



## FCC Test Report FCC ID: 2BLXN-PAD6PLUS

Product : Tablet

Pad6 Plus, S30pro, 12Spro, Pad5 pro, J5, Z50, P61, S22, X101, Tab14, Tablet, P70, Pad6S, Pad6 pro, P62, P63, P64, P65, P66, Tab1, Tab2, Tab3, Tab4, Tab5, Tab6, Tab7, Tab8, Tab9, Tab10, Tab11, Tab12, Tab13, S23 pro, S22pro, S24 pro, p60,

Model Name : K11, K12, 11pro, 12pro, 13pro, 14pro, 15pro, X11pro, x99,

mate60, mate70, mate80, mate90, mate10, mate20, mate30, x98, x97, x96, x94, x93, x92, x91, x99, mate60, mate70, mate80, mate90, mate10, mate20, mate30, x98, x97, x96, x94,

x93, x92, x91, Mix 4, Mix 3, Mix 2, Mix 1, Mix 5

Brand : N/A

Report No. : NCT24035724E1-4

## Prepared for

Paitengsheng technology co., Itd

Room 311, Building C, Hongshengyuan Building, Longgang District, Shenzhen

## Prepared by

Shenzhen NCT Testing Technology Co., Ltd.

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## TEST RESULT CERTIFICATION

Applicant's name : Paitengsheng technology co., Itd

Address Room 311, Building C, Hongshengyuan Building,

Longgang District, Shenzhen, China

Manufacture's name : Paitengsheng technology co., ltd

Address Room 311, Building C, Hongshengyuan Building,

Longgang District, Shenzhen, China

Product name : Tablet

Model name : For details, see section 2.1 of the report

FCC CFR Title 47 Part22 Subpart H FCC CFR Title 47 Part24 Subpart E

Applicable Standards: : FCC CFR Title 47 Part27 ANSI/ TIA/ EIA-603-E-2016

FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01

ANSI C63.26:2015

Date of test : Sept. 09, 2024-Sept. 30, 2024

Date of Issue : Sept. 30, 2024

Test Result : Pass

This device described above has been tested by NCT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

Keven Wu / Engineer

Henry Wang /

Ceven wer

Technical Manager:





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## 1. TEST SUMMARY

Test Items	Test Requirement	Result
Peak to Average Radio	2.1046 24.232 (band 2) 22.913 (band 5) 27.50(d) (band 7, band 41)	PASS
99% & -26 dB Occupied Bandwidth	2.1049	PASS
Frequency Stability	2.1055 22.355(band 5) 24.235 (band 2) 27.54 (band 7, band 41)	PASS
Conducted Out of Band Emissions	2.1051,2.1057 22.917 (band 5) 24.238(band 2) 27.53(m) (band 7, band 41)	PASS
Band Edge	2.1051,2.1057 22.917 (band 5) 24.238(band 2) 27.53(m) (band 7, band 41)	PASS
Transmitter Radiated Power (EIPR/ERP)	2.1046 24.232 (band 2) 22.913 (band 5) 27.50(h) (band 7, band 41)	PASS
Radiated Out of Band Emissions	2.1051,2.1057 22.917 (band 5) 24.238(band 2) 27.53(m) (band 7, band 41)	PASS

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## 2. GENERAL PRODUCT INFORMATION

2.1. Description of Device (EUT)

Description of Device (EUT)					
Product Name:	Tablet				
Trademark	N/A				
Model No.:	Pad6 Plus				
Sample ID:	24035724-001#				
Series Model.:	S30pro,12Spro, Pad5 pro, J5, Z50, P61, S22, X101, Tab14, Tablet, P70, Pad6S, Pad6 pro, P62, P63, P64, P65, P66, Tab1, Tab2, Tab3, Tab4, Tab5, Tab6, Tab7, Tab8, Tab9, Tab10, Tab11, Tab12, Tab13, S23 pro, S22pro, S24 pro, p60, K11, K12, 11pro, 12pro, 13pro, 14pro, 15pro, X11pro, x99, mate60, mate70, mate80, mate90, mate10, mate20, mate30, x98, x97, x96, x94, x93, x92, x91, x99, mate60, mate70, mate80, mate90, mate10, mate20, mate30, x98, x97, x96, x94, x93, x92, x91, Mix 4, Mix 3, Mix 2, Mix 1, Mix 5				
Model Difference:	All the same except the model number.				
Operation Frequency:	GSM 850: Tx: 824.20 - 848.80MHz; Rx: 869.20 - 893.80MHz GSM1900: Tx: 1850.20 - 1909.80MHz; Rx: 1930.20 - 1989.80MHz WCDMA Band 2: Tx: 1850.00 - 1910.00MHz; Rx: 1930.00 - 1990.00MHz WCDMA Band 5: Tx: 824.00 - 849.00MHz; Rx: 869.00 - 894.00MHz LTE Band 7: Tx: 2500.00 - 2570.00MHz; Rx: 2620.00 - 2690.00MHz LTE Band 41: Tx: 2496.00 - 2690.00MHz; Rx: 2496.00 - 2690.00MHz				
Modulation technology:	GSM Mode with CS/GMSK/8PSK Modulation WCDMA Mode with BPSK Modulation HSDPA Mode with QPSK, 16QAM Modulation HSUPA Mode with QPSK, 16QAM Modulation LTE Mode with QPSK,16QAM				
Antenna Type:	FPCB Antenna				
Antenna gain:	GSM850: -2.3dBi, GSM1900:1.3dBi, WCDMA Band 2: 1.2dBi, WCDMA Band 5: -2.3dBi, LTE Band 7: -1.5dBi, LTE Band 41: -1.5dBi				
Power supply:	DC 3.7V by battery ; Charging input: DC 5V				
LTE Category	4				
Hardware Version	N/A				
Software Version	N/A				

## Note:

- 1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2. The EUT's all information provided by client.

## 2.2. Product Function

Refer to Technical Construction Form and User Manual.

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## 2.3. Independent Operation Modes

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

	Test modes					
Band	Radiated	Conducted				
GSM	CS/GMSK/8PSK	CS/GMSK/8PSK				
WCDMA	RMC/ HSDPA/ HSUPA	RMC/ HSDPA/ HSUPA				
LTE Band 7	Bandwidth: 5/10/15/20MHz	Bandwidth: 5/10/15/20MHz				
	Modulation: QPSK/16QAM	Modulation: QPSK/16QAM				
	RB:1/50%/100%	RB:1/50%/100%				
LTE Band 41	Bandwidth: 5/10/15/20MHz	Bandwidth:5/10/15/20MHz				
	Modulation: QPSK/16QAM	Modulation: QPSK/16QAM				
	RB:1/50%/100%	RB:1/50%/100%				

Test Channel(MHz)					
Band	Low	Middle	High		
GSM850	824.20	836.60	848.80		
GSM1900	1850.20	1880.00	1909.80		
WCDMA Band 2	1852.4	1880	1907.6		
WCDMA Band 5	826.4	836.6	846.6		
LTE Band 7	2502.5	2535	2567.5		
LTE Band 41	2498.5	2593	2687.5		

Note1: for LTE mode, if the bandwidth is different, the test frequency is changed.

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<sup>2:</sup> we pretest all voltage, only the DC 3.7V was worst mode, and the data show in the report.



## 3. TEST SITES

## 3.1. Test Facilities

Site Description

EMC Lab. : Accredited by CNAS, 2022-09-27

The certificate is valid until 2028.01.07

The Laboratory has been assessed and proved to be in compliance with

CNAS-CL01:2006 (identical to ISO/IEC 17025:2017)

The Certificate Registration Number is L8251

Designation Number: CN1347

Test Firm Registration Number: 894804 Accredited by A2LA, June 14, 2023

The Certificate Registration Number is 6837.01

Accredited by Industry Canada, November 09, 2018 The Conformity Assessment Body Identifier is CN0150

Company Number: 30806

Name of Firm : Shenzhen NCT Testing Technology Co., Ltd.

