

CUWI Series For HDMI, USB 3.0



A full series of common mode choke is designed for excellent noise attenuation and compact sizing for use in wide range of applications. Both standard series and custom designs are available.

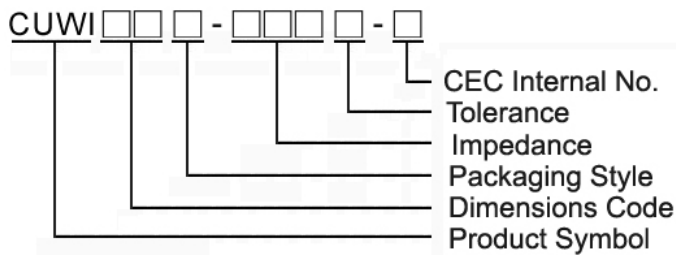
Features

- RoHS Compliant
- Miniature SMD type common mode filter for fully automated assembly
- Excellent solderability

Applications

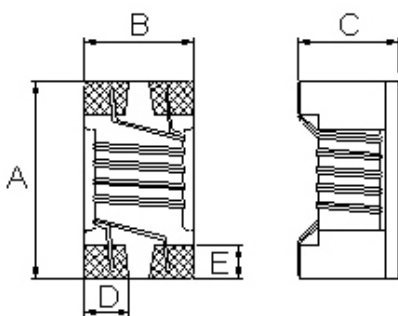
- HDMI
- USB lines (for personal computers and peripheral), DVC, STB, LVDS, panel line for liquid display panels, etc.

Product Identification



- Packaging: T : Tape and Reel

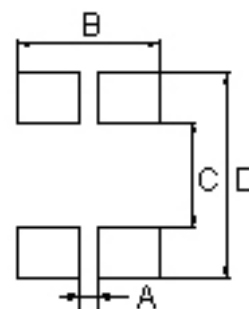
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E
CUWI11	1.25±0.2	1.00±0.2	0.80±0.1	0.32	0.33
CUWI21	2.05±0.2	1.25±0.2	1.20±0.2	0.50	0.40

Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
CUWI11	0.36	1.00	0.59	1.75
CUWI21	0.50	1.27	0.80	2.60

Electrical Characteristics

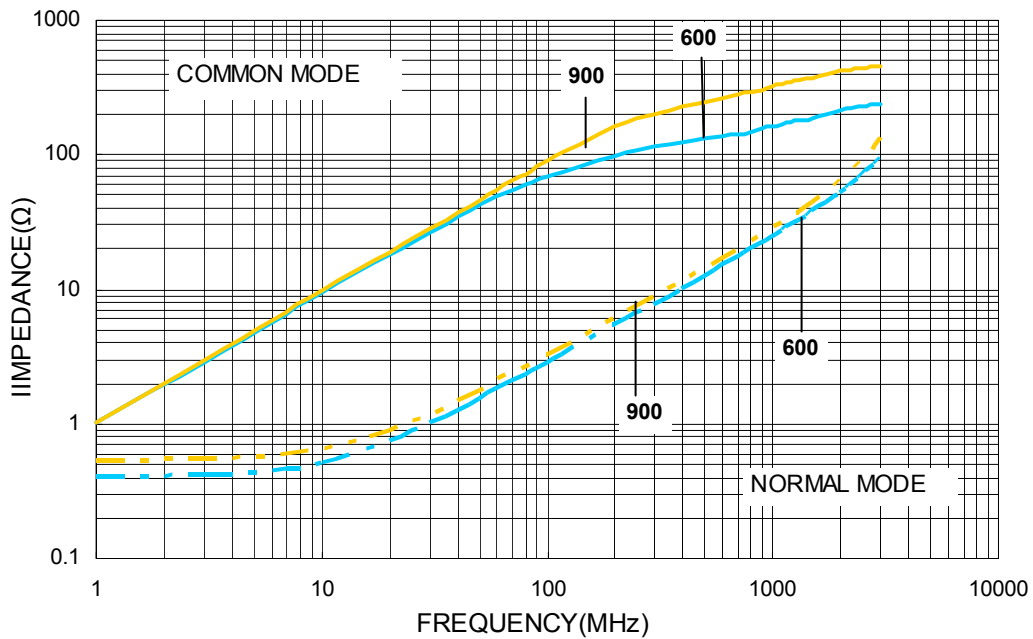
Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min
CUWI11T-600Y-N	60	25	100	0.40	250	20	10
CUWI11T-900Y-N	90	25	100	0.30	250	20	10

Note: When ordering, please specify tolerance code. Tolerance: Y=±25%

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment :
 Z : HP4286A/HP4287A/Agilent E4991A+Agilent16197A
 RDC : CHROMA MILLIOM METER MODE 16502(Single Wire Test Value)
 IDC : HP4284A+HP42841A/HP4285A+HP42841A
 Insulation Resistance : Agilent HP4339B

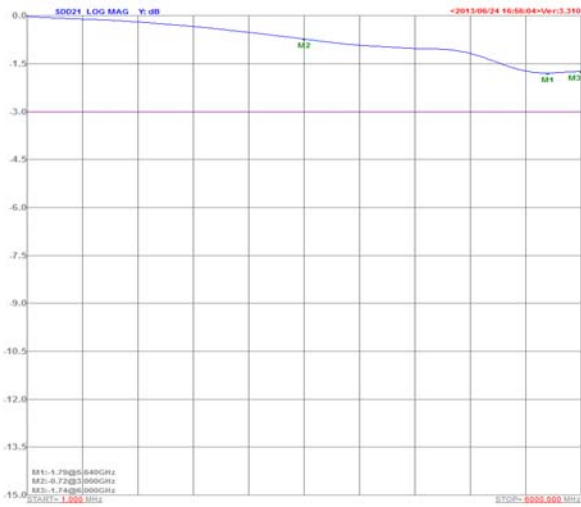
Test Instruments : HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

