HDMI to Analog, 192kHz : Signal Path Setup

Output Connector:	HDMI Source
Output Sample Rate:	192.000 kHz
Output Bit Depth:	24
Dither:	Enabled
HDMI Receiver Status:	Read successful
Audio Format:	Linear 8Ch Layout1
Status Bits:	Auto (Consumer)
Speaker Allocation:	FL|FR|LFE|FC|RL|RR|RLC|RRC
Video Format:	1920x1080p @ 60 Hz
Color Depth:	8 Bit
HDCP Encryption:	No
Output EQ:	None
Input Connector:	Analog Unbalanced
Channels:	2
Termination:	100 kohm
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Device Delay:	0.000 s
Input EQ:	None

• References

dBr G:	-0.530 dBFS
Shared Frequency Reference:	1.00000 kHz
dBrA:	73.38 mVrms
dBrB:	1.000 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	0.000 dB
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm

• DCX

DCX is not detected.

HDMI to Analog, 192kHz : Signal Path Setup (incl. Level, Gain)

Waveform: Sine

Generator Level: -20.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

RMS Level (6/15/2017 10:21:54.379 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	70.00 mVrms	73.38 mVrms	---- Vrms	✓
Ch2	70.00 mVrms	71.93 mVrms	---- Vrms	✓

Result: ✓ PASSED

Gain (6/15/2017 10:21:54.379 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	700.0 mVrms/FS	733.8 mVrms/FS	---- Vrms/FS	✓
Ch2	700.0 mVrms/FS	719.3 mVrms/FS	---- Vrms/FS	✓

Result: ✓ PASSED

Gain -> Compare (Ratio) (6/15/2017 10:21:54.379 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	0.000 dB	---- dB	✓
Ch2	-0.300 dB	-0.173 dB	0.300 dB	✓

Gain -> Compare (Ratio) Parameters

Reference: Ch1

Source: Gain

Result: ✓ PASSED

Frequency (6/15/2017 10:21:54.379 AM)

Ch1 1.00002 kHz

Ch2 1.00002 kHz

HDMI to Analog, 192kHz : Level and Gain (from Input Ch1)

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Gain (6/15/2017 10:21:57.578 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	700.0 mVrms/FS	734.0 mVrms/FS	---- Vrms/FS	✓
Ch2	---- Vrms/FS	17.53 uVrms/FS	2.000 mVrms/FS	✓

Result: ✓ PASSED

HDMI to Analog, 192kHz : Level and Gain (from Input Ch2)

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Gain (6/15/2017 10:22:00.616 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- Vrms/FS	18.66 uVrms/FS	2.000 mVrms/FS	✓
Ch2	700.0 mVrms/FS	719.5 mVrms/FS	---- Vrms/FS	✓

Result: ✓ PASSED

HDMI to Analog, 192kHz : THD+N

Waveform:	Sine
Generator Level:	-3.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz
Notch Tuning Mode:	Measured Frequency

THD+N Ratio (6/15/2017 10:22:03.725 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- %	0.007190 %	0.050000 %	✓
Ch2	---- %	0.009748 %	0.050000 %	✓

Result: ✓ PASSED

THD Ratio (6/15/2017 10:22:03.725 AM)

