



RADIO TEST REPORT

Test Report No.: 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Type of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
FCC ID : AX2QZ6072B1
Test regulation : FCC Part15 Subpart B: 2008
FCC Part15 Subpart C: 2008
Test result : Complied

1. This test report shall not be reproduced except in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.

Date of test: February 7, 8 and 12, 2008

Tested by: T. Arai
Tatsuya Arai

Approved by: O. Watatani
Osamu Watatani
Manager of Yamakita EMC Lab.

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

Table of Contents	Page
1 Applicant information	3
2 Equipment under test (E.U.T.)	3
3 Test specification, procedures and results	4
4 System test configuration	7
5 Carrier frequency separation	9
6 20dB bandwidth & Occupied bandwidth (99%)	9
7 Number of hopping frequency	9
8 Dwell time	9
9 Maximum peak output power	9
10 Out of band emissions (Antenna port conducted)	9
11 Out of band emissions (Radiated)	10
<u>Contents of Appendixes</u>	11
APPENDIX 1: Photographs of test setup	12
APPENDIX 2: Test data	13
APPENDIX 3: Test instruments	84
APPENDIX 4: EUT clock frequencies	85

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

1 Applicant information

Company Name : Clarion Co., Ltd.
Address : 7-2, Shintoshin, Chuo-ku, Saitama-shi, Saitama-ken 330-0081, Japan
Telephone Number : +81 48 601 3627
Facsimile Number : +81 48 601 3818
Contact Person : Kunihiro Nakajima

2 Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 259X (Antenna port conducted test), 258X (Radiated emission test)
Rating : DC 10.8-15.6V (directly from a car battery)
Country of Manufacture : China
Receipt Date of Sample : February 1, 2008
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT : No modification by the test lab.

2.2 Product description

Model: MAX685BT (referred to as the EUT in this report) is a 2DIN DVD AUDIO-VISUAL UNIT.

Equipment type : Transceiver
Frequency of operation : 2402-2480MHz
Clock frequency : Refer to Appendix 4.
Bandwidth & channel spacing : 79MHz & 1MHz
Type of modulation : FHSS (GFSK)
Antenna type : inverted-F antenna
Antenna gain : +3.418dBi
Antenna connector type : None
ITU code : F1D
Operation temperature range : -20 to +70 deg.C.

FCC Part15.31 (e)

The equipment provides the Bluetooth module with stable power supply (DC 3.3 V), therefore, the equipment complies power supply regulation.

FCC Part15.203 Antenna requirement

The equipment and its antenna comply with this requirement since this antenna is built in the equipment and it cannot be replaced by end users.

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

3 Test specification, procedures and results

3.1 Test specification

Test Specification : FCC Part 15 Subpart B: 2008
Title : FCC 47CFR Part 15 Radio Frequency Device Subpart B Unintentional Radiators

Test specification : FCC Part15 Subpart C: 2008
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits
Section 15.209 Radiated emission limits, general requirements
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz,
and 5725-5850MHz

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011

Facsimile: +81 465 77 2112

MF060b (09.01.08)

3.2 Procedures & Results

<Part 15 Subpart B, Radio requirement>

Item	Test Procedure	Limits	Deviation	Worst margin	Result
Conducted emission	ANSI C63.4: 2003 7. AC powerline conducted emission measurements	FCC Section 15.107	N/A *1)	N/A	N/A
Radiated emission	ANSI C63.4: 2003 8. Radiated emission measurements	FCC Section 15.109	N/A	2.9dB (286.02MHz, Horizontal, Rx, Display: Open)	Complied

Note: UL Japan's EMI Work Procedures No.QPM05.

<Part 15 Subpart C>

Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin	Results	
Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	FCC Section 15.207	-	N/A *1)	N/A	N/A	
Carrier Frequency Separation	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.247 (a)(1)	Conducted	N/A	*See data.	Complied	
20dB Bandwidth	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.247 (a)(1)	Conducted	N/A		Complied	
Number of Hopping Frequency	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.247 (a)(1)(iii)	Conducted	N/A		Complied	
Dwell time	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.247 (a)(1)(iii)	Conducted	N/A		Complied	
Maximum Peak Output Power	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.247 (b)(1)	Conducted	N/A		Complied	
Spurious Emission	FCC Public Notice DA 00-705 & ANSI C63.4:2003 13. Measurement of intentional radiators	FCC Section15.209 & Section15.247 (d)	Conducted/ Radiated	N/A		2.7dB (286.01MHz, Horizontal, Tx 2480MHz, Display: Open)	Complied

Note: UL Japan's EMI Work Procedures No.QPM05 and QPM15.

*1) The test is not applicable since the EUT has no AC mains.

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011

Facsimile: +81 465 77 2112

MF060b (09.01.08)

3.3 Addition to standard

Item	Test Procedure	Specification	Remarks	Worst Margin	Results
Occupied Bandwidth (99%)	ANSI C63.4:2003 13. Measurement of intentional radiators & RSS-Gen 4.6.1	RSS-Gen 4.6.1	Conducted	-	Complied

* Other than above, no addition, exclusion nor deviation has been made from the standard.

3.3 Uncertainty

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

	No.1 open site (±)	No.2 open site (±)	No.1 anechoic chamber (±)
Radiated emission (3m)			
30-300MHz	4.5 dB	4.4 dB	4.5 dB
300-1000MHz	4.3 dB	4.3 dB	4.3 dB
1GHz<	5.7 dB	5.7 dB	5.7 dB

Antenna port conducted test	(±)
Below 1GHz	0.4dB
1GHz and above	0.7dB

Radiated Emission Test

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

3.4 Test location

UL Japan, Inc. Yamakita EMC Lab.
 907, Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken 258-0124 JAPAN
 Telephone number : +81 465 77 1011
 Facsimile number : +81 465 77 2112
 NVLAP Lab. code : 200441-0

No. 1 test site has been fully described in a report submitted to FCC office, and accepted on August 26, 2005 (Registration No.: 95486).
 IC Registration No. : 2973B-1

No. 2 test site has been fully described in a report submitted to FCC office, and accepted on April 4, 2005 (Registration No.: 466226).
 IC Registration No. : 2973B-3

No. 1 anechoic chamber has been fully described in a report submitted to FCC office, and accepted on November 2, 2005 (Registration No.: 95967).
 IC Registration No. : 2973B-2

Test room	Width x Depth x Height (m)	Test room	Width x Depth x Height (m)
No.1 shielded room	8.0 x 5.0 x 2.5	No.1 Semi-anechoic chamber	10.0 x 7.5 x 5.7
No.2 shielded room	5.0 x 4.0 x 2.5		
No.3 shielded room	4.0 x 5.0 x 2.7		

Open test site	Maximum measurement distance
No.1 open test site	30m
No.2 open test site	10m

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

4 System test configuration

4.1 Justification

The system was configured in typical fashion (as a customer would normally use it) for testing.

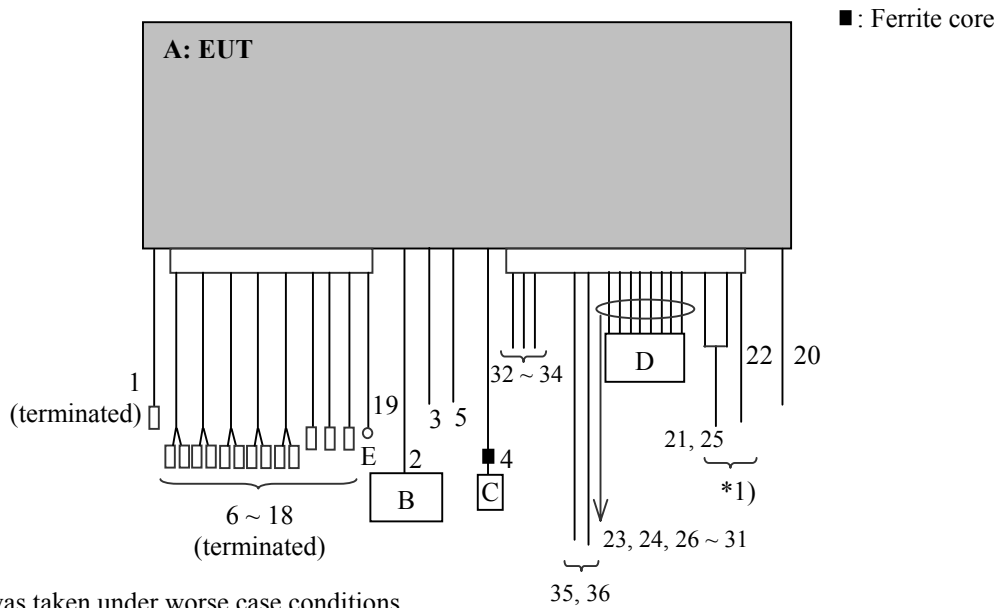
Test mode: Transmitting (Packet size: DH1, DH3, DH5)
 - Low channel : 2402MHz
 - Middle channel : 2441MHz
 - High channel : 2480MHz
 - Hopping mode
 - Inquiry mode
 Receiving
 - Middle channel : 2441MHz

All measurements were performed with the display open unless stated otherwise.

*Remarks: Test was not performed at AFH mode, because the decrease of number of channel (min: 20ch) at AFH mode does not influence on the output power and bandwidth of the EUT.

However, the limit level 125mW of AFH mode was used for the test. The EUT has no EDR mode.

4.2 Configuration of tested system



Description of EUT and support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID (Remarks)
A	2DIN DVD AUDIO-VISUAL UNIT	MAX685BT	*2)	Clarion Co., Ltd.	AX2QZ6072B1 (EUT)
B	XM Mini Tuner	CNP-2000	061200358013642630	AUDIOVOX	-
C	USB Memory	RUF-C/U2	7040906067	BUFFALO	D.o.C.
D	Dummy load	-	-	-	-
E	Microphone	KHM872	-	-	-

*1) DC power supply (Model No.: PAN35-10A) was used for DC 12V input.

*2) 259X: Antenna port conducted test), 258X: Radiated emission test

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

List of cables used

No.	Name	Length (m)	Shield		Remark
			Cable	Connector	
1	Radio antenna cable	0.02	Shielded	Shielded	-
2	XM Mini-Tuner cable	1.5	Shielded	Shielded	-
3	RGB cable	2.5	Shielded	Shielded	-
4	USB cable	1.1	Shielded	Shielded	-
5	Steering wheel remote control cable	6.4	Unshielded	Unshielded	-
6	Audio cable (Front audio output)	2.7	Shielded	Shielded	Gray, Red (Right)
7	Audio cable (Front audio output)	2.7	Shielded	Shielded	Gray, White (Left)
8	Audio cable (Rear audio output)	2.7	Shielded	Shielded	Black, Red (Right)
9	Audio cable (Rear audio output)	2.7	Shielded	Shielded	Black, White (Left)
10	Audio cable (Non fader output)	2.65	Shielded	Shielded	Purple, Red (Right)
11	Audio cable (Non fader output)	2.65	Shielded	Shielded	Purple, White (Left)
12	Video cable (Video output)	2.62	Shielded	Shielded	Gray, Yellow
13	Audio cable (2 zone audio output)	2.65	Shielded	Shielded	Green, Red (Right)
14	Audio cable (2 zone audio output)	2.65	Shielded	Shielded	Green, White (Left)
15	Video cable (AUX input)	2.62	Shielded	Shielded	Black, Yellow (Visual IN)
16	Audio cable (AUX input)	2.65	Shielded	Shielded	Red, White (Left)
17	Audio cable (AUX input)	2.65	Shielded	Shielded	Red, Red (Right)
18	Video cable (CCD camera input)	2.62	Shielded	Shielded	Black, Yellow (CCD IN)
19	Microphone cable	5.0	Shielded	Shielded	-
20	CeNET cable	2.5	Shielded	Shielded	-
21	DC cable	1.15	Unshielded	Unshielded	Yellow (+12V main power, max.15A)
22	Ground cable	1.15	Unshielded	Unshielded	Black
23	Speaker cable	0.15	Unshielded	Unshielded	Purple (Rear right, +)
24	Speaker cable	0.15	Unshielded	Unshielded	Purple/Black (Rear right, -)
25	Accessory cable	0.98	Unshielded	Unshielded	Red (+12V)
26	Speaker cable	0.15	Unshielded	Unshielded	Gray (Front right, +)
27	Speaker cable	0.15	Unshielded	Unshielded	Gray/Black (Front right, -)
28	Speaker cable	0.15	Unshielded	Unshielded	White (Front left, +)
29	Speaker cable	0.15	Unshielded	Unshielded	White/Black (Front left, -)
30	Speaker cable	0.15	Unshielded	Unshielded	Green (Rear left, +)
31	Speaker cable	0.15	Unshielded	Unshielded	Green/Black (Rear left, -)
32	Amplifier cable	0.15	Unshielded	Unshielded	Blue/White
33	Illumination cable	0.15	Unshielded	Unshielded	Orange/White
34	Auto antenna cable	0.15	Unshielded	Unshielded	Blue
35	Parking brake cable	2.8	Unshielded	Unshielded	Grass-green
36	Reverse gear cable	5.0	Unshielded	Unshielded	Purple/White

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011

Facsimile: +81 465 77 2112

MF060b (09.01.08)

5 Carrier frequency separation

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

6 20dB bandwidth & Occupied bandwidth (99%)

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

The channel separation in Hopping mode and Inquiry mode was separated by 25kHz and 2/3 of the 20dB bandwidth.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

7 Number of hopping frequency

The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

8 Dwell time

The Dwell time was measured with a spectrum analyzer connected to the antenna port.

Measurement was performed with the packet type of DH1, DH3 and DH5.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

9 Maximum peak output power

The Maximum Peak Output Power was measured with a power meter connected to the antenna port.

Measurement was performed with the packet type of DH1, DH3 and DH5.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

10 Out of band emissions (Antenna port conducted)

The Out of Band Emissions was measured with a spectrum analyzer connected to the antenna port.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a conducted measurement.

Summary of the test results: Pass

Date : February 12, 2008 Test engineer : Tatsuya Arai

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

11 Out of band emissions (Radiated)

11.1 Operating environment

The test was carried out in No.1 anechoic chamber.

11.2 Test configuration

EUT was placed on a urethane platform of nominal size, 0.5m by 0.5m, raised 80cm above the conducting ground plane. Photographs of the set up are shown in Appendix 1.

11.3 Test conditions

Frequency range : 30MHz - 26.5GHz
 Test distance : 3m
 EUT operation mode : Transmitting

11.4 Test procedure

The Radiated Electric Field Strength intensity has been measured with a ground plane and at a distance of 3m. The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization.

Measurements were performed with QP, PK, and AV detector.

The radiated emission measurements were made with the following detector function of the test receiver.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector IF Bandwidth	QP: BW 120kHz	PK: RBW: 1MHz/VBW: 1MHz, AV: RBW: 1MHz VBW: 200Hz (Harmonics)*1, 1kHz (Other emission)*2
Measuring antenna	Biconical (30-300MHz) Logperiodic (300MHz-1GHz)	Horn

*1: $VBW=1/T=1000ms/7.53ms=132.80Hz \Rightarrow 200Hz$ (T=Duty cycle)

*2: $VBW=1/T=1000ms/1.24ms=806.45Hz \Rightarrow 1kHz$ (T=Duty cycle)

11.5 Band edge

Band edge level at 2390MHz and 2483.5MHz is below the limits of FCC 15.209 and band edge level at 2400MHz is below the 20dBc. Refer to the band edge plot: Page 28, 31, 34, 37 and 40. Because of the presence of noise at antenna port conducted test, measurement for the upper band edge was performed for confirmation.

11.6 Results

Summary of the test results : Pass
 *No noise was detected above the 5th order harmonics.

Date : February 7 and 8, 2008

Test engineer : Tatsuya Arai

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

APPENDIX 1: Photographs of test setup

Page 12 : Radiated emission

APPENDIX 2: Test Data

Page 13 : Carrier frequency separation

Page 14 - 15 : 20dB bandwidth

Page 16 - 18 : Number of hopping frequency

Page 19 - 26 : Dwell time

Page 27 : Maximum peak output power

Page 28 - 45 : Out of band emissions (Antenna Port Conducted)
Transmitting
Receiving

Page 46 - 77 : Out of band emissions (Radiated)
Page 46 - 61 : Display: Close
Transmitting
Receiving

Page 62 - 77 : Display: Open
Transmitting
Receiving

Page 78 - 81 : Band edge
Display: Open
Display: Close

Page 82 - 83 : Occupied bandwidth

APPENDIX 3: Test instruments

Page 84 : Test instruments

APPENDIX 4: EUT clock frequencies

Page 85 : EUT clock frequencies

UL Japan, Inc.

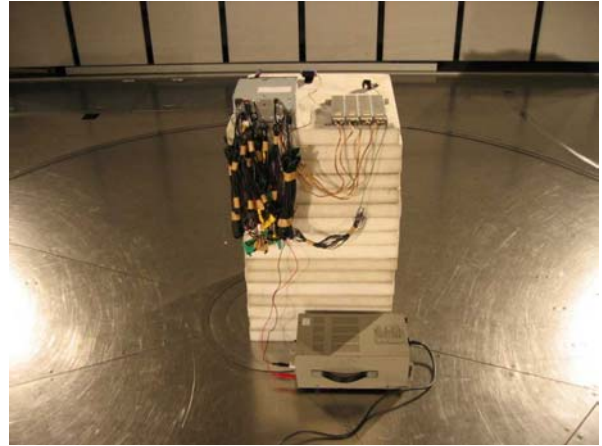
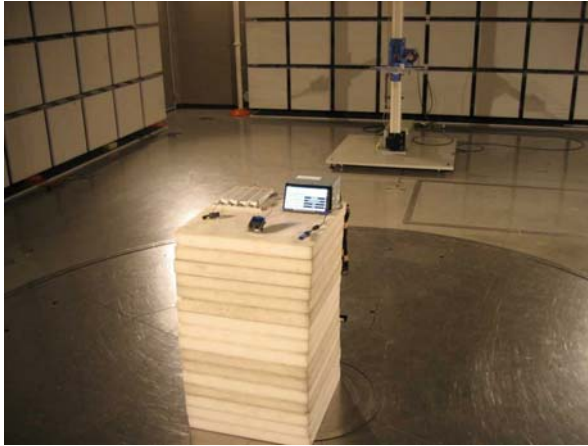
YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

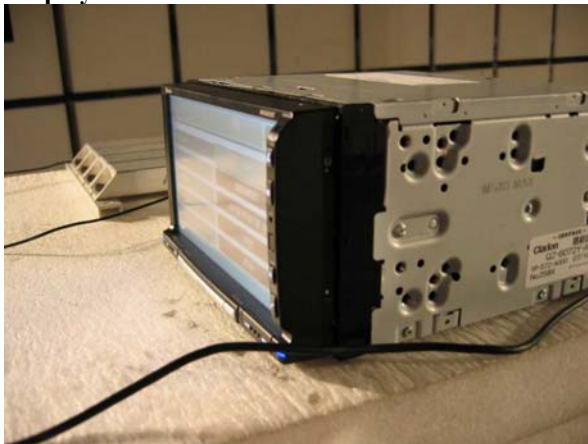
Telephone: +81 465 77 1011 Facsimile: +81 465 77 2112

MF060b (09.01.08)

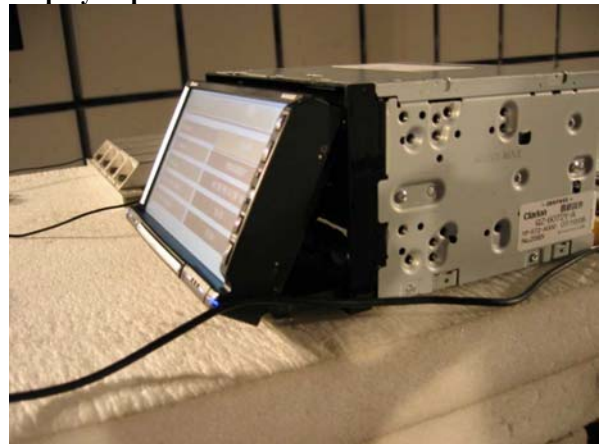
Radiated emission



Display: Close



Display: Open



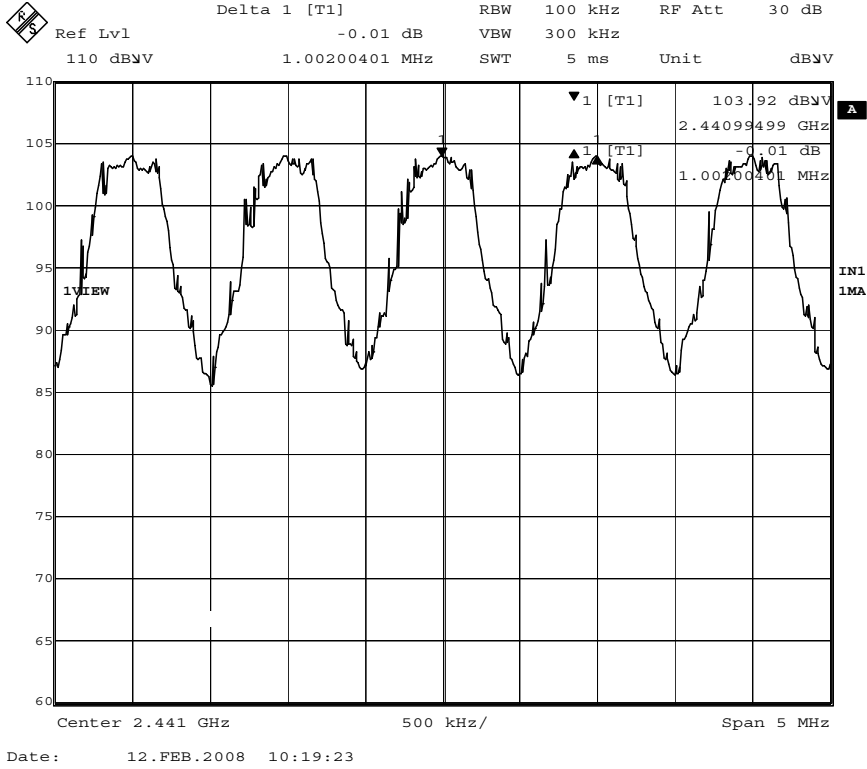
Channel Separation: FCC 15.247(a)(1)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

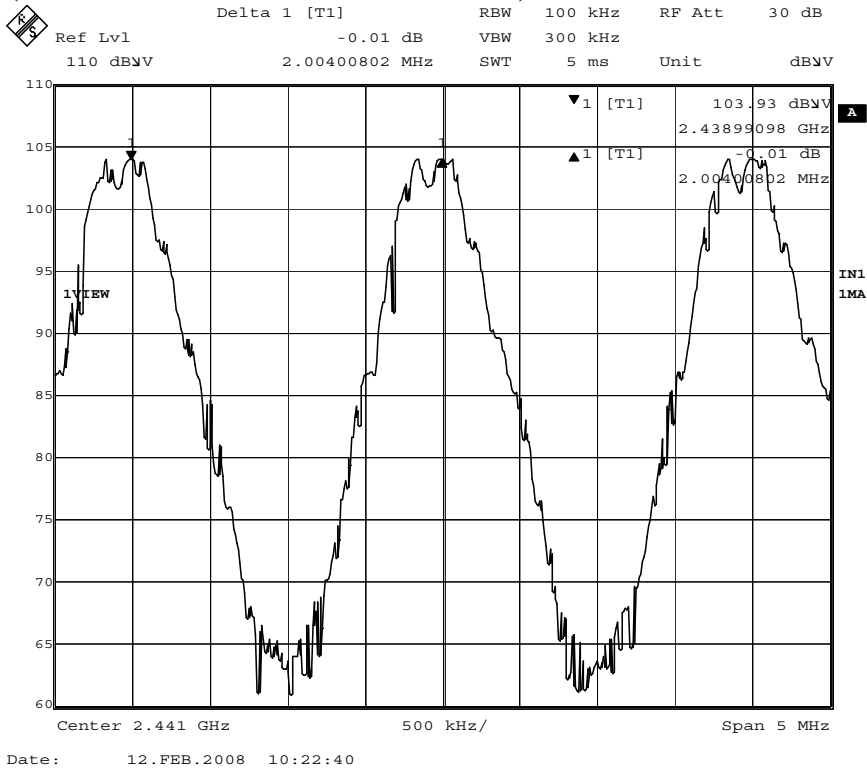
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Limit: $\geq 25\text{kHz}$ or $2/3 * 20\text{dB Bandwidth}$ (Power : No greater than 125mW)

1. Hopping, DH5: 1002.0kHz (2/3*20dB Bandwidth: 2/3*1.106MHz = 737.3kHz)



2. Inquiry: 2.004MHz (2/3*20dB Bandwidth: 2/3*1.082MHz = 721.3kHz)



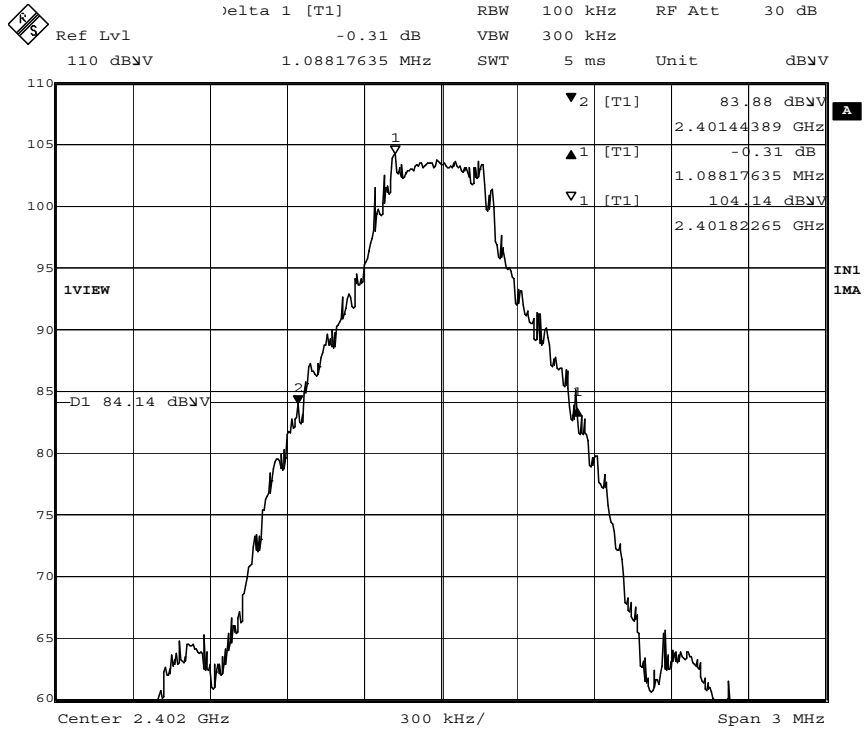
20dB Bandwidth: FCC 15.247(a)(1)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

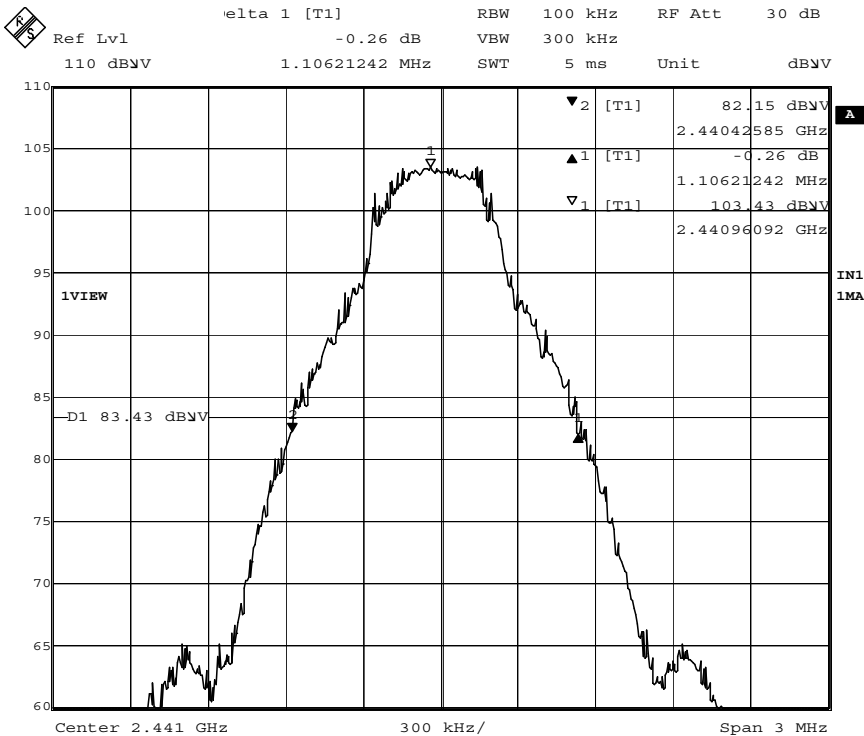
[Hopping off, DH5]

