

# FCC 47 CFR PART 15 SUBPART B & IC ICES-003 TEST REPORT

for

7 Rugged Tablet PC

MODEL: Algiz 7 ; Algiz 7-XXX (X=A~Z , a~z , 0 ~9 , Blank or Slash)

Test Report Number:

T100201002-D

Issued for

**HHCS HANDHELD COMPUTER SPECIALISTS AB**

Kinnegatan 17 A, S-531 33 Lidköping, Sweden

Issued By:

**Compliance Certification Services Inc.**

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Issued Date: February 25, 2010



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**Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	February 25, 2010	Initial Issue	ALL	Sandy Lin



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# 1 TEST RESULT CERTIFICATION

<b>Product:</b>	7 Rugged Tablet PC
<b>Model:</b>	Algiz 7 ; Algiz 7-XXX (X=A~Z , a~z , 0 ~9 , Blank or Slash)
<b>Brand:</b>	handheld
<b>Applicant:</b>	HHCS HANDHELD COMPUTER SPECIALISTS AB Kinnegatan 17 A, S-531 33 Lidköping, Sweden
<b>Manufacturer:</b>	HHCS HANDHELD COMPUTER SPECIALISTS AB Kinnegatan 17 A, S-531 33 Lidköping, Sweden
<b>Tested:</b>	February 6 ~ 24, 2010
<b>Test Voltage:</b>	120VAC, 60Hz

EMISSION			
Standard	Item	Result	Remarks
FCC 47 CFR Part 15 Subpart B (July 10, 2008), ICES-003 Issue 4 ANSI C63.4-2003	Conducted (Power Port)	PASS	Meet Class B limit
	Radiated	PASS	Meet Class B limit

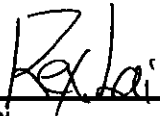
Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.  
2. The information of measurement uncertainty is available upon the customer's request.


Deviation from Applicable Standard
None

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Reviewed by:

  
 \_\_\_\_\_  
 Rex Lai  
 Section Manager

  
 \_\_\_\_\_  
 Gina Lo  
 Section Manager



## 2 EUT DESCRIPTION

<b>Product</b>	7 Rugged Tablet PC		
<b>Brand Name</b>	handheld		
<b>Model</b>	Algiz 7 ; Algiz 7-XXX (X=A~Z , a~z , 0 ~9 , Blank or Slash)		
<b>Applicant</b>	HHCS HANDHELD COMPUTER SPECIALISTS AB		
<b>Housing material</b>	Plastic		
<b>Serial Number</b>	T100201002		
<b>Received Date</b>	February 1, 2010		
<b>EUT Power Rating</b>	VDC from Power Adapter I/P: 100-240V, 1.8A, 50-60Hz O/P: 12V-17V, 4.2A & 50W MAX. 12V, 4.16A Typical		
<b>Power Adapter Manufacturer</b>	EDAC	<b>Model</b>	EA1050C-120
<b>AC Power Cord Type</b>	Unshielded, 1.8m (Detachable) to Power Adapter		
<b>M/B</b>	Winmate	<b>Model</b>	I983
<b>CPU Manufacturer</b>	Intel	<b>Model</b>	Atom Z530 1.6GHz
<b>RAM</b>	Apacer	<b>Model</b>	DDR2-667 2GB
<b>SSD</b>	PATA 64GB MLC		
<b>Panel</b>	7" / CLAA070NC0BCT / 1024x600		
<b>Megapixel Camera</b>	Fangtec	<b>Model</b>	EM5020B1
<b>Battery Pack</b>	ALG7-08A		

**Remark:**

1. The suffix of "X" (X= 0~9, A~Z or Blank) on model number is just for marketing purpose only.
2. Client consigns only one sample to test (model number: Algiz 7). Therefore, the testing Lab. just guarantees the unit, which has been tested.

I/O PORT TYPES	Q'TY	TESTED WITH
1) USB Port	2	2
2) LAN Port	1	1
3) Audio Port	2	2
4) RS 232 Port	1	1

### 3 TEST METHODOLOGY

#### 3.1. DECISION OF FINAL TEST MODE

- The following test mode was scanned during the preliminary test:

Pre-Test Mode
<b>Mode 1: Operating</b>

- After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test Mode		
Emission	Conducted Emission	<b>Mode 1</b>
	Radiated Emission	<b>Mode 1</b>

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

#### 3.2. EUT SYSTEM OPERATION

1	Setup the EUT and simulators as shown on 4.2.
2	Turn on the power of all equipment.
3	EUT play music and link to Notebook PC.
4	EMI test program (file name: EMCTEST) was loaded and executed in “Windows XP” mode. The detect signal was sent to EUT.
5	EUT will sends “H” pattern to monitor, the monitor will show “H” pattern on the screen.
6	Start to the tests and record.

