

Beo Grace C Antenna Report

MERRY Sounds Excellent

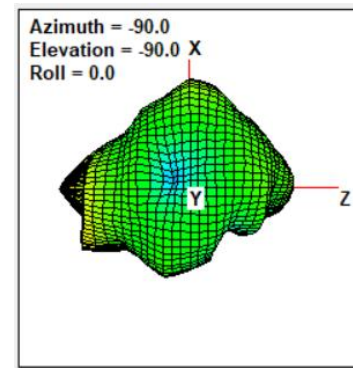
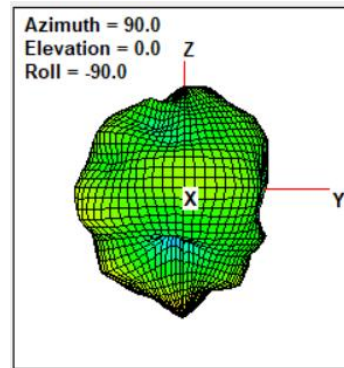
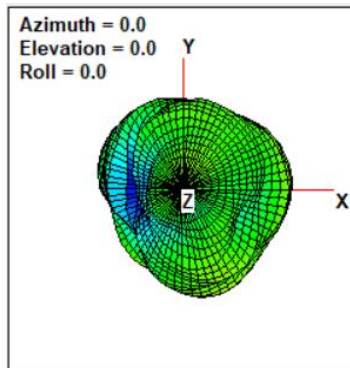
Prepared by : Merry
Date : 2025.02.04

Beo Grace C_Antenna

- Efficiency and Gain

	Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
DV Build	2402	-9.8	10.5	-3.3
Charging case	2441	-9.2	12.0	-3.7
Antenna	2480	-11.6	7.0	-6.6

- Radiation Pattern



Test Information

Beo Grace C_Antenna

Test date	2025/01/10
Table Lab	Bureau Veritas, No 19, Hwa Ya 2nd Road, Wen Hwa Tsuen, Kwei Shan Hsiang, TaoYuan 333, Taiwan
Test personnel	Leo-Wn Chen
Test Chamber	ETS-lindgren_AMS-8500 rectangular anechoic chamber, Calibration Date: 2024/06/25
Table of Calibrated Equipment	E5071C ENA Vector Network Analyzer Keysight, Calibration Date: 2024/05/31
Commercial software being used	ETS-Lindgren EMQuest

Specifications

Beo Grace C_Antenna specifications

Frequency range	2.4GHz-2.4835GHz
Antenna type	PCB antenna
Connectors	N/A
Input impedance	50Ω
Standing-Wave Ratio	2:1
Antenna gain	-3.3dBi
Polarization	Linear

Antenna Info.

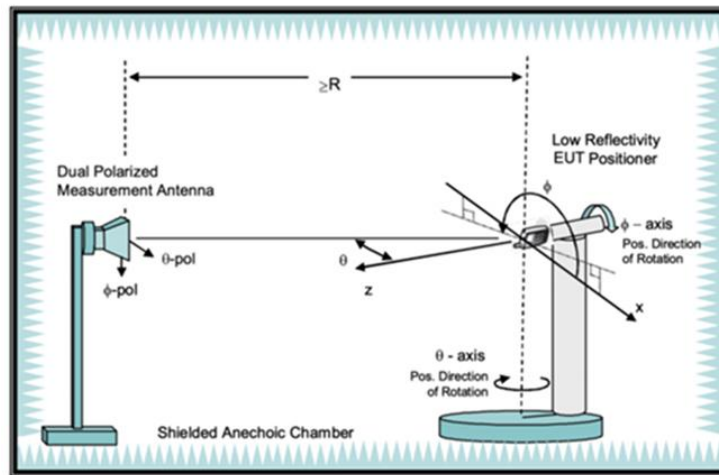
- Type : PCB antenna
- Dimension : 5.9mm*14.9mm

Test method

The antenna gains are obtained through measurements in a fully anechoic OTA chamber with a 3D positioner.

Measurements are taken in discrete steps in theta and phi direction. Data is being recorded using a network analyzer (passive) for both theta and phi polarizations at each position resulting in a 3D gain pattern.

Gain is derived directly through spatial averaging of VNA S21 measurements (passive measurement).



Chamber

The anechoic chamber is a standard AMS-8500 rectangular anechoic chamber designed and built by ETS-Lindgren with the following nominal dimensions

Rectangular Test Region:

Length: 7.32 m (24 ft)

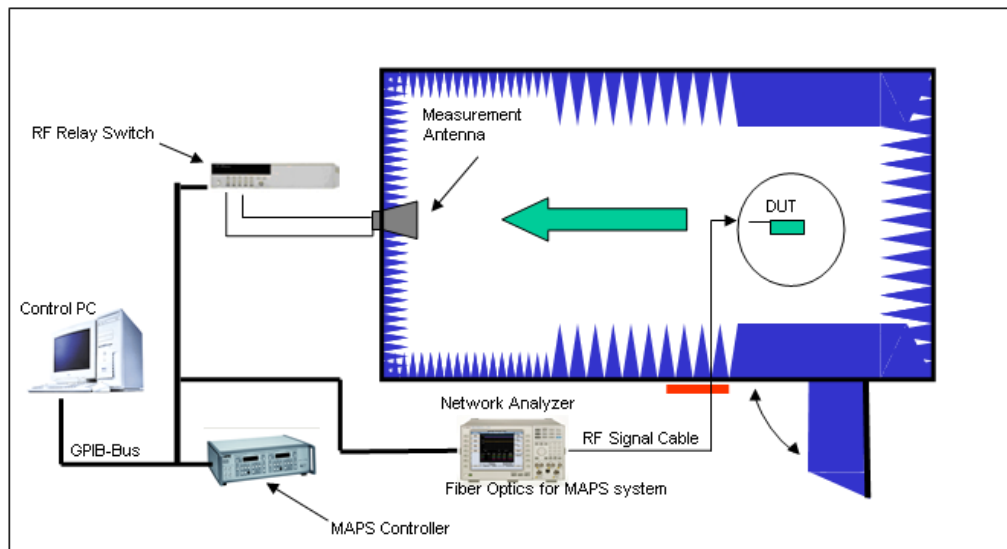
Width: 3.66 m (12 ft)

Height: 3.66 m (12 ft)

Turntable height: 1.45 m

Measurement antenna height: 1.75 m

Measurement distance: 4.860 m



Thank You

Delivering Fidelity Sound to Enrich Human's Life



MERRY