

RF TEST REPORT

Applicant	Smawave Technology Co., Ltd
FCC ID	2AU8HSC421
Product	Cat12 Indoor CPE
Brand	Smawave
Model	SC421
Report No.	EFTA25030078-IE-01-R1
Issue Date	April 8, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 / FCC CFR 47 Part 22H / FCC CFR 47 Part 24E / FCC CFR47 Part 27C**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Xu Ying

Approved by: Xu Kai

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

TABLE OF CONTENT

1	Test Laboratory	5
1.1	Notes of the Test Report.....	5
1.2.	Test facility	5
1.3	Testing Location.....	5
2	General Description of Equipment under Test.....	6
2.1	Applicant and Manufacturer Information	6
2.2	General information	6
3	Applied Standards.....	8
4	Test Configuration	9
5	Test Case	10
5.1	RF Power Output and Effective Isotropic Radiated Power	10
5.2	Radiated Spurious Emission	11
6	Test Results.....	14
6.1	RF Power Output and Effective (Isotropic) Radiated Power	14
6.2	Radiated Spurious Emission	33
7	Main Test Instruments	42
ANNEX A: The EUT Appearance		43
ANNEX B: Test Setup Photos		44

Summary of Measurement Results

Test Case	Clause in FCC rules	Limits	Verdict
WCDMA Band 5; LTE Band 5; CA_5B			
Occupied Bandwidth	Refer to the Module report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02; FCC ID: ZMOFG101NA, Grant date: 07/26/2023)		
Band Edge Compliance			
Peak-to-Average Power Ratio			
Frequency Stability			
Spurious Emissions at Antenna Terminals			
RF Power Output and Effective Radiated Power	2.1046 22.913(a)(5)	$\leq 7 \text{ W (38.45 dBm)}$	PASS Note 1
Radiated Spurious Emission	2.1053 22.917 (a)	$\leq -13 \text{ dBm}$	PASS
WCDMA Band 2			
Occupied Bandwidth	Refer to the Module report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02; FCC ID: ZMOFG101NA, Grant date: 07/26/2023)		
Band Edge Compliance			
Peak-to-Average Power Ratio			
Frequency Stability			
Spurious Emissions at Antenna Terminals			
RF Power Output and Effective Isotropic Radiated Power	2.1046 24.232(c)	$\leq 2 \text{ W (33 dBm)}$	PASS Note 1
Radiated Spurious Emission	2.1053 24.238(a)	$\leq -13 \text{ dBm}$	PASS
LTE Band 4/66			
Occupied Bandwidth	Refer to the Module report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02; FCC ID: ZMOFG101NA, Grant date: 07/26/2023)		
Band Edge Compliance			
Peak-to-Average Power Ratio			
Frequency Stability			
Spurious Emissions at Antenna Terminals			
RF Power Output and Effective Isotropic Radiated Power	2.1046 27.50(d)(4)	$\leq 1 \text{ W (30 dBm)}$	PASS Note 1
Radiated Spurious Emission	2.1053 27.53(h)	$\leq -13 \text{ dBm}$	PASS

Test Case	Clause in FCC rules	Limits	Verdict
LTE Band 41; CA_41C			
Occupied Bandwidth	Refer to the Module report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02; FCC ID: ZMOFG101NA, Grant date: 07/26/2023)		
Band Edge Compliance			
Peak-to-Average Power Ratio			
Frequency Stability			
Spurious Emissions at Antenna Terminals			
RF Power Output and Effective Isotropic Radiated Power	2.1046 27.50(h)(2)	≤ 2 W (33 dBm)	PASS Note 1
Radiated Spurious Emission	2.1053 27.53(m)	≤ -25 dBm	PASS
LTE Band 12			
Occupied Bandwidth	Refer to the Module report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02; FCC ID: ZMOFG101NA, Grant date: 07/26/2023)		
Band Edge Compliance			
Peak-to-Average Power Ratio			
Frequency Stability			
Spurious Emissions at Antenna Terminals			
RF Power Output and Effective Radiated Power	2.1046 27.50(c)(10)	≤ 3 W (34.77 dBm)	PASS Note 1
Radiated Spurious Emission	2.1053 27.53(g)	≤ -13 dBm	PASS
Date of Testing: March 18, 2025 Date of Sample Received: March 10, 2025			
Note: 1. Because of the change of antenna gain, ERP/EIRP need to be re-evaluated. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

1 Test Laboratory

1.1 Notes of the Test Report

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

1.2. Test facility

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

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

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <https://www.eurofins.com/electrical-and-electronics>
E-mail: Kain.Xu@cpt.eurofinscn.com

2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	Shanghai Smawave Technology Co. ,Ltd
Applicant address	3/F, Building 8, 1001 North Qinzhou Road , Xuhui District, Shanghai, China
Manufacturer	Shanghai Smawave Technology Co. ,Ltd
Manufacturer address	3/F, Building 8, 1001 North Qinzhou Road , Xuhui District, Shanghai, China

2.2 General information

EUT Description				
Model	SC421			
Lab internal SN	EFTA25030078-IE-01/S01			
Hardware Version	/			
Software Version	/			
Power Supply	AC adapter			
Antenna Type	External Antenna			
Rated Power Supply Voltage	12VDC			
Operating Voltage	Minimum: 9.6VDC Maximum: 14.4VDC			
Operating Temperature	Lowest: -30°C Highest: +50°C			
Testing Temperature	Lowest: -30°C Highest: +50°C			
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)	Gain (dBi)
	WCDMA Band II	1850 ~ 1910	1930 ~ 1990	3.51
	WCDMA Band V	824 ~ 849	869 ~ 894	1.78
	LTE Band 4	1710 ~ 1755	2110 ~ 2155	4.46
	LTE Band 5	824 ~ 849	869 ~ 894	1.78
	LTE Band 12	699 ~ 716	729 ~ 746	1.08
	LTE Band 41	2496 ~ 2690	2496 ~ 2690	5.09
	LTE Band 46	/	5150 ~ 5925	/
	LTE Band 66	1710 ~ 1780	2110 ~ 2180	4.46
LTE UL CA Band(s)	CA_5B; CA_41C			
Test Modulation	(WCDMA) BPSK, QPSK,16QAM; (LTE) QPSK, 16QAM, 64QAM;			
Maximum E.I.R.P./ E.R.P.	WCDMA Band II	27.09 dBm		
	WCDMA Band V	23.28 dBm		
	LTE Band 4	27.28 dBm		
	LTE Band 5	22.82 dBm		

RF Test Report		Report No.: EUT2550097012-0212
	LTE Band 12	22.18 dBm
	LTE Band 41 (Power Class 2)	30.77 dBm
	LTE Band 41 (Power Class 3)	28.35dBm
	LTE Band 66	27.27 dBm
	CA_5B	22.43 dBm
	CA_41C	29.72 dBm
EUT Accessory		
Adapter	Manufacturer: SHENZHEN TOPOW Model: TPA259-18120-US	
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.		

3 Applied Standards

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

Test standards:

FCC CFR 47 Part 2 (2024)

FCC CFR 47 Part 22H (2024)

FCC CFR 47 Part 24E (2024)

FCC CFR 47 Part 27C (2024)

Reference standard:

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

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

	Main Antenna
WCDMA	Z axis, vertical polarization
LTE	Z axis, vertical polarization
LTE CA	X axis, horizontal polarization

All mode and data rates and positions and RB size and modulations were investigated. Subsequently, only the worst case emissions are reported.

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

The following testing in different Bandwidth is set to detail in the following table:

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

Test items	Modes/Modulation
	WCDMA Band 2/5
RF Power Output and Effective (Isotropic) Radiated power	RMC HSDPA/HSUPA DC-HSDPA/HSPA+
Radiated Spurious Emission	RMC

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

Test items	Modes	Bandwidth (MHz)						Modulation		RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM/ 64QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	LTE 4	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 5	O	O	O	O	-	-	O	O	O	O	O	O	O	O
	CA_5B	O	O	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	CA_41C	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Radiated Spurious Emission	LTE 4	O	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 5	O	-	O	O	-	-	O	-	O	-	-	-	O	-
	CA_5B														
	LTE 12	O	-	O	O	-	-	O	-	O	-	-	-	O	-
	LTE 41	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	CA_41C	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 66	O	O	O	-	-	O	O	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.														

5 Test Case

5.1 RF Power Output and Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Methods of Measurement

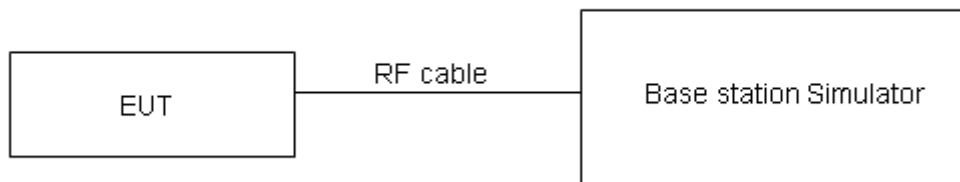
During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

ERP can then be calculated as follows:

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

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

Test Setup



Measurement Uncertainty

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

Test Results

Refer to the section 6.1 of this report for test data.

5.2 Radiated Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.8 and ANSI C63.26-2015.
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=100kHz, VBW=300kHz for 30MHz to 1GHz and RBW=1MHz, VBW=3MHz for above 1GHz, and the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:

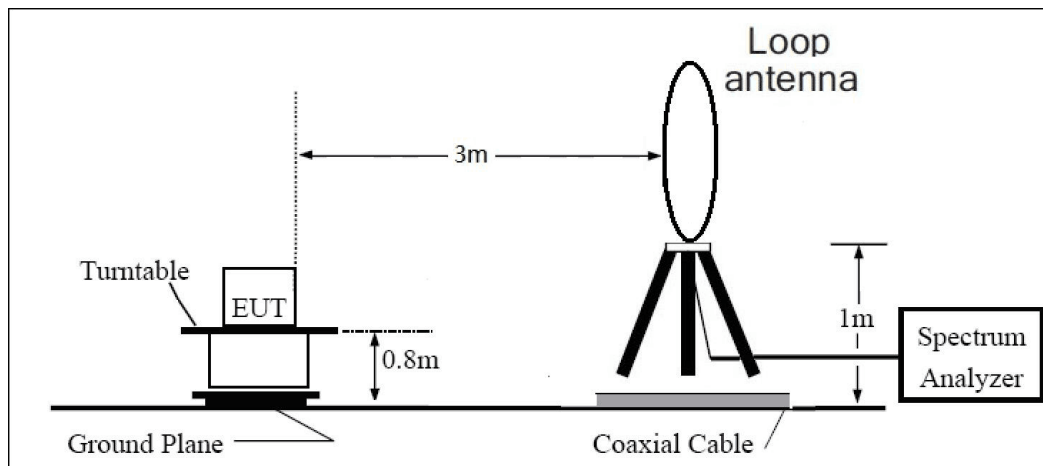
$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$
The measurement results are amend as described below:

