Spectrum Report (LTE)

FCC ID Applicant:	DANLAW Inc
FCC ID Address of Applicant:	41131 Vincenti Court, Novi, Michigan 48375, United States
IC Applicant:	Danlaw, Inc
IC Address of Applicant:	41131 Vincenti Court Novi MI 48375 United States Of America
Manufacturer:	Asiatelco Technologies Co.
Address of Manufacturer:	#289 Bisheng Road,Building-8,3F,Zhangjiang Hi-tech Park,Pudong Shanghai 201204 China
Equipment Under Test (EUT)	
Product Name:	OBDII Datalogger
Model No.:	DL980QT
FCC ID:	2AD9I-DL980QT
IC:	24046-DL980QT
Contains FCC ID:	XMR201605EC25A
Contains IC:	10224A-201611EC25A
Applicable standards:	FCC CFR Title 47 Part 2
	FCC CFR Title 47 Part 24
	FCC CFR Title 47 Part 27
	RSS-130 Issue 2, February 2019
	RSS-133 Issue 6, January 2018
	RSS-139 Issue 3, July 2015
Date of sample receipt:	March 01, 2019
Date of Test:	March 01-14, 2019
Date of report issued:	March 14, 2019
Test Result :	PASS *

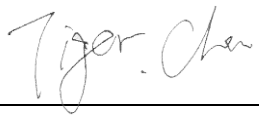
* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*March 14, 2019*	*Original*

Prepared By:  ***Date:*** *March 14, 2019*

Project Engineer

Check By:  ***Date:*** *March 14, 2019*

Reviewer

3 Contents

Page

4 Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Pass* (Please refer to MPE Report)
Peak-to-Average Ratio	FCC part24.232(d) FCC Part 27.50	Compliance
Modulation Characteristics	Part 2.1047	N/A
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 24.238 Part 27.53(h)/(g)	Compliance*
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 24.238 (a) Part 27.53(h)/(g)	Compliance*
RF Output Power	Part 2.1046 Part 24.232 (c) Part 27.50(c)(10)/(d)(4)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 24.238 (a) Part 27.53(h)/(g)	Pass
Out of band emission, Band Edge	Part 24.238 (a) Part 27.53(h)/(g)	Compliance*
Frequency stability vs. temperature	Part 2.1055(a)(1)(b)	Compliance*
Frequency stability vs. voltage	Part 2.1055(d)(1)(2)	Compliance*

Pass: The EUT complies with the essential requirements in the standard.

Compliance: Test data refers to FCC ID: XMR201605EC25A*

N/A: Not applicable.

Test Item	Section in RSS	Result
RF Exposure (SAR)	RSS-102	Pass* (Please refer to MPE Report)
RF Output Power	RSS-130 Clause 4.6 RSS-133 Clause 6.4 RSS-139 Clause 6.5	Pass
Transmitter Output Power and Equivalent Isotropically Radiated Power	RSS-130 Clause 4.6 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Pass
Field strength of spurious radiation measurement	RSS-Gen Clause 6.13	Pass
Frequency Plan	RSS-130 Clause 4.3 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Compliance*
Types of Modulation	RSS-130 Clause 4.2 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Compliance*
Occupied Bandwidth	RSS-Gen Clause 6.6	Compliance*
Frequency Stability	RSS-130 Clause 4.5 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Compliance*
Peak-to-Average Power Ratio	RSS-130 Clause 4.6 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Compliance*
Transmitter Unwanted Emissions	RSS-130 Clause 4.7 RSS-133 Clause 6.1 RSS-139 Clause 6.1	Compliance*

Pass: The EUT complies with the essential requirements in the standard.

Compliance: Test data refers to IC: 10224A-201611EC25A*

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	± 4.34dB	(1)
Radiated Emission	30MHz ~ 1000MHz	± 4.24dB	(1)
Radiated Emission	1GHz ~ 26.5GHz	± 4.68dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product Name:	OBDII Datalogger
Model No.:	DL980QT
Serial No.:	9042601001
Tested Sample(s) ID:	GTS201904000001-1
Hardware Version:	p5
Software Version:	v1.0
Support Networks:	LTE
Support Bands:	LTE Band 2, LTE Band 4, LTE Band 12
Channel Bandwidth:	LTE Band 2: 1.4MHz; 3MHz; 5MHz; 10MHz; 15MHz; 20MHz LTE Band 4: 1.4MHz; 3MHz; 5MHz; 10MHz; 15MHz; 20MHz LTE Band 12: 1.4MHz; 3MHz; 5MHz; 10MHz
TX Frequency:	LTE Band 2: 1850.70MHz-1909.30MHz LTE Band 4: 1710.70MHz-1754.30MHz LTE Band 12: 699.70MHz-715.30MHz
Modulation type:	LTE Band 2/4/12: QPSK, 16QAM
Antenna type:	Integral antenna
Antenna gain:	LTE Band 2: 0.8dBi LTE Band 4: 0.7dBi LTE Band 12: -0.7dBi
Power supply:	DC 12V

Remark: The radio module is installed according to the installation instructions of the module manufacture

Output power, spurious radiated emission and ERP/EIRP retest

5.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.
This submittal(s) (test report) is filing to comply with RSS-130, RSS-133, RSS-139, RSS-Gen of the IC Rules.

5.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures document on ANSI / TIA / EIA-603-D-2010 and FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01 and ANSI C63.4, FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383.

