Small Omni Directional Antenna

Model : TH246A

一. ELECTRONICAL:

1. **ANTENNA TYPE 天線型式: Base Antenna**
2. **FREQUENCY 頻率: 2.4~2.5GHz**
3. **IMPEDANCE 阻抗: 50 Ohm**
4. **POLARISATION 極: Vertical**
5. **VSWR: 2.0:1**
6. **MAX.POWER 最大功率: 50W**

二. MECHANICAL:

1. **MATERIALS 材質: Fiberglass**
2. **COLOR 顏色: White**

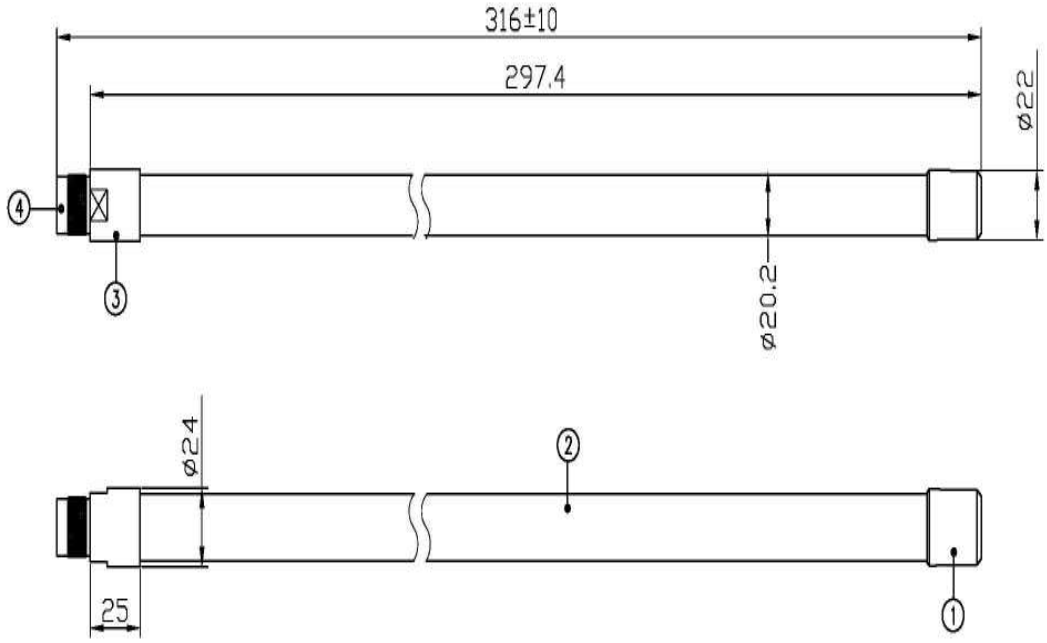
3. TOTAL HEIGHT 總長度: 316m/m ±10

4. WEIGHT 重量:

5. CONNECTOR : N(M)

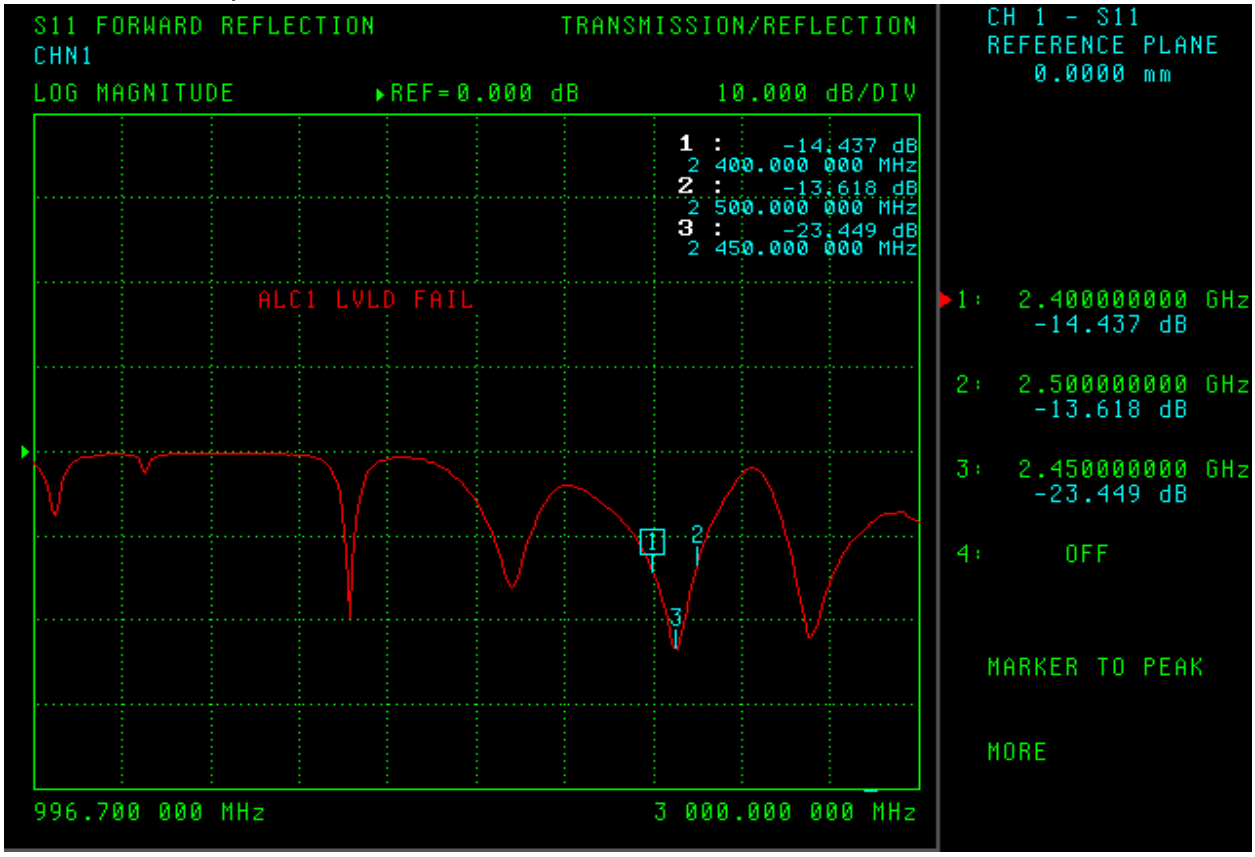
1. APPEARANCE:

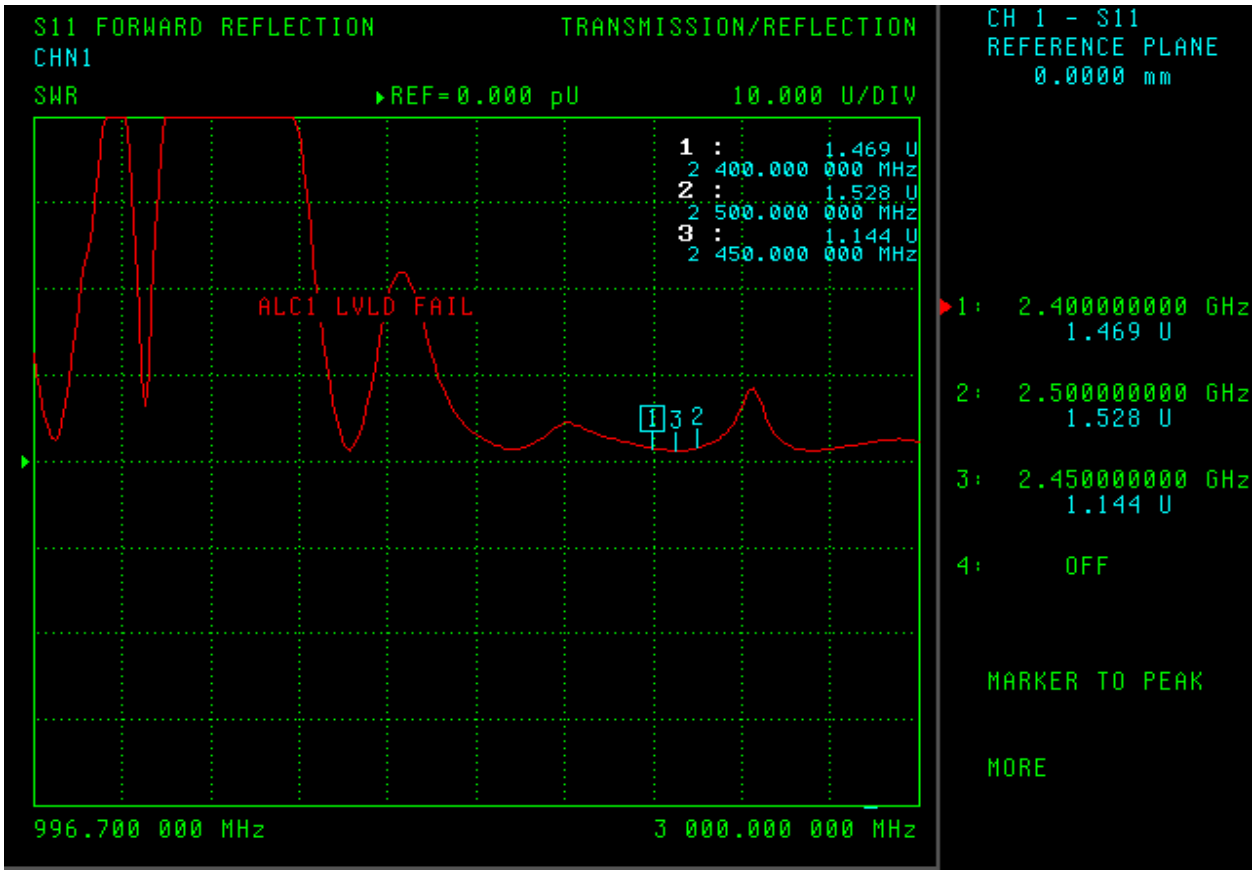
NO.	NAME	Q, TY
01	Cap	01
02	Fiber glass	01
03	Connecting vopper pipe	01
04	N Male	01