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

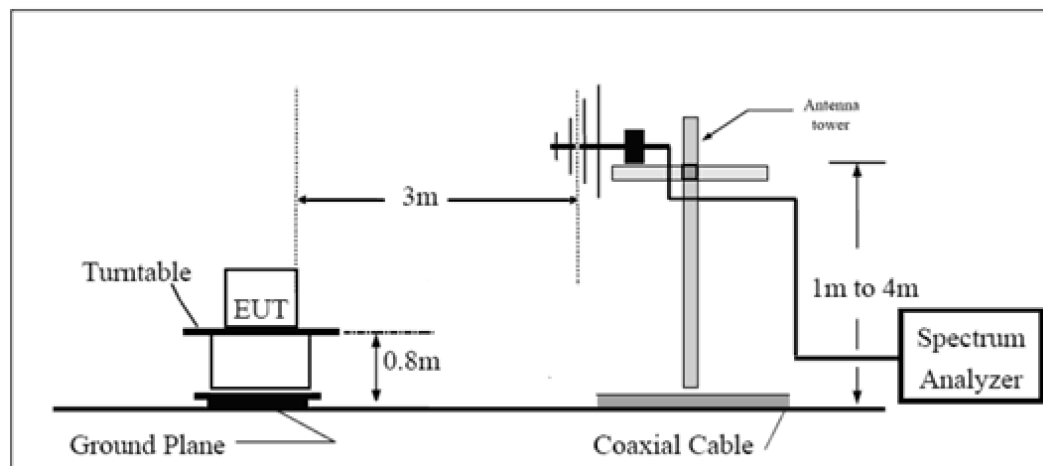
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

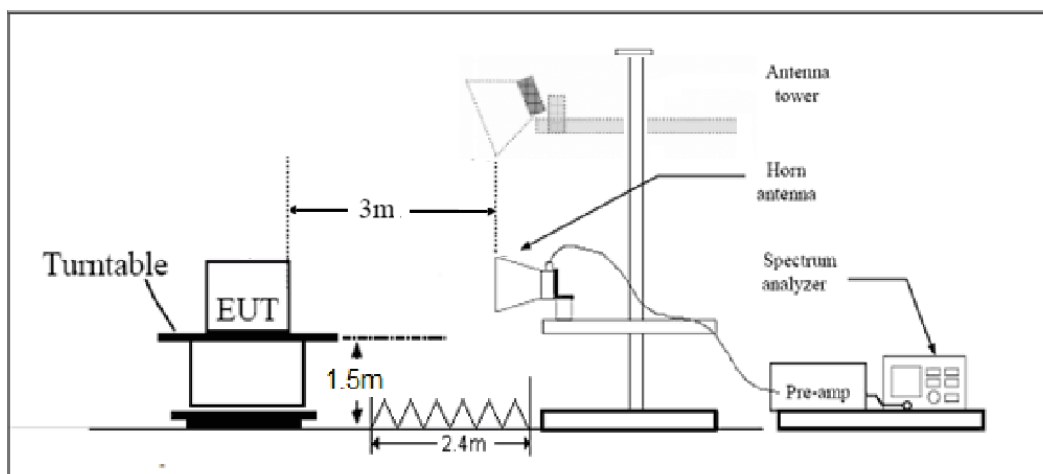
9KHz~ 30MHz



30MHz~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Measurement Uncertainty

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

Test Results

Refer to the section 6.2 of this report for test data.

6 Test Results

6.1 RF Power Output and Effective (Isotropic) Radiated Power

WCDMA Band II		Maximum Output Power (dBm)			EIRP (dBm)		
		Channel 9262	Channel 9400	Channel 9538	Channel 9262	Channel 9400	Channel 9538
		1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)	1852.4 (MHz)	1880 (MHz)	1907.6 (MHz)
RMC		23.51	23.58	23.52	27.02	27.09	27.03
HSDPA	Sub - Test 1	23.34	23.26	23.25	26.85	26.77	26.76
	Sub - Test 2	23.34	23.27	23.25	26.85	26.78	26.76
	Sub - Test 3	22.87	22.80	22.78	26.38	26.31	26.29
	Sub - Test 4	22.88	22.81	22.78	26.39	26.32	26.29
HSUPA	Sub - Test 1	22.07	22.51	22.70	25.58	26.02	26.21
	Sub - Test 2	21.94	21.99	22.19	25.45	25.50	25.70
	Sub - Test 3	22.10	22.53	22.71	25.61	26.04	26.22
	Sub - Test 4	22.41	22.47	22.68	25.92	25.98	26.19
	Sub - Test 5	22.47	22.50	22.69	25.98	26.01	26.20
DC-HSDPA	Sub - Test 1	23.25	23.25	23.36	26.76	26.76	26.87
	Sub - Test 2	23.38	23.23	23.28	26.89	26.74	26.79
	Sub - Test 3	22.78	22.87	22.77	26.29	26.38	26.28
	Sub - Test 4	22.84	22.83	22.77	26.35	26.34	26.28
HSPA+	16QAM	22.78	22.78	22.91	26.29	26.29	26.42

WCDMA Band V		Maximum Output Power (dBm)			ERP (dBm)		
		Channel 4132	Channel 4183	Channel 4233	Channel 4132	Channel 4183	Channel 4233
		826.4 (MHz)	836.6 (MHz)	846.6 (MHz)	826.4 (MHz)	836.6 (MHz)	846.6 (MHz)
RMC		23.58	23.65	23.60	23.21	23.28	23.23
HSDPA	Sub - Test 1	23.26	23.35	23.28	22.89	22.98	22.91
	Sub - Test 2	23.25	23.30	23.25	22.88	22.93	22.88
	Sub - Test 3	22.75	23.06	22.76	22.38	22.69	22.39
	Sub - Test 4	22.75	23.05	22.76	22.38	22.68	22.39
HSUPA	Sub - Test 1	21.64	21.81	22.92	21.27	21.44	22.55
	Sub - Test 2	22.91	22.09	22.40	22.54	21.72	22.03
	Sub - Test 3	22.44	22.61	22.84	22.07	22.24	22.47

	Sub - Test 4	22.38	22.57	22.87	22.01	22.20	22.50
	Sub - Test 5	22.41	22.58	22.81	22.04	22.21	22.44
DC-HSDPA	Sub - Test 1	23.08	23.00	22.96	22.71	22.63	22.59
	Sub - Test 2	23.06	22.98	23.10	22.69	22.61	22.73
	Sub - Test 3	22.55	22.56	22.65	22.18	22.19	22.28
	Sub - Test 4	22.66	22.57	22.55	22.29	22.20	22.18
HSPA+	16QAM	21.83	21.68	21.30	21.46	21.31	20.93

LTE Band 4				Maximum Output Power(dBm)			EIRP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				20050	20175	20300	20050	20175	20300
Frequency (MHz)				1720	1732.5	1745	1720	1732.5	1745
20	QPSK	1	0	22.82	22.80	22.76	27.28	27.26	27.22
20	QPSK	1	49	22.80	22.66	22.68	27.26	27.12	27.14
20	QPSK	1	99	22.71	22.56	22.51	27.17	27.02	26.97
20	QPSK	50	0	21.85	21.77	21.81	26.31	26.23	26.27
20	QPSK	50	24	21.74	21.78	21.80	26.20	26.24	26.26
20	QPSK	50	50	21.76	21.75	21.66	26.22	26.21	26.12
20	QPSK	100	0	21.70	21.70	21.61	26.16	26.16	26.07
20	16QAM	1	0	21.88	21.87	21.70	26.34	26.33	26.16
20	16QAM	1	49	21.70	21.83	21.61	26.16	26.29	26.07
20	16QAM	1	99	21.71	21.80	21.58	26.17	26.26	26.04
20	16QAM	50	0	20.79	20.76	20.86	25.25	25.22	25.32
20	16QAM	50	24	20.86	20.70	20.72	25.32	25.16	25.18
20	16QAM	50	50	20.56	20.66	20.54	25.02	25.12	25.00
20	16QAM	100	0	20.83	20.77	20.78	25.29	25.23	25.24
20	64QAM	1	0	20.95	20.89	20.75	25.41	25.35	25.21
20	64QAM	1	49	20.96	20.91	20.89	25.42	25.37	25.35
20	64QAM	1	99	20.86	20.76	21.01	25.32	25.22	25.47
20	64QAM	50	0	19.88	19.85	19.76	24.34	24.31	24.22
20	64QAM	50	24	19.74	19.84	19.92	24.20	24.30	24.38
20	64QAM	50	50	19.76	19.57	19.89	24.22	24.03	24.35
20	64QAM	100	0	19.84	19.77	19.54	24.30	24.23	24.00
Channel				20025	20175	20325	20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
15	QPSK	1	0	22.78	22.75	22.72	27.24	27.21	27.18
15	QPSK	1	37	22.72	22.60	22.70	27.18	27.06	27.16
15	QPSK	1	74	22.63	22.72	22.62	27.09	27.18	27.08
15	QPSK	36	0	21.90	21.80	21.73	26.36	26.26	26.19
15	QPSK	36	20	21.88	21.74	21.77	26.34	26.20	26.23
15	QPSK	36	39	21.74	21.63	21.66	26.20	26.09	26.12
15	QPSK	75	0	21.83	21.60	21.71	26.29	26.06	26.17
15	16QAM	1	0	21.85	21.88	21.75	26.31	26.34	26.21
15	16QAM	1	37	21.78	21.85	21.63	26.24	26.31	26.09
15	16QAM	1	74	21.71	21.73	21.70	26.17	26.19	26.16
15	16QAM	36	0	20.78	20.77	20.81	25.24	25.23	25.27
15	16QAM	36	20	20.68	20.74	20.70	25.14	25.20	25.16