1. ch : 2402MHz/20dB Bandwidth:1.088MHz



Date: 12.FEB.2008 09:48:56

2. ch : 2441MHz/20dB Bandwidth:1.106MHz



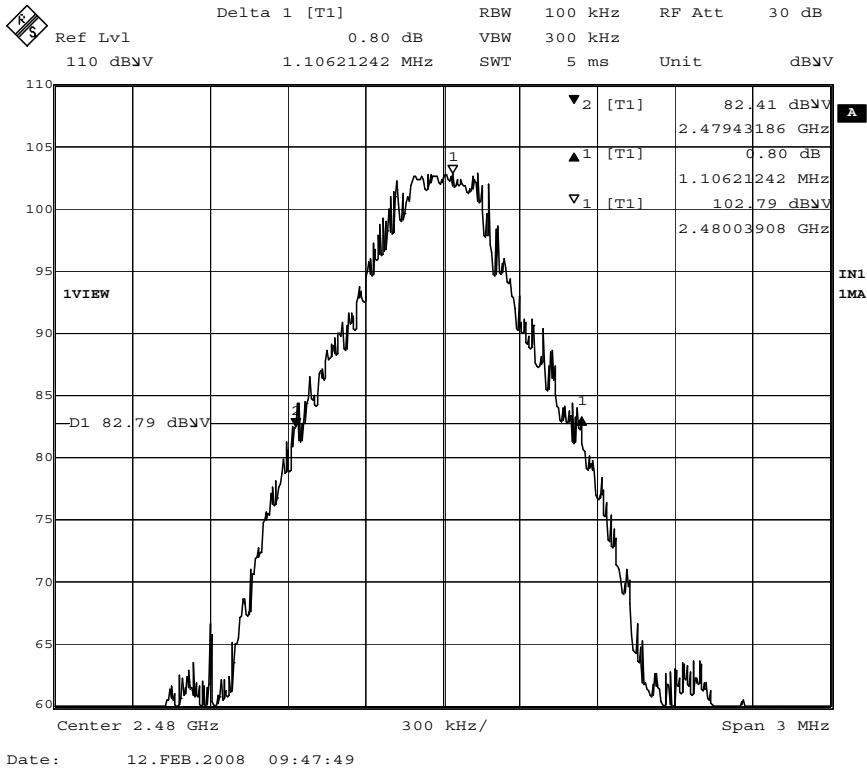
Date: 12.FEB.2008 09:50:23

20dB Bandwidth: FCC 15.247(a)(1)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

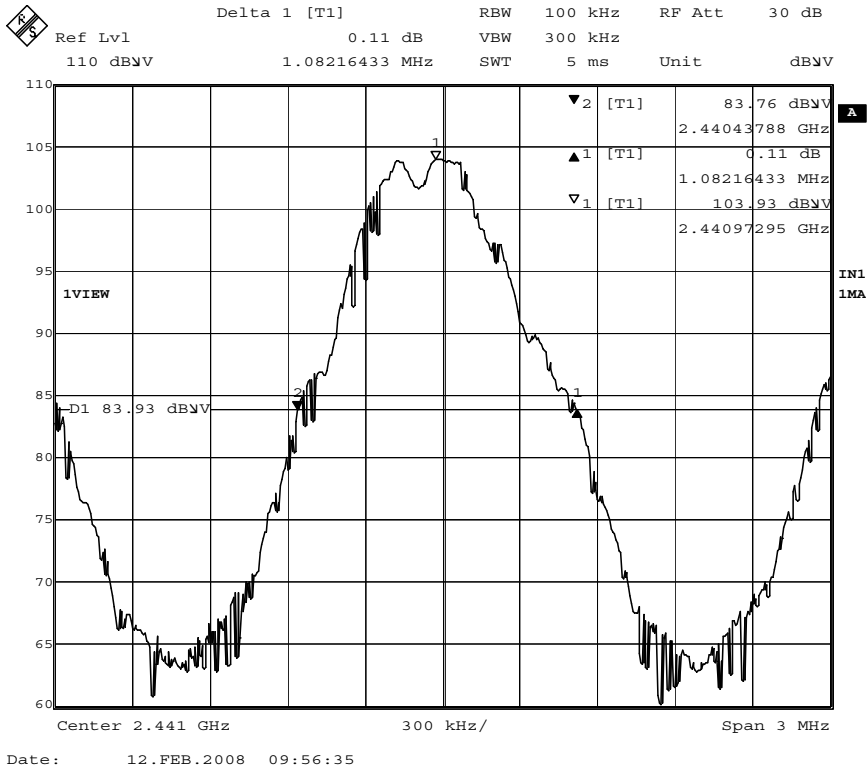
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

3. ch : 2480MHz/20dB Bandwidth:1.106MHz



[Inquiry]

4. Inauriy/20dB Bandwidth:1.082MHz



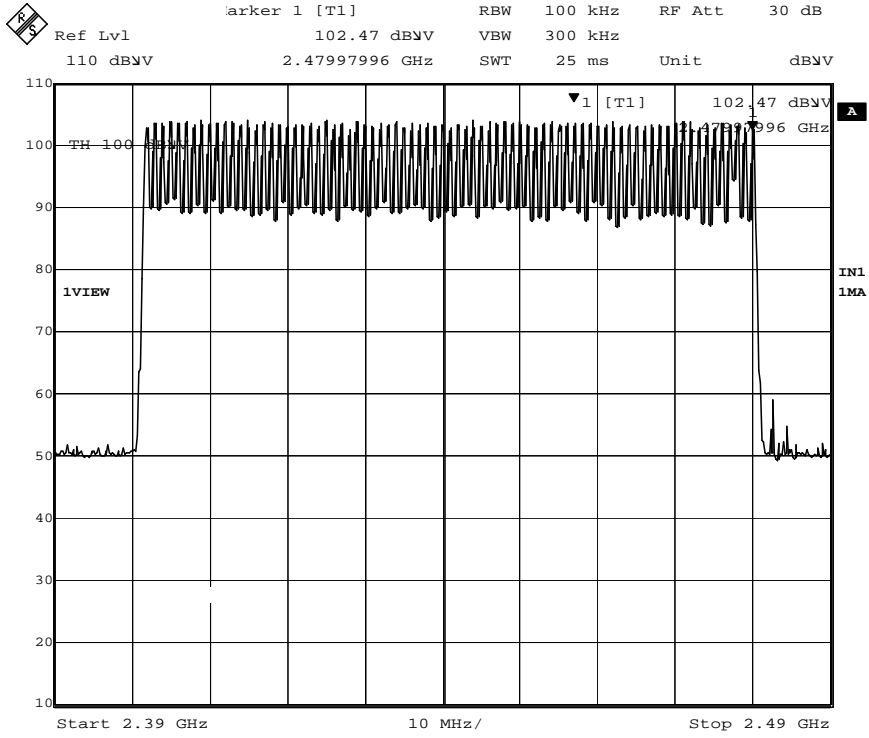
Channel Utilization: FCC 15.247(a)(1)(iii)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

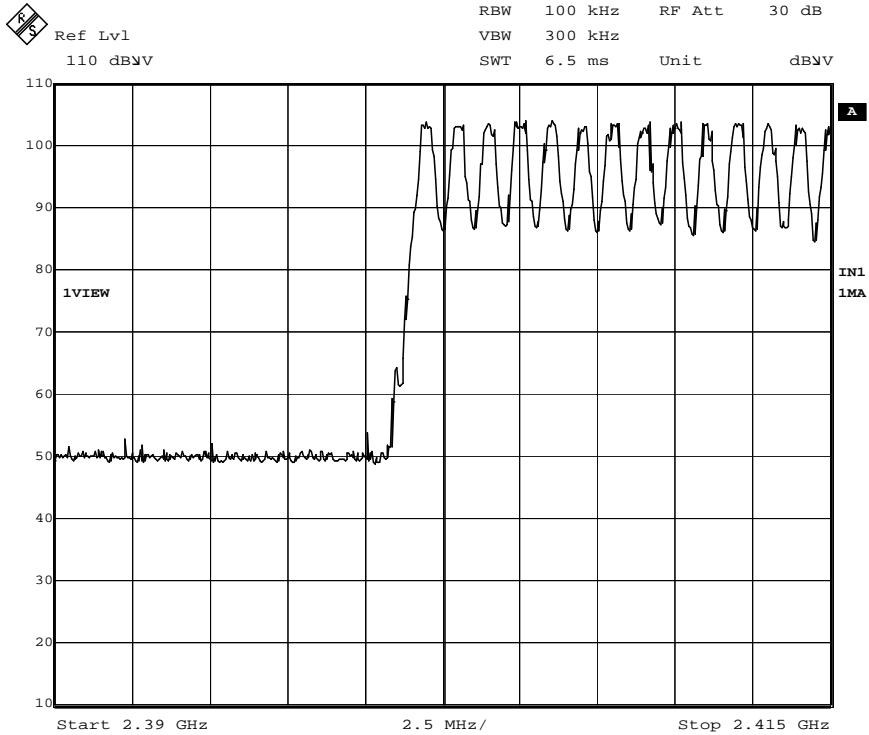
Hopping, DH5: 79ch

1.



Date: 12.FEB.2008 10:42:02

2.



Date: 12.FEB.2008 10:44:02

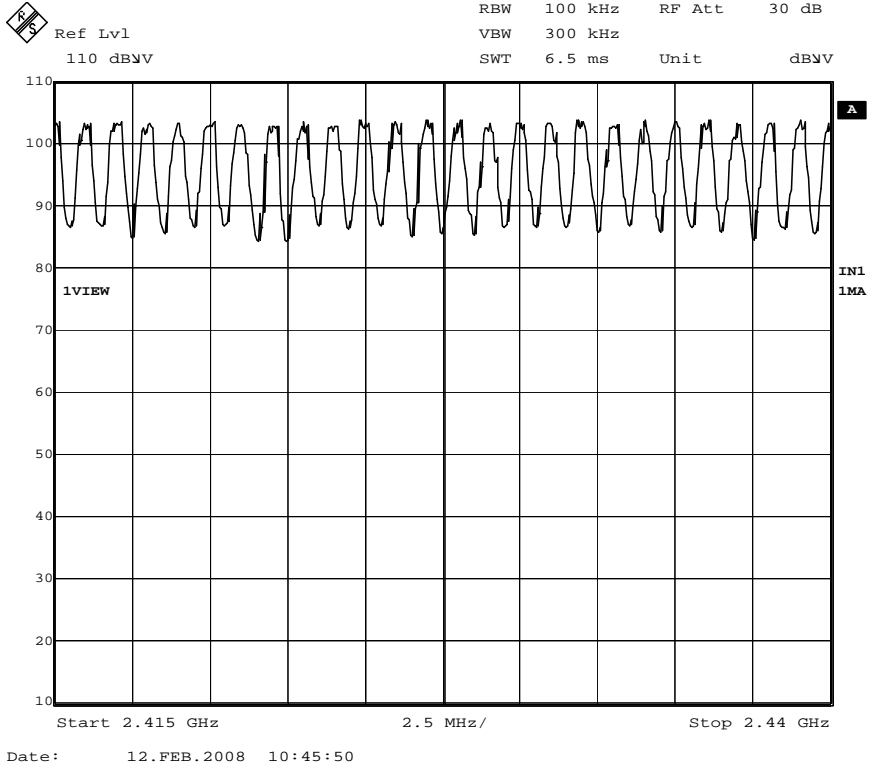
Channel Utilization: FCC 15.247(a)(1)(iii)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

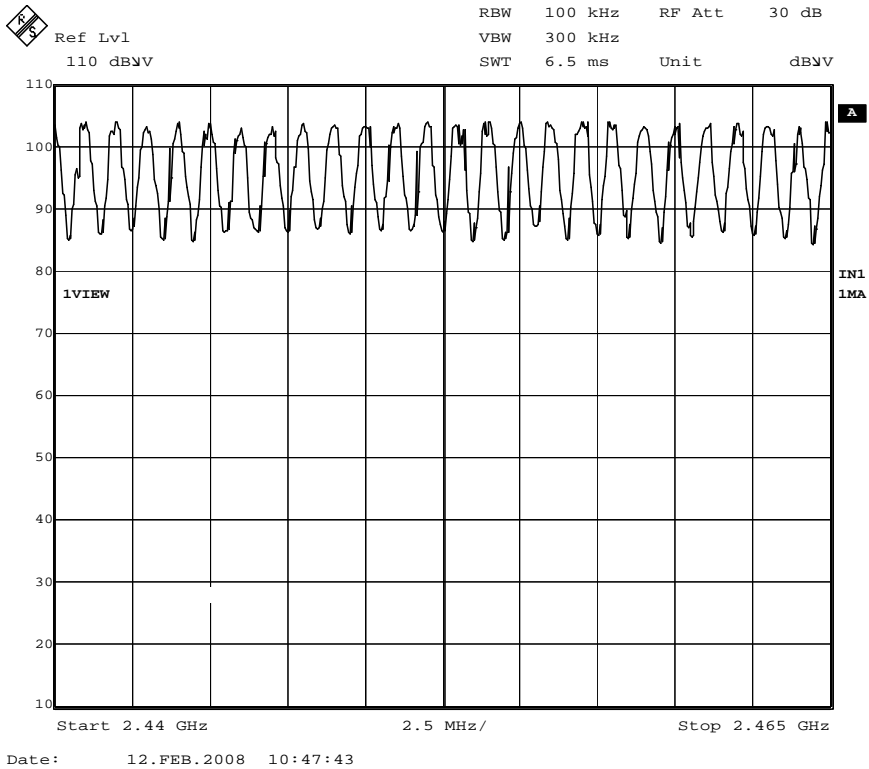
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Hopping, DH5: 79ch

3.



4.

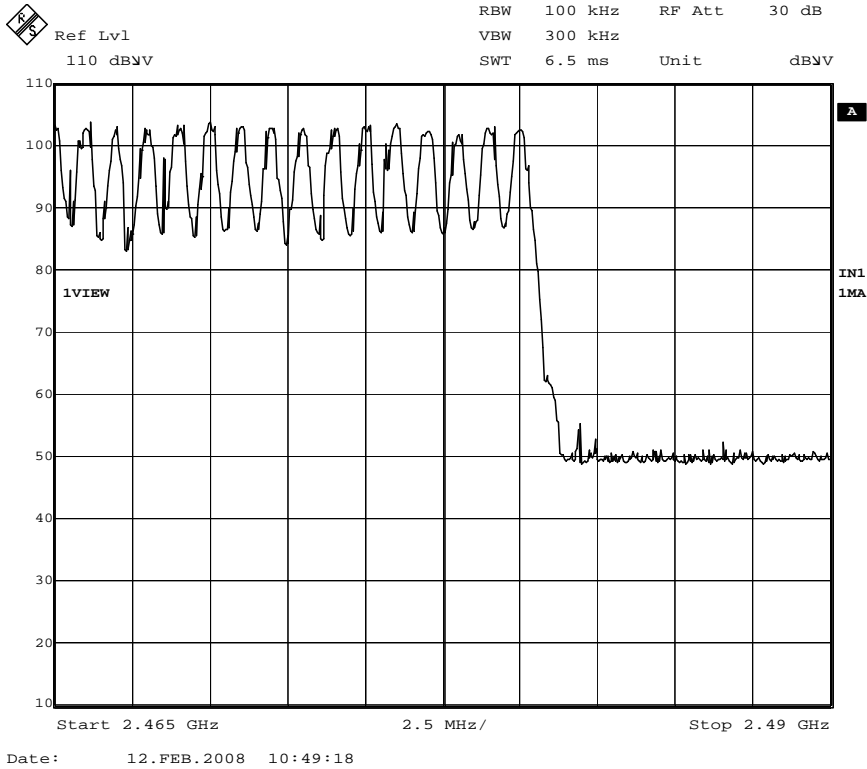


Channel Utilization: FCC 15.247(a)(1)(iii)

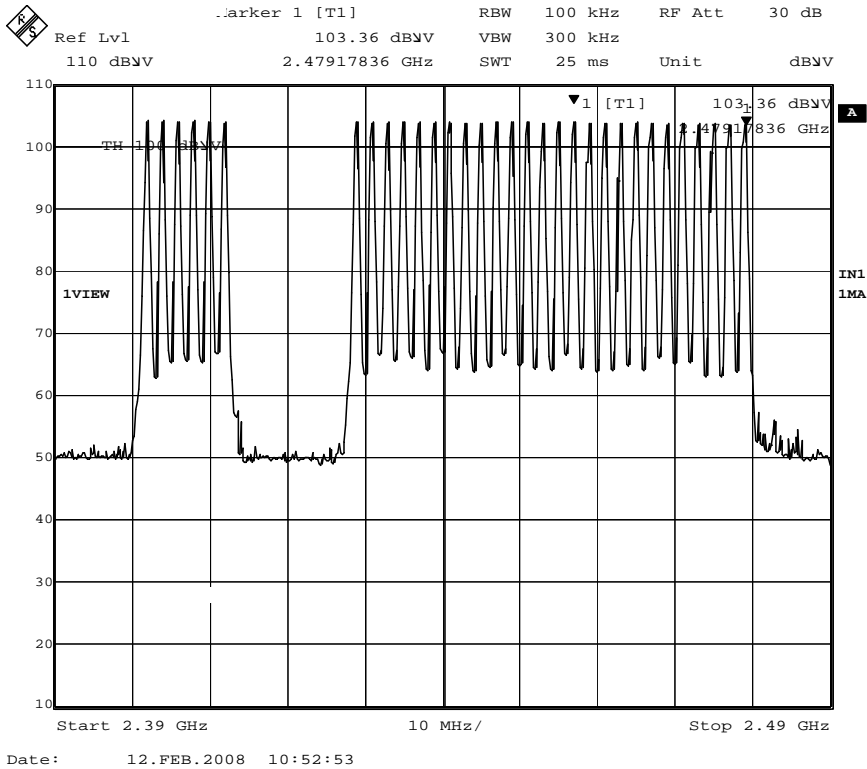
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Hopping, DH5: 79ch
5.



Inquiry: 32ch



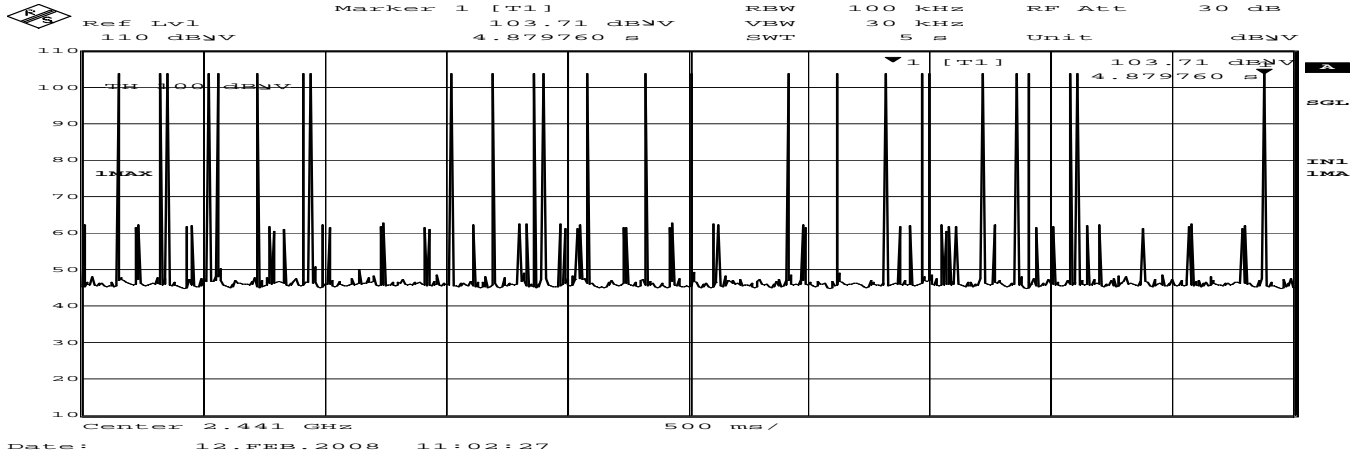
Dwell Time: FCC 15.247(a)(1)(iii)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

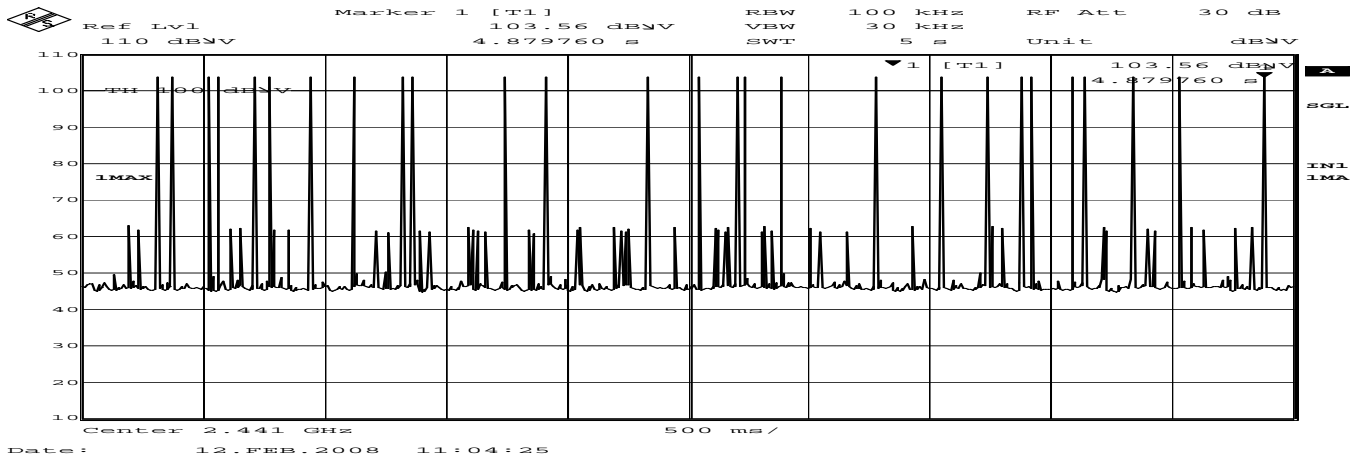
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Hopping (DH1):

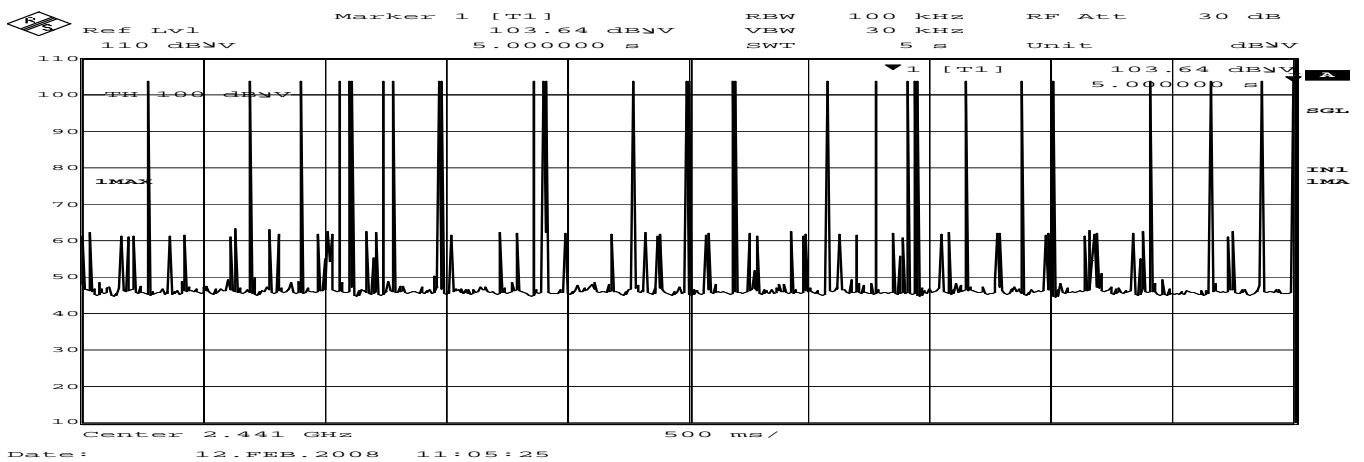
Count 1



Count 2



Count 3

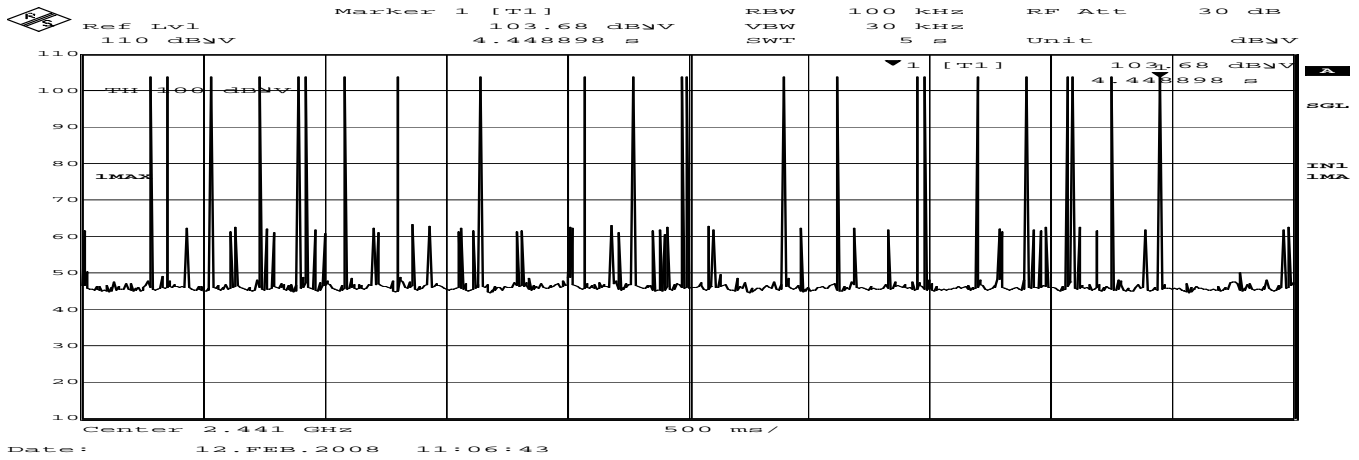


Dwell Time: FCC 15.247(a)(1)(iii)