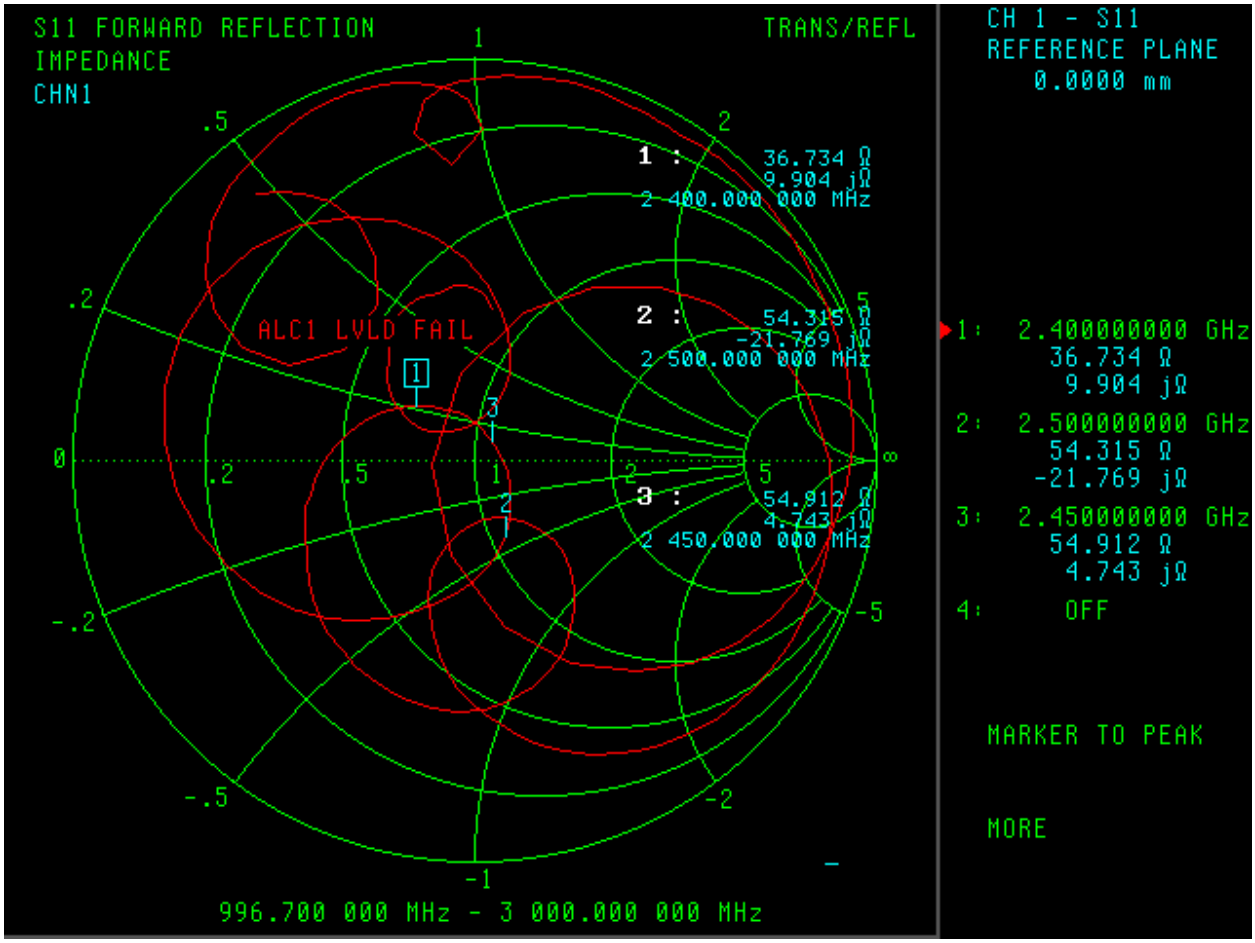


Third angle projection	CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
				2400~2500MHz(6dBi)	M/M		20110223	1
	TOLERANCE	X.XX±0.15	NAME	PARTS NUMBER	APPROVED	CHECKED	DRAWING	DESIGNED
	SURFACE ROUGHNESS	S	APPEARANCE					

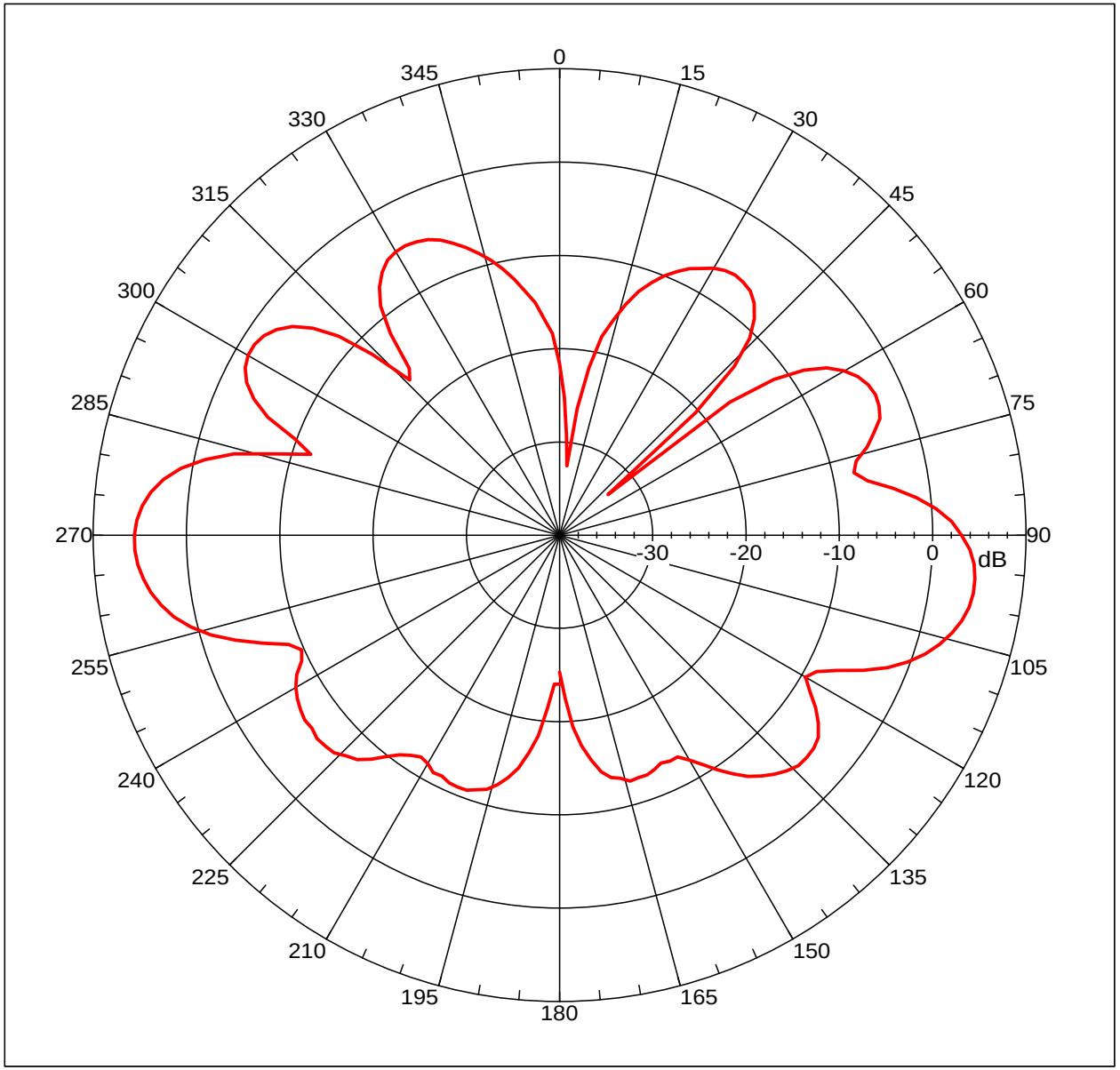
2. Return Loss, V.S.W.R. and Smith Chart






