

## ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

### INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT AND INDUSTRY CANADA RSS 210

OF

**Product Name:** LCD TABLET

**Brand Name:** WACOM

**Model Name:** DTU-1931

**FCC ID:** HV4DTU1931  
**IC:** 6888A-DTU1931

**Report No:** ER/2008/40064

**Issue Date:** Aug. 05, 2008

**FCC Rule Part:** §15.209  
**IC Rule Part:** RSS 210, Annex 2.2

**Prepared for:** Wacom Co., Ltd.  
2-510-1 Toyonodai, Otone-machi, Kitasai-  
tama-gun, Saitama, 349-1148, Japan

**Prepared by:** SGS Taiwan Ltd.  
Electronics & Communication Laboratory  
No. 134, Wu Kung Rd., Wuku Industrial  
Zone, Taipei County, Taiwan.



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## VERIFICATION OF COMPLIANCE

**Applicant:** Wacom Co., Ltd.  
2-510-1 Toyonodai, Otone-machi, Kitasaitama-gun, Saitama,  
349-1148, Japan

**Equipment Under Test:** LCD TABLET

**Brand Name:** WACOM

**FCC ID:** HV4DTU1931

**IC:** 6888A-DTU1931

**Model No:** DTU-1931

**Model Difference:** N/A

**File Number:** ER/2008/40064

**Date of test:** Jul. 15, 2008 ~ Aug. 01, 2008

**Date of EUT Received:** Jul. 15, 2008

### We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.209 and RSS-210 Annex A2.2. The test results of this report relate only to the tested sample identified in this report.

**Test By:**



**Date**

Aug. 05, 2008

*Sky Wang / Asst. Supervisor*

**Prepared By:**



**Date**

Aug. 05, 2008

*Elisa Chen / Asst. Supervisor*

**Approved By:**



**Date**

Aug. 05, 2008

*Vincent Su / Manager*

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## Version

Version No.	Date	Description
00	Aug. 05, 2008	Initial creation of document

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## 1. GENERAL INFORMATION

### 1.1. Product Description

Product Name:	LCD TABLET
Brand Name:	WACOM
Model Name:	DTU-1931
Model Difference:	N/A
Power Supply	12V from AC/DC adaptor, model: EA1050A-120 or LSE9901B1260
Operating Frequency	531.25kHz, 562.50kHz, 593.75kHz
Transmit Power	< 42dBuA/m at 10m.
Number of Channels	3
Operating Mode	Point-to-Point

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## 1.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: HV4DTU1931** filing to comply with Section 15.209 of the FCC Part 15, Subpart C Rules. And **IC: 6888A-DTU1931** filing to comply with Section Annex 2.2 of RSS-210:2007

## 1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

## 1.4. Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003. FCC Registration Number are: 990257 and 236194, Canada Registration Number: 4620A-1

The 10 m Open Area Test Sites located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 29, Pau-Tou-Tsuo Valley Chia-Pau Tsuen, Linkou Hsiang, Taipei county, which is constructed and calibrated to meet the CISPR 22/EN 55022 requirements. SGS Site No. 1(3 &10 meters) and FCC Registration Number: 94644.

## 1.5. Special Accessories

Not available for this EUT intended for grant.

## 1.6. Equipment Modifications

Not available for this EUT intended for grant.

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## 2. SYSTEM TEST CONFIGURATION

### 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 2.2. EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements.

### 2.3. Test Procedure

#### 2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 and 13 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and Average detector mode.

#### 2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna. according to the requirements in Section 8 and 13 and Subclause 8.3.1.2 of ANSI C63.4-2003.

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## 2.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Radiated test)

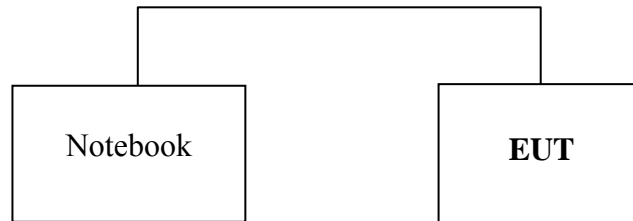


Table 2-2 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Notebook	IBM	T43	L3LHHN6	Un- sliding	Un- sliding

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### 3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.207/ RSS-Gen §7.2.2	Conducted Emission	Compliant
§15.209 A2.2(b)(d)	Radiated Emission	Compliant
RSS-Gen §4.4.1	99% Power Bandwidth	Compliant

### 4. DESCRIPTION OF TEST MODES

The EUT has been tested under continuous operating condition. The Frequency 562.50kHz was the worst case and chosen for testing.