Site Location : A101&2F B2, Fuqiao 6th Area, Xintian Community, Fuhai Street, Baoan

District, Shenzhen, People's Republic of China

## 3.2. Measurement Uncertainty

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

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%
8	Bandwidth	±0.2MHz
9	Frequency Stability	±0.02MHz

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## 3.3. List of Test and Measurement Instruments

## 3.3.1. For radiated test

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
966 Shielded Room	966 Room	1	EMToni	2022/5/31	2025/5/30
EMI Test Receiver	ESCI	101178	Rohde & Schwarz	2024/6/17	2025/6/16
Amplifi (30MHz-1GHz)	BBV 9743 B	00374	SCHNWARZBECK	2024/6/17	2025/6/16
Bilog Antenna (30MHz-1GHz)	VULB9162	00473	SCHNWARZBECK	2023/3/19	2025/3/18
Horn antenna (1GHz-18GHz)	BBHA 9120 D	02622	SCHNWARZBECK	2023/3/19	2025/3/18
Pream plifier (1GHz-18GHz)	BBV 9718D	0024	SCHNWARZBECK	2024/6/17	2025/6/16
Spectrum Analyze (10Hz-40GHz)	FSV 40	100952	Rohde & Schwarz	2024/6/17	2025/6/16
Pream plifier (18GHz-40GHz)	BBV 9721	0056	SCHNWARZBECK	2024/6/17	2025/6/16
Double Ridge Guide Horn Antenna (18GHz-40GHz)	SAS-574	588	A.H.System	2023/3/19	2025/3/18
Loop Antenna (9KHz-30MHz)	FMZB1519B	014	SCHNWARZBECK	2024/6/17	2025/6/16
Amplifier (9KHz-30MHz)	CVP 9222 C	00109	CHNWARZBECK	2024/6/17	2025/6/16
MXG Signal Analyzer	N9020A	MY50510202	Agilent	2024/6/17	2025/6/16
MXG Vector Signal Generator	N5182A	MY50140020	Agilent	2024/6/17	2025/6/16
MXG Analog Signal Generator	N5181A	MY47420919	Agilent	2024/6/17	2025/6/16
Power Sensor	TR1029-2	512364	Techoy	2024/6/17	2025/6/16
RF Swith	TR1029-1	512364	Techoy	2024/6/17	2025/6/16
Cable	DA800- 4000MM	NA	DA	2024/6/17	2025/6/16
Cable	DA800- 11000MM	N/A	DA	2024/6/17	2025/6/16
Oven	GX-3020-M150	N/A	GAOXN	2024/3/11	2025/3/10
Bilog Antenna (30MHz-1GHz)	VULB9162	00478	SCHNWARZBECK	2023/3/19	2025/3/18
Horn antenna (1GHz-18GHz)	BBHA 9120 D	02627	SCHNWARZBECK	2023/3/19	2025/3/18

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## 3.3.2. For conducted emission at the mains terminals test

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
944 Shielded	944 Room	,	EMToni	2022/5/31	2025/5/30
Room	944 NOOIII	,	LIVITOIII	2022/3/31	2023/3/30
EMI Test Receiver	ESPI	101604	Rohde & Schwarz	2024/6/17	2025/6/16
LISN	ENV 216	102796	Rohde & Schwarz	2024/6/17	2025/6/16
LISN	VN1-13S	004023	CRANAGE	2024/6/17	2025/6/16
Cabla	RG223-	NI/A	DC	2024/6/47	2025/6/46
Cable	1500MM	N/A	RG	2024/6/17	2025/6/16

## Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ-EMC	Ver.EMC-CON 3A1.1+
2	EMC radiation test system	FALA	EZ-EMC	Ver.FA-03A2 RE+
3	RF test system	TACHOY	RFTest	V1.0.0
4	RF communication test system	TACHOY	RFTest	V1.0.0

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## 4. TEST SET-UP

4.1. Principle of Configuration Selection

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

4.2. Block Diagram of Test Set-up
System Diagram of Connections between EUT and Simulators

EUT

## 4.3. Test Environment:

Ambient conditions in the test laboratory:

Items	Actual
Temperature (°ℂ)	21~23
Humidity (%RH)	50~65

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## 5. EMISSION TEST RESULTS

5.1. Conducted RF Output Power

5.1.1. Limit

According to FCC section 2.1046(a), For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in § 2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

FCC part 24.232 (c), 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.

FCC part 22.913(a) (5), The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC part 27.50 (b) (10), Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

FCC part 27.50 (c) (10), Portable stations (hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC part 27.50 (d) (4), 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 1watt 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.

FCC part 27.50(h) (2), for BRS and EBS: 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 EUT, which is powered by the adapter, 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 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power.

5.1.3. Test Result

Here the lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT.

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The conducted power tables are as follows:

GSM 850		Burst Average Conducted power (dBm)		
		Channel/Frequency(MHz)		
		128/824.2	190/836.6	251/848.8
G	SM	32.62	32.54	32.87
	1TX slot	32.22	32.24	32.13
GPRS	2TX slot	31.26	30.38	30.63
(GMSK)	3TX slot	29.92	29.05	29.39
	4TX slot	28.27	28.97	27.12
		Burst Average Conducted power (dBm)		
GSM	l 1900	Channel/Frequency(MHz)		
		512/1850.2	661/1880.0	810/1909.8
G	GSM		29.82	29.67
	1TX slot	29.43	29.28	29.13
GPRS	2TX slot	27.54	27.22	27.20
(GMSK)	3TX slot	26.12	26.01	26.03
	4TX slot	25.06	25.83	25.88

GSM 850		Burst A	verage Conducted pow	er (dBm)
		Channel/Frequency(MHz)		
		128/824.2	190/836.6	251/848.8
	1TX slot	28.12	28.13	28.15
EGPRS	2TX slot	26.20	26.15	26.15
(8PSK)	3TX slot	23.76	23.80	23.80
	4TX slot	23.07	23.03	23.03
		Burst Average Conducted power (dBm)		
GSM	1900	Channel/Frequency(MHz)		
		512/1850.2	661/1880.0	810/1909.8
	1TX slot	27.21	27.22	27.21
EGPRS	2TX slot	25.10	25.13	25.09
((8PSK)	3TX slot	23.81	23.78	23.78
	4TX slot	23.04	23.05	23.06

	Band	FD	D Band II result (d	Bm)		
Item	Ballu	Test Channel				
	ARFCN	9262	9400	9538		
RMC	12.2kbps RMC	23.55	23.59	23.55		
	Sub – Test 1	22.94	22.97	22.98		
HSDPA	Sub – Test 2	22.90	22.82	22.87		
пэрра	Sub – Test 3	22.71	22.77	22.81		
	Sub – Test 4	22.76	22.83	22.84		
	Sub – Test 1	22.88	22.79	22.77		
	Sub – Test 2	22.80	22.87	22.86		
HSUPA	Sub – Test 3	22.73	22.73	22.82		
	Sub – Test 4	22.87	22.84	22.88		
	Sub – Test 5	22.72	22.81	22.77		

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	Dond	FD	D Band V result (d	Bm)		
Item	Band	Test Channel				
	ARFCN	4132	4183	4233		
RMC	12.2kbps RMC	23.42	23.47	23.41		
	Sub - Test 1	22.98	22.98	22.99		
LICDDA	Sub - Test 2	22.85	22.90	22.82		
HSDPA	Sub - Test 3	22.77	22.71	22.74		
	Sub - Test 4	22.76	22.75	22.77		
	Sub - Test 1	22.71	22.85	22.75		
	Sub - Test 2	22.81	22.85	22.88		
HSUPA	Sub - Test 3	22.81	22.80	22.78		
	Sub - Test 4	22.85	22.84	22.88		
	Sub - Test 5	22.74	22.77	22.70		

