Calibration Services
5750 SW Arctic Drive
Beaverton, Oregon 97005
USA

ACCREDITED
Calibration Cert #2527.01

Calibration Report

Accredited Calibration

Report number: SYS2-37920-101021-1

Model: 2722-192K
Serial Number: SYS2-000000
Data Type: AS SHIPPED, NEW
Date of Cal: 21-Oct-2010
Program: S2FamilyCal.apb 2.03

Option Status

BUR	Installed
IMD	Installed
WFA	Not Installed
EURZ	Not Installed
S-AES17	Installed
OPT-2020	Not Installed

Internal Module Status and Data

AP Name	*Type*	*Serial No.*	*Revision*
GEN	Hi-Perf	000000	209
INP	Hi-Perf	000000	209
ANL	Hi-Perf	000000	313
DSP	Hi-Perf	000000	114
DIO	192k	000000	201

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, statistical data of repeatability and/or other information. These are based on a coverage factor of 2 (k=2) corresponding to a confidence level of 95% using the recommendations in the Guide to the Expression of Uncertainty in Measurement, 1993, ISO Geneva; and NIST Technical Note 1297 (1994).

"TUR" - The column labeled "**TUR**" lists the test uncertainty ratio calculated by dividing the lesser of the lower and upper reading tolerances by the 95% 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 95% expanded measurement uncertainty. The confidence level is very high the observed characteristic is within specification.*

uncertain -- *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 95% expanded measurement uncertainty. Conformance to specification is more probable than not, however the confidence level may be unacceptable.*

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

Accredited measurements listed in the following pages correlate to Audio Precision's Scope of Accreditation as noted:

note 1 - Frequency Measurement
note 2 - AC Voltage Measurement
note 3 - AC Flatness Measurement
note 4 - Resistance Measurement
note 5 - AC Voltage Source for testing AC Measurement Equipment

