



UL Apex Co., Ltd.

Test report No. : 26GE0360-HO-A-1
Page : 1 of 37
Issued date : April 19, 2006
Revised date : April 25, 2006
FCC ID : AK8MEXBT5000
No. : ME-O012

RADIO TEST REPORT

Test Report No. : 26GE0360-HO-A-1

Applicant : Sony EMCS Corporation

Type of Equipment : Car Radio with CD player built in Blue Tooth unit

Model No. : MEX-BT5000

FCC ID : AK8MEXBT5000

Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247: 2006

Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with the above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test:

March 28 and 29, 2006

Tested by:

Makoto Kosaka
EMC Services

Yasuyuki Fukui
EMC Services

Approved by :

Naoki Sakamoto
Group Leader of EMC Services

UL Apex Co., Ltd.

Head Office EMC Lab.

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SECTION 1: Client information

Company Name	:	Sony EMCS Corporation
Address	:	6-7-35 Kitashinagawa, Shinagawa-ku, Tokyo 141-0001 Japan
Telephone Number	:	+81-3-5769-5650
Facsimile Number	:	+81-3-5769-5085
Contact Person	:	Kengo Nakamura

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

2.1 Identification of E.U.T.

Type of Equipment	:	Car Radio with CD player built in Blue Tooth unit
Model No.	:	MEX-BT5000
Serial No.	:	07 (for Radiated emission) 10 (for the other testes)
Rating	:	DC12V (DC3.3V for module)
Country of Manufacture	:	Thailand
Receipt Date of Sample	:	March 27, 2006
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 No: MEX-BT5000 (referred to as the EUT in this report) is the Car Radio with CD player built in Blue Tooth unit.

Clock frequency(ies) in the system	:	26MHz, 18.432MHz, 12.5MHz, 14.7456MHz, 5MHz
Equipment Type	:	Transceiver
Frequency of Operation	:	2402-2480MHz
Bandwidth & Channel spacing	:	1MHz & 1MHz
Modulation	:	FHSS
ITU code	:	F1D
Power Supply (inner)	:	DC 3.3V
Antenna Type	:	Monopole antenna (PWB Pattern antenna)
Antenna Connector Type	:	UFL (Hirose)
Antenna Gain	:	-0.5dBi

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SECTION 3: Test specification, procedures & 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 : 2006
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz : 2006

FCC 15.31 (e)

This EUT provides stable voltage(DC3.3V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

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

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3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin*0)	Results
1	Conducted emission	FCC: ANSI C63.4:2003 7. AC powerline conducted emission measurements IC: RSS-Gen 7.2.2	FCC: Section 15.207 IC: RSS-Gen 7.2.2	-	N/A	N/A*1)	N/A
2	Carrier Frequency Separation	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1) IC: RSS-210 A8.1 (2)	Conducted	N/A	See data.	Complied
3	20dB Bandwidth	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1) FCC: Section 15.247(a)(1)(ii) IC: RSS-210 A8.1 (1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1)(iii) FCC: Section 15.247(a)(1)(ii) IC: RSS-210 A8.1 (4) IC: RSS-210 A8.1 (5)	Conducted	N/A		Complied
5	Dwell time	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1)(iii) FCC: Section 15.247(a)(1)(ii) IC: RSS-210 A8.1 (4) IC: RSS-210 A8.1 (5)	Conducted	N/A		Complied
6	Maximum Peak Output Power	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.6	FCC: Section 15.247(b)(1) IC: RSS-210 A8.4 (2) IC: RSS-210 A8.1 (3)	Conducted	N/A		Complied
7	Band Edge Compliance	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(d) IC: RSS-210 A8.5	Conducted	N/A		Complied
8	Spurious Emission	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.7 RSS-Gen 4.8	FCC: Section 15.247(d) IC: RSS-210 A8.5 RSS-Gen 7.2.1 and 7.2.3	Conducted/ Radiated	N/A	<Tx> 8.6dB 2483.5MHz VER, AV <Rx> 15.9dB 701.107MHz, QP, Vertical	Complied

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

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*1) The test is not applicable since EUT is a DC drive device.

*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-Gen 4.4.1	-	Conducted	N/A	N/A	N/A

3.4 Uncertainty

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.59\text{dB}(3\text{m})/\pm 4.58\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 4.62\text{dB}(3\text{m})/\pm 4.60\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 5.27\text{dB}$.

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

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 3.0\text{dB}$.

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0

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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 measurement room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 measurement room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.5 shielded room	-	-	6.0 x 6.0 x 3.9m	N/A	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	N/A	-
No.6 preparation room	-	-	4.75 x 5.4 x 3.0m	N/A	-
No.7 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.8 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.7 shielded room.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode used for test : [FHSS:Bluetooth]

Transmitting mode (Packet size DH5 (worst), Data packet: PRBS9)

- Low Channel : 2402MHz
- Mid Channel : 2441MHz
- High Channel : 2480MHz
- Inquiry

Receiving mode

- Mid Channel : 2441MHz

[FHSS:Bluetooth/ with AFH function]*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.

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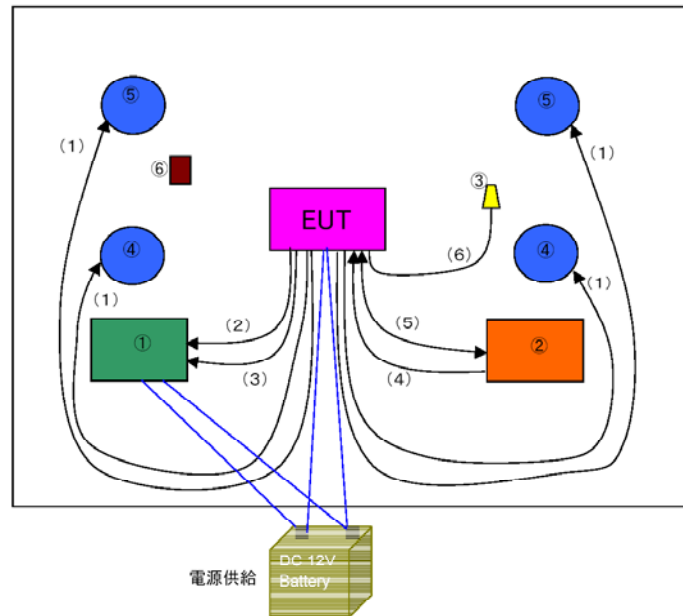
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4.2 Configuration and peripherals



* Cabling and setup were taken into consideration and test data was taken under worse case conditions.

Description of EUT

No.	Item	Model number	Serial number	Manufacturer
EUT	Car Radio with CD player built in Blue Tooth unit	MEX-BT5000	07 (for Radiated emission) 10 (for the other testes)	SONY

Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remark
1	Outside amplifier	XM-754HX	0563448	SONY	-
2	CD Changer	CDX-T67	22634	SONY	-
3	Wired Remote controller	RM-X4S	-	SONY	-
4	Speaker 1	XS-F1611	-	SONY	-
5	Speaker 2	1-544-814-31	-	AIWA	-
6	Remote Controller with Infrared rays	RM-X303	7	SONY	-

List of cables used

No.	Name	Length (m)	Shield
(1)	Speaker Cable	2.0	N
(2)	Audio Cable	5.2	N
(3)	Audio Cable	5.2	N
(4)	Audio Cable	5.5	N
(5)	Bus Cable	5.0	Y
(6)	Cable for Wired remote controller	2.0	N

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SECTION 5: Spurious Emission

[Conducted]

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on an urethane platform of nominal size, 1.0m by 1.0m, raised 80cm above the conducting ground plane. The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring 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 with the Test Receiver, or the Spectrum Analyzer (in linear mode).

The test was made with the detector (RBW/VBW) in the following table.

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

The result also satisfied with the general limits specified in section 15.209(a).

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth		AV: RBW:1MHz/VBW:10Hz

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.

The test was made on EUT at the normal use position.

Test data : APPENDIX 3

Test result : Pass

Date: March 28, 2006

Test engineer: Makoto Kosaka and Yasuyuki Fukui

SECTION 6: Bandwidth

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

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SECTION 7: Maximum Peak Output Power

Test Procedure

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 8: Carrier Frequency Separation

Test Procedure

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

Test data	: APPENDIX 3
Test result	: Pass

SECTION 9: Number of Hopping Frequency

Test Procedure

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

Test data	: APPENDIX 3
Test result	: Pass

SECTION 10: Dwell time

Test Procedure

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

Test data	: APPENDIX 3
Test result	: Pass

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APPENDIX 1: Photographs of test setup

Spurious Emission (Radiated)

This page has been submitted as a separate exhibit.

