

TECHNICAL SPECIFICATIONS

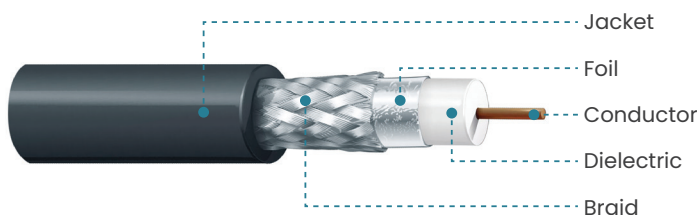
Coaxial Cable

50 Ohms

LRG8-777I-021I

Designed for 50 Ohm wireless communication systems demanding high performance and low loss. Liberty cables are versatile infrastructure solutions for indoor or outdoor environments with UV-resistant jacket. Designed most typically for antenna feeder assemblies demanding:

- High performance
- Low-loss RF cable
- Flexibility



Cable Construction	
Center Conductor	10 AWG Solid Copper Clad Aluminum, Construction: 1 × 108" Nom (1 × 2.74mm)
Dielectric	Foam PE, Dia. over Dia. over Dielectric: 0.285" Nom (7.24 ±0.15mm)
Shield	Foil Tape: Aluminum/Polyester/ Aluminum (Bonded), Braid: Tinned Copper, 90% Coverage Nom
Jacket	PE (Color: Black), Dia. over Jacket: 0.405" ±0.008" (10.29 ±0.20mm), Nominal Jacket Thickness: 0.045" (1.14mm)
Electrical Properties	
Operating Temperature	-40°C ~ +75°C
Characteristic Impedance	50.0 ±3.0 Ohms Nom
Velocity Of Propagation	85.0% Nom
Capacitance	24.0 pF/ft. Nom
DCR: Conductor	1.47 Ohms/1000 ft. Nom
DCR: Shield	1.76 Ohms/1000 ft. Nom
Suggested Working Voltage	300V Max
Cutoff Frequency	16.2 GHz
Physical Characteristics	
Tensile Strength	≥ 2400PS (UL1581 Table 50.136)
Tensile Elongation	≥ 300% (UL1581 Table 50.136)
Cold Bend Test	-20 ±2°C/4H No Crack (UL758 Clause 23)
Crush Strength	600 lbf (2668N or 272kgf) (UL758 Clause 27)
Bend Radius	8D (82.32mm or 3.24")



Jacket Marking			
LIBERTY LRG8-777I RG8/U 50 OHM COAX 10AWG 75C 6GHZ MM/DD/YYYY ****FT/****FT			
Attenuation			
30Mhz	0.82	2000Mhz	6.21
50Mhz	1.00	2500Mhz	7.00
150Mhz	1.60	3000Mhz	7.78
220Mhz	1.91	3500Mhz	8.49
450Mhz	2.77	4500Mhz	9.75
900Mhz	4.01	5800Mhz	11.57
1500Mhz	5.28	6000Mhz	12.06
1800Mhz	5.84		

Liberty wire and cable specifications are subject to change without notice. Contact an account representative for current product specifications. Liberty continuously strives to ensure product specifications are accurate and complete. All physical specifications are nominal.