

Specification

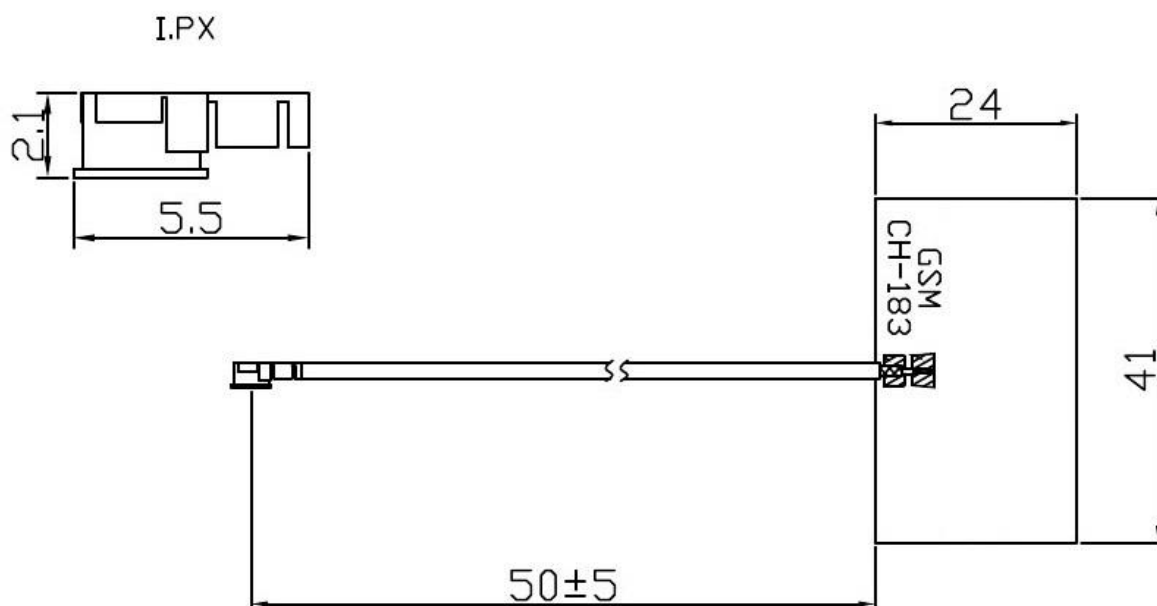
1.1 Product Type: FPC Antenna

1.2 Product's No: EG-IPX113PCB-4812

1.2 Product's Photo:



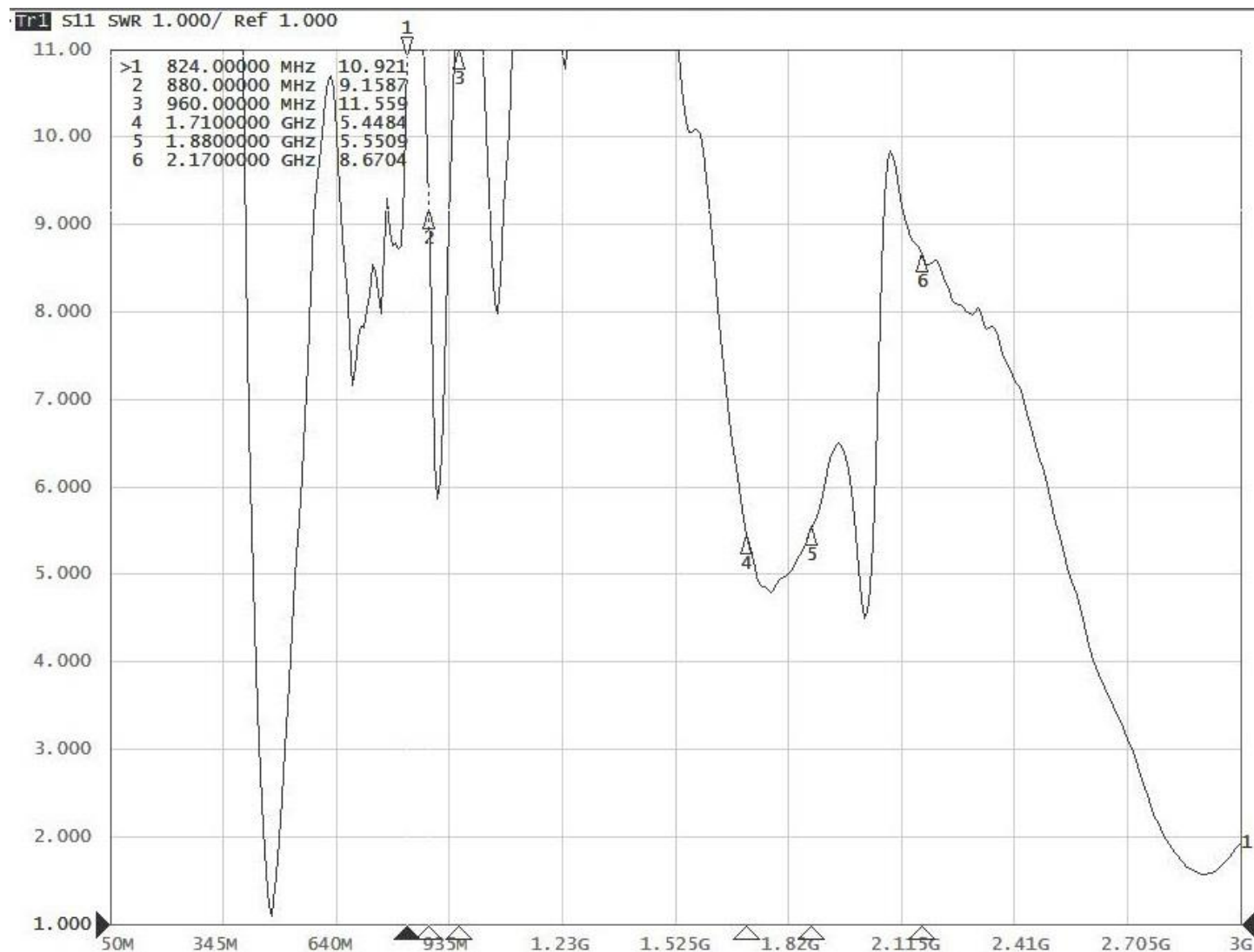
2.1 Technical Drawing:



