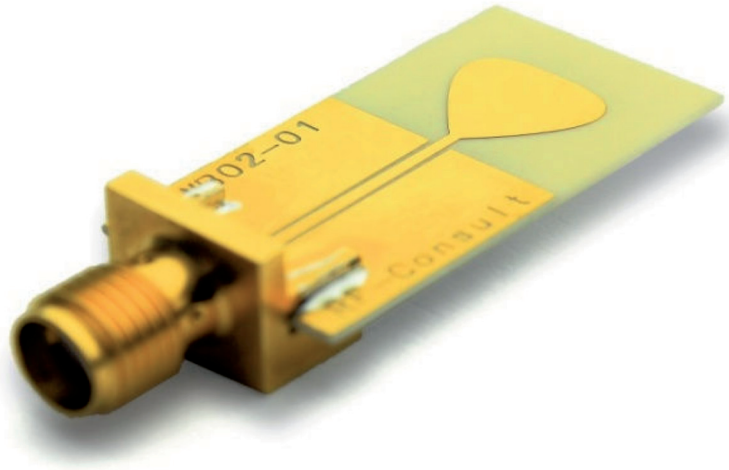
RFC-UWB5.8-090801

ULTRA-WIDEBAND ANTENNA 5—9 GHz



Features

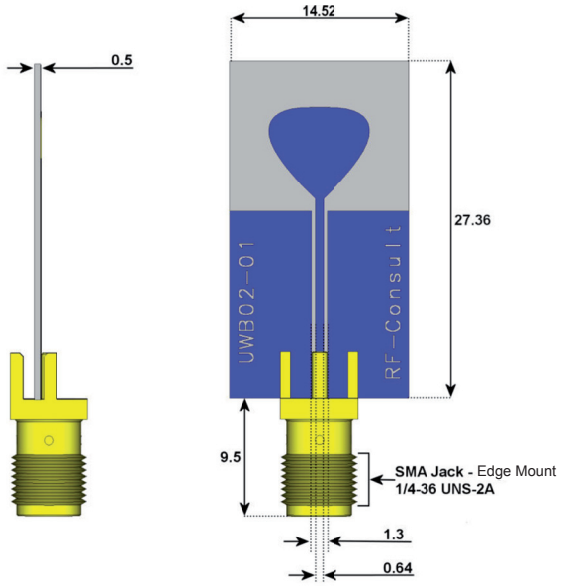
The compact UWB Antenna family RFC-UWB by RF Consult offers a compact form factor still supporting a wide range of frequency bands, just as an UWB antenna should be. The specific model RFC-UWB5.8 was specially developed and engineered for a UWB localization System with a bandwidth of 4 GHz and a middle-band frequency of 7 GHz. Moreover, it is also possible to use the antenna in the ISM-band around 5.8GHz. The antenna geometry can be varied to meet the customer's needs and cover the desired frequency bands.

Mechanical Specifications

Assembly PCB:	27.36	x 14.52 x 0.5 mm
Antenna Element:	09.0	x 17.00 mm c.a
PCB Ground Area:	15.20	x 14.20 mm
Weight:	2 g (with connector)	

Electrical Specifications

Frequency Range:	5—9GHz
Gain:	4.2 dBi peak at 7.5 GHz
Polarization:	Linear
Radiation Pattern:	Azimuth Omni-directional
Feed Impedance:	50 Ω Unbalanced



dimensions in [mm]

