



Test Report

Product Name : Ego Cup FM

Model No. : 14600111

FCC ID : TQ6BTHF850

Applicant : Shanghai Flaircomm Technologies Inc.

Address : No. 5, Bibo Road, Keyuan Building 4F, Zhangjiang
Hi-Tech Park, Shanghai 201203 P.R. China

Date of Receipt : 2008/06/12

Issued Date : 2008/07/15

Report No. : 086S063-RF-US-P10V01

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNLA, NVLAP or any agency of the Government.
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Test Report Certification

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Manufacturer : Shanghai Flaircomm Technologies Inc.

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Hi-Tech Park, Shanghai 201203 P.R. China

Model No. : 14600111

FCC ID : TQ6BTHF850

Rated Voltage : AC 120 V / 60 Hz

EUT Voltage : DC 3.7V

Trade Name : Flaircomm

Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2007
ANSI C63.4: 2003

Test Result : Complied

Performed Location : SuZhou EMC laboratory
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Laboratory Information

We , **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	: BSMI, DGT, CNLA
Germany	: TUV Rheinland
Norway	: Nemko, DNV
USA	: FCC, NVLAP
Japan	: VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://tw.quietek.com/modules/myalbum/>
The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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1. General Information

1.1. EUT Description

Product Name	Ego Cup FM
Trade Name	Flaircomm
Model No.	14600111
FCC ID	TQ6BTHF850
Working Voltage	DC 3.7V
Frequency Range	88.1 - 107.9MHz
Channel Number	199
Type of Modulation	FM
Data Rate	N/A
Channel Control	Auto
Antenna Type	Coil Wire
Antenna Gain	Refer to the "Antenna List"

Component	
Car Charger	Manufacturer: Shanghai Flaircomm Technologies Inc M/N: TTX-GC-196C Input: 12~24VDC Output: 5.0VDC, 500mA Cable Out: Non-Shielded, 1.8m
USB Cable	Manufacturer: MORETHANALL(CHANGZHOU)ELECTRONICS CO.,LTD M/N: YK-C008-USB002
Microphone	Manufacturer: ESS GmbH M/N: Car Mic 02-L

Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	88.1 MHz	51	93.1 MHz	101	98.1 MHz	151	103.1 MHz
2	88.2 MHz	52	93.2 MHz	102	98.2 MHz	152	103.2 MHz
3	88.3 MHz	53	93.3 MHz	103	98.3 MHz	153	103.3 MHz
4	88.4 MHz	54	93.4 MHz	104	98.4 MHz	154	103.4 MHz
5	88.5 MHz	55	93.5 MHz	105	98.5 MHz	155	103.5 MHz
6	88.6 MHz	56	93.6 MHz	106	98.6 MHz	156	103.6 MHz
7	88.7 MHz	57	93.7 MHz	107	98.7 MHz	157	103.7 MHz
8	88.8 MHz	58	93.8 MHz	108	98.8 MHz	158	103.8 MHz
9	88.9 MHz	59	93.9 MHz	109	98.9 MHz	159	103.9 MHz
10	89.0 MHz	60	94.0 MHz	110	99.0 MHz	160	104.0 MHz
11	89.1 MHz	61	94.1 MHz	111	99.1 MHz	161	104.1 MHz
12	89.2 MHz	62	94.2 MHz	112	99.2 MHz	162	104.2 MHz
13	89.3 MHz	63	94.3 MHz	113	99.3 MHz	163	104.3 MHz
14	89.4 MHz	64	94.4 MHz	114	99.4 MHz	164	104.4 MHz
15	89.5 MHz	65	94.5 MHz	115	99.5 MHz	165	104.5 MHz
16	89.6 MHz	66	94.6 MHz	116	99.6 MHz	166	104.6 MHz
17	89.7 MHz	67	94.7 MHz	117	99.7 MHz	167	104.7 MHz
18	89.8 MHz	68	94.8 MHz	118	99.8 MHz	168	104.8 MHz
19	89.9 MHz	69	94.9 MHz	119	99.9 MHz	169	104.9 MHz
20	90.0 MHz	70	95.0 MHz	120	100.0 MHz	170	105.0 MHz
21	90.1 MHz	71	95.1 MHz	121	100.1 MHz	171	105.1 MHz
22	90.2 MHz	72	95.2 MHz	122	100.2 MHz	172	105.2 MHz
23	90.3 MHz	73	95.3 MHz	123	100.3 MHz	173	105.3 MHz
24	90.4 MHz	74	95.4 MHz	124	100.4 MHz	174	105.4 MHz
25	90.5 MHz	75	95.5 MHz	125	100.5 MHz	175	105.5 MHz
26	90.6 MHz	76	95.6 MHz	126	100.6 MHz	176	105.6 MHz
27	90.7 MHz	77	95.7 MHz	127	100.7 MHz	177	105.7 MHz
28	90.8 MHz	78	95.8 MHz	128	100.8 MHz	178	105.8 MHz
29	90.9 MHz	79	95.9 MHz	129	100.9 MHz	179	105.9 MHz
30	91.0 MHz	80	96.0 MHz	130	101.0 MHz	180	106.0 MHz
31	91.1 MHz	81	96.1 MHz	131	101.1 MHz	181	106.1 MHz
32	91.2 MHz	82	96.2 MHz	132	101.2 MHz	182	106.2 MHz
33	91.3 MHz	83	96.3 MHz	133	101.3 MHz	183	106.3 MHz
34	91.4 MHz	84	96.4 MHz	134	101.4 MHz	184	106.4 MHz

35	91.5 MHz	85	96.5 MHz	135	101.5 MHz	185	106.5 MHz
36	91.6 MHz	86	96.6 MHz	136	101.6 MHz	186	106.6 MHz
37	91.7 MHz	87	96.7 MHz	137	101.7 MHz	187	106.7 MHz
38	91.8 MHz	88	96.8 MHz	138	101.8 MHz	188	106.8 MHz
39	91.9 MHz	89	96.9 MHz	139	101.9 MHz	189	106.9 MHz
40	92.0 MHz	90	97.0 MHz	140	102.0 MHz	190	107.0 MHz
41	92.1 MHz	91	97.1 MHz	141	102.1 MHz	191	107.1 MHz
42	92.2 MHz	92	97.2 MHz	142	102.2 MHz	192	107.2 MHz
43	92.3 MHz	93	97.3 MHz	143	102.3 MHz	193	107.3 MHz
44	92.4 MHz	94	97.4 MHz	144	102.4 MHz	194	107.4 MHz
45	92.5 MHz	95	97.5 MHz	145	102.5 MHz	195	107.5 MHz
46	92.6 MHz	96	97.6 MHz	146	102.6 MHz	196	107.6 MHz
47	92.7 MHz	97	97.7 MHz	147	102.7 MHz	197	107.7 MHz
48	92.8 MHz	98	97.8 MHz	148	102.8 MHz	198	107.8 MHz
49	92.9 MHz	99	97.9 MHz	149	102.9 MHz	199	107.9 MHz
50	93.0 MHz	100	98.0 MHz	150	103.0 MHz	N/A	N/A

Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
FM Antenna	Flaircomm	Ego Cup FM	2.7dBi