Frequency	824~960/1710~2170 MHz
V.S.W.R	5.0:1
Cable	Ø1.13
Connector	IPEX
✘RoHS Compliant	

3.1 Test Report:

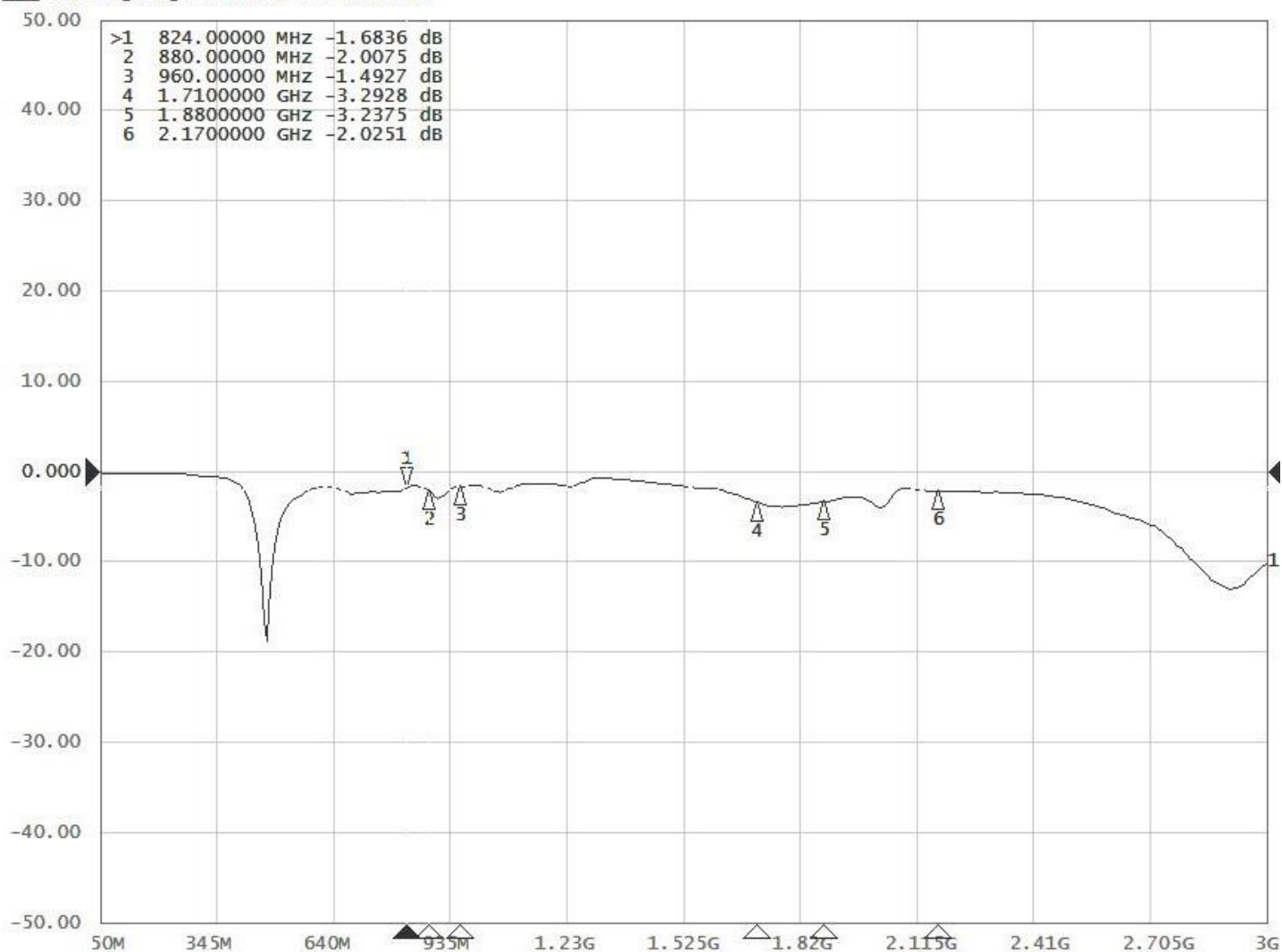
V.S.W.R



Frequency	824 MHz	880 MHz	960 MHz
V.S.W.R	10.92	9.15	11.55
Frequency	1710 MHz	1880 MHz	2170 MHz
V.S.W.R	5.44	5.55	8.67

