RSS-247 TEST REPORT FOR CERTIFICATION
On Behalf of

Sony Corporation

Home Audio System

Model No.: GTK-XB7

IC: 409B-GTKXB7

Prepared for : Sony Corporation
1-7-1 Konan, Minato-ku, Tokyo 108-0075 Japan

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number : ACS-I15116
Date of Test : Oct.13~Nov.06, 2015
Date of Report : Nov.17, 2015

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TEST REPORT CERTIFICATION

Applicant	:	Sony Corporation
Manufacturer	:	Sony Corporation
EUT Description	:	Home Audio System
IC	:	409B-GTKXB7
		(A) Model NO. : GTK-XB7
		(B) Serial NO. : N/A
		(C) Test Voltage : AC 120V/60Hz

Test Procedure Used:
RSS-247, ISSUE 1, May 2015
RSS-Gen, ISSUE 4, November 2014
ANSI C63.10 : 2013

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the RSS-247, ISSUE 1 requirement.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the RSS-247 requirements.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Oct.13~Nov.06, 2015 Report of date: Nov.17, 2015

Prepared by : Monica Liu
Monica Liu / Assistant

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信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report

Approved & Authorized Signer : Signature: David Jin
David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Radiated Emission Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Conducted Spurious Emissions	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Carrier Frequency Separation Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
20dB & 99% Bandwidth Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Number Of Hopping Frequency Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Dwell Time Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Maximum Peak Output Power Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS
Band Edge Compliance Test	RSS-247, ISSUE 1 RSS-Gen, ISSUE 4 ANSI C63.10 :2013	PASS

2. GENERAL INFORMATION

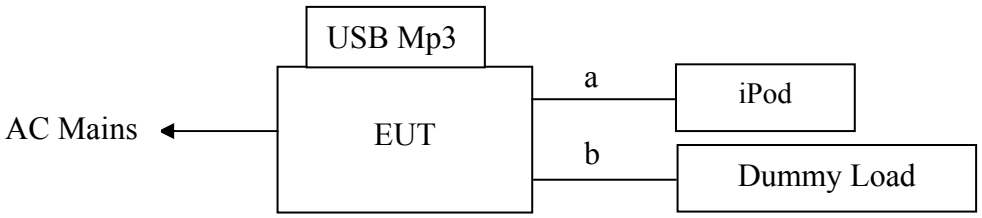
2.1. Description of Device (EUT)

Product Name	: Home Audio System
Model Number	: GTK-XB7
IC	: 409B-GTKXB7
Radio	: Bluetooth V3.0+EDR NFC Rx
Operation Frequency	: 2402-2480MHz for Bluetooth 13.56MHz for NFC
Channel Number	: Bluetooth V3.0+EDR: 79 channels
Modulation Technology	: Bluetooth V3.0+EDR:GFSK, π/4DQPSK,8-DPSK NFC: ASK
Antenna Assembly Gain	: Integrated PCB Antenna, 2.4dBi PK gain
Applicant	: Sony Corporation 1-7-1 Konan, Minato-ku, Tokyo 108-0075 Japan
Manufacturer	: Sony Corporation 1-7-1 Konan, Minato-ku, Tokyo 108-0075 Japan
Remote Controller	: Manufacturer: Sony, M/N: RMT-AM200U
AC Cable	: Unshielded, Detachable, 1.5m
Date of Test	: Oct.13~Nov.06, 2015
Date of Receipt	: Oct.10, 2015

2.2. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number
1.	USB Mp3	---	Sony	BNP-1	---
2.	iPod	ACS-EMC-IP01	APPLE	A1199	YM706MLDVQ5
		Data Cable: Shielded, Detachable, 1.0m			

2.3. Block Diagram of connection between EUT and simulators



a: Audio In Cable
b : Audio Out Cable

(EUT: Home Audio System)

2.4. Test information

A special software was used to control EUT work in Continuous TX mode(GFSK, π/4DQPSK,8-DPSK Modulation), and select test channel.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)	Channel	Frequency (MHz)
Tx Mode GFSK modulation	1	Low :CH 0	2402
	1	Middle: CH39	2441
	1	High: CH78	2480
Tx Mode 8-DPSK modulation	3	Low :CH 0	2402
	3	Middle: CH39	2441
	3	High: CH78	2480
Note: π/4DQPSK modulation is same type modulation with 8-DPSK, and according exploratory test, 8-DPSK will have worse emissions, so the final test were only performed with GFSK and 8-DPSK modulation.			

2.5. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Dec.30, 2017
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Jul.12, 2016
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: May.14, 2017
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.15, 2016
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2016

2.6. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.4dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	2.6 dB(30~200MHz, Polarize: H)
	2.6 dB(30~200MHz, Polarize: V)
	3.0 dB(200M~1GHz, Polarize: H)
	2.8 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	6.3 dB (1~6GHz, Distance: 3m)
	5.7 dB (6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6 dB
Uncertainty for Conduction Spurious emission test	2.0 dB
Uncertainty for Output power test	0.8 dB
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

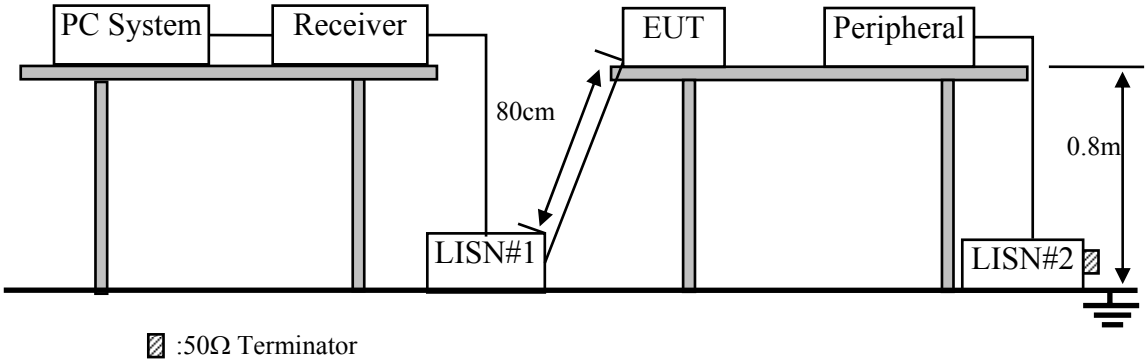
3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

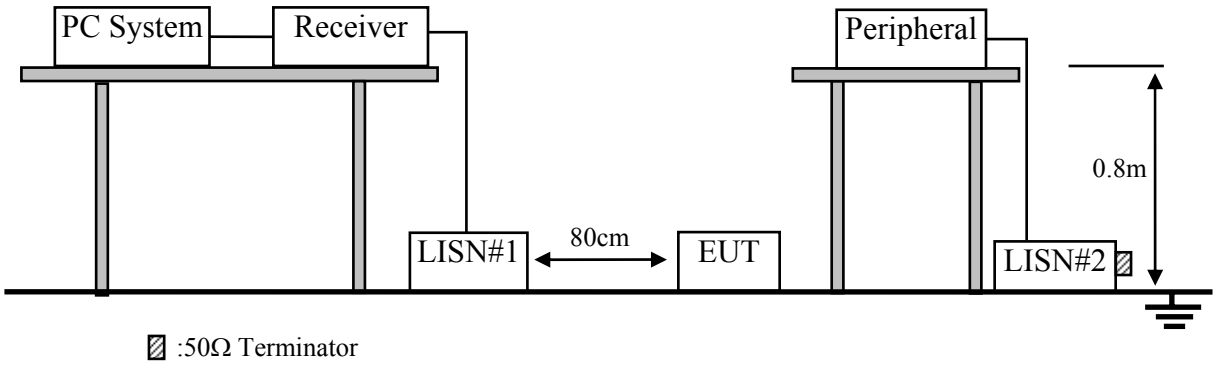
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	Apr.17,15	1 Year
2.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.28,15	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	100429	Oct.18,15	1 Year
4.	L.I.S.N#2	Kyoritsu	K NW-403D	8-1750-2	Apr.28,15	1 Year
5.	Terminator	Hubersuhner	50Ω	No.1	Apr.28,15	1 Year
6.	Terminator	Hubersuhner	50Ω	No.2	Apr.28,15	1 Year
7.	RF Cable	MIYAZAKI	3D-2W	No.1	Apr.28,15	1Year
8.	Coaxial Switch	Anritsu	MP59B	6200766906	Apr.28,15	1 Year
9.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101838	Oct.17,15	1 Year
10.	Test Software	AUDIX	E3	6.100913a	N/A	N/A

3.2.Block Diagram of Test Setup

EUT is Horizontal:



EUT is Vertical:



3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Home Audio System (EUT)

Model Number : GTK-XB7
Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipments.

3.5.3. PC run test software to control EUT work in BT 3.0 Tx mode.

3.6. Test Procedure

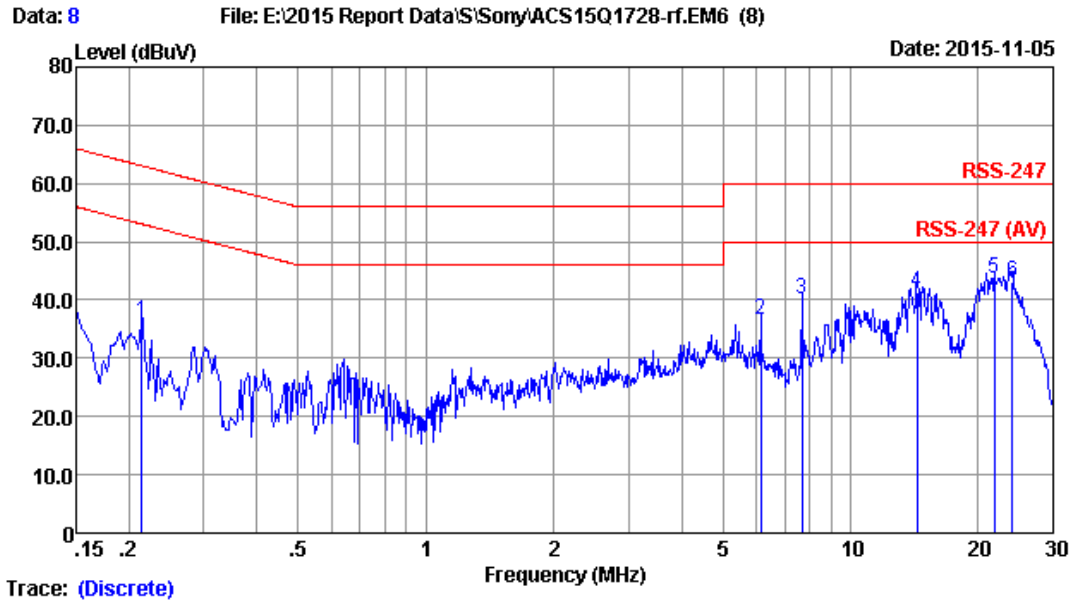
When the EUT is Horizontal, it was placed on a non-metallic table, 80cm above the ground plane. When the EUT is Vertical, it was placed on ground plane that it was floor-standing equipment. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10-2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

PASS. **(**All emissions not reported below are too low against the prescribed limits.)



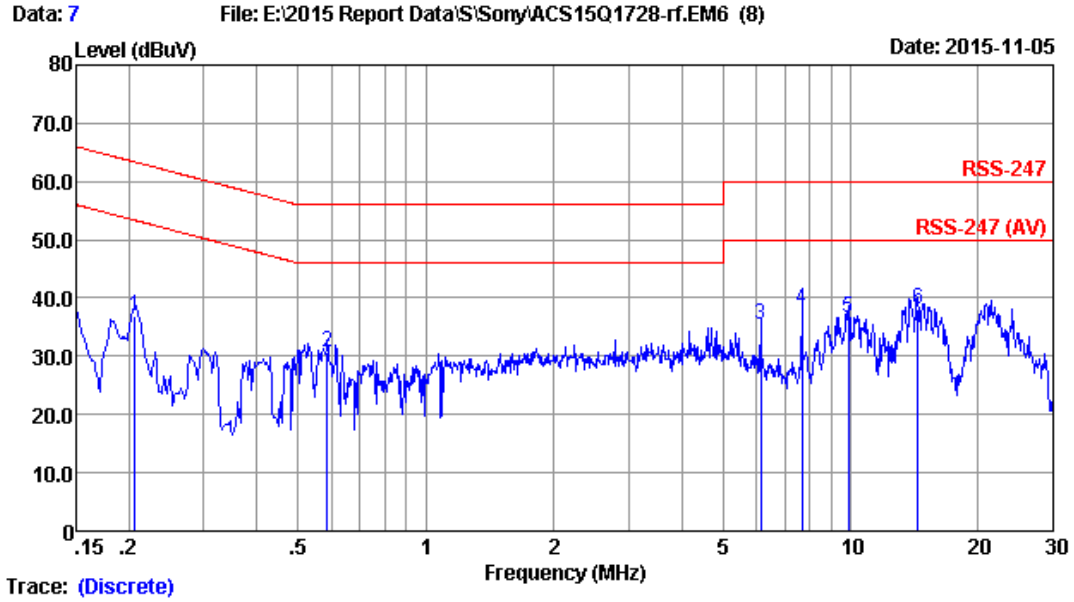
Site no :1# Conduction
Dis./Lisn :2015 KNW-242C VA
Limit :RSS-247
Env./Ins. :23.5*C/51%
EUT :Home Audio System M/N:GTK-XB7
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
Horizontal

Data No :8
LISN phase:

Engineer :Alvis-Wu

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.214	0.49	9.95	25.73	36.17	63.05	26.88	QP
2	6.153	0.64	10.01	25.84	36.49	60.00	23.51	QP
3	7.687	0.65	10.03	29.52	40.20	60.00	19.80	QP
4	14.364	0.78	10.09	30.54	41.41	60.00	18.59	QP
5	21.830	0.94	10.16	32.68	43.78	60.00	16.22	QP
6	24.015	1.05	10.18	31.75	42.98	60.00	17.02	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



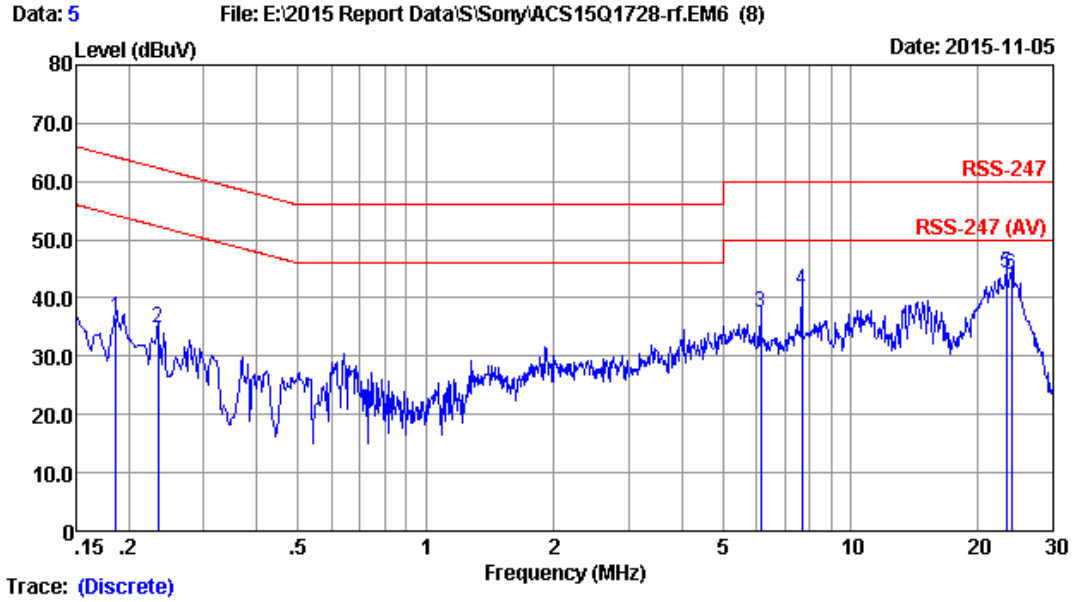
Site no :1# Conduction
Dis./Lisn :2015 KNW-242C VB
Limit :RSS-247
Env./Ins. :23.5*C/51%
EUT :Home Audio System M/N:GTK-XB7
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
Horizontal

Data No :7
LISN phase:

Engineer :Alvis-Wu

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.206	0.41	9.95	26.60	36.96	63.36	26.40	QP
2	0.585	0.35	9.94	20.44	30.73	56.00	25.27	QP
3	6.153	0.33	10.01	25.16	35.50	60.00	24.50	QP
4	7.687	0.33	10.03	27.84	38.20	60.00	21.80	QP
5	9.861	0.36	10.05	26.21	36.62	60.00	23.38	QP
6	14.440	0.48	10.09	27.44	38.01	60.00	21.99	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



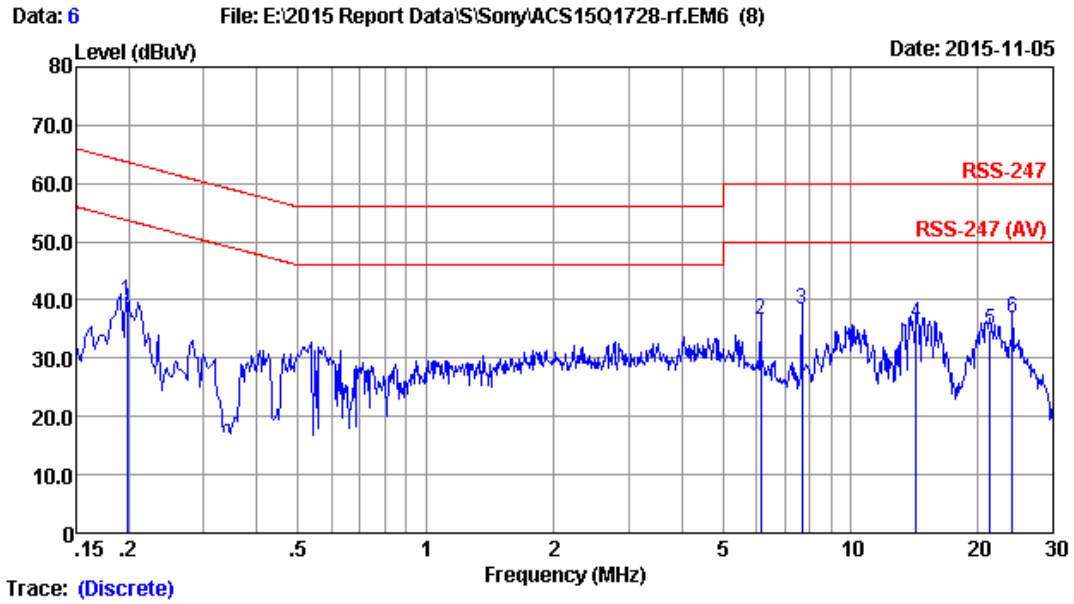
Site no :1# Conduction
Dis./Lisn :2015 KNW-242C VA
Limit :RSS-247
Env./Ins. :23.5*C/51%
EUT :Home Audio System M/N:GTK-XB7
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
Vertical

Data No :5
LISN phase:

Engineer :Alvis-Wu

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.186	0.49	9.95	26.03	36.47	64.20	27.73	QP
2	0.234	0.49	9.95	24.36	34.80	62.30	27.50	QP
3	6.153	0.64	10.01	26.87	37.52	60.00	22.48	QP
4	7.687	0.65	10.03	30.56	41.24	60.00	18.76	QP
5	23.263	1.04	10.17	33.04	44.25	60.00	15.75	QP
6	23.960	1.05	10.18	32.80	44.03	60.00	15.97	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1# Conduction Data No :6
Dis./Lisn :2015 KNW-242C VB LISN phase:
Limit :RSS-247
Env./Ins. :23.5*C/51% Engineer :Alvis-Wu
EUT :Home Audio System M/N:GTK-XB7
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
Vertical

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.198	0.41	9.95	29.47	39.83	63.71	23.88	QP
2	6.153	0.33	10.01	26.12	36.46	60.00	23.54	QP
3	7.687	0.33	10.03	27.88	38.24	60.00	21.76	QP
4	14.288	0.48	10.09	25.33	35.90	60.00	24.10	QP
5	21.260	0.68	10.15	23.97	34.80	60.00	25.20	QP
6	24.015	0.73	10.18	25.97	36.88	60.00	23.12	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION MEASUREMENT

4.1.Test Equipment

Frequency range: 30~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Nov.23,14	1 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	Apr.28,15	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Apr.28,15	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.28,15	1 Year
5.	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-493	May.06,15	1 Year
6.	RF Cable	MIYAZAKI	CFD400-N W(3.5M)	No.3	Apr.28,15	1 Year
7.	RF Cable	MIYAZAKI	CFD400-L W(22M)	No.7	Apr.28,15	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.28,15	1 Year
9.	Test Software	AUDIX	E3	6.2009-5-21a(n)	N/A	N/A

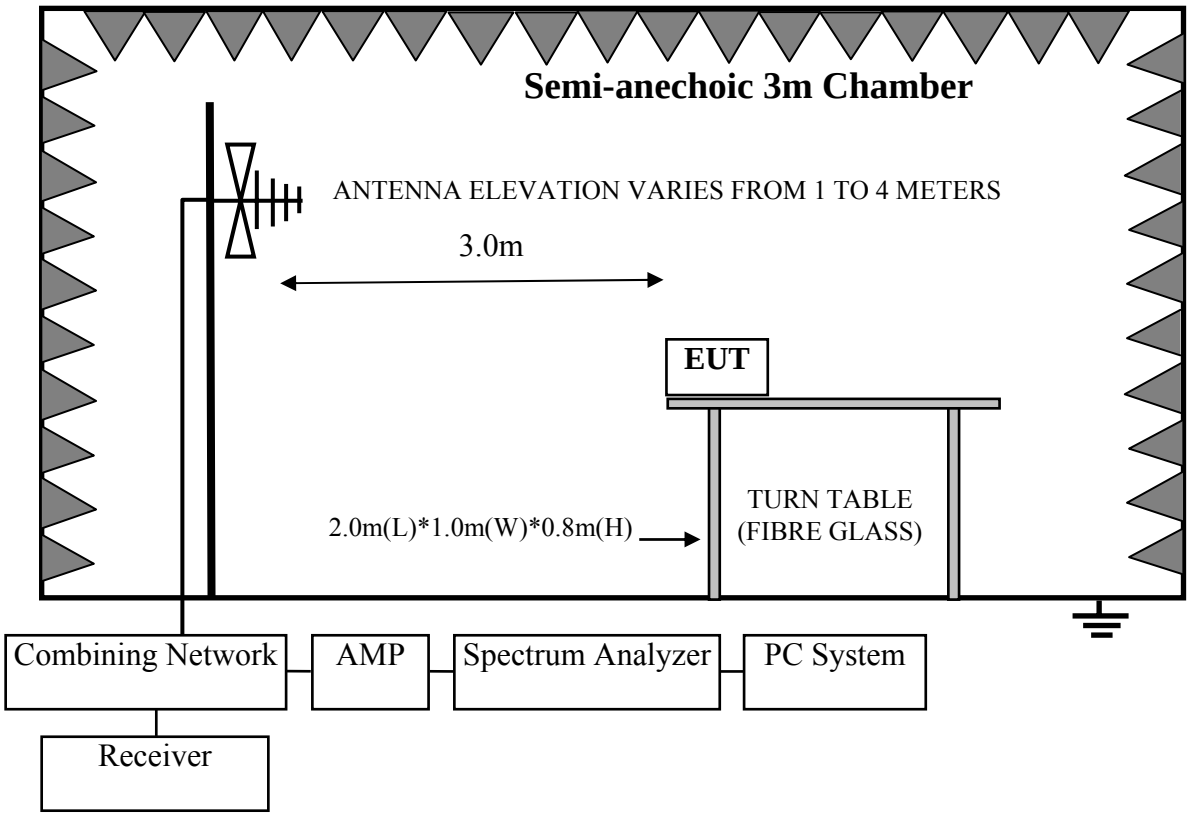
Frequency range: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	May. 21,15	1 Year
2.	Spectrum Analyzer	Agilent	E4407B	MY41440292	Apr. 28,15	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03007	Feb.03,15	1 Year
4.	Amplifier	Agilent	8449B	3008A00863	Apr. 28,15	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	Apr. 28,15	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX106	28616/2	Apr. 28,15	1 Year
7.	Horn Antenna	ETS	3116	00060088	Nov.08, 14	1 Year

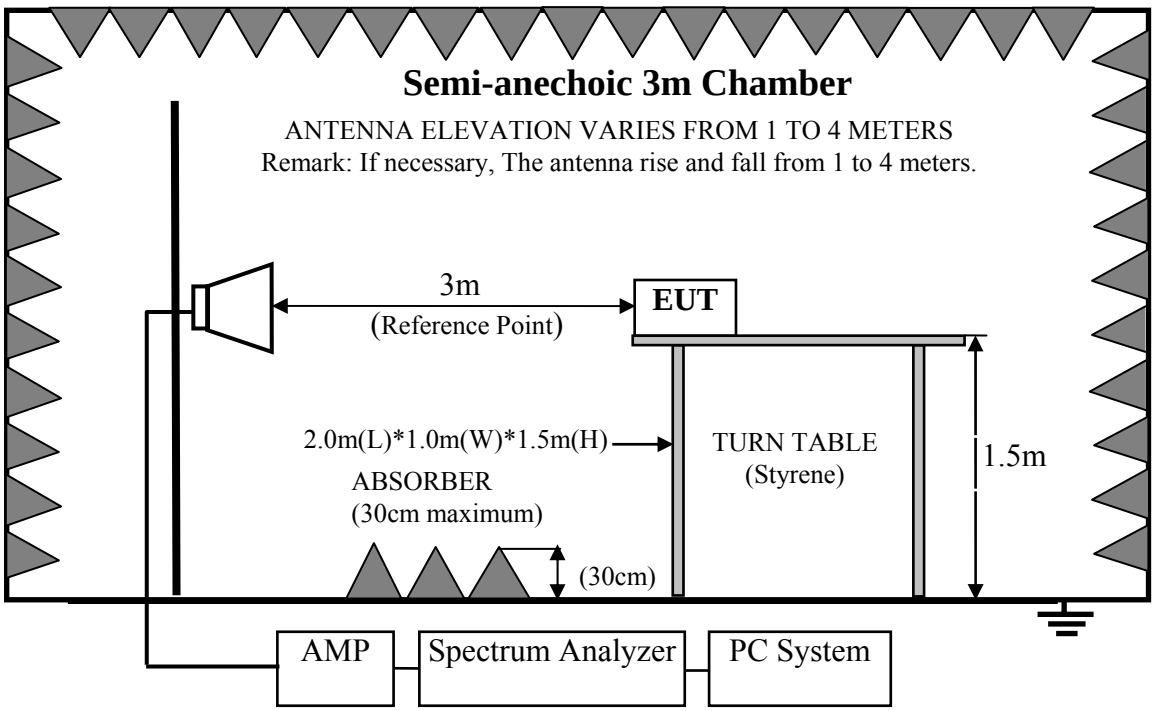
4.2.Block Diagram of Test Setup

EUT is Horizontal:

For frequency range 30MHz-1000MHz

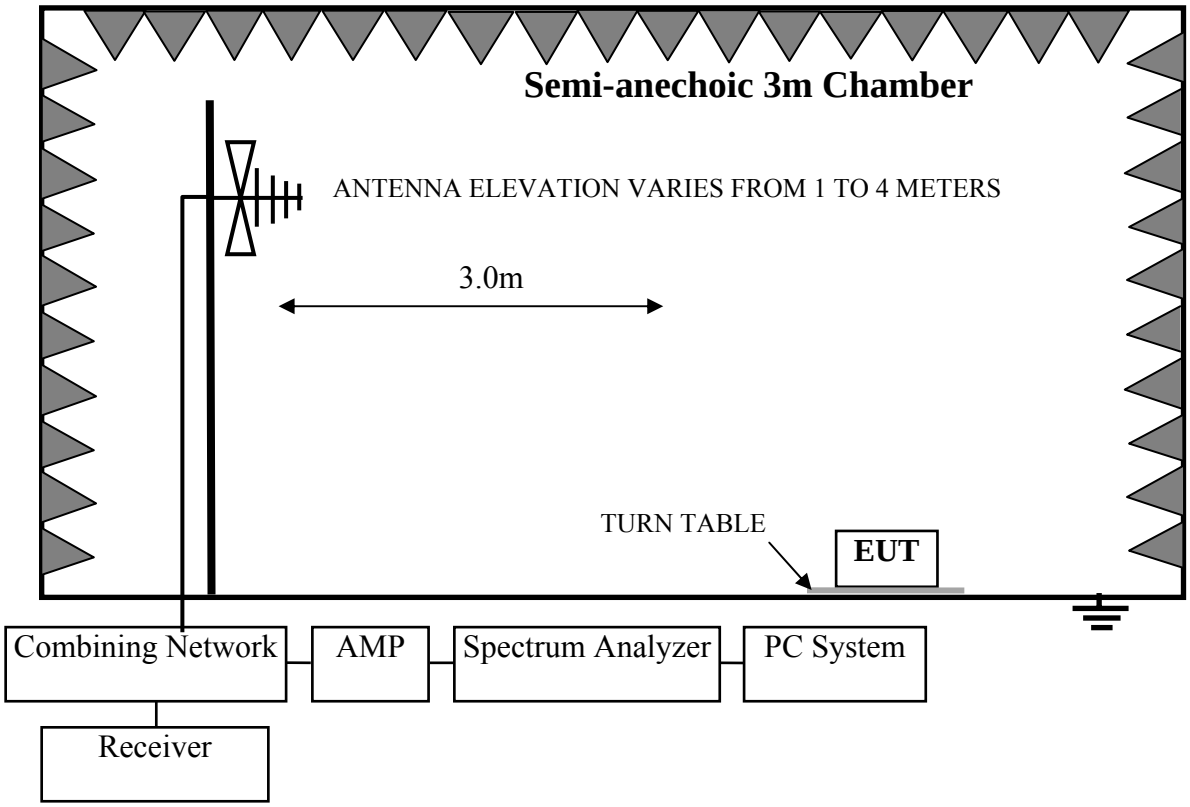


For frequency range 1GHz-25GHz

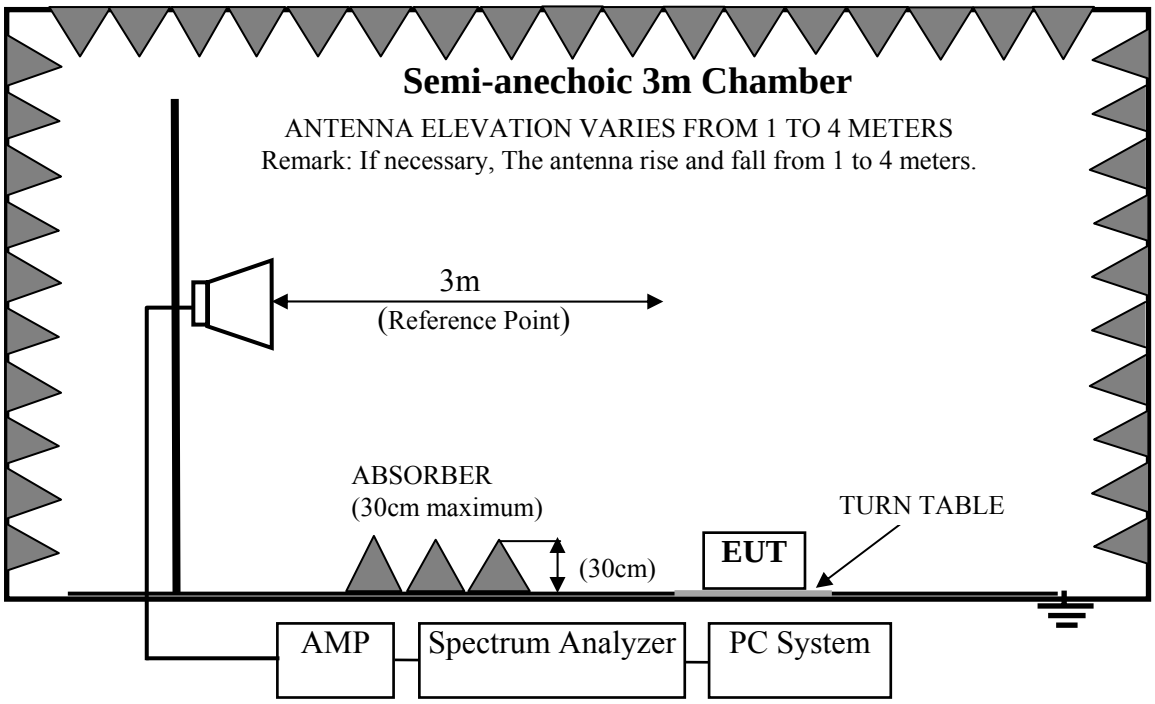


EUT is Vertical:

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3. Radiated Emission Limit Standard:

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000MHz	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

(4) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. Home Audio System (EUT)

Model Number : GTK-XB7
Serial Number : N/A

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turn on the power of all equipments.

