

# 884031984/30 | CS27R BLU C5E 4/24 U/UTP RL 3KFT

ETL Verified Category 5e U/UTP Cable, non-plenum, blue jacket, 4 pair count, 3000 ft (914 m) length, reel



## Product Classification

**Regional Availability** Asia | Australia/New Zealand | Latin America | North America

**Portfolio** CommScope®

**Product Type** Twisted pair cable

## General Specifications

**Product Number** CS27R

**ANSI/TIA Category** 5e

**Cable Component Type** Horizontal

**Cable Type** U/UTP (unshielded)

**Conductor Type, singles** Solid

**Conductors, quantity** 8

**Jacket Color** Blue

**Note** All electrical transmission tests include swept frequency measurements

**Pairs, quantity** 4

**Transmission Standards** ANSI/TIA-568.2-D | CENELEC EN 50288-3-1 | ISO/IEC 11801 Class D

## Dimensions

**Cable Length** 914.4 m | 3000 ft

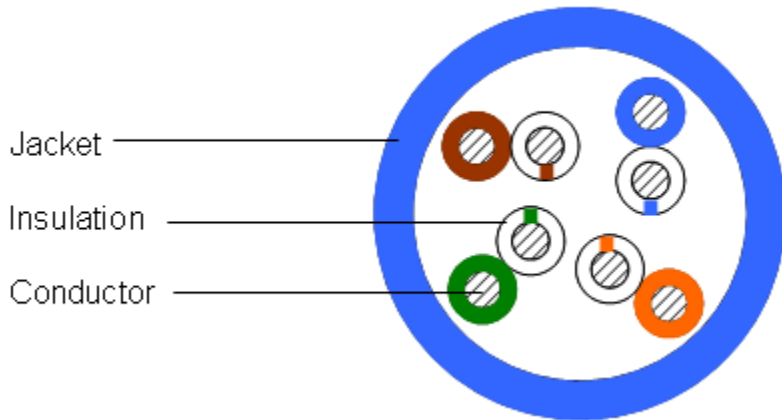
**Cable Length Tolerance** ±5%

**Diameter Over Jacket, nominal** 4.953 mm | 0.195 in

**Jacket Thickness** 0.508 mm | 0.02 in

**Conductor Gauge, singles** 24 AWG

## Cross Section Drawing



## Electrical Specifications

<b>Characteristic Impedance</b>	100 ohm
<b>dc Resistance Unbalance, maximum</b>	5 %
<b>dc Resistance, maximum</b>	9.38 ohms/100 m   2.859 ohms/100 ft
<b>Delay Skew, maximum</b>	15 ns
<b>Dielectric Strength, minimum</b>	1500 Vac   2500 Vdc
<b>Mutual Capacitance at Frequency</b>	5.6 nF/100 m @ 1 kHz
<b>Nominal Velocity of Propagation (NVP)</b>	69 %
<b>Operating Frequency, maximum</b>	350 MHz
<b>Operating Voltage, maximum</b>	80 V
<b>Remote Powering</b>	Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A
<b>Safety Voltage Rating</b>	300 V

## Electrical Cable Performance

<b>CS</b>	CommScope	<b>NEXT</b>	Near End Crosstalk (dB/100m)
<b>STD</b>	Refers to the standard value listed under Transmission Standards in the Electrical Specifications above	<b>PSNEXT</b>	Power Sum Near End Crosstalk (db/100m)
<b>TYP</b>	Typical Electrical Performance	<b>ACRF</b>	Attenuation to Crosstalk Ratio - Far End (dB/100m)
<b>IL</b>	Insertion Loss (dB/100m)	<b>RL</b>	Return Loss (dB)
<b>ACR</b>	Attenuation to Crosstalk Ratio (dB/100m)	<b>ELTCTL</b>	Equal Level Transverse Conversion Transfer Loss (dB/100m)
<b>PSACR</b>	Power Sum Attenuation to Crosstalk Ratio (dB/100m)		
<b>PSACRF</b>	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)		
<b>TCL</b>	Transverse Conversion Loss (dB/100m)		

