

Antenna Report

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1 Basic Antenna Characteristic

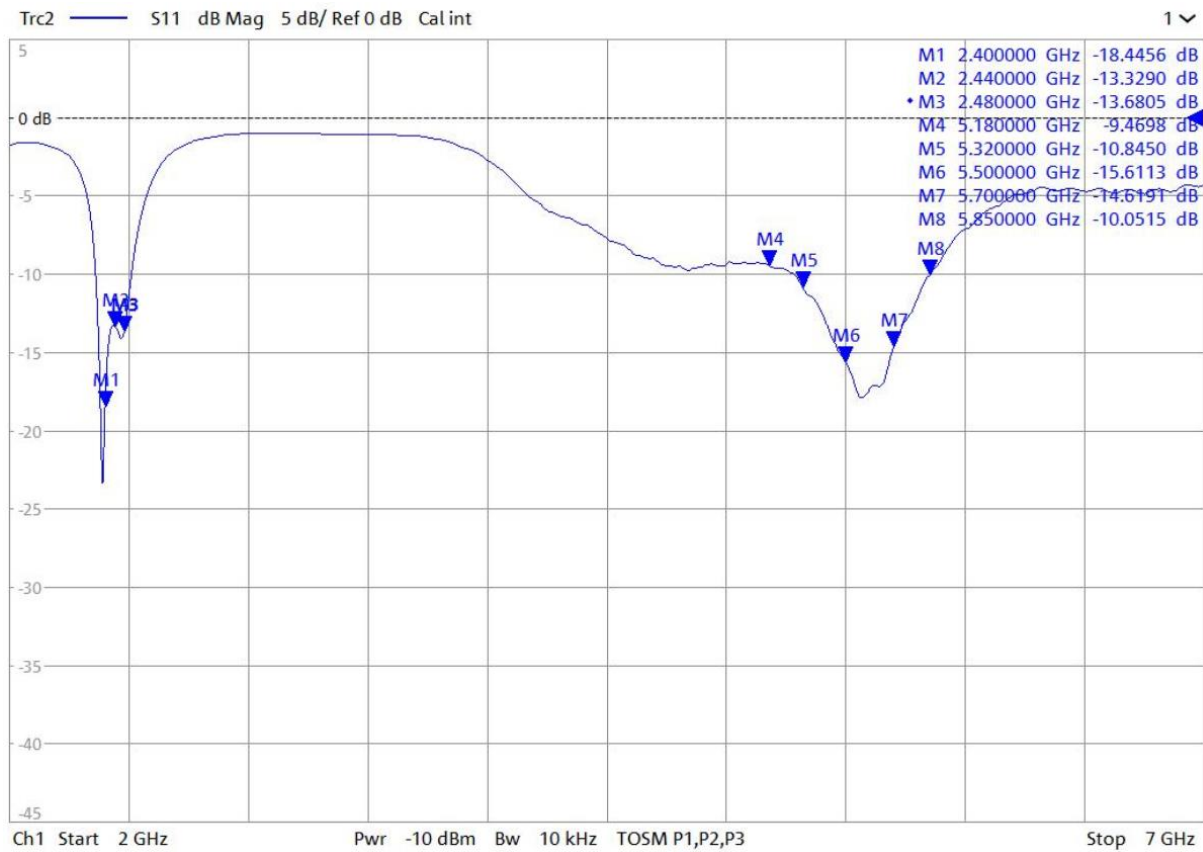
Module has on board printed antennas with the given gain values in below.

1.1 Onboard Printed Antenna Gain Table

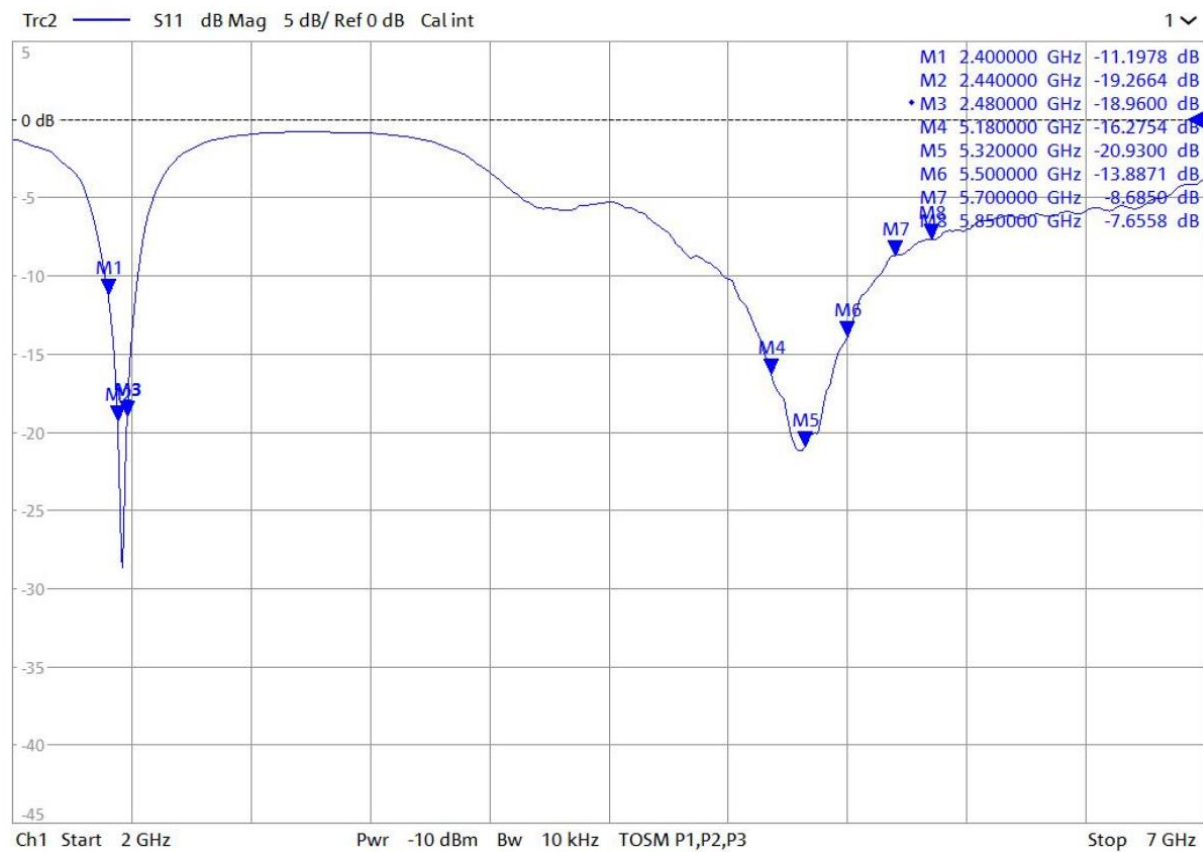
	2.4 Ghz	5 Ghz low band (5180 to 5320) (ch 36-64)	5 Ghz medium band (5500 to 5700) (ch100-140)	5 Ghz high band (5745 to 5825) (ch149-165)
Antenna 0	3,4 dBi	2,97 dBi	3,69 dBi	2,89 dBi
Antenna 1	2,12 dBi	3,7 dBi	3,68 dBi	2,83 dBi
BT	0,29 dBi			