Return Loss

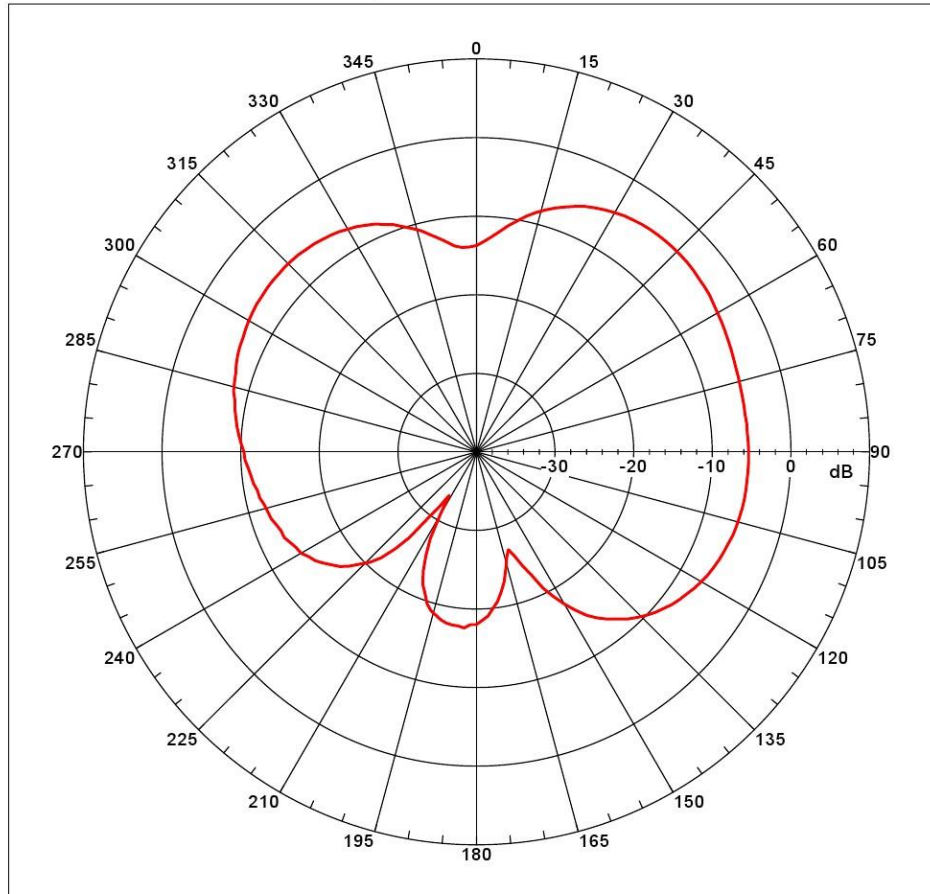
S11 Log Mag 10.00dB/ Ref 0.000dB



Frequency	824 MHz	880 MHz	960 MHz
Return Loss	-1.68 dB	-2.00 dB	-1.49 dB
Frequency	1710 MHz	1880 MHz	2170 MHz
Return Loss	-3.29 dB	-3.23 dB	-2.02 dB



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -3.94875 dBi
Max far-field (global) = -46.94809 dB, Max far-field (plot) =
-46.9481 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 47.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-E.nsi
Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -9.419 dB
-3. dB beam width: 100.74 deg
-6. dB beam width: 123.88 deg
-10. dB beam width: 263.06 deg
Left Sidelobe: -2.18 dB at -45.251 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)

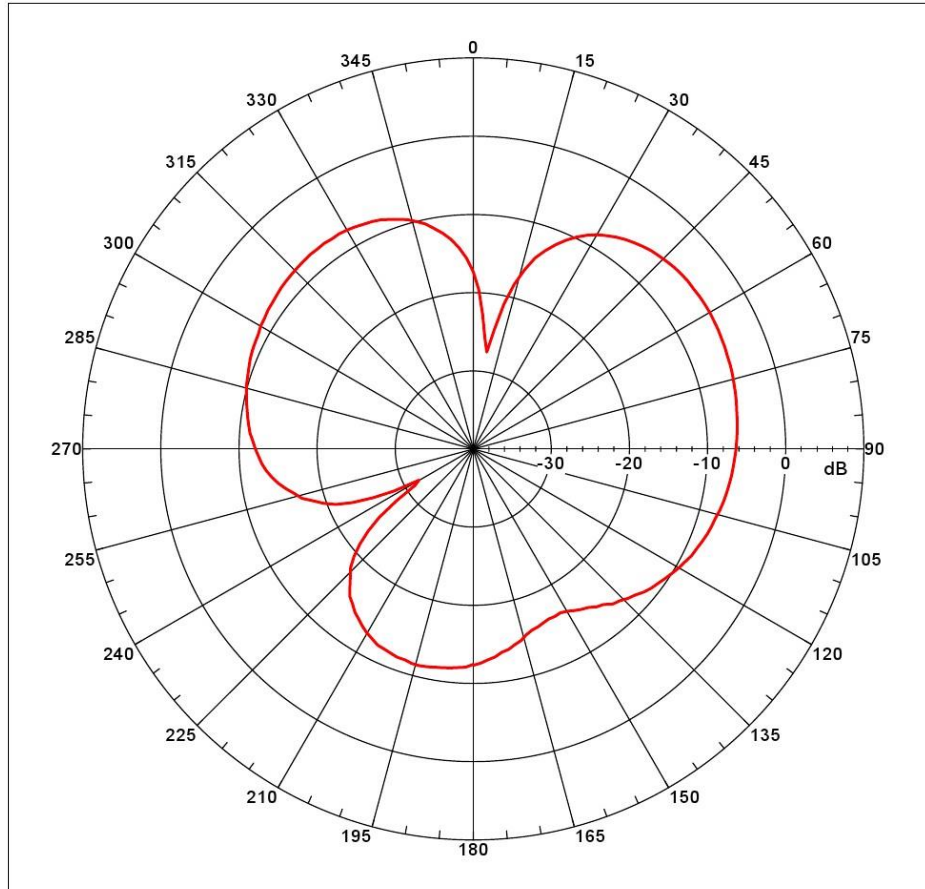
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

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



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -5.06064 dB
Max far-field (global) = -45.98665 dB, Max far-field (plot) =
-45.98666 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 57.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\EG-4812\EG-4812-E.nsi

Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -10.493 dB
-3. dB beam width: 78.57 deg
-6. dB beam width: 104.85 deg
-10. dB beam width: 128.28 deg
Left Sidelobe: -2.53 dB at -31.173 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)

