

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE181210404

FCC REPORT (BLE)

Applicant: SKY PHONE LLC

Address of Applicant: 1348 Washington Av. Suite 350, Miami Beach, FL 33139

Equipment Under Test (EUT)

Product Name: 4G Smart Phone

Model No.: Elite T55

Trade mark: SKY DEVICES

FCC ID: 2ABOSSKYELITET55

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 20 Dec., 2018

Date of Test: 20 Dec., 2018 to 21 Jan., 2019

Date of report issued: 21 Jan., 2019

Test Result: PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2 Version

Version No.	Date	Description
00	21 Jan., 2019	Original

Tested by: Mike DU Date: 21 Jan., 2019

Test Engineer

Reviewed by: Date: 21 Jan., 2019

Project Engineer



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Test Summary

Test Items	Section in CFR 47	Result		
Antenna requirement	15.203 & 15.247 (b)	Pass		
AC Power Line Conducted Emission	15.207	Pass		
Conducted Peak Output Power	15.247 (b)(3)	Pass		
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Pass		
Power Spectral Density	15.247 (e)	Pass		
Band Edge	15.247 (d)	Pass		
Spurious Emission	15.205 & 15.209	Pass		
Pass: The EUT complies with the essential requirements in the standard.				

N/A: Not Applicable.



5 General Information

5.1 Client Information

Applicant:	SKY PHONE LLC	
Address:	1348 Washington Av. Suite 350, Miami Beach, FL 33139	
Manufacturer	SKY PHONE LLC	
Address:	1348 Washington Av. Suite 350, Miami Beach, FL 33139	

5.2 General Description of E.U.T.

Product Name:	4G Smart Phone
Model No.:	Elite T55
Operation Frequency:	2402-2480 MHz
Channel numbers:	40
Channel separation:	2 MHz
Modulation technology:	GFSK
Data speed :	1Mbps
Antenna Type:	Internal Antenna
Antenna gain:	1.2 dBi
Power supply:	Rechargeable Li-ion Battery DC3.8V-2500mAh
AC adapter:	Model: Elite T55 Input: AC100-240V, 50/60Hz, 0.2A Output: DC 5.0V, 1mA
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

Operation	Operation Frequency each of channel						
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test. Channel No. 0, 20 & 39 were selected as Lowest, Middle and Highest channel.

5.3 Test environment and test mode

Operating Environment:				
Temperature:	24.0 °C			
Humidity:	54 % RH			
Atmospheric Pressure:	1010 mbar			
Test mode:				
Transmitting mode Keep the EUT in continuous transmitting with modulation				

Report No: CCISE181210404

The sample was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

5.4 Description of Support Units

The EUT has been tested as an independent unit.

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±2.22 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±2.76 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.28 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.72 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±2.88 dB (k=2)

5.6 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 727551

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

5.7 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
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Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



5.8 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
rest Equipment	Mariaracturer	Model No.	ocriai ito.	(mm-dd-yy)	(mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-16-2018	03-15-2019
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-16-2018	03-15-2019
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-16-2018	03-15-2019
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-21-2018	11-20-2019
EMI Test Software	AUDIX	E3	Version: 6.110919b		b
Pre-amplifier	HP	8447D	2944A09358	03-07-2018	03-06-2019
Pre-amplifier	CD	PAP-1G18	11804	03-07-2018	03-06-2019
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-07-2018	03-06-2019
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-21-2018	11-20-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-07-2018	03-06-2019
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2018	03-06-2019
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2018	03-06-2019
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2018	03-06-2019
RF Switch Unit	MWRFTEST	MW200	N/A	N/A	N/A
Test Software	MWRFTEST	MTS8200	Version: 2.0.0.0		

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-07-2018	03-06-2019
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-07-2018	03-06-2019
LISN	CHASE	MN2050D	1447	03-19-2018	03-18-2019
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2018	07-20-2019
Cable	HP	10503A	N/A	03-07-2018	03-06-2019
EMI Test Software	AUDIX	E3	V	ersion: 6.110919/	b



6 Test results and Measurement Data

6.1 Antenna requirement:

Standard requirement: FCC Part 15 C Section 15.203 /247(b)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

E.U.T Antenna:

The BLE antenna is an Internal antenna which cannot replace by end-user, the best-case gain of the antenna is1.2 dBi.





