

**DIGITAL EMC CO., LTD.**

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<http://www.digitalemcc.com>**CERTIFICATION OF COMPLIANCE****LG Electronics USA.**

1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States

Dates of Tests: February 25 ~ March 03, 2010

Test Report S/N: DR50111003E

Test Site : DIGITAL EMC CO., LTD.

FCC ID

BEJHX300GJE

APPLICANT

LG Electronics USA.

Purpose	:	Original Grant
FCC Equipment Class	:	Low Power Communication Device Transmitter(DXX)
Device name	:	DLP PROJECTOR
Manufacturer	:	LG Electronics Inc.
FCC ID	:	BEJHX300GJE
Model name	:	HX300G-JE
Test Device Serial number	:	Identical prototype
FCC Rule Part(s)	:	FCC Part 15.239 Subpart C ANSI C-63.4-2003
Frequency Range	:	88.5 ~ 95.5 MHz
Data of issue	:	March 4, 2010

The Test results relate only to the tested sample. It is not allowed to copy this report even partly without the allowance of DIGITAL EMC CO., LTD.

TABLE OF CONTENTS

1. GENERAL INFORMATION	3
2. EQUIPMENT INFORMATION	4
2.1 EQUIPMENT DESCRIPTION	4
2.2 ANCILLARY EQUIPMENT	4
3. INFORMATION ABOUT TEST ITEMS	5
3.1 TESTED FREQUENCY	5
3.2 TESTED ENVIRONMENT	5
3.3 AXUIILIARYEQUIPMENT	5
3.4 EMI SUPPRESSION DEVICE(S)/MODIFICATION	5
4. TEST REPORT	6
4.1 SUMMARY OF TESTS	6
4.2 FIELD STRENGTH OF FUNDAMENTAL AND EMISSIONS WITHIN PERMITTED BAND ---	7
4.3 RADIATED EMISSIONS	10
4.4 OCCUPIED CHANNEL BANDWIDTH	20
4.5 AC CONDUCTED EMISSIONS	28
4.6 ANTENNA REQUIREMENTS	35
APPENDIX TEST EQUIPMENT USED FOR TESTS	36

1. General information

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

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Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

Tested by: *Manager*

March 4, 2010

Won-Jung, Lee



Date

Name

Signature

Reviewed by: *Technical Director*

March 4, 2010

Harvey Sung



Date

Name

Signature

Applicant:

Company name : LG Electronics USA.

Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States

Date of order : January 31, 2010

2. Equipment information

BEJHX300GJE

2.1 Equipment description

Equipment model no.	HX300G-JE
Equipment serial no.	Identical prototype
Type of equipment	DLP PROJECTOR
Frequency band	88.5MHz ~ 95.5MHz
Channel spacing	200kHz
Type of Modulation	FM
Power	AC Adapter: 120V / 60Hz
Type of antenna	PCB Pattern Antenna



2.2 Ancillary equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
AC/DC Adapter	PA-1121-04	9Y00062503	DONGGUANG LITE PWER 2nd PLANT	-
-	-	-	-	-

3. Information about test items

BEJHX300GJE

3.1 Tested frequency

Frequency	TX	RX
Lowest frequency	88.5MHz	-
Middle frequency	92.1MHz	-
Highest frequency	95.5MHz	-

3.2 Tested environment

Temperature	: 20 ~ 24 (°C)
Relative humidity content	: 34 ~ 41 % R.H
Air pressure	: 86 ~ 103 kPa
Details of power supply	: AC 120V 60Hz

3.3 Test mode

Test Case 1	HDMI mode
Test Case 2	Audio in mode
Test Case 2	USB mode

3.3 Auxiliary equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
HDMI Cable	N/A	N/A	N/A	2.07m
Audio Cable	N/A	N/A	N/A	0.9m
DSUB Cable	N/A	N/A	N/A	1.5m
USB memory	XTICK	N/A	LG Electronics Inc.	DoC
NOTEBOOK	R410-L.A241L	904QTQM019228	LG Electronics Inc.	DoC
MOUSE	MOCO5UO	HOFOOJYN	DELL	DoC

3.4 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing

→ None

4. Test Report

4.1 Summary of tests

FCC Part Section(s)	Parameter	Limit	Test Condition	Status Note 1
I. Test Items				
15.239	Field Strength of Fundamental and Emissions within permitted band	< 250 uV/m @ 3m	Radiated	C
15.209	Radiated Emission	< FCC 15.209 limits		C
15.239	Occupied channel bandwidth	< 200kHz		C
				C
15.207	AC Conducted Emissions	EN 55022	AC Line Conducted	C
15.203	Antenna Requirements	FCC 15.203	-	C
Note 1: C=Comply NC=Not Comply NT=Not Tested NA=Not Applicable Note 2: The JBP(Computing device peripheral) portion was tested and approved by FCC DoC Procedure.				

The sample was tested according to the following specification:

ANSI C-63.4-2003

4.2 Field Strength of Fundamental and Emissions within permitted band.

Procedure:

The field strength of emissions from intentional radiators operated within the bands 88.5 ~ 95.5MHz was measured in accordance with FCC Part §15.239. The test set-up was made according to ANSI C 63.4:2003.

The EUT was placed on a 0.8m high wooden table inside a shielded semi-anechoic chamber.

An antenna was placed at 3m distance from EUT and measurements of frequencies and amplitudes of field strengths were recorded.

Type of Test	: Low Power Communication Device Transmitter
FCC ID	: BEJHX300GJE
Operating Condition	: Transmit the rock song

Measurement Data: **Complies**

Note 1: See next pages for actual measured data.

Minimum Standard:

The maximum Field Strength authorized within 200kHz is 250 uV/m@3m
--

Measurement Data:**Test Case 1**

Frequency [MHz]	Detector Mode	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
88.5	PK	H	56.6	8.8	1.3	22.7	44.0	68.0	24.0
88.5	AV	H	55.0	8.8	1.3	22.7	42.4	48.0	5.6
92.1	PK	H	57.9	9.4	1.4	22.7	46.0	68.0	22.0
92.1	AV	H	56.0	9.4	1.4	22.7	44.1	48.0	3.9
95.5	PK	H	56.5	10.0	1.4	22.7	45.2	68.0	22.8
95.5	AV	H	54.3	10.0	1.4	22.7	43.0	48.0	5.0

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp gain

Margin = Limit – Level

Test Case 2

Frequency [MHz]	Detector Mode	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
88.5	PK	H	57.8	8.8	1.3	22.7	45.2	68.0	22.8
88.5	AV	H	56.4	8.8	1.3	22.7	43.8	48.0	4.2
92.1	PK	H	58.6	9.4	1.4	22.7	46.7	68.0	21.3
92.1	AV	H	56.8	9.4	1.4	22.7	44.9	48.0	3.1
95.5	PK	H	57.4	10.0	1.4	22.7	46.1	68.0	21.9
95.5	AV	H	55.2	10.0	1.4	22.7	43.9	48.0	4.1

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp gain

Margin = Limit – Level

Test Case 3

Frequency [MHz]	Detector Mode	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
88.5	PK	H	58.0	8.8	1.3	22.7	45.4	68.0	22.6
88.5	AV	H	57.3	8.8	1.3	22.7	44.7	48.0	3.3
92.1	PK	H	58.0	9.4	1.4	22.7	46.1	68.0	21.9
92.1	AV	H	56.6	9.4	1.4	22.7	44.7	48.0	3.3
95.5	PK	H	56.9	10.0	1.4	22.7	45.6	68.0	22.4
95.5	AV	H	55.0	10.0	1.4	22.7	43.7	48.0	4.3

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp gain

Margin = Limit – Level

4.3 Radiated Emissions

Procedure:

The field strength of emissions from intentional radiators operated within the bands 88.5 ~95.5MHz was measured in accordance with FCC Part §15.239. The test set-up was made according to ANSI C 63.4:2003.

The EUT was placed on a 0.8m high wooden table inside a shielded semi-anechoic chamber.

An antenna was placed at 3m distance from EUT and measurements of frequencies and amplitudes of field strengths were recorded.

The spectrum analyzer is set to:

Frequency Range = 30 MHz ~ 10th harmonic.

RBW = 120 kHz (30MHz ~ 1 GHz)

= 1 MHz (1 GHz ~ 10th harmonic)

Trace = max hold

Sweep = auto

Operating Condition: Transmit the rock song.

VBW ≥ RBW

Detector function = Peak/Average (>1GHz)

Receiver Detector = Quasi-Peak(≤1GHz)

Measurement Data: Complies

Note 1: See next pages for actual measured spectrum plots and data.