			LTE Band 7			
BW	Madulation	DD Cine	DD 0#44	Chann	el/Frequenc	y(MHz)
(MHz)	Modulation	RB Size	RB Offset	20850	21100	21350
				2510	2535	2560
20	QPSK	1	0	23.69	23.36	23.80
20	QPSK	1	49	23.47	23.41	23.67
20	QPSK	1	99	23.76	24.03	23.30
20	QPSK	50	0	22.11	22.44	22.44
20	QPSK	50	24	22.62	22.60	22.25
20	QPSK	50	50	22.36	22.50	22.18
20	QPSK	100	0	22.60	22.71	22.25
20	16QAM	1	0	22.34	22.19	22.32
20	16QAM	1	49	22.73	22.61	22.41
20	16QAM	1	99	22.37	22.62	22.24
20	16QAM	50	0	21.19	21.37	21.32
20	16QAM	50	24	21.79	21.55	21.60
20	16QAM	50	50	21.32	21.47	21.40
20	16QAM	100	0	21.43	21.65	21.43
BW	Modulation	RB Size	RB Offset		el/Frequenc	
(MHz)		1.2 6.26		20825 2507.5	21100 2535	21375 2562.5
15	QPSK	1	0	23.72	23.73	23.84
15	QPSK QPSK	1	37	23.72	23.73	23.45
15	QPSK	1		23.18	23.73	23.45
15	QPSK	36	0	22.26	22.17	22.25
15	QPSK	36	20	22.46	22.17	22.23
15	QPSK	36	39	22.53	22.26	22.36
15	QPSK	75	<u></u> 0	22.16	22.23	22.71
15	16QAM	1	0	22.10	22.23	22.65
15	16QAM	1	37	22.41	22.33	22.57
15	16QAM	1		22.16	22.28	22.36
	IOQAW		0	22.38	22.32	22.30
15	160 / 1/4	26		<b>∠1.40</b>	L Z 1.03	<sub>1</sub> ∠1./9
15	16QAM	36				24 50
15	16QAM	36	20	21.44	21.33	
						21.59 21.30 21.54

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BW			Channel/Frequenc				
(MHz)	Modulation	RB Size	RB Offset	20800	21100	21400	
, ,				2505	2535	2565	
10	QPSK	1	0	23.39	23.68	23.17	
10	QPSK	1	25	23.43	23.92	23.42	
10	QPSK	1	49	23.25	23.31	23.78	
10	QPSK	25	0	22.45	22.49	22.48	
10	QPSK	25	12	22.29	22.45	22.20	
10	QPSK	25	25	22.41	22.40	22.52	
10	QPSK	50	0	22.62	22.54	22.39	
10	16QAM	1	0	22.39	22.61	22.50	
10	16QAM	1	25	22.18	22.22	22.41	
10	16QAM	1	49	22.17	22.19	22.22	
10	16QAM	25	0	21.56	21.54	21.20	
10	16QAM	25	12	21.48	21.56	21.46	
10	16QAM	25	25	21.43	21.50	21.35	
10	16QAM	50	0	21.77	21.65	21.48	
				Channel/Frequency(MHz)			
BW	Modulation	DD Cina	DP Officet	Cha	nnel/Frequency(N	ИHz)	
BW (MHz)	Modulation	RB Size	RB Offset	Cha 20775	nnel/Frequency(N	ЛНz) 21425	
	Modulation	RB Size	RB Offset				
	<b>Modulation</b> QPSK	RB Size	RB Offset	20775	21100	21425	
(MHz)				20775 2502.5	21100 2535	21425 2567.5	
(MHz) 5	QPSK	1	0	<b>20775 2502.5</b> 23.61	21100 2535 23.48	<b>21425 2567.5</b> 23.08	
(MHz) 5 5	QPSK QPSK	1 1	0 12	20775 2502.5 23.61 23.82	21100 2535 23.48 23.68	21425 2567.5 23.08 23.77	
5 5 5 5 5	QPSK QPSK QPSK	1 1 1	0 12 24	20775 2502.5 23.61 23.82 23.51	21100 2535 23.48 23.68 23.95	21425 2567.5 23.08 23.77 23.59	
5 5 5 5 5 5	QPSK QPSK QPSK QPSK	1 1 1 1	0 12 24 0	20775 2502.5 23.61 23.82 23.51 22.36	21100 2535 23.48 23.68 23.95 22.06	21425 2567.5 23.08 23.77 23.59 22.21	
5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12	0 12 24 0 7	20775 2502.5 23.61 23.82 23.51 22.36 22.56	21100 2535 23.48 23.68 23.95 22.06 22.54	21425 2567.5 23.08 23.77 23.59 22.21 22.23	
5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12	0 12 24 0 7	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38	
(MHz)  5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25	0 12 24 0 7 13	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13 22.59	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61 22.33	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38 22.51 22.38 22.51	
5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25	0 12 24 0 7 13 0	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13 22.59 22.38	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61 22.33 22.65	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38 22.51 22.38	
(MHz)  5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25 1	0 12 24 0 7 13 0 0	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13 22.59 22.38 22.60	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61 22.33 22.65 22.44	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38 22.51 22.38 22.51	
(MHz)  5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25 1 1	0 12 24 0 7 13 0 0 12 24	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13 22.59 22.38 22.60 22.60	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61 22.33 22.65 22.44 22.35	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38 22.38 22.38 22.38 22.41	
(MHz)  5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25 1 1 1 1	0 12 24 0 7 13 0 0 12 24	20775 2502.5 23.61 23.82 23.51 22.36 22.56 22.13 22.59 22.38 22.60 22.60 21.64	21100 2535 23.48 23.68 23.95 22.06 22.54 22.61 22.33 22.65 22.44 22.35 21.71	21425 2567.5 23.08 23.77 23.59 22.21 22.23 22.38 22.51 22.38 22.26 22.41 21.74	

		,	L	TE Band 41				
BW	Modulation	RB Size	RB Offset		Chanr	nel/Frequenc	y(MHz)	
(MHz)	Wodulation	KD SIZE		39750	40185	40620	41055	41490
				2506	2549.5	2593	2636.5	2680
20	QPSK	1	0	23.57	23.53	23.66	23.67	23.66
20	QPSK	1	49	23.81	23.53	23.17	23.25	23.40
20	QPSK	1	99	23.90	23.72	23.83	23.38	23.35
20	QPSK	50	0	22.17	22.31	22.57	22.52	22.66
20	QPSK	50	24	22.17	22.50	22.50	22.23	22.06
20	QPSK	50	50	22.56	22.19	22.08	22.32	22.42
20	QPSK	100	0	22.59	22.42	22.14	22.31	22.44
20	16QAM	1	0	22.44	22.36	22.56	22.51	22.64
20	16QAM	1	49	22.31	22.33	22.46	22.38	22.41
20	16QAM	1	99	22.11	22.20	22.33	22.22	22.23
20	16QAM	50	0	21.57	21.55	21.44	21.38	21.36
20	16QAM	50	24	21.63	21.41	21.46	21.56	21.66
20	16QAM	50	50	21.55	21.46	21.41	21.28	21.49
20	16QAM	100	0	21.43	21.54	21.74	21.74	21.77

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BW	Modulation	DD Ci-a	RB	Channel/Frequency(MHz)				
(MHz)	Wodulation	RB Size	Offset	39725	40173	40620	41068	41515
				2503.5	2548.5	2593	2637.8	2682.5
15	QPSK	1	0	23.83	23.63	23.59	23.72	23.50
15	QPSK	1	37	23.19	23.50	23.68	23.29	23.22
15	QPSK	1	74	23.19	23.36	23.64	23.73	23.64
15	QPSK	36	0	22.31	22.33	22.53	22.29	22.44
15	QPSK	36	20	22.09	22.05	22.31	22.21	22.36
15	QPSK	36	39	22.14	22.03	22.29	22.23	22.34
15	QPSK	75	0	22.71	22.21	22.16	22.19	22.24
15	16QAM	1	0	22.37	22.20	22.13	22.16	22.28
15	16QAM	1	37	22.31	22.24	22.38	22.38	22.57
15	16QAM	1	74	22.48	22.06	22.30	22.04	22.42
15	16QAM	36	0	21.48	21.53	21.47	21.34	21.44
15	16QAM	36	20	21.21	21.26	21.64	21.40	21.60
15	16QAM	36	39	21.26	21.27	21.45	21.25	21.34
15	16QAM	75	0	21.34	21.34	21.70	21.69	21.73