4.5.3. Let EUT work in BT 3.0 Tx mode.

4.6. Test Procedure

When the EUT is Horizontal, it and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground . When the EUT is Vertical, it and its simulators are placed on a turn table. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as the test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz

This device is pulse Modulated, a duty cycle factor was used to calculated average level based measured peak level.

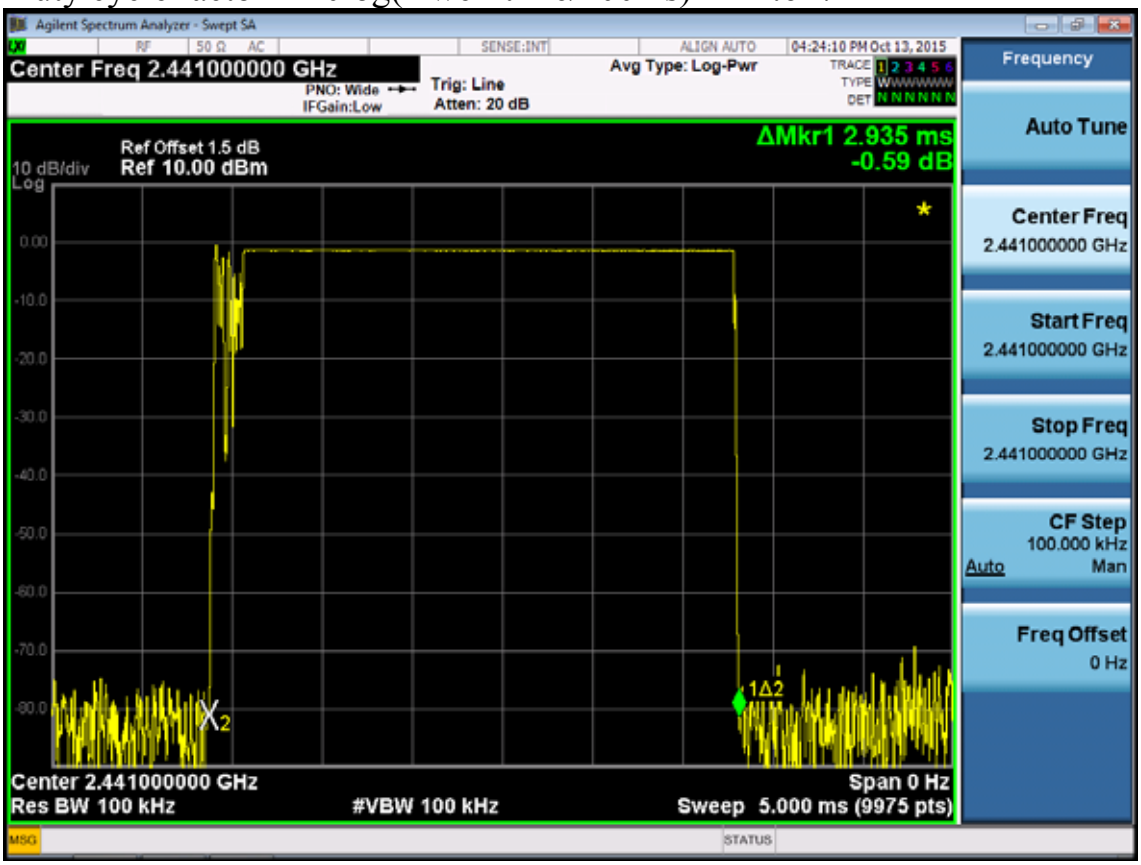
The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

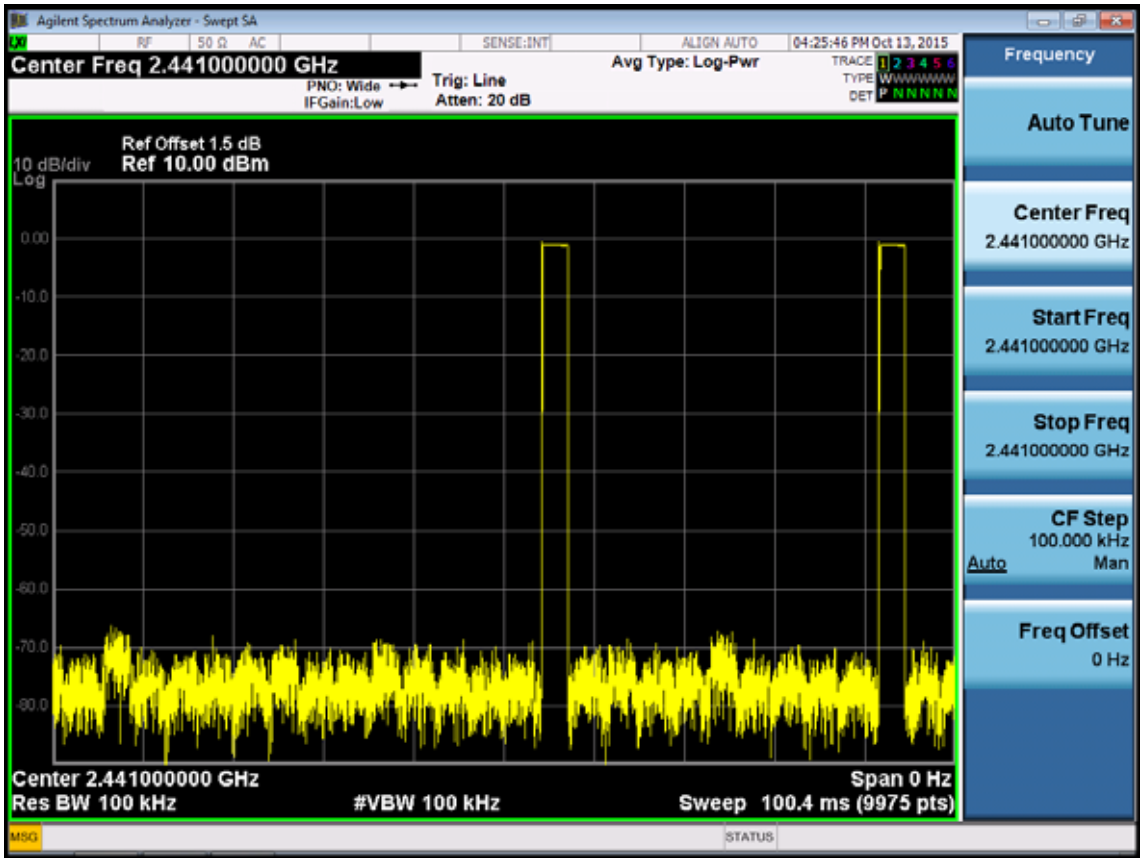
4.7. Radiated Emission Test Results

PASS.

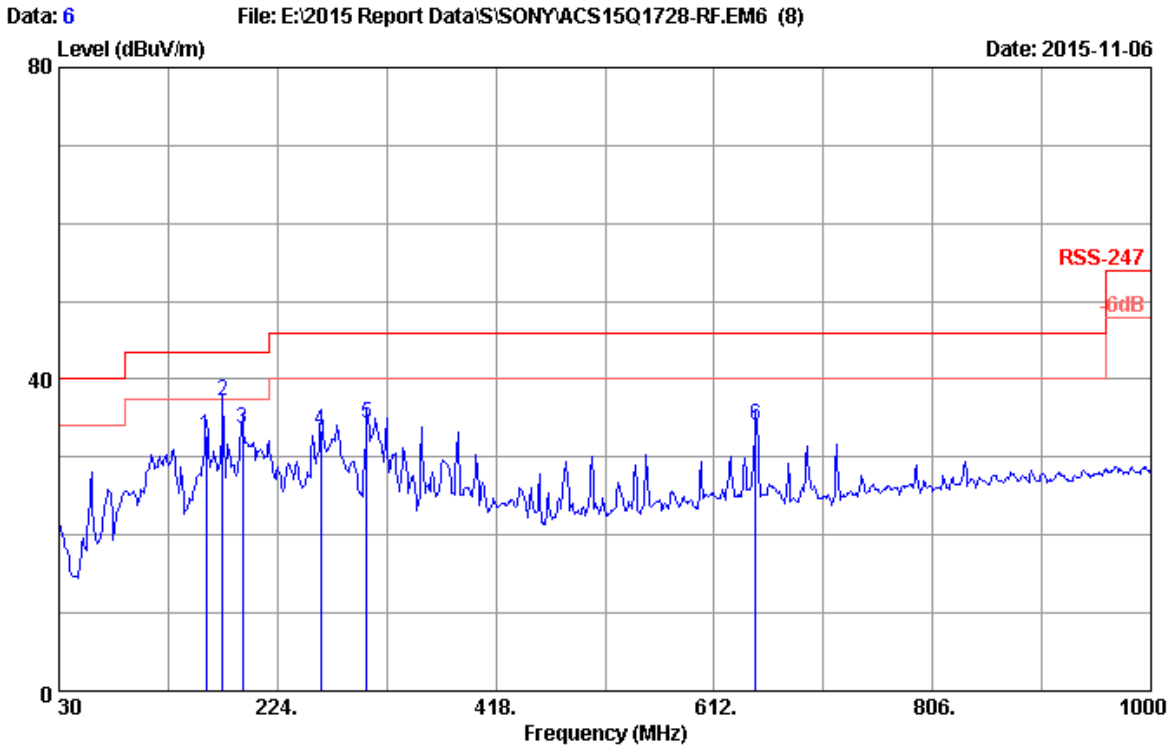
All the emissions from 30MHz to 25GHz were comply with the RSS-247 Limit.
Note: The duty cycle factor for calculate average level is -24.627 dB, and average limit is 20dB below peak limit, so if peak measured level comply with average limit, the average level was deemed to comply with average limit.

Duty cycle factor = 20log(Dwell time/100ms)= -24.627





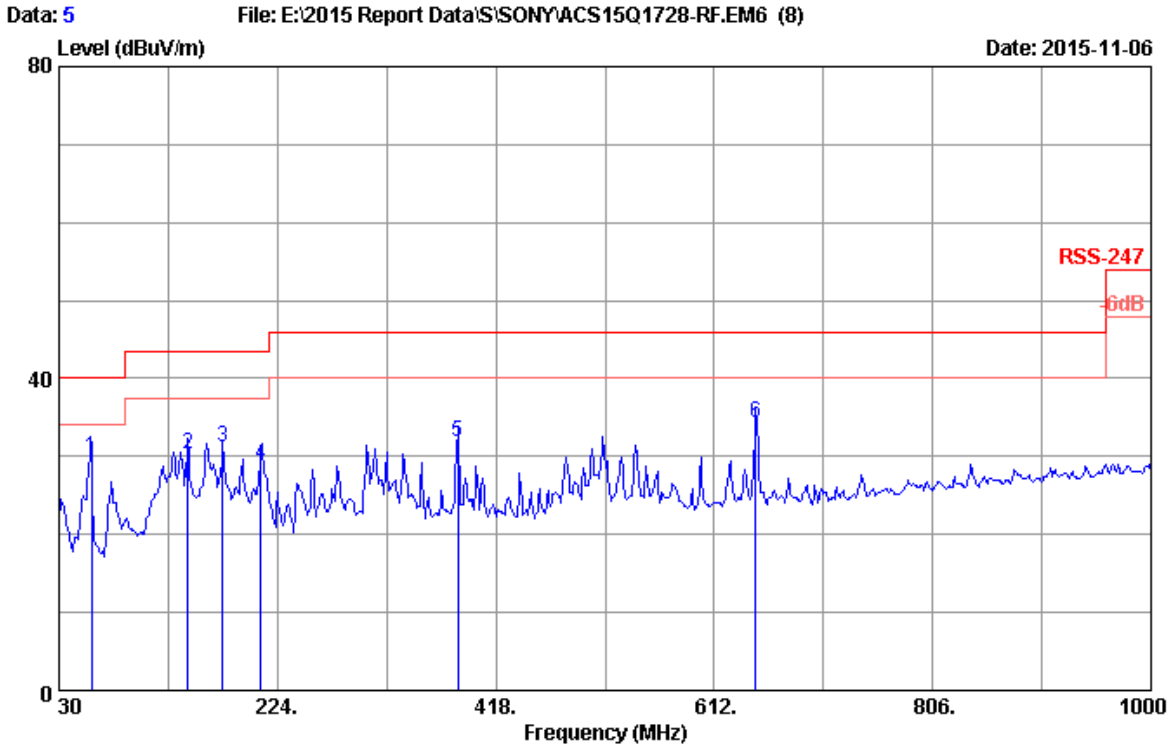
Frequency: 30MHz~1GHz




```
Site no.      : 3m Chamber                    Data no.   : 6
Dis. / Ant.   : 3m   2015 CBL6112D 35375      Ant. pol.  : HORIZONTAL
Limit         : RSS-247
Env. / Ins.   : 24*C/56%                      Engineer   : Donjon_Huang
EUT           : Home Audio System     M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : Tx Mode
                Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	160.950	11.15	1.35	20.33	32.83	43.50	10.67	QP
2	175.500	10.12	1.40	25.62	37.14	43.50	6.36	QP
3	192.960	10.25	1.49	21.82	33.56	43.50	9.94	QP
4	262.800	14.36	1.76	17.25	33.37	46.00	12.63	QP
5	303.540	14.31	1.90	18.11	34.32	46.00	11.68	QP
6	648.860	19.90	2.89	11.34	34.13	46.00	11.87	QP

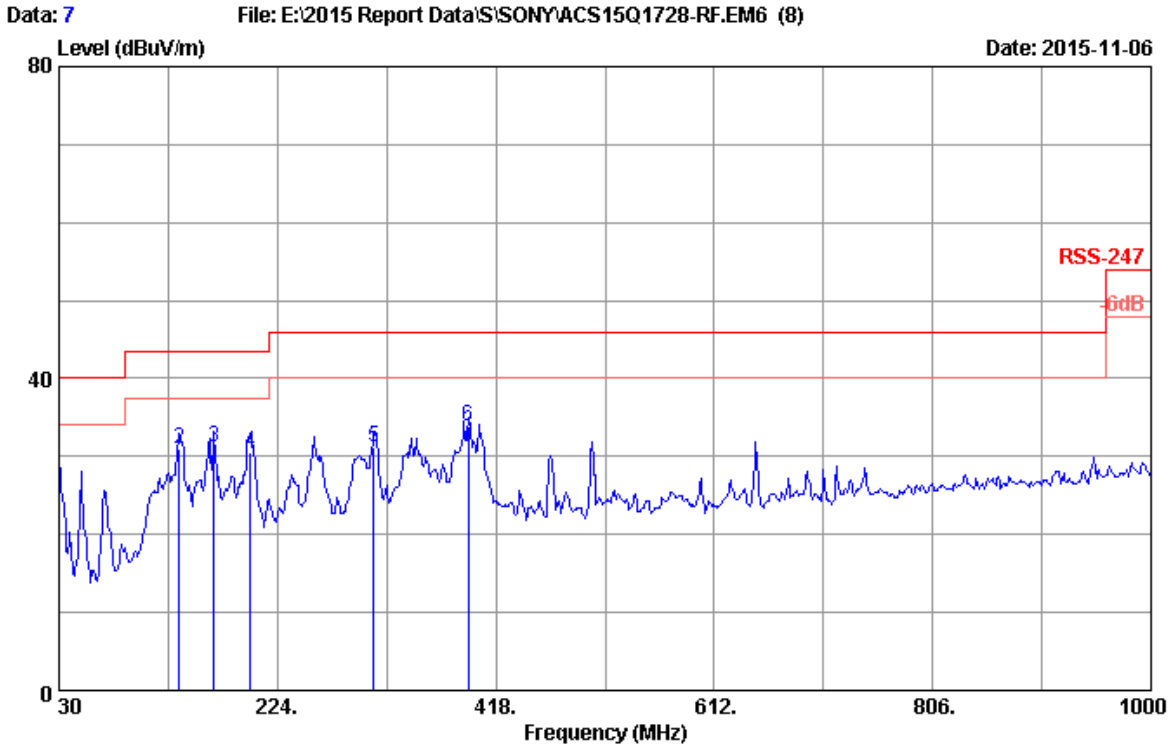
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber                    Data no.   : 5
Dis. / Ant.   : 3m   2015 CBL6112D 35375      Ant. pol.  : VERTICAL
Limit         : RSS-247
Env. / Ins.   : 24*C/56%                      Engineer   : Donjon_Huang
EUT           : Home Audio System     M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : Tx Mode
                Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	59.100	6.94	0.85	22.05	29.84	40.00	10.16	QP
2	144.460	11.78	1.29	17.20	30.27	43.50	13.23	QP
3	175.500	10.12	1.40	19.57	31.09	43.50	12.41	QP
4	209.450	10.83	1.54	16.51	28.88	43.50	14.62	QP
5	384.050	16.32	2.16	13.30	31.78	46.00	14.22	QP
6	648.860	19.90	2.89	11.44	34.23	46.00	11.77	QP

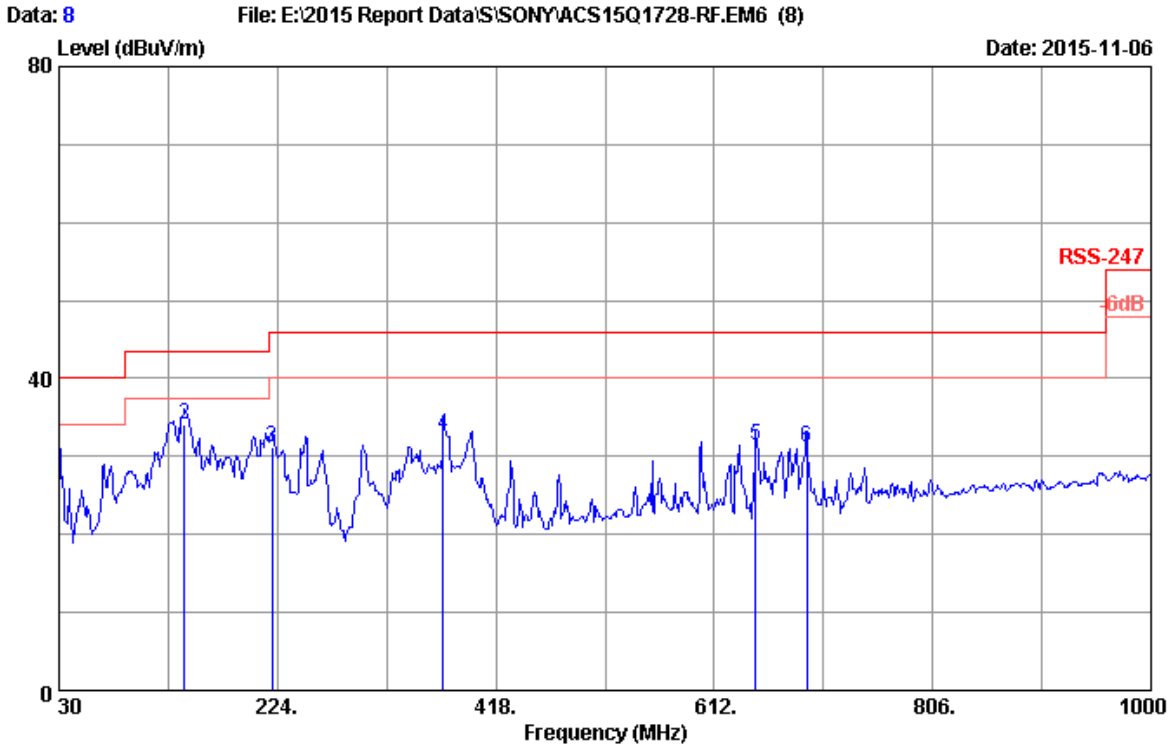
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 7
Dis. / Ant. : 3m 2015 CBL6112D 35375 Ant. pol. : HORIZONTAL
Limit : RSS-247
Env. / Ins. : 24*C/56% Engineer : Donjon_Huang
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : Tx Mode
Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.30	0.51	6.88	27.69	40.00	12.31	QP
2	136.700	12.43	1.27	17.29	30.99	43.50	12.51	QP
3	167.740	10.53	1.38	19.19	31.10	43.50	12.40	QP
4	199.750	10.59	1.51	18.40	30.50	43.50	13.00	QP
5	309.360	14.48	1.92	14.90	31.30	46.00	14.70	QP
6	393.750	16.67	2.18	15.08	33.93	46.00	12.07	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

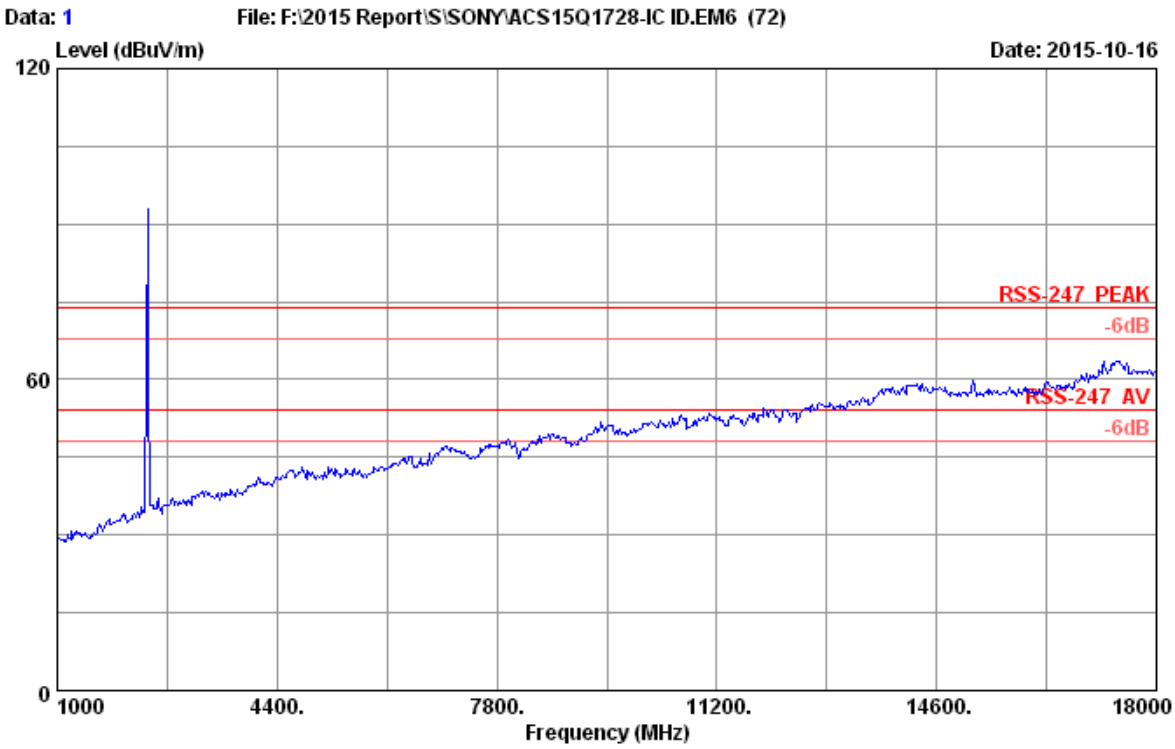


Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 2015 CBL6112D 35375 Ant. pol. : VERTICAL
Limit : RSS-247
Env. / Ins. : 24*C/56% Engineer : Donjon_Huang
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : Tx Mode
Vertical

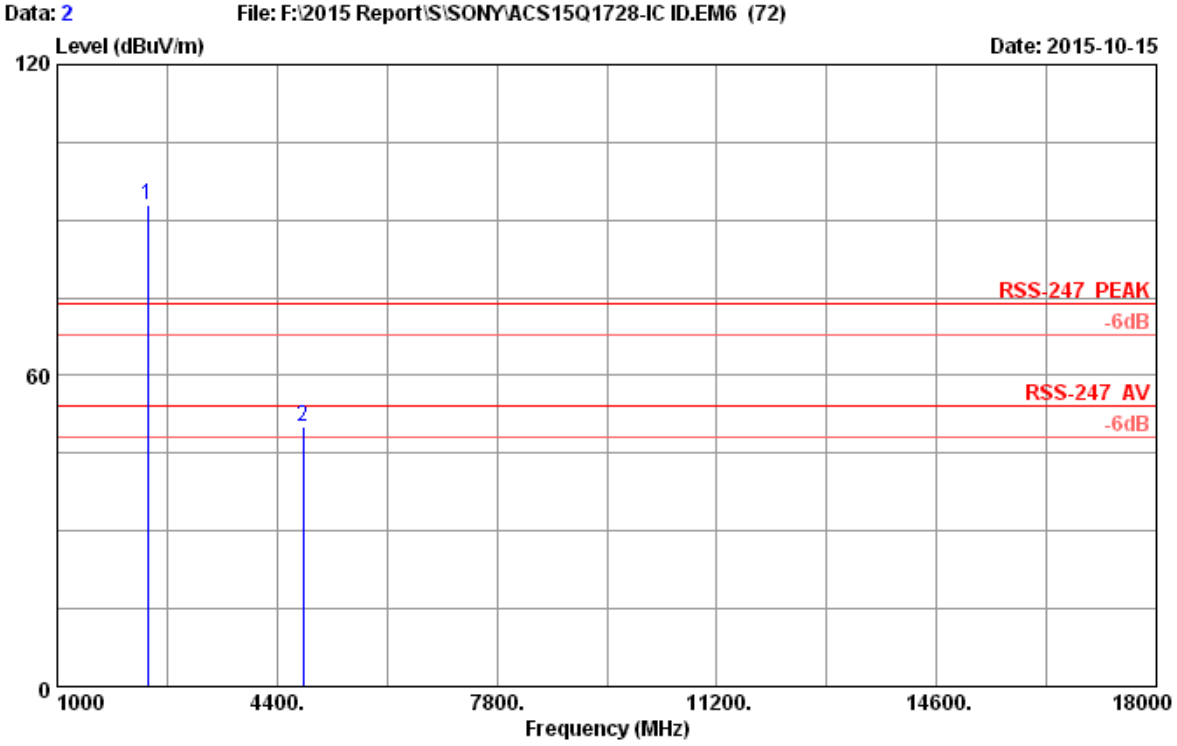
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.30	0.51	8.86	29.67	40.00	10.33	QP
2	141.550	12.02	1.27	20.90	34.19	43.50	9.31	QP
3	219.150	10.96	1.57	18.65	31.18	46.00	14.82	QP
4	371.440	15.85	2.12	14.84	32.81	46.00	13.19	QP
5	648.860	19.90	2.89	8.66	31.45	46.00	14.55	QP
6	694.450	20.10	3.00	8.05	31.15	46.00	14.85	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



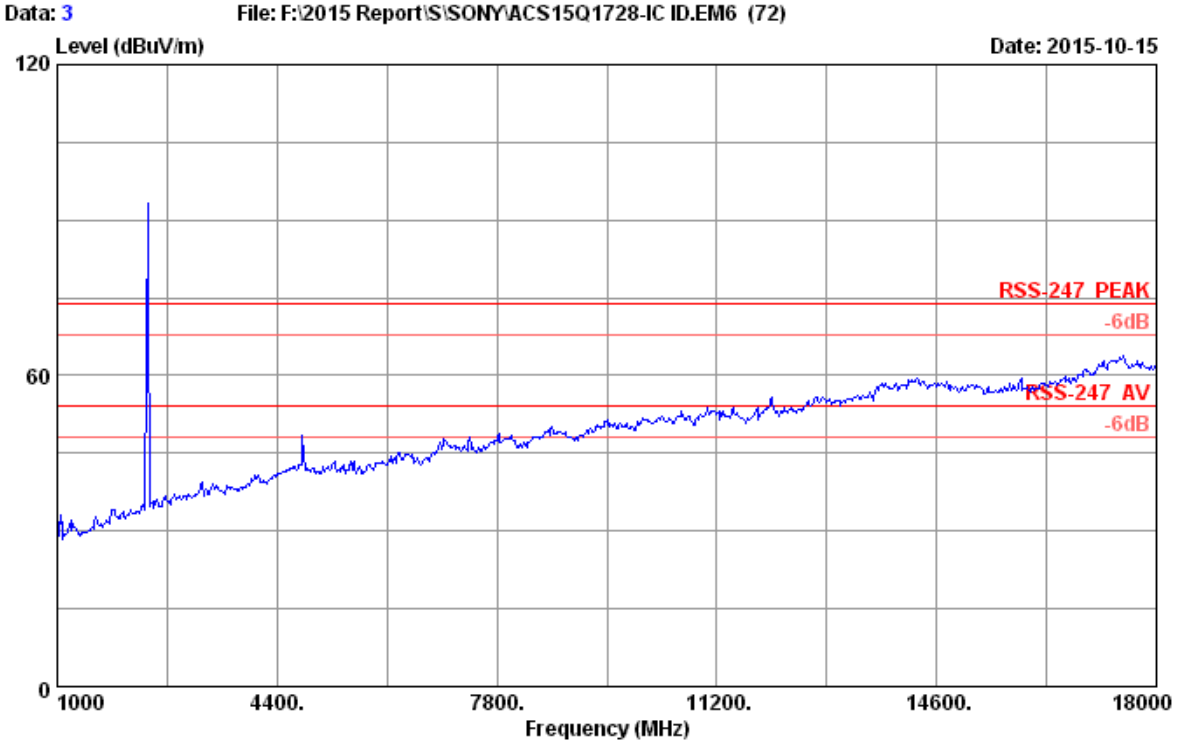

