FCC RF Test Report

APPLICANT : PAX Technology Limited EQUIPMENT : Mobile Payment Terminal

BRAND NAME : PAX MODEL NAME : D190

FCC ID : V5PD190

STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L) , 27(H) , 27(F)

CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Oct. 13, 2018 and completely tested on Jan. 08, 2019. We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Shenzhen) Inc., the test report shall not be reproduced except in full.



Approved by: Eric Shih / Manager

Sporton International (Shenzhen) Inc.

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Sporton International (Shenzhen) Inc.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG8D1307	Rev. 01	Initial issue of report	Jan. 18, 2019

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
3.4	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13)	ERP < 3 Watt	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt	PASS	-
-	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	Reporting Only	PASS	1
-	\$2.1051 \$22.917(a) \$24.238(a) \$27.53(c)(2)(4) \$27.53(g) \$27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 26)	< 43+10log10(P[Watts])	PASS	1
-	\$2.1051 \$22.917(a) \$24.238(a) \$27.53(c)(2) \$27.53(g) \$27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 26)	< 43+10log10(P[Watts])	PASS	1
	§2.1055 §22.355	_	< 2.5 ppm for Part 22		
-	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band PASS		1
4.4	\$2.1053 \$22.917(a) \$24.238(a) \$27.53(c)(2) \$27.53(f) \$27.53(g) \$27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 26)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 17.16 dB at 1559.50 MHz

Remark 1: The product was installed a WWAN module (Brand Name: Fibocom Wireless Inc. / FCC ID: ZMOM910GL), the test items are referred to module report "SZEM180400321702".

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1 General Description

1.1 Applicant

PAX Technology Limited

Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

1.2 Manufacturer

PAX Computer Technology (Shenzhen) Co., Ltd.

4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.

Report No.: FG8D1307

1.3 Product Feature of Equipment Under Test

Product Feature						
Equipment	Mobile Payment Terminal					
Brand Name	PAX					
Model Name	D190					
FCC ID	V5PD190					
EUT supports Radios application	LTE (Cat M1) / NFC WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth BR/EDR/LE					
IMEI Code	Conducted: N/A Radiation: N/A					
HW Version	D190-xxx-xxxx					
SW Version	V0.0.0.1					
EUT Stage	Production Unit					

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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1.4 Product Specification of Equipment Under Test

S	tandards-related Product Specification
	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz
	LTE Band 4: 1710.7 MHz ~ 1754.3 MHz
Tx Frequency	LTE Band 5: 824.7 MHz ~ 848.3 MHz
TX Tequency	LTE Band 12: 699.7 MHz ~ 715.3 MHz
	LTE Band 13: 779.5 MHz ~ 784.5 MHz
	LTE Band 26 : 824.7MHz ~ 848.3 MHz
	LTE Band 2: 1930.7 MHz ~ 1989.3 MHz
	LTE Band 4: 2110.7 MHz ~ 2154.3 MHz
Rx Frequency	LTE Band 5: 869.7 MHz ~ 893.3 MHz
l requeitcy	LTE Band 12: 729.7 MHz ~ 745.3 MHz
	LTE Band 13: 748.5 MHz ~ 753.5 MHz
	LTE Band 26 : 869.7MHz ~ 893.3MHz
	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
	LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
 Bandwidth	LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz
Bandwidth	LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz
	LTE Band 13: 5MHz / 10MHz
	LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz
	LTE Band 2: 22.69 dBm
	LTE Band 4: 22.17 dBm
Maximum Output Power to	LTE Band 5: 22.76 dBm
Antenna	LTE Band 12 : 22.79 dBm
	LTE Band 13 : 23.08 dBm
	LTE Band 26 : 22.77 dBm
	LTE Band 2: 1.0 dBi
	LTE Band 4: 1.0 dBi
Antenna Gain	LTE Band 5: 0.8 dBi
Antenna Gam	LTE Band 12: 0.8 dBi
	LTE Band 13: 0.8 dBi
	LTE Band 26 : 0.8 dBi
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

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1.6 Maximum ERP/EIRP Power

	TE Band 2		QPSK			16QAM			
L		Emission	Frequency		Emission				
BW (MHz)	Frequency Range (MHz)	Designator Tolerance (99%OBW) (ppm)		Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)		
1.4	1850.7 ~ 1909.3	-	-	0.2084	-	-	0.1824		
3	1851.5 ~ 1908.5	-	-	0.2183	-	-	0.2051		
5	1852.5 ~ 1907.5	-	-	0.2203	-	-	0.2032		
10	1855.0 ~ 1905.0	-	-	0.2249	-	-	0.2312		
15	1857.5 ~ 1902.5	-	-	0.2254	-	-	0.2296		
20	1860.0 ~ 1900.0	-	-	0.2339	-	-	0.2265		
L	TE Band 4		QPSK			16QAM			
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)		
1.4	1710.7 ~ 1754.3	-	-	0.1923	-	-	0.1466		
3	1711.5 ~ 1753.5	-	-	0.1972	-	-	0.1432		
5	1712.5 ~ 1752.5	-	-	0.1941	-	-	0.1950		
10	1715.0 ~ 1750.0	-	-	0.2009	-	-	0.1986		
15	1717.5 ~ 1747.5	-	-	0.1982	-	-	0.1982		
20	1720.0 ~ 1745.0	-	- 0.2075				0.1991		
L	TE Band 5		QPSK		16QAM				
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)		
1.4	824.7 ~ 848.3	-	-	0.1265	-	-	0.1062		
3	825.5 ~ 847.5	-	-	0.1268	-	-	0.1038		
5	826.5 ~ 846.5	-	-	0.1374	-	-	0.1242		
10	829.0 ~ 844.0	-	-	0.1384	-	-	0.1352		
Ľ	TE Band 12		QPSK			16QAM			
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)		
1.4	699.7 ~ 715.3	-	-	0.1233	-	-	0.1014		
3	700.5 ~ 714.5	-	-	0.1230	-	-	0.1045		
5	701.5 ~ 713.5	-	-	0.1334	-	-	0.1153		
10	704.0 ~ 711.0	-	- 0.1393		-	0.1390			

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Ľ	TE Band 13		QPSK		16QAM			
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	FRP(W) Designator Tolerar		Frequency Tolerance (ppm)	Maximum ERP(W)	
5	779.5 ~ 784.5	-	-	0.1455	-	-	0.1303	
10	782.0	-	-	- 0.1489		-	0.1479	
Ľ	TE Band 26		QPSK		16QAM			
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	
1.4	824.7 ~ 848.3	-	-	0.1279	-	-	0.1057	
3	825.5 ~ 847.5	-	-	0.1285	-	-	0.1057	
5	826.5 ~ 846.5	-	-	0.1343	-			
10	829.0 ~ 844.0	-	-	0.1343			0.1306	
15	831.5 ~ 841.5	_	_	0.1387	_			

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1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0).

Test Site	Sporton International (S	Sporton International (Shenzhen) Inc.							
Test Site Location	Guangdong Province 5	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen City, Guangdong Province 518055, China TEL: +86-755-8637-9589							
	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.						
Test Site No.	TH01-SZ	CN5018	337463						

Test Site	Sporton International (S	Sporton International (Shenzhen) Inc.							
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District, Shenzhen City, Guangdong Province 518055, China								
Test Site Location	TEL: +86-755- 3320-23	5 5	o, cillia						
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.						
rest Site No.	03CH02-SZ	CN5019	577730						

1.8 Applicable Standards

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

- 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H), 27(F)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

- All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

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2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

		Bandwidth (MHz)				Modulation			RB#			Test Channel				
Test Items	Band	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	М	н
	2	v	٧	v	v	v	v	v	v	v	٧	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	٧	v	v	v	v	v
Max.	5	v	v	v	v	-	-	v	v	v	٧	v	v	v	v	v
Output Power	12	v	v	v	v	-	-	v	v	v	٧	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	٧	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	v	٧	v	v	v	v	v
	2	v	v	v	v	v	v	v	v	v	٧			v	v	v
	4	v	v	v	v	v	v	v	v	v	٧			v	v	v
E.R.P /	5	v	v	v	v	-	-	v	v	v	٧			v	v	v
E.I.R.P	12	v	v	v	v	-	-	v	v	v	٧			v	v	v
	13	-	-	v	v	-	-	v	v	v	٧			v	v	v
	26	v	v	v	v	v	-	v	v	v	٧			v	v	v
	2	v	٧	v	v	v	v	v			٧			v	v	v
	4	v	v	v	v	v	v	v			٧			v	v	v
Radiated	5	v	v	v	v	-	-	v			٧			v	v	v
Spurious Emission	12	v	v	v	v	-	-	v			٧			v	v	v
	13	-	-	v	v	-	-	v			v			v	v	v
	26	v	v	v	v	v	-	v			v			v	v	v
Note	2. The 3. The	e mark " e device	-" mea	ins that estigate	this ba	andwid 30MF	th is not Iz to 10		-	-						der

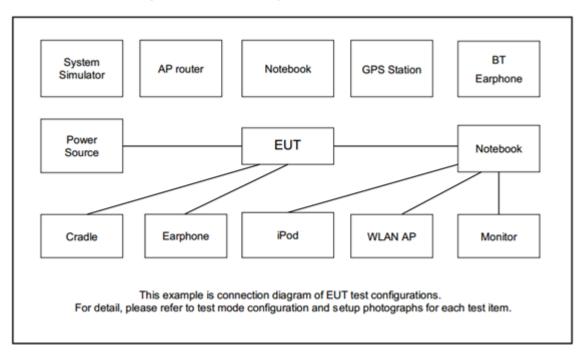
 The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

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2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

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2.4 Frequency List of Low/Middle/High Channels

	LTE Band 2 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest							
20	Channel	18700	18900	19100							
20	Frequency	1860	1880	1900							
15	Channel	18675	18900	19125							
15	Frequency	1857.5	1880	1902.5							
10	Channel	18650	18900	19150							
10	Frequency	1855	1880	1905							
5	Channel	18625	18900	19175							
5	Frequency	1852.5	1880	1907.5							
3	Channel	18615	18900	19185							
3	Frequency	1851.5	1880	1908.5							
1.4	Channel	18607	18900	19193							
1.4	Frequency	1850.7	1880	1909.3							

	LTE Band 4 Cha	nnel and Frequenc	cy List	
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
20	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
15	15 Frequency		1732.5	1747.5
10	Channel	20000	20175	20350
10	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
5	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
3	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
1.4	Frequency	1710.7	1732.5	1754.3

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	LTE Band 5 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest							
40	Channel	20450	20525	20600							
10	Frequency	829	836.5	844							
-	Channel	20425	20525	20625							
5	Frequency	826.5	836.5	846.5							
2	Channel	20415	20525	20635							
3	Frequency	825.5	836.5	847.5							
1.4	Channel	20407	20525	20643							
1.4	Frequency	824.7	836.5	848.3							

	LTE Band 12 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest							
40	Channel	23060	23095	23130							
10	Frequency	704	707.5	711							
5	Channel	23035	23095	23155							
5	Frequency	701.5	707.5	713.5							
3	Channel	23025	23095	23165							
3	Frequency	700.5	704 707.5 23035 23095 701.5 707.5 23025 23095	714.5							
1.4	Channel	23017	23095	23173							
1.4	Frequency	699.7	707.5	715.3							

LTE Band 13 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest						
10	Channel	-	23230	-						
10	Frequency	-	782	-						
-	Channel	23205	23230	23255						
5	Frequency	779.5	782	784.5						

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	LTE Band 26 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest							
45	Channel	26865	26915	26965							
15	Frequency	831.5	836.5	841.5							
10	Channel	26840	26915	26990							
10	Frequency	829	836.5	844							
5	Channel	26815	26915	27015							
5	Frequency	826.5	836.5	846.5							
3	Channel	26805	26915	27025							
3	Frequency	825.5	836.5	847.5							
1.4	Channel	26797	26915	27033							
1.4	Frequency	824.7	836.5	848.3							

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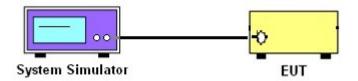
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

Sporton International (Shenzhen) Inc.

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3.4 Conducted Output Power and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

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.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12 and Band 13.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

According to KDB 412172 D01 Power Approach,

EIRP = P_T + G_T – L_C , ERP = EIRP -2.15, where

 P_T = transmitter output power in dBm

 G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

- 1. The testing follows ANSI C63.26 Section 5.2
- 2. The transmitter output port was connected to the system simulator.
- 3. Set EUT at maximum power through the system simulator.
- 4. Select lowest, middle, and highest channels for each band and different modulation.
- 5. Measure and record the power level from the system simulator.

