

FCC REPORT

(LTE)

Applicant: SKY PHONE LLC

Address of Applicant: 1348 Washington Av. Suite 350, Miami Beach, FL 33139

Equipment Under Test (EUT)

Product Name: TABLET

Model No.: Elite T8

Trade mark: SKY DEVICES

FCC ID: 2ABOSSKYELIT8

Applicable standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 22 Subpart H
FCC CFR Title 47 Part 24 Subpart E
FCC CFR Title 47 Part 27 Subpart L
FCC CFR Title 47 Part 27 Subpart N
FCC CFR Title 47 Part 27 Subpart H

Date of sample receipt: 09 Apr., 2021

Date of Test: 10 Apr., to 25 Apr., 2021

Date of report issued: 26 Apr., 2021

Test Result: PASS*

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

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2. Version

Version No.	Date	Description
00	26 Apr., 2021	Original

Tested by: Carrey Chen **Date:** 26 Apr., 2021
Test Engineer

Reviewed by: Winner Zhang **Date:** 26 Apr., 2021
Project Engineer

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4. Test Summary

Test Items	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Passed (Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 22.913 (a)(5) Part 24.232 (c) Part 27.50 (c)(10) Part 27.50 (d)(4)	Pass
Peak-to-Average Ratio	Part 24.232 (d) Part 27.50(d)(5)	Pass
Modulation Characteristics	Part 2.1047	Pass
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917(b) Part 24.238(b) Part 27.53(g) Part 27.53(h)	Pass
Out of band emission at antenna terminals	Part 2.1053 Part 22.917(a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h)	Pass
Field strength of spurious radiation	Part 22.917(a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h)	Pass
Frequency stability vs. temperature	Part 22.355 Part 24.235 Part 27.54 Part 2.1055(a)(1)(b)	Pass
Frequency stability vs. voltage	Part 22.355 Part 24.235 Part 27.54 Part 2.1055(d)(2)	Pass
Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB(Fundamental Frequency below 1GHz)/1.0dB(Fundamental Frequency above 1GHz) (provided by the customer).		
Test Method:	ANSI/TIA-603-E-2016 ANSI C63.26-2015	

5. General Information

5.1 Client Information

Applicant:	SKY PHONE LLC
Address:	1348 Washington Av. Suite 350, Miami Beach, FL 33139
Manufacturer:	SKY PHONE LLC
Address:	1348 Washington Av. Suite 350, Miami Beach, FL 33139

5.2 General Description of E.U.T.

Product Name:	TABLET		
Model No.:	Elite T8		
Operation Frequency range:	LTE Band 2: TX: 1850MHz-1910MHz RX: 1930MHz-1990MHz LTE Band 4: TX: 1710MHz-1755MHz RX: 2110MHz-2155MHz LTE Band 5: TX: 824MHz-849MHz RX: 869MHz-894MHz LTE Band 12: TX: 699MHz-716MHz RX: 729MHz-746MHz LTE Band 17: TX: 704MHz-716MHz RX: 734MHz-746MHz LTE Band 66: TX: 1710MHz-1780MHz RX: 2110MHz-2200MHz LTE Band 71: TX: 663MHz-698MHz RX: 617MHz-652MHz		
Modulation type:	☒ QPSK	☒ 16QAM	☒ 64QAM
Antenna type:	Internal Antenna		
Antenna gain:	LTE Band 2: -1.68 dBi(declare by Applicant) LTE Band 4: -1.73 dBi(declare by Applicant) LTE Band 5: -2.30 dBi(declare by Applicant) LTE Band 12: -2.80 dBi(declare by Applicant) LTE Band 17: -2.80 dBi(declare by Applicant) LTE Band 66: -1.73 dBi(declare by Applicant) LTE Band 71: -3.20 dBi(declare by Applicant)		
Power supply:	Rechargeable Li-ion Battery DC3.7V, 3500mAh		
AC adapter:	Model: Elite T8 Input: AC100-240V, 50/60Hz, 0.2A Output: DC 5.0V, 2.0A		
Test Sample Condition:	The applicant provided engineering samples for staying in continuously transmitting for testing.		

Operation Frequency List:

LTE Band 2 (1.4MHz)		LTE Band 2 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.70	18615	1851.50
18608	1850.80	18616	1851.60
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19193	1909.20	19185	1908.40
19194	1909.30	19186	1908.50
LTE Band 2 (5MHz)		LTE Band 2 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18625	1852.50	18650	1855.00
18626	1852.60	18651	1855.10
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19175	1907.40	19150	1904.90
19176	1907.50	19151	1905.00
LTE Band 2 (15MHz)		LTE Band 2 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.50	18700	1860.00
18676	1857.60	18701	1860.10
....			
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19125	1902.40	19100	1899.90
19126	1902.50	19101	1900.00

LTE Band 4 (1.4MHz)		LTE Band 4 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.70	19965	1711.50
19958	1710.80	19966	1711.60
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20392	1754.20	20384	1753.40
20393	1754.30	20385	1753.50
LTE Band 4 (5MHz)		LTE Band 4 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.50	20000	1715.00
19976	1712.60	20001	1715.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20374	1752.40	20349	1749.90
20375	1752.50	20350	1750.00
LTE Band 4 (15MHz)		LTE Band 4 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.50	20050	1720.00
20026	1717.60	20051	1720.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20324	1747.40	20299	1744.90
20325	1747.50	20300	1745.00

LTE Band 5 (1.4MHz)		LTE Band 5 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20407	824.70	20415	825.50
20408	824.80	20416	825.60
....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
...	...	...	...
20642	848.20	20634	847.40
20643	848.30	20635	847.50
LTE Band 5 (5MHz)		LTE Band 5 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20425	826.50	20450	829.00
20426	826.60	20451	829.10
....			
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
...	...	...	...
20624	846.40	20599	839.90
20625	846.50	20600	844.00

LTE Band 12 (1.4MHz)		LTE Band 12 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23017	699.70	23025	700.50
23756	699.80	23026	700.60
....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
...	...	...	...
23172	715.20	23164	714.40
23173	715.30	23165	714.50
LTE Band 12 (5MHz)		LTE Band 12 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23035	701.50	23060	704.00
23036	701.60	23061	704.10
....			
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
...	...	...	...
23154	713.40	23129	710.90
23155	713.50	23130	711.00

LTE Band 17 (5MHz)		LTE Band 17 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23755	706.50	23780	709.00
23756	706.60	23781	709.10
....			
23789	709.90	23789	709.90
23790	710.00	23790	710.00
23791	710.10	23791	710.10
...	...	...	...
23824	713.40	23799	710.90
23825	713.50	23800	711.00

LTE Band 66 (1.4MHz)		LTE Band 66 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131979	1710.70	131987	1711.50
131980	1710.80	131988	1711.60
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
132664	1779.20	132656	1778.40
132665	1779.30	132657	1778.50
LTE Band 66 (5MHz)		LTE Band 66 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131997	1712.50	132022	1715.00
131998	1712.60	132023	1715.10
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
136246	1777.40	132621	1774.90
136247	1777.50	132622	1775.00
LTE Band 66 (15MHz)		LTE Band 66 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
132047	1717.50	132072	1720.00
132048	1717.60	132073	1720.10
....			
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
...	...	...	...
132596	1772.40	132571	1769.90
132597	1772.50	132572	1770.00

LTE Band 71 (5MHz)		LTE Band 71 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
133147	665.50	133172	668.00
133148	665.60	133173	668.10
....			
133296	680.40	133296	680.40
133297	680.50	133297	680.50
133298	680.60	133298	680.60
...	...	...	...
133446	695.40	133421	692.90
133447	695.50	133422	693.00
LTE Band 71 (15MHz)		LTE Band 71 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
133197	670.50	133222	673.00
133198	670.60	133223	673.10
....			
133296	680.40	133321	682.90
133297	680.50	133322	683.00
133298	680.60	133323	683.10
...	...	...	...
133396	690.40	133371	687.90
133397	690.50	133372	688.00

Regards to the operating frequency range, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channels as below:

LTE Band 2 (1.4MHz)			LTE Band 2 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18607	1850.70	Lowest channel	18615	1851.50
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19193	1909.30	Highest channel	19185	1908.50
LTE Band 2 (5MHz)			LTE Band 2 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18625	1852.50	Lowest channel	18650	1855.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19175	1907.50	Highest channel	19150	1905.00
LTE Band 2 (15MHz)			LTE Band 2 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18675	1857.50	Lowest channel	18700	1860.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19125	1902.50	Highest channel	19100	1900.00

LTE Band 4 (1.4MHz)			LTE Band 4 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19957	1710.70	Lowest channel	19965	1711.50
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20393	1754.30	Highest channel	20385	1753.50
LTE Band 4 (5MHz)			LTE Band 4 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19975	1712.50	Lowest channel	20000	1715.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20375	1752.50	Highest channel	20350	1750.00
LTE Band 4 (15MHz)			LTE Band 4 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20025	1717.50	Lowest channel	20050	1720.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20325	1747.50	Highest channel	20300	1745.00

LTE Band 5 (1.4MHz)			LTE Band 5 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20407	824.70	Lowest channel	20415	825.50
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20643	848.30	Highest channel	20635	847.50
LTE Band 5 (5MHz)			LTE Band 5 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20425	826.50	Lowest channel	20450	829.00
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20625	846.50	Highest channel	20600	844.00

LTE Band 12(1.4MHz)			LTE Band 12(3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23017	699.70	Lowest channel	23025	700.50
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23173	715.30	Highest channel	23165	714.50
LTE Band 12(5MHz)			LTE Band 12(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23035	701.50	Lowest channel	23060	704.00
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23155	713.50	Highest channel	23130	711.00

LTE Band 17(5MHz)			LTE Band 17(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23755	706.50	Lowest channel	23780	709.00
Middle channel	23790	710.00	Middle channel	23790	710.00
Highest channel	23825	713.50	Highest channel	23800	711.00

LTE Band 66 (1.4MHz)			LTE Band 66 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131979	1710.7	Lowest channel	131987	1711.5
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132665	1779.3	Highest channel	132657	1778.5
LTE Band 66 (5MHz)			LTE Band 66 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131997	1712.5	Lowest channel	132022	1715.0
Middle channel	132322	1745.5	Middle channel	132322	1745.0
Highest channel	132647	1777.5	Highest channel	132622	1775.0
LTE Band 66 (15MHz)			LTE Band 66 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	132047	1717.5	Lowest channel	132072	1720.0
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132597	1772.5	Highest channel	132572	1770.0

LTE Band 71 (5MHz)			LTE Band 71 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	133147	665.5	Lowest channel	133172	668.0
Middle channel	133297	680.5	Middle channel	133297	680.5
Highest channel	133447	695.5	Highest channel	133422	693.0
LTE Band 71 (15MHz)			LTE Band 71 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	133197	670.5	Lowest channel	133222	673.0
Middle channel	133297	680.5	Middle channel	133322	683.0
Highest channel	133397	690.5	Highest channel	133372	688.0

5.3 Test environment and mode, and test samples plans

Operating Environment:	
Temperature:	Normal: 15°C ~ 35°C, Extreme: -30°C ~ +50°C
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.7Vdc, Extreme: Low 3.5Vdc, High 4.20Vdc
Test mode:	
LTE QPSK mode	Keep the EUT communication with simulated station in QPSK mode
LTE 16-QAM mode	Keep the EUT communication with simulated station in 16-QAM mode
Remark: The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.	
Test Samples Plans:	
Samples Number	Used for Test Items
1#	Conducted measurements test method
2#	Radiated measurements test method
3#	EUT constructional details
Remark: JianYan Testing Group Shenzhen Co., Ltd. is only responsible for the test project data of the above samples, and will keep the above samples for a month.	

