



**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT**

OF
Wireless FM Sender

MODEL No.: GF-88

BRAND NAME: I-free

FCC ID: OR7GF-88

REPORT NO: 020101-RF-ID

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GENERAL INFORMATION

1.1 Product Description

The Globlink Technology Inc. Model: GF-88 (referred to as the EUT in this report), The EUT is an short range, lower power, FM Sender designed as an " Input Device. It is designed by way of utilizing the FSK modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

- A). Operation Frequency: 88.20 MHz~89.40MHz, six channel.
- B). Modulation: Frequency Modulation
- C). Antenna Designation: Non-User Replaceable (Fixed)
- D). Power Supply: 3 Vdc by AAA *2 battery./12dc ADAPTOR

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: OR7GF-88 filing to comply with Section 15.239 of the FCC Part 15, Subpart C Rules. The composite system (receiver) is compliance with Subpart B is authorized under a DoC procedure.

1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (1992). Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the address of C&C Laboratory, Co., Ltd. No. 81-1, 210 Lane, Pa-de 2nd Road, Lu-Chu Hsiang, Taoyuan, Taiwan, R.O.C.. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 1992 and CISPR 22/EN 55022 requirements.

1.5 Special Accessories

Not available for this EUT intended for grant.

1.6 Equipment Modifications

Not available for this EUT intended for grant.



1. 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 Transmitter was operated in the normal operating mode. the Tx frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions (Not apply in the report)

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-1992. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak /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 according to the requirements in Section 13.1.4.1 of ANSI C63.4-1992.

2.4 Limitation

(1) Conducted Emission

According to section 15.207(a) Conducted Emission Limits is as following.

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.		

(2) Radiated Emission

- a. The field strength of any emission within this band (section 15.239 frequency between 88 MHz –108MHz) shall not exceed 250 micro volts/meter at 3 meters. (47.958dB μ V at 3m) The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in section 15.35 for limiting peak emissions apply.
- b. The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in section 15.209(Intentional Radiators general limit).as below.

Frequency (MHz)	Field strength μ V/m	Distance(m)	Field strength at 3m dB μ V/m
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



- Remark:
1. Emission level in dBuV/m= $20 \log (\mu\text{V/m})$
 2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
 3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205
 4. Emission spurious frequency which appearing within the Restricted Bands specified in provision of ξ 15.205, then the general radiated emission limits in ξ 15.209 apply.

2.5 Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Power From PC Mode)

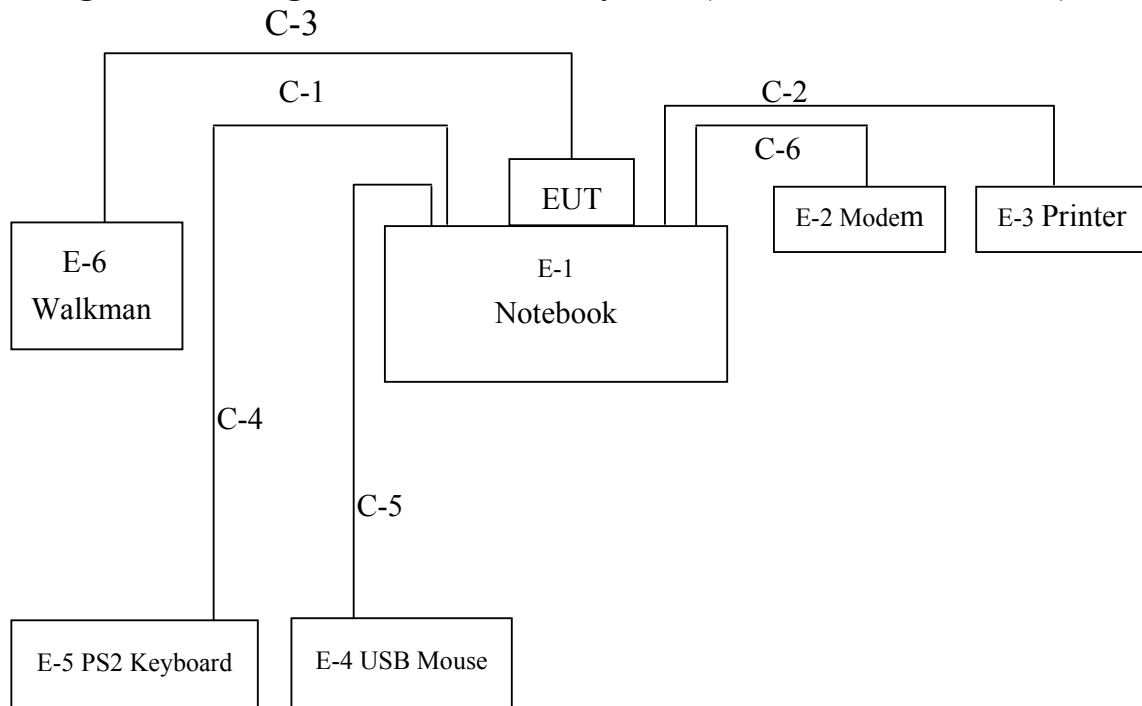
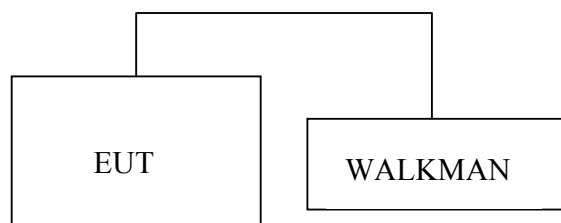


