

Report No.SH16060006W10

FCC RF TEST REPORT

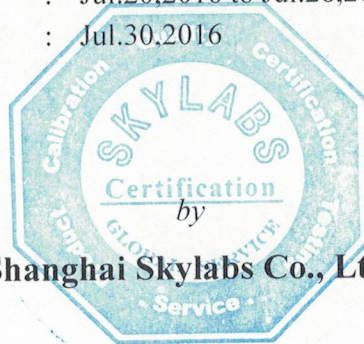
Issued to

Shanghai Rising Digital Co.,Ltd.

For

SECD-710F-02 display screen

Model Name : SECD-710F-02
Trade Name : RISING
Brand Name : RISING
Standard : 47 CFR Part 2
47 CFR Part 22 Subpart H
47 CFR Part 24 Subpart E
47 CFR Part 27
Test date : Jul.20,2016 to Jul.28,2016
Issue date : Jul.30,2016



Shanghai Skylabs Co., Ltd.

Tested by Wu Hongfei

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Review by Xiao deng mei

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Change History

Issue	Date	Reason for change
1.0	Jul.30,2016	First edition



1. General Information

1.1 Applicant

Shanghai Rising Digital Co.,Ltd.

No 318 ,Chuanda Road , Pudong New District, Shanghai,China

1.2 Manufacturer

Shanghai Rising Digital Co.,Ltd.

No 318 ,Chuanda Road , Pudong New District, Shanghai,China

1.3 Description of EUT

EUT Type: SECD-710F-02 display screen n
Brand Name.....: RISING
Trade Name: RISING
Model Name: SECD-710F-02
Hardware Version.....: V109
Software Version: V1318
Antenna type.....: PCB
Antenna gain.....: PCB 1.5dBi
Frequency Range..... GSM 850MHz:
Tx: 824.20-848.80 MHz (at intervals of 200kHz);
Rx: 869.20-893.80 MHz (at intervals of 200kHz)
GSM 1900MHz
Tx: 1850.20-1909.80 MHz (at intervals of 200kHz);
Rx: 1930.20-1989.80 MHz (at intervals of 200kHz)
WCDMA Band II
Tx: 1852.4 - 1907.6MHz (at intervals of 200kHz);
Rx: 1932.4 - 1987.6MHz (at intervals of 200kHz)
WCDMA Band IV
Tx: 1712.4 - 1752.6 MHz (at intervals of 200kHz);
Rx: 2112.4 - 2152.6 MHz (at intervals of 200kHz)
WCDMA BandV
Tx: 826.4- 846.6MHz (at intervals of 200kHz);
Rx: 871.4 - 891.6MHz (at intervals of 200kHz)

LTE Band 2
TX:1852.5 ~ 1907.5 MHz
RX: 1932.5 ~ 1987.5 MHz
LTE Band 4



TX: 1712.5 ~ 1752.5 MHz

RX:2112.5 ~ 2152.5 MHz

LTE Band 5

TX: 826.5 ~ 846.5 MHz

RX: 871.5 ~ 891.5 MHz

LTE Band 12

TX:699.7 ~ 715.3 MHz

RX: 729.7~ 745.3MHz

LTE Band 17

TX: 706.5 ~ 713.5 MHz;

RX: 736.5 ~ 743.5 MHz

Bandwidth: Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz
Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz
Band 17: 5MHz / 10MHz

Modulation Type: QPSK,16QAM

Power.....: DC 24V

NOTE:

(1) For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



2. Facilities and Accreditations

2.1 Test Facility

Shanghai Skylabs Co., Ltd. is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. FCC listed: 196218, IC listed: 21609.

The accreditation certificate number is L6644. A 9*6*6(m) fully anechoic chamber was used for the radiated spurious emissions test.

2.2 Environmental Conditions

Ambient temperature: 20~25°C

Relative humidity: 40~60%

Atmosphere pressure: 86-102kPa

2.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Uncertainty of Conducted Emission: ± 1.76 dB

Uncertainty of Radiated Emission: ± 3.16 dB



2.4 List of Equipments Used

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	R&S	CMW500	100830	2015.9.22	1year
Spectrum Analyzer	Rohde&Schwarz	FSU26	200880	2016.6.17	1year
Spectrum Analyzer	Agilent	N9020N	MY55320135	2016.2.25	1year
Power Splitter	Weinschel	1506A	NW521	(n.a.)	(n.a.)
Power Splitter	Mini-Circuits	ZFRSC-183-S+	765001016	(n.a.)	(n.a.)
Attenuator 1	Mini-Circuits	10dB	(n.a.)	(n.a.)	(n.a.)
Attenuator 2	Resnet	10dB	(n.a.)	(n.a.)	(n.a.)
Attenuator 3	Resnet	3dB	(n.a.)	(n.a.)	(n.a.)
DC/AC Power supplier	NF	ES2000S	9087735	2015.10.17	1year
Temperature Chamber	YinHe Experimental Equip.	HL4003T	(n.a.)	2015.9.20	1year
Full/Half-Anechoic Chamber	CHENGYU	9.2×6.25×6.15m	SAR	2016.04.11	3year
Signal Generator	Rohde&Schwarz	SMF100A	101935	2015.9.22	1year
Broadband Trilog Antenna	Schwarzbeck	VULB 9163	9163-561	2016.07.25	2year
Substitution Broadband Trilog Antenna	Schwarzbeck	VULB 9163	9163-572	2016.07.25	2year
Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1033	2016.07.25	2year
Substitution Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1034	2016.07.25	2year
Broadband Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91970171	2015.9.22	2year
Substitution Broadband Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91970208	2015.9.22	2year
Test Antenna-Loop	Rohde&Schwarz	HFH2-Z2	860004/001	2015.9.22	2year
RF Cable	(n.a.)	0-25GHz	(n.a.)	(n.a.)	(n.a.)

NOTE:

Equipments listed above have been calibrated and are in the period of validation.



