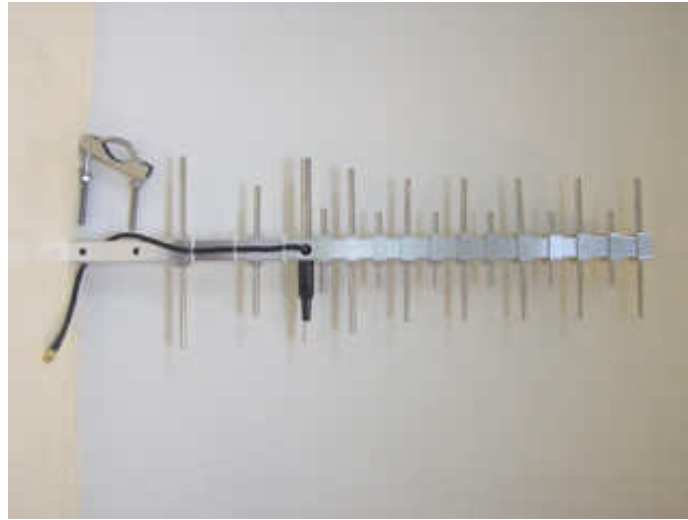


GSM/3G Yagi Antenna

MODEL: YGA-150



1. GENERAL DESCRIPTION

1.1 Electrical Properties

Parameter	Description
Frequency Band	850/900/1800/1900/2170 MHz
Nominal Impedance	50 ohm
Polarization	Vertical
V.S.W.R	2.0:1
Antenna Gain	11 dBi
Note: Gain includes the cable loss	

1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Touch Type	Screw Type
Connector Type	SMA 180° (Male)
Antenna Dimensions	540 mm ±10
Antenna Color	Black
Operating Temperature Range	-40°C~+85°C

Storage Temperature Range

-40°C~+85°C

2. Appearance

NO.	NAME	FINISH	Q. TY
01	Body	Nickel plating	01
02	Core tube	Black	01
03	Screw set		01
04	DF-58/U Cable	Black	01
05	SMA 180° (Male)	Golden plating	01
06	Top cap	Black	01
07	Heat-shrink tube	Black	01
08	Clip wire	White	03
09	Clip retaining	Nickel plating	01
10	U-Clip	Nickel plating	01
11	Resonance, nut	Nickel plating	02
12	Washer	Nickel plating	02

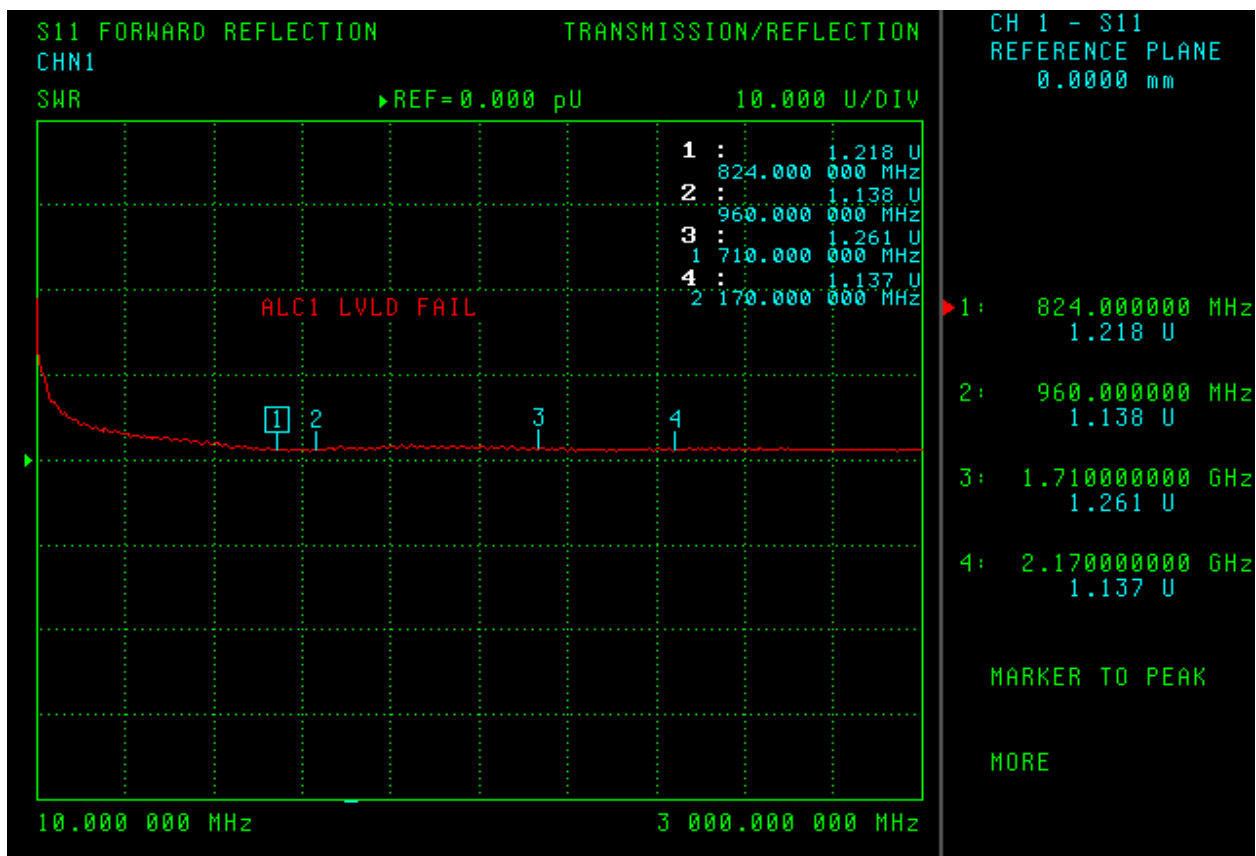
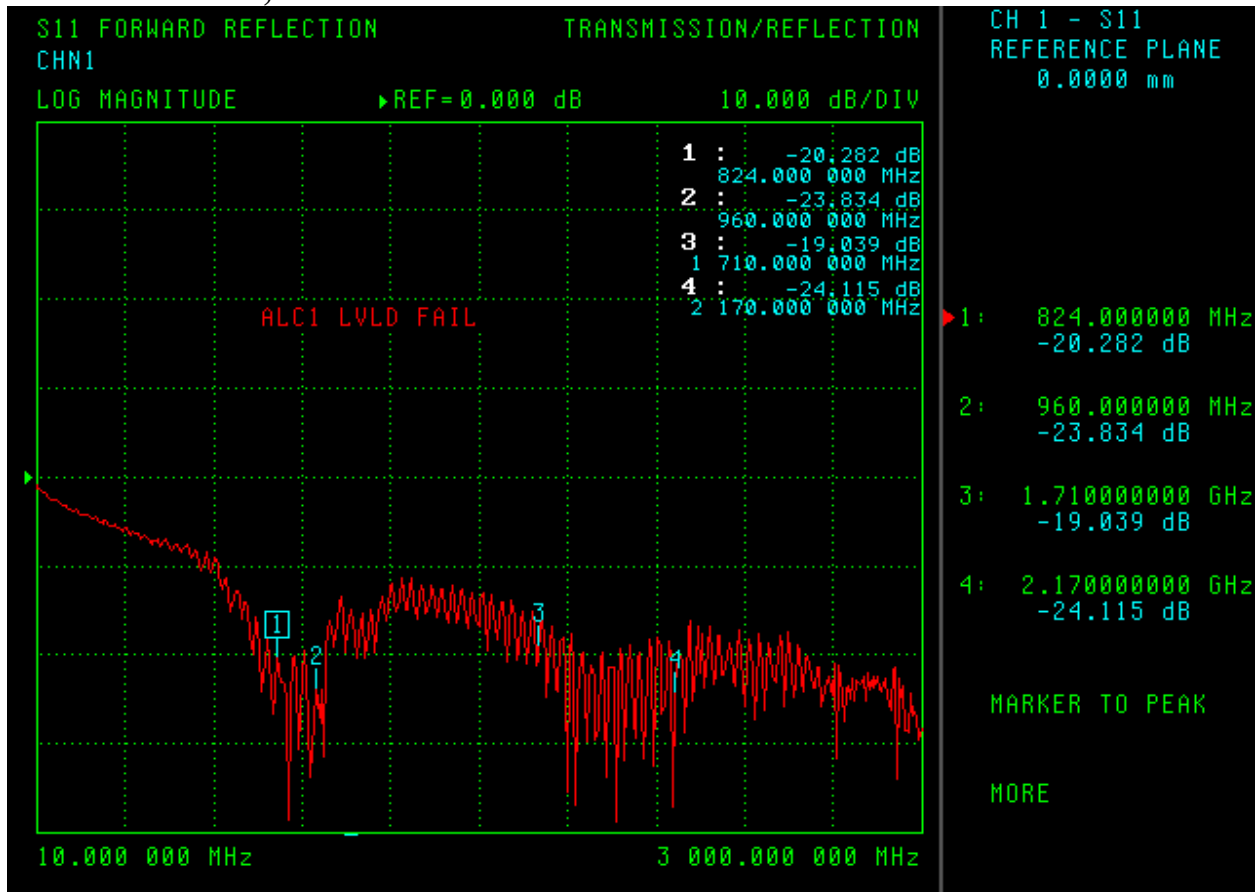
The drawing shows a probe assembly with three views. The perspective view on the right shows a central core tube (02) with a top cap (06) and a heat-shrink tube (07) at the top. A clip wire (08) is attached to the side. The side view in the middle shows the overall length of 540±10 and a diameter of 42±10. The top-down view on the left shows the arrangement of the clip retaining (09) and U-clip (10) components.

CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
	X.YX40.15		910/900/1000/1100/2100MHz	V/M		20100415	1

TOLERANCE	SURFACE ROUGHNESS	APPEARANCE	APPROVED	CHECKED	DRAWING DESIGNED
	$\sqrt{0.4}$				

Third angle projection

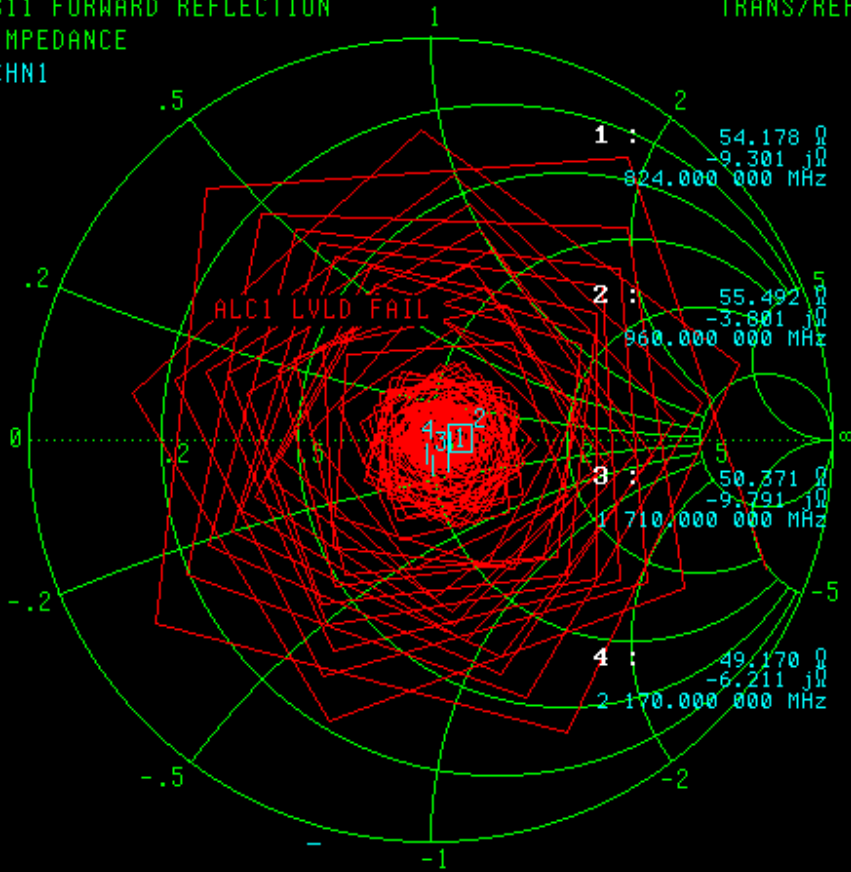
3. 1 Return Loss, V.S.W.R. and Smith Chart



