Test Report For Antenna1

Tested Products.

- Antenna1: integrated antenna.
  - Frequency = 2.402GHz.
  - Frequency = 2.441GHz.
  - Frequency = 2.480GHz.

Shenzhen Hong Lian Xing Technology Co., Ltd.

No. 37, Dake Kang Road, Yuanshan Subdistrict, Longgang District, Shenzhen City

Antenna1 Photo & Length (mm)

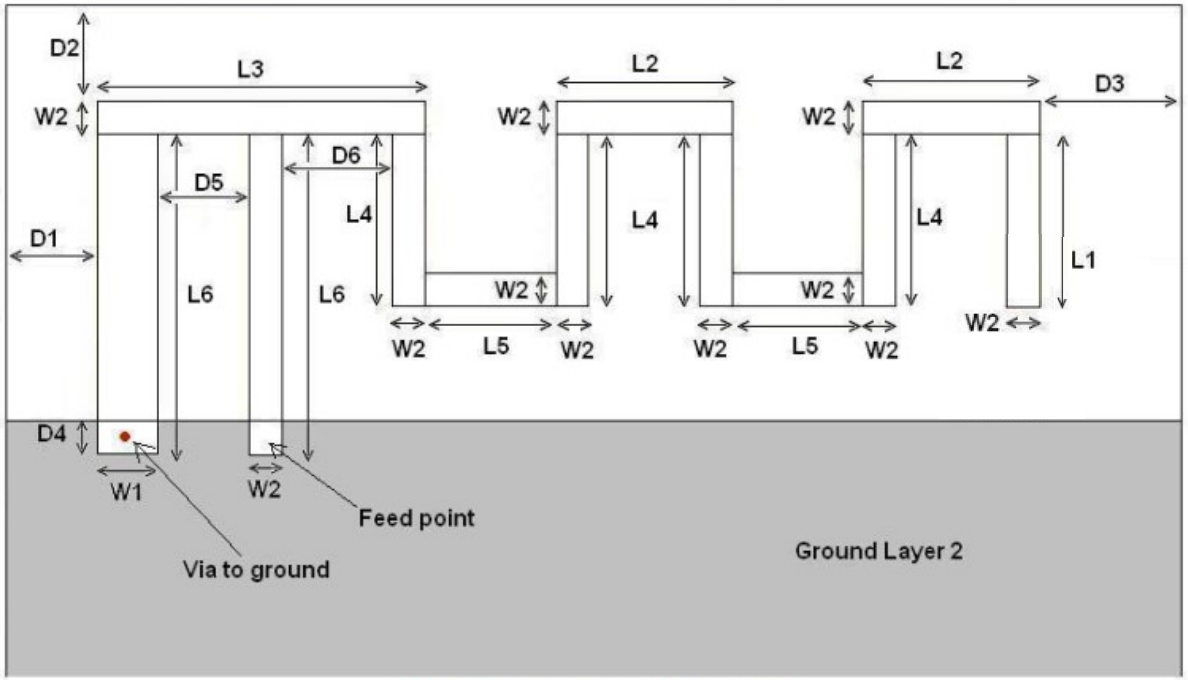
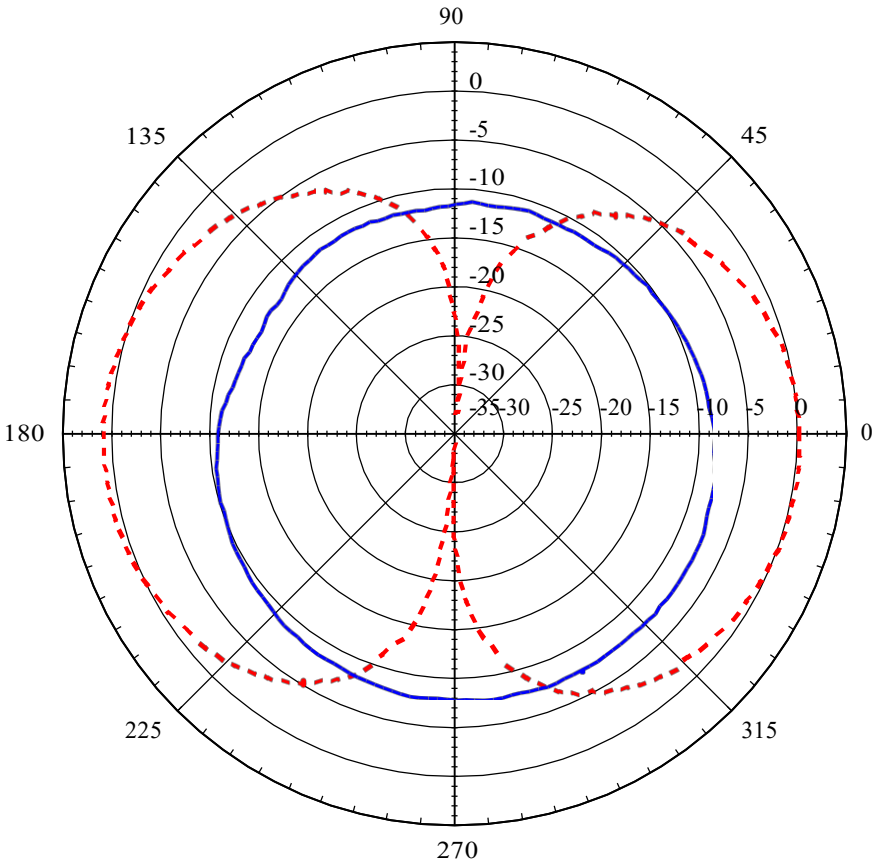


