

# Sample Calibration Report

**Report Number: Sample**

**Model:** APx585  
**Serial Number:** 10548

**Data Type:** AS RECEIVED  
**Date of Cal:** 10-Jul-2007

**Program:**  
 APx585Calibration-apc.exe 2.01

Internal Module Status and Data			
AP Name	Description	Serial No.	Revision
BRIO	Backplane module	Sample	100
BSOL	Clock module	Sample	102
BPLX	Analog Output module	Sample	105
BCAS	Analog input module	Sample	101
BCRO	Digital I/O module	Sample	101

**Explanatory notes to the last three columns of the calibration report**

**"MU"** - The column labeled **"MU"** lists the expanded measurement uncertainties derived from published specifications of the calibration equipment, resolution factors, and statistical data of repeatability which may include inter-lab comparisons and/or other information. These are based on a coverage factor of 2 (k=2) corresponding to a confidence level of 95%.

**"TUR"** - The column labeled **"TUR"** lists the test uncertainty ratio calculated by dividing the lesser of the lower and upper reading tolerances by the expanded measurement uncertainty. An entry of **"na"** indicates [1] the specified limits are one-sided, or [2] the performance characteristic is a self-test or system specification that is not independently certifiable.

**"Result"** - The column labeled **"Result"** lists color-coded assessments that the observed characteristic is within its specified limits of performance. There are three possible indications:

**pass** -- The **READING** is within the specified upper and lower limits reduced by guard-bands equal to the expanded measurement uncertainty or **"MU"**. The confidence level is 95% or higher the observed characteristic is within specification.

**pass (<95%)** -- The **READING** is within the specified upper and lower limits, but it is close to one of the limits by an amount that is less than the expanded measurement uncertainty or **"MU"**. Conformance to specification is more probable than not, however the confidence level may be <95%.

**>> FAIL <<** -- The observed characteristic is out of specification.

This report is valid only when accompanied by a signed Certificate of Calibration.