```
Site no.      : 3m Chamber                        Data no.  : 1
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Horizontal
```



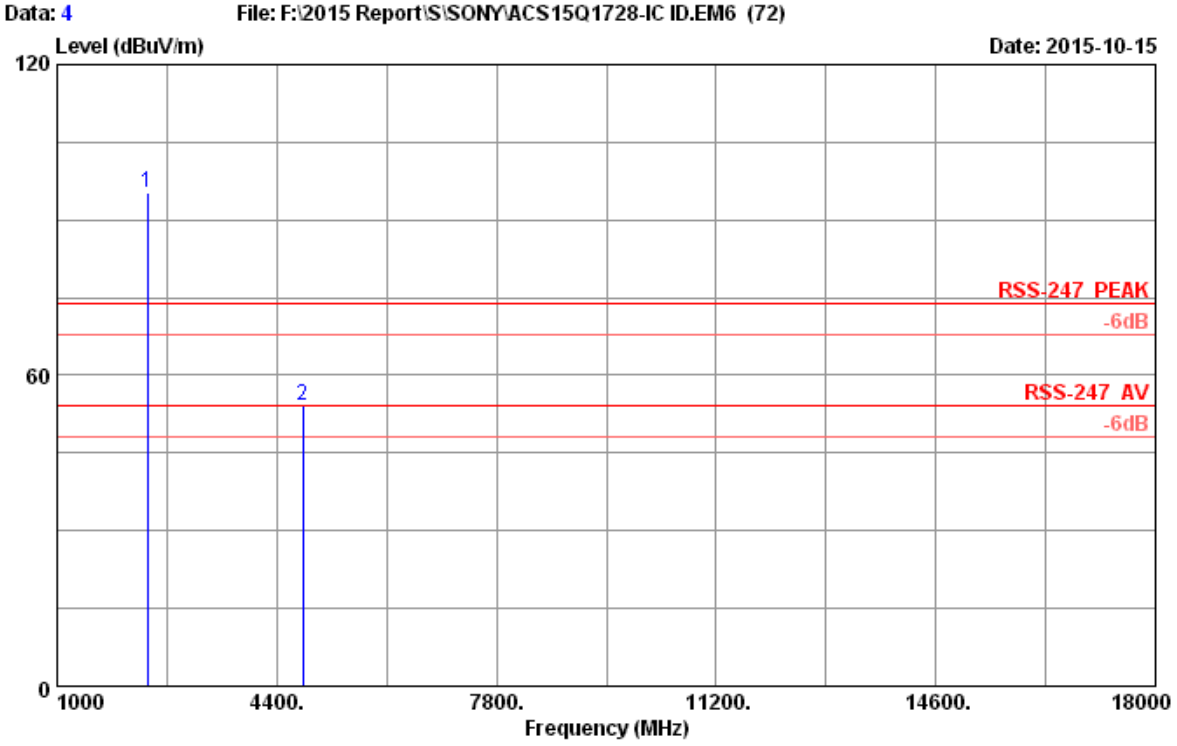
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	94.30	93.00	74.00	-19.00	Peak
2	4804.000	33.69	9.46	35.54	42.52	50.13	74.00	23.87	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber                        Data no.  : 3
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Horizontal
```

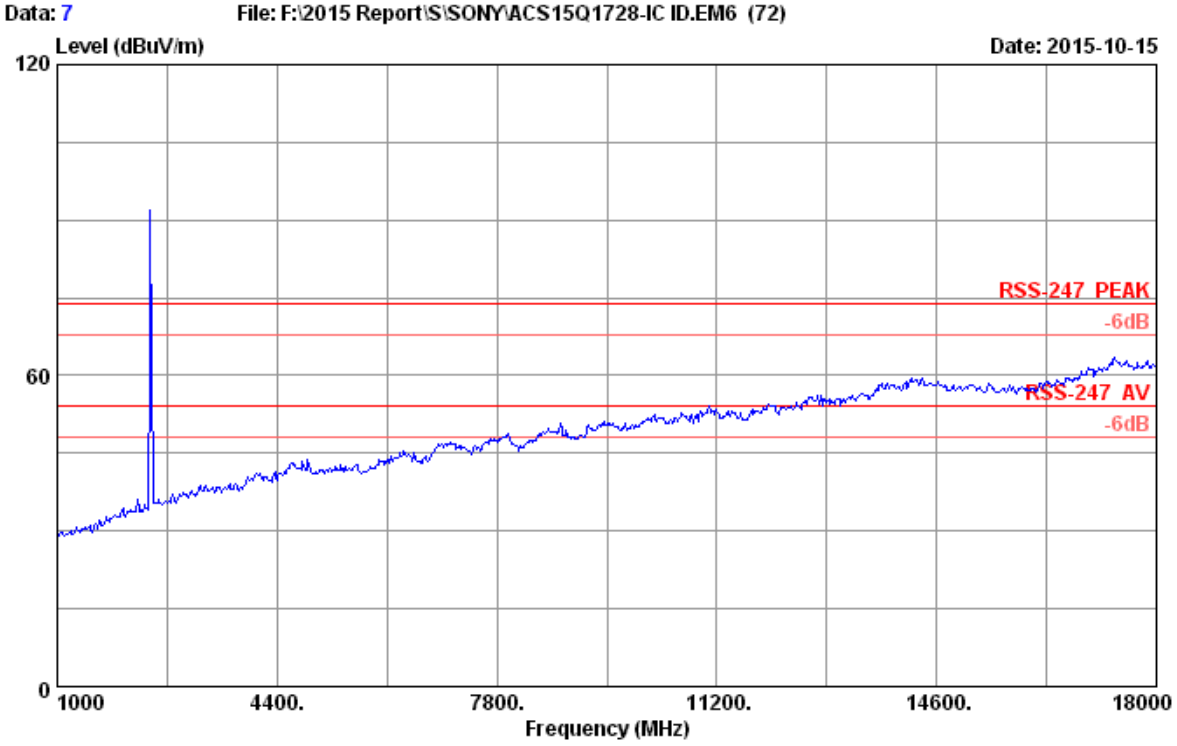



```
Site no.      : 3m Chamber                        Data no.  : 4
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Horizontal
```

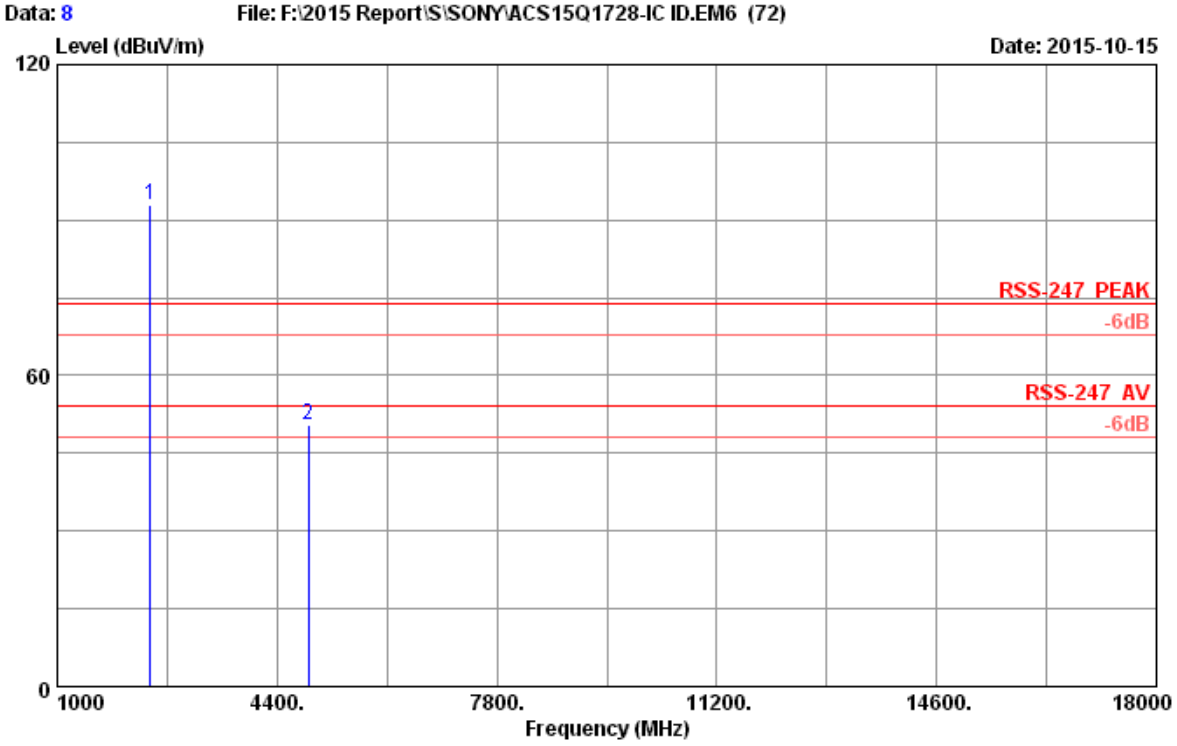
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	96.70	95.40	74.00	-21.40	Peak
2	4804.000	33.69	9.46	35.54	46.57	54.18	74.00	19.82	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency（MHz）	Peak level（dBuv/m）	Duty cycle factor (dB)	AV level (dBuv/m)	Limit(dBuv/m)	Conclusion
4804.000	54.18	-24.627	29.553	54	Pass



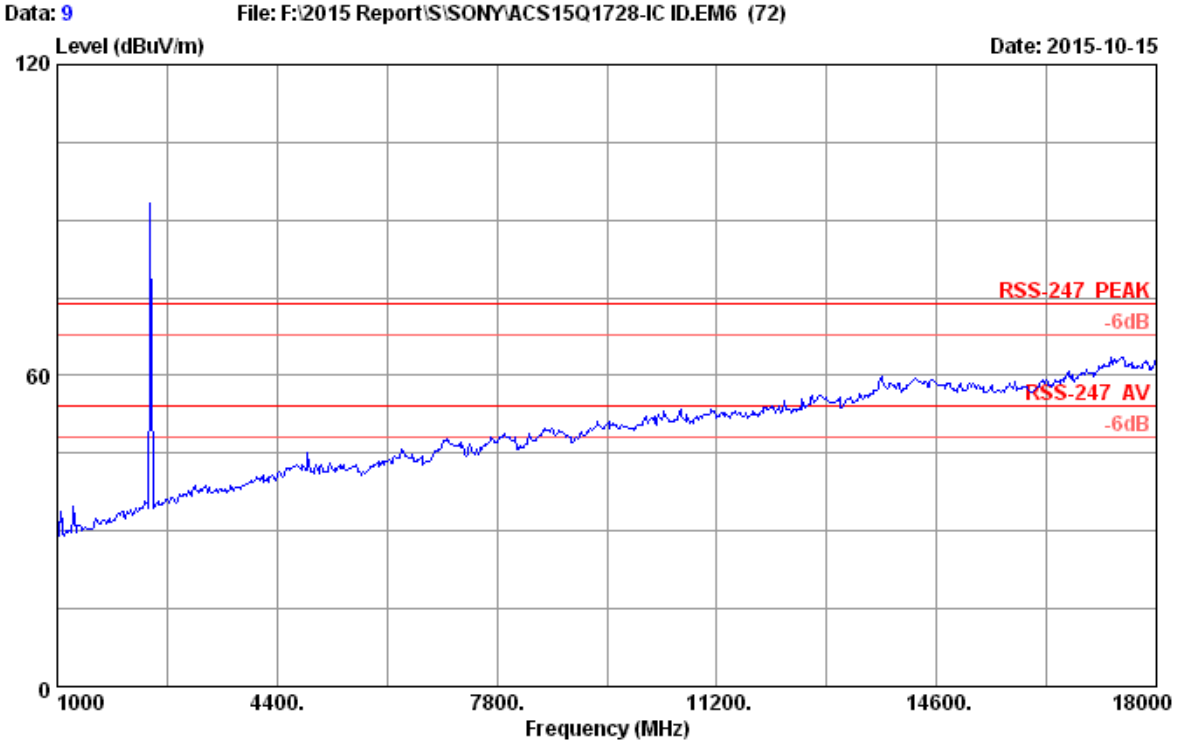

```
Site no.      : 3m Chamber                        Data no.  : 7
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2441MHz  Tx Mode
              : Horizontal
```



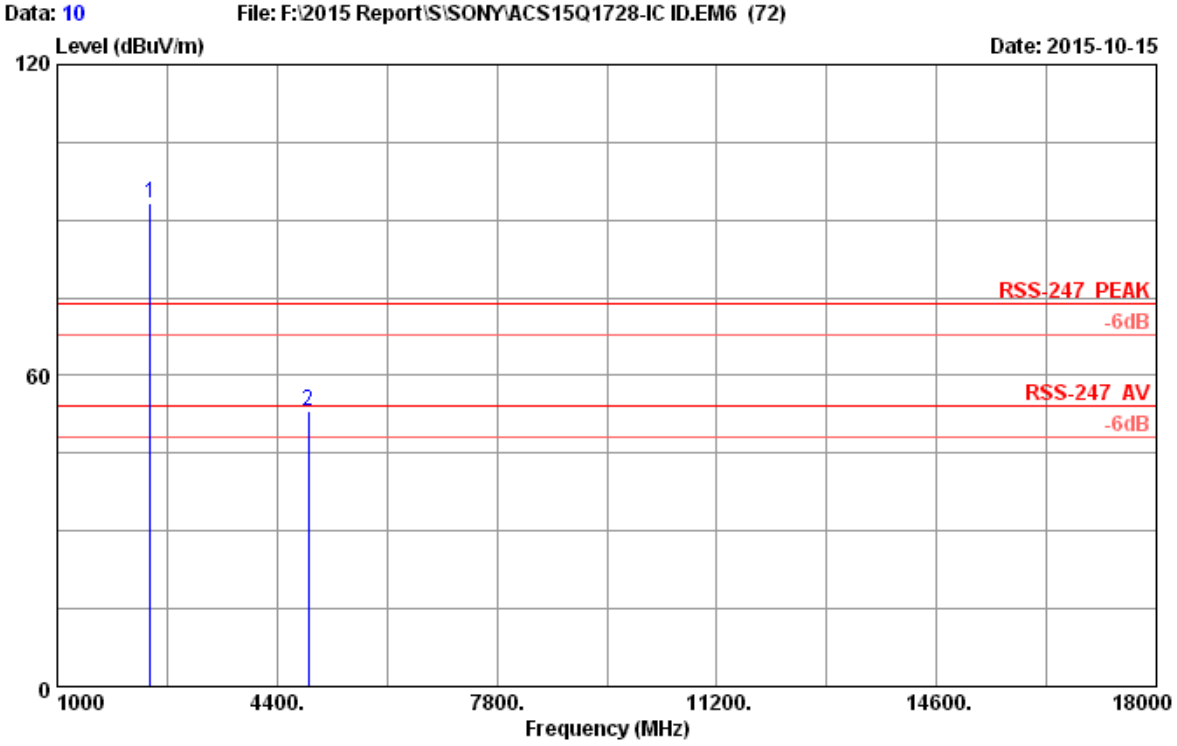
Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2441MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	94.04	92.91	74.00	-18.91	Peak
2	4882.000	33.81	9.49	35.51	42.67	50.46	74.00	23.54	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



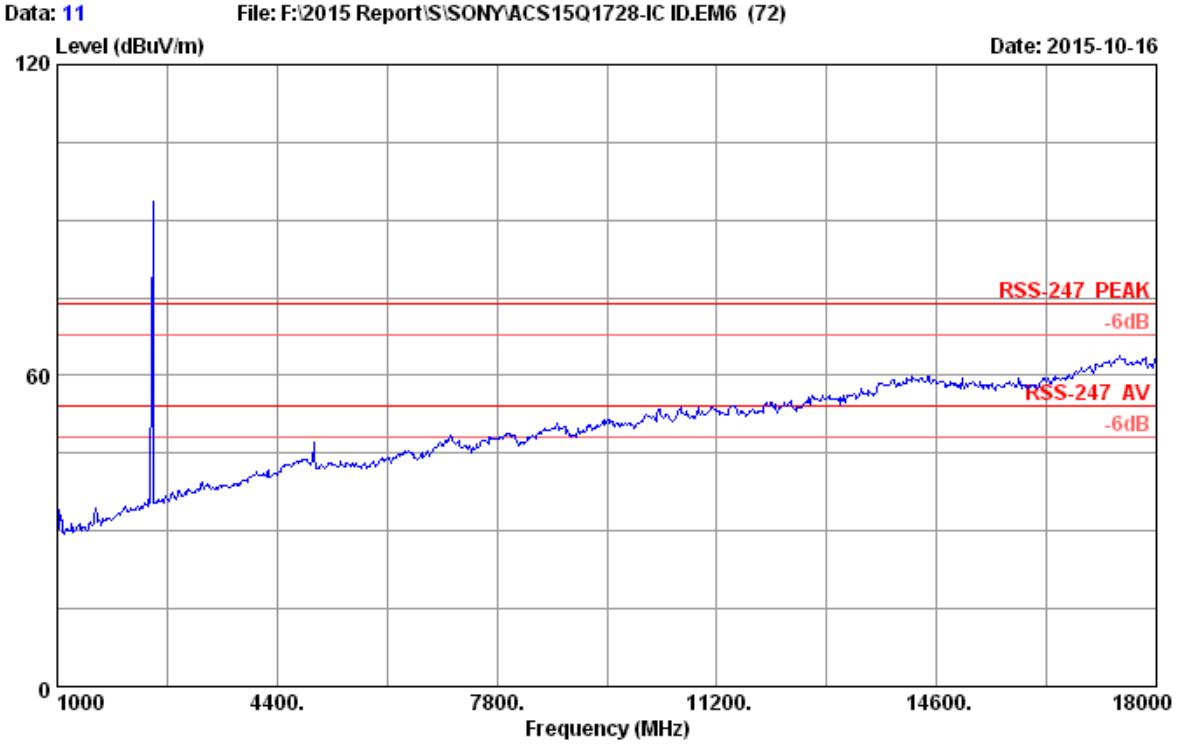

```
Site no.      : 3m Chamber                        Data no.  : 9
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2441MHz  Tx Mode
              : Horizontal
```



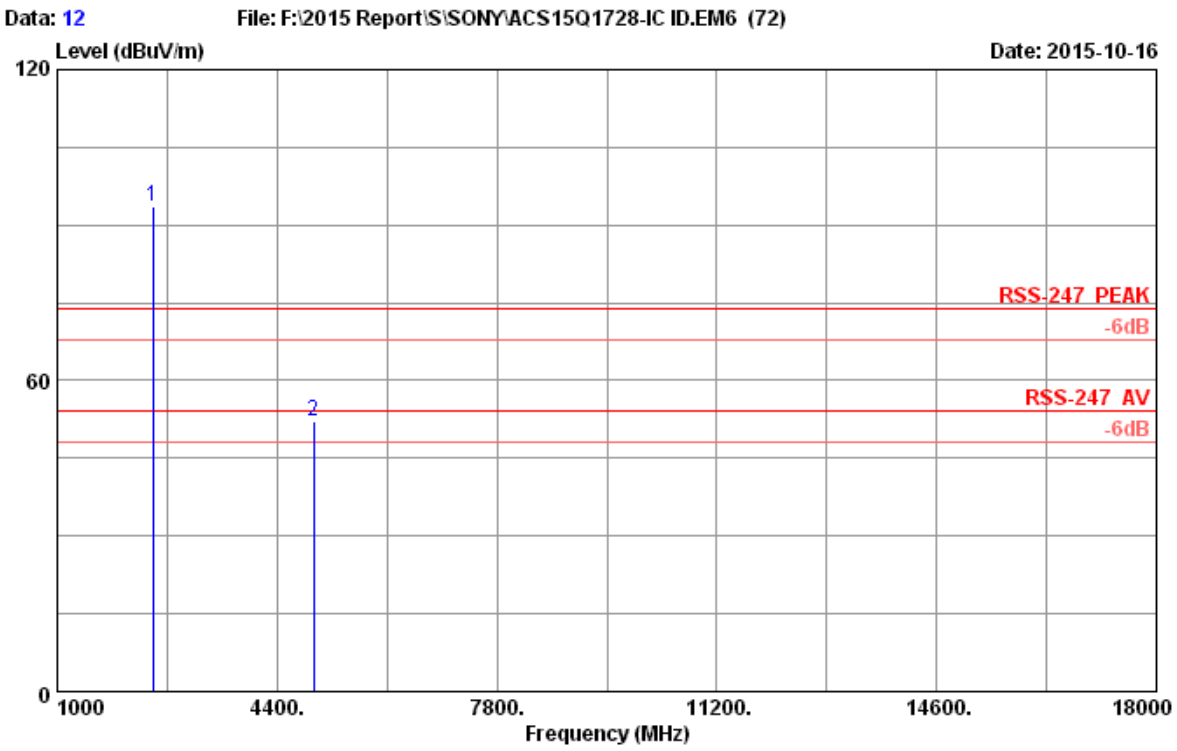

```
Site no.      : 3m Chamber                        Data no.  : 10
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2441MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	94.47	93.34	74.00	-19.34	Peak
2	4882.000	33.81	9.49	35.51	45.23	53.02	74.00	20.98	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



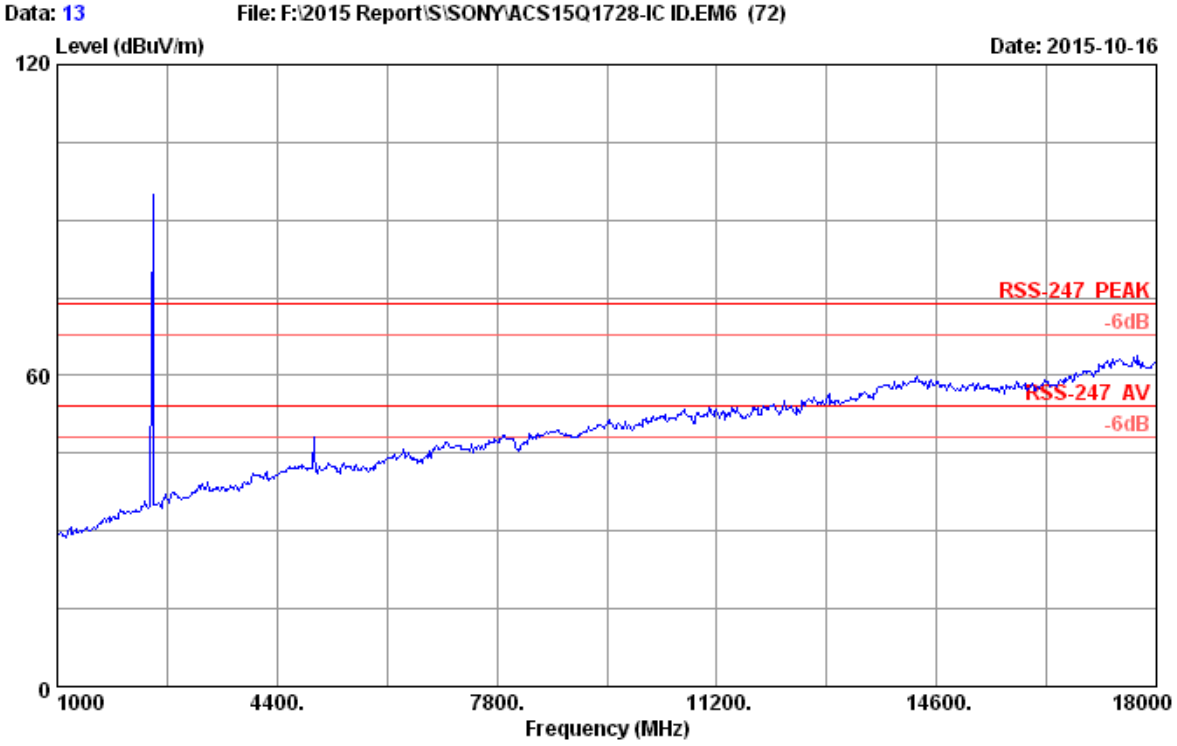

```
Site no.      : 3m Chamber                        Data no.  : 11
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Horizontal
```



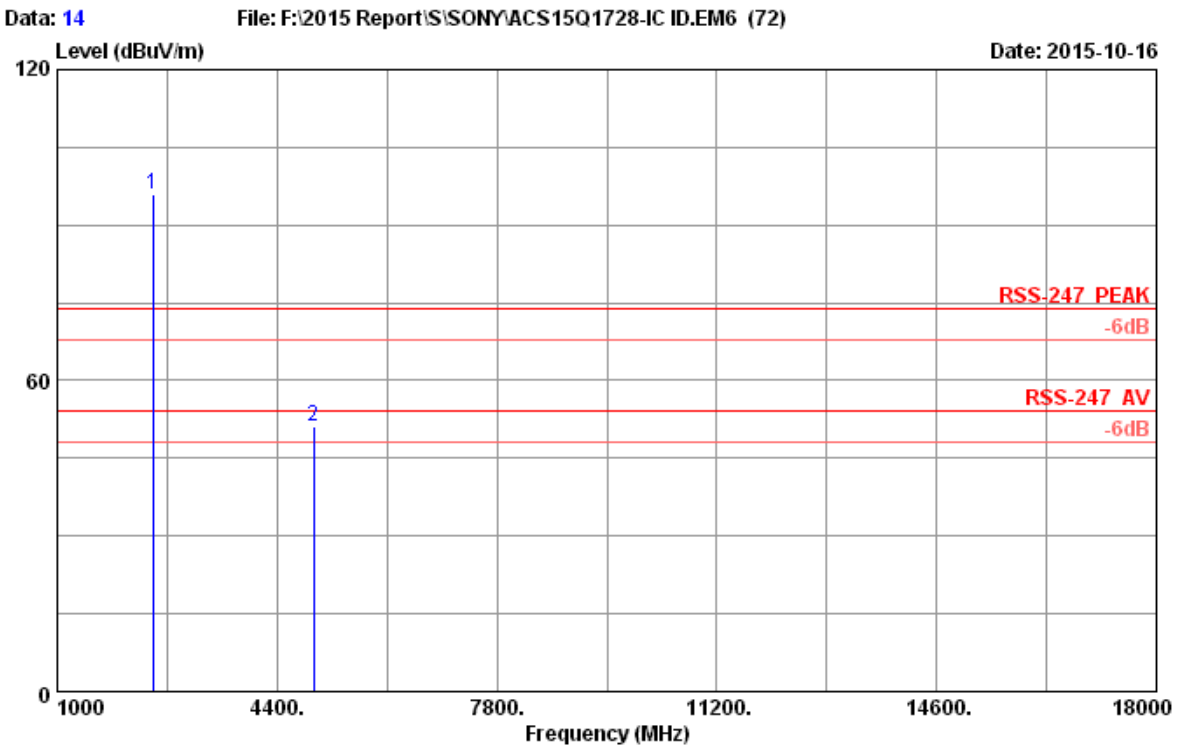

```
Site no.      : 3m Chamber                        Data no.  : 12
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	94.56	93.60	74.00	-19.60	Peak
2	4960.000	33.94	9.52	35.47	44.21	52.20	74.00	21.80	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



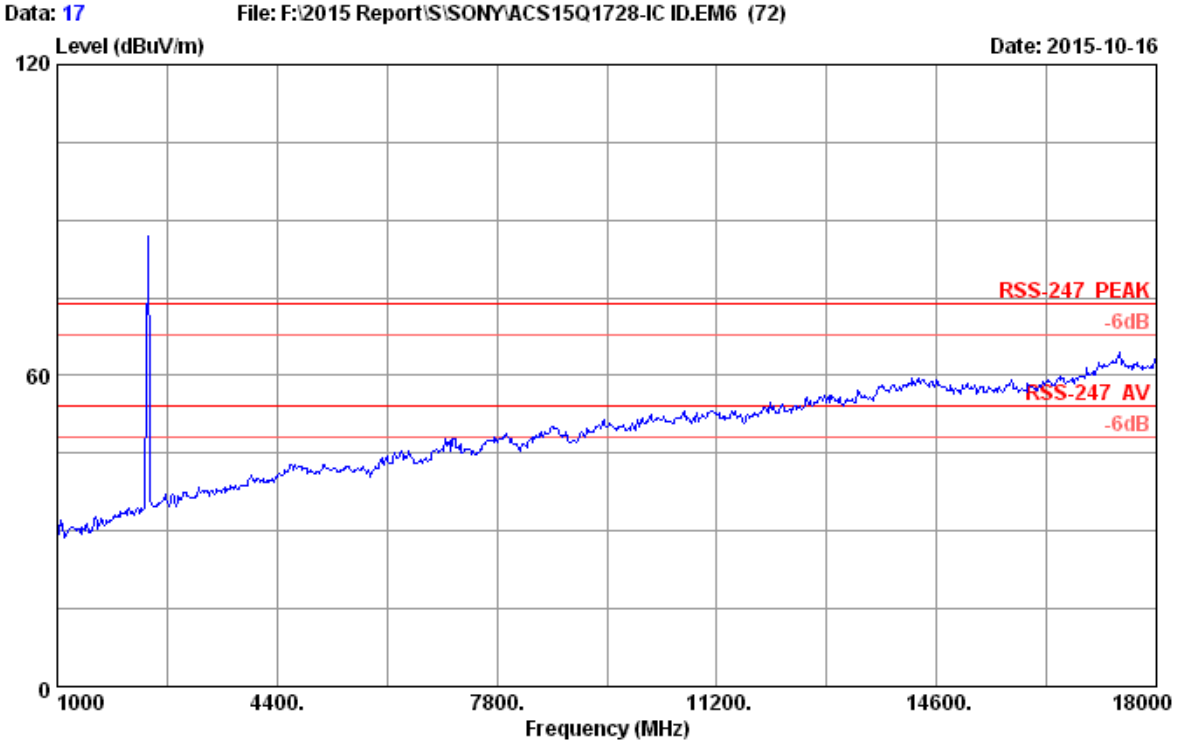

```
Site no.      : 3m Chamber                        Data no.  : 13
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Horizontal
```




```
Site no.      : 3m Chamber                        Data no.  : 14
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	96.75	95.79	74.00	-21.79	Peak
2	4960.000	33.94	9.52	35.47	43.04	51.03	74.00	22.97	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

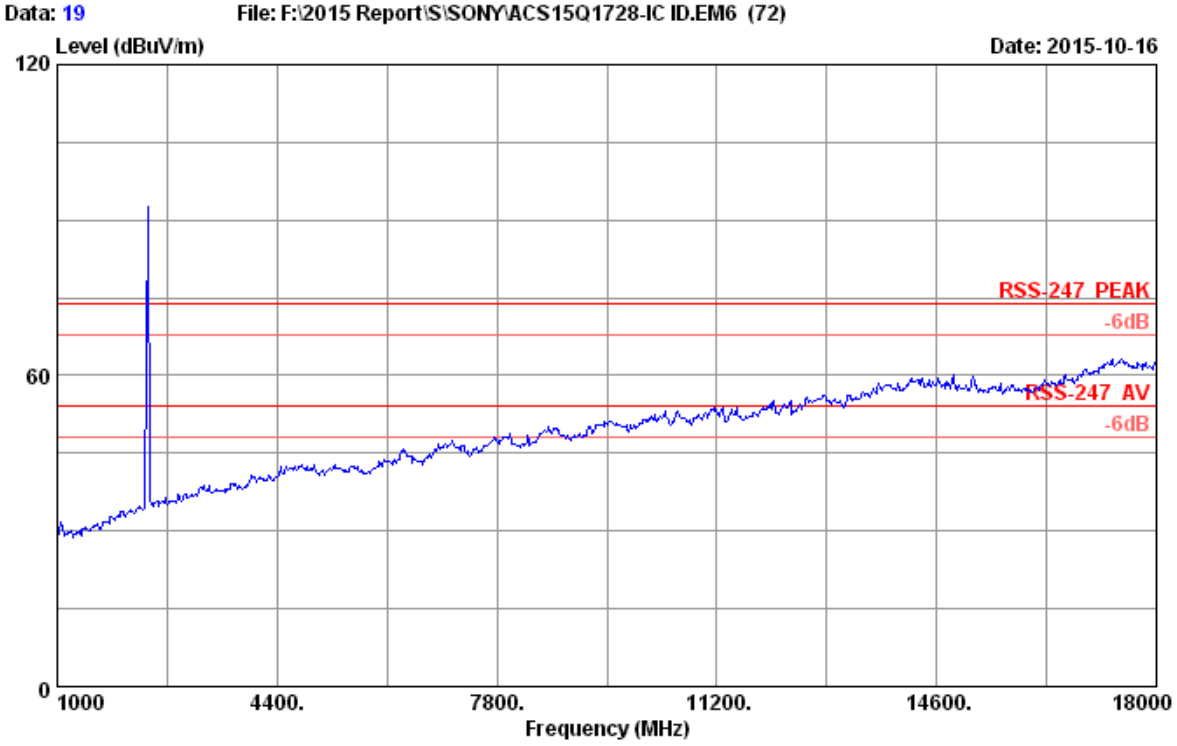



