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## CTK Co., Ltd.

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### TEST REPORT For FCC

Test Report No. : 2012010081  
Date of Issue : January 20, 2012  
FCC ID : UBUXPDA-SPCI  
Model/Type No. : XPDA-S PCI  
Kind of Product : Pandora  
Applicant : ITWell Co., Ltd.  
Applicant Address : #505 Gayang Techno Town 1487 Gayang-Dong, Gangseo-Gu, Seoul 157-810 Korea  
Manufacturer : ITWell Co., Ltd.  
Manufacturer Address : #505 Gayang Techno Town 1487 Gayang-Dong, Gangseo-Gu, Seoul 157-810 Korea  
Contact Person : HOIL KIM / Senior Research Engineer  
Telephone : +82-2-360-2359  
Received Date : December 20, 2011  
Test period : Start : January 11, 2012 End : January 13, 2012  
Test Results : ☒ In Compliance ☐ Not in Compliance

The test results presented in this report relate only to the object tested.

Tested by

Y. T. Lee

Young-taek, Lee  
Test Engineer  
Date: January 20, 2012

Reviewed by

Y. J. Park

Young-Joon, Park  
Technical Manager  
Date: January 20, 2012



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### REPORT REVISION HISTORY

Date	Revision	Revision
January 20, 2012	Issued (2012010081)	All

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## 1.0 General Product Description

### 1.0.1 Tested Equipment

- ☒ Unless otherwise indicated, all tests were conducted on Model XPDA-S PCI
- ☐ Tests performed on Model \_\_\_\_\_ were considered to be representative of Model(s) \_\_\_\_\_.

### 1.0.2 Equipment Size, Mobility and Identification

Dimensions: 75(W) by 205(L) by 47(H) ☒ mm

Mobility: ☒ Portable ☒ Table-top ☐ Built-in  
☐ Floor-standing

Serial No.: Prototype

### 1.0.3 Electrical Ratings

Input 1: DC 7.4 V(Battery Pack)  
Output 1: -

Input 2: 10 Vdc (AC ADAPTER      Input: 100-240 Vac, 50-60 Hz, 1.0 A  
Output: 10 Vdc, 3.0 A)

Output 2: -

### 1.0.4 Test Voltage & Frequency

Unless indicated otherwise on the individual data sheet or test results, the test voltage and frequency was as indicated below.

Voltage 1: 7.4 Vdc (Battery)  
Frequency 1: -

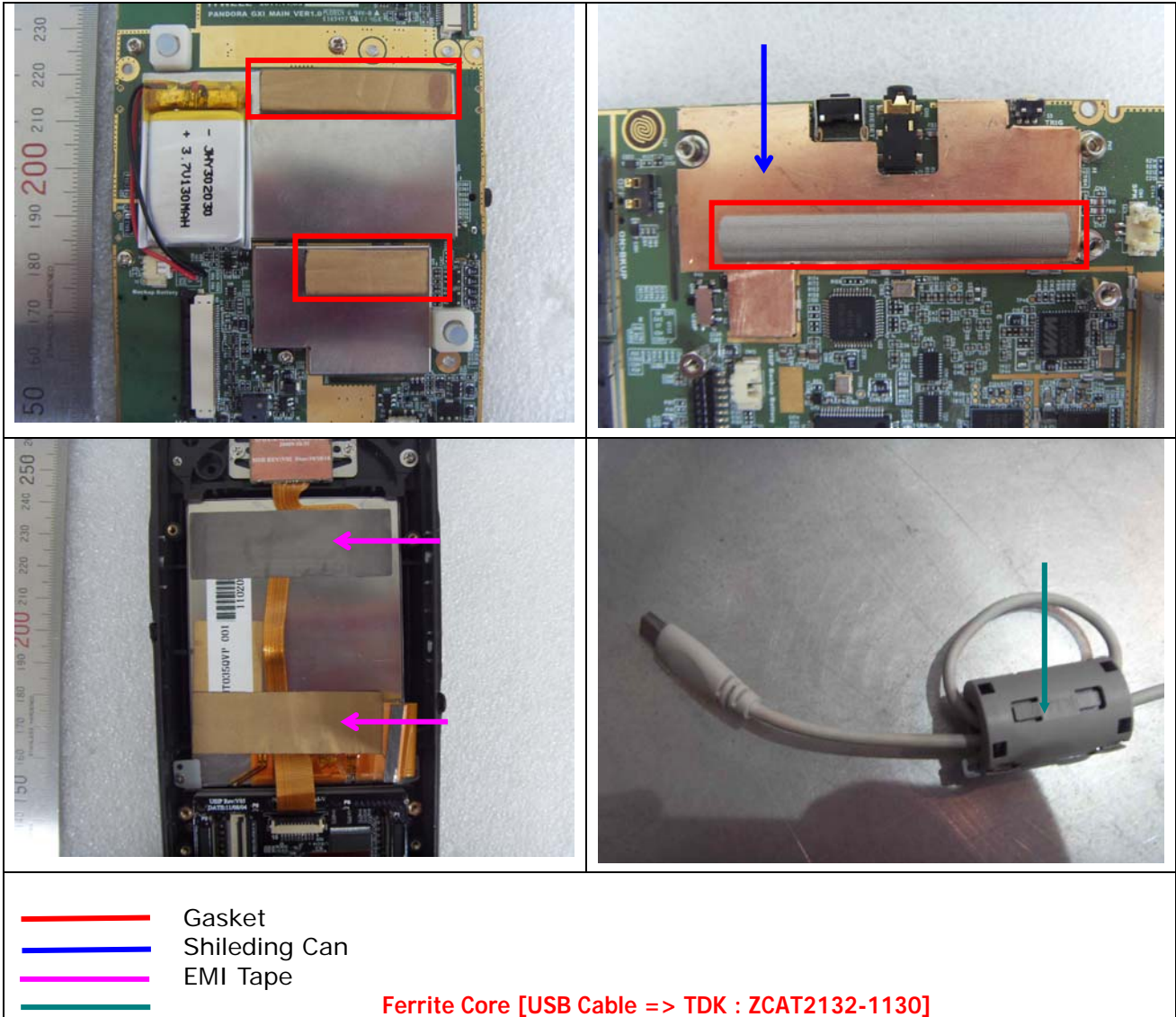
Voltage 2: 120 Vac (AC ADAPTOR)  
Frequency 2: 60 Hz

## 1.1 Model Differences

Not applicable

## 1.2 Device Modifications

The following modifications were necessary for compliance and was applied by applicant.