1.2 Antenna Dimensions

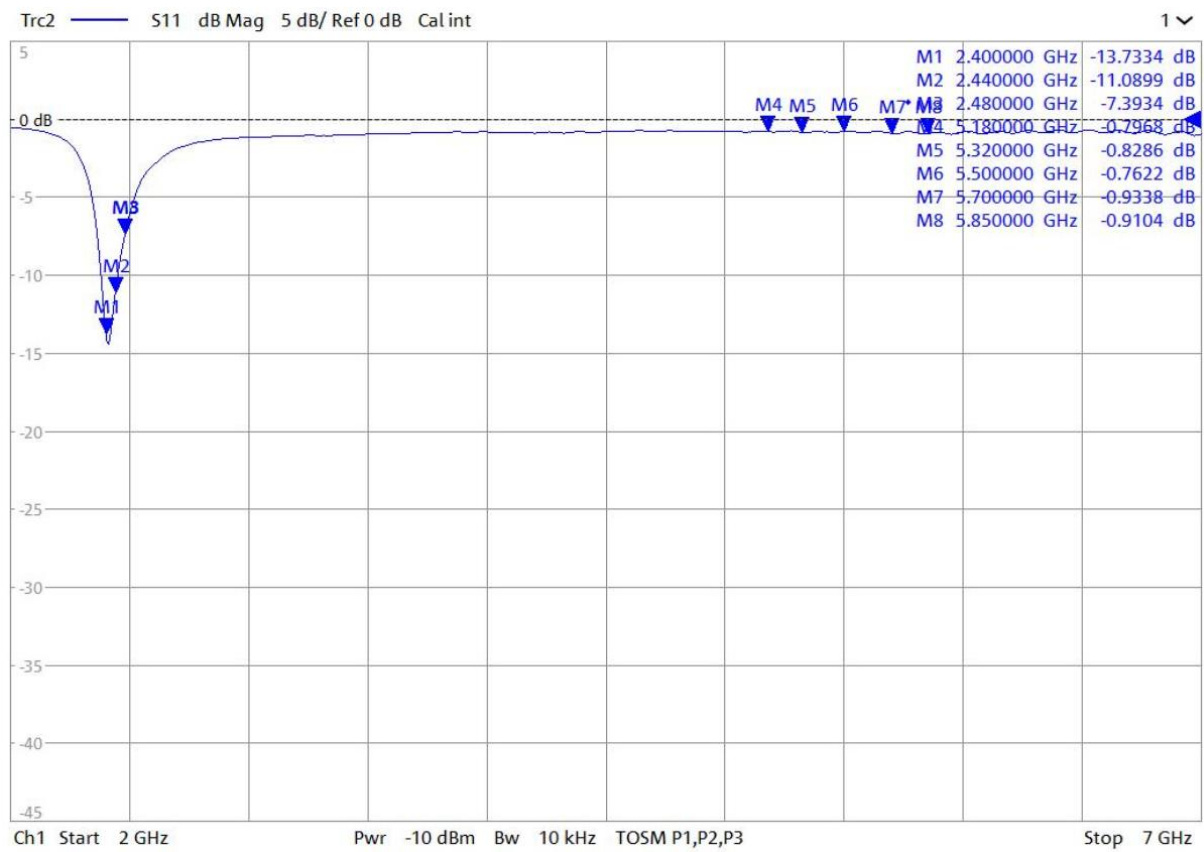
1.3 Antenna 0 Return Loss



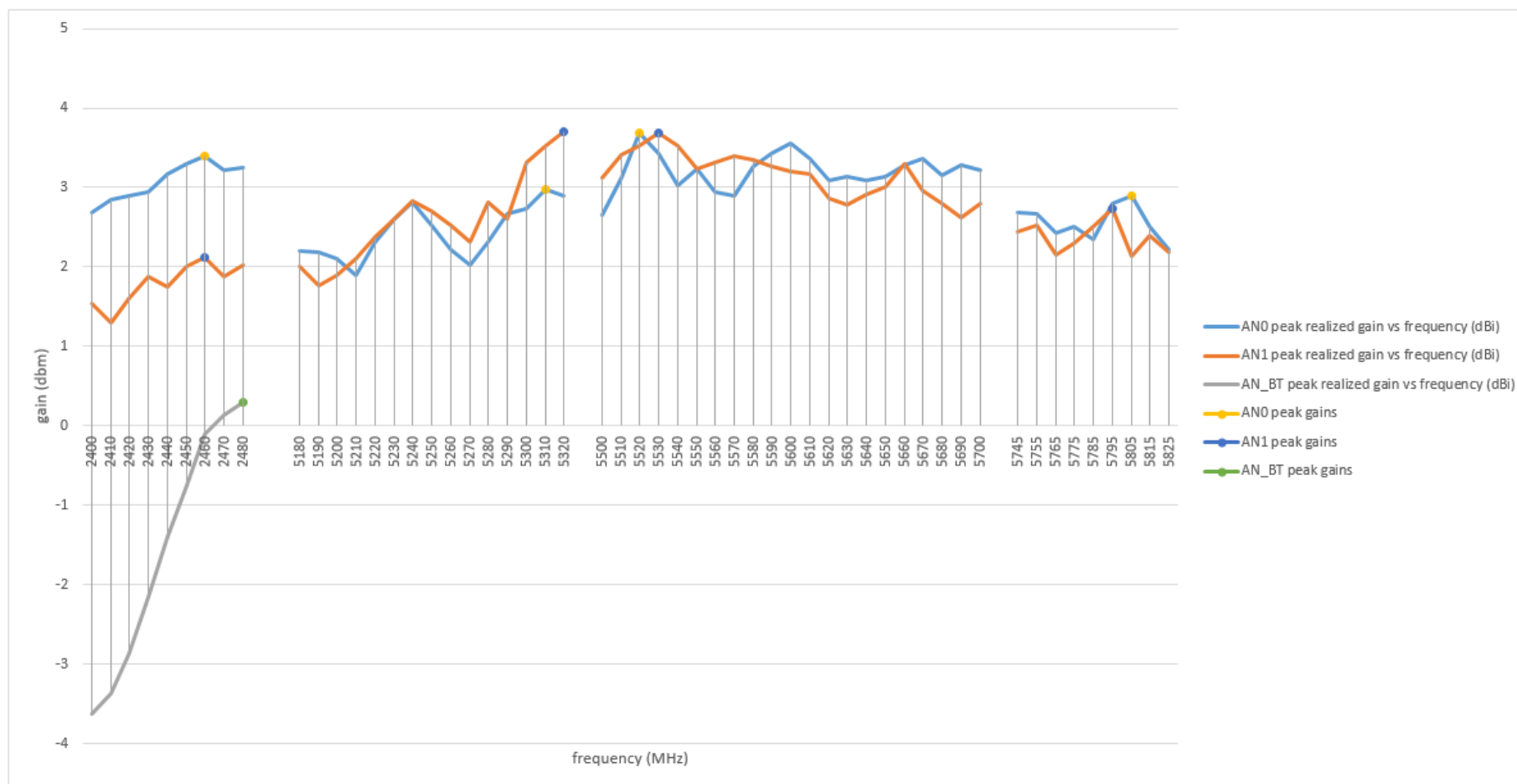
1.4 Antenna 1 Return Loss



1.5 Antenna BT Return Loss



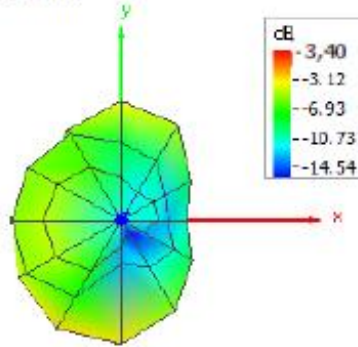
2 Antenna Gain Vs Frequency Characteristics



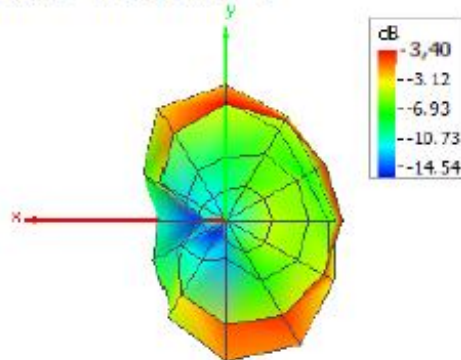
3 Antenna 0 Radiation Patterns @ Peak Gain