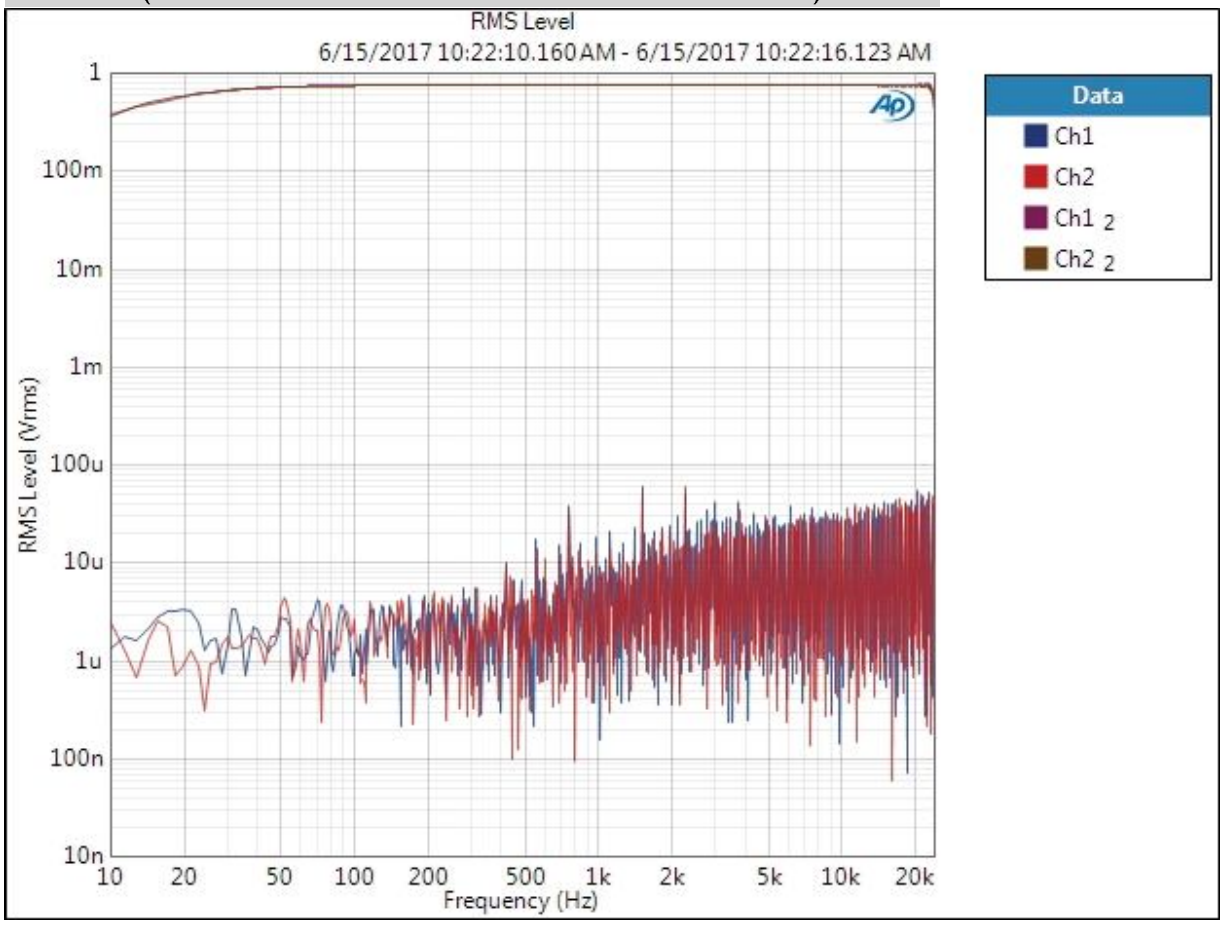
Ch1 0.006255 %

Ch2 0.009137 %

HDMI to Analog, 192kHz : Frequency Response + S/N Ratio vs. Freq

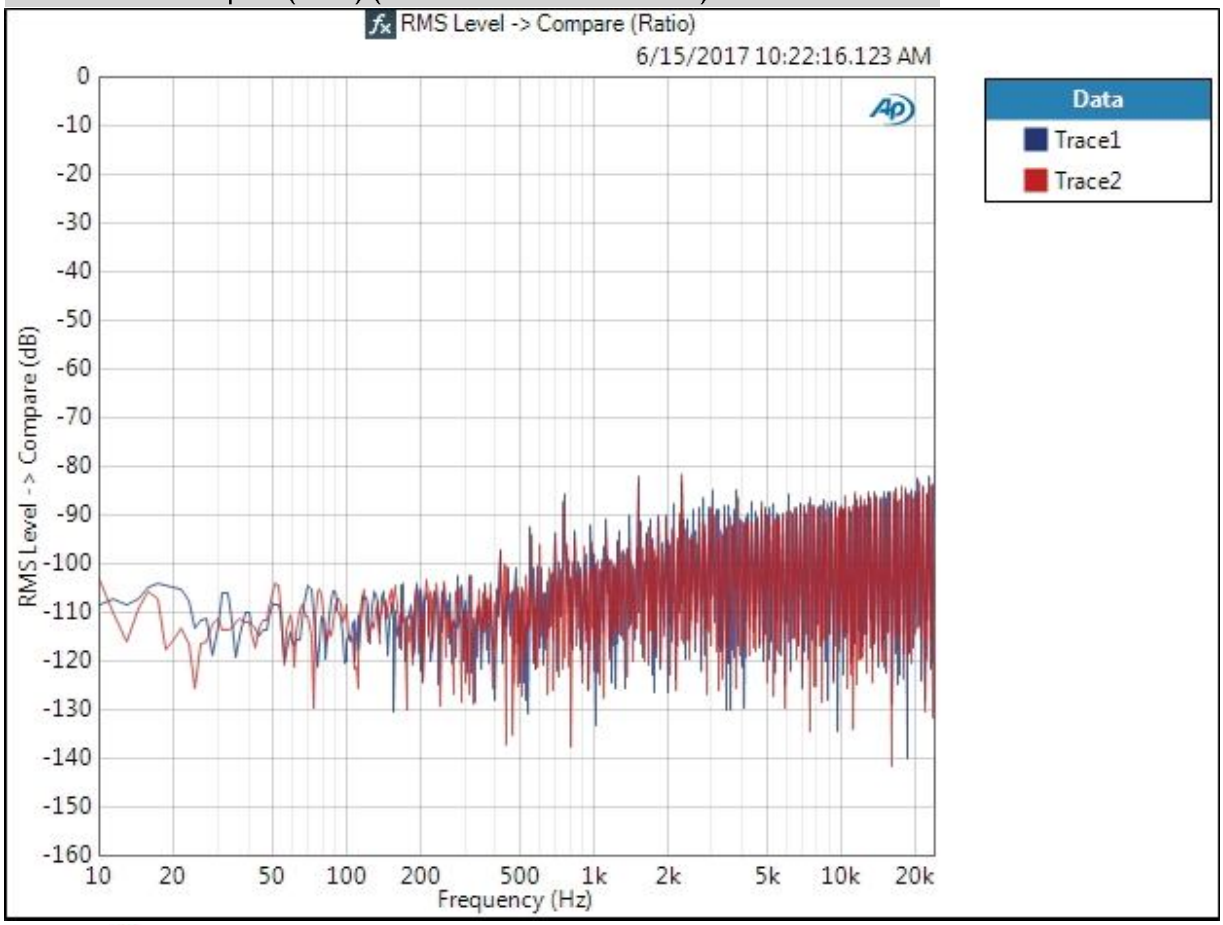
Generator Level:	-0.000 dBrG (@0.941 FS)
DC Offset:	0.000 D
EQ:	None
Start Frequency:	10.0000 Hz
Stop Frequency:	24.0000 kHz
Sweep:	1.000 s
Pre-Sweep:	200.0 ms
Extend Acquisition By:	200.0 ms
Secondary Source:	Gen Level
From:	-200.000 dBFS
To:	-0.000 dBFS
Step Type:	Linear
Number of Points:	2
Step Size:	+200.000 dBFS
Measured 1	6/15/2017 10:22:10 AM Gen Level = -200.000 dBFS
Measured 2	6/15/2017 10:22:16 AM Gen Level = -0.000 dBFS

RMS Level (6/15/2017 10:22:10.160 AM - 6/15/2017 10:22:16.123 AM)



Result: PASSED

RMS Level -> Compare (Ratio) (6/15/2017 10:22:16.123 AM)



