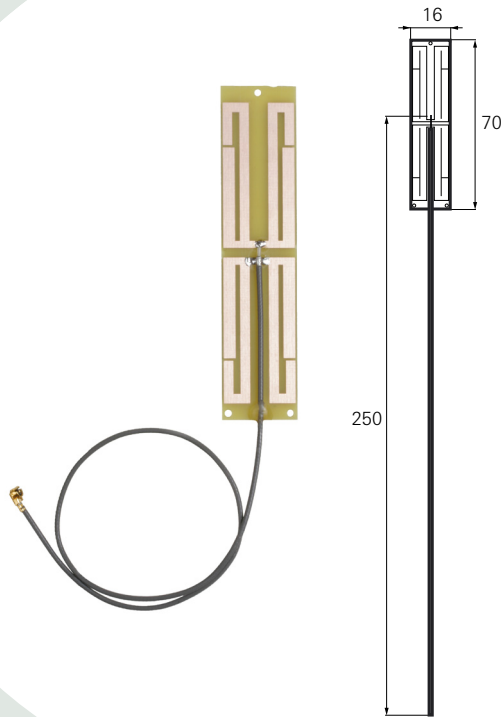


Access Point Router 802.11n Antenna

PWB Antenna with feed cable. Pulse Part Number: W3513



Features

- Low profile
- Omni directional gain in XY-plane
- Size W x L x H (16 x 70 x 0.9 mm)
- Antenna feed cable length: 250mm (total) / 212mm (from radiator edge)
- Antenna feed cable: 1.13mm OD with U.FL compatible connector
- Lead free materials
- RoHS Compliant Product

Applications

- Access point routers 802.11n
- WLAN/WiFi 802.11a/b/g/n

Electrical specifications @ +25 °C

Note: Electrical characteristics are measured on free space.

2.4 – 2.5 GHz

Typical free space performance

Frequency Range [GHz]	2.4 – 2.5
Linear Average Gain [dBi]	-3,5
3D Peak Gain [dBi]	2,0
Total 3D Efficiency [%] / [dB]	72 / -1,4 (peak) 69 / -1,6 (band edges)
Return loss min. [dB]	-10
Impedance [Ω]	50
Operating Temperature [°C]	-40 to +85

4.9 – 5.85 GHz

Typical free space performance

Frequency Range [GHz]	4.9 – 5.85
Linear Average Gain [dBi]	-4,5
3D Peak Gain [dBi]	2,0
Total 3D Efficiency [%] / [dB]	65 / -1,9 (peak) 50 / -3.0 (band edges)
Return loss min. [dB]	-10
Impedance [Ω]	50
Operating Temperature [°C]	-40 to +85

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Typical Electrical Characteristics (T=25 °C)