S11 FORWARD REFLECTION
IMPEDANCE
CHN1

TRANS/REFL

CH 1 - S11
REFERENCE PLANE
0.0000 mm



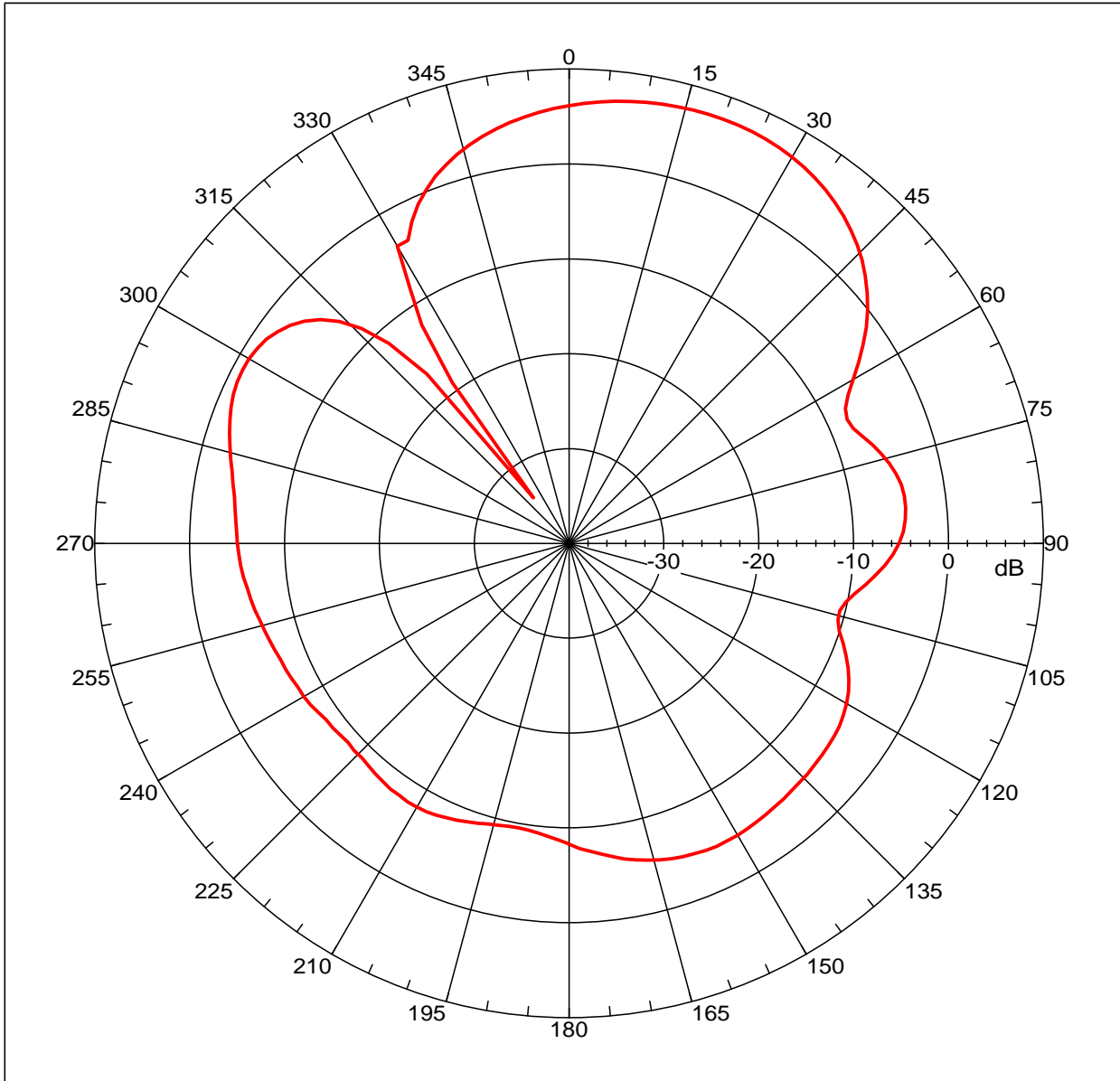
10.000 000 MHz - 3 000.000 000 MHz

- 1: 824.000000 MHz
54.178 Ω
-9.301 $j\Omega$
- 2: 960.000000 MHz
55.492 Ω
-3.801 $j\Omega$
- 3: 1.710000000 GHz
50.371 Ω
-9.791 $j\Omega$
- 4: 2.170000000 GHz
49.170 Ω
-6.211 $j\Omega$

MARKER TO PEAK

MORE

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 7.57027 dBi
 Max far-field (global) = -35.42907 dB, Max far-field (plot) = -35.42908 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 19.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

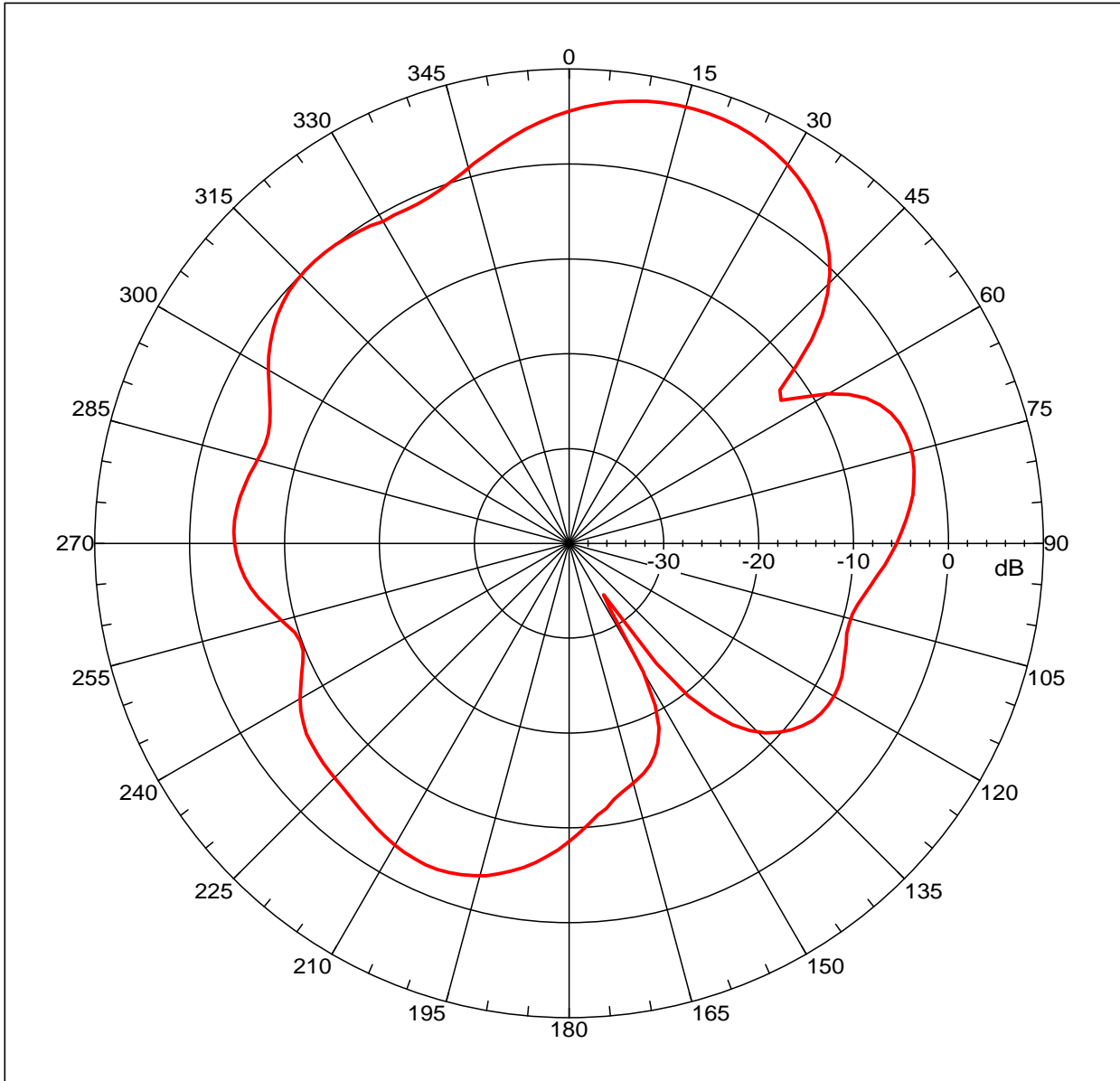
Far-field Cut Analysis:
 Avg value: -2.025 dB
 -3. dB beam width: 50.70 deg
 -6. dB beam width: 68.24 deg
 -10. dB beam width: 82.40 deg
 Left Sidelobe: -8.61 dB at -61.341 deg
 Right Sidelobe: -11.89 dB at 83.464 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
1	0.824 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 7.64141 dBi
 Max far-field (global) = -33.12642 dB, Max far-field (plot) = -33.12642 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 15.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

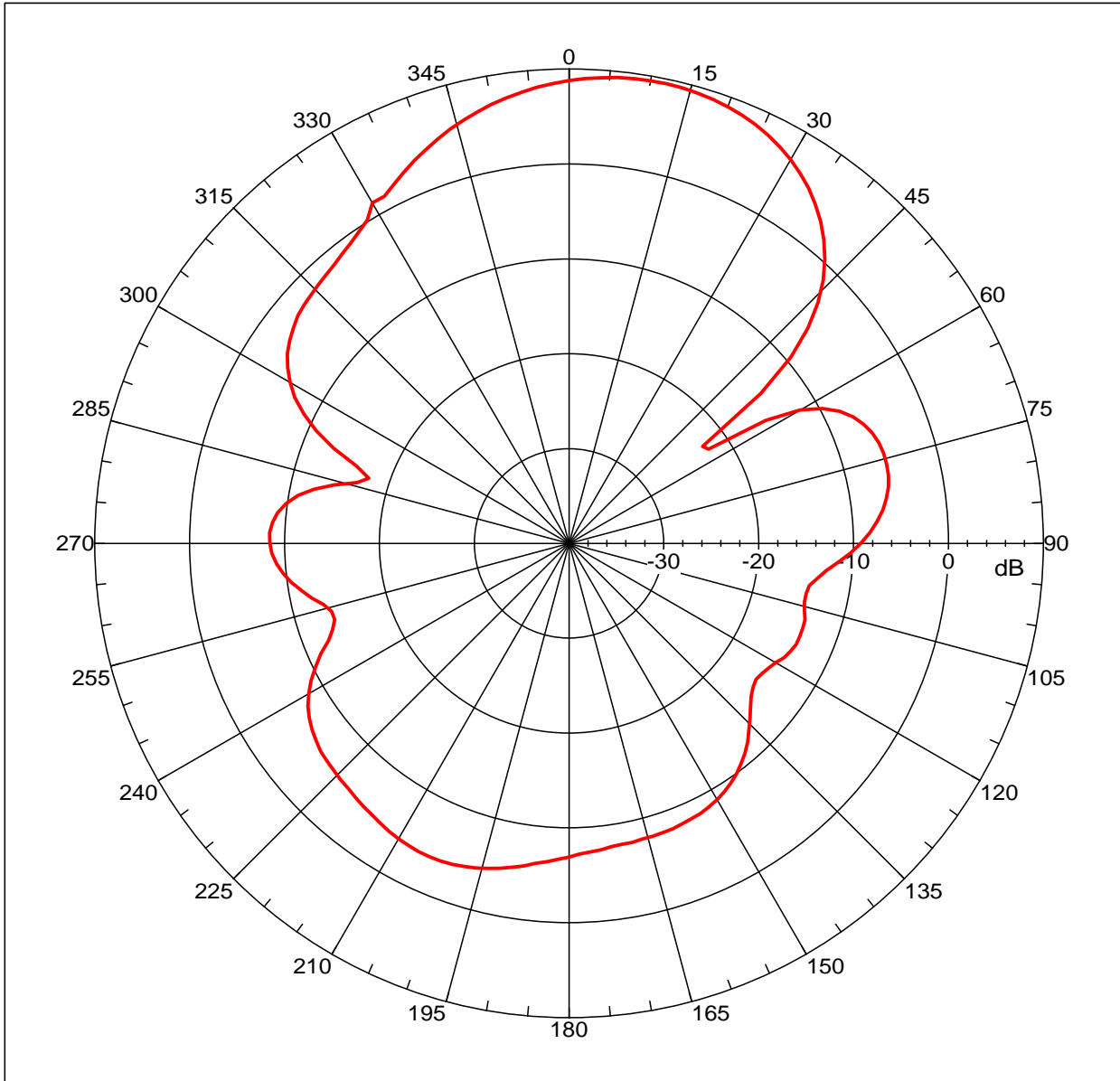
Far-field Cut Analysis:
 Avg value: -2.542 dB
 -3. dB beam width: 38.17 deg
 -6. dB beam width: 54.01 deg
 -10. dB beam width: 103.78 deg
 Left Sidelobe: -12.31 dB at -87.486 deg
 Right Sidelobe: -10.23 dB at 75.419 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
2	0.860 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 9.50865 dBi
 Max far-field (global) = -32.05103 dB, Max far-field (plot) = -32.05103 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 9.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