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG GENERATOR CHARACTERISTICS</b>							
<b>[1] Sine Frequency Accuracy (Hz)</b>							
	10 kHz	9999.9700	<b>9999.9969</b>	10000.0300	0.0063	4.8	pass
<b>[2] Sine Amplitude Accuracy, 1 kHz (Volts, mVolts)</b>							
Channel 1	7.200 V	7.1748	<b>7.2006</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00208</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00074</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99969</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.17</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9978</b>	10.0350	0.0041	8.5	pass
Channel 2	7.200 V	7.1748	<b>7.2006</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00155</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00050</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99944</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.13</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9964</b>	10.0350	0.0041	8.5	pass
Channel 3	7.200 V	7.1748	<b>7.2008</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00200</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00056</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99974</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.15</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9983</b>	10.0350	0.0041	8.5	pass
Channel 4	7.200 V	7.1748	<b>7.2009</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00159</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00077</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99966</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.11</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9977</b>	10.0350	0.0041	8.5	pass
Channel 5	7.200 V	7.1748	<b>7.2006</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00192</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00051</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99957</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.15</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9972</b>	10.0350	0.0041	8.5	pass
Channel 6	7.200 V	7.1748	<b>7.2008</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00224</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00087</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>1.00013</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.12</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>10.0015</b>	10.0350	0.0041	8.5	pass
Channel 7	7.200 V	7.1748	<b>7.2002</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.00074</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.00043</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.99918</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.04</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9926</b>	10.0350	0.0041	8.5	pass
Channel 8	7.200 V	7.1748	<b>7.2010</b>	7.2252	0.0010	>10	pass
	4.000 V	3.98600	<b>4.0025</b>	4.01400	0.00063	>10	pass
	2.000 V	1.99300	<b>2.0009</b>	2.00700	0.00040	>10	pass
	1.000 V	0.99650	<b>0.9997</b>	1.00350	0.00029	>10	pass
	300 mV	298.950	<b>300.16</b>	301.050	0.051	>10	pass
	10 mV	9.9650	<b>9.9983</b>	10.0350	0.0041	8.5	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG GENERATOR, continued</b>							
<b>[3] Sine Flatness, 1 Vrms (dB)</b>							
Channel 1	10 Hz	-0.0080	0.0000	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0001	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	0.0001	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0044	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	-0.0199	0.1000	0.0074	>10	pass
