

# Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE200710606

# **FCC REPORT**

Applicant: SKY PHONE LLC

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

**Equipment Under Test (EUT)** 

Product Name: 4G Smartphone

Model No.: Elite P55

Trade mark: SKY DEVICES

FCC ID: 2ABOSSKYELITEP55

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

Date of sample receipt: 28 Jul., 2020

**Date of Test:** 29 Jul., to 18 Aug., 2020

Date of report issued: 19 Aug., 2020

Test Result: PASS \*

#### 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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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.





2 Version

Version No.	Date	Description
00	19 Aug., 2020	Original

Tested by: Date: 19 Aug., 2020

Reviewed by:

Date: 19 Aug., 2020

Project Engineer

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

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Project No.: CCISE2007106

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# 4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part 15.107	Pass
Radiated Emission	Part 15.109	Pass

#### Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- . N/A: The EUT not applicable of the test item.

Test Method: ANSI C63.4:2014



# 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 Smartphone	
Model No.:	Elite P55	
Power supply:	Rechargeable Li-ion Battery DC3.8V, 2500mAh	
AC adapter:	Input: AC100-240V, 50/60Hz, 0.2A	
	Output: DC 5.0V, 1.0A	
Test Sample Condition:	The test samples were provided in good working order with no visible defects.	

# 5.3 Test Mode and test samples plans

Operating mode	Detail description
PC mode	Keep the EUT in Downloading mode(Worst case)
Charging+Recording mode	Keep the EUT in Charging+Recording mode
Charging+Playing mode	Keep the EUT in Charging+Playing mode
FM mode	Keep the EUT in FM receiver mode
GPS mode	Keep the EUT in GPS receiver mode

The sample was placed 0.8m 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.

# 5.4 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±1.60 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.32 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.16 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.20 dB (k=2)

# 5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX7070	2J8XSZ2	DoC
DELL	MONITOR	SE2018HR	3M7QPY2	DoC
DELL	KEYBOARD	KB216d	N/A	DoC
DELL	MOUSE	MS116t1	N/A	DoC
HP	Printer	HP LaserJet P1007	VNFP409729	DoC

Shenzhen Zhongjian Nanfang Testing Co., Ltd. No.110~116, Building B, Jinyuan Business Building, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China

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# 5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

### 5.7 Description of Cable Used

Cable Type	Description	Length	From	То
Detached USB Cable	Shielding	1.0m	EUT	PC/Adapter
Detached headset cable	Unshielded	1.2m	EUT	Headset

### 5.8 Additions to, deviations, or exclusions from the method

No

## 5.9 Laboratory Facility

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

#### • FCC - Designation No.: CN1211

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

#### • ISED - CAB identifier.: CN0021

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.

#### 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

# 5.10 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No.110~116, Building B, Jinyuan Business Building, 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



# **5.11 Test Instruments list**

Radiated Emission:						
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020	
3III SAC	SAEIVIC	9111 6111 6111	900	07-22-2020	07-21-2023	
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-07-2020	03-06-2021	
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-07-2020	03-06-2021	
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-07-2020	03-06-2021	
Horn Antenna	CCHWA DZDECK	DDLLA0420D	1805	06-22-2017	06-21-2020	
nom Antenna	SCHWARZBECK	BBHA9120D		06-22-2020	06-21-2021	
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-18-2019	11-17-2020	
EMI Test Software	AUDIX	E3	\	/ersion: 6.110919	b	
Pre-amplifier	HP	8447D	2944A09358	03-07-2020	03-06-2021	
Pre-amplifier	CD	PAP-1G18	11804	03-07-2020	03-06-2021	
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-05-2020	03-04-2021	
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-18-2019	11-17-2020	
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-05-2020	03-04-2021	
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2020	03-06-2021	
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2020	03-06-2021	
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2020	03-06-2021	

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	03-05-2020	03-04-2021
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-05-2020	03-04-2021
LISN	CHASE	MN2050D	1447	03-05-2020	03-04-2021
LICNI	Dahda 9 Cahusara	F0110.75	0.400004/0.40	07-21-2017	07-20-2020
LISN	Rohde & Schwarz	ESH3-Z5 8438621/010		07-21-2020	07-20-2023
Cable	HP	10503A	N/A	03-05-2020	03-04-2021
EMI Test Software	AUDIX	E3	Version: 6.110919b		