5.4 Description of Support Units

Test Equipment	Manufacturer	Model No.	Serial No.
Simulated Station	Anritsu	MT8820C	6201026545

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.32 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.16 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.20 dB (k=2)

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.
--

5.7 Additions to, deviations, or exclusions from the method

No

5.8 Laboratory Facility

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

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

5.9 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

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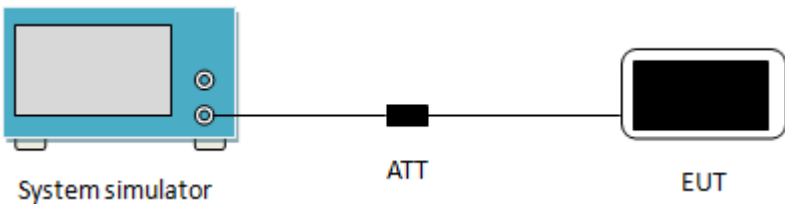
Email: info@ccis-cb.com, Website: <http://www.ccis-cb.com>

5.10 Test Instruments list

Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	966	01-19-2021	01-18-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-03-2021	03-02-2022
Biconical Antenna	SCHWARZBECK	VUBA9117	359	06-18-2020	06-17-2021
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-18-2020	06-17-2021
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-18-2020	11-17-2021
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-03-2021	03-02-2022
Pre-amplifier	CD	PAP-1G18	11804	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-18-2020	11-17-2021
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Spectrum Analyzer	Agilent	N9020A	MY50510123	11-18-2020	11-17-2021
Signal Generator	Rohde & Schwarz	SMX	835454/016	03-03-2021	03-02-2022
Signal Generator	R&S	SMR20	1008100050	03-03-2021	03-02-2022
RF Switch Unit	MWRFTTEST	MW200	N/A	N/A	N/A
Test Software	MWRFTTEST	MTS8200	Version: 2.0.0.0		
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-03-2021	03-02-2022
Cable	MICRO-COAX	MFR64639	K10742-5	03-03-2021	03-02-2022
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-03-2021	03-02-2022
DC Power Supply	XinNuoEr	WYK-10020K	1409050110020	09-25-2020	09-24-2021
Temperature Humidity Chamber	HengPu	HPGDS-500	20140828008	11-01-2020	10-31-2021
Simulated Station	Rohde & Schwarz	CMW500	140493	07-22-2020	07-21-2021

6. Test results

6.1 Conducted Output Power, ERP and EIRP

Test Requirement:	Part 22.913(a)(5), Part 24.232(c), part 27.50(c)(10), Part 27.50(d)(4),
Limit:	LTE Band 2: 2W, LTE Band 4: 1W, LTE Band 5: 7W, LTE Band 12: 3W, LTE Band 17: 3W, LTE Band 66: 1W, LTE Band 71: 1W
Test Setup:	 The diagram illustrates the test setup. On the left is a blue box labeled 'System simulator'. A line connects it to a black box labeled 'ATT' (attenuator). Another line connects the 'ATT' box to a black box labeled 'EUT' (Equipment Under Test).
Test Procedure:	The transmitter output was connected to a calibrated attenuator, the other end of which was connected to the CMW500. Transmitter output power was read off in dBm.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
2	1.4	QPSK	1	0	23.32	23.26	23.65
			1	2	23.36	23.31	23.8
			1	5	23.23	23.25	23.65
			3	0	22.36	22.28	22.77
			3	1	22.35	22.3	22.68
			3	2	22.33	22.3	23.76
			6	0	22.41	22.25	22.66
		Antenna Gain (dBi):			-1.68		
		Max. EIRP (dBm):			22.12		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.15	22.09	22.37
			1	2	22.44	22.19	22.62
			1	5	22.11	22.03	22.21
			3	0	22.19	22.11	22.54
			3	1	22.16	22.13	22.47
			3	2	22.15	22.13	22.56
			6	0	21.33	21.1	21.64
Antenna Gain (dBi):			-1.68				
Max. EIRP (dBm):			20.94				
EIRP Limit (dBm):			33.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18615	18900	19185
					1851.5MHz	1880.0MHz	1908.5MHz
2	3	QPSK	1	0	23.33	23.24	23.63
			1	7	23.35	23.21	23.7
			1	14	23.36	23.17	23.75
			8	0	22.28	22.23	22.61
			8	4	22.26	22.23	22.6
			8	7	22.26	22.22	22.66
			15	0	22.28	22.21	22.62
		Antenna Gain (dBi):			-1.68		
		Max. EIRP (dBm):			22.07		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.19	22.24	22.5
			1	7	22.12	22.16	22.47
			1	14	22.1	22.13	22.5
			8	0	21.23	21.18	21.58
			8	4	21.24	21.25	21.58
			8	7	21.23	21.21	21.63
			15	0	21.15	21.22	21.5
Antenna Gain (dBi):			-1.68				
Max. EIRP (dBm):			20.82				
EIRP Limit (dBm):			33.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).							

