# RF TESTREPORT

ISSUED BY Shenzhen BALUN Technology Co., Ltd.



FOR

# **Smartphone**

ISSUED TO
Shenzhen Sang Fei Consumer Communications Co., Ltd

11 Science and Technology Road, Shenzhen Hi-tech Industrial Park Nanshan District, Shenzhen city, GuangDong province, 518057, China



Tested by: Any Ai ping
Heng Aiping
(Engineer)
Date Dec. 13, 206

Approved by: Wei Yanguan
(Chief Engineer)
Date Dec. 13, 276

Report No.: BL-SZ16B0295-501

**EUT Type:** Smartphone

Model Name: O7
Brand Name: AOC

Test Standard: 47 CFR Part 2 (10-1-15 Edition)

47 CFR Part 22 (10-1-15 Edition) 47 CFR Part 24 (10-1-15 Edition)

47 CFR Part 27 (10-1-15 Edition)

FCC ID: VQRCTO7

Test Conclusion: Pass

1 433

Test Date: Nov. 21, 2016 ~ Nov. 30, 2016

Date of Issue: Dec. 13, 2016

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# **Revision History**

Version

Issue Date

**Revisions Content** 

Rev. 01

Dec. 13, 2016

Initial Issue

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# 1 GENERAL INFORMATION

# 1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road,
Address	Nanshan District, Shenzhen, Guangdong Province, P. R. China.
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

# 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Addroop	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road,
Address	Nanshan District, Shenzhen, Guangdong Province, P. R. China.
	The laboratory has been listed by Industry Canada to perform
	electromagnetic emission measurements. The recognition numbers of
	test site are 11524A-1.
	The laboratory has been listed by US Federal Communications
Accreditation Certificate	Commission to perform electromagnetic emission measurements. The
	recognition numbers of test site are 832625.
	The laboratory is a testing organization accredited by China National
	Accreditation Service for Conformity Assessment (CNAS) according to
	ISO/IEC 17025. The accreditation certificate number is L6791.
	All measurement facilities used to collect the measurement data are
Description	located at Block B, FL 1, Baisha Science and Technology Park, Shahe
Description	Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R.
	China 518055

# 1.3 Test Environment Condition

Ambient Temperature	20 to 35 °C
Ambient Relative	30 to 60 %
Humidity	30 10 60 %
Ambient Pressure	98 to 102KPa



#### 1.4 Announce

- (1) The test report reference to the report template version v1.3.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory



# **2 PRODUCT INFORMATION**

# 2.1 Applicant Information

Applicant	Shenzhen Sang Fei Consumer Communications Co., Ltd
	11 Science and Technology Road, Shenzhen Hi-tech Industrial Park
Address	Nanshan District, Shenzhen city, GuangDong province, 518057,
	China

## 2.2 Manufacturer Information

Manufacturer	Wuhan Admiral Technology Ltd
Address	No. 11, Zhuankou District, Wuhan economic and Technology
Address	Development Zone, Hubei, China

# 2.3 Factory Information

Factory	Huizhou Qiaoxing Electronics Technology Co.,LTD
Address	Qiaoxing Tech Industrial Park, Tangquan, Huizhou, Guangdong, China

# 2.4 General Description for Equipment under Test (EUT)

EUT Type	Smartphone
Model Name	07
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	M7_V1.03
Software Version	AOC_O7_1646_V01_CP
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/HSPA+ Band 2/5 4G Network FDD LTE Band2/4/7 Bluetooth 3.0, Bluetooth 4.0 Low Energy (BLE),
	WIFI 802.11b, 802.11g and 802.11n (HT20/40), GPS
About the Product	The equipment is Smartphone, intended for used with information technology equipment.

#### Note 1:

The EUT is a mobile phone, supporting dual SIM card slots under the same transceiver. Both SIM card slots support GSM, WCDMA and LTE. And both SIM card slots share the same transceiver, so only SIM1 is tested in this report.



## 2.5 Technical Information

The requirement for the following technical information of the EUT was tested in this report:

	CSM/CDDS/E	2DDS 850/1000		
Eroguanov Panda	GSM/GPRS/EGPRS 850/1900 WCDMA/HSDPA/HSUPA Band 2/5			
Frequency Bands	LTE FDD Band 2/4/7			
	GSM/GPRS	GMSK		
	EGPRS	8PSK		
	WCDMA	QPSK		
Modulation Type	HSDPA	QPSK		
Modulation Type	/HSUPA	16QAM		
	/HSOFA	QPSK		
	LTE	16QAM		
	CSM/CDDS/E			
	GSM/GPRS/EGPRS 850: 824 - 849 MHz GSM/GPRS/EGPRS 1900: 1850 - 1910 MHz			
		PA/HSUPA Band 2: 1850 -1910 MHz		
TX Frequency Range		PA/HSUPA Band 5: 824 - 849 MHz		
TX Trequency Range		2: 1850 - 1910 MHz		
		4: 1710 - 1755 MHz		
		7: 2500 - 2570 MHz		
		GPRS 850: 869 - 894 MHz		
	GSM/GPRS/EGPRS 1900: 1930 - 1990 MHz			
	WCDMA/HSDPA/HSUPA Band 2: 1930 - 1990 MHz			
Rx Frequency Range	WCDMA/HSDPA/HSUPA Band 5: 869 - 894 MHz			
Tax requested realings	LTE FDD Band 2: 1930 - 1990 MHz			
	LTE FDD Band 4: 2110 - 2155 MHz			
		LTE FDD Band 7: 2620 - 2690 MHz		
	GSM/GPRS 85	0: 4		
	GSM/GPRS 1900: 1			
	EGPRS 850/1900: E2			
Dawar Class	WCDMA/HSDPA/HSUPA Band 2: 3			
Power Class	WCDMA/HSDPA/HSUPA Band 5: 3			
	LTE FDD Band 2: 3			
	LTE FDD Band 4: 3			
	LTE FDD Band 7: 3			
Multislot Class	GPRS/EGPRS: 12			
Antenna Type	PIFA Antenna			
	GSM/GPRS/EG	GPRS 850:-4.29 dBi		
	GSM/GPRS/EGPRS 1900:-3.69 dBi			
	WCDMA/HSDPA/HSUPA Band 2: -3.62 dBi			
Antenna Gain	WCDMA/HSDPA/HSUPA Band 5: -4.25 dBi			
	LTE FDD Band 2: -3.67 dBi			
	LTE FDD Band 4: -3.45 dBi			
	LTE FDD Band	7: -4.20 dBi		

Note 1: The EUT information are declared by manufacturer. For more detailed features description, please refer to



the manufacturer's specifications or user's manual.

# 2.6 Ancillary Equipment

	Battery		
	Brand Name	AOC	
	Model No.	O7	
Ancillary Equipment 1	Serial No.	N/A	
	Capacitance	4000 mAh	
	Rated Voltage	3.8 V	
	Limit Charge Voltage	4.35 V	
	Adapter 1		
	Brand Name	AOC	
Ancillary Equipment 2	Model Name	TPA-59050150VU (EU) Note	
	Rated Input	100-240 V ~, 50/60 Hz, 300 mA	
	Rated Output	5 V =, 1500 mA	
	Adapter 2		
	Brand Name	AOC	
Ancillary Equipment 3	Model Name	TPA-46050150UU (US Plug) Note	
	Rated Input	100-240 V ~, 50/60 Hz, 300 mA	
	Rated Output	5 V =, 1500 mA	
Ancillary Equipment 4	USB Cable		
Anomary Equipment 4	Length(Approx.)	100 cm	

Note: The adapter are same with electrical parameters and internal circuit structure, only differ in model name and adapter plug, TPA-46050150UU as the main for tested in this report.



# **3 SUMMARY OF TEST RESULTS**

# 3.1 Test Standards

No.	Identity	Document Title	
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters;	
'	(10 - 1 - 15 Edition)	General Rules and Regulations	
2	47 CFR Part 22	Public Mobile Services	
	(10 - 1 - 15 Edition)		
3	47 CFR Part 24	Personal Communications Services	
3	(10 - 1 - 15 Edition)		
4	47 CFR Part 27	Miscellaneous Wireless Communications Services	
4	(10 - 1 - 15 Edition)		
5	TIA/EIA 603.D-2010	Land Mobile FM or PM Communications Equipment Measurement	
5	11A/EIA 603.D-2010	and Performance Standards	
6	KDB 971168	Measurement Guidance for Certification of Licensed Digital	
0	D01 v02r02	Transmitters	



# 3.2 Test Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Conducted RF Output Power	2.1046	Reporting only (ANNEX A.1)	Pass
2	Effective (Isotropic) Radiated Power	2.1046 22.913 24.232 27.50(b) 27.50(c) 27.50(d) 27.50(h)	ANNEX A.1	Pass
3	Peak to average radio	2.1046 24.232(d) 27.50(d)	ANNEX A.2	Pass
4	Occupied Bandwidth	2.1049 22.917 24.238	ANNEX A.3	Pass
5	Frequency Stability	2.1055 22.355 24.235 27.54	ANNEX A.4	Pass
6	Spurious Emission at Antenna Terminals	2.1051 22.917 24.238 27.53(c) 27.53(g) 27.53(h) 27.53(m)	ANNEX A.5	Pass
7	Band Edge	2.1051 22.917 24.238 27.53(c) 27.53(g) 27.53(h) 27.53(m)	ANNEX A.6	Pass
8	Field Strength of Spurious Radiation	2.1053 22.917 24.238 27.53(c) 27.53(g) 27.53(h) 27.53(m)	ANNEX A.7	Pass



# 4 GENERAL TEST CONFIGURATIONS

# 4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

	NV (Normal Voltage)	3.8 V
Working Voltage of The EUT	of The EUT LV (Low Voltage)	
	HV (High Voltage)	4.35 V
Madin a Tanananatana at Tha EUT	LT (Low Temperature)	0 °C
Working Temperature of The EUT	HT (High Temperature)	60 °C

# 4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWAR Z	FSV-30	103118	2016.07.13	2017.07.12
Spectrum Analyzer	AGILENT	E4440A	MY45304434	2016.11.08	2017.11.07
Universal Radio Communication Tester	ROHDE&SCHWAR Z	CMU 200	123666	2016.11.08	2017.11.07
Wireless Communications Test Set	ROHDE&SCHWAR Z	CMW 500	102318	2016.07.13	2017.07.12
EMI Receiver	ROHDE&SCHWAR Z	ESRP	101036	2016.07.05	2017.07.04
Power Splitter	KMW	DCPD-LDC	1305003215		
Power Sensor	ROHDE&SCHWAR Z	NRP-Z21	103971	2016.07.13	2017.07.12
Attenuator (20 dB)	KMW	ZA-S1-201	110617091		
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	-	
DC Power Supply	ROHDE&SCHWAR Z	IT6863A	6000140106 87210020	2016.07.13	2017.07.12
Temperature Chamber	ANGELANTIONI SCIENCE	SP20	1412	2016.07.13	2017.07.12
Test Antenna- Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2015.07.22	2017.07.21
Test Antenna- Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2015.07.22	2017.07.21
Test Antenna- Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21
Test Antenna- Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2015.07.22	2017.07.21
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2015.02.28	2017.02.27
Shielded Enclosure	ChangNing	CN-130701	130703		



# 4.3 Test Configurations

Took Home	Took Mode		Test Channel	
Test Items	Test Mode	LCH	MCH	HCH
	GSM 850	V	V	V
	GSM 1900	V	V	V
	GPRS 850	V	V	V
	GPRS 1900	V	V	V
	EGPRS 850	V	V	V
E.R.P/E.I.R.P	EGPRS 1900	V	V	V
E.IX.I /E.I.IX.I	WCDMA Band 2	V	V	V
	WCDMA Band 5	V	V	V
	HSUPA Band 2	V	V	V
	HSUPA Band 5	V	V	V
	HSDPA Band 2	V	V	V
	HSDPA Band 5	V	V	V
Peak to Average Ratio	WCDMA Band 2	V	V	V
	GSM 850	V	V	V
	GSM 1900	V	V	V
Occupied Bandwidth	EGPRS 850	V	V	V
	EGPRS 1900	V	V	V
	WCDMA Band 2	V	V	V
	WCDMA Band 5	V	V	V
	GSM 850	V	V	V
	GSM 1900	V	V	٧
	GPRS 850	V	V	V
Canada a Chabilita	GPRS 1900	V	V	V
Frequency Stability	EGPRS 850	V	V	V
	EGPRS 1900	V	V	٧
	WCDMA Band 2	V	V	٧
	WCDMA Band 5	V	V	٧
	GSM 850	V	V	V
	GSM 1900	V	V	V
Spurious Emission at Antenna	EGPRS 850	V	V	V
Terminals	EGPRS 1900	V	V	٧
	WCDMA Band 2	V	V	٧
	WCDMA Band 5	V	V	V
	GSM 850	V		V
	GSM 1900	V		V
Dand Eda-	EGPRS 850	V		V
Band Edge	EGPRS 1900	V		V
	WCDMA Band 2	V		V
	WCDMA Band 5	V		V
Field Strength of Spurious	GSM 850	V	V	V
Radiation	GSM 1900	V	V	V



Toot Itoma	Toot Mode	Test Channel				
Test Items	Test Mode	LCH	MCH	HCH		
	EGPRS 850	V	V	V		
	EGPRS 1900	V	V	V		
	WCDMA Band 2	V	V	V		
	WCDMA Band 5	V	V	V		
Note 4. The money "" we are all of	Only and Control of the Control of t					

Note 1: The mark "v" means that this configuration is chosen for testing.

LTE		Bar	ndwid	th (MI	lz)		Mod	ulation		RB#			st Chan	nel
Band	1.4	3	5	10	15	20	QPSK	16-QAM	1	Half	Full	LCH	MCH	HCH
	E.R.P/E.I.R.P													
2	V	V	V	٧	٧	٧	V	V	٧	٧	٧	٧	V	V
4	٧	٧	V	V	٧	V	V	V	٧	٧	٧	٧	V	V
7	n	n	٧	٧	٧	٧	V	V	٧	٧	٧	٧	V	V
						Pe	ak to Ave	rage Ratio						
2						٧	V	V	٧		٧	٧	V	V
4						٧	V	V	٧		٧	٧	V	V
7	n	n				٧	V	V	٧		٧	٧	V	V
						0	ccupied E	Bandwidth						
2	٧	٧	٧	٧	٧	٧	V	V			٧	٧	V	V
4	٧	٧	٧	٧	٧	٧	V	V			٧	٧	V	V
7	n	n	V	٧	٧	٧	V	V			٧	٧	V	V
						F	requency	Stability						
2				٧			V	V			٧		V	
4				٧			V	V			٧		V	
7	n	n		٧			V	V			٧		V	
				9	Spurio	us En	nission at	Antenna Te	ermina	als				
2	٧	٧	٧	٧	٧	٧	V	V	٧			٧	V	٧
4	٧	٧	٧	٧	٧	٧	V	V	٧			٧	V	V
7	n	n	٧	٧	٧	٧	V	V	٧			٧	V	V
							Band I	Edge						
2	٧	٧	V	٧	٧	٧	V	V	٧		٧	٧		٧
4	٧	٧	V	٧	٧	٧	V	V	٧		٧	٧		V
7	n	n	٧	٧	٧	٧	V	V	٧		٧	٧		V
					Fiel	d Stre	ngth of S	ourious Rac	liation	1				
2	٧	٧	V	V	٧	٧	V		٧				٧	
4	٧	٧	V	٧	٧	٧	V		٧				٧	
7	n	n	٧	٧	٧	٧	V		٧		-		٧	
1 -														

Note 1: The mark "v" means that this configuration is chosen for testing.

Note 2: The mark "n" means that this bandwidth is not supported.



