

Flat Panel Array Antenna

1.95-2.25 GHz



Product Datasheet

PAN-185185-4-S

S-band Flat Panel Array Antenna.

Overview

The PAN-185185-4-S flat panel technology developed by ReliaSat is a high-performance solution for modern communication systems.

It can be used for satellite and 5G communication systems, offering a high data rate throughput system. The antenna has a small profile and flat geometry, this technology enables wide operational bandwidth, good polarization purity and high gain in accordance with customer needs. The board is composed of 3 layers.



Features

- 1.95-2.25 GHz frequency range
- Gain >10 dB
- Polarization RHCP and LHCP
- Fits cubesats



Applications

- Satellite communications
- Ground - satellite - ground communications (circular polarization)*
- UAV
- Telemetry, Tracking and command

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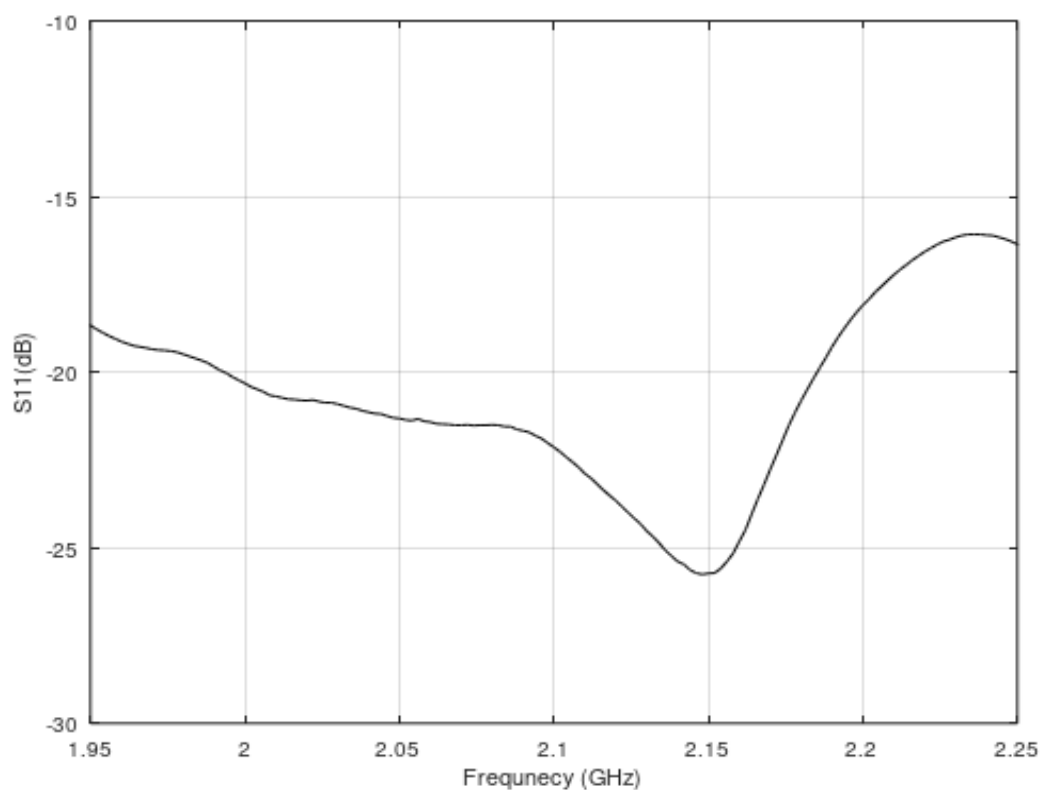
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FPA Specification

Parameter	Value	Unit
Frequency Range	1.95-2.25	GHz
Polarization	RHCP OR LHCP	
Gain	>10	dB
Axial Ratio	<3	dB
HPBW	35-40	degree
Dimension	190 x 190 x 12	mm
Connector	SMA	

Measurement Results

Return Loss (S_{11})