S11 FORWARD REFLECTION
IMPEDANCE
CHN1
TRANS/REFL
1 :
36.734 Ω
9.904 jΩ
2 400.000 000 MHz
2 :
54.315 Ω
-21.769 jΩ
2 500.000 000 MHz
3 :
54.912 Ω
4.743 jΩ
2 450.000 000 MHz
ALC1 LVLD FAIL
996.700 000 MHz - 3 000.000 000 MHz
CH 1 - S11
REFERENCE PLANE
0.0000 mm
1: 2.400000000 GHz
36.734 Ω
9.904 jΩ
2: 2.500000000 GHz
54.315 Ω
-21.769 jΩ
3: 2.450000000 GHz
54.912 Ω
4.743 jΩ
4: OFF
MARKER TO PEAK
MORE

Far-field amplitude of 20110217 TH246 E-PLANE.nsi



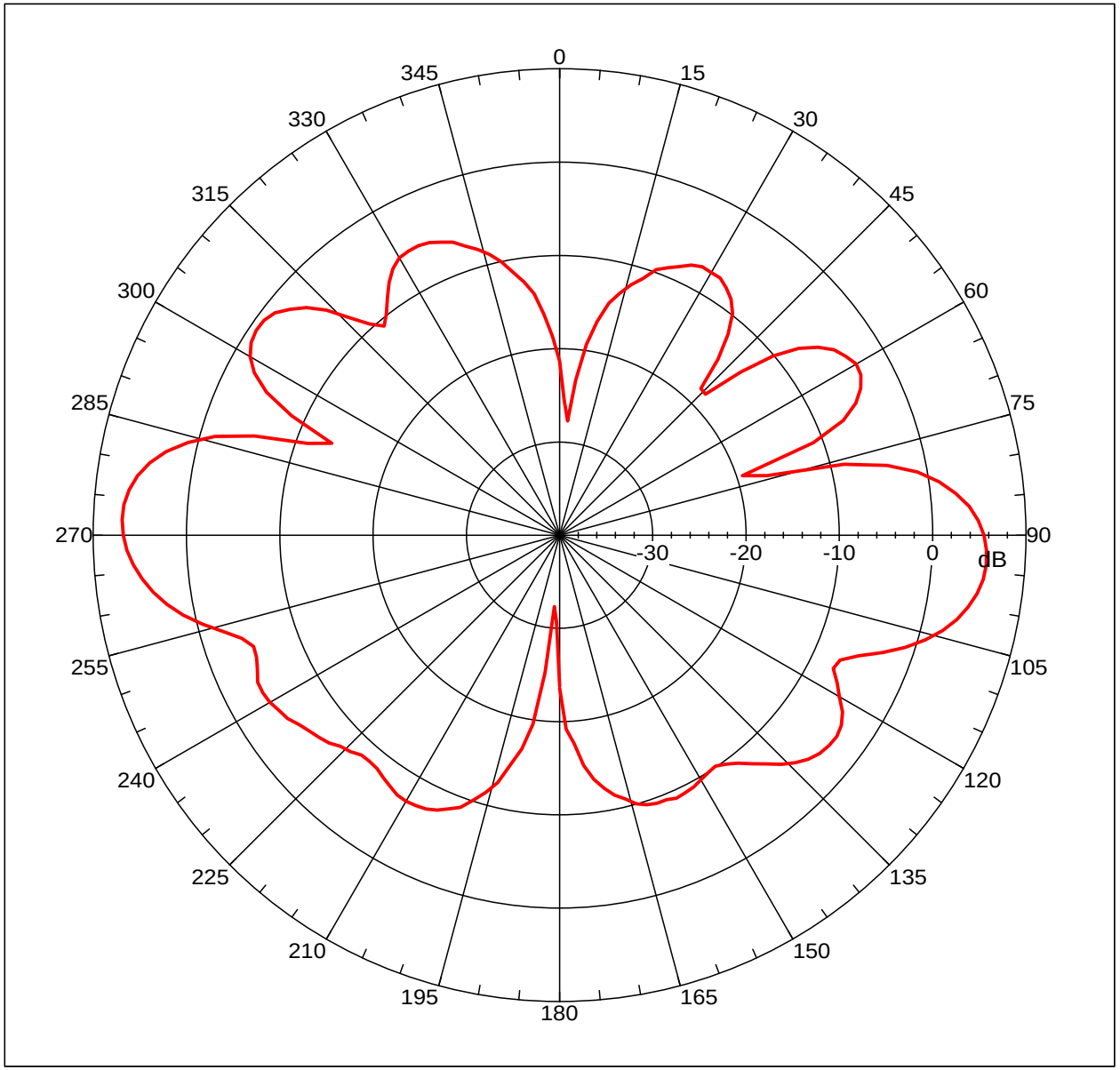

```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
  Gain = 5.56461  dBi
  Max far-field (global) = -43.44302  dB, Max far-field (plot) =
  -43.44315  dB
  Normalization: Reference, Network offset = 0.000  dB
  Hpeak at: -90.000  deg, Vpeak at: 0.000  deg
  Plot centering: On

  20110217 TH246 E-PLANE

  NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
  E-PLANE.nsi
  Measurement date/time: 2/17/2011 4:15:52 PM, Filetype: NSI-97
  Far-field Cut Analysis:
     Avg value: -5.264 dB
     -3. dB beam width: 19.87 deg
     -6. dB beam width: 26.81 deg
     -10. dB beam width: 33.06 deg
     Left Sidelobe: -11.82 dB at -125.698  deg
     Right Sidelobe: -7.03 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 3
  Beam    Frequency   Azimuth  Elevation  Pol
  ----    ---------   -------  ---------  ---
  1       2.400  GHz  Azimuth  Elevation  Single-pol
```