3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

No.	FCC Rules	Description	Result
1	2.1046 22.913(a)(2) 24.232(c) 27.50(c)(10) 27.50(d)(4)	Transmitter Radiated Power (EIPR/ERP)	PASS
2	2.1053 22.917(a) 24.238(a) 27.53(h)	Radiated Out of Band Emissions	PASS



4. Test Result

4.1 Transmitter Radiated Power (EIRP/ERP)

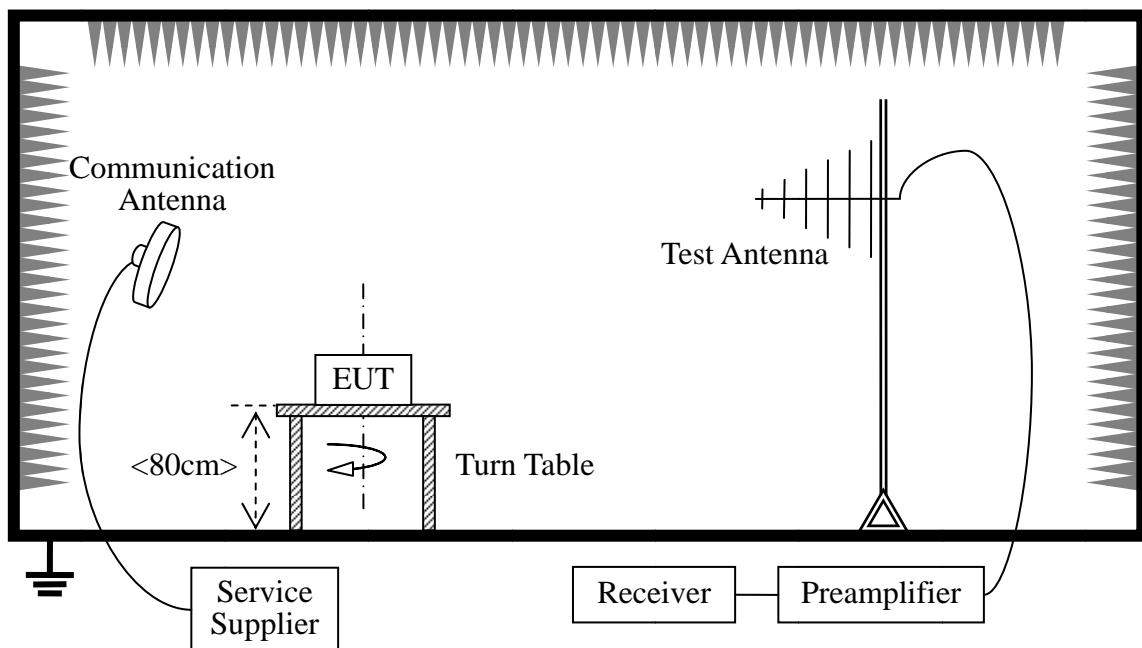
4.1.1 Requirement

According to FCC section 2.1046, 22.913(a)(2), 24.232(c), 27.50(c)(10) and 27.50(d)(4)

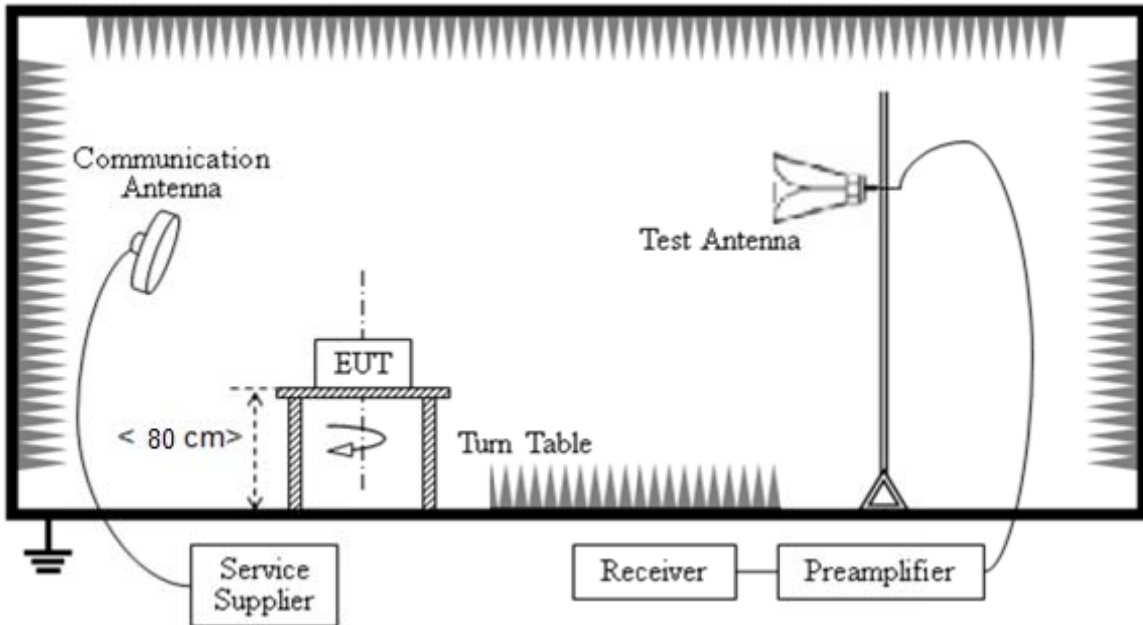
Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 and 3 watts with LTE band 12 / 17.

Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 and 1 watt with LTE band 4.

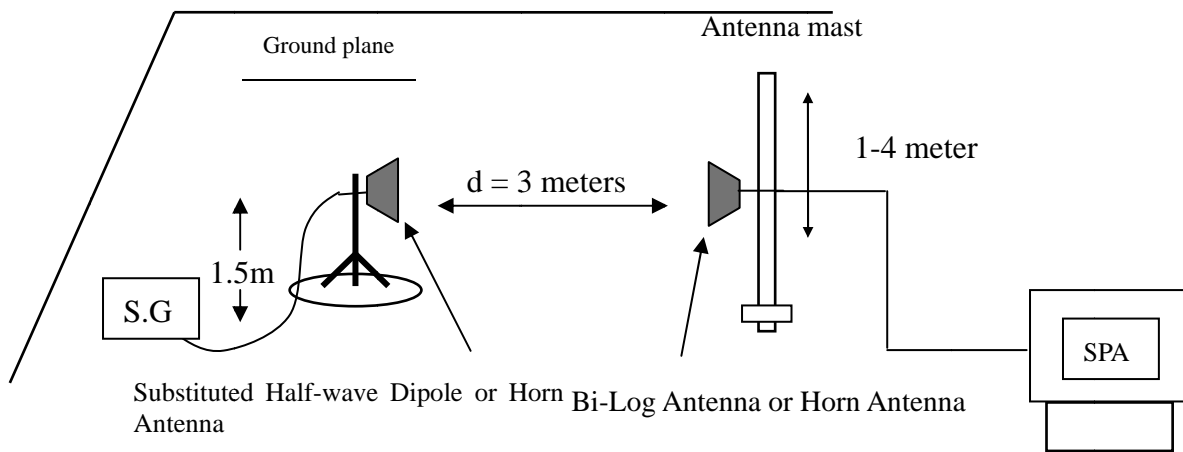
4.1.2 Test Description



Radiated Emissions 30-1000MHz



Radiated Emissions above 1000MHz



Substituted method

4.1.3 Test Procedure

The measurements procedures in TIA-603D-2010 are used.

1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1-4m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (P_r).
3. 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 (P_{Mea}) 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 (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The cable loss (P_{cl}) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (G_a) should be recorded after test. The measurement results are obtained as described below:

$$\text{Power(EIRP)} = P_{Mea} + P_{cl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dBi}$.



