



# RADIO TEST REPORT

Test Report No. : 27IE0016-YK-A

Applicant : Sony Corporation  
Type of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
FCC ID : AK8DRBT22  
Test Standard : FCC Part15 Subpart C: 2006  
FCC Part15 Subpart B: 2006  
Test Result : Complied

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

Date of test: May 21 and 24, 2007

Tested by:   
Toyokazu Imamura

Approved by:   
Osamu Watatani  
Manager of Yamakita EMC Lab.

**UL Japan, Inc.**

**YAMAKITA EMC LAB.**

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MF060b (26.04.07)

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## 1 Applicant Information

Company Name : Sony Corporation  
Address : Shinagawa INTERCITY C Tower  
2-15-3 Konan Minato-ku, Tokyo, 108-6201 JAPAN  
Telephone Number : +81-3-5769-5640  
Facsimile Number : +81-3-5769-5962  
Contact Person : Kikuo Murata

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

### 2.1 Identification of E.U.T.

Type of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129 (Radiated emission test), 144 (other test)  
Rating : DC3.7V  
Country of Manufacture : Malaysia  
Receipt Date of Sample : May 21, 2007  
Condition of EUT : Engineering 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: DR-BT22 (referred to as the EUT in this report) is a Wireless Stereo Headset.

Equipment type : Transceiver  
Frequency of operation : 2402-2480MHz  
Clock frequency : Module clock: 24MHz  
Bandwidth & channel spacing : 79MHz & 1MHz  
Type of modulation : FHSS  
Antenna type : Chip Helical  
Antenna connector type : Integral  
Antenna gain : 1dBi  
ITU code : F1D  
Operation temperature range : 0 to +45 deg.C.

#### FCC Part15.31 (e)

The Bluetooth module is provided with stable power supply (DC 1.8 V), therefore, the equipment complies power supply regulation.

#### FCC Part15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the module. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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### 3 Test Specification, Procedures and Results

#### 3.1 Test specification

Test specification : FCC Part15 Subpart C: 2006  
 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

Test Specification : FCC Part 15 Subpart B: 2006  
 Title : FCC 47CFR Part 15 Radio Frequency Device  
 Subpart B Unintentional Radiators

#### 3.2 Procedures & Results

Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin	Results
Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A *1	N/A	N/A
Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247 (a)(1)	Conducted	N/A	*See data.	Complied
20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247 (a)(1)	Conducted	N/A		Complied
Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247 (a)(1)(iii)	Conducted	N/A		Complied
Dwell time	ANSI C63.4:2003 13.Measurement of intentional radiators	Section15.247 (a)(1)(iii)	Conducted	N/A		Complied
Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247 (b)(1)	Conducted	N/A		Complied
Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.209 Section15.247 (d)	Conducted / Radiated	N/A		Tx 9.0dB (1601.34MHz, AV, Horizontal, Tx 2402MHz) Rx 10.6dB (9764.00MHz, AV, Vertical, Rx 2441MHz)

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

The measurements also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

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

#### 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 4.4.1	RSS-Gen 4.4.1	Conducted	-	Complied

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

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### 3.3 Uncertainty

	No.1 open site	No.2 open site	No.1 anechoic chamber
<b>Radiated emission (3m)</b>			
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

The measurement uncertainty (with 95% confidence level) for this test is  $\pm 0.4$ dB.

#### Spurious emission test (Radiated)

The data listed in this test report has enough margin, more than site margin.

### 3.4 Test Location

UL Japan, Inc. Yamakita EMC Lab.

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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 EMS lab. (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		

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## 4 System Test Configuration

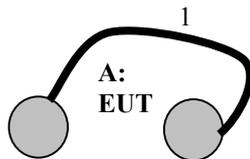
### 4.1 Justification

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

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

\*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.

### 4.2 Configuration of Tested System



\* Test data was taken under worse case conditions.

#### Description of EUT and support equipment

No.	Item	Model number	Serial number *1)	Manufacturer	FCC ID (Remarks)
A	Wireless Stereo Headset	DR-BT22	129 144	SONY	AK8DRBT22 (EUT)

\*1) 129 (Radiated emission test), 144 (other test)

#### List of cables used

No.	Name	Length (m)	Shield		Remark
			Connector	Cable	
1	Headphone cable	0.6	- (No connector)	Unshielded	-

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## 5 Carrier Frequency Separation

### Test Procedure

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

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

## 6 20dB Bandwidth & Occupied Bandwidth (99%)

### Test Procedure

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

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

## 7 Number of Hopping Frequency

### Test Procedure

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

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

## 8 Dwell time

### Test Procedure

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

Pre-check was performed with the packet type of DH1, DH3 and DH5. DH5, which had the longest dwell time, was chosen for the final measurement.

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

## 9 Maximum Peak Output Power

### Test Procedure

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

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

## 10 Out of Band Emissions (Antenna Port Conducted)

### Test Procedure

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

Summary of the test results: Pass

Date: May 24, 2006

Test engineer : Toyokazu Imamura

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## 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. A drawing of the set up is shown in the photos of Appendix 1.

### 11.3 Test conditions

Frequency range : 30MHz - 26GHz  
 Test distance : 3m  
 EUT operation mode : Transmitting, Receiving

### 11.4 Test procedure

The Radiated Electric Field Strength intensity has been measured with a ground plane and at a distance of 3m and 1m. 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.

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 radiated measurement.

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: 10Hz
Measuring antenna	Biconical (30-299MHz) Logperiodic (300MHz-1GHz)	Horn

The equipment was previously checked at each position of three axes X, Y and Z. The position in which the maximum noise occurred was chosen to put into measurement. See the table below and photographs in page 11. With the position, the noise levels of all the frequencies were measured.

	Below 1GHz	Above 1GHz
Horizontal	X	Z
Vertical	Y	X

### 11.5 Results

Summary of the test results : Pass  
 No noise was detected above the 5<sup>th</sup> order harmonics.

Date : May 21 and 24, 2006 Test engineer : Toyokazu Imamura

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### **APPENDIX 1: Photographs of test setup**

Page 10	:	Radiated emission
Page 11	:	Pre-check of the worst position

### **APPENDIX 2: Test Data**

Page 12	:	Carrier Frequency Separation
Page 13 - 14	:	20dB Bandwidth
Page 15 - 17	:	Number of Hopping Frequency
Page 18 - 21	:	Dwell time
Page 22	:	Maximum Peak Output Power
Page 23 - 34	:	Out of Band Emissions (Antenna Port Conducted)
22-32	:	Transmitting
33-34	:	Receiving
Page 35 - 46	:	Out of Band Emissions (Radiated)
35-43	:	Transmitting
44-46	:	Receiving
Page 47 - 48	:	Occupied Bandwidth

### **APPENDIX 3: Test instruments**

Page 49	:	Test instruments
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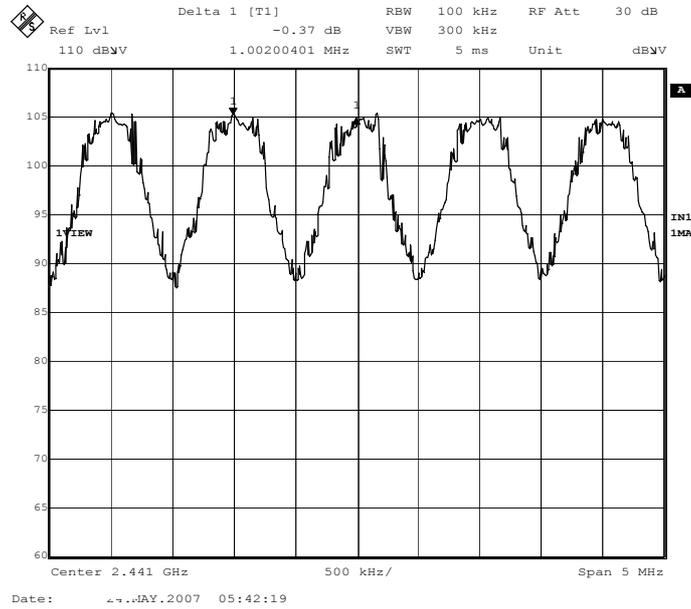
MF060b (26.04.07)

# Channel Separation: FCC 15.247(a)(1)

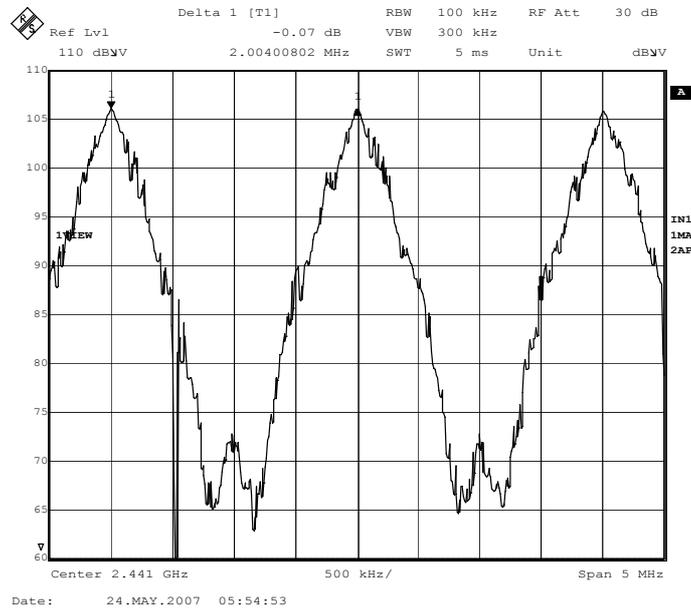
COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V

UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)  
DATE : 2007.05.24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamura

## 1. Hopping: 1.002MHz



## 2. Inquiry: 2.004MHz



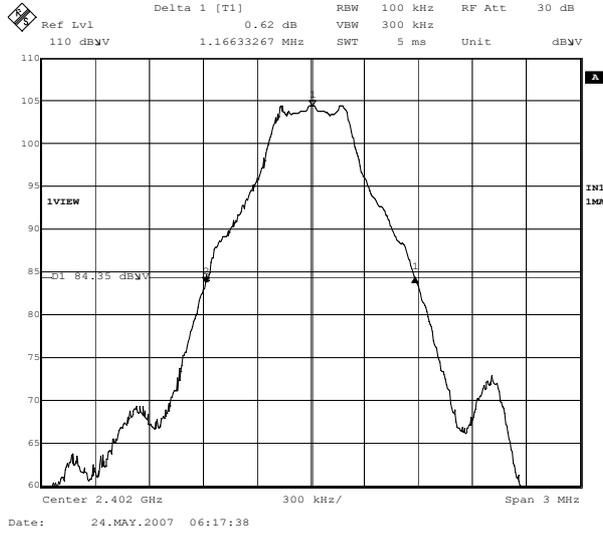
# 20dB Bandwidth: FCC 15.247(a)(1)

COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V

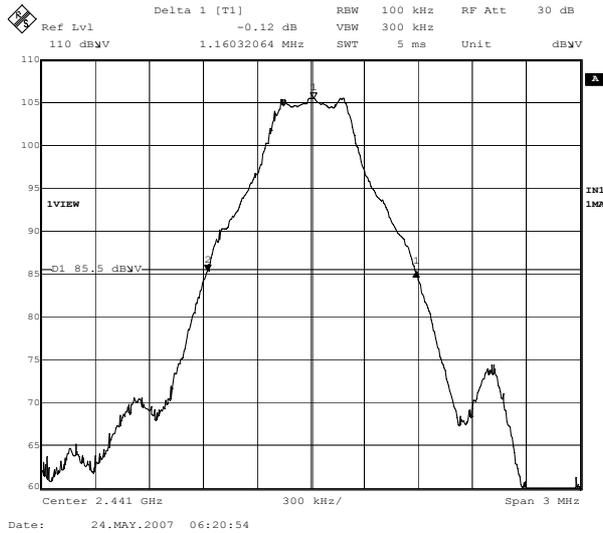
UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)  
DATE : 2007.05. 24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamra

[Hopping off]