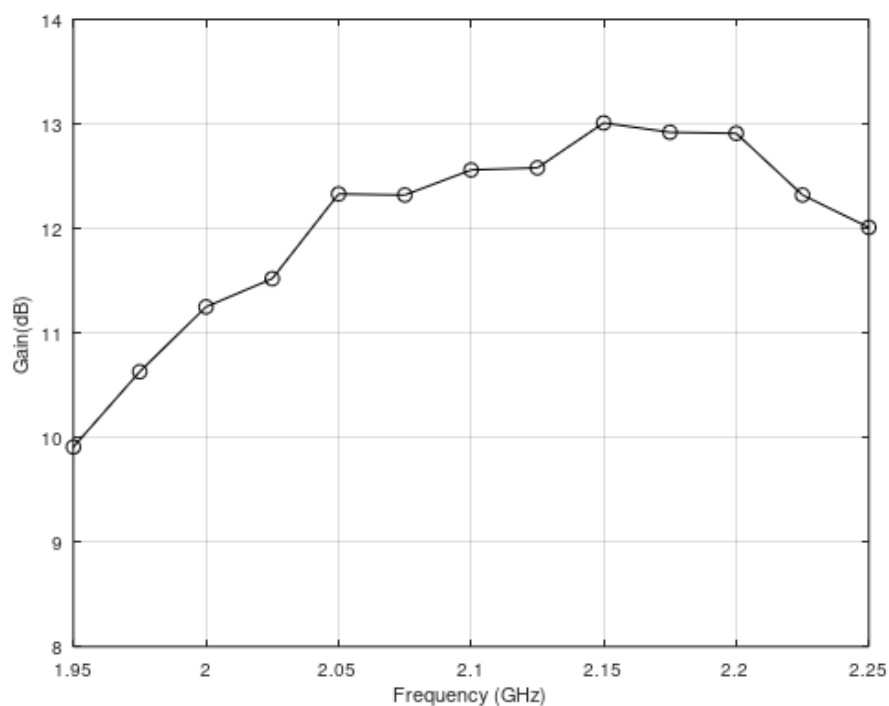
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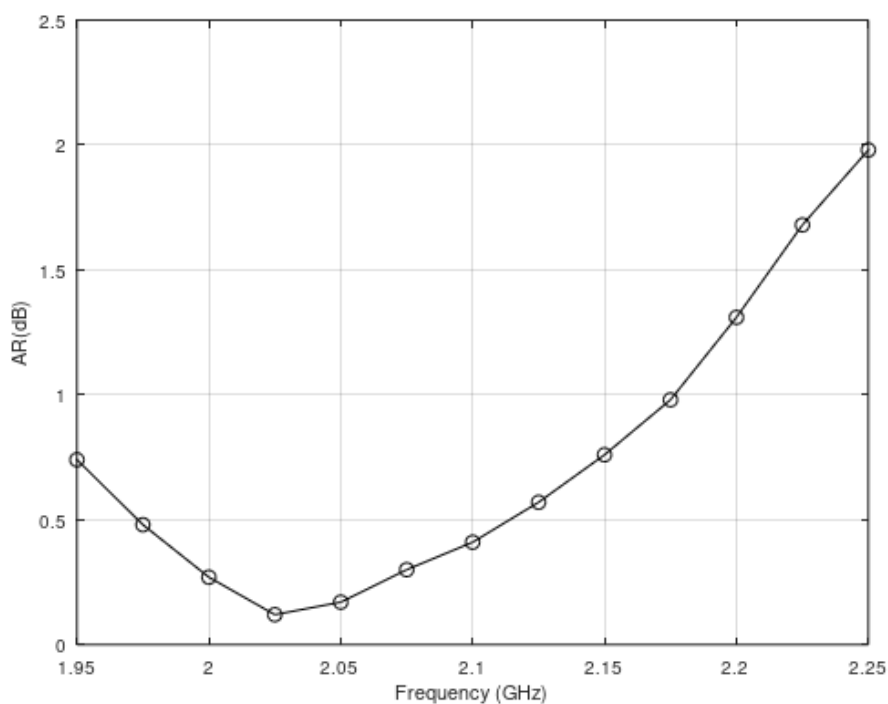


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Gain



AR (Axial Ratio)