```
Site no.      : 3m Chamber                        Data no.  : 17
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2402MHz  Tx Mode
              : Horizontal
```

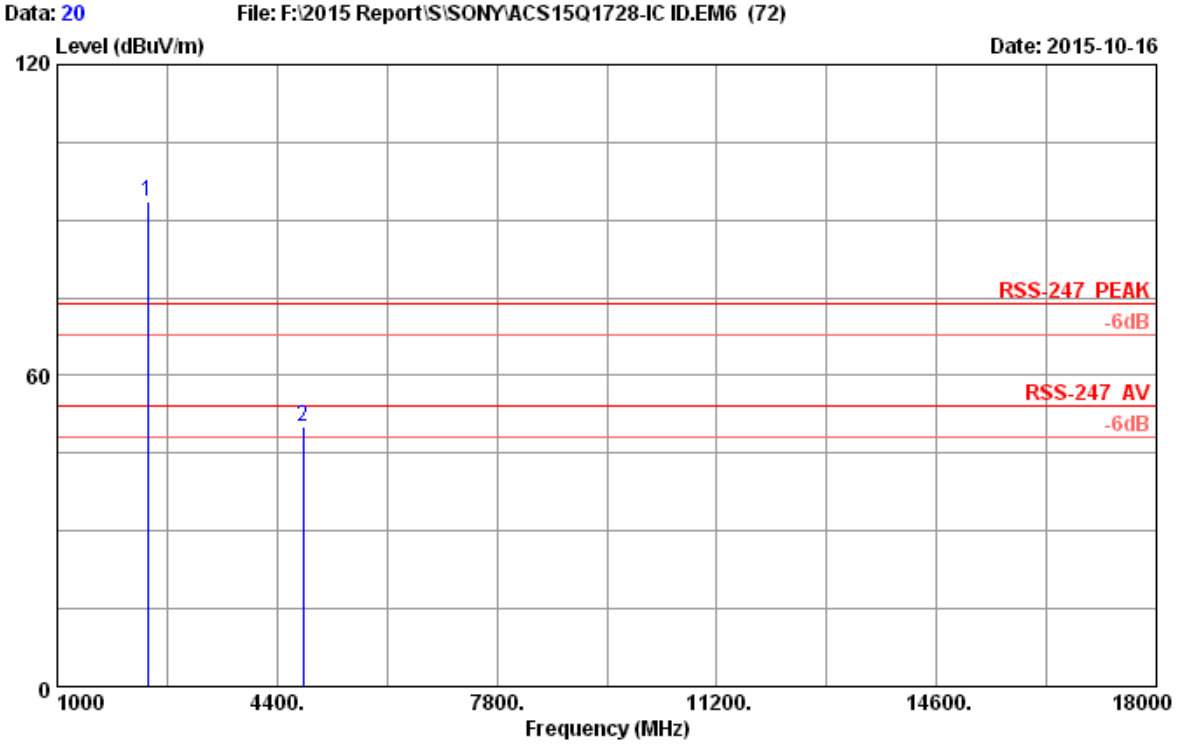
```
Site no.      : 3m Chamber                        Data no.  : 18
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2402MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	92.12	90.82	74.00	-16.82	Peak
2	4804.000	33.69	9.46	35.54	41.36	48.97	74.00	25.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



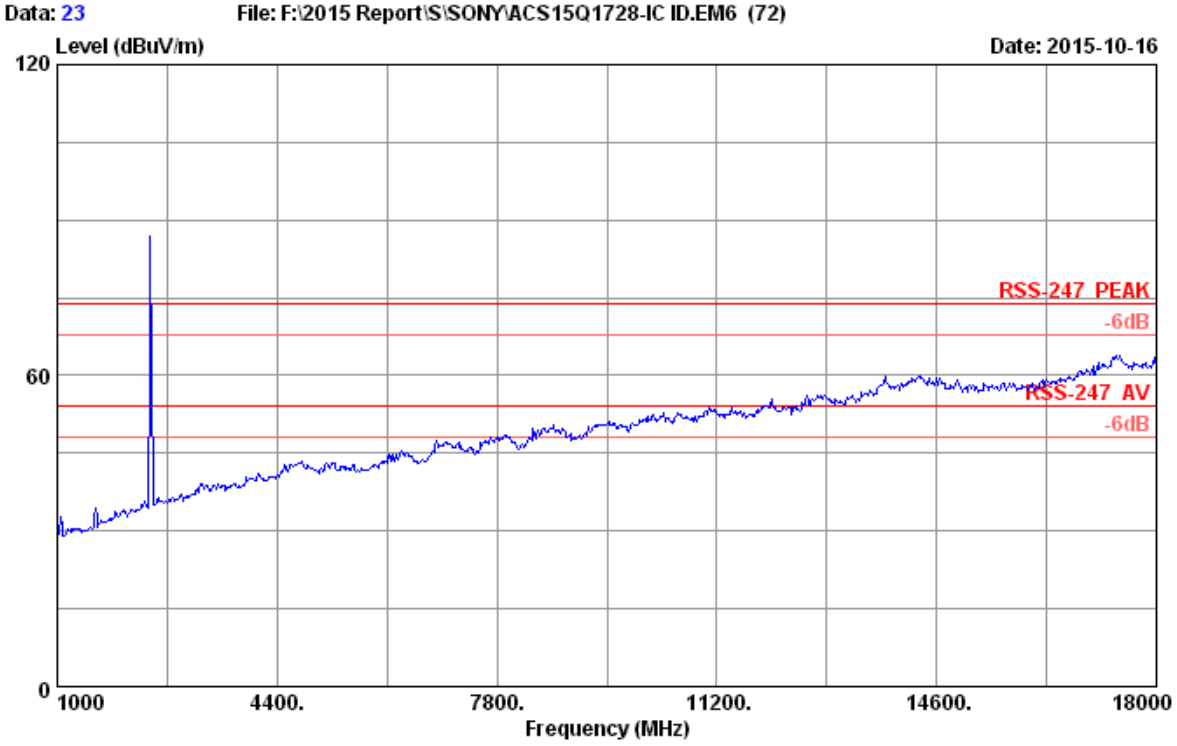

```
Site no.      : 3m Chamber                        Data no.  : 19
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2402MHz  Tx Mode
              : Horizontal
```



Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	94.98	93.68	74.00	-19.68	Peak
2	4804.000	33.69	9.46	35.54	42.57	50.18	74.00	23.82	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

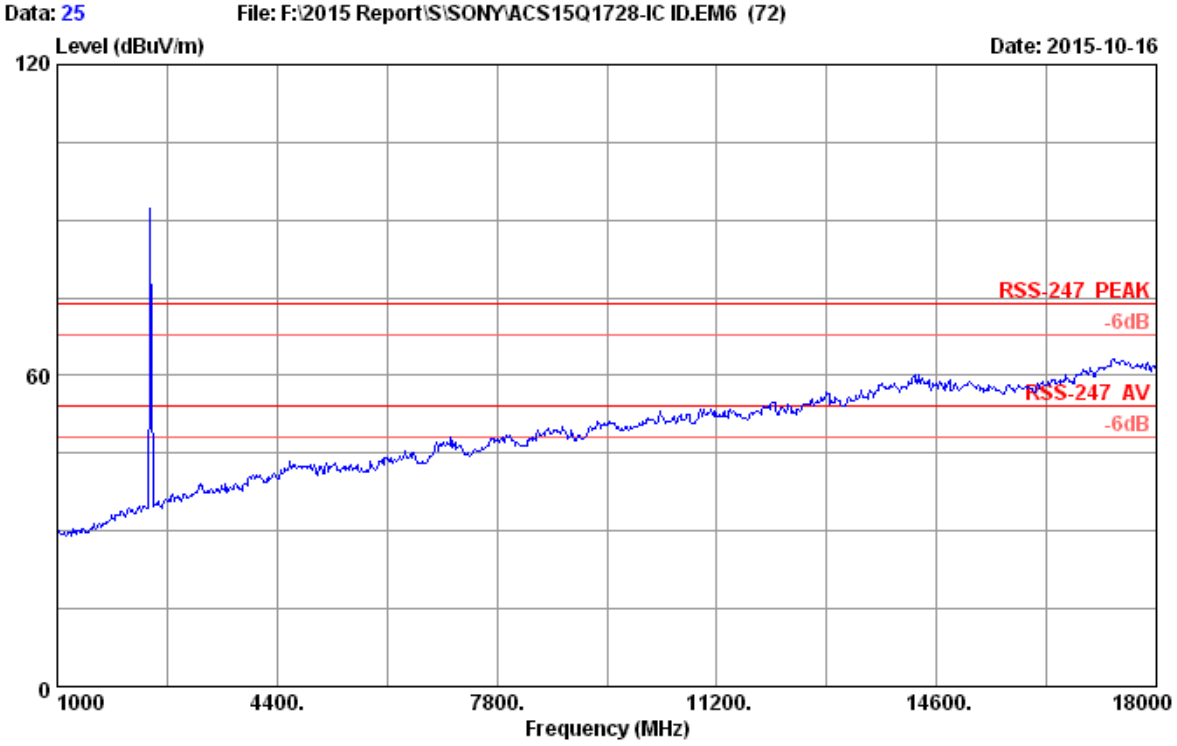



```
Site no.      : 3m Chamber                        Data no.  : 23
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Horizontal
```

Site no. : 3m Chamber Data no. : 24
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2441MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	89.89	88.76	74.00	-14.76	Peak
2	4882.000	33.81	9.49	35.51	41.04	48.83	74.00	25.17	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

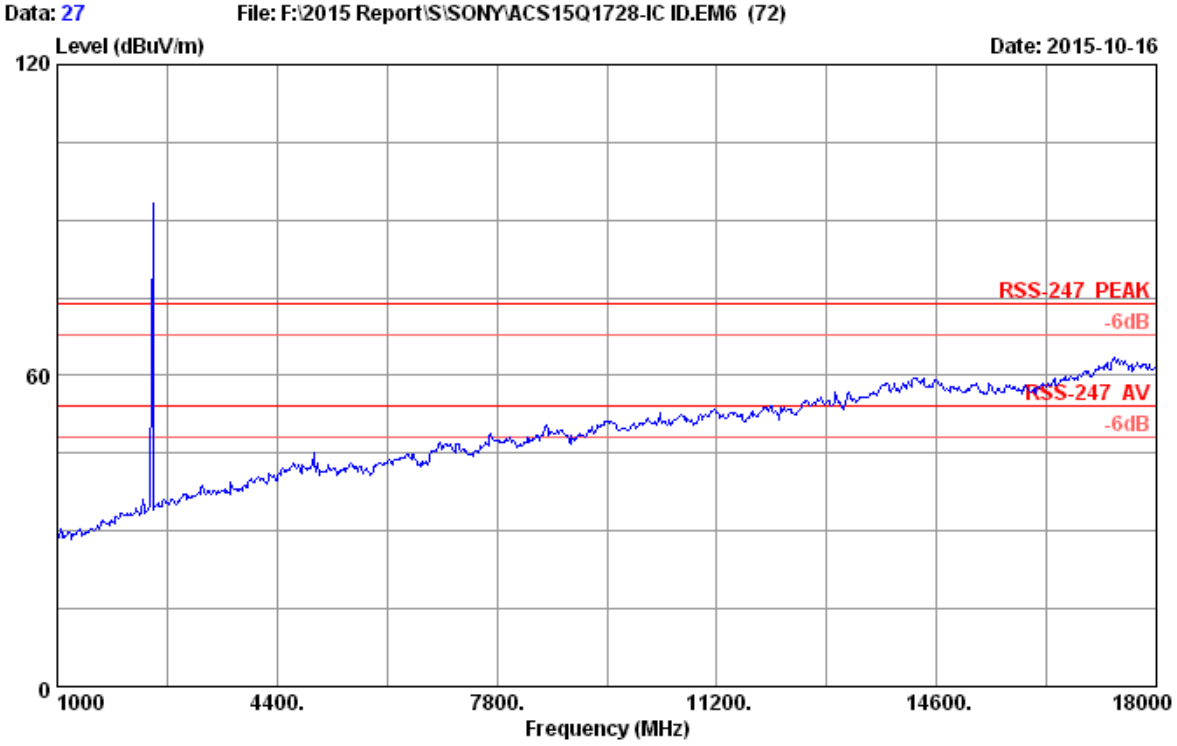



```
Site no.      : 3m Chamber                        Data no.  : 25
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Horizontal
```

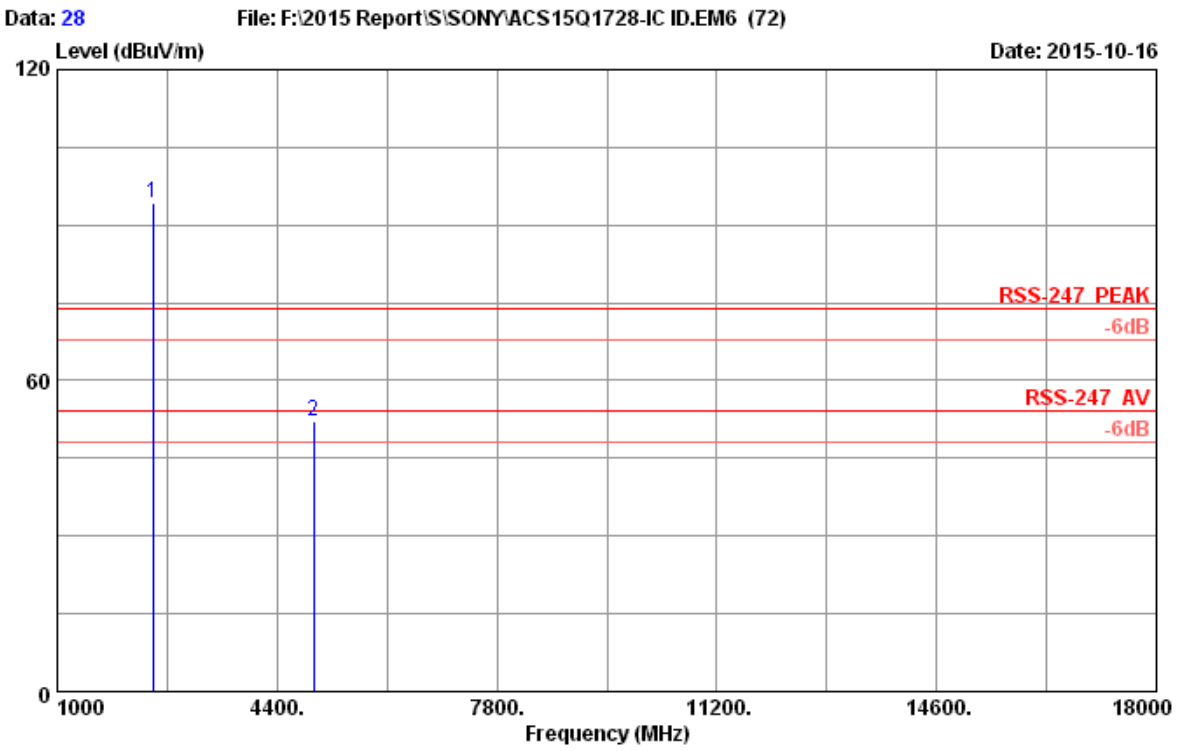
```
Site no.      : 3m Chamber                        Data no.  : 26
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	96.42	95.29	74.00	-21.29	Peak
2	4882.000	33.81	9.49	35.51	41.45	49.24	74.00	24.76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



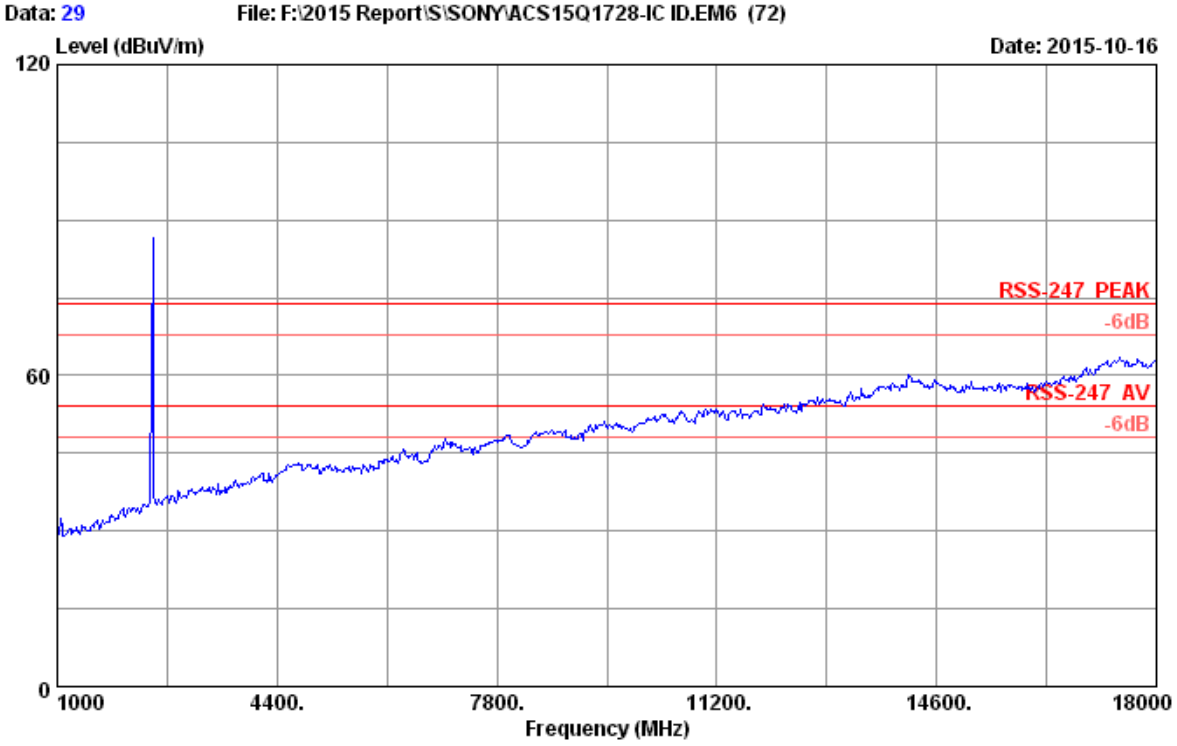

```
Site no.      : 3m Chamber                        Data no.  : 27
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Horizontal
```




```
Site no.      : 3m Chamber                        Data no.  : 28
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	95.20	94.24	74.00	-20.24	Peak
2	4960.000	33.94	9.52	35.47	44.21	52.20	74.00	21.80	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

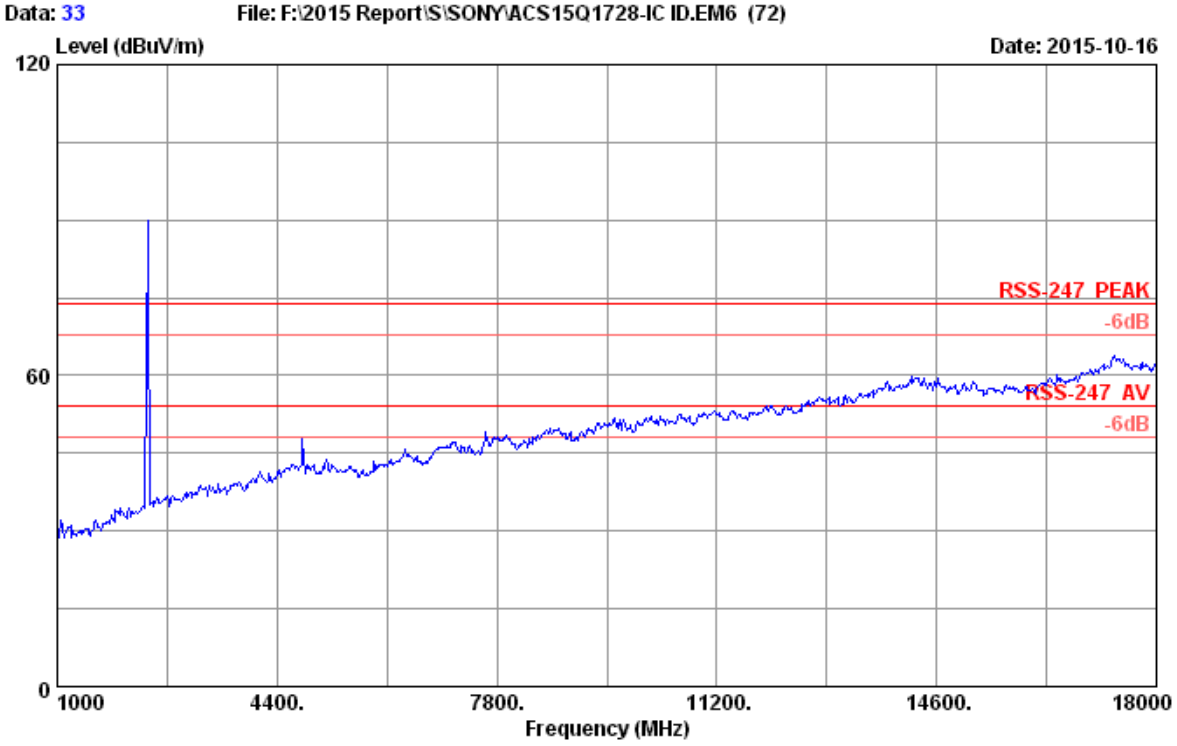



```
Site no.      : 3m Chamber                        Data no.  : 29
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Horizontal
```

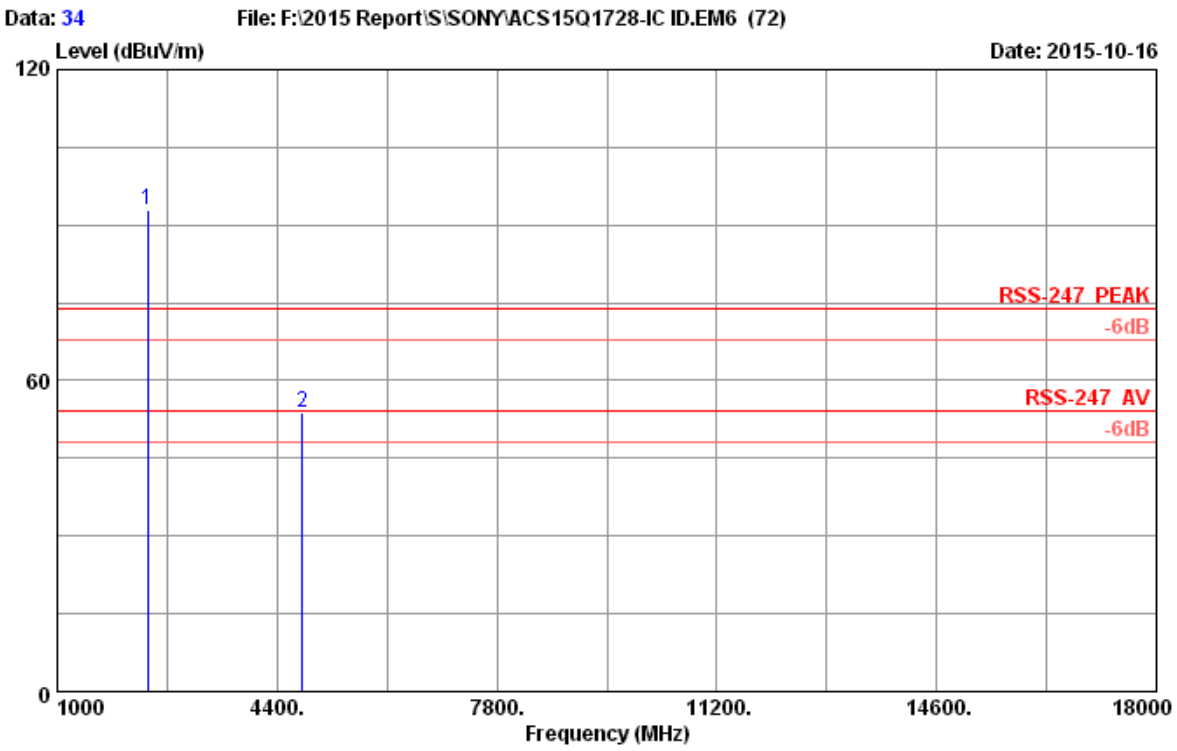
```
Site no.      : 3m Chamber                        Data no.  : 30
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.000	28.16	7.47	36.59	91.41	90.45	74.00	-16.45	Peak
2	4960.000	33.94	9.52	35.47	41.18	49.17	74.00	24.83	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



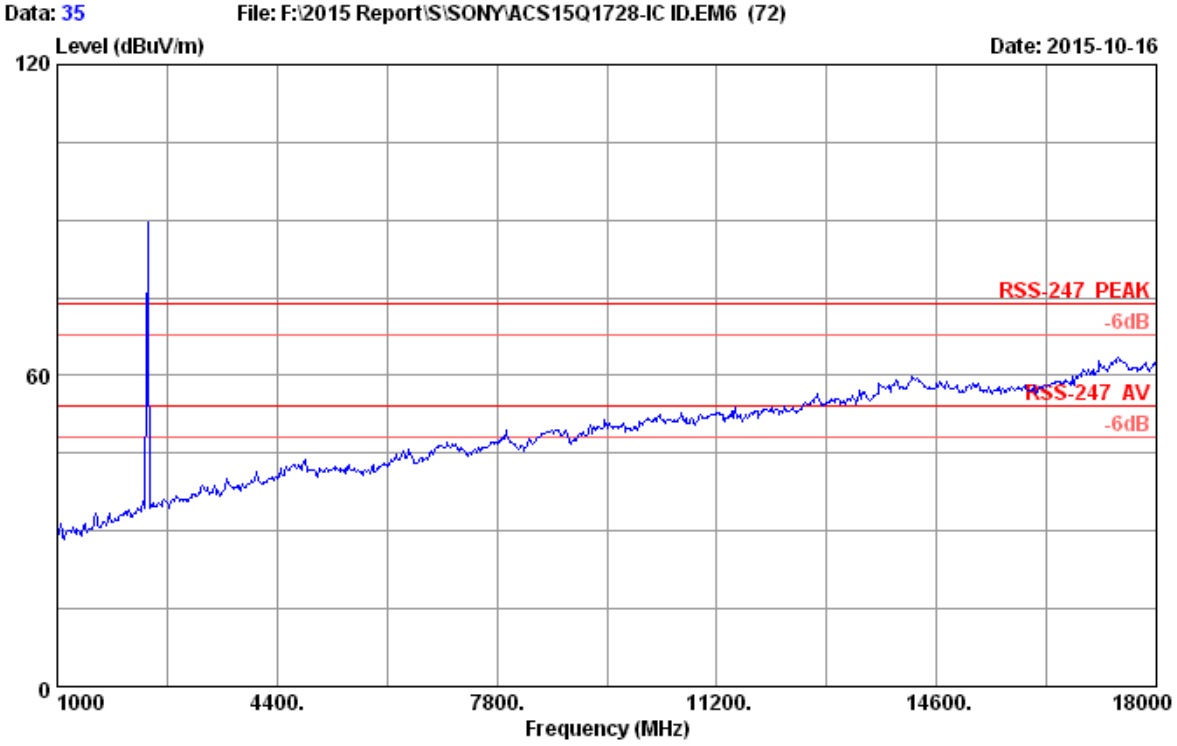

```
Site no.      : 3m Chamber                        Data no.  : 33
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Vertical
```



Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2394.000	27.99	7.32	36.62	94.30	92.99	74.00	-18.99	Peak
2	4791.000	33.67	9.45	35.54	46.08	53.66	74.00	20.34	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

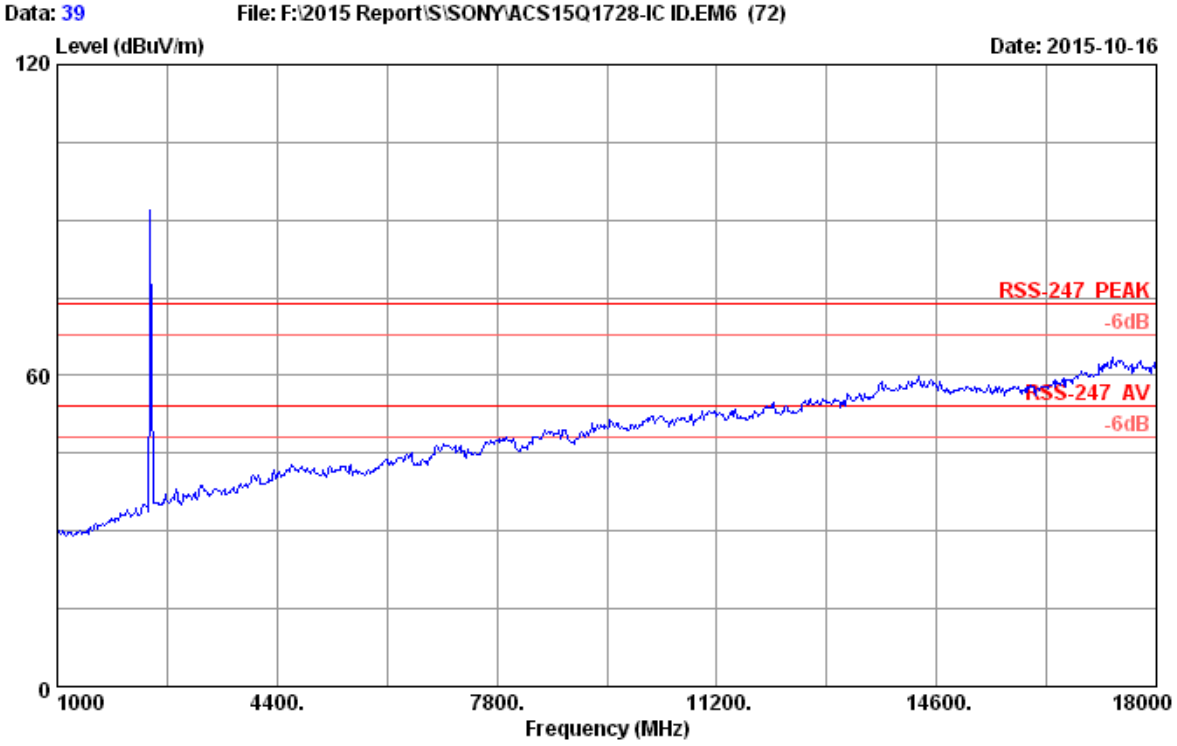