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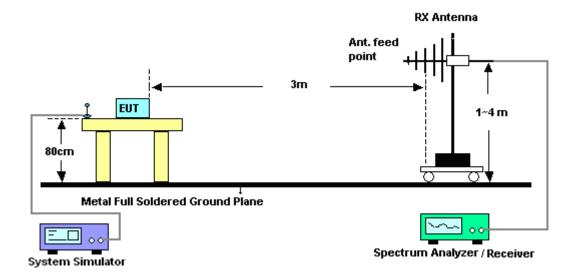
4 Radiated Test Items

4.1 Measuring Instruments

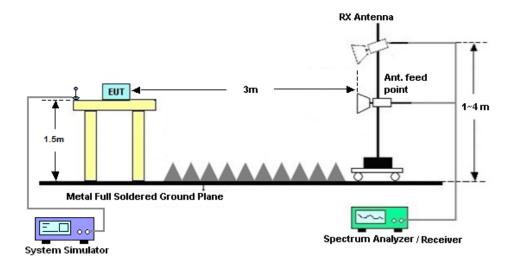
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

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4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

- 1. The testing follows ANSI C63.26 Section 5.5
- 2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
- 3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
- 4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
- 6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
- 7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 10. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 11. ERP (dBm) = EIRP 2.15
- 12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

- = P(W)- [43 + 10log(P)] (dB)
- = [30 + 10log(P)] (dBm) [43 + 10log(P)] (dB)
- = -13dBm.

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5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Base Station	R&S	CMW500	132727	2G/3G/4G	Dec. 25, 2018	Jan. 06, 2019	Dec. 24, 2019	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Apr. 19, 2018	Jan. 07, 2019	Apr. 18, 2019	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	May. 10, 2018	Jan. 07, 2019	May. 09, 2019	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	ВВНА	9120D-1285	1GHz~18GHz	Mar.29, 2018	Jan. 07, 2019	Mar.28, 2019	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Mar.30, 2018	Jan. 07, 2019	Mar.29, 2019	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct.20, 2018	Jan. 07, 2019	Oct 19, 2019	Radiation (03CH02-SZ
HF Amplifier	Agilent	8449B	3008A01023	1GHz~26.5GHz	Oct.20, 2018	Jan. 07, 2019	Oct 19, 2019	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul.30, 2018	Jan. 07, 2019	Jul.29, 2019	Radiation (03CH02-SZ
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Jan. 07, 2019	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jan. 07, 2019	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jan. 07, 2019	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required

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6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of	2 EAD
Confidence of 95% (U = 2Uc(y))	2.5dB

<u>Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)</u>

Measuring Uncertainty for a Level of	
Confidence of 95% (U = 2Uc(y))	3.3dB

<u>Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)</u>

Measuring Uncertainty for a Level of	3.7dB
Confidence of 95% (U = 2Uc(y))	3.7UB

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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

			LTE Ba	and 2	2 Max	ximum	Average Power [dBm]	
BW [MHz]	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highest
DVV [IVITIZ]	IVIOU	ND SIZE	KB Oliset	L	М	Н	Lowest	Middle	ingilos:
20		1	0	0	8	15	22.51	22.57	22.50
20		1	5	0	8	15	22.57	22.59	22.56
20	QPSK	3	0	0	8	15	22.62	22.69	22.64
20		3	3	0	8	15	22.60	22.61	22.55
20		6	0	0	8	15	22.54	22.58	22.56
20		1	0	0	8	15	22.53	22.12	21.85
20		1	5	0	8	15	22.51	21.80	21.86
20	16-QAM	3	0	0	8	15	22.52	22.55	22.54
20		3	3	0	8	15	22.51	22.49	22.53
20		6	0	0	8	15	22.51	22.34	22.47
15		1	0	0	6	11	22.26	22.44	22.52
15		1	5	0	6	11	22.24	22.48	22.51
15	QPSK	3	0	0	6	11	22.25	22.53	22.49
15		3	3	0	6	11	22.22	22.43	22.51
15		6	0	0	6	11	22.25	22.36	22.41
15		1	0	0	6	11	22.42	21.54	21.70
15	16-QAM	1	5	0	6	11	22.41	21.54	21.60
15		3	0	0	6	11	22.30	22.53	22.59
15		3	3	0	6	11	22.27	22.61	22.60
15		6	0	0	6	11	22.29	22.19	22.17

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	LTE Band 2 Maximum Average Power [dBm]										
10		1	0	0	4	7	22.32	22.42	22.50		
10		1	5	0	4	7	22.24	22.43	22.49		
10	QPSK	3	0	0	4	7	22.30	22.51	22.48		
10	_	3	3	0	4	7	22.33	22.52	22.46		
10		6	0	0	4	7	21.74	21.86	21.89		
10		1	0	0	4	7	22.62	21.60	21.68		
10		1	5	0	4	7	22.39	21.52	21.67		
10	16-QAM	3	0	0	4	7	22.25	22.50	22.58		
10		3	3	0	4	7	22.27	22.59	22.64		
10		6	0	0	4	7	21.18	21.13	21.16		
5		1	0	0	2	3	21.65	22.41	22.40		
5		1	5	0	2	3	21.68	22.39	22.43		
5	QPSK	3	0	0	2	3	21.03	21.83	21.90		
5		3	3	0	2	3	21.05	21.85	21.89		
5		6	0	0	2	3	21.01	21.76	21.84		
5		1	0	0	2	3	21.87	21.62	21.62		
5		1	5	0	2	3	21.90	21.60	21.57		
5	16-QAM	3	0	0	2	3	21.08	22.02	22.00		
5		3	3	0	2	3	21.10	22.05	22.08		
5		6	0	0	2	3	21.00	21.10	21.14		
3		1	0	0	0	1	21.55	22.25	22.32		
3		1	5	0	0	1	21.57	22.29	22.39		
3	QPSK	3	0	0	0	1	21.20	21.67	21.76		
3		3	3	0	0	1	21.11	21.65	21.69		
3		6	0	0	0	1	21.17	21.17	21.25		
3		1	0	0	0	1	21.22	21.81	21.72		
3		1	5	0	0	1	21.03	21.73	21.69		
3	16-QAM	3	0	0	0	1	21.11	21.93	22.01		
3		3	3	0	0	1	21.10	22.09	22.12		
3		6	0	0	0	1	21.98	21.16	21.27		

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	LTE Band 2 Maximum Average Power [dBm]										
BW [MHz]	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highoot		
BVV [IVITIZ]	IVIOU	RB Size	KB Oliset	٦	M	Н	Lowest	Middle	Highest		
1.4		1	0	0	0	0	21.98	21.91	22.19		
1.4		1	5	0	0	0	21.99	21.92	22.00		
1.4	QPSK	3	0	0	0	0	21.68	21.57	21.64		
1.4		3	3	0	0	0	21.51	21.31	21.59		
1.4		6	0	0	0	0	21.20	21.22	21.34		
1.4		1	0	0	0	0	21.58	21.59	21.61		
1.4		1	5	0	0	0	21.55	21.58	21.60		
1.4	16-QAM	3	0	0	0	0	21.21	21.20	21.27		
1.4		3	3	0	0	0	21.44	21.42	21.54		
1.4		6	0	0	0	0	21.12	21.08	21.15		

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			LTE Ba	and 4	1 Max	ximum	Average Power [dBm]	
BW [MHz]	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highest
DVV [IVITZ]	IVIOU	RD SIZE	RB Oliset	L	М	Н	Lowest	Middle	Highest
20		1	0	0	8	15	22.01	21.94	22.01
20		1	5	0	8	15	21.99	21.96	22.02
20	QPSK	3	0	0	8	15	22.17	22.04	22.09
20		3	3	0	8	15	21.99	21.95	22.11
20		6	0	0	8	15	22.02	21.87	22.01
20		1	0	0	8	15	21.97	21.02	21.21
20		1	5	0	8	15	21.96	21.04	21.23
20	16-QAM	3	0	0	8	15	21.89	21.82	21.98
20		3	3	0	8	15	21.82	21.92	21.99
20		6	0	0	8	15	21.89	21.56	21.80
15		1	0	0	6	11	21.80	21.65	21.70
15		1	5	0	6	11	21.73	21.75	21.79
15	QPSK	3	0	0	6	11	21.87	21.63	21.77
15		3	3	0	6	11	21.79	21.62	21.93
15		6	0	0	6	11	21.69	21.63	21.97
15		1	0	0	6	11	21.80	20.73	21.03
15		1	5	0	6	11	21.93	20.91	21.04
15	16-QAM	3	0	0	6	11	21.91	21.86	21.96
15		3	3	0	6	11	21.97	21.94	21.89
15		6	0	0	6	11	21.86	21.66	21.86

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			LTE B	and 4	4 Ma	ximum	Average Power [dBm]	
10		1	0	0	4	7	21.73	21.59	21.69
10		1	5	0	4	7	21.69	21.71	21.77
10	QPSK	3	0	0	4	7	21.80	21.68	22.01
10		3	3	0	4	7	21.82	21.69	22.03
10		6	0	0	4	7	21.23	21.23	21.34
10		1	0	0	4	7	21.67	20.81	21.12
10		1	5	0	4	7	21.80	20.83	21.11
10	16-QAM	3	0	0	4	7	21.85	21.75	21.98
10		3	3	0	4	7	21.92	21.92	21.89
10		6	0	0	4	7	20.69	20.37	20.57
5		1	0	0	2	3	21.72	21.51	21.88
5		1	5	0	2	3	21.76	21.67	21.84
5	QPSK	3	0	0	2	3	21.08	21.08	21.25
5		3	3	0	2	3	21.18	21.09	21.40
5		6	0	0	2	3	21.20	21.02	21.30
5		1	0	0	2	3	21.89	20.93	21.23
5		1	5	0	2	3	21.90	20.82	21.16
5	16-QAM	3	0	0	2	3	21.11	21.22	21.21
5		3	3	0	2	3	21.15	21.31	21.57
5		6	0	0	2	3	20.65	20.26	20.53
3		1	0	0	0	1	21.63	21.38	21.73
3		1	5	0	0	1	21.66	21.60	21.95
3	QPSK	3	0	0	0	1	21.00	21.21	21.56
3		3	3	0	0	1	21.69	21.66	21.83
3		6	0	0	0	1	21.23	21.10	21.00
3		1	0	0	0	1	20.21	20.13	20.49
3		1	5	0	0	1	20.22	20.19	20.56
3	16-QAM	3	0	0	0	1	20.02	20.27	20.20
3		3	3	0	0	1	20.07	20.04	20.32
3		6	0	0	0	1	20.18	20.12	20.12

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			LTE Ba	and 4	4 Ma	ximum	Average Power [dBm]	
DW IMU-1	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highest
BW [MHz]	IVIOU	RB SIZE	RB Oliset	L	М	Н	Lowest	Middle	Highest
1.4		1	0	0	0	0	21.68	21.55	21.84
1.4		1	5	0	0	0	21.57	21.44	21.77
1.4	QPSK	3	0	0	0	0	21.61	21.51	21.06
1.4		3	3	0	0	0	21.60	21.49	21.59
1.4		6	0	0	0	0	21.09	21.01	21.28
1.4		1	0	0	0	0	20.60	20.44	20.66
1.4		1	5	0	0	0	20.27	20.25	20.26
1.4	16-QAM	3	0	0	0	0	20.34	20.17	20.51
1.4		3	3	0	0	0	20.11	20.17	20.14
1.4		6	0	0	0	0	20.06	20.22	20.19