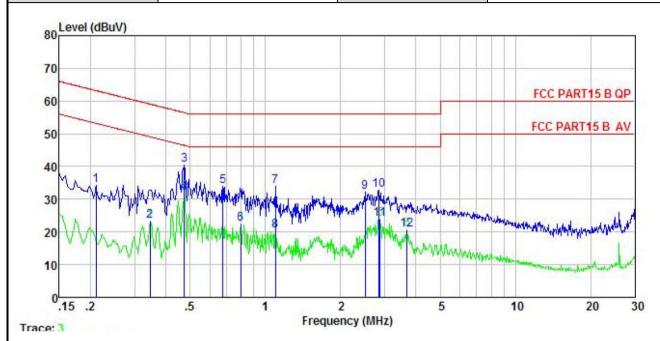
6.2 Conducted Emission

Test Requirement:	FCC Part 15 C Section 15	.207	
Test Method:	ANSI C63.10: 2013		
Test Frequency Range:	150 kHz to 30 MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	,	Limit	(dBuV)
Ellint.	Frequency range (MHz)	Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
	* Decreases with the logar		
Test procedure	 The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement. 		
Test setup:	Reference Plane LISN 40cm 80cm Filter AC power Equipment Test table/Insulation plane Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m		
Test Instruments:	Refer to section 5.8 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		



Measurement Data:

Product name:	4G Smart Phone	Product model:	Elite T55
Test by:	Mike	Test mode:	BLE Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%



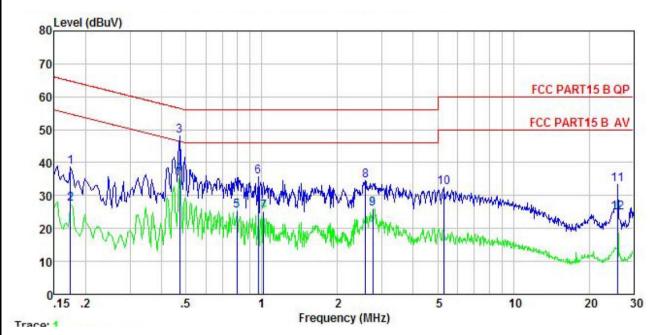
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line		Remark
<u> </u>	MHz	dBu∀	₫B	dB	—dBu₹	dBu∜	<u>dB</u>	
1	0.211	23.42	0.15	10.76	34.33	63.18	-28.85	QP
1 2 3 4 5 6 7 8 9	0.346	12.38	0.12	10.73	23.23	59.05	-35.82	Average
3	0.474	29.52	0.12	10.75	40.39	56.45	-16.06	QP
4	0.474	21.03	0.12	10.75	31.90	56.45	-24.55	Average
5	0.675	23.12	0.13	10.77	34.02	56.00	-21.98	QP
6	0.796	11.63	0.13	10.81	22.57	56.00	-33.43	Average
7	1.100	23.00	0.13	10.88	34.01	56.00	-21.99	QP
8	1.100	9.38	0.13	10.88	20.39	56.00	-35.61	Average
9	2.500	21.19	0.15	10.94	32.28		-23.72	
10	2.839	21.68	0.16	10.93	32.77	56.00	-23.23	QP
11	2.869	12.70	0.16	10.92	23.78	56.00	-32.22	Average
12	3.681	9.69	0.17	10.90	20.76	56.00	-35.24	Average

Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



Product name:	4G Smart Phone	Product model:	Elite T55		
Test by:	Mike	Test mode:	BLE Tx mode		
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral		
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%		



	Freq	Kead Level	Factor	Loss	Level	Limit	Limit	Remark
	MHz	dBu∇	<u>ab</u>	₫B	dBu₹	dBu∜	<u>d</u> B	
1	0.174	26.96	0.95	10.77	38.68	64.77	-26.09	QP
2	0.174	15.74	0.95	10.77	27.46	64.77	-37.31	Average
1 2 3 4 5 6 7 8 9	0.471	36.28	0.97	10.75	48.00	56.49	-8.49	QP
4	0.471	24.89	0.97	10.75	36.61	56.49	-19.88	Average
5	0.796	13.56	0.97	10.81	25.34	56.00	-30.66	Average
6	0.968	23.92	0.97	10.86	35.75	56.00	-20.25	QP
7	1.016	13.17	0.97	10.87	25.01	56.00	-30.99	Average
8	2.581	22.74	0.99	10.93	34.66	56.00	-21.34	QP
9	2.765	14.18	0.99	10.93	26.10	56.00	-29.90	Average
10	5.277	20.48	1.01	10.84	32.33	60.00	-27.67	QP
11	26.001	21.79	0.78	10.87	33.44	60.00	-26.56	QP
12	26.001	13.11	0.78	10.87	24.76	60.00	-35.24	Average

Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



6.3 Conducted Output Power

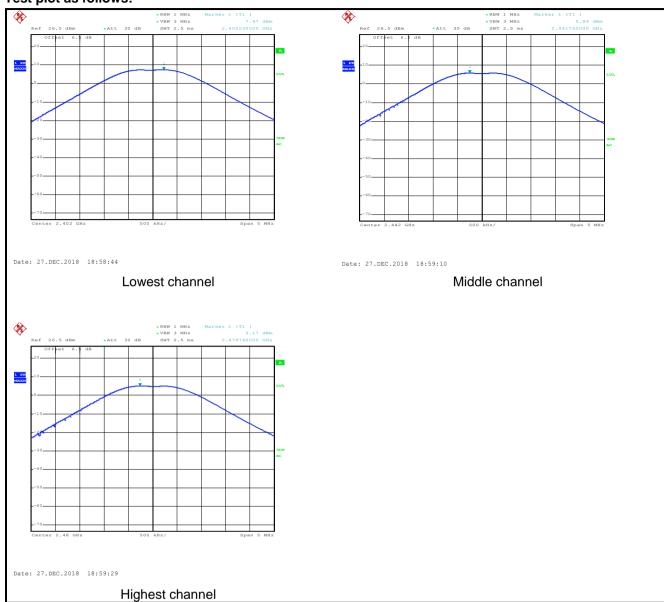
Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2013 and KDB 558074
Limit:	30dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

Test CH	Maximum Conducted Output Power (dBm)	Limit(dBm)	Result
Lowest	7.47		
Middle	5.89	30.00	Pass
Highest	5.17		



Test plot as follows:





6.4 Occupy Bandwidth

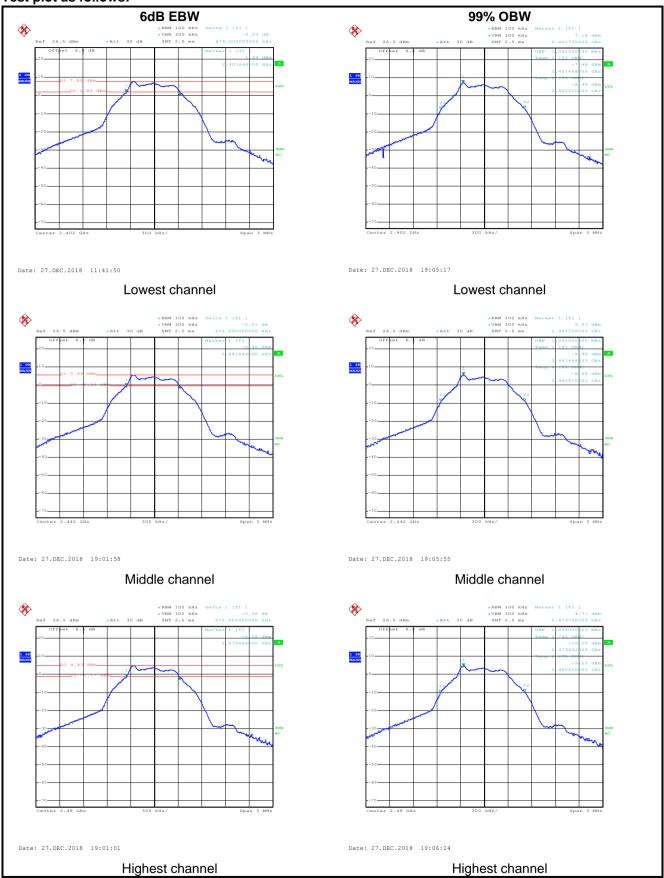
Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10:2013 and KDB 558074
Limit:	>500kHz
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

Test CH	6dB Emission Bandwidth (MHz)	Limit(kHz)	Result
Lowest	0.678		
Middle	0.672	>500	Pass
Highest	0.672		
Test CH	99% Occupy Bandwidth (MHz)	Limit(kHz)	Result
Lowest	1.062		
Middle	1.062	N/A	N/A
Highest	1.068		



Test plot as follows:





6.5 Power Spectral Density

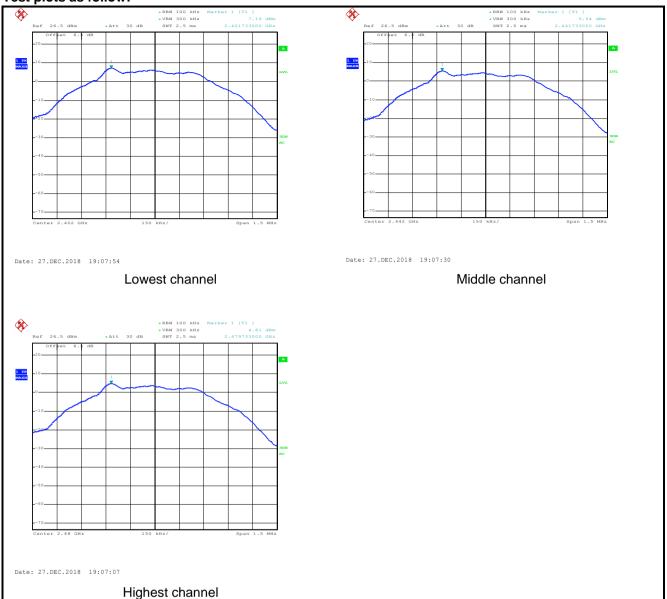
Test Requirement:	FCC Part 15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB 558074
Limit:	8 dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

Test CH	Power Spectral Density (dBm)	Limit(dBm)	Result
Lowest	7.16		
Middle	5.54	8.00	Pass
Highest	4.81		



Test plots as follow:





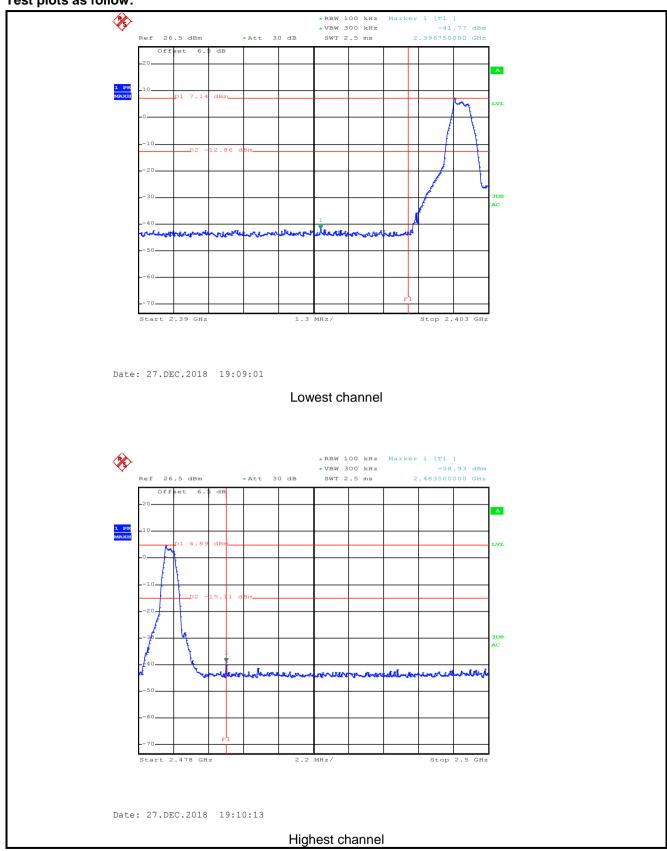
6.6 Band Edge

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)					
Test Method:	ANSI C63.10:2013 and KDB 558074					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup: Spectrum Analyzer						
	E.U.T					
	Non-Conducted Table					
	Ground Reference Plane					
Test Instruments:	Refer to section 5.8 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Passed					



Test plots as follow:





6.6.2 Radiated Emission Method

0.0.2	2.2 Radiated Emission Method							
	Test Requirement:	FCC Part 15 C	Section 1	5.20	5 and 15.209			
	Test Method:	ANSI C63.10:	2013 and	KDE	3 558074			
	Test Frequency Range:	2.3GHz to 2.5	GHz					
	Test Distance:	3m						
	Receiver setup:	Frequency	Detecto	r	RBW	\	/BW	Remark
	·	Above 1GHz	Peak		1MHz		MHz	Peak Value
			RMS		1MHz		MHz	Average Value
	Limit:	Frequer	ncy	Lin	nit (dBuV/m @3	Bm)	Λ.	Remark
		Above 10	GHz -		54.00 74.00			verage Value Peak Value
	Test Procedure:	the groun to determ 2. The EUT antenna, tower. 3. The anter the groun Both horiz make the 4. For each case and meters ar to find the 5. The test-I Specified 6. If the emite the limits of the EU have 10 ce	d at a 3 medine the possions set 3 which was set 3 which was mana height and to deterrize then the and the rota e maximum receiver sy Bandwidth ssion level specified, the T would be dB margin was set 3 margin w	laced on the top of a rotating table 1.5 meters 3 meter camber. The table was rotated 360 deposition of the highest radiation. Let 3 meters away from the interference-received was mounted on the top of a variable-height was mounted on the top of a variable-height was mounted from one meter to four meters a determine the maximum value of the field streng and vertical polarizations of the antenna are sourcement. The control of the entenna was tuned to heights from 1 meters and table was turned from 0 degrees to 360 cmm reading. For system was set to Peak Detect Function and width with Maximum Hold Mode. Level of the EUT in peak mode was 10 dB lowed, then testing could be stopped and the peak do be reported. Otherwise the emissions that the gin would be re-tested one by one using peak as method as specified and then reported in a few method as specified and the reported in a few method as specified and the reported in a few method as specified and the reported in a few method as specified and the reported in a few method as specified and the repo			ce-receiving e-height antenna meters above ield strength. nna are set to d to its worst n 1 meter to 4 s to 360 degrees nction and 0 dB lower than d the peak values ons that did not sing peak, quasi-	
	Test setup:	AE (T	EUT umtable) Test Rei		Horn Antenna Ampiñer Contr	Antenna T	Tower -	
	Test Instruments:	Refer to section	on 5.8 for d	etails	S			
	Test mode:	Refer to section	on 5.3 for d	etails	 S			
	Test results:	Passed						
		l .						



Product Name:		4G Sr	4G Smart Phone			Pro	Product Model: Test mode:		Elite T55 BLE Tx mode		
Test By:		Mike			Tes						
Test Cha	annel:	Lowes	Lowest channel			Pola	arization		Vertical		
Гest Voltage:		AC 12	20/60Hz			Env	rironmen	t:	Temp: 24℃	Huni: 57%	
	lovel /dPuV/m										
100	Level (dBuV/m)										
90											
80									FCC PA	RT 15 (PR)	
70											
60									ECC DA	RT 15 (AV)	
50	~~~~	mor	ww	m	mm	m	mm	Man		W1 13 (AV)	
40									2		
30											
20											
10											
0-2	2310 2320				2350	ncy (MHz)	14.5			2404	
		D 1		a 11	-						
	Freq	Level	Antenna Factor	Loss	Factor	Level	Limit Line	Over Limit	Remark		
	MHz	dBm	— <u>d</u> B/m		<u>d</u> B			<u>d</u> B		-	
1 2	2390.000 2390.000	16.43 8.54		4.69 4.69	0.00	50.17	74.00	-23.83	Peak Average		