3.1 2460 MHz

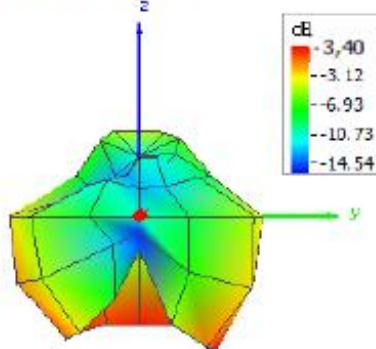
Theta = 0, Phi = 0



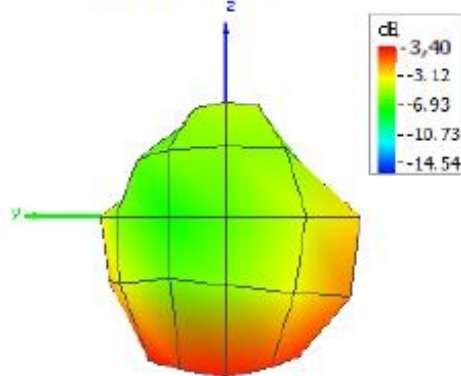
Theta = 180, Phi = 0



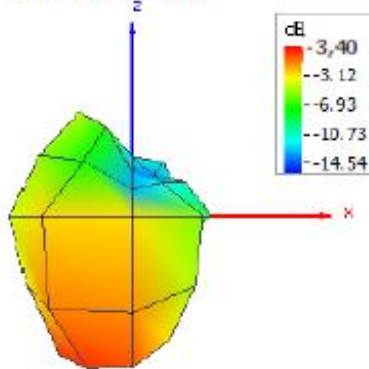
Theta = 90, Phi = 0



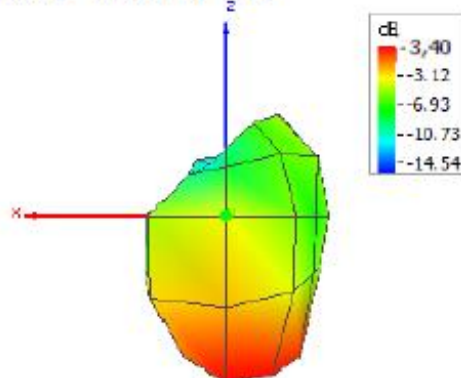
Theta = 90, Phi = 180



Theta = 90, Phi = 270

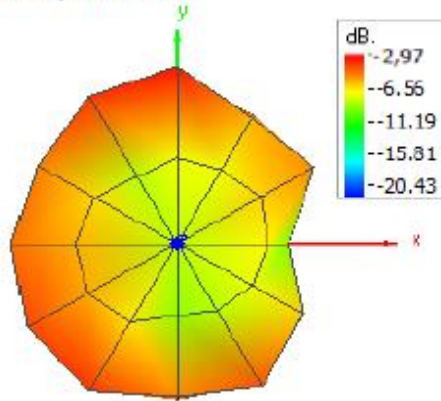


Theta = 90, Phi = 90

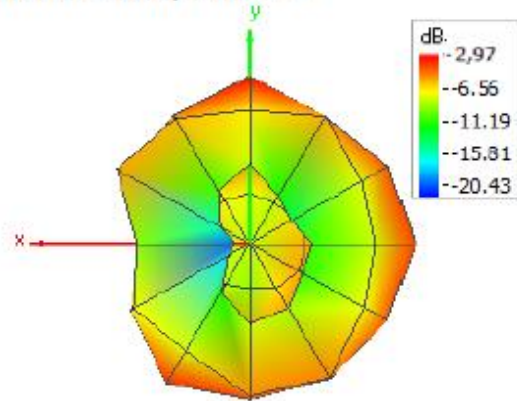


3.2 5310 MHz

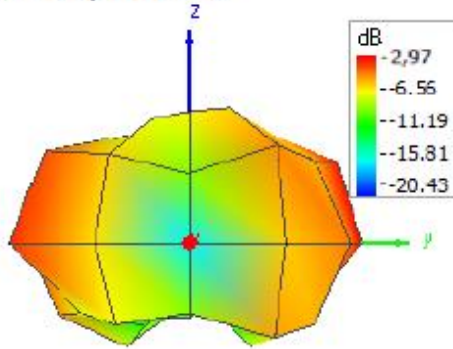
Theta = 0, Phi = 0



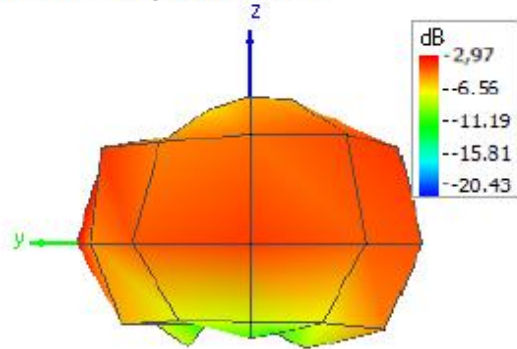
Theta = 180, Phi = 0



