FCC RF Test Report

APPLICANT : Greater Goods, LLC

EQUIPMENT: Omada LTE-M Scale 0020

BRAND NAME : Greater Goods

MODEL NAME : Omada LTE-M Scale 0020

FCC ID : Contains FCC ID: 2ADUL-0020 STANDARD : 47 CFR Part 2, 24(E), 27(H), 27(L) CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was installed a module: M2M DATA MODULE (Model Name: IMA2A, FCC ID: 2ADUL-0020) during the test.

The product was received on Jun. 20, 2019 and completely tested on Jul. 30, 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.

Derreck Chen

Reviewed by: Derreck Chen / Supervisor

Fire Shih

Approved by: Eric Shih / Manager

Sporton International (ShenZhen) Inc.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

Sporton International (Shenzhen) Inc.

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ACCREDITED
Cert #5145.01

Report Template No.: BU5-FGLTE Version 2.0

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG962003	Rev. 01	Initial issue of report Aug. 29,	

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
	§2.1046	Conducted Output Power	Reporting Only		
	§27.50(c)(10)	Effective Radiated Power (Band 12)	ERP < 3 Watt		
3.4	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
4.4	§2.1053 §24.238(a) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 12)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 27.20 dB at 3451.680 MHz

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1 General Description

1.1 Applicant

Greater Goods,LLC

4427 Chouteau Ave., St. Louis MO 63110, United States

1.2 Manufacturer

Greater Goods,LLC

4427 Chouteau Ave., St. Louis MO 63110, United States

1.3 Product Feature of Equipment Under Test

Product Feature						
Equipment	Omada LTE-M Scale 0020					
Brand Name	Greater Goods					
Model Name	Omada LTE-M Scale 0020					
FCC ID	Contains FCC ID: 2ADUL-0020					
EUT supports Radios application	LTE Category M1					
IMEI Code	Radiation: N/A					
HW Version	Rev1					
SW Version	A02					
EUT Stage	Identical Prototype					

Note: This is a variant report for Omada LTE-M Scale 0020, the Conducted test items could be referred to MODULE report, FCC ID: 2ADUL-0020, the RSE/ERP/EIRP/ Conducted Power to re-test in this report.

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1.4 Product Specification of Equipment Under Test

Standards-related Product Specification						
Tx Frequency	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz					
Rx Frequency	LTE Band 2: 1930.7 MHz ~ 1989.3 MHz LTE Band 4: 2110.7 MHz ~ 2154.3 MHz LTE Band 12: 729.7 MHz ~ 745.3 MHz					
Bandwidth	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz					
Maximum Output Power to Antenna	LTE Band 2: 23.82 dBm LTE Band 4: 23.87 dBm LTE Band 12: 23.79 dBm					
Antenna Gain	LTE Band 2: 0.81 dBi LTE Band 4: 1.02 dBi LTE Band 12: 1.37 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

L	TE Band 2		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	1850.7 ~ 1909.3	-	-	0.2438	-	-	0.2761	
3	1851.5 ~ 1908.5	-	-	0.2472	-	-	0.2773	
5	1852.5 ~ 1907.5	-	-	0.2455	-	-	0.2780	
10	1855.0 ~ 1905.0	-	-	0.2483	-	-	0.2767	
15	1857.5 ~ 1902.5	•	•	0.2483	-	=	0.2799	
20	1860.0 ~ 1900.0	ı	•	0.2529	-	-	0.2904	
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	-	-	0.2742	-	-	0.2951	
3	1711.5 ~ 1753.5	-	-	0.2767	-	-	0.3020	
5	1712.5 ~ 1752.5	-	-	0.2799	-	-	0.3076	
10	1715.0 ~ 1750.0	-	-	0.2786	-	-	0.3041	
15	1717.5 ~ 1747.5	-	-	0.2793	-	-	0.3006	
20	1720.0 ~ 1745.0	-	-	0.2871	-	-	0.3083	
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	-	-	0.1799	-	-	0.1936	
3	700.5 ~ 714.5	-	-	0.1824	-	-	0.1968	
5	701.5 ~ 713.5	-	-	0.1845	-	-	0.1986	
10	704.0 ~ 711.0	-	-	0.1866	-	-	0.2000	

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1.7 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Sh	porton International (Shenzhen) Inc.								
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398									
Tool Site No	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.							
Test Site No.	03CH01-SZ	CN1256	421272							

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, 24(E), 27(L), 27(H)
- 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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Test Configuration of Equipment Under Test 2

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.