The field strength of radiation emission was measured as EUT stand-up position.

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## 5. CONDUCTED EMISSION TEST

### 5.1. Standard Applicable

According to §15.207 and RSS-Gen §7.2.2, frequency range within 150KHz to 30MHz shall not exceed the Limit table as below.

Frequency range MHz	Limits dB(uV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Note

- 1.The lower limit shall apply at the transition frequencies
- 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

### 5.2. EUT Setup

1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.4-2003.
2. The EUT was plug-in the AC/DC Power adapter. The host system was placed on the center of the back edge on the test table. The peripherals was placed on the side of the host PC system. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
3. The spacing between the peripherals was 10 centimeters.
4. External I/O cables were draped along the edge of the test table and bundle when necessary.
5. The host system was connected with 110Vac/60Hz power source.

### 5.3. Measurement Procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

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#### 5.4. Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EMC Analyzer	HP	8594EM	3624A00203	09/02/2007	09/03/2008
EMI Test Receiver	R&S	ESCS30	828985/004	06/09/2008	06/10/2009
Transient Limiter	HP	11947A	3107A02062	09/02/2007	09/03/2008
LISN	Rolf-Heine	NNB-2/16Z	99012	12/31/2007	12/30/2008
LISN	Rolf-Heine	NNB-2/16Z	99013	01/10/2008	01/09/2009
Coaxial Cables	FCC	FCC-LISN-50/250-25-01	04034	01/11/2008	01/10/2009

#### 5.5. Measurement Result:

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

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### AC POWER LINE CONDUCTED EMISSION TEST DATA

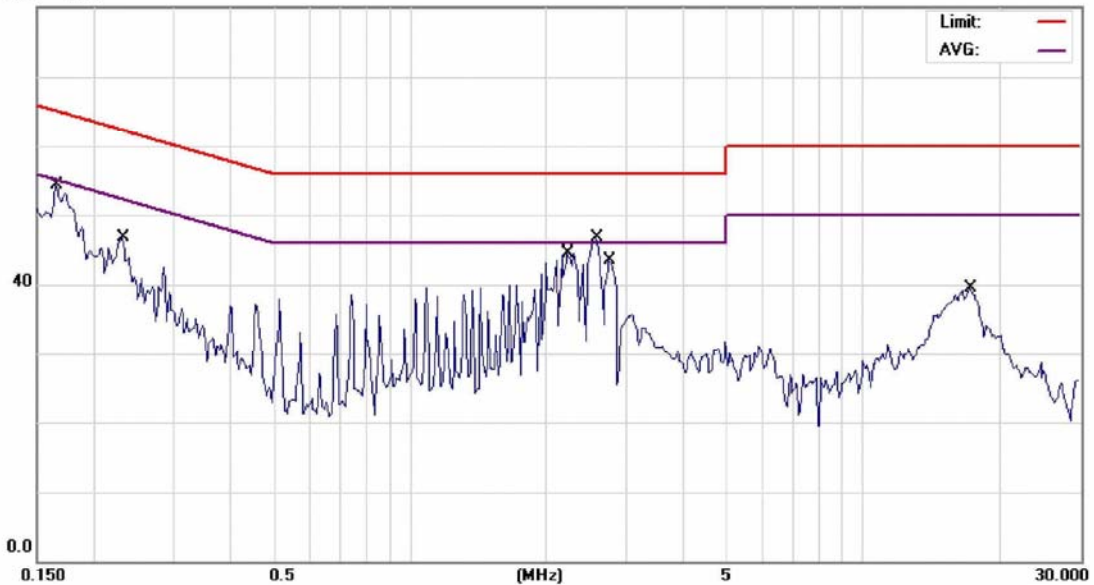
Operation Mode:	Operating (Adaptor: EA1050A-120)		Test Date:	Jul. 10, 2008	
Temperature:	23 °C	Humidity:	60%	Test By:	Sky

