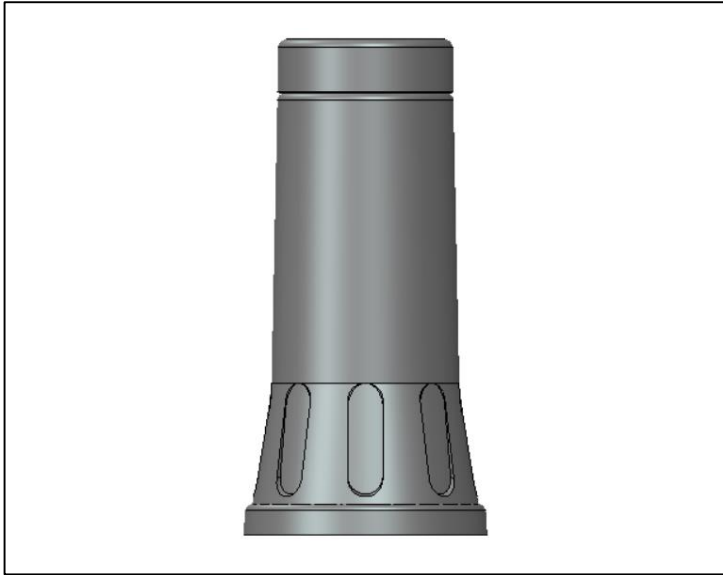


Description: LPT 450-512MHz Antenna

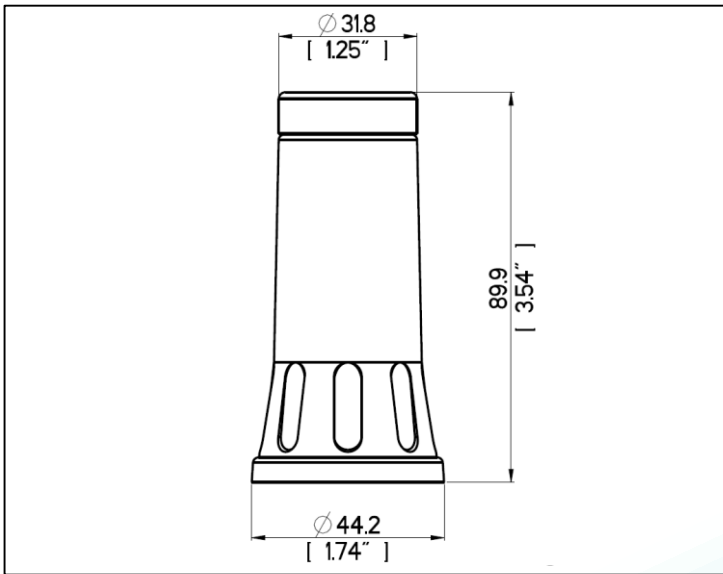
Series: LPT Antenna

PART NUMBER: LPT450/512NMO



Features:

- Wide Bandwidth
  - Support wider BW modern radios
- Excellent Gain
- Excellent VSWR
  - 2:1 at 450-512Mhz
  - 2.3:1 at 450-520Mhz
- Low Profile (3.5 “ tall)
- NMO Mount



Applications:

- Public Safety
  - Police
  - Fire
  - Ambulance
- Most Demanding Applications:
  - High Gain (4.6 dBi peak)
- Dealers seeking fewer stocking SKUs.

All dimensions are in mm / inches

Issue: 1627

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For more information:

Pulse Worldwide Headquarters  
12220 World Trade Drive  
San Diego, CA 92128  
USA  
Tel:1-858-674-8100

Pulse/Larsen Antennas  
3611 NE 112<sup>th</sup> Ave  
Vancouver, WA 98682  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



**Description: LPT 450-512MHz Antenna****Series: LPT Antenna****PART NUMBER: LPT450/512NMO****ELECTRICAL SPECIFICATIONS**

|                    |   |
|--------------------|---|
| Antenna type       | Monopole, Measured on Ø1.3M (Ø51”) ground plane |
| Frequency          | 450-512 MHz                                     |
| Nominal Impedance  | 50 Ω  |
| VSWR               | 2:1   |
| Gain               | 4.6 dBi   |
| HPBW / H-Plane     | 360°  |
| HPBW / E-Plane     | 40°   |
| Polarization       | Vertical  |
| Power withstanding | 100 W   |
| E.S.D. Protection  | DC Grounded                                     |
| Connector type     | NMO   |

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Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

### MECHANICAL SPECIFICATIONS

|                    |                    |
|--------------------|--------------------|
| Plastic radome     | MACROBLEND         |
| Color              | BLACK              |
| Ingress Protection | IP67               |
| Weight             | 105 g              |
| Overall Length     | 89.9 mm            |
| Fixing system      | NMO Mount Required |

