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REPORT ON ELECTROMAGNETIC COMPATIBILITY TESTS

Performed at: TWENTY PENCE TEST SITE

Twenty Pence Road, Cottenham, Cambridge U.K. CB24 8PS

on

Cyrus Audio Ltd

System 1 (6dac / 8dac + PSXR)

dated

20th March 2014

Document History

Issue	Date	Affected page(s)	Description of modifications	Revised by	Approved by
1	27/03/14		Initial release		

Based on report template: v090319

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
(dB)	Test No:	T5276	Test Report	Page:	2 of 41

Equipment Under Test (EUT): System 1 (6dac / 8dac + PSXR)

Test Commissioned by: Cyrus Audio Ltd

Spitfire Close

Ermine Business Park

Huntingdon Cambridgeshire PE29 6XY

Representative: Ceri Williamson

Test Started: 12th February 2014

Test Completed: 26th February 2014

Test Engineer: Peter Barlow

Date of Report: 20th March 2014

Written by: Peter Barlow Checked by: Derek Barlow

Signature: Signature:

Date: 20th March 2014 Date: 27th March 2014

dB Technology can only report on the specific unit(s) tested at its site. The responsibility for extrapolating this data to a product line lies solely with the manufacturer.

Test Standards Applied

CFR 47 Code of Federal Regulations: Pt 15 Subpart B- Radio Frequency Devices Class B Unintentional Radiators

Measurements performed at dB Technology FCC Listed test facility, registration No: 90528

Emissions Test Results Summary

CFR 47 PASS

Test	Port	Method	Limit	PASS/FAIL	Notes
Conducted Emissions	ac power	ANSI C63.4:2003	FCC(B) = CISPR22(B)	PASS	
Radiated Emissions		ANSI C63.4:2003	FCC(B) = FCC_B	PASS	

specs_fccv100412

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1 EUT Details

1.1 General

The EUTs were the Cyrus 8dac and 6dac units incorporating a high power integrated amplifier and advanced digital to analogue converter which may be connected to a PC via a USB 2.0 connection. The units are identical in circuitry with the exception that the 8dac has a larger linear transformer for its internal power supply and also an extra connector to enable the unit to be powered by an external regulated power supply (PSXR). They included microprocessor circuitry with a maximum frequency of 480MHz requiring emissions tests to be performed up to 2GHz.

The purpose of this report is to cover the USB operation of the unit(s) for Certification as a computer peripheral. Operation in other modes is covered in our Verification Report R3320.

Testing was performed with the system connected as per Figure 1 diagram. The 6dac cannot operate with the PSXR, so this was not included in the set-up for the 6dac.

Details of the EUT and associated peripherals used during the tests are listed below. Figure 1 shows the interconnections between the EUT and peripherals.

Item	Manufacturer	Model	Description	Serial No:	Notes
1 2 3 4 5	Cyrus Audio Cyrus Audio Cyrus Audio Cyrus Audio Cyrus Audio Apple Inc California	8dac 6dac CDT PSXR CLS50 Mac Book Pro A1278	USB DAC USB DAC CD Player 8dac PSU Speakers Laptop PC	AW1DB0512 BN1EB0100 Proto 1 HNBB0151 CLS50-M0196 C02HV69TDTY3 FCC ID: QDS-BRCM1055 IC: 4324A-BRCM1055	EUT EUT
7 8 9	Delta Electronics Ltd Netgear Netgear	ADP-60ADT FS605v3 DV-751AUK	Laptop PSU 5 port switch AC-DC adapter	N/A 1FM1853S06387 330-10148-01	

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1.2 Details of Interconnecting Cables

The following table lists details of the cables connected to the EUT.

From	То	Cable Type	Length	Notes
8dac (PSXR) 8dac/6dac (Headphones) 8dac/6dac (Speaker L&R) 8dac/6dac (MCBUS In&Out) 8dac/6dac (Pre-out1 L&R) 8dac/6dac (Pre-out2 L&R) 8dac/6dac (Zone2 out L&R) 8dac/6dac (In 1 L&R) 8dac/6dac (In 2 L&R) 8dac/6dac (In 3 L&R) 8dac/6dac (In 3 L&R) 8dac/6dac (In 5 L&R) 8dac/6dac (In 6 L&R) 8dac/6dac (In 8) 8dac/6dac (In 9) 8dac/6dac (In 10) 8dac/6dac (In 10) 8dac/6dac (In 10) 8dac/6dac (AC Power)	PSXR Senizer HD600 headphones CLS50 speakers CDT (MCBUS) floating floating floating floating floating floating floating floating floating CDT (Optical) Optical 2 not connected CDT (SPDIFF out) floating Laptop PC 115V ac power	Cyrus integral cable Integral cable Cyrus Speaker Cable Cyrus std Phono USB 2.0 cable Cyrus Std mains	0.5m 3m 1.25m 0.5m 1.2m 1.2m 1.2m 1.5m 0.5 1.2m 1.2m N/A N/A 1m 1m 2m 2m	
PSXR (DC) PSXR (AC Power)	8dac (PSXR) 115V ac power	Cyrus integral cable Cyrus Std mains	0.5m 2m	
CDT (MCBUS In&Out) CDT (SPDIFF Out) CDT (Digital Optical) CDT (AC Power)	8dac/6dac (MCBUS In&Out) 8dac/6dac (In 9) 8dac/6dac (In 7) 115V ac power	Cyrus std Phono Cyrus std Phono Fiber optic Cyrus Std mains	0.5m 1m N/A 2m	

1.3 Modifications to EUT and Peripherals

Details of any modifications that were required to achieve compliance are listed below. The modification numbers are referred to in the results sections as appropriate.

Mod No:	Details	Implemented for
0	No modifications. EUTs tested as received.	

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1.4 EUT Operating Modes

The EUT was tested in the following operating mode or modes. Generally, operating modes are chosen that will exercise the functions of the EUT as fully as possible and in a manner likely to produce maximum emission levels or susceptibility. Individual test result sheets reference the operating mode of the EUT.

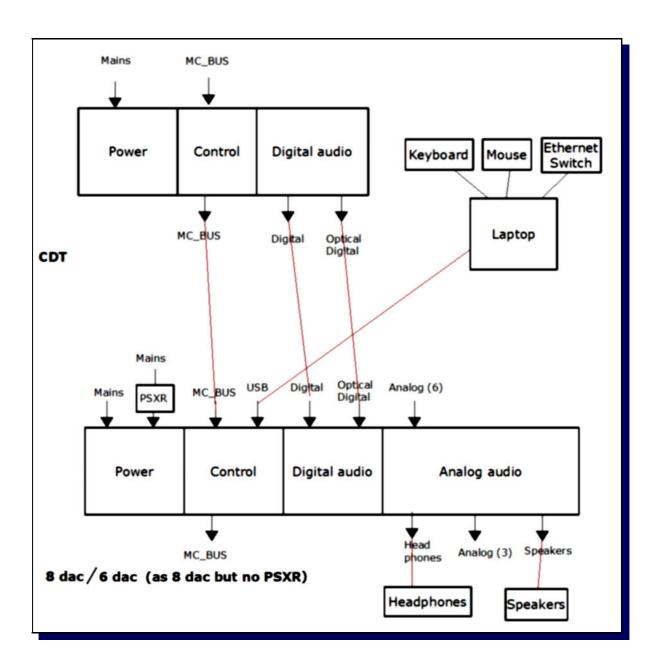
Operating Mode	Details
1	8dac/6dac with USB Source from PC.

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
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Figure 1 General Arrangement of EUT and Peripherals

The 8dac and the 6dac could be connected to a domestic PC and so to test this at dB Technology it is necessary to go through the certification route. The 6dac and the 8dac are considered sufficiently similar to be tested under one project with only a subset of prescans necessary on the 6dac).

