RADIO TEST REPORT

Report No:STS1908166W13

Issued for

Shanghai Unihertz E-Commerce Co., Ltd

Room 302, No. 5, Lane 59, Shennan Rd, Minhang district, Shanghai, China 201108

Product Name:	Smart phone
Brand Name:	Unihertz
Model Name:	Titan
Series Model:	N/A
FCC ID:	2AK6CTITAN
Test Standard:	47 CFR Part 2, 22H, 24(E), 27, 90 December 20, 2018

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TEST RESULT CERTIFICATION

Applicant's Name.....:	Shanghai Unihertz E-Commerce Co., Ltd
Address .....:	Room 302, No. 5, Lane 59, Shennan Rd, Minhang district, Shanghai, China 201108
Manufacture's Name .....:	OBLUE Communication Technology Co.,Ltd.
Address .....:	Room 406, Hivac Building,No. 2 North keji Rd, North Hi-Tech Industry Park, Nanshan district, shenzhen, China 201108

Product description

Product Name .....:	Smart phone
Brand Name .....:	Unihertz
Model Name .....:	Titan
Series Model .....:	N/A
Test Standards.....:	47 CFR Part 2, 22H, 24(E), 27, 90 December 20, 2018
Test Procedure .....:	KDB 971168 D01 v03r01, ANSI C63.26 2015

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
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Date of Test.....:	
Date (s) of performance of tests.:	07 Aug. 2019 ~ 30 Sept. 2019
Date of Issue .....:	08 Oct. 2019
Test Result .....:	Pass

Testing Engineer : Chris Chen

(Chris Chen)

Technical Manager : Sunday Hu

(Sunday Hu)

Authorized Signatory : Vita Li

(Vita Li)

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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	08 Oct. 2019	STS1908166W13	ALL	Initial Issue

1. TEST FACTORY & MEASUREMENT UNCERTAINTY

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD
Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District,Bao'an District, Shenzhen, Guang Dong, China
FCC test Firm Registration Number: 625569
IC test Firm Registration Number: 12108A
A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	RF output power, conducted	±0.71dB
2	Unwanted Emissions, conducted	±0.63dB
3	All emissions, radiated 30-200MHz	±3.43dB
4	All emissions, radiated 200MHz-1GHz	±3.57dB
5	All emissions, radiated>1G	±4.13dB
6	Conducted Emission (9KHz-150KHz)	±3.18dB
7	Conducted Emission (150KHz-30MHz)	±2.70dB

2. GENERAL INFORMATION

2.1 TECHNICAL SPECIFICATIONS AND REGULATIONS

2.1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Name:	Smart phone
Trade Name	Unihertz
Model Name	Titan
Series Model	N/A
Model Difference	N/A
Frequency Bands:	U.S. Bands: ☒LTE FDD Band 2 ☒LTE FDD Band 4 ☒LTE FDD Band 5 ☒LTE FDD Band 7 ☒LTE FDD Band 12 ☒LTE FDD Band 13 ☒LTE FDD Band 17 ☒LTE FDD Band 25 ☒LTE FDD Band 26 ☒LTE TDD Band 41 ☒LTE FDD Band 66
SIM CARD:	SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested
Antenna:	PIFA Antenna Antenna
Antenna gain:	LTE B2: 0.61 dBi, LTE B4: 1.44 dBi, LTE B5: -2.11 dBi, LTE B7: 0.19 dBi, LTE B12: -1.18 dBi, LTE B13: -4.88 dBi, LTE B17: -1.18 dBi, LTE B26: -2.11 dBi, LTE B25: 0.61 dBi, LTE B41:-2.21 dBi, LTE B66: 1.64 dBi
Battery parameter:	Rated Voltage: 3.85V Charge Limit: 4.4V Capacity: 6000mAh
Adapter:	Input: 100-240V, 50/60Hz, 0.6A Output: 5V, 2.0A 9V, 2.0A 12V, 1.5A
Extreme Vol. Limits:	DC 4.24V to DC 3.47V (Nominal DC 3.85V)
Extreme Temp. Tolerance:	-30℃ to +50℃
Hardware version number:	G61_V2.0
Software version number:	Titan_20190629