Fig. 2-2 Configuration of Tested System (Power from Adaptor Mode)



**Table 2-1 Equipment Used in Tested System**

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Notebook	KDS	Valiant6380iPTD	DOC	SPL 0529800024	
E-2	MODEM	Computer Peripherals	2400	DK467GSM24	94-364-176273	
E-3	PRINTER	HP	2225C	DOC	<i>3137S01428</i>	
E-4	USB-MOUSE	LOGITECH	M-BB48	DOC	LZE2250259	
E-5	PS2 KEYBORAD	COMPAQ	SK-2800C	GYUR79SK	B1C790BCPJ73JQ	
E-6	Walkman	Panasonic	RQ-L10	DOC	HB004469	

Note:

- (1) Unless otherwise denoted as EUT in 『Remark』 column , device(s) used in tested system is a support equipment.



2. Summary Of Test Results

FCC Rules	Description Of Test	Result
§15.207	Conducted Emission	Compliant
§15.227	Radiated Emission	Compliant
§15.227	Occupied Bandwidth	Compliant

3. Description of test modes

The EUT (Wireless FM Sender) has been tested under normal operating condition.

The EUT stay in continuous transmitting mode. The Frequency 88.20MHz and 89.40MHz are chosen for testing.

4. CONDUCTED EMISSION TEST

5.1 Standard Applicable

According to §15.207, frequency within 150KHz to 30MHz shall not exceed 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 C63.4-1992.
2. The EUT was plug-in the AC/DC Power Adaptor was placed on the center of the back edge on the test table.
3. External I/O cables were draped along the edge of the test table and bundle when necessary.

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.



5.4 Measurement Equipment Used:

Conducted Emission Test Site # 3					
EQUIPMENT TYPE	MFR	MODEL NO.	SERIAL NO.	LAST CAL.	CAL DUE.
EMI Test Receiver	R&S	ESCS30	847793/012	12/19/2001	12/18/2003
LISN	R&S	ESH2-Z5	843285/010	12/10/2001	12/09/2003
LISN	EMCO	3825/2	9003-1628	07/26/2002	07/25/2003
Spectrum Analyzer	ADVANTEST	R3261C	71720533	08/06/2002	08/05/2003
2X2 WIRE ISN	R&S	ENY22	100020	06/20/2002	06/19/2003
FOUR WIRE ISN	R&S	ENY41	100006	06/20/2002	06/19/2003

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.

