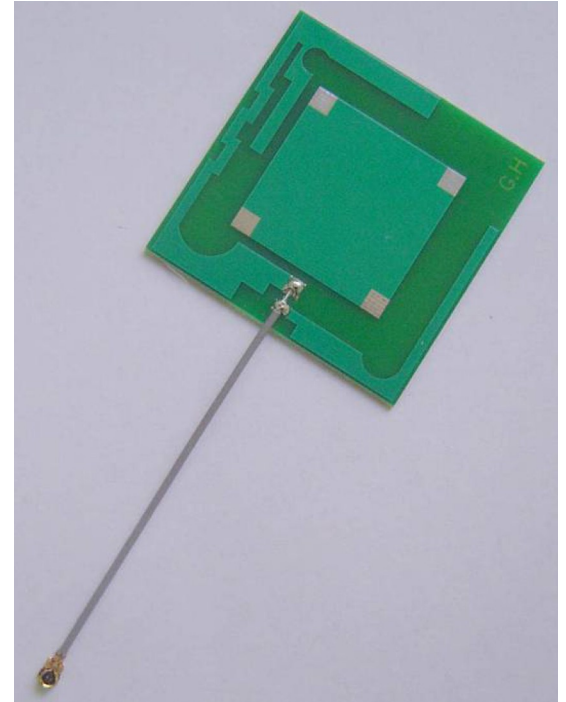


ANT-PCB4242

Features

- 800/900/1800/1900/2100MHz
- Omni Directional 1/2 Wave
- Miniature 42 x 42 x 1mm
- VSWR <3.0
- RG178 Coax 50Ω Impedance
- 2-3dBi Gain (nominal)
- Vertical Polarization
- Admitted Radiation Power 1W
- iPex/UFL Connector
- Operating temp -40 to +70°C



