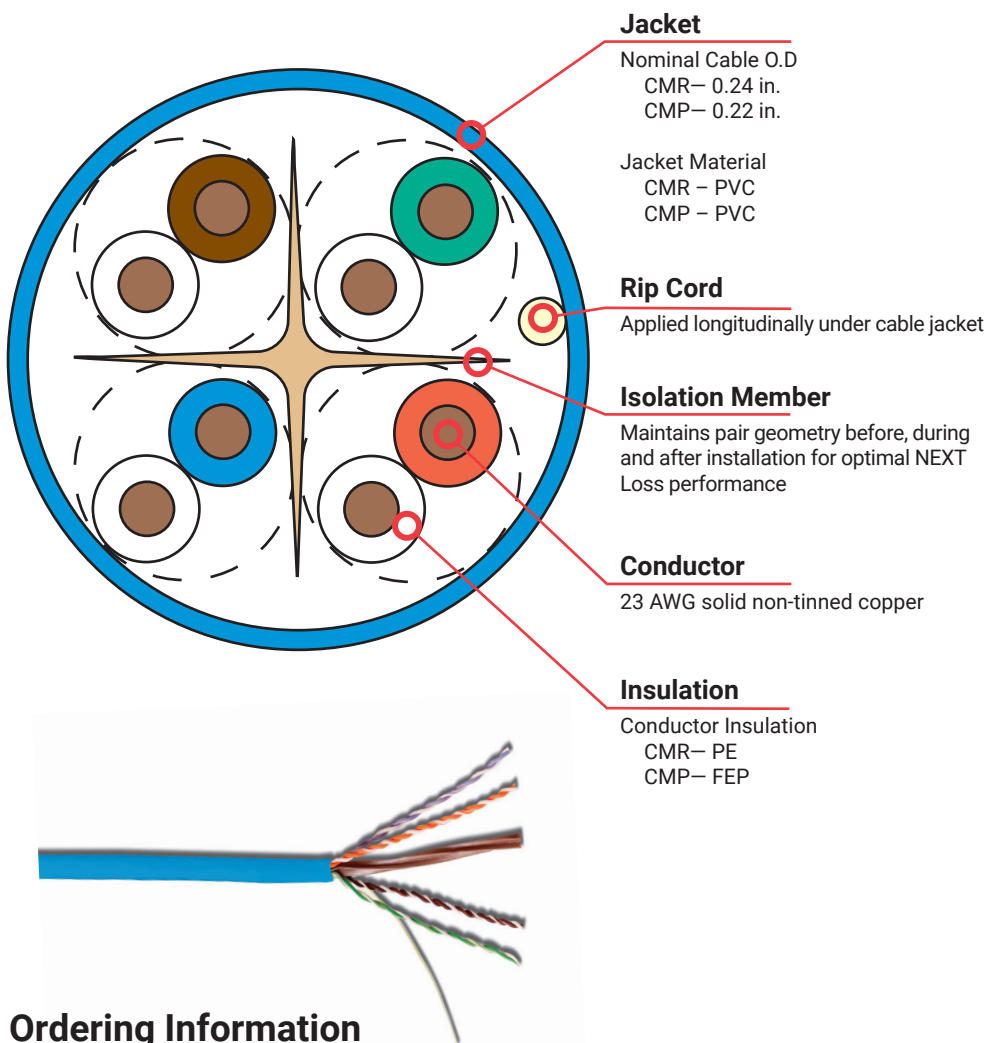


Premium 6 UTP Cable

Siemon's Premium 6 cable provides performance exceeding Category 6 transmission levels for both ANSI/TIA-568.2-D and ISO/IEC 11801-1 industry standards. Combine our high performance Category 6 connectivity with Premium 6 cable and the result is a system with superior electrical performance. The additional headroom above industry standard transmission levels provides a high level of immunity to installation variables ensuring reliable application support over the life of your cabling system.



Highlights

- Transmission performance verified by UL
- Reverse sequential length markings
- Round jacket
- Center isolation member
- Jacket material is lead free
- Supports any application designed for category 6 or lower cabling

Packaging

- 1000 ft. reel in a box
- Weight
CMR— 34 lbs/1000 ft.
CMP— 35 lbs/1000 ft.

