

FCC Test Report FCC ID: 2AFEV-SP5026I

Product: Smartphone

Trade Name: WOO

Model Number: SP5026i

Serial Model: N/A

Report No.: NTEK-2015NT06152058R1

Prepared for

WOO Global Markets, S.L.

Calle Amado Nervo 3, 28007 Madrid - Spain

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China

Tel.: +86-0755-61156588 Fax.: +86-0755-61156599 Website: www.ntek.org.cn



TEST RESULT CERTIFICATION

Report No.: NTEK-2015NT06152058R1

Applicant's name: WOO Glo	bal Markets, S.L.				
Address : Calle Ama	Calle Amado Nervo 3, 28007 Madrid - Spain				
Manufacturer's Name: Bluebank	Bluebank Communication Technology Co.Ltd.				
No. 13-2, Jiang Ying Road, Nan An District, Chongqing, P.R. China					
Product description					
Product name: Smartpho	ne				
Model and/or type reference : SP5026i					
Standards FCC Part	15B:01 Oct.2014 3.4:2014				
	ted by NTEK, and the test results show that the ce with Part 15 of FCC Rules. And it is applicable only to				
·	in full, without the written approval of NTEK, this EK, personnel only, and shall be noted in the revision of				
Date (s) of performance of tests:	15 Jun. 2015 ~03 Jul. 2015				
Date of Issue:	03 Jul. 2015				
Test Result:	Pass				
Testing Engineer :	Denny Huang				
Technical Manager :	Brown Lu)				
Authorized Signatory:	(Bill Yao)				



Table of Contents	Page
1 . TEST SUMMARY	4
1.1 TEST FACILITY	5
1.2 MEASUREMENT UNCERTAINTY	5
2 . GENERAL INFORMATION	6
2.1 GENERAL DESCRIPTION OF EUT	6
2.2 DESCRIPTION OF TEST SETUP	8
2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL	9
2.4 MEASUREMENT INSTRUMENTS LIST	10
3 . EMC EMISSION TEST	11
3.1 CONDUCTED EMISSION MEASUREMENT 3.1.1 POWER LINE CONDUCTED EMISSION	11 11
3.1.2 TEST PROCEDURE	12
3.1.3 TEST SETUP	12
3.1.4 EUT OPERATING CONDITIONS	12
3.1.5 TEST RESULTS	13
3.2 RADIATED EMISSION MEASUREMENT	21
3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT 3.2.2 TEST PROCEDURE	21 21
3.2.3 TEST SETUP	22
3.2.4 TEST RESULTS	23
3.2.5 TEST RESULTS(1000~12400MHz)	25
4 . EUT TEST PHOTO	26



1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission							
Standard	Judgment	Remark					
FCC Part15B:2014 ANSI C63.4: 2014	Conducted Emission	Class B	PASS				
	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

NTEK Testing Technology Co., Ltd

Add.: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registration Number:238937; IC Registration Number:9270A-1

CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

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

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
NTEKC01	ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.7	
		1GHz ~12.4GHz	5.0	



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Smartphone			
Model Name	SP5026i			
Additional Model Number(s)	N/A			
Model Difference	N/A			
	The EUT is a Smartphor Connecting I/O port:	ne.		
	Operation Frequency:	BT:2402~2480 MHz WIFI:		
		802.11b/g/n(20MHz): 2412~2462MHz		
		GSM: 824.2-848.8MHz/1850.2-1909.8MHz		
		WCDMA: 826.4-846.6MHz/		
Product Description		1852.4-1907.6MHz		
	Modulation Type:	BT(1Mbps): GFSK BT EDR(2Mbps): π/4-DQPSK BT EDR(3Mbps): 8-DPSK IEEE 802.11b: DSSS (CCK, QPSK, DBPSK) IEEE 802.11g/n (HT20): OFDM (64QAM, 16QAM, QPSK, BPSK) GSM / DCS: GMSK WCDMA:QPSK		
Power Source	DC Voltage			
	Mode: WTA0501000USA1			
Adapter				
Battery	DC 3.7V,2000mAh			



