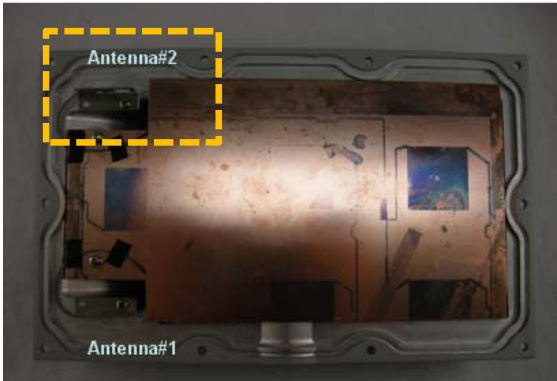# Gluhwein Build-in Antenna Test Report
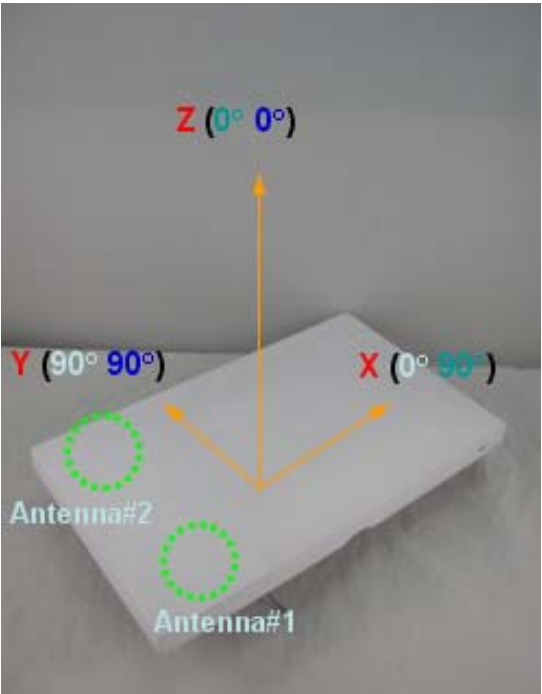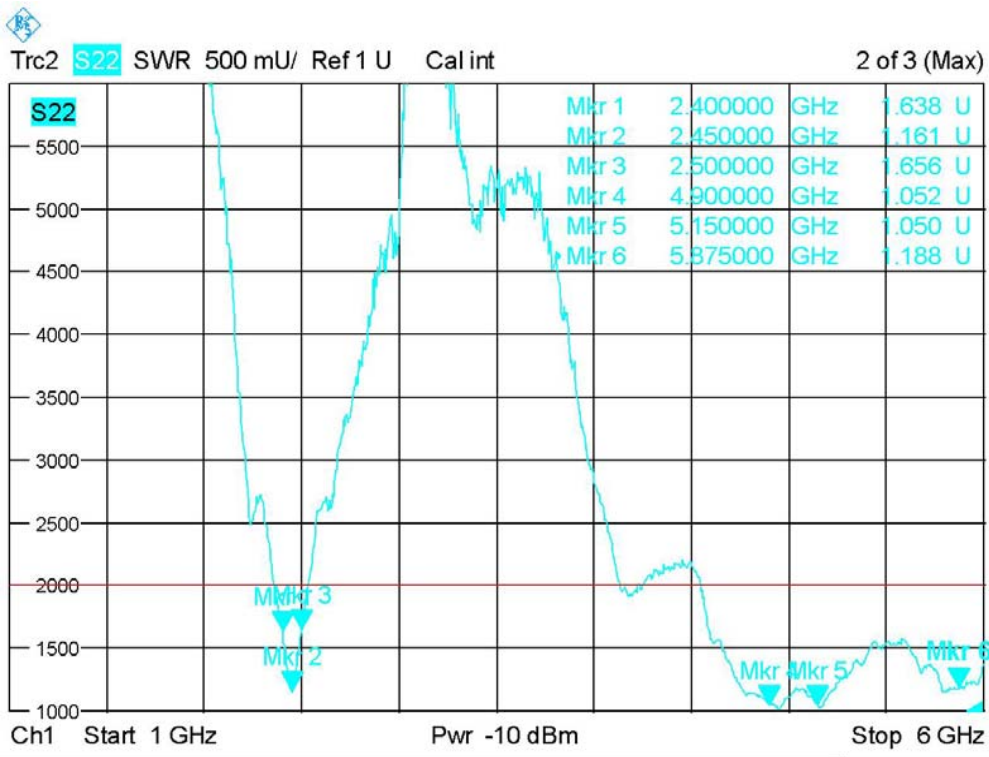
By GTT RF Design Center @ 2014-09-04