15	16QAM	36	39	20.64	20.65	20.53	25.10	25.11	24.99
15	16QAM	75	0	20.73	20.55	20.71	25.19	25.01	25.17
15	64QAM	1	0	20.90	20.85	20.81	25.36	25.31	25.27
15	64QAM	1	37	20.83	20.81	20.73	25.29	25.27	25.19
15	64QAM	1	74	20.84	20.65	20.76	25.30	25.11	25.22
15	64QAM	36	0	19.80	19.72	19.64	24.26	24.18	24.10
15	64QAM	36	20	19.71	19.84	19.89	24.17	24.30	24.35
15	64QAM	36	39	19.89	19.75	19.63	24.35	24.21	24.09
15	64QAM	75	0	19.82	19.81	19.79	24.28	24.27	24.25
Channel				20000	20175	20350	20000	20175	20350
Frequency (MHz)				1715	1732.5	1750	1715	1732.5	1750
10	QPSK	1	0	22.79	22.77	22.74	27.25	27.23	27.20
10	QPSK	1	25	22.77	22.71	22.60	27.23	27.17	27.06
10	QPSK	1	49	22.61	22.54	22.75	27.07	27.00	27.21
10	QPSK	25	0	21.85	21.76	21.84	26.31	26.22	26.30
10	QPSK	25	12	21.79	21.77	21.79	26.25	26.23	26.25
10	QPSK	25	25	21.63	21.79	21.60	26.09	26.25	26.06
10	QPSK	50	0	21.84	21.76	21.78	26.30	26.22	26.24
10	16QAM	1	0	21.92	21.95	21.83	26.38	26.41	26.29
10	16QAM	1	25	21.86	21.82	21.83	26.32	26.28	26.29
10	16QAM	1	49	21.92	21.77	21.85	26.38	26.23	26.31
10	16QAM	25	0	20.65	20.84	20.63	25.11	25.30	25.09
10	16QAM	25	12	20.90	20.86	20.85	25.36	25.32	25.31
10	16QAM	25	25	20.86	20.84	20.86	25.32	25.30	25.32
10	16QAM	50	0	20.83	20.83	20.67	25.29	25.29	25.13
10	64QAM	1	0	20.84	20.81	20.90	25.30	25.27	25.36
10	64QAM	1	25	20.73	20.76	20.90	25.19	25.22	25.36
10	64QAM	1	49	20.97	20.86	20.75	25.43	25.32	25.21
10	64QAM	25	0	19.98	19.93	19.79	24.44	24.39	24.25
10	64QAM	25	12	19.86	19.73	19.62	24.32	24.19	24.08
10	64QAM	25	25	19.92	19.69	19.63	24.38	24.15	24.09
10	64QAM	50	0	19.68	19.84	19.69	24.14	24.30	24.15
Channel				19975	20175	20375	19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
5	QPSK	1	0	22.80	22.79	22.72	27.26	27.25	27.18
5	QPSK	1	12	22.68	22.73	22.72	27.14	27.19	27.18
5	QPSK	1	24	22.68	22.71	22.51	27.14	27.17	26.97
5	QPSK	12	0	21.92	21.92	21.75	26.38	26.38	26.21
5	QPSK	12	7	21.73	21.82	21.69	26.19	26.28	26.15
5	QPSK	12	13	21.85	21.78	21.52	26.31	26.24	25.98
5	QPSK	25	0	21.65	21.87	21.67	26.11	26.33	26.13
5	16QAM	1	0	21.85	21.91	21.86	26.31	26.37	26.32
5	16QAM	1	12	21.79	21.92	21.72	26.25	26.38	26.18

5	16QAM	1	24	21.77	21.67	21.76	26.23	26.13	26.22
5	16QAM	12	0	20.91	20.86	20.76	25.37	25.32	25.22
5	16QAM	12	7	20.75	20.79	20.81	25.21	25.25	25.27
5	16QAM	12	13	20.67	20.84	20.77	25.13	25.30	25.23
5	16QAM	25	0	20.89	20.61	20.72	25.35	25.07	25.18
5	64QAM	1	0	20.95	20.91	20.96	25.41	25.37	25.42
5	64QAM	1	12	20.92	20.83	20.96	25.38	25.29	25.42
5	64QAM	1	24	20.84	20.85	20.91	25.30	25.31	25.37
5	64QAM	12	0	19.83	19.95	19.98	24.29	24.41	24.44
5	64QAM	12	7	19.94	19.60	19.97	24.40	24.06	24.43
5	64QAM	12	13	19.77	19.78	19.70	24.23	24.24	24.16
5	64QAM	25	0	19.80	19.86	19.85	24.26	24.32	24.31
Channel				19965	20175	20385	19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
3	QPSK	1	0	22.78	22.76	22.66	27.24	27.22	27.12
3	QPSK	1	8	22.69	22.73	22.71	27.15	27.19	27.17
3	QPSK	1	14	22.65	22.64	22.67	27.11	27.10	27.13
3	QPSK	8	0	21.76	21.81	21.64	26.22	26.27	26.10
3	QPSK	8	4	21.80	21.79	21.80	26.26	26.25	26.26
3	QPSK	8	7	21.84	21.57	21.67	26.30	26.03	26.13
3	QPSK	15	0	21.76	21.76	21.64	26.22	26.22	26.10
3	16QAM	1	0	21.92	21.90	21.89	26.38	26.36	26.35
3	16QAM	1	8	21.87	21.75	21.85	26.33	26.21	26.31
3	16QAM	1	14	21.86	21.91	21.60	26.32	26.37	26.06
3	16QAM	8	0	20.92	20.84	20.77	25.38	25.30	25.23
3	16QAM	8	4	20.83	20.70	20.81	25.29	25.16	25.27
3	16QAM	8	7	20.69	20.61	20.73	25.15	25.07	25.19
3	16QAM	15	0	20.70	20.65	20.71	25.16	25.11	25.17
3	64QAM	1	0	20.94	20.92	20.75	25.40	25.38	25.21
3	64QAM	1	8	20.86	20.74	20.80	25.32	25.20	25.26
3	64QAM	1	14	20.82	20.72	20.86	25.28	25.18	25.32
3	64QAM	8	0	19.89	19.93	19.57	24.35	24.39	24.03
3	64QAM	8	4	19.85	19.79	19.76	24.31	24.25	24.22
3	64QAM	8	7	19.52	19.55	19.56	23.98	24.01	24.02
3	64QAM	15	0	19.86	19.83	19.83	24.32	24.29	24.29
Channel				19957	20175	20393	19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3	1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.77	22.75	22.76	27.23	27.21	27.22
1.4	QPSK	1	3	22.71	22.66	22.68	27.17	27.12	27.14
1.4	QPSK	1	5	22.72	22.74	22.65	27.18	27.20	27.11
1.4	QPSK	3	0	21.90	21.79	21.88	26.36	26.25	26.34
1.4	QPSK	3	1	21.85	21.63	21.76	26.31	26.09	26.22
1.4	QPSK	3	3	21.81	21.77	21.66	26.27	26.23	26.12

1.4	QPSK	6	0	21.82	21.87	21.75	26.28	26.33	26.21
1.4	16QAM	1	0	21.89	21.84	21.73	26.35	26.30	26.19
1.4	16QAM	1	3	21.85	21.82	21.86	26.31	26.28	26.32
1.4	16QAM	1	5	21.82	21.71	21.72	26.28	26.17	26.18
1.4	16QAM	3	0	20.71	20.90	20.69	25.17	25.36	25.15
1.4	16QAM	3	1	20.94	20.89	20.78	25.40	25.35	25.24
1.4	16QAM	3	3	20.92	20.67	20.76	25.38	25.13	25.22
1.4	16QAM	6	0	20.62	20.86	20.94	25.08	25.32	25.40
1.4	64QAM	1	0	20.80	20.87	20.73	25.26	25.33	25.19
1.4	64QAM	1	3	20.82	20.94	20.75	25.28	25.40	25.21
1.4	64QAM	1	5	20.96	20.93	20.97	25.42	25.39	25.43
1.4	64QAM	3	0	19.76	19.74	19.79	24.22	24.20	24.25
1.4	64QAM	3	1	19.91	19.56	19.72	24.37	24.02	24.18
1.4	64QAM	3	3	19.83	19.85	19.80	24.29	24.31	24.26
1.4	64QAM	6	0	19.84	19.82	19.97	24.30	24.28	24.43

LTE Band 5				Maximum Output Power(dBm)			ERP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				20450	20525	20600	20450	20525	20600
Frequency (MHz)				829	836.5	844	829	836.5	844
10	QPSK	1	0	23.09	23.15	23.19	22.72	22.78	22.82
10	QPSK	1	25	23.08	23.00	23.13	22.71	22.63	22.76
10	QPSK	1	49	22.91	23.13	23.16	22.54	22.76	22.79
10	QPSK	25	0	22.02	22.18	22.34	21.65	21.81	21.97
10	QPSK	25	12	22.15	22.28	22.10	21.78	21.91	21.73
10	QPSK	25	25	21.99	22.25	22.06	21.62	21.88	21.69
10	QPSK	50	0	22.11	22.14	22.20	21.74	21.77	21.83
10	16QAM	1	0	22.16	22.32	22.36	21.79	21.95	21.99
10	16QAM	1	25	22.24	22.30	22.14	21.87	21.93	21.77
10	16QAM	1	49	21.96	22.06	22.33	21.59	21.69	21.96
10	16QAM	25	0	21.03	21.06	21.17	20.66	20.69	20.80
10	16QAM	25	12	21.06	20.98	21.11	20.69	20.61	20.74
10	16QAM	25	25	20.93	21.08	21.03	20.56	20.71	20.66
10	16QAM	50	0	20.97	21.24	21.12	20.60	20.87	20.75
10	64QAM	1	0	21.22	21.31	21.25	20.85	20.94	20.88
10	64QAM	1	25	21.04	21.14	21.09	20.67	20.77	20.72
10	64QAM	1	49	21.03	21.18	21.16	20.66	20.81	20.79
10	64QAM	25	0	20.02	20.32	20.29	19.65	19.95	19.92
10	64QAM	25	12	20.17	20.11	20.15	19.80	19.74	19.78
10	64QAM	25	25	20.07	20.15	20.18	19.70	19.78	19.81
10	64QAM	50	0	20.14	20.23	20.16	19.77	19.86	19.79

Channel				20425	20525	20625	20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5	826.5	836.5	846.5
5	QPSK	1	0	23.06	23.11	23.16	22.69	22.74	22.79
5	QPSK	1	12	23.04	23.08	23.02	22.67	22.71	22.65
5	QPSK	1	24	23.02	23.06	23.13	22.65	22.69	22.76
5	QPSK	12	0	22.17	22.31	22.19	21.80	21.94	21.82
5	QPSK	12	7	22.24	22.11	22.12	21.87	21.74	21.75
5	QPSK	12	13	22.08	22.14	22.03	21.71	21.77	21.66
5	QPSK	25	0	21.93	22.21	22.00	21.56	21.84	21.63
5	16QAM	1	0	22.23	22.34	22.35	21.86	21.97	21.98
5	16QAM	1	12	22.22	22.17	22.08	21.85	21.80	21.71
5	16QAM	1	24	22.08	22.19	22.07	21.71	21.82	21.70
5	16QAM	12	0	21.08	21.27	21.20	20.71	20.90	20.83
5	16QAM	12	7	21.12	21.15	21.14	20.75	20.78	20.77
5	16QAM	12	13	21.12	21.09	21.19	20.75	20.72	20.82
5	16QAM	25	0	21.12	21.01	21.15	20.75	20.64	20.78
5	64QAM	1	0	21.11	21.14	21.22	20.74	20.77	20.85
5	64QAM	1	12	21.18	21.12	21.02	20.81	20.75	20.65
5	64QAM	1	24	21.16	21.23	21.19	20.79	20.86	20.82
5	64QAM	12	0	20.10	20.21	20.18	19.73	19.84	19.81
5	64QAM	12	7	20.09	19.98	20.15	19.72	19.61	19.78
5	64QAM	12	13	19.92	20.08	19.93	19.55	19.71	19.56
5	64QAM	25	0	20.07	20.19	20.14	19.70	19.82	19.77
Channel				20415	20525	20635	20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5	825.5	836.5	847.5
3	QPSK	1	0	23.05	23.17	23.15	22.68	22.80	22.78
3	QPSK	1	8	22.93	22.99	23.01	22.56	22.62	22.64
3	QPSK	1	14	23.01	23.06	23.07	22.64	22.69	22.70
3	QPSK	8	0	22.10	22.07	22.27	21.73	21.70	21.90
3	QPSK	8	4	22.10	22.35	22.12	21.73	21.98	21.75
3	QPSK	8	7	21.94	22.02	22.14	21.57	21.65	21.77
3	QPSK	15	0	22.15	22.18	22.20	21.78	21.81	21.83
3	16QAM	1	0	22.21	22.33	22.19	21.84	21.96	21.82
3	16QAM	1	8	22.05	22.29	22.14	21.68	21.92	21.77
3	16QAM	1	14	22.10	22.14	22.32	21.73	21.77	21.95
3	16QAM	8	0	21.15	21.31	21.31	20.78	20.94	20.94
3	16QAM	8	4	20.95	21.29	21.23	20.58	20.92	20.86
3	16QAM	8	7	21.10	21.10	21.21	20.73	20.73	20.84
3	16QAM	15	0	21.09	21.23	21.12	20.72	20.86	20.75
3	64QAM	1	0	21.25	21.28	21.36	20.88	20.91	20.99
3	64QAM	1	8	21.05	21.06	21.07	20.68	20.69	20.70
3	64QAM	1	14	21.10	21.09	21.26	20.73	20.72	20.89
3	64QAM	8	0	20.20	20.29	20.21	19.83	19.92	19.84