APPENDIX 2: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	1	2005/04/11 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	1	2004/11/25 * 24
MRENT-26	Spectrum Analyzer	Advantest	R3273	1	2006/02/15 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	1	2006/02/02 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	1	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	1	2005/10/14 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	1	2006/02/23 * 12
MPA-09	Pre Amplifier	Agilent	8447D	1	2005/09/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	1	2005/12/16 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	1	2006/01/09 * 12
MHA-02	Horn Antenna	EMCO	3160-09	1	2006/01/09 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	1	2006/02/02 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	1	2005/08/30 * 12
MPA-10	Pre Amplifier	Agilent	8449B	1	2005/09/07 * 12
MAT-24	Attenuator(10dB) (above1GHz)	Agilent	8493C	1	2005/06/03 * 12
MHF-05	High Pass Filter	Tokimec	TF323DCA	1	2006/01/24 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	2 to 7	2005/09/16 * 12
MCC-15	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	2 to 7	2006/02/02 * 12
MAT-25	Attenuator(10dB) (above1GHz)	Agilent	8493C	2 to 7	2005/06/03 * 12
MOS-16	Thermo-Hygrometer	Custom	CTH-180	2 to 7	2006/01/19 * 24
MSTW-14	EMI measurement software TEPTO-DV	TSJ	TEPTO-DV	1	-

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

Test Item:

- 1: Radiated Spurious Emission**
- 2: Antenna Terminal Conducted Spurious Emission**
- 3: Maximum Peak Output Power**
- 4: Carrier Frequency Separation**
- 5: 20dB Bandwidth**
- 6: Number of Hopping Frequency**
- 7: Dwell time**

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APPENDIX 3: Data of EMI test

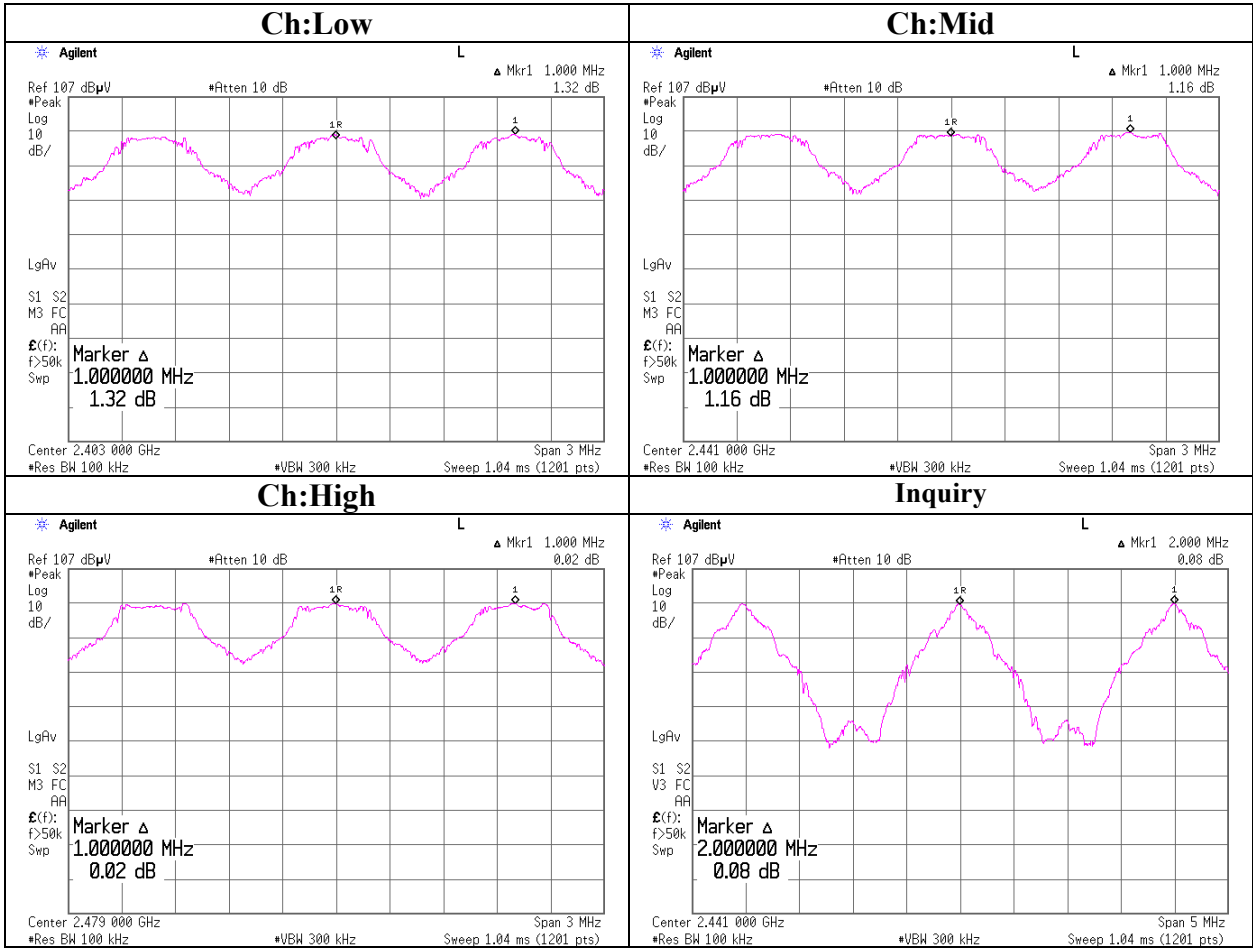
Carrier Frequency Separation

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COMPANY	: Sony EMCS Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: Car Radio with CD Player	TEST DISTANCE	: -
MODEL	: MEX-BT5000	DATE	: 03/29/2006
S/ N	: 10	TEMPERATURE	: 23deg.C
POWER	: DC12V (BT Module DC 3.3V)	HUMIDITY	: 33%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Makoto Kosaka

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
Mid	2441.0	1.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
High	2480.0	1.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)
Inquiry	2441.0	2.000	>two-thirds of the 20dB Bandwidth or 25[kHz](whichever is greater)

Carrier Frequency Separation



20dB Bandwidth

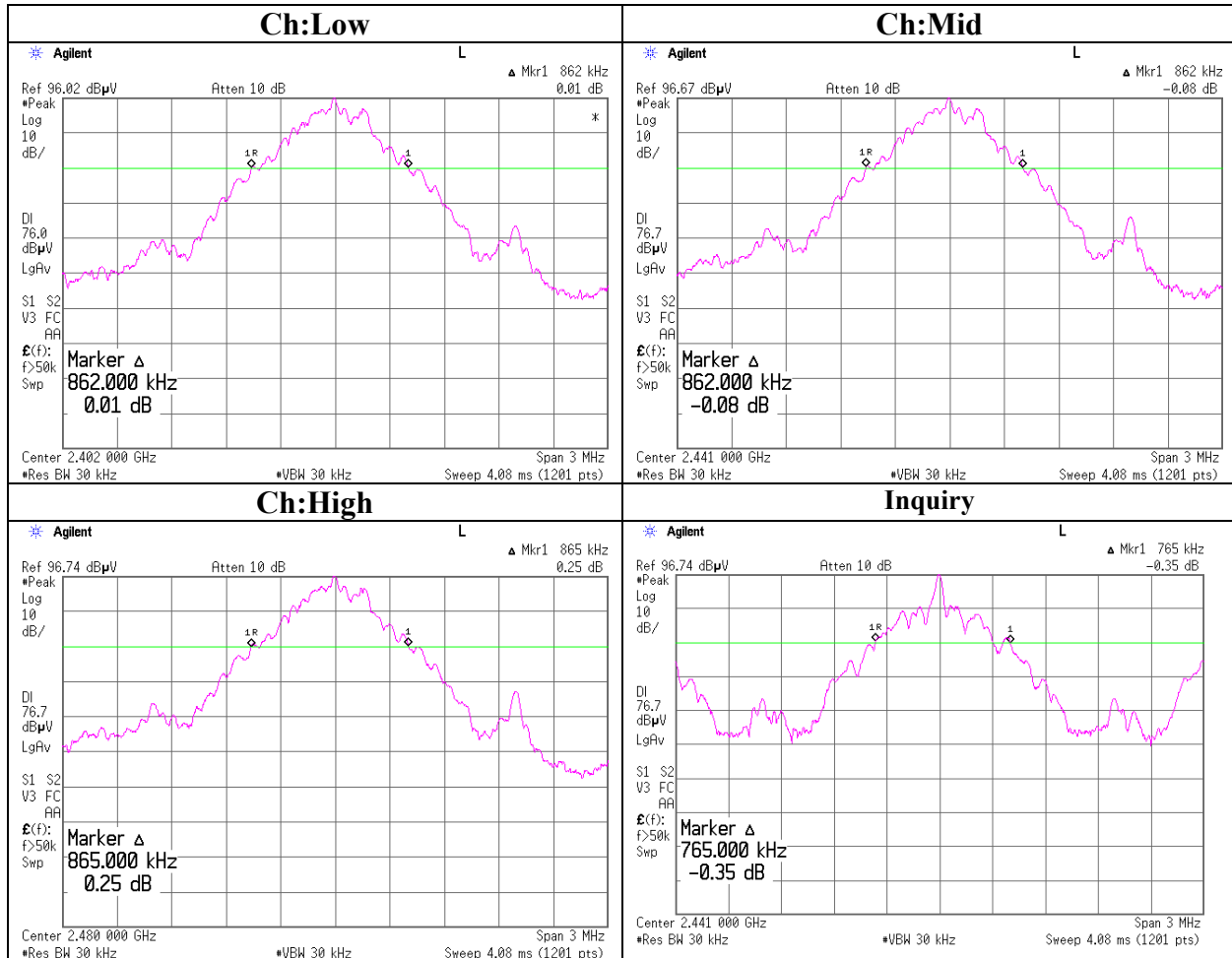
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COMPANY : Sony EMCS Corporation
EQUIPMENT : Car Radio with CD Player
MODEL : MEX-BT5000
S/ N : 10
POWER : DC12V (BT Module DC 3.3V)
MODE : Tx (Hopping off) /Inquiry

REGULATION : FCC Part15 Subpart C 15.247(a)(1)
TEST DISTANCE : -
DATE : 03/29/2006
TEMPERATURE : 23deg.C
HUMIDITY : 33%
ENGINEER : Makoto Kosaka

Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.862	-
Mid	2441.0	0.862	-
High	2480.0	0.865	-
Inquiry	2441.0	0.756	-