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					18625	18900	19175	
					1852.5MHz	1880.0MHz	1907.5MHz	
2	5	QPSK	1	0	23.21	23.25	23.48	
			1	12	23.38	23.3	23.69	
			1	24	23.28	23.16	23.6	
			12	0	22.18	22.15	22.49	
			12	6	22.24	22.17	22.54	
			12	11	22.21	22.1	22.54	
			25	0	22.24	22.24	22.68	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				22.01		
		EIRP Limit (dBm):				33.00		
		16QAM	1	0	22.09	22.15	22.5	
			1	12	22.24	22.17	22.73	
			1	24	22.13	22.11	22.68	
			12	0	21.18	21.16	21.58	
			12	6	21.22	21.16	21.6	
			12	11	21.21	21.15	21.59	
			25	0	21.27	21.25	21.61	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				21.05		
		EIRP Limit (dBm):				33.00		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					18650	18900	19150	
					1855.0MHz	1880.0MHz	1905.0MHz	
2	10	QPSK	1	0	23.28	23.37	23.53	
			1	24	23.36	23.37	23.72	
			1	49	23.34	23.18	23.64	
			25	0	22.26	22.2	22.58	
			25	12	22.27	22.22	22.54	
			25	24	22.26	22.25	22.64	
			50	0	22.27	22.29	22.63	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				22.04		
		EIRP Limit (dBm):				33.00		
		16QAM	1	0	22.24	22.14	22.24	
			1	24	22.31	22.14	22.53	
			1	49	22.35	21.97	22.29	
			25	0	21.24	21.25	21.63	
			25	12	21.25	21.18	21.66	
			25	24	21.23	21.22	21.32	
			50	0	21.22	21.28	21.39	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				20.85		
		EIRP Limit (dBm):				33.00		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					18675	18900	19125	
					1857.5MHz	1880.0MHz	1902.5MHz	
2	15	QPSK	1	0	23.22	23.28	23.31	
			1	37	23.34	23.16	23.6	
			1	74	23.33	23	23.64	
			36	0	22.28	22.2	22.43	
			36	16	22.21	22.22	22.52	
			36	35	22.34	22.26	22.47	
			75	0	22.31	22.27	22.68	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				21.96		
		EIRP Limit (dBm):				33.00		
		16QAM	1	0	22.16	22.38	22.04	
			1	37	22.35	22.28	22.43	
			1	74	22.31	22.15	22.09	
			36	0	21.26	21.3	21.53	
			36	16	21.24	21.28	21.5	
			36	35	21.32	21.29	21.51	
			75	0	21.28	21.25	21.53	
		Antenna Gain (dBi):				-1.68		
Max. EIRP (dBm):				20.75				
EIRP Limit (dBm):				33.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					18700	18900	19100	
					1860.0MHz	1880.0MHz	1900.0MHz	
2	20	QPSK	1	0	23.15	23.2	22.92	
			1	49	23.5	23.34	23.6	
			1	99	23.27	23	23.26	
			50	0	22.52	22.18	22.66	
			50	24	22.5	22.21	22.61	
			50	49	22.54	22.18	22.65	
			100	0	22.47	22.27	22.69	
		Antenna Gain (dBi):				-1.68		
		Max. EIRP (dBm):				21.92		
		EIRP Limit (dBm):				33.00		
		16QAM	1	0	21.98	22.34	21.75	
			1	49	22.46	22.38	22.4	
			1	99	22.09	22.07	22.21	
			50	0	21.47	21.21	21.7	
			50	24	21.53	21.19	21.66	
			50	49	21.5	21.17	21.61	
			100	0	21.42	21.24	21.6	
		Antenna Gain (dBi):				-1.68		
Max. EIRP (dBm):				20.78				
EIRP Limit (dBm):				33.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					19957	20175	20393	
					1710.7MHz	1732.5MHz	1754.3MHz	
4	1.4	QPSK	1	0	23.2	22.77	23.21	
			1	2	23.12	22.86	23.28	
			1	5	22.64	22.71	23.2	
			3	0	21.82	21.9	22.22	
			3	1	21.8	21.87	22.23	
			3	2	21.8	21.86	22.23	
			6	0	21.74	21.85	22.19	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.55		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	22.07	21.64	21.97	
			1	2	21.8	21.89	22.13	
			1	5	21.63	21.65	22	
			3	0	21.67	21.71	22.1	
			3	1	21.67	21.72	22.12	
			3	2	21.68	21.76	22.12	
			6	0	20.77	20.81	21.01	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.40		
EIRP Limit (dBm):				30.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					19965	20175	20385	
					1711.5MHz	1732.5MHz	1753.5MHz	
4	3	QPSK	1	0	22.76	22.87	23.16	
			1	7	22.84	22.88	23.26	
			1	14	22.82	22.8	23.24	
			8	0	21.74	21.9	22.12	
			8	4	21.74	21.85	22.14	
			8	7	21.76	21.83	22.2	
			15	0	21.79	21.86	22.2	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.53		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.64	21.89	22.02	
			1	7	21.62	21.86	22.08	
			1	14	21.64	21.86	22.03	
			8	0	20.75	20.9	21.13	
			8	4	20.77	20.91	21.14	
			8	7	20.79	20.83	21.18	
			15	0	20.73	20.84	21.14	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.35		
EIRP Limit (dBm):				30.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					19975	20175	20375	
					1712.5MHz	1732.5MHz	1752.5MHz	
4	5	QPSK	1	0	22.63	22.78	22.97	
			1	12	22.85	22.94	23.18	
			1	24	22.77	22.77	23.11	
			12	0	21.67	21.89	22.02	
			12	6	21.68	21.92	22.03	
			12	11	21.67	21.86	22.01	
			25	0	21.82	21.86	22.18	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.45		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.57	21.73	22.01	
			1	12	21.79	21.82	22.17	
			1	24	21.74	21.69	22.13	
			12	0	20.71	20.9	21.09	
			12	6	20.71	20.9	21.14	
			12	11	20.74	20.9	21.14	
			25	0	20.92	20.88	21.13	
Antenna Gain (dBi):				-1.73				
Max. EIRP (dBm):				20.44				
EIRP Limit (dBm):				30.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					20000	20175	20350	
					1715.0MHz	1732.5MHz	1750.0MHz	
4	10	QPSK	1	0	22.66	22.83	22.89	
			1	24	22.93	22.89	23.14	
			1	49	22.87	22.76	23.22	
			25	0	21.76	22.01	21.89	
			25	12	21.72	22.02	21.89	
			25	24	21.75	21.98	21.89	
			50	0	21.93	21.92	22.12	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.49		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.67	21.83	21.7	
			1	24	22	21.92	22	
			1	49	21.88	21.77	22.01	
			25	0	20.8	21	20.94	
			25	12	20.78	21.07	20.93	
			25	24	20.81	21.02	20.93	
			50	0	21	20.97	21.19	
Antenna Gain (dBi):				-1.73				
Max. EIRP (dBm):				20.28				
EIRP Limit (dBm):				30.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					20025	20175	20325	
					1717.5MHz	1732.5MHz	1747.5MHz	
4	15	QPSK	1	0	22.6	22.78	22.65	
			1	37	22.86	22.83	22.94	
			1	74	22.74	22.68	23.01	
			36	0	21.69	21.94	21.85	
			36	16	21.71	21.9	21.87	
			36	35	21.7	21.95	21.85	
			75	0	21.77	21.85	22.08	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.28		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.64	21.86	21.78	
			1	37	21.91	21.85	22.04	
			1	74	21.59	21.72	22.14	
			36	0	20.73	20.99	20.91	
			36	16	20.74	20.96	20.88	
			36	35	20.74	20.97	20.88	
			75	0	20.78	20.84	21.07	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.41		
		EIRP Limit (dBm):				30.00		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					20050	20175	20300	
					1720.0MHz	1732.5MHz	1745.0MHz	
4	20	QPSK	1	0	22.45	22.69	22.5	
			1	49	22.91	22.91	23.05	
			1	99	22.59	22.67	23.01	
			50	0	21.65	22.18	21.84	
			50	24	21.68	22.15	21.85	
			50	49	21.72	22.16	21.88	
			100	0	21.74	21.95	22.17	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.32		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.42	21.63	21.62	
			1	49	21.99	21.91	22.08	
			1	99	21.51	21.53	22.08	
			50	0	20.71	21.24	20.89	
			50	24	20.67	21.24	20.89	
			50	49	20.73	21.21	20.85	
			100	0	20.82	21.01	21.2	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.35		
		EIRP Limit (dBm):				30.00		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20407	20525	20643
					824.7MHz	836.5MHz	848.3MHz
5	1.4	QPSK	1	0	24.05	23.92	23.83
			1	2	23.74	24.11	23.92
			1	5	23.61	23.99	23.8
			3	0	22.63	22.96	22.88
			3	1	22.61	23	22.87
			3	2	22.61	23.05	22.87
			6	0	22.7	23.01	22.88
		Antenna Gain(dBi):			-2.30		
		Max. ERP (dBm):			19.66		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	22.45	22.72	22.56
			1	2	22.65	22.88	22.81
			1	5	22.47	22.75	22.53
			3	0	22.44	22.82	22.63
			3	1	22.45	22.84	22.61
			3	2	22.44	22.82	22.62
			6	0	21.64	21.84	21.87
		Antenna Gain(dBi):			-2.30		
		Max. ERP (dBm):			18.43		
		ERP Limit (dBm):			38.45		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20415	20525	20635
					825.5MHz	836.5MHz	847.50MHz
5	3	QPSK	1	0	24.14	24.03	23.95
			1	7	23.91	24.04	23.9
			1	14	23.74	24.09	23.86
			8	0	22.69	22.95	22.88
			8	4	22.68	22.95	22.92
			8	7	22.75	22.99	22.91
			15	0	22.65	22.93	22.89
		Antenna Gain(dBi):			-2.30		
		Max. ERP (dBm):			19.69		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	23.09	22.8	22.59
			1	7	22.68	22.84	22.66
			1	14	22.76	22.82	22.61
			8	0	21.67	21.91	21.88
			8	4	21.68	21.94	21.87
			8	7	21.73	21.98	21.91
			15	0	21.6	21.89	21.78
		Antenna Gain(dBi):			-2.30		
		Max. ERP (dBm):			18.64		
		ERP Limit (dBm):			38.45		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).							

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					20425	20525	20625	
					826.5MHz	836.5MHz	846.5MHz	
5	5	QPSK	1	0	24.17	24.19	23.88	
			1	12	24.25	24.2	23.98	
			1	24	24.17	24.26	23.78	
			12	0	23.1	23.46	22.84	
			12	6	23.1	23.36	22.86	
			12	11	23.06	23.08	22.82	
			25	0	23.14	23.1	22.88	
		Antenna Gain(dBi):				-2.30		
		Max. ERP (dBm):				19.81		
		ERP Limit (dBm):				38.45		
		16QAM	1	0	23.05	23.29	22.88	
			1	12	23.25	23.5	22.99	
			1	24	23.14	23.4	22.79	
			12	0	22.08	22.5	21.88	
			12	6	22.09	22.29	21.9	
			12	11	22.05	22.06	21.92	
			25	0	22.19	21.98	21.88	
		Antenna Gain(dBi):				-2.30		
		Max. ERP (dBm):				19.05		
		ERP Limit (dBm):				38.45		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					20450	20525	20600	
					829.0MHz	836.5MHz	844.0MHz	
5	10	QPSK	1	0	23.82	23.91	24.04	
			1	24	23.84	24.15	24.01	
			1	49	23.84	24.08	23.86	
			25	0	22.73	23.07	23.01	
			25	12	22.74	23.05	22.99	
			25	24	22.76	23.05	22.99	
			50	0	22.77	23.07	23.03	
		Antenna Gain(dBi):				-2.30		
		Max. ERP (dBm):				19.70		
		ERP Limit (dBm):				38.45		
		16QAM	1	0	22.63	22.68	22.69	
			1	24	22.89	23.02	22.75	
			1	49	22.83	22.87	22.59	
			25	0	21.68	22.1	22.06	
			25	12	21.69	22.1	22.07	
			25	24	21.67	22.1	22.01	
			50	0	21.69	22.08	22.04	
		Antenna Gain(dBi):				-2.30		
		Max. ERP (dBm):				18.57		
		ERP Limit (dBm):				38.45		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23017	23095	23173	
					699.7MHz	707.5MHz	715.3MHz	
12	1.4	QPSK	1	0	24.02	23.86	23.87	
			1	2	24.12	24.02	24.06	
			1	5	23.97	23.82	23.93	
			3	0	23.01	22.99	22.87	
			3	1	23.02	22.96	22.91	
			3	2	23.01	22.95	22.92	
			6	0	23.03	22.82	22.96	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.17		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	22.79	22.71	22.63	
			1	2	22.92	22.88	22.82	
			1	5	22.72	22.79	22.67	
			3	0	22.8	22.8	22.73	
			3	1	22.83	22.68	22.72	
			3	2	22.82	22.82	22.68	
			6	0	21.92	21.76	21.85	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				17.97		
		ERP Limit (dBm):				34.77		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23025	23095	23165	
					700.5MHz	707.5MHz	714.5MHz	
12	3	QPSK	1	0	24.03	24.01	23.7	
			1	7	24.02	23.8	23.89	
			1	14	23.97	23.47	23.94	
			8	0	23.03	22.33	22.97	
			8	4	23.04	22.43	22.9	
			8	7	23.07	22.51	22.93	
			15	0	22.99	22.42	22.89	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.08		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	23.03	22.77	22.23	
			1	7	22.9	22.37	22.58	
			1	14	22.87	22.3	22.56	
			8	0	21.97	21.39	21.86	
			8	4	21.95	21.37	21.86	
			8	7	21.93	21.39	21.84	
			15	0	21.95	21.31	21.76	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				18.08		
		ERP Limit (dBm):				34.77		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23035	23095	23155	
					701.5MHz	707.5MHz	713.5MHz	
12	5	QPSK	1	0	24.01	23.9	23.88	
			1	12	24.05	23.92	24.01	
			1	24	23.96	23.88	23.92	
			12	0	22.97	22.93	22.82	
			12	6	23.02	22.95	22.8	
			12	11	22.95	22.95	22.81	
			25	0	22.92	22.98	22.86	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.10		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	22.91	22.84	22.82	
			1	12	22.93	23.06	22.8	
			1	24	22.83	22.98	22.73	
			12	0	21.97	22	21.82	
			12	6	21.97	22.04	21.85	
			12	11	21.96	22.05	21.83	
			25	0	21.92	21.98	21.89	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				18.11		
ERP Limit (dBm):				34.77				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23060	23095	23130	
					704.0MHz	707.5MHz	711.0MHz	
12	10	QPSK	1	0	23.96	23.95	23.88	
			1	24	24.05	24.02	24.08	
			1	49	23.96	23.92	23.94	
			25	0	23.17	23.14	22.92	
			25	12	23.17	23.12	22.93	
			25	24	23.14	23.12	22.88	
			50	0	23.12	23.17	23.04	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.13		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	22.96	22.63	22.68	
			1	24	23.06	22.88	22.86	
			1	49	22.97	22.73	22.63	
			25	0	22.11	22.13	21.94	
			25	12	22.15	22.18	21.97	
			25	24	22.13	22.15	21.98	
			50	0	22.09	22.28	22.05	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				18.11		
ERP Limit (dBm):				34.77				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23755	23790	23825	
					706.5MHz	710.0MHz	713.5MHz	
17	5	QPSK	1	0	23.88	23.79	23.81	
			1	12	24.08	23.94	24.04	
			1	24	23.98	23.83	23.95	
			12	0	22.98	22.84	22.82	
			12	6	22.98	22.84	22.81	
			12	11	22.94	22.85	22.81	
			25	0	23.01	23.00	22.87	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.13		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	22.77	22.91	22.77	
			1	12	23.02	23.01	22.87	
			1	24	22.86	22.86	22.73	
			12	0	21.96	21.95	21.84	
			12	6	21.97	21.94	21.81	
			12	11	21.99	21.98	21.86	
			25	0	22.04	21.96	21.91	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				18.07		
		ERP Limit (dBm):				34.77		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					23780	23790	23800	
					709.0MHz	710.0MHz	711.0MHz	
17	10	QPSK	1	0	23.89	23.92	23.94	
			1	24	24.04	24.04	24.07	
			1	49	23.91	23.95	23.95	
			25	0	23.02	22.95	22.91	
			25	12	23.04	22.97	22.90	
			25	24	23.06	22.96	22.92	
			50	0	23.18	23.09	23.04	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				19.12		
		ERP Limit (dBm):				34.77		
		16QAM	1	0	22.84	22.70	22.61	
			1	24	23.07	22.85	22.83	
			1	49	22.97	22.69	22.65	
			25	0	22.04	22.02	21.95	
			25	12	22.03	22.02	21.96	
			25	24	22.05	22.02	21.97	
			50	0	22.20	22.16	22.08	
		Antenna Gain(dBi):				-2.80		
		Max. ERP (dBm):				18.12		
		ERP Limit (dBm):				34.77		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					131979	132322	132665	
					1710.7MHz	1745.0MHz	1779.3MHz	
66	1.4	QPSK	1	0	22.62	22.72	23.11	
			1	2	22.71	22.84	23.22	
			1	5	22.49	22.72	23.09	
			3	0	23.01	22.99	22.87	
			3	1	23.02	22.96	22.91	
			3	2	23.01	22.95	22.92	
			6	0	21.59	21.81	22.14	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.49		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.44	21.59	21.96	
			1	2	21.67	21.76	22.12	
			1	5	21.49	21.56	21.92	
			3	0	21.52	21.58	21.94	
			3	1	21.5	21.6	21.95	
			3	2	21.54	21.6	21.94	
			6	0	20.62	20.77	20.94	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.39		
		EIRP Limit (dBm):				30.00		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					131987	132322	132657	
					1711.5MHz	1745.0MHz	1778.5MHz	
66	3	QPSK	1	0	22.59	22.8	23.18	
			1	7	22.61	22.81	23.2	
			1	14	22.65	22.82	23.22	
			8	0	21.59	21.81	22.09	
			8	4	21.6	21.77	22.09	
			8	7	21.65	21.85	22.09	
			15	0	21.65	21.8	22.12	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.49		
		EIRP Limit (dBm):				30.00		
		16QAM Modulation	1	0	21.61	21.79	21.97	
			1	7	21.62	21.76	21.95	
			1	14	21.64	21.8	21.98	
			8	0	20.64	20.77	21.1	
			8	4	20.66	20.82	21.09	
			8	7	20.7	20.8	21.09	
			15	0	20.68	20.8	21.02	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				20.25		
		EIRP Limit (dBm):				30.00		
Note: EIRP (dBm) = Burst Average power (dBm) + Antenna Gain (dBi). ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

