



RADIO TEST REPORT

Test Report No. : 26CE0113-HO-3b

Applicant : Sony EMCS Corporation Saitama TEC

Type of Equipment : Digital Stereo Transmitter

Model No. : TMR-RF5000

FCC ID : AK8TMR5000

Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247 : 2005

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:

November 24 to December 3, 2005

Tested by:

M. Fujimura

Mitsuru Fujimura
EMC Services

Y. Yoshida

Yutaka Yoshida
EMC Services

K. Adachi

Kenichi Adachi
EMC Services

Approved by :

[Signature]

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 Saitama TEC
Brand name : SONY
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

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

2.1 Identification of E.U.T.

Type of Equipment : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Country of Manufacture : Malaysia
Rating : DC 9V (RF Module DC3.3V)
: AC 120V/ 60Hz(AC-S906T)
Receipt Date of Sample : November 2, 2005
Condition of EUT : Production Prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

M/N: TMR-RF5000 is a Digital Stereo Transmitter.

Operating frequency : 2412MHz to 2462MHz
Bandwidth & Channel spacing : 12MHz & 5MHz
Clock frequencies in the system : 44MHz, 12.288MHz (Crystal)
Modulation : DSSS, QPSK
Antenna Type : Monopole Antenna
Antenna Gain : -4 dBi
Mode of operation : Simplex
ITU Code : G1D

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 undetachable from EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2005

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2005
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz : 2005

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	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	17.4dB 0.27760MHz QP, N	Complied
2	6dB Bandwidth	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.4.2	FCC: Section 15.247(a)(2) IC: RSS-210 A8.2(1)	Conducted	N/A	*See data.	Complied
3	Maximum Peak Output Power	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.6	FCC: Section 15.247(b)(3) IC: RSS-210 A8.4(4)	Conducted	N/A		Complied
4	Spurious Emission	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.7	FCC: Section 15.247 (d) IC: RSS-210 A8.5	Conducted/ Radiated	N/A	3.6dB 4924MHz, Vertical, AV	Complied
5	Restricted Band Edges	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247 (d) IC: RSS-210 A8.5	Conducted/ Radiated	N/A	*See data.	Complied
6	Power Density	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247 (e) IC: RSS-210 A8.2(2)	Conducted	N/A	*See data.	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.

*These tests were also referred to "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247".

*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
2	Co-location & Co-operation (Confirmation testing for Radiated Spurious Emission at simultaneous transmission)	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d) RSS-210 A8.5	Radiated	N/A	N/A *1)	N/A

*1) The test is not applicable since EUT does not have co-location & co-operation mode.

3.4 Uncertainty

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 1.3\text{dB}$.
The data listed in this test report has enough margin, more than the site margin.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.5\text{dB}(3\text{m})/\pm 4.7\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 5.2\text{dB}(3\text{m})/\pm 3.8\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 6.6\text{dB}$.
The data listed in this report meets the limits unless the uncertainty is taken into consideration.

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
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
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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 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 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.3 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

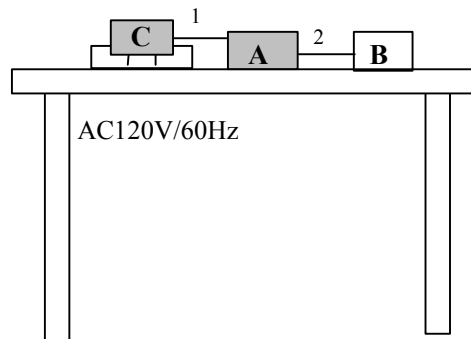
4.1 Operating Modes

The mode is used : Transmitting mode
Low Channel : 2412MHz(Ch1)
Mid Channel : 2437MHz(Ch6)
High Channel : 2462MHz(Ch11)

[Remarks]

1. As there is no difference in radio specification between Digital input and Analogue input, test was performed with Analogue input.
2. Optical input has no influence on radio specification, and therefore test was performed without a fiber-optic cable.

4.2 Configuration and peripherals



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

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID/Remarks
A	Digital Stereo Transmitter	TMR-RF5000	5000130	SONY	AK8TMR5000 (EUT)
B	Cassette-corder	TCM-20DV	NOM-097	SONY	-
C	AC Power Adaptor	AC-S906T	055	SONY	EUT

List of cables used

No.	Name	Length (m)	Shield
1	DC Cable	2.2	N
2	Audio Cable	1.0	N

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT with other peripherals (as a whole system)

I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane.

2) For the tests on EUT itself (as a stand alone equipment)

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN/(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistivity terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Detector	: CISPR quasi-peak and average detector (IF BW 9 kHz)
Measurement range	: 0.15-30MHz
Test data	: APPENDIX 3
Test result	: Pass

Date: November 26, 2005

Test engineer: Kenichi Adachi

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SECTION 6: 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 a platform of nominal size, 0.5m 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.

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.

20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of 15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW: 100kHz VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

Test data : APPENDIX 3

Test result : Pass

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

Date: November 25 to December 2, 2005

Test engineer: Yutaka Yoshida and Mitsuru Fujimura

SECTION 7: 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 8: Maximum Peak Output Power

Test Procedure

The test was made with the spectrum analyzer that has a function of channel-power measurements.
The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Peak Power Density

[Conducted]

Test Procedure

The Peak Power Density 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

Conducted Emission **Front**



Rear

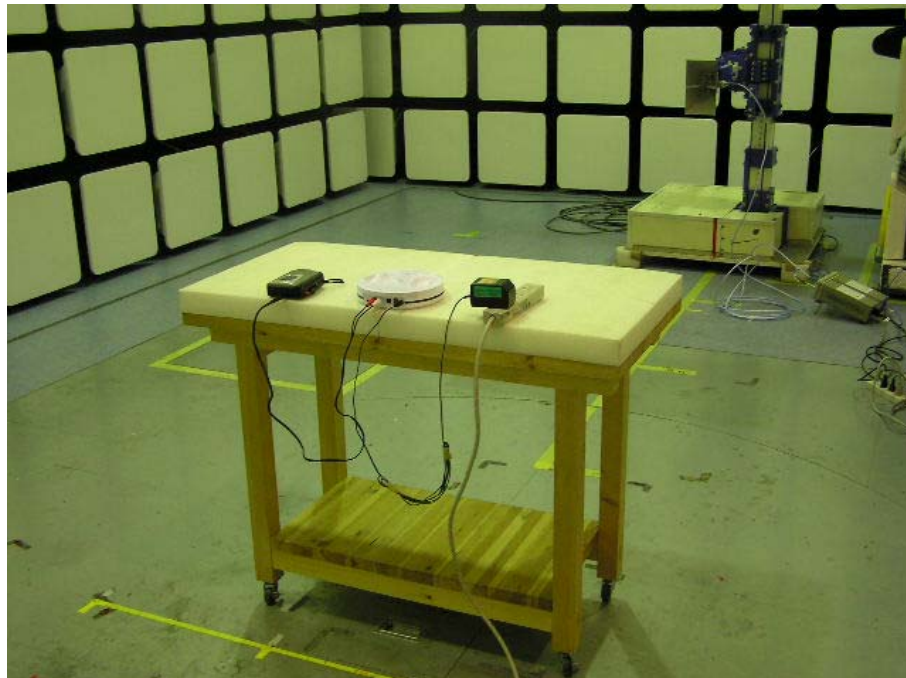


Spurious Emission (Radiated)

Front



Rear



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	RE	2005/04/11 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MCC-04	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2005/02/05 * 12
MRENT-21	Spectrum Analyzer	Advantest	R3273	RE	2005/08/19 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2005/09/27 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2005/02/24 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2005/09/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2005/02/04 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2005/02/04 * 12
MTA-06	Termination	MCL	BTRM-50	CE	2005/02/03 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2005/02/24 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE/CE	2005/02/02 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT	2005/05/19 * 12
MCC-22	Microwave Cable 1G-50GHz	Storm	421-011 (90-011-080)	AT	2005/04/29 * 12
MAT-22	Attenuator(10dB) (above1GHz)	Orient Microwave	BX10-0476-00	AT	2005/03/16 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2005/11/12 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2005/11/10 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MCC-18	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MCC-26	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2005/09/07 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE	2005/01/10 * 12

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

Test Item:

CE: AC Main Conducted Emission

RE: Radiated Spurious Emission

AT: Antenna Terminal Conducted Spurious Emission

AT: Maximum Peak Output Power

AT: 6dB Bandwidth 6: Peak Output Power Density

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APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/11/26 01:37:10

Applicant : Sony EMCS Corporation Saitama TEC

Kind of EUT : Digital Stereo Transmitter

Model No. : TMR-RF5000

Serial No. : 5000130

Report No. : 26CE0113-H0

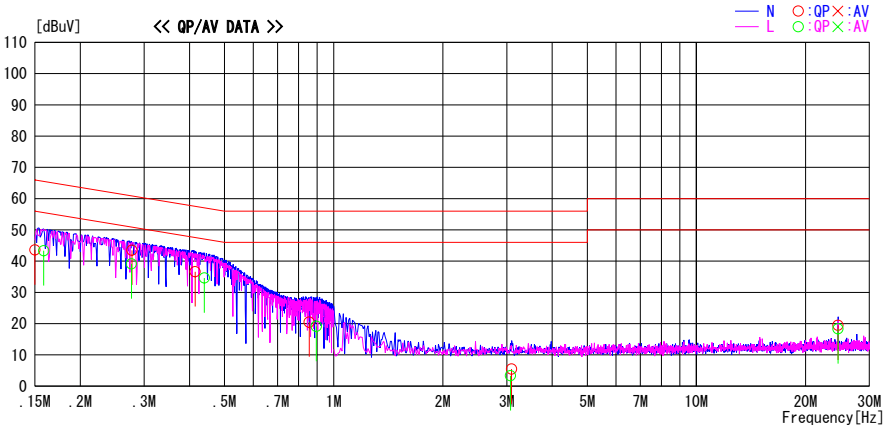
Power : AC120V / 60Hz

Temp./Humi. : 26deg. C / 28%

Operator : Yutaka Yoshida

Mode / Remarks : Transmitting 2412MHz

LIMIT : FCC15C § 15. 207 (QP) / RSS-Gen
FCC15C § 15. 207 (AV) / RSS-Gen



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.15000	43.5	---	0.1	43.6	---	66.0	---	22.4	---	N
0.15850	43.2	---	0.1	43.3	---	65.5	---	22.2	---	L
0.27760	43.4	---	0.1	43.5	---	60.9	---	17.4	---	N
0.27700	39.0	---	0.1	39.1	---	60.9	---	21.8	---	L
0.41460	36.5	---	0.1	36.6	---	57.6	---	21.0	---	N
0.43985	34.5	---	0.1	34.6	---	57.1	---	22.5	---	L
0.85536	20.2	---	0.3	20.5	---	56.0	---	35.5	---	N
0.89471	18.8	---	0.3	19.1	---	56.0	---	36.9	---	L
3.07300	2.8	---	0.5	3.3	---	56.0	---	52.7	---	L
3.09118	5.0	---	0.5	5.5	---	56.0	---	50.5	---	N
24.57483	16.3	---	2.0	18.3	---	60.0	---	41.7	---	L
24.57741	17.5	---	2.0	19.5	---	60.0	---	40.5	---	N