Minimum Standard: FCC Part 15.209(a)

Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

Measurement Data: Test Case 1

Operating Frequency : 88.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.71	H	40.2	16.1	0.9	22.6	34.6	40.0	5.4
34.09	V	42.3	15.9	0.9	22.6	36.5	40.0	3.5
100.80	H	45.4	10.7	1.4	22.7	34.8	43.5	8.7
107.90	H	46.8	11.1	1.5	22.7	36.7	43.5	6.8
108.00	V	44.4	11.1	1.5	22.7	34.3	43.5	9.2
115.18	V	43.8	11.4	1.5	22.8	33.9	43.5	9.6
192.59	V	47.2	10.7	2.0	23.3	36.6	43.5	6.9
192.60	H	47.5	10.7	2.0	23.3	36.9	43.5	6.6
215.99	V	46.7	11.6	2.1	23.4	37.0	43.5	6.5
237.60	V	47.9	12.6	2.2	23.5	39.2	46.0	6.8
242.10	H	50.0	12.8	2.2	23.5	41.5	46.0	4.5
302.39	H	45.2	14.4	2.6	23.7	38.5	46.0	7.5
591.00	V	41.2	19.1	4.0	24.4	39.9	46.0	6.1
600.69	H	41.3	19.2	4.0	24.4	40.1	46.0	5.9
643.30	V	38.6	19.0	4.1	24.3	37.4	46.0	8.6
671.99	V	40.1	18.9	4.2	24.2	39.0	46.0	7.0
672.00	H	37.3	18.9	4.2	24.2	36.2	46.0	9.8
839.99	H	35.9	19.7	4.7	23.5	36.8	46.0	9.2
960.00	V	36.8	20.7	5.2	23.0	39.7	46.0	6.3

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 1

Operating Frequency : 92.1 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
34.15	V	40.2	15.9	0.9	22.6	34.4	40.0	5.6
61.09	V	45.9	5.9	1.1	22.7	30.2	40.0	9.8
100.80	H	45.8	10.7	1.4	22.7	35.2	43.5	8.3
108.00	V	44.4	11.1	1.5	22.7	34.3	43.5	9.2
115.18	V	43.5	11.4	1.5	22.8	33.6	43.5	9.9
192.59	V	47.0	10.7	2.0	23.3	36.4	43.5	7.1
237.60	V	47.3	12.6	2.2	23.5	38.6	46.0	7.4
240.00	H	49.8	12.7	2.2	23.5	41.2	46.0	4.8
590.67	V	42.8	19.1	4.0	24.4	41.5	46.0	4.5
590.93	H	40.3	19.1	4.0	24.4	39.0	46.0	7.0
643.50	V	39.6	19.0	4.1	24.3	38.4	46.0	7.6
671.99	V	40.3	18.9	4.2	24.2	39.2	46.0	6.8
839.98	H	36.0	19.7	4.7	23.5	36.9	46.0	9.1
960.00	H	39.5	20.7	5.2	23.0	42.4	46.0	3.6

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 1

Operating Frequency : 95.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.81	H	43.1	16.1	0.9	22.6	37.5	40.0	2.5
33.86	V	43.6	16.0	0.9	22.6	37.9	40.0	2.1
100.80	H	45.5	10.7	1.4	22.7	34.9	43.5	8.6
107.99	H	46.1	11.1	1.5	22.7	36.0	43.5	7.5
108.00	V	44.7	11.1	1.5	22.7	34.6	43.5	8.9
115.18	V	43.7	11.4	1.5	22.8	33.8	43.5	9.7
192.59	V	46.8	10.7	2.0	23.3	36.2	43.5	7.3
237.00	V	44.9	12.6	2.2	23.5	36.2	46.0	9.8
241.00	H	50.0	12.8	2.2	23.5	41.5	46.0	4.5
590.00	V	43.0	19.0	4.0	24.4	41.6	46.0	4.4
597.50	H	37.4	19.1	4.0	24.4	36.1	46.0	9.9
636.15	V	40.0	19.0	4.1	24.3	38.8	46.0	7.2
672.00	V	40.1	18.9	4.2	24.2	39.0	46.0	7.0
960.00	H	39.3	20.7	5.2	23.0	42.2	46.0	3.8
960.00	V	35.5	20.7	5.2	23.0	38.4	46.0	7.6

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 2

Operating Frequency : 88.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.84	V	38.5	16.0	0.9	22.6	32.8	40.0	7.2
107.19	V	48.7	11.0	1.5	22.7	38.5	43.5	5.0
107.19	H	49.3	11.0	1.5	22.7	39.1	43.5	4.4
116.14	V	47.8	11.5	1.5	22.8	38.0	43.5	5.5
116.14	H	46.5	11.5	1.5	22.8	36.7	43.5	6.8
125.00	V	46.1	11.9	1.5	22.8	36.7	43.5	6.8
134.00	H	47.3	11.5	1.6	22.9	37.5	43.5	6.0
187.60	V	47.5	10.6	2.0	23.2	36.9	43.5	6.6
214.40	H	52.2	11.6	2.1	23.4	42.5	43.5	1.0
214.40	V	49.4	11.6	2.1	23.4	39.7	43.5	3.8
239.24	H	46.6	12.7	2.2	23.5	38.0	46.0	8.0
398.51	H	45.9	16.5	3.0	24.4	41.0	46.0	5.0
591.00	V	41.3	19.1	4.0	24.4	40.0	46.0	6.0
600.00	H	37.6	19.2	4.0	24.4	36.4	46.0	9.6
671.99	V	40.7	18.9	4.2	24.2	39.6	46.0	6.4

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 2

Operating Frequency : 92.1 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.83	V	37.6	16.1	0.9	24.3	30.3	40.0	9.7
107.20	V	48.4	11.0	1.5	22.0	38.9	43.5	4.6
107.20	H	48.2	11.0	1.5	22.7	38.0	43.5	5.5
116.14	V	47.9	11.5	1.5	22.8	38.1	43.5	5.4
116.14	H	46.6	11.5	1.5	22.8	36.8	43.5	6.7
125.00	V	46.2	11.9	1.5	22.8	36.8	43.5	6.7
134.00	V	48.4	11.5	1.6	22.9	38.6	43.5	4.9
134.00	H	47.9	11.5	1.6	22.9	38.1	43.5	5.4
187.59	V	47.4	10.6	2.0	23.2	36.8	43.5	6.7
214.00	V	49.0	11.5	2.1	23.4	39.2	43.5	4.3
214.39	H	52.1	11.6	2.1	23.4	42.4	43.5	1.1
238.22	H	46.3	12.7	2.2	23.5	37.7	46.0	8.3
397.20	H	45.2	16.5	3.0	24.3	40.4	46.0	5.6
589.98	V	40.5	19.0	4.0	24.4	39.1	46.0	6.9
595.00	H	41.1	19.1	4.0	24.4	39.8	46.0	6.2
671.98	H	38.6	18.9	4.2	24.2	37.5	46.0	8.5
672.00	V	40.4	18.9	4.2	24.2	39.3	46.0	6.7
960.00	V	35.5	20.7	5.2	23.0	38.4	46.0	7.6

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 2

Operating Frequency : 95.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.86	H	42.8	16.0	0.9	22.6	37.1	40.0	2.9
34.19	V	42.1	15.9	0.9	22.6	36.3	40.0	3.7
61.11	V	45.7	5.9	1.1	22.7	30.0	40.0	10.0
107.19	H	49.2	11.0	1.5	22.7	39.0	43.5	4.5
107.19	V	46.3	11.0	1.5	22.7	36.1	43.5	7.4
116.15	V	47.5	11.5	1.5	22.8	37.7	43.5	5.8
125.04	V	45.0	11.9	1.5	22.8	35.6	43.5	7.9
134.00	V	47.1	11.5	1.6	22.9	37.3	43.5	6.2
134.00	H	45.3	11.5	1.6	22.9	35.5	43.5	8.0
214.39	H	50.6	11.6	2.1	23.4	40.9	43.5	2.6
214.39	V	49.5	11.6	2.1	23.4	39.8	43.5	3.7
241.00	H	48.5	12.8	2.2	23.5	40.0	46.0	6.0
294.76	H	44.3	14.2	2.5	23.7	37.3	46.0	8.7
394.80	H	43.5	16.4	3.0	24.3	38.6	46.0	7.4
588.80	H	40.1	19.0	4.0	24.4	38.7	46.0	7.3
597.71	V	42.4	19.1	4.0	24.4	41.1	46.0	4.9
636.34	H	38.2	19.0	4.1	24.3	37.0	46.0	9.0
671.00	V	39.9	18.9	4.2	24.2	38.8	46.0	7.2
671.99	H	37.7	18.9	4.2	24.2	36.6	46.0	9.4
960.00	H	39.6	20.7	5.2	23.0	42.5	46.0	3.5

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 3

Operating Frequency : 88.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.86	V	38.0	16.0	0.9	22.6	32.3	40.0	7.7
107.19	H	49.5	11.0	1.5	22.7	39.3	43.5	4.2
107.19	V	48.9	11.0	1.5	22.7	38.7	43.5	4.8
116.14	H	46.3	11.5	1.5	22.8	36.5	43.5	7.0
116.15	V	47.6	11.5	1.5	22.8	37.8	43.5	5.7
125.00	V	45.8	11.9	1.5	22.8	36.4	43.5	7.1
133.99	V	48.3	11.5	1.6	22.9	38.5	43.5	5.0
134.99	H	48.0	11.4	1.6	22.9	38.1	43.5	5.4
187.59	H	46.2	10.6	2.0	23.2	35.6	43.5	7.9
187.60	V	47.6	10.6	2.0	23.2	37.0	43.5	6.5
214.39	H	51.6	11.6	2.1	23.4	41.9	43.5	1.6
214.39	V	48.3	11.6	2.1	23.4	38.6	43.5	4.9
239.60	H	46.7	12.7	2.2	23.5	38.1	46.0	7.9
428.75	H	40.8	16.9	3.2	24.4	36.5	46.0	9.5
645.90	V	38.0	19.0	4.1	24.3	36.8	46.0	9.2
671.99	V	40.9	18.9	4.2	24.2	39.8	46.0	6.2
671.99	H	38.6	18.9	4.2	24.2	37.5	46.0	8.5

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 3

Operating Frequency : 92.1 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.60	V	37.9	16.2	0.9	22.6	32.4	40.0	7.6
92.10	V	54.2	9.4	1.4	22.7	42.3	43.5	1.2
107.19	V	48.9	11.0	1.5	22.7	38.7	43.5	4.8
107.20	H	49.6	11.0	1.5	22.7	39.4	43.5	4.1
116.14	H	46.3	11.5	1.5	22.8	36.5	43.5	7.0
116.14	V	47.5	11.5	1.5	22.8	37.7	43.5	5.8
125.05	V	45.8	11.9	1.5	22.8	36.4	43.5	7.1
133.99	V	48.2	11.5	1.6	22.9	38.4	43.5	5.1
134.00	H	48.2	11.5	1.6	22.9	38.4	43.5	5.1
187.59	H	45.9	10.6	2.0	23.2	35.3	43.5	8.2
187.60	V	47.6	10.6	2.0	23.2	37.0	43.5	6.5
214.40	H	51.6	11.6	2.1	23.4	41.9	43.5	1.6
214.40	V	49.7	11.6	2.1	23.4	40.0	43.5	3.5
241.58	H	46.8	12.8	2.2	23.5	38.3	46.0	7.7
294.80	H	45.4	14.2	2.5	23.7	38.4	46.0	7.6
428.80	H	42.0	16.9	3.2	24.4	37.7	46.0	8.3
646.00	V	37.6	19.0	4.1	24.3	36.4	46.0	9.6
671.99	V	40.3	18.9	4.2	24.2	39.2	46.0	6.8
671.99	H	38.7	18.9	4.2	24.2	37.6	46.0	8.4