3	64QAM	8	4	20.09	20.13	20.10	19.72	19.76	19.73
3	64QAM	8	7	20.07	20.06	20.05	19.70	19.69	19.68
3	64QAM	15	0	20.03	20.01	19.98	19.66	19.64	19.61
Channel				20407	20525	20643	20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3	824.7	836.5	848.3
1.4	QPSK	1	0	23.12	23.14	23.17	22.75	22.77	22.80
1.4	QPSK	1	3	23.08	23.06	23.15	22.71	22.69	22.78
1.4	QPSK	1	5	22.92	22.96	23.02	22.55	22.59	22.65
1.4	QPSK	3	0	22.10	22.18	22.09	21.73	21.81	21.72
1.4	QPSK	3	1	22.12	22.03	22.08	21.75	21.66	21.71
1.4	QPSK	3	3	22.08	22.02	22.15	21.71	21.65	21.78
1.4	QPSK	6	0	21.88	22.02	22.00	21.51	21.65	21.63
1.4	16QAM	1	0	22.09	22.36	22.28	21.72	21.99	21.91
1.4	16QAM	1	3	22.16	22.14	22.16	21.79	21.77	21.79
1.4	16QAM	1	5	22.14	22.14	22.28	21.77	21.77	21.91
1.4	16QAM	3	0	21.00	21.27	21.03	20.63	20.90	20.66
1.4	16QAM	3	1	21.20	21.21	21.29	20.83	20.84	20.92
1.4	16QAM	3	3	21.06	21.11	21.13	20.69	20.74	20.76
1.4	16QAM	6	0	21.02	21.05	21.25	20.65	20.68	20.88
1.4	64QAM	1	0	21.28	21.26	21.15	20.91	20.89	20.78
1.4	64QAM	1	3	21.05	21.20	21.20	20.68	20.83	20.83
1.4	64QAM	1	5	21.09	21.27	21.08	20.72	20.90	20.71
1.4	64QAM	3	0	20.01	20.14	20.15	19.64	19.77	19.78
1.4	64QAM	3	1	20.07	20.16	20.01	19.70	19.79	19.64
1.4	64QAM	3	3	20.05	20.13	20.18	19.68	19.76	19.81
1.4	64QAM	6	0	20.16	20.26	20.21	19.79	19.89	19.84

LTE Band 12				Maximum Output Power(dBm)			ERP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				23060	23095	23130	23060	23095	23130
Frequency (MHz)				704	707.5	711	704	707.5	711
10	QPSK	1	0	23.17	23.13	23.25	22.10	22.06	22.18
10	QPSK	1	25	23.20	23.17	23.12	22.13	22.10	22.05
10	QPSK	1	49	23.12	23.06	23.22	22.05	21.99	22.15
10	QPSK	25	0	22.34	22.31	22.40	21.27	21.24	21.33
10	QPSK	25	12	22.19	22.26	22.15	21.12	21.19	21.08
10	QPSK	25	25	22.11	22.24	22.10	21.04	21.17	21.03
10	QPSK	50	0	22.26	22.19	22.17	21.19	21.12	21.10
10	16QAM	1	0	22.21	22.41	22.45	21.14	21.34	21.38
10	16QAM	1	25	22.28	22.23	22.36	21.21	21.16	21.29
10	16QAM	1	49	22.31	22.33	22.23	21.24	21.26	21.16

10	16QAM	25	0	21.31	21.15	21.35	20.24	20.08	20.28
10	16QAM	25	12	21.07	21.36	21.12	20.00	20.29	20.05
10	16QAM	25	25	21.13	21.05	21.26	20.06	19.98	20.19
10	16QAM	50	0	21.22	21.32	21.21	20.15	20.25	20.14
10	64QAM	1	0	21.25	21.35	21.39	20.18	20.28	20.32
10	64QAM	1	25	21.24	21.30	21.22	20.17	20.23	20.15
10	64QAM	1	49	21.14	21.31	21.28	20.07	20.24	20.21
10	64QAM	25	0	20.29	20.22	20.26	19.22	19.15	19.19
10	64QAM	25	12	20.24	20.31	20.34	19.17	19.24	19.27
10	64QAM	25	25	20.17	20.29	20.22	19.10	19.22	19.15
10	64QAM	50	0	20.10	20.22	20.10	19.03	19.15	19.03
Channel				23035	23095	23155	23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5	701.5	707.5	713.5
5	QPSK	1	0	23.13	23.12	23.22	22.06	22.05	22.15
5	QPSK	1	12	23.19	23.15	23.19	22.12	22.08	22.12
5	QPSK	1	24	23.19	23.17	23.14	22.12	22.10	22.07
5	QPSK	12	0	22.12	22.15	22.26	21.05	21.08	21.19
5	QPSK	12	7	22.10	22.21	22.14	21.03	21.14	21.07
5	QPSK	12	13	22.03	22.22	22.18	20.96	21.15	21.11
5	QPSK	25	0	22.14	22.07	22.12	21.07	21.00	21.05
5	16QAM	1	0	22.35	22.35	22.30	21.28	21.28	21.23
5	16QAM	1	12	22.28	22.21	22.32	21.21	21.14	21.25
5	16QAM	1	24	22.24	22.32	22.18	21.17	21.25	21.11
5	16QAM	12	0	21.15	21.13	21.18	20.08	20.06	20.11
5	16QAM	12	7	20.97	21.16	21.28	19.90	20.09	20.21
5	16QAM	12	13	21.14	21.07	21.26	20.07	20.00	20.19
5	16QAM	25	0	20.99	21.24	21.05	19.92	20.17	19.98
5	64QAM	1	0	21.24	21.26	21.32	20.17	20.19	20.25
5	64QAM	1	12	21.22	21.18	21.17	20.15	20.11	20.10
5	64QAM	1	24	21.23	21.17	21.16	20.16	20.10	20.09
5	64QAM	12	0	20.10	20.11	20.37	19.03	19.04	19.30
5	64QAM	12	7	20.05	20.19	20.29	18.98	19.12	19.22
5	64QAM	12	13	20.07	20.04	20.05	19.00	18.97	18.98
5	64QAM	25	0	20.06	20.25	20.22	18.99	19.18	19.15
Channel				23025	23095	23165	23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5	700.5	707.5	714.5
3	QPSK	1	0	23.16	23.20	23.20	22.09	22.13	22.13
3	QPSK	1	8	23.15	23.05	23.18	22.08	21.98	22.11
3	QPSK	1	14	23.05	23.12	23.02	21.98	22.05	21.95
3	QPSK	8	0	22.16	22.20	22.14	21.09	21.13	21.07
3	QPSK	8	4	22.10	22.23	22.17	21.03	21.16	21.10
3	QPSK	8	7	22.19	22.20	22.10	21.12	21.13	21.03
3	QPSK	15	0	22.03	22.16	22.18	20.96	21.09	21.11

3	16QAM	1	0	22.24	22.29	22.35	21.17	21.22	21.28
3	16QAM	1	8	22.16	22.33	22.36	21.09	21.26	21.29
3	16QAM	1	14	22.07	22.36	22.31	21.00	21.29	21.24
3	16QAM	8	0	21.07	21.38	21.12	20.00	20.31	20.05
3	16QAM	8	4	21.30	21.31	21.33	20.23	20.24	20.26
3	16QAM	8	7	21.12	21.15	21.20	20.05	20.08	20.13
3	16QAM	15	0	21.11	21.03	21.01	20.04	19.96	19.94
3	64QAM	1	0	21.31	21.36	21.24	20.24	20.29	20.17
3	64QAM	1	8	21.26	21.29	21.41	20.19	20.22	20.34
3	64QAM	1	14	21.11	21.36	21.37	20.04	20.29	20.30
3	64QAM	8	0	20.31	20.11	20.20	19.24	19.04	19.13
3	64QAM	8	4	20.01	20.31	20.34	18.94	19.24	19.27
3	64QAM	8	7	20.05	20.20	20.15	18.98	19.13	19.08
3	64QAM	15	0	20.03	20.36	20.19	18.96	19.29	19.12
Channel				23017	23095	23173	23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3	699.7	707.5	715.3
1.4	QPSK	1	0	23.16	23.17	23.19	22.09	22.10	22.12
1.4	QPSK	1	3	23.07	23.17	23.07	22.00	22.10	22.00
1.4	QPSK	1	5	23.05	23.07	23.18	21.98	22.00	22.11
1.4	QPSK	3	0	22.28	22.33	22.34	21.21	21.26	21.27
1.4	QPSK	3	1	22.26	22.30	22.31	21.19	21.23	21.24
1.4	QPSK	3	3	22.23	22.13	22.17	21.16	21.06	21.10
1.4	QPSK	6	0	22.28	22.39	22.17	21.21	21.32	21.10
1.4	16QAM	1	0	22.27	22.33	22.42	21.20	21.26	21.35
1.4	16QAM	1	3	22.07	22.34	22.37	21.00	21.27	21.30
1.4	16QAM	1	5	22.09	22.33	22.40	21.02	21.26	21.33
1.4	16QAM	3	0	21.15	21.19	21.20	20.08	20.12	20.13
1.4	16QAM	3	1	21.12	21.13	21.29	20.05	20.06	20.22
1.4	16QAM	3	3	21.10	21.25	21.27	20.03	20.18	20.20
1.4	16QAM	6	0	21.21	21.09	21.02	20.14	20.02	19.95
1.4	64QAM	1	0	21.27	21.25	21.37	20.20	20.18	20.30
1.4	64QAM	1	3	21.12	21.29	21.28	20.05	20.22	20.21
1.4	64QAM	1	5	21.08	21.19	21.13	20.01	20.12	20.06
1.4	64QAM	3	0	20.03	20.27	20.18	18.96	19.20	19.11
1.4	64QAM	3	1	20.14	20.20	20.13	19.07	19.13	19.06
1.4	64QAM	3	3	20.20	20.06	20.24	19.13	18.99	19.17
1.4	64QAM	6	0	20.09	20.26	20.31	19.02	19.19	19.24

