

# OUTSIDE GSM ANTENNA

## MODEL: GSM-100

Fiber Glass Antenna

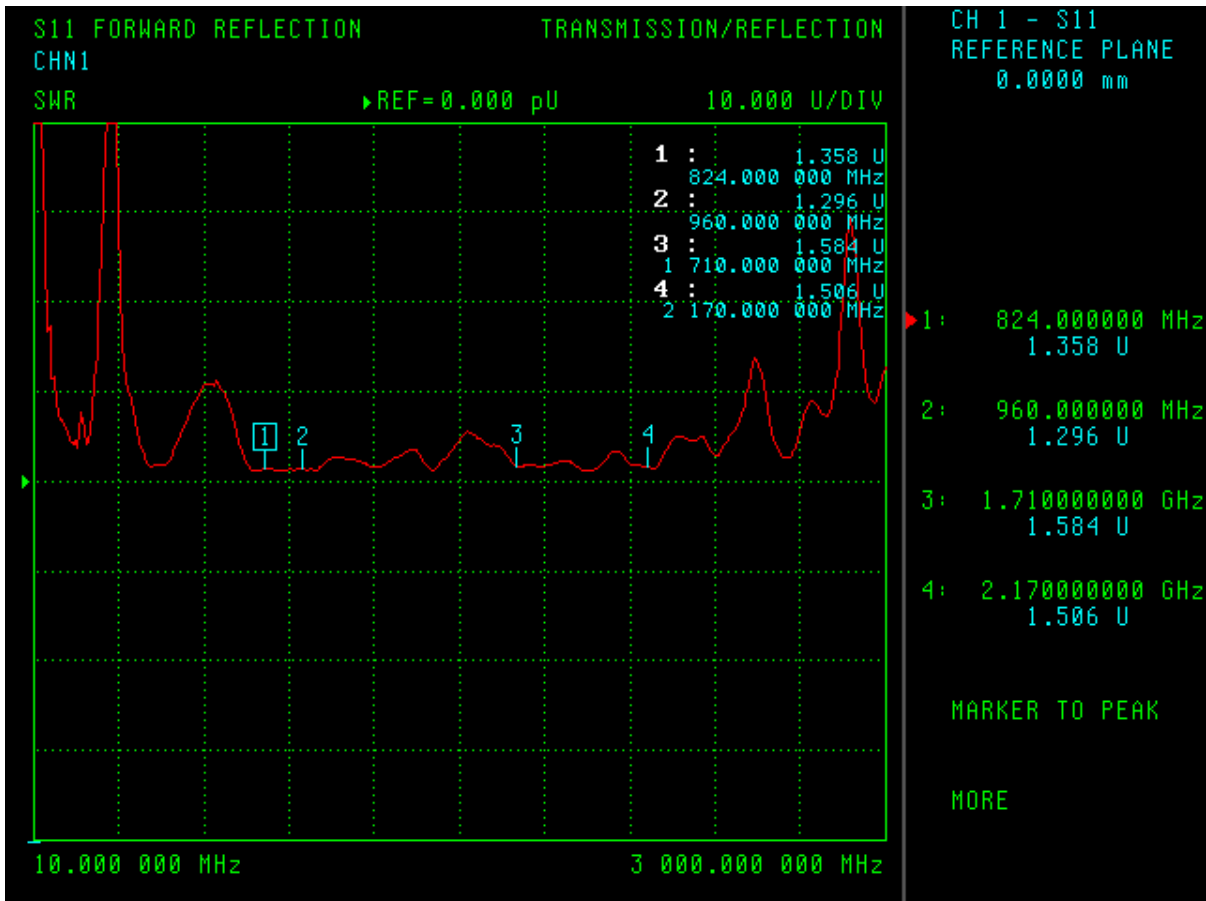
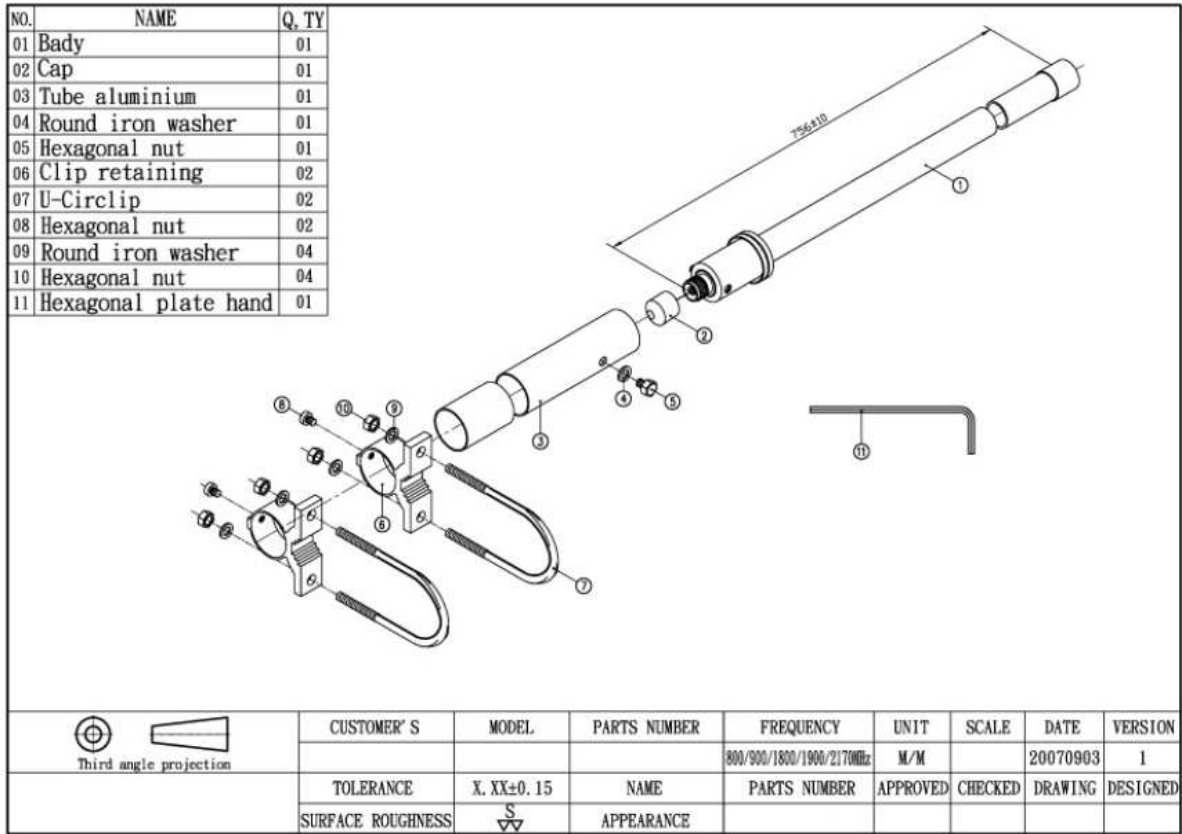
850/900/1800/1900/2170Mhz

