

FCC PART 15 TEST REPORT

For

ddung MP3

FCC ID: XIBK233

Brand: ddung C seol

Report No.: AGC11080906SZ05-1E5

Date of Issue: Jun.23, 2009

Prepared For

SOLOMON.YOU COMPANY LIMITED

FLAT/RM. 1502, 15/F YUEXIU BUILDING 160-714

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1. VERIFICATION OF COMPLIANCE

Equipment Under Test:	ddung MP3
Model Name:	K233-D, K233-B, SD-001, SD-002, SD-003, SD-004,SD-005, SD-006, SD-007, SD-008, SD-009, SD-010, SD-011,SD-012, SD-013, SD-014, SD-015, SD-016, SD-017, SD-018,SD-019, SD-020, SD-021, SD-022, SD-023, SD-024
Model Difference:	K233-D is the main model, K233-B is different from K233-D in the expression in Face, the differences between K233-D and (SD-001~SD-024) lie in the Hairstyle, the differences of SD-001~SD-024 are the clothing style, face's expression and hairstyle.
Applicant:	SOLOMON.YOU COMPANY LIMITED FLAT/RM. 1502, 15/F YUEXIU BUILDING 160-714, LOCKHART ROAD, WAN CHAI, HK
Manufacturer:	DONG GUAN LUNG CHEONG TECHNOLOGY CO.,LTD. Qiaoli Industrial District, Chang Huang Road, Hang Ping Town, Dong Guan City, Guang Dong Province, China
Type of Test:	FCC Class B
Measurement Procedure:	ANSI C63.4: 2003
File Number:	AGC11080906SZ05-1E5
Date of test:	Jun.11~Jun.23, 2009
Deviation:	None
Condition of Test Sample:	Normal

The above equipment was tested by Attestation Of Global Compliance Co., Ltd. For compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2003 This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Checked By :

Tony Tian

Tony Tian

Jun.23, 2009

Authorized By :

King Zhang

King Zhang

Jun.23, 2009

2. PRODUCT INFORMATION

Housing Type: Plastic

Rating Voltage: DC 5V

I/O Port Information (☒Applicable ☐Not Applicable)

I/O Port of EUT			
I/O Port Type	Q'TY	Cable	Tested with
USB PORT	1	1	1
EARPHONE PORT	1	0	1

3. TEST FACILITY

Location: 1-2/F, Dachong Keji Building, No.28 of Tonggu Road, Nanshan District.

Description: There is one 3m semi-anechoic chamber for final test, the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4 and CISPR 22/EN 55022 requirements.

Site Filing: Accredited by TUV Rheinland Shenzhen, May 10, 2004
FCC register No.: 276008 and IC register No.: 7700A-1

Instrument All measuring equipment is in accord with ANSI C63.4 requirements that meet industry
Tolerance: regulatory agency and accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For radiated emission test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	SAMSUNG	301	N/A	--	--
LCD	SAMSUNG	2494LW	N/A	--	--
MOUSE	TCL	HE72114A	N/A	1.5 M	--
Keyboard	gothink	HA5423	N/A	1.5 M	--

****Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

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

5. SYSTEM DESCRIPTION

EUT test procedure:

1. Connect EUT and peripheral devices (if need).
2. Power on the EUT, the EUT begins to work.
3. Make sure the EUT operates normally during the test.

MODE1: USB-PC

MODE2: PLAYING MUSIC WITHOUT EARPHONE

MODE3: PLAYING MUSIC WITH EARPHONE

6. FCC LINE CONDUCTED EMISSION TEST

6.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESCS30	--	04/16/2009	04/15/2010
LISN	AFJ	LS16	--	04/16/2009	04/15/2010