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

File name: Sys2MReport.xls File version: REV1.11-12AUG2010-SR

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG GENERATOR CHARACTERISTICS							
[1] Sine Frequency Accuracy (Hz) - *note 1*							
Fast Mode	10 Hz	9.9500	**10.0067**	10.0500	0.0020	>10	**pass**
	100 Hz	99.500	**99.986**	100.500	0.020	>10	**pass**
	1 kHz	995.00	**999.97**	1005.00	0.20	>10	**pass**
	10 kHz	9950.0	**10000.9**	10050.0	2.0	>10	**pass**
	100 kHz	99500	**100005**	100500	30	>10	**pass**
	200 kHz	199000	**200145**	201000	60	>10	**pass**
High-Acc Mode	10 Hz	9.99700	**10.00032**	10.00300	0.00060	5.0	**pass**
	100 Hz	99.9700	**100.0018**	100.0300	0.0060	5.0	**pass**
	1 kHz	999.700	**1000.009**	1000.300	0.060	5.0	**pass**
	10 kHz	9997.00	**10000.08**	10003.00	0.60	5.0	**pass**
	100 kHz	99970.0	**100001.4**	100030.0	6.0	5.0	**pass**
	200 kHz	199940	**200001**	200060	12	5.0	**pass**
[2] Sine (D/A) Frequency Accuracy (Hz) - *note 1*							
	10 kHz	9999.9800	**9999.9966**	10000.0200	0.0063	3.2	**pass**
[3] Sine Amplitude Accuracy (Volts, mVolts) - *note 2*							
Channel A	10.00 V	9.9300	**10.0027**	10.0700	0.0041	>10	**pass**
	5.000 V	4.9650	**4.9986**	5.0350	0.0021	>10	**pass**
	2.500 V	2.4825	**2.4997**	2.5175	0.0011	>10	**pass**
	1.200 V	1.1916	**1.2009**	1.2084	0.0017	4.9	**pass**
	600 mV	595.80	**600.49**	604.20	0.84	5.0	**pass**
	300 mV	297.90	**299.84**	302.10	0.42	5.0	**pass**
	150 mV	148.95	**149.94**	151.05	0.21	5.0	**pass**
	80 mV	79.44	**80.05**	80.56	0.11	5.1	**pass**
	40 mV	39.720	**40.029**	40.280	0.056	5.0	**pass**
	20 mV	19.860	**20.002**	20.140	0.028	5.0	**pass**
	10 mV	9.930	**10.001**	10.070	0.014	5.0	**pass**
Channel B	10.00 V	9.9300	**10.0064**	10.0700	0.0041	>10	**pass**
	5.000 V	4.9650	**5.0009**	5.0350	0.0021	>10	**pass**
	2.500 V	2.4825	**2.5005**	2.5175	0.0011	>10	**pass**
	1.200 V	1.1916	**1.2019**	1.2084	0.0017	4.9	**pass**
	600 mV	595.80	**600.92**	604.20	0.84	5.0	**pass**
	300 mV	297.90	**299.78**	302.10	0.42	5.0	**pass**
	150 mV	148.95	**149.89**	151.05	0.21	5.0	**pass**
	80 mV	79.44	**80.04**	80.56	0.11	5.1	**pass**
	40 mV	39.720	**40.018**	40.280	0.056	5.0	**pass**
	20 mV	19.860	**20.006**	20.140	0.028	5.0	**pass**
	10 mV	9.930	**10.002**	10.070	0.014	5.0	**pass**
[4] Sine (D/A) Amplitude Accuracy (Volts) - *note 2*							
Channel A	2.500 V	2.4825	**2.4995**	2.5175	0.0020	8.8	**pass**
Channel B	2.500 V	2.4825	**2.5002**	2.5175	0.0020	8.8	**pass**
[5] Sine Flatness (dB) - *note 3*							
Channel A	10 Hz	-0.0080	**0.0004**	0.0080	0.0019	4.2	**pass**
	20 Hz	-0.0080	**0.0000**	0.0080	0.0017	4.7	**pass**
	50 Hz	-0.0080	**-0.0001**	0.0080	0.0014	5.7	**pass**
	10 kHz	-0.0080	**0.0001**	0.0080	0.0019	4.2	**pass**
	20 kHz	-0.0080	**-0.0007**	0.0080	0.0019	4.2	**pass**
	50 kHz	-0.0300	**0.0003**	0.0300	0.0033	9.1	**pass**
	100 kHz	-0.1000	**0.0049**	0.1000	0.0095	>10	**pass**
	200 kHz	-0.300	**0.094**	0.200	0.027	7.4	**pass**
Channel B	10 Hz	-0.0080	**0.0001**	0.0080	0.0019	4.2	**pass**
	20 Hz	-0.0080	**-0.0002**	0.0080	0.0017	4.7	**pass**
	50 Hz	-0.0080	**-0.0003**	0.0080	0.0014	5.7	**pass**
	10 kHz	-0.0080	**-0.0001**	0.0080	0.0019	4.2	**pass**
	20 kHz	-0.0080	**-0.0008**	0.0080	0.0019	4.2	**pass**
	50 kHz	-0.0300	**-0.0004**	0.0300	0.0033	9.1	**pass**
	100 kHz	-0.1000	**0.0030**	0.1000	0.0095	>10	**pass**
	200 kHz	-0.300	**0.088**	0.200	0.027	7.4	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG GENERATOR, continued							
[6] Sine (D/A) Flatness (dB) - *note 3*							
Channel A	10 Hz	-0.0300	**0.0002**	0.0300	0.0019	>10	**pass**
	20 Hz	-0.0100	**-0.0004**	0.0100	0.0019	5.3	**pass**
	10 kHz	-0.0100	**-0.0029**	0.0100	0.0021	4.8	**pass**
	20 kHz	-0.0100	**-0.0014**	0.0100	0.0021	4.8	**pass**
	30 kHz	-0.0300	**0.0103**	0.0300	0.0037	8.1	**pass**
	50 kHz	-0.1000	**0.0360**	0.1000	0.0086	>10	**pass**
Channel B	10 Hz	-0.0300	**0.0000**	0.0300	0.0019	>10	**pass**
	20 Hz	-0.0100	**-0.0001**	0.0100	0.0019	5.3	**pass**
	10 kHz	-0.0100	**-0.0025**	0.0100	0.0021	4.8	**pass**
	20 kHz	-0.0100	**-0.0019**	0.0100	0.0021	4.8	**pass**
	30 kHz	-0.0300	**0.0046**	0.0300	0.0037	8.1	**pass**
	50 kHz	-0.1000	**0.0138**	0.1000	0.0086	>10	**pass**
[7] Sine THD+N (%) - non-accredited, self-test							
Channel A	20 Hz, 26.6V, 22k BW	0%	**0.00063%**	0.00200%	0.00020%	na	**pass**