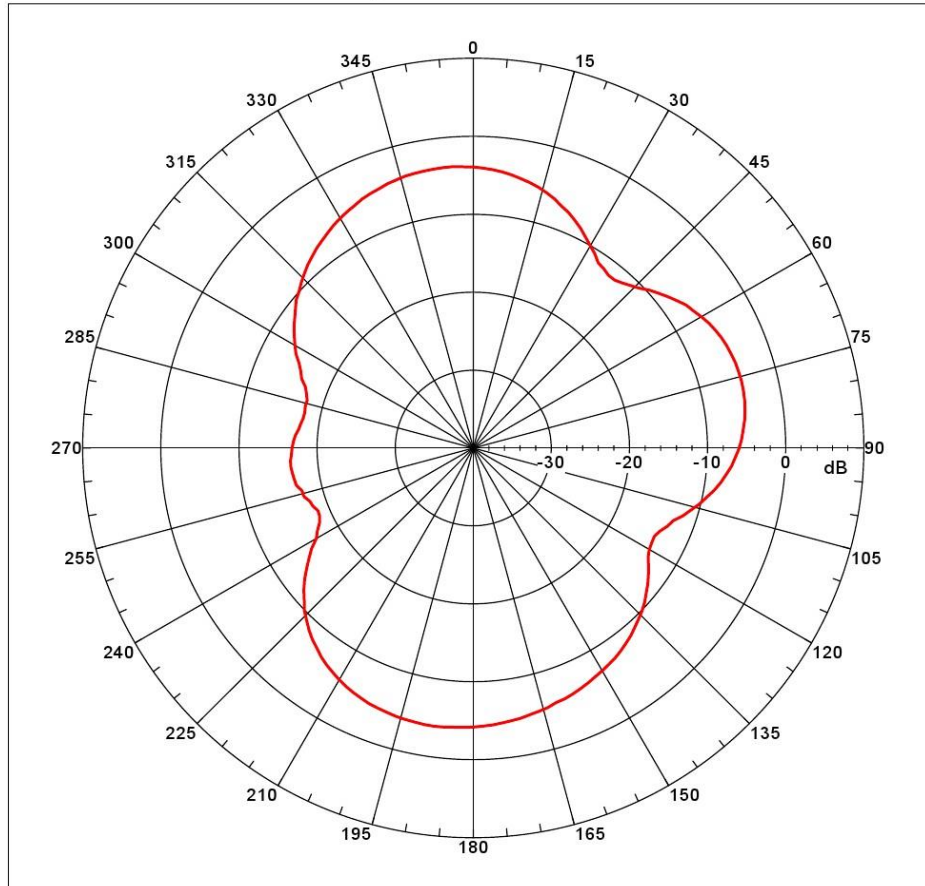
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
2	0.880 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -3.82735 dBi
Max far-field (global) = -46.45702 dB, Max far-field (plot) = -46.45702 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: -4.00001 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

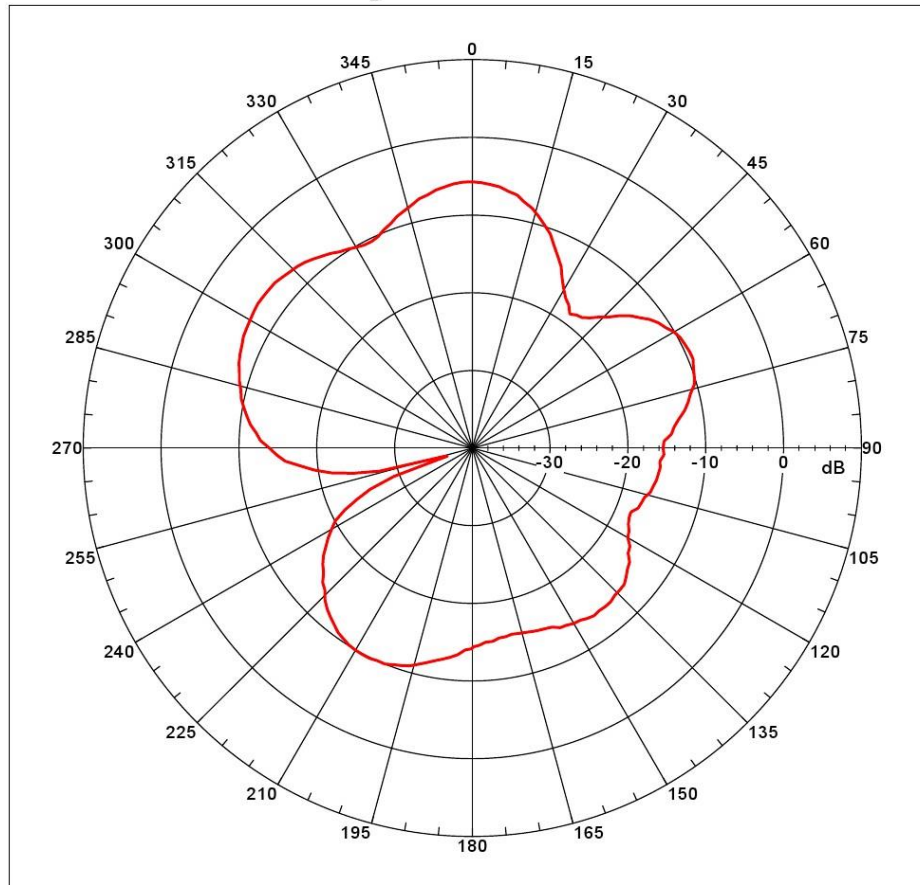
NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-E.nsi
Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -8.082 dB
-3. dB beam width: 54.38 deg
-6. dB beam width: 77.21 deg
-10. dB beam width: 175.54 deg
Left Sidelobe: -12.70 dB at -95.531 deg
Right Sidelobe: -0.78 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 6

Beam	Frequency	Azimuth	Elevation	Pol
3	0.960 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -5.7194 dB
Max far-field (global) = -50.91199 dB, Max far-field (plot) =
-50.91199 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: -0.00001 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-E.nsi
Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -11.853 dB
-3. dB beam width: 33.61 deg
-6. dB beam width: 107.15 deg
-10. dB beam width: 122.55 deg
Left Sidelobe: -1.06 dB at -55.307 deg
Right Sidelobe: -3.69 dB at 69.385 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

Elevation (deg)