Test Mode	UL Channel	UL Channel No.	UL Frequency (MHz)
GSM/GPRS/EGPRS	LCH	128	824.2
	MCH	190	836.6
850	HCH	251	848.8
GSM/GPRS/EGPRS	LCH	512	1850.2
1900	MCH	661	1880.0
1900	HCH	810	1909.8
	LCH	9262	1852.4
WCDMA Band 2	MCH	9400	1880.0
	HCH	9538	1907.6
	LCH	4132	826.4
WCDMA Band 5	MCH	4182	836.4
	HCH	4233	846.6

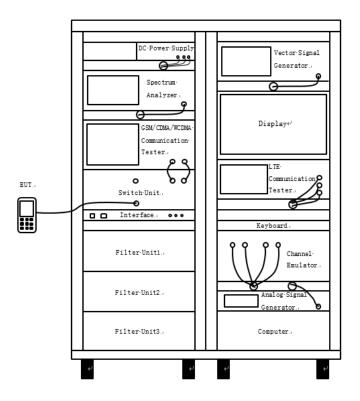


Test Mode	UL Channel	Channel Bandwidth	UL Channel	UL Frequency (MHz)
rest Mode	OL Chariner	(MHz)	No.	OL Frequency (WiF12)
		1.4	18607	1850.7
		3	18615	1851.5
	Low Range	5	18625	1852.5
	Low Range	10	18650	1855
		15	18675	1857.5
		20	18700	1860
LTE Band 2	Mid Range	1.4/3/5/10/15/20	18900	1880
		1.4	19193	1909.3
		3	19185	1908.5
	High Range	5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900
		1.4	19957	1710.7
		3	19965	1711.5
	Low Range	5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
LTE Band 4	Mid Range	1.4/3/5/10/15/20	20175	1732.5
		1.4	20393	1754.3
LTE Band 4		3	20385	1753.5
	High Range	5	20375	1752.5
	High Kange	10	20350	1750
		15	20325	1747.5
		20	20300	1745
		5	20775	2502.5
	Low Pango	10	20800	2505
	Low Range	15	20825	2507.5
		20	20850	2510
LTE Band 7	Mid Range	5/10/15/20	21100	2535
		5	21425	2567.5
	High Panga	10	21400	2565
	High Range	15	21375	2562.5
		20	21350	2560



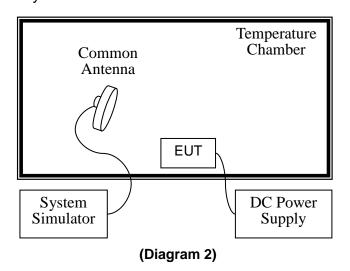
# 4.4 Test Setup

#### 4.4.1 For Antenna Port Test



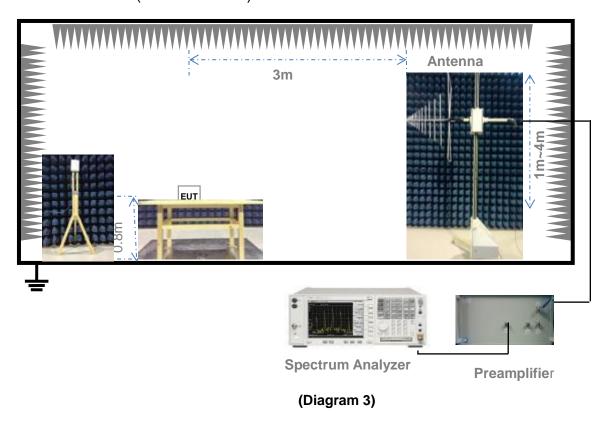
(Diagram 1)

## 4.4.2 For Frequency Stability Test

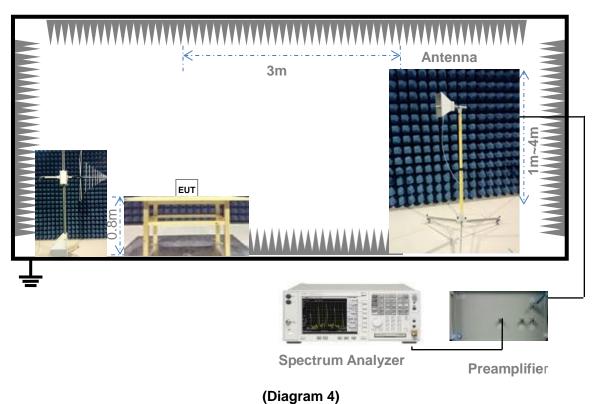




# 4.4.3 For Radiated Test (30 MHz-1 GHz)



# 4.4.4 For Radiated Test (Above 1 GHz)





### 5 TEST ITEMS

## 5.1 Transmitter Radiated Power (EIRP/ERP)

#### 5.1.1 Limit

FCC § 2.1046(a) & 22.913 & 24.232 & 27.50(b) & 27.50(c) & 27.50(d) & 27.50(h)

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

According to FCC section 24.232, Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to FCC section 27.50(b), portable stations (hand-held devices) transmitting in the 746-757MHz, 776-788MHz, and 805-806MHz bands are limited to 3 watts ERP.

FCC section 27.50(c), portable stations (hand-held devices) in the 698-746MHz band are limited to 3 watts ERP.

FCC section 27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

Fixed, mobile, and portable (hand-held) stations operating in the 2000-2020 MHz band are limited to 2 watts EIRP.

And FCC section 27.50(h), for mobile and other user stations, mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

#### 5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.1.3 Test Procedure

#### Description of the Conducted Output Power Measurement

The EUT is coupled to the SS with attenuator through power splitter; the RF load attached to EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. 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.

Note: Reference test setup 4.4.1 (Diagram 1)

## Description of the Transmitter Radiated Power Measurement

In many cases, the RF output power limits for licensed digital transmission devices is specified in terms of effective radiated power (ERP) or equivalent isotropic radiated power (EIRP). Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1



GHz. Both are determined by adding the transmit antenna gain to the conducted RF output power with the primary difference between the two being that when determining the ERP, the transmit antenna gain is referenced to a dipole antenna (i.e., dBd) whereas when determining the EIRP, the transmit antenna gain is referenced to an isotropic antenna (dBi).

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP/EIRP = P<sub>Meas</sub> + GT - LC

where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as  $P_{Meas}$ , typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

dBd (ERP)=dBi (EIRP) -2.15 dB

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

Note: Reference test setup 4.4.3 and 4.4.4 (Diagram 3, 4)

#### 5.1.4 Test Result

Please refer to ANNEX A.1.



## 5.2 Peak to average ratio

#### 5.2.1 Limit

FCC § 2.1046 & 24.232(d) & 27.50(d)

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

According to FCC section 24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with 24.232 (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of § 24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

For FCC section 24.232(e), peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

According to FCC section 27.50(d), in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

### 5.2.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.2.3 Test Procedure

Here the lowest, middle and highest channels are selected to perform testing to verify the peak-to-average ratio.

CCDF procedure for PAPR:

- a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
- b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- c) Set the number of counts to a value that stabilizes the measured CCDF curve;
- d) Set the measurement interval as follows:
  - 1) for continuous transmissions, set to 1 ms,
- 2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.



e) Record the maximum PAPR level associated with a probability of 0.1%.

Alternate procedure for PAPR:

Use one of the procedures presented in 4.1 to measure the total peak power and record as P<sub>Pk</sub>. Use one of the applicable procedures presented 4.2 to measure the total average power and record as P<sub>Avg</sub>. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

PAPR (dB) =  $P_{Pk}$  (dBm) -  $P_{Avg}$  (dBm).

Note: Reference test setup 4.4.1 (Diagram 1).

5.2.4 Test Result

Please refer to ANNEX A.2.



## 5.3 Occupied Bandwidth

#### 5.3.1 Limit

FCC § 2.1049

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Many of the individual rule parts specify a relative OBW in lieu of the 99% OBW. In such cases, the OBW is defined as the width of the signal between two points, one below the carrier center frequency and on above the carrier center frequency, outside of which all emissions are attenuated by at least X dB below the transmitter power, where the value of X is typically specified as 26.

#### 5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.3.3 Test Procedure

The following procedure shall be used for measuring (99%) power bandwidth.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the anticipated OBW).
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.
- d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.
- e) For -26 dB OBW, the dynamic range of the spectrum analyzer at the selected RBW shall be at least 10dB below the target "-X dB down" requirement, e.g. -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be 36dB below the reference value.
- f) Set the detection mode to peak, and the trace mode to max hold.
- g) For 99% OBW, use the 99 % power bandwidth function of the spectrum analyzer (if available) and report the measured bandwidth.

If the instrument does not have a 99 % power bandwidth function, the trace data points are to be recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % power bandwidth is the difference between these two frequencies.



h) For -26 dB OBW, determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace(this is the reference value).

Determine the "-X dB down amplitude" as equal to (reference value -X). Alternatively, this calculation can be performed by the analyzer by using the marker-delta function.

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below "-X dB down amplitude" determined in step g). If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

- i) The OBW shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).
- j) Change variable modulations, coding, or channel bandwidth settings, then repeat above test procedures.

Note: Reference test setup 4.4.1 (Diagram 1).

5.3.4 Test Result

Please refer to ANNEX A.3.



## 5.4 Frequency Stability

#### 5.4.1 Limit

FCC § 2.1055 & 22.355 & 24.235 &27.54

FCC § 2.1055

The frequency stability shall be measured with variation of ambient temperature as follows:

- (1) The temperature is varied from -30°C to +50°C.
- (2) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10°C through the range.

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating and point which shall be specified by the manufacture.
- (3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

#### FCC § 22.355

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Mobile ≤ 3 watts Mobile > 3 watts Frequency range Base, fixed (ppm) (MHz) (ppm) (ppm) 25 to 50 20.0 50.0 20.0 50.0 50 to 450 5.0 5.0 450 to 512 2.5 5.0 5.0 821 to 896 1.5 2.5 2.5 928 to 929 5.0 n/a n/a 929 to 960 1.5 n/a n/a 2110 to 2220 10.0 n/a n/a

Table C-1—Frequency Tolerance for Transmitters in the Public Mobile Services

#### FCC § 24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### FCC § 27.54

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

#### 5.4.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to



ANNEX B.

#### 5.4.3 Test Procedure

- 1. The test is performed in a Temperature Chamber.
- 2. The EUT is configured as MS + DC Power Supply.

Note: Reference test setup 4.4.2 (Diagram 2).

#### 5.4.4 Test Result

Please refer to ANNEX A.4.



## 5.5 Spurious Emission at Antenna Terminals

#### 5.5.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

FCC § 22.917(a) & 24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10\*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746-758MHz band and the 776-788MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated outside the band below the transmitter power (P) by at least 43+10\*log(P) dB.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10\*log(P) dB.

FCC § 27.53(h)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  dB.

FCC § 27.53(m)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- 40+10logP dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.
- 43+10logP dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,
- 55+10logP dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

#### 5.5.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.5.3 Test Procedure

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of



any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

- 1. The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading.
- 2. CMW500 was used to establish communication with the EUT, Its parameters were set to force the EUT transmitting at maximum output power.
- 3. The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.
- 4. Spurious emissions were tested with 0.001MHz RBW for frequency less than 150kHz, 0.01MHz RBW for frequency less than 30MHz, 0.1MHz RBW for frequency less than 1GHz, and 1MHz RBW for frequency above 1GHz. And sweep point number were at least 401, refering to following formula.

Sweep point number = Span/RBW

VBW=3RBW

Detector Mode=mean or average power

5. Record the frequencies and levels of spurious emissions.

Note: Reference test setup 4.4.1 (Diagram 1).

5.5.4 Test Result

Please refer to ANNEX A.5.



## 5.6 Band Edge

#### 5.6.1 Limit

FCC § 2.1051 & 22.917 & 24.238 & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### FCC § 22.917 & 24.238

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10\*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746-758MHz band and the 776-788MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated outside the band below the transmitter power (P) by at least 43+10\*log(P) dB.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10\*log(P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  dB.

FCC § 27.53(m)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- 40+10logP dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.
- 43+10logP dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,
- 55+10logP dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS



licensees.

#### 5.6.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.6.3 Test Procedure

The EUT, which is powered by the Battery, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading.

- 1.The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading.
- 2. CMW500 was used to establish communication with the EUT, and its parameters were set to force the EUT transmitting at maximum output power.
- 3. The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient Attenuation.
- 4. The center of the spectrum analyzer was set to block edge frequency.
- 5. Band edge were tested with 1% cBW RBW, and sweep point number refered to following formula.

Sweep point number = 2\*Span/RBW

VBW=3RBW

6. Record the frequencies and levels of spurious emissions.

Note: Reference test setup 4.4.1 (Diagram 1).

#### 5.6.4 Test Result

Please refer to ANNEX A.6.



## 5.7 Field Strength of Spurious Radiation

#### 5.7.1 Limit

FCC § 2.1053 & 22.917(a) & 24.238(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

FCC § 22.917(a) & 24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10\*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746-758MHz band and the 776-788MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated outside the band below the transmitter power (P) by at least 43+10\*log(P) dB.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10\*log(P) dB.

FCC § 27.53(h)

General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P) dB$ .

Additional protection levels. Notwithstanding the foregoing paragraph (h)(1) of this section:

- (i) Operations in the 2180-2200 MHz band are subject to the out-of-band emission requirements set forth in § 27.1134 for the protection of federal government operations operating in the 2200-2290 MHz band.
- (ii) For operations in the 2000-2020 MHz band, the power of any emissions below 2000 MHz shall be attenuated below the transmitter power (P) in watts by at least 70 + 10 log10(P) dB.
- (iii) For operations in the 1915-1920 MHz band, the power of any emission between 1930-1995 MHz shall be attenuated below the transmitter power (P) in watts by at least 70 + 10 log10(P) dB.
- (iv) For operations in the 1995-2000 MHz band, the power of any emission between 2005-2020 MHz shall be attenuated below the transmitter power (P) in watts by at least 70 + 10 log10(P) dB.

FCC § 27.53(m)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- 40+10logP dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.
- 43+10logP dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,
- 55+10logP dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).



#### 5.7.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.7.3 Test Procedure

- 1. On a test site, the EUT shall be placed at 80cm height on a turn table, and in the position close to normal use as declared by the applicant.
- 2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
- 3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
- 4. During the measurement of the EUT, the resolution bandwidth was to 1 MHz and the average bandwidth was set to 1 MHz.
- 5. The transmitter shall be switched on; the measuring receiver shall be tuned to the frequency of the transmitter under test.
- 6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
- 7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- 8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
- 9. The maximum signal level detected by the measuring receiver shall be noted.
- 10. The EUT was replaced by half-wave dipole (824  $\sim$  849 MHz) or horn antenna (1 850  $\sim$  1 910 MHz) connected

to a signal generator.

- 11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- 12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- 13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- 14. The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- 15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

Note: Reference test setup 4.4.3 and 4.4.4 (Diagram 3, 4).

#### 5.7.4 Test Result

Please refer to ANNEX A.7.



## ANNEX A TEST RESULTS

## A.1 Transmitter Radiated Power (EIRP/ERP)

#### **GSM Mode Test Data**

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
	LCH	31.82	-4.29	-6.44	25.38	0.35	7.00	Pass
GSM 850	MCH	31.79	-4.29	-6.44	25.35	0.34	7.00	Pass
	HCH	31.78	-4.29	-6.44	25.34	0.34	7.00	Pass
GPRS	LCH	32.34	-4.29	-6.44	25.90	0.39	7.00	Pass
850	MCH	32.43	-4.29	-6.44	25.99	0.40	7.00	Pass
030	HCH	32.46	-4.29	-6.44	26.02	0.40	7.00	Pass
ECDDS	LCH	30.30	-4.29	-6.44	23.86	0.24	7.00	Pass
EGPRS 850	MCH	30.36	-4.29	-6.44	23.92	0.25	7.00	Pass
030	HCH	30.61	-4.29	-6.44	24.17	0.26	7.00	Pass

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
GSM	LCH	28.51	-3.69	24.82	0.30	2.00	Pass
1900	MCH	28.59	-3.69	24.90	0.31	2.00	Pass
1900	HCH	28.63	-3.69	24.94	0.31	2.00	Pass
GPRS	LCH	29.59	-3.69	25.90	0.39	2.00	Pass
1900	MCH	29.61	-3.69	25.92	0.39	2.00	Pass
1900	HCH	29.46	-3.69	25.77	0.38	2.00	Pass
EGPRS	LCH	29.57	-3.69	25.88	0.39	2.00	Pass
1900	MCH	29.69	-3.69	26.00	0.40	2.00	Pass
1900	HCH	29.33	-3.69	25.64	0.37	2.00	Pass

Note 1: For the GPRS and EGPRS mode, all the slots were tested and just the worst data were recorded in this table.

Note 2: ERP/EIRP = PMeas + GT - LC

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

ERP = EIRP - 2.15; where ERP and EIRP are expressed in consistent units.



# GPRS Conducted Output Power

		Conducted Output Peak Power								
Band	Channel	Slot 1	Slot 1	Slot 2	Slot 2	Slot 3	Slot 3	Slot 4	Slot 4	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
GPRS	LCH	32.34	1.71	31.90	1.55	30.38	1.09	29.33	0.86	
850	MCH	32.43	1.75	31.95	1.56	30.46	1.11	29.36	0.86	
650	HCH	32.46	1.76	31.97	1.57	30.46	1.11	29.40	0.87	
CDDC	LCH	29.59	0.91	29.09	0.81	27.60	0.58	26.50	0.45	
GPRS	MCH	29.61	0.91	29.12	0.82	27.67	0.58	26.58	0.46	
1900	HCH	29.46	0.88	28.96	0.79	27.49	0.56	26.41	0.44	

### **EGPRS Conducted Output Power**

	ST NO CONDUCTOR CONTROL CONTRO									
		Conducted Output Peak Power								
Band	Channel	Slot 1	Slot 1	Slot 2	Slot 2	Slot 3	Slot 3	Slot 4	Slot 4	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
EGPRS	LCH	30.30	1.07	29.19	0.83	26.09	0.41	25.93	0.39	
	MCH	30.36	1.09	29.34	0.86	27.32	0.54	26.02	0.40	
850	HCH	30.61	1.15	29.43	0.88	27.29	0.54	26.24	0.42	
ECDD0	LCH	29.57	0.91	28.20	0.66	25.91	0.39	24.63	0.29	
EGPRS 1900	MCH	29.69	0.93	28.26	0.67	26.22	0.42	24.86	0.31	
1900	HCH	29.33	0.86	28.28	0.67	25.93	0.39	25.07	0.32	



## WCDMA Mode Test Data:

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
WCDMA	LCH	22.68	-3.62	19.06	0.08	2.00	Pass
Band 2	MCH	22.45	-3.62	18.83	0.08	2.00	Pass
	HCH	22.58	-3.62	18.96	0.08	2.00	Pass
HSDPA	LCH	21.61	-3.62	17.99	0.06	2.00	Pass
Band 2	MCH	21.46	-3.62	17.84	0.06	2.00	Pass
Danu Z	HCH	21.61	-3.62	17.99	0.06	2.00	Pass
HSUPA	LCH	21.83	-3.62	18.21	0.07	2.00	Pass
	MCH	21.31	-3.62	17.69	0.06	2.00	Pass
Band 2	HCH	21.67	-3.62	18.05	0.06	2.00	Pass

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
MCDMA	LCH	22.39	-4.25	-6.40	15.99	0.04	7.00	Pass
WCDMA Band 5	MCH	22.41	-4.25	-6.40	16.01	0.04	7.00	Pass
	HCH	22.50	-4.25	-6.40	16.10	0.04	7.00	Pass
HSDPA Band 5	LCH	21.35	-4.25	-6.40	14.95	0.03	7.00	Pass
	MCH	21.37	-4.25	-6.40	14.97	0.03	7.00	Pass
	HCH	21.44	-4.25	-6.40	15.04	0.03	7.00	Pass
HSUPA Band 5	LCH	21.48	-4.25	-6.40	15.08	0.03	7.00	Pass
	MCH	21.75	-4.25	-6.40	15.35	0.03	7.00	Pass
	HCH	21.53	-4.25	-6.40	15.13	0.03	7.00	Pass



Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this table.