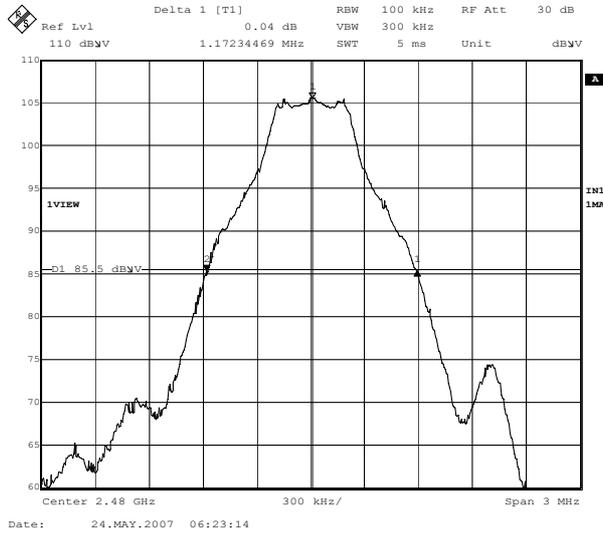
1. ch : 2402MHz/20dB Bandwidth:1.166MHz



2. ch : 2441MHz/20dB Bandwidth:1.160MHz



3. ch : 2480MHz/20dB Bandwidth:1.172MHz



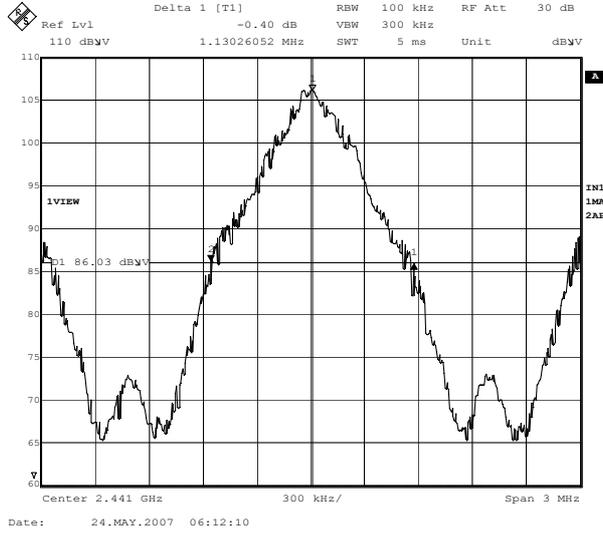
### 20dB Bandwidth: FCC 15.247(a)(1)

COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V

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REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)  
DATE : 2007.05. 24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamra

#### [Inquiry]

#### 4. Inaury/20dB Bandwidth:1.130MHz



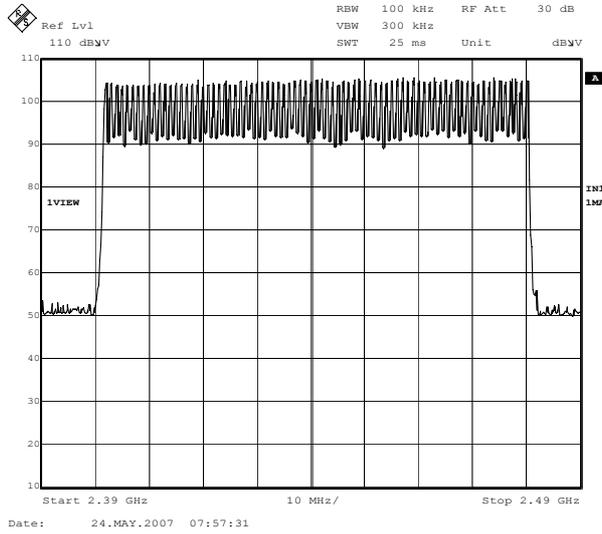
# Channel Utilization: FCC 15.247(a)(1)(iii)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

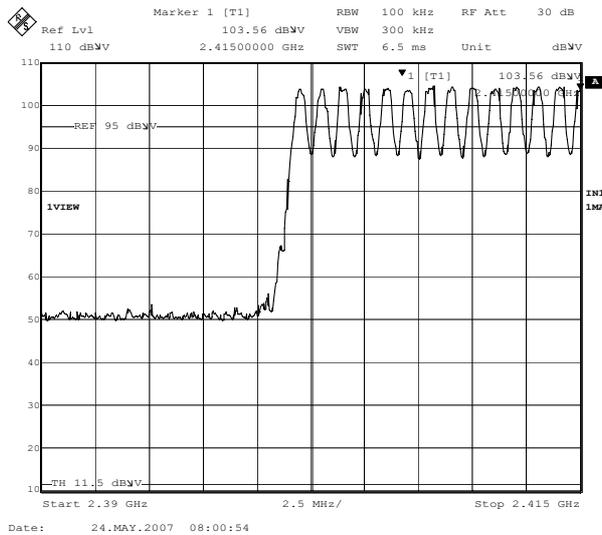
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**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(a)(1)(iii)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

## Hopping: 79ch

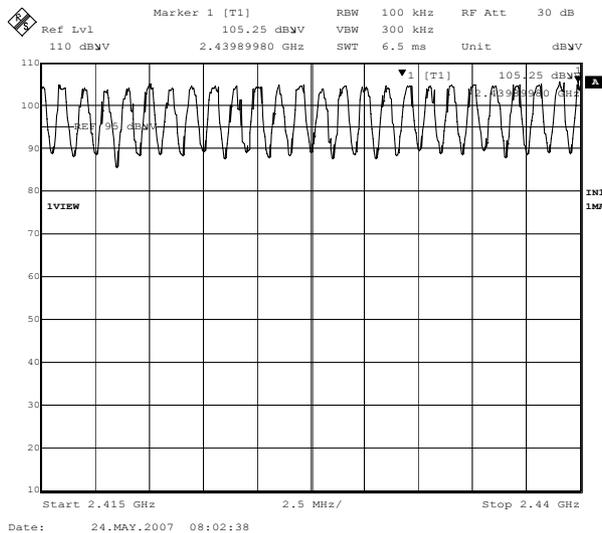
1.



2.



3.

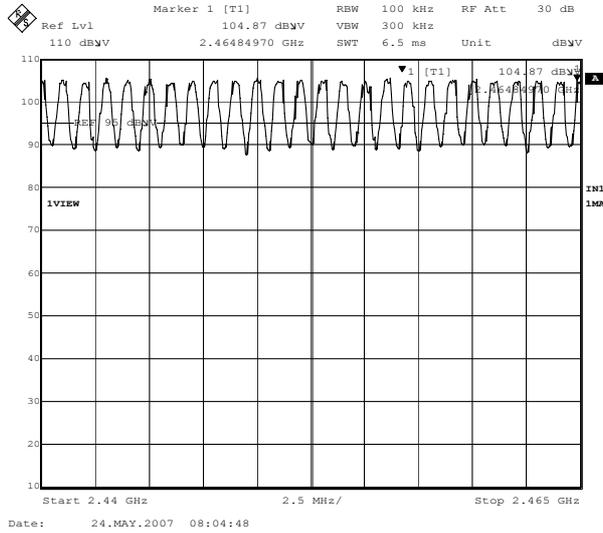


### Channel Utilization: FCC 15.247(a)(1)(iii)

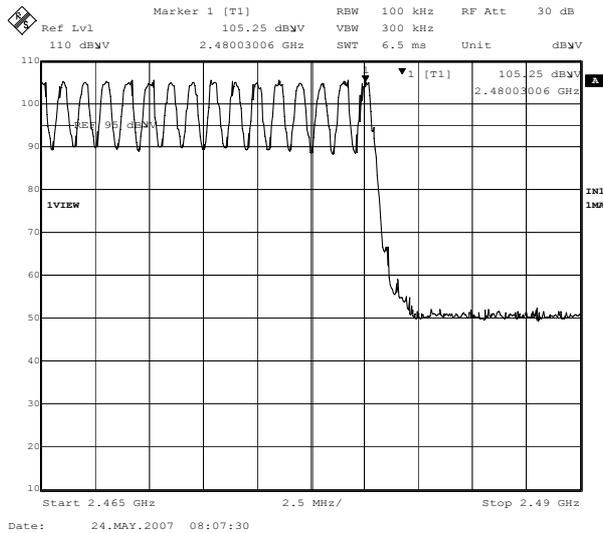
**COMPANY** : Sony Corporation  
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**POWER** : DC3.7V

**UL Japan, Inc. Yamakita No.2 Shielded Room**  
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**REGULATION** : Fcc Part15SubpartC 247(a)(1)(iii)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

4.



5.

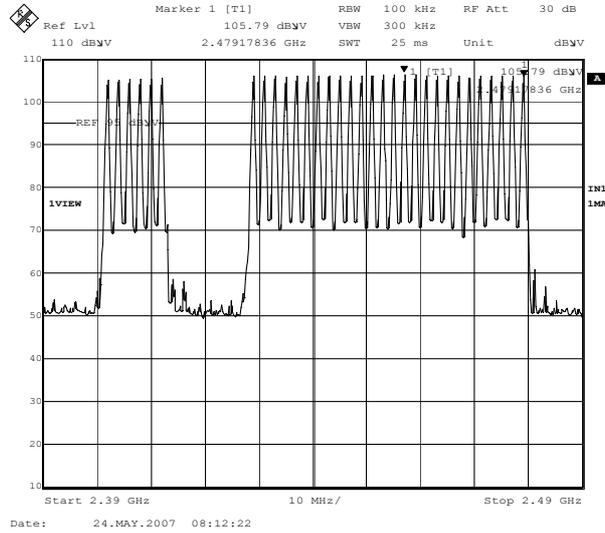


# Channel Utilization: FCC 15.247(a)(1)(iii)

COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
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REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)(iii)  
DATE : 2007.05.24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamura

## 1. Inquiry: 32ch



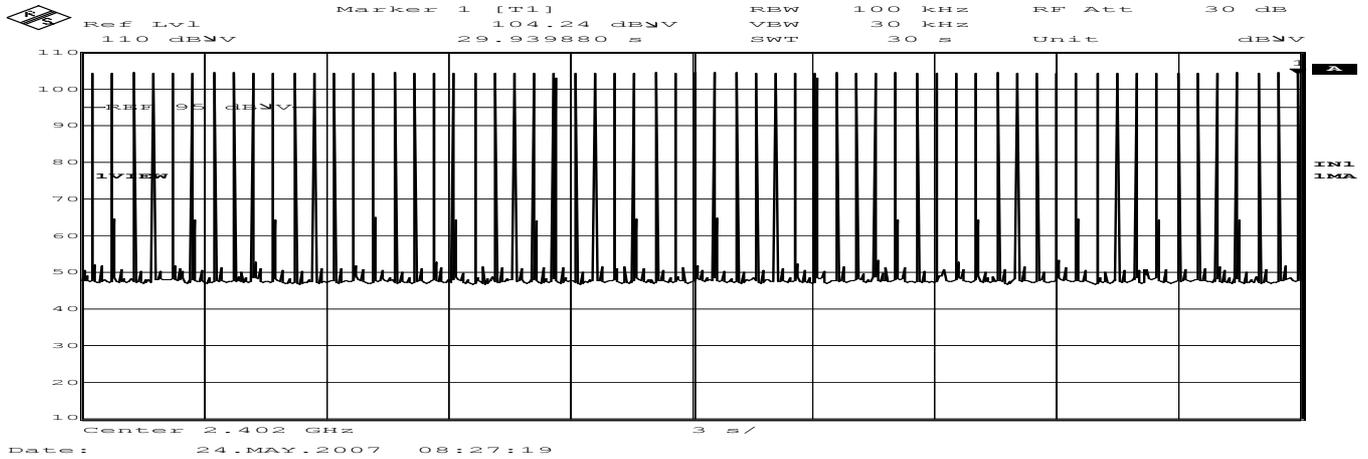
Dwell Time: FCC 15.247(a)(1)(iii)

COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V

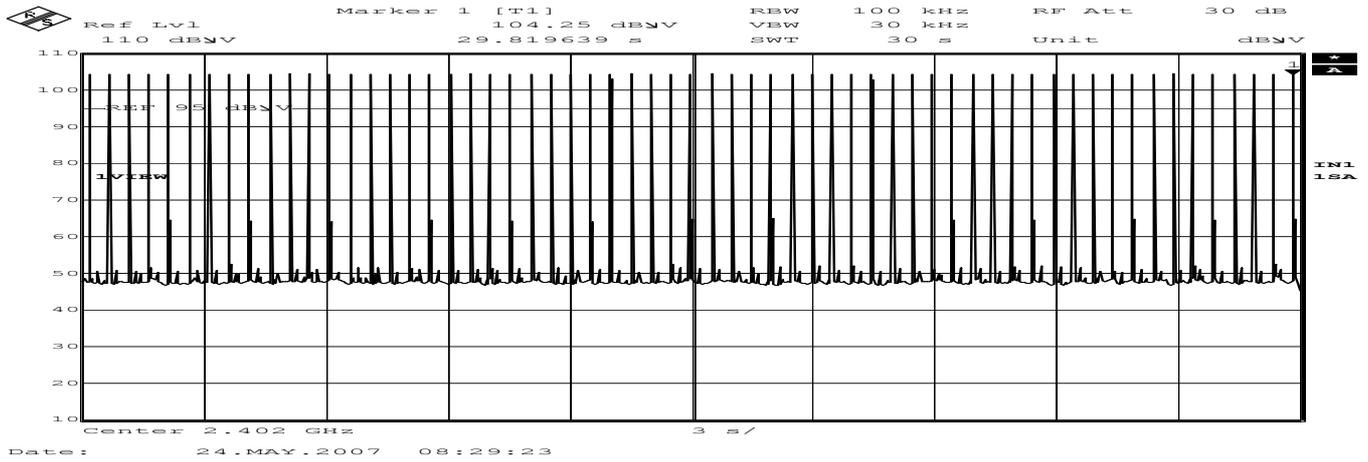
UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)(iii)  
DATE : 2007.05.24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamura

Hopping (DH5):

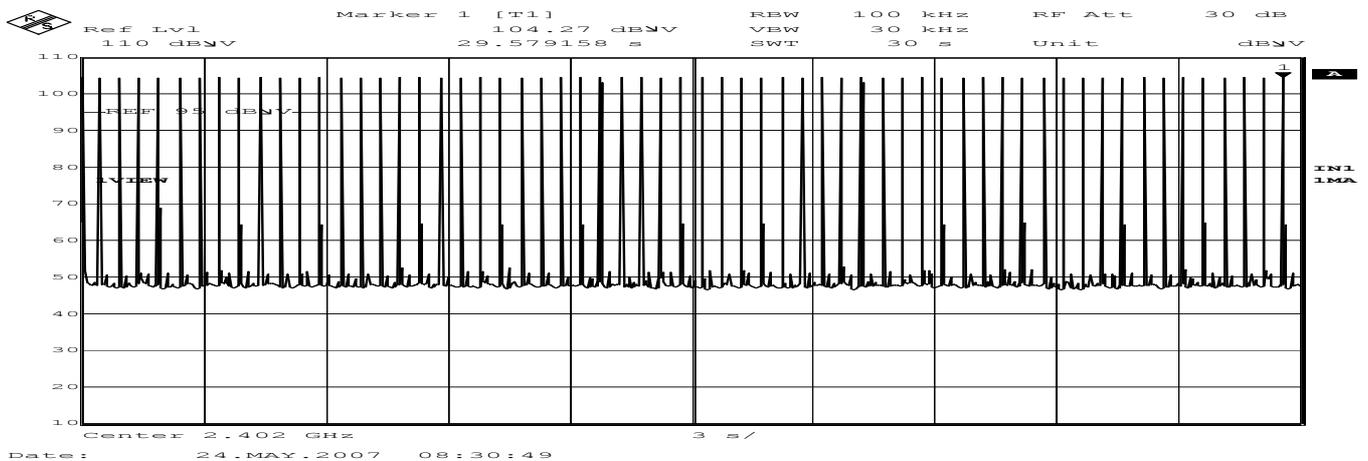
Count 1



Count 2



Count 3

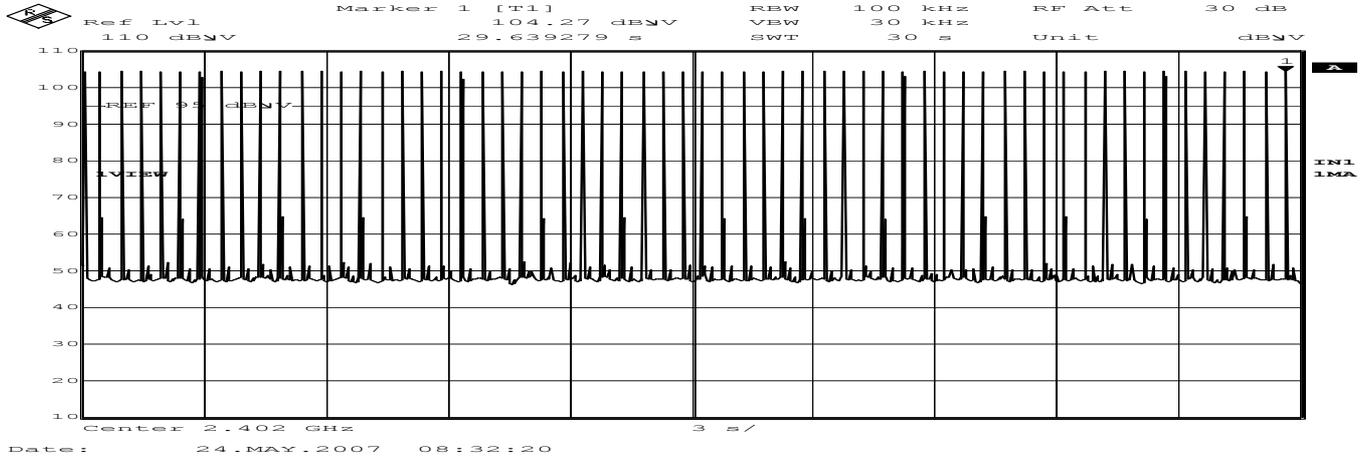


**Dwell Time: FCC 15.247(a)(1)(iii)**

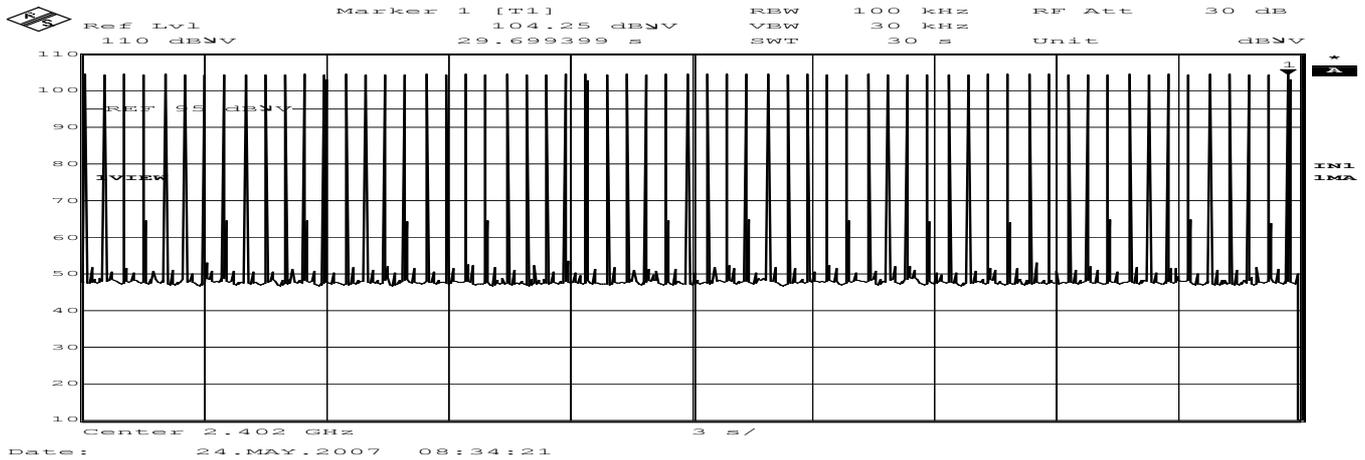
**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
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**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(a)(1)(iii)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

**Count 4**



**Count 5**



**Duty cycle(Hopping DH5)**



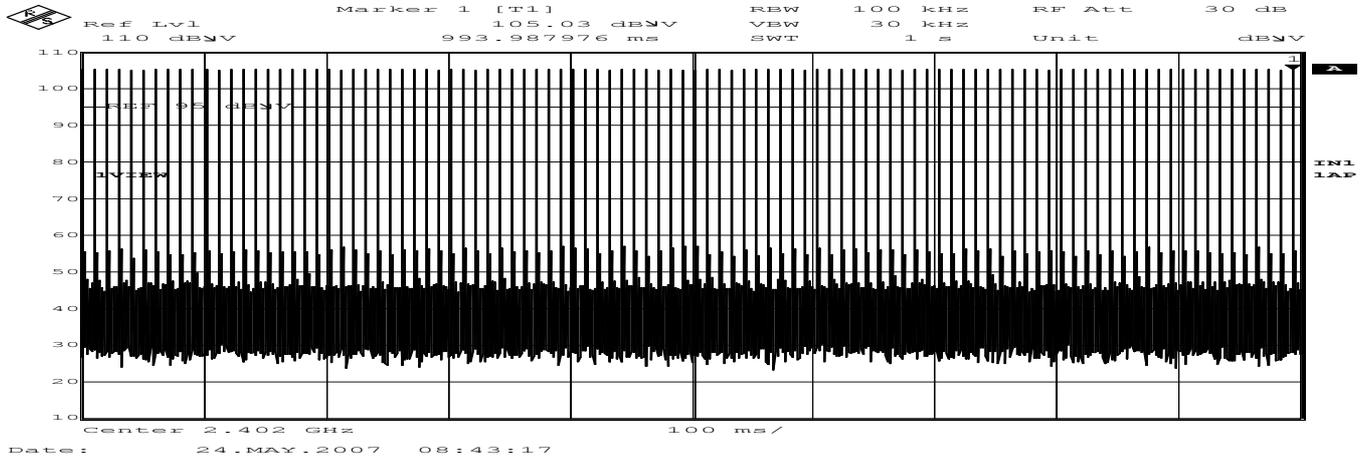
Average times of rising in 30 sec. of sweep = (61 + 61 + 61 + 61 + 61) / 5 = 61  
 Average times of rising in 1 sec. = 61 / 30s = 2.033  
 Average times of rising in 0.4x = 0.4 \* 79ch \* 2.03 = 64.15  
 Dwell time = 64.15 \* 2.92 = 187.32 [ms]  
 Limit : Dwell Time < 0.4[s]

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

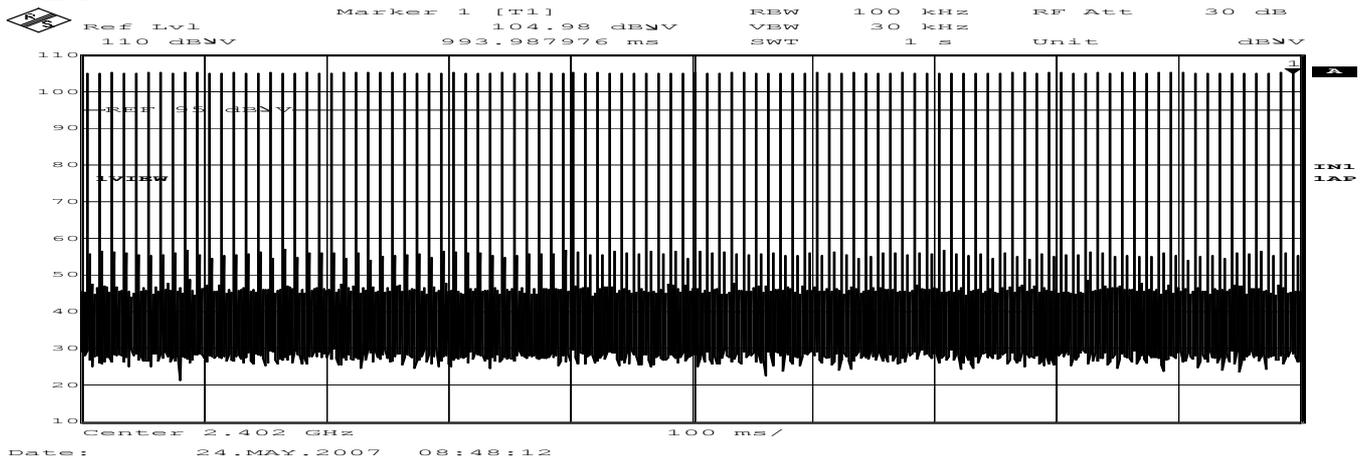
COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V

UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(a)(1)(iii)  
DATE : 2007.05.24  
TEMP./HUMI : 24deg.C./55%  
TEST MODE : Transmitting  
ENGINEER : Toyokazu Imamura

