

🧲 Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE190912603

FCC REPORT

Applicant: SKY PHONE LLC

Address of Applicant: 1348 Washington Av. Suite 350, Miami Beach, FL33139

Equipment Under Test (EUT)

Product Name: SMART PHONE

Model No.: Elite A5

Trade mark: SKY DEVICES

FCC ID: 2ABOSSKYELITEA5

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

Date of sample receipt: 27 Sep., 2019

Date of Test: 28 Sep., to 29 Oct., 2019

Date of report issued: 30 Oct., 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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Version 2

Version No.	Date	Description
00	30 Oct., 2019	Original

Test Engineer

Test Many Date:

Date: Tested by: 30 Oct., 2019

Reviewed by: 30 Oct., 2019



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4 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

Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. N/A: Not Applicable.
- 3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer).

ANSI C63.4-2014
ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance v05r02



5 General Information

5.1 Client Information

Applicant:	SKY PHONE LLC
Address:	1348 Washington Av. Suite 350, Miami Beach, FL33139
Manufacturer:	SKY PHONE LLC
Address:	1348 Washington Av. Suite 350, Miami Beach, FL33139

5.2 General Description of E.U.T.

Product Name:	SMART PHONE
Model No.:	Elite A5
Operation Frequency:	2402-2480 MHz
Channel numbers:	40
Channel separation:	2 MHz
Modulation technology:	GFSK
Data speed :	1Mbps
Antenna Type:	Internal Antenna
Antenna gain:	0.5 dBi
Power supply:	Rechargeable Li-ion Battery DC3.8V-2000mAh
AC adapter:	Input: AC100-240V, 50/60Hz, 0.2A Output: DC 5.0V, 1000mA
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

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				
	2 120111112	.0	2 1 10111112		0 24201VII 12 10 24401VII 12 20 24001VII 12 30 24001VII 12						

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			

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)	±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)	±5.38 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.36 dB (k=2)

5.6 Additions to, deviations, or exclusions from the method

Νc

5.7 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.

• 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

5.8 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.

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

Bao'an District, Shenzhen, Guangdong, China

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366

Project No.: CCISE1909126

Report No: CCISE190912603





5.9 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
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-18-2019	03-17-2020
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-18-2019	03-17-2020
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	03-18-2019	03-17-2020
Pre-amplifier	CD	PAP-1G18	11804	03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-21-2018	11-20-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-18-2019	03-17-2020
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-18-2019	03-17-2020
Cable	MICRO-COAX	MFR64639	K10742-5	03-18-2019	03-17-2020
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-18-2019	03-17-2020
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	03-18-2019	03-17-2020
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-18-2019	03-17-2020
LISN	CHASE	MN2050D	1447	03-18-2019	03-17-2020
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2018	07-20-2021
Cable	HP	10503A	N/A	03-18-2019	03-17-2020
EMI Test Software	AUDIX	E3	\	/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 is 0.5 dBi.





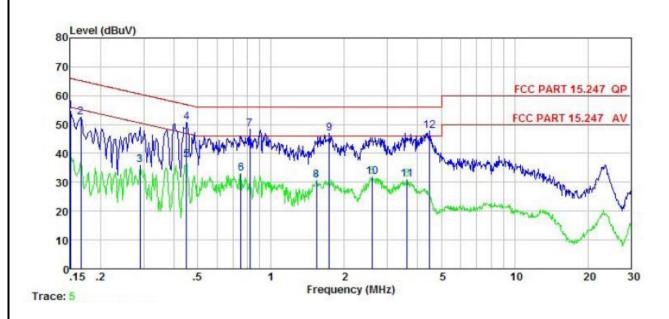
6.2 Conducted Emission

Test Requirement:	FCC Part 15 C Section 15	FCC Part 15 C Section 15.207			
Test Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz			
Class / Severity:	Class B	Class B			
Receiver setup:	RBW=9kHz, VBW=30kHz				
Limit:			(dBuV)		
Liitiit.	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		
Test procedure	* Decreases with the logar				
	 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 C63.10-2013 on conducted measurement. 				
Test setup:	LISN 40cm		AC power		
Test Instruments:	Refer to section 5.9 for de	tails			
Test mode:	Refer to section 5.3 for de	tails			
Test results:	Passed				



Measurement Data:

Product name:	SMART PHONE	Product model:	Elite A5
Test by:	Yaro	Test mode:	BLE Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