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

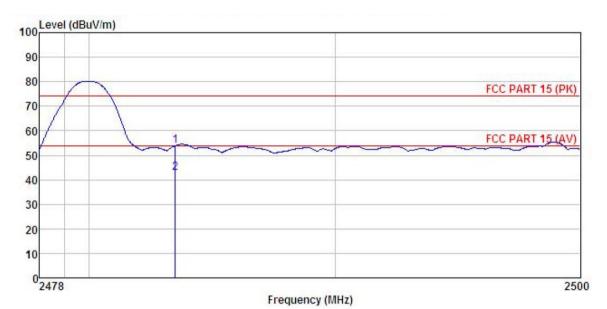


roduct Name	t Name: 4G Smart Phone			ie		Produ	ct Model	l :	Elite T55	;				
est By:		Mike				Test m	node:		BLE Tx n	node	е			
est Channel:		Lowest channel			Polarization:			Horizonta	al					
est Voltage:		AC 12	20/60Hz			Enviro	Environment: Temp: 24					l℃ Huni: 57%		
100 Level (di	RuV/m)													
100	Jaring													
90														
80										FCC	PART	15 (P)	ds	
70													1	
													1	
60														
60		20	Λ Λ Λ Λ	~~ ~	~ ^ ^	- m-	+ M	2000			PART	15 (A)	<u>()</u>	
50	m	~~~~~		~~	~~	mm	www	man			~^^~	15 (A)	<u>v)</u>	
	~~~	m	~~~~	~~	~~~	m	~~~	ham			-AAA	15 (A)	<u>v)</u> (	
50	m	m	~~~~		~~	~~~	~~~	~~~~			-AAA	15 (A)	<u>v)</u> (	
50 ~~~~	n	, com	~~~~		~~~	~~	~~~	m			PART	15 (A)	<u>v)</u> (	
50 VVVVV 40 30	m	m	~~~~		~~^	~~	~~~				PART	15 (A)	<u>v)</u> (	
50 ~~~~ 40 30 20 10		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			~~~	~~	·~~				PART	~\		
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50 ~~~~ 40 30 20 10					Frequ	uency (M					PART	~\		
50 ~~~~ 40 30 20 10	2320	ReadA	ΛΛΛΛ Intenna Factor		Frequ	uency (M	Hz) Limit	Over	way.		PART	~\		
50 ~~~~ 40 30 20 10	2320	ReadA	ant enna		Frequ Preamp Factor	uency (M	Hz) Limit	Over Limit	w y		PART	~\		

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product Name:	4G Smart Phone	Product Model:	Elite T55
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



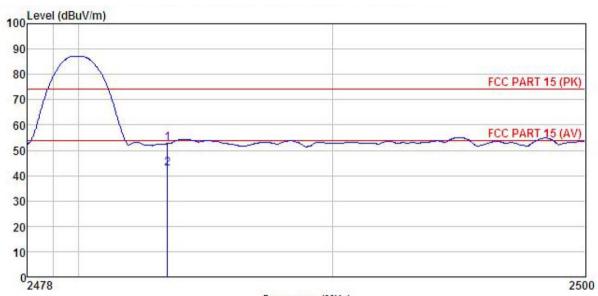
Freq		Antenna Factor						
MHz	dBm		<u>dB</u>	<u>ab</u>	_dBm/m	_dBm/m	<u>dB</u>	
2483.500 2483.500								

1 2

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product Name:	4G Smart Phone	Product Model:	Elite T55
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



#### Frequency (MHz)

	Freq				Cable Preamp Loss Factor Level				Remark
	MHz	dBm	dB/m	<u>d</u> B	<u>d</u> B	_dBm/m	dBπ/m	<u>dB</u>	
1 2	2483.500 2483.500								

#### Remark:

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



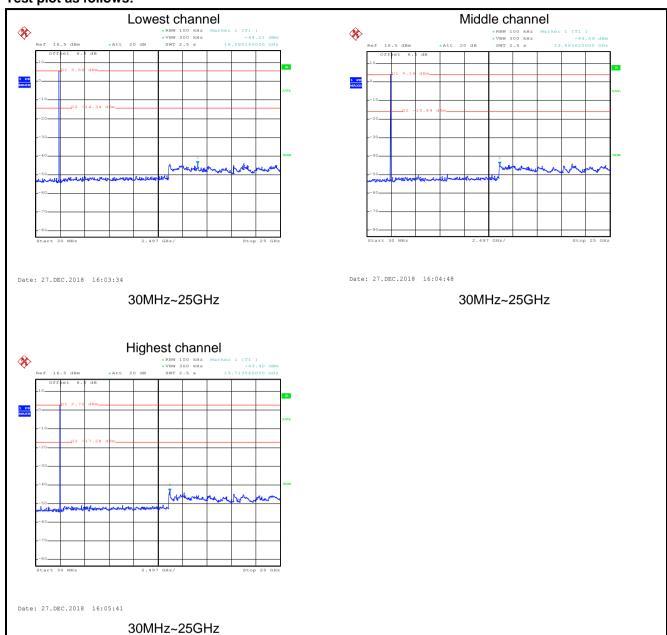
# 6.7 Spurious Emission

# 6.7.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)							
Test Method:	ANSI C63.10:2013 and KDB 558074							
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.							
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane							
Test Instruments:	Refer to section 5.8 for details							
Test mode:	Refer to section 5.3 for details							
Test results:	Passed							



## Test plot as follows:

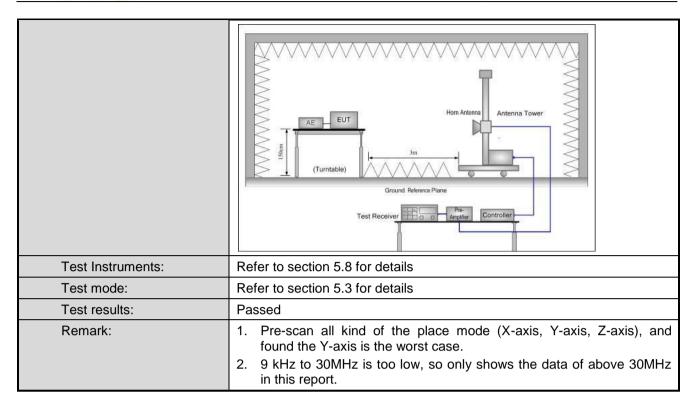




## 6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C	Section 1	5.20	5 and 15.209				
Test Method:	ANSI C63.10:20							
Test Frequency Range:	9kHz to 25GHz	710						
Test Distance:	3m							
Receiver setup:	Frequency	Detecto	or	RBW	VB	sW	Remark	
receiver detap.	30MHz-1GHz	Quasi-pe		120KHz	300		Quasi-peak Value	
	Above 1CHz	Peak		1MHz	3M	Hz	Peak Value	