Far-field amplitude of 20110217 TH246 E-PLANE.nsi



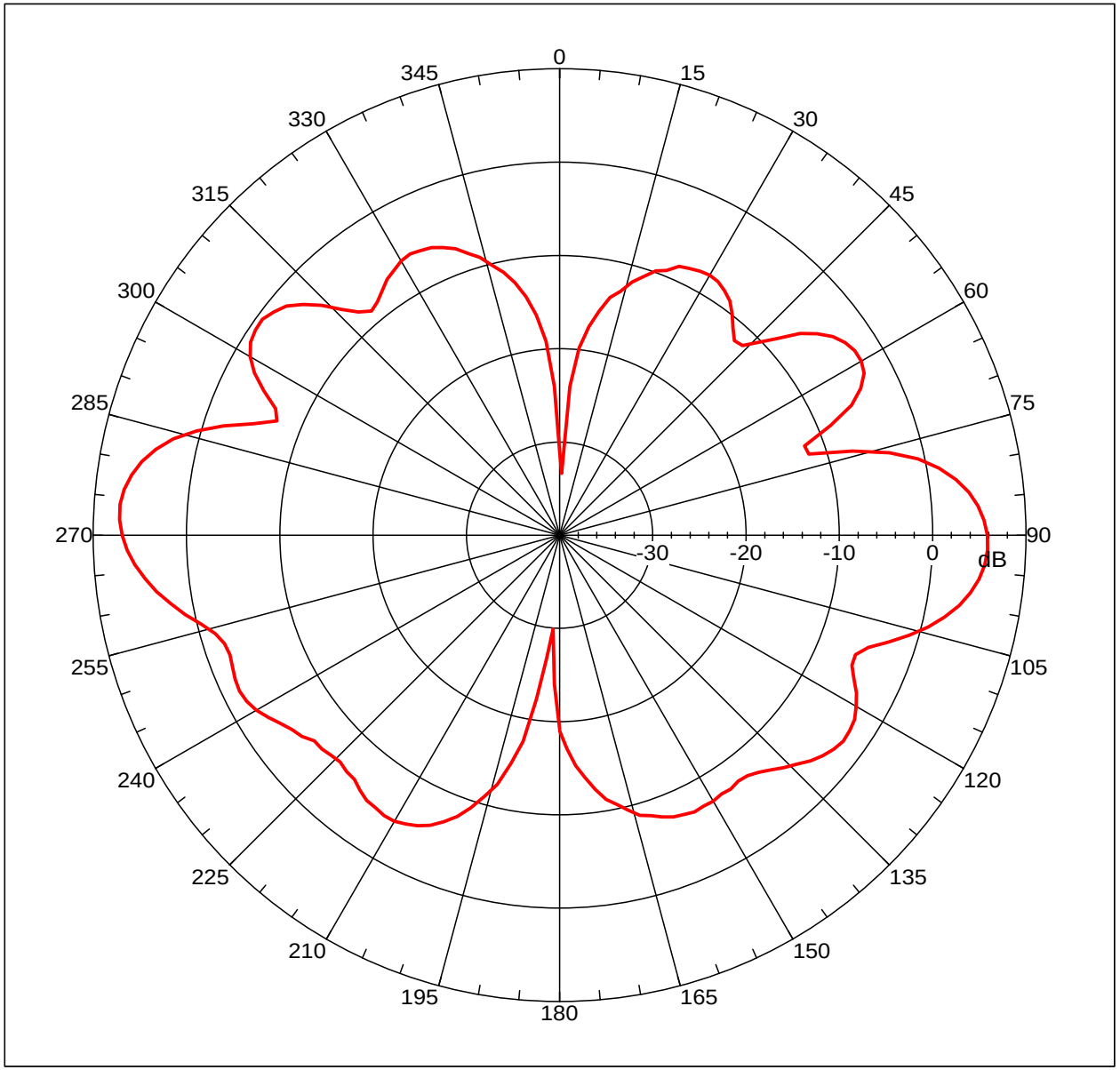

```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
  Gain = 6.91786  dBi
  Max far-field (global) = -43.06029  dB, Max far-field (plot) =
  -43.06035  dB
  Normalization: Reference, Network offset = 0.000  dB
  Hpeak at: -88.00001  deg, Vpeak at: 0.000  deg
  Plot centering: On

  20110217 TH246 E-PLANE

  NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
  E-PLANE.nsi
  Measurement date/time: 2/17/2011 4:15:52 PM, Filetype: NSI-97
  Far-field Cut Analysis:
     Avg value: -4.346 dB
     -3. dB beam width: 19.08 deg
     -6. dB beam width: 26.58 deg
     -10. dB beam width: 33.60 deg
     Left Sidelobe: -10.92 dB at -117.654  deg
     Right Sidelobe: -7.69 dB at -55.307  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 3
  Beam    Frequency   Azimuth  Elevation  Pol
  ----    ---------   -------  ---------  ---
  2       2.450  GHz  Azimuth  Elevation  Single-pol
```