BW					Chann	el/Frequenc	y(MHz)	
(MHz)	Modulation	RB Size	RB Offset	39700	40160	40620	41080	41540
` ,				2501	2547	2593	2639	2685
10	QPSK	1	0	23.64	23.40	23.43	23.24	23.34
10	QPSK	1	25	23.70	23.73	23.68	23.84	23.85
10	QPSK	1	49	23.38	23.50	23.73	23.68	23.87
10	QPSK	25	0	22.27	22.13	22.45	22.38	22.24
10	QPSK	25	12	22.43	22.44	22.65	22.45	22.55
10	QPSK	25	25	22.17	22.26	22.33	22.33	22.67
10	QPSK	50	0	22.35	22.31	22.40	22.38	22.49
10	16QAM	1	0	22.57	22.41	22.66	22.24	22.16
10	16QAM	1	25	22.20	22.19	22.54	22.51	22.43
10	16QAM	1	49	22.39	22.22	22.17	22.25	22.17
10	16QAM	25	0	21.65	21.61	21.63	21.56	21.50
10	16QAM	25	12	21.63	21.54	21.76	21.51	21.25
10	16QAM	25	25	21.52	21.48	21.29	21.27	21.56
10	16QAM	50	0	21.78	21.60	21.54	21.53	21.22
BW	Modulation	RB Size	RB Offset		Chann	el/Frequenc	y(MHz)	
(MHz)	Wiodulation	KB Size	KD Ollset	39675	40148	40620	41093	51565
				2498.5	2545.8	2593	2640.3	2687.5
5	QPSK	1	0	23.45	23.72	23.99	23.86	23.95
5	QPSK	1	12	23.80	23.56	23.74	23.46	23.13
5	QPSK	1	24	23.67	23.78	23.81	23.77	23.78
5	QPSK	12	0	22.31	22.03	22.23	22.19	22.45
5	QPSK	12	7	22.51	22.34	22.27	22.17	22.57
5	QPSK	12	13	22.06	22.33	22.53	22.45	22.46
5	QPSK	25	0	22.43	22.17	22.24	22.34	22.47
5	16QAM	1	0	22.42	22.36	22.21	22.44	22.45
5	16QAM	1	12	22.35	22.23	22.16	22.27	22.28
5	16QAM	1	24	22.07	22.14	22.46	22.15	22.11
5	16QAM	12	0	21.24	21.22	21.37	21.63	21.48
						04.50	24 52	21.36
5	16QAM	12	7	21.42	21.27	21.50	21.52	21.30
		12 12 25	7 13 0	21.42 21.35	21.27 21.33	21.50 21.37 21.52	21.32	21.36

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5.2. -26dB and 99% Occupied Bandwidth

5.2.1. Limit

According to FCC section 2.1049

5.2.2. Test Setup

The EUT, which is powered by the adapter, 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 500hm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power.

5.2.3. Test Result

Pass, the table and plot please see annex.

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## 5.3. Peak to Average Radio

## 5.3.1. Limit

According to FCC section 2.1046

## FCC Part 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 paragraph (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 13dB.

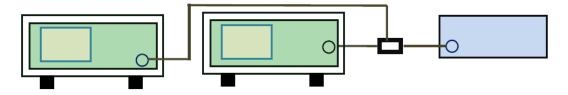
## FCC Part 22.913 (d)

Power measurement. Measurement of the ERP of Cellular base transmitters and repeaters must be made using an average power measurement technique. The peak-to-average ratio (PAR) of the transmission must not exceed 13dB.

## FCC Part 27.50 (d) (5)

Equipment employed must be authorized in accordance with the provisions of § 24.51. 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 paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

## 5.3.2. Test Setup



5.3.3. Test Procedure

## According with KDB 971168 v03r01

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW > Emission bandwidth of signal
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

## 5.3.4. Test Result

Pass, the table and plot please see annex.

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## 5.4. Frequency Stability

5.4.1. Limit

FCC section 24.235: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

FCC section 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.

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

Frequency range (MHz)	Base, fixed (ppm)	Mobile >3 watts (ppm)	Mobile ≤3 watts (ppm)	
25 to 50	20.0	20.0	50.0	
50 to 450	5.0	5.0	50.0	
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	

FCC section 27.54: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -40 $^{\circ}$ C to +80 $^{\circ}$ C at intervals of not more than 10 $^{\circ}$ C.
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. 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.

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## 5.4.2. Test Setup

# Spectrum analyzer EUT Att.

Variable Power Supply

Note: Measurement setup for testing on Antenna connector

The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber.

The EUT is commanded by the System Simulator (SS) to operate at the maximum output power

## 5.4.3. Test Result

The nominal, highest and lowest extreme voltages are separately 3.7VDC, 4.07VDC and 3.33VDC which are specified by the applicant; the normal temperature here used is  $25^{\circ}$ C. The frequency deviation limit of 850MHz band is  $\pm 2.5$ ppm, and 1900MHz is  $\pm 1$ ppm

For LTE mode, only test the max bandwidth.

Please see the attchment for the data.

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Report No.: NCT24035724E1-4

## 5.5. Conducted Spurious Emissions

## 5.5.1. Limit

According to FCC section 22.917(a), Out of band emissions. 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.

FCC section 24.238(a), Out of band emissions. 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. FCC section 27.53 (c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

## FCC section 27.53 (g)

For operations in the 600 MHz band and the 698–746 MHz 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 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC section 27.53 (h)

## AWS emission limits:

- (1) 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 log10 (P) dB.
- (2) 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 section 27.53 (m) (4)

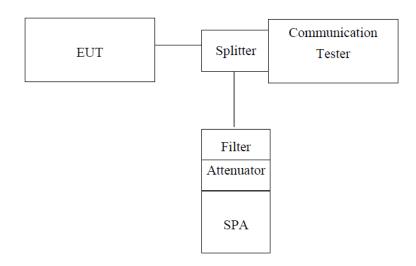
For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. 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

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conditions as adjacent channel BRS or EBS licensees.

## 5.5.2. Test Setup



Note: Measurement setup for testing on Antenna connector

## 5.5.3. Measurement Procedure

The testing according to FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.72, FCC Part 22.917, 24.238, 27.53

## 5.5.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

For LTE mode, the plot only show the min and max bandwidth's data.

Pass, the table and plot please see annex.

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Report No.: NCT24035724E1-4

## 5.6. Conducted Out of Band Emissions

5.6.1. Limit

According to FCC section 22.917(a), Out of band emissions. 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.

FCC section 24.238(a), Out of band emissions. 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. FCC section 27.53 (c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC section 27.53 (g)

For operations in the 600 MHz band and the 698–746 MHz 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 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC section 27.53 (h)

AWS emission limits:

- (1) 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 log10 (P) dB.
- (2) 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 section 27.53 (m) (4)

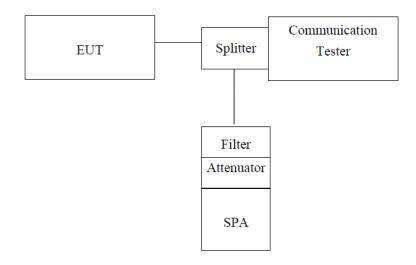
For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. 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

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conditions as adjacent channel BRS or EBS licensees.