Trace1 PASSED

Trace2 PASSED

RMS Level -> Compare (Ratio) Parameters

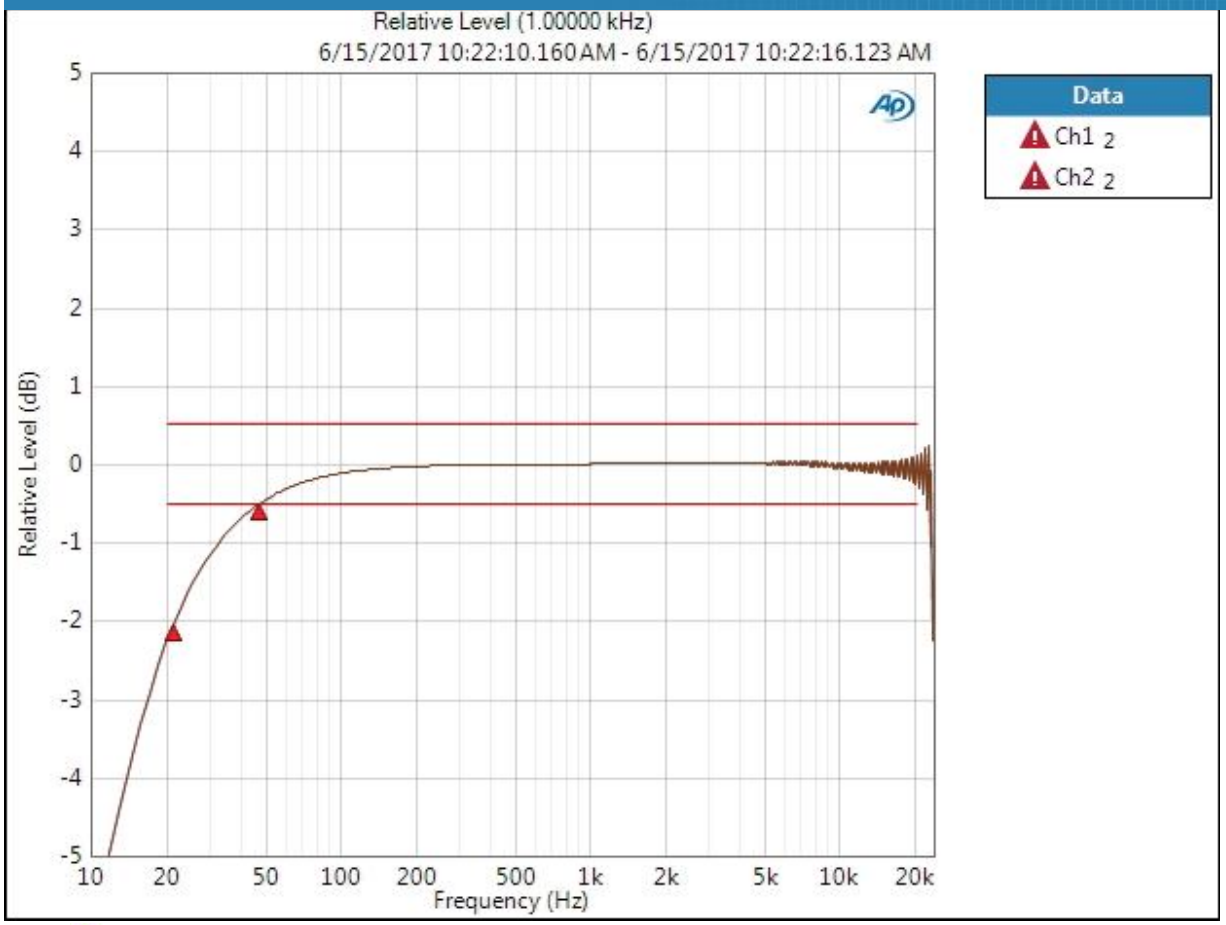
Source: RMS Level

Trace1 [Ch1], [Measured 2], [Ch1], [Measured 1]

Trace2 [Ch2], [Measured 2], [Ch2], [Measured 1]

Result: PASSED

Relative Level (1.00000 kHz) (6/15/2017 10:22:10.160 AM - 6/15/2017 10:22:16.123 AM)



Ch1 ⚠ Failed Upper LimitFailed Lower Limit
Ch2 ⚠ Failed Upper LimitFailed Lower Limit
Ch1 ⚠ Failed Lower Limit
Ch2 ⚠ Failed Lower Limit

Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference
Ref Frequency: 1.00000 kHz

Result: ⚠ FAILED

Deviation (20.0000 Hz - 20.0000 kHz) (6/15/2017 10:22:16.123 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	±1.174 dB	±0.500 dB	⚠
Ch2	---- dB	±1.174 dB	±0.500 dB	⚠

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz
Max: 20.0000 kHz

Result: ⚠ FAILED

HDMI to Analog, 192kHz : Signal to Noise Ratio

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz

Signal to Noise Ratio (6/15/2017 10:22:19.590 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	90.000 dB	92.265 dB	---- dB	✓
Ch2	90.000 dB	93.017 dB	---- dB	✓

Result: ✓ PASSED

HDMI to Analog, 192kHz : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	10.0000 kHz

Crosstalk (6/15/2017 10:22:25.959 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	-90.807 dB	-60.000 dB	✓
Ch2	---- dB	-85.843 dB	-60.000 dB	✓

Result: ✓ PASSED

HDMI to Analog, 192kHz : Interchannel Phase

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Reference Channel:	Ch1
Meter Range:	-90 -> 270 deg

Phase (6/15/2017 10:22:28.527 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	-0.100 deg	---- deg	+0.100 deg	✓
Ch2	-0.100 deg	-0.001 deg	+0.100 deg	✓

Result: ✓ PASSED

HDMI to Analog, 96kHz : Signal Path Setup

Output Connector:	HDMI Source
Output Sample Rate:	96.0000 kHz
Output Bit Depth:	24
Dither:	Enabled
HDMI Receiver Status:	Read successful
Audio Format:	Linear 8Ch Layout1
Status Bits:	Auto (Consumer)
Speaker Allocation:	FL|FR|LFE|FC|RL|RR|RLC|RRC
Video Format:	1920x1080p @ 60 Hz
Color Depth:	8 Bit
HDCP Encryption:	No
Output EQ:	None
Input Connector:	Analog Unbalanced
Channels:	2
Termination:	100 kohm
Input Bandwidth:	AC (<10 Hz) - 22.4k (48 kHz SR)
Device Delay:	0.000 s
Input EQ:	None