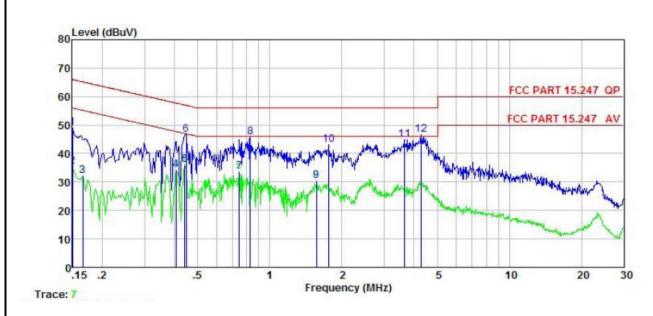
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	₫BuV	₫B	₫B	dBu∀	dBu∀	dB	
1	0.150	44.24	-0.45	10.78	54.57	66.00	-11.43	QP
2	0.166	42.13	-0.44	10.77	52.46	65.16	-12.70	QP
3	0.289	25.62	-0.39	10.74	35.97	50.54	-14.57	Average
4	0.449	40.31	-0.38	10.74	50.67	56.89	-6.22	QP
1 2 3 4 5 6 7 8 9	0.449	27.57	-0.38	10.74	37.93	46.89	-8.96	Average
6	0.751	22.62	-0.38	10.79	33.03	46.00	-12.97	Average
7	0.817	38.10	-0.38	10.82	48.54	56.00	-7.46	QP
8	1.535	20.24	-0.40	10.93	30.77	46.00	-15.23	Average
9	1.734	36.50	-0.40	10.94	47.04	56.00	-8.96	QP
10	2.608	21.42	-0.43	10.93	31.92	46.00	-14.08	Average
11	3.623	20.43	-0.45	10.90	30.88			Average
12	4.478	37.31	-0.47	10.87	47.71	56.00		

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.
- Final Level =Receiver Read level + LISN Factor + Cable Loss.



Product name:	SMART PHONE	Product model:	Elite A5
Test by:	Yaro	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%



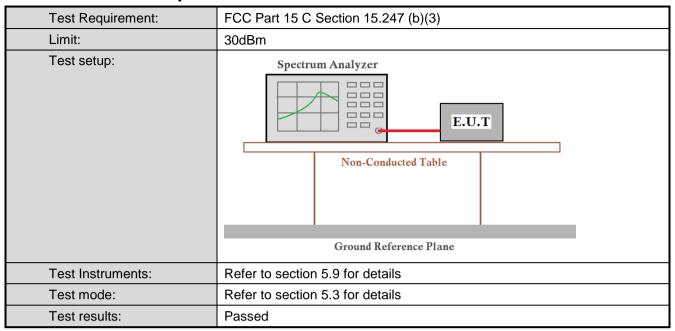
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
-	MHz	dBuV	dB	₫B	dBu∀	dBu∇	<u>dB</u>	
1	0.150	38.80	-0.68	10.78	48.90	66.00	-17.10	QP
2	0.150	25.41	-0.68	10.78	35.51	56.00	-20.49	Average
3	0.166	22.14	-0.68	10.77	32.23	55.16	-22.93	Average
1 2 3 4 5 6 7 8 9	0.406	24.25	-0.64	10.72	34.33	47.73	-13.40	Average
5	0.442	26.04	-0.64	10.74	36.14	47.02	-10.88	Average
6	0.447	36.58	-0.64	10.74	46.68	56.93	-10.25	QP
7	0.747	23.53	-0.64	10.79	33.68	46.00	-12.32	Average
8	0.830	35.44	-0.64	10.82	45.62	56.00	-10.38	QP
9	1.568	19.99	-0.66	10.93	30.26	46.00	-15.74	Average
10	1.762	32.92	-0.66	10.94	43.20	56.00	-12.80	QP
11	3.642	34.65	-0.69	10.90	44.86	56.00	-11.14	QP
12	4.269	36.41	-0.70	10.88	46.59	56.00	-9.41	QP