Compliance

- ISO/IEC 11801-1 Ed 1.0 (Category 6)
- ANSI/TIA-568.2-D (Category 6)
- IEC 61156-5:2002 (Category 6)
- c(UL)us CMP and CSA FT6
- c(UL)us CMR and CSA FT4
- 10BASE-T
- 100BASE-T
- 1000BASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 PoE)
- IEEE 802.3bt (Type 4 PoE)
- Power over HDBaseT (PoH)

Ordering Information

Premium 6 Plenum 4-Pair UTP Cable (CMP, CSA Type FT6)

Part Number	Description
9C6P4-E4-(XX)-RBA	Plenum, 1000 ft. Reel-In-Box

Premium 6 Riser 4-Pair UTP Cable (CMR, CSA Type FT4)

Part Number	Description
9C6R4-E4-(XX)-RBA	Riser, 1000 ft. Reel-In-Box

Use (XX) to specify jacket color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

Some colors may carry a minimum order quantity. Contact Siemon Customer Service for more information.



Product Information

Electrical Specifications		Physical Properties		
DC Resistance		CMP		CMR
		Pulling Tension (max)		110N (25 lbf)
DC resistance Unbalance		Bend Radius (min)		22.4mm (0.88 in.)
Mutual Capacitance		Installation Temperature		0 to 60°C (+32 to 140°F)
Capacitance Unbalance		Storage Temperature		-20 to 75°C (-4 to 167°F)
Characteristic Impedance (ohms)		Operating Temperature		-20 to 75°C (-4 to 167°F)
NVP				
TCL				
Delay Skew				

Transmission Performance

Guaranteed worse case Siemon Typical

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1	2.0	1.7	81.3	103.8	79.3	98.6	79.3	102.2	77.3	96.9	74.8	94.0	71.8	88.9	20.0	29.5	570	491
4	3.7	3.4	72.3	94.8	70.3	87.6	68.6	91.3	66.6	84.2	62.7	82.2	59.7	77.0	23.0	34.8	552	486
10	5.8	5.5	66.3	85.2	64.3	78.8	60.5	79.7	58.5	73.3	54.8	74.6	51.8	69.3	25.0	35.3	545	481
16	7.3	7.0	63.2	85.8	61.2	78.2	55.9	78.8	53.9	71.2	50.7	71.0	47.7	65.6	25.0	36.8	543	480
20	8.2	7.9	61.8	82.5	59.8	75.7	53.6	74.7	51.6	67.8	48.7	69.3	45.7	64.0	25.0	36.6	542	480
31.25	10.4	9.9	58.9	82.2	56.9	74.2	48.5	72.3	46.5	64.3	44.9	66.8	41.9	61.2	23.6	36.6	540	479
62.5	14.9	14.2	54.4	74.3	52.4	66.0	39.4	60.1	37.4	51.9	38.8	62.2	35.8	57.0	21.5	34.6	539	478
100	19.2	18.3	51.3	70.8	49.3	62.9	32.1	52.5	30.1	44.6	34.8	56.1	31.8	49.3	20.1	39.9	538	477
160	24.8	23.6	48.2	70.0	46.2	63.4	23.4	46.4	21.4	39.9	30.7	49.8	27.7	42.3	18.7	33.4	537	477
200	28.1	26.4	46.8	70.0	44.8	63.2	18.7	43.6	16.7	36.8	28.7	48.9	25.7	41.4	18.0	32.2	537	477
250	31.9	30.5	45.3	67.5	43.3	59.6	13.5	37.0	11.5	29.1	26.8	48.0	23.8	40.3	17.3	33.4	536	477
300*	35.3	33.8	44.1	67.1	42.1	58.9	8.8	33.3	6.8	25.1	25.2	48.1	22.2	42.0	16.8	33.1	536	477
400*	41.7	39.8	42.3	63.4	40.3	55.2	0.6	23.6	-1.4	15.4	22.7	43.4	19.7	37.3	15.9	31.2	536	477
500*	47.5	45.0	40.8	58.0	38.8	50.3	-6.7	13.0	-8.7	5.3	20.8	41.0	17.8	33.3	15.2	28.7	536	476
550*	50.2	47.8	40.2	57.2	38.2	51.1	-10.0	9.4	-12.0	3.3	19.9	38.3	16.9	33.1	14.9	31.0	536	476
600*	52.9	50.3	39.6	57.5	37.6	50.2	-13.2	7.2	-15.2	-0.1	19.2	36.5	16.2	30.6	14.7	30.0	535	477

*Values above industry requirements are for information only. All performance based on 100 meters (328 ft.).

