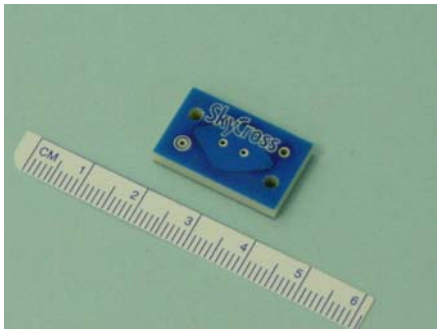
5.1—5.9 GHz Connectorized WLAN Loop Antenna for 802.11a, HiperLAN2, CSMA and HiSWANa Wireless Applications



Features

- *Very Efficient MLA Technology*
- *Upper and lower U-NII Band*
- *Hemispherical Pattern*
- *Peak Gain +2.2 dBi*
- *Low Profile for Embedded Applications*

This compact Wireless LAN antenna covers the entire 5.1 - 5.9 GHz frequency band, encompassing all worldwide frequency allocations for high data rate WLANs, including IEEE 802.11a, ETSI HiperLAN2, and MMAC CSMA and HiSWANa standards. Using SkyCross' patented MLA technology, this antenna provides superior efficiency and gain directivity in a small package. This antenna is the best performance solution for developers implementing high data rate WLANs in any or all of the upper frequency bands.

Electrical Specifications

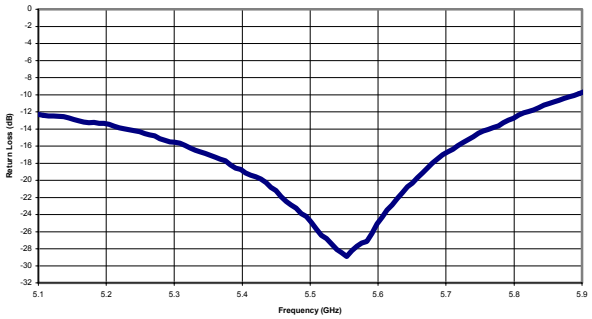
Frequency Range	**5100 — 5900 MHz**
Gain	**1.5 dBi minimum over entire bandwidth**
VSWR	**< 2.3:1 maximum over entire bandwidth**
Polarization	**Linear**
Elevation Pattern	**Uni-directional**
Feed Impedance	**50 Ohms Unbalanced**

Mechanical Specifications

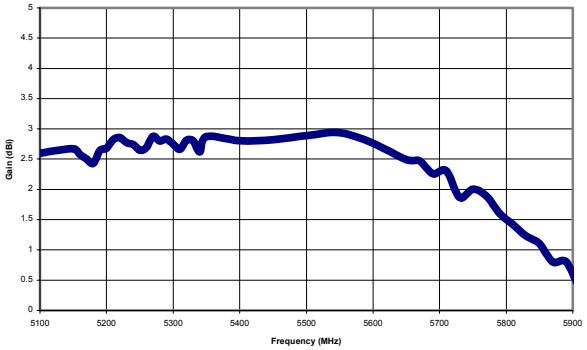
Size	**0.88 x 0.53 x 0.155 inches** **22.4 x 13.5 x 3.9 mm**
Weight	**2.4 g***

*weight does not include ground plane or connector

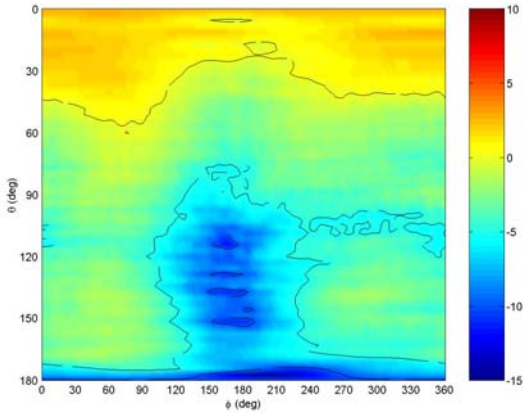
Typical Return Loss



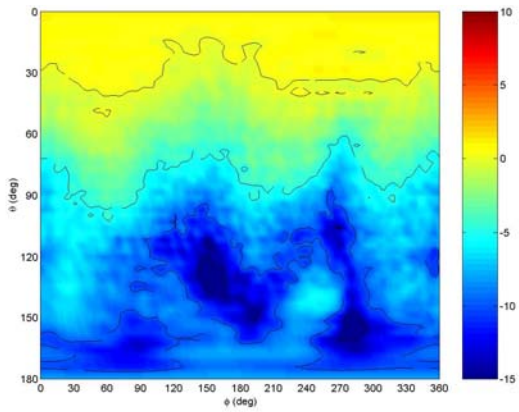
Swept Peak Gain



Spherical Gain Contour Map

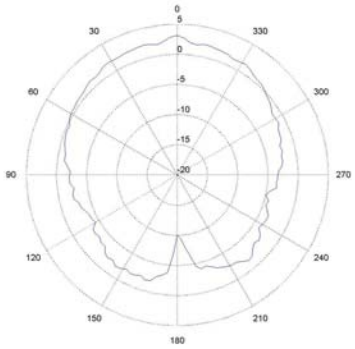


5250 MHz

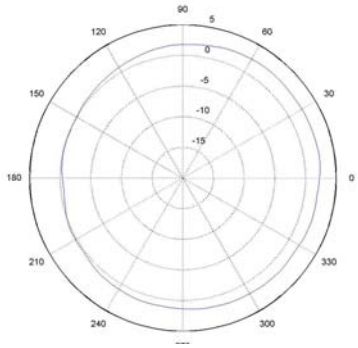


5800 MHz

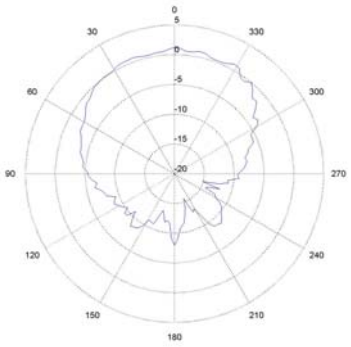
Typical Gain Pattern



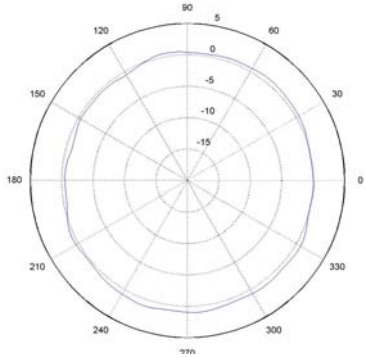
Gain at 5250 MHz
Phi = 90 degrees



Gain at 5250 MHz
Theta = 30 degrees
(60 degrees above horizon)



Gain at 5800 MHz
Phi = 90 degrees



Gain at 5800 MHz
Theta = 30 degrees
(60 degrees above horizon)