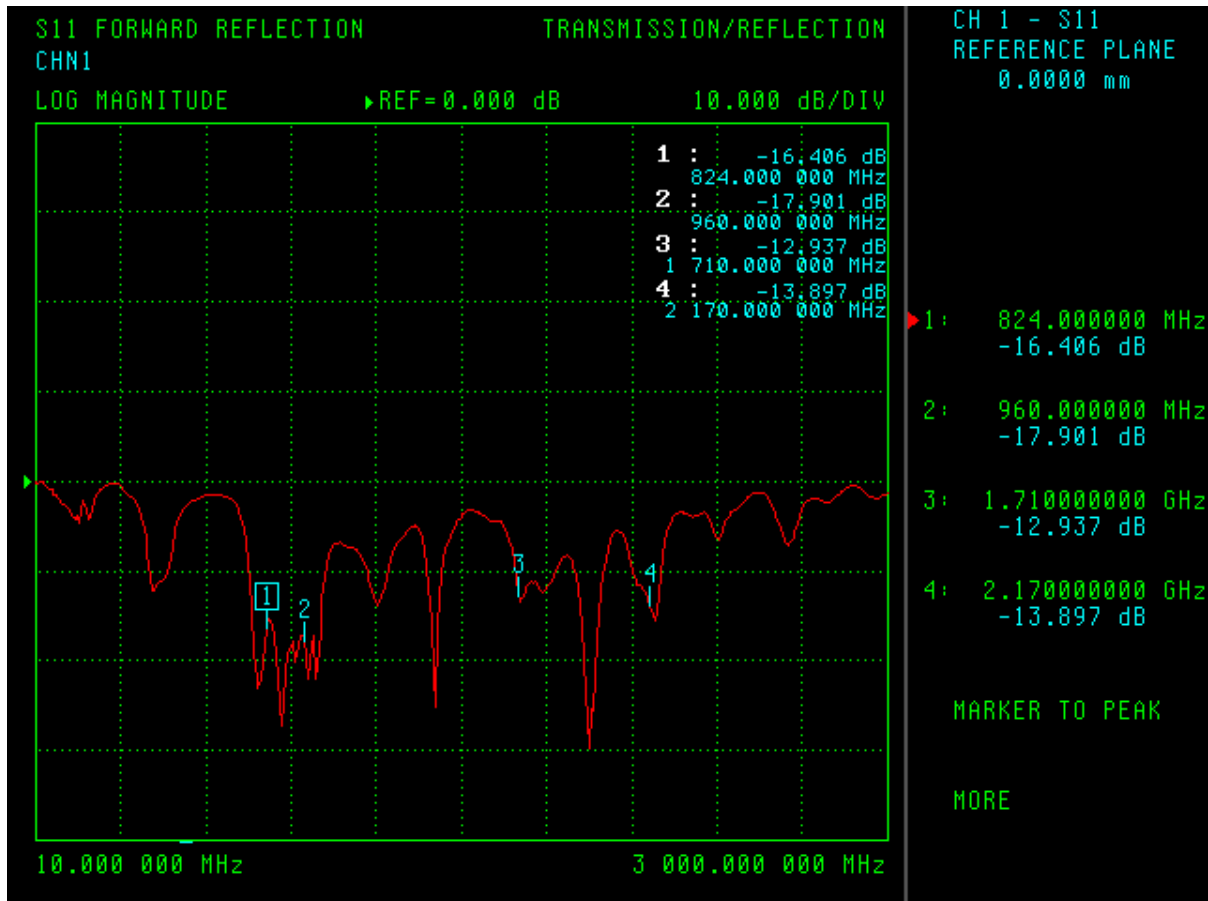


### Specifications:

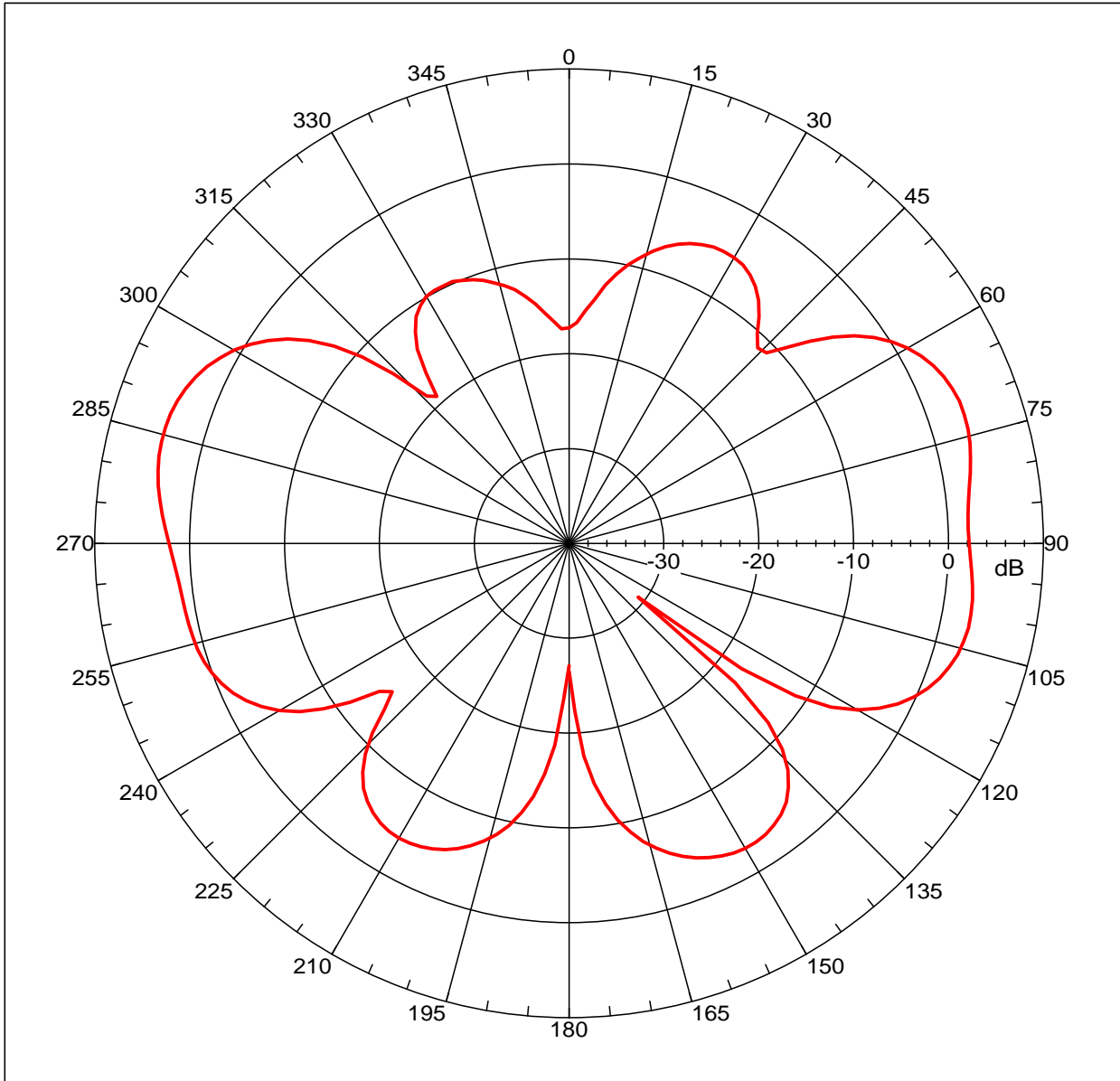
Frequency range:	850/900/1800/1900/2170Mhz
Gain:	7~9dBi
V.S.W.R:	<2.0
Impedence:	50 ohm
Connector:	N Type Female
Dimension:	756mm +/-10 x OD20mm
Weight:	0.76Kg
Polarization :	vertical
Power handling :	50W
Colour :	white
Rated wind velocity :	60m/s
Working Temperature :	-40~60°C
Lightning Protection :	Direct Ground

