

# Cat5e Riser Unshielded

24AWG • 4 Twisted Pairs • CMR  
U/UTP • 350MHz • Solid Copper



## Key Features

- Bandwidth tested up to 350 MHz
- Suitable for 1 Gigabit and 2.5 Gigabit Ethernet up to 328 ft
- In compliance with ANSI/TIA 568.2-D
- RoHS-3 Compliant
- Easily identified color striped pairs
- Supports Power over Ethernet: PoE/PoE+/PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 100W
- Sequential footage markings every 2ft

## Technical Data

Insulation	PE
Average Thickness (mm)	0.205
Min Point Thickness (mm)	0.198
<b>Conductor Insulation Dia. (±0.02mm)</b>	<b>0.86</b>
Twisted Pair Dia. (±0.02mm)	1.72
Ripcord	Nylon
Spline	Not Present
Polyethylene Tape	Not Present
Shielding	U/UTP

Conductor	Solid Bare Copper
Size	24AWG
Conductor Dia. (±0.05mm)	0.46

Color of Pairs	
Pair 1	Blue- White/Blue
Pair 2	Orange- White/Orange
Pair 3	Green- White/Green
Pair 4	Brown- White/Brown

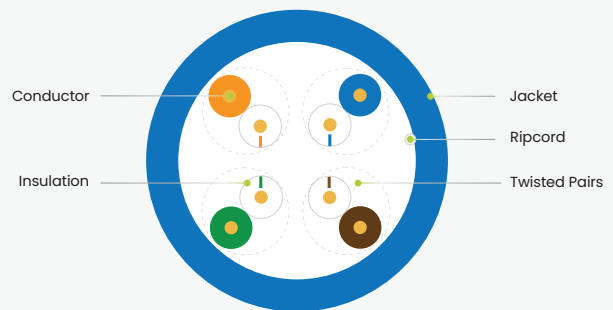
Cable Jacket	PVC
Average Thickness (mm)	0.50
Min. Point Thickness (mm)	0.45
<b>Outer Diameter (±0.2mm)</b>	<b>4.60</b>

### Standards Reference

UL-444 / cETLus

ANSI/TIA 568-2.D

ISO/IEC 11801



## Print Legend

trueCABLE Cat5e CMR U/UTP 75°C 4PR 24AWG c(ETL)us VERIFIED to ANSI/TIA 568.2-D Category 5e 350MHz RoHS-3 XXXXFT MM/YY

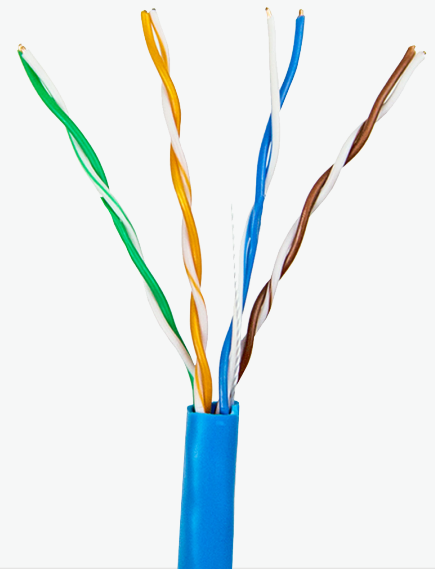
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## Electrical Characteristics

PoE Certification	PoE/PoE+/PoE++ 4PPoE
Maximum PoE Wattage	100W
PoE Application Compatibility	802.3af/at/bt Type 4
TIA 568-2.D Cat5e Permanent Link +PoE	CERTIFIED
Maximum Application Speed @ 295ft	2.5GBASE-T
Nominal Velocity of Propagation (NVP)	70.5
Maximum Operating Voltage	300V
1.0 - 350MHz Impedance ( $\Omega$ )	100 $\pm$ 15
Maximum Operating Frequency	350MHz
1.0 - 350MHz Delay Skew (ns/100m)	$\leq$ 45
Pair-to-Ground Capacitance Unbalance (pF/km)	$\leq$ 3300
Max. Conductor DC Resistance 20°C ( $\Omega$ /km)	93.8



## Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition ( $^{\circ}$ C x hrs)	100 x 168
Test Material	PVC	After Tensile Strength (Mpa)	$\geq$ 85% of unaged
Before- Tensile Strength (Mpa)	$\geq$ 13.8	Aging Condition - Elongation (%)	$\geq$ 50% of unaged
Aging- Elongation (%)	$\geq$ 100	Cold Bend ( $-20 \pm 2^{\circ}$ C x 4hrs)	No Crack
Min. Bend Radius	2.0cm/0.75in	Operating & Storage Temp.	$-40^{\circ}$ C to $75^{\circ}$ C   $-40^{\circ}$ F to $167^{\circ}$ F
Max. Installation Tension	110N/25lb-ft	Installation Temp.	$-20^{\circ}$ C to $75^{\circ}$ C   $-4^{\circ}$ F to $167^{\circ}$ F

## Tested Compatible Accessories

Product	Part Number
Cat5e Punch Down Keystone Jack   Unshielded	5EPD90CMPT
Cat5e Toolless Keystone Jack   Unshielded	5ETL90CMPT
Cat5e Pass Through RJ45 Connectors   Unshielded	5MPTRJ45
Cat5e Standard RJ45 Connectors   Unshielded	5MRJ45
Small Cut-to-Fit RJ45 Strain Relief Boot   5.5 - 7.00mm	5SMCTF



**Cable ID: 5ECMR 11/21 UTP JACK > JACK**

Test Limit: TIA Cat 5e Perm. Link (+PoE)

Limits Version: V7.6

Date / Time: 04/11/2022 12:33:24 PM

Operator: DON S

Headroom 10.9 dB (NEXT 3,6-4,5)

Cable Type: Cat 5e U/UTP

NVP: 69.3%

Main: Versiv

S/N: 1924100

Software Version: V6.7 Build 1

Calibration Date: 11/14/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 4523169

Remote: Versiv

S/N: 1917273

Software Version: V6.7 Build 1

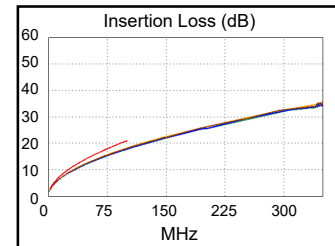
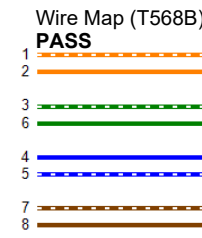
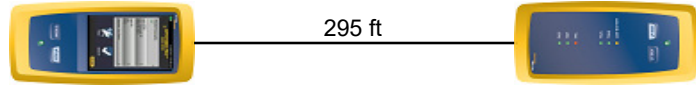
Calibration Date: 11/14/2020

Adapter: DSX-8000R (DSX-PLA804)

S/N: 4523168

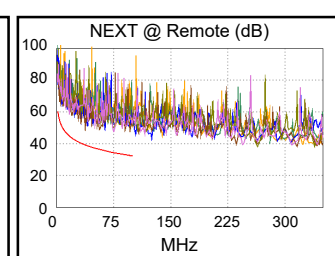
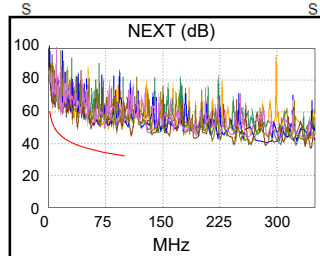
**Test Summary: PASS**

Length (ft), Limit 295	[Pair 3,6]	295
Prop. Delay (ns), Limit 498	[Pair 1,2]	443
Delay Skew (ns), Limit 44	[Pair 1,2]	10
Resistance (ohms), Limit 21.00	[Pair 7,8]	17.06
Resist. Unbal. (ohms), Limit 0.510	[Pair 4,5]	0.061
Resist. P2P Unbal. (ohms), Limit 0.590	[Pair 4,5-7,8]	0.053
Insertion Loss Margin (dB)	[Pair 1,2]	2.7
Frequency (MHz)	[Pair 1,2]	100.0
Limit (dB)	[Pair 1,2]	21.0