• References

dBr G:	-0.530 dBFS
Shared Frequency Reference:	1.00000 kHz
dBrA:	73.43 mVrms
dBrB:	1.000 Vrms
dBrA Offset:	0.000 dB
dBrB Offset:	0.000 dB
dBSPL1:	10.00 mVrms
dBSPL2:	10.00 mVrms
dBSPL1 Calibrator Level:	94.000 dBSPL
dBSPL2 Calibrator Level:	94.000 dBSPL
dBm (Input Power):	600.0 ohm
W(watts) (Input Power):	8.000 ohm

• DCX

DCX is not detected.

HDMI to Analog, 96kHz : Signal Path Setup (incl. Level, Gain)

Waveform: Sine

Generator Level: -20.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

RMS Level (6/15/2017 10:22:39.225 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	70.00 mVrms	73.43 mVrms	---- Vrms	✓
Ch2	70.00 mVrms	71.98 mVrms	---- Vrms	✓

Result: ✓ PASSED

Gain (6/15/2017 10:22:39.225 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	700.0 mVrms/FS	734.3 mVrms/FS	---- Vrms/FS	✓
Ch2	700.0 mVrms/FS	719.8 mVrms/FS	---- Vrms/FS	✓

Result: ✓ PASSED

Gain -> Compare (Ratio) (6/15/2017 10:22:39.225 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	0.000 dB	---- dB	✓
Ch2	-0.300 dB	-0.173 dB	0.300 dB	✓

Gain -> Compare (Ratio) Parameters

Reference: Ch1

Source: Gain

Result: ✓ PASSED

Frequency (6/15/2017 10:22:39.225 AM)

Ch1 1.00002 kHz

Ch2 1.00002 kHz

HDMI to Analog, 96kHz : Level and Gain (from Input Ch1)

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Gain (6/15/2017 10:22:42.354 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	700.0 mVrms/FS	734.4 mVrms/FS	---- Vrms/FS	✓
Ch2	---- Vrms/FS	17.79 uVrms/FS	2.000 mVrms/FS	✓

Result: ✓ PASSED

HDMI to Analog, 96kHz : Level and Gain (from Input Ch2)

Waveform: Sine

Generator Level: -0.000 dBFS

DC Offset: 0.000 D

Frequency: 1.00000 kHz

Gain (6/15/2017 10:22:45.242 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- Vrms/FS	18.55 uVrms/FS	2.000 mVrms/FS	✓
Ch2	700.0 mVrms/FS	719.9 mVrms/FS	---- Vrms/FS	✓

Result: ✓ PASSED

HDMI to Analog, 96kHz : THD+N

Waveform:	Sine
Generator Level:	-3.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz
Notch Tuning Mode:	Measured Frequency

THD+N Ratio (6/15/2017 10:22:48.520 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- %	0.005380 %	0.050000 %	✓
Ch2	---- %	0.006662 %	0.050000 %	✓