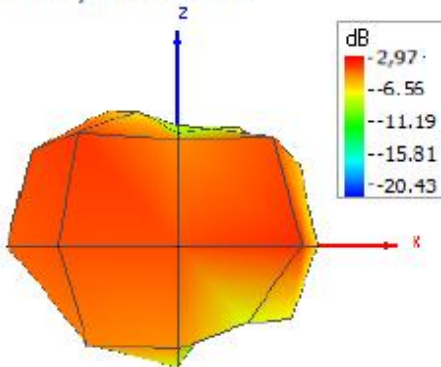
Theta = 90, Phi = 0



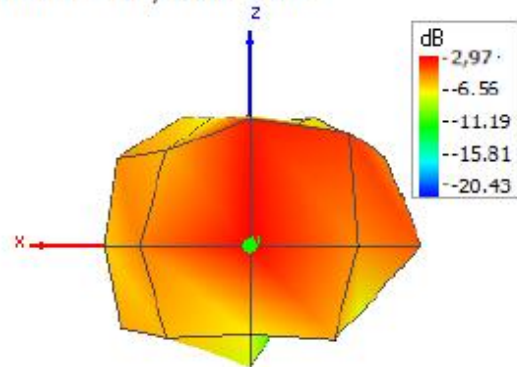
Theta = 90, Phi = 180



Theta = 90, Phi = 270

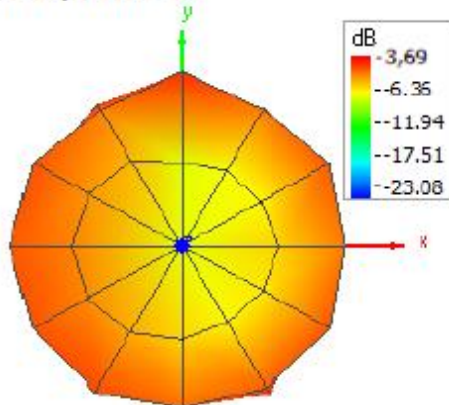


Theta = 90, Phi = 90

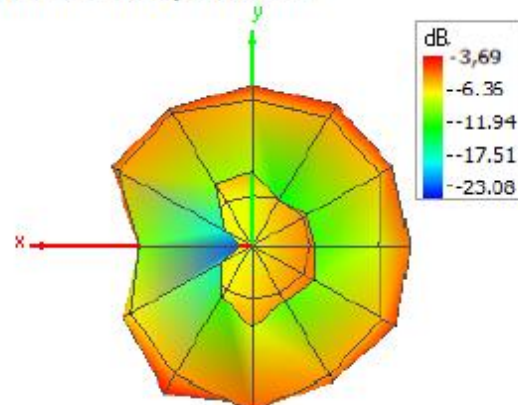


3.3 5520 MHz

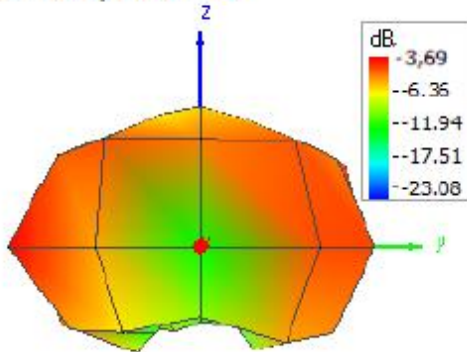
Theta = 0, Phi = 0



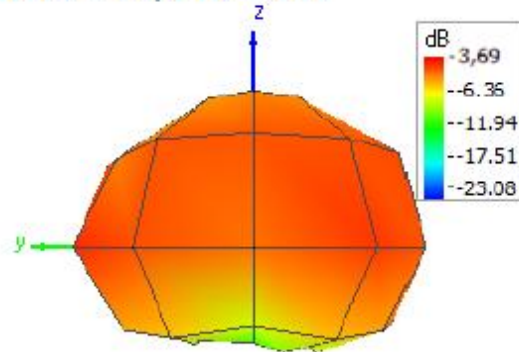
Theta = 180, Phi = 0



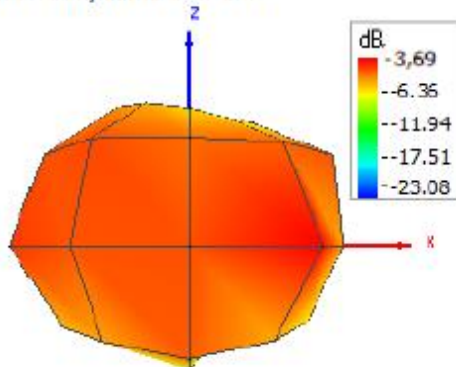
Theta = 90, Phi = 0



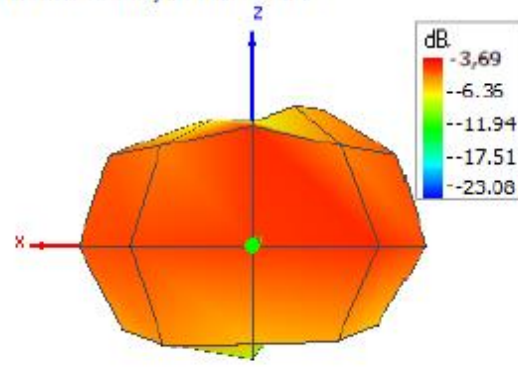
Theta = 90, Phi = 180



Theta = 90, Phi = 270