```
Site no.      : 3m Chamber                        Data no.  : 35
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Vertical
```

Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2394.000	27.99	7.32	36.62	93.06	91.75	74.00	-17.75	Peak
2	4804.000	33.69	9.46	35.54	41.66	49.27	74.00	24.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

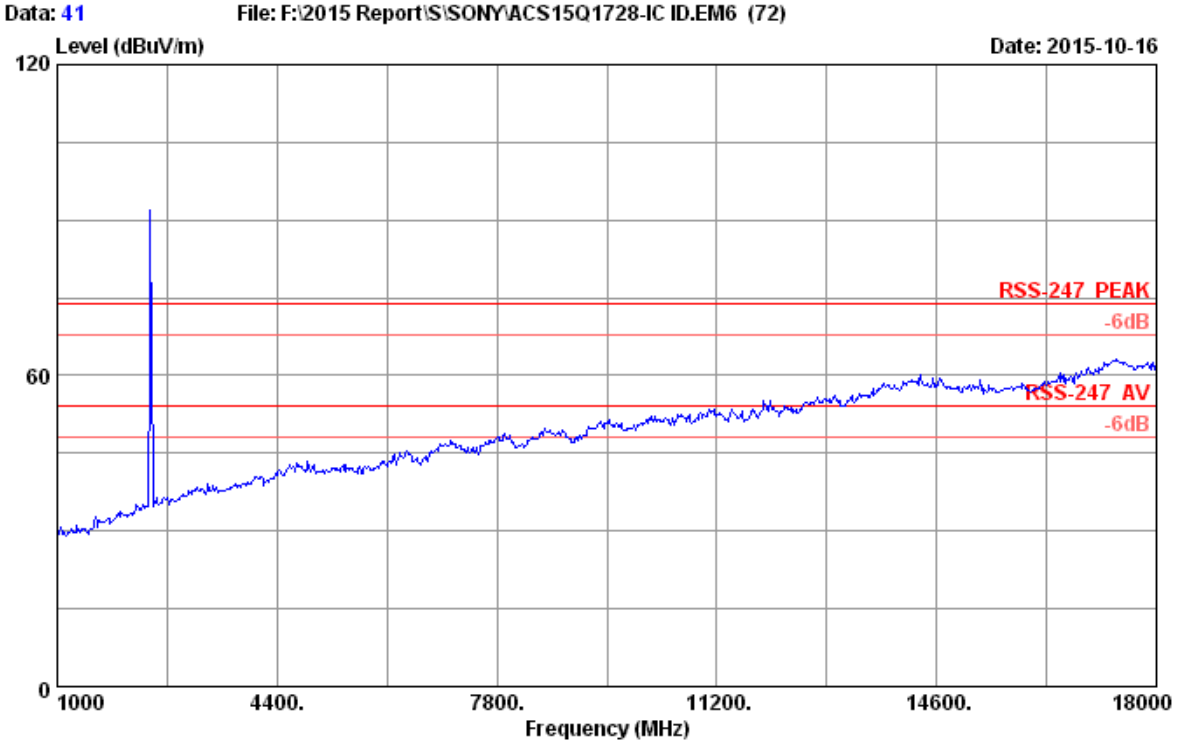



```
Site no.      : 3m Chamber                        Data no.  : 39
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2441MHz  Tx Mode
              : Vertical
```

Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2441MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2445.000	28.09	7.39	36.60	94.96	93.84	74.00	-19.84	Peak
2	4882.000	33.81	9.49	35.51	41.11	48.90	74.00	25.10	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

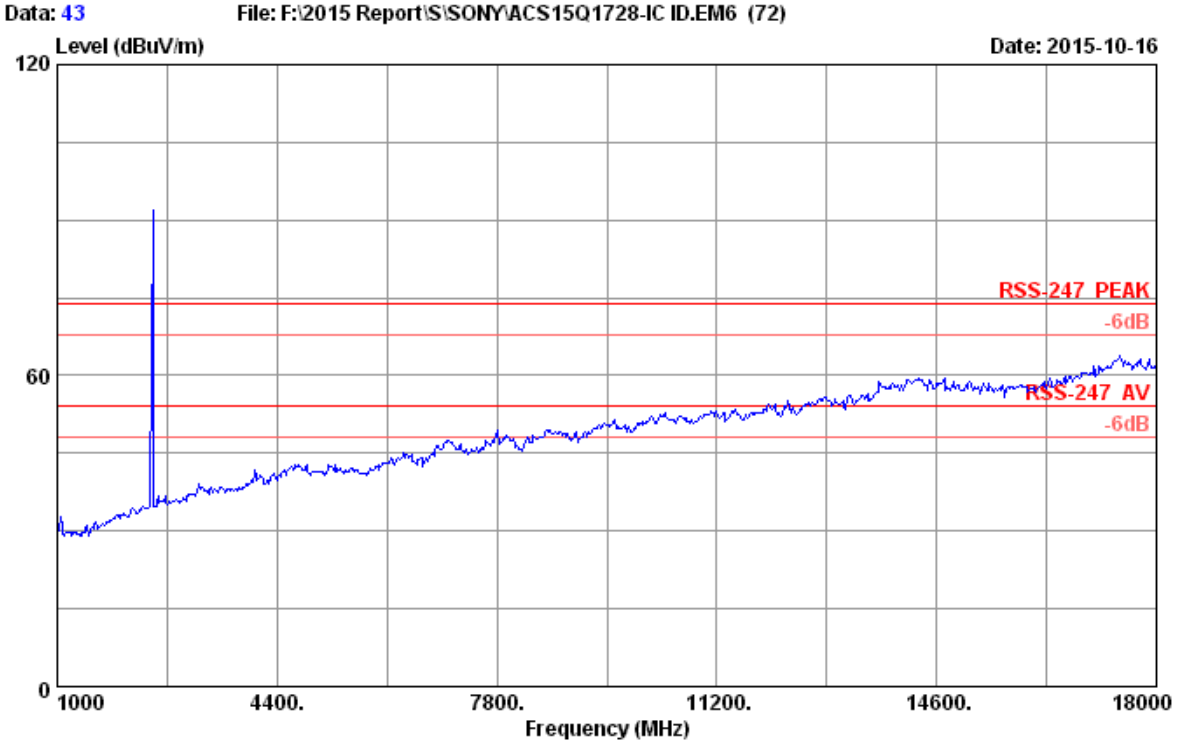



```
Site no.      : 3m Chamber                        Data no.  : 41
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2441MHz  Tx Mode
              : Vertical
```

Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2441MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2445.000	28.09	7.39	36.60	94.09	92.97	74.00	-18.97	Peak
2	4882.000	33.81	9.49	35.51	42.73	50.52	74.00	23.48	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

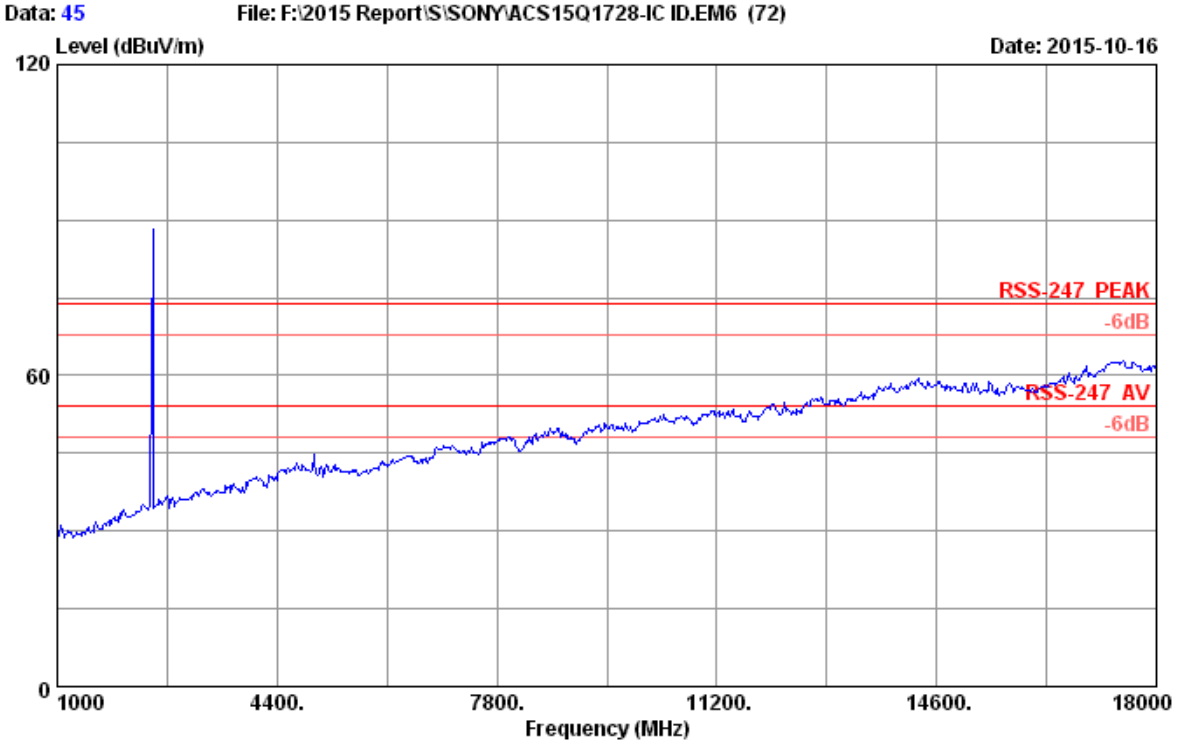



```
Site no.      : 3m Chamber                        Data no.  : 43
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Vertical
```

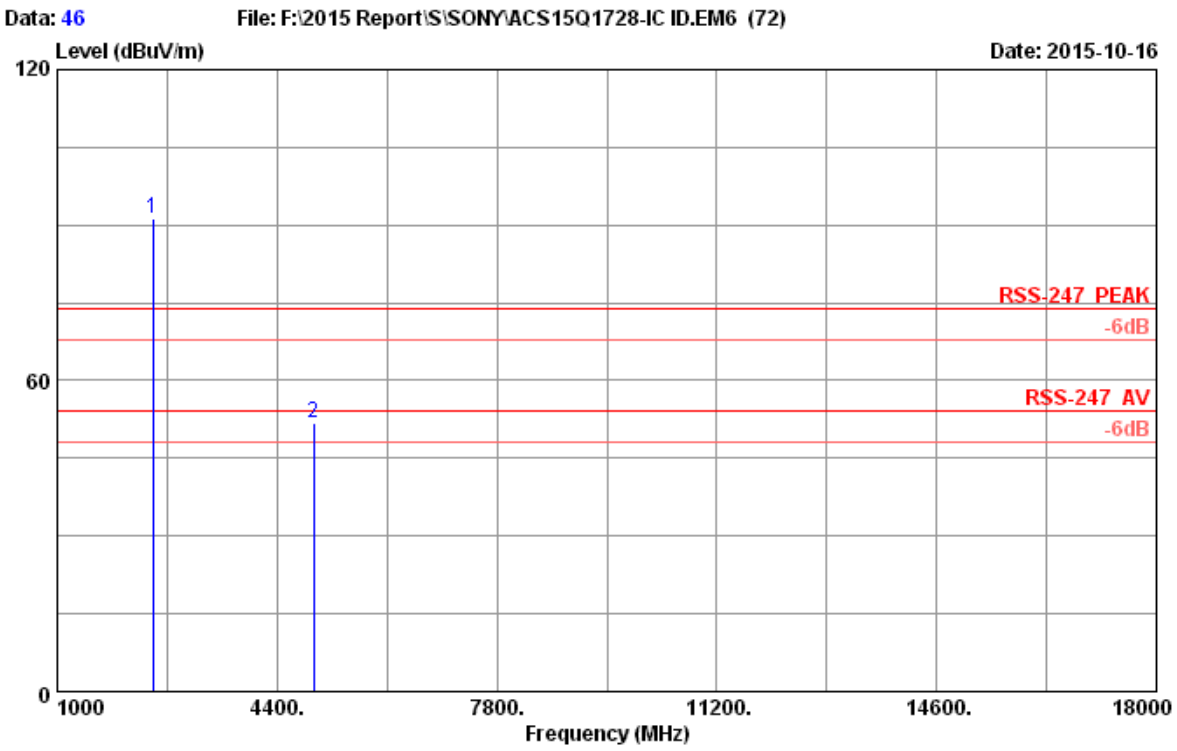
Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2480MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	93.77	92.81	74.00	-18.81	Peak
2	4960.000	33.94	9.52	35.47	41.38	49.37	74.00	24.63	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



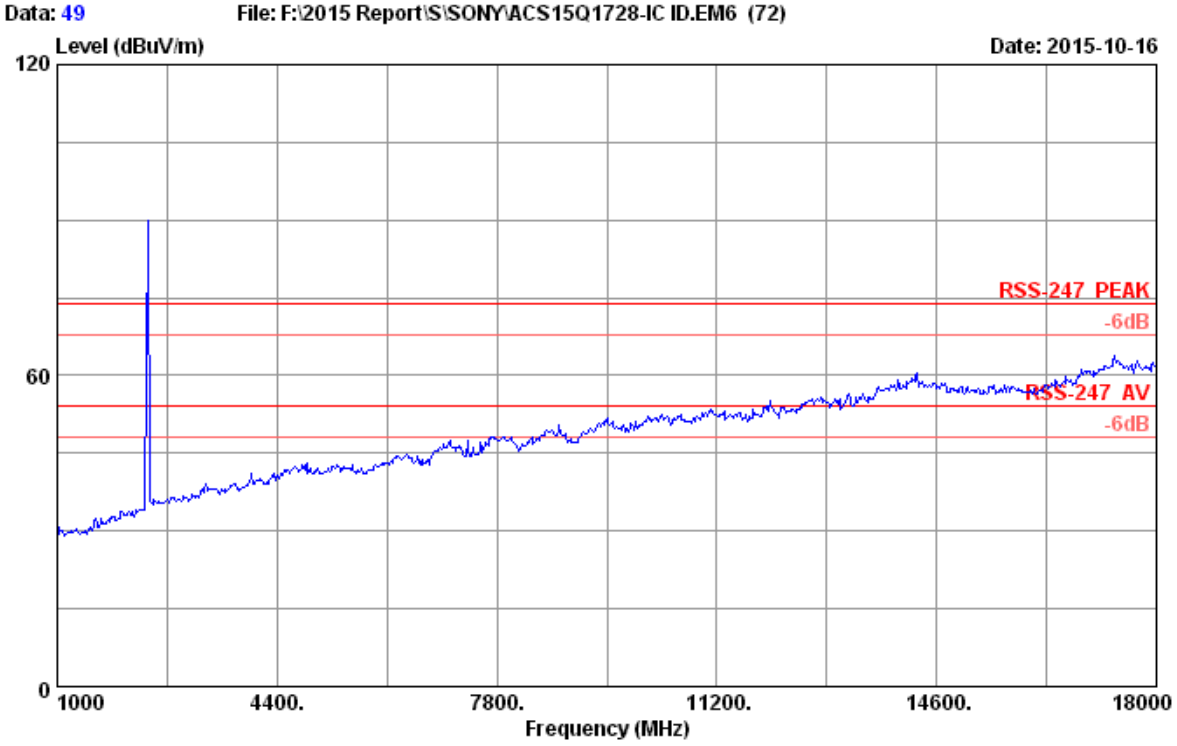

```
Site no.      : 3m Chamber                        Data no.  : 45
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Vertical
```




```
Site no.      : 3m Chamber                        Data no.  : 46
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Vertical
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	92.14	91.18	74.00	-17.18	Peak
2	4960.000	33.94	9.52	35.47	43.68	51.67	74.00	22.33	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

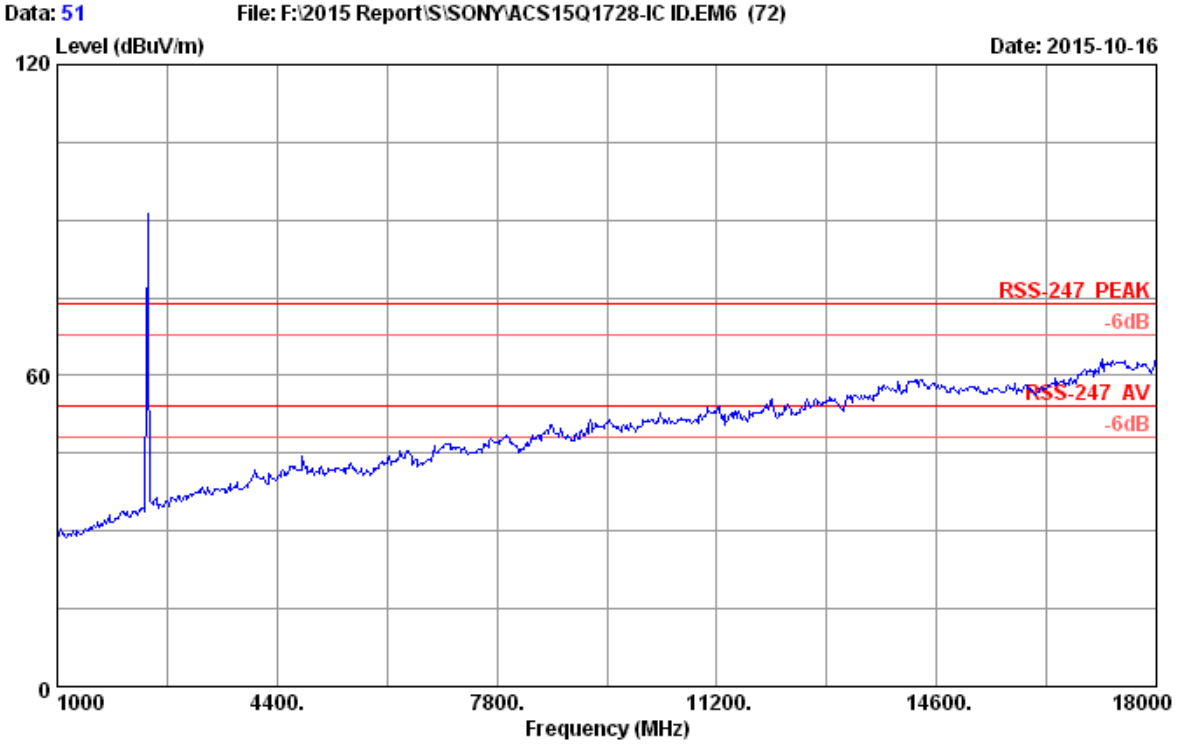



```
Site no.      : 3m Chamber                        Data no.  : 49
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2402MHz  Tx Mode
              : Vertical
```

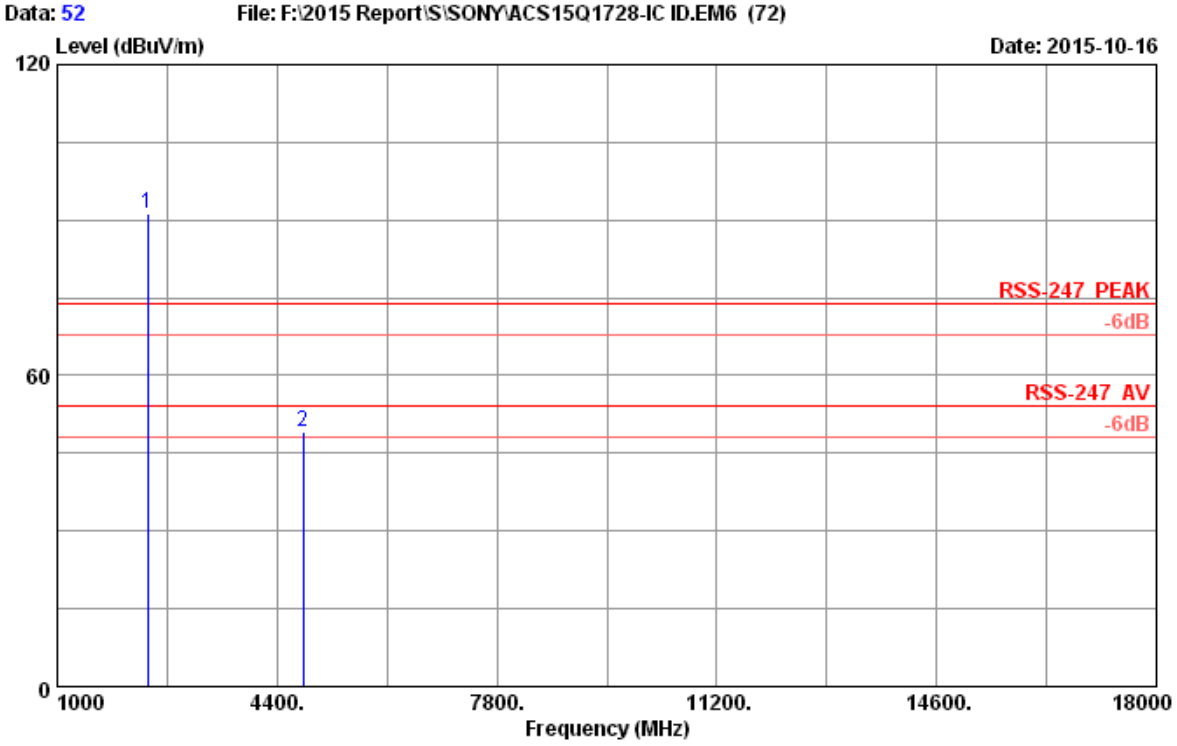
Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	91.15	89.85	74.00	-15.85	Peak
2	4804.000	33.69	9.46	35.54	40.73	48.34	74.00	25.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



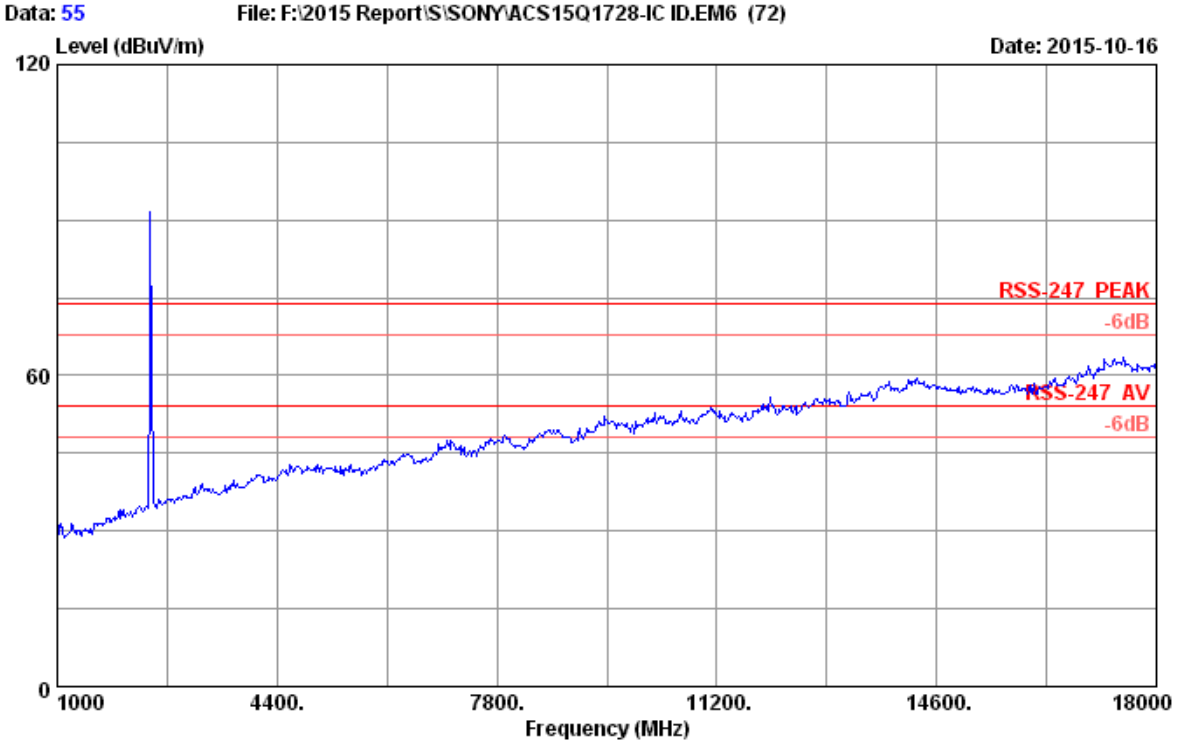

```
Site no.      : 3m Chamber                        Data no.  : 51
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2402MHz  Tx Mode
              : Vertical
```



Site no. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.000	28.00	7.32	36.62	92.40	91.10	74.00	-17.10	Peak
2	4804.000	33.69	9.46	35.54	41.67	49.28	74.00	24.72	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

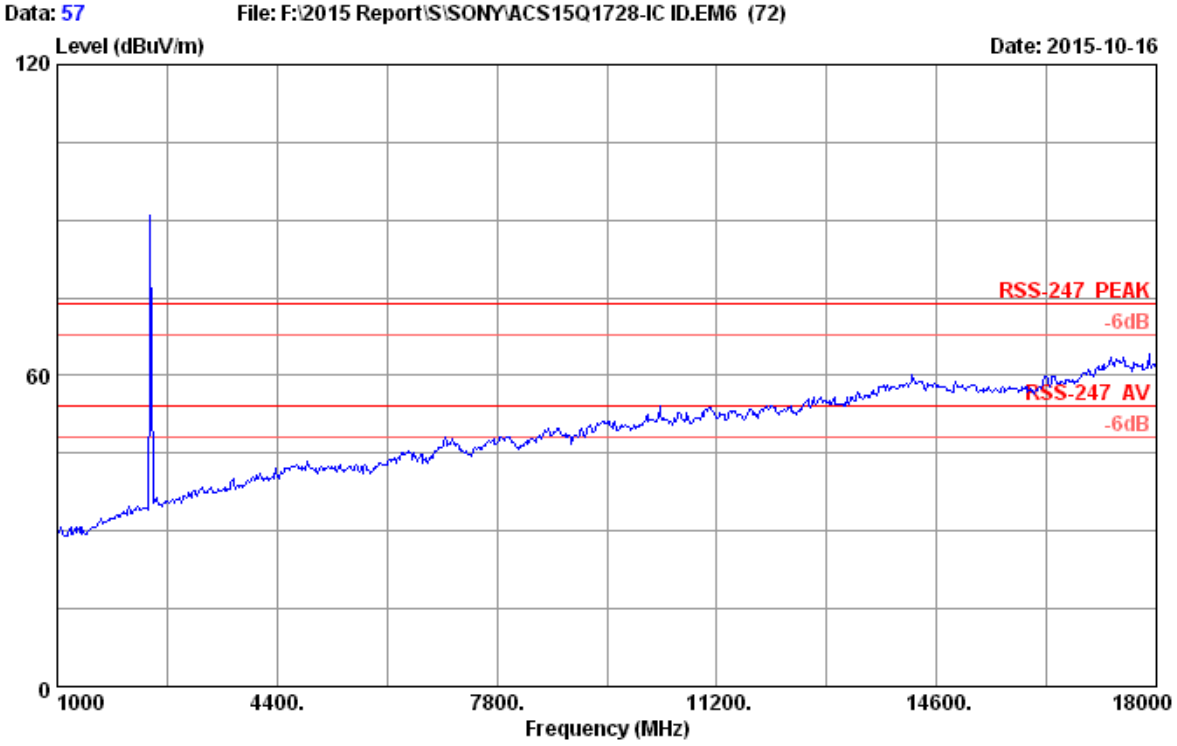



```
Site no.      : 3m Chamber                        Data no.  : 55
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Vertical
```

Site no. : 3m Chamber Data no. : 56
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2441MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	92.69	91.56	74.00	-17.56	Peak
2	4882.000	33.81	9.49	35.51	40.73	48.52	74.00	25.48	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

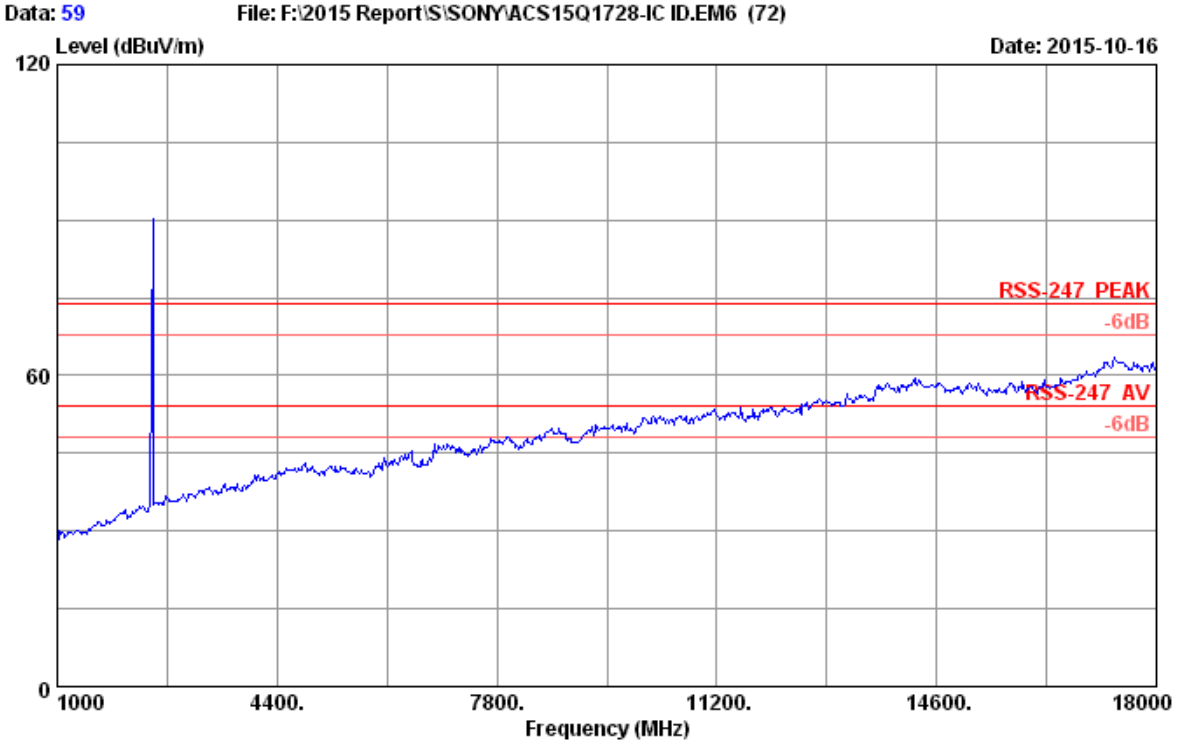



```
Site no.      : 3m Chamber                        Data no.  : 57
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Vertical
```