# 6 Test results and Measurement Data

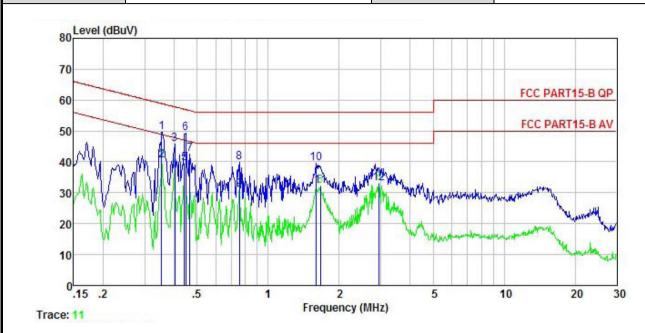
# **6.1 Conducted Emission**

Test Requirement:	FCC Part 15 B Section 15.107				
Test Frequency Range:	150kHz to 30MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9kHz, VBW=30kHz				
Limit:	Frequency range (MHz)         Limit (dBμV)           Quasi-peak         Average           0.15-0.5         66 to 56*         56 to 46*				
	0.5-5	56	46		
	0.5-30	60	50		
	* Decreases with the logarithm	of the frequency.			
Test presedure	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 procedure	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).</li> <li>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(latest version) on conducted measurement.</li> </ol>				
Test Instruments:	Refer to section 5.11 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Pass				



#### Measurement data:

Product name:	4G Smartphone	Product model:	Elite P55
Test by:	YT	Test mode:	PC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



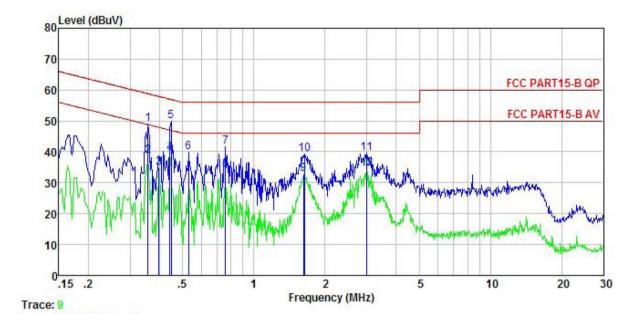
	Freq	Read Level	LISN Factor	Cable Loss	Aux Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBu₹	dB		<u>dB</u>	dBu₹	dBu∀	<u>dB</u>	
1	0.354	39.36	-0.51	10.73	0.14	49.72	58.87	-9.15	QP
2	0.354	30.18	-0.51	10.73	0.14	40.54	48.87	-8.33	Average
3	0.402	35.02	-0.48	10.72	0.42	45.68	57.81	-12.13	QP
4	0.402	26.56	-0.48	10.72	0.42	37.22	47.81	-10.59	Average
1 2 3 4 5 6 7 8	0.442	29.33	-0.46	10.74	0.08	39.69	47.02	-7.33	Average
6	0.447	38.91	-0.46	10.74	0.05	49.24	56.93	-7.69	QP
7	0.466	32.25	-0.44	10.75	-0.12	42.44	56.58	-14.14	QP
8	0.755	29.80	-0.55	10.79	-0.22	39.82	56.00	-16.18	QP
9	0.755	20.92	-0.55	10.79	-0.22	30.94	46.00	-15.06	Average
10	1.602	29.25	-0.54	10.93	-0.07	39.57	56.00	-16.43	QP
11	1.662	21.90	-0.54	10.94	-0.11	32.19	46.00	-13.81	Average
12	2.946	22.71	-0.43	10.92	-0.21	32.99	46.00	-13.01	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 Smartphone	Product model:	Elite P55
Test by:	YT	Test mode:	PC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%
	<u> </u>	•	



	Freq	Kead Level	Factor	Cable Loss	Factor	Level	Limit Line	Over Limit	Remark
2	MHz	dBu∇	<u>ab</u>	<u>ab</u>	<u>d</u> B	—dBu⊽	—dBu∀	<u>d</u> B	
1	0.358	38.91	-0.65	10.73	-0.03	48.96	58.78	-9.82	QP
2	0.358	28.49	-0.65	10.73	-0.03	38.54	48.78	-10.24	Average
3	0.398	24.78	-0.63	10.72	-0.06	34.81	47.90	-13.09	Average
2 3 4 5 6	0.442	29.45	-0.64	10.74	-0.02	39.53	47.02	-7.49	Average
5	0.447	39.88	-0.64	10.74	-0.02	49.96	56.93	-6.97	QP
6	0.529	29.76	-0.65	10.76	0.03	39.90	56.00	-16.10	QP
7	0.759	31.28	-0.65	10.80	0.05	41.48	56.00	-14.52	QP
7 8 9	0.759	24.04	-0.65	10.80	0.05	34.24	46.00	-11.76	Average
9	1.619	22.35	-0.70	10.93	0.14	32.72	46.00	-13.28	Average
10	1.636	28.78	-0.70	10.93	0.14	39.15	56.00	-16.85	QP
11	3.009	29.08	-0.65	10.92	0.32	39.67	56.00	-16.33	QP
12	3.009	23.98	-0.65	10.92	0.32	34.57	46.00	-11.43	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.