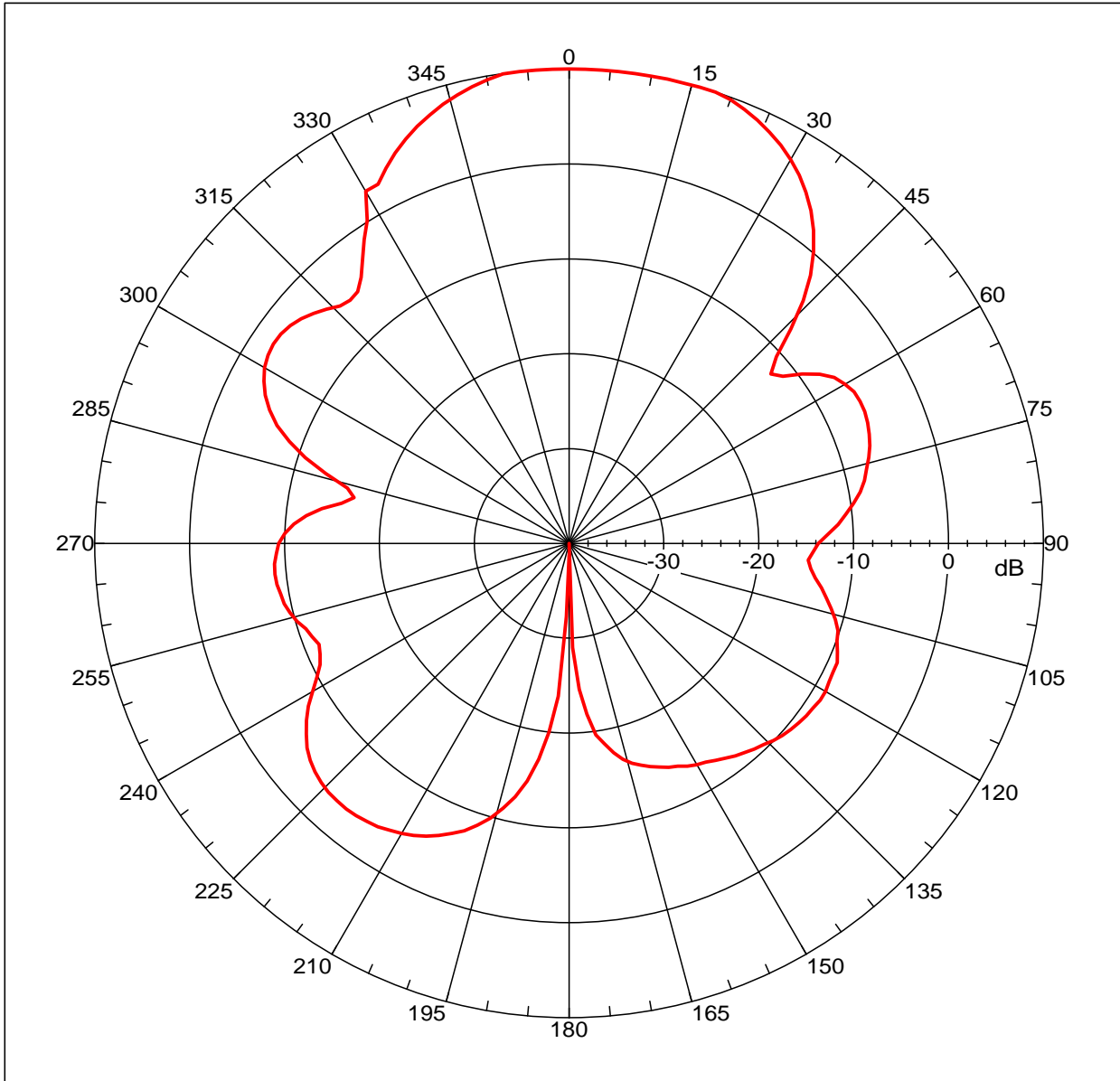
Far-field Cut Analysis:
 Avg value: -2.165 dB
 -3. dB beam width: 42.64 deg
 -6. dB beam width: 59.53 deg
 -10. dB beam width: 77.74 deg
 Left Sidelobe: -17.94 dB at -87.486 deg
 Right Sidelobe: -15.01 dB at 77.430 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
3	0.900 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 11.08266 dBi
 Max far-field (global) = -31.54701 dB, Max far-field (plot) = -31.54701 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 5.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

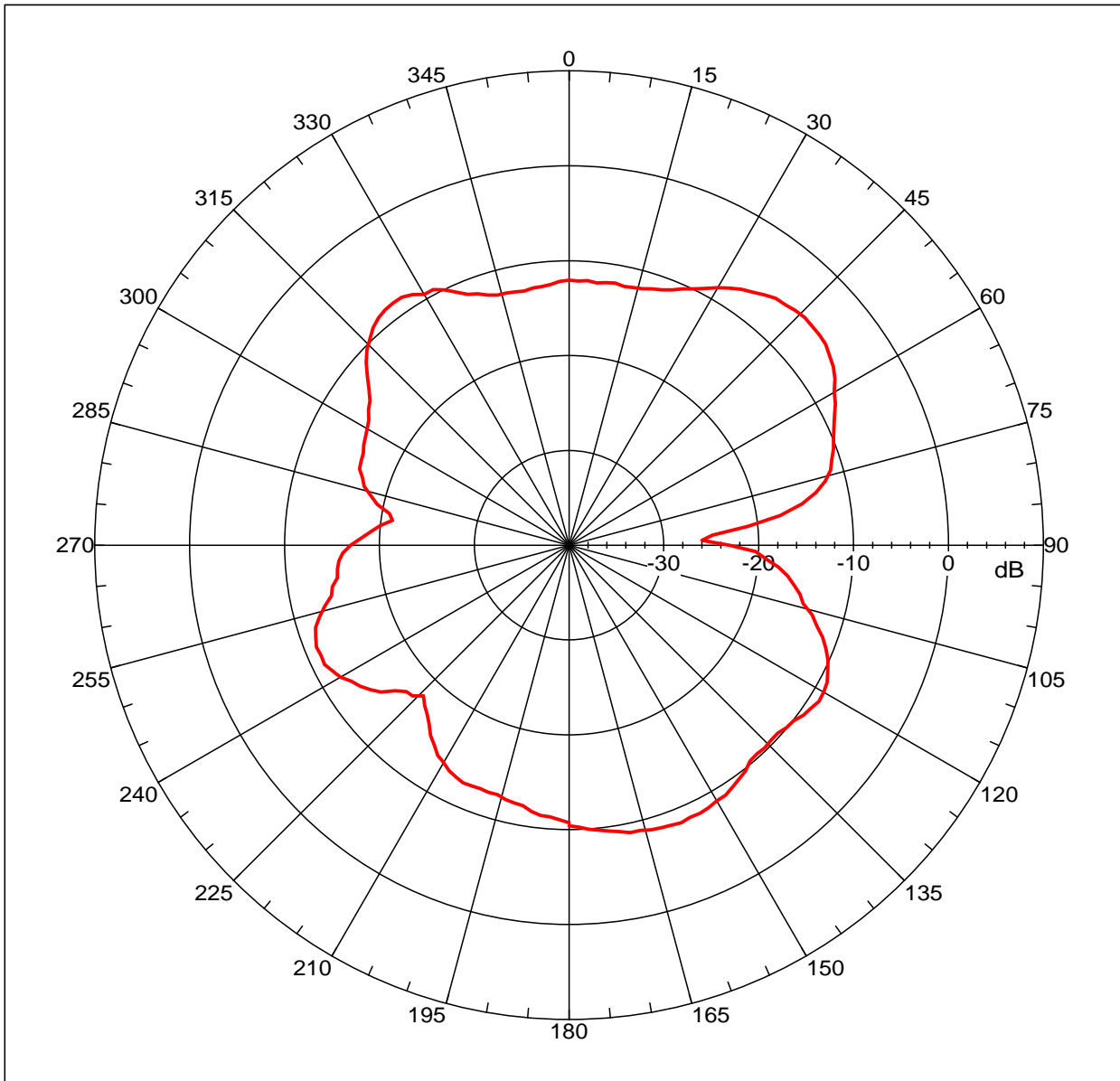
Far-field Cut Analysis:
 Avg value: -1.628 dB
 -3. dB beam width: 42.75 deg
 -6. dB beam width: 57.44 deg
 -10. dB beam width: 70.57 deg
 Left Sidelobe: -13.51 dB at -55.307 deg
 Right Sidelobe: -16.94 dB at 65.363 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
4	0.960 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = -5.45698 dBi
 Max far-field (global) = -50.64957 dB, Max far-field (plot) = -50.64962 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 45.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

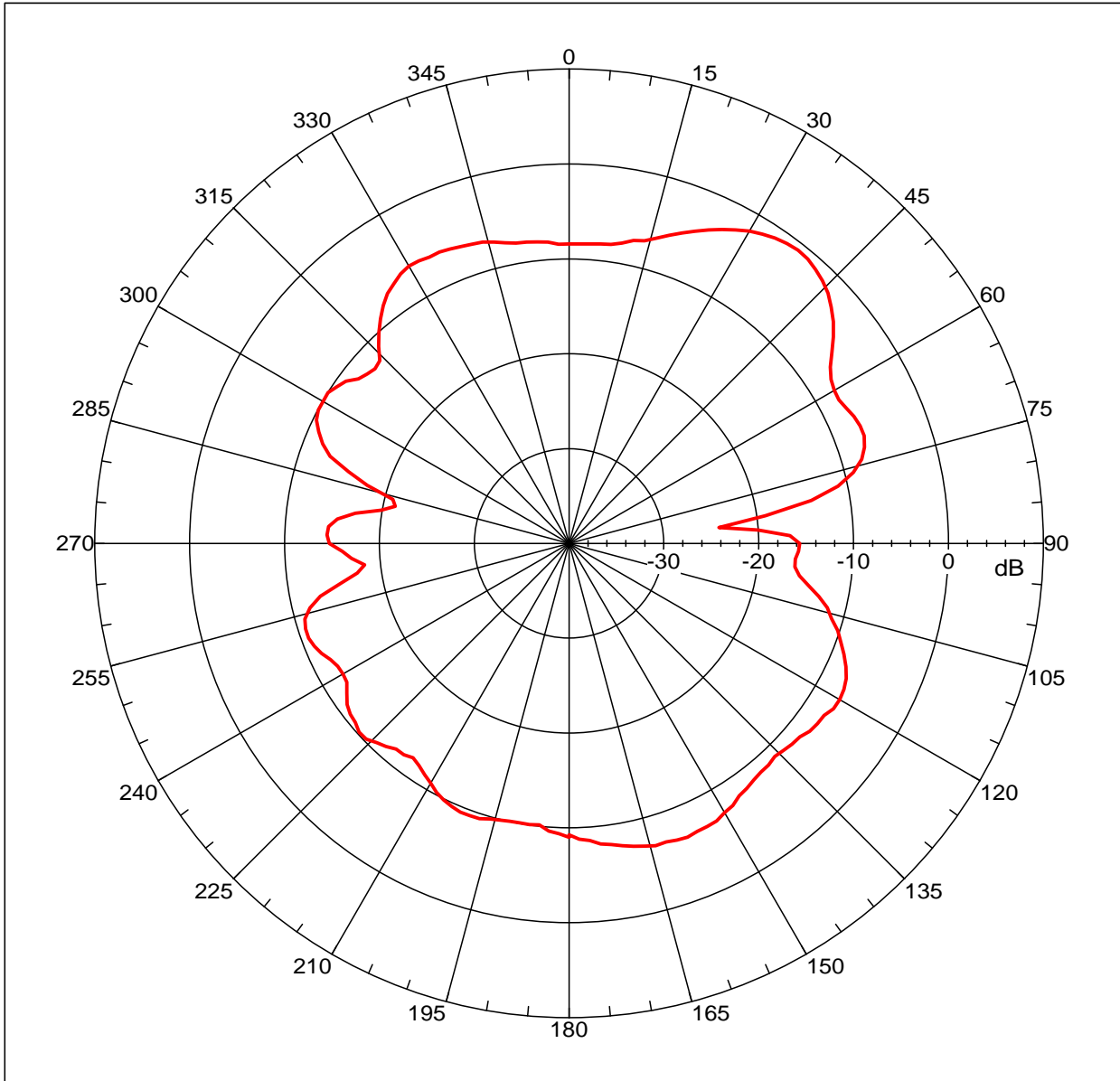
Far-field Cut Analysis:
 Avg value: -11.505 dB
 -3. dB beam width: 32.20 deg
 -6. dB beam width: 55.34 deg
 -10. dB beam width: 141.21 deg
 Left Sidelobe: -3.01 dB at -35.196 deg
 Right Sidelobe: -3.48 dB at 123.687 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
5	1.710 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = -0.811 dBi
 Max far-field (global) = -47.63304 dB, Max far-field (plot) = -47.63307 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 37.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