#### Conducted Emission Measurement

File :EM-2008-40129

Data :#2

80.0 dBuV



Site SGS CONDUCTED #1 Phase: **L1** Temperature: 23 °C  
 Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 60 %  
 EUT: LCD TABLET  
 M/N:  
 Note: VGA to DVI 1280\*1024 75Hz; 2 USB i-Pod R/W; Run Burn In; Full System  
 Adaptor: EA1050A-120

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1656	53.99	0.34	54.33	65.18	-10.85	QP	
2		0.2320	46.58	0.15	46.73	62.38	-15.65	QP	
3		2.2344	44.50	0.04	44.54	56.00	-11.46	QP	
4		2.5785	44.85	0.04	44.89	56.00	-11.11	QP	
5	*	2.5785	38.11	0.04	38.15	46.00	-7.85	AVG	
6		2.7539	43.48	0.04	43.52	56.00	-12.48	QP	
7		17.2070	39.38	0.14	39.52	60.00	-20.48	QP	

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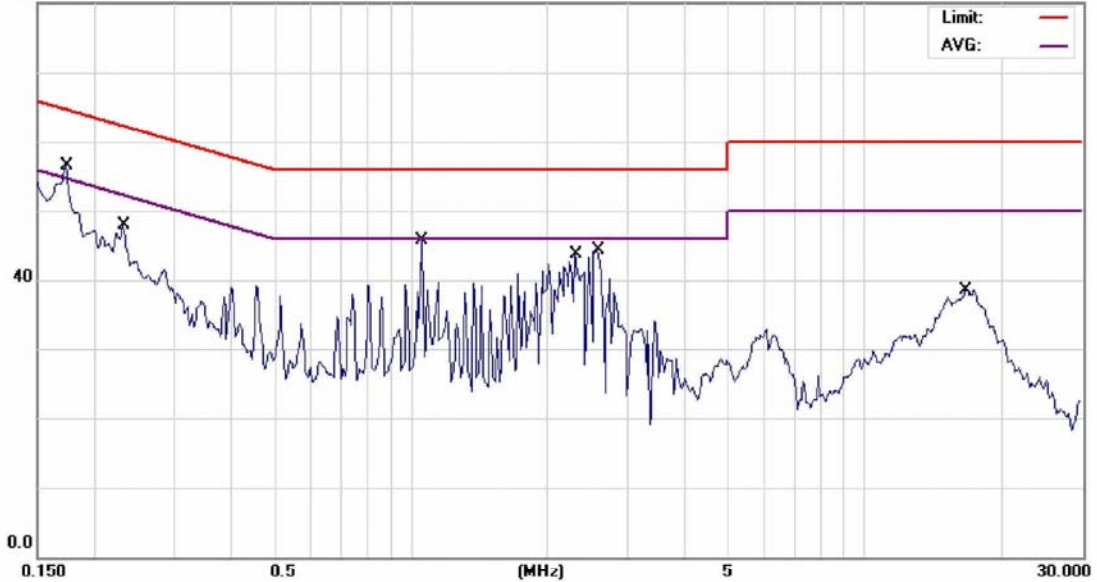
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Conducted Emission Measurement

File :EM-2008-40129

Data :#1

80.0 dBuV



Site SGS CONDUCTED #1

Phase: N

Temperature: 23 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: LCD TABLET

M/N:

Note: VGA to DVI 1280\*1024 75Hz; 2 USB i-Pod R/W; Run Burn In; Full System

Adapter: EA1050A-120

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1728	54.04	0.30	54.34	64.82	-10.48	QP	
2		0.1728	41.86	0.30	42.16	54.82	-12.66	AVG	
3		0.2320	47.73	0.15	47.88	62.38	-14.50	QP	
4	*	1.0586	45.69	0.04	45.73	56.00	-10.27	QP	
5		2.3008	43.72	0.04	43.76	56.00	-12.24	QP	
6		2.5898	44.19	0.04	44.23	56.00	-11.77	QP	
7		16.7266	38.42	0.14	38.56	60.00	-21.44	QP	