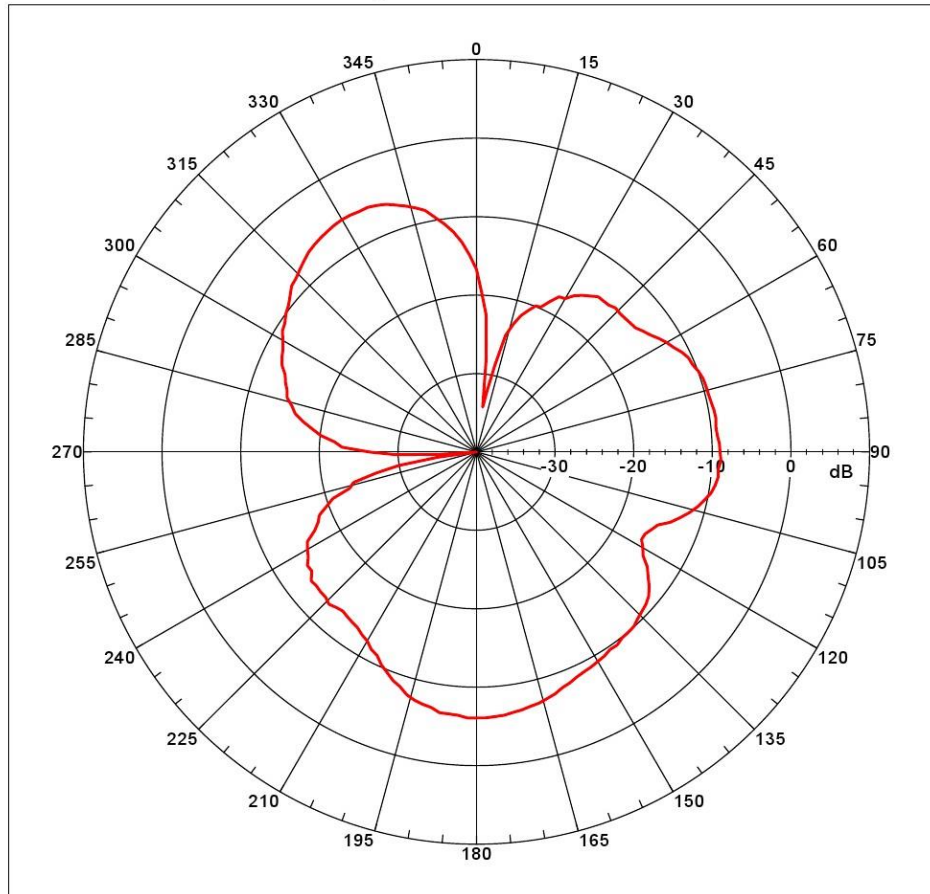
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
4	1.710 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -5.82419 dB
Max far-field (global) = -52.49276 dB, Max far-field (plot) = -52.49277 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: -30.00001 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-E.nsi
Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -11.509 dB
-3. dB beam width: 38.06 deg
-6. dB beam width: 55.20 deg
-10. dB beam width: 75.40 deg
Left Sidelobe: -8.26 dB at -123.687 deg
Right Sidelobe: -9.05 dB at 39.218 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)

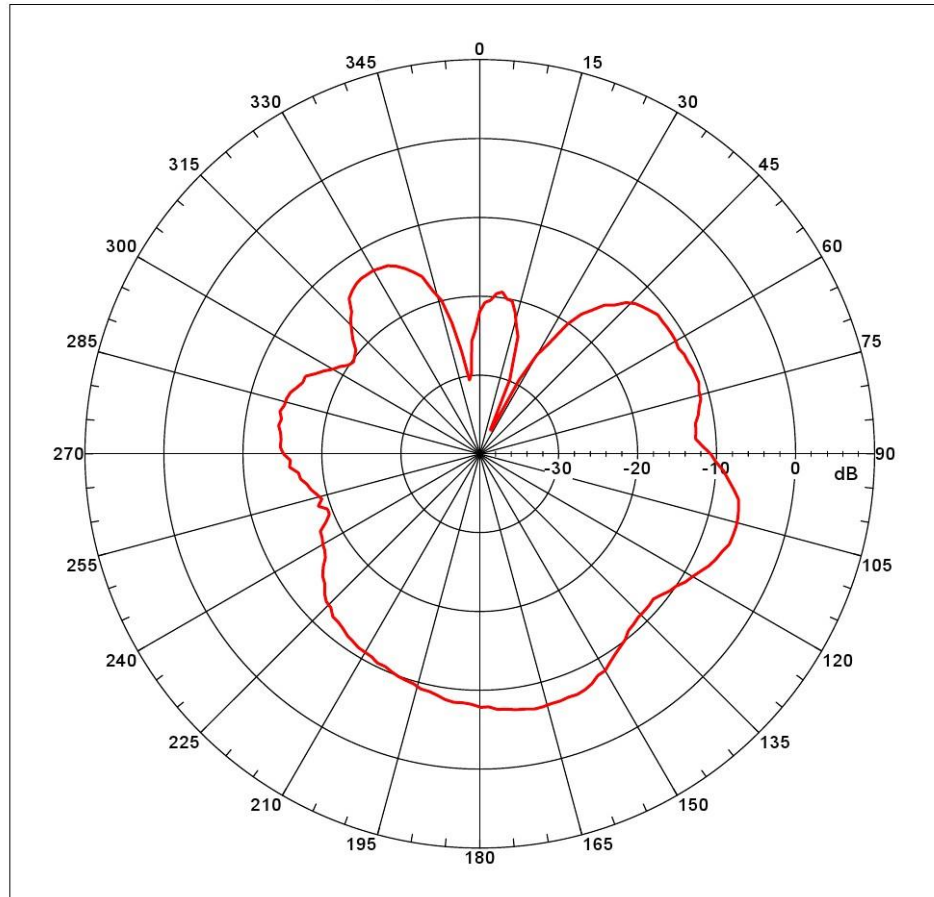
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
5	1.880 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -6.24622 dBi
Max far-field (global) = -53.77833 dB, Max far-field (plot) =
-53.77841 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 105.95959 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-E

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-E.nsi
Measurement date/time: 7/25/2017 11:37:37 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -12.552 dB
-3. dB beam width: 28.29 deg
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -4.56 dB at 73.408 deg
Right Sidelobe: -0.83 dB at 159.888 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