## 5.6.2. Test Setup



Note: Measurement setup for testing on Antenna connector

## 5.6.3. Measurement Procedure

The testing according to FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.72, FCC Part 22.917, 24.238, 27.53

## 5.6.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

Pass, the table and plot please see annex.

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## 5.7. Transmitter Radiated Power (EIRP/ERP)

## 5.7.1. Limit

According to FCC section 2.1046(a), For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in § 2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

FCC part 24.232 (c), 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.

FCC part 22.913(a) (5), The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC part 27.50 (b) (10), Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

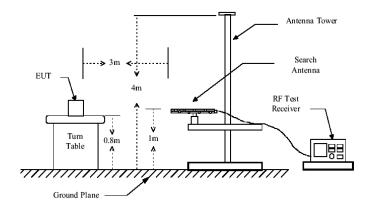
FCC part 27.50 (c) (10), Portable stations (hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC part 27.50 (d) (4), 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 1watt 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.

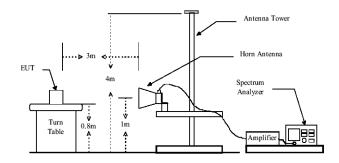
FCC part 27.50(h) (2), for BRS and EBS: Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

## 5.7.2. Test Setup

Below 1GHz



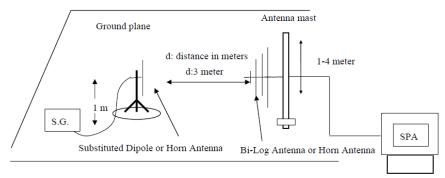
Above 1GHz



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## Substituted method:



## 5.7.3. Measurement Procedure

The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. all test in Full-Anechoic Chamber.

During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824.2 –848.80.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:

EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

ERP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)-2.15

EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)

5.7.4. Test Result

Pass, the table and plot please see annex.

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EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
	Lowest	V	15.34	19.33	2.52	30.00	20.45	Doos
		Н	15.20	19.33	2.52	29.86	38.45	Pass
GSM 850	Middle	V	15.16	19.50	2.60	29.91	20 45	Doos
GSM 850 (GMS)	ivildale	Н	15.29	19.50	2.60	30.04	38.45	Pass
(GIVIS)		V	15.34	19.94	2.71	30.42		
	Highest	Н	15.27	19.94	2.71	30.35	38.45	Pass
		Н	15.23	19.94	2.71	30.31		
EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
	Lowest	V	13.52	15.68	1.65	27.55	22.00	Doos
	Lowest	Н	13.12	15.68	1.65	27.15	33.00	Pass
D004000	Middle	V	13.32	15.7	1.67	27.35	33.00	Doos
PCS1900 (GMS)	Middle	Н	13.25	15.7	1.67	27.28	33.00	Pass
(GIVIO)	· · · · · · · · · · · · · · · · · · ·	V	13.02	15.7	1.71	27.01		
	Highest	Н	13.05	15.7	1.71	27.04	33.00	Pass
		Н	13.12	15.7	1.71	27.11		

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
		V	12.36	19.33	2.52	27.02	,	_
	Lowest	Н	12.18	19.33	2.52	26.84	38.45	Pass
GSM	Middle	V	12.01	19.5	2.6	26.76	38.45	Door
850(GPR	ivildale	Н	11.36	19.5	2.6	26.11	36.43	Pass
S)		V	10.36	19.94	2.71	25.44		
	Highest	Н	10.27	19.94	2.71	25.35	38.45	Pass
		Н	10.19	19.94	2.71	25.27		
EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
	Lowest	V	10.16	14.02	1.65	22.53	33.00	Pass
	Lowest	Н	10.01	14.02	1.65	22.38	33.00	Pass
DCC4000	Middle	V	10.21	14.23	1.67	22.77	33.00	Pass
PCS1900 (GPRS)	Middle	Н	10.01	14.23	1.67	22.57	33.00	Fa55
(5) (6)		V	10.12	14.31	1.71	22.72		
	Highest	Н	10.23	14.31	1.71	22.83	33.00	Pass
		Н	10.03	14.31	1.71	22.63		

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EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
	Lowest	V	12.33	13.33	2.52	20.99	20.45	Doos
	Lowest	Н	12.87	13.33	2.52	21.53	38.45	Pass
PCS 850 Middle	Middlo	V	12.02	14.5	2.6	21.77	38.45	Pass
(EGPR	Middle	Н	12.06	14.5	2.6	21.81	36.43	Pass
<b>S</b> )	V	11.23	13.91	2.71	20.28			
	Highest	Н	11.36	13.91	2.71	20.41	38.45	Pass
		Н	11.38	13.91	2.71	20.43		
EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
	Lowest	V	11.01	12.68	1.65	22.04	33.00	Doos
	Lowest	Н	11.23	12.68	1.65	22.26	33.00	Pass
GSM190	Middle	V	11.27	12.56	1.67	22.16	33.00	Pass
0(EGPRS	Middle	Н	11.03	12.56	1.67	21.92	33.00	Fa55
)		V	10.11	13.01	1.71	21.41		
	Highest	Н	10.02	13.01	1.71	21.32	33.00	Pass
		Н	10.06	13.01	1.71	21.36		

EUT	Channel	Antenna	S.G. output	Antenna	Cable	EIRP	Limit	Result
mode	Channel	Pol.	(dBm)	Gain (dBi)	Loss (dB)	(dBm)	(dBm)	Result
	Lowest	V	4.19	19.33	1.65	21.87	33.00	Doos
	Lowest	Н	4.35	19.33	1.65	22.03		Pass
WCDMA	WCDMA	V	4.55	19.50	1.67	22.38	22.00	Davis
Band 2 Middle	Н	4.38	19.50	1.67	22.21	33.00	Pass	
	Himboot	V	4.16	19.94	1.71	22.39	22.00	
	Highest	Н	4.09	19.94	1.71	22.32	33.00	Pass

EUT	Channel	Antenna	S.G. output	Antenna	Cable	ERP	Limit	Result
mode	Chamilei	Pol.	(dBm)	Gain (dBi)	Loss (dB)	(dBm)	(dBm)	Result
	Lowest	V	8.74	15.68	2.52	19.75	20 45	Doos
	Lowest	Н	9.79	15.68	2.52	20.80	38.45	Pass
WCDMA	Middle	V	9.36	15.70	2.60	20.31	20.45	Door
Band 5	Middle	Н	9.25	15.70	2.60	20.20	38.45	Pass
	Highest	V	9.09	15.70	2.71	19.93	20.45	D
		Н	8.90	15.70	2.71	19.74	38.45	Pass

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EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
	Lawaat	V	4.87	19.33	1.65	22.55	22.00	Door
	Lowest	Н	4.68	19.33	1.65	22.36	33.00	Pass
HSDPA	Middle	V	4.78	19.5	1.67	22.61	22.00	Daga
Band 2	Middle	Н	4.96	19.5	1.67	22.79	33.00	Pass
	Lighaat	V	4.78	19.94	1.71	23.01	22.00	Door
	Highest	Н	4.23	19.94	1.71	22.46	33.00	Pass

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
111040		V	8.96	15.68	2.52	19.97		_
	Lowest	Н	9.23	15.68	2.52	20.24	38.45	Pass
HSDPA	Middle	V	9.69	15.7	2.6	20.64	20.45	Door
Band 5	Middle	Н	9.78	15.7	2.6	20.73	38.45	Pass
	Highest	V	9.63	15.7	2.71	20.47	20.45	Door
	nignest	Н	9.03	15.7	2.71	19.87	38.45	Pass

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
	Lowest	V	4.66	19.33	1.65	22.34	22.00	Doos
	Lowest	Н	4.58	19.33	1.65	22.26	33.00	Pass
HSUPA	Middle	V	4.36	19.5	1.67	22.19	22.00	Dage
Band 2	Middle	Н	4.78	19.5	1.67	22.61	33.00	Pass
	Highoot	V	4.29	19.94	1.71	22.52	22.00	Doos
	Highest	Н	4.62	19.94	1.71	22.85	33.00	Pass