20dB Bandwidth



Number of Hopping Frequency

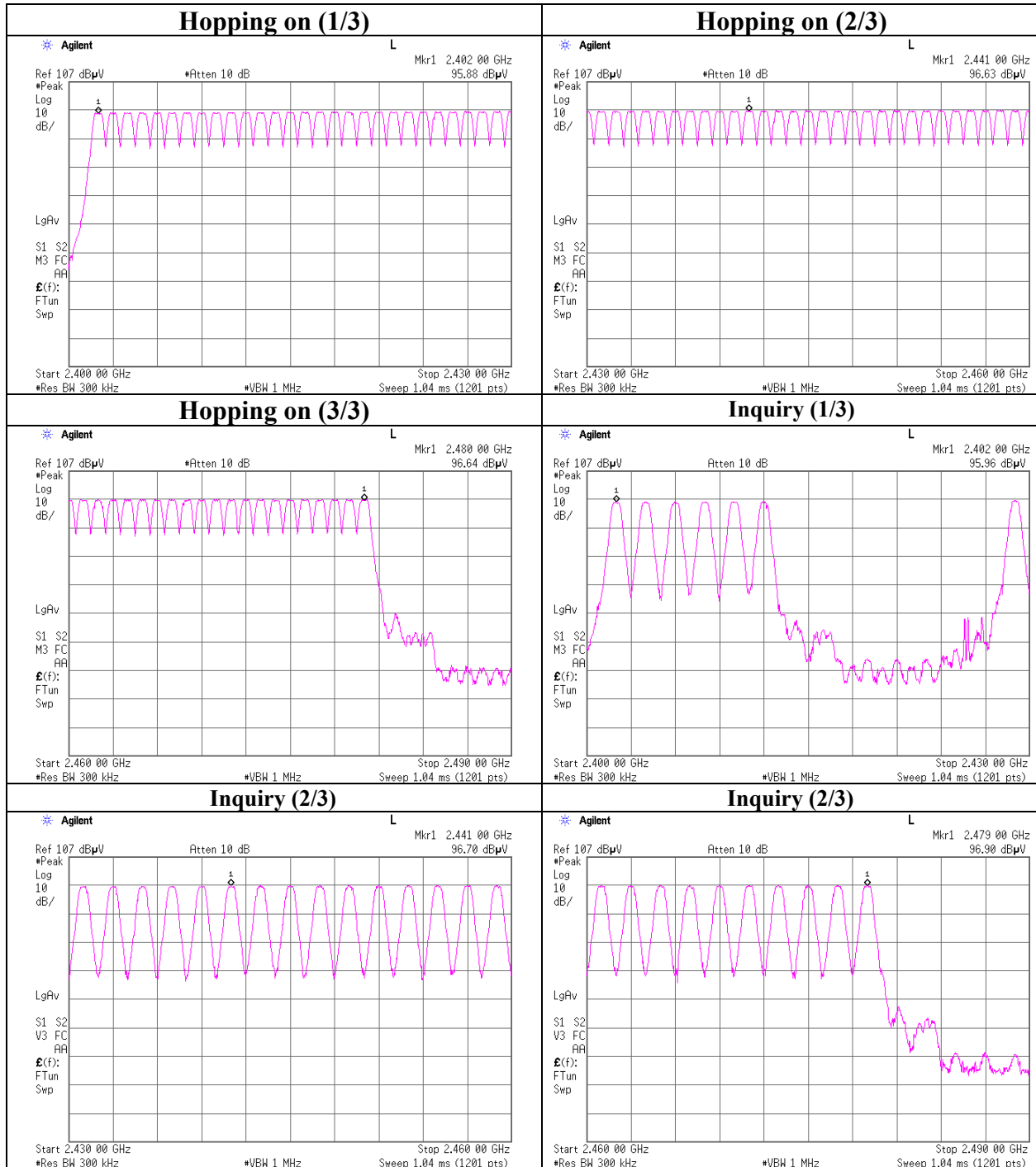
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COMPANY	: Sony EMCS Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: Car Radio with CD Player	TEST DISTANCE	: -
MODEL	: MEX-BT5000	DATE	: 03/29/2006
S/ N	: 10	TEMPERATURE	: 23deg.C
POWER	: DC12V (BT Module DC 3.3V)	HUMIDITY	: 33%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Makoto Kosaka

Mode	Number of channel [time]	Limit [time]
Tx(Hopping on)	79	≥ 15

Mode	Number of channel [time]	Limit [time]
Inquiry	32	≥ 15

Number of Hopping Frequency



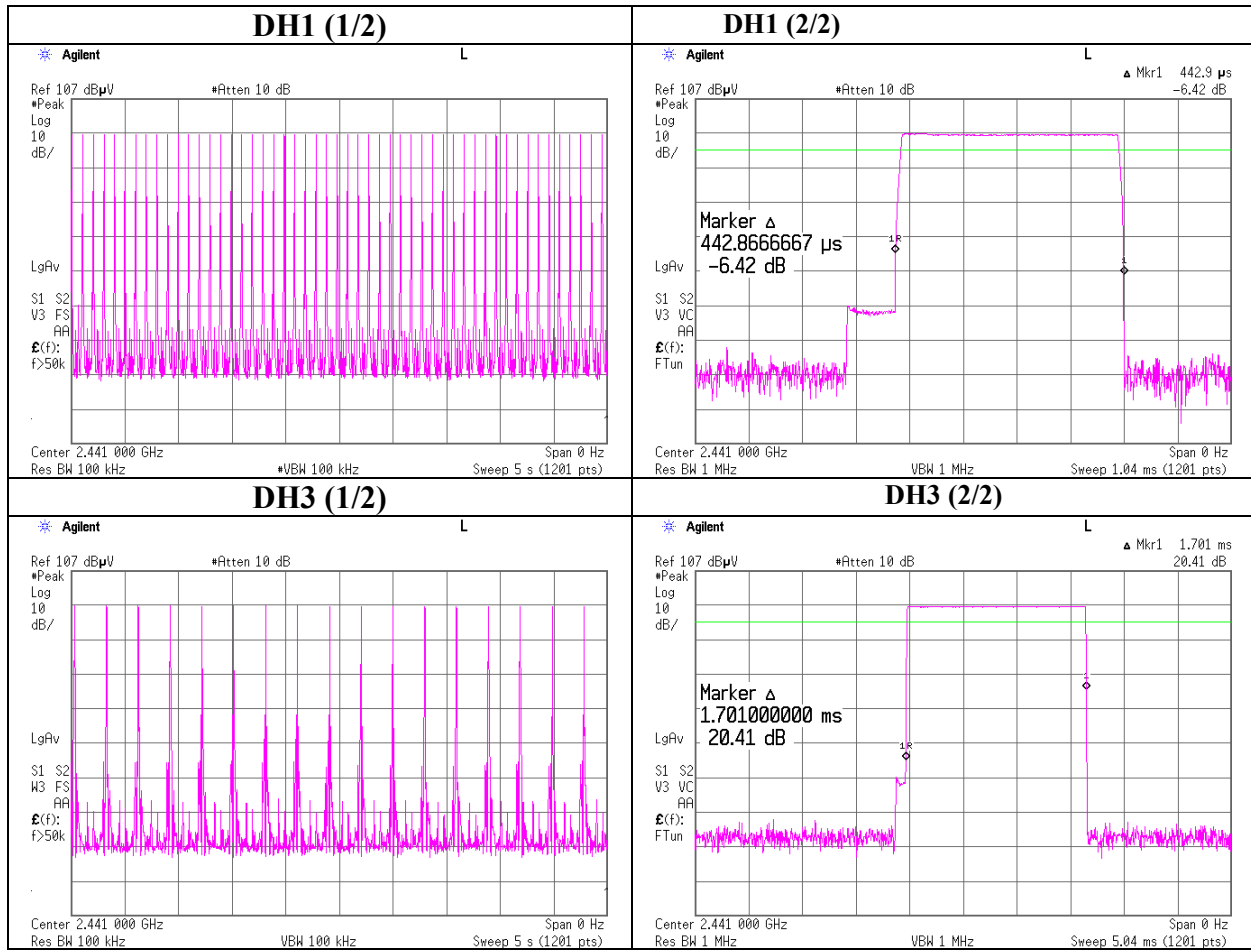
Dwell time

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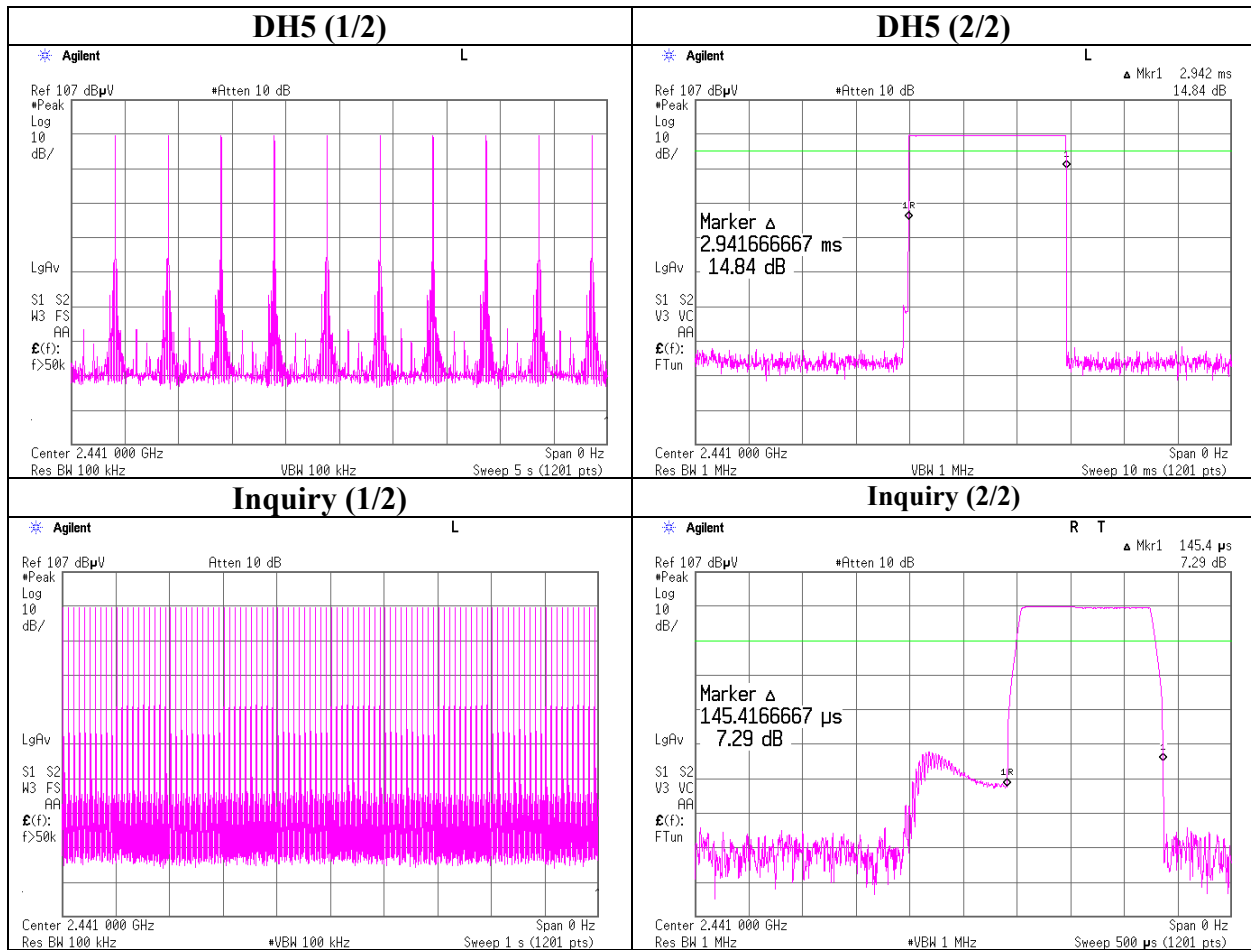
COMPANY	: Sony EMCS Corporation	REGULATION	: FCC Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: Car Radio with CD Player	TEST DISTANCE	: -
MODEL	: MEX-BT5000	DATE	: 03/29/2006
S/ N	: 10	TEMPERATURE	: 23deg.C
POWER	: DC12V (BT Module DC 3.3V)	HUMIDITY	: 33%
MODE	: Tx (Hopping on) /Inquiry	ENGINEER	: Makoto Kosaka