Figure 3: Antenna Dimensions

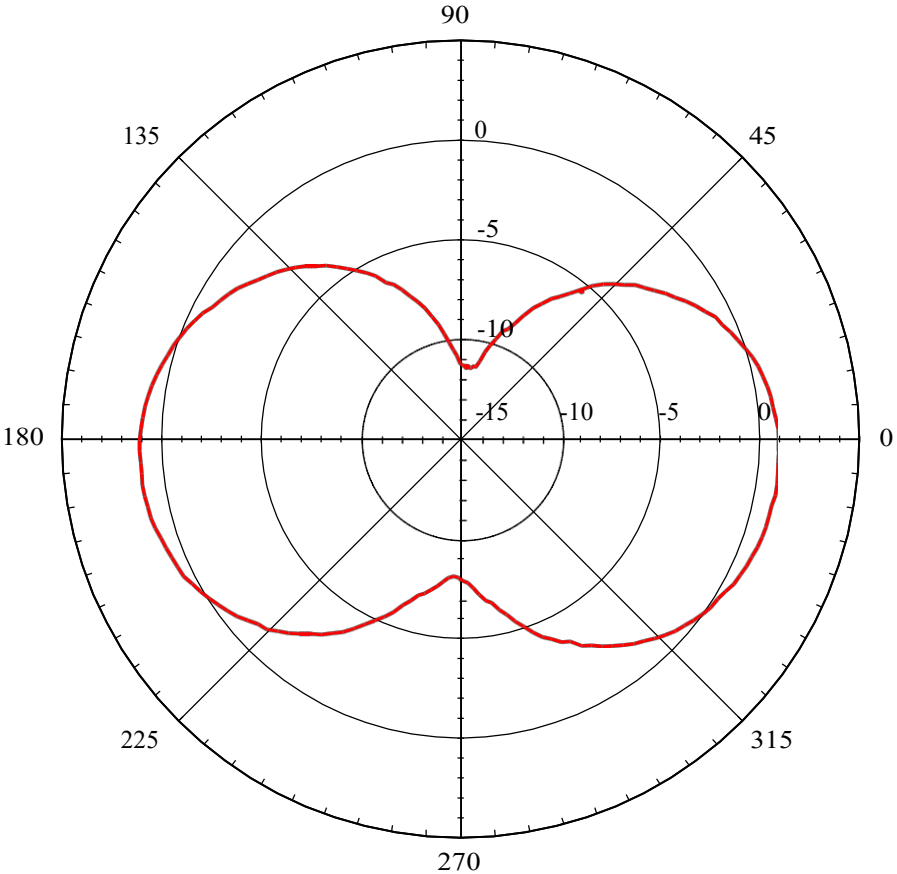
L1	2.64 mm
L2	2.70 mm
L3	5.00 mm
L4	2.64 mm
L5	2.00 mm
L6	4.90 mm
W1	0.90 mm
W2	0.50 mm
D1	0.50 mm
D2	0.30 mm
D3	0.30 mm
D4	0.50 mm
D5	1.40mm
D6	1.70 mm

Table 1: Antenna Dimensions

Radiation pattern: Antenna 1. XZ Plane at f = 2.402GHz



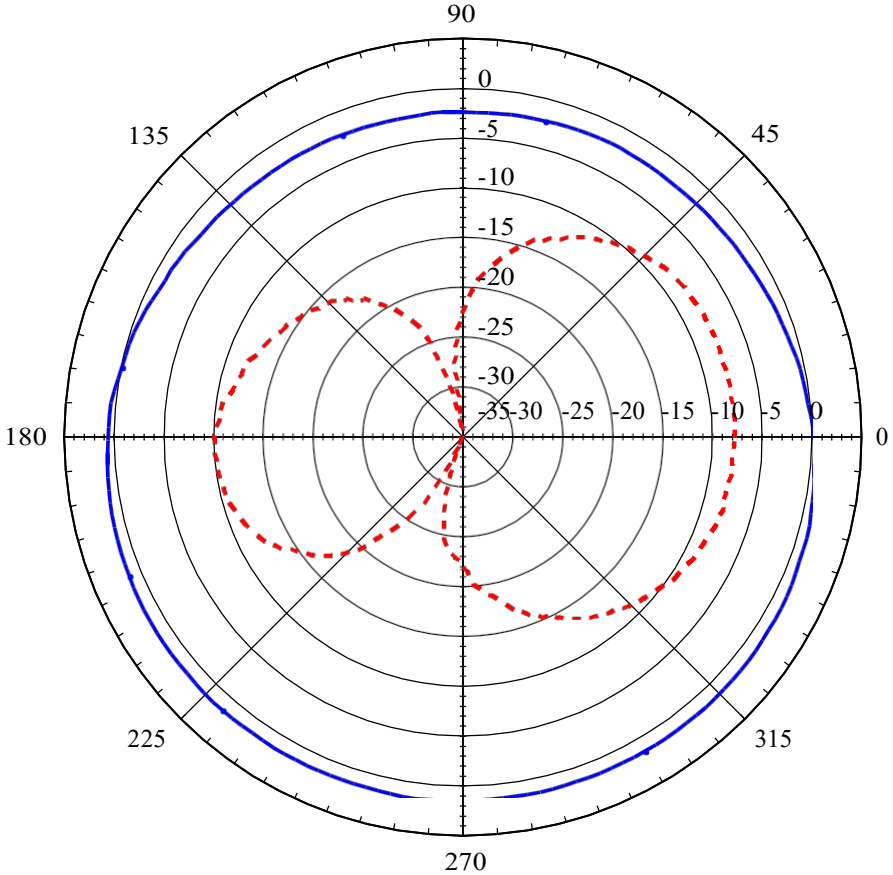
Co-cross polarization field (dBi)



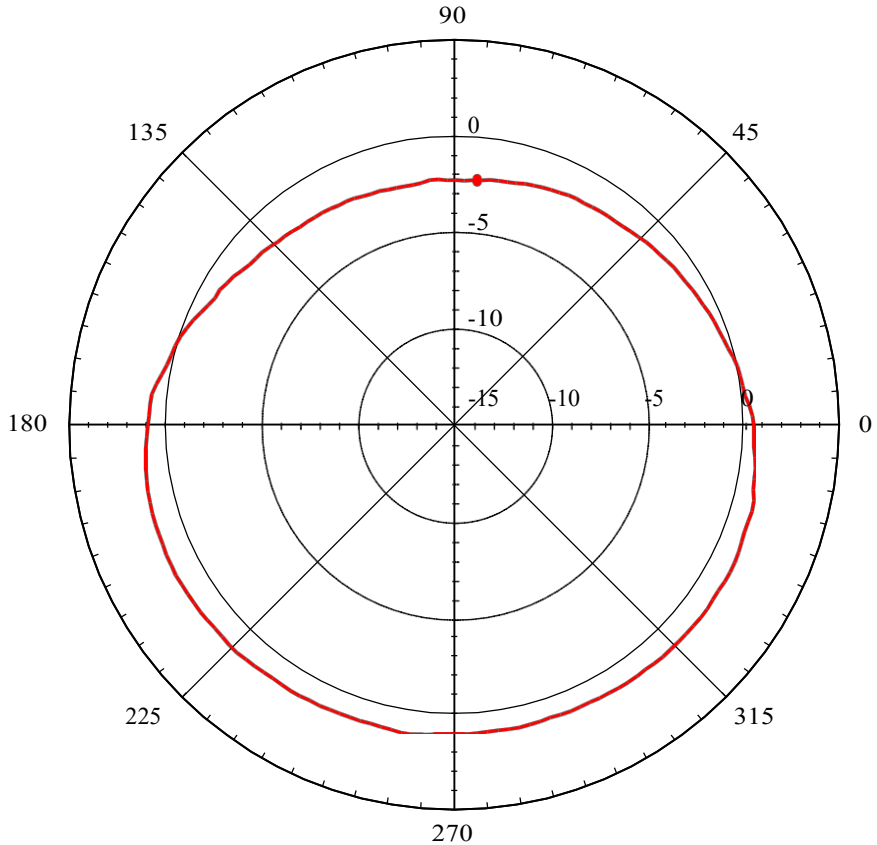
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. YZ Plane at f = 2.402GHz