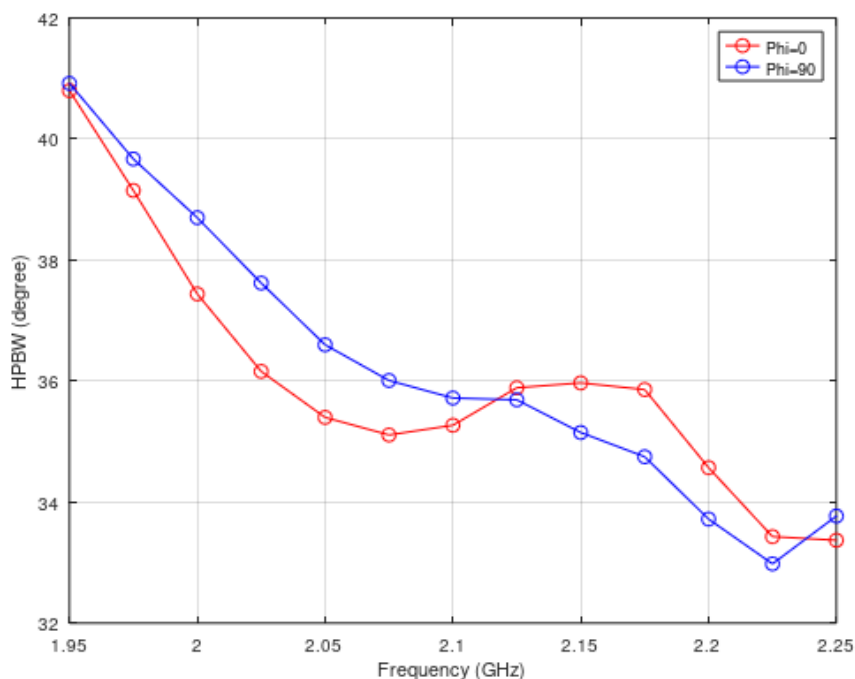
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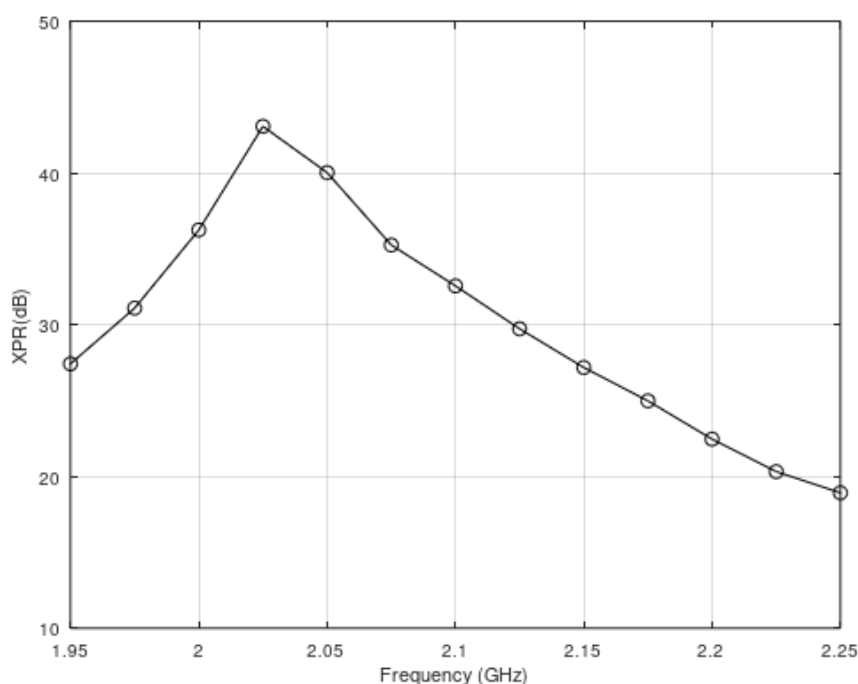


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HPBW (Half Power Beamwidth at $\Phi=0$ & $\Phi=90$)



XPR (Cross Polarization Ratio)