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

Measurement Data: Test Case 3

Operating Frequency : 95.5 MHz
 Measurement Distance : 3 Meters

Frequency [MHz]	Pol	Reading Level [dBuV]	Ant Factor [dB/m]	Cable Loss [dB]	Preamp Gain [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]
33.24	H	35.5	16.4	0.8	22.6	30.1	40.0	9.9
34.17	V	38.8	15.9	0.9	22.6	33.0	40.0	7.0
107.20	V	49.5	11.0	1.5	22.7	39.3	43.5	4.2
107.20	H	49.4	11.0	1.5	22.7	39.2	43.5	4.3
116.15	V	47.6	11.5	1.5	22.8	37.8	43.5	5.7
116.15	H	46.2	11.5	1.5	22.8	36.4	43.5	7.1
125.05	V	45.7	11.9	1.5	22.8	36.3	43.5	7.2
134.00	H	47.3	11.5	1.6	22.9	37.5	43.5	6.0
134.00	V	48.2	11.5	1.6	22.9	38.4	43.5	5.1
187.60	V	47.2	10.6	2.0	23.2	36.6	43.5	6.9
214.40	H	52.4	11.6	2.1	23.4	42.7	43.5	0.8
214.40	V	49.3	11.6	2.1	23.4	39.6	43.5	3.9
242.48	H	46.5	12.9	2.2	23.5	38.1	46.0	7.9
428.81	H	41.5	16.9	3.2	24.4	37.2	46.0	8.8
671.99	H	38.5	18.9	4.2	24.2	37.4	46.0	8.6
671.99	V	40.4	18.9	4.2	24.2	39.3	46.0	6.7
960.06	H	41.1	20.7	5.2	23.0	44.0	54.0	10.0

Note 1: Field Strength Calculation

Level = Read Level + ANT Factor + Cable Loss – Preamp Gain

Margin = Limit - Level

Note 2: Up to the 10th harmonics of fundamental were investigated according to 15.239 and the worst-case emissions are reported.

Note 3: No other spurious and harmonic were detected at level greater than 10dB below limit.

4.4 Occupied channel bandwidth

Procedure:

The occupied channel Bandwidth is defined as the minimum declared bandwidth within which the transmitter's necessary bandwidth can be contained. The transmitter was adjusted to work at the selected channels. The occupied channel BW was measured at an amplitude level reduced from the reference level by the 26dB.

The plot is taken at 30kHz/division frequency span, 10kHz resolution bandwidth and 10dB/division amplitude logarithmic display from a spectrum analyzer.

The spectrum analyzer is set to:

Center Frequency = The highest, middle and the lowest channels

RBW = 10 kHz

Trace = max hold

Sweep = auto

Operating Condition: Transmit the rock song.

$VBW \geq RBW$

Detector function = Peak

Span = 500 kHz

Measurement Data: **Comple**

Note 1: See next pages for actual measured spectrum plots and data.

Minimum Standard:

Occupied Bandwidth < 200kHz.

Measurement Data:**Test Case 1**

Frequency [MHz]	Test Results	
	Measured Bandwidth [kHz]	Result
88.5	178.37	Comply
92.1	182.69	Comply
95.5	175.96	Comply

Test Case 2

Frequency [MHz]	Test Results	
	Measured Bandwidth [kHz]	Result
88.5	188.46	Comply
92.1	189.90	Comply
95.5	189.90	Comply

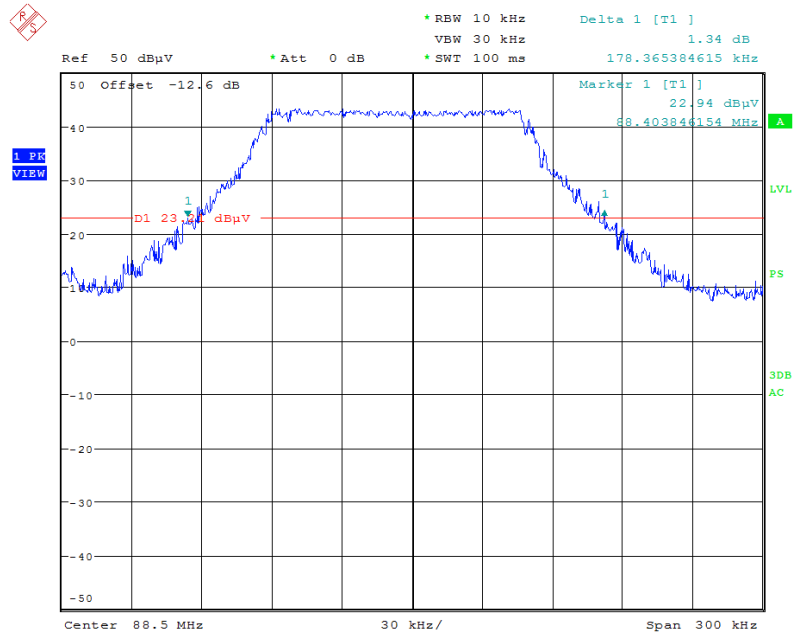
Test Case 3

Frequency [MHz]	Test Results	
	Measured Bandwidth [kHz]	Result
88.5	169.23	Comply
92.1	167.31	Comply
95.5	177.40	Comply

- See next pages for actual measured spectrum plots.

