70	2.5	24.20	2.00	33.01	PASS
		1	49		21.99	2.5	24.49	2.00	33.01	PASS
		1	99		22.01	2.5	24.51	2.00	33.01	PASS
		50	0		21.09	2.5	23.59	2.00	33.01	PASS
		50	24		20.91	2.5	23.41	2.00	33.01	PASS
		50	49		20.85	2.5	23.35	2.00	33.01	PASS
		100	0		20.79	2.5	23.29	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		1	99		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
		50	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	49		N/A	N/A	N/A	N/A	N/A	N/A
		100	0		N/A	N/A	N/A	N/A	N/A	N/A
	Middle	1	0	QPSK	22.03	2.5	24.53	2.00	33.01	PASS
		1	49		22.64	2.5	25.14	2.00	33.01	PASS
		1	99		21.79	2.5	24.29	2.00	33.01	PASS
		50	0		20.91	2.5	23.41	2.00	33.01	PASS
		50	24		20.85	2.5	23.35	2.00	33.01	PASS
		50	49		20.82	2.5	23.32	2.00	33.01	PASS
		100	0		20.95	2.5	23.45	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		1	99		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
		50	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	49		N/A	N/A	N/A	N/A	N/A	N/A
		100	0		N/A	N/A	N/A	N/A	N/A	N/A
	Highest	1	0	QPSK	21.69	2.5	24.19	2.00	33.01	PASS
		1	49		21.99	2.5	24.49	2.00	33.01	PASS
		1	99		21.44	2.5	23.94	2.00	33.01	PASS
		50	0		20.74	2.5	23.24	2.00	33.01	PASS
		50	24		20.86	2.5	23.36	2.00	33.01	PASS
		50	49		20.80	2.5	23.30	2.00	33.01	PASS
		100	0		20.86	2.5	23.36	2.00	33.01	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		1	99		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
		50	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	49		N/A	N/A	N/A	N/A	N/A	N/A
		100	0		N/A	N/A	N/A	N/A	N/A	N/A

Radiated Power (ERP) for LTE Band 5 /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	22.24	1	21.09	7.00	38.45	PASS
		1	2		22.26	1	21.11	7.00	38.45	PASS
		1	5		22.10	1	20.95	7.00	38.45	PASS
		3	0		22.07	1	20.92	7.00	38.45	PASS
		3	1		22.12	1	20.97	7.00	38.45	PASS
		3	2		21.98	1	20.83	7.00	38.45	PASS
		6	0		20.99	1	19.84	7.00	38.45	PASS
		1	0	16QAM	20.94	1	19.79	7.00	38.45	PASS
		1	2		20.91	1	19.76	7.00	38.45	PASS
		1	5		20.87	1	19.72	7.00	38.45	PASS
		3	0		21.10	1	19.95	7.00	38.45	PASS
		3	1		21.11	1	19.96	7.00	38.45	PASS
		3	2		20.98	1	19.83	7.00	38.45	PASS
		6	0		20.40	1	19.25	7.00	38.45	PASS
	Middle	1	0	QPSK	22.37	1	21.22	7.00	38.45	PASS
		1	2		22.47	1	21.32	7.00	38.45	PASS
		1	5		22.47	1	21.32	7.00	38.45	PASS
		3	0		22.36	1	21.21	7.00	38.45	PASS
		3	1		22.46	1	21.31	7.00	38.45	PASS
		3	2		22.65	1	21.50	7.00	38.45	PASS
		6	0		21.50	1	20.35	7.00	38.45	PASS
		1	0	16QAM	21.64	1	20.49	7.00	38.45	PASS
		1	2		21.60	1	20.45	7.00	38.45	PASS
		1	5		21.47	1	20.32	7.00	38.45	PASS
		3	0		21.21	1	20.06	7.00	38.45	PASS
		3	1		21.32	1	20.17	7.00	38.45	PASS
		3	2		21.40	1	20.25	7.00	38.45	PASS
		6	0		20.31	1	19.16	7.00	38.45	PASS
	Highest	1	0	QPSK	22.52	1	21.37	7.00	38.45	PASS
		1	2		22.60	1	21.45	7.00	38.45	PASS
		1	5		22.53	1	21.38	7.00	38.45	PASS
		3	0		22.60	1	21.45	7.00	38.45	PASS
		3	1		22.59	1	21.44	7.00	38.45	PASS
		3	2		22.43	1	21.28	7.00	38.45	PASS
		6	0		21.56	1	20.41	7.00	38.45	PASS
		1	0	16QAM	21.23	1	20.08	7.00	38.45	PASS
		1	2		21.23	1	20.08	7.00	38.45	PASS
		1	5		21.16	1	20.01	7.00	38.45	PASS
		3	0		21.33	1	20.18	7.00	38.45	PASS
		3	1		21.53	1	20.38	7.00	38.45	PASS
		3	2		21.49	1	20.34	7.00	38.45	PASS
		6	0		20.69	1	19.54	7.00	38.45	PASS

Radiated Power (ERP) for LTE Band 5 /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	22.37	1	21.22	7.00	38.45	PASS
		1	7		22.16	1	21.01	7.00	38.45	PASS
		1	14		22.15	1	21.00	7.00	38.45	PASS
		8	0		21.19	1	20.04	7.00	38.45	PASS
		8	4		21.07	1	19.92	7.00	38.45	PASS
		8	7		21.07	1	19.92	7.00	38.45	PASS
		15	0		21.16	1	20.01	7.00	38.45	PASS
		1	0	16QAM	20.85	1	19.70	7.00	38.45	PASS
		1	7		20.76	1	19.61	7.00	38.45	PASS
		1	14		20.69	1	19.54	7.00	38.45	PASS
		8	0		20.03	1	18.88	7.00	38.45	PASS
		8	4		19.71	1	18.56	7.00	38.45	PASS
		8	7		19.83	1	18.68	7.00	38.45	PASS
		15	0		20.01	1	18.86	7.00	38.45	PASS
	Middle	1	0	QPSK	22.19	1	21.04	7.00	38.45	PASS
		1	7		22.56	1	21.41	7.00	38.45	PASS
		1	14		22.51	1	21.36	7.00	38.45	PASS
		8	0		21.32	1	20.17	7.00	38.45	PASS
		8	4		21.55	1	20.40	7.00	38.45	PASS
		8	7		21.49	1	20.34	7.00	38.45	PASS
		15	0		21.46	1	20.31	7.00	38.45	PASS
		1	0	16QAM	21.18	1	20.03	7.00	38.45	PASS
		1	7		21.61	1	20.46	7.00	38.45	PASS
		1	14		21.51	1	20.36	7.00	38.45	PASS
		8	0		20.30	1	19.15	7.00	38.45	PASS
		8	4		20.43	1	19.28	7.00	38.45	PASS
		8	7		20.46	1	19.31	7.00	38.45	PASS
		15	0		20.28	1	19.13	7.00	38.45	PASS
	Highest	1	0	QPSK	22.74	1	21.59	7.00	38.45	PASS
		1	7		22.87	1	21.72	7.00	38.45	PASS
		1	14		22.88	1	21.73	7.00	38.45	PASS
		8	0		21.60	1	20.45	7.00	38.45	PASS
		8	4		21.67	1	20.52	7.00	38.45	PASS
		8	7		21.58	1	20.43	7.00	38.45	PASS
		15	0		21.53	1	20.38	7.00	38.45	PASS
		1	0	16QAM	21.55	1	20.40	7.00	38.45	PASS
		1	7		21.91	1	20.76	7.00	38.45	PASS
		1	14		21.72	1	20.57	7.00	38.45	PASS
		8	0		20.29	1	19.14	7.00	38.45	PASS
		8	4		20.40	1	19.25	7.00	38.45	PASS
		8	7		20.29	1	19.14	7.00	38.45	PASS
		15	0		20.61	1	19.46	7.00	38.45	PASS

Radiated Power (ERP) for LTE Band 5 /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	22.12	1	20.97	7.00	38.45	PASS
		1	12		22.15	1	21.00	7.00	38.45	PASS
		1	24		22.11	1	20.96	7.00	38.45	PASS
		12	0		21.23	1	20.08	7.00	38.45	PASS
		12	6		21.15	1	20.00	7.00	38.45	PASS
		12	11		21.16	1	20.01	7.00	38.45	PASS
		25	0		21.25	1	20.10	7.00	38.45	PASS
		1	0	16QAM	21.01	1	19.86	7.00	38.45	PASS
		1	12		20.75	1	19.60	7.00	38.45	PASS
		1	24		20.58	1	19.43	7.00	38.45	PASS
		12	0		20.13	1	18.98	7.00	38.45	PASS
		12	6		20.13	1	18.98	7.00	38.45	PASS
		12	11		20.05	1	18.90	7.00	38.45	PASS
		25	0		20.12	1	18.97	7.00	38.45	PASS
	Middle	1	0	QPSK	22.00	1	20.85	7.00	38.45	PASS
		1	12		22.81	1	21.66	7.00	38.45	PASS
		1	24		22.67	1	21.52	7.00	38.45	PASS
		12	0		21.41	1	20.26	7.00	38.45	PASS
		12	6		21.55	1	20.40	7.00	38.45	PASS
		12	11		21.71	1	20.56	7.00	38.45	PASS
		25	0		21.46	1	20.31	7.00	38.45	PASS
		1	0	16QAM	21.49	1	20.34	7.00	38.45	PASS
		1	12		22.20	1	21.05	7.00	38.45	PASS
		1	24		21.58	1	20.43	7.00	38.45	PASS
		12	0		20.11	1	18.96	7.00	38.45	PASS
		12	6		20.45	1	19.30	7.00	38.45	PASS
		12	11		20.68	1	19.53	7.00	38.45	PASS
		25	0		20.36	1	19.21	7.00	38.45	PASS
	Highest	1	0	QPSK	22.49	1	21.34	7.00	38.45	PASS
		1	12		22.89	1	21.74	7.00	38.45	PASS
		1	24		22.52	1	21.37	7.00	38.45	PASS
		12	0		21.73	1	20.58	7.00	38.45	PASS
		12	6		21.83	1	20.68	7.00	38.45	PASS
		12	11		21.72	1	20.57	7.00	38.45	PASS
		25	0		21.70	1	20.55	7.00	38.45	PASS
		1	0	16QAM	21.19	1	20.04	7.00	38.45	PASS
		1	12		21.68	1	20.53	7.00	38.45	PASS
		1	24		21.20	1	20.05	7.00	38.45	PASS
		12	0		20.66	1	19.51	7.00	38.45	PASS
		12	6		20.69	1	19.54	7.00	38.45	PASS
		12	11		20.88	1	19.73	7.00	38.45	PASS
		25	0		20.59	1	19.44	7.00	38.45	PASS

