

TEST REPORT

Report No.: BCTC2307096488-6E

Applicant: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY

CO.,LTD

Product Name: Smart Phone

Model/Type

reference:

C36

Tested Date: 2023-07-20 to 2023-07-31

Issued Date: 2023-08-01

Shenzhen BCTC Testing Co., Ltd.



No.: BCTC/RF-EMC-007 Page: 1 of 39 / / / / / Edition Bit



FCC ID: 2ANMU-C36SPUT

Product Name: Smart Phone

Trademark: OUKITEL

Model/Type reference: C36

Address:

C36 S, C36 Pro, C36 Ultra

Prepared For: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD

Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,

GUANLAN, LONGHUA SHENZHEN, 518XXX China

Manufacturer: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD

Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,

GUANLAN, LONGHUA SHENZHEN, 518XXX China

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road,

Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2023-07-20

Sample tested Date: 2023-07-20 to 2023-07-31

Issue Date: 2023-08-01

Report No.: BCTC2307096488-6E

FCC CFR Title 47 Part 2

Test Standards: FCC CFR Title 47 Part 22 FCC CFR Title 47 Part 24

FCC CFR Title 47 Part 27

Test Results: PASS

Remark: This is radio test report for 4G in US full bands.

Tested by:

Brave 2emg

Brave Zeng/ Project Handler

Approved by:

10

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

No.: BCTC/RF-EMC-007 Page: 2 of 39 / / / / / Edition: B.0





Table Of Content

Test	Report Declaration	Page
1.	Version	5
2.	Test Summary	6
3.	Measurement Uncertainty	7
4.	Product Information And Test Setup	8
4.1	Product Information	
4.2	Test Setup Configuration	9
4.2	Emission Designator	9
4.3	Description Operation Frequency	12
4.4	Test Mode	14
4.5	Support Equipment	17
4.6	Measurement Results Explanation Example	17
5.	Test Facility And Test Instrument Used	18
5.1	Test Facility	18
5.2	Test Instrument Used	18
6.	RF Output Power	19
6.1	Block Diagram Of Test Setup	19
6.2	Limit	21
6.3	Test procedure	21
6.4	Test Result	22
7.	Peak-To-Average Ratio(PAR) Of Transmitter	
7.1	Block Diagram Of Test Setup	28
7.2	Limit	28
7.3	Test procedure	
7.4	Test Result	
8.	Emission Bandwidth	
8.1	Block Diagram Of Test Setup	
8.2	Standard Applicable	
8.3	Test procedure	and the second of the second of
8.4	Test Result	and the second second
9.	Out of Band Emissions at Antenna Terminal	30
9.1	Block Diagram Of Test Setup	30
9.2	Block Diagram Of Test Setup. Limit Test procedure Test Result	30
9.3	Test procedure	30
9.4	Test Result	30
	Spurious Radiated Emissions	31
10.1	Block Diagram Of Test Setup	31
10.2	Limit	32
10.3	Test procedure Test Result	32
10.4	Test Result	33
11.	Frequency Stability	
11.1	Block Diagram Of Test Setup	36

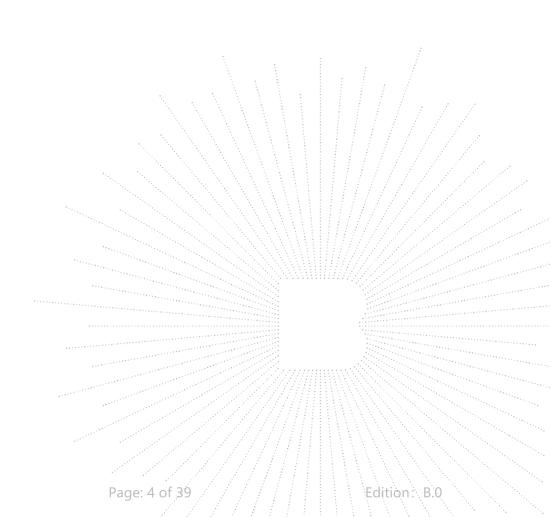


No.: BCTC/RF-EMC-007

Report No.:BCTC2307096488-6E

11.2	Limit	36
11.3	Test procedure	36
	Test Result	
12.	EUT Photographs	37
	EUT Test Setup Photographs	

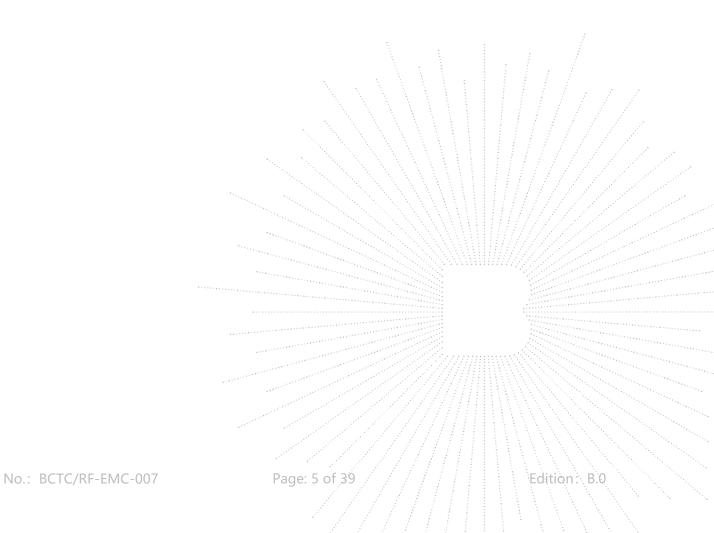
(Note: N/A Means Not Applicable)





1. Version

Report No.	Issue Date	Description	Approved
BCTC2307096488-6E	2023-08-01	Original	Valid





2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No	Results
1	RF Exposure	§1.1307,§2.1093	PASS
2	RF Output Power	§2.1046; §22.913; §24.232(c); §27.50(d); §27.50(c); §27.50(b);	PASS
3	3 Peak-to-average Ratio(PAR) of Transmitter \$2.1046 \$27.50(c)		PASS
4	Emission Bandwidth	§2.1049; §24.238(b);§27.53;	PASS
5	Spurious Emissions at Antenna Terminal	§22.917 (a), §24.238 (a), §27.53(g),§27.53(h)	PASS
6	Spurious Radiation Emissions	§2.1051; §22.917(a); §27.53(h); §27.53(g); §27.53(c); §24.238(a);	PASS
7	Out of Band Emissions	§2.1051; §22.917(a); §27.53(h); §27.53(c); §27.53(g); §24.238(a);	PASS
8	Frequency Stability	§2.1055;§22.355; §27.54; §24.235;	PASS

No.: BCTC/RF-EMC-007 Page: 6 of 39 / / / / Edition B.



3. Measurement Uncertainty

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

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(9KHz-30MHz)	U=3.7dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission (150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59℃

No.: BCTC/RF-EMC-007 Page: 7 of 39 / / / / Edition B.



4. Product Information And Test Setup

4.1 Product Information

Model/Type reference: C36

C36 S, C36 Pro, C36 Ultra

Model differences: All the model are the same circuit and RF module, except model names.