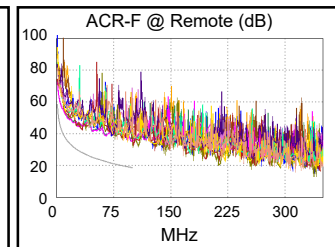
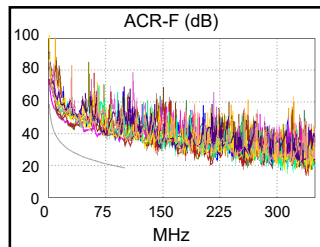


Worst Case Margin Worst Case Value

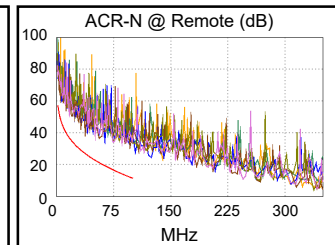
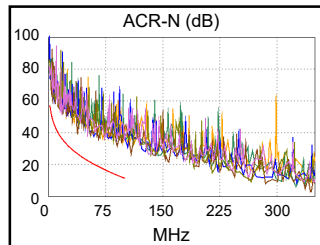
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	4,5-7,8
<b>NEXT (dB)</b>	11.1	10.9	14.7	13.2
Freq. (MHz)	38.0	37.8	90.0	75.3
Limit (dB)	39.2	39.2	33.1	34.3
Worst Pair	3,6	4,5	4,5	7,8
<b>PS NEXT (dB)</b>	13.3	13.5	16.4	14.2
Freq. (MHz)	38.0	37.8	90.0	75.8
Limit (dB)	36.2	36.2	30.1	31.3



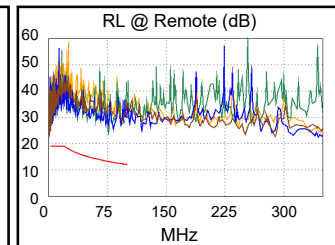
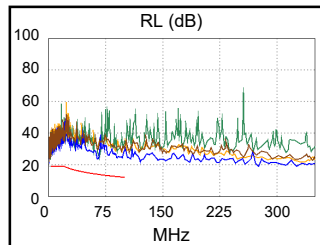
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	4,5-1,2	4,5-3,6	3,6-4,5
<b>ACR-F (dB)</b>	14.1	14.0	16.1	15.9
Freq. (MHz)	4.9	4.9	100.0	100.0
Limit (dB)	44.9	44.9	18.6	18.6
Worst Pair	4,5	4,5	1,2	4,5
<b>PS ACR-F (dB)</b>	14.8	14.6	16.4	16.2
Freq. (MHz)	16.9	16.9	100.0	100.0
Limit (dB)	31.1	31.1	15.6	15.6



N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
<b>ACR-N (dB)</b>	12.8	12.6	17.7	19.0
Freq. (MHz)	38.0	37.8	90.0	96.5
Limit (dB)	26.7	26.8	13.3	12.0
Worst Pair	4,5	4,5	4,5	4,5
<b>PS ACR-N (dB)</b>	14.6	14.6	19.4	19.2
Freq. (MHz)	5.0	5.1	90.0	90.3
Limit (dB)	45.9	45.7	10.3	10.2



PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5	3,6	4,5	3,6
<b>RL (dB)</b>	8.9	9.2	9.5	10.5
Freq. (MHz)	3.8	3.8	66.3	76.3
Limit (dB)	19.0	19.0	13.8	13.2



Compliant Network Standards:  
 10BASE-T      100BASE-TX      100BASE-T4  
 1000BASE-T    2.5GBASE-T      ATM-25  
 ATM-51      ATM-155      100VG-AnyLan  
 TR-4      TR-16 Active      TR-16 Passive