

FCC Test Report

FCC ID:2ACMQSP-SI-602

Product : Smartphone

Trade Name : N/A

Model Number : SP-SI-602

SP-SI-502, SP-SI-602-BK (black), SP-SI-602-WH (white),
SP-SI-602-BE (Blue), SP-SI-602-RD (red), SP-SI-602-GR
(Green), SP-SI-602-YW (Yellow), SP-SI-702, SP-SI-802,
SP-SI-504, SP-SI-604, SP-SI-704, SP-SI-804, SP-SI-505,
SP-SI-605, SP-SI-705, SP-SI-805, SP-SI-508, SP-SI-608,
SP-SI-708, SP-SI-808, SP-OR-T42, SP-OR-T43, SP-OR-T44,

Serial Model : SP-OR-T45, SP-OR-T46, SP-OR-T47, SP-OR-T48,
SP-OR-T49, SP-OR-T52, SP-OR-T53, SP-OR-T54,
SP-OR-T55, SP-OR-T56, SP-OR-T57, SP-OR-T58,
SP-OR-T59, SP-CY-434, SP-CY-435, SP-CY-436,
SP-CY-437, SP-CY-438, SP-CY-439, SP-CY-534,
SP-CY-535, SP-CY-536, SP-CY-537, SP-CY-538,
SP-CY-539, SP-CY-554, SP-CY-555, SP-CY-556,
SP-CY-557, SP-CY-558, SP-CY-559

Report No. : ISOT14083210E

Prepared for

SISTEMAS APLICADOS USA, LLC

2005 E Griffin Pkwy Suite 150, Mission, Texas, United States 78572

Prepared by

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[Http://www.ISOTek.com.cn](http://www.ISOTek.com.cn)

TEST RESULT CERTIFICATION

Applicant's name : SISTEMAS APLICADOS USA, LLC
Address : 2005 E Griffin Pkwy Suite 150, Mission, Texas, United States
78572
Manufacturer's Name : SISTEMAS APLICADOS USA, LLC
Address : 2005 E Griffin Pkwy Suite 150, Mission, Texas, United States
78572

Product description

Product name : Smartphone
Model and/or type reference : SP-SI-602
FCC Part15B:01 Oct.2013

Standards : ANSI C63.4:2003

This device described above has been tested by Shenzhen ISOTek, and the test results show that the equipment under test (EUT) is in compliance with Part 15 of FCC Rules. And it is applicable only to the tested sample identified in the report.

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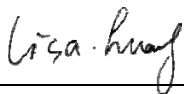
Date of Test

Date (s) of performance of tests : 02 August. 2014 ~18 August. 2014

Date of Issue : 18 August. 2014

Test Result..... : **Pass**

Compiled by:



Lisa Huang/ Project Engineer

Approved by:



Richard Chen/ Manager

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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15.107	Conducted Emission	Class B	PASS	
FCC Part15.109	Radiated Emission	Class B	PASS	

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report
- (2) For client's request and manual description, the test will not be executed.

1.1 TEST FACILITY

All the tests were performed at:

Waltek Services(Shenzhen) Co., Ltd. at 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen, China

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

1.2 MEASUREMENT UNCERTAINTY

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

A. Conducted Measurement :

Method	Measurement Frequency Range	U , (dB)	NOTE
ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement :

Method	Measurement Frequency Range	U , (dB)	NOTE
ANSI	30MHz ~ 1000MHz	4.7	
	1GHz ~12.4GHz	5.0	

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Smartphone	
Model Name	SP-SI-602	
Serial Model	Refer to the first page.	
Model Difference	All the names are the same circuit and RF module, except the model names.	
Product Description	The EUT is a SMARTPHONE.	
	Connecting I/O port:	USB, Earphone
	Operation Frequency:	BT:2402~2480 MHz WIFI: 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz):2422~2452MHz
	Modulation Type:	BT(1Mbps): GFSK BT EDR(2Mbps): $\pi/4$ -DQPSK BT EDR(3Mbps): 8-DPSK WIFI: CCK/OFDM/DBPSK/DAPSK
	Crystal oscillator	26MHz; 32.768kHz
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.	
Power Source	DC Voltage	
Adapter	Input: 100-240V	
	Output: 5.0V $\overline{\text{---}}$, 2000mA	
Battery	DC3.7V, 2600mAh	

2.1.1 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

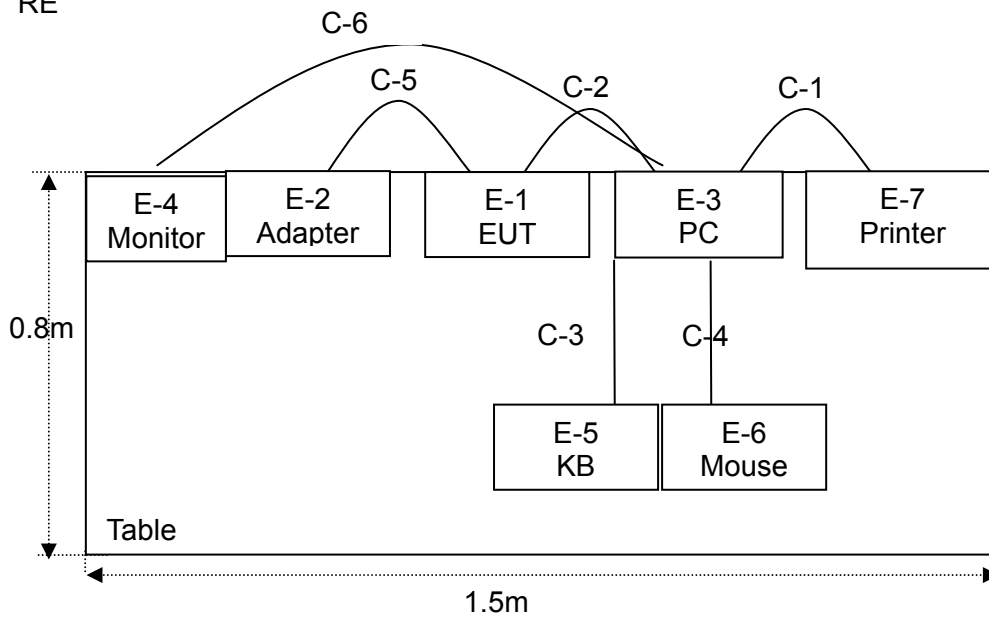
Pretest Mode	Description
Mode 1	Playing+charging
Mode 2	Camera
Mode 3	Downloading+Charging

For Conducted Test	
Final Test Mode	Description
Mode 1	Playing+charging
Mode 2	Camera
Mode 3	Downloading+Charging

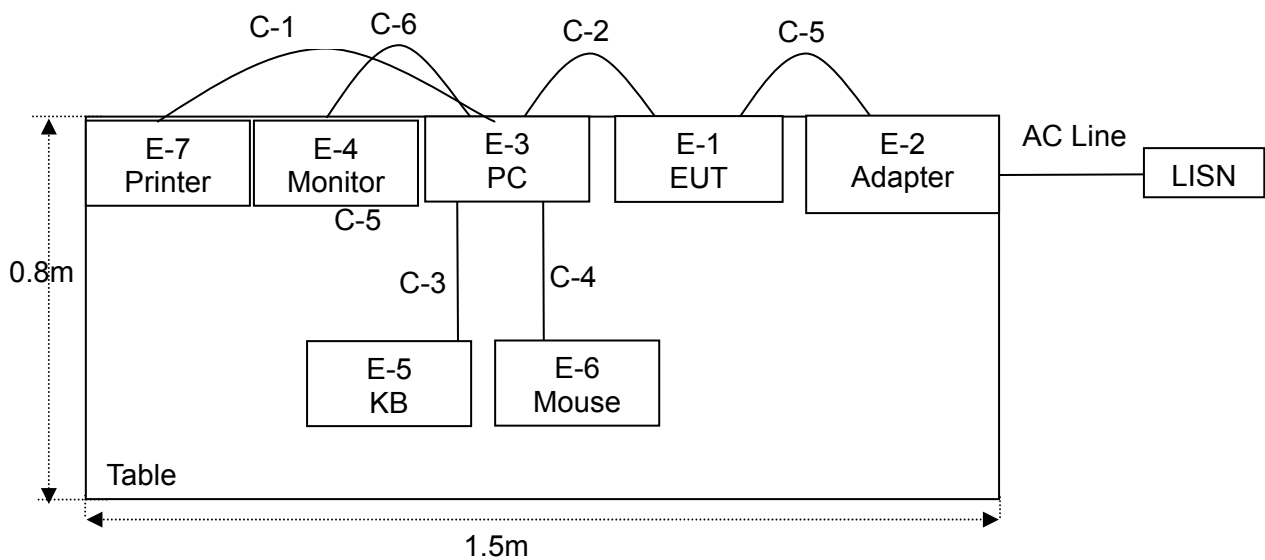
For Radiated Test	
Final Test Mode	Description
Mode 1	Playing+charging
Mode 2	Camera
Mode 3	Downloading+Charging