To at Hanna	D d		В	andwic	lth (MF	lz)		Modu	ılation		RB#		Tes	t Char	nel
Test Items	Band	1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	М	Н
Max.	2	v	٧	v	v	v	v	v	v	v	v	٧	v	v	٧
Output	4	v	v	v	v	v	v	v	v	v	v	v	v	v	٧
Power	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	2	٧	٧	v	٧	٧	v	v	v	v			v	v	٧
E.R.P / E.I.R.P	4	v	v	v	v	v	v	v	v	v			v	v	v
	12	v	٧	v	٧	•	•	v	v	v			٧	v	٧
Radiated	2	v	٧	v	V	v	V	v		v				v	
Spurious	4	v	v	v	v	v	٧	v		v				v	
Emission	12	v	v	v	v	-	•	v		v				v	
Note	2. The 3. The diff	e mark e device	"-" mea e is inve	ns that estigate	this ba	ndwidth 30MHz	is not to 10 t		sting mental signal Subsequently		•				der

reported.

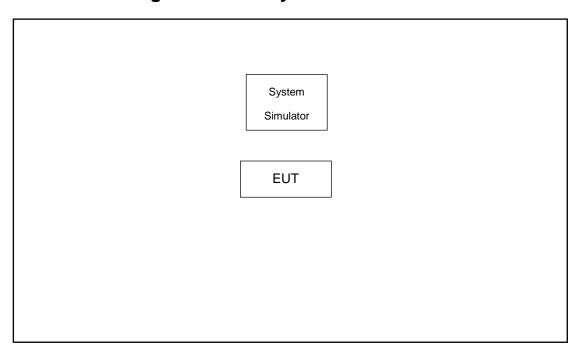
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2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

tem	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	CMW500	Fcc DoC	N/A	Shielded, 1.5 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 Channel and Frequency 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	Frequency	1717.5	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 12 Channel and Frequency List									
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest					
10	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	707.5	714.5					
1.4	Channel	23017	23095	23173					
1.4	Frequency	699.7	707.5	715.3					

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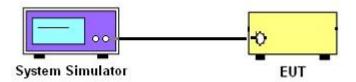
3 Conducted Test Items

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.

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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 3 Watts for LTE Band 12.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2.

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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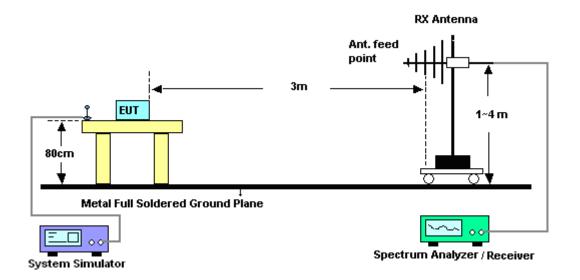
4 Radiated Test Items

4.1 Measuring Instruments

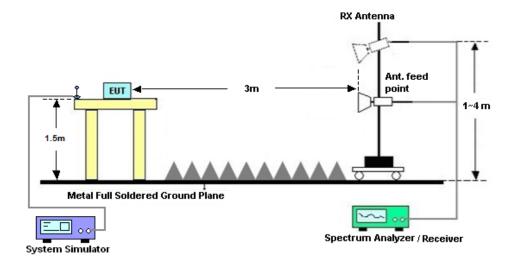
See list of measuring instruments of this test report.

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.

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.
- 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
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Aug. 30, 2018	Jul. 29, 2019~ Jul. 30, 2019	Aug. 29, 2019	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jun. 05, 2019	Jul. 29, 2019~ Jul. 30, 2019	Jun. 04, 2020	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	119436	1GHz~18GHz	Jun. 27, 2019	Jul. 29, 2019~ Jul. 30, 2019	Jun. 26, 2020	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Mar. 30, 2019	Jul. 29, 2019~ Jul. 30, 2019	Mar. 29, 2020	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 19, 2019	Jul. 29, 2019~ Jul. 30, 2019	Apr. 18, 2020	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1707137	1GHz~18GHz	Oct. 19, 2018	Jul. 29, 2019~ Jul. 30, 2019	Oct. 18, 2019	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 18, 2019	Jul. 29, 2019~ Jul. 30, 2019	Jul. 17, 2020	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jul. 29, 2019~ Jul. 30, 2019	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jul. 29, 2019~ Jul. 30, 2019	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jul. 29, 2019~ Jul. 30, 2019	NCR	Radiation (03CH01-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.