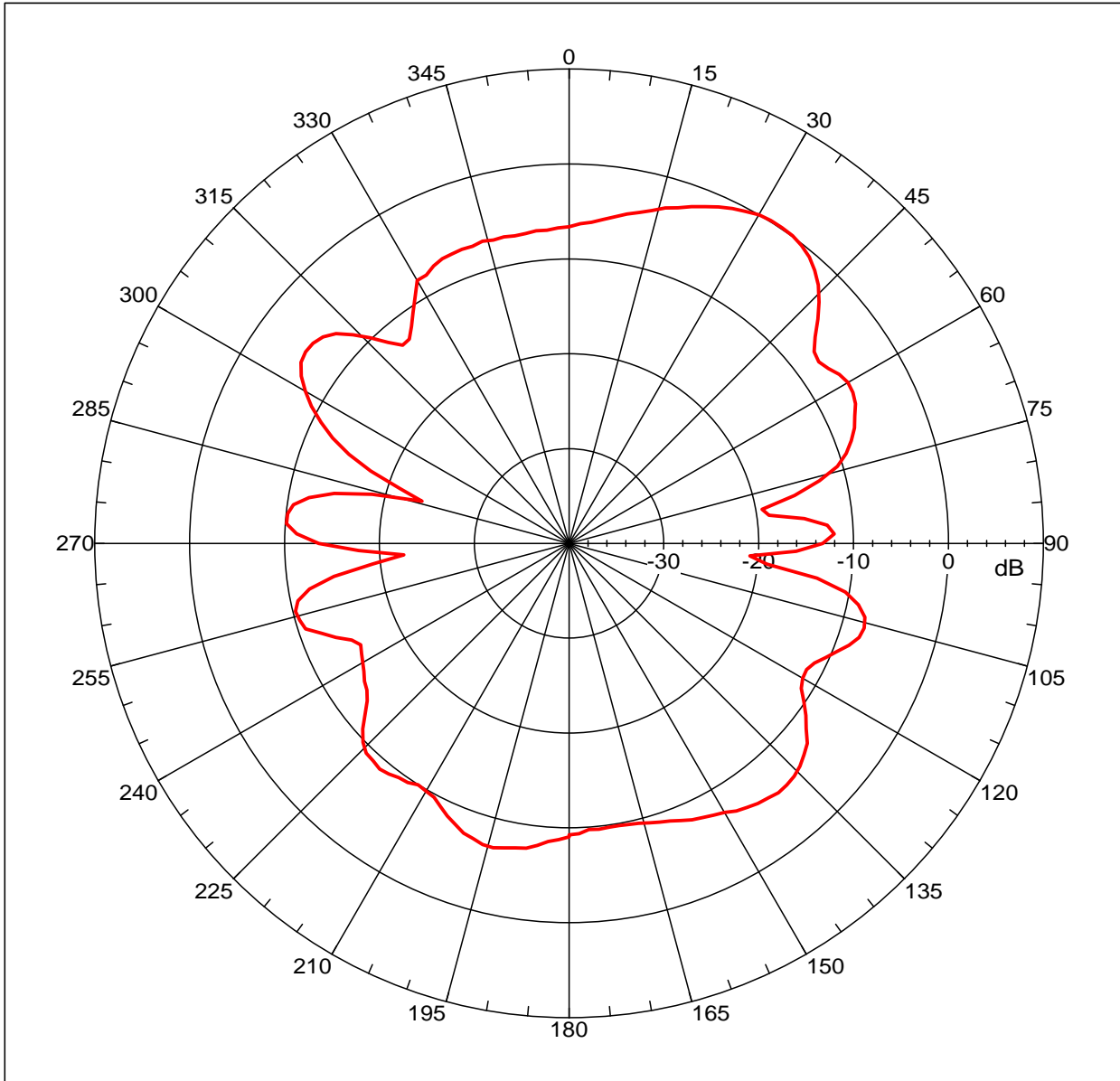
Far-field Cut Analysis:
 Avg value: -8.693 dB
 -3. dB beam width: 26.34 deg
 -6. dB beam width: 41.27 deg
 -10. dB beam width: 121.83 deg
 Left Sidelobe: -5.57 dB at -23.128 deg
 Right Sidelobe: -14.89 dB at 91.508 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
6	1.800 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 0.14454 dBi
 Max far-field (global) = -46.52403 dB, Max far-field (plot) = -46.52404 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 33.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

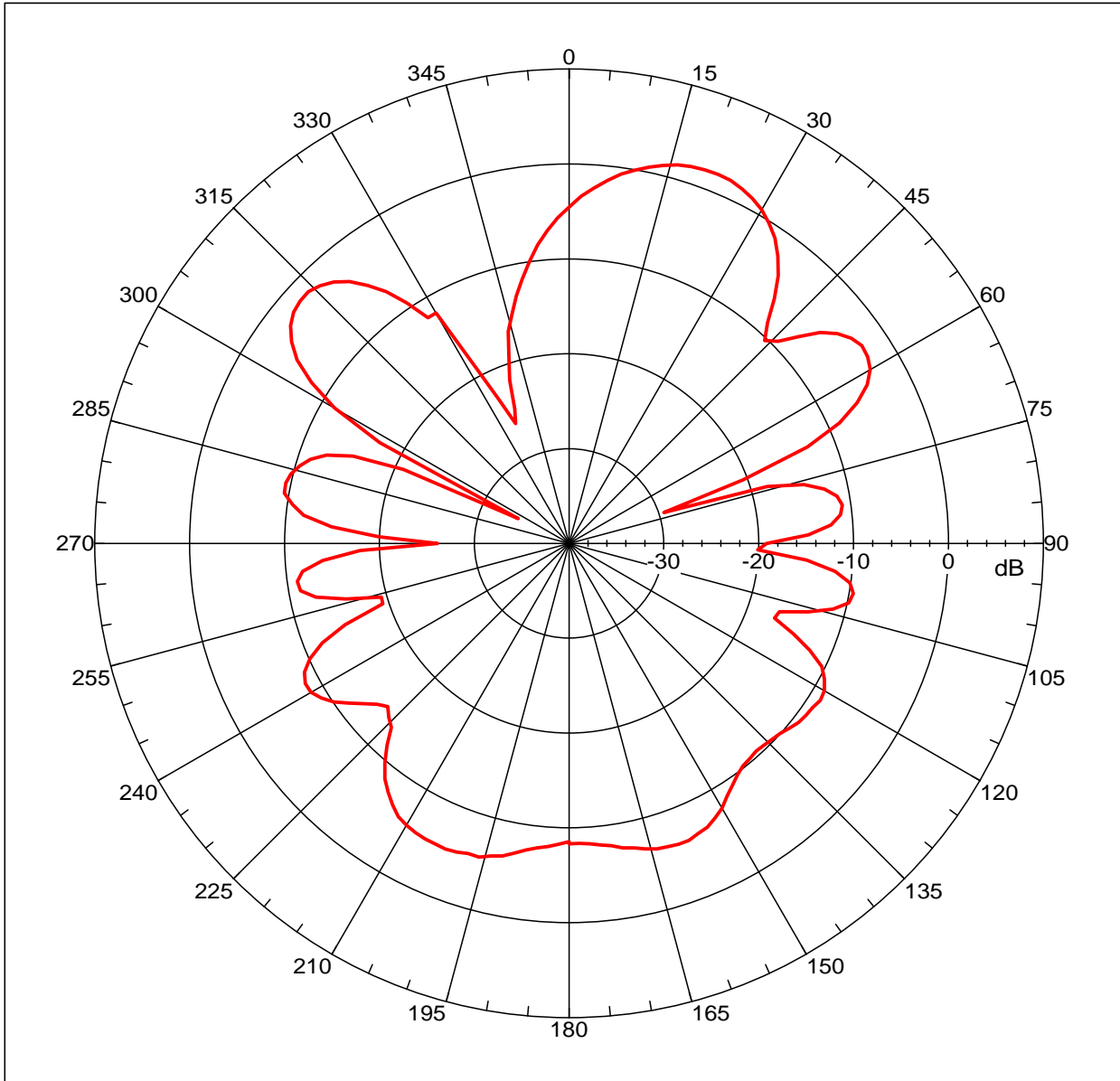
Far-field Cut Analysis:
 Avg value: -8.099 dB
 -3. dB beam width: 27.45 deg
 -6. dB beam width: 44.65 deg
 -10. dB beam width: 106.21 deg
 Left Sidelobe: -5.84 dB at -53.296 deg
 Right Sidelobe: -6.22 dB at 61.341 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
7	1.880 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.94902 dBi
 Max far-field (global) = -45.85708 dB, Max far-field (plot) = -45.85709 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 21.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

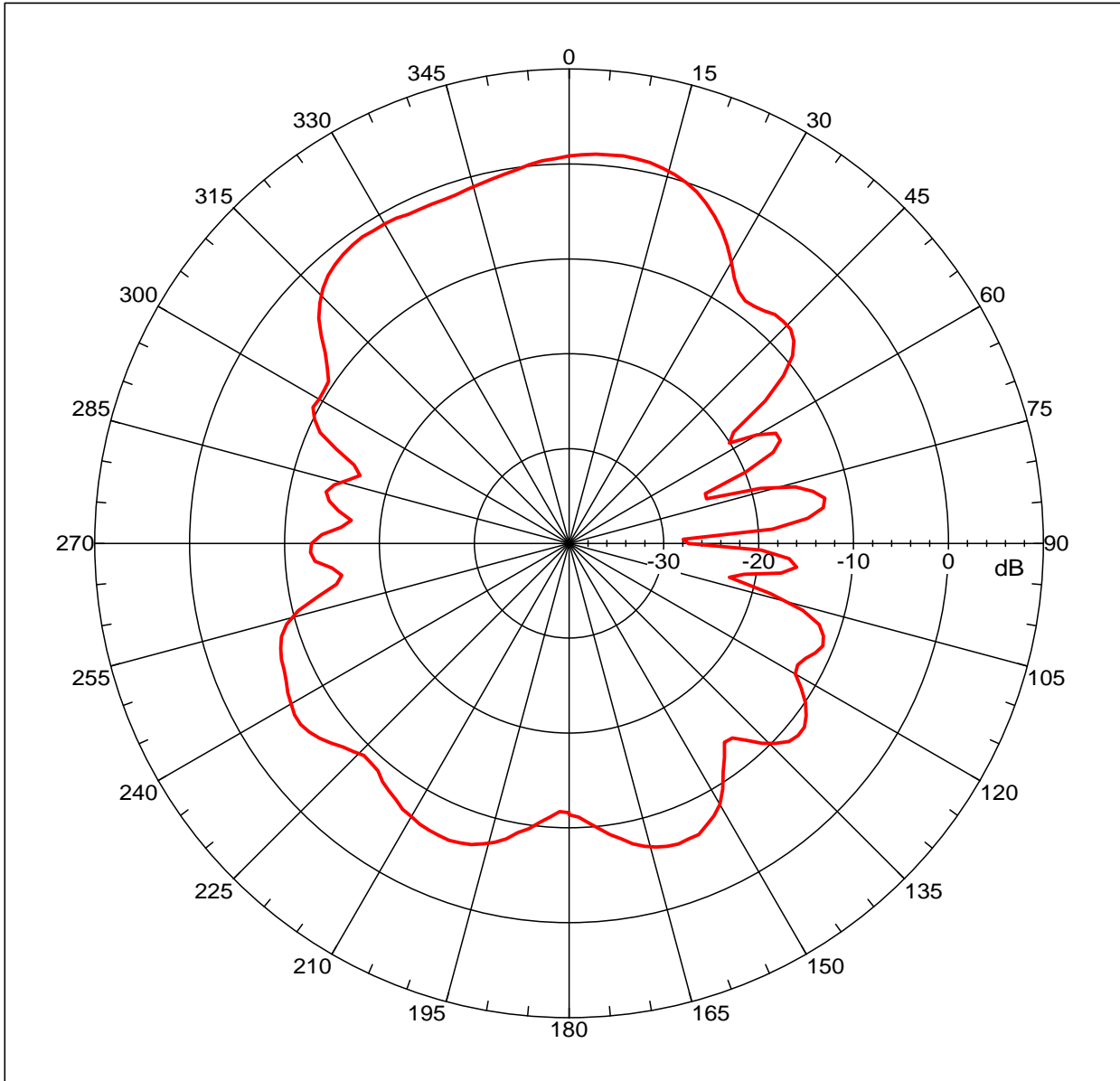
Far-field Cut Analysis:
 Avg value: -7.627 dB
 -3. dB beam width: 26.67 deg
 -6. dB beam width: 37.14 deg
 -10. dB beam width: 47.23 deg
 Left Sidelobe: -3.78 dB at -45.251 deg
 Right Sidelobe: -4.71 dB at 57.318 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
8	1.990 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.22706 dBi
 Max far-field (global) = -46.09964 dB, Max far-field (plot) =
 -46.09964 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 7.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