\* This specification is subject to change without prior notice





### Far-field amplitude of GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = 4.26758 dBi  
Max far-field (global) = -38.73176 dB, Max far-field (plot) = -38.73181 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: -76.00001 deg, Vpeak at: 0.000 deg  
Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -3.212 dB

-3. dB beam width: 35.45 deg

-6. dB beam width: 59.33 deg

-10. dB beam width: 69.90 deg

Left Sidelobe: -8.40 dB at -149.832 deg

Right Sidelobe: -14.08 dB at -25.140 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

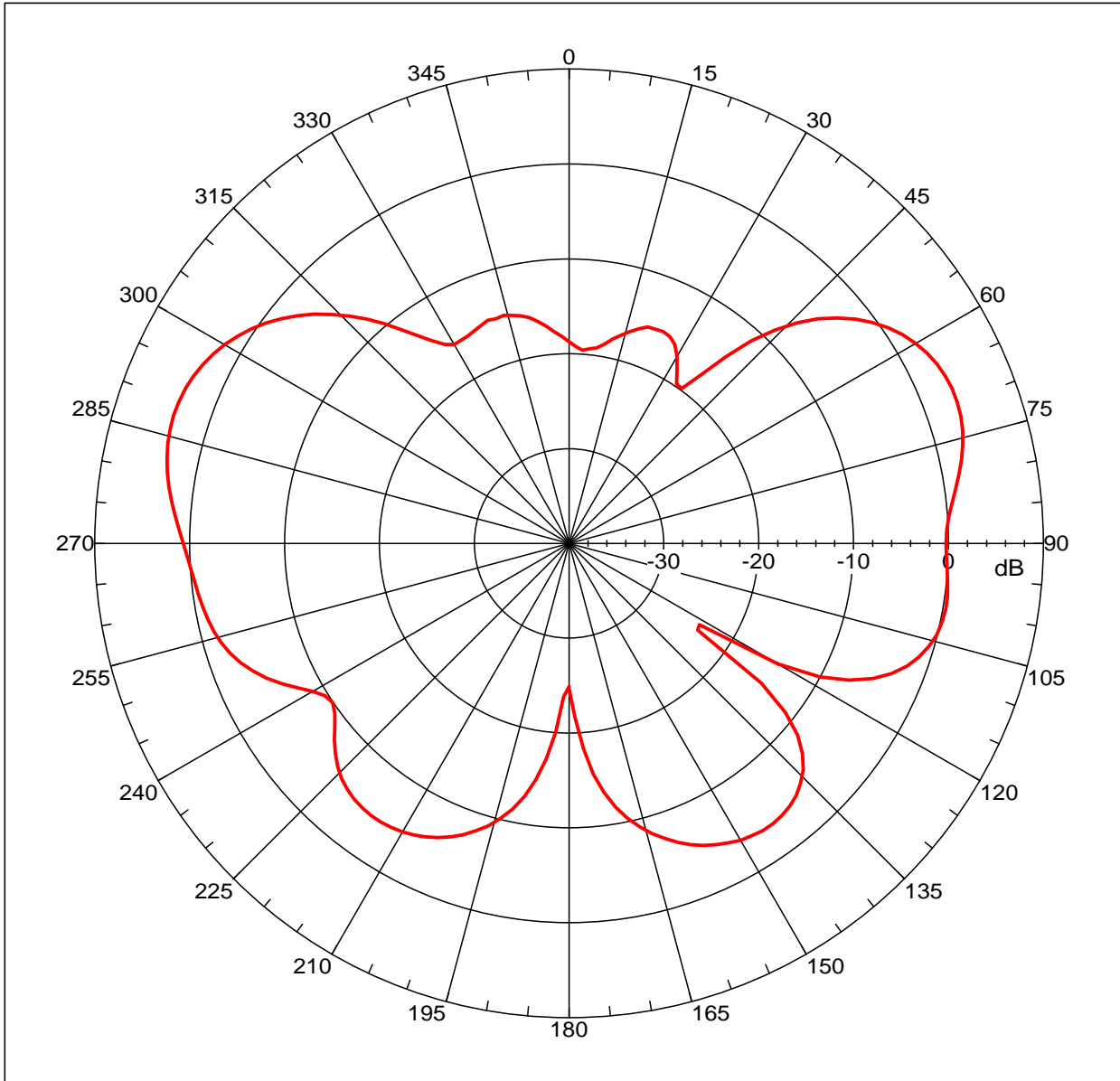
Elevation (deg)

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 3.7918 dBi  
 Max far-field (global) = -36.97603 dB, Max far-field (plot) = -36.97608 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: -72.00001 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -4.339 dB

-3. dB beam width: 32.60 deg

-6. dB beam width: 56.59 deg

-10. dB beam width: 71.60 deg

Left Sidelobe: -8.30 dB at -143.799 deg

Right Sidelobe: -19.37 dB at 25.140 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