Channel 2	10 Hz	-0.0080	0.0002	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	-0.0003	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0026	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	-0.0094	0.1000	0.0074	>10	pass
Channel 3	10 Hz	-0.0080	0.0000	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	-0.0008	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0006	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	-0.0121	0.1000	0.0074	>10	pass
Channel 4	10 Hz	-0.0080	0.0002	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	-0.0001	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	-0.0007	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	0.0009	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	0.0161	0.1000	0.0074	>10	pass
Channel 5	10 Hz	-0.0080	0.0000	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	0.0000	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0006	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	0.0022	0.1000	0.0074	>10	pass
Channel 6	10 Hz	-0.0080	0.0000	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	0.0001	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0029	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	-0.0109	0.1000	0.0074	>10	pass
Channel 7	10 Hz	-0.0080	0.0000	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	0.0002	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0037	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	-0.0181	0.1000	0.0074	>10	pass
Channel 8	10 Hz	-0.0080	0.0001	0.0080	0.0017	4.7	pass
	20 Hz	-0.0080	0.0000	0.0080	0.0016	5.0	pass
	20 kHz	-0.0080	-0.0002	0.0080	0.0019	4.2	pass
	50 kHz	-0.0300	-0.0003	0.0300	0.0032	9.4	pass
	80 kHz	-0.1000	0.0112	0.1000	0.0074	>10	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG GENERATOR, continued</b>							
<b>[4] DC Offset (mV), Unbal</b>							
Channel 1	7.200V	-18.25	-0.95	18.25	0.10	>10	pass
	1.000V	-2.750	-0.153	2.750	0.015	>10	pass
	100mV	-0.500	-0.022	0.500	0.008	>10	pass
Channel 2	7.200V	-18.25	-0.56	18.25	0.10	>10	pass
	1.000V	-2.750	-0.064	2.750	0.015	>10	pass
	100mV	-0.500	-0.014	0.500	0.008	>10	pass
Channel 3	7.200V	-18.25	-1.28	18.25	0.10	>10	pass
	1.000V	-2.750	-0.202	2.750	0.015	>10	pass
	100mV	-0.500	-0.027	0.500	0.008	>10	pass
Channel 4	7.200V	-18.25	-0.99	18.25	0.10	>10	pass
	1.000V	-2.750	-0.134	2.750	0.015	>10	pass
	100mV	-0.500	-0.009	0.500	0.008	>10	pass
Channel 5	7.200V	-18.25	0.78	18.25	0.10	>10	pass
	1.000V	-2.750	0.153	2.750	0.015	>10	pass
	100mV	-0.500	0.010	0.500	0.008	>10	pass
Channel 6	7.200V	-18.25	-2.86	18.25	0.10	>10	pass
	1.000V	-2.750	-0.455	2.750	0.015	>10	pass
	100mV	-0.500	-0.053	0.500	0.008	>10	pass
Channel 7	7.200V	-18.25	-0.67	18.25	0.10	>10	pass
	1.000V	-2.750	-0.080	2.750	0.015	>10	pass
	100mV	-0.500	-0.015	0.500	0.008	>10	pass
Channel 8	7.200V	-18.25	3.25	18.25	0.10	>10	pass
	1.000V	-2.750	0.614	2.750	0.015	>10	pass
	100mV	-0.500	0.054	0.500	0.008	>10	pass
<b>[5] Source Resistance Accuracy (<math>\Omega</math>)</b>							
50 $\Omega$ Unbal	Ch 1	49.000	50.340	51.000	0.020	>10	pass
	Ch 2	49.000	50.330	51.000	0.020	>10	pass
	Ch 3	49.000	50.338	51.000	0.020	>10	pass
	Ch 4	49.000	50.311	51.000	0.020	>10	pass
	Ch 5	49.000	50.318	51.000	0.020	>10	pass
	Ch 6	49.000	50.299	51.000	0.020	>10	pass
	Ch 7	49.000	50.318	51.000	0.020	>10	pass