### 6.2 Radiated Emission

Test Requirement:	FCC Part 15 B Se	ection 15.10	9				
Test Frequency Range:	30MHz to 6000M	Hz					
Test site:	Measurement Dis	stance: 3m (	Sem	i-Anechoic (	Chamber)	)	
Receiver setup:	Frequency	Detecto	r	RBW	VBW	Remark	
Γισσοίνοι σοιαρ.	30MHz-1GHz	Quasi-pe		120kHz	300kHz		
	Above 1GHz	Peak		1MHz	3MHz		
	Above IGHZ	RMS		1MHz	3MHz	Average Value	
Limit:	Frequenc	•	Lim	nit (dBuV/m	@3m)	Remark	
	30MHz-88N			40.0		Quasi-peak Value	
	88MHz-216I			43.5		Quasi-peak Value	
						Quasi-peak Value	
	960MHz-10	iHZ		54.0		Quasi-peak Value	
	Above 1GI	Hz -		54.0		Average Value	
Test setup:				74.0		Peak Value	
	Antenna Tower  Search Antenna  RF Test Receiver  Ground Plane  Above 1GHz						
Horn Antenna Tower  AE EUT  Ground Reference Plane  Test Receiver  Test Receiver  Test Receiver						ver V	
Test Procedure:	ground at a 3 ndegrees to detect 2. The EUT was sometime which was mound at a 2 ndegrees to detect the detect of t	neter semi-a ermine the p set 3 meters unted on the eight is varia rmine the m	anec positi s awa e top ed fro axim	hoic camber on of the hig ay from the i of a variable om one mete oum value of	The tab ghest radi nterference- e-height a er to four the field	ce-receiving antenna, antenna tower. meters above the	





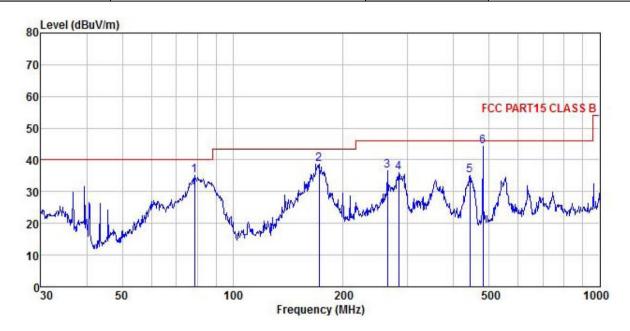
	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	<ol><li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li></ol>
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.11 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All of the observed value above 6GHz ware the niose floor , which were no recorded



#### **Measurement Data:**

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

Product Name:	4G Smartphone	Product Model:	Elite P55
Test By:	YT	Test mode:	PC mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



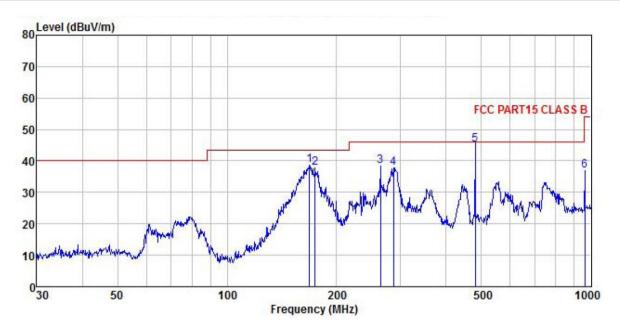
	Freq		Antenna Factor			Preamp Factor		Limit Line	Over Limit	Remark
_	MHz	dBu∜	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1	78.689	51.76	12.46	0.47	0.00	29.65	35.04	40.00	-4.96	QP
2	171.995	50.53	16.61	0.66	0.00	29.03	38.77	43.50	-4.73	QP
3	263.819	45.84	18.56	0.81	0.00	28.51	36.70	46.00	-9.30	QP
4	282.985	45.14	18.63	0.84	0.00	28.48	36.13	46.00	-9.87	QP
5	443.294	43.79	19.19	1.04	0.00	28.86	35.16	46.00	-10.84	QP
6	480.528	52.66	19.33	1.08	0.00	28.92	44.15	46.00	-1.85	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.
- 3. The Aux Factor is a notch filter switch box loss, this item is not used.