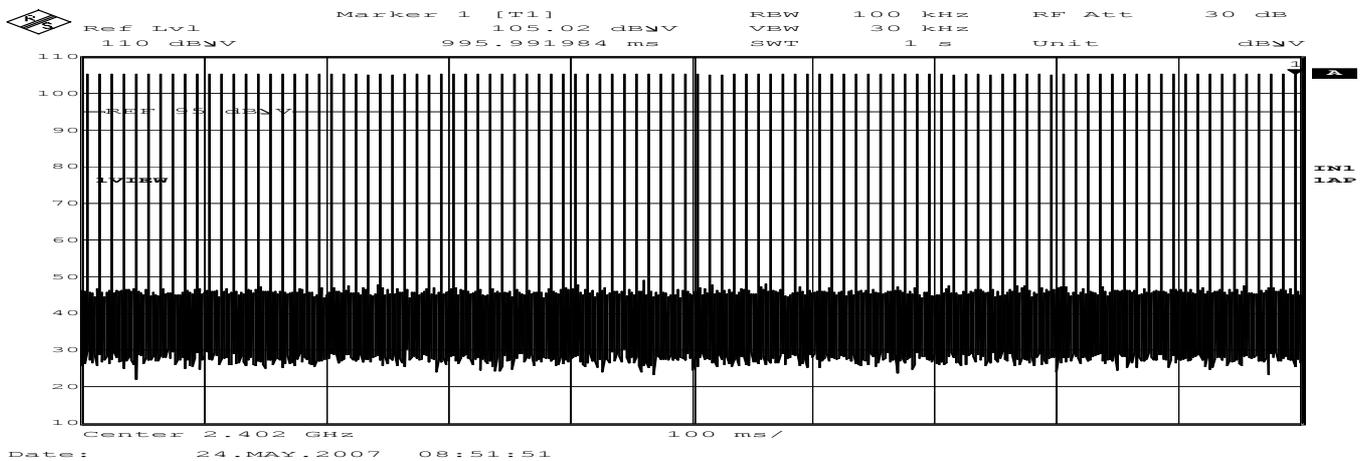
Inquiry:  
Count 1



Count 2



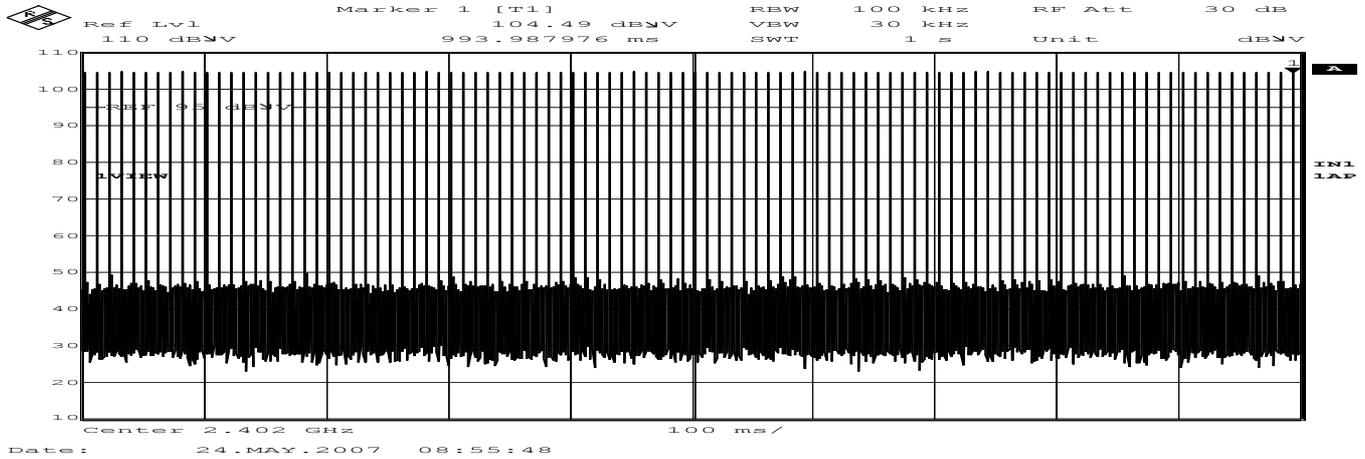
Count 3



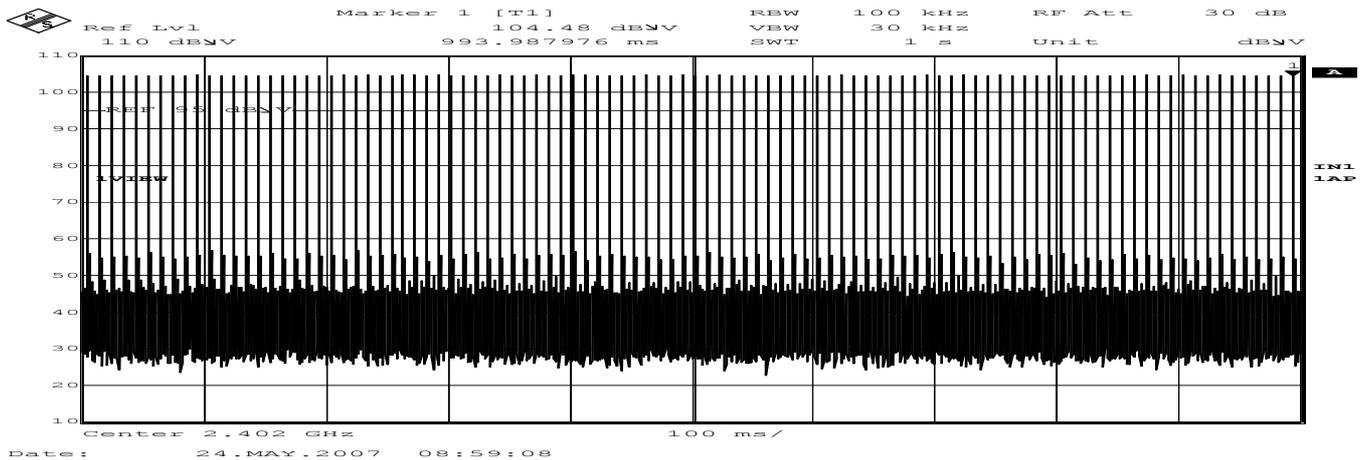
**Dwell Time: FCC 15.247(a)(1)(iii)**

<b>COMPANY</b>	: Sony Corporation	<b>UL Japan, Inc. Yamakita No.2 Shielded Room</b>	
<b>EQUIPMENT</b>	: Wireless Stereo Headset	<b>REPORT NO</b>	: 27IE0016-YK-A
<b>MODEL NUMBER</b>	: DR-BT22	<b>REGULATION</b>	: Fcc Part15SubpartC 247(a)(1)(iii)
<b>SERIAL NUMBER</b>	: 144	<b>DATE</b>	: 2007.05.24
<b>FCC ID</b>	: AK8DRBT22	<b>TEMP./HUMI</b>	: 24deg.C./55%
<b>POWER</b>	: DC3.7V	<b>TEST MODE</b>	: Transmitting
		<b>ENGINEER</b>	: Toyokazu Imamura

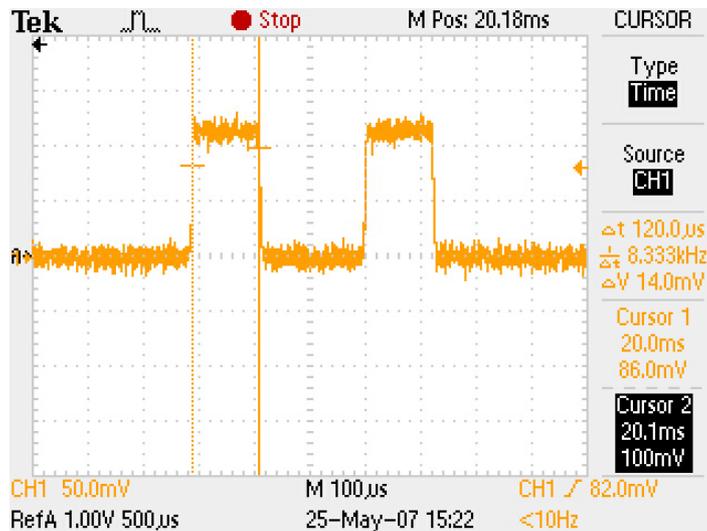
**Count 4**



**Count 5**



**Duty cycle(Inquiry)**



Average times of rising in 30 sec. of sweep = (100 + 100 + 100 + 100 + 100) / 5 = 100  
 Average times of rising in 1 sec. = 100 / 1s = 100.0  
 Average times of rising in 0.4x = 0.4 \* 32ch \* 100.0 = 1280.0  
 Dwell time = 1280.0 \* 0.12 = 153.60 [ms]  
 Limit : Dwell Time < 0.4[s]

# Maximum Peak Conducted Output Power

UL Japan, Inc.  
YAMAKITA No.2 Shielded Room

COMPANY : Sony Corporation  
EQUIPMENT : Wireless Stereo Headset  
MODEL NUMBER: DR-BT22  
SERIAL NUMBER: 144  
FCC ID : AK8DRBT22  
POWER : DC3.7V  
TEST MODE : Transmitting

REPORT NO : 27IE0016-YK-A  
REGULATION : Fcc Part15SubpartC 247(b)(1)  
DATE : 2007.05.24  
TEMP./HUMI : 24deg.C/55%

ENGINEER : Toyokazu Imamura

CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]	Limit (125mW) [dBm]	MARGIN [dB]
Low	2402.00	-1.01	0.00	-1.01	20.96	21.97
Mid	2441.00	-0.27	0.00	-0.27	20.96	21.23
High	2480.00	-0.06	0.00	-0.06	20.96	21.02
Hopping	-	-0.54	0.00	-0.54	20.96	21.50
Inquiry	-	0.02	0.00	0.02	20.96	20.94

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:None(Direct)

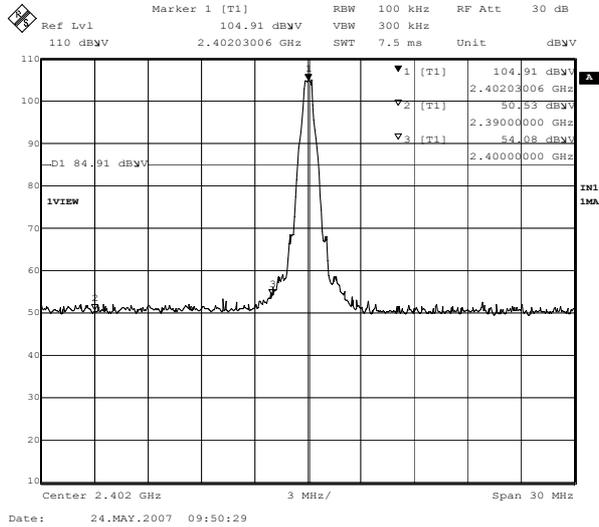
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

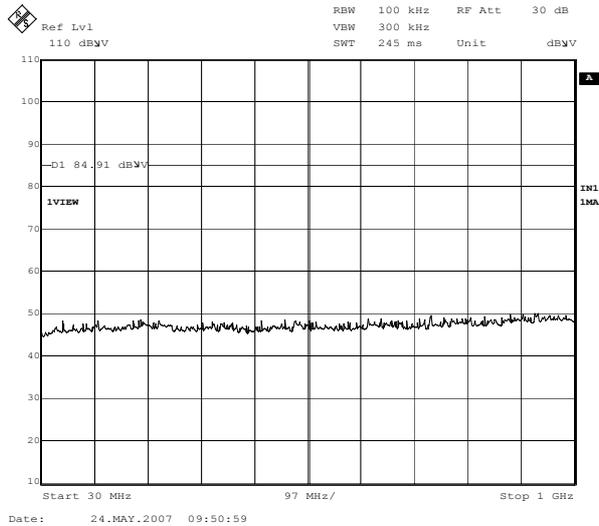
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

**[Transmitting]**  
**Ch:2402MHz**

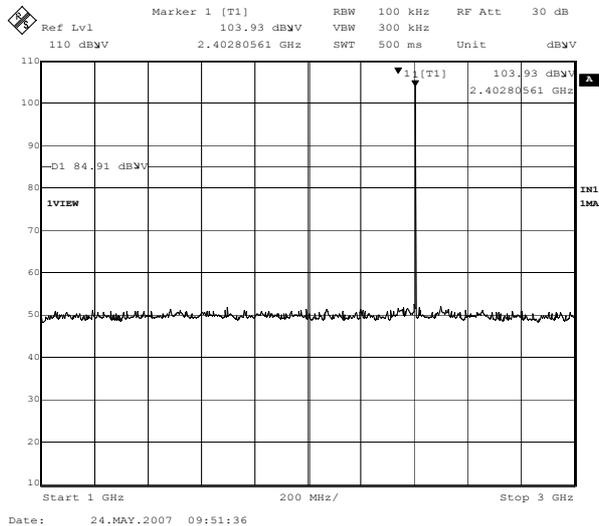
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2.



3.