	Ch 8	49.000	50.337	51.000	0.020	>10	pass
100 $\Omega$ Bal	Ch 1	99.000	100.517	101.000	0.040	>10	pass
	Ch 2	99.000	100.503	101.000	0.040	>10	pass
	Ch 3	99.000	100.445	101.000	0.040	>10	pass
	Ch 4	99.000	100.378	101.000	0.040	>10	pass
	Ch 5	99.000	100.352	101.000	0.040	>10	pass
	Ch 6	99.000	100.256	101.000	0.040	>10	pass
	Ch 7	99.000	100.303	101.000	0.040	>10	pass
	Ch 8	99.000	100.371	101.000	0.040	>10	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG ANALYZER CHARACTERISTICS</b>							
<b>[6] DC Measurement Accuracy (Volts, mVolts)</b>							
Channel 1	+100 V	99.100	<b>99.963</b>	100.900	0.040	>10	pass
	+30 V	29.728	<b>29.978</b>	30.272	0.012	>10	pass
	+10 V	9.9100	<b>9.9956</b>	10.0900	0.0040	>10	pass
	+3 V	2.9728	<b>2.9977</b>	3.0272	0.0012	>10	pass
	+1 V	0.99100	<b>0.99859</b>	1.00900	0.00040	>10	pass
	+300 mV	297.00	<b>299.82</b>	303.00	0.12	>10	pass
	0 mV	-0.600	<b>-0.089</b>	0.600	0.018	>10	pass
	-300 mV	-303.00	<b>-300.00</b>	-297.00	0.12	>10	pass
	-1 V	-1.00900	<b>-0.99841</b>	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	<b>-2.9970</b>	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	<b>-9.9932</b>	-9.9100	0.0040	>10	pass
	-30 V	-30.272	<b>-29.972</b>	-29.728	0.012	>10	pass
-100V	-100.900	<b>-99.941</b>	-99.100	0.040	>10	pass	
Channel 2	+100 V	99.100	<b>99.945</b>	100.900	0.040	>10	pass
	+30 V	29.728	<b>29.963</b>	30.272	0.012	>10	pass
	+10 V	9.9100	<b>9.9944</b>	10.0900	0.0040	>10	pass
	+3 V	2.9728	<b>2.9985</b>	3.0272	0.0012	>10	pass
	+1 V	0.99100	<b>0.99813</b>	1.00900	0.00040	>10	pass
	+300 mV	297.00	<b>299.31</b>	303.00	0.12	>10	pass
	0 mV	-0.600	<b>-0.475</b>	0.600	0.018	>10	pass
	-300 mV	-303.00	<b>-300.25</b>	-297.00	0.12	>10	pass
	-1 V	-1.00900	<b>-0.99916</b>	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	<b>-2.9986</b>	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	<b>-9.9996</b>	-9.9100	0.0040	>10	pass
	-30 V	-30.272	<b>-29.988</b>	-29.728	0.012	>10	pass
-100V	-100.900	<b>-100.003</b>	-99.100	0.040	>10	pass	
Channel 3	+100 V	99.100	<b>99.986</b>	100.900	0.040	>10	pass
	+30 V	29.728	<b>29.987</b>	30.272	0.012	>10	pass
	+10 V	9.9100	<b>9.9987</b>	10.0900	0.0040	>10	pass
	+3 V	2.9728	<b>2.9988</b>	3.0272	0.0012	>10	pass
	+1 V	0.99100	<b>0.99918</b>	1.00900	0.00040	>10	pass
	+300 mV	297.00	<b>300.03</b>	303.00	0.12	>10	pass
	0 mV	-0.600	<b>0.188</b>	0.600	0.018	>10	pass
	-300 mV	-303.00	<b>-299.66</b>	-297.00	0.12	>10	pass
	-1 V	-1.00900	<b>-0.99788</b>	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	<b>-2.9955</b>	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	<b>-9.9892</b>	-9.9100	0.0040	>10	pass
	-30 V	-30.272	<b>-29.954</b>	-29.728	0.012	>10	pass
-100V	-100.900	<b>-99.893</b>	-99.100	0.040	>10	pass	
Channel 4	+100 V	99.100	<b>99.893</b>	100.900	0.040	>10	pass
	+30 V	29.728	<b>29.953</b>	30.272	0.012	>10	pass
	+10 V	9.9100	<b>9.9890</b>	10.0900	0.0040	>10	pass
	+3 V	2.9728	<b>2.9954</b>	3.0272	0.0012	>10	pass
	+1 V	0.99100	<b>0.99782</b>	1.00900	0.00040	>10	pass
	+300 mV	297.00	<b>299.46</b>	303.00	0.12	>10	pass
	0 mV	-0.600	<b>-0.443</b>	0.600	0.018	>10	pass
	-300 mV	-303.00	<b>-300.35</b>	-297.00	0.12	>10	pass
	-1 V	-1.00900	<b>-0.99936</b>	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	<b>-2.9999</b>	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	<b>-10.0029</b>	-9.9100	0.0040	>10	pass
	-30 V	-30.272	<b>-30.000</b>	-29.728	0.012	>10	pass
-100V	-100.900	<b>-100.034</b>	-99.100	0.040	>10	pass	