2.1.1 DESCRIPTION OF TEST MODES

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

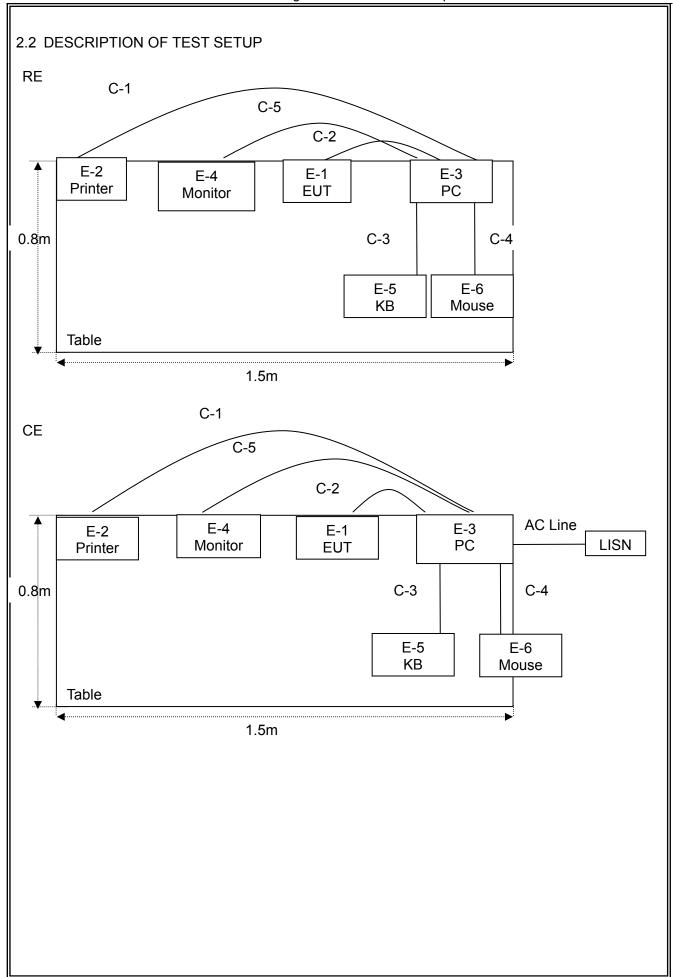
Pretest Mode	Description
Mode 1	Data Exchange Mode
Mode 2	REC Mode
Mode 3	TF Card Playing Mode+Charging
Mode 4	GPS

For Conducted Test				
Final Test Mode Description				
Mode 1	Data Exchange Mode			

For Radiated Test				
Final Test Mode Description				
Mode 1	Data Exchange Mode			

Note: Final Test Mode: Through Pre-scan, find the mode 1 is the worse case. Only the worst case mode is recorded in the report.







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	WOO	SP5026i	N/A	EUT
E-2	Printer	Canon	L11121E	LBP2900	
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	

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	

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 <code>"Length_"</code> column.
- (3) "YES" means "shielded" "with core"; "NO" means "unshielded" "without core".



2.4 MEASUREMENT INSTRUMENTS LIST

Radiation Test equipment

Item	Kind of	Manufacturer	Type No.	Serial No.	Last	Calibrated	Calibratio
	Equipment				calibration	until	n period
1	Spectrum Analyzer	Agilent	E4407B	MY4510804 0	2014.07.06	2015.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2015.06.07	2016.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2014.07.06	2015.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 6	2015.06.07	2016.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2015.06.07	2016.06.06	1 year
6	Horn Antenna	EM	EM-AH-101 80	2011071402	2014.07.06	2015.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2014.12.22	2015.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2015.06.08	2016.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2014.07.06	2015.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619. 05	2014.07.06	2015.07.05	1 year
12	Test Cable	N/A	R-01	N/A	2014.07.06	2015.07.05	1 year
13	Test Cable	N/A	R-02	N/A	2014.07.06	2015.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufactu rer	Type No.	Serial No.	Last calibration	Calibrated until	Calibratio n period
1	Test Receiver	R&S	ESCI	101160	2015.06.06	2016.06.05	1 year
2	LISN	R&S	ENV216	101313	2014.08.24	2015.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2014.08.24	2015.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 7	2015.06.07	2016.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2015.06.07	2016.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2015.06.08	2016.06.07	1 year
7	Test Cable	N/A	C01	N/A	2015.06.08	2016.06.07	1 year
8	Test Cable	N/A	C02	N/A	2015.06.08	2016.06.07	1 year
9	Test Cable	N/A	C03	N/A	2015.06.08	2016.06.07	1 year