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.



Solution 6™ UTP Cable

Solution 6 cable meets or exceeds all ANSI/TIA and ISO/IEC category 6 transmission performance specifications. Combine our high performance category 6 connectivity with Solution 6 cable and the result is a system with excellent electrical performance for optimum applications support.

The Solution 6 cable design eliminates the central isolation member common to many category 6 UTP cables, reducing overall cable diameter. This reduces pathway size requirements, carton materials, connector termination times, and provides more efficient shipping options for a greener installation.

Cable Features

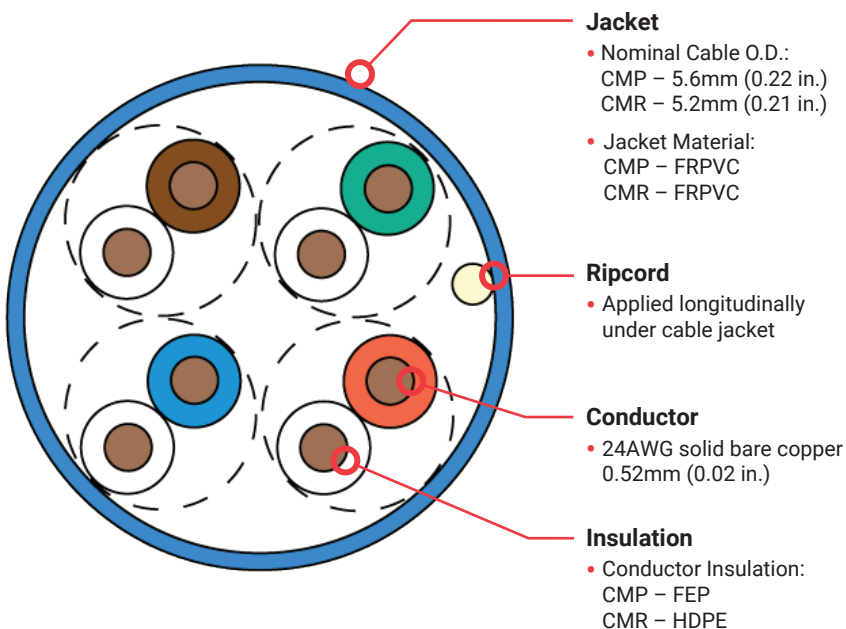
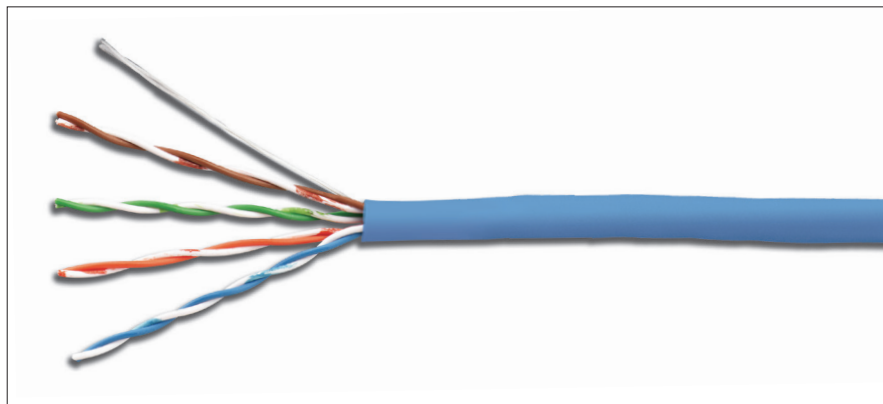
- CMP Nominal Jacket OD: 5.6mm (0.22 in.)
- CMR Nominal Jacket OD: 5.2mm (0.21 in.)
- 24 AWG 0.52mm (0.02 in.) solid (non-tinned) copper
- Reverse sequential numbering
- Round jacket
- Jacket material is lead free
- 75°C temperature rating