### ENVIRONMENTAL SPECIFICATIONS

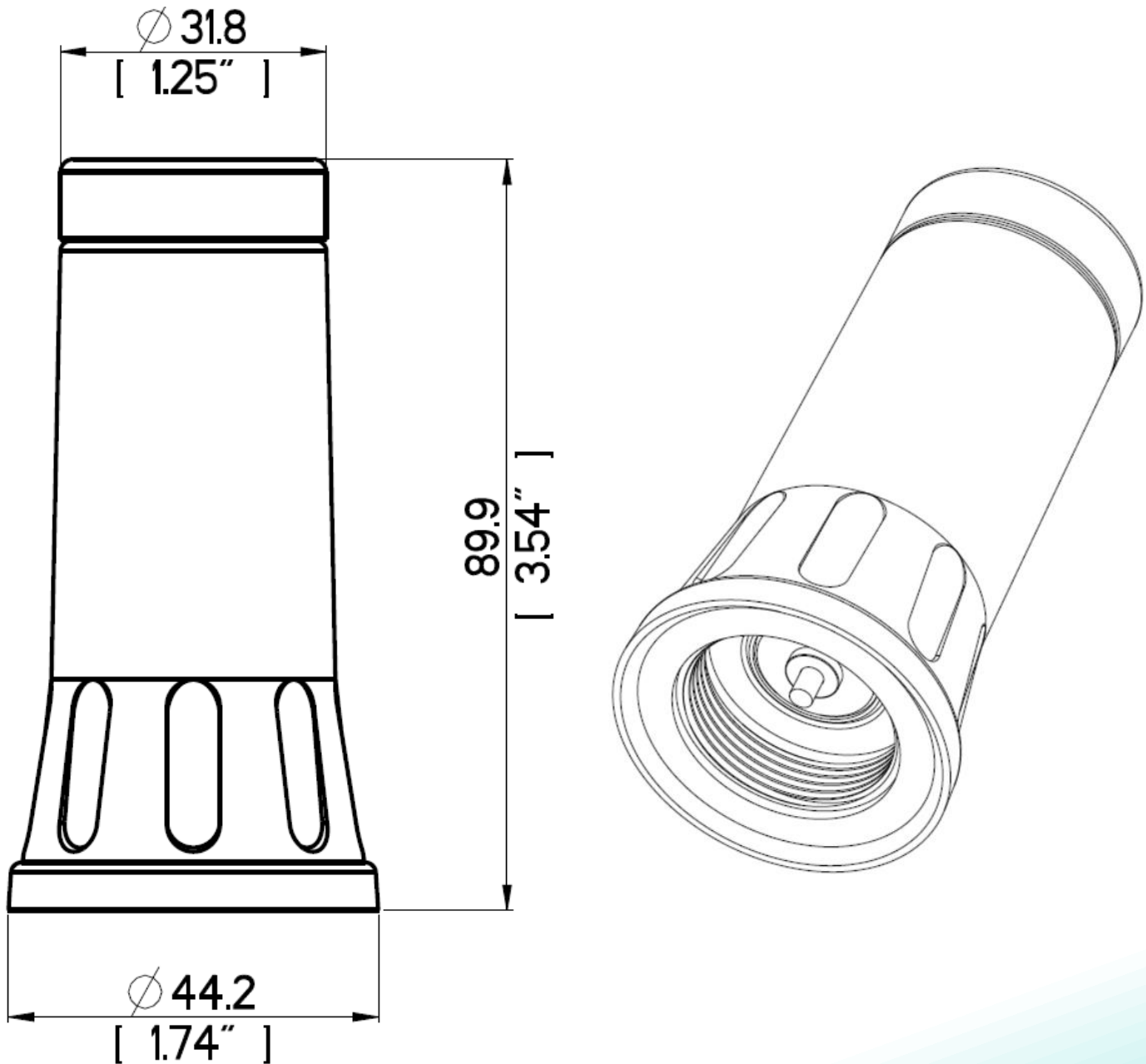
|                       |              |
|-----------------------|--------------|
| Operating temperature | -40 ~ +85° C |
|-----------------------|--------------|

Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

MECHANICAL DRAWING



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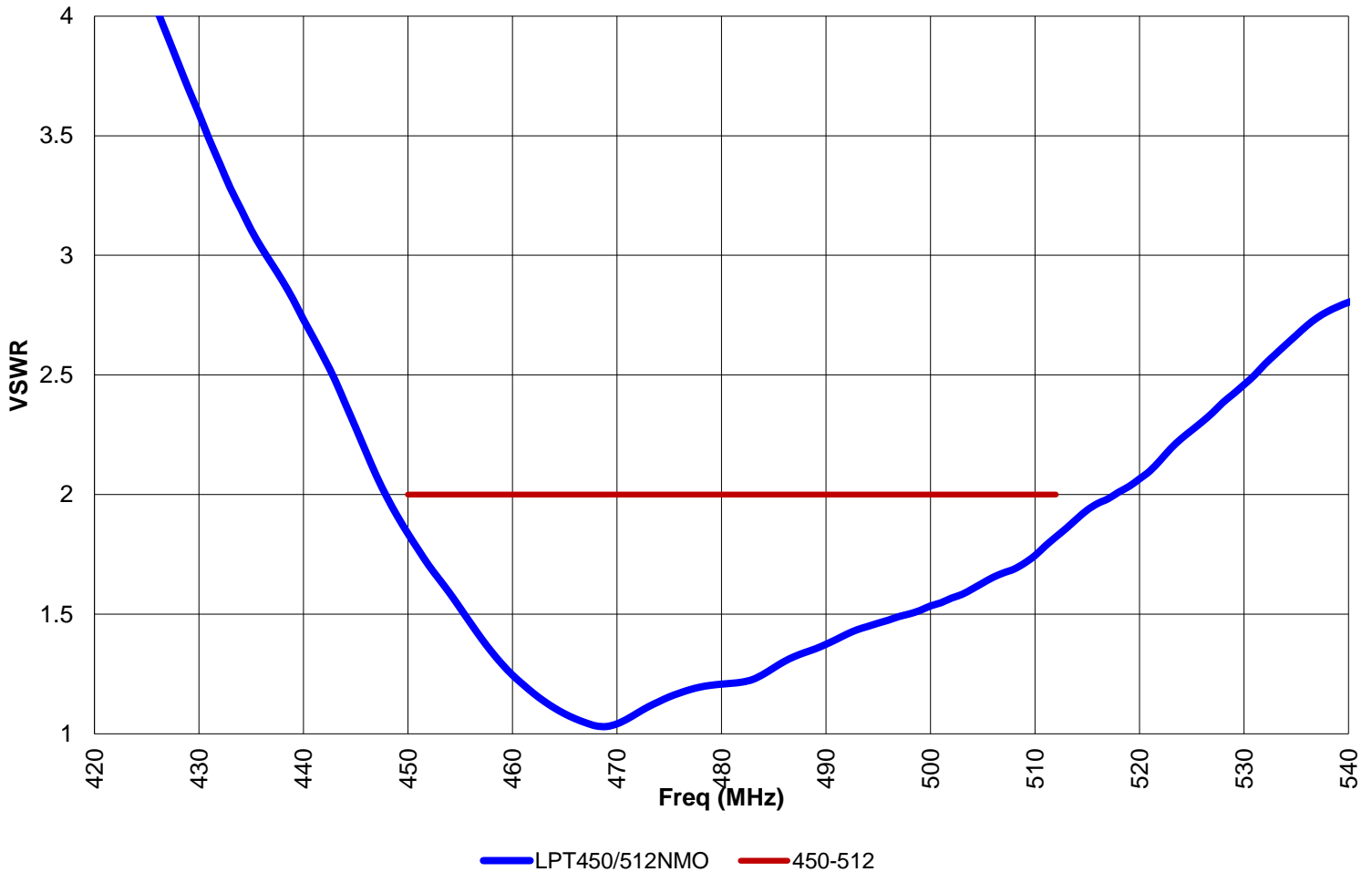
Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