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

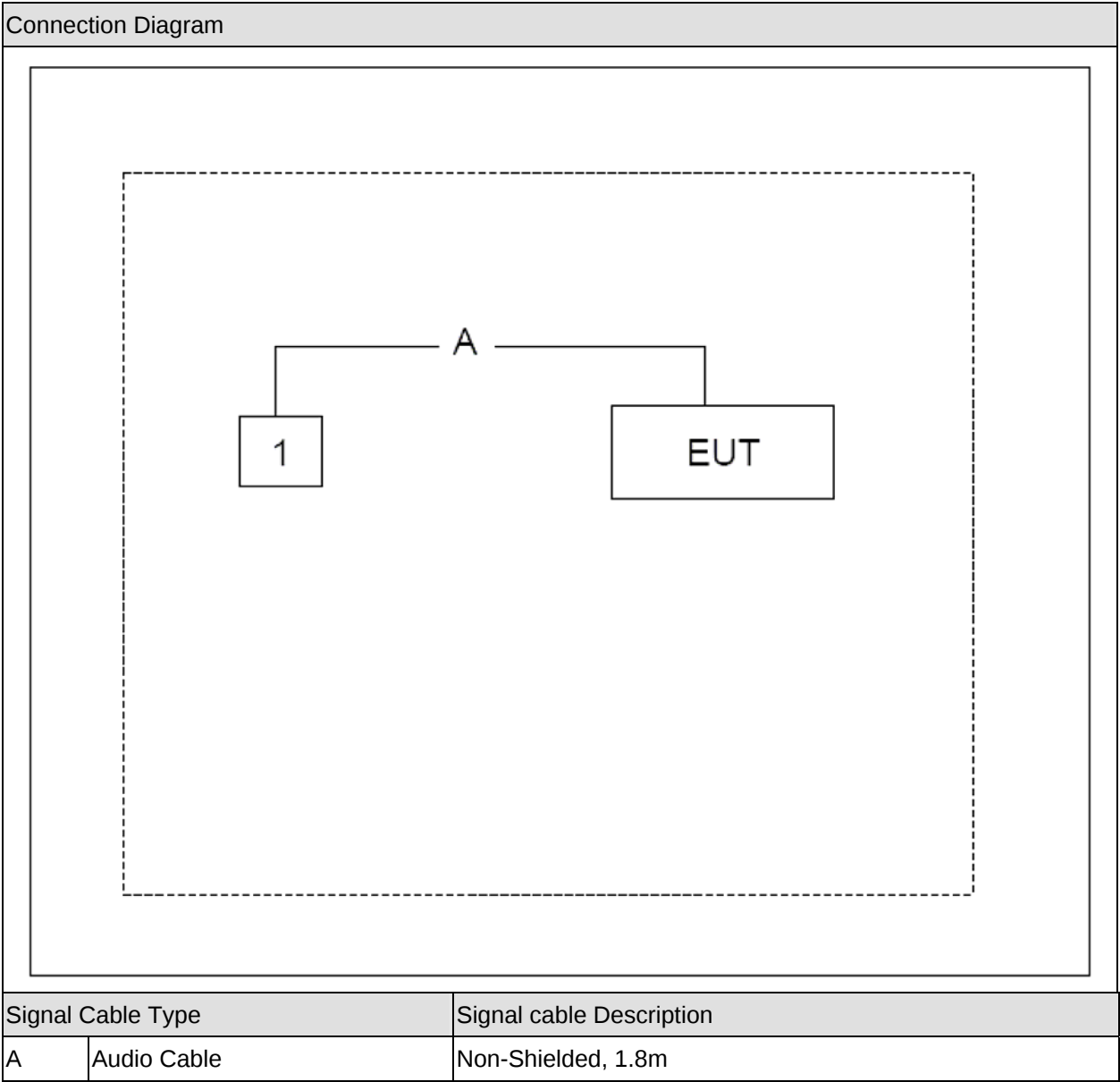
Test Mode
Mode 1: Transmit with 1kHz Audio Signal

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	iPod	Apple	A1199	6U715UY9VQ5	Power by Battery

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	Set the EUT work on contineous transmit mode with 1kHz audio signal for three channels.

2. Technical Test

2.1. Summary of Test Result

- ☒ No deviations from the test standards
- ☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.239(c) and 15.209	Yes	No
Field Strength of the Fundamental Signal	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.239(b)	Yes	No
26dB Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.239(a)	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

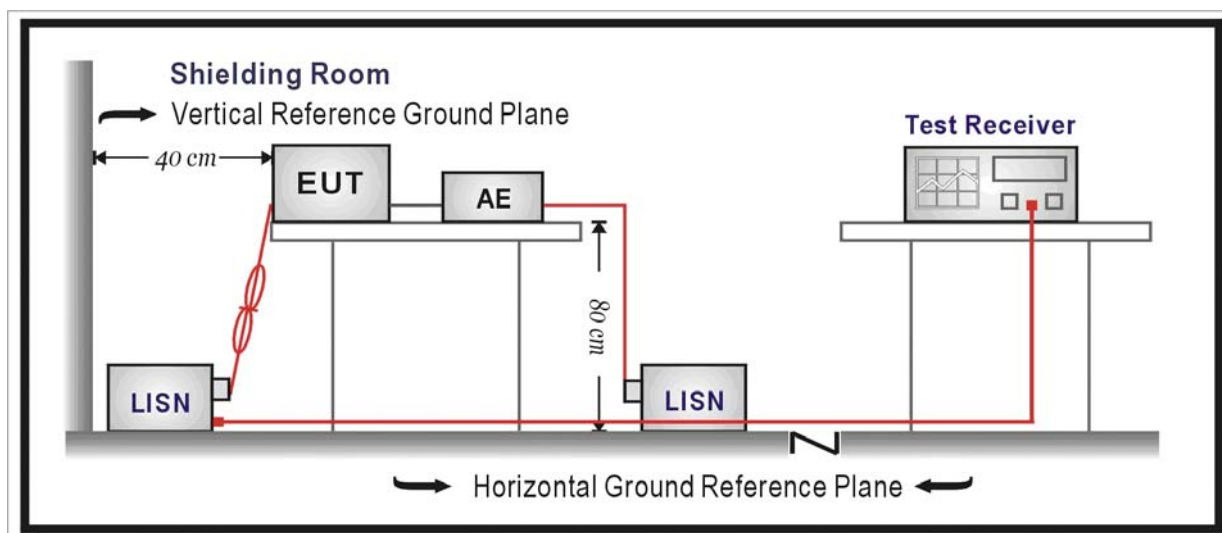
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2008/02/07
Two-Line V-Network	R&S	ENV216	100013	2007/11/15
Two-Line V-Network	R&S	ENV216	100014	2007/11/15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2007/11/25
50ohm Termination	SHX	TF2	07081401	2007/10/19
Coaxial Cable	Luthi	RG214	519358	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH004	2008/03/31

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

The EUT have no AC input power port, so this test item needn't perform.

4. Radiated Emission

4.1. Test Equipment

☒ Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2007/11/12
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

☐ Radiated Emission / AC-3

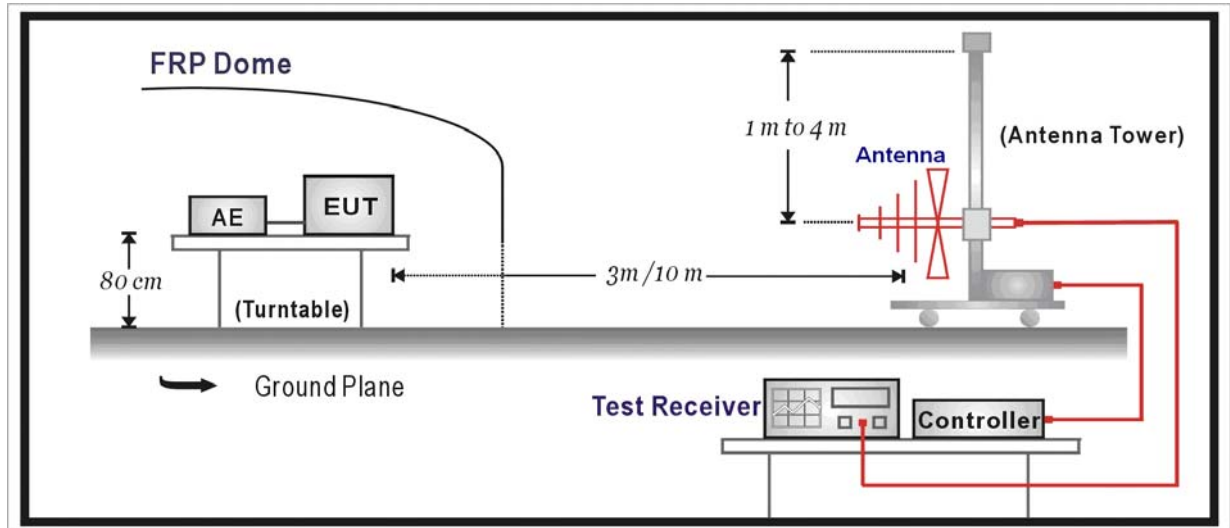
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

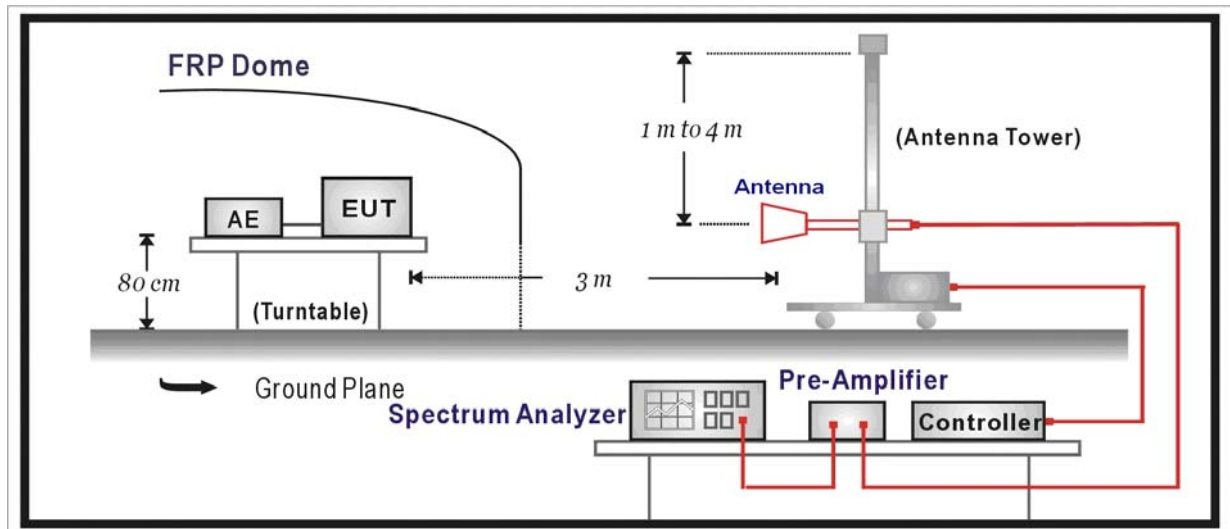
Note 2: The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