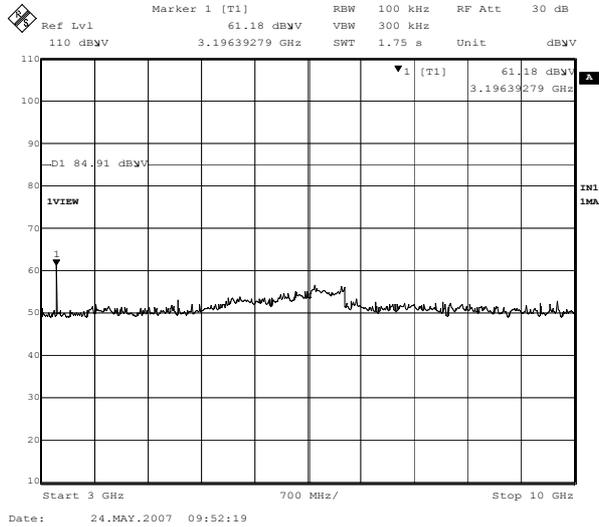
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

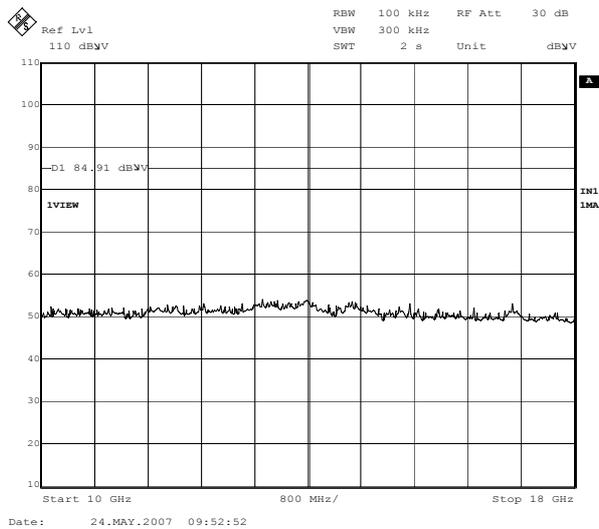
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

**[Transmitting]**  
**Ch:2402MHz**

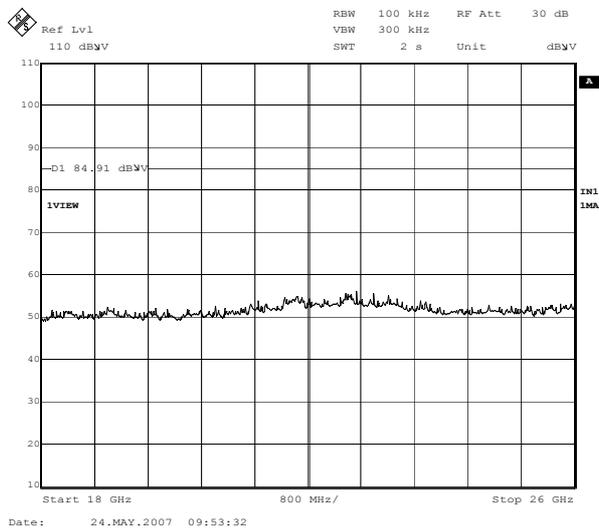
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5.



6.



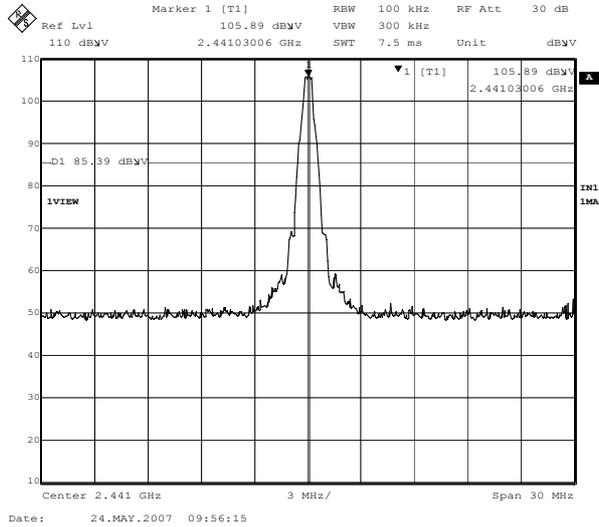
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

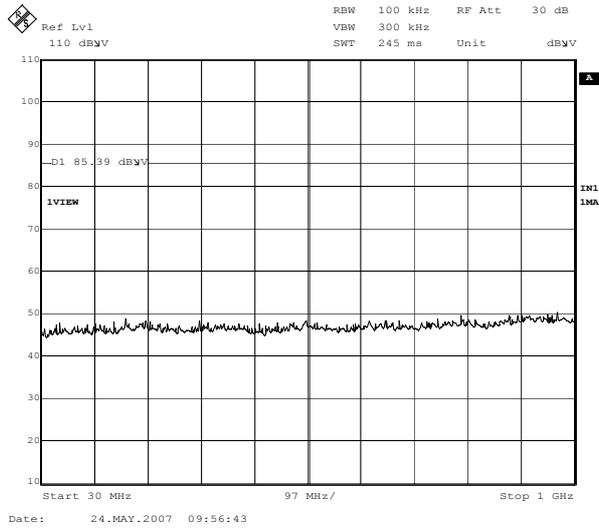
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Ch:2441MHz

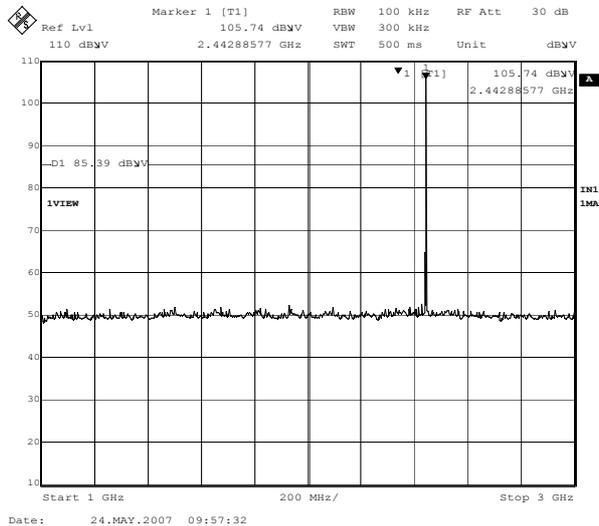
1.



2.



3.



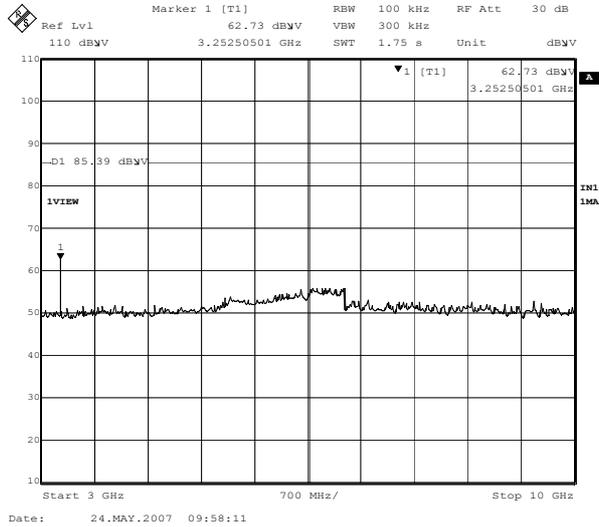
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

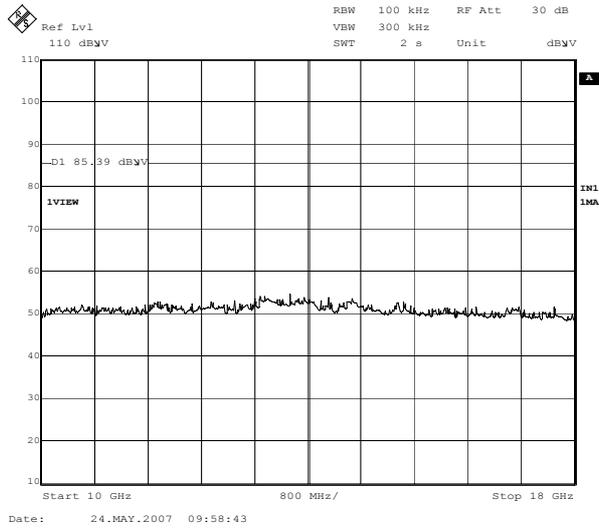
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Ch:2441MHz

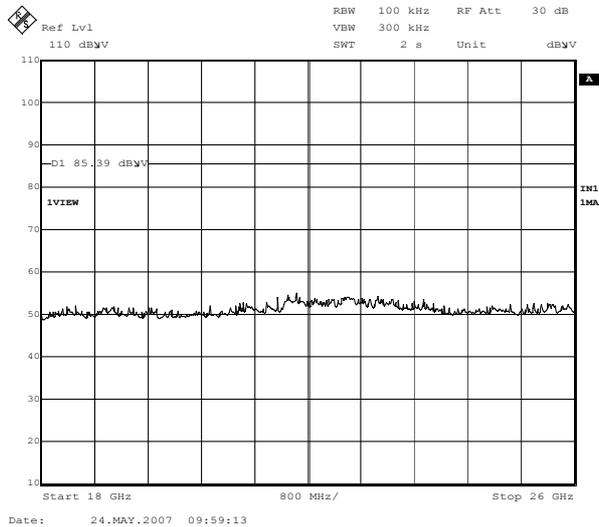
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5.



6.



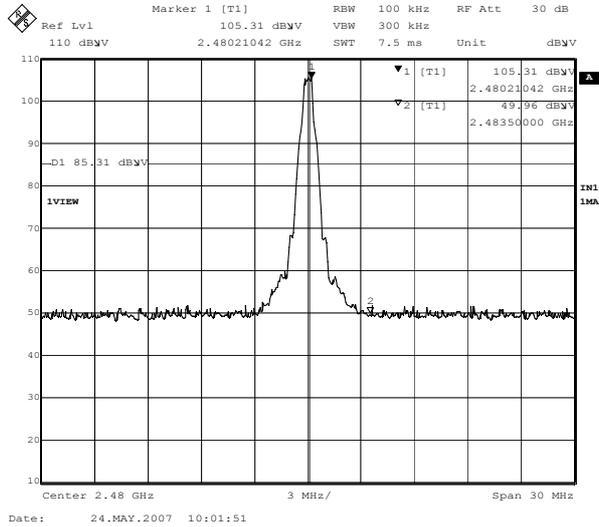
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

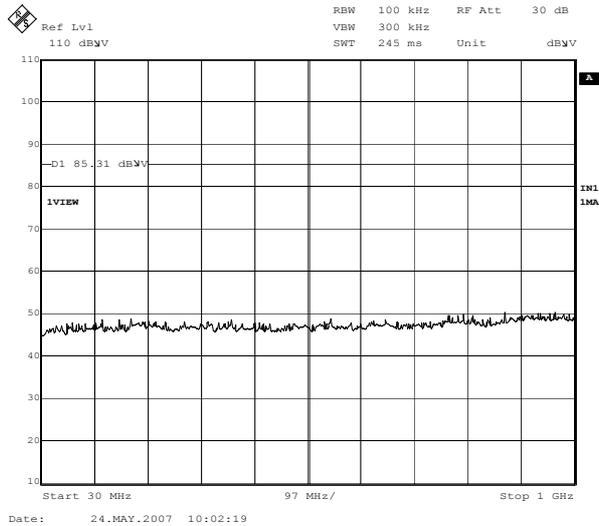
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

**[Transmitting]**  
**Ch:2480MHz**

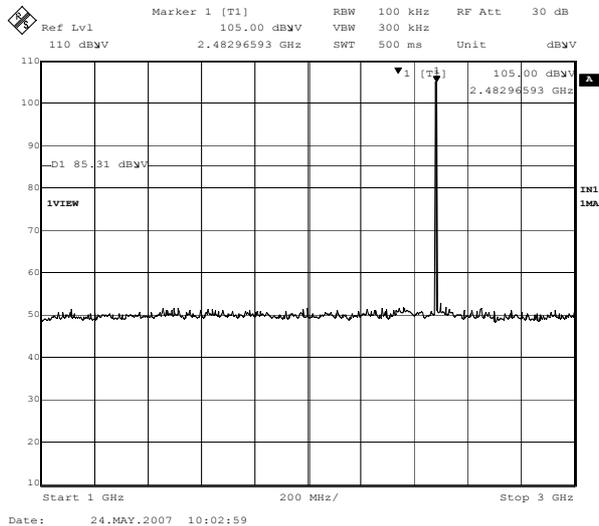
1.



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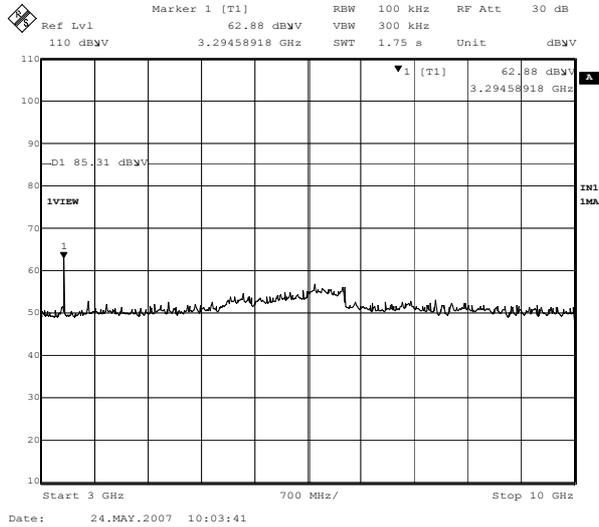
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

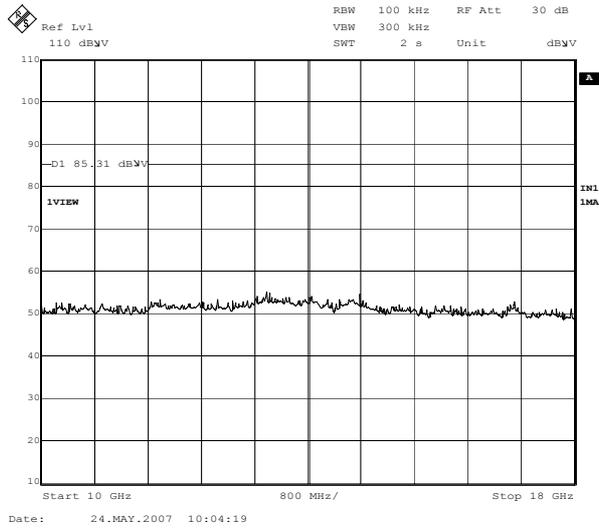
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

**[Transmitting]**  
**Ch:2480MHz**

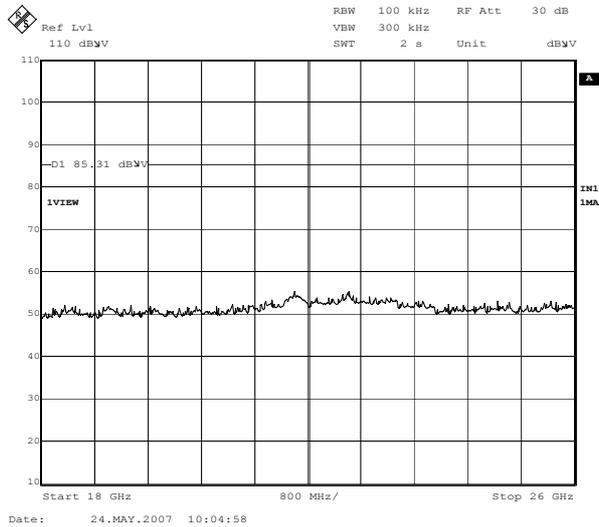
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5.



