



RF TEST REPORT

Applicant	Asiatelco Technologies Co.
FCC ID	XYO-J912
Product	LTE CPE
Brand	ATEL
Model	AOL-J912
Report No.	R2111A0991-R2V1
Issue Date	December 15, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2020)/ FCC CFR 47 Part 24E (2020)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	December 3, 2021
Rev.1	Update description in Page 4.	December 15, 2021
Note: This revised report (Report No. R2111A0991-R2V1) supersedes and replaces the previously issued report (Report No. R2111A0991-R2). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of measurement results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046 24.232(c)	PASS
2	Radiates Spurious Emission	2.1053 / 24.238(a)	PASS
Date of Testing: November 12, 2021 ~ December 2, 2021			
Date of Sample Received: November 9, 2021			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

Only RF Power Output and Effective Radiated Power and Radiates Spurious Emission are tested for LTE CPE in this report. Other test items refer to the Module report (Report No.: FG8N2911A and FG8N2911B; FCC ID: XMR201901EM12G).



1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
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Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	Asiatelco Technologies Co.
Applicant address	#68 HuaTuo Road, Building-8, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201204, China
Manufacturer	Asiatelco Technologies Co.
Manufacturer address	#68 HuaTuo Road, Building-8, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201204, China

2.2. General information

EUT Description			
Model	AOL-J912		
IMEI	869710030051985		
Hardware Version	J91-P1		
Software Version	CPE3_WT_J91_00_v1.0.3		
Power Supply	POE		
Antenna Type	Internal Antenna		
Antenna Gain	WCDMA Band II: 9 dBi LTE Band 2: 9 dBi LTE Band 25: 10 dBi		
Test Mode(s)	WCDMA Band II; LTE Band 2/25;		
Test Modulation	(WCDMA) BPSK, QPSK,16QAM; (LTE)QPSK,16QAM		
HSDPA UE Category	24		
HSUPA UE Category	6		
LTE Category	12		
Maximum E.I.R.P	WCDMA Band II:	32.05 dBm	
	LTE Band 2:	32.10 dBm	
	LTE Band 25:	32.09 dBm	
Rated Power Supply Voltage	50 V		
Operating Voltage	Minimum: 48 V Maximum: 55 V		
Operating Temperature	Lowest: -30°C Highest: +60°C		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band II	1850 ~ 1910	1930 ~ 1990
	LTE Band 2	1850 ~ 1910	1930 ~ 1990
	LTE Band 25	1850 ~ 1915	1930 ~ 1995
EUT Accessory			
POE Injector	Manufacturer: KeTujia Model: PSE302G		
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			

3. Applied Standards

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

Test standards:

FCC CFR 47 Part 24E (2020)

FCC CFR47 Part 2 (2020)

Reference standard:

ANSI C63.26 (2015)

KDB 971168 D01 Power Meas License Digital Systems v03r01

4. Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, horizontal polarization for WCDMA, Z axis, Vertical polarization for LTE) and the worst case was recorded.

All mode and data rates and positions and RB size and modulations were investigated.

Subsequently, only the worst case emissions are reported.

The following testing in WCDMA/LTE is set based on the maximum RF Output Power.

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

Test items	Modes/Modulation
	WCDMA Band II
RF Power Output and Effective Isotropic Radiated Power	RMC HSDPA/HSUPA DC-HSDPA/HSPA+
Radiates Spurious Emission	RMC

Test modes are chosen to be reported as the worst case configuration below for LTE Band 2/25:

Test items	Bandwidth (MHz)						Modulation		RB			Test Channel		
	1.4	3	5	10	15	20	QPSK	16QAM/ 64QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Radiates Spurious Emission	O	-	O	-	-	O	O	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.													

5. Test Case Results

5.1.RF Power Output and Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

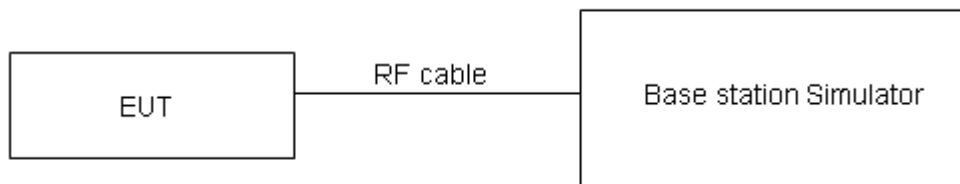
ERP can then be calculated as follows:

$$\text{EIRP (dBm)} = \text{Output Power (dBm)} - \text{Losses (dB)} + \text{Antenna Gain (dBi)}$$

where:dBd refers to gain relative to an ideal dipole.

$$\text{EIRP (dBm)} = \text{ERP (dBm)} + 2.15 \text{ (dB.)}$$

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 24.232(c) Mobile and portable stations are limited to 2 watts EIRP.

Rule Part 24.232(e) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

Limit	$\leq 2 \text{ W}$ (33 dBm)
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4 \text{ dB}$ for RF power output, $k = 2$, $U = 1.19 \text{ dB}$ for EIRP.

Test Results

WCDMA Band II		Maximum Output Power (dBm)			EIRP (dBm)		
		Channel 9262	Channel 9400	Channel 9538	Channel 9262	Channel 9400	Channel 9538
		1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)	1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)
RMC		23.05	23.02	23.04	32.05	32.02	32.04
HSDPA	Sub - Test 1	22.51	22.44	22.48	31.51	31.44	31.48
	Sub - Test 2	22.50	22.46	22.45	31.50	31.46	31.45
	Sub - Test 3	21.97	21.96	21.97	30.97	30.96	30.97
	Sub - Test 4	21.98	21.97	21.95	30.98	30.97	30.95
HSUPA	Sub - Test 1	22.47	22.43	22.43	31.47	31.43	31.43
	Sub - Test 2	21.46	21.41	21.42	30.46	30.41	30.42
	Sub - Test 3	21.93	21.89	21.91	30.93	30.89	30.91
	Sub - Test 4	21.39	21.38	21.39	30.39	30.38	30.39
	Sub - Test 5	22.40	22.36	22.37	31.40	31.36	31.37
DC-HSDPA	Sub - Test 1	22.39	22.38	22.38	31.39	31.38	31.38
	Sub - Test 2	22.38	22.37	22.37	31.38	31.37	31.37
	Sub - Test 3	21.96	21.86	21.88	30.96	30.86	30.88
	Sub - Test 4	21.95	21.85	21.87	30.95	30.85	30.87
HSPA+	16QAM	21.94	21.93	21.94	30.94	30.93	30.94



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Maximum Output Power (dBm)	EIRP (dBm)
LTE Band2	1.4	18607	1	#0	QPSK	21.52	30.52
LTE Band2	1.4	18607	1	#Mid	QPSK	21.62	30.62
LTE Band2	1.4	18607	1	#Max	QPSK	21.52	30.52
LTE Band2	1.4	18607	3	#0	QPSK	21.46	30.46
LTE Band2	1.4	18607	3	#Mid	QPSK	21.45	30.45
LTE Band2	1.4	18607	3	#Max	QPSK	21.42	30.42
LTE Band2	1.4	18607	6	#0	QPSK	20.46	29.46
LTE Band2	1.4	18607	1	#0	QAM16	20.61	29.61
LTE Band2	1.4	18607	1	#Mid	QAM16	20.67	29.67
LTE Band2	1.4	18607	1	#Max	QAM16	20.57	29.57
LTE Band2	1.4	18607	3	#0	QAM16	20.72	29.72
LTE Band2	1.4	18607	3	#Mid	QAM16	20.70	29.70
LTE Band2	1.4	18607	3	#Max	QAM16	20.71	29.71
LTE Band2	1.4	18607	6	#0	QAM16	19.58	28.58
LTE Band2	1.4	18900	1	#0	QPSK	21.54	30.54
LTE Band2	1.4	18900	1	#Mid	QPSK	21.65	30.65
LTE Band2	1.4	18900	1	#Max	QPSK	21.53	30.53
LTE Band2	1.4	18900	3	#0	QPSK	21.58	30.58
LTE Band2	1.4	18900	3	#Mid	QPSK	21.59	30.59
LTE Band2	1.4	18900	3	#Max	QPSK	21.56	30.56
LTE Band2	1.4	18900	6	#0	QPSK	20.61	29.61
LTE Band2	1.4	18900	1	#0	QAM16	20.76	29.76
LTE Band2	1.4	18900	1	#Mid	QAM16	20.86	29.86
LTE Band2	1.4	18900	1	#Max	QAM16	20.78	29.78
LTE Band2	1.4	18900	3	#0	QAM16	20.65	29.65
LTE Band2	1.4	18900	3	#Mid	QAM16	20.63	29.63
LTE Band2	1.4	18900	3	#Max	QAM16	20.64	29.64
LTE Band2	1.4	18900	6	#0	QAM16	19.66	28.66
LTE Band2	1.4	19193	1	#0	QPSK	21.80	30.80
LTE Band2	1.4	19193	1	#Mid	QPSK	21.87	30.87
LTE Band2	1.4	19193	1	#Max	QPSK	21.75	30.75
LTE Band2	1.4	19193	3	#0	QPSK	21.79	30.79
LTE Band2	1.4	19193	3	#Mid	QPSK	21.78	30.78
LTE Band2	1.4	19193	3	#Max	QPSK	21.75	30.75
LTE Band2	1.4	19193	6	#0	QPSK	20.78	29.78
LTE Band2	1.4	19193	1	#0	QAM16	20.75	29.75
LTE Band2	1.4	19193	1	#Mid	QAM16	20.81	29.81
LTE Band2	1.4	19193	1	#Max	QAM16	20.73	29.73
LTE Band2	1.4	19193	3	#0	QAM16	20.83	29.83