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG ANALYZER CHARACTERISTICS, continued</b>							
<b>[6] DC Measurement Accuracy, continued</b>							
Channel 5	+100 V	99.100	99.936	100.900	0.040	>10	pass
	+30 V	29.728	29.972	30.272	0.012	>10	pass
	+10 V	9.9100	9.9920	10.0900	0.0040	>10	pass
	+3 V	2.9728	2.9968	3.0272	0.0012	>10	pass
	+1 V	0.99100	0.99854	1.00900	0.00040	>10	pass
	+300 mV	297.00	299.68	303.00	0.12	>10	pass
	0 mV	-0.600	-0.182	0.600	0.018	>10	pass
	-300 mV	-303.00	-300.05	-297.00	0.12	>10	pass
	-1 V	-1.00900	-0.99913	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	-2.9991	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	-9.9998	-9.9100	0.0040	>10	pass
	-30 V	-30.272	-29.996	-29.728	0.012	>10	pass
Channel 6	+100 V	99.100	100.009	100.900	0.040	>10	pass
	+30 V	29.728	29.991	30.272	0.012	>10	pass
	+10 V	9.9100	10.0016	10.0900	0.0040	>10	pass
	+3 V	2.9728	2.9995	3.0272	0.0012	>10	pass
	+1 V	0.99100	0.99932	1.00900	0.00040	>10	pass
	+300 mV	297.00	299.98	303.00	0.12	>10	pass
	0 mV	-0.600	-0.147	0.600	0.018	>10	pass
	-300 mV	-303.00	-300.07	-297.00	0.12	>10	pass
	-1 V	-1.00900	-0.99876	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	-2.9978	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	-9.9959	-9.9100	0.0040	>10	pass
	-30 V	-30.272	-29.976	-29.728	0.012	>10	pass
Channel 7	+100 V	99.100	100.005	100.900	0.040	>10	pass
	+30 V	29.728	29.989	30.272	0.012	>10	pass
	+10 V	9.9100	9.9991	10.0900	0.0040	>10	pass
	+3 V	2.9728	2.9985	3.0272	0.0012	>10	pass
	+1 V	0.99100	0.99899	1.00900	0.00040	>10	pass
	+300 mV	297.00	299.78	303.00	0.12	>10	pass
	0 mV	-0.600	-0.157	0.600	0.018	>10	pass
	-300 mV	-303.00	-300.09	-297.00	0.12	>10	pass
	-1 V	-1.00900	-0.99915	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	-2.9992	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	-10.0012	-9.9100	0.0040	>10	pass
	-30 V	-30.272	-29.996	-29.728	0.012	>10	pass
Channel 8	+100 V	99.100	100.025	100.900	0.040	>10	pass
	+30 V	29.728	29.993	30.272	0.012	>10	pass
	+10 V	9.9100	10.0004	10.0900	0.0040	>10	pass
	+3 V	2.9728	2.9988	3.0272	0.0012	>10	pass
	+1 V	0.99100	0.99925	1.00900	0.00040	>10	pass
	+300 mV	297.00	299.93	303.00	0.12	>10	pass
	0 mV	-0.600	0.009	0.600	0.018	>10	pass
	-300 mV	-303.00	-299.92	-297.00	0.12	>10	pass
	-1 V	-1.00900	-0.99914	-0.99100	0.00040	>10	pass
	-3 V	-3.0272	-2.9989	-2.9728	0.0012	>10	pass
	-10 V	-10.0900	-10.0008	-9.9100	0.0040	>10	pass
	-30 V	-30.272	-29.993	-29.728	0.012	>10	pass
-100V	-100.900	-100.027	-99.100	0.040	>10	pass	