As a peripheral to a computer the FCC "minimum" set up is required. In addition, a device such as a CD player is needed to exercise the digital inputs. The CDT was used as a representative input device.



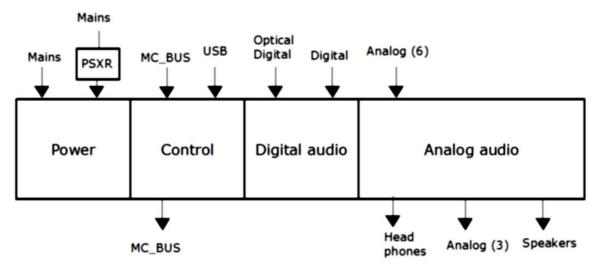
All other ports to be connected to floating cables.

NOTE: The PSXR option is not available for the 6 dac, so this was tested only with the direct mains input.

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Photograph 1 8dac





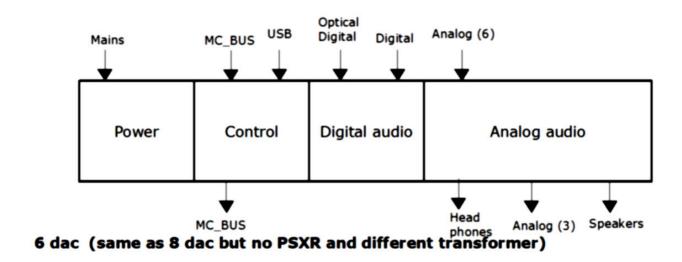
8 dac

A	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10	
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Photograph 2 6dac

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/ †\	Report No: Issue No:	R3330 1
(dB)	Test No:	T5276

FCC ID: 2ABZXJG10

Test Report

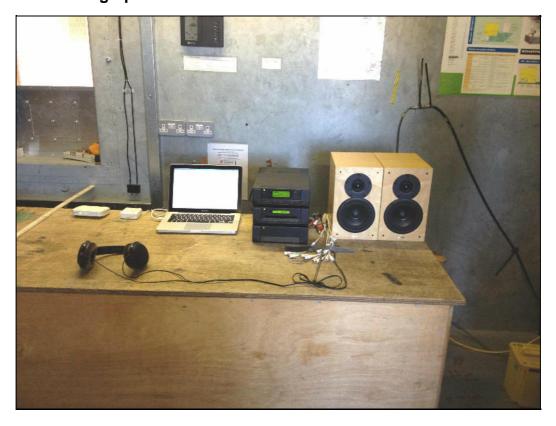
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Photograph 3 PSXR



Photograph 4 Conducted Emissions - 8dac - USB Source



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Photograph 5 Conducted Emissions - 8dac - USB Source



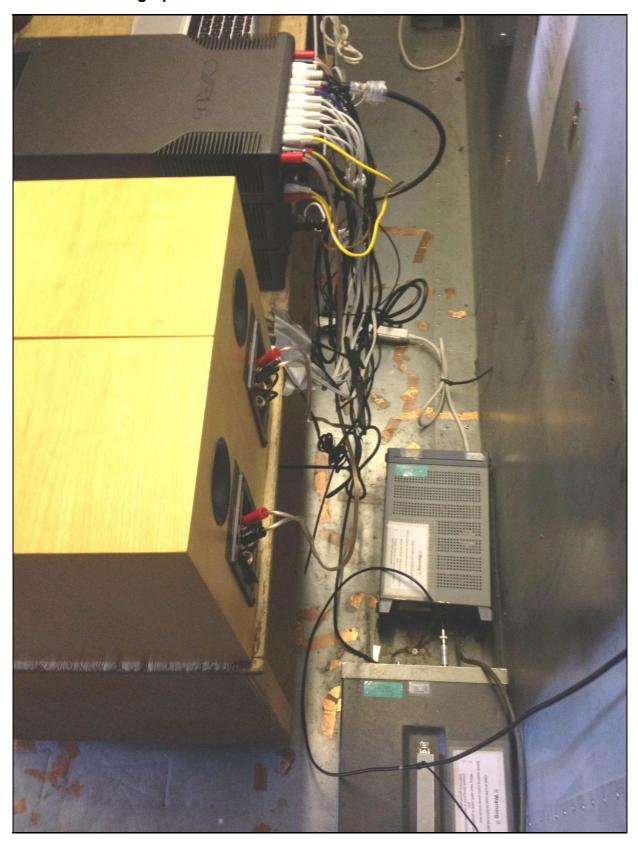
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
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Photograph 6 Conducted Emissions - 6dac - USB Source



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Photograph 7 Conducted Emissions - 6dac - USB Source



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Photograph 8 Conducted Emissions - 6dac - USB Source



<u> </u>	Report No: Issue No:	R3330 1
dB	Test No:	T5276

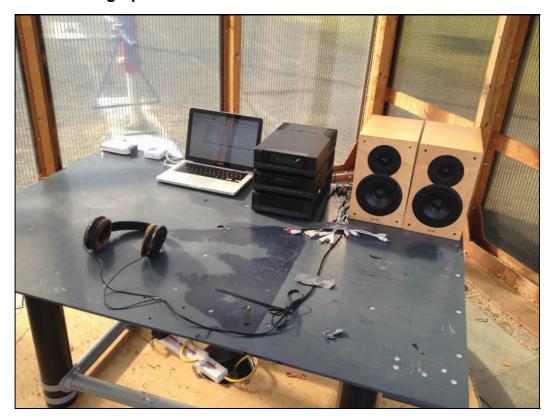
FCC ID: 2ABZXJG10

Test Report

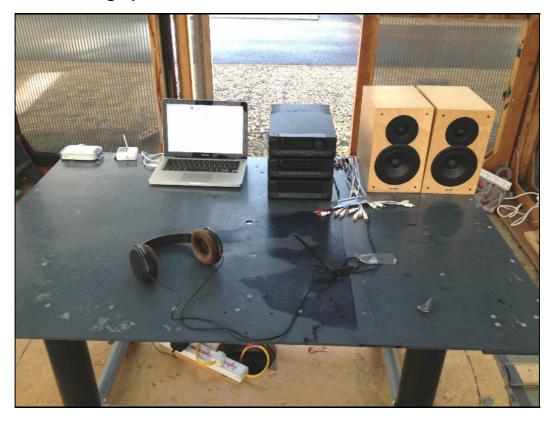
Page:

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Photograph 9 Radiated Emissions - 8dac - USB Source

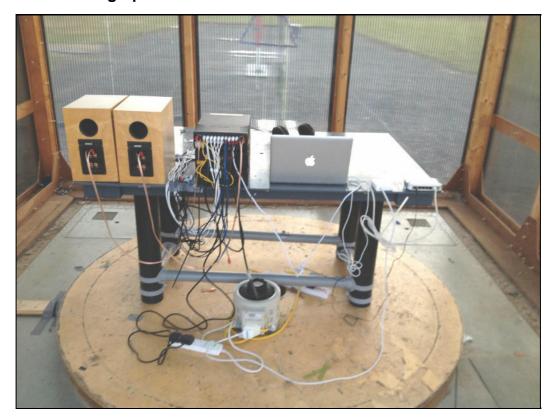


Photograph 10 Radiated Emissions - 8dac - USB Source



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Photograph 11 Radiated Emissions - 6dac - USB Source



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dB	Test No:	T5276	Test Report	Page:	17 of 41

2 Test Equipment

The test equipment used during the tests was one or more of the items listed below. Individual test result sheets indicate which items were used.