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### 1.3 EUT Configuration(s)

See Appendix A for individual test set-up configuration(s). The following peripheral devices and/or interface cables were connected during the measurement:

#### [Without Cradle]

☒ Peripheral Devices

Device	Manufacturer	Model No.	Serial No.	FCC ID or DoC
I.T.E. Power Supply	BridgePower Corp.	JPW128KA0902N05	-	-
Personal Computer	SAMSUNG	DB-A75	-	DoC
Keyboard (PS/2 type)	MONTEREY INTERNATIONAL CORP.	K6515	ZCH3011	DoC
Mouse (USB type)	INTECH ELECTRONICS CORP.	3D-510	510080601804	DoC
LCD Monitor	Lite-On Technology Corp.	VS17	CNN5130QMC	DoC
Earphone 1	-	-	-	-
Earphone 2	-	-	-	-

☒ Cable Description

#	Description	Ferrite Core	Length (m)	Other Details
1	AC Power Cable, Unshielded	No	1.8	Connect to AC power
2	AC Power Cable, Unshielded	No	1.8	Connect to AC power
3	Monitor Cable, Shielded	Yes	1.5	Between a Personal Computer and a LCD Monitor
4	Keyboard Cable, Shielded	No	1.5	PS/2 type
5	Mouse Cable, Shielded	Yes	1.5	USB type
6	USB Cable, Shielded	Yes	0.3	Between the EUT and a Personal Computer
7	Earphone Cable, Unshielded	No	1.2	Between the EUT and an Earphone 1
8	Earphone Cable, Unshielded	No	1.2	Between the EUT and an Earphone 2
9	DC In Cable, Unshielded	Yes	1.8	Between the EUT and an I.T.E. Power Supply
10	AC Power Cable, Unshielded	No	1.8	Connect to AC power

#### [With Cradle]

☒ Peripheral Devices

Device	Manufacturer	Model No.	Serial No.	FCC ID or DoC
I.T.E. Power Supply	BridgePower Corp.	JPW128KA0902N05	-	-
Cradle	-	-	-	-
Personal Computer	SAMSUNG	DB-A75	-	DoC
Keyboard (PS/2 type)	MONTEREY INTERNATIONAL CORP.	K6515	ZCH3011	DoC
Mouse (USB type)	INTECH ELECTRONICS CORP.	3D-510	510080601804	DoC
LCD Monitor	Lite-On Technology Corp.	VS17	CNN5130QMC	DoC
Earphone 1	-	-	-	-
Earphone 2	-	-	-	-

☒ Cable Description

#	Description	Ferrite Core	Length (m)	Other Details
1	AC Power Cable, Unshielded	No	1.8	Connect to AC power
2	AC Power Cable, Unshielded	No	1.8	Connect to AC power
3	Monitor Cable, Shielded	Yes	1.5	Between a Personal Computer and a LCD Monitor
4	Keyboard Cable, Shielded	No	1.5	PS/2 type
5	Mouse Cable, Shielded	Yes	1.5	USB type
6	USB Cable, Shielded	Yes	0.3	Between a Cradle and a Personal Computer
7	Earphone Cable, Unshielded	No	1.2	Between the EUT and an Earphone 1
8	Earphone Cable, Unshielded	No	1.2	Between the EUT and an Earphone 2
9	Cradle connector	-	-	Between the EUT and a Cradle
10	DC In Cable, Unshielded	Yes	1.8	Between a Cradle and an I.T.E. Power Supply
11	AC Power Cable, Unshielded	No	1.8	Connect to AC power



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### 1.4 Test Software

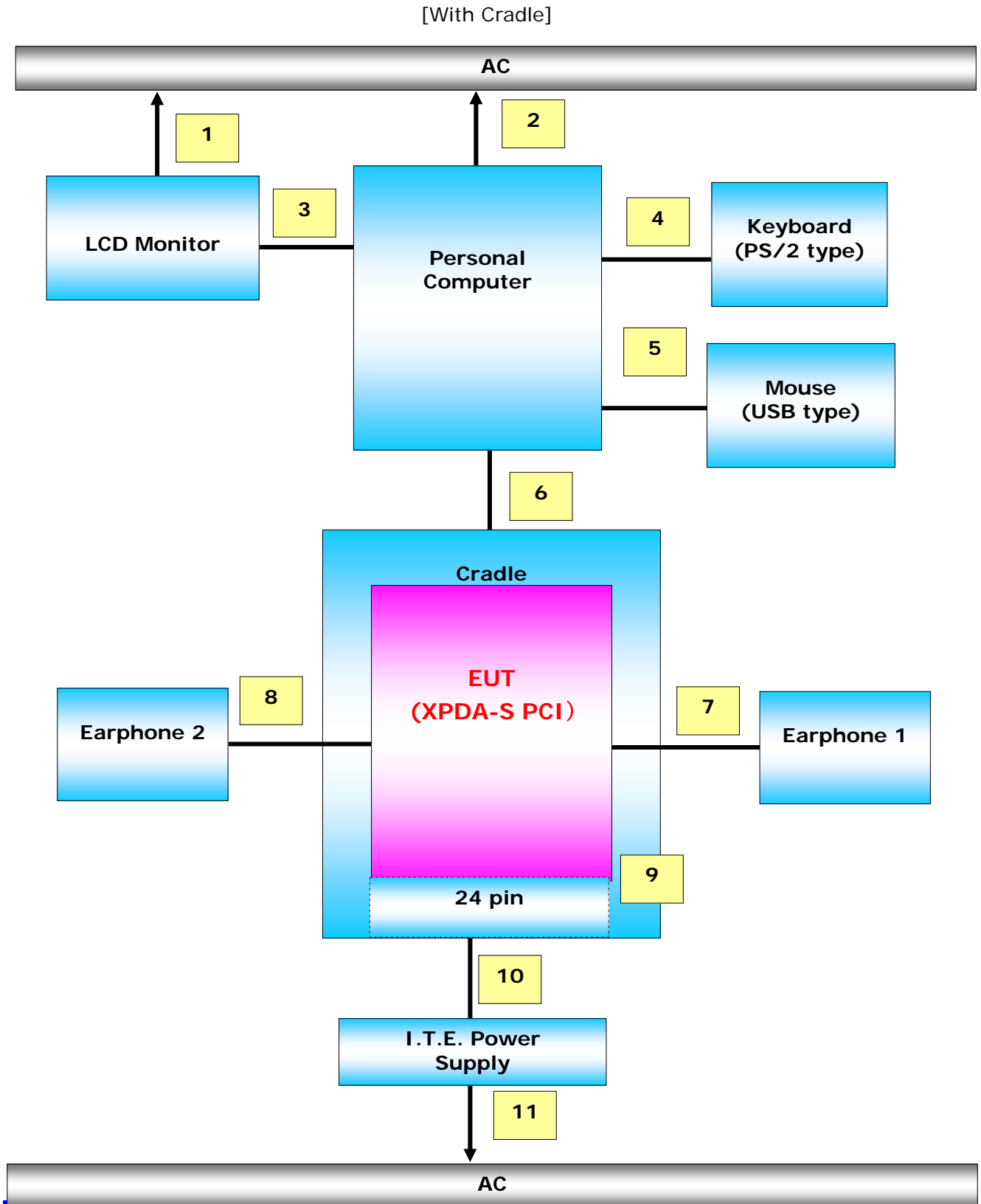
- ☐ EMC Test V 1.0
- ☐ Display Test Patterns – V1.5
- ☐ Ping.exe
- ☒ Not applicable

### 1.5 EUT Operating Mode(s)

Equipment under test was operated during the measurement under the following conditions:

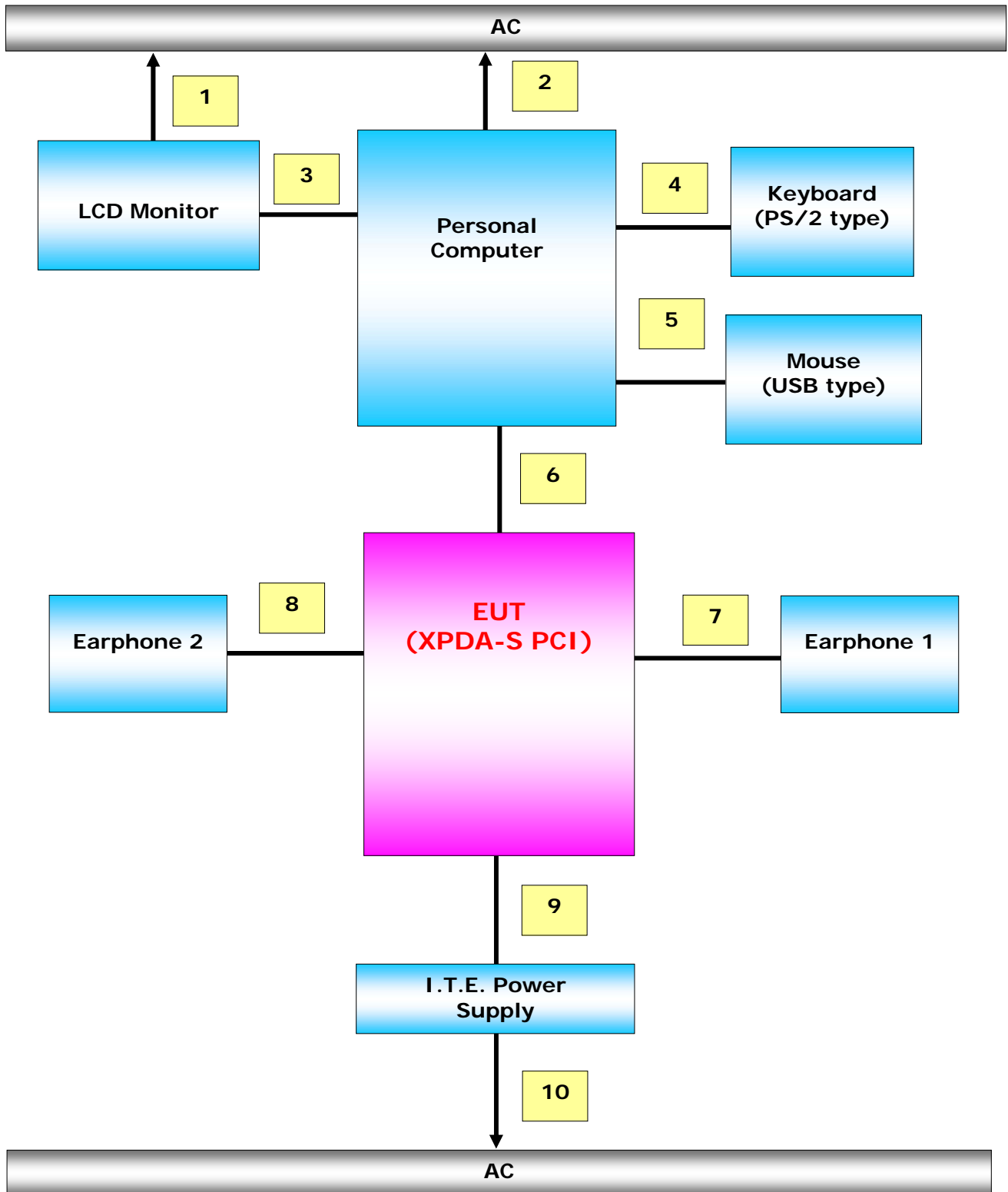
- ☐ Standby
- ☐ Display circles pattern
- ☒ Practice operation – EUT transmitting at 13.56 MHz continuously
  1. Without Cradle Mode(Battery Mode)
  2. With Cradle Mode
- ☐ Scrolling 'H'
- ☐ Read / Write

## 1.6 Configuration





[Without Cradle]





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### 1.7 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.

### 1.8 Test Facility

The measurement facility is located at 386-1, Ho-dong, Cheoin-gu, Yongin-si, Gyeonggi-do, 449-100, Korea. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

### 1.9 Measurement Procedure

Preliminary AC power line conducted emissions tests were performed shielded room. To find worst mode, several typical mode and typical cable position were tested. Final AC power line conducted emissions test was performed shielded room. (location is same as Preliminary test)  
Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

Preliminary radiated emissions test were performed anechoic chamber (Distance of antenna and EUT was 3 m). To find worst mode, several typical mode and typical cable position were tested and peak level and frequency were recorded.

Final radiated emissions test was performed Open Area Test Site. Based on the preliminary tests of the EUT, final test was proceeded worst case test mode and cable configuration.

\* Measurement procedures was In accordance with ANSI C63.4-2003 7.2.3, 7.2.4, 8.3.1.1, 8.3.1.2



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### 1.10 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3 m & 10 m OATS, 3 m & 10 m SAC and Conducted Test Site to perform FCC Part 15/18 measurements	 805871
JAPAN	VCCI	10 meter Open Area Test Site and one conducted site.	 R-948, C-986, T-1843
KOREA	KCC	EMI (10 m OATS, 10 m SAC and Conducted Test Site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and Interruptions)	 No. 51, KR0025
International	KOLAS	EMC	



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## 2.0 Emissions Test Regulations

The emissions tests were performed according to following regulations:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> EN 61000-6-3:2007                   |  |  |
| <input type="checkbox"/> EN 61000-6-4:2007                   |  |  |
| <input type="checkbox"/> EN 55011:2007 +A2:2007              | <input type="checkbox"/> Group 1<br><input type="checkbox"/> Class A | <input type="checkbox"/> Group 2<br><input type="checkbox"/> Class B |
| <input type="checkbox"/> EN 55013:2001 +A1:2003 +A2:2006     |  |  |
| <input type="checkbox"/> EN 55014-1:2006                     |  |  |
| <input type="checkbox"/> EN 55015:2006                       |  |  |
| <input type="checkbox"/> EN 61204-3:2000                     | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |
| <input type="checkbox"/> EN 61131-2:2003                     |  |  |
| <input type="checkbox"/> EN 61326-1:2006                     | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |
| <input type="checkbox"/> EN 55022:2006                       | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |
| <input type="checkbox"/> EN 61000-3-2:2006                   |  |  |
| <input type="checkbox"/> EN 61000-3-3:1995 +A1:2001 +A2:2005 |  |  |
| <input type="checkbox"/> VCCI V-3/2008.04                    | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |
| <input type="checkbox"/> AS/NZS CISPR22:2006                 | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |
| <input checked="" type="checkbox"/> FCC Part 15 Subpart C    |  |  |
| <input type="checkbox"/> CISPR 22:2006                       | <input type="checkbox"/> Class A                                     | <input type="checkbox"/> Class B                                     |

## 2.1 Radiated Electric Field Emissions - 15.225(a)

### Reference Standard

FCC Part 15.225(a)

### Test Date

January 12, 2012

### Test Location

☒ EMI-Anechoic chamber with a conductive ground plane:  
Testing was performed at a test distance of 3 m

### Test Equipment

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
<input checked="" type="checkbox"/>	Field Strength Meter	Rohde & Schwarz	ESHS30	828144/002	2012-02-09
<input checked="" type="checkbox"/>	Loop Antenna	EMCO	6502	9107-2652	2012-10-29

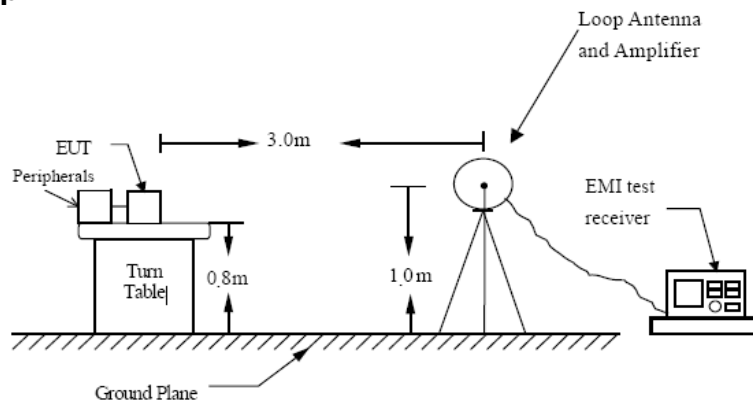
### Frequency Range of Measurement

13.553 MHz to 13.567 MHz

### Instrument Settings

IF Band Width: 10 kHz

### Test Setup





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### Measurement Procedure(blow 30 MHz)

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. Three orientation for the EUT were tried to find out which orientation produces the worst emissions.
3. The loop antenna was also moved around to find out worst position for the emissions.
4. Set the spectrum analyzer in the following setting as:  
For Below 30 MHz :  
RBW = 9 kHz / VBW = 300 kHz / Sweep = AUTO
5. Repeat above procedures until the measurements for all frequencies are complete.