Radiated Power (ERP) for LTE Band 5 /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	22.21	1	21.06	7.00	38.45	PASS
		1	24		22.32	1	21.17	7.00	38.45	PASS
		1	49		22.50	1	21.35	7.00	38.45	PASS
		25	0		21.14	1	19.99	7.00	38.45	PASS
		25	12		21.16	1	20.01	7.00	38.45	PASS
		25	24		21.08	1	19.93	7.00	38.45	PASS
		50	0		21.18	1	20.03	7.00	38.45	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Middle	1	0	QPSK	22.03	1	20.88	7.00	38.45	PASS
		1	24		22.41	1	21.26	7.00	38.45	PASS
		1	49		22.42	1	21.27	7.00	38.45	PASS
		25	0		21.37	1	20.22	7.00	38.45	PASS
		25	12		21.54	1	20.39	7.00	38.45	PASS
		25	24		21.65	1	20.50	7.00	38.45	PASS
		50	0		21.41	1	20.26	7.00	38.45	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Highest	1	0	QPSK	22.90	1	21.75	7.00	38.45	PASS
		1	24		22.55	1	21.40	7.00	38.45	PASS
		1	49		22.52	1	21.37	7.00	38.45	PASS
		25	0		21.69	1	20.54	7.00	38.45	PASS
		25	12		21.61	1	20.46	7.00	38.45	PASS
		25	24		21.61	1	20.46	7.00	38.45	PASS
		50	0		21.71	1	20.56	7.00	38.45	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A

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	21.52	0.5	19.87	3.00	34.77	PASS
		1	2		21.69	0.5	20.04	3.00	34.77	PASS
		1	5		21.62	0.5	19.97	3.00	34.77	PASS
		3	0		21.53	0.5	19.88	3.00	34.77	PASS
		3	1		21.65	0.5	20.00	3.00	34.77	PASS
		3	2		21.77	0.5	20.12	3.00	34.77	PASS
		6	0		20.53	0.5	18.88	3.00	34.77	PASS
		1	0	16QAM	20.33	0.5	18.68	3.00	34.77	PASS
		1	2		20.54	0.5	18.89	3.00	34.77	PASS
		1	5		20.54	0.5	18.89	3.00	34.77	PASS
		3	0		20.24	0.5	18.59	3.00	34.77	PASS
		3	1		20.34	0.5	18.69	3.00	34.77	PASS
		3	2		20.35	0.5	18.70	3.00	34.77	PASS
		6	0		19.52	0.5	17.87	3.00	34.77	PASS
	Middle	1	0	QPSK	21.59	0.5	19.94	3.00	34.77	PASS
		1	2		21.63	0.5	19.98	3.00	34.77	PASS
		1	5		21.58	0.5	19.93	3.00	34.77	PASS
		3	0		21.73	0.5	20.08	3.00	34.77	PASS
		3	1		21.72	0.5	20.07	3.00	34.77	PASS
		3	2		21.60	0.5	19.95	3.00	34.77	PASS
		6	0		20.76	0.5	19.11	3.00	34.77	PASS
		1	0	16QAM	21.04	0.5	19.39	3.00	34.77	PASS
		1	2		20.69	0.5	19.04	3.00	34.77	PASS
		1	5		20.44	0.5	18.79	3.00	34.77	PASS
		3	0		20.55	0.5	18.90	3.00	34.77	PASS
		3	1		20.59	0.5	18.94	3.00	34.77	PASS
		3	2		20.52	0.5	18.87	3.00	34.77	PASS
		6	0		19.91	0.5	18.26	3.00	34.77	PASS
	Highest	1	0	QPSK	21.61	0.5	19.96	3.00	34.77	PASS
		1	2		21.73	0.5	20.08	3.00	34.77	PASS
		1	5		21.65	0.5	20.00	3.00	34.77	PASS
		3	0		21.79	0.5	20.14	3.00	34.77	PASS
		3	1		21.74	0.5	20.09	3.00	34.77	PASS
		3	2		21.53	0.5	19.88	3.00	34.77	PASS
		6	0		20.76	0.5	19.11	3.00	34.77	PASS
		1	0	16QAM	20.39	0.5	18.74	3.00	34.77	PASS
		1	2		20.29	0.5	18.64	3.00	34.77	PASS
		1	5		20.35	0.5	18.70	3.00	34.77	PASS
		3	0		21.03	0.5	19.38	3.00	34.77	PASS
		3	1		21.00	0.5	19.35	3.00	34.77	PASS
		3	2		20.65	0.5	19.00	3.00	34.77	PASS
		6	0		19.81	0.5	18.16	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	21.80	0.5	20.15	3.00	34.77	PASS
		1	7		22.38	0.5	20.73	3.00	34.77	PASS
		1	14		21.89	0.5	20.24	3.00	34.77	PASS
		8	0		20.49	0.5	18.84	3.00	34.77	PASS
		8	4		20.68	0.5	19.03	3.00	34.77	PASS
		8	7		20.76	0.5	19.11	3.00	34.77	PASS
		15	0		20.53	0.5	18.88	3.00	34.77	PASS
		1	0	16QAM	20.42	0.5	18.77	3.00	34.77	PASS
		1	7		20.46	0.5	18.81	3.00	34.77	PASS
		1	14		20.43	0.5	18.78	3.00	34.77	PASS
		8	0		19.40	0.5	17.75	3.00	34.77	PASS
		8	4		19.58	0.5	17.93	3.00	34.77	PASS
		8	7		19.59	0.5	17.94	3.00	34.77	PASS
		15	0		19.30	0.5	17.65	3.00	34.77	PASS
	Middle	1	0	QPSK	21.56	0.5	19.91	3.00	34.77	PASS
		1	7		21.67	0.5	20.02	3.00	34.77	PASS
		1	14		21.37	0.5	19.72	3.00	34.77	PASS
		8	0		20.76	0.5	19.11	3.00	34.77	PASS
		8	4		20.70	0.5	19.05	3.00	34.77	PASS
		8	7		20.65	0.5	19.00	3.00	34.77	PASS
		15	0		20.80	0.5	19.15	3.00	34.77	PASS
		1	0	16QAM	20.45	0.5	18.80	3.00	34.77	PASS
		1	7		20.48	0.5	18.83	3.00	34.77	PASS
		1	14		20.36	0.5	18.71	3.00	34.77	PASS
		8	0		19.86	0.5	18.21	3.00	34.77	PASS
		8	4		19.56	0.5	17.91	3.00	34.77	PASS
		8	7		19.53	0.5	17.88	3.00	34.77	PASS
		15	0		19.75	0.5	18.10	3.00	34.77	PASS
	Highest	1	0	QPSK	21.65	0.5	20.00	3.00	34.77	PASS
		1	7		21.84	0.5	20.19	3.00	34.77	PASS
		1	14		21.64	0.5	19.99	3.00	34.77	PASS
		8	0		20.87	0.5	19.22	3.00	34.77	PASS
		8	4		20.73	0.5	19.08	3.00	34.77	PASS
		8	7		20.59	0.5	18.94	3.00	34.77	PASS
		15	0		20.72	0.5	19.07	3.00	34.77	PASS
		1	0	16QAM	20.64	0.5	18.99	3.00	34.77	PASS
		1	7		20.92	0.5	19.27	3.00	34.77	PASS
		1	14		20.49	0.5	18.84	3.00	34.77	PASS
		8	0		19.93	0.5	18.28	3.00	34.77	PASS
		8	4		19.75	0.5	18.10	3.00	34.77	PASS
		8	7		19.58	0.5	17.93	3.00	34.77	PASS
		15	0		19.74	0.5	18.09	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	21.58	0.5	19.93	3.00	34.77	PASS
		1	12		21.88	0.5	20.23	3.00	34.77	PASS
		1	24		21.73	0.5	20.08	3.00	34.77	PASS
		12	0		20.52	0.5	18.87	3.00	34.77	PASS
		12	6		20.74	0.5	19.09	3.00	34.77	PASS
		12	11		20.63	0.5	18.98	3.00	34.77	PASS
		25	0		20.63	0.5	18.98	3.00	34.77	PASS
		1	0	16QAM	20.17	0.5	18.52	3.00	34.77	PASS
		1	12		20.75	0.5	19.10	3.00	34.77	PASS
		1	24		20.25	0.5	18.60	3.00	34.77	PASS
		12	0		19.30	0.5	17.65	3.00	34.77	PASS
		12	6		19.71	0.5	18.06	3.00	34.77	PASS
		12	11		19.82	0.5	18.17	3.00	34.77	PASS
		25	0		19.57	0.5	17.92	3.00	34.77	PASS
	Middle	1	0	QPSK	21.42	0.5	19.77	3.00	34.77	PASS
		1	12		21.59	0.5	19.94	3.00	34.77	PASS
		1	24		21.45	0.5	19.80	3.00	34.77	PASS
		12	0		20.86	0.5	19.21	3.00	34.77	PASS
		12	6		20.66	0.5	19.01	3.00	34.77	PASS
		12	11		20.60	0.5	18.95	3.00	34.77	PASS
		25	0		20.81	0.5	19.16	3.00	34.77	PASS
		1	0	16QAM	20.57	0.5	18.92	3.00	34.77	PASS
		1	12		20.42	0.5	18.77	3.00	34.77	PASS
		1	24		20.31	0.5	18.66	3.00	34.77	PASS
		12	0		19.76	0.5	18.11	3.00	34.77	PASS
		12	6		19.37	0.5	17.72	3.00	34.77	PASS
		12	11		19.33	0.5	17.68	3.00	34.77	PASS
		25	0		19.92	0.5	18.27	3.00	34.77	PASS
	Highest	1	0	QPSK	21.17	0.5	19.52	3.00	34.77	PASS
		1	12		21.95	0.5	20.30	3.00	34.77	PASS
		1	24		21.27	0.5	19.62	3.00	34.77	PASS
		12	0		20.58	0.5	18.93	3.00	34.77	PASS
		12	6		20.85	0.5	19.20	3.00	34.77	PASS
		12	11		20.66	0.5	19.01	3.00	34.77	PASS
		25	0		20.73	0.5	19.08	3.00	34.77	PASS
		1	0	16QAM	20.50	0.5	18.85	3.00	34.77	PASS
		1	12		20.89	0.5	19.24	3.00	34.77	PASS
		1	24		20.33	0.5	18.68	3.00	34.77	PASS
		12	0		19.38	0.5	17.73	3.00	34.77	PASS
		12	6		19.78	0.5	18.13	3.00	34.77	PASS
		12	11		19.61	0.5	17.96	3.00	34.77	PASS
		25	0		19.69	0.5	18.04	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	21.82	0.5	20.17	3.00	34.77	PASS
		1	24		22.40	0.5	20.75	3.00	34.77	PASS
		1	49		21.68	0.5	20.03	3.00	34.77	PASS
		25	0		20.55	0.5	18.90	3.00	34.77	PASS
		25	12		20.66	0.5	19.01	3.00	34.77	PASS
		25	24		20.60	0.5	18.95	3.00	34.77	PASS
		50	0		20.66	0.5	19.01	3.00	34.77	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Middle	1	0	QPSK	21.65	0.5	20.00	3.00	34.77	PASS
		1	24		21.43	0.5	19.78	3.00	34.77	PASS
		1	49		21.43	0.5	19.78	3.00	34.77	PASS
		25	0		20.79	0.5	19.14	3.00	34.77	PASS
		25	12		20.61	0.5	18.96	3.00	34.77	PASS
		25	24		20.67	0.5	19.02	3.00	34.77	PASS
		50	0		20.77	0.5	19.12	3.00	34.77	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A
	Highest	1	0	QPSK	21.70	0.5	20.05	3.00	34.77	PASS
		1	24		21.64	0.5	19.99	3.00	34.77	PASS
		1	49		21.77	0.5	20.12	3.00	34.77	PASS
		25	0		20.62	0.5	18.97	3.00	34.77	PASS
		25	12		20.76	0.5	19.11	3.00	34.77	PASS
		25	24		20.79	0.5	19.14	3.00	34.77	PASS
		50	0		20.66	0.5	19.01	3.00	34.77	PASS
		1	0	16QAM	N/A	N/A	N/A	N/A	N/A	N/A
		1	24		N/A	N/A	N/A	N/A	N/A	N/A
		1	49		N/A	N/A	N/A	N/A	N/A	N/A
		25	0		N/A	N/A	N/A	N/A	N/A	N/A
		25	12		N/A	N/A	N/A	N/A	N/A	N/A
		25	24		N/A	N/A	N/A	N/A	N/A	N/A
		50	0		N/A	N/A	N/A	N/A	N/A	N/A