LTE Band2	1.4	19193	3	#Mid	QAM16	20.86	29.86
LTE Band2	1.4	19193	3	#Max	QAM16	20.85	29.85
LTE Band2	1.4	19193	6	#0	QAM16	19.89	28.89
LTE Band2	3	18615	1	#0	QPSK	21.48	30.48
LTE Band2	3	18615	1	#Mid	QPSK	21.45	30.45
LTE Band2	3	18615	1	#Max	QPSK	21.40	30.40
LTE Band2	3	18615	8	#0	QPSK	20.53	29.53
LTE Band2	3	18615	8	#Mid	QPSK	20.53	29.53
LTE Band2	3	18615	8	#Max	QPSK	20.54	29.54
LTE Band2	3	18615	15	#0	QPSK	20.53	29.53
LTE Band2	3	18615	1	#0	QAM16	20.84	29.84
LTE Band2	3	18615	1	#Mid	QAM16	20.76	29.76
LTE Band2	3	18615	1	#Max	QAM16	20.80	29.80
LTE Band2	3	18615	8	#0	QAM16	19.63	28.63
LTE Band2	3	18615	8	#Mid	QAM16	19.64	28.64
LTE Band2	3	18615	8	#Max	QAM16	19.62	28.62
LTE Band2	3	18615	15	#0	QAM16	19.58	28.58
LTE Band2	3	18900	1	#0	QPSK	21.61	30.61
LTE Band2	3	18900	1	#Mid	QPSK	21.65	30.65
LTE Band2	3	18900	1	#Max	QPSK	21.58	30.58
LTE Band2	3	18900	8	#0	QPSK	20.71	29.71
LTE Band2	3	18900	8	#Mid	QPSK	20.67	29.67
LTE Band2	3	18900	8	#Max	QPSK	20.67	29.67
LTE Band2	3	18900	15	#0	QPSK	20.67	29.67
LTE Band2	3	18900	1	#0	QAM16	20.90	29.90
LTE Band2	3	18900	1	#Mid	QAM16	20.87	29.87
LTE Band2	3	18900	1	#Max	QAM16	20.83	29.83
LTE Band2	3	18900	8	#0	QAM16	19.79	28.79
LTE Band2	3	18900	8	#Mid	QAM16	19.76	28.76
LTE Band2	3	18900	8	#Max	QAM16	19.72	28.72
LTE Band2	3	18900	15	#0	QAM16	19.65	28.65
LTE Band2	3	19185	1	#0	QPSK	21.85	30.85
LTE Band2	3	19185	1	#Mid	QPSK	21.87	30.87
LTE Band2	3	19185	1	#Max	QPSK	21.83	30.83
LTE Band2	3	19185	8	#0	QPSK	20.82	29.82
LTE Band2	3	19185	8	#Mid	QPSK	20.86	29.86
LTE Band2	3	19185	8	#Max	QPSK	20.82	29.82
LTE Band2	3	19185	15	#0	QPSK	20.87	29.87
LTE Band2	3	19185	1	#0	QAM16	20.84	29.84
LTE Band2	3	19185	1	#Mid	QAM16	20.78	29.78
LTE Band2	3	19185	1	#Max	QAM16	20.80	29.80
LTE Band2	3	19185	8	#0	QAM16	19.90	28.90
LTE Band2	3	19185	8	#Mid	QAM16	19.92	28.92



LTE Band2	3	19185	8	#Max	QAM16	19.89	28.89
LTE Band2	3	19185	15	#0	QAM16	19.98	28.98
LTE Band2	5	18625	1	#0	QPSK	21.60	30.60
LTE Band2	5	18625	1	#Mid	QPSK	21.60	30.60
LTE Band2	5	18625	1	#Max	QPSK	21.51	30.51
LTE Band2	5	18625	12	#0	QPSK	20.59	29.59
LTE Band2	5	18625	12	#Mid	QPSK	20.60	29.60
LTE Band2	5	18625	12	#Max	QPSK	20.56	29.56
LTE Band2	5	18625	25	#0	QPSK	20.53	29.53
LTE Band2	5	18625	1	#0	QAM16	20.94	29.94
LTE Band2	5	18625	1	#Mid	QAM16	20.87	29.87
LTE Band2	5	18625	1	#Max	QAM16	20.88	29.88
LTE Band2	5	18625	12	#0	QAM16	19.61	28.61
LTE Band2	5	18625	12	#Mid	QAM16	19.60	28.60
LTE Band2	5	18625	12	#Max	QAM16	19.56	28.56
LTE Band2	5	18625	25	#0	QAM16	19.64	28.64
LTE Band2	5	18900	1	#0	QPSK	21.75	30.75
LTE Band2	5	18900	1	#Mid	QPSK	21.75	30.75
LTE Band2	5	18900	1	#Max	QPSK	21.68	30.68
LTE Band2	5	18900	12	#0	QPSK	20.76	29.76
LTE Band2	5	18900	12	#Mid	QPSK	20.77	29.77
LTE Band2	5	18900	12	#Max	QPSK	20.69	29.69
LTE Band2	5	18900	25	#0	QPSK	20.71	29.71
LTE Band2	5	18900	1	#0	QAM16	20.95	29.95
LTE Band2	5	18900	1	#Mid	QAM16	20.94	29.94
LTE Band2	5	18900	1	#Max	QAM16	20.84	29.84
LTE Band2	5	18900	12	#0	QAM16	19.80	28.80
LTE Band2	5	18900	12	#Mid	QAM16	19.79	28.79
LTE Band2	5	18900	12	#Max	QAM16	19.73	28.73
LTE Band2	5	18900	25	#0	QAM16	19.75	28.75
LTE Band2	5	19175	1	#0	QPSK	21.83	30.83
LTE Band2	5	19175	1	#Mid	QPSK	21.82	30.82
LTE Band2	5	19175	1	#Max	QPSK	21.74	30.74
LTE Band2	5	19175	12	#0	QPSK	20.88	29.88
LTE Band2	5	19175	12	#Mid	QPSK	20.90	29.90
LTE Band2	5	19175	12	#Max	QPSK	20.85	29.85
LTE Band2	5	19175	25	#0	QPSK	20.87	29.87
LTE Band2	5	19175	1	#0	QAM16	21.17	30.17
LTE Band2	5	19175	1	#Mid	QAM16	21.18	30.18
LTE Band2	5	19175	1	#Max	QAM16	21.15	30.15
LTE Band2	5	19175	12	#0	QAM16	20.02	29.02
LTE Band2	5	19175	12	#Mid	QAM16	20.03	29.03
LTE Band2	5	19175	12	#Max	QAM16	19.99	28.99



LTE Band2	5	19175	25	#0	QAM16	19.97	28.97
LTE Band2	10	18650	1	#0	QPSK	21.59	30.59
LTE Band2	10	18650	1	#Mid	QPSK	21.51	30.51
LTE Band2	10	18650	1	#Max	QPSK	21.50	30.50
LTE Band2	10	18650	25	#0	QPSK	20.60	29.60
LTE Band2	10	18650	25	#Mid	QPSK	20.58	29.58
LTE Band2	10	18650	25	#Max	QPSK	20.61	29.61
LTE Band2	10	18650	50	#0	QPSK	20.63	29.63
LTE Band2	10	18650	1	#0	QAM16	20.98	29.98
LTE Band2	10	18650	1	#Mid	QAM16	20.88	29.88
LTE Band2	10	18650	1	#Max	QAM16	20.89	29.89
LTE Band2	10	18650	25	#0	QAM16	19.72	28.72
LTE Band2	10	18650	25	#Mid	QAM16	19.73	28.73
LTE Band2	10	18650	25	#Max	QAM16	19.73	28.73
LTE Band2	10	18650	50	#0	QAM16	19.70	28.70
LTE Band2	10	18900	1	#0	QPSK	21.76	30.76
LTE Band2	10	18900	1	#Mid	QPSK	21.71	30.71
LTE Band2	10	18900	1	#Max	QPSK	21.65	30.65
LTE Band2	10	18900	25	#0	QPSK	20.79	29.79
LTE Band2	10	18900	25	#Mid	QPSK	20.77	29.77
LTE Band2	10	18900	25	#Max	QPSK	20.71	29.71
LTE Band2	10	18900	50	#0	QPSK	20.72	29.72
LTE Band2	10	18900	1	#0	QAM16	20.97	29.97
LTE Band2	10	18900	1	#Mid	QAM16	20.88	29.88
LTE Band2	10	18900	1	#Max	QAM16	20.83	29.83
LTE Band2	10	18900	25	#0	QAM16	19.86	28.86
LTE Band2	10	18900	25	#Mid	QAM16	19.86	28.86
LTE Band2	10	18900	25	#Max	QAM16	19.79	28.79
LTE Band2	10	18900	50	#0	QAM16	19.82	28.82
LTE Band2	10	19150	1	#0	QPSK	22.05	31.05
LTE Band2	10	19150	1	#Mid	QPSK	21.92	30.92
LTE Band2	10	19150	1	#Max	QPSK	21.90	30.90
LTE Band2	10	19150	25	#0	QPSK	20.97	29.97
LTE Band2	10	19150	25	#Mid	QPSK	20.97	29.97
LTE Band2	10	19150	25	#Max	QPSK	20.90	29.90
LTE Band2	10	19150	50	#0	QPSK	20.94	29.94
LTE Band2	10	19150	1	#0	QAM16	20.97	29.97
LTE Band2	10	19150	1	#Mid	QAM16	20.80	29.80
LTE Band2	10	19150	1	#Max	QAM16	20.80	29.80
LTE Band2	10	19150	25	#0	QAM16	20.01	29.01
LTE Band2	10	19150	25	#Mid	QAM16	20.04	29.04
LTE Band2	10	19150	25	#Max	QAM16	19.99	28.99
LTE Band2	10	19150	50	#0	QAM16	20.03	29.03