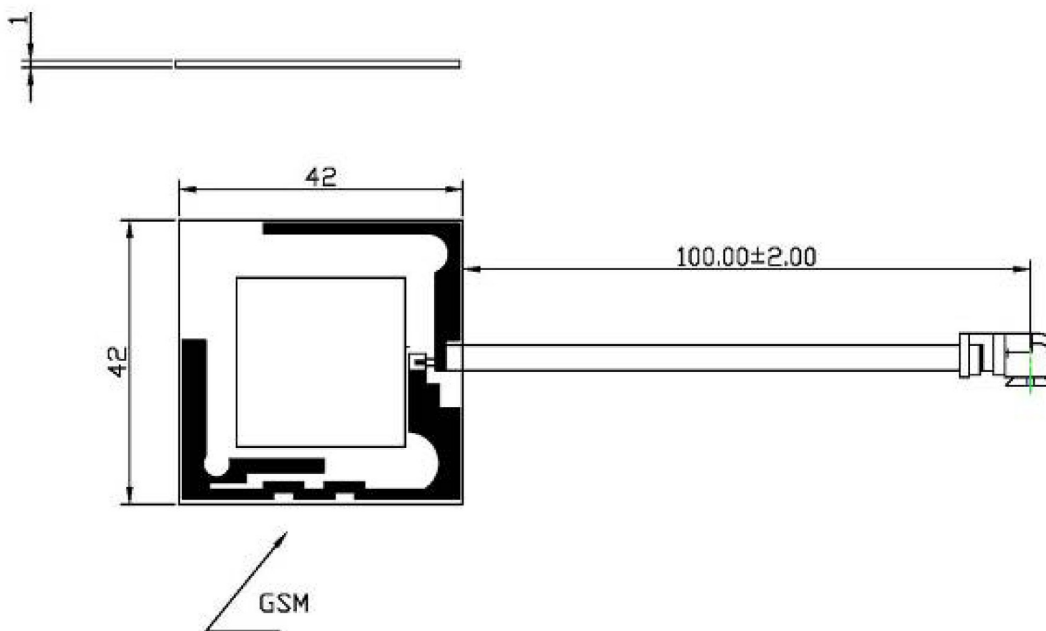
Applications

- Embedded GSM Systems
- For World-wide Use

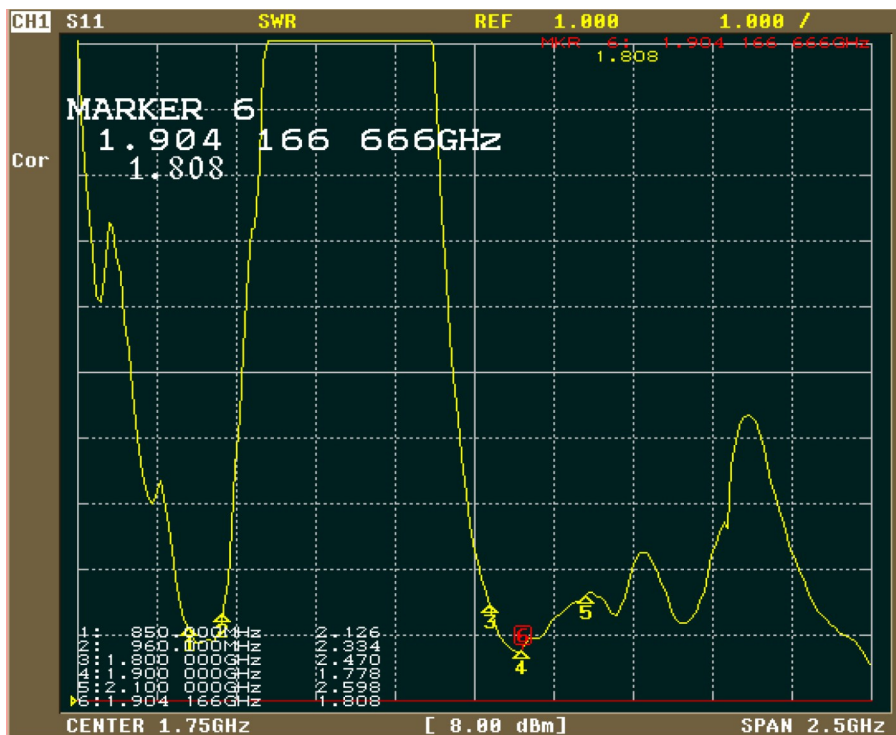
Ordering Information

Part Number	Description
ANT-PCB4242-FL	Miniature PCB Penta Band Antenna

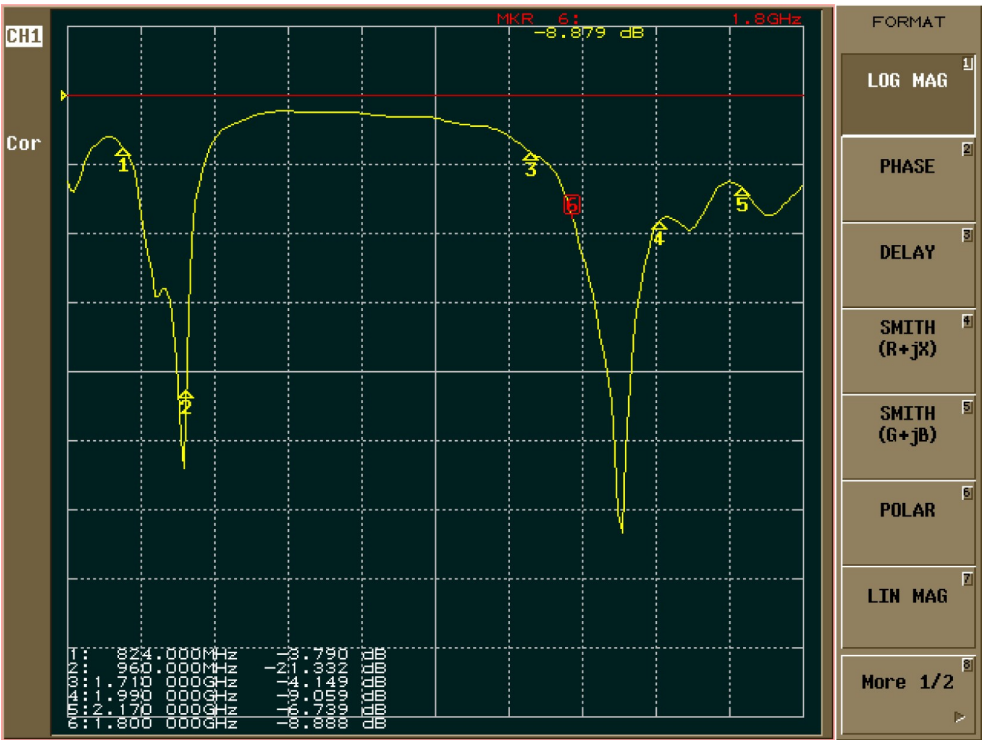
Mechanical Detail



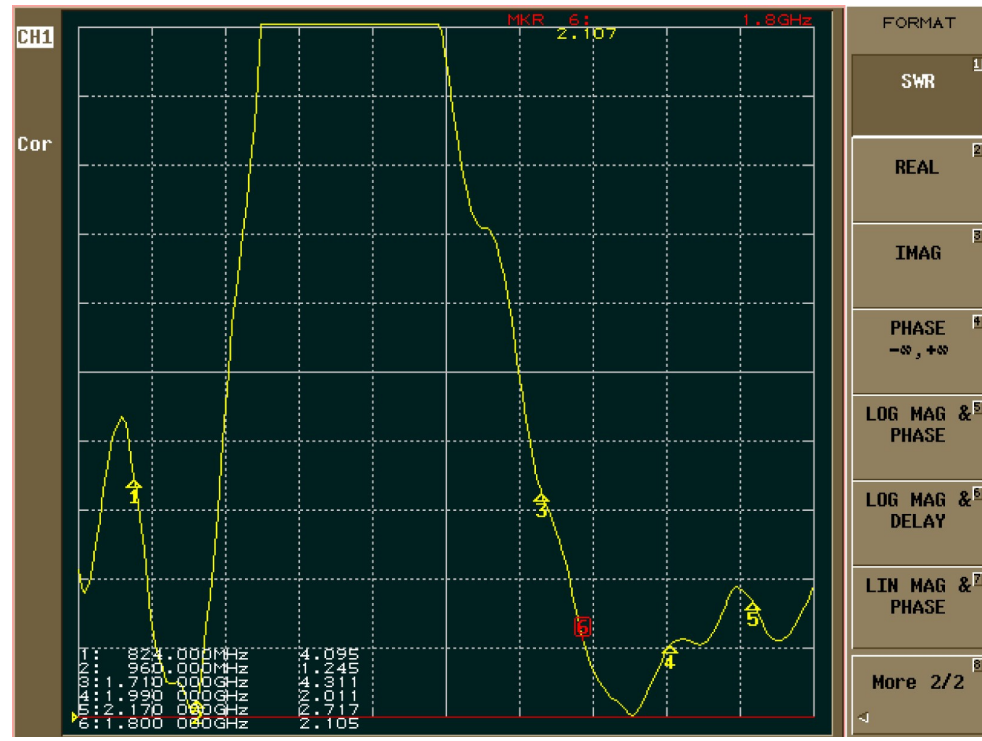
Performance Data – TEST VSWR



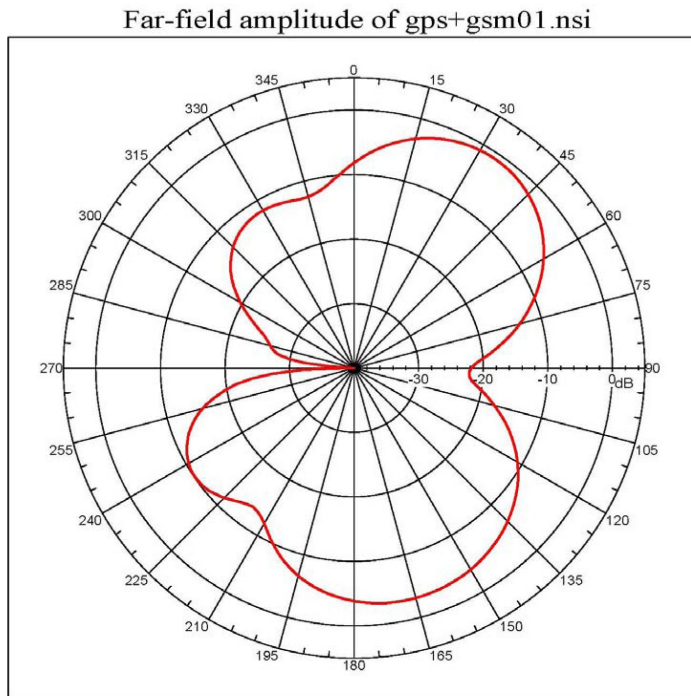
Performance Data — VSWR



Performance Data — RETURN LOSS



Performance Data—Smith Chart @ 880MHz

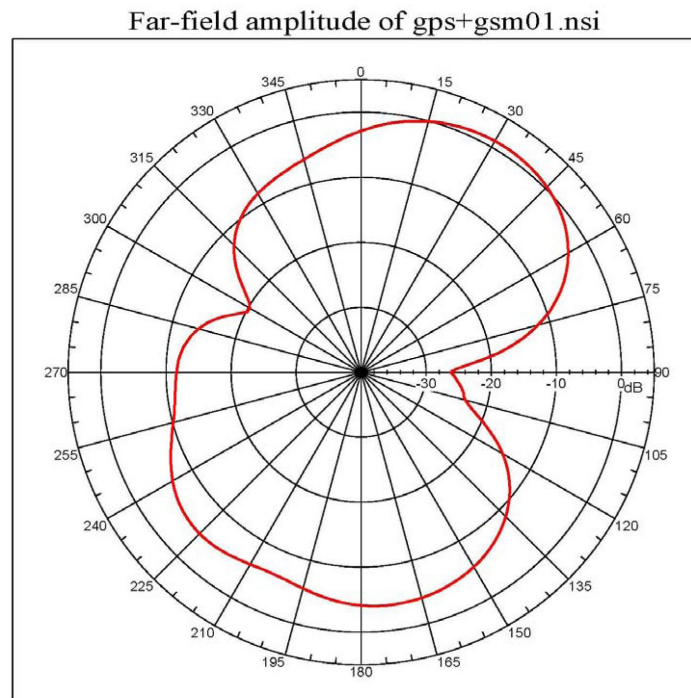


Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = -0.93756 dBi