4.1.4 Test Results

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested. All modes are tested.

LTE Band 2:

LTE Band 2 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.61	0.0915	17.61	0.0576
Middle		1	0	18.85	0.0767	16.56	0.0453
Highest		1	0	18.08	0.0643	17.28	0.0534
Lowest	16QAM	1	0	18.36	0.0686	17.77	0.0599
Middle		1	0	17.32	0.0540	17.35	0.0544
Highest		1	0	16.84	0.0483	15.81	0.0381
Limit	EIRP <2W			Result		Pass	

LTE Band 2 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.53	0.0897	17.94	0.0623
Middle		1	0	18.92	0.0780	16.81	0.0480
Highest		1	0	18.37	0.0688	16.18	0.0415
Lowest	16QAM	1	0	18.93	0.0782	17.21	0.0526
Middle		1	0	17.13	0.0516	17.06	0.0509
Highest		1	0	17.71	0.0590	16.82	0.0481
Limit	EIRP <2W			Result		Pass	

LTE Band 2 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.13	0.0818	17.45	0.0556
Middle		1	0	19.30	0.0852	17.28	0.0534
Highest		1	0	18.26	0.0669	17.00	0.0501
Lowest	16QAM	1	0	17.88	0.0614	16.96	0.0497
Middle		1	0	18.16	0.0655	17.05	0.0507
Highest		1	0	17.27	0.0534	16.51	0.0448
Limit	EIRP <2W			Result		Pass	



LTE Band 2 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.56	0.0904	18.14	0.0651
Middle		1	0	19.45	0.0880	17.29	0.0536
Highest		1	0	18.86	0.0769	16.63	0.0460
Lowest	16QAM	1	0	19.20	0.0831	16.90	0.0490
Middle		1	0	18.63	0.0730	17.19	0.0523
Highest		1	0	18.13	0.0650	16.80	0.0479
Limit	EIRP <2W			Result		Pass	

LTE Band 2 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	18.38	0.0688	17.97	0.0626
Middle		1	0	18.94	0.0784	18.07	0.0641
Highest		1	0	18.60	0.0725	16.59	0.0456
Lowest	16QAM	1	0	18.08	0.0642	16.55	0.0452
Middle		1	0	18.17	0.0656	17.76	0.0597
Highest		1	0	17.88	0.0614	16.20	0.0417
Limit	EIRP <2W			Result		Pass	

LTE Band 2 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.98	0.0995	17.57	0.0571
Middle		1	0	19.84	0.0963	17.63	0.0579
Highest		1	0	18.07	0.0641	18.02	0.0635
Lowest	16QAM	1	0	17.68	0.0587	15.79	0.0379
Middle		1	0	17.15	0.0519	17.01	0.0502
Highest		1	0	17.80	0.0602	16.82	0.0481
Limit	EIRP <2W			Result		Pass	



LTE Band4

LTE Band 4 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.52	0.1787	19.07	0.0807
Middle		1	0	21.42	0.1386	18.66	0.0734
Highest		1	0	21.22	0.1325	19.26	0.0843
Lowest	16QAM	1	0	20.80	0.1203	18.82	0.0762
Middle		1	0	21.39	0.1377	18.79	0.0757
Highest		1	0	21.73	0.1488	19.35	0.0862
Limit	EIRP < 1W			Result		Pass	

LTE Band 4 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.62	0.1451	19.14	0.0820
Middle		1	0	21.50	0.1411	18.89	0.0775
Highest		1	0	21.41	0.1383	18.92	0.0780
Lowest	16QAM	1	0	21.63	0.1456	18.35	0.0684
Middle		1	0	21.55	0.1428	19.13	0.0818
Highest		1	0	21.41	0.1384	18.97	0.0789
Limit	EIRP < 1W			Result		Pass	

LTE Band 4 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.19	0.1655	19.55	0.0901
Middle		1	0	22.39	0.1733	18.42	0.0694
Highest		1	0	20.55	0.1136	19.97	0.0992
Lowest	16QAM	1	0	21.55	0.1427	19.35	0.0861
Middle		1	0	21.67	0.1470	18.60	0.0724
Highest		1	0	20.75	0.1189	18.31	0.0677
Limit	EIRP < 1W			Result		Pass	



LTE Band 4 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	20.73	0.1183	19.16	0.0825
Middle		1	0	20.89	0.1227	19.28	0.0848
Highest		1	0	21.92	0.1557	18.23	0.0665
Lowest	16QAM	1	0	20.80	0.1203	18.29	0.0674
Middle		1	0	22.48	0.1769	19.13	0.0818
Highest		1	0	22.53	0.1791	19.23	0.0837
Limit	EIRP < 1W			Result		Pass	

LTE Band 4 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.47	0.1403	19.27	0.0845
Middle		1	0	20.83	0.1211	20.31	0.1073
Highest		1	0	22.20	0.1661	19.29	0.0850
Lowest	16QAM	1	0	21.33	0.1359	19.99	0.0998
Middle		1	0	21.59	0.1442	18.86	0.0769
Highest		1	0	21.28	0.1342	19.22	0.0836
Limit	EIRP < 1W			Result		Pass	

LTE Band 4 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.18	0.1312	18.89	0.0775
Middle		1	0	20.96	0.1247	19.55	0.0901
Highest		1	0	21.82	0.1521	18.58	0.0720
Lowest	16QAM	1	0	21.55	0.1428	19.53	0.0897
Middle		1	0	21.24	0.1331	18.13	0.0650
Highest		1	0	21.10	0.1287	18.07	0.0642
Limit	EIRP < 1W			Result		Pass	



LTE Band 5

LTE Band 5 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	15.67	0.0369	6.78	0.0048
Middle		1	0	15.80	0.0380	6.86	0.0049
Highest		1	0	15.60	0.0363	6.71	0.0047
Lowest	16QAM	1	0	14.62	0.0290	6.16	0.0041
Middle		1	0	14.90	0.0309	6.30	0.0043
Highest		1	0	15.51	0.0356	6.74	0.0047
Limit	ERP <7W			Result		Pass	

LTE Band 5 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	15.17	0.0329	5.89	0.0039
Middle		1	0	15.69	0.0371	6.87	0.0049
Highest		1	0	15.17	0.0329	6.55	0.0045
Lowest	16QAM	1	0	13.81	0.0240	4.47	0.0028
Middle		1	0	14.45	0.0278	5.61	0.0036
Highest		1	0	14.92	0.0311	5.34	0.0034
Limit	ERP <7W			Result		Pass	