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			LTE B	and (5 Ma	ximum	Average Power [dBm]	
10		1	0	0	4	7	22.73	22.57	22.54
10		1	5	0	4	7	22.76	22.58	22.52
10	QPSK	3	0	0	4	7	22.57	22.59	22.63
10		3	3	0	4	7	22.59	22.58	22.61
10		6	0	0	4	7	22.10	21.92	21.97
10		1	0	0	4	7	21.69	21.65	21.64
10		1	5	0	4	7	21.68	21.64	21.62
10	16-QAM	3	0	0	4	7	22.63	22.65	22.62
10		3	3	0	4	7	22.65	22.66	22.63
10		6	0	0	4	7	21.64	21.25	21.31
5		1	0	0	2	3	22.70	22.56	22.48
5		1	5	0	2	3	22.73	22.54	22.44
5	QPSK	3	0	0	2	3	22.11	22.17	21.97
5		3	3	0	2	3	22.12	22.06	21.95
5		6	0	0	2	3	22.13	21.98	21.89
5		1	0	0	2	3	21.68	21.64	21.46
5		1	5	0	2	3	21.70	21.63	21.42
5	16-QAM	3	0	0	2	3	22.18	22.24	22.15
5		3	3	0	2	3	22.29	22.25	22.25
5		6	0	0	2	3	21.67	21.21	21.11
3		1	0	0	0	1	22.38	22.21	22.20
3		1	5	0	0	1	22.26	22.23	22.19
3	QPSK	3	0	0	0	1	21.49	21.31	21.24
3		3	3	0	0	1	21.29	21.29	21.23
3		6	0	0	0	1	21.12	20.93	20.85
3		1	0	0	0	1	21.44	21.25	21.13
3		1	5	0	0	1	21.34	21.27	21.18
3	16-QAM	3	0	0	0	1	21.51	21.31	21.22
3		3	3	0	0	1	21.35	21.26	21.12
3		6	0	0	0	1	21.10	20.95	20.85

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			LTE Ba	and (5 Max	ximum	Average Power [dBm]		
DW [MU-1	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highest	
BW [MHz]	IVIOU	RB SIZE	RB Oliset	L	М	Н	Lowest	Middle	Highest	
1.4		1	0	0	0	0	22.36	22.22	22.18	
1.4		1	5	0	0	0	22.37	22.23	22.19	
1.4	QPSK	3	0	0	0	0	21.56	21.32	21.25	
1.4		3	3	0	0	0	21.41	21.29	21.23	
1.4		6	0	0	0	0	21.13	21.04	20.86	
1.4		1	0	0	0	0	21.36	21.18	21.10	
1.4		1	5	0	0	0	21.27	21.15	21.11	
1.4	16-QAM	3	0	0	0	0	21.51	21.28	21.23	
1.4		3	3	0	0	0	21.38	21.19	21.12	
1.4		6	0	0	0	0	21.14	21.61	21.58	

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			LTE Ba	nd 1	2 Ma	ximur	n Average Power [dBm]	
10		1	0	0	4	7	22.54	22.77	22.50
10		1	5	0	4	7	22.57	22.79	22.51
10	QPSK	3	0	0	4	7	22.61	22.66	22.50
10		3	3	0	4	7	22.64	22.68	22.49
10		6	0	0	4	7	21.98	22.07	21.91
10		1	0	0	4	7	21.51	21.80	21.64
10		1	5	0	4	7	21.56	21.73	21.65
10	16-QAM	3	0	0	4	7	22.73	22.67	22.78
10		3	3	0	4	7	22.76	22.69	22.77
10		6	0	0	4	7	21.54	21.46	21.30
5		1	0	0	2	3	22.03	22.44	22.60
5		1	5	0	2	3	22.06	22.41	22.50
5	QPSK	3	0	0	2	3	21.33	21.91	21.96
5		3	3	0	2	3	21.35	21.93	21.97
5		6	0	0	2	3	21.34	21.92	21.90
5		1	0	0	2	3	21.28	21.77	21.61
5		1	5	0	2	3	21.20	21.72	21.60
5	16-QAM	3	0	0	2	3	21.64	21.88	21.96
5		3	3	0	2	3	21.67	21.89	21.97
5		6	0	0	2	3	21.10	21.00	21.02
3		1	0	0	0	1	21.64	22.10	22.22
3		1	5	0	0	1	21.69	22.13	22.25
3	QPSK	3	0	0	0	1	21.20	21.20	21.25
3		3	3	0	0	1	21.23	21.12	21.27
3		6	0	0	0	1	21.00	21.12	21.19
3		1	0	0	0	1	21.02	21.38	21.54
3		1	5	0	0	1	21.01	21.34	21.46
3	16-QAM	3	0	0	0	1	21.09	21.35	21.40
3		3	3	0	0	1	21.11	21.29	21.33
3		6	0	0	0	1	20.70	20.93	21.01

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			LTE Ba	nd 1	2 Ma	ximun	n Average Power [dBm]	
DW/ FMU-1	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle	Highest
BW [MHz]	IVIOG	RD SIZE	RB Oliset	L	М	н	Lowest	Middle	Highest
1.4		1	0	0	0	0	21.58	22.13	22.22
1.4		1	5	0	0	0	21.63	22.18	22.26
1.4	QPSK	3	0	0	0	0	21.00	21.18	21.26
1.4		3	3	0	0	0	21.47	22.18	22.17
1.4		6	0	0	0	0	20.92	21.01	21.09
1.4		1	0	0	0	0	20.95	21.29	21.35
1.4		1	5	0	0	0	20.99	21.40	21.41
1.4	16-QAM	3	0	0	0	0	21.09	21.34	21.40
1.4		3	3	0	0	0	21.05	21.36	21.33
1.4		6	0	0	0	0	20.91	21.10	21.00

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			LTE Ba	ınd 1	3 Ma	ximun	n Average Power [dBm]	
10		1	0	0	4	7		22.89	
10		1	5	0	4	7		22.90	
10	QPSK	3	0	0	4	7		23.06	
10		3	3	0	4	7		23.08	
10		6	0	0	4	7		22.27	
10		1	0	0	4	7	-	22.13	-
10		1	5	0	4	7		22.03	
10	16-QAM	3	0	0	4	7		23.00	
10		3	3	0	4	7		23.05	
10		6	0	0	4	7		21.64	
5		1	0	0	2	3	22.95	22.93	22.97
5		1	5	0	2	3	22.98	22.91	22.93
5	QPSK	3	0	0	2	3	22.39	22.32	22.39
5		3	3	0	2	3	22.40	22.33	22.37
5		6	0	0	2	3	22.41	22.23	22.29
5		1	0	0	2	3	22.45	22.44	22.50
5		1	5	0	2	3	22.46	22.45	22.46
5	16-QAM	3	0	0	2	3	22.43	22.47	22.49
5		3	3	0	2	3	22.44	22.48	22.50
5		6	0	0	2	3	21.94	21.60	22.00

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			LTE Ba	and 2	6 Ma	ximur	n Average Power [dBm]	
15		1	0	0	6	11	22.62	22.59	22.63
15		1	5	0	6	11	22.77	22.74	22.64
15	QPSK	3	0	0	6	11	22.72	22.69	22.53
15		3	3	0	6	11	22.59	22.56	22.52
15		6	0	0	6	11	22.62	22.59	22.42
15		1	0	0	6	11	21.76	21.73	21.75
15		1	5	0	6	11	21.75	21.72	21.66
15	16-QAM	3	0	0	6	11	22.72	22.69	22.73
15		3	3	0	6	11	22.75	22.72	22.75
15		6	0	0	6	11	22.45	22.42	22.29
10		1	0	0	4	7	22.59	22.57	22.60
10		1	5	0	4	7	22.63	22.63	22.59
10	QPSK	3	0	0	4	7	22.61	22.62	22.60
10		3	3	0	4	7	22.62	22.63	22.57
10		6	0	0	4	7	22.14	21.84	21.72
10		1	0	0	4	7	22.50	21.51	21.43
10		1	5	0	4	7	22.51	21.47	21.41
10	16-QAM	3	0	0	4	7	22.36	22.43	22.41
10		3	3	0	4	7	22.38	22.42	22.49
10		6	0	0	4	7	21.68	21.30	21.21
5		1	0	0	2	3	21.58	22.60	22.48
5		1	5	0	2	3	21.61	22.63	22.44
5	QPSK	3	0	0	2	3	21.11	22.12	21.94
5		3	3	0	2	3	21.13	22.02	21.92
5		6	0	0	2	3	21.04	21.94	21.75
5		1	0	0	2	3	21.79	21.73	21.53
5		1	5	0	2	3	21.83	21.67	21.48
5	16-QAM	3	0	0	2	3	21.18	22.22	22.15
5		3	3	0	2	3	21.19	22.23	22.24
5		6	0	0	2	3	21.00	21.35	21.13

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			LTE Ba	nd 2	6 Ma	ximun	n Average Power [dBm]	
3		1	0	0	0	1	21.37	22.40	22.43
3		1	5	0	0	1	21.39	22.42	22.44
3	QPSK	3	0	0	0	1	21.24	22.30	22.17
3		3	3	0	0	1	21.12	22.17	22.15
3		6	0	0	0	1	20.98	21.17	21.14
3		1	0	0	0	1	21.19	21.55	21.31
3		1	5	0	0	1	21.11	21.57	21.28
3	16-QAM	3	0	0	0	1	21.13	21.59	21.35
3		3	3	0	0	1	21.00	21.46	21.24
3		6	0	0	0	1	20.99	21.21	21.09
1.4		1	0	0	0	0	21.39	22.42	22.34
1.4		1	5	0	0	0	21.38	22.37	22.35
1.4	QPSK	3	0	0	0	0	21.29	22.23	22.21
1.4		3	3	0	0	0	21.21	22.28	22.20
1.4		6	0	0	0	0	20.99	21.17	21.06
1.4		1	0	0	0	0	21.16	21.34	21.25
1.4		1	5	0	0	0	20.99	21.41	21.26
1.4	16-QAM	3	0	0	0	0	21.13	21.59	21.38
1.4		3	3	0	0	0	21.07	21.37	21.28
1.4		6	0	0	0	0	20.97	21.11	21.01

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ERP/EIRP

	LTE Band 2 (GT - LC = 1.0 dB) QPSK												
Bandwidth		1.4M			3M			5M					
Ob served	18607	18900	19193	18615	18900	19185	18625	18900	19175				
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)				
Frequency	4050.7	4000	4000.3	4054.5	4000	4000 5	4050.5	4000	4007.5				
(MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5				
Conducted Power (dBm)	21.98	21.91	22.19	21.57	22.29	22.39	21.68	22.39	22.43				
Conducted Power (Watts)	0.1578	0.1552	0.1656	0.1435	0.1694	0.1734	0.1472	0.1734	0.1750				
EIRP(dBm)	22.98	22.91	23.19	22.57	23.29	23.39	22.68	23.39	23.43				
EIRP(Watts)	0.1986	0.1954	0.2084	0.1807	0.2133	0.2183	0.1854	0.2183	0.2203				

			_TE Band	2 (GT - LC	c = 1.0 dB)	QPSK			
Bandwidth		10M			15M			20M	
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
Chamie	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
(MHz)	1000	1000	1905	1007.5	1000	1902.5	1000	1000	1900
Conducted Power (dBm)	22.33	22.52	22.46	22.25	22.53	22.49	22.62	22.69	22.64
Conducted Power (Watts)	0.1710	0.1786	0.1762	0.1679	0.1791	0.1774	0.1828	0.1858	0.1837
EIRP(dBm)	23.33	23.52	23.46	23.25	23.53	23.49	23.62	23.69	23.64
EIRP(Watts)	0.2153	0.2249	0.2218	0.2113	0.2254	0.2234	0.2301	0.2339	0.2312

Sporton International (Shenzhen) Inc.