Max far-field (global) = -34.95309 dB, Max far-field (plot) = -34.95309 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 214.000 deg, Vpeak at: 0.000 deg
Plot centering: on

NSI2000 V4.0.116, Filename:C:\Documents and Settings\Administrator\Desktop\bill\gps+gsm01.nsi
Measurement date/time: 11/26/2009 8:04:08 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -8.754 dB
-3. dB beam width: 41.64 deg
-6. dB beam width: 59.14 deg
-10. dB beam width: 78.02 deg
Left sidelobe: -9.20 dB at -123.687 deg
Right sidelobe: -2.13 dB at 167.933 deg
Far-field display setup
Azimuth (deg)
Span = 360.00001 deg, Center = 180.00001 deg, #pts = 181
Start = 0.000 deg, Stop = 360.00001 deg, Delta = 2.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 9
Beam Frequency Azimuth Elevation Pol
1 0.880 GHz Azimuth Elevation Single-pol

Performance Data—Smith Chart @ 920MHz

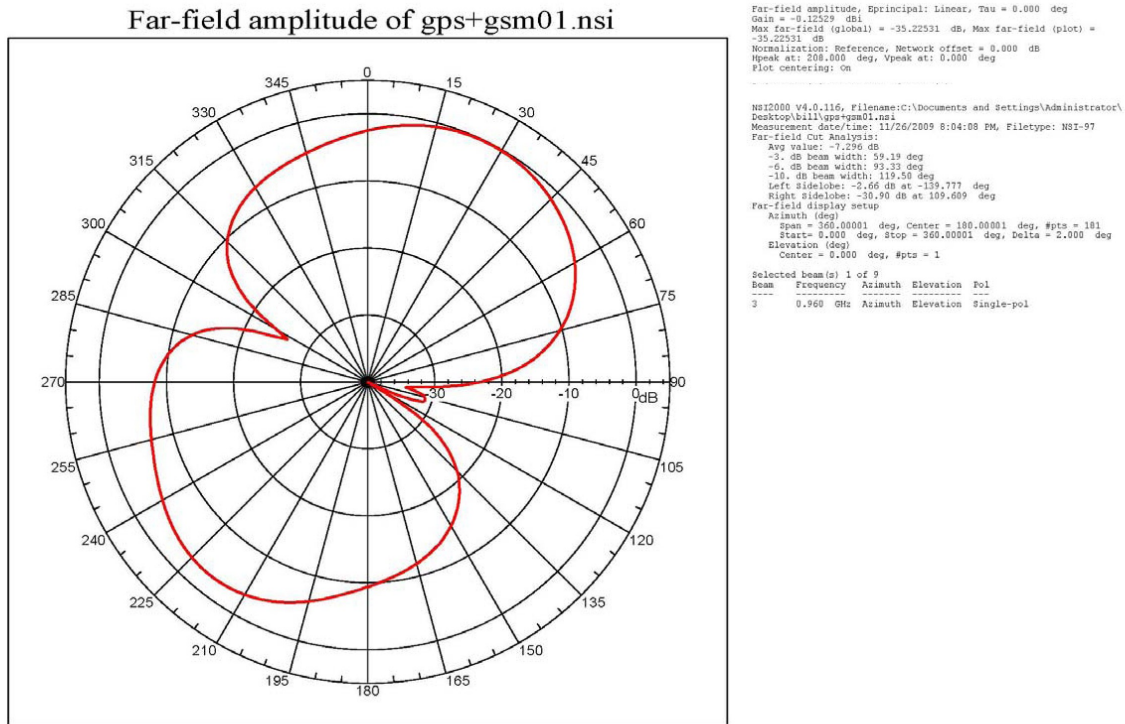


Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = 1.08571 dBi
Max far-field (global) = -33.66057 dB, Max far-field (plot) = -33.66056 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 212.000 deg, Vpeak at: 0.000 deg
Plot centering: on