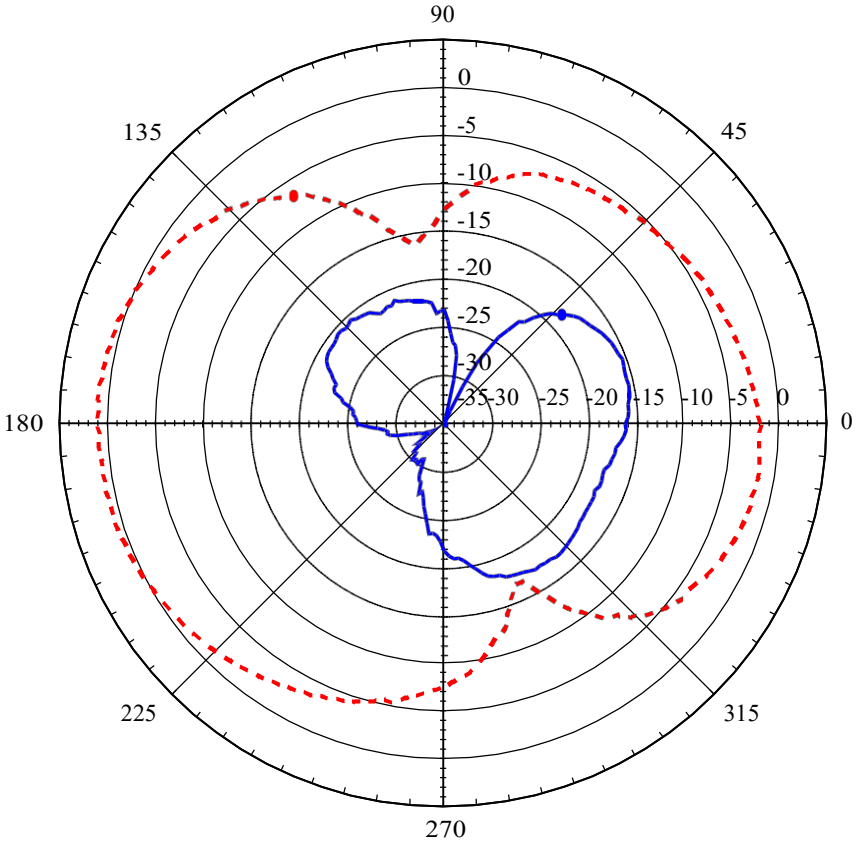
Co-cross polarization field (dBi)



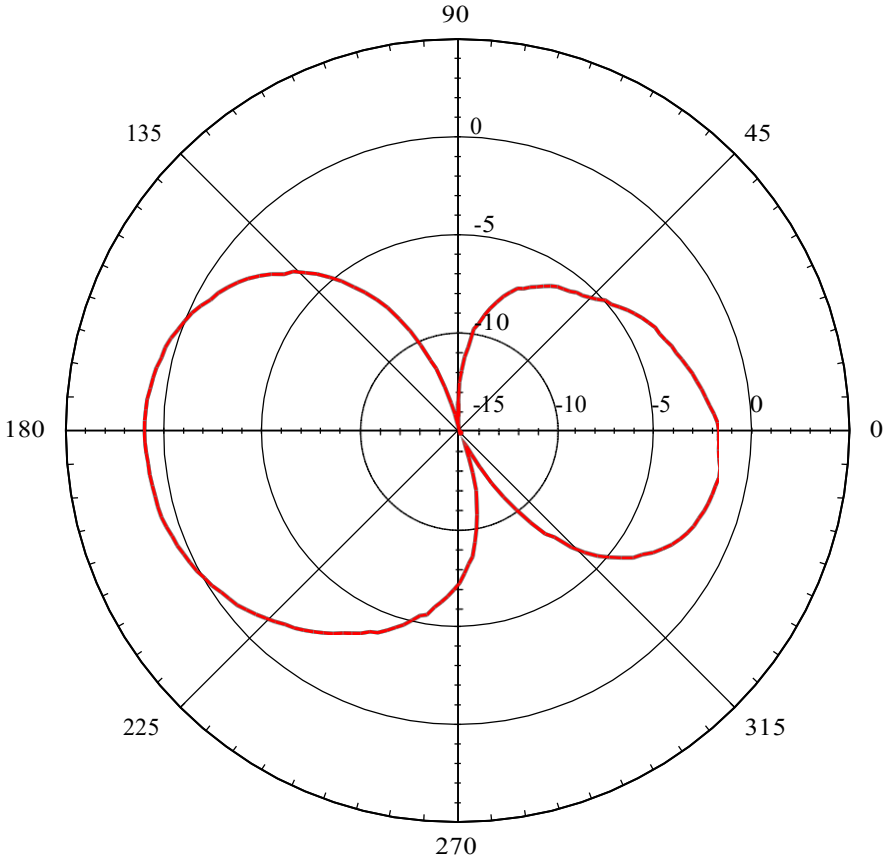
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. XY Plane at f = 2.402GHz



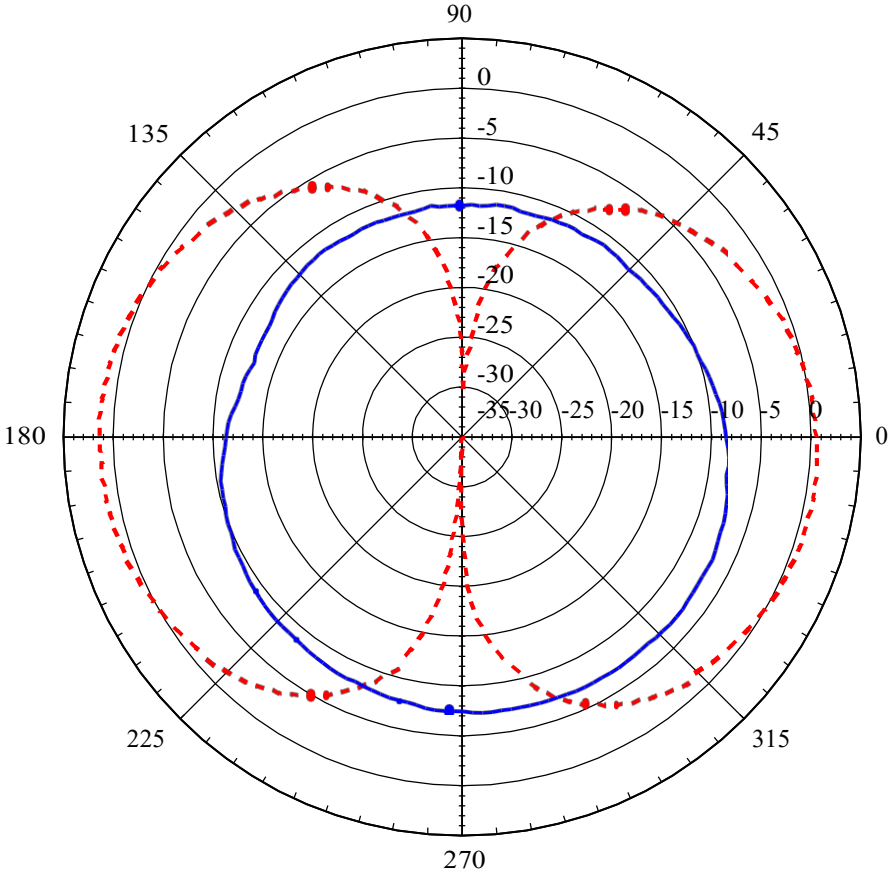
Co-cross polarization field (dBi)