CHARTS

S11 Parameter Ø51" GROUND PLANE, CAL AT ANTENNA



Issue: 1627

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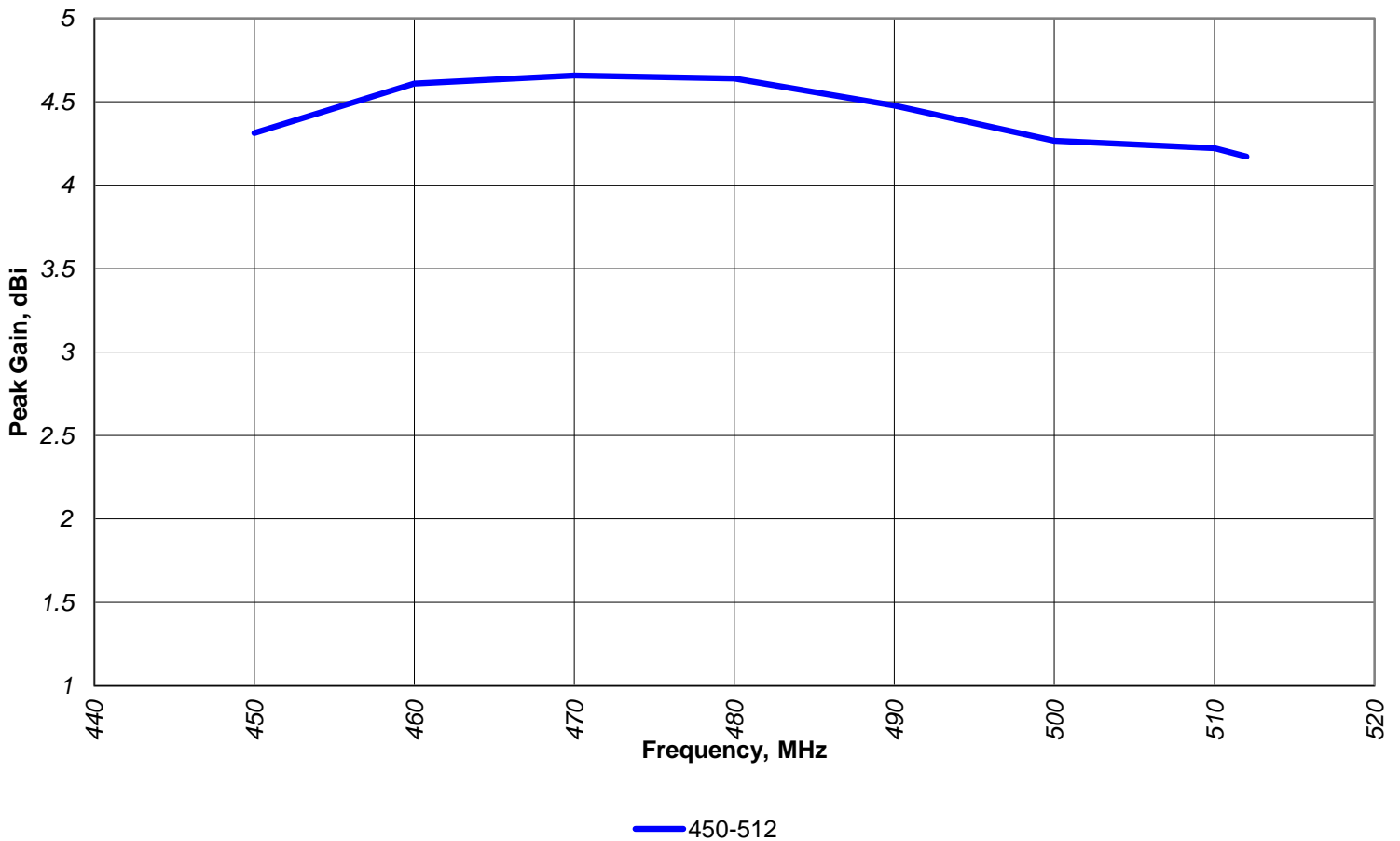
Series: LPT Antenna

PART NUMBER: LPT450/512NMO

CHARTS

Peak Gain vs Frequency  
LP450/512NMO

Measured at Pulse, USA - July 11, 2016



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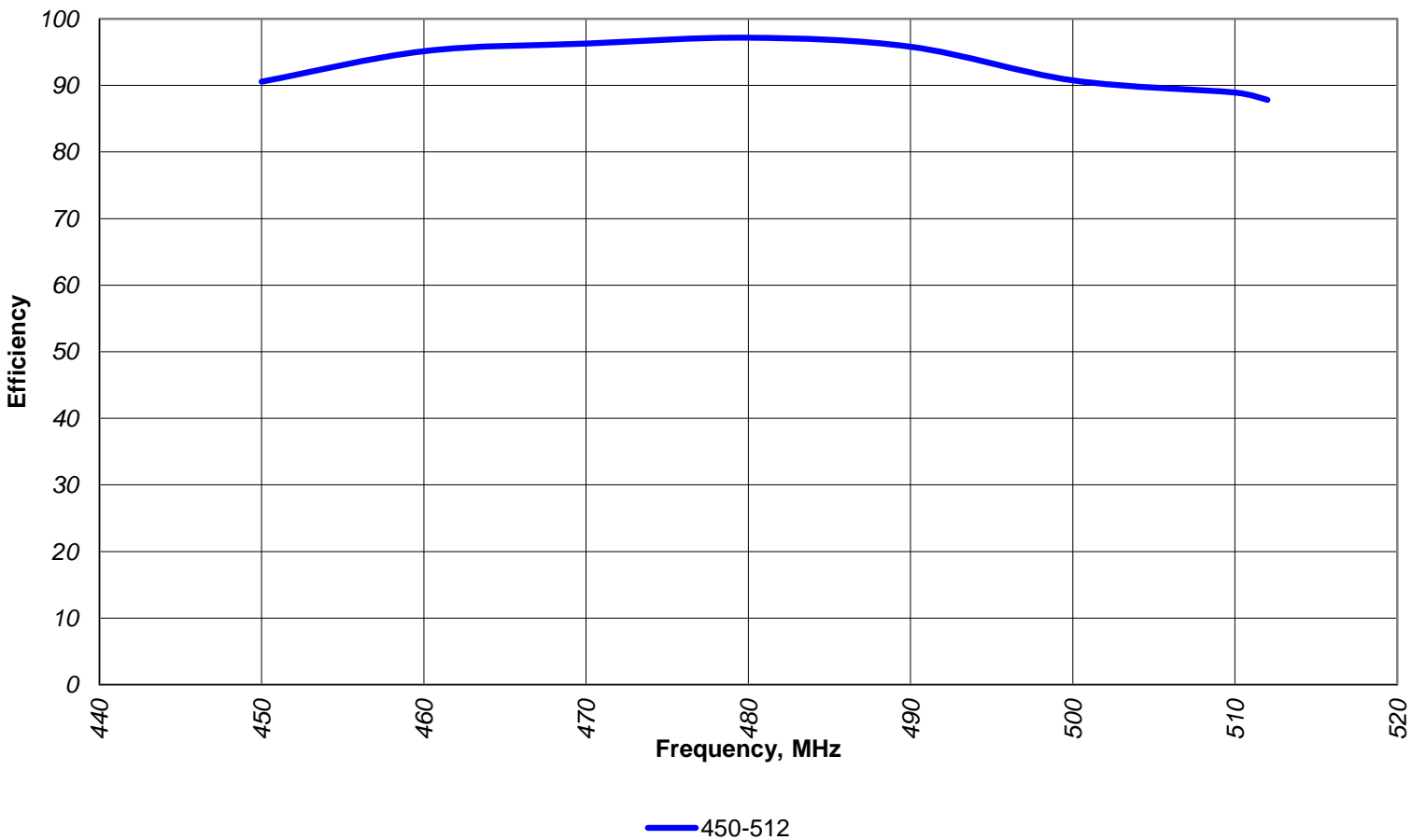
Series: LPT Antenna