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

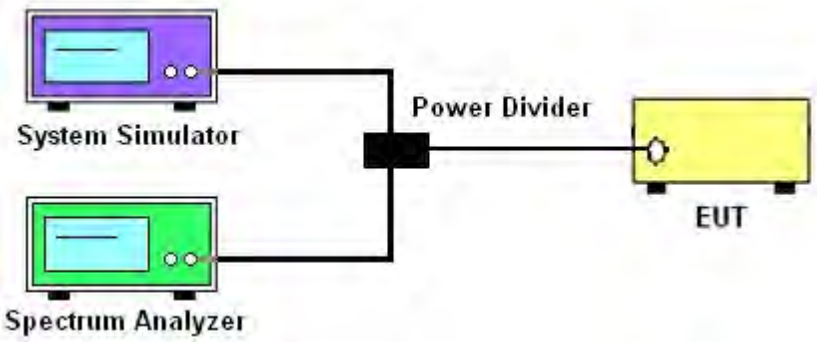
1. The testing follows FCC KDB 971168 v03r01 section.

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 “CTA231114011W03_Appendix GSM” , “CTA231114011W03_Appendix WCDMA” and “CTA231114011W03_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.

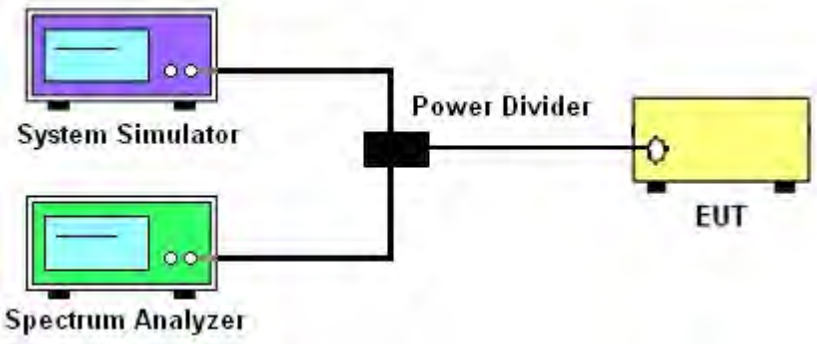
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) 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 ≥ 3 x 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 "CTA231114011W03_Appendix GSM" , "CTA231114011W03_Appendix WCDMA" and "CTA231114011W03_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 ±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

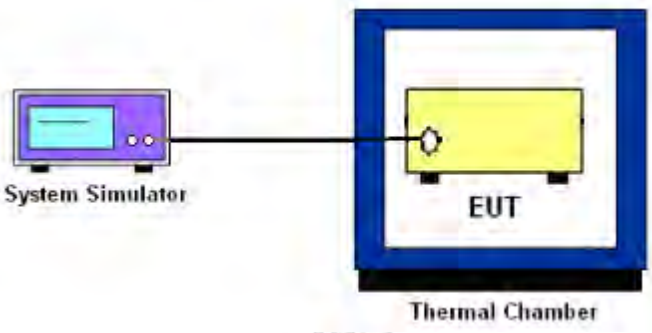
Temperature Variation

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±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

TEST SETUP



TEST RESULT

GPRS 850 /836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	30.52	0.036	2.5ppm	PASS
40		30.97	0.037		
30		31.46	0.038		
20		17.70	0.021		
10		16.47	0.020		
0		25.02	0.030		
-10		12.31	0.015		
-20		11.89	0.014		
-30		35.67	0.043		
20	Maximum Voltage	21.18	0.025		
20	BEP	12.09	0.014		

EGPRS 850 /836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	35.58	0.043	2.5ppm	PASS
40		22.33	0.027		
30		27.16	0.032		
20		20.76	0.025		
10		19.88	0.024		
0		15.64	0.019		
-10		16.51	0.020		
-20		20.07	0.024		
-30		12.40	0.015		
20	Maximum Voltage	34.59	0.041		
20	BEP	34.33	0.041		

GPRS 1900 / 1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	27.84	0.015	Within Authorized Band	PASS
40		35.75	0.019		
30		13.70	0.007		
20		26.11	0.014		
10		19.55	0.010		
0		16.12	0.009		
-10		35.60	0.019		
-20		27.86	0.015		
-30		36.11	0.019		
20	Maximum Voltage	26.83	0.014		
20	BEP	13.24	0.007		

EGPRS 1900 / 1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	14.58	0.008	Within Authorized Band	PASS
40		31.15	0.017		
30		23.26	0.012		
20		34.97	0.019		
10		25.48	0.014		
0		33.79	0.018		
-10		17.03	0.009		
-20		31.89	0.017		
-30		21.02	0.011		
20	Maximum Voltage	24.30	0.013		
20	BEP	19.97	0.011		

UMTS Band 2 /1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	34.05	0.018	Within Authorized Band	PASS
40		31.23	0.017		
30		36.45	0.019		
20		31.33	0.017		
10		15.99	0.009		
0		19.88	0.011		
-10		22.67	0.012		
-20		16.51	0.009		
-30		27.39	0.015		
20	Maximum Voltage	11.77	0.006		
20	BEP	22.40	0.012		

HSDPA Band 2 /1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	15.29	0.008	Within Authorized Band	PASS
40		17.05	0.009		
30		20.83	0.011		
20		23.95	0.013		
10		17.08	0.009		
0		35.61	0.019		
-10		24.97	0.013		
-20		27.46	0.015		
-30		31.27	0.017		
20	Maximum Voltage	20.33	0.011		
20	BEP	24.70	0.013		

HSUPA Band 2 /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	18.33	0.010	Within Authorized Band	PASS
40		27.12	0.014		
30		33.74	0.018		
20		20.26	0.011		
10		13.91	0.007		
0		21.25	0.011		
-10		25.61	0.014		
-20		16.94	0.009		
-30		35.67	0.019		
20	Maximum Voltage	13.91	0.007		
20	BEP	30.23	0.016		

UMTS Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	34.34	0.041	2.5ppm	PASS
40		23.66	0.028		
30		18.39	0.022		
20		31.45	0.038		
10		14.02	0.017		
0		20.45	0.024		
-10		22.44	0.027		
-20		36.15	0.043		
-30		12.05	0.014		
20	Maximum Voltage	36.22	0.043		
20	BEP	22.71	0.027		