Freq. MHz	IL			NEXT			ACR			PSNEXT			PSACR			ACRF			PSACRF			RL		
	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP	CS	STD	TYP
1	2	2	1.8	70.3	65.3	85	68.3	63.3	83.1	68.3	62.3	82.6	66.3	60.3	80.8	67.8	63.8	79.8	65.8	60.8	78	20	20	34.8
4	3.9	4.1	3.7	61.3	56.3	75.9	57.3	52.2	72.2	59.3	53.3	73.4	55.3	49.2	69.7	55.8	51.8	68.1	53.8	48.8	66.3	23.3	23	35.1
8	5.6	5.8	5.3	56.8	51.8	70.8	51.2	46	65.6	54.8	48.8	68.5	49.2	43	63.3	49.7	45.7	62.2	47.7	42.7	60.5	25	24.5	35.9
10	6.2	6.5	5.9	55.3	50.3	69.7	49.1	43.8	63.8	53.3	47.3	67.4	47.1	40.8	61.5	47.8	43.8	60.3	45.8	40.8	58.5	25.5	25	36.8
16	7.9	8.2	7.6	52.2	47.2	66.3	44.3	39	58.7	50.2	44.2	64	42.3	36	56.4	43.7	39.7	56.3	41.7	36.7	54.5	25.5	25	37.9
20	8.9	9.3	8.5	50.8	45.8	64.8	41.9	36.5	56.3	48.8	42.8	62.4	39.9	33.5	53.9	41.8	37.8	54.4	39.8	34.8	52.5	25.5	25	37.6
25	10	10.4	9.5	49.3	44.3	63.3	39.3	33.9	53.8	47.3	41.3	61	37.3	30.9	51.5	39.8	35.8	52.5	37.8	32.8	50.6	24.8	24.3	37.9
31.25	11.3	11.7	10.7	47.9	42.9	61.8	36.6	31.2	51.2	45.9	39.9	59.5	34.6	28.2	48.9	37.9	33.9	50.5	35.9	30.9	48.6	24.1	23.6	37.7
62.5	16.3	17	15.3	43.4	38.4	57.3	27.1	21.4	42	41.4	35.4	55.1	25.1	18.4	39.7	31.9	27.9	44.4	29.9	24.9	42.5	22	21.5	33.5
100	21	22	19.6	40.3	35.3	54.5	19.3	13.3	34.9	38.3	32.3	52.1	17.3	10.3	32.5	27.8	23.8	40.4	25.8	20.8	38.4	20.6	20.1	31
155	26.8		24.8	37.4		51.2	10.7		26.4	35.4		49	8.7		24.1	24		36.7	22		34.7	19.3		28.9
200	30.9		28.4	35.8		48.9	4.9		20.4	33.8		46.6	2.9		18.2	21.8		34.2	19.8		32.2	18.5		28.6
250	35		32	34.3		47.4	-0.7		15.4	32.3		45.1	-2.7		13.1	19.8		32	17.8		30	17.8		28
300	38.9		35.3	33.1		45.8	-5.8		10.5	31.1		43.5	-7.8		8.2	18.3		30.1	16.3		28.2	17.3		28.1
350	42.6		38.4	32.1		44.1	-10.4		5.7	30.1		41.9	-12.4		3.5	16.9		28.4	14.9		26.5	16.8		27.4

## Material Specifications

<b>Conductor Material</b>	Bare copper
<b>Insulation Material</b>	Polyolefin
<b>Jacket Material</b>	PVC

## Mechanical Specifications

<b>Pulling Tension, maximum</b>	11.34 kg   25 lb
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## Environmental Specifications

<b>Installation temperature</b>	0 °C to +60 °C (+32 °F to +140 °F)
<b>Operating Temperature</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Environmental Space</b>	Non-plenum
<b>Flame Test Method</b>	CMR   NEC Article 800   UL 1666   UL 444

Packaging and Weights

**Cable weight** 27.977 kg/km | 18.8 lb/kft  
**Packaging Type** Reel

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