1 Attenuation MCE 24-10-34 BN9258 2015.06.08 2016.06.07 1 year	ar
--	----



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

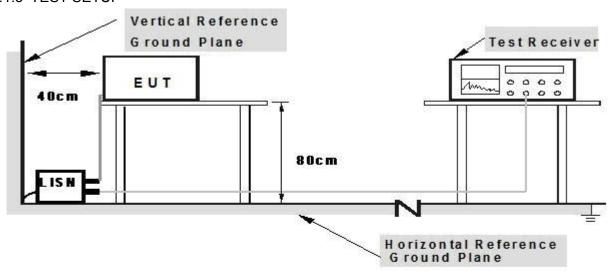
Receiver Parameters	Setting		
Attenuation	10 dB		
Start Frequency	0.15 MHz		
Stop Frequency	30 MHz		
IF Bandwidth	9 kHz		



3.1.2 TEST PROCEDURE

- a. 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. 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 LISM.

2.Both of LISMs (AMM) are 80 cm from EUT and at least 80

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.



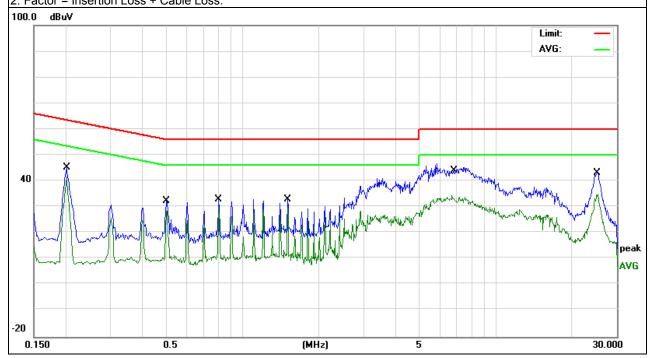
3.1.5 TEST RESULTS

EUT:	Smartphone	Model Name. :	SP5026i			
Temperature :	26 ℃	Relative Humidity:	54%			
Pressure :	1010hPa	Test Date :	2015-06-29			
Test Mode:	Mode 1	Phase :	L			
Test Voltage :	est Voltage : DC 5V From PC AC 120V/60Hz					

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Demont
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.2020	35.77	9.60	45.37	63.52	-18.15	QP
0.2020	32.04	9.60	41.64	53.52	-11.88	AVG
0.5020	22.53	9.77	32.30	56.00	-23.70	QP
0.5020	18.56	9.77	28.33	46.00	-17.67	AVG
0.8059	23.21	9.77	32.98	56.00	-23.02	QP
0.8059	20.47	9.77	30.24	46.00	-15.76	AVG
1.5100	23.22	9.68	32.90	56.00	-23.10	QP
1.5100	20.09	9.68	29.77	46.00	-16.23	AVG
6.8338	24.63	9.70	34.33	50.00	-15.67	QP
6.8338	34.43	9.70	44.13	60.00	-15.87	AVG
25.2578	33.25	9.92	43.17	60.00	-16.83	QP
25.2578	25.03	9.92	34.95	50.00	-15.05	AVG

Remark:

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



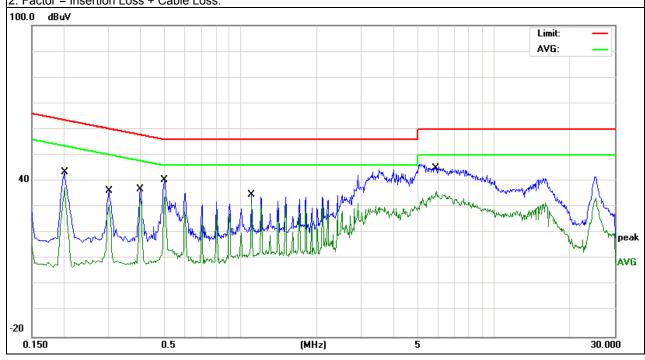


EUT: Smartphone Model Name. : SP5026i Temperature: 26 ℃ Relative Humidity: 54% Pressure: 1010hPa Test Date: 2015-06-29 Test Mode: Phase: Ν Mode 1 Test Voltage : DC 5V From PC AC 120V/60Hz

