

Drills a hole fixed 2.4Ghz Antenna

MODEL: TH-240L



1. GENERAL DESCRIPTION

| Model No |
|----------|
| TH240L |

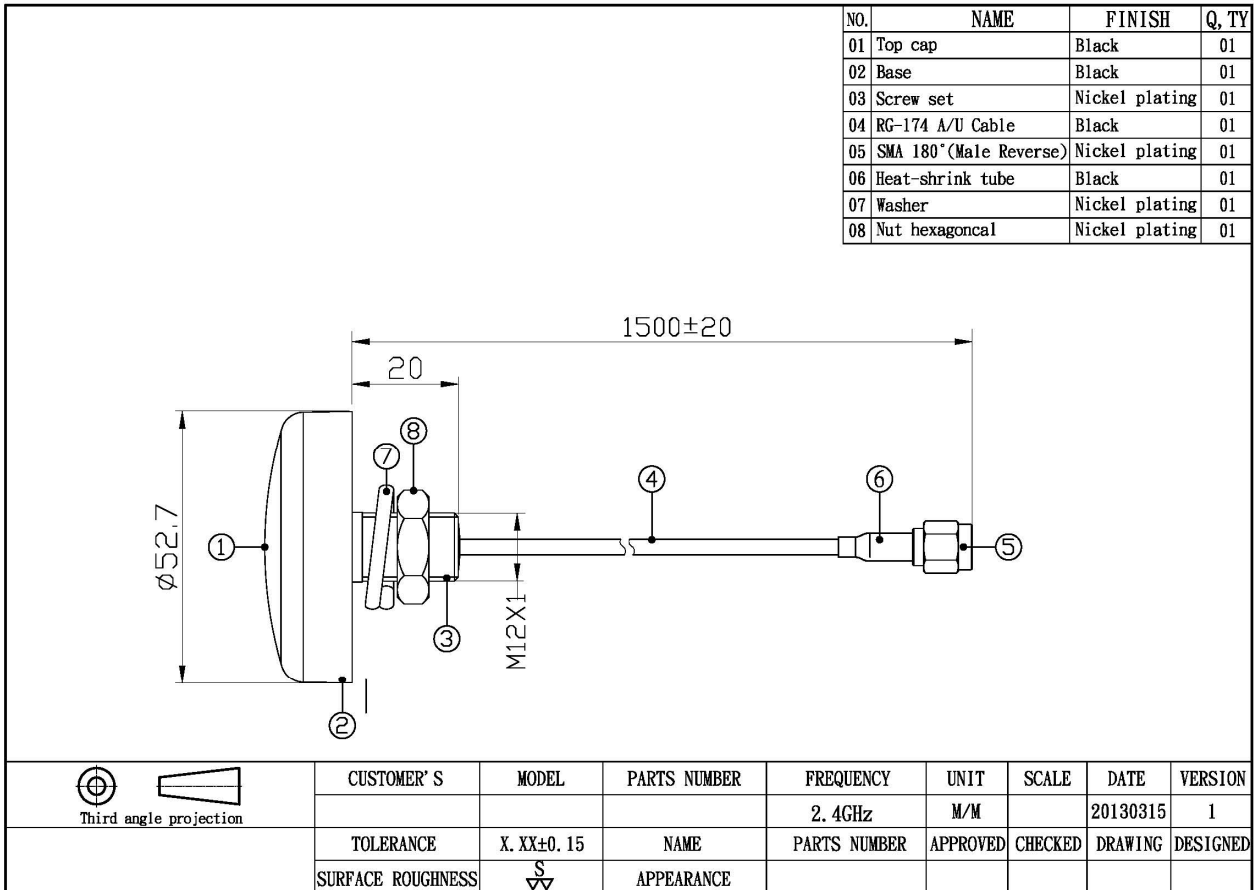
1.1 Electrical Properties

| Parameter | Description |
|-------------------|-------------|
| Frequency Band | 2.4~2.5GHz |
| Nominal Impedance | 50 ohm |
| VSWR | 2.0:1 |