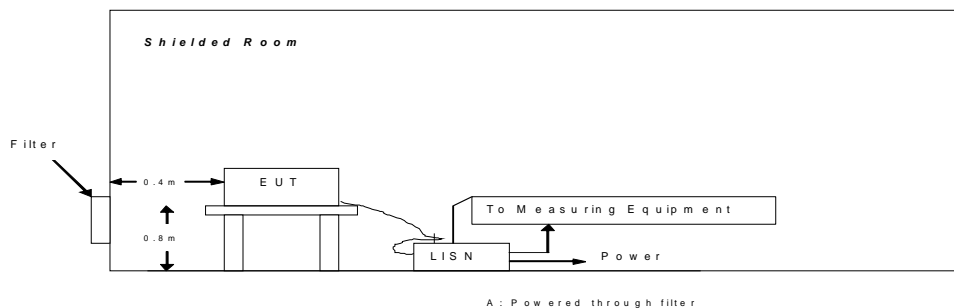
6.2 .LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

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

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

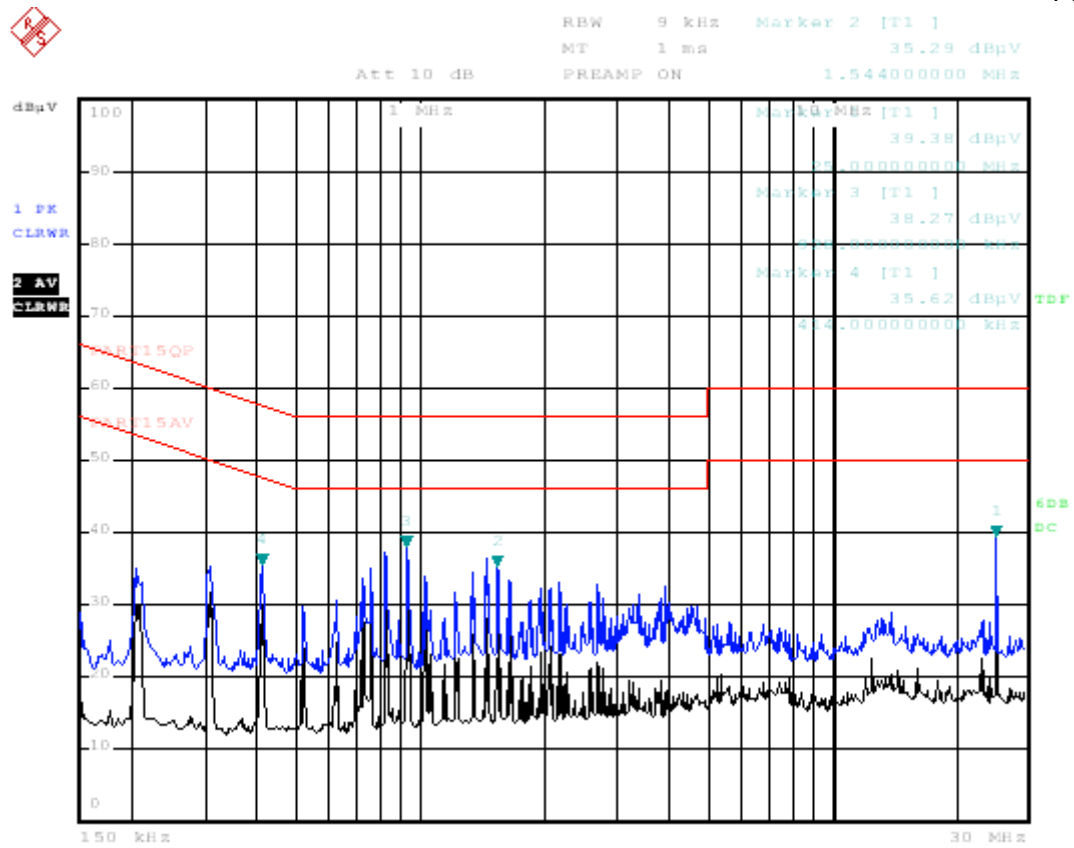
6.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



6.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1) The equipment was set up as per the test configuration to simulate typical actual 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 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V by PC power through a Line Impedance Stabilization Network (LISN) that was grounded to the protect earth.
- 5) All support equipments received AC120V power from a second LISN, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- 10) 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. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 11) The test data of the worst case condition(s) was reported on the Summary Data page.