Hardware Version: FS311-MB-V0.1A

Software Version: OUKITEL C36 EEA V01

LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz

Tx Frequency: LTE Band 7: 2500MHz-2570MHz

LTE Band 12: 699 MHz ~ 716 MHz LTE Band 17: 704MHz-716MHz LTE Band 2: 1930 MHz ~ 1990 MHz LTE Band 4: 2110 MHz ~ 2155 MHz LTE Band 5: 869 MHz ~ 894 MHz

Rx Frequency: LTE Band 3: 609 MHz ~ 694 MHz

LTE Band 7: 2620MHz-2690MHz

LTE Band 12: 729 MHz ~ 746 MHz

LTE Band 17: 734MHz-746MHz

LTE Band 2: 1.4 MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4 MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz

Bandwidth: LTE Band 5: 1.4MHz /3MHz /5MHz /10MHz LTE Band 7: 5MHz /10MHz /20MHz

LTE Band 12: 1.4MHz /3MHz /5MHz /10MHz

LTE Band 17: 5MHz /10MHz LTE Band 2: 23.69 dBm LTE Band 4: 23.97 dBm

Maximum Output Power to

Antenna:

LTE Band 5: 23.44 dBm LTE Band 7: 23.27 dBm LTE Band 12: 21.46 dBm LTE Band 17: 21.45 dBm LTE Band 2: 18M1G7D LTE Band 4: 18M1W7D

LTE Band 5: 9M01W7D

99% Occupied Bandwidth: LTE Band 7: 18M1W7D

LTE Band 12: 9M03W7D LTE Band 17: 8M97G7D

Type of Modulation: QPSK/16QAM

Antenna Type: Internal Antenna

LTE Band 2: 0.11 dBi LTE Band 4: 0.15 dBi LTE Band 5: -0.20 dBi

Antenna Gain: LTE Band 5: -0.20 dBi LTE Band 7: 0.26 dBi LTE Band 12: -0.22 dBi

LTE Band 17: -0.28 dBi
Connecting I/O Port(s): Please refer to the User's Manual

Ratings: DC 5V from adapter/DC 3.87V from battery

Model: HJ-0502000N2-US

Adapter Information: Input: 100-240V~50/60Hz 0.3A

Output: 5.0V ___ 2.0A

No.: BCTC/RF-EMC-007 Page: 8 of 39 / / / / / | | | | | | | | | | |

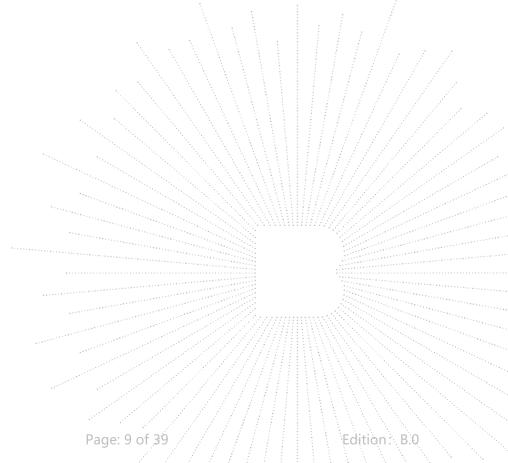


4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

4.2 Emission Designator

LTE Band 2	12 QPSK		16QAM	
BW(MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
1.4	1M10G7D	0.211	1M10W7D	0.234
3	2M72G7D	0.207	2M72W7D	0.229
5	4M52G7D	0.207	4M53W7D	0.211
10	8M99G7D	0.205	9M01W7D	0.233
15	13M5G7D	0.202	13M5W7D	0.234
20	18M1G7D	0.215	18M0W7D	0.187



No.: BCTC/RF-EMC-007



Report No.:BCTC2307096488-6E

LTE Band 4	QF	PSK	160	QAM
BW(MHz)	BW(MHz) Emission Designator (99%OBW)		Emission Designator (99%OBW)	Maximum EIRP(W)
1.4	1M10G7D	0.218	1M11W7D	0.242
3	2M72G7D	0.211	2M72W7D	0.247
5	4M55G7D	0.213	4M53W7D	0.201
10	9M01G7D	0.207	9M02W7D	0.247
15	13M5G7D	0.206	13M5W7D	0.249
20	18M0G7D	0.220	18M1W7D	0.212

LTE Band 5	QPSK		16QAM	
BW(MHz)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)
1.4	1M10G7D	0.200	1M10W7D	0.221
3	2M73G7D	0.200	2M71W7D	0.207
5	4M54G7D	0.189	4M57W7D	0.200
10	9M00G7D	0.196	9M01W7D	0.217

LTE Band 7	QF	PSK	16	6QAM		
BW(MHz) Emission Designator (99%OBW)		Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)		
5	4M52G7D	0.179	4M51W7D	0.173		
10	9M00G7D	0.179	9M00W7D	0.212		
15	13M5G7D	0.180	13M5W7D	0.210		
20	18M0G7D	0.192	18M1W7D	0.173		

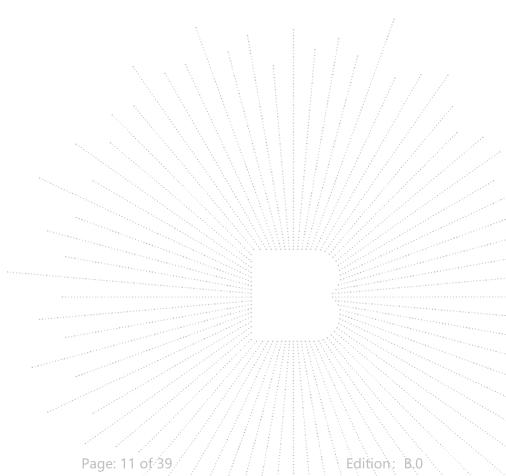
LTE Band 12	QF	PSK	16QAM		
BW(MHz)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	
1.4	1M10G7D	0.127	1M11W7D	0.140	
3	2M72G7D	0.127	2M72W7D	0.135	
5	4M53G7D	0.121	4M53W7D	0.125	
10	9M02G7D	0.128	9M03W7D	0.140	

No.: BCTC/RF-EMC-007 Page: 10 of 39/ / / / Edition: B.0



Report No.:BCTC2307096488-6E

LTE Band 17	QPSK		16QAM	
BW(MHz)	Emission Designator (99%OBW) Maximum ERP(W)		Emission Designator (99%OBW)	Maximum ERP(W)
5	4M53G7D	0.121	4M55W7D	0.123
10	8M97G7D	0.125	8M97W7D	0.140



No.: BCTC/RF-EMC-007



4.3 Description Operation Frequency

LTE Band	2(1.4MHz)	LTE Ba	nd 2(3MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.7	18615	1851.5
18900	1880	18900	1880
19193	1909.3	19185	1908.5
LTE Band	1 2(5MHz)	LTE Bai	nd 2(10MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18625	1852.5	18650	1855
18900	1880	18900	1880
19175	1907.5	19150	1905
LTE Band	2(15MHz)	LTE Bai	nd 2(20MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.5	18700	1860
18900	1880	18900	1880
19125	1902.5	19100	1900

LTE Band	4(1.4MHz)	LTE Band	d 4(3MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.7	19965	1711.5
20175	1732.5	20175	1732.5
20393	1754.3	20385	1753.5
LTE Band	4(5MHz)	LTE Band	I 4(10MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.5	20000	1715
20175	1732.5	20175	1732.5
20375	1752.5	20350	1750
LTE Band	4(15MHz)	LTE Band	I 4(20MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.5	20050	1720
20175	1732.5	20175	1732.5
20325	1747.5	20300	1745