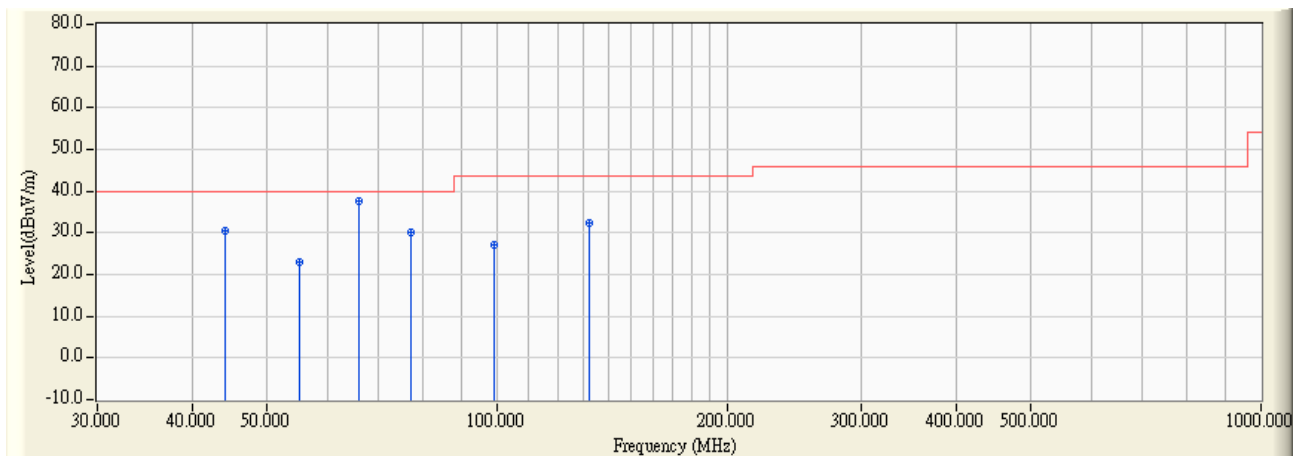
Note: When measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
below 1G is defined as ± 3.8 dB

4.6. Test Result

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)

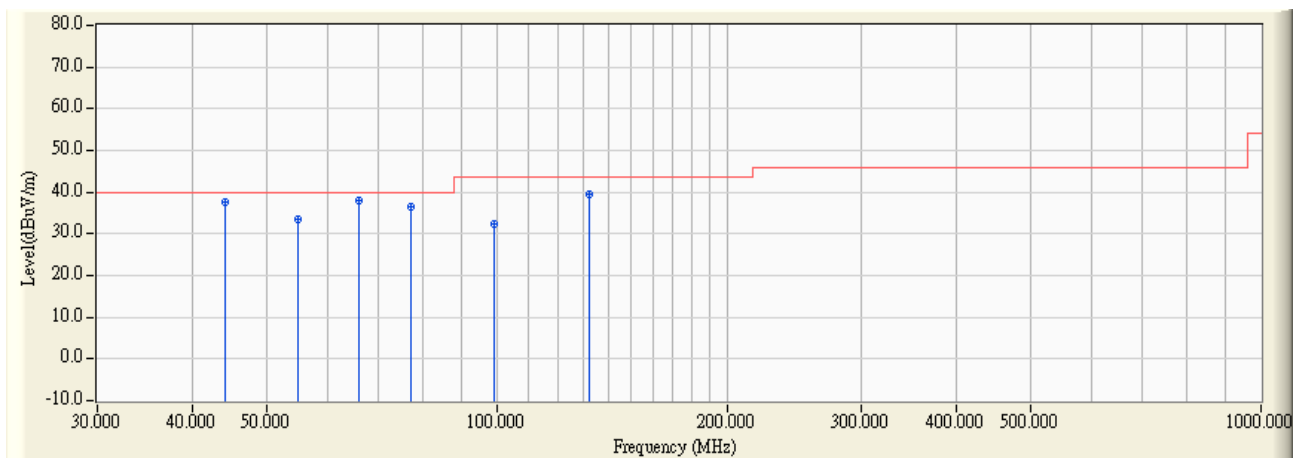


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		44.050	-12.232	42.600	30.367	-9.633	40.000	QUASIPeAK	132.000	75.000
2		55.075	-16.326	39.400	23.075	-16.925	40.000	QUASIPeAK	176.000	210.000
3	*	66.075	-17.328	55.100	37.773	-2.227	40.000	QUASIPeAK	184.000	231.000
4		77.100	-16.019	46.300	30.281	-9.719	40.000	QUASIPeAK	156.000	135.000
5		99.100	-11.736	38.900	27.164	-16.356	43.520	QUASIPeAK	146.000	189.000
6		132.150	-10.658	43.200	32.542	-10.978	43.520	QUASIPeAK	153.000	235.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)

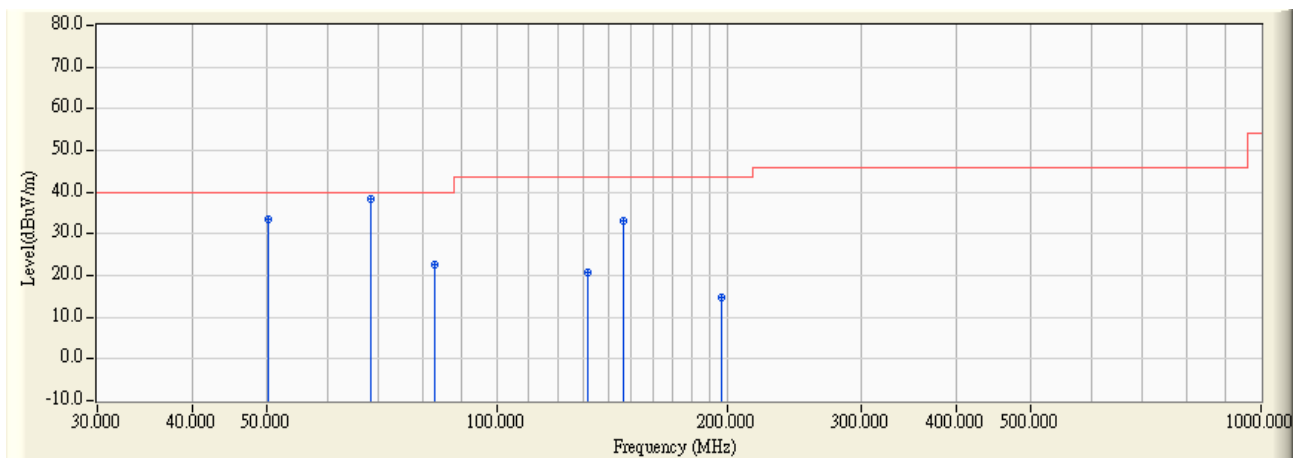


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		44.050	-12.232	49.700	37.467	-2.533	40.000	QUASIPeAK	100.000	290.000
2		55.025	-16.311	49.700	33.389	-6.611	40.000	QUASIPeAK	100.000	230.000
3	*	66.075	-17.328	55.500	38.173	-1.827	40.000	QUASIPeAK	100.000	310.000
4		77.100	-16.019	52.400	36.381	-3.619	40.000	QUASIPeAK	187.000	263.900
5		99.100	-11.736	44.000	32.264	-11.256	43.520	QUASIPeAK	100.000	234.000
6		132.150	-10.658	50.200	39.542	-3.978	43.520	QUASIPeAK	100.000	10.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)