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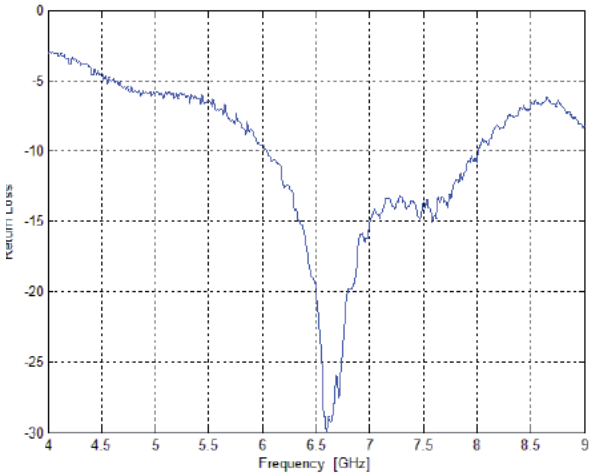
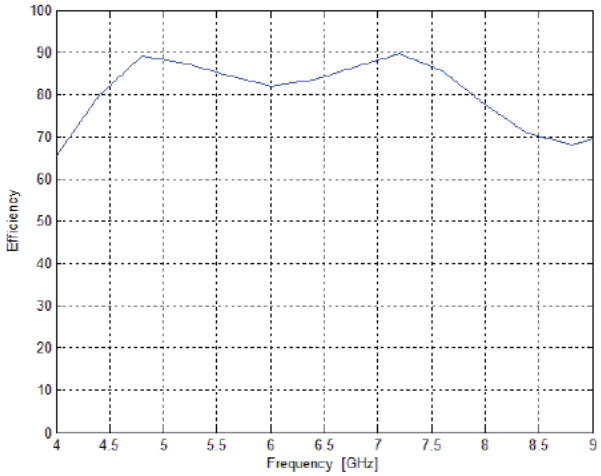
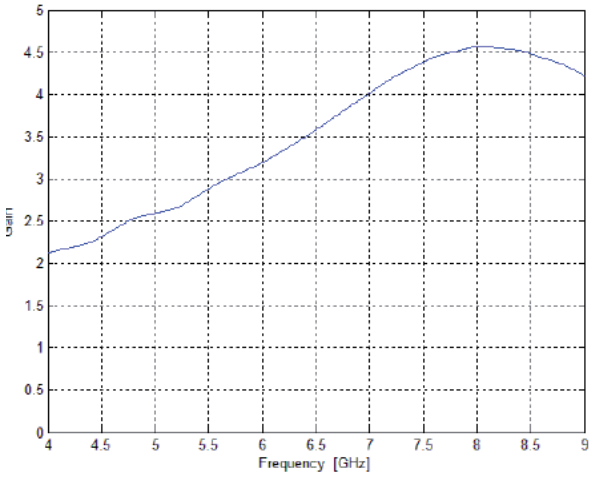
Return Loss