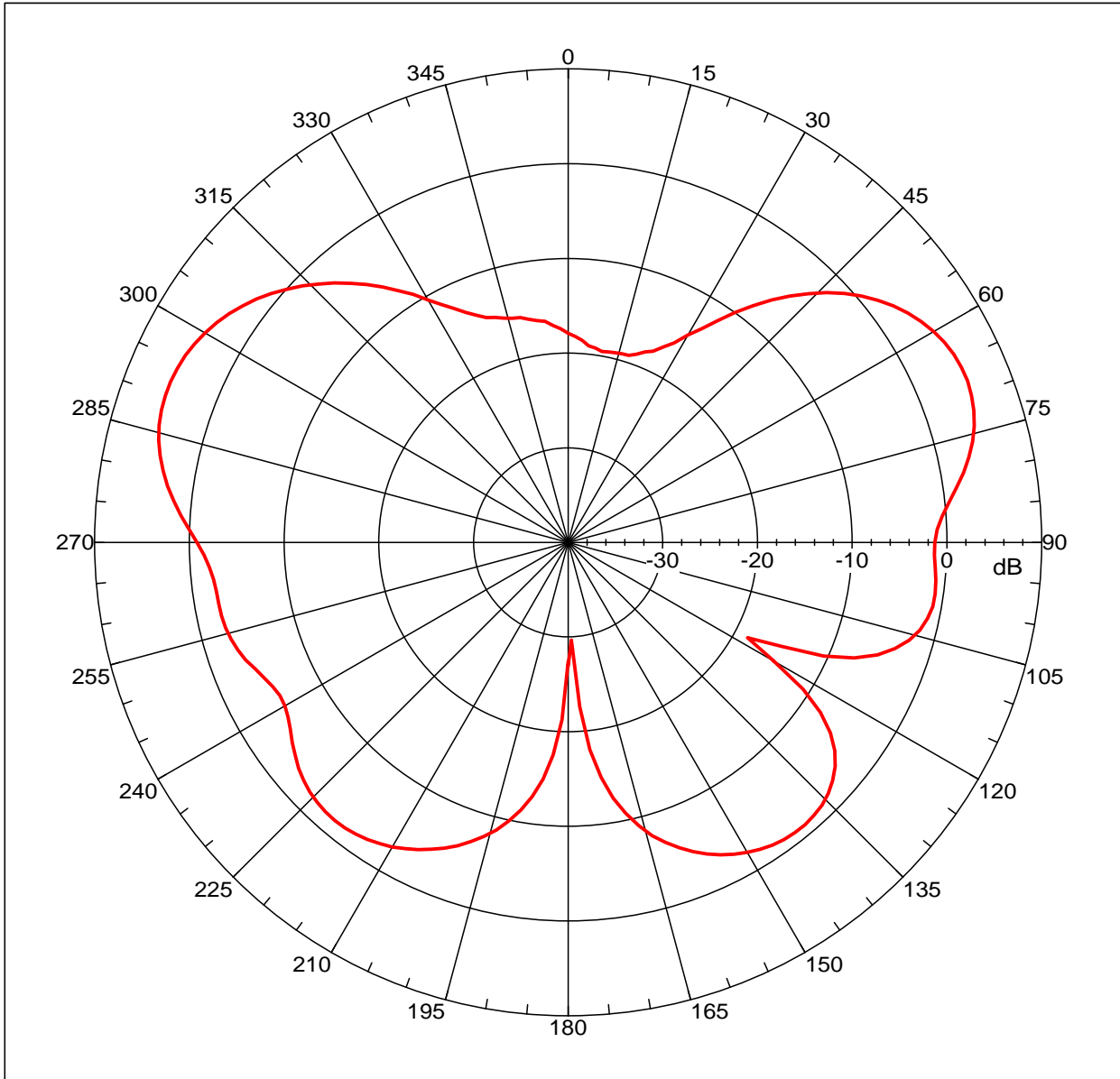
Elevation (deg)

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 5.46746 dBi  
 Max far-field (global) = -36.09222 dB, Max far-field (plot) = -36.09225 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: 67.99999 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.919 dB

-3. dB beam width: 25.93 deg

-6. dB beam width: 38.27 deg

-10. dB beam width: 66.83 deg

Left Sidelobe: -0.20 dB at -67.374 deg

Right Sidelobe: -6.55 dB at 141.788 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

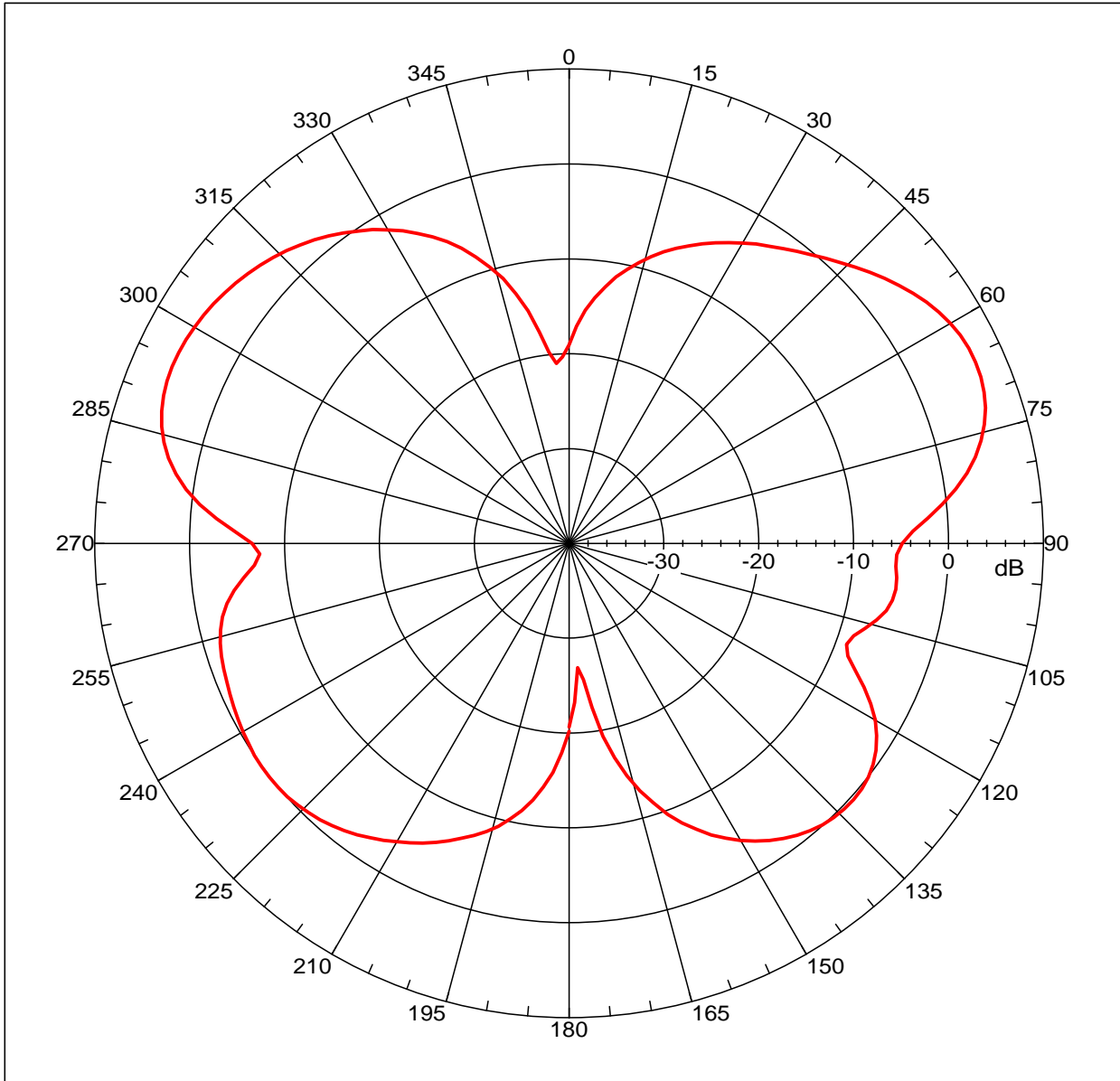
Elevation (deg)

