

Report No. : EED32J00012504 Page 1 of 25

## TEST REPORT

Product : WisePad 2 Plus

Trade mark : BBPOS

Model/Type reference : WisePad 2 Plus

Serial Number : N/A

Report Number : EED32J00012504

FCC ID : 2AB7X-WISEPAD2PLUS

Date of Issue : Mar. 20, 2017

Test Standards : 47 CFR Part 15 Subpart C (2015)

Test result : PASS

Prepared for:

BBPOS International Limited Suite 1602, 16/F, Tower 2, Nina Tower, No. 8 Yeung Uk Road, Tsuen Wan, N.T. HK, Hong Kong

Prepared by:

Centre Testing International Group Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

TEL: +86-755-3368 3668 FAX: +86-755-3368 3385

Tested By:

Tom - Chen
Tom chen (Test Project)

Compiled by:

Report Seal

Kevin yang (Project Engineer)

Reviewed by:

Date:

Ware Xm

Ware xin (Reviewer)

Mar. 20, 2017

Sheek Luo (Lab supervisor)

Check No.: 2457559993









2 Version

Version No.	Date	Description
00	Mar. 20, 2017	Original
	**	













































































## 3 Test Summary

Test Item	Test Requirement	Test method	<b>Result</b> PASS	
AC Power Line Conducted Emission	47 CFR Part 15Subpart C Section 15.207	ANSI C63.10-2013		
Conducted Peak Output Power	47 CFR Part 15Subpart C Section 15.247 (b)(3)	ANSI C63.10-2013/ KDB 558074 D01v03r05	PASS	
Radiated Spurious Emissions	47 CFR Part 15Subpart C Section 15.205/15.209	ANSI C63.10-2013	PASS	

### Remark:

Test according to ANSI C63.4-2014 & ANSI C63.10-2013.

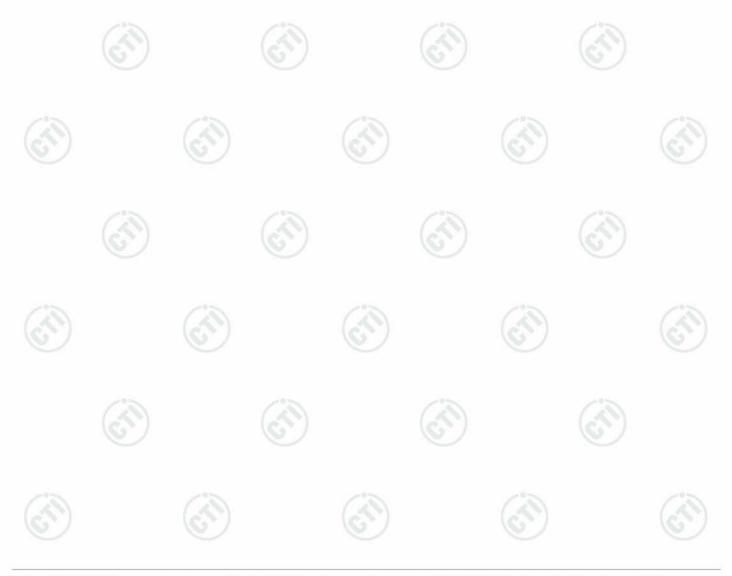
The tested sample and the sample information are provided by the client.

Model No.: WisePad 2 Plus, WisePad 2

This test report (Ref. No.: EED32J00012504) is only valid with the original test report (Ref. No.: EED32I00208214).

According to the declaration from the applicant, their RF part, main board, electrical circuit design, layout, components used and internal wiring are identical, only the WisePad 2 Plus is consisted by printer function part, but WisePad 2 is not included.

Therefore in this report AC Power Line Conducted Emission, Conducted Peak Output Power and Radiated Spurious emissions were fully retested on model WisePad 2 Plus and shown the data in this report, other tests please refer to original report EED32I00208214.





## 4 Content

2 VERSION			 2
TEST SUMMARY			 3
TEST REQUIREMENT	T		 5
5.1.1 For Conducte 5.1.2 For Radiated 5.1.3 For Conducte	ed test setup Emissions test setuped Emissions test setup		5 5
GENERAL INFORMA	TION		 7
6.2 GENERAL DESCRIP 6.3 PRODUCT SPECIFIC 6.4 DESCRIPTION OF S 6.5 TEST LOCATION 6.6 TEST FACILITY 6.7 DEVIATION FROM S 6.8 ABNORMALITIES FR 6.9 OTHER INFORMATIC 6.10 MEASUREMENT U	TION OF EUT CATION SUBJECTIVE TO THIS ST. UPPORT UNITS TANDARDS OM STANDARD CONDITIONS ON REQUESTED BY THE CUSTO NCERTAINTY (95% CONFIDENC	ANDARD	
7 EQUIPMENT LIST			 10
B RADIO TECHNICAL F	REQUIREMENTS SPECIFICA	ATION	 12
Appendix B): AC P Appendix C): Radia	ucted Peak Output Power ower Line Conducted Emission ated Spurious Emissions	on	15 18
PHOTOGRAPHS OF TE	ST SETUP	•••••	 23







PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS.....