2.2 DESCRIPTION OF TEST SETUP

RE



CE



2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	Smartphone	N/A	SP-SI-602	N/A	EUT
E-2	Adapter	N/A	CW0502000	N/A	
E-3	Personal computer	DELL	FT4Y23X	34413561645	
E-4	Monitor	DELL	IN2020MB	cn-0y6mhx-74261-11f-67es	
E-5	Keyboard	DELL	SK-8185	OY526KUS	
E-6	Mouse	DELL	MS111-P	cn-011d3v-71581-11e-1th7	
E-7	Printer	Canon	L11121E	LBP2900	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1.2m	
C-2	NO	NO	1.0m	
C-3	NO	NO	1.0m	
C-4	NO	NO	1.0m	
C-5	NO	NO	1.0m	
C-6	NO	NO	1.0m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” means “shielded” “with core”; “NO” means “unshielded” “without core”.

2.4 MEASUREMENT INSTRUMENTS LIST

2.4.1 CONDUCTED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	LISN	R&S	ENV216	101313	Jul. 06, 2014	Jul. 05, 2015	1 year
2	LISN	SCHWARZBECK	NNLK 8129	8129245	Dec. 25, 2013	Dec. 24, 2014	1 year
3	Pulse Limiter	SCHWARZBECK	VTSD 9561F	9716	Dec. 25, 2013	Dec. 24, 2014	1 year
4	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2014	Jul. 05, 2015	1 year
5	Test Cable	N/A	C01	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
6	Test Cable	N/A	C02	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
7	Test Cable	N/A	C03	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
8	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2014	Jul. 07, 2015	1 year

2.4.2 RADIATED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2014	Jul. 05, 2015	1 year
2	Test Cable	N/A	R-01	N/A	Dec. 25, 2013	Dec. 24, 2014	1 year
3	Test Cable	N/A	R-02	N/A	Dec. 25, 2013	Dec. 24, 2014	1 year
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2014	Jul. 05, 2015	1 year
5	Antenna Mast	EM	SC100_1	N/A	N/A	N/A	N/A
6	Turn Table	EM	SC100	060531	N/A	N/A	N/A
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2014	Jul. 05, 2015	1 year
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2014	Jul. 05, 2015	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06, 2014	Jul. 05, 2015	1 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

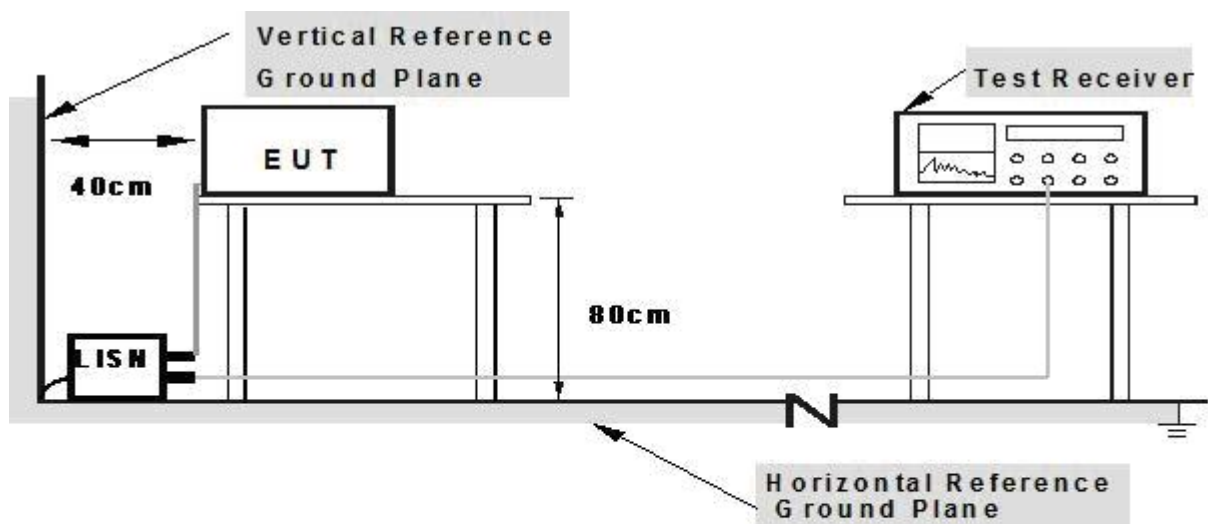
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

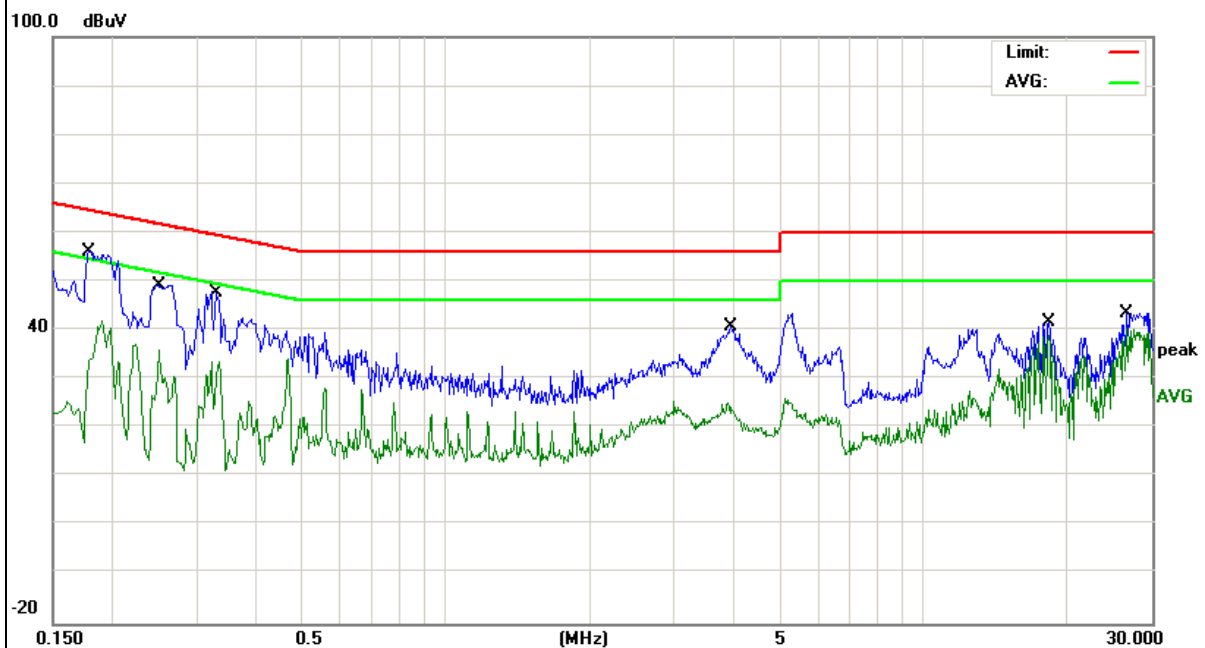
3.1.5 TEST RESULTS

EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 1	Phase :	L
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1804	46.32	9.55	55.87	64.46	-8.59	QP
0.1804	32.36	9.55	41.91	54.46	-12.55	AVG
0.2500	39.77	9.49	49.26	61.75	-12.49	QP
0.2500	26.45	9.49	35.94	51.75	-15.81	AVG
0.3339	38.37	9.50	47.87	59.35	-11.48	QP
0.3339	24.16	9.50	33.66	49.35	-15.69	AVG
3.8940	31.28	9.59	40.87	56.00	-15.13	QP
3.8940	15.49	9.59	25.08	46.00	-20.92	AVG
18.2334	31.63	10.13	41.76	60.00	-18.24	QP
18.2334	28.70	10.13	38.83	50.00	-11.17	AVG
26.5740	33.35	10.15	43.50	60.00	-16.50	QP
26.5740	30.25	10.15	40.40	50.00	-9.60	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