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = 6.91288 dBi  
Max far-field (global) = -35.71679 dB, Max far-field (plot) = -35.71684 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: 66.000 deg, Vpeak at: 0.000 deg  
Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi  
Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

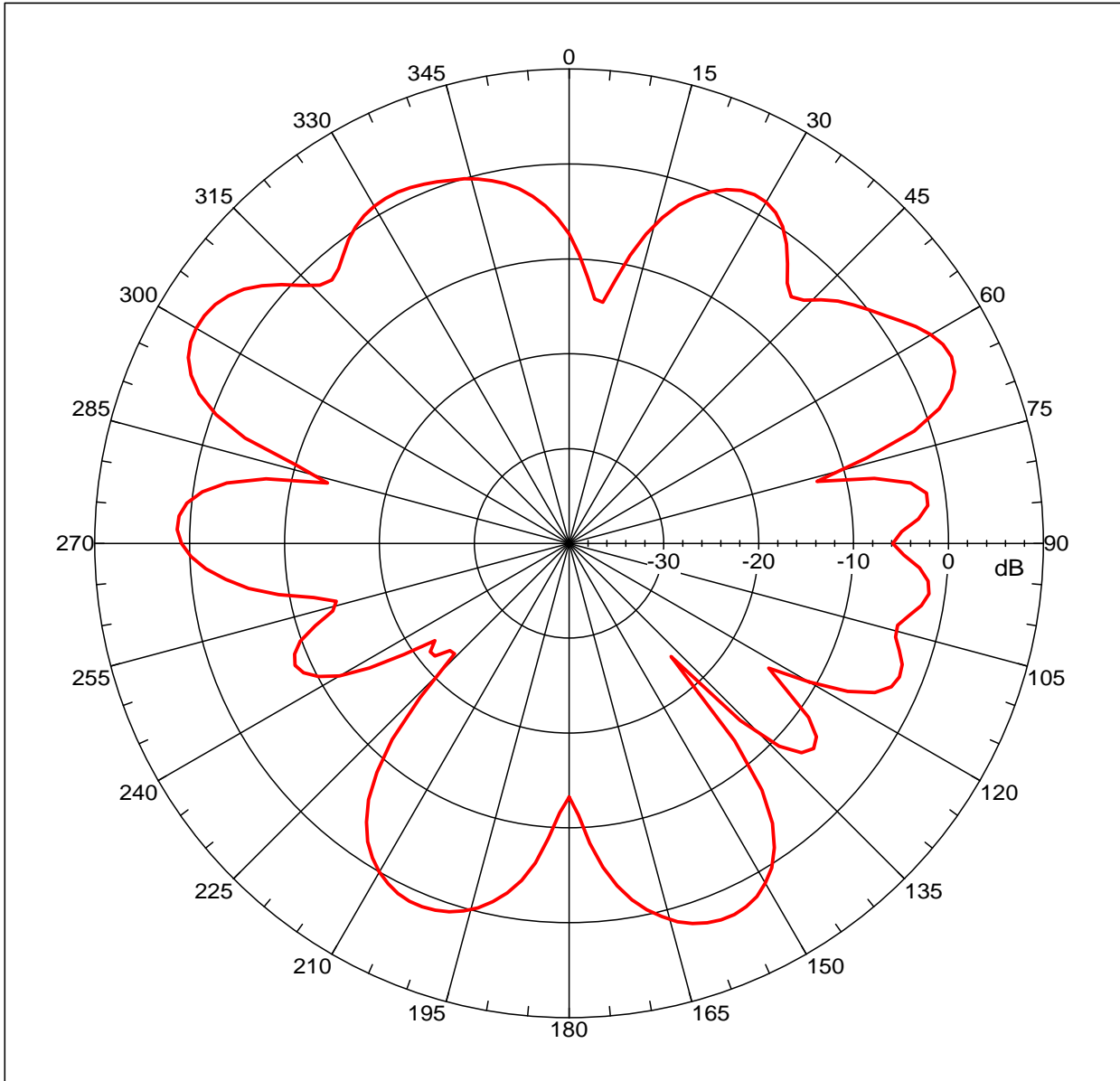
Far-field Cut Analysis:  
Avg value: -1.462 dB  
-3. dB beam width: 26.53 deg  
-6. dB beam width: 39.15 deg  
-10. dB beam width: 56.41 deg  
Left Sidelobe: -1.13 dB at -63.352 deg  
Right Sidelobe: -6.54 dB at 133.743 deg

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 5.35921 dBi  
 Max far-field (global) = -40.00541 dB, Max far-field (plot) = -40.00551 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: -60.00001 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi  
 Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:  
 Avg value: -2.171 dB  
 -3. dB beam width: 17.51 deg  
 -6. dB beam width: 23.97 deg  
 -10. dB beam width: 68.97 deg  
 Left Sidelobe: -4.05 dB at -87.486 deg  
 Right Sidelobe: -4.17 dB at -25.140 deg