● **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.5 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 27 2018	June. 26 2019
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 27 2018	June. 26 2019
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 27 2018	June. 26 2019
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 27 2018	June. 26 2019
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 27 2018	June. 26 2019
9	Coaxial Cable	GTS	N/A	GTS211	June. 27 2018	June. 26 2019
10	Coaxial cable	GTS	N/A	GTS210	June. 27 2018	June. 26 2019
11	Coaxial Cable	GTS	N/A	GTS212	June. 27 2018	June. 26 2019
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 27 2018	June. 26 2019
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 27 2018	June. 26 2019
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 27 2018	June. 26 2019
15	Band filter	Amindeon	82346	GTS219	June. 27 2018	June. 26 2019
16	Power Meter	Anritsu	ML2495A	GTS540	June. 27 2018	June. 26 2019
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 27 2018	June. 26 2019
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 27 2018	June. 26 2019
19	Splitter	Agilent	11636B	GTS237	June. 27 2018	June. 26 2019
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 27 2018	June. 26 2019
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 20 2018	Oct. 19 2019
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 20 2018	Oct. 19 2019
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 20 2018	Oct. 19 2019
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 27 2018	June. 26 2019

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 27 2018	June. 26 2019
2	Barometer	ChangChun	DYM3	GTS255	June. 27 2018	June. 26 2019

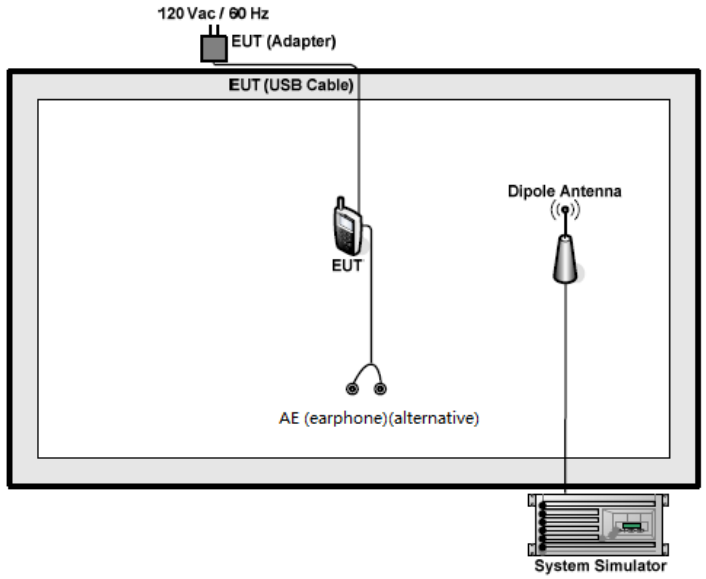
7 System test configuration

7.1 Test mode

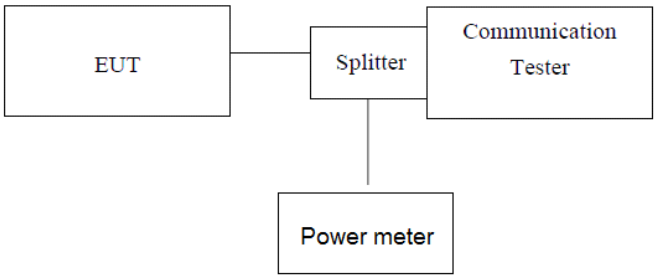
During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Test modes		
Band	Radiated	Conducted
LTE Band 2	■ QPSK and 16QAM link	■ QPSK and 16QAM link
LTE Band 4	■ QPSK and 16QAM link	■ QPSK and 16QAM link
LTE Band 12	■ QPSK and 16QAM link	■ QPSK and 16QAM link

7.2 Configuration of Tested System



7.3 Conducted Average Output Power

Test Requirement for FCC:	Part 24.232 (c); Part 27.50(c)(10)/(d)(4)
Test Requirement for IC:	RSS-130 Clause 4.6; RSS-133 Clause 6.4; RSS-139 Clause 6.5
Limit for FCC:	LTE Band 2: 2W LTE Band 4: 1W LTE Band 12: 3W
Limit for IC:	LTE Band 2: 2W LTE Band 4: 1W LTE Band 12: 3W
Test setup:	 *Note: Measurement setup for testing on Antenna connector*
Test Procedure:	1. The transmitter output port was connected to base station. 2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement. 3. Set EUT at maximum power through base station. 4. Select lowest, middle, and highest channels for each band and different modulation. 5. Measure the maximum burst average power.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 7.1 for details
Test results:	Pass

Measurement Data

Band 2						
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18607 1850.7MHz	Channel 18900 1880.0MHz	Channel 19193 1909.3MHz
1.4MHz	QPSK	1	0	22.83	22.49	22.46
		1	2	23.13	22.38	22.30
		1	5	22.30	23.13	23.36
		3	0	23.84	23.36	22.14
		3	1	23.91	23.19	22.98
		3	2	22.28	**23.93**	22.79
		6	0	23.33	22.58	22.59
	16QAM	1	0	22.03	22.44	23.91
		1	2	22.03	22.10	22.37
		1	5	22.76	22.60	23.83
		3	0	22.98	23.26	22.88
		3	1	23.87	22.34	22.93
		3	2	22.85	22.35	23.31
		6	0	23.14	22.42	22.69
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18615 1851.5MHz	Channel 18900 1880.0MHz	Channel 19185 1908.5MHz
3MHz	QPSK	1	0	22.30	22.77	22.18
		1	8	22.09	22.33	22.75
		1	14	22.76	22.69	22.53
		8	0	22.06	22.29	23.03
		8	4	22.79	22.62	23.58
		8	7	23.33	22.68	23.16
		15	0	22.41	22.19	23.39
	16QAM	1	0	22.14	23.34	22.62
		1	8	22.01	22.35	22.38
		1	14	**23.72**	23.52	22.43
		8	0	23.56	22.74	22.86
		8	4	22.44	22.75	22.80
		8	7	22.94	23.09	22.01
		15	0	23.22	22.81	23.66

Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18625 1852.5MHz	Channel 18900 1880.0MHz	Channel 19175 1907.5MHz
5MHz	QPSK	1	0	22.30	22.42	22.68
		1	13	23.81	23.33	22.92
		1	24	22.87	23.12	22.07
		12	0	23.34	22.05	23.40
		12	6	22.68	22.94	22.16
		12	13	23.76	22.56	23.93
		25	0	23.19	22.87	22.86
	16QAM	1	0	**23.99**	22.31	22.82
		1	13	23.76	22.48	22.61
		1	24	23.48	22.57	22.73
		12	0	22.55	22.43	22.34
		12	6	23.37	22.13	22.27
		12	13	23.11	23.73	22.85
		25	0	22.08	23.44	22.51
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18650 1855.0MHz	Channel 18900 1880.0MHz	Channel 19150 1905.0MHz
10MHz	QPSK	1	0	22.39	22.82	22.17
		1	25	23.56	22.95	22.48
		1	49	22.54	22.17	22.55
		25	0	23.76	23.26	23.70
		25	13	23.78	22.03	22.61
		25	25	22.72	22.54	22.28
		50	0	22.38	23.42	**23.86**
	16QAM	1	0	22.73	22.97	23.47
		1	25	22.93	22.54	22.51
		1	49	22.82	23.60	22.42
		25	0	23.03	22.05	22.25
		25	13	23.47	23.85	22.98
		25	25	23.26	22.44	22.47
		50	0	22.30	22.32	22.35

Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18675 1857.5MHz	Channel 18900 1880.0MHz	Channel 19125 1902.5MHz
15MHz	QPSK	1	0	22.38	22.80	22.75
		1	38	22.72	23.50	22.79
		1	74	22.98	22.12	22.02
		36	0	22.11	23.63	23.71
		36	18	23.43	22.25	22.99
		36	39	22.70	23.73	23.50
		75	0	22.94	22.04	22.21
	16QAM	1	0	23.09	**23.97**	23.73
		1	38	22.27	22.69	22.61
		1	74	22.19	22.88	23.22
		36	0	22.89	23.50	22.81
		36	18	22.64	22.89	23.68
		36	39	23.27	23.68	22.60
		75	0	22.71	23.93	23.36
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 18700 1860.0MHz	Channel 18900 1880.0MHz	Channel 19100 1900.0MHz
20MHz	QPSK	1	0	23.61	22.88	23.83
		1	50	22.01	22.01	22.93
		1	99	22.54	23.07	23.81
		50	0	22.30	22.07	22.40
		50	25	**23.91**	23.09	22.03
		50	50	23.87	22.29	23.56
		100	0	23.89	22.25	22.57
	16QAM	1	0	22.00	22.52	22.70
		1	50	22.41	22.18	22.16
		1	99	23.12	23.57	22.63
		50	0	22.88	22.71	23.46
		50	25	22.79	23.28	22.62
		50	50	23.57	22.46	23.09
		100	0	22.03	22.75	22.75

Band 4						
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 19957 1710.7MHz	Channel 20175 1732.5MHz	Channel 20393 1754.3MHz
1.4MHz	QPSK	1	0	23.61	23.74	22.27
		1	2	22.80	22.68	23.26
		1	5	**23.92**	23.21	23.85
		3	0	22.40	22.45	22.15
		3	1	22.59	23.21	23.01
		3	2	23.07	22.97	22.35
		6	0	22.99	22.95	22.47
	16QAM	1	0	22.97	22.31	22.74
		1	2	22.55	22.42	23.40
		1	5	22.33	22.70	23.84
		3	0	23.77	22.75	22.20
		3	1	22.92	22.76	22.10
		3	2	22.17	23.86	22.06
		6	0	22.25	22.43	22.54
Bandwidth	Mode	RB Size	RB Offset	Actual output po2wer(dBm)		
				Channel 19965 1711.5MHz	Channel 20175 1732.5MHz	Channel 20385 753.5MHz
3MHz	QPSK	1	0	23.87	22.77	22.78
		1	8	23.11	22.75	23.23
		1	14	23.56	23.18	22.23
		8	0	23.32	22.46	22.88
		8	4	23.65	23.78	22.83
		8	7	22.81	22.82	23.52
		15	0	23.15	23.87	22.76
	16QAM	1	0	22.22	22.20	22.40
		1	8	22.95	22.61	22.51
		1	14	22.99	22.49	23.40
		8	0	23.71	**23.96**	23.91
		8	4	22.64	22.25	22.38
		8	7	22.82	22.01	22.61
		15	0	22.25	22.57	23.12