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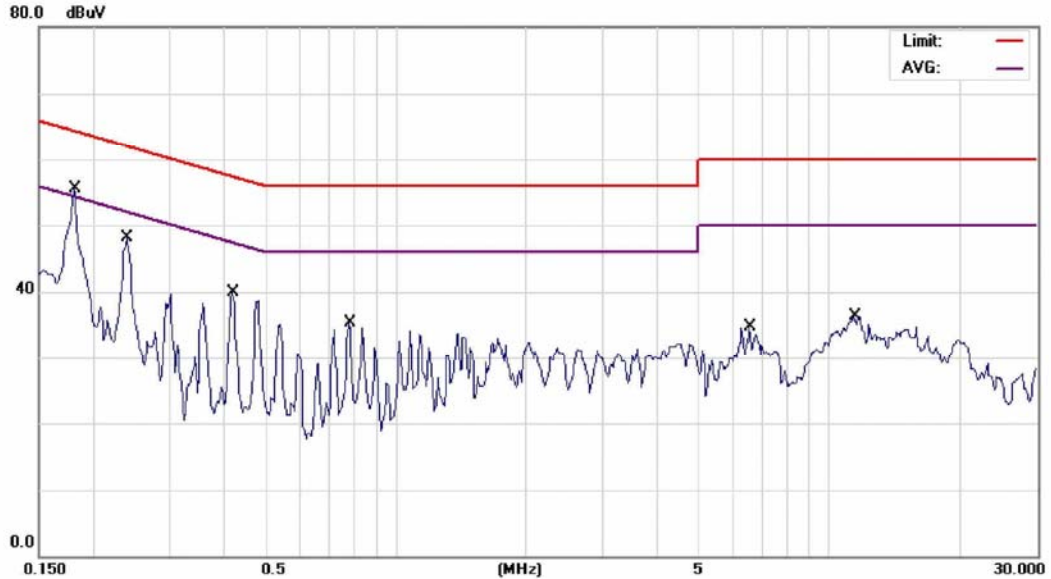
### AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Operating (Adaptor: LSE9901B1260)	Test Date:	Jul. 10, 2008
Temperature:	23 °C	Humidity:	60%
		Test By:	Sky

#### Conducted Emission Measurement

File :EM-2008-40129

Data :#7



Site SGS CONDUCTED #1 Phase: **L1** Temperature: 23 °C  
 Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 60 %  
 EUT: LCD TABLET  
 M/N:  
 Note: VGA to DVI 1280\*1024 75Hz; 2 USB i-Pod R/W; Run Burn In; Full System  
 Adaptor: LSE9901B1260

No.	Mk.	Freq.	Reading Level	Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1794	53.57	0.26	53.83	64.51	-10.68	QP	
2	*	0.1794	45.23	0.26	45.49	54.51	-9.02	AVG	
3		0.2398	47.88	0.15	48.03	62.10	-14.07	QP	
4		0.4195	39.74	0.08	39.82	57.46	-17.64	QP	
5		0.7813	35.30	0.05	35.35	56.00	-20.65	QP	
6		6.5586	34.66	0.09	34.75	60.00	-25.25	QP	
7		11.4492	36.20	0.11	36.31	60.00	-23.69	QP	