PART NUMBER: LPT450/512NMO

CHARTS

Efficiency vs Frequency  
LPT450/512NMO

Measured at Pulse, USA - July 11, 2016



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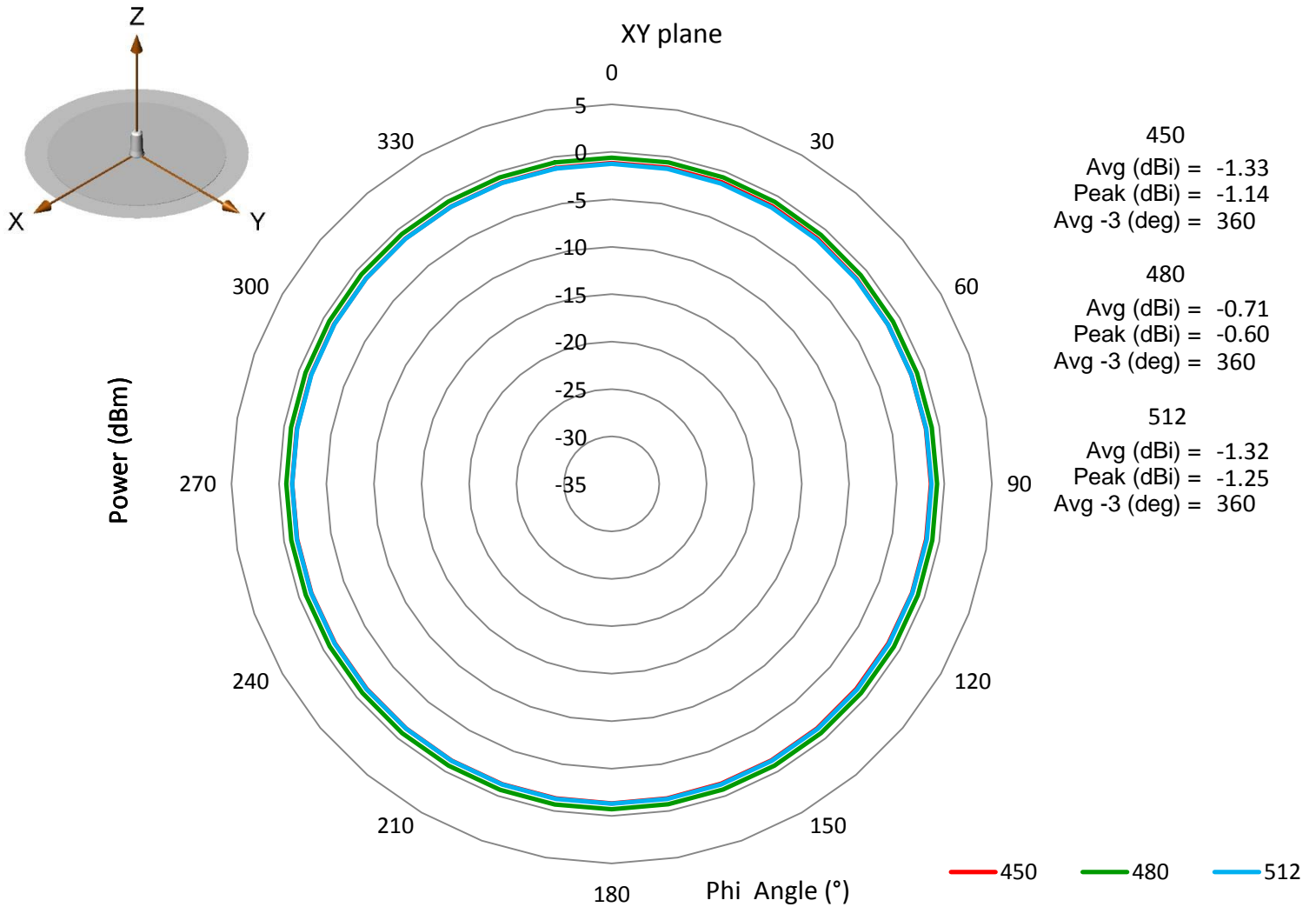
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Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