2.1.2 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Product Specification Subjective To This Standard	
Tx Frequency	LTE Band 2:1850~1910MHz LTE Band 4:1710~1755MHz LTE Band 5:824~849MHz LTE Band 7:2500~2570MHz LTE Band 12:699~716MHz LTE Band 13:777~787MHz LTE Band 17:704~716MHz LTE Band 25:1850~1915MHz LTE Band 26:814~849MHz LTE Band 41:2555~2655MHz LTE Band 66:1710~1780MHz
Rx Frequency	LTE Band 2:1930 ~1990MHz LTE Band 4:2110~2155MHz LTE Band 5:869~894MHz LTE Band 7:2620~2690MHz LTE Band 12:729~746MHz LTE Band 13:746~756MHz LTE Band 17:734~746MHz LTE Band 25:1930~1995MHz LTE Band 26:859~894MHz LTE Band 41:2555~2655MHz LTE Band 66:2110~2200MHz
Bandwidth	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13: 5MHz / 10MHz LTE Band 17: 5MHz / 10MHz LTE Band 25: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz/15MHz LTE Band 41: 5MHz / 10MHz / 15MHz /20MHz LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz
Maximum Output Power Limit	LTE Band 2: 23.41 dBm LTE Band 4: 21.22 dBm LTE Band 5: 23.98 dBm LTE Band 7: 20.50 dBm LTE Band 12: 23.61 dBm LTE Band 13: 22.62 dBm LTE Band 17: 22.79 dBm LTE Band 25: 23.42 dBm LTE Band 26: 23.30 dBm LTE Band 26: 23.13 dBm(Part 90) LTE Band 41: 20.92 dBm LTE Band 66: 21.91 dBm
Type of Modulation	QPSK /16QAM

2.1.3 EMISSION DESIGNATOR

LTE Band 2	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M29G7D	1M31W7D
3	2M86G7D	2M86W7D
5	5M22G7D	5M36W7D
10	9M89G7D	9M83W7D
15	15M3G7D	15M0W7D
20	19M6G7D	19M6W7D

LTE Band 4	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M29G7D	1M31W7D
3	2M86G7D	2M86W7D
5	5M21G7D	5M21W7D
10	9M93G7D	9M81W7D
15	15M2G7D	15M2W7D
20	19M5G7D	19M6W7D

LTE Band 5	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M29G7D	1M31W7D
3	2M86G7D	2M86W7D
5	5M23G7D	5M18W7D
10	9M87G7D	9M89W7D

LTE Band 7	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
5	5M21G7D	5M21W7D
10	9M89G7D	9M82W7D
15	15M2G7D	15M1W7D
20	19M7G7D	19M6W7D

LTE Band 12	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M29G7D	1M31W7D
3	2M87G7D	2M86W7D
5	5M20G7D	5M22W7D
10	9M91G7D	9M85W7D

LTE Band 13	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
5	5M20G7D	5M24W7D
10	9M91G7D	9M69W7D

LTE Band 17	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
5	5M19G7D	5M25W7D
10	10M02G7D	9M86W7D

LTE Band 25	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M31G7D	1M31W7D
3	2M87G7D	2M87W7D
5	5M21G7D	5M31W7D
10	10M07G7D	10M57W7D
15	15M2G7D	15M1W7D
20	19M7G7D	19M8W7D

LTE Band 26	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M28G7D	1M29W7D
3	2M86G7D	2M86W7D
5	4M96G7D	4M94W7D
10	9M65G7D	9M58W7D
15	14M7G7D	14M5W7D

LTE Band 26(Part 90)	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M31G7D	1M31W7D
3	2M87G7D	2M86W7D
5	4M93G7D	4M90W7D
10	9M62G7D	9M52W7D