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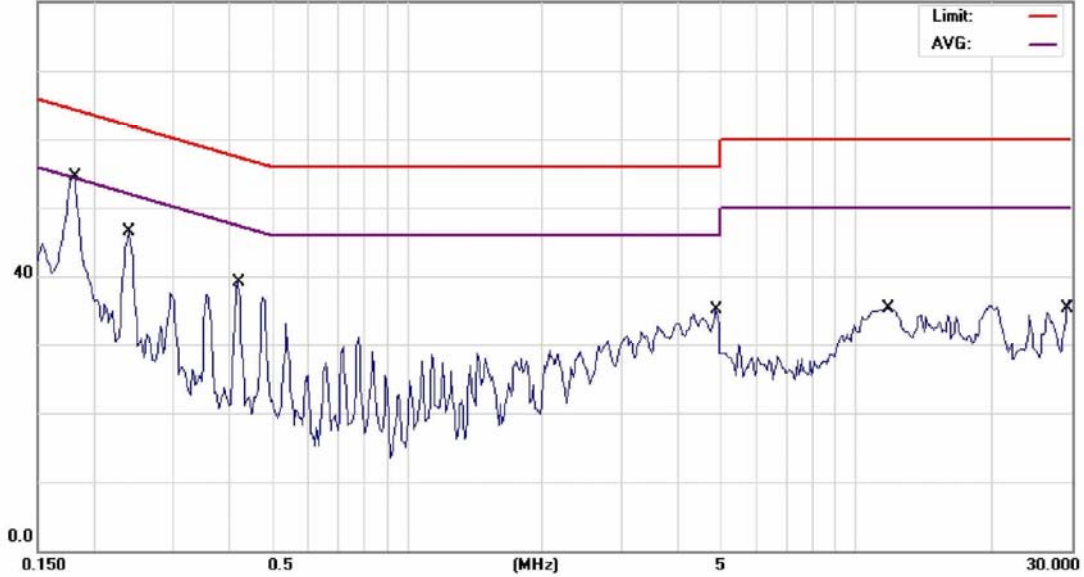
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Conducted Emission Measurement

File :EM-2008-40129

Data :#8

80.0 dBuV



Site SGS CONDUCTED #1

Phase: N

Temperature: 23 °C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: LCD TABLET

M/N:

Note: VGA to DVI 1280\*1024 75Hz; 2 USB i-Pod R/W; Run Burn In; Full System

Adapter: LSE9901B1260

No.	Mk.	Freq.	Reading Level	Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1798	52.87	0.24	53.11	64.49	-11.38	QP	
2	*	0.1798	43.56	0.24	43.80	54.49	-10.69	AVG	
3		0.2398	46.45	0.13	46.58	62.10	-15.52	QP	
4		0.4195	39.11	0.07	39.18	57.46	-18.28	QP	
5		4.8867	34.98	0.06	35.04	56.00	-20.96	QP	
6		11.7852	35.10	0.21	35.31	60.00	-24.69	QP	
7		29.9492	36.29	0.24	36.53	60.00	-23.47	QP	

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## 6. Radiated Emission Test

### 6.1. Standard Applicable

According to §15.209,

#### (2) Radiated Emission

- (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:
- (b) In the emission table above, the tighter limit applies at the band edges.
- (c) The level of any unwanted emissions from an intentional radiator operating under these general provisions shall not exceed the level of the fundamental emission. For intentional radiators which operate under the provisions of other Sections within this Part and which are required to reduce their unwanted emissions to the limits specified in this table, the limits in this table are based on the frequency of the unwanted emission and not the fundamental frequency. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Frequency (MHz)	Field strength $\mu\text{V/m}$	Distance (m)	Field strength at 3m $\text{dB}\mu\text{V/m}$
0.009-0.490	2400/F(KHz)	300	
0.490-1.705	24000/F(KHz)	30	
1.705-30	30	30	69.54
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

According to A2.2 510-1705 kHz

Systems using this band shall comply with one of the following limits:

- (a) Limit the total input power to the final radio frequency stage to 100 milliwatts, and the total length of transmission line, antenna and ground lead (if used) to 3 metres; or

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(b) The device shall not radiate more than a field strength of 42.67 microvolts/m measured at 30 metres.

42.67 microvolts/m measured at 30m = 32.60dBuV/m at 30m

32.60dBuV/m at 30m transfer to 3m limit =  $32.60 + 40\log(30/3) = 72.60\text{dBuV/m}$

(c) As a further alternative to the above, transmitters employing a leaky coaxial cable as the radiating antenna may meet the field strength limit of 15 microvolts/m, as measured at a distance of  $47715/(\text{frequency in kHz})$  metres (equivalent to  $\text{wavelength}/(2\pi)$ ) from the coaxial cable.

(d) Emissions outside of this band shall be attenuated by at least 20 dB below the mean transmitter output power, or to the limits of Table 3, whichever is less stringent.