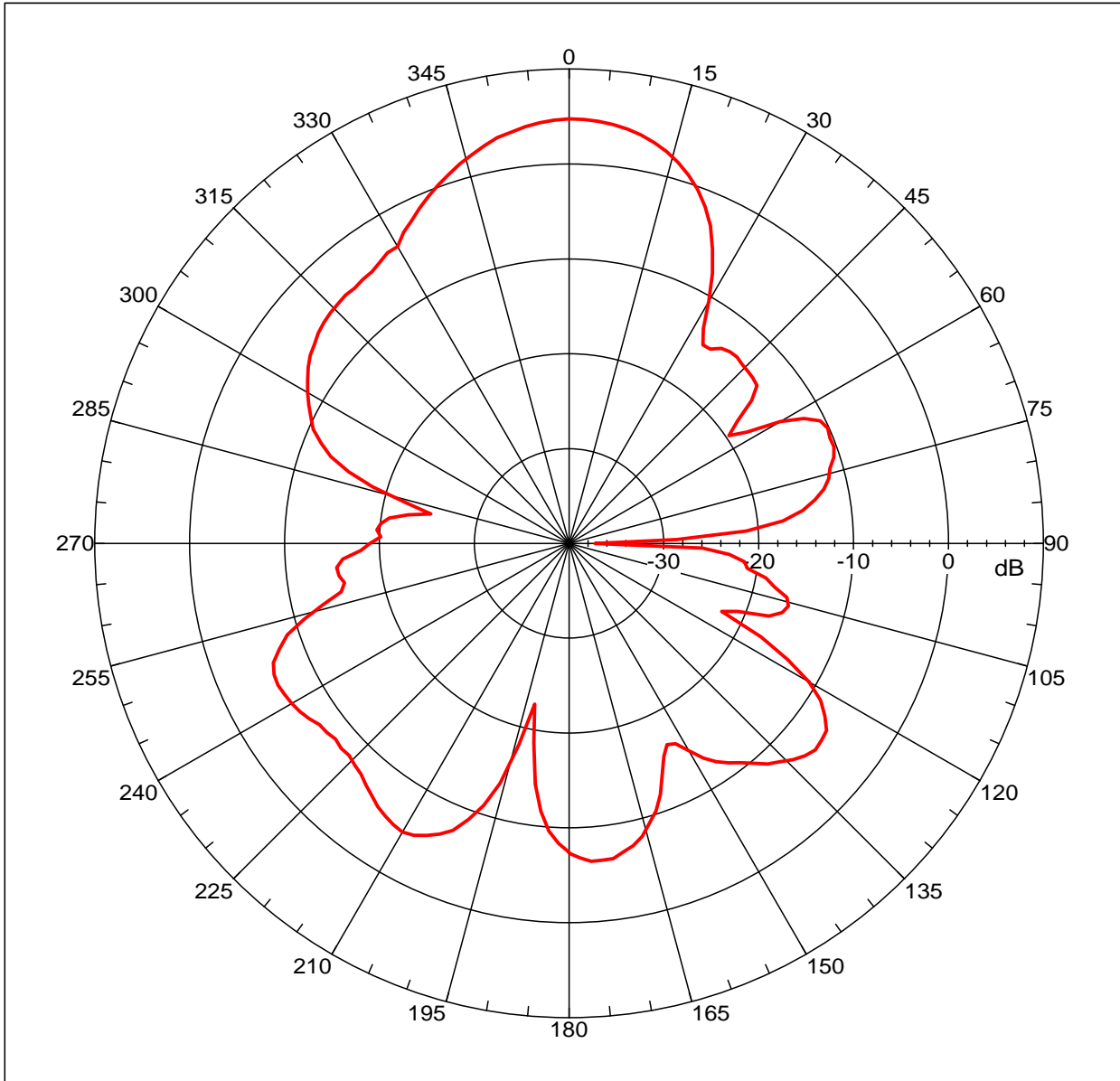
NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150
 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -7.164 dB
 -3. dB beam width: 63.93 deg
 -6. dB beam width: 77.25 deg
 -10. dB beam width: 104.27 deg
 Left Sidelobe: -15.06 dB at -77.430 deg
 Right Sidelobe: -16.46 dB at 65.363 deg
 Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000
 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
9	2.100 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz E-PLANE.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 4.73327 dBi
 Max far-field (global) = -42.79884 dB, Max far-field (plot) = -42.79884 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -0.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz E-PLANE

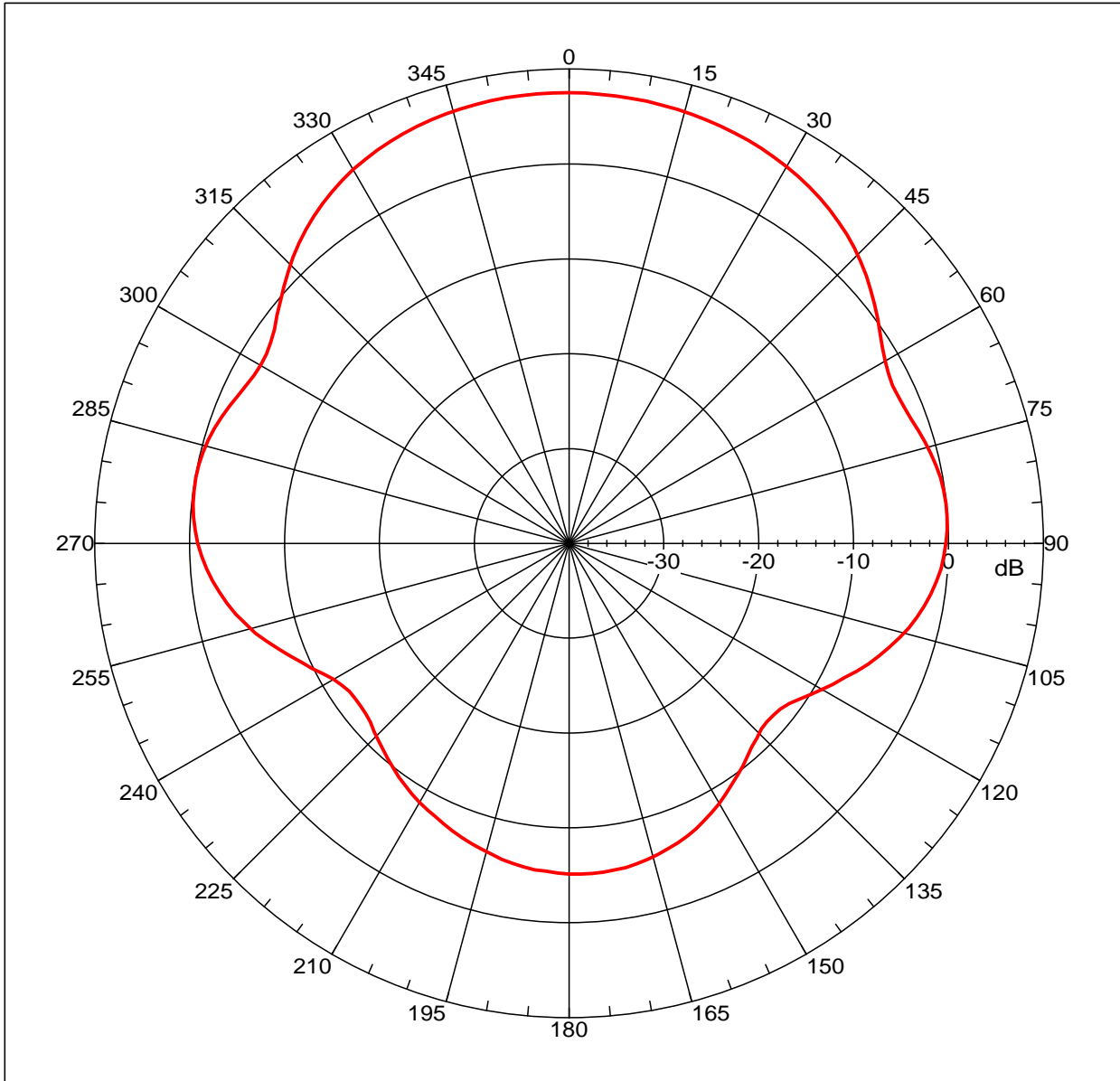
NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz E-PLANE.nsi
 Measurement date/time: 11/5/2009 10:36:21 AM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -6.873 dB
 -3. dB beam width: 31.82 deg
 -6. dB beam width: 45.47 deg
 -10. dB beam width: 74.38 deg
 Left Sidelobe: -24.43 dB at -85.475 deg
 Right Sidelobe: -18.29 dB at 43.240 deg
 Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
10	2.170 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 7.49476 dBi
 Max far-field (global) = -35.50458 dB, Max far-field (plot) = -35.50458 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -2.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