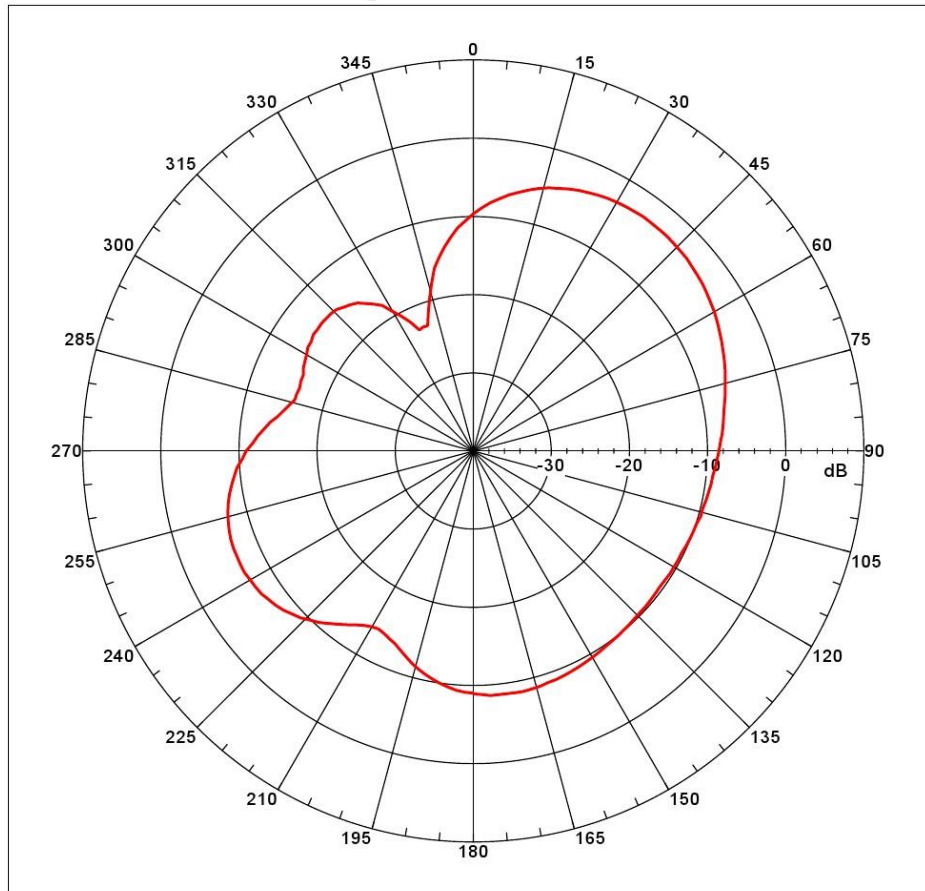
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
6	2.170 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -3.00157 dBi
Max far-field (global) = -46.00091 dB, Max far-field (plot) =
-46.00093 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 35.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-H

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812\EG-4812-H.nsi

Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -9.142 dB

-3. dB beam width: 59.98 deg

-6. dB beam width: 93.98 deg

-10. dB beam width: Not Found

Left Sidelobe: -11.65 dB at -49.274 deg

Right Sidelobe: -5.58 dB at 169.944 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)

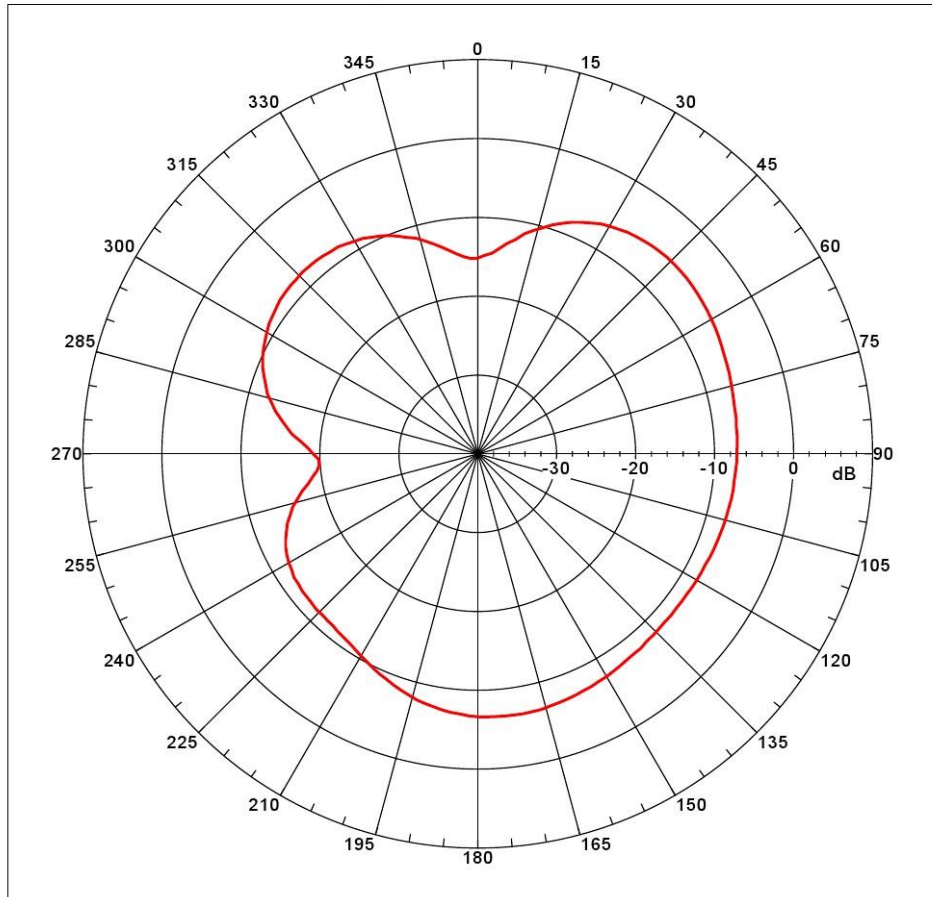
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

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



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -5.38895 dBi
Max far-field (global) = -46.31496 dB, Max far-field (plot) =
-46.31497 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 45.99995 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-H

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-H.nsi
Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -5.008 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -2.62 dB at -43.240 deg
Right Sidelobe: -1.19 dB at 167.933 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