Page 4 of 25



















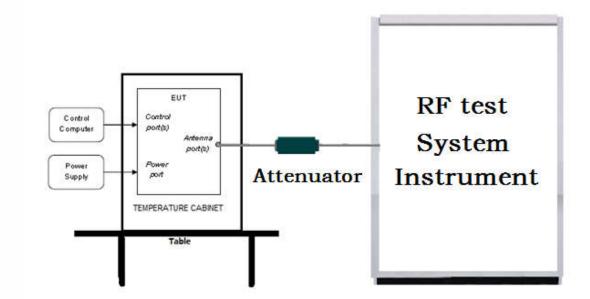




Page 5 of 25

# 5 Test Requirement5.1 Test setup

### 5.1.1 For Conducted test setup



### 5.1.2 For Radiated Emissions test setup

### Radiated Emissions setup:

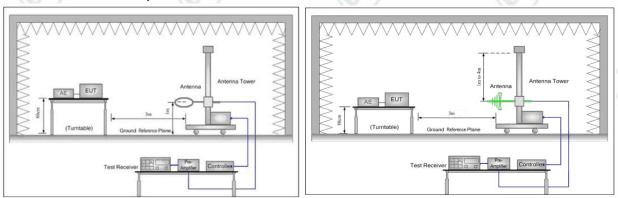


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

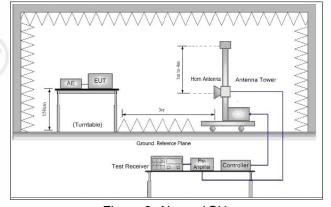
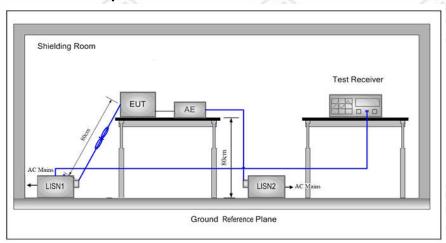


Figure 3. Above 1GHz



Page 6 of 25

## 5.1.3 For Conducted Emissions test setup Conducted Emissions setup



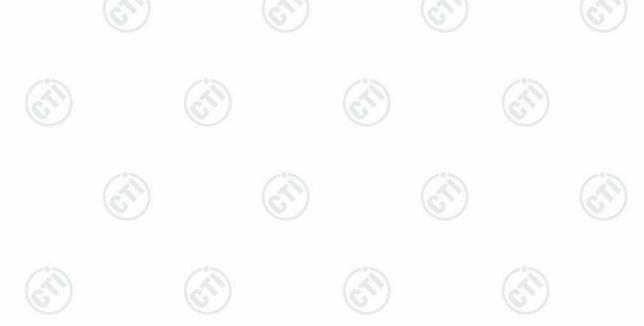
### 5.2 Test Environment

Operating Environment:	(47)	(25)	(20)
Temperature:	22°C		(6)
Humidity:	53% RH		
Atmospheric Pressure:	1010 mbar		

## **5.3 Test Condition**

### Test channel:

Test Mode	Tx	RF Channel			
rest wode	1X	Low(L)	Middle(M)	High(H)	
GFSK	2402MHz ~2480 MHz	Channel 1	Channel 20	Channel 40	
Grak	2402IVIHZ ~2480 IVIHZ	2402MHz	2440MHz	2480MHz	
Transmitting mode:	Keep the EUT in transmitting mod rate.	e with all kind of n	nodulation and a	all kind of data	
	C.C. Market Co.	CARRAGO	5-10		





Report No. : EED32J00012504 Page 7 of 25

## 6 General Information

## 6.1 Client Information

Applicant:	BBPOS International Limited
Address of Applicant:	Suite 1602, 16/F, Tower 2, Nina Tower, No. 8 Yeung Uk Road, Tsuen Wan, N.T. HK, Hong Kong
Manufacturer:	BBPOS International Limited
Address of Manufacturer:	Suite 1602, 16/F, Tower 2, Nina Tower, No. 8 Yeung Uk Road, Tsuen Wan, N.T. HK, Hong Kong

## 6.2 General Description of EUT

Product Name:	WisePad 2 Plus
Model No.(EUT):	WisePad 2 Plus
Trade Mark:	BBPOS
EUT Supports Radios application	BT 2.1(2402MHz-2480MHz), BT 4.0(2402MHz-2480MHz), NFC(13.56MHz), WIFIb/g/n(HT20)(2412MHz-2472MHz), 2G(850MHz/1900MHz)GPRS
Power Supply:	DC 3.7V by Battery DC 5V by USB port
Battery:	Li-polymer 3.7V, 1300mAh
Sample Received Date:	Jan. 23, 2017
Sample tested Date:	Jan. 23, 2017 to Mar. 20, 2017