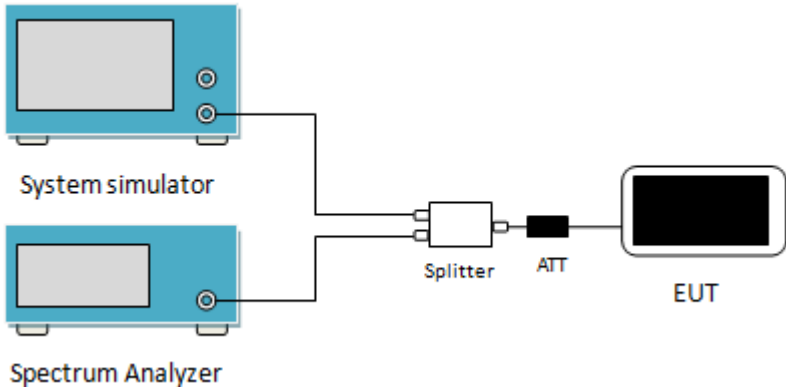
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					131997	132322	132647	
					1712.5MHz	1745.0MHz	1777.5MHz	
66	5	QPSK	1	0	22.65	22.78	23.02	
			1	12	22.76	22.89	23.17	
			1	24	22.73	22.79	23.11	
			12	0	21.59	21.71	22.03	
			12	6	21.57	21.74	22.06	
			12	11	21.58	21.73	22.09	
			25	0	21.71	21.82	22.17	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.44		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.55	21.66	22	
			1	12	21.71	21.75	22.16	
			1	24	21.67	21.76	22.09	
			12	0	20.66	20.71	21.06	
			12	6	20.64	20.7	21.14	
			12	11	20.66	20.73	21.15	
			25	0	20.83	20.83	21.13	
Antenna Gain (dBi):				-1.73				
Max. EIRP (dBm):				20.43				
EIRP Limit (dBm):				30.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					132022	132322	132622	
					1715.0MHz	1745.0MHz	1775.0MHz	
66	10	QPSK	1	0	22.59	22.71	23.16	
			1	24	22.84	22.84	23.26	
			1	49	22.82	22.94	23.2	
			25	0	21.72	21.81	22.26	
			25	12	21.71	21.8	22.23	
			25	24	21.74	21.81	22.26	
			50	0	21.82	21.95	22.3	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.53		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.58	21.75	21.94	
			1	24	21.91	21.99	22.01	
			1	49	21.83	21.9	22.03	
			25	0	20.69	20.8	21.28	
			25	12	20.71	20.75	21.26	
			25	24	20.67	20.78	21.26	
			50	0	20.99	20.97	21.29	
Antenna Gain (dBi):				-1.73				
Max. EIRP (dBm):				20.30				
EIRP Limit (dBm):				30.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					132047	132322	132597	
					1717.5MHz	1745.0MHz	1772.5MHz	
66	15	QPSK	1	0	22.85	22.6	23.04	
			1	37	22.77	22.86	23.12	
			1	74	22.12	22.91	23.02	
			36	0	21.58	21.65	22.16	
			36	16	21.82	21.82	22.21	
			36	35	21.84	21.79	22.23	
			75	0	21.67	22.02	22.27	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.39		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.58	21.67	22.15	
			1	37	21.82	21.79	22.22	
			1	74	21.83	21.9	22.16	
			36	0	21.54	21.63	22.1	
			36	16	21.78	21.84	22.19	
			36	35	21.83	21.79	22.22	
			75	0	20.71	20.88	21.28	
		Antenna Gain (dBi):				-1.73		
Max. EIRP (dBm):				20.49				
EIRP Limit (dBm):				30.00				
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					132072	132322	132572	
					1720.0MHz	1745.0MHz	1770.0MHz	
66	20	QPSK	1	0	22.85	22.48	22.87	
			1	49	22.85	22.99	23.24	
			1	99	22.5	22.88	22.97	
			50	0	21.59	21.79	22.51	
			50	24	21.58	21.75	22.48	
			50	49	21.59	21.76	22.47	
			100	0	21.63	22.08	22.34	
		Antenna Gain (dBi):				-1.73		
		Max. EIRP (dBm):				21.51		
		EIRP Limit (dBm):				30.00		
		16QAM	1	0	21.28	21.37	22.01	
			1	49	21.86	21.76	22.35	
			1	99	21.45	21.84	22.07	
			50	0	20.64	20.78	21.5	
			50	24	20.63	20.81	21.56	
			50	49	20.62	20.78	21.52	
			100	0	20.66	21.13	21.33	
		Antenna Gain (dBi):				-1.73		
Max. EIRP (dBm):				20.62				
EIRP Limit (dBm):				30.00				
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					133147	133297	133447	
					665.5MHz	680.5MHz	695.5MHz	
71	5	QPSK	1	0	23.65	23.74	23.88	
			1	12	23.74	23.7	24	
			1	24	23.64	23.89	23.85	
			12	0	22.63	22.83	22.88	
			12	6	22.7	22.89	22.85	
			12	11	22.61	22.89	22.86	
			25	0	22.66	22.92	22.89	
		Antenna Gain (dBi):				-3.20		
		Max. ERP (dBm):				18.65		
		EIRP Limit (dBm):				34.77		
		16QAM	1	0	22.55	22.81	22.69	
			1	12	22.68	22.95	22.81	
			1	24	22.36	22.44	22.71	
			12	0	21.67	21.92	21.88	
			12	6	21.63	21.92	21.87	
			12	11	21.56	21.9	21.79	
			25	0	21.65	21.78	21.9	
		Antenna Gain (dBi):				-3.20		
		Max. ERP (dBm):				17.60		
		EIRP Limit (dBm):				34.77		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)			
					133172	133297	133422	
					668.0MHz	680.5MHz	693.0MHz	
71	10	QPSK	1	0	23.66	23.76	23.89	
			1	24	23.84	24	24.01	
			1	49	23.77	23.83	23.94	
			25	0	22.81	23.04	22.92	
			25	12	22.84	23.03	22.88	
			25	24	22.78	23.06	22.93	
			50	0	22.88	23.02	22.9	
		Antenna Gain (dBi):				-3.20		
		Max. ERP (dBm):				18.66		
		EIRP Limit (dBm):				34.77		
		16QAM	1	0	22.59	22.58	22.63	
			1	24	22.72	22.56	22.73	
			1	49	22.77	22.45	22.68	
			25	0	21.75	22.02	21.88	
			25	12	21.77	22.09	21.9	
			25	24	21.75	22.04	21.93	
			50	0	21.83	22.03	21.84	
		Antenna Gain (dBi):				-3.20		
		Max. ERP (dBm):				17.42		
		EIRP Limit (dBm):				34.77		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).								
ERP (dBm) = EIRP (dBm) - 2.15 (dB).								