**FCC 15.209 and IC RSS-210 Table 3 Limit Table:**

Frequency KHz	Distance m	Limitation $\mu\text{V/m}$	Limite $\mu\text{V/m}$	Limite $\text{dB}\mu\text{V/m}$	Distance Factor dB	Limite $\text{dB}\mu\text{V/m}$ at 3m
562.5	30	2,4000 / F (KHz)	42.67	32.60	40	72.60
1125	30	2,4000 / F (KHz)	21.33	26.58	40	66.58
1687.5	30	2,4000 / F (KHz)	14.22	23.06	40	63.06
2250	30	30.00	30.00	29.54	40	69.54
2812.5	30	30.00	30.00	29.54	40	69.54
3375	30	30.00	30.00	29.54	40	69.54
3937.5	30	30.00	30.00	29.54	40	69.54
4500	30	30.00	30.00	29.54	40	69.54
5062.5	30	30.00	30.00	29.54	40	69.54
5625	30	30.00	30.00	29.54	40	69.54

30m limite transfer to 3 m limit

$40\log(30/3) = 40.00\text{dB}$

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**Limit Calculation and transfer to 1m test distance:**

If the frequency between 490 KHz – 1.705MHz  
Limit =  $20\log(24000/f(\text{KHz})) + 40\log(30/3)$

**6.2.EUT Setup**

1. The radiated emission tests were performed in the 3 meter open-test site, using the setup in accordance with the ANSI C63.4-2003.
2. The EUT was put in the front of the test table. The peripherals was placed on the side of the host system. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
3. The spacing between the peripherals was 10 centimeters.
4. External I/O cables were draped along the edge of the test table and bundle when necessary.
5. The host PC system was connected with 110Vac/60Hz power source.

**6.3.Measurement Procedure**

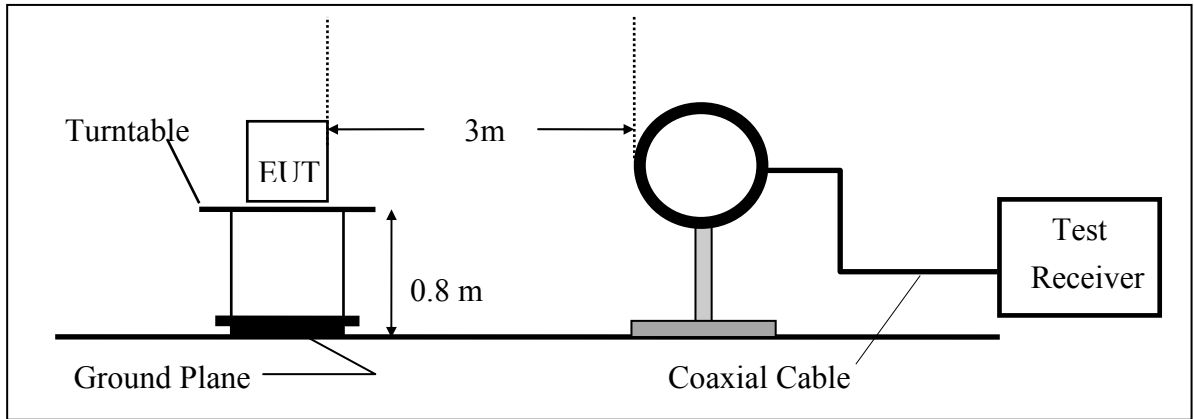
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
4. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. Repeat above procedures until all frequency measured were complete.