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	50 times /5sec. x 31.6 = 316 times	0.443	140	400
DH3	17 times / 5sec. x 31.6 = 107 times	1.701	182	400
DH5	10 times / 5 sec. x 31.6 = 63 times	2.942	185	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.145	186	400

Dwell time



Dwell time



Maximum Peak Output Power

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COMPANY	: Sony EMCS Corporation	REGULATION	: FCC Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: Car Radio with CD Player	TEST DISTANCE	: -
MODEL	: MEX-BT5000	DATE	: 03/29/2006
S/ N	: 10	TEMPERATURE	: 23deg.C
POWER	: DC12V (BT Module DC 3.3V)	HUMIDITY	: 33%
MODE	: Tx(Hopping Off)/Inquiry	ENGINEER	: Makoto Kosaka

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-11.02	0.55	10.12	-0.35	0.92	20.97	125	21.32
Mid	2441.0	-10.29	0.56	10.14	0.41	1.10	20.97	125	20.56
High	2480.0	-10.04	0.56	10.15	0.67	1.17	20.97	125	20.30
Inquiry	2441.0	-10.24	0.56	10.14	0.46	1.11	20.97	125	20.51

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

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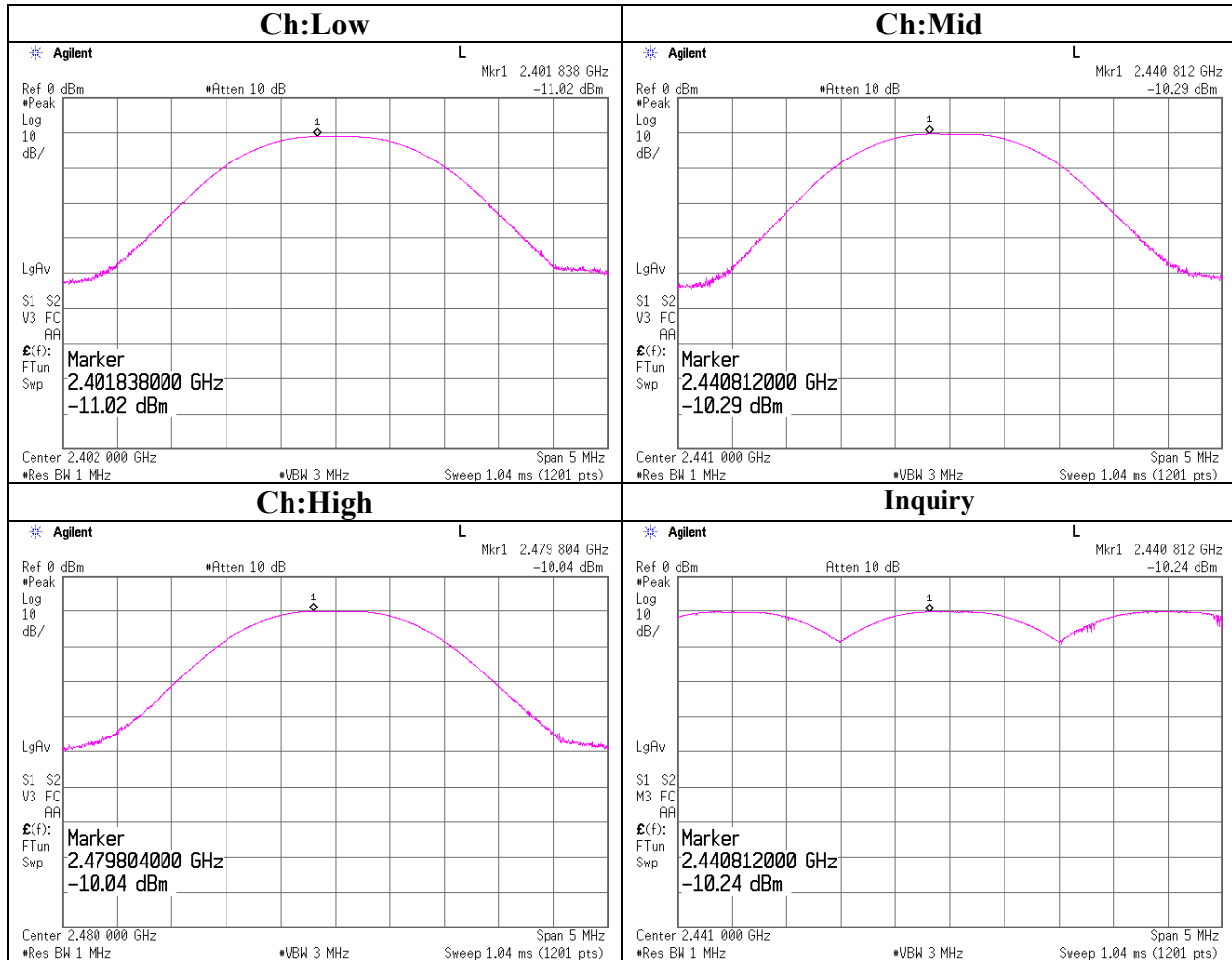
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Maximum Peak Output Power



Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF RADIATED EMISSION TEST

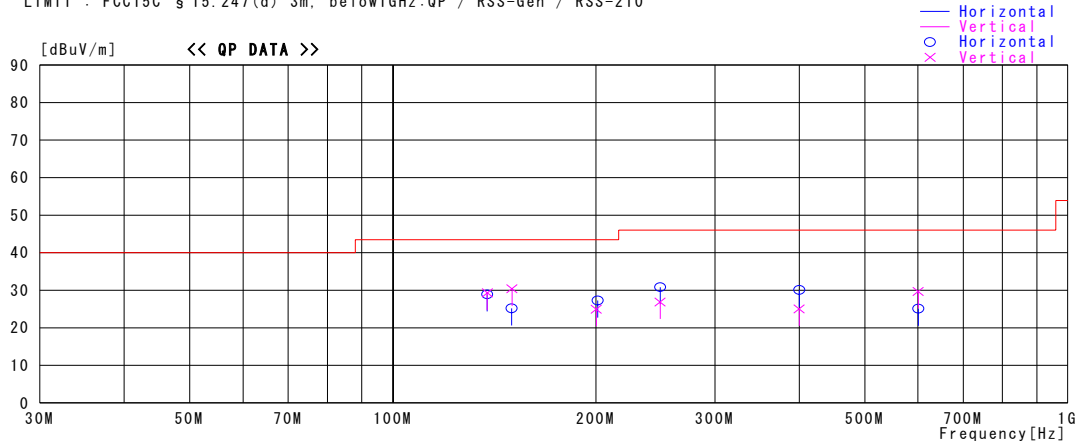
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/03/28 01:14:52

Company : Sony EMCS Corporation
Kind of EUT : Car Radio with CD Player
Model No. : MEX-BT5000
Serial No. : 07

Report No. : 26GE0360-HO
Power : DC12V Car Battery(EUT DC 3.3V)
Temp./Humi. : 25deg.C. / 34%
Operator : Yasuyuki Fukui

Mode / Remarks : Tx 2402MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
138.036	35.1	QP	14.1	-20.3	28.9	62	186	Hori.	43.5	14.6
137.999	35.5	QP	14.1	-20.3	29.3	229	100	Vert.	43.5	14.2
150.060	31.3	QP	14.8	-20.9	25.2	344	111	Hori.	43.5	18.3
150.102	36.5	QP	14.8	-20.9	30.4	228	100	Vert.	43.5	13.1
200.133	28.4	QP	16.6	-20.0	25.0	249	100	Vert.	43.5	18.5
201.141	30.7	QP	16.6	-20.0	27.3	154	172	Hori.	43.5	16.2
248.940	29.6	QP	17.1	-19.8	26.9	84	100	Vert.	46.0	19.1
248.940	33.5	QP	17.1	-19.8	30.8	126	111	Hori.	46.0	15.2
400.020	27.0	QP	17.8	-19.7	25.1	203	117	Vert.	46.0	20.9
400.000	32.0	QP	17.8	-19.7	30.1	223	113	Hori.	46.0	15.9
600.425	29.7	QP	19.2	-19.2	29.7	224	100	Vert.	46.0	16.3
600.145	25.1	QP	19.2	-19.2	25.1	233	139	Hori.	46.0	20.9

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

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MF060b(01.06.05)