LTE Band 41	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
5	5M01G7D	5M18W7D
10	9M83G7D	9M81W7D
15	15M2G7D	15M8W7D
20	19M8G7D	20M2W7D

LTE Band 66	Emission Designator	Emission Designator
BW(MHz)	(26dBc)QPSK	(26dBc)16QAM
1.4	1M30G7D	1M31W7D
3	2M86G7D	2M86W7D
5	5M20G7D	5M23W7D
10	9M91G7D	9M83W7D
15	15M1G7D	15M1W7D
20	19M7G7D	19M7W7D

2.1.4 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 v03r01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power. Radiated measurements are performed by rotating the EUT in three different orthogonal test planes tofind the maximum emission.

Remark:

1. The mark ‘v’means that this configuration is chosen for testing
2. The mark ‘-’means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated

ITEMS	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v			v	v	v	v	v	v	v	v
	7			v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v			v	v	v	v	v	v	v	v
	13			v	v			v	v	v	v	v		v	
	17			v	v			v	v	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v		v	v	v	v	v	v	v	v
	41			v	v	v	v	v	v	v	v	v	v	v	v
Peak&Avera Ratio	2						v	v	v	v		v	v	v	v
	4						v	v	v	v		v	v	v	v
	5				v			v	v	v		v	v	v	v
	7						v	v	v	v		v	v	v	v
	12				v			v	v	v		v	v	v	v
	13				v			v	v	v		v		v	
	17				v			v	v	v		v	v	v	v
	25						v	v	v	v		v	v	v	v
	26					v		v	v	v		v	v	v	v
	41						v	v	v	v		v	v	v	v
26dB&99% Bandwidth	2	v	v	v	v	v	v	v	v			v	v	v	v
	4	v	v	v	v	v	v	v	v			v	v	v	v
	5	v	v	v	v			v	v			v	v	v	v
	7			v	v	v	v	v	v			v	v	v	v
	12	v	v	v	v			v	v			v	v	v	v
	13			v	v			v	v			v		v	
	17			v	v			v	v			v	v	v	v
	25	v	v	v	v	v	v	v	v			v	v	v	v
	26	v	v	v	v	v		v	v			v	v	v	v
	41			v	v	v	v	v	v			v	v	v	v

Conducted Band Edge	2	v	v	v	v	v	v	v	v	v		v	v	v	v
	4	v	v	v	v	v	v	v	v	v		v	v	v	v
	5	v	v	v	v			v	v	v		v	v	v	v
	7			v	v	v	v	v	v	v		v	v	v	v
	12	v	v	v	v			v	v	v		v	v	v	v
	13			v	v			v	v	v		v		v	
	17			v	v			v	v	v		v	v	v	v
	25	v	v	v	v	v	v	v	v	v		v	v	v	v
	26	v	v	v	v	v		v	v	v		v	v	v	v
	41			v	v	v	v	v	v	v		v	v	v	v
Conducted Spurious Emission	2	v	v	v	v	v	v	v	v	v			v	v	v
	4	v	v	v	v	v	v	v	v	v			v	v	v
	5	v	v	v	v			v	v	v			v	v	v
	7			v	v	v	v	v	v	v			v	v	v
	12	v	v	v	v			v	v	v			v	v	v
	13			v	v			v	v	v				v	
	17			v	v			v	v	v			v	v	v
	25	v	v	v	v	v	v	v	v	v			v	v	v
	26	v	v	v	v	v		v	v	v			v	v	v
	41			v	v	v	v	v	v	v			v	v	v
Frequency Stability	2				v			v				v		v	
	4				v			v				v		v	
	5				v			v				v		v	
	7				v			v				v		v	
	12				v			v				v		v	
	13				v			v				v		v	
	17				v			v				v		v	
	25				v			v				v		v	
	26				v			v				v		v	
	41				v			v				v		v	
E.R.P.& E.I.R.P.	2	v	v	v	v	v	v	v	v	v			v	v	v
	4	v	v	v	v	v	v	v	v	v			v	v	v
	5	v	v	v	v			v	v	v			v	v	v
	7			v	v	v	v	v	v	v			v	v	v
	12	v	v	v	v			v	v	v			v	v	v
	13			v	v			v	v	v				v	
	17			v	v			v	v	v			v	v	v
	25	v	v	v	v	v	v	v	v	v			v	v	v
	26	v	v	v	v	v		v	v	v			v	v	v
	41			v	v	v	v	v	v	v			v	v	v

2.1.5 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for filing to comply with the 47 CFR Part 2, 24(E), 27

2.1.6 SPECIAL ACCESSORIES

The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with eut intended for fcc grant together.