Note 2: ERP/EIRP = PMeas + GT - LC

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

ERP = EIRP - 2.15; where ERP and EIRP are expressed in consistent units.

#### **HSDPA Conducted Output Power**

				Cond	ucted Outpu	ıt Average F	Power						
Band	Channel	Subtest1		Subtest2		Subtest3		Subtest4					
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)				
LICDDA	LCH	21.55	0.14	21.61	0.14	21.14	0.13	21.10	0.13				
HSDPA Band 2	MCH	21.46	0.14	21.43	0.14	20.98	0.13	20.98	0.13				
Bana 2	HCH	21.61	0.14	21.61	0.14	21.14	0.13	21.13	0.13				
HSDPA	LCH	21.29	0.13	21.35	0.14	20.87	0.12	20.85	0.12				
Band 5	MCH	21.31	0.14	21.37	0.14	20.89	0.12	20.86	0.12				
	HCH	21.40	0.14	21.44	0.14	20.96	0.12	20.94	0.12				

#### **HSUPA Conducted Output Power**

					Conduc	cted Outp	ut Avera	ge Powe	ſ		
Band	Channel	Subtest1		Subtest2		Subtest3		Subtest4		Subtest5	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)
LICLIDA	LCH	20.00	0.10	19.84	0.10	20.84	0.12	19.37	0.09	21.83	0.15
HSUPA Band 2	MCH	19.79	0.10	19.69	0.09	20.67	0.12	19.09	0.08	21.31	0.14
Band 2	HCH	19.68	0.09	19.7	0.09	20.69	0.12	19.18	0.08	21.67	0.15
HSUPA Band 5	LCH	19.55	0.09	19.54	0.09	20.57	0.11	18.97	0.08	21.48	0.14
	MCH	19.56	0.09	19.46	0.09	20.54	0.11	18.97	0.08	21.75	0.15
	HCH	19.62	0.09	19.61	0.09	18.97	0.08	19.03	0.08	21.53	0.14



## LTE Mode Test Data:

LIE Mode I	lesi Daia.			Conducted					
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
			(1 1 1 1 1 )	(dBm)	(dBi)	( )	,		
LTE BAND2									
			RB1#0	21.67	-3.67	18.00	0.06	2.00	Pass
			RB1#3	21.74	-3.67	18.07	0.06	2.00	Pass
			RB1#5	21.68	-3.67	18.01	0.06	2.00	Pass
		QPSK	RB3#0	21.66	-3.67	17.99	0.06	2.00	Pass
			RB3#2	21.65	-3.67	17.98	0.06	2.00	Pass
			RB3#3	21.64	-3.67	17.97	0.06	2.00	Pass
	LCH		RB6#0	20.64	-3.67	16.97	0.05	2.00	Pass
	LON		RB1#0	20.65	-3.67	16.98	0.05	2.00	Pass
			RB1#3	20.71	-3.67	17.04	0.05	2.00	Pass
			RB1#5	20.66	-3.67	16.99	0.05	2.00	Pass
		16-QAM	RB3#0	20.64	-3.67	16.97	0.05	2.00	Pass
			RB3#2	20.62	-3.67	16.95	0.05	2.00	Pass
			RB3#3	20.65	-3.67	16.98	0.05	2.00	Pass
			RB6#0	19.73	-3.67	16.06	0.04	2.00	Pass
		QPSK	RB1#0	21.64	-3.67	17.97	0.06	2.00	Pass
1.4 MHz			RB1#3	21.72	-3.67	18.05	0.06	2.00	Pass
			RB1#5	21.64	-3.67	17.97	0.06	2.00	Pass
			RB3#0	21.71	-3.67	18.04	0.06	2.00	Pass
			RB3#2	21.70	-3.67	18.03	0.06	2.00	Pass
			RB3#3	21.72	-3.67	18.05	0.06	2.00	Pass
	MCH		RB6#0	20.60	-3.67	16.93	0.05	2.00	Pass
			RB1#0	20.97	-3.67	17.30	0.05	2.00	Pass
			RB1#3	21.00	-3.67	17.33	0.05	2.00	Pass
			RB1#5	20.98	-3.67	17.31	0.05	2.00	Pass
		16-QAM	RB3#0	20.87	-3.67	17.20	0.05	2.00	Pass
			RB3#2	20.79	-3.67	17.12	0.05	2.00	Pass
			RB3#3	20.86	-3.67	17.19	0.05	2.00	Pass
			RB6#0	19.54	-3.67	15.87	0.04	2.00	Pass
			RB1#0	21.59	-3.67	17.92	0.06	2.00	Pass
			RB1#3	21.72	-3.67	18.05	0.06	2.00	Pass
			RB1#5	21.64	-3.67	17.97	0.06	2.00	Pass
		QPSK	RB3#0	21.66	-3.67	17.99	0.06	2.00	Pass
	НСН		RB3#2	21.66	-3.67	17.99	0.06	2.00	Pass
			RB3#3	21.68	-3.67	18.01	0.06	2.00	Pass
			RB6#0	20.69	-3.67	17.02	0.05	2.00	Pass
			RB1#0	20.56	-3.67	16.89	0.05	2.00	Pass
		16-QAM	RB1#3	20.63	-3.67	16.96	0.05	2.00	Pass
			RB1#5	20.58	-3.67	16.91	0.05	2.00	Pass



				Conducted	A 1				
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	\
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
				(dBm)	(dBi)				
			ı	TE BAND2					
			RB3#0	20.79	-3.67	17.12	0.05	2.00	Pass
			RB3#2	20.79	-3.67	17.12	0.05	2.00	Pass
			RB3#3	20.77	-3.67	17.10	0.05	2.00	Pass
			RB6#0	19.76	-3.67	16.09	0.04	2.00	Pass
			RB1#0	21.67	-3.67	18.00	0.06	2.00	Pass
			RB1#7	21.73	-3.67	18.06	0.06	2.00	Pass
			RB1#14	21.67	-3.67	18.00	0.06	2.00	Pass
		QPSK	RB8#0	20.69	-3.67	17.02	0.05	2.00	Pass
			RB8#4	20.72	-3.67	17.05	0.05	2.00	Pass
			RB8#7	20.69	-3.67	17.02	0.05	2.00	Pass
	LCH		RB15#0	20.67	-3.67	17.00	0.05	2.00	Pass
	LOIT		RB1#0	20.47	-3.67	16.80	0.05	2.00	Pass
		16-QAM	RB1#7	20.54	-3.67	16.87	0.05	2.00	Pass
			RB1#14	20.46	-3.67	16.79	0.05	2.00	Pass
			RB8#0	19.76	-3.67	16.09	0.04	2.00	Pass
			RB8#4	19.78	-3.67	16.11	0.04	2.00	Pass
			RB8#7	19.74	-3.67	16.07	0.04	2.00	Pass
			RB15#0	19.66	-3.67	15.99	0.04	2.00	Pass
			RB1#0	21.62	-3.67	17.95	0.06	2.00	Pass
			RB1#7	21.69	-3.67	18.02	0.06	2.00	Pass
3 MHz			RB1#14	21.61	-3.67	17.94	0.06	2.00	Pass
J WII 12		QPSK	RB8#0	20.69	-3.67	17.02	0.05	2.00	Pass
			RB8#4	20.70	-3.67	17.03	0.05	2.00	Pass
			RB8#7	20.68	-3.67	17.01	0.05	2.00	Pass
	MCH		RB15#0	20.62	-3.67	16.95	0.05	2.00	Pass
	WICH		RB1#0	20.91	-3.67	17.24	0.05	2.00	Pass
			RB1#7	21.00	-3.67	17.33	0.05	2.00	Pass
			RB1#14	20.94	-3.67	17.27	0.05	2.00	Pass
		16-QAM	RB8#0	19.74	-3.67	16.07	0.04	2.00	Pass
			RB8#4	19.74	-3.67	16.07	0.04	2.00	Pass
			RB8#7	19.76	-3.67	16.09	0.04	2.00	Pass
			RB15#0	19.66	-3.67	15.99	0.04	2.00	Pass
			RB1#0	21.57	-3.67	17.90	0.06	2.00	Pass
			RB1#7	21.66	-3.67	17.99	0.06	2.00	Pass
			RB1#14	21.62	-3.67	17.95	0.06	2.00	Pass
	HCH	QPSK	RB8#0	20.69	-3.67	17.02	0.05	2.00	Pass
			RB8#4	20.71	-3.67	17.04	0.05	2.00	Pass
			RB8#7	20.69	-3.67	17.02	0.05	2.00	Pass
			RB15#0	20.64	-3.67	16.97	0.05	2.00	Pass



				Conducted	Antonno				
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	Vordict
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
				(dBm)	(dBi)				
				LTE BAND2					
			RB1#0	20.58	-3.67	16.91	0.05	2.00	Pass
			RB1#7	20.62	-3.67	16.95	0.05	2.00	Pass
			RB1#14	20.52	-3.67	16.85	0.05	2.00	Pass
		16-QAM	RB8#0	19.68	-3.67	16.01	0.04	2.00	Pass
			RB8#4	19.71	-3.67	16.04	0.04	2.00	Pass
			RB8#7	19.67	-3.67	16.00	0.04	2.00	Pass
			RB15#0	19.58	-3.67	15.91	0.04	2.00	Pass
			RB1#0	21.79	-3.67	18.12	0.06	2.00	Pass
			RB1#13	21.79	-3.67	18.12	0.06	2.00	Pass
			RB1#24	21.76	-3.67	18.09	0.06	2.00	Pass
		QPSK	RB12#0	20.71	-3.67	17.04	0.05	2.00	Pass
			RB12#6	20.68	-3.67	17.01	0.05	2.00	Pass
			RB12#13	20.70	-3.67	17.03	0.05	2.00	Pass
	LCH		RB25#0	20.66	-3.67	16.99	0.05	2.00	Pass
	2011		RB1#0	20.79	-3.67	17.12	0.05	2.00	Pass
			RB1#13	20.82	-3.67	17.15	0.05	2.00	Pass
			RB1#24	20.81	-3.67	17.14	0.05	2.00	Pass
		16-QAM	RB12#0	19.76	-3.67	16.09	0.04	2.00	Pass
			RB12#6	19.73	-3.67	16.06	0.04	2.00	Pass
			RB12#13	19.77	-3.67	16.10	0.04	2.00	Pass
			RB25#0	19.66	-3.67	15.99	0.04	2.00	Pass
			RB1#0	21.67	-3.67	18.00	0.06	2.00	Pass
5 MHz			RB1#13	21.69	-3.67	18.02	0.06	2.00	Pass
			RB1#24	21.67	-3.67	18.00	0.06	2.00	Pass
		QPSK	RB12#0	20.69	-3.67	17.02	0.05	2.00	Pass
			RB12#6	20.66	-3.67	16.99	0.05	2.00	Pass
			RB12#13	20.68	-3.67	17.01	0.05	2.00	Pass
	MCH		RB25#0	20.63	-3.67	16.96	0.05	2.00	Pass
			RB1#0	21.15	-3.67	17.48	0.06	2.00	Pass
			RB1#13	21.17	-3.67	17.50	0.06	2.00	Pass
			RB1#24	21.13	-3.67	17.46	0.06	2.00	Pass
		16-QAM	RB12#0	19.82	-3.67	16.15	0.04	2.00	Pass
			RB12#6	19.82	-3.67	16.15	0.04	2.00	Pass
			RB12#13	19.83	-3.67	16.16	0.04	2.00	Pass
			RB25#0	19.69	-3.67	16.02	0.04	2.00	Pass
			RB1#0	21.70	-3.67	18.03	0.06	2.00	Pass
	HCH	QPSK	RB1#13	21.72	-3.67	18.05	0.06	2.00	Pass
			RB1#24	21.71	-3.67	18.04	0.06	2.00	Pass
			RB12#0	20.67	-3.67	17.00	0.05	2.00	Pass



				Conducted					
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	Manaliat
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
				(dBm)	(dBi)				
			ı	TE BAND2					
			RB12#6	20.66	-3.67	16.99	0.05	2.00	Pass
			RB12#13	20.66	-3.67	16.99	0.05	2.00	Pass
			RB25#0	20.61	-3.67	16.94	0.05	2.00	Pass
			RB1#0	20.74	-3.67	17.07	0.05	2.00	Pass
			RB1#13	20.71	-3.67	17.04	0.05	2.00	Pass
			RB1#24	20.69	-3.67	17.02	0.05	2.00	Pass
		16-QAM	RB12#0	19.73	-3.67	16.06	0.04	2.00	Pass
			RB12#6	19.72	-3.67	16.05	0.04	2.00	Pass
			RB12#13	19.70	-3.67	16.03	0.04	2.00	Pass
			RB25#0	19.56	-3.67	15.89	0.04	2.00	Pass
			RB1#0	21.70	-3.67	18.03	0.06	2.00	Pass
			RB1#25	21.70	-3.67	18.03	0.06	2.00	Pass
			RB1#49	21.71	-3.67	18.04	0.06	2.00	Pass
		QPSK	RB25#0	20.64	-3.67	16.97	0.05	2.00	Pass
			RB25#13	20.64	-3.67	16.97	0.05	2.00	Pass
			RB25#25	20.66	-3.67	16.99	0.05	2.00	Pass
	LCH		RB50#0	20.64	-3.67	16.97	0.05	2.00	Pass
	2011		RB1#0	20.57	-3.67	16.90	0.05	2.00	Pass
			RB1#25	20.56	-3.67	16.89	0.05	2.00	Pass
			RB1#49	20.59	-3.67	16.92	0.05	2.00	Pass
		16-QAM	RB25#0	19.66	-3.67	15.99	0.04	2.00	Pass
			RB25#13	19.66	-3.67	15.99	0.04	2.00	Pass
			RB25#25	19.66	-3.67	15.99	0.04	2.00	Pass
10 MHz			RB50#0	19.63	-3.67	15.96	0.04	2.00	Pass
10 1011 12			RB1#0	21.73	-3.67	18.06	0.06	2.00	Pass
			RB1#25	21.70	-3.67	18.03	0.06	2.00	Pass
			RB1#49	21.69	-3.67	18.02	0.06	2.00	Pass
		QPSK	RB25#0	20.67	-3.67	17.00	0.05	2.00	Pass
			RB25#13	20.64	-3.67	16.97	0.05	2.00	Pass
			RB25#25	20.64	-3.67	16.97	0.05	2.00	Pass
	MCH		RB50#0	20.65	-3.67	16.98	0.05	2.00	Pass
			RB1#0	21.01	-3.67	17.34	0.05	2.00	Pass
			RB1#25	21.00	-3.67	17.33	0.05	2.00	Pass
			RB1#49	21.00	-3.67	17.33	0.05	2.00	Pass
		16-QAM	RB25#0	19.71	-3.67	16.04	0.04	2.00	Pass
			RB25#13	19.70	-3.67	16.03	0.04	2.00	Pass
			RB25#25	19.69	-3.67	16.02	0.04	2.00	Pass
			RB50#0	19.69	-3.67	16.02	0.04	2.00	Pass
	HCH	QPSK	RB1#0	21.55	-3.67	17.88	0.06	2.00	Pass