### Radiated emission limits

The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 uV/m at 30 meters.

### Test Results

Frequency (MHz)	Field Strength of Fundamental uV/m@ 30 m	Field Strength of Fundamental dBuV/m @ 30 m	Field Strength of Fundamental dBuV/m @ 3 m
13.553-13.567	4.40	12.86	52.86

The requirements are:

- ☒ MET  
☐ NOT MET  
☐ NOT APPLICABLE

### Remarks

See Appendix A for test data



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## 2.2 Radiated Electric Field Emissions - 15.225(b)(c)

### Reference Standard

FCC Part 15.225(b)(c)

### Test Date

January 12, 2012

### Test Location

☒ EMI-Anechoic chamber with a conductive ground plane:  
Testing was performed at a test distance of 3 m

### Test Equipment

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
<input checked="" type="checkbox"/>	Field Strength Meter	Rohde & Schwarz	ESHS30	828144/002	2012-02-09
<input checked="" type="checkbox"/>	Loop Antenna	EMCO	6502	9107-2652	2012-10-29

### Frequency Range of Measurement

13.410 MHz to 13.553 MHz, 13.567 MHz to 13.710 MHz  
13.110 MHz to 13.410 MHz, 13.710 MHz to 14.010 MHz

### Instrument Settings

IF Band Width: 10 kHz

### Radiated emission limits

Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334  $\mu\text{V/m}$  at 30 meters.

Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz, the field strength of any emissions shall not exceed 106  $\mu\text{V/m}$  at 30 meters.

### Test Results

Frequency (MHz)	Field Strength of Fundamental $\mu\text{V/m}$ @ 30 m	Field Strength of Fundamental dBuV/m @ 30 m	Field Strength of Fundamental dBuV/m @ 3 m
13.410-13.553	1.05	0.45	40.45
13.567-13.710	1.61	4.12	44.12
13.110-13.410	0.26	-11.63	28.37
13.710-14.010	0.32	-9.93	30.07

The requirements are:

- ☒ MET  
☐ NOT MET  
☐ NOT APPLICABLE



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## 2.3 Radiated Electric Field Emissions - 15.225(d)

### Reference Standard

FCC Part 15.225(d), 15.209

### Test Date

January 12, 2012

### Test Location

☒ EMI-OATS: Testing was performed at a test distance of 3 m

### Test Equipment

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
<input checked="" type="checkbox"/>	Field Strength Meter	Rohde & Schwarz	ESVS30	826638/008	2012-07-07
<input checked="" type="checkbox"/>	ULTRA Broadband Antenna	Rohde & Schwarz	HL562	100203	2013-07-05
<input checked="" type="checkbox"/>	Field Strength Meter	Rohde & Schwarz	ESHS30	828144/002	2012-02-09
<input checked="" type="checkbox"/>	Loop Antenna	EMCO	6502	9107-2652	2012-10-29

### Frequency Range of Measurement

9 kHz to 1000 MHz

### Instrument Settings

IF Band Width: 10 kHz (9 kHz to 30 MHz)

IF Band Width: 120 kHz (30 MHz to 1000 MHz)

### Measurement Procedure(above 30 MHz)

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:  
For 30 MHz ~ 1000 MHz :  
RBW = 120 kHz / VBW = 300 kHz / Sweep = AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.





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### Radiated emission limits

Frequency (MHz)	Field Strength ( $\mu\text{V}/\text{m}$ )	Measurement Distance (m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

\*\* Except as provided in 15.209(g).fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72MHz, 76-88MHz, 174-216MHz, 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g.15.231 and 15.241.

### Test Results

The requirements are:

- ☒ MET  
☐ NOT MET  
☐ NOT APPLICABLE

### Remarks

See Appendix A for test data

## 2.4 Frequency Stability – 15.225(e)

### Reference Standard

FCC Part 15.225(e)

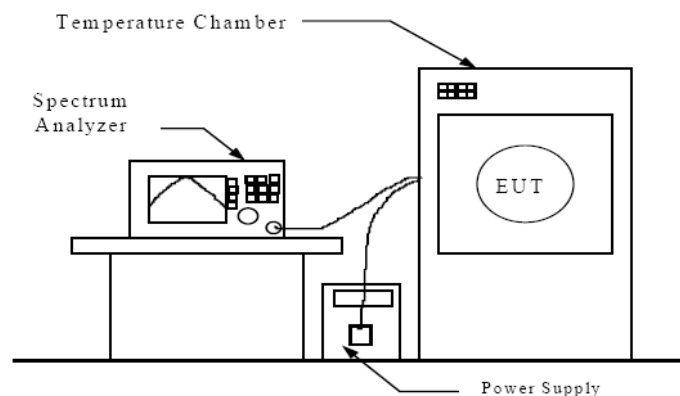
### Test Date

January 12, 2012

### Test Equipment

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
<input checked="" type="checkbox"/>	Spectrum Analyzer	Rohde & Schwarz	FSP-30	100994	2012-11-10
<input checked="" type="checkbox"/>	Temp & Humi Chamber	Kunpoong Engineering	JT-TH-556-1	9QE5-002	2013-01-12

### Test Setup



### Test Procedure

- A. Frequency stability vs. temperature measurement
  - The EUT was placed into the constant temperature chamber.
  - The spectrum analyzer was used to read the EUT operating frequency.
  - Set the constant temperature chamber temperature within the range of -20°C to +50°C
- B. Frequency stability vs. input voltage measurement
  - The EUT was placed into the constant temperature chamber and set the temperature to 20°C.
  - The spectrum analyzer was used to read the EUT operating frequency.
  - The EUT is powered with the DC Power Supplied it with 85% and 115% voltage, and measured the EUT operating frequency.



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### Frequency tolerance Limit

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of  $20^{\circ}\text{C}$ .

- Operating frequency : 13.56 MHz
- Limit : 13.56 MHz \*  $(\pm 0.0001) = (\pm 1356 \text{ Hz})$
- Within the band : 13.558644 MHz – 13.561356 MHz.