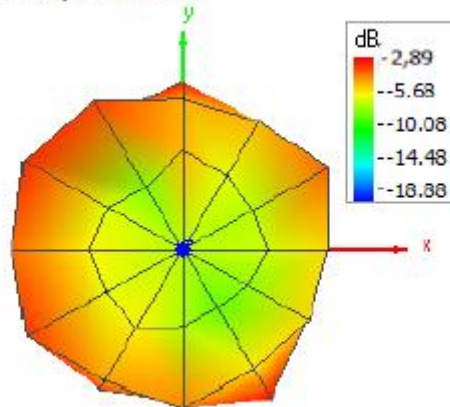


Theta = 90, Phi = 90

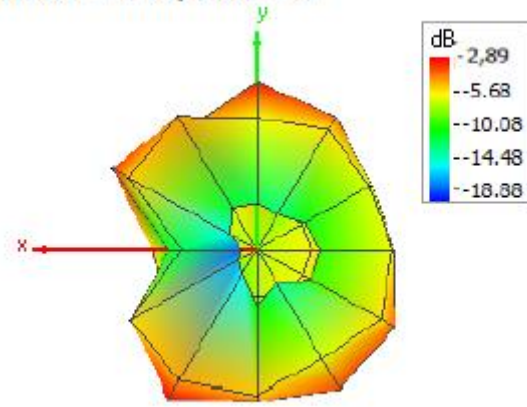


3.4 5805 MHz

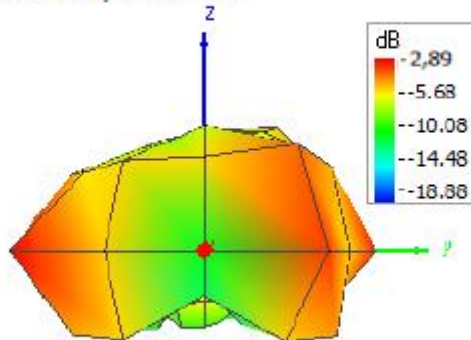
Theta = 0, Phi = 0



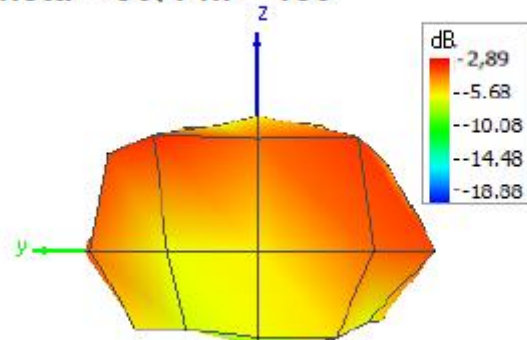
Theta = 180, Phi = 0



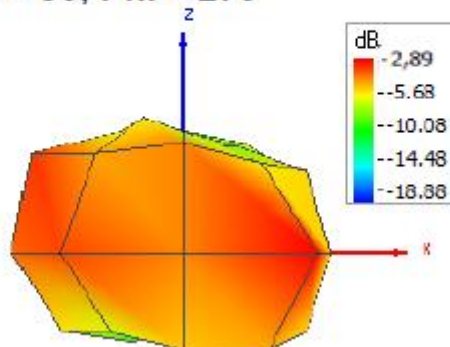
Theta = 90, Phi = 0



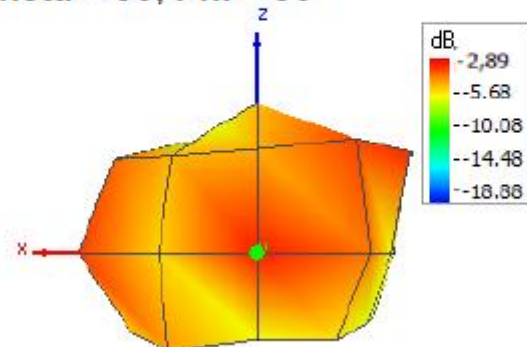
Theta = 90, Phi = 180



Theta = 90, Phi = 270



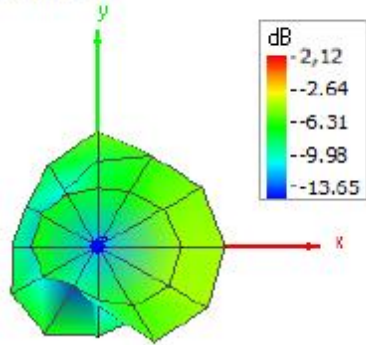
Theta = 90, Phi = 90



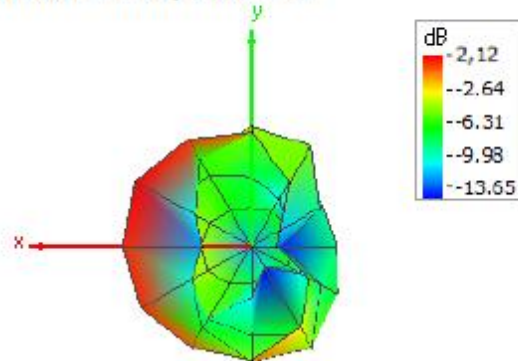
4 Antenna 1 Radiation Patterns @ Peak Gain