Report No.: NTEK-2015NT06152058R1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Demont
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.2020	33.80	9.61	43.41	63.52	-20.11	QP
0.2020	27.89	9.61	37.50	53.52	-16.02	AVG
0.3019	26.60	9.62	36.22	60.19	-23.97	QP
0.3019	21.36	9.62	30.98	50.19	-19.21	AVG
0.4020	27.12	9.64	36.76	57.81	-21.05	QP
0.4020	23.63	9.64	33.27	47.81	-14.54	AVG
0.5020	30.84	9.68	40.52	56.00	-15.48	QP
0.5020	24.29	9.68	33.97	46.00	-12.03	AVG
1.1060	25.02	9.60	34.62	56.00	-21.38	QP
1.1060	21.21	9.60	30.81	46.00	-15.19	AVG
5.9298	35.81	9.51	45.32	60.00	-14.68	QP
5.9298	26.36	9.51	35.87	50.00	-14.13	AVG

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



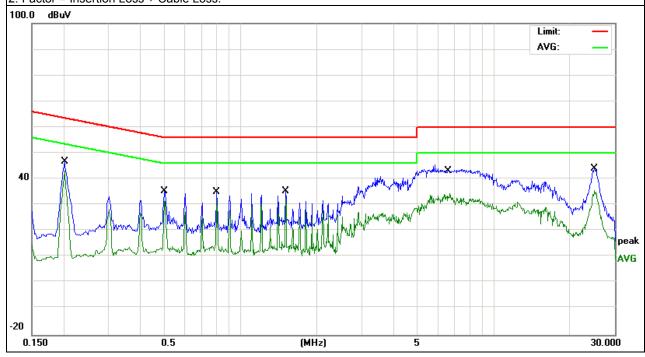


EUT: Smartphone Model Name. : SP5026i Temperature: 26 ℃ Relative Humidity: 54% Pressure: 1010hPa Test Date: 2015-06-29 Test Mode: Phase: Mode 1 Test Voltage : DC 5V From PC AC 240V/60Hz

Report No.: NTEK-2015NT06152058R1

			1			
Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.2020	37.27	9.60	46.87	63.52	-16.65	QP
0.2020	33.54	9.60	43.14	53.52	-10.38	AVG
0.5020	25.53	9.77	35.30	56.00	-20.70	QP
0.5020	21.56	9.77	31.33	46.00	-14.67	AVG
0.8059	25.21	9.77	34.98	56.00	-21.02	QP
0.8059	22.47	9.77	32.24	46.00	-13.76	AVG
1.5100	25.72	9.68	35.40	56.00	-20.60	QP
1.5100	22.59	9.68	32.27	46.00	-13.73	AVG
6.7137	33.79	9.70	43.49	60.00	-16.51	QP
6.7137	24.63	9.70	34.33	50.00	-15.67	AVG
24.9576	34.07	9.92	43.99	60.00	-16.01	QP
24.9576	25.74	9.92	35.66	50.00	-14.34	AVG

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



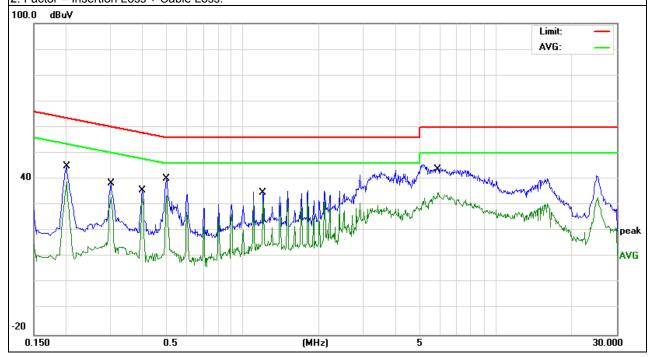


EUT: Smartphone Model Name. : SP5026i Temperature: 26 ℃ Relative Humidity: 54% Pressure: 1010hPa Test Date: 2015-06-29 Test Mode: Phase: Ν Mode 1 Test Voltage : DC 5V From PC AC 240V/60Hz