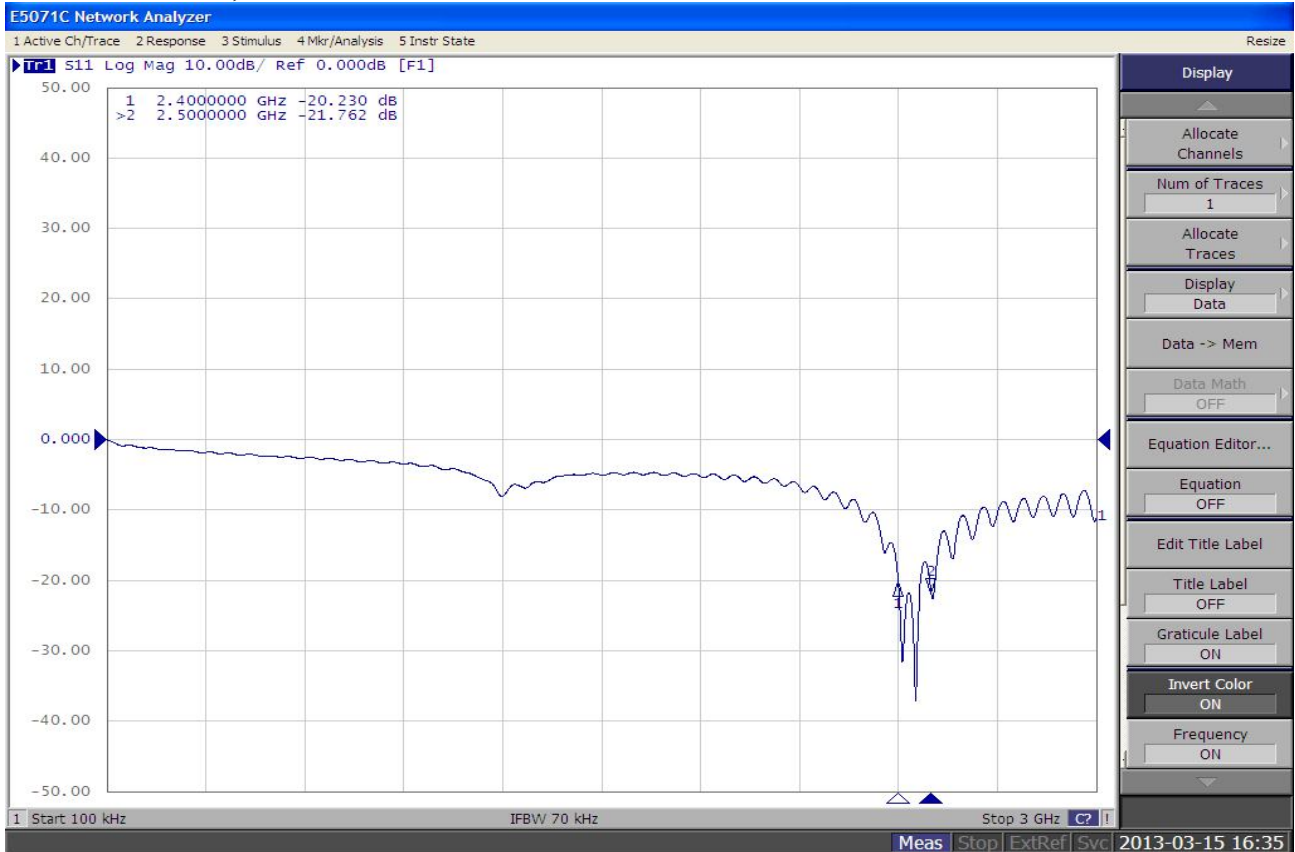
1.2 Mechanical Properties

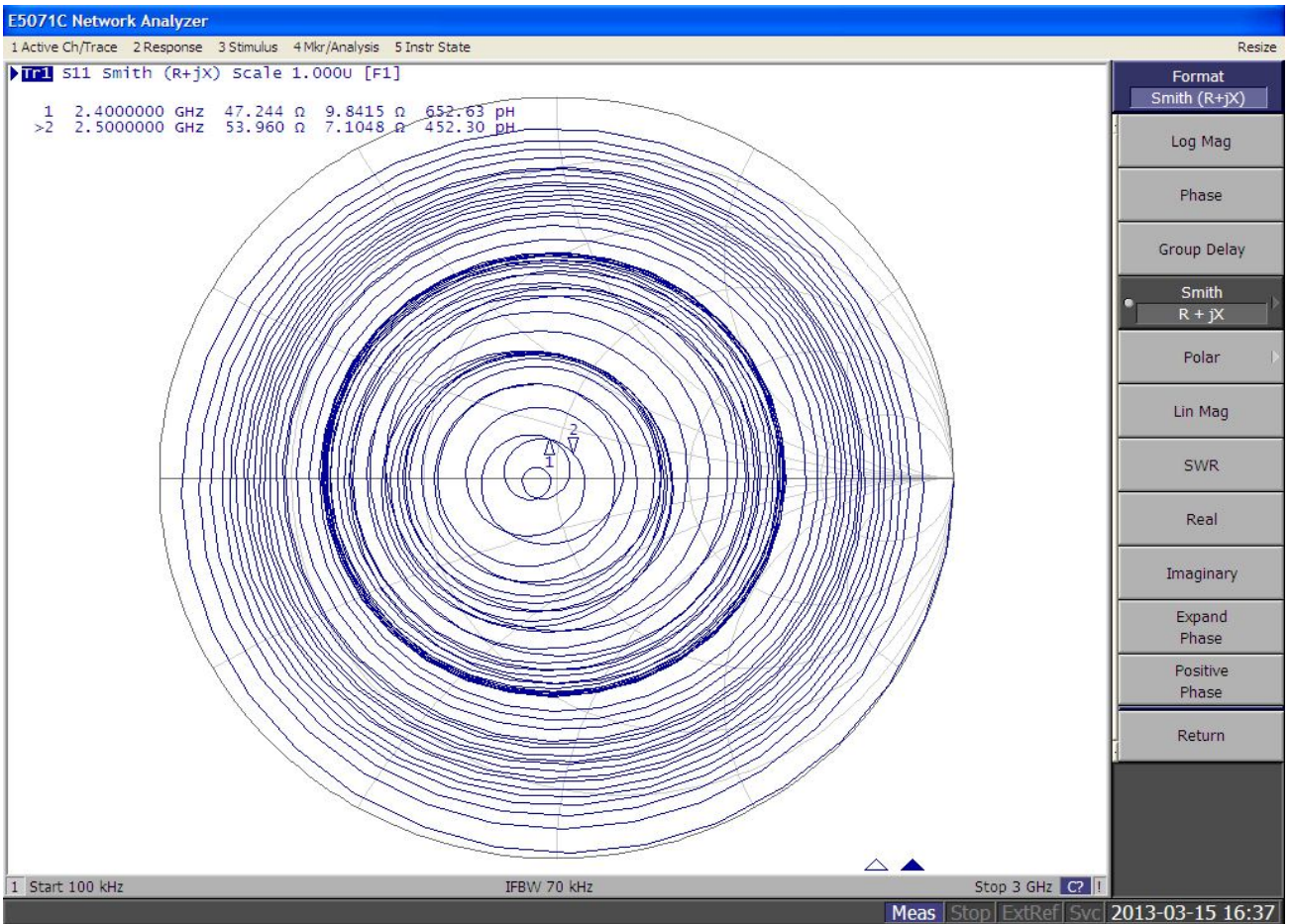
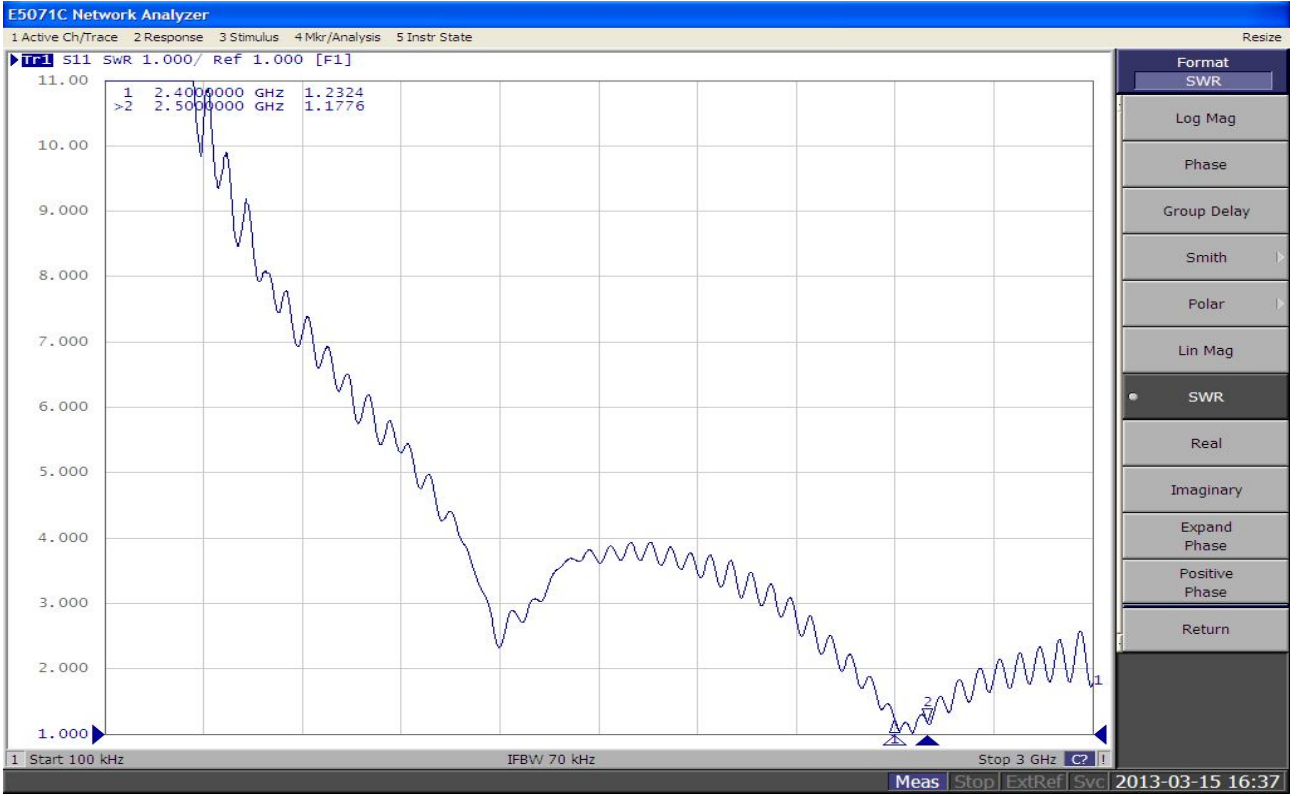
| Parameter | Description |
|-----------------------------|-------------------|
| Connector Type | RP-SMA180° (Male) |
| Antenna Dimensions | 1500mm ± 20 |
| Antenna Cable Total Length | RG-174 |
| Antenna Color | Black |
| Operating Temperature Range | -30°C~+70°C |
| Storage Temperature Range | -40°C~+80°C |