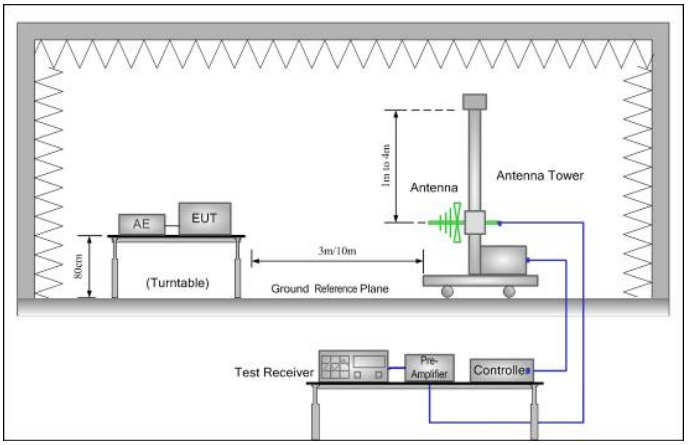
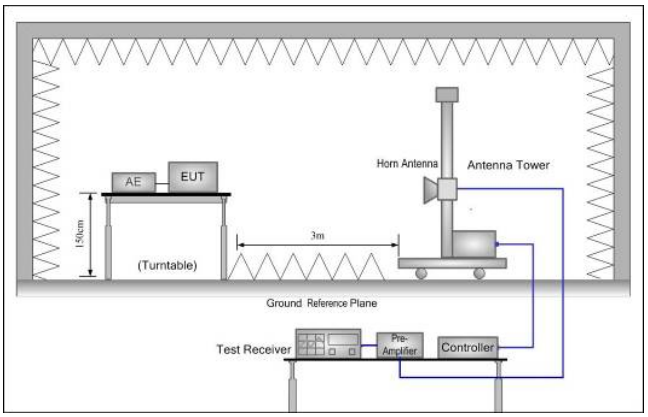
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 19975 1712.5MHz	Channel 20175 1732.5MHz	Channel 20375 1752.5MHz
5MHz	QPSK	1	0	23.60	22.74	23.70
		1	13	22.28	23.03	23.21
		1	24	22.37	22.13	22.08
		12	0	22.19	22.78	23.79
		12	6	23.50	23.72	22.84
		12	13	22.46	23.15	23.53
		25	0	22.53	22.27	22.95
	16QAM	1	0	23.04	22.77	22.99
		1	13	**23.93**	22.16	23.38
		1	24	22.76	23.60	22.38
		12	0	23.81	22.87	23.28
		12	6	22.34	22.33	23.40
		12	13	22.87	22.50	22.84
		25	0	23.12	22.19	23.73
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 20000 1715.0MHz	Channel 20175 1732.5MHz	Channel 20350 1750.0MHz
10MHz	QPSK	1	0	23.82	22.36	22.24
		1	25	22.94	22.38	22.66
		1	49	22.43	22.96	22.58
		25	0	22.41	22.03	22.86
		25	13	22.29	22.75	22.28
		25	25	22.92	23.02	22.45
		50	0	**23.89**	22.27	23.33
	16QAM	1	0	23.66	22.34	22.46
		1	25	22.26	22.80	22.00
		1	49	23.60	22.65	22.05
		25	0	22.96	22.70	22.62
		25	13	23.61	23.83	23.43
		25	25	22.15	22.08	22.20
		50	0	22.72	22.48	23.14

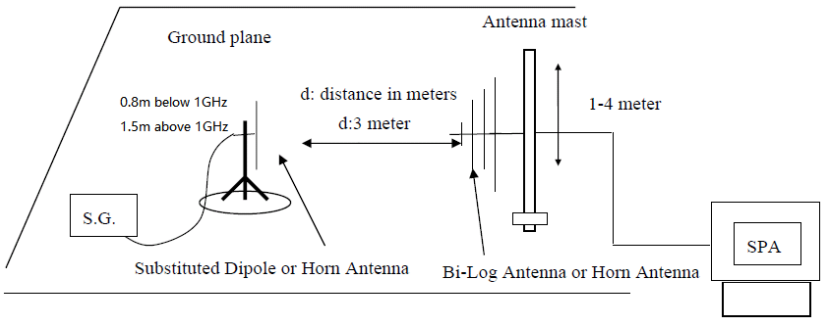
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 20025 1717.5MHz	Channel 20175 1732.5MHz	Channel 20325 1747.5MHz
15MHz	QPSK	1	0	23.59	22.73	22.89
		1	38	22.22	23.81	22.98
		1	74	23.09	22.46	23.18
		36	0	22.48	23.78	22.53
		36	18	23.30	22.92	23.09
		36	39	22.43	22.72	22.35
		75	0	23.19	22.98	22.84
	16QAM	1	0	22.98	**23.86**	22.57
		1	38	22.50	22.30	22.01
		1	74	22.54	23.08	23.68
		36	0	22.12	23.25	23.24
		36	18	22.21	23.25	23.46
		36	39	22.11	22.26	22.98
		75	0	22.19	22.09	22.29
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 20050 1720.0MHz	Channel 20175 1732.5MHz	Channel 20300 1745.0MHz
20MHz	QPSK	1	0	23.73	22.13	23.41
		1	50	22.36	23.10	22.04
		1	99	22.87	23.40	22.70
		50	0	**23.95**	22.08	22.37
		50	25	22.48	22.44	23.85
		50	50	22.98	22.13	22.95
		100	0	22.16	23.19	22.82
	16QAM	1	0	22.54	22.16	23.68
		1	50	22.33	23.02	22.55
		1	99	22.37	23.70	23.37
		50	0	22.61	22.09	23.10
		50	25	22.46	22.43	23.08
		50	50	22.85	22.34	23.87
		100	0	22.58	22.40	22.40

Band 12						
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 23017 699.7MHz	Channel 23095 707.5MHz	Channel 23173 715.3MHz
1.4MHz	QPSK	1	0	22.59	23.47	22.72
		1	2	22.56	22.41	22.63
		1	5	22.95	23.84	22.53
		3	0	22.14	23.75	23.50
		3	1	23.58	22.77	22.03
		3	2	23.71	22.83	22.74
		6	0	22.78	22.86	22.53
	16QAM	1	0	22.37	23.34	22.64
		1	2	22.96	**23.89**	22.82
		1	5	22.36	22.62	22.18
		3	0	22.08	22.06	22.30
		3	1	22.23	22.00	22.95
		3	2	22.68	22.95	23.44
		6	0	22.19	22.56	22.57
Bandwidth	Mode	RB Size	RB Offset	Actual output po2wer(dBm)		
				Channel 23025 700.5MHz	Channel 23095 707.5MHz	Channel 23165 714.5MHz
3MHz	QPSK	1	0	22.52	23.55	**24.00**
		1	8	23.56	22.74	22.71
		1	14	22.32	22.58	22.85
		8	0	22.89	23.46	23.63
		8	4	22.01	22.53	22.04
		8	7	23.73	22.62	22.73
		15	0	23.26	22.04	23.44
	16QAM	1	0	22.07	22.20	22.61
		1	8	22.67	22.58	23.82
		1	15	22.03	22.07	23.21
		8	0	22.12	22.03	22.38
		8	4	22.80	22.07	22.31
		8	7	23.55	23.41	23.76
		15	0	22.54	23.03	23.50

Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 23035 701.5MHz	Channel 23095 707.5MHz	Channel 23155 713.5MHz
5MHz	QPSK	1	0	22.07	22.76	23.60
		1	13	23.65	22.64	22.32
		1	24	22.93	22.39	22.07
		12	0	23.42	22.07	22.45
		12	6	23.73	23.26	22.48
		12	13	23.17	22.73	22.41
		25	0	22.72	22.92	22.15
	16QAM	1	0	23.75	22.27	23.01
		1	13	22.50	22.32	23.70
		1	24	22.65	**23.99**	23.34
		12	0	22.51	22.68	22.35
		12	6	22.01	22.79	22.31
		12	13	22.26	22.14	22.38
		25	0	23.92	23.80	22.40
Bandwidth	Mode	RB Size	RB Offset	Actual output power(dBm)		
				Channel 23060 704.0MHz	Channel 23095 707.5MHz	Channel 23130 711.0MHz
10MHz	QPSK	1	0	22.84	23.18	22.97
		1	25	22.27	23.21	22.84
		1	49	22.14	**23.98**	22.46
		25	0	23.64	23.00	23.20
		25	13	22.81	23.83	23.19
		25	25	23.41	22.44	22.91
		50	0	23.37	23.30	23.18
	16QAM	1	0	23.23	22.89	22.53
		1	25	22.18	23.25	23.46
		1	49	23.94	22.07	22.84
		25	0	22.09	22.71	23.58
		25	13	22.23	22.86	22.01
		25	25	22.92	22.32	22.08
		50	0	22.35	22.57	22.98

7.4 ERP, EIRP Measurement

Test Requirement for FCC:	Part 24.238 (a); Part 27.50(c)(10)/(d)(4)
Test Requirement for IC:	RSS-130 Clause 4.6, RSS-133 Clause 6.4, RSS-139 Clause 6.5
Limit for FCC:	LTE Band 2: 2W (EIRP) LTE Band 4: 1W (EIRP) LTE Band 12: 3W (ERP)
Limit for IC:	LTE Band 2: 2W (EIRP) LTE Band 4: 1W (EIRP) LTE Band 12: 3W (EIRP)
Test setup:	Below 1GHz  Above 1GHz  Substituted method:

<table>
<tr><td></td><td colspan="6"> 
</td></tr>
<tr><td>Test Procedure:</td><td colspan="6">1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.
2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.
3. ERP in frequency band 777–787MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated asfollows:
ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB)
4. EIRP in frequency band 1710–1755MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:
EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)</td></tr>
<tr><td>Test environment:</td><td>Temp.:</td><td>25 °C</td><td>Humid.:</td><td>52%</td><td>Press.:</td><td>1 012mbar</td></tr>
<tr><td>Test Instruments:</td><td colspan="6">Refer to section 6.0 for details</td></tr>
<tr><td>Test mode:</td><td colspan="6">Refer to section 7.1 for details</td></tr>
<tr><td>Test results:</td><td colspan="6">Pass</td></tr>
</table>

Measurement Data

The maximum value has been record and the tighter limits apply:

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2 (1.4M)	Lowest	QPSK	H	20.41	-1.93	1.13	19.61	33.00	Pass
	Middle	QPSK	H	20.37	-1.93	1.22	19.66	33.00	Pass
	Highest	QPSK	H	21.73	-1.93	1.34	21.14	33.00	Pass
	Lowest	16-QAM	H	20.61	-1.93	1.13	19.81	33.00	Pass
	Middle	16-QAM	H	21.21	-1.93	1.22	20.5	33.00	Pass
	Highest	16-QAM	H	20.77	-1.93	1.34	20.18	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2 (3M)	Lowest	QPSK	H	21.85	-1.93	1.13	21.05	33.00	Pass
	Middle	QPSK	H	20.86	-1.93	1.22	20.15	33.00	Pass
	Highest	QPSK	H	21.27	-1.93	1.34	20.68	33.00	Pass
	Lowest	16-QAM	H	21.6	-1.93	1.13	20.8	33.00	Pass
	Middle	16-QAM	H	20.36	-1.93	1.22	19.65	33.00	Pass
	Highest	16-QAM	H	20.76	-1.93	1.34	20.17	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2 (5M)	Lowest	QPSK	H	21.44	-1.93	1.13	20.64	33.00	Pass
	Middle	QPSK	H	21.68	-1.93	1.22	20.97	33.00	Pass
	Highest	QPSK	H	21.31	-1.93	1.34	20.72	33.00	Pass
	Lowest	16-QAM	H	21.01	-1.93	1.13	20.21	33.00	Pass
	Middle	16-QAM	H	20.22	-1.93	1.22	19.51	33.00	Pass
	Highest	16-QAM	H	21.15	-1.93	1.34	20.56	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2 (10M)	Lowest	QPSK	H	21.17	-1.93	1.13	20.37	33.00	Pass
	Middle	QPSK	H	21.04	-1.93	1.22	20.33	33.00	Pass
	Highest	QPSK	H	21.27	-1.93	1.34	20.68	33.00	Pass
	Lowest	16-QAM	H	20.87	-1.93	1.13	20.07	33.00	Pass
	Middle	16-QAM	H	20.95	-1.93	1.22	20.24	33.00	Pass
	Highest	16-QAM	H	20.32	-1.93	1.34	19.73	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2(15M)	Lowest	QPSK	H	21.38	-1.93	1.13	20.58	33.00	Pass
	Middle	QPSK	H	21.6	-1.93	1.22	20.89	33.00	Pass
	Highest	QPSK	H	21.64	-1.93	1.34	21.05	33.00	Pass
	Lowest	16-QAM	H	21.15	-1.93	1.13	20.35	33.00	Pass
	Middle	16-QAM	H	20.15	-1.93	1.22	19.44	33.00	Pass
	Highest	16-QAM	H	20.23	-1.93	1.34	19.64	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 2 (20M)	Lowest	QPSK	H	21.93	-1.93	1.13	21.13	33.00	Pass
	Middle	QPSK	H	21.33	-1.93	1.22	20.62	33.00	Pass
	Highest	QPSK	H	21.9	-1.93	1.34	21.31	33.00	Pass
	Lowest	16-QAM	H	21.54	-1.93	1.13	20.74	33.00	Pass
	Middle	16-QAM	H	21.89	-1.93	1.22	21.18	33.00	Pass
	Highest	16-QAM	H	20.19	-1.93	1.34	19.6	33.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (1.4M)	Lowest	QPSK	H	21.93	-2.74	1.71	20.9	30.00	Pass
	Middle	QPSK	H	21.7	-2.74	1.73	20.69	30.00	Pass
	Highest	QPSK	H	21.86	-2.74	1.81	20.93	30.00	Pass
	Lowest	16-QAM	H	21.34	-2.74	1.71	20.31	30.00	Pass
	Middle	16-QAM	H	21.75	-2.74	1.73	20.74	30.00	Pass
	Highest	16-QAM	H	21.15	-2.74	1.81	20.22	30.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (3M)	Lowest	QPSK	H	21.51	-2.74	1.71	20.48	30.00	Pass
	Middle	QPSK	H	21.97	-2.74	1.73	20.96	30.00	Pass
	Highest	QPSK	H	21.76	-2.74	1.81	20.83	30.00	Pass
	Lowest	16-QAM	H	22.61	-2.74	1.71	21.58	30.00	Pass
	Middle	16-QAM	H	22.06	-2.74	1.73	21.05	30.00	Pass
	Highest	16-QAM	H	21.85	-2.74	1.81	20.92	30.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (5M)	Lowest	QPSK	H	22.42	-2.74	1.71	21.39	30.00	Pass
	Middle	QPSK	H	22.94	-2.74	1.73	21.93	30.00	Pass
	Highest	QPSK	H	22.39	-2.74	1.81	21.46	30.00	Pass
	Lowest	16-QAM	H	22.54	-2.74	1.71	21.51	30.00	Pass
	Middle	16-QAM	H	22.76	-2.74	1.73	21.75	30.00	Pass
	Highest	16-QAM	H	22.27	-2.74	1.81	21.34	30.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (10M)	Lowest	QPSK	H	22.41	-2.74	1.71	21.38	30.00	Pass
	Middle	QPSK	H	21.05	-2.74	1.73	20.04	30.00	Pass
	Highest	QPSK	H	21.77	-2.74	1.81	20.84	30.00	Pass
	Lowest	16-QAM	H	21.76	-2.74	1.71	20.73	30.00	Pass
	Middle	16-QAM	H	21.33	-2.74	1.73	20.32	30.00	Pass
	Highest	16-QAM	H	21.42	-2.74	1.81	20.49	30.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (15M)	Lowest	QPSK	H	22.66	-2.74	1.71	21.63	30.00	Pass
	Middle	QPSK	H	22.88	-2.74	1.73	21.87	30.00	Pass
	Highest	QPSK	H	22.31	-2.74	1.81	21.38	30.00	Pass
	Lowest	16-QAM	H	22.6	-2.74	1.71	21.57	30.00	Pass
	Middle	16-QAM	H	21.75	-2.74	1.73	20.74	30.00	Pass
	Highest	16-QAM	H	21.52	-2.74	1.81	20.59	30.00	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	EIRP (dBm)	Limit (dBm)	Result
LTE Band 4 (20M)	Lowest	QPSK	H	22.28	-2.74	1.71	21.25	30.00	Pass
	Middle	QPSK	H	22.21	-2.74	1.73	21.2	30.00	Pass
	Highest	QPSK	H	21.33	-2.74	1.81	20.4	30.00	Pass
	Lowest	16-QAM	H	21.92	-2.74	1.71	20.89	30.00	Pass
	Middle	16-QAM	H	21.41	-2.74	1.73	20.4	30.00	Pass
	Highest	16-QAM	H	22.74	-2.74	1.81	21.81	30.00	Pass