Far-field amplitude of 20110217 TH246 E-PLANE.nsi



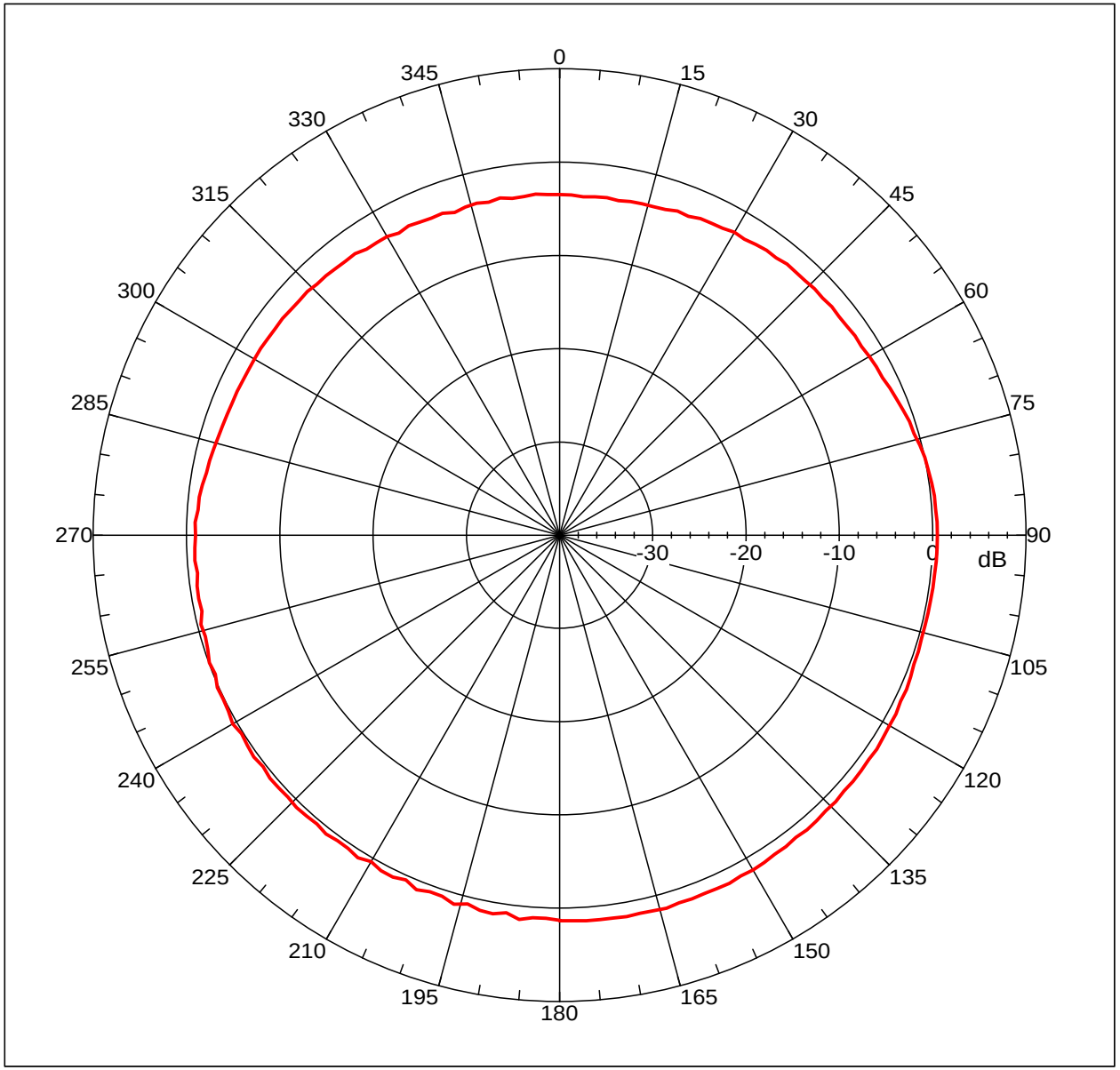

```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
 Gain = 7.21162  dBi
 Max far-field (global) = -42.92437  dB, Max far-field (plot) =
 -42.9245  dB
 Normalization: Reference, Network offset = 0.000  dB
 Hpeak at: -86.000  deg, Vpeak at: 0.000  deg
 Plot centering: On

 20110217 TH246 E-PLANE

 NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
 E-PLANE.nsi
 Measurement date/time: 2/17/2011 4:15:52 PM, Filetype: NSI-97
 Far-field Cut Analysis:
    Avg value: -3.612 dB
    -3. dB beam width: 18.95 deg
    -6. dB beam width: 27.18 deg
    -10. dB beam width: 49.64 deg
    Left Sidelobe: -11.75 dB at -147.821  deg
    Right Sidelobe: -7.85 dB at -53.296  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 3
 Beam    Frequency   Azimuth  Elevation  Pol
 ----    ---------   -------  ---------  ---
 3       2.500  GHz  Azimuth  Elevation  Single-pol
```