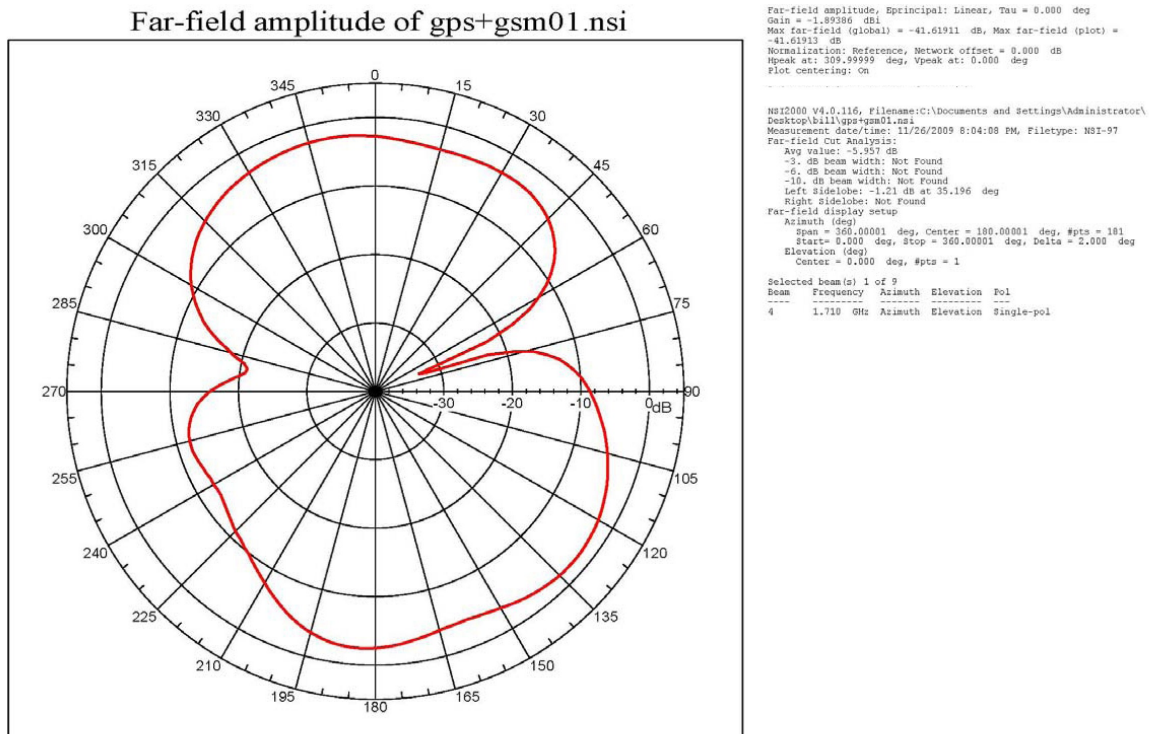
NSI2000 V4.0.116, Filename:C:\Documents and Settings\Administrator\Desktop\bill\gps+gsm01.nsi
Measurement date/time: 11/26/2009 8:04:08 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -6.312 dB
-3. dB beam width: 51.85 deg
-6. dB beam width: 73.16 deg
-10. dB beam width: 105.26 deg
Left sidelobe: -5.48 dB at -135.754 deg
Right sidelobe: -4.99 dB at 173.967 deg
Far-field display setup
Azimuth (deg)
Span = 360.00001 deg, Center = 180.00001 deg, #pts = 181
Start = 0.000 deg, Stop = 360.00001 deg, Delta = 2.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 9
Beam Frequency Azimuth Elevation Pol
2 0.920 GHz Azimuth Elevation Single-pol