Ref No:	Details	Serial Number	Cal Date	Cal Interval
A12	Chase Bilog CBL6111A	1012	28/10/2013	1 year
A15	Chase X-wing Bilog CBL6140 20MHz-2GHz	1047	28/10/2013	1 year
A23	EMCO 3115 DR Guide (1-18GHz)	9507-4525	28/10/2013	1 year
L1	EMCO 3825/2 LISN	1358	12/03/2013	1 year
L2	R&S ESH3-Z5 LISN	843862/009	13/03/2013	1 year
R10	Narda PMM 9010 Receiver (10Hz-30MHz)	595WX11003	12/02/2014	1 year
R4	R&S ESVS10	843744/002	13/12/2013	1 year
R7	R&S ESVD	841729/003	10/12/2013	1 year
R8	Agilent E7405A Spectrum Analyser	MY44212494	24/09/2013	1 year

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3 Test Methods

3.1 Conducted Emissions - ac power

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.

Bench top EUTs and peripheral equipment are normally placed on a 0.8m high non-conducting bench, positioned 0.4m from one of the metallic walls of a screened room. Floor standing EUTs are normally placed 0.1m above the metallic floor of the screened room. Mains leads are bundled so as not to exceed 1m

The EUT is powered using a 50ohm/50uH Line Impedance Stabilisation Network (LISN). Peripherals are powered using a second a 50ohm/50uH LISN. These LISNs are bonded to the screened room floor.

With the correct supply voltage applied to the EUT scans are performed on both the live and neutral line outputs of the LISN using quasi-peak detection over the specified frequency range. The results of these scans are shown in the plots section at the end of the report.

Significant emissions identified by the scans are measured and the results tabulated. The table of results is shown in the conducted emissions results section.

3.2 Radiated Emissions

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.

Initial scans are performed in a semi-anechoic screened room at a distance of 3m. Scans are performed over the frequency range specified in the test standard with the antenna both horizontally and vertically polarised. During these scans the EUT and peripherals are rotated through 360°. Bench top EUTs are placed on a non-conducting bench at a height of 0.8m above the ground plane. Floor standing EUTs are placed 0.1m above the ground plane. The results of the scans are shown in the plots included at the end of the report.

Significant emissions identified by the scans are measured on an open area test site (O.A.T.S) at the appropriate test distance using a CISPR16 quasi-peak receiver. Maximised readings are obtained by rotating the EUT through 360° and adjusting the height of the antenna from 1m to 4m. Measurements are made with the antenna both horizontally and vertically polarised and the results tabulated.

4 Test Results

The following sections contain tabulated test results. Plots of various scans are included at the back of this section.

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
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Conducted Emissions (Power) - 8dac - USB Source - Live Line 4.1

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2: Factor Set 3:

	or Set		 R10 L1	١ 2								
			ns (Powe									
Com	pany:	Cyru	s Audi	o Ltd				Produc	Sy Sy	/stem 1 (6	6dac / 8da	ac + PSXR)
Date) <i>:</i>		2/2014					Test E	<i>ng:</i> Pe	ter Barlow		
Ports Test		ac pov		2002	uoina l	imita	-t	ECC//	D)	_	CICDD22/D	,
Ports		ANSI	C63.4:	2003	using l	iiiiits (JI	FCC(D)		CISPR22(B)
Test	:				using l	imits (of					
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes
1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0		1 1 1 1 1 1 1 1 1	0.165 0.165 0.215 0.215 0.645 0.645 0.690 0.690 8.575 8.575 8.985 8.985	qp av qp av qp av qp av	42.2 27.3 34.1 23.3 25.2 20.3 28.3 22.7 33.6 27.0 33.0 26.9	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.1 10.1 10.1	52.2 37.3 44.0 33.2 35.1 30.2 38.2 32.7 43.7 37.1 43.1 37.1	65.2 55.2 63.0 53.0 56.0 46.0 56.0 46.0 60.0 50.0	13.1 17.9 19.0 19.8 20.9 15.8 17.8 13.3 16.3 12.9 16.9	115V 8dac USB 115V 8dac USB
	Resul	ts					Minimu PASS/F		jin	12.9 PASS	dB	
No	tes						Comme	nts and	Obser	vations		
			Results	of sca	ns showi	n in plo		dac live	e line, l	JSB mode,	115V.	

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	20 of 41

Conducted Emissions (Power) - 8dac - USB Source - Neutral Line 4.2

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2:

	Factor Set 3: Test Equipment: R10 L1 L2												
			ns (Powe										
Com	pany:	Cyru	s Audi	o Ltc	l			Produc	et: Sy	ystem 1 (6dac / 8d	ac + PSXR)	
Date			2/2014					Test E	<i>ng:</i> Pe	ter Barlow			
Ports		ac pov											
Test Ports		ANSI	C63.4:	2003	using I	imits (of	FCC(B)	=	CISPR22(B	3)	
Test					using l	imits (of						
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes	
2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1	0.165 0.165 0.215 0.215 0.640 0.645 0.685 8.580 8.580 8.680 8.680	qp av qp av qp av qp av	42.7 35.4 36.7 32.2 33.1 27.9 35.3 30.1 30.1 23.7 29.9 24.0	10.0 10.0 10.0 10.0 10.0 10.0 10.1 10.1	52.7 45.3 46.6 42.1 43.1 37.8 45.3 40.0 40.2 33.8 40.0 34.1	65.2 55.2 63.0 53.0 56.0 46.0 56.0 46.0 60.0 50.0 60.0	12.6 9.9 16.4 10.9 12.9 8.2 10.7 6.0 19.8 16.2 20.0 15.9	115V 8dac USB 115V 8dac USB	
	Pocul						Minimu	m Marc	in.	6.0	dB		
	Resul	เร					Minimu PASS/F)in	6.0 PASS	dB		
No	tes						Comme	nts and	Obser	vations			
			Results	of sca	ns showr	n in plo	ot 2. 8	dac Ne	utral lii	ne, USB mo	ode, 115V.		

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Conducted Emissions (Power) - 6dac - USB Source - Neutral Line 4.3

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2:

	Factor Set 3: Fest Equipment: R10 L1 L2												
			ns (Powe										
			s Audi					Produc	st: Sy	stem 1 (6	6dac / 8d	ac + PSXR)	
Date			2/2014					Test E	<i>ng:</i> Pe	ter Barlow			
Ports		ac pov											
Test. Ports		ANSI	C63.4:	2003	using l	imits (of	FCC(I	3)	=	CISPR22(B	3)	
Test					using li	imits (of						
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes	
3 3 3 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1	0.185 0.185 0.265 0.265 0.610 0.610 0.695 2.995 2.995 6.290 6.290	qp av qp av qp av qp av	43.8 41.3 39.6 36.1 39.1 31.1 36.6 29.5 32.5 26.9 34.2 28.4	10.0 10.0 10.0 10.0 9.9 9.9 10.0 10.0 10	53.7 51.3 49.5 46.0 49.1 41.0 46.5 39.5 42.5 36.9 44.3 38.5	64.3 54.3 61.3 51.3 56.0 46.0 56.0 46.0 56.0 50.0	10.6 3.0 11.8 5.3 6.9 5.0 9.5 6.5 13.5 9.1 15.7 11.5	115V 6dac USB 115V 6dac USB	
	Resul	ts					Minimui PASS/F		jin	3.0 PASS	dB		
No	tes						Comme		Obser				
		Results of scans shown in plot 3. 6dac Neutral line, USB mode, 115V.											

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Conducted Emissions (Power) - 6dac - USB Source - Live Line 4.4

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2:

	ector Set 3: est Equipment: R10 L1 L2												
			ns (Powe										
			s Audi					Produc	st: Sy	stem 1 (6dac / 8da	ac + PSXR)	
Date			2/2014					Test E	<i>ng:</i> Pe	ter Barlow			
Ports	S <i>:</i>	ac pov	ver										
Test. Ports		ANSI	C63.4:	2003	using l	imits (of	FCC(I	3)	=	CISPR22(B)	
Test					using li	imits (of						
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes	
4 4 4 4 4 4 4 4	1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0		1 1 1 1 1 1 1 1	0.185 0.185 0.615 0.615 0.680 0.680 3.590 6.280 6.280 8.570 8.570	qp av qp av qp av qp av	31.1 27.5 32.2 24.5 33.1 25.5 34.5 28.9 32.5 26.3 30.4 24.8	10.0 10.0 9.9 9.9 10.0 10.0 10.0 10.1 10.1	41.0 37.4 42.2 34.4 43.0 35.5 44.5 38.9 42.6 36.4 40.5 34.9	64.3 54.3 56.0 46.0 56.0 46.0 60.0 50.0 60.0 50.0	23.2 16.8 13.8 11.6 13.0 10.5 11.5 7.1 17.4 13.6 19.5 15.1	115V 6dac USB	
	Resul	ts					Minimui PASS/F		jin	7.1 PASS	dB		
No	tes						Comme		Obser	vations			
		Results of scans shown in plot 4. 6dac live line, USB mode, 115V.											