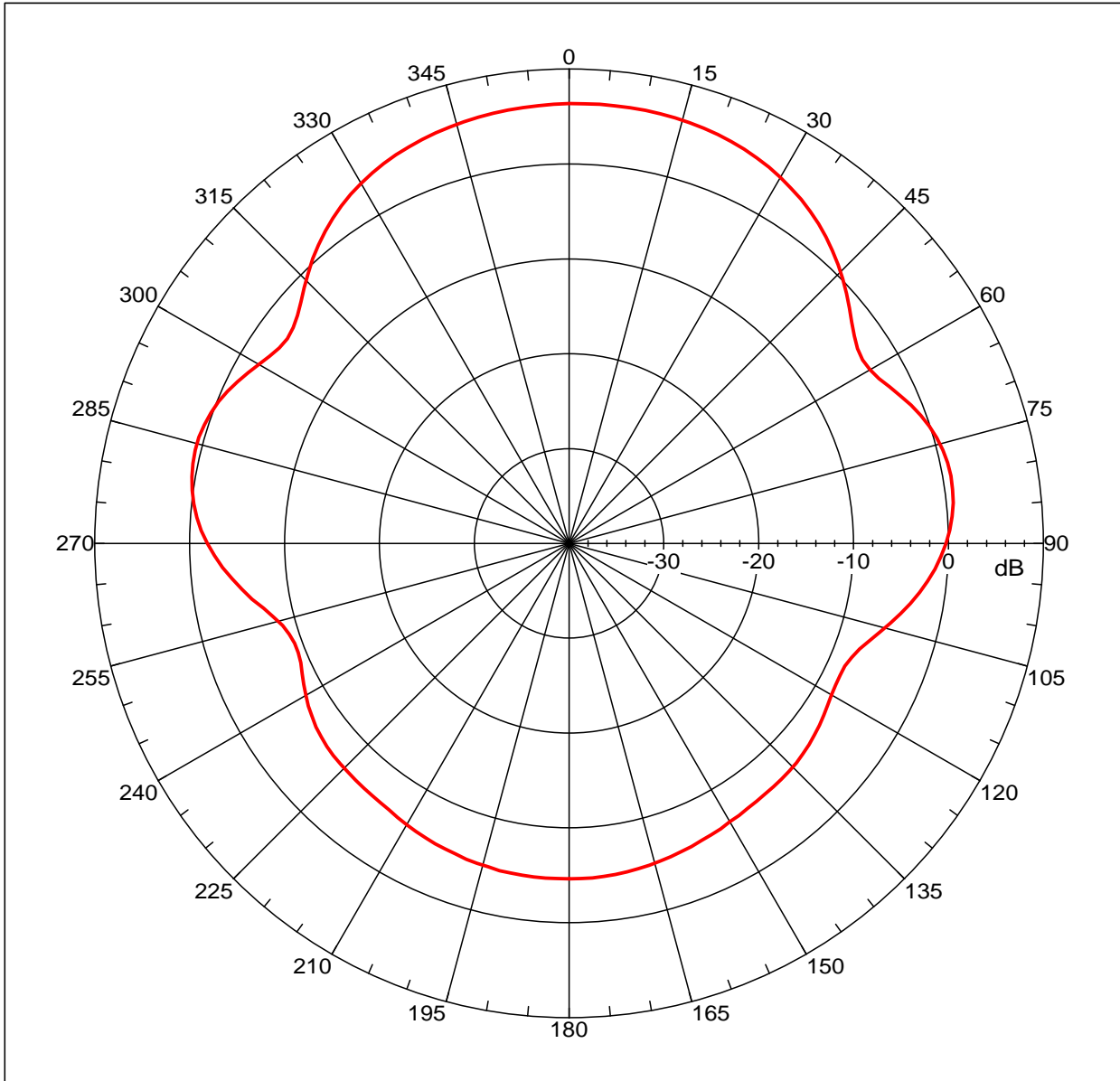
NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -0.236 dB
 -3. dB beam width: 73.84 deg
 -6. dB beam width: 95.62 deg
 -10. dB beam width: 200.10 deg
 Left Sidelobe: -7.56 dB at -79.441 deg
 Right Sidelobe: -7.55 dB at 85.475 deg
 Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
1	0.824 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 6.37289 dBi
 Max far-field (global) = -34.39494 dB, Max far-field (plot) = -34.39494 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 3.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

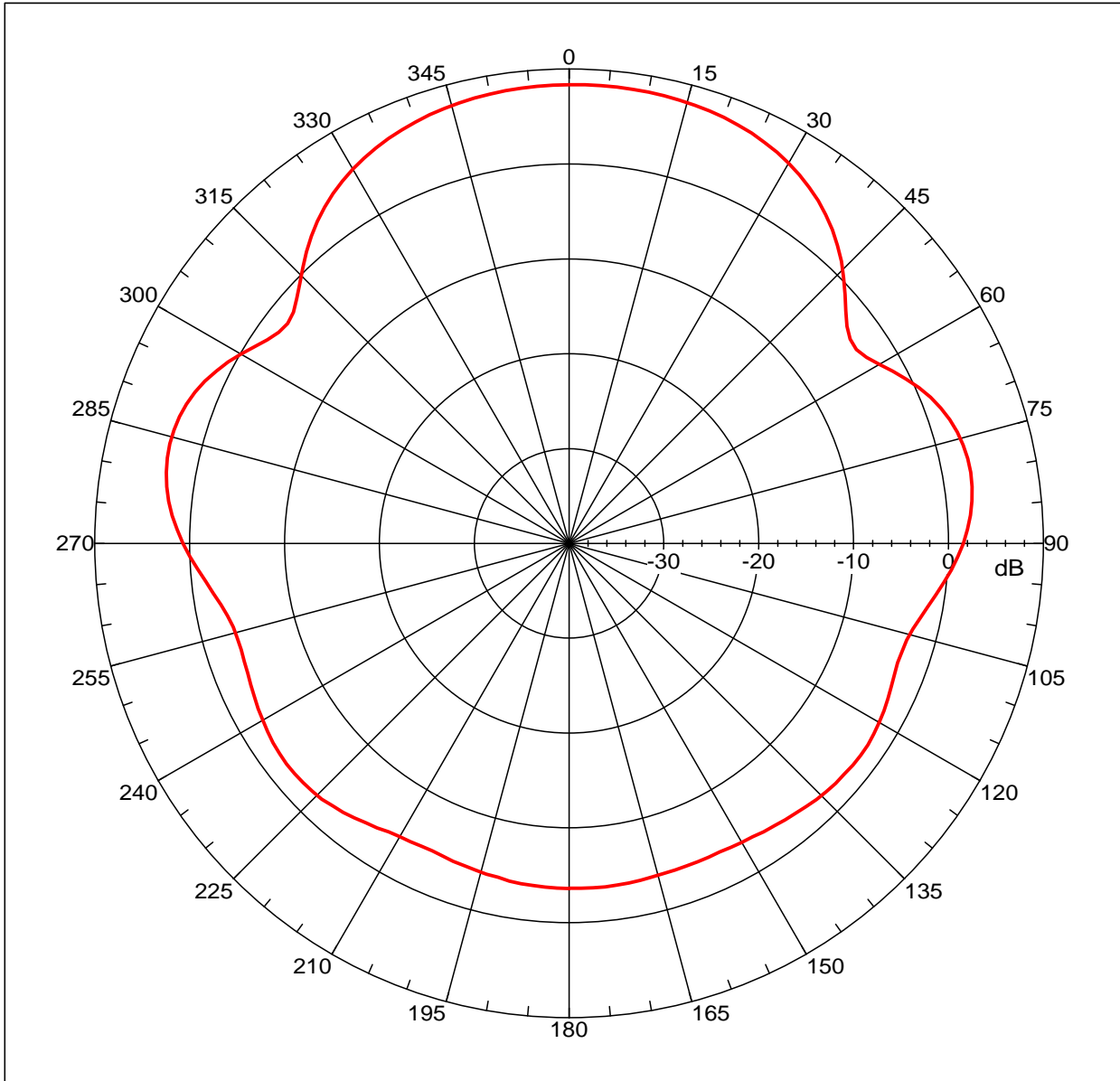
Far-field Cut Analysis:
 Avg value: -0.772 dB
 -3. dB beam width: 67.89 deg
 -6. dB beam width: 87.66 deg
 -10. dB beam width: 195.97 deg
 Left Sidelobe: -5.78 dB at -75.419 deg
 Right Sidelobe: -5.52 dB at 81.453 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
2	0.860 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 8.36758 dBi
 Max far-field (global) = -33.1921 dB, Max far-field (plot) = -33.1921 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 3.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

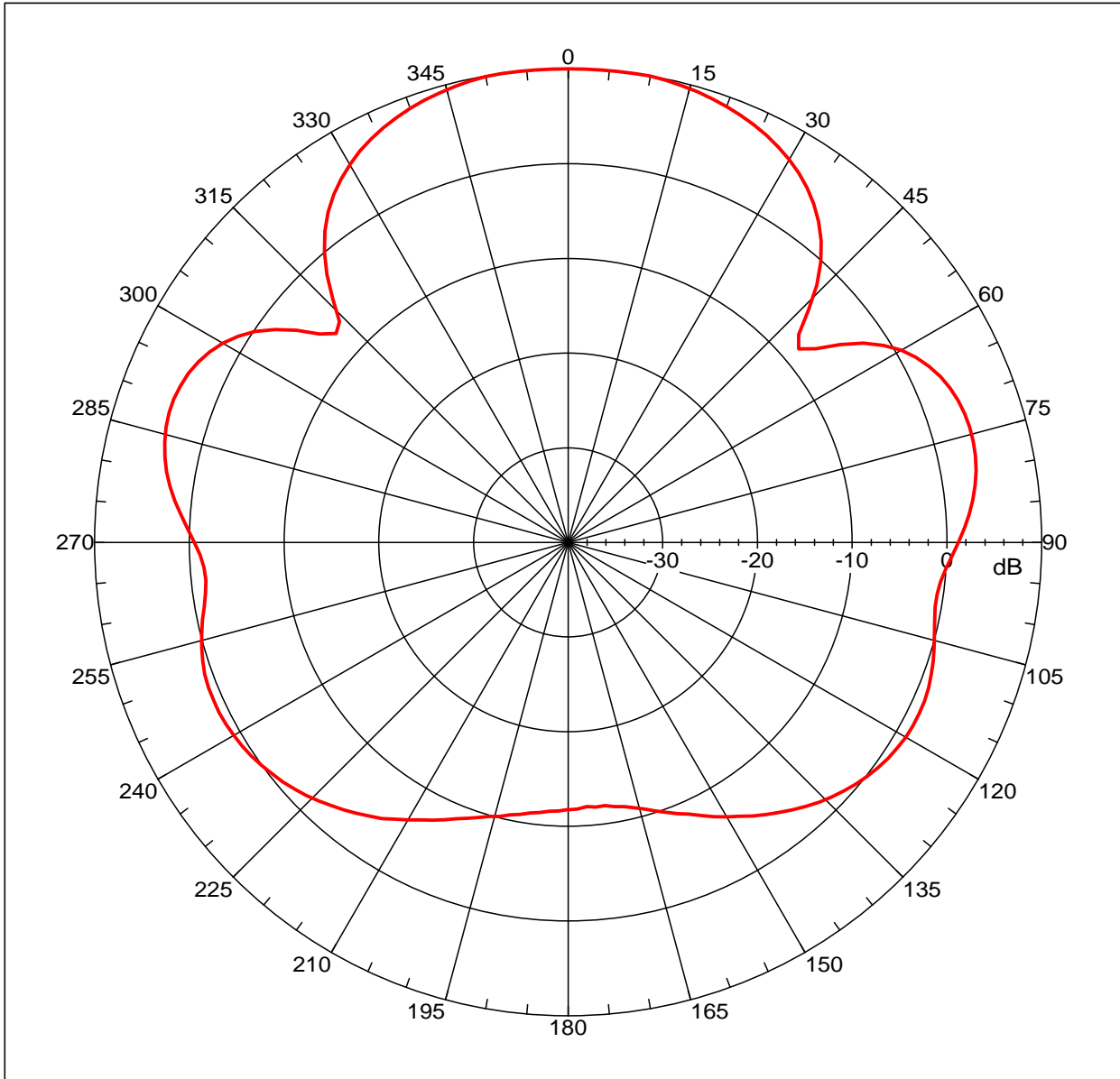
Far-field Cut Analysis:
 Avg value: 1.366 dB
 -3. dB beam width: 64.66 deg
 -6. dB beam width: 81.93 deg
 -10. dB beam width: 98.68 deg
 Left Sidelobe: -5.02 dB at -75.419 deg
 Right Sidelobe: -5.38 dB at 81.453 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
3	0.900 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 10.29425 dBi
 Max far-field (global) = -32.33542 dB, Max far-field (plot) = -32.33542 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -0.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