Antenna Definition and Scanning Orientation
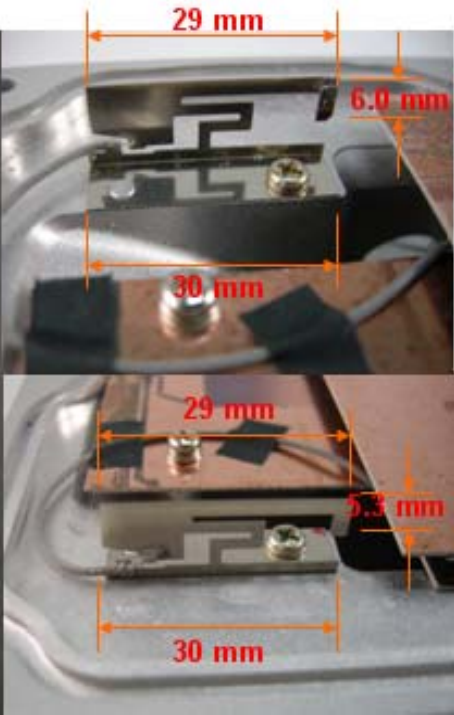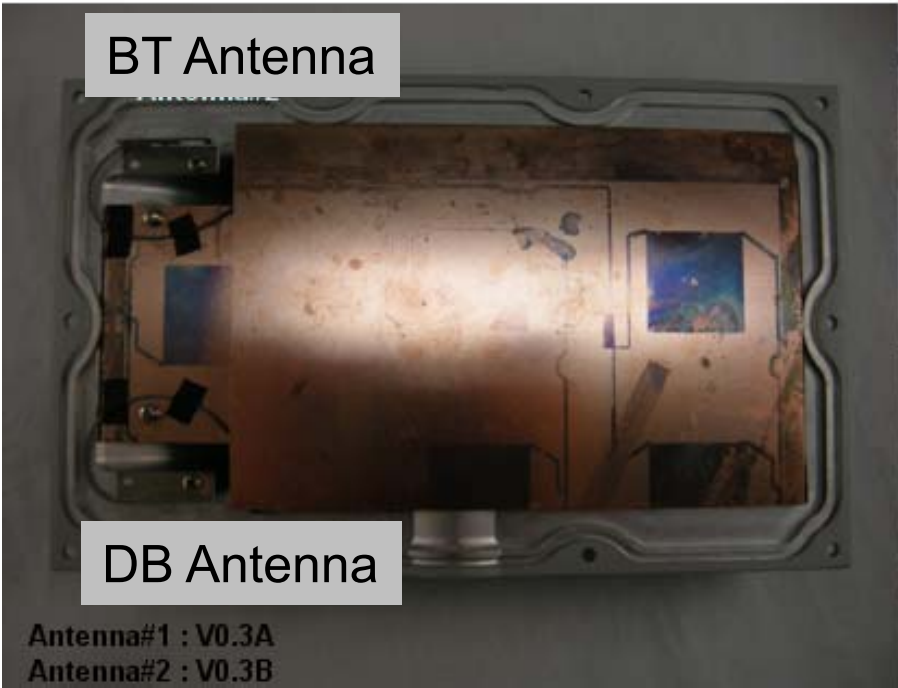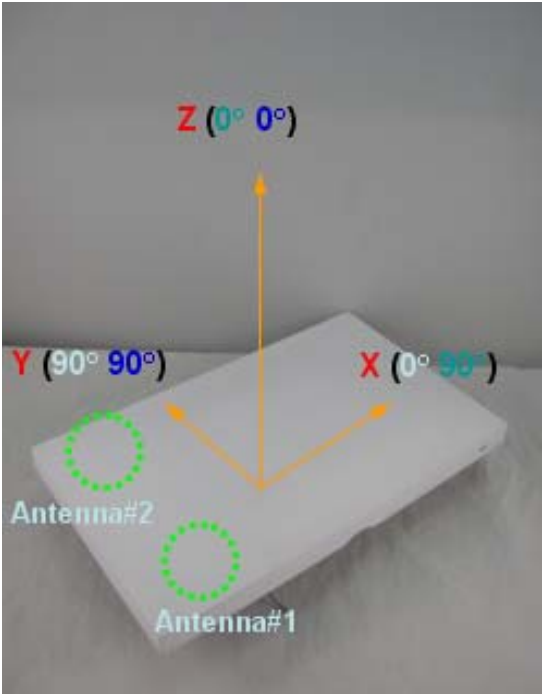
Antenna Performance Summary-BT Antenna