2. Appearance

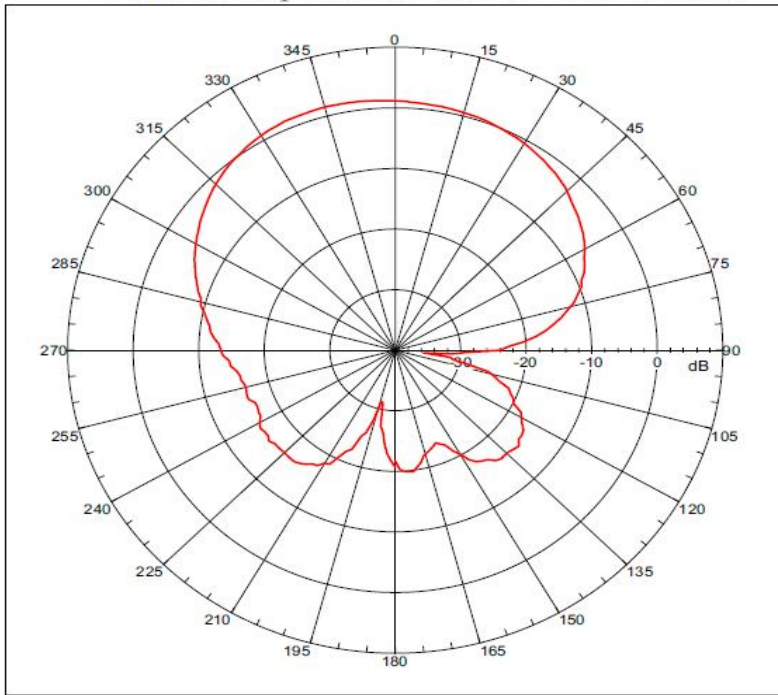


3. Return Loss, V.S.W.R. and Smith Chart





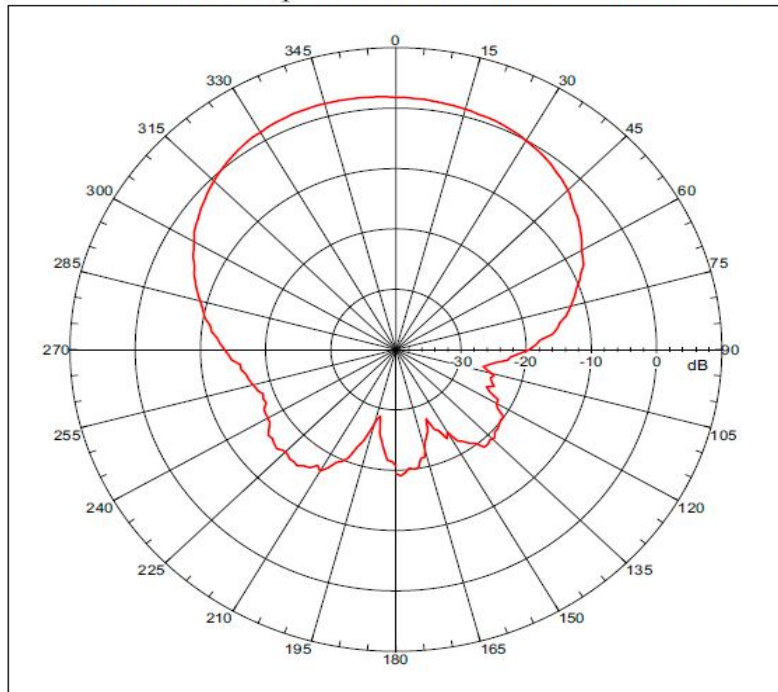
Far-field amplitude of TH240L-2.4G-2-E.nsi



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Far-field amplitude, Eprincipal: Linear, Txs = 0.000 deg
Gain = 1.49663 dBi
Max Far-field (global) = -47.511 dB, Max Far-field (plot) =
-47.51101 dB
Normalization: Reference, Network offset = 0.000 dB
Vpeak at: -14.00001 deg, Vpeak at: 0.000 deg
Plot centering: On
TH240L-2.4G-2-E
NSI2000 V4.0.124, Filename: C:\Documents and Settings\MSI\Desktop\Y.
N.7\TH240L-2.4G\TH240L-2.4G-2-E.nsi
Measurement date/time: 3/13/2013 2:25:27 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -7.492 dB
-3. dB beam width: 83.30 deg
-6. dB beam width: 111.07 deg
-10. dB beam width: 139.30 deg
Left Sidelobe: -17.22 dB at -121.676 deg
Right Sidelobe: -16.87 dB at 131.732 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
    