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LTE Band 2 (GT - LC = 1.0 dB) 16QAM										
Bandwidth	1.4M			3M			5M			
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175	
Chamie	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5	
(MHz)	1030.7	1000	1909.5	1031.3	1000	1900.5	1032.3	1000	1907.5	
Conducted Power (dBm)	21.58	21.59	21.61	21.10	22.09	22.12	21.10	22.05	22.08	
Conducted Power (Watts)	0.1439	0.1442	0.1449	0.1288	0.1618	0.1629	0.1288	0.1603	0.1614	
EIRP(dBm)	22.58	22.59	22.61	22.10	23.09	23.12	22.10	23.05	23.08	
EIRP(Watts)	0.1811	0.1816	0.1824	0.1622	0.2037	0.2051	0.1622	0.2018	0.2032	

LTE Band 2 (GT - LC = 1.0 dB) 16QAM										
Bandwidth	10M			15M			20M			
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100	
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900	
(MHz)	1000	1000	1303	1037.3	1000	1302.3	1000	1000	1300	
Conducted Power (dBm)	22.27	22.59	22.64	22.27	22.61	22.60	22.52	22.55	22.54	
Conducted Power (Watts)	0.1687	0.1816	0.1837	0.1687	0.1824	0.1820	0.1786	0.1799	0.1795	
EIRP(dBm)	23.27	23.59	23.64	23.27	23.61	23.60	23.52	23.55	23.54	
EIRP(Watts)	0.2123	0.2286	0.2312	0.2123	0.2296	0.2291	0.2249	0.2265	0.2259	

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LTE Band 4 (GT - LC = 1.0 dB) QPSK										
Bandwidth	1.4M			3M			5M			
Ohamai	19957	20175	20393	19965	20175	20385	19975	20175	20375	
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	4740.7	4700 5	4754.0	4744.5	4700 5	4750.5	4740.5	4700 5	4750.5	
(MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5	
Conducted Power (dBm)	21.68	21.55	21.84	21.66	21.60	21.95	21.72	21.51	21.88	
Conducted Power (Watts)	0.1472	0.1429	0.1528	0.1466	0.1445	0.1567	0.1486	0.1416	0.1542	
EIRP(dBm)	22.68	22.55	22.84	22.66	22.60	22.95	22.72	22.51	22.88	
EIRP(Watts)	0.1854	0.1799	0.1923	0.1845	0.1820	0.1972	0.1871	0.1782	0.1941	

LTE Band 4 (GT - LC = 1.0 dB) QPSK									
Bandwidth	10M			15M			20M		
Observati	20000	20175	20350	20025	20175	20325	20050	20175	20300
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
(MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	21.82	21.69	22.03	21.69	21.63	21.97	22.17	22.04	22.09
Conducted Power (Watts)	0.1521	0.1476	0.1596	0.1476	0.1455	0.1574	0.1648	0.1600	0.1618
EIRP(dBm)	22.82	22.69	23.03	22.69	22.63	22.97	23.17	23.04	23.09
EIRP(Watts)	0.1914	0.1858	0.2009	0.1858	0.1832	0.1982	0.2075	0.2014	0.2037

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	LTE Band 4 (GT - LC = 1.0 dB) 16QAM									
Bandwidth		1.4M			3M		5M			
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375	
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	4740.7	4700 5	4754.0	4744 5	4700 5	4750.5	4740.5	4700 5	4750.5	
(MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5	
Conducted Power (dBm)	20.60	20.44	20.66	20.22	20.19	20.56	21.90	20.82	21.16	
Conducted Power (Watts)	0.1148	0.1107	0.1164	0.1052	0.1045	0.1138	0.1549	0.1208	0.1306	
EIRP(dBm)	21.60	21.44	21.66	21.22	21.19	21.56	22.90	21.82	22.16	
EIRP(Watts)	0.1445	0.1393	0.1466	0.1324	0.1315	0.1432	0.1950	0.1521	0.1644	

	LTE Band 4 (GT - LC = 1.0 dB) 16QAM										
Bandwidth		10M			15M		20M				
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300		
Chamiei	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)		
Frequency	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745		
(MHz)	1713	1732.5	1750	1717.5	1732.3	1747.5	1720	1732.5	1745		
Conducted Power (dBm)	21.85	21.75	21.98	21.97	21.94	21.89	21.82	21.92	21.99		
Conducted Power (Watts)	0.1531	0.1496	0.1578	0.1574	0.1563	0.1545	0.1521	0.1556	0.1581		
EIRP(dBm)	22.85	22.75	22.98	22.97	22.94	22.89	22.82	22.92	22.99		
EIRP(Watts)	0.1928	0.1884	0.1986	0.1982	0.1968	0.1945	0.1914	0.1959	0.1991		

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	LTE Band 5 (GT - LC = 0.8 dB) QPSK										
Bandwidth	1.4M				3M		5M				
Channal	20407	20525	20643	20415	20525	20635	20425	20525	20625		
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)		
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5		
(MHz)	024.7	036.5	040.3	025.5	036.5	047.5	020.5	036.5	046.5		
Conducted Power (dBm)	22.37	22.23	22.19	22.38	22.21	22.20	22.73	22.54	22.44		
Conducted Power (Watts)	0.1726	0.1671	0.1656	0.1730	0.1663	0.1660	0.1875	0.1795	0.1754		
ERP(dBm)	21.02	20.88	20.84	21.03	20.86	20.85	21.38	21.19	21.09		
ERP(Watts)	0.1265	0.1225	0.1213	0.1268	0.1219	0.1216	0.1374	0.1315	0.1285		

	LTE Band 5 (GT - LC = 0.8 dB) QPSK									
Bandwidth		10M								
Channel	20450	20525	20600							
Channel	(Low)	(Mid)	(High)							
Frequency	829	836.5	844							
(MHz)	029	030.5	044							
Conducted Power (dBm)	22.76	22.58	22.52							
Conducted Power (Watts)	0.1888	0.1811	0.1786							
ERP(dBm)	21.41	21.23	21.17							
ERP(Watts)	0.1384	0.1327	0.1309							

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	LTE Band 5 (GT - LC = 0.8 dB) 16QAM									
Bandwidth		1.4M			3M		5M			
Channal	20407	20525	20643	20415	20525	20635	20425	20525	20625	
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5	
(MHz)	024.7	030.5	040.3	025.5	030.5	047.5	020.5	030.5	040.5	
Conducted Power (dBm)	21.14	21.61	21.58	21.51	21.31	21.22	22.29	22.25	22.25	
Conducted Power (Watts)	0.1300	0.1449	0.1439	0.1416	0.1352	0.1324	0.1694	0.1679	0.1679	
ERP(dBm)	19.79	20.26	20.23	20.16	19.96	19.87	20.94	20.90	20.90	
ERP(Watts)	0.0953	0.1062	0.1054	0.1038	0.0991	0.0971	0.1242	0.1230	0.1230	

	LTE Band 5 (GT - LC = 0.8 dB) 16QAM										
Bandwidth		10M									
Channel	20450	20525	20600								
Channel	(Low)	(Mid)	(High)								
Frequency	829	836.5	844								
(MHz)	029	030.3	044								
Conducted Power (dBm)	22.65	22.66	22.63								
Conducted Power (Watts)	0.1841	0.1845	0.1832								
ERP(dBm)	21.30	21.31	21.28								
ERP(Watts)	0.1349	0.1352	0.1343								

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	LTE Band 12 (GT - LC = 0.8 dB) QPSK										
Bandwidth		1.4M			3M		5M				
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155		
Chamiei	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)		
Frequency	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5		
(MHz)	099.1	707.5	7 15.5	700.5	707.5	7 14.5	701.5	707.5	713.5		
Conducted Power (dBm)	21.63	22.18	22.26	21.69	22.13	22.25	22.03	22.44	22.60		
Conducted Power (Watts)	0.1455	0.1652	0.1683	0.1476	0.1633	0.1679	0.1596	0.1754	0.1820		
ERP(dBm)	20.28	20.83	20.91	20.34	20.78	20.90	20.68	21.09	21.25		
ERP(Watts)	0.1067	0.1211	0.1233	0.1081	0.1197	0.1230	0.1169	0.1285	0.1334		

	LTE Band 12 (GT - LC = 0.8 dB) QPSK									
Bandwidth		10M								
Channel	23060	23095	23130							
Chamie	(Low)	(Mid)	(High)							
Frequency	704	707.5	711							
(MHz)	704	707.5	711							
Conducted Power (dBm)	22.57	22.79	22.51							
Conducted Power (Watts)	0.1807	0.1901	0.1782							
ERP(dBm)	21.22	21.44	21.16							
ERP(Watts)	0.1324	0.1393	0.1306							

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	LTE Band 12 (GT - LC = 0.8 dB) 16QAM									
Bandwidth		1.4M			3M		5M			
Ohamal	23017	23095	23173	23025	23095	23165	23035	23095	23155	
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	
Frequency	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5	
(MHz)	033.7	707.5	7 13.3	700.5	707.5	714.5	701.5	707.5	713.3	
Conducted Power (dBm)	20.99	21.40	21.41	21.02	21.38	21.54	21.67	21.89	21.97	
Conducted Power (Watts)	0.1256	0.1380	0.1384	0.1265	0.1374	0.1426	0.1469	0.1545	0.1574	
ERP(dBm)	19.64	20.05	20.06	19.67	20.03	20.19	20.32	20.54	20.62	
ERP(Watts)	0.0920	0.1012	0.1014	0.0927	0.1007	0.1045	0.1076	0.1132	0.1153	

	LTE Band 12 (GT - LC =	0.8 dB) 16QAM		
Bandwidth		10M		
Channel	23060	23095	23130	
Channel	(Low)	(Mid)	(High)	
Frequency	704	707.5	711	
(MHz)	704	707.5	7 11	
Conducted Power (dBm)	22.73	22.67	22.78	
Conducted Power (Watts)	0.1875	0.1849	0.1897	
ERP(dBm)	21.38	21.32	21.43	
ERP(Watts)	0.1374	0.1355	0.1390	

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		LTE Band 1	3 (GT - LC = 0.8	B dB) QPSK			
Bandwidth		5M		10M			
Channel	23205	23230	23255				
Channel	(Low)	(Mid)	(High)	•	(Mid)	•	
Frequency	779.5	782	784.5		782		
(MHz)	779.5	762	704.5	•	702	_	
Conducted Power (dBm)	22.98	22.91	22.93		23.08	1	
Conducted Power (Watts)	0.1986	0.1954	0.1963		0.2032	-	
ERP(dBm)	21.63	21.56	21.58		21.73	•	
ERP(Watts)	0.1455	0.1432	0.1439		0.1489	-	

		LTE Band 1	3 (GT - LC = 0.8	dB) 16QAM			
Bandwidth		5M		10M			
Channel	23205	23230	23255	23230			
Chamilei	(Low)	(Mid)	(High)	•	(Mid)	-	
Frequency	779.5	782	784.5		782		
(MHz)	779.5	702	764.5	•	702	-	
Conducted Power (dBm)	22.44	22.48	22.50		23.05	-	
Conducted Power (Watts)	0.1754	0.1770	0.1778		0.2018	-	
ERP(dBm)	21.09	21.13	21.15		21.70	-	
ERP(Watts)	0.1285	0.1297	0.1303		0.1479	-	

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	LTE Band 26 (GT - LC = 0.8 dB) QPSK													
Bandwidth		1.4M			3M		5M							
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015					
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)					
Frequency	0047	000 5	0.40.0	005.5	000 5	0.47.5	000 5	000 5	040.5					
(MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5					
Conducted Power (dBm)	21.39	22.42	22.34	21.39	22.42	22.44	21.61	22.63	22.44					
Conducted Power (Watts)	0.1377	0.1746	0.1714	0.1377	0.1746	0.1754	0.1449	0.1832	0.1754					
ERP(dBm)	20.04	21.07	20.99	20.04	21.07	21.09	20.26	21.28	21.09					
ERP(Watts)	0.1009	0.1279	0.1256	0.1009	0.1279	0.1285	0.1062	0.1343	0.1285					

	LTE Band 26 (GT - LC = 0.8 dB) QPSK													
Bandwidth		10M			15M		15M							
Channel	26840	26915	26990	26865	26915	26965	26765							
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)							
Frequency	000	000 5	044	004.5	000 5	044.5	004.5							
(MHz)	829	836.5	844	831.5	836.5	841.5	821.5							
Conducted Power (dBm)	22.63	22.63	22.59	22.77	22.74	22.64	22.55							
Conducted Power (Watts)	0.1832	0.1832	0.1816	0.1892	0.1879	0.1837	0.1799							
ERP(dBm)	21.28	21.28	21.24	21.42	21.39	21.29	21.20							
ERP(Watts)	0.1343	0.1343	0.1330	0.1387	0.1377	0.1346	0.1318							

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	LTE Band 26 (GT - LC = 0.8 dB) 16QAM												
Bandwidth		1.4M			3M		5M						
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015				
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)				
Frequency	0047	020 5	040.0	005.5	020 5	047.5	000 5	020 5	040 5				
(MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5				
Conducted Power (dBm)	21.13	21.59	21.38	21.13	21.59	21.35	21.19	22.23	22.24				
Conducted Power (Watts)	0.1297	0.1442	0.1374	0.1297	0.1442	0.1365	0.1315	0.1671	0.1675				
ERP(dBm)	19.78	20.24	20.03	19.78	20.24	20.00	19.84	20.88	20.89				
ERP(Watts)	0.0951	0.1057	0.1007	0.0951	0.1057	0.1000	0.0964	0.1225	0.1227				