	30 Hz, 26.6V, 22k BW	0%	**0.00016%**	0.00030%	0.00004%	na	**pass**
	1 kHz, 26.6V, 22k BW	0%	**0.00015%**	0.00030%	0.00002%	na	**pass**
	5 kHz, 26.6V, 22k BW	0%	**0.00019%**	0.00030%	0.00002%	na	**pass**
	1 kHz, 26.6V, 80k BW	0%	**0.00025%**	0.00050%	0.00002%	na	**pass**
	20 kHz, 26.6V, 80k BW	0%	**0.00029%**	0.00050%	0.00002%	na	**pass**
	10 Hz, 13.3V, 500k BW	0%	**0.00083%**	0.00400%	0.00050%	na	**pass**
	20 Hz, 13.3V, 500k BW	0%	**0.00057%**	0.00100%	0.00020%	na	**pass**
	20 kHz,13.3V,500k BW	0%	**0.00059%**	0.00100%	0.00010%	na	**pass**
	100kHz,13.3V,500k BW	0%	**0.00089%**	0.00400%	0.00010%	na	**pass**
Channel B	20 Hz, 26.6V, 22k BW	0%	**0.00088%**	0.00200%	0.00020%	na	**pass**
	30 Hz, 26.6V, 22k BW	0%	**0.00017%**	0.00030%	0.00004%	na	**pass**
	1 kHz, 26.6V, 22k BW	0%	**0.00016%**	0.00030%	0.00002%	na	**pass**
	5 kHz, 26.6V, 22k BW	0%	**0.00019%**	0.00030%	0.00002%	na	**pass**
	1 kHz, 26.6V, 80k BW	0%	**0.00025%**	0.00050%	0.00002%	na	**pass**
	20 kHz, 26.6V, 80k BW	0%	**0.00029%**	0.00050%	0.00002%	na	**pass**
	10 Hz, 13.3V, 500k BW	0%	**0.00129%**	0.00400%	0.00050%	na	**pass**
	20 Hz, 13.3V, 500k BW	0%	**0.00055%**	0.00100%	0.00020%	na	**pass**
	20 kHz,13.3V,500k BW	0%	**0.00058%**	0.00100%	0.00010%	na	**pass**
	100kHz,13.3V,500k BW	0%	**0.00084%**	0.00400%	0.00010%	na	**pass**
[8] Sine (D/A) THD+N (%) - non-accredited, self-test							
Channel A	20 Hz	0%	**0.00036%**	0.00070%	0.00010%	na	**pass**
	1 kHz	0%	**0.00031%**	0.00070%	0.00002%	na	**pass**
	5 kHz	0%	**0.00034%**	0.00070%	0.00002%	na	**pass**
	20 kHz	0%	**0.00024%**	0.00070%	0.00002%	na	**pass**
Channel B	20 Hz	0%	**0.00049%**	0.00070%	0.00010%	na	**pass**
	1 kHz	0%	**0.00041%**	0.00070%	0.00002%	na	**pass**
	5 kHz	0%	**0.00045%**	0.00070%	0.00002%	na	**pass**
	20 kHz	0%	**0.00031%**	0.00070%	0.00002%	na	**pass**
[9] Output Crosstalk (dB) - non-accredited, self-test							
Ch B into Ch A	20 kHz	-999	**-124.0**	-120.0	1.4	na	**pass**
	100 kHz	-999	**-116.9**	-106.0	1.4	na	**pass**
Ch A into Ch B	20 kHz	-999	**-141.4**	-120.0	1.4	na	**pass**
	100 kHz	-999	**-135.7**	-106.0	1.4	na	**pass**
[10] Source Resistance Accuracy (Ω) - *note 4*							
Channel A	40 Ω Bal	39.000	**40.592**	41.000	0.020	>10	**pass**
	150 Ω Bal	148.500	**150.651**	151.500	0.040	>10	**pass**
	600 Ω Bal	597.00	**601.12**	603.00	0.16	>10	**pass**
	20 Ω Unbal	19.000	**20.484**	21.000	0.010	>10	**pass**
	600 Ω Unbal	597.00	**600.54**	603.00	0.16	>10	**pass**
Channel B	40 Ω Bal	39.000	**40.606**	41.000	0.020	>10	**pass**
	150 Ω Bal	148.500	**150.673**	151.500	0.040	>10	**pass**
	600 Ω Bal	597.00	**600.74**	603.00	0.16	>10	**pass**
	20 Ω Unbal	19.000	**20.478**	21.000	0.010	>10	**pass**
	600 Ω Unbal	597.00	**600.22**	603.00	0.16	>10	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG ANALYZER CHARACTERISTICS							
[11] Input Termination Accuracy (Ω) - *note 4*							
Channel A	600 Ω	594.00	**600.38**	606.00	0.16	>10	**pass**
	300 Ω	297.000	**300.503**	303.000	0.080	>10	**pass**
Channel B	600 Ω	594.00	**602.94**	606.00	0.16	>10	**pass**
	300 Ω	297.000	**301.093**	303.000	0.080	>10	**pass**
[12] Input Common Mode Rejection (dB) - *note 5*							
Channel A	2.5V range, 10 Hz	-999	**-117.7**	-80.0	5.0	na	**pass**
	2.5V range, 1 kHz	-999	**-111.9**	-80.0	5.0	na	**pass**
	2.5V range, 20 kHz	-999	**-105.3**	-80.0	5.0	na	**pass**
	10V range, 1kHz	-999	**-97.8**	-65.0	2.0	na	**pass**
	10V range, 20 kHz	-999	**-76.3**	-65.0	2.0	na	**pass**
	40V range, 1kHz	-999	**-61.2**	-50.0	2.0	na	**pass**
	160V range, 1kHz	-999	**-60.7**	-50.0	2.0	na	**pass**
Channel B	2.5V range, 10 Hz	-999	**-117.8**	-80.0	5.0	na	**pass**
	2.5V range, 1 kHz	-999	**-111.2**	-80.0	5.0	na	**pass**
	2.5V range, 20 kHz	-999	**-106.8**	-80.0	5.0	na	**pass**
	10V range, 1kHz	-999	**-101.4**	-65.0	2.0	na	**pass**
	10V range, 20 kHz	-999	**-78.1**	-65.0	2.0	na	**pass**
	40V range, 1kHz	-999	**-56.1**	-50.0	2.0	na	**pass**
	160V range, 1kHz	-999	**-62.8**	-50.0	2.0	na	**pass**
[13] Input Residual Crosstalk (dB) - *note 5*							
Ch B into Ch A	20 kHz	-999	**-141.8**	-140.0	1.1	na	**pass**
	100 kHz	-999	**-128.0**	-126.0	1.1	na	**pass**
Ch A into Ch B	20 kHz	-999	**-159.9**	-140.0	1.1	na	**pass**
	100 kHz	-999	**-144.2**	-126.0	1.1	na	**pass**
[14] Level Meter Accuracy (Volts, mVolts) - *note 5*							
Channel A	120 V	119.400	**120.028**	120.600	0.052	>10	**pass**