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Conducted Emissions (Power) - 8dac + PSXR - USB Source - Live Line 4.5

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2: Factor Set 3:

Factor Set 3: Test Equipment: R10 L1 L2												
			ns (Powe									
			s Audi					Produc	et: Sv	vstem 1 (6dac / 8d	ac + PSXR)
Date			2/2014					Test E		ter Barlow		,
Ports		ac pov					_					
Test Ports		ANSI	C63.4:	2003	using I	imits	of	FCC(B)	=	CISPR22(B	3)
Test					using l	imits	of					
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes
5 5 5 5 5 5 5 5 5	1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1	0.165 0.165 0.215 0.215 0.635 0.635 0.680 0.680 2.380 2.380 8.830 8.830	qp av qp av qp av qp av qp	35.3 31.1 30.6 27.3 27.4 22.7 28.1 22.6 25.0 20.5 25.8 30.5	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	45.2 41.1 40.6 37.3 37.4 32.6 38.0 32.6 35.0 30.5 35.9 40.6	65.2 55.2 63.0 53.0 56.0 46.0 56.0 46.0 60.0 50.0	20.0 14.2 22.5 15.7 18.6 13.4 18.0 13.4 21.0 15.5 24.1 9.4	115V PSXR USB
No	Resul	ts					Minimu PASS/F	AIL		9.4 PASS	dB	
INO	tes						Comme	nts and	Obser	vations		
			Results	of sca	ıns showı	n in plo	ot 5. P	SXR liv	e line,	USB mode,	115V.	

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	24 of 41

Conducted Emissions (Power) - 8dac + PSXR - USB Source - Neutral Line 4.6

L1_13A AB002_CBL005_CBL039_12A --Factor Set 1:

Factor Set 2: Factor Set 3:

	or Set		 D10 I 1										
			R10 L1 ns (Powe										
	Company: Cyrus Audio Ltd Product: System 1 (6dac / 8dac + PSXR) Date: 26/02/2014 Test Eng: Peter Barlow												
								Test E					
Port:	s:	ac pov	ver				_						
Test Ports		ANSI	C63.4:	2003	using I	imits	of	FCC(B)	=	CISPR22(B	3)	
Test					using l	imits	of						
Plot	Op Mode	Mod State	Line (L/N)	Fact Set	Freq. MHz	Det qp/ av	Rec. Level dBuV	Corr'n Factor dB	Total Level dBuV	Limit CISPR22(B) dBuV	Margin CISPR22(B) dB	Notes	
6 6 6 6 6 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N N N N N N	1 1 1 1 1 1 1	0.165 0.165 0.215 0.215 0.400 0.400 0.690 0.690 2.420	qp av qp av qp av qp av	34.7 29.2 29.5 26.2 23.1 20.9 29.4 24.2 23.0	10.0 10.0 10.0 10.0 10.0 10.0 10.0	44.6 39.2 39.4 36.2 33.0 30.9 39.4 34.1 33.0	65.2 55.2 63.0 53.0 57.9 47.9 56.0 46.0	20.6 16.0 23.6 16.8 24.8 17.0 16.6 11.9 23.0	115V PSXR USB 115V PSXR USB	
6 6	1 1 1	0 0 0	N N N	1 1 1	2.420 8.880 8.880	av qp av	19.7 25.4 20.2	10.0 10.1 10.1	29.7 35.5 30.3	46.0 60.0 50.0	16.3 24.5 19.7	115V PSXR USB 115V PSXR USB 115V PSXR USB	
	Resul	ts					Minimu PASS/F	-	jin	11.9 PASS	dB		
No	tes						Comme	nts and	Obser	vations			
Notes Comments and Observations Results of scans shown in plot 6. PSXR neutral line, USB mode, 115V.													

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	25 of 41

4.7 Radiated Emissions - 3m Semi-anech chamber - 8dac + PSXR - USB Source

A15_13C - - CBL002_CBL069_10A Factor Set 1: 1 m cable

Factor Set 2: Factor Set 3: Test Equipment: R7 A15

Test:

Radiated	Emissions				
Compan	^{py:} Cyrus Audio Ltd		Product: Sys	tem 1 (6dac / 8dac + P	SXR)
Date:	12/02/2014		Test Eng: Josh	nua Gawthrop	
Ports:					
Test:	ANSI C63.4:2003	using limits of	FCC(B)	=FCC B	
Ports:					

using limits of

Plot		Mod State		Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Corr'n Factor dB	Total Level dBuV/m	Limit FCC_B dBuV/m	Margin FCC_B dB	Notes
7 7 7 7 7 7	1 1 1 1 1 1 1 1 1	0 0 0 0 0 0	3 3 3 3 3 3	1 1 1 1 1 1 1	90.000 90.000 101.870 101.870 104.700 104.700 106.700	> H > H > H > H	22.2 26.9 25.3 20.4 24.1 19.1 26.4 23.0	8.1 9.3 9.3 8.7 8.7 8.2 8.2		30.3 35.0 34.6 29.7 32.8 27.8 34.6 31.2	43.5 43.5 43.5 43.5 43.5 43.5 43.5	13.2 8.5 8.9 13.8 10.7 15.7 8.9 12.3	#1 #1 #1 #1 #1 #1 #1

Resul	s Minimum Margin PASS/FAIL	8.5 PASS	dB	
Notes	Comments and Observations			

Notes	Comments and Observations
	Results of scans shown in plots 7 to 9.
#1	These emissions all occur at frequencies close to local FM broadcast stations. These emissions were therefore maximised in the chamber in case some or all of them could not be measured on the open area test site.
	Measurements were made using a 120kHz bandwidth and quasi-peak detector at a measuring distance of 3m in a semi-anechoic chamber.

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	26 of 41

4.8 Radiated Emissions - 3m Semi-anech chamber - 6dac - USB Source

Factor Set 1: A15_13C - - CBL002_CBL069_10A 1 m cable

Factor Set 2: -- -Factor Set 3: -- -Test Equipment: R7 A15

Radiated Emissions

-	naaratea_En	110010110			
ĺ	Company:	Cyrus Audio Ltd		Product:	System 1 (6dac / 8dac + PSXR)
	Date:	12/02/2014		Test Eng:	Peter Barlow
I	Ports:				
l	Test:	ANSI C63.4:2003	using limits of	FCC(B)	=FCC B

Ports: Test:

using limits of

Plot	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Corr'n Factor dB	Total Level dBuV/m	Limit FCC_B dBuV/m	Margin FCC_B dB	Notes
10 10 10 10 10	1 1 1 1 1	0 0 0 0 0	3 3 3 3 3	1 1 1 1 1	101.608 101.608 104.744 104.744 108.773 108.773	> H > H > H	26.8 22.9 27.3 19.8 27.0 23.7	9.4 9.4 8.7 8.7 7.8 7.8		36.2 32.3 36.0 28.5 34.8 31.5	43.5 43.5 43.5 43.5 43.5 43.5	7.3 11.2 7.5 15.0 8.7 12.0	#1 #1 #1 #1 #1
	Resul	ts					Minimu	m Marg	jin	·	7.3	dB	