LTE Band2	15	18675	1	#0	QPSK	21.67	30.67
LTE Band2	15	18675	1	#Mid	QPSK	21.56	30.56
LTE Band2	15	18675	1	#Max	QPSK	21.49	30.49
LTE Band2	15	18675	36	#0	QPSK	20.65	29.65
LTE Band2	15	18675	36	#Mid	QPSK	20.66	29.66
LTE Band2	15	18675	36	#Max	QPSK	20.57	29.57
LTE Band2	15	18675	75	#0	QPSK	20.61	29.61
LTE Band2	15	18675	1	#0	QAM16	21.07	30.07
LTE Band2	15	18675	1	#Mid	QAM16	20.93	29.93
LTE Band2	15	18675	1	#Max	QAM16	20.93	29.93
LTE Band2	15	18675	36	#0	QAM16	19.79	28.79
LTE Band2	15	18675	36	#Mid	QAM16	19.81	28.81
LTE Band2	15	18675	36	#Max	QAM16	19.68	28.68
LTE Band2	15	18675	75	#0	QAM16	19.76	28.76
LTE Band2	15	18900	1	#0	QPSK	21.77	30.77
LTE Band2	15	18900	1	#Mid	QPSK	21.68	30.68
LTE Band2	15	18900	1	#Max	QPSK	21.64	30.64
LTE Band2	15	18900	36	#0	QPSK	20.79	29.79
LTE Band2	15	18900	36	#Mid	QPSK	20.79	29.79
LTE Band2	15	18900	36	#Max	QPSK	20.68	29.68
LTE Band2	15	18900	75	#0	QPSK	20.75	29.75
LTE Band2	15	18900	1	#0	QAM16	21.09	30.09
LTE Band2	15	18900	1	#Mid	QAM16	21.00	30.00
LTE Band2	15	18900	1	#Max	QAM16	20.92	29.92
LTE Band2	15	18900	36	#0	QAM16	19.89	28.89
LTE Band2	15	18900	36	#Mid	QAM16	19.93	28.93
LTE Band2	15	18900	36	#Max	QAM16	19.81	28.81
LTE Band2	15	18900	75	#0	QAM16	19.87	28.87
LTE Band2	15	19125	1	#0	QPSK	22.09	31.09
LTE Band2	15	19125	1	#Mid	QPSK	21.93	30.93
LTE Band2	15	19125	1	#Max	QPSK	21.91	30.91
LTE Band2	15	19125	36	#0	QPSK	20.93	29.93
LTE Band2	15	19125	36	#Mid	QPSK	20.91	29.91
LTE Band2	15	19125	36	#Max	QPSK	20.87	29.87
LTE Band2	15	19125	75	#0	QPSK	20.86	29.86
LTE Band2	15	19125	1	#0	QAM16	21.16	30.16
LTE Band2	15	19125	1	#Mid	QAM16	21.03	30.03
LTE Band2	15	19125	1	#Max	QAM16	20.97	29.97
LTE Band2	15	19125	36	#0	QAM16	20.02	29.02
LTE Band2	15	19125	36	#Mid	QAM16	20.02	29.02
LTE Band2	15	19125	36	#Max	QAM16	19.97	28.97
LTE Band2	15	19125	75	#0	QAM16	19.97	28.97
LTE Band2	20	18700	1	#0	QPSK	21.73	30.73



LTE Band2	20	18700	1	#Mid	QPSK	21.65	30.65
LTE Band2	20	18700	1	#Max	QPSK	21.61	30.61
LTE Band2	20	18700	50	#0	QPSK	20.77	29.77
LTE Band2	20	18700	50	#Mid	QPSK	20.78	29.78
LTE Band2	20	18700	50	#Max	QPSK	20.71	29.71
LTE Band2	20	18700	100	#0	QPSK	20.71	29.71
LTE Band2	20	18700	1	#0	QAM16	21.04	30.04
LTE Band2	20	18700	1	#Mid	QAM16	20.89	29.89
LTE Band2	20	18700	1	#Max	QAM16	20.90	29.90
LTE Band2	20	18700	50	#0	QAM16	19.86	28.86
LTE Band2	20	18700	50	#Mid	QAM16	19.89	28.89
LTE Band2	20	18700	50	#Max	QAM16	19.84	28.84
LTE Band2	20	18700	100	#0	QAM16	19.78	28.78
LTE Band2	20	18900	1	#0	QPSK	21.88	30.88
LTE Band2	20	18900	1	#Mid	QPSK	21.83	30.83
LTE Band2	20	18900	1	#Max	QPSK	21.70	30.70
LTE Band2	20	18900	50	#0	QPSK	20.87	29.87
LTE Band2	20	18900	50	#Mid	QPSK	20.89	29.89
LTE Band2	20	18900	50	#Max	QPSK	20.71	29.71
LTE Band2	20	18900	100	#0	QPSK	20.81	29.81
LTE Band2	20	18900	1	#0	QAM16	20.77	29.77
LTE Band2	20	18900	1	#Mid	QAM16	20.69	29.69
LTE Band2	20	18900	1	#Max	QAM16	20.59	29.59
LTE Band2	20	18900	50	#0	QAM16	19.98	28.98
LTE Band2	20	18900	50	#Mid	QAM16	19.94	28.94
LTE Band2	20	18900	50	#Max	QAM16	19.79	28.79
LTE Band2	20	18900	100	#0	QAM16	19.91	28.91
LTE Band2	20	19100	1	#0	QPSK	22.10	31.10
LTE Band2	20	19100	1	#Mid	QPSK	21.93	30.93
LTE Band2	20	19100	1	#Max	QPSK	21.86	30.86
LTE Band2	20	19100	50	#0	QPSK	21.00	30.00
LTE Band2	20	19100	50	#Mid	QPSK	21.03	30.03
LTE Band2	20	19100	50	#Max	QPSK	20.96	29.96
LTE Band2	20	19100	100	#0	QPSK	20.92	29.92
LTE Band2	20	19100	1	#0	QAM16	20.99	29.99
LTE Band2	20	19100	1	#Mid	QAM16	20.81	29.81
LTE Band2	20	19100	1	#Max	QAM16	20.68	29.68
LTE Band2	20	19100	50	#0	QAM16	20.12	29.12
LTE Band2	20	19100	50	#Mid	QAM16	20.15	29.15
LTE Band2	20	19100	50	#Max	QAM16	20.08	29.08
LTE Band2	20	19100	100	#0	QAM16	20.03	29.03
LTE Band2	1.4	18607	1	#0	QAM64	20.36	29.36
LTE Band2	1.4	18607	1	#Mid	QAM64	20.48	29.48



LTE Band2	1.4	18607	1	#Max	QAM64	20.40	29.40
LTE Band2	1.4	18607	3	#0	QAM64	20.21	29.21
LTE Band2	1.4	18607	3	#Mid	QAM64	20.21	29.21
LTE Band2	1.4	18607	3	#Max	QAM64	20.25	29.25
LTE Band2	1.4	18607	6	#0	QAM64	19.19	28.19
LTE Band2	1.4	18900	1	#0	QAM64	20.27	29.27
LTE Band2	1.4	18900	1	#Mid	QAM64	20.28	29.28
LTE Band2	1.4	18900	1	#Max	QAM64	20.21	29.21
LTE Band2	1.4	18900	3	#0	QAM64	20.33	29.33
LTE Band2	1.4	18900	3	#Mid	QAM64	20.33	29.33
LTE Band2	1.4	18900	3	#Max	QAM64	20.29	29.29
LTE Band2	1.4	18900	6	#0	QAM64	19.37	28.37
LTE Band2	1.4	19193	1	#0	QAM64	20.57	29.57
LTE Band2	1.4	19193	1	#Mid	QAM64	20.65	29.65
LTE Band2	1.4	19193	1	#Max	QAM64	20.56	29.56
LTE Band2	1.4	19193	3	#0	QAM64	20.73	29.73
LTE Band2	1.4	19193	3	#Mid	QAM64	20.74	29.74
LTE Band2	1.4	19193	3	#Max	QAM64	20.72	29.72
LTE Band2	1.4	19193	6	#0	QAM64	19.59	28.59
LTE Band2	3	18615	1	#0	QAM64	20.20	29.20
LTE Band2	3	18615	1	#Mid	QAM64	20.16	29.16
LTE Band2	3	18615	1	#Max	QAM64	20.16	29.16
LTE Band2	3	18615	8	#0	QAM64	19.29	28.29
LTE Band2	3	18615	8	#Mid	QAM64	19.33	28.33
LTE Band2	3	18615	8	#Max	QAM64	19.27	28.27
LTE Band2	3	18615	15	#0	QAM64	19.28	28.28
LTE Band2	3	18900	1	#0	QAM64	20.62	29.62
LTE Band2	3	18900	1	#Mid	QAM64	20.59	29.59
LTE Band2	3	18900	1	#Max	QAM64	20.54	29.54
LTE Band2	3	18900	8	#0	QAM64	19.43	28.43
LTE Band2	3	18900	8	#Mid	QAM64	19.48	28.48
LTE Band2	3	18900	8	#Max	QAM64	19.43	28.43
LTE Band2	3	18900	15	#0	QAM64	19.41	28.41
LTE Band2	3	19185	1	#0	QAM64	20.78	29.78
LTE Band2	3	19185	1	#Mid	QAM64	20.74	29.74
LTE Band2	3	19185	1	#Max	QAM64	20.70	29.70
LTE Band2	3	19185	8	#0	QAM64	19.61	28.61
LTE Band2	3	19185	8	#Mid	QAM64	19.60	28.60
LTE Band2	3	19185	8	#Max	QAM64	19.61	28.61
LTE Band2	3	19185	15	#0	QAM64	19.55	28.55
LTE Band2	5	18625	1	#0	QAM64	20.62	29.62
LTE Band2	5	18625	1	#Mid	QAM64	20.62	29.62
LTE Band2	5	18625	1	#Max	QAM64	20.53	29.53