2.1.7 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission’s requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.1.8 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

2.1.9 CONFIGURATION OF EUT SYSTEM

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

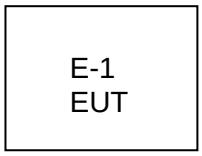


Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	Serial No.	Note
N/A	N/A	N/A	N/A	N/A

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.1.10 MEASUREMENT INSTRUMENTS

The radiated emission testing was performed according to the procedures of ANSI C63.26 2015 and FCC CFR 47 rules of 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057.

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2018.10.13	2019.10.12
Signal Analyzer	Agilent	N9020A	MY51110105	2019.03.02	2020.03.01
Wireless Communications Test Set	R&S	CMW 500	133884	2019.03.02	2020.03.01
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.1
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10
Pre-Amplifier(0.1M-3GHz)	EM	EM330	060665	2018.10.13	2019.10.12
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2018.10.13	2019.10.12
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10
Test SW	BULUN	BL410-E/18.905			

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Universal Radio communication tester	R&S	CMU200	11764	2018.10.13	2019.10.12
Wireless Communications Test Set	R&S	CMW 500	133884	2019.03.02	2020.03.01
Signal Analyzer	Agilent	N9020A	MY49100060	2018.10.13	2019.10.12
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10
Test SW	FARAD	LZ-RF /LzRf-3A3			

2.1.11 MEASUREMENT RESULTS EXPLANATION EXAMPLE

For all conducted test items:
The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factorbetween EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF Cable Loss + Attenuator Factor.

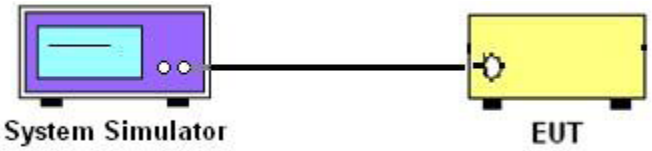
3. CONDUCTED OUTPUT POWER

3.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

3.1.1 MEASUREMENT METHOD

A system simulator was used to establish communication with the eut. Its parameters were set to force the eut transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.
Configuration follows KDB 971168 D01 v03r01.

3.1.2 TEST SETUP



3.1.3 TEST PROCEDURES

1. The transmitter output port was connected to system simulator.

2. Set EUT at maximum power through the system simulator.

3. Select lowest/middle/highest channels for each band and different modulation.

4. Measure and record the power level from the system simulator.

3.1.4 TEST RESULTS

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.25	23.08	23.2
1.4	1	2		22.97	22.86	22.97
1.4	1	5		22.67	22.61	22.77
1.4	3	0		22.38	22.32	22.5
1.4	3	1		22.1	22.05	22.27
1.4	3	2		21.85	21.8	22.04
1.4	6	0		21.57	21.55	21.84
1.4	1	0	16-QAM	23.04	22.86	22.98
1.4	1	2		22.79	22.57	22.78
1.4	1	5		22.49	22.31	22.57
1.4	3	0		22.23	22.1	22.31
1.4	3	1		21.94	21.88	22.1
1.4	3	2		21.73	21.61	21.86
1.4	6	0		21.47	21.35	21.56
3	1	0	QPSK	22.77	22.75	22.58
3	1	7		22.49	22.54	22.28
3	1	14		22.22	22.27	22.07
3	8	0		21.96	21.98	21.84
3	8	4		21.73	21.75	21.54
3	8	7		21.52	21.52	21.25
3	15	0		21.28	21.3	20.96
3	1	0	16-QAM	22.56	22.53	22.32
3	1	7		22.28	22.24	22.04
3	1	14		22.07	22.03	21.82
3	8	0		21.85	21.79	21.61
3	8	4		21.56	21.59	21.36
3	8	7		21.3	21.35	21.06
3	15	0		21.08	21.14	20.77