	PASS/FAIL	PASS	
Notes	Comments and Observations		
	Results of scans shown in plots 10 to 12.		
#1	These emissions all occur at frequencies close to local FM These emissions were therefore maximised in the chamber could not be measured on the open area test site.		nem
	Measurements were made using a 120kHz bandwidth and at a measuring distance of 3m in a semi-anechoic chamber		

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	27 of 41

4.9 Radiated Emissions - 3m O.A.T.S - 8dac + PSXR - USB Source

Factor Set 1: A12_FS_12C - - CBL015_11A 1 m cable

Factor Set 2: -- -Factor Set 3: -- -Test Equipment: R4 A12

Radiated Emissions

Radiated Emissions Company: Cyrus Audio Ltd Product: System 1 (6dac / 8dac + PSXR)														
Com	рану.	Cyru	ıs Aı	ıdio l	Ltd			1100	S	ystem 1	(6dac / 8	Bdac + PSX	R)	
Date		12/02	2/201	4				Test	Eng: J	oshua Ga	awthrop			
Ports														
Test		ANSI	C63	.4:200	03 using	limits	s of	FCC	(B)		=FCC B			
Ports														
Test	<u>: </u>				using	limits	s of							
Б	١													
Plot	Ор	Mod	Dist	Fact	Freq.	Ant	Rec.	Corr'n		Total	Limit	Margin	Notes	
	Ivioae	State	m	Set	MHz	Pol	Level	Factor	Factor	Level	FCC_B	FCC_B		
							dBuV	dB/m	dB	dBuV/m	dBuV/m	dB		
7	1	0	3	1	30.620	V	10.7	18.7		29.4	40.0	10.6		
7	1	0	3	1	30.720	Н	-4.0	18.7		14.7	40.0	25.3		
7	1	0	3	1	35.270	V	11.3	16.3		27.6	40.0	12.4		
7	1	0	3	1	35.270	Н	-2.6	16.3		13.7	40.0	26.3		
7	1	0	3	1	48.000	V	17.6	9.6		27.2	40.0	12.8		
7	1	0	3	1	48.000	Н	8.5	9.6		18.1	40.0	21.9		
7	1	0	3	1	106.700	V	12.7	12.1		24.8	43.5	18.7		
7	1	0	3	1	106.700	Н	13.5	12.1		25.6	43.5	17.9		
7	1	0	3	1	125.000	V	6.4	13.4		19.8	43.5	23.7		
7	1	0	3	1	125.000	Н	16.6	13.4		30.0	43.5	13.5		
7	1	0	3	1	162.100	V	21.1	12.1		33.2	43.5	10.3		
7	1	0	3	1	162.100	Н	19.3	12.1		31.4	43.5	12.1		
7	1	0	3	1	180.025	V	21.3	11.3		32.6	43.5	10.9		
7	1	0	3	1	180.025	H	21.5	11.3		32.8	43.5	10.7		
7	1	0	3	1	198.100	V	16.8	10.3		27.1	43.5	16.4		
7	1	0	3	1	198.100	H	18.8	10.3		29.1	43.5	14.4		
8	1	0	3	1	250.000	V	13.4	15.0		28.4	46.0	17.6		
8	1	0	3	1	250.000	H	15.2	15.0		30.2	46.0	15.8		
8	1	0	3	1	287.900	V	16.6	15.9		32.5	46.0	13.5		
8	1	0	3	1	287.900	Н	24.9	15.9		40.8	46.0	5.2		
							l							
	Resul	ts					Minimu	m Marc	in .		5.2	dB		
	itesui	w					PASS/F		j <i>1</i>		PASS	uD		

	TAGO, ALL	1 700	
Notes	Comments and Observations		
N.B.	Results of scans shown in plots 7 to 9. Table above does not contain all frequencies measured onl margins. Measurements were made using a 120kHz bandwidth and at a measuring distance of 3m in a semi-anechoic chamber	quasi-peak detector	t

	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	28 of 41

4.10 Radiated Emissions - 3m O.A.T.S - 6dac - USB Source

Factor Set 1: A12_FS_12C - - CBL015_11A 1 m cable

Radiated Emissions

Company: Cyrus Audio Ltd Froduct: System 1 (6dac / 8dac + PSX Date: 12/02/2014 Test Eng: Peter Barlow FCC B FCC	
Ports:	K)
Plot	
Plot Op Mod State m Set Freq. MHz Pol Level Factor Factor GB Mode State m Set MHz Pol Level Factor Factor GB GB GB GB GB GB GB G	
Plot Op Mod Dist Fact MHz Pol Rec. Level Factor Factor GBuV/m GB GBuV/m GB GBuV/m GB GBuV/m GB GB GB GB GB GB GB G	
Plot Op Mod State Mod Mo	
Mode State m	
Mode State m	Notes
10	
10 1 0 3 1 30.000 H -1.5 19.1 17.6 40.0 22.4 10 1 0 3 1 56.487 V 22.5 6.6 29.1 40.0 10.9 10 1 0 3 1 56.487 H 17.6 6.6 24.2 40.0 15.8 10 1 0 3 1 101.608 V 6.8 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 101.608 H 9.3 11.6 9.5 30.4 43.5 15.6 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 <t< td=""><td></td></t<>	
10 1 0 3 1 30.000 H -1.5 19.1 17.6 40.0 22.4 10 1 0 3 1 56.487 V 22.5 6.6 29.1 40.0 10.9 10 1 0 3 1 56.487 H 17.6 6.6 24.2 40.0 15.8 10 1 0 3 1 101.608 V 6.8 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 101.608 H 9.3 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 <t< td=""><td></td></t<>	
10 1 0 3 1 30.000 H -1.5 19.1 17.6 40.0 22.4 10 1 0 3 1 56.487 V 22.5 6.6 29.1 40.0 10.9 10 1 0 3 1 56.487 H 17.6 6.6 24.2 40.0 15.8 10 1 0 3 1 101.608 V 6.8 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 101.608 H 9.3 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 144.744 H 3.4 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 <t< td=""><td></td></t<>	
10 1 0 3 1 56.487 V 22.5 6.6 29.1 40.0 10.9 10 1 0 3 1 56.487 H 17.6 6.6 24.2 40.0 15.8 10 1 0 3 1 101.608 V 6.8 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 101.608 H 9.5 30.4 43.5 15.6 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 21.7 43.5 21.8 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 146.736 <td></td>	
10 1 0 3 1 56.487 H 17.6 6.6 24.2 40.0 15.8 10 1 0 3 1 101.608 V 6.8 11.6 9.5 27.9 43.5 15.6 10 1 0 3 1 101.608 H 9.5 30.4 43.5 13.1 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 21.7 43.5 21.8 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 180.021<	
10 1 0 3 1 101.608 H 9.3 11.6 9.5 30.4 43.5 13.1 10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 21.7 43.5 21.8 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4	
10 1 0 3 1 104.744 V 10.1 11.9 6.4 28.4 43.5 15.1 10 1 0 3 1 104.744 H 3.4 11.9 6.4 21.7 43.5 21.8 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 143.935 H 12.4 13.2 25.6 43.5 17.9 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10	10k av
10 1 0 3 1 104.744 H 3.4 11.9 6.4 21.7 43.5 21.8 10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 W 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 <td< td=""><td>10k av</td></td<>	10k av
10 1 0 3 1 143.935 V 15.1 13.2 28.3 43.5 15.2 10 1 0 3 1 143.935 H 12.4 13.2 25.6 43.5 17.9 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 10.4 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 </td <td>10k av</td>	10k av
10 1 0 3 1 143.935 H 12.4 13.2 25.6 43.5 17.9 10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 </td <td>10k av</td>	10k av
10 1 0 3 1 146.736 V 15.4 12.9 28.3 43.5 15.2 10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 </td <td></td>	
10 1 0 3 1 146.736 H 13.2 12.9 26.1 43.5 17.4 10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 </td <td></td>	
10 1 0 3 1 180.021 V 21.8 11.3 33.1 43.5 10.4 10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
10 1 0 3 1 180.021 H 19.9 11.3 31.2 43.5 12.3 10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
10 1 0 3 1 191.973 V 13.8 10.3 24.1 43.5 19.4 10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
10 1 0 3 1 191.973 H 20.9 10.3 31.2 43.5 12.3 11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
11 1 0 3 1 250.002 V 14.4 15.0 29.4 46.0 16.6 11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
11 1 0 3 1 250.002 H 12.4 15.0 27.4 46.0 18.6 11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
11 1 0 3 1 287.900 V 16.4 15.9 32.3 46.0 13.7 11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
11 1 0 3 1 287.900 H 25.4 15.9 41.3 46.0 4.7	
Results Minimum Margin 4.7 dB	
PASS/FAIL PASS	