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
	Lowest	V	8.78	15.68	2.52	19.79	20 45	Doos
	Lowest	Н	9.33	15.68	2.52	20.34	38.45	Pass
HSUPA	Middle	V	9.58	15.7	2.6	20.53	20.45	Desc
Band 5	Middle	Н	9.69	15.7	2.6	20.64	38.45	Pass
	Lighoot	V	9.58	15.7	2.71	20.42	20 45	Doos
	Highest	Н	9.06	15.7	2.71	19.9	38.45	Pass

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EUT	01	Antenna	S.G. output	Antenna	Cable	EIRP	Limit	D
mode	Channel	Pol.	(dBm)	Gain (dBi)	Loss (dB)	(dBm)	(dBm)	Result
		V	5.52	16.35	2.54	19.33	,	_
LTE	Lowest	Н	5.60	16.35	2.54	19.41	33.00	Pass
BAND 7		V	6.46	16.51	2.62	20.35		_
5MHz	Middle	Н	5.28	16.51	2.62	19.17	33.00	Pass
QPSK		V	5.72	16.96	2.69	19.99		_
	Highest	Н	5.68	16.96	2.69	19.95	33.00	Pass
		V	5.39	16.35	2.54	19.20		_
LTE	Lowest	Н	5.50	16.35	2.54	19.31	33.00	Pass
BAND 7		V	5.31	16.51	2.62	19.20	22.22	_
10MHz	Middle	Н	5.17	16.51	2.62	19.06	33.00	Pass
QPSK		V	5.60	16.96	2.69	19.87	22.22	_
	Highest	Н	5.59	16.96	2.69	19.86	33.00	Pass
		V	5.50	16.35	2.54	19.31	22.22	_
LTE	Lowest	Н	5.59	16.35	2.54	19.40	33.00	Pass
BAND 7	NAC - U	V	5.43	16.51	2.62	19.32	00.00	D.
15MHz	Middle	Н	5.27	16.51	2.62	19.16	33.00	Pass
QPSK		V	5.70	16.96	2.69	19.97	22.22	_
	Highest	Н	5.67	16.96	2.69	19.94	33.00	Pass
		V	5.52	16.35	2.54	19.33	00.00	_
LTE	Lowest	Н	5.60	16.35	2.54	19.41	33.00	Pass
BAND 7		V	5.45	16.51	2.62	19.34	22.22	_
20MHz	Middle	Н	5.34	16.51	2.62	19.23	33.00	Pass
QPSK		V	5.73	16.96	2.69	20.00	00.00	_
	Highest	Н	5.67	16.96	2.69	19.94	33.00	Pass
		V	5.34	16.35	2.54	19.15	00.00	_
LTE	Lowest	Н	5.44	16.35	2.54	19.25	33.00	Pass
BAND 7		V	5.26	16.51	2.62	19.15	00.00	_
5MHz	Middle	Н	5.12	16.51	2.62	19.01	33.00	Pass
16QAM		V	5.54	16.96	2.69	19.81	22.22	_
	Highest	Н	5.78	16.96	2.69	20.05	33.00	Pass
		V	5.45	16.35	2.54	19.26	00.00	_
LTE	Lowest	Н	5.54	16.35	2.54	19.35	33.00	Pass
BAND 7	N 41 1 11	V	5.37	16.51	2.62	19.26	00.00	_
10MHz	Middle	Н	5.23	16.51	2.62	19.12	33.00	Pass
16QAM		V	5.65	16.96	2.69	19.92	00.00	_
	Highest	Н	5.62	16.96	2.69	19.89	33.00	Pass
		V	5.35	16.35	2.54	19.16	22.22	_
LTE	Lowest	Н	5.45	16.35	2.54	19.26	33.00	Pass
BAND 7		V	5.27	16.51	2.62	19.16		_
15MHz	Middle	Н	5.13	16.51	2.62	19.02	33.00	Pass
16QAM		V	5.55	16.96	2.69	19.82		_
	Highest	Н	5.54	16.96	2.69	19.81	33.00	Pass
	_	V	5.45	16.35	2.54	19.26		_
LTE	Lowest	H	5.54	16.35	2.54	19.35	33.00	Pass
BAND 7		V	5.37	16.51	2.62	19.26		_
20MHz	Middle	H	5.23	16.51	2.62	19.12	33.00	Pass
16QAM	Highest	V	5.67	16.96	2.69	19.94	33.00	Pass

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		Н	5.62	16.96	2.69	19.89		
EUT		Antenna	S.G. output	Antenna	Cable	EIRP	Limit	
mode	Channel	Pol.	(dBm)	Gain (dBi)	Loss (dB)	(dBm)	(dBm)	Result
		V	5.46	16.35	2.54	19.27	,	
LTE	Lowest	Н	5.54	16.35	2.54	19.35	30.00	Pass
BAND 41		V	6.39	16.51	2.62	20.28		
5MHz	Middle	H	5.22	16.51	2.62	19.11	30.00	Pass
QPSK		V	5.66	16.96	2.69	19.93		
	Highest	H	5.62	16.96	2.69	19.89	30.00	Pass
		V	5.33	16.35	2.54	19.14		
LTE	Lowest	Н	5.44	16.35	2.54	19.25	30.00	Pass
BAND 41		V	5.25	16.51	2.62	19.14		
10MHz	Middle	Н	5.11	16.51	2.62	19.00	30.00	Pass
QPSK		V	5.54	16.96	2.69	19.81		
	Highest	H	5.53	16.96	2.69	19.80	30.00	Pass
		V	5.28	16.35	2.54	19.00		
LTE	Lowest	H	5.38	16.35	2.54	19.09	— 30 00	Pass
BAND 41		V	5.20	16.51	2.62	19.19		
15MHz	Middle	H	5.20	16.51	2.62	18.95	30.00	Pass
QPSK		V	5.48	16.96	2.69	19.75		
QFSK	Highest	H		16.96	2.69	19.75	30.00	Pass
		V	5.71		2.54			
LTE	Lowest	H	5.31	16.35	2.54	19.12	30.00	Pass
BAND 41		V	5.40	16.35		19.21		
20MHz	Middle		5.23	16.51	2.62	19.12	30.00	Pass
QPSK		Н	5.09	16.51	2.62	18.98		
Q. 3.1	Highest	V	5.51	16.96	2.69	19.78	30.00	Pass
		Н	5.48	16.96	2.69	19.75	30.00	
LTE	Lowest	V	5.52	16.35	2.54	19.33	30.00	Pass
BAND 41		Н	5.60	16.35	2.54	19.41	30.00	
5MHz	Middle	V	6.46	16.51	2.62	20.35		Pass
16QAM		Н	5.28	16.51	2.62	19.17		
	Highest	V	5.72	16.96	2.69	19.99	30.00	Pass
	- Ingrioot	Н	5.68	16.96	2.69	19.95	00.00	1 400
LTE	Lowest	V	5.39	16.35	2.54	19.20	30.00	Pass
BAND 41	Lowest	Н	5.50	16.35	2.54	19.31	30.00	1 433
10MHz	Middle	V	5.31	16.51	2.62	19.20	30.00	Pass
16QAM	Middle	Н	5.17	16.51	2.62	19.06	30.00	1 433
IOQAINI	Highest	V	5.60	16.96	2.69	19.87	30.00	Pass
	riignest	Н	5.59	16.96	2.69	19.86	50.00	1 033
	Lowest	V	5.34	16.35	2.54	19.15	30.00	Pass
LTE	LUWESI	Н	5.44	16.35	2.54	19.25	30.00	F d 5 5
BAND 41	Middla	V	5.26	16.51	2.62	19.15	20.00	Desa
15MHz	Middle	Н	5.12	16.51	2.62	19.01	30.00	Pass
16QAM	Lliada a =4	V	5.54	16.96	2.69	19.81	20.00	Dass
	Highest	Н	5.77	16.96	2.69	20.04	30.00	Pass
	1 1	V	5.45	16.35	2.54	19.26	20.00	D
LTE	Lowest	Н	5.54	16.35	2.54	19.35	30.00	Pass
BAND 41	B #1 1 11	V	5.37	16.51	2.62	19.26	00.55	_
20MHz	Middle	Н	5.23	16.51	2.62	19.12		) Pass
16QAM		V	5.65	16.96	2.69	19.92	2 34 77	_
	Highest	Н	5.62	16.96	2.69	19.89		Pass

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## 5.8. Radiated Out of Band Emissions

5.8.1. Limit

According to FCC section 22.917(a), Out of band emissions. 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.