Date: 17.Jun.2009 11:39:47



K233-D-L

Date: 17.Jun.2009 11:42:47

7. FCC RADIATED EMISSION TEST

7.1. TEST EQUIPMENT OF RADIATED EMISSION

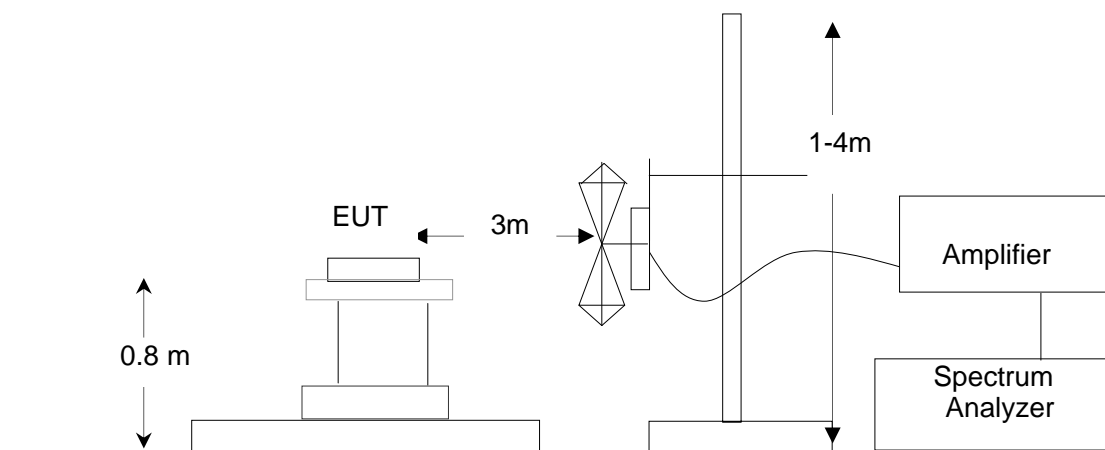
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI test receiver	R&S	ESCS30	100343	04/16/2009	04/15/2010
Amplifier	H.P.	HP8447E	2945A02715	04/16/2009	04/15/2010
Antenna	Sunol Sciences Corp.	JB3	A021907	04/16/2009	04/15/2010
CABLE	TIME MICROWAVE	LMR-400	N/A	06/29/2008	06/28/2009

7.2. LIMITS OF RADIATED EMISSION TEST

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ Q.P.)
30~88	3	40.0
88~216	3	43.5
216~960	3	46.0
Above 960	3	54.0