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

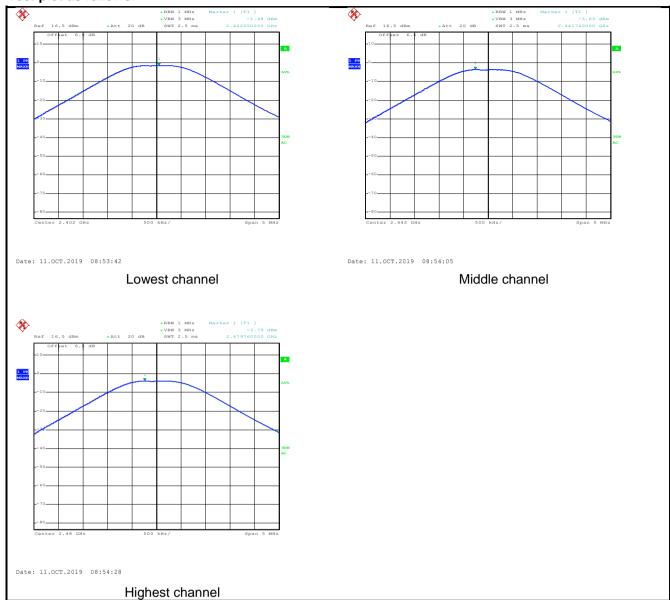


Measurement Data:

Test CH	Maximum Conducted Output Power (dBm)	Limit(dBm)	Result
Lowest	-1.48		
Middle	-3.63	30.00	Pass
Highest	-3.79		

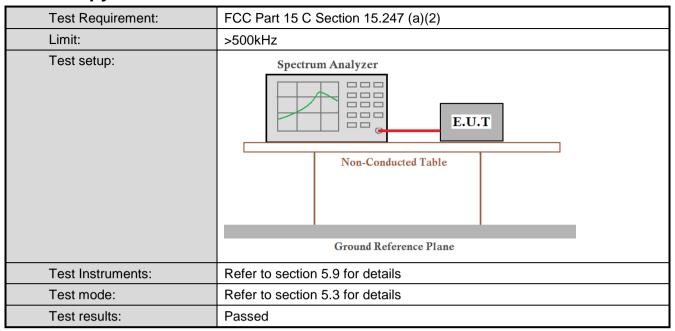


Test plot as follows:





6.4 Occupy Bandwidth

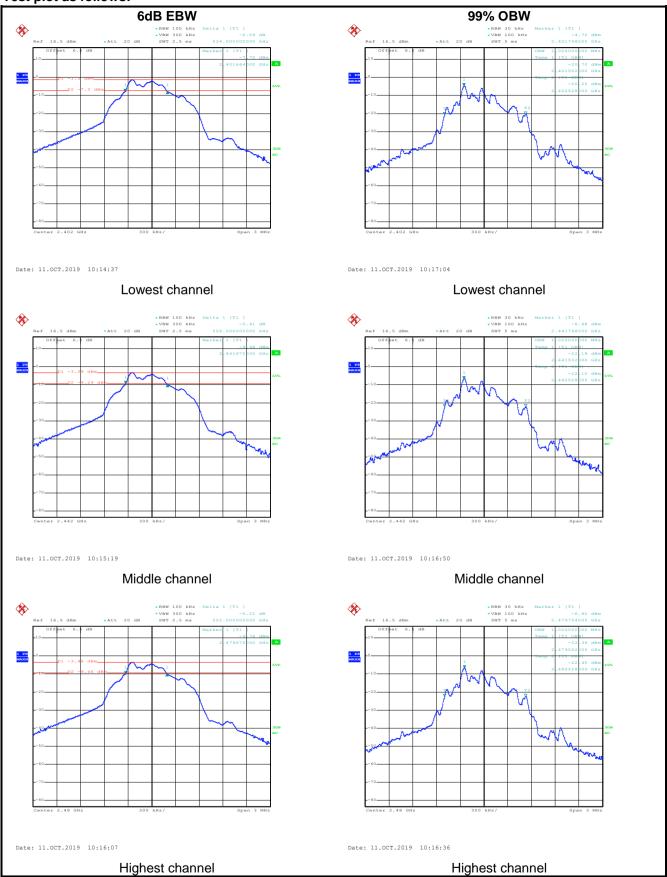


Measurement Data:

Test CH	6dB Emission Bandwidth (MHz)	Limit(kHz)	Result	
Lowest	0.534			
Middle	0.528	>500	Pass	
Highest	0.522			
Test CH	99% Occupy Bandwidth (MHz)	Limit(kHz)	Result	
Lowest	1.026			
Middle	Middle 1.026		N/A	
Highest	1.026			



Test plot as follows:





6.5 Power Spectral Density

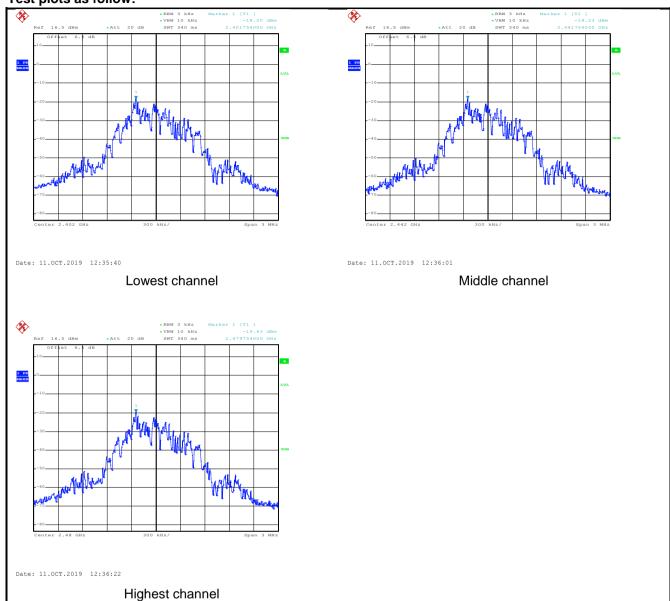
Test Requirement:	FCC Part 15 C Section 15.247 (e)		
Limit:	8 dBm/3KHz		
Test setup:			
	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.9 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

Measurement Data:

Test CH	Power Spectral Density (dBm/3KHz)	Limit(dBm/3KHz)	Result
Lowest	-18.20		
Middle	-18.23	8.00	Pass
Highest	-19.63		



Test plots as follow:





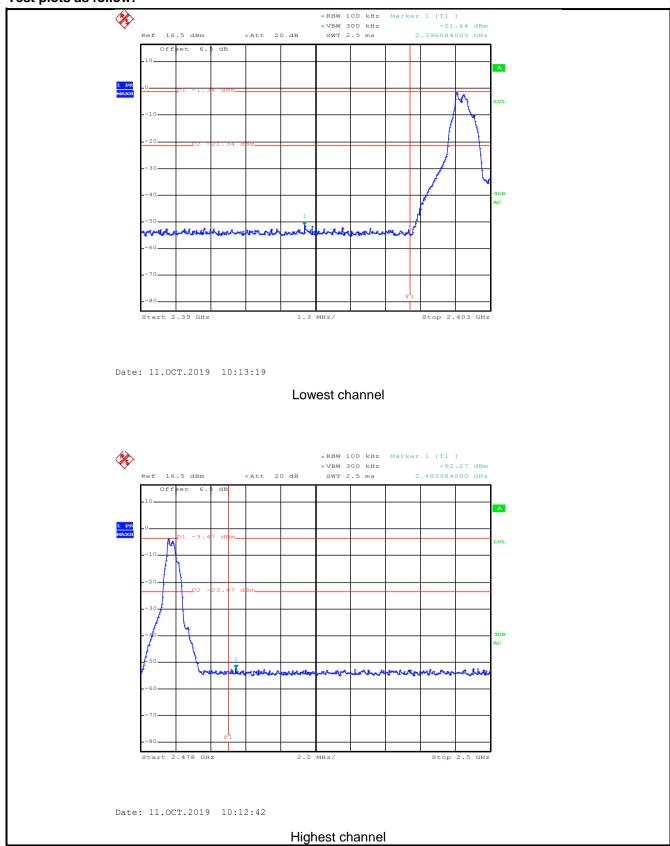
6.6 Band Edge

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)				
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 is 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				
	Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 5.9 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				



Test plots as follow:





6.6.2 Radiated Emission Method

	vietnoa					
Test Requirement:	FCC Part 15 C Section 15.205 and 15.209					
Test Frequency Range:	2.3GHz to 2.5GHz					
Test Distance:	3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Remark	
	Above 1GHz	Peak	1MHz	3MHz	Peak Value	
		RMS	1MHz	3MHz	Average Value	
Limit:	Frequer	icy L	imit (dBuV/m @3 54.00		Remark verage Value	
	Above 10	GHz —	74.00		Peak Value	
Test poture:	the groun to determ 2. The EUT antenna, tower. 3. The anter the groun Both horize make the 4. For each case and meters are to find the Specified 6. If the emite the limits of the EU have 10 ce	ad at a 3 meterine the position was set 3 meterine which was meterine which was meterine which was measurement and the rota take maximum represented the maximum represented the maximum represented the maximum represented by the maximum r	varied from one re the maximum varical polarization of the control	ble was rotal radiation. he interferent of a variable meter to four value of the fis of the ante was arrange of heights from 0 degrees ak Detect Fuld Mode. In mode was 1 estopped and se the emissione by one up to find the stopped and se the emissione by one up to find the stopped and se the emissione by one up to find the stopped and se the emissione by one up to find the stopped and se the emissione by one up to find the stopped and se the emissione by one up to find the stopped and the s	ted 360 degrees ce-receiving e-height antenna meters above ield strength. nna are set to d to its worst m 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	Test Receiver	Horn Antenna 3m Amplifier Cont	Antenna Tower		
Test Instruments:	Refer to section	on 5.9 for deta	nils			
Test mode:	Refer to section					
Test results:	Passed					