LTE Band2	5	18625	12	#0	QAM64	19.32	28.32
LTE Band2	5	18625	12	#Mid	QAM64	19.29	28.29
LTE Band2	5	18625	12	#Max	QAM64	19.25	28.25
LTE Band2	5	18625	25	#0	QAM64	19.33	28.33
LTE Band2	5	18900	1	#0	QAM64	20.59	29.59
LTE Band2	5	18900	1	#Mid	QAM64	20.59	29.59
LTE Band2	5	18900	1	#Max	QAM64	20.53	29.53
LTE Band2	5	18900	12	#0	QAM64	19.47	28.47
LTE Band2	5	18900	12	#Mid	QAM64	19.47	28.47
LTE Band2	5	18900	12	#Max	QAM64	19.39	28.39
LTE Band2	5	18900	25	#0	QAM64	19.41	28.41
LTE Band2	5	19175	1	#0	QAM64	20.90	29.90
LTE Band2	5	19175	1	#Mid	QAM64	20.89	29.89
LTE Band2	5	19175	1	#Max	QAM64	20.81	29.81
LTE Band2	5	19175	12	#0	QAM64	19.72	28.72
LTE Band2	5	19175	12	#Mid	QAM64	19.68	28.68
LTE Band2	5	19175	12	#Max	QAM64	19.71	28.71
LTE Band2	5	19175	25	#0	QAM64	19.65	28.65
LTE Band2	10	18650	1	#0	QAM64	20.61	29.61
LTE Band2	10	18650	1	#Mid	QAM64	20.51	29.51
LTE Band2	10	18650	1	#Max	QAM64	20.54	29.54
LTE Band2	10	18650	25	#0	QAM64	19.42	28.42
LTE Band2	10	18650	25	#Mid	QAM64	19.40	28.40
LTE Band2	10	18650	25	#Max	QAM64	19.39	28.39
LTE Band2	10	18650	50	#0	QAM64	19.36	28.36
LTE Band2	10	18900	1	#0	QAM64	20.62	29.62
LTE Band2	10	18900	1	#Mid	QAM64	20.58	29.58
LTE Band2	10	18900	1	#Max	QAM64	20.49	29.49
LTE Band2	10	18900	25	#0	QAM64	19.52	28.52
LTE Band2	10	18900	25	#Mid	QAM64	19.52	28.52
LTE Band2	10	18900	25	#Max	QAM64	19.45	28.45
LTE Band2	10	18900	50	#0	QAM64	19.50	28.50
LTE Band2	10	19150	1	#0	QAM64	20.63	29.63
LTE Band2	10	19150	1	#Mid	QAM64	20.50	29.50
LTE Band2	10	19150	1	#Max	QAM64	20.48	29.48
LTE Band2	10	19150	25	#0	QAM64	19.69	28.69
LTE Band2	10	19150	25	#Mid	QAM64	19.73	28.73
LTE Band2	10	19150	25	#Max	QAM64	19.64	28.64
LTE Band2	10	19150	50	#0	QAM64	19.73	28.73
LTE Band2	15	18675	1	#0	QAM64	20.75	29.75
LTE Band2	15	18675	1	#Mid	QAM64	20.61	29.61
LTE Band2	15	18675	1	#Max	QAM64	20.57	29.57
LTE Band2	15	18675	36	#0	QAM64	19.48	28.48



LTE Band2	15	18675	36	#Mid	QAM64	19.48	28.48
LTE Band2	15	18675	36	#Max	QAM64	19.33	28.33
LTE Band2	15	18675	75	#0	QAM64	19.42	28.42
LTE Band2	15	18900	1	#0	QAM64	20.72	29.72
LTE Band2	15	18900	1	#Mid	QAM64	20.66	29.66
LTE Band2	15	18900	1	#Max	QAM64	20.61	29.61
LTE Band2	15	18900	36	#0	QAM64	19.59	28.59
LTE Band2	15	18900	36	#Mid	QAM64	19.59	28.59
LTE Band2	15	18900	36	#Max	QAM64	19.48	28.48
LTE Band2	15	18900	75	#0	QAM64	19.54	28.54
LTE Band2	15	19125	1	#0	QAM64	20.83	29.83
LTE Band2	15	19125	1	#Mid	QAM64	20.71	29.71
LTE Band2	15	19125	1	#Max	QAM64	20.65	29.65
LTE Band2	15	19125	36	#0	QAM64	19.68	28.68
LTE Band2	15	19125	36	#Mid	QAM64	19.71	28.71
LTE Band2	15	19125	36	#Max	QAM64	19.64	28.64
LTE Band2	15	19125	75	#0	QAM64	19.71	28.71
LTE Band2	20	18700	1	#0	QAM64	20.66	29.66
LTE Band2	20	18700	1	#Mid	QAM64	20.54	29.54
LTE Band2	20	18700	1	#Max	QAM64	20.58	29.58
LTE Band2	20	18700	50	#0	QAM64	19.54	28.54
LTE Band2	20	18700	50	#Mid	QAM64	19.52	28.52
LTE Band2	20	18700	50	#Max	QAM64	19.50	28.50
LTE Band2	20	18700	100	#0	QAM64	19.45	28.45
LTE Band2	20	18900	1	#0	QAM64	20.43	29.43
LTE Band2	20	18900	1	#Mid	QAM64	20.32	29.32
LTE Band2	20	18900	1	#Max	QAM64	20.23	29.23
LTE Band2	20	18900	50	#0	QAM64	19.63	28.63
LTE Band2	20	18900	50	#Mid	QAM64	19.62	28.62
LTE Band2	20	18900	50	#Max	QAM64	19.44	28.44
LTE Band2	20	18900	100	#0	QAM64	19.61	28.61
LTE Band2	20	19100	1	#0	QAM64	20.65	29.65
LTE Band2	20	19100	1	#Mid	QAM64	20.44	29.44
LTE Band2	20	19100	1	#Max	QAM64	20.31	29.31
LTE Band2	20	19100	50	#0	QAM64	19.79	28.79
LTE Band2	20	19100	50	#Mid	QAM64	19.87	28.87
LTE Band2	20	19100	50	#Max	QAM64	19.76	28.76
LTE Band2	20	19100	100	#0	QAM64	19.72	28.72



Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Maximum Output Power (dBm)	EIRP (dBm)
LTE Band25	1.4	26047	1	#0	QPSK	21.58	31.58
LTE Band25	1.4	26047	1	#Mid	QPSK	21.68	31.68
LTE Band25	1.4	26047	1	#Max	QPSK	21.60	31.60
LTE Band25	1.4	26047	3	#0	QPSK	21.56	31.56
LTE Band25	1.4	26047	3	#Mid	QPSK	21.55	31.55
LTE Band25	1.4	26047	3	#Max	QPSK	21.55	31.55
LTE Band25	1.4	26047	6	#0	QPSK	20.56	30.56
LTE Band25	1.4	26047	1	#0	QAM16	20.67	30.67
LTE Band25	1.4	26047	1	#Mid	QAM16	20.77	30.77
LTE Band25	1.4	26047	1	#Max	QAM16	20.69	30.69
LTE Band25	1.4	26047	3	#0	QAM16	20.85	30.85
LTE Band25	1.4	26047	3	#Mid	QAM16	20.83	30.83
LTE Band25	1.4	26047	3	#Max	QAM16	20.81	30.81
LTE Band25	1.4	26047	6	#0	QAM16	19.66	29.66
LTE Band25	1.4	26365	1	#0	QPSK	21.77	31.77
LTE Band25	1.4	26365	1	#Mid	QPSK	21.81	31.81
LTE Band25	1.4	26365	1	#Max	QPSK	21.71	31.71
LTE Band25	1.4	26365	3	#0	QPSK	21.78	31.78
LTE Band25	1.4	26365	3	#Mid	QPSK	21.78	31.78
LTE Band25	1.4	26365	3	#Max	QPSK	21.77	31.77
LTE Band25	1.4	26365	6	#0	QPSK	20.80	30.80
LTE Band25	1.4	26365	1	#0	QAM16	21.02	31.02
LTE Band25	1.4	26365	1	#Mid	QAM16	21.07	31.07
LTE Band25	1.4	26365	1	#Max	QAM16	21.05	31.05
LTE Band25	1.4	26365	3	#0	QAM16	20.96	30.96
LTE Band25	1.4	26365	3	#Mid	QAM16	20.95	30.95
LTE Band25	1.4	26365	3	#Max	QAM16	20.94	30.94
LTE Band25	1.4	26365	6	#0	QAM16	19.84	29.84
LTE Band25	1.4	26683	1	#0	QPSK	21.87	31.87
LTE Band25	1.4	26683	1	#Mid	QPSK	21.93	31.93
LTE Band25	1.4	26683	1	#Max	QPSK	21.86	31.86
LTE Band25	1.4	26683	3	#0	QPSK	21.86	31.86
LTE Band25	1.4	26683	3	#Mid	QPSK	21.84	31.84
LTE Band25	1.4	26683	3	#Max	QPSK	21.78	31.78
LTE Band25	1.4	26683	6	#0	QPSK	20.88	30.88
LTE Band25	1.4	26683	1	#0	QAM16	20.84	30.84
LTE Band25	1.4	26683	1	#Mid	QAM16	20.88	30.88
LTE Band25	1.4	26683	1	#Max	QAM16	20.79	30.79
LTE Band25	1.4	26683	3	#0	QAM16	20.93	30.93