2,4 GHz typical Return Loss S11/ impedance

2.4 GHz

19 Dec 2007 11:31:10

CH1Markers

1. -13.569 dB 2.4 GHz
2. -16.484 dB 2.5 GHz

CH1 S11 &M log MAG 5 dB/REF 0 dB

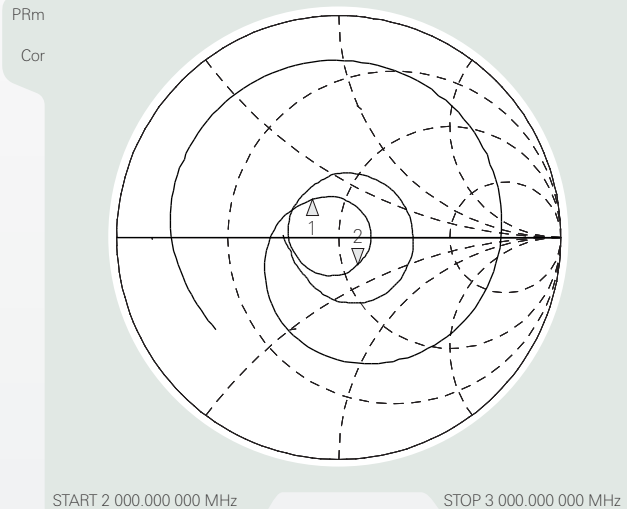


2.4 GHz

19 Dec 2007 11:31:19

1. 37.51 Ω 13.486 Ω 2. 4 GHz
2. 57.486 Ω -14.463 Ω 4.4017 pF
2 500.000 000 MHz

CH1 S11&M 1 U FS



5 GHz typical Return Loss S11/ impedance

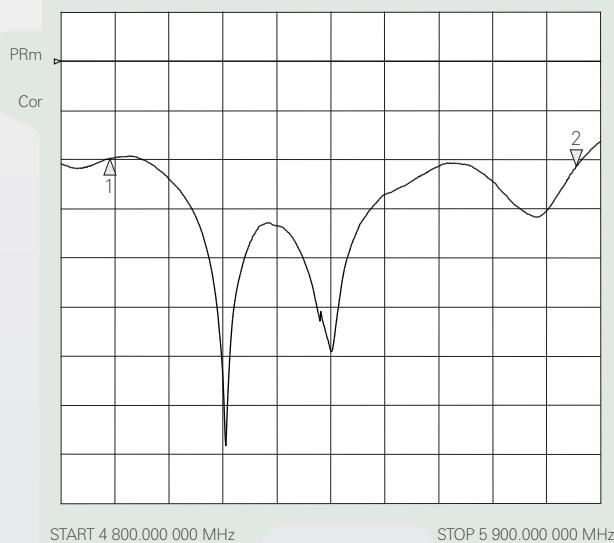
5 GHz

19 Dec 2007 11:29:22

CH1Markers

1. -10.919 dB 4.9 GHz
2. -11.725 dB 5 850.0 MHz

CH1 S11 &M log MAG 5 dB/REF 0 dB

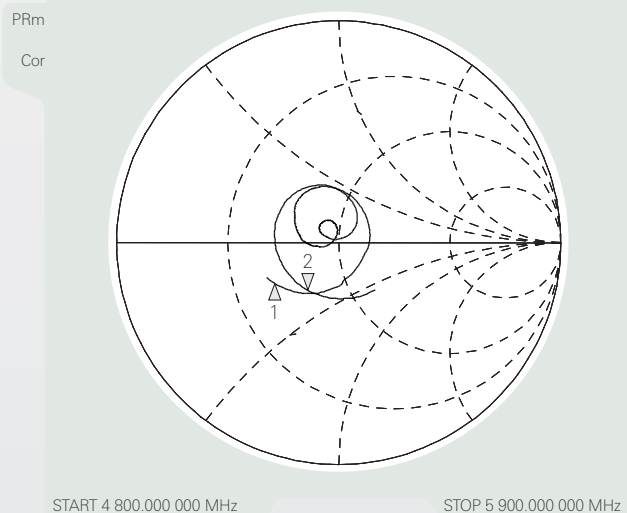


5 GHz

19 Dec 2007 11:29:30

1. 27.604 Ω 2.0156 Ω 4.9 GHz
2. 34.602 Ω -17.129 Ω 1.5883 pF
5 850.000 000 MHz

CH1 S11&M 1 U FS



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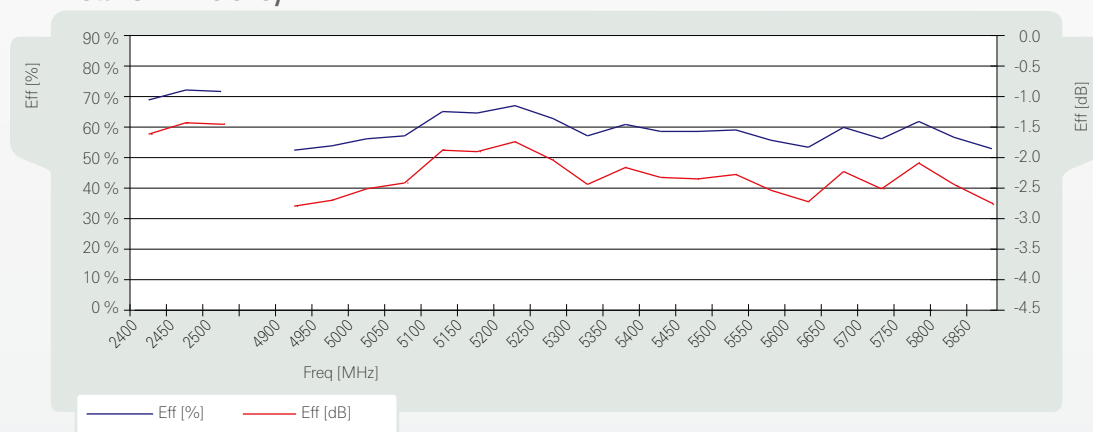
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Access Point Router 802.11n Antenna