## 6.3 Product Specification subjective to this standard

Operation F	requency:	2402MHz~2480MHz						
Bluetooth \	/ersion:	4.0	4.0					
Modulation	dulation Technique: DSSS					100		
Modulation	Type:	GFSK	GFSK					
Number of	Channel:	40					6	
Sample Ty	pe:	Portabl	e production					
Antenna Ty	/ре:	Integral		28%		28%		
Test Power	r Grade:	N/A		(20)	3	(2)	4)	
Test Softwa	are of EUT:	BBPOS	S_FCC_0713 (	Version: 201	60713)	(6)	/	
Antenna G	ain:	1dBi						
Test Voltag	Fest Voltage: AC 120V/60Hz, DC 3.7V							
Operation F	requency eac	h of channe					63	
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz	
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz	
3	2406MHz	13	2426MHz	23	2446MHz	33	2466MHz	
4	2408MHz	14	2428MHz	24	2448MHz	34	2468MHz	
5	2410MHz	15	2430MHz	25	2450MHz	35	2470MHz	
6	2412MHz	16	2432MHz	26	2452MHz	36	2472MHz	
7	2414MHz	17	2434MHz	27	2454MHz	37	2474MHz	
8	2416MHz	18	2436MHz	28	2456MHz	38	2476MHz	



Report No.: EED32J00012504 Page 8 of 25

9	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz

### 6.4 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.	Certification	Supplied by
laptop	LENOVO	T3900	FCC DOC	CTI
Mouse	L.Selectron	GL-204	FCC DOC	CTI

### 6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

## 6.6 Test Facility

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

CNAS-Lab Code: L1910

Centre Testing International Group Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories..

### A2LA-Lab Cert. No. 3061.01

Centre Testing International Group Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

### FCC-Registration No.: 886427

Centre Testing International Group 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 886427.

#### IC-Registration No.: 7408A-2

The 3m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408A-2.

### IC-Registration No.: 7408B-1

The 10m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408B-1.

**NEMKO-Aut. No.: ELA503** 



Page 9 of 25

Centre Testing International Group Co., Ltd. has been assessed the quality assurance system, the testing facilities, qualifications and testing practices of the relevant parts of the organization. The quality assurance system of the Laboratory has been validated against ISO/IEC 17025 or equivalent. The laboratory also fulfils the conditions described in Nemko Document NLA-10.

### VCCI

The Radiation 3 &10 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-4096.

Main Ports Conducted Interference Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-4563.

Telecommunication Ports Conducted Disturbance Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-2146.

The Radiation 3 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-758

### 6.7 Deviation from Standards

None.

## 6.8 Abnormalities from Standard Conditions None.

## 6.9 Other Information Requested by the Customer

None.

## 6.10 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty		
1	Radio Frequency	7.9 x 10 <sup>-8</sup>		
6,7	DE novem conducted	0.31dB (30MHz-1GHz)		
2	RF power, conducted	0.57dB (1GHz-18GHz)		
2	Dedicted Courieus emission test	4.5dB (30MHz-1GHz)		
3	Radiated Spurious emission test	4.8dB (1GHz-12.75GHz)		
4	Conduction onciceios	3.6dB (9kHz to 150kHz)		
4	Conduction emission	3.2dB (150kHz to 30MHz)		
5	Temperature test	0.64°C		
6	Humidity test	2.8%		
7	DC power voltages	0.025%		





Page 10 of 25

## **Equipment List**

RF test system							
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)		
Signal Generator	Keysight	E8257D	MY53401106	04-01-2016	03-31-2017		
Communication test set test set	Agilent	N4010A	MY51400230	04-01-2016	03-31-2017		
Spectrum Analyzer	Keysight	N9010A	MY54510339	04-01-2016	03-31-2017		
Signal Generator	Keysight	N5182B	MY53051549	04-01-2016	03-31-2017		
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002		01-11-2017	01-10-2018		
High-pass filter	MICRO- TRONICS	SPA-F-63029-4	(21)	01-11-2017	01-10-2018		
DC Power	Keysight	E3642A	MY54436035	04-01-2016	03-31-2017		
PC-1	Lenovo	R4960d		04-01-2016	03-31-2017		
power meter & power sensor	R&S	OSP120	101374	04-01-2016	03-31-2017		
RF control unit	JS Tonscend	JS0806-2	158060006	04-01-2016	03-31-2017		
BT&WI-FI Automatic test software	JS Tonscend	JS1120-2		04-01-2016	03-31-2017		