<u>Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)</u>

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

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of	3.5 dB
Confidence of 95% (U = 2Uc(y))	3.5 ub

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

Measuring Uncertainty for a Level of	4.0 dB
Confidence of 95% (U = 2Uc(y))	4.0 UD

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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

			LTE Ba	nd 2	Ma	ximur	n Average Power	[dBm]	
					Inde			-	
BW [MHz]	Mod	RB Size	RB Offset	L	М	Н	Lowest	Middle	Highest
20		1	0	0	0	15	23.12	23.02	22.87
20	QPSK	1	5	0	0	15	23.22	23.08	22.90
20		6	0	0	0	15	23.11	23.01	22.95
20		1	0	0	0	15	23.75	23.54	23.48
20	16-QAM	1	5	0	0	15	23.82	23.62	23.55
20		6	0	0	0	15	23.28	23.16	23.01
15		1	0	0	0	11	22.74	23.04	22.85
15	QPSK	1	5	0	0	11	23.08	22.95	22.99
15		6	0	0	0	11	23.14	22.60	22.81
15		1	0	0	0	11	23.66	23.53	23.45
15	16-QAM	1	5	0	0	11	23.61	23.58	23.46
15		6	0	0	0	11	23.23	23.11	23.02
10		1	0	0	0	7	23.14	22.96	22.82
10	QPSK	1	5	0	0	7	23.11	23.00	22.83
10		6	0	0	0	7	22.39	22.22	21.73
10		1	0	0	0	7	23.56	23.41	23.43
10	16-QAM	1	5	0	0	7	23.61	23.37	23.47
10		6	0	0	0	7	21.77	21.59	21.51
5		1	0	0	0	3	22.60	22.99	22.87
5	QPSK	1	5	0	0	3	23.09	22.98	22.88
5		6	0	0	0	3	22.35	22.24	22.09
5		1	0	0	0	3	23.63	23.39	23.33
5	16-QAM	1	5	0	0	3	23.56	23.41	23.31
5		6	0	0	0	3	21.75	21.52	21.45

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	LTE Band 2 Maximum Average Power [dBm]													
DW/ FMU=1	Mod	RB Size	RB Offset		Inde	x	Lowest	Middle						
BW [MHz]	IVIOG	KB 0ize	RB Offset	L	М	Н	Lowest	Middle	Highest					
3		1	0	0	0	1	22.72	23.00	22.83					
3	QPSK	1	5	0	0	1	23.06	22.91	22.97					
3		6	0	0	0	1	23.12	22.56	22.79					
3		1	0	0	0	1	23.62	23.47	23.41					
3	16-QAM	1	5	0	0	1	23.57	23.52	23.42					
3		6	0	0	0	1	23.21	23.07	23.00					
1.4		1	0	0	0	0	22.57	22.96	22.84					
1.4	QPSK	1	5	0	0	0	23.06	22.95	22.85					
1.4		6	0	0	0	0	22.32	22.21	22.06					
1.4		1	0	0	0	0	23.60	23.36	23.30					
1.4	16-QAM	1	5	0	0	0	23.53	23.38	23.28					
1.4		6	0	0	0	0	21.72	21.49	21.42					

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			ITF Ra	nd 4	Ma	vimuu	m Average Power	idRm1	
				110 4	Inde		TAVERAGE TOWER	[desiri]	
BW [MHz]	Mod	RB Size	RB Offset	L	М	Н	Lowest	Middle	Highest
20		1	0	0	0	15	23.37	23.46	23.23
20	QPSK	1	5	0	0	15	23.56	23.52	23.26
20		6	0	0	0	15	23.45	23.47	23.25
20		1	0	0	0	15	23.87	23.81	23.81
20	16-QAM	1	5	0	0	15	23.81	23.75	23.71
20	-	6	0	0	0	15	23.35	23.34	23.23
15		1	0	0	0	11	23.38	23.32	23.28
15	QPSK	1	5	0	0	11	23.43	23.35	23.22
15		6	0	0	0	11	23.40	23.44	23.34
15		1	0	0	0	11	23.69	23.65	23.42
15	16-QAM	1	5	0	0	11	23.76	23.76	23.47
15		6	0	0	0	11	23.41	23.26	23.12
10		1	0	0	0	7	23.42	23.26	23.16
10	QPSK	1	5	0	0	7	23.43	23.28	23.18
10		6	0	0	0	7	22.75	22.59	22.39
10		1	0	0	0	7	23.78	23.71	23.48
10	16-QAM	1	5	0	0	7	23.81	23.70	23.46
10		6	0	0	0	7	22.15	22.04	21.90
5		1	0	0	0	3	23.43	23.32	23.17
5	QPSK	1	5	0	0	3	23.45	23.27	23.21
5		6	0	0	0	3	22.68	22.57	22.45
5		1	0	0	0	3	23.86	23.77	23.64
5	16-QAM	1	5	0	0	3	23.82	23.79	23.59
5		6	0	0	0	3	22.16	22.03	21.96
3		1	0	0	0	1	23.39	23.23	23.13
3	QPSK	1	5	0	0	1	23.40	23.25	23.15
3		6	0	0	0	1	22.72	22.56	22.36
3		1	0	0	0	1	23.75	23.68	23.45
3	16-QAM	1	5	0	0	1	23.78	23.67	23.43
3		6	0	0	0	1	22.12	22.01	21.87