6.



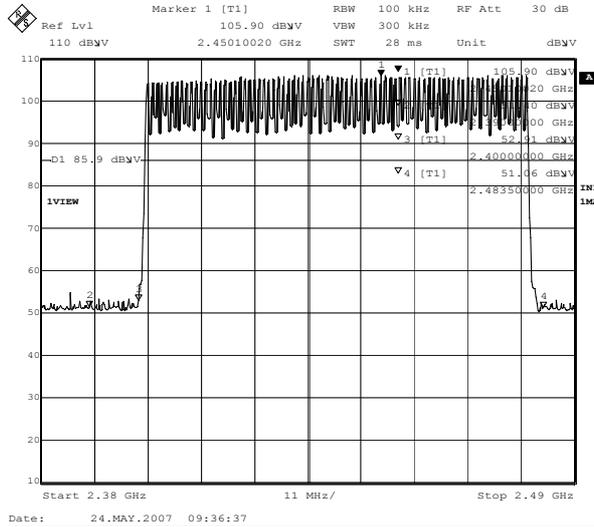
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

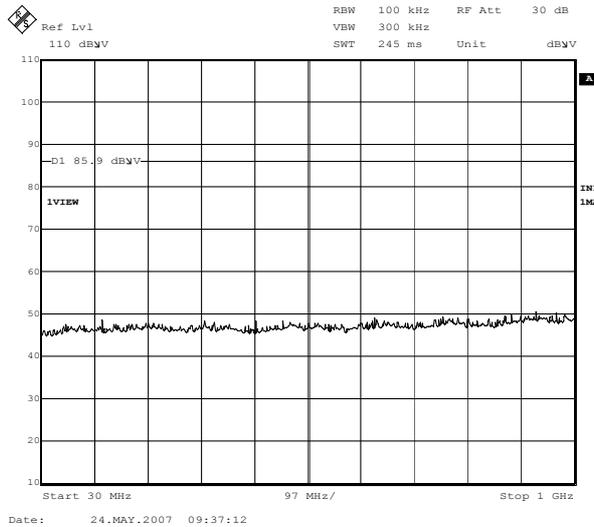
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Hopping

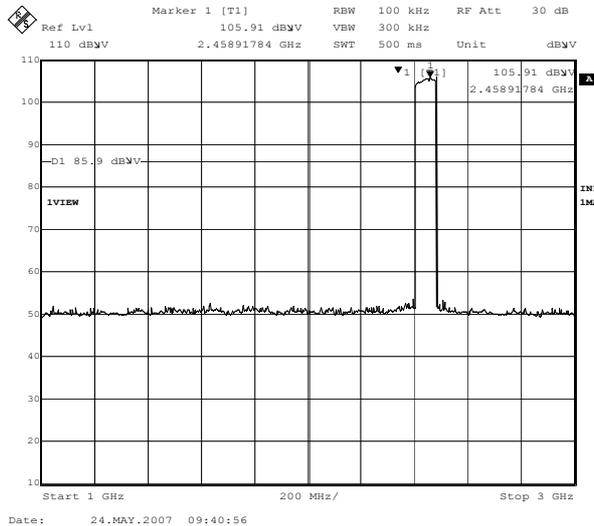
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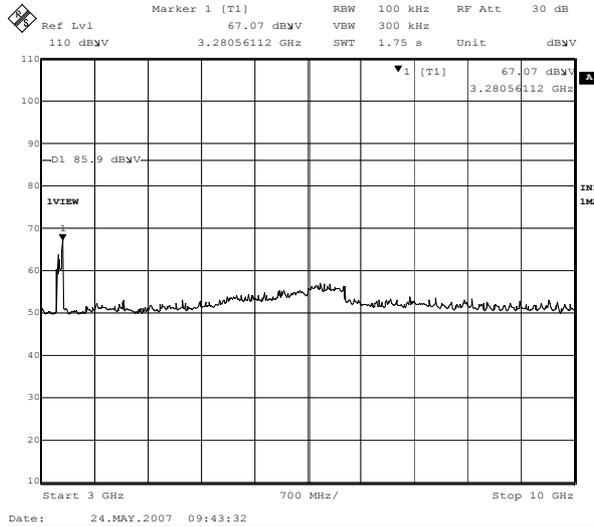
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

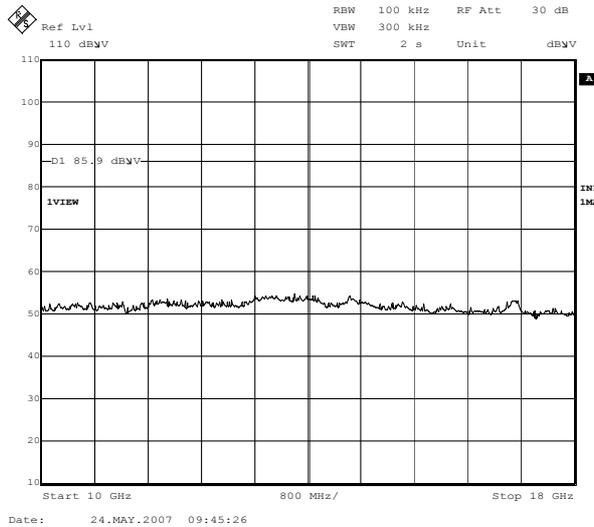
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Hopping

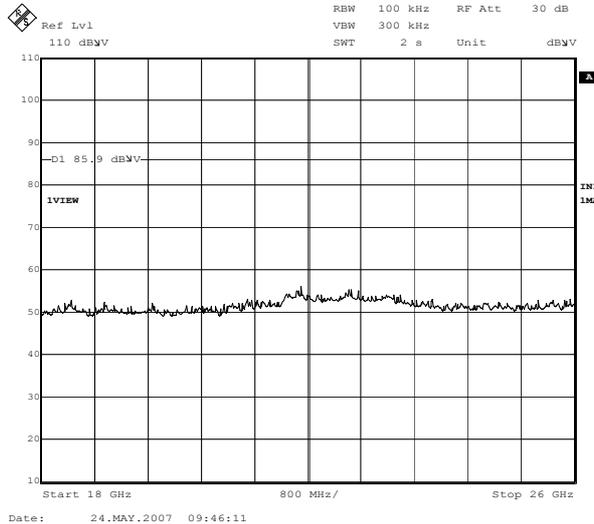
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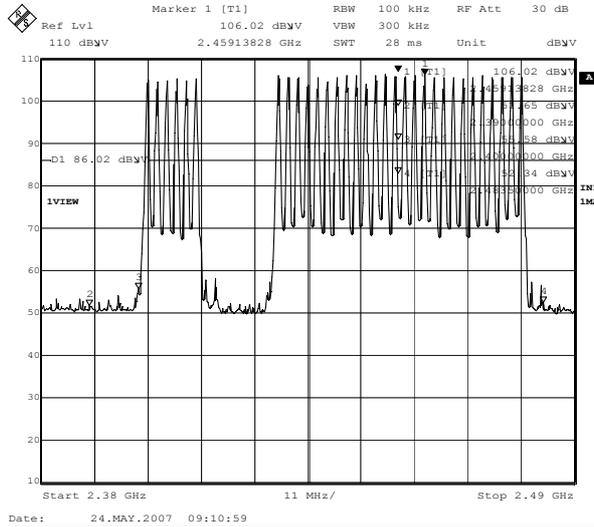
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

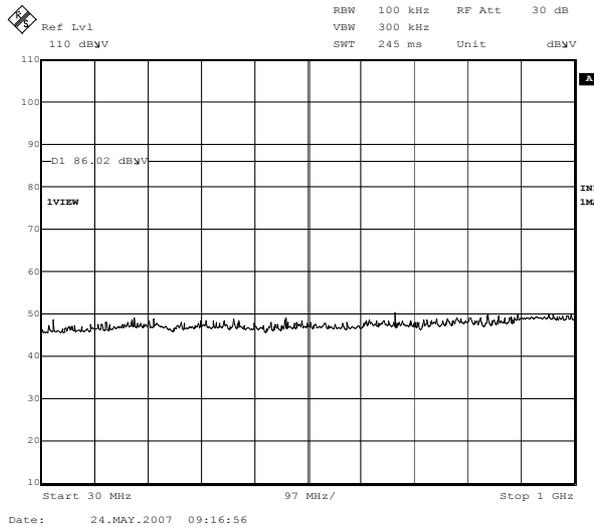
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Inquiry

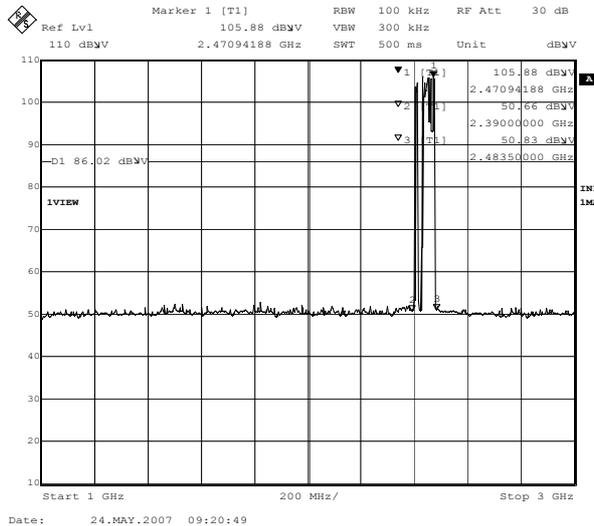
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2.



3.



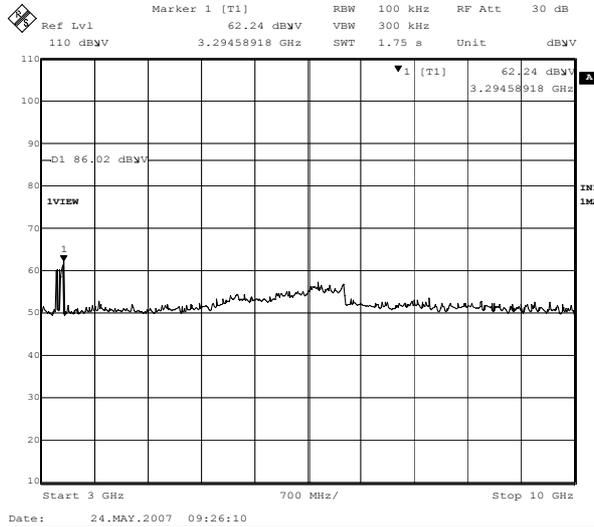
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

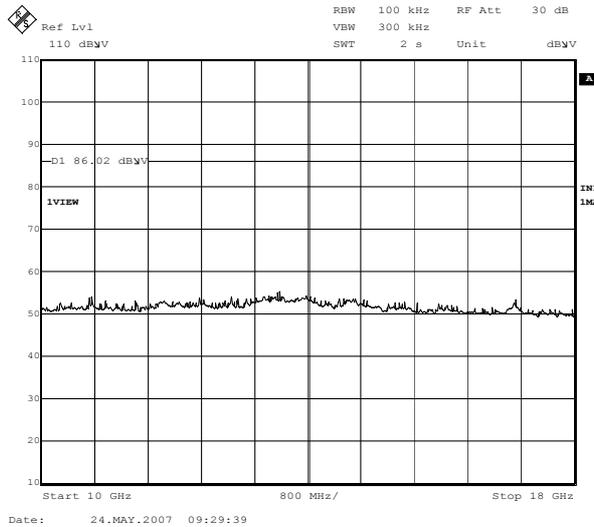
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

[Transmitting]  
Inquiry

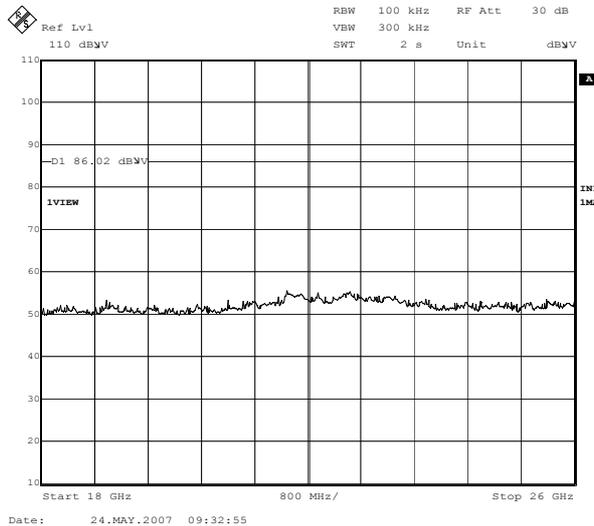
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6.