	Conducted disturbance Test							
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)			
Receiver	R&S	ESCI	100009	06-16-2016	06-15-2017			
Temperature/ Humidity Indicator	TAYLOR	1451	1905	04-27-2016	04-26-2017			
Communication test set	Agilent	E5515C	GB47050534	04-01-2016	03-31-2017			
Communication test set	R&S	CMW500	152394	04-01-2016	03-31-2017			
LISN	R&S	ENV216	100098	06-16-2016	06-15-2017			
LISN	schwarzbeck	NNLK8121	8121-529	06-16-2016	06-15-2017			
Voltage Probe	R&S	ESH2-Z3	(0)	07-09-2014	07-07-2017			
Current Probe	R&S	EZ17	100106	06-16-2016	06-15-2017			
ISN	TESEQ GmbH	ISN T800	30297	02-23-2017	02-22-2018			















Page 11 of 25

	3M	Semi/full-anech	oic Chamber		
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3		06-05-2016	06-05-2019
TRILOG Broadband Antenna	SCHWARZBECK	VULB9163	9163-484	05-23-2016	05-22-2017
Microwave Preamplifier	Agilent	8449B	3008A02425	02-16-2017	02-15-2018
Horn Antenna	ETS-LINDGREN	3117	00057407	07-20-2015	07-18-2018
Loop Antenna	ETS	6502	00071730	07-30-2015	07-28-2017
Spectrum Analyzer	R&S	FSP40	100416	06-16-2016	06-15-2017
Receiver	R&S	ESCI	100435	06-16-2016	06-15-2017
Multi device Controller	maturo	NCD/070/10711 112		01-11-2017	01-10-2018
LISN	schwarzbeck	NNBM8125	81251547	06-16-2016	06-15-2017
LISN	schwarzbeck	NNBM8125	81251548	06-16-2016	06-15-2017
Signal Generator	Agilent	E4438C	MY45095744	04-01-2016	03-31-2017
Signal Generator	Keysight	E8257D	MY53401106	04-01-2016	03-31-2017
Temperature/ Humidity Indicator	TAYLOR	1451	1905	04-27-2016	04-26-2017
Communication test set	Agilent	E5515C	GB47050534	04-01-2016	03-31-2017
Cable line	Fulai(7M)	SF106	5219/6A	01-11-2017	01-10-2018
Cable line	Fulai(6M)	SF106	5220/6A	01-11-2017	01-10-2018
Cable line	Fulai(3M)	SF106	5216/6A	01-11-2017	01-10-2018
Cable line	Fulai(3M)	SF106	5217/6A	01-11-2017	01-10-2018
Communication test set	R&S	CMW500	152394	04-01-2016	03-31-2017
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002		01-11-2017	01-10-2018
High-pass filter	MICRO- TRONICS	SPA-F-63029-4		01-11-2017	01-10-2018
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	(3)	01-11-2017	01-10-2018
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001		01-11-2017	01-10-2018
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002		01-11-2017	01-10-2018
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001		01-11-2017	01-10-2018























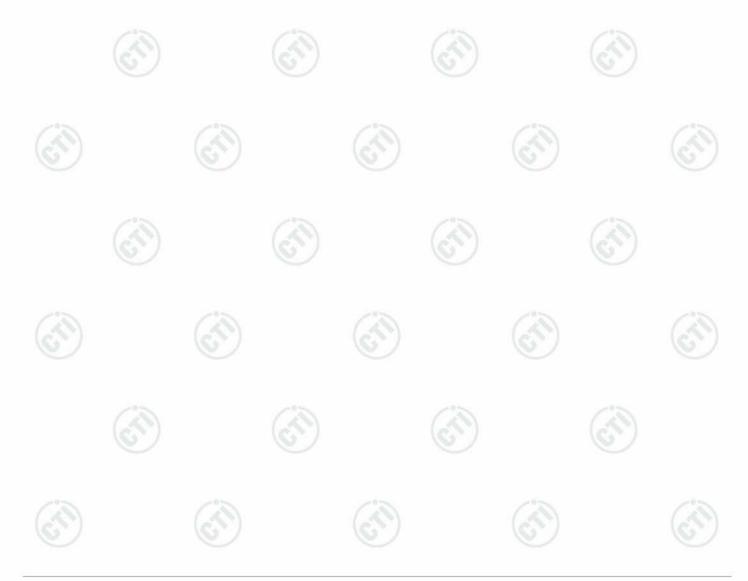
## 8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	FCC Part15C (2015)	Subpart C-Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicesed Wireless Devices

## Test Results List:

Test Requirement	Test method	Test item	Verdict	Note
Part15C Section 15.247 (b)(3)	ANSI C63.10	Conducted Peak Output Power	PASS	Appendix A)
Part15C Section 15.207	ANSI C63.10	AC Power Line Conducted Emission	PASS	Appendix B)
Part15C Section 15.205/15.209	ANSI C63.10	Radiated Spurious Emissions	PASS	Appendix C)