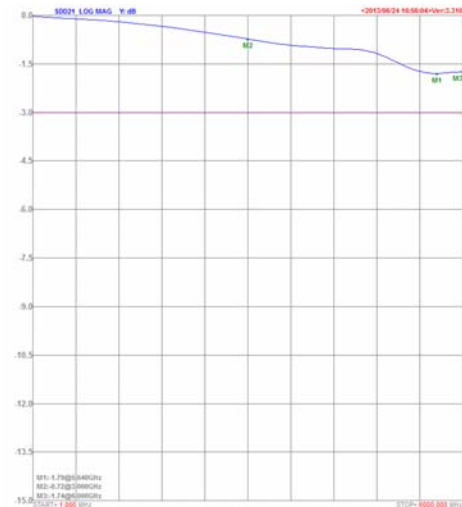


CUWI11T-600Y-N

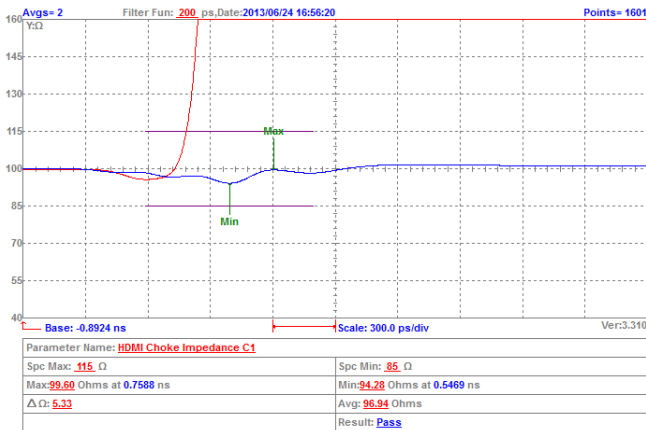
Insertion Loss For HDMI Testing:



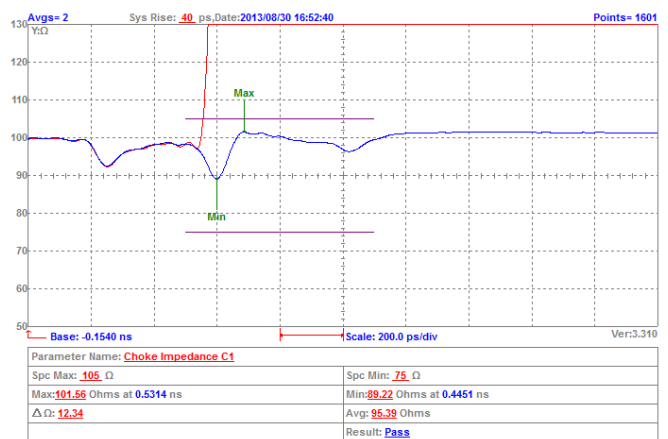
Insertion Loss For USB3.1 Testing:



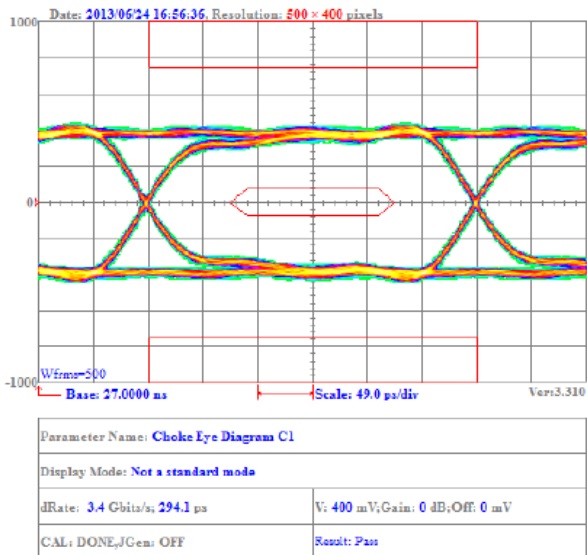
TDR For HDMI Testing:



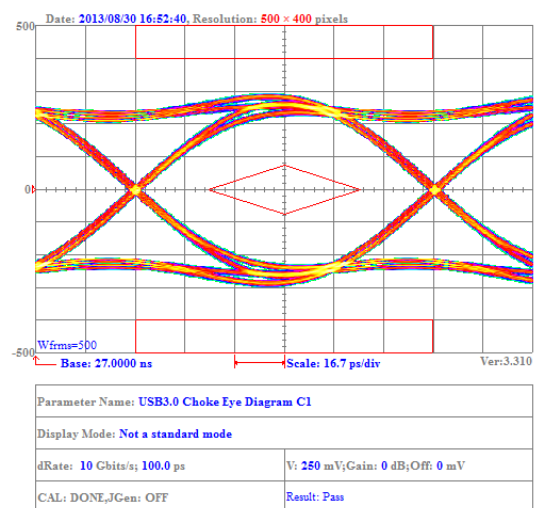
TDR For USB3.1 Testing:



Eye Diagram For HDMI Testing:

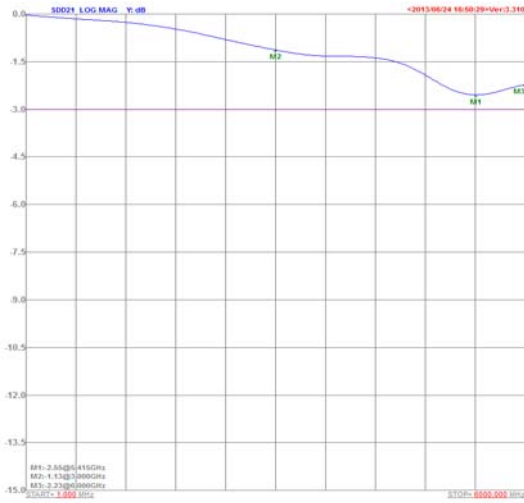


Eye Diagram For USB3.1 Testing:

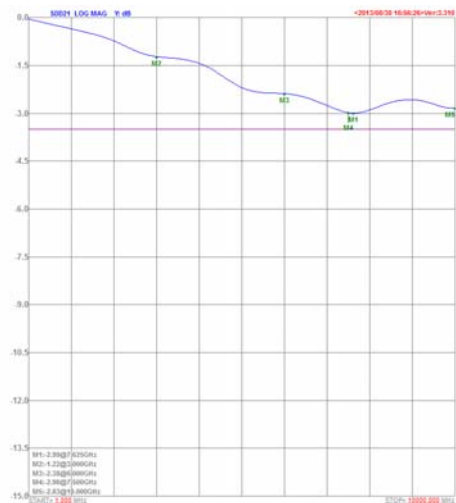


CUWI11T-900Y-N

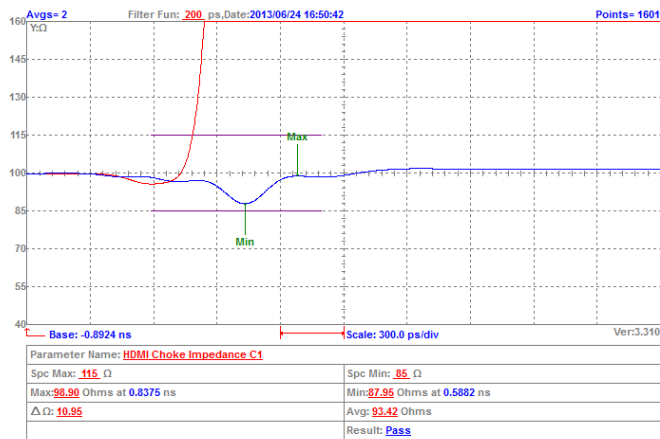
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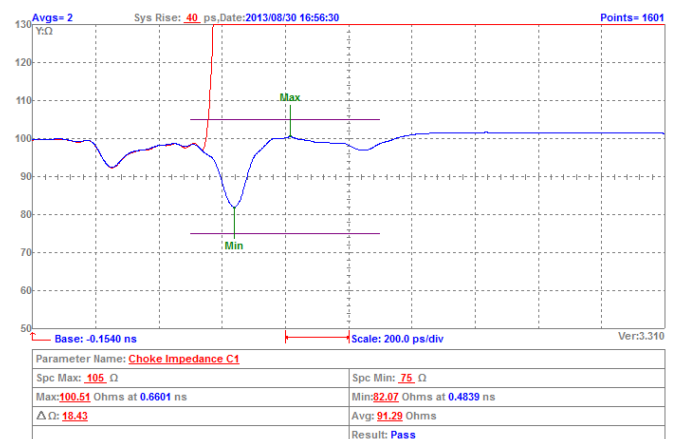
Insertion Loss For USB3.1 Testing:



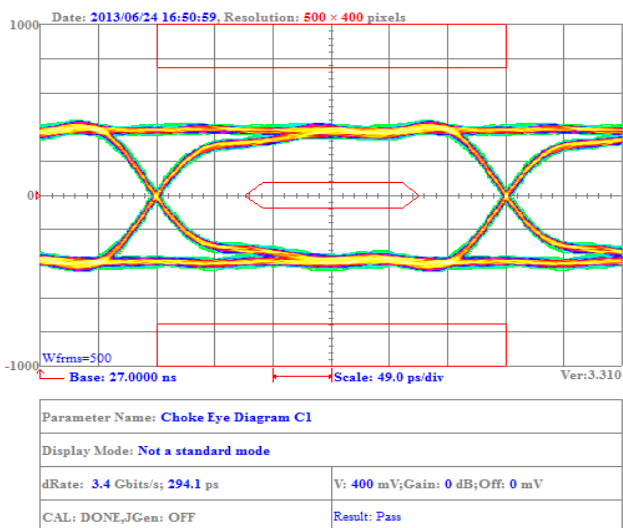
TDR For HDMI Testing:



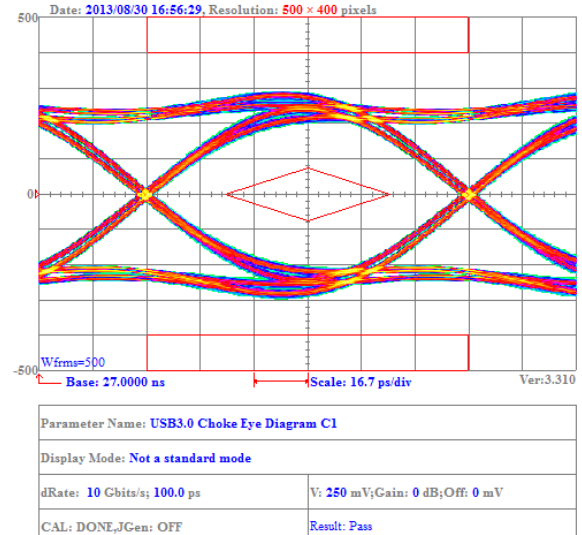
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Eye Diagram For HDMI Testing:



Eye Diagram For USB3.1 Testing:



Electrical Characteristics

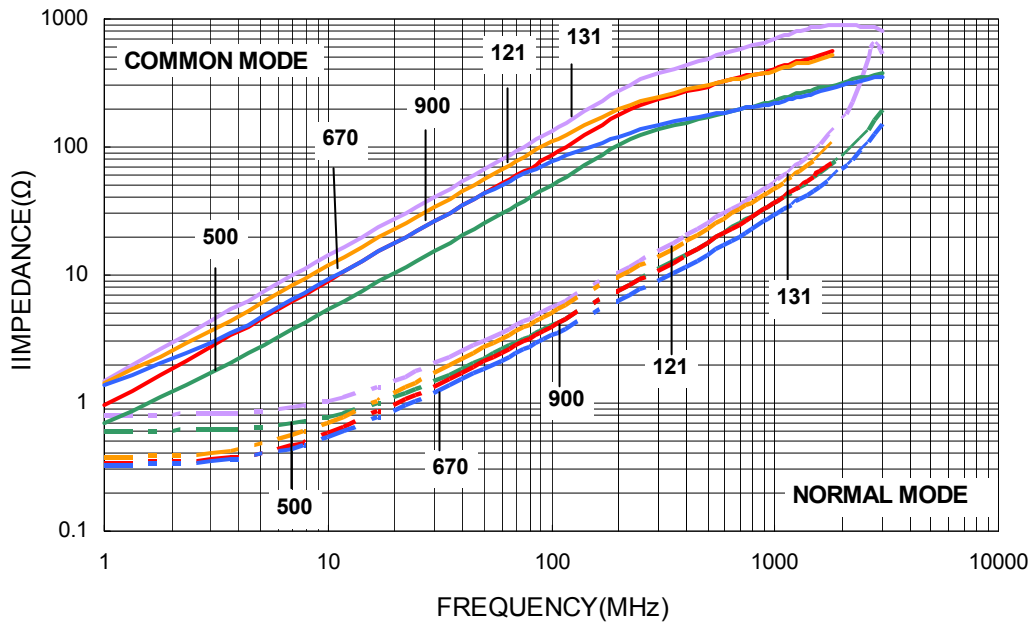
Part Number	Impedance (Ω)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) Max	IDC (mA) Max	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min
CUWI21T-500Y-N	50	25	100	0.20	500	50	10
CUWI21T-670Y-N	67	25	100	0.30	500	50	10
CUWI21T-900Y-N	90	25	100	0.30	500	50	10
CUWI21T-121Y-N	120	25	100	0.35	330	50	10
CUWI21T-131Y-N	130	25	100	0.40	300	50	10