				Conducted	Antonna				
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	\/a nalia4
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
				(dBm)	(dBi)				
			I	LTE BAND2					
			RB1#25	21.57	-3.67	17.90	0.06	2.00	Pass
			RB1#49	21.63	-3.67	17.96	0.06	2.00	Pass
			RB25#0	20.55	-3.67	16.88	0.05	2.00	Pass
			RB25#13	20.56	-3.67	16.89	0.05	2.00	Pass
			RB25#25	20.58	-3.67	16.91	0.05	2.00	Pass
			RB50#0	20.58	-3.67	16.91	0.05	2.00	Pass
			RB1#0	20.56	-3.67	16.89	0.05	2.00	Pass
			RB1#25	20.60	-3.67	16.93	0.05	2.00	Pass
			RB1#49	20.55	-3.67	16.88	0.05	2.00	Pass
		16-QAM	RB25#0	19.67	-3.67	16.00	0.04	2.00	Pass
			RB25#13	19.67	-3.67	16.00	0.04	2.00	Pass
			RB25#25	19.67	-3.67	16.00	0.04	2.00	Pass
			RB50#0	19.64	-3.67	15.97	0.04	2.00	Pass
			RB1#0	21.75	-3.67	18.08	0.06	2.00	Pass
			RB1#38	21.70	-3.67	18.03	0.06	2.00	Pass
			RB1#74	21.69	-3.67	18.02	0.06	2.00	Pass
		QPSK	RB36#0	20.76	-3.67	17.09	0.05	2.00	Pass
			RB36#19	20.76	-3.67	17.09	0.05	2.00	Pass
		LCH	RB36#39	20.77	-3.67	17.10	0.05	2.00	Pass
	LCH		RB75#0	20.76	-3.67	17.09	0.05	2.00	Pass
			RB1#0	20.59	-3.67	16.92	0.05	2.00	Pass
			RB1#38	20.57	-3.67	16.90	0.05	2.00	Pass
			RB1#74	20.58	-3.67	16.91	0.05	2.00	Pass
		16-QAM	RB36#0	19.68	-3.67	16.01	0.04	2.00	Pass
			RB36#19	19.69	-3.67	16.02	0.04	2.00	Pass
15 MHz			RB36#39	19.69	-3.67	16.02	0.04	2.00	Pass
			RB75#0	19.70	-3.67	16.03	0.04	2.00	Pass
			RB1#0	21.76	-3.67	18.09	0.06	2.00	Pass
			RB1#38	21.71	-3.67	18.04	0.06	2.00	Pass
			RB1#74	21.66	-3.67	17.99	0.06	2.00	Pass
		QPSK	RB36#0	20.72	-3.67	17.05	0.05	2.00	Pass
			RB36#19	20.72	-3.67	17.05	0.05	2.00	Pass
	MCH		RB36#39	20.70	-3.67	17.03	0.05	2.00	Pass
			RB75#0	20.71	-3.67	17.04	0.05	2.00	Pass
			RB1#0	21.04	-3.67	17.37	0.05	2.00	Pass
			RB1#38	21.02	-3.67	17.35	0.05	2.00	Pass
		16-QAM	RB1#74	20.94	-3.67	17.27	0.05	2.00	Pass
			RB36#0	19.74	-3.67	16.07	0.04	2.00	Pass
			RB36#19	19.73	-3.67	16.06	0.04	2.00	Pass



				Conducted	Antenna				
Test	Test	Test	Test RB	Output AV	Gain	EIRP	EIRP	Limit	Verdict
BW	Channel	Model	(Size#Offset)	Power	(dBi)	(dBm)	(W)	(W)	Verdict
				(dBm)	(uDi)				
	1	1	I	LTE BAND2	1				
			RB36#39	19.71	-3.67	16.04	0.04	2.00	Pass
			RB75#0	19.71	-3.67	16.04	0.04	2.00	Pass
			RB1#0	21.70	-3.67	18.03	0.06	2.00	Pass
			RB1#38	21.58	-3.67	17.91	0.06	2.00	Pass
			RB1#74	21.69	-3.67	18.02	0.06	2.00	Pass
		QPSK	RB36#0	20.62	-3.67	16.95	0.05	2.00	Pass
			RB36#19	20.63	-3.67	16.96	0.05	2.00	Pass
			RB36#39	20.63	-3.67	16.96	0.05	2.00	Pass
	НСН		RB75#0	20.65	-3.67	16.98	0.05	2.00	Pass
	11011		RB1#0	20.92	-3.67	17.25	0.05	2.00	Pass
			RB1#38	20.91	-3.67	17.24	0.05	2.00	Pass
			RB1#74	20.85	-3.67	17.18	0.05	2.00	Pass
		16-QAM	RB36#0	19.56	-3.67	15.89	0.04	2.00	Pass
			RB36#19	19.57	-3.67	15.90	0.04	2.00	Pass
			RB36#39	19.57	-3.67	15.90	0.04	2.00	Pass
			RB75#0	19.60	-3.67	15.93	0.04	2.00	Pass
			RB1#0	21.77	-3.67	18.10	0.06	2.00	Pass
			RB1#50	21.71	-3.67	18.04	0.06	2.00	Pass
		QPSK	RB1#99	21.72	-3.67	18.05	0.06	2.00	Pass
			RB50#0	20.67	-3.67	17.00	0.05	2.00	Pass
			RB50#25	20.65	-3.67	16.98	0.05	2.00	Pass
			RB50#50	20.70	-3.67	17.03	0.05	2.00	Pass
	LCH		RB100#0	20.66	-3.67	16.99	0.05	2.00	Pass
	LOTT		RB1#0	21.19	-3.67	17.52	0.06	2.00	Pass
			RB1#50	21.16	-3.67	17.49	0.06	2.00	Pass
			RB1#99	21.19	-3.67	17.52	0.06	2.00	Pass
20 MHz		16-QAM	RB50#0	19.68	-3.67	16.01	0.04	2.00	Pass
20 1111 12			RB50#25	19.68	-3.67	16.01	0.04	2.00	Pass
			RB50#50	19.70	-3.67	16.03	0.04	2.00	Pass
			RB100#0	19.68	-3.67	16.01	0.04	2.00	Pass
			RB1#0	21.74	-3.67	18.07	0.06	2.00	Pass
			RB1#50	21.72	-3.67	18.05	0.06	2.00	Pass
			RB1#99	21.66	-3.67	17.99	0.06	2.00	Pass
		QPSK	RB50#0	20.69	-3.67	17.02	0.05	2.00	Pass
	MCH		RB50#25	20.66	-3.67	16.99	0.05	2.00	Pass
			RB50#50	20.64	-3.67	16.97	0.05	2.00	Pass
			RB100#0	20.63	-3.67	16.96	0.05	2.00	Pass
		16-QAM	RB1#0	21.15	-3.67	17.48	0.06	2.00	Pass
			RB1#50	21.13	-3.67	17.46	0.06	2.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			I	TE BAND2					
			RB1#99	21.03	-3.67	17.36	0.05	2.00	Pass
			RB50#0	19.72	-3.67	16.05	0.04	2.00	Pass
			RB50#25	19.69	-3.67	16.02	0.04	2.00	Pass
			RB50#50	19.68	-3.67	16.01	0.04	2.00	Pass
			RB100#0	19.67	-3.67	16.00	0.04	2.00	Pass
			RB1#0	21.67	-3.67	18.00	0.06	2.00	Pass
			RB1#50	21.56	-3.67	17.89	0.06	2.00	Pass
			RB1#99	21.66	-3.67	17.99	0.06	2.00	Pass
		QPSK	RB50#0	20.55	-3.67	16.88	0.05	2.00	Pass
			RB50#25	20.50	-3.67	16.83	0.05	2.00	Pass
			RB50#50	20.55	-3.67	16.88	0.05	2.00	Pass
	HCH		RB100#0	20.54	-3.67	16.87	0.05	2.00	Pass
	ПСП		RB1#0	20.97	-3.67	17.30	0.05	2.00	Pass
			RB1#50	20.88	-3.67	17.21	0.05	2.00	Pass
			RB1#99	20.90	-3.67	17.23	0.05	2.00	Pass
		16-QAM	RB50#0	19.54	-3.67	15.87	0.04	2.00	Pass
			RB50#25	19.51	-3.67	15.84	0.04	2.00	Pass
			RB50#50	19.54	-3.67	15.87	0.04	2.00	Pass
			RB100#0	19.54	-3.67	15.87	0.04	2.00	Pass



				Conducted	Antenna				
Test	Test	Test	Test RB	Output AV	Gain	EIRP	EIRP	Limit	Verdict
BW	Channel	Model	(Size#Offset)	Power	(dBi)	(dBm)	(W)	(W)	Voluiot
				(dBm)	(abi)				
	T	T		LTE BAND4	T	T	1	T	
			RB1#0	21.48	-3.45	18.03	0.06	1.00	Pass
			RB1#3	21.56	-3.45	18.11	0.06	1.00	Pass
			RB1#5	21.49	-3.45	18.04	0.06	1.00	Pass
		QPSK	RB3#0	21.46	-3.45	18.01	0.06	1.00	Pass
			RB3#2	21.48	-3.45	18.03	0.06	1.00	Pass
			RB3#3	21.50	-3.45	18.05	0.06	1.00	Pass
	LCH		RB6#0	20.44	-3.45	16.99	0.05	1.00	Pass
	2011		RB1#0	20.52	-3.45	17.07	0.05	1.00	Pass
			RB1#3	20.60	-3.45	17.15	0.05	1.00	Pass
			RB1#5	20.53	-3.45	17.08	0.05	1.00	Pass
		16-QAM	RB3#0	20.51	-3.45	17.06	0.05	1.00	Pass
			RB3#2	20.50	-3.45	17.05	0.05	1.00	Pass
			RB3#3	20.53	-3.45	17.08	0.05	1.00	Pass
			RB6#0	19.56	-3.45	16.11	0.04	1.00	Pass
			RB1#0	21.50	-3.45	18.05	0.06	1.00	Pass
			RB1#3	21.56	-3.45	18.11	0.06	1.00	Pass
			RB1#5	21.50	-3.45	18.05	0.06	1.00	Pass
		QPSK	RB3#0	21.56	-3.45	18.11	0.06	1.00	Pass
1.4 MHz			RB3#2	21.52	-3.45	18.07	0.06	1.00	Pass
1.4 1011 12			RB3#3	21.53	-3.45	18.08	0.06	1.00	Pass
	MCH		RB6#0	20.48	-3.45	17.03	0.05	1.00	Pass
	IVIOIT		RB1#0	20.79	-3.45	17.34	0.05	1.00	Pass
			RB1#3	20.85	-3.45	17.40	0.05	1.00	Pass
			RB1#5	20.78	-3.45	17.33	0.05	1.00	Pass
		16-QAM	RB3#0	20.71	-3.45	17.26	0.05	1.00	Pass
			RB3#2	20.65	-3.45	17.20	0.05	1.00	Pass
			RB3#3	20.72	-3.45	17.27	0.05	1.00	Pass
			RB6#0	19.38	-3.45	15.93	0.04	1.00	Pass
			RB1#0	21.14	-3.45	17.69	0.06	1.00	Pass
			RB1#3	21.23	-3.45	17.78	0.06	1.00	Pass
			RB1#5	21.15	-3.45	17.70	0.06	1.00	Pass
		QPSK	RB3#0	21.17	-3.45	17.72	0.06	1.00	Pass
			RB3#2	21.19	-3.45	17.74	0.06	1.00	Pass
	HCH		RB3#3	21.19	-3.45	17.74	0.06	1.00	Pass
			RB6#0	20.21	-3.45	16.76	0.05	1.00	Pass
			RB1#0	20.08	-3.45	16.63	0.05	1.00	Pass
		16-QAM	RB1#3	20.13	-3.45	16.68	0.05	1.00	Pass
		10-QAIVI	RB1#5	20.09	-3.45	16.64	0.05	1.00	Pass
			RB3#0	20.27	-3.45	16.82	0.05	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			l	TE BAND4					
			RB3#2	20.26	-3.45	16.81	0.05	1.00	Pass
			RB3#3	20.27	-3.45	16.82	0.05	1.00	Pass
			RB6#0	19.30	-3.45	15.85	0.04	1.00	Pass
			RB1#0	21.39	-3.45	17.94	0.06	1.00	Pass
			RB1#7	21.51	-3.45	18.06	0.06	1.00	Pass
			RB1#14	21.43	-3.45	17.98	0.06	1.00	Pass
		QPSK	RB8#0	20.49	-3.45	17.04	0.05	1.00	Pass
			RB8#4	20.53	-3.45	17.08	0.05	1.00	Pass
			RB8#7	20.50	-3.45	17.05	0.05	1.00	Pass
	LCH		RB15#0	20.46	-3.45	17.01	0.05	1.00	Pass
	LON		RB1#0	20.30	-3.45	16.85	0.05	1.00	Pass
			RB1#7	20.38	-3.45	16.93	0.05	1.00	Pass
		16-QAM	RB1#14	20.26	-3.45	16.81	0.05	1.00	Pass
			RB8#0	19.62	-3.45	16.17	0.04	1.00	Pass
			RB8#4	19.62	-3.45	16.17	0.04	1.00	Pass
			RB8#7	19.58	-3.45	16.13	0.04	1.00	Pass
			RB15#0	19.51	-3.45	16.06	0.04	1.00	Pass
			RB1#0	21.49	-3.45	18.04	0.06	1.00	Pass
			RB1#7	21.53	-3.45	18.08	0.06	1.00	Pass
			RB1#14	21.45	-3.45	18.00	0.06	1.00	Pass
3 MHz		QPSK	RB8#0	20.51	-3.45	17.06	0.05	1.00	Pass
			RB8#4	20.51	-3.45	17.06	0.05	1.00	Pass
			RB8#7	20.51	-3.45	17.06	0.05	1.00	Pass
	MCH		RB15#0	20.44	-3.45	16.99	0.05	1.00	Pass
	IVICIT		RB1#0	20.75	-3.45	17.30	0.05	1.00	Pass
			RB1#7	20.80	-3.45	17.35	0.05	1.00	Pass
			RB1#14	20.74	-3.45	17.29	0.05	1.00	Pass
		16-QAM	RB8#0	19.57	-3.45	16.12	0.04	1.00	Pass
			RB8#4	19.58	-3.45	16.13	0.04	1.00	Pass
			RB8#7	19.57	-3.45	16.12	0.04	1.00	Pass
			RB15#0	19.49	-3.45	16.04	0.04	1.00	Pass
			RB1#0	21.16	-3.45	17.71	0.06	1.00	Pass
			RB1#7	21.19	-3.45	17.74	0.06	1.00	Pass
			RB1#14	21.1	-3.45	17.65	0.06	1.00	Pass
	HCH	QPSK	RB8#0	20.24	-3.45	16.79	0.05	1.00	Pass
	11011		RB8#4	20.24	-3.45	16.79	0.05	1.00	Pass
			RB8#7	20.23	-3.45	16.78	0.05	1.00	Pass
			RB15#0	20.18	-3.45	16.73	0.05	1.00	Pass
		16-QAM	RB1#0	20.08	-3.45	16.63	0.05	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			ı	TE BAND4					
			RB1#7	20.09	-3.45	16.64	0.05	1.00	Pass
			RB1#14	20.02	-3.45	16.57	0.05	1.00	Pass
			RB8#0	19.22	-3.45	15.77	0.04	1.00	Pass
			RB8#4	19.23	-3.45	15.78	0.04	1.00	Pass
			RB8#7	19.19	-3.45	15.74	0.04	1.00	Pass
			RB15#0	19.09	-3.45	15.64	0.04	1.00	Pass
			RB1#0	21.59	-3.45	18.14	0.07	1.00	Pass
			RB1#13	21.61	-3.45	18.16	0.07	1.00	Pass
			RB1#24	21.59	-3.45	18.14	0.07	1.00	Pass
		QPSK	RB12#0	20.50	-3.45	17.05	0.05	1.00	Pass
			RB12#6	20.5	-3.45	17.05	0.05	1.00	Pass
			RB12#13	20.51	-3.45	17.06	0.05	1.00	Pass
	LCH		RB25#0	20.46	-3.45	17.01	0.05	1.00	Pass
	LOIT		RB1#0	20.63	-3.45	17.18	0.05	1.00	Pass
			RB1#13	20.64	-3.45	17.19	0.05	1.00	Pass
			RB1#24	20.63	-3.45	17.18	0.05	1.00	Pass
		16-QAM	RB12#0	19.60	-3.45	16.15	0.04	1.00	Pass
			RB12#6	19.58	-3.45	16.13	0.04	1.00	Pass
			RB12#13	19.58	-3.45	16.13	0.04	1.00	Pass
			RB25#0	19.49	-3.45	16.04	0.04	1.00	Pass
			RB1#0	21.52	-3.45	18.07	0.06	1.00	Pass
5 MHz			RB1#13	21.53	-3.45	18.08	0.06	1.00	Pass
02			RB1#24	21.51	-3.45	18.06	0.06	1.00	Pass
		QPSK	RB12#0	20.51	-3.45	17.06	0.05	1.00	Pass
			RB12#6	20.51	-3.45	17.06	0.05	1.00	Pass
			RB12#13	20.51	-3.45	17.06	0.05	1.00	Pass
	MCH		RB25#0	20.45	-3.45	17.00	0.05	1.00	Pass
			RB1#0	20.94	-3.45	17.49	0.06	1.00	Pass
			RB1#13	20.98	-3.45	17.53	0.06	1.00	Pass
			RB1#24	20.95	-3.45	17.50	0.06	1.00	Pass
		16-QAM	RB12#0	19.64	-3.45	16.19	0.04	1.00	Pass
			RB12#6	19.64	-3.45	16.19	0.04	1.00	Pass
			RB12#13	19.64	-3.45	16.19	0.04	1.00	Pass
			RB25#0	19.50	-3.45	16.05	0.04	1.00	Pass
			RB1#0	21.34	-3.45	17.89	0.06	1.00	Pass
			RB1#13	21.31	-3.45	17.86	0.06	1.00	Pass
	HCH	H QPSK	RB1#24	21.25	-3.45	17.80	0.06	1.00	Pass
			RB12#0	20.27	-3.45	16.82	0.05	1.00	Pass
			RB12#6	20.25	-3.45	16.80	0.05	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			l	TE BAND4					
			RB12#13	20.21	-3.45	16.76	0.05	1.00	Pass
			RB25#0	20.17	-3.45	16.72	0.05	1.00	Pass
			RB1#0	20.30	-3.45	16.85	0.05	1.00	Pass
			RB1#13	20.25	-3.45	16.80	0.05	1.00	Pass
			RB1#24	20.22	-3.45	16.77	0.05	1.00	Pass
		16-QAM	RB12#0	19.27	-3.45	15.82	0.04	1.00	Pass
			RB12#6	19.24	-3.45	15.79	0.04	1.00	Pass
			RB12#13	19.22	-3.45	15.77	0.04	1.00	Pass
			RB25#0	19.09	-3.45	15.64	0.04	1.00	Pass
			RB1#0	21.44	-3.45	17.99	0.06	1.00	Pass
			RB1#25	21.51	-3.45	18.06	0.06	1.00	Pass
			RB1#49	21.51	-3.45	18.06	0.06	1.00	Pass
		QPSK	RB25#0	20.47	-3.45	17.02	0.05	1.00	Pass
			RB25#13	20.45	-3.45	17.00	0.05	1.00	Pass
			RB25#25	20.42	-3.45	16.97	0.05	1.00	Pass
	LCH		RB50#0	20.43	-3.45	16.98	0.05	1.00	Pass
	LON		RB1#0	20.39	-3.45	16.94	0.05	1.00	Pass
		16-QAM	RB1#25	20.33	-3.45	16.88	0.05	1.00	Pass
			RB1#49	20.30	-3.45	16.85	0.05	1.00	Pass
			RB25#0	19.48	-3.45	16.03	0.04	1.00	Pass
			RB25#13	19.47	-3.45	16.02	0.04	1.00	Pass
			RB25#25	19.42	-3.45	15.97	0.04	1.00	Pass
			RB50#0	19.43	-3.45	15.98	0.04	1.00	Pass
10 MHz			RB1#0	21.58	-3.45	18.13	0.07	1.00	Pass
			RB1#25	21.54	-3.45	18.09	0.06	1.00	Pass
			RB1#49	21.54	-3.45	18.09	0.06	1.00	Pass
		QPSK	RB25#0	20.46	-3.45	17.01	0.05	1.00	Pass
			RB25#13	20.45	-3.45	17.00	0.05	1.00	Pass
			RB25#25	20.46	-3.45	17.01	0.05	1.00	Pass
	MCH		RB50#0	20.46	-3.45	17.01	0.05	1.00	Pass
	IVIOIT		RB1#0	20.81	-3.45	17.36	0.05	1.00	Pass
			RB1#25	20.80	-3.45	17.35	0.05	1.00	Pass
			RB1#49	20.81	-3.45	17.36	0.05	1.00	Pass
		16-QAM	RB25#0	19.49	-3.45	16.04	0.04	1.00	Pass
			RB25#13	19.50	-3.45	16.05	0.04	1.00	Pass
			RB25#25	19.49	-3.45	16.04	0.04	1.00	Pass
			RB50#0	19.47	-3.45	16.02	0.04	1.00	Pass
	HCH	QPSK	RB1#0	21.40	-3.45	17.95	0.06	1.00	Pass
		ς, σιτ	RB1#25	21.28	-3.45	17.83	0.06	1.00	Pass