HSDPA Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)		(ppm)		
50	Normal Voltage	16.91	0.020	2.5ppm	PASS
40		14.75	0.018		
30		20.18	0.024		
20		20.74	0.025		
10		16.60	0.020		
0		13.30	0.016		
-10		31.87	0.038		
-20		12.63	0.015		
-30		27.70	0.033		
20	Maximum Voltage	25.03	0.030		
20	BEP	29.50	0.035		

HSUPA Band 5 / 836.4MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	13.22	0.016	2.5ppm	PASS
40		28.47	0.034		
30		24.99	0.030		
20		22.86	0.027		
10		11.80	0.014		
0		32.52	0.039		
-10		20.38	0.024		
-20		33.55	0.040		
-30		19.68	0.024		
20	Maximum Voltage	32.89	0.039		
20	BEP	20.50	0.025		

LTE Band 2 (QPSK) / 1880MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	26.05	0.014	2.5ppm	PASS
40		30.66	0.016		
30		21.64	0.012		
20		27.94	0.015		
10		12.54	0.007		
0		14.15	0.008		
-10		15.48	0.008		
-20		35.60	0.019		
-30		30.11	0.016		
20	Maximum Voltage	21.82	0.012		
20	BEP	34.18	0.018		

LTE Band 2 (QPSK) / 1880MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	32.94	0.018	2.5ppm	PASS
40		17.04	0.009		
30		29.20	0.016		
20		34.43	0.018		
10		16.99	0.009		
0		32.50	0.017		
-10		12.71	0.007		
-20		25.98	0.014		
-30		21.59	0.011		
20	Maximum Voltage	29.26	0.016		
20	BEP	26.22	0.014		

LTE Band 5 (QPSK) / 836.5MHz / BW5M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	17.65	0.025	2.5ppm	PASS
40		21.33	0.030		
30		21.32	0.030		
20		27.53	0.039		
10		36.01	0.051		
0		16.42	0.023		
-10		29.61	0.004		
-20		13.36	0.019		
-30		19.92	0.028		
20	Maximum Voltage	15.62	0.022		
20	BEP	24.79	0.035		

LTE Band 5 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	19.09	0.027	2.5ppm	PASS
40		16.42	0.023		
30		27.98	0.039		
20		23.12	0.033		
10		23.78	0.033		
0		22.81	0.032		
-10		22.33	0.003		
-20		14.51	0.020		
-30		32.00	0.045		
20	Maximum Voltage	30.31	0.043		
20	BEP	21.17	0.030		

LTE Band 12 (QPSK) / 707.5MHz / BW5M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	22.86	0.032	2.5ppm	PASS
40		18.79	0.026		
30		35.77	0.050		
20		27.63	0.039		
10		23.48	0.033		
0		21.33	0.030		
-10		17.80	0.003		
-20		35.13	0.049		
-30		22.02	0.031		
20	Maximum Voltage	35.44	0.050		
20	BEP	30.26	0.043		

LTE Band 12 (QPSK) / 707.5MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	36.10	0.051	2.5ppm	PASS
40		15.65	0.022		
30		35.62	0.050		
20		15.33	0.022		
10		34.53	0.049		
0		22.92	0.032		
-10		13.46	0.002		
-20		15.54	0.022		
-30		20.98	0.030		
20	Maximum Voltage	23.99	0.034		
20	BEP	14.29	0.020		

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

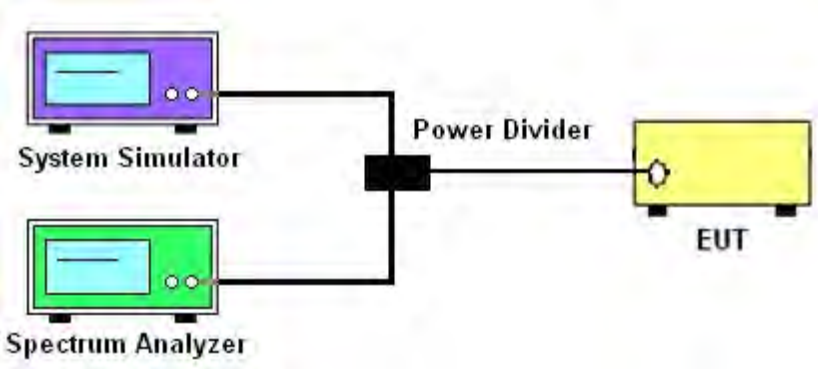
1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26-2015-Section 5.7.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated 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 + 10log(P) dB below the transmitter power P(Watts)

= P(W) - [43 + 10log(P)] (dB)

= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

= -13dBm.

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment “CTA231114011W03_Appendix GSM” , “CTA231114011W03_Appendix WCDMA” and “CTA231114011W03_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 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

2. §24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

3. §27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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 that 43 + 10 log (P) dB on all frequencies between 2490.5 MHzand 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licenseesoperating on frequencies below 2495 MHz may also submit a documented interference complaintagainst 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 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

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 + 10log(P) dB below the transmitter power P(Watts)

= P(W) - [43 + 10log(P)] (dB)

= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

= -13dBm.

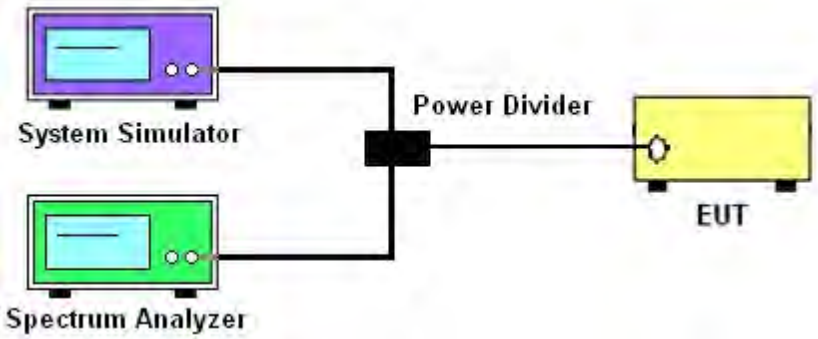
Band 7:

= P(W)- [55 + 10log(P)] (dB)

= [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)

= -25dBm.

TEST SETUP



TEST RESULT

Note: The test data please reference to attachment “CTA231114011W03_Appendix GSM” , “CTA231114011W03_Appendix WCDMA” and “CTA231114011W03_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 signalsoperating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas.Measurements on signals operating above 1GHz are performed using vertically and horizontally polarizedhorn antennas. All measurements are performed as peak measurements while the EUT isoperating 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.

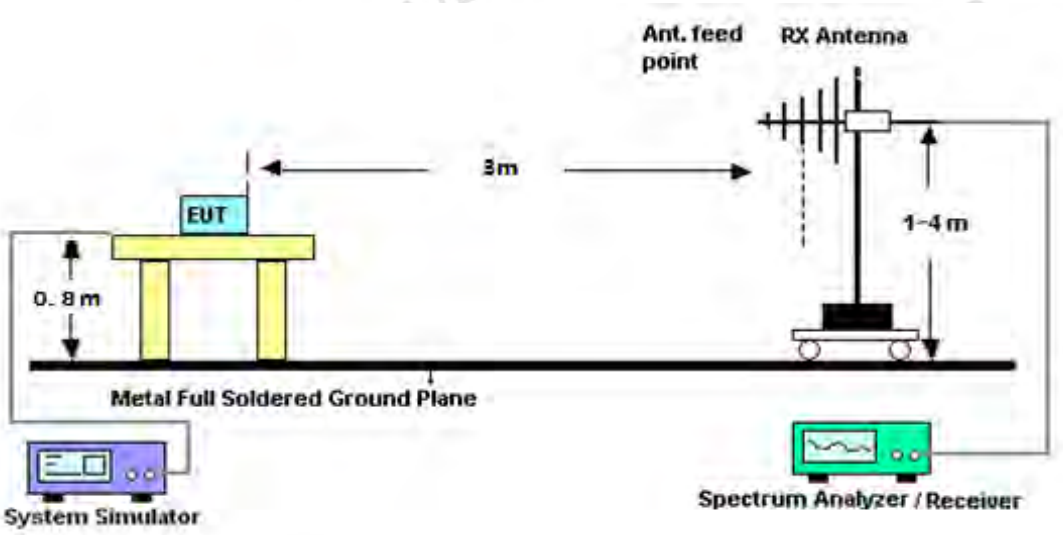
TEST PROCEDURE

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 ≥ 3 x RBW
4. Span = 1.5 times the OBW
5.No. of sweep points > 2 x 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.

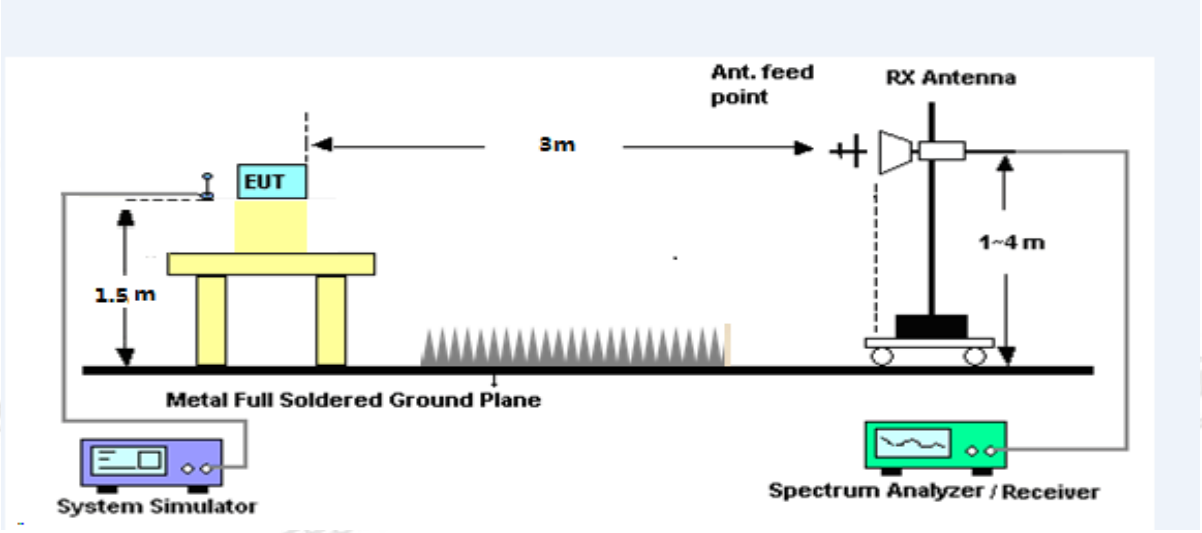
PMea=S.G Level+ Ant-Cable loss; Margin=PMea-Limit.

