

1.8 dBi, UHF Rubber Duck Antenna, 400-470 MHz,  
MOTO Connector, Vertical Polarization



**LCANRBD1002**

**Features**

- 400 MHz to 470 MHz, 1.8 dBi Gain
- MOTO connector
- Heliflex whip antenna
- Plug and play
- 10W power handling
- VSWR < 3:1
- Vertical polarization

**Applications**

- PtP or PtMP applications
- Trunking for two-way radio comms
- UHF applications
- Public Safety / Emergency services
- Tetra and P-25 applications exclusively supported
- Land and Private mobile radio (LMR) (PMR)
- Fixed and mobile services

**Description**

The LCANRBD1002 rubber duck antenna from L-com is part of our extensive line of directional antennas that we offer with global same-day shipping from our facilities certified to ISO 9001:2015. L-com's high-quality single-band rubber duck antenna has a 1.8 dBi nominal gain and can be procured with no order limit. This rubber duck single-band 1.8 dBi antenna has a frequency range of 400 MHz to 470 MHz.

We lead the industry in supplying products like this 400 MHz to 470 MHz single-band antenna, along with other RF, microwave, and millimeter wave components. This rubber duck antenna from L-com uses a MOTO connector and has a maximum input power of 10 watts. Use our single-band rubber duck antenna with vertical polarization for fixed and mobile services, public safety or emergency services, trunking for two-way radio communications, land and private mobile radio (LMR) (PMR), PtP or PtMP, tetra, and P-25 applications.

L-com's rubber duck antenna with 1.8 dBi gain has a MOTO-type connector. This MOTO-series connectorized omnidirectional antenna is 0.5 inches tall, 0.5 inches wide, and 3.54 inches long. The LCANRBD1002 UHF antenna has 360-degrees of horizontal and 90-degrees of vertical HPBW. Our high-quality antenna has a maximum input VSWR (voltage standing wave ratio) of 3:1.

L-com's 50 Ohms impedance antenna can operate at temperatures ranging from -40 °C to 60 °C. This single-band rubber duck antenna is offered with expert technical support, PDF datasheets, and CAD drawings with dimensions and specifications. Order your 1.8 dBi UHF rubber duck antennas now and enjoy our international or domestic same-day shipping.

**Configuration**

Design	Rubber Duck
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	MOTO

**Electrical Specifications**

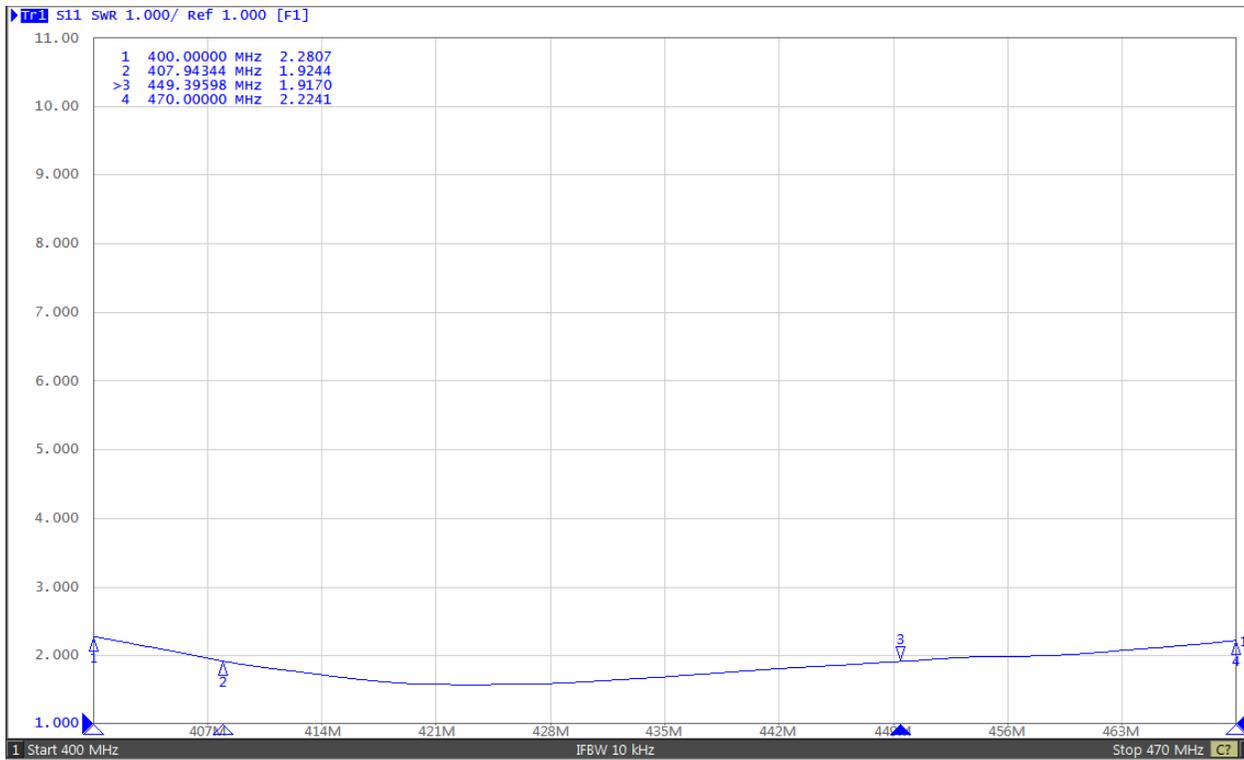
Description	Minimum	Typical	Maximum	Units
Frequency Range	400		470	MHz
Input VSWR			3:1	
Impedance		50		Ohms
Gain		1.8		dBi
Horizontal (Azimuth) HPBW		360		Omnidirectional Degrees
Vertical (Elevation) HPBW		90		Degrees
Input Power			10	Watts