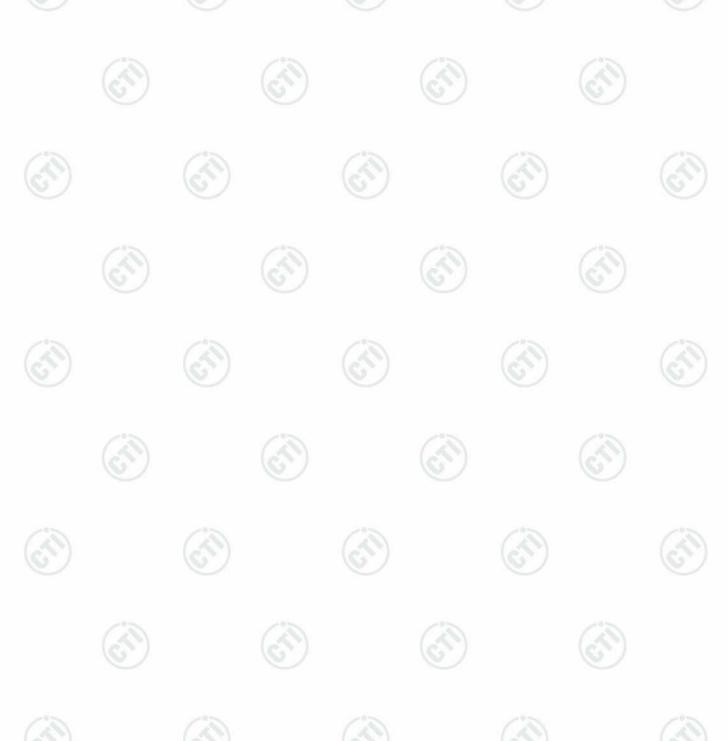


Report No. : EED32J00012504 Page 13 of 25

## Appendix A): Conducted Peak Output Power

### **Test Result**

Mode	Channel	Conduct Peak Power[dBm]	Verdict
BLE	LCH	3.147	PASS
BLE	MCH	3.334	PASS
BLE	НСН	3.48	PASS





Page 14 of 25

**Test Graphs** 















Report No. : EED32J00012504 Page 15 of 25

## Appendix B): AC Power Line Conducted Emission

	1	est frequency range :150KHz	-30MHz								
	1	)The mains terminal disturbar	nce voltage test was co	onducted in a shield	ded room.						
	2	2) The EUT was connected to AC power source through a LISN 1 (Line Impedance									
		Stabilization Network) which provides a $50\Omega/50\mu H + 5\Omega$ linear impedance power cables of all other units of the EUT were connected to a second I									
	- 0										
		which was bonded to the g		-							
	600	for the unit being measure multiple power cables to a s									
		exceeded.	single Lion provided ti	ie raung of the Lio	in was not						
	3	3)The tabletop EUT was place	ed unon a non-metallio	r table 0.8m abov	e the aroun						
		reference plane. And for flo									
		horizontal ground reference	_	(PA)							
	4	) The test was performed with	th a vertical ground re	eference plane. Th	e rear of th						
		EUT shall be 0.4 m from the									
		reference plane was bonde									
		1 was placed 0.8 m from t									
		ground reference plane for plane. This distance was be									
	100	All other units of the EUT a									
		LISN 2.	1-1-1-1								
	5	b) In order to find the maximun	n emission, the relative	e positions of equip	oment and a						
		of the interface cables r	must be changed ac	cording to ANSI	C63.10 o						
		conducted measurement.									
nit:	-	(6)	(6)	(0,1)	_						
		Frequency range (MHz)	Limit (dl	BµV)							
		- Trequency runge (Wiriz)	Quasi-peak	Average							
	-	0.15-0.5	66 to 56*	56 to 46*	100						
	(63)	0.5-5	56	46	(65)						
		5-30	60	50							
		The limit decreases linearly MHz to 0.50 MHz.  NOTE: The lower limit is applied.	•		e range 0.1						
	יו	10 TE . The lower little is applie	cable at the transition i	requericy							
asurement Da				(45)							
initial pre-scan	was perfo	ormed on the live and neutral l		or.	uminaian wa						
initial pre-scan asi-Peak and A	was perfo	ormed on the live and neutral leasurement were performed a		or.	emission we						
initial pre-scan	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wei						
initial pre-scan asi-Peak and A	was perfo			or.	emission we						
initial pre-scan asi-Peak and A	was perfo			or.	emission we						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wer						
initial pre-scan asi-Peak and A	was perfo			or.	emission wei						