LTE Band 5 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	14.69	0.0294	5.62	0.0036
Middle		1	0	15.08	0.0322	6.33	0.0043
Highest		1	0	14.73	0.0297	7.06	0.0051
Lowest	16QAM	1	0	13.55	0.0227	4.49	0.0028
Middle		1	0	14.81	0.0303	5.54	0.0036
Highest		1	0	14.28	0.0268	5.87	0.0039
Limit	ERP <7W			Result		Pass	



LTE Band 5 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	14.68	0.0294	5.42	0.0035
Middle		1	0	14.88	0.0308	6.58	0.0046
Highest		1	0	14.91	0.0310	5.79	0.0038
Lowest	16QAM	1	0	15.17	0.0329	4.57	0.0029
Middle		1	0	14.27	0.0267	5.76	0.0038
Highest		1	0	14.73	0.0297	5.86	0.0039
Limit	ERP <7W			Result		Pass	

LTE Band 12

LTE Band 12 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	13.77	0.0238	-3.31	0.0005
Middle		1	0	12.66	0.0184	-3.39	0.0005
Highest		1	0	13.19	0.0208	-3.37	0.0005
Lowest	16QAM	1	0	11.94	0.0156	-3.85	0.0004
Middle		1	0	12.28	0.0169	-4.93	0.0003
Highest		1	0	12.47	0.0176	-4.23	0.0004
Limit	ERP <3W			Result		Pass	

LTE Band 12 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	13.30	0.0214	-3.83	0.0004
Middle		1	0	12.65	0.0184	-3.72	0.0004
Highest		1	0	13.16	0.0207	-4.54	0.0004
Lowest	16QAM	1	0	12.13	0.0163	-4.55	0.0004
Middle		1	0	12.33	0.0171	-4.01	0.0004
Highest		1	0	11.59	0.0144	-5.42	0.0003
Limit	ERP <3W			Result		Pass	



LTE Band 12 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	13.89	0.0245	-2.91	0.0005
Middle		1	0	12.87	0.0194	-4.39	0.0004
Highest		1	0	14.05	0.0254	-4.00	0.0004
Lowest	16QAM	1	0	12.61	0.0182	-4.55	0.0004
Middle		1	0	11.62	0.0145	-4.89	0.0003
Highest		1	0	12.12	0.0163	-5.27	0.0003
Limit	ERP <3W			Result		Pass	

LTE Band 12 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	14.20	0.0263	-3.36	0.0005
Middle		1	0	13.00	0.0200	-3.76	0.0004
Highest		1	0	12.36	0.0172	-3.50	0.0004
Lowest	16QAM	1	0	12.67	0.0185	-3.88	0.0004
Middle		1	0	11.36	0.0137	-4.66	0.0003
Highest		1	0	11.83	0.0152	-5.04	0.0003
Limit	ERP <3W			Result		Pass	

LTE Band 17

LTE Band 17 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.76	0.0189	-4.60	0.0003
Middle		1	0	12.82	0.0191	-3.10	0.0005
Highest		1	0	12.79	0.0190	-4.14	0.0004
Lowest	16QAM	1	0	12.25	0.0168	-5.75	0.0003
Middle		1	0	12.07	0.0161	-4.74	0.0003
Highest		1	0	11.97	0.0157	-4.63	0.0003
Limit	ERP <3W			Result		Pass	



LTE Band 17 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	EIRP(W)	ERP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.15	0.0164	-3.17	0.0005
Middle		1	0	13.33	0.0215	-3.92	0.0004
Highest		1	0	13.57	0.0228	-3.43	0.0005
Lowest	16QAM	1	0	12.79	0.0190	-4.06	0.0004
Middle		1	0	12.53	0.0179	-3.95	0.0004
Highest		1	0	11.93	0.0156	-4.44	0.0004
Limit	ERP <3W			Result		Pass	



4.2 Radiated Out of Band Emissions

4.2.1 Requirement

According to FCC section 2.1053, 22.917(a), 24.238(a) and 27.53(h), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10*\log(P)$ dB. This calculated to be -13dBm.

4.2.2 Test Description

See section 4.7.2 of this report.

4.2.3 Test Procedure

1. The lowest, middle and the highest channel were selected to perform tests respectively.
2. The EUT was placed on a rotatable non-conductive table 0.8 meters above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antennatower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A substituted antenna was in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
12. $ERP \text{ (dBm)} = EIRP - 2.15$
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



4.2.4 Test Results

LTE Band 2

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3704	-59.60	-13	Pass
	H	5556	-47.61	-13	Pass
	H	7404	-49.82	-13	Pass
	H	9256	-49.87	-13	Pass
	H	12956	-39.20	-13	Pass
	V	3704	-61.71	-13	Pass
	V	5556	-55.58	-13	Pass
	V	7404	-51.12	-13	Pass
	V	9256	-50.33	-13	Pass
	V	12956	-46.23	-13	Pass
Middle	H	3764	-60.60	-13	Pass
	H	5644	-49.74	-13	Pass
	H	7524	-54.43	-13	Pass
	H	9400	-50.88	-13	Pass
	H	13160	-37.52	-13	Pass
	V	3764	-59.96	-13	Pass
	V	5644	-54.63	-13	Pass
	V	7524	-55.04	-13	Pass
	V	9400	-56.00	-13	Pass
	V	13160	-41.98	-13	Pass
Highest	H	3820	-62.32	-13	Pass
	H	5732	-46.78	-13	Pass
	H	7640	-53.14	-13	Pass
	H	9548	-51.12	-13	Pass
	V	3820	-63.64	-13	Pass
	V	5732	-55.56	-13	Pass
	V	7640	-54.84	-13	Pass
	V	9548	-52.35	-13	Pass



LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3704	-59.36	-13	Pass
	H	5556	-50.03	-13	Pass
	H	7404	-49.50	-13	Pass
	H	9256	-48.92	-13	Pass
	V	12956	-40.77	-13	Pass
	V	3704	-61.86	-13	Pass
	V	5556	-50.66	-13	Pass
	V	7404	-52.97	-13	Pass
	V	9256	-54.72	-13	Pass
	V	12956	-43.87	-13	Pass
Middle	H	3760	-59.80	-13	Pass
	H	5640	-48.91	-13	Pass
	H	7520	-56.90	-13	Pass
	H	9396	-50.76	-13	Pass
	V	13156	-39.02	-13	Pass
	V	3760	-63.12	-13	Pass
	V	5640	-54.79	-13	Pass
	V	7520	-56.62	-13	Pass
	V	9396	-51.96	-13	Pass
	V	13156	-46.02	-13	Pass
Highest	H	3820	-59.04	-13	Pass
	H	5724	-48.54	-13	Pass
	H	7632	-38.23	-13	Pass
	H	9540	-54.14	-13	Pass
	V	13356	-42.20	-13	Pass
	V	3820	-65.96	-13	Pass
	V	5724	-52.63	-13	Pass
	V	7632	-55.09	-13	Pass
	V	9540	-55.93	-13	Pass
	V	13356	-44.69	-13	Pass



LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3704	-56.93	-13	Pass
	H	5556	-47.96	-13	Pass
	H	7404	-50.58	-13	Pass
	H	9256	-52.53	-13	Pass
	V	12956	-38.12	-13	Pass
	V	3704	-60.67	-13	Pass
	V	5556	-53.85	-13	Pass
	V	7404	-55.09	-13	Pass
	V	9256	-51.79	-13	Pass
	V	12956	-46.25	-13	Pass
Middle	H	3760	-59.07	-13	Pass
	H	5636	-49.74	-13	Pass
	H	7516	-53.07	-13	Pass
	H	9392	-52.08	-13	Pass
	V	13148	-38.65	-13	Pass
	V	3760	-63.59	-13	Pass
	V	5636	-56.63	-13	Pass
	V	7516	-53.20	-13	Pass
	V	9392	-53.40	-13	Pass
	V	13148	-41.56	-13	Pass
Highest	H	3816	-56.04	-13	Pass
	H	5720	-48.20	-13	Pass
	H	7624	-52.64	-13	Pass
	V	3816	-61.59	-13	Pass
	V	5720	-52.49	-13	Pass
	V	7624	-54.87	-13	Pass



LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3704	-60.11	-13	Pass
	H	5556	-50.58	-13	Pass
	H	7408	-48.01	-13	Pass
	H	9256	-51.10	-13	Pass
	H	11108	-47.40	-13	Pass
	H	12960	-42.54	-13	Pass
	V	3704	-49.05	-13	Pass
	V	5556	-54.30	-13	Pass
	V	7408	-51.30	-13	Pass
	V	9256	-53.37	-13	Pass
	V	11108	-52.03	-13	Pass
	V	12960	-47.07	-13	Pass
Middle	H	3756	-59.25	-13	Pass
	H	5632	-50.85	-13	Pass
	H	13132	-41.80	-13	Pass
	V	3756	-62.65	-13	Pass
	V	5632	-53.43	-13	Pass
	V	13132	-44.31	-13	Pass
Highest	H	3804	-54.92	-13	Pass
	H	5704	-54.08	-13	Pass
	H	7608	-50.72	-13	Pass
	H	9508	-54.82	-13	Pass
	H	11412	-51.55	-13	Pass
	H	13308	-41.32	-13	Pass
	V	3804	-61.33	-13	Pass
	V	5704	-57.80	-13	Pass
	V	7608	-54.80	-13	Pass
	V	9508	-52.52	-13	Pass
	V	11412	-50.32	-13	Pass
	V	13308	-45.33	-13	Pass



LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3704	-57.28	-13	Pass
	H	5556	-47.45	-13	Pass
	H	7408	-48.98	-13	Pass
	H	9260	-49.24	-13	Pass
	H	12960	-40.02	-13	Pass
	V	3704	-64.12	-13	Pass
	V	5556	-52.79	-13	Pass
	V	7408	-57.01	-13	Pass
	V	9260	-39.39	-13	Pass
	V	12960	-48.15	-13	Pass
Middle	H	3752	-60.65	-13	Pass
	H	5624	-48.38	-13	Pass
	H	7496	-50.02	-13	Pass
	H	9372	-48.87	-13	Pass
	V	13116	-40.43	-13	Pass
	V	3752	-60.55	-13	Pass
	V	5624	-53.11	-13	Pass
	V	7496	-55.34	-13	Pass
	V	9372	-53.61	-13	Pass
	V	13116	-48.92	-13	Pass
Highest	H	3796	-51.70	-13	Pass
	H	5692	-49.48	-13	Pass
	H	7588	-48.95	-13	Pass
	H	9484	-49.28	-13	Pass
	H	13276	-41.47	-13	Pass
	V	3796	-60.15	-13	Pass
	V	5692	-51.36	-13	Pass
	V	7588	-54.08	-13	Pass
	V	9484	-52.63	-13	Pass
	V	13276	-45.35	-13	Pass



LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3708	-57.17	-13	Pass
	H	5556	-50.48	-13	Pass
	H	7408	-48.56	-13	Pass
	H	9260	-49.28	-13	Pass
	H	12960	-40.24	-13	Pass
	V	3708	-60.79	-13	Pass
	V	5556	-56.03	-13	Pass
	V	7408	-51.33	-13	Pass
	V	9260	-53.38	-13	Pass
	V	12960	-47.61	-13	Pass
Middle	H	3748	-62.05	-13	Pass
	H	5616	-50.67	-13	Pass
	H	7488	-38.05	-13	Pass
	H	9360	-50.07	-13	Pass
	H	13100	-43.90	-13	Pass
	V	3748	-59.30	-13	Pass
	V	5616	-55.32	-13	Pass
	V	7488	-55.54	-13	Pass
	V	9360	-51.60	-13	Pass
	V	13100	-47.50	-13	Pass
Highest	H	3788	-56.32	-13	Pass
	H	5676	-48.25	-13	Pass
	H	7568	-51.60	-13	Pass
	H	9460	-50.66	-13	Pass
	H	13240	-40.76	-13	Pass
	V	3788	-62.88	-13	Pass
	V	5676	-55.01	-13	Pass
	V	7568	-56.32	-13	Pass
	V	9460	-53.04	-13	Pass
	V	13240	-41.55	-13	Pass



LTE Band 4

LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-56.99	-13	Pass
	H	5128	-48.26	-13	Pass
	H	6843	-35.69	-13	Pass
	H	8551	-50.73	-13	Pass
	V	3420	-61.70	-13	Pass
	V	5128	-55.11	-13	Pass
	V	6843	-38.41	-13	Pass
	V	8551	-49.26	-13	Pass
Middle	H	3462	-57.81	-13	Pass
	H	5198	-45.53	-13	Pass
	H	6927	-38.28	-13	Pass
	H	8663	-46.18	-13	Pass
	V	3462	-58.48	-13	Pass
	V	5198	-48.84	-13	Pass
	V	6927	-41.73	-13	Pass
	V	8663	-47.29	-13	Pass
Highest	H	3511	-58.25	-13	Pass
	H	5261	-46.98	-13	Pass
	H	7018	-40.53	-13	Pass
	H	8768	-44.77	-13	Pass
	V	3511	-58.17	-13	Pass
	V	5261	-52.15	-13	Pass
	V	7018	-45.13	-13	Pass
	V	8768	-51.81	-13	Pass



LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-57.55	-13	Pass
	H	5128	-47.28	-13	Pass
	H	6843	-33.44	-13	Pass
	H	8551	-45.23	-13	Pass
	V	3420	-63.63	-13	Pass
	V	5128	-53.39	-13	Pass
	V	6843	-44.70	-13	Pass
	V	8551	-48.41	-13	Pass
Middle	H	3462	-52.97	-13	Pass
	H	5191	-44.61	-13	Pass
	H	6927	-37.75	-13	Pass
	H	8656	-44.63	-13	Pass
	V	3462	-61.25	-13	Pass
	V	5191	-50.08	-13	Pass
	V	6927	-40.95	-13	Pass
	V	8656	-52.04	-13	Pass
Highest	H	3504	-62.81	-13	Pass
	H	5254	-43.54	-13	Pass
	H	7011	-41.63	-13	Pass
	H	8761	-47.27	-13	Pass
	V	3504	-62.44	-13	Pass
	V	5254	-51.59	-13	Pass
	V	7011	-42.13	-13	Pass
	V	8761	-52.09	-13	Pass



LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-57.87	-13	Pass
	H	5128	-49.71	-13	Pass
	H	6843	-34.23	-13	Pass
	H	8551	-50.10	-13	Pass
	V	3420	-63.33	-13	Pass
	V	5128	-55.10	-13	Pass
	V	6843	-38.42	-13	Pass
	V	8551	-54.20	-13	Pass
Middle	H	3462	-55.65	-13	Pass
	H	5191	-45.78	-13	Pass
	H	6920	-35.11	-13	Pass
	H	8649	-44.86	-13	Pass
	V	3462	-61.75	-13	Pass
	V	5191	-52.96	-13	Pass
	V	6920	-37.59	-13	Pass
	V	8649	-47.36	-13	Pass
Highest	H	3504	-56.40	-13	Pass
	H	5254	-49.15	-13	Pass
	H	7004	-40.66	-13	Pass
	H	8754	-47.45	-13	Pass
	V	3504	-63.71	-13	Pass
	V	5254	-52.45	-13	Pass
	V	7004	-41.20	-13	Pass
	V	8754	-49.04	-13	Pass



LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-57.39	-13	Pass
	H	5132	-45.71	-13	Pass
	H	6843	-34.20	-13	Pass
	V	3420	-59.64	-13	Pass
	V	5132	-52.62	-13	Pass
	V	6843	-38.31	-13	Pass
Middle	H	3455	-53.15	-13	Pass
	H	5184	-50.55	-13	Pass
	H	6913	-36.89	-13	Pass
	H	8642	-48.69	-13	Pass
	V	3455	-60.85	-13	Pass
	V	5184	-53.08	-13	Pass
	V	6913	-38.02	-13	Pass
V	8642	-48.67	-13	Pass	
Highest	H	3490	-57.90	-13	Pass
	H	5240	-50.14	-13	Pass
	H	6983	-38.52	-13	Pass
	H	8726	-48.82	-13	Pass
	V	3490	-63.84	-13	Pass
	V	5240	-48.76	-13	Pass
	V	6983	-40.08	-13	Pass
	V	8726	-49.52	-13	Pass



LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-58.11	-13	Pass
	H	5135	-50.25	-13	Pass
	H	6843	-36.74	-13	Pass
	V	3420	-64.46	-13	Pass
	V	5135	-51.80	-13	Pass
	V	6843	-42.79	-13	Pass
Middle	H	3455	-56.13	-13	Pass
	H	5177	-47.94	-13	Pass
	H	6906	-38.16	-13	Pass
	H	8628	-46.39	-13	Pass
	V	3455	-60.88	-13	Pass
	V	5177	-53.23	-13	Pass
	V	6906	-38.46	-13	Pass
V	8628	-45.98	-13	Pass	
Highest	H	3483	-56.62	-13	Pass
	H	5226	-45.73	-13	Pass
	H	6962	-36.65	-13	Pass
	H	8705	-43.90	-13	Pass
	V	3483	-59.54	-13	Pass
	V	5226	-50.11	-13	Pass
	V	6962	-39.58	-13	Pass
	V	8705	-50.89	-13	Pass



LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	3420	-60.59	-13	Pass
	H	5135	-49.80	-13	Pass
	H	6843	-36.42	-13	Pass
	H	8558	-50.10	-13	Pass
	V	3420	-62.13	-13	Pass
	V	5135	-53.72	-13	Pass
	V	6843	-41.83	-13	Pass
	V	8558	-52.37	-13	Pass
Middle	H	3448	-53.24	-13	Pass
	H	5170	-48.43	-13	Pass
	H	6892	-35.12	-13	Pass
	H	8621	-47.37	-13	Pass
	V	3448	-61.15	-13	Pass
	V	5170	-50.74	-13	Pass
	V	6892	-41.27	-13	Pass
	V	8621	-50.97	-13	Pass
Highest	H	3476	-53.28	-13	Pass
	H	5212	-45.10	-13	Pass
	H	6948	-33.70	-13	Pass
	H	8684	-46.71	-13	Pass
	V	3476	-61.20	-13	Pass
	V	5212	-48.94	-13	Pass
	V	6948	-36.57	-13	Pass
	V	8684	-48.84	-13	Pass



LTE Band 5

LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1651	-58.07	-13	Pass
	H	2476	-62.17	-13	Pass
	H	3302	-67.56	-13	Pass
	V	1651	-64.37	-13	Pass
	V	2476	-64.73	-13	Pass
	V	3302	-64.11	-13	Pass
Middle	H	1675	-61.28	-13	Pass
	H	2512	-65.13	-13	Pass
	H	3346	-63.43	-13	Pass
	V	1675	-66.60	-13	Pass
	V	2512	-67.04	-13	Pass
	V	3346	-65.67	-13	Pass
Highest	H	1699	-62.38	-13	Pass
	H	2545	-66.54	-13	Pass
	H	3394	-61.95	-13	Pass
	V	1699	-65.18	-13	Pass
	V	2545	-68.04	-13	Pass
	V	3394	-63.39	-13	Pass



LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1651	-63.08	-13	Pass
	H	2476	-66.87	-13	Pass
	H	3301	-64.81	-13	Pass
	V	1651	-67.46	-13	Pass
	V	2476	-63.70	-13	Pass
	V	3301	-64.98	-13	Pass
Middle	H	1672	-65.62	-13	Pass
	H	2509	-62.64	-13	Pass
	H	3343	-64.55	-13	Pass
	V	1672	-69.06	-13	Pass
	V	2509	-61.62	-13	Pass
	V	3343	-64.70	-13	Pass
Highest	H	1696	-62.00	-13	Pass
	H	2542	-63.86	-13	Pass
	H	3388	-64.24	-13	Pass
	V	1696	-66.54	-13	Pass
	V	2542	-65.55	-13	Pass
	V	3388	-64.27	-13	Pass