Report No.: NTEK-2015NT06152058R1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Damada
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.2020	35.30	9.61	44.91	63.52	-18.61	QP
0.2020	29.39	9.61	39.00	53.52	-14.52	AVG
0.3019	28.60	9.62	38.22	60.19	-21.97	QP
0.3019	23.36	9.62	32.98	50.19	-17.21	AVG
0.4020	26.12	9.64	35.76	57.81	-22.05	QP
0.4020	22.63	9.64	32.27	47.81	-15.54	AVG
0.5020	30.34	9.68	40.02	56.00	-15.98	QP
0.5020	23.79	9.68	33.47	46.00	-12.53	AVG
1.2057	25.52	9.60	35.12	56.00	-20.88	QP
1.2057	22.00	9.60	31.60	46.00	-14.40	AVG
5.9298	34.47	9.51	43.98	60.00	-16.02	QP
5.9298	25.36	9.51	34.87	50.00	-15.13	AVG

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



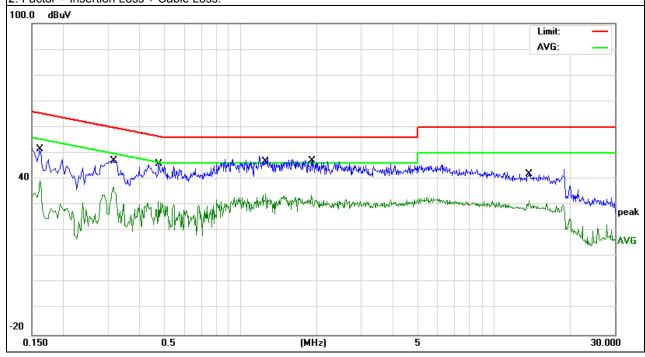


EUT: Smartphone Model Name. : SP5026i Temperature: 26 ℃ Relative Humidity: 54% Pressure: 1010hPa Test Date: 2015-06-29 Test Mode: Mode 1 Phase: Test Voltage : DC 5V From Adapter AC 120V/60Hz

Report No.: NTEK-2015NT06152058R1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domonic
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1620	42.04	9.62	51.66	65.36	-13.70	QP
0.1620	29.79	9.62	39.41	55.36	-15.95	AVG
0.3140	37.18	9.69	46.87	59.86	-12.99	QP
0.3140	27.31	9.69	37.00	49.86	-12.86	AVG
0.4778	36.15	9.68	45.83	56.38	-10.55	QP
0.4778	21.69	9.68	31.37	46.38	-15.01	AVG
1.2579	36.81	9.71	46.52	56.00	-9.48	QP
1.2579	24.73	9.71	34.44	46.00	-11.56	AVG
1.8977	37.00	9.66	46.66	56.00	-9.34	QP
1.8977	24.13	9.66	33.79	46.00	-12.21	AVG
13.7499	31.45	9.77	41.22	60.00	-18.78	QP
13.7499	22.08	9.77	31.85	50.00	-18.15	AVG

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

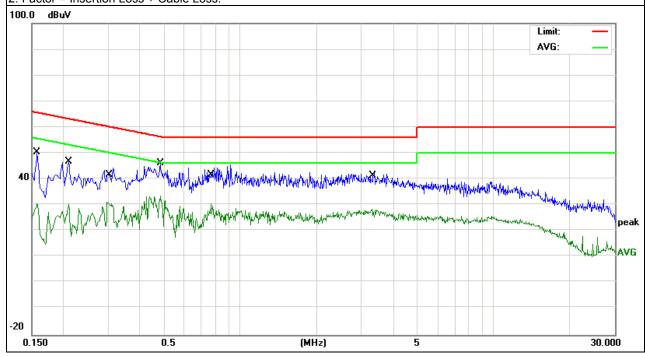




EUT:	Smartphone	Model Name. :	SP5026i			
Temperature :	26 ℃	Relative Humidity:	54%			
Pressure:	1010hPa	Test Date :	2015-06-29			
Test Mode:	Mode 1	Phase :	N			
Test Voltage :	DC 5V From Adapter AC 120V/60Hz					