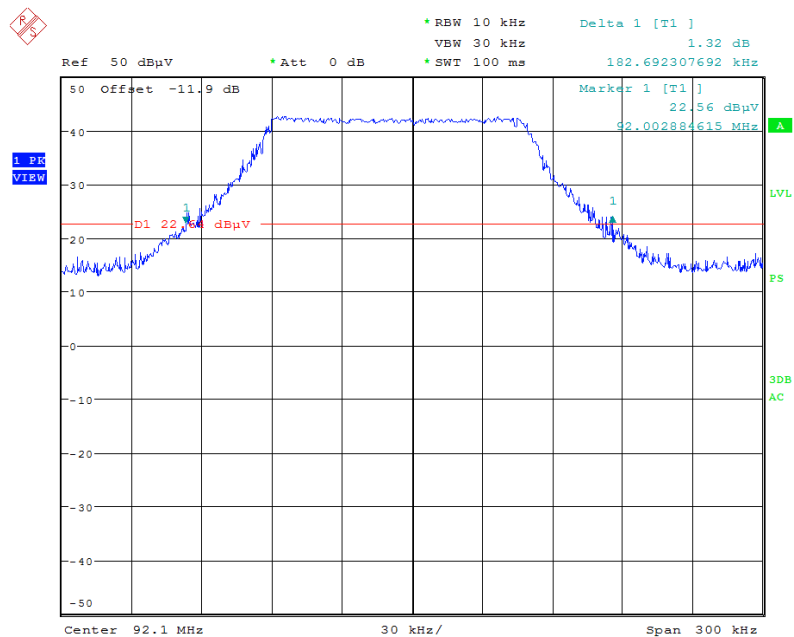
Occupied Channel Bandwidth plot

▪ Test Case 1 & 88.5MHz



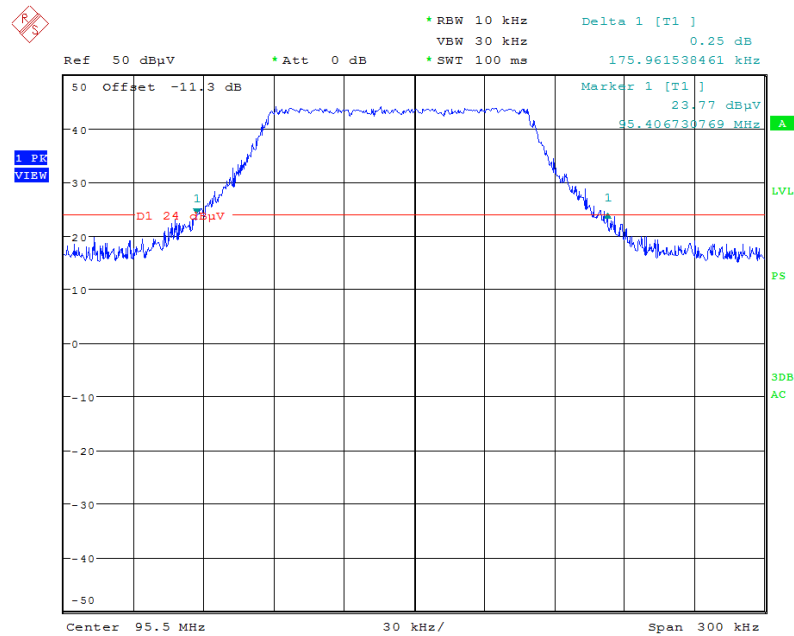
Occupied Channel Bandwidth plot

▪ Test Case 1 & 92.1MHz



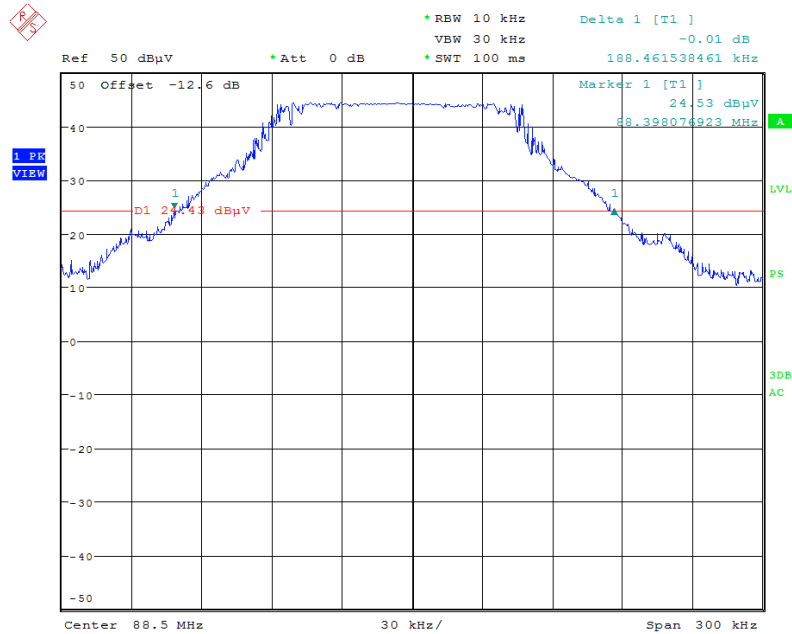
Occupied Channel Bandwidth plot

▪ Test Case 1 & 95.5MHz



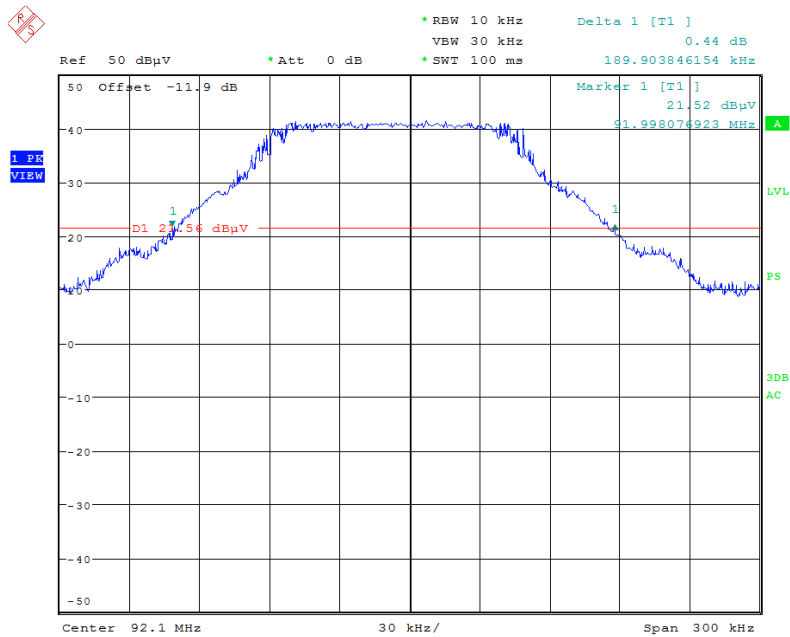
Occupied Channel Bandwidth plot

▪ Test Case 2 & 88.5MHz



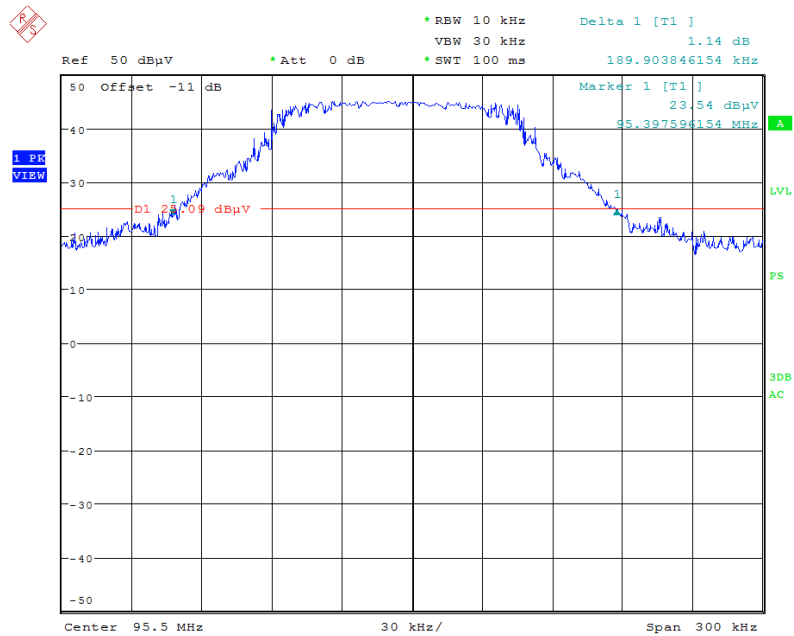
Occupied Channel Bandwidth plot

▪ Test Case 2 & 92.1MHz



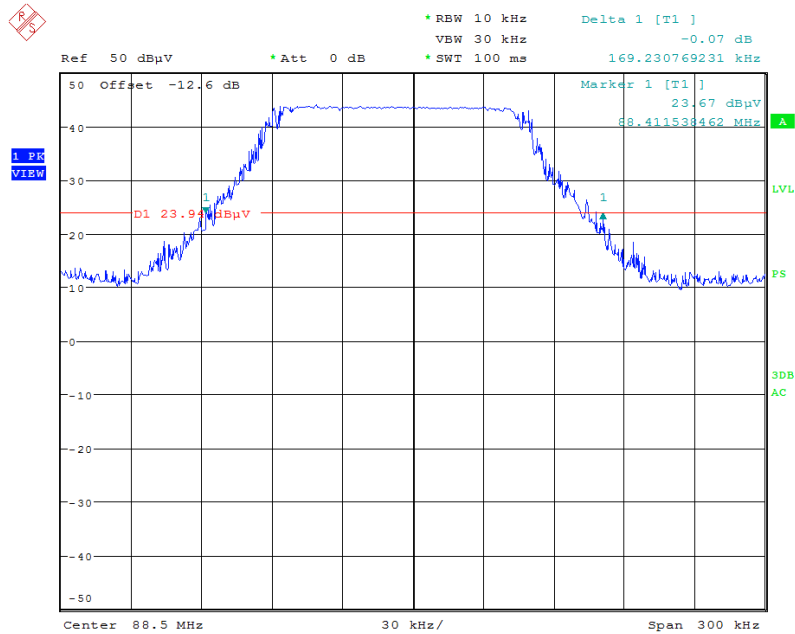
Occupied Channel Bandwidth plot

▪ Test Case 2 & 95.5MHz



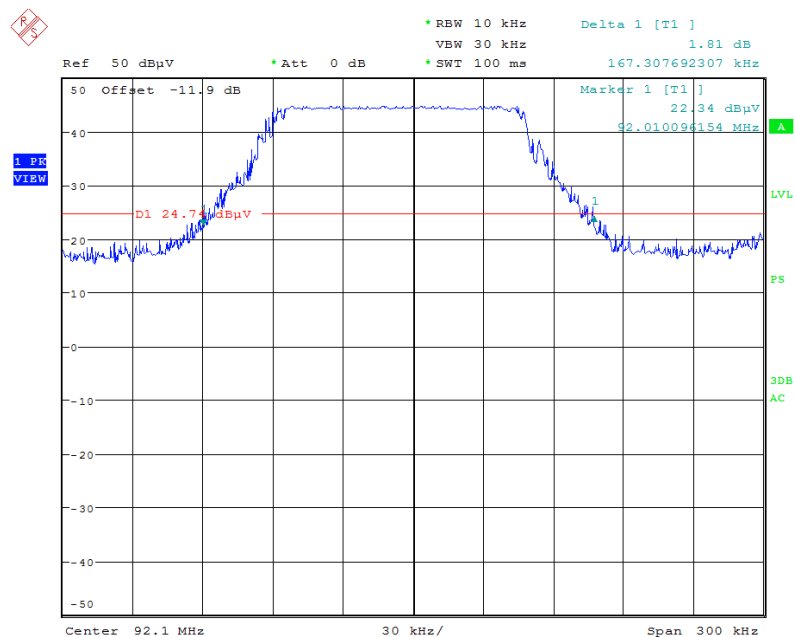
Occupied Channel Bandwidth plot

▪ Test Case 3 & 88.5MHz



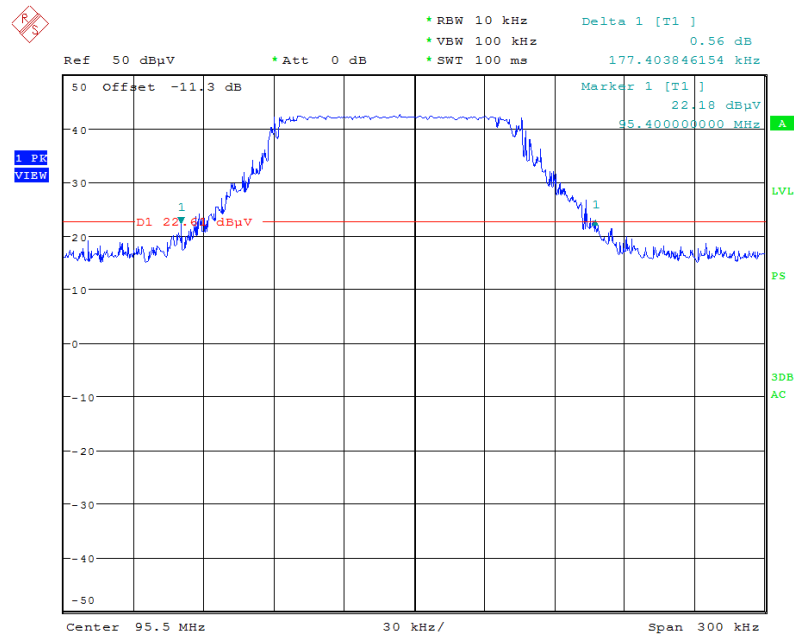
Occupied Channel Bandwidth plot

▪ Test Case 3 & 92.1MHz



Occupied Channel Bandwidth plot

▪ Test Case 3 & 95.5MHz



4.5 AC Conducted Emissions

Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its normal operating function. Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