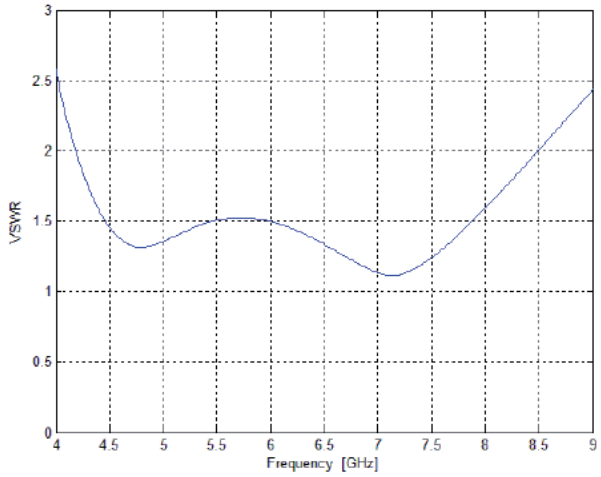
Efficiency



Gain



VSWR



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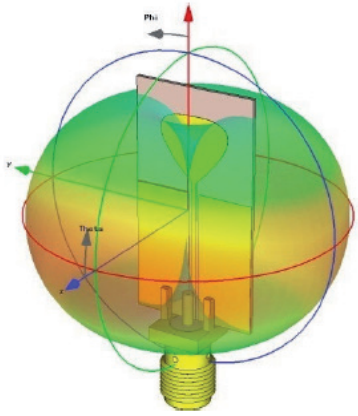
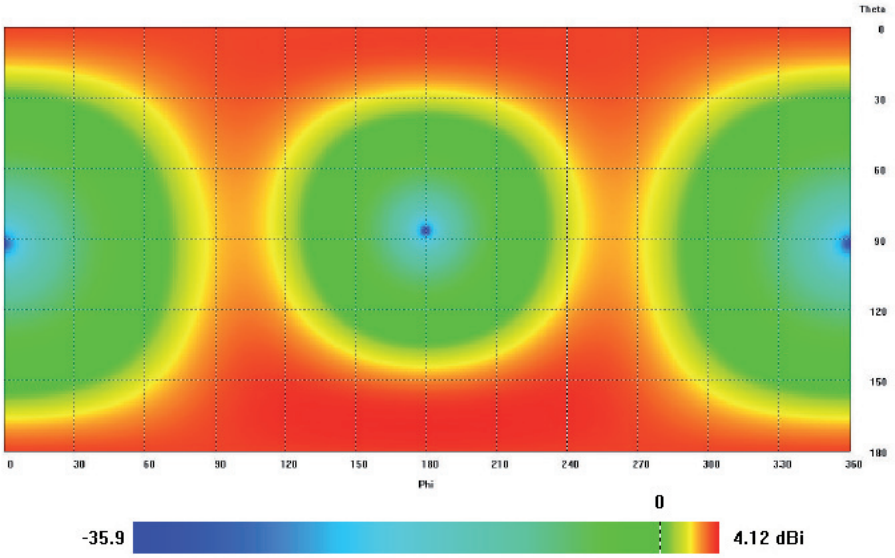
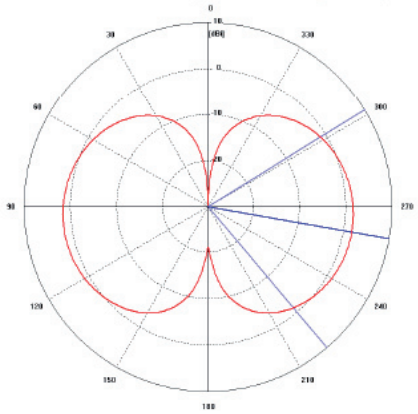
ULTRA-WIDEBAND ANTENNA 5—9 GHz

Diagrams Below are at 5 GHz

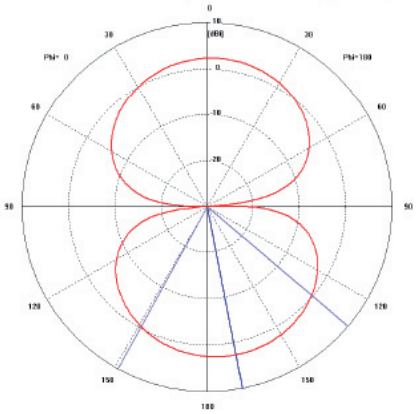




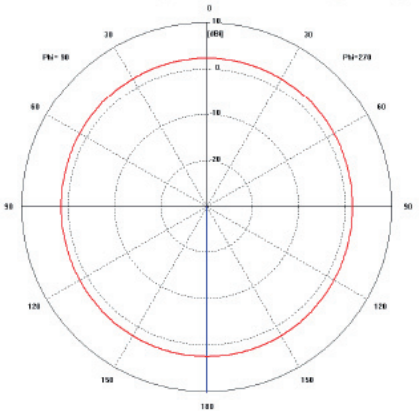
Elevation Cut (Phi = 0 Degrees)



Elevation Cut (Phi = 90 Degrees)



Azimuth Cut (Theta = 90 Degrees)