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1580	40.69	9.62	50.31	65.56	-15.25	QP
0.1580	20.98	9.62	30.60	55.56	-24.96	AVG
0.2099	37.03	9.61	46.64	63.21	-16.57	QP
0.2099	20.60	9.61	30.21	53.21	-23.00	AVG
0.2977	33.64	9.74	43.38	60.30	-16.92	QP
0.2977	21.31	9.74	31.05	50.30	-19.25	AVG
0.4818	36.55	9.70	46.25	56.31	-10.06	QP
0.4818	23.89	9.70	33.59	46.31	-12.72	AVG
0.7660	34.05	9.77	43.82	56.00	-12.18	QP
0.7660	20.79	9.77	30.56	46.00	-15.44	AVG
3.2980	32.15	9.68	41.83	56.00	-14.17	QP
3.2980	18.69	9.68	28.37	46.00	-17.63	AVG

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

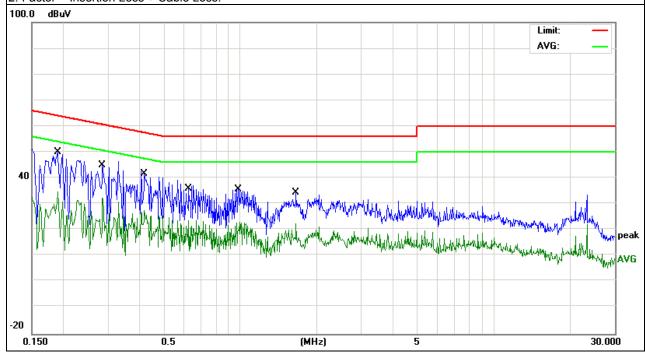




EUT:	Smartphone	Model Name. :	SP5026i		
Temperature :	26 ℃	Relative Humidity:	54%		
Pressure:	1010hPa	Test Date :	2015-06-29		
Test Mode:	Mode 1	Phase :	L		
Test Voltage :	DC 5V From Adapter AC 240V /60Hz				

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1901	40.39	9.61	50.00	64.03	-14.03	QP
0.1901	25.11	9.61	34.72	54.03	-19.31	AVG
0.2857	35.32	9.72	45.04	60.65	-15.61	QP
0.2857	22.77	9.72	32.49	50.65	-18.16	AVG
0.4178	33.07	9.43	42.50	57.49	-14.99	QP
0.4178	18.01	9.43	27.44	47.49	-20.05	AVG
0.6260	26.28	9.77	36.05	56.00	-19.95	QP
0.6260	13.76	9.77	23.53	46.00	-22.47	AVG
0.9939	25.93	9.73	35.66	56.00	-20.34	QP
0.9939	13.26	9.73	22.99	46.00	-23.01	AVG
1.6535	24.76	9.67	34.43	56.00	-21.57	QP
1.6535	12.84	9.67	22.51	46.00	-23.49	AVG

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



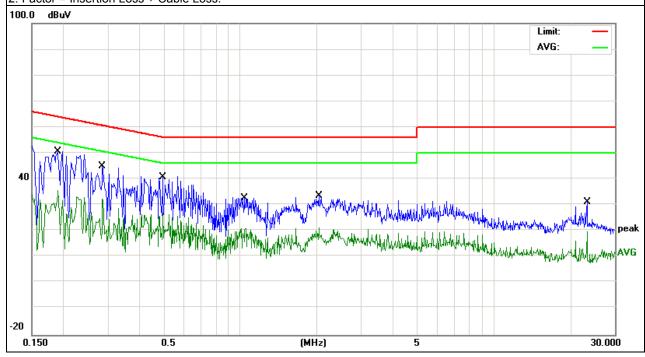


EUT: Smartphone Model Name. : SP5026i Temperature: 26 ℃ Relative Humidity: 54% Pressure: 1010hPa Test Date: 2015-06-29 Test Mode: Ν Mode 1 Phase: Test Voltage : DC 5V From Adapter AC 240V/60Hz