	60 V	59.700	**60.014**	60.300	0.026	>10	**pass**
	30 V	29.850	**29.999**	30.150	0.013	>10	**pass**
	16 V	15.9200	**15.9995**	16.0800	0.0068	>10	**pass**
	8 V	7.9600	**7.9965**	8.0400	0.0035	>10	**pass**
	4 V	3.9800	**3.9983**	4.0200	0.0019	>10	**pass**
	2 V	1.99000	**1.99913**	2.01000	0.00085	>10	**pass**
	1 V	0.99500	**0.99950**	1.00500	0.00043	>10	**pass**
	500 mV	497.50	**499.77**	502.50	0.23	>10	**pass**
	240 mV	238.80	**239.77**	241.20	0.10	>10	**pass**
	120 mV	119.400	**119.879**	120.600	0.052	>10	**pass**
	60 mV	59.700	**59.934**	60.300	0.027	>10	**pass**
	30 mV	29.850	**29.965**	30.150	0.014	>10	**pass**
	5 mV	4.9750	**4.9976**	5.0250	0.0032	7.8	**pass**
Channel B	120 V	119.400	**119.808**	120.600	0.052	>10	**pass**
	60 V	59.700	**59.906**	60.300	0.026	>10	**pass**
	30 V	29.850	**30.005**	30.150	0.013	>10	**pass**
	16 V	15.9200	**16.0025**	16.0800	0.0068	>10	**pass**
	8 V	7.9600	**7.9950**	8.0400	0.0035	>10	**pass**
	4 V	3.9800	**3.9978**	4.0200	0.0019	>10	**pass**
	2 V	1.99000	**1.99888**	2.01000	0.00085	>10	**pass**
	1 V	0.99500	**0.99938**	1.00500	0.00043	>10	**pass**
	500 mV	497.50	**499.69**	502.50	0.23	>10	**pass**
	240 mV	238.80	**239.77**	241.20	0.10	>10	**pass**
	120 mV	119.400	**119.875**	120.600	0.052	>10	**pass**
	60 mV	59.700	**59.924**	60.300	0.027	>10	**pass**
	30 mV	29.850	**29.960**	30.150	0.014	>10	**pass**
	5 mV	4.9750	**5.0005**	5.0250	0.0032	7.8	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG ANALYZER, continued							
[15] Level Meter Flatness (dB) - *note 5*							
Channel A	10 Hz	-0.1000	**-0.0089**	0.1000	0.0027	>10	**pass**
	15 Hz	-0.0300	**-0.0024**	0.0300	0.0026	>10	**pass**
	20 Hz	-0.0080	**-0.0019**	0.0080	0.0026	3.1	**pass**
	50 Hz	-0.0080	**-0.0014**	0.0080	0.0018	4.4	**pass**
	20 kHz	-0.0080	**-0.0016**	0.0080	0.0020	4.0	**pass**
	50 kHz	-0.0300	**-0.0076**	0.0300	0.0026	>10	**pass**
	100 kHz	-0.1000	**-0.0256**	0.1000	0.0054	>10	**pass**
	500 kHz	-0.500	**-0.040**	0.200	0.027	7.4	**pass**
Channel B	10 Hz	-0.1000	**-0.0125**	0.1000	0.0027	>10	**pass**
	15 Hz	-0.0300	**-0.0033**	0.0300	0.0026	>10	**pass**
	20 Hz	-0.0080	**-0.0022**	0.0080	0.0026	3.1	**pass**
	50 Hz	-0.0080	**-0.0011**	0.0080	0.0018	4.4	**pass**
	20 kHz	-0.0080	**-0.0014**	0.0080	0.0020	4.0	**pass**
	50 kHz	-0.0300	**-0.0073**	0.0300	0.0026	>10	**pass**
	100 kHz	-0.1000	**-0.0250**	0.1000	0.0054	>10	**pass**
	500 kHz	-0.500	**-0.048**	0.200	0.027	7.4	**pass**
[16] Amplitude Meter Accuracy (Volts, mVolts) - *note 5*							
Channel A	2.000 V	1.9800	**2.0003**	2.0200	0.0012	>10	**pass**
	500 mV	495.00	**499.97**	505.00	0.32	>10	**pass**
	120 mV	118.800	**119.992**	121.200	0.075	>10	**pass**
	30 mV	29.700	**30.000**	30.300	0.019	>10	**pass**
	8.0 mV	7.9200	**7.9950**	8.0800	0.0051	>10	**pass**
	2.0 mV	1.9800	**1.9967**	2.0200	0.0017	>10	**pass**
Channel B	2.000 V	1.9800	**2.0004**	2.0200	0.0012	>10	**pass**
	500 mV	495.00	**499.98**	505.00	0.32	>10	**pass**
	120 mV	118.800	**119.992**	121.200	0.075	>10	**pass**
	30 mV	29.700	**30.001**	30.300	0.019	>10	**pass**
	8.0 mV	7.9200	**7.9955**	8.0800	0.0051	>10	**pass**
	2.0 mV	1.9800	**1.9967**	2.0200	0.0017	>10	**pass**
[17] Amplitude Meter Flatness (dB) - *note 5*							
2.000 Vrms	15 Hz	-0.0500	**-0.0294**	0.0500	0.0027	>10	**pass**
	20 Hz	-0.0200	**-0.0071**	0.0200	0.0026	7.7	**pass**
	20 kHz	-0.0200	**-0.0008**	0.0200	0.0020	10.0	**pass**
	50 kHz	-0.0500	**-0.0076**	0.0500	0.0026	>10	**pass**
	100 kHz	-0.1500	**-0.0280**	0.1500	0.0053	>10	**pass**
	200 kHz	-0.300	**-0.084**	0.200	0.018	>10	**pass**
120 mVrms	15 Hz	-0.0500	**-0.0292**	0.0500	0.0042	>10	**pass**
	20 Hz	-0.0200	**-0.0071**	0.0200	0.0041	4.9	**pass**
	20 kHz	-0.0200	**0.0008**	0.0200	0.0022	9.1	**pass**
	50 kHz	-0.0500	**-0.0045**	0.0500	0.0032	>10	**pass**
	100 kHz	-0.1500	**-0.0175**	0.1500	0.0073	>10	**pass**
	200 kHz	-0.300	**-0.045**	0.200	0.018	>10	**pass**
8 mVrms	15 Hz	-0.0500	**-0.0271**	0.0500	0.0028	>10	**pass**
	20 Hz	-0.0200	**-0.0050**	0.0200	0.0023	8.7	**pass**
	20 kHz	-0.0200	**0.0005**	0.0200	0.0021	9.5	**pass**
	50 kHz	-0.0500	**-0.0096**	0.0500	0.0028	>10	**pass**
	100 kHz	-0.150	**-0.044**	0.150	0.011	>10	**pass**
	200 kHz	-0.300	**-0.132**	0.200	0.013	>10	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG ANALYZER, continued							
[18] Bandreject & THD+N Accuracy (dBV) - *note 5*							