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	LTE Band 4 Maximum Average Power [dBm]													
DVA/ FMI I=1	Mod	RB Size	DD 0#+		Inde	x	Lowest	BA: dalla	Highest					
BW [MHz]	BW [WITZ] WIOU	KD SIZE	RB Offset	L	М	н	Lowest	Middle	Highest					
1.4		1	0	0	0	0	23.30	23.24	23.20					
1.4	QPSK	1	5	0	0	0	23.35	23.27	23.14					
1.4		6 0		0	0	0	23.32	23.36	23.26					
1.4		1	0	0	0	0	23.61	23.57	23.34					
1.4	16-QAM	1	5	0	0	0	23.68	23.68	23.39					
1.4		6	0	0	0	0	23.33	23.18	23.04					

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			LTE Bar	nd 12	2 M	aximu	m Average Power	[dBm]	
					Inde	x			
BW [MHz]	Mod	RB Size	RB Offset	L	М	Н	Lowest	Middle	Highest
10		1	0	0	0	7	23.42	23.35	23.22
10	QPSK	1	5	0	0	7	23.46	23.49	23.33
10		6	0	0	0	7	22.76	22.63	22.49
10		1	0	0	0	7	23.74	23.79	23.69
10	16-QAM	1	5	0	0	7	23.72	23.76	23.68
10		6	0	0	0	7	22.26	22.32	22.09
5		1	0	0	0	3	23.42	23.34	23.22
5	QPSK	1	5	0	0	3	23.44	23.36	23.26
5		6	0	0	0	3	22.79	22.73	22.58
5		1	0	0	0	3	23.76	23.71	23.56
5	16-QAM	1	5	0	0	3	23.74	23.66	23.50
5		6	0	0	0	3	22.30	22.17	21.92
3		1	0	0	0	1	23.35	23.28	23.15
3	QPSK	1	5	0	0	1	23.39	23.32	23.26
3		6	0	0	0	1	22.69	22.56	22.42
3		1	0	0	0	1	23.67	23.72	23.62
3	16-QAM	1	5	0	0	1	23.65	23.69	23.61
3		6	0	0	0	1	22.19	22.25	22.02
1.4		1	0	0	0	0	23.31	23.23	23.11
1.4	QPSK	1	5	0	0	0	23.33	23.25	23.15
1.4		6	0	0	0	0	22.68	22.62	22.47
1.4		1	0	0	0	0	23.65	23.60	23.45
1.4	16-QAM	1	5	0	0	0	23.63	23.55	23.39
1.4		6	0	0	0	0	22.19	22.06	21.81

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ERP/EIRP

	LTE Band 2 (GT - LC = 0.81 dB) QPSK													
Bandwidth		1.4M			3M		5M							
Channal	18607	18900 19193		18615	18615 18900		18625	18900	19175					
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)					
Frequency	1950.7	1990	1000.3	40E4 E	1000	4000 F	40E2 E	1990	1007 F					
(MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5					
Conducted Power (dBm)	23.06	22.95	22.85	23.12	22.56	22.79	23.09	22.98	22.88					
Conducted Power (Watts)	0.2023	0.1972	0.1928	0.2051	0.1803	0.1901	0.2037	0.1986	0.1941					
EIRP(dBm)	23.87	23.76	23.66	23.93	23.37	23.60	23.90	23.79	23.69					
EIRP(Watts)	0.2438	0.2377	0.2323	0.2472	0.2173	0.2291	0.2455	0.2393	0.2339					