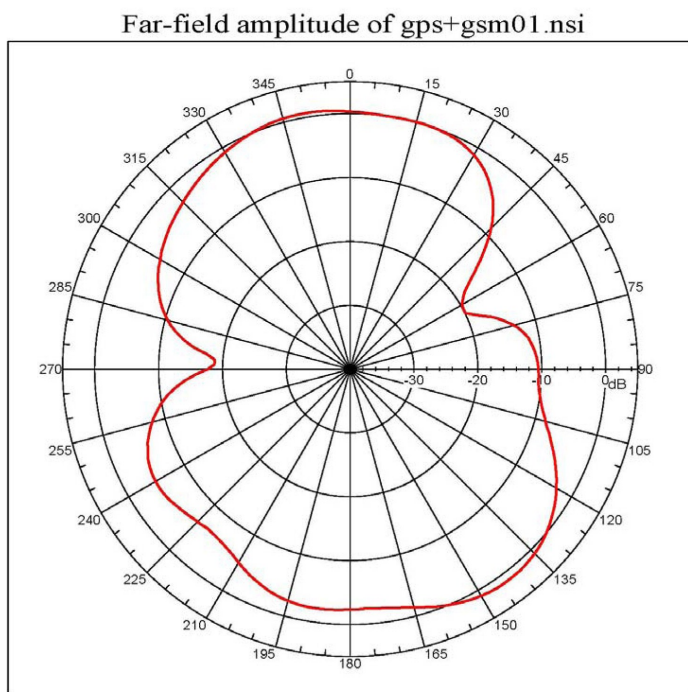
Performance Data—Smith Chart @ 960MHz



Performance Data—Smith Chart @ 1710MHz



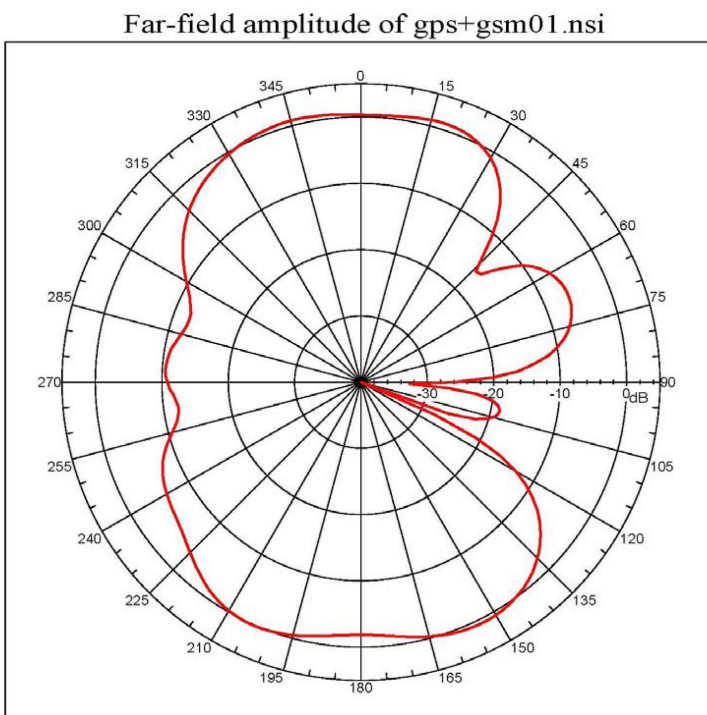
Performance Data—Smith Chart @ 1785MHz



Far-field amplitude, Spherical: Linear, Tau = 0.000 deg
Gain = 1.31446 dBi
Max far-field (global) = -40.32198 dB, Max far-field (plot) = -40.522 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 324.000 deg, Vpeak at: 0.000 deg
Plot centering: on

NSI2000 V4.0.116, Filename: C:\Documents and Settings\Administrator\Desktop\bill\gps+gsm01.nsi
Measurement date/time: 11/26/2009 8:04:08 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -3.945 dB
-3. dB beam width: 43.98 deg
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: -1.26 dB at 17.095 deg
Right Sidelobe: Not Found
Far-field display setup
Azimuth (deg)
Span = 360.00001 deg, Center = 180.00001 deg, #pts = 181
Start = 0.000 deg, Stop = 360.00001 deg, Delta = 2.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1
Selected beam(s) 1 of 9
Beam Frequency Azimuth Elevation Pol
5 1.785 GHz Azimuth Elevation Single-pol