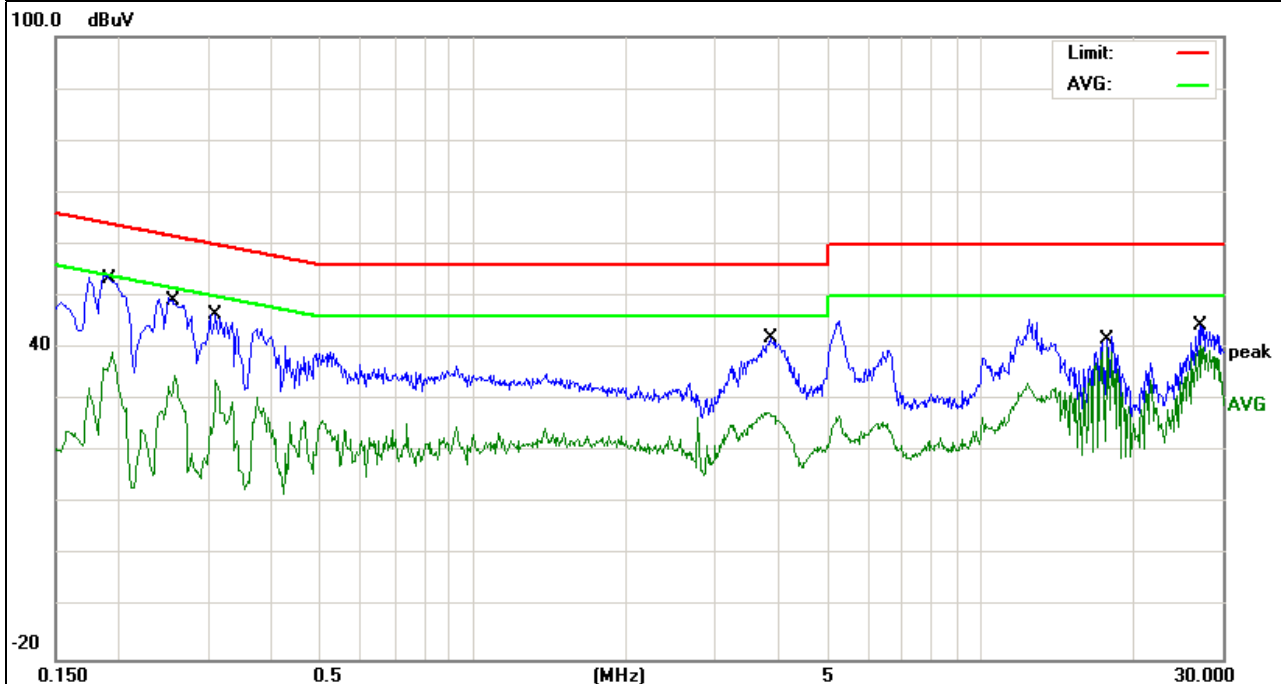


EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 1	Phase :	N
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1940	44.33	9.52	53.85	63.86	-10.01	QP
0.1940	29.76	9.52	39.28	53.86	-14.58	AVG
0.2580	40.09	9.51	49.60	61.49	-11.89	QP
0.2580	25.28	9.51	34.79	51.49	-16.70	AVG
0.3099	36.90	9.51	46.41	59.97	-13.56	QP
0.3099	24.30	9.51	33.81	49.97	-16.16	AVG
3.8180	32.22	9.59	41.81	56.00	-14.19	QP
3.8180	18.03	9.59	27.62	46.00	-18.38	AVG
17.7819	32.11	10.02	42.13	60.00	-17.87	QP
17.7819	30.06	10.02	40.08	50.00	-9.92	AVG
27.0060	34.16	10.27	44.43	60.00	-15.57	QP
27.0060	30.26	10.27	40.53	50.00	-9.47	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

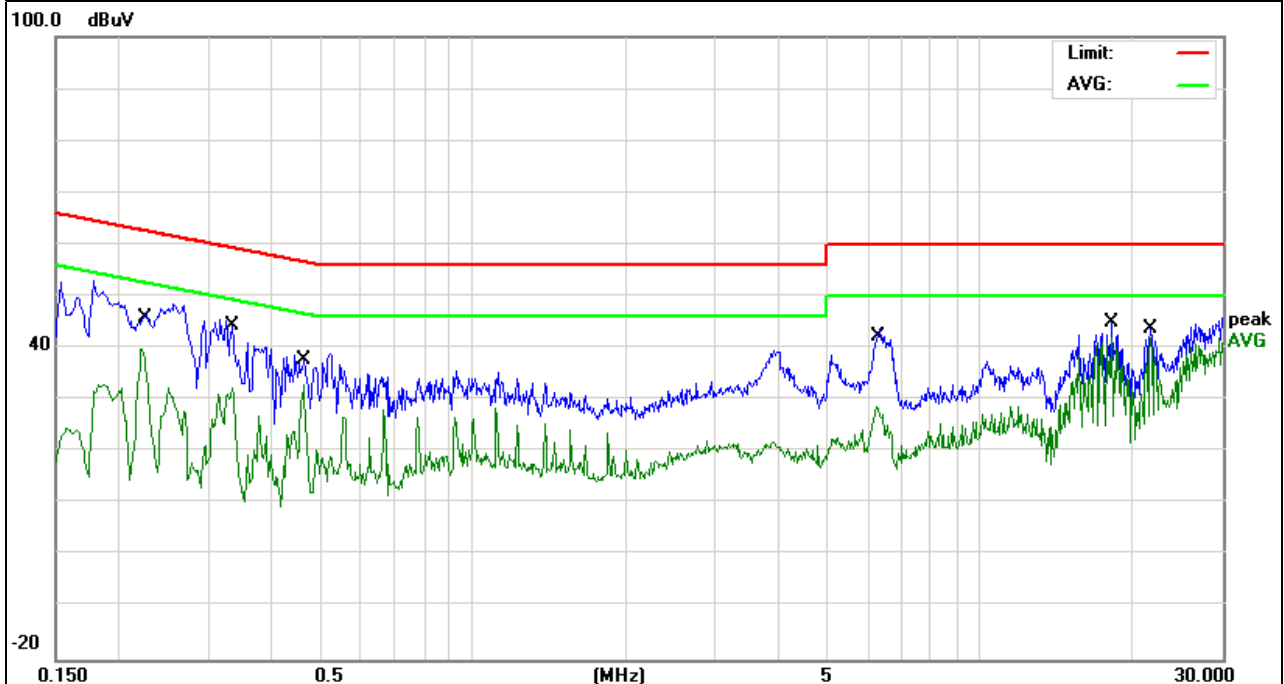


EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 2	Phase :	L
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.2220	37.16	9.49	46.65	62.74	-16.09	QP
0.2220	30.37	9.49	39.86	52.74	-12.88	AVG
0.3339	36.09	9.50	45.59	59.35	-13.76	QP
0.3339	22.86	9.50	32.36	49.35	-16.99	AVG
0.4620	29.05	9.51	38.56	56.66	-18.10	QP
0.4620	23.47	9.51	32.98	46.66	-13.68	AVG
6.2419	34.10	9.64	43.74	60.00	-16.26	QP
6.2419	18.96	9.64	28.60	50.00	-21.40	AVG
18.2219	34.76	10.13	44.89	60.00	-15.11	QP
18.2219	31.69	10.13	41.82	50.00	-8.18	AVG
21.6700	33.60	10.26	43.86	60.00	-16.14	QP
21.6700	31.58	10.26	41.84	50.00	-8.16	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