CHART:WITH FACTOR,Peak hold data,Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/11/26 02:04:33

Applicant	: Sony EMCS Corporation Saitama TEC	Report No.	: 26CE0113-HO
Kind of EUT	: Digital Stereo Transmitter	Power	: AC120V / 60Hz
Model No.	: TMR-RF5000	Temp./Humi.	: 26deg. C / 28%
Serial No.	: 5000130	Operator	: Yutaka Yoshida

Mode / Remarks : Transmitting 2437MHz

LIMIT : FCC15C § 15.207 (QP) / RSS-Gen
FCC15C § 15.207 (AV) / RSS-Gen

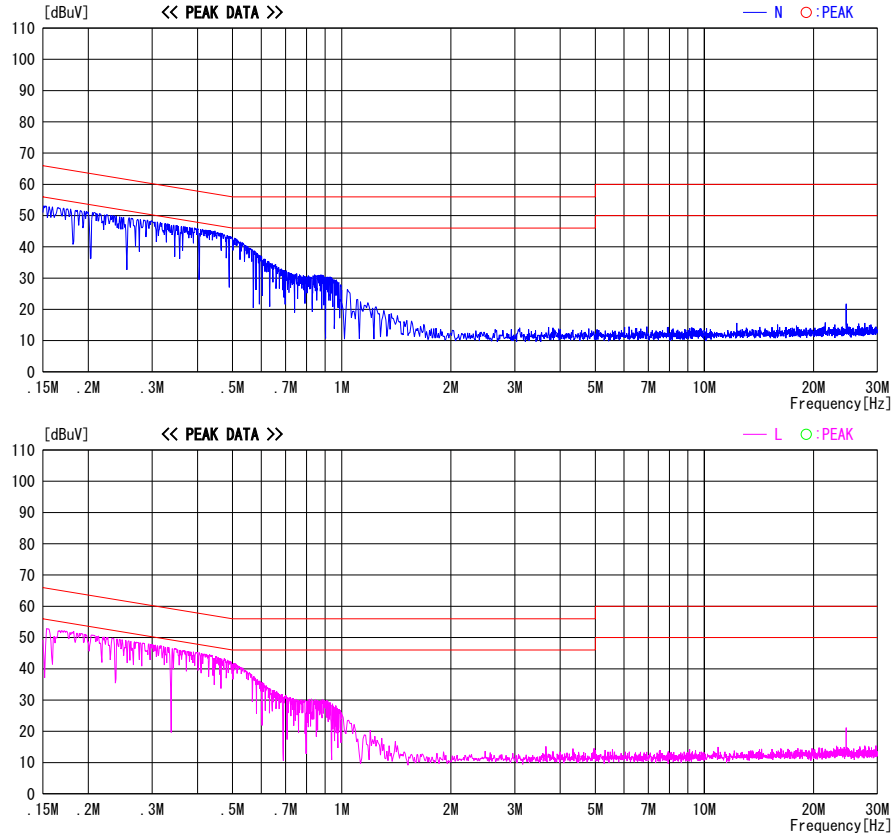


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/11/26 02:08:12

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC120V / 60Hz
Temp./Humi. : 26deg. C / 28%
Operator : Yutaka Yoshida

Mode / Remarks : Transmitting 2462MHz

LIMIT : FCC15C § 15.207 (QP) / RSS-Gen
FCC15C § 15.207 (AV) / RSS-Gen

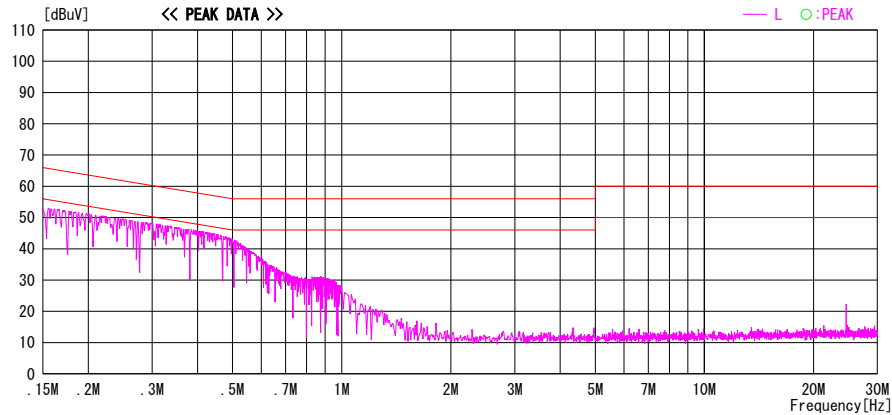
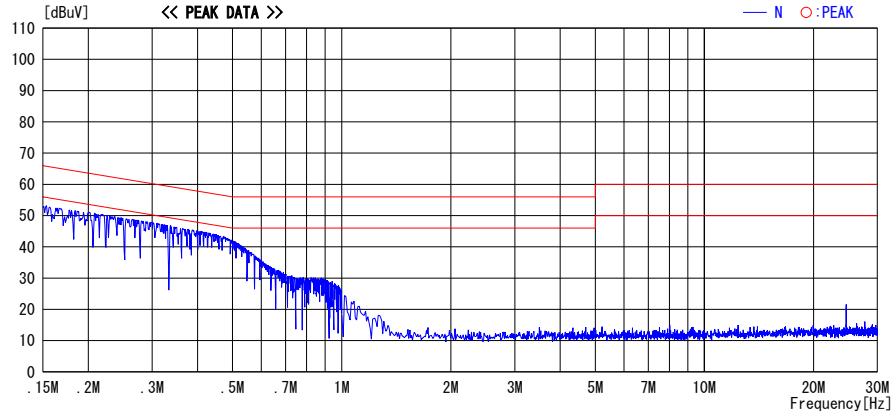


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(L1SN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

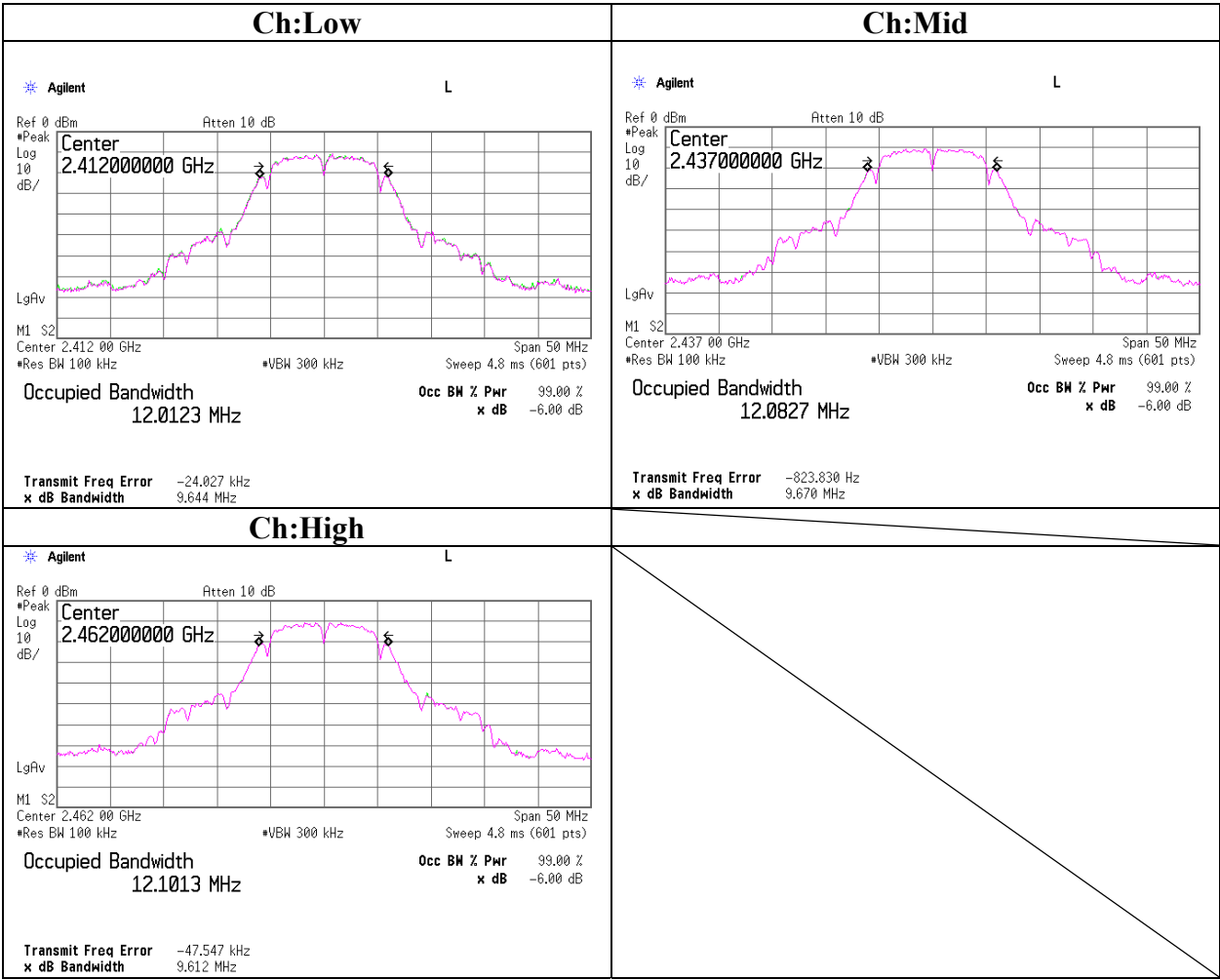
6dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

Company	: Sony EMCS Corporation Saitama	TEC REPORT NO	: 26CE0113-HO
Equipment	: Digital Stereo Transmitter	REGULATION	: FCC Part15 Subpart C 15.247(a)(2)
Model	: TMR-RF5000	TEST DISTANCE	: -
Sample No.	: 5000130	DATE	: 11/29/2005
Power	: AC120V/60Hz	TEMPERATURE	: 21℃
Mode	: Tx (ch1,6,11)	HUMIDITY	: 35%
		ENGINEER	: Kenichi Adachi