FCC section 24.238(a), Out of band emissions. 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. FCC section 27.53 (c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
- (3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC section 27.53 (g)

For operations in the 600 MHz band and the 698–746 MHz 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 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC section 27.53 (h)

AWS emission limits:

- (1) 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 log10 (P) dB.
- (2) 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 section 27.53 (m) (4)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. 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

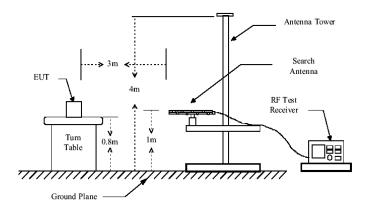
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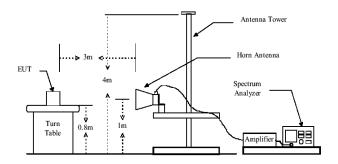
complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

5.8.2. Test Setup

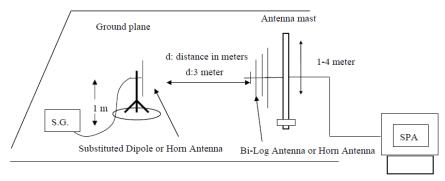
## Below 1GHz



## Above 1GHz



## Substituted method:



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## 5.8.3. Measurement Procedure

The EUT was placed on a non-conductive, The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. all test in Full-Anechoic Chamber.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

EIRP (Level)= S.G. output (dBm) + Antenna Gain(dBi) - Cable Loss (dB)

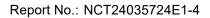
Note: Measurement Uncertainty: ±3.6 dB.

The data show only the worst results, and the other results are very low and not shown in the report.

## 5.8.4. Test Result

	Frequency		Spur	ious Emission			Limit	
Band	(MHz)	Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)	(dBm)	Result
	87.53	Vertical	-75.62	3.35	0.38	-72.65		
	1648.40	Vertical	-46.29	7.76	3.75	-42.28		
GSM850	2472.60	Vertical	-47.40	9.84	4.94	-42.50	-13	PASS
Lowest	3296.80	Vertical	-39.82	10.21	5.32	-34.93	-13	FAGG
	4121.00	Vertical	-43.20	11.36	6.02	-37.86		
	4945.20	Vertical	-44.74	14.52	6.68	-36.90		
	88.46	Vertical	-75.62	3.35	0.38	-72.65		
	1673.20	Vertical	-47.61	7.76	3.75	-43.60		PASS
GSM850	2509.80	Vertical	-47.20	9.84	4.94	-42.30	-13	
Middle	3346.40	Vertical	-42.81	10.21	5.32	-37.92		
	4183.00	Vertical	-42.22	11.36	6.02	-36.88		
	5019.60	Vertical	-46.19	14.52	6.68	-38.35		
	88.65	Vertical	-75.58	3.35	0.38	-72.61		
	1697.60	Vertical	-47.20	7.79	3.53	-42.94		
GSM850	2546.40	Vertical	-41.66	9.88	5.02	-36.80	12	DACC
Highest	3395.20	Vertical	-37.85	10.25	5.54	-33.14	-13	PASS
	4244.00	Vertical	-44.71	11.38	6.16	-39.49		
	5092.80	Vertical	-47.15	14.56	6.72	-39.31		

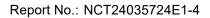
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	F		Spur	ious Emission			1.5	
Band	Frequency (MHz)	Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)	Limit (dBm)	Result
	87.54	Vertical	-75.19	3.35	0.38	-72.22		
	3700.40	Vertical	-46.02	7.76	3.75	-42.01		
GSM190	5550.60	Vertical	-47.13	9.84	4.94	-42.23	-13	PASS
0 Lowest	7400.80	Vertical	-39.59	10.21	5.32	-34.70	-13	PASS
	9251.00	Vertical	-42.96	11.36	6.02	-37.62		
	11101.20	Vertical	-44.49	14.52	6.68	-36.65		
	88.70	Vertical	-75.19	3.35	0.38	-72.22		
	3760.00	Vertical	-47.34	7.76	3.75	-43.33		
GSM190	5640.00	Vertical	-46.94	9.84	4.94	-42.04	-13	PASS
0 Middle	7520.00	Vertical	-42.57	10.21	5.32	-37.68		PASS
	9400.00	Vertical	-41.98	11.36	6.02	-36.64		
	11280.00	Vertical	-45.92	14.52	6.68	-38.08		
	88.76	Vertical	-75.15	3.35	0.38	-72.18		
	3819.60	Vertical	-46.94	7.79	3.53	-42.68		
GSM190	5729.40	Vertical	-41.41	9.88	5.02	-36.55	12	DACC
0 Highest	7639.20	Vertical	-37.62	10.25	5.54	-32.91	-13	PASS
	9549.00	Vertical	-44.46	11.38	6.16	-39.24		
	11458.80	Vertical	-46.89	14.56	6.72	-39.05		

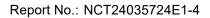
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	F		Spur	ious Emission			1.5	
Band	Frequency (MHz)	Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)	Limit (dBm)	Result
	87.15	Vertical	-74.74	3.35	0.38	-71.77		
	3704.80	Vertical	-45.74	7.76	3.75	-41.73		
WCDMA BAND 2	5557.20	Vertical	-46.85	9.84	4.94	-41.95	-13	PASS
Lowest	7409.60	Vertical	-39.35	10.21	5.32	-34.46	-13	PASS
	9262.00	Vertical	-42.71	11.36	6.02	-37.37		
	11114.40	Vertical	-44.23	14.52	6.68	-36.39		
	88.27	Vertical	-74.74	3.35	0.38	-71.77		
	3760.00	Vertical	-47.06	7.76	3.75	-43.05		
WCDMA BAND 2	5640.00	Vertical	-46.66	9.84	4.94	-41.76	-13	PASS
Middle	7520.00	Vertical	-42.32	10.21	5.32	-37.43		PASS
	9400.00	Vertical	-41.73	11.36	6.02	-36.39		
	11280.00	Vertical	-45.64	14.52	6.68	-37.80		
	88.21	Vertical	-74.70	3.35	0.38	-71.73		
	3815.20	Vertical	-46.66	7.79	3.53	-42.40		
WCDMA BAND 2	5722.80	Vertical	-41.17	9.88	5.02	-36.31	12	PASS
Highest	7630.40	Vertical	-37.40	10.25	5.54	-32.69	-13 -	rass
	9538.00	Vertical	-44.20	11.38	6.16	-38.98		
	11445.60	Vertical	-46.60	14.56	6.72	-38.76		