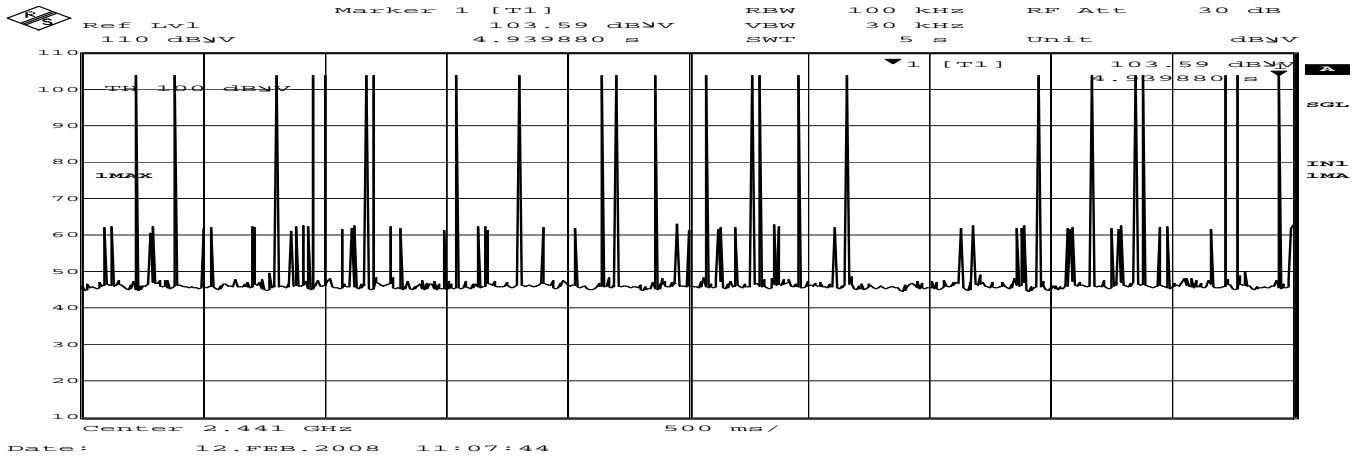
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER : MAX685BT
SERIAL NUMBER : 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

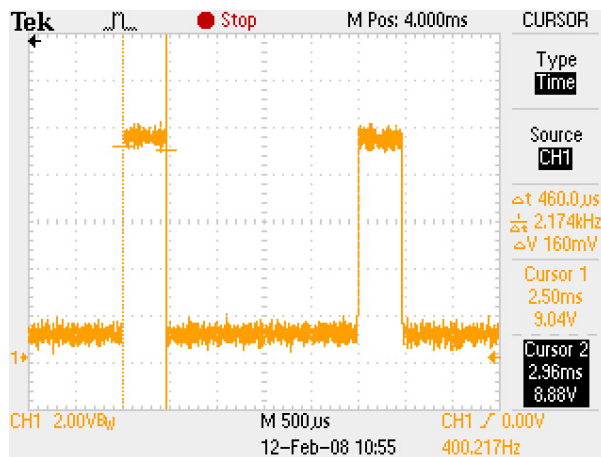
Count 4



Count 5



Duty cycle(Hopping DH1)



Average times of rising in 5 sec. of sweep = (26 + 27 + 24 + 23 + 24) / 5 = 24.8
 Average times of rising in 1 sec. = 24.8 / 5s = 4.96
 Average times of rising in 0.4x = 0.4 * 79ch * 4.96 = 156.74
 Dwell time = 156.74 * 0.460 = 72.10[ms]
 Limit : Dwell Time < 0.4[s]

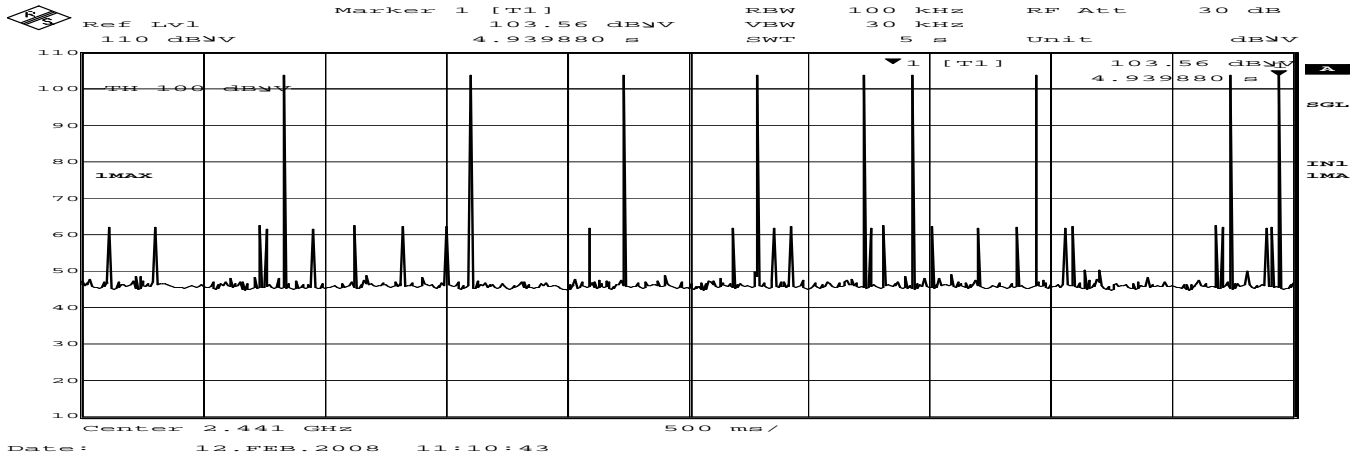
Dwell Time: FCC 15.247(a)(1)(iii)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

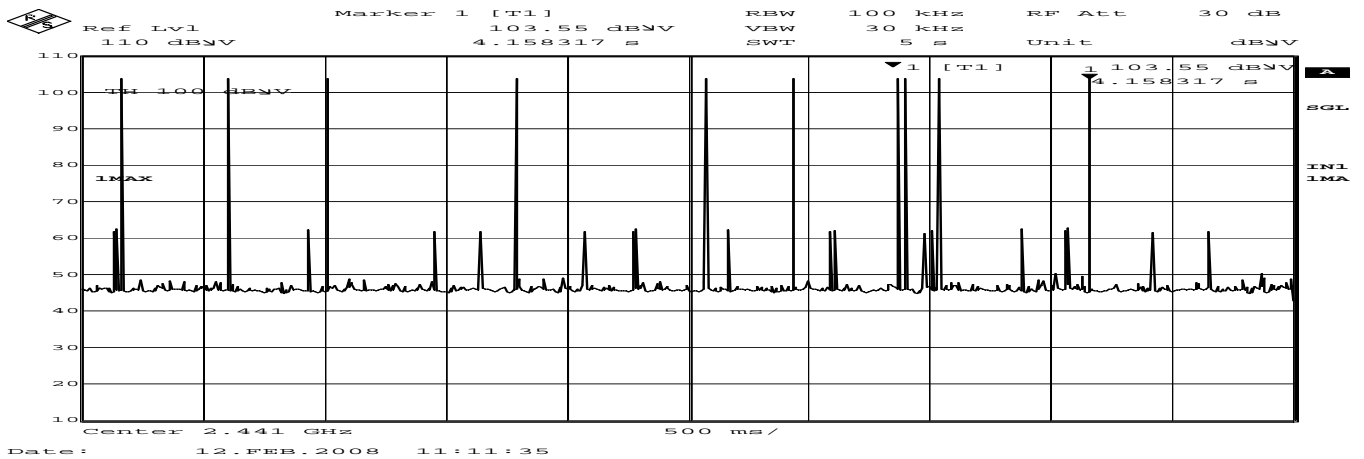
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Hopping (DH3):

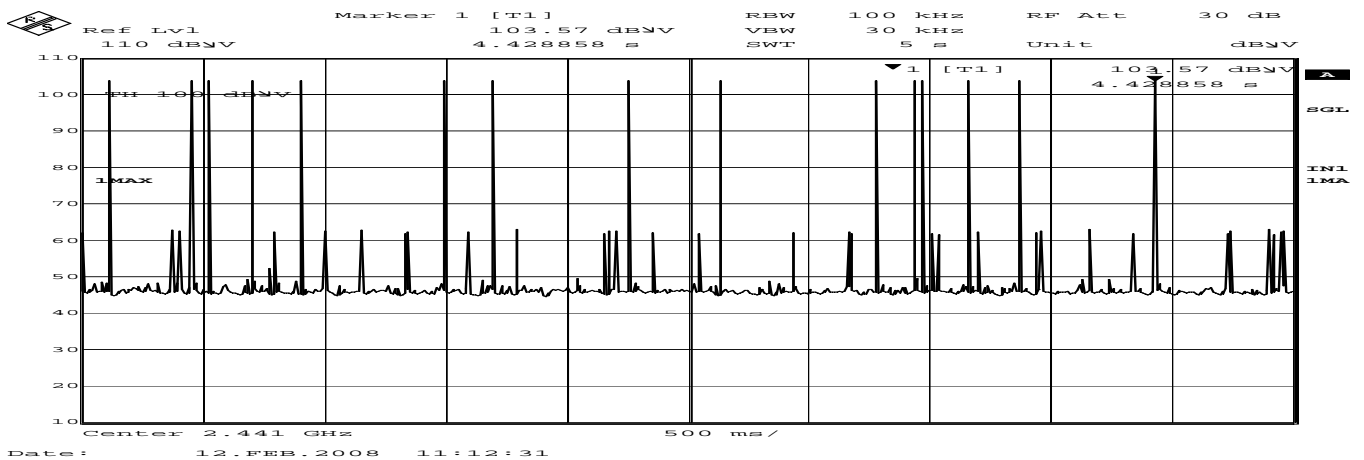
Count 1



Count 2



Count 3

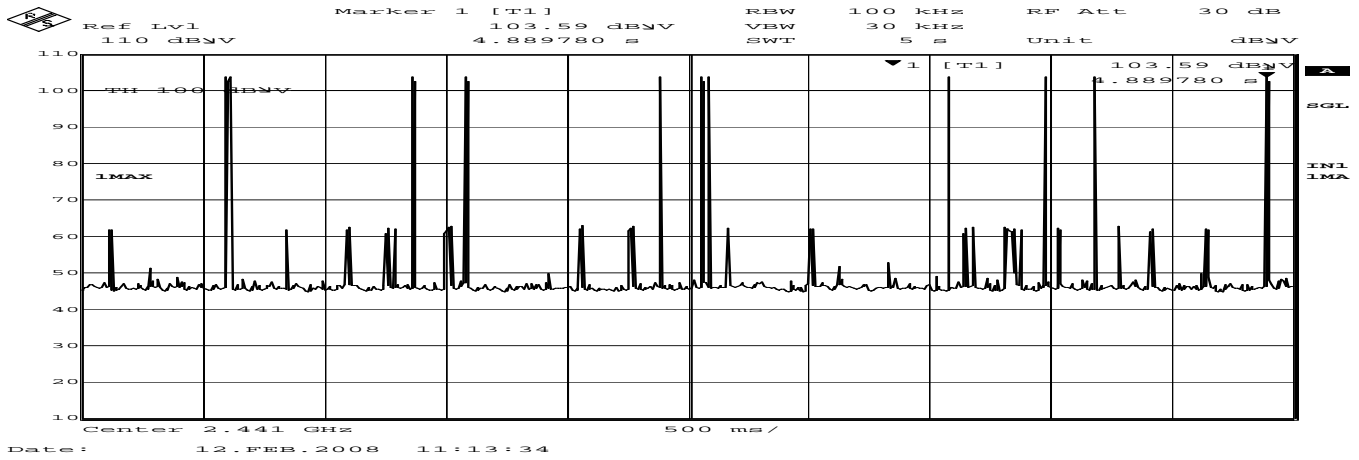


Dwell Time: FCC 15.247(a)(1)(iii)

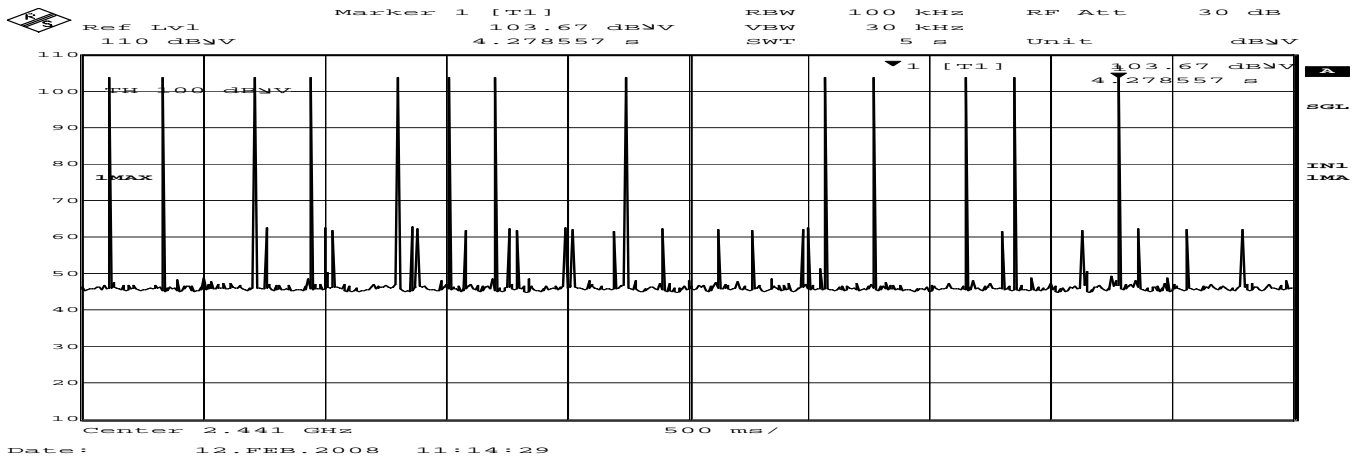
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

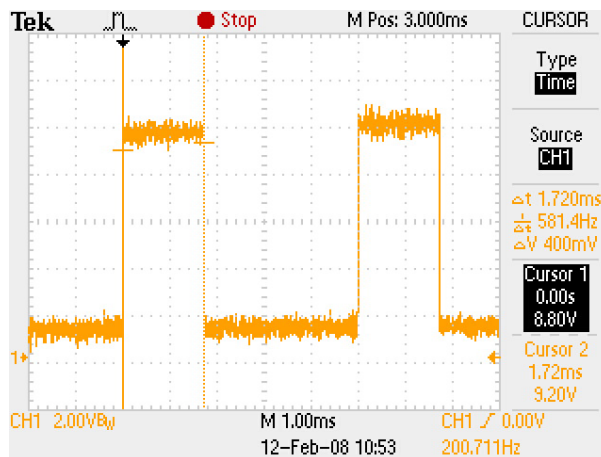
Count 4



Count 5



Duty cycle(Hopping DH3)



Average times of rising in 5 sec. of sweep = (9 + 10 + 15 + 10 + 13) / 5 = 11.4
 Average times of rising in 1 sec. = 11.4 / 5s = 2.28
 Average times of rising in 0.4x = 0.4 * 79ch * 2.28 = 72.05
 Dwell time = 72.05 * 1.72 = 123.93[ms]
 Limit : Dwell Time < 0.4[s]

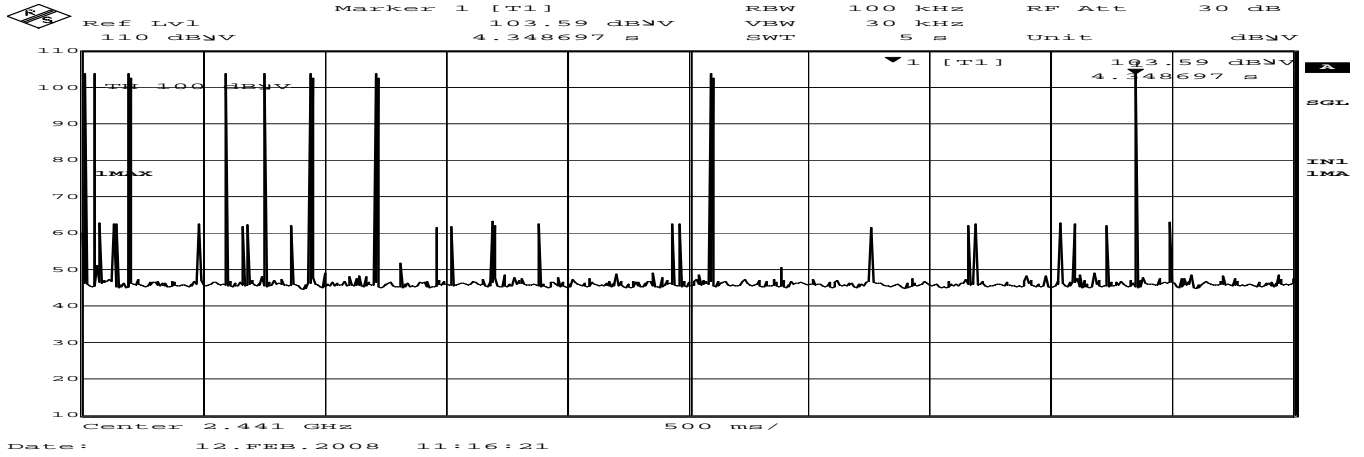
Dwell Time: FCC 15.247(a)(1)(iii)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

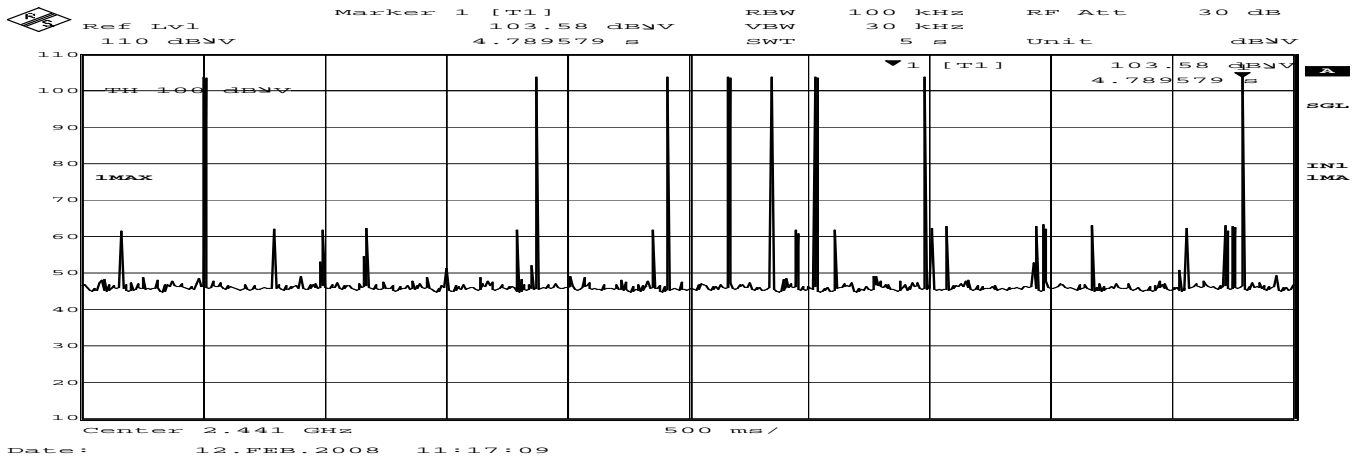
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

Hopping (DH5):

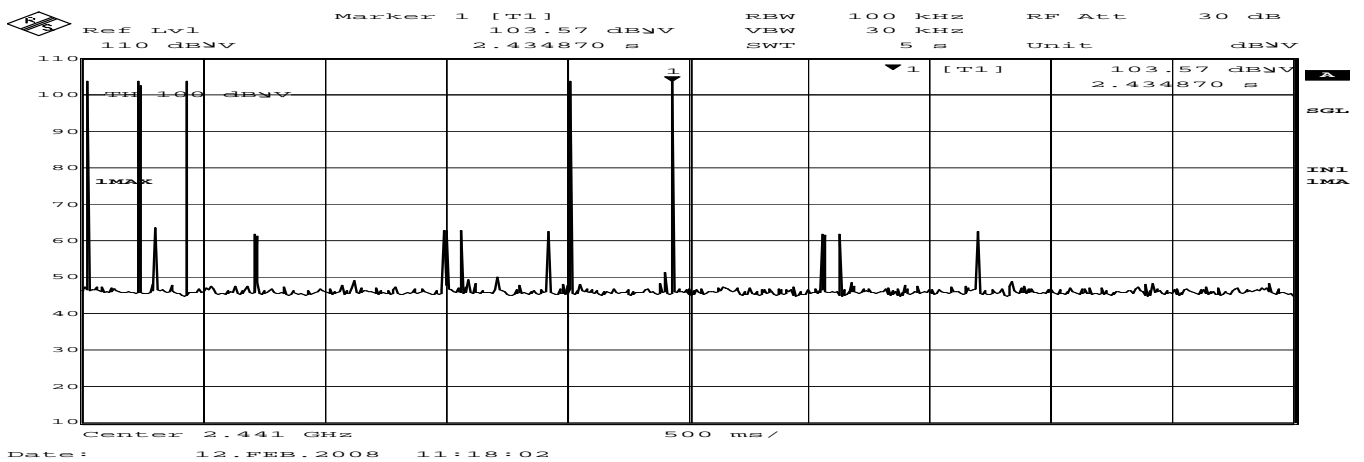
Count 1



Count 2



Count 3

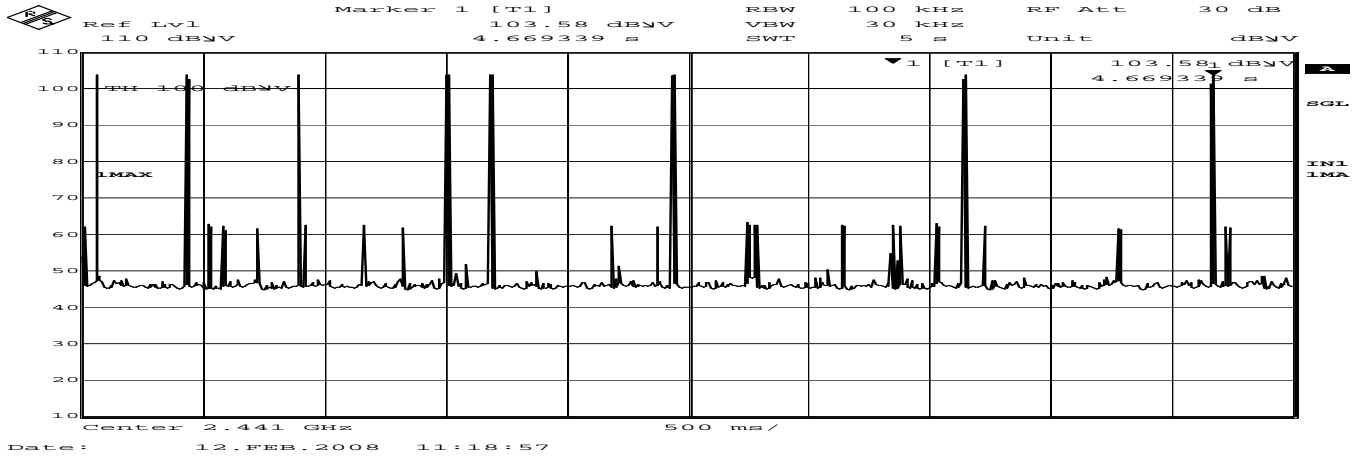


Dwell Time: FCC 15.247(a)(1)(iii)

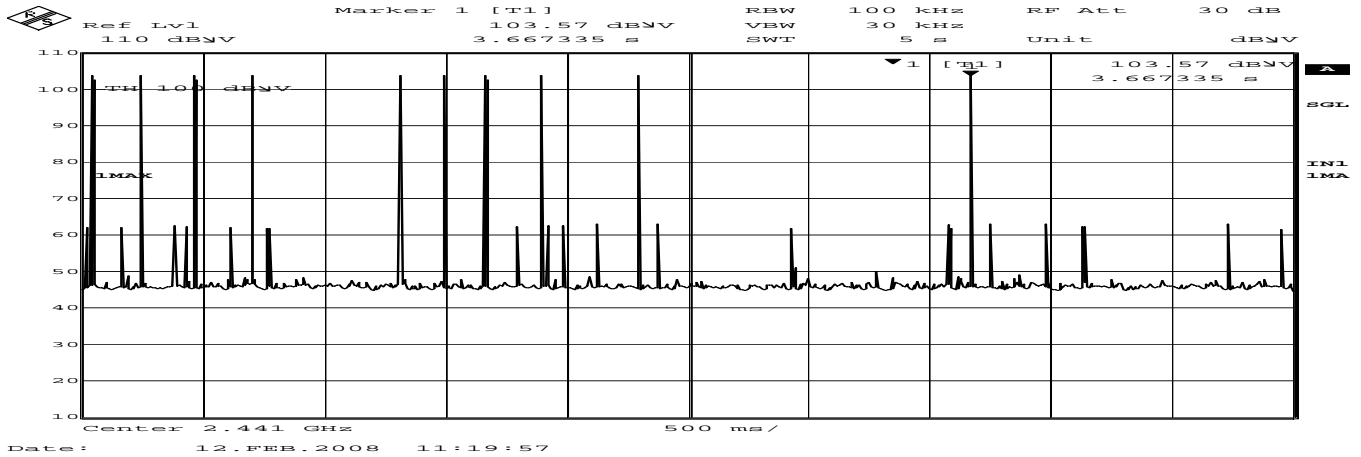
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

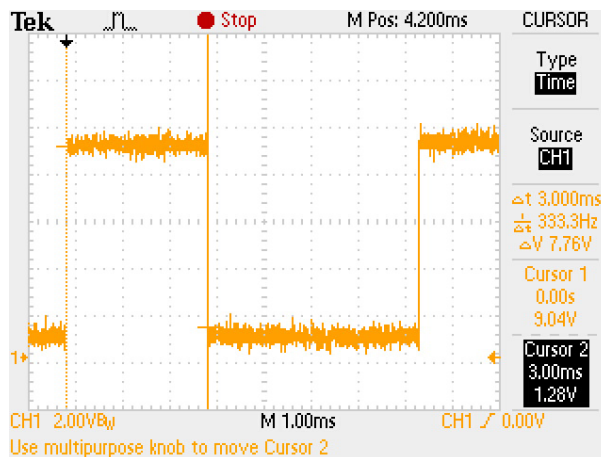
Count 4



Count 5



Duty cycle(Hopping DH5)



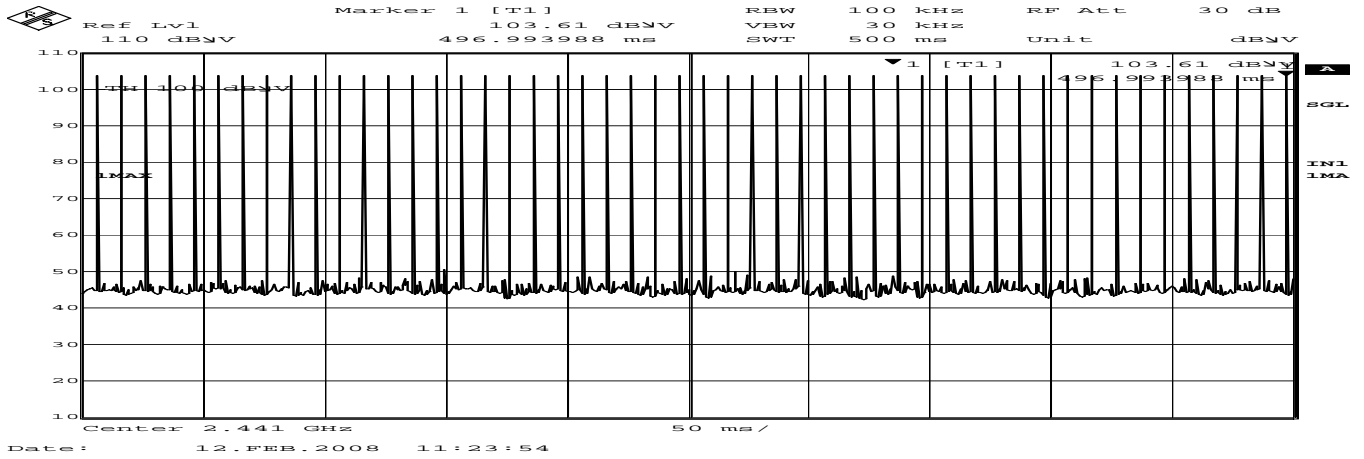
Average times of rising in 5 sec. of sweep = $(9 + 8 + 5 + 8 + 10) / 5 = 8$
 Average times of rising in 1 sec. = $8 / 5s = 1.6$
 Average times of rising in 0.4x = $0.4 * 79ch * 1.6 = 50.56$
 Dwell time = $50.56 * 3.00 = 151.68 [ms]$
 Limit : Dwell Time < 0.4[s]