LINE CONDUCTED TEST

Model Number: GF-88

Tested by: Jean

Test Mode: POWER FROM PC

Detector Function: Quasi-Peak

Temperature: 25 °C

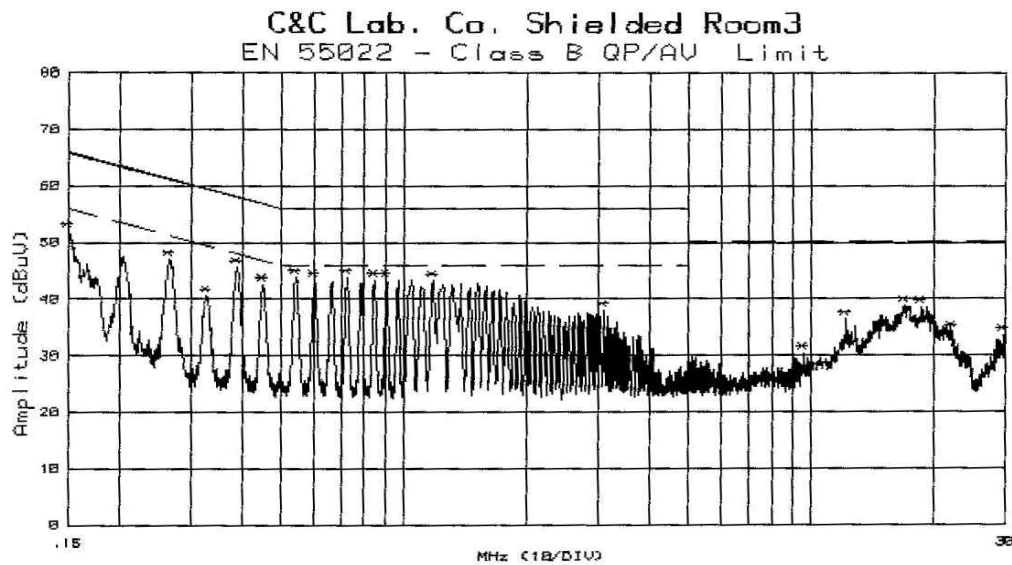
Humidity: 65%RH

(The chart below shows the highest readings taken from the final data)

FREQ	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw dBuV	Raw dBuV	Limit dBuV	Limit dBuV	Margin dB	Margin dB	
0.150	51.70	---	66.00	56.00	-14.30	---	L1
0.267	46.50	---	61.20	51.20	-14.70	---	L1
0.390	45.20	---	58.10	48.10	-12.90	---	L1
0.726	43.40	---	56.00	46.00	-12.60	---	L1
16.971	38.30	---	60.00	50.00	-21.70	---	L1
18.600	38.10	---	60.00	50.00	-21.90	---	L1
0.328	54.40	41.30	59.50	49.50	-5.10	-8.20	L2
0.390	46.80	38.70	58.06	48.06	-11.26	-9.36	L2
0.452	46.70	38.60	56.84	46.84	-10.14	-8.24	L2
0.543	46.90	35.60	56.00	46.00	-9.10	-10.40	L2
0.604	44.20	34.50	56.00	46.00	-11.80	-11.50	L2
0.786	39.80	---	56.00	46.00	-16.20	---	L2

Remark :

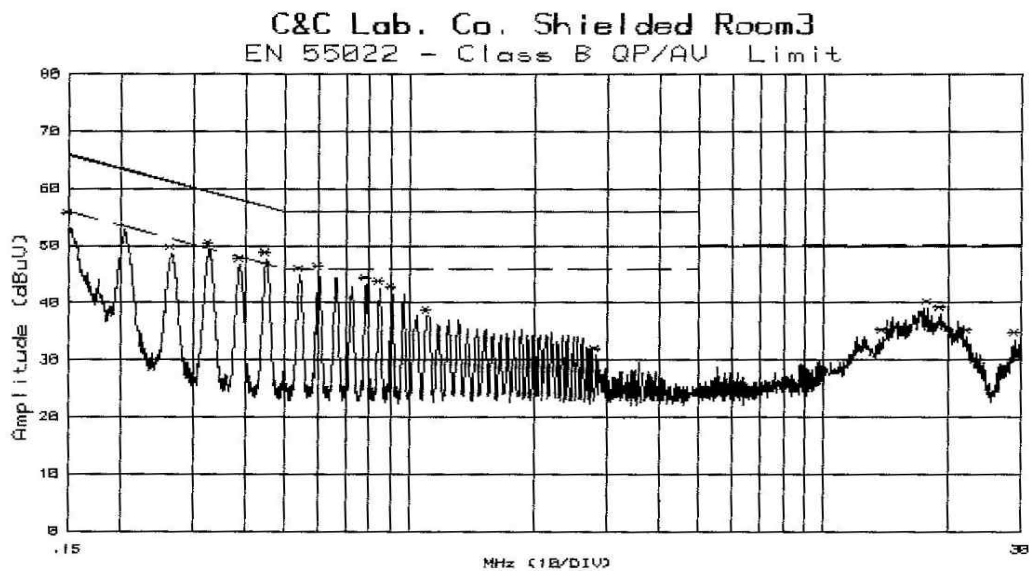
- (1) Measuring frequencies from 0.15 MHz to 30MHz .
- (2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-Peak detector and Average detector.
- (3) “---” denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.
- (4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;
- (5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)