Report No.: NTEK-2015NT06152058R1

Frequency	Frequency Reading Level		Measure-ment	Limits	Margin	Domonic
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.1901	40.89	9.61	50.50	64.03	-13.53	QP
0.1901	26.11	9.61	35.72	54.03	-18.31	AVG
0.2857	35.32	9.72	45.04	60.65	-15.61	QP
0.2857	22.77	9.72	32.49	50.65	-18.16	AVG
0.4939	30.90	9.75	40.65	56.10	-15.45	QP
0.4939	17.31	9.75	27.06	46.10	-19.04	AVG
1.0460	23.33	9.73	33.06	56.00	-22.94	QP
1.0460	11.30	9.73	21.03	46.00	-24.97	AVG
2.0379	23.92	9.65	33.57	56.00	-22.43	QP
2.0379	11.64	9.65	21.29	46.00	-24.71	AVG
23.3338	21.08	9.94	31.02	60.00	-28.98	QP
23.3338	9.82	9.94	19.76	50.00	-30.24	AVG

- 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.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency below 1GHz.

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.

Note: For the hand-held device, the EUT should be measured for all 3 axes and only the wors



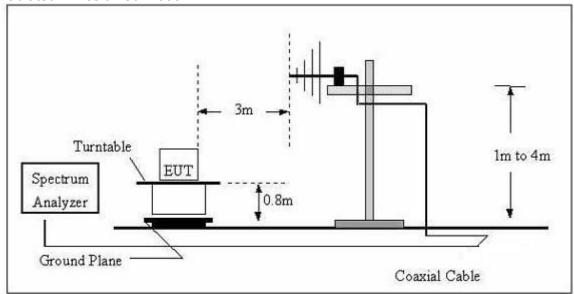
case is recorded in the report

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

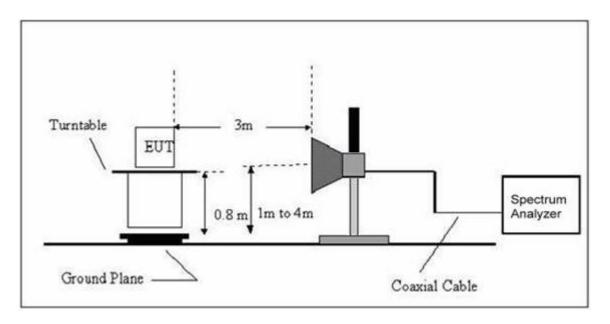
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
	Peak	1 MHz	1 MHz
Above 1000	Peak	1 MHz	10 Hz

3.2.3 TEST SETUP

For Radiated Emission 30~1000MHz



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





3.2.4 TEST RESULTS

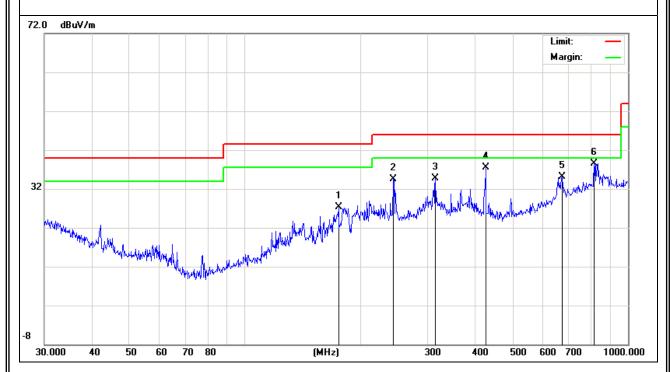
TEST RESULTS (30~1000 MHz)

EUT:	Smartphone	Model Name :	SP5026i			
Temperature :	24 °C	Relative Humidity:	54%			
Pressure :	1010 hPa	Test Date :	2015-06-29			
Test Mode :	Mode 1	Polarization :	Horizontal			
Test Power :	DC 5V From PC AC 120V/60Hz					

Freq.	Reading	Factor	Measurement	Limit	Over	Remark
(MHz)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	Remark
175.6516	16.76	10.60	27.36	43.50	-16.14	QP
244.2321	21.07	13.53	34.60	46.00	-11.40	QP
314.3765	19.88	14.75	34.63	46.00	-11.37	QP
425.028	18.74	18.81	37.55	46.00	-8.45	QP
672.8444	11.06	24.04	35.10	46.00	-10.90	QP
815.9678	11.24	27.36	38.60	46.00	-7.40	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.