LTE Band	d 5(1.4MHz)	LTE Ban	d 5(3MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)		
20407	824.7	20415 825.5			
20525	836.5	20525	836.5		
20643	848.3	20635	847.5		
LTE Bar	nd 5(5MHz)	LTE Band	1 5(10MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)		
20425	826.5	20450	829		
20525	836.5	20525 / / 836.5			
20625	846.5	20600 844			

No.: BCTC/RF-EMC-007 Page: 12 of 39/// Edition; B,0



Report No.:BCTC2307096488-6E

LTE Ba	nd 7(5MHz)	LTE Band 7(10MHz)				
Channel	Frequency (MHz)	Channel	Frequency (MHz)			
20775	2502.5	20800	2505			
21100	2535	21100	2535			
21425	2567.5	21400 2565				
LTE Bai	nd 7(15MHz)	LTE Ba	nd 7(20MHz)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)			
20825	2507.5	20850	2510			
21100	2535	21100 2535				
21375	2562.5	21350	1350 2560			

LTE Band	l 12(1.4MHz)	LTE Ba	nd 12(3MHz)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)			
23017	699.7	23025	700.5			
23095	707.5	23095	707.5			
23173	715.3	23165 714.5				
LTE Ban	d 12(5MHz)	LTE Bar	nd 12(10MHz)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)			
23035	701.5	23060	704			
23095	707.5	23095	707.5			
23155	713.5	23130 711				

LTE Band	17(5MHz)	LTE Band	17(10MHz)
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23755	706.5	23780	709
23790	710	23790	710
23825	713.5	23800	711

No.: BCTC/RF-EMC-007 Page: 13 of 39/// Edition: B.0



4.4 Test Mode

Test modes are chosen to be reported as the worst case configuration below:

Test Mode										
Band	Radiated TCs	Conducted TCs								
LTE Band 2	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz)								
LTE Band 4	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz)								
LTE Band 5	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz)								
LTE Band 7	QPSK Link (5MHz /10MHz / 15MHz / 20MHz)	16QAM Link (5MHz /10MHz / 15MHz / 20MHz)								
LTE Band 12	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz)								
LTE Band 17	QPSK Link (5MHz /10MHz)	16QAM Link (5MHz /10MHz)								

Note 1: All modes and data rates and positions were investigated.

Note 2: Both the SIM 1 and SIM 2 were tested, the worst mode is the SIM 1, the data recording in the report.

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas License Digital Systems v03 with maximum output power.

EUT Cable List and Details

Cable Description	able Description Length (M) Shielded/Unshielded					
1	1					
1	1					

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
1	1		

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
1	1	1	

No.: BCTC/RF-EMC-007 Page: 14 of 39 / / / / Edition: B.0



Report No.:BCTC2307096488-6E

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

the maximum er	11133101	1.									RB				
Test Items	Band		Bandwidth (MHz)			Mod	ulation		#	ı	Tes	t Cha	nnel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	М	Н
	2	V	V	٧	٧	V	V	V	V	٧	٧	٧	٧	٧	٧
	4	V	٧	٧	٧	V	V	v	v	V	V	V	٧	٧	٧
Max.Output	5	V	٧	٧	٧	-	-	v	v	٧	V	v	٧	٧	٧
Power	7	-	-	٧	٧	V	V	v	v	٧	V	v	٧	٧	٧
	12	V	٧	٧	٧	-	-	v	v	٧	V	V	V	٧	٧
	17	-	-	V	٧	-	-	v	v	v	V	v	V	٧	V
	2	V	٧	٧	٧	V	٧	V	V	V	V	٧	٧	٧	٧
	4	V	٧	V	V	V	V	V	v	V	v	v	V	٧	V
Peak-to-Averag	5	V	٧	V	V	-	-	V	v	V	v	v	V	٧	V
e Ratio	7			V	٧	٧	V	V	v	V	V	V	V	٧	V
	12	٧	٧	v	V	-	-	V	v	V	V	V	V	٧	V
	17			v	V			V	v	V	V	V	V	٧	V
	2	٧	٧	٧	٧	V	٧	٧	V	٧	٧	٧	٧	٧	٧
	4	V	٧	v	٧	V	v	v	v	v	V	v	٧	٧	٧
26dB and 99%	5	V	٧	V	V	-	-	V	v	v	٧	V	V	٧	٧
Bandwidth	7			v	v	v	v	V	· v	v	Ņ	v _:	٧	v	٧
	12	V	٧	v	٧	-	-	v .	V	v .	V	V	V	٧	٧
	17	-	-	v	v	-	-	V	ν	v	v	V	V	V	V
	2	٧	٧	٧	٧	٧	,V	V	V	٧	٧	ν	V	/ -//	٧
	4	V	٧	v	v	v	V	V	V	٧	V	v	V	, -,	V
Conducted	5	V	٧	v	v	-	-	V	V	V	v	v	v	-	٧
Band Edge	7			ν.	V	V ,	٧	V	V	٧	v	V	٧	٧	V
	12	V	٧	v	v	<u>-</u>	-	V	V	V	V	V	V	V	V
	17			v	· · v , , ,			V	V	٧	v	ν	V	. v	V
	2	٧	٧	٧	٧	V	٧	V	V	٧	- -	_	V	V	٧
	4	٧	٧	V	ν	···· V ·····	· V	V	V	v	-	-	V	V	ν
Conducted	5	٧	٧	v	ν	-	-	., V .,	V	v	-	-	V	V	y
Spurious Emission	7			ν.	V	y	V , , ,	V	V	v	v	V	V	V	· · V
	12	٧	٧	v	٧	<u>=</u>	-	V	v	V	V	V	V	v	V
	17			v	v			v	v	v	v	V	٧	٧	V
Frequency	2	٧	-	-		-	2	V	v	٧	-	-	V	V .	٧
tability	4	V	-	-	-	-	-	v	v /	ν	-	-	V	ν.	V

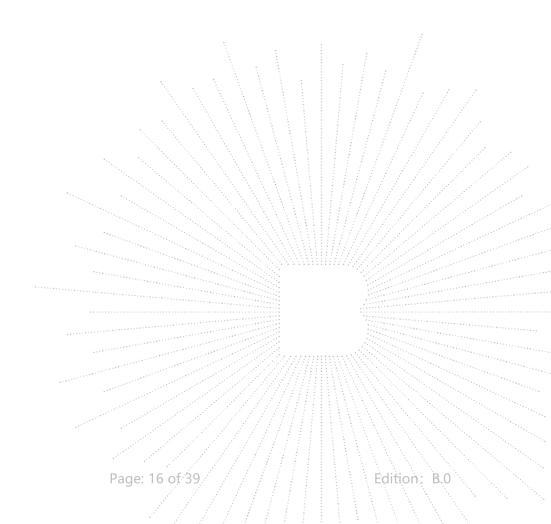
No.: BCTC/RF-EMC-007 Page: 15 of 39/// Edition: B.0