	LTE Band 2 (GT - LC = 0.81 dB) QPSK													
Bandwidth		10M			15M		20M							
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100					
Channel	(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	1037.3	1000	1902.5	1000	1000	1900					
Conducted Power (dBm)	23.14	22.96	22.82	23.14	22.60	22.81	23.22	23.08	22.90					
Conducted Power (Watts)	0.2061	0.1977	0.1914	0.2061	0.1820	0.1910	0.2099	0.2032	0.1950					
EIRP(dBm)	23.95	23.77	23.63	23.95	23.41	23.62	24.03	23.89	23.71					
EIRP(Watts)	0.2483	0.2382	0.2307	0.2483	0.2193	0.2301	0.2529	0.2449	0.2350					

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	LTE Band 2 (GT - LC = 0.81 dB) 16QAM													
Bandwidth		1.4M			3M		5M							
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175					
Channel	(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)	23.60	23.36	23.30	23.62	23.47	23.41	23.63	23.39	23.33					
Conducted Power (Watts)	0.2291	0.2168	0.2138	0.2301	0.2223	0.2193	0.2307	0.2183	0.2153					
EIRP(dBm)	24.41	24.17	24.11	24.43	24.28	24.22	24.44	24.20	24.14					
EIRP(Watts)	0.2761	0.2612	0.2576	0.2773	0.2679	0.2642	0.2780	0.2630	0.2594					

		Ľ	ΓE Band 2	(GT - LC :	= 0.81 dB)	16QAM			
Bandwidth		10M			15M			20M	
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
Channel	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
(MHz)	1033	1000	1903	1037.3	1000	1902.5	1000	1000	1900
Conducted Power (dBm)	23.61	23.37	23.47	23.66	23.53	23.45	23.82	23.62	23.55
Conducted Power (Watts)	0.2296	0.2173	0.2223	0.2323	0.2254	0.2213	0.2410	0.2301	0.2265
EIRP(dBm)	24.42	24.18	24.28	24.47	24.34	24.26	24.63	24.43	24.36
EIRP(Watts)	0.2767	0.2618	0.2679	0.2799	0.2716	0.2667	0.2904	0.2773	0.2729

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	LTE Band 4 (GT - LC = 1.02 dB) QPSK										
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	4722 F	4754.0	4744 5	4722 F	4750.5	4740 5	4722 F	4750 F		
(MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5		
Conducted Power (dBm)	23.32	23.36	23.26	23.40	23.25	23.15	23.45	23.27	23.21		
Conducted Power (Watts)	0.2148	0.2168	0.2118	0.2188	0.2113	0.2065	0.2213	0.2123	0.2094		
EIRP(dBm)	24.34	24.38	24.28	24.42	24.27	24.17	24.47	24.29	24.23		
EIRP(Watts)	0.2716	0.2742	0.2679	0.2767	0.2673	0.2612	0.2799	0.2685	0.2649		

	LTE Band 4 (GT - LC = 1.02 dB) QPSK										
Bandwidth		10M			15M			20M			
Channel	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)	1713	1732.3	1730	1717.5	1732.3	1747.5	1720	1732.3	1745		
Conducted Power (dBm)	23.43	23.28	23.18	23.40	23.44	23.34	23.56	23.52	23.26		
Conducted Power (Watts)	0.2203	0.2128	0.2080	0.2188	0.2208	0.2158	0.2270	0.2249	0.2118		
EIRP(dBm)	24.45	24.30	24.20	24.42	24.46	24.36	24.58	24.54	24.28		
EIRP(Watts)	0.2786	0.2692	0.2630	0.2767	0.2793	0.2729	0.2871	0.2844	0.2679		

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	LTE Band 4 (GT - LC = 1.02 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	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5		
(MHz)	1710.7	1732.5	1754.5	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5		
Conducted Power (dBm)	23.68	23.68	23.39	23.78	23.67	23.43	23.86	23.77	23.64		
Conducted Power (Watts)	0.2333	0.2333	0.2183	0.2388	0.2328	0.2203	0.2432	0.2382	0.2312		
EIRP(dBm)	24.70	24.70	24.41	24.80	24.69	24.45	24.88	24.79	24.66		
EIRP(Watts)	0.2951	0.2951	0.2761	0.3020	0.2944	0.2786	0.3076	0.3013	0.2924		

	LTE Band 4 (GT - LC = 1.02 dB) 16QAM										
Bandwidth		10M			15M			20M			
Channel	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)	1713	1732.3	1730	1717.5	1732.3	1747.5	1720	1732.3	1743		
Conducted Power (dBm)	23.81	23.70	23.46	23.76	23.76	23.47	23.87	23.81	23.81		
Conducted Power (Watts)	0.2404	0.2344	0.2218	0.2377	0.2377	0.2223	0.2438	0.2404	0.2404		
EIRP(dBm)	24.83	24.72	24.48	24.78	24.78	24.49	24.89	24.83	24.83		
EIRP(Watts)	0.3041	0.2965	0.2805	0.3006	0.3006	0.2812	0.3083	0.3041	0.3041		