Result: ✓ PASSED

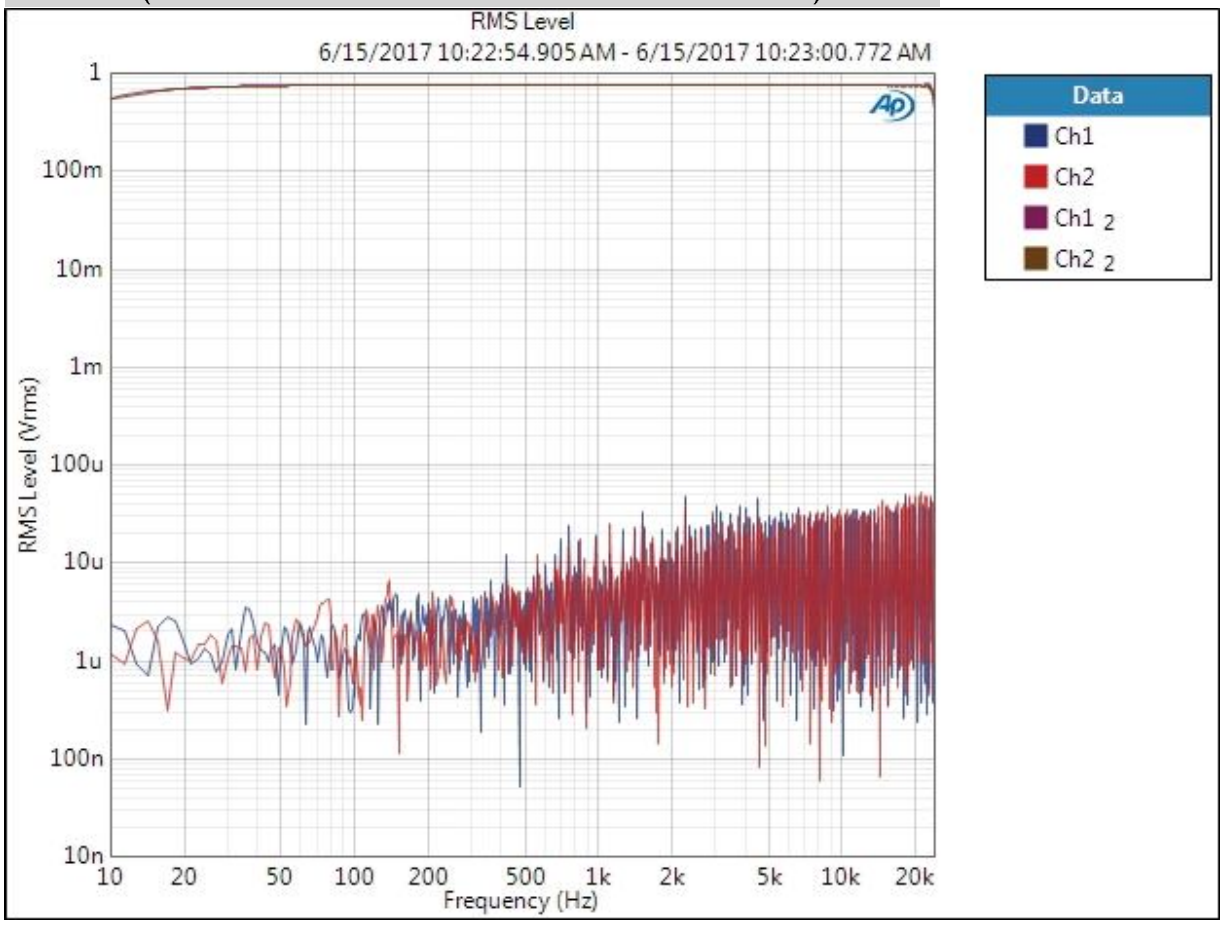
THD Ratio (6/15/2017 10:22:48.520 AM)

