

# EPLRS Wearable Antenna



## Features and Benefits

- 420 – 450 MHz Wearable Antenna
- Waterproof cover
- Flexible material
- Unobtrusive
- Small and lightweight
- Can be integrated with
  - Helmet
  - Body Armor Vest Carrier

Pharad's *octane*<sup>®</sup> wearable EPLRS antennas are the ideal antenna solution for soldiers engaged in urban and combat missions. This body wearable antenna is fabricated using a state-of-the-art, thin flexible material that conforms to the exterior of body armor or tactical vests. The lightweight, unobtrusive design and flush mounting provide the most combat friendly alternative to stub or whip antennas. EPLRS link performance is maintained without hindering the soldier's vision or movement. A helmet mounted antenna and a torso worn spatially diverse antenna system that further enhances link performance are available. The antenna system comes standard with an SMA connector, or optional TNC connector, allowing these antennas to easily connect to standard EPLRS radios. The unsurpassed range and coverage performance of the *octane*<sup>®</sup> wearable antenna makes it the preferred choice for EPLRS applications.

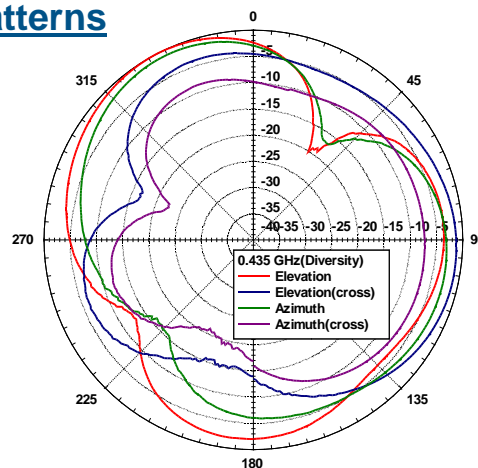
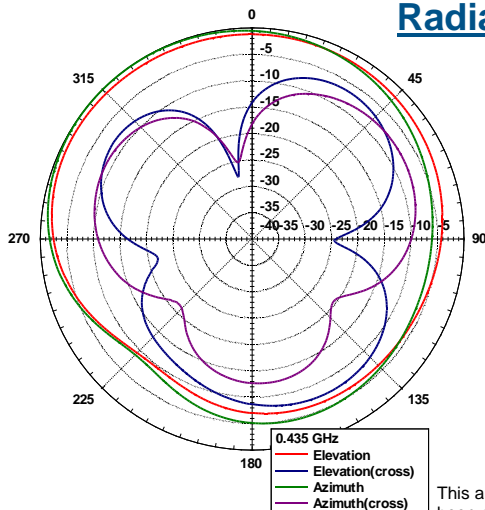
## Characteristics

Model Number	BW-420-450	BW-420-450-D
Frequency	420 - 450 MHz	
Gain <sup>†</sup>	-3.8 dBi	-1.3 dBi
VSWR <sup>†</sup>	< 2.5:1	< 2.5:1
Nominal Impedance	50 ohms	
Pattern	Near omni-directional	
Polarization	Vertical	Dual
Radiator Size (L x W x D)	4.0" x 3.5" x 0.4"	
Cable Length	16.5"	17.5"
Radiator Weight	0.9 oz	2.8 oz
Standard Connector Type	SMA	



<sup>†</sup>Measurements done on phantom as surrogate body.

## Radiation Patterns



This antenna is intended for occupational use only to satisfy FCC RF energy exposure requirements. This antenna has been designed and tested to comply with the IEEE (FCC) exposure limits for occupational/controlled RF exposure environments at usage factors of up to 50% talk-50% listen for radios transmitting up to 5 W of power at 435 MHz.