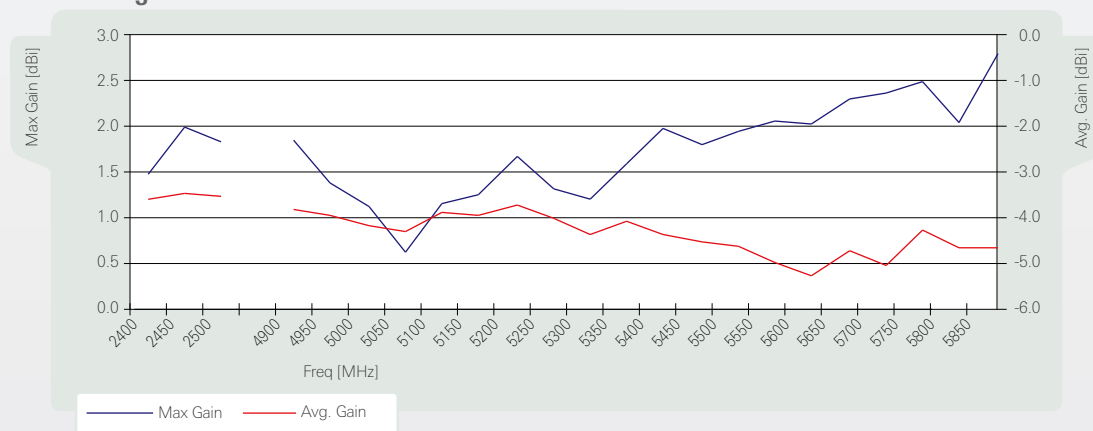
PWB Antenna with feed cable. Pulse Part Number: W3513

Free Space Efficiency, Average and Maximum Gain

Total 3D Efficiency



Average and Max Gain



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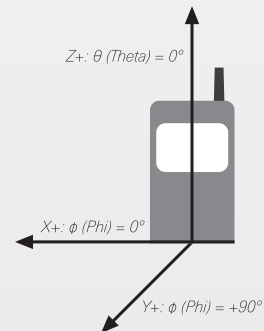
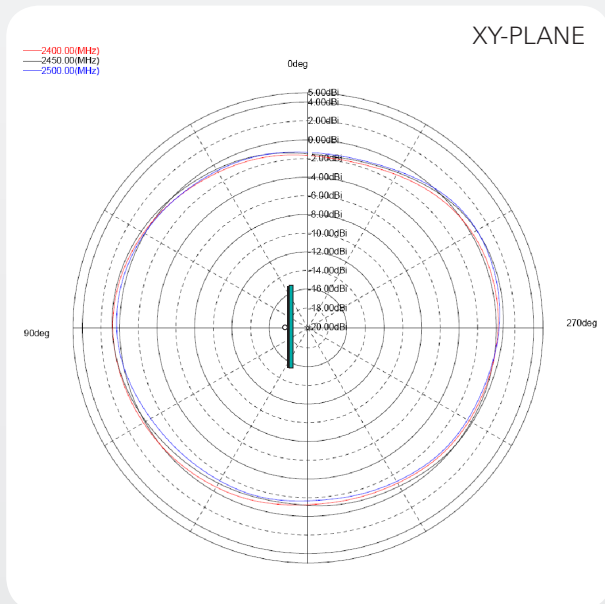
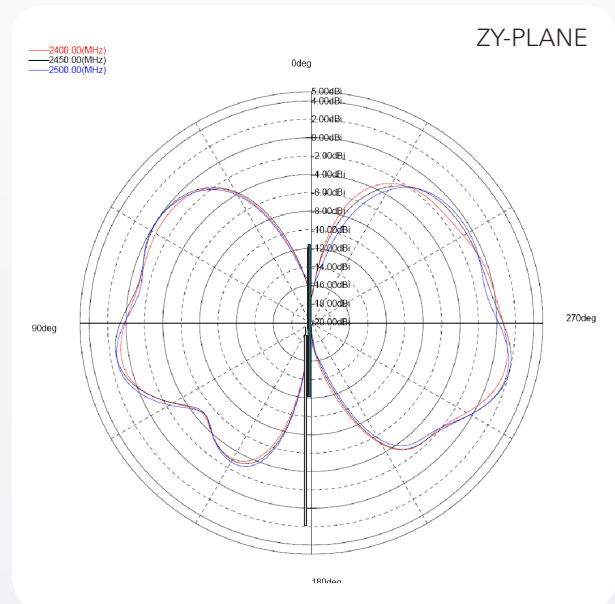
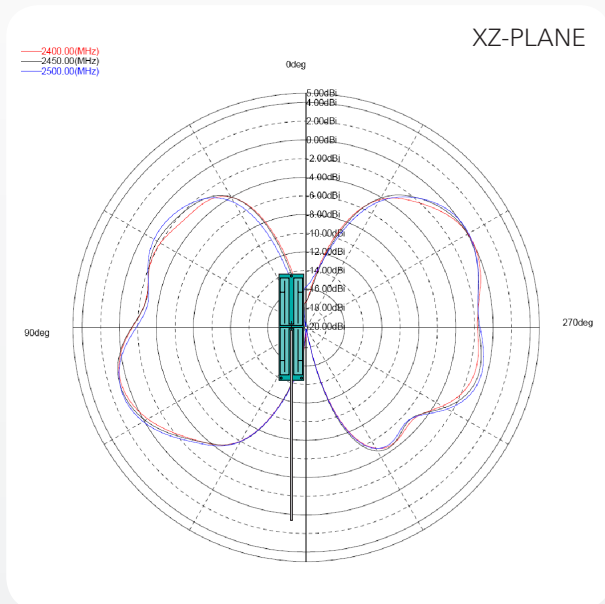
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824 – 894 MHz Typical Free Space Radiation Patterns