oduct Na	ict Name: SMART PHONE			Product Model:			Elite A5	Elite A5			
est By:		Yaro				Test mode	:	BLE Tx mode		de	
est Chann	el:	Lowest c	hannel		1	Polarizatio	n:	Vertical			
est Voltag	e:	AC 120/6	0Hz		1	Environme	ent:	Temp: 2	24℃ Hun	i: 57%	
	(12.22/0.22/0.12										
110 Level	(dBuV/m)										
100					-						
										Λ	
80								F	CC PART 15	(PK)	
60									1		
00~	m	~~~~	~~~		when he		m		PART 15	(AV)	
40									Ī		
20											
2310	2320			2350				1	1	2404	
				Fre	quency (M	IHZ)					
		Pood	Ant enna	Cabla	Droomn		Limit	Over			
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark		
23											
	MHz	dBu∀	dB/m	dB	dB	dBuV/m	dBuV/m	dB			
		24 45	27. 07	4, 69	0.00	57.89	74.00	-16, 11	Peak		
1	2390.000	44.90									

- 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.

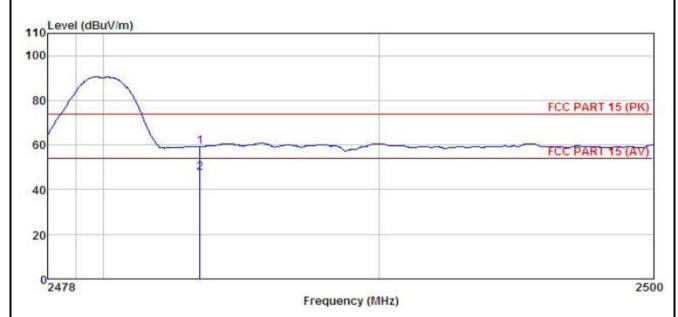


roduct	Name: SMART PHONE			Product Model:			Elite A5		
est By:		Yaro Test mode: BLE Tx mode				Test mode:		le	
est Cha	annel:	Lowest ch	annel		Po	larization:	F	lorizontal	
Test Vol	tage:	AC 120/60)Hz		En	vironment	: Т	emp: 24℃	Huni: 57%
Le	evel (dBuV/m)								
100									
100									Λ
80									FCC PART 15 (PK)
-									
60	m	~~~	~~~	~~~	~~~	M	m	~~~~	POC PART TO (AV)
40									2
40									
20									
023	310 2320			235	0 equency (I	MU-V			240
				ri	equency (i	vinz)			
		Read	Antenna	Cable	Preamp		Limit	0ver	
	Freq		Factor			Level	Line	Limit	Remark
	MHz	dBu∜	dB/m	₫B	₫B	dBuV/m	dBuV/m	₫B	
1	MHz 2390, 000			200		dBuV/m 58.63			Peak

- 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.



Test By: Yaro Test mode: BLE Tx mode	Product Name:	SMART PHONE	Product Model:	Elite A5
	Test By:	Yaro	Test mode:	BLE Tx mode
Test Channel: Highest channel Polarization: Vertical	Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:AC 120/60HzEnvironment:Temp: 24℃Huni: 57%	Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



	Freq		Antenna Factor						
	MHz	dBu₹	dB/m	dB	<u>d</u> B	dBuV/m	dBuV/m	₫B	
1 2	2483.500 2483.500								

- 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 N	oduct Name: SMART PHONE			Pro	duct Mode	l: Eli	Elite A5			
Гest By:	,	Yaro			Tes	t mode:	BL	BLE Tx mode		
Test Char	nnel:	Highest ch	annel		Pola	arization:	Н	Horizontal		
Γest Volta	ige:	AC 120/60	Hz		Env	ironment:	Te	mp: 24℃	Huni: 57%	6
110 Leve 100 80 60 40	el (dBuV/m)	1 2							CC PART 15 (P	
02478		Read	Ant enna		quency (M		Limit	Over		2500
	Freq		Factor						Remark	
	MHz	dBu∛	dB/m	₫B	<u>dB</u>	dBuV/m	dBuV/m	dB		
1 2	2483.500 2483.500	25.54 13.44	27.35 27.35	4.81 4.81	0.00 0.00	59.40 47.30	74.00 54.00	-14.60 -6.70	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.