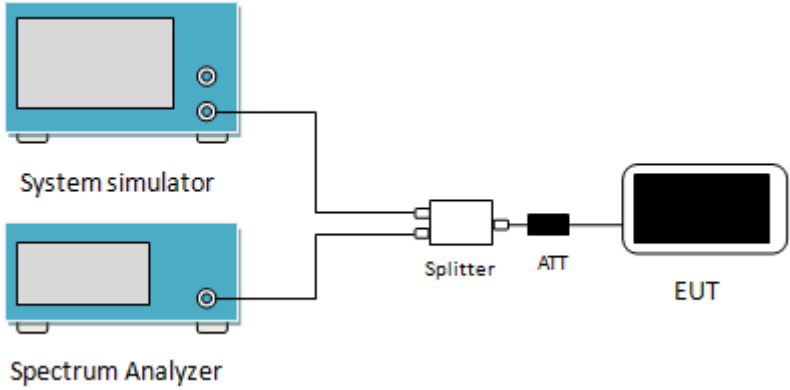
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133197	133297	133397
					670.5MHz	680.5MHz	690.5MHz
71	15	QPSK	1	0	23.56	23.53	23.85
			1	37	23.76	23.85	23.97
			1	74	23.8	23.86	23.9
			36	0	22.76	22.89	22.85
			36	16	22.75	22.93	22.87
			36	35	22.75	22.94	22.85
			75	0	22.85	23	22.92
		Antenna Gain (dBi):			-3.20		
		Max. ERP (dBm):			18.62		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.5	22.7	22.58
			1	37	22.73	22.96	22.72
			1	74	22.75	23.03	22.61
			36	0	21.69	21.93	21.8
			36	16	21.7	21.99	21.82
			36	35	21.71	21.95	21.8
			75	0	21.81	21.98	21.86
		Antenna Gain (dBi):			-3.20		
		Max. ERP (dBm):			17.68		
		EIRP Limit (dBm):			34.77		
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133222	133322	133372
					673.0MHz	683.0MHz	688.0MHz
71	20	QPSK	1	0	23.42	23.47	23.57
			1	49	24	24.02	24.04
			1	99	23.81	23.82	23.71
			50	0	22.74	23.06	22.86
			50	24	22.75	23.02	22.86
			50	49	22.71	23.03	22.87
			100	0	22.73	23.16	23.02
		Antenna Gain (dBi):			-3.20		
		Max. ERP (dBm):			18.69		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.28	22.52	22.15
			1	49	22.83	23.2	22.85
			1	99	22.73	22.89	22.51
			50	0	21.68	22.01	21.95
			50	24	21.7	22.02	21.94
			50	49	21.67	22.04	21.91
			100	0	21.71	22.18	21.96
		Antenna Gain (dBi):			-3.20		
		Max. ERP (dBm):			17.85		
		EIRP Limit (dBm):			34.77		
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).							
ERP (dBm) = EIRP (dBm) - 2.15 (dB).							

6.2 Peak-to-Average Ratio

Test Requirement:	Part 24.232 (d), Part 27.50(d)(5)
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test Setup:	 The diagram illustrates the test setup. On the left, there are two blue rectangular units: the top one is labeled 'System simulator' and the bottom one is labeled 'Spectrum Analyzer'. Both have a single output port. These two ports are connected to a single input port of a white rectangular unit labeled 'Splitter'. The 'Splitter' has two output ports. One output port is connected to a black rectangular unit labeled 'ATT' (Attenuator). The other output port is connected to a black rectangular unit labeled 'EUT' (Equipment Under Test).
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 Set the CCDF option in spectrum analyzer, $RBW \geq OBW$, 3 Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level. 4 Repeat step 1~3 at other frequency and modulations.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

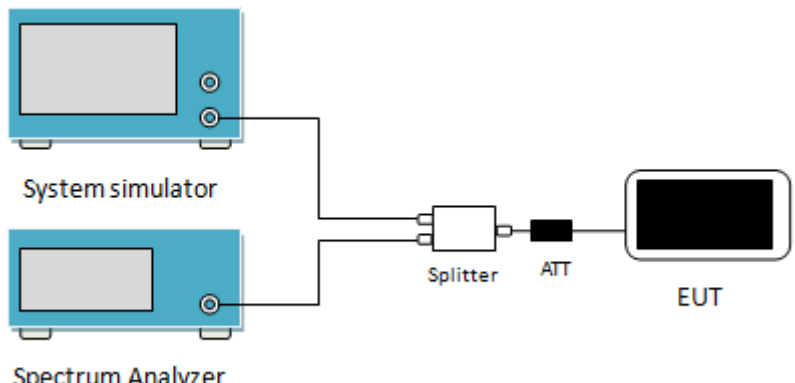
Measurement Data: Appendix - LTE

6.3 Occupy Bandwidth

Test Requirement:	Part 22.917(b), Part 24.238(b), Part 27.53(g), Part 27.53(h),
Test Setup:	 The diagram illustrates the test setup. On the left, there are two blue rectangular devices: a 'System simulator' on top and a 'Spectrum Analyzer' on the bottom. Both have a single output port. These two ports are connected to a single input port of a 'Splitter' (a small white rectangle). The other output port of the 'Splitter' is connected to an 'ATT' (Attenuator, a small black rectangle). Finally, the output of the 'ATT' is connected to the 'EUT' (Equipment Under Test, represented by a smartphone icon).
Test Procedure:	1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer 2. RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW. 3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

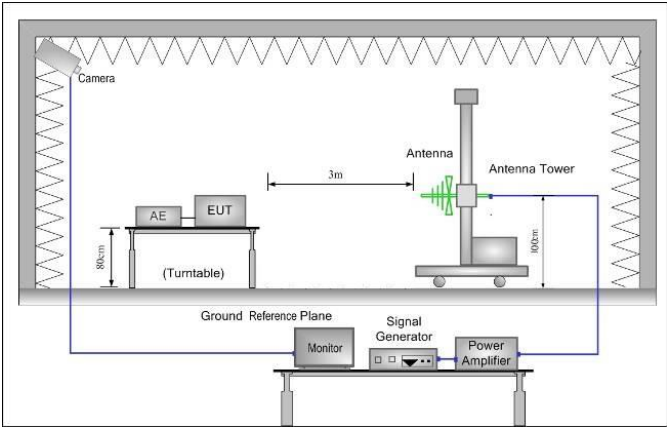
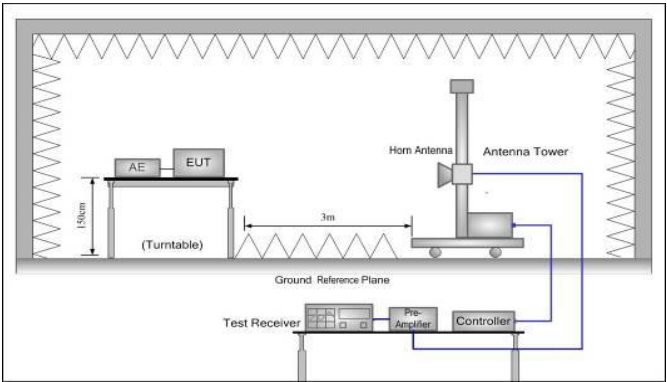
Measurement Data: Appendix - LTE

6.4 Out of band emission at antenna terminals

Test Requirement:	Part 22.917(a), Part 24.238 (a), part 27.53(g), part 27.53(h),
Limit:	LTE Band 2 & 4 & 5 & 12 & 17 & 66 & 71: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB (-13 dBm).
Test Setup:	 The diagram shows a test setup for out-of-band emission measurement. A System simulator and a Spectrum Analyzer are connected to a Splitter. The Splitter is connected to an ATT (Attenuator) and then to the EUT (Equipment Under Test).
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 For the out of band: For Band 5 & 12 & 17 set the RBW=100 kHz, VBW=300 kHz and for Band 2 & 4 & 7 set the RBW=1 MHz, VBW=3 MHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic. 3 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	Pre-scan all RB Size and offset, and found the RB Size and offset of worst case, so the report shows only the worst case test data.

Measurement Data: Appendix - LTE

6.5 Field strength of spurious radiation measurement

Test Requirement:	Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(h)
Limit:	LTE Band 2 & 4 & 5 & 12 & 17 & 66 & 71: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB (-13 dBm).
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. 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. $ERP / EIRP = S.G. \text{ output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

Measurement Data:
LTE Band 2 part:

Band 2 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3701.40	-57.82	12.64	0.75	-45.93	-13.00	-32.93	Vertical
5552.10	-46.60	12.76	1.13	-34.97	-13.00	-21.97	Vertical
7402.00	-53.01	11.44	1.63	-43.20	-13.00	-30.20	Vertical
3701.40	-50.59	12.64	0.75	-38.70	-13.00	-25.70	Horizontal
5552.10	-50.45	12.76	1.13	-38.82	-13.00	-25.82	Horizontal
7402.00	-53.57	11.44	1.63	-43.76	-13.00	-30.76	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-57.71	12.71	0.79	-45.79	-13.00	-32.79	Vertical
5640.00	-46.19	12.87	1.15	-34.47	-13.00	-21.47	Vertical
7520.00	-53.38	11.48	1.66	-43.56	-13.00	-30.56	Vertical
3760.00	-50.42	12.71	0.79	-38.50	-13.00	-25.50	Horizontal
5640.00	-50.28	12.87	1.15	-38.56	-13.00	-25.56	Horizontal
7520.00	-53.27	11.48	1.66	-43.45	-13.00	-30.45	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3816.60	-57.92	12.78	0.81	-45.95	-13.00	-32.95	Vertical
5724.90	-46.40	12.97	1.19	-34.62	-13.00	-21.62	Vertical
7633.20	-52.49	11.34	1.71	-42.86	-13.00	-29.86	Vertical
3816.60	-50.49	12.78	0.81	-38.52	-13.00	-25.52	Horizontal
5724.90	-50.68	12.97	1.19	-38.90	-13.00	-25.90	Horizontal
7633.20	-53.20	11.34	1.71	-43.57	-13.00	-30.57	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 2 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3720.00	-58.25	12.66	0.77	-46.36	-13.00	-33.36	Vertical
5580.00	-46.76	12.80	1.15	-35.11	-13.00	-22.11	Vertical
7440.00	-52.39	11.46	1.64	-42.57	-13.00	-29.57	Vertical
3720.00	-50.73	12.66	0.77	-38.84	-13.00	-25.84	Horizontal
5580.00	-51.04	12.80	1.15	-39.39	-13.00	-26.39	Horizontal
7440.00	-53.05	11.46	1.64	-43.23	-13.00	-30.23	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-58.77	12.71	0.79	-46.85	-13.00	-33.85	Vertical
5640.00	-47.29	12.87	1.15	-35.57	-13.00	-22.57	Vertical
7520.00	-52.18	11.48	1.66	-42.36	-13.00	-29.36	Vertical
3760.00	-50.56	12.71	0.79	-38.64	-13.00	-25.64	Horizontal
5640.00	-51.16	12.87	1.15	-39.44	-13.00	-26.44	Horizontal
7520.00	-53.14	11.48	1.66	-43.32	-13.00	-30.32	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3800.00	-58.50	12.76	0.79	-46.53	-13.00	-33.53	Vertical
5700.00	-47.58	12.94	1.18	-35.82	-13.00	-22.82	Vertical
7600.00	-52.07	11.38	1.69	-42.38	-13.00	-29.38	Vertical
3800.00	-50.35	12.76	0.79	-38.38	-13.00	-25.38	Horizontal
5700.00	-50.97	12.94	1.18	-39.21	-13.00	-26.21	Horizontal
7600.00	-53.38	11.38	1.69	-43.69	-13.00	-30.69	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 4 part:

Band 4 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3421.40	-53.71	12.24	0.70	-42.17	-13.00	-29.17	Vertical
5132.10	-46.76	12.92	1.01	-34.85	-13.00	-21.85	Vertical
6842.80	-55.75	11.42	1.53	-45.86	-13.00	-32.86	Vertical
3421.40	-53.09	12.24	0.70	-41.55	-13.00	-28.55	Horizontal
5132.10	-47.33	12.92	1.01	-35.42	-13.00	-22.42	Horizontal
6842.80	-58.58	11.42	1.53	-48.69	-13.00	-35.69	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3465.00	-53.87	12.33	0.72	-42.26	-13.00	-29.26	Vertical
5197.50	-46.69	12.88	1.04	-34.85	-13.00	-21.85	Vertical
6930.00	-55.38	11.30	1.56	-45.64	-13.00	-32.64	Vertical
3465.00	-53.16	12.33	0.72	-41.55	-13.00	-28.55	Horizontal
5197.50	-47.08	12.88	1.04	-35.24	-13.00	-22.24	Horizontal
6930.00	-58.06	11.30	1.56	-48.32	-13.00	-35.32	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3508.60	-53.41	12.41	0.74	-41.74	-13.00	-28.74	Vertical
5262.90	-46.98	12.84	1.07	-35.21	-13.00	-22.21	Vertical
7017.20	-55.17	11.21	1.58	-45.54	-13.00	-32.54	Vertical
3508.60	-52.90	12.41	0.74	-41.23	-13.00	-28.23	Horizontal
5262.90	-47.13	12.84	1.07	-35.36	-13.00	-22.36	Horizontal
7017.20	-58.52	11.21	1.58	-48.89	-13.00	-35.89	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 4 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3440.00	-53.14	12.28	0.71	-41.57	-13.00	-28.57	Vertical
5160.00	-47.47	12.90	1.03	-35.60	-13.00	-22.60	Vertical
6880.00	-55.51	11.37	1.54	-45.68	-13.00	-32.68	Vertical
3440.00	-52.68	12.28	0.71	-41.11	-13.00	-28.11	Horizontal
5160.00	-47.46	12.90	1.03	-35.59	-13.00	-22.59	Horizontal
6880.00	-58.60	11.37	1.54	-48.77	-13.00	-35.77	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3465.00	-53.41	12.33	0.72	-41.80	-13.00	-28.80	Vertical
5197.50	-47.60	12.88	1.04	-35.76	-13.00	-22.76	Vertical
6930.00	-55.08	11.30	1.56	-45.34	-13.00	-32.34	Vertical
3465.00	-52.59	12.33	0.72	-40.98	-13.00	-27.98	Horizontal
5197.50	-47.35	12.88	1.04	-35.51	-13.00	-22.51	Horizontal
6930.00	-58.55	11.30	1.56	-48.81	-13.00	-35.81	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-53.75	12.38	0.73	-42.10	-13.00	-29.10	Vertical
5235.00	-47.93	12.86	1.06	-36.13	-13.00	-23.13	Vertical
6980.00	-54.93	11.23	1.57	-45.27	-13.00	-32.27	Vertical
3490.00	-53.12	12.38	0.73	-41.47	-13.00	-28.47	Horizontal
5235.00	-47.33	12.86	1.06	-35.53	-13.00	-22.53	Horizontal
6980.00	-58.38	11.23	1.57	-48.72	-13.00	-35.72	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 5 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1649.40	-58.00	9.57	0.20	-48.63	-13.00	-35.63	Vertical
2474.10	-48.58	10.86	0.43	-38.15	-13.00	-25.15	Vertical
3298.80	-66.50	12.00	0.64	-55.14	-13.00	-42.14	Vertical
1649.40	-61.84	9.57	0.20	-52.47	-13.00	-39.47	Horizontal
2474.10	-48.77	10.86	0.43	-38.34	-13.00	-25.34	Horizontal
3298.80	-63.43	12.00	0.64	-52.07	-13.00	-39.07	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-57.57	9.66	0.22	-48.13	-13.00	-35.13	Vertical
2509.50	-49.04	10.91	0.46	-38.59	-13.00	-25.59	Vertical
3346.00	-66.79	12.09	0.66	-55.36	-13.00	-42.36	Vertical
1673.30	-61.52	9.66	0.22	-52.08	-13.00	-39.08	Horizontal
2509.50	-49.21	10.91	0.46	-38.76	-13.00	-25.76	Horizontal
3346.00	-63.57	12.09	0.66	-52.14	-13.00	-39.14	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1696.60	-58.47	9.74	0.23	-48.96	-13.00	-35.96	Vertical
2544.90	-49.00	10.94	0.49	-38.55	-13.00	-25.55	Vertical
3393.20	-66.55	12.19	0.68	-55.04	-13.00	-42.04	Vertical
1696.60	-61.88	9.74	0.23	-52.37	-13.00	-39.37	Horizontal
2544.90	-48.95	10.94	0.49	-38.50	-13.00	-25.50	Horizontal
3393.20	-64.00	12.19	0.68	-52.49	-13.00	-39.49	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 5 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1658.00	-58.67	9.60	0.21	-49.28	-13.00	-36.28	Vertical
2487.00	-48.87	10.88	0.45	-38.44	-13.00	-25.44	Vertical
3316.00	-66.08	12.03	0.65	-54.70	-13.00	-41.70	Vertical
1658.00	-62.14	9.60	0.21	-52.75	-13.00	-39.75	Horizontal
2487.00	-48.65	10.88	0.45	-38.22	-13.00	-25.22	Horizontal
3316.00	-64.25	12.03	0.65	-52.87	-13.00	-39.87	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-58.82	9.66	0.21	-49.37	-13.00	-36.37	Vertical
2509.50	-48.90	10.91	0.46	-38.45	-13.00	-25.45	Vertical
3346.00	-66.63	12.09	0.66	-55.20	-13.00	-42.20	Vertical
1673.30	-61.92	9.66	0.21	-52.47	-13.00	-39.47	Horizontal
2509.50	-48.45	10.91	0.46	-38.00	-13.00	-25.00	Horizontal
3346.00	-64.20	12.09	0.66	-52.77	-13.00	-39.77	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1688.00	-58.68	9.71	0.23	-49.20	-13.00	-36.20	Vertical
2532.00	-48.78	10.93	0.48	-38.33	-13.00	-25.33	Vertical
3376.00	-67.11	12.15	0.67	-55.63	-13.00	-42.63	Vertical
1688.00	-61.95	9.71	0.23	-52.47	-13.00	-39.47	Horizontal
2532.00	-47.99	10.93	0.48	-37.54	-13.00	-24.54	Horizontal
3376.00	-64.67	12.15	0.67	-53.19	-13.00	-40.19	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 12 part:

Band 12 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1399.40	-60.04	7.80	0.11	-52.35	-13.00	-39.35	Vertical
2099.10	-53.23	10.34	0.29	-43.18	-13.00	-30.18	Vertical
2798.80	-69.00	11.20	0.53	-58.33	-13.00	-45.33	Vertical
1399.40	-56.30	7.80	0.11	-48.61	-13.00	-35.61	Horizontal
2099.10	-54.14	10.34	0.29	-44.09	-13.00	-31.09	Horizontal
2798.80	-69.34	11.20	0.53	-58.67	-13.00	-45.67	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1415.00	-60.15	7.92	0.13	-52.36	-13.00	-39.36	Vertical
2122.50	-53.16	10.37	0.32	-43.11	-13.00	-30.11	Vertical
2830.00	-69.00	11.23	0.55	-58.32	-13.00	-45.32	Vertical
1415.00	-56.52	7.92	0.13	-48.73	-13.00	-35.73	Horizontal
2122.50	-54.07	10.37	0.32	-44.02	-13.00	-31.02	Horizontal
2830.00	-69.10	11.23	0.55	-58.42	-13.00	-45.42	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1430.60	-59.81	8.04	0.16	-51.93	-13.00	-38.93	Vertical
2145.90	-53.61	10.40	0.35	-43.56	-13.00	-30.56	Vertical
2861.20	-68.73	11.26	0.58	-58.05	-13.00	-45.05	Vertical
1430.60	-56.22	8.04	0.16	-48.34	-13.00	-35.34	Horizontal
2145.90	-54.10	10.40	0.35	-44.05	-13.00	-31.05	Horizontal
2861.20	-69.57	11.26	0.58	-58.89	-13.00	-45.89	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 12 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1408.00	-60.05	7.86	0.12	-52.31	-13.00	-39.31	Vertical
2112.00	-53.58	10.36	0.30	-43.52	-13.00	-30.52	Vertical
2816.00	-68.45	11.22	0.54	-57.77	-13.00	-44.77	Vertical
1408.00	-56.51	7.86	0.12	-48.77	-13.00	-35.77	Horizontal
2112.00	-53.89	10.36	0.30	-43.83	-13.00	-30.83	Horizontal
2816.00	-70.02	11.22	0.54	-59.34	-13.00	-46.34	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1415.00	-60.18	7.92	0.13	-52.39	-13.00	-39.39	Vertical
2122.50	-53.55	10.37	0.32	-43.50	-13.00	-30.50	Vertical
2830.00	-68.93	11.23	0.55	-58.25	-13.00	-45.25	Vertical
1415.00	-56.28	7.92	0.13	-48.49	-13.00	-35.49	Horizontal
2122.50	-53.65	10.37	0.32	-43.60	-13.00	-30.60	Horizontal
2830.00	-69.89	11.23	0.55	-59.21	-13.00	-46.21	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1422.00	-60.66	7.98	0.15	-52.83	-13.00	-39.83	Vertical
2133.00	-53.76	10.39	0.34	-43.71	-13.00	-30.71	Vertical
2844.00	-69.08	11.24	0.57	-58.41	-13.00	-45.41	Vertical
1422.00	-56.19	7.98	0.15	-48.36	-13.00	-35.36	Horizontal
2133.00	-54.10	10.39	0.34	-44.05	-13.00	-31.05	Horizontal
2844.00	-70.30	11.24	0.57	-59.63	-13.00	-46.63	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 17 part:

Band 17 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1413.00	-61.46	7.90	0.12	-53.68	-13.00	-40.68	Vertical
2119.50	-54.47	10.37	0.31	-44.41	-13.00	-31.41	Vertical
2826.00	-68.81	11.23	0.54	-58.12	-13.00	-45.12	Vertical
1413.00	-56.98	7.90	0.12	-49.20	-13.00	-36.20	Horizontal
2119.50	-56.60	10.37	0.31	-46.54	-13.00	-33.54	Horizontal
2826.00	-68.48	11.23	0.54	-57.79	-13.00	-44.79	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1420.00	-61.29	7.96	0.14	-53.47	-13.00	-40.47	Vertical
2130.00	-54.17	10.38	0.33	-44.12	-13.00	-31.12	Vertical
2840.00	-68.30	11.24	0.56	-57.62	-13.00	-44.62	Vertical
1420.00	-56.92	7.96	0.14	-49.10	-13.00	-36.10	Horizontal
2130.00	-56.30	10.38	0.33	-46.25	-13.00	-33.25	Horizontal
2840.00	-68.00	11.24	0.56	-57.32	-13.00	-44.32	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1427.00	-61.74	8.02	0.16	-53.88	-13.00	-40.88	Vertical
2140.50	-54.65	10.40	0.34	-44.59	-13.00	-31.59	Vertical
2854.00	-68.31	11.25	0.57	-57.63	-13.00	-44.63	Vertical
1427.00	-56.58	8.02	0.16	-48.72	-13.00	-35.72	Horizontal
2140.50	-56.36	10.40	0.34	-46.30	-13.00	-33.30	Horizontal
2854.00	-68.48	11.25	0.57	-57.80	-13.00	-44.80	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 17 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1418.00	-61.83	7.94	0.13	-54.02	-13.00	-41.02	Vertical
2127.00	-54.36	10.38	0.32	-44.30	-13.00	-31.30	Vertical
2836.00	-68.79	11.24	0.56	-58.11	-13.00	-45.11	Vertical
1418.00	-56.73	7.94	0.13	-48.92	-13.00	-35.92	Horizontal
2127.00	-55.90	10.38	0.32	-45.84	-13.00	-32.84	Horizontal
2836.00	-68.68	11.24	0.56	-58.00	-13.00	-45.00	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1420.00	-62.11	7.96	0.14	-54.29	-13.00	-41.29	Vertical
2130.00	-54.54	10.38	0.33	-44.49	-13.00	-31.49	Vertical
2840.00	-68.47	11.24	0.56	-57.79	-13.00	-44.79	Vertical
1420.00	-56.64	7.96	0.14	-48.82	-13.00	-35.82	Horizontal
2130.00	-55.85	10.38	0.33	-45.80	-13.00	-32.80	Horizontal
2840.00	-68.75	11.24	0.56	-58.07	-13.00	-45.07	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1422.00	-61.87	7.98	0.15	-54.04	-13.00	-41.04	Vertical
2133.00	-54.34	10.39	0.34	-44.29	-13.00	-31.29	Vertical
2844.00	-68.81	11.24	0.57	-58.14	-13.00	-45.14	Vertical
1422.00	-56.58	7.98	0.15	-48.75	-13.00	-35.75	Horizontal
2133.00	-56.31	10.39	0.34	-46.26	-13.00	-33.26	Horizontal
2844.00	-69.09	11.24	0.57	-58.42	-13.00	-45.42	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 66 part:

Band 66 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3421.40	-68.66	12.24	0.70	-57.12	-13.00	-44.12	Vertical
5132.10	-49.07	12.92	1.01	-37.16	-13.00	-24.16	Vertical
6842.80	-63.54	11.42	1.53	-53.65	-13.00	-40.65	Vertical
3421.40	-68.70	12.24	0.70	-57.16	-13.00	-44.16	Horizontal
5132.10	-67.86	12.92	1.01	-55.95	-13.00	-42.95	Horizontal
6842.80	-58.49	11.42	1.53	-48.60	-13.00	-35.60	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-69.04	12.38	0.73	-57.39	-13.00	-44.39	Vertical
5235.00	-49.15	12.86	1.06	-37.35	-13.00	-24.35	Vertical
6980.00	-63.29	11.23	1.57	-53.63	-13.00	-40.63	Vertical
3490.00	-69.19	12.38	0.73	-57.54	-13.00	-44.54	Horizontal
5235.00	-67.93	12.86	1.06	-56.13	-13.00	-43.13	Horizontal
6980.00	-58.27	11.23	1.57	-48.61	-13.00	-35.61	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3558.60	-68.85	12.47	0.74	-57.12	-13.00	-44.12	Vertical
5337.90	-48.88	12.80	1.08	-37.16	-13.00	-24.16	Vertical
7117.20	-63.33	11.27	1.59	-53.65	-13.00	-40.65	Vertical
3558.60	-68.89	12.47	0.74	-57.16	-13.00	-44.16	Horizontal
5337.90	-67.67	12.80	1.08	-55.95	-13.00	-42.95	Horizontal
7117.20	-58.28	11.27	1.59	-48.60	-13.00	-35.60	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

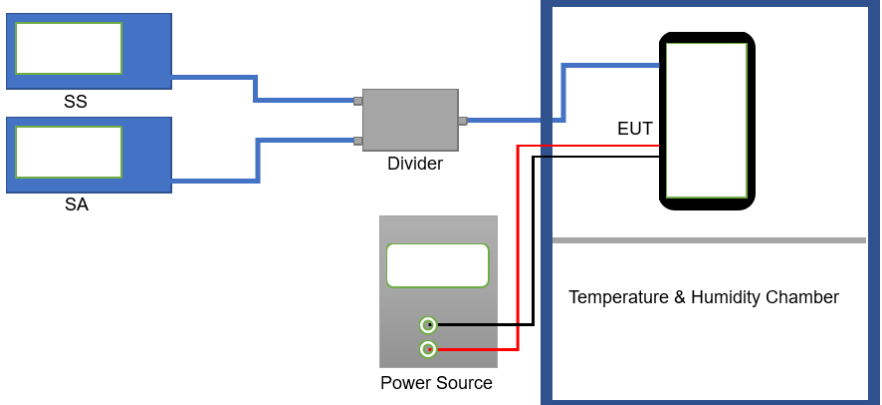
Band 66 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3440.00	-68.37	12.28	0.71	-56.80	-13.00	-43.80	Vertical
5160.00	-49.51	12.90	1.03	-37.64	-13.00	-24.64	Vertical
6880.00	-63.28	11.37	1.54	-53.45	-13.00	-40.45	Vertical
3440.00	-68.53	12.28	0.71	-56.96	-13.00	-43.96	Horizontal
5160.00	-67.88	12.90	1.03	-56.01	-13.00	-43.01	Horizontal
6880.00	-58.75	11.37	1.54	-48.92	-13.00	-35.92	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-68.72	12.38	0.73	-57.07	-13.00	-44.07	Vertical
5235.00	-49.77	12.86	1.06	-37.97	-13.00	-24.97	Vertical
6980.00	-63.01	11.23	1.57	-53.35	-13.00	-40.35	Vertical
3490.00	-69.09	12.38	0.73	-57.44	-13.00	-44.44	Horizontal
5235.00	-67.80	12.86	1.06	-56.00	-13.00	-43.00	Horizontal
6980.00	-58.45	11.23	1.57	-48.79	-13.00	-35.79	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3540.00	-68.78	12.45	0.74	-57.07	-13.00	-44.07	Vertical
5310.00	-49.70	12.81	1.08	-37.97	-13.00	-24.97	Vertical
7080.00	-63.01	11.25	1.59	-53.35	-13.00	-40.35	Vertical
3540.00	-69.15	12.45	0.74	-57.44	-13.00	-44.44	Horizontal
5310.00	-67.73	12.81	1.08	-56.00	-13.00	-43.00	Horizontal
7080.00	-58.45	11.25	1.59	-48.79	-13.00	-35.79	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 71 part:

Band 71 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1331.00	-56.44	7.70	0.11	-48.85	-13.00	-35.85	Vertical
1996.50	-50.94	7.79	0.26	-43.41	-13.00	-30.41	Vertical
2662.00	-55.62	11.06	0.52	-45.08	-13.00	-32.08	Vertical
1331.00	-55.86	7.70	0.11	-48.27	-13.00	-35.27	Horizontal
1996.50	-53.43	7.79	0.26	-45.90	-13.00	-32.90	Horizontal
2662.00	-55.48	11.06	0.52	-44.94	-13.00	-31.94	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1361.00	-56.01	7.74	0.11	-48.38	-13.00	-35.38	Vertical
2041.50	-53.84	10.26	0.27	-43.85	-13.00	-30.85	Vertical
2722.00	-55.91	11.12	0.52	-45.31	-13.00	-32.31	Vertical
1361.00	-55.54	7.74	0.11	-47.91	-13.00	-34.91	Horizontal
2041.50	-56.34	10.26	0.27	-46.35	-13.00	-33.35	Horizontal
2722.00	-55.81	11.12	0.52	-45.21	-13.00	-32.21	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1391.00	-56.68	7.79	0.11	-49.00	-13.00	-36.00	Vertical
2086.50	-53.39	10.32	0.29	-43.36	-13.00	-30.36	Vertical
2782.00	-56.02	11.18	0.53	-45.37	-13.00	-32.37	Vertical
1391.00	-56.24	7.79	0.11	-48.56	-13.00	-35.56	Horizontal
2086.50	-55.45	10.32	0.29	-45.42	-13.00	-32.42	Horizontal
2782.00	-55.37	11.18	0.53	-44.72	-13.00	-31.72	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 71 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1346.00	-56.52	7.72	0.11	-48.91	-13.00	-35.91	Vertical
2019.00	-53.81	10.23	0.26	-43.84	-13.00	-30.84	Vertical
2692.00	-55.85	11.09	0.52	-45.28	-13.00	-32.28	Vertical
1346.00	-55.80	7.72	0.11	-48.19	-13.00	-35.19	Horizontal
2019.00	-55.39	10.23	0.26	-45.42	-13.00	-32.42	Horizontal
2692.00	-54.95	11.09	0.52	-44.38	-13.00	-31.38	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1366.00	-56.42	7.75	0.11	-48.78	-13.00	-35.78	Vertical
2049.00	-53.63	10.27	0.27	-43.63	-13.00	-30.63	Vertical
2732.00	-56.17	11.13	0.52	-45.56	-13.00	-32.56	Vertical
1366.00	-56.33	7.75	0.11	-48.69	-13.00	-35.69	Horizontal
2049.00	-54.98	10.27	0.27	-44.98	-13.00	-31.98	Horizontal
2732.00	-54.67	11.13	0.52	-44.06	-13.00	-31.06	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1376.00	-56.42	7.76	0.11	-48.77	-13.00	-35.77	Vertical
2064.00	-53.69	10.29	0.27	-43.67	-13.00	-30.67	Vertical
2752.00	-55.79	11.15	0.52	-45.16	-13.00	-32.16	Vertical
1376.00	-56.52	7.76	0.11	-48.87	-13.00	-35.87	Horizontal
2064.00	-54.71	10.29	0.27	-44.69	-13.00	-31.69	Horizontal
2752.00	-54.27	11.15	0.52	-43.64	-13.00	-30.64	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