No.: BCTC/RF-EMC-007

Report No.:BCTC2307096488-6E

	5	V	•	-	-	-	-	٧	٧	٧	-	-	٧	٧	V
	7	v						V	٧	v	-	-	٧	٧	٧
	12	V	•	-	-	-	-	٧	V	V	-	-	٧	٧	V
	17	V						٧	V	V	-	-	٧	٧	V
	2	٧	٧	٧	٧	٧	٧	٧	V	٧	٧	٧	٧	٧	٧
	4	V	٧	٧	٧	V	V	٧	V	٧	V	V	٧	٧	V
E.R.P./ E.I.R.P.	5	V	V	V	V	-	-	٧	٧	V	V	V	٧	٧	٧
E.R.P./ E.I.R.P.	7			v	v			V	٧	v	v	v	٧	٧	٧
	12	v	V	v	v	-	-	V	٧	v	V	v	٧	٧	V
	17	-	-	v	v	-	-	٧	٧	v	V	v	٧	٧	٧
	2	٧	ı	-	-	-	-	٧	V	٧	-	-	٧	٧	٧
	4	V	•	-	-	-	-	٧	٧	V	-	-	٧	٧	V
Radiated	5	v	-	-	-	-	-	V	٧	v	-	-	٧	٧	٧
Spurious Emission	7	v						V	٧	v			٧	٧	٧
	12	v	-	-	-	-	-	V	٧	v	-	-	٧	٧	V
	17	٧						V	٧	v			٧	٧	٧
Note	1.The mark "v" means that this configuration is chosen for testing 2.The mark "-" means that this bandwidth is not supported.														





4.5 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Smart Phone	OUKITEL	C36	N/A	EUT
E-2	Adapter	N/A	HJ-0502000N2- US	N/A	Auxiliary

Item Shielded Type		Ferrite Core Length		Note	
C-1	N/A	N/A	1M	DC cable unshielded	

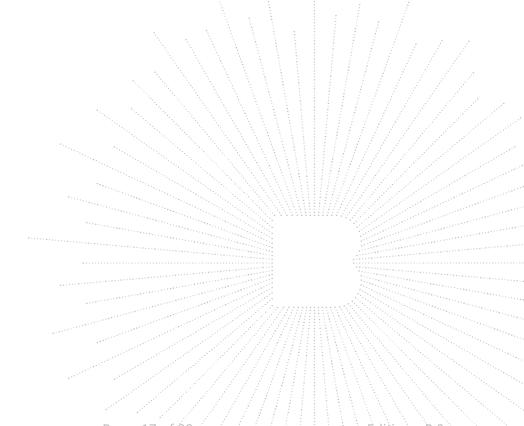
Notes:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level. The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Offset = RF cable loss + attenuator factor.



No.: BCTC/RF-EMC-007 Page: 17 of/39/ / / / / Edition; B₀0



5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850 A2LA certificate registration number is: CN1212

ISED Registered No.: 23583 ISED CAB identifier: CN0017

5.2 Test Instrument Used

	Radiated Emissions Test (966 Chamber01)								
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.				
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026				
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024				
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024				
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024				
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 29, 2023	May 28, 2024				
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024				
Amplifier	SKET	LAPA_01G18 G-45dB	\ \	May 15, 2023	May 14, 2024				
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024				
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 15, 2023	May 14, 2024				
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024				
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024				
Communication test set	R&S	CMW500	126173	Nov. 08, 2022	Nov. 07, 2023				
Software	Frad	EZ-EMC	FA-03A2 RE	1					

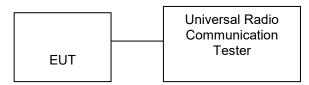
No.: BCTC/RF-EMC-007 Page: 18 of 39/ / / / / Edition; B,0



6. RF Output Power

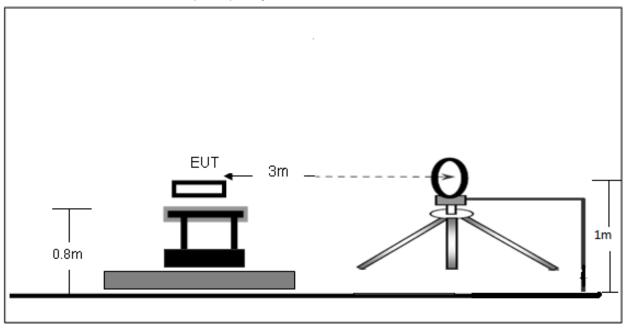
6.1 Block Diagram Of Test Setup

Conducted output power test method:



Radiated power test method:

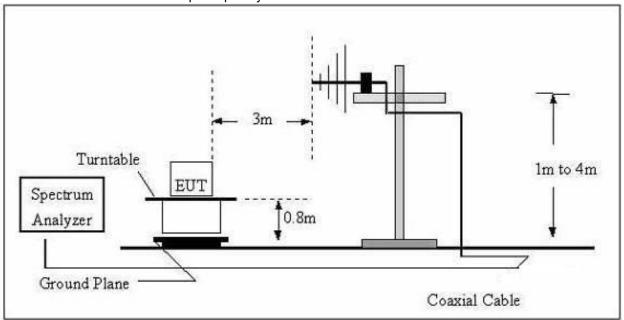
(A) Radiated Emission Test-Up Frequency Below 30MHz



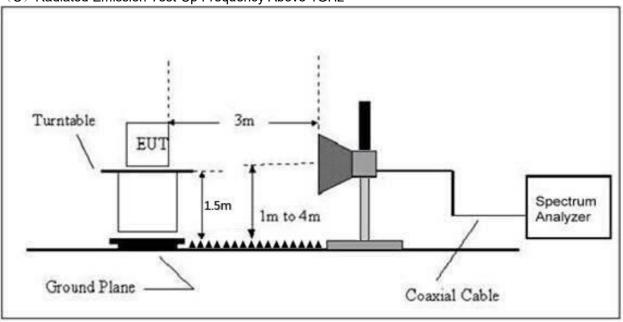
No.: BCTC/RF-EMC-007 Page: 19 of 39/ / / / Edition: B.0



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



No.: BCTC/RF-EMC-007 Page: 20 of 39/// Edition: B.0



6.2 Limit

According to §22.913(a)(2), The ERP of mobileand portable stations transmitters and auxiliary test transmitters must not exceed 7 Watts.

According to §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.

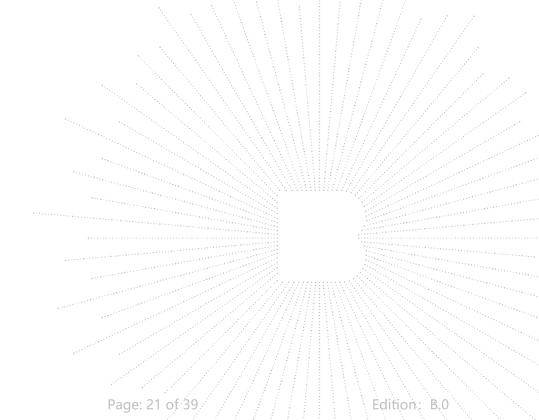
According to §27.50(d)(4), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

6.3 Test procedure

Radiated power test method:

No.: BCTC/RF-EMC-007

- 1.The setup of EUT is according with per ANSI/TIA Standard 603D and ANSI C63.4-2014 measurement procedure.
- 2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
- 3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
- 4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.