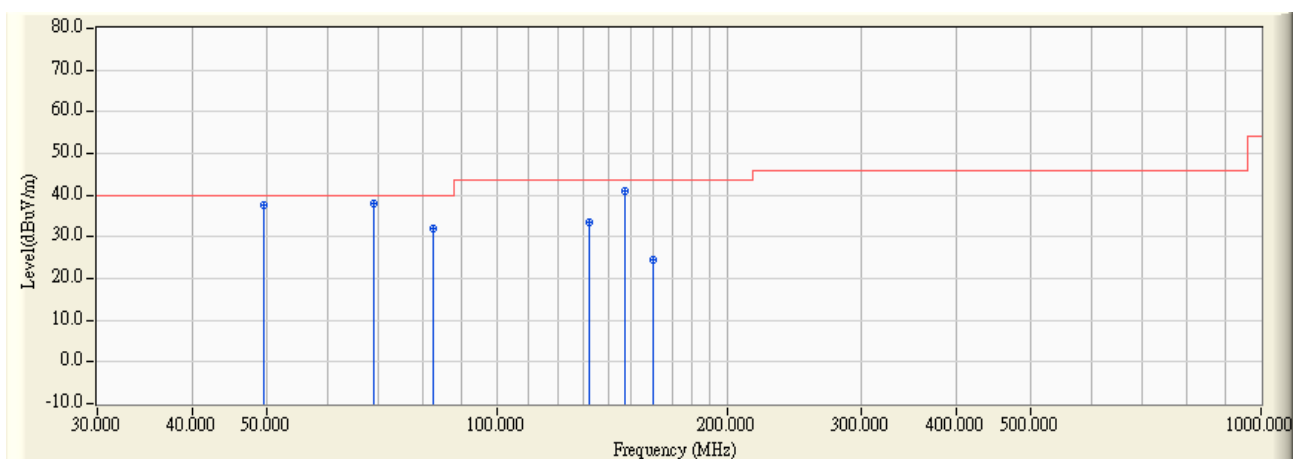


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		50.100	-14.836	48.200	33.364	-6.636	40.000	QUASIPeAK	135.400	245.800
2	*	68.400	-17.196	55.420	38.224	-1.776	40.000	QUASIPeAK	188.000	296.000
3		82.900	-14.868	37.500	22.632	-17.368	40.000	QUASIPeAK	156.000	264.300
4		131.540	-10.611	31.500	20.889	-22.631	43.520	QUASIPeAK	134.000	238.000
5		146.250	-11.664	44.700	33.036	-10.484	43.520	QUASIPeAK	144.900	235.400
6		197.000	-13.369	28.100	14.731	-28.789	43.520	QUASIPeAK	157.000	321.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)

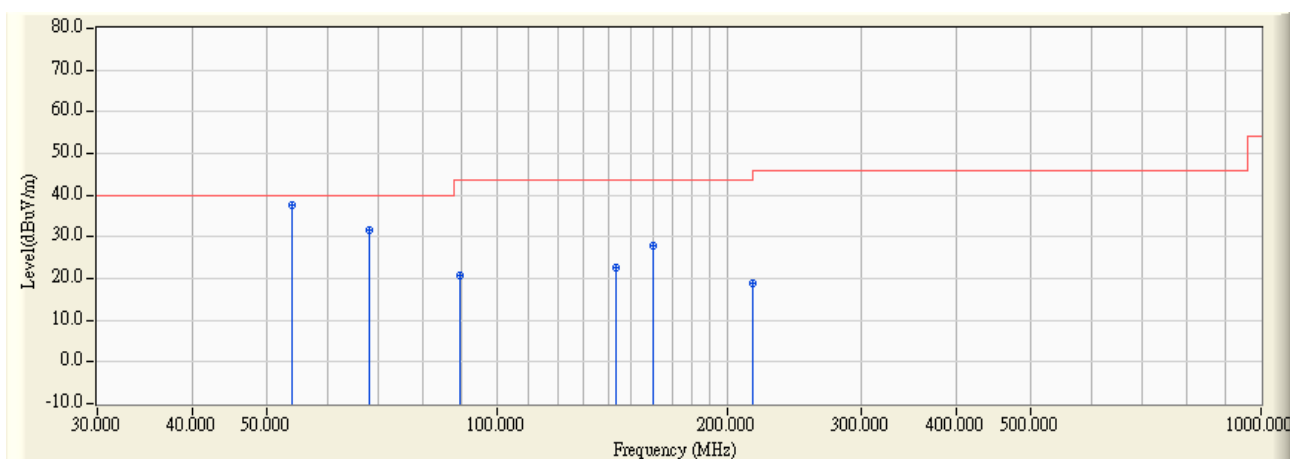


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		49.560	-14.628	52.400	37.772	-2.228	40.000	QUASIPeAK	132.000	236.000
2	*	69.100	-17.155	55.200	38.045	-1.955	40.000	QUASIPeAK	169.000	245.000
3		82.600	-14.935	46.800	31.865	-8.135	40.000	QUASIPeAK	100.000	178.000
4		132.260	-10.666	44.100	33.434	-10.086	43.520	QUASIPeAK	164.000	305.000
5		146.780	-11.720	52.700	40.980	-2.540	43.520	QUASIPeAK	115.000	267.000
6		160.025	-12.490	37.100	24.610	-18.910	43.520	QUASIPeAK	122.000	162.300

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)

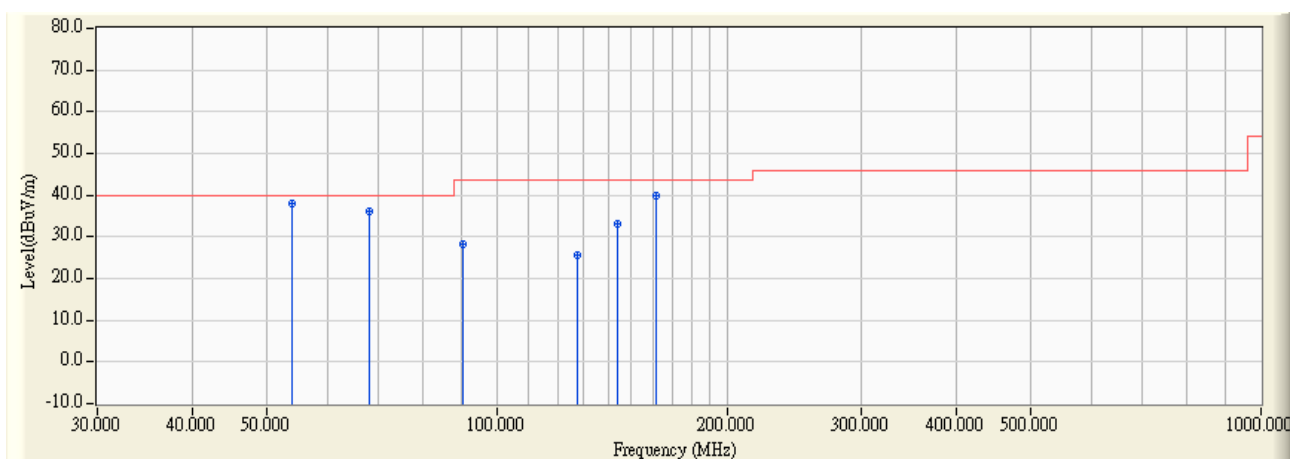


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	53.950	-16.003	53.700	37.697	-2.303	40.000	QUASIPeAK	200.000	64.400
2		68.075	-17.215	48.700	31.485	-8.515	40.000	QUASIPeAK	156.000	105.000
3		89.525	-13.530	34.100	20.570	-22.950	43.520	QUASIPeAK	120.000	258.000
4		143.250	-11.420	34.200	22.780	-20.740	43.520	QUASIPeAK	187.000	235.400
5		160.000	-12.489	40.300	27.811	-15.709	43.520	QUASIPeAK	149.000	310.000
6		216.075	-13.544	32.600	19.056	-26.964	46.020	QUASIPeAK	144.000	225.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:05
Limit : FCC_SpartC_15.209_03M_QP	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112B_2932(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	53.950	-16.003	53.900	37.897	-2.103	40.000	QUASIPeAK	100.000	96.500
2		68.100	-17.214	53.500	36.286	-3.714	40.000	QUASIPeAK	165.000	238.400
3		90.325	-13.357	41.600	28.243	-15.277	43.520	QUASIPeAK	126.000	334.000
4		127.450	-10.424	35.900	25.477	-18.043	43.520	QUASIPeAK	108.000	155.000
5		143.665	-11.450	44.650	33.200	-10.320	43.520	QUASIPeAK	179.000	166.700
6		161.850	-12.554	52.400	39.846	-3.674	43.520	QUASIPeAK	130.000	10.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

5. Field Strength of the Fundamental Signal

5.1. Test Equipment

☒ Field Strength of the Fundamental Signal / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2007/11/12
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