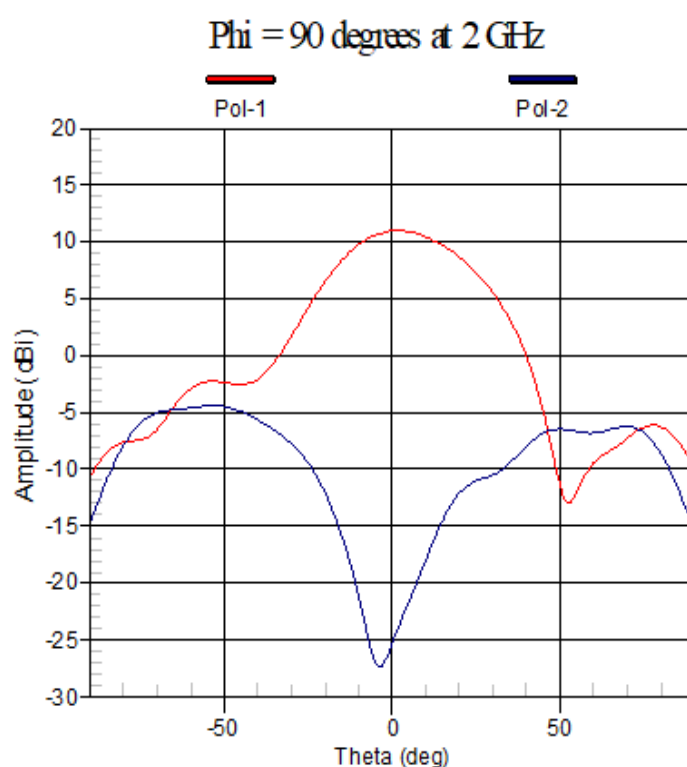
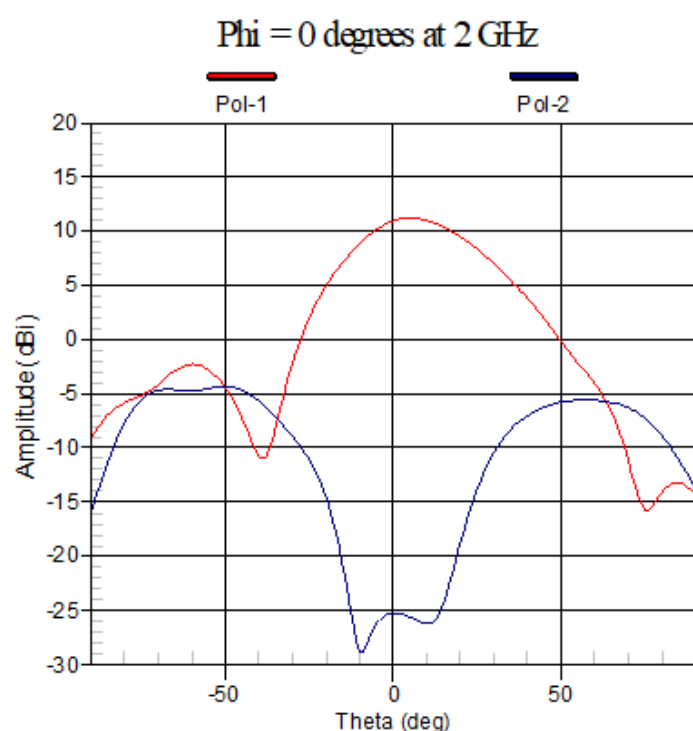
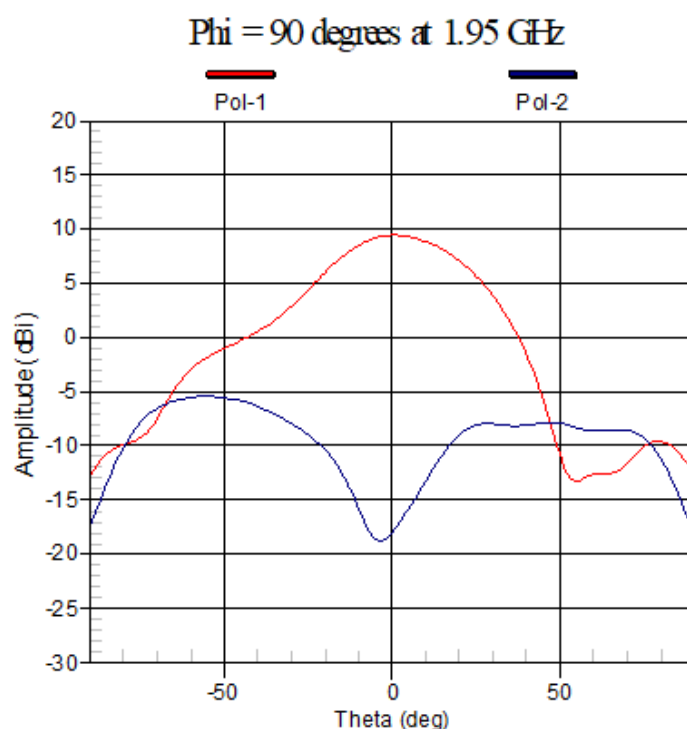
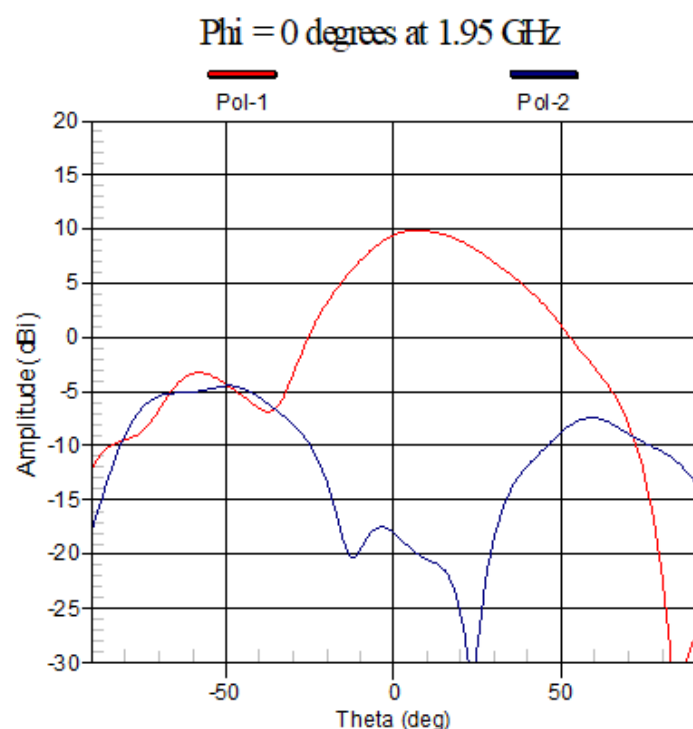
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Radiation Pattern