6.4 Test Result

Max Radiated Power:

FDD-LTE Band 2

8411-4°		dwidth: 1.4MHz	\
Modulation	Channel	E.I.R.P(dBm)	Verdict
ODCK	LCH	22.83	PASS
QPSK	MCK	23.1	PASS
	HCH	23.25	PASS
400 414	LCH	23.17	PASS
16QAM	MCK	22.79	PASS
	HCH	23.69	PASS
Maraladada		idwidth: 3MHz	M 11 - 4
Modulation	Channel	E.I.R.P(dBm)	Verdict
ODOK	LCH	22.76	PASS
QPSK	MCK	23.01	PASS
	HCH	23.16	PASS
400414	LCH	23.6	PASS
16QAM	MCK	22.2	PASS
	HCH	22.71	PASS
NA - ded - d'		dwidth: 5MHz	M 11 - 4
Modulation	Channel	E.I.R.P(dBm)	Verdict
0.0014	LCH	22.71	PASS
QPSK	MCK	23.17	PASS
	HCH	22.84	PASS
	LCH	22.64	PASS
16QAM	MCK	22.78	PASS
	HCH	23.24	PASS
		dwidth: 10MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	22.78	PASS
QPSK	MCK	22.99	PASS
	HCH	23.12	PASS
	LCH	23.68	PASS
16QAM	MCK	23.45	PASS
	HCH	23.02	PASS
	-	dwidth: 15MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	22.91	PASS
QPSK	MCK	23.06	PASS
	HCH	T-7	PASS
	LCH	23.69	PASS
16QAM	MCK	23.5	PASS
	HCH	23.53	PASS
		dwidth: 20MHz	***************************************
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	23.17	PASS
QPSK	MCK	23.33	PASS
	HCH	23.32	PASS
	LCH	22.73	PASS
16QAM	MCK	22.38	PASS

No.: BCTC/RF-EMC-007 Page: 22 of 39/// Edition: B.0





FDD-LTE Band 4

Modulation	Channel Ban Channel	E.I.R.P(dBm)	Verdict
iviouuiatiOII	LCH	23.38	PASS
QPSK	MCK	23.26	PASS
QF OIN	HCH	23.07	PASS
	LCH	23.84	PASS
16QAM	MCK	22.81	PASS
IOQAW	HCH	22.46	PASS
		ndwidth: 3MHz	PASS
Modulation			Vardiat
Modulation	Channel	E.I.R.P(dBm)	Verdict
ODCK	LCH	23.08	PASS
QPSK	MCK	23.25	PASS
	HCH	23.11	PASS
400 414	LCH	23.92	PASS
16QAM	MCK	22.84	PASS
	HCH	22.17	PASS
		ndwidth: 5MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	23.12	PASS
QPSK	MCK	23.29	PASS
	HCH	22.66	PASS
	LCH	23.03	PASS
16QAM	MCK	22.87	PASS
	HCH	22.98	PASS
	Channel Ban	dwidth: 10MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	23.09	PASS
QPSK	MCK	23.16	PASS
	HCH	23.04	PASS
	LCH	23.93	PASS
16QAM	MCK	23.47	PASS
	HCH	23.46	PASS
		dwidth: 15MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
	LCH	23.09	PASS
QPSK	MCK	23.14	PASS
	HCH	23.04	PASS
	LCH	23.97	PASS
16QAM	MCK	23.43	PASS
	HCH	23.71	PASS
		dwidth: 20MHz	
Modulation	Channel	E.I.R.P(dBm)	Verdict
modulation	LCH	23.33	PASS
QPSK	MCK	23.43	PASS
QF OIN	HCH	23.13	PASS
	LCH	22.93	PASS
16OAM			
16QAM	MCK HCH	22.85 23.27	PASS PASS
		72.77	ロハビビ

No.: BCTC/RF-EMC-007 Page: 23 of 39 / / Edition: B.0





	Channel Ba	ndwidth: 1.4MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.72	PASS	
QPSK	MCK	22.75	PASS	
	HCH	23.01	PASS	
	LCH	22.96	PASS	
16QAM	MCK	22.23	PASS	
	HCH	23.44	PASS	
	Channel Ba	andwidth: 3MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.54	PASS	
QPSK	MCK	22.82	PASS	
	HCH	23.01	PASS	
	LCH	23.15	PASS	
16QAM	MCK	22.34	PASS	
	HCH	22.55	PASS	
	Channel Ba	andwidth: 5MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.49	PASS	
QPSK	MCK	22.76	PASS	
	HCH	22.76	PASS	
	LCH	22.33	PASS	
16QAM	MCK	22.28	PASS	
	HCH	23.02	PASS	
	Channel Ba	ndwidth: 10MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.72	PASS	
QPSK	MCK	22.81	PASS	
	HCH	22.92	PASS	
	LCH	23.36	PASS	
16QAM	MCK	23.09	PASS	
	HCH	22.75	PASS	

No.: BCTC/RF-EMC-007 Page: 24 of 39 / / / Edition: B.0





		andwidth: 5MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.54	PASS	
QPSK	MCK	22.09	PASS	
	HCH	21.77	PASS	
	LCH	21.84	PASS	
16QAM	MCK	22.39	PASS	
	HCH	21.82	PASS	
	Channel Ba	ndwidth: 10MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.54	PASS	
QPSK	MCK	22.33	PASS	
	HCH	22.02	PASS	
	LCH	23.27	PASS	
16QAM	MCK	22.68	PASS	
	HCH	22.03	PASS	
	Channel Ba	ndwidth: 15MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.55	PASS	
QPSK	MCK	22.29	PASS	
	HCH	22.03	PASS	
	LCH	23.23	PASS	
16QAM	MCK	22.68	PASS	
	HCH	22.77	PASS	
	Channel Ba	ndwidth: 20MHz		
Modulation	Channel	E.R.P(dBm)	Verdict	
	LCH	22.5	PASS	
QPSK	MCK	22.83	PASS	
	HCH	22.32	PASS	
	LCH	22.25	PASS	
16QAM	MCK	22.01	PASS	
	HCH	22.37	PASS	

No.: BCTC/RF-EMC-007 Page: 25 of 39//// Edition: B.0





		ndwidth: 1.4MHz	
Modulation	Channel	E.R.P(dBm)	Verdict
	LCH	20.88	PASS
QPSK	MCK	20.91	PASS
	HCH	21.05	PASS
	LCH	21.02	PASS
16QAM	MCK	20.39	PASS
	HCH	21.45	PASS
	Channel Ba	andwidth: 3MHz	
Modulation	Channel	E.R.P(dBm)	Verdict
	LCH	20.69	PASS
QPSK	MCK	20.99	PASS
	HCH	21.05	PASS
	LCH	21.31	PASS
16QAM	MCK	20.4	PASS
	HCH	20.6	PASS
	Channel Ba	andwidth: 5MHz	
Modulation	Channel	E.R.P(dBm)	Verdict
	LCH	20.74	PASS
QPSK	MCK	20.84	PASS
	HCH	20.71	PASS
	LCH	20.45	PASS
16QAM	MCK	20.52	PASS
	HCH	20.96	PASS
		ndwidth: 10MHz	
Modulation	Channel	E.R.P(dBm)	Verdict
	LCH	20.82	PASS
QPSK	MCK	20.97	PASS
	HCH	21.07	PASS
	LCH	21.46	PASS
16QAM	MCK	21.17	PASS
	HCH	20.93	PASS