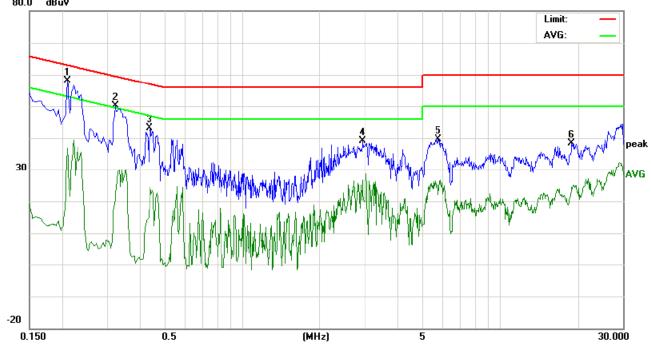












No.	Freq.		ling_LedBuV)	vel	Correct Factor	M	leasurem (dBuV)	ent	Lin (dB			rgin dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F	Comment
1	0.2100	48.41		27.03	9.80	58.21		36.83	63.20	53.20	-4.99	-16.37	Р	
2	0.3220	40.21		10.67	9.82	50.03		20.49	59.65	49.65	-9.62	-29.16	Р	
3	0.4380	33.30		8.59	9.90	43.20		18.49	57.10	47.10	-13.90	-28.61	Р	
4	2.9380	29.07		12.71	10.00	39.07		22.71	56.00	46.00	-16.93	-23.29	Р	
5	5.7660	29.62		13.99	10.00	39.62		23.99	60.00	50.00	-20.38	-26.01	Ρ	
6	18.9340	28.44		14.59	9.86	38.30		24.45	60.00	50.00	-21.70	-25.55	Р	





































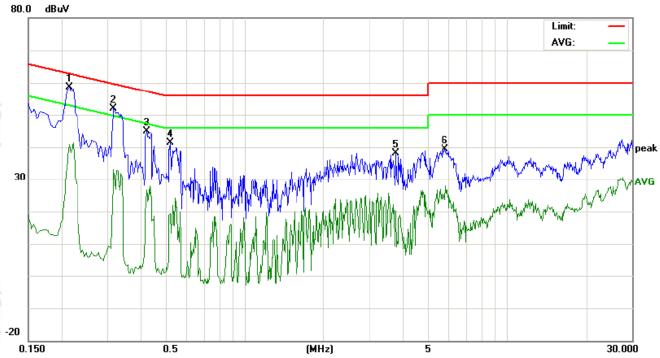








## Neutral line:



No.	Freq.		ling_Le dBu∀)	vel	Correct Factor	M	leasurem (dBuV)		Lir (dB	nit u∀)		rgin dB)		
	MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	P/F	Comment
1	0.2140	48.94		31.00	9.80	58.74		40.80	63.04	53.04	-4.30	-12.24	Р	
2	0.3180	42.11		23.27	9.82	51.93		33.09	59.76	49.76	-7.83	-16.67	Р	
3	0.4220	34.98		16.80	9.90	44.88		26.70	57.41	47.41	-12.53	-20.71	Р	
4	0.5220	31.39		9.55	9.90	41.29		19.45	56.00	46.00	-14.71	-26.55	Р	
5	3.7900	28.20		8.49	10.00	38.20		18.49	56.00	46.00	-17.80	-27.51	Р	
6	5.8060	29.47		13.52	10.00	39.47		23.52	60.00	50.00	-20.53	-26.48	Р	

### Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.





Report No.: EED32J00012504 Page 18 of 25

## Appendix C): Radiated Spurious Emissions

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
(630)	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
)	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Ab 4011-	Peak	1MHz	3MHz	Peak
	Above 1GHz	Peak	1MHz	10Hz	Average

### Test Procedure:

### Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. 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, whichwas mounted on the top of a variable-height antenna tower.
- c. The antenna 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.

### Above 1GHz test procedure as below:

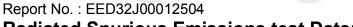
- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter (Above 18GHz the distance is 1 meter and table is 1.5 meter).
- h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
- . Repeat above procedures until all frequencies measured was complete.

ı	im	:4.
	1111	

Frequency	Field strength (microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	_	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	70-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

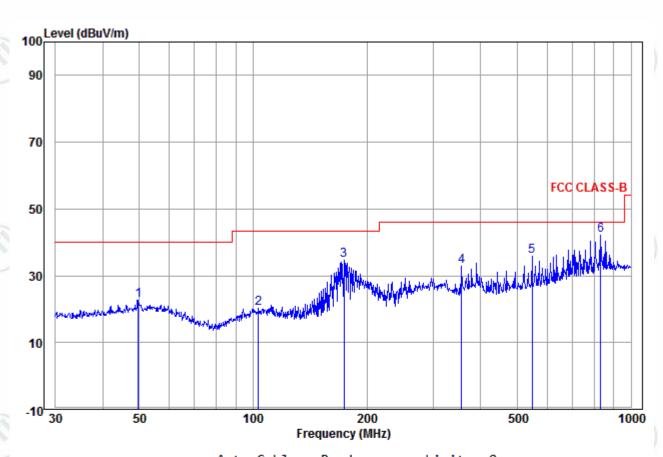
Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.