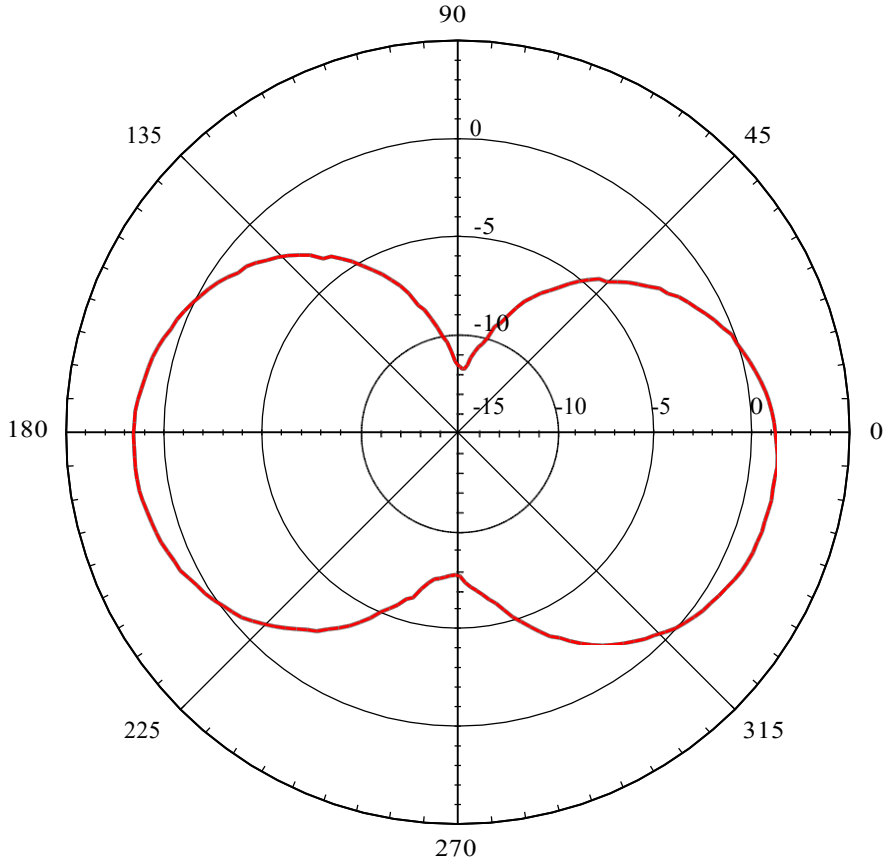
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. XZ Plane at f = 2.441GHz



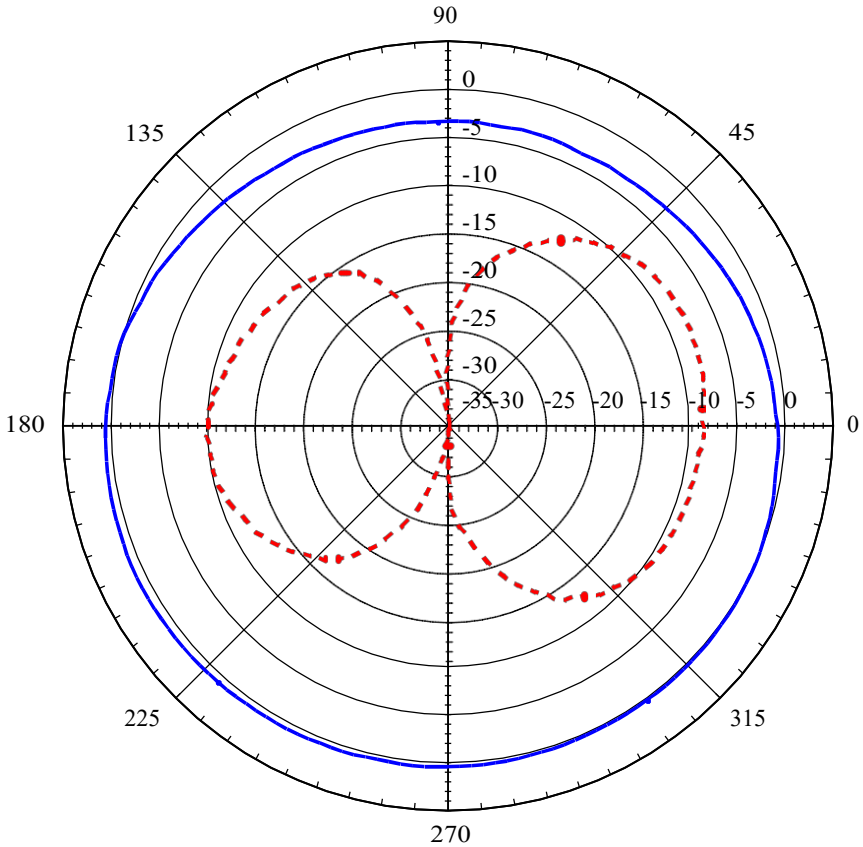
Co-cross polarization field (dBi)



