

# CR-1070-NHR



CR-1070, Cell Reach® Standard Coaxial Cable, smoothwall copper, 7/8 in, black non-halogenated, fire retardant, riser rated polyolefin jacket

## **OBSOLETE**

### **Replaced By**

FXL-780-NHR

FXL-780, HELIAX® Flexible Coaxial Cable, smoothwall aluminum, 7/8 in, black non-halogenated, fire retardant, low smoke, riser rated polyolefin jacket

## Product Classification

<b>Brand</b>	Cell Reach®
<b>Product Series</b>	CR
<b>Product Type</b>	Coaxial wireless cable

## Construction Materials

<b>Jacket Material</b>	Non-halogenated, fire retardant polyolefin
<b>Outer Conductor Material</b>	Smoothwall copper
<b>Dielectric Material</b>	Foam PE
<b>Flexibility</b>	Standard
<b>Inner Conductor Material</b>	Copper
<b>Jacket Color</b>	Black

## Dimensions

<b>Nominal Size</b>	7/8 in
<b>Cable Weight</b>	0.36 lb/ft   0.54 kg/m
<b>Diameter Over Dielectric</b>	26.670 mm   1.050 in
<b>Diameter Over Jacket</b>	29.718 mm   1.170 in
<b>Inner Conductor OD</b>	0.3990 in   10.1300 mm
<b>Outer Conductor OD</b>	1.070 in   27.200 mm

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm ±1 ohm
<b>Capacitance</b>	23.0 pF/ft   75.5 pF/m
<b>dc Resistance, Inner Conductor</b>	0.630 ohms/kft   2.070 ohms/km
<b>dc Resistance, Outer Conductor</b>	0.360 ohms/kft   1.180 ohms/km
<b>dc Test Voltage</b>	6000 V
<b>Inductance</b>	0.190 µH/m   0.058 µH/ft
<b>Jacket Spark Test Voltage (rms)</b>	8000 V
<b>Operating Frequency Band</b>	100 – 5000 MHz
<b>Peak Power</b>	108.0 kW

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**Velocity** 88 %

## Environmental Specifications

**Installation Temperature** -40 °C to +60 °C (-40 °F to +140 °F)  
**Operating Temperature** -50 °C to +70 °C (-58 °F to +158 °F)  
**Storage Temperature** -55 °C to +80 °C (-67 °F to +176 °F)

## Mechanical Specifications

**Bending Moment** 66.4 N-m | 49.0 ft lb  
**Flat Plate Crush Strength** 210.0 lb/in | 3.8 kg/mm  
**Minimum Bend Radius, Single Bend** 203.20 mm | 8.00 in  
**Number of Bends, minimum** 15  
**Tensile Strength** 408 kg | 900 lb

## Note

**Performance Note** Values typical, unless otherwise stated

## Standard Conditions

**Attenuation, Ambient Temperature** 20 °C | 68 °F  
**Average Power, Ambient Temperature** 40 °C | 104 °F  
**Average Power, Inner Conductor Temperature** 100 °C | 212 °F

## Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
30–2500 MHz	1.1	26.40

## Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100 MHz	1.04	0.32
108 MHz	1.08	0.33
150 MHz	1.28	0.39
174 MHz	1.39	0.43
200 MHz	1.51	0.46
300 MHz	1.86	0.57
400 MHz	2.18	0.67
450 MHz	2.33	0.71
500 MHz	2.47	0.75
512 MHz	2.50	0.76
600 MHz	2.74	0.83
700 MHz	2.99	0.91
800 MHz	3.21	0.98
824 MHz	3.27	1.00

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894 MHz	3.42	1.04
960 MHz	3.57	1.09
1000 MHz	3.66	1.11
1700 MHz	4.99	1.52
1800 MHz	5.17	1.58
1900 MHz	5.35	1.63
2000 MHz	5.51	1.68
2300 MHz	6.01	1.83
2400 MHz	6.20	1.89
2500 MHz	6.39	1.95
3000 MHz	7.04	2.15
4000 MHz	8.43	2.57
5000 MHz	9.84	3.00

*\* Values typical, guaranteed within 5%*