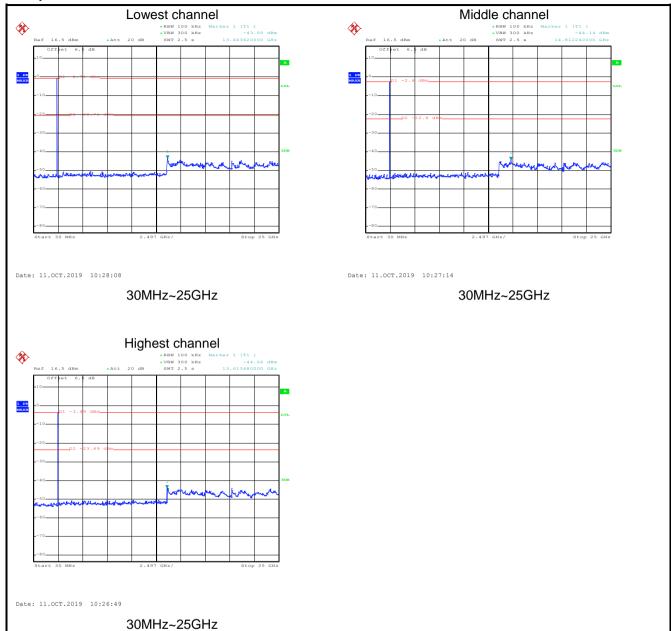
6.7 Spurious Emission

6.7.1 Conducted Emission Method

0.7.1 Conducted Emission	T Motified						
Test Requirement:	FCC Part 15 C Section 15.247 (d)						
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 5.9 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Passed						



Test plot as follows:

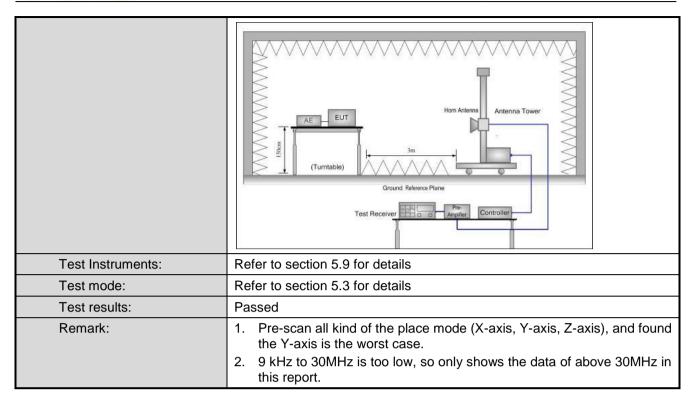




6.7.2 Radiated Emission Method

FCC Part 15 C Section 15.205 and 15.209								
9kHz to 25GHz								
3m								
Frequency	Detector	RBW		W	Remark			
30MHz-1GHz	Quasi-peak	120KHz	3001	КНz	Quasi-peak Value			
Above 1CHz	Peak	1MHz	3M					
Above IGHZ	RMS	1MHz	3M	Hz	Average Value			
Frequency	/ Lir	mit (dBuV/m @	23m)		Remark			
30MHz-88M	Hz	40.0			Quasi-peak Value			
		43.5			Quasi-peak Value			
					Quasi-peak Value			
960MHz-1G	Hz			C	Quasi-peak Value			
Above 1GH	lz				Average Value			
			•		Peak Value			
highest rad 2. The EUT antenna, w tower. 3. The antenn Both horize make the n 4. For each s case and t meters and to find the n 5. The test-re Specified E 6. If the emiss the limit sp of the EUT have 10 dE	iation. was set 3 m hich was mouna height is v to determine ontal and vert neasurement. suspected em hen the anter I the rota table maximum reace eceiver system sandwidth with sion level of the cified, then to would be rep margin would	eters away inted on the taried from one the maximularisation, the Enna was turned ding. In Maximum Hone EUT in peresting could be pre-tested.	from the top of a me met um valitions of EUT was do not be from 0 to Pea hold Morak more stop wise the done be	er to the action of the action	erference-receiving ble-height antenna four meters above the field strength. antenna are set to anged to its worst from 1 meter to 4 tes to 360 degrees tect Function and as 10 dB lower than and the peak values ssions that did not using peak, quasi-			
EUT	4m				1			
	9kHz to 25GHz 3m Frequency 30MHz-1GHz Above 1GHz Frequency 30MHz-88M 88MHz-216M 216MHz-960M 960MHz-1G Above 1GHz 1. The EUT 1GHz)/1.5r The table whighest rad 2. The EUT antenna, where to the ground Both horizon make the limit spoof the EUT have 10 dB peak or awheet. Below 1GHz	9kHz to 25GHz 3m Frequency Detector 30MHz-1GHz Quasi-peak Peak RMS Frequency Lir 30MHz-88MHz 88MHz-216MHz 216MHz-960MHz 960MHz-1GHz Above 1GHz 1. The EUT was placed of 1GHz)/1.5m(above 1GH The table was rotated 3 highest radiation. 2. The EUT was set 3 m antenna, which was mountower. 3. The antenna height is voor the ground to determine Both horizontal and vert make the measurement. 4. For each suspected emicase and then the anter meters and the rota table to find the maximum read to find the maximum read 5. The test-receiver system specified Bandwidth with 6. If the emission level of the EUT would be rephave 10 dB margin would peak or average method sheet. Below 1GHz	9kHz to 25GHz 3m Frequency Detector RBW 30MHz-1GHz Quasi-peak 120KHz Above 1GHz Peak 1MHz RMS 1MHz Frequency Limit (dBuV/m @ 30MHz-88MHz 40.0 88MHz-216MHz 43.5 216MHz-960MHz 46.0 960MHz-1GHz 54.0 Above 1GHz 74.0 1. The EUT was placed on the top of 1GHz)/1.5m(above 1GHz) above the The table was rotated 360 degrees thighest radiation. 2. The EUT was set 3 meters away antenna, which was mounted on the tower. 3. The antenna height is varied from of the ground to determine the maxim Both horizontal and vertical polarizat make the measurement. 4. For each suspected emission, the Educate and then the antenna was tune meters and the rota table was turned to find the maximum reading. 5. The test-receiver system was set Specified Bandwidth with Maximum Here is limit specified, then testing could be find the EUT would be reported. Other have 10 dB margin would be re-tested peak or average method as specified sheet. Below 1GHz	9kHz to 25GHz 3m Frequency Detector RBW VB 30MHz-1GHz Quasi-peak 120KHz 300I Above 1GHz Peak 1MHz 3M RMS 1MHz 3M Frequency Limit (dBuV/m @3m) 30MHz-88MHz 40.0 88MHz-216MHz 43.5 216MHz-960MHz 46.0 960MHz-1GHz 54.0 Above 1GHz 74.0 1. The EUT was placed on the top of a ro 1GHz)/1.5m(above 1GHz) above the groun The table was rotated 360 degrees to deter highest radiation. 2. The EUT was set 3 meters away from the antenna, which was mounted on the top of a tower. 3. The antenna height is varied from one met the ground to determine the maximum vall Both horizontal and vertical polarizations of make the measurement. 4. For each suspected emission, the EUT was case and then the antenna was tuned to he meters and the rota table was turned from 0 to find the maximum reading. 5. The test-receiver system was set to Pea Specified Bandwidth with Maximum Hold Mo 6. If the emission level of the EUT in peak mooth the limit specified, then testing could be stop of the EUT would be reported. Otherwise the have 10 dB margin would be re-tested one be peak or average method as specified and sheet. Below 1GHz	9kHz to 25GHz 3m Frequency Detector RBW VBW 30MHz-1GHz Quasi-peak 120KHz 300KHz Above 1GHz Peak 1MHz 3MHz Frequency Limit (dBuV/m @3m) 30MHz-88MHz 40.0 0 88MHz-216MHz 43.5 0 216MHz-960MHz 46.0 0 960MHz-1GHz 74.0 1. The EUT was placed on the top of a rotating 1GHz)/1.5m(above 1GHz) above the ground at a The table was rotated 360 degrees to determine highest radiation. 2. The EUT was set 3 meters away from the inte antenna, which was mounted on the top of a varia tower. 3. The antenna height is varied from one meter to the ground to determine the maximum value of Both horizontal and vertical polarizations of the amake the measurement. 4. For each suspected emission, the EUT was arracase and then the antenna was tuned to heights meters and the rota table was turned from 0 degree to find the maximum reading. 5. The test-receiver system was set to Peak Despecified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was the limit specified, then testing could be stopped and the EUT would be reported. Otherwise the emi have 10 dB margin would be re-tested one by one peak or average method as specified and then is sheet. Below 1GHz			