	LTE Band 26 (GT - LC = 0.8 dB) 16QAM												
Bandwidth		10M			15M		15M						
Channel	26840	26915	26990	26865	26915	26965	26765						
Chamilei	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)						
Frequency	000	020 5	044	0045 0005 0445			004.5						
(MHz)	829	836.5	844	831.5	836.5	841.5	821.5						
Conducted Power (dBm)	22.51	21.47	21.41	22.75	22.72	22.75	22.67						
Conducted Power (Watts)	0.1782	0.1403	0.1384	0.1884	0.1871	0.1884	0.1849						
ERP(dBm)	21.16	20.12	20.06	21.40	21.37	21.40	21.32						
ERP(Watts)	0.1306	0.1028	0.1014	0.1380	0.1371	0.1380	0.1355						

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Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

		LTE Band 2 / 1.4MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)					
	3700.32	-59.82	-13	-46.82	-78.24	-66.57	5.85	12.60	Н					
1	5550.48	-60.73	-13	-47.73	-83.14	-66.53	7.30	13.10	Н					
	7400.64	-54.54	-13	-41.54	-82.89	-57.69	8.35	11.50	Н					
Lowest	3700.32	-58.37	-13	-45.37	-76.82	-65.12	5.85	12.60	V					
	5550.48	-60.61	-13	-47.61	-83.22	-66.41	7.30	13.10	V					
	7400.64	-54.37	-13	-41.37	-82.4	-57.52	8.35	11.50	V					
	3758.92	-61.65	-13	-48.65	-80.15	-68.40	5.85	12.60	Н					
	5638.38	-60.91	-13	-47.91	-83.08	-66.71	7.30	13.10	Н					
Middle	7517.84	-54.87	-13	-41.87	-82.71	-58.02	8.35	11.50	Н					
Middle	3758.92	-57.08	-13	-44.08	-75.62	-63.83	5.85	12.60	V					
	5638.38	-60.83	-13	-47.83	-83.4	-66.63	7.30	13.10	V					
	7517.84	-55.09	-13	-42.09	-82.71	-58.24	8.35	11.50	V					
	3817.52	-61.60	-13	-48.60	-80.23	-68.35	5.85	12.60	Н					
	5726.28	-60.71	-13	-47.71	-83.22	-66.51	7.30	13.10	Н					
I limboot	7635.04	-55.28	-13	-42.28	-82.79	-58.43	8.35	11.50	Н					
Highest	3817.52	-61.00	-13	-48.00	-79.69	-67.75	5.85	12.60	V					
	5726.28	-60.06	-13	-47.06	-82.9	-65.86	7.30	13.10	V					
	7635.04	-54.55	-13	-41.55	-81.92	-57.70	8.35	11.50	V					

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3700.48	-56.90	-13	-43.90	-75.32	-63.65	5.85	12.60	Н				
	5550.72	-60.91	-13	-47.91	-83.32	-66.71	7.30	13.10	Н				
Lawaat	7400.96	-54.35	-13	-41.35	-82.70	-57.50	8.35	11.50	Н				
Lowest	3700.48	-56.59	-13	-43.59	-75.04	-63.34	5.85	12.60	V				
	5550.72	-60.29	-13	-47.29	-82.9	-66.09	7.30	13.10	V				
	7400.96	-54.91	-13	-41.91	-82.94	-58.06	8.35	11.50	V				
	3757.48	-60.25	-13	-47.25	-78.75	-67.00	5.85	12.60	Н				
	5636.22	-60.72	-13	-47.72	-82.89	-66.52	7.30	13.10	Н				
M: al all a	7514.96	-55.18	-13	-42.18	-83.02	-58.33	8.35	11.50	Н				
Middle	3757.48	-60.96	-13	-47.96	-79.5	-67.71	5.85	12.60	V				
	5636.22	-60.63	-13	-47.63	-83.2	-66.43	7.30	13.10	V				
	7514.96	-55.10	-13	-42.10	-82.72	-58.25	8.35	11.50	V				
	3814.48	-61.80	-13	-48.80	-80.44	-68.55	5.85	12.60	Н				
	5721.72	-60.54	-13	-47.54	-83.05	-66.34	7.30	13.10	Н				
I P . I (7628.96	-55.16	-13	-42.16	-82.67	-58.31	8.35	11.50	Н				
Highest	3814.48	-60.36	-13	-47.36	-79.06	-67.11	5.85	12.60	V				
	5721.72	-60.53	-13	-47.53	-83.37	-66.33	7.30	13.10	V				
	7628.96	-54.81	-13	-41.81	-82.18	-57.96	8.35	11.50	V				

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	LTE Band 2 / 5MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3700.68	-55.61	-13	-42.61	-74.03	-62.36	5.85	12.60	Н				
	5551.02	-60.76	-13	-47.76	-83.17	-66.56	7.30	13.10	Н				
Lowest	7401.36	-54.30	-13	-41.30	-82.65	-57.45	8.35	11.50	Н				
Lowest	3700.68	-54.59	-13	-41.59	-73.04	-61.34	5.85	12.60	V				
	5551.02	-60.52	-13	-47.52	-83.13	-66.32	7.30	13.10	V				
	7401.36	-53.82	-13	-40.82	-81.85	-56.97	8.35	11.50	V				
	3755.68	-58.49	-13	-45.49	-76.99	-65.24	5.85	12.60	Н				
	5633.52	-61.01	-13	-48.01	-83.18	-66.81	7.30	13.10	Н				
M: dalla	7511.36	-53.47	-13	-40.47	-81.31	-56.62	8.35	11.50	Н				
Middle	3755.68	-57.54	-13	-44.54	-76.08	-64.29	5.85	12.60	V				
	5633.52	-60.28	-13	-47.28	-82.85	-66.08	7.30	13.10	V				
	7511.36	-50.13	-13	-37.13	-77.75	-53.28	8.35	11.50	V				
	3810.68	-58.87	-13	-45.87	-77.45	-65.62	5.85	12.60	Н				
	5716.02	-60.14	-13	-47.14	-82.58	-65.94	7.30	13.10	Н				
I.P. b f	7621.36	-54.53	-13	-41.53	-82.03	-57.68	8.35	11.50	Н				
Highest	3810.68	-56.43	-13	-43.43	-75.05	-63.18	5.85	12.60	V				
	5716.02	-59.35	-13	-46.35	-82.14	-65.15	7.30	13.10	V				
	7621.36	-49.87	-13	-36.87	-77.24	-53.02	8.35	11.50	V				

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	LTE Band 2 / 10MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3701.18	-54.09	-13	-41.09	-72.51	-60.84	5.85	12.60	Н				
	5551.77	-60.47	-13	-47.47	-82.88	-66.27	7.30	13.10	Н				
Lowest	7402.36	-54.18	-13	-41.18	-82.53	-57.33	8.35	11.50	Н				
Lowest	3701.18	-53.11	-13	-40.11	-71.56	-59.86	5.85	12.60	V				
	5551.77	-60.42	-13	-47.42	-83.03	-66.22	7.30	13.10	V				
	7402.36	-51.53	-13	-38.53	-79.56	-54.68	8.35	11.50	V				
	3751.18	-57.10	-13	-44.10	-75.60	-63.85	5.85	12.60	Н				
	5626.77	-60.60	-13	-47.60	-82.95	-66.40	7.30	13.10	Н				
Middle	7502	-54.95	-13	-41.95	-82.87	-58.10	8.35	11.50	Н				
ivildale	3751.18	-56.50	-13	-43.50	-75.04	-63.25	5.85	12.60	V				
	5626.77	-59.96	-13	-46.96	-82.58	-65.76	7.30	13.10	V				
	7502	-50.71	-13	-37.71	-78.39	-53.86	8.35	11.50	V				
	3801.18	-57.82	-13	-44.82	-76.40	-64.57	5.85	12.60	Н				
	5701.77	-59.75	-13	-46.75	-82.19	-65.55	7.30	13.10	Н				
Himboot	7602.36	-54.65	-13	-41.65	-82.15	-57.80	8.35	11.50	Н				
Highest	3801.18	-57.95	-13	-44.95	-76.57	-64.70	5.85	12.60	V				
	5701.77	-58.09	-13	-45.09	-80.88	-63.89	7.30	13.10	V				
	7602.36	-50.35	-13	-37.35	-77.72	-53.50	8.35	11.50	V				

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	LTE Band 2 / 15MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3701.68	-55.63	-13	-42.63	-74.05	-62.38	5.85	12.60	Н				
	5552.52	-60.79	-13	-47.79	-83.20	-66.59	7.30	13.10	Н				
Lowest	7403.36	-54.47	-13	-41.47	-82.79	-57.62	8.35	11.50	Н				
Lowest	3701.68	-56.67	-13	-43.67	-75.12	-63.42	5.85	12.60	V				
	5552.52	-60.48	-13	-47.48	-83.09	-66.28	7.30	13.10	V				
	7403.36	-53.38	-13	-40.38	-81.38	-56.53	8.35	11.50	V				
	3746.68	-55.87	-13	-42.87	-74.37	-62.62	5.85	12.60	Н				
	5620.02	-59.95	-13	-46.95	-82.30	-65.75	7.30	13.10	Н				
N 4: -I -II -	7493.36	-54.12	-13	-41.12	-82.04	-57.27	8.35	11.50	Н				
Middle	3746.68	-57.63	-13	-44.63	-76.17	-64.38	5.85	12.60	V				
	5620.02	-60.23	-13	-47.23	-82.85	-66.03	7.30	13.10	V				
	7493.36	-48.03	-13	-35.03	-75.71	-51.18	8.35	11.50	V				
	3791.68	-57.82	-13	-44.82	-76.37	-64.57	5.85	12.60	Н				
	5687.52	-59.92	-13	-46.92	-82.29	-65.72	7.30	13.10	Н				
l liada a at	7583.36	-54.41	-13	-41.41	-81.98	-57.56	8.35	11.50	Н				
Highest	3791.68	-58.62	-13	-45.62	-77.21	-65.37	5.85	12.60	V				
	5687.52	-59.04	-13	-46.04	-81.77	-64.84	7.30	13.10	V				
	7583.36	-51.79	-13	-38.79	-79.21	-54.94	8.35	11.50	V				

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	LTE Band 2 / 20MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3702.18	-53.71	-13	-40.71	-72.13	-60.46	5.85	12.60	Н				
	5553.27	-60.77	-13	-47.77	-83.18	-66.57	7.30	13.10	Н				
Lowoot	7404.36	-54.25	-13	-41.25	-82.57	-57.40	8.35	11.50	Н				
Lowest	3702.18	-54.95	-13	-41.95	-73.4	-61.70	5.85	12.60	V				
	5553.27	-60.71	-13	-47.71	-83.32	-66.51	7.30	13.10	V				
	7404.36	-50.47	-13	-37.47	-78.47	-53.62	8.35	11.50	V				
	3742.18	-56.10	-13	-43.10	-74.56	-62.85	5.85	12.60	Н				
	5613.27	-60.70	-13	-47.70	-83.23	-66.50	7.30	13.10	Н				
M: al all a	7484.36	-54.66	-13	-41.66	-82.64	-57.81	8.35	11.50	Н				
Middle	3742.18	-55.73	-13	-42.73	-74.23	-62.48	5.85	12.60	V				
	5613.27	-60.31	-13	-47.31	-82.99	-66.11	7.30	13.10	V				
	7484.36	-49.42	-13	-36.42	-77.15	-52.57	8.35	11.50	V				
	3782.18	-57.21	-13	-44.21	-75.77	-63.96	5.85	12.60	Н				
	5673.27	-60.04	-13	-47.04	-82.34	-65.84	7.30	13.10	Н				
I limbaat	7564.36	-52.69	-13	-39.69	-80.32	-55.84	8.35	11.50	Н				
Highest	3782.18	-58.56	-13	-45.56	-77.16	-65.31	5.85	12.60	V				
	5673.27	-58.42	-13	-45.42	-81.1	-64.22	7.30	13.10	V				
	7564.36	-51.03	-13	-38.03	-78.5	-54.18	8.35	11.50	V				