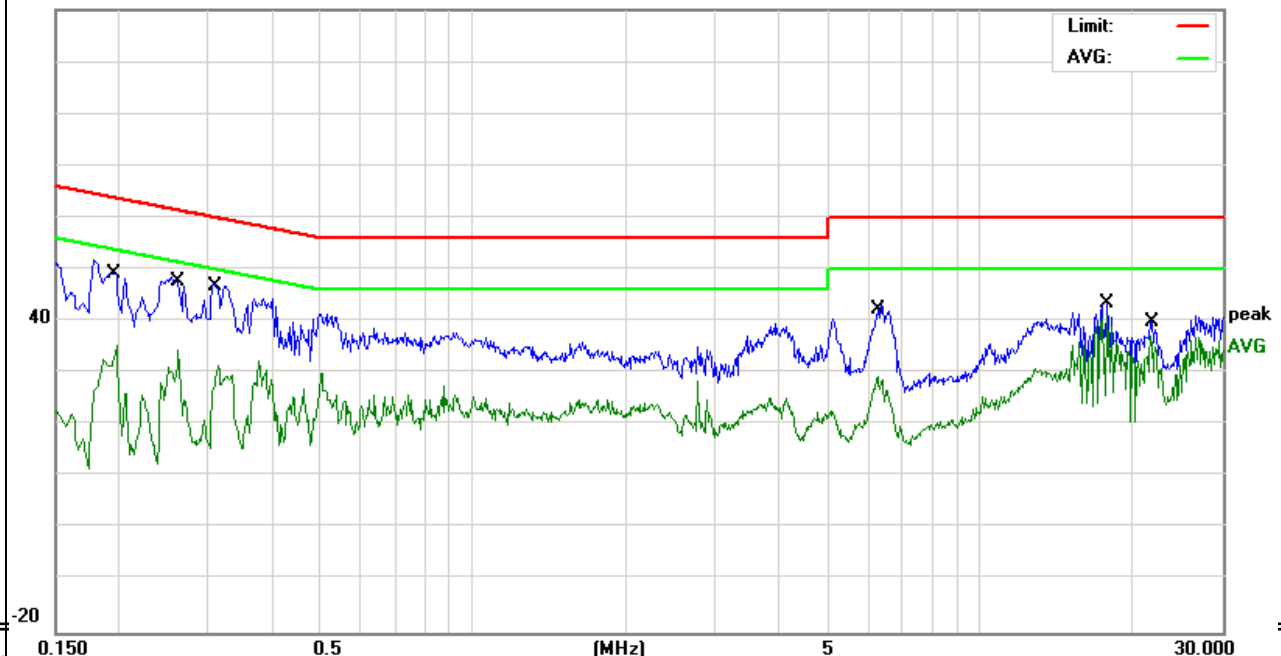
EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 2	Phase :	N
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1980	39.72	9.51	49.23	63.69	-14.46	QP
0.1980	25.81	9.51	35.32	53.69	-18.37	AVG
0.2620	38.90	9.51	48.41	61.36	-12.95	QP
0.2620	24.91	9.51	34.42	51.36	-16.94	AVG
0.3140	37.64	9.51	47.15	59.86	-12.71	QP
0.3140	22.07	9.51	31.58	49.86	-18.28	AVG
6.2659	33.41	9.64	43.05	60.00	-16.95	QP
6.2659	19.56	9.64	29.20	50.00	-20.80	AVG
17.7819	33.33	10.02	43.35	60.00	-16.65	QP
17.7819	30.98	10.02	41.00	50.00	-9.00	AVG
21.6700	29.63	10.21	39.84	60.00	-20.16	QP
21.6700	26.80	10.21	37.01	50.00	-12.99	AVG
0.1980	39.72	9.51	49.23	63.69	-14.46	QP
0.1980	25.81	9.51	35.32	53.69	-18.37	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

100.0 dBμV

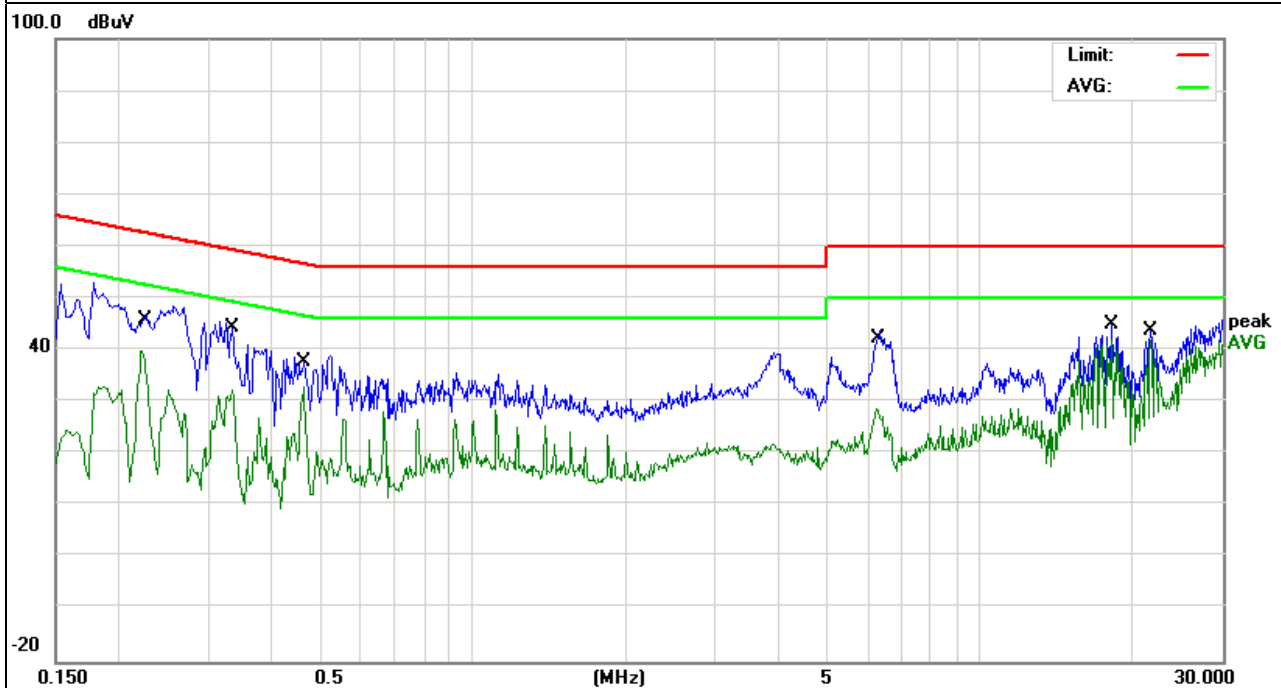


EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 3	Phase :	L
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1859	41.23	9.53	50.76	64.21	-13.45	QP
0.1859	26.54	9.53	36.07	54.21	-18.14	AVG
0.3099	38.73	9.50	48.23	59.97	-11.74	QP
0.3099	25.17	9.50	34.67	49.97	-15.30	AVG
0.6660	32.30	9.53	41.83	56.00	-14.17	QP
0.6660	20.77	9.53	30.30	46.00	-15.70	AVG
3.8780	33.51	9.58	43.09	56.00	-12.91	QP
3.8780	19.70	9.58	29.28	46.00	-16.72	AVG
19.4419	33.95	10.25	44.20	60.00	-15.80	QP
19.4419	31.79	10.25	42.04	50.00	-7.96	AVG
25.5533	30.81	10.17	40.98	60.00	-19.02	QP
25.5533	28.29	10.17	38.46	50.00	-11.54	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