Dwell Time: FCC 15.247(a)(1)(iii)

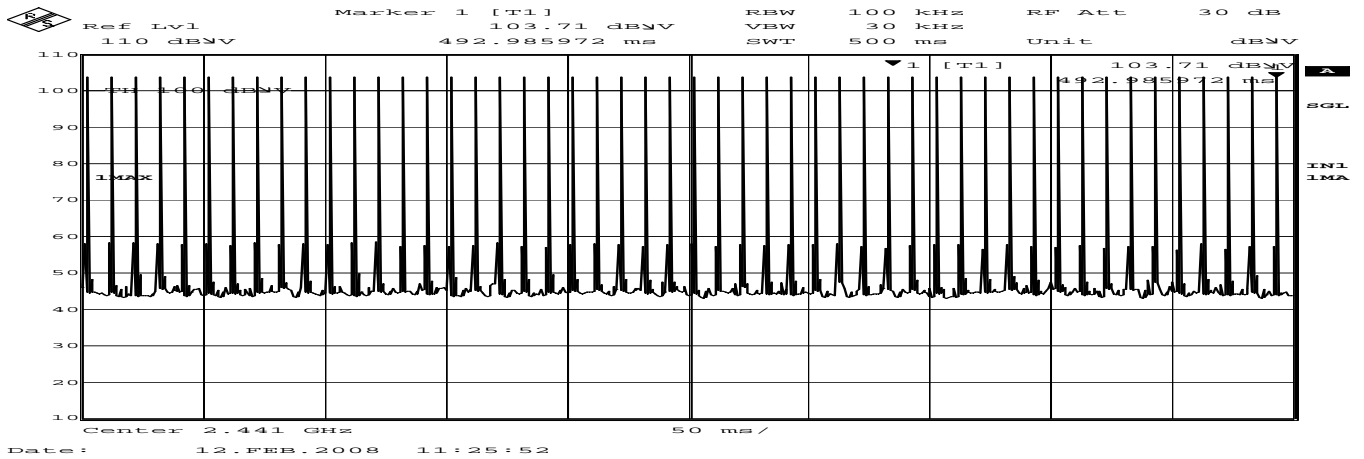
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

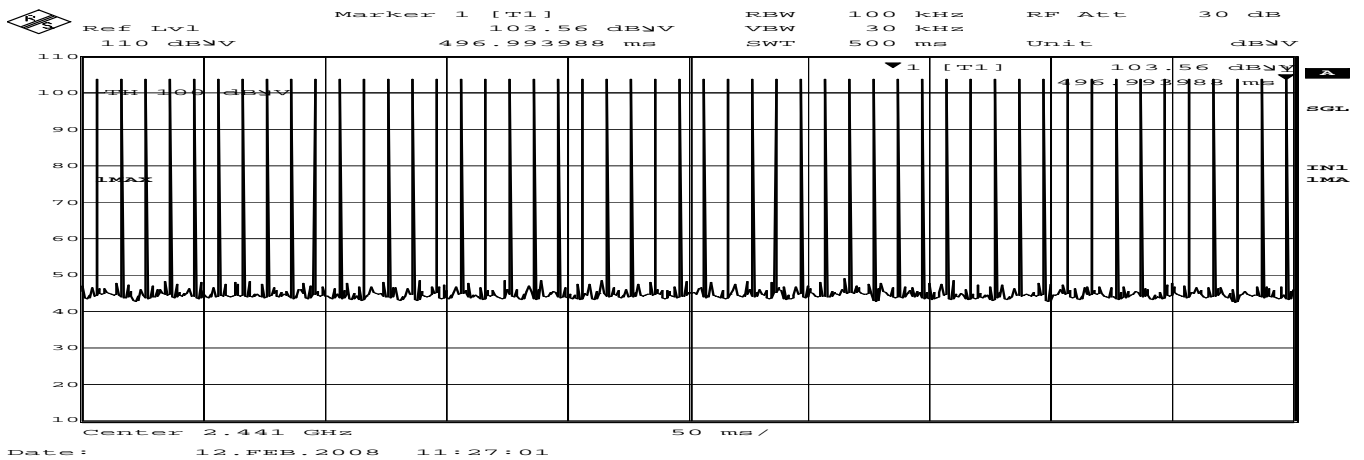
Inquiry:
Count 1



Count 2



Count 3

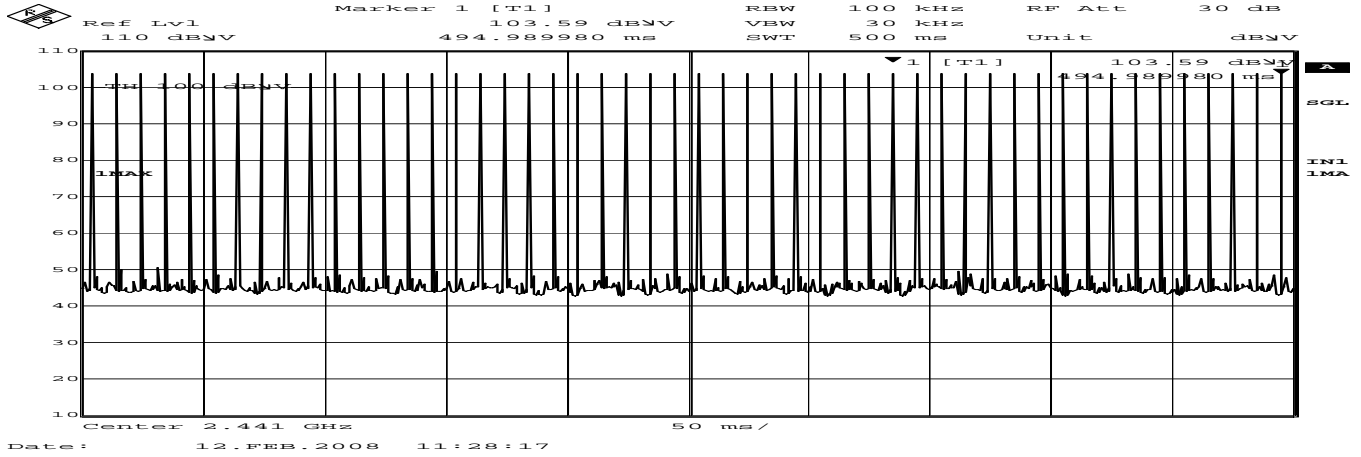


Dwell Time: FCC 15.247(a)(1)(iii)

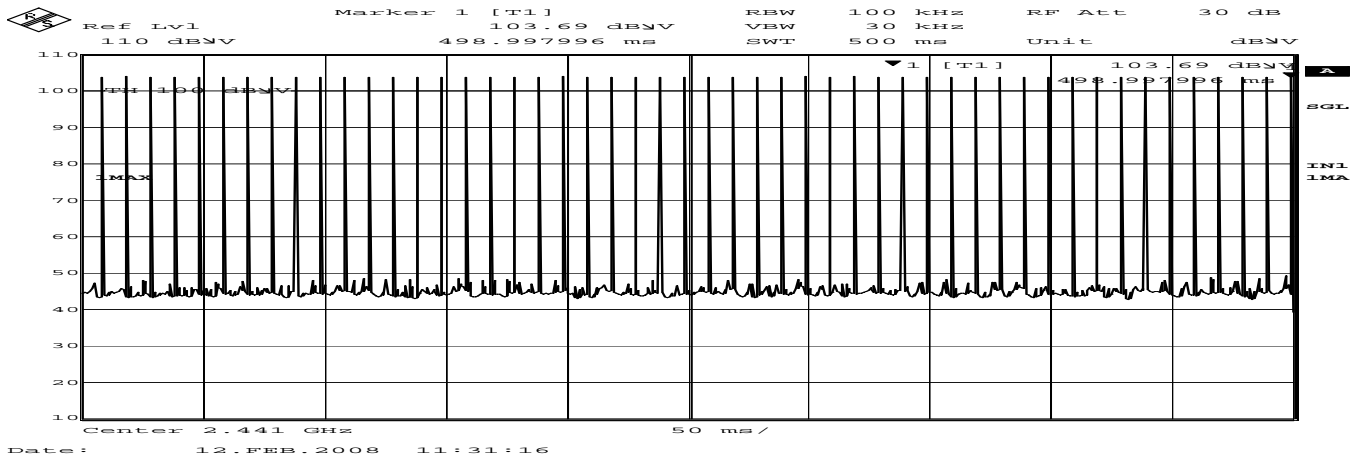
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(a)(1)(iii)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

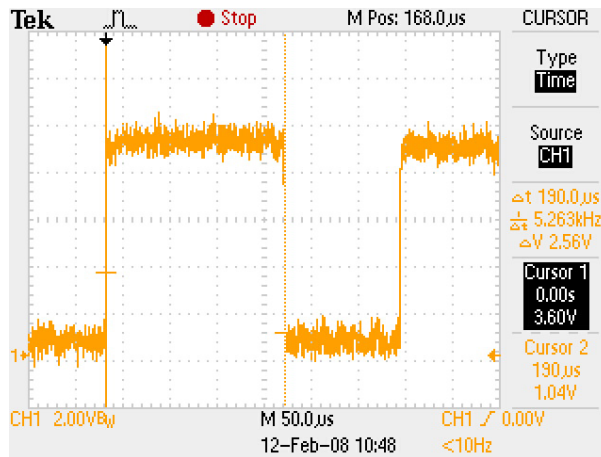
Count 4



Count 5



Duty cycle(Inquiry)



Average times of rising in 0.5 sec. of sweep = (50 + 50 + 50+ 50 + 50) / 5 = 50
 Average times of rising in 1 sec. = 50 / 0.5s = 100
 Average times of rising in 0.4x = 0.4 * 32ch * 100 = 1280
 Dwell time = 1280 * 0.190 = 243.2[ms]
 Limit : Dwell Time < 0.4[s]

Maximum Peak Conducted Output Power

UL Japan, Inc.
YAMAKITA No.4 Shielded Room

COMPANY : Clarion Co., Ltd.	REPORT NO : 28GE0050-YK-A
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT	REGULATION : FCC Part15SubpartC 247(b)(1)
MODEL NUMBER : MAX685BT	DATE : 2008.02.12
SERIAL NUMBER : 259X	TEMP./HUMI : 22deg.C./35%
POWER : DC12V	
TEST MODE : Transmitting	
	ENGINEER : Tatsuya Arai

DH1

CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]	Limit (125mW) [dBm]	MARGIN [dB]
Low	2402.00	-2.01	3.31	1.30	20.96	19.66
Mid	2441.00	-2.33	3.31	0.98	20.96	19.98
High	2480.00	-2.79	3.31	0.52	20.96	20.44

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:The Cable Prepared by The Client + KCC-D7

DH3

CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]	Limit (125mW) [dBm]	MARGIN [dB]
Low	2402.00	-2.01	3.31	1.30	20.96	19.66
Mid	2441.00	-2.35	3.31	0.96	20.96	20.00
High	2480.00	-2.78	3.31	0.53	20.96	20.43

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:The Cable Prepared by The Client + KCC-D7

DH5

CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]	Limit (125mW) [dBm]	MARGIN [dB]
Low	2402.00	-2.02	3.31	1.29	20.96	19.67
Mid	2441.00	-2.33	3.31	0.98	20.96	19.98
High	2480.00	-2.78	3.31	0.53	20.96	20.43
Inquiry	-	-2.78	3.31	0.53	20.96	20.43

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:The Cable Prepared by The Client + KCC-D7

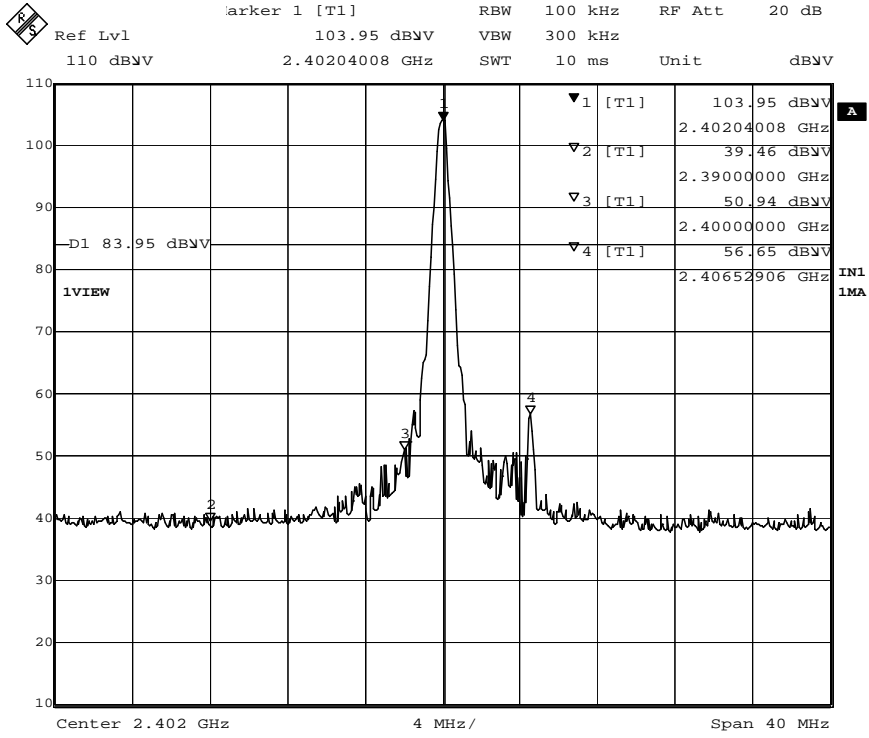
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

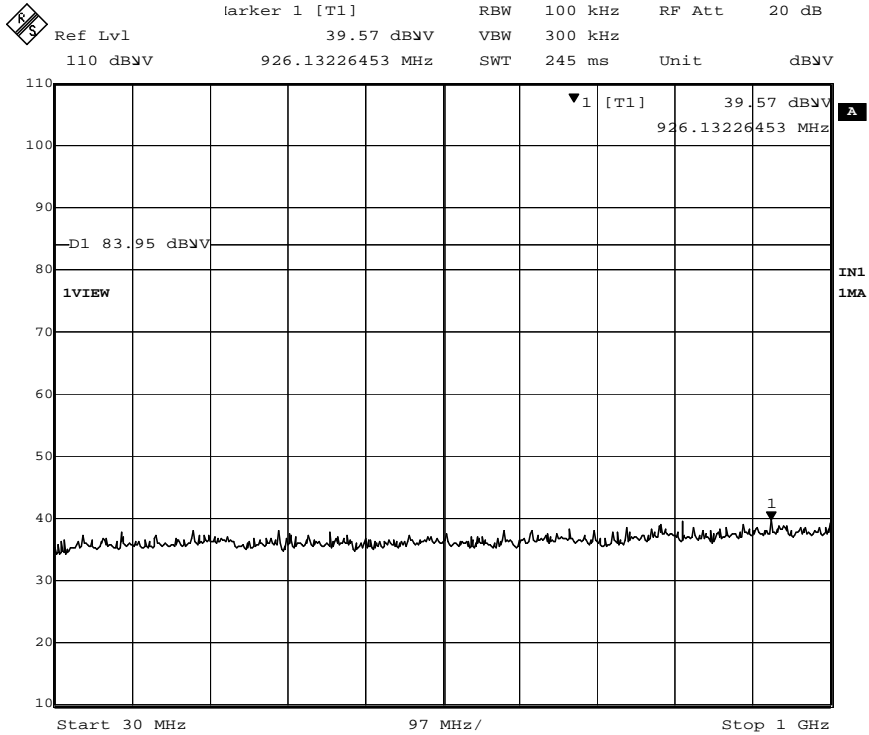
[Transmitting DH5]
Ch:2402MHz

1.



Date: 12.FEB.2008 13:14:44

2.



Date: 12.FEB.2008 13:15:37

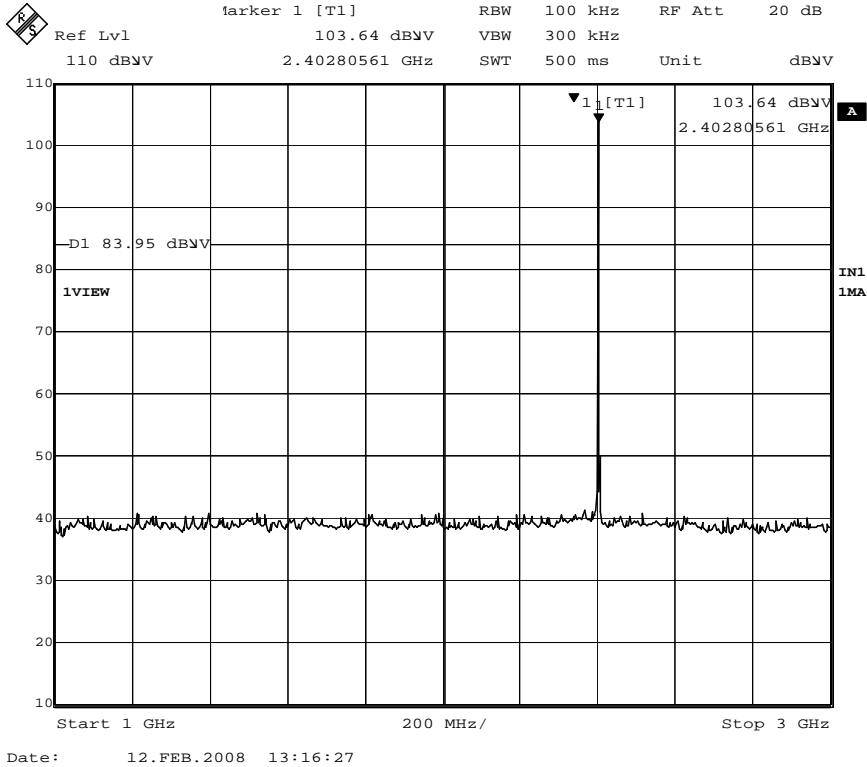
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

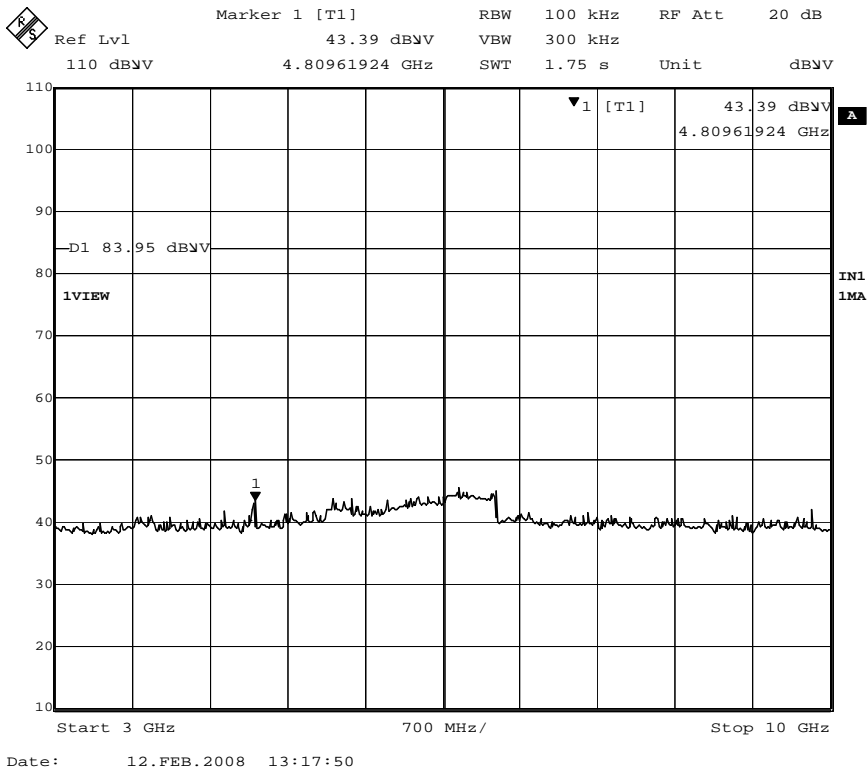
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

[Transmitting DH5]
Ch:2402MHz

3.



4.



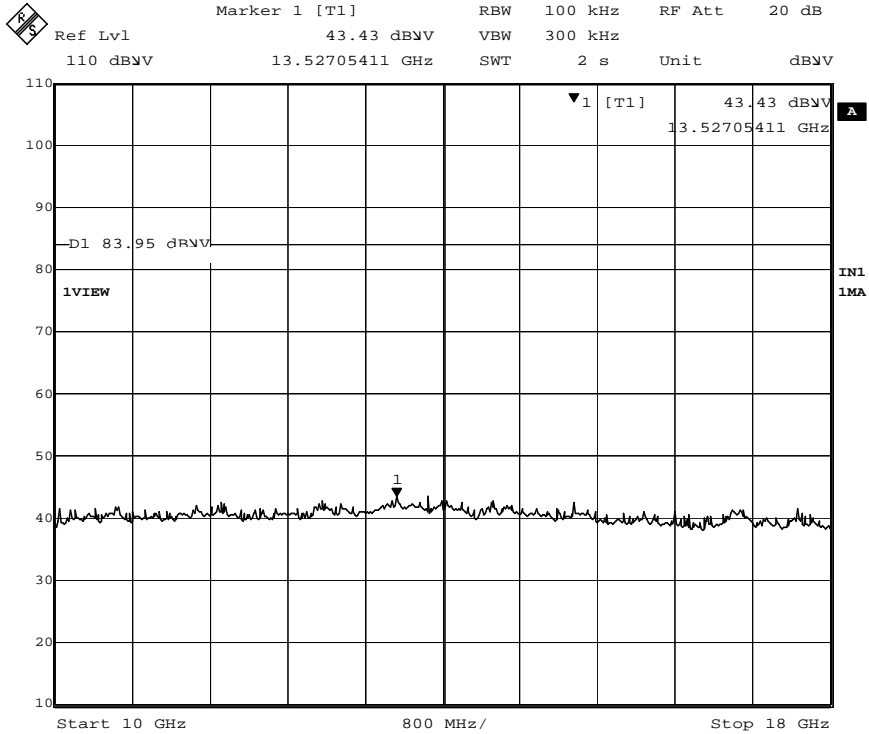
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

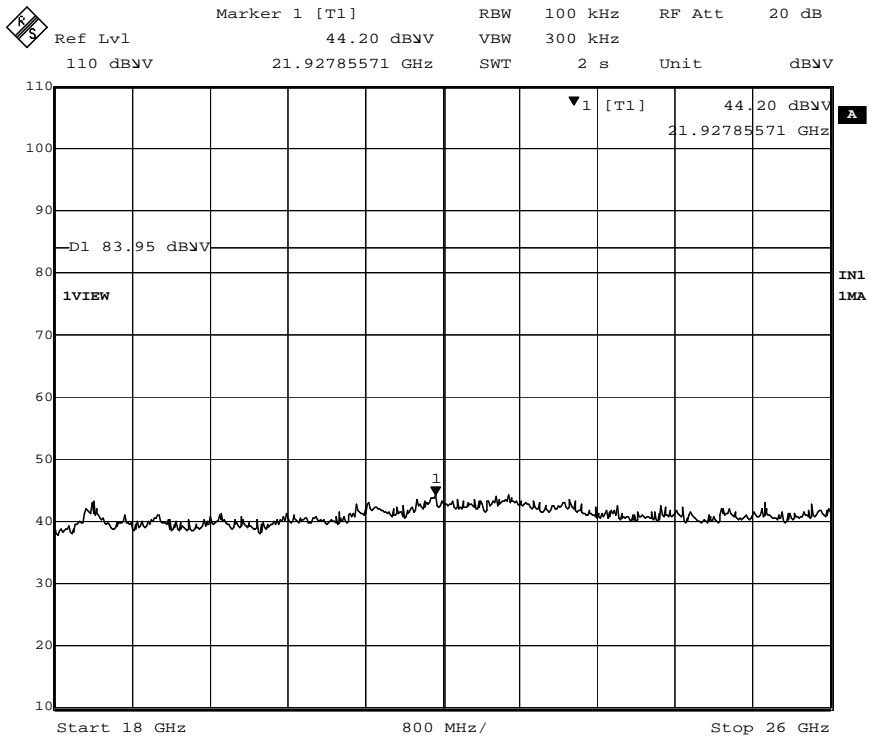
[Transmitting DH5]
Ch:2402MHz

5.



Date: 12.FEB.2008 13:18:46

6.



Date: 12.FEB.2008 13:19:30

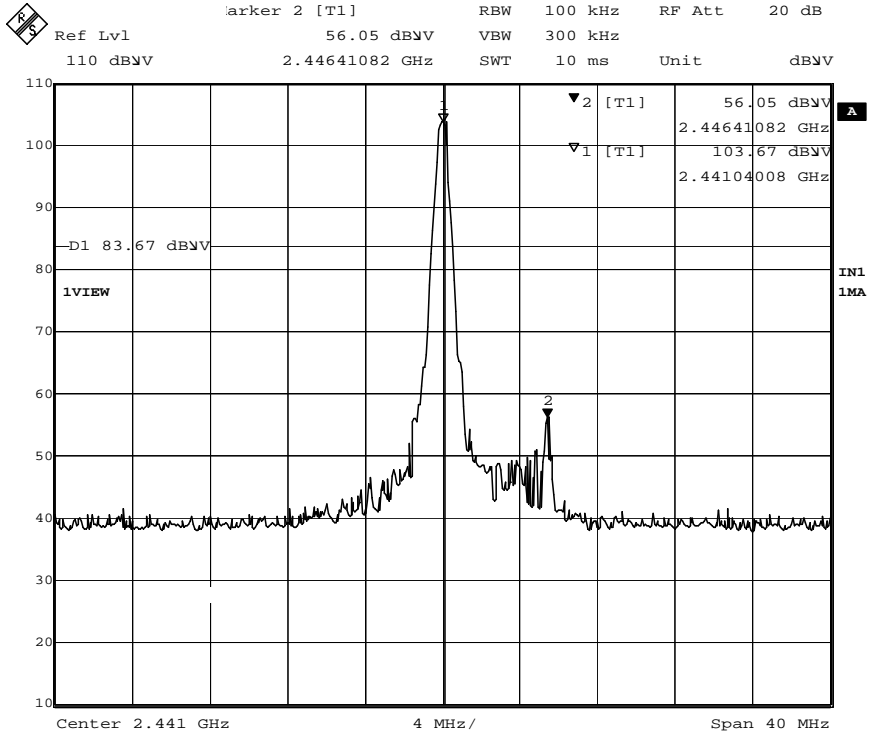
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

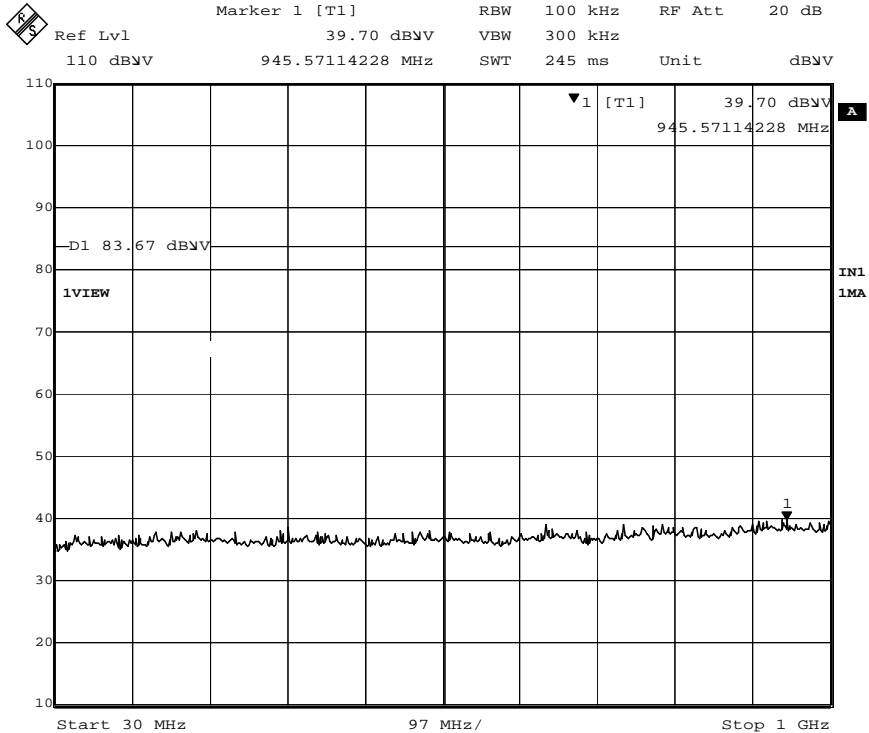
[Transmitting DH5]
Ch:2441MHz

1.