LTE Band 41 (Power Class 2)				Maximum Output Power(dBm)			EIRP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				39750	40620	41490	39750	40620	41490
Frequency (MHz)				2506	2593	2680	2506	2593	2680
20	QPSK	1	0	25.60	25.68	25.42	30.69	30.77	30.51
20	QPSK	1	49	25.63	25.40	25.55	30.72	30.49	30.64
20	QPSK	1	99	25.42	25.54	25.47	30.51	30.63	30.56
20	QPSK	50	0	24.61	24.80	24.60	29.70	29.89	29.69
20	QPSK	50	24	24.65	24.65	24.70	29.74	29.74	29.79
20	QPSK	50	50	24.58	24.62	24.57	29.67	29.71	29.66
20	QPSK	100	0	24.65	24.52	24.69	29.74	29.61	29.78
20	16QAM	1	0	24.55	24.64	24.70	29.64	29.73	29.79
20	16QAM	1	49	24.84	24.68	24.56	29.93	29.77	29.65
20	16QAM	1	99	24.52	24.67	24.72	29.61	29.76	29.81
20	16QAM	50	0	23.62	23.61	23.67	28.71	28.70	28.76
20	16QAM	50	24	23.58	23.46	23.43	28.67	28.55	28.52
20	16QAM	50	50	23.49	23.60	23.53	28.58	28.69	28.62
20	16QAM	100	0	23.45	23.58	23.48	28.54	28.67	28.57
20	64QAM	1	0	23.56	23.81	23.68	28.65	28.90	28.77
20	64QAM	1	49	23.67	23.77	23.54	28.76	28.86	28.63
20	64QAM	1	99	23.61	23.58	23.73	28.70	28.67	28.82
20	64QAM	50	0	22.54	22.52	22.46	27.63	27.61	27.55
20	64QAM	50	24	22.43	22.54	22.47	27.52	27.63	27.56
20	64QAM	50	50	22.42	22.63	22.48	27.51	27.72	27.57
20	64QAM	100	0	22.49	22.58	22.56	27.58	27.67	27.65
Channel				39725	40620	41515	39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5	2503.5	2593	2682.5
15	QPSK	1	0	25.56	25.65	25.40	30.65	30.74	30.49
15	QPSK	1	37	25.43	25.42	25.57	30.52	30.51	30.66
15	QPSK	1	74	25.35	25.34	25.63	30.44	30.43	30.72
15	QPSK	36	0	24.51	24.79	24.80	29.60	29.88	29.89
15	QPSK	36	20	24.51	24.61	24.62	29.60	29.70	29.71
15	QPSK	36	39	24.50	24.65	24.54	29.59	29.74	29.63
15	QPSK	75	0	24.37	24.66	24.55	29.46	29.75	29.64
15	16QAM	1	0	24.69	24.82	24.62	29.78	29.91	29.71
15	16QAM	1	37	24.63	24.56	24.71	29.72	29.65	29.80
15	16QAM	1	74	24.46	24.53	24.64	29.55	29.62	29.73
15	16QAM	36	0	23.55	23.64	23.54	28.64	28.73	28.63
15	16QAM	36	20	23.65	23.59	23.57	28.74	28.68	28.66
15	16QAM	36	39	23.54	23.30	23.31	28.63	28.39	28.40

15	16QAM	75	0	23.34	23.36	23.58	28.43	28.45	28.67
15	64QAM	1	0	23.82	23.83	23.62	28.91	28.92	28.71
15	64QAM	1	37	23.50	23.70	23.58	28.59	28.79	28.67
15	64QAM	1	74	23.62	23.68	23.68	28.71	28.77	28.77
15	64QAM	36	0	22.47	22.53	22.72	27.56	27.62	27.81
15	64QAM	36	20	22.44	22.67	22.48	27.53	27.76	27.57
15	64QAM	36	39	22.57	22.55	22.37	27.66	27.64	27.46
15	64QAM	75	0	22.42	22.40	22.61	27.51	27.49	27.70
Channel				39700	40620	41540	39700	40620	41540
Frequency (MHz)				2501	2593	2685	2501	2593	2685
10	QPSK	1	0	25.57	25.62	25.53	30.66	30.71	30.62
10	QPSK	1	25	25.49	25.59	25.41	30.58	30.68	30.50
10	QPSK	1	49	25.44	25.60	25.63	30.53	30.69	30.72
10	QPSK	25	0	24.62	24.58	24.77	29.71	29.67	29.86
10	QPSK	25	12	24.72	24.49	24.43	29.81	29.58	29.52
10	QPSK	25	25	24.61	24.43	24.41	29.70	29.52	29.50
10	QPSK	50	0	24.64	24.63	24.45	29.73	29.72	29.54
10	16QAM	1	0	24.60	24.64	24.72	29.69	29.73	29.81
10	16QAM	1	25	24.73	24.70	24.77	29.82	29.79	29.86
10	16QAM	1	49	24.67	24.53	24.66	29.76	29.62	29.75
10	16QAM	25	0	23.52	23.64	23.43	28.61	28.73	28.52
10	16QAM	25	12	23.60	23.67	23.65	28.69	28.76	28.74
10	16QAM	25	25	23.47	23.51	23.37	28.56	28.60	28.46
10	16QAM	50	0	23.58	23.62	23.48	28.67	28.71	28.57
10	64QAM	1	0	23.64	23.88	23.70	28.73	28.97	28.79
10	64QAM	1	25	23.55	23.54	23.60	28.64	28.63	28.69
10	64QAM	1	49	23.75	23.60	23.64	28.84	28.69	28.73
10	64QAM	25	0	22.42	22.62	22.56	27.51	27.71	27.65
10	64QAM	25	12	22.43	22.57	22.65	27.52	27.66	27.74
10	64QAM	25	25	22.46	22.52	22.31	27.55	27.61	27.40
10	64QAM	50	0	22.65	22.47	22.67	27.74	27.56	27.76
Channel				39675	40620	41565	39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5	2498.5	2593	2687.5
5	QPSK	1	0	25.62	25.60	25.60	30.71	30.69	30.69
5	QPSK	1	12	25.46	25.43	25.59	30.55	30.52	30.68
5	QPSK	1	24	25.60	25.34	25.45	30.69	30.43	30.54
5	QPSK	12	0	24.54	24.45	24.48	29.63	29.54	29.57
5	QPSK	12	7	24.52	24.55	24.58	29.61	29.64	29.67
5	QPSK	12	13	24.65	24.61	24.58	29.74	29.70	29.67
5	QPSK	25	0	24.62	24.38	24.59	29.71	29.47	29.68
5	16QAM	1	0	24.72	24.70	24.66	29.81	29.79	29.75
5	16QAM	1	12	24.76	24.64	24.65	29.85	29.73	29.74
5	16QAM	1	24	24.69	24.64	24.69	29.78	29.73	29.78

5	16QAM	12	0	23.61	23.63	23.72	28.70	28.72	28.81
5	16QAM	12	7	23.59	23.59	23.54	28.68	28.68	28.63
5	16QAM	12	13	23.44	23.52	23.44	28.53	28.61	28.53
5	16QAM	25	0	23.37	23.62	23.45	28.46	28.71	28.54
5	64QAM	1	0	23.81	23.87	23.80	28.90	28.96	28.89
5	64QAM	1	12	23.56	23.67	23.52	28.65	28.76	28.61
5	64QAM	1	24	23.61	23.75	23.50	28.70	28.84	28.59
5	64QAM	12	0	22.57	22.63	22.70	27.66	27.72	27.79
5	64QAM	12	7	22.42	22.59	22.69	27.51	27.68	27.78
5	64QAM	12	13	22.57	22.40	22.63	27.66	27.49	27.72
5	64QAM	25	0	22.61	22.46	22.36	27.70	27.55	27.45

LTE Band 41 (Power Class 3)				Maximum Output Power(dBm)			EIRP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				39750	40620	41490	39750	40620	41490
Frequency (MHz)				2506	2593	2680	2506	2593	2680
20	QPSK	1	0	23.20	23.26	23.15	28.29	28.35	28.24
20	QPSK	1	49	23.05	23.10	23.03	28.14	28.19	28.12
20	QPSK	1	99	23.06	23.11	23.00	28.15	28.20	28.09
20	QPSK	50	0	22.27	22.33	22.18	27.36	27.42	27.27
20	QPSK	50	24	22.07	22.19	22.02	27.16	27.28	27.11
20	QPSK	50	50	22.14	22.09	22.06	27.23	27.18	27.15
20	QPSK	100	0	22.09	22.10	21.89	27.18	27.19	26.98
20	16QAM	1	0	22.25	22.31	22.17	27.34	27.40	27.26
20	16QAM	1	49	22.25	22.11	22.06	27.34	27.20	27.15
20	16QAM	1	99	22.19	22.00	22.16	27.28	27.09	27.25
20	16QAM	50	0	21.02	21.22	21.08	26.11	26.31	26.17
20	16QAM	50	24	20.99	21.07	21.06	26.08	26.16	26.15
20	16QAM	50	50	20.90	21.10	21.01	25.99	26.19	26.10
20	16QAM	100	0	21.02	21.07	20.95	26.11	26.16	26.04
20	64QAM	1	0	21.20	21.41	21.37	26.29	26.50	26.46
20	64QAM	1	49	21.25	21.26	21.05	26.34	26.35	26.14
20	64QAM	1	99	21.19	21.09	21.03	26.28	26.18	26.12
20	64QAM	50	0	19.94	20.15	20.18	25.03	25.24	25.27
20	64QAM	50	24	19.86	20.13	19.88	24.95	25.22	24.97
20	64QAM	50	50	20.14	19.99	19.81	25.23	25.08	24.90
20	64QAM	100	0	19.86	19.87	19.93	24.95	24.96	25.02
Channel				39725	40620	41515	39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5	2503.5	2593	2682.5
15	QPSK	1	0	23.05	23.20	23.04	28.14	28.29	28.13
15	QPSK	1	37	22.89	22.97	22.97	27.98	28.06	28.06