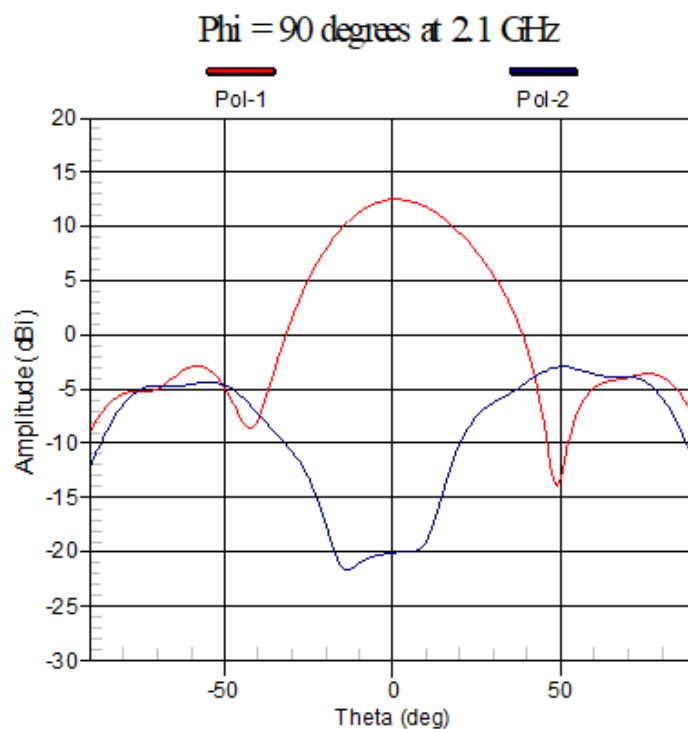
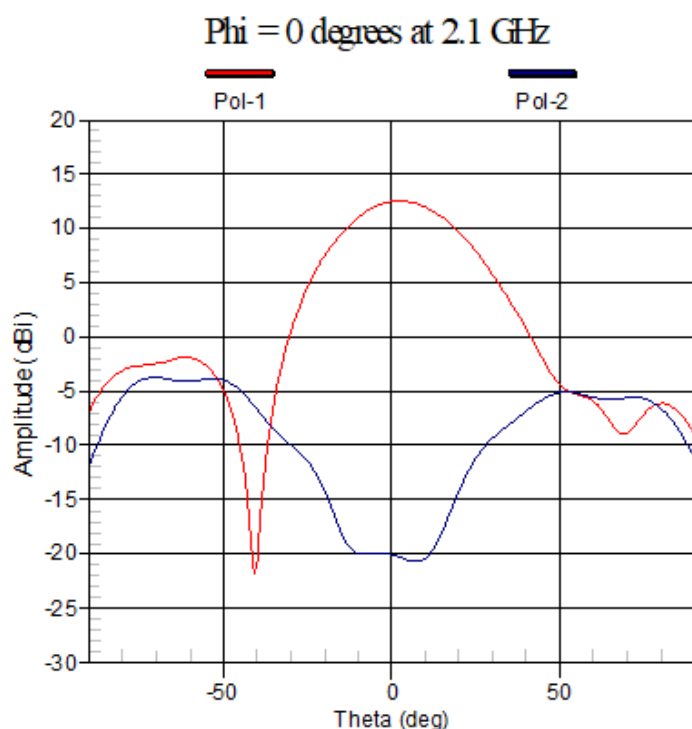
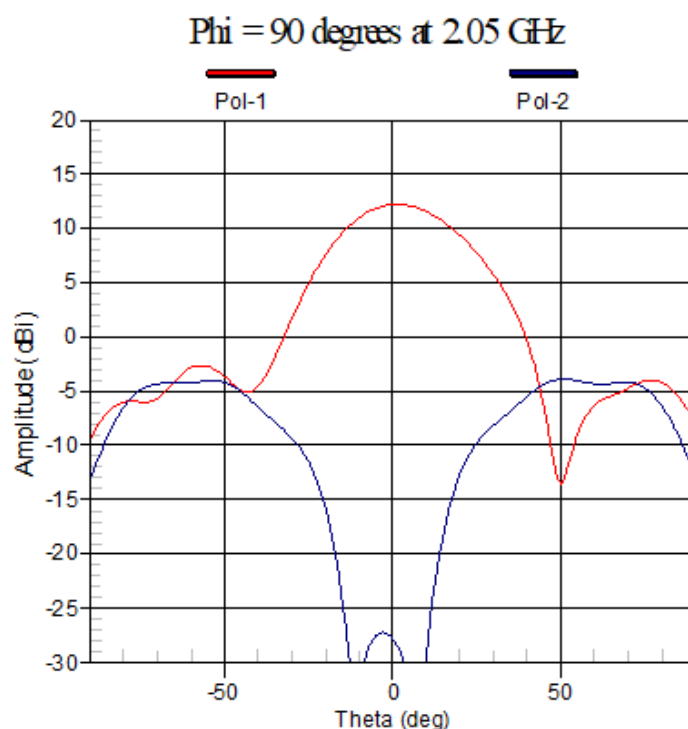
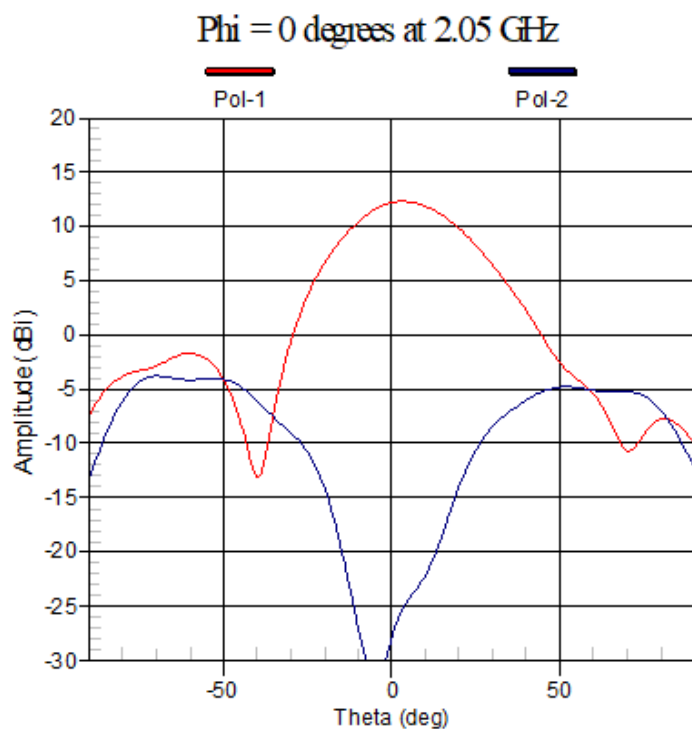