CHARTS



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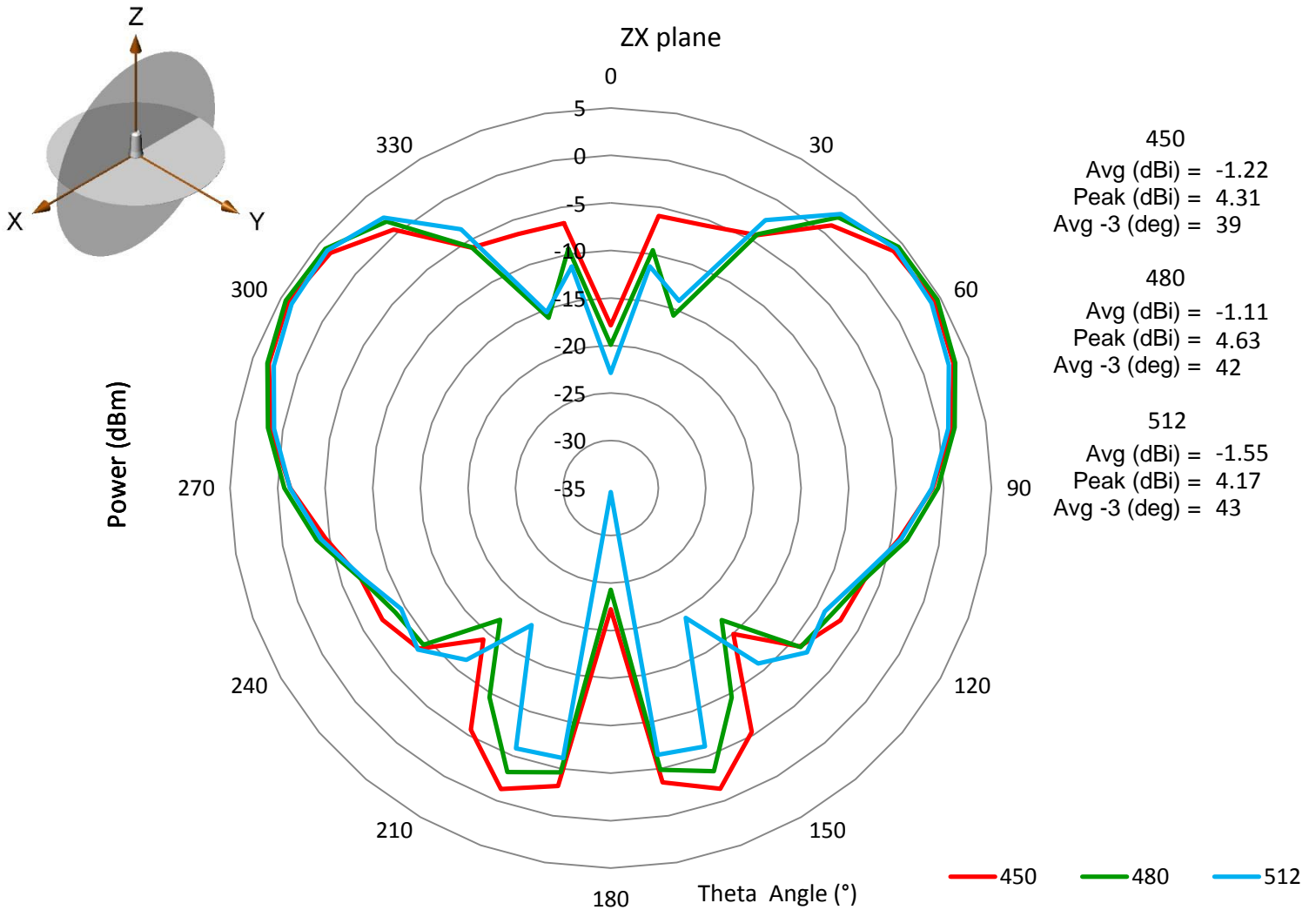


Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

CHARTS



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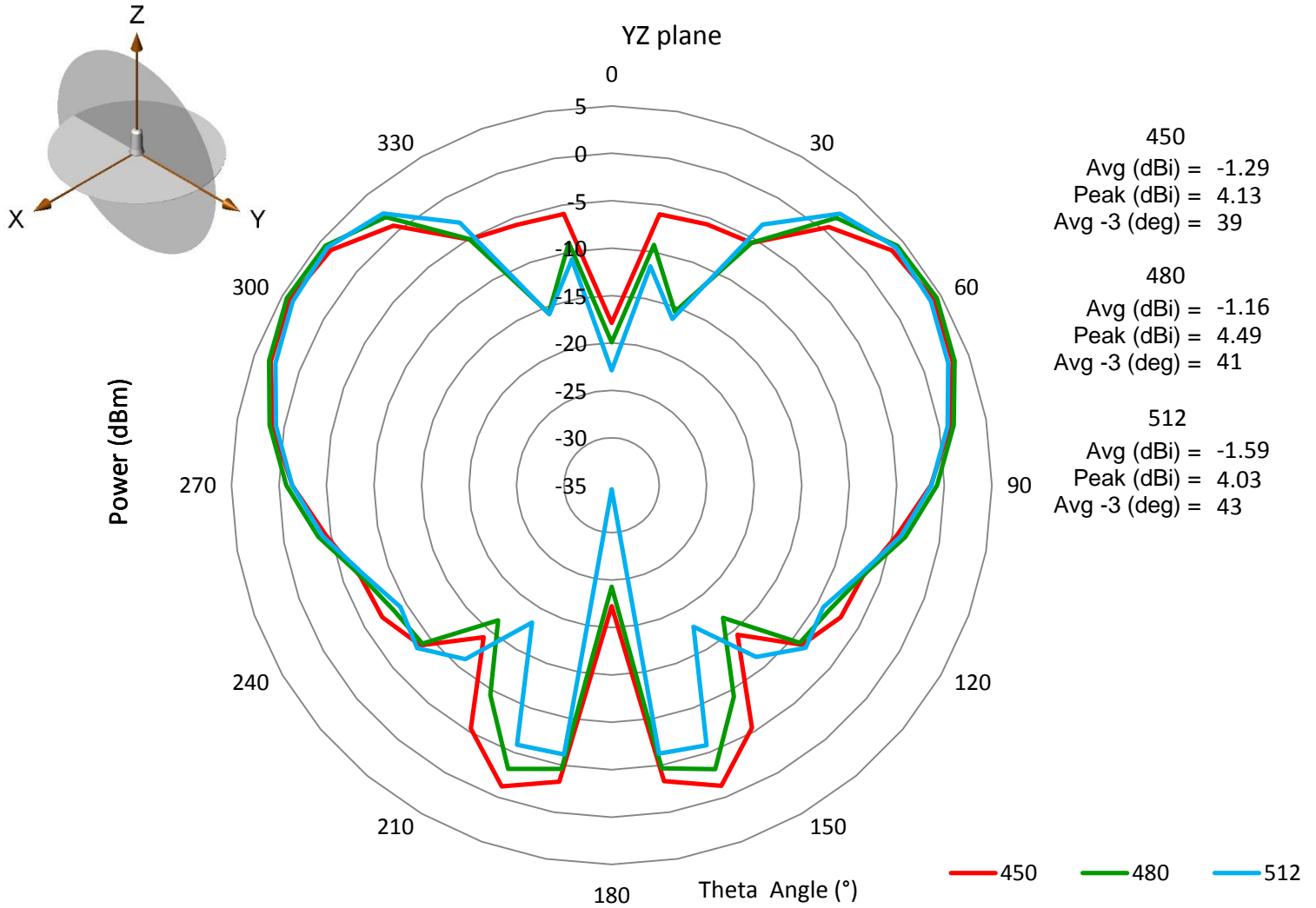
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Series: LPT Antenna

