# LWC-195 SUPER LOW LOSS COAXIAL CABLE

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|---|---|---|---|
| **Inner Conductor** | Solid Bare Copper | 0.037 inch | 0.94 mm |
| **Dielectric** | Foam Polyethylene | 0.110 inch | 2.79 mm |
| **Outer Conductor** | Aluminium Tape | 0.116 inch | 2.95 mm |
| **Overall Braid** | Tinned Copper | 0.139 inch | 3.53 mm |
| **Jacket** | Black Polyethylene | 0.195 inch | 4.95 mm |

## Mechanical Specifications

| | | |
|---|---|---|
| **Bend Radius** | Installation: 12.7 mm | Repeated: 50.8 mm |
| **Bending Moment** | 0.27 N-m | |
| **Weight** | 30 grams per metre | |
| **Tensile Strength** | 0.27 N-m | |
| **Operating Temperature** | -40°C to +85°C | |

## Electrical Specifications

| | | | |
|---|---|---|---|
| **Cutoff Frequency** | 41 GHz | **Impedance** | 50 Ohms |
| **Velocity of Propogation** | 80 % | **Capacitance** | 83.3 pF/m |
| **Dielectric Constant** | 1.56 | **Inductance** | 0.21 uH/m |
| **Time Delay** | 4.17 nS/m | **Shielding Effectiveness** | > 90 dB |
| **DC Resistance** | Inner Conductor: | 24.9 ohms/km | |
| | Outer Conductor: | 6.1 ohms/km | |
| **Voltage Withstand** | 1000 Volts DC | | |
| **Jacket Spark** | 3000 Volts RMS | | |
| **Peak Power** | 2.5 kW | | |

| **Attenuation** | | **Per 100 feet** | **Per 100 metres** | **Average Power** |
|---|---|---|---|---|
| **Frequency** | **30 MHz** | 2.0 dB | 6.5 dB | 0.89 kW |
| | **50 MHz** | 2.5 dB | 8.4 dB | 0.68 kW |
| | **150 MHz** | 4.4 dB | 14.6 dB | 0.39 kW |
| | **220 MHz** | 5.4 dB | 17.7 dB | 0.32 kW |
| | **450 MHz** | 7.8 dB | 25.5 dB | 0.22 kW |
| | **900 MHz** | 11.1 dB | 36.5 dB | 0.16 kW |
| | **1500 MHz** | 14.5 dB | 47.7 dB | 0.12 kW |
| | **1800 MHz** | 16.0 dB | 52.5 dB | 0.11 kW |
| | **2000 MHz** | 16.9 dB | 55.4 dB | 0.10 kW |
| | **2500 MHz** | 19.0 dB | 62.4 dB | 0.09 kW |
| | **5000 MHz** | 29.9 dB | 98.1 dB | 0.06 kW |