15	QPSK	1	74	22.88	23.14	22.98	27.97	28.23	28.07
15	QPSK	36	0	22.28	22.23	22.01	27.37	27.32	27.10
15	QPSK	36	20	22.06	22.19	21.94	27.15	27.28	27.03
15	QPSK	36	39	21.98	22.04	21.92	27.07	27.13	27.01
15	QPSK	75	0	22.19	21.91	22.03	27.28	27.00	27.12
15	16QAM	1	0	22.16	22.28	22.17	27.25	27.37	27.26
15	16QAM	1	37	22.20	22.27	22.23	27.29	27.36	27.32
15	16QAM	1	74	22.20	22.12	22.26	27.29	27.21	27.35
15	16QAM	36	0	20.95	21.15	21.08	26.04	26.24	26.17
15	16QAM	36	20	20.95	21.18	21.13	26.04	26.27	26.22
15	16QAM	36	39	20.84	20.87	20.96	25.93	25.96	26.05
15	16QAM	75	0	21.16	21.17	21.01	26.25	26.26	26.10
15	64QAM	1	0	21.02	21.07	21.11	26.11	26.16	26.20
15	64QAM	1	37	21.27	21.08	21.22	26.36	26.17	26.31
15	64QAM	1	74	20.93	21.17	21.05	26.02	26.26	26.14
15	64QAM	36	0	20.09	20.24	20.26	25.18	25.33	25.35
15	64QAM	36	20	20.19	20.06	20.13	25.28	25.15	25.22
15	64QAM	36	39	19.93	20.15	20.08	25.02	25.24	25.17
15	64QAM	75	0	20.19	20.21	19.97	25.28	25.30	25.06
Channel				39700	40620	41540	39700	40620	41540
Frequency (MHz)				2501	2593	2685	2501	2593	2685
10	QPSK	1	0	23.14	23.16	23.01	28.23	28.25	28.10
10	QPSK	1	25	22.89	22.97	23.03	27.98	28.06	28.12
10	QPSK	1	49	22.89	23.05	22.93	27.98	28.14	28.02
10	QPSK	25	0	22.12	22.16	22.20	27.21	27.25	27.29
10	QPSK	25	12	22.24	22.04	21.90	27.33	27.13	26.99
10	QPSK	25	25	22.05	22.15	22.06	27.14	27.24	27.15
10	QPSK	50	0	22.15	22.00	22.10	27.24	27.09	27.19
10	16QAM	1	0	22.35	22.38	22.35	27.44	27.47	27.44
10	16QAM	1	25	22.17	22.04	22.03	27.26	27.13	27.12
10	16QAM	1	49	22.09	22.24	22.26	27.18	27.33	27.35
10	16QAM	25	0	20.97	21.15	21.04	26.06	26.24	26.13
10	16QAM	25	12	21.19	20.95	21.12	26.28	26.04	26.21
10	16QAM	25	25	20.95	20.99	20.93	26.04	26.08	26.02
10	16QAM	50	0	20.89	21.15	20.89	25.98	26.24	25.98
10	64QAM	1	0	21.27	21.19	21.16	26.36	26.28	26.25
10	64QAM	1	25	21.18	21.03	21.05	26.27	26.12	26.14
10	64QAM	1	49	21.07	21.18	21.13	26.16	26.27	26.22
10	64QAM	25	0	20.07	20.21	20.18	25.16	25.30	25.27
10	64QAM	25	12	20.16	19.98	19.87	25.25	25.07	24.96
10	64QAM	25	25	19.90	20.11	19.95	24.99	25.20	25.04
10	64QAM	50	0	20.12	19.96	20.07	25.21	25.05	25.16
Channel				39675	40620	41565	39675	40620	41565

Frequency (MHz)				2498.5	2593	2687.5	2498.5	2593	2687.5
5	QPSK	1	0	23.12	23.19	22.99	28.21	28.28	28.08
5	QPSK	1	12	23.02	23.19	22.95	28.11	28.28	28.04
5	QPSK	1	24	23.12	23.08	23.03	28.21	28.17	28.12
5	QPSK	12	0	22.09	22.23	22.09	27.18	27.32	27.18
5	QPSK	12	7	22.11	22.05	22.21	27.20	27.14	27.30
5	QPSK	12	13	21.95	22.00	22.11	27.04	27.09	27.20
5	QPSK	25	0	22.15	22.18	22.14	27.24	27.27	27.23
5	16QAM	1	0	22.14	22.11	22.13	27.23	27.20	27.22
5	16QAM	1	12	22.02	22.05	22.01	27.11	27.14	27.10
5	16QAM	1	24	22.17	22.16	21.95	27.26	27.25	27.04
5	16QAM	12	0	21.16	21.00	21.13	26.25	26.09	26.22
5	16QAM	12	7	20.90	20.95	21.12	25.99	26.04	26.21
5	16QAM	12	13	21.01	21.04	21.04	26.10	26.13	26.13
5	16QAM	25	0	20.95	21.15	20.84	26.04	26.24	25.93
5	64QAM	1	0	21.22	21.15	21.09	26.31	26.24	26.18
5	64QAM	1	12	21.28	21.25	21.08	26.37	26.34	26.17
5	64QAM	1	24	21.16	21.04	21.02	26.25	26.13	26.11
5	64QAM	12	0	19.97	20.05	20.16	25.06	25.14	25.25
5	64QAM	12	7	20.14	20.13	20.00	25.23	25.22	25.09
5	64QAM	12	13	20.14	20.09	20.15	25.23	25.18	25.24
5	64QAM	25	0	20.02	20.01	20.04	25.11	25.10	25.13

LTE Band 66				Maximum Output Power(dBm)			EIRP (dBm)		
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
Channel				132072	132322	132572	132072	132322	132572
Frequency (MHz)				1720	1745	1770	1720	1745	1770
20	QPSK	1	0	22.72	22.81	22.78	27.18	27.27	27.24
20	QPSK	1	49	22.74	22.67	22.59	27.20	27.13	27.05
20	QPSK	1	99	22.51	22.69	22.62	26.97	27.15	27.08
20	QPSK	50	0	21.79	21.90	21.88	26.25	26.36	26.34
20	QPSK	50	24	21.74	21.69	21.56	26.20	26.15	26.02
20	QPSK	50	50	21.66	21.71	21.68	26.12	26.17	26.14
20	QPSK	100	0	21.55	21.79	21.68	26.01	26.25	26.14
20	16QAM	1	0	21.73	21.85	21.83	26.19	26.31	26.29
20	16QAM	1	49	21.56	21.71	21.76	26.02	26.17	26.22
20	16QAM	1	99	21.69	21.66	21.71	26.15	26.12	26.17
20	16QAM	50	0	20.81	20.86	20.72	25.27	25.32	25.18
20	16QAM	50	24	20.81	20.62	20.84	25.27	25.08	25.30
20	16QAM	50	50	20.52	20.76	20.60	24.98	25.22	25.06
20	16QAM	100	0	20.72	20.58	20.76	25.18	25.04	25.22

20	64QAM	1	0	20.82	20.80	20.74	25.28	25.26	25.20
20	64QAM	1	49	20.70	20.76	20.70	25.16	25.22	25.16
20	64QAM	1	99	20.56	20.65	20.67	25.02	25.11	25.13
20	64QAM	50	0	19.73	19.84	19.71	24.19	24.30	24.17
20	64QAM	50	24	19.63	19.56	19.76	24.09	24.02	24.22
20	64QAM	50	50	19.57	19.60	19.79	24.03	24.06	24.25
20	64QAM	100	0	19.77	19.69	19.73	24.23	24.15	24.19
Channel				132047	132322	132597	132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5	1717.5	1745	1772.5
15	QPSK	1	0	22.73	22.75	22.68	27.19	27.21	27.14
15	QPSK	1	37	22.72	22.68	22.70	27.18	27.14	27.16
15	QPSK	1	74	22.63	22.66	22.66	27.09	27.12	27.12
15	QPSK	36	0	21.76	21.87	21.86	26.22	26.33	26.32
15	QPSK	36	20	21.63	21.70	21.62	26.09	26.16	26.08
15	QPSK	36	39	21.59	21.75	21.65	26.05	26.21	26.11
15	QPSK	75	0	21.50	21.59	21.70	25.96	26.05	26.16
15	16QAM	1	0	21.75	21.85	21.85	26.21	26.31	26.31
15	16QAM	1	37	21.70	21.80	21.76	26.16	26.26	26.22
15	16QAM	1	74	21.82	21.86	21.78	26.28	26.32	26.24
15	16QAM	36	0	20.71	20.83	20.73	25.17	25.29	25.19
15	16QAM	36	20	20.66	20.80	20.95	25.12	25.26	25.41
15	16QAM	36	39	20.63	20.67	20.87	25.09	25.13	25.33
15	16QAM	75	0	20.67	20.65	20.51	25.13	25.11	24.97
15	64QAM	1	0	20.73	20.83	20.74	25.19	25.29	25.20
15	64QAM	1	37	20.64	20.74	20.61	25.10	25.20	25.07
15	64QAM	1	74	20.77	20.81	20.83	25.23	25.27	25.29
15	64QAM	36	0	19.65	19.75	19.82	24.11	24.21	24.28
15	64QAM	36	20	19.73	19.76	19.56	24.19	24.22	24.02
15	64QAM	36	39	19.58	19.84	19.69	24.04	24.30	24.15
15	64QAM	75	0	19.51	19.71	19.84	23.97	24.17	24.30
Channel				132022	132322	132622	132022	132322	132622
Frequency (MHz)				1715	1745	1775	1715	1745	1775
10	QPSK	1	0	22.74	22.79	22.75	27.20	27.25	27.21
10	QPSK	1	25	22.61	22.69	22.59	27.07	27.15	27.05
10	QPSK	1	49	22.62	22.75	22.53	27.08	27.21	26.99
10	QPSK	25	0	21.62	21.89	21.74	26.08	26.35	26.20
10	QPSK	25	12	21.82	21.87	21.85	26.28	26.33	26.31
10	QPSK	25	25	21.66	21.61	21.66	26.12	26.07	26.12
10	QPSK	50	0	21.69	21.91	21.61	26.15	26.37	26.07
10	16QAM	1	0	21.76	21.80	21.82	26.22	26.26	26.28
10	16QAM	1	25	21.83	21.76	21.75	26.29	26.22	26.21
10	16QAM	1	49	21.68	21.69	21.83	26.14	26.15	26.29