20 Hz notch	40 Hz	-0.300	**-0.045**	0.300	0.010	>10	**pass**
	60 Hz	-0.300	**0.040**	0.300	0.010	>10	**pass**
	20 kHz	-0.300	**0.028**	0.300	0.010	>10	**pass**
	120 kHz	-0.300	**-0.015**	0.300	0.021	>10	**pass**
1 kHz notch	20 Hz	-0.300	**0.017**	0.300	0.010	>10	**pass**
	500 Hz	-0.300	**-0.079**	0.300	0.010	>10	**pass**
	2.0 kHz	-0.300	**-0.040**	0.300	0.010	>10	**pass**
	3.0 kHz	-0.300	**0.043**	0.300	0.010	>10	**pass**
	20 kHz	-0.300	**0.027**	0.300	0.010	>10	**pass**
	120 kHz	-0.300	**-0.017**	0.300	0.021	>10	**pass**
20 kHz notch	20 Hz	-0.300	**0.017**	0.300	0.010	>10	**pass**
	10 kHz	-0.300	**-0.093**	0.300	0.010	>10	**pass**
	40 kHz	-0.300	**-0.053**	0.300	0.010	>10	**pass**
	60 kHz	-0.300	**0.023**	0.300	0.011	>10	**pass**
	120 kHz	-0.300	**-0.016**	0.300	0.021	>10	**pass**
100 kHz notch	20 Hz	-0.300	**0.017**	0.300	0.010	>10	**pass**
	20 kHz	-0.300	**0.034**	0.300	0.010	>10	**pass**
	50 kHz	-0.300	**-0.085**	0.300	0.010	>10	**pass**
[19] Bandpass Accuracy (dBV) - *note 5*							
20 Hz	19.60 Hz BP	-0.300	**-0.003**	0.300	0.010	>10	**pass**
	20.00 Hz BP	-0.300	**0.048**	0.300	0.010	>10	**pass**
	20.40 Hz BP	-0.300	**-0.052**	0.300	0.010	>10	**pass**
1 kHz	0.980 kHz BP	-0.300	**0.004**	0.300	0.010	>10	**pass**
	1.000 kHz BP	-0.300	**0.042**	0.300	0.010	>10	**pass**
	1.020 kHz BP	-0.300	**-0.071**	0.300	0.010	>10	**pass**
20 kHz	19.60 kHz BP	-0.300	**-0.054**	0.300	0.010	>10	**pass**
	20.00 kHz BP	-0.300	**-0.001**	0.300	0.010	>10	**pass**
	20.40 kHz BP	-0.300	**-0.099**	0.300	0.010	>10	**pass**
100 kHz	98.0 kHz BP	-0.300	**0.138**	0.300	0.021	>10	**pass**
	100.0 kHz BP	-0.300	**0.183**	0.300	0.021	>10	**pass**
	102.0 kHz BP	-0.300	**0.071**	0.300	0.021	>10	**pass**
[20] Bandwidth Limiting Filters (dB) - *note 5*							
22 Hz Highpass	22.4 Hz	-6.000	**-1.920**	0.000	0.020	na	**pass**
	31.5 Hz	-0.500	**-0.270**	0.500	0.020	>10	**pass**
	50 Hz	-0.500	**-0.010**	0.500	0.010	>10	**pass**
100 Hz Highpass	95 Hz	-999	**-3.759**	-3.000	0.030	na	**pass**
	105 Hz	-3.000	**-2.414**	0.000	0.030	na	**pass**
400 Hz Highpass	380 Hz	-999	**-4.086**	-3.000	0.010	na	**pass**
	420 Hz	-3.000	**-2.695**	0.000	0.010	na	**pass**
22 kHz Lowpass	5 kHz	-0.500	**0.005**	0.500	0.010	>10	**pass**
	16 kHz	-0.500	**0.051**	0.500	0.010	>10	**pass**
	22.4 kHz	-6.000	**-2.820**	0.000	0.010	na	**pass**
30 kHz Lowpass	28.5 kHz	-3.000	**-2.265**	0.000	0.010	na	**pass**
	31.5 kHz	-999	**-3.534**	-3.000	0.010	na	**pass**
80 kHz Lowpass	76 kHz	-3.000	**-2.174**	0.000	0.011	na	**pass**
	84 kHz	-999	**-3.364**	-3.000	0.011	na	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
ANALOG ANALYZER, continued							
[21] Residual Noise (uVolts) - non-accredited, self-test							
Channel A	22-22k BW	0	**0.85**	1.00	0.04	na	**pass**
	10-80k BW	0	**1.60**	2.00	0.04	na	**pass**
	Full BW	0	**4.68**	6.00	0.04	na	**pass**
	5 kHz bandpass	0	**0.21**	0.25	0.02	na	**pass**
	20 kHz bandpass	0	**0.38**	0.50	0.02	na	**pass**
	200 kHz bandpass	0	**1.16**	1.50	0.02	na	**pass**
Channel B	22-22k BW	0	**0.84**	1.00	0.04	na	**pass**
	10-80k BW	0	**1.59**	2.00	0.04	na	**pass**
	Full BW	0	**4.68**	6.00	0.04	na	**pass**
	5 kHz bandpass	0	**0.21**	0.25	0.02	na	**pass**
	20 kHz bandpass	0	**0.38**	0.50	0.02	na	**pass**
	200 kHz bandpass	0	**1.15**	1.50	0.02	na	**pass**
[22] Residual THD+N (%) - non-accredited, self-test							
Channel A	20 Hz, 1.5V, 22k BW	0%	**0.00017%**	0.00030%	0.00003%	na	**pass**
	1 kHz, 1.5V, 22k BW	0%	**0.00017%**	0.00025%	0.00002%	na	**pass**
	5 kHz, 1.5V, 22k BW	0%	**0.00021%**	0.00030%	0.00002%	na	**pass**
	20 kHz, 1.5V, 22k BW	0%	**0.00019%**	0.00030%	0.00002%	na	**pass**
	1 kHz, 1.5V, 80k BW	0%	**0.00028%**	0.00050%	0.00002%	na	**pass**
	20 kHz, 1.5V, 80k BW	0%	**0.00032%**	0.00050%	0.00002%	na	**pass**
	1 kHz, 1.5V, 500k BW	0%	**0.00058%**	0.00100%	0.00002%	na	**pass**
	20 kHz,1.5V,500k BW	0%	**0.00061%**	0.00100%	0.00002%	na	**pass**
	50 kHz,1.5V,500k BW	0%	**0.00077%**	0.00400%	0.00004%	na	**pass**
	100 kHz,1.5V,500k BW	0%	**0.00086%**	0.00400%	0.00006%	na	**pass**
Channel B	20 Hz, 1.5V, 22k BW	0%	**0.00017%**	0.00030%	0.00003%	na	**pass**
	1 kHz, 1.5V, 22k BW	0%	**0.00017%**	0.00025%	0.00002%	na	**pass**
	5 kHz, 1.5V, 22k BW	0%	**0.00020%**	0.00030%	0.00002%	na	**pass**
	20 kHz, 1.5V, 22k BW	0%	**0.00020%**	0.00030%	0.00002%	na	**pass**