Customer:GLOBLINK
Model :GF-88
Mode :
Reading :Peak(R3261C SPA)
Remark :110V-PC

File#: 363
Humd.:65 (%)
Port :L1

Date :18 Dec 2002 14:19:11
Temp. :25 (C)
Tested by:Jean



Customer:GLOBLINK
Model :GF-88
Mode :
Reading :Peak(R3261C SPA)
Remark :110V-PC

File#: 364
Humd.:65 (%)
Port :L2

Date :18 Dec 2002 14:23:28
Temp. :25 (C)
Tested by:Jean

LINE CONDUCTED TEST

Model Number: GF-88

Tested by: Jean

Test Mode: POWER FROM ADAPTOR

Detector Function: Quasi-Peak

Temperature: 25 °C

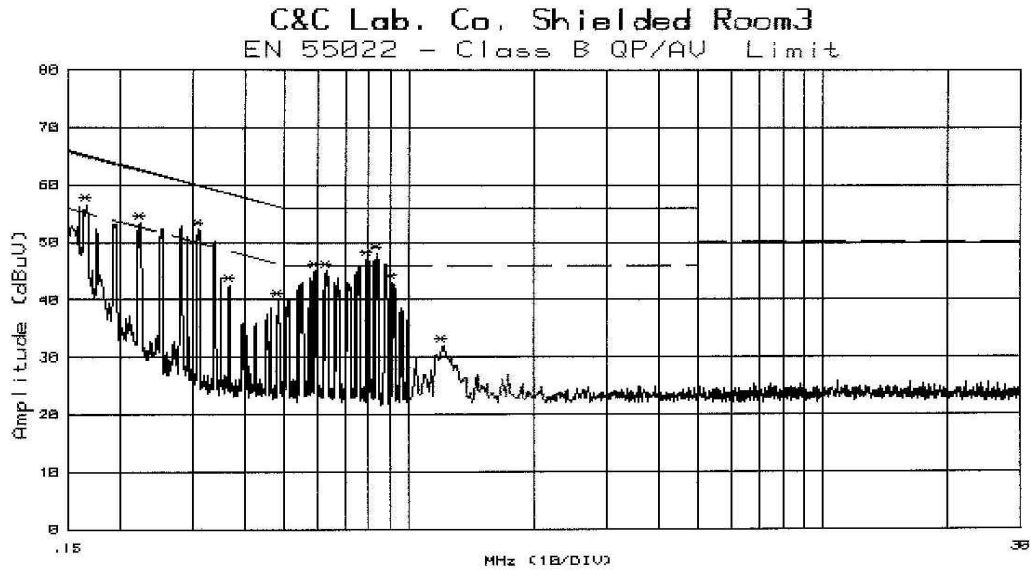
Humidity: 65%RH

(The chart below shows the highest readings taken from the final data)