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

7.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST



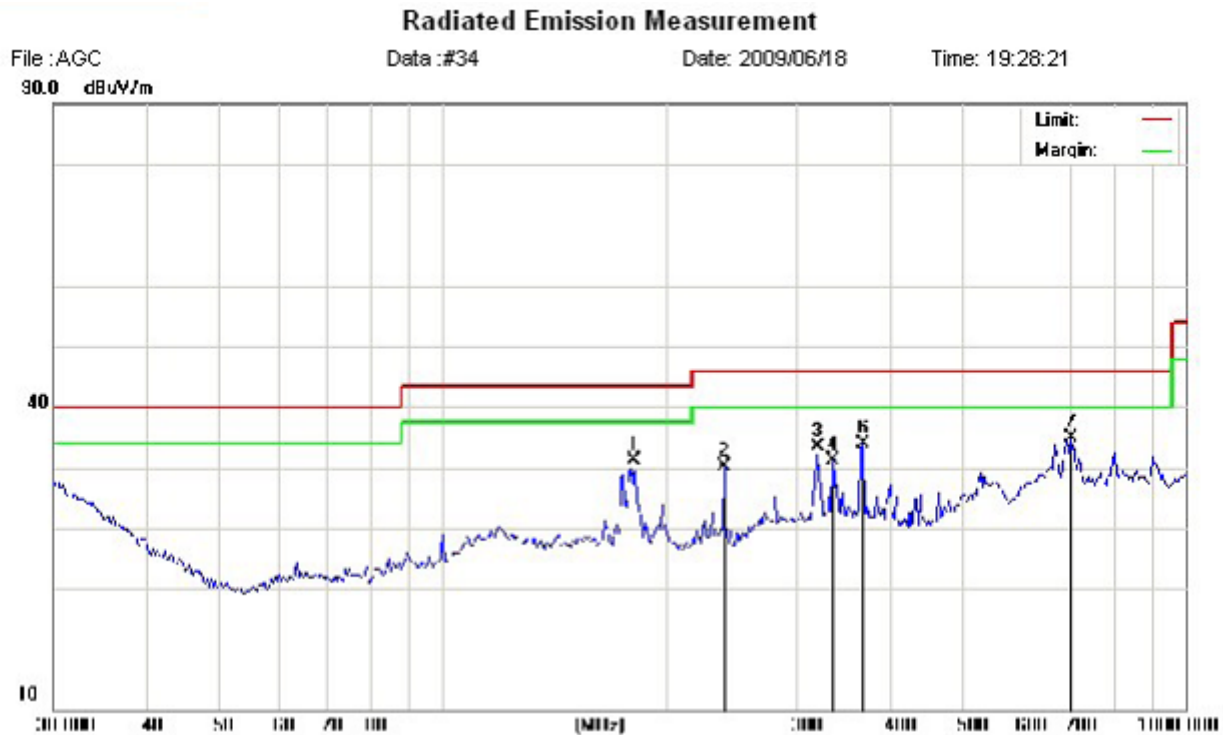
7.4 PROCEDURE OF RADIATED EMISSION TEST

- 1) The equipment was set up as per the test configuration to simulate typical actual 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 as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V from the USB. All support equipments received AC 120V/60Hz power from socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. 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.
- 7) The test mode(s) were scanned during the test:
- 8) Recorded 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 Q.P./Peak reading is presented.

The test data was reported on the Summary Data page.

7.5 TEST RESULT OF RADIATED EMISSION TEST

MODE1: USB-PC



Site 966 Chamber #1

Polarization: *Horizontal*

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N:

Mode:

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		181.1693	39.12	-7.95	31.17	43.50	-12.33	peak		
2		239.9442	36.54	-6.30	30.24	46.00	-15.76	peak		
3		319.5776	35.70	-2.37	33.33	46.00	-12.67	peak		
4		336.1560	34.05	-3.01	31.04	46.00	-14.96	peak		
5		367.7808	36.63	-2.66	33.97	46.00	-12.03	peak		
6		367.7808	36.63	-2.66	33.97	46.00	-12.03	peak		
7	*	701.8557	31.16	3.80	34.96	46.00	-11.04	peak		

Radiated Emission Measurement

File :AGC

Data :#35

Date: 2009/06/18

Time: 19:30:30

90.0 dBuV/m



Site 966 Chamber #1

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N:

Mode:

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		166.5241	35.02	-6.64	28.38	43.50	-15.12	peak			
2		179.1446	38.55	-7.74	30.81	43.50	-12.69	peak			
3		198.2133	37.18	-6.74	30.44	43.50	-13.06	peak			
4		365.7199	36.11	-1.22	34.89	46.00	-11.11	peak			
5		803.1933	29.76	5.85	35.61	46.00	-10.39	peak			
6	*	898.7322	29.74	6.79	36.53	46.00	-9.47	peak			

MODE2: PLAYING MUSIC WITHOUT EARPHONE**Radiated Emission Measurement**

File : AGC6-15

Data : #7

Date: 2009-6-15

Time: 15:12:36

90.0 dBuV/m



Site 966 Chamber #1

Polarization: *Horizontal*

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: MP3

Mode: PLAYING MUSIC

Note: WITHOUT EARPHONE

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	30.1691	22.63	4.78	27.41	40.00	-12.59	peak			
2		68.5293	23.45	-11.32	12.13	40.00	-27.87	peak			
3		113.6377	24.02	-5.02	19.00	43.50	-24.50	peak			
4		205.0104	24.60	-6.62	17.98	43.50	-25.52	peak			
5		285.6051	24.08	-2.87	21.21	46.00	-24.79	peak			
6		355.5871	25.05	-2.73	22.32	46.00	-23.68	peak			