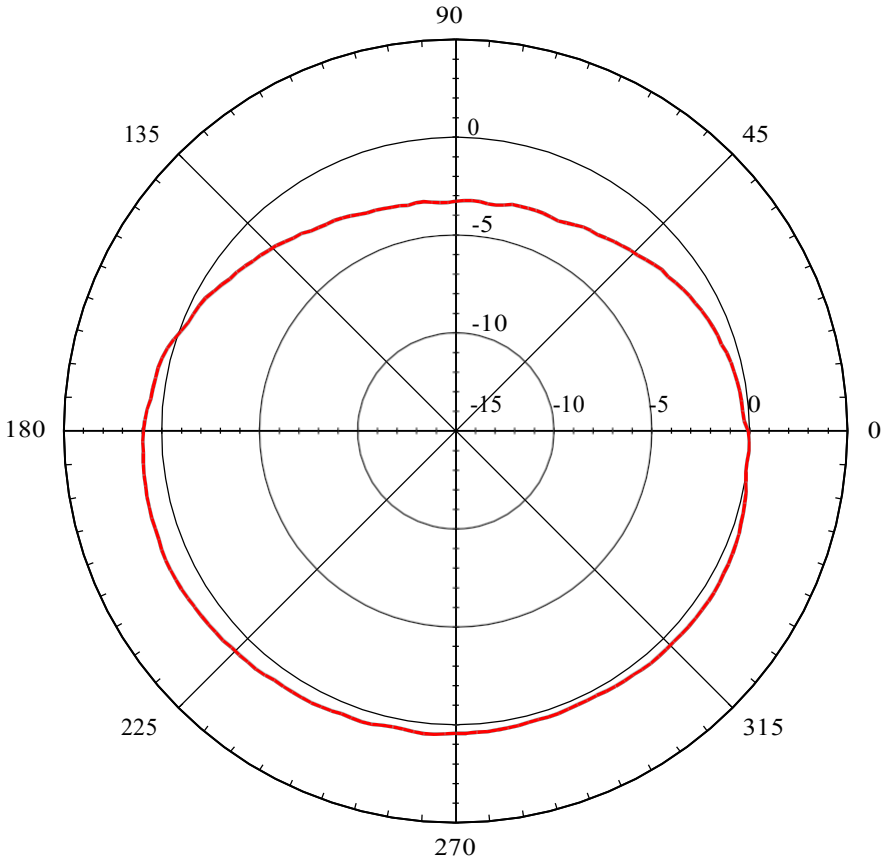
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. YZ Plane at f = 2.441GHz



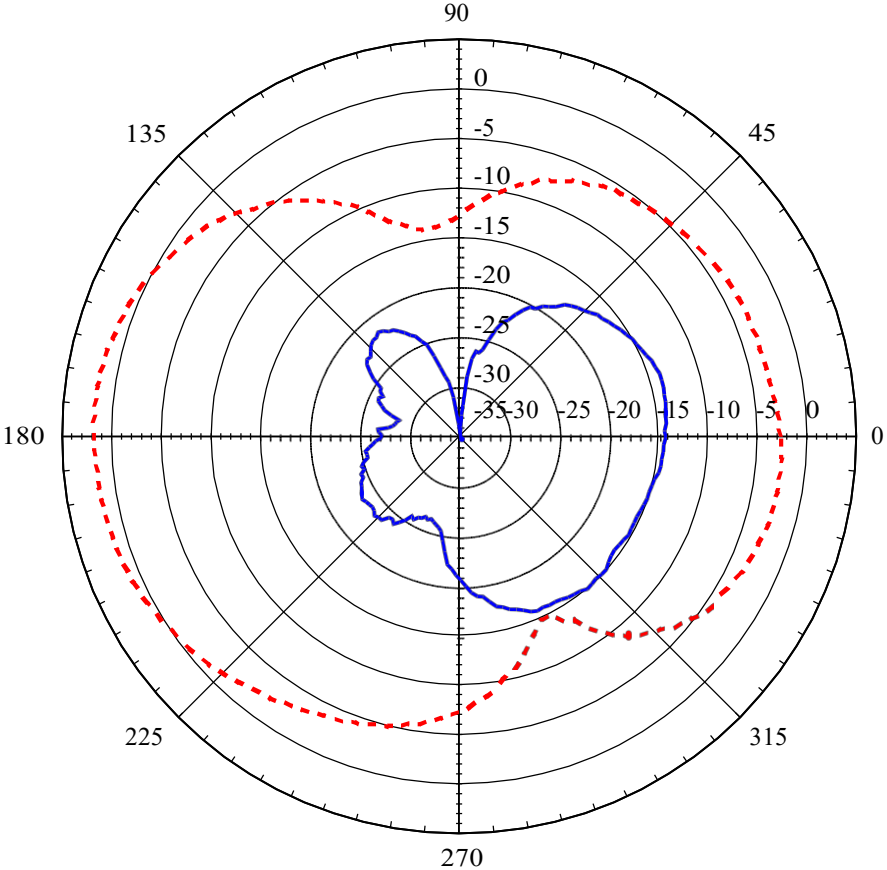
Co-cross polarization field (dBi)



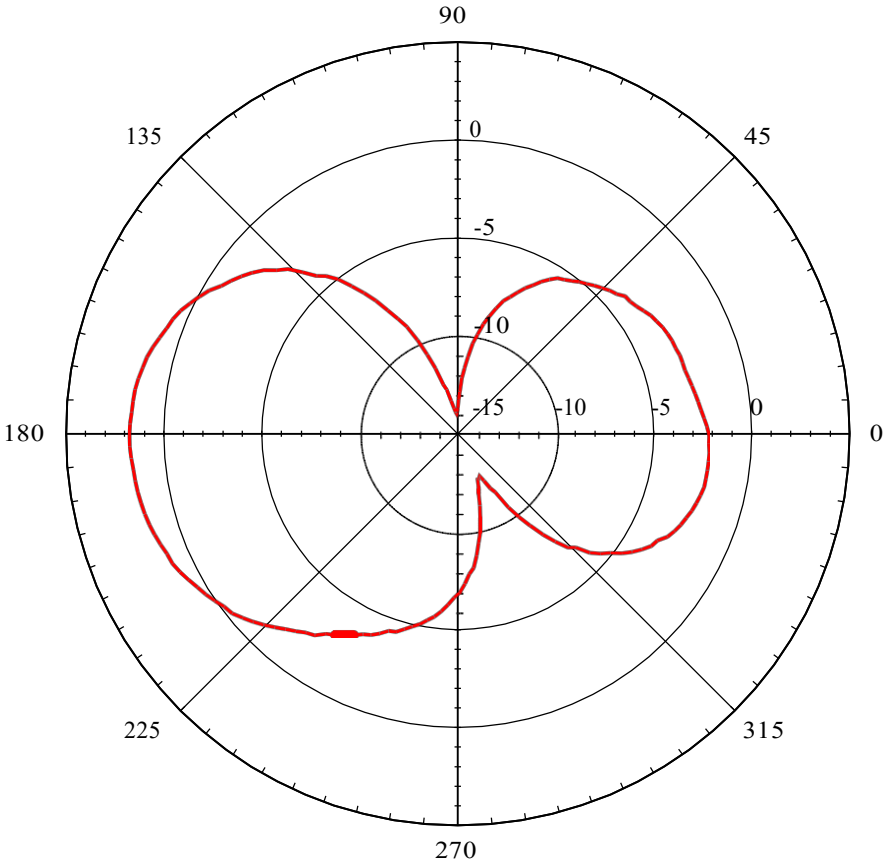
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. XY Plane at f = 2.441GHz