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	9.644	500.0
Mid	2437.0	9.670	500.0
High	2462.0	9.612	500.0

6dB Bandwidth



Maximum Peak OutPut Power

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

Company	: Sony EMCS Corporation Saitama TEC	REPORT NO	: 26CE0113-HO
Equipment	: Digital Stereo Transmitter	REGULATION	: FCC Part15 Subpart C 15.247(a)(2)
Model	: TMR-RF5000	TEST DISTANCE	: -
Sample No.	: 5000130	DATE	: 11/29/2005
Power	: AC120V/60Hz	TEMPERATURE	: 21℃
Mode	: Tx (ch1,6,11)	HUMIDITY	: 35%
		ENGINEER	: Kenichi Adachi

[IEEE802.11b]

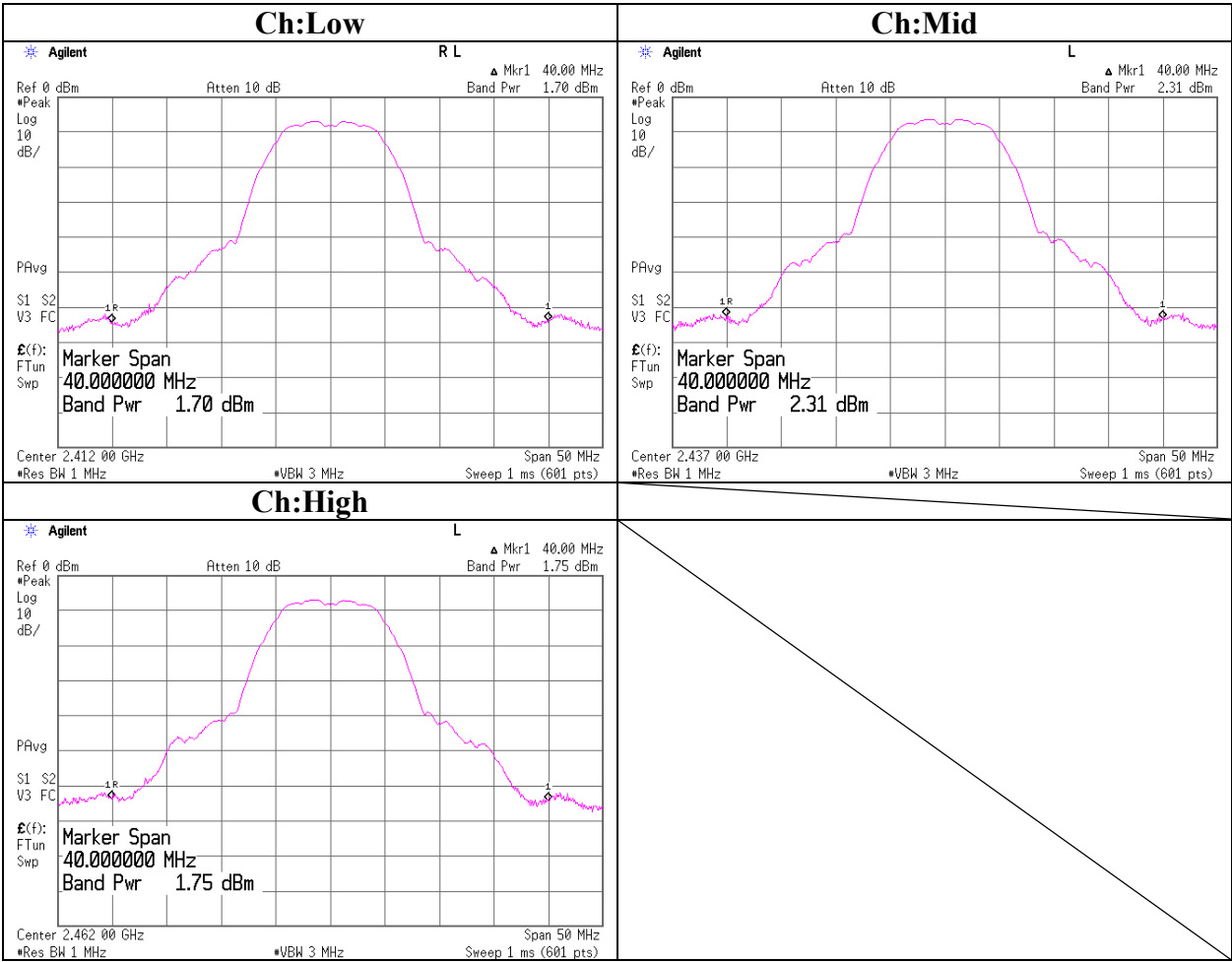
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.0	1.70	1.87	9.90	13.47	30.00	16.53
Mid	2437.0	2.31	1.89	9.90	14.10	30.00	15.90
High	2462.0	1.75	1.90	9.90	13.55	30.00	16.45

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

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

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.

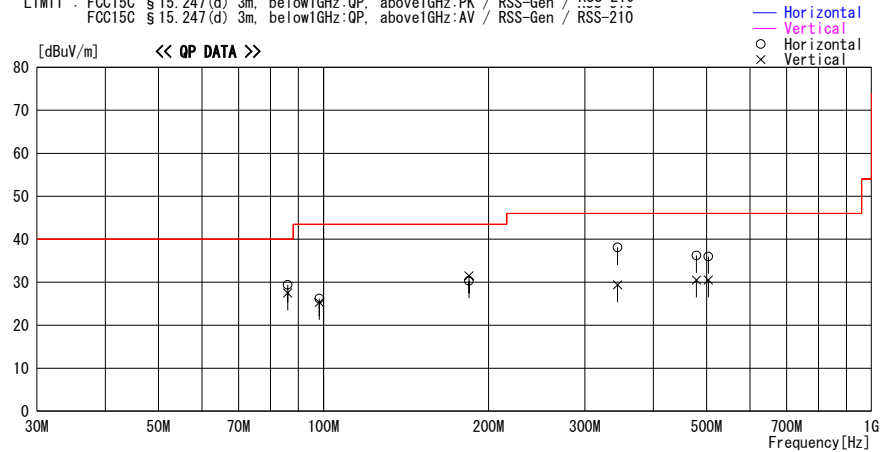
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/11/25 22:50:52

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 24deg.C / 30%
Operator : Yutaka Yoshida

Mode / Remarks : Transmitting 2412MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / 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]
86.018	44.2	QP	7.3	-22.1	29.4	-1	222	Hori.	40.0	10.6
86.016	42.3	QP	7.3	-22.1	27.5	298	100	Vert.	40.0	12.5
98.305	38.7	QP	9.6	-22.1	26.2	141	331	Hori.	43.5	17.3
98.305	37.8	QP	9.6	-22.1	25.3	113	100	Vert.	43.5	18.2
184.321	35.0	QP	16.1	-20.8	30.3	102	183	Hori.	43.5	13.2
184.323	36.2	QP	16.1	-20.8	31.5	360	100	Vert.	43.5	12.0
344.067	42.0	QP	15.9	-19.8	38.1	272	100	Hori.	46.0	7.9
344.067	33.3	QP	15.9	-19.8	29.4	197	100	Vert.	46.0	16.6
479.236	38.4	QP	17.8	-20.0	36.2	66	100	Hori.	46.0	9.8
479.235	32.7	QP	17.8	-20.0	30.5	135	114	Vert.	46.0	15.5
503.812	38.2	QP	17.9	-20.1	36.0	74	100	Hori.	46.0	10.0
503.813	32.7	QP	17.9	-20.1	30.5	135	100	Vert.	46.0	15.5

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.

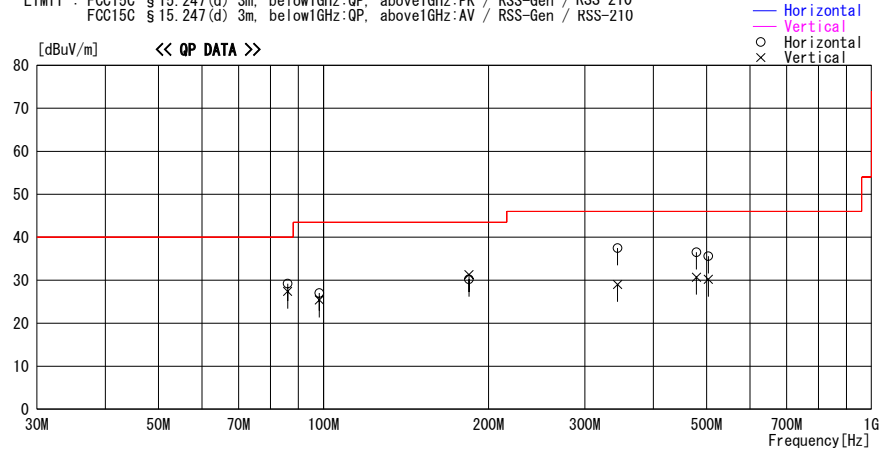
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/11/25 23:40:56

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 24deg.C / 30%
Operator : Yutaka Yoshida

Mode / Remarks : Transmitting 2437MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / 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]
86.017	44.0	QP	7.3	-22.1	29.2	-1	227	Hori.	40.0	10.8
86.017	42.2	QP	7.3	-22.1	27.4	296	100	Vert.	40.0	12.6
98.306	39.5	QP	9.6	-22.1	27.0	173	316	Hori.	43.5	16.5
98.305	37.9	QP	9.6	-22.1	25.4	122	100	Vert.	43.5	18.1
184.322	34.9	QP	16.1	-20.8	30.2	101	174	Hori.	43.5	13.3
184.322	36.0	QP	16.1	-20.8	31.3	-1	100	Vert.	43.5	12.2
344.068	41.4	QP	15.9	-19.8	37.5	278	100	Hori.	46.0	8.5
344.067	32.9	QP	15.9	-19.8	29.0	207	100	Vert.	46.0	17.0
479.236	38.7	QP	17.8	-20.0	36.5	68	100	Hori.	46.0	9.5
479.236	32.9	QP	17.8	-20.0	30.7	133	121	Vert.	46.0	15.3
503.812	37.8	QP	17.9	-20.1	35.6	72	100	Hori.	46.0	10.4
503.813	32.4	QP	17.9	-20.1	30.2	129	100	Vert.	46.0	15.8

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.