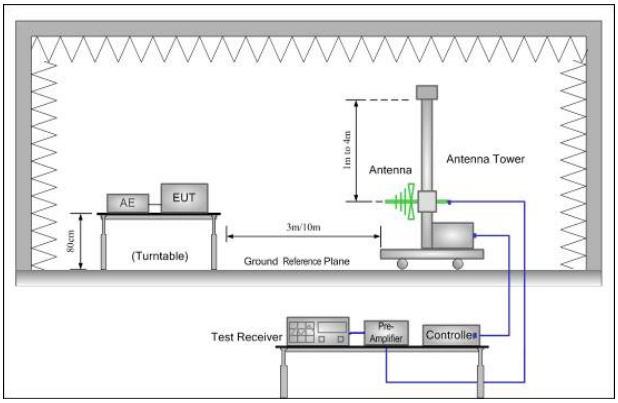
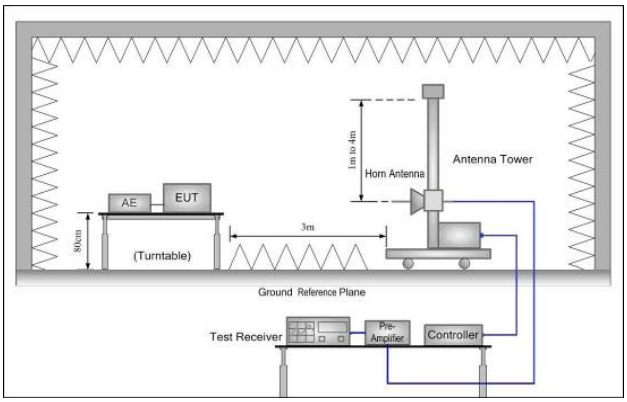
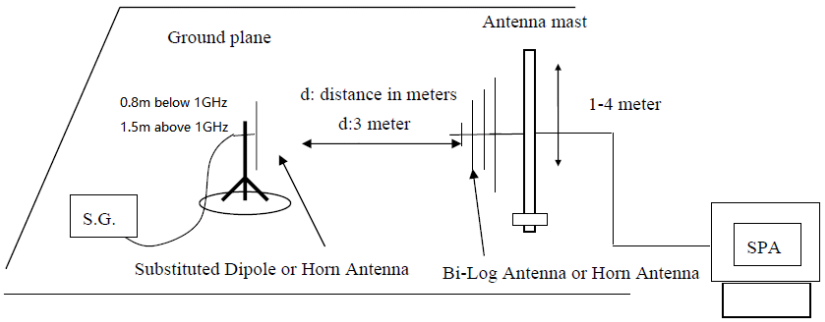
EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	ERP (dBm)	Limit (dBm)	Result
LTE Band 12 (1.4M)	Lowest	QPSK	H	22.92	-2.46	1.55	22.01	34.77	Pass
	Middle	QPSK	H	21.31	-2.46	1.6	20.45	34.77	Pass
	Highest	QPSK	H	22.42	-2.46	1.65	21.61	34.77	Pass
	Lowest	16-QAM	H	21.05	-2.46	1.55	20.14	34.77	Pass
	Middle	16-QAM	H	22.55	-2.46	1.6	21.69	34.77	Pass
	Highest	16-QAM	H	22.05	-2.46	1.65	21.24	34.77	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	ERP (dBm)	Limit (dBm)	Result
LTE Band 12 (3M)	Lowest	QPSK	H	21.99	-2.46	1.55	21.08	34.77	Pass
	Middle	QPSK	H	22.97	-2.46	1.6	22.11	34.77	Pass
	Highest	QPSK	H	22.81	-2.46	1.65	22	34.77	Pass
	Lowest	16-QAM	H	22.24	-2.46	1.55	21.33	34.77	Pass
	Middle	16-QAM	H	22.72	-2.46	1.6	21.86	34.77	Pass
	Highest	16-QAM	H	22.03	-2.46	1.65	21.22	34.77	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	ERP (dBm)	Limit (dBm)	Result
LTE Band 12 (5M)	Lowest	QPSK	H	21.96	-2.46	1.55	21.05	34.77	Pass
	Middle	QPSK	H	22.13	-2.46	1.6	21.27	34.77	Pass
	Highest	QPSK	H	21.92	-2.46	1.65	21.11	34.77	Pass
	Lowest	16-QAM	H	22.07	-2.46	1.55	21.16	34.77	Pass
	Middle	16-QAM	H	21.86	-2.46	1.6	21	34.77	Pass
	Highest	16-QAM	H	21.95	-2.46	1.65	21.14	34.77	Pass

EUT mode	Channel	Modulation	Polarization	SGP [dBm]	Substitution Gain[dBi]	Cable loss[dB]	ERP (dBm)	Limit (dBm)	Result
LTE Band 12 (10M)	Lowest	QPSK	H	21.81	-2.46	1.55	20.9	34.77	Pass
	Middle	QPSK	H	22.23	-2.46	1.6	21.37	34.77	Pass
	Highest	QPSK	H	21.04	-2.46	1.65	20.23	34.77	Pass
	Lowest	16-QAM	H	21.78	-2.46	1.55	20.87	34.77	Pass
	Middle	16-QAM	H	22.01	-2.46	1.6	21.15	34.77	Pass
	Highest	16-QAM	H	22.38	-2.46	1.65	21.57	34.77	Pass

7.5 Field strength of spurious radiation measurement

Test Requirement for FCC:	Part 24.238 (a); FCC Part 27.53(h)/(g)
Test Requirement for IC:	RSS-GEN Clause 6.13
Limit:	Band 2/4/12:-13dBm
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1 012mbar
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 7.1 for details					
Test results:	Pass					

Measurement Data

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.
3. All conditions have been test and compliance

QPSK mode:

Test mode:	**LTE Band 2(5MHz)**		**Test channel:**	**Lowest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3705.00	Vertical	-46.60	-13.00	Pass
5557.50	V	-48.14		
7410.00	V	-45.18		
9262.50	V	-47.27		
11115.00	V	-45.17		
3705.00	Horizontal	-45.49	-13.00	Pass
5557.50	H	-49.08		
7410.00	H	-48.44		
9262.50	H	-47.88		
11115.00	H	-47.64		
Test mode:	**LTE Band 2(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-47.72	-13.00	Pass
5640.00	V	-45.81		
7520.00	V	-45.49		
9400.00	V	-47.23		
11280.00	V	-48.96		
3760.00	Horizontal	-45.76	-13.00	Pass
5640.00	H	-48.72		
7520.00	H	-47.83		
9400.00	H	-48.83		
11280.00	H	-46.55		
Test mode:	**LTE Band 2(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3815.00	Vertical	-46.76	-13.00	Pass
5722.50	V	-47.61		
7630.00	V	-48.08		
9537.50	V	-46.63		
11445.00	V	-47.63		
3815.00	Horizontal	-45.33	-13.00	Pass
5722.50	H	-47.95		
7630.00	H	-48.92		
9537.50	H	-50.68		
11445.00	H	-48.40		