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## LCANRBD1002

VSWR plot:



### Mechanical Specifications

Radome Material	TPEE
<b>Size</b>	
Length	3.54 in [89.92 mm]
Width	0.5 in [12.7 mm]
Height	0.5 in [12.7 mm]
Weight	0.022 lbs [9.98 g]

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-40 to +60 deg C

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## LCANRBD1002



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

### Plotted and Other Data

Notes:

### Typical Radiation Pattern

### Appendix

**Electrical Downtilt:** Angle in the antenna's elevation pattern in which the maximum gain occurs.

**Gain:** Antenna's average gain.

**Front to Back Ratio @ 180°±30°:** Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

**Cross-polarization Ratio (dB):** Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

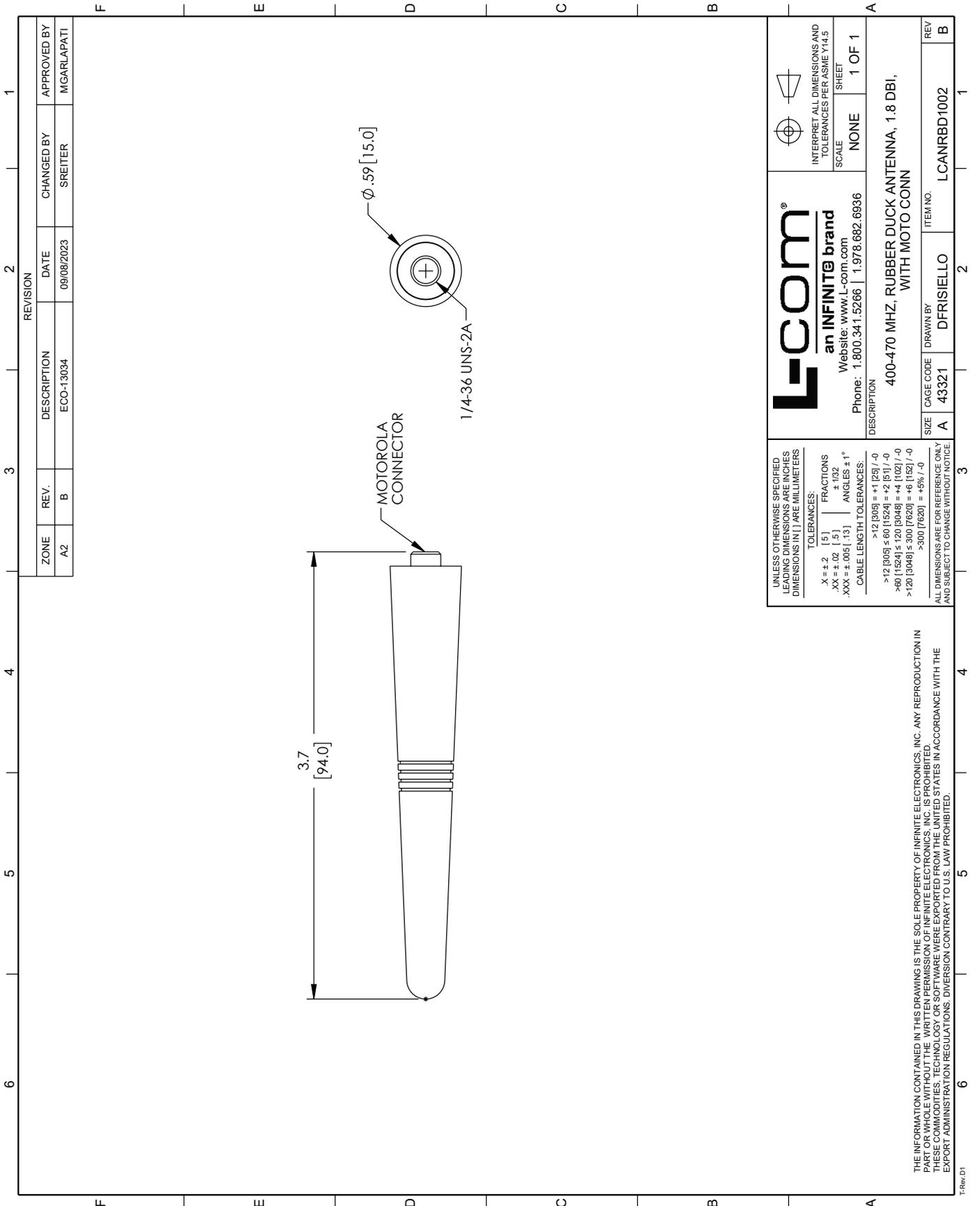
1.8 dBi, UHF Rubber Duck Antenna, 400-470 MHz, MOTO Connector, Vertical Polarization from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/1.8-dbi-uhf-rubber-duck-antenna-400-470-mhz-moto-connector-vertical-polarization-lcanrbd1002-p.aspx>

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# LCANRBD1002 CAD Drawing

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ZONE		REVISION		APPROVED BY	
A2	B	DESCRIPTION	DATE	CHANGED BY	MGARLAPATI
		ECO-13034	09/08/2023	SREITER	

<p>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [5]   FRACTIONS ± 1/32                  .XX = ±.02 [1.5]   ANGLES ± 1°                  .XXX = ±.005 [1.3]   CABLE LENGTH TOLERANCES:                  &gt;12 [305] = ±.1 [25] / -0                  &gt;.60 [1524] ≤ 120 [3048] = ±.02 [51] / -0                  &gt;120 [3048] ≤ 300 [7620] = ±.04 [102] / -0                  &gt;300 [7620] = ±.08 [20] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE NONE</p> <p>SHEET 1 OF 1</p>
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