Ch1 0.003813 %
Ch2 0.005585 %

HDMI to Analog, 96kHz : Frequency Response + S/N Ratio vs. Freq

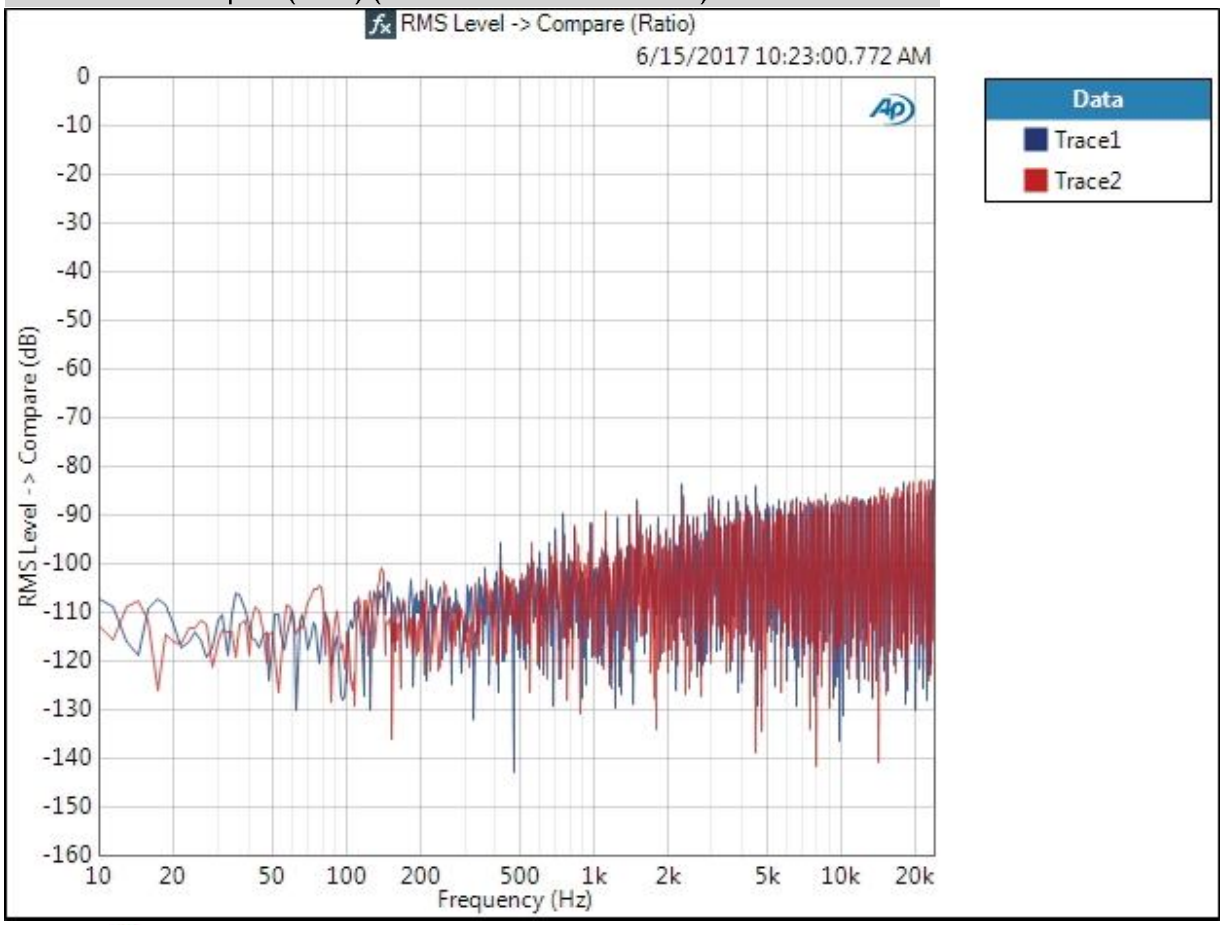
Generator Level:	-0.000 dBrG (@0.941 FS)
DC Offset:	0.000 D
EQ:	None
Start Frequency:	10.0000 Hz
Stop Frequency:	24.0000 kHz
Sweep:	1.000 s
Pre-Sweep:	200.0 ms
Extend Acquisition By:	200.0 ms
Secondary Source:	Gen Level
From:	-200.000 dBFS
To:	-0.000 dBFS
Step Type:	Linear
Number of Points:	2
Step Size:	+200.000 dBFS
Measured 1	6/15/2017 10:22:54 AM Gen Level = -200.000 dBFS
Measured 2	6/15/2017 10:23:00 AM Gen Level = -0.000 dBFS

RMS Level (6/15/2017 10:22:54.905 AM - 6/15/2017 10:23:00.772 AM)



Result: PASSED

RMS Level -> Compare (Ratio) (6/15/2017 10:23:00.772 AM)