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

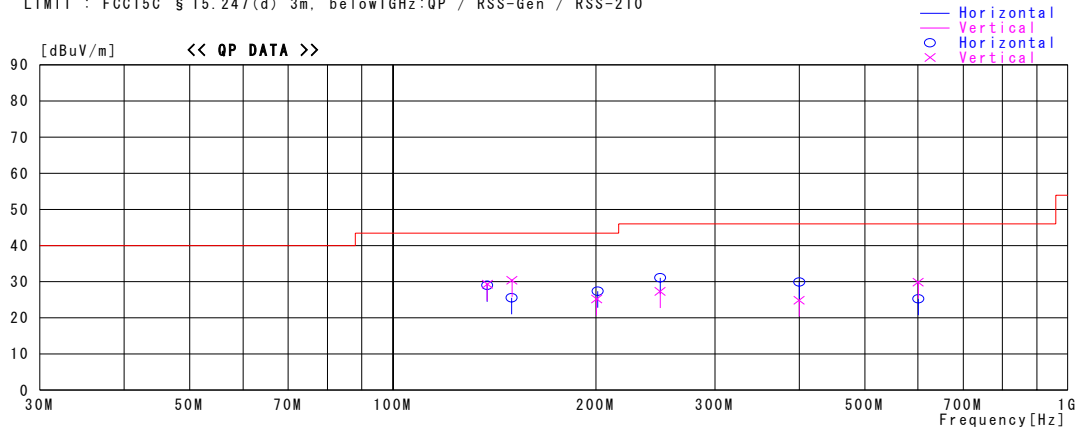
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/03/28 01:23:09

Company : Sony EMCS Corporation Report No. : 26GE0360-HO
Kind of EUT : Car Radio with CD Player Power : DC12V Car Battery(EUT DC 3.3V)
Model No. : MEX-BT5000 Temp./Humi. : 25deg.C. / 34%
Serial No. : 07 Operator : Yasuyuki Fukui

Mode / Remarks : Tx 2441MHz

LIMIT : FCC15C § 15.247(d) 3m, below 1GHz:QP / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna Factor	Loss & Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
138.037	35.2	QP	14.1	-20.3	29.0	62	185	Hori.	43.5	14.5
137.999	35.5	QP	14.1	-20.3	29.3	220	100	Vert.	43.5	14.2
150.056	31.7	QP	14.8	-20.9	25.6	110	340	Hori.	43.5	17.9
150.122	36.5	QP	14.8	-20.9	30.4	228	100	Vert.	43.5	13.1
201.140	30.8	QP	16.6	-20.0	27.4	174	154	Hori.	43.5	16.1
200.370	28.6	QP	16.6	-20.0	25.2	240	100	Vert.	43.5	18.3
248.940	33.8	QP	17.1	-19.8	31.1	111	130	Hori.	46.0	14.9
248.940	30.0	QP	17.1	-19.8	27.3	90	100	Vert.	46.0	18.7
400.000	31.8	QP	17.8	-19.7	29.9	110	220	Hori.	46.0	16.1
400.020	26.8	QP	17.8	-19.7	24.9	203	110	Vert.	46.0	21.1
600.421	25.3	QP	19.2	-19.2	25.3	130	223	Hori.	46.0	20.7
600.321	29.9	QP	19.2	-19.2	29.9	223	100	Vert.	46.0	16.1

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

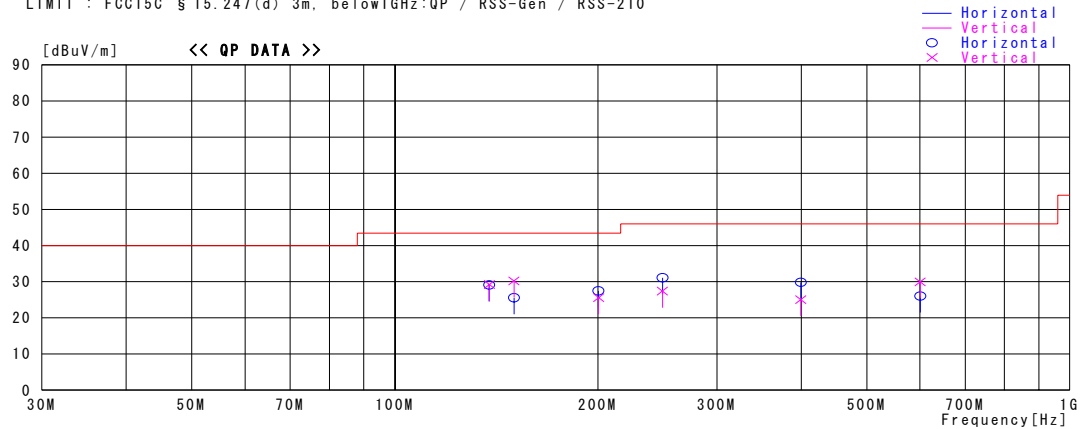
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/03/28 01:54:36

Company : Sony EMCS Corporation Report No. : 26GE0360-HO
Kind of EUT : Car Radio with CD Player Power : DC12V Car Battery(EUT DC 3.3V)
Model No. : MEX-BT5000 Temp./Humi. : 25deg.C. / 34%
Serial No. : 07 Operator : Yasuyuki Fukui

Mode / Remarks : Tx 2480MHz

LIMIT : FCC15C § 15.247(d) 3m, below 1GHz:QP / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna Factor	Loss & Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
137.999	35.3	QP	14.1	-20.3	29.1	64	180	Hori.	43.5	14.4
137.999	35.4	QP	14.1	-20.3	29.2	220	100	Vert.	43.5	14.3
150.150	31.7	QP	14.8	-20.9	25.6	110	342	Hori.	43.5	17.9
150.150	36.3	QP	14.8	-20.9	30.2	230	100	Vert.	43.5	13.3
200.370	30.9	QP	16.6	-20.0	27.5	174	154	Hori.	43.5	16.0
200.370	29.0	QP	16.6	-20.0	25.6	240	100	Vert.	43.5	17.9
249.241	33.8	QP	17.1	-19.8	31.1	111	130	Hori.	46.0	14.9
249.241	30.1	QP	17.1	-19.8	27.4	83	100	Vert.	46.0	18.6
399.402	31.7	QP	17.8	-19.7	29.8	110	220	Hori.	46.0	16.2
399.402	27.0	QP	17.8	-19.7	25.1	210	100	Vert.	46.0	20.9
600.305	26.0	QP	19.2	-19.2	26.0	130	223	Hori.	46.0	20.0
600.305	30.0	QP	19.2	-19.2	30.0	223	100	Vert.	46.0	16.0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP,30-300MHz BICONICAL,300MHz-1000MHz LOGPERIODIC,1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result

DATA OF RADIATED EMISSION TEST

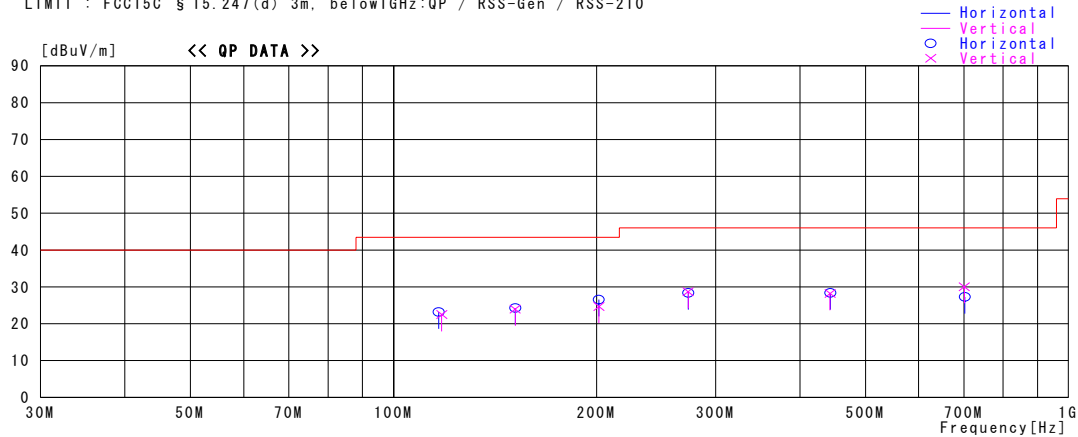
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/03/28 02:24:32

Company : Sony EMCS Corporation
Kind of EUT : Car Radio with CD Player
Model No. : MEX-BT5000
Serial No. : 07

Report No. : 26GE0360-H0
Power : DC12V Car Battery(EUT DC 3.3V)
Temp./Humi. : 25deg. C. / 34%
Operator : Yasuyuki Fukui

Mode / Remarks : Rx 2441MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna Factor	Loss & Gain	Level	Angle	Height	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
116.669	32.3	QP	12.1	-21.2	23.2	117	138	Hori.	43.5	20.3
117.940	31.3	QP	12.3	-21.1	22.5	231	100	Vert.	43.5	21.0
151.500	30.3	QP	14.8	-20.8	24.3	178	200	Hori.	43.5	19.2
151.500	30.0	QP	14.8	-20.8	24.0	265	100	Vert.	43.5	19.5
201.450	29.9	QP	16.6	-20.0	26.5	237	173	Hori.	43.5	17.0
201.450	28.1	QP	16.6	-20.0	24.7	95	100	Vert.	43.5	18.8
273.271	29.5	QP	18.6	-19.7	28.4	208	190	Hori.	46.0	17.6
273.271	29.8	QP	18.6	-19.7	28.7	311	100	Vert.	46.0	17.3
444.100	30.3	QP	17.8	-19.7	28.4	202	100	Hori.	46.0	17.6
443.503	30.1	QP	17.8	-19.7	28.2	234	100	Vert.	46.0	17.8
701.107	28.1	QP	20.6	-18.6	30.1	276	100	Vert.	46.0	15.9
701.807	25.3	QP	20.6	-18.6	27.3	238	100	Hori.	46.0	18.7

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

Test report No. : 26GE0360-HO-A-1
Page : 28 of 37
Issued date : April 19, 2006
Revised date : April 25, 2006
FCC ID : AK8MEXBT5000
No. : ME-0012

Radiated Spurious Emission

DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

Company : Sony EMCS Corporation
Equipment : Car Radio with CD Player
Model : MEX-BT5000
Sample No. : 07
Power : DC12V (BT Modul DC 3.3V)
Mode : Bluetooth, Tx 2402MHz
Remarks : Normal Position

REPORT NO : 26GE0360-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 03/28/2006
TEMPERATURE : 24deg.C
HUMIDITY : 38%
ENGINEER : Makoto Kosaka