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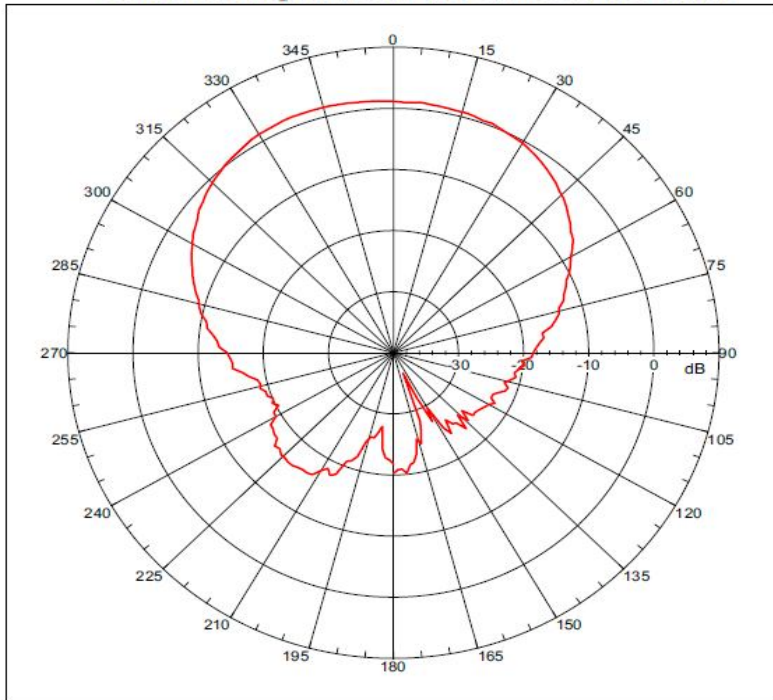
Far-field amplitude of TH240L-2.4G-2-E.nsi



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Far-field amplitude, Eprincipal: Linear, Txs = 0.000 deg
Gain = 2.20529 dBi
Max Far-field (global) = -47.77286 dB, Max Far-field (plot) =
-47.77286 dB
Normalization: Reference, Network offset = 0.000 dB
Vpeak at: -18.00001 deg, Vpeak at: 0.000 deg
Plot centering: On
TH240L-2.4G-2-E
NSI2000 V4.0.124, Filename: C:\Documents and Settings\MSI\Desktop\Y.
N.7\TH240L-2.4G\TH240L-2.4G-2-E.nsi
Measurement date/time: 3/13/2013 2:25:27 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -7.086 dB
-3. dB beam width: 82.19 deg
-6. dB beam width: 108.06 deg
-10. dB beam width: 135.68 deg
Left Sidelobe: -18.08 dB at -125.698 deg
Right Sidelobe: -26.52 dB at 107.598 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 TH240L-2.4G-2-E.nsi