Trace1 PASSED

Trace2 PASSED

RMS Level -> Compare (Ratio) Parameters

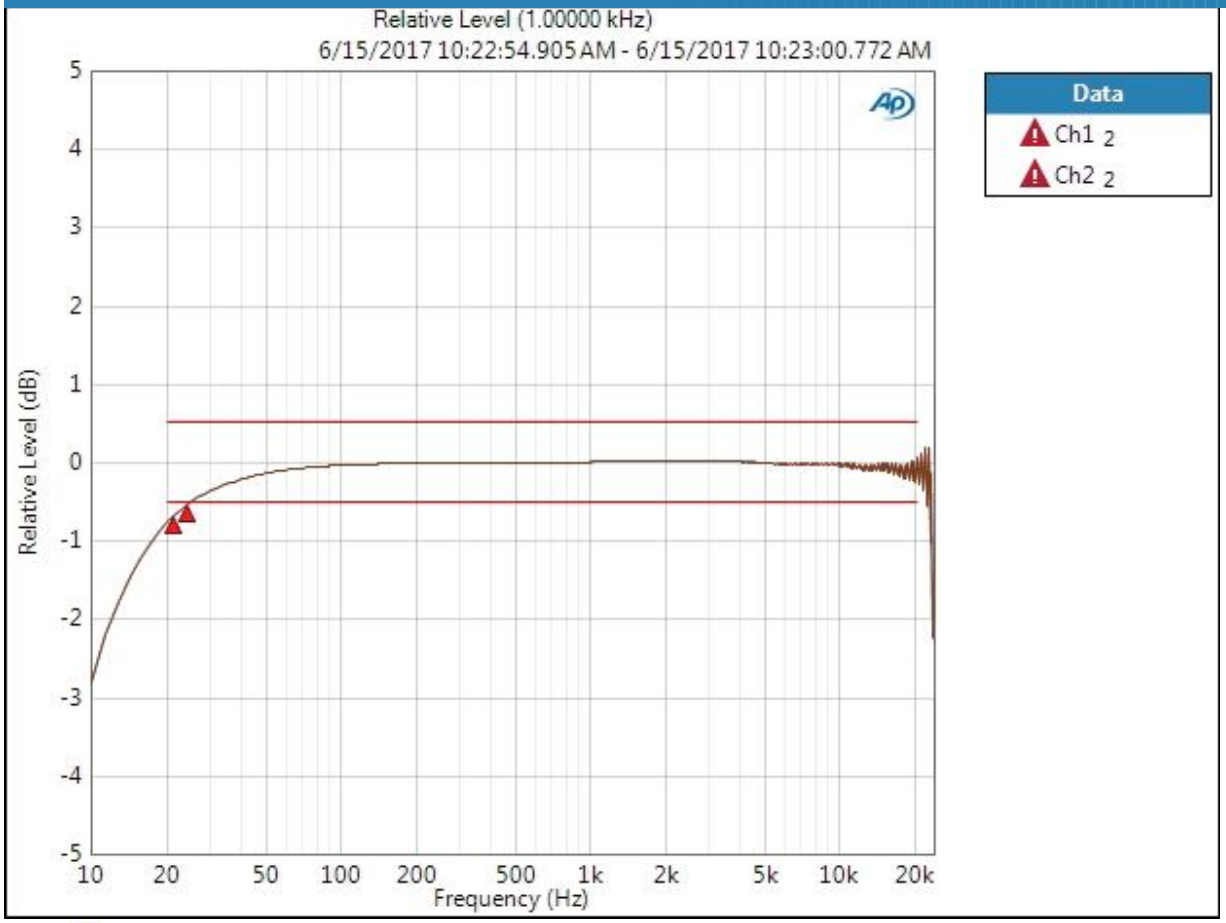
Source: RMS Level

Trace1 [Ch1], [Measured 2], [Ch1], [Measured 1]

Trace2 [Ch2], [Measured 2], [Ch2], [Measured 1]

Result: PASSED

Relative Level (1.00000 kHz) (6/15/2017 10:22:54.905 AM - 6/15/2017 10:23:00.772 AM)



Ch1 Failed Upper LimitFailed Lower Limit
Ch2 Failed Upper LimitFailed Lower Limit
Ch1 Failed Lower Limit
Ch2 Failed Lower Limit

Relative Level (1.00000 kHz) Parameters

Mode: Normalized at Reference
Ref Frequency: 1.00000 kHz

Result: FAILED

Deviation (20.0000 Hz - 20.0000 kHz) (6/15/2017 10:23:00.772 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	±0.399 dB	±0.500 dB	
Ch2	---- dB	±0.399 dB	±0.500 dB	

Deviation (20.0000 Hz - 20.0000 kHz) Parameters

Min: 20.0000 Hz
Max: 20.0000 kHz

Result: PASSED

HDMI to Analog, 96kHz : Signal to Noise Ratio

Waveform:	Sine
Generator Level:	-0.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Low-pass Filter:	20 kHz
Weighting Filter:	Signal Path
High-pass Filter:	20 Hz

Signal to Noise Ratio (6/15/2017 10:23:04.230 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	90.000 dB	92.206 dB	---- dB	✓
Ch2	90.000 dB	92.610 dB	---- dB	✓

Result: ✓ PASSED

HDMI to Analog, 96kHz : Crosstalk, One Channel Undriven

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	10.0000 kHz

Crosstalk (6/15/2017 10:23:10.866 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	---- dB	-91.356 dB	-60.000 dB	✓
Ch2	---- dB	-85.367 dB	-60.000 dB	✓

Result: ✓ PASSED

HDMI to Analog, 96kHz : Interchannel Phase

Waveform:	Sine
Generator Level:	-20.000 dBFS
DC Offset:	0.000 D
Frequency:	1.00000 kHz
Reference Channel:	Ch1
Meter Range:	-90 -> 270 deg

Phase (6/15/2017 10:23:13.586 AM)

Channel	Lower Limit	Value	Upper Limit	
Ch1	-0.100 deg	---- deg	+0.100 deg	✓
Ch2	-0.100 deg	-0.001 deg	+0.100 deg	✓

Result: ✓ PASSED