**Note:** Test program is self-repeating throughout the test.



## 4 SETUP OF EQUIPMENT UNDER TEST

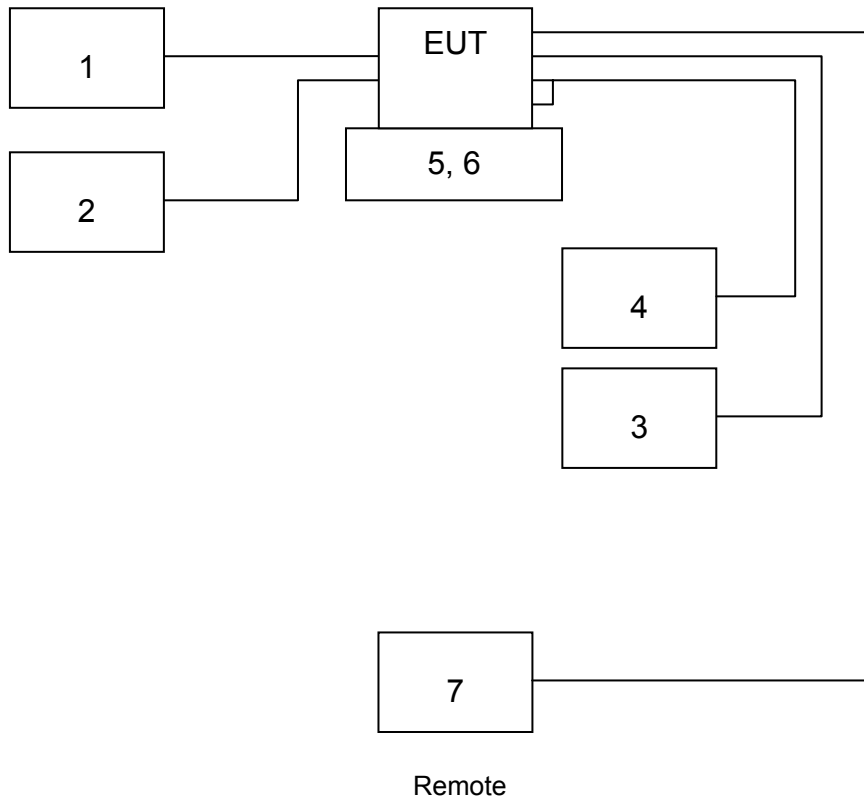
### 4.1. DESCRIPTION OF SUPPORT UNITS

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.

No.	Equipment	Trade Name	Model No.	Serial No.	FCC ID	Data Cable	Power Cord
1.	Modem	ACEEX	DM-1414	304012269	IFAXDM1414	Shielded, 1.8m	Unshielded, 1.8m
2.	USB Keyboard	DELL	Sk-8115	N/A	FCC DoC	Shielded, 1.8m	N/A
3.	USB Mouse	Logitech	M-CAA43	LZE03262922	FCC DoC	Shielded, 1.8m	N/A
4	Multimedia Earphone	Labtec	Axis-301	N/A	FCC DoC	Unshielded, 1.8m*2	N/A
5	Test Kit	N/A	N/A	N/A	N/A	N/A	N/A
6	Test Kit	N/A	N/A	N/A	N/A	N/A	N/A
7	Notebook PC (Remote)	DELL	PP19L	GK102 A00	QDS-BRCM1021	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core

**Note:** Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

## 4.2. CONFIGURATION OF SYSTEM UNDER TEST





## 5 FACILITIES AND ACCREDITATIONS

### 5.1. FACILITIES

All measurement facilities used to collect the measurement data are located at:

- No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan
- No. 81-1, Lane 210, Pa-De 2nd Rd., Luchu Hsiang, Taoyuan Shien, Taiwan.
- No.163-1, Jhongsheng Rd., Sindian City, Taipei County 23151, Taiwan.

*Remark: The radiated emissions test items was tested at Compliance Certification Services Inc. (Sindian Lab.) The test equipments were listed in page 17 and the test data, please refer page 21-23.*

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5.

### 5.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

<b>Taiwan</b>	TAF
<b>USA</b>	A2LA

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

<b>Canada</b>	Industry Canada
<b>Norway</b>	Nemko
<b>USA</b>	FCC

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.ccsrf.com>

### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	+/- 2.81 dB
Radiated emissions #H	30MHz ~ 200MHz	+/- 3.89 dB
	200MHz ~1000MHz	+/- 3.87 dB
Radiated emissions # 966	Above 1GHz	+/- 3.09 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

Consistent with industry standard (e.g. CISPR 22: 2006, clause 11, Measurement Uncertainty) determining compliance with the limits shall be based on the results of the compliance measurement. Consequently the measured emissions being less than the maximum allowed emission result in this being a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is based on conducted and radiated emissions being less than  $U_{CISPR}$  which is 3.6dB and 5.2dB respectively. CCS values (called  $U_{Lab}$  in CISPR 16-4-2) is less than  $U_{CISPR}$  as shown in the table above. Therefore, MU need not be considered for compliance.