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.28	22.43	22.19
5	1	12		22.04	22.2	21.91
5	1	24		21.82	21.97	21.66
5	12	0		21.61	21.68	21.37
5	12	6		21.35	21.42	21.14
5	12	11		21.08	21.2	20.89
5	25	0		20.86	20.95	20.63
5	1	0	16-QAM	22.08	22.18	21.94
5	1	12		21.88	21.93	21.7
5	1	24		21.62	21.66	21.43
5	12	0		21.34	21.37	21.14
5	12	6		21.13	21.12	20.86
5	12	11		20.88	20.82	20.61
5	25	0		20.58	20.6	20.39
10	1	0	QPSK	22.61	22.37	22.5
10	1	24		22.32	22.15	22.25
10	1	49		22.1	21.86	22.05
10	25	0		21.86	21.57	21.79
10	25	12		21.62	21.34	21.59
10	25	24		21.37	21.11	21.31
10	50	0		21.09	20.82	21.08
10	1	0	16-QAM	22.37	22.15	22.28
10	1	24		22.13	21.93	22.04
10	1	49		21.88	21.73	21.81
10	25	0		21.58	21.52	21.57
10	25	12		21.35	21.24	21.28
10	25	24		21.13	20.98	21.06
10	50	0		20.85	20.75	20.81

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.27	21.98	22.05
15	1	37		21.99	21.74	21.85
15	1	74		21.74	21.48	21.6
15	36	0		21.46	21.26	21.31
15	36	18		21.17	21.03	21.03
15	36	39		20.92	20.75	20.79
15	75	0		20.68	20.45	20.57
15	1	0	16-QAM	22.03	21.69	21.82
15	1	38		21.77	21.44	21.54
15	1	75		21.5	21.23	21.31
15	36	0		21.25	20.94	21.03
15	36	18		20.98	20.64	20.83
15	36	39		20.77	20.42	20.63
15	75	0		20.53	20.19	20.37
20	1	0	QPSK	23.3	23.19	23.41
20	1	49		23	22.99	23.2
20	1	99		22.77	22.7	22.99
20	50	0		22.53	22.45	22.78
20	50	24		22.23	22.18	22.57
20	50	49		22.01	21.9	22.34
20	100	0		21.75	21.67	22.07
20	1	0	16-QAM	23.05	22.98	23.2
20	1	49		22.75	22.75	22.96
20	1	99		22.48	22.48	22.72
20	50	0		22.27	22.21	22.43
20	50	24		21.99	22	22.2
20	50	49		21.77	21.71	21.99
20	100	0		21.54	21.47	21.78

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	20.77	20.95	20.93
1.4	1	2		20.53	20.73	20.69
1.4	1	5		20.32	20.44	20.46
1.4	3	0		20.12	20.19	20.19
1.4	3	1		19.92	19.96	19.9
1.4	3	2		19.62	19.69	19.63
1.4	6	0		19.36	19.41	19.39
1.4	1	0	16-QAM	20.47	20.74	20.64
1.4	1	2		20.18	20.53	20.39
1.4	1	5		19.95	20.32	20.16
1.4	3	0		19.68	20.07	19.91
1.4	3	1		19.41	19.82	19.67
1.4	3	2		19.13	19.56	19.42
1.4	6	0		18.9	19.3	19.14
3	1	0	QPSK	20.19	20.25	20.16
3	1	7		19.9	19.99	19.88
3	1	14		19.66	19.69	19.63
3	8	0		19.41	19.47	19.39
3	8	4		19.19	19.22	19.14
3	8	7		18.96	18.93	18.93
3	15	0		18.68	18.68	18.66
3	1	0	16-QAM	19.96	20	19.86
3	1	7		19.75	19.76	19.59
3	1	14		19.53	19.52	19.38
3	8	0		19.23	19.3	19.14
3	8	4		18.99	19.07	18.9
3	8	7		18.77	18.8	18.67
3	15	0		18.56	18.57	18.41