4.1 2460 MHz

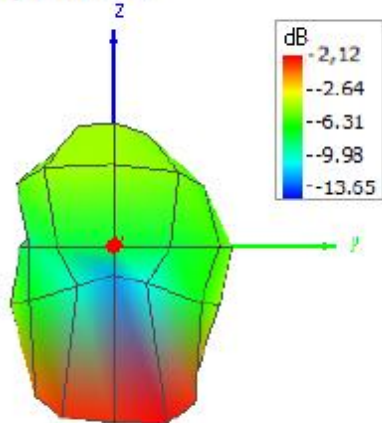
Theta = 0, Phi = 0



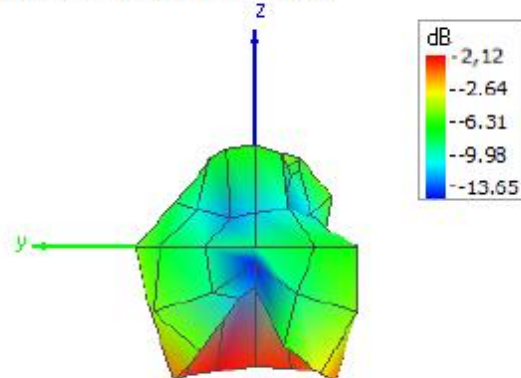
Theta = 180, Phi = 0



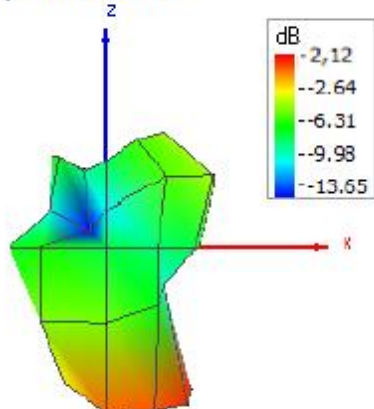
Theta = 90, Phi = 0



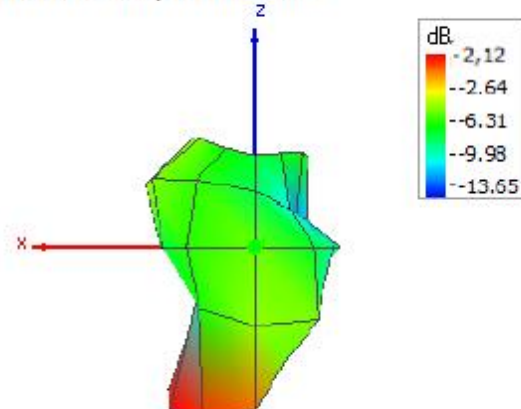
Theta = 90, Phi = 180



Theta = 90, Phi = 270

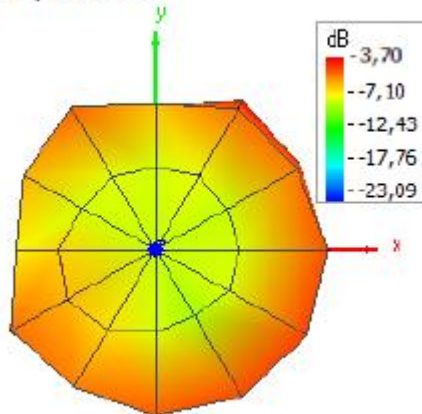


Theta = 90, Phi = 90

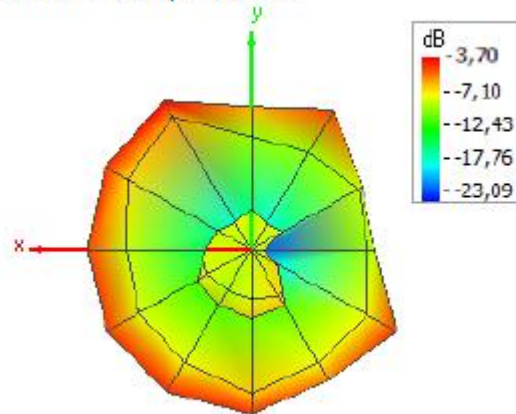


4.2 5320 MHz

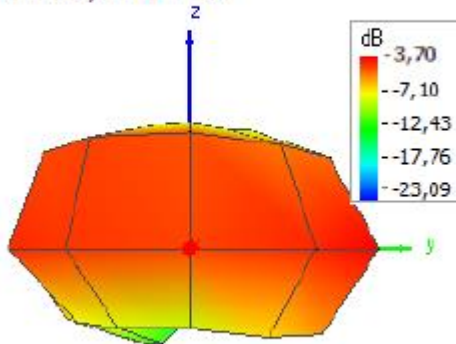
Theta = 0, Phi = 0



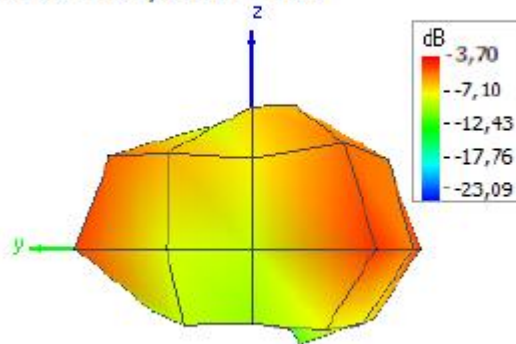
Theta = 180, Phi = 0



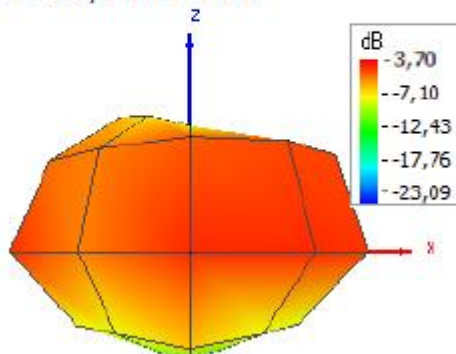
Theta = 90, Phi = 0



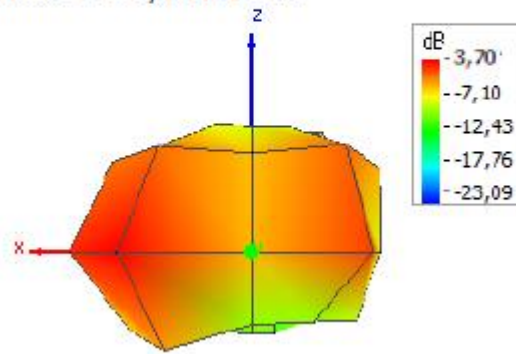
Theta = 90, Phi = 180



Theta = 90, Phi = 270