FREQ	QP	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw dBuV	Raw dBuV	Limit dBuV	Limit dBuV	Margin dB	Margin dB	
0.167	56.30	51.40	65.11	55.11	-8.81	-3.71	L1
0.224	52.90	50.10	62.67	52.67	-9.77	-2.57	L1
0.312	51.70	45.30	59.92	49.92	-8.22	-4.62	L1
0.594	44.60	43.20	56.00	46.00	-11.40	-2.80	L1
0.636	44.60	43.50	56.00	46.00	-11.40	-2.50	L1
0.842	47.60	41.70	56.00	46.00	-8.40	-4.30	L1
0.150	56.30	53.30	66.00	56.00	-9.70	-2.70	L2
0.230	51.10	50.40	62.45	52.45	-11.35	-2.05	L2
0.297	50.10	47.10	60.33	50.33	-10.23	-3.23	L2
0.579	46.50	42.30	56.00	46.00	-9.50	-3.70	L2
0.621	47.90	41.80	56.00	46.00	-8.10	-4.20	L2
0.827	45.70	41.80	56.00	46.00	-10.30	-4.20	L2

Remark :

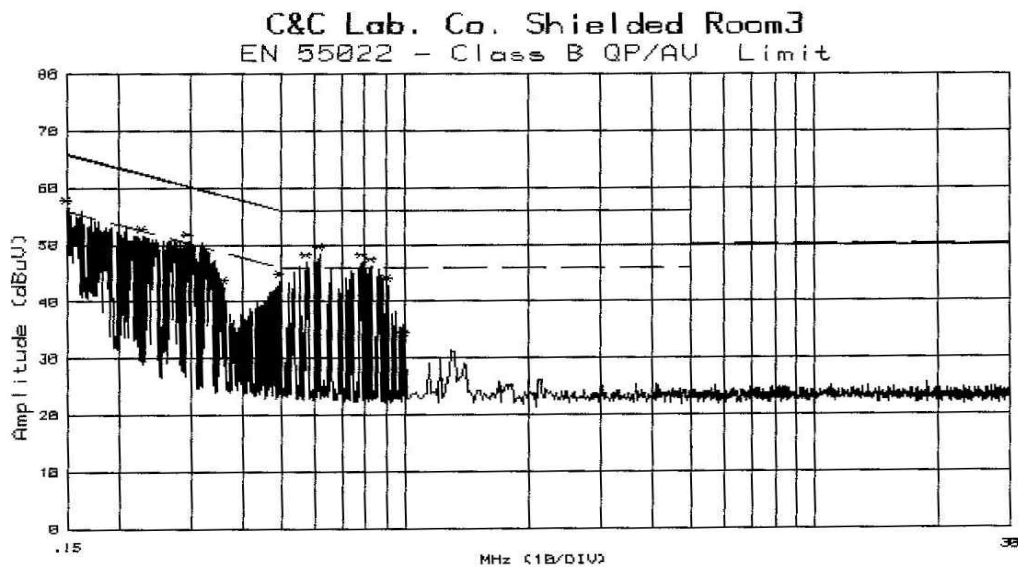
- (1) Measuring frequencies from 0.15 MHz to 30MHz .
- (2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.
- (3) “---” denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.
- (4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;
- (5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot

Customer: GLOBLINK
Model : GF-88
Mode :
Reading : Peak (R3261C SPA)
Remark : 110V

File#: 370
Humd.: 65 (%)
Port : L1

Date : 18 Dec 2002 15:06:06
Temp. : 25 (C)
Tested by: Jean



Customer: GLOBLINK
Model : GF-88
Mode :
Reading : Peak (R3261C SPA)
Remark : 110V