	Above 1GHz	RMS		1MHz	3M	Hz	Average Value	
Limit:	Frequency Limit (dBuV/m @3m) Remark							
	30MHz-88MHz 40.0 Quasi-peak Valu							
	88MHz-216M			43.5			uasi-peak Value	
	216MHz-960N			46.0			uasi-peak Value	
	960MHz-1G	Hz		54.0			uasi-peak Value	
	Above 1GH	lz		54.0			Average Value	
Test Procedure:	1. The EUT	was nlac	od 6	74.0	f a rot	tating	Peak Value table 0.8m(below	
	The table with highest rad 2. The EUT antenna, with tower.  3. The antenrithe ground Both horizon make the minus and to find the meters and to find the meters. Specified Eight the limit specified EUT have 10 dE	was rotate iation. was set hich was na height to deter ontal and neasurem suspected hen the all the rota maximum eceiver sandwidth sion level ecified, the would be margin version.	3 mounts of the server to the	eters away funted on the trained from or the maximulical polarizate ission, the Enna was turned ling.  In Maximum Hame EUT in peresting could be ported. Other the distance of the could be re-tested.	rom the op of a me met um valuions of to he from 0 to Pea old Mo ak mode stop wise the stop one be stop to the stop one	mine to the intervariable of the analysis degree of the wasped and elements of the control of th	3 meter camber. the position of the rference-receiving ble-height antenna our meters above the field strength. Intenna are set to anged to its worst from 1 meter to 4 es to 360 degrees ect Function and 10 dB lower than and the peak values asions that did not using peak, quasi-eported in a data	
Test setup:	Below 1GHz  Turn Table  Ground Plane  Above 1GHz	4m 4m 0.8m 1	wm &			Antenna Search Antenn Test eiver —		



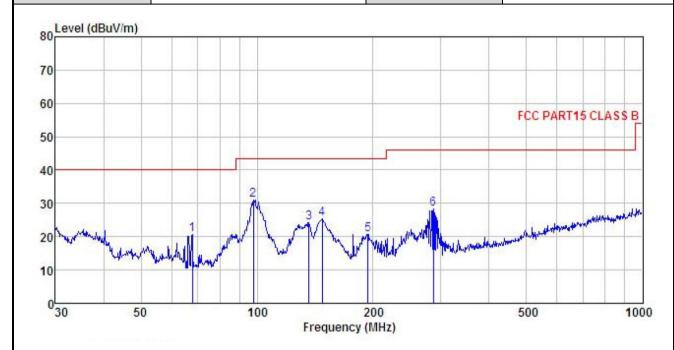




#### Measurement Data (worst case):

#### **Below 1GHz:**

Product Name:	4G Smart Phone	Product Model:	Elite T55
Test By:	Mike	Test mode:	BLE Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



	Freq		Antenna Factor				Limit Line		
	MHz	dBu₹	<u>dB</u> /m	dB	<u>d</u> B	dBuV/m	dBuV/m	<u>dB</u>	
1	67.913	39.23	9.75	1.46	29.74	20.70	40.00	-19.30	QP
2	97.798	47.20	11.34	1.98	29.54	30.98	43.50	-12.52	QP
2	136.460	42.85	8.31	2.36	29.29	24.23	43.50	-19.27	QP
4			8.47					-18.20	
5	193.773	35.54	11.31	2.82	28.87	20.80	43.50	-22.70	QP
6	286.982	40.39	13.53	2.90	28.47	28.35	46.00	-17.65	QP

#### Remark:

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



oduct Name:	4G Smart Phor	P	Product Model:			Elite T55				
st By:	Mike			T	est mode	):	E	BLE Tx r	mode	
st Frequency:	30 MHz ~ 1 GH	1 GHz			olarizatio	n:	H	Horizont	al	
st Voltage:	AC 120/60Hz			E	nvironme	ent:	7	Γemp: 2	<b>4</b> ℃	Huni: 5
Lovel /dPul//m										
80 Level (dBuV/m)										
70										
60										
							F	CC PAR	T15 CLA	ASSB
50				7						
40		4			5	ı				
30			2 4	4		k.				_
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10 mar and market	and	100	² / _M	200		Mosqueed or		anyth show	ng ketang mendina	1000