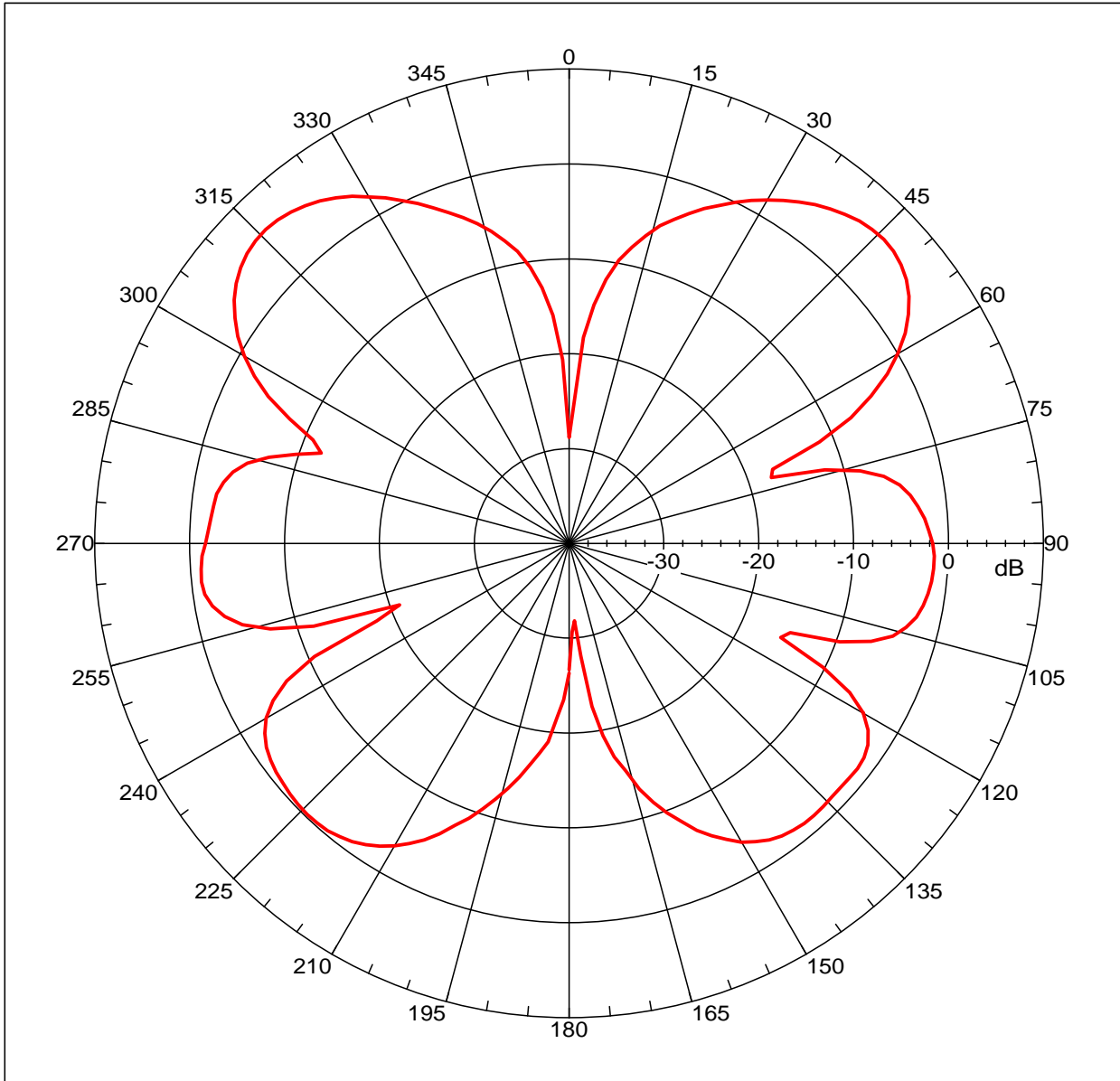
Far-field display setup  
 Azimuth (deg)  
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
 Elevation (deg)  
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 10

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



Far-field amplitude of GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 6.12125 dBi  
 Max far-field (global) = -40.94657 dB, Max far-field (plot) = -40.94667 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: 45.99999 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.567 dB  
 -3. dB beam width: 22.90 deg  
 -6. dB beam width: 33.81 deg  
 -10. dB beam width: 45.32 deg  
 Left Sidelobe: -0.12 dB at -43.240 deg  
 Right Sidelobe: -7.60 dB at 93.520 deg

Far-field display setup

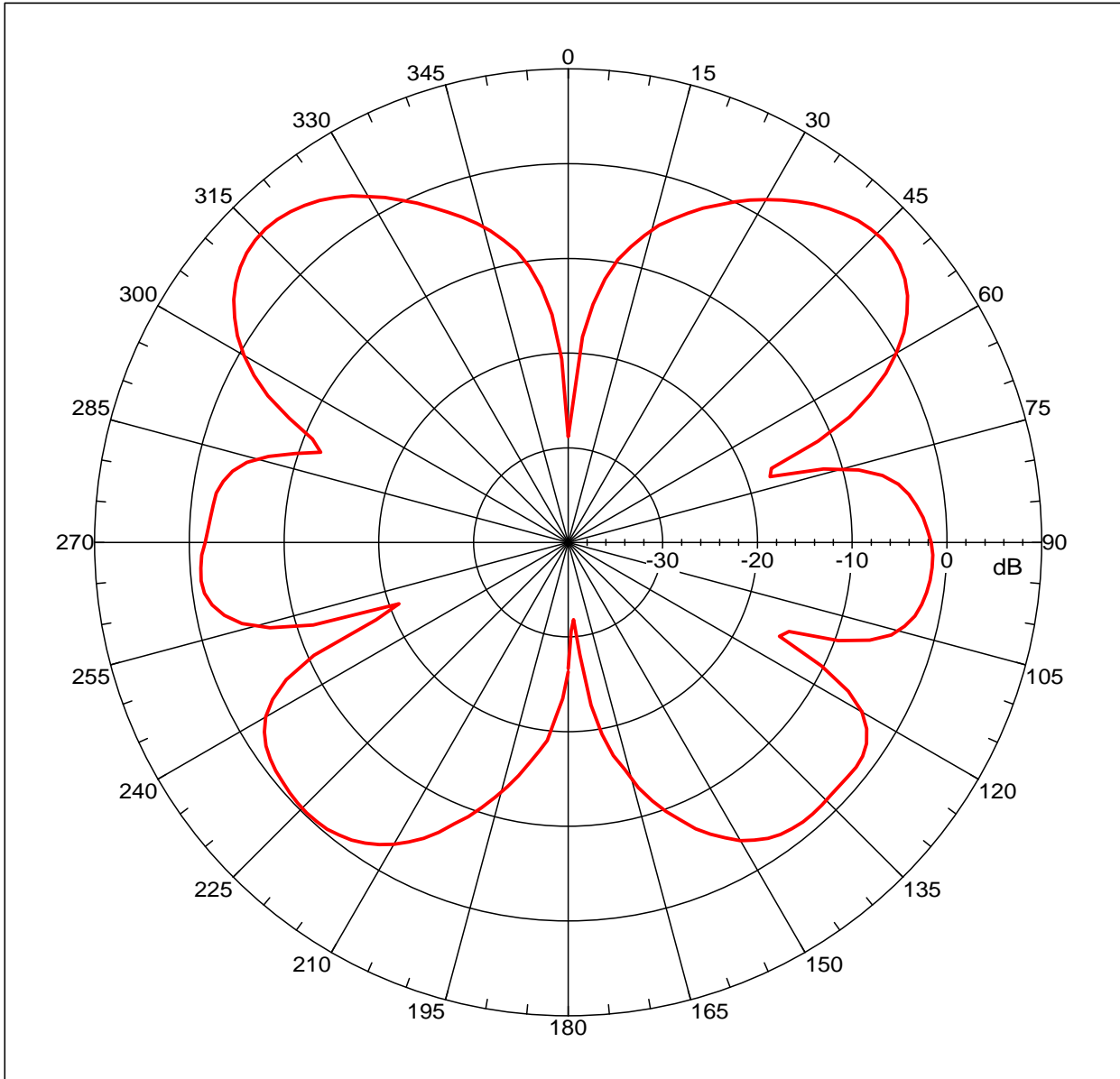
Azimuth (deg)  
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 6.12125 dBi  
 Max far-field (global) = -40.94657 dB, Max far-field (plot) = -40.94667 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: 45.99999 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.567 dB  
 -3. dB beam width: 22.90 deg  
 -6. dB beam width: 33.81 deg  
 -10. dB beam width: 45.32 deg  
 Left Sidelobe: -0.12 dB at -43.240 deg  
 Right Sidelobe: -7.60 dB at 93.520 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