	1 kHz, 1.5V, 80k BW	0%	**0.00028%**	0.00050%	0.00002%	na	**pass**
	20 kHz, 1.5V, 80k BW	0%	**0.00032%**	0.00050%	0.00002%	na	**pass**
	1 kHz, 1.5V, 500k BW	0%	**0.00057%**	0.00100%	0.00002%	na	**pass**
	20 kHz,1.5V,500k BW	0%	**0.00060%**	0.00100%	0.00002%	na	**pass**
	50 kHz,1.5V,500k BW	0%	**0.00075%**	0.00400%	0.00004%	na	**pass**
	100 kHz,1.5V,500k BW	0%	**0.00086%**	0.00400%	0.00006%	na	**pass**
[23] Phase Measurement Offset (Deg) - non-accredited, self-test							
	10 Hz, dc coupled	-0.50	**0.00**	0.50	0.060	na	**pass**
	10 Hz, ac coupled	-0.50	**0.03**	0.50	0.060	na	**pass**
	1 kHz	-0.50	**-0.01**	0.50	0.060	na	**pass**
	5 kHz	-0.50	**-0.03**	0.50	0.060	na	**pass**
	20 kHz	-1.00	**-0.09**	1.00	0.060	na	**pass**
	50 kHz	-2.00	**-0.17**	2.00	0.060	na	**pass**
[24] Frequency Measurement Accuracy (µHz/Hz) - *note 1*							
	20 kHz	-6.0	**0.0**	6.0	1.0	6.0	**pass**
[25] High Resolution A/D Distortion (dB) - non-accredited, self-test							
Channel A	5 kHz	-999	**-119.2**	-105.0	1.0	na	**pass**
Channel B	5 kHz	-999	**-119.3**	-105.0	1.0	na	**pass**
[26] High Bandwidth A/D Distortion (dB) - non-accredited, self-test							
Channel A	20 kHz	-999	**-98.8**	-90.0	1.0	na	**pass**
Channel B	20 kHz	-999	**-98.4**	-90.0	1.0	na	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
OPTION "BUR" RELATED							
[27] Burst OFF Ratio Accuracy (dB) - *note 2*							
	0 dB	-0.300	**-0.010**	0.300	0.020	>10	**pass**
	-10 dB	-10.300	**-9.970**	-9.700	0.020	>10	**pass**
	-20 dB	-20.300	**-19.979**	-19.700	0.020	>10	**pass**
	-40 dB	-40.300	**-40.076**	-39.700	0.020	>10	**pass**
	-60 dB	-60.300	**-60.031**	-59.700	0.042	7	**pass**
[28] Squarewave Amplitude Accuracy (Volts) - *note 2*							
	1.000V, 100Hz	1.3859	**1.4149**	1.4425	0.0024	>10	**pass**
OPTION "IMD" RELATED							
[29] IMD Signal Amplitude Accuracy (Volts) - *note 2*							
	SMPTE 4:1,100/7k,1V	0.8081	**0.8296**	0.8411	0.0012	>10	**pass**
	SMPTE 1:1,100/7k,1V	0.6930	**0.7069**	0.7212	0.0010	>10	**pass**
	DFD, 14k/15k, 1V	0.6859	**0.7120**	0.7283	0.0014	>10	**pass**
	DIM-100, 1V	1.1081	**1.1264**	1.1533	0.0023	>10	**pass**
[30] SMPTE LF Tone Accuracy (Hz) - *note 1*							
	40 Hz	39.400	**40.147**	40.600	0.032	>10	**pass**
	50 Hz	49.250	**50.186**	50.750	0.040	>10	**pass**
	60 Hz	59.100	**59.994**	60.900	0.048	>10	**pass**
	70 Hz	68.950	**69.858**	71.050	0.056	>10	**pass**
	100 Hz	98.500	**100.800**	101.500	0.080	>10	**pass**
	125 Hz	123.13	**125.11**	126.88	0.10	>10	**pass**
	250 Hz	246.25	**250.20**	253.75	0.20	>10	**pass**
	500 Hz	492.50	**501.93**	507.50	0.40	>10	**pass**
[31] DIM Squarewave Accuracy (Hz) - *note 1*							
	DIM-100 (3.15 kHz)	3118.5000	**3150.5972**	3181.5000	0.0063	>10	**pass**
	DIM-B (2.96 kHz)	2930.4000	**2960.3302**	2989.6000	0.0059	>10	**pass**
[32] IMD Measurement Accuracy (dB) - non-accredited, self-test							
	SMPTE, -60 dB	-60.50	**-60.17**	-59.50	0.020	na	**pass**
	DFD, -60 dB	-60.50	**-59.79**	-59.50	0.020	na	**pass**
	DIM, -60 dB u4	-60.70	**-59.99**	-59.30	0.020	na	**pass**
	DIM, -60 dB u5	-60.70	**-60.16**	-59.30	0.020	na	**pass**
[33] Residual IMD (%) - non-accredited, self-test							
Channel A	SMPTE 4:1,60/7k,26V	0%	**0.00059%**	0.00150%	0.00014%	na	**pass**
	SMPTE 4:1,60/7k,1V	0%	**0.00060%**	0.00150%	0.00014%	na	**pass**
	SMPTE 4:1,60/7k,0.2V	0%	**0.00099%**	0.00150%	0.00016%	na	**pass**
	DFD, 14k/15k, 26V	0%	**0.00007%**	0.00020%	0.00003%	na	**pass**
	DFD, 14k/15k, 1V	0%	**0.00007%**	0.00020%	0.00003%	na	**pass**
	DFD, 14k/15k, 0.2V	0%	**0.00008%**	0.00020%	0.00003%	na	**pass**
	DIM-100, 26V	0%	**0.00085%**	0.00200%	0.00010%	na	**pass**
	DIM-100, 1V	0%	**0.00080%**	0.00200%	0.00010%	na	**pass**
	DIM-100, 0.2V	0%	**0.00111%**	0.00200%	0.00010%	na	**pass**
Channel B	SMPTE 4:1,60/7k,26V	0%	**0.00062%**	0.00150%	0.00014%	na	**pass**
	SMPTE 4:1,60/7k,1V	0%	**0.00059%**	0.00150%	0.00014%	na	**pass**
	SMPTE 4:1,60/7k,0.2V	0%	**0.00102%**	0.00150%	0.00016%	na	**pass**
	DFD, 14k/15k, 26V	0%	**0.00007%**	0.00020%	0.00003%	na	**pass**
	DFD, 14k/15k, 1V	0%	**0.00007%**	0.00020%	0.00003%	na	**pass**
	DFD, 14k/15k, 0.2V	0%	**0.00009%**	0.00020%	0.00003%	na	**pass**
	DIM-100, 26V	0%	**0.00086%**	0.00200%	0.00010%	na	**pass**
	DIM-100, 1V	0%	**0.00080%**	0.00200%	0.00010%	na	**pass**
	DIM-100, 0.2V	0%	**0.00109%**	0.00200%	0.00010%	na	**pass**