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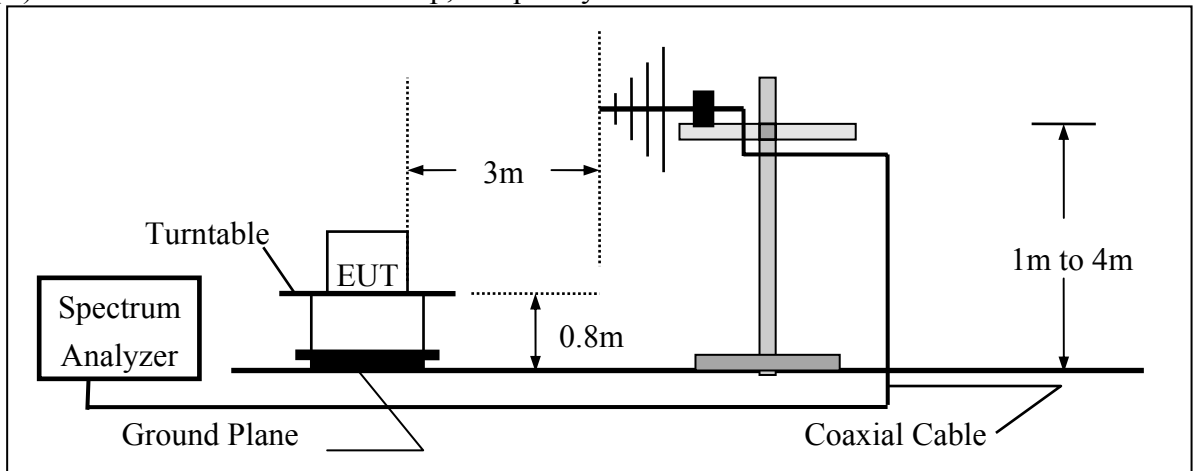
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### 6.4. Test SET-UP (Block Diagram of Configuration)

#### (A) Radiated Emission Test Set-Up, Frequency Below 30MHz



#### (B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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## 6.6.Measurement Equipment Used:

966 Chamber					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/19/2008	04/18/2009
Spectrum Analyzer	R&S	FSP 40	100034	05/27/2008	05/26/2009
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2008	07/03/2009
Loop Antenna	MESSTEC	FLA30	03/10086	06/02/2008	06/01/2009
Bi-log Antenna	SCHWAZBECK	VULB9160	3224	11/14/2007	11/13/2008
Pre-Amplifier	HP	8447D	2944A09469	07/19/2008	07/18/2009
Turn Table	HD	DT420	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R
Controller	HD	HD100	N/A	N.C.R	N.C.R
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	10/09/2007	10/08/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	10/09/2007	10/08/2008
Site NSA	SGS	966 chamber	N/A	11/17/2007	11/16/2008

## 6.7.Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

## 6.8.Measurement Result

Refer to attach tabular data sheets.

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Measurement Result

Operation Mode:	Transmitting Mode (TX)	Test Date :	Jul. 12, 2008
Fundamental Frequency:	562.5 KHz	Test By:	Sky
Temperature :	25 °C	Ant. Pol:	Vertical/ Horizontal
Humidity :	58 %		

Freq. (KHz)	Ant.Pol. H/V	Detector Mode (PK/AV/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit at 3m (dBuV/m)	Safe Margin (dB)	Note
562.50	V	Peak	50.99	-10.55	40.44	72.60	-32.16	F
1125.00	V	Peak	38.44	-10.51	27.93	66.58	-38.65	H
1687.50	V	Peak	36.90	-10.37	26.53	63.06	-36.53	H
2250.00	V	Peak	30.83	-10.18	20.65	69.54	-48.89	H
2812.50	V	Peak	36.18	-10.07	26.11	69.54	-43.43	H
3375.00	V	Peak	36.30	-9.83	26.47	69.54	-43.07	H
3937.50	V	Peak	31.13	-9.60	21.53	69.54	-48.01	H
4500.00	V	Peak	29.73	-9.39	20.34	69.54	-49.20	H
5062.50	V	Peak	22.81	-9.16	13.65	69.54	-55.89	H
5625.00	V	Peak	--			69.54		H
562.50	H	Peak	51.28	-10.55	40.73	72.60	-31.87	F
1125.00	H	Peak	40.46	-10.51	29.95	66.58	-36.63	H
1687.50	H	Peak	39.03	-10.37	28.66	63.06	-34.40	H
2250.00	H	Peak	34.01	-10.18	23.83	69.54	-45.71	H
2812.50	H	Peak	39.07	-10.07	29.00	69.54	-40.54	H
3375.00	H	Peak	39.76	-9.83	29.93	69.54	-39.61	H
3937.50	H	Peak	32.30	-9.60	22.70	69.54	-46.84	H
4500.00	H	Peak	30.34	-9.39	20.95	69.54	-48.59	H
5062.50	H	Peak	24.60	-9.16	15.44	69.54	-54.10	H
5625.00	H	Peak	--			69.54		H

Remark :

- (1) Measuring frequencies from foundation frequency to 10<sup>th</sup> Harmonic. °
- (2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
- (3) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA between 9KHz to 150KHz was 300Hz, 150KHz to 30MHz was 10KHz; 30MHz to 1GHz was 100KHz.