### Test Data

Timing	$-20^{\circ}\text{C}$	$-10^{\circ}\text{C}$	$0^{\circ}\text{C}$	$10^{\circ}\text{C}$	$20^{\circ}\text{C}$	$30^{\circ}\text{C}$	$40^{\circ}\text{C}$	$50^{\circ}\text{C}$
Start-up	13.560288	13.506290	13.560264	13.560235	13.560189	13.560155	13.560139	13.560110
10 min	13.560289	13.560287	13.560264	13.560235	13.560189	13.560155	13.560129	13.560108
30 min	13.560289	13.560287	13.560264	13.560235	13.560189	13.560153	13.560124	13.560108

Timing	Power 85%	Power 115%
Start-up	13.560166 MHz	13.560166 MHz
10 min	13.560166 MHz	13.560166 MHz
30 min	13.560166 MHz	13.560166 MHz

### Test Results

The requirements are:

- ☒ MET
- ☐ NOT MET
- ☐ NOT APPLICABLE



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## 2.5 Conducted Voltage Emissions – 15.207

### Reference Standard

FCC Part 15.207

### Test Date

January 12, 2012

### Test Location

Shielded Room

### Test Equipment

	Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
<input checked="" type="checkbox"/>	EMI Test Receiver	Rohde & Schwarz	ESCI3	100032	2012-02-09
<input checked="" type="checkbox"/>	LISN	Rohde & Schwarz	ENV216	101235	2012-08-18
<input checked="" type="checkbox"/>	LISN	Rohde & Schwarz	ENV216	101236	2012-08-06
<input type="checkbox"/>	EMI Test Receiver	Rohde & Schwarz	ESHS30	828144/002	2012-02-09
<input type="checkbox"/>	LISN	Rohde & Schwarz	ENV216	101150	2012-02-10
<input type="checkbox"/>	LISN	EMCO	3825/2	9607-2575	2012-07-06

### Frequency Range of Measurement

150 kHz to 30 MHz

### Instrument Settings

IF Band Width: 9 kHz

### Conducted Emission limits

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

### Test Results

The requirements are: ☒ MET ☐ NOT MET ☐ NOT APPLICABLE

[With Cradle]

Frequency (MHz)	Measured Data (dBμV)	Margin (dB)	Remark
24.144 000	40.1	9.9	Average

[Without Cradle]

Frequency (MHz)	Measured Data (dBμV)	Margin (dB)	Remark
0.676 500	44.3	1.7	Average

### Remarks

See Appendix A for test data.



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## APPENDIX A – TEST DATA

### Radiated Electric Field Emissions (Quasi-Peak reading)

#### 1) Fundamental Frequency Test Data

Test Mode : With Cradle Mode

Frequency [MHz]	Reading [dB $\mu$ V/m@3m]	Pol.	Height [m]	Correction Factor		Limits [dB $\mu$ V/m@3m]	Result [dB $\mu$ V/m@3m]	Margin [dB]
				Antenna	Cable			
13.56	54.46	V	1.0	8.84	0.01	124.0	52.9	71.1

#### 2) Frequency Range from 9 kHz to 30 MHz Test Data

Test Mode : With Cradle Mode

Frequency [MHz]	Reading [dB $\mu$ V/m@3m]	Pol.	Height [m]	Correction Factor		Limits [dB $\mu$ V/m@3m]	Result [dB $\mu$ V/m@3m]	Margin [dB]
				Antenna	Cable			
13.01	18.6	V	1.0	8.84	0.01	69.5	17.0	52.5
14.13	19.6	V	1.0	8.84	0.01	69.5	18.0	51.6



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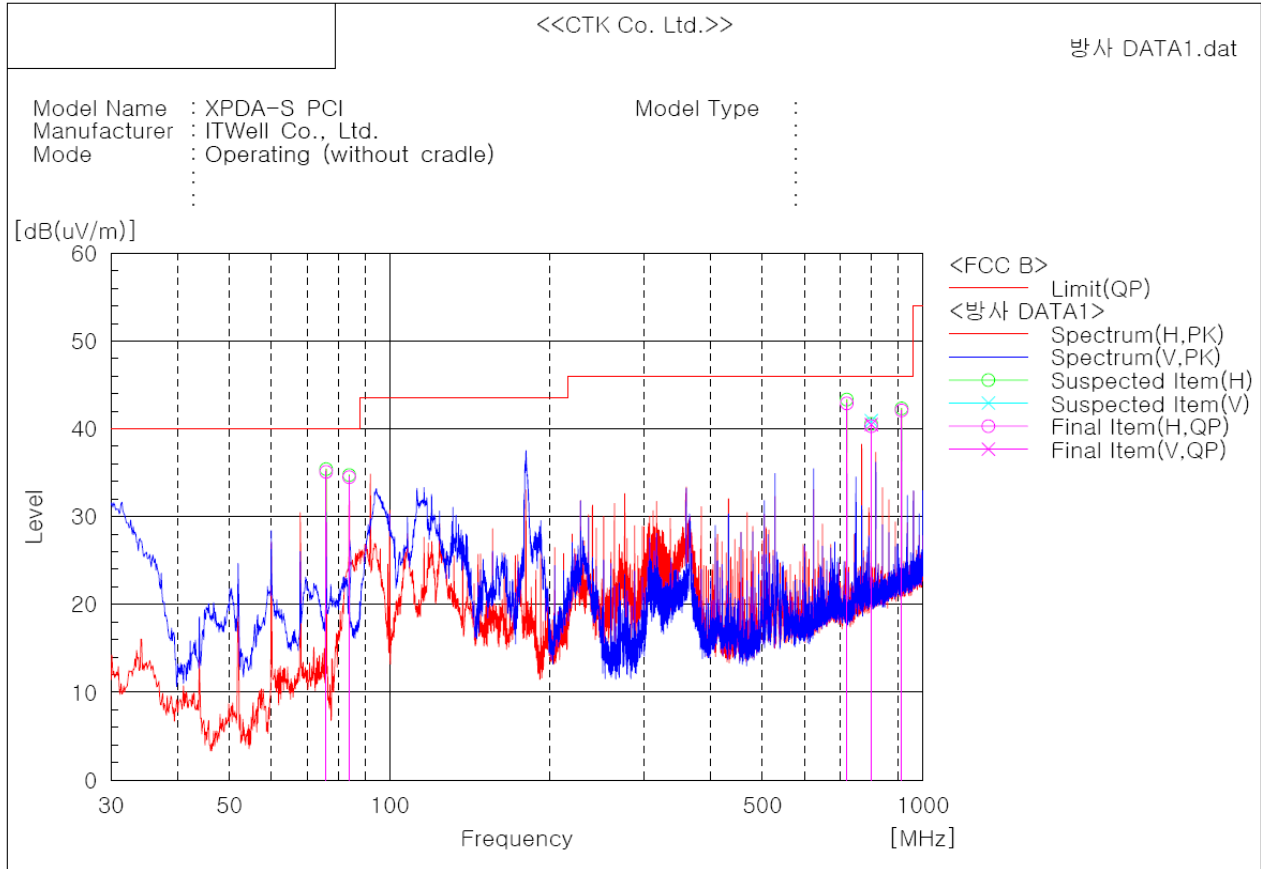
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## 3) Frequency Range from 30 MHz to 1000 MHz Test Data

Test Mode : Without Cradle Mode



### Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	75.954	H	56.3	-21.2	35.1	40.0	4.9	306.0	66.0
2	83.956	H	54.9	-20.4	34.5	40.0	5.5	206.0	0.0
3	720.034	H	47.4	-4.5	42.9	46.0	3.1	100.0	4.0
4	800.059	V	43.3	-2.8	40.5	46.0	5.5	192.0	253.0
5	800.059	H	43.1	-2.8	40.3	46.0	5.7	100.0	268.0
6	912.094	H	42.5	-0.4	42.1	46.0	3.9	100.0	115.0