				Conducted					
Test	Test	Test	Test RB	Output AV	Antenna	EIRP	EIRP	Limit	
BW	Channel	Model	(Size#Offset)	Power	Gain	(dBm)	(W)	(W)	Verdict
			,	(dBm)	(dBi)	,			
			ı	LTE BAND4					
			RB1#49	21.21	-3.45	17.76	0.06	1.00	Pass
			RB25#0	20.30	-3.45	16.85	0.05	1.00	Pass
			RB25#13	20.22	-3.45	16.77	0.05	1.00	Pass
			RB25#25	20.17	-3.45	16.72	0.05	1.00	Pass
			RB50#0	20.24	-3.45	16.79	0.05	1.00	Pass
			RB1#0	20.36	-3.45	16.91	0.05	1.00	Pass
			RB1#25	20.20	-3.45	16.75	0.05	1.00	Pass
			RB1#49	20.08	-3.45	16.63	0.05	1.00	Pass
		16-QAM	RB25#0	19.38	-3.45	15.93	0.04	1.00	Pass
			RB25#13	19.28	-3.45	15.83	0.04	1.00	Pass
			RB25#25	19.24	-3.45	15.79	0.04	1.00	Pass
			RB50#0	19.26	-3.45	15.81	0.04	1.00	Pass
			RB1#0	21.50	-3.45	18.05	0.06	1.00	Pass
			RB1#38	21.48	-3.45	18.03	0.06	1.00	Pass
			RB1#74	21.46	-3.45	18.01	0.06	1.00	Pass
		QPSK	RB36#0	20.49	-3.45	17.04	0.05	1.00	Pass
			RB36#19	20.52	-3.45	17.07	0.05	1.00	Pass
	LCH		RB36#39	20.51	-3.45	17.06	0.05	1.00	Pass
			RB75#0	20.50	-3.45	17.05	0.05	1.00	Pass
			RB1#0	20.37	-3.45	16.92	0.05	1.00	Pass
			RB1#38	20.3	-3.45	16.85	0.05	1.00	Pass
			RB1#74	20.26	-3.45	16.81	0.05	1.00	Pass
		16-QAM	RB36#0	19.45	-3.45	16.00	0.04	1.00	Pass
			RB36#19	19.47	-3.45	16.02	0.04	1.00	Pass
15 MHz			RB36#39	19.43	-3.45	15.98	0.04	1.00	Pass
			RB75#0	19.46	-3.45	16.01	0.04	1.00	Pass
			RB1#0	21.62	-3.45	18.17	0.07	1.00	Pass
			RB1#38	21.55	-3.45	18.10	0.06	1.00	Pass
			RB1#74	21.50	-3.45	18.05	0.06	1.00	Pass
		QPSK	RB36#0	20.57	-3.45	17.12	0.05	1.00	Pass
			RB36#19	20.54	-3.45	17.09	0.05	1.00	Pass
			RB36#39	20.50	-3.45	17.05	0.05	1.00	Pass
	MCH		RB75#0	20.55	-3.45	17.10	0.05	1.00	Pass
			RB1#0	20.83	-3.45	17.38	0.05	1.00	Pass
			RB1#38	20.82	-3.45	17.37	0.05	1.00	Pass
		16-QAM	RB1#74	20.77	-3.45	17.32	0.05	1.00	Pass
		16-QAM	RB36#0	19.58	-3.45	16.13	0.04	1.00	Pass
			RB36#19	19.57	-3.45	16.12	0.04	1.00	Pass
			RB36#39	19.55	-3.45	16.10	0.04	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			l	TE BAND4					
			RB75#0	19.55	-3.45	16.10	0.04	1.00	Pass
			RB1#0	21.62	-3.45	18.17	0.07	1.00	Pass
			RB1#38	21.47	-3.45	18.02	0.06	1.00	Pass
			RB1#74	21.34	-3.45	17.89	0.06	1.00	Pass
		QPSK	RB36#0	20.52	-3.45	17.07	0.05	1.00	Pass
			RB36#19	20.46	-3.45	17.01	0.05	1.00	Pass
			RB36#39	20.39	-3.45	16.94	0.05	1.00	Pass
	HCH		RB75#0	20.47	-3.45	17.02	0.05	1.00	Pass
	ПСП		RB1#0	20.92	-3.45	17.47	0.06	1.00	Pass
			RB1#38	20.65	-3.45	17.20	0.05	1.00	Pass
			RB1#74	20.45	-3.45	17.00	0.05	1.00	Pass
		16-QAM	RB36#0	19.45	-3.45	16.00	0.04	1.00	Pass
			RB36#19	19.38	-3.45	15.93	0.04	1.00	Pass
			RB36#39	19.28	-3.45	15.83	0.04	1.00	Pass
			RB75#0	19.41	-3.45	15.96	0.04	1.00	Pass
			RB1#0	21.56	-3.45	18.11	0.06	1.00	Pass
			RB1#50	21.53	-3.45	18.08	0.06	1.00	Pass
		QPSK	RB1#99	21.53	-3.45	18.08	0.06	1.00	Pass
			RB50#0	20.45	-3.45	17.00	0.05	1.00	Pass
			RB50#25	20.42	-3.45	16.97	0.05	1.00	Pass
			RB50#50	20.41	-3.45	16.96	0.05	1.00	Pass
	LCH		RB100#0	20.40	-3.45	16.95	0.05	1.00	Pass
	LOIT		RB1#0	20.99	-3.45	17.54	0.06	1.00	Pass
			RB1#50	20.88	-3.45	17.43	0.06	1.00	Pass
			RB1#99	20.91	-3.45	17.46	0.06	1.00	Pass
		16-QAM	RB50#0	19.47	-3.45	16.02	0.04	1.00	Pass
20 MHz			RB50#25	19.41	-3.45	15.96	0.04	1.00	Pass
			RB50#50	19.41	-3.45	15.96	0.04	1.00	Pass
			RB100#0	19.43	-3.45	15.98	0.04	1.00	Pass
			RB1#0	21.61	-3.45	18.16	0.07	1.00	Pass
			RB1#50	21.56	-3.45	18.11	0.06	1.00	Pass
			RB1#99	21.5	-3.45	18.05	0.06	1.00	Pass
		QPSK	RB50#0	20.53	-3.45	17.08	0.05	1.00	Pass
	MCH		RB50#25	20.47	-3.45	17.02	0.05	1.00	Pass
	141011		RB50#50	20.49	-3.45	17.04	0.05	1.00	Pass
			RB100#0	20.48	-3.45	17.03	0.05	1.00	Pass
			RB1#0	20.86	-3.45	17.41	0.06	1.00	Pass
		16-QAM	RB1#50	20.92	-3.45	17.47	0.06	1.00	Pass
		16-QAW	RB1#99	20.86	-3.45	17.41	0.06	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			ı	LTE BAND4					
			RB50#0	19.53	-3.45	16.08	0.04	1.00	Pass
			RB50#25	19.50	-3.45	16.05	0.04	1.00	Pass
			RB50#50	19.51	-3.45	16.06	0.04	1.00	Pass
			RB100#0	19.48	-3.45	16.03	0.04	1.00	Pass
			RB1#0	21.67	-3.45	18.22	0.07	1.00	Pass
			RB1#50	21.52	-3.45	18.07	0.06	1.00	Pass
			RB1#99	21.35	-3.45	17.90	0.06	1.00	Pass
		QPSK	RB50#0	20.56	-3.45	17.11	0.05	1.00	Pass
			RB50#25	20.46	-3.45	17.01	0.05	1.00	Pass
			RB50#50	20.33	-3.45	16.88	0.05	1.00	Pass
	HCH		RB100#0	20.44	-3.45	16.99	0.05	1.00	Pass
	ПСП		RB1#0	20.98	-3.45	17.53	0.06	1.00	Pass
			RB1#50	20.80	-3.45	17.35	0.05	1.00	Pass
			RB1#99	20.52	-3.45	17.07	0.05	1.00	Pass
		16-QAM	RB50#0	19.55	-3.45	16.10	0.04	1.00	Pass
			RB50#25	19.42	-3.45	15.97	0.04	1.00	Pass
			RB50#50	19.27	-3.45	15.82	0.04	1.00	Pass
		_	RB100#0	19.44	-3.45	15.99	0.04	1.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			ı	TE BAND7					
			RB1#0	21.17	-4.2	16.97	0.05	2.00	Pass
			RB1#13	21.19	-4.2	16.99	0.05	2.00	Pass
			RB1#24	21.20	-4.2	17.00	0.05	2.00	Pass
		QPSK	RB12#0	20.23	-4.2	16.03	0.04	2.00	Pass
			RB12#6	20.22	-4.2	16.02	0.04	2.00	Pass
			RB12#13	20.24	-4.2	16.04	0.04	2.00	Pass
	LCH		RB25#0	20.21	-4.2	16.01	0.04	2.00	Pass
	LOIT		RB1#0	20.67	-4.2	16.47	0.04	2.00	Pass
			RB1#13	20.72	-4.2	16.52	0.04	2.00	Pass
			RB1#24	20.72	-4.2	16.52	0.04	2.00	Pass
		16-QAM	RB12#0	19.40	-4.2	15.20	0.03	2.00	Pass
			RB12#6	19.40	-4.2	15.20	0.03	2.00	Pass
			RB12#13	19.43	-4.2	15.23	0.03	2.00	Pass
			RB25#0	19.31	-4.2	15.11	0.03	2.00	Pass
		QPSK	RB1#0	21.43	-4.2	17.23	0.05	2.00	Pass
			RB1#13	21.34	-4.2	17.14	0.05	2.00	Pass
			RB1#24	21.42	-4.2	17.22	0.05	2.00	Pass
			RB12#0	20.41	-4.2	16.21	0.04	2.00	Pass
5 MHz			RB12#6	20.33	-4.2	16.13	0.04	2.00	Pass
			RB12#13	20.41	-4.2	16.21	0.04	2.00	Pass
	MCH		RB25#0	20.34	-4.2	16.14	0.04	2.00	Pass
	IVIOIT		RB1#0	20.46	-4.2	16.26	0.04	2.00	Pass
			RB1#13	20.31	-4.2	16.11	0.04	2.00	Pass
			RB1#24	20.46	-4.2	16.26	0.04	2.00	Pass
		16-QAM	RB12#0	19.52	-4.2	15.32	0.03	2.00	Pass
			RB12#6	19.40	-4.2	15.20	0.03	2.00	Pass
			RB12#13	19.52	-4.2	15.32	0.03	2.00	Pass
			RB25#0	19.39	-4.2	15.19	0.03	2.00	Pass
			RB1#0	21.55	-4.2	17.35	0.05	2.00	Pass
			RB1#13	21.33	-4.2	17.13	0.05	2.00	Pass
			RB1#24	21.52	-4.2	17.32	0.05	2.00	Pass
		QPSK	RB12#0	20.26	-4.2	16.06	0.04	2.00	Pass
	HCH		RB12#6	20.23	-4.2	16.03	0.04	2.00	Pass
			RB12#13	20.43	-4.2	16.23	0.04	2.00	Pass
			RB25#0	20.29	-4.2	16.09	0.04	2.00	Pass
			RB1#0	20.58	-4.2	16.38	0.04	2.00	Pass
		16-QAM	RB1#13	20.33	-4.2	16.13	0.04	2.00	Pass
			RB1#24	20.54	-4.2	16.34	0.04	2.00	Pass