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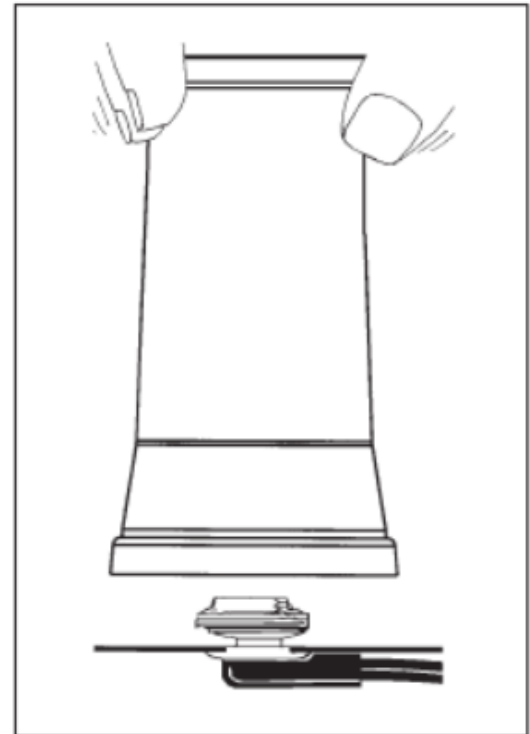
ASSEMBLY

ANTENNA MOUNTING

MINIMUM GROUND PLANE

|                         |              |
|-------------------------|--------------|
| 406 - 512 MHz           | 24" Diameter |
| 806 - 960 MHz and above | 16" Diameter |

1. Place SuperSeal gasket on the base of the antenna. SuperSeal gasket must be used when mounting Shadow antennas.
2. Carefully line up the threads of the antenna with the threads of the base and turn slowly.
3. Stop when the antenna feels snug.



Description: LPT 450-512MHz Antenna

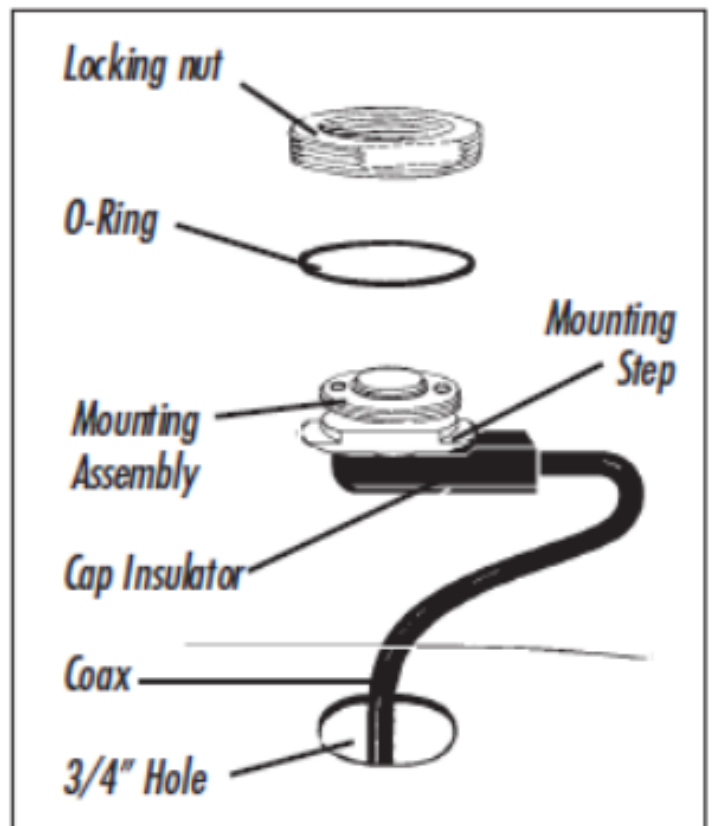
Series: LPT Antenna

PART NUMBER: LPT450/512NMO

## ASSEMBLY

### MOUNTING KIT INSTALLATION

1. Use hole saw to drill 3/4" (19 mm) hole in vehicle.
2. Metal to metal contact between the vehicle and mount is essential for best performance. Remove any burrs on the under side of the hole.
3. Screw the locking nut onto the mounting assembly and twist one and a half times. Feed the coax and serrated part of the mount (mounting assembly) through the hole.



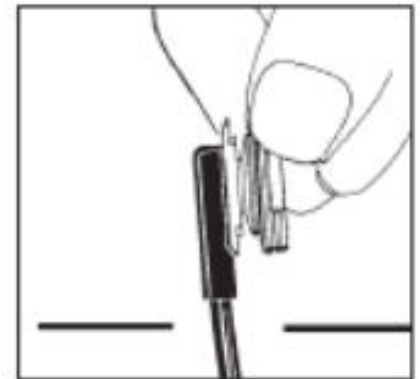
Description: LPT 450-512MHz Antenna

Series: LPT Antenna

PART NUMBER: LPT450/512NMO

## ASSEMBLY

4. Pull up on the locking nut and slip the mount step into proper alignment in the hole. Continue to pull upwards and tighten the locking nut until finger tight. Be sure the "O" ring on the underside of the locking nut is properly seated.



5. Use a spanner wrench or long nose pliers to hold the mounting assembly. Then use an adjustable or open end wrench on the locking nut and tighten firmly (60 in.-lbs. max).