## 6 CONDUCTED EMISSION MEASUREMENT

### 6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

**NOTE:**

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 6.2. TEST INSTRUMENTS

Conducted Emission Room				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver 9kHz-30MHz	Rohde & Schwarz	ESHS30	828144/003	12/06/2010
Two-Line V-Network 9kHz-30MHz	Schaffner	NNB41	03/10013	12/03/2010
LISN 10kHz-100MHz	EMCO	3825/2	9106-1809	05/03/2010
Test S/W		LABVIEW (V 6.1)		

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



### **6.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

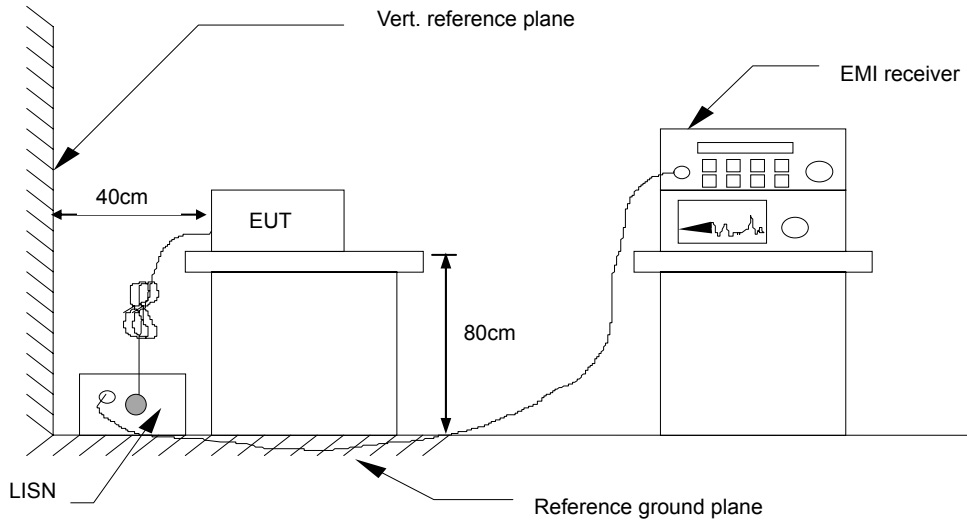
#### **Procedure of Preliminary Test**

- The EUT and support equipment, if needed, were set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- The test program of the EUT was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.

### 6.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 6.5. DATA SAMPLE:

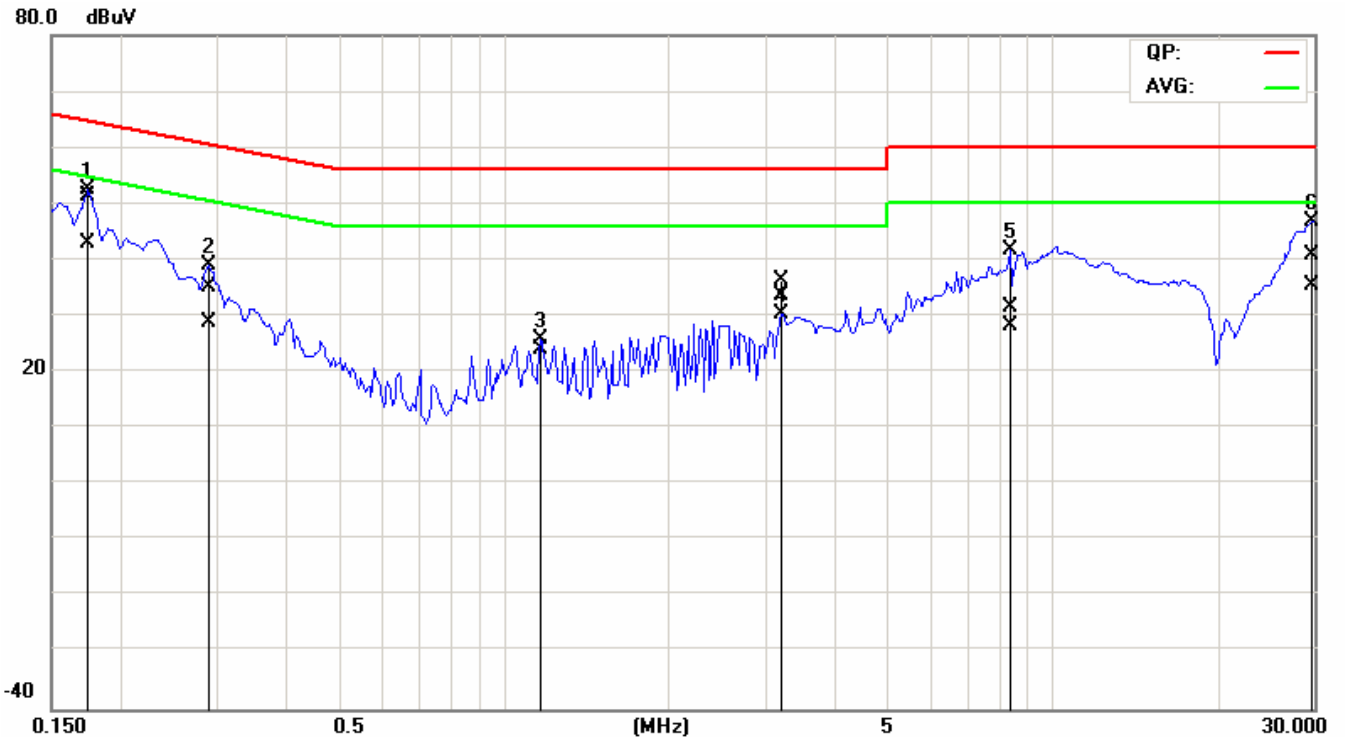
Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correctrion factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak. limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
x.xx	43.95	33.00	10.00	53.95	43.00	56.00	46.00	-2.05	-3.00	Pass