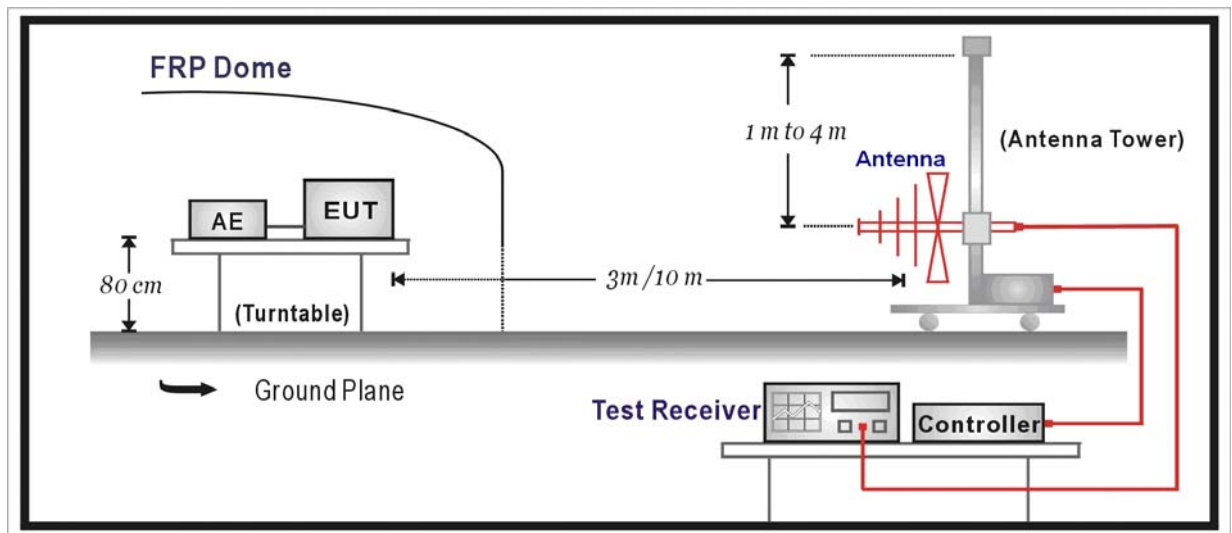
☐ Field Strength of the Fundamental Signal / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Note 2: The test instruments marked with "X" are used to measure the final test results.

5.2. Test Setup



5.3. Limit

The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit is based on measurement instrumentation employing an average detector. The provision in Section 15.35 of standard for limiting peak emissions apply.

5.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

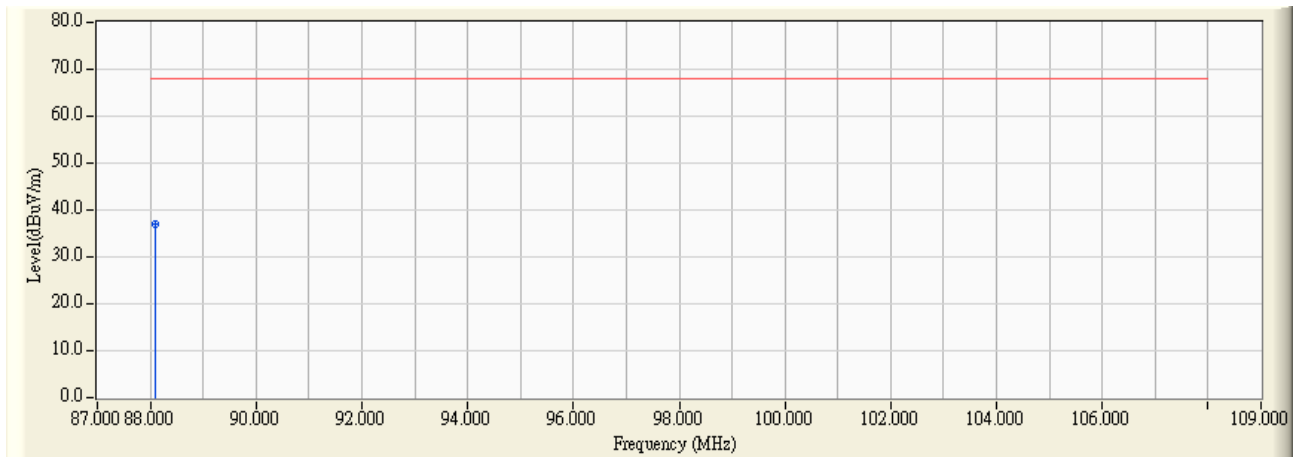
The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz.

5.5. Uncertainty

The measurement uncertainty below 1G is defined as ± 3.8 dB

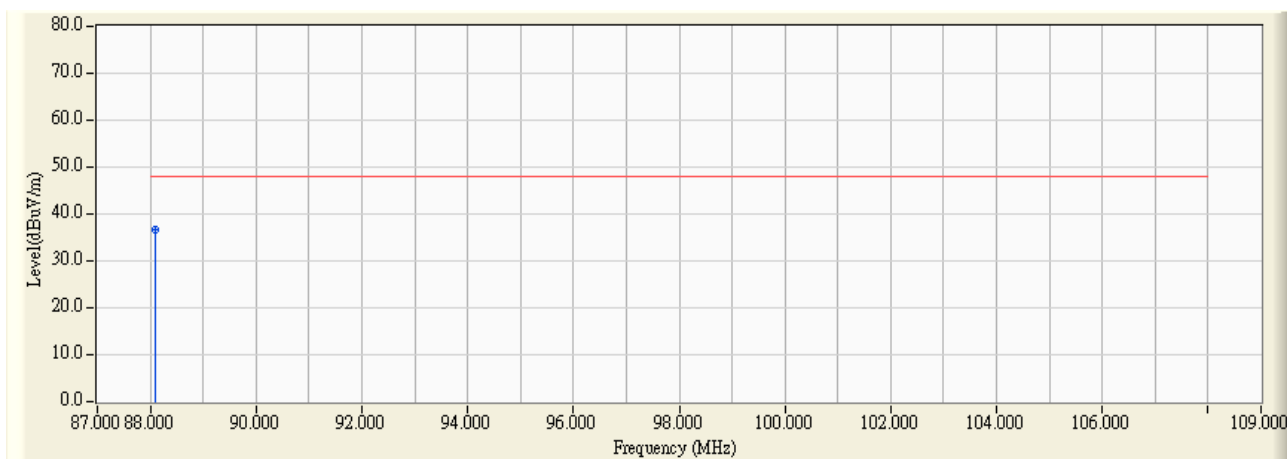
5.6. Test Result

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)



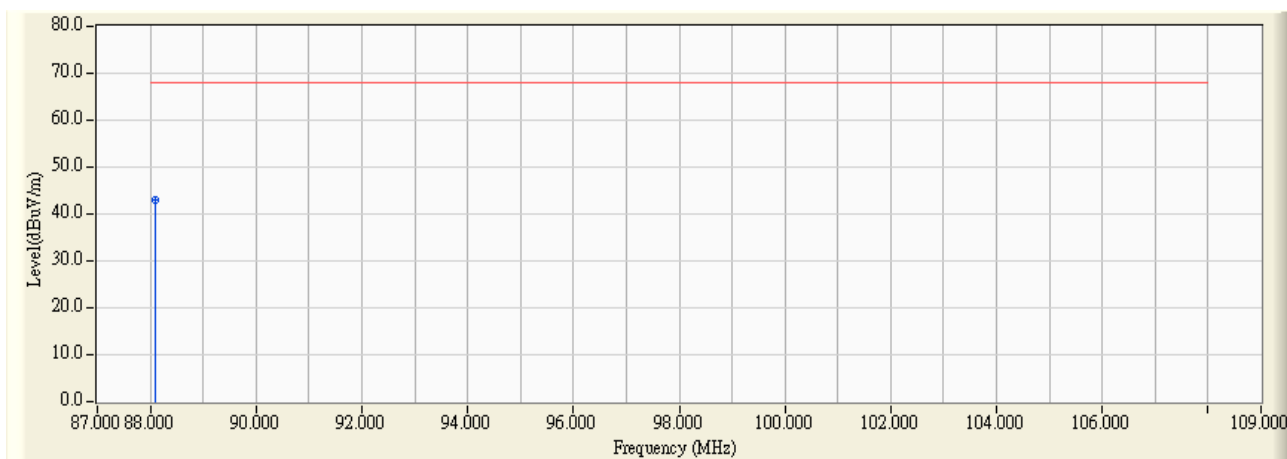
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	88.100	-13.642	50.674	37.032	-30.918	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)