Date: 12.FEB.2008 13:26:30

2.



Date: 12.FEB.2008 13:28:19

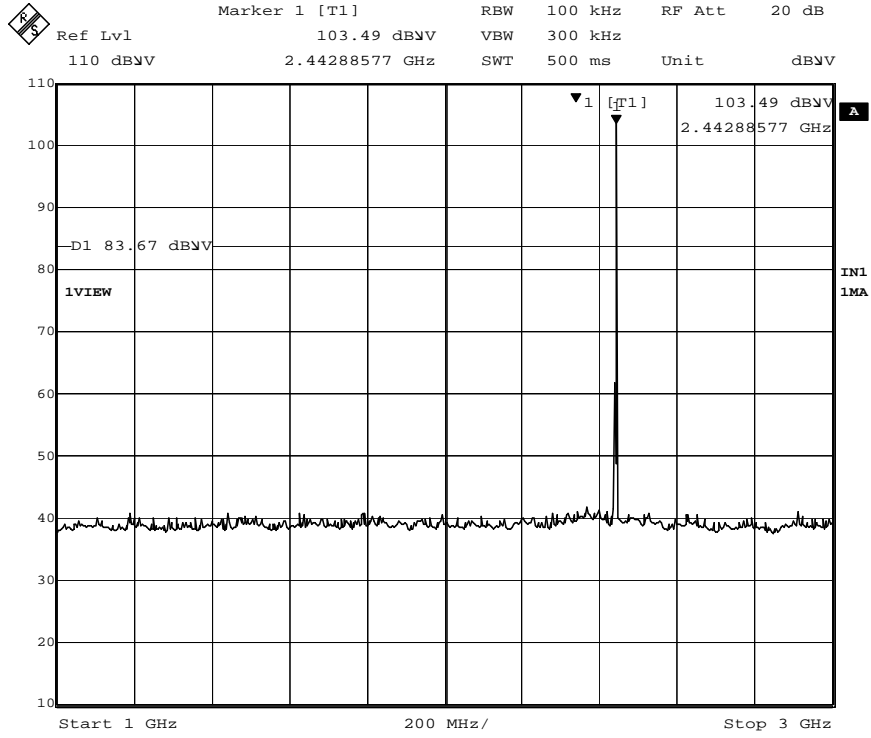
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

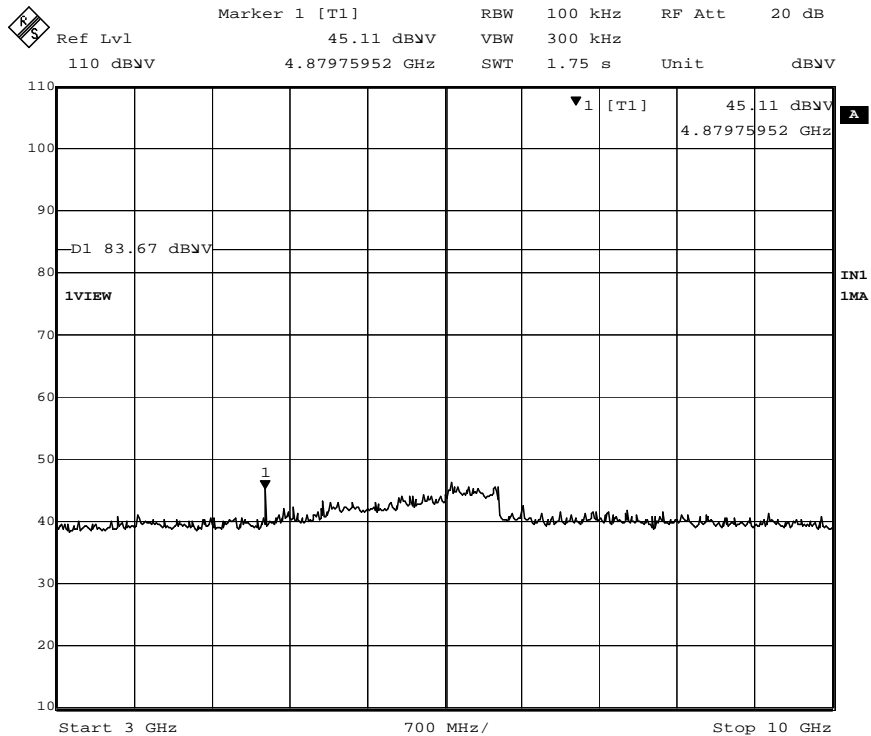
[Transmitting DH5]
Ch:2441MHz

3.



Date: 12.FEB.2008 13:29:50

4.



Date: 12.FEB.2008 13:31:25

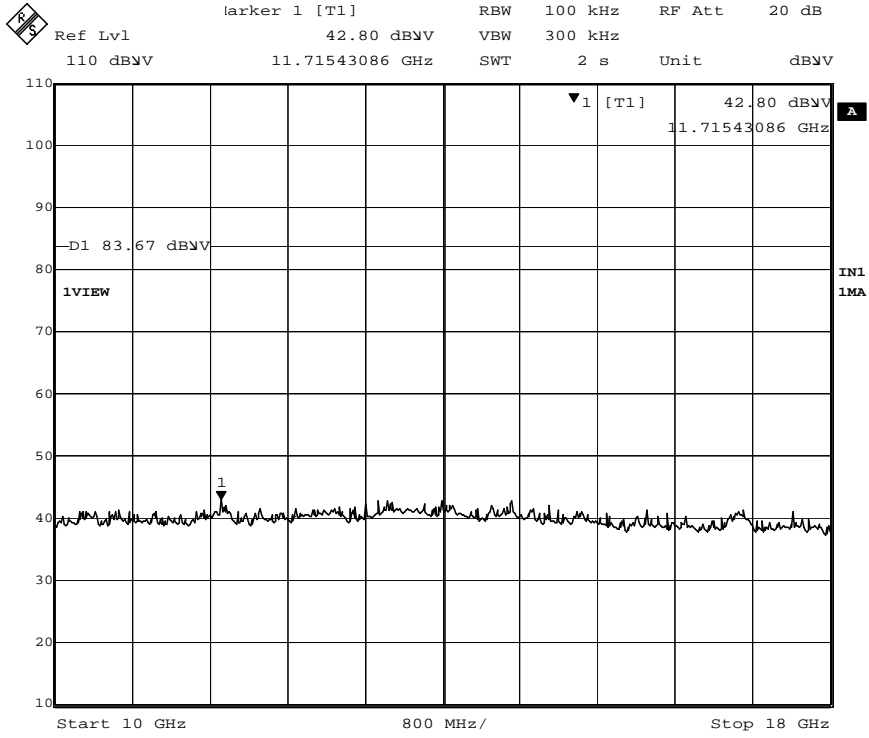
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

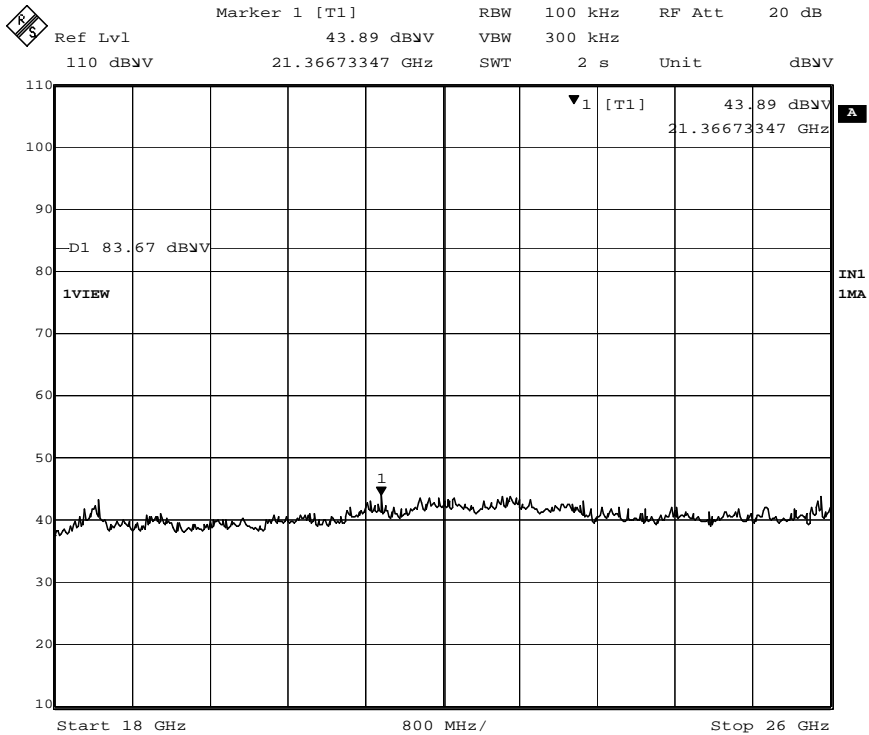
[Transmitting DH5]
Ch:2441MHz

5.



Date: 12.FEB.2008 13:32:22

6.



Date: 12.FEB.2008 13:33:44

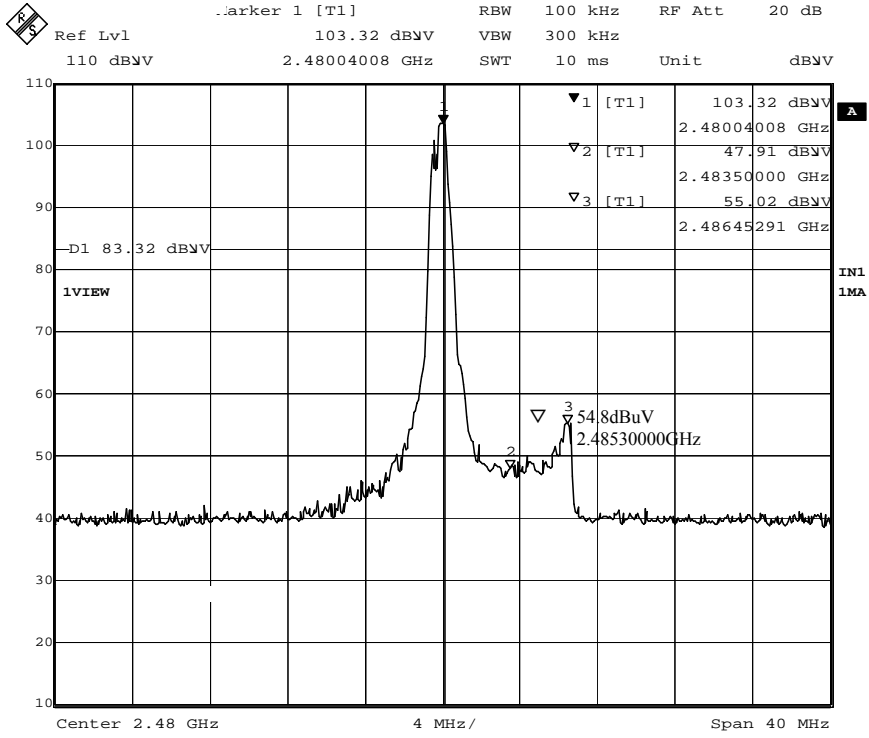
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

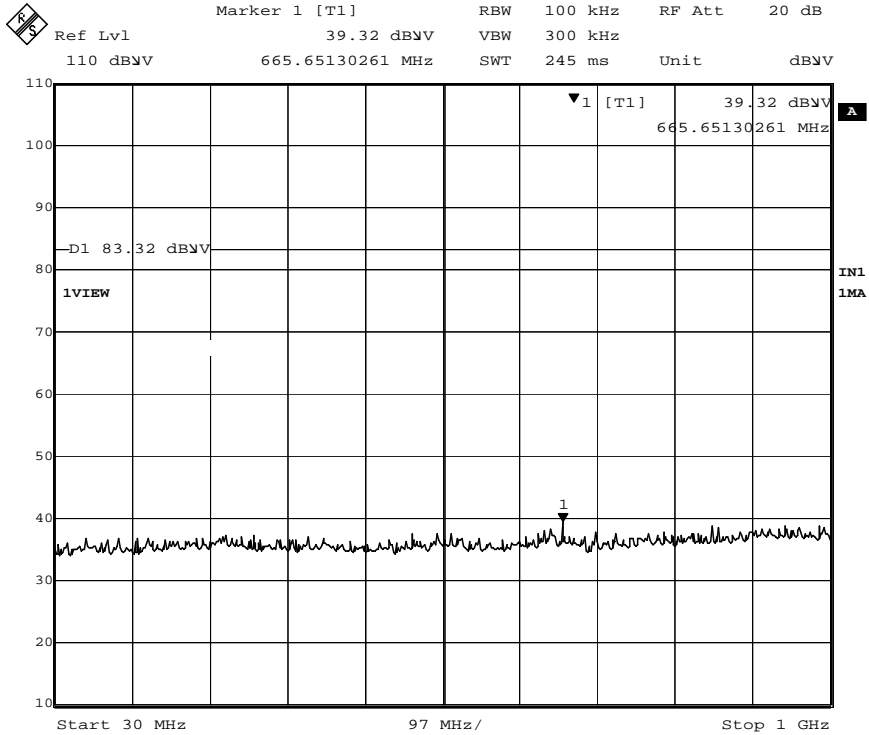
[Transmitting DH5]
Ch:2480MHz

1.



Date: 12.FEB.2008 13:42:37

2.



Date: 12.FEB.2008 13:44:27

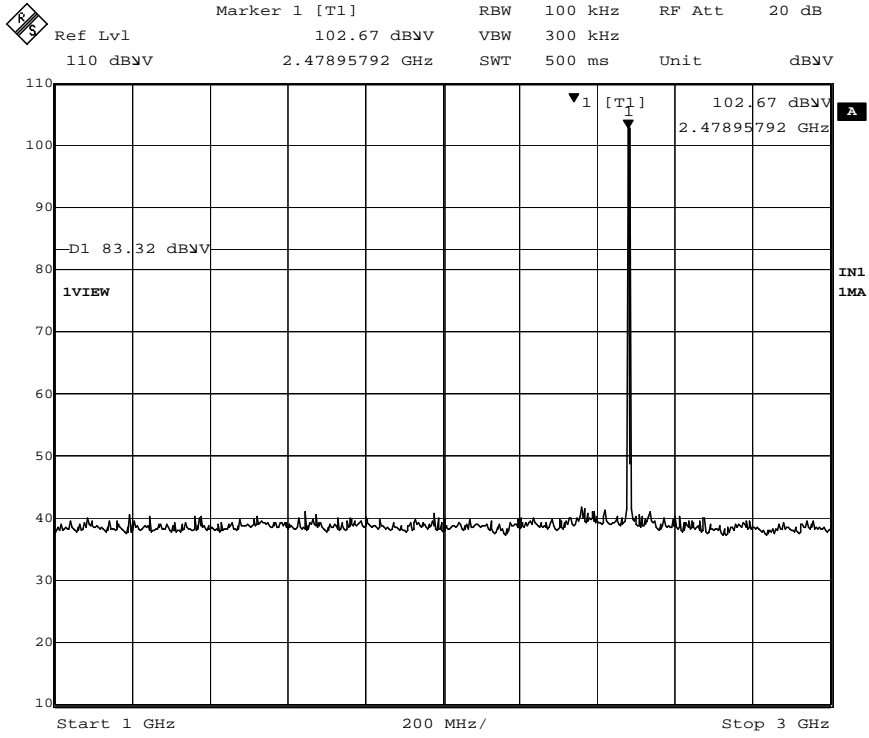
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

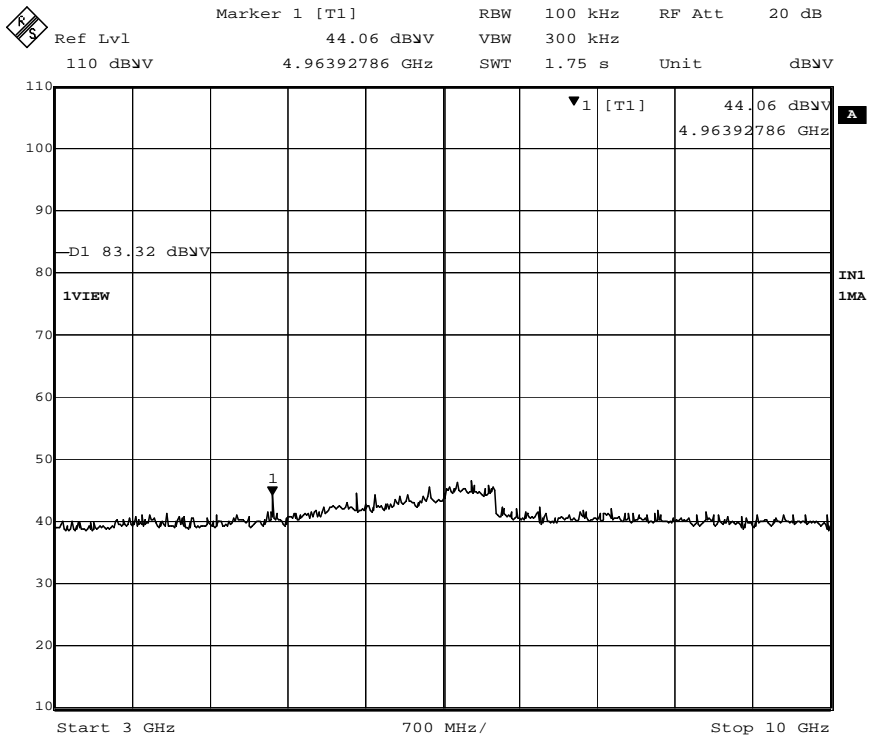
[Transmitting DH5]
Ch:2480MHz

3.



Date: 12.FEB.2008 13:45:28

4.



Date: 12.FEB.2008 13:48:14

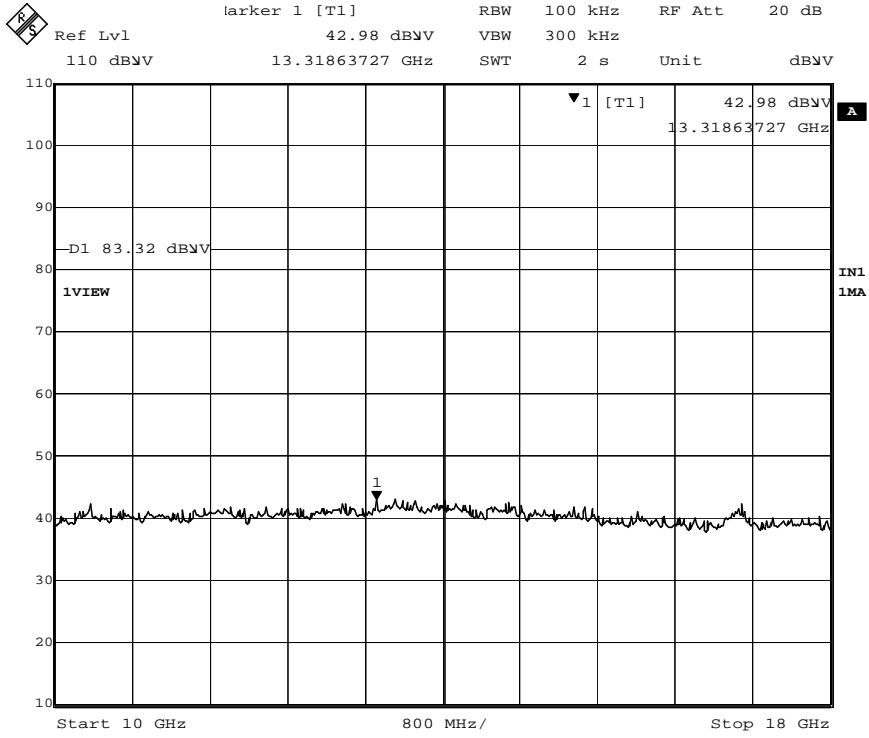
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

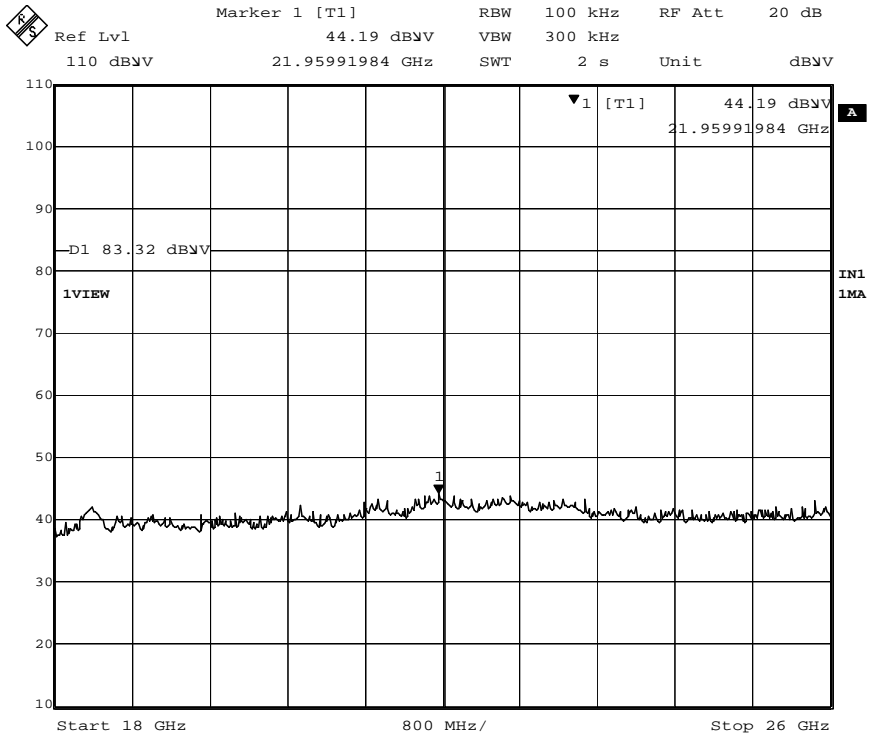
[Transmitting DH5]
Ch:2480MHz

5.



Date: 12.FEB.2008 13:49:20

6.



Date: 12.FEB.2008 13:50:15

Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

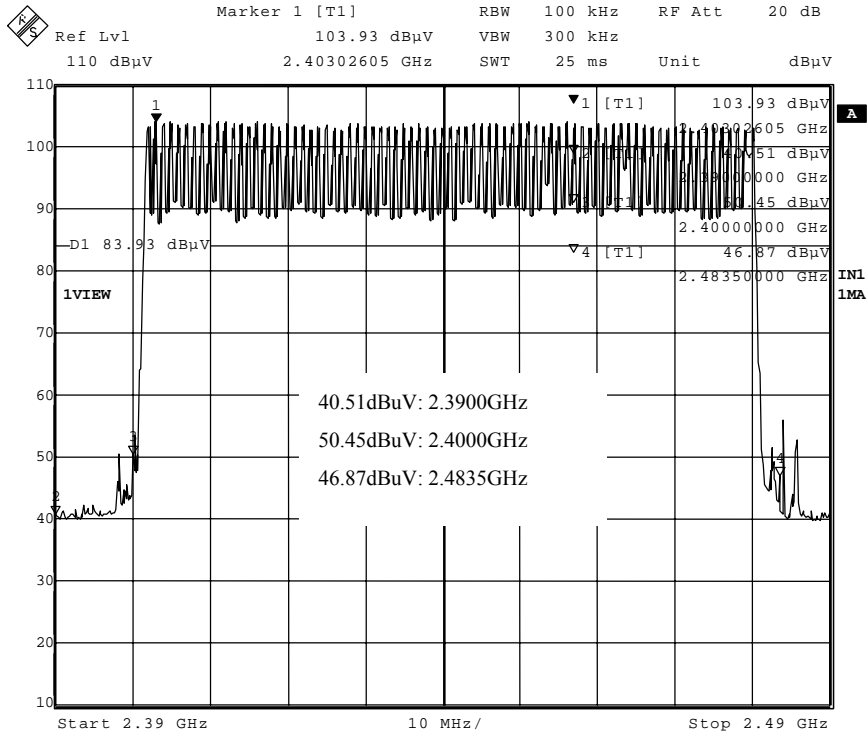
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

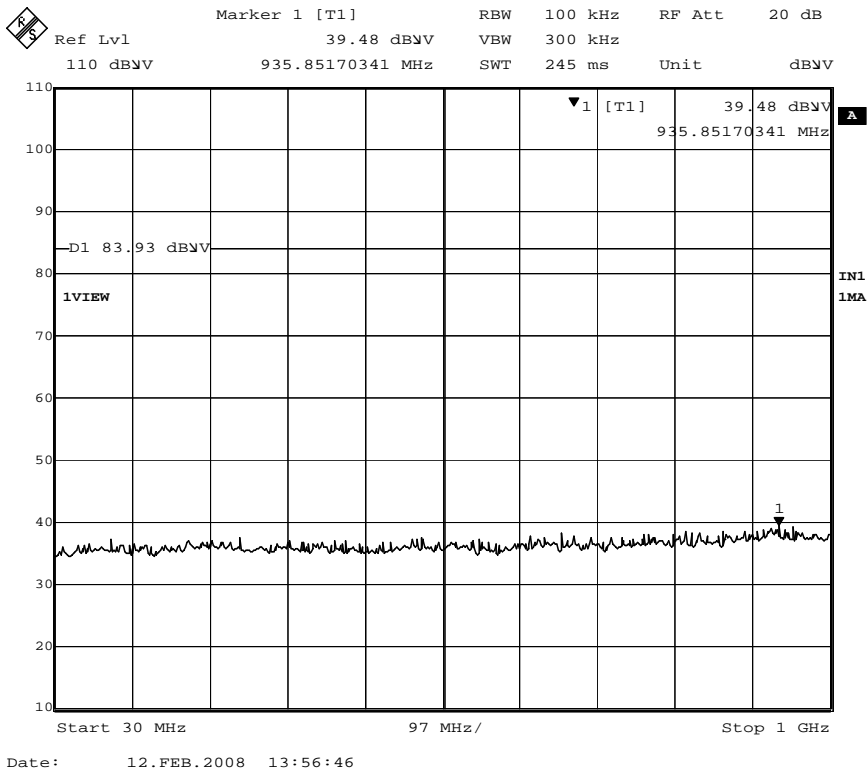
[Transmitting DH5]

Hopping

1.



2.



Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

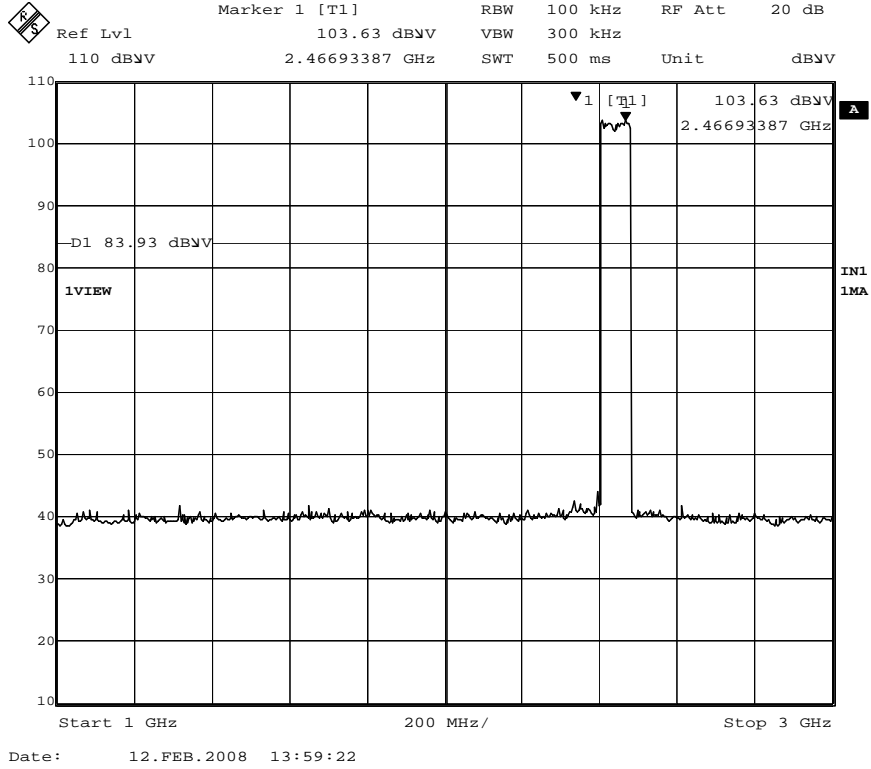
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

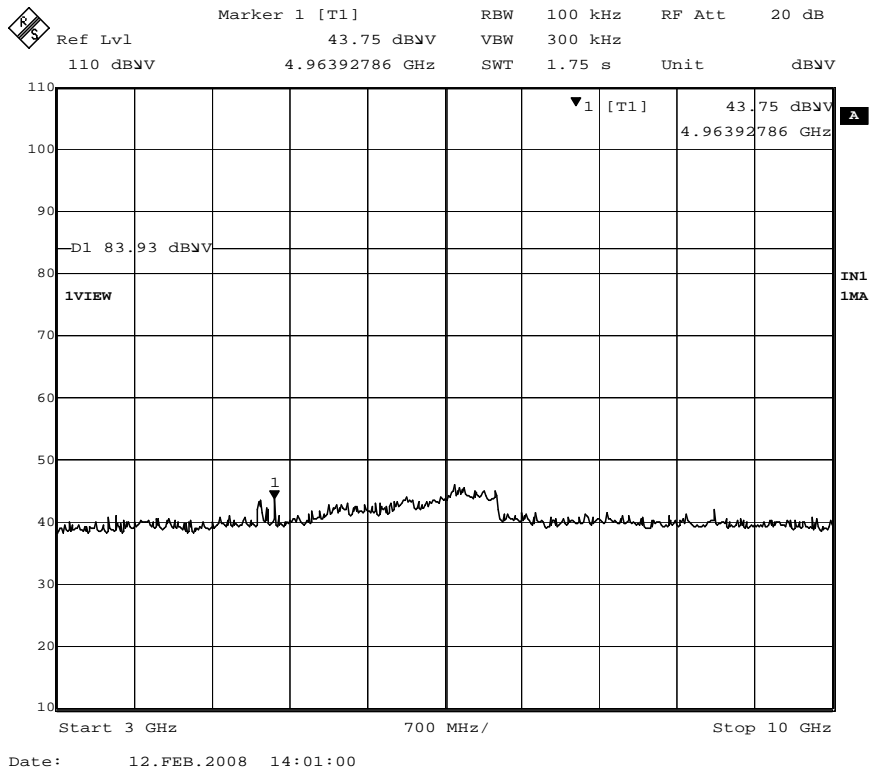
[Transmitting DH5]

Hopping

3.



4.



Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

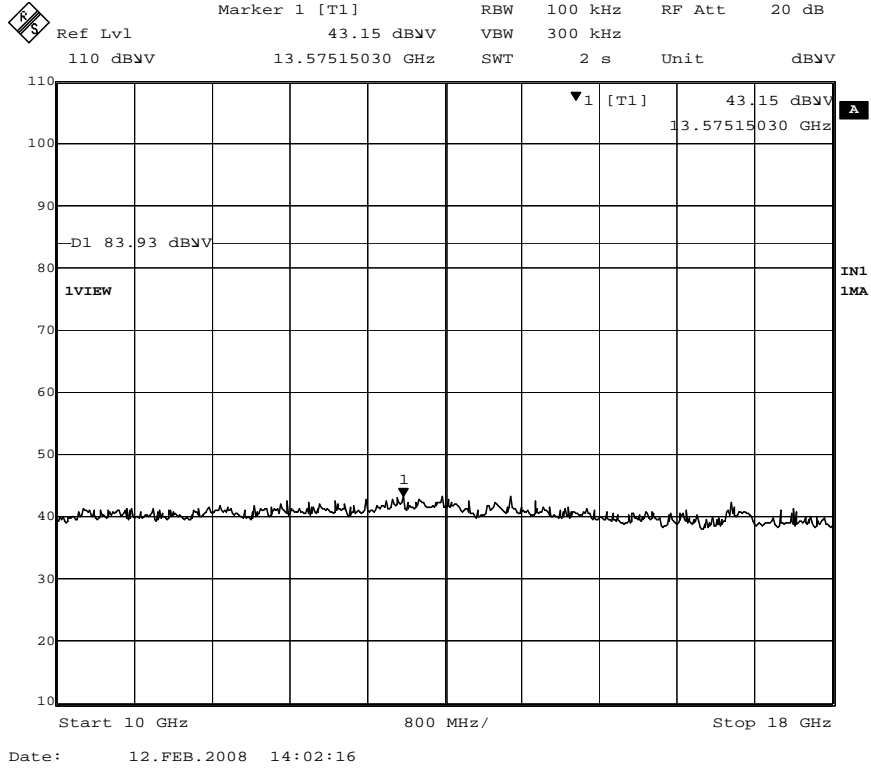
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

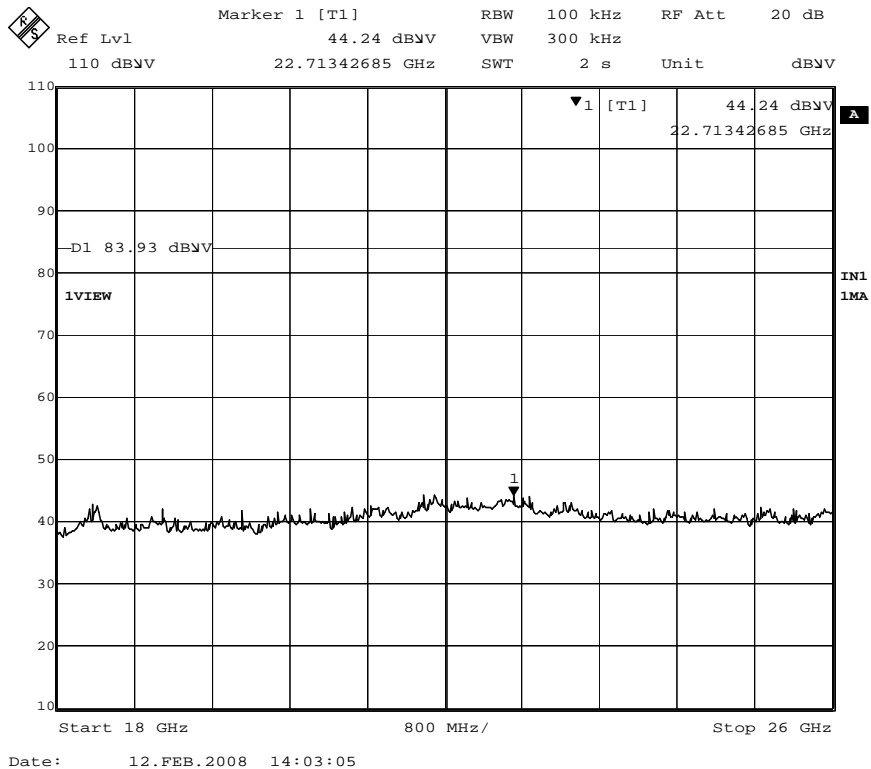
[Transmitting DH5]

Hopping

5.



6.



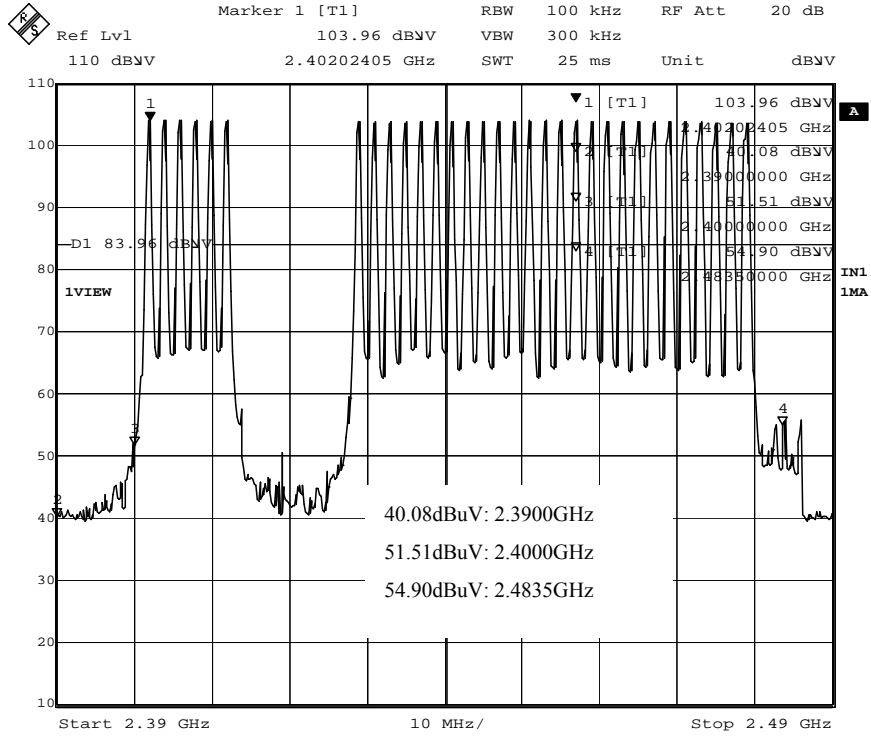
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

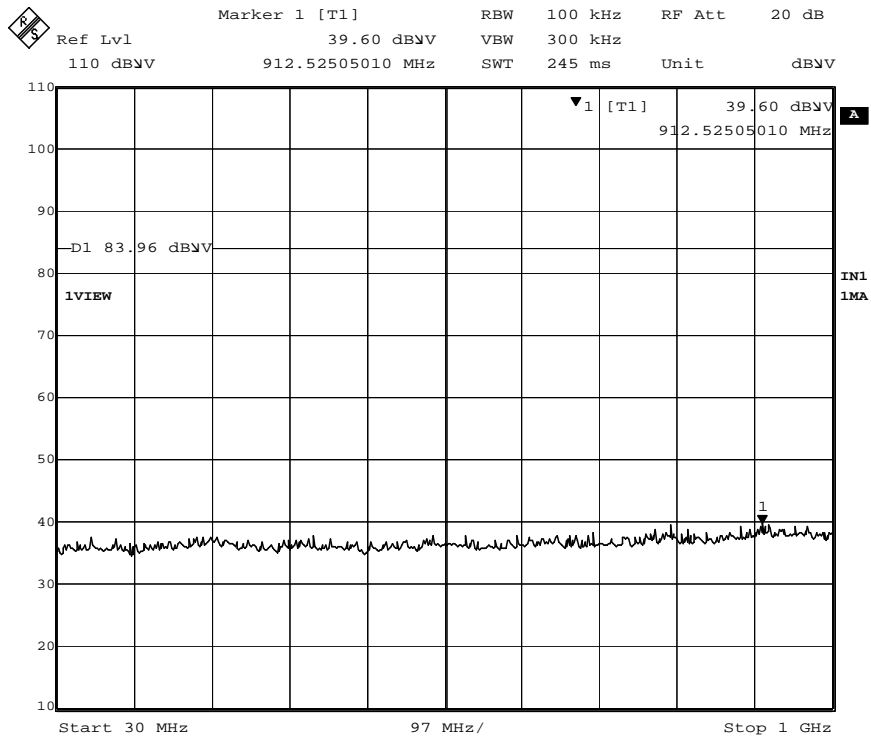
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

[Transmitting]
Inquiry

1.



2.



Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

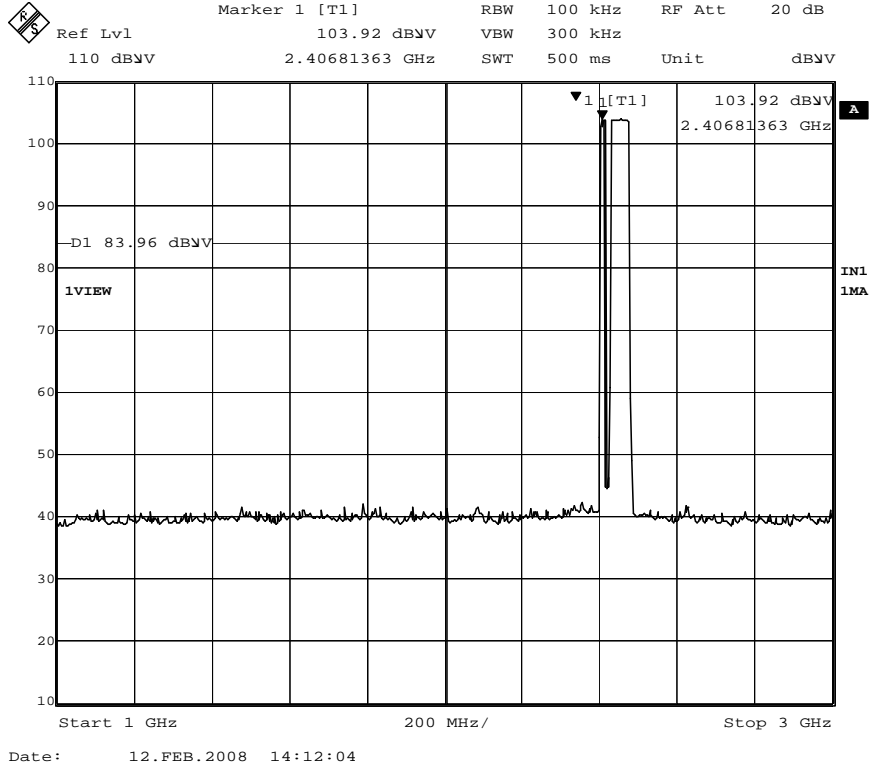
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

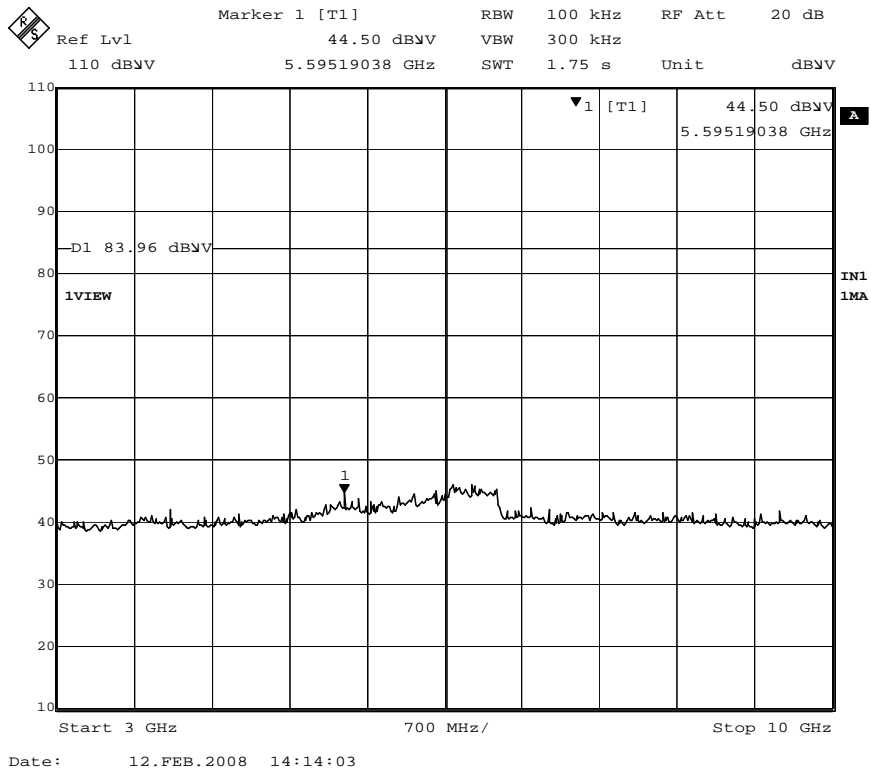
[Transmitting DH5]

Inquiry

3.



4.



Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

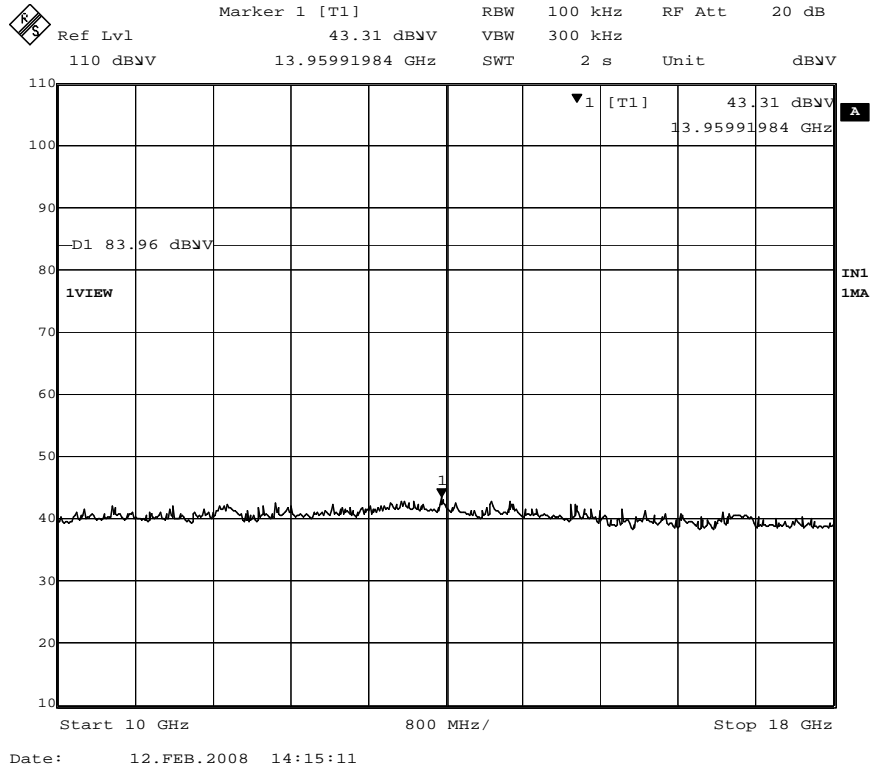
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

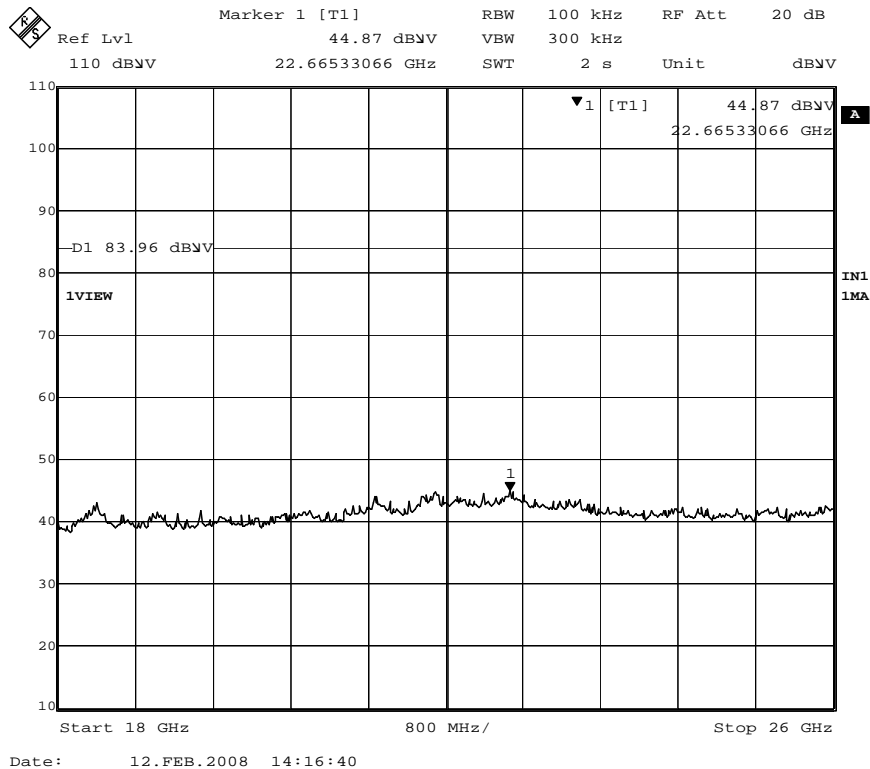
[Transmitting]

Inquiry

5.



6.



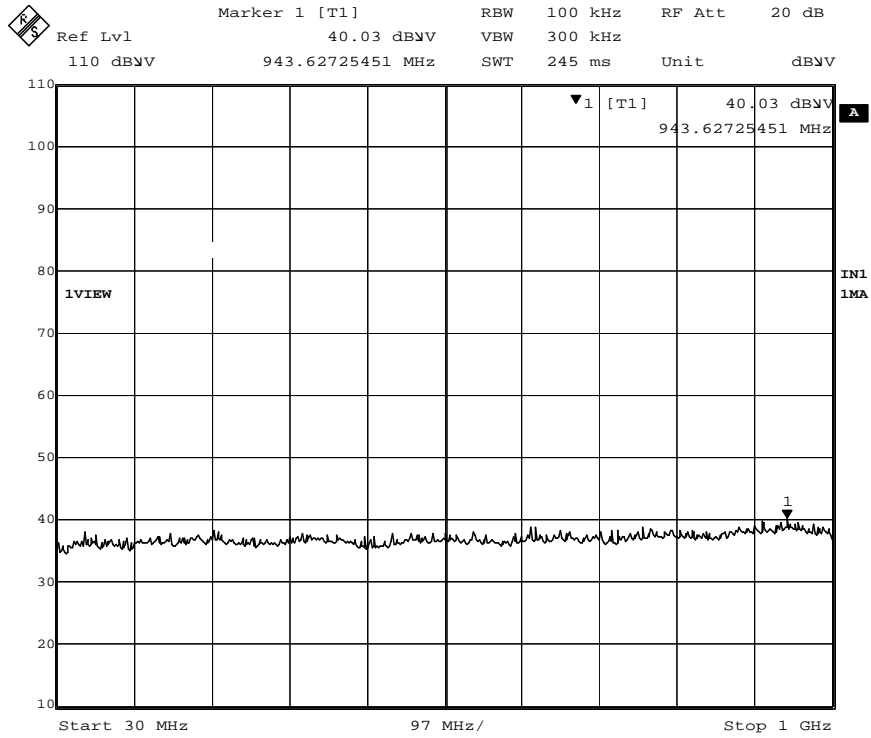
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

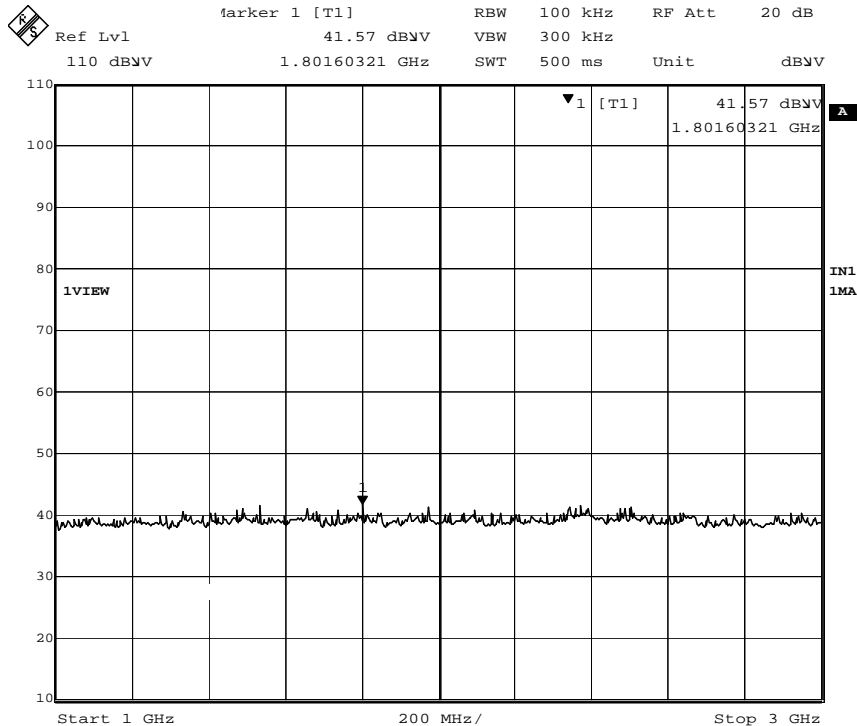
[Receiving]
Ch:2441MHz

1.



Date: 12.FEB.2008 14:21:32

2.



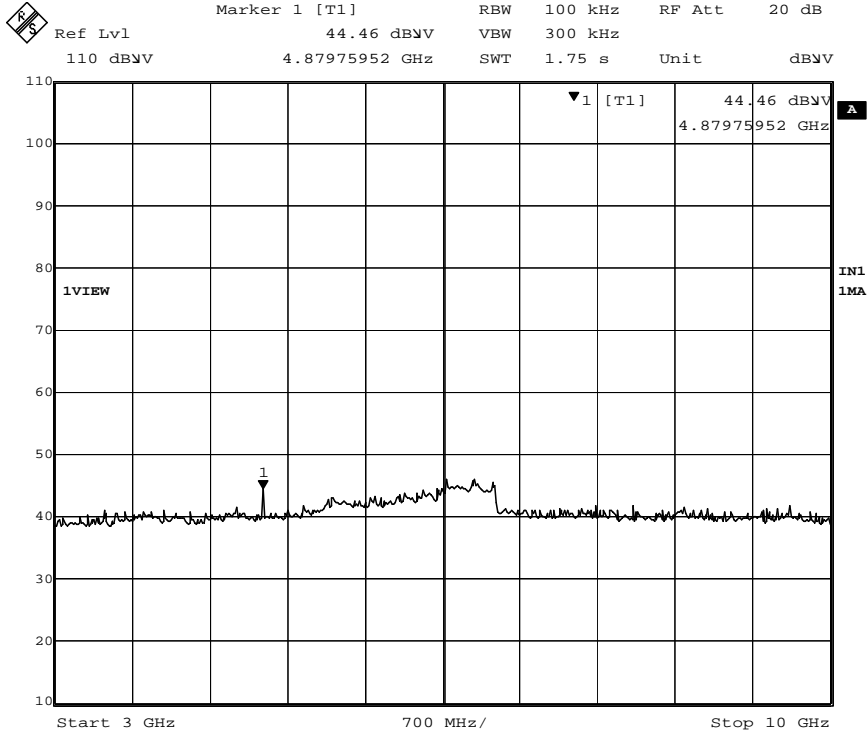
Date: 12.FEB.2008 14:24:11

Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

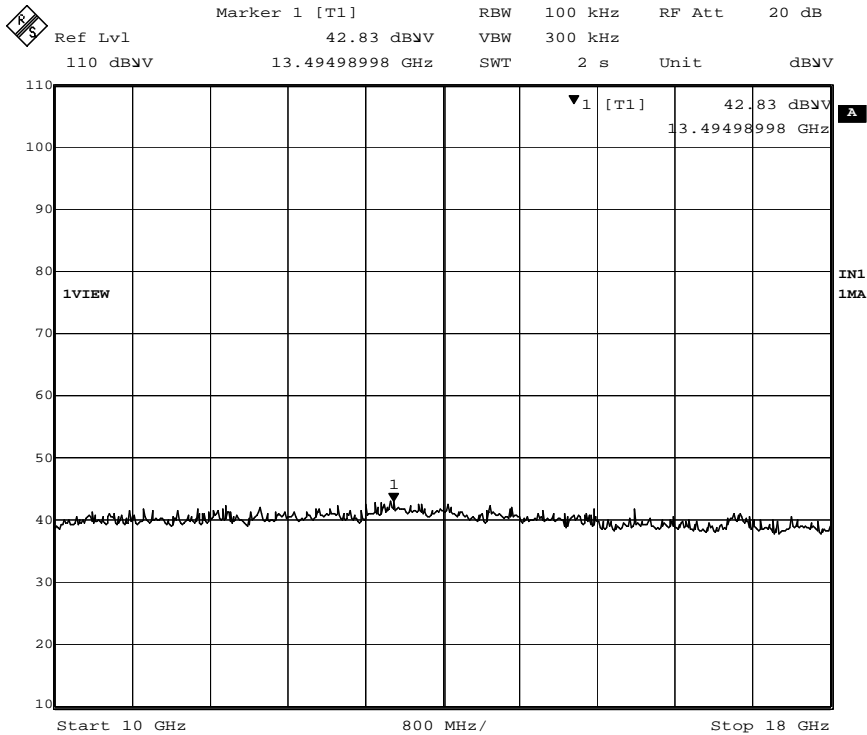
UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

[Receiving]
Ch:2441MHz
3.