Notes	Comments and Observations
N.B.	Results of scans shown in plots 10 to 12. Table above does not contain all frequencies measured only those with the smallest margins. Unless otherwise noted measurements were made using a 120kHz bandwidth and quasi-peak detector. These measurements were made at 3m on an Open Area Test Site.
Key:	qp - quasi-peak, av - average, pk - peak

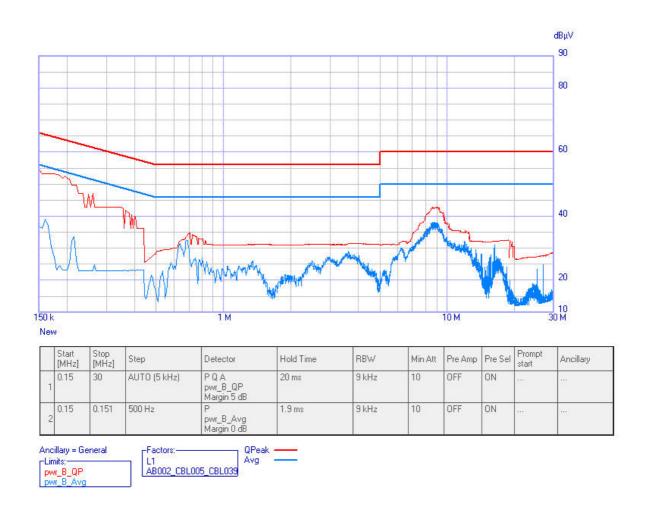
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	29 of 41

4.11 Radiated Emissions Above 1GHz

Results of emissions measurements above 1GHz are shown in plots 9 & 12.

All peak emissions were well below the average detector limits; therefore it was not considered necessary to take any spot measurements over this frequency range.

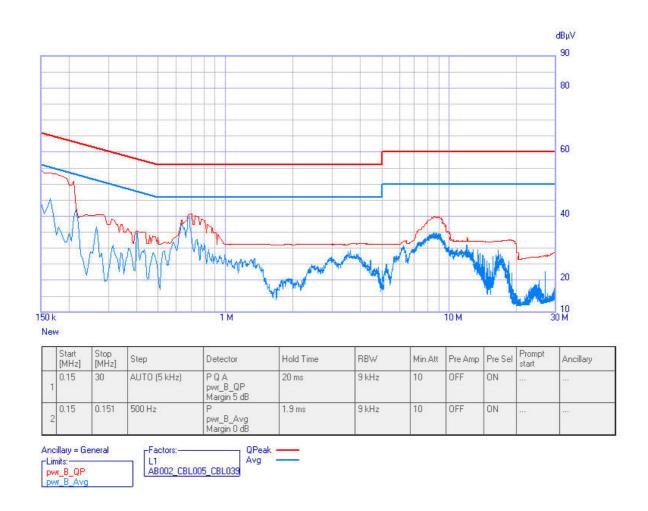
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	30 of 41



PLOT 1 Conducted Emissions - 115V ac power - Live line - 8 dac - USB Source

Company:	Cyrus Ltd		Product:	System 1 (8 d	lac)	
Date:	26 Feb 14		Test Enginee	er: Peter Barlow		
Test:	FCC pt 15		Limit:	EN (B) QP +	- AV	
Notes:						
Op.Mode: US	B Streaming mod	de. Playing 1kHz to	ne at 1/8 power.			
Setup: 8dac po	owered 115V via	L1. All other units	powered via L2. See	photograph.		
Line:	Live	Attenuator:	10dB PAD	Operating Mode:	1	
Detector:	Qp, Ave			Mod. State:	0	
LISN:	EMCO	Filename:	C422651D.png			

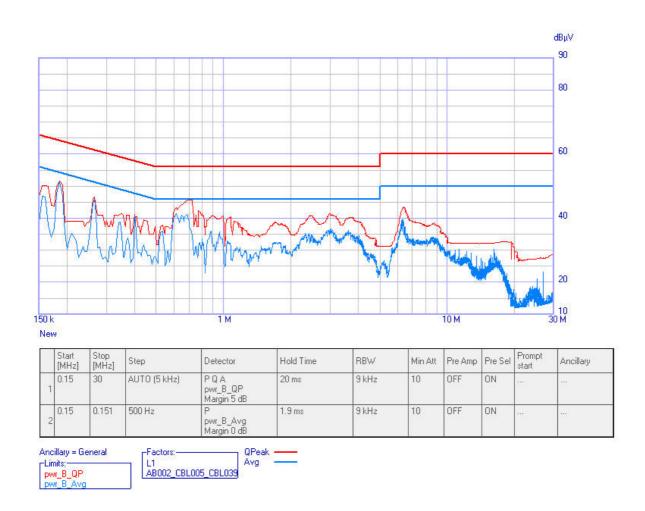
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	31 of 41



PLOT 2 Conducted Emissions - 115V ac power - Neutral line - 8 dac - USB Source

Company:	Cyrus Ltd		Product:	System 1 (8 d	lac)	
Date:	26 Feb 14		Test Enginee	er: Peter Barlow		
Test:	FCC pt 15		Limit:	EN (B) QP +	- AV	
Notes:						
Op.Mode: USI	B Streaming mod	de. Playing 1kHz tor	ne at 1/8 power.			
Setup: 8dac po	wered 115V via	L1. All other units	powered via L2. See 1	photograph.		
Line:	Neutral	Attenuator:	10dB PAD	Operating Mode:	1	
Detector:	Qp, Ave			Mod. State:	0	
LISN:	EMCO	Filename:	C422653A.png			

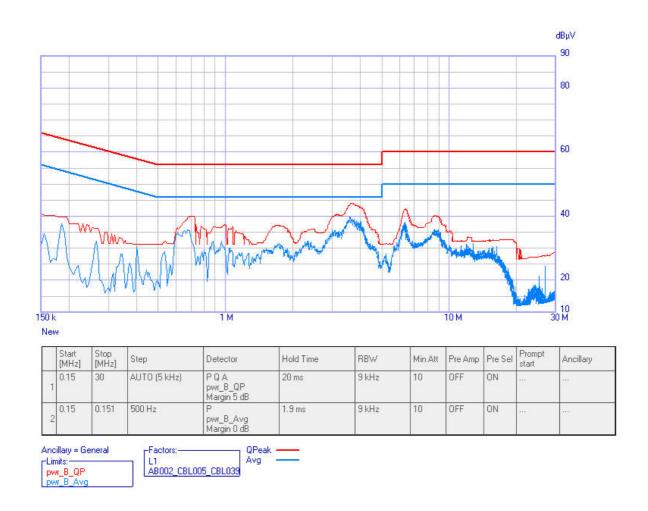
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	32 of 41