Measurement Data: **Comply**

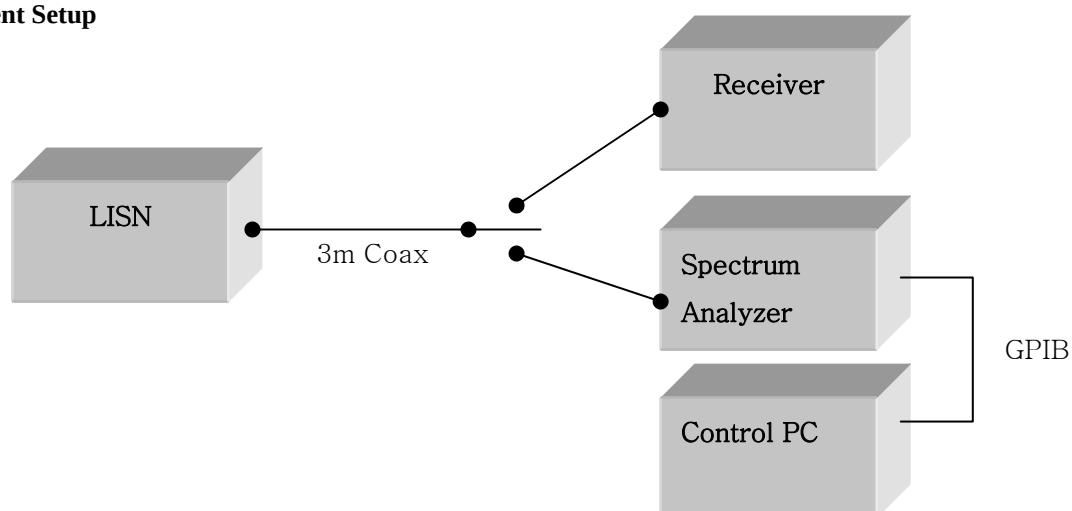
Note 1: See next pages for actual measured spectrum plots and data.

Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

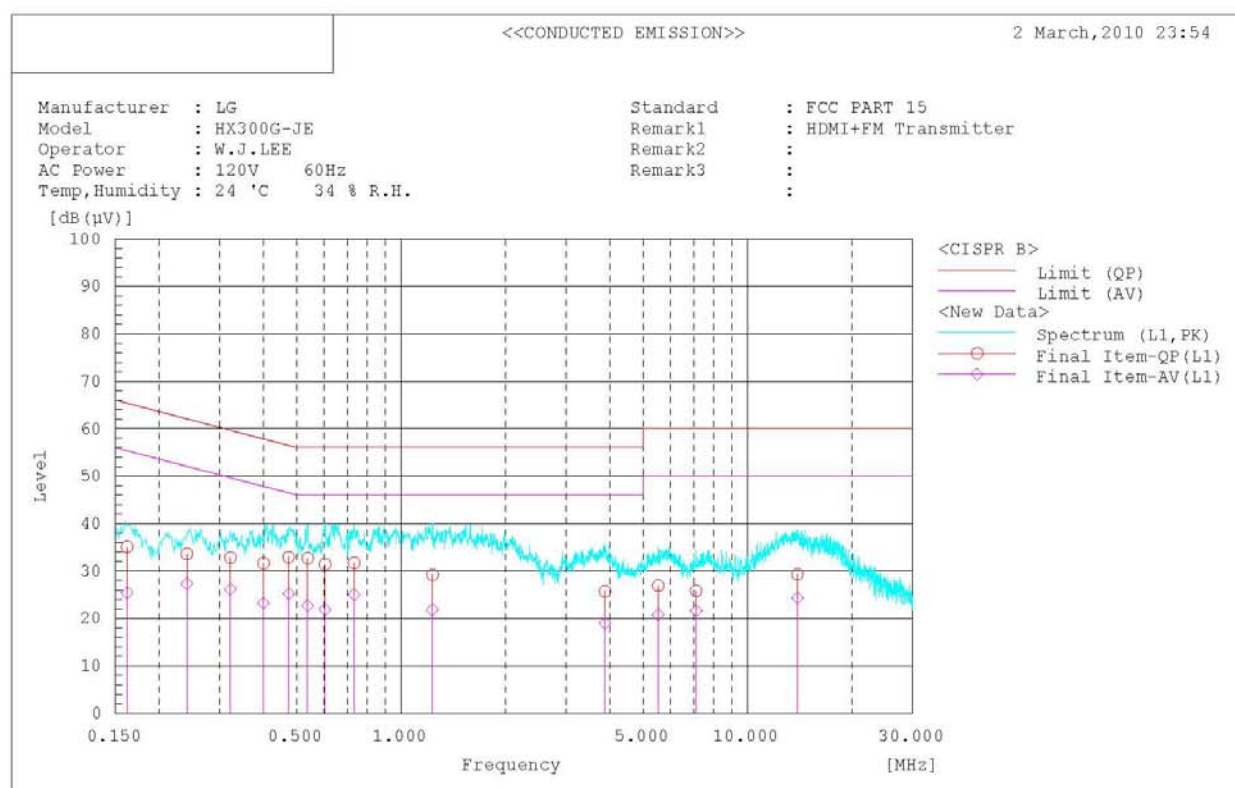
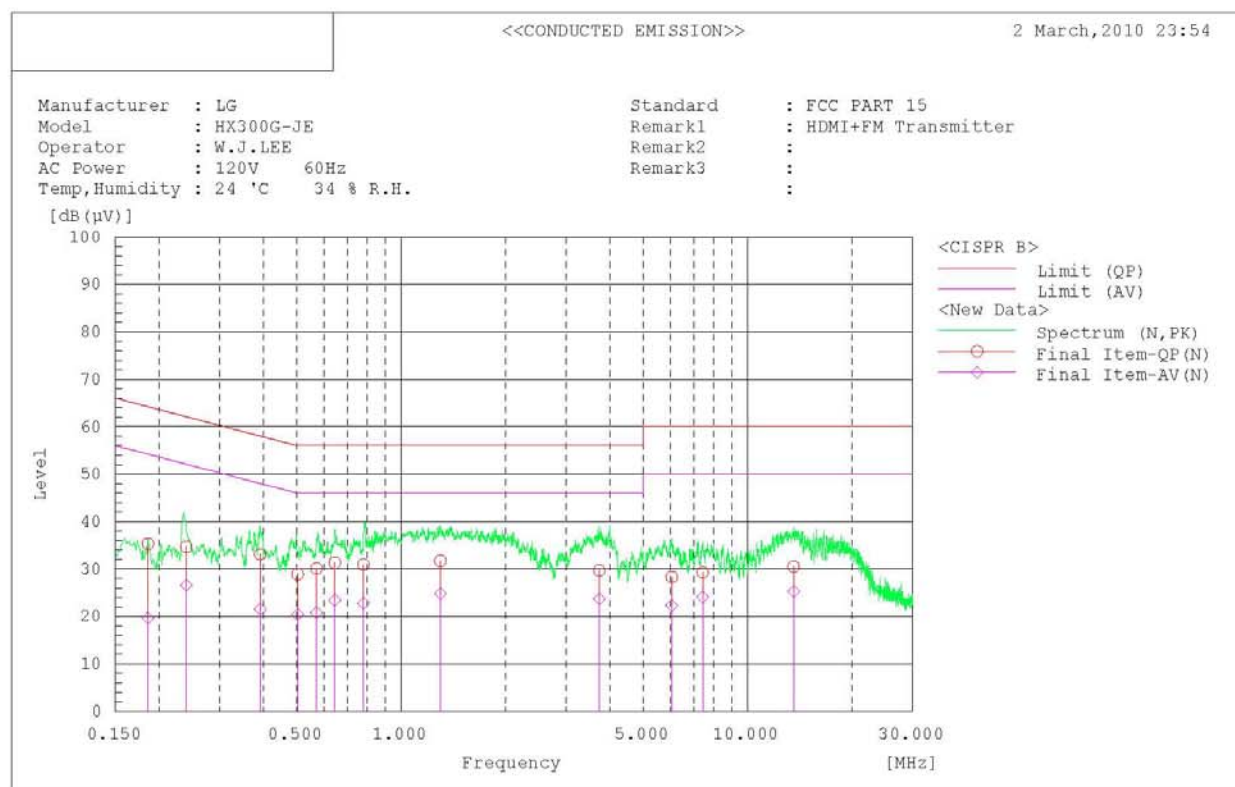
* Decreases with the logarithm of the frequency

Measurement Setup



Measurement setup for AC Conducted Emission

Conducted Emission Graph & Test Case 1



Conducted Emission List & Test Case 1

<<CONDUCTED EMISSION>>

2 March, 2010 23:54

Standard : FCC PART 15

Manufacturer : LG

Model : HK300G-JE

Operator : W.J.LEE

AC Power : 120V 60Hz

Temp, Humidity : 24 °C 34 % R.H.