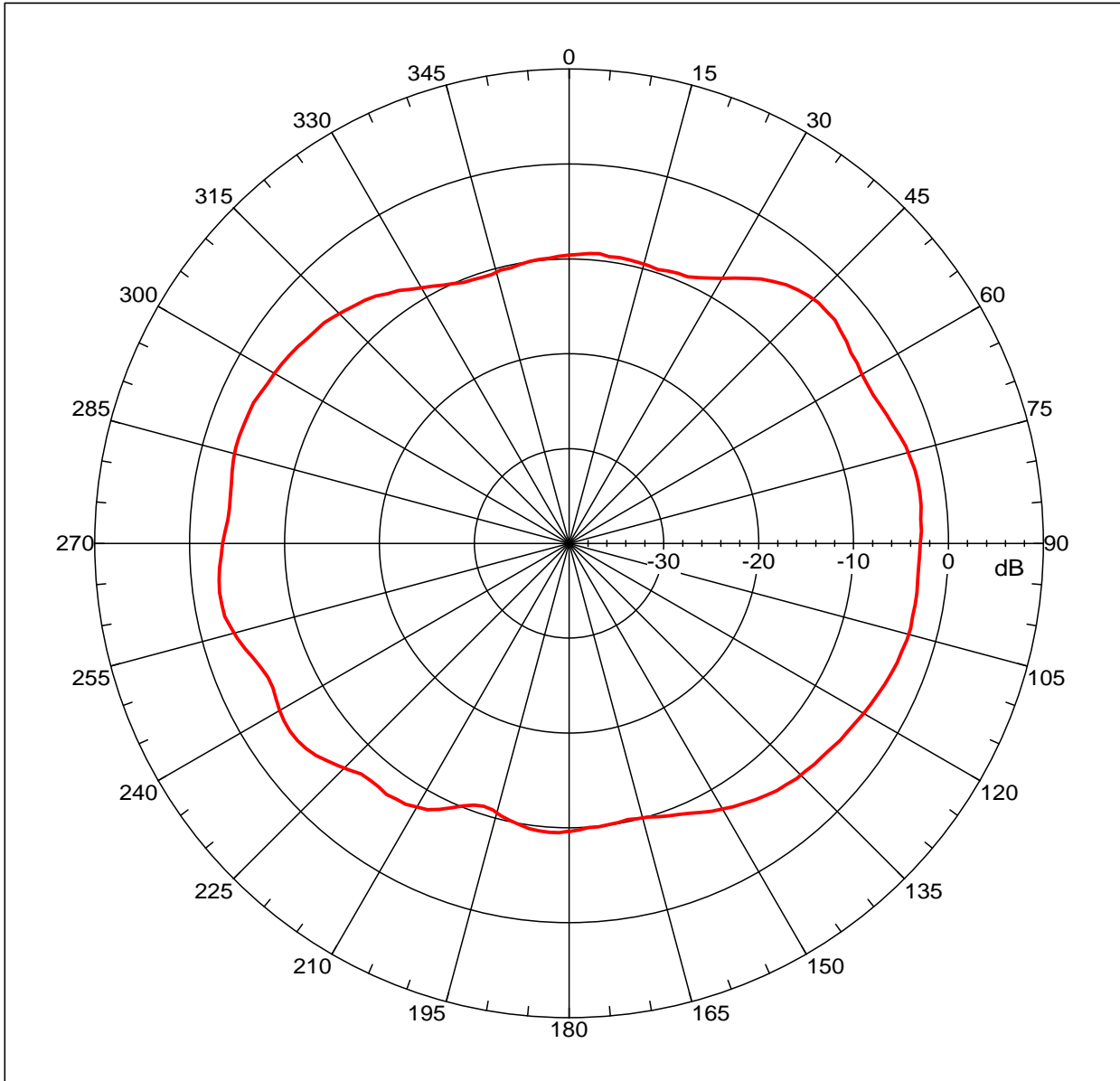
Far-field Cut Analysis:
 Avg value: 1.929 dB
 -3. dB beam width: 54.49 deg
 -6. dB beam width: 69.98 deg
 -10. dB beam width: 81.58 deg
 Left Sidelobe: -6.01 dB at -71.397 deg
 Right Sidelobe: -6.19 dB at 75.419 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
4	0.960 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = -2.63903 dBi
 Max far-field (global) = -47.83162 dB, Max far-field (plot) = -47.83165 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 81.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

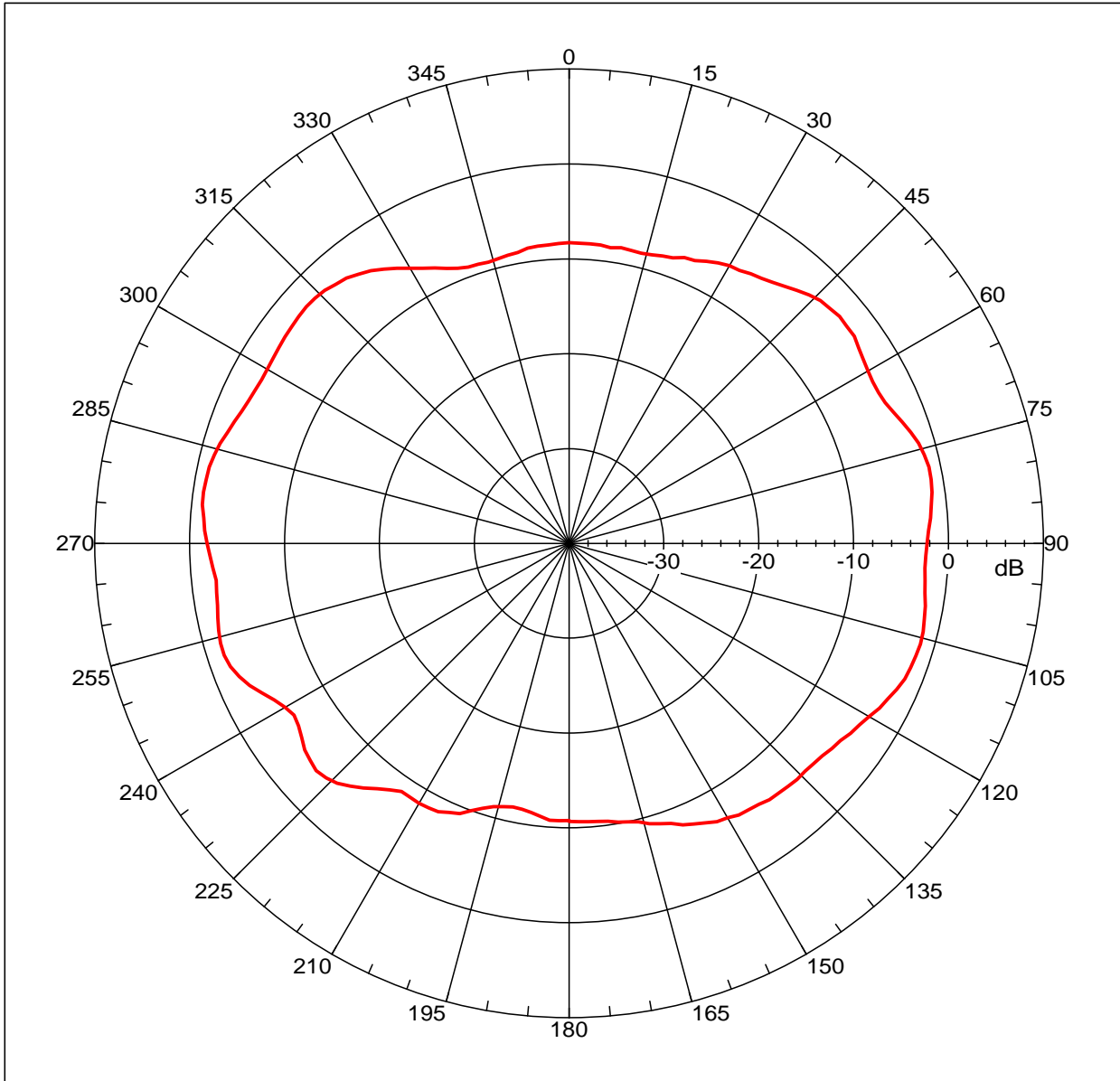
Far-field Cut Analysis:
 Avg value: -5.859 dB
 -3. dB beam width: 101.77 deg
 -6. dB beam width: 128.93 deg
 -10. dB beam width: Not Found
 Left Sidelobe: -0.81 dB at -71.397 deg
 Right Sidelobe: Not Found

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
5	1.710 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = -1.11223 dBi
 Max far-field (global) = -47.93427 dB, Max far-field (plot) = -47.93431 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -82.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

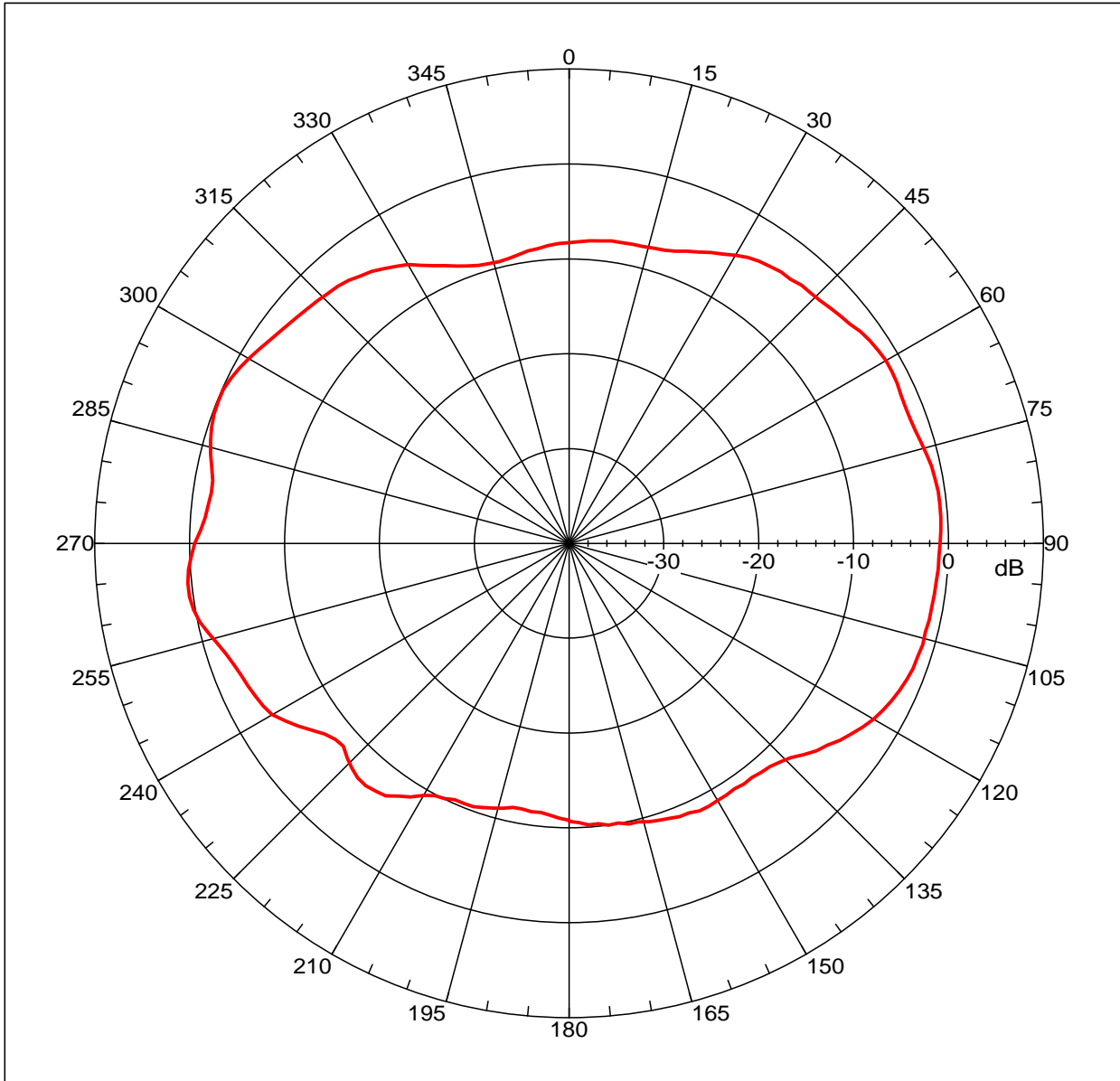
Far-field Cut Analysis:
 Avg value: -4.827 dB
 -3. dB beam width: 79.15 deg
 -6. dB beam width: 114.28 deg
 -10. dB beam width: Not Found
 Left Sidelobe: -3.06 dB at -131.732 deg
 Right Sidelobe: -1.68 dB at 51.285 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
6	1.800 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 0.39706 dBi
 Max far-field (global) = -46.27151 dB, Max far-field (plot) = -46.27154 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -98.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