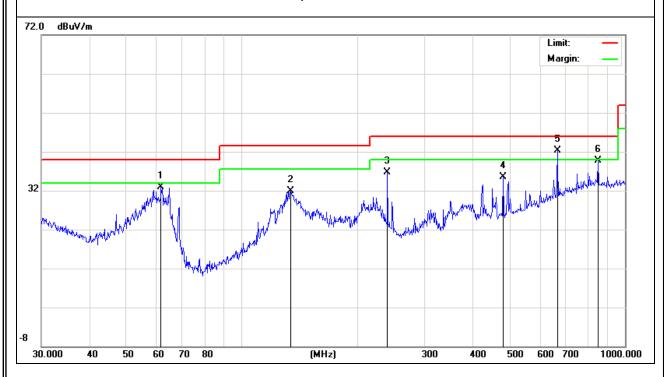
EUT: Smartphone Model Name : SP5026i Relative Humidity: 54% Temperature: **24** ℃ Pressure: 1010 hPa Test Date: 2015-06-29 Test Mode : Mode 1 Polarization: Vertical Test Power : DC 5V From PC AC 120V/60Hz

Report No.: NTEK-2015NT06152058R1

Freq.	Reading	Factor	Measurement	Limit	Over	Remark
(MHz)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	Remark
61.5617	25.44	7.48	32.92	40.00	-7.08	QP
134.0882	20.11	11.70	31.81	43.50	-11.69	QP
239.9874	23.17	13.49	36.66	46.00	-9.34	QP
480.5276	15.53	19.91	35.44	46.00	-10.56	QP
665.8034	18.38	23.85	42.23	46.00	-3.77	QP
851.0353	12.55	27.22	39.77	46.00	-6.23	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.





3.2.5 TEST RESULTS(1000~12400MHz)

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
V	1188.982	66.31	-17.34	48.97	74	-25.03	peak
V	1188.982	43.91	-17.34	26.57	54	-27.43	AVG
V	2001.073	64.58	-12.37	52.21	74	-21.79	peak
V	2001.073	43.13	-12.37	30.76	54	-23.24	AVG
V	2326.459	64.12	-12.12	52	74	-22	peak
V	2326.459	41.53	-12.12	29.41	54	-24.59	AVG
V	2726.266	64.24	-10.85	53.39	74	-20.61	peak
V	2726.266	41.88	-10.85	31.03	54	-22.97	AVG
V	2926.354	63.53	-11.03	52.5	74	-21.5	peak
V	2926.354	43.49	-11.03	32.46	54	-21.54	AVG
V	4051.168	60.32	-5.05	55.27	74	-18.73	peak
V	4051.168	38.92	-5.05	33.87	54	-20.13	AVG
Н	1389.472	61.14	-16.5	44.64	74	-29.36	peak
Н	1389.472	40.97	-16.5	24.47	54	-29.53	AVG
Н	1589.098	61.53	-15.57	45.96	74	-28.04	peak
Н	1589.098	41.72	-15.57	26.15	54	-27.85	AVG
Н	2000.987	59.94	-12.37	47.57	74	-26.43	peak
Н	2000.987	39.33	-12.37	26.96	54	-27.04	AVG
Н	2776.366	59.74	-10.68	49.06	74	-24.94	peak
Н	2776.366	38.46	-10.68	27.78	54	-26.22	AVG
Н	3864.151	56.38	-6.29	50.09	74	-23.91	peak
Н	3864.151	34.78	-6.32	28.46	54	-25.54	AVG
Н	4838.995	54.24	-2.6	51.64	74	-22.36	peak
Н	4838.995	33.18	-2.62	30.56	54	-23.44	AVG
Domar	le.						

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



4. EUT TEST PHOTO