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer/Receiver reading + Insertion loss of LISN, if it > 0.5 dB  
 Correction Factor (dB) = LISN Factor + Cable Loss  
 Result (dBuV) = Raw reading converted to dBuV and CF added  
 Limit (dBuV) = Limit stated in standard  
 Margin (dB) = Result (dBuV) – Limit (dBuV)

### 6.6. TEST RESULTS

#### CCS Conduction Test

<b>Model No.</b>	Algiz 7	<b>Test Date</b>	2010/2/9
<b>Environmental Conditions</b>	22°C, 45% RH	<b>Test Mode</b>	Mode 1
<b>Tested by</b>	Skyman Tsai	<b>Line</b>	L1



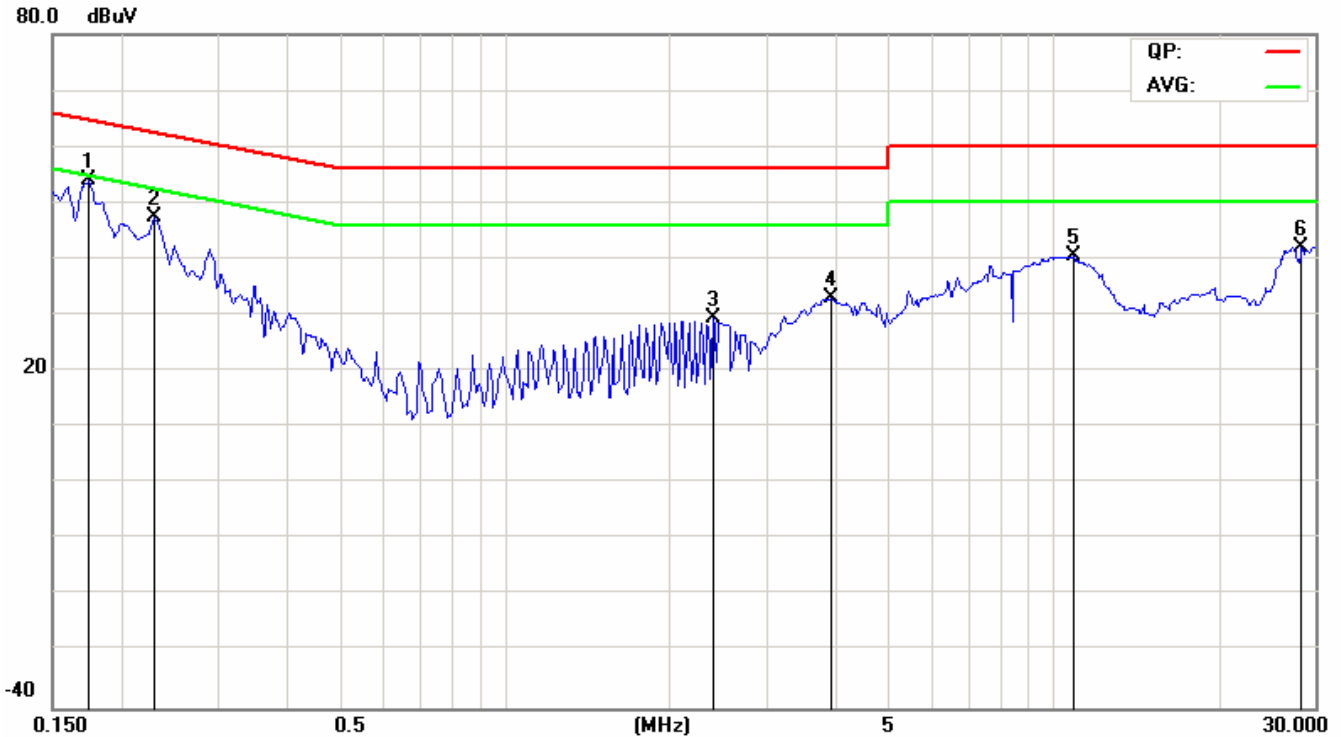
NO.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark (Pass/Fail)
1	0.1750	51.20	42.70	0.20	51.40	42.90	64.72	54.72	-13.32	-11.82	Pass
2	0.2900	34.96	28.66	0.14	35.10	28.80	60.52	50.52	-25.42	-21.72	Pass
3	1.1700	25.95	24.15	0.05	26.00	24.20	56.00	46.00	-30.00	-21.80	Pass
4	3.2200	36.11	33.71	0.09	36.20	33.80	56.00	46.00	-19.80	-12.20	Pass
5	8.3900	31.04	27.94	0.46	31.50	28.40	60.00	50.00	-28.50	-21.60	Pass
6	29.7400	39.87	34.57	0.93	40.80	35.50	60.00	50.00	-19.20	-14.50	Pass