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	LTE Band 4 / 1.4MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3420.32	-60.23	-13	-47.23	-76.90	-67.11	5.60	12.48	Н				
	5130.48	-61.64	-13	-48.64	-83.23	-67.32	7.10	12.78	Н				
Lowest	6840.64	-56.39	-13	-43.39	-82.78	-59.78	8.38	11.77	Н				
Lowest	3420.32	-47.96	-13	-34.96	-64.67	-54.84	5.60	12.48	V				
	5130.48	-60.93	-13	-47.93	-82.95	-66.61	7.10	12.78	V				
	6840.64	-56.24	-13	-43.24	-82.86	-59.63	8.38	11.77	V				
	3463.74	-56.38	-13	-43.38	-73.50	-63.23	5.65	12.50	Н				
	5195.61	-61.47	-13	-48.47	-83.14	-67.14	7.13	12.80	Н				
Middle	6927.48	-56.09	-13	-43.09	-82.89	-59.49	8.40	11.80	Н				
Middle	3463.74	-46.71	-13	-33.71	-63.86	-53.56	5.65	12.50	V				
	5195.61	-60.98	-13	-47.98	-83.1	-66.65	7.13	12.80	V				
	6927.48	-55.76	-13	-42.76	-82.67	-59.16	8.40	11.80	V				
	3507.52	-48.82	-13	-35.82	-66.37	-55.66	5.68	12.52	Н				
	5261.28	-62.06	-13	-49.06	-83.29	-67.73	7.15	12.82	Н				
Lliabaat	7015.04	-56.06	-13	-43.06	-83.21	-59.49	8.42	11.85	Н				
Highest	3507.52	-42.71	-13	-29.71	-60.29	-49.55	5.68	12.52	V				
	5261.28	-61.94	-13	-48.94	-83.22	-67.61	7.15	12.82	V				
	7015.04	-55.19	-13	-42.19	-82.44	-58.62	8.42	11.85	V				

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				LTE Band 4	/ 3MHz / QPS	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	3420.48	-60.04	-13	-47.04	-76.71	-66.92	5.60	12.48	Н
	5130.72	-61.61	-13	-48.61	-83.20	-67.29	7.10	12.78	Н
Lawast	6840.96	-56.19	-13	-43.19	-82.58	-59.58	8.38	11.77	Н
Lowest	3420.48	-48.49	-13	-35.49	-65.2	-55.37	5.60	12.48	V
	5130.72	-60.98	-13	-47.98	-83	-66.66	7.10	12.78	V
	6840.96	-55.57	-13	-42.57	-82.19	-58.96	8.38	11.77	V
	3462.48	-46.60	-13	-33.60	-63.72	-53.45	5.65	12.50	Н
	5193.72	-61.79	-13	-48.79	-83.46	-67.46	7.13	12.80	Н
N 4: -1 -11 -	6924.96	-56.00	-13	-43.00	-82.80	-59.40	8.40	11.80	Н
Middle	3462.48	-44.67	-13	-31.67	-61.82	-51.52	5.65	12.50	V
	5193.72	-60.99	-13	-47.99	-83.11	-66.66	7.13	12.80	V
	6924.96	-55.69	-13	-42.69	-82.6	-59.09	8.40	11.80	V
	3504.48	-48.82	-13	-35.82	-66.22	-55.66	5.68	12.52	Н
	5256.72	-62.06	-13	-49.06	-83.20	-67.73	7.15	12.82	Н
	7008.96	-55.53	-13	-42.53	-82.65	-58.96	8.42	11.85	Н
Highest	3504.48	-42.82	-13	-29.82	-60.25	-49.66	5.68	12.52	V
	5256.72	-62.00	-13	-49.00	-83.15	-67.67	7.15	12.82	V
	7008.96	-55.76	-13	-42.76	-82.9	-59.19	8.42	11.85	V

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3420.68	-44.09	-13	-31.09	-60.76	-50.97	5.60	12.48	Н				
	5131.02	-59.52	-13	-46.52	-81.11	-65.20	7.10	12.78	Н				
Lowest	6841.36	-56.29	-13	-43.29	-82.68	-59.68	8.38	11.77	Н				
Lowest	3420.68	-44.96	-13	-31.96	-61.67	-51.84	5.60	12.48	V				
	5131.02	-57.49	-13	-44.49	-79.51	-63.17	7.10	12.78	V				
	6841.36	-56.26	-13	-43.26	-82.88	-59.65	8.38	11.77	V				
	3460.68	-42.56	-13	-29.56	-59.68	-49.41	5.65	12.50	Н				
	5191.02	-60.72	-13	-47.72	-82.39	-66.39	7.13	12.80	Н				
Middle	6921.36	-56.18	-13	-43.18	-82.89	-59.58	8.40	11.80	Н				
ivildale	3460.68	-42.25	-13	-29.25	-59.4	-49.10	5.65	12.50	V				
	5191.02	-59.88	-13	-46.88	-82	-65.55	7.13	12.80	V				
	6921.36	-56.12	-13	-43.12	-82.97	-59.52	8.40	11.80	V				
	3500.68	-40.89	-13	-27.89	-58.30	-47.73	5.68	12.52	Н				
	5251.02	-62.30	-13	-49.30	-83.44	-67.97	7.15	12.82	Н				
l liada a at	7001.36	-55.74	-13	-42.74	-82.86	-59.17	8.42	11.85	Н				
Highest	3500.68	-41.21	-13	-28.21	-58.65	-48.05	5.68	12.52	V				
	5251.02	-61.94	-13	-48.94	-83.09	-67.61	7.15	12.82	V				
	7001.36	-55.79	-13	-42.79	-82.93	-59.22	8.42	11.85	V				

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			L	TE Band 4 /	10MHz / QP	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	3421.18	-44.99	-13	-31.99	-61.66	-51.87	5.60	12.48	Н
	5131.77	-58.13	-13	-45.13	-79.72	-63.81	7.10	12.78	Н
Lowest	6842.36	-54.25	-13	-41.25	-80.64	-57.64	8.38	11.77	Н
Lowest	3421.18	-46.13	-13	-33.13	-62.84	-53.01	5.60	12.48	V
	5131.77	-59.09	-13	-46.09	-81.11	-64.77	7.10	12.78	V
	6842.36	-56.12	-13	-43.12	-82.74	-59.51	8.38	11.77	V
	3456.18	-51.47	-13	-38.47	-68.44	-58.32	5.65	12.50	Н
	5184.27	-61.53	-13	-48.53	-83.18	-67.20	7.13	12.80	Н
Middle	6912.36	-55.99	-13	-42.99	-82.70	-59.39	8.40	11.80	Н
ivildale	3456.18	-40.58	-13	-27.58	-57.58	-47.43	5.65	12.50	V
	5184.27	-60.51	-13	-47.51	-82.61	-66.18	7.13	12.80	V
	6912.36	-55.84	-13	-42.84	-82.69	-59.24	8.40	11.80	V
	3491.18	-40.87	-13	-27.87	-58.28	-47.71	5.68	12.52	Н
	5236.77	-61.83	-13	-48.83	-83.15	-67.50	7.15	12.82	Н
112.1	6982.36	-55.71	-13	-42.71	-82.75	-59.14	8.42	11.85	Н
Highest	3491.18	-39.84	-13	-26.84	-57.28	-46.68	5.68	12.52	V
	5236.77	-61.52	-13	-48.52	-83	-67.19	7.15	12.82	V
	6982.36	-56.02	-13	-43.02	-83.1	-59.45	8.42	11.85	V

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			L	TE Band 4 /	15MHz / QP	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	3421.68	-54.84	-13	-41.84	-71.51	-61.72	5.60	12.48	Н
	5132.52	-60.76	-13	-47.76	-82.35	-66.44	7.10	12.78	Н
Lawast	6843.36	-55.39	-13	-42.39	-81.78	-58.78	8.38	11.77	Н
Lowest	3421.68	-45.85	-13	-32.85	-62.56	-52.73	5.60	12.48	V
	5132.52	-57.53	-13	-44.53	-79.55	-63.21	7.10	12.78	V
	6843.36	-56.09	-13	-43.09	-82.71	-59.48	8.38	11.77	V
	3451.68	-49.96	-13	-36.96	-66.93	-56.81	5.65	12.50	Н
	5177.52	-59.50	-13	-46.50	-81.15	-65.17	7.13	12.80	Н
N 4: -1 -11 -	6903.36	-56.10	-13	-43.10	-82.73	-59.50	8.40	11.80	Н
Middle	3451.68	-44.90	-13	-31.90	-61.9	-51.75	5.65	12.50	V
	5177.52	-59.98	-13	-46.98	-82.08	-65.65	7.13	12.80	V
	6903.36	-55.95	-13	-42.95	-82.74	-59.35	8.40	11.80	V
	3481.68	-50.76	-13	-37.76	-68.02	-57.60	5.68	12.52	Н
	5222.52	-61.62	-13	-48.62	-83.12	-67.29	7.15	12.82	Н
115.1	6963.36	-56.13	-13	-43.13	-83.08	-59.56	8.42	11.85	Н
Highest	3481.68	-42.10	-13	-29.10	-59.4	-48.94	5.68	12.52	V
	5222.52	-61.42	-13	-48.42	-83.22	-67.09	7.15	12.82	V
	6963.36	-55.01	-13	-42.01	-82.03	-58.44	8.42	11.85	V

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			L	TE Band 4 /	20MHz / QP	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	3422.18	-54.75	-13	-41.75	-71.42	-61.63	5.60	12.48	Н
	5133.27	-61.31	-13	-48.31	-82.90	-66.99	7.10	12.78	Н
Lowest	6844.36	-55.54	-13	-42.54	-81.93	-58.93	8.38	11.77	Н
Lowest	3422.18	-45.14	-13	-32.14	-61.85	-52.02	5.60	12.48	V
	5133.27	-57.45	-13	-44.45	-79.47	-63.13	7.10	12.78	V
	6844.36	-56.05	-13	-43.05	-82.67	-59.44	8.38	11.77	V
	3447.18	-49.79	-13	-36.79	-66.76	-56.64	5.65	12.50	Н
	5170.77	-61.42	-13	-48.42	-83.05	-67.09	7.13	12.80	Н
Middle	6894.36	-56.27	-13	-43.27	-82.90	-59.67	8.40	11.80	Н
Middle	3447.18	-44.83	-13	-31.83	-61.83	-51.68	5.65	12.50	V
	5170.77	-59.29	-13	-46.29	-81.37	-64.96	7.13	12.80	\
	6894.36	-55.85	-13	-42.85	-82.64	-59.25	8.40	11.80	V
	3472.18	-50.97	-13	-37.97	-68.09	-57.81	5.68	12.52	Н
	5208.27	-61.16	-13	-48.16	-82.65	-66.83	7.15	12.82	Н
112.1	6944.36	-55.81	-13	-42.81	-82.68	-59.24	8.42	11.85	Н
Highest	3472.18	-41.40	-13	-28.40	-58.55	-48.24	5.68	12.52	V
	5208.27	-61.14	-13	-48.14	-82.93	-66.81	7.15	12.82	V
	6944.36	-55.96	-13	-42.96	-82.92	-59.39	8.42	11.85	V

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			L	TE Band 5 /	1.4MHz / QP	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	1649.92	-68.00	-13	-55.00	-78.59	-71.23	3.98	9.36	Н
	2474.88	-65.22	-13	-52.22	-80.22	-68.77	4.85	10.55	Н
Lawast	3299.84	-63.93	-13	-50.93	-81.01	-68.86	5.50	12.58	Н
Lowest	1649.92	-66.00	-13	-53.00	-76.22	-69.23	3.98	9.36	V
	2474.88	-65.26	-13	-52.26	-80.19	-68.81	4.85	10.55	V
	3299.84	-63.58	-13	-50.58	-80.73	-68.51	5.50	12.58	V
	1649.92	-68.00	-13	-55.00	-78.59	-71.25	4.00	9.40	Н
	2474.88	-65.22	-13	-52.22	-80.22	-68.79	4.88	10.60	Н
Middle	3299.84	-63.93	-13	-50.93	-81.01	-68.86	5.52	12.60	Н
Middle	1649.92	-66.00	-13	-53.00	-76.22	-69.25	4.00	9.40	V
	2474.88	-65.26	-13	-52.26	-80.19	-68.83	4.88	10.60	V
	3299.84	-63.58	-13	-50.58	-80.73	-68.51	5.52	12.60	V
	1695.52	-67.78	-13	-54.78	-78.28	-70.95	4.10	9.42	Н
	2543.28	-65.42	-13	-52.42	-80.32	-69.00	4.90	10.63	Н
Lliabaat	3391.04	-64.65	-13	-51.65	-81.18	-69.57	5.55	12.62	Н
Highest	1695.52	-61.18	-13	-48.18	-71.48	-64.35	4.10	9.42	V
	2543.28	-65.75	-13	-52.75	-80.55	-69.33	4.90	10.63	V
	3391.04	-64.45	-13	-51.45	-81.01	-69.37	5.55	12.62	V