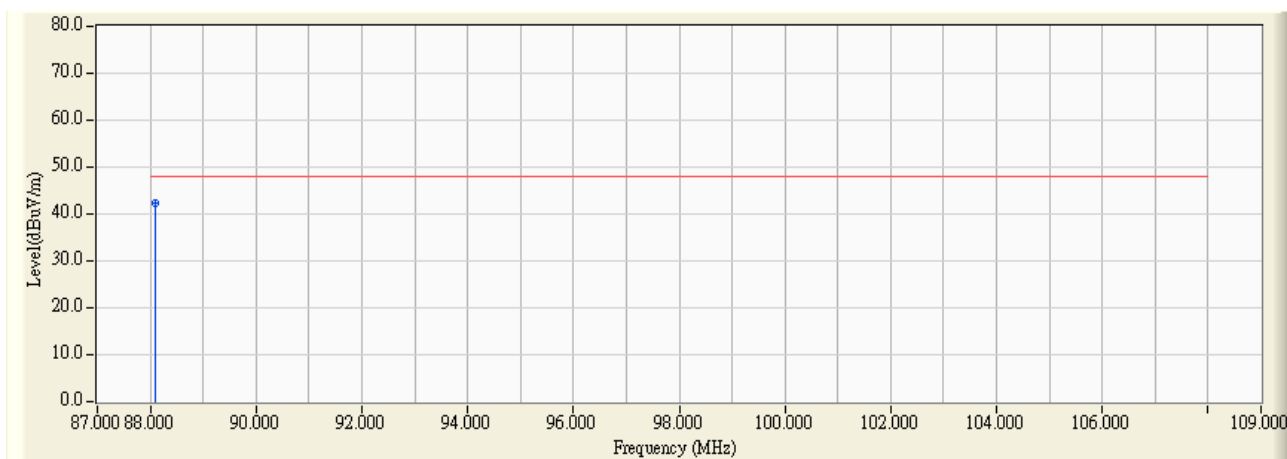
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	88.100	-13.642	50.174	36.532	-11.418	47.950	AVERAGE

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)



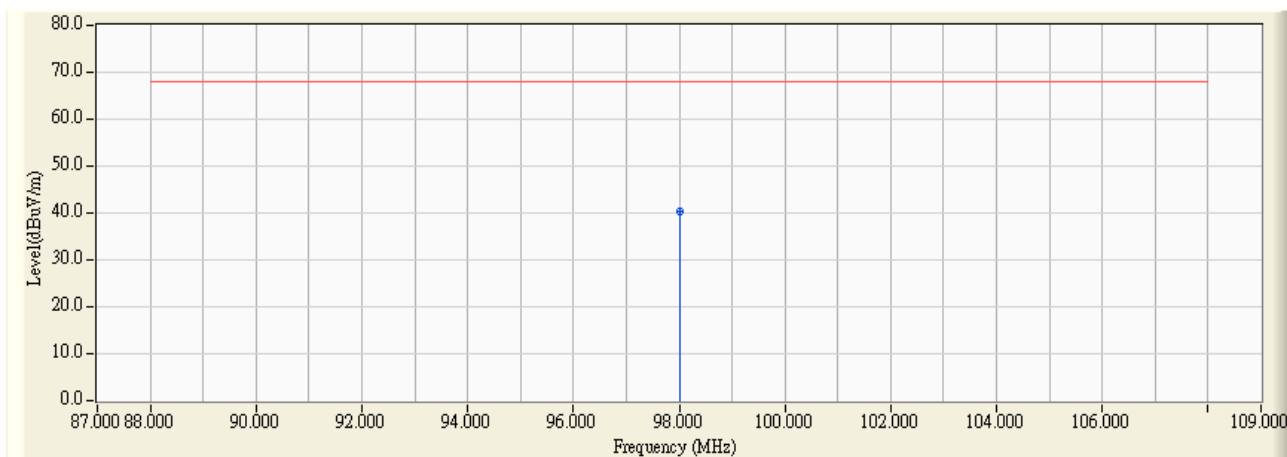
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	88.100	-13.642	56.517	42.875	-25.075	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (88.1MHz)



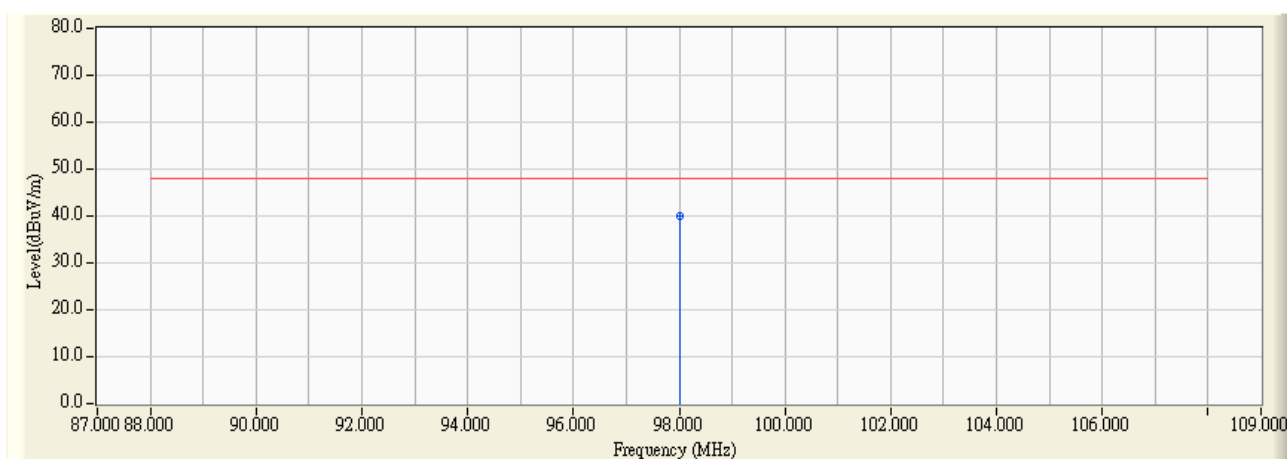
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	88.100	-13.642	56.017	42.375	-5.575	47.950	AVERAGE

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)



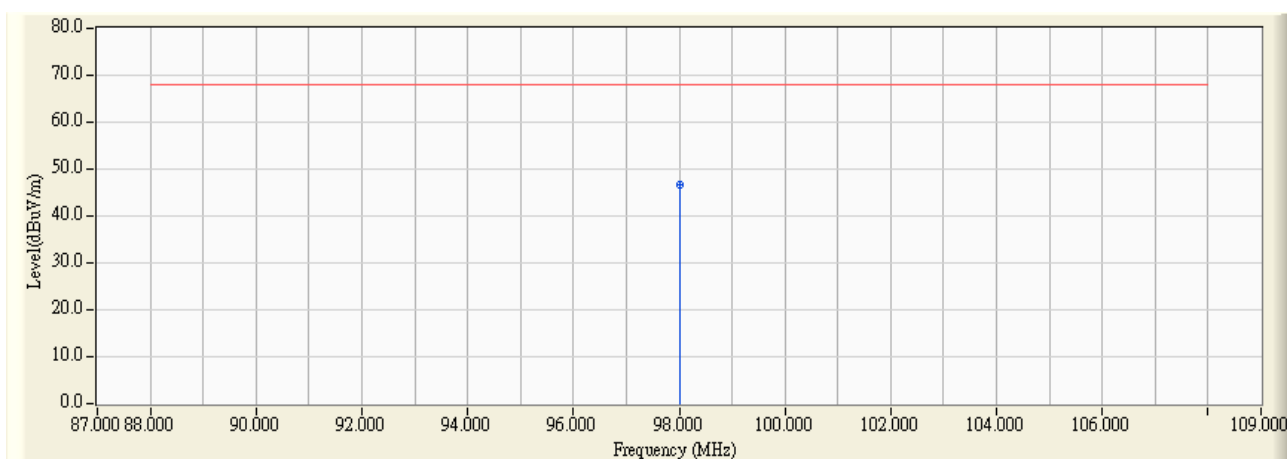
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	98.000	-11.775	52.122	40.347	-27.603	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:14
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)



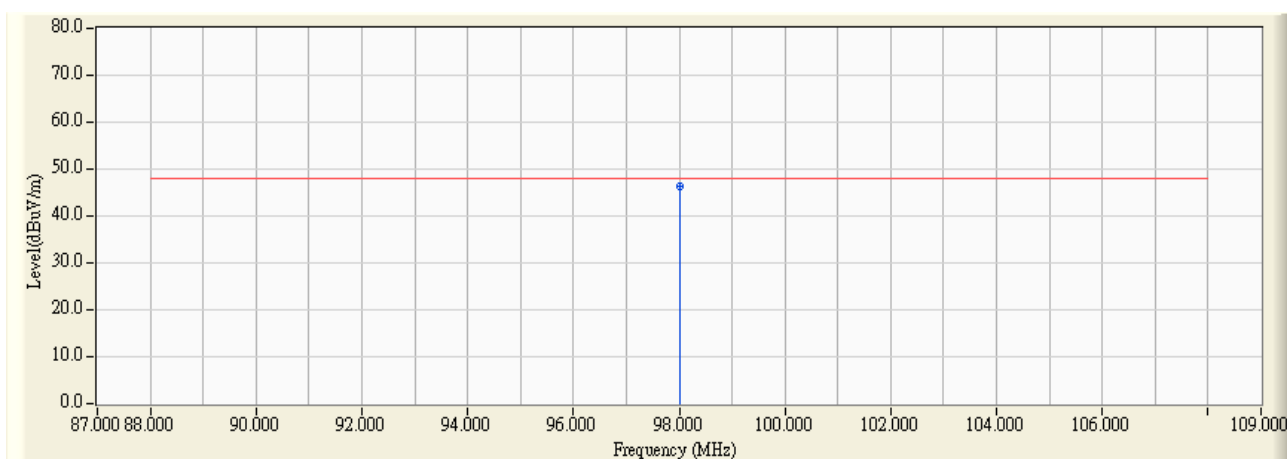
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	98.000	-11.775	51.922	40.147	-7.803	47.950	AVERAGE