REMARKS: L1 = Line One (Live Line)



CCS Conduction Test

Model No.	Algiz 7	Test Date	2010/2/9
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 1
Tested by	Skyman Tsai	Line	L2



NO.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark (Pass/Fail)
1	0.1750	52.70	52.70	0.22	52.92	52.92	64.72	54.72	-11.80	-1.80	Pass
2	0.2300	47.31	47.31	0.19	47.50	47.50	62.45	52.45	-14.95	-4.95	Pass
3	2.4000	29.39	29.39	0.09	29.48	29.48	56.00	46.00	-26.52	-16.52	Pass
4	3.9300	32.93	32.93	0.15	33.08	33.08	56.00	46.00	-22.92	-12.92	Pass
5	10.9100	39.94	39.94	0.66	40.60	40.60	60.00	50.00	-19.40	-9.40	Pass
6	28.3750	41.17	41.17	1.02	42.19	42.19	60.00	50.00	-17.81	-7.81	Pass

REMARKS: L2 = Line Two (Neutral Line)

## 7 RADIATED EMISSION MEASUREMENT

### 7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or in which the device operated or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower

#### Maximum permissible level of Radiated Emission measured at 10 meter

FREQUENCY (MHz)	dBuV/m (At 10m)	
	Class A	Class B
30 ~ 230	40	30
230 ~ 1000	47	37

Frequency (MHz)	Class A (dBuV/m) (At 10m)	
	Average	Peak
Above 1000	49.5	69.5

**NOTE:** (1) The lower limit shall apply at the transition frequencies.  
 (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).





**Maximum permissible level of Radiated Emission measured at 3 meter**

Frequency (MHz)	Field Strength (µV/m at 3-meter) Average	Field Strength (dBµV/m at 3-meter) Average
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Class A (dBuV/m)		Class B (dBuV/m)	
	Average	Peak	Average	Peak
Above 1000	59.5	79.5	54	74

*Remark: The lower limit shall apply at the transition frequency.*

**7.2. TEST INSTRUMENTS**

Open Area Test Site # H				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
MEASURE RECEIVER	SCHAFFNER	SCR 3501	412	05/24/2010
SPECTRUM ANALYZER	ADVANTEST	R3132	120900003	N.C.R
ANTENNA	SCHAFFNER	CBL 6112B	2801	09/13/2010
AMPLIFIER	HP	8447D	1937A01554	10/11/2010
CABLE	PACIFIC	8D-FB	N-TYPE #H7、#8	08/14/2010
THERMO-HYGRO METER	TECPEL	DTM-303	090639	05/24/2010

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
 2. N.C.R = No Calibration Request.



Wugu 966 Chamber A				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4411B	MY41440314	N.C.R
EMI Test Receiver	R&S	ESCS30	847793/012	05/13/2010
Pre-Amplifier	HP	8447D	2944A08780	08/07/2010
Bilog Antenna	CHASE	CBL 6112A	2307	06/12/2010
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
RF Switch	ANRITSU	MP59B	M76890	N.C.R
Site NSA	CCS	N/A	N/A	05/08/2010
Test S/W	LabVIEW 6.1 (CCS OATS EMI SW V2.7)			