LTE Band25	1.4	26683	3	#Mid	QAM16	20.93	30.93
LTE Band25	1.4	26683	3	#Max	QAM16	20.90	30.90
LTE Band25	1.4	26683	6	#0	QAM16	19.92	29.92
LTE Band25	3	26055	1	#0	QPSK	21.58	31.58
LTE Band25	3	26055	1	#Mid	QPSK	21.57	31.57
LTE Band25	3	26055	1	#Max	QPSK	21.50	31.50
LTE Band25	3	26055	8	#0	QPSK	20.61	30.61
LTE Band25	3	26055	8	#Mid	QPSK	20.61	30.61
LTE Band25	3	26055	8	#Max	QPSK	20.58	30.58
LTE Band25	3	26055	15	#0	QPSK	20.64	30.64
LTE Band25	3	26055	1	#0	QAM16	20.96	30.96
LTE Band25	3	26055	1	#Mid	QAM16	20.96	30.96
LTE Band25	3	26055	1	#Max	QAM16	20.90	30.90
LTE Band25	3	26055	8	#0	QAM16	19.72	29.72
LTE Band25	3	26055	8	#Mid	QAM16	19.73	29.73
LTE Band25	3	26055	8	#Max	QAM16	19.70	29.70
LTE Band25	3	26055	15	#0	QAM16	19.68	29.68
LTE Band25	3	26365	1	#0	QPSK	21.57	31.57
LTE Band25	3	26365	1	#Mid	QPSK	21.59	31.59
LTE Band25	3	26365	1	#Max	QPSK	21.58	31.58
LTE Band25	3	26365	8	#0	QPSK	20.66	30.66
LTE Band25	3	26365	8	#Mid	QPSK	20.66	30.66
LTE Band25	3	26365	8	#Max	QPSK	20.66	30.66
LTE Band25	3	26365	15	#0	QPSK	20.63	30.63
LTE Band25	3	26365	1	#0	QAM16	20.84	30.84
LTE Band25	3	26365	1	#Mid	QAM16	20.83	30.83
LTE Band25	3	26365	1	#Max	QAM16	20.76	30.76
LTE Band25	3	26365	8	#0	QAM16	19.71	29.71
LTE Band25	3	26365	8	#Mid	QAM16	19.70	29.70
LTE Band25	3	26365	8	#Max	QAM16	19.70	29.70
LTE Band25	3	26365	15	#0	QAM16	19.60	29.60
LTE Band25	3	26675	1	#0	QPSK	21.94	31.94
LTE Band25	3	26675	1	#Mid	QPSK	21.93	31.93
LTE Band25	3	26675	1	#Max	QPSK	21.95	31.95
LTE Band25	3	26675	8	#0	QPSK	20.90	30.90
LTE Band25	3	26675	8	#Mid	QPSK	20.91	30.91
LTE Band25	3	26675	8	#Max	QPSK	20.90	30.90
LTE Band25	3	26675	15	#0	QPSK	20.93	30.93
LTE Band25	3	26675	1	#0	QAM16	20.91	30.91
LTE Band25	3	26675	1	#Mid	QAM16	20.86	30.86
LTE Band25	3	26675	1	#Max	QAM16	20.85	30.85
LTE Band25	3	26675	8	#0	QAM16	19.98	29.98
LTE Band25	3	26675	8	#Mid	QAM16	19.99	29.99



LTE Band25	3	26675	8	#Max	QAM16	19.98	29.98
LTE Band25	3	26675	15	#0	QAM16	20.03	30.03
LTE Band25	5	26065	1	#0	QPSK	21.62	31.62
LTE Band25	5	26065	1	#Mid	QPSK	21.68	31.68
LTE Band25	5	26065	1	#Max	QPSK	21.57	31.57
LTE Band25	5	26065	12	#0	QPSK	20.70	30.70
LTE Band25	5	26065	12	#Mid	QPSK	20.65	30.65
LTE Band25	5	26065	12	#Max	QPSK	20.64	30.64
LTE Band25	5	26065	25	#0	QPSK	20.66	30.66
LTE Band25	5	26065	1	#0	QAM16	21.04	31.04
LTE Band25	5	26065	1	#Mid	QAM16	21.03	31.03
LTE Band25	5	26065	1	#Max	QAM16	20.93	30.93
LTE Band25	5	26065	12	#0	QAM16	19.77	29.77
LTE Band25	5	26065	12	#Mid	QAM16	19.76	29.76
LTE Band25	5	26065	12	#Max	QAM16	19.65	29.65
LTE Band25	5	26065	25	#0	QAM16	19.76	29.76
LTE Band25	5	26365	1	#0	QPSK	21.69	31.69
LTE Band25	5	26365	1	#Mid	QPSK	21.71	31.71
LTE Band25	5	26365	1	#Max	QPSK	21.67	31.67
LTE Band25	5	26365	12	#0	QPSK	20.73	30.73
LTE Band25	5	26365	12	#Mid	QPSK	20.71	30.71
LTE Band25	5	26365	12	#Max	QPSK	20.68	30.68
LTE Band25	5	26365	25	#0	QPSK	20.66	30.66
LTE Band25	5	26365	1	#0	QAM16	20.90	30.90
LTE Band25	5	26365	1	#Mid	QAM16	20.90	30.90
LTE Band25	5	26365	1	#Max	QAM16	20.83	30.83
LTE Band25	5	26365	12	#0	QAM16	19.73	29.73
LTE Band25	5	26365	12	#Mid	QAM16	19.71	29.71
LTE Band25	5	26365	12	#Max	QAM16	19.69	29.69
LTE Band25	5	26365	25	#0	QAM16	19.74	29.74
LTE Band25	5	26665	1	#0	QPSK	21.87	31.87
LTE Band25	5	26665	1	#Mid	QPSK	21.84	31.84
LTE Band25	5	26665	1	#Max	QPSK	21.76	31.76
LTE Band25	5	26665	12	#0	QPSK	20.94	30.94
LTE Band25	5	26665	12	#Mid	QPSK	20.94	30.94
LTE Band25	5	26665	12	#Max	QPSK	20.90	30.90
LTE Band25	5	26665	25	#0	QPSK	20.93	30.93
LTE Band25	5	26665	1	#0	QAM16	21.25	31.25
LTE Band25	5	26665	1	#Mid	QAM16	21.26	31.26
LTE Band25	5	26665	1	#Max	QAM16	21.20	31.20
LTE Band25	5	26665	12	#0	QAM16	20.08	30.08
LTE Band25	5	26665	12	#Mid	QAM16	20.09	30.09
LTE Band25	5	26665	12	#Max	QAM16	20.05	30.05



LTE Band25	5	26665	25	#0	QAM16	20.02	30.02
LTE Band25	10	26090	1	#0	QPSK	21.66	31.66
LTE Band25	10	26090	1	#Mid	QPSK	21.57	31.57
LTE Band25	10	26090	1	#Max	QPSK	21.47	31.47
LTE Band25	10	26090	25	#0	QPSK	20.66	30.66
LTE Band25	10	26090	25	#Mid	QPSK	20.66	30.66
LTE Band25	10	26090	25	#Max	QPSK	20.60	30.60
LTE Band25	10	26090	50	#0	QPSK	20.65	30.65
LTE Band25	10	26090	1	#0	QAM16	21.05	31.05
LTE Band25	10	26090	1	#Mid	QAM16	20.98	30.98
LTE Band25	10	26090	1	#Max	QAM16	20.88	30.88
LTE Band25	10	26090	25	#0	QAM16	19.82	29.82
LTE Band25	10	26090	25	#Mid	QAM16	19.82	29.82
LTE Band25	10	26090	25	#Max	QAM16	19.72	29.72
LTE Band25	10	26090	50	#0	QAM16	19.74	29.74
LTE Band25	10	26365	1	#0	QPSK	21.73	31.73
LTE Band25	10	26365	1	#Mid	QPSK	21.64	31.64
LTE Band25	10	26365	1	#Max	QPSK	21.60	31.60
LTE Band25	10	26365	25	#0	QPSK	20.72	30.72
LTE Band25	10	26365	25	#Mid	QPSK	20.73	30.73
LTE Band25	10	26365	25	#Max	QPSK	20.63	30.63
LTE Band25	10	26365	50	#0	QPSK	20.70	30.70
LTE Band25	10	26365	1	#0	QAM16	20.97	30.97
LTE Band25	10	26365	1	#Mid	QAM16	20.85	30.85
LTE Band25	10	26365	1	#Max	QAM16	20.80	30.80
LTE Band25	10	26365	25	#0	QAM16	19.83	29.83
LTE Band25	10	26365	25	#Mid	QAM16	19.83	29.83
LTE Band25	10	26365	25	#Max	QAM16	19.69	29.69
LTE Band25	10	26365	50	#0	QAM16	19.76	29.76
LTE Band25	10	26640	1	#0	QPSK	21.96	31.96
LTE Band25	10	26640	1	#Mid	QPSK	21.94	31.94
LTE Band25	10	26640	1	#Max	QPSK	21.95	31.95
LTE Band25	10	26640	25	#0	QPSK	20.88	30.88
LTE Band25	10	26640	25	#Mid	QPSK	20.85	30.85
LTE Band25	10	26640	25	#Max	QPSK	20.93	30.93
LTE Band25	10	26640	50	#0	QPSK	20.85	30.85
LTE Band25	10	26640	1	#0	QAM16	20.85	30.85
LTE Band25	10	26640	1	#Mid	QAM16	20.83	30.83
LTE Band25	10	26640	1	#Max	QAM16	20.77	30.77
LTE Band25	10	26640	25	#0	QAM16	19.95	29.95
LTE Band25	10	26640	25	#Mid	QAM16	19.96	29.96
LTE Band25	10	26640	25	#Max	QAM16	19.99	29.99
LTE Band25	10	26640	50	#0	QAM16	19.94	29.94