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1602.0	44.3	46.5	25.5	32.9	2.8	9.5	49.3	51.5	74.0	24.7	22.5
2	2390.0	42.4	42.6	30.6	32.4	3.3	9.5	53.4	53.6	74.0	20.6	20.4
3*	2400.0	57.5	58.4	30.6	32.4	3.3	9.5	68.5	69.4	74.0	5.5	4.6
4	3204.0	42.5	42.9	31.7	32.1	3.8	9.5	55.5	55.8	74.0	18.5	18.2
5	4804.0	42.1	43.8	35.7	31.9	4.6	1.4	51.9	53.6	74.0	22.1	20.4
6	7205.4	41.8	42.4	37.5	31.5	5.6	1.2	54.7	55.3	74.0	19.3	18.7
7	9608.0	NS	NS	36.6	31.7	6.5	1.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	12010.0	NS	NS	40.3	31.3	7.8	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
9	14412.0	NS	NS	43.2	31.0	8.7	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
10	16814.0	NS	NS	46.4	30.8	9.6	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
11	19216.0	NS	NS	39.0	30.0	10.5	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
12	21618.0	NS	NS	39.3	30.3	11.0	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
13	24020.0	43.0	43.0	39.1	30.4	11.2	0.0	53.4	53.4	74.0	20.6	20.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1602.0	33.3	35.5	25.5	32.9	2.8	9.5	38.4	40.5	54.0	15.6	13.5
2	2390.0	29.5	29.5	30.6	32.4	3.3	9.5	40.5	40.5	54.0	13.5	13.5
3*	2400.0	42.3	42.3	30.6	32.4	3.3	9.5	53.3	53.3	54.0	0.7	0.7
4	3204.0	29.5	30.0	31.7	32.1	3.8	9.5	42.5	43.0	54.0	11.5	11.1
5	4804.0	29.6	31.7	35.7	31.9	4.6	1.4	39.4	41.4	54.0	14.6	12.6
6	7205.4	28.8	29.4	37.5	31.5	5.6	1.2	41.7	42.3	54.0	12.3	11.7
7	9608.0	NS	NS	36.6	31.7	6.5	1.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	12010.0	NS	NS	40.3	31.3	7.8	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
9	14412.0	NS	NS	43.2	31.0	8.7	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
10	16814.0	NS	NS	46.4	30.8	9.6	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
11	19216.0	NS	NS	39.0	30.0	10.5	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
12	21618.0	NS	NS	39.3	30.3	11.0	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
13	24020.0	32.7	32.7	39.1	30.4	11.2	0.0	43.1	43.1	54.0	10.9	10.9

*Reference data

20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATT or Filter Loss [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dBuV/m]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2402.0	82.3	83.1	30.6	32.4	3.3	9.5	93.3	94.1	-	-	-
2	2400.0	35.1	34.5	30.6	32.4	3.3	9.5	46.1	45.5	Funda-20dB	27.2	28.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*NS: Non signal

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MF060b(01.06.05)

Test report No. : 26GE0360-HO-A-1
 Page : 29 of 37
 Issued date : April 19, 2006
 Revised date : April 25, 2006
 FCC ID : AK8MEXBT5000
 No. : ME-0012

Radiated Spurious Emission

Company : Sony EMCS Corporation Equipment : Car Radio with CD Player Model : MEX-BT5000 Sample No. : 07 Power : DC12V (BT Modul DC 3.3V) Mode : Bluetooth, Tx 2441MHz Remarks : Normal Position	REPORT NO : 26GE0360-HO REGULATION : Fcc Part15 Subpart C 15.247(d) TEST DISTANCE : 3/1m DATE : 03/28/2006 TEMPERATURE : 24deg.C HUMIDITY : 38% ENGINEER : Makoto Kosaka	UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
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PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1628.0	45.4	45.9	25.9	32.8	2.9	9.5	50.9	51.3	74.0	23.1	22.7
2	3256.0	43.0	43.4	31.6	32.1	3.8	9.5	55.9	56.3	74.0	18.1	17.7
3	4882.0	43.4	43.4	36.2	31.8	4.7	1.4	53.8	53.7	74.0	20.2	20.3
4	7323.0	NS	NS	37.9	31.7	5.7	1.1	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
5	9764.0	NS	NS	36.6	31.8	6.6	1.1	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12205.0	NS	NS	40.4	31.0	7.9	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
7	14646.0	NS	NS	43.1	31.1	8.8	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
8	17087.0	NS	NS	46.1	30.7	9.7	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
9	19528.0	NS	NS	39.1	29.7	10.6	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
10	21969.0	NS	NS	39.6	30.7	11.0	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
11	24410.0	43.1	43.1	39.1	30.5	11.3	0.0	53.5	53.5	74.0	20.5	20.5

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1628.0	32.9	34.7	25.9	32.8	2.9	9.5	38.3	40.2	54.0	15.7	13.8
2	3256.0	29.4	30.4	31.6	32.1	3.8	9.5	42.3	43.3	54.0	11.7	10.7
3	4882.0	29.9	30.6	36.2	31.8	4.7	1.4	40.3	40.9	54.0	13.7	13.1
4	7323.0	NS	NS	37.9	31.7	5.7	1.1	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
5	9764.0	NS	NS	36.6	31.8	6.6	1.1	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12205.0	NS	NS	40.4	31.0	7.9	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
7	14646.0	NS	NS	43.1	31.1	8.8	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
8	17087.0	NS	NS	46.1	30.7	9.7	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
9	19528.0	NS	NS	39.1	29.7	10.6	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
10	21969.0	NS	NS	39.6	30.7	11.0	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
11	24410.0	32.0	32.0	39.1	30.5	11.3	0.0	42.4	42.4	54.0	11.6	11.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*NS: Non signal

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MF060b(01.06.05)

Radiated Spurious Emission

DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

Company : Sony EMCS Corporation	REPORT NO : 26GE0360-HO	UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Equipment : Car Radio with CD Player	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : MEX-BT5000	TEST DISTANCE : 3/1m	
Sample No. : 07	DATE : 03/28/2006	
Power : DC12V (BT Modul DC 3.3V)	TEMPERATURE : 24deg.C	
Mode : Bluetooth, Tx 2480MHz	HUMIDITY : 38%	
Remarks : Normal Position	ENGINEER : Makoto Kosaka	

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1654.0	45.0	46.1	26.3	32.8	2.9	9.5	50.9	52.0	74.0	23.1	22.0
2	2483.5	44.7	45.3	30.4	32.4	3.5	9.5	55.7	56.3	74.0	18.3	17.7
3	3308.0	43.1	44.4	31.6	32.1	3.8	9.5	56.0	57.2	74.0	18.0	16.8
4	4960.0	42.2	45.4	36.6	31.8	4.7	1.4	53.1	56.2	74.0	21.0	17.8
5	7440.0	NS	NS	38.2	31.9	5.7	1.1	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
6	9920.0	NS	NS	36.5	32.0	6.7	1.2	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12400.0	NS	NS	40.5	30.7	8.0	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
8	14880.0	NS	NS	42.8	31.0	8.8	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
9	17360.0	NS	NS	46.2	31.0	9.9	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
10	19840.0	NS	NS	39.1	30.3	10.6	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
11	22320.0	NS	NS	39.5	30.7	11.1	0.0	#VALUE!	#VALUE!	74.0	#VALUE!	#VALUE!
12	24800.0	42.1	42.1	39.3	30.6	11.5	0.0	52.8	52.8	74.0	21.3	21.3

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1654.0	32.6	34.3	26.3	32.8	2.9	9.5	38.5	40.2	54.0	15.5	13.8
2	2483.5	33.7	34.4	30.4	32.4	3.5	9.5	44.7	45.4	54.0	9.3	8.6
3	3308.0	30.1	31.8	31.6	32.1	3.8	9.5	43.0	44.7	54.0	11.0	9.3
4	4960.0	29.3	32.8	36.6	31.8	4.7	1.4	40.2	43.6	54.0	13.9	10.4
5	7440.0	NS	NS	38.2	31.9	5.7	1.1	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
6	9920.0	NS	NS	36.5	32.0	6.7	1.2	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	12400.0	NS	NS	40.5	30.7	8.0	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
8	14880.0	NS	NS	42.8	31.0	8.8	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
9	17360.0	NS	NS	46.2	31.0	9.9	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
10	19840.0	NS	NS	39.1	30.3	10.6	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
11	22320.0	NS	NS	39.5	30.7	11.1	0.0	#VALUE!	#VALUE!	54.0	#VALUE!	#VALUE!
12	24800.0	31.0	31.0	39.3	30.6	11.5	0.0	41.7	41.7	54.0	12.4	12.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS: Non signal

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Radiated Spurious Emission

Company : Sony EMCS Corporation	REPORT NO : 26GE0360-HO	
Equipment : Car Radio with CD Player	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : MEX-BT5000	TEST DISTANCE : 3/1m	
Sample No. : 07	DATE : 03/28/2006	
Power : DC12V (BT Modul DC 3.3V)	TEMPERATURE : 24deg C	
Mode : Bluetooth, Rx 2441MHz	HUMIDITY : 38%	
Remarks : Normal Position	ENGINEER : Makoto Kosaka	

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1626.3	42.7	47.5	25.9	32.8	2.9	0.0	38.6	43.4	74.0	35.4	30.6
2	3252.6	41.2	40.7	31.6	32.1	3.8	0.0	44.5	44.1	74.0	29.5	29.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12205.0			40.4	31.0	7.9	0.0	7.8	7.8	74.0	66.2	66.2
7	14646.0			43.1	31.1	8.8	0.0	11.3	11.3	74.0	62.7	62.7
8	17087.0			46.1	30.7	9.7	0.0	15.7	15.7	74.0	58.3	58.3
9	19528.0			39.1	29.7	10.6	0.0	10.5	10.5	74.0	63.6	63.6
10	21969.0			39.6	30.7	11.0	0.0	10.4	10.4	74.0	63.6	63.6
11	24410.0			39.1	30.5	11.3	0.0	10.4	10.4	74.0	63.6	63.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1626.3	34.3	41.2	25.9	32.8	2.9	0.0	30.2	37.1	54.0	23.8	16.9
2	3252.6	29.4	30.0	31.6	32.1	3.8	0.0	32.8	33.4	54.0	21.2	20.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12205.0			40.4	31.0	7.9	0.0	7.8	7.8	54.0	46.2	46.2
7	14646.0			43.1	31.1	8.8	0.0	11.3	11.3	54.0	42.7	42.7
8	17087.0			46.1	30.7	9.7	0.0	15.7	15.7	54.0	38.3	38.3
9	19528.0			39.1	29.7	10.6	0.0	10.5	10.5	54.0	43.6	43.6
10	21969.0			39.6	30.7	11.0	0.0	10.4	10.4	54.0	43.6	43.6
11	24410.0			39.1	30.5	11.3	0.0	10.4	10.4	54.0	43.6	43.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*NS: Non signal

UL Apex Co., Ltd.