Cisco P/N: 460-33070

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2400	61%	-2.1	3.4
2450	71%	-1.5	4.1
2500	68%	-1.7	4.2

Radiation Pattern

XY-plane	YZ-plane	ZX-plane
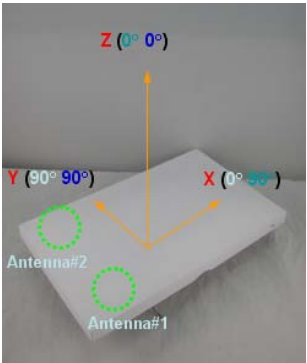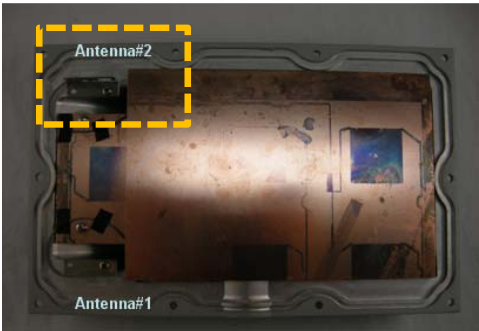
Legend
2400(MHz)
2450(MHz)
2500(MHz)
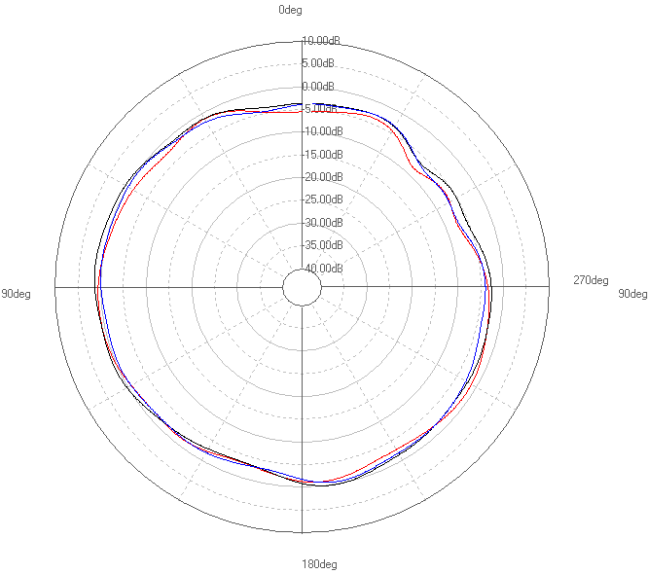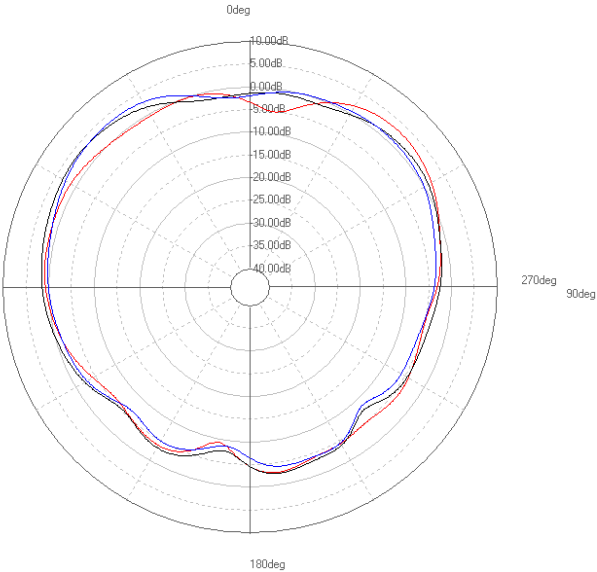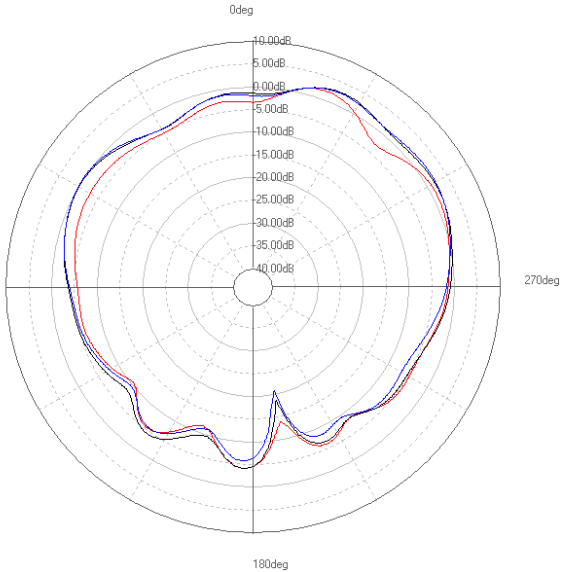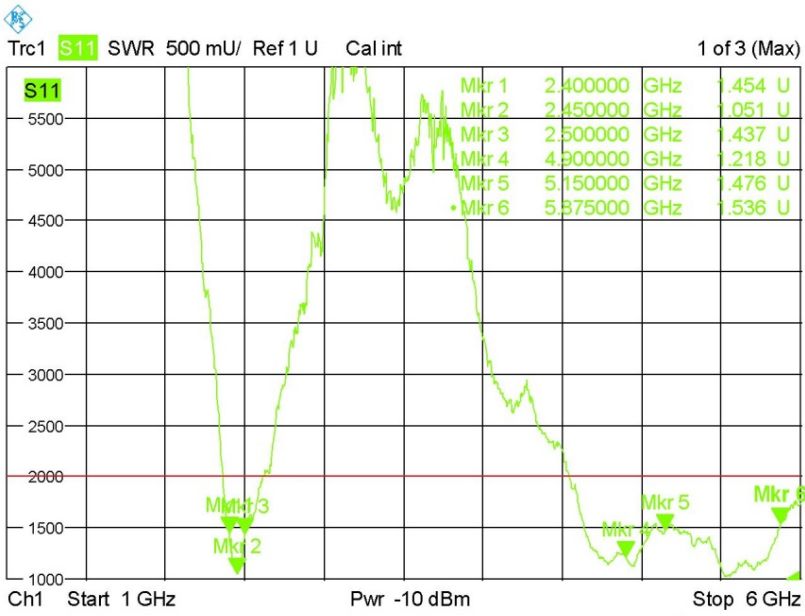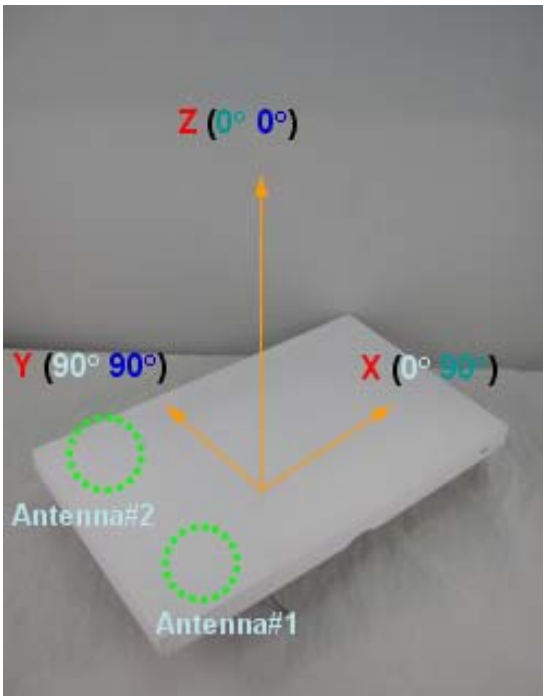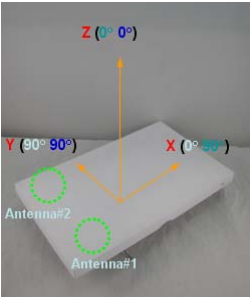
Antenna Performance Summary-DB Scanning Antenna