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.65	20.59	20.72
5	1	12		20.41	20.33	20.47
5	1	24		20.15	20.06	20.17
5	12	0		19.95	19.81	19.9
5	12	6		19.71	19.55	19.61
5	12	11		19.5	19.3	19.38
5	25	0		19.22	19.08	19.14
5	1	0	16-QAM	20.36	20.32	20.45
5	1	12		20.14	20.04	20.2
5	1	24		19.91	19.84	19.92
5	12	0		19.68	19.54	19.69
5	12	6		19.43	19.31	19.47
5	12	11		19.13	19.08	19.18
5	25	0		18.87	18.83	18.92
10	1	0	QPSK	20.4	20.22	20.17
10	1	24		20.17	19.96	19.88
10	1	49		19.92	19.72	19.58
10	25	0		19.72	19.49	19.3
10	25	12		19.45	19.21	19.03
10	25	24		19.24	18.94	18.8
10	50	0		18.98	18.64	18.51
10	1	0	16-QAM	20.19	19.99	19.89
10	1	24		19.99	19.78	19.6
10	1	49		19.7	19.5	19.3
10	25	0		19.42	19.27	19.04
10	25	12		19.18	19	18.82
10	25	24		18.96	18.75	18.58
10	50	0		18.76	18.46	18.34

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	20.7	20.62	20.87
15	1	37		20.49	20.38	20.65
15	1	74		20.29	20.13	20.44
15	36	0		20.04	19.86	20.24
15	36	18		19.75	19.57	20.02
15	36	39		19.45	19.33	19.72
15	75	0		19.25	19.04	19.49
15	1	0	16-QAM	20.5	20.4	20.63
15	1	38		20.22	20.18	20.38
15	1	75		19.95	19.97	20.09
15	36	0		19.69	19.73	19.88
15	36	18		19.47	19.46	19.62
15	36	39		19.19	19.19	19.42
15	75	0		18.95	18.93	19.15
20	1	0	QPSK	21.03	21.22	20.95
20	1	49		20.81	20.95	20.74
20	1	99		20.54	20.68	20.44
20	50	0		20.29	20.43	20.15
20	50	24		20.09	20.22	19.88
20	50	49		19.87	19.94	19.61
20	100	0		19.66	19.69	19.34
20	1	0	16-QAM	20.81	20.95	20.72
20	1	49		20.57	20.69	20.48
20	1	99		20.32	20.44	20.25
20	50	0		20.1	20.18	20
20	50	24		19.83	19.91	19.72
20	50	49		19.57	19.65	19.48
20	100	0		19.35	19.44	19.19

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.62	23.19	22.16
1.4	1	2		23.35	22.9	21.93
1.4	1	5		23.11	22.67	21.69
1.4	3	0		22.89	22.44	21.46
1.4	3	1		22.59	22.22	21.21
1.4	3	2		22.38	21.95	20.93
1.4	6	0		22.16	21.69	20.68
1.4	1	0	16-QAM	23.33	22.96	21.91
1.4	1	2		23.06	22.71	21.65
1.4	1	5		22.81	22.46	21.42
1.4	3	0		22.55	22.19	21.21
1.4	3	1		22.31	21.91	20.95
1.4	3	2		22.08	21.63	20.74
1.4	6	0		21.82	21.4	20.46
3	1	0	QPSK	22.83	22.97	22.25
3	1	7		22.56	22.75	22.01
3	1	14		22.34	22.54	21.75
3	8	0		22.08	22.27	21.46
3	8	4		21.8	22.03	21.25
3	8	7		21.55	21.79	21.04
3	15	0		21.27	21.54	20.77
3	1	0	16-QAM	22.59	22.68	21.99
3	1	7		22.31	22.39	21.7
3	1	14		22.06	22.17	21.45
3	8	0		21.84	21.92	21.23
3	8	4		21.64	21.64	21.02
3	8	7		21.4	21.35	20.78
3	15	0		21.17	21.13	20.53