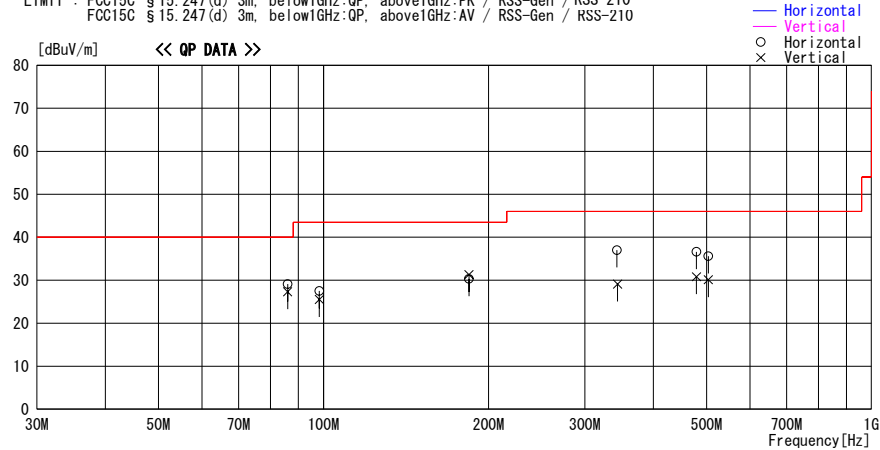
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2005/11/26 00:05:16

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 24deg.C / 30%
Operator : Yutaka Yoshida

Mode / Remarks : Transmitting 2462MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / 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]
86.017	43.9	QP	7.3	-22.1	29.1	360	222	Hori.	40.0	10.9
86.017	42.1	QP	7.3	-22.1	27.3	298	100	Vert.	40.0	12.7
98.305	40.0	QP	9.6	-22.1	27.5	320	166	Hori.	43.5	16.0
98.305	38.0	QP	9.6	-22.1	25.5	117	100	Vert.	43.5	18.0
184.322	35.0	QP	16.1	-20.8	30.3	100	177	Hori.	43.5	13.2
184.322	36.0	QP	16.1	-20.8	31.3	0	100	Vert.	43.5	12.2
343.067	41.0	QP	15.8	-19.8	37.0	285	100	Hori.	46.0	9.0
344.067	33.0	QP	15.9	-19.8	29.1	209	100	Vert.	46.0	16.9
479.236	38.8	QP	17.8	-20.0	36.6	55	100	Hori.	46.0	9.4
479.236	33.0	QP	17.8	-20.0	30.8	129	119	Vert.	46.0	15.2
503.813	37.8	QP	17.9	-20.1	35.6	69	100	Hori.	46.0	10.4
503.812	32.3	QP	17.9	-20.1	30.1	130	100	Vert.	46.0	15.9

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)

Radiated Spurious Emission

DATA OF SPURIOUS EMISSIONS(1GHz to 10GHz)

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

Company : Sony EMCS Corporation Saitama TEC	REPORT NO : 26CE0113-HO
Equipment : Digital Stereo Transmitter	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : TMR-RF5000	TEST DISTANCE : 3m
Sample No. : 5000130	DATE : November 24, 2005
Power : AC 120 V / 60 Hz	TEMPERATURE : 23deg.C
Mode : Transmitting 2412MHz	HUMIDITY : 35%
Remarks : Normal position	ENGINEER : Yutaka Yoshida

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 [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	2390.0	46.4	45.7	30.5	36.4	4.6	0.0	45.1	44.4	74.0	28.9	29.6
2	4824.0	41.8	43.4	35.3	36.0	6.6	0.8	48.5	50.1	74.0	25.5	23.9
3	7236.0	41.3	42.0	37.7	36.0	8.2	0.3	51.5	52.2	74.0	22.5	21.8
4	9648.0	40.4	40.7	36.9	36.4	9.9	0.7	51.5	51.8	74.0	22.5	22.2

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	2390.0	36.1	36.0	30.5	36.4	4.6	0.0	34.8	34.7	54.0	19.2	19.3
2	4824.0	29.8	33.7	35.3	36.0	6.6	0.8	36.5	40.4	54.0	17.5	13.6
3	7236.0	28.6	32.2	37.7	36.0	8.2	0.3	38.8	42.4	54.0	15.2	11.6
4	9648.0	30.2	30.1	36.9	36.4	9.9	0.7	41.3	41.2	54.0	12.7	12.8

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [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												
0	2412.0	95.7	95.2	30.5	36.4	4.6	0.0	94.4	93.9	-	-	-
1	2400.0	51.5	52.2	30.5	36.4	4.6	0.0	50.2	50.9	Funda-20dB	24.2	23.0

*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.

Radiated Spurious Emission

DATA OF SPURIOUS EMISSIONS(1GHz to 10GHz)

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

Company : Sony EMCS Corporation Saitama TEC	REPORT NO : 26CE0113-HO
Equipment : Digital Stereo Transmitter	REGULATION : FCC Part15 Subpart C 15.247(d)
Model : TMR-RF5000	TEST DISTANCE : 3m
Sample No. : 5000130	DATE : November 24, 2005
Power : AC 120 V / 60 Hz	TEMPERATURE : 23deg.C
Mode : Transmitting 2437MHz	HUMIDITY : 35%
Remarks : Normal position	ENGINEER : Yutaka Yoshida

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	44.9	45.4	35.6	36.0	6.6	0.8	51.9	52.4	74.0	22.1	21.6
2	7311.0	40.3	41.6	37.9	36.0	8.2	0.3	50.7	52.0	74.0	23.3	22.0
3	9748.0	40.5	40.0	36.8	36.4	9.9	0.6	51.4	50.9	74.0	22.6	23.1

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit AV	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4874.0	34.8	37.4	35.6	36.0	6.6	0.8	41.8	44.4	54.0	12.2	9.6
2	7311.0	29.4	29.3	37.9	36.0	8.2	0.3	39.8	39.7	54.0	14.2	14.3
3	9748.0	29.6	29.4	36.8	36.4	9.9	0.6	40.5	40.3	54.0	13.5	13.7

*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.

UL Apex Co., Ltd.

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MF060b(01.06.05)

Radiated Spurious Emission

DATA OF SPURIOUS EMISSIONS(1GHz to 10GHz)

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

Company : Sony EMCS Corporation Saitama TEC	REPORT NO : 26CE0113-HO
Equipment : Digital Stereo Transmitter	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : TMR-RF5000	TEST DISTANCE : 3m
Sample No. : 5000130	DATE : November 24, 2005
Power : AC 120 V / 60 Hz	TEMPERATURE : 23deg.C
Mode : Transmitting 2462MHz	HUMIDITY : 35%
Remarks : Normal position	ENGINEER : Yutaka Yoshida

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	46.5	45.8	30.5	36.4	4.7	0.0	45.3	44.6	74.0	28.7	29.4
2	4924.0	47.5	48.7	35.9	35.9	6.6	0.8	54.9	56.1	74.0	19.1	17.9
3	7386.0	41.0	41.5	38.0	36.0	8.2	0.3	51.5	52.0	74.0	22.5	22.0
4	9848.0	41.4	41.1	36.7	36.4	9.9	0.6	52.2	51.9	74.0	21.8	22.1

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit AV	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	35.9	35.8	30.5	36.4	4.7	0.0	34.7	34.6	54.0	19.3	19.4
2	4924.0	42.6	43.0	35.9	35.9	6.6	0.8	50.0	50.4	54.0	4.0	3.6
3	7386.0	28.0	30.9	38.0	36.0	8.2	0.3	38.5	41.4	54.0	15.5	12.6
4	9848.0	29.5	29.5	36.7	36.4	9.9	0.6	40.3	40.3	54.0	13.7	13.7

*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.

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/02 22:10:48

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg.C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2412MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

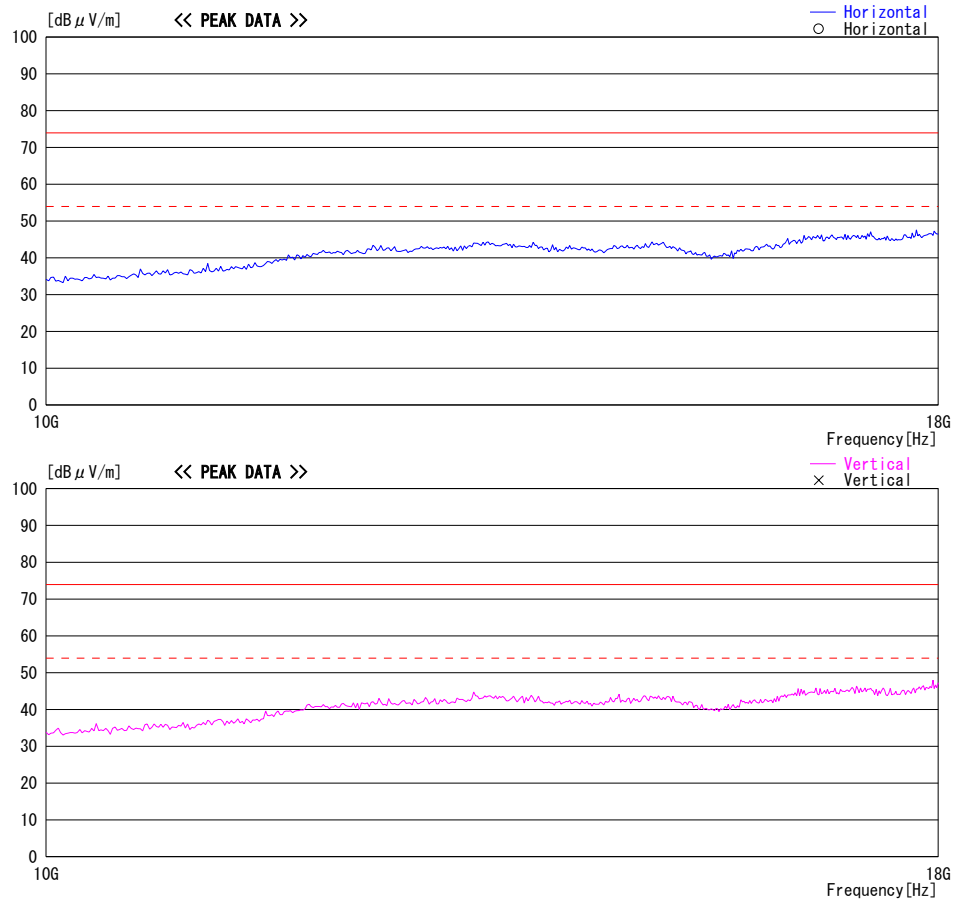


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/02 22:21:12

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg.C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2437MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