PLOT 3 Conducted Emissions - 115V ac power - Neutral line - 6 dac - USB Source

Company:	Cyrus Ltd		Product:	System 1 (6	dac)	
Date:	26 Feb 14		Test Enginee	er: Peter Barlow		
Test:	FCC pt 15		Limit:	EN (B) QP +	- AV	
Notes:						
Op.Mode: USI	B Streaming mod	de. Playing 1kHz tor	ne at 1/8 power.			
Setup: 6dac po	wered 115V via	L1. All other units	powered via L2. See	photograph.		
Line:	Neutral	Attenuator:	10dB PAD	Operating Mode:	1	
Detector:	Qp, Ave			Mod. State:	0	
LISN:	EMCO	Filename:	C4226638.png			

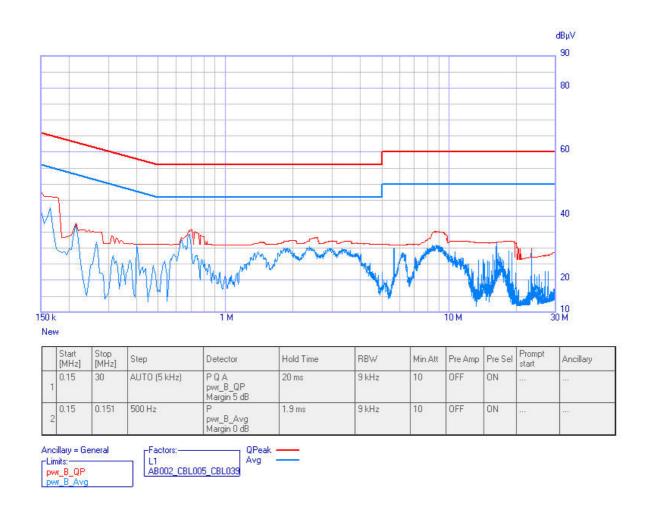
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	33 of 41



PLOT 4 Conducted Emissions - 115V ac power - Live line - 6 dac - USB Source

Company:	Cyrus Ltd		Product:	System 1 (6 d	lac)	
Date:	26 Feb 14		Test Enginee	er: Peter Barlow		
Test:	FCC pt 15		Limit:	EN (B) QP +	- AV	
Notes:						
Op.Mode: US	B Streaming mod	de. Playing 1kHz to	ne at 1/8 power.			
Setup: 6dac po	owered 115V via	L1. All other units	powered via L2. See	photograph.		
Line:	Live	Attenuator:	10dB PAD	Operating Mode:	1	
Detector:	Qp, Ave			Mod. State:	0	
LISN:	EMCO	Filename:	C4226659.png			

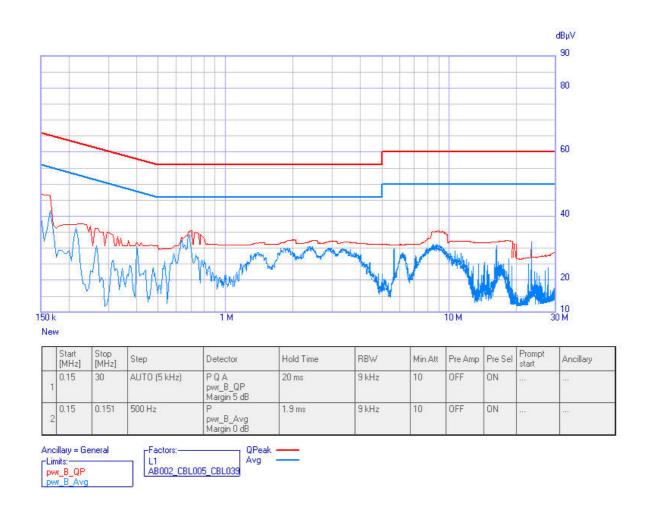
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	34 of 41



PLOT 5 Conducted Emissions - 115V ac - Live line - 8dac + PSXR - USB Source

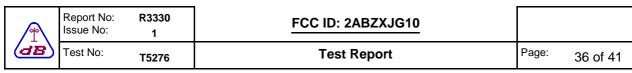
Company:	Cyrus Ltd		Product:	System 1 (PS)	XR/8 dac)	
Date:	26 Feb 14		Test Enginee	r: Peter Barlow		
Test:	FCC pt 15		Limit:	EN(B)QP +	AV	
Notes:						
Op.Mode: US	B Streaming mod	de. Playing 1kHz to:	ne at 1/8 power.			
Setup: PSXR 1	powered 115V v	ia L1. All other units	s powered via L2. See	photograph.		
Line:	Live	Attenuator:	10dB PAD	Operating Mode:	1	
Detector:	Qp, Ave			Mod. State:	0	
LISN:	EMCO	Filename:	C42266CA.png			

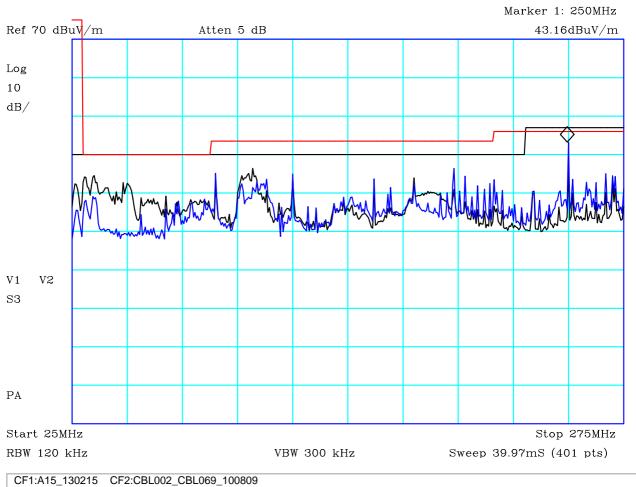
	Report No: Issue No:	R3330 1	FCC ID: 2ABZXJG10		
dB	Test No:	T5276	Test Report	Page:	35 of 41



PLOT 6 Conducted Emissions - 115V - Neutral line - 8dac + PSXR - USB Source

Company:	Cyrus Ltd		Product:	System 1 (PSXR/8 dac)
Date:	26 Feb 14		Test Enginee	er: Peter Barlow
Test:	FCC pt 15		Limit:	EN (B) QP + AV
Notes:				
Op.Mode: US	B Streaming mod	de. Playing 1kHz tor	ne at 1/8 power.	
Setup: PSXR p	powered 115V v	ia L1. All other units	s powered via L2. See	e photograph.
Line:	Neutral	Attenuator:	10dB PAD	Operating Mode: 1
Detector:	Qp, Ave			Mod. State: 0
LISN:	EMCO	Filename:	C42266E5.png	





PLOT 7 Radiated Emissions - 25MHz to 275MHz - 8dac + PSXR - USB Source

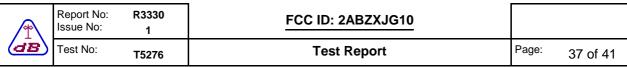
Company:	Cyrus Audio Ltd	Product:	System 1 (8dac + PSXR)
Date:	12/02/'2014	Test Eng:	Joshua Gawthrop
Method:		Method:	
Limit1:(BLK)	EN55022(B)@3m	Limit2:(RED)	FCC(B)@3m
Limit3:		Limit4:	

Op mode: USB Streaming mode. Playing 1kHz tone at 1/8 power.

Setup mode: 8dac connected to PSXR, CDT connected to 8dac via SP Diff coaxial, optical and MC BUS. Mac book pro connected to 8dac via USB also connected to netgear switch via STP. Switch powered from 230V, all others from 115V.

