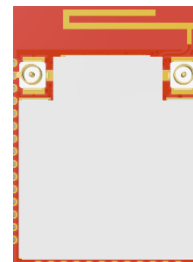


1. Description

BDE-ANT-MB13 is an integrated PCB trace antenna designed for BDE-MB13R/BDE-MB13P1/BDE-MB13P2/BDE-MP26P module series, including but not limited to the below model numbers:

- BDE-MB13R
- BDE-MB13P1
- BDE-MB13P2
- BDE-MP26P



The dimension of the antenna area is 19mm x 4.3mm.

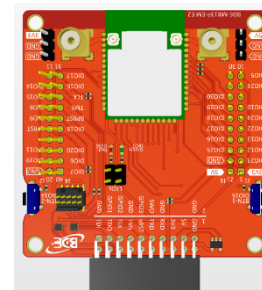
2. Specifications

Electrical	
Frequency (MHz)	2400 - 2500
Efficiency	42%
Peak Gain	0.8dBi
Impedance	50 ohm
Polarization	Linear
Radiation	Omni-directional
Mechanical	
Dimension	19mm x 4.3mm x 0.6mm
PCB Substrate	FR4
Environmental	
Temperature Range	-40°C to 105°C

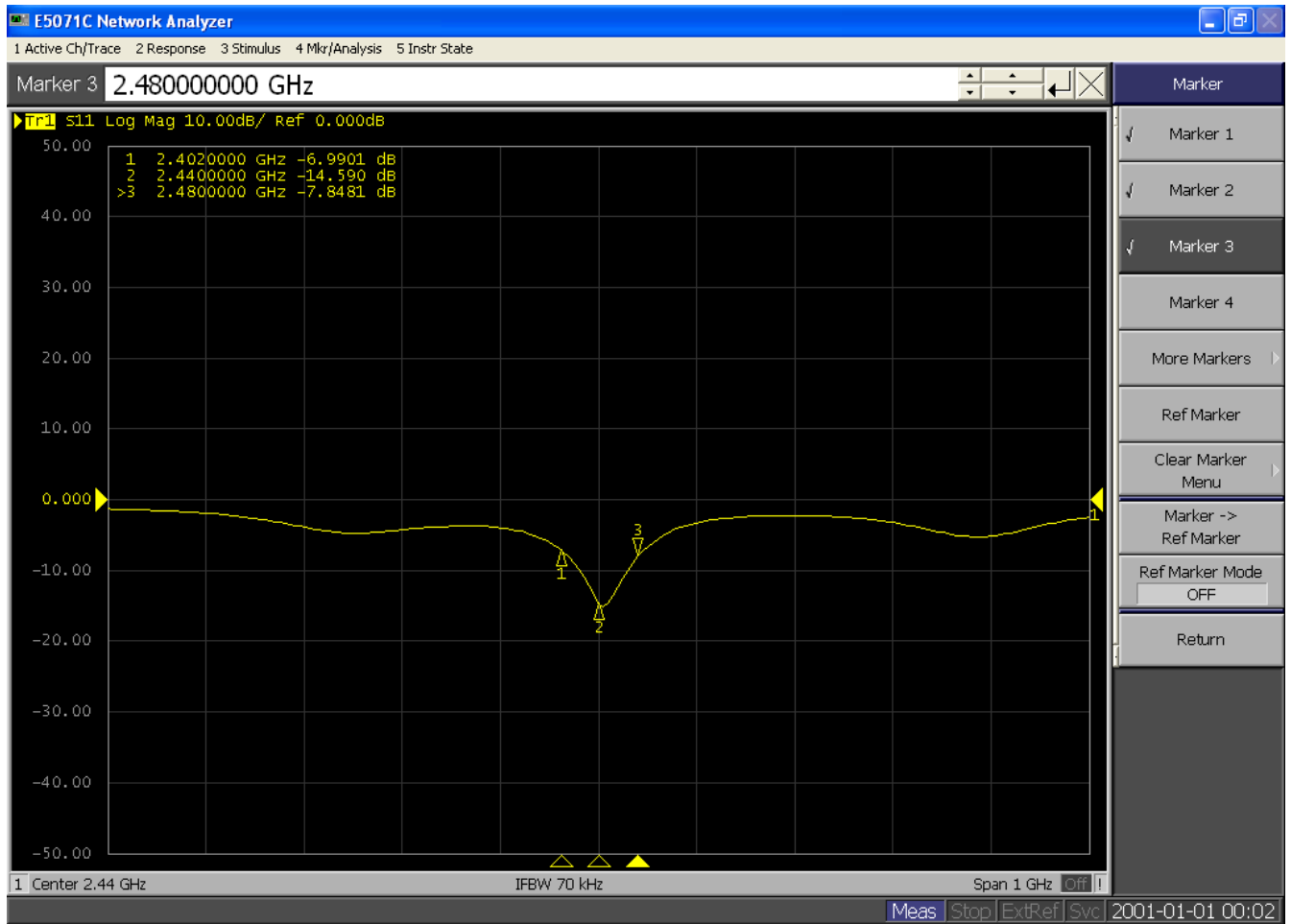
3. Antenna Characteristics

The antenna characteristics data are measured with the module sitting on the evaluation board as the picture on the right shows.

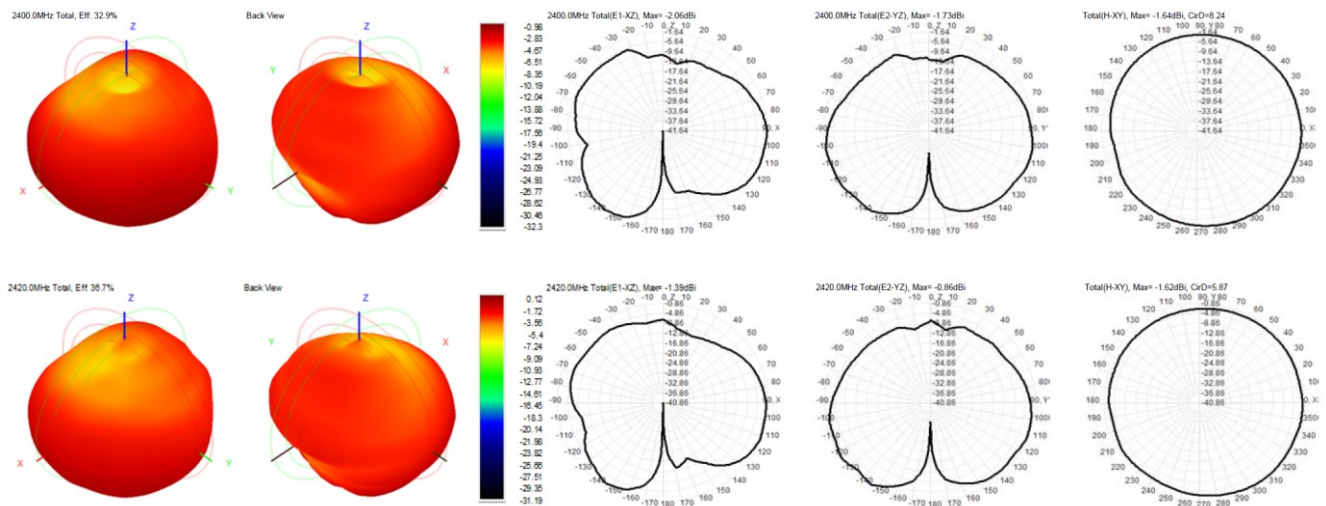
The dimension of the evaluation board is 59mm x 59mm x 1.6mm.