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	LTE Band 12 (GT - LC = 1.37 dB) QPSK											
Bandwidth		1.4M			3M		5M					
Channel	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)	099.7	707.5	713.3	700.5	707.5	714.5	701.5	707.5	713.3			
Conducted Power (dBm)	23.33	23.25	23.15	23.39	23.32	23.26	23.44	23.36	23.26			
Conducted Power (Watts)	0.2153	0.2113	0.2065	0.2183	0.2148	0.2118	0.2208	0.2168	0.2118			
ERP(dBm)	22.55	22.47	22.37	22.61	22.54	22.48	22.66	22.58	22.48			
ERP(Watts)	0.1799	0.1766	0.1726	0.1824	0.1795	0.1770	0.1845	0.1811	0.1770			

	LTE Band 12 (GT - LC =	1.37 dB) QPSK			
Bandwidth		10M			
Channel	23060 23095		23130		
Chamilei	(Low)	(Mid)	(High)		
Frequency	704	707.5	711		
(MHz)	704	101.5	, , ,		
Conducted Power (dBm)	23.46	23.49	23.33		
Conducted Power (Watts)	0.2218	0.2234	0.2153		
ERP(dBm)	22.68	22.71	22.55		
ERP(Watts)	0.1854	0.1866	0.1799		

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	LTE Band 12 (GT - LC = 1.37 dB) 16QAM										
Bandwidth		1.4M			3M			5M			
Ob annual	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)	033.1	101.5	7 13.3	700.5	707.5	714.5	701.5	707.5	713.3		
Conducted Power (dBm)	23.65	23.60	23.45	23.67	23.72	23.62	23.76	23.71	23.56		
Conducted Power (Watts)	0.2317	0.2291	0.2213	0.2328	0.2355	0.2301	0.2377	0.2350	0.2270		
ERP(dBm)	22.87	22.82	22.67	22.89	22.94	22.84	22.98	22.93	22.78		
ERP(Watts)	0.1936	0.1914	0.1849	0.1945	0.1968	0.1923	0.1986	0.1963	0.1897		

L	LTE Band 12 (GT - LC = 1.37 dB) 16QAM								
Bandwidth		10M							
Channel	23060	23095	23130						
Channel	(Low)	(Mid)	(High)						
Frequency	704	707.5	711						
(MHz)	704	707.5	711						
Conducted Power (dBm)	23.74	23.79	23.69						
Conducted Power (Watts)	0.2366	0.2393	0.2339						
ERP(dBm)	22.96	23.01	22.91						
ERP(Watts)	0.1977	0.2000	0.1954						

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Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

			L	TE Band 2 /	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)
	3758.92	-47.25	-13	-34.25	-69.19	-54.00	5.85	12.60	Н
	5638.38	-57.32	-13	-44.32	-80.94	-63.12	7.30	13.10	Н
N 4: al all a	7517.84	-55.79	-13	-42.79	-81.72	-58.94	8.35	11.50	Н
Middle	3758.92	-47.36	-13	-34.36	-72.46	-54.11	5.85	12.60	V
	5638.38	-52.37	-13	-39.37	-76.14	-58.17	7.30	13.10	V
	7517.84	-52.95	-13	-39.95	-78.87	-56.10	8.35	11.50	V

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

				LTE Band 2	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)
	3757.48	-45.35	-13	-32.35	-67.29	-52.10	5.85	12.60	Н
	5636.22	-52.36	-13	-39.36	-75.98	-58.16	7.30	13.10	Н
NA: el el la	7514.96	-54.15	-13	-41.15	-80.09	-57.30	8.35	11.50	Н
Middle	3757.48	-46.45	-13	-33.45	-71.55	-53.20	5.85	12.60	V
	5636.22	-51.85	-13	-38.85	-75.62	-57.65	7.30	13.10	V
	7514.96	-52.09	-13	-39.09	-78.02	-55.24	8.35	11.50	V

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

	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)			
	3755.68	-48.73	-13	-35.73	-70.67	-55.48	5.85	12.60	Н			
	5633.52	-57.56	-13	-44.56	-81.18	-63.36	7.30	13.10	Н			
NA: al all a	7511.36	-55.54	-13	-42.54	-81.48	-58.69	8.35	11.50	Н			
Middle	3755.68	-45.97	-13	-32.97	-71.07	-52.72	5.85	12.60	V			
	5633.52	-57.10	-13	-44.10	-80.87	-62.90	7.30	13.10	V			
	7511.36	-55.50	-13	-42.50	-81.43	-58.65	8.35	11.50	V			