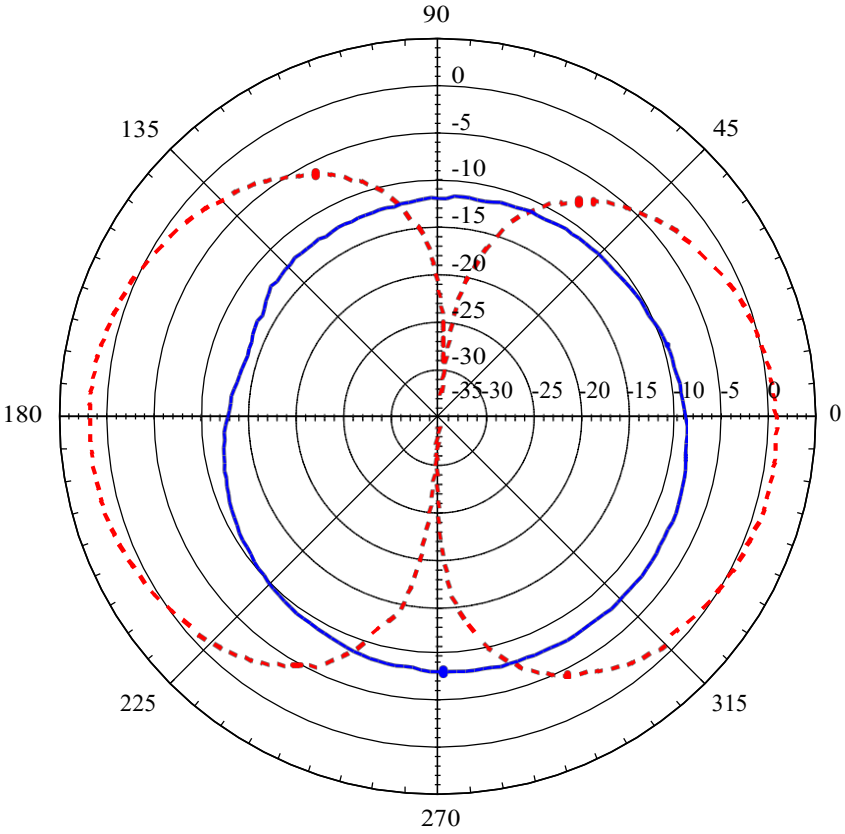
Co-cross polarization field (dBi)



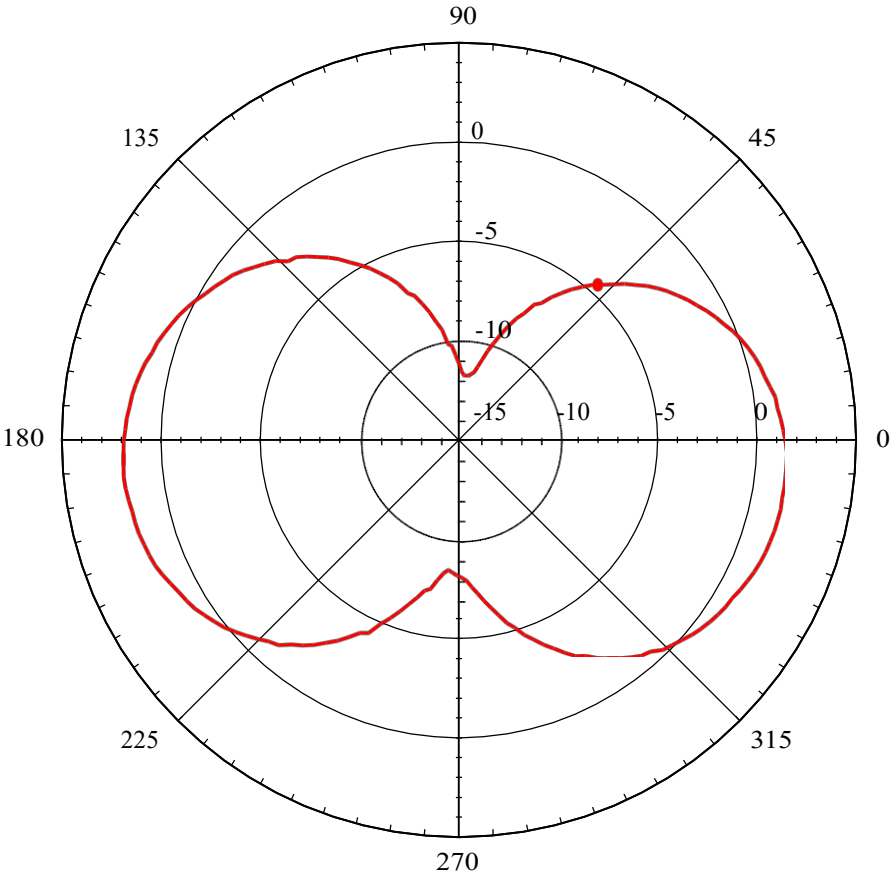
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. XZ Plane at f = 2.480GHz



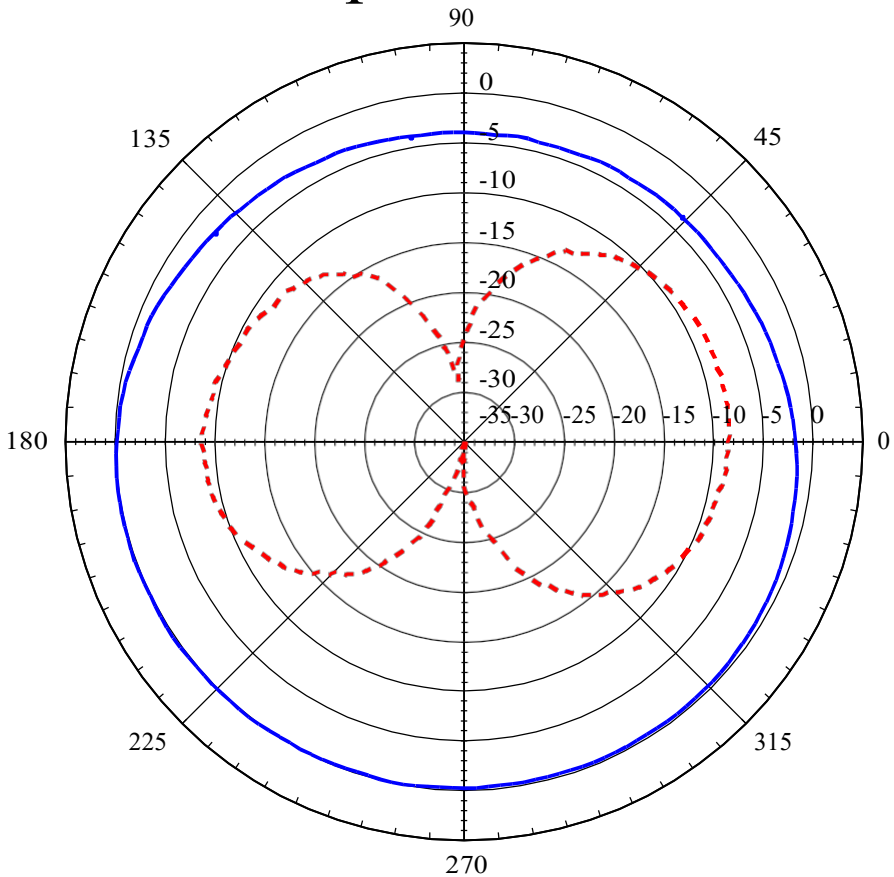
Co-cross polarization field (dBi)