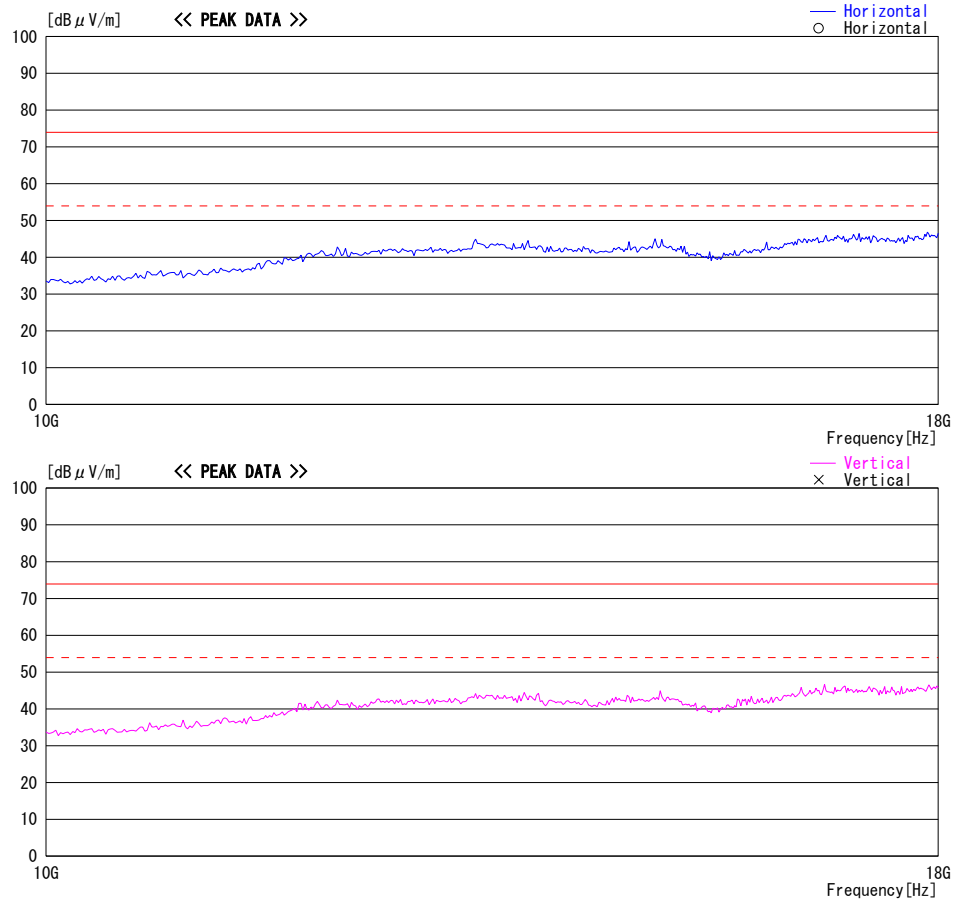


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

UL Apex Co., Ltd.

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MF060b(01.06.05)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/02 22:24:28

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg.C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2462MHz

LIMIT : FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C § 15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

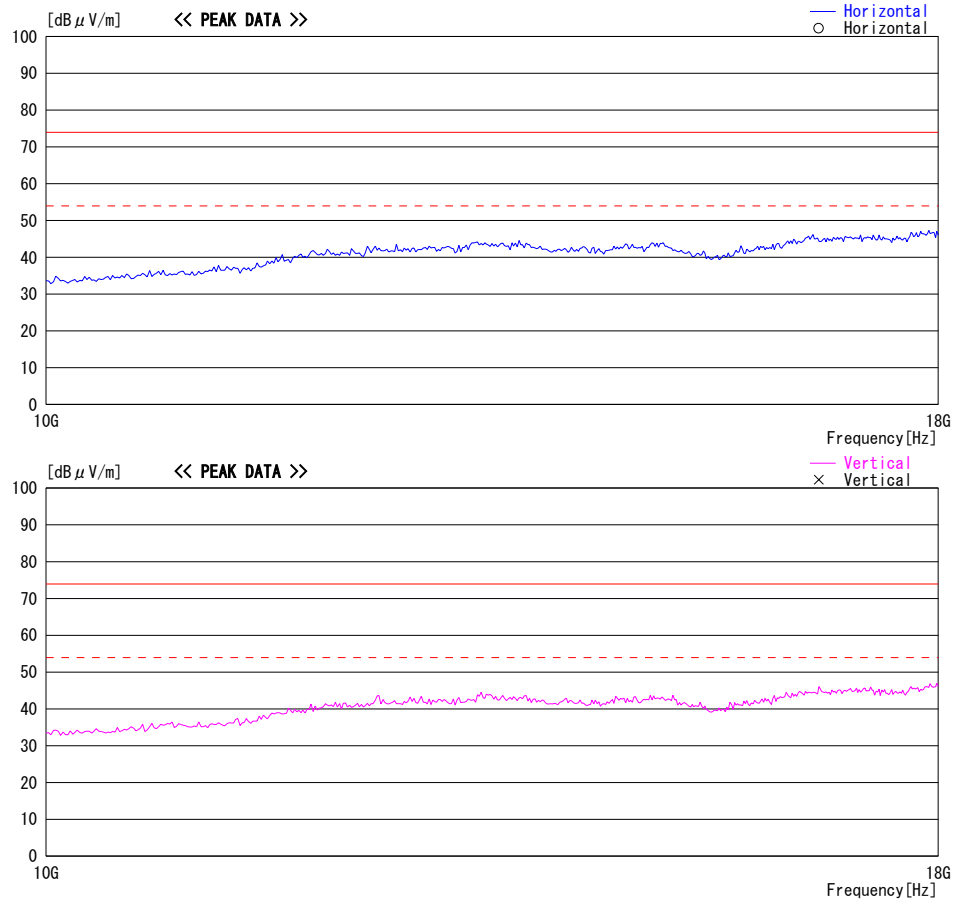


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(01.06.05)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:18:43

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2412MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

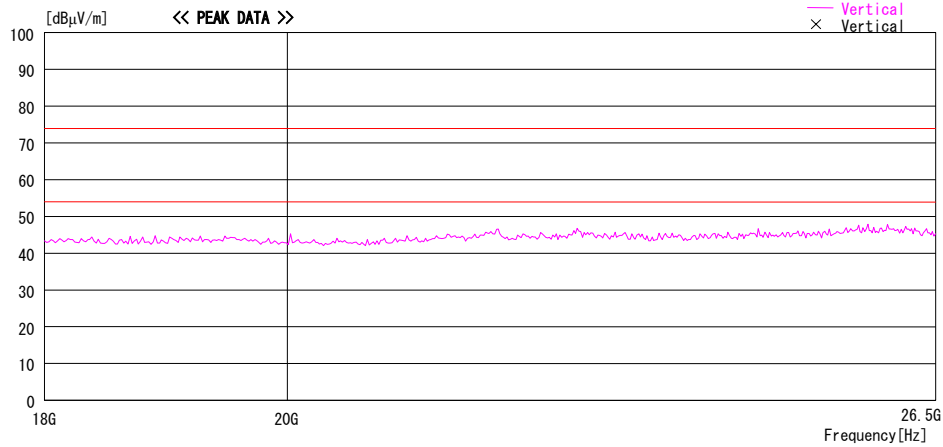
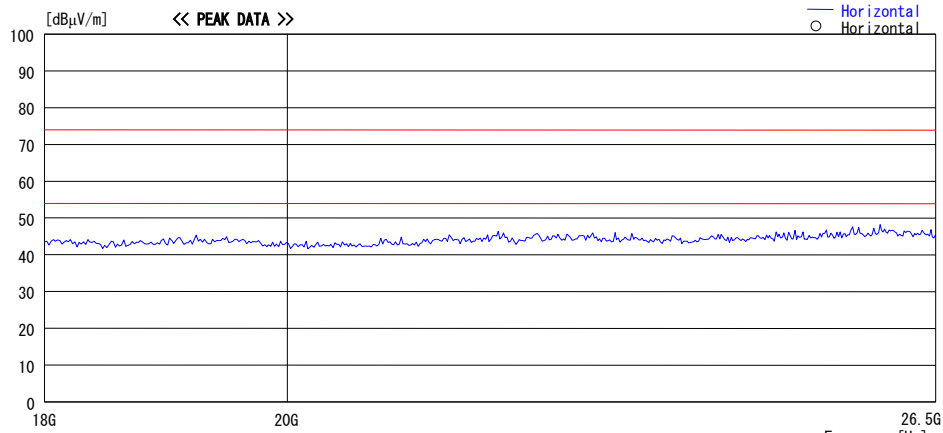


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(01.06.05)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:18:43

Applicant : Sony EMCS Corporation Saitama TEC

Kind of EUT : Digital Stereo Transmitter

Model No. : TMR-RF5000

Serial No. : 5000130

Report No. : 26CE0113-H0

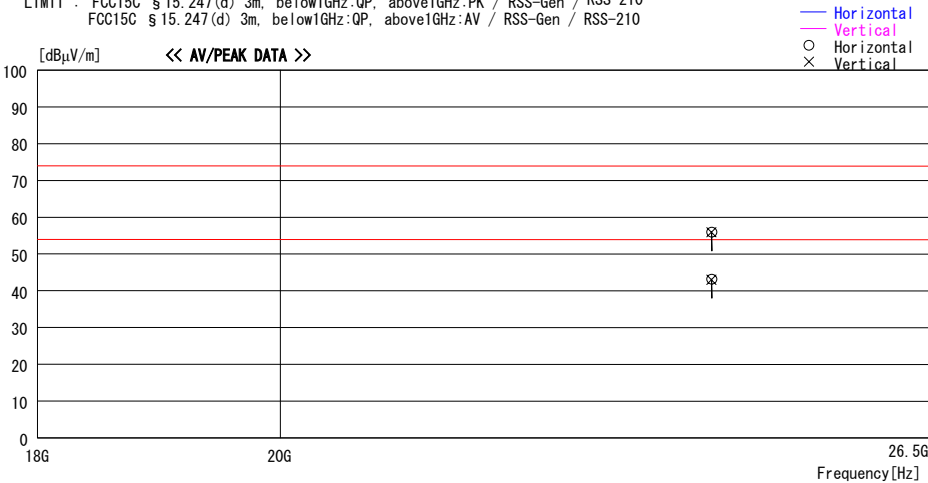
Power : AC 120V / 60Hz

Temp./Humi. : 20deg. C / 38%

Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2412MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna	Loss	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBμV]		[dB/m]	[dB]	[dBμV/m]	[Deg]	[cm]		[dBμV/m]	[dB]
24120.000	45.6	PK	41.0	-30.6	56.0	0	100	Hori.	74.0	18.0
24120.000	32.7	AV	41.0	-30.6	43.1	0	100	Hori.	54.0	10.9
24120.000	45.5	PK	41.0	-30.6	55.9	0	100	Vert.	74.0	18.1
24120.000	32.6	AV	41.0	-30.6	43.0	0	100	Vert.	54.0	11.0