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.74	22.62	22.29
5	1	12		22.54	22.38	22.09
5	1	24		22.28	22.11	21.79
5	12	0		22.01	21.89	21.54
5	12	6		21.79	21.63	21.25
5	12	11		21.53	21.34	21.01
5	25	0		21.32	21.13	20.77
5	1	0	16-QAM	22.46	22.35	22.07
5	1	12		22.2	22.13	21.84
5	1	24		21.91	21.83	21.62
5	12	0		21.66	21.6	21.41
5	12	6		21.41	21.32	21.13
5	12	11		21.18	21.08	20.88
5	25	0		20.9	20.85	20.66
10	1	0	QPSK	23.98	23.57	23.25
10	1	24		23.71	23.35	22.99
10	1	49		23.48	23.07	22.7
10	25	0		23.26	22.83	22.47
10	25	12		23.04	22.59	22.2
10	25	24		22.84	22.36	21.92
10	50	0		22.6	22.11	21.69
10	1	0	16-QAM	23.74	23.27	22.98
10	1	24		23.46	23.03	22.72
10	1	49		23.2	22.76	22.49
10	25	0		22.91	22.51	22.29
10	25	12		22.67	22.26	22.08
10	25	24		22.43	22	21.81
10	50	0		22.17	21.79	21.56

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.16	20.22	20.34
5	1	12		19.89	19.96	20.07
5	1	24		19.64	19.66	19.79
5	12	0		19.43	19.42	19.51
5	12	6		19.21	19.21	19.31
5	12	11		18.95	18.96	19.03
5	25	0		18.71	18.71	18.78
5	1	0	16-QAM	19.89	19.96	20.06
5	1	12		19.66	19.76	19.79
5	1	24		19.45	19.55	19.52
5	12	0		19.24	19.34	19.28
5	12	6		18.99	19.11	19.07
5	12	11		18.75	18.85	18.82
5	25	0		18.54	18.63	18.58
10	1	0	QPSK	19.95	20.08	20.17
10	1	24		19.7	19.79	19.95
10	1	49		19.45	19.58	19.67
10	25	0		19.25	19.29	19.45
10	25	12		18.98	19.02	19.23
10	25	24		18.76	18.74	19.01
10	50	0		18.52	18.53	18.73
10	1	0	16-QAM	19.67	19.87	19.97
10	1	24		19.41	19.64	19.74
10	1	49		19.17	19.42	19.44
10	25	0		18.95	19.16	19.15
10	25	12		18.72	18.89	18.94
10	25	24		18.44	18.68	18.66
10	50	0		18.23	18.44	18.36

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	19.88	20.03	19.76
15	1	37		19.65	19.81	19.49
15	1	74		19.42	19.59	19.24
15	36	0		19.18	19.3	19.03
15	36	18		18.92	19.09	18.76
15	36	39		18.7	18.88	18.51
15	75	0		18.46	18.68	18.25
15	1	0	16-QAM	19.61	19.83	19.48
15	1	38		19.4	19.62	19.24
15	1	75		19.17	19.33	18.94
15	36	0		18.91	19.03	18.72
15	36	18		18.63	18.82	18.45
15	36	39		18.36	18.58	18.24
15	75	0		18.14	18.35	18.01
20	1	0	QPSK	20.28	20.5	20.43
20	1	49		20.02	20.3	20.15
20	1	99		19.81	20.07	19.9
20	50	0		19.54	19.83	19.62
20	50	24		19.3	19.57	19.36
20	50	49		19.03	19.36	19.12
20	100	0		18.74	19.12	18.83
20	1	0	16-QAM	20.05	20.2	20.21
20	1	49		19.77	19.92	19.96
20	1	99		19.54	19.63	19.69
20	50	0		19.28	19.35	19.46
20	50	24		19.05	19.07	19.26
20	50	49		18.8	18.81	18.96
20	100	0		18.54	18.61	18.7