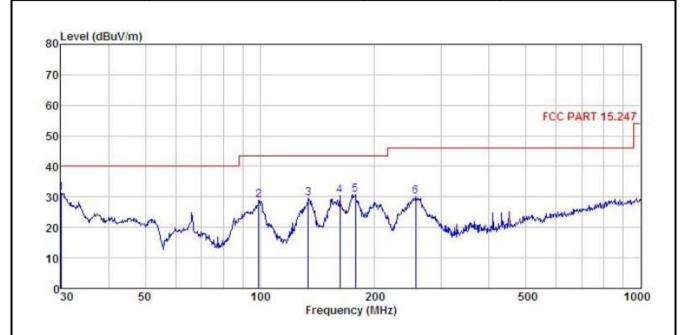




Measurement Data (worst case):

Below 1GHz:

Product Name:	SMART PHONE	Product Model:	Elite A5
Test By:	Yaro	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	Over Limit	Remark
	MHz	dBu₹	<u>dB</u> /m	<u>d</u> B	dB	dBuV/m	dBuV/m	<u>d</u> B	
1	30.000	49.88	10.60	0.72	29.98	31.22	40.00	-8.78	QP
2	99.180	44.33	12.32	1.95	29.53	29.07	43.50	-14.43	QP
2	134.088	46.53	9.88	2.33	29.31	29.43	43.50	-14.07	QP
4	162.041	47.67	9.37	2.60	29.12	30.52	43.50	-12.98	QP
4 5 6	178.133	47.11	9.91	2.71	28.99	30.74	43.50	-12.76	QP
6	256.521	43.11	12.83	2.83		30.24			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

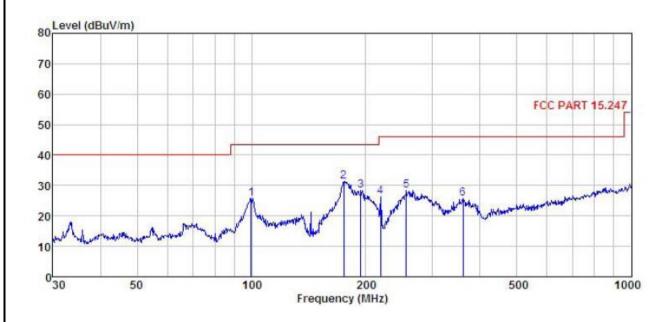
Remark:

^{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:	SMART PHONE	Product Model:	Elite A5
Test By:	Yaro	Test mode:	BLE Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



	Freq		Antenna Factor				Limit Line	Over Limit	
	MHz	dBu₹	<u>dB/m</u>	d₿	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1	99.878	40.91	12.41	1.94	29.53	25.73	43.50	-17.77	QP
2	175.037	47.87	9.81	2.69	29.01	31.36	43.50	-12.14	QP
3	193.773	43.99	10.40	2.82	28.87	28.34	43.50	-15.16	QP
4	219.075	40.84	11.43	2.85	28.71	26.41	46.00	-19.59	QP
5	255.623	41.26	12.80	2.82	28.53	28.35	46.00	-17.65	QP
6	360.448	36.37	14.75	3.10	28.61	25.61	46.00	-20.39	QP

- 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 ch	annel: Lowe	est 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	48.78	30.85	6.80	41.81	44.62	74.00	-29.38	Vertical				
4804.00	48.36	30.85	6.80	41.81	44.20	74.00	-29.80	Horizontal				
			Dete	ector: Avera	ge 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	40.80	30.85	6.80	41.81	36.64	54.00	-17.36	Vertical				
4804.00	40.27	30.85	6.80	41.81	36.11	54.00	-17.89	Horizontal				
	Test channel: Middle channel											
			De	tector: 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				
4884.00	48.25	31.20	6.86	41.84	44.47	74.00	-29.53	Vertical				
4884.00	48.37	31.20	6.86	41.84	44.59	74.00	-29.41	Horizontal				
			Dete	ector: Avera	ge 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	40.15	31.20	6.86	41.84	36.37	54.00	-17.63	Vertical				
4884.00	40.84	31.20	6.86	41.84	37.06	54.00	-16.94	Horizontal				

	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	48.97	31.63	6.91	41.87	45.64	74.00	-28.36	Vertical							
4960.00	48.25	31.63	6.91	41.87	44.92	74.00	-29.08	Horizontal							
			Dete	ctor: Avera	ge 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	40.67	31.63	6.91	41.87	37.34	54.00	-16.66	Vertical							
4960.00	40.78	31.63	6.91	41.87	37.45	54.00	-16.55	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.