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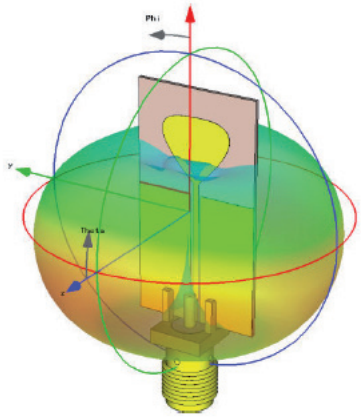
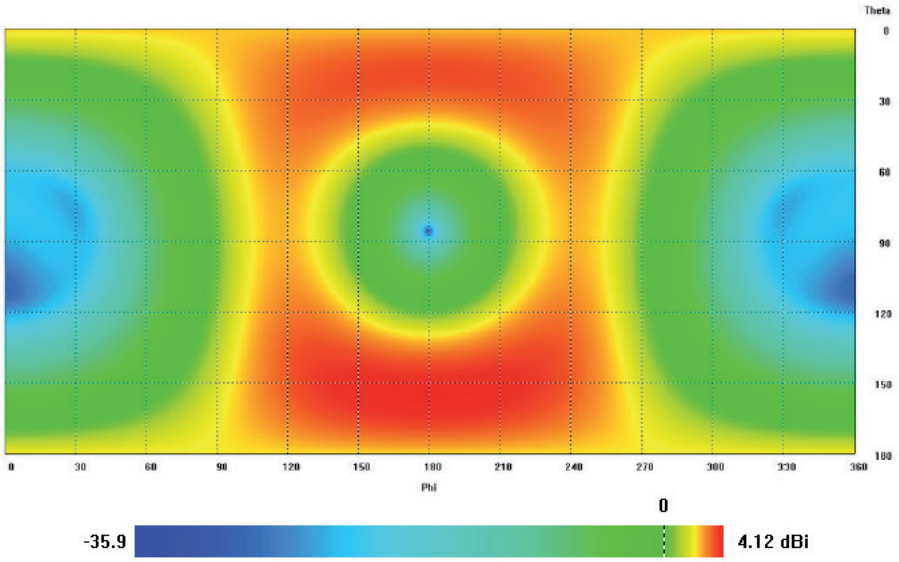
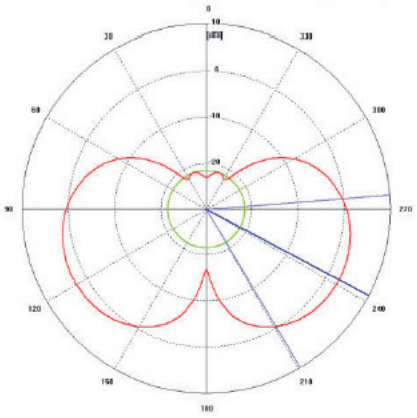
ULTRA-WIDEBAND ANTENNA 5—9 GHz

Diagrams Below are at 7 GHz

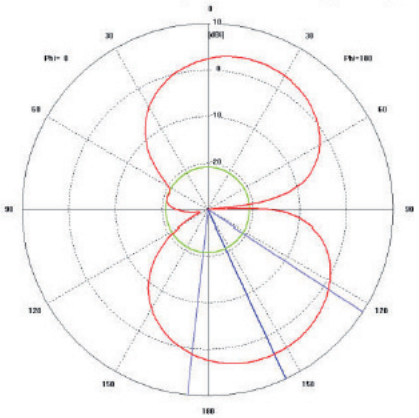




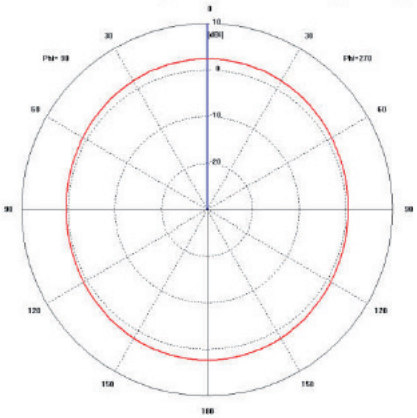
Elevation Cut (Phi = 0 Degrees)



Elevation Cut (Phi = 90 Degrees)



Azimuth Cut (Theta = 90 Degrees)



DATASHEET CURRENTLY UNDER REVISION

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