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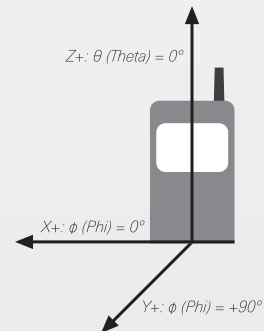
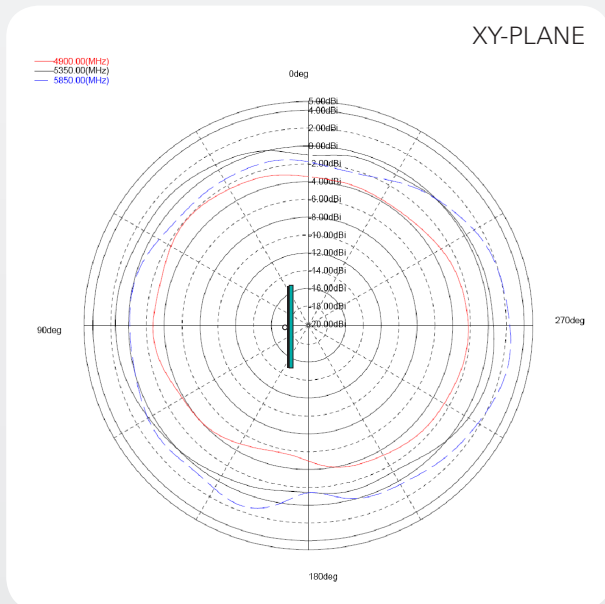
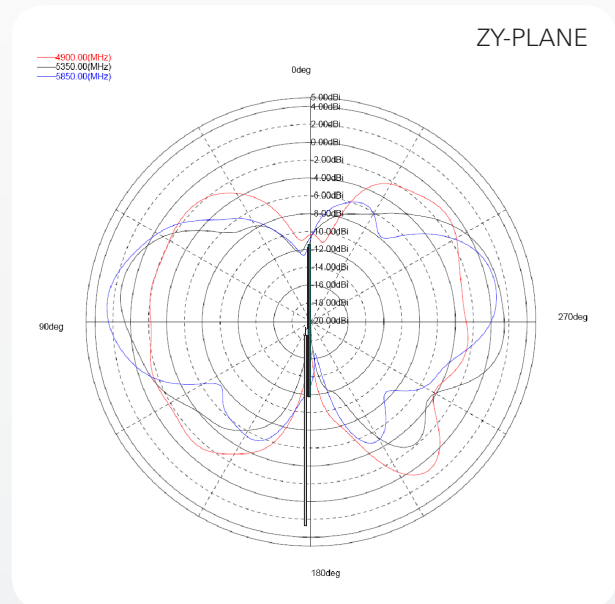
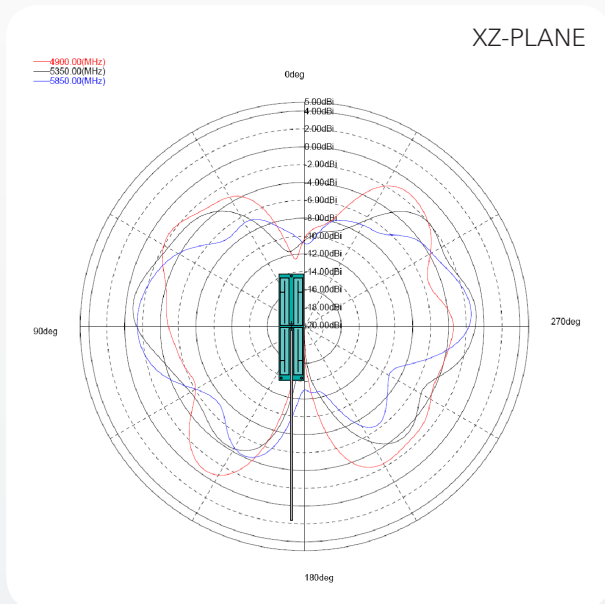


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Access Point Router 802.11n Antenna

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880 – 960 MHz Typical Free Space Radiation Patterns



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