

Plenum 4.1/9.5 Male Right Angle to N Male Right Angle Low PIM Cable  
Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter



## LCCA31056-M3

### Configuration

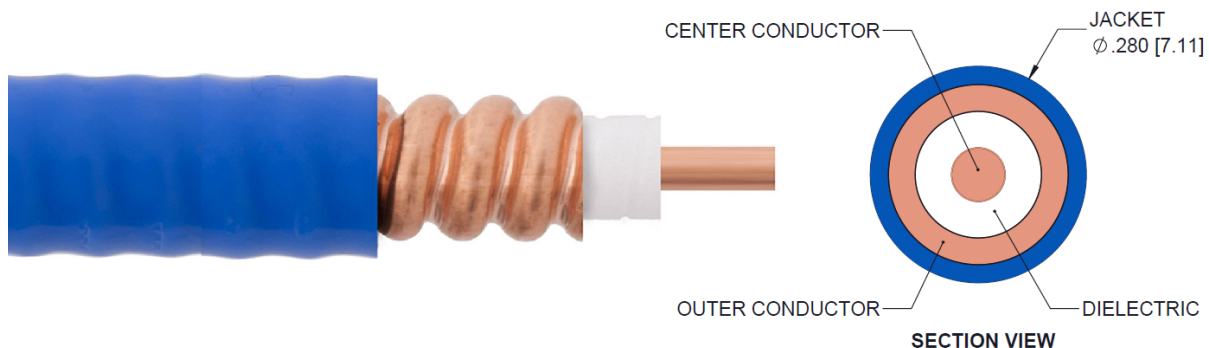
- Connector 1: 4.1/9.5 Mini DIN Male Right Angle
- Connector 2: N Male Right Angle
- Cable Type: SPP-250-LLPL

### Features

- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

### Applications

- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing



### Description

L-com's LCCA31056-M3 is a plenum 4.1/9.5 male right angle to N male right angle low PIM cable using SPP-250-LLPL coax using Times Microwave parts 3 meter and ships same-day. These corrugated RF cable assemblies are extremely durable and ideal for high power applications. Our L-com 4.1/9.5 Mini DIN to N cable assembly has a male to male gender configuration with corrugated SPP-250-LLPL series coax and operates to 3 GHz. The jacketed copper shield provides reliable durability and excellent shielding effectiveness greater than 100dB. This right angle 4.1/9.5 Mini DIN and N cable interface on the SPP-250-LLPL coax allows for easier connections in tight spaces. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

Custom versions of this 4.1/9.5 Mini DIN male to 4.1/9.5 Mini DIN male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA31056-M3 L-com Plenum 4.1/9.5 Male Right Angle to N Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range               | DC      |              | 3       | GHz                   |
| VSWR                          |         |              | 1.38:1  |                       |
| Velocity of Propagation       |         | 76           |         | %                     |
| RF Shielding                  | 100     |              |         | dB                    |
| Passive Intermodulation       |         |              | -160    | dBc                   |
| Capacitance                   |         | 27 [88.58]   |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.067 [0.22] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 3 [9.84]     |         | Ohms/1000ft [Ohms/Km] |

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Max.) | 0.38 | 0.51 | 0.69 | 0.84 | 1.31 | dB    |

#### Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.25 dB for the N male connector and 0.05 for the DIN male connector.

### Mechanical Specifications

#### Cable Assembly

|          |                      |
|----------|----------------------|
| Length   | 118.11 in [300 cm]   |
| Diameter | 0.5 in [12.7 mm]     |
| Weight   | 0.937 lbs [425.02 g] |

#### Cable

|                                      |              |
|--------------------------------------|--------------|
| Cable Type                           | SPP-250-LLPL |
| Impedance                            | 50 Ohms      |
| Inner Conductor Type                 | Solid        |
| Inner Conductor Material and Plating | Copper       |
| Dielectric Type                      | PTFE         |
| Number of Shields                    | 1            |
| Outer Conductor Material and Plating | Copper       |

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|                              |                       |
|------------------------------|-----------------------|
| Jacket Material              | FEP, Blue             |
| Jacket Diameter              | 0.28 in [7.11 mm]     |
| One Time Minimum Bend Radius | 1.25 in [31.75 mm]    |
| Bending Moment               | 0.8 lbs-ft [1.08 N-m] |

### Connectors

| Description                        | Connector 1                       | Connector 2         |
|------------------------------------|-----------------------------------|---------------------|
| Type                               | 4.1/9.5 Mini DIN Male Right Angle | N Male Right Angle  |
| Impedance                          | 50 Ohms                           | 50 Ohms             |
| Mating Cycles                      | 500                               |                     |
| Contact Material and Plating       | Brass, Silver                     | Brass, Silver       |
| Contact Plating Specification      | 200 µin                           | 200 µin             |
| Dielectric Type                    | PTFE                              | PTFE                |
| Body Material and Plating          | Brass, Silver                     | Brass, Tri-Metal    |
| Body Plating Specification         | 200 µin                           | 80 µin              |
| Coupling Nut Material and Plating  | Brass, Nickel                     | Brass, Tri-Metal    |
| Coupling Nut Plating Specification | 200 µin                           | 80 µin              |
| Torque                             | 88.51 in-lbs 10 Nm                | 15.05 in-lbs 1.7 Nm |