Note: When ordering, please specify tolerance code. Tolerance: Y=±25%

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value without current.
- Measure Equipment :
 Z : HP4286A/HP4287A/Agilent E4991A+Agilent16197A
 RDC : CHROMA MILLIOM METER MODE 16502(Single Wire Test Value)
 IDC : HP4284A+HP42841A/HP4285A+HP42841A
 Insulation Resistance : Agilent HP4339B

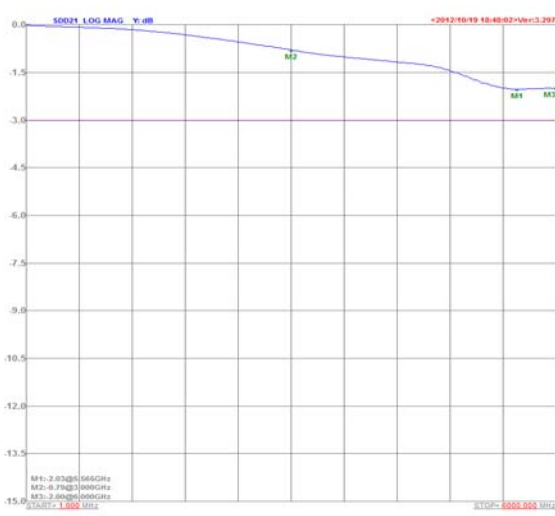
Test Instruments : HP4291A Material/Impedance Analyzer

Typical Impedance vs. Frequency

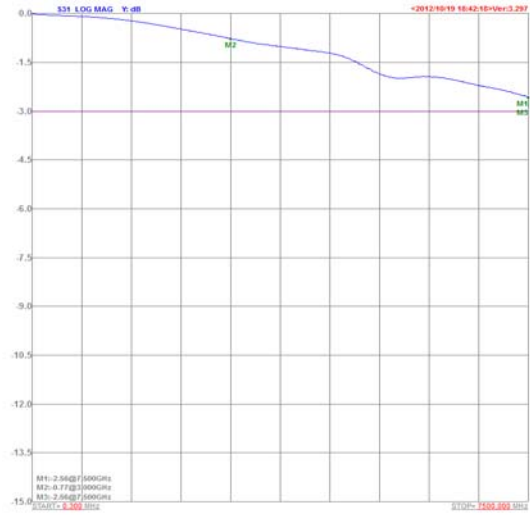


CUWI21T-500Y-N

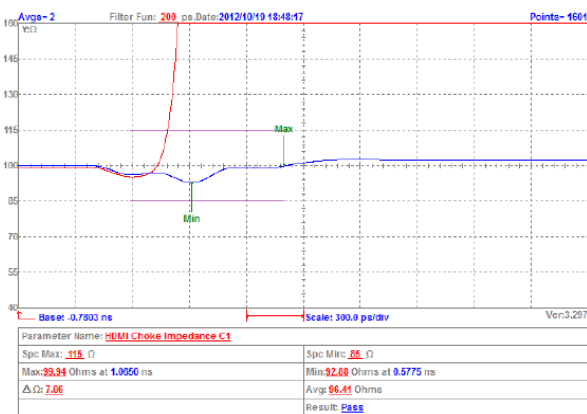
Insertion Loss For HDMI Testing:



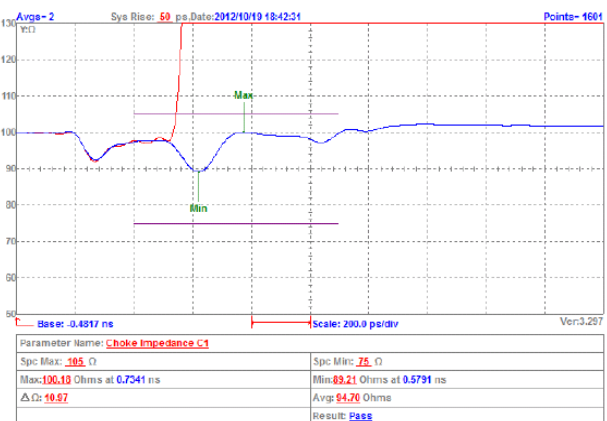
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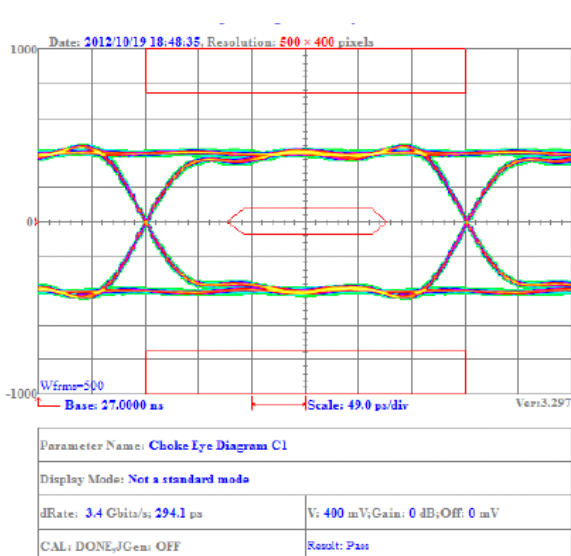
TDR For HDMI Testing:



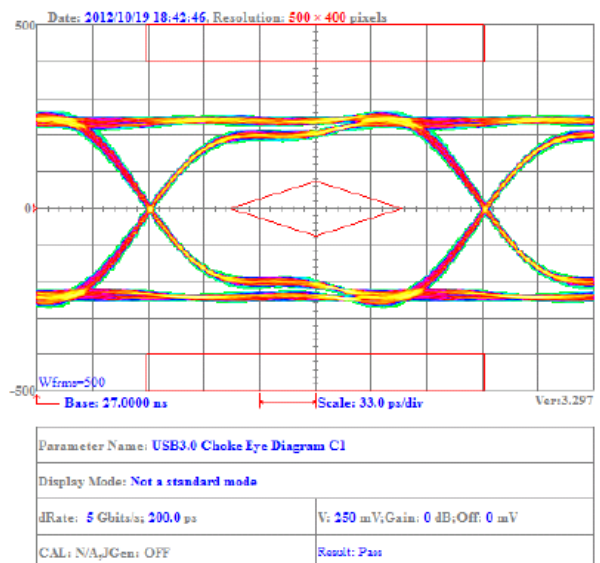
TDR For USB3.0 Testing:



Eye Diagram For HDMI Testing:

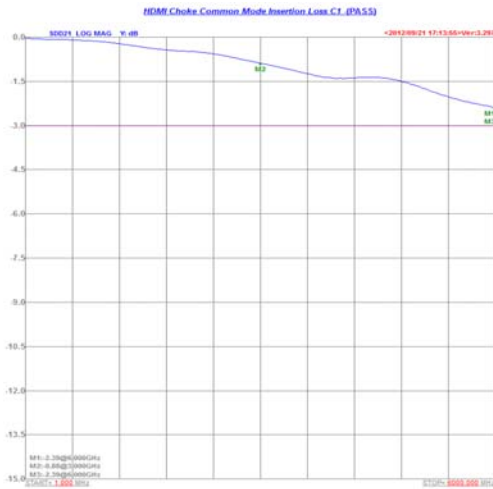


Eye Diagram For USB3.0 Testing:

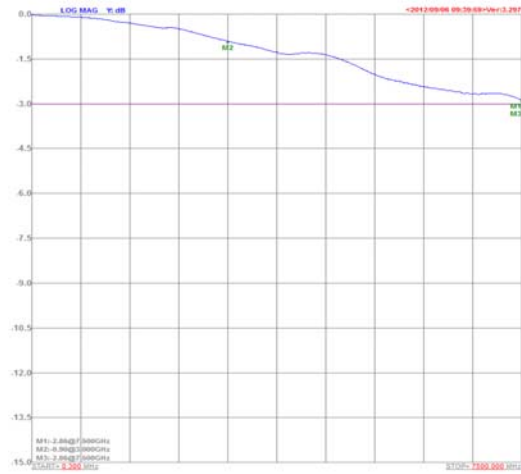


CUWI21T-670Y-N

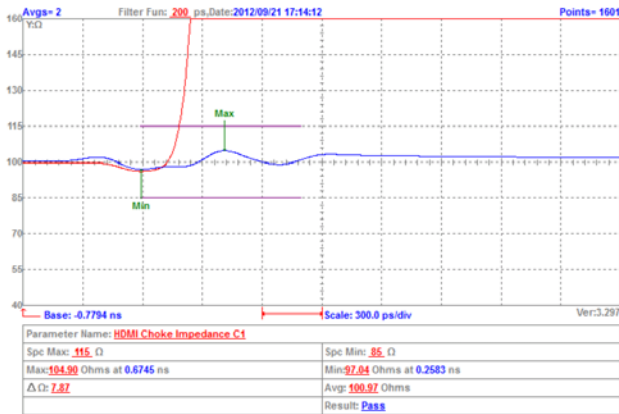
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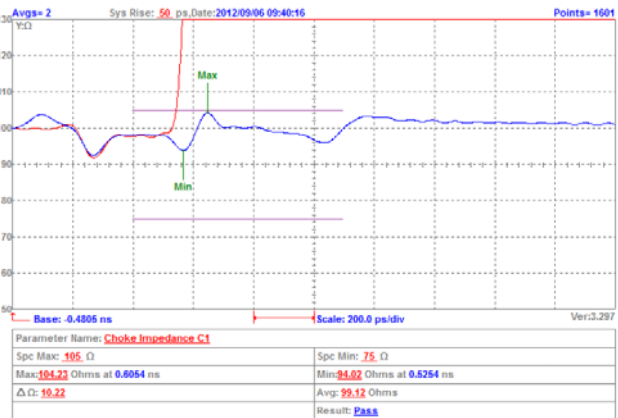
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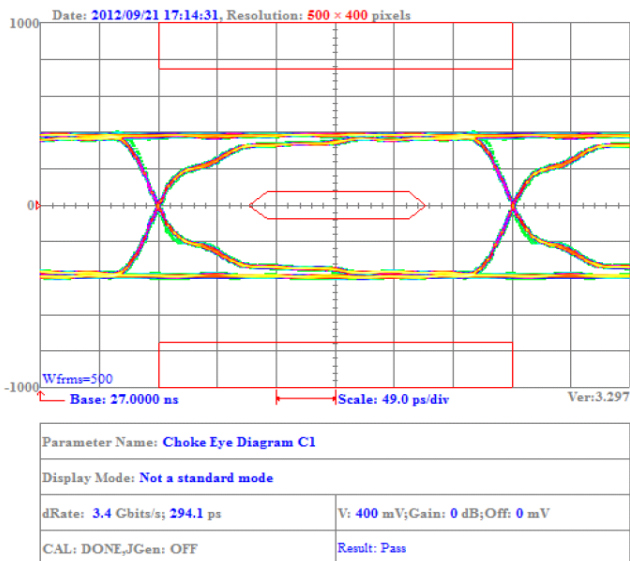
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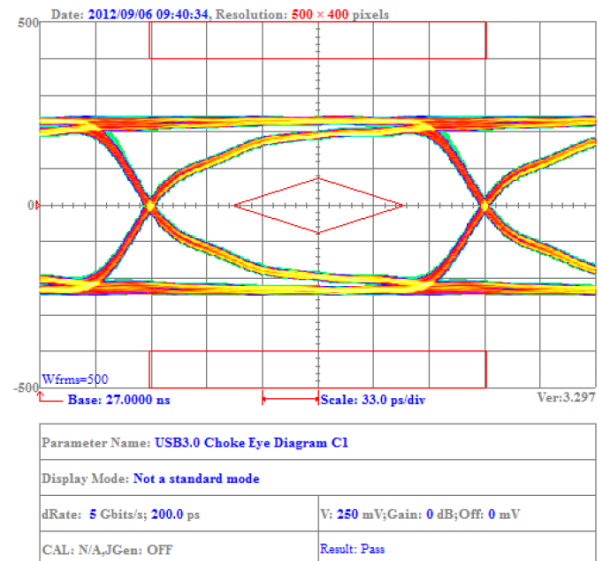
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Eye Diagram For HDMI Testing:

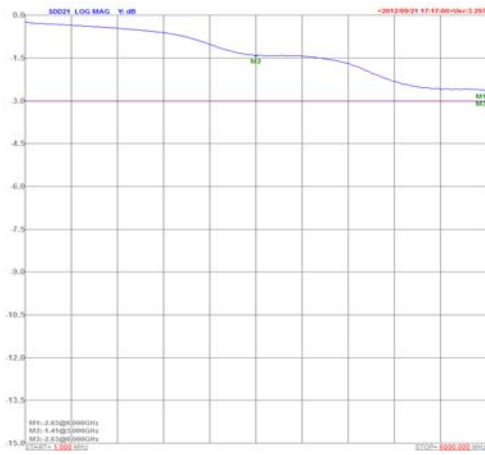


Eye Diagram For USB3.0 Testing:

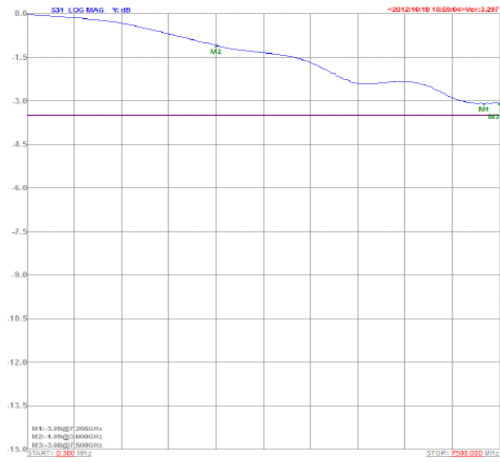


CUWI21T-900Y-N

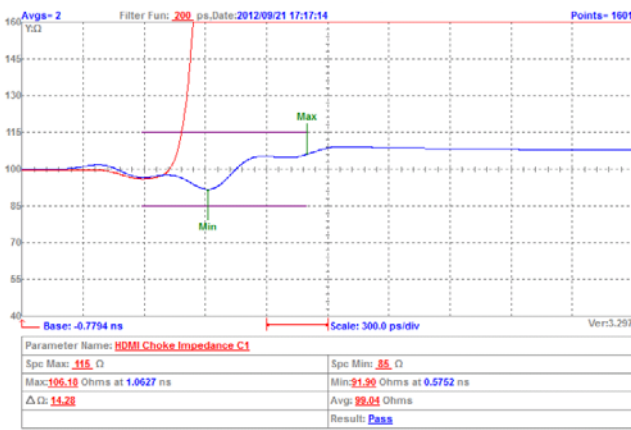
Insertion Loss For HDMI Testing:



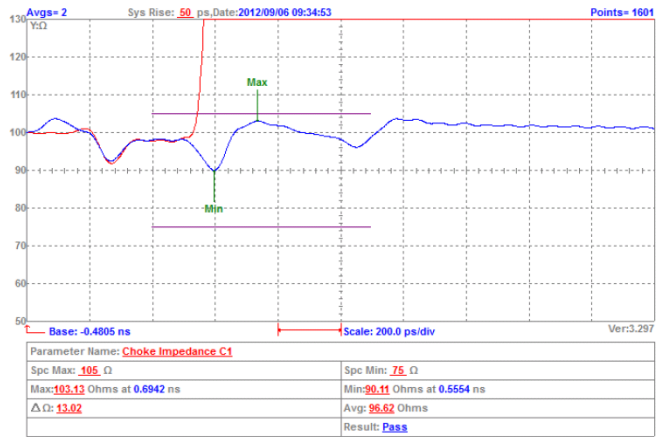
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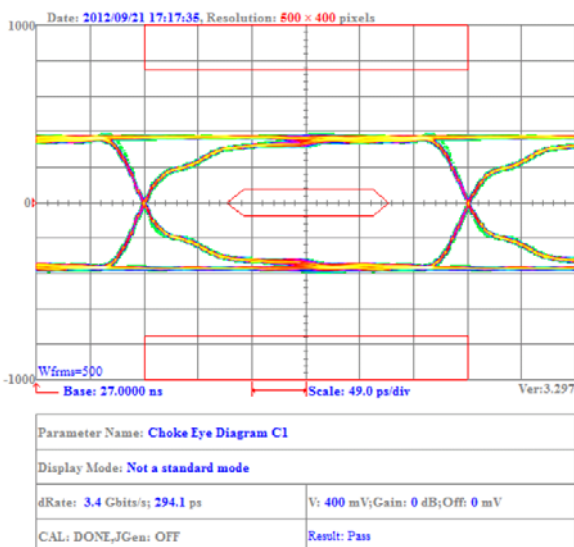
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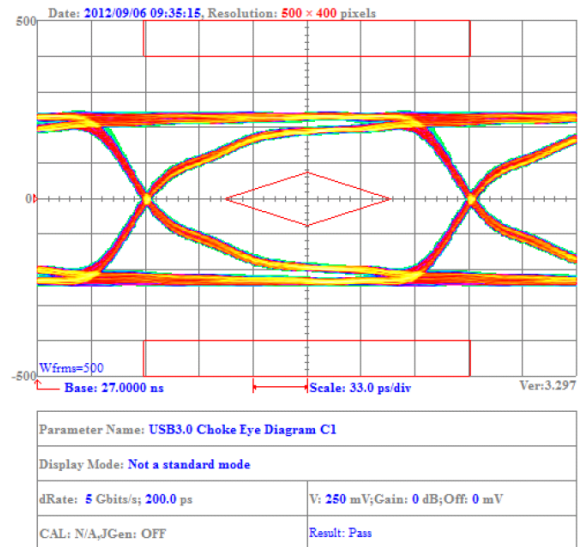
TDR For USB3.0 Testing:



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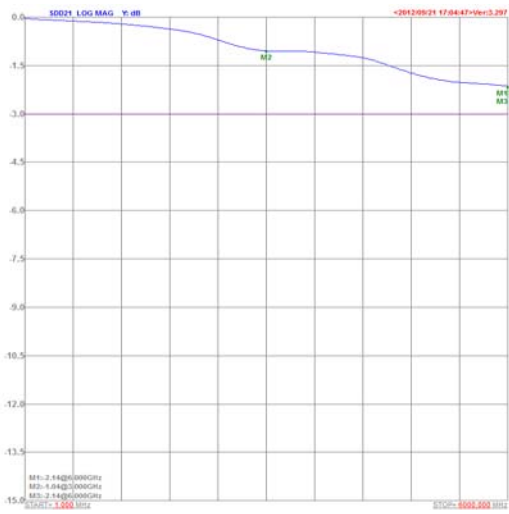