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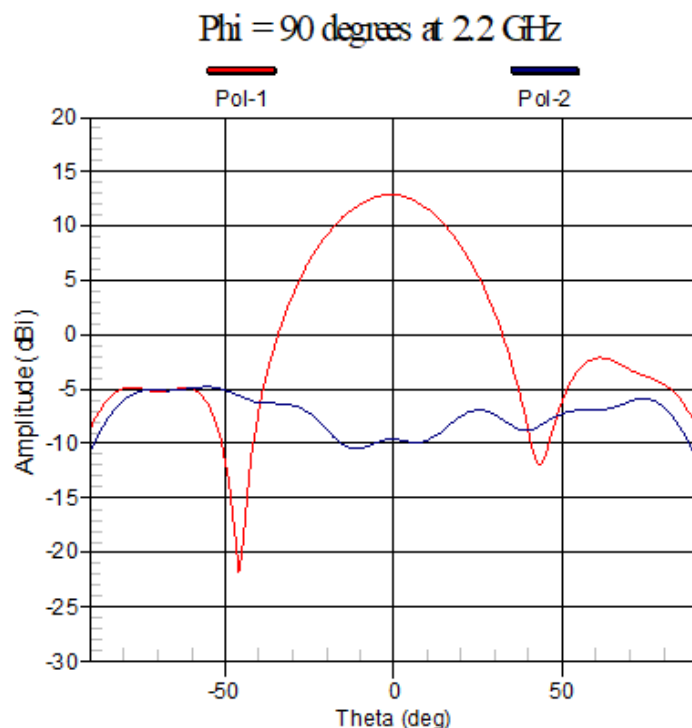
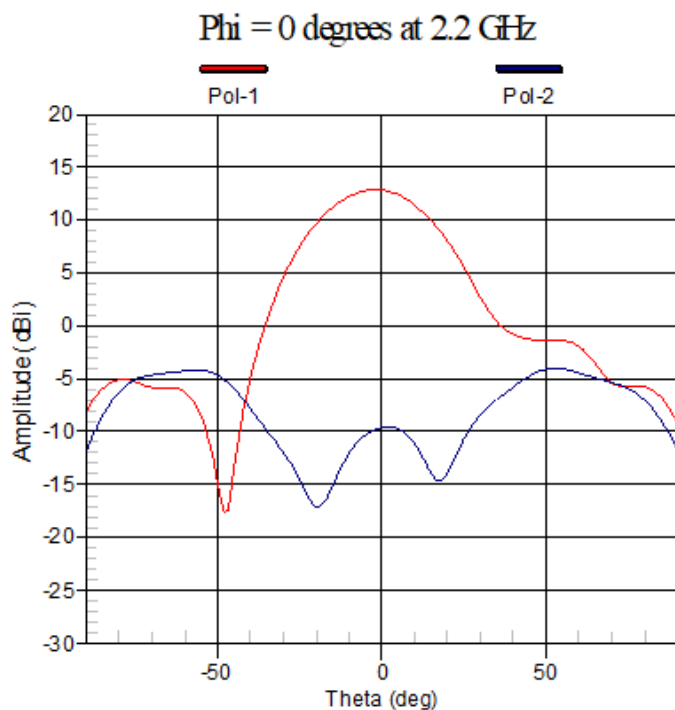
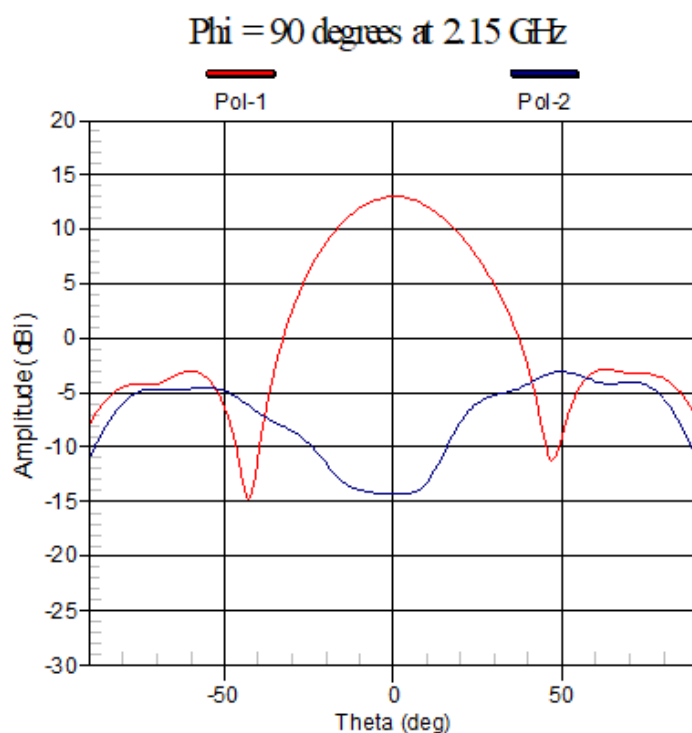
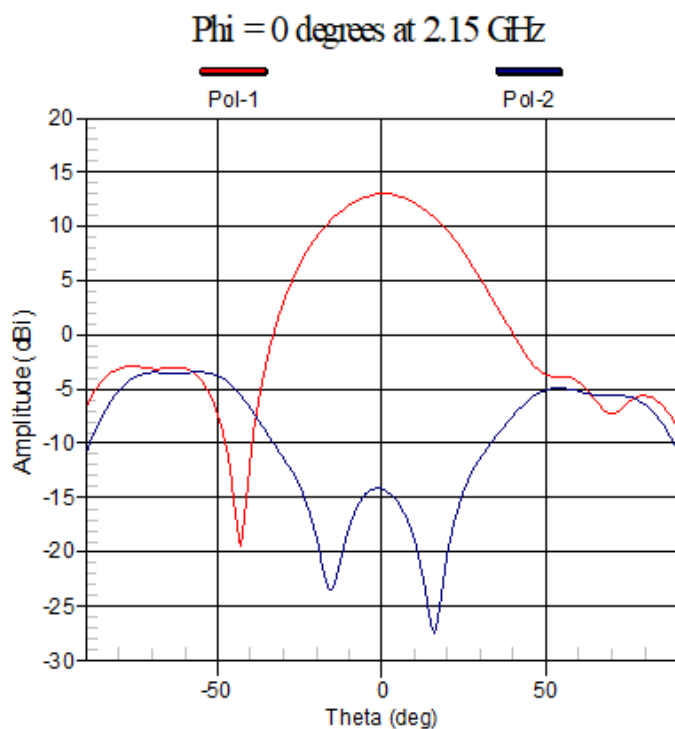