### Environmental Specifications

#### Temperature

Operating Range -40 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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**LCCA31056-M3**

**How to Order**

Part Number Configuration:

**LCCA31056 - xx uu**



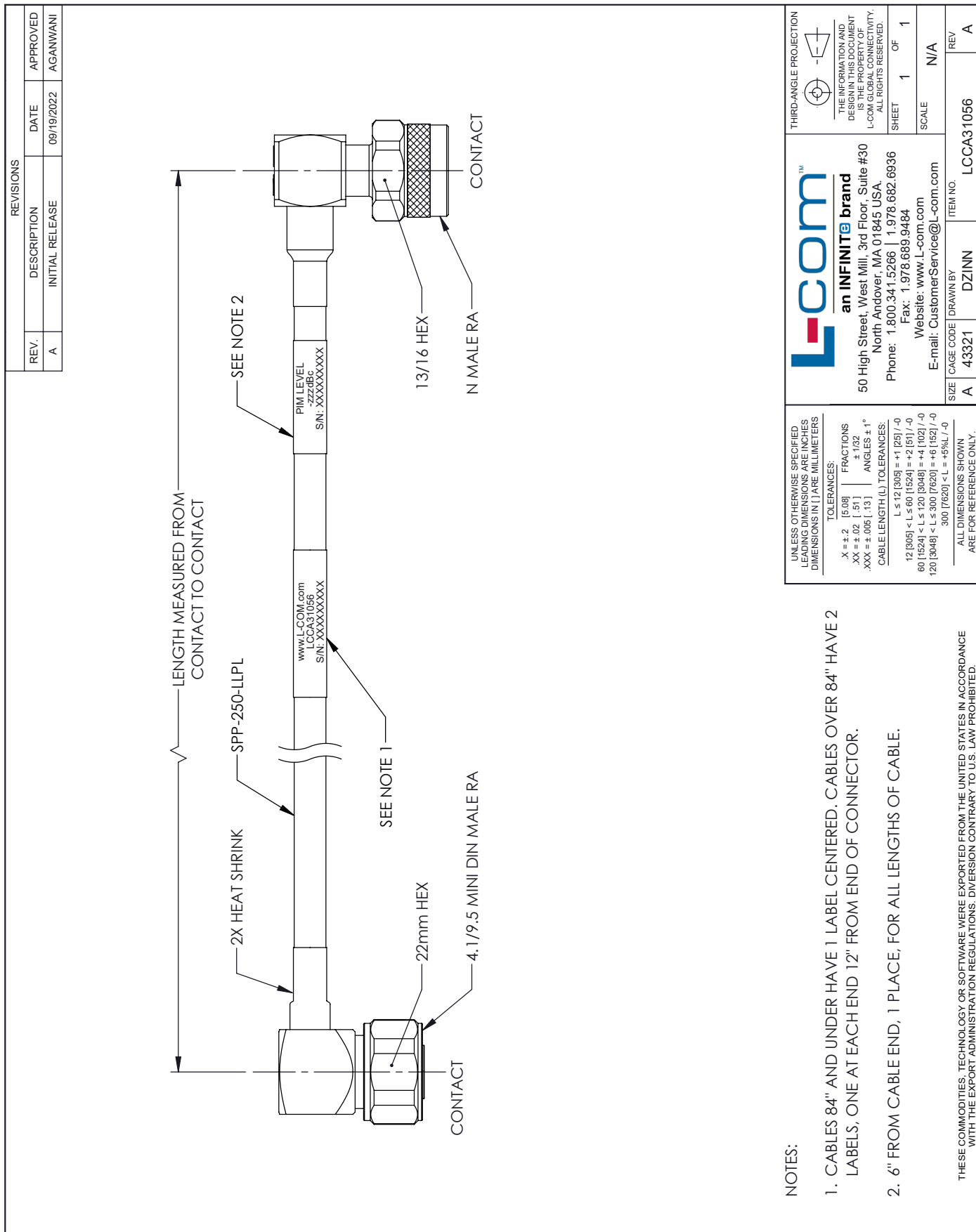
Example: LCCA31056-12 = 12 inches long cable  
LCCA31056-100cm = 100 cm long cable

Plenum 4.1/9.5 Male Right Angle to N Male Right Angle Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.ontained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

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L-com CAD Drawing



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**an INFINITE brand**  
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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
 SCALE N/A

|      |           |          |           |
|------|-----------|----------|-----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO.  |
| A    | 43321     | DZINN    | LCCA31056 |

REV A

NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12" FROM END OF CONNECTOR.
- 6" FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.

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