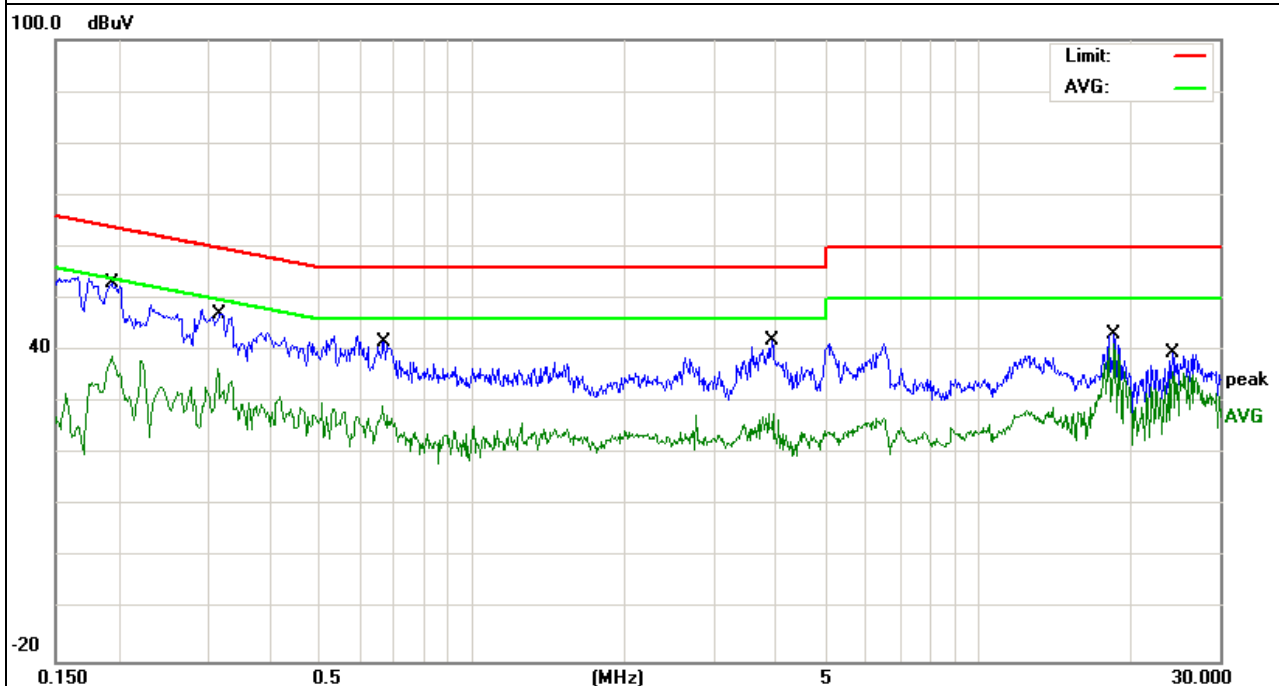


EUT :	Smartphone	Model Name. :	SP-SI-602
Temperature :	26 °C	Relative HuSmartphoneity :	54%
Pressure :	1010hPa	Test Date :	2014-08-06
Test Mode :	Mode 3	Phase :	N
Test Voltage :	DC 5V From ADAPTER AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1940	43.53	9.52	53.05	63.86	-10.81	QP
0.1940	29.34	9.52	38.86	53.86	-15.00	AVG
0.3140	37.62	9.51	47.13	59.86	-12.73	QP
0.3140	27.09	9.51	36.60	49.86	-13.26	AVG
0.6660	32.19	9.54	41.73	56.00	-14.27	QP
0.6660	19.81	9.54	29.35	46.00	-16.65	AVG
3.9380	32.24	9.59	41.83	56.00	-14.17	QP
3.9380	18.19	9.59	27.78	46.00	-18.22	AVG
18.5499	33.10	10.07	43.17	60.00	-16.83	QP
18.5499	31.13	10.07	41.20	50.00	-8.80	AVG
24.2135	29.16	10.28	39.44	60.00	-20.56	QP
24.2135	25.67	10.28	35.95	50.00	-14.05	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)
	dBuV/m	dBuV/m
30 ~ 88	39.0	40.0
88 ~ 216	43.5	43.5
216 ~ 960	46.5	46.0
Above 960	49.5	54.0

Notes:

- (1) The limit for radiated test was performed according to as following:
FCC PART 15B /ICES-003.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

3.2.2 TEST PROCEDURE

Test Arrangement for Radiated Emissions up to 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. 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.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30~1000	QP	120kHz	300kHz

Test Arrangement for Radiated Emissions above 1 GHz.

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna

was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

- e. The spectrum analyzer system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

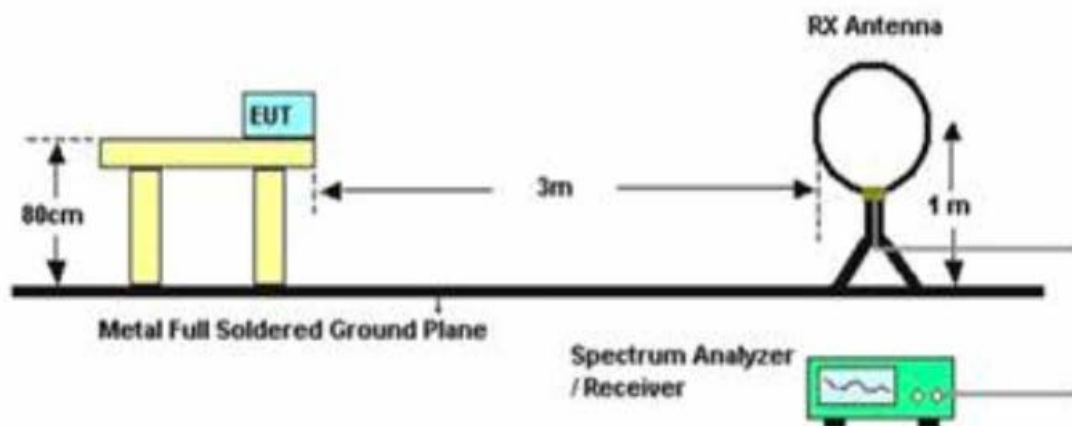
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
Above 1000	Peak	1 MHz	3 MHz
	Average	1 MHz	10 Hz

Note: For the hand-held device, the EUT should be measured for all 3 axes and only the worst case is recorded in the report

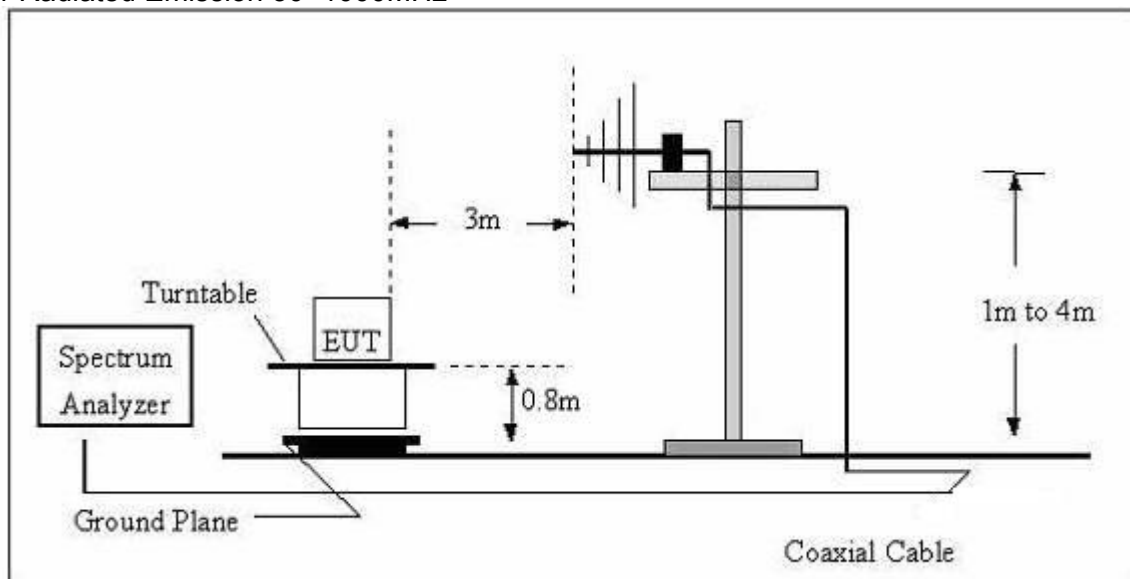
3.2.3 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz

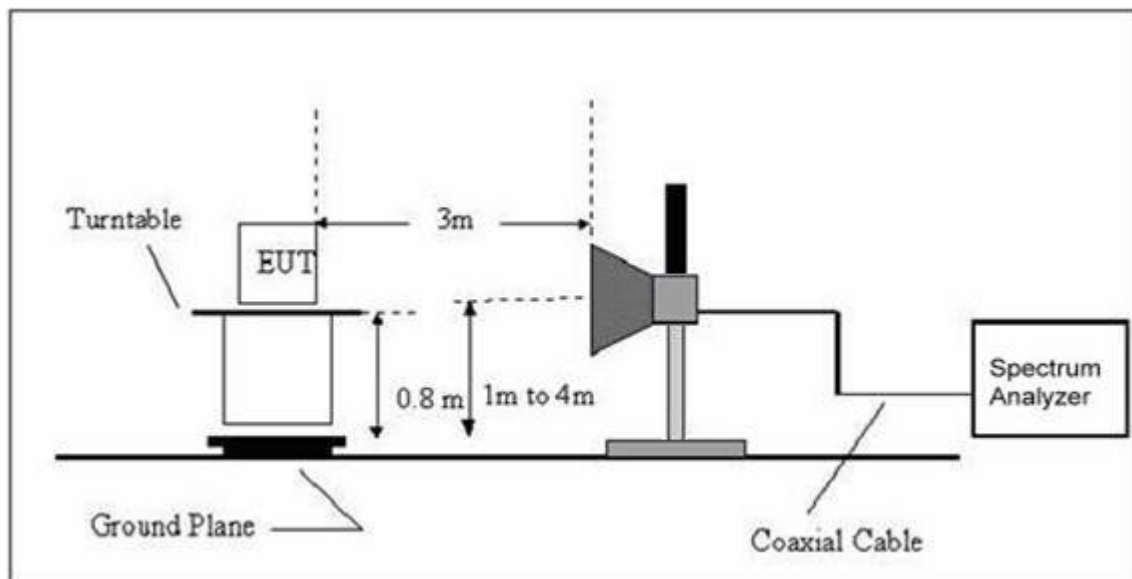
For radiated emissions below 30MHz



For Radiated Emission 30~1000MHz



(B) Radiated Emission Test Set-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.5 TEST RESULTS

TEST RESULTS (Below 30 MHz)

EUT :	3G SMARTPHONE	Model Name :	SP-SI-602
Temperature :	20 °C	Relative HuSmartphoneity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization :	---

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $20 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

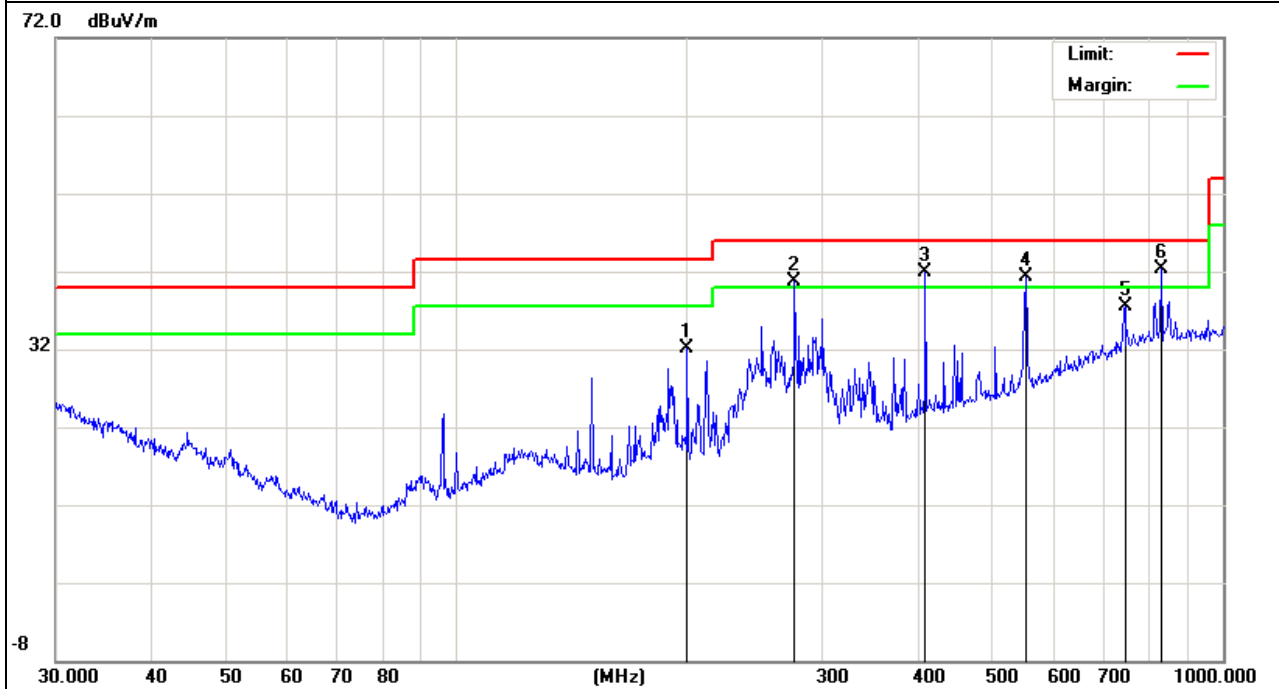
TEST RESULTS (30~1000 MHz)

EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 1	Polarization :	Horizontal
Test Power :	DC 5V From ADAPTER AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
199.9856	21.34	10.78	32.12	43.50	-11.38	QP
276.1235	26.82	13.88	40.70	46.00	-5.30	QP
408.9460	23.37	18.49	41.86	46.00	-4.14	QP
552.8832	19.90	21.40	41.30	46.00	-4.70	QP
744.8660	11.56	25.96	37.52	46.00	-8.48	QP
830.4002	15.10	27.30	42.40	46.00	-3.60	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

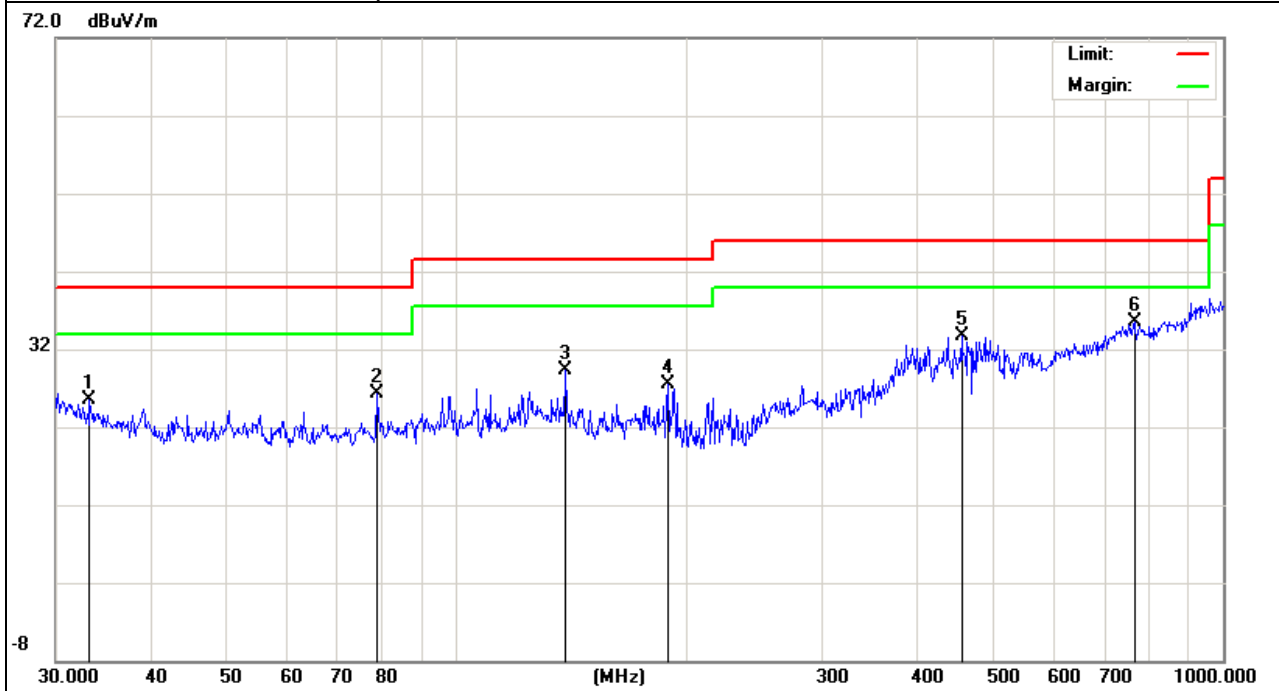


EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 1	Polarization :	Vertical
Test Power :	DC 9V From Notebook AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
37.4164	21.23	15.17	36.40	40.00	-3.60	QP
44.2751	22.74	12.16	34.90	40.00	-5.10	QP
199.9856	18.67	10.78	29.45	43.50	-14.05	QP
276.1235	22.75	13.88	36.63	46.00	-9.37	QP
550.9479	19.65	21.36	41.01	46.00	-4.99	QP
815.9678	13.59	27.36	40.95	46.00	-5.05	QP