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1651	-60.79	-13	Pass
	H	2476	-64.17	-13	Pass
	H	3302	-65.95	-13	Pass
	V	1651	-65.27	-13	Pass
	V	2476	-68.18	-13	Pass
	V	3302	-66.98	-13	Pass
Middle	H	1672	-63.44	-13	Pass
	H	2506	-61.69	-13	Pass
	H	3340	-66.17	-13	Pass
	V	1672	-70.29	-13	Pass
	V	2506	-63.84	-13	Pass
	V	3340	-65.29	-13	Pass
Highest	H	1693	-69.02	-13	Pass
	H	2536	-65.82	-13	Pass
	H	3385	-65.19	-13	Pass
	V	1693	-68.18	-13	Pass
	V	2536	-62.91	-13	Pass
	V	3385	-65.76	-13	Pass



LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1651	-62.44	-13	Pass
	H	2476	-65.75	-13	Pass
	H	3301	-62.37	-13	Pass
	V	1651	-66.66	-13	Pass
	V	2476	-63.81	-13	Pass
	V	3301	-65.22	-13	Pass
Middle	H	1666	-66.89	-13	Pass
	H	2500	-67.09	-13	Pass
	H	3331	-64.97	-13	Pass
	V	1666	-70.65	-13	Pass
	V	2500	-66.09	-13	Pass
	V	3331	-65.71	-13	Pass
Highest	H	1688	-60.26	-13	Pass
	H	2532	-68.24	-13	Pass
	H	3376	-64.48	-13	Pass
	V	1688	-69.07	-13	Pass
	V	2532	-64.96	-13	Pass
	V	3376	-66.47	-13	Pass



LTE Band 12

LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1402	-70.71	-13	Pass
	H	2101	-61.97	-13	Pass
	H	2800	-63.89	-13	Pass
	V	1402	-69.77	-13	Pass
	V	2101	-61.24	-13	Pass
	V	2800	-66.67	-13	Pass
Middle	H	1417	-68.37	-13	Pass
	H	2125	-62.67	-13	Pass
	H	2830	-68.29	-13	Pass
	V	1417	-69.88	-13	Pass
	V	2125	-61.39	-13	Pass
	V	2830	-62.90	-13	Pass
Highest	H	1432	-66.33	-13	Pass
	H	2149	-66.35	-13	Pass
	H	2863	-64.22	-13	Pass
	V	1432	-65.99	-13	Pass
	V	2149	-64.94	-13	Pass
	V	2863	-63.57	-13	Pass



LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1398	-66.31	-13	Pass
	H	2097	-59.54	-13	Pass
	H	2796	-62.90	-13	Pass
	V	1398	-67.95	-13	Pass
	V	2097	-59.67	-13	Pass
	V	2796	-64.87	-13	Pass
Middle	H	1412	-67.46	-13	Pass
	H	2118	-65.99	-13	Pass
	H	2824	-64.82	-13	Pass
	V	1412	-67.29	-13	Pass
	V	2118	-63.61	-13	Pass
	V	2824	-66.95	-13	Pass
Highest	H	1424	-62.51	-13	Pass
	H	2144	-61.82	-13	Pass
	H	2856	-64.44	-13	Pass
	V	1424	-69.35	-13	Pass
	V	2144	-59.04	-13	Pass
	V	2856	-63.74	-13	Pass



LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1400	-67.02	-13	Pass
	H	2096	-56.41	-13	Pass
	H	2800	-58.69	-13	Pass
	V	1400	-72.38	-13	Pass
	V	2096	-56.58	-13	Pass
	V	2800	-64.50	-13	Pass
Middle	H	1408	-66.46	-13	Pass
	H	2120	-64.79	-13	Pass
	H	2820	-67.73	-13	Pass
	V	1408	-71.79	-13	Pass
	V	2120	-62.28	-13	Pass
	V	2820	-65.66	-13	Pass
Highest	H	1424	-66.35	-13	Pass
	H	2136	-57.30	-13	Pass
	H	2848	-65.66	-13	Pass
	V	1424	-69.03	-13	Pass
	V	2136	-57.89	-13	Pass
	V	2848	-63.65	-13	Pass



LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1400	-67.92	-13	Pass
	H	2096	-59.29	-13	Pass
	H	2800	-61.70	-13	Pass
	V	1400	-68.06	-13	Pass
	V	2096	-60.10	-13	Pass
	V	2800	-63.65	-13	Pass
Middle	H	1408	-64.21	-13	Pass
	H	2112	-58.19	-13	Pass
	H	2816	-65.49	-13	Pass
	V	1408	-68.87	-13	Pass
	V	2112	-62.66	-13	Pass
	V	2816	-65.24	-13	Pass
Highest	H	1416	-65.52	-13	Pass
	H	2120	-61.28	-13	Pass
	H	2824	-66.74	-13	Pass
	V	1416	-69.16	-13	Pass
	V	2120	-61.97	-13	Pass
	V	2824	-62.97	-13	Pass



LTE Band 17

LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1408	-68.74	-13	Pass
	H	2112	-64.23	-13	Pass
	H	2816	-66.28	-13	Pass
	V	1408	-69.76	-13	Pass
	V	2112	-62.89	-13	Pass
	V	2816	-63.51	-13	Pass
Middle	H	1416	-67.49	-13	Pass
	H	2122	-60.52	-13	Pass
	H	2830	-64.40	-13	Pass
	V	1416	-73.48	-13	Pass
	V	2122	-59.08	-13	Pass
	V	2830	-64.63	-13	Pass
Highest	H	1422	-67.40	-13	Pass
	H	2136	-56.11	-13	Pass
	H	2848	-62.70	-13	Pass
	V	1422	-67.10	-13	Pass
	V	2136	-53.40	-13	Pass
	V	2848	-65.14	-13	Pass