Cisco P/N: 460-33060

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2400	75%	-1.3	5.4
2450	73%	-1.4	5.7
2500	69%	-1.6	4.7
4900	70%	-1.5	6.0
5150	69%	-1.6	6.1
5350	69%	-1.6	5.7
5475	73%	-1.4	6.2
5725	67%	-1.7	5.8
5875	64%	-1.9	6.5

Radiation Pattern
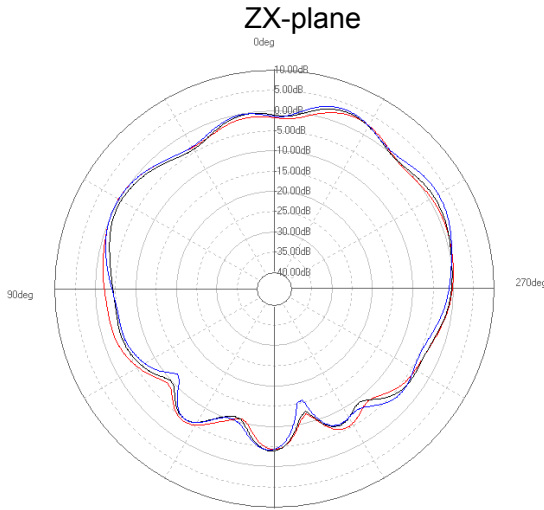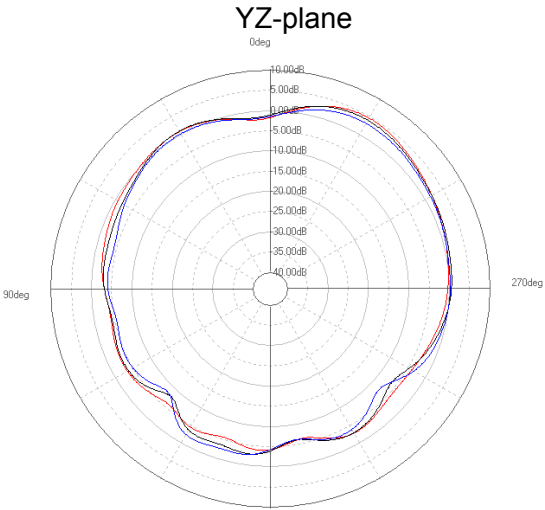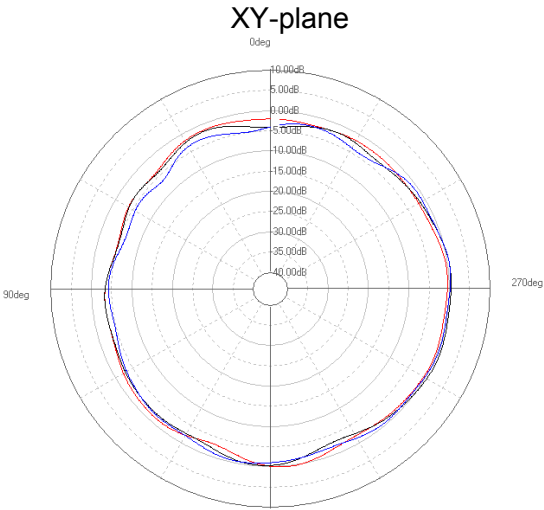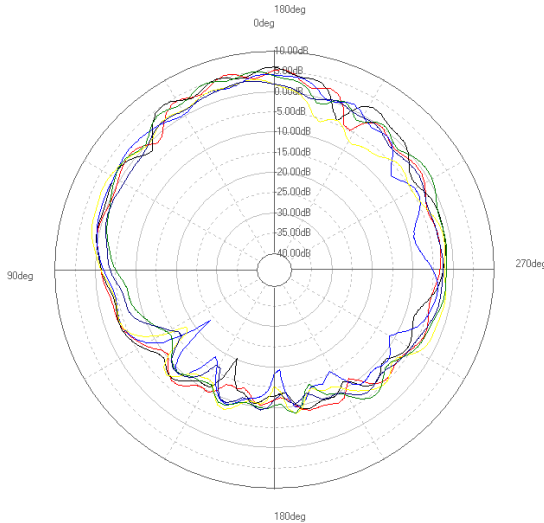