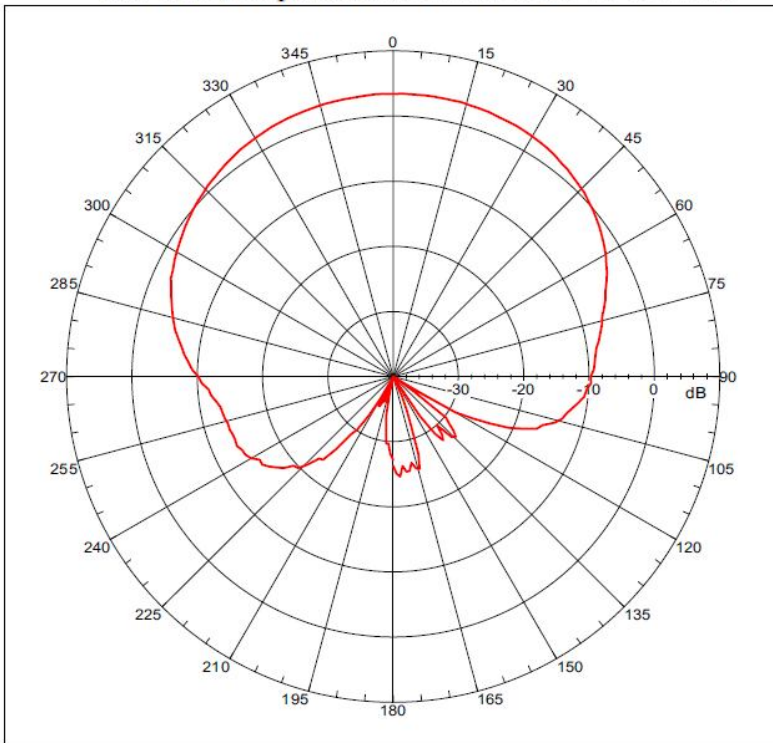
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Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = 1.5928 dB
Max Far-field (global) = -48.54319 dB, Max Far-field (plot) =
-48.54319 dB
Normalization: Reference, Network offset = 0.000 dB
Vpeak at: -22.00001 deg, Vpeak at: 0.000 deg
Plot centering: On

TH240L-2.4G-2-E
NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\Y.
R.T\TH240L-2.4G\TH240L-2.4G-2-E.nsi
Measurement date/time: 3/13/2013 2:25:27 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -7.549 dB
-3. dB beam width: 85.01 deg
-6. dB beam width: 109.09 deg
-10. dB beam width: 133.25 deg
Left Side-lobe: -17.83 dB at -129.721 deg
Right Side-lobe: -25.83 dB at 135.754 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 TH240L-2.4G-2-H.nsi



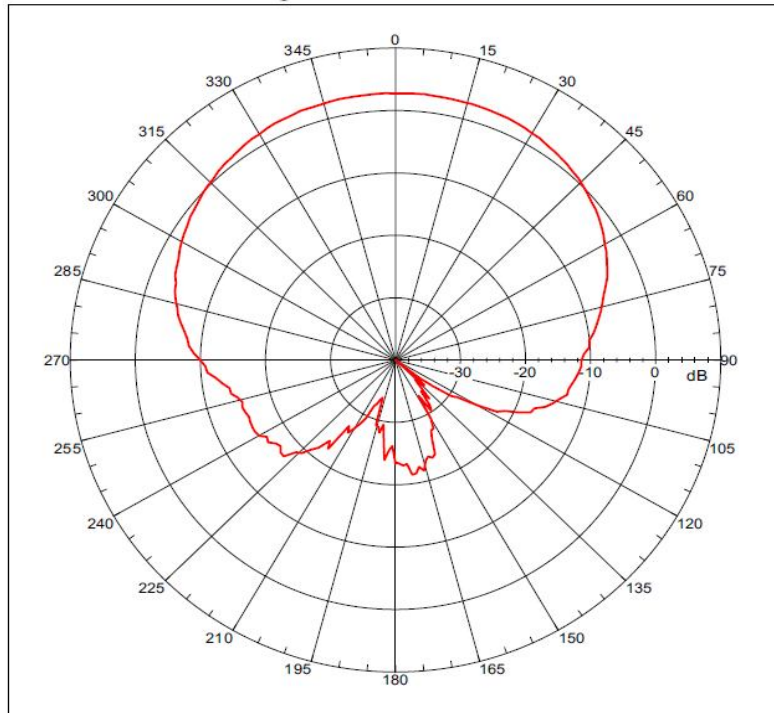
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Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = 3.4291 dB
Max Far-field (global) = -45.57853 dB, Max Far-field (plot) =
-45.57853 dB
Normalization: Reference, Network offset = 0.000 dB
Vpeak at: 1.99999 deg, Vpeak at: 0.000 deg
Plot centering: On