Mod state:

Į						
	Facility:	Anech_1	Height	1,1.5,2m	Mode:	1
	Distance	3m	Polarisation	V+H	Modification State:	0
	Angle	0-360	File:	H41124E0	Analyser:	R8



Marker 1: 289.4MHz

Ref 70 dBuV/m Atten 5 dB 42.37dBuV/m

Log
10
dB/

V1 V2
S3

PA

Stop 1000MHz

PLOT 8 Radiated Emissions - 250MHz to 1GHz - 8dac + PSXR - USB Source

VBW 300 kHz

Sweep 119.9mS (401 pts)

Company:	Cyrus Audio Ltd	Product:	System 1 (8dac + PSXR)
Date:	12/02/'2014	Test Eng:	Joshua Gawthrop
Method:		Method:	
Limit1:(BLK)	EN55022(B)@3m	Limit2:(RED)	FCC(B)@3m
Limit3:		Limit4:	

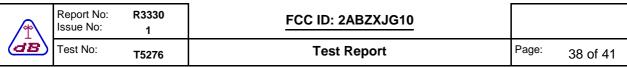
Op mode: USB Streaming mode. Playing 1kHz tone at 1/8 power.

Setup mode: 8dac connected to PSXR, CDT connected to 8dac via SP Diff coaxial, optical and MC BUS. Mac book pro connected to 8dac via USB also connected to netgear switch via STP. Switch powered from 230V, all others from 115V.

Mod state:

RBW 120 kHz

Facility:	Anech_1	Height	1,1.5,2m	Mode:	1
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H41124FC	Analyser:	R8



Marker 1: 1.065GHz

Ref 70 dBuV/m Atten 5 dB 41.34dBuV/m

Log
10
dB/

V1 V2
S3

Start 1000MHz

RBW 1 MHz

VBW 3 MHz

Sweep 4mS (401 pts)

CF1:A23_3m_120820 CF2:CBL002_CBL069_100809 CF3:PRE14_120627

PLOT 9 Radiated Emissions - 1GHz to 2GHz - 8dac + PSXR - USB Source

Company: Cyrus Audio Ltd Product: System 1 (8dac + PSXR)

Date: 12/02/'2014 Test Eng: Joshua Gawthrop

Method: Method:

Limit1: Limit2:(RED) FCC(B)@3m

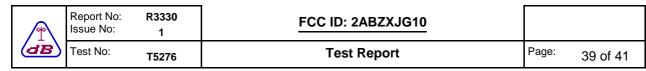
Limit3: Limit4:

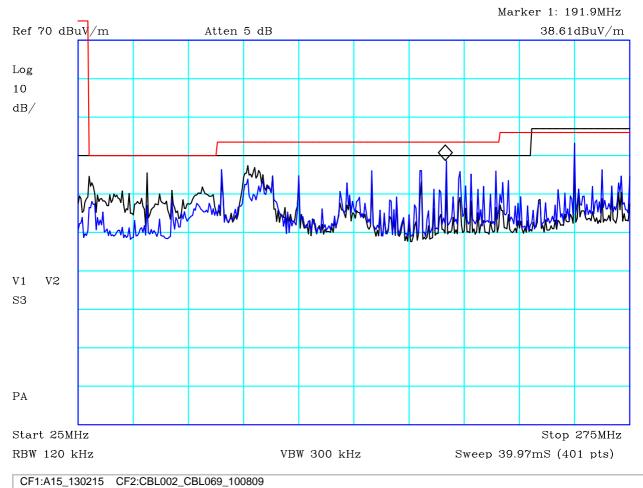
Op mode: USB Streaming mode. Playing 1kHz tone at 1/8 power.

Setup mode: 8dac connected to PSXR, CDT connected to 8dac via SP Diff coaxial, optical and MC BUS. Mac book pro connected to 8dac via USB also connected to netgear switch via STP. Switch powered from 230V, all others from 115V.

Mod state:

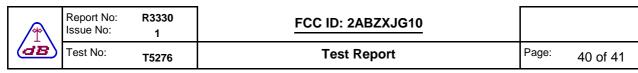
Facility:	Anech_1	Height	1m,1.5m,2m	Mode:	1
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H41126C5	Analyser:	R8

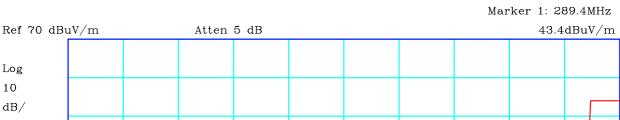




PLOT 10 Radiated Emissions - 25MHz to 275MHz - 6 dac - USB Source

Company:	Cyrus Audi	o Ltd	Product:	System 1 (6da	ac)
Date:	12/02/'2014	ļ	Test Eng:	Joshua Gawth	rop
Method:			Method:		
Limit1:(BLK)	EN55022(E	3)@3m	Limit2:(RED) FCC(B)@3m	
Limit3:			Limit4:		
powered from	n 230V, all other	s from 115V.			
Mod state:		race, Blue = Hor	izontal		
Mod state:		race, Blue = Hor	izontal	Mode:	1
Mod state: Vertical polar	isation = Black ⅂			Mode: Modification State:	1 0







VBW 300 kHz

Sweep 119.9mS (401 pts)

PLOT 11 Radiated Emissions - 250MHz to 1GHz - 6 dac - USB Source

Company:	Cyrus Audio Ltd	Product:	System 1 (6dac)
Date:	12/02/'2014	Test Eng:	Joshua Gawthrop
Method:		Method:	
Limit1:(BLK)	EN55022(B)@3m	Limit2:(RED)	FCC(B)@3m
Limit3:		Limit4:	

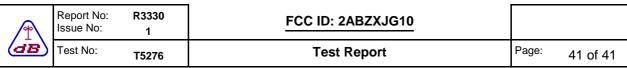
Op mode: USB Streaming mode. Playing 1kHz tone at 1/8 power.

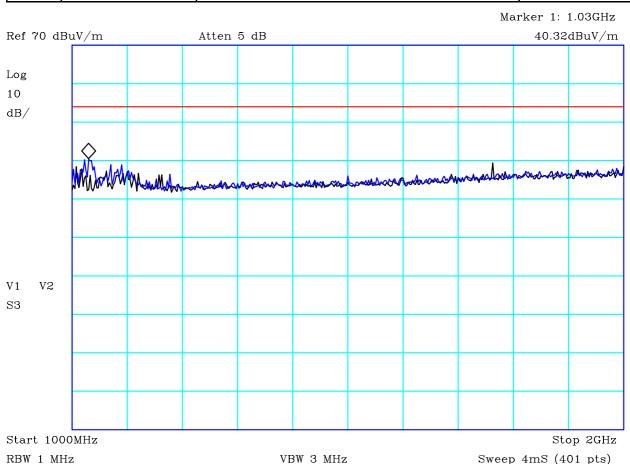
Setup mode: PSXR on table not powered. CDT connected to 6 Dac via SP Diff coaxial, optical and MC BUS. Mac book pro connected to 6 dac via USB also connected to netgear switch via STP. Switch powered from 230V, all others from 115V.

Mod state:

RBW 120 kHz

Facility:	Anech_1	Height	1m,1.5m,2m	Mode:	1
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4112613	Analyser:	R8





CF1:A23_3m_120820 CF2:CBL002_CBL069_100809 CF3:PRE14_120627

PLOT 12 Radiated Emissions - 1GHz to 2GHz - 6 dac - USB Source

Company:	Cyrus Audio	Ltd	Product:	System 1 (6da	ac)			
Date:	12/02/'2014		Test Eng:	Joshua Gawth	nrop			
Method:			Method:					
Limit1:			Limit2:(REI	D) FCC(B)@3m				
Limit3:			Limit4:					
Op mode: USB Streaming mode. Playing 1kHz tone at 1/8 power. Setup mode: PSXR on table not powered. CDT connected to 6 Dac via SP Diff coaxial, optical and MC BUS. Mac book pro connected to 6 dac via USB also connected to netgear switch via STP. Switch powered from 230V, all others from 115V. Mod state: Vertical polarisation = Black Trace, Blue = Horizontal								
Facility:	Anech_1	Height	1m,1.5m,2m	Mode:	1			
Distance	3m	Polarisation	V+H	Modification State:	0			
Angle	0-360	File:	H4112697	Analyser:	R8			