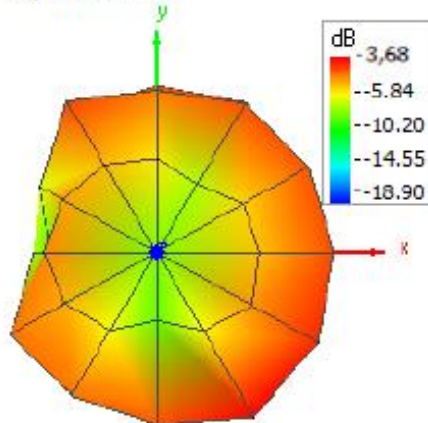


Theta = 90, Phi = 90

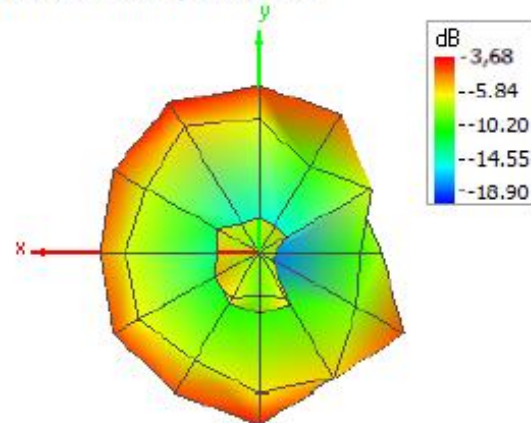


4.3 5530 MHz

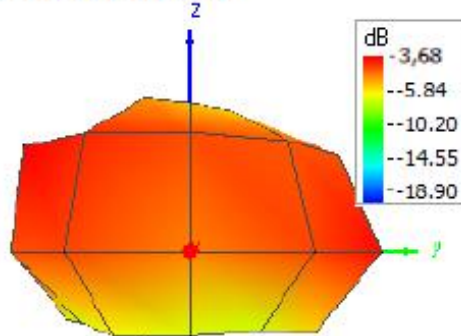
Theta = 0, Phi = 0



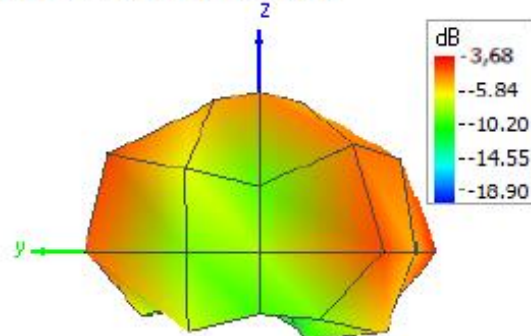
Theta = 180, Phi = 0



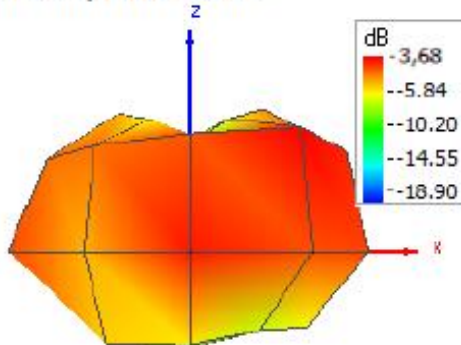
Theta = 90, Phi = 0



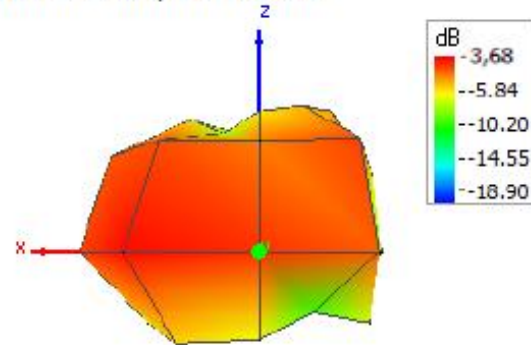
Theta = 90, Phi = 180



Theta = 90, Phi = 270

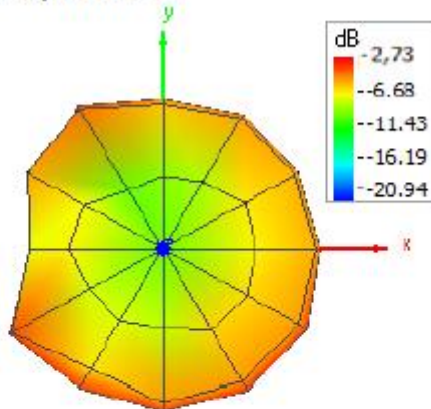


Theta = 90, Phi = 90

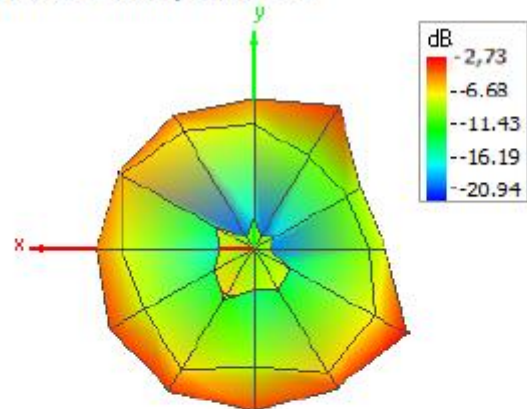


4.4 5795 MHz

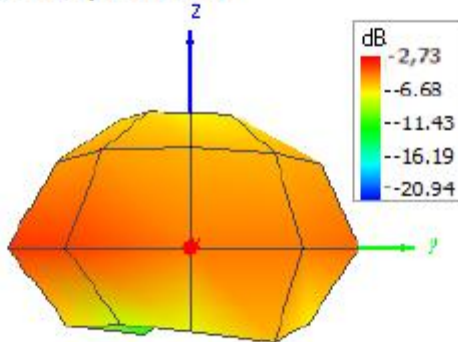
Theta = 0, Phi = 0



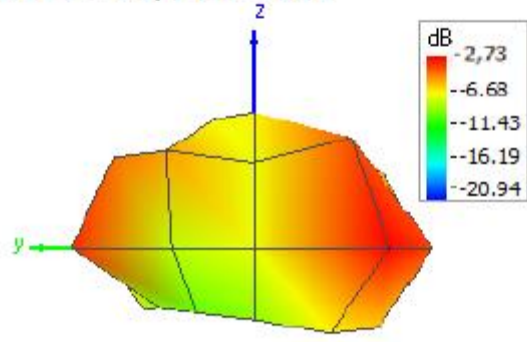
Theta = 180, Phi = 0



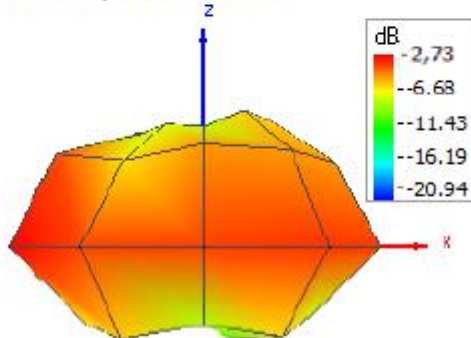
Theta = 90, Phi = 0