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## 7. 99% Bandwidth Measurement

### 7.1. Standard Applicable

RSS-Gen §4.4.1, the transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual.

The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded.

The span between the two recorded frequencies is the occupied bandwidth.

### 7.2 Measurement Equipment Used:

Refer to section 6.6

### 7.3 Test Set-up:

Refer to section 6.4.

### 7.4 Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=1% of the approximate emission bandwidth, VBW = 3 times RBW, Span= approximately 20dB below the peak level. Sweep=auto
4. Turn on the 99% bandwidth function, max reading..
5. Repeat above procedures until all frequency measured were complete.

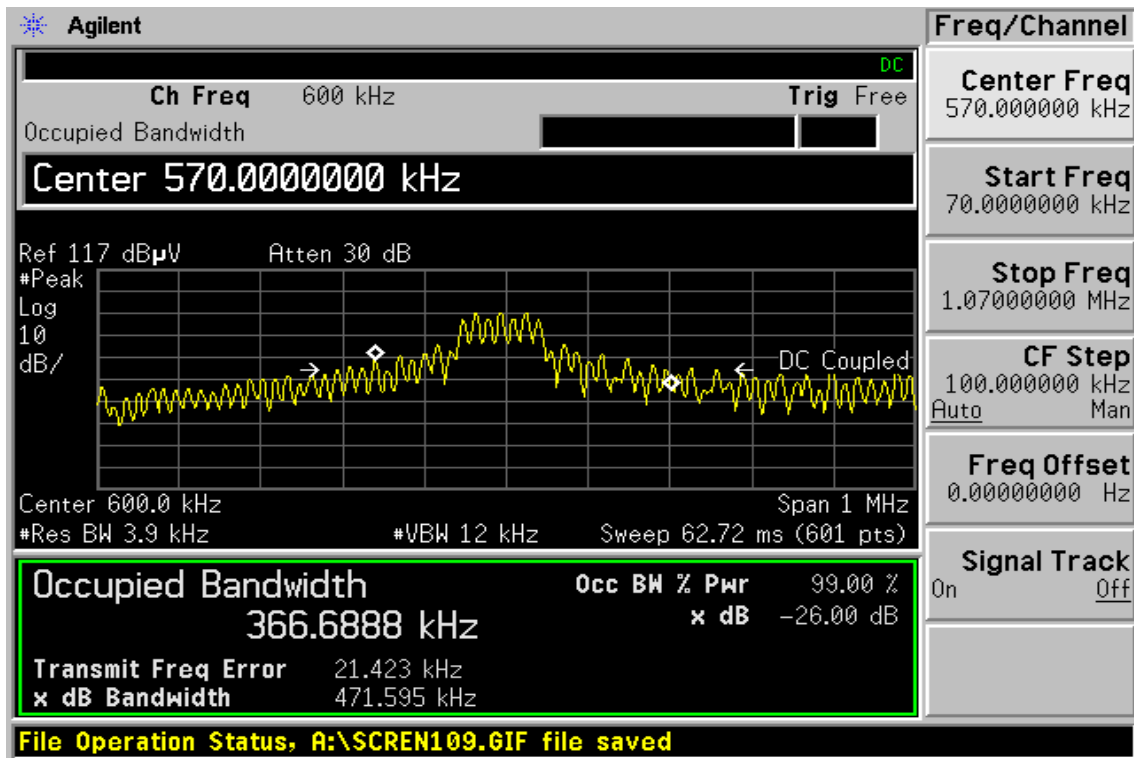
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### 7.5 Measurement Result

<b>99% Bandwidth(KHz)</b>
366.6888

### 99% Bandwidth



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