Standards Compliance

- ISO/IEC 11801-1 Ed 1.0
- IEC 61156-5
- TIA-568.2-D
- UL CMP
- UL CMR
- RoHS

Applications Support

- 1000BASE-T
- 100BASE-T
- 10BASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 PoE)
- IEEE 802.3bt (Type 4 PoE)
- Power over HDBaseT (PoH)



Product Information

Electrical Specifications

DC Resistance	<8.8Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.2 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	67%
TCL	30-10 log(f/100) dB
Delay Skew	≤45ns

Physical Properties

Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	25mm (1 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

Transmission Performance

		Guaranteed Worst Case		Siemon Typical													
Frequency (MHz)	Insertion Loss (dB/100)	NEXT (dB)		PS NEXT (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)		ACR-N (dB)		PSACR-N (dB)		Propagation Delay (ns)	
1.0	2.0 1.9	74.3	90.8	72.3	87.4	67.8	79.8	64.8	79.4	20.0	27.8	72.3	88.9	70.3	85.5	570	516
4.0	3.8 3.6	65.3	77.8	63.3	74.4	55.8	68.3	52.8	67.7	23.0	31.4	61.5	74.2	59.5	70.8	552	500
10.0	6.0 5.7	59.3	70.2	57.3	68.4	47.8	60.5	44.8	59.7	25.0	31.5	53.3	64.5	51.3	62.7	545	494
16.0	7.6 7.3	56.2	65.5	54.2	63.0	43.7	56.5	40.7	55.6	25.0	33.2	48.7	58.3	46.7	55.8	543	492
20.0	8.5 8.2	54.8	64.9	52.8	62.7	41.8	54.6	38.8	53.6	25.0	31.6	46.3	56.8	44.3	54.6	542	491
31.25	10.7 10.2	51.9	60.2	49.9	57.0	37.9	51.0	34.9	49.8	23.7	31.4	41.3	50.1	39.3	46.9	540	489
62.5	15.4 14.7	47.4	55.9	45.4	55.1	31.9	46.1	28.9	45.6	21.5	33.5	32.0	41.5	30.0	40.4	539	488
100.0	19.8 18.8	44.3	52.5	42.3	50.4	27.8	42.8	24.8	41.5	20.1	30.5	24.5	34.2	22.5	32.0	538	487
160.0	25.6 24.1	41.2	51.8	39.2	50.4	23.7	43.8	20.7	40.6	18.7	32.3	15.6	27.9	13.6	26.4	537	486
200.0	29.0 27.1	39.8	49.1	37.8	47.2	21.8	37.1	18.8	35.7	18.0	30.3	10.8	22.5	8.8	20.2	537	486
250.0	32.8 30.6	38.3	45.1	36.3	43.5	19.8	33.1	16.8	30.9	17.3	34.7	5.5	15.1	3.5	13.5	536	485
300.0*	- 34.7	-	43.8	-	42.1	-	27.9	-	27.3	-	28.6	-	10.0	-	7.6	-	485
400.0*	- 40.7	-	42.8	-	40.4	-	27.5	-	27.0	-	23.6	-	3.1	-	-0.2	-	485
500.0*	- 46.0	-	41.5	-	39.8	-	30.4	-	29.5	-	28.5	-	-3.5	-	-5.2	-	485
550.0*	- 48.7	-	42.8	-	39.7	-	27.2	-	26.6	-	22.0	-	-5.4	-	-	-	485

*Values for frequencies above industry requirements are for information only.
All performance based on 100 meters (328 ft.).