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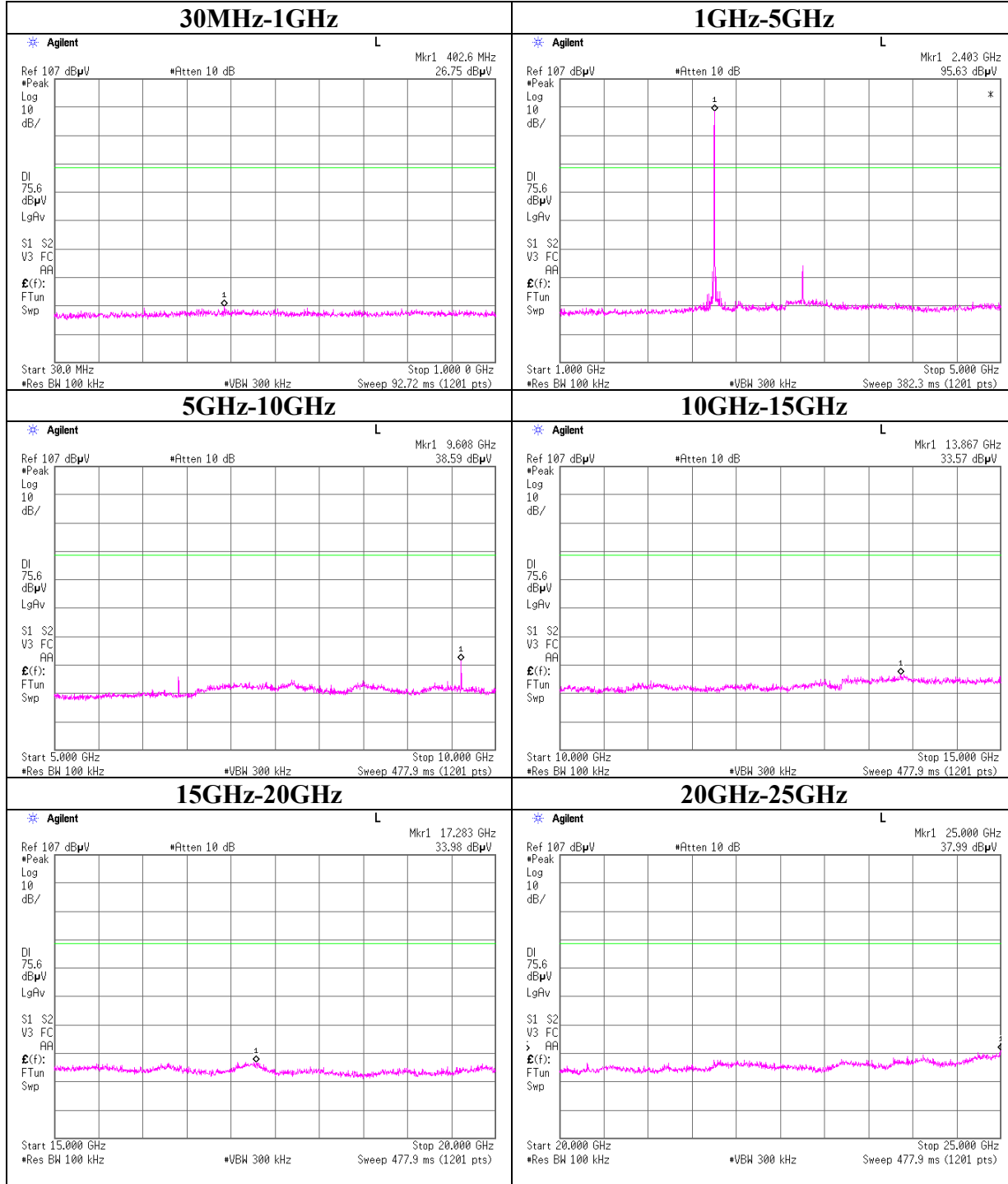
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Facsimile : +81 596 24 8124

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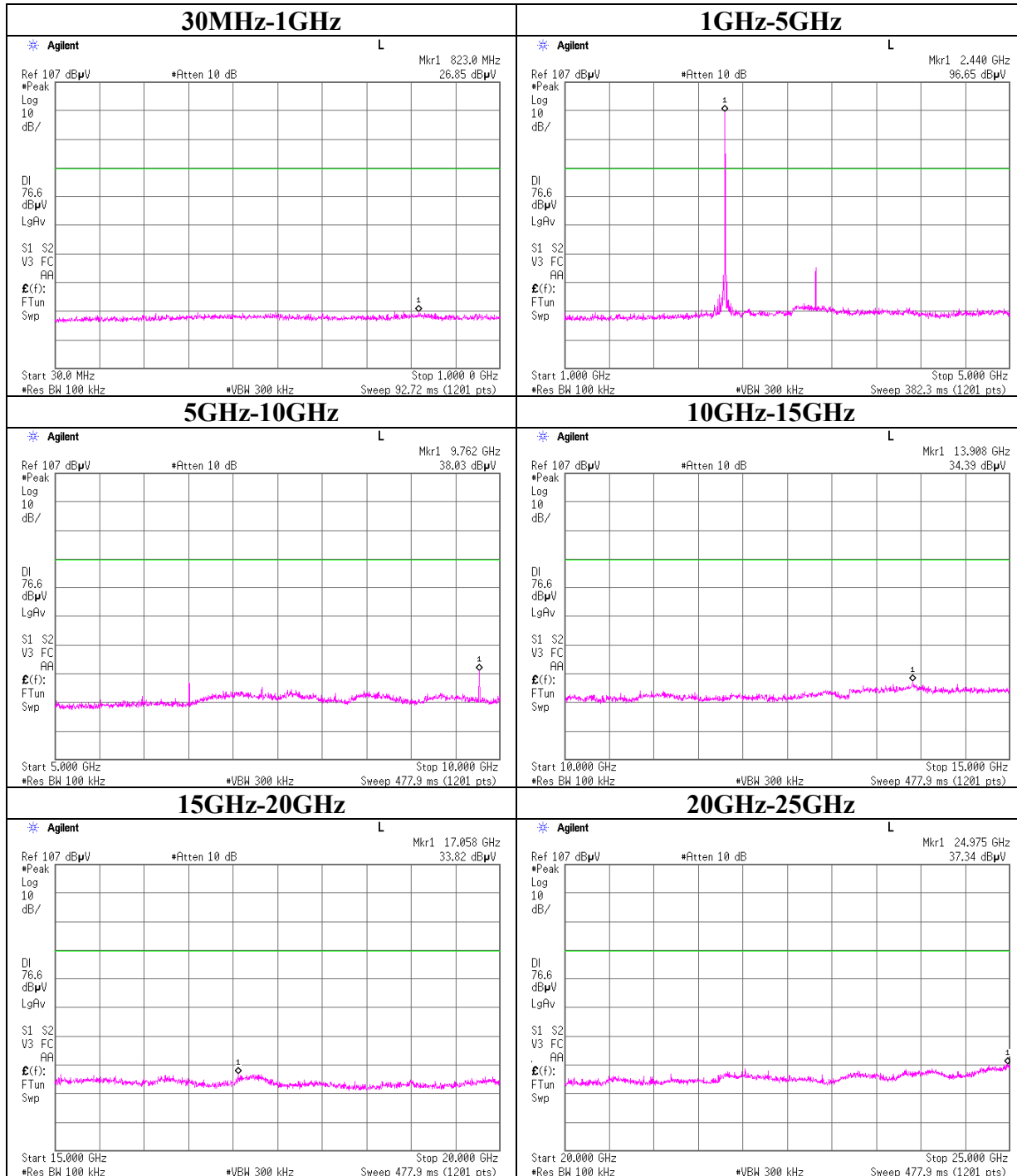
Conducted Spurious Emission