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

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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)				
	3751.18	-49.29	-13	-36.29	-71.23	-56.04	5.85	12.60	Н				
	5626.77	-56.79	-13	-43.79	-80.49	-62.59	7.30	13.10	Н				
Middle	7502	-54.26	-13	-41.26	-80.26	-57.41	8.35	11.50	Н				
ivildale	3751.18	-48.48	-13	-35.48	-73.58	-55.23	5.85	12.60	V				
	5626.77	-55.00	-13	-42.00	-79.2	-60.80	7.30	13.10	V				
	7502	-51.26	-13	-38.26	-77.25	-54.41	8.35	11.50	V				

			L	TE Band 2 /	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)
	3746.68	-46.28	-13	-33.28	-68.22	-53.03	5.85	12.60	Н
	5620.02	-57.47	-13	-44.47	-81.17	-63.27	7.30	13.10	Н
NA: el ell e	7493.36	-54.86	-13	-41.86	-80.86	-58.01	8.35	11.50	Н
Middle	3746.68	-55.61	-13	-42.61	-80.71	-62.36	5.85	12.60	V
	5620.02	-56.00	-13	-43.00	-80.2	-61.80	7.30	13.10	V
	7493.36	-50.36	-13	-37.36	-76.35	-53.51	8.35	11.50	V

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

			L	TE Band 2 /	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)
	3742.18	-46.11	-13	-33.11	-68.60	-52.86	5.85	12.60	Н
	5613.27	-57.42	-13	-44.42	-81.20	-63.22	7.30	13.10	Н
NA: al all a	7484.36	-55.27	-13	-42.27	-81.34	-58.42	8.35	11.50	Н
Middle	3742.18	-46.77	-13	-33.77	-71.27	-53.52	5.85	12.60	V
	5613.27	-52.16	-13	-39.16	-76.79	-57.96	7.30	13.10	V
	7484.36	-50.89	-13	-37.89	-76.94	-54.04	8.35	11.50	V

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

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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)				
	3463.74	-44.15	-13	-31.15	-65.69	-51.00	5.65	12.50	Н				
	5195.61	-57.74	-13	-44.74	-81.34	-63.41	7.13	12.80	Н				
Middle	6927.48	-56.73	-13	-43.73	-81.88	-60.13	8.40	11.80	Н				
ivildale	3463.74	-51.48	-13	-38.48	-72.82	-58.33	5.65	12.50	V				
	5195.61	-50.49	-13	-37.49	-74.36	-56.16	7.13	12.80	V				
	6927.48	-55.61	-13	-42.61	-81.68	-59.01	8.40	11.80	V				

	LTE Band 4 / 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)				
	3462.48	-43.79	-13	-30.79	-65.33	-50.64	5.65	12.50	Н				
	5193.72	-56.65	-13	-43.65	-80.25	-62.32	7.13	12.80	Н				
N 4: al all a	6924.96	-56.15	-13	-43.15	-81.30	-59.55	8.40	11.80	Н				
Middle	3462.48	-45.03	-13	-32.03	-66.37	-51.88	5.65	12.50	V				
	5193.72	-49.46	-13	-36.46	-73.33	-55.13	7.13	12.80	V				
	6924.96	-53.92	-13	-40.92	-79.99	-57.32	8.40	11.80	V				

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

	LTE Band 4 / 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)				
	3460.68	-40.38	-13	-27.38	-61.92	-47.23	5.65	12.50	Н				
	5191.02	-54.38	-13	-41.38	-77.98	-60.05	7.13	12.80	Н				
N 4: al all a	6921.36	-56.19	-13	-43.19	-81.30	-59.59	8.40	11.80	Н				
Middle	3460.68	-45.68	-13	-32.68	-67.02	-52.53	5.65	12.50	V				
	5191.02	-49.93	-13	-36.93	-73.8	-55.60	7.13	12.80	V				
	6921.36	-54.99	-13	-41.99	-81.2	-58.39	8.40	11.80	V				