File#: 371
Humd.: 65 (%)
Port : L2

Date : 18 Dec 2002 15:11:08
Temp. : 25 (C)
Tested by: Jean



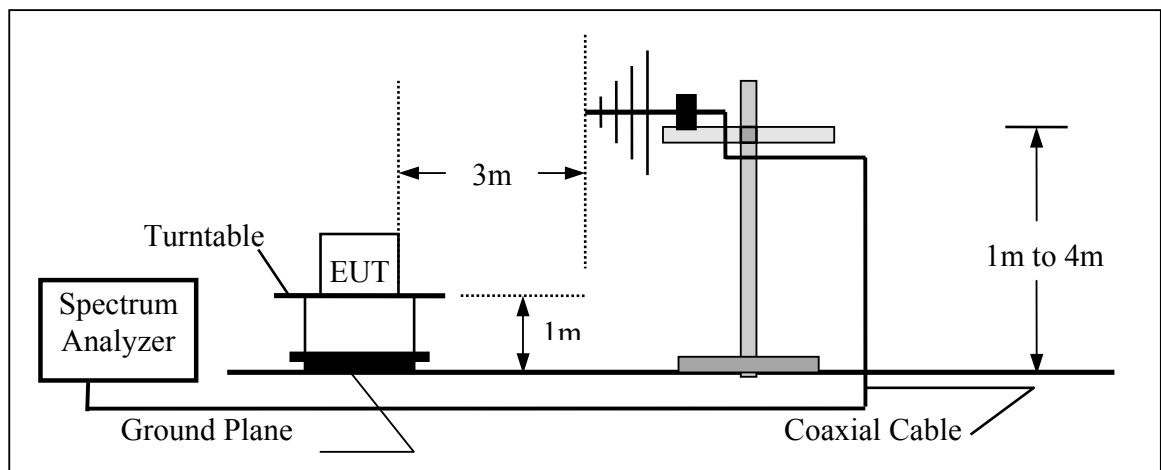
5. Radiated Emission Test

6.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.

6.2 Test SET-UP (Block Diagram of Configuration)

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



6.3 Measurement Equipment Used:

Open Area Test Site # 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/19/2002	03/18/2003
EMI Test Receiver	R&S	ESVS20	838804/004	01/05/2002	01/04/2003
Pre-Amplifier	HP	8447D	2944A09173	03/04/2002	03/03/2003
Bilog Antenna	SCHWAZBECK	VULB9163	145	07/06/2002	07/05/2003
Turn Table	EMCO	2081-1.21	9709-1885	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2060	N.C.R	N.C.R
Controller	EMCO	2090	9709-1256	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M53867	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	11/17/2002	11/16/2003
Pre-Amplifier	HP	8449B	3008B00965	10/01/2002	10/02/2003

6.4 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	



6.5 Measurement Result

Operation Mode: Power From PC
 Fundamental Frequency: 88.2 MHz
 Temperature : 26 °C

Test Date : Feb. 07, 2003
 Test By: Robin
 Pol: Vertical/Horizontal

Humidity : 68 %

Judgement : Passed by -1.5 dB at 88.2 MHz Ant.Pol. Hor.

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/AV)	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	Note
88.200	V	Peak	37.10	11.59	48.69	68.00	-19.31	F
88.200	V	AV	26.66	11.59	38.25	48.00	-9.75	F
176.250	V	Peak	13.38	12.60	25.98	43.50	-17.52	H
264.450	V	Peak	21.62	15.95	37.57	46.00	-8.43	H
440.000	V	Peak	4.50	20.28	24.78	46.00	-21.22	H
527.500	V	Peak	4.03	23.48	27.51	46.00	-18.49	H
88.200	H	Peak	46.40	11.59	57.99	68.00	-10.01	F
88.200	H	AV	34.91	11.59	46.50	48.00	-1.50	F
176.250	H	Peak	27.02	12.64	39.66	43.50	-3.84	H
264.000	H	Peak	25.76	15.97	41.73	46.00	-4.27	H
351.330	H	Peak	17.10	18.10	35.20	46.00	-10.80	H
440.000	H	Peak	16.17	20.28	36.45	46.00	-9.55	H
528.660	H	Peak	9.68	23.52	33.20	46.00	-12.80	H

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz °
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB
- (4) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (5) * Denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (6) Datas 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.
- (7) The IF bandwidth of 30MHz to 1GHz was 100KHz.

6.5 Measurement Result

Operation Mode: Power From PC
 Fundamental 89.4 MHz
 Frequency:
 Temperature : 26 °C
 Humidity : 68 %
 Test Date : Feb. 07, 2003
 Test By: Robin
 Pol: Vertical/Horizontal
 Judgement : Passed by -1.5 dB at 89.4 MHz Ant.Pol. Hor.