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>[7] Input Common Mode Rejection (dB)</b>							
Channel 1	3.2V range, 200 Hz	-999	-113.0	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-101.6	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-90.3	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-87.3	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-65.0	-45.0	2.0	na	pass
Channel 2	3.2V range, 200 Hz	-999	-92.1	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-91.9	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-89.7	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-78.4	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-70.7	-45.0	2.0	na	pass
Channel 3	3.2V range, 200 Hz	-999	-99.8	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-99.3	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-97.7	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-78.0	-50.0	2.0	na	pass
Channel 4	3.2V range, 200 Hz	-999	-97.4	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-96.9	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-95.8	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-72.4	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-74.3	-45.0	2.0	na	pass
Channel 5	3.2V range, 200 Hz	-999	-100.8	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-101.6	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-98.0	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-90.8	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-70.9	-45.0	2.0	na	pass
Channel 6	3.2V range, 200 Hz	-999	-101.5	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-102.2	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-99.8	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-75.7	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-79.8	-45.0	2.0	na	pass
Channel 7	3.2V range, 200 Hz	-999	-100.4	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-100.8	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-100.3	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-91.4	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-73.2	-45.0	2.0	na	pass
Channel 8	3.2V range, 200 Hz	-999	-113.6	-70.0	5.0	na	pass
	3.2V range, 5 kHz	-999	-112.3	-70.0	5.0	na	pass
	3.2V range, 20 kHz	-999	-108.8	-70.0	5.0	na	pass
	10V range, 20 kHz	-999	-78.0	-50.0	2.0	na	pass
	100V range, 20 kHz	-999	-68.0	-45.0	2.0	na	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>[8] Level Meter AC Accuracy, 1 kHz (Volts, mVolts)</b>							
Channel 1	100 V	99.650	99.949	100.350	0.043	8.1	pass
	30 V	29.895	29.976	30.105	0.013	8.1	pass
	10 V	9.9650	9.9942	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9975	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99850	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.92	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9987	5.0175	0.0023	7.6	pass
Channel 2	100 V	99.650	99.969	100.350	0.043	8.1	pass
	30 V	29.895	29.977	30.105	0.013	8.1	pass
	10 V	9.9650	9.9971	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9977	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99868	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.80	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9966	5.0175	0.0023	7.6	pass
Channel 3	100 V	99.650	99.936	100.350	0.043	8.1	pass
	30 V	29.895	29.971	30.105	0.013	8.1	pass
	10 V	9.9650	9.9938	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9972	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99853	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.86	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9976	5.0175	0.0023	7.6	pass
Channel 4	100 V	99.650	99.961	100.350	0.043	8.1	pass
	30 V	29.895	29.976	30.105	0.013	8.1	pass
	10 V	9.9650	9.9961	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9978	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99862	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.93	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9988	5.0175	0.0023	7.6	pass
Channel 5	100 V	99.650	99.974	100.350	0.043	8.1	pass
	30 V	29.895	29.985	30.105	0.013	8.1	pass
	10 V	9.9650	9.9959	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9981	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99886	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.89	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9980	5.0175	0.0023	7.6	pass
Channel 6	100 V	99.650	99.981	100.350	0.043	8.1	pass
	30 V	29.895	29.986	30.105	0.013	8.1	pass
	10 V	9.9650	9.9992	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9989	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99910	1.00350	0.00043	8.1	pass
	300 mV	298.95	300.06	301.05	0.13	8.1	pass
	5 mV	4.9825	5.0008	5.0175	0.0023	7.6	pass
Channel 7	100 V	99.650	100.015	100.350	0.043	8.1	pass
	30 V	29.895	29.994	30.105	0.013	8.1	pass
	10 V	9.9650	10.0005	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9991	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99910	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.97	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9996	5.0175	0.0023	7.6	pass
Channel 8	100 V	99.650	100.027	100.350	0.043	8.1	pass
	30 V	29.895	29.996	30.105	0.013	8.1	pass
	10 V	9.9650	10.0013	10.0350	0.0043	8.1	pass
	3 V	2.9895	2.9991	3.0105	0.0013	8.1	pass
	1 V	0.99650	0.99926	1.00350	0.00043	8.1	pass
	300 mV	298.95	299.95	301.05	0.13	8.1	pass
	5 mV	4.9825	4.9992	5.0175	0.0023	7.6	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG ANALYZER, continued</b>							
<b>[9] Level Meter AC Flatness, 3 Vrms (dB)</b>							
Channel 1	10 Hz	-0.0080	-0.0013	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0004	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0002	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0012	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0331	0.1000	0.0053	>10	pass
Channel 2	10 Hz	-0.0080	-0.0013	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0004	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0001	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0019	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0346	0.1000	0.0053	>10	pass
Channel 3	10 Hz	-0.0080	-0.0013	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0004	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	-0.0002	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0039	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0405	0.1000	0.0053	>10	pass