No.: BCTC/RF-EMC-007 Page: 26 of 39/// Edition: B.0



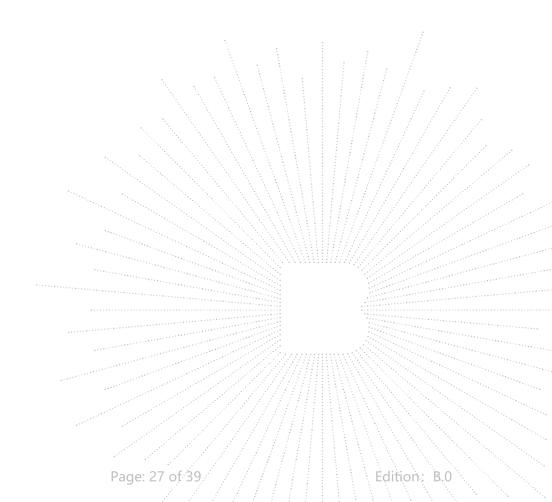


	Channel Bandwidth: 5MHz							
Modulation	Channel	E.R.P(dBm)	Verdict					
	LCH	20.69	PASS					
QPSK	MCK	20.59	PASS					
	HCH	20.81	PASS					
	LCH	19.99	PASS					
16QAM	MCK	20.91	PASS					
	HCH	20.46	PASS					
	Channel Band	dwidth: 10MHz						
Modulation	Channel	E.R.P(dBm)	Verdict					
	LCH	20.87	PASS					
QPSK	MCK	20.81	PASS					
	HCH	20.96	PASS					
	LCH	21.45	PASS					
16QAM	MCK	21.1	PASS					
	HCH	20.83	PASS					

Max Conducted output Power:

No.: BCTC/RF-EMC-007

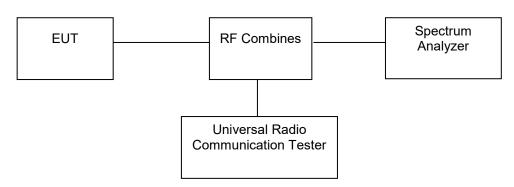
Please refer to appendix A: Conducted Output Power Test Result: Pass





7. Peak-To-Average Ratio(PAR) Of Transmitter

7.1 Block Diagram Of Test Setup



7.2 Limit

According to §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 13 dB.

According to §27.50(B), the peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

7.3 Test procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 30kHz and the peak-to-average ratio (PAR) of the transmission was recorded. Record the maximum PAPR level associated with a probability of 0.1%.

7.4 Test Result

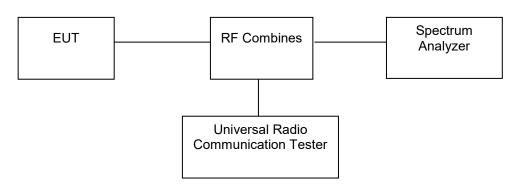
Please refer to Appendix 3: Peak-to-Average Ratio Test Result: Pass

No.: BCTC/RF-EMC-007 Page: 28 of 39/ / / / / Edition; B.0



8. Emission Bandwidth

8.1 Block Diagram Of Test Setup



8.2 Standard Applicable

According to §22.917(b), 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.

According to §24.238(b), 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.

According to §27.53, 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.

8.3 Test procedure

- 1. The testing follows FCC KDB 971168 D01v03 Section 4.2.
- 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
- 3. The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 4. The 99% occupied bandwidth were measured, set RBW= 1% of OBW, VBW= 3*RBW, sample detector, trace maximum hold.
- 5. The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3*RBW, peak detector, trace maximum hold.

8.4 Test Result

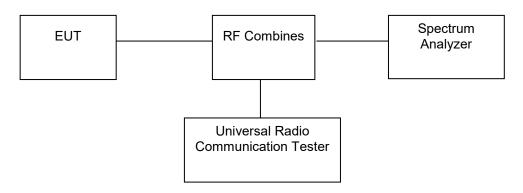
Please refer to Appendix 4: Occupied BandWidth Test Result: Pass

No.: BCTC/RF-EMC-007 Page: 29 of 39/ / / / / Edition; B.0



9. Out of Band Emissions at Antenna Terminal

9.1 Block Diagram Of Test Setup



9.2 Limit

According to §22.917(a), the power of any emissions 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.

According to §24.238(a), the power of any emissions 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.

According to §27.53 (h), 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.

9.3 Test procedure

The RF output terminal of the transmitter was connected to the input of the spectrum analyzer via a suitable attenuation. The RBW of the spectrum analyzer was set to 100kHz and 1MHz for the scan frequency from 30MHz to 1GHz and the scan frequency from 1GHz to up to 10th harmonic.

9.4 Test Result

Please refer to Appendix 5: Band Edge & Appendix 6: Out-of-band Emissions Test Result: Pass

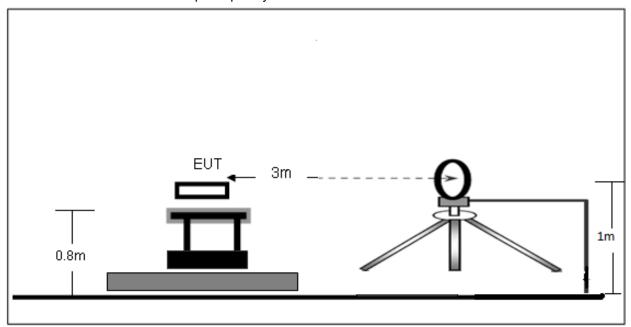
No.: BCTC/RF-EMC-007 Page: 30 of 39/// Edition: B.0



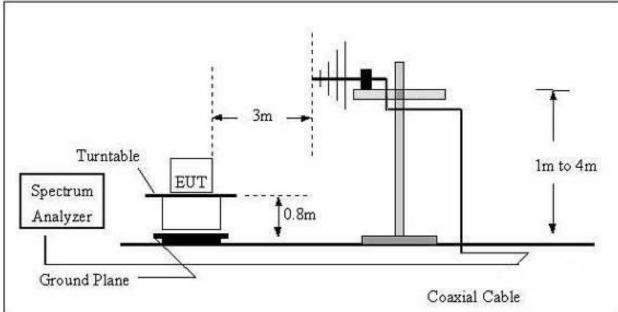
10. Spurious Radiated Emissions

10.1 Block Diagram Of Test Setup

(A) Radiated Emission Test-Up Frequency Below 30MHz



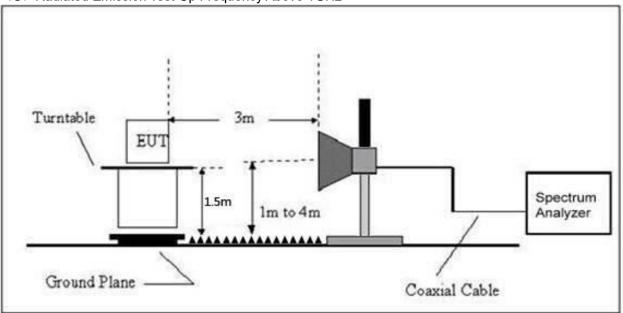
(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



No.: BCTC/RF-EMC-007 Page: 31 of 39/ / / / Edition: B.0



(C) Radiated Emission Test-Up Frequency Above 1GHz



10.2 Limit

According to §22.917(a), the power of any emissions 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.

According to §24.238(a), the power of any emissions 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.