Eye Diagram For USB3.0 Testing:

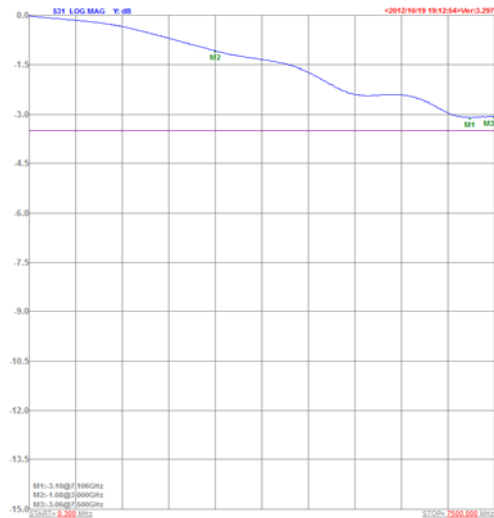


CUWI21T-121Y-N

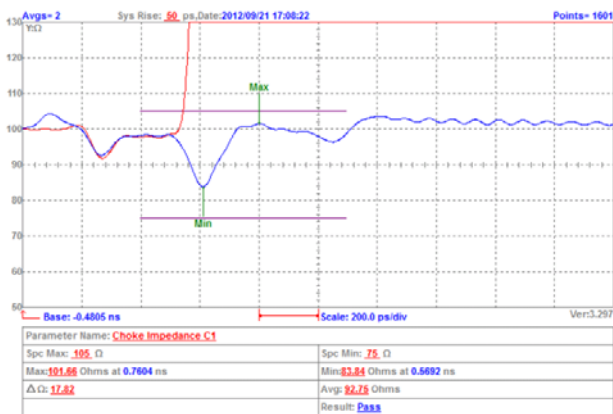
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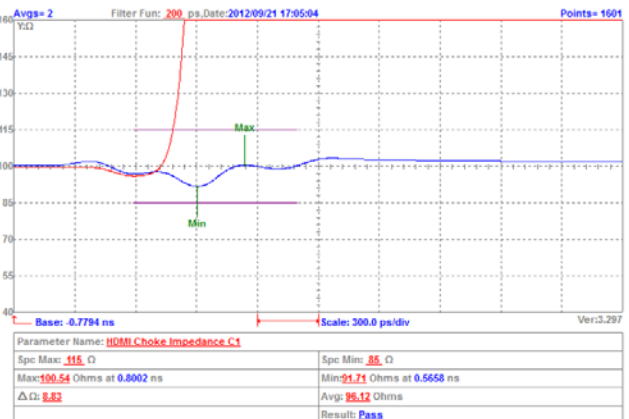
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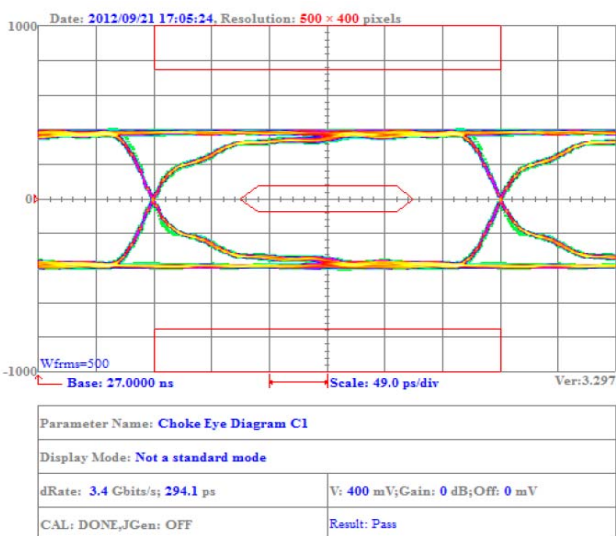
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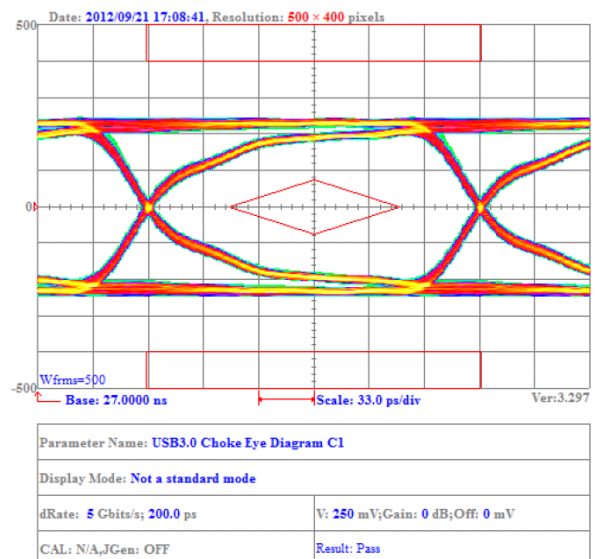
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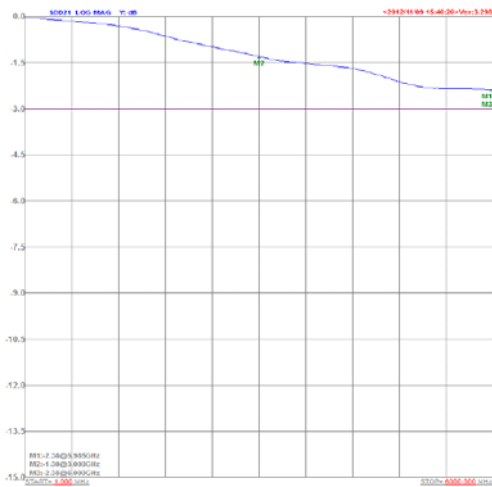


Eye Diagram For USB3.0 Testing:

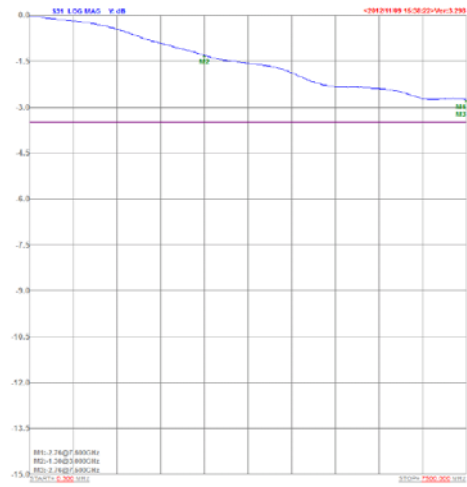


CUWI21T-131Y-N

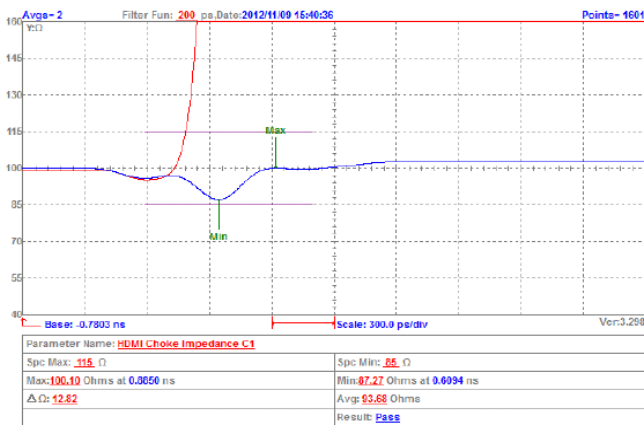
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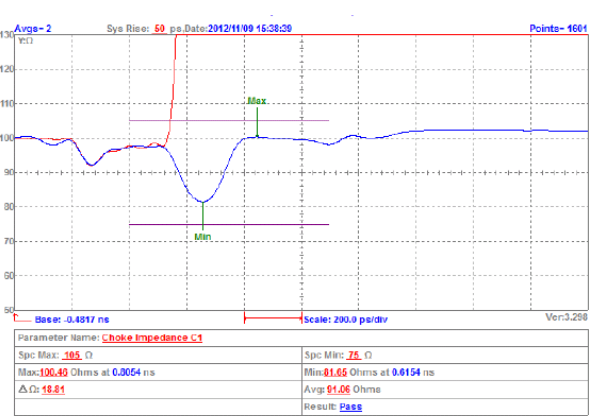
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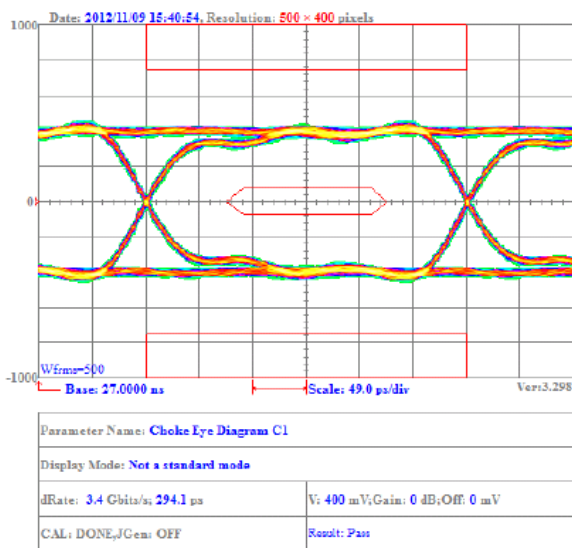
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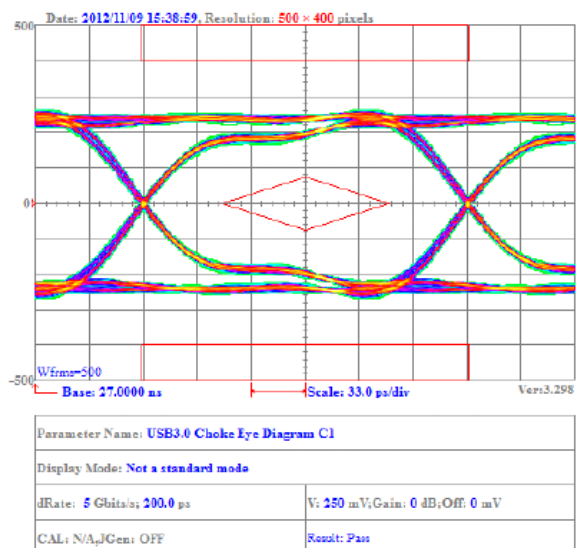
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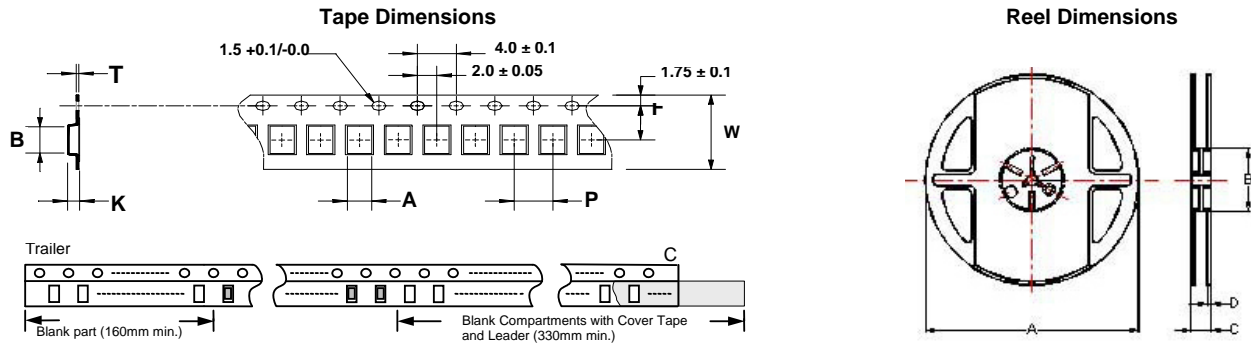
Eye Diagram For HDMI Testing:



Eye Diagram For USB3.0 Testing:



Packaging Specifications



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	A	B	C	D	
CUWI11	1.15	1.45	0.25	8	4	3.5	1.00	178	60	12	1.5	2000
CUWI21	1.50	2.25	0.24	8	4	3.5	1.35	178	60	12	1.5	2000