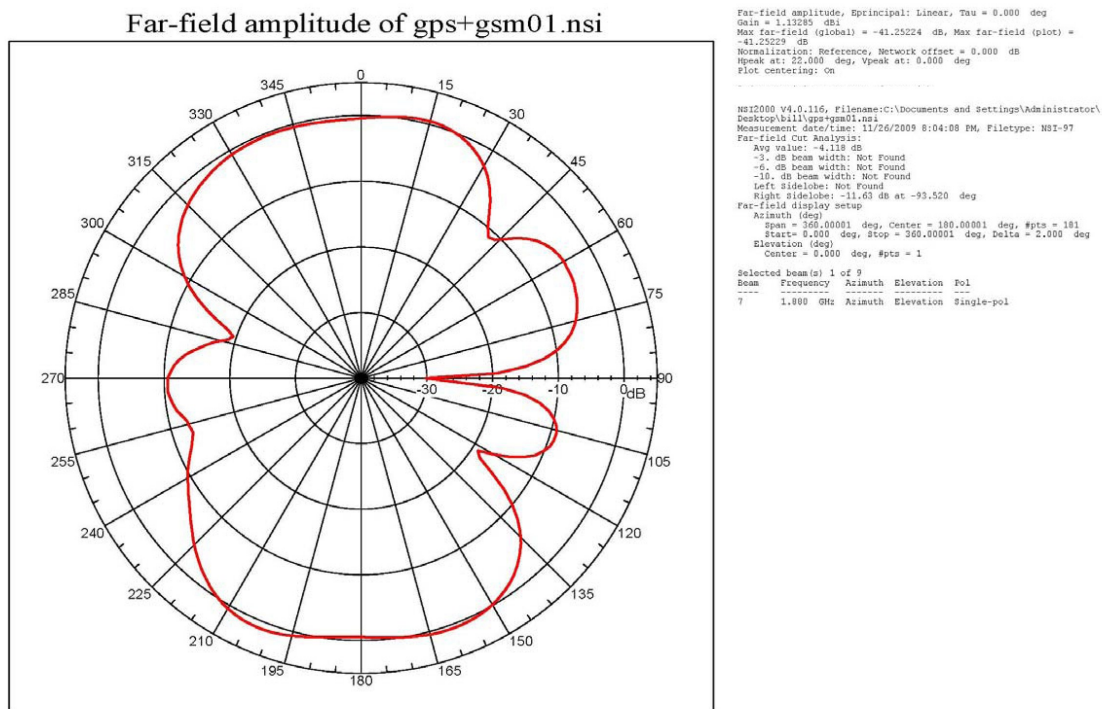
Performance Data—Smith Chart @ 1850MHz



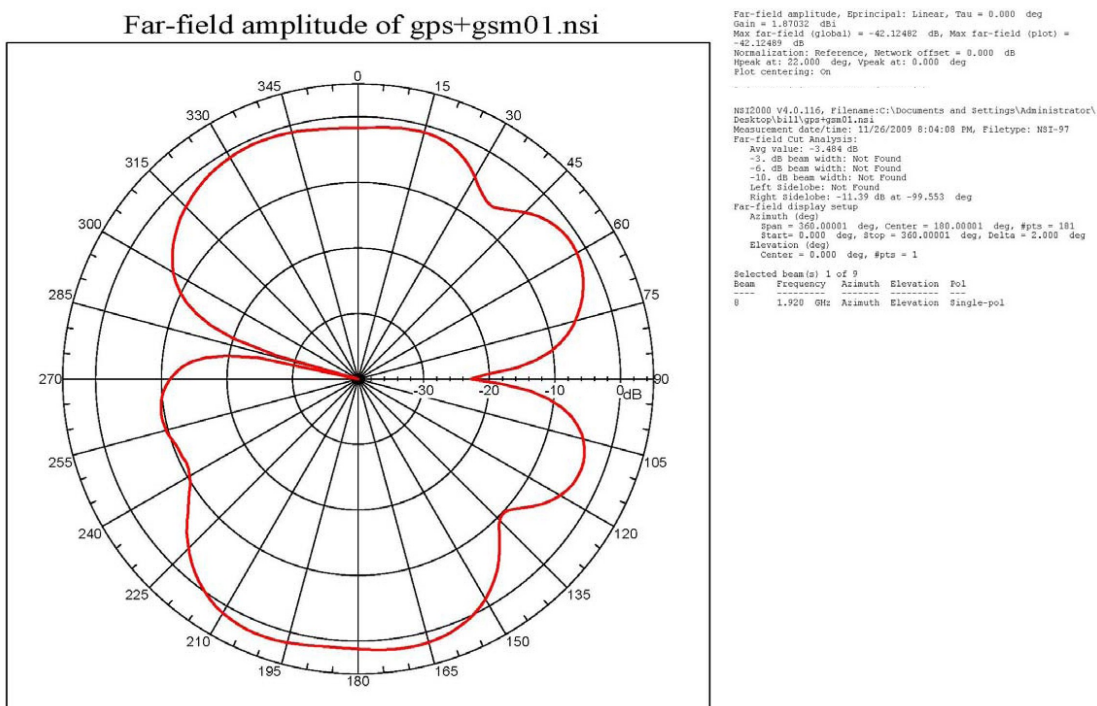
Far-field amplitude, Spherical: Linear, Tau = 0.000 deg
Gain = 0.97485 dBi
Max far-field (global) = -41.31947 dB, Max far-field (plot) = -41.31947 dB
Normalization: Reference, Network offset = 0.000 dB
Hpeak at: 198.000 deg, Vpeak at: 0.000 deg
Plot centering: on