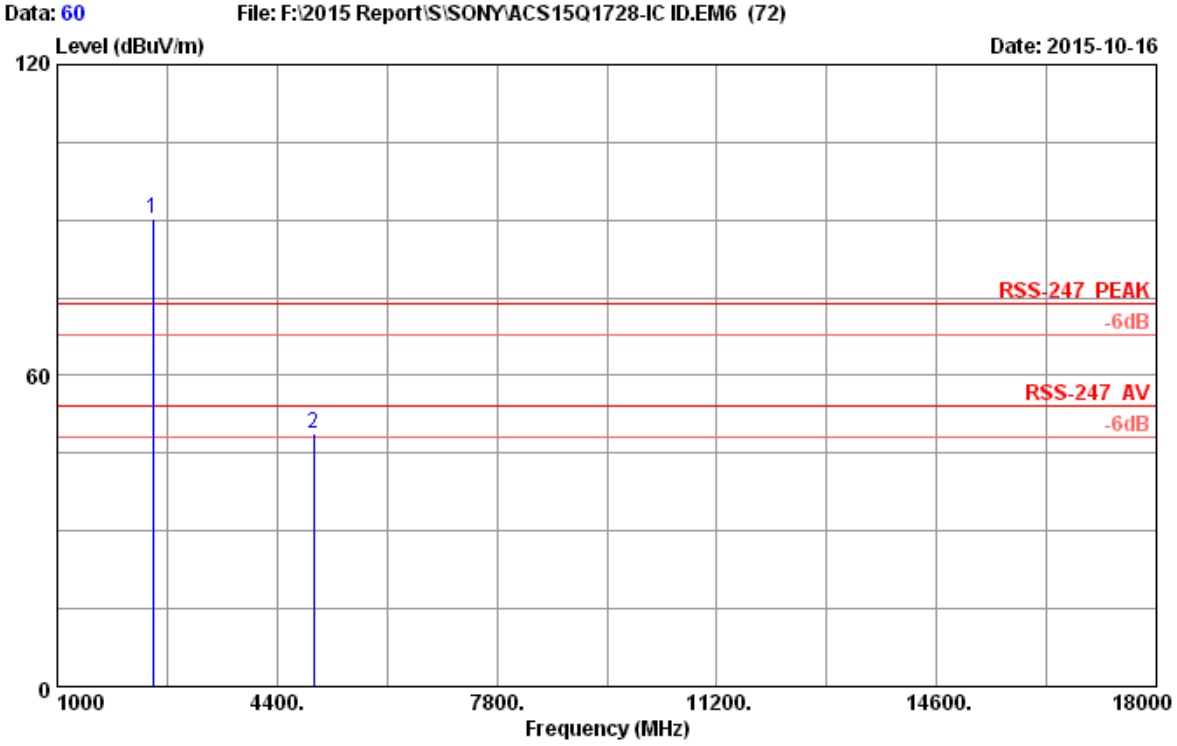
```
Site no.      : 3m Chamber                        Data no.  : 58
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2441MHz  Tx Mode
              : Vertical
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.000	28.08	7.39	36.60	92.05	90.92	74.00	-16.92	Peak
2	4882.000	33.81	9.49	35.51	40.78	48.57	74.00	25.43	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



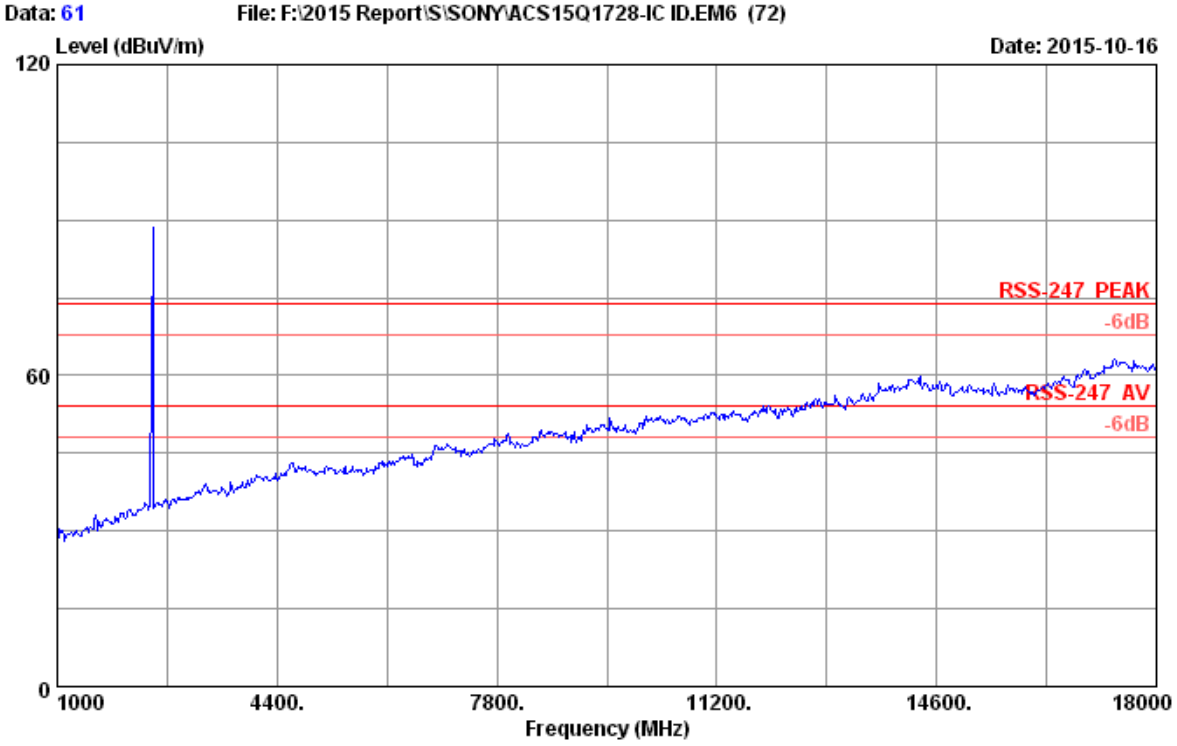

```
Site no.      : 3m Chamber                        Data no.  : 59
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Vertical
```