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1648.48	-67.45	-13	-54.45	-78.04	-70.68	3.98	9.36	Н				
	2472.72	-64.97	-13	-51.97	-79.97	-68.52	4.85	10.55	Н				
Lowest	3296.96	-63.68	-13	-50.68	-80.76	-68.61	5.50	12.58	Н				
Lowest	1648.48	-65.64	-13	-52.64	-75.86	-68.87	3.98	9.36	V				
	2472.72	-64.94	-13	-51.94	-79.87	-68.49	4.85	10.55	V				
	3296.96	-63.78	-13	-50.78	-80.93	-68.71	5.50	12.58	V				
	1670.48	-67.70	-13	-54.70	-78.19	-70.95	4.00	9.40	Н				
	2505.72	-64.47	-13	-51.47	-79.45	-68.04	4.88	10.60	Н				
M: dalla	3340.96	-63.86	-13	-50.86	-80.83	-68.79	5.52	12.60	Н				
Middle	1670.48	-66.20	-13	-53.20	-76.41	-69.45	4.00	9.40	V				
	2505.72	-65.22	-13	-52.22	-80.05	-68.79	4.88	10.60	V				
	3340.96	-63.91	-13	-50.91	-80.88	-68.84	5.52	12.60	V				
	1692.48	-67.83	-13	-54.83	-78.33	-71.00	4.10	9.42	Н				
	2538.72	-64.62	-13	-51.62	-79.51	-68.20	4.90	10.63	Н				
I limboot	3384.96	-64.04	-13	-51.04	-80.71	-68.96	5.55	12.62	Н				
Highest	1692.48	-62.44	-13	-49.44	-72.74	-65.61	4.10	9.42	V				
	2538.72	-65.28	-13	-52.28	-80.07	-68.86	4.90	10.63	V				
	3384.96	-63.81	-13	-50.81	-80.51	-68.73	5.55	12.62	V				

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	1648.68	-67.12	-13	-54.12	-77.71	-70.35	3.98	9.36	Н				
	2473.02	-64.62	-13	-51.62	-79.62	-68.17	4.85	10.55	Н				
Lowest	3297.36	-63.40	-13	-50.40	-80.48	-68.33	5.50	12.58	Н				
Lowest	1648.68	-61.23	-13	-48.23	-71.45	-64.46	3.98	9.36	V				
	2473.02	-63.06	-13	-50.06	-77.99	-66.61	4.85	10.55	V				
	3297.36	-63.89	-13	-50.89	-81.04	-68.82	5.50	12.58	V				
	1668.68	-68.07	-13	-55.07	-78.56	-71.32	4.00	9.40	Н				
	2503.02	-64.84	-13	-51.84	-79.84	-68.41	4.88	10.60	Н				
M: dalla	3337.36	-63.95	-13	-50.95	-80.95	-68.88	5.52	12.60	Н				
Middle	1668.68	-62.81	-13	-49.81	-73.02	-66.06	4.00	9.40	V				
	2503.02	-63.15	-13	-50.15	-78.04	-66.72	4.88	10.60	V				
	3337.36	-63.75	-13	-50.75	-80.78	-68.68	5.52	12.60	V				
	1688.68	-67.89	-13	-54.89	-78.39	-71.06	4.10	9.42	Н				
	2533.02	-65.22	-13	-52.22	-80.16	-68.80	4.90	10.63	Н				
I limboot	3377.36	-64.00	-13	-51.00	-80.67	-68.92	5.55	12.62	Н				
Highest	1688.68	-61.51	-13	-48.51	-71.81	-64.68	4.10	9.42	V				
	2533.02	-64.87	-13	-51.87	-79.69	-68.45	4.90	10.63	V				
	3377.36	-64.21	-13	-51.21	-80.91	-69.13	5.55	12.62	V				

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	1649.18	-64.80	-13	-51.80	-75.39	-68.03	3.98	9.36	Н
	2473.77	-64.20	-13	-51.20	-79.20	-67.75	4.85	10.55	Н
Lowest	3298.36	-63.32	-13	-50.32	-80.40	-68.25	5.50	12.58	Н
Lowest	1649.18	-60.97	-13	-47.97	-71.19	-64.20	3.98	9.36	V
	2473.77	-62.00	-13	-49.00	-76.93	-65.55	4.85	10.55	V
	3298.36	-63.02	-13	-50.02	-80.17	-67.95	5.50	12.58	V
	1664.18	-67.33	-13	-54.33	-77.82	-70.58	4.00	9.40	Н
	2496.27	-64.10	-13	-51.10	-79.10	-67.67	4.88	10.60	Н
N 4: -I -II -	3328.36	-63.17	-13	-50.17	-80.17	-68.10	5.52	12.60	Н
Middle	1664.18	-60.46	-13	-47.46	-70.67	-63.71	4.00	9.40	V
	2496.27	-63.52	-13	-50.52	-78.41	-67.09	4.88	10.60	V
	3328.36	-63.81	-13	-50.81	-80.84	-68.74	5.52	12.60	V
	1679.18	-67.61	-13	-54.61	-77.98	-70.78	4.10	9.42	Н
	2518.77	-64.97	-13	-51.97	-79.96	-68.55	4.90	10.63	Н
112.1	3358.36	-64.18	-13	-51.18	-81.00	-69.10	5.55	12.62	Н
Highest	1679.18	-64.86	-13	-51.86	-75.02	-68.03	4.10	9.42	V
	2518.77	-65.49	-13	-52.49	-80.33	-69.07	4.90	10.63	V
	3358.36	-63.94	-13	-50.94	-80.77	-68.86	5.55	12.62	V

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			נו	ΓΕ Band 12 /	1.4MHz / QF	PSK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	1398.14	-60.73	-13	-47.73	-71.70	-63.96	3.98	9.36	Н
	2097.21	-64.73	-13	-51.73	-78.94	-68.28	4.85	10.55	Н
Lawast	2796.28	-64.37	-13	-51.37	-79.62	-69.30	5.50	12.58	Н
Lowest	1398.14	-50.04	-13	-37.04	-60.93	-53.27	3.98	9.36	V
	2097.21	-61.34	-13	-48.34	-75.48	-64.89	4.85	10.55	V
	2796.28	-64.04	-13	-51.04	-80.00	-68.97	5.50	12.58	V
	1413.74	-60.50	-13	-47.50	-71.51	-63.75	4.00	9.40	Н
	2120.61	-64.69	-13	-51.69	-79.15	-68.26	4.88	10.60	Н
Middle	2827.48	-64.07	-13	-51.07	-79.49	-69.00	5.52	12.60	Н
Middle	1413.74	-53.78	-13	-40.78	-64.75	-57.03	4.00	9.40	V
	2120.61	-63.84	-13	-50.84	-78.21	-67.41	4.88	10.60	V
	2827.48	-64.26	-13	-51.26	-80.29	-69.19	5.52	12.60	V
	1429.34	-62.99	-13	-49.99	-74.04	-66.16	4.10	9.42	Н
	2144.01	-64.84	-13	-51.84	-79.56	-68.42	4.90	10.63	Н
Lliabaat	2858.68	-64.48	-13	-51.48	-80.22	-69.40	5.55	12.62	Н
Highest	1429.34	-50.01	-13	-37.01	-60.96	-53.18	4.10	9.42	V
	2144.01	-64.15	-13	-51.15	-78.76	-67.73	4.90	10.63	V
	2858.68	-63.83	-13	-50.83	-79.96	-68.75	5.55	12.62	V

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	LTE Band 12 / 3MHz / QPSK												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1398.3	-59.75	-13	-46.75	-70.72	-62.98	3.98	9.36	Н				
	2097.45	-62.76	-13	-49.76	-76.97	-66.31	4.85	10.55	Н				
Lowest	2796.6	-64.64	-13	-51.64	-79.89	-69.57	5.50	12.58	Н				
Lowest	1398.3	-50.09	-13	-37.09	-60.98	-53.32	3.98	9.36	V				
	2097.45	-61.32	-13	-48.32	-75.46	-64.87	4.85	10.55	V				
	2796.6	-64.04	-13	-51.04	-80.00	-68.97	5.50	12.58	V				
	1412.3	-60.35	-13	-47.35	-71.36	-63.60	4.00	9.40	Н				
	2118.45	-64.27	-13	-51.27	-78.73	-67.84	4.88	10.60	Н				
Middle	2824.6	-64.58	-13	-51.58	-79.99	-69.51	5.52	12.60	Н				
ivildale	1412.3	-49.49	-13	-36.49	-60.46	-52.74	4.00	9.40	V				
	2118.45	-63.70	-13	-50.70	-78.07	-67.27	4.88	10.60	V				
	2824.6	-64.38	-13	-51.38	-80.40	-69.31	5.52	12.60	V				
	1426.3	-63.25	-13	-50.25	-74.30	-66.42	4.10	9.42	Н				
	2139.45	-64.47	-13	-51.47	-79.19	-68.05	4.90	10.63	Н				
11:	2852.6	-63.96	-13	-50.96	-79.69	-68.88	5.55	12.62	Н				
Highest	1426.3	-52.34	-13	-39.34	-63.29	-55.51	4.10	9.42	V				
	2139.45	-64.61	-13	-51.61	-79.22	-68.19	4.90	10.63	V				
	2852.6	-64.32	-13	-51.32	-80.44	-69.24	5.55	12.62	V				

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			L	TE Band 12	/ 5MHz / QP	SK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	1398.5	-58.87	-13	-45.87	-69.84	-62.10	3.98	9.36	Н
	2097.75	-64.32	-13	-51.32	-78.53	-67.87	4.85	10.55	Н
Lowest	2797	-64.37	-13	-51.37	-79.62	-69.30	5.50	12.58	Н
Lowest	1398.5	-50.27	-13	-37.27	-61.16	-53.50	3.98	9.36	V
	2097.75	-60.21	-13	-47.21	-74.35	-63.76	4.85	10.55	V
	2797	-63.70	-13	-50.70	-79.66	-68.63	5.50	12.58	V
	1410.5	-60.20	-13	-47.20	-71.21	-63.45	4.00	9.40	Н
	2115.75	-64.93	-13	-51.93	-79.39	-68.50	4.88	10.60	Н
Middle	2821	-64.43	-13	-51.43	-79.84	-69.36	5.52	12.60	Н
ivildale	1410.5	-51.41	-13	-38.41	-62.38	-54.66	4.00	9.40	V
	2115.75	-62.56	-13	-49.56	-76.93	-66.13	4.88	10.60	V
	2821	-64.57	-13	-51.57	-80.59	-69.50	5.52	12.60	V
	1422.5	-62.33	-13	-49.33	-73.31	-65.50	4.10	9.42	Н
	2133.75	-65.13	-13	-52.13	-79.85	-68.71	4.90	10.63	Н
18.6	2845	-64.19	-13	-51.19	-79.92	-69.11	5.55	12.62	Н
Highest	1422.5	-49.49	-13	-36.49	-60.37	-52.66	4.10	9.42	V
	2133.75	-62.88	-13	-49.88	-77.49	-66.46	4.90	10.63	V
	2845	-64.00	-13	-51.00	-80.12	-68.92	5.55	12.62	V

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			Ľ	TE Band 12	/ 10MHz / QF	PSK			
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
	1399	-57.39	-13	-44.39	-68.36	-60.62	3.98	9.36	Н
	2098.5	-60.90	-13	-47.90	-75.11	-64.45	4.85	10.55	Н
Lowoot	2798	-64.22	-13	-51.22	-79.47	-69.15	5.50	12.58	Н
Lowest	1399	-48.93	-13	-35.93	-59.82	-52.16	3.98	9.36	V
	2098.5	-60.33	-13	-47.33	-74.47	-63.88	4.85	10.55	V
	2798	-64.21	-13	-51.21	-80.17	-69.14	5.50	12.58	V
	1406	-60.56	-13	-47.56	-71.57	-63.81	4.00	9.40	Н
	2109	-61.94	-13	-48.94	-76.17	-65.51	4.88	10.60	Н
M: al all a	2812	-64.09	-13	-51.09	-79.50	-69.02	5.52	12.60	Н
Middle	1406	-48.87	-13	-35.87	-59.84	-52.12	4.00	9.40	V
	2109	-60.36	-13	-47.36	-74.52	-63.93	4.88	10.60	V
	2812	-63.77	-13	-50.77	-79.79	-68.70	5.52	12.60	V
	1413	-59.56	-13	-46.56	-70.57	-62.73	4.10	9.42	Н
	2119.5	-63.41	-13	-50.41	-77.87	-66.99	4.90	10.63	Н
I Palacat	2826	-64.14	-13	-51.14	-79.55	-69.06	5.55	12.62	Н
Highest	1413	-51.42	-13	-38.42	-62.39	-54.59	4.10	9.42	V
	2119.5	-63.24	-13	-50.24	-77.61	-66.82	4.90	10.63	V
	2826	-64.42	-13	-51.42	-80.44	-69.34	5.55	12.62	V