NSI2000 V4.0.116, Filename: C:\Documents and Settings\Administrator\Desktop\bill\gps+gsm01.nsi
Measurement date/time: 11/26/2009 8:04:08 PM, Filetype: NSI-97
Far-field Cut Analysis:
Avg value: -4.034 dB
-3. dB beam width: 72.51 deg
-6. dB beam width: 86.92 deg
-10. dB beam width: 99.85 deg
Left Sidelobe: -11.50 dB at -65.475 deg
Right Sidelobe: -7.14 dB at 67.374 deg
Far-field display setup
Azimuth (deg)
Span = 360.00001 deg, Center = 180.00001 deg, #pts = 181
Start = 0.000 deg, Stop = 360.00001 deg, Delta = 2.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1
Selected beam(s) 1 of 9
Beam Frequency Azimuth Elevation Pol
6 1.850 GHz Azimuth Elevation Single-pol

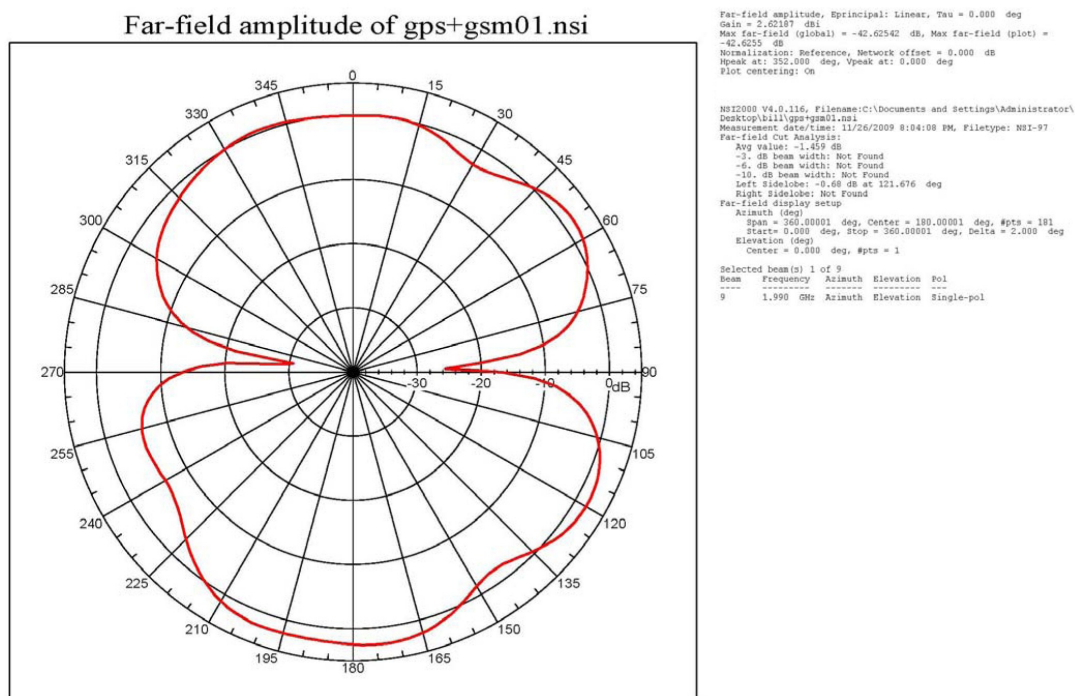
Performance Data—Smith Chart @ 1880MHz



Performance Data—Smith Chart @ 1920MHz



Performance Data—Smith Chart @ 1990MHz



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ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

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Waste Batteries and Accumulators

Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

Environment Agency producer registration number: WEE/JB0104WV.

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