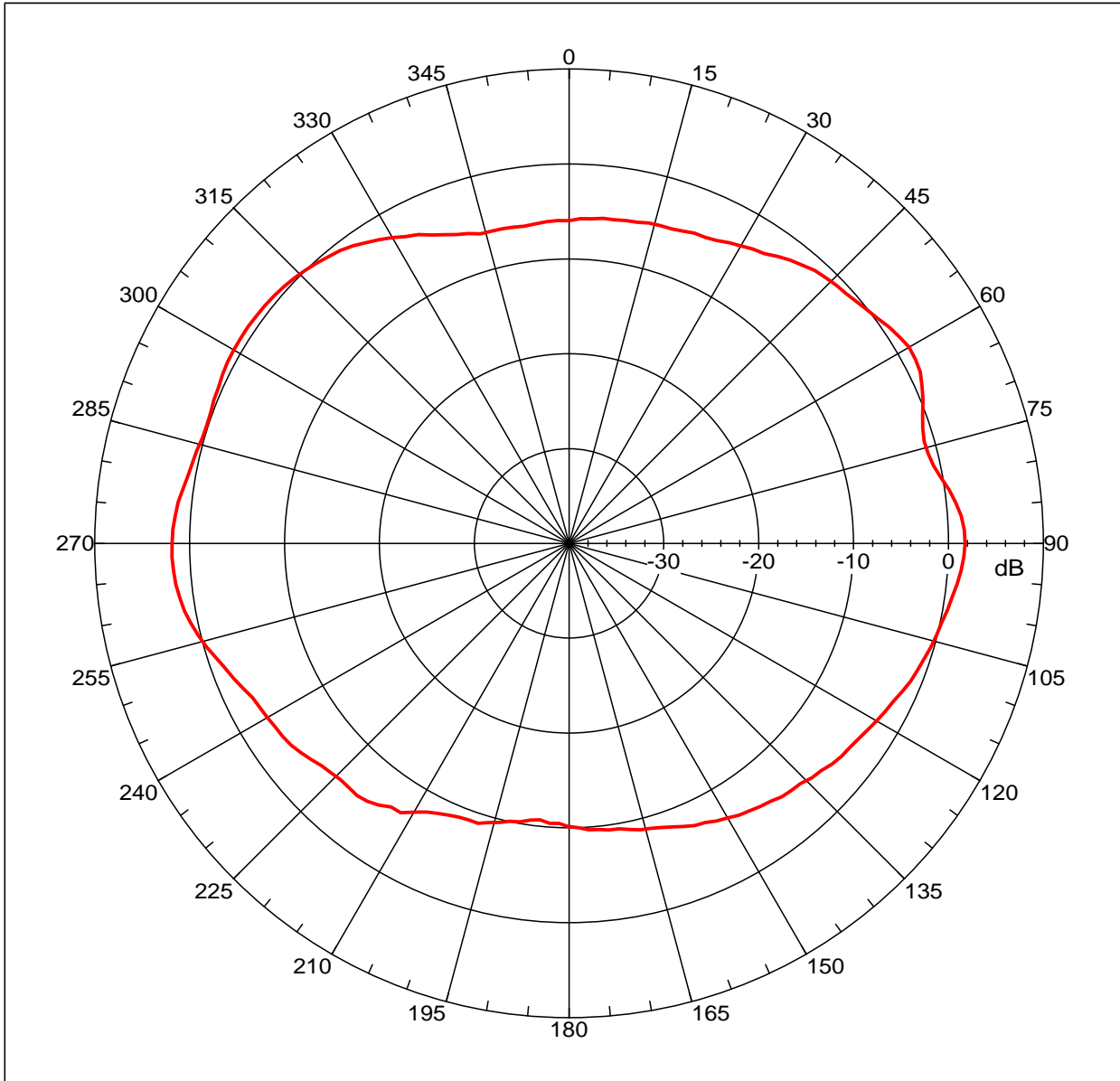
Far-field Cut Analysis:
 Avg value: -4.414 dB
 -3. dB beam width: 60.13 deg
 -6. dB beam width: 92.71 deg
 -10. dB beam width: 317.75 deg
 Left Sidelobe: -7.06 dB at -139.777 deg
 Right Sidelobe: -0.52 dB at -65.363 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
7	1.880 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.87798 dBi
 Max far-field (global) = -45.92812 dB, Max far-field (plot) = -45.92821 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -92.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

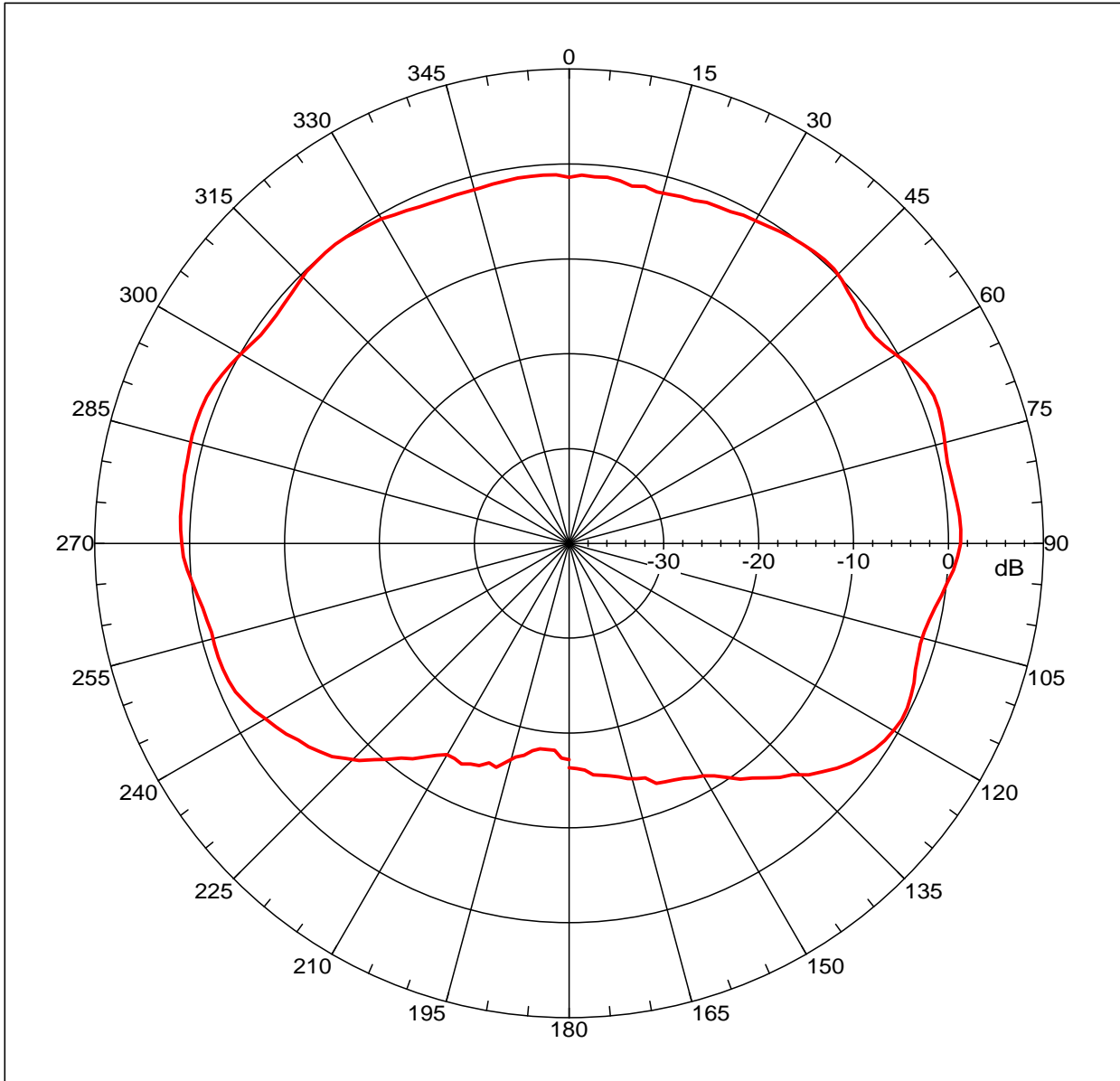
NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -2.544 dB
 -3. dB beam width: 72.65 deg
 -6. dB beam width: 103.42 deg
 -10. dB beam width: 314.38 deg
 Left Sidelobe: Not Found
 Right Sidelobe: -0.52 dB at 61.341 deg
 Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
8	1.990 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.46588 dBi
 Max far-field (global) = -45.86082 dB, Max far-field (plot) = -45.86091 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 67.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

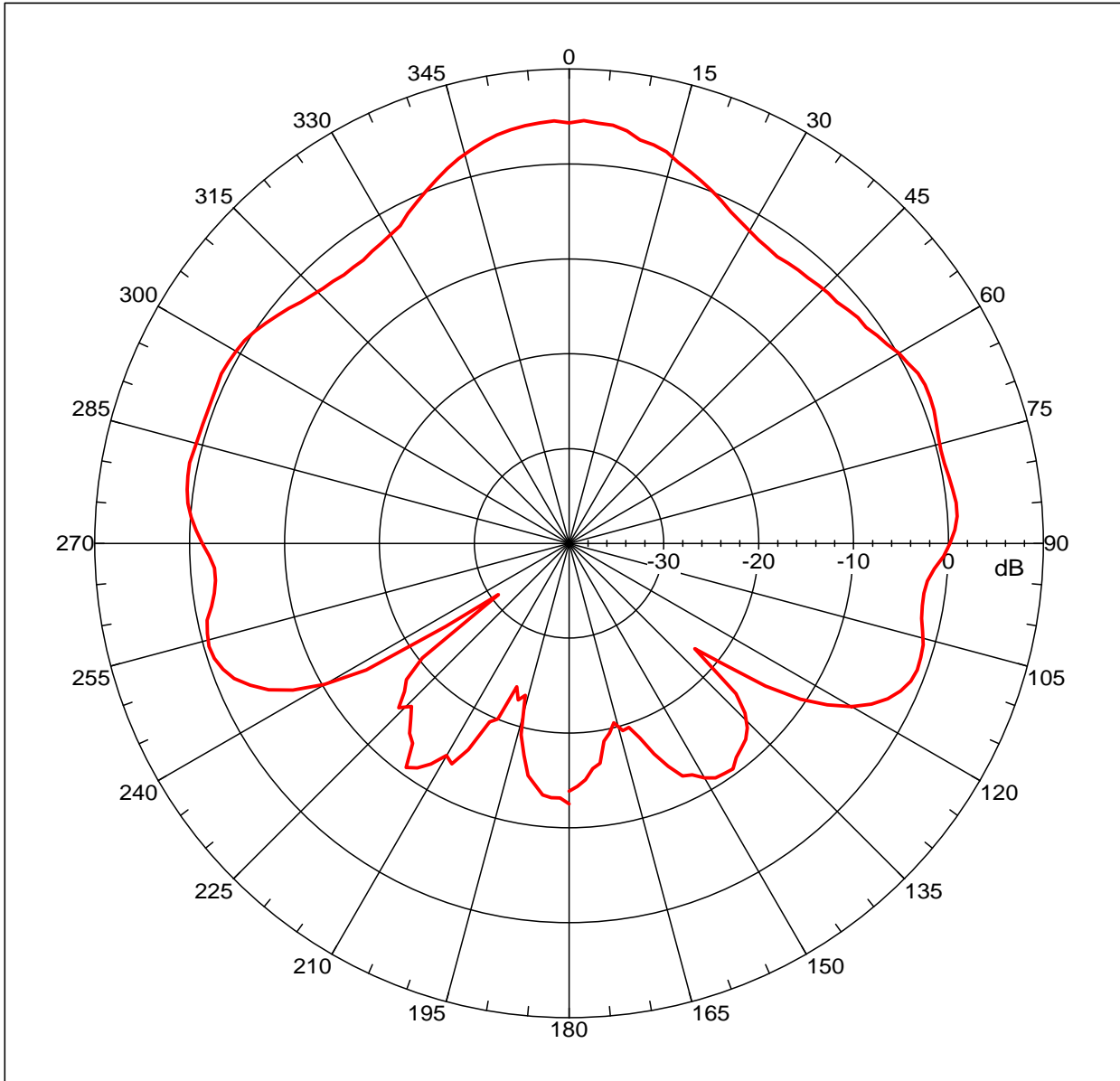
Far-field Cut Analysis:
 Avg value: -2.429 dB
 -3. dB beam width: 105.76 deg
 -6. dB beam width: 260.04 deg
 -10. dB beam width: 280.04 deg
 Left Sidelobe: -1.22 dB at 43.240 deg
 Right Sidelobe: -1.77 dB at 119.665 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
9	2.100 GHz	Azimuth	Elevation	Single-pol

Far-field amplitude of 20091105 YGA-150 800-2100mhz H-PLANE01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 4.57565 dBi
 Max far-field (global) = -42.95646 dB, Max far-field (plot) = -42.95646 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 1.99999 deg, Vpeak at: 0.000 deg
 Plot centering: On

20091105 YGA-150 800-2100mhz H-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\Data\20091105 YGA-150 800-2100mhz H-PLANE01.nsi
 Measurement date/time: 11/5/2009 10:42:42 AM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -2.855 dB
 -3. dB beam width: 34.73 deg
 -6. dB beam width: 53.96 deg
 -10. dB beam width: 237.69 deg
 Left Sidelobe: -3.79 dB at -63.352 deg
 Right Sidelobe: -3.49 dB at 67.374 deg
 Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

Beam	Frequency	Azimuth	Elevation	Pol
10	2.170 GHz	Azimuth	Elevation	Single-pol