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Title: OVERHEAD PHASE II ANTENNA SPECIFICATION (902-928 MHZ)							
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1.0 DESCRIPTION

The Checkpoint OH2 antenna is a 2x1 patch design, with a microstrip feeding network. It is designed for UHF RFID application in the frequency range from 902 to 928 MHz. It has a plastic cover and an aluminum back plate. **Figure 1, 2, and 3** show the front, back, and internal structure of the antenna, respectively. **Figure 4** shows the 3D radiation pattern. **Figure 5** shows the 2D radiation pattern along the width of the antenna. **Figure 6** shows the 2D radiation pattern along the length of the antenna. **Table 1** shows the antenna's technical specifications.

Table 1 OH2 antenna technical specifications

Item	Description
Checkpoint Part Number	10042405
Frequency range	902-928 MHz
Gain	6dBiL max
Nominal impedance	50 ohms
VSWR	1.3:1
Half power beam width (HPBW)	73 degrees (along width) 43 degrees (along length)
Polarization	Left hand circular (LHCP)
Axial ratio	<3 dB over entire half power beam width
Front to back ratio	>16 dB
Antenna weight	1.3 kg (2.8 lbs)
Dimensions	406 mm x 228 mm x 38 mm (16 in x 9 in x 1.5 in)
Connector	SMA female



Figure 1 OH2 antenna (front).



Figure 2 OH2 antenna (back).

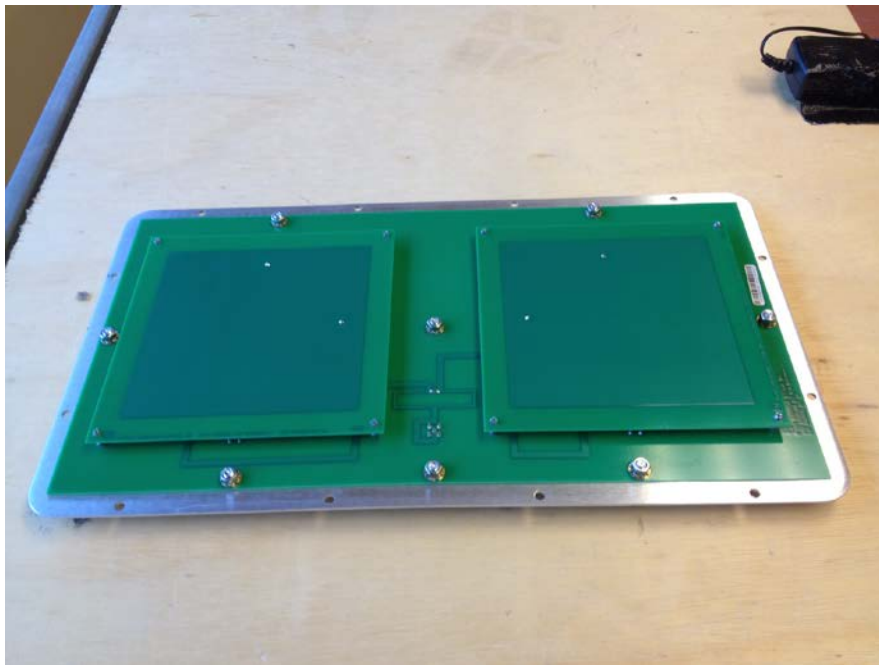


Figure 3 OH2 antenna (internal).