LTE Band25	15	26115	1	#0	QPSK	21.74	31.74
LTE Band25	15	26115	1	#Mid	QPSK	21.54	31.54
LTE Band25	15	26115	1	#Max	QPSK	21.56	31.56
LTE Band25	15	26115	36	#0	QPSK	20.69	30.69
LTE Band25	15	26115	36	#Mid	QPSK	20.69	30.69
LTE Band25	15	26115	36	#Max	QPSK	20.62	30.62
LTE Band25	15	26115	75	#0	QPSK	20.67	30.67
LTE Band25	15	26115	1	#0	QAM16	21.16	31.16
LTE Band25	15	26115	1	#Mid	QAM16	20.92	30.92
LTE Band25	15	26115	1	#Max	QAM16	20.94	30.94
LTE Band25	15	26115	36	#0	QAM16	19.80	29.80
LTE Band25	15	26115	36	#Mid	QAM16	19.79	29.79
LTE Band25	15	26115	36	#Max	QAM16	19.77	29.77
LTE Band25	15	26115	75	#0	QAM16	19.82	29.82
LTE Band25	15	26365	1	#0	QPSK	21.71	31.71
LTE Band25	15	26365	1	#Mid	QPSK	21.64	31.64
LTE Band25	15	26365	1	#Max	QPSK	21.55	31.55
LTE Band25	15	26365	36	#0	QPSK	20.74	30.74
LTE Band25	15	26365	36	#Mid	QPSK	20.76	30.76
LTE Band25	15	26365	36	#Max	QPSK	20.59	30.59
LTE Band25	15	26365	75	#0	QPSK	20.67	30.67
LTE Band25	15	26365	1	#0	QAM16	21.00	31.00
LTE Band25	15	26365	1	#Mid	QAM16	20.90	30.90
LTE Band25	15	26365	1	#Max	QAM16	20.81	30.81
LTE Band25	15	26365	36	#0	QAM16	19.85	29.85
LTE Band25	15	26365	36	#Mid	QAM16	19.84	29.84
LTE Band25	15	26365	36	#Max	QAM16	19.71	29.71
LTE Band25	15	26365	75	#0	QAM16	19.80	29.80
LTE Band25	15	26615	1	#0	QPSK	22.09	32.09
LTE Band25	15	26615	1	#Mid	QPSK	21.94	31.94
LTE Band25	15	26615	1	#Max	QPSK	21.97	31.97
LTE Band25	15	26615	36	#0	QPSK	20.89	30.89
LTE Band25	15	26615	36	#Mid	QPSK	20.89	30.89
LTE Band25	15	26615	36	#Max	QPSK	20.90	30.90
LTE Band25	15	26615	75	#0	QPSK	20.86	30.86
LTE Band25	15	26615	1	#0	QAM16	21.17	31.17
LTE Band25	15	26615	1	#Mid	QAM16	21.04	31.04
LTE Band25	15	26615	1	#Max	QAM16	20.99	30.99
LTE Band25	15	26615	36	#0	QAM16	20.01	30.01
LTE Band25	15	26615	36	#Mid	QAM16	20.02	30.02
LTE Band25	15	26615	36	#Max	QAM16	20.01	30.01
LTE Band25	15	26615	75	#0	QAM16	19.98	29.98
LTE Band25	20	26140	1	#0	QPSK	21.78	31.78



LTE Band25	20	26140	1	#Mid	QPSK	21.57	31.57
LTE Band25	20	26140	1	#Max	QPSK	21.52	31.52
LTE Band25	20	26140	50	#0	QPSK	20.70	30.70
LTE Band25	20	26140	50	#Mid	QPSK	20.69	30.69
LTE Band25	20	26140	50	#Max	QPSK	20.64	30.64
LTE Band25	20	26140	100	#0	QPSK	20.74	30.74
LTE Band25	20	26140	1	#0	QAM16	21.08	31.08
LTE Band25	20	26140	1	#Mid	QAM16	20.85	30.85
LTE Band25	20	26140	1	#Max	QAM16	20.82	30.82
LTE Band25	20	26140	50	#0	QAM16	19.83	29.83
LTE Band25	20	26140	50	#Mid	QAM16	19.82	29.82
LTE Band25	20	26140	50	#Max	QAM16	19.77	29.77
LTE Band25	20	26140	100	#0	QAM16	19.82	29.82
LTE Band25	20	26365	1	#0	QPSK	21.82	31.82
LTE Band25	20	26365	1	#Mid	QPSK	21.73	31.73
LTE Band25	20	26365	1	#Max	QPSK	21.73	31.73
LTE Band25	20	26365	50	#0	QPSK	20.82	30.82
LTE Band25	20	26365	50	#Mid	QPSK	20.82	30.82
LTE Band25	20	26365	50	#Max	QPSK	20.64	30.64
LTE Band25	20	26365	100	#0	QPSK	20.67	30.67
LTE Band25	20	26365	1	#0	QAM16	20.69	30.69
LTE Band25	20	26365	1	#Mid	QAM16	20.64	30.64
LTE Band25	20	26365	1	#Max	QAM16	20.55	30.55
LTE Band25	20	26365	50	#0	QAM16	19.88	29.88
LTE Band25	20	26365	50	#Mid	QAM16	19.88	29.88
LTE Band25	20	26365	50	#Max	QAM16	19.75	29.75
LTE Band25	20	26365	100	#0	QAM16	19.82	29.82
LTE Band25	20	26590	1	#0	QPSK	22.06	32.06
LTE Band25	20	26590	1	#Mid	QPSK	21.80	31.80
LTE Band25	20	26590	1	#Max	QPSK	21.86	31.86
LTE Band25	20	26590	50	#0	QPSK	21.01	31.01
LTE Band25	20	26590	50	#Mid	QPSK	20.99	30.99
LTE Band25	20	26590	50	#Max	QPSK	20.82	30.82
LTE Band25	20	26590	100	#0	QPSK	20.93	30.93
LTE Band25	20	26590	1	#0	QAM16	20.97	30.97
LTE Band25	20	26590	1	#Mid	QAM16	20.68	30.68
LTE Band25	20	26590	1	#Max	QAM16	20.69	30.69
LTE Band25	20	26590	50	#0	QAM16	20.10	30.10
LTE Band25	20	26590	50	#Mid	QAM16	20.10	30.10
LTE Band25	20	26590	50	#Max	QAM16	19.98	29.98
LTE Band25	20	26590	100	#0	QAM16	19.99	29.99
LTE Band25	1.4	26047	1	#0	QAM64	20.39	30.39
LTE Band25	1.4	26047	1	#Mid	QAM64	20.50	30.50



LTE Band25	1.4	26047	1	#Max	QAM64	20.40	30.40
LTE Band25	1.4	26047	3	#0	QAM64	20.56	30.56
LTE Band25	1.4	26047	3	#Mid	QAM64	20.54	30.54
LTE Band25	1.4	26047	3	#Max	QAM64	20.53	30.53
LTE Band25	1.4	26047	6	#0	QAM64	19.41	29.41
LTE Band25	1.4	26365	1	#0	QAM64	20.76	30.76
LTE Band25	1.4	26365	1	#Mid	QAM64	20.79	30.79
LTE Band25	1.4	26365	1	#Max	QAM64	20.78	30.78
LTE Band25	1.4	26365	3	#0	QAM64	20.68	30.68
LTE Band25	1.4	26365	3	#Mid	QAM64	20.67	30.67
LTE Band25	1.4	26365	3	#Max	QAM64	20.62	30.62
LTE Band25	1.4	26365	6	#0	QAM64	19.57	29.57
LTE Band25	1.4	26683	1	#0	QAM64	20.52	30.52
LTE Band25	1.4	26683	1	#Mid	QAM64	20.58	30.58
LTE Band25	1.4	26683	1	#Max	QAM64	20.54	30.54
LTE Band25	1.4	26683	3	#0	QAM64	20.71	30.71
LTE Band25	1.4	26683	3	#Mid	QAM64	20.69	30.69
LTE Band25	1.4	26683	3	#Max	QAM64	20.67	30.67
LTE Band25	1.4	26683	6	#0	QAM64	19.65	29.65
LTE Band25	3	26055	1	#0	QAM64	20.66	30.66
LTE Band25	3	26055	1	#Mid	QAM64	20.65	30.65
LTE Band25	3	26055	1	#Max	QAM64	20.61	30.61
LTE Band25	3	26055	8	#0	QAM64	19.44	29.44
LTE Band25	3	26055	8	#Mid	QAM64	19.44	29.44
LTE Band25	3	26055	8	#Max	QAM64	19.44	29.44
LTE Band25	3	26055	15	#0	QAM64	19.39	29.39
LTE Band25	3	26365	1	#0	QAM64	20.56	30.56
LTE Band25	3	26365	1	#Mid	QAM64	20.54	30.54
LTE Band25	3	26365	1	#Max	QAM64	20.49	30.49
LTE Band25	3	26365	8	#0	QAM64	19.47	29.47
LTE Band25	3	26365	8	#Mid	QAM64	19.46	29.46
LTE Band25	3	26365	8	#Max	QAM64	19.43	29.43
LTE Band25	3	26365	15	#0	QAM64	19.34	29.34
LTE Band25	3	26675	1	#0	QAM64	20.62	30.62
LTE Band25	3	26675	1	#Mid	QAM64	20.56	30.56
LTE Band25	3	26675	1	#Max	QAM64	20.61	30.61
LTE Band25	3	26675	8	#0	QAM64	19.73	29.73
LTE Band25	3	26675	8	#Mid	QAM64	19.70	29.70
LTE Band25	3	26675	8	#Max	QAM64	19.73	29.73
LTE Band25	3	26675	15	#0	QAM64	19.81	29.81
LTE Band25	5	26065	1	#0	QAM64	20.73	30.73
LTE Band25	5	26065	1	#Mid	QAM64	20.75	30.75
LTE Band25	5	26065	1	#Max	QAM64	20.65	30.65