**Note:** (1). The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
(2). N.C.R = No Calibration Request.

### **7.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

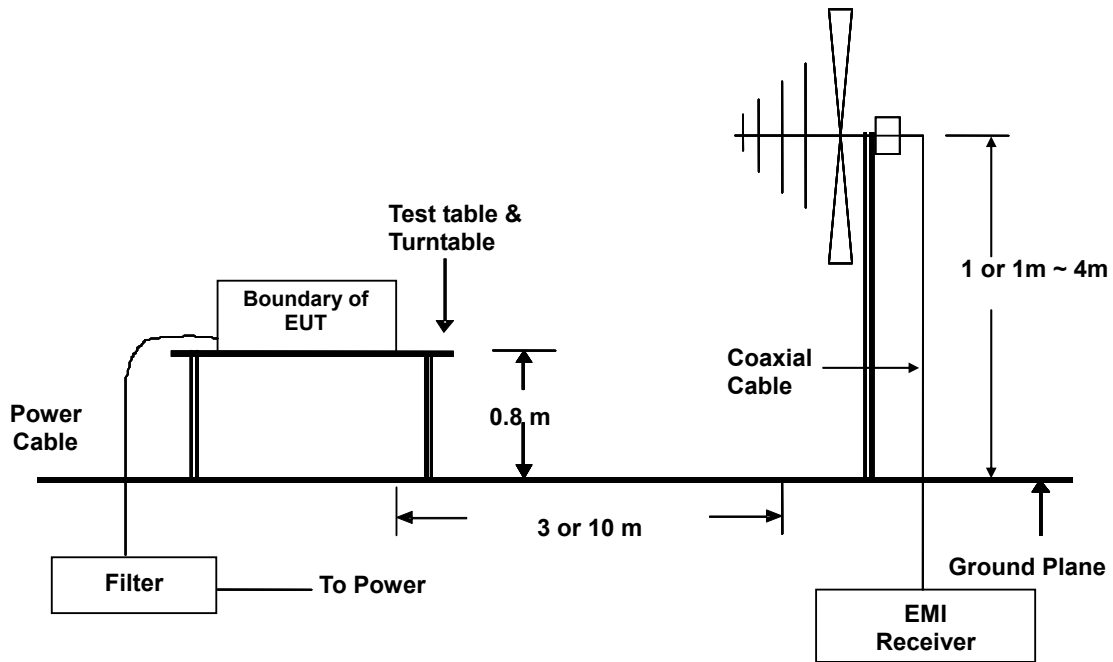
#### **Procedure of Preliminary Test**

- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground plane which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The EUT received AC 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment power received from another socket under the turntable.
- The antenna was placed at 3 or 10 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 40GHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 or 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recording at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.
- The test data of the worst-case condition(s) was recorded.

### 7.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 7.5. DATA SAMPLE:

#### Below 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
xx.xx	16.49	9.86	26.35	30.00	-3.65	116.00	101.00	QP

#### Above 1GHz

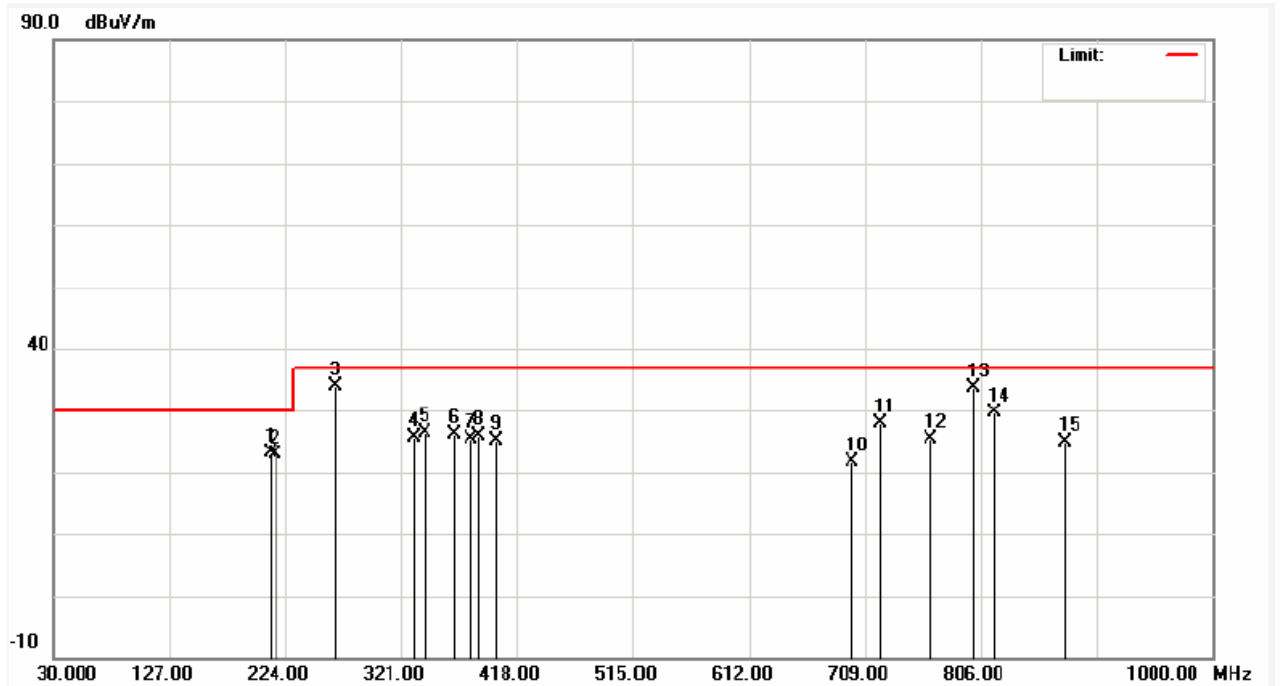
Frequency MHz	Reading		Corr. Factor (dB/m)	Result		Limit		Margin (dB)	Azimuth (°)	Height (cm)	Remark
	Peak (dBuV/m)	Average (dBuV/m)		Peak (dBuV/m)	Average (dBuV/m)	Peak (dBuV/m)	Average (dBuV/m)				
xx.xx	39.34	---	0.68	40.02	---	74.00	54.00	-13.98	49.70	100.00	Peak

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
 Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
 Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
 Q.P. = Quasi-Peak

### 7.6. TEST RESULTS

#### Below 1000MHz

<b>Model No.</b>	Algiz 7	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	28°C, 76% RH	<b>Test Date</b>	2010/2/6
<b>Antenna Pole</b>	Vertical	<b>Antenna Distance</b>	10m
<b>Detector Function:</b>	Quasi-peak.	<b>Tested by</b>	Jason Lee