According to §27.53 (h), 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.

10.3 Test procedure

- 1. The setup of EUT is according with per ANSI/TIA Standard 603D and ANSI C63.4-2014 measurement procedure.
- 2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
- 3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
- 4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious attenuation limit in dB =43+10 Log₁₀ (power out in Watts)

No.: BCTC/RF-EMC-007 Page: 32 of/39/ / / / / Edition; B,0



10.4 Test Result

For FDD-LTE Band 2 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar			
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V			
	Low Channel (1852.5MHz)								
77.63	-44.40	-15.89	-60.29	-13.00	-47.29	Н			
3705.00	-21.88	-14.31	-36.19	-13.00	-23.19	Н			
5557.50	-23.94	-9.60	-33.54	-13.00	-20.54	Н			
77.63	-44.23	-15.89	-60.12	-13.00	-47.12	V			
3705.00	-20.77	-14.31	-35.08	-13.00	-22.08	V			
5557.50	-23.49	-9.60	-33.09	-13.00	-20.09	V			
		Middle	Channel (1880	OMHz)					
77.63	-43.48	-15.89	-59.37	-13.00	-46.37	Н			
3760.00	-21.77	-14.12	-35.89	-13.00	-22.89	Н			
5640.00	-26.25	-9.50	-35.75	-13.00	-22.75	Н			
77.63	-41.56	-15.89	-57.45	-13.00	-44.45	V			
3760.00	-19.27	-14.12	-33.39	-13.00	-20.39	V			
5640.00	-25.08	-9.50	-34.58	-13.00	-21.58	V			
		High C	Channel (1907.5	5MHz)					
77.63	-41.12	-15.89	-57.01	-13.00	-44.01	Н			
3815.00	-18.35	-13.93	-32.28	-13.00	-19.28	Н			
5722.50	-23.48	-9.40	-32.88	-13.00	-19.88	Н			
77.63	-43.03	-15.89	-58.92	-13.00	-45.92	V			
3815.00	-20.27	-13.93	-34.20	-13.00	-21.20	V			
5722.50	-23.96	-9.40	-33.36	-13.00	-20.36	V			

For FDD-LTE Band 4 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar				
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V				
	Low Channel (1710.7MHz)									
77.63	-41.77	-15.89	-57.66	-13.00	-44.66	/ / H/ /				
3421.40	-24.38	-15.29	-39.67	-13.00	-26.67	///#///				
5132.10	-32.37	-10.10	-42.47	-13.00	-29.47	/ / H/ /				
77.63	-41.56	-15.89	-57.45	-13.00	-44.45	V				
3421.40	-27.54	-15.29	-42.83	-13.00	-29.83	V				
5132.10	-29.65	-10.10	-39.75	-13.00	-26.75	V				
		Middle	Channel (1732	.5MHz)						
77.63	-43.67	-15.89	-59.56	-13.00	-46.56	A H				
3465.00	-25.04	-15.14	-40.18	-13.00	-27.18	Н				
5197.50	-32.13	-10.02	-42.15	-13.00	-29.15	H				
77.63	-44.57	-15.89	-60.46	-13.00	-47.46	V				
3465.00	-26.49	-15.14	-41.63	-13.00	-28.63	V				
5197.50	-28.27	-10.02	-38.29	-13.00	-25.29	V				
		High (Channel (1754.3	BMHz)						
77.63	-43.53	-15.89	-59.42	-13.00	-46.42	Н				
3508.60	-25.80	-14.99	-40.79	-13.00	-27.79	Н				
5262.90	-32.88	-9.95	-42.83	-13.00	-29.83	Н				
77.63	-43.02	-15.89	-58.91	-13.00	-45.91	V				
3508.60	-28.51	-14.99	-43.50	-13.00	-30.50	V				
5262.90	-31.08	-9.95	-41.03	-13.00	-28.03	V				

No.: BCTC/RF-EMC-007 Page: 33 of 39/ / / / Edition: B.0





For FDD-LTE Band 5 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar			
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V			
	Low Channel (824.7MHz)								
77.63	-41.09	-15.89	-56.98	-13.00	-43.98	Н			
1649.40	-27.65	-22.56	-50.21	-13.00	-37.21	Н			
2474.10	-32.24	-19.09	-51.33	-13.00	-38.33	I			
77.63	-42.77	-15.89	-58.66	-13.00	-45.66	V			
1649.40	-29.86	-22.56	-52.42	-13.00	-39.42	V			
2474.10	-30.15	-19.09	-49.24	-13.00	-36.24	V			
		Middle	Channel (836.	5MHz)					
77.63	-43.66	-15.89	-59.55	-13.00	-46.55	H			
1673.00	-25.82	-22.47	-48.29	-13.00	-35.29	H			
2509.50	-30.94	-18.93	-49.87	-13.00	-36.87	H			
77.63	-43.80	-15.89	-59.69	-13.00	-46.69	V			
1673.00	-28.52	-22.47	-50.99	-13.00	-37.99	V			
2509.50	-31.76	-18.93	-50.69	-13.00	-37.69	V			
		High	Channel (848.3	MHz)					
77.63	-44.46	-15.89	-60.35	-13.00	-47.35	Н			
1696.60	-25.78	-22.38	-48.16	-13.00	-35.16	Н			
2544.90	-31.77	-18.78	-50.55	-13.00	-37.55	Н			
77.63	-43.84	-15.89	-59.73	-13.00	-46.73	V			
1696.60	-29.09	-22.38	-51.47	-13.00	-38.47	V			
2544.90	-31.33	-18.78	-50.11	-13.00	-37.11	V			

For FDD-LTE Band 7 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar		
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V		
Low Channel (2502.5MHz)								
77.63	-42.04	-15.89	-57.93	-13.00	-44.93	/ H		
5005.00	-21.15	-10.25	-31.40	-13.00	-18.40	/ H / /		
7507.50	-25.40	-1.98	-27.38	-13.00	-14.38	/ /H/ /		
77.63	-43.58	-15.89	-59.47	-13.00	-46.47	V		
5005.00	-18.92	-10.25	-29.17	-13.00	-16.17	V		
7507.50	-26.64	-1.98	-28.62	-13.00	-15.62	V		
		Middle	Channel (253	5MHz)				
77.63	-42.66	-15.89	-58.55	-13.00	-45.55	///#//		
5070.00	-20.39	-10.18	-30.57	-13.00	-17.57	Н		
7605.00	-23.48	-1.63	-25.11	-13.00	-12.11	Н		
77.63	-42.69	-15.89	-58.58	-13.00	-45.58	V		
5070.00	-19.99	-10.18	-30.17	-13.00	-17.17	V		
7605.00	-23.45	-1.63	-25.08	-13.00	-12.08	V		
		High C	Channel (2567.5	5MHz)				
77.63	-42.92	-15.89	-58.81	-13.00	-45.81	Н		
5135.00	-18.20	-10.10	-28.30	-13.00	-15.30	H		
7702.50	-23.88	-1.29	-25.17	-13.00	-12.17	H		
77.63	-44.73	-15.89	-60.62	-13.00	-47.62	V		
5135.00	-20.52	-10.10	-30.62	-13.00	-17.62	V		
7702.50	-25.14	-1.29	-26.43	-13.00	-13.43	V		