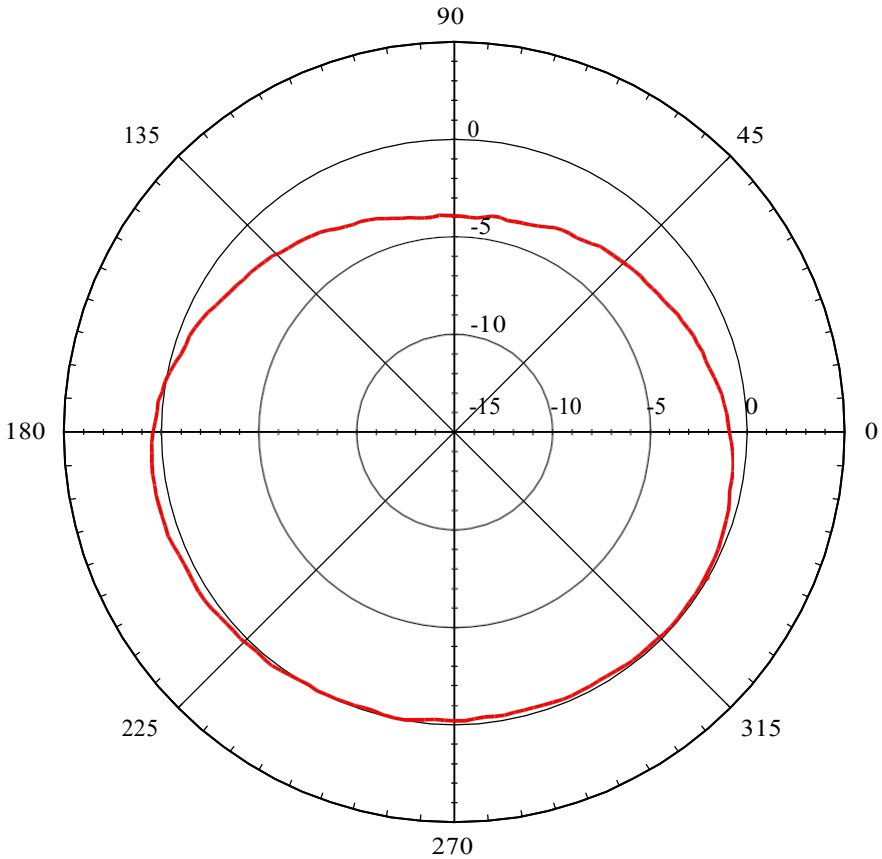
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. YZ Plane at f = 2.480GHz



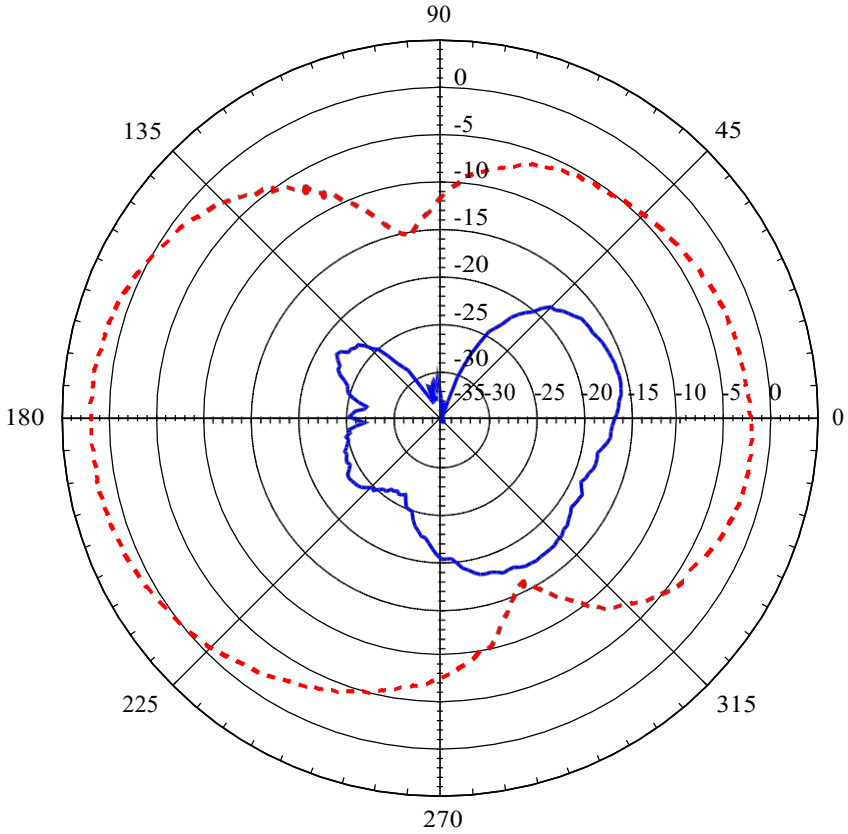
Co-cross polarization field (dBi)