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
OPTION "W&F" RELATED					**>> Not Installed**		
[34] W&F Measurement Accuracy (%) - non-accredited, self-test							
IEC	1.000% peak						
NAB/JIS	0.7071% rms						
[35] Residual Wow & Flutter (%) - non-accredited, self-test							
IEC	Weighted						
	Unweighted						
NAB	Weighted						
	Unweighted						
SCRAPE	12.5 kHz tone						

OPTION "S-AES17" RELATED							
[36] Option Response (dB) - *note 5*							
20 kHz Pre-Filter	1 kHz	-0.100	**0.004**	0.100	0.010	10	**pass**
	15 kHz	-0.100	**0.016**	0.100	0.010	10	**pass**
	20 kHz	-0.100	**-0.018**	0.100	0.010	10	**pass**
	25 kHz	-4.000	**-2.762**	-2.000	0.010	na	**pass**
40 kHz Pre-Filter	1 kHz	-0.100	**-0.007**	0.100	0.010	10	**pass**
	30 kHz	-0.100	**-0.004**	0.100	0.010	10	**pass**
	40 kHz	-0.100	**-0.019**	0.100	0.010	10	**pass**
	50 kHz	-4.000	**-2.715**	-2.000	0.010	na	**pass**
20 kHz AES17 mode	20 Hz	-0.100	**-0.022**	0.100	0.010	10	**pass**
	10 kHz	-0.100	**0.030**	0.100	0.010	10	**pass**
	15 kHz	-0.100	**0.030**	0.100	0.010	10	**pass**
	20 kHz	-0.100	**0.025**	0.100	0.010	10	**pass**
	24 kHz	-999	**-76.49**	-60.00	0.40	na	**pass**
	27 kHz	-999	**-69.45**	-60.00	0.40	na	**pass**
	200 kHz	-999	**-76.73**	-60.00	0.40	na	**pass**
40 kHz AES17 mode	20 Hz	-0.100	**-0.044**	0.100	0.010	10	**pass**
	20 kHz	-0.100	**0.019**	0.100	0.010	10	**pass**
	30 kHz	-0.100	**0.012**	0.100	0.010	10	**pass**
	40 kHz	-0.100	**0.017**	0.100	0.010	10	**pass**
	48 kHz	-999	**-73.59**	-60.00	0.40	na	**pass**
	54 kHz	-999	**-68.96**	-60.00	0.40	na	**pass**
	200 kHz	-999	**-73.76**	-60.00	0.40	na	**pass**
[37] Option Residual THD+N (%) - non-accredited, self-test							
20 kHz AES17 mode	8 V	0%	**0.00016%**	0.00030%	0.00002%	na	**pass**
	50 mV	0%	**0.00158%**	0.00200%	0.00010%	na	**pass**
40 kHz AES17 mode	8 V	0%	**0.00021%**	0.00040%	0.00002%	na	**pass**
	50 mV	0%	**0.00227%**	0.00280%	0.00010%	na	**pass**