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 frequeny 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.

GPRS 850: (30-9000)MHz							
The Worst Test Results Channel 128/824.2 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1648.49	-41.27	9.40	4.75	-36.62	-13.00	-23.62	H
2472.52	-39.94	10.60	8.39	-37.73	-13.00	-24.73	H
3296.62	-31.25	12.00	11.79	-31.04	-13.00	-18.04	H
1648.49	-44.56	9.40	4.75	-39.91	-13.00	-26.91	V
2472.52	-45.30	10.60	8.39	-43.09	-13.00	-30.09	V
3296.62	-42.98	12.00	11.79	-42.77	-13.00	-29.77	V
The Worst Test Results Channel 190/836.6 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.23	-40.90	9.50	4.76	-36.16	-13.00	-23.16	H
2509.86	-39.40	10.70	8.40	-37.10	-13.00	-24.10	H
3345.97	-32.08	12.20	11.80	-31.68	-13.00	-18.68	H
1673.23	-43.79	9.40	4.75	-39.14	-13.00	-26.14	V
2509.86	-44.12	10.60	8.39	-41.91	-13.00	-28.91	V
3345.97	-42.70	12.20	11.82	-42.32	-13.00	-29.32	V
The Worst Test Results Channel 251/848.8 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1697.37	-40.88	9.60	4.77	-36.05	-13.00	-23.05	H
2546.16	-39.78	10.80	8.50	-37.48	-13.00	-24.48	H
3395.08	-31.47	12.50	11.90	-30.87	-13.00	-17.87	H
1697.37	-43.53	9.60	4.77	-38.70	-13.00	-25.70	V
2546.16	-45.25	10.80	8.50	-42.95	-13.00	-29.95	V
3395.08	-42.61	12.50	11.90	-42.01	-13.00	-29.01	V

EGPRS 850: (30-9000)MHz							
The Worst Test Results Channel 128/824.2 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1648.31	-41.03	9.40	4.75	-36.38	-13.00	-23.38	H
2472.35	-39.35	10.60	8.39	-37.14	-13.00	-24.14	H
3296.80	-32.03	12.00	11.79	-31.82	-13.00	-18.82	H
1648.31	-43.65	9.40	4.75	-39.00	-13.00	-26.00	V
2472.35	-44.39	10.60	8.39	-42.18	-13.00	-29.18	V
3296.80	-43.10	12.00	11.79	-42.89	-13.00	-29.89	V
The Worst Test Results Channel 190/836.6 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.13	-40.46	9.50	4.76	-35.72	-13.00	-22.72	H
2509.49	-39.83	10.70	8.40	-37.53	-13.00	-24.53	H
3346.10	-32.16	12.20	11.80	-31.76	-13.00	-18.76	H
1673.13	-44.26	9.40	4.75	-39.61	-13.00	-26.61	V
2509.49	-45.07	10.60	8.39	-42.86	-13.00	-29.86	V
3346.10	-42.89	12.20	11.82	-42.51	-13.00	-29.51	V
The Worst Test Results Channel 251/848.8 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1697.62	-41.00	9.60	4.77	-36.17	-13.00	-23.17	H
2546.33	-40.01	10.80	8.50	-37.71	-13.00	-24.71	H
3395.11	-30.88	12.50	11.90	-30.28	-13.00	-17.28	H
1697.62	-44.17	9.60	4.77	-39.34	-13.00	-26.34	V
2546.33	-45.08	10.80	8.50	-42.78	-13.00	-29.78	V
3395.11	-43.28	12.50	11.90	-42.68	-13.00	-29.68	V

GPRS1900: (30-20000)MHz							
The Worst Test Results for Channel 512/1850.2MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3700.19	-34.02	12.60	12.93	-34.35	-13.00	-21.35	H
5550.21	-34.79	13.10	17.11	-38.80	-13.00	-25.80	H
7400.52	-32.46	11.50	22.20	-43.16	-13.00	-30.16	H
3700.19	-35.62	12.60	12.93	-35.95	-13.00	-22.95	V
5550.21	-35.01	13.10	17.11	-39.02	-13.00	-26.02	V
7400.52	-32.17	11.50	22.20	-42.87	-13.00	-29.87	V
The Worst Test Results for Channel 661/1880.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3759.91	-34.06	12.60	12.93	-34.39	-13.00	-21.39	H
5639.86	-35.31	13.10	17.11	-39.32	-13.00	-26.32	H
7519.99	-33.19	11.50	22.20	-43.89	-13.00	-30.89	H
3759.91	-35.74	12.60	12.93	-36.07	-13.00	-23.07	V
5639.86	-34.17	13.10	17.11	-38.18	-13.00	-25.18	V
7519.99	-33.15	11.50	22.20	-43.85	-13.00	-30.85	V
The Worst Test Results for Channel 810/1909.8MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3819.42	-33.80	12.60	12.93	-34.13	-13.00	-21.13	H
5729.46	-35.35	13.10	17.11	-39.36	-13.00	-26.36	H
7638.85	-33.60	11.50	22.20	-44.30	-13.00	-31.30	H
3819.42	-34.62	12.60	12.93	-34.95	-13.00	-21.95	V
5729.46	-34.33	13.10	17.11	-38.34	-13.00	-25.34	V
7638.85	-32.09	11.50	22.20	-42.79	-13.00	-29.79	V

EGPRS 1900: (30-20000)MHz							
The Worst Test Results for Channel 512/1850.2MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3700.49	-34.73	12.60	12.93	-35.06	-13.00	-22.06	H
5550.31	-35.49	13.10	17.11	-39.50	-13.00	-26.50	H
7400.70	-33.30	11.50	22.20	-44.00	-13.00	-31.00	H
3700.49	-35.98	12.60	12.93	-36.31	-13.00	-23.31	V
5550.31	-35.01	13.10	17.11	-39.02	-13.00	-26.02	V
7400.70	-31.74	11.50	22.20	-42.44	-13.00	-29.44	V
The Worst Test Results for Channel 661/1880.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3760.19	-34.86	12.60	12.93	-35.19	-13.00	-22.19	H
5640.18	-35.26	13.10	17.11	-39.27	-13.00	-26.27	H
7519.96	-33.54	11.50	22.20	-44.24	-13.00	-31.24	H
3760.19	-35.36	12.60	12.93	-35.69	-13.00	-22.69	V
5640.18	-35.00	13.10	17.11	-39.01	-13.00	-26.01	V
7519.96	-31.88	11.50	22.20	-42.58	-13.00	-29.58	V
The Worst Test Results for Channel 810/1909.8MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3819.57	-33.80	12.60	12.93	-34.13	-13.00	-21.13	H
5729.02	-34.31	13.10	17.11	-38.32	-13.00	-25.32	H
7638.83	-32.62	11.50	22.20	-43.32	-13.00	-30.32	H
3819.57	-35.38	12.60	12.93	-35.71	-13.00	-22.71	V
5729.02	-34.26	13.10	17.11	-38.27	-13.00	-25.27	V
7638.83	-32.46	11.50	22.20	-43.16	-13.00	-30.16	V