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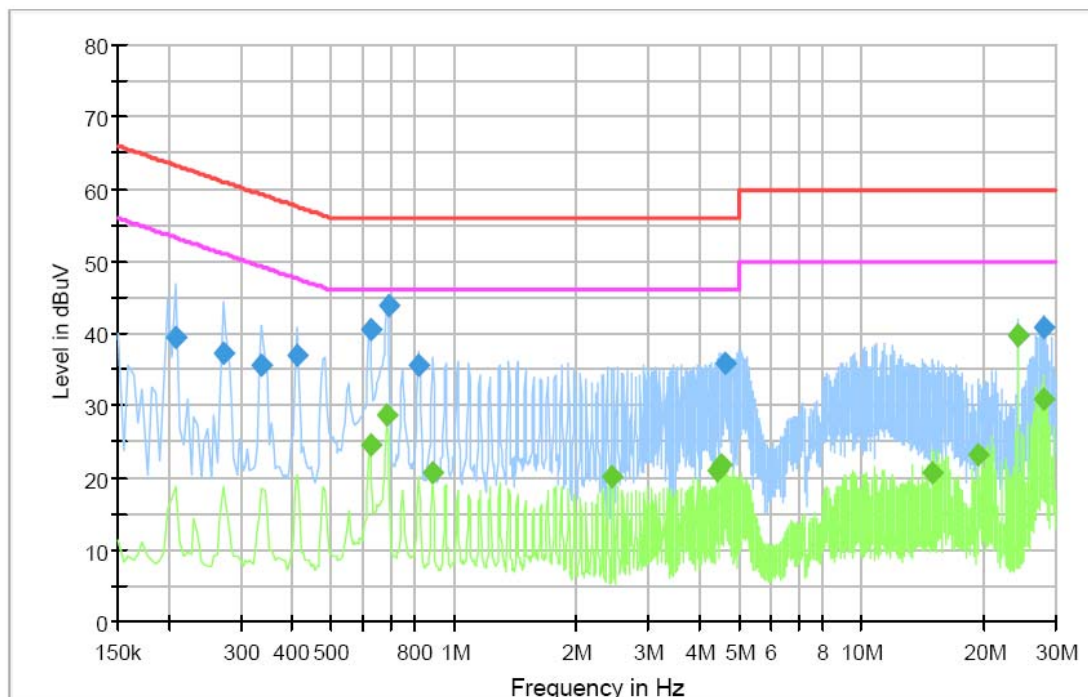
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### Conducted Voltage Emissions

[With Cradle]

[HOT]



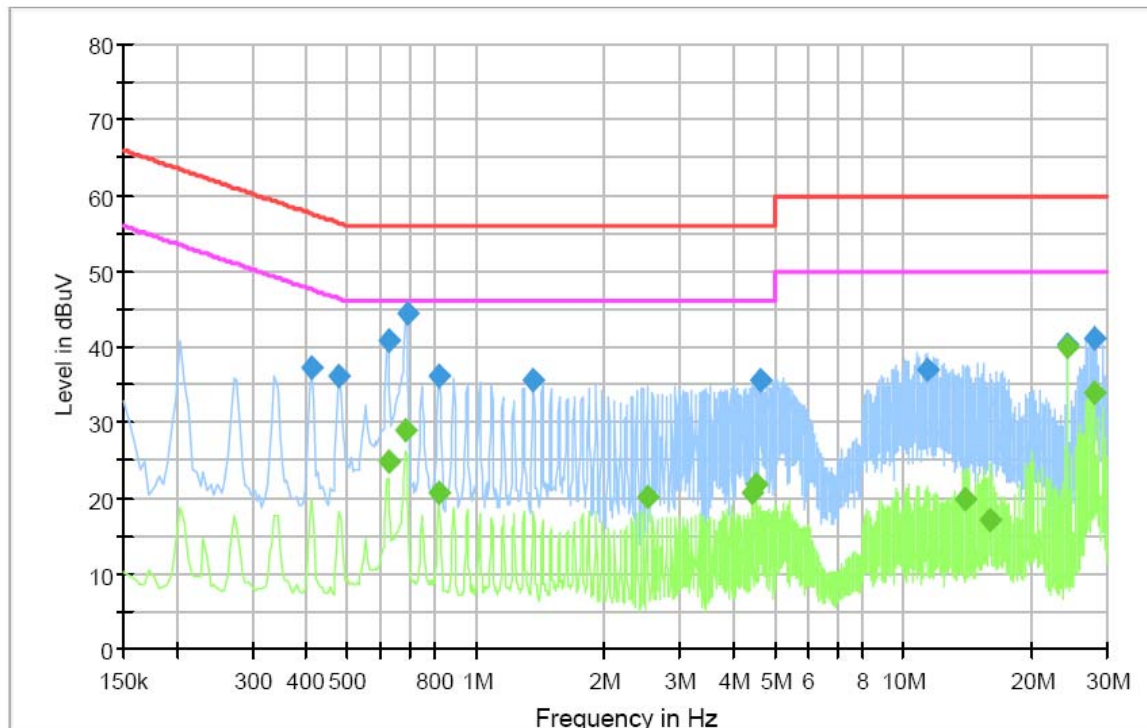
#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.208500	39.4	1000.0	9.000	On	L1	10.1	23.9	63.3
0.271500	37.3	1000.0	9.000	On	L1	10.1	23.7	61.1
0.339000	35.5	1000.0	9.000	On	L1	10.0	23.8	59.2
0.411000	37.1	1000.0	9.000	On	L1	10.0	20.5	57.6
0.622500	40.7	1000.0	9.000	On	L1	10.1	15.4	56.0
0.690000	44.0	1000.0	9.000	On	L1	10.1	12.0	56.0
0.820500	35.6	1000.0	9.000	On	L1	10.1	20.4	56.0
4.623000	35.9	1000.0	9.000	On	L1	9.8	20.1	56.0
24.144000	39.8	1000.0	9.000	On	L1	9.9	20.2	60.0
28.000500	40.8	1000.0	9.000	On	L1	10.0	19.2	60.0

#### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.622500	24.6	1000.0	9.000	On	L1	10.1	21.4	46.0
0.685500	28.6	1000.0	9.000	On	L1	10.1	17.4	46.0
0.883500	20.8	1000.0	9.000	On	L1	10.0	25.2	46.0
2.449500	20.0	1000.0	9.000	On	L1	9.9	26.0	46.0
4.420500	20.9	1000.0	9.000	On	L1	9.8	25.1	46.0
4.555500	21.7	1000.0	9.000	On	L1	9.8	24.3	46.0
14.896500	20.7	1000.0	9.000	On	L1	9.8	29.3	50.0
19.311000	23.2	1000.0	9.000	On	L1	9.8	26.8	50.0
24.144000	39.8	1000.0	9.000	On	L1	9.9	10.2	50.0
28.000500	31.0	1000.0	9.000	On	L1	10.0	19.0	50.0

[NEUTRAL]



### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.411000	37.3	1000.0	9.000	On	N	10.0	20.3	57.6
0.478500	36.0	1000.0	9.000	On	N	9.9	20.3	56.4
0.622500	40.9	1000.0	9.000	On	N	10.0	15.1	56.0
0.690000	44.3	1000.0	9.000	On	N	10.1	11.7	56.0
0.820500	36.1	1000.0	9.000	On	N	10.1	19.9	56.0
1.365000	35.6	1000.0	9.000	On	N	10.0	20.4	56.0
4.618500	35.4	1000.0	9.000	On	N	9.8	20.6	56.0
11.350500	37.0	1000.0	9.000	On	N	9.7	23.0	60.0
24.144000	40.4	1000.0	9.000	On	N	10.1	19.6	60.0
28.000500	41.2	1000.0	9.000	On	N	10.2	18.8	60.0

### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.622500	24.8	1000.0	9.000	On	N	10.0	21.2	46.0
0.685500	29.0	1000.0	9.000	On	N	10.1	17.0	46.0
0.820500	20.8	1000.0	9.000	On	N	10.1	25.2	46.0
2.526000	20.2	1000.0	9.000	On	N	9.9	25.8	46.0
4.420500	20.8	1000.0	9.000	On	N	9.8	25.2	46.0
4.555500	21.9	1000.0	9.000	On	N	9.8	24.1	46.0
13.933500	20.0	1000.0	9.000	On	N	9.8	30.0	50.0
15.999000	17.2	1000.0	9.000	On	N	9.8	32.8	50.0
24.144000	40.1	1000.0	9.000	On	N	10.1	9.9	50.0
28.000500	34.0	1000.0	9.000	On	N	10.2	16.0	50.0





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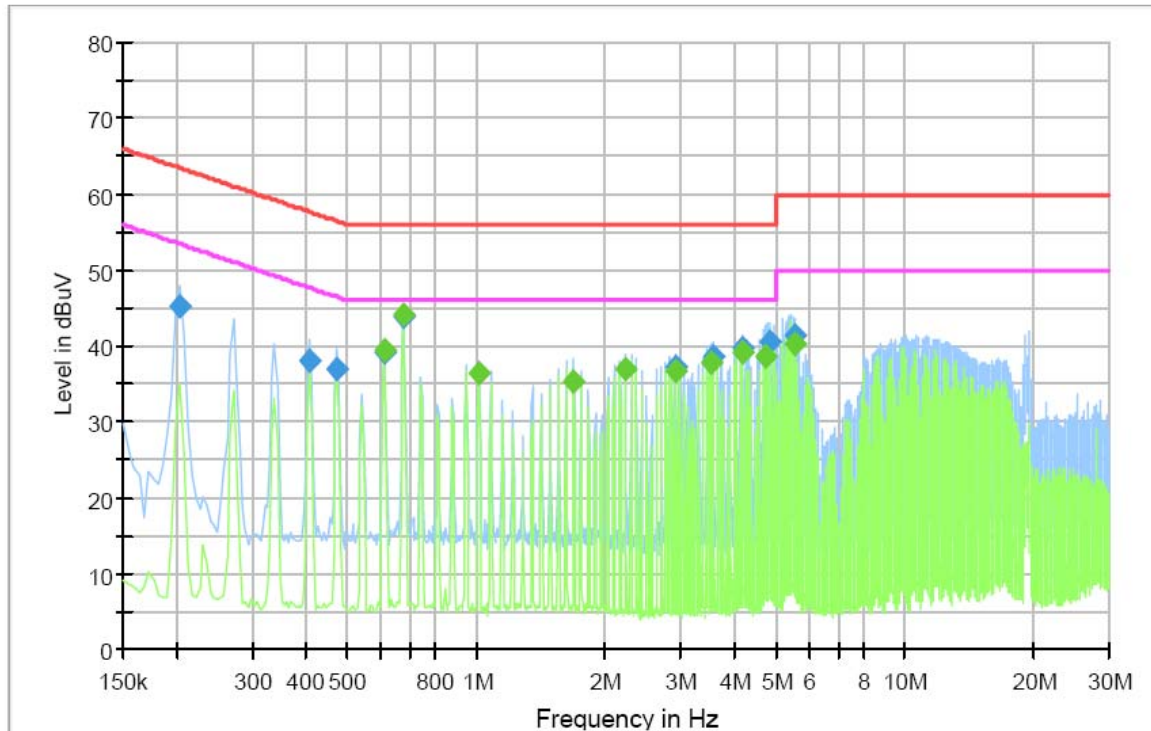
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[Without Cradle]

[HOT]



### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.204000	45.2	1000.0	9.000	On	L1	10.1	18.2	63.4
0.406500	38.0	1000.0	9.000	On	L1	10.0	19.8	57.7
0.474000	37.0	1000.0	9.000	On	L1	10.0	19.4	56.4
0.609000	39.3	1000.0	9.000	On	L1	10.1	16.7	56.0
0.676500	44.0	1000.0	9.000	On	L1	10.1	12.0	56.0
2.908500	37.2	1000.0	9.000	On	L1	9.9	18.8	56.0
3.588000	38.7	1000.0	9.000	On	L1	9.8	17.3	56.0
4.195500	39.7	1000.0	9.000	On	L1	9.8	16.3	56.0
4.875000	40.5	1000.0	9.000	On	L1	9.8	15.5	56.0
5.550000	41.5	1000.0	9.000	On	L1	9.8	18.5	60.0

### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.609000	39.5	1000.0	9.000	On	L1	10.1	6.5	46.0
0.676500	44.3	1000.0	9.000	On	L1	10.1	1.7	46.0
1.014000	36.3	1000.0	9.000	On	L1	10.0	9.7	46.0
1.693500	35.3	1000.0	9.000	On	L1	9.9	10.7	46.0
2.233500	37.0	1000.0	9.000	On	L1	9.9	9.0	46.0
2.908500	36.7	1000.0	9.000	On	L1	9.9	9.3	46.0
3.520500	37.8	1000.0	9.000	On	L1	9.8	8.2	46.0
4.195500	39.3	1000.0	9.000	On	L1	9.8	6.8	46.0
4.740000	38.7	1000.0	9.000	On	L1	9.8	7.3	46.0
5.550000	40.3	1000.0	9.000	On	L1	9.8	9.7	50.0



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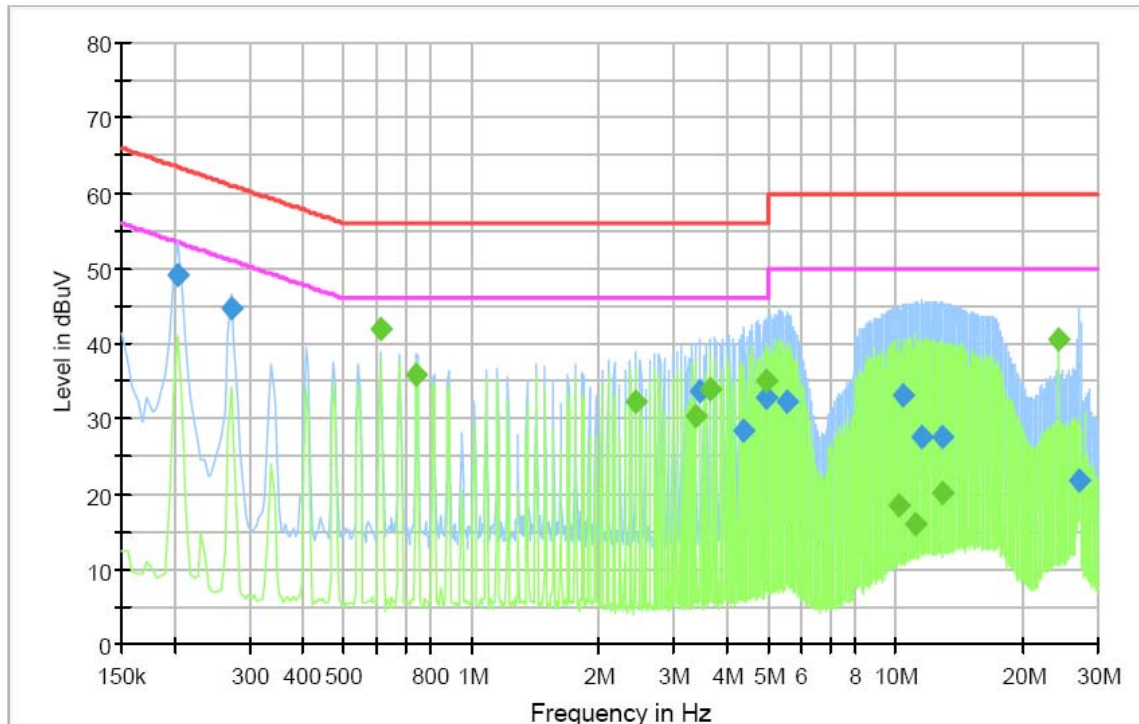
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[NEUTRAL]