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	210.6800	39.30	-16.23	23.07	30.00	-6.93	138.40	303.00	QP
2	214.8100	39.10	-16.23	22.87	30.00	-7.13	155.00	110.00	QP
3	265.5200	46.00	-12.06	33.94	37.00	-3.06	115.00	227.00	QP
4	331.6500	36.90	-11.21	25.69	37.00	-11.31	196.10	303.00	QP
5	341.0600	37.40	-10.96	26.44	37.00	-10.56	145.10	220.00	QP
6	365.4700	36.60	-10.55	26.05	37.00	-10.95	52.40	100.00	QP
7	380.1300	35.80	-10.38	25.42	37.00	-11.58	210.10	100.00	QP
8	385.1800	36.10	-10.33	25.77	37.00	-11.23	155.10	100.00	QP
9	399.7500	35.40	-10.16	25.24	37.00	-11.76	80.40	110.00	QP
10	696.7100	29.00	-7.26	21.74	37.00	-15.26	100.00	227.00	QP

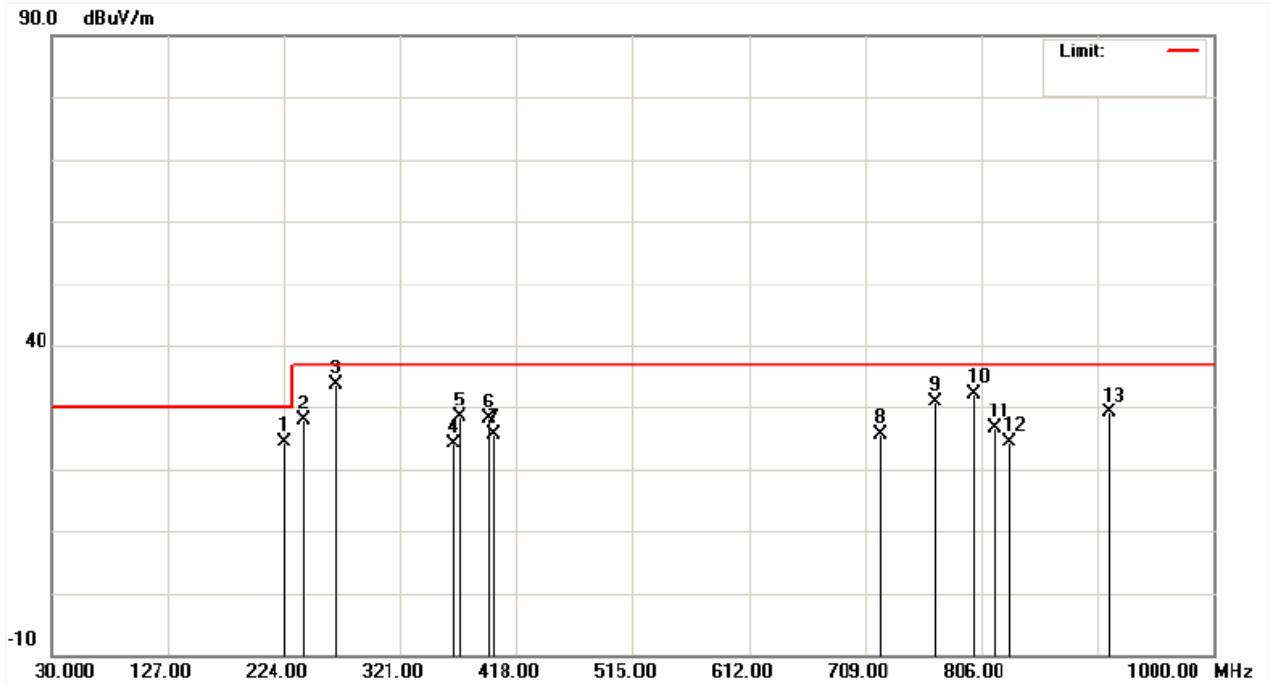


11	719.9700	34.70	-6.80	27.90	37.00	-9.10	184.30	303.00	QP
12	763.2100	31.40	-6.11	25.29	37.00	-11.71	224.30	110.00	QP
13	799.5300	39.60	-6.06	33.54	37.00	-3.46	303.40	227.00	QP
14	815.9700	35.60	-5.94	29.66	37.00	-7.34	184.30	220.00	QP
15	875.0170	30.50	-5.50	25.00	37.00	-12.00	184.30	225.00	QP

**REMARKS:** The other emission levels were very low against the limit.



<b>Model No.</b>	Algiz 7	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	28°C, 76% RH	<b>Test Date</b>	2010/2/6
<b>Antenna Pole</b>	Horizontal	<b>Antenna Distance</b>	10m
<b>Detector Function:</b>	Quasi-peak.	<b>Tested by</b>	Jason Lee