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
3704.08	-33.97	12.60	12.93	-34.30	-13.00	-21.30	H
5557.49	-35.46	13.10	17.11	-39.47	-13.00	-26.47	H
7409.59	-32.83	11.50	22.20	-43.53	-13.00	-30.53	H
3704.08	-35.73	12.60	12.93	-36.06	-13.00	-23.06	V
5557.49	-34.16	13.10	17.11	-38.17	-13.00	-25.17	V
7409.59	-32.17	11.50	22.20	-42.87	-13.00	-29.87	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
3760.05	-34.31	12.60	12.93	-34.64	-13.00	-21.64	H
5640.13	-34.17	13.10	17.11	-38.18	-13.00	-25.18	H
7520.06	-32.73	11.50	22.20	-43.43	-13.00	-30.43	H
3760.05	-35.30	12.60	12.93	-35.63	-13.00	-22.63	V
5640.13	-34.04	13.10	17.11	-38.05	-13.00	-25.05	V
7520.06	-33.17	11.50	22.20	-43.87	-13.00	-30.87	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
3815.41	-34.50	12.60	12.93	-34.83	-13.00	-21.83	H
5722.52	-34.47	13.10	17.11	-38.48	-13.00	-25.48	H
7630.38	-33.26	11.50	22.20	-43.96	-13.00	-30.96	H
3815.41	-35.26	12.60	12.93	-35.59	-13.00	-22.59	V
5722.52	-34.50	13.10	17.11	-38.51	-13.00	-25.51	V
7630.38	-32.81	11.50	22.20	-43.51	-13.00	-30.51	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
3704.45	-34.31	12.60	12.93	-34.64	-13.00	-21.64	H
5557.35	-34.05	13.10	17.11	-38.06	-13.00	-25.06	H
7409.90	-32.67	11.50	22.20	-43.37	-13.00	-30.37	H
3704.45	-34.78	12.60	12.93	-35.11	-13.00	-22.11	V
5557.35	-33.82	13.10	17.11	-37.83	-13.00	-24.83	V
7409.90	-32.27	11.50	22.20	-42.97	-13.00	-29.97	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
3759.77	-33.46	12.60	12.93	-33.79	-13.00	-20.79	H
5640.15	-34.51	13.10	17.11	-38.52	-13.00	-25.52	H
7520.11	-32.48	11.50	22.20	-43.18	-13.00	-30.18	H
3759.77	-35.78	12.60	12.93	-36.11	-13.00	-23.11	V
5640.15	-34.74	13.10	17.11	-38.75	-13.00	-25.75	V
7520.11	-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
3815.70	-34.14	12.60	12.93	-34.47	-13.00	-21.47	H
5722.81	-34.94	13.10	17.11	-38.95	-13.00	-25.95	H
7630.10	-33.17	11.50	22.20	-43.87	-13.00	-30.87	H
3815.70	-34.83	12.60	12.93	-35.16	-13.00	-22.16	V
5722.81	-34.65	13.10	17.11	-38.66	-13.00	-25.66	V
7630.10	-32.19	11.50	22.20	-42.89	-13.00	-29.89	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
3704.43	-34.47	12.60	12.93	-34.80	-13.00	-21.80	H
5557.54	-34.07	13.10	17.11	-38.08	-13.00	-25.08	H
7409.74	-32.75	11.50	22.20	-43.45	-13.00	-30.45	H
3704.43	-35.62	12.60	12.93	-35.95	-13.00	-22.95	V
5557.54	-34.45	13.10	17.11	-38.46	-13.00	-25.46	V
7409.74	-32.92	11.50	22.20	-43.62	-13.00	-30.62	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
3759.79	-34.06	12.60	12.93	-34.39	-13.00	-21.39	H
5640.27	-35.46	13.10	17.11	-39.47	-13.00	-26.47	H
7520.05	-33.52	11.50	22.20	-44.22	-13.00	-31.22	H
3759.79	-34.63	12.60	12.93	-34.96	-13.00	-21.96	V
5640.27	-34.45	13.10	17.11	-38.46	-13.00	-25.46	V
7520.05	-32.84	11.50	22.20	-43.54	-13.00	-30.54	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
3815.45	-33.79	12.60	12.93	-34.12	-13.00	-21.12	H
5722.61	-34.55	13.10	17.11	-38.56	-13.00	-25.56	H
7630.27	-32.66	11.50	22.20	-43.36	-13.00	-30.36	H
3815.45	-34.61	12.60	12.93	-34.94	-13.00	-21.94	V
5722.61	-34.62	13.10	17.11	-38.63	-13.00	-25.63	V
7630.27	-31.78	11.50	22.20	-42.48	-13.00	-29.48	V

WCDMA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.78	-40.76	9.40	4.75	-36.11	-13.00	-23.11	H
2479.19	-39.72	10.60	8.39	-37.51	-13.00	-24.51	H
3305.86	-31.97	12.00	11.79	-31.76	-13.00	-18.76	H
1652.78	-44.23	9.40	4.75	-39.58	-13.00	-26.58	V
2479.19	-44.25	10.60	8.39	-42.04	-13.00	-29.04	V
3305.86	-42.70	12.00	11.79	-42.49	-13.00	-29.49	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
1672.69	-41.36	9.40	4.75	-36.71	-13.00	-23.71	H
2509.43	-39.95	10.60	8.39	-37.74	-13.00	-24.74	H
3345.67	-31.53	12.00	11.79	-31.32	-13.00	-18.32	H
1672.69	-43.34	9.40	4.75	-38.69	-13.00	-25.69	V
2509.43	-44.11	10.60	8.39	-41.90	-13.00	-28.90	V
3345.67	-43.94	12.00	11.79	-43.73	-13.00	-30.73	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
1693.28	-40.76	9.40	4.75	-36.11	-13.00	-23.11	H
2539.59	-39.69	10.60	8.39	-37.48	-13.00	-24.48	H
3386.22	-31.40	12.00	11.79	-31.19	-13.00	-18.19	H
1693.28	-43.88	9.40	4.75	-39.23	-13.00	-26.23	V
2539.59	-44.98	10.60	8.39	-42.77	-13.00	-29.77	V
3386.22	-42.55	12.00	11.79	-42.34	-13.00	-29.34	V

HSUPA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.89	-40.59	9.40	4.75	-35.94	-13.00	-22.94	H
2479.43	-40.46	10.60	8.39	-38.25	-13.00	-25.25	H
3305.61	-31.30	12.00	11.79	-31.09	-13.00	-18.09	H
1652.89	-43.86	9.40	4.75	-39.21	-13.00	-26.21	V
2479.43	-45.19	10.60	8.39	-42.98	-13.00	-29.98	V
3305.61	-42.95	12.00	11.79	-42.74	-13.00	-29.74	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
1672.67	-40.99	9.40	4.75	-36.34	-13.00	-23.34	H
2509.02	-40.15	10.60	8.39	-37.94	-13.00	-24.94	H
3345.49	-30.86	12.00	11.79	-30.65	-13.00	-17.65	H
1672.67	-43.75	9.40	4.75	-39.10	-13.00	-26.10	V
2509.02	-44.83	10.60	8.39	-42.62	-13.00	-29.62	V
3345.49	-42.63	12.00	11.79	-42.42	-13.00	-29.42	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
1693.52	-41.60	9.40	4.75	-36.95	-13.00	-23.95	H
2539.87	-40.02	10.60	8.39	-37.81	-13.00	-24.81	H
3386.26	-32.25	12.00	11.79	-32.04	-13.00	-19.04	H
1693.52	-43.87	9.40	4.75	-39.22	-13.00	-26.22	V
2539.87	-44.14	10.60	8.39	-41.93	-13.00	-28.93	V
3386.26	-42.75	12.00	11.79	-42.54	-13.00	-29.54	V