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)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:27:02

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2437MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

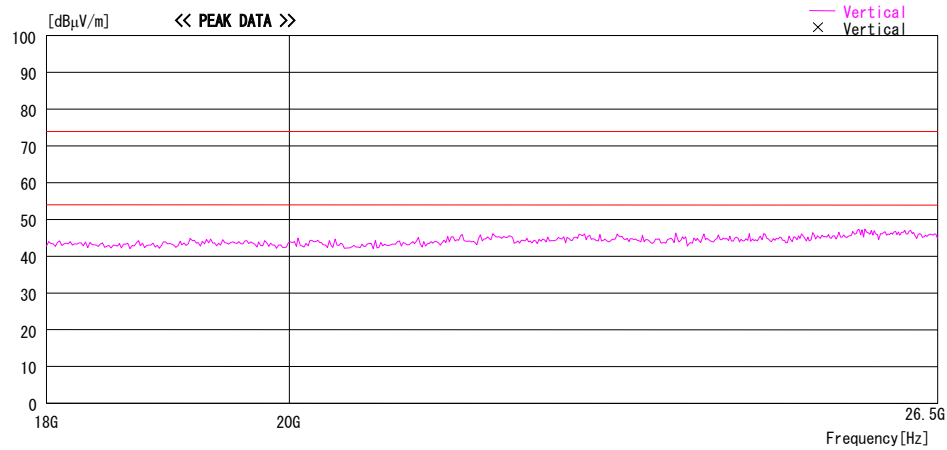
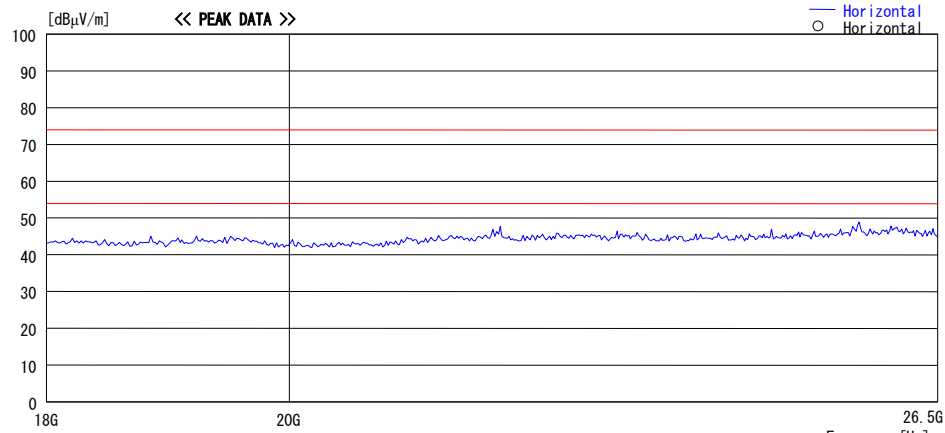


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

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MF060b(01.06.05)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:27:02

Applicant : Sony EMCS Corporation Saitama TEC

Kind of EUT : Digital Stereo Transmitter

Model No. : TMR-RF5000

Serial No. : 5000130

Report No. : 26CE0113-HO

Power : AC 120V / 60Hz

Temp./Humi. : 20deg. C / 38%

Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2437MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBμV]		[dB/m]	[dB]	[dBμV/m]	[Deg]	[cm]		[dBμV/m]	[dB]
24370.000	45.0	PK	41.1	-30.7	55.4	0	100	Hori.	74.0	18.6
24370.000	31.9	AV	41.1	-30.7	42.3	0	100	Hori.	54.0	11.7
24370.000	44.9	PK	41.1	-30.7	55.3	0	100	Vert.	74.0	18.7
24370.000	32.0	AV	41.1	-30.7	42.4	0	100	Vert.	54.0	11.6

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)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:36:43

Applicant : Sony EMCS Corporation Saitama TEC
Kind of EUT : Digital Stereo Transmitter
Model No. : TMR-RF5000
Serial No. : 5000130
Report No. : 26CE0113-HO
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 38%
Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2462MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

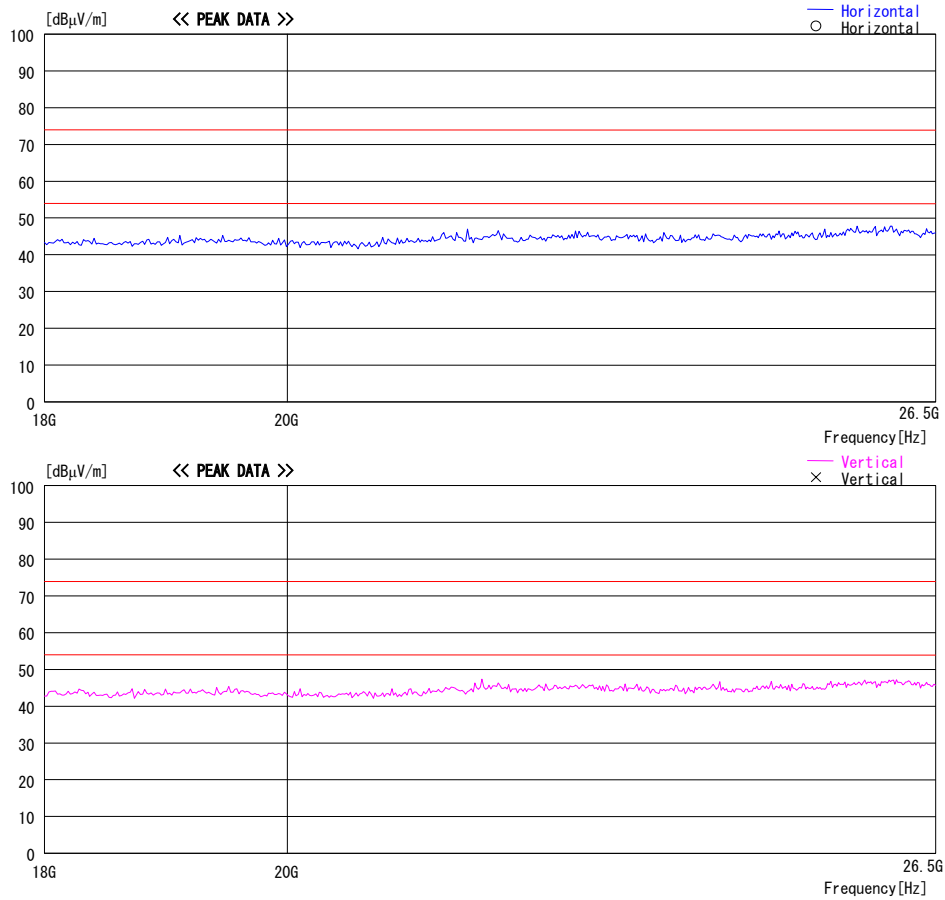


CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2005/12/03 01:36:43

Applicant : Sony EMCS Corporation Saitama TEC

Kind of EUT : Digital Stereo Transmitter

Model No. : TMR-RF5000

Serial No. : 5000130

Report No. : 26CE0113-HO

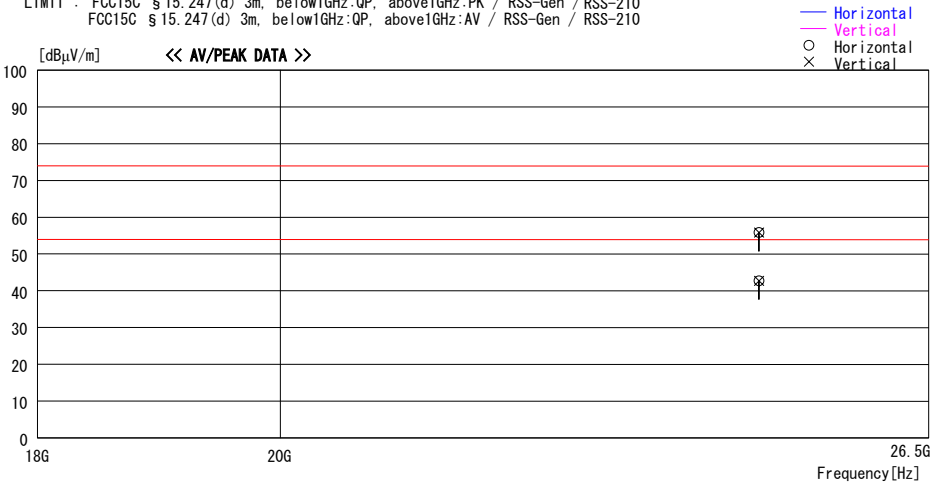
Power : AC 120V / 60Hz

Temp./Humi. : 20deg. C / 38%

Operator : Mitsuru Fujimura

Mode / Remarks : Transmitting 2462MHz

LIMIT : FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:PK / RSS-Gen / RSS-210
FCC15C §15.247(d) 3m, below1GHz:QP, above1GHz:AV / RSS-Gen / RSS-210