## Radiated Spurious Emissions test Data: Radiated Emission below 1GHz

30MHz~1GHz (QP)	(2)	
Test mode:	Transmitting	Horizontal



		Ant	Cable	Read		Limit	0ver	
	Freq	Factor	Loss	Level	Level	Line	Limit	Remark
_	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
		,				,		
1	49.707	15.08	1.38	6.15	22.61	40.00	-17.39	
2	103.442							
3	173.814	10.21	1.90	22.47	34.58	43.50	-8.92	
4	356.676	15.18	2.72	15.00	32.90	46.00	-13.10	
5	547.098	18.60	3.21	14.19	36.00	46.00	-10.00	
6 рр	830.400	21.85	4.05	16.29	42.19	46.00	-3.81	









Page 19 of 25







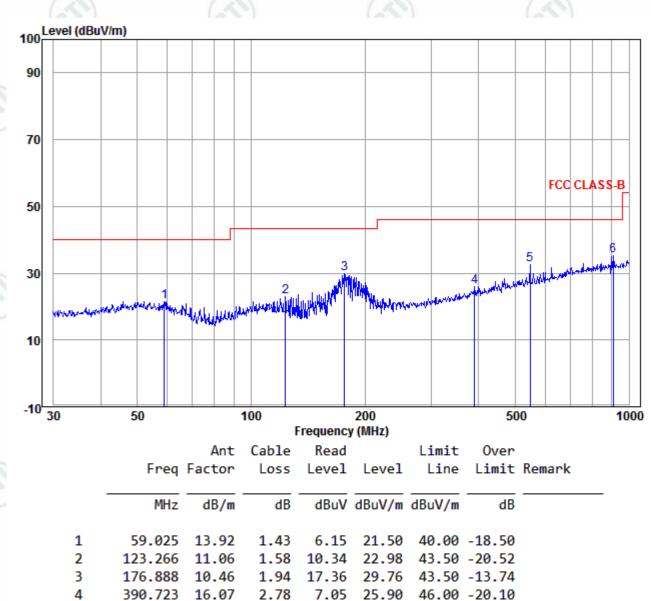






Report No. : EED32J00012504 Page 20 of 25

Test mode:	Transmitting	Vertical	
------------	--------------	----------	--





5

6 pp



547.098

909.667

18.60

22.40

3.21

4.34



10.84



32.65

35.19











46.00 -13.35

46.00 -10.81





Page 21 of 25

### **Transmitter Emission above 1GHz**

Worse case mode:		GFSK		Test channel:		Lowest	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1593.340	31.04	2.91	43.89	51.27	41.33	74.00	-32.67	Pass	Н
1978.230	31.67	3.21	43.52	50.21	41.57	74.00	-32.43	Pass	H
3003.173	33.60	5.62	44.70	49.97	44.49	74.00	-29.51	Pass	Н
4804.000	34.69	5.11	44.60	49.44	44.64	74.00	-29.36	Pass	Н
7206.000	36.42	6.66	44.77	46.21	44.52	74.00	-29.48	Pass	Н
9608.000	37.88	7.73	45.58	46.03	46.06	74.00	-27.94	Pass	Н
1491.300	30.85	2.82	44.01	54.80	44.46	74.00	-29.54	Pass	V
1983.272	31.68	3.22	43.51	52.82	44.21	74.00	-29.79	Pass	V
3844.279	32.91	5.46	44.61	52.41	46.17	74.00	-27.83	Pass	V
4804.000	34.69	5.11	44.60	50.48	45.68	74.00	-28.32	Pass	V
7206.000	36.42	6.66	44.77	50.75	49.06	74.00	-24.94	Pass	V
9608.000	37.88	7.73	45.58	47.03	47.06	74.00	-26.94	Pass	V

Worse case mode:		GFSK		Test channel:		Middle	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1479.955	30.83	2.81	44.02	51.25	40.87	74.00	-33.13	Pass	Н
1923.606	31.59	3.18	43.57	54.21	45.41	74.00	-28.59	Pass	H
3249.760	33.38	5.57	44.67	52.12	46.40	74.00	-27.60	Pass	(H)
4880.000	34.85	5.08	44.60	49.97	45.30	74.00	-28.70	Pass	H
7320.000	36.43	6.77	44.87	47.55	45.88	74.00	-28.12	Pass	Н
9760.000	38.05	7.60	45.55	45.99	46.09	74.00	-27.91	Pass	Н
1165.013	30.14	2.47	44.44	51.24	39.41	74.00	-34.59	Pass	V
1663.803	31.17	2.97	43.82	52.74	43.06	74.00	-30.94	Pass	V
3249.760	33.38	5.57	44.67	50.91	45.19	74.00	-28.81	Pass	V
4880.000	34.85	5.08	44.60	52.21	47.54	74.00	-26.46	Pass	V
7320.000	36.43	6.77	44.87	47.88	46.21	74.00	-27.79	Pass	V
9760.000	38.05	7.60	45.55	45.60	45.70	74.00	-28.30	Pass	V