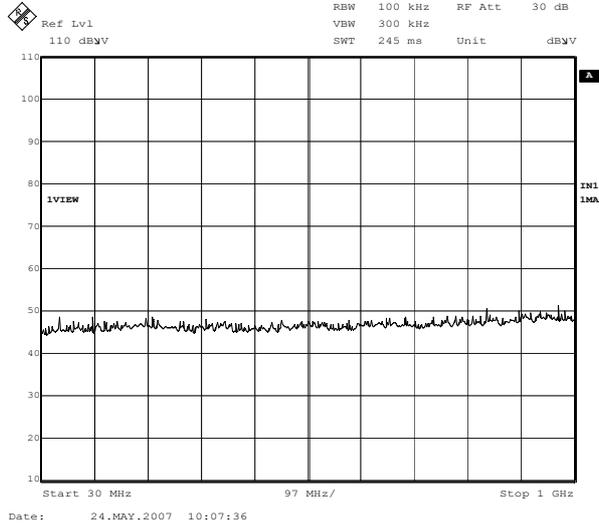
# Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

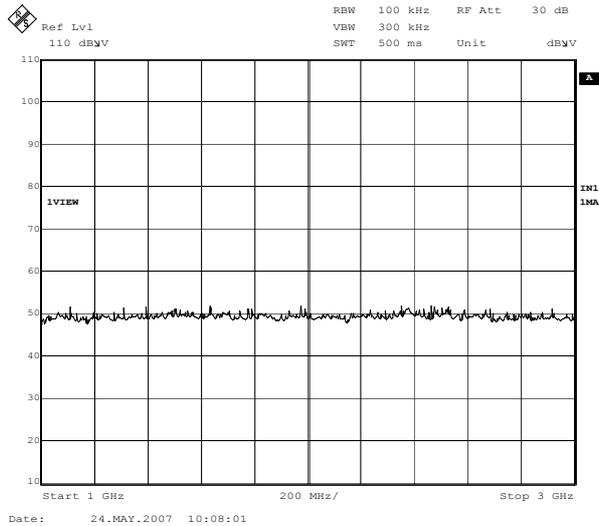
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Receiving  
**ENGINEER** : Toyokazu Imamura

**[Receiving]**  
**Ch:2441MHz**

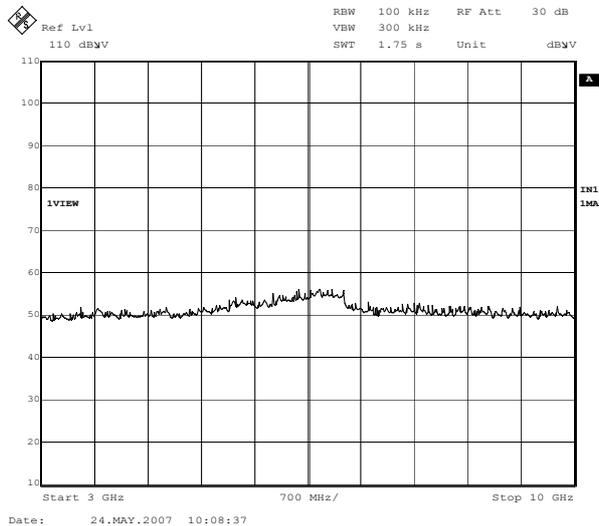
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2.



3.



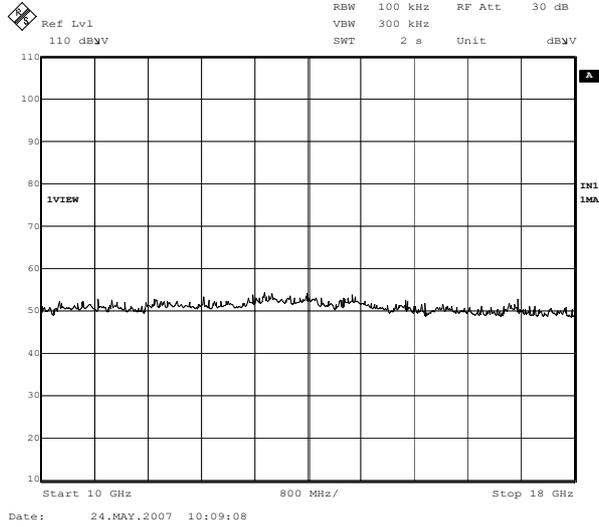
## Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

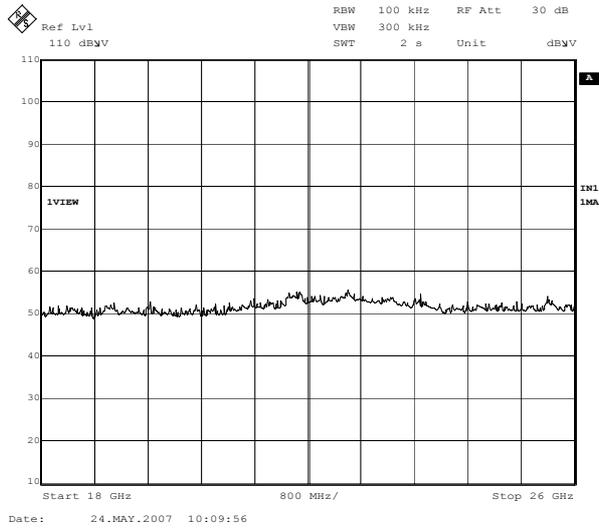
**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : Fcc Part15SubpartC 247(d)  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Receiving  
**ENGINEER** : Toyokazu Imamura

**[Receiving]**  
**Ch:2441MHz**

4.



5.



# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Tx2402MHz  
Remarks :  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
Regulation : FCC Part15C § 15.209

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.	60.70	BB	23.4	25.1	8.4	28.7	1.5	5.8	10.4	12.1	40.0	29.6	27.9
2.	96.00	BB	23.1	26.9	9.7	28.6	2.0	5.8	12.0	15.8	43.5	31.5	27.7
3.	286.36	BB	22.9	23.5	19.5	27.4	3.6	5.9	24.5	25.1	46.0	21.5	20.9

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-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Tx2402MHz  
Remarks : PK  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
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.	1601.34	BB	54.4	50.5	26.5	35.8	3.0	0.0	48.1	44.2	74.0	25.9	29.8
2.	2390.00	BB	45.7	44.3	29.8	35.5	3.4	0.0	43.4	42.0	74.0	30.6	32.0
3.	3202.78	BB	57.1	57.7	31.3	35.4	4.1	0.0	57.1	57.7	74.0	16.9	16.3
4.	4804.00	BB	48.1	44.8	33.8	34.6	5.3	0.0	52.6	49.3	74.0	21.4	24.7
5.	7206.00	BB	41.0	40.6	37.5	35.3	6.1	0.0	49.3	48.9	74.0	24.7	25.1
6.	9608.00	BB	42.7	43.4	38.9	35.9	8.0	0.0	53.7	54.4	74.0	20.3	19.6

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Tx2402MHz  
Remarks : AV  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
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.	1601.34	BB	51.3	43.8	26.5	35.8	3.0	0.0	45.0	37.5	54.0	9.0	16.5
2.	2390.00	BB	34.0	33.9	29.8	35.5	3.4	0.0	31.7	31.6	54.0	22.3	22.4
3.	3202.78	BB	42.4	43.0	31.3	35.4	4.1	0.0	42.4	43.0	54.0	11.6	11.0
4.	4804.00	BB	36.8	37.4	33.8	34.6	5.3	0.0	41.3	41.9	54.0	12.7	12.1
5.	7206.00	BB	30.9	31.2	37.5	35.3	6.1	0.0	39.2	39.5	54.0	14.8	14.5
6.	9608.00	BB	32.3	32.5	38.9	35.9	8.0	0.0	43.3	43.5	54.0	10.7	10.5

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Tx2441MHz  
Remarks :  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
Regulation : FCC Part15C § 15.209

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.	60.70	BB	23.3	25.0	8.4	28.7	1.5	5.8	10.3	12.0	40.0	29.7	28.0
2.	96.00	BB	23.1	28.9	9.7	28.6	2.0	5.8	12.0	17.8	43.5	31.5	25.7
3.	286.36	BB	24.0	24.1	19.5	27.4	3.6	5.9	25.6	25.7	46.0	20.4	20.3

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-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
 Kind of Equipment : Wireless Stereo Headset  
 Model No. : DR-BT22  
 Serial No. : 129  
 Power : DC3.7V  
 Mode : Tx2441MHz  
 Remarks : PK  
 Date : 5/21/2007  
 Test Distance : 3 m  
 Temperature : 24 °C Engineer : Toyokazu Imamura  
 Humidity : 50 %  
 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.	1627.31	BB	52.3	51.0	26.7	35.8	3.0	0.0	46.2	44.9	74.0	27.8	29.1
2.	3254.67	BB	57.5	57.1	31.2	35.3	4.1	0.0	57.5	57.1	74.0	16.5	16.9
3.	4882.00	BB	46.9	47.6	34.0	34.6	5.4	0.0	51.7	52.4	74.0	22.3	21.6
4.	7323.00	BB	42.6	42.4	37.6	35.3	6.1	0.0	51.0	50.8	74.0	23.0	23.2
5.	9764.00	BB	44.5	43.4	38.8	35.9	7.7	0.0	55.1	54.0	74.0	18.9	20.0

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Tx2441MHz  
Remarks : AV  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
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.	1627.31	BB	48.2	46.0	26.7	35.8	3.0	0.0	42.1	39.9	54.0	11.9	14.1
2.	3254.67	BB	41.7	41.8	31.2	35.3	4.1	0.0	41.7	41.8	54.0	12.3	12.2
3.	4882.00	BB	35.4	36.4	34.0	34.6	5.4	0.0	40.2	41.2	54.0	13.8	12.8
4.	7323.00	BB	31.3	31.2	37.6	35.3	6.1	0.0	39.7	39.6	54.0	14.3	14.4
5.	9764.00	BB	32.8	32.8	38.8	35.9	7.7	0.0	43.4	43.4	54.0	10.6	10.6

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
 Kind of Equipment : Wireless Stereo Headset  
 Model No. : DR-BT22  
 Serial No. : 129  
 Power : DC3.7V  
 Mode : Tx2480MHz  
 Remarks :  
 Date : 5/21/2007  
 Test Distance : 3 m  
 Temperature : 24 °C  
 Humidity : 50 %  
 Regulation : FCC Part15C § 15.209

Engineer : Toyokazu Imamura

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.	60.70	BB	23.1	24.9	8.4	28.7	1.5	5.8	10.1	11.9	40.0	29.9	28.1
2.	96.00	BB	24.6	28.5	9.7	28.6	2.0	5.8	13.5	17.4	43.5	30.0	26.1
3.	286.36	BB	23.9	24.2	19.5	27.4	3.6	5.9	25.5	25.8	46.0	20.5	20.2

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-05 (8447D) ■ EMI RECEIVER : KTR-01 (ES140)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
 Kind of Equipment : Wireless Stereo Headset  
 Model No. : DR-BT22  
 Serial No. : 129  
 Power : DC3.7V  
 Mode : Tx2480MHz  
 Remarks : PK  
 Date : 5/21/2007  
 Test Distance : 3 m  
 Temperature : 24 °C  
 Humidity : 50 %  
 Regulation : FCC Part15C § 15.209(PK Detection)

Engineer : Toyokazu Imamura

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.	1653.34	BB	51.5	51.1	27.0	35.8	3.0	0.0	45.7	45.3	74.0	28.3	28.7
2.	2483.50	BB	60.1	58.4	29.7	35.5	3.4	0.0	57.7	56.0	74.0	16.3	18.0
3.	3306.66	BB	57.2	57.0	31.1	35.2	4.2	0.0	57.3	57.1	74.0	16.7	16.9
4.	4960.00	BB	45.8	46.4	34.2	34.6	5.4	0.0	50.8	51.4	74.0	23.2	22.6
5.	7440.00	BB	42.0	42.6	37.8	35.4	6.1	0.0	50.5	51.1	74.0	23.5	22.9
6.	9920.00	BB	44.0	44.2	38.7	35.9	7.5	0.0	54.3	54.5	74.0	19.7	19.5