Product Name:	4G Smartphone	Product Model:	Elite P55
Test By:	YT	Test mode:	PC mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



		Read	Antenna	Cable	Aux	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dBu∜	<u>dB</u> /m		<u>ab</u>	<u>ab</u>	$\overline{dBuV/m}$	$\overline{dB} \overline{uV/m}$	<u>dB</u>	
1	168.414	50.80	16.20	0.65	0.00	29.06	38.59	43.50	-4.91	QP
2	174.424	49.38	16.76	0.67	0.00	29.02	37.79	43.50	-5.71	QP
2	263.819	47.37	18.56	0.81	0.00	28.51	38.23	46.00	-7.77	QP
4	286.982	46.88	18.65	0.85	0.00	28.47	37.91	46.00	-8.09	QP
5	480.528	53.81	19.33	1.08	0.00	28.92	45.30	46.00	-0.70	QP
6	962.162	40.10	22.88	1.57	0.00	27.65	36.90	54.00	-17.10	QP

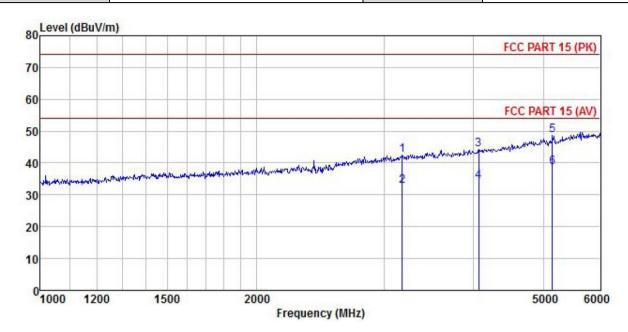
#### Remark:

- 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.
- 3. The Aux Factor is a notch filter switch box loss, this item is not used.



#### **Above 1GHz:**

Product Name:	4G Smartphone	Product Model:	Elite P55
Test By:	YT	Test mode:	PC mode
Test Frequency:	1 GHz ~ 6 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



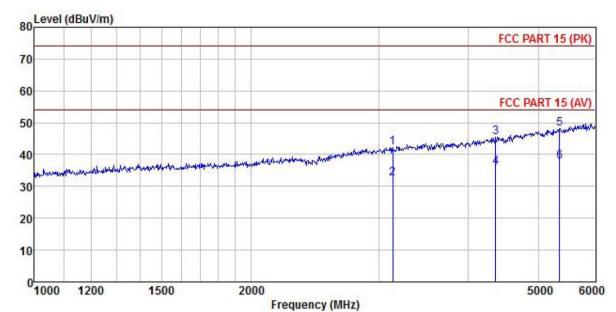
			Antenna			Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Factor	Level	Line	Limit	Remark
-	MHz	dBu∜			<u>d</u> B	<u>dB</u>	dBuV/m	$\overline{dBuV/m}$	<u>d</u> B	
1	3182.976	48.31	28.52	5.05	2.02	41.41	42.49	74.00	-31.51	Peak
2	3182.976	38.64	28.52	5.05	2.02	41.41	32.82	54.00	-21.18	Average
3	4067.389	48.71	29.40	5.82	2.22	41.81	44.34	74.00	-29.66	Peak
4	4067.389	38.47	29.40	5.82	2.22	41.81	34.10	54.00	-19.90	Average
5	5147.218	49.86	31.53	6.69	2.54	41.93	48.69	74.00	-25.31	Peak
6	5147.218	39.86	31.53	6.69	2.54	41.93	38.69	54.00	-15.31	Average

#### 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.



Product Name:	4G Smartphone	Product Model:	Elite P55		
Test By:	YT	Test mode:	PC mode		
Test Frequency:	1 GHz ~ 6 GHz	Polarization:	Horizontal		
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%		



	Freq		Antenna Factor					Limit Line	Over Limit	Remark
	MHz	dBu∀	$-\overline{dB}/\overline{m}$		<u>d</u> B	<u>dB</u>	$\overline{dBuV/m}$	$\overline{dBuV/m}$	<u>d</u> B	
1	3139.913	48.04	28.49	5.01	1.98	41.44	42.08	74.00	-31.92	Peak
2	3139.913	38.32	28.49	5.01	1.98	41.44	32.36	54.00	-21.64	Average
3	4362.538	49.14	29.90	6.04	2.31	41.94	45.45	74.00	-28.55	Peak
4	4362.538	39.67	29.90	6.04	2.31	41.94	35.98	54.00	-18.02	Average
5	5351.487	48.53	31.97	6.87	2.61	41.89	48.09	74.00	-25.91	Peak
6	5351.487	38.24	31.97	6.87	2.61	41.89	37.80	54.00	-16.20	Average

#### 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.