Date: 12.FEB.2008 14:25:43

4.



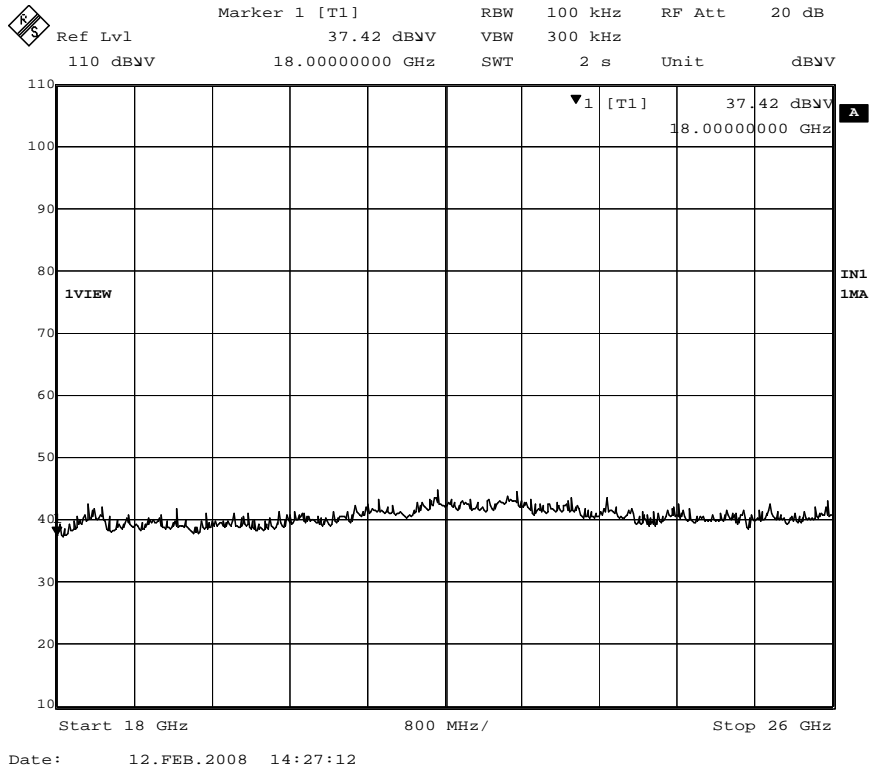
Date: 12.FEB.2008 14:26:33

Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : FCC Part15SubpartC 247(d)
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

[Receiving]
Ch:2441MHz
5.



DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : Display Close
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15. 209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.17	BB	28.6	37.5	7.8	27.8	1.5	5.8	15.9	24.8	40.0	24.1	15.2
2.	208.01	BB	34.0	30.4	16.9	27.6	3.1	5.8	32.2	28.6	43.5	11.3	14.9
3.	234.02	BB	36.5	34.7	17.2	27.5	3.3	5.8	35.3	33.5	46.0	10.7	12.5
4.	286.00	BB	34.6	30.4	19.5	27.5	3.7	5.8	36.1	31.9	46.0	9.9	14.1
5.	390.01	BB	37.1	34.0	16.9	28.2	5.0	5.8	36.6	33.5	46.0	9.4	12.5
6.	432.00	BB	37.3	31.4	17.6	28.6	5.3	5.8	37.4	31.5	46.0	8.6	14.5
7.	728.01	BB	29.7	29.4	20.7	29.4	6.5	5.8	33.3	33.0	46.0	12.7	13.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2441MHz
 Remarks : Display Close
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15. 209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.07	BB	27.3	37.8	7.8	27.8	1.5	5.8	14.6	25.1	40.0	25.4	14.9
2.	208.01	BB	34.0	31.2	16.9	27.6	3.1	5.8	32.2	29.4	43.5	11.3	14.1
3.	234.02	BB	36.6	35.8	17.2	27.5	3.3	5.8	35.4	34.6	46.0	10.6	11.4
4.	286.00	BB	32.9	29.0	19.5	27.5	3.7	5.8	34.4	30.5	46.0	11.6	15.5
5.	390.01	BB	35.8	34.0	16.9	28.2	5.0	5.8	35.3	33.5	46.0	10.7	12.5
6.	432.01	BB	37.1	32.1	17.6	28.6	5.3	5.8	37.2	32.2	46.0	8.8	13.8
7.	727.99	BB	29.5	29.2	20.7	29.4	6.5	5.8	33.1	32.8	46.0	12.9	13.2

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2480MHz
 Remarks : Display Close
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.06	BB	27.2	37.8	7.8	27.8	1.5	5.8	14.5	25.1	40.0	25.5	14.9
2.	208.01	BB	33.9	31.4	16.9	27.6	3.1	5.8	32.1	29.6	43.5	11.4	13.9
3.	234.02	BB	34.1	35.6	17.2	27.5	3.3	5.8	32.9	34.4	46.0	13.1	11.6
4.	286.00	BB	33.5	29.1	19.5	27.5	3.7	5.8	35.0	30.6	46.0	11.0	15.4
5.	390.01	BB	35.6	34.0	16.9	28.2	5.0	5.8	35.1	33.5	46.0	10.9	12.5
6.	432.02	BB	36.4	33.0	17.6	28.6	5.3	5.8	36.5	33.1	46.0	9.5	12.9
7.	728.01	BB	29.3	28.6	20.7	29.4	6.5	5.8	32.9	32.2	46.0	13.1	13.8

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(PK Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2390.00	BB	47.3	46.8	28.5	35.4	5.0	0.0	45.4	44.9	74.0	28.6	29.1	
2.	4804.00	BB	47.5	47.9	32.9	34.1	5.7	0.0	52.0	52.4	74.0	22.0	21.6	
3.	7206.00	BB	46.0	46.1	36.5	34.7	7.6	0.0	55.4	55.5	74.0	18.6	18.5	
4.	9608.00	BB	46.8	47.7	37.7	35.3	7.7	0.0	56.9	57.8	74.0	17.1	16.2	
5.	12010.00	BB	46.6	45.1	40.0	35.0	8.9	0.0	60.5	59.0	74.0	13.5	15.0	

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Close
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(AV Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2390.00	BB	33.5	33.7	28.5	35.4	5.0	0.0	31.6	31.8	54.0	22.4	22.2	
2.	4804.00	BB	36.7	37.0	32.9	34.1	5.7	0.0	41.2	41.5	54.0	12.8	12.5	
3.	7206.00	BB	33.2	33.2	36.5	34.7	7.6	0.0	42.6	42.6	54.0	11.4	11.4	
4.	9608.00	BB	34.1	34.1	37.7	35.3	7.7	0.0	44.2	44.2	54.0	9.8	9.8	
5.	12010.00	BB	32.9	33.0	40.0	35.0	8.9	0.0	46.8	46.9	54.0	7.2	7.1	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Transmitting:2441MHz
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	4882.00	BB	46.7	47.4	33.1	34.1	5.8	0.0	51.5	52.2	74.0	22.5	21.8
2.	7323.00	BB	46.7	46.5	36.7	34.8	7.7	0.0	56.3	56.1	74.0	17.7	17.9
3.	9764.00	BB	47.3	48.2	37.7	35.4	7.7	0.0	57.3	58.2	74.0	16.7	15.8
4.	12205.00	BB	46.6	45.5	40.2	34.8	9.0	0.0	61.0	59.9	74.0	13.0	14.1

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2441MHz
 Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Close
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C Engineer : Tatsuya Arai
 Humidity : 39 %
 Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	4882.00	BB	35.6	36.8	33.1	34.1	5.8	0.0	40.4	41.6	54.0	13.6	12.4
2.	7323.00	BB	33.2	33.2	36.7	34.8	7.7	0.0	42.8	42.8	54.0	11.2	11.2
3.	9764.00	BB	34.2	34.1	37.7	35.4	7.7	0.0	44.2	44.1	54.0	9.8	9.9
4.	12205.00	BB	32.9	32.9	40.2	34.8	9.0	0.0	47.3	47.3	54.0	6.7	6.7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2480MHz
 Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C Engineer : Tatsuya Arai
 Humidity : 39 %
 Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2483.50	BB	57.7	52.3	28.3	35.3	5.1	0.0	55.8	50.4	74.0	18.2	23.6
2.	4960.00	BB	46.5	47.1	33.4	34.1	5.8	0.0	51.6	52.2	74.0	22.4	21.8
3.	7440.00	BB	46.1	47.6	36.8	34.8	7.9	0.0	56.0	57.5	74.0	18.0	16.5
4.	9920.00	BB	46.9	47.7	37.7	35.4	7.7	0.0	56.9	57.7	74.0	17.1	16.3
5.	12400.00	BB	46.0	46.1	40.3	34.6	9.1	0.0	60.8	60.9	74.0	13.2	13.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Transmitting:2480MHz
Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2483.50	BB	46.6	40.4	28.3	35.3	5.1	0.0	44.7	38.5	54.0	9.3	15.5
2.	4960.00	BB	35.6	35.5	33.4	34.1	5.8	0.0	40.7	40.6	54.0	13.3	13.4
3.	7440.00	BB	33.2	34.9	36.8	34.8	7.9	0.0	43.1	44.8	54.0	10.9	9.2
4.	9920.00	BB	34.1	34.1	37.7	35.4	7.7	0.0	44.1	44.1	54.0	9.9	9.9
5.	12400.00	BB	33.1	33.0	40.3	34.6	9.1	0.0	47.9	47.8	54.0	6.1	6.2

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Hopping Mode
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2390.00	BB	47.5	45.9	28.5	35.4	5.0	0.0	45.6	44.0	74.0	28.4	30.0
2.	2483.50	BB	56.4	53.9	28.3	35.3	5.1	0.0	54.5	52.0	74.0	19.5	22.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Hopping Mode
Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2390.00	BB	34.0	33.9	28.5	35.4	5.0	0.0	32.1	32.0	54.0	21.9	22.0
2.	2483.50	BB	47.4	41.8	28.3	35.3	5.1	0.0	45.5	39.9	54.0	8.5	14.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Inquiry Mode
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2390.00	BB	47.1	45.9	28.5	35.4	5.0	0.0	45.2	44.0	74.0	28.8	30.0
2.	2483.50	BB	56.6	53.9	28.3	35.3	5.1	0.0	54.7	52.0	74.0	19.3	22.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Inquiry Mode
Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2390.00	BB	33.9	33.6	28.5	35.4	5.0	0.0	32.0	31.7	54.0	22.0	22.3
2.	2483.50	BB	33.7	33.6	28.3	35.3	5.1	0.0	31.8	31.7	54.0	22.2	22.3

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Receiving
 Remarks : Display Close
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15B § 15. 109(a)

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.06	BB	26.8	36.5	7.8	27.8	1.5	5.8	14.1	23.8	40.0	25.9	16.2
2.	208.01	BB	27.2	30.7	16.9	27.6	3.1	5.8	25.4	28.9	43.5	18.1	14.6
3.	234.02	BB	37.2	36.5	17.2	27.5	3.3	5.8	36.0	35.3	46.0	10.0	10.7
4.	286.02	BB	33.9	29.3	19.5	27.5	3.7	5.8	35.4	30.8	46.0	10.6	15.2
5.	390.01	BB	35.6	33.9	16.9	28.2	5.0	5.8	35.1	33.4	46.0	10.9	12.6
6.	432.02	BB	36.7	32.1	17.6	28.6	5.3	5.8	36.8	32.2	46.0	9.2	13.8
7.	728.02	BB	29.1	29.1	20.7	29.4	6.5	5.8	32.7	32.7	46.0	13.3	13.3

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Receiving
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15B CLASS B (PK)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2443.00	BB	48.0	47.3	28.4	35.3	5.1	0.0	46.2	45.5	74.0	27.8	28.5
2.	4886.00	BB	46.8	47.2	33.2	34.1	5.8	0.0	51.7	52.1	74.0	22.3	21.9

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Receiving
Remarks : AV (RBW: 1MHz, VBW: 1kHz), Display Close
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15B § 15.109(a)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2443.00	BB	38.4	35.5	28.4	35.3	5.1	0.0	36.6	33.7	54.0	17.4	20.3
2.	4886.00	BB	36.5	37.7	33.2	34.1	5.8	0.0	41.4	42.6	54.0	12.6	11.4

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : Display Open
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15. 209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	61.11	BB	25.2	36.8	7.8	27.8	1.5	5.8	12.5	24.1	40.0	27.5	15.9	
2.	122.21	BB	31.0	37.1	13.0	27.8	2.3	5.8	24.3	30.4	43.5	19.2	13.1	
3.	208.01	BB	38.1	37.2	16.9	27.6	3.1	5.8	36.3	35.4	43.5	7.2	8.1	
4.	286.01	BB	41.5	32.0	19.5	27.5	3.7	5.8	43.0	33.5	46.0	3.0	12.5	
5.	312.02	BB	38.7	24.9	14.9	27.6	4.0	5.8	35.8	22.0	46.0	10.2	24.0	
6.	390.01	BB	34.2	32.9	16.9	28.2	5.0	5.8	33.7	32.4	46.0	12.3	13.6	
7.	432.01	BB	33.7	32.3	17.6	28.6	5.3	5.8	33.8	32.4	46.0	12.2	13.6	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2441MHz
 Remarks : Display Open
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.12	BB	25.5	36.7	7.8	27.8	1.5	5.8	12.8	24.0	40.0	27.2	16.0
2.	122.21	BB	30.8	37.0	13.0	27.8	2.3	5.8	24.1	30.3	43.5	19.4	13.2
3.	208.01	BB	37.9	36.8	16.9	27.6	3.1	5.8	36.1	35.0	43.5	7.4	8.5
4.	286.01	BB	40.4	31.3	19.5	27.5	3.7	5.8	41.9	32.8	46.0	4.1	13.2
5.	312.01	BB	27.2	37.7	14.9	27.6	4.0	5.8	24.3	34.8	46.0	21.7	11.2
6.	390.01	BB	32.1	34.3	16.9	28.2	5.0	5.8	31.6	33.8	46.0	14.4	12.2
7.	432.01	BB	32.1	33.6	17.6	28.6	5.3	5.8	32.2	33.7	46.0	13.8	12.3

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2480MHz
 Remarks : Display Open
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	61.12	BB	25.6	36.7	7.8	27.8	1.5	5.8	12.9	24.0	40.0	27.1	16.0
2.	122.20	BB	30.6	36.4	13.0	27.8	2.3	5.8	23.9	29.7	43.5	19.6	13.8
3.	208.01	BB	37.9	36.6	16.9	27.6	3.1	5.8	36.1	34.8	43.5	7.4	8.7
4.	286.01	BB	41.8	31.8	19.5	27.5	3.7	5.8	43.3	33.3	46.0	2.7	12.7
5.	312.01	BB	26.8	27.3	14.9	27.6	4.0	5.8	23.9	24.4	46.0	22.1	21.6
6.	390.00	BB	34.5	32.0	16.9	28.2	5.0	5.8	34.0	31.5	46.0	12.0	14.5
7.	432.03	BB	33.4	31.8	17.6	28.6	5.3	5.8	33.5	31.9	46.0	12.5	14.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C Engineer : Tatsuya Arai
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2390.00	BB	46.8	46.7	28.5	35.4	5.0	0.0	44.9	44.8	74.0	29.1	29.2	
2.	4804.00	BB	47.0	47.5	32.9	34.1	5.7	0.0	51.5	52.0	74.0	22.5	22.0	
3.	7206.00	BB	46.7	46.7	36.5	34.7	7.6	0.0	56.1	56.1	74.0	17.9	17.9	
4.	9608.00	BB	46.1	46.4	37.7	35.3	7.7	0.0	56.2	56.5	74.0	17.8	17.5	
5.	12010.00	BB	43.8	45.7	40.0	35.0	8.9	0.0	57.7	59.6	74.0	16.3	14.4	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2402MHz
 Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(AV Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2390.00	BB	33.7	33.6	28.5	35.4	5.0	0.0	31.8	31.7	54.0	22.2	22.3	
2.	4804.00	BB	35.7	36.0	32.9	34.1	5.7	0.0	40.2	40.5	54.0	13.8	13.5	
3.	7206.00	BB	33.2	33.2	36.5	34.7	7.6	0.0	42.6	42.6	54.0	11.4	11.4	
4.	9608.00	BB	34.3	33.2	37.7	35.3	7.7	0.0	44.4	43.3	54.0	9.6	10.7	
5.	12010.00	BB	32.7	32.7	40.0	35.0	8.9	0.0	46.6	46.6	54.0	7.4	7.4	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2441MHz
 Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(PK Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	4882.00	BB	45.8	47.8	33.1	34.1	5.8	0.0	50.6	52.6	74.0	23.4	21.4	
2.	7323.00	BB	46.4	46.4	36.7	34.8	7.7	0.0	56.0	56.0	74.0	18.0	18.0	
3.	9764.00	BB	48.2	47.3	37.7	35.4	7.7	0.0	58.2	57.3	74.0	15.8	16.7	
4.	12205.00	BB	45.3	45.8	40.2	34.8	9.0	0.0	59.7	60.2	74.0	14.3	13.8	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ EMI RECEIVER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2441MHz
 Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C Engineer : Tatsuya Arai
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	4882.00	BB	33.5	36.5	33.1	34.1	5.8	0.0	38.3	41.3	54.0	15.7	12.7	
2.	7323.00	BB	33.1	33.3	36.7	34.8	7.7	0.0	42.7	42.9	54.0	11.3	11.1	
3.	9764.00	BB	34.2	34.2	37.7	35.4	7.7	0.0	44.2	44.2	54.0	9.8	9.8	
4.	12205.00	BB	32.9	32.9	40.2	34.8	9.0	0.0	47.3	47.3	54.0	6.7	6.7	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ EMI RECEIVER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2480MHz
 Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(PK Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2483.50	BB	55.4	51.4	28.3	35.3	5.1	0.0	53.5	49.5	74.0	20.5	24.5	
2.	4960.00	BB	46.5	46.1	33.4	34.1	5.8	0.0	51.6	51.2	74.0	22.4	22.8	
3.	7440.00	BB	46.1	46.1	36.8	34.8	7.9	0.0	56.0	56.0	74.0	18.0	18.0	
4.	9920.00	BB	46.9	47.0	37.7	35.4	7.7	0.0	56.9	57.0	74.0	17.1	17.0	
5.	12400.00	BB	46.1	46.1	40.3	34.6	9.1	0.0	60.9	60.9	74.0	13.1	13.1	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Transmitting:2480MHz
 Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15C § 15. 209(AV Detection)
 Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2483.50	BB	43.9	41.1	28.3	35.3	5.1	0.0	42.0	39.2	54.0	12.0	14.8	
2.	4960.00	BB	34.1	34.5	33.4	34.1	5.8	0.0	39.2	39.6	54.0	14.8	14.4	
3.	7440.00	BB	33.1	33.1	36.8	34.8	7.9	0.0	43.0	43.0	54.0	11.0	11.0	
4.	9920.00	BB	34.1	34.1	37.7	35.4	7.7	0.0	44.1	44.1	54.0	9.9	9.9	
5.	12400.00	BB	33.1	33.1	40.3	34.6	9.1	0.0	47.9	47.9	54.0	6.1	6.1	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Hopping Mode
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2390.00	BB	47.8	46.3	28.5	35.4	5.0	0.0	45.9	44.4	74.0	28.1	29.6
2.	2483.50	BB	56.7	55.0	28.3	35.3	5.1	0.0	54.8	53.1	74.0	19.2	20.9

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Hopping Mode
Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Open
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2390.00	BB	33.8	33.9	28.5	35.4	5.0	0.0	31.9	32.0	54.0	22.1	22.0
2.	2483.50	BB	48.1	42.3	28.3	35.3	5.1	0.0	46.2	40.4	54.0	7.8	13.6

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Inquiry Mode
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2390.00	BB	47.5	46.1	28.5	35.4	5.0	0.0	45.6	44.2	74.0	28.4	29.8
2.	2483.50	BB	56.7	54.2	28.3	35.3	5.1	0.0	54.8	52.3	74.0	19.2	21.7

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Inquiry Mode
Remarks : AV (RBW: 1MHz, VBW: 200Hz), Display Open
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15C § 15.209(AV Detection)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]		HOR [dB]	VER [dB]
1.	2390.00	BB	40.0	33.8	28.5	35.4	5.0	0.0	38.1	31.9	54.0	15.9	22.1
2.	2483.50	BB	33.8	33.7	28.3	35.3	5.1	0.0	31.9	31.8	54.0	22.1	22.2

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE:KCC-D3/D7 ■ PREAMP:KAF-07 (8449B) ■ SPECTRUMANALYZER:KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Receiving
 Remarks : Display Open
 Date : 2/8/2008
 Test Distance : 3 m
 Temperature : 22 °C
 Humidity : 37 %
 Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	61.12	BB	25.5	36.6	7.8	27.8	1.5	5.8	12.8	23.9	40.0	27.2	16.1	
2.	122.23	BB	29.1	36.6	13.0	27.8	2.3	5.8	22.4	29.9	43.5	21.1	13.6	
3.	208.01	BB	37.6	37.1	16.9	27.6	3.1	5.8	35.8	35.3	43.5	7.7	8.2	
4.	286.02	BB	41.6	32.0	19.5	27.5	3.7	5.8	43.1	33.5	46.0	2.9	12.5	
5.	312.01	BB	39.0	27.2	14.9	27.6	4.0	5.8	36.1	24.3	46.0	9.9	21.7	
6.	390.00	BB	34.2	32.6	16.9	28.2	5.0	5.8	33.7	32.1	46.0	12.3	13.9	
7.	432.03	BB	33.4	32.3	17.6	28.6	5.3	5.8	33.5	32.4	46.0	12.5	13.6	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz
 ■ CABLE : KCC-30/31/32/34 ■ PREAMP : KAF-03 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
Model No. : MAX685BT
Serial No. : 258X
Power : DC12V
Mode : Receiving
Remarks : PK (RBW: 1MHz, VBW: 1MHz), Display Open
Date : 2/7/2008
Test Distance : 3 m
Temperature : 24 °C Engineer : Tatsuya Arai
Humidity : 39 %
Regulation : FCC Part15B CLASS B (PK)

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER [dB μ V]					HOR [dB μ V/m]	VER [dB μ V/m]	HOR [dB]	VER [dB]		
1.	2443.00	BB	47.5	47.1	28.4	35.3	5.1	0.0	45.7	45.3	74.0	28.3	28.7	
2.	4886.00	BB	47.1	46.4	33.2	34.1	5.8	0.0	52.0	51.3	74.0	22.0	22.7	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

DATA OF RADIATION TEST

UL Japan, Inc.
YAMAKITA No.1 ANECHOIC CHAMBER
Report No. : 28GE0050-YK-A

Applicant : Clarion Co., Ltd.
 Kind of Equipment : 2DIN DVD AUDIO-VISUAL UNIT
 Model No. : MAX685BT
 Serial No. : 258X
 Power : DC12V
 Mode : Receiving
 Remarks : AV (RBW: 1MHz, VBW: 1kHz), Display Open
 Date : 2/7/2008
 Test Distance : 3 m
 Temperature : 24 °C
 Humidity : 39 %
 Regulation : FCC Part15B § 15.109(a)

Engineer : Tatsuya Arai

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	2443.00	BB	47.5	47.1	28.4	35.3	5.1	0.0	45.7	45.3	74.0	28.3	28.7
2.	4886.00	BB	47.1	46.4	33.2	34.1	5.8	0.0	52.0	51.3	74.0	22.0	22.7

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz
 ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUMANALYZER: KTR-01 (ES140)

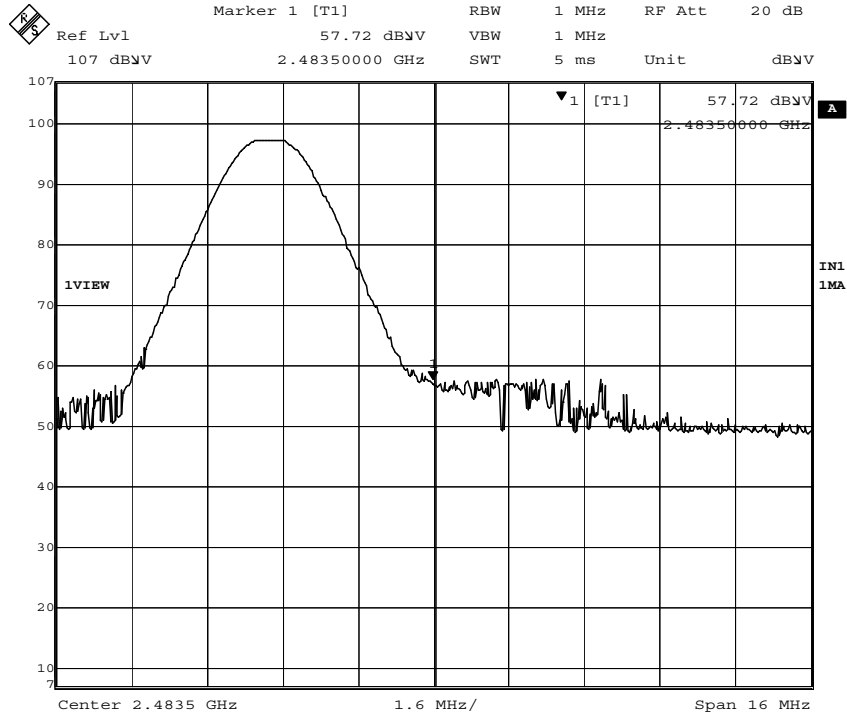
Band Edge

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 258X
POWER : DC12V

REPORT NO : 28GE0050-YK-A
DATE : 2008/2/7
TEMP./HUMI : 24deg.C./39%
TEST MODE : Tx2480MHz
ENGINEER : Tatsuya Arai