6.6 Frequency stability V.S. Temperature measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(a)(1)(b)
Limit:	±2.5 ppm for Band 5 Within authorized band for Band 2 & 4 & 12 & 17 & 66 & 71
Test setup:	
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):
LTE Band 2 part:

Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	171	0.090957	Within authorized band for Band 2	Pass
	-20	149	0.079255		
	-10	163	0.086702		
	0	153	0.081383		
	10	131	0.069681		
	20	126	0.067021		
	30	140	0.074468		
	40	118	0.062766		
	50	107	0.056915		
16QAM					
3.80	-30	170	0.090426	Within authorized band for Band 2	Pass
	-20	162	0.086170		
	-10	155	0.082447		
	0	146	0.077660		
	10	138	0.073404		
	20	123	0.065426		
	30	116	0.061702		
	40	103	0.054787		
	50	130	0.069149		
Note: Only the worst case shown in the report.					

LTE Band 4 part:

Reference Frequency: LTE Band 4 (10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	175	0.101010	Within authorized band for Band 4	Pass
	-20	168	0.096970		
	-10	151	0.087157		
	0	143	0.082540		
	10	136	0.078499		
	20	128	0.073882		
	30	160	0.092352		
	40	120	0.069264		
	50	112	0.064646		
16QAM					
3.80	-30	170	0.098124	Within authorized band for Band 4	Pass
	-20	140	0.080808		
	-10	166	0.095815		
	0	132	0.076190		
	10	159	0.091775		
	20	124	0.071573		
	30	117	0.067532		
	40	101	0.058297		
	50	150	0.086580		
Note: Only the worst case shown in the report.					

LTE Band 5 part:

Reference Frequency: LTE Band 5 (10MHz) Middle channel=20525 channel=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	167	0.199641	±2.5	Pass
	-20	157	0.187687		
	-10	142	0.169755		
	0	135	0.161387		
	10	129	0.154214		
	20	114	0.136282		
	30	151	0.180514		
	40	120	0.143455		
	50	103	0.123132		
16QAM					
3.80	-30	165	0.197250	±2.5	Pass
	-20	156	0.186491		
	-10	145	0.173341		
	0	137	0.163778		
	10	121	0.144650		
	20	118	0.141064		
	30	102	0.121937		
	40	130	0.155409		
	50	110	0.131500		
Note: Only the worst case shown in the report.					

LTE Band 17 part:

Reference Frequency: LTE Band 17 (10MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	174	0.245070	Within authorized band for Band 17	Pass
	-20	150	0.211268		
	-10	142	0.200000		
	0	134	0.188732		
	10	168	0.236620		
	20	127	0.178873		
	30	113	0.159155		
	40	160	0.225352		
	50	120	0.169014		
16QAM					
3.80	-30	171	0.240845	Within authorized band for Band 17	Pass
	-20	151	0.212676		
	-10	143	0.201408		
	0	164	0.230986		
	10	157	0.221127		
	20	134	0.188732		
	30	127	0.178873		
	40	118	0.166197		
	50	109	0.153521		
Note: Only the worst case shown in the report.					

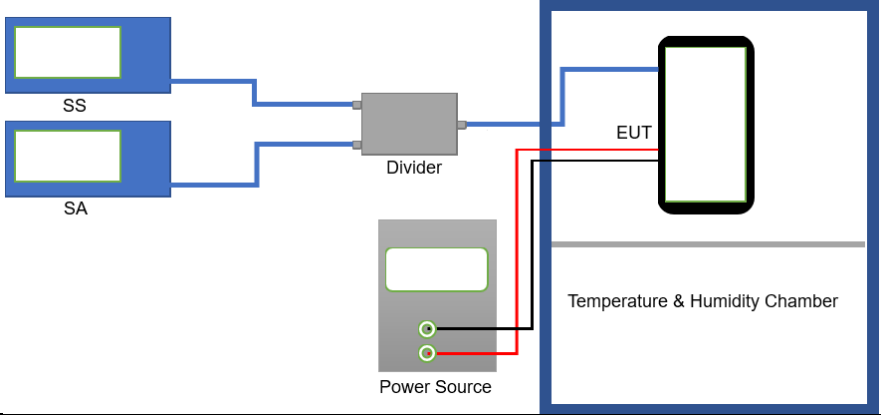
LTE Band 66 part:

Reference Frequency: LTE Band 66 (10MHz) Middle channel=132322 channel=1745.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	173	0.099140	Within authorized band for Band 66	Pass
	-20	157	0.089971		
	-10	142	0.081375		
	0	135	0.077364		
	10	129	0.073926		
	20	114	0.065330		
	30	151	0.086533		
	40	120	0.068768		
	50	103	0.059026		
16QAM					
3.70	-30	169	0.096848	Within authorized band for Band 66	Pass
	-20	156	0.089398		
	-10	145	0.083095		
	0	137	0.078510		
	10	121	0.069341		
	20	118	0.067622		
	30	102	0.058453		
	40	130	0.074499		
	50	110	0.063037		
Note: Only the worst case shown in the report.					

LTE Band 71 part:

Reference Frequency: LTE Band 71 (10MHz) Middle channel=133297 Frequency=680.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	174	0.255694	Within authorized band for Band 71	Pass
	-20	168	0.246877		
	-10	151	0.221896		
	0	143	0.210140		
	10	136	0.199853		
	20	128	0.188097		
	30	160	0.235121		
	40	120	0.176341		
	50	112	0.164585		
16QAM					
3.70	-30	172	0.252755	Within authorized band for Band 71	Pass
	-20	140	0.205731		
	-10	166	0.243938		
	0	132	0.193975		
	10	159	0.233652		
	20	124	0.182219		
	30	117	0.171932		
	40	101	0.148420		
	50	150	0.220426		
Note: Only the worst case shown in the report.					

6.7 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(d)(2)
Limit:	±2.5 ppm for Band 5 Within authorized band for Band 2 & 4 & 12 & 17 & 66 & 71
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer (SA) and a Signal Source (SS) are connected to a Divider. The Divider is connected to the EUT (Equipment Under Test) inside a Temperature & Humidity Chamber. A Power Source is also connected to the EUT.
Test procedure:	1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):
LTE Band 2 part:

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	89	0.047340	Within authorized band for Band 2	Pass
	3.80	75	0.039894		
	3.50	61	0.032447		
16QAM					
25	4.35	88	0.046809	Within authorized band for Band 2	Pass
	3.80	72	0.038298		
	3.50	60	0.031915		
Note: Only the worst case shown in the report.					

LTE Band 4 part:

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	87	0.050216	Within authorized band for Band 4	Pass
	3.80	77	0.044444		
	3.50	65	0.037518		
16QAM					
25	4.35	85	0.049062	Within authorized band for Band 4	Pass
	3.80	76	0.043867		
	3.50	60	0.034632		
Note: Only the worst case shown in the report.					

LTE Band 5 part:

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 channel=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	86	0.102809	±2.5	Pass
	3.80	62	0.074118		
	3.50	73	0.087268		
16QAM					
25	4.35	81	0.096832	±2.5	Pass
	3.80	74	0.088464		
	3.50	56	0.066946		
Note: Only the worst case shown in the report.					

LTE Band 12 part:

Reference Frequency: LTE Band 12(10MHz) Middle channel=23095 channel=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	89	0.125795	Within authorized band for Band 12	Pass
	3.80	73	0.103180		
	3.50	60	0.084806		
16QAM					
25	4.35	84	0.118728	Within authorized band for Band 12	Pass
	3.80	70	0.098940		
	3.50	61	0.086219		
Note: Only the worst case shown in the report.					

LTE Band 17 part:

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	76	0.107042	Within authorized band for Band 17	Pass
	3.80	63	0.088732		
	3.50	58	0.081690		
16QAM					
25	4.35	73	0.102817	Within authorized band for Band 17	Pass
	3.80	64	0.090141		
	3.50	52	0.073239		
Note: Only the worst case shown in the report.					

LTE Band 66 part:

Reference Frequency: LTE Band 66(10MHz) Middle channel=132332 channel=1745.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	67	0.038395	Within authorized band for Band 66	Pass
	3.70	81	0.046418		
	3.50	70	0.040115		
16QAM					
25	4.20	76	0.043553	Within authorized band for Band 66	Pass
	3.70	80	0.045845		
	3.50	63	0.036103		
Note: Only the worst case shown in the report.					

LTE Band 71 part:

Reference Frequency: LTE Band 71(10MHz) Middle channel=133297 Frequency=680.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	80	0.117561	Within authorized band for Band 71	Pass
	3.70	73	0.107274		
	3.50	64	0.094048		
16QAM					
25	4.20	79	0.116091	Within authorized band for Band 71	Pass
	3.70	53	0.077884		
	3.50	65	0.095518		
Note: Only the worst case shown in the report.					

8 EUT Constructional Details

Reference to the test report No. JYTSZB-R01-2100144.

-----End of report-----