Radiated Emission Measurement

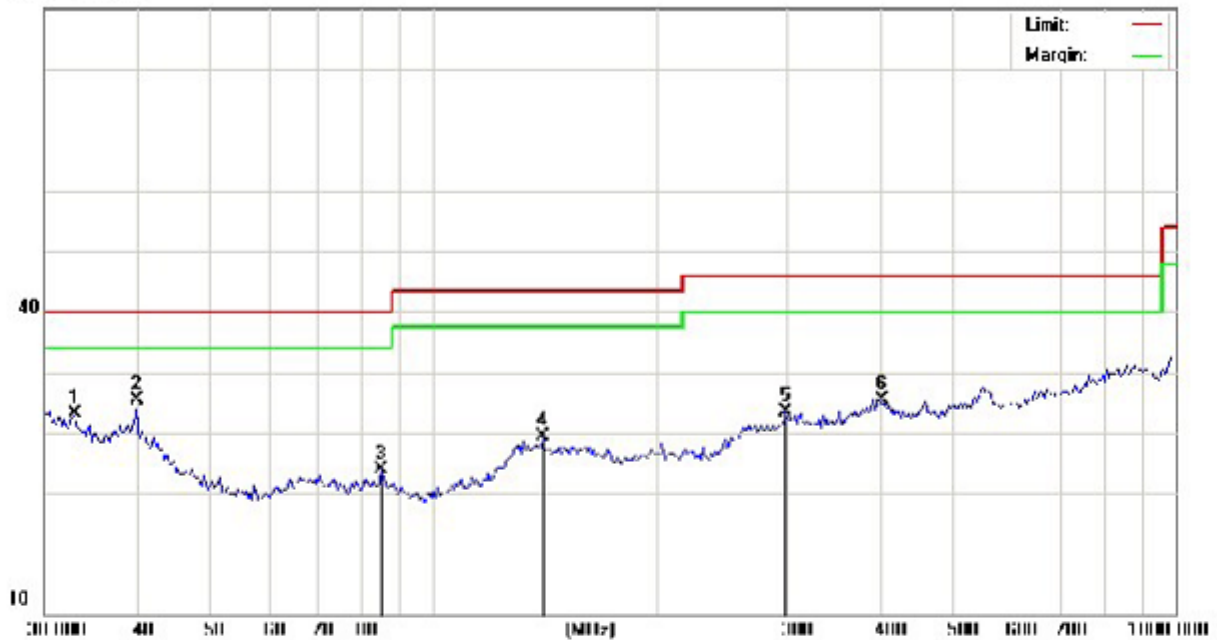
File : AGC6-15

Data : #8

Date: 2009-6-15

Time: 15:13:53

90.0 dBuV/m



Site 966 Chamber #1

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: MP3

Mode: PLAYING MUSIC

Note: WITHOUT EARPHONE

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		33.0073	24.33	-1.15	23.18	40.00	-16.82	peak			
2	*	39.9565	27.08	-1.74	25.34	40.00	-14.66	peak			
3		85.3210	24.46	-10.66	13.80	40.00	-26.20	peak			
4		140.6895	24.86	-5.51	19.35	43.50	-24.15	peak			
5		298.7378	24.67	-1.39	23.28	46.00	-22.72	peak			
6		402.3808	24.22	1.14	25.36	46.00	-20.64	peak			

MODE3: PLAYING MUSIC WITH EARPHONE

Radiated Emission Measurement

File : AGC6-15
90.0 dBuV/m

Data : #6

Date: 2009-6-15

Time: 15:10:41



Site 966 Chamber #1

Polarization: *Horizontal*

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: MP3

Mode: PLAYING MUSIC

Note: WITH EARPHONE

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		166.5241	41.76	-6.84	34.92	43.50	-8.58	peak		
2	*	293.7438	46.17	-3.27	42.90	46.00	-3.10	peak		