Far-field amplitude of 20110217 TH246 H-PLANE01.nsi



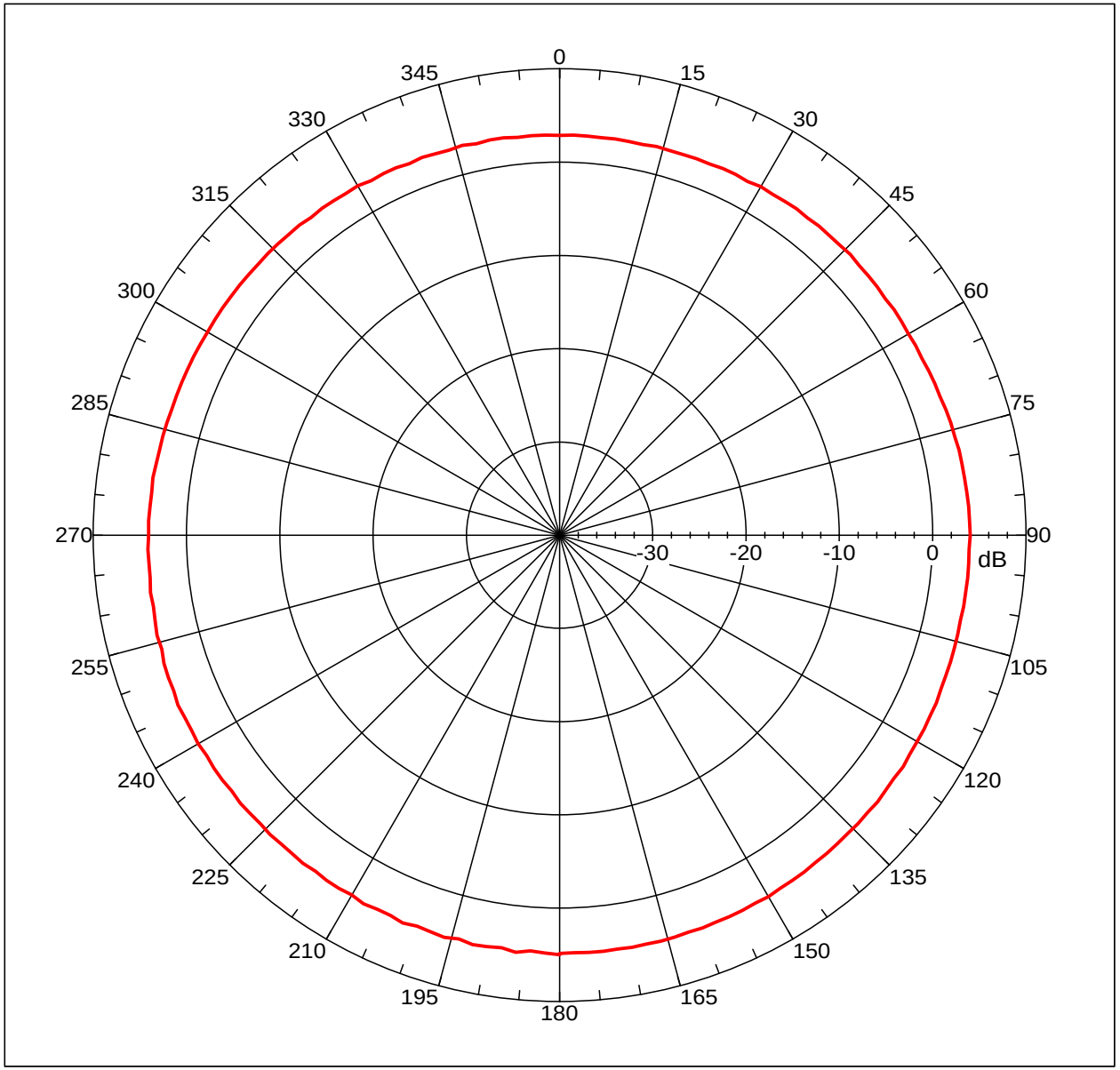

```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
Gain = 1.62142  dBi
Max far-field (global) = -47.38621  dB, Max far-field (plot) =
-47.38636  dB
Normalization: Reference, Network offset = 0.000  dB
Hpeak at: 163.99999  deg, Vpeak at: 0.000  deg
Plot centering: On

20110217 TH246 H-PLANE

NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
H-PLANE01.nsi
Measurement date/time: 2/17/2011 4:20:21 PM, Filetype: NSI-97
Far-field Cut Analysis:
   Avg value: -0.618 dB
   -3. dB beam width: Not Found
   -6. dB beam width: Not Found
   -10. dB beam width: Not Found
   Left Sidelobe: -4.20 dB at -41.229  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 3
Beam    Frequency   Azimuth  Elevation  Pol
----    ---------   -------  ---------  ---
1       2.400  GHz  Azimuth  Elevation  Single-pol
```