10 mark and	50	100	Frequ	200 iency (MH		Maywar			ng darkan gentra dilina	
10 0 30 !	ReadAntenna	Cable	Preamp	iency (MH	łz) Limit	Over	5	600	ng dyrany no and n	
10 0 30 !		Cable	Preamp	iency (MH	łz) Limit	Over	5	600	ng bigang na sala	
10 0 30 !	ReadAntenna	Cable	Preamp Factor	iency (MH Level	łz) Limit	Over	5	600	ng birth y ar o all a	
20 10 0 30 Freq MHz 1 100.934	ReadAntenna Level Factor dBuV dB/m 34.11 11.76	Cable Loss dB	Preamp Factor dB	Level  dBuV/m  18.30	Limit Line dBuV/m 43.50	Over Limit ———————————————————————————————————	Rema	600	ing dependent of a self-se	
20 10 0 30 Freq MHz 1 100.934	ReadAntenna Level Factor dBuV dB/m 34.11 11.76 43.70 8.91 46.98 8.52	Cable Loss dB 1.95 2.27 2.50	Preamp Factor ————————————————————————————————————	Level dBuV/m 18.30 25.54 28.77	Limit Line dBuV/m 43.50 43.50 43.50	Over Limit 	Rema QP QP QP QP	600	ing digital year of a sole	
Freq  MHz  1 100.934 2 128.563 3 148.441 4 206.398 5 283.979	ReadAntenna Level Factor dBuV dB/m 34.11 11.76 43.70 8.91	Cable Loss ——————————————————————————————————	Preamp Factor ————————————————————————————————————	Level dBuV/m 18.30 25.54 28.77 26.86 38.48	Limit Line dBuV/m 43.50 43.50 43.50 43.50 46.00	Over Limit 	Rema QP QP QP QP QP QP QP	600	ng birthan part of and a	

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



#### **Above 1GHz**

Test channel: Lowest channel										
Detector: Peak Value										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
4804.00	46.90	30.85	6.80	41.81	42.74	74.00	-31.26	Vertical		
4804.00	47.12	30.85	6.80	41.81	42.96	74.00	-31.04	Horizontal		
			Dete	ctor: Averag	je Value					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
4804.00	40.26	30.85	6.80	41.81	36.10	54.00	-17.90	Vertical		
4804.00	38.64	30.85	6.80	41.81	34.48	54.00	-19.52	Horizontal		
			Test ch	annel: Midd	le channel					
				tector: Peak						
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
4884.00	47.21	31.20	6.86	41.84	43.43	74.00	-30.57	Vertical		
4884.00	46.37	31.20	6.86	41.84	42.59	74.00	-31.41	Horizontal		
			Dete	ctor: Averag	je Value					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
4884.00	37.86	31.20	6.86	41.84	34.08	54.00	-19.92	Vertical		
4884.00	36.84	31.20	6.86	41.84	33.06	54.00	-20.94	Horizontal		
			Test cha	annel: Highe	est channel					

	Test channel: Highest channel											
Detector: Peak Value												
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4960.00	47.83	31.63	6.91	41.87	44.50	74.00	-29.50	Vertical				
4960.00	47.23	31.63	6.91	41.87	43.90	74.00	-30.10	Horizontal				
			Dete	ctor: Averag	je Value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4960.00	37.46	31.63	6.91	41.87	34.13	54.00	-19.87	Vertical				
4960.00	37.67	31.63	6.91	41.87	34.34	54.00	-19.66	Horizontal				

#### Remark:

^{1.} Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

^{2.} The emission levels of other frequencies are very lower than the limit and not show in test report.