				Conducted	Antenna				
Test	Test	Test	Test RB	Output AV	Gain	EIRP	EIRP	Limit	Verdict
BW	Channel	Model	(Size#Offset)	Power	(dBi)	(dBm)	(W)	(W)	VOIGIOU
				(dBm)	(abi)				
		,	<u> </u>	LTE BAND7					
			RB12#0	19.43	-4.2	15.23	0.03	2.00	Pass
			RB12#6	19.42	-4.2	15.22	0.03	2.00	Pass
			RB12#13	19.57	-4.2	15.37	0.03	2.00	Pass
			RB25#0	19.46	-4.2	15.26	0.03	2.00	Pass
			RB1#0	21.26	-4.2	17.06	0.05	2.00	Pass
			RB1#25	21.26	-4.2	17.06	0.05	2.00	Pass
			RB1#49	21.29	-4.2	17.09	0.05	2.00	Pass
		QPSK	RB25#0	20.21	-4.2	16.01	0.04	2.00	Pass
			RB25#13	20.21	-4.2	16.01	0.04	2.00	Pass
			RB25#25	20.27	-4.2	16.07	0.04	2.00	Pass
	LCH		RB50#0	20.27	-4.2	16.07	0.04	2.00	Pass
			RB1#0	20.04	-4.2	15.84	0.04	2.00	Pass
			RB1#25	20.15	-4.2	15.95	0.04	2.00	Pass
			RB1#49	20.18	-4.2	15.98	0.04	2.00	Pass
		16-QAM	RB25#0	19.26	-4.2	15.06	0.03	2.00	Pass
			RB25#13	19.29	-4.2	15.09	0.03	2.00	Pass
			RB25#25	19.34	-4.2	15.14	0.03	2.00	Pass
			RB50#0	19.28	-4.2	15.08	0.03	2.00	Pass
			RB1#0	21.02	-4.2	16.82	0.05	2.00	Pass
			RB1#25	20.91	-4.2	16.71	0.05	2.00	Pass
10 MHz			RB1#49	21.09	-4.2	16.89	0.05	2.00	Pass
10 1011 12		QPSK	RB25#0	19.95	-4.2	15.75	0.04	2.00	Pass
			RB25#13	19.98	-4.2	15.78	0.04	2.00	Pass
			RB25#25	20.06	-4.2	15.86	0.04	2.00	Pass
	MCH		RB50#0	19.98	-4.2	15.78	0.04	2.00	Pass
	IVICIT		RB1#0	20.15	-4.2	15.95	0.04	2.00	Pass
			RB1#25	20.25	-4.2	16.05	0.04	2.00	Pass
			RB1#49	20.43	-4.2	16.23	0.04	2.00	Pass
		16-QAM	RB25#0	19.02	-4.2	14.82	0.03	2.00	Pass
			RB25#13	19.17	-4.2	14.97	0.03	2.00	Pass
			RB25#25	19.26	-4.2	15.06	0.03	2.00	Pass
			RB50#0	19.13	-4.2	14.93	0.03	2.00	Pass
			RB1#0	20.97	-4.2	16.77	0.05	2.00	Pass
			RB1#25	20.81	-4.2	16.61	0.05	2.00	Pass
			RB1#49	21.11	-4.2	16.91	0.05	2.00	Pass
	HCH	QPSK	RB25#0	19.86	-4.2	15.66	0.04	2.00	Pass
			RB25#13	19.86	-4.2	15.66	0.04	2.00	Pass
			RB25#25	19.99	-4.2	15.79	0.04	2.00	Pass
			RB50#0	19.91	-4.2	15.71	0.04	2.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			ı	TE BAND7					
			RB1#0	19.83	-4.2	15.63	0.04	2.00	Pass
			RB1#25	19.81	-4.2	15.61	0.04	2.00	Pass
			RB1#49	20.16	-4.2	15.96	0.04	2.00	Pass
		16-QAM	RB25#0	19.07	-4.2	14.87	0.03	2.00	Pass
			RB25#13	19.10	-4.2	14.90	0.03	2.00	Pass
			RB25#25	19.24	-4.2	15.04	0.03	2.00	Pass
			RB50#0	19.12	-4.2	14.92	0.03	2.00	Pass
			RB1#0	21.22	-4.2	17.02	0.05	2.00	Pass
		RB1#38	21.24	-4.2	17.04	0.05	2.00	Pass	
			RB1#74	21.30	-4.2	17.10	0.05	2.00	Pass
		QPSK	RB36#0	20.27	-4.2	16.07	0.04	2.00	Pass
			RB36#19	20.28	-4.2	16.08	0.04	2.00	Pass
	LCH		RB36#39	20.31	-4.2	16.11	0.04	2.00	Pass
			RB75#0	20.32	-4.2	16.12	0.04	2.00	Pass
			RB1#0	19.93	-4.2	15.73	0.04	2.00	Pass
			RB1#38	20.18	-4.2	15.98	0.04	2.00	Pass
			RB1#74	20.23	-4.2	16.03	0.04	2.00	Pass
		16-QAM	RB36#0	19.24	-4.2	15.04	0.03	2.00	Pass
			RB36#19	19.24	-4.2	15.04	0.03	2.00	Pass
			RB36#39	19.28	-4.2	15.08	0.03	2.00	Pass
			RB75#0	19.29	-4.2	15.09	0.03	2.00	Pass
			RB1#0	20.86	-4.2	16.66	0.05	2.00	Pass
15 MHz			RB1#38	20.63	-4.2	16.43	0.04	2.00	Pass
			RB1#74	21.27	-4.2	17.07	0.05	2.00	Pass
		QPSK	RB36#0	19.67	-4.2	15.47	0.04	2.00	Pass
			RB36#19	19.69	-4.2	15.49	0.04	2.00	Pass
			RB36#39	19.92	-4.2	15.72	0.04	2.00	Pass
	MCH		RB75#0	19.74	-4.2	15.54	0.04	2.00	Pass
			RB1#0	20.00	-4.2	15.80	0.04	2.00	Pass
			RB1#38	19.98	-4.2	15.78	0.04	2.00	Pass
			RB1#74	20.62	-4.2	16.42	0.04	2.00	Pass
		16-QAM	RB36#0	18.76	-4.2	14.56	0.03	2.00	Pass
			RB36#19	18.86	-4.2	14.66	0.03	2.00	Pass
			RB36#39	19.14	-4.2	14.94	0.03	2.00	Pass
			RB75#0	18.93	-4.2	14.73	0.03	2.00	Pass
			RB1#0	21.19	-4.2	16.99	0.05	2.00	Pass
	HCH	QPSK -	RB1#38	20.51	-4.2	16.31	0.04	2.00	Pass
			RB1#74	21.10	-4.2	16.90	0.05	2.00	Pass
			RB36#0	19.79	-4.2	15.59	0.04	2.00	Pass



				Conducted	Antenna				
Test	Test	Test	Test RB	Output AV	Gain	EIRP	EIRP	Limit	Verdict
BW	Channel	Model	(Size#Offset)	Power	(dBi)	(dBm)	(W)	(W)	VOIGIOU
				(dBm)	(uDI)				
	T		l	LTE BAND7			1		
			RB36#19	19.61	-4.2	15.41	0.03	2.00	Pass
			RB36#39	19.70	-4.2	15.50	0.04	2.00	Pass
			RB75#0	19.71	-4.2	15.51	0.04	2.00	Pass
			RB1#0	20.41	-4.2	16.21	0.04	2.00	Pass
			RB1#38	19.88	-4.2	15.68	0.04	2.00	Pass
			RB1#74	20.42	-4.2	16.22	0.04	2.00	Pass
		16-QAM	RB36#0	18.82	-4.2	14.62	0.03	2.00	Pass
			RB36#19	18.70	-4.2	14.50	0.03	2.00	Pass
			RB36#39	18.87	-4.2	14.67	0.03	2.00	Pass
			RB75#0	18.86	-4.2	14.66	0.03	2.00	Pass
			RB1#0	21.16	-4.2	16.96	0.05	2.00	Pass
			RB1#50	21.20	-4.2	17.00	0.05	2.00	Pass
			RB1#99	21.32	-4.2	17.12	0.05	2.00	Pass
		QPSK	RB50#0	20.26	-4.2	16.06	0.04	2.00	Pass
			RB50#25	20.26	-4.2	16.06	0.04	2.00	Pass
			RB50#50	20.31	-4.2	16.11	0.04	2.00	Pass
	LCH		RB100#0	20.27	-4.2	16.07	0.04	2.00	Pass
	LOIT		RB1#0	20.46	-4.2	16.26	0.04	2.00	Pass
		16-QAM	RB1#50	20.76	-4.2	16.56	0.05	2.00	Pass
			RB1#99	20.84	-4.2	16.64	0.05	2.00	Pass
			RB50#0	19.32	-4.2	15.12	0.03	2.00	Pass
			RB50#25	19.33	-4.2	15.13	0.03	2.00	Pass
			RB50#50	19.35	-4.2	15.15	0.03	2.00	Pass
20 MHz			RB100#0	19.32	-4.2	15.12	0.03	2.00	Pass
20 1011 12			RB1#0	20.83	-4.2	16.63	0.05	2.00	Pass
			RB1#50	20.49	-4.2	16.29	0.04	2.00	Pass
			RB1#99	21.39	-4.2	17.19	0.05	2.00	Pass
		QPSK	RB50#0	19.52	-4.2	15.32	0.03	2.00	Pass
			RB50#25	19.56	-4.2	15.36	0.03	2.00	Pass
			RB50#50	19.91	-4.2	15.71	0.04	2.00	Pass
	MCH		RB100#0	19.70	-4.2	15.50	0.04	2.00	Pass
			RB1#0	20.05	-4.2	15.85	0.04	2.00	Pass
			RB1#50	19.94	-4.2	15.74	0.04	2.00	Pass
			RB1#99	20.84	-4.2	16.64	0.05	2.00	Pass
		16-QAM	RB50#0	18.60	-4.2	14.40	0.03	2.00	Pass
			RB50#25	18.71	-4.2	14.51	0.03	2.00	Pass
			RB50#50	19.13	-4.2	14.93	0.03	2.00	Pass
			RB100#0	18.86	-4.2	14.66	0.03	2.00	Pass
	HCH	QPSK	RB1#0	21.61	-4.2	17.41	0.06	2.00	Pass



Test BW	Test Channel	Test Model	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
			l	TE BAND7					
			RB1#50	20.59	-4.2	16.39	0.04	2.00	Pass
			RB1#99	21.14	-4.2	16.94	0.05	2.00	Pass
			RB50#0	20.11	-4.2	15.91	0.04	2.00	Pass
			RB50#25	19.72	-4.2	15.52	0.04	2.00	Pass
			RB50#50	19.69	-4.2	15.49	0.04	2.00	Pass
			RB100#0	19.92	-4.2	15.72	0.04	2.00	Pass
			RB1#0	20.93	-4.2	16.73	0.05	2.00	Pass
			RB1#50	20.01	-4.2	15.81	0.04	2.00	Pass
			RB1#99	20.50	-4.2	16.30	0.04	2.00	Pass
		16-QAM	RB50#0	19.14	-4.2	14.94	0.03	2.00	Pass
			RB50#25	18.82	-4.2	14.62	0.03	2.00	Pass
		RB50#50	18.87	-4.2	14.67	0.03	2.00	Pass	
			RB100#0	19.09	-4.2	14.89	0.03	2.00	Pass



#### A.2 Peak to Average Ratio

Note 1: For average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB. For GSM, GPRS and EGPRS, there are peak power to demonstrate compliance, PAR measurements are not required.

Note 2: Test plots please refer to the document "Annex No.:BL-SZ16B0295-501 Data Part 1.pdf".

### WCDMA Test Data

Test Band	Test Channel	Peak to Average ratio (dBm)	Limit (dBm)	Refer to Plot <sup>Note2</sup>	Verdict
	LCH	2.64	13	1.1	Pass
Band 2	MCH	2.87	13	1.2	Pass
	HCH	2.78	13	1.3	Pass

#### LTE Test Data

Test Band	Test Bandwidth	Test Channel	Test Model	Test RB (Size#Offset)	Peak to Average ratio (dBm)	Limit (dBm)	Refer to Plot <sup>Note2</sup>	Verdict
			QPSK	RB1#0	3.97	13	2.1	Pass
		LCH	QFSN	RB100#0	4.90	13	2.2	Pass
		LON	16-QAM	RB1#0	4.58	13	2.3	Pass
			10-QAIVI	RB100#0	5.77	13	2.4	Pass
			QPSK	RB1#0	4.70	13	2.5	Pass
LTE	20 MHz	MCH	QF3K	RB100#0	5.01	13	2.6	Pass
Band 2	Band 2	IVICH	16-QAM	RB1#0	5.01	13	2.7	Pass
		10-QAIVI	RB100#0	5.91	13	2.8	Pass	
		QPSK	RB1#0	4.23	13	2.9	Pass	
		НСН		RB100#0	5.10	13	2.10	Pass
			16-QAM	RB1#0	5.22	13	2.11	Pass
			10-QAIVI	RB100#0	5.91	13	2.12	Pass
			QPSK	RB1#0	4.52	13	3.1	Pass
		ICH	LCH 16-QAM	RB100#0	4.75	13	3.2	Pass
		LOIT		RB1#0	5.22	13	3.3	Pass
			10-QAIVI	RB100#0	5.62	13	3.4	Pass
			QPSK	RB1#0	3.83	13	3.5	Pass
LTE	20 MHz	MCH	3	RB100#0	5.04	13	3.6	Pass
Band 4	20 1011 12	IVICIT	16-QAM	RB1#0	4.70	13	3.7	Pass
			10-QAIVI	RB100#0	5.88	13	3.8	Pass
			QPSK	RB1#0	4.61	13	3.9	Pass
		НСН	QI SIX	RB100#0	4.78	13	3.10	Pass
		11011	16-QAM	RB1#0	5.22	13	3.11	Pass
			10-QAM	RB100#0	5.71	13	3.12	Pass
LTE	20 MHz	LCH	QPSK	RB1#0	3.39	13	4.1	Pass
Band 7	ZU IVII IZ	LOIT	QI OIN	RB100#0	5.01	13	4.2	Pass



Test Band	Test Bandwidth	Test Channel	Test Model	Test RB (Size#Offset)	Peak to Average ratio (dBm)	Limit (dBm)	Refer to Plot <sup>Note2</sup>	Verdict
			16-QAM	RB1#0	4.14	13	4.3	Pass
			16-QAM	RB100#0	6.00	13	4.4	Pass
			QPSK	RB1#0	3.97	13	4.5	Pass
		MCH	QPSN	RB100#0	5.28	13	4.6	Pass
		IVICH	16-QAM	RB1#0	4.70	13	4.7	Pass
			16-QAIVI	RB100#0	6.17	13	4.8	Pass
			QPSK	RB1#0	3.80	13	4.9	Pass
		HCH -	QPSN	RB100#0	5.33	13	4.10	Pass
			16-QAM	RB1#0	4.78	13	4.11	Pass
			10-QAM	RB100#0	6.14	13	4.12	Pass



### A.3 Occupied Bandwidth

Note 1: All mode were tested, but only the typical data were reported in this report.

Note 2: Test plots please refer to the document "Annex No.:BL-SZ16B0295-501 Data Part 2.pdf".

## GSM and WCDMA Mode Test Data

Test Band	Test Channel	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot <sup>Note2</sup>
	LCH	0.25	0.31	1.1
GSM 850	MCH	0.25	0.30	1.2
	HCH	0.25	0.31	1.3
	LCH	0.24	0.31	2.1
GSM 1900	MCH	0.24	0.31	2.2
	HCH	0.25	0.31	2.3
	LCH	0.25	0.30	3.1
EGPRS 850	MCH	0.25	0.31	3.2
	HCH	0.25	0.31	3.3
	LCH	0.25	0.30	4.1
EGPRS 1900	MCH	0.25	0.31	4.2
	HCH	0.25	0.31	4.3
WCDMA Band	LCH	4.22	4.88	5.1
2	MCH	4.20	4.85	5.2
	HCH	4.20	4.84	5.3
WCDMA Band	LCH	4.21	4.84	6.1
5	MCH	4.19	4.82	6.2
3	HCH	4.21	4.82	6.3



## LTE Mode Test Data

L Mode les					Measured	Measured -26	
Test	Test	Test	Test	Test RB	99% Occupied	dB Occupied	Refer to
Band	Bandwidth	Channel	Mode	(Size#Offset	Bandwidth	Bandwidth	Plot <sup>Note2</sup>
Dana	Danaman	O'lanioi	mode	)	(MHz)	(MHz)	00
			QPSK	RB6#0	1.07	1.22	7.1
		LCH	16-QAM	RB6#0	1.08	1.24	7.2
			QPSK	RB6#0	1.07	1.23	7.3
	1.4 MHz	MCH	16-QAM	RB6#0	1.08	1.20	7.4
			QPSK	RB6#0	1.08	1.23	7.5
		HCH	16-QAM	RB6#0	1.08	1.22	7.6
			QPSK	RB15#0	2.68	2.90	7.7
	3 MHz	LCH	16-QAM	RB15#0	2.68	2.91	7.8
		14011	QPSK	RB15#0	2.68	2.90	7.9
		MCH	16-QAM	RB15#0	2.67	2.90	7.10
		11011	QPSK	RB15#0	2.68	2.90	7.11
		HCH	16-QAM	RB15#0	2.68	2.90	7.12
			QPSK	RB25#0	4.48	4.97	7.13
		LCH 16	16-QAM	RB25#0	4.47	4.94	7.14
	_ NALI_	MCLI	QPSK	M       RB15#0       2.67       2.90       7.1         K       RB15#0       2.68       2.90       7.1         M       RB15#0       2.68       2.90       7.1         K       RB25#0       4.48       4.97       7.1         M       RB25#0       4.47       4.94       7.1         K       RB25#0       4.48       4.93       7.1         K       RB25#0       4.47       4.93       7.1         K       RB25#0       4.47       4.93       7.1         K       RB50#0       8.94       9.82       7.1         M       RB50#0       8.94       9.64       7.2	7.15		
	5 MHz	MCH	16-QAM	RB25#0	RB25#0       4.48       4.97       7.         RB25#0       4.47       4.94       7.         RB25#0       4.48       4.93       7.         RB25#0       4.48       4.96       7.         RB25#0       4.47       4.93       7.         RB25#0       4.47       4.94       7.	7.16	
		11611	QPSK	RB25#0	4.47	4.93	7.17
Dond O		HCH	16-QAM	RB25#0	4.47	4.94	7.18
Band 2		1.011	QPSK	RB50#0	8.94	9.82	7.19
		LCH	16-QAM	RB50#0	8.92	9.64	7.20
	10 MHz	MCH	QPSK	RB50#0	8.92	9.66	7.21
	TO MITZ	IVICH	16-QAM	RB50#0	8.93	9.71	7.22
		HCH	QPSK	RB50#0	8.93	9.69	7.23
		ПОП	16-QAM	RB50#0	8.92	9.73	7.24
		LCH	QPSK	RB75#0	13.41	14.52	7.25
		LOF	16-QAM	RB75#0	13.41	14.57	7.26
	15 MHz	MCH	QPSK	RB75#0	13.38	14.51	7.27
	15 MITZ	IVICT	16-QAM	RB75#0	13.39	14.49	7.28
		HCH	QPSK	RB75#0	13.40	14.61	7.29
		1011	16-QAM	RB75#0	13.41	14.50	7.30
		LCH	QPSK	RB100#0	17.85	19.03	7.31
		LOIT	16-QAM	RB100#0	17.85	19.17	7.32
	20 MHz	MCH	QPSK	RB100#0	17.85	19.20	7.33
	20 1011 12	IVIOII	16-QAM	RB100#0	17.88	19.22	7.34
		HCH	QPSK	RB100#0	17.87	19.29	7.35
		11011	16-QAM	RB100#0	17.86	19.13	7.36



Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset )	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot <sup>Note2</sup>
		1.011	QPSK	RB6#0	1.07	1.22	8.1
		LCH	16-QAM	RB6#0	1.08	1.23	8.2
	4 4 1 1 1 -	MOLL	QPSK	RB6#0	1.08	1.22	8.3
	1.4 MHz	MCH	16-QAM	RB6#0	1.07	1.20	8.4
		ПСП	QPSK	RB6#0	1.08	1.23	8.5
		HCH	16-QAM	RB6#0	1.08	1.24	8.6
	3 MHz	LCII	QPSK	RB15#0	2.68	2.91	8.7
		LCH	16-QAM	RB15#0	2.68	2.92	8.8
		MOLL	QPSK	RB15#0	2.68	2.89	8.9
		MCH	16-QAM	RB15#0	2.68	2.91	8.10
		НСН	QPSK	RB15#0	2.68	2.91	8.11
			16-QAM	RB15#0	2.68	2.90	8.12
		1.011	QPSK	RB25#0	4.47	4.97	8.13
		LCH	16-QAM	RB25#0	4.47	4.91	8.14
	5 MHz	MOLI	QPSK	RB25#0	4.47	4.94	8.15
	5 MHZ	MCH	16-QAM	RB25#0	4.48	4.95	8.16
		НСН	QPSK	RB25#0	4.47	4.92	8.17
David 4			16-QAM	RB25#0	4.48	4.97	8.18
Band 4			QPSK	RB50#0	8.93	9.78	8.19
		LCH	16-QAM	RB50#0	8.92	9.57	8.20
	40 MH	MOLL	QPSK	RB50#0	8.92	9.65	8.21
	10 MHz	MCH	16-QAM	RB50#0	8.93	9.71	8.22
		ПСП	QPSK	RB50#0	8.92	9.67	8.23
		HCH	16-QAM	RB50#0	8.92	9.63	8.24
		1.011	QPSK	RB75#0	13.38	14.55	8.25
		LCH	16-QAM	RB75#0	13.38	14.54	8.26
	45 MH-	MCH	QPSK	RB75#0	13.39	14.53	8.27
	15 MHz	MCH	16-QAM	RB75#0	13.41	14.50	8.28
		ПСП	QPSK	RB75#0	13.38	14.50	8.29
		HCH	16-QAM	RB75#0	13.39	14.46	8.30
		1.011	QPSK	RB100#0	17.84	19.11	8.31
		LCH	16-QAM	RB100#0	17.83	19.14	8.32
	20 MI I-	MOLL	QPSK	RB100#0	17.86	19.20	8.33
	20 MHz	MCH	16-QAM	RB100#0	17.89	19.29	8.34
		НСН	QPSK	RB100#0	17.82	19.29	8.35
			16-QAM	RB100#0	17.82	19.14	8.36



Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset )	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot <sup>Note2</sup>
		1.011	QPSK	RB25#0	4.48	4.95	9.1
		LCH	16-QAM	RB25#0	4.47	4.92	9.2
	5 MHz	MCH	QPSK	RB25#0	4.48	4.95	9.3
	J IVII IZ	IVICIT	16-QAM	RB25#0	4.49	4.96	9.4
		HCH	QPSK	RB25#0	4.47	4.94	9.5
		ПОП	16-QAM	RB25#0	4.48	5.02	9.6
		LCH	QPSK	RB50#0	8.93	9.75	9.7
			16-QAM	RB50#0	8.92	9.56	9.8
	10 MHz	MCH	QPSK	RB50#0	8.93	9.71	9.9
	TO WILLS		16-QAM	RB50#0	8.93	9.66	9.10
		НСН	QPSK	RB50#0	8.94	9.80	9.11
Band 7			16-QAM	RB50#0	8.95	9.72	9.12
Danu 1		LCH	QPSK	RB75#0	13.38	14.45	9.13
			16-QAM	RB75#0	13.38	14.43	9.14
	15 MHz	MCH	QPSK	RB75#0	13.39	14.51	9.15
	13 1011 12	IVICIT	16-QAM	RB75#0	13.40	14.53	9.16
		HCH	QPSK	RB75#0	13.42	14.62	9.17
		1011	16-QAM	RB75#0	13.41	14.44	9.18
		LCH	QPSK	RB100#0	17.82	18.95	9.19
	20 MHz	LON	16-QAM	RB100#0	17.84	19.13	9.20
		MCH	QPSK	RB100#0	17.87	19.16	9.21
	ZU IVITZ	IVICT	16-QAM	RB100#0	17.90	19.34	9.22
		HCH	QPSK	RB100#0	17.90	19.41	9.23
		пСп	16-QAM	RB100#0	17.89	19.23	9.24



# A.4 Frequency Stability

## GSM 850

Test	Conditions			Frequenc	y Deviation			
		LCH		MCH		HCH		
Power	Temperature	824.2 MHz		836.6 MHz		848.8 MHz		Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-9.05		-8.72		-2.60		
	+5	0.83		3.71		9.20		
	+10	0.18		3.17		4.50		
	+20	6.42		5.66		7.41		
3.8	+30	-4.48		-8.07		-4.11		
	+40	8.75	±2060.5	1.33	±2091.5	4.69	±2122	Pass
	+50	5.46		7.61		7.92		
	+55	-0.97		4.51		7.70		
	+60	3.28		8.09		4.24		
3.5	+25	8.64		4.38		7.16		
4.35	+25	2.50		-0.48		7.70		

## GSM 1900

Test	Conditions			Frequenc	y Deviation			
		LCH		MCH		HCH		
Power	Temperature	1850	.2 MHz	188	0 MHz	1909	9.8 MHz	Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-0.42		-3.35		-3.29		
	+5	6.25		9.44		2.53		
	+10	3.32		6.50		1.73		
	+20	1.24		2.87		1.86		
3.8	+30	-4.43		-5.96		-7.60		
	+40	0.02	±4625.5	5.85	±4700.0	0.00	±4774.5	Pass
	+50	6.56		6.93		0.51		
	+55	-8.48		1.54		7.88		
	+60	2.90		7.66		9.14		
3.5	+25	0.13		-9.12		-2.61		
4.35	+25	8.23		4.33		7.58		



### **GPRS 850**

Test	Test Conditions			Frequenc	y Deviation			
			LCH		MCH		HCH	
Power	Temperature	824.	2 MHz	836.	6 MHz	848	.8 MHz	Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-6.30		-7.47		-1.03		
	+5	4.28		4.85		5.04		
	+10	1.27		6.64		1.66		
	+20	5.42		0.41		1.87		
3.8	+30	-8.15		-0.11		-4.11		
	+40	6.95	±2060.5	7.42	±2091.5	4.80	±2122	Pass
	+50	1.31		9.53		8.71		
	+55	-1.68		-6.95		3.26		
	+60	9.29		8.55		3.29		
3.5	+25	3.26		1.02		7.42		
4.35	+25	2.83		5.22		-3.98		

## **GPRS 1900**

Test	Conditions			Frequenc	y Deviation			
		LCH		MCH		HCH		
Power	Temperature	1850.2 MHz		1880 MHz		1909.8 MHz		Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-5.79		-1.66		-6.21		
	+5	2.80		0.21		2.50		
	+10	7.92		2.00		5.75		
	+20	0.38		4.44		4.50		
3.8	+30	-5.48		-2.26		-7.86		
	+40	6.57	±4625.5	5.70	±4700.0	9.06	±4774.5	Pass
	+50	7.50		7.02		0.08		
	+55	1.24		-2.59		-7.37		
	+60	9.57		0.21		4.68		
3.5	+25	3.76		4.86		2.43		
4.35	+25	-7.66		0.89		4.52		



### **EGPRS 850**

Test	Test Conditions			Frequenc	y Deviation			
		LCH		MCH		HCH		
Power	Temperature	824.	2 MHz	836.	6 MHz	848	.8 MHz	Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-3.59		-6.15		-6.08		
	+5	6.01		5.54		4.50		
	+10	1.50		7.76		0.23		
	+20	8.95		1.10		1.63		
3.8	+30	-9.25		-3.71		-9.39		
	+40	8.98	±2060.5	1.75	±2091.5	2.44	±2122	Pass
	+50	3.14		2.46		4.48		
	+55	4.63		-7.49		6.16		
	+60	4.37		1.44		0.36		
3.5	+25	-8.57		7.49		-2.25		
4.35	+25	7.90		5.89		7.11		

## EGPRS 1900

Test Conditions				Frequenc	y Deviation			
		LCH		MCH		HCH		
Power	Temperature	1850	.2 MHz	1880	O MHz	1909	9.8 MHz	Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-2.87		-8.34		-8.52		
	+5	0.52		4.11		3.37		
	+10	8.10		5.83		0.44		
	+20	4.62		0.17		5.54		
3.8	+30	-8.01		-3.32		-4.65		
	+40	7.84	±4625.5	6.92	±4700.0	6.72	±4774.5	Pass
	+50	3.38		2.25		0.55		
	+55	-1.96		1.07		6.76		
	+60	7.77		2.22		8.99		
3.5	+25	0.39		6.49		-6.18		
4.35	+25	1.19		-4.16		4.39		



## WCDMA Band 2

Test	Test Conditions			Frequenc	y Deviation			
		LCH		M	MCH		HCH	
Power	Temperature	1852	.4 MHz	1880	O MHz	1907	7.6 MHz	Verdict
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits	
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	
	0	-6.08		-4.96		-7.07		
	+5	0.91		3.02		5.38		
	+10	4.24		3.58		8.44		
	+20	1.06		3.72		6.92		
3.8	+30	-6.37		-1.88		-5.71		
	+40	5.79	±4631	9.51	±4700	4.23	±4769	Pass
	+50	6.66		5.52		1.67		
	+55	-2.01		7.51		3.43		
	+60	7.92		3.56		6.03		
3.5	+25	8.07		7.50		9.08		
4.35	+25	7.97		-7.93		-5.24		

### WCDMA Band B5

VVCDIVIA Dai	<u>la 155</u>									
Test	Conditions		Frequency Deviation							
			LCH		MCH		HCH			
Power	Temperature	826.	4 MHz	836.	4 MHz	846	.6 MHz	Verdict		
(VDC)	(°C)	Value	Limits	Value	Limits	Value	Limits			
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)			
	0	-5.88		-7.87		-6.07				
	+5	9.21		0.18		3.78				
	+10	6.95		2.08		3.50				
	+20	8.71		0.97		2.20				
3.8	+30	-6.55		-0.14		-4.73				
	+40	5.36	±2066	5.26	±2091	4.05	±2116.5	Pass		
	+50	1.66		2.22		3.35				
	+55	9.40		-3.30		-8.36				
	+60	2.29		5.38		3.59				
3.5	+25	4.64		4.54		0.29				
4.35	+25	-6.30		5.45		1.15				



### LTE Band 2 QPSK 10 MHz

Te	st Conditions	Frequenc	y Deviation	Verdict
			СН	
Power (VDC)	Temperature (°C)	1880	) MHz	
1 ower (VDO)	remperature ( C)	Value	Limits (Hz)	
		(Hz)	Lillits (112)	
	0	-0.28		
	+5	0.19		
	+10	1.97		
	+20	7.54		
3.8	+30	-1.86		
	+40	4.09	±4700	Pass
	+50	2.28		
	+55	-1.70		
	+60	8.35		
3.5	+25	7.15		
4.35	+25	7.50		

# LTE Band 2 16-QAM 10 MHz

Te	st Conditions	Frequen	cy Deviation	
Davier (V/DC)	Town overlying (9C)		MCH 30 MHz	Verdict
Power (VDC)	Temperature (°C)	Value	Limits (Hz)	
		(Hz)	Lillilis (HZ)	
	0	-5.31		
	+5	0.04		
	+10	6.11		
	+20	7.88		
3.8	+30	-0.08		
	+40	6.10	±4700	Pass
	+50	6.32		
	+55	2.34		
	+60	0.99		
3.5	+25	7.56		
4.35	+25	-8.40		



## LTE Band 4 QPSK 10 MHz

Te	st Conditions	Frequen	cy Deviation			
		ı	MCH			
Power (VDC)	Temperature (°C)	1732	2.5 MHz	Verdict		
Fower (VDC)	remperature ( C)	Value	Limits (Hz)			
		(Hz)	Lillius (HZ)			
	0	-0.89				
	+5	8.62				
	+10	0.16				
	+20	5.67				
3.8	+30	-0.44				
	+40	0.70	±4331.25	Pass		
	+50	1.23				
	+55	-1.92				
	+60	8.62				
3.5	+25	7.29				
4.35	+25	3.95				

## LTE Band 4 16QAM 10 MHz

ETE BAHA + TOQ/TIVI					
Te	st Conditions	Frequen	Frequency Deviation		
		1	MCH		
Power (VDC)	Tomporatura (°C)	173	2.5 MHz	Verdict	
Power (VDC)	Temperature (°C)	Value	Limits (Hz)		
		(Hz)	Lillins (HZ)		
	0	-3.48			
	+5	5.58	]	Pass	
	+10	3.04			
	+20	3.09			
3.8	+30	-0.24			
	+40	1.36	±4331.25		
	+50	7.47			
	+55	-7.18			
	+60	1.04			
3.5	+25	3.65			
4.35	+25	0.01			



## LTE Band 7 QPSK 10 MHz

Te	st Conditions	Frequen	cy Deviation	
Davier (\/DC\	Tarran a ratura (90)		MCH 85 MHz	Verdict
Power (VDC)	Temperature (°C)	Value	Limits (Hz)	
		(Hz)	Lillins (112)	
	0	6.21		
	+5	1.79		Pass
	+10	7.65		
	+20	-8.62		
3.8	+30	6.04		
	+40	0.65	±6337.5	
	+50	7.31		
	+55	-5.21		
	+60	6.30		
3.5	+25	6.85		
4.35	+25	7.19		

### LTE Band 7 16-QAM 10 MHz

Te	st Conditions	Frequen	Frequency Deviation		
		MCH			
Power (VDC)	Temperature (°C)	253	B5 MHz	Verdict	
1 ower (VDO)	remperature ( O)	Value	Limits (Hz)		
		(Hz)	Lillins (112)		
	0	-0.47			
	+5	3.28		Pass	
	+10	3.20			
	+20	9.10			
3.8	+30	-8.44			
	+40	8.54	±6337.5		
	+50	2.66			
	+55	-2.58			
	+60	8.23			
3.5	+25	1.42			
4.35	+25	3.71			



### A.5 Spurious Emission at Antenna Terminals

Note 1: GSM and EGPRS modes have been verified, and only the worst data with different bandwidth for LTE are shown here.

Note 2: The frequency of verdict which mark by "N/A" should be ignored because they are MS carrier frequency.

Note 3: Test plots please refer to the document "Annex No.:BL-SZ16B0295-501 Data Part 3.pdf".

#### **GSM and WCDMA Mode Test Verdict**

Test Band	Test Channel	Refer to Plot <sup>Note3</sup>	Verdict
	LCH	1.1	Pass
GSM 850	MCH	1.2	Pass
	HCH	1.3	Pass
	LCH	1.4	Pass
GSM 1900	MCH	1.5	Pass
	HCH	1.6	Pass
	LCH	2.1	Pass
EGPRS 850	MCH	2.2	Pass
	HCH	2.3	Pass
	LCH	2.4	Pass
EGPRS 1900	MCH	2.5	Pass
	HCH	2.6	Pass
	LCH	3.1	Pass
WCDMA Band 2	MCH	3.2	Pass
	HCH	3.3	Pass
	LCH	4.1	Pass
WCDMA Band 5	MCH	4.2	Pass
	HCH	4.3	Pass



### LTE Mode Test Verdict

Test	Test	Test	T (NA )	Test	Refer to	V/ E /
Band	Bandwidth	Channel	Test Mode	RB(Size#Offset)	Plot <sup>Note3</sup>	Verdict
		. 0	QPSK	RB1#0	5.1	Pass
		LCH	16-QAM	RB1#0	5.2	Pass
	4 4 1 1 1 -	MOLL	QPSK	RB1#0	5.3	Pass
	1.4 MHz	MCH	16-QAM	RB1#0	5.4	Pass
		11011	QPSK	RB1#0	5.5	Pass
		HCH	16-QAM	RB1#0	5.6	Pass
		- ( )	QPSK	RB1#0	5.7	Pass
		LCH	16-QAM	RB1#0	5.8	Pass
	2 MH I=	MCII	QPSK	RB1#0	5.9	Pass
	3 MHz	MCH	16-QAM	RB1#0	5.10	Pass
		ПСП	QPSK	RB1#0	5.11	Pass
		HCH	16-QAM	RB1#0	5.12	Pass
		LCH	QPSK	RB1#0	5.13	Pass
		LCI	16-QAM	RB1#0	5.14	Pass
	5 MHz	MCH	QPSK	RB1#0	5.15	Pass
	2 MILZ	IVICH	16-QAM	RB1#0	5.16	Pass
		HCH	QPSK	RB1#0	5.17	Pass
Band 2			16-QAM	RB1#0	5.18	Pass
Danu Z		LCH	QPSK	RB1#0	5.19	Pass
			16-QAM	RB1#0	5.20	Pass
	10 MHz	MCH	QPSK	RB1#0	5.21	Pass
	10 1011 12	IVICIT	16-QAM	RB1#0	5.22	Pass
		НСН	QPSK	RB1#0	5.23	Pass
		11011	16-QAM	RB1#0	5.24	Pass
		LCH	QPSK	RB1#0	5.25	Pass
		LOIT	16-QAM	RB1#0	5.26	Pass
	15 MHz	MCH	QPSK	RB1#0	5.27	Pass
	13 1011 12	IVICIT	16-QAM	RB1#0	5.28	Pass
		НСН	QPSK	RB1#0	5.29	Pass
		11011	16-QAM	RB1#0	5.30	Pass
		LCH	QPSK	RB1#0	5.31	Pass
		LOIT	16-QAM	RB1#0	5.32	Pass
	20 MHz	MCH	QPSK	RB1#0	5.33	Pass
	ZU IVIITZ	IVICIT	16-QAM	RB1#0	5.34	Pass
		HCH	QPSK	RB1#0	5.35	Pass
		ПОП	16-QAM	RB1#0	5.36	Pass