Ch:Low



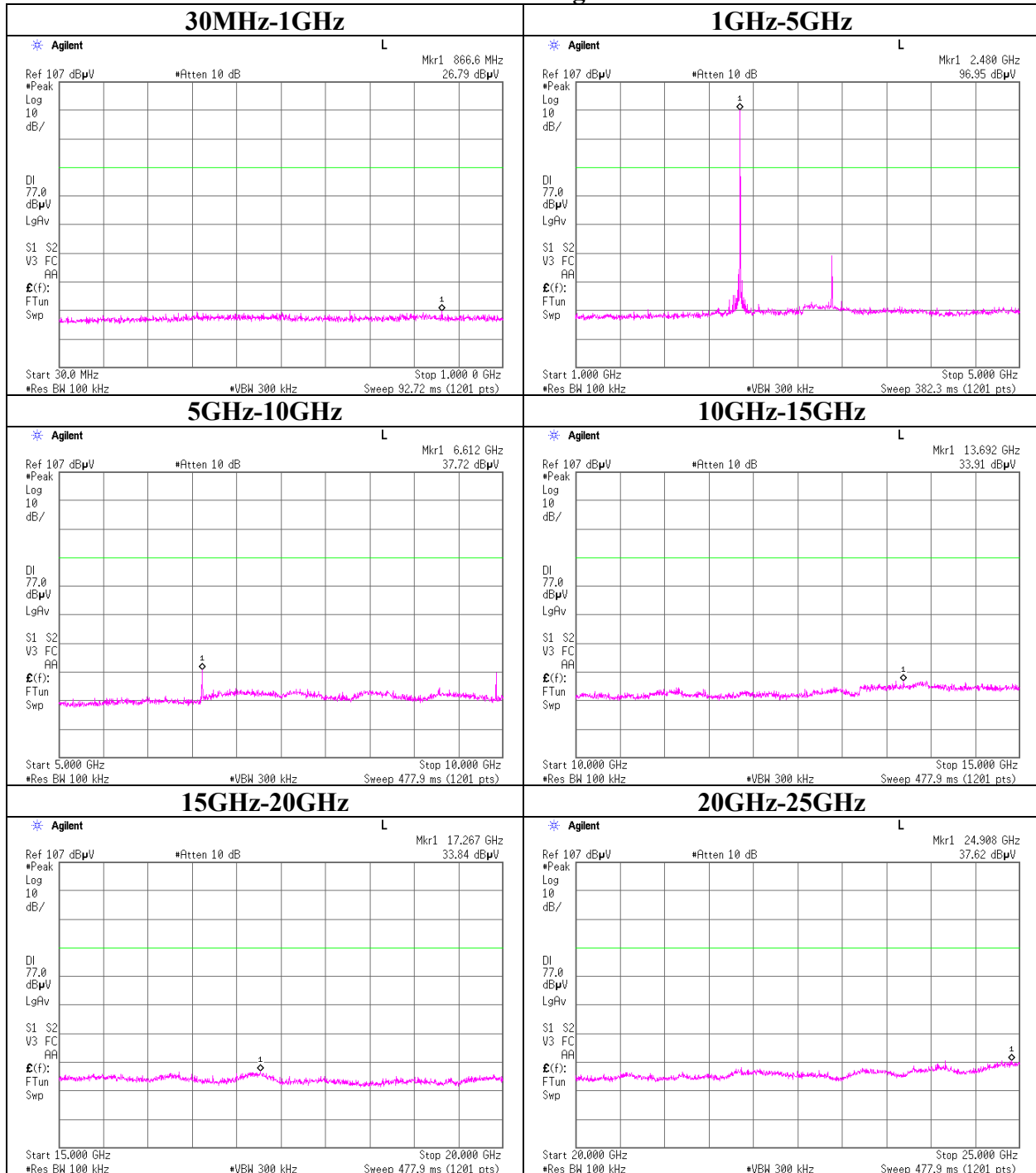
Conducted Spurious Emission

Ch:Mid



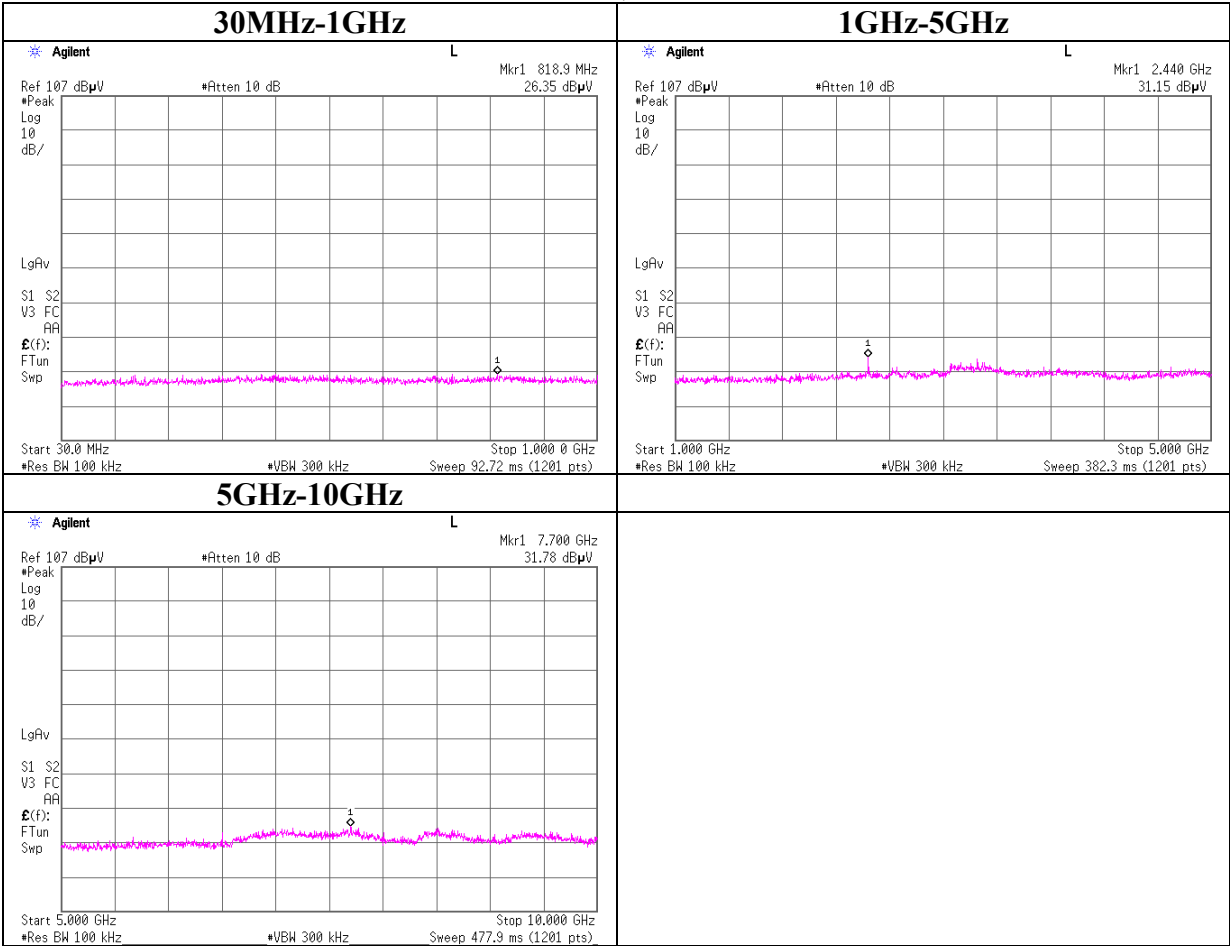
Conducted Spurious Emission

Ch:High

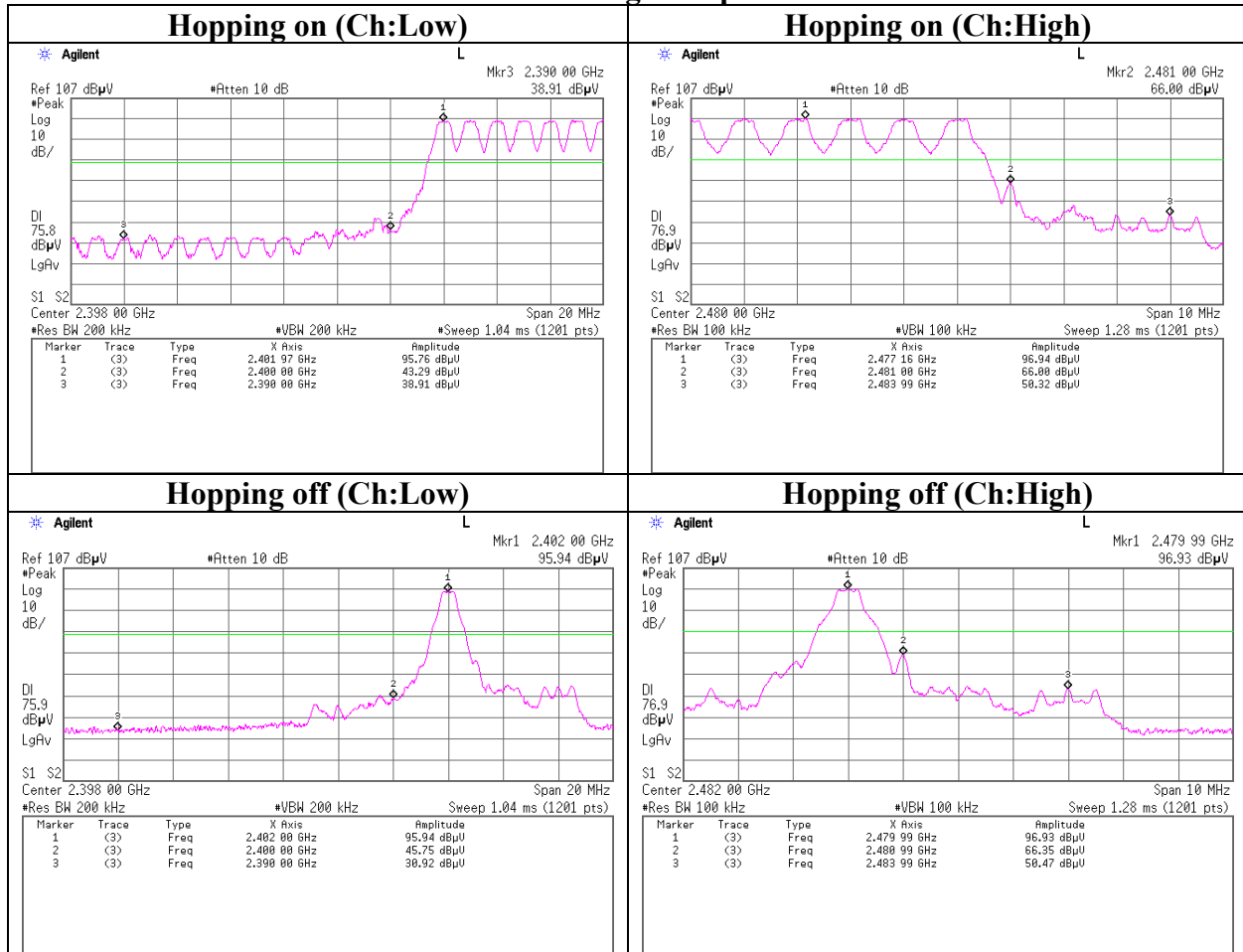


Conducted Spurious Emission

Rx,Ch:Mid



Conducted Spurious Emission
Band Edge compliance



99% Occupied Bandwidth