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:15
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)



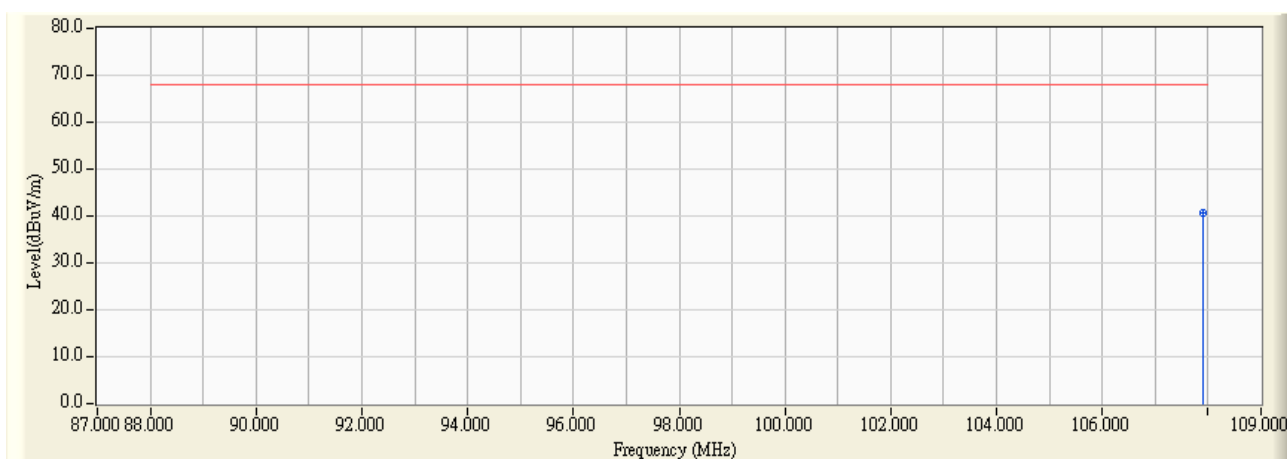
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	98.000	-11.775	58.558	46.783	-21.167	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:15
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (98MHz)



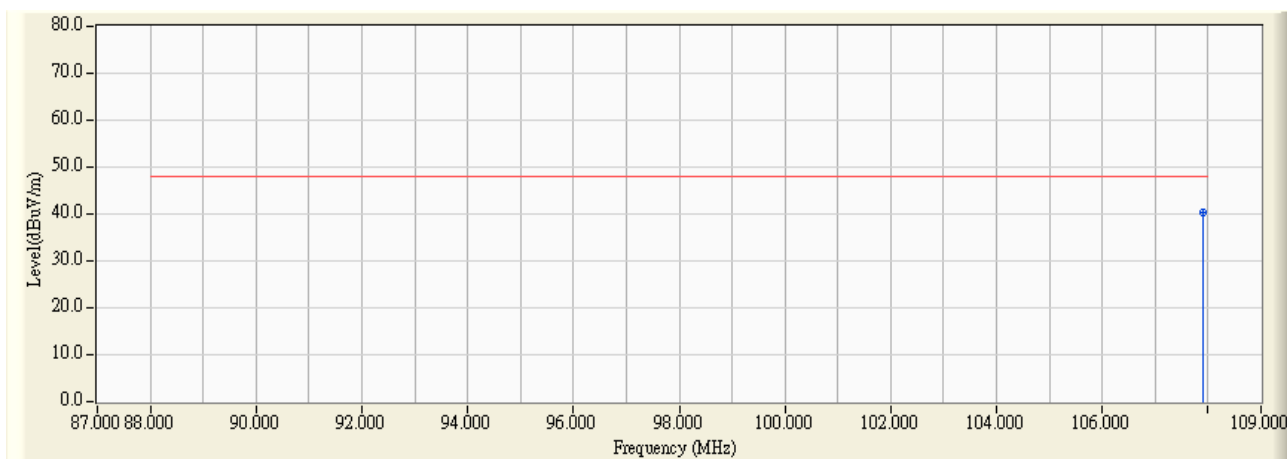
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	98.000	-11.775	58.258	46.483	-1.467	47.950	AVERAGE

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:16
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)



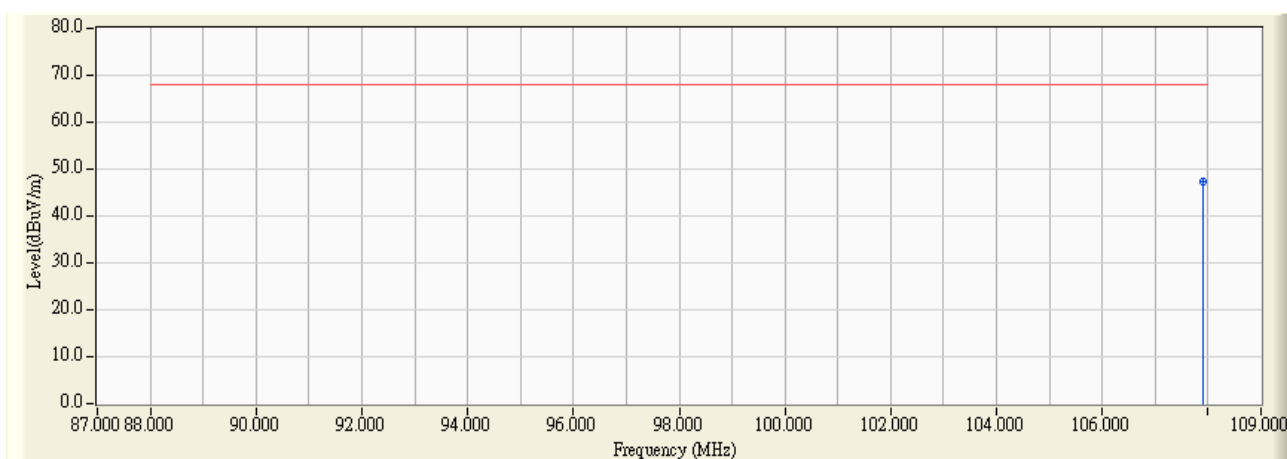
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	107.900	-10.442	51.228	40.787	-27.163	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:16
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)



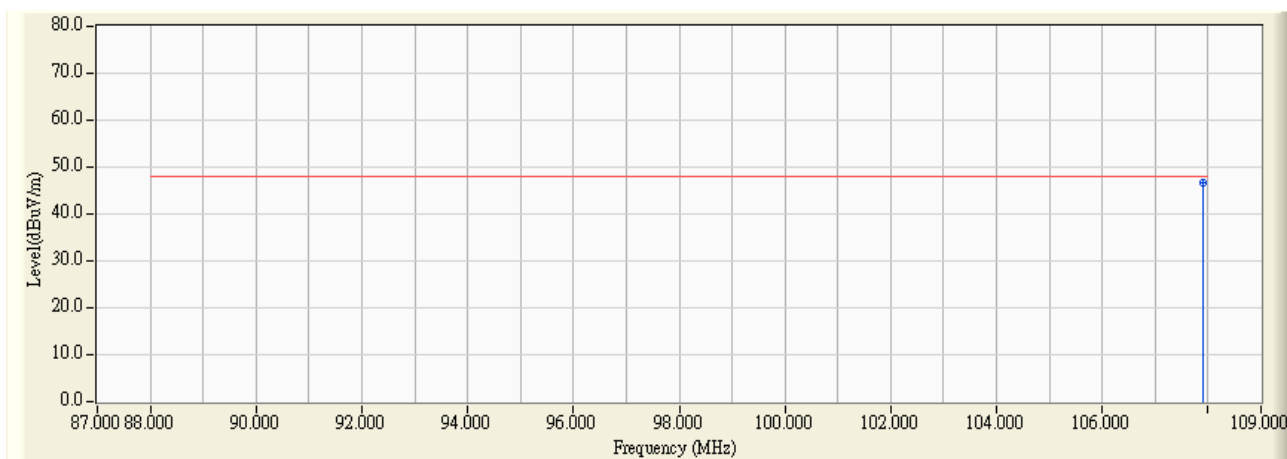
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	107.900	-10.442	50.828	40.387	-7.563	47.950	AVERAGE