Channel 4	10 Hz	-0.0080	-0.0013	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0004	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0002	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0015	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0344	0.1000	0.0053	>10	pass
Channel 5	10 Hz	-0.0080	-0.0012	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0003	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0002	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0014	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0338	0.1000	0.0053	>10	pass
Channel 6	10 Hz	-0.0080	-0.0013	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0004	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0001	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0020	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0351	0.1000	0.0053	>10	pass
Channel 7	10 Hz	-0.0080	-0.0011	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0002	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	-0.0001	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0037	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0395	0.1000	0.0053	>10	pass
Channel 8	10 Hz	-0.0080	-0.0011	0.0080	0.0025	3.2	pass
	20 Hz	-0.0080	-0.0002	0.0080	0.0025	3.2	pass
	20 kHz	-0.0080	0.0001	0.0080	0.0020	4.0	pass
	50 kHz	-0.0300	-0.0032	0.0300	0.0026	>10	pass
	80 kHz	-0.1000	-0.0390	0.1000	0.0053	>10	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>ANALOG ANALYZER, continued</b>							
<b>[10] Phase Measurement Offset (Deg)</b>							
Ch1 - Ch 2	200 Hz	-1.0000	-0.0003	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0067	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0266	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.0641	5.0000	0.0016	>10	pass
Ch1 - Ch 3	200 Hz	-1.0000	-0.0004	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0094	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0376	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.0932	5.0000	0.0016	>10	pass
Ch1 - Ch 4	200 Hz	-1.0000	-0.0003	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0071	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0285	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.0714	5.0000	0.0016	>10	pass
Ch1 - Ch 5	200 Hz	-1.0000	-0.0003	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0083	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0319	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.0827	5.0000	0.0016	>10	pass
Ch1 - Ch 6	200 Hz	-1.0000	-0.0004	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0093	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0369	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.0907	5.0000	0.0016	>10	pass
Ch1 - Ch 7	200 Hz	-1.0000	0.0002	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	0.0053	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	0.0219	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	0.0596	5.0000	0.0016	>10	pass
Ch1 - Ch 8	200 Hz	-1.0000	-0.0008	1.0000	0.0004	>10	pass
	5 kHz	-1.0000	-0.0185	1.0000	0.0004	>10	pass
	20 kHz	-2.0000	-0.0733	2.0000	0.0006	>10	pass
	50 kHz	-5.0000	-0.1833	5.0000	0.0016	>10	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>[11] Sine THD+N (dB), 20 kHz BW - self-test</b>							
Channel 1	20 Hz, 14.4V, Bal	-999	-105.1	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.2	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.1	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.2	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-105.7	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-106.0	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.4	-103.0	1.0	na	pass
Channel 2	20 Hz, 14.4V, Bal	-999	-105.2	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.5	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.3	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.1	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-104.6	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-105.3	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.1	-103.0	1.0	na	pass
Channel 3	20 Hz, 14.4V, Bal	-999	-105.8	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.4	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.5	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-107.9	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-107.1	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-107.5	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-110.9	-103.0	1.0	na	pass
Channel 4	20 Hz, 14.4V, Bal	-999	-105.4	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.8	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.9	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.2	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-105.5	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-106.1	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.2	-103.0	1.0	na	pass
Channel 5	20 Hz, 14.4V, Bal	-999	-105.3	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.6	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.5	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.1	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-105.9	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-105.9	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.4	-103.0	1.0	na	pass
Channel 6	20 Hz, 14.4V, Bal	-999	-105.6	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.3	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.2	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-107.8	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-106.0	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-106.1	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-110.5	-103.0	1.0	na	pass
Channel 7	20 Hz, 14.4V, Bal	-999	-105.2	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.6	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.6	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.1	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-104.7	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-105.2	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.0	-103.0	1.0	na	pass
Channel 8	20 Hz, 14.4V, Bal	-999	-104.7	-102.0	1.0	na	pass
	1 kHz, 14.4V, Bal	-999	-106.5	-103.0	1.0	na	pass
	5 kHz, 14.4V, Bal	-999	-106.6	-103.0	1.0	na	pass
	20 kHz, 14.4V, Bal	-999	-108.1	-103.0	1.0	na	pass
	10 Hz, 7.2V, Unbal	-999	-104.2	-102.0	1.0	na	pass
	20 Hz, 7.2V, Unbal	-999	-104.8	-102.0	1.0	na	pass
	20 kHz, 7.2V, Unbal	-999	-111.1	-103.0	1.0	na	pass