```
Site no.      : 3m Chamber                        Data no.  : 60
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Vertical
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	91.30	90.34	74.00	-16.34	Peak
2	4960.000	33.94	9.52	35.47	40.81	48.80	74.00	25.20	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber                        Data no.  : 61
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : 8-DPSK  2480MHz  Tx Mode
              : Vertical
```

Site no. : 3m Chamber Data no. : 62
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2480MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.000	28.16	7.47	36.59	89.62	88.66	74.00	-14.66	Peak
2	4960.000	33.94	9.52	35.47	40.37	48.36	74.00	25.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct. 18,15	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,15	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr. 28,15	1 Year

5.2. Limit

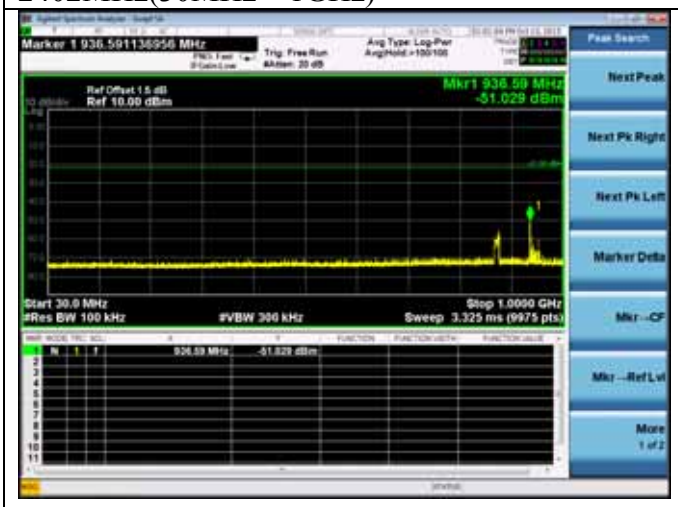
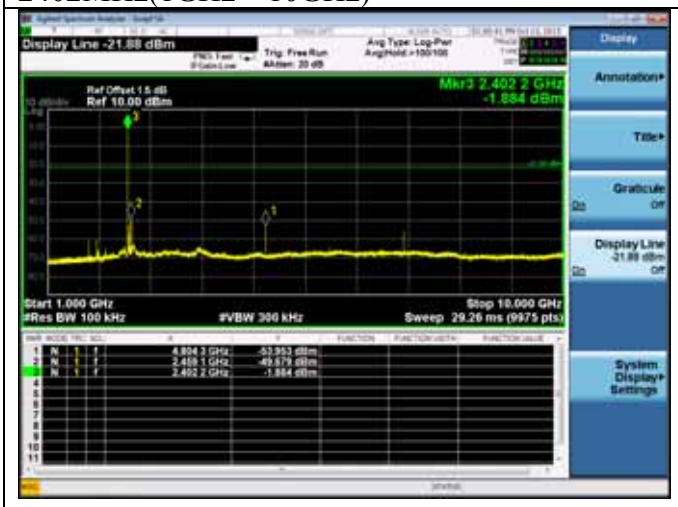
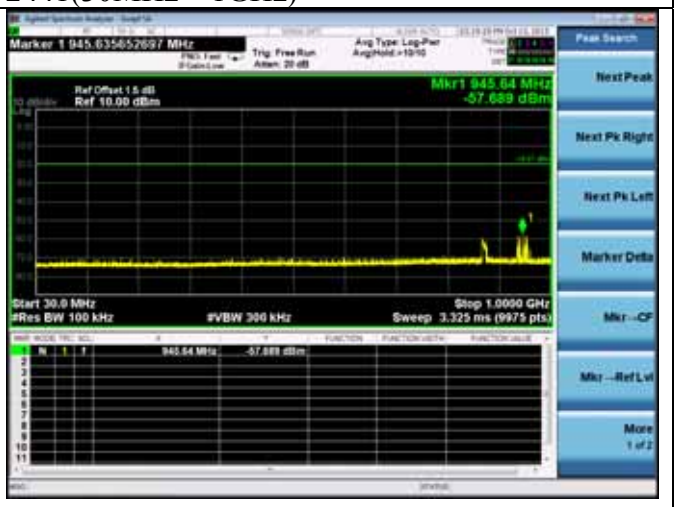
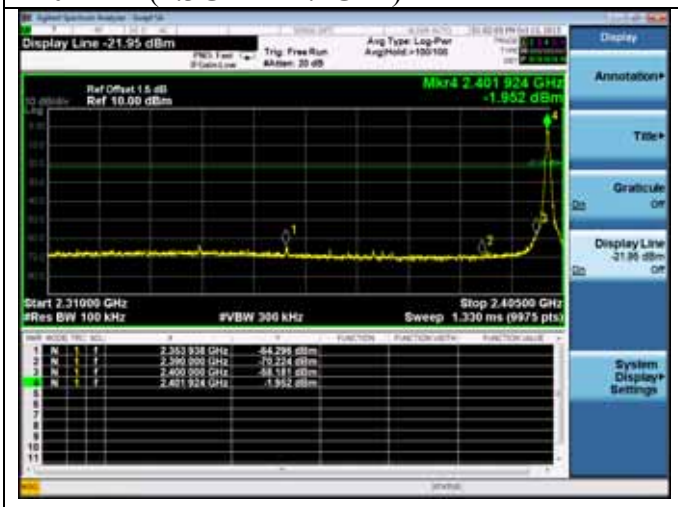
In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

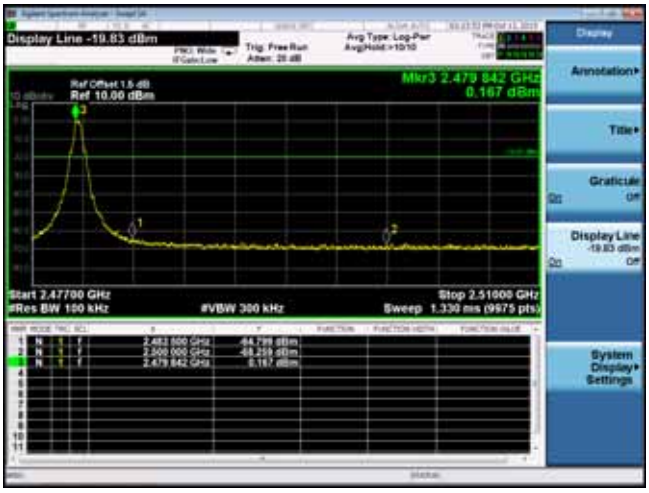
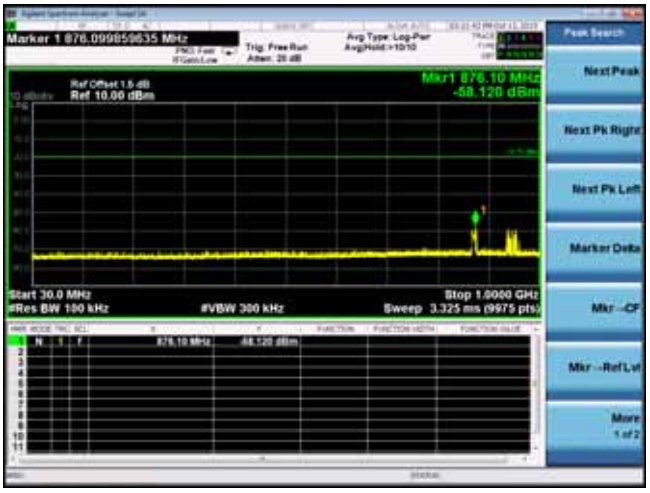
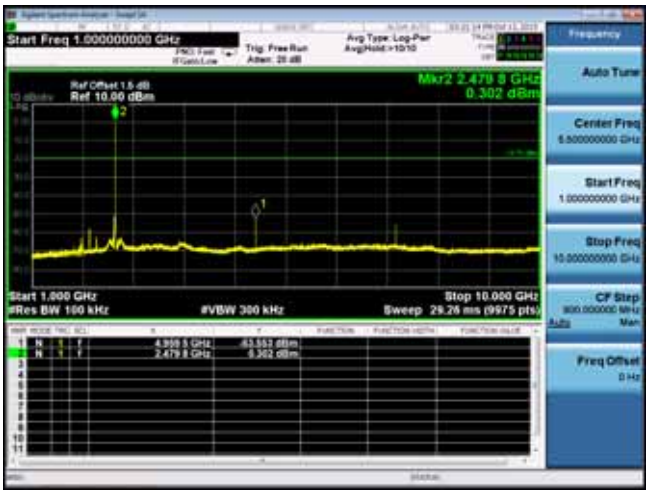
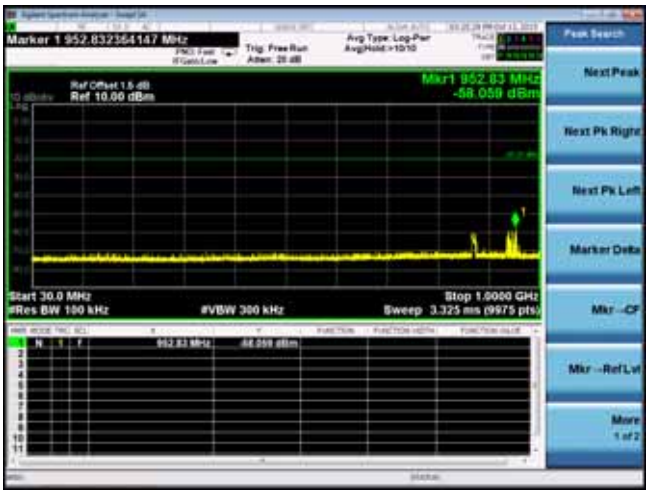
5.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions With peak detector.

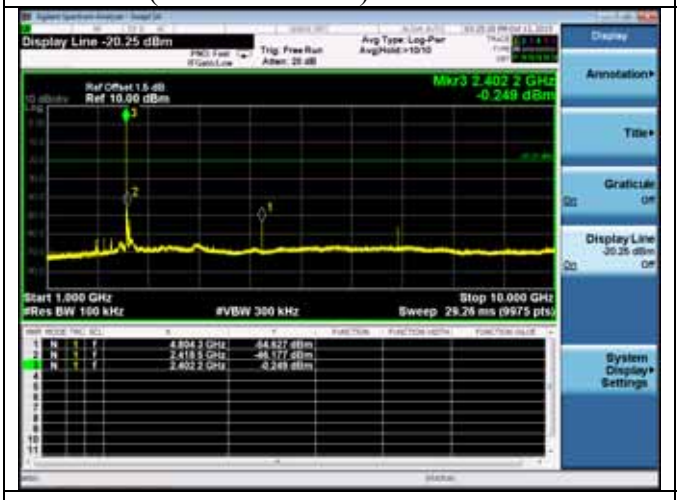
5.4. Test result

PASS (The testing data was attached in the next pages.)

Hopping off	
GFSK	
2402MHz(30MHz – 1GHz)	2402MHz(10GHz – 25GHz)
	
2402MHz(1GHz – 10GHz)	2441(30MHz – 1GHz)
	
2402MHz(2.3GHz – 2.4GHz)	2441(1GHz – 10GHz)
	

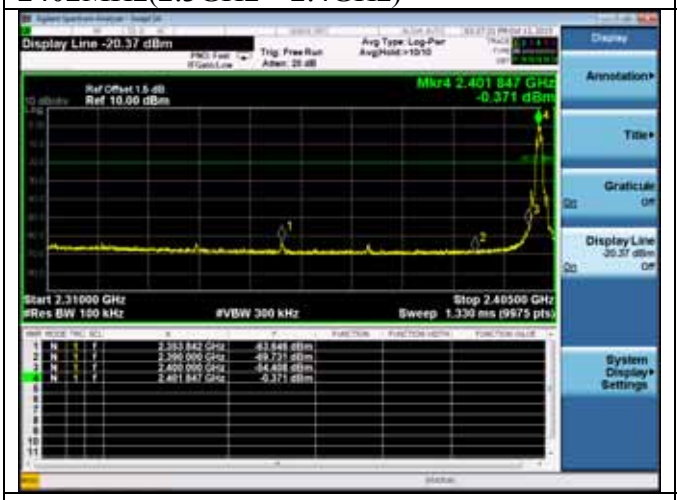
2441(10GHz – 25GHz)	2480MHz(2.4GHz – 2.5GHz)
	
2480MHz(30MHz – 1GHz)	2480MHz(10GHz – 25GHz)
	
	8-DPSK
2480MHz(1GHz – 10GHz)	2402MHz(30MHz – 1GHz)
	

2402MHz(1GHz – 10GHz)

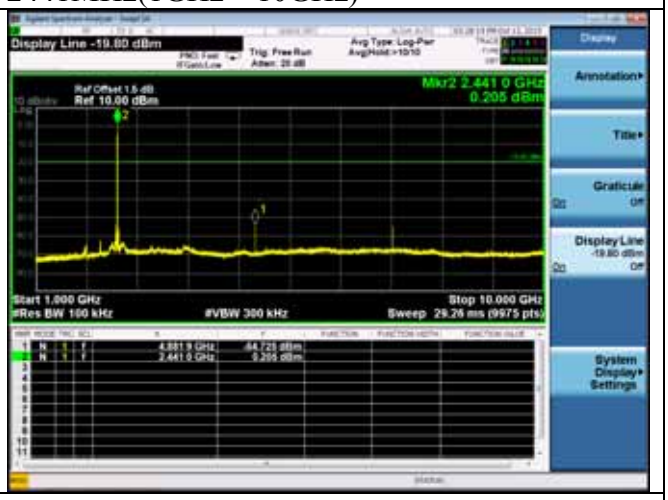


2441MHz (30MHz – 1GHz)

2402MHz(2.3GHz – 2.4GHz)

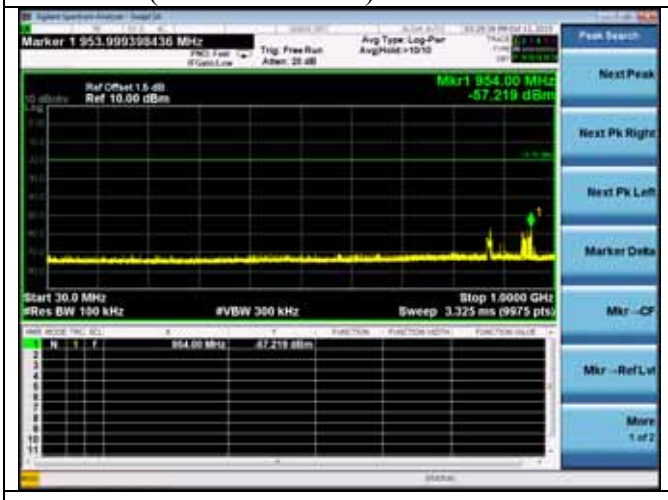
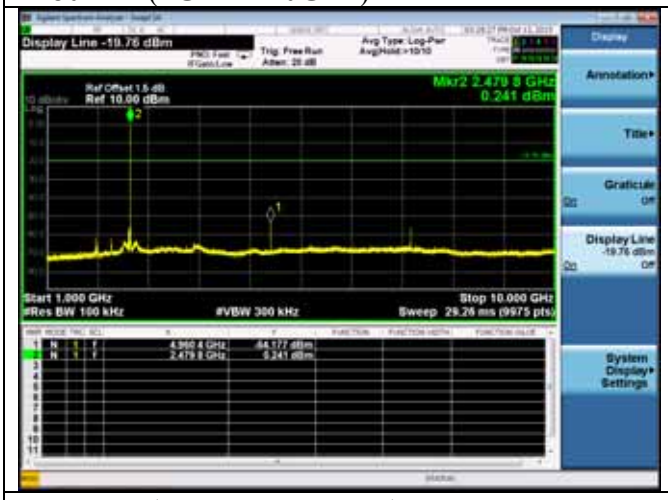
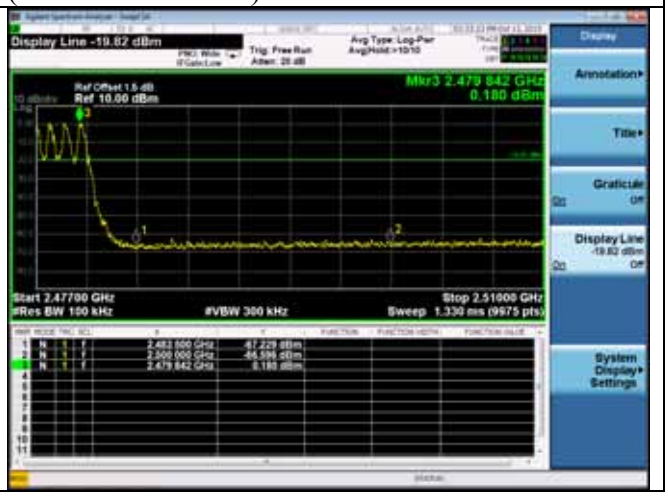


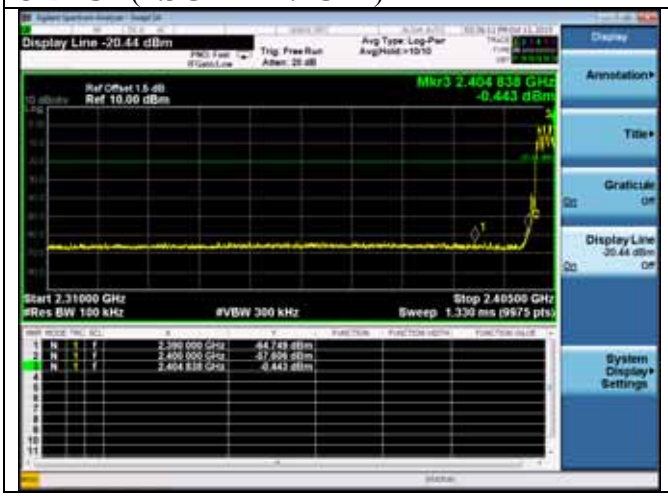
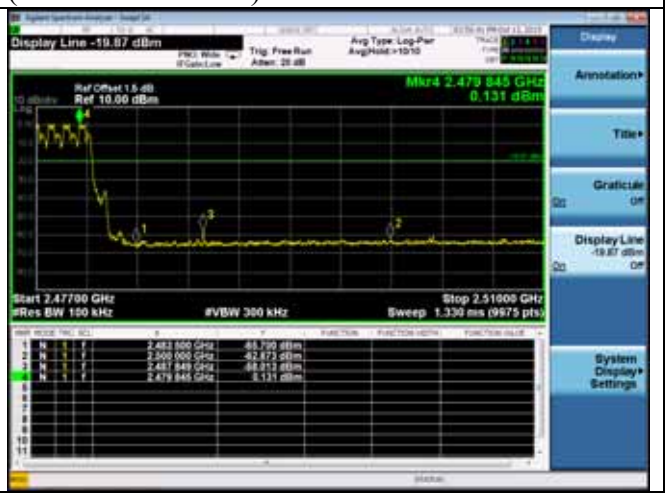
2441MHz(1GHz – 10GHz)



2402MHz(10GHz – 25GHz)

2441MHz(10GHz – 25GHz)

2480MHz(30MHz – 1GHz)	2480MHz(10GHz – 25GHz)
	
	Hopping on
2480MHz(1GHz – 10GHz)	GFSK(2.3GHz – 2.4GHz)
	
2480MHz(2.4GHz – 2.5GHz)	(2.4GHz – 2.5GHz)
	

8-DPSK(2.3GHz – 2.4GHz)	(2.4GHz – 2.5GHz)
	

6. 20 DB & 99% BANDWIDTH TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct. 18,15	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,15	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr. 28,15	1 Year

6.2.Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in RSS-GEN, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

6.3.Test Results

EUT: Home Audio System		
M/N: GTK-XB7		
Test date: 2015-10-15	Pressure: 101.9±1.0 kpa	Humidity: 52.5±3.0%
Tested by: Donjon_Huang	Test site: RF Site	Temperature: 23.3±0.6℃

Test Mode	Frequency (MHz)	20dB bandwidth (KHz)	Limit (KHz)
GFSK	2402	673.7	N/A
	2441	672.3	N/A
	2480	670.5	N/A
8-DPSK	2402	1165	N/A
	2441	1162	N/A
	2480	1164	N/A
Conclusion：PASS			

Test Mode	Frequency (MHz)	99% bandwidth (KHz)	Limit (KHz)
GFSK	2402	736.57	N/A
	2441	738.52	N/A
	2480	741.46	N/A
8-DPSK	2402	1101.9	N/A
	2441	1100.1	N/A
	2480	1100.9	N/A
Conclusion：PASS			

GFSK	**8-DPSK**
2402MHz	2402MHz
2441MHz	2441MHz
2480MHz	2480MHz

7. CARRIER FREQUENCY SEPARATION TEST

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.29, 14	1Year
2.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr.28, 15	1 Year

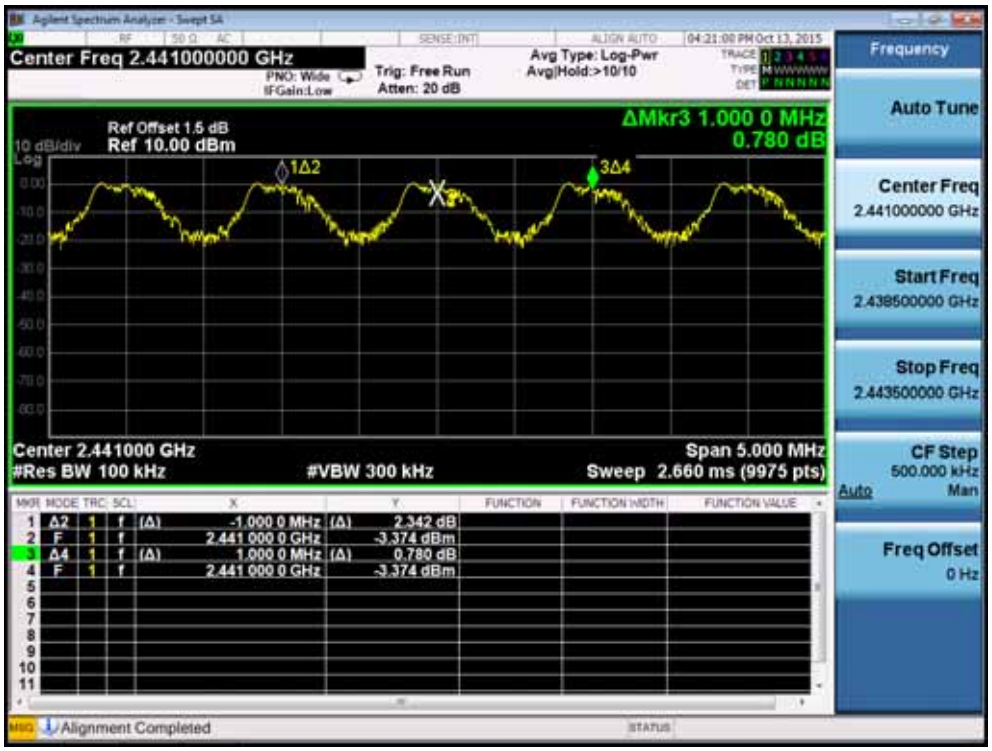
7.2.Limit

Frequency hopping systems shall have hopping channel carrier frequency separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.3.Test Results.

EUT: Home Audio System		
M/N: GTK-XB7		
Test date: 2015-10-15	Pressure: 101.4±1.0kpa	Humidity: 51.4±3.0%
Tested by: Donjon_Huang	Test site: RF Site	Temperature: 23.4±0.6℃

Test Mode	Channel separation	Limit(KHz)	Conclusion
8-DPSK	1.0MHz	494.307	PASS
GFSK	1.0MHz	734.600	PASS



8. NUMBER OF HOPPING FREQUENCY TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.18,15	1Year
2.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr.28, 15	1 Year

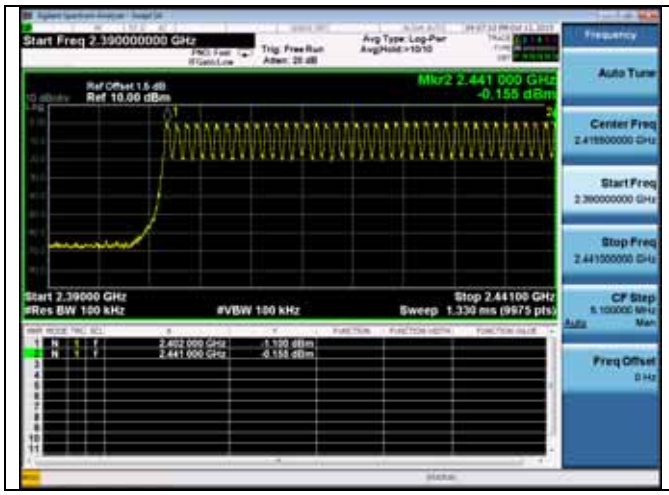
8.2.Limit

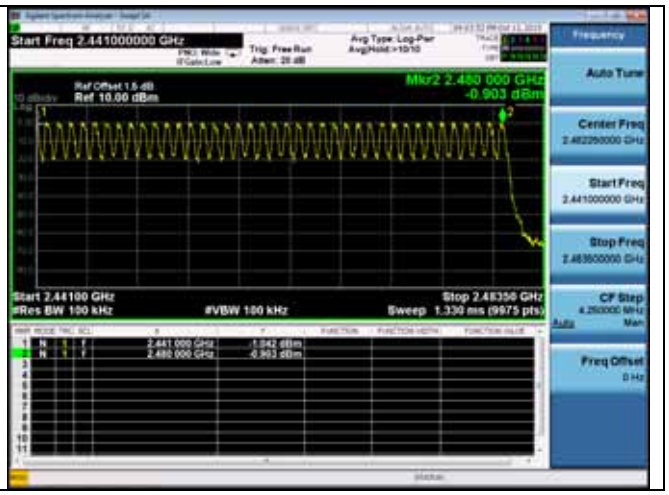
Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

8.3.Test Results

EUT: Home Audio System		
M/N: GTK-XB7		
Test date: 2015-10-15	Pressure: 101.4±1.0 kpa	Humidity: 51.4±3.0%
Tested by: Donjon_Huang	Test site: RF Site	Temperature: 23.4±0.6℃

Test Mode	Number of channel	Limit	Conclusion
8-DPSK	79	>=15	PASS
GFSK	79	>=15	PASS





9. DWELL TIME

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.29, 14	1Year
2.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr.28, 15	1 Year

9.2.Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

9.3.Test Results

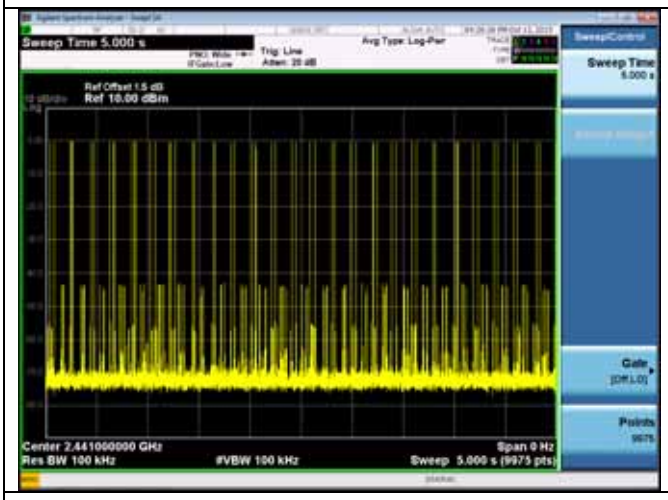
EUT: Home Audio System		
M/N: GTK-XB7		
Test date: 2015-10-15	Pressure: 101.4±1.0kpa	Humidity: 51.4±3.0%
Tested by: Donjon_Huang	Test site: RF Site	Temperature: 23.4±0.6℃

Mode		dwell time	Limit	Conclusion
GFSK	DH1	46hops/5s*0.4*79chanels*0.428ms =124.515ms	<400ms	PASS
	DH3	26hops/5s*0.4*79chanels*1.695ms =278.522ms	<400ms	PASS
	DH5	10hops/5s*0.4*79chanels*2.947ms =186.250ms	<400ms	PASS
8-DPSK	DH1	45hops/5s*0.4*79chanels*0.427ms =121.297ms	<400ms	PASS
	DH3	29hops/5s*0.4*79chanels*1.682ms =308.277ms	<400ms	PASS
	DH5	20hops/5s*0.4*79chanels*2.951ms =373.006ms	<400ms	PASS

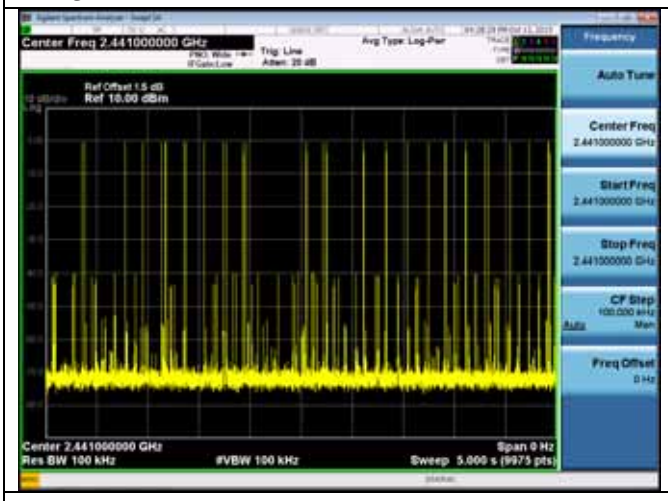
Note: All the lower levels were signaled from receiver and should not be considered in here.

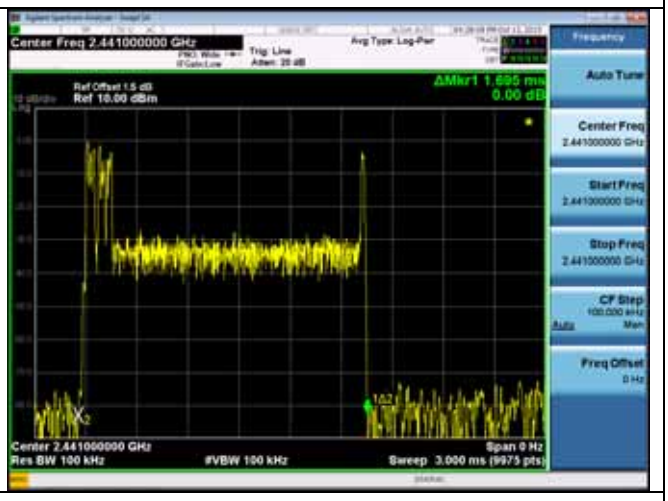
GFSK

DH 1

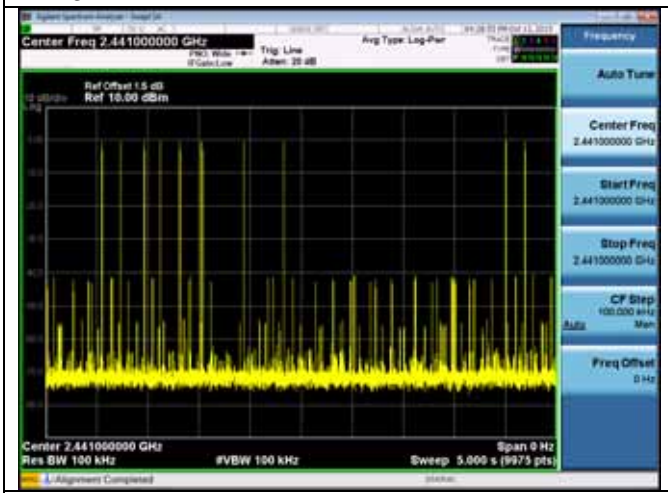


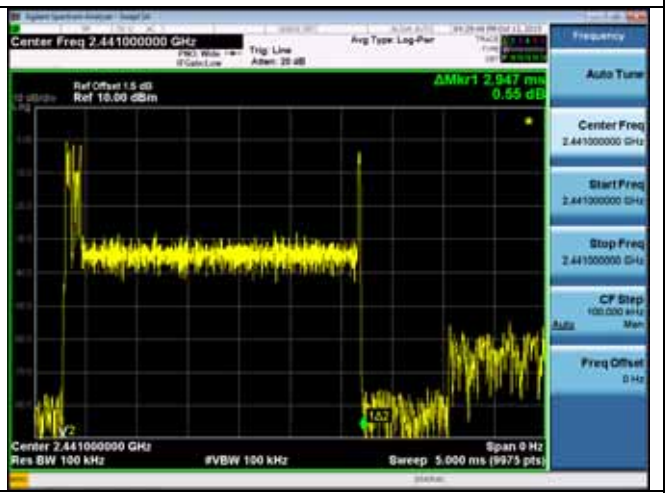
DH 3





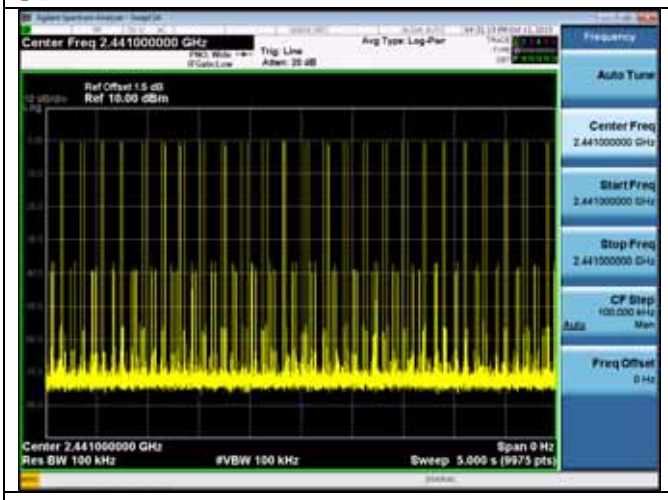
DH 5



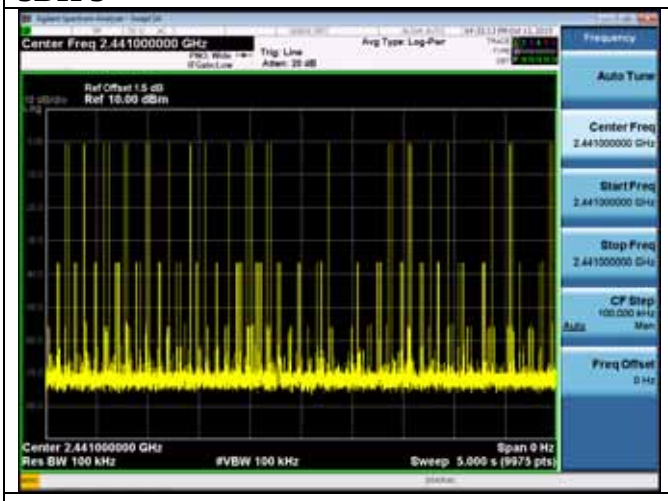


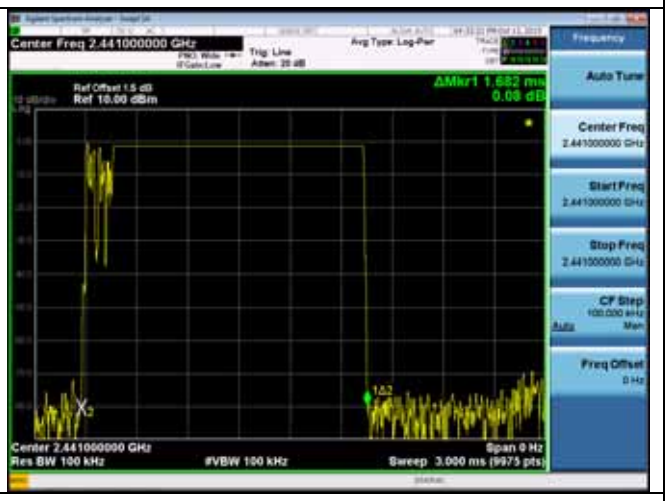
8-DPSK

3DH 1

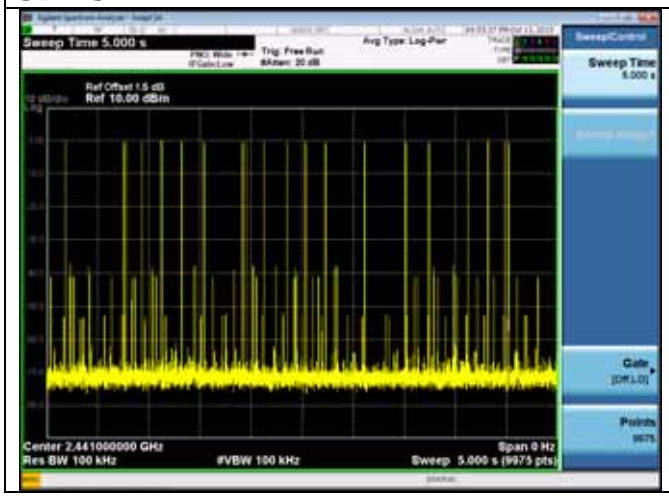


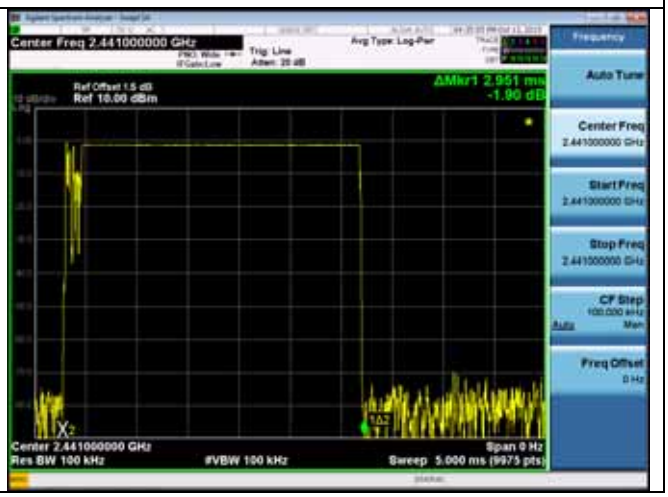
3DH 3





3DH 5





10. MAXIMUM PEAK OUTPUT POWER TEST

10.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct. 29,14	1Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr. 28,15	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr. 28,15	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,15	1Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,15	1Year

10.2. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, the max. peak conducted output power should not exceed 1.0W and the E.I.R.P shall not exceed 4W.

10.3. Test Procedure

Connected the EUT's antenna port to Power Sensor, and use power meter to test peak output power directly.

10.4. Test Results

EUT: Home Audio System			
M/N: GTK-XB7			
Test date: 2015-10-15	Pressure: 101.8±1.0 kpa		Humidity: 52.4±1.0%
Tested by: Donjon_Huang	Test site: RF site		Temperature:23.4±1.0 ℃
Test Mode	Frequency (MHz)	Peak output Power （dBm）	Limit (dBm)
GFSK	2402	-1.413	30
	2441	-0.383	30
	2480	-1.380	30
8-DPSK	2402	-1.324	30
	2441	-0.004	30
	2480	-1.087	30
Conclusion: PASS			

11. BAND EDGE COMPLIANCE TEST

11.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr.28,15	1 Year
2.	Amp	HP	8449B	3008A02495	Apr.28,15	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03007	Feb.03,15	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.28,15	1 Year

11.2. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in RSS-247, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with RSS-210 limits.

11.3. Test Produce

For upper band emissions that are up to two bandwidths(2MHz) away (2483.5MHz to 2485.5MHz） from the band-edge use below produce:

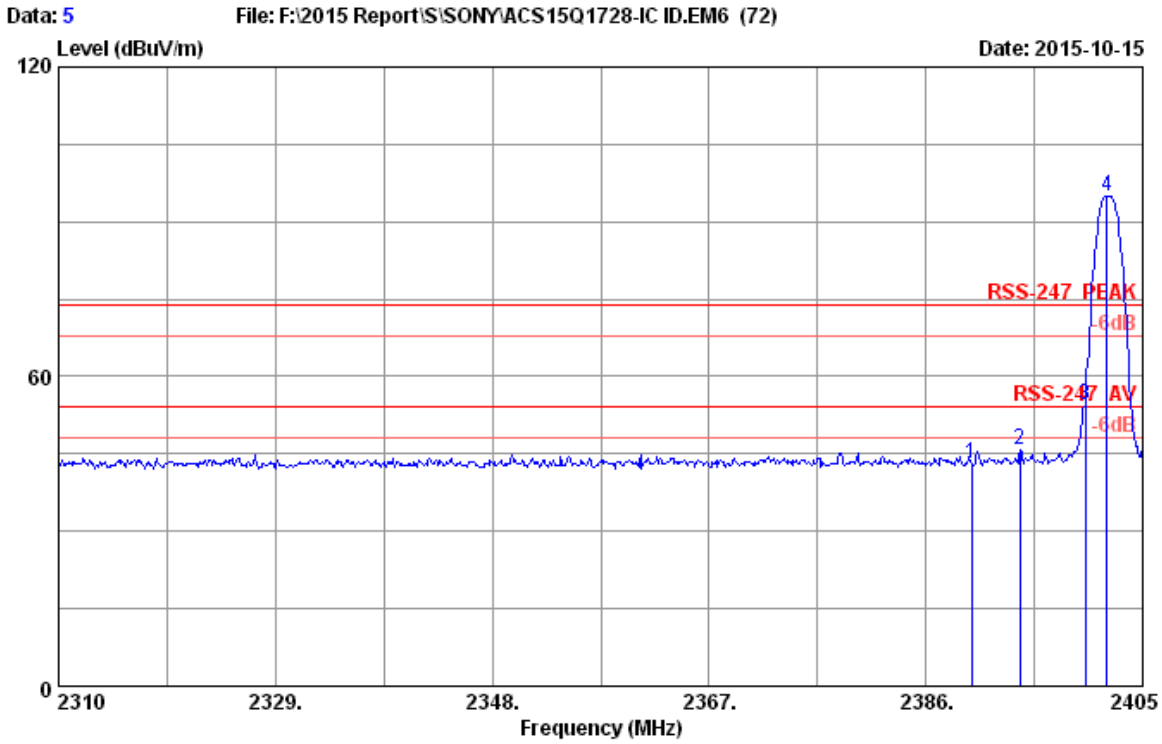
1. Choose a spectrum analyzer span that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set the analyzer RBW to 100KHz and with a video bandwidth 300KHz. Record the peak levels of the fundamental emission and the relevant band-edge emission, Observe the stored trace and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission. This is not a field strength measurement, it is only a relative measurement to determine the amount by which the emission drops at the band edge relative to the highest fundamental emission level.
2. Subtract the delta measured in step (1) from the maximum field strengths measured in clause 4 .The resultant field strengths are then used to determine band-edge compliance as required by Section RSS-247.

For emissions above two bandwidths away from the band-edge use below produce:

1. The EUT is placed on a insulating material (up to 12mm thick) worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
   (a) PEAK: RBW=1MHz ;VBW=3MHz, PK detector, Sweep=AUTO
   (b) This is pulse Modulation device a duty cycle factor was used to calculate average level based measured peak level.

11.4. Test Results

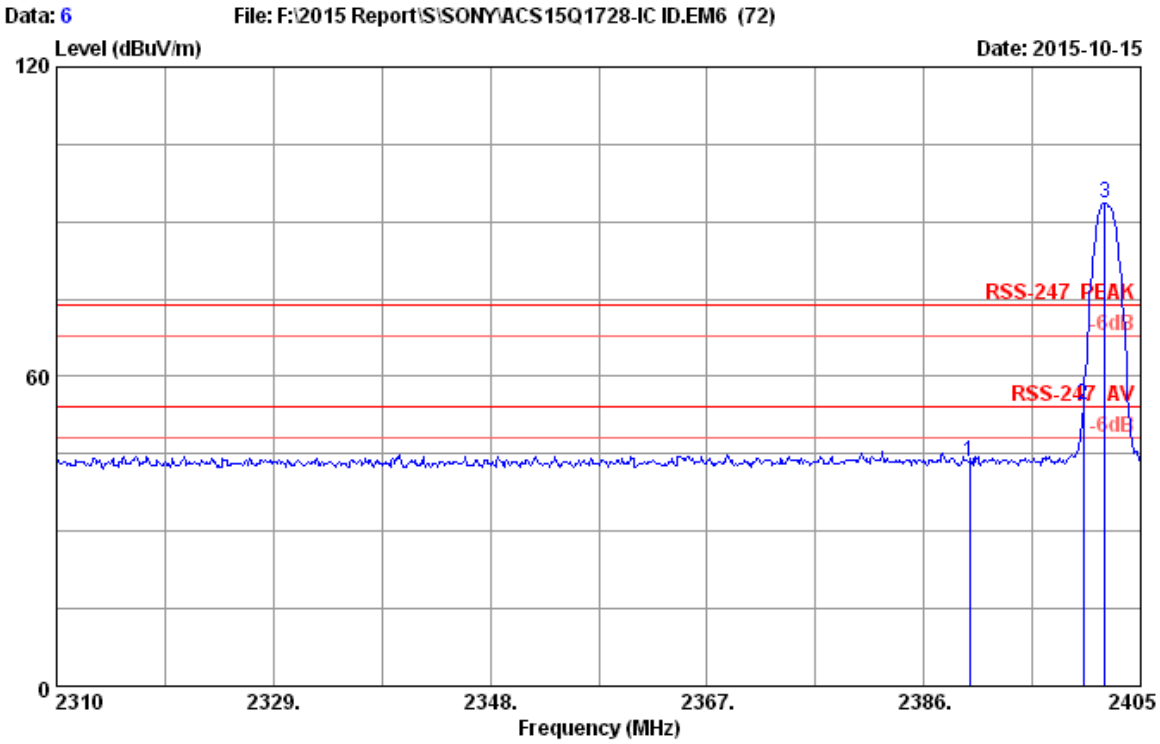
Pass (The testing data was attached in the next pages.)
Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.62	43.26	74.00	30.74	Peak
2	2394.265	27.99	7.32	36.62	47.18	45.87	74.00	28.13	Peak
3	2400.000	28.00	7.32	36.62	55.78	54.48	74.00	19.52	Peak
4	2401.865	28.00	7.32	36.62	96.36	95.06	74.00	-21.06	Peak

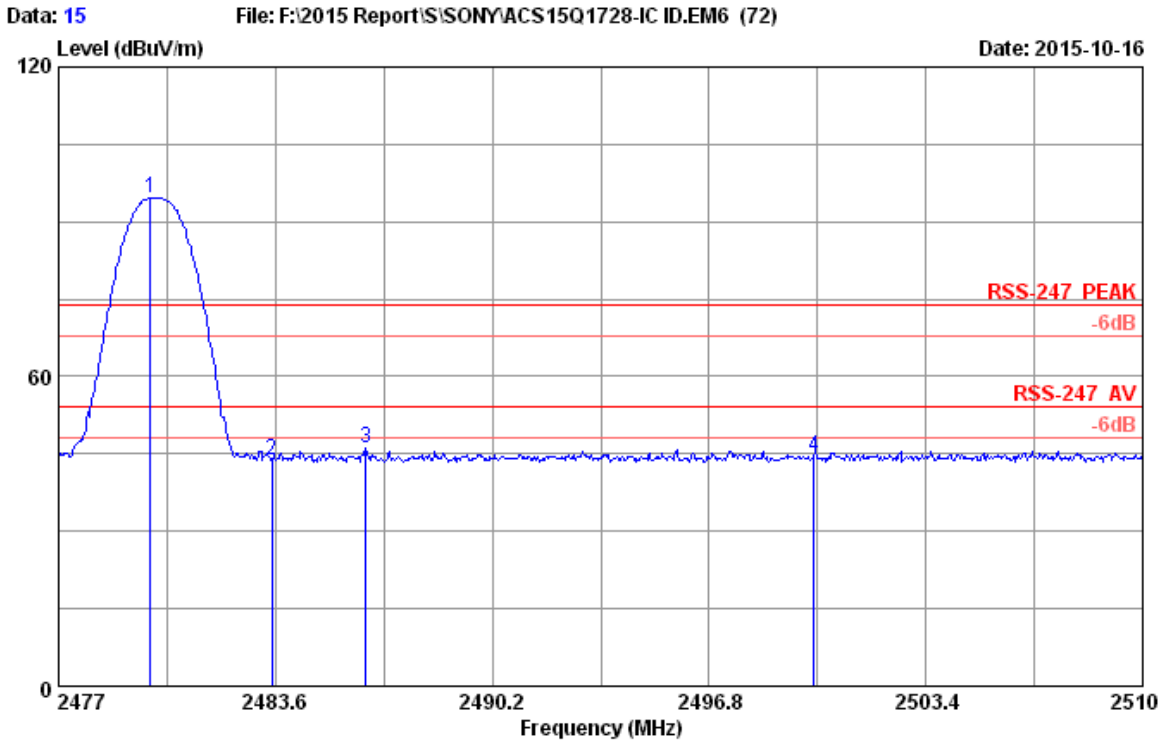
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 6
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.68	43.32	74.00	30.68	Peak
2	2400.000	28.00	7.32	36.62	55.65	54.35	74.00	19.65	Peak
3	2401.865	28.00	7.32	36.62	94.84	93.54	74.00	-19.54	Peak

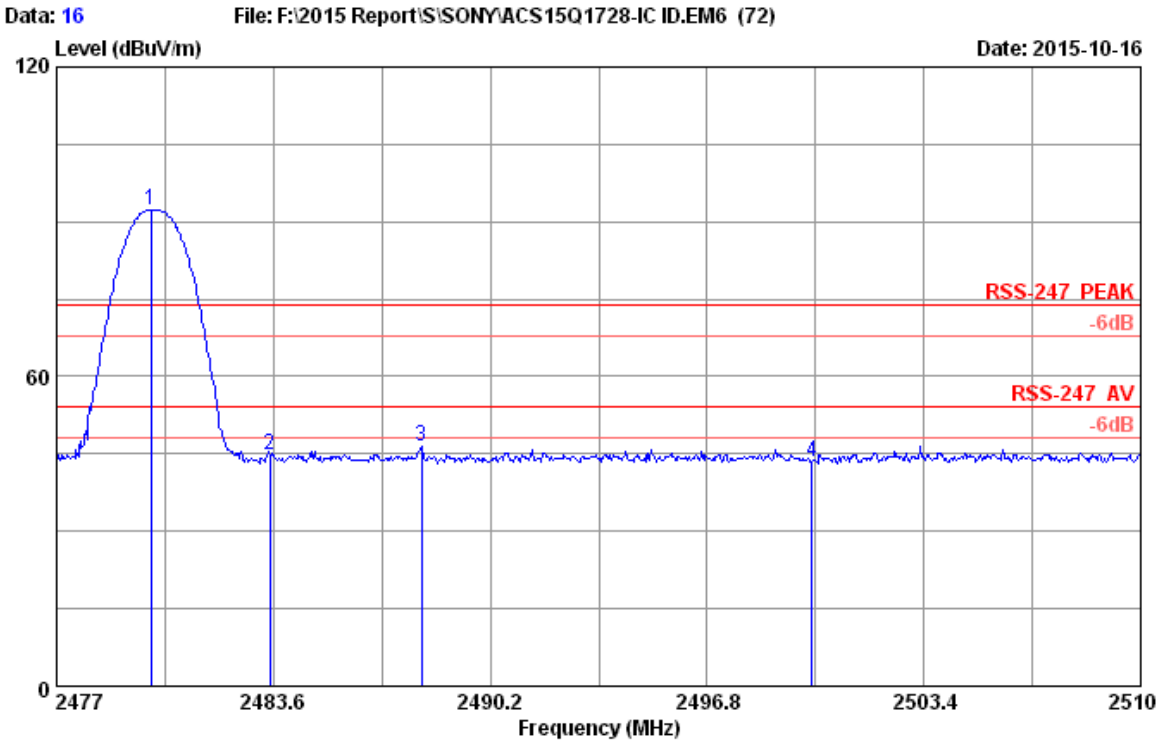
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber                        Data no.  : 15
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Horizontal
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.805	28.16	7.47	36.59	95.67	94.71	74.00	-20.71	Peak
2	2483.500	28.17	7.51	36.59	44.83	43.92	74.00	30.08	Peak
3	2486.339	28.17	7.51	36.59	46.98	46.07	74.00	27.93	Peak
4	2500.000	28.20	7.51	36.58	45.36	44.49	74.00	29.51	Peak

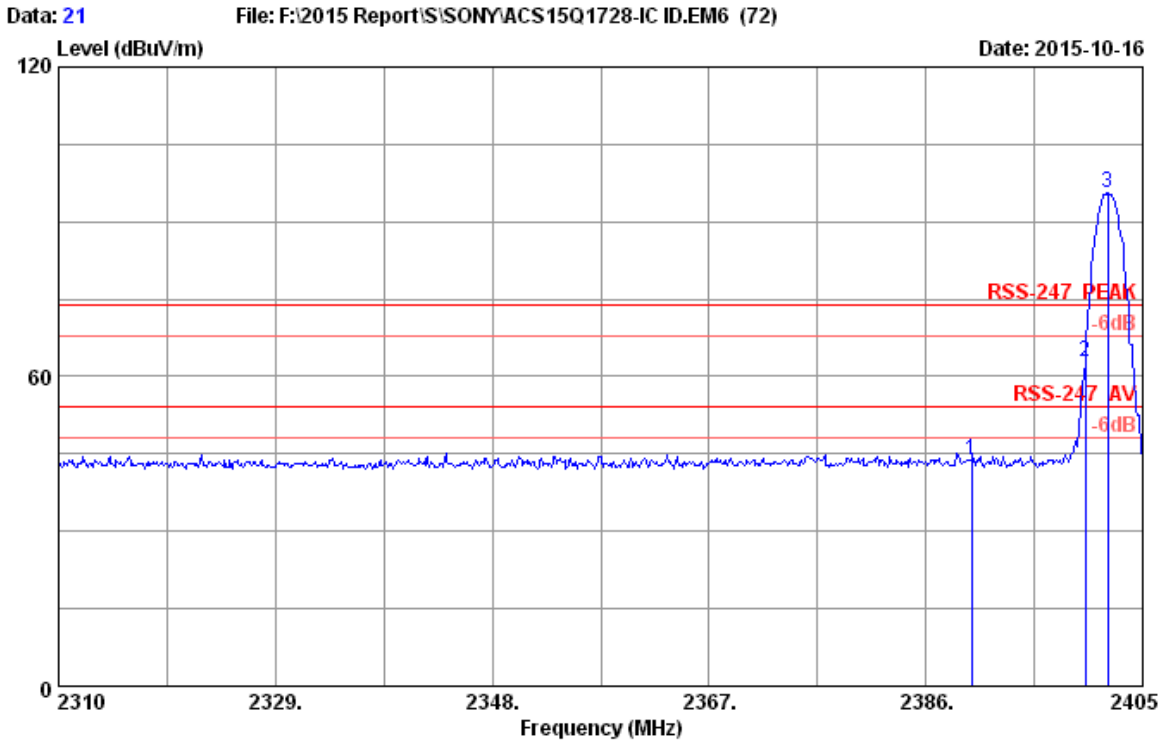
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2480MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.871	28.16	7.47	36.59	93.24	92.28	74.00	-18.28	Peak
2	2483.500	28.17	7.51	36.59	45.71	44.80	74.00	29.20	Peak
3	2488.121	28.18	7.51	36.58	47.30	46.41	74.00	27.59	Peak
4	2500.000	28.20	7.51	36.58	44.45	43.58	74.00	30.42	Peak

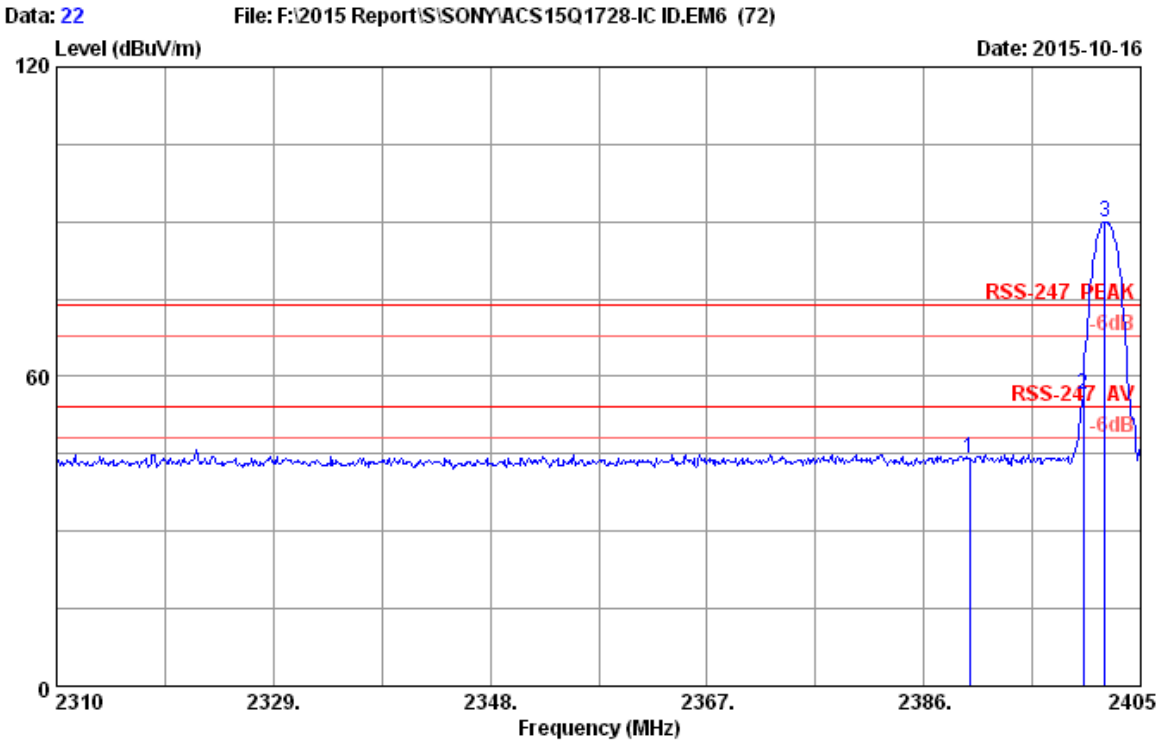
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 21
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	45.09	43.73	74.00	30.27	Peak
2	2400.000	28.00	7.32	36.62	64.13	62.83	74.00	11.17	Peak
3	2401.960	28.00	7.32	36.62	96.75	95.45	74.00	-21.45	Peak

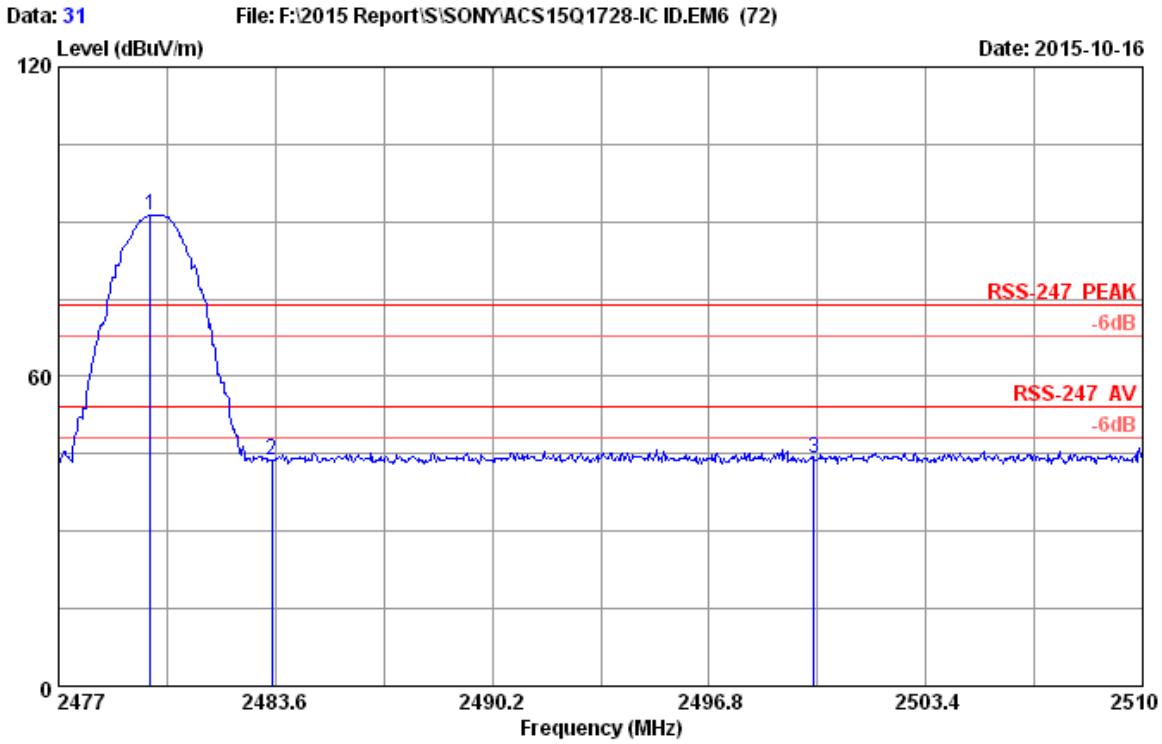
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	45.38	44.02	74.00	29.98	Peak
2	2400.000	28.00	7.32	36.62	57.75	56.45	74.00	17.55	Peak
3	2401.865	28.00	7.32	36.62	91.15	89.85	74.00	-15.85	Peak

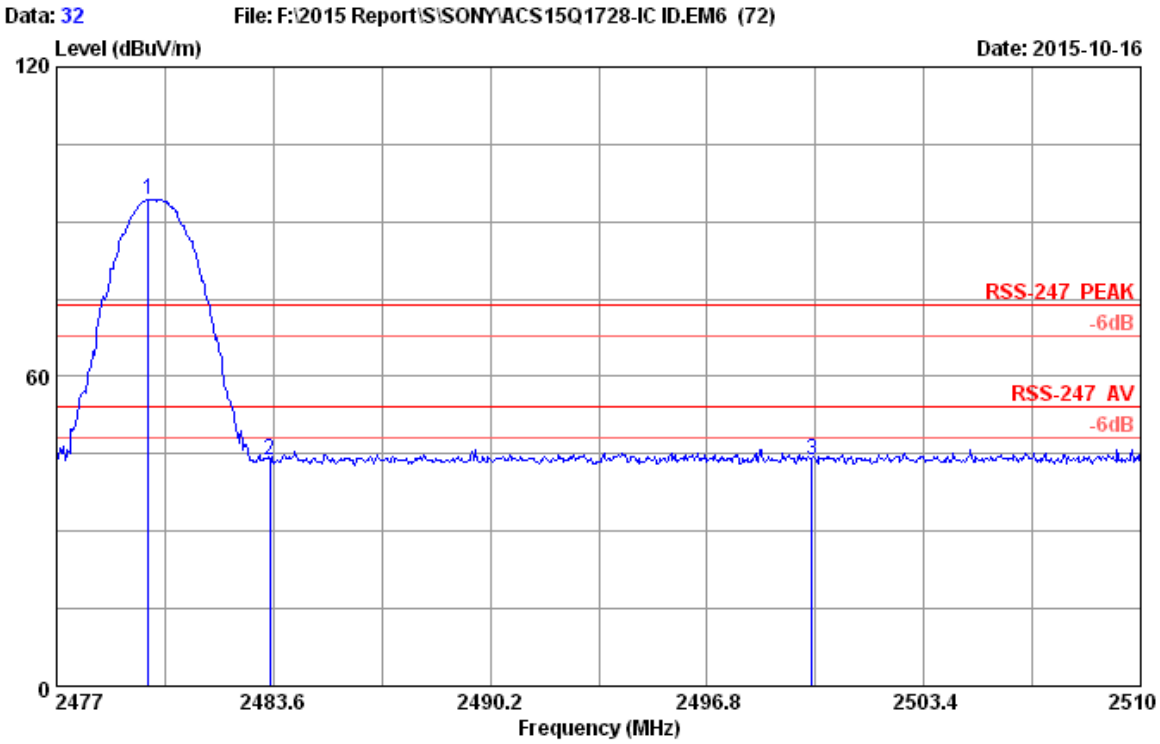
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2480MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.805	28.16	7.47	36.59	92.17	91.21	74.00	-17.21	Peak
2	2483.500	28.17	7.51	36.59	44.76	43.85	74.00	30.15	Peak
3	2500.000	28.20	7.51	36.58	45.11	44.24	74.00	29.76	Peak

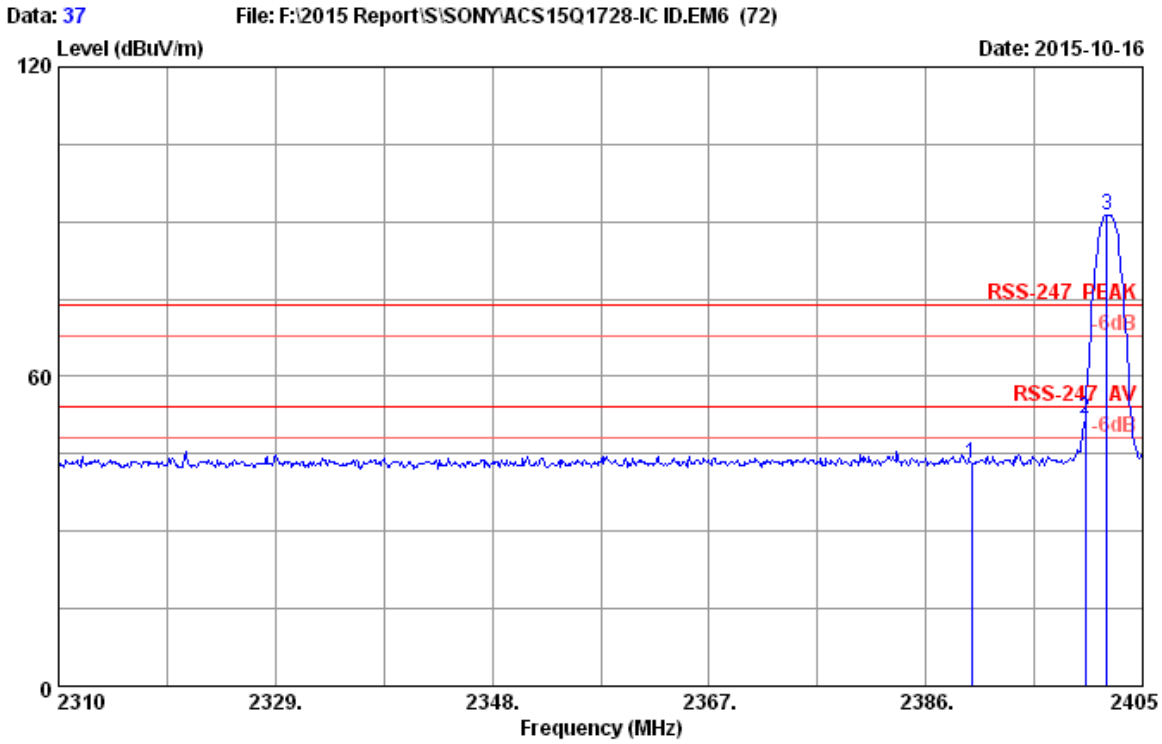
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2480MHz Tx Mode
: Horizontal

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.805	28.16	7.47	36.59	95.18	94.22	74.00	-20.22	Peak
2	2483.500	28.17	7.51	36.59	44.60	43.69	74.00	30.31	Peak
3	2500.000	28.20	7.51	36.58	44.63	43.76	74.00	30.24	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

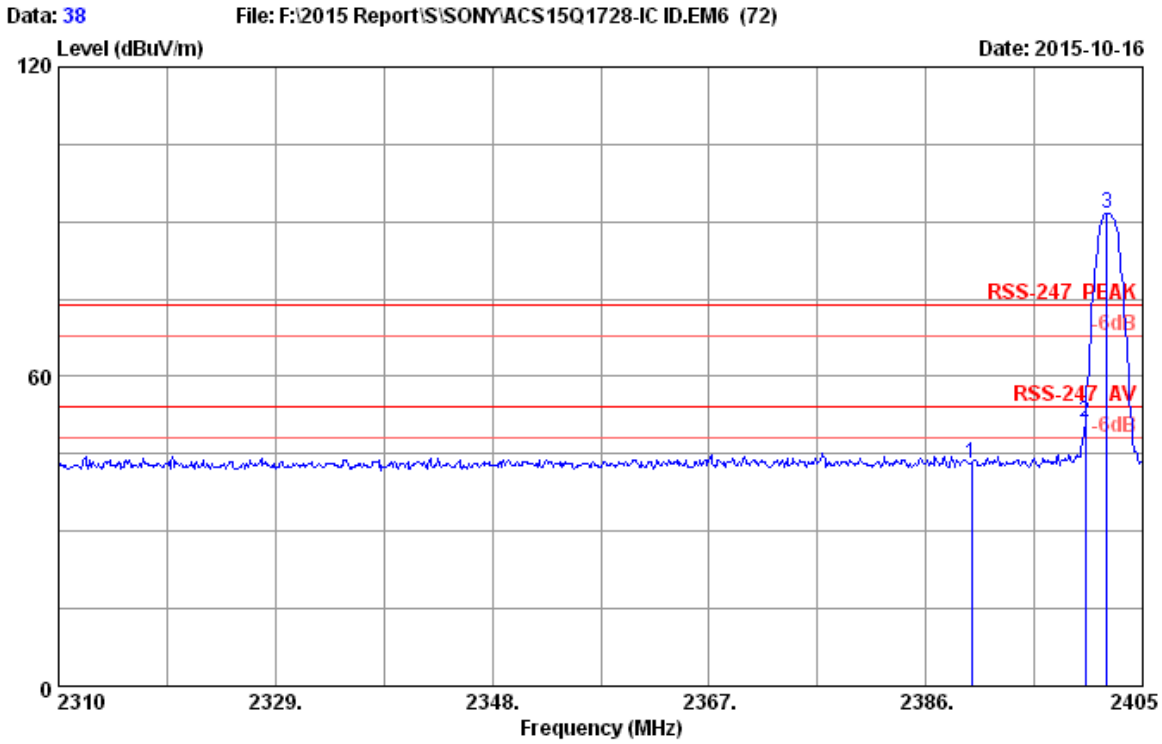



