

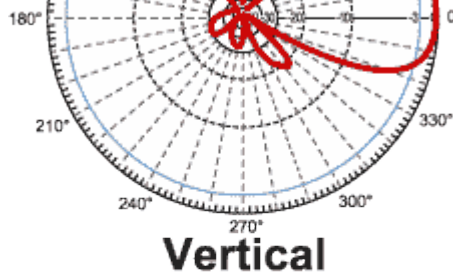
HyperGain[®] 2.4 GHz 14 dBi Wireless LAN Flat Patch Range Extender Antenna - RE14P-RSP.

Electrical Specifications

FREQUENCY	2400-2500 MHz
GAIN	14 dBi
HORIZONTAL BEAM WIDTH	30 DEGREES
VERTICAL BEAM WIDTH	30 DEGREES
IMPEDANCE	50 OHM
MAX. INPUT POWER	25 WATTS
VSWR	< 1.5:1 AVG.
LIGHTNING PROTECTION	DC SHORT

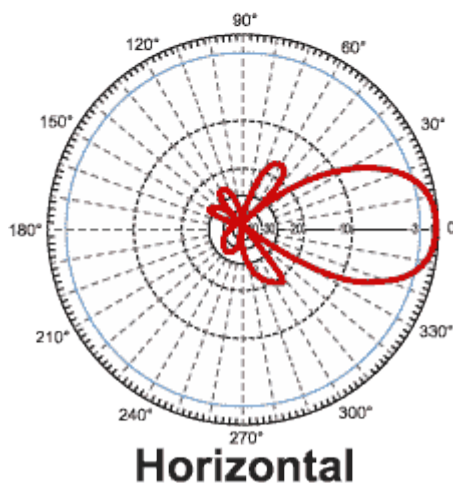
The antenna pattern is provided by vendor operation when antenna boresight is pointing horizontally.

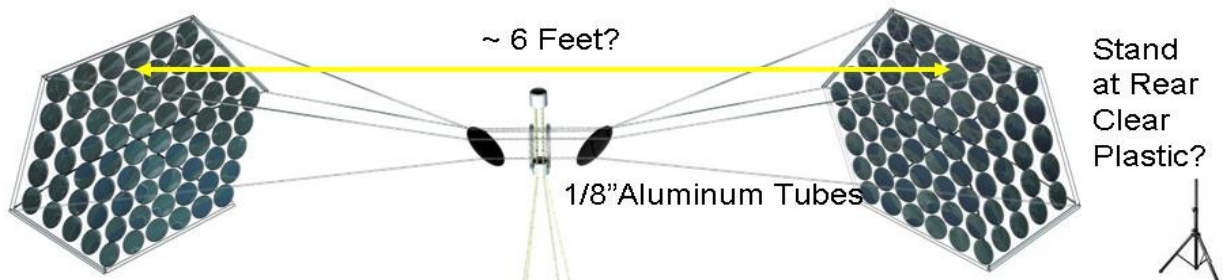
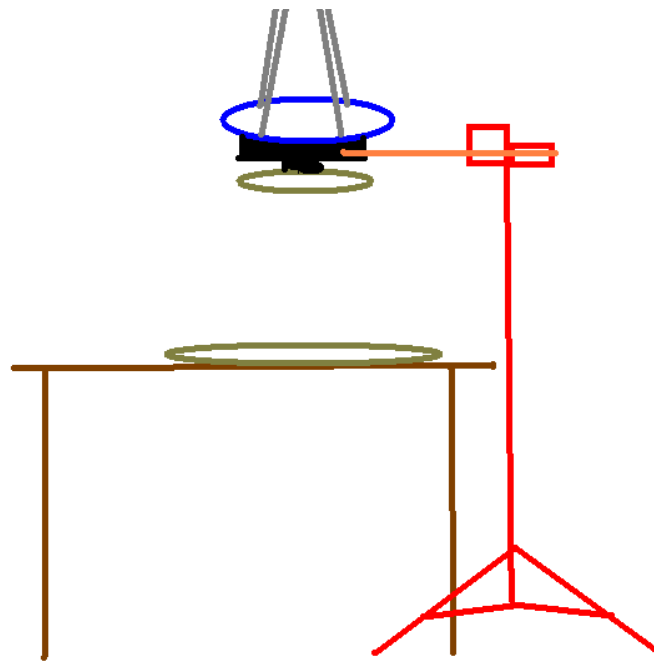
In the planned experimental application, the patch antenna will be mounted on upper part of apparatus (depicted in next figure) with boresight pointing vertically downwards towards a rectenna (rectifying antenna) which will convert most of the incident RF to DC power. Therefore the labels “horizontal” and “vertical” on the vendor diagrams are actually both vertical, and orthogonal. There is no plan to radiate in the horizontal direction.



As of March 2008 the above patch antennas have been purchased and delivery accepted. They are presently being evaluated for suitability.

It is possible that alternative directional antennas will also be evaluated; this application will be revised if a different antenna is selected.

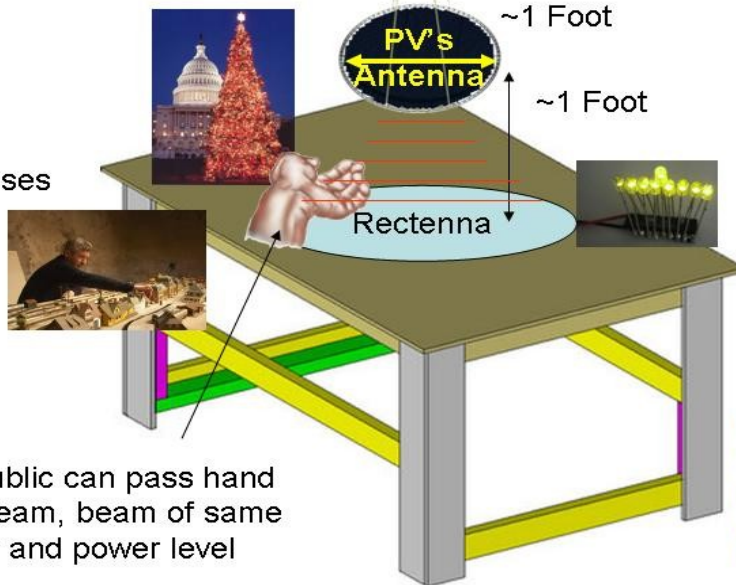




Polystyrene sheets covered with Aluminum Foil



- Fits in two cases



Ideally, public can pass hand through beam, beam of same frequency and power level

-Minimum 1 LED
-Maximum Model-Train style City Diorama with multiple lights and a working MAGLEV & Space Port