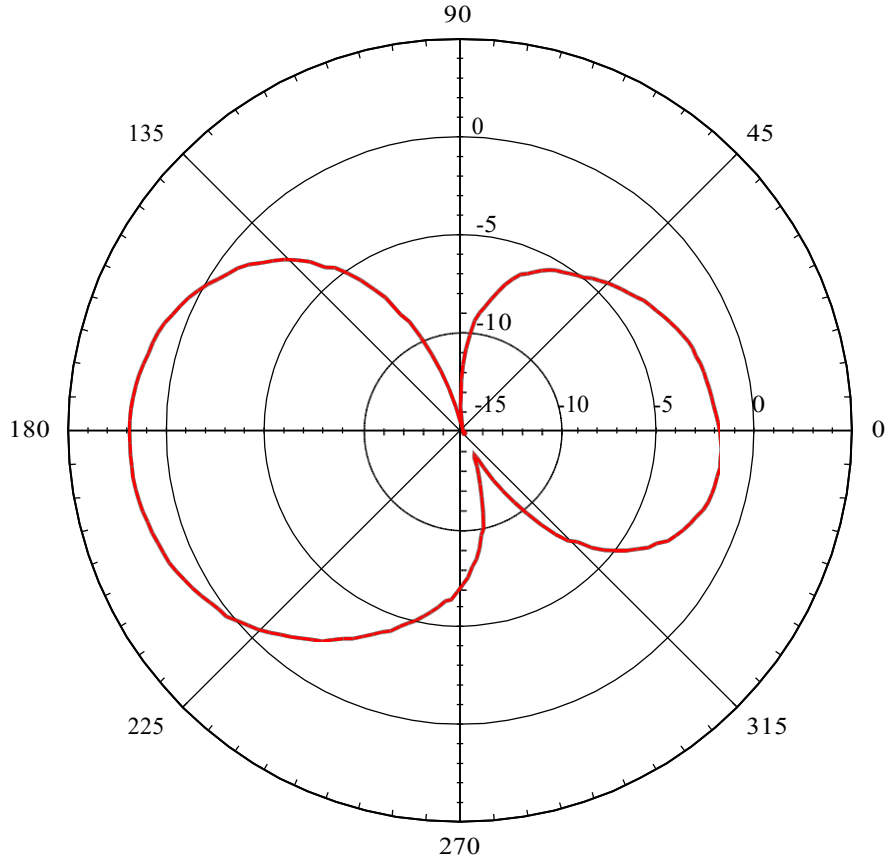
Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Radiation pattern: Antenna 1. XY Plane at f = 2.480GHz



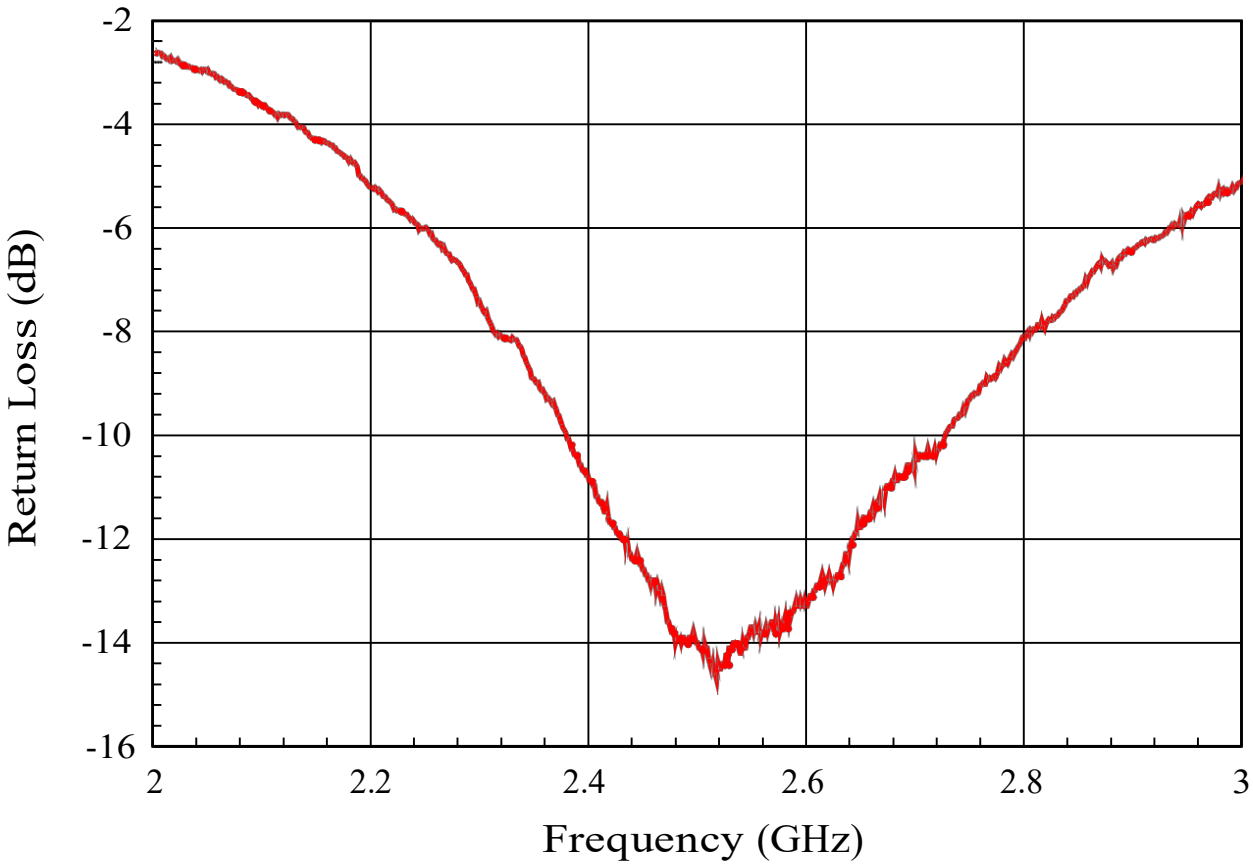
Co-cross polarization field (dBi)



Total field (dBi)

Solid line: vertical polarization
Dash line: horizontal polarization

Return Loss: Antenna 1



BW(-10dB) 13.48%

Measurements summary

MAX Gain 1.87dBi

	Frequency (GHz)	Plane	Return Loss (dB)	Polarization	Gain max. (dBi)	θ for Gain max.	φ for Gain max.
Antenna 1							
	2.402	XZ	-10.90	Vertical	-7.8	290	
	2.402	XZ	-10.90	Horizontal	0.786	182	
	2.402	YZ	-10.90	Vertical	1.21	226	
	2.402	YZ	-10.90	Horizontal	-7.75	10	
	2.402	XY	-10.90	Vertical	-15.4		20
	2.402	XY	-10.90	Horizontal	0.93		180
	2.441	XZ	-12.20	Vertical	-7.36	318	
	2.441	XZ	-12.20	Horizontal	1.32	180	
	2.441	YZ	-12.20	Vertical	0.981	204	
	2.441	YZ	-12.20	Horizontal	-8.23	24	
	2.441	XY	-12.20	Vertical	-14.1		-14
	2.441	XY	-12.20	Horizontal	1.74		180
	2.48	XZ	-13.80	Vertical	-7.95	312	
	2.48	XZ	-13.80	Horizontal	1.81	186	
	2.48	YZ	-13.80	Vertical	0.204	214	
	2.48	YZ	-13.80	Horizontal	-8.38	8	
	2.48	XY	-13.80	Vertical	-15.8		12
	2.48	XY	-13.80	Horizontal	1.87		180