LTE Band25	5	26065	12	#0	QAM64	19.45	29.45
LTE Band25	5	26065	12	#Mid	QAM64	19.48	29.48
LTE Band25	5	26065	12	#Max	QAM64	19.41	29.41
LTE Band25	5	26065	25	#0	QAM64	19.43	29.43
LTE Band25	5	26365	1	#0	QAM64	20.66	30.66
LTE Band25	5	26365	1	#Mid	QAM64	20.63	30.63
LTE Band25	5	26365	1	#Max	QAM64	20.57	30.57
LTE Band25	5	26365	12	#0	QAM64	19.46	29.46
LTE Band25	5	26365	12	#Mid	QAM64	19.46	29.46
LTE Band25	5	26365	12	#Max	QAM64	19.44	29.44
LTE Band25	5	26365	25	#0	QAM64	19.44	29.44
LTE Band25	5	26665	1	#0	QAM64	20.97	30.97
LTE Band25	5	26665	1	#Mid	QAM64	20.97	30.97
LTE Band25	5	26665	1	#Max	QAM64	20.92	30.92
LTE Band25	5	26665	12	#0	QAM64	19.82	29.82
LTE Band25	5	26665	12	#Mid	QAM64	19.82	29.82
LTE Band25	5	26665	12	#Max	QAM64	19.78	29.78
LTE Band25	5	26665	25	#0	QAM64	19.80	29.80
LTE Band25	10	26090	1	#0	QAM64	20.80	30.80
LTE Band25	10	26090	1	#Mid	QAM64	20.66	30.66
LTE Band25	10	26090	1	#Max	QAM64	20.60	30.60
LTE Band25	10	26090	25	#0	QAM64	19.54	29.54
LTE Band25	10	26090	25	#Mid	QAM64	19.55	29.55
LTE Band25	10	26090	25	#Max	QAM64	19.44	29.44
LTE Band25	10	26090	50	#0	QAM64	19.41	29.41
LTE Band25	10	26365	1	#0	QAM64	20.65	30.65
LTE Band25	10	26365	1	#Mid	QAM64	20.53	30.53
LTE Band25	10	26365	1	#Max	QAM64	20.49	30.49
LTE Band25	10	26365	25	#0	QAM64	19.54	29.54
LTE Band25	10	26365	25	#Mid	QAM64	19.54	29.54
LTE Band25	10	26365	25	#Max	QAM64	19.44	29.44
LTE Band25	10	26365	50	#0	QAM64	19.49	29.49
LTE Band25	10	26640	1	#0	QAM64	20.63	30.63
LTE Band25	10	26640	1	#Mid	QAM64	20.58	30.58
LTE Band25	10	26640	1	#Max	QAM64	20.55	30.55
LTE Band25	10	26640	25	#0	QAM64	19.70	29.70
LTE Band25	10	26640	25	#Mid	QAM64	19.66	29.66
LTE Band25	10	26640	25	#Max	QAM64	19.74	29.74
LTE Band25	10	26640	50	#0	QAM64	19.69	29.69
LTE Band25	15	26115	1	#0	QAM64	20.91	30.91
LTE Band25	15	26115	1	#Mid	QAM64	20.64	30.64
LTE Band25	15	26115	1	#Max	QAM64	20.68	30.68
LTE Band25	15	26115	36	#0	QAM64	19.51	29.51



LTE Band25	15	26115	36	#Mid	QAM64	19.52	29.52
LTE Band25	15	26115	36	#Max	QAM64	19.46	29.46
LTE Band25	15	26115	75	#0	QAM64	19.55	29.55
LTE Band25	15	26365	1	#0	QAM64	20.69	30.69
LTE Band25	15	26365	1	#Mid	QAM64	20.65	30.65
LTE Band25	15	26365	1	#Max	QAM64	20.56	30.56
LTE Band25	15	26365	36	#0	QAM64	19.59	29.59
LTE Band25	15	26365	36	#Mid	QAM64	19.57	29.57
LTE Band25	15	26365	36	#Max	QAM64	19.48	29.48
LTE Band25	15	26365	75	#0	QAM64	19.54	29.54
LTE Band25	15	26615	1	#0	QAM64	20.93	30.93
LTE Band25	15	26615	1	#Mid	QAM64	20.78	30.78
LTE Band25	15	26615	1	#Max	QAM64	20.76	30.76
LTE Band25	15	26615	36	#0	QAM64	19.78	29.78
LTE Band25	15	26615	36	#Mid	QAM64	19.77	29.77
LTE Band25	15	26615	36	#Max	QAM64	19.77	29.77
LTE Band25	15	26615	75	#0	QAM64	19.74	29.74
LTE Band25	20	26140	1	#0	QAM64	20.80	30.80
LTE Band25	20	26140	1	#Mid	QAM64	20.58	30.58
LTE Band25	20	26140	1	#Max	QAM64	20.58	30.58
LTE Band25	20	26140	50	#0	QAM64	19.56	29.56
LTE Band25	20	26140	50	#Mid	QAM64	19.58	29.58
LTE Band25	20	26140	50	#Max	QAM64	19.50	29.50
LTE Band25	20	26140	100	#0	QAM64	19.58	29.58
LTE Band25	20	26365	1	#0	QAM64	20.44	30.44
LTE Band25	20	26365	1	#Mid	QAM64	20.36	30.36
LTE Band25	20	26365	1	#Max	QAM64	20.30	30.30
LTE Band25	20	26365	50	#0	QAM64	19.60	29.60
LTE Band25	20	26365	50	#Mid	QAM64	19.65	29.65
LTE Band25	20	26365	50	#Max	QAM64	19.48	29.48
LTE Band25	20	26365	100	#0	QAM64	19.59	29.59
LTE Band25	20	26590	1	#0	QAM64	20.72	30.72
LTE Band25	20	26590	1	#Mid	QAM64	20.44	30.44
LTE Band25	20	26590	1	#Max	QAM64	20.45	30.45
LTE Band25	20	26590	50	#0	QAM64	19.88	29.88
LTE Band25	20	26590	50	#Mid	QAM64	19.89	29.89
LTE Band25	20	26590	50	#Max	QAM64	19.73	29.73
LTE Band25	20	26590	100	#0	QAM64	19.79	29.79

5.2. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26 (2015).
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz, and the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAG) should be recorded after test.
7. The measurement results are obtained as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{PAG} - \text{Pcl} + \text{Ga}$$
The measurement results are amend as described below:

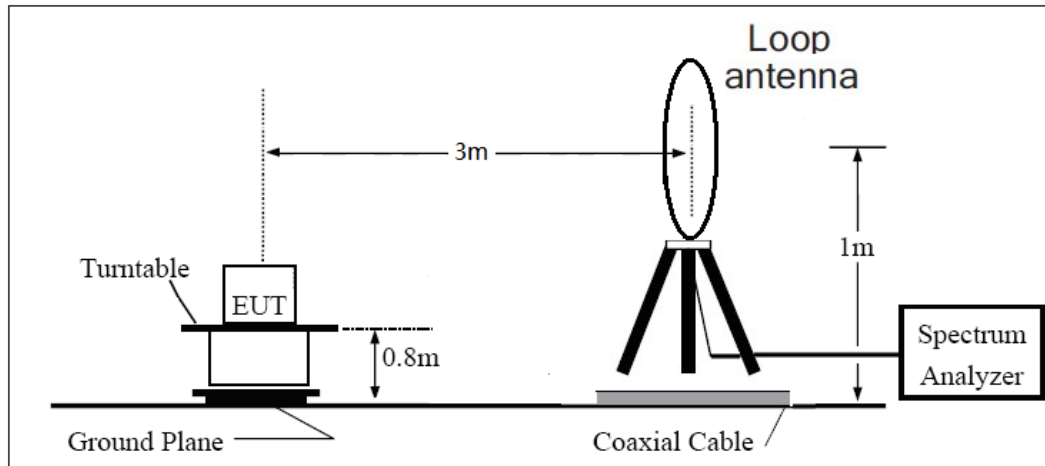
$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP

= EIRP-2.15dB.