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	F		Spur	ious Emission			1.5	
Band	Frequency (MHz)	Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)	Limit (dBm)	Result
	87.15	Vertical	-74.83	3.35	0.38	-71.86		
	1652.80	Vertical	-45.79	7.76	3.75	-41.78		
WCDMA BAND 5	2479.20	Vertical	-46.90	9.84	4.94	-42.00	-13	PASS
Lowest	3305.60	Vertical	-39.39	10.21	5.32	-34.50	-13	PASS
	4132.00	Vertical	-42.75	11.36	6.02	-37.41		
	4958.40	Vertical	-44.28	14.52	6.68	-36.44		
	88.27	Vertical	-74.83	3.35	0.38	-71.86		
	1673.20	Vertical	-47.11	7.76	3.75	-43.10		
WCDMA BAND 5	2509.80	Vertical	-46.71	9.84	4.94	-41.81	-13	PASS
Middle	3346.40	Vertical	-42.37	10.21	5.32	-37.48		PASS
	4183.00	Vertical	-41.78	11.36	6.02	-36.44		
	5019.60	Vertical	-45.69	14.52	6.68	-37.85		
	88.21	Vertical	-74.79	3.35	0.38	-71.82		
	1693.20	Vertical	-46.71	7.79	3.53	-42.45		
WCDMA BAND 5	2539.80	Vertical	-41.21	9.88	5.02	-36.35	12	PASS
Highest	3386.40	Vertical	-37.44	10.25	5.54	-32.73	-13	FASS
	4233.00	Vertical	-44.25	11.38	6.16	-39.03		
	5079.60	Vertical	-46.65	14.56	6.72	-38.81		

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	Fraguenav		Spur	ious Emission			Limit	
Band	Frequency (MHz)	Polarization	S.G. output	Antenna	Cable	Level	(dBm)	Result
	(1411 12)	1 Glarization	(dBm)	Gain (dBi)	Loss (dB)	(dBm)	(dDiii)	
	87.12	Vertical	-74.32	3.35	0.38	-71.35		
LTE	5015.00	Vertical	-45.49	7.76	3.75	-41.48		
BAND 7	7522.50	Vertical	-46.58	9.84	4.94	-41.68	-25	PASS
15MHz	10030.00	Vertical	-39.14	10.21	5.32	-34.25	-25	1 700
Lowest	12537.50	Vertical	-42.46	11.36	6.02	-37.12		
	15045.00	Vertical	-43.98	14.52	6.68	-36.14		
	88.87	Vertical	-74.32	3.35	0.38	-71.35		
LTE	5070.00	Vertical	-46.79	7.76	3.75	-42.78		
BAND 7	7605.00	Vertical	-46.39	9.84	4.94	-41.49	-25	PASS
15MHz	10140.00	Vertical	-42.08	10.21	5.32	-37.19		PASS
Middle	12675.00	Vertical	-41.50	11.36	6.02	-36.16		
	15210.00	Vertical	-45.39	14.52	6.68	-37.55		
	88.29	Vertical	-74.28	3.35	0.38	-71.31		
LTE	5125.00	Vertical	-46.39	7.79	3.53	-42.13		
BAND 7 15MHz	7687.50	Vertical	-40.94	9.88	5.02	-36.08	0.5	DACC
	10250.00	Vertical	-37.20	10.25	5.54	-32.49	-25	PASS
Highest	ghest 12812.50 Vertica	Vertical	-43.95	11.38	6.16	-38.73		
	15375.00	Vertical	-46.34	14.56	6.72	-38.50		
	87.81	Vertical	-74.29	3.35	0.38	-71.32		
LTE	5020.00	Vertical	-45.47	7.76	3.75	-41.46		
BAND 7	7530.00	Vertical	-46.56	9.84	4.94	-41.66	0.5	D400
20MHz	10040.00	Vertical	-39.12	10.21	5.32	-34.23	-25	PASS
Lowest	12550.00	Vertical	-42.45	11.36	6.02	-37.11		
	15060.00	Vertical	-43.96	14.52	6.68	-36.12		
	88.56	Vertical	-74.49	3.35	0.38	-71.52		
LTE	5070.00	Vertical	-46.89	7.76	3.75	-42.88		
BAND 7	7605.00	Vertical	-46.49	9.84	4.94	-41.59	0.5	D.4.00
20MHz	10140.00	Vertical	-42.18	10.21	5.32	-37.29	-25	PASS
Middle	12675.00	Vertical	-41.60	11.36	6.02	-36.26	3	
	15210.00	Vertical	-45.49	14.52	6.68	-37.65		
	88.22	Vertical	-74.45	3.35	0.38	-71.48		
LTE	5120.00	Vertical	-46.49	7.79	3.53	-42.23	1	
BAND 7	7680.00	Vertical	-41.04	9.88	5.02	-36.18		
20MHz	10240.00	Vertical	-37.27	10.25	5.54	-32.56	-25	PASS
Highest	12800.00	Vertical	-44.05	11.38	6.16	-38.83		
	15360.00	Vertical	-46.44	14.56	6.72	-38.60	1	

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Band	Frequency (MHz)	Spurious Emission						
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)	Limit (dBm)	Result
LTE BAND 41 15MHz Lowest	87.18	Vertical	-74.35	3.35	0.38	-71.38	-25	PASS
	5120.00	Vertical	-45.50	7.76	3.75	-41.49		
	7680.00	Vertical	-46.60	9.84	4.94	-41.70		
	10240.00	Vertical	-39.15	10.21	5.32	-34.26		
	12800.00	Vertical	-42.48	11.36	6.02	-37.14		
	15360.00	Vertical	-43.99	14.52	6.68	-36.15		
LTE BAND 41 15MHz Middle	88.32	Vertical	-74.35	3.35	0.38	-71.38	-25	PASS
	5210.00	Vertical	-46.82	7.76	3.75	-42.81		
	7815.00	Vertical	-46.41	9.84	4.94	-41.51		
	10420.00	Vertical	-42.10	10.21	5.32	-37.21		
	13025.00	Vertical	-41.51	11.36	6.02	-36.17		
	15630.00	Vertical	-45.39	14.52	6.68	-37.55		
LTE BAND 41 15MHz Highest	88.11	Vertical	-74.31	3.35	0.38	-71.34	-25	PASS
	5300.00	Vertical	-46.41	7.79	3.53	-42.15		
	7950.00	Vertical	-40.95	9.88	5.02	-36.09		
	10600.00	Vertical	-37.20	10.25	5.54	-32.49		
	13250.00	Vertical	-43.96	11.38	6.16	-38.74		
	15900.00	Vertical	-46.36	14.56	6.72	-38.52		
LTE BAND 41 20MHz Lowest	87.32	Vertical	-74.37	3.35	0.38	-71.40	25	PASS
	5120.00	Vertical	-45.52	7.76	3.75	-41.51		
	7680.00	Vertical	-46.62	9.84	4.94	-41.72		
	10240.00	Vertical	-39.16	10.21	5.32	-34.27		
	12800.00	Vertical	-42.49	11.36	6.02	-37.15		
	15360.00	Vertical	-44.00	14.52	6.68	-36.16		
LTE BAND 41 20MHz Middle	88.21	Vertical	-74.39	3.35	0.38	-71.42	-25	PASS
	5210.00	Vertical	-46.84	7.76	3.75	-42.83		
	7815.00	Vertical	-46.45	9.84	4.94	-41.55		
	10420.00	Vertical	-42.12	10.21	5.32	-37.23		
	13025.00	Vertical	-41.54	11.36	6.02	-36.20		
	15630.00	Vertical	-45.43	14.52	6.68	-37.59		
LTE BAND 41 20MHz Highest	88.76	Vertical	-74.36	3.35	0.38	-71.39	-25	PASS
	5300.00	Vertical	-46.45	7.79	3.53	-42.19		
	7950.00	Vertical	-40.97	9.88	5.02	-36.11		
	10600.00	Vertical	-37.22	10.25	5.54	-32.51		
	13250.00	Vertical	-43.98	11.38	6.16	-38.76		
	15900.00	Vertical	-46.40	14.56	6.72	-38.56		

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## 6. PHOTOGRAPHS OF TEST SET-UP

Reference to the appendix I for details.

## 7. PHOTOGRAPHS OF THE EUT

Reference to the appendix II for details.

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

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