Far-field amplitude of 20110217 TH246 H-PLANE01.nsi



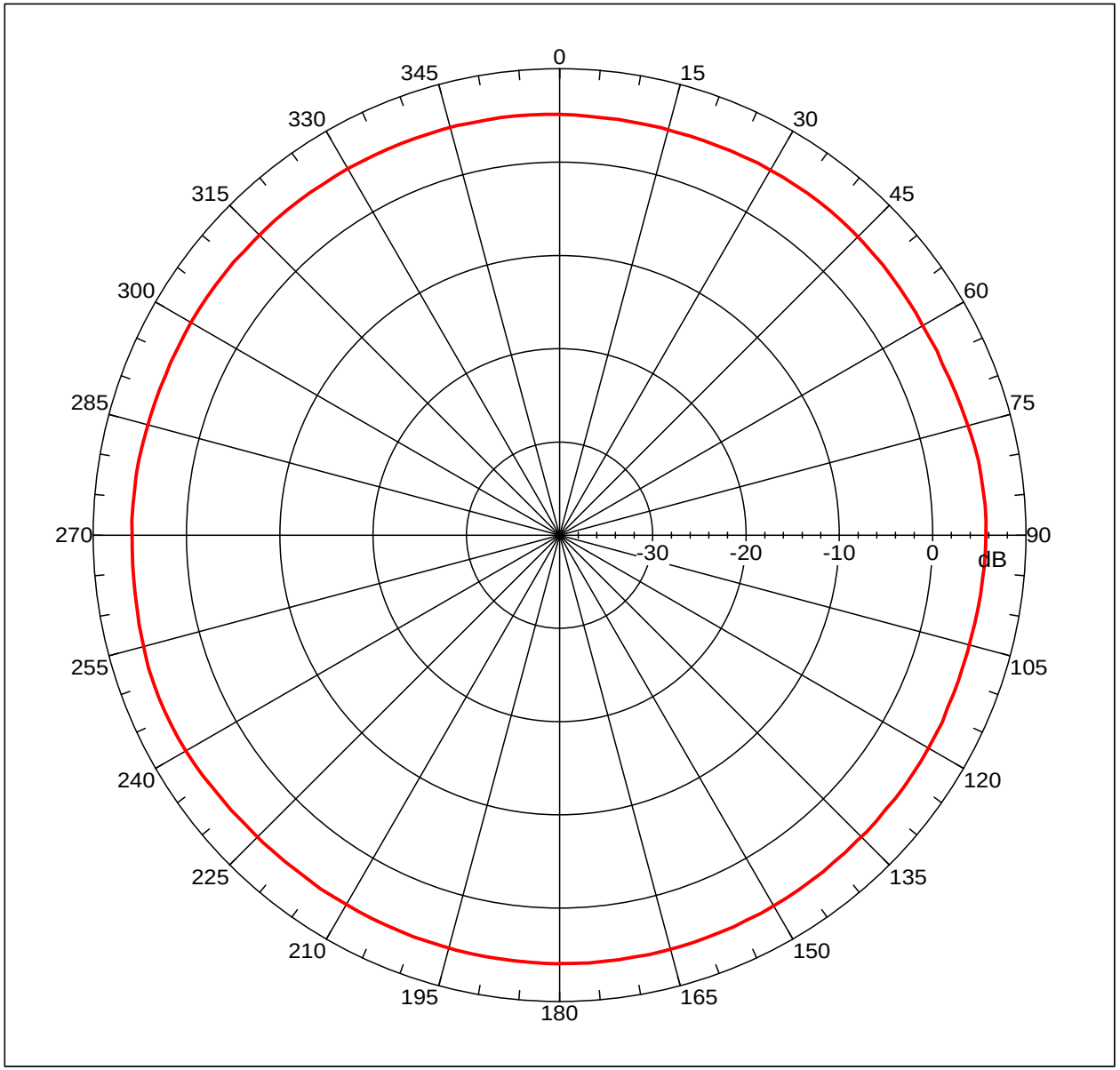

```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
Gain = 4.9769  dBi
Max far-field (global) = -45.00125  dB, Max far-field (plot) =
-45.0014  dB
Normalization: Reference, Network offset = 0.000  dB
Hpeak at: -180.00001  deg, Vpeak at: 0.000  deg
Plot centering: On

20110217 TH246 H-PLANE

NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
H-PLANE01.nsi
Measurement date/time: 2/17/2011 4:20:21 PM, Filetype: NSI-97
Far-field Cut Analysis:
   Avg value: 3.944 dB
   -3. dB beam width: Not Found
   -6. dB beam width: Not Found
   -10. dB beam width: Not Found
   Left Sidelobe: Not Found
   Right Sidelobe: -0.96 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 3
Beam    Frequency   Azimuth  Elevation  Pol
----    ---------   -------  ---------  ---
2       2.450  GHz  Azimuth  Elevation  Single-pol
```

Far-field amplitude of 20110217 TH246 H-PLANE01.nsi




```
Far-field amplitude, Eprincipal: Linear, Tau = 0.000  deg
Gain = 6.34542  dBi
Max far-field (global) = -43.79057  dB, Max far-field (plot) =
-43.79058  dB
Normalization: Reference, Network offset = 0.000  dB
Hpeak at: -114.000  deg, Vpeak at: 0.000  deg
Plot centering: On

20110217 TH246 H-PLANE

NSI2000 V4.0.124, Filename:C:\nsi2000\T.Y.HUS\20110217 TH246
H-PLANE01.nsi
Measurement date/time: 2/17/2011 4:20:21 PM, Filetype: NSI-97
Far-field Cut Analysis:
   Avg value: 5.591 dB
   -3. dB beam width: Not Found
   -6. dB beam width: Not Found
   -10. dB beam width: Not Found
   Left Sidelobe: Not Found
   Right Sidelobe: -0.41 dB at 153.855  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 3
Beam    Frequency   Azimuth  Elevation  Pol
----    ---------   -------  ---------  ---
3       2.500  GHz  Azimuth  Elevation  Single-pol
```