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
 Kind of Equipment : Wireless Stereo Headset  
 Model No. : DR-BT22  
 Serial No. : 129  
 Power : DC3.7V  
 Mode : Tx2480MHz  
 Remarks : AV  
 Date : 5/21/2007  
 Test Distance : 3 m  
 Temperature : 24 °C  
 Humidity : 50 %  
 Regulation : FCC Part15C § 15.209(AV Detection)

Engineer : Toyokazu Imamura

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.	1653.34	BB	47.0	43.8	27.0	35.8	3.0	0.0	41.2	38.0	54.0	12.8	16.0
2.	2483.50	BB	46.1	45.3	29.7	35.5	3.4	0.0	43.7	42.9	54.0	10.3	11.1
3.	3306.66	BB	42.7	42.3	31.1	35.2	4.2	0.0	42.8	42.4	54.0	11.2	11.6
4.	4960.00	BB	34.7	34.8	34.2	34.6	5.4	0.0	39.7	39.8	54.0	14.3	14.2
5.	7440.00	BB	31.1	31.2	37.8	35.4	6.1	0.0	39.6	39.7	54.0	14.4	14.3
6.	9920.00	BB	32.9	33.0	38.7	35.9	7.5	0.0	43.2	43.3	54.0	10.8	10.7

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Rx2441MHz  
Remarks :  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
Regulation : FCC Part15C § 15.209

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.	60.70	BB	23.0	25.2	8.4	28.7	1.5	5.8	10.0	12.2	40.0	30.0	27.8	
2.	96.00	BB	23.8	27.9	9.7	28.6	2.0	5.8	12.7	16.8	43.5	30.8	26.7	
3.	286.36	BB	23.5	23.4	19.5	27.4	3.6	5.9	25.1	25.0	46.0	20.9	21.0	

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-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Rx2441MHz  
Remarks : PK  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
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.	1629.32	BB	52.6	50.7	26.8	35.8	3.0	0.0	46.6	44.7	74.0	27.4	29.3
2.	2441.00	BB	44.6	44.8	29.7	35.5	3.4	0.0	42.2	42.4	74.0	31.8	31.6
3.	3252.69	BB	47.7	45.6	31.2	35.3	4.1	0.0	47.7	45.6	74.0	26.3	28.4
4.	4882.00	BB	43.9	42.8	34.0	34.6	5.4	0.0	48.7	47.6	74.0	25.3	26.4
5.	7323.00	BB	42.3	42.7	37.6	35.3	6.1	0.0	50.7	51.1	74.0	23.3	22.9
6.	9764.00	BB	44.8	44.1	38.8	35.9	7.7	0.0	55.4	54.7	74.0	18.6	19.3

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-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 271E0016-YK-A

Applicant : Sony Corporation  
Kind of Equipment : Wireless Stereo Headset  
Model No. : DR-BT22  
Serial No. : 129  
Power : DC3.7V  
Mode : Rx2441MHz  
Remarks : AV  
Date : 5/21/2007  
Test Distance : 3 m  
Temperature : 24 °C Engineer : Toyokazu Imamura  
Humidity : 50 %  
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					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	1629.32	BB	49.3	45.1	26.8	35.8	3.0	0.0	43.3	39.1	54.0	10.7	14.9
2.	2441.00	BB	33.1	33.3	29.7	35.5	3.4	0.0	30.7	30.9	54.0	23.3	23.1
3.	3252.69	BB	36.4	33.9	31.2	35.3	4.1	0.0	36.4	33.9	54.0	17.6	20.1
4.	4882.00	BB	31.8	32.6	34.0	34.6	5.4	0.0	36.6	37.4	54.0	17.4	16.6
5.	7323.00	BB	31.4	30.8	37.6	35.3	6.1	0.0	39.8	39.2	54.0	14.2	14.8
6.	9764.00	BB	32.7	32.8	38.8	35.9	7.7	0.0	43.3	43.4	54.0	10.7	10.6

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

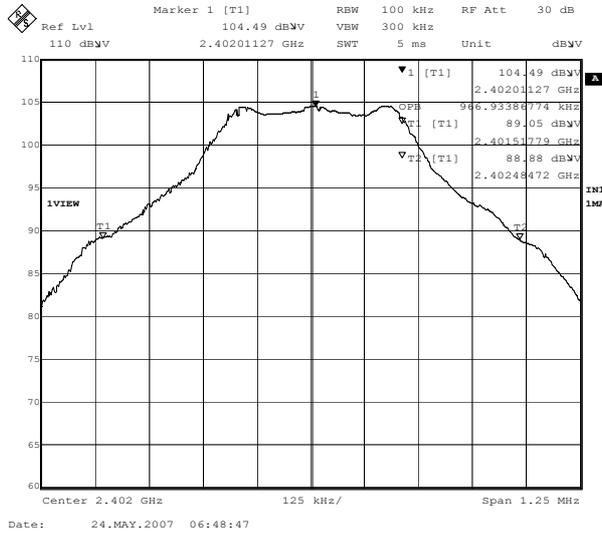
■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz  
■ CABLE: KCC-D16/D17 ■ PREAMP: APPRA05 (8449B) ■ SPECTRUMANALYZER: KSA-04 (R3271A)

## Occupied Bandwidth(99%)

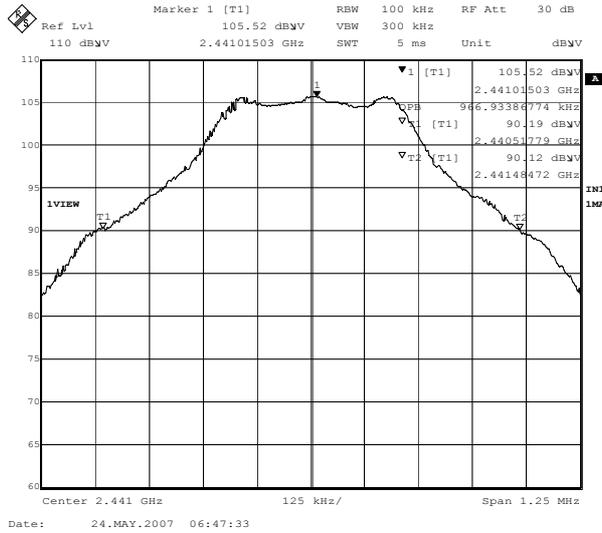
**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : RSS-210  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

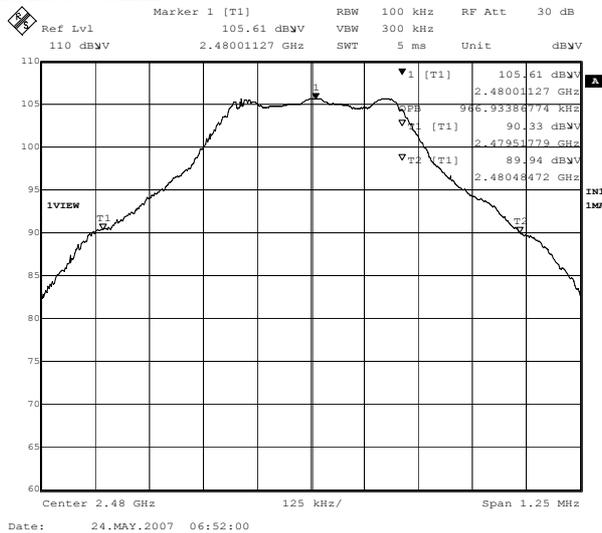
### 1. ch : 2402MHz/Occupied Bandwidth:966.93kHz



### 2. ch : 2441MHz/Occupied Bandwidth:966.93kHz



### 3. ch : 2480MHz/Occupied Bandwidth:966.93kHz

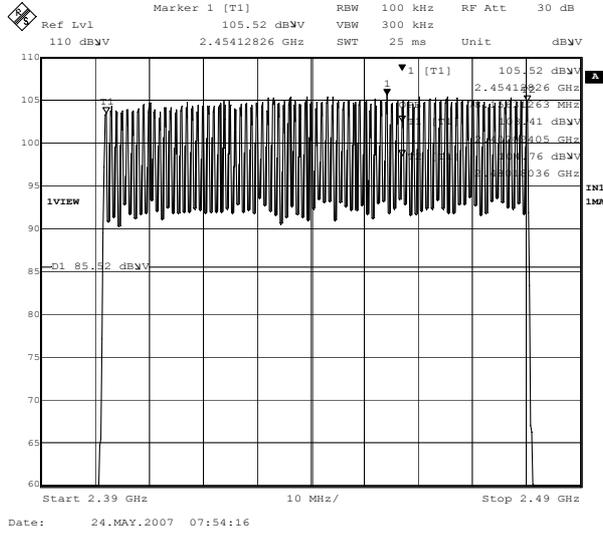


## Occupied Bandwidth(99%)

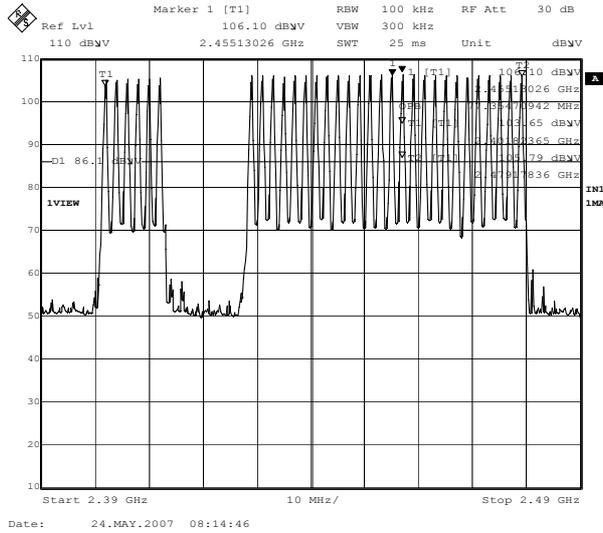
**COMPANY** : Sony Corporation  
**EQUIPMENT** : Wireless Stereo Headset  
**MODEL NUMBER**: DR-BT22  
**SERIAL NUMBER**: 144  
**FCC ID** : AK8DRBT22  
**POWER** : DC3.7V

**UL Japan, Inc. Yamakita No.2 Shielded Room**  
**REPORT NO** : 27IE0016-YK-A  
**REGULATION** : RSS-210  
**DATE** : 2007.05.24  
**TEMP./HUMI** : 24deg.C./55%  
**TEST MODE** : Transmitting  
**ENGINEER** : Toyokazu Imamura

### 4. Hopping/Occupied Bandwidth:78.16MHz



### 5. Inquiry/Occupied Bandwidth:77.35MHz



### 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	2006/08/31 * 12
KAF-05	Pre Amplifier	Agilent	8447D	RE	2007/04/13 * 12
KAT6-01	Attenuator	INMET	18N-6dB	RE	2007/03/28 * 12
KBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/01/06 * 12
KCC-30/31/32 /34/KRM-03	Coaxial Cable/RF Relay Matrix	Fujikura/Suhner/TSJ	5D-2W/S04272B/RFM-E421	RE	2006/11/27 * 12
KLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2007/01/06 * 12
KOS-02	Humidity Indicator	Custom	CTH-190	RE	2006/07/10 * 24
KSA-04	Spectrum Analyzer	Advantest	R3271A	RE	2006/09/05 * 12
KTR-01	Test Receiver	Rohde & Schwarz	ES140	RE, AT 1,2,3,4,6	2007/04/12 * 12
KJM-01	Measure	TAJIMA	GL19-55	RE	-
KCC-D16/D17	Coaxial Cable	INSULATED WIRE INC	KPS-1501-200-KPS/K PS-1501-2000-KPS	RE	2007/02/05 * 12
KHA-01	Horn Antenna	A.H.Systems	SAS-200/571	RE	2006/08/17 * 12
KHA-03	Horn Antenna	EMCO	3160-09	RE	2007/04/14 * 12
KPM-05	Power meter	Agilent	E4417A	AT 5	2007/04/03 * 12
KPSS-01	Power sensor	Agilent	E9327A	AT 5	2007/03/13 * 12
APPRA05	Pre Amplifier	Hewlett Packard	8449B	RE	2006/12/21 * 12
KOSC-01	Oscilloscope	Tektronix	TDS-2022B	AT 4	2007/05/15 * 12
KCC-D7	Coaxial Cable	Advantest	A01002	AT 1,2,3,4,6	2007/04/11 * 12
KDT-01	Coaxial Crystal Detector	Agilent	8473C	AT 4	Pre Check

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: Bandwidth
  - 3: Number of Hopping Frequency
  - 4: Dwell time
  - 5: Maximum Peak Output Power
  - 6: Out of Band Emission (Conducted)