Page 22 of 25

Worse case mode:		GFSK		Test channel:		Highest	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBµV)	Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Result	Antenna Polaxis
1402.920	30.68	2.73	44.11	52.12	41.42	74.00	-32.58	Pass	Н
1983.272	31.68	3.22	43.51	52.00	43.39	74.00	-30.61	Pass	~ H
3308.185	33.33	5.56	44.67	52.76	46.98	74.00	-27.02	Pass	H)
4960.000	35.02	5.05	44.60	50.56	46.03	74.00	-27.97	Pass	H
7440.000	36.45	6.88	44.97	49.41	47.77	74.00	-26.23	Pass	Н
9920.000	38.22	7.47	45.52	48.75	48.92	74.00	-25.08	Pass	Н
1663.803	31.17	2.97	43.82	53.04	43.36	74.00	-30.64	Pass	V
2065.715	31.85	3.42	43.60	50.72	42.39	74.00	-31.61	Pass	V
3570.714	33.12	5.51	44.64	50.88	44.87	74.00	-29.13	Pass	V
4960.000	35.02	5.05	44.60	50.28	45.75	74.00	-28.25	Pass	V
7440.000	36.45	6.88	44.97	47.15	45.51	74.00	-28.49	Pass	V
9920.000	38.22	7.47	45.52	44.94	45.11	74.00	-28.89	Pass	V

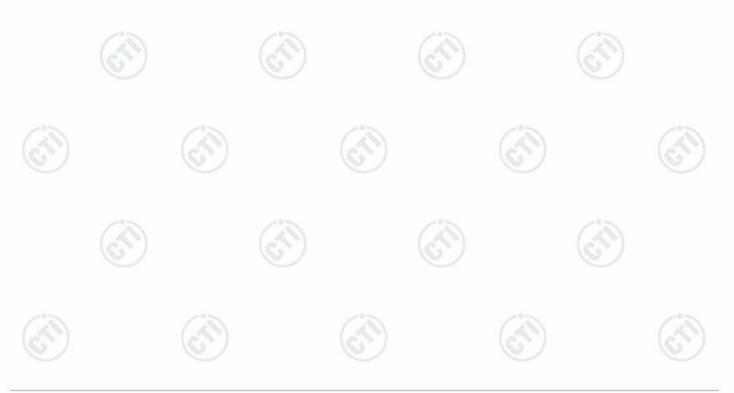
### Note:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading -Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

2) Scan from 9kHz to 25GHz, the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.





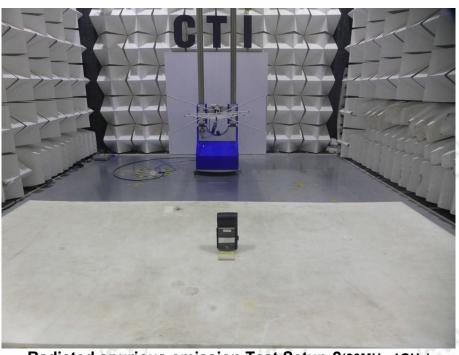
Report No.: EED32J00012504 Page 23 of 25

## PHOTOGRAPHS OF TEST SETUP

Test model No.: WisePad 2 Plus



Radiated spurious emission Test Setup-1(Below 30MHz)



Radiated spurious emission Test Setup-2(30MHz-1GHz)





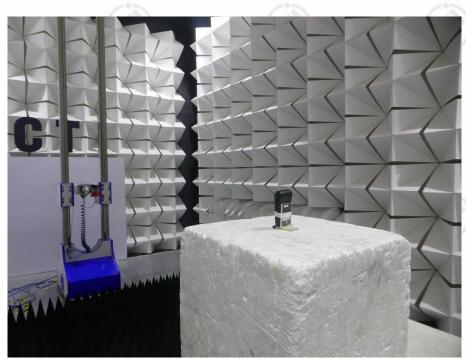








Report No. : EED32J00012504 Page 24 of 25



Radiated spurious emission Test Setup-3(Above 1GHz)



**Conducted Emissions Test Setup** 













Report No.: EED32J00012504 Page 25 of 25

## **PHOTOGRAPHS OF EUT Constructional Details**

Refer to Report No.EED32J00012502 for EUT external and internal photos.

### \*\*\* End of Report \*\*\*

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced