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/AV)	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	Note
89.400	V	Peak	34.80	11.82	46.62	68.00	-21.38	F
89.400	V	AV	26.43	11.82	38.25	48.00	-9.75	F
178.950	V	Peak	13.45	12.85	26.30	43.50	-17.20	H
264.900	V	Peak	19.78	15.95	35.73	46.00	-10.27	H
357.166	V	Peak	8.48	18.42	26.90	46.00	-19.10	H
445.833	V	Peak	5.81	20.22	26.03	46.00	-19.97	H
528.667	V	Peak	2.35	23.52	25.87	46.00	-20.13	H
89.400	H	Peak	43.50	11.82	55.32	68.00	-12.68	F
89.400	H	AV	34.68	11.82	46.50	48.00	-1.50	F
178.500	H	Peak	27.96	12.81	40.77	43.50	-2.73	H
267.600	H	Peak	20.51	15.89	36.40	46.00	-9.60	H
357.166	H	Peak	19.98	18.42	38.40	46.00	-7.60	H
447.000	H	Peak	16.55	20.20	36.75	46.00	-9.25	H
535.667	H	Peak	5.54	23.77	29.31	46.00	-16.69	H

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz .
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB
- (4) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (5) * Denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (6) Datas 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.
- (7) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



6.5 Measurement Result

Operation Mode: Power From Adaptor
 Fundamental 88.2 MHz
 Frequency:
 Temperature : 26 °C
 Humidity : 68 %
 Test Date : Feb. 07, 2003
 Test By: Robin
 Pol: Vertical/Horizontal
 Judgement : Passed by -1.34 dB at 176.25 MHz Ant.Pol. Hor.

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/AV)	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	Note
88.200	V	Peak	38.83	11.59	50.42	68.00	-17.58	F
88.200	V	AV	30.26	11.59	41.85	48.00	-6.15	F
176.250	V	Peak	20.19	12.64	32.83	43.50	-10.67	H
264.450	V	Peak	13.93	15.97	29.90	46.00	-16.10	H
351.330	V	Peak	4.77	18.10	22.87	46.00	-23.13	H
528.660	V	Peak	0.67	23.52	24.19	46.00	-21.81	H
88.200	H	Peak	41.16	11.59	52.75	68.00	-15.25	F
88.200	H	AV	32.24	11.59	43.83	48.00	-4.17	F
176.250	H	Peak	29.52	12.64	42.16	43.50	-1.34	H
264.000	H	Peak	19.26	15.97	35.23	46.00	-10.77	H
351.330	H	Peak	17.43	18.10	35.53	46.00	-10.47	H
440.000	H	Peak	13.34	20.28	33.62	46.00	-12.38	H
528.667	H	Peak	7.84	23.52	31.36	46.00	-14.64	H

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz °
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB
- (4) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (5) * Denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (6) Datas 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.
- (7) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



6.5 Measurement Result

Operation Mode: Power From Adaptor
 Fundamental: 89.4 MHz
 Frequency:
 Temperature : 26 °C
 Humidity : 68 %
 Test Date : Feb. 07, 2003
 Test By: Robin
 Pol: Vertical/Horizontal
 Judgement : Passed by -3.56 dB at 89.4 MHz Ant.Pol. Hor.

Freq. (MHz)	Ant.Pol. H/V	DetectorMode (PK/AV)	Reading (dBuV)	Ant./CL/ Amp. CF(dB)	Actual FS (dBuV/m)	Limit3m (dBuV/m)	Safe Margin (dB)	Note
89.400	V	Peak	37.96	11.94	49.90	68.00	-18.10	F
89.400	V	AV	29.04	11.94	40.98	48.00	-7.02	F
178.950	V	Peak	21.80	12.81	34.61	43.50	-8.89	H
267.600	V	Peak	10.01	15.89	25.90	46.00	-20.10	H
357.166	V	Peak	7.82	18.42	26.24	46.00	-19.76	H
89.400	H	Peak	40.96	11.94	52.90	68.00	-15.10	F
89.400	H	AV	32.50	11.94	44.44	48.00	-3.56	F
178.950	H	Peak	30.46	12.81	43.27	63.50	-20.23	H
178.950	H	AV	23.50	12.81	36.31	43.50	-7.19	H
267.600	H	Peak	14.51	15.89	30.40	46.00	-15.60	H
357.166	H	Peak	21.15	18.42	39.57	46.00	-6.43	H
445.833	H	Peak	12.49	20.22	32.71	46.00	-13.29	H

Remark:

- (1) Measuring frequencies from 30 MHz to the 1GHz .
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB
- (4) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (5) * Denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (6) Datas 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.
- (7) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



7. Occupied Bandwidth

7.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as normal operation
3. Set SPA Center Frequency = fundamental frequency, RBW,VBW= 10KHz, Span =500KHz.
4. Set SPA Max hold. Mark peak, -26dB.