```
Site no.      : 3m Chamber                        Data no.  : 37
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : VERTICAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2402MHz  Tx Mode
              : Vertical
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.46	43.10	74.00	30.90	Peak
2	2400.000	28.00	7.32	36.62	53.12	51.82	74.00	22.18	Peak
3	2401.865	28.00	7.32	36.62	92.57	91.27	74.00	-17.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor

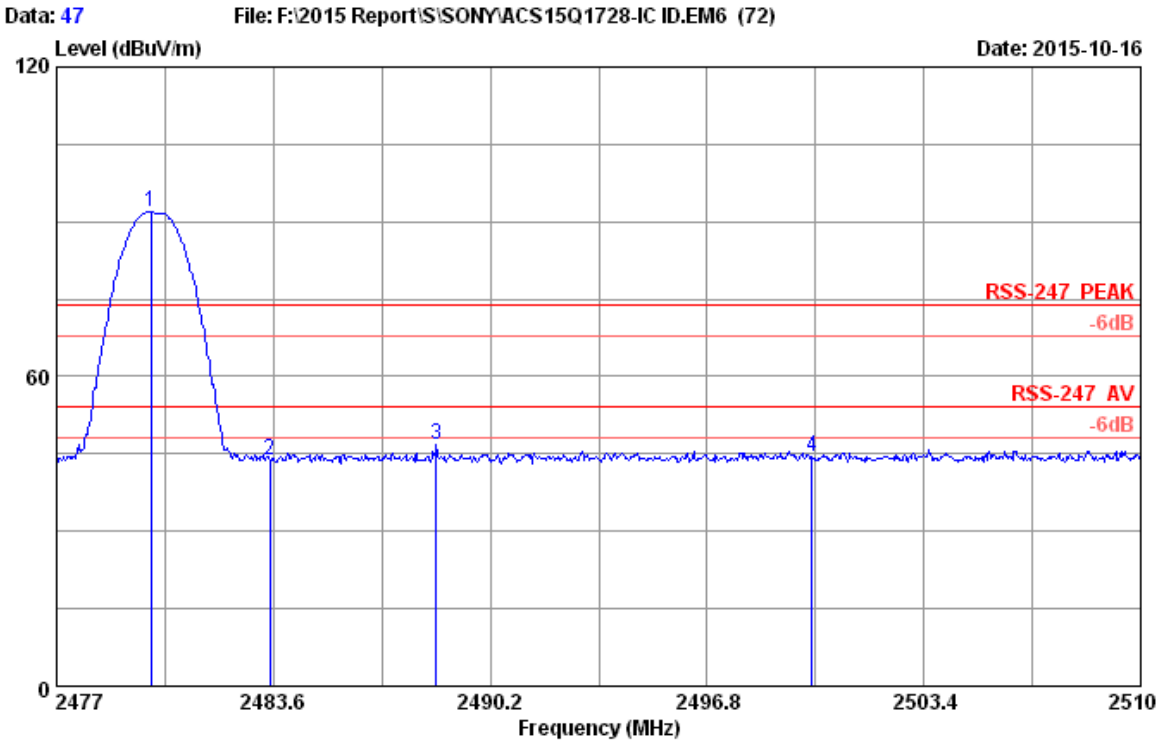
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.61	43.25	74.00	30.75	Peak
2	2400.000	28.00	7.32	36.62	52.29	50.99	74.00	23.01	Peak
3	2401.865	28.00	7.32	36.62	92.95	91.65	74.00	-17.65	Peak

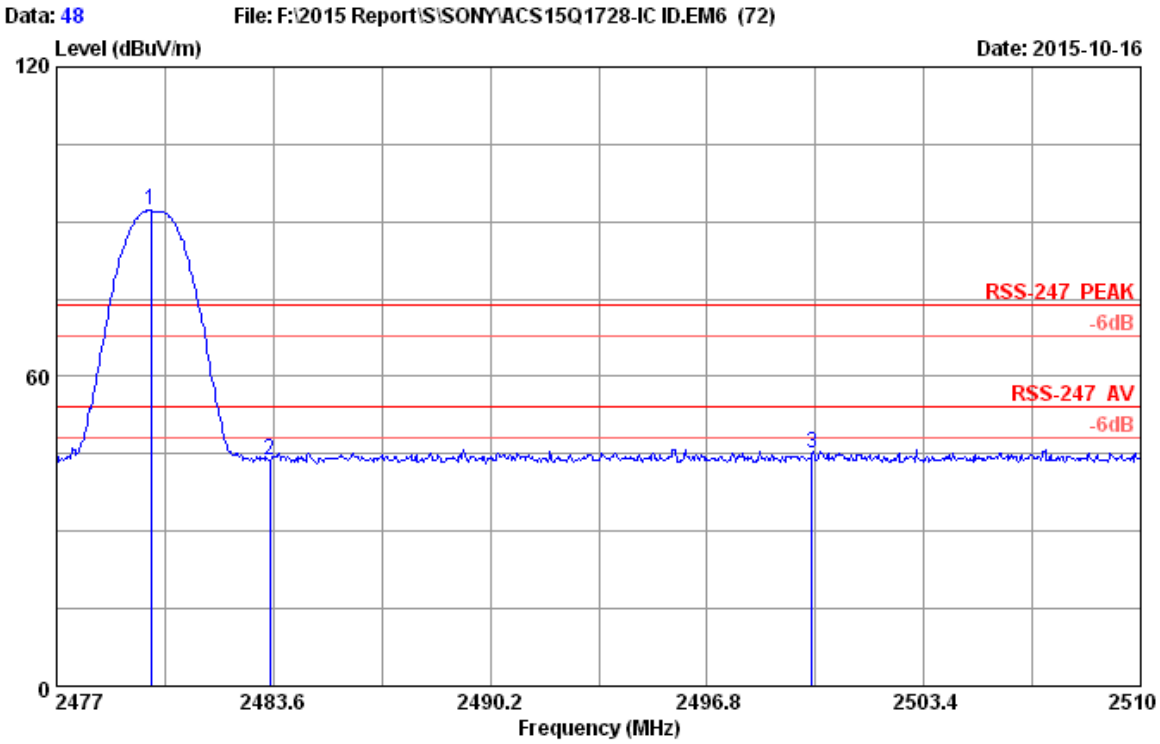
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber                        Data no.  : 47
Dis. / Ant.   : 3m   2015 MCTD1209   3006   Ant. pol. : HORIZONTAL
Limit         : RSS-247  PEAK
Env. / Ins.   : 23.7*C/49.8%
Engineer      : Donjon
EUT           : Home Audio System  M/N:GTK-XB7
Power rating  : AC 120V/60Hz
Test Mode     : GFSK  2480MHz  Tx Mode
              : Vertical
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.871	28.16	7.47	36.59	92.85	91.89	74.00	-17.89	Peak
2	2483.500	28.17	7.51	36.59	44.66	43.75	74.00	30.25	Peak
3	2488.550	28.18	7.51	36.58	47.55	46.66	74.00	27.34	Peak
4	2500.000	28.20	7.51	36.58	45.24	44.37	74.00	29.63	Peak

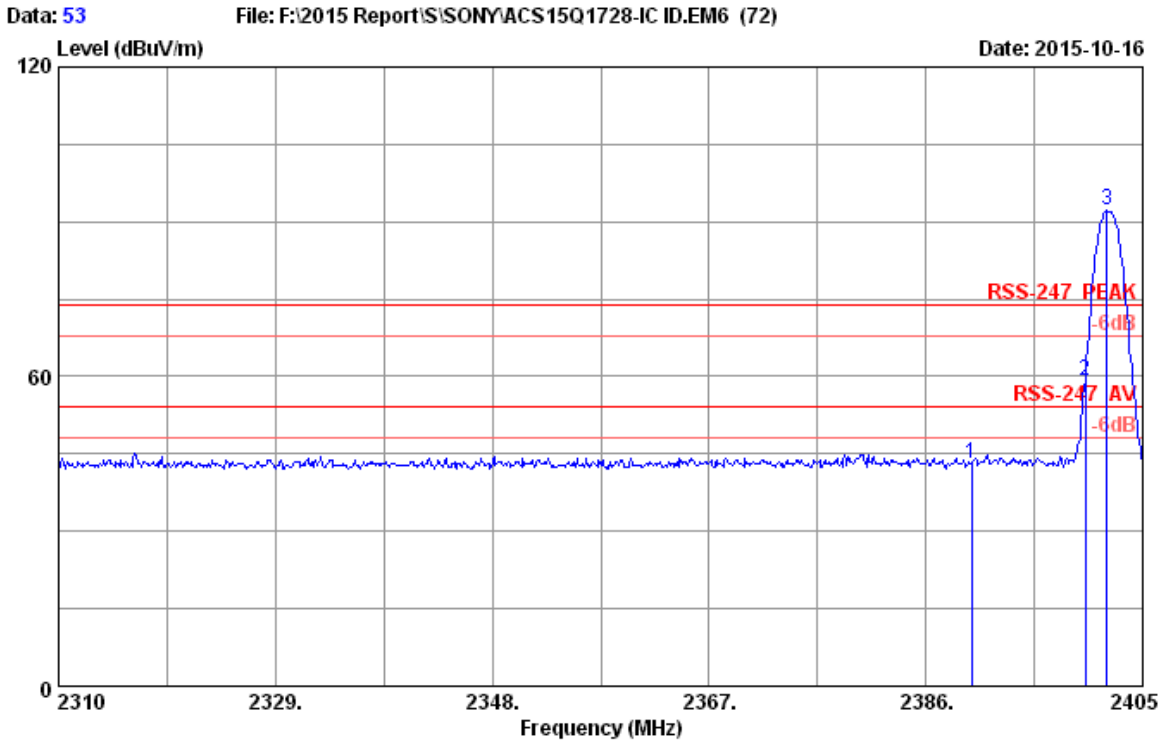
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : GFSK 2480MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.871	28.16	7.47	36.59	93.14	92.18	74.00	-18.18	Peak
2	2483.500	28.17	7.51	36.59	44.74	43.83	74.00	30.17	Peak
3	2500.000	28.20	7.51	36.58	45.85	44.98	74.00	29.02	Peak

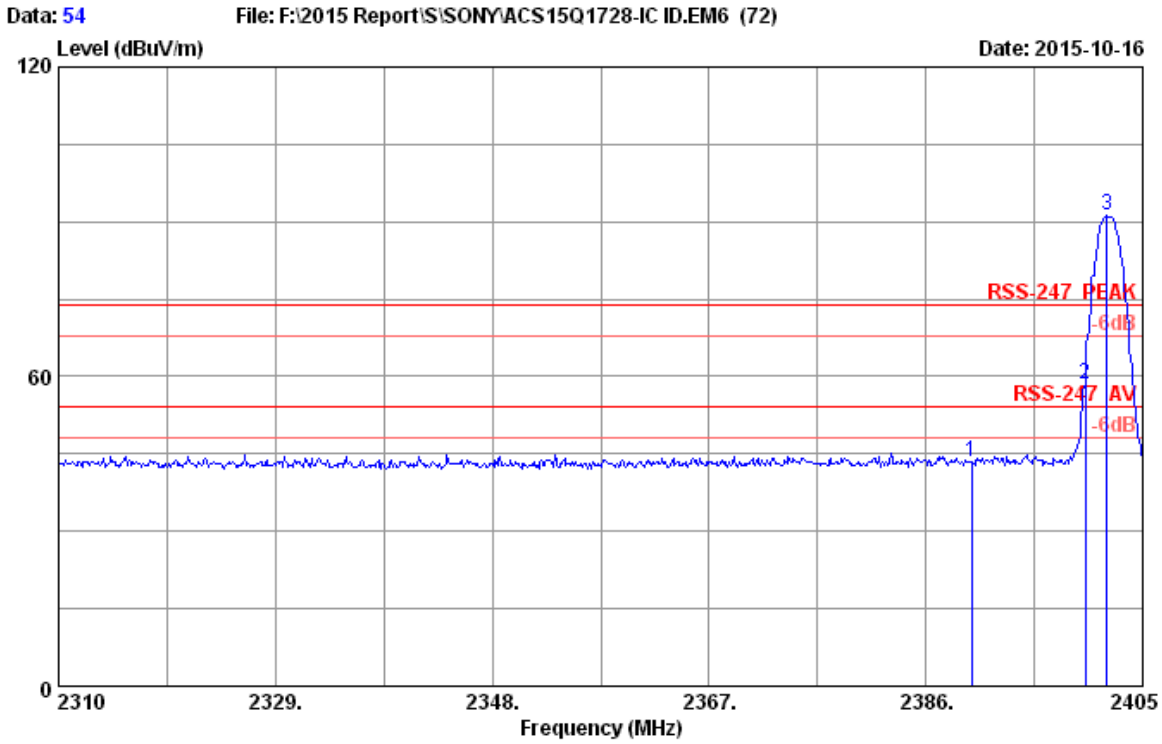
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.32	42.96	74.00	31.04	Peak
2	2400.000	28.00	7.32	36.62	60.56	59.26	74.00	14.74	Peak
3	2401.865	28.00	7.32	36.62	93.40	92.10	74.00	-18.10	Peak

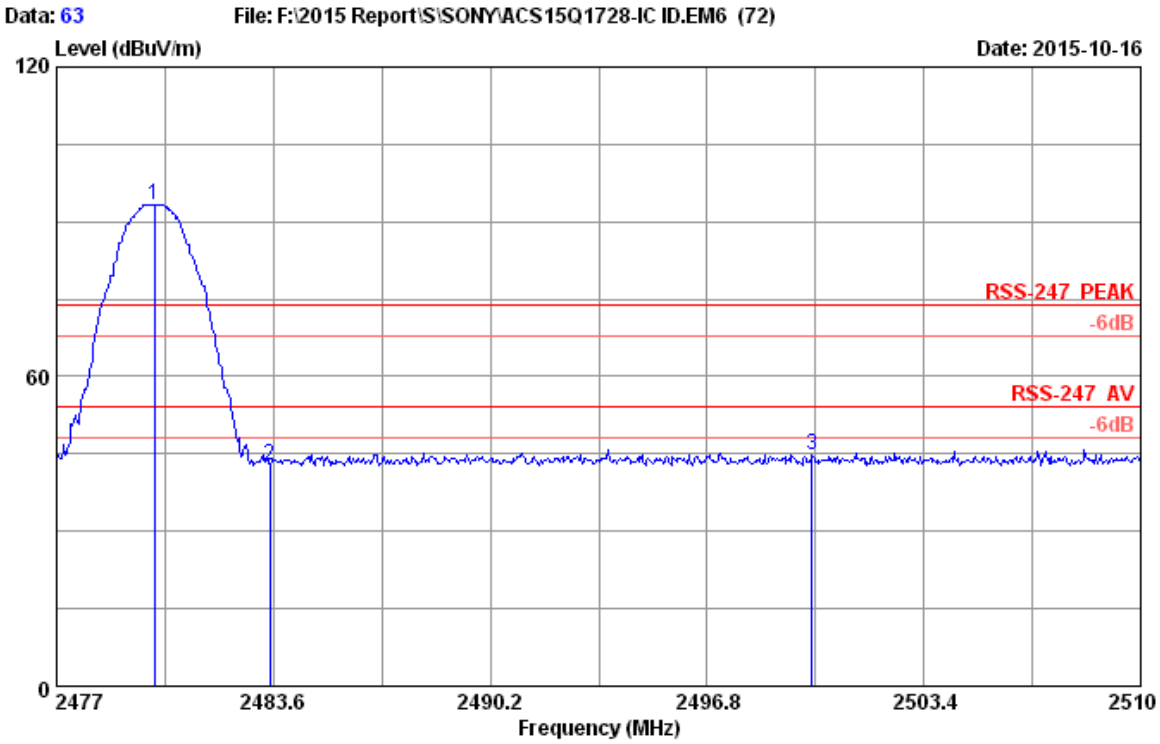
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2402MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.98	7.28	36.62	44.91	43.55	74.00	30.45	Peak
2	2400.000	28.00	7.32	36.62	59.81	58.51	74.00	15.49	Peak
3	2401.865	28.00	7.32	36.62	92.46	91.16	74.00	-17.16	Peak

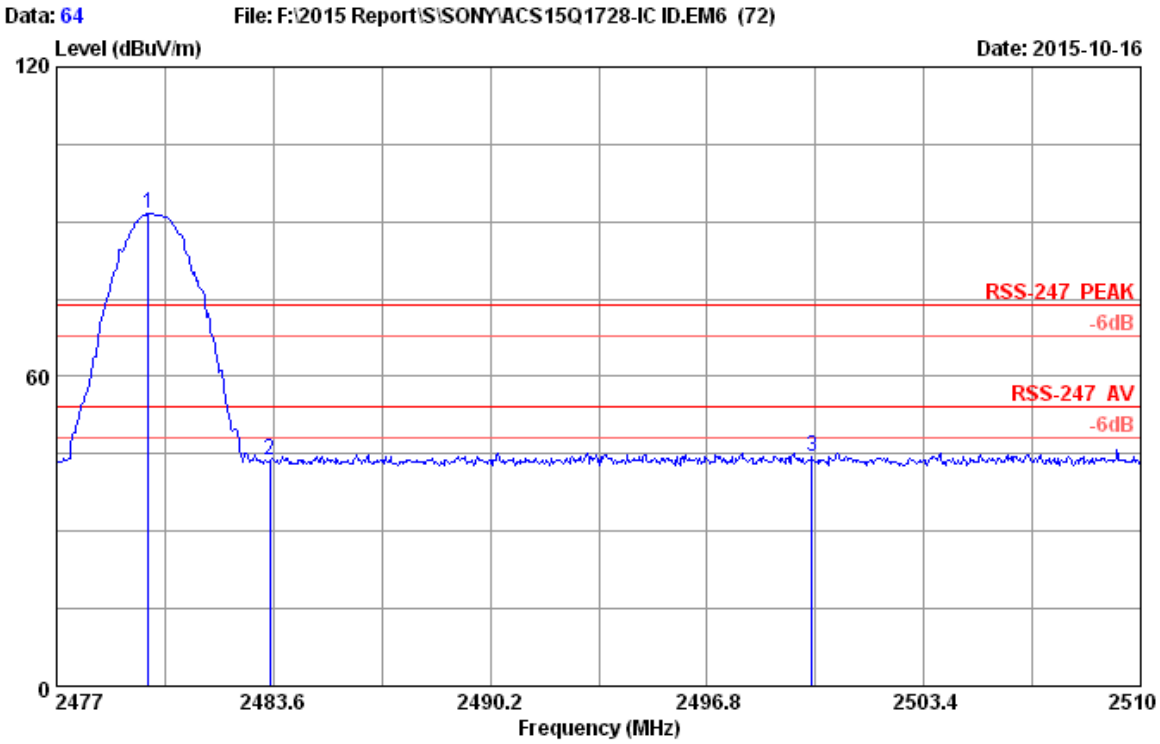
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : VERTICAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2480MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.970	28.16	7.47	36.59	94.31	93.35	74.00	-19.35	Peak
2	2483.500	28.17	7.51	36.59	43.67	42.76	74.00	31.24	Peak
3	2500.000	28.20	7.51	36.58	45.60	44.73	74.00	29.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 2015 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : RSS-247 PEAK
Env. / Ins. : 23.7*C/49.8%
Engineer : Donjon
EUT : Home Audio System M/N:GTK-XB7
Power rating : AC 120V/60Hz
Test Mode : 8-DPSK 2480MHz Tx Mode
: Vertical

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.805	28.16	7.47	36.59	92.52	91.56	74.00	-17.56	Peak
2	2483.500	28.17	7.51	36.59	44.60	43.69	74.00	30.31	Peak
3	2500.000	28.20	7.51	36.58	45.36	44.49	74.00	29.51	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

12. DEVIATION TO TEST SPECIFICATIONS

[NONE]