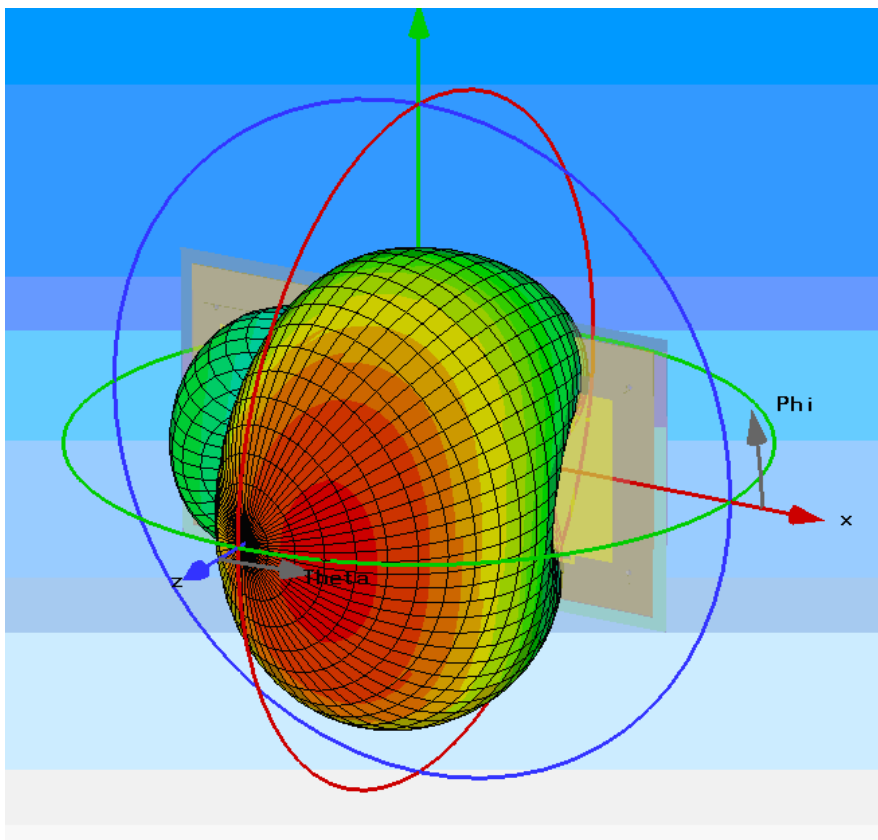


Figure 4 3D radiation pattern.

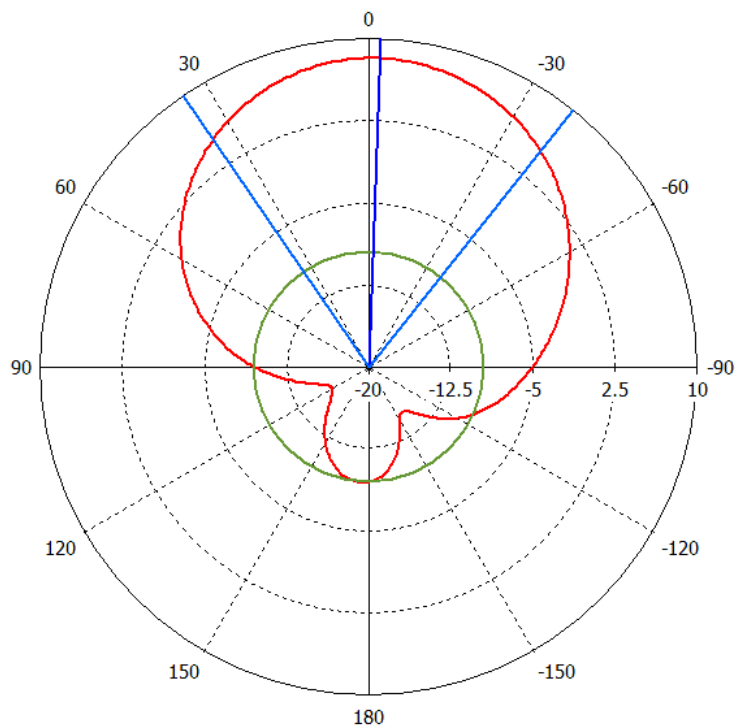


Figure 5 2D radiation pattern (elevation, along the width).

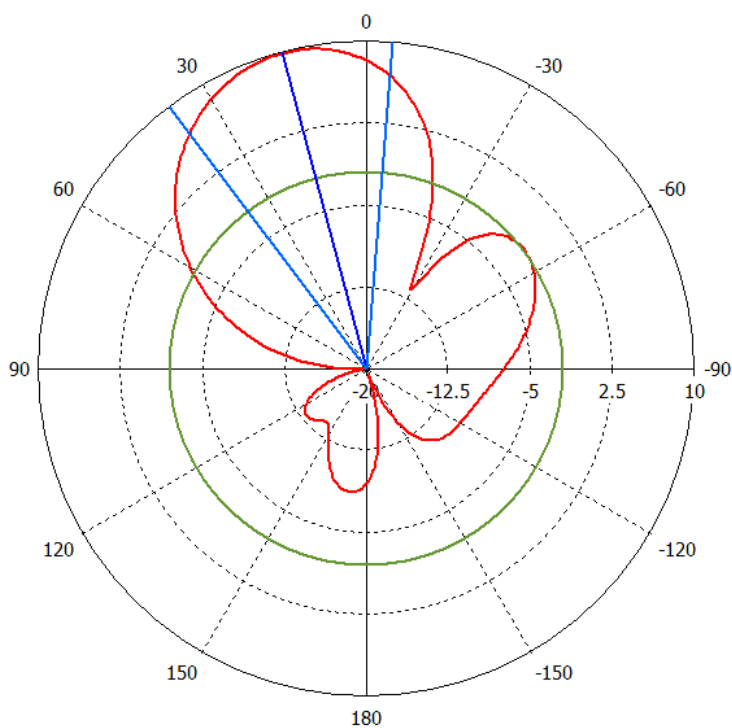


Figure 6 2D radiation pattern (azimuth, along the length).