Radiated Emission Measurement

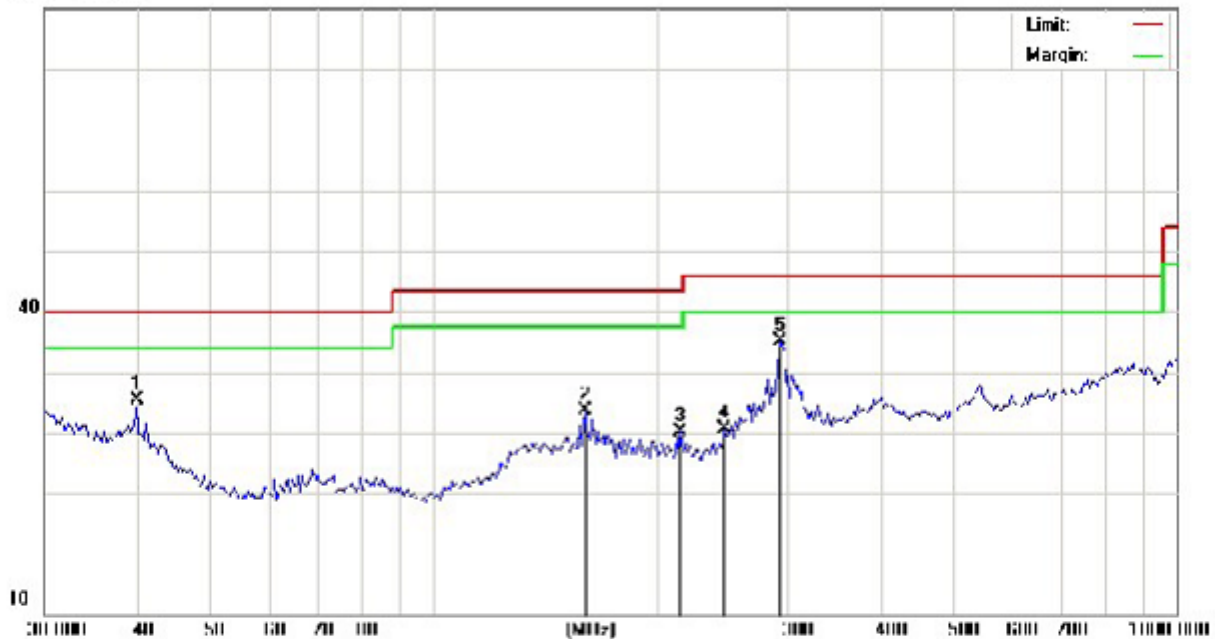
File :AGC6-15

Data :#5

Date: 2009-6-15

Time: 15:09:24

90.0 dBuV/m



Site 966 Chamber #1

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part15 RE-Class B_30-1000MHz

Power:

Humidity: 60 %

EUT:

Distance: 3m

M/N: MP3

Mode: PLAYING MUSIC

Note: WITH EARPHONE

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		39.9565	27.05	-1.74	25.31	40.00	-14.69	peak		
2		160.1008	29.32	-5.62	23.70	43.50	-19.80	peak		
3		215.6456	27.13	-6.96	20.17	43.50	-23.33	peak		
4		246.7816	26.47	-5.92	20.55	46.00	-25.45	peak		
5	*	293.7438	37.35	-2.16	35.19	46.00	-10.81	peak		

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

FCC Line Conducted Emission Test Setup



FCC Radiated Emission Test Setup



APPENDIX 2 EXTERNAL PHOTOGRAPHS OF EUT

All View of EUT



Front View of EUT



Back View of EUT



Left View of EUT



Right View of EUT



Up View of EUT



Down View of EUT



APPENDIX 3 INTERNAL PHOTOGRAPHS OF EUT

Internal View of EUT-1



Internal View of EUT-2



---END OF REPORT---