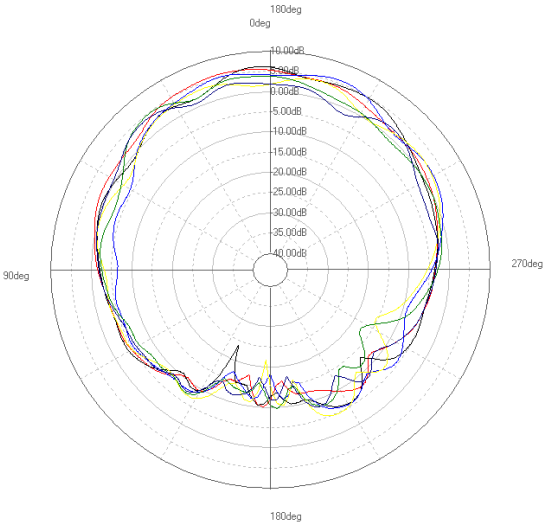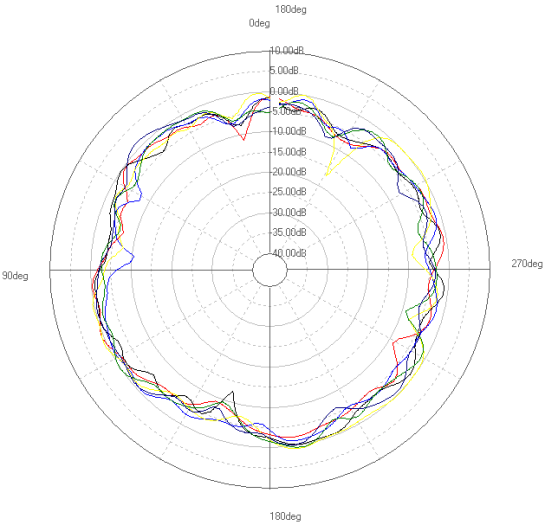
Isolation

Specification:
Isolation >20dB →Pass

Trc3 S12 dB Mag 10 dB / Ref 0 dB   Cal int   3 of 3 (Max)

Mkr 1	2.400000 GHz	-23.492 dB
Mkr 2	2.450000 GHz	-21.023 dB
Mkr 3	2.500000 GHz	-23.418 dB
Mkr 4	4.900000 GHz	-24.220 dB
Mkr 5	5.150000 GHz	-24.881 dB
• Mkr 6	5.875000 GHz	-26.380 dB

Ch1   Start 1 GHz   Pwr -10 dBm   Stop 6 GHz