10	16QAM	25	0	20.82	20.88	20.86	25.28	25.34	25.32
10	16QAM	25	12	20.65	20.86	20.62	25.11	25.32	25.08
10	16QAM	25	25	20.59	20.53	20.67	25.05	24.99	25.13
10	16QAM	50	0	20.69	20.77	20.60	25.15	25.23	25.06
10	64QAM	1	0	20.76	20.88	20.85	25.22	25.34	25.31
10	64QAM	1	25	20.62	20.67	20.75	25.08	25.13	25.21
10	64QAM	1	49	20.57	20.71	20.76	25.03	25.17	25.22
10	64QAM	25	0	19.52	19.77	19.63	23.98	24.23	24.09
10	64QAM	25	12	19.65	19.73	19.77	24.11	24.19	24.23
10	64QAM	25	25	19.59	19.75	19.54	24.05	24.21	24.00
10	64QAM	50	0	19.69	19.80	19.54	24.15	24.26	24.00
Channel				131997	132322	132647	131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5	1712.5	1745	1777.5
5	QPSK	1	0	22.66	22.78	22.73	27.12	27.24	27.19
5	QPSK	1	12	22.77	22.71	22.71	27.23	27.17	27.17
5	QPSK	1	24	22.71	22.76	22.50	27.17	27.22	26.96
5	QPSK	12	0	21.72	21.76	21.76	26.18	26.22	26.22
5	QPSK	12	7	21.80	21.63	21.58	26.26	26.09	26.04
5	QPSK	12	13	21.60	21.62	21.51	26.06	26.08	25.97
5	QPSK	25	0	21.64	21.65	21.79	26.10	26.11	26.25
5	16QAM	1	0	21.88	21.86	21.73	26.34	26.32	26.19
5	16QAM	1	12	21.83	21.75	21.72	26.29	26.21	26.18
5	16QAM	1	24	21.59	21.77	21.66	26.05	26.23	26.12
5	16QAM	12	0	20.71	20.69	20.76	25.17	25.15	25.22
5	16QAM	12	7	20.64	20.75	20.81	25.10	25.21	25.27
5	16QAM	12	13	20.51	20.57	20.54	24.97	25.03	25.00
5	16QAM	25	0	20.40	20.60	20.65	24.86	25.06	25.11
5	64QAM	1	0	20.68	20.79	20.72	25.14	25.25	25.18
5	64QAM	1	12	20.89	20.84	20.82	25.35	25.30	25.28
5	64QAM	1	24	20.52	20.63	20.73	24.98	25.09	25.19
5	64QAM	12	0	19.83	19.70	19.77	24.29	24.16	24.23
5	64QAM	12	7	19.66	19.80	19.78	24.12	24.26	24.24
5	64QAM	12	13	19.59	19.75	19.78	24.05	24.21	24.24
5	64QAM	25	0	19.56	19.70	19.65	24.02	24.16	24.11
Channel				131987	132322	132657	131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5	1711.5	1745	1778.5
3	QPSK	1	0	22.68	22.77	22.68	27.14	27.23	27.14
3	QPSK	1	8	22.59	22.71	22.59	27.05	27.17	27.05
3	QPSK	1	14	22.60	22.63	22.75	27.06	27.09	27.21
3	QPSK	8	0	21.65	21.77	21.78	26.11	26.23	26.24
3	QPSK	8	4	21.75	21.79	21.71	26.21	26.25	26.17
3	QPSK	8	7	21.57	21.64	21.46	26.03	26.10	25.92
3	QPSK	15	0	21.74	21.60	21.63	26.20	26.06	26.09

3	16QAM	1	0	21.77	21.86	21.84	26.23	26.32	26.30
3	16QAM	1	8	21.87	21.83	21.69	26.33	26.29	26.15
3	16QAM	1	14	21.68	21.82	21.77	26.14	26.28	26.23
3	16QAM	8	0	20.68	20.71	20.90	25.14	25.17	25.36
3	16QAM	8	4	20.69	20.72	20.88	25.15	25.18	25.34
3	16QAM	8	7	20.62	20.57	20.70	25.08	25.03	25.16
3	16QAM	15	0	20.65	20.80	20.53	25.11	25.26	24.99
3	64QAM	1	0	20.73	20.87	20.81	25.19	25.33	25.27
3	64QAM	1	8	20.82	20.82	20.82	25.28	25.28	25.28
3	64QAM	1	14	20.58	20.69	20.73	25.04	25.15	25.19
3	64QAM	8	0	19.69	19.81	19.83	24.15	24.27	24.29
3	64QAM	8	4	19.62	19.66	19.62	24.08	24.12	24.08
3	64QAM	8	7	19.61	19.70	19.56	24.07	24.16	24.02
3	64QAM	15	0	19.64	19.75	19.87	24.10	24.21	24.33
Channel				131979	132322	132665	131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3	1710.7	1745	1779.3
1.4	QPSK	1	0	22.70	22.76	22.65	27.16	27.22	27.11
1.4	QPSK	1	3	22.57	22.72	22.69	27.03	27.18	27.15
1.4	QPSK	1	5	22.60	22.65	22.61	27.06	27.11	27.07
1.4	QPSK	3	0	21.65	21.72	21.67	26.11	26.18	26.13
1.4	QPSK	3	1	21.66	21.65	21.86	26.12	26.11	26.32
1.4	QPSK	3	3	21.73	21.80	21.69	26.19	26.26	26.15
1.4	QPSK	6	0	21.77	21.60	21.80	26.23	26.06	26.26
1.4	16QAM	1	0	21.81	21.83	21.79	26.27	26.29	26.25
1.4	16QAM	1	3	21.69	21.82	21.74	26.15	26.28	26.20
1.4	16QAM	1	5	21.55	21.87	21.77	26.01	26.33	26.23
1.4	16QAM	3	0	20.57	20.76	20.71	25.03	25.22	25.17
1.4	16QAM	3	1	20.65	20.85	20.85	25.11	25.31	25.31
1.4	16QAM	3	3	20.52	20.69	20.83	24.98	25.15	25.29
1.4	16QAM	6	0	20.65	20.83	20.68	25.11	25.29	25.14
1.4	64QAM	1	0	20.71	20.86	20.80	25.17	25.32	25.26
1.4	64QAM	1	3	20.84	20.78	20.81	25.30	25.24	25.27
1.4	64QAM	1	5	20.56	20.68	20.72	25.02	25.14	25.18
1.4	64QAM	3	0	19.65	19.89	19.90	24.11	24.35	24.36
1.4	64QAM	3	1	19.57	19.75	19.85	24.03	24.21	24.31
1.4	64QAM	3	3	19.58	19.60	19.53	24.04	24.06	23.99
1.4	64QAM	6	0	19.54	19.58	19.70	24.00	24.04	24.16

LTE CA_5B Combination:20MHz+20MHz(100RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	EIRP (dBm)
Channel	Channel		RB Size	RB Offset	RB Size	RB Offset			
20450	20549	QPSK	1	0	0	0	1	22.76	22.39
20476	20575	QPSK	1	0	0	0	1	22.80	22.43
20501	20600	QPSK	1	0	0	0	1	22.73	22.36
LTE CA_41C Combination:20MHz+20MHz(100RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	EIRP (dBm)
Channel	Channel		RB Size	RB Offset	RB Size	RB Offset			
39750	39948	QPSK	1	0	0	0	1	24.6	29.69
40521	40719	QPSK	1	0	0	0	1	24.63	29.72
41292	41490	QPSK	1	0	0	0	1	24.59	29.68

6.2 Radiated Spurious Emission

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

WCDMA Band II CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3765.10	-66.42	2.60	12.50	Vertical	-56.52	-13.00	43.52	35
3	5646.60	-64.95	3.30	12.50	Vertical	-55.75	-13.00	42.75	124
4	7520.80	-56.72	4.20	12.20	Vertical	-48.72	-13.00	35.72	33
5	9406.20	-52.76	4.30	11.10	Vertical	-45.96	-13.00	32.96	86
6	11282.20	-50.67	5.90	11.90	Vertical	-44.67	-13.00	31.67	28
7	13161.80	-52.53	5.70	14.00	Vertical	-44.23	-13.00	31.23	224
8	15046.80	-56.57	5.80	13.10	Vertical	-49.27	-13.00	36.27	21
9	16917.20	-50.83	6.10	14.60	Vertical	-42.33	-13.00	29.33	48
10	18800.00	-	-	-	-	-	-	-	-

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

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

WCDMA Band V CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1671.15	-69.65	1.70	8.70	Vertical	-64.80	-13.00	51.80	85
3	2514.95	-67.15	2.30	12.00	Vertical	-59.60	-13.00	46.60	63
4	3346.10	-66.19	2.70	12.70	Vertical	-58.34	-13.00	45.34	124
5	4184.30	-63.86	3.00	12.50	Vertical	-56.51	-13.00	43.51	27
6	5019.90	-62.86	3.40	12.50	Vertical	-55.91	-13.00	42.91	43
7	5854.70	-62.35	3.40	12.80	Vertical	-55.10	-13.00	42.10	46
8	6692.90	-59.70	4.10	11.50	Vertical	-54.45	-13.00	41.45	71
9	7526.50	-56.30	4.20	12.20	Vertical	-50.45	-13.00	37.45	223
10	8369.80	-55.39	4.30	12.50	Vertical	-49.34	-13.00	36.34	97

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

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

LTE Band 4 QPSK 1.4MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3464.50	-77.34	2.70	12.70	Vertical	-67.34	-13.00	54.34	0
3	5194.70	-74.24	3.20	12.50	Vertical	-64.94	-13.00	51.94	180
4	6923.60	-70.63	4.20	11.80	Vertical	-63.03	-13.00	50.03	0
5	8663.20	-64.92	4.40	12.50	Vertical	-56.82	-13.00	43.82	135
6	10387.80	-63.76	4.70	11.30	Vertical	-57.16	-13.00	44.16	135
7	12131.00	-65.68	5.20	13.80	Vertical	-57.08	-13.00	44.08	90
8	13849.00	-60.87	5.70	11.30	Vertical	-55.27	-13.00	42.27	0
9	15587.00	-71.71	6.10	16.80	Vertical	-61.01	-13.00	48.01	180
10	17319.40	-63.42	6.10	14.20	Vertical	-55.32	-13.00	42.32	0

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

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

LTE Band 4 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3460.70		2.70	12.70	Vertical	-66.50	-13.00	53.50	0
3	5185.90		3.20	12.50	Vertical	-64.80	-13.00	51.80	270
4	6924.40		4.20	11.80	Vertical	-62.69	-13.00	49.69	0
5	8653.80		4.40	12.50	Vertical	-57.02	-13.00	44.02	45
6	10379.20		4.70	11.30	Vertical	-57.27	-13.00	44.27	135
7	12109.80		5.20	13.80	Vertical	-58.24	-13.00	45.24	0
8	13844.00		5.70	11.30	Vertical	-53.81	-13.00	40.81	225
9	15576.20		6.10	16.80	Vertical	-60.20	-13.00	47.20	90
10	17315.40		6.10	14.20	Vertical	-54.50	-13.00	41.50	90