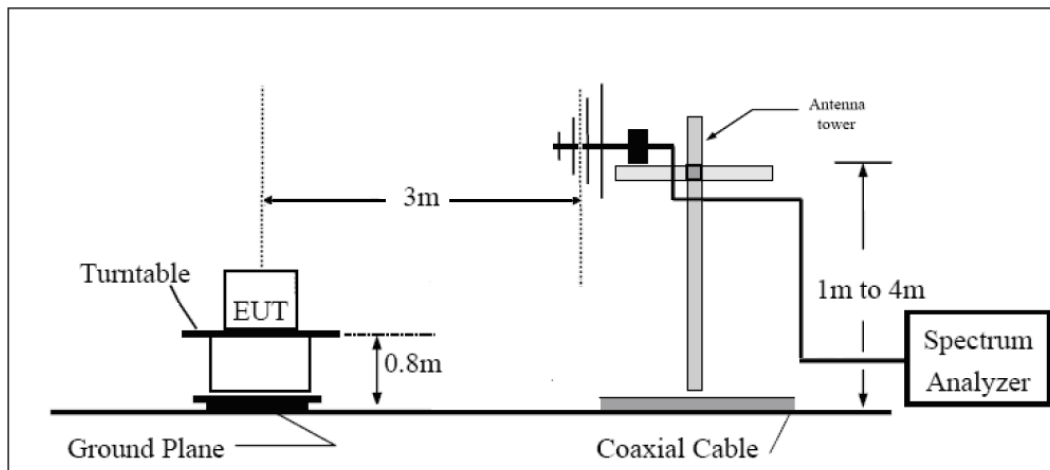
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

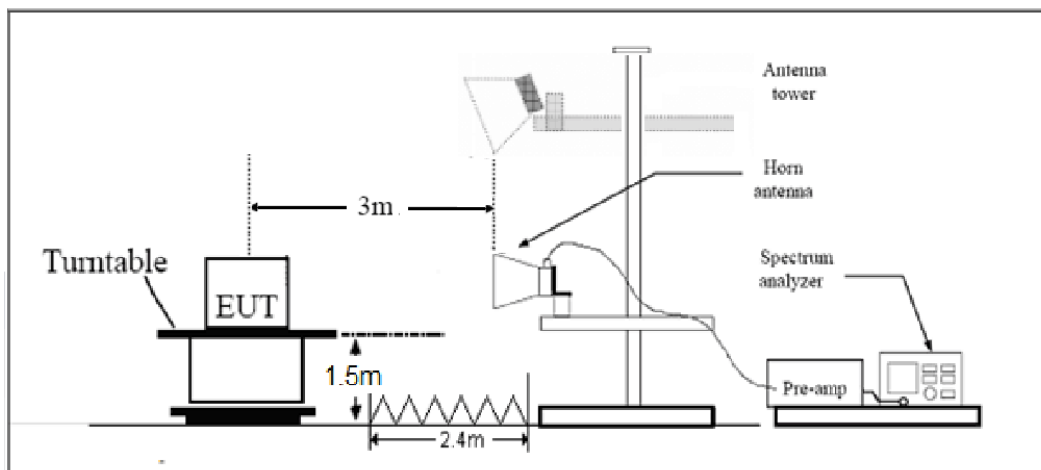
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side: 2.4mX3.6m

Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10} (P)$ dB.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

Test Result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

WCDMA Band II CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.0	-63.83	2.60	12.50	Horizontal	-53.93	-13.00	40.93	45
3	5640.0	-61.42	3.30	12.50	Horizontal	-52.22	-13.00	39.22	225
4	7520.0	-56.59	4.20	12.20	Horizontal	-48.59	-13.00	35.59	45
5	9400.0	-50.42	4.30	11.10	Horizontal	-43.62	-13.00	30.62	225
6	11280.0	-44.23	5.90	11.90	Horizontal	-38.23	-13.00	25.23	90
7	13160.0	-43.99	5.70	14.00	Horizontal	-35.69	-13.00	22.69	45
8	15040.0	-41.40	5.80	13.10	Horizontal	-34.10	-13.00	21.10	90
9	16920.0	-46.66	6.10	14.60	Horizontal	-38.16	-13.00	25.16	135
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3759.0	-63.98	2.60	12.50	Vertical	-54.08	-13.00	41.08	0
3	5638.9	-59.58	3.30	12.50	Vertical	-50.38	-13.00	37.38	180
4	7520.0	-55.93	4.20	12.20	Vertical	-47.93	-13.00	34.93	90
5	9400.0	-51.24	4.30	11.10	Vertical	-44.44	-13.00	31.44	45
6	11277.6	-41.69	5.90	11.90	Vertical	-35.69	-13.00	22.69	270
7	13157.0	-35.79	5.70	14.00	Vertical	-27.49	-13.00	14.49	90
8	15040.0	-45.48	5.80	13.10	Vertical	-38.18	-13.00	25.18	180
9	16920.0	-48.72	6.10	14.60	Vertical	-40.22	-13.00	27.22	90
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 2 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3755.6	-64.32	2.60	12.50	Vertical	-54.42	-13.00	41.42	135
3	5633.6	-60.54	3.30	12.50	Vertical	-51.34	-13.00	38.34	270
4	7510.0	-55.53	4.20	12.20	Vertical	-47.53	-13.00	34.53	315
5	9387.5	-50.88	4.30	11.10	Vertical	-44.08	-13.00	31.08	0
6	11267.6	-42.69	5.90	11.90	Vertical	-36.69	-13.00	23.69	225
7	13144.8	-36.88	5.70	14.00	Vertical	-28.58	-13.00	15.58	225
8	15020.0	-45.46	5.80	13.10	Vertical	-38.16	-13.00	25.16	135
9	16897.5	-47.10	6.10	14.60	Vertical	-38.60	-13.00	25.60	45
10	18800.0	--	--	--	--	--	--	--	--
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

LTE Band 2 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3742.1	-63.12	2.60	12.50	Vertical	-53.22	-13.00	40.22	0
3	5613.4	-60.63	3.30	12.50	Vertical	-51.43	-13.00	38.43	135
4	7484.6	-54.88	4.20	12.20	Vertical	-46.88	-13.00	33.88	135
5	9350.0	-50.12	4.30	11.10	Vertical	-43.32	-13.00	30.32	135
6	11226.4	-44.67	5.90	11.90	Vertical	-38.67	-13.00	25.67	225
7	13097.6	-36.13	5.70	14.00	Vertical	-27.83	-13.00	14.83	135
8	14960.0	-43.77	5.80	13.10	Vertical	-36.47	-13.00	23.47	315
9	16830.0	-48.65	6.10	14.60	Vertical	-40.15	-13.00	27.15	180
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 25 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3765.0	-64.05	2.60	12.50	Vertical	-54.15	-13.00	41.15	315
3	5647.5	-59.38	3.30	12.50	Vertical	-50.18	-13.00	37.18	180
4	7530.0	-54.80	4.20	12.20	Vertical	-46.80	-13.00	33.80	90
5	9412.5	-49.33	4.30	11.10	Vertical	-42.53	-13.00	29.53	315
6	11295.0	-40.38	5.90	11.90	Vertical	-34.38	-13.00	21.38	0
7	13177.5	-35.42	5.70	14.00	Vertical	-27.12	-13.00	14.12	45
8	15060.0	-40.77	5.80	13.10	Vertical	-33.47	-13.00	20.47	315
9	16942.5	-48.73	6.10	14.60	Vertical	-40.23	-13.00	27.23	180
10	18825.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 25 5MHz CH-Middle



Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3760.0	-64.04	2.60	12.50	Vertical	-54.14	-13.00	41.14	0
3	5640.0	-60.06	3.30	12.50	Vertical	-50.86	-13.00	37.86	270
4	7520.0	-56.39	4.20	12.20	Vertical	-48.39	-13.00	35.39	315
5	9400.0	-51.57	4.30	11.10	Vertical	-44.77	-13.00	31.77	90
6	11280.0	-41.09	5.90	11.90	Vertical	-35.09	-13.00	22.09	45
7	13160.0	-35.00	5.70	14.00	Vertical	-26.70	-13.00	13.70	90
8	15040.0	-40.59	5.80	13.10	Vertical	-33.29	-13.00	20.29	135
9	16920.0	-42.49	6.10	14.60	Vertical	-33.99	-13.00	20.99	90
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

LTE Band 25 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3748.1	-62.20	2.60	12.50	Vertical	-52.30	-13.00	39.30	315
3	5622.0	-62.12	3.30	12.50	Vertical	-52.92	-13.00	39.92	90
4	7496.0	-56.51	4.20	12.20	Vertical	-48.51	-13.00	35.51	45
5	9370.0	-51.08	4.30	11.10	Vertical	-44.28	-13.00	31.28	45
6	11244.0	-43.46	5.90	11.90	Vertical	-37.46	-13.00	24.46	0
7	13118.0	-33.32	5.70	14.00	Vertical	-25.02	-13.00	12.02	315
8	14992.0	-39.89	5.80	13.10	Vertical	-32.59	-13.00	19.59	135
9	16866.0	-45.37	6.10	14.60	Vertical	-36.87	-13.00	23.87	315
10	18740.0	--	--	--	--	--	--	--	--
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	150415	2021-05-15	2022-05-14
Universal Radio Communication Tester	Key sight	E5515C	GB44400275	2021-05-15	2022-05-14
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2021-12-15
Horn Antenna	R&S	HF907	102723	2020-08-11	2023-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
RF Cable	Agilent	SMA 15cm	0001	2021-06-09	2021-12-08
Software	R&S	EMC32	10.35.10	/	/

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



ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.