Test mode:	LTE Band 4(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3425.00	Vertical	-48.70	-13.00	Pass
5137.50	V	-49.88		
6850.00	V	-48.62		
8562.50	V	-46.45		
10275.00	V	-46.08		
3425.00	Horizontal	-46.92	-13.00	Pass
5137.50	H	-48.02		
6850.00	H	-49.16		
8562.50	H	-47.23		
10275.00	H	-45.99		
Test mode:	**LTE Band 4(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-48.65	-13.00	Pass
5197.50	V	-49.90		
6930.00	V	-47.69		
8662.50	V	-48.59		
10395.00	V	-45.12		
3465.00	Horizontal	-49.01	-13.00	Pass
5197.50	H	-47.20		
6930.00	H	-48.39		
8662.50	H	-46.53		
10395.00	H	-45.18		
Test mode:	**LTE Band 4(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3505.00	Vertical	-47.69	-13.00	Pass
5257.50	V	-48.87		
7010.00	V	-49.61		
8762.50	V	-47.44		
10515.00	V	-45.01		
3505.00	Horizontal	-45.91	-13.00	Pass
5257.50	H	-49.01		
7010.00	H	-47.15		
8762.50	H	-47.22		
10515.00	H	-45.45		

Test mode:	LTE Band 12(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1559.00	Vertical	-49.45	-13.00	Pass
2338.50	V	-45.97		
3118.00	V	-47.99		
3897.50	V	-50.10		
4677.00	V	-45.56		
1559.00	Horizontal	-48.32	-13.00	Pass
2338.50	H	-51.90		
3118.00	H	-49.24		
3897.50	H	-48.65		
4677.00	H	-44.85		
Test mode:	**LTE Band 12(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1764.00	Vertical	-48.34	-13.00	Pass
2646.00	V	-47.05		
3528.00	V	-49.23		
4410.00	V	-48.49		
5292.00	V	-46.69		
1764.00	Horizontal	-49.58	-13.00	Pass
2646.00	H	-51.43		
3528.00	H	-48.88		
4410.00	H	-47.48		
5292.00	H	-46.90		
Test mode:	**LTE Band 12(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1569.00	Vertical	-48.76	-13.00	Pass
2353.50	V	-47.62		
3138.00	V	-48.93		
3922.50	V	-47.31		
4707.00	V	-45.30		
1569.00	Horizontal	-49.29	-13.00	Pass
2353.50	H	-49.35		
3138.00	H	-49.39		
3922.50	H	-48.21		
4707.00	H	-45.12		

16QAM mode:

Test mode:	LTE Band 2(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3705.00	Vertical	-49.60	-13.00	Pass
5557.50	V	-48.15		
7410.00	V	-47.69		
9262.50	V	-47.15		
11115.00	V	-45.14		
3705.00	Horizontal	-48.07	-13.00	Pass
5557.50	H	-46.52		
7410.00	H	-51.74		
9262.50	H	-49.10		
11115.00	H	-46.24		
Test mode:	**LTE Band 2(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-48.53	-13.00	Pass
5640.00	V	-50.65		
7520.00	V	-48.08		
9400.00	V	-47.48		
11280.00	V	-45.01		
3760.00	Horizontal	-49.66	-13.00	Pass
5640.00	H	-47.33		
7520.00	H	-48.69		
9400.00	H	-46.64		
11280.00	H	-45.79		
Test mode:	**LTE Band 2(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3815.00	Vertical	-49.95	-13.00	Pass
5722.50	V	-48.20		
7630.00	V	-46.64		
9537.50	V	-48.47		
11445.00	V	-46.06		
3815.00	Horizontal	-47.07	-13.00	Pass
5722.50	H	-47.17		
7630.00	H	-48.36		
9537.50	H	-49.24		
11445.00	H	-46.40		

Test mode:	LTE Band 4(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3425.00	Vertical	-51.49	-13.00	Pass
5137.50	V	-48.69		
6850.00	V	-49.52		
8562.50	V	-46.69		
10275.00	V	-46.43		
3425.00	Horizontal	-48.91	-13.00	Pass
5137.50	H	-52.45		
6850.00	H	-51.32		
8562.50	H	-48.99		
10275.00	H	-46.93		
Test mode:	**LTE Band 4(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-49.77	-13.00	Pass
5197.50	V	-47.66		
6930.00	V	-49.00		
8662.50	V	-53.02		
10395.00	V	-45.58		
3465.00	Horizontal	-48.57	-13.00	Pass
5197.50	H	-49.13		
6930.00	H	-51.14		
8662.50	H	-53.88		
10395.00	H	-47.60		
Test mode:	**LTE Band 4(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3505.00	Vertical	-50.14	-13.00	Pass
5257.50	V	-49.61		
7010.00	V	-46.79		
8762.50	V	-48.95		
10515.00	V	-46.65		
3505.00	Horizontal	-47.94	-13.00	Pass
5257.50	H	-49.29		
7010.00	H	-49.99		
8762.50	H	-52.58		
10515.00	H	-47.09		

Test mode:	LTE Band 12(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1559.00	Vertical	-45.95	-13.00	Pass
2338.50	V	-47.51		
3118.00	V	-44.58		
3897.50	V	-46.68		
4677.00	V	-44.80		
1559.00	Horizontal	-44.88	-13.00	Pass
2338.50	H	-48.51		
3118.00	H	-47.90		
3897.50	H	-47.38		
4677.00	H	-47.09		
Test mode:	**LTE Band 12(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1764.00	Vertical	-46.11	-13.00	Pass
2646.00	V	-46.98		
3528.00	V	-47.48		
4410.00	V	-46.04		
5292.00	V	-46.93		
1764.00	Horizontal	-44.72	-13.00	Pass
2646.00	H	-47.38		
3528.00	H	-48.38		
4410.00	H	-50.18		
5292.00	H	-47.77		
Test mode:	**LTE Band 12(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1569.00	Vertical	-47.07	-13.00	Pass
2353.50	V	-45.18		
3138.00	V	-44.89		
3922.50	V	-46.64		
4707.00	V	-48.32		
1569.00	Horizontal	-45.15	-13.00	Pass
2353.50	H	-48.15		
3138.00	H	-47.29		
3922.50	H	-48.33		
4707.00	H	-46.00		

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End------