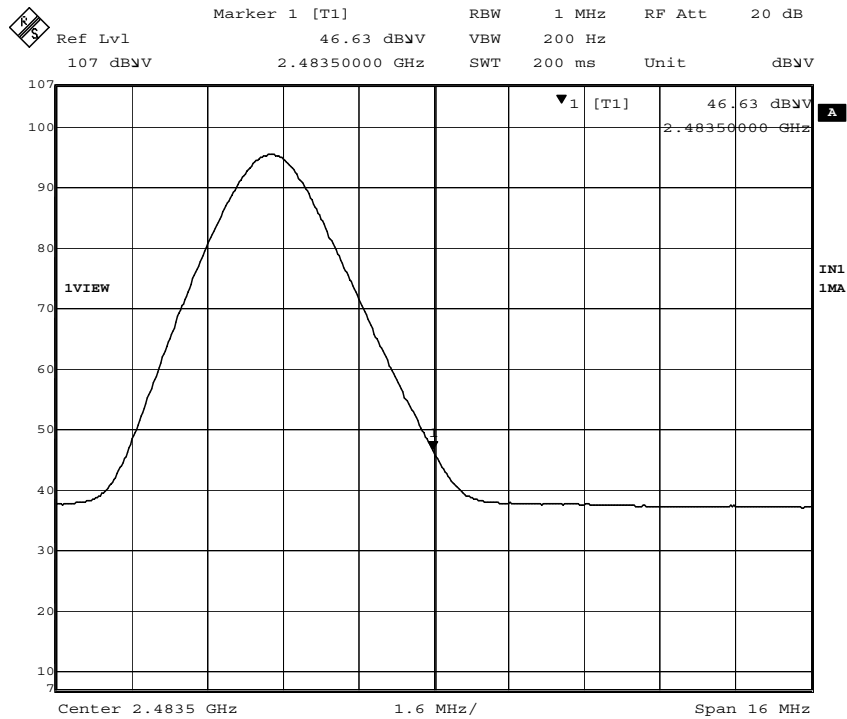
Display Close (Antenna: Horizontal)

PK Detector



Date: 7.FEB.2008 16:17:00

AV Detector



Date: 7.FEB.2008 16:18:07

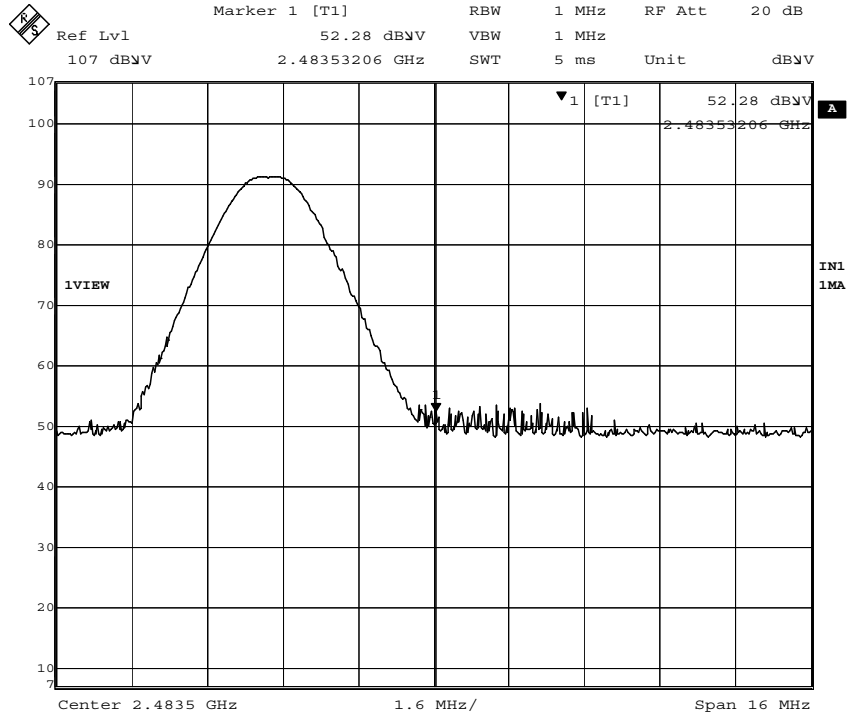
Band Edge

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 258X
POWER : DC12V

REPORT NO : 28GE0050-YK-A
DATE : 2008/2/7
TEMP./HUMI : 24deg.C./39%
TEST MODE : Tx2480MHz
ENGINEER : Tatsuya Arai

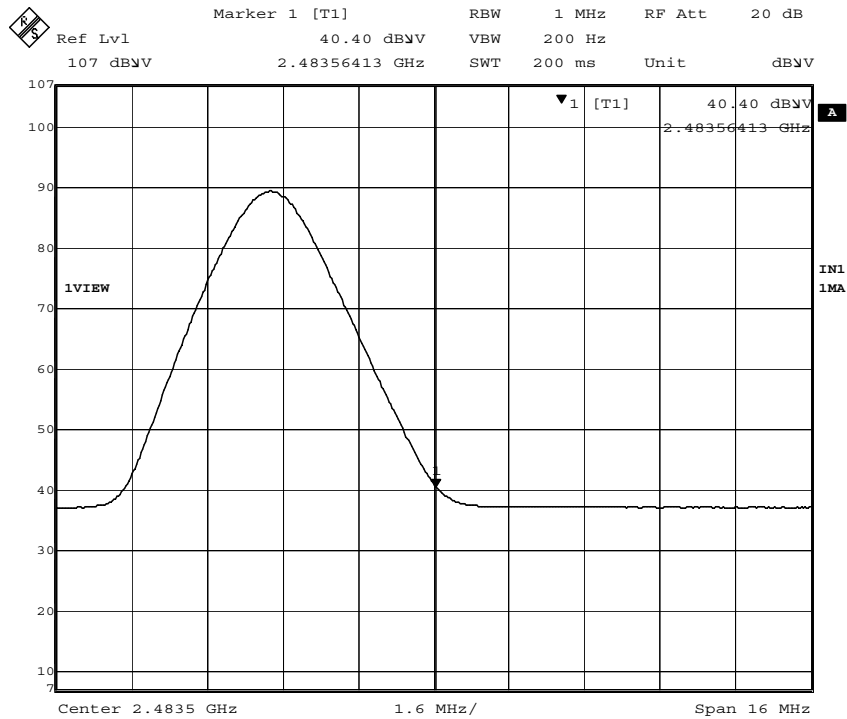
Display Close (Antenna: Vertical)

PK Detector



Date: 7.FEB.2008 16:24:42

AV Detector



Date: 7.FEB.2008 16:22:10

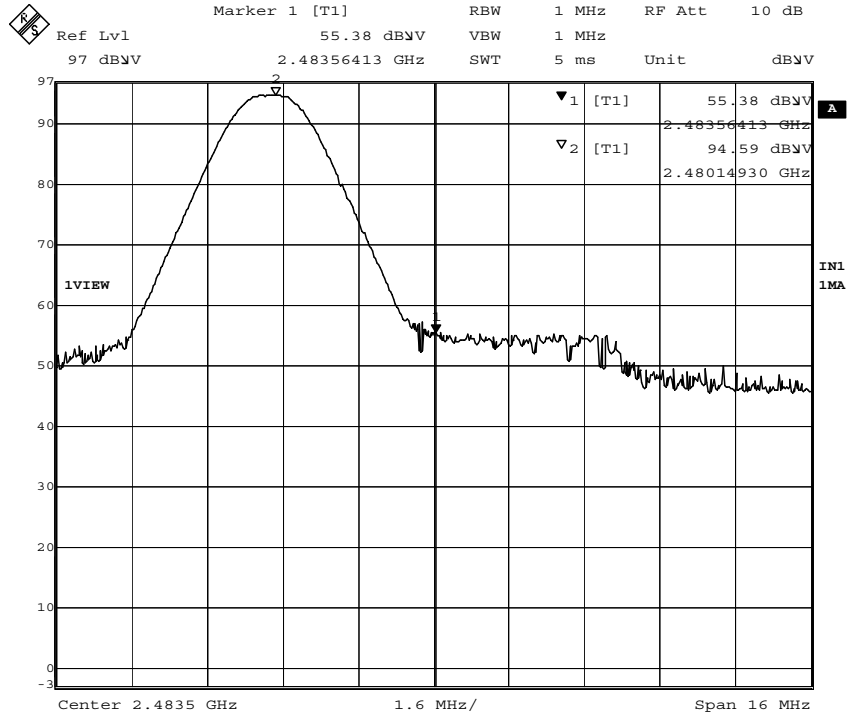
Band Edge

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 258X
POWER : DC12V

REPORT NO : 28GE0050-YK-A
DATE : 2008/2/7
TEMP./HUMI : 24deg.C./39%
TEST MODE : Tx2480MHz
ENGINEER : Tatsuya Arai

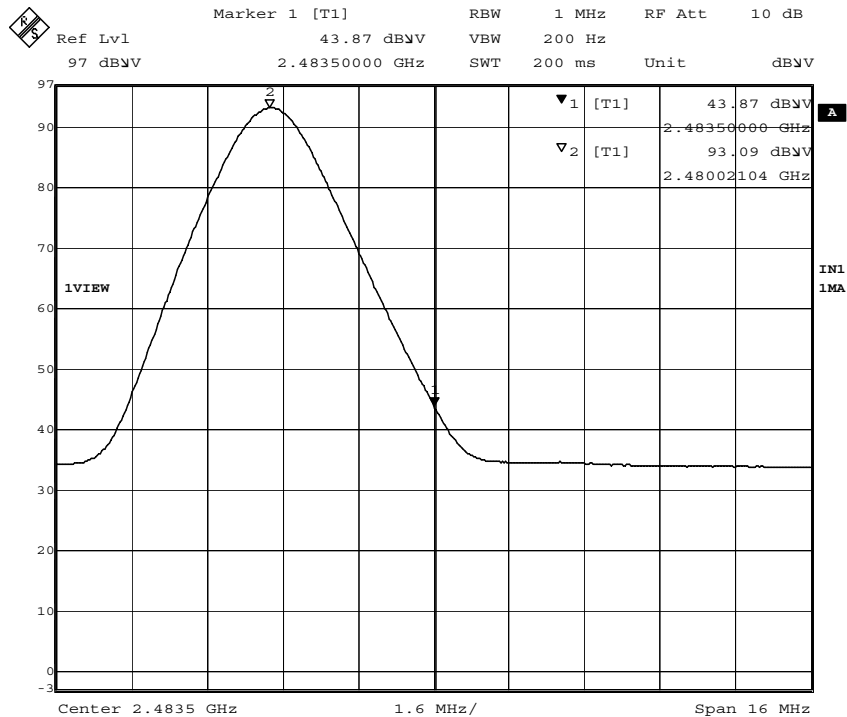
Display Open (Antenna: Horizontal)

PK Detector



Date: 7.FEB.2008 14:01:23

AV Detector



Date: 7.FEB.2008 14:03:11

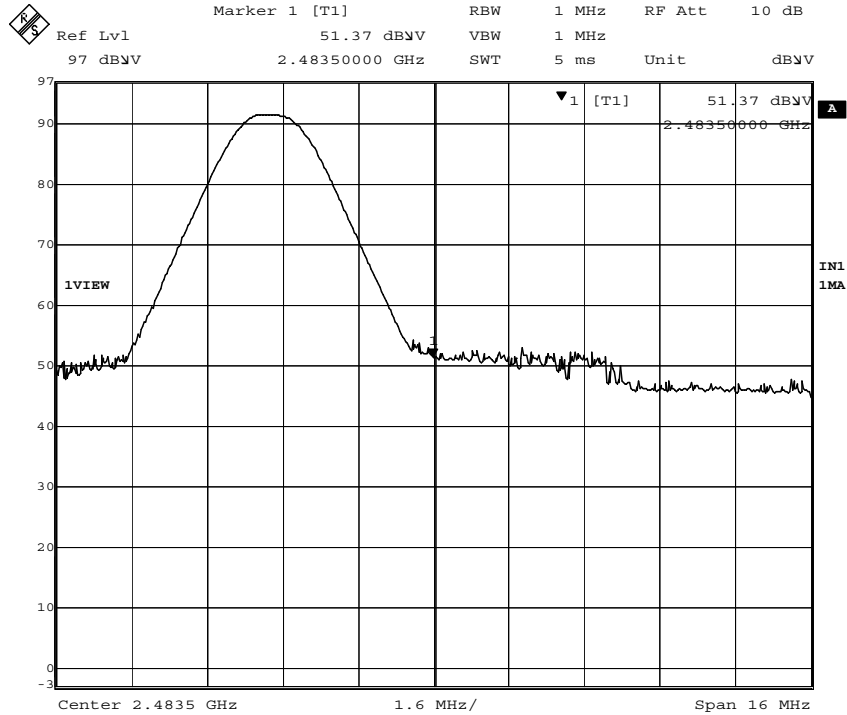
Band Edge

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 258X
POWER : DC12V

REPORT NO : 28GE0050-YK-A
DATE : 2008/2/7
TEMP./HUMI : 24deg.C./39%
TEST MODE : Tx2480MHz
ENGINEER : Tatsuya Arai

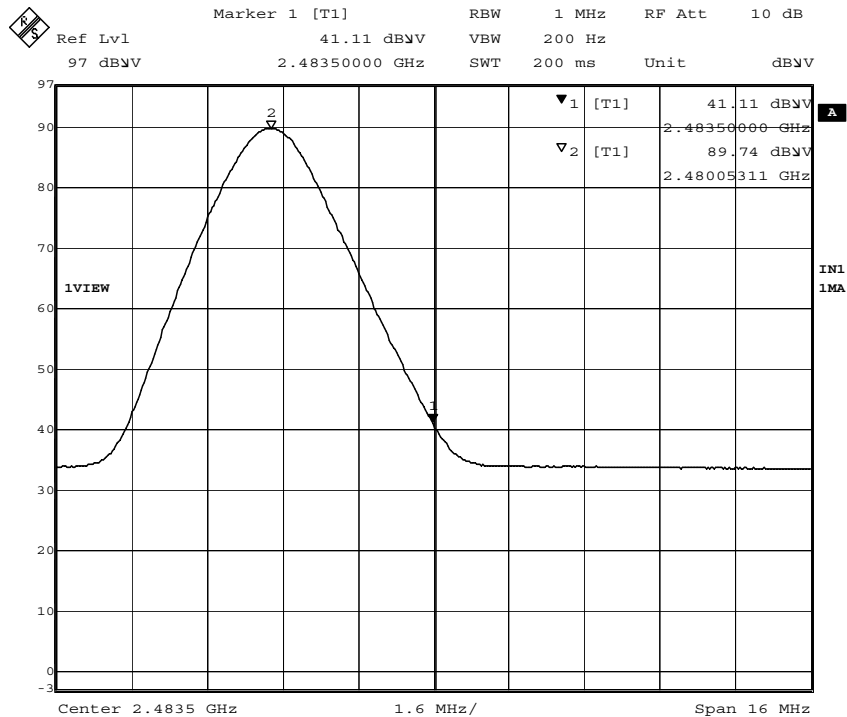
Display Open (Antenna: Vertical)

PK Detector



Date: 7.FEB.2008 14:12:11

AV Detector



Date: 7.FEB.2008 14:13:11

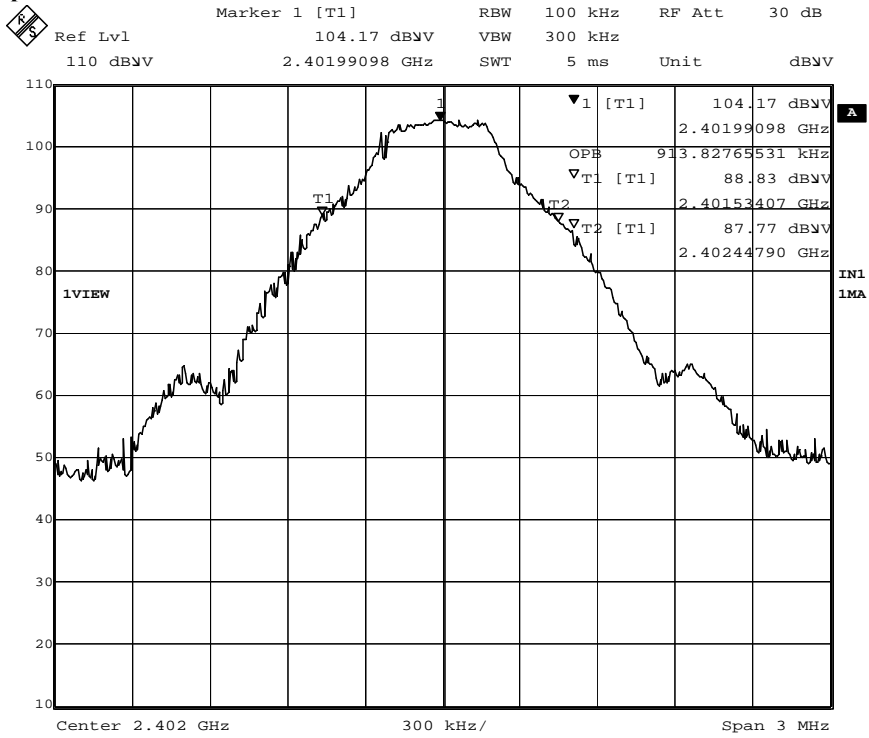
Occupied Bandwidth(99%)

COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : RSS-210
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

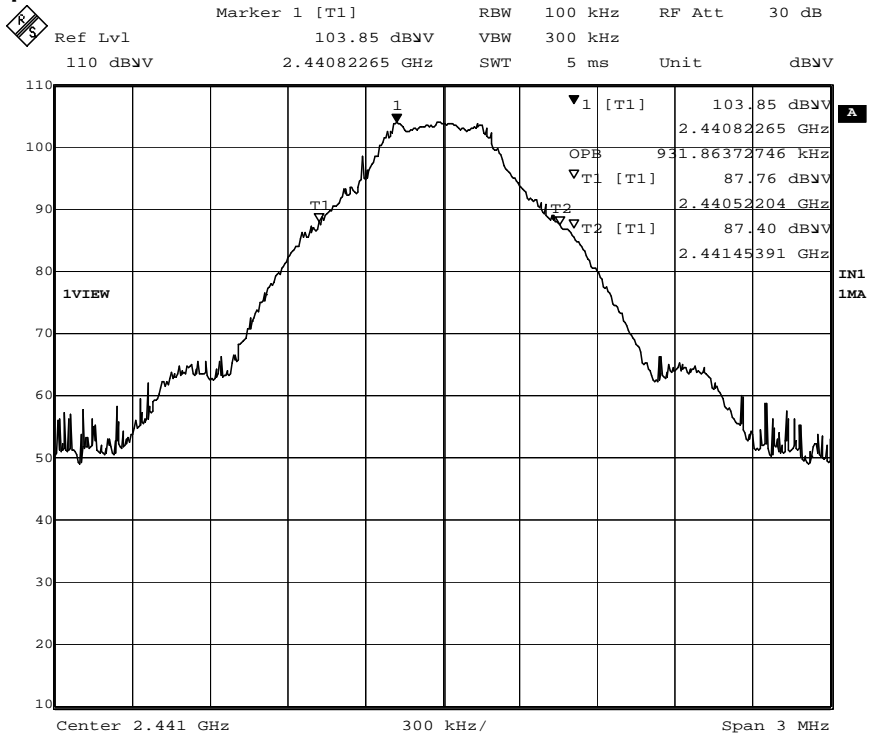
[Hopping off, DH5]

1. ch : 2402MHz/Occupied Bandwidth:913.8kHz



Date: 12.FEB.2008 10:28:54

2. ch : 2441MHz/Occupied Bandwidth:931.9kHz



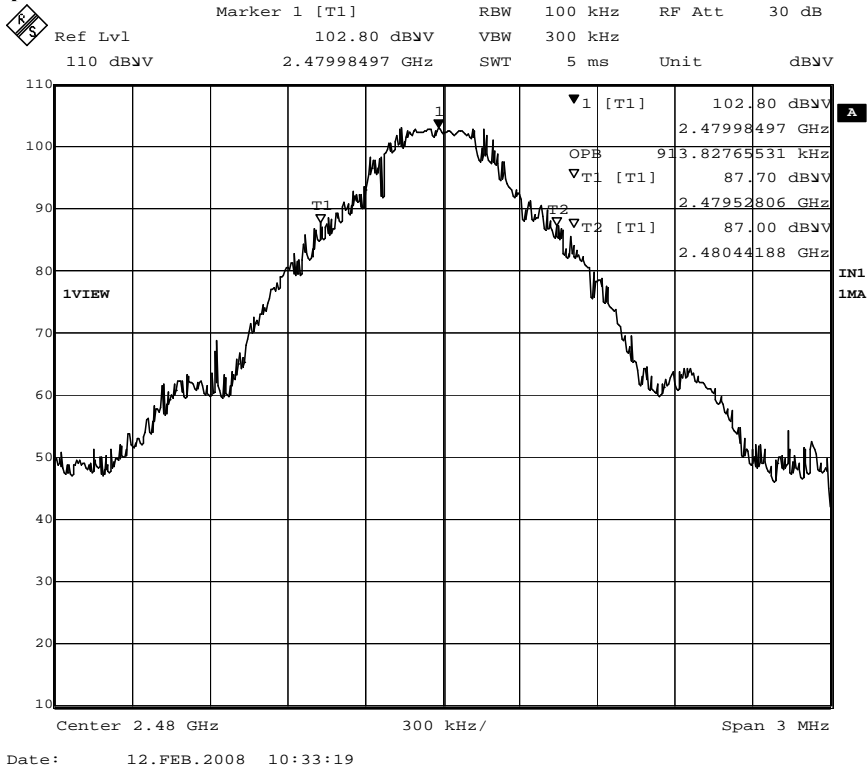
Date: 12.FEB.2008 10:30:27

Occupied Bandwidth(99%)

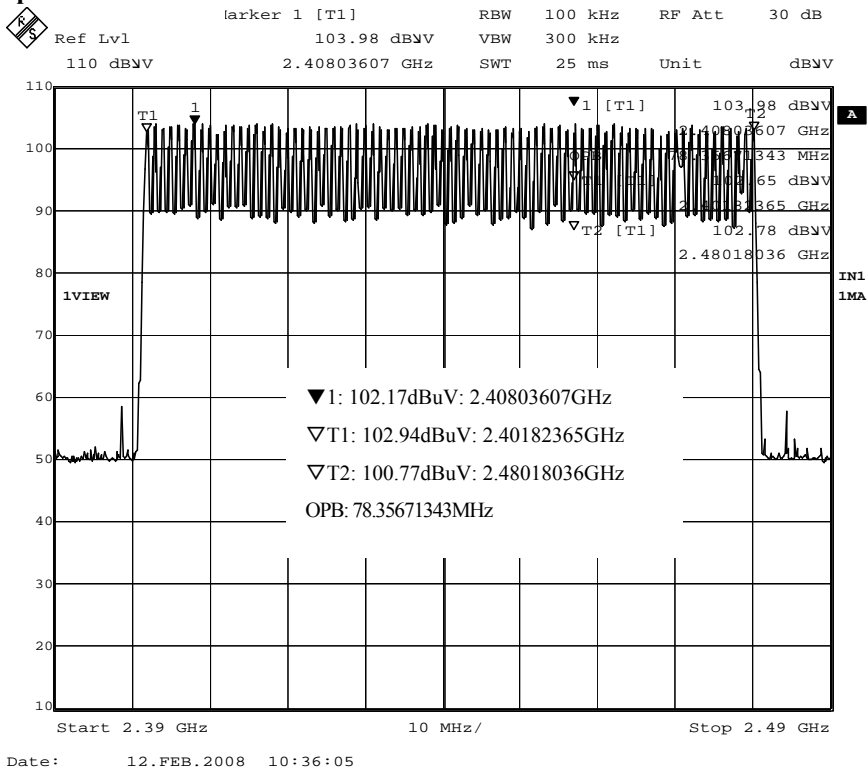
COMPANY : Clarion Co., Ltd.
EQUIPMENT : 2DIN DVD AUDIO-VISUAL UNIT
MODEL NUMBER: MAX685BT
SERIAL NUMBER: 259X
POWER : DC12V

UL Japan, Inc. Yamakita No.4 Shielded Room
REPORT NO : 28GE0050-YK-A
REGULATION : RSS-210
DATE : 2008.02.12
TEMP./HUMI : 22deg.C./35%
TEST MODE : Transmitting
ENGINEER : Tatsuya Arai

3. ch : 2480MHz/Occupied Bandwidth:913.8kHz



4. Hopping, DHS/Occupied Bandwidth:78.4MHz



**APPENDIX 3
Test Instruments**

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
YA-RE	Radiated emission(software)	UL Japan	RE(Ver.1.5)	RE	-
KAEC-01	Anechoic Chamber	JSE	Semi 3m	RE	2007/08/26 * 12
KAF-03	Pre Amplifier	Hewlett Packard	8447D	RE	2007/09/26 * 12
KAT6-03	Attenuator	INMET	18N-6dB	RE	2007/03/28 * 12
KBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/12/27 * 12
KCC-30/31/32 /34/KRM-03	Coaxial Cable/RF Relay Matrix	Fujikura/Suhner/TSJ	5D-2W/S04272B/RFM-E421	RE	2007/11/01 * 12
KLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2007/12/27 * 12
KOS-02	Humidity Indicator	Custom	CTH-190	RE	2006/07/10 * 24
KSA-04	Spectrum Analyzer	Advantest	R3271A	RE	2007/09/25 * 12
KTR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2007/10/30 * 12
KJM-01	Measure	TAJIMA	GL19-55	RE	-
KTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE, AT1,2,3,4,6	2007/04/12 * 12
KCC-D3/D7	Coaxial Cable	Rosenberger/Advantest	2201/JUN-08-01-061	RE	2007/04/11 * 12
KAF-07	Pre Amplifier	Hewlett Packard	8449B	RE	2007/12/10 * 12
KHA-01	Horn Antenna	A.H.Systems	SAS-200/571	RE	2007/08/14 * 12
KHA-03	Horn Antenna	EMCO	3160-09	RE	2007/04/14 * 12
KCC-D7	Coaxial Cable	Advantest	A01002	AT all	2007/04/11 * 12
KPM-05	Power meter	Agilent	E4417A	AT5	2007/04/03 * 12
KPSS-01	Power sensor	Agilent	E9327A	AT5	2007/03/13 * 12
KOSC-01	Oscilloscope	Tektronix	TDS-2022B	AT4	2007/05/15 * 12
KDT-01	Coaxial Crystal Detector	Agilent	8473C	AT4	Pre Check
KOS-07	Humidity Indicator	Custom	CTH-190	AT all	2006/10/06 * 24

The expiration date of the calibration is the end of the expired month .

All equipment is calibrated with traceable calibrations . Each calibration is traceable to the national or international standards .

Test Item :

RE: Out of Band Emission (Radiated)

AT: Antenna terminal conducted test

1: Carrier Frequency Separation

2: 20dB Bandwidth

3: Number of Hopping Frequency

4: Dwell time

5: Maximum Peak Output Power

6: Out of Band Emission (Conducted)

EUT clock frequencies

Device	Frequency [Hz]		Note
	Main	Sub	
Tuner Pack	197.2M - 237.2M		Oscillator
	10.7M		IF OUT
	20.5M		Tuner IC
Video Decoder	4.43M		
On Screen Display	9.708041M		
Touch Panel MICOM	11.0592M		
PCM CODEC	26.0M		
DVD MECHANISM	27.0M		DVD Encoder
DIGITAL SIGNAL Processor	41.6M		Audio DSP
System Control MICOM	3.14M	32.768K	
DIGITAL SIGNAL Processor	16.92M		MP3, WMA, AAC DECODE
USB iPod Control MICOM	9.0M	32.768K	
iPod Authentication Coprocessor	32.768K		
DC/DC Converter	415K - 460K		3.3V
	2.0M		5V
	1.9M		8V
	275K		LCD DRIVE
Inverter	63K		LCD BACK LIGHT
XM DT IC	45.1594M		

UL Japan, Inc.

YAMAKITA EMC LAB.

907 Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken, 258-0124 JAPAN

Telephone: +81 465 77 1011

Facsimile: +81 465 77 2112

MF060b (09.01.08)