### Final Result 1

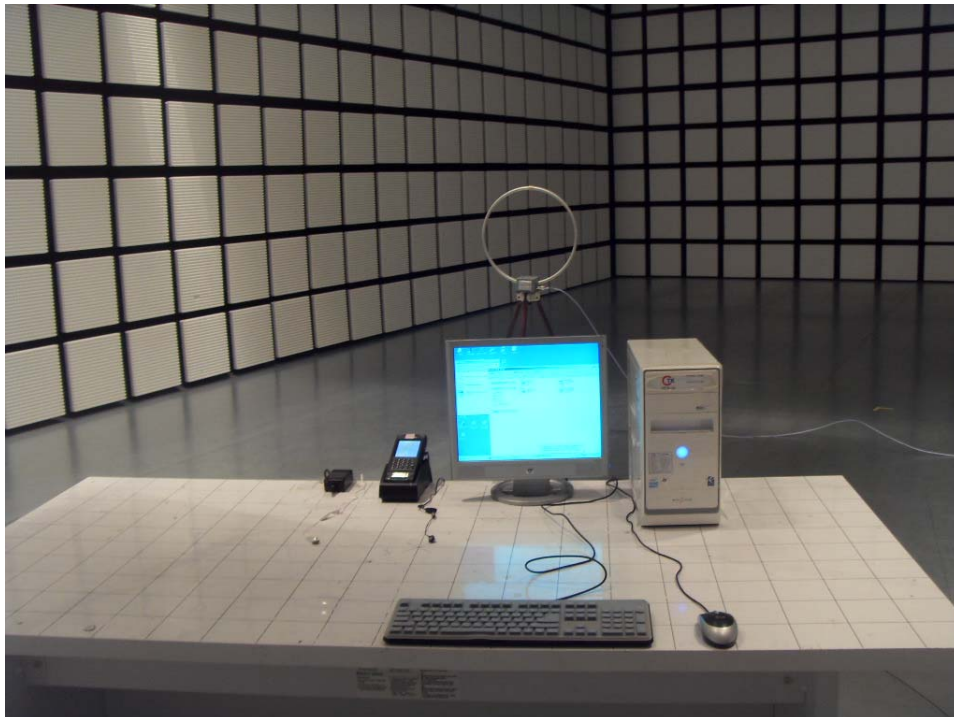
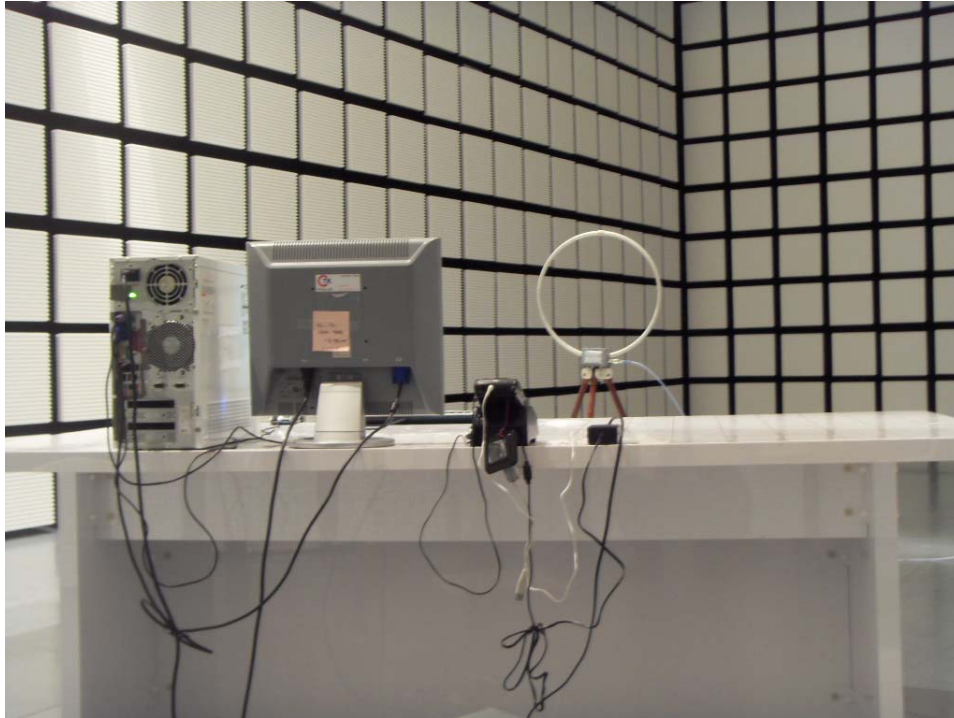
Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.204000	49.1	1000.0	9.000	On	N	10.2	14.3	63.4
0.271500	44.6	1000.0	9.000	On	N	10.1	16.5	61.1
3.457500	33.5	1000.0	9.000	On	N	9.8	22.5	56.0
4.407000	28.5	1000.0	9.000	On	N	9.8	27.5	56.0
4.947000	32.7	1000.0	9.000	On	N	9.8	23.3	56.0
5.559000	32.1	1000.0	9.000	On	N	9.8	27.9	60.0
10.365000	33.2	1000.0	9.000	On	N	9.7	26.8	60.0
11.584500	27.7	1000.0	9.000	On	N	9.7	32.3	60.0
12.871500	27.5	1000.0	9.000	On	N	9.8	32.5	60.0
27.226500	21.7	1000.0	9.000	On	N	10.2	38.3	60.0

### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.609000	41.9	1000.0	9.000	On	N	10.0	4.1	46.0
0.744000	35.9	1000.0	9.000	On	N	10.1	10.1	46.0
2.440500	32.3	1000.0	9.000	On	N	9.9	13.7	46.0
3.390000	30.4	1000.0	9.000	On	N	9.8	15.6	46.0
3.660000	33.8	1000.0	9.000	On	N	9.8	12.2	46.0
4.947000	34.9	1000.0	9.000	On	N	9.8	11.1	46.0
10.230000	18.4	1000.0	9.000	On	N	9.7	31.6	50.0
11.179500	15.9	1000.0	9.000	On	N	9.7	34.1	50.0
12.871500	20.1	1000.0	9.000	On	N	9.8	29.9	50.0
24.144000	40.7	1000.0	9.000	On	N	10.1	9.3	50.0

## APPENDIX B - Test Setup Photos and Configuration

### Radiated Electric Field Emissions (9 kHz ~ 30 MHz)





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### Radiated Electric Field Emissions (30 MHz ~ 1000 MHz) :







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### Frequency Stability