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

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

LTE Band 4 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3747.40	-75.90	2.70	12.70	Vertical	-65.90	-13.00	52.90	45
3	5162.90	-73.42	3.20	12.50	Vertical	-64.12	-13.00	51.12	135
4	6886.20	-70.57	4.20	11.80	Vertical	-62.97	-13.00	49.97	45
5	8611.80	-64.76	4.40	12.50	Vertical	-56.66	-13.00	43.66	225
6	10338.80	-63.61	4.70	11.30	Vertical	-57.01	-13.00	44.01	0
7	12055.00	-66.90	5.20	13.80	Vertical	-58.30	-13.00	45.30	135
8	13776.80	-60.62	5.70	11.30	Vertical	-55.02	-13.00	42.02	0
9	15505.00	-71.00	6.10	16.80	Vertical	-60.30	-13.00	47.30	225
10	17222.20	-62.63	6.10	14.20	Vertical	-54.53	-13.00	41.53	135

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

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

LTE Band 5 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1671.25	-70.51	1.70	8.70	Vertical	-65.66	-13.00	52.66	270
3	2497.75	-65.12	2.30	12.00	Vertical	-57.57	-13.00	44.57	180
4	3344.70	-65.32	2.70	12.70	Vertical	-57.47	-13.00	44.47	45
5	4175.00	-63.20	3.00	12.50	Vertical	-55.85	-13.00	42.85	135
6	5016.00	-62.47	3.40	12.50	Vertical	-55.52	-13.00	42.52	0
7	5850.70	-62.70	3.40	12.80	Vertical	-55.45	-13.00	42.45	0
8	6683.30	-57.88	4.10	11.50	Vertical	-52.63	-13.00	39.63	225
9	7525.70	-54.90	4.20	12.20	Vertical	-49.05	-13.00	36.05	0
10	8355.80	-53.73	4.30	12.50	Vertical	-47.68	-13.00	34.68	0

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

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

LTE Band 5 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1668.90	-70.60	1.70	8.70	Vertical	-65.75	-13.00	52.75	0
3	2499.15	-65.63	2.30	12.00	Vertical	-58.08	-13.00	45.08	0
4	3337.80	-65.18	2.70	12.70	Vertical	-57.33	-13.00	44.33	0
5	4172.30	-62.59	3.00	12.50	Vertical	-55.24	-13.00	42.24	0
6	5003.50	-61.07	3.40	12.50	Vertical	-54.12	-13.00	41.12	135
7	5835.40	-61.21	3.40	12.80	Vertical	-53.96	-13.00	40.96	90
8	6671.80	-58.04	4.10	11.50	Vertical	-52.79	-13.00	39.79	225
9	7504.60	-55.22	4.20	12.20	Vertical	-49.37	-13.00	36.37	0
10	8338.30	-53.79	4.30	12.50	Vertical	-47.74	-13.00	34.74	120

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

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

LTE Band 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1663.60	-70.88	1.70	8.70	Vertical	-66.03	-13.00	53.03	225
3	2498.35	-65.15	2.30	12.00	Vertical	-57.60	-13.00	44.60	45
4	3323.40	-65.60	2.70	12.70	Vertical	-57.75	-13.00	44.75	0
5	4155.10	-62.73	3.00	12.50	Vertical	-55.38	-13.00	42.38	135
6	4986.90	-61.96	3.40	12.50	Vertical	-55.01	-13.00	42.01	90
7	5812.80	-63.11	3.40	12.80	Vertical	-55.86	-13.00	42.86	0
8	6654.60	-57.33	4.10	11.50	Vertical	-52.08	-13.00	39.08	135
9	7482.90	-55.65	4.20	12.20	Vertical	-49.80	-13.00	36.80	90
10	8317.20	-55.07	4.30	12.50	Vertical	-49.02	-13.00	36.02	45

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

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

LTE Band 12 QPSK 1.4MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1412.40	-68.70	1.70	8.70	Vertical	-63.85	-13.00	50.85	90
3	2120.13	-66.96	2.10	11.10	Vertical	-60.11	-13.00	47.11	45
4	2825.87	-66.47	2.30	13.10	Vertical	-57.82	-13.00	44.82	135
5	3535.67	-65.10	2.60	12.70	Vertical	-57.15	-13.00	44.15	135
6	4240.80	-62.91	3.30	12.50	Vertical	-55.86	-13.00	42.86	0
7	4955.00	-62.50	3.40	12.50	Vertical	-55.55	-13.00	42.55	45
8	5652.67	-62.94	3.30	12.50	Vertical	-55.89	-13.00	42.89	135
9	6364.00	-58.80	3.80	11.50	Vertical	-53.25	-13.00	40.25	0
10	7066.83	-57.42	4.20	11.80	Vertical	-51.97	-13.00	38.97	0

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

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

LTE Band 12 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1412.27	-68.00	1.70	8.70	Vertical	-63.15	-13.00	50.15	0
3	2115.80	-67.18	2.10	11.10	Vertical	-60.33	-13.00	47.33	270
4	2819.93	-66.62	2.30	13.10	Vertical	-57.97	-13.00	44.97	0
5	3527.67	-64.29	2.60	12.70	Vertical	-56.34	-13.00	43.34	90
6	4234.67	-63.69	3.30	12.50	Vertical	-56.64	-13.00	43.64	135
7	4930.50	-62.16	3.40	12.50	Vertical	-55.21	-13.00	42.21	0
8	5640.50	-63.05	3.30	12.50	Vertical	-56.00	-13.00	43.00	90
9	6343.00	-58.85	3.80	11.50	Vertical	-53.30	-13.00	40.30	45
10	7049.66	-57.73	4.20	11.80	Vertical	-52.28	-13.00	39.28	0

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

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

LTE Band 12 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1406.20	-67.89	1.70	8.70	Vertical	-63.04	-13.00	50.04	135
3	2107.20	-67.26	2.10	11.10	Vertical	-60.41	-13.00	47.41	0
4	2809.53	-66.25	2.30	13.10	Vertical	-57.60	-13.00	44.60	225
5	3512.50	-65.02	2.60	12.70	Vertical	-57.07	-13.00	44.07	225
6	4215.00	-63.12	3.30	12.50	Vertical	-56.07	-13.00	43.07	0
7	4917.50	-63.45	3.40	12.50	Vertical	-56.50	-13.00	43.50	0
8	5620.00	-63.40	3.30	12.50	Vertical	-56.35	-13.00	43.35	0
9	6322.50	-60.22	3.80	11.50	Vertical	-54.67	-13.00	41.67	0
10	7025.00	-57.99	4.20	11.80	Vertical	-52.54	-13.00	39.54	180
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

LTE Band 41 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5181.00	-65.16	3.20	12.50	Vertical	-55.86	-25.00	30.86	74
3	7771.50	-57.73	4.40	12.30	Vertical	-49.83	-25.00	24.83	23
4	10362.00	-53.74	4.70	11.80	Vertical	-46.64	-25.00	21.64	1
5	13952.50	-52.37	5.40	14.00	Vertical	-43.77	-25.00	18.77	153
6	15543.00	-61.27	6.10	16.80	Vertical	-50.57	-25.00	25.57	225
7	18133.50		--	--	--	--	--	--	--
8	20653.20		--	--	--	--	--	--	--
9	23234.85		--	--	--	--	--	--	--
10	25816.50		--	--	--	--	--	--	--

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

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

LTE Band 41 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5166.00	-64.54	3.20	12.50	Vertical	-55.24	-25.00	30.24	58
3	7749.00	-57.53	4.40	12.30	Vertical	-49.63	-25.00	24.63	175
4	10332.00	-54.21	4.70	11.80	Vertical	-47.11	-25.00	22.11	86
5	12915.00	-52.63	5.40	14.00	Vertical	-44.03	-25.00	19.03	156
6	15498.00	-61.48	6.10	16.80	Vertical	-50.78	-25.00	25.78	275
7	18023.60		--	--	--	--	--	--	--
8	20598.40		--	--	--	--	--	--	--
9	23173.20		--	--	--	--	--	--	--
10	25748.00		--	--	--	--	--	--	--

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

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

LTE Band 66 QPSK 1.4MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3509.25	-77.24	2.70	12.70	Vertical	-67.24	-13.00	54.24	36
3	5262.50	-75.17	3.20	12.50	Vertical	-65.87	-13.00	52.87	2
4	7018.00	-70.40	4.20	11.80	Vertical	-62.80	-13.00	49.80	175
5	8772.50	-64.60	4.40	12.50	Vertical	-56.50	-13.00	43.50	63
6	10527.00	-62.88	4.70	11.80	Vertical	-55.78	-13.00	42.78	23
7	12281.50	-65.26	5.20	13.80	Vertical	-56.66	-13.00	43.66	123
8	14036.00	-61.94	5.70	13.20	Vertical	-54.44	-13.00	41.44	38
9	15790.50	-71.47	6.10	16.80	Vertical	-60.77	-13.00	47.77	26
10	17545.00	-64.39	6.10	14.20	Vertical	-56.29	-13.00	43.29	176

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

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

LTE Band 66 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3486.00	-77.57	2.70	12.70	Vertical	-67.57	-13.00	54.57	35
3	5229.00	-75.33	3.20	12.50	Vertical	-66.03	-13.00	53.03	93
4	6972.00	-71.08	4.20	11.80	Vertical	-63.48	-13.00	50.48	178
5	8715.00	-64.72	4.40	12.50	Vertical	-56.62	-13.00	43.62	253
6	10458.00	-64.00	4.70	11.80	Vertical	-56.90	-13.00	43.90	24
7	12201.00	-64.77	5.20	13.80	Vertical	-56.17	-13.00	43.17	175
8	13944.00	-61.50	5.70	13.20	Vertical	-54.00	-13.00	41.00	2
9	15687.00	-71.14	6.10	16.80	Vertical	-60.44	-13.00	47.44	36
10	17430.00	-63.74	6.10	14.20	Vertical	-55.64	-13.00	42.64	75

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

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

LTE Band 66 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3472.88	-76.10	2.70	12.70	Vertical	-66.10	-13.00	53.10	22
3	5209.00	-75.28	3.20	12.50	Vertical	-65.98	-13.00	52.98	15
4	6945.75	-71.09	4.20	11.80	Vertical	-63.49	-13.00	50.49	27
5	8682.00	-64.66	4.40	12.50	Vertical	-56.56	-13.00	43.56	301
6	10418.63	-63.44	4.70	11.80	Vertical	-56.34	-13.00	43.34	96
7	12455.00	-65.10	5.20	13.80	Vertical	-56.50	-13.00	43.50	285
8	13891.50	-62.31	5.70	13.20	Vertical	-54.81	-13.00	41.81	17
9	15627.00	-70.80	6.10	16.80	Vertical	-60.10	-13.00	47.10	22
10	17364.38	-63.56	6.10	14.20	Vertical	-55.46	-13.00	42.46	142

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

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

7 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Wideband radio communication tester	R&S	CMW500	113645	2024-12-02	2025-12-01
Spectrum Analyzer	R&S	FSV30	100815	2024-12-02	2025-12-01
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2022-09-29	2025-09-28
Horn Antenna	SCHWARZBECK	BBHA 9120D	01799	2022-09-01	2025-08-31
Horn Antenna	ETS-Lindgren	3160-09	00102643	2024-9-24	2027-09-23
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

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