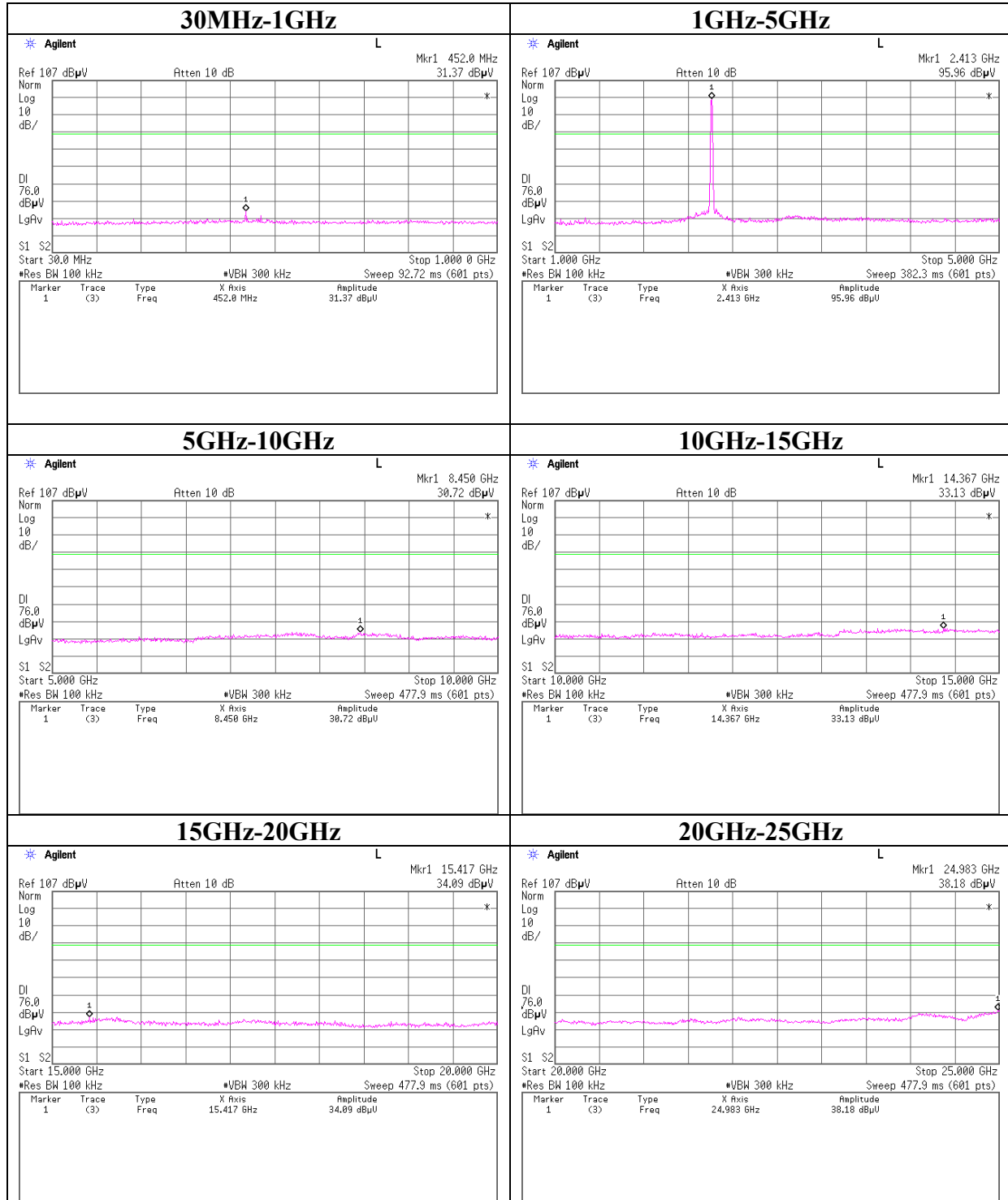


Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBμV]		[dB/m]	[dB]	[dBμV/m]	[Deg]	[cm]		[dBμV/m]	[dB]
24620.000	45.5	PK	41.1	-30.7	55.9	0	100	Hori.	74.0	18.1
24620.000	32.3	AV	41.1	-30.7	42.7	0	100	Hori.	54.0	11.3
24620.000	45.4	PK	41.1	-30.7	55.8	0	100	Vert.	74.0	18.2
24620.000	32.3	AV	41.1	-30.7	42.7	0	100	Vert.	54.0	11.3

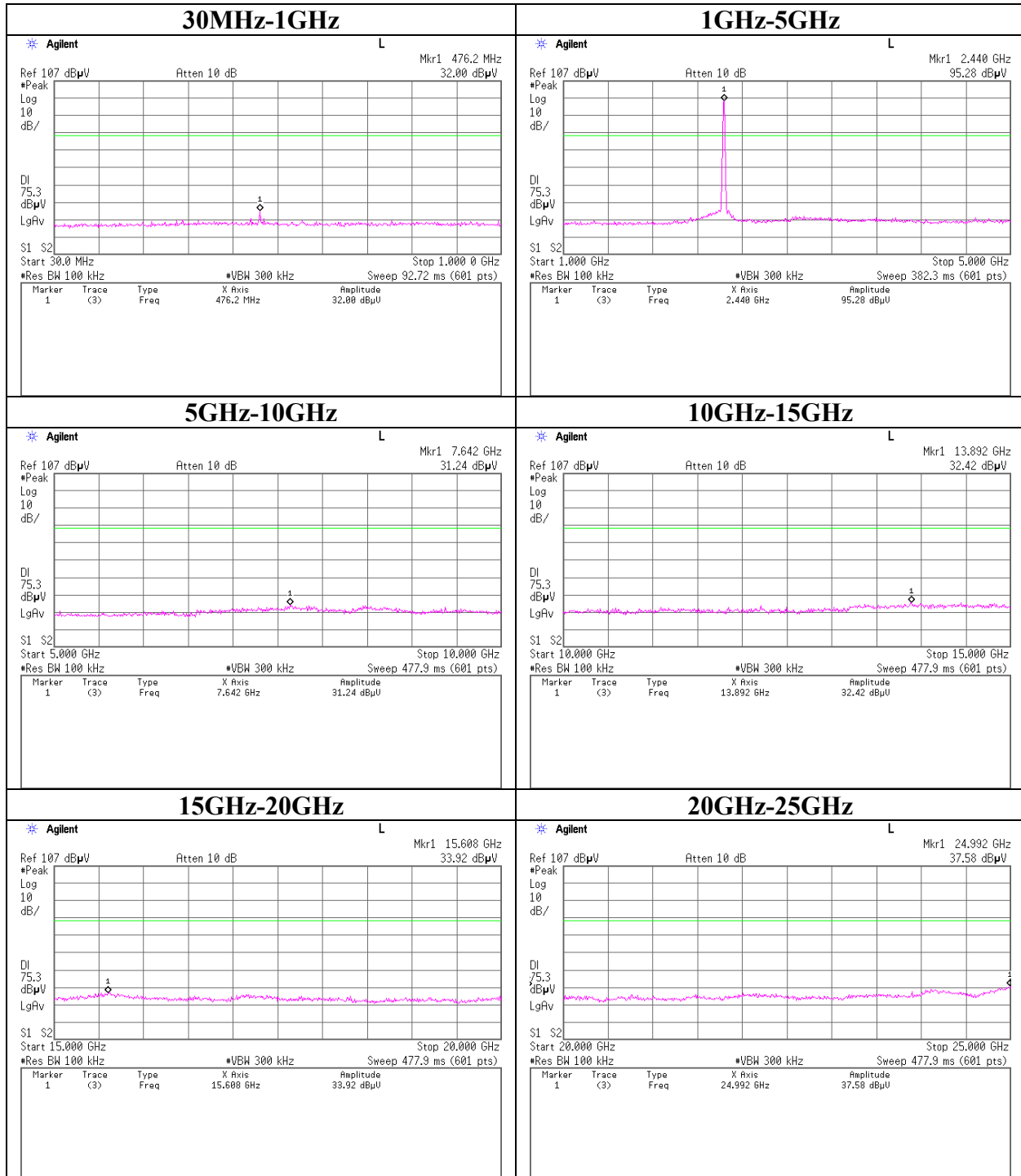
CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Conducted Spurious Emission