Remark1 : HDMI+FM Transmitter

Remark2 :

Remark3 :

Final Result

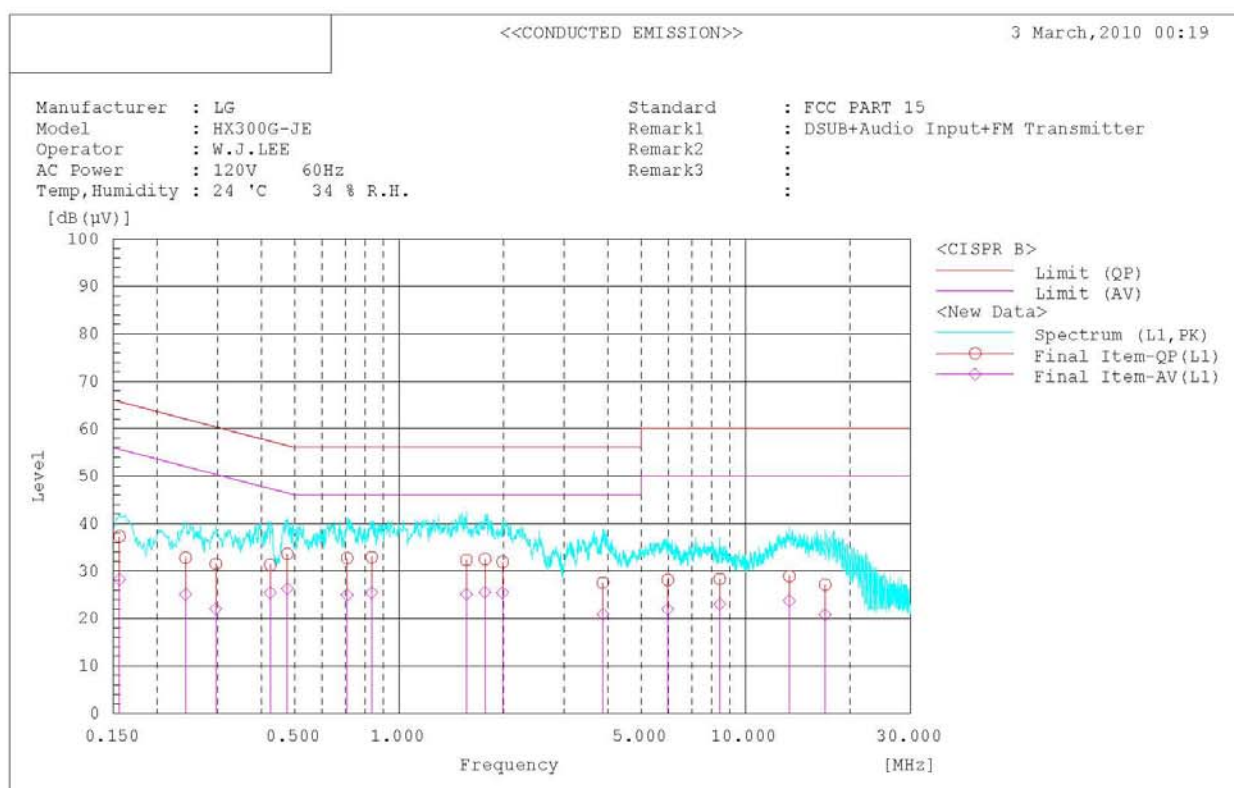
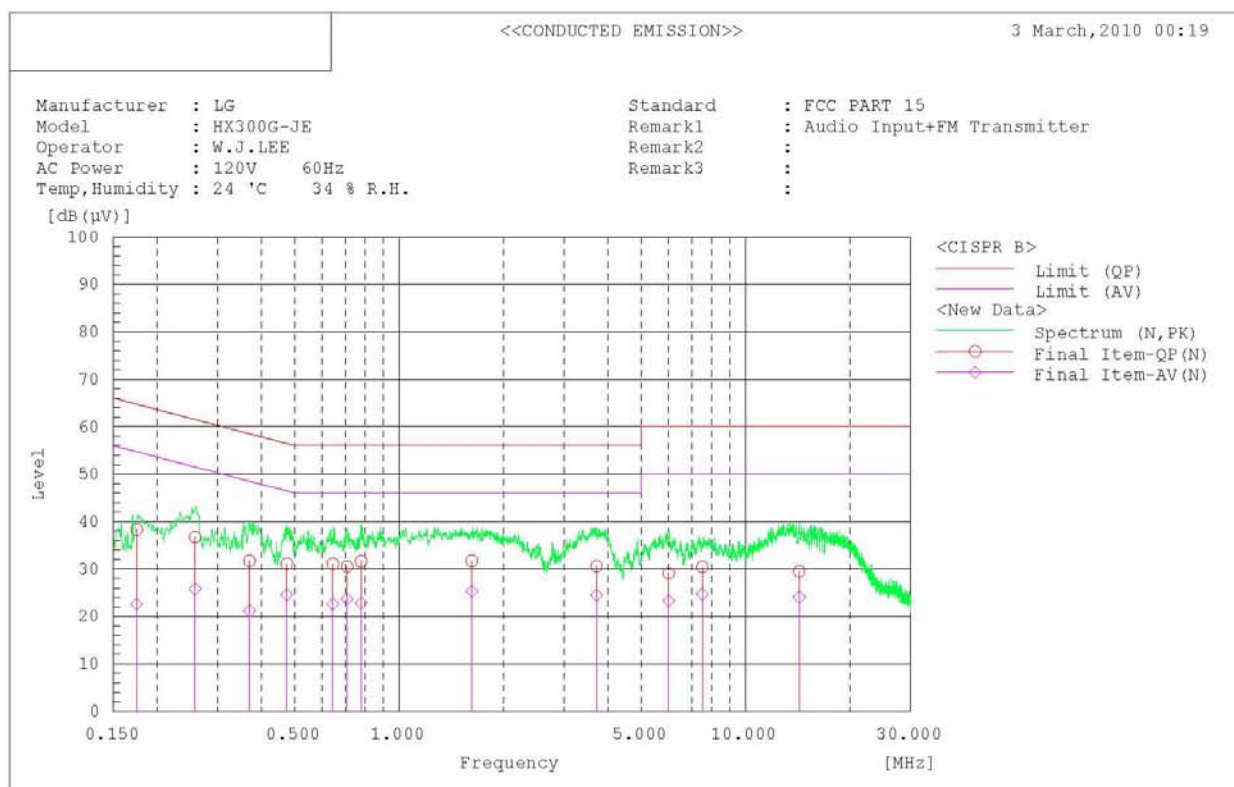
--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.240	34.5	26.4	0.2	34.7	26.6	62.1	52.1	27.4	25.5	
2	0.392	32.8	21.2	0.3	33.1	21.5	58.0	48.0	24.9	26.5	
3	0.186	35.1	19.5	0.2	35.3	19.7	64.2	54.2	28.9	34.5	
4	0.503	28.5	20.0	0.4	28.9	20.4	56.0	46.0	27.1	25.6	
5	0.570	29.7	20.4	0.4	30.1	20.8	56.0	46.0	25.9	25.2	
6	0.644	30.9	23.0	0.4	31.3	23.4	56.0	46.0	24.7	22.6	
7	0.779	30.5	22.4	0.4	30.9	22.8	56.0	46.0	25.1	23.2	
8	1.298	31.3	24.4	0.4	31.7	24.8	56.0	46.0	24.3	21.2	
9	3.735	29.4	23.4	0.3	29.7	23.7	56.0	46.0	26.3	22.3	
10	6.045	27.9	21.9	0.4	28.3	22.3	60.0	50.0	31.7	27.7	
11	7.423	28.9	23.7	0.4	29.3	24.1	60.0	50.0	30.7	25.9	
12	13.575	30.0	24.8	0.5	30.5	25.3	60.0	50.0	29.5	24.7	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.162	35.0	25.3	0.1	35.1	25.4	65.4	55.4	30.3	30.0	
2	0.241	33.4	27.1	0.2	33.6	27.3	62.1	52.1	28.5	24.8	
3	0.322	32.6	25.9	0.2	32.8	26.1	59.7	49.7	26.9	23.6	
4	0.401	31.3	22.9	0.3	31.6	23.2	57.8	47.8	26.2	24.6	
5	0.474	32.5	24.8	0.4	32.9	25.2	56.4	46.4	23.5	21.2	
6	0.538	32.2	22.2	0.5	32.7	22.7	56.0	46.0	23.3	23.3	
7	0.603	30.9	21.4	0.5	31.4	21.9	56.0	46.0	24.6	24.1	
8	0.732	31.2	24.5	0.5	31.7	25.0	56.0	46.0	24.3	21.0	
9	1.233	28.7	21.3	0.5	29.2	21.8	56.0	46.0	26.8	24.2	
10	3.878	25.0	18.3	0.7	25.7	19.0	56.0	46.0	30.3	27.0	
11	5.521	26.2	20.1	0.7	26.9	20.8	60.0	50.0	33.1	29.2	
12	7.108	25.0	20.8	0.8	25.8	21.6	60.0	50.0	34.2	28.4	
13	13.935	28.2	23.2	1.1	29.3	24.3	60.0	50.0	30.7	25.7	

Conducted Emission Graph & Test Case 2



Conducted Emission List & Test Case 2

<<CONDUCTED EMISSION>>

3 March, 2010 00:19

Standard : FCC PART 15
Manufacturer : LG
Model : HK300G-JE
Operator : W.J.LEE
AC Power : 120V 60Hz
Temp, Humidity : 24 °C 34 % R.H.
Remark1 : Audio Input+FM Transmitter
Remark2 :
Remark3 :
:

Final Result

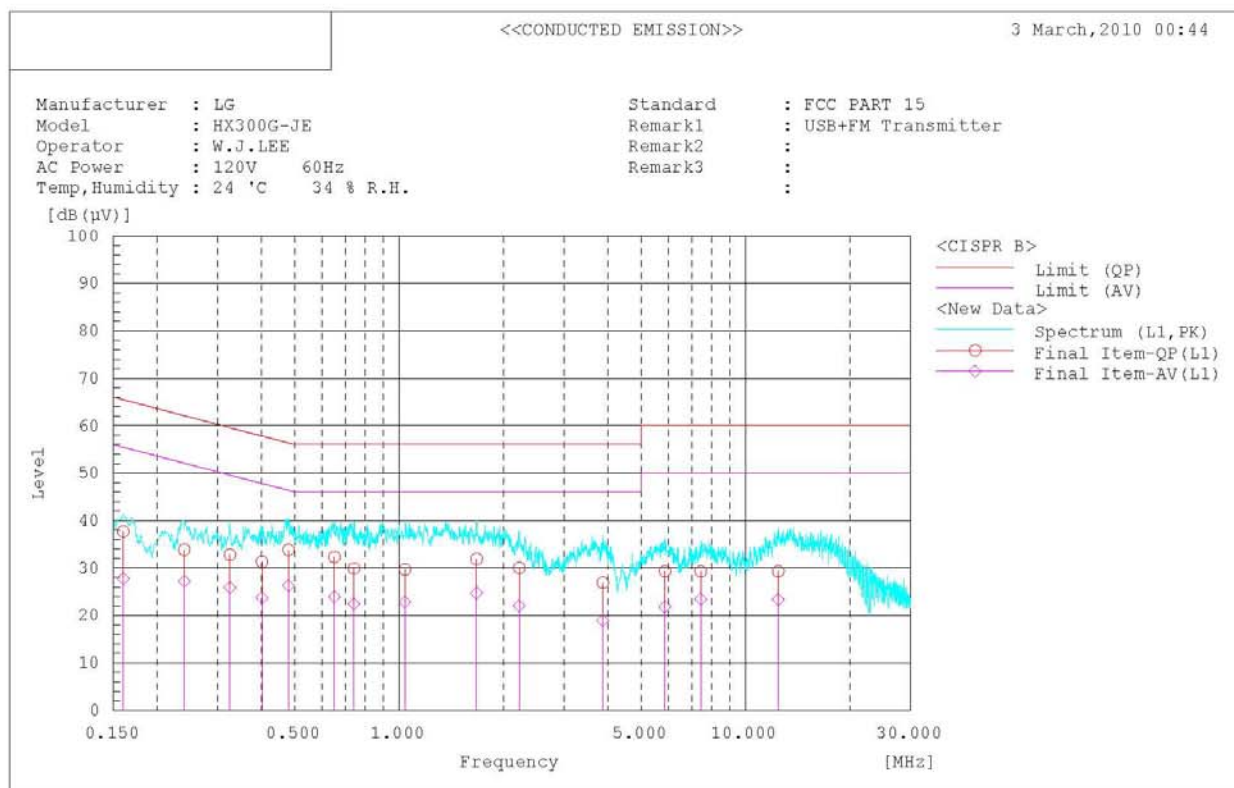
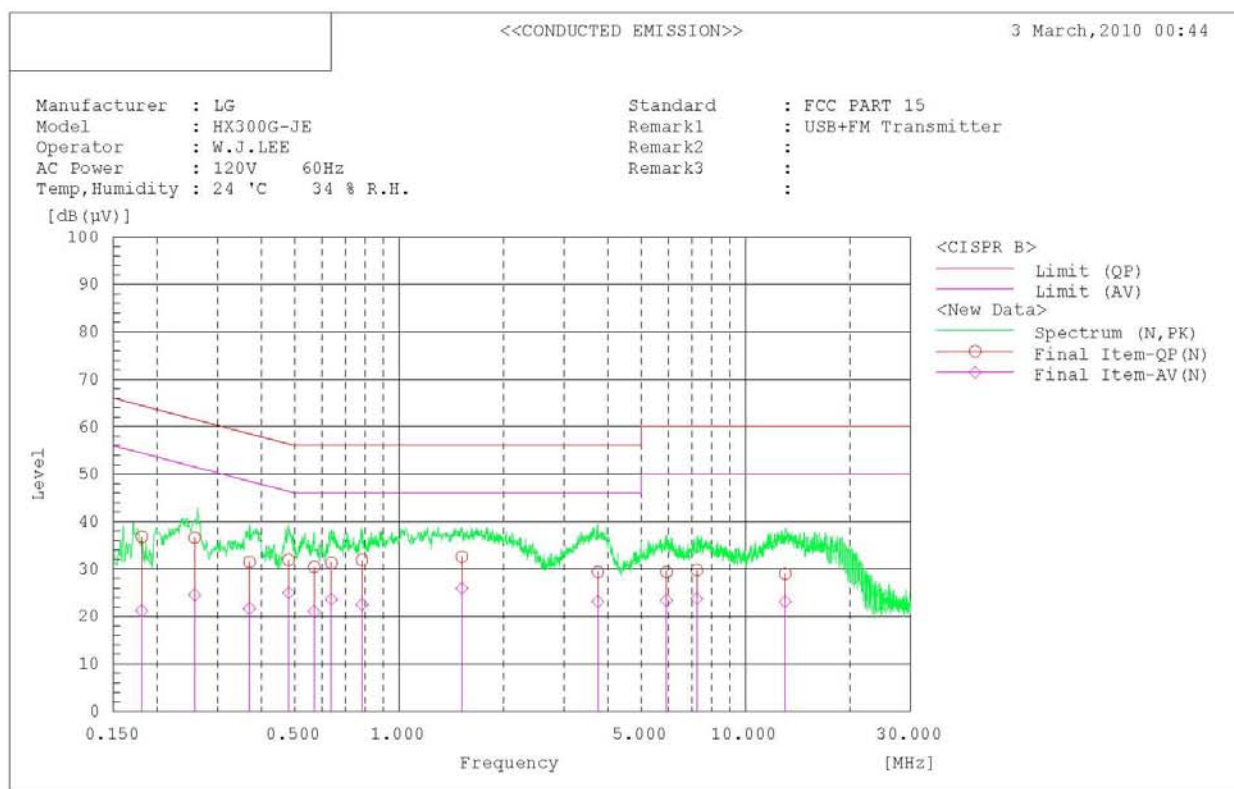
--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.175	38.1	22.4	0.2	38.3	22.6	64.7	54.7	26.4	32.1	
2	0.258	36.4	25.5	0.3	36.7	25.8	61.5	51.5	24.8	25.7	
3	0.370	31.4	20.9	0.3	31.7	21.2	58.5	48.5	26.8	27.3	
4	0.474	30.7	24.2	0.4	31.1	24.6	56.4	46.4	25.3	21.8	
5	0.644	30.7	22.2	0.4	31.1	22.6	56.0	46.0	24.9	23.4	
6	0.708	30.1	23.3	0.4	30.5	23.7	56.0	46.0	25.5	22.3	
7	0.777	31.2	22.5	0.4	31.6	22.9	56.0	46.0	24.4	23.1	
8	1.621	31.3	24.9	0.4	31.7	25.3	56.0	46.0	24.3	20.7	
9	3.717	30.3	24.2	0.3	30.6	24.5	56.0	46.0	25.4	21.5	
10	6.002	28.7	22.9	0.4	29.1	23.3	60.0	50.0	30.9	26.7	
11	7.498	30.0	24.3	0.4	30.4	24.7	60.0	50.0	29.6	25.3	
12	14.298	29.0	23.6	0.5	29.5	24.1	60.0	50.0	30.5	25.9	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.156	37.2	28.1	0.1	37.3	28.2	65.7	55.7	28.4	27.5	
2	0.242	32.6	24.9	0.2	32.8	25.1	62.0	52.0	29.2	26.9	
3	0.296	31.3	21.8	0.2	31.5	22.0	60.4	50.4	28.9	28.4	
4	0.425	30.9	25.0	0.4	31.3	25.4	57.3	47.3	26.0	21.9	
5	0.476	33.2	25.9	0.4	33.6	26.3	56.4	46.4	22.8	20.1	
6	0.708	32.2	24.4	0.5	32.7	24.9	56.0	46.0	23.3	21.1	
7	0.834	32.4	24.9	0.5	32.9	25.4	56.0	46.0	23.1	20.6	
8	1.565	31.8	24.6	0.5	32.3	25.1	56.0	46.0	23.7	20.9	
9	1.772	32.0	25.0	0.5	32.5	25.5	56.0	46.0	23.5	20.5	
10	1.991	31.3	24.8	0.6	31.9	25.4	56.0	46.0	24.1	20.6	
11	3.875	26.8	20.2	0.7	27.5	20.9	56.0	46.0	28.5	25.1	
12	5.965	27.4	21.2	0.7	28.1	21.9	60.0	50.0	31.9	28.1	
13	8.422	27.5	22.2	0.8	28.3	23.0	60.0	50.0	31.7	27.0	
14	13.376	27.8	22.6	1.1	28.9	23.7	60.0	50.0	31.1	26.3	
15	16.966	25.7	19.4	1.4	27.1	20.8	60.0	50.0	32.9	29.2	

Conducted Emission Graph & Test Case 3



Conducted Emission List & Test Case 3

<<CONDUCTED EMISSION>>

3 March, 2010 00:44

Standard : FCC PART 15

Manufacturer : LG

Model : HK300G-JE

Operator : W.J.LEE

AC Power : 120V 60Hz

Temp, Humidity : 24 °C 34 % R.H.