Ordering Information

Part Number	Description
9C6P4-E2-(XX)ARXA	Plenum (CMP, CSA FT6) 305m (1000 ft.) Reelex
9C6R4-E2-(XX)-RXB	Riser (CMR, CSA FT4) 305m (1000 ft.) Reelex

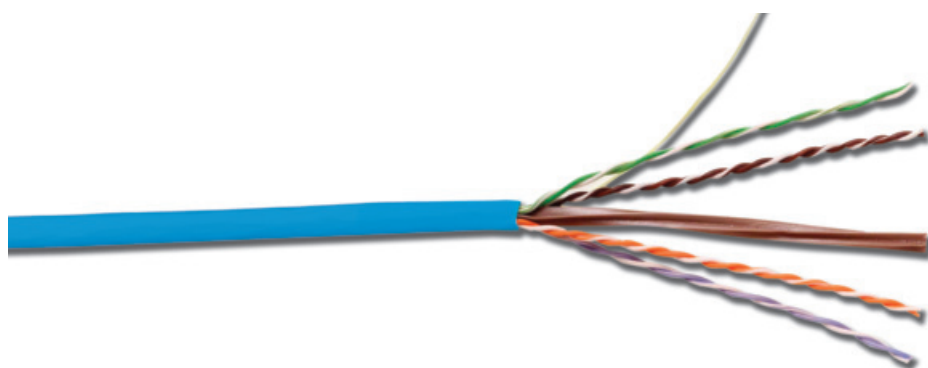
Use (XX) to specify color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange
Minimum order quantity may apply to select colors.

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.



SYSTEM 6® UTP CABLE —RISER & PLENUM

Siemon offers multiple levels of system performance based on our high-performance category 6 UTP connectivity, including System 6 UTP cable with exceptional margin on all parameters that exceeds ISO/IEC and TIA connecting hardware and channel performance specifications. The result is a system with superior electrical performance for optimum applications support. Available in Plenum and Riser with reverse sequential numbering and a minimal center isolation member for reduced overall diameter.



CABLE FEATURES:

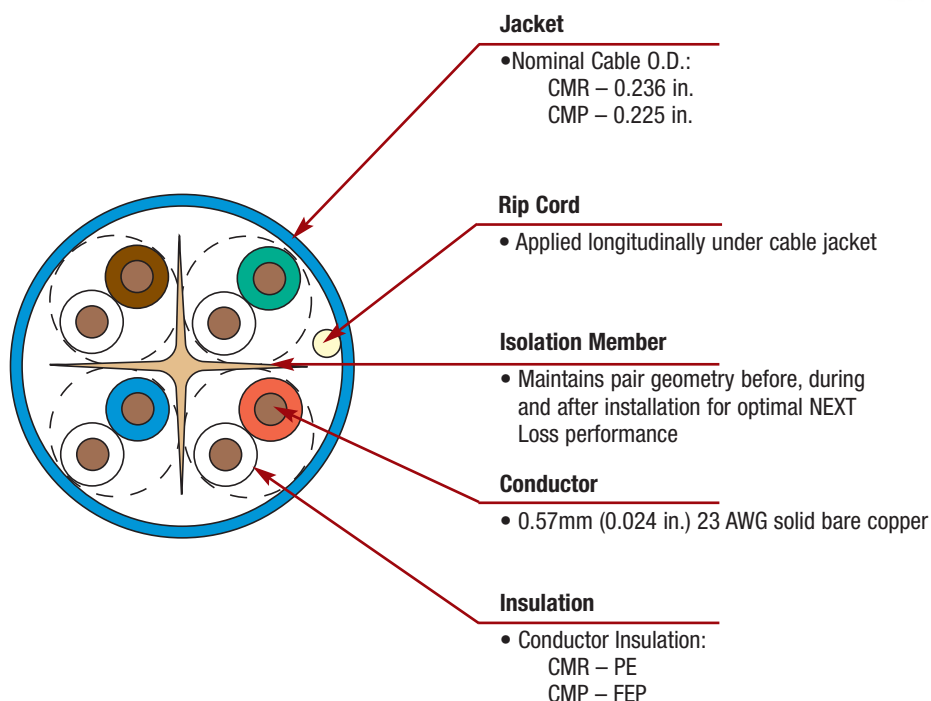
- Nominal jacket OD:
 - CMR = .236 in.
 - CMP = .225 in.
- 23 AWG 0.57mm (0.024 in.) solid bare copper
- Reverse sequential numbering
- Round jacket
- Jacket material is lead free