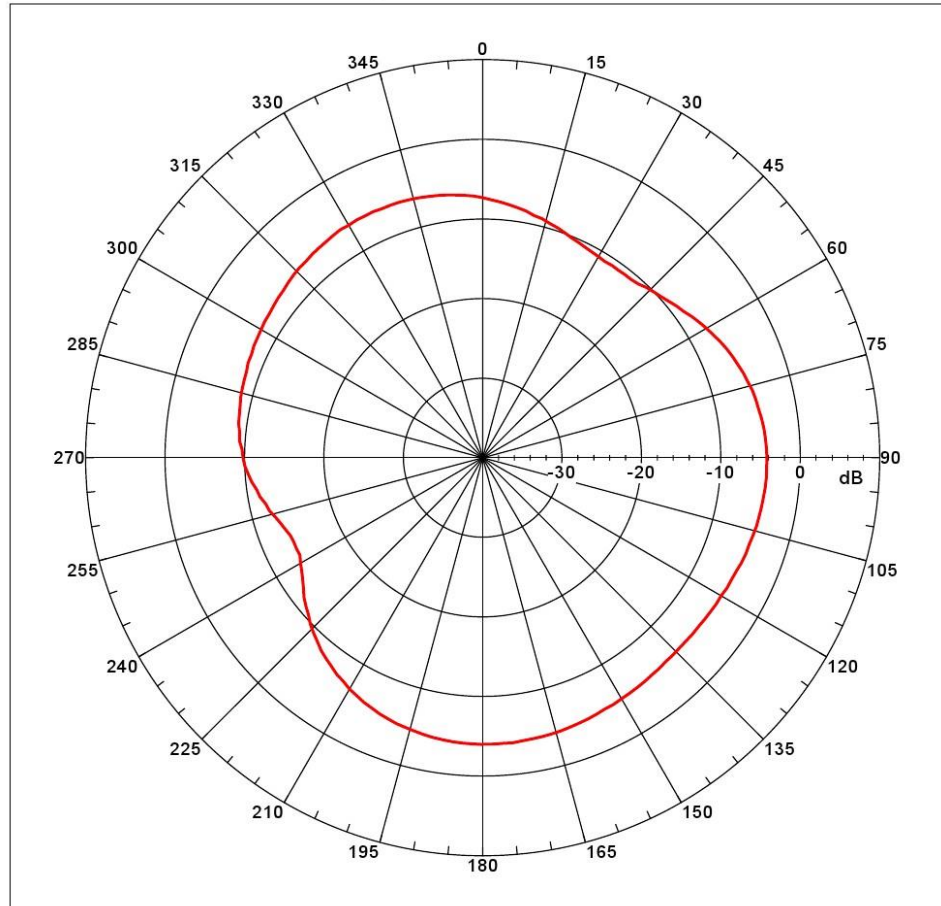
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
2	0.880 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -3.983 dBi
Max far-field (global) = -46.61267 dB, Max far-field (plot) = -46.61278 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 174.000 deg, Vpeak at: 0.000 deg
Plot centering: 0m

EG-4812-H

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\EG-4812\EG-4812-H.nsi
Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -8.533 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -0.20 dB at 95.531 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

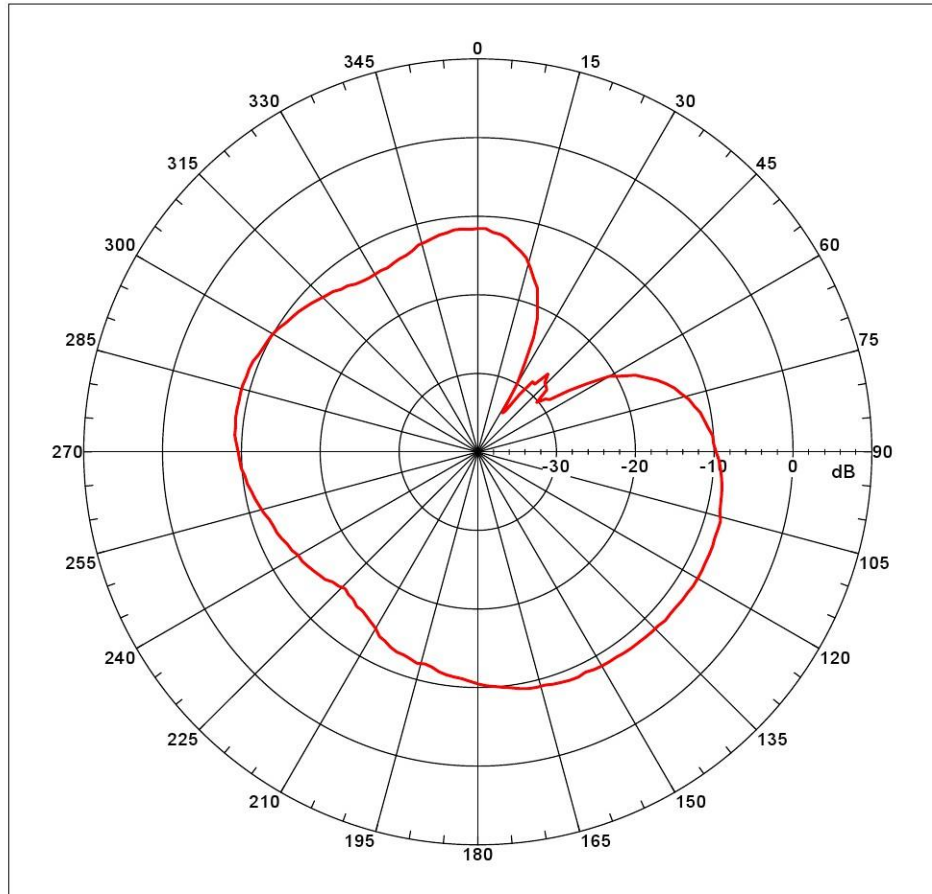
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
3	0.960 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -7.78569 dBi
Max far-field (global) = -52.97828 dB, Max far-field (plot) =
-52.97834 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 119.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-H

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812-EG-4812-H.nsi

Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -11.842 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -18.87 dB at 43.240 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