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.25	23.16	22.47
1.4	1	2		22.96	22.91	22.19
1.4	1	5		22.68	22.62	21.97
1.4	3	0		22.42	22.33	21.72
1.4	3	1		22.21	22.05	21.46
1.4	3	2		22	21.78	21.18
1.4	6	0		21.73	21.51	20.9
1.4	1	0	16-QAM	23.01	22.96	22.26
1.4	1	2		22.76	22.69	21.98
1.4	1	5		22.52	22.44	21.68
1.4	3	0		22.3	22.22	21.48
1.4	3	1		22.01	21.96	21.18
1.4	3	2		21.72	21.71	20.97
1.4	6	0		21.46	21.51	20.77
3	1	0	QPSK	21.95	21.68	21.62
3	1	7		21.68	21.43	21.41
3	1	14		21.46	21.16	21.17
3	8	0		21.25	20.9	20.93
3	8	4		21.03	20.65	20.72
3	8	7		20.81	20.4	20.5
3	15	0		20.53	20.18	20.22
3	1	0	16-QAM	21.75	21.44	21.33
3	1	7		21.52	21.18	21.06
3	1	14		21.25	20.97	20.86
3	8	0		21.02	20.76	20.61
3	8	4		20.8	20.51	20.32
3	8	7		20.59	20.26	20.1
3	15	0		20.37	20.03	19.86

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.73	22.8	22.97
5	1	12		22.44	22.59	22.68
5	1	24		22.24	22.34	22.42
5	12	0		22.02	22.07	22.12
5	12	6		21.74	21.82	21.9
5	12	11		21.47	21.54	21.62
5	25	0		21.2	21.27	21.36
5	1	0	16-QAM	22.45	22.57	22.76
5	1	12		22.22	22.35	22.48
5	1	24		22.01	22.05	22.23
5	12	0		21.75	21.79	21.94
5	12	6		21.47	21.49	21.65
5	12	11		21.24	21.21	21.39
5	25	0		20.98	20.95	21.18
10	1	0	QPSK	23.61	23.52	23.36
10	1	24		23.37	23.31	23.08
10	1	49		23.09	23.07	22.81
10	25	0		22.88	22.87	22.54
10	25	12		22.61	22.66	22.28
10	25	24		22.39	22.4	22.08
10	50	0		22.17	22.1	21.81
10	1	0	16-QAM	23.34	23.3	23.07
10	1	24		23.1	23.09	22.87
10	1	49		22.8	22.86	22.66
10	25	0		22.53	22.58	22.42
10	25	12		22.26	22.38	22.18
10	25	24		22.01	22.09	21.93
10	50	0		21.77	21.87	21.68

LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.43	22.28	22.31
5	1	12		22.19	22	22.02
5	1	24		21.96	21.71	21.81
5	12	0		21.69	21.48	21.52
5	12	6		21.42	21.22	21.31
5	12	11		21.2	20.98	21.05
5	25	0		20.92	20.74	20.81
5	1	0	16-QAM	22.21	22	22.1
5	1	12		21.99	21.73	21.84
5	1	24		21.7	21.49	21.58
5	12	0		21.49	21.21	21.33
5	12	6		21.24	20.95	21.08
5	12	11		21.01	20.66	20.81
5	25	0		20.79	20.45	20.54
10	1	0	QPSK		22.62	
10	1	24			22.41	
10	1	49			22.18	
10	25	0			21.91	
10	25	12			21.66	
10	25	24			21.37	
10	50	0			21.08	
10	1	0	16-QAM		22.36	
10	1	24			22.11	
10	1	49			21.87	
10	25	0			21.62	
10	25	12			21.35	
10	25	24			21.12	
10	50	0			20.84	