STANDARDS COMPLIANCE:

- ISO/IEC 11801-1 Ed.1.0
- IEC 61156-5
- TIA-568.2-D
- UL-CMR and CSA FT4
- UL-CMP and CSA FT6
- RoHS

APPLICATIONS SUPPORT

- 1000BASE-T
- 100BASE-T
- 10BASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 PoE)
- IEEE 802.3bt (Type 4 PoE)
- Power over HDBaseT (PoH)



PRODUCT INFORMATION

System 6® UTP Cable

ELECTRICAL SPECIFICATIONS	CMR / CMP
DC Resistance	<9.38 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	CMR 65% CMP 68%
TCL/LCL	30-10log(f/100)dB
Delay Skew	≤ 35ns/100m

PHYSICAL PROPERTIES	CMR	CMP
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	25mm (1 in.)	25mm (1 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)	0 to 60°C (32 to 140°F)
Storage Temperature	-20 to 50°C (-4 to 122°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE



GUARANTEED WORST CASE*



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.0	1.8	77.3	87.3	75.3	82.3	75.3	85.5	73.3	80.5	70.8	84.8	68.8	79.8	21.0	29.0	550	545
4.0	3.8	3.5	68.3	78.3	66.3	73.3	64.5	74.8	62.5	69.8	58.8	72.8	56.8	67.8	24.0	32.0	532	527
10.0	5.9	5.6	62.3	72.3	60.3	67.3	56.4	66.7	54.4	61.7	50.8	64.8	48.8	59.8	26.0	38.0	525	520
16.0	7.5	7.1	59.2	69.2	57.2	64.2	51.8	62.1	49.8	57.1	46.7	60.7	44.7	55.7	26.0	34.0	523	518
20.0	8.4	7.9	57.8	67.8	55.8	62.8	49.4	59.9	47.4	54.9	44.8	58.8	42.8	53.8	26.0	34.0	522	517
31.25	10.6	10.0	54.9	64.9	52.9	59.9	44.3	54.9	42.3	49.9	40.9	54.9	38.9	49.9	24.6	32.0	520	515
62.5	15.2	14.4	50.4	60.4	48.4	55.4	35.1	46.0	33.1	41.0	34.9	48.9	32.9	43.9	22.5	32.0	519	514
100.0	19.6	18.6	47.3	57.3	45.3	52.3	27.7	38.7	25.7	33.7	30.8	44.8	28.8	39.8	21.1	32.0	518	513
160.0	25.4	24.1	44.2	54.2	42.2	49.2	18.9	30.1	16.9	25.1	26.7	40.7	24.7	35.7	19.7	31.0	517	512
200.0	28.7	26.8	42.8	52.8	40.8	47.8	14.1	26.0	12.1	21.0	24.8	38.8	22.8	33.8	19.0	29.0	517	512
250.0	32.6	30.5	41.3	51.3	39.3	46.3	8.8	20.8	6.8	15.8	22.8	37.0	20.8	31.8	18.3	29.0	516	511
300.0*	—	33.7	—	50.0	—	45.0	—	16.3	—	11.3	—	36.0	—	30.0	—	27.0	—	511
400.0*	—	40.3	—	48.0	—	43.0	—	7.7	—	2.7	—	32.0	—	27.0	—	26.0	—	511
500.0*	—	39.9	—	48.0	—	42.0	—	8.1	—	2.1	—	31.0	—	26.0	—	25.0	—	511
550.0*	—	39.7	—	46.0	—	42.0	—	6.3	—	2.3	—	30.0	—	26.0	—	24.0	—	510

*Performance for frequencies above 250 MHz are for information only.

All performance based on 100 meters (328 ft.).

System 6, 4-Pair UTP Cable:

Part #	Description
9C6R4-E3-(XX)-RXA	Riser, 1000 ft. Reelex
9C6P4-E3-(XX)-RXA	Plenum, 1000 ft. Reelex

Use (XX) to specify jacket color: 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange

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