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:15
Limit : FCC_SpartC_15.239_F_03M_PK	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	107.900	-10.442	57.650	47.209	-20.741	67.950	PEAK

Engineer : Derek	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2008/07/11 - 10:15
Limit : FCC_SpartC_15.239_F_03M_AV	Margin : 0
EUT : Ego Cup FM	Probe : CBL6112D_22254(30-2000MHz) - VERTICAL
Power : DC 3.7V	Note : Mode 1: Transmit with 1kHz Audio Signal (107.9MHz)



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	107.900	-10.442	57.250	46.809	-1.141	47.950	AVERAGE

6. 26dB Occupied Bandwidth

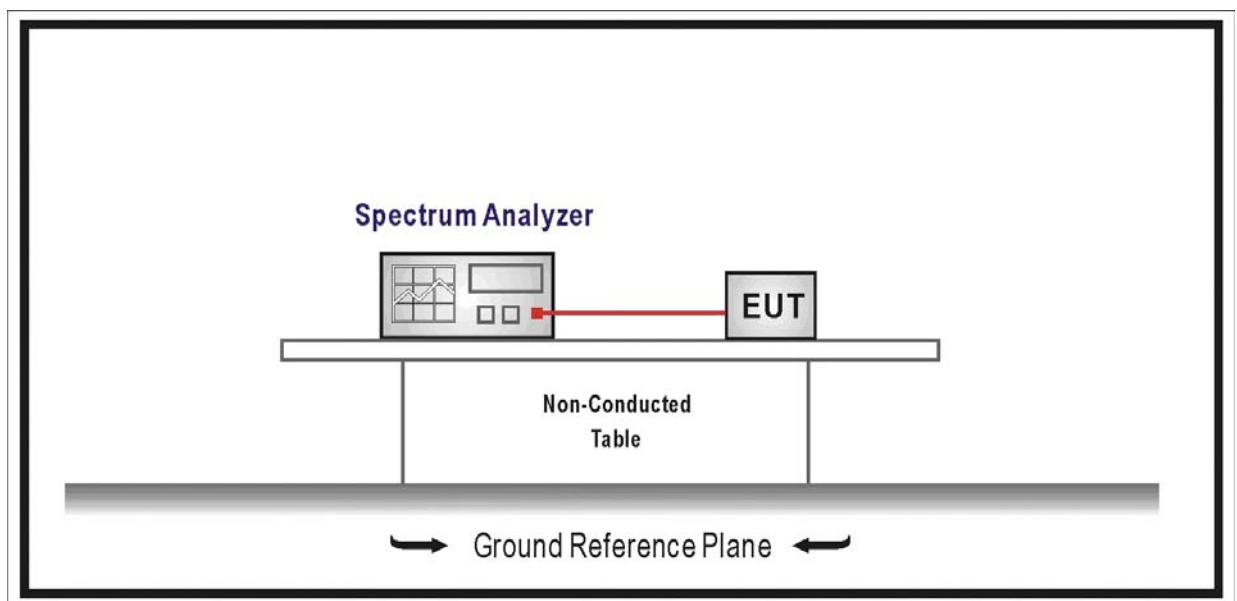
6.1. Test Equipment

26dB Occupied Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

6.2. Test Setup



6.3. Limit

Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency, The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.

6.4. Test Procedure

Set RBW = 10 kHz, VBW = 30 kHz, Span greater than 200 kHz.

6.5. Uncertainty

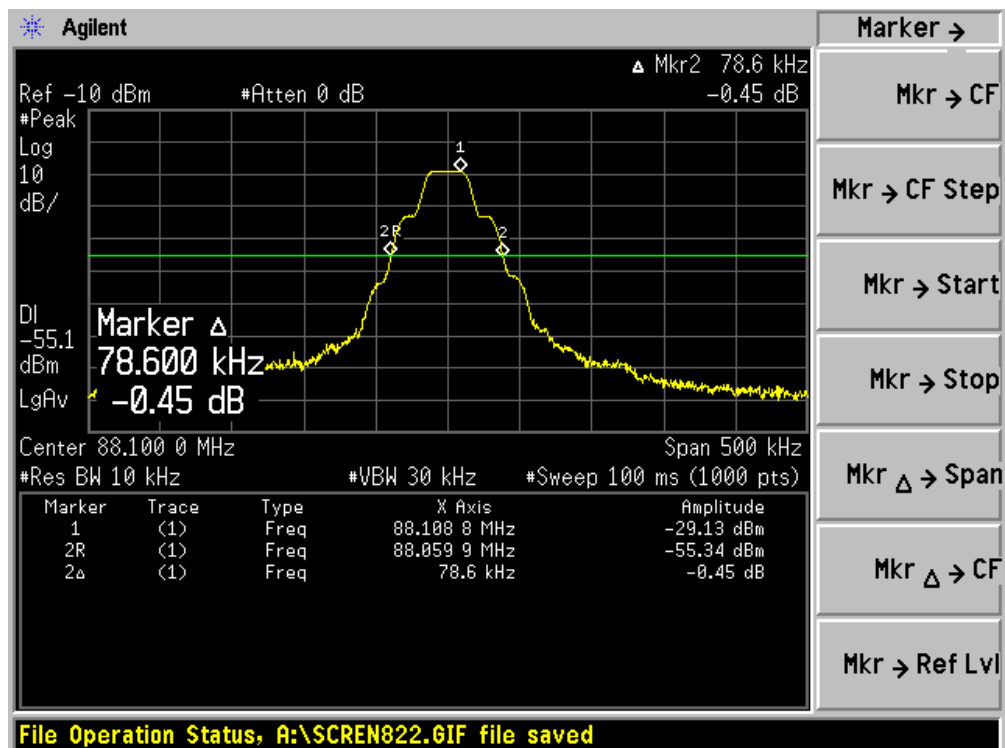
The measurement uncertainty is defined as ± 1 kHz

6.6. Test Result

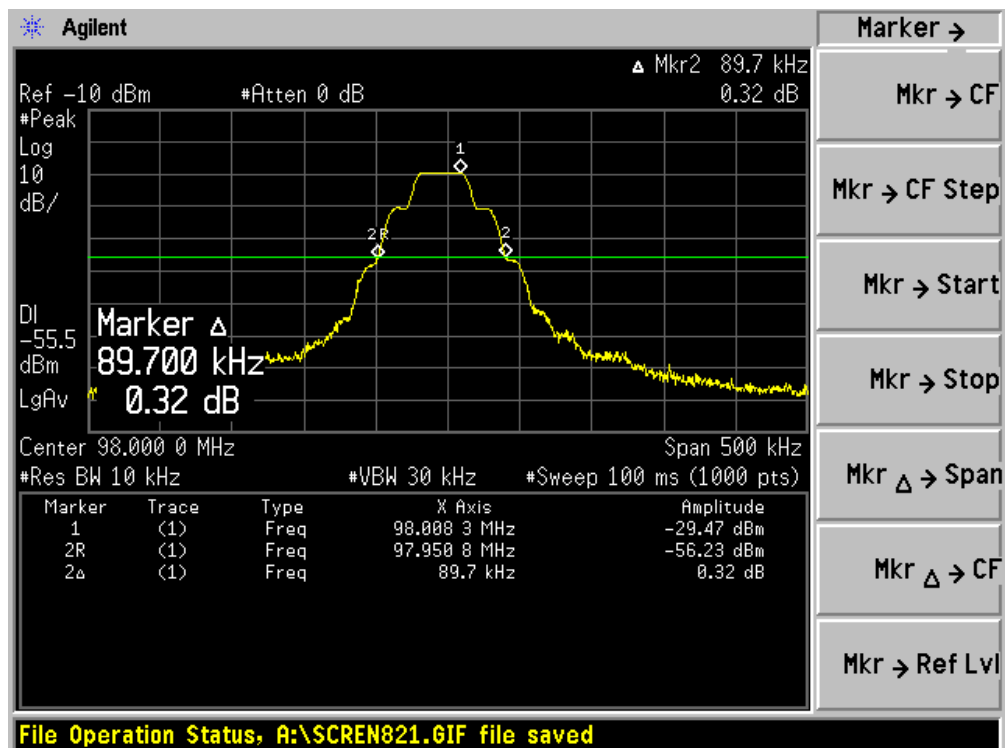
Product	:	Eee PC
Test Item	:	26dB Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit with 1kHz Audio Signal

Frequency (MHz)	26dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
88.1	78.6	200	Pass
98.0	89.7	200	Pass
107.9	121.3	200	Pass

Low (88.1MHz)



Middle (98MHz)



High (107.9MHz)