Remark:

1. All readings are Peak and Average values.
2. Factor = Antenna Factor + Cable Loss - Amplifier.
3. N/A means All Data have pass Limit

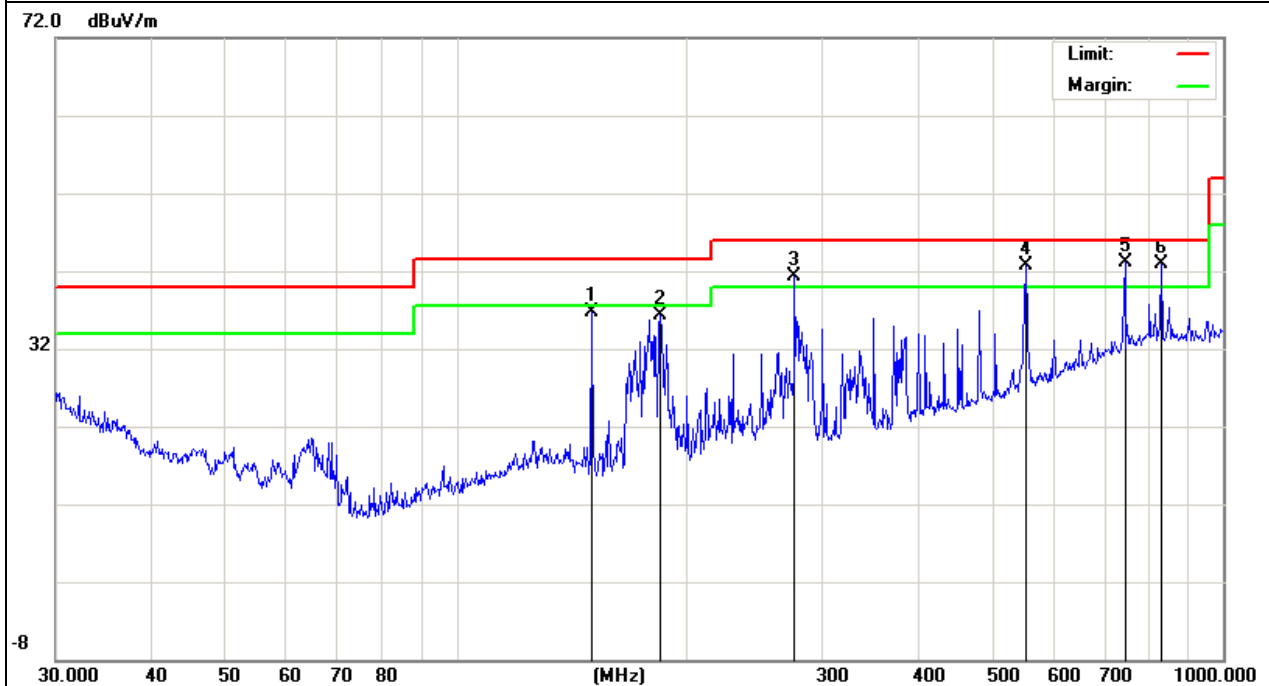


EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 2	Polarization :	Horizontal
Test Power :	DC 5V From ADAPTER AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
150.0107	26.29	10.41	36.70	43.50	-6.80	QP
184.4898	25.69	10.66	36.35	43.50	-7.15	QP
276.1235	27.42	13.88	41.30	46.00	-4.70	QP
552.8832	21.30	21.40	42.70	46.00	-3.30	QP
744.8660	17.05	25.96	43.01	46.00	-2.99	QP
830.4002	15.63	27.30	42.93	46.00	-3.07	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

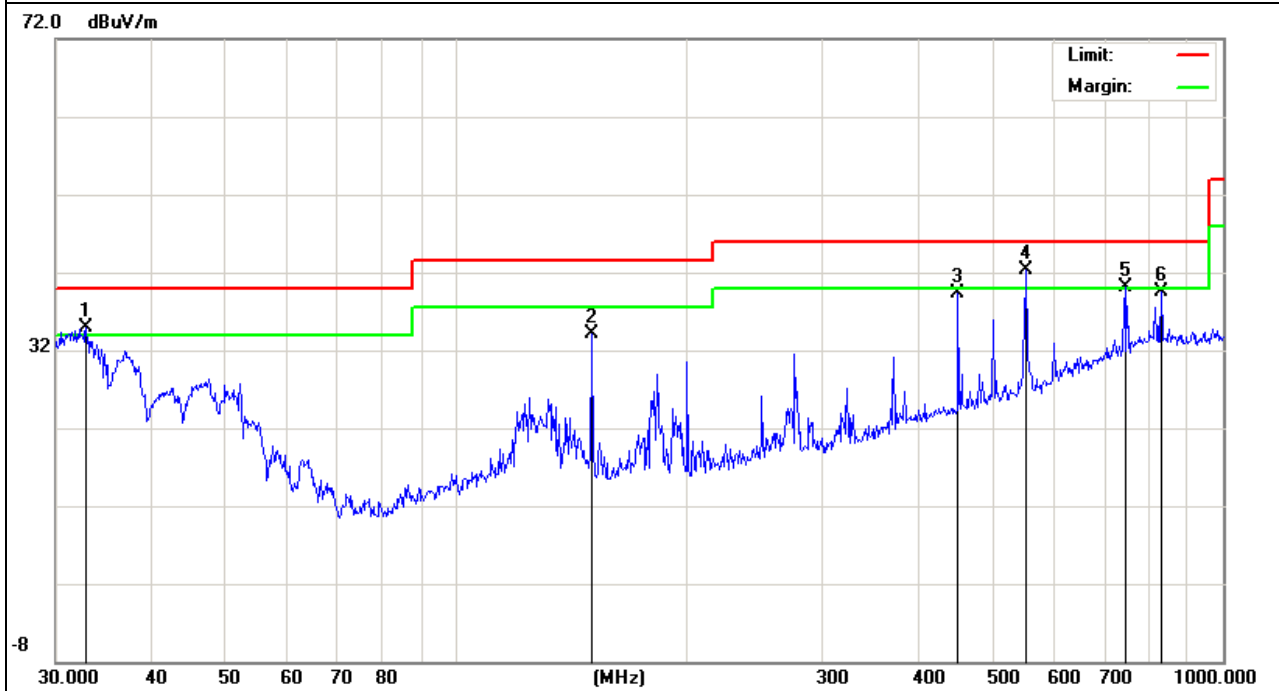


EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 2	Polarization :	Vertical
Test Power :	DC 5V From ADAPTER AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
32.8637	17.05	17.86	34.91	40.00	-5.09	QP
150.0107	23.69	10.41	34.10	43.50	-9.40	QP
451.1349	19.94	19.33	39.27	46.00	-6.73	QP
552.8831	20.90	21.40	42.30	46.00	-3.70	QP
744.8659	14.07	25.96	40.03	46.00	-5.97	QP
830.4002	12.13	27.30	39.43	46.00	-6.57	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