Remark1 : USB+FM Transmitter

Remark2 :

Remark3 :

Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.181	36.6	21.0	0.2	36.8	21.2	64.4	54.4	27.6	33.2	
2	0.257	36.3	24.2	0.3	36.6	24.5	61.5	51.5	24.9	27.0	
3	0.370	31.2	21.4	0.3	31.5	21.7	58.5	48.5	27.0	26.8	
4	0.480	31.5	24.6	0.4	31.9	25.0	56.3	46.3	24.4	21.3	
5	0.569	30.0	20.6	0.4	30.4	21.0	56.0	46.0	25.6	25.0	
6	0.638	30.9	23.2	0.4	31.3	23.6	56.0	46.0	24.7	22.4	
7	0.782	31.5	22.1	0.4	31.9	22.5	56.0	46.0	24.1	23.5	
8	1.518	32.2	25.5	0.4	32.6	25.9	56.0	46.0	23.4	20.1	
9	3.749	29.1	22.8	0.3	29.4	23.1	56.0	46.0	26.6	22.9	
10	5.915	29.0	23.0	0.4	29.4	23.4	60.0	50.0	30.6	26.6	
11	7.241	29.4	23.4	0.4	29.8	23.8	60.0	50.0	30.2	26.2	
12	13.013	28.5	22.6	0.5	29.0	23.1	60.0	50.0	31.0	26.9	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.160	37.6	27.7	0.1	37.7	27.8	65.5	55.5	27.8	27.7	
2	0.240	33.6	27.0	0.2	33.8	27.2	62.1	52.1	28.3	24.9	
3	0.325	32.6	25.7	0.2	32.8	25.9	59.6	49.6	26.8	23.7	
4	0.402	31.0	23.4	0.3	31.3	23.7	57.8	47.8	26.5	24.1	
5	0.480	33.4	25.9	0.4	33.8	26.3	56.3	46.3	22.5	20.0	
6	0.651	31.8	23.4	0.5	32.3	23.9	56.0	46.0	23.7	22.1	
7	0.741	29.4	21.9	0.5	29.9	22.4	56.0	46.0	26.1	23.6	
8	1.040	29.2	22.3	0.5	29.7	22.8	56.0	46.0	26.3	23.2	
9	1.674	31.4	24.2	0.5	31.9	24.7	56.0	46.0	24.1	21.3	
10	2.223	29.4	21.4	0.6	30.0	22.0	56.0	46.0	26.0	24.0	
11	3.876	26.2	18.2	0.7	26.9	18.9	56.0	46.0	29.1	27.1	
12	5.855	28.6	21.1	0.7	29.3	21.8	60.0	50.0	30.7	28.2	
13	7.431	28.5	22.6	0.8	29.3	23.4	60.0	50.0	30.7	26.6	
14	12.425	28.2	22.2	1.1	29.3	23.3	60.0	50.0	30.7	26.7	

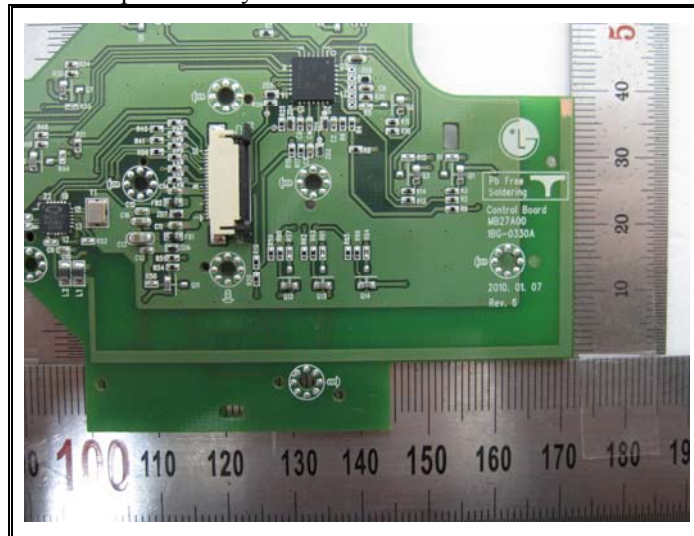
4.6 Antenna Requirements

- Procedure:

Describe how the EUT complies with the requirement that either its antenna is permanently attached, or that it employs a unique antenna connector, for every antenna proposed for use with the EUT.

- Conclusion: **Comply**

The antenna is installed permanently on the PCB board of this device.



- Minimum Standard:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions.

APPENDIX

TEST EQUIPMENT FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
☐	Spectrum Analyzer	Agilent	E4440A	25/09/09	25/09/10	MY45304199
☐	Spectrum Analyzer	Rohde Schwarz	FSQ26	25/02/10	25/02/11	200347
☐	Spectrum Analyzer(RE)	H.P	8563E	13/10/09	13/10/10	3551A04634
☐	Power Meter	H.P	EMP-442A	02/07/09	02/07/10	GB37170413
☐	Power Sensor	H.P	8481A	02/07/09	02/07/10	3318A96332
☐	Power Divider	Agilent	11636B	13/10/09	13/10/10	56471
☐	Power Splitter	Anritsu	K241B	13/10/09	13/10/10	20611
☐	Power Splitter	Anritsu	K241B	02/07/09	02/07/10	017060
☐	Frequency Counter	H.P	5342A	13/07/09	13/07/10	2119A04450
☐	TEMP & HUMIDITY Chamber	JISCO	KR-100/J-RHC2	10/10/09	10/10/10	30604493/021031
☐	Digital Multimeter	H.P	34401A	13/03/09	13/03/10	3146A13475, US36122178
☐	Multifunction Synthesizer	HP	8904A	06/10/09	06/10/10	3633A08404
☐	Signal Generator	Rohde Schwarz	SMR20	13/03/09	13/03/10	101251
☐	Signal Generator	H.P	ESG-3000A	02/07/09	02/07/10	US37230529
☐	Vector Signal Generator	Rohde Schwarz	SMJ100A	11/01/10	11/01/11	100148
☐	Audio Analyzer	H.P	8903B	02/07/09	02/07/10	3011A09448
☐	Modulation Analyzer	H.P	8901B	02/07/09	02/07/10	3028A03029
☐	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	02/07/09	02/07/10	GB43461134
☐	Universal Radio communication Tester	Rohde Schwarz	CMU 200	19/05/09	19/05/10	106760
☐	Bluetooth Tester	TESCOM	TC-3000B	02/07/09	02/07/10	3000B000268
☐	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-3
☐	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-2
☐	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-4
☐	AC Power supply	DAEKWANG	5KVA	13/03/09	13/03/10	20060321-1
☐	DC Power Supply	HP	6622A	13/03/09	13/03/10	3448A03760
☐	DC Power Supply	HP	6633A	13/03/09	13/03/10	3524A06634
☐	BAND Reject Filter	Microwave Circuits	N0308372	06/10/09	06/10/10	3125-01DC0352
☐	BAND Reject Filter	Wainwright	WRCG1750	06/10/09	06/10/10	2
☐	High-Pass Filter	ANRITSU	MP526D	06/10/09	06/10/10	M27756
☐	High-pass filter	Wainwright	WHNX8.5	N/A	N/A	1
☐	High-Pass Filter	Wainwright	WHKX3.0	N/A	N/A	9
☐	Tunable Notch Filter	Wainwright	WRCT800.0 /960.0-0.2/40-8SSK	N/A	N/A	32
☐	Tunable Notch Filter	Wainwright	WRCD1700.0 /2000.0-0.2/40-10SSK	N/A	N/A	53
☐	Tunable Notch Filter	Wainwright	WRCT1900.0 /2200.0-5/40-10SSK	N/A	N/A	30
☐	HORN ANT	ETS	3115	17/06/09	17/06/10	6419
☐	HORN ANT	ETS	3115	23/09/09	23/09/10	21097
☐	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	154
☐	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	155

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
☐	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2116
☐	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2117
☐	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2261
☐	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2262
☐	LOOP Antenna	ETS	6502	14/09/09	14/09/10	3471
☐	Coaxial Fixed Attenuators	Agilent	8491B	02/07/09	02/07/10	MY39260700
☐	Attenuator (3dB)	WEINSCHTEL	56-3	16/12/09	16/12/10	Y2342
☐	Attenuator (3dB)	WEINSCHTEL	56-3	16/12/09	16/12/10	Y2370
☐	Attenuator (10dB)	WEINSCHTEL	23-10-34	01/10/09	01/10/10	BP4386
☐	Attenuator (10dB)	WEINSCHTEL	23-10-34	11/01/10	11/01/11	BP4387
☐	Attenuator (20dB)	WEINSCHTEL	86-20-11	06/10/09	06/10/10	432
☐	Attenuator (10dB)	WEINSCHTEL	31696	06/10/09	06/10/10	446
☐	Attenuator (10dB)	WEINSCHTEL	31696	06/10/09	06/10/10	408
☐	Attenuator (40dB)	WEINSCHTEL	57-40-33	01/10/09	01/10/10	NN837
☐	Attenuator (30dB)	JFW	50FH-030-300	13/03/09	13/03/10	060320-1
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	02/07/09	02/07/10	788
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	02/07/09	02/07/10	790
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	02/07/09	02/07/10	112
☐	Amplifier (30dB)	Agilent	8449B	10/10/09	10/10/10	3008A01590
☐	Amplifier	EMPOWER	BBS3Q7ELU	02/11/09	02/11/10	1020
☐	RF Power Amplifier	OPHIRRF	5069F	02/07/09	02/07/10	1006
☒	EMI TEST RECEIVER	R&S	ESU	29/01/10	29/01/11	100014
☒	BILOG ANTENNA	SCHAFFNER	CBL6112B	02/06/09	02/06/10	2737
☒	Amplifier (22dB)	H.P	8447E	29/01/10	29/01/11	2945A02865
☐	EMI TEST RECEIVER	R&S	ESCI	12/05/09	12/05/10	100364
☐	LOG-PERIODIC ANT.	Schwarzbeck	UHALP9108A	30/05/09	30/05/10	590
☐	BICONICAL ANT.	Schwarzbeck	VHA 9103	02/06/09	02/06/10	2233
☐	LOG-PERIODIC ANT.	Schwarzbeck	UHALP 9108 A-1	07/10/09	07/10/10	1098
☐	BICONICAL ANT.	Schwarzbeck	VHA 9103	06/10/09	06/10/10	91031946
☐	Low Noise Pre Amplifier	TSJ	MLA-100K01-B01-2	13/03/09	13/03/10	1252741
☐	Amplifier (25dB)	Agilent	8447D	12/05/09	12/05/10	2944A10144
☐	Amplifier (25dB)	Agilent	8447D	03/07/09	03/07/10	2648A04922
☒	Spectrum Analyzer(CE)	H.P	8591E	26/04/09	26/04/10	3649A05889
☒	LISN	Kyoritsu	KNW-407	29/01/10	29/01/11	8-317-8
☒	LISN	Kyoritsu	KNW-242	29/01/10	29/01/11	8-654-15
☒	CVCF	NF Electronic	4420	13/03/09	13/03/10	304935/337980
☒	50 ohm Terminator	HME	CT-01	12/01/10	12/01/11	N/A
☒	RFI/FIELD Intensity Meter	Kyoritsu	KNM-2402	03/07/09	03/07/10	4N-170-3