OPTION "OPT-2020" RELATED					**>> Not Installed**		
[36A] Option Response (dB) - *note 5*							
20 kHz AES17 mode	20 Hz						
	10 kHz						
	15 kHz						
	20 kHz						
	24 kHz						
	27 kHz						
	200 kHz						
[37A] Option Residual THD+N (%) - non-accredited, self-test							
20 kHz AES17 mode	8 V						
	50 mV						

Item	Setting(s)	Lower Limit	READING	Upper Limit	MU	TUR	Result
AES/EBU DIGITAL I/O CHARACTERISTICS							
[38] Output Voltage Accuracy (Volts) - non-accredited, oscilloscope referenced							
Output I, balanced	8.00 Vpp	7.200	**7.912**	8.800	0.098	na	**pass**
	0.800 Vpp	0.640	**0.792**	0.960	0.010	na	**pass**
Output II, balanced	8.00 Vpp	7.200	**7.941**	8.800	0.098	na	**pass**
	0.800 Vpp	0.640	**0.790**	0.960	0.010	na	**pass**
Output I, unbal	2.00 Vpp	1.840	**1.990**	2.160	0.027	na	**pass**
	0.200 Vpp	0.164	**0.198**	0.236	0.003	na	**pass**
Output II, unbal	2.00 Vpp	1.840	**1.990**	2.160	0.027	na	**pass**
	0.200 Vpp	0.164	**0.198**	0.236	0.003	na	**pass**
[39] Input Voltage Measurement Accuracy (Volts) - non-accredited, oscilloscope referenced							
Input I, balanced	8.00 Vpp	7.600	**7.954**	8.400	0.098	na	**pass**
	0.800 Vpp	0.735	**0.818**	0.865	0.010	na	**pass**
Input II, balanced	8.00 Vpp	7.600	**7.925**	8.400	0.098	na	**pass**
	0.800 Vpp	0.735	**0.817**	0.865	0.010	na	**pass**
Input I, unbal	2.00 Vpp	1.900	**2.001**	2.100	0.027	na	**pass**
	0.200 Vpp	0.184	**0.206**	0.216	0.003	na	**pass**
Input II, unbal	2.00 Vpp	1.900	**2.002**	2.100	0.027	na	**pass**
	0.200 Vpp	0.184	**0.206**	0.216	0.003	na	**pass**
[40] Variable Rise Time Accuracy (nsec) - non-accredited, oscilloscope referenced							
Output I	25 nsec	20.5	**23.6**	29.5	1.0	na	**pass**
	100 nsec	88.0	**103.2**	112.0	3.0	na	**pass**
Output II	25 nsec	20.5	**24.9**	29.5	1.0	na	**pass**
	100 nsec	88.0	**103.7**	112.0	3.0	na	**pass**
[41] Normal Mode Noise Amplitude (Volts) - non-accredited, oscilloscope referenced							
Output I, unbal	0.500 Vpp	0.450	**0.471**	0.550	0.014	na	**pass**
	0.100 Vpp	0.075	**0.095**	0.125	0.008	na	**pass**
Output II, unbal	0.500 Vpp	0.450	**0.474**	0.550	0.014	na	**pass**
	0.100 Vpp	0.075	**0.095**	0.125	0.008	na	**pass**
[42] Common Mode Sine Amplitude (Volts) - *note 2*							
Output I, balanced	20.00 Vpp	18.00	**19.77**	22.00	0.16	>10	**pass**
	1.200 Vpp	0.920	**1.318**	1.480	0.010	>10	**pass**
Output II, balanced	20.00 Vpp	18.00	**19.75**	22.00	0.16	>10	**pass**
	1.200 Vpp	0.920	**1.319**	1.480	0.010	>10	**pass**
[43] Common Mode Voltage Measurement Accuracy (Volts) - *note 5*							
Input I, balanced	20.00 Vpp	18.00	**19.62**	22.00	0.08	>10	**pass**
	1.200 Vpp	1.030	**1.193**	1.370	0.005	>10	**pass**
Input II, balanced	20.00 Vpp	18.00	**19.67**	22.00	0.08	>10	**pass**
	1.200 Vpp	1.030	**1.195**	1.370	0.005	>10	**pass**
[44] Jitter Accuracy (UI) - non-accredited, self-test							
Generator	4.90 UI	4.40	**4.90**	5.40	0.14	na	**pass**
	0.305 UI	0.263	**0.305**	0.347	0.008	na	**pass**
Analyzer	0.305 UI, Avg Det	0.268	**0.305**	0.341	0.008	na	**pass**
	0.305 UI, Peak Det	0.268	**0.307**	0.341	0.008	na	**pass**
[45] Jitter Flatness (dB) - non-accredited, self-test							
	100 Hz	-1.00	**0.01**	1.00	0.06	na	**pass**
	200 Hz	-1.00	**0.01**	1.00	0.06	na	**pass**
	1 kHz	-1.00	**-0.02**	1.00	0.06	na	**pass**
	5 kHz	-1.00	**-0.06**	1.00	0.06	na	**pass**
	20 kHz	-1.00	**-0.06**	1.00	0.06	na	**pass**
	50 kHz	-1.00	**-0.17**	1.00	0.06	na	**pass**
[46] Residual Jitter (nsec, pk) - non-accredited, self-test							
Output I	48 kS, full BW	0	**0.446**	1.000	0.100	na	**pass**
	96 kS, full BW	0	**0.446**	1.000	0.100	na	**pass**
	192 kS, full BW	0	**0.446**	1.000	0.160	na	**pass**
Output II	48 kS, full BW	0	**0.402**	1.000	0.100	na	**pass**
	96 kS, full BW	0	**0.446**	1.000	0.100	na	**pass**
	192 kS, full BW	0	**0.491**	1.000	0.160	na	**pass**

END OF REPORT