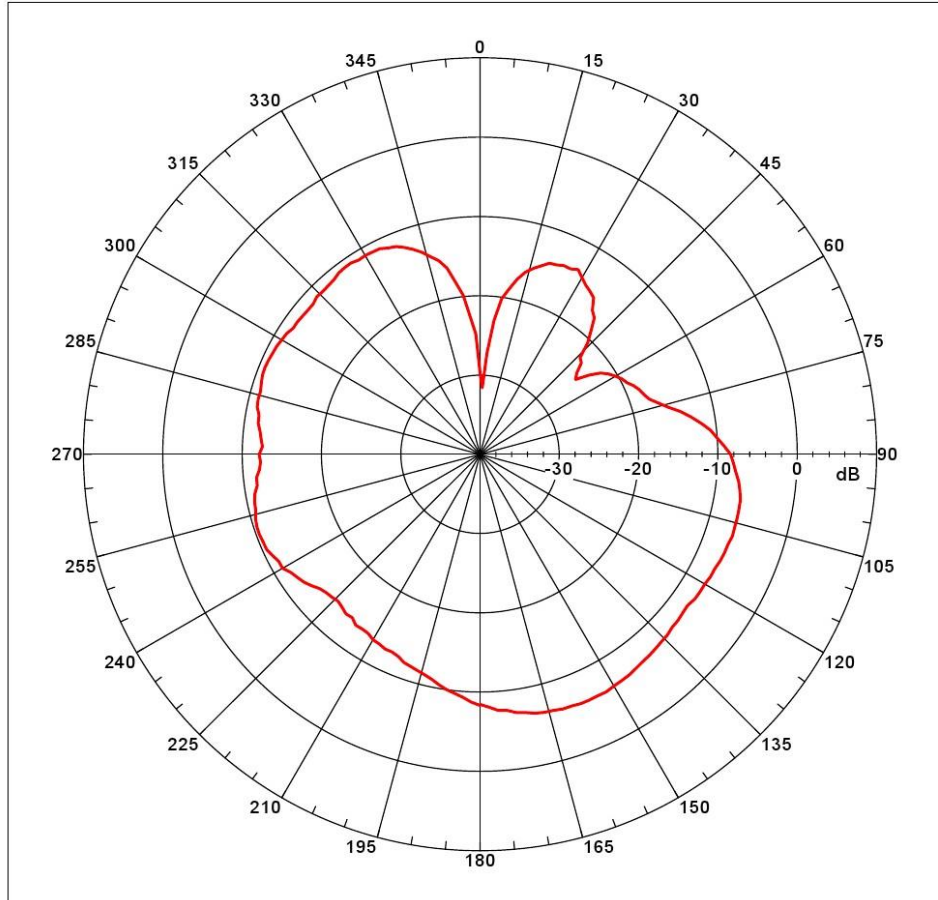
deg
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
4	1.710 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -6.06951 dBi
Max far-field (global) = -52.73808 dB, Max far-field (plot) =
-52.73814 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 155.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-H

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\EG-4812\EG-4812-H.nsi
Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -11.216 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -0.47 dB at 109.609 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)

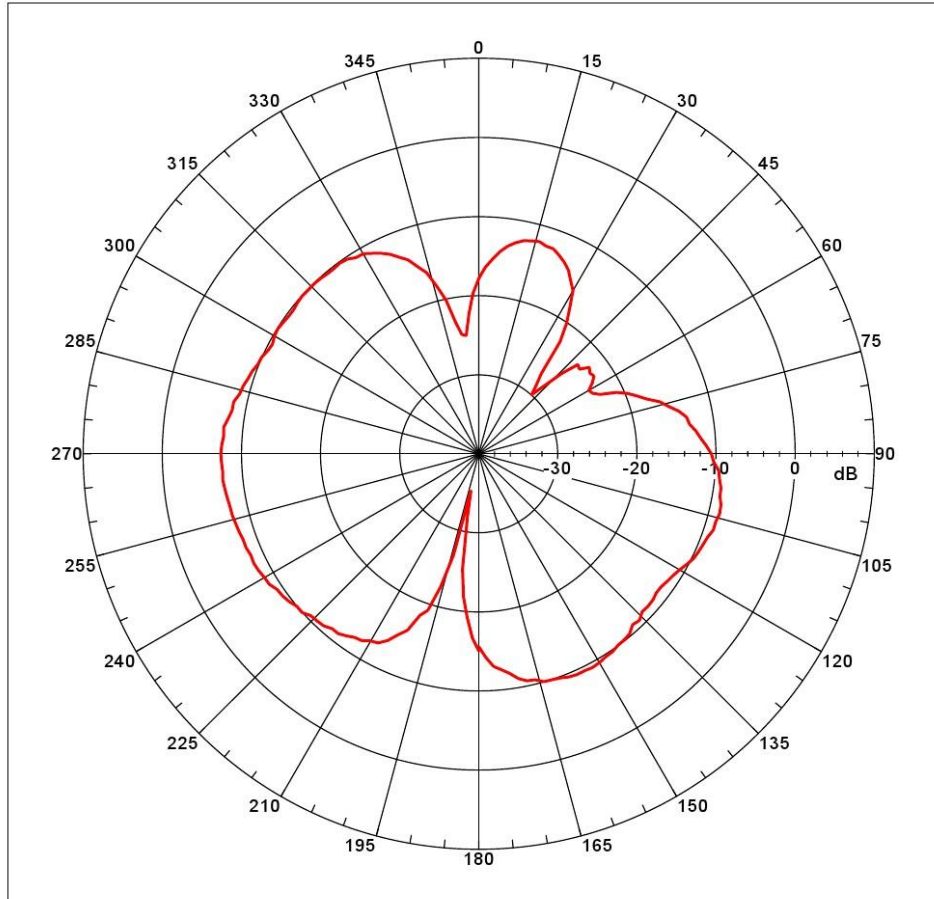
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 6

Beam	Frequency	Azimuth	Elevation	Pol
5	1.880 GHz	Azimuth	Elevation	Single-pol



Far-field amplitude of EG-4812-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -7.40676 dBi
Max far-field (global) = -54.93887 dB, Max far-field (plot) =
-54.93891 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: -90.000 deg, Vpeak at: 0.000 deg
Plot centering: On

EG-4812-H

NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\EG-4812\EG-4812-H.nsi
Measurement date/time: 7/25/2017 11:28:46 AM, Filetype: NSI-97

Far-field Cut Analysis:
Avg value: -12.041 dB
-3. dB beam width: 70.87 deg
-6. dB beam width: 132.49 deg
-10. dB beam width: 145.27 deg
Left Sidelobe: Not Found
Right Sidelobe: -4.70 dB at 17.095 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 6

Beam	Frequency	Azimuth	Elevation	Pol
6	2.170 GHz	Azimuth	Elevation	Single-pol