Test	Test	Test	To d Maria	Test	Refer to	Mars Park
Band	Bandwidth	Channel	Test Mode	RB(Size#Offset)	Plot <sup>Note2</sup>	Verdict
			QPSK	RB1#0	6.1	Pass
		LCH	16-QAM	RB1#0	6.2	Pass
	4 4 1 1 1 -	MOLL	QPSK	RB1#0	6.3	Pass
	1.4 MHz	MCH	16-QAM	RB1#0	6.4	Pass
		1.01	QPSK	RB1#0	6.5	Pass
		HCH	16-QAM	RB1#0	6.6	Pass
		LCH	QPSK	RB1#0	6.7	Pass
		LCH	16-QAM	RB1#0	6.8	Pass
	3 MHz	MCH	QPSK	RB1#0	6.9	Pass
	3 IVITZ	IVICH	16-QAM	RB1#0	6.10	Pass
		НСН	QPSK	RB1#0	6.11	Pass
		ПСП	16-QAM	RB1#0	6.12	Pass
		LCH	QPSK	RB1#0	6.13	Pass
		LO	16-QAM	RB1#0	6.14	Pass
	5 MHz	MCH	QPSK	RB1#0	6.15	Pass
	J WII 12	IVICIT	16-QAM	RB1#0	6.16	Pass
		НСН	QPSK	RB1#0	6.17	Pass
Band 4			16-QAM	RB1#0	6.18	Pass
Danu 4		LCH 10 MHz MCH	QPSK	RB1#0	6.19	Pass
			16-QAM	RB1#0	6.20	Pass
	10 MHz		QPSK	RB1#0	6.21	Pass
	10 1011 12	IVIOIT	16-QAM	RB1#0	6.22	Pass
		HCH	QPSK	RB1#0	6.23	Pass
		11011	16-QAM	RB1#0	6.24	Pass
		LCH	QPSK	RB1#0	6.25	Pass
			16-QAM	RB1#0	6.26	Pass
	15 MHz	MCH	QPSK	RB1#0	6.27	Pass
	10 1011 12	WIOTT	16-QAM	RB1#0	6.28	Pass
		HCH	QPSK	RB1#0	6.29	Pass
		11011	16-QAM	RB1#0	6.30	Pass
		LCH	QPSK	RB1#0	6.31	Pass
		LOIT	16-QAM	RB1#0	6.32	Pass
	20 MHz	MCH	QPSK	RB1#0	6.33	Pass
	ZU IVII IZ	IVIOII	16-QAM	RB1#0	6.34	Pass
		HCH	QPSK	RB1#0	6.35	Pass
		11011	16-QAM	RB1#0	6.36	Pass



Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB(Size#Offset)	Refer to Plot <sup>Note2</sup>	Verdict	
			QPSK	RB1#0	7.1	Pass	
		LCH	16-QAM	RB1#0	7.2	Pass	
	_ NALI_	MCII	QPSK	RB1#0	7.3	Pass	
	5 MHz	MCH	16-QAM	RB1#0	7.4	Pass	
		1.01	QPSK	RB1#0	7.5	Pass	
		HCH	16-QAM	RB1#0	7.6	Pass	
		LCH	QPSK	RB1#0	7.7	Pass	
		Г	16-QAM	RB1#0	7.8	Pass	
	10 MHz	MCH	QPSK	RB1#0	7.9	Pass	
	TO WITZ	10 MICH	16-QAM	RB1#0	7.10	Pass	
		НСН	QPSK	RB1#0	7.11	Pass	
Band 7			16-QAM	RB1#0	7.12	Pass	
Dallu 1		LCH	QPSK	RB1#0	7.13	Pass	
			16-QAM	RB1#0	7.14	Pass	
	15 MHz	MCH	QPSK	RB1#0	7.15	Pass	
	15 MHZ	IVICH	16-QAM	RB1#0	7.16	Pass	
			НСН	QPSK	RB1#0	7.17	Pass
		ПОП	16-QAM	RB1#0	7.18	Pass	
		LCH	QPSK	RB1#0	7.19	Pass	
		LON	16-QAM	RB1#0	7.20	Pass	
	20 MHz	MCH	QPSK	RB1#0	7.21	Pass	
	ZU IVITZ	IVICH	16-QAM	RB1#0	7.22	Pass	
		HCH	QPSK	RB1#0	7.23	Pass	
		поп	16-QAM	RB1#0	7.24	Pass	



## A.6 Band Edge

Note 1: Test plots please refer to the document "Annex No.:BL-SZ16B0295-501 Data Part 4.pdf".

### **GSM and WCDMA Mode Test Verdict**

Test Band	Test Channel	Refer to Plot <sup>Note1</sup>	Verdict
GSM 850	LCH	1.1	Pass
G21VI 000	HCH	1.2	Pass
GSM 1900	LCH	1.3	Pass
GSW 1900	HCH	1.4	Pass
EODDO 050	LCH	2.1	Pass
EGPRS 850	HCH	2.2	Pass
EGPRS 1900	LCH	2.3	Pass
EGPRS 1900	HCH	2.4	Pass
WCDMA Band 2	LCH	3.1	Pass
VVCDIVIA Band 2	HCH	3.2	Pass
WCDMA Band 5	LCH	4.1	Pass
WCDIVIA Ballu 5	HCH	4.2	Pass



## LTE Mode Test Verdict

Test	Test	Test	Test	Test	Refer to	
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note1</sup>	Verdict
			ODCK	RB1#0	5.1	Pass
		1.011	QPSK	RB6#0	5.2	Pass
		LCH	40.000	RB1#0	5.3	Pass
			16-QAM	RB6#0	5.4	Pass
	1.4 MHz		ODCK	RB1#5	5.5	Pass
		HCH	QPSK	RB6#0	5.6	Pass
		HCH	40.004	RB1#5	5.7	Pass
			16-QAM	RB6#0	5.8	Pass
			OBSK	RB1#0	5.9	Pass
		LCH	QPSK	RB15#0	5.10	Pass
		LON	16 OAM	RB1#0	5.11	Pass
	3 MHz		16-QAM	RB15#0	5.12	Pass
	3 IVITZ		QPSK	RB1#14	5.13	Pass
		нсн	QFSK	RB15#0	5.14	Pass
		псп	16-QAM	RB1#14	5.15	Pass
			16-QAIVI	RB15#0	5.16	Pass
			QPSK	RB1#0	5.17	Pass
		LCH -		RB25#0	5.18	Pass
			16-QAM	RB1#0	5.19	Pass
Band 2	5 MHz			RB25#0	5.20	Pass
Danu Z	2 IVITZ		QPSK HCH	RB1#24	5.21	Pass
		⊔∩⊔		RB25#0	5.22	Pass
		11011	16-QAM	RB1#24	5.23	Pass
				RB25#0	5.24	Pass
			QPSK	RB1#0	5.25	Pass
		LCH	QI SIN	RB50#0	5.26	Pass
		LOTT	16-QAM	RB1#0	5.27	Pass
	10 MHz		TO-QAIVI	RB50#0	5.28	Pass
	I O IVII IZ		QPSK	RB1#49	5.29	Pass
		НСН	QI SIN	RB50#0	5.30	Pass
		11011	16-QAM	RB1#49	5.31	Pass
			TO-QAIVI	RB50#0	5.32	Pass
			QPSK	RB1#0	5.33	Pass
		LCH	Qi Oit	RB75#0	5.34	Pass
		LOIT	16-QAM	RB1#0	5.35	Pass
	15 MHz		IO-QAIVI	RB75#0	5.36	Pass
	I U IVII IZ		QPSK	RB1#74	5.37	Pass
		НСН	QI OIN	RB75#0	5.38	Pass
		11011	16-QAM	RB1#74	5.39	Pass
			I U-WAIVI	RB75#0	5.40	Pass



Test	Test	Test	Test	Test	Refer to	Verdict
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note1</sup>	verdict
			QPSK	RB1#0	5.41	Pass
		1.011	QPSK	RB100#0	5.42	Pass
		LCH	16-QAM	RB1#0	5.43	Pass
	20 MH-			RB100#0	5.44	Pass
	ZU IVITZ	20 MHz	QPSK	RB1#99	5.45	Pass
	НСН	ПСП	QPSK	RB100#0	5.46	Pass
		псп		RB1#99	5.47	Pass
		16-QAM	RB100#0	5.48	Pass	

Test	Test	Test	Test	Test	Refer to	Verdict
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note1</sup>	verdict
			QPSK	RB1#0	6.1	Pass
		LCH	QFSK	RB6#0	6.2	Pass
		LCH	16 OAM	RB1#0	6.3	Pass
	1.4 MHz		16-QAM	RB6#0	6.4	Pass
	1.4 IVIDZ		QPSK	RB1#5	6.5	Pass
		НСН	QPSK	RB6#0	6.6	Pass
		пСп	16 OAM	RB1#5	6.7	Pass
			16-QAM	RB6#0	6.8	Pass
			ODSK	RB1#0	6.9	Pass
		LCH	QPSK	RB15#0	6.10	Pass
		LCH	16 OAM	RB1#0	6.11	Pass
	2 MI I=		16-QAM	RB15#0	6.12	Pass
	3 MHz	НСН -	QPSK -	RB1#14	6.13	Pass
				RB15#0	6.14	Pass
			16-QAM	RB1#14	6.15	Pass
Band 4				RB15#0	6.16	Pass
			LCH QPSK	RB1#0	6.17	Pass
		104		RB25#0	6.18	Pass
		LOH		RB1#0	6.19	Pass
	5 MHz		10-QAM	RB25#0	6.20	Pass
	J IVII IZ		QPSK	RB1#24	6.21	Pass
		НСН	QFSK	RB25#0	6.22	Pass
		поп	16-QAM	RB1#24	6.23	Pass
			10-QAM	RB25#0	6.24	Pass
			QPSK	RB1#0	6.25	Pass
		LCH	QFSK	RB50#0	6.26	Pass
		LCH	16-QAM	RB1#0	6.27	Pass
	10 MHz		IO-QAIVI	RB50#0	6.28	Pass
			OBSK	RB1#49	6.29	Pass
		HCH	QPSK	RB50#0	6.30	Pass
			16-QAM	RB1#49	6.31	Pass



Test	Test	Test	Test	Test	Refer to	Verdict
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note1</sup>	
				RB50#0	6.32	Pass
			QPSK	RB1#0	6.33	Pass
		LCH	QFSK	RB75#0	6.34	Pass
		LON	16-QAM	RB1#0	6.35	Pass
	15 MHz		10-QAIVI	RB75#0	6.36	Pass
			QPSK	RB1#74	6.37	Pass
		НСН	QPSK	RB75#0	6.38	Pass
			16-QAM	RB1#74	6.39	Pass
				RB75#0	6.40	Pass
			QPSK	RB1#0	6.41	Pass
		LCH		RB100#0	6.42	Pass
		LON	16-QAM	RB1#0	6.43	Pass
	20 MHz		10-QAIVI	RB100#0	6.44	Pass
	ZU IVITZ		QPSK	RB1#99	6.45	Pass
		11011	QF3N	RB100#0	6.46	Pass
		HCH	16-QAM	RB1#99	6.47	Pass
			I O-QAIVI	RB100#0	6.48	Pass



Test	Test	Test	Test	Test	Refer to	Verdict
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note1</sup>	_
	5 MHz	LCH	QPSK	RB1#0	7.1	Pass
				RB25#0	7.2	Pass
			16-QAM	RB1#0	7.3	Pass
				RB25#0	7.4	Pass
		нсн	QPSK	RB1#24	7.5	Pass
				RB25#0	7.6	Pass
			16-QAM	RB1#24	7.7	Pass
				RB25#0	7.8	Pass
		LCH	QPSK	RB1#0	7.9	Pass
	10 MHz			RB50#0	7.10	Pass
			16-QAM	RB1#0	7.11	Pass
				RB50#0	7.12	Pass
	10 1011 12		QPSK	RB1#49	7.13	Pass
		НСН	QPSK	RB50#0	7.14	Pass
			16-QAM	RB1#49	7.15	Pass
Band 7				RB50#0	7.16	Pass
Danu 1	15 MHz	LCH	QPSK	RB1#0	7.17	Pass
				RB75#0	7.18	Pass
			16-QAM	RB1#0	7.19	Pass
				RB75#0	7.20	Pass
		НСН	QPSK	RB1#74	7.21	Pass
				RB75#0	7.22	Pass
			16-QAM	RB1#74	7.23	Pass
				RB75#0	7.24	Pass
	20 MHz	LCH	QPSK	RB1#0	7.25	Pass
				RB100#0	7.26	Pass
			16-QAM	RB1#0	7.27	Pass
				RB100#0	7.28	Pass
		НСН	QPSK	RB1#99	7.29	Pass
				RB100#0	7.30	Pass
			16-QAM	RB1#99	7.31	Pass
				RB100#0	7.32	Pass



## A.7 Field Strength of Spurious Radiation

Note 1: GSM and EGPRS modes have been verified, only the worst data with different data bandwidth for LTE are shown here.

Note 2: The frequency of verdict which mark by "N/A" should be ignored because they are MS carrier frequency.

Note 3: <u>Test plots please refer to the document "Annex No.:BL-SZ16B0295-501 Data Part 5.pdf".</u> <u>GSM and WCDMA Mode Test Verdict</u>

Test Band	Test Channel	Refer to Plot <sup>Note3</sup>	Verdict	
	LCH	1.1	Pass	
GSM 850	MCH	1.2	Pass	
	HCH	1.3	Pass	
	LCH	1.4	Pass	
GSM 1900	MCH	1.5	Pass	
	HCH	1.6	Pass	
	LCH	1.7	Pass	
EGPRS 850	MCH	1.8	Pass	
	HCH	1.9	Pass	
	LCH	1.10	Pass	
EGPRS 1900	MCH	1.11	Pass	
	HCH	1.12	Pass	
	LCH	2.1	Pass	
WCDMA Band 2	MCH	2.2	Pass	
	HCH	2.3	Pass	
	LCH	3.1	Pass	
WCDMA Band 5	MCH	3.2	Pass	
	HCH	3.3	Pass	



## LTE Mode Test Verdict

Test	Test	Test	Test	Test	Refer to	Verdict
Band	Bandwidth	Channel	Mode	RB(Size#Offset)	Plot <sup>Note3</sup>	
Band 2	1.4 MHz	MCH	QPSK	RB1#0	4.1	Pass
				RB1#0	4.2	Pass
	3 MHz	MCH	QPSK	RB1#0	4.3	Pass
				RB1#0	4.4	Pass
	5 MHz	MCH	QPSK	RB1#0	4.5	Pass
				RB1#0	4.6	Pass
	10 MHz	MCH	QPSK	RB1#0	4.7	Pass
				RB1#0	4.8	Pass
	15 MHz	MCH	QPSK	RB1#0	4.9	Pass
				RB1#0	4.10	Pass
	20 MHz	MCH	QPSK	RB1#0	4.11	Pass
	20 1011 12			RB1#0	4.12	Pass
	1.4 MHz	MCH	QPSK	RB1#0	5.1	Pass
				RB1#0	5.2	Pass
	3 MHz	МСН	QPSK	RB1#0	5.3	Pass
				RB1#0	5.4	Pass
	5 MHz	MCH	QPSK	RB1#0	5.5	Pass
Band 4				RB1#0	5.6	Pass
Dana 4	10 MHz	MCH	QPSK	RB1#0	5.7	Pass
				RB1#0	5.8	Pass
	15 MHz	MCH	QPSK	RB1#0	5.9	Pass
				RB1#0	5.10	Pass
	20 MHz	MCH	QPSK	RB1#0	5.11	Pass
				RB1#0	5.12	Pass
	5 MHz	МСН	QPSK	RB1#0	6.1	Pass
				RB1#0	6.2	Pass
	10 MHz	MCH	QPSK	RB1#0	6.3	Pass
Band 7				RB1#0	6.4	Pass
	15 MHz	МСН	QPSK	RB1#0	6.5	Pass
				RB1#0	6.6	Pass
	20 MHz	МСН	QPSK	RB1#0	6.7	Pass
				RB1#0	6.8	Pass



## ANNEX B TEST SETUP PHOTOS

Please refer to the document "BL-SZ16B0295-AR.PDF".

## ANNEX C EUT EXTERNAL PHOTOS

Please refer to the document "BL- SZ16B0295-AW.PDF".

## ANNEX D EUT INTERNAL PHOTOS

Please refer to the document "BL- SZ16B0295-AI.PDF".

-END OF REPORT--