TH240L-2.4G-2-H
NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\Y.
R.T\TH240L-2.4G\TH240L-2.4G-2-H.nsi
Measurement date/time: 3/13/2013 2:18:28 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -5.138 dB
-3. dB beam width: 93.55 deg
-6. dB beam width: 125.58 deg
-10. dB beam width: 154.27 deg
Left Side-lobe: -38.35 dB at -153.855 deg
Right Side-lobe: -30.11 dB at 135.754 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

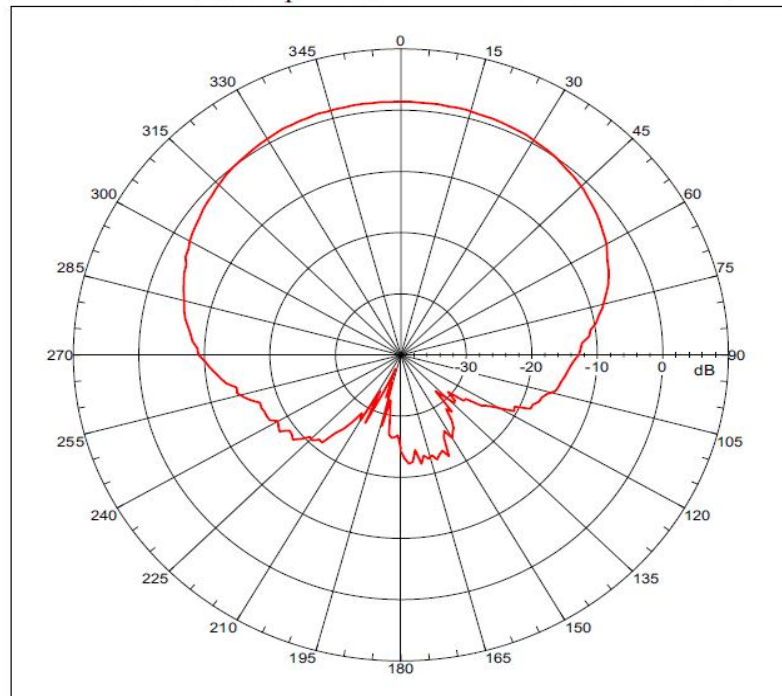
Selected beam(s) 1 of 3
Beam Frequency Azimuth Elevation Pol
-----
1 2.400 GHz Azimuth Elevation Single-pol
    
```

Far-field amplitude of TH240L-2.4G-2-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 2.80195 dB
 Max far-field (global) = -47.1762 dB, Max far-field (plot) = -47.1762 dB
 Normalization: Reference, Network offset = 0.000 dB
 Vpeak at: 5.9899 deg, Vpeak at: 0.000 deg
 Plot centering: On
 TH240L-2.4G-2-H
 NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\Y.H.T\TH240L-2.4G\TH240L-2.4G-2-H.nsi
 Measurement date/time: 3/13/2013 2:18:28 PM, Filetype: NSI-97
 Far-field Cut Analysis:
 Avg value: -5.536 dB
 -3. dB beam width: 96.60 deg
 -6. dB beam width: 128.29 deg
 -10. dB beam width: 157.74 deg
 Left Sidelobe: -25.21 dB at -143.798 deg
 Right Sidelobe: -36.82 dB at 135.754 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 TH240L-2.4G-2-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.44499 dB
 Max far-field (global) = -48.691 dB, Max far-field (plot) = -48.691 dB
 Normalization: Reference, Network offset = 0.000 dB
 Vpeak at: -10.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On
 TH240L-2.4G-2-H
 NSI2000 V4.0.124, Filename:C:\Documents and Settings\NSI\Desktop\Y.H.T\TH240L-2.4G\TH240L-2.4G-2-H.nsi
 Measurement date/time: 3/13/2013 2:18:28 PM, Filetype: NSI-97
 Far-field Cut Analysis:
 Avg value: -6.618 dB
 -3. dB beam width: 99.94 deg
 -6. dB beam width: 132.50 deg
 -10. dB beam width: 164.66 deg
 Left Sidelobe: -29.01 dB at -149.832 deg
 Right Sidelobe: -30.08 dB at 135.754 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