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

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	LTE Band 4 / 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)				
	3456.18	-45.65	-13	-32.65	-66.39	-52.50	5.65	12.50	Н				
	5184.27	-57.01	-13	-44.01	-80.49	-62.68	7.13	12.80	Н				
Middle	6912.36	-55.79	-13	-42.79	-80.90	-59.19	8.40	11.80	Н				
ivildale	3456.18	-46.13	-13	-33.13	-67.81	-52.98	5.65	12.50	V				
	5184.27	-55.22	-13	-42.22	-79.09	-60.89	7.13	12.80	V				
	6912.36	-53.98	-13	-40.98	-80.19	-57.38	8.40	11.80	V				

	LTE Band 4 / 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)				
	3451.68	-40.20	-13	-27.20	-60.94	-47.05	5.65	12.50	Н				
	5177.52	-57.89	-13	-44.89	-81.37	-63.56	7.13	12.80	Н				
N 4: al all a	6903.36	-55.98	-13	-42.98	-81.06	-59.38	8.40	11.80	Н				
Middle	3451.68	-41.95	-13	-28.95	-63.63	-48.80	5.65	12.50	V				
	5177.52	-47.42	-13	-34.42	-71.29	-53.09	7.13	12.80	V				
	6903.36	-54.98	-13	-41.98	-81.34	-58.38	8.40	11.80	V				

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

	LTE Band 4 / 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)				
	3447.18	-45.43	-13	-32.43	-66.17	-52.28	5.65	12.50	Н				
	5170.77	-56.03	-13	-43.03	-79.39	-61.70	7.13	12.80	Н				
NA: al all a	6894.36	-55.50	-13	-42.50	-80.59	-58.90	8.40	11.80	Н				
Middle	3447.18	-47.75	-13	-34.75	-69.43	-54.60	5.65	12.50	V				
	5170.77	-51.56	-13	-38.56	-75.42	-57.23	7.13	12.80	V				
	6894.36	-53.30	-13	-40.30	-79.67	-56.70	8.40	11.80	V				

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

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	LTE Band 12 / 1.4MHz / QPSK												
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1413.74	-42.21	-13	-29.21	-52.13	-45.46	4.00	9.40	Н				
	2120.61	-56.95	-13	-43.95	-74.21	-60.52	4.88	10.60	Н				
Middle	2827.48	-57.35	-13	-44.35	-75.95	-62.28	5.52	12.60	Н				
ivildale	1416	-60.66	-13	-47.66	-71.64	-63.91	4.00	9.40	V				
	2120.61	-54.95	-13	-41.95	-71.98	-58.52	4.88	10.60	V				
	2827.48	-59.26	-13	-46.26	-78.67	-64.19	5.52	12.60	V				

	LTE Band 12 / 3MHz / QPSK												
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1412.3	-43.61	-13	-30.61	-53.53	-46.86	4.00	9.40	Н				
	2118.45	-52.01	-13	-39.01	-69.27	-55.58	4.88	10.60	Н				
N 4: al all a	2824.6	-57.13	-13	-44.13	-75.73	-62.06	5.52	12.60	Н				
Middle	1412.3	-52.59	-13	-39.59	-63.57	-55.84	4.00	9.40	V				
	2118.45	-57.40	-13	-44.40	-74.43	-60.97	4.88	10.60	V				
	2824.6	-58.87	-13	-45.87	-78.28	-63.80	5.52	12.60	V				

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

	LTE Band 12 / 5MHz / QPSK												
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1410.5	-44.30	-13	-31.30	-54.22	-47.55	4.00	9.40	Н				
	2115.75	-53.22	-13	-40.22	-70.48	-56.79	4.88	10.60	Н				
N 4: al all a	2821	-59.48	-13	-46.48	-78.08	-64.41	5.52	12.60	Н				
Middle	1410.5	-51.77	-13	-38.77	-62.75	-55.02	4.00	9.40	V				
	2115.75	-55.90	-13	-42.90	-72.93	-59.47	4.88	10.60	V				
	2821	-58.76	-13	-45.76	-78.17	-63.69	5.52	12.60	V				

 $Remark: Spurious\ emissions\ within\ 30\text{-}1000MHz\ were\ found\ more\ than\ 20dB\ below\ limit\ line.$

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Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-59.64	-13	-46.64	-69.56	-62.89	4.00	9.40	Н
	2109	-61.00	-13	-48.00	-78.17	-64.57	4.88	10.60	Н
	2812	-59.54	-13	-46.54	-78.14	-64.47	5.52	12.60	Н
	1406	-53.95	-13	-40.95	-64.93	-57.20	4.00	9.40	V
	2109	-56.29	-13	-43.29	-73.25	-59.86	4.88	10.60	V
	2812	-58.97	-13	-45.97	-78.38	-63.90	5.52	12.60	V

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