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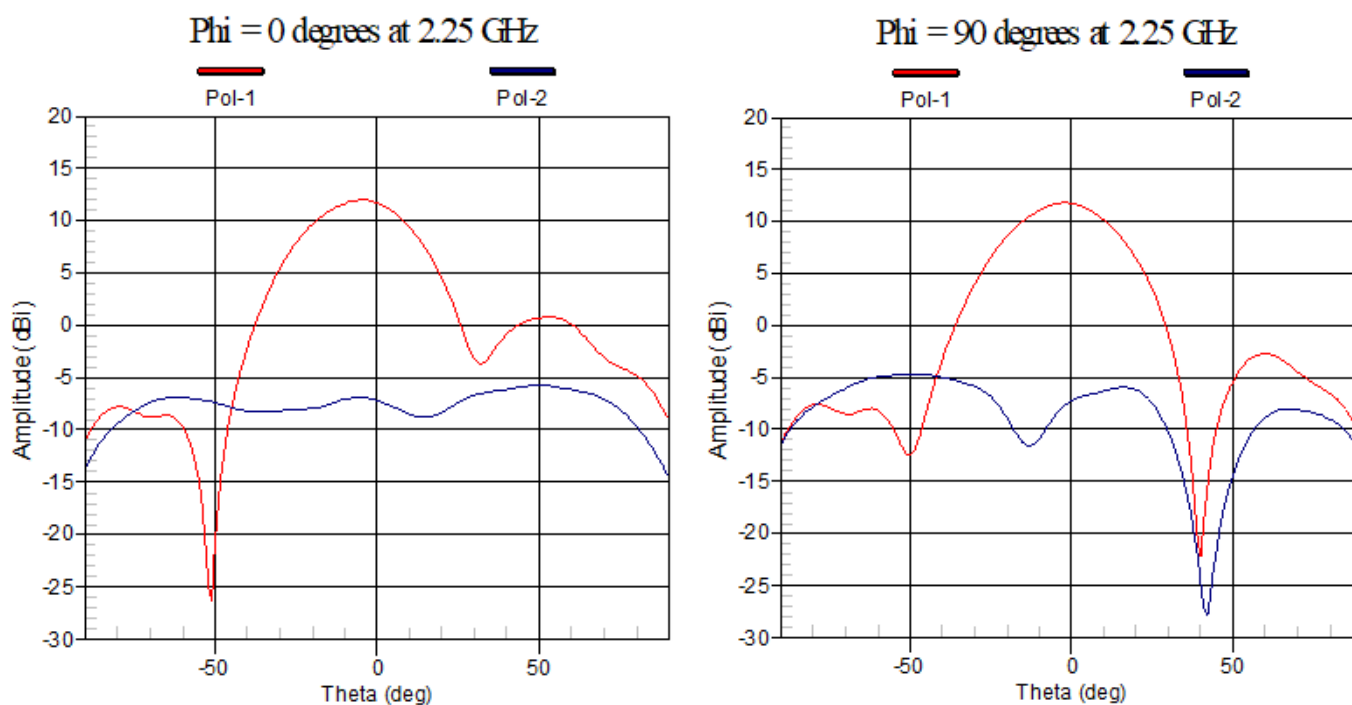