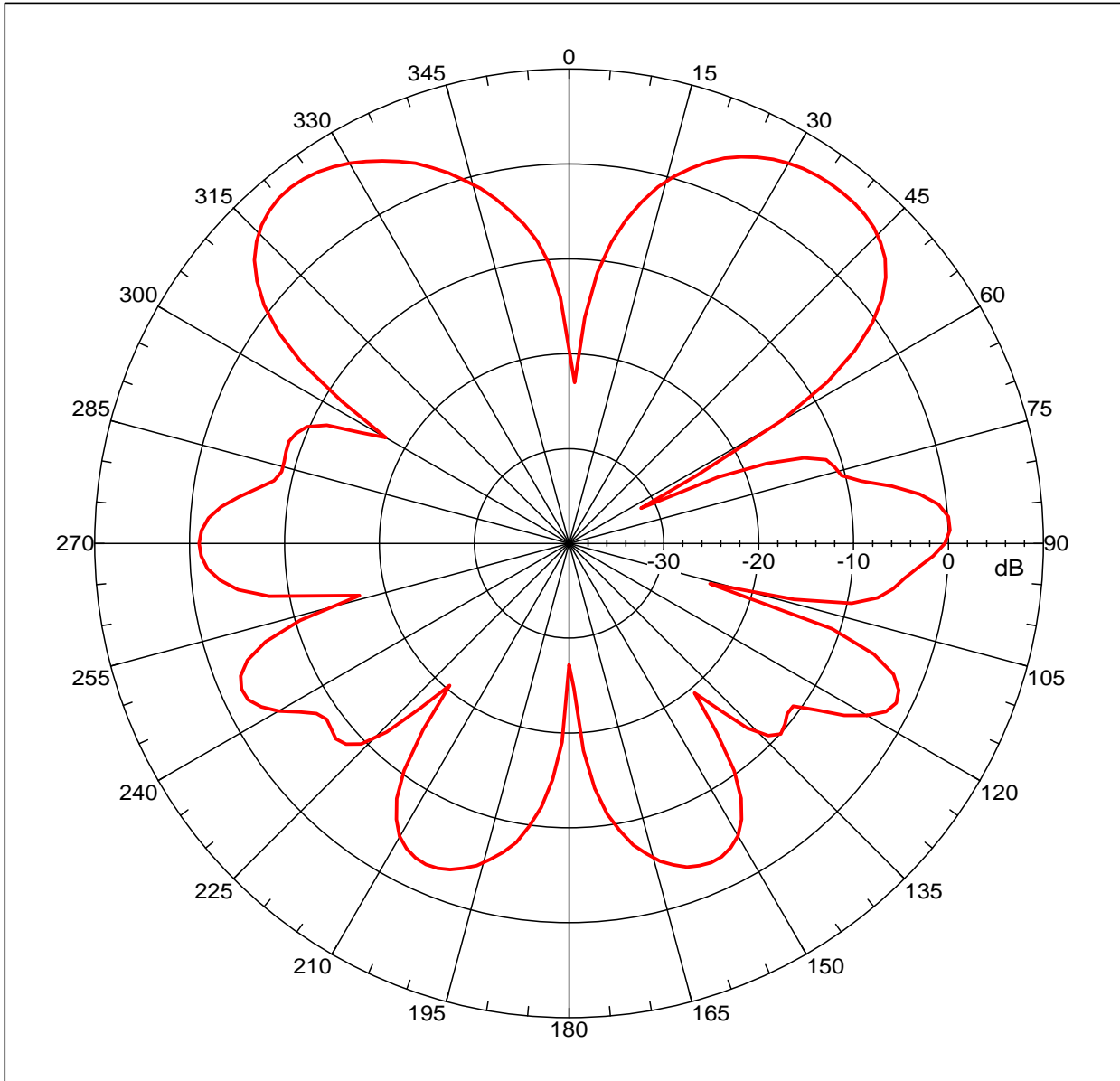
deg

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 7.61791 dBi  
 Max far-field (global) = -40.02376 dB, Max far-field (plot) = -40.02383 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: -38.00001 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.588 dB  
 -3. dB beam width: 22.68 deg  
 -6. dB beam width: 32.35 deg  
 -10. dB beam width: 41.64 deg  
 Left Sidelobe: -16.22 dB at -69.385 deg  
 Right Sidelobe: -0.75 dB at 37.207 deg

Far-field display setup

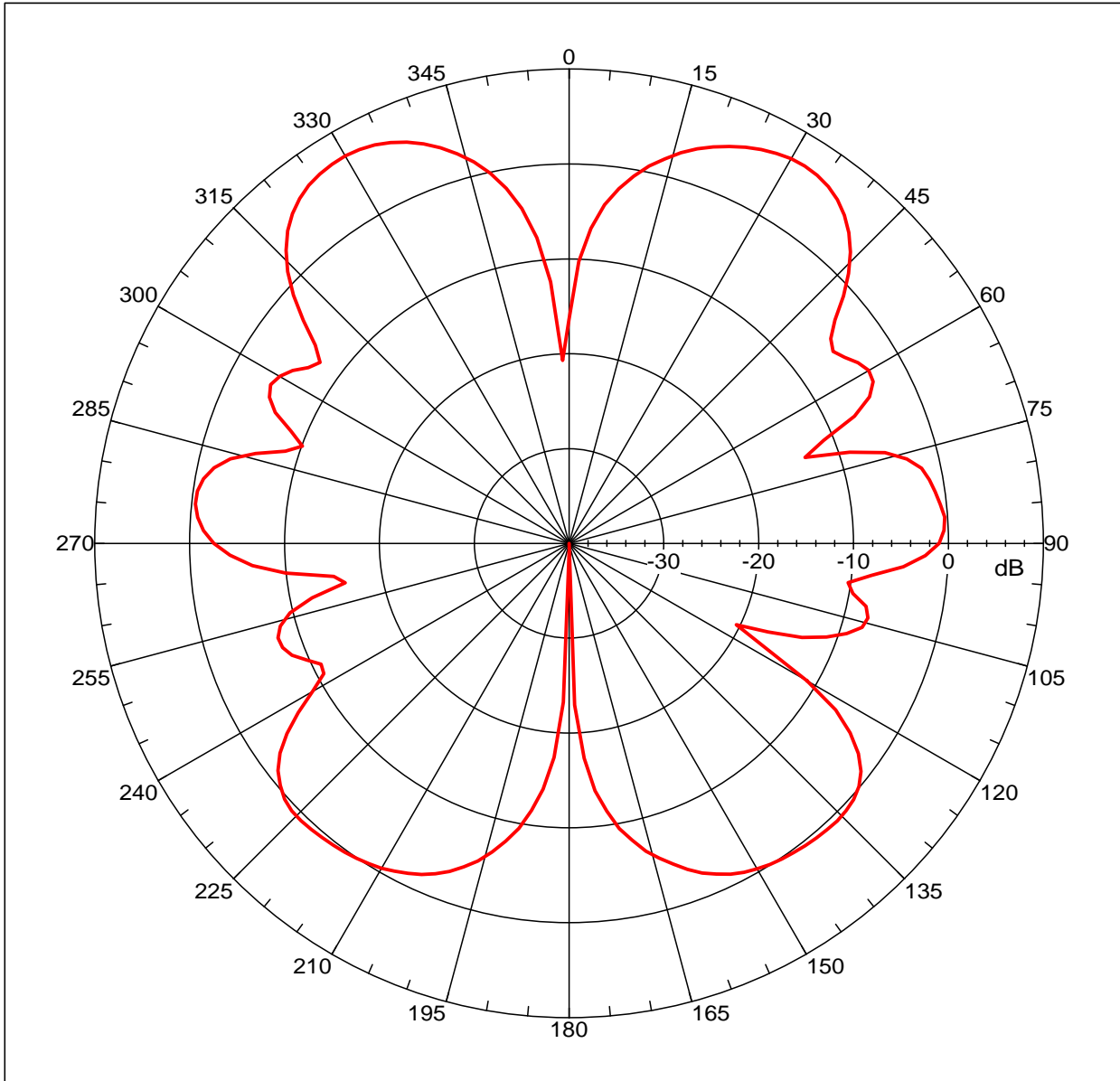
Azimuth (deg)  
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
 Gain = 7.14952 dBi  
 Max far-field (global) = -40.32984 dB, Max far-field (plot) = -40.32989 dB  
 Normalization: Reference, Network offset = 0.000 dB  
 Hpeak at: -30.00001 deg, Vpeak at: 0.000 deg  
 Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -1.583 dB  
 -3. dB beam width: 23.69 deg  
 -6. dB beam width: 32.59 deg  
 -10. dB beam width: 40.46 deg  
 Left Sidelobe: -11.53 dB at -61.341 deg  
 Right Sidelobe: -0.27 dB at 33.184 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