7.2 Test SET-UP (Block Diagram of Configuration)

Same as 4.2 Radiated Emission Measurement.

7.3 Measurement Equipment Used:

Same as 4.2 Radiated Emission Measurement.

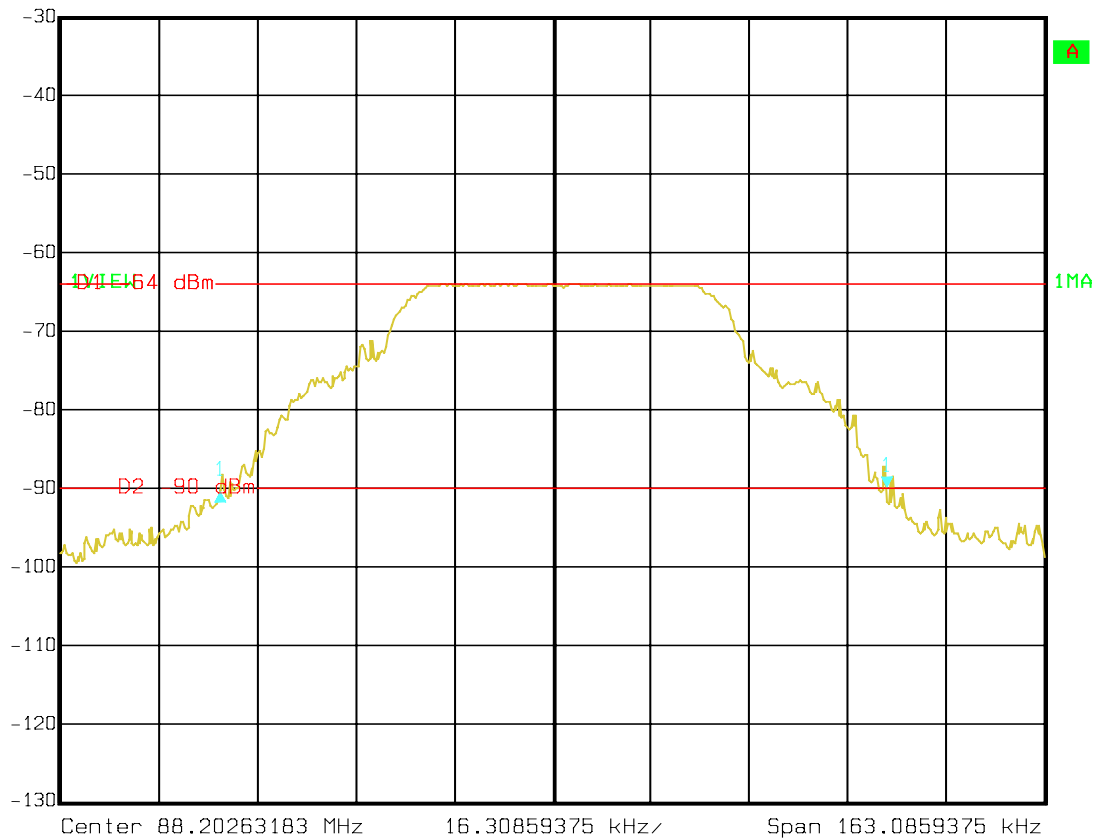
5.4 Measurement Results:

26dB bandwidth = 110KHz

Refer to attached data chart.

**26dB Band Width Test Data**

 Ref Lvl Delta 1 [T1] RBW 10 kHz RF Att 10 dB
-30 dBm -0.46 dB VBW 10 kHz
-110.30361504 kHz SWT 15 ms Unit dBm



Date: 08.JAN.2003 15:28:11