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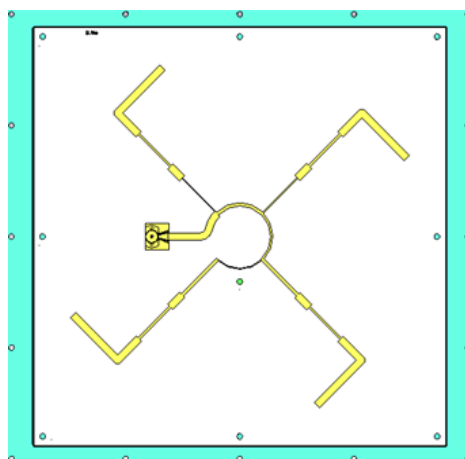
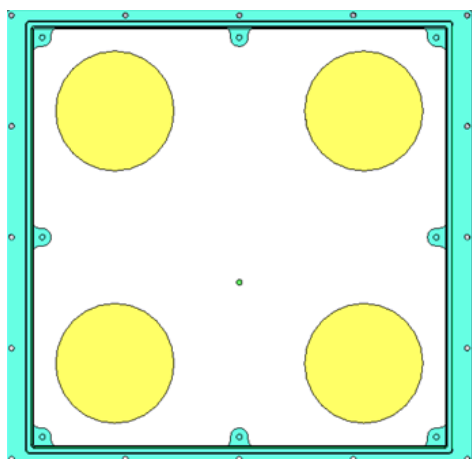
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Board Layout



Contact Information

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