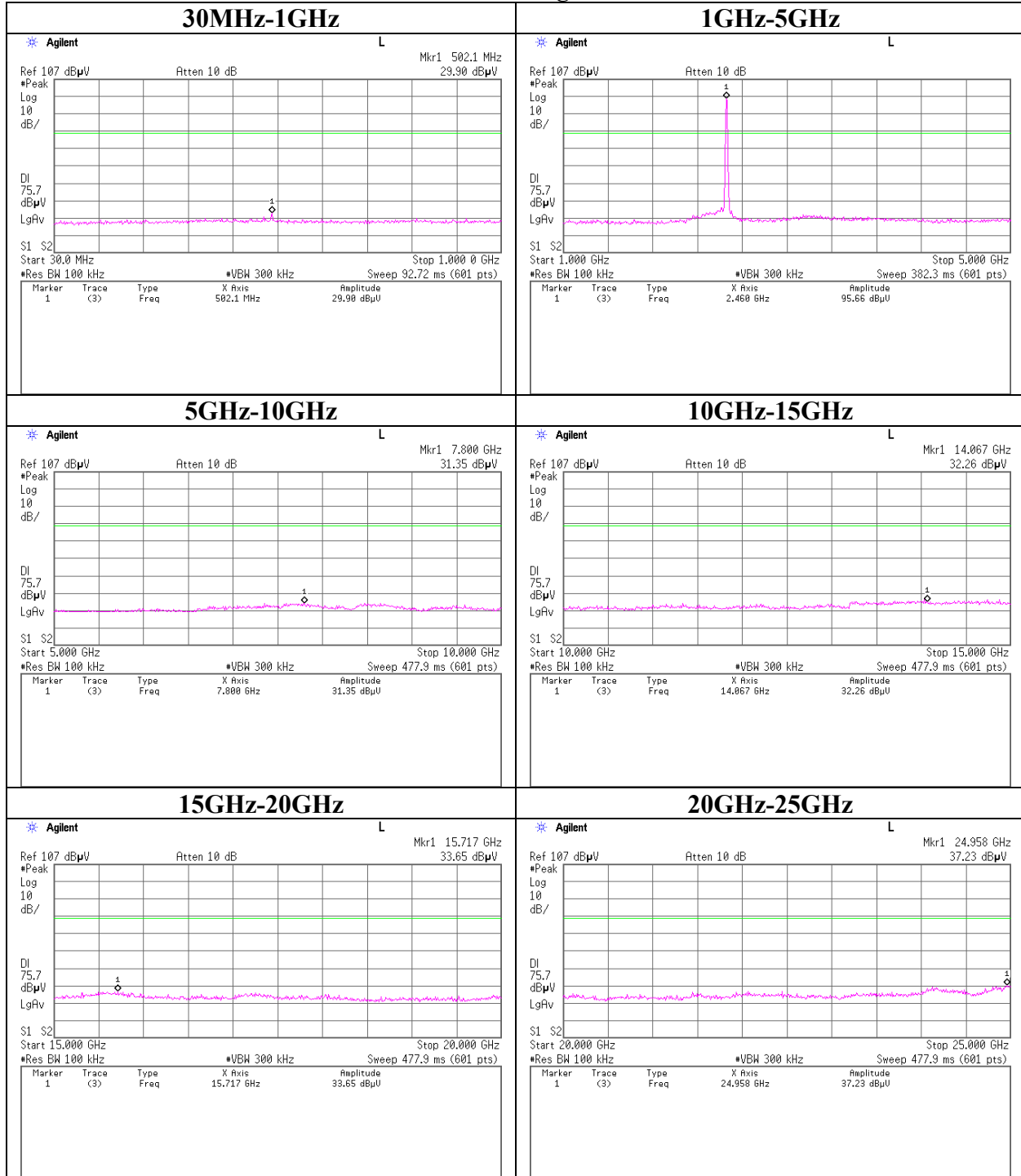
Ch: Low



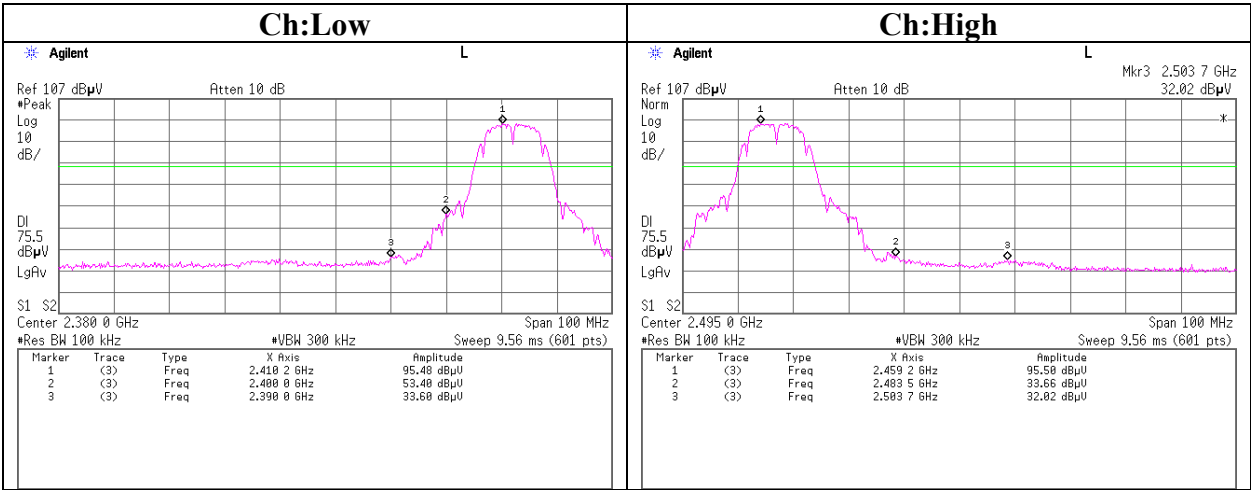
Conducted Spurious Emission
Ch: Mid



Conducted Spurious Emission
Ch: High

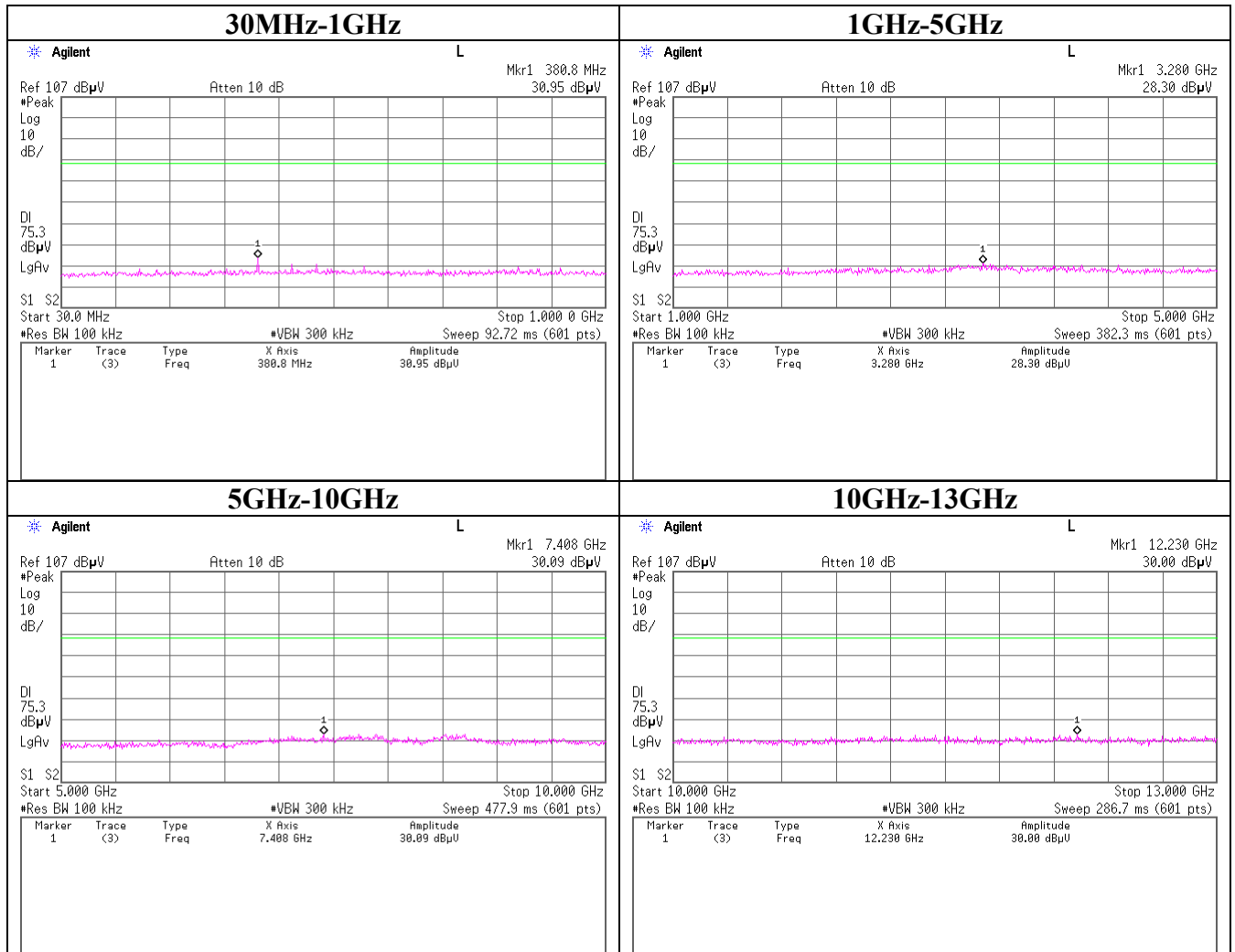


Conducted emission Band Edge compliance



Conducted Spurious Emission

RX



Power Density

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Roo

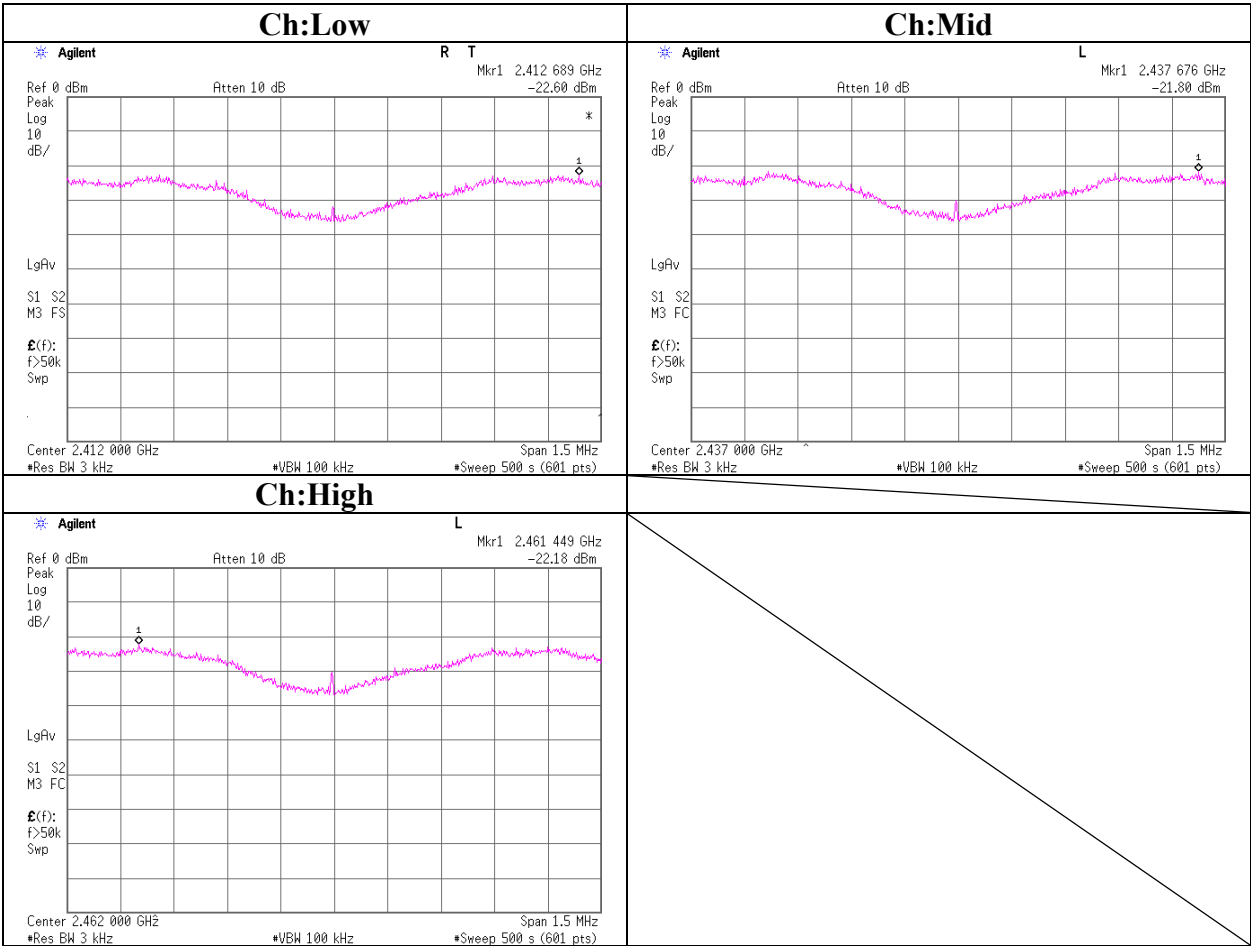
Company : Sony EMCS Corporation Saitama TEC REPORT NO : 26CE0113-HO
Equipment : Digital Stereo Transmitter REGULATION : FCC Part15 Subpart C 15.247(a)(2)
Model : TMR-RF5000 TEST DISTANCE: -
Sample No. : 5000130 DATE : 11/29/2005
Power : AC120V/60Hz TEMPERATURE: 21°C
Mode : Tx (ch1,6,11) HUMIDITY : 35%
ENGINEER : Kenichi Adachi

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.7	-22.60	1.9	10.0	-10.7	8.0	18.7
Mid	2437.7	-21.80	1.9	10.0	-9.9	8.0	17.9
High	2462.4	-22.18	1.9	10.0	-10.3	8.0	18.3

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

Power Density



99%Occupied Bandwidth