No.: BCTC/RF-EMC-007 Page: 34 of 39/ / / / Edition: B.0



For FDD-LTE Band 12 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar			
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V			
Low Channel (699.7MHz)									
77.63	-44.84	-15.89	-60.73	-13.00	-47.73	Н			
1399.40	-24.01	-23.53	-47.54	-13.00	-34.54	Н			
2099.10	-32.45	-20.76	-53.21	-13.00	-40.21	Н			
77.63	-44.37	-15.89	-60.26	-13.00	-47.26	V			
1399.40	-28.98	-23.53	-52.51	-13.00	-39.51	V			
2099.10	-30.40	-20.76	-51.16	-13.00	-38.16	V			
Middle Channel (707.5MHz)									
77.63	-44.82	-15.89	-60.71	-13.00	-47.71	Н			
1415.00	-27.27	-23.47	-50.74	-13.00	-37.74	Н			
2122.50	-31.29	-20.65	-51.94	-13.00	-38.94	Н			
77.63	-41.36	-15.89	-57.25	-13.00	-44.25	V			
1415.00	-28.97	-23.47	-52.44	-13.00	-39.44	V			
2122.50	-29.35	-20.65	-50.00	-13.00	-37.00	V			
High Channel (715.3MHz)									
77.63	-43.70	-15.89	-59.59	-13.00	-46.59	Н			
1430.60	-27.07	-23.41	-50.48	-13.00	-37.48	Н			
2145.90	-32.55	-20.55	-53.10	-13.00	-40.10	Н			
77.63	-41.25	-15.89	-57.14	-13.00	-44.14	V			
1430.60	-29.50	-23.41	-52.91	-13.00	-39.91	V			
2145.90	-30.94	-20.55	-51.49	-13.00	-38.49	V			

For FDD-LTE Band 17 Mode

Frequency	Reading	Correct	Result	Limit	Margin	Polar			
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V			
Low Channel (706.5MHz)									
77.63	-43.91	-15.89	-59.80	-13.00	-46.80	/ H			
1413.00	-25.38	-23.48	-48.86	-13.00	-35.86	/ H			
2119.50	-30.13	-20.35	-50.48	-13.00	-37.48	/ /H / /			
77.63	-44.52	-15.89	-60.41	-13.00	-47.41	V			
1413.00	-27.34	-23.48	-50.82	-13.00	-37.82	V			
2119.50	-30.53	-20.35	-50.88	-13.00	-37.88	V			
Middle Channel (710MHz)									
77.63	-41.38	-15.89	-57.27	-13.00	-44.27	Н			
1420.00	-25.81	-23.45	-49.26	-13.00	-36.26	/ / H / /			
2130.00	-32.84	-20.60	-53.44	-13.00	-40.44	H			
77.63	-43.47	-15.89	-59.36	-13.00	-46.36	V			
1420.00	-29.98	-23.45	-53.43	-13.00	-40.43	V			
2130.00	-28.88	-20.60	-49.48	-13.00	-36.48	V			
High Channel (713.5MHz)									
77.63	-42.63	-15.89	-58.52	-13.00	-45.52	Н			
1427.00	-25.49	-23.42	-48.91	-13.00	-35.91	Н			
2140.50	-30.87	-20.57	-51.44	-13.00	-38.44	Н			
77.63	-44.56	-15.89	-60.45	-13.00	-47.45	V			
1427.00	-29.15	-23.42	-52.57	-13.00	-39.57	V			
2140.50	-29.64	-20.57	-50.21	-13.00	-37.21	V			

Note: Result=Reading+ Correct, Margin= Result- Limit

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listedin the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

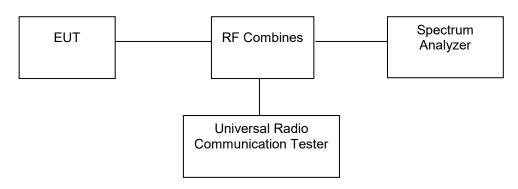
No.: BCTC/RF-EMC-007 Page: 35 of 39/ / / / Edition; B.0

Report No.:BCTC2307096488-6E



11. Frequency Stability

11.1 Block Diagram Of Test Setup



11.2 Limit

±2.5 ppm

11.3 Test procedure

Test Procedures for Temperature Variation

- 1. The testing follows FCC KDB 971168 D01v03 Section 9.0.
- 2. The EUT was set up in the thermal chamber and connected with the system simulator.
- 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
- 4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Test Procedures for Voltage Variation

- 1. The testing follows FCC KDB 971168 D01v03 Section 9.0.
- 2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
- 3. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
- 4. The variation in frequency was measured for the worst case.
- 5. The worst case(worst bandwidth) for frequency stability reported in the Test Data. The worst bandwidth is as follow:
 - 1.4M is for LTE Band 2, 1.4M is for LTE Band 4,
 - 1.4M is for LTE Band 5, 1.4M is for LTE Band 12,

5M is for LTE Band 13, 1.4M is for LTE Band 66, 5M is for LTE Band 71

11.4 Test Result

Please refer to Appendix 2: Frequency Stability
Test Result: Pass

No.: BCTC/RF-EMC-007 Page: 36 of/39/ / / / / / Edition; B₀0

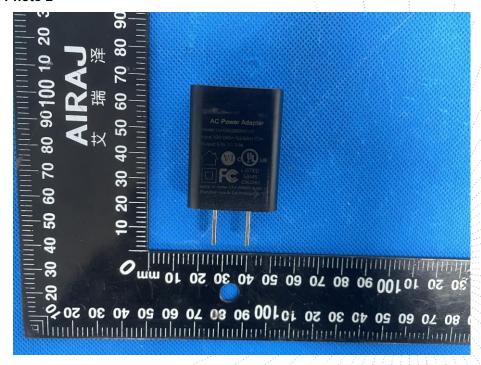


12. EUT Photographs

EUT Photo 1



EUT Photo 2

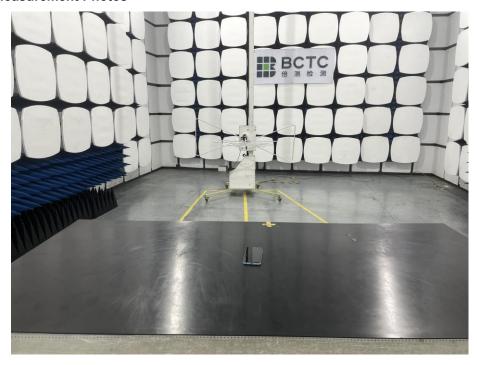


No.: BCTC/RF-EMC-007 Page: 37 of 39 / / / / Edition: B.0



13. EUT Test Setup Photographs

Radiated Measurement Photos





No.: BCTC/RF-EMC-007 Page: 38 of 39/ / / / Edition: B.0



STATEMENT

- 1. The equipment lists are traceable to the national reference standards.
- 2. The test report can not be partially copied unless prior written approval is issued from our lab.
- 3. The test report is invalid without the "special seal for inspection and testing".
- 4. The test report is invalid without the signature of the approver.
- 5. The test process and test result is only related to the Unit Under Test.
- 6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
- 7. The quality system of our laboratory is in accordance with ISO/IEC17025.
- 8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

E-Mail: bctc@bctc-lab.com.cn

**** END ****

No.: BCTC/RF-EMC-007 Page: 39 of 39/ / / / / | Edition; B.0