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
<b>[12] Residual Crosstalk (dB) - self-test</b>							
<i>Unbalanced, 7.2V, 20 kHz. All channels driven, except the selected channel.</i>	Ch 1	-999	<b>-137.0</b>	-115.0	2.0	na	pass
	Ch 2	-999	<b>-128.0</b>	-115.0	2.0	na	pass
	Ch 3	-999	<b>-128.9</b>	-115.0	2.0	na	pass
	Ch 4	-999	<b>-130.3</b>	-115.0	2.0	na	pass
	Ch 5	-999	<b>-130.5</b>	-115.0	2.0	na	pass
	Ch 6	-999	<b>-129.8</b>	-115.0	2.0	na	pass
	Ch 7	-999	<b>-131.4</b>	-115.0	2.0	na	pass
	Ch 8	-999	<b>-136.5</b>	-115.0	2.0	na	pass
<i>Balanced, 14.4V, 20 kHz. All channels driven, except the selected channel.</i>	Ch 1	-999	<b>-110.7</b>	-100.0	2.0	na	pass
	Ch 2	-999	<b>-104.0</b>	-100.0	2.0	na	pass
	Ch 3	-999	<b>-104.6</b>	-100.0	2.0	na	pass
	Ch 4	-999	<b>-105.1</b>	-100.0	2.0	na	pass
	Ch 5	-999	<b>-105.4</b>	-100.0	2.0	na	pass
	Ch 6	-999	<b>-104.9</b>	-100.0	2.0	na	pass
	Ch 7	-999	<b>-104.9</b>	-100.0	2.0	na	pass
	Ch 8	-999	<b>-111.1</b>	-100.0	2.0	na	pass
<b>[13] Residual Noise (uVolts) - self-test</b>							
<i>Balanced Input, inputs shorted, 20 kHz BW.</i>	Ch 1	0	<b>1.13</b>	1.30	0.10	na	pass
	Ch 2	0	<b>1.14</b>	1.30	0.10	na	pass
	Ch 3	0	<b>1.13</b>	1.30	0.10	na	pass
	Ch 4	0	<b>1.13</b>	1.30	0.10	na	pass
	Ch 5	0	<b>1.12</b>	1.30	0.10	na	pass
	Ch 6	0	<b>1.11</b>	1.30	0.10	na	pass
	Ch 7	0	<b>1.12</b>	1.30	0.10	na	pass
	Ch 8	0	<b>1.13</b>	1.30	0.10	na	pass
<b>[14] Residual SMPTE IMD (%) - self-test</b>							
<i>Unbalanced, 7.200 Vrms. 4:1 Ratio 60Hz:7kHz</i>	Ch 1	0%	<b>0.00108%</b>	0.00250%	0.00020%	na	pass
	Ch 2	0%	<b>0.00130%</b>	0.00250%	0.00020%	na	pass
	Ch 3	0%	<b>0.00095%</b>	0.00250%	0.00020%	na	pass
	Ch 4	0%	<b>0.00103%</b>	0.00250%	0.00020%	na	pass
	Ch 5	0%	<b>0.00118%</b>	0.00250%	0.00020%	na	pass
	Ch 6	0%	<b>0.00129%</b>	0.00250%	0.00020%	na	pass
	Ch 7	0%	<b>0.00129%</b>	0.00250%	0.00020%	na	pass
	Ch 8	0%	<b>0.00128%</b>	0.00250%	0.00020%	na	pass
<b>[15] Residual MOD IMD (%) - self-test</b>							
<i>Unbalanced, 7.200 Vrms. 4:1 Ratio 60Hz:7kHz</i>	Ch 1	0%	<b>0.00105%</b>	0.00250%	0.00020%	na	pass
	Ch 2	0%	<b>0.00127%</b>	0.00250%	0.00020%	na	pass
	Ch 3	0%	<b>0.00091%</b>	0.00250%	0.00020%	na	pass
	Ch 4	0%	<b>0.00098%</b>	0.00250%	0.00020%	na	pass
	Ch 5	0%	<b>0.00115%</b>	0.00250%	0.00020%	na	pass
	Ch 6	0%	<b>0.00125%</b>	0.00250%	0.00020%	na	pass
	Ch 7	0%	<b>0.00134%</b>	0.00250%	0.00020%	na	pass
	Ch 8	0%	<b>0.00130%</b>	0.00250%	0.00020%	na	pass
<b>[16] Residual DFD IMD (%) - self-test</b>							
<i>Unbalanced, 7.200 Vrms. Mean = 12.5kHz Diff = 80Hz</i>	Ch 1	0%	<b>0.00027%</b>	0.00100%	0.00010%	na	pass
	Ch 2	0%	<b>0.00031%</b>	0.00100%	0.00010%	na	pass
	Ch 3	0%	<b>0.00021%</b>	0.00100%	0.00010%	na	pass
	Ch 4	0%	<b>0.00024%</b>	0.00100%	0.00010%	na	pass
	Ch 5	0%	<b>0.00027%</b>	0.00100%	0.00010%	na	pass
	Ch 6	0%	<b>0.00029%</b>	0.00100%	0.00010%	na	pass
	Ch 7	0%	<b>0.00030%</b>	0.00100%	0.00010%	na	pass
	Ch 8	0%	<b>0.00031%</b>	0.00100%	0.00010%	na	pass
<b>AES/EBU DIGITAL I/O CHARACTERISTICS</b>							
<b>[17] Digital Output Amplitude Accuracy (Volts) - oscilloscope referenced</b>							
	0.5 Vpp	0.450	<b>0.489</b>	0.550	0.006	na	pass

END OF REPORT