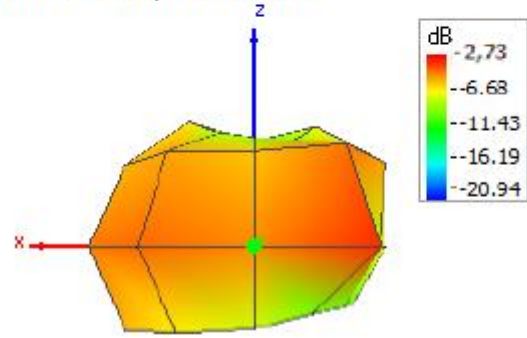
Theta = 90, Phi = 180



Theta = 90, Phi = 270

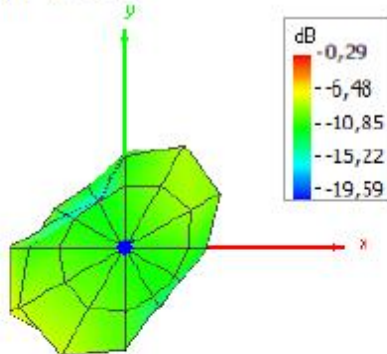


Theta = 90, Phi = 90

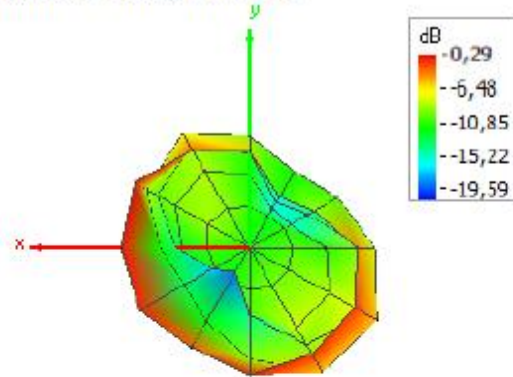


5 Antenna BT Radiation Pattern @ Peak Gain

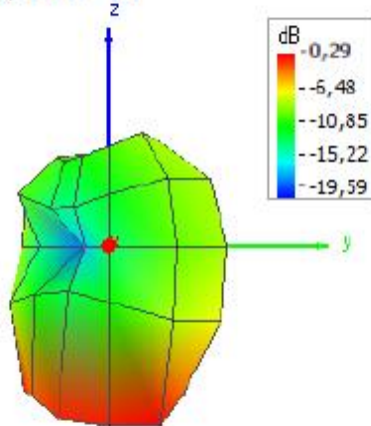
Theta = 0, Phi = 0



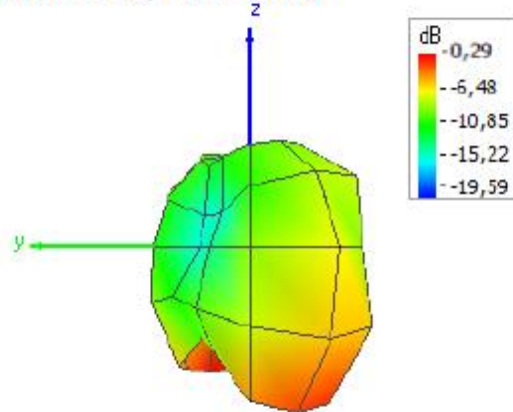
Theta = 180, Phi = 0



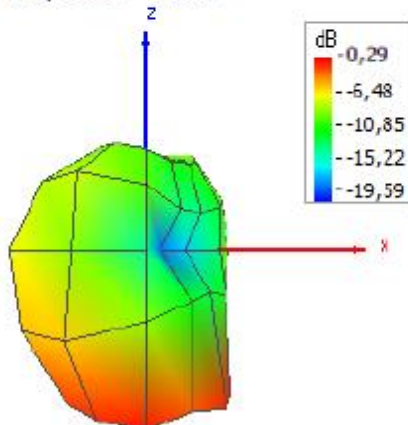
Theta = 90, Phi = 0



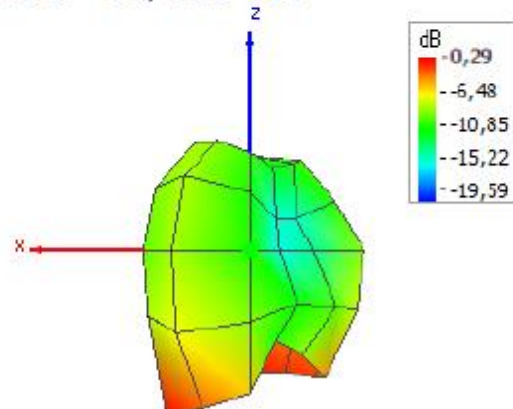
Theta = 90, Phi = 180



Theta = 90, Phi = 270



Theta = 90, Phi = 90



6 Test Site Information

- Albatross full anechoic chamber (5x5 m)
- Howland QR-4 Horn antenna
- R&S ZNB 20 VNA
- R&S AMS32 measurement software
- Maturo Controller