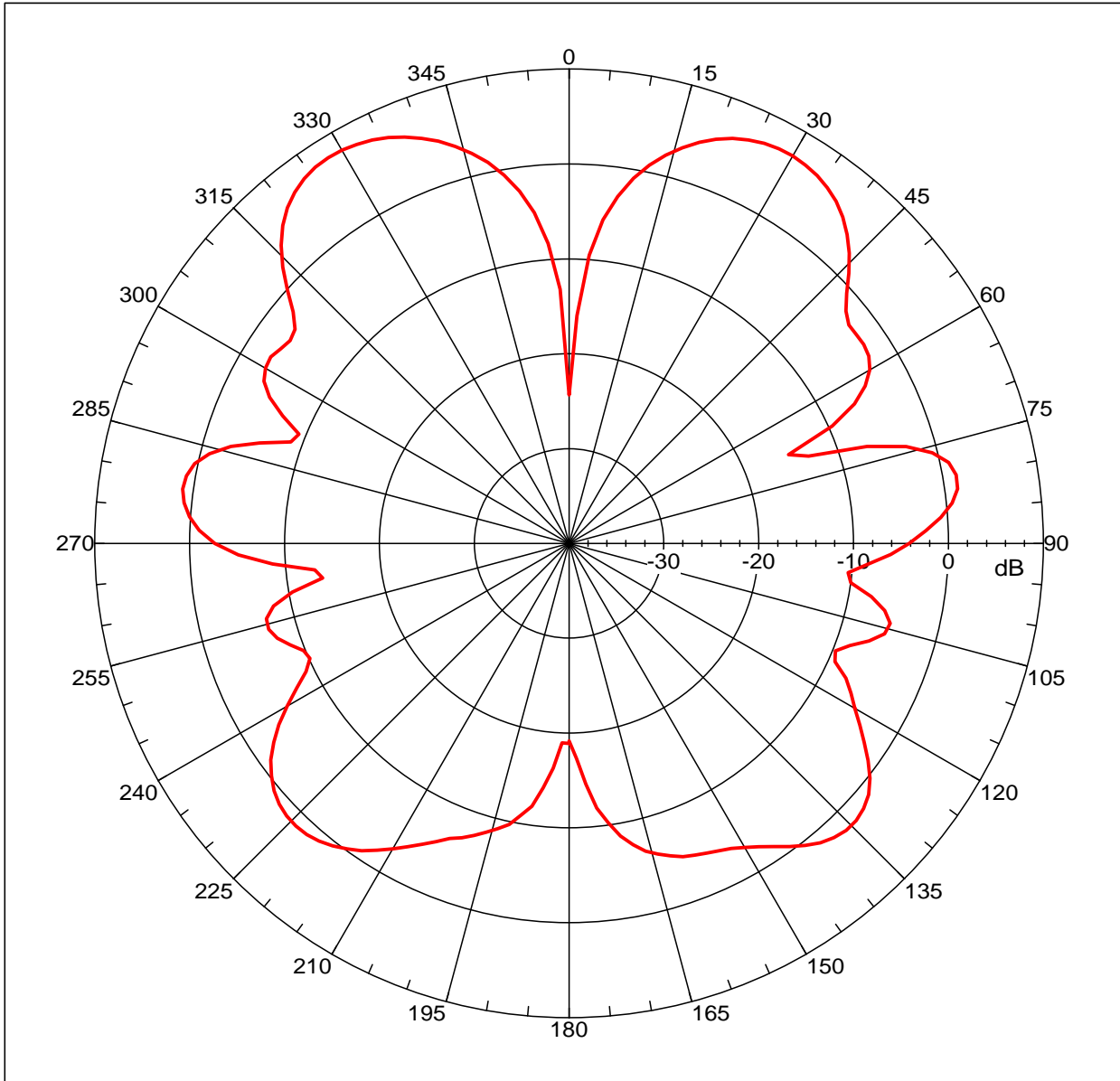
deg

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 GSM-100 800-2170MHZ E-PLANE06.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = 7.90368 dBi  
Max far-field (global) = -39.67872 dB, Max far-field (plot) = -39.67876 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: -32.00001 deg, Vpeak at: 0.000 deg  
Plot centering: On

GSM-100-800-2170MHZ 2007-6-7 E-PLANE

NSI2000 V4.0.124, Filename: C:\nsi2000\steven\MP-51 80MM\YG-16AA 800-2170MHZ E-PLANE06.nsi

Measurement date/time: 6/7/2007 10:42:50 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -1.086 dB

-3. dB beam width: 23.54 deg

-6. dB beam width: 32.89 deg

-10. dB beam width: 41.84 deg

Left Sidelobe: -6.79 dB at -81.453 deg

Right Sidelobe: -0.75 dB at 31.173 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