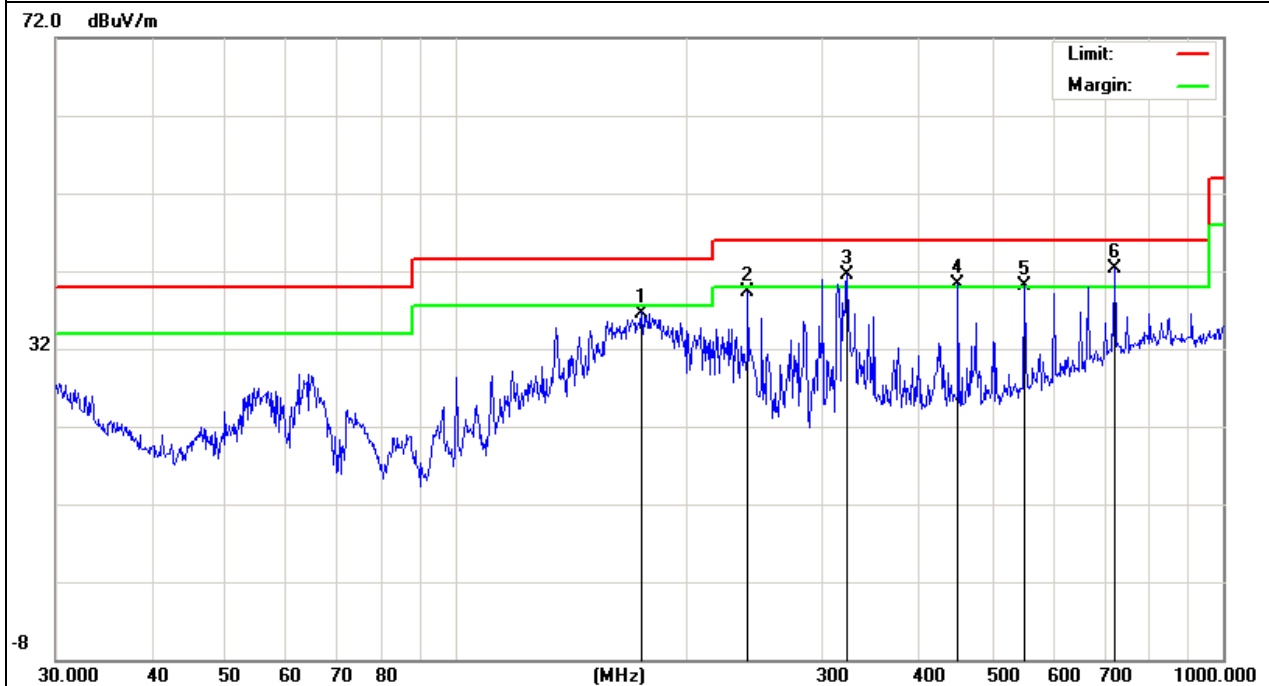


EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 3	Polarization :	Horizontal
Test Power :	DC 5V From PC AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
174.4241	26.02	10.58	36.60	43.50	-6.90	QP
239.9874	25.91	13.49	39.40	46.00	-6.60	QP
323.3204	26.33	15.12	41.45	46.00	-4.55	QP
451.1349	20.97	19.33	40.30	46.00	-5.70	QP
550.9479	18.65	21.36	40.01	46.00	-5.99	QP
721.7259	16.94	25.36	42.30	46.00	-3.70	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

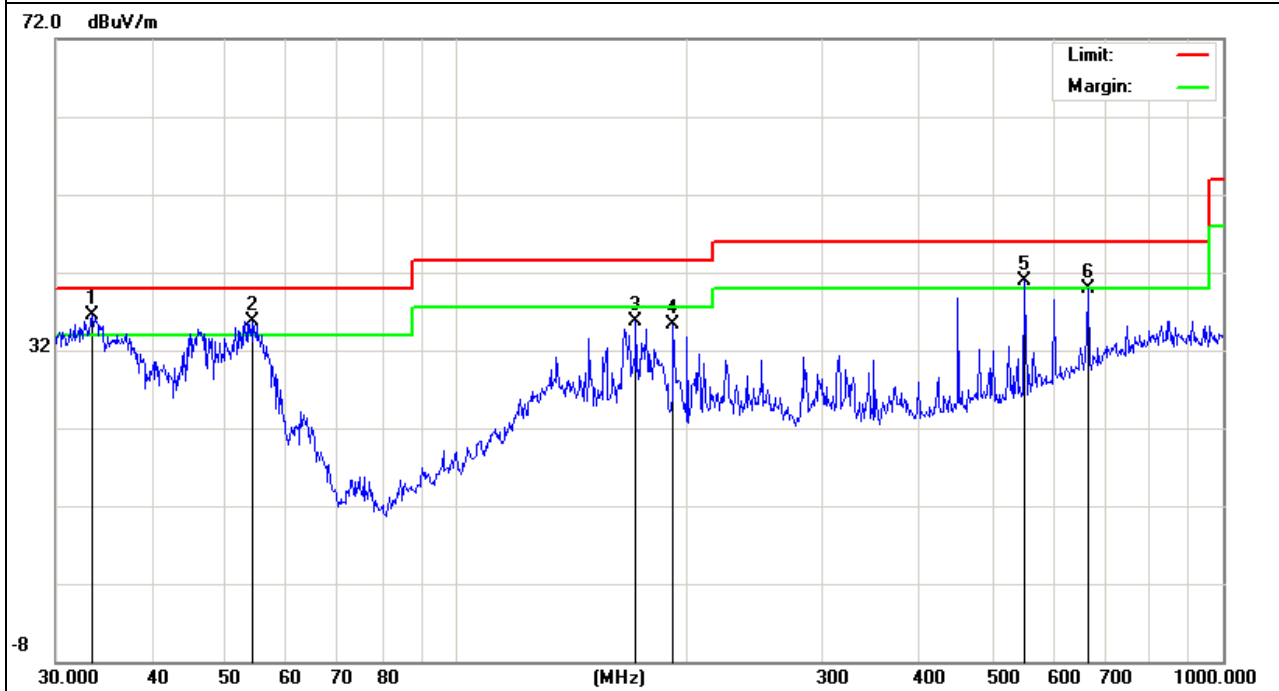


EUT :	Smartphone	Model Name :	SP-SI-602
Temperature :	24 °C	Relative HuSmartphoneity :	54%
Pressure :	1010 hPa	Test Date :	2014-08-06
Test Mode :	Mode 3	Polarization :	Vertical
Test Power :	DC 5V From PC AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
33.4448	18.96	17.54	36.50	40.00	-3.50	QP
54.0711	26.19	9.53	35.72	40.00	-4.28	QP
171.3925	25.13	10.57	35.70	43.50	-7.80	QP
191.7450	24.60	10.71	35.31	43.50	-8.19	QP
550.9479	19.54	21.36	40.90	46.00	-5.10	QP
665.8034	16.01	23.85	39.86	46.00	-6.14	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.



3.2.6 TEST RESULTS(1000~12400MHz)

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
V	1178.5	65.15	-18.27	46.88	74.00	-27.12	peak
V	1178.5	42.75	-18.27	24.48	54.00	-29.52	AVG
V	2035.0	63.42	-13.30	50.12	74.00	-23.88	peak
V	2035.0	41.97	-13.30	28.67	54.00	-25.33	AVG
V	2725.0	63.08	-11.78	51.30	74.00	-22.70	peak
V	2725.0	40.69	-11.78	28.91	54.00	-25.09	AVG
V	2925.0	62.34	-11.96	50.38	74.00	-23.62	peak
V	2925.0	42.33	-11.96	30.37	54.00	-23.63	AVG
V	4050.2	59.16	-5.98	53.18	74.00	-20.82	peak
V	4050.2	37.74	-5.98	31.76	54.00	-22.24	AVG
H	1387.5	59.98	-17.43	42.55	74.00	-31.45	peak
H	1387.5	39.79	-17.43	22.36	54.00	-31.64	AVG
H	2000.0	58.74	-13.30	45.44	74.00	-28.56	peak
H	2000.0	38.17	-13.30	24.87	54.00	-29.13	AVG
H	2775.0	58.58	-11.61	46.97	74.00	-27.03	peak
H	2775.0	37.30	-11.61	25.69	54.00	-28.31	AVG
H	3862.5	55.22	-7.25	47.97	74.00	-26.03	peak
H	3862.5	33.62	-7.25	26.37	54.00	-27.63	AVG
H	4837.5	53.08	-3.55	49.53	74.00	-24.47	peak
H	4837.5	32.02	-3.55	28.47	54.00	-25.53	AVG
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit							

4. EUT TEST PHOTO

Radiated Measurement Photos



Conducted Measurement Photos



----END OF REPORT----