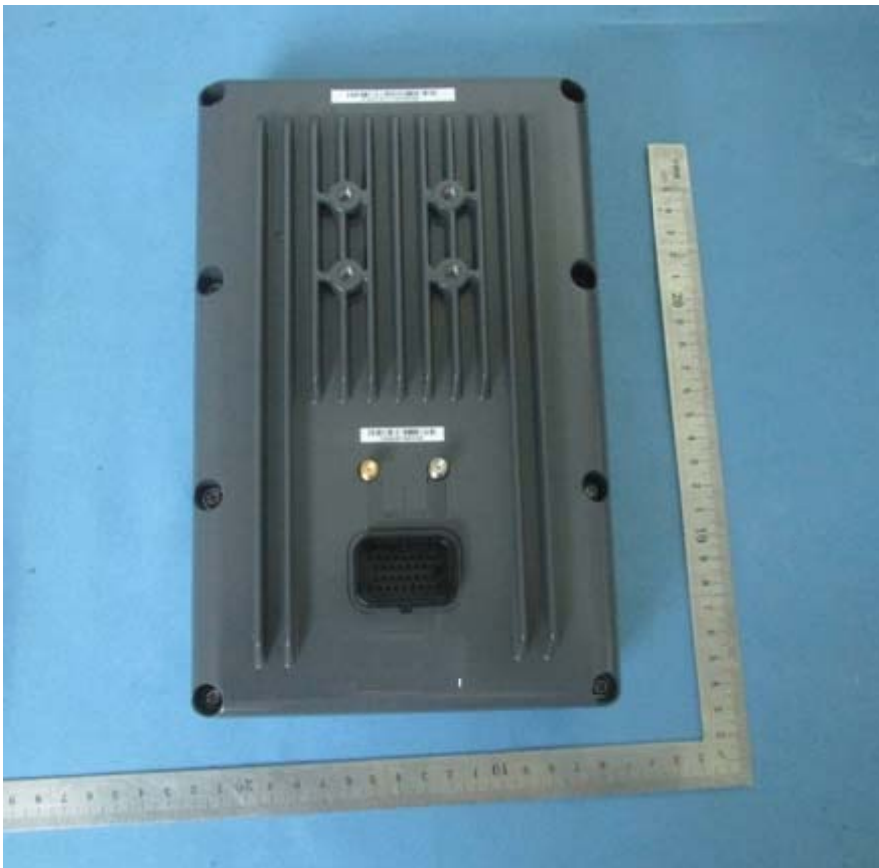
LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0					
Measured Max. Spurious Emission(dBm)					
Channel	Polarization	Frequency	Level(dBm)	Limit(dBm)	Verdict
Lowest	H	1408	-65.56	-13	Pass
	H	2112	-61.00	-13	Pass
	H	2816	-63.56	-13	Pass
	V	1408	-65.97	-13	Pass
	V	2112	-63.11	-13	Pass
	V	2816	-62.91	-13	Pass
Middle	H	1408	-68.44	-13	Pass
	H	2120	-61.65	-13	Pass
	H	2820	-64.45	-13	Pass
	V	1408	-69.55	-13	Pass
	V	2120	-63.58	-13	Pass
	V	2820	-66.12	-13	Pass
Highest	H	1416	-66.86	-13	Pass
	H	2118	-60.69	-13	Pass
	H	2824	-68.82	-13	Pass
	V	1416	-70.77	-13	Pass
	V	2118	-63.29	-13	Pass
	V	2824	-66.21	-13	Pass

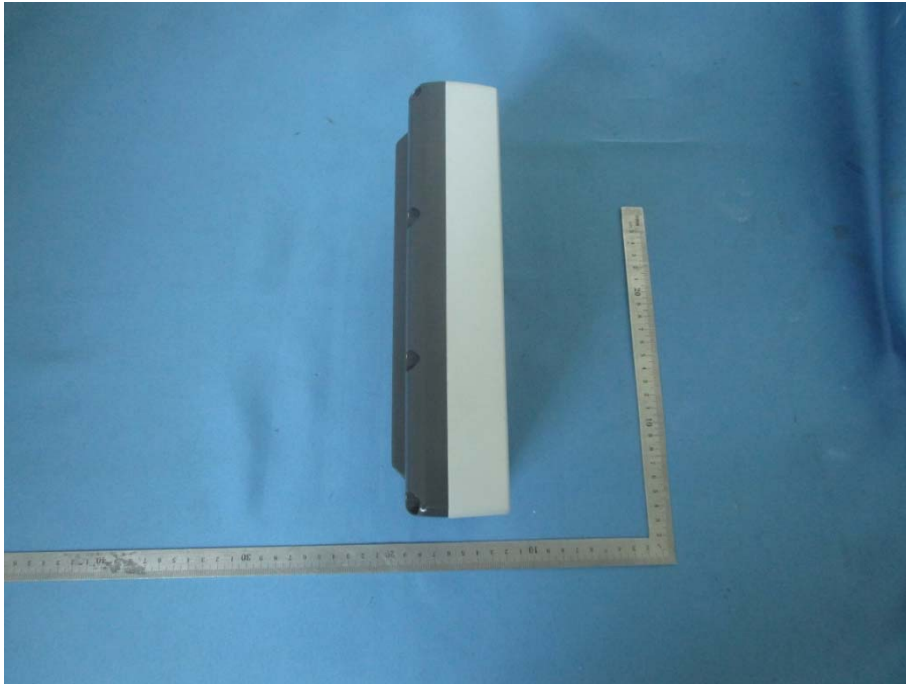
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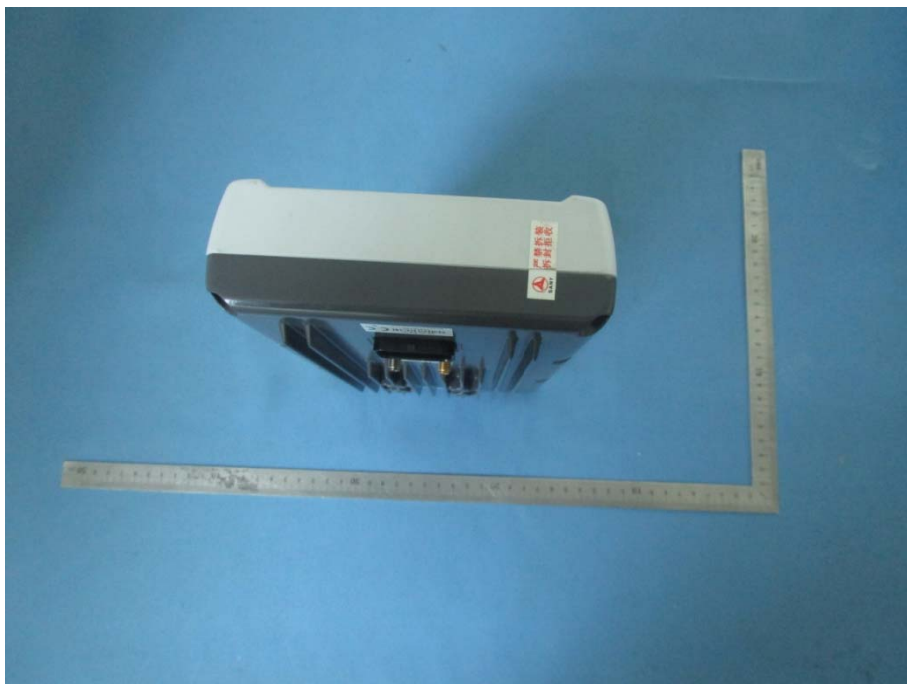
- 1) The power of the EUT transmitting frequency should be ignored.
- 2) All spurious emission tests were performed in X,Y,Z axis direction. Only the worst axis test condition was recorded in this test report.
- 3) The emission levels of below 1 GHz are very lower than the limit(<-40dBm) and not show in this report.



Annex Photos of the EUT







**** END OF REPORT ****