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1554.5	-61.00	-13	-48.00	-71.97	-64.23	3.98	9.36	Н			
	2331.75	-64.45	-13	-51.45	-79.71	-68.00	4.85	10.55	Н			
Lowest	3109	-62.90	-13	-49.90	-80.15	-67.83	5.50	12.58	Н			
Lowest	1554.5	-58.48	-13	-45.48	-68.95	-61.71	3.98	9.36	V			
	2331.75	-64.65	-13	-51.65	-79.93	-68.20	4.85	10.55	V			
	3109	-63.22	-13	-50.22	-80.32	-68.15	5.50	12.58	V			
	1559.5	-62.23	-40	-22.23	-73.20	-65.48	4.00	9.40	Н			
	2339.25	-64.04	-13	-51.04	-79.25	-67.61	4.88	10.60	Н			
N 4: -1 -11 -	3119	-62.66	-13	-49.66	-79.92	-67.59	5.52	12.60	Н			
Middle	1559.5	-57.16	-40	-17.16	-67.63	-60.41	4.00	9.40	V			
	2339.25	-64.38	-13	-51.38	-79.64	-67.95	4.88	10.60	V			
	3119	-62.98	-13	-49.98	-80.17	-67.91	5.52	12.60	V			
	1564.5	-62.65	-40	-22.65	-73.62	-65.82	4.10	9.42	Н			
	2346.75	-64.23	-13	-51.23	-79.44	-67.81	4.90	10.63	Н			
115.1	3129	-63.25	-13	-50.25	-80.51	-68.17	5.55	12.62	Н			
Highest	1564.5	-60.55	-40	-20.55	-73.02	-63.72	4.10	9.42	V			
	2346.75	-64.69	-13	-51.69	-79.95	-68.27	4.90	10.63	V			
	3129	-62.69	-13	-49.69	-79.88	-67.61	5.55	12.62	V			

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	LTE Band 13 / 10MHz / QPSK											
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1555	-64.35	-40	-24.35	-75.32	-67.60	4.00	9.40	Н			
	2332.5	-63.83	-13	-50.83	-79.09	-67.40	4.88	10.60	Н			
Middle	3110	-62.81	-13	-49.81	-80.06	-67.74	5.52	12.60	Н			
Middle	1555	-57.68	-40	-17.68	-68.15	-60.93	4.00	9.40	V			
	2332.5	-63.90	-13	-50.90	-79.18	-67.47	4.88	10.60	V			
	3110	-62.49	-13	-49.49	-79.59	-67.42	5.52	12.60	V			

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	LTE Band 26 / 1.4MHz / QPSK											
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1648.14	-68.94	-13	-55.94	-79.53	-72.17	3.98	9.36	Н			
	2472.21	-65.45	-13	-52.45	-80.45	-69.00	4.85	10.55	Н			
Lawast	3296.28	-64.19	-13	-51.19	-81.27	-69.12	5.50	12.58	Н			
Lowest	1648.14	-68.54	-13	-55.54	-78.76	-71.77	3.98	9.36	V			
	2472.21	-65.50	-13	-52.50	-80.43	-69.05	4.85	10.55	V			
	3296.28	-63.76	-13	-50.76	-80.91	-68.69	5.50	12.58	V			
	1671.74	-68.39	-13	-55.39	-78.76	-71.64	4.00	9.40	Н			
	2507.61	-64.25	-13	-51.25	-79.23	-67.82	4.88	10.60	Н			
Middle	3343.48	-64.25	-13	-51.25	-81.22	-69.18	5.52	12.60	Н			
Middle	1671.74	-68.95	-13	-55.95	-79.11	-72.20	4.00	9.40	V			
	2507.61	-65.40	-13	-52.40	-80.23	-68.97	4.88	10.60	V			
	3343.48	-64.03	-13	-51.03	-81.00	-68.96	5.52	12.60	V			
	1695.34	-68.32	-13	-55.32	-78.82	-71.49	4.10	9.42	Н			
	2543.01	-65.72	-13	-52.72	-80.62	-69.30	4.90	10.63	Н			
l limb a at	3390.68	-64.69	-13	-51.69	-81.22	-69.61	5.55	12.62	Н			
Highest	1695.34	-68.96	-13	-55.96	-79.26	-72.13	4.10	9.42	V			
	2543.01	-65.99	-13	-52.99	-80.79	-69.57	4.90	10.63	V			
	3390.68	-64.82	-13	-51.82	-81.38	-69.74	5.55	12.62	V			

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	1648.3	-67.63	-13	-54.63	-78.22	-70.86	3.98	9.36	Н			
	2472.45	-65.11	-13	-52.11	-80.11	-68.66	4.85	10.55	Н			
Lowest	3296.6	-63.74	-13	-50.74	-80.82	-68.67	5.50	12.58	Н			
Lowest	1648.3	-69.10	-13	-56.10	-79.32	-72.33	3.98	9.36	V			
	2472.45	-65.41	-13	-52.41	-80.34	-68.96	4.85	10.55	V			
	3296.6	-63.95	-13	-50.95	-81.10	-68.88	5.50	12.58	V			
	1670.3	-68.88	-13	-55.88	-79.37	-72.13	4.00	9.40	Н			
	2505.45	-65.03	-13	-52.03	-80.01	-68.60	4.88	10.60	Н			
N 4: -I -II -	3340.6	-63.94	-13	-50.94	-80.91	-68.87	5.52	12.60	Н			
Middle	1670.3	-68.60	-13	-55.60	-78.81	-71.85	4.00	9.40	V			
	2505.45	-65.59	-13	-52.59	-80.42	-69.16	4.88	10.60	V			
	3340.6	-63.97	-13	-50.97	-80.94	-68.90	5.52	12.60	V			
	1692.3	-68.77	-13	-55.77	-79.27	-71.94	4.10	9.42	Н			
	2538.45	-65.24	-13	-52.24	-80.18	-68.82	4.90	10.63	Н			
112.1	3384.6	-64.46	-13	-51.46	-81.13	-69.38	5.55	12.62	Н			
Highest	1692.3	-68.88	-13	-55.88	-79.18	-72.05	4.10	9.42	V			
	2538.45	-65.61	-13	-52.61	-80.43	-69.19	4.90	10.63	V			
	3384.6	-64.47	-13	-51.47	-81.17	-69.39	5.55	12.62	V			

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Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1648.5	-68.58	-13	-55.58	-79.17	-71.81	3.98	9.36	Н			
	2472.75	-64.94	-13	-51.94	-79.94	-68.49	4.85	10.55	Н			
Lowest	3297	-63.69	-13	-50.69	-80.77	-68.62	5.50	12.58	Н			
Lowest	1648.5	-68.79	-13	-55.79	-79.01	-72.02	3.98	9.36	V			
	2472.75	-64.98	-13	-51.98	-79.91	-68.53	4.85	10.55	V			
	3297	-63.59	-13	-50.59	-80.74	-68.52	5.50	12.58	V			
	1668.5	-67.61	-13	-54.61	-78.10	-70.86	4.00	9.40	Н			
	2502.75	-64.26	-13	-51.26	-79.26	-67.83	4.88	10.60	Н			
Middle	3337	-63.65	-13	-50.65	-80.65	-68.58	5.52	12.60	Н			
ivildale	1668.5	-68.19	-13	-55.19	-78.40	-71.44	4.00	9.40	V			
	2502.75	-65.12	-13	-52.12	-80.01	-68.69	4.88	10.60	V			
	3337	-63.84	-13	-50.84	-80.87	-68.77	5.52	12.60	V			
	1688.5	-68.38	-13	-55.38	-78.77	-71.55	4.10	9.42	Н			
	2532.75	-64.99	-13	-51.99	-79.93	-68.57	4.90	10.63	Н			
Highest	3377	-64.20	-13	-51.20	-80.87	-69.12	5.55	12.62	Н			
	1688.5	-68.25	-13	-55.25	-78.43	-71.42	4.10	9.42	V			
	2532.75	-65.16	-13	-52.16	-79.98	-68.74	4.90	10.63	V			
	3377	-64.12	-13	-51.12	-80.82	-69.04	5.55	12.62	V			

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	LTE Band 26 / 10MHz / QPSK											
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1649	-67.50	-13	-54.50	-78.09	-70.73	3.98	9.36	Н			
	2473.5	-65.03	-13	-52.03	-80.03	-68.58	4.85	10.55	Н			
Lowest	3298	-63.42	-13	-50.42	-80.50	-68.35	5.50	12.58	Н			
Lowest	1649	-68.10	-13	-55.10	-78.32	-71.33	3.98	9.36	V			
	2473.5	-65.07	-13	-52.07	-80.00	-68.62	4.85	10.55	V			
	3298	-63.29	-13	-50.29	-80.44	-68.22	5.50	12.58	V			
	1664	-65.69	-13	-52.69	-76.18	-68.94	4.00	9.40	Н			
	2496	-64.84	-13	-51.84	-79.84	-68.41	4.88	10.60	Н			
Middle	3328	-63.61	-13	-50.61	-80.61	-68.54	5.52	12.60	Н			
Middle	1664	-64.85	-13	-51.85	-75.06	-68.10	4.00	9.40	V			
	2496	-63.03	-13	-50.03	-77.92	-66.60	4.88	10.60	V			
	3328	-63.74	-13	-50.74	-80.77	-68.67	5.52	12.60	V			
	1679	-68.78	-13	-55.78	-79.15	-71.95	4.10	9.42	Н			
	2518.5	-65.17	-13	-52.17	-80.16	-68.75	4.90	10.63	Н			
I II ale a a C	3358	-64.38	-13	-51.38	-81.20	-69.30	5.55	12.62	Н			
Highest	1679	-68.68	-13	-55.68	-78.84	-71.85	4.10	9.42	V			
	2518.5	-65.36	-13	-52.36	-80.20	-68.94	4.90	10.63	V			
	3358	-64.32	-13	-51.32	-81.15	-69.24	5.55	12.62	V			

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	LTE Band 26 / 15MHz / QPSK											
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1649.5	-68.16	-13	-55.16	-78.75	-71.39	3.98	9.36	Н			
	2474.25	-65.23	-13	-52.23	-80.23	-68.78	4.85	10.55	Н			
Lawast	3299	-63.59	-13	-50.59	-80.67	-68.52	5.50	12.58	Н			
Lowest	1649.5	-68.55	-13	-55.55	-78.77	-71.78	3.98	9.36	V			
	2474.25	-65.19	-13	-52.19	-80.12	-68.74	4.85	10.55	V			
	3299	-63.90	-13	-50.90	-81.05	-68.83	5.50	12.58	V			
	1659.5	-68.39	-13	-55.39	-78.88	-71.64	4.00	9.40	Н			
	2489.25	-65.23	-13	-52.23	-80.23	-68.80	4.88	10.60	Н			
N 4: -1 -11 -	3319	-64.34	-13	-51.34	-81.38	-69.27	5.52	12.60	Н			
Middle	1659.5	-68.95	-13	-55.95	-79.16	-72.20	4.00	9.40	V			
	2489.25	-65.63	-13	-52.63	-80.52	-69.20	4.88	10.60	V			
	3319	-64.00	-13	-51.00	-81.09	-68.93	5.52	12.60	V			
	1669.5	-68.92	-13	-55.92	-79.41	-72.09	4.10	9.42	Н			
	2504.25	-65.22	-13	-52.22	-80.22	-68.80	4.90	10.63	Н			
115.1	3339	-64.21	-13	-51.21	-81.18	-69.13	5.55	12.62	Н			
Highest	1669.5	-69.10	-13	-56.10	-79.31	-72.27	4.10	9.42	V			
	2504.25	-65.15	-13	-52.15	-80.04	-68.73	4.90	10.63	V			
	3339	-64.10	-13	-51.10	-81.07	-69.02	5.55	12.62	V			

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