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	224.9200	40.20	-15.74	24.46	30.00	-5.54	184.30	143.00	QP
2	240.0100	42.20	-14.28	27.92	37.00	-9.08	228.90	120.00	QP
3	266.5060	45.60	-12.07	33.53	37.00	-3.47	25.00	140.00	QP
4	365.5900	34.60	-10.55	24.05	37.00	-12.95	184.30	220.00	QP
5	370.3200	38.90	-10.49	28.41	37.00	-8.59	224.30	225.00	QP
6	394.4600	38.30	-10.22	28.08	37.00	-8.92	303.40	310.00	QP
7	398.1400	35.90	-10.18	25.72	37.00	-11.28	184.30	220.00	QP
8	719.9600	32.50	-6.80	25.70	37.00	-11.30	184.30	220.00	QP
9	766.3100	37.00	-6.11	30.89	37.00	-6.11	224.30	180.00	QP
10	799.6200	38.20	-6.06	32.14	37.00	-4.86	299.40	110.00	QP
11	815.9500	32.60	-5.94	26.66	37.00	-10.34	184.30	110.00	QP
12	829.4900	30.10	-5.84	24.26	37.00	-12.74	228.90	110.00	QP
13	911.9800	34.40	-5.15	29.25	37.00	-7.75	25.00	180.00	QP

**REMARKS:** The other emission levels were very low against the limit.



Above 1000MHz

<b>Model No.</b>	Algiz 7	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	23°C, 53% RH	<b>Test Date</b>	2010/2/24
<b>Antenna Pole</b>	Vertical	<b>Antenna Distance</b>	3m
<b>Highest frequency generated or used</b>	1600MHz	<b>Upper frequency</b>	8000MHz
<b>Detector Function:</b>	Average	<b>Tested by</b>	Mimic Yang

Frequency MHz	Reading		Corr. Factor (dB/m)	Result		Limit		Margin (dB)	Azimuth (°)	Height (cm)	Remark
	Peak (dBuV/m)	Average (dBuV/m)		Peak (dBuV/m)	Average (dBuV/m)	Peak (dBuV/m)	Average (dBuV/m)				
1058.33	67.48	51.18	-9.49	57.99	41.69	74.00	54.00	-12.31	244.00	100.00	AVG
1326.67	63.34	47.01	-9.05	54.29	37.96	74.00	54.00	-16.04	21.00	110.00	AVG
1385.00	63.92	47.39	-8.95	54.97	38.44	74.00	54.00	-15.56	358.30	100.00	AVG
1595.00	64.20	45.68	-7.88	56.32	37.80	74.00	54.00	-16.20	270.10	108.10	AVG
1863.33	61.49	46.98	-5.41	56.08	41.57	74.00	54.00	-12.43	301.60	100.00	AVG
2026.67	58.77	42.56	-4.07	54.70	38.49	74.00	54.00	-15.51	190.40	100.00	AVG
2131.67	69.16	51.25	-3.76	65.41	47.49	74.00	54.00	-6.51	190.40	159.50	AVG
2236.67	59.12	44.40	-3.44	55.68	40.96	74.00	54.00	-13.04	265.40	100.00	AVG
2388.33	57.28	40.95	-2.99	54.29	37.96	74.00	54.00	-16.04	280.00	100.00	AVG
2668.33	58.27	41.41	-2.17	56.10	39.24	74.00	54.00	-14.76	260.90	132.00	AVG
3181.67	56.46	36.69	-1.17	55.29	35.52	74.00	54.00	-18.48	3.60	100.00	AVG

**REMARKS:** 1. The other emission levels were very low against the limit.  
2. P= Peak Reading; A= Average Reading.





<b>Model No.</b>	Algiz 7	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	23°C, 53% RH	<b>Test Date</b>	2010/2/24
<b>Antenna Pole</b>	Horizontal	<b>Antenna Distance</b>	3m
<b>Highest frequency generated or used</b>	1600MHz	<b>Upper frequency</b>	8000MHz
<b>Detector Function:</b>	Average / Peak	<b>Tested by</b>	Mimic Yang

Frequency MHz	Reading		Corr. Factor (dB/m)	Result		Limit		Margin (dB)	Azimuth (°)	Height (cm)	Remark
	Peak (dBuV/m)	Average (dBuV/m)		Peak (dBuV/m)	Average (dBuV/m)	Peak (dBuV/m)	Average (dBuV/m)				
1058.33	61.22	---	-9.49	51.72	---	74.00	54.00	-2.28	324.10	100.00	Peak
1326.67	63.08	48.27	-9.05	54.03	39.22	74.00	54.00	-14.78	148.80	108.00	AVG
1385.00	63.89	48.91	-8.95	54.94	39.96	74.00	54.00	-14.04	227.70	100.00	AVG
1595.00	59.16	---	-7.88	51.28	---	74.00	54.00	-2.72	310.60	117.00	Peak
1921.67	55.32	---	-4.87	50.45	---	74.00	54.00	-3.55	167.00	100.00	Peak
2120.00	65.43	49.51	-3.79	61.63	45.72	74.00	54.00	-8.28	41.80	100.00	AVG
2248.33	53.99	---	-3.41	50.58	---	74.00	54.00	-3.42	105.30	120.00	Peak
2668.33	54.00	---	-2.17	51.83	---	74.00	54.00	-2.17	109.70	100.00	Peak

**REMARKS:** 1. The other emission levels were very low against the limit.  
2. P= Peak Reading; A= Average Reading.

## 8 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST



**RADIATED EMISSION TEST**