HSDPA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.54	-40.97	9.40	4.75	-36.32	-13.00	-23.32	H
2479.18	-39.29	10.60	8.39	-37.08	-13.00	-24.08	H
3305.59	-31.07	12.00	11.79	-30.86	-13.00	-17.86	H
1652.54	-43.37	9.40	4.75	-38.72	-13.00	-25.72	V
2479.18	-44.65	10.60	8.39	-42.44	-13.00	-29.44	V
3305.59	-42.53	12.00	11.79	-42.32	-13.00	-29.32	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
1672.96	-41.45	9.40	4.75	-36.80	-13.00	-23.80	H
2509.21	-40.45	10.60	8.39	-38.24	-13.00	-25.24	H
3345.69	-30.89	12.00	11.79	-30.68	-13.00	-17.68	H
1672.96	-44.17	9.40	4.75	-39.52	-13.00	-26.52	V
2509.21	-45.25	10.60	8.39	-43.04	-13.00	-30.04	V
3345.69	-43.20	12.00	11.79	-42.99	-13.00	-29.99	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
1693.50	-41.24	9.40	4.75	-36.59	-13.00	-23.59	H
2539.61	-40.38	10.60	8.39	-38.17	-13.00	-25.17	H
3386.12	-31.74	12.00	11.79	-31.53	-13.00	-18.53	H
1693.50	-44.00	9.40	4.75	-39.35	-13.00	-26.35	V
2539.61	-44.60	10.60	8.39	-42.39	-13.00	-29.39	V
3386.12	-43.76	12.00	11.79	-43.55	-13.00	-30.55	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
3701.03	-33.83	12.60	12.93	-34.16	-13.00	-21.16	H
5552.15	-34.64	13.10	17.11	-38.65	-13.00	-25.65	H
7402.55	-32.62	11.50	22.20	-43.32	-13.00	-30.32	H
3701.03	-34.67	12.60	12.93	-35.00	-13.00	-22.00	V
5552.15	-33.78	13.10	17.11	-37.79	-13.00	-24.79	V
7402.55	-32.65	11.50	22.20	-43.35	-13.00	-30.35	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
3759.84	-34.09	12.60	12.93	-34.42	-13.00	-21.42	H
5640.26	-34.04	13.10	17.11	-38.05	-13.00	-25.05	H
7519.98	-32.90	11.50	22.20	-43.60	-13.00	-30.60	H
3759.84	-35.43	12.60	12.93	-35.76	-13.00	-22.76	V
5640.26	-34.44	13.10	17.11	-38.45	-13.00	-25.45	V
7519.98	-32.15	11.50	22.20	-42.85	-13.00	-29.85	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
3818.14	-34.26	12.60	12.93	-34.59	-13.00	-21.59	H
5727.79	-35.05	13.10	17.11	-39.06	-13.00	-26.06	H
7636.98	-33.04	11.50	22.20	-43.74	-13.00	-30.74	H
3818.14	-34.66	12.60	12.93	-34.99	-13.00	-21.99	V
5727.79	-34.01	13.10	17.11	-38.02	-13.00	-25.02	V
7636.98	-32.41	11.50	22.20	-43.11	-13.00	-30.11	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
3703.06	-34.20	12.60	12.93	-34.53	-13.00	-21.53	H
5554.45	-34.01	13.10	17.11	-38.02	-13.00	-25.02	H
7405.72	-33.11	11.50	22.20	-43.81	-13.00	-30.81	H
3703.06	-34.93	12.60	12.93	-35.26	-13.00	-22.26	V
5554.45	-34.01	13.10	17.11	-38.02	-13.00	-25.02	V
7405.72	-32.22	11.50	22.20	-42.92	-13.00	-29.92	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
3760.26	-33.56	12.60	12.93	-33.89	-13.00	-20.89	H
5640.28	-34.82	13.10	17.11	-38.83	-13.00	-25.83	H
7520.06	-32.29	11.50	22.20	-42.99	-13.00	-29.99	H
3760.26	-35.75	12.60	12.93	-36.08	-13.00	-23.08	V
5640.28	-34.35	13.10	17.11	-38.36	-13.00	-25.36	V
7520.06	-32.82	11.50	22.20	-43.52	-13.00	-30.52	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
3817.33	-34.60	12.60	12.93	-34.93	-13.00	-21.93	H
5725.43	-35.47	13.10	17.11	-39.48	-13.00	-26.48	H
7634.12	-32.77	11.50	22.20	-43.47	-13.00	-30.47	H
3817.33	-35.04	12.60	12.93	-35.37	-13.00	-22.37	V
5725.43	-34.16	13.10	17.11	-38.17	-13.00	-25.17	V
7634.12	-32.08	11.50	22.20	-42.78	-13.00	-29.78	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
3705.32	-33.75	12.60	12.93	-34.08	-13.00	-21.08	H
5557.34	-35.19	13.10	17.11	-39.20	-13.00	-26.20	H
7410.02	-32.23	11.50	22.20	-42.93	-13.00	-29.93	H
3705.32	-34.80	12.60	12.93	-35.13	-13.00	-22.13	V
5557.34	-34.74	13.10	17.11	-38.75	-13.00	-25.75	V
7410.02	-32.20	11.50	22.20	-42.90	-13.00	-29.90	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
3760.17	-33.64	12.60	12.93	-33.97	-13.00	-20.97	H
5640.16	-34.72	13.10	17.11	-38.73	-13.00	-25.73	H
7519.84	-32.34	11.50	22.20	-43.04	-13.00	-30.04	H
3760.17	-34.54	12.60	12.93	-34.87	-13.00	-21.87	V
5640.16	-33.76	13.10	17.11	-37.77	-13.00	-24.77	V
7519.84	-32.15	11.50	22.20	-42.85	-13.00	-29.85	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
3815.37	-33.95	12.60	12.93	-34.28	-13.00	-21.28	H
5722.13	-35.44	13.10	17.11	-39.45	-13.00	-26.45	H
7630.32	-32.75	11.50	22.20	-43.45	-13.00	-30.45	H
3815.37	-34.96	12.60	12.93	-35.29	-13.00	-22.29	V
5722.13	-33.90	13.10	17.11	-37.91	-13.00	-24.91	V
7630.32	-31.80	11.50	22.20	-42.50	-13.00	-29.50	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
3710.12	-33.59	12.60	12.93	-33.92	-13.00	-20.92	H
5565.12	-34.46	13.10	17.11	-38.47	-13.00	-25.47	H
7420.19	-33.34	11.50	22.20	-44.04	-13.00	-31.04	H
3710.12	-35.43	12.60	12.93	-35.76	-13.00	-22.76	V
5565.12	-34.67	13.10	17.11	-38.68	-13.00	-25.68	V
7420.19	-33.13	11.50	22.20	-43.83	-13.00	-30.83	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
3760.24	-34.62	12.60	12.93	-34.95	-13.00	-21.95	H
5640.11	-34.45	13.10	17.11	-38.46	-13.00	-25.46	H
7519.91	-33.36	11.50	22.20	-44.06	-13.00	-31.06	H
3760.24	-35.73	12.60	12.93	-36.06	-13.00	-23.06	V
5640.11	-34.39	13.10	17.11	-38.40	-13.00	-25.40	V
7519.91	-32.78	11.50	22.20	-43.48	-13.00	-30.48	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
3809.93	-33.84	12.60	12.93	-34.17	-13.00	-21.17	H
5714.69	-34.20	13.10	17.11	-38.21	-13.00	-25.21	H
7620.18	-32.94	11.50	22.20	-43.64	-13.00	-30.64	H
3809.93	-34.96	12.60	12.93	-35.29	-13.00	-22.29	V
5714.69	-34.14	13.10	17.11	-38.15	-13.00	-25.15	V
7620.18	-32.55	11.50	22.20	-43.25	-13.00	-30.25	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
3714.97	-33.77	12.60	12.93	-34.10	-13.00	-21.10	H
5572.31	-34.27	13.10	17.11	-38.28	-13.00	-25.28	H
7430.82	-32.71	11.50	22.20	-43.41	-13.00	-30.41	H
3714.97	-35.59	12.60	12.93	-35.92	-13.00	-22.92	V
5572.31	-34.02	13.10	17.11	-38.03	-13.00	-25.03	V
7430.82	-31.84	11.50	22.20	-42.54	-13.00	-29.54	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
3760.07	-34.42	12.60	12.93	-34.75	-13.00	-21.75	H
5640.28	-35.37	13.10	17.11	-39.38	-13.00	-26.38	H
7520.14	-32.16	11.50	22.20	-42.86	-13.00	-29.86	H
3760.07	-34.71	12.60	12.93	-35.04	-13.00	-22.04	V
5640.28	-34.12	13.10	17.11	-38.13	-13.00	-25.13	V
7520.14	-31.89	11.50	22.20	-42.59	-13.00	-29.59	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
3805.16	-33.53	12.60	12.93	-33.86	-13.00	-20.86	H
5707.32	-34.35	13.10	17.11	-38.36	-13.00	-25.36	H
7610.26	-32.49	11.50	22.20	-43.19	-13.00	-30.19	H
3805.16	-34.85	12.60	12.93	-35.18	-13.00	-22.18	V
5707.32	-34.53	13.10	17.11	-38.54	-13.00	-25.54	V
7610.26	-32.29	11.50	22.20	-42.99	-13.00	-29.99	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
3720.33	-34.46	12.60	12.93	-34.79	-13.00	-21.79	H
5580.15	-34.05	13.10	17.11	-38.06	-13.00	-25.06	H
7439.79	-32.42	11.50	22.20	-43.12	-13.00	-30.12	H
3720.33	-34.77	12.60	12.93	-35.10	-13.00	-22.10	V
5580.15	-34.69	13.10	17.11	-38.70	-13.00	-25.70	V
7439.79	-32.33	11.50	22.20	-43.03	-13.00	-30.03	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
3759.97	-33.84	12.60	12.93	-34.17	-13.00	-21.17	H
5639.87	-34.44	13.10	17.11	-38.45	-13.00	-25.45	H
7519.83	-33.19	11.50	22.20	-43.89	-13.00	-30.89	H
3759.97	-35.86	12.60	12.93	-36.19	-13.00	-23.19	V
5639.87	-34.02	13.10	17.11	-38.03	-13.00	-25.03	V
7519.83	-32.01	11.50	22.20	-42.71	-13.00	-29.71	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
3799.73	-34.79	12.60	12.93	-35.12	-13.00	-22.12	H
5699.97	-34.04	13.10	17.11	-38.05	-13.00	-25.05	H
7599.86	-32.51	11.50	22.20	-43.21	-13.00	-30.21	H
3799.73	-35.43	12.60	12.93	-35.76	-13.00	-22.76	V
5699.97	-34.85	13.10	17.11	-38.86	-13.00	-25.86	V
7599.86	-32.45	11.50	22.20	-43.15	-13.00	-30.15	V

LTE Band 5 / 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
1648.85	-34.20	9.56	9.72	-34.36	-13.00	-21.36	H
2473.49	-35.41	10.50	10.86	-35.77	-13.00	-22.77	H
3298.36	-33.61	12.78	11.57	-32.40	-13.00	-19.40	H
1648.85	-35.92	9.56	9.72	-36.08	-13.00	-23.08	V
2473.49	-33.98	10.50	10.86	-34.34	-13.00	-21.34	V
3298.36	-32.67	12.78	11.57	-31.46	-13.00	-18.46	V
LTE Band 5 / 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
1672.79	-34.61	9.56	9.72	-34.77	-13.00	-21.77	H
2509.23	-34.96	10.50	10.86	-35.32	-13.00	-22.32	H
3345.69	-33.51	12.78	11.57	-32.30	-13.00	-19.30	H
1672.79	-35.77	9.56	9.72	-35.93	-13.00	-22.93	V
2509.23	-34.62	10.50	10.86	-34.98	-13.00	-21.98	V
3345.69	-32.33	12.78	11.57	-31.12	-13.00	-18.12	V
LTE Band 5 / 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
1696.30	-33.87	9.56	9.72	-34.03	-13.00	-21.03	H
2544.33	-34.46	10.50	10.86	-34.82	-13.00	-21.82	H
3392.85	-32.29	12.78	11.57	-31.08	-13.00	-18.08	H
1696.30	-35.74	9.56	9.72	-35.90	-13.00	-22.90	V
2544.33	-33.97	10.50	10.86	-34.33	-13.00	-21.33	V
3392.85	-32.14	12.78	11.57	-30.93	-13.00	-17.93	V

LTE Band 5 / 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
1650.29	-34.28	9.56	9.72	-34.44	-13.00	-21.44	H
2475.96	-34.21	10.50	10.86	-34.57	-13.00	-21.57	H
3301.47	-32.50	12.78	11.57	-31.29	-13.00	-18.29	H
1650.29	-34.90	9.56	9.72	-35.06	-13.00	-22.06	V
2475.96	-35.02	10.50	10.86	-35.38	-13.00	-22.38	V
3301.47	-33.03	12.78	11.57	-31.82	-13.00	-18.82	V
LTE Band 5 / 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
1672.50	-33.54	9.56	9.72	-33.70	-13.00	-20.70	H
2508.96	-34.33	10.50	10.86	-34.69	-13.00	-21.69	H
3345.85	-33.01	12.78	11.57	-31.80	-13.00	-18.80	H
1672.50	-34.91	9.56	9.72	-35.07	-13.00	-22.07	V
2508.96	-35.23	10.50	10.86	-35.59	-13.00	-22.59	V
3345.85	-32.04	12.78	11.57	-30.83	-13.00	-17.83	V
LTE Band 5 / 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
1694.38	-34.40	9.56	9.72	-34.56	-13.00	-21.56	H
2541.91	-35.02	10.50	10.86	-35.38	-13.00	-22.38	H
3389.31	-33.10	12.78	11.57	-31.89	-13.00	-18.89	H
1694.38	-35.33	9.56	9.72	-35.49	-13.00	-22.49	V
2541.91	-35.18	10.50	10.86	-35.54	-13.00	-22.54	V
3389.31	-32.58	12.78	11.57	-31.37	-13.00	-18.37	V

LTE Band 5 / 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
1652.71	-33.99	9.56	9.72	-34.15	-13.00	-21.15	H
2478.61	-34.14	10.50	10.86	-34.50	-13.00	-21.50	H
3305.76	-32.39	12.78	11.57	-31.18	-13.00	-18.18	H
1652.71	-35.96	9.56	9.72	-36.12	-13.00	-23.12	V
2478.61	-34.65	10.50	10.86	-35.01	-13.00	-22.01	V
3305.76	-32.11	12.78	11.57	-30.90	-13.00	-17.90	V
LTE Band 5 / 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
1672.61	-34.61	9.56	9.72	-34.77	-13.00	-21.77	H
2508.68	-34.69	10.50	10.86	-35.05	-13.00	-22.05	H
3345.37	-32.71	12.78	11.57	-31.50	-13.00	-18.50	H
1672.61	-35.06	9.56	9.72	-35.22	-13.00	-22.22	V
2508.68	-33.97	10.50	10.86	-34.33	-13.00	-21.33	V
3345.37	-32.14	12.78	11.57	-30.93	-13.00	-17.93	V
LTE Band 5 / 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
1692.19	-33.96	9.56	9.72	-34.12	-13.00	-21.12	H
2539.03	-34.94	10.50	10.86	-35.30	-13.00	-22.30	H
3385.70	-32.86	12.78	11.57	-31.65	-13.00	-18.65	H
1692.19	-35.53	9.56	9.72	-35.69	-13.00	-22.69	V
2539.03	-34.27	10.50	10.86	-34.63	-13.00	-21.63	V
3385.70	-32.63	12.78	11.57	-31.42	-13.00	-18.42	V

LTE Band 5 / 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
1657.68	-34.60	9.56	9.72	-34.76	-13.00	-21.76	H
2486.48	-34.33	10.50	10.86	-34.69	-13.00	-21.69	H
3315.27	-33.48	12.78	11.57	-32.27	-13.00	-19.27	H
1657.68	-35.10	9.56	9.72	-35.26	-13.00	-22.26	V
2486.48	-33.90	10.50	10.86	-34.26	-13.00	-21.26	V
3315.27	-31.93	12.78	11.57	-30.72	-13.00	-17.72	V
LTE Band 5 / 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
1672.46	-34.20	9.56	9.72	-34.36	-13.00	-21.36	H
2509.06	-34.78	10.50	10.86	-35.14	-13.00	-22.14	H
3345.33	-33.19	12.78	11.57	-31.98	-13.00	-18.98	H
1672.46	-34.73	9.56	9.72	-34.89	-13.00	-21.89	V
2509.06	-33.85	10.50	10.86	-34.21	-13.00	-21.21	V
3345.33	-32.25	12.78	11.57	-31.04	-13.00	-18.04	V
LTE Band 5 / 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
1687.37	-34.47	9.56	9.72	-34.63	-13.00	-21.63	H
2531.61	-35.39	10.50	10.86	-35.75	-13.00	-22.75	H
3375.83	-32.40	12.78	11.57	-31.19	-13.00	-18.19	H
1687.37	-35.84	9.56	9.72	-36.00	-13.00	-23.00	V
2531.61	-34.71	10.50	10.86	-35.07	-13.00	-22.07	V
3375.83	-31.91	12.78	11.57	-30.70	-13.00	-17.70	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
1399.09	-34.66	8.17	9.34	-35.83	-13.00	-22.83	H
2098.73	-34.35	9.53	10.42	-35.24	-13.00	-22.24	H
2798.78	-32.79	11.27	11.12	-32.64	-13.00	-19.64	H
1399.09	-35.15	8.17	9.34	-36.32	-13.00	-23.32	V
2098.73	-34.29	9.53	10.42	-35.18	-13.00	-22.18	V
2798.78	-32.20	11.27	11.12	-32.05	-13.00	-19.05	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
1414.87	-34.62	8.17	9.34	-35.79	-13.00	-22.79	H
2122.47	-34.30	9.53	10.42	-35.19	-13.00	-22.19	H
2829.65	-33.03	11.27	11.12	-32.88	-13.00	-19.88	H
1414.87	-35.42	8.17	9.34	-36.59	-13.00	-23.59	V
2122.47	-34.21	9.53	10.42	-35.10	-13.00	-22.10	V
2829.65	-32.08	11.27	11.12	-31.93	-13.00	-18.93	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
1430.35	-34.09	8.17	9.34	-35.26	-13.00	-22.26	H
2145.86	-35.46	9.53	10.42	-36.35	-13.00	-23.35	H
2861.10	-33.59	11.27	11.12	-33.44	-13.00	-20.44	H
1430.35	-35.74	8.17	9.34	-36.91	-13.00	-23.91	V
2145.86	-34.59	9.53	10.42	-35.48	-13.00	-22.48	V
2861.10	-31.91	11.27	11.12	-31.76	-13.00	-18.76	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
1400.96	-34.68	8.17	9.34	-35.85	-13.00	-22.85	H
2101.02	-34.26	9.53	10.42	-35.15	-13.00	-22.15	H
2801.67	-33.16	11.27	11.12	-33.01	-13.00	-20.01	H
1400.96	-34.56	8.17	9.34	-35.73	-13.00	-22.73	V
2101.02	-34.64	9.53	10.42	-35.53	-13.00	-22.53	V
2801.67	-33.21	11.27	11.12	-33.06	-13.00	-20.06	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
1414.87	-34.64	8.17	9.34	-35.81	-13.00	-22.81	H
2122.43	-35.08	9.53	10.42	-35.97	-13.00	-22.97	H
2829.92	-32.21	11.27	11.12	-32.06	-13.00	-19.06	H
1414.87	-34.82	8.17	9.34	-35.99	-13.00	-22.99	V
2122.43	-34.28	9.53	10.42	-35.17	-13.00	-22.17	V
2829.92	-32.38	11.27	11.12	-32.23	-13.00	-19.23	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
1428.88	-33.63	8.17	9.34	-34.80	-13.00	-21.80	H
2143.28	-35.22	9.53	10.42	-36.11	-13.00	-23.11	H
2857.52	-32.64	11.27	11.12	-32.49	-13.00	-19.49	H
1428.88	-35.28	8.17	9.34	-36.45	-13.00	-23.45	V
2143.28	-33.86	9.53	10.42	-34.75	-13.00	-21.75	V
2857.52	-32.66	11.27	11.12	-32.51	-13.00	-19.51	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
1402.78	-33.98	8.17	9.34	-35.15	-13.00	-22.15	H
2104.11	-35.02	9.53	10.42	-35.91	-13.00	-22.91	H
2805.73	-33.10	11.27	11.12	-32.95	-13.00	-19.95	H
1402.78	-35.13	8.17	9.34	-36.30	-13.00	-23.30	V
2104.11	-34.49	9.53	10.42	-35.38	-13.00	-22.38	V
2805.73	-32.48	11.27	11.12	-32.33	-13.00	-19.33	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	-34.26	8.17	9.34	-35.43	-13.00	-22.43	H
2122.19	-34.12	9.53	10.42	-35.01	-13.00	-22.01	H
2829.71	-32.58	11.27	11.12	-32.43	-13.00	-19.43	H
1414.80	-35.55	8.17	9.34	-36.72	-13.00	-23.72	V
2122.19	-34.97	9.53	10.42	-35.86	-13.00	-22.86	V
2829.71	-31.85	11.27	11.12	-31.70	-13.00	-18.70	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
1426.66	-33.47	8.17	9.34	-34.64	-13.00	-21.64	H
2140.09	-34.85	9.53	10.42	-35.74	-13.00	-22.74	H
2853.60	-33.60	11.27	11.12	-33.45	-13.00	-20.45	H
1426.66	-35.33	8.17	9.34	-36.50	-13.00	-23.50	V
2140.09	-34.22	9.53	10.42	-35.11	-13.00	-22.11	V
2853.60	-32.51	11.27	11.12	-32.36	-13.00	-19.36	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
1407.88	-34.58	8.17	9.34	-35.75	-13.00	-22.75	H
2111.53	-34.33	9.53	10.42	-35.22	-13.00	-22.22	H
2815.65	-32.56	11.27	11.12	-32.41	-13.00	-19.41	H
1407.88	-35.61	8.17	9.34	-36.78	-13.00	-23.78	V
2111.53	-34.76	9.53	10.42	-35.65	-13.00	-22.65	V
2815.65	-32.52	11.27	11.12	-32.37	-13.00	-19.37	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
1414.74	-34.34	8.17	9.34	-35.51	-13.00	-22.51	H
2122.23	-34.54	9.53	10.42	-35.43	-13.00	-22.43	H
2829.72	-32.37	11.27	11.12	-32.22	-13.00	-19.22	H
1414.74	-35.53	8.17	9.34	-36.70	-13.00	-23.70	V
2122.23	-33.95	9.53	10.42	-34.84	-13.00	-21.84	V
2829.72	-31.80	11.27	11.12	-31.65	-13.00	-18.65	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
1421.85	-33.60	8.17	9.34	-34.77	-13.00	-21.77	H
2132.54	-34.17	9.53	10.42	-35.06	-13.00	-22.06	H
2843.69	-33.37	11.27	11.12	-33.22	-13.00	-20.22	H
1421.85	-35.08	8.17	9.34	-36.25	-13.00	-23.25	V
2132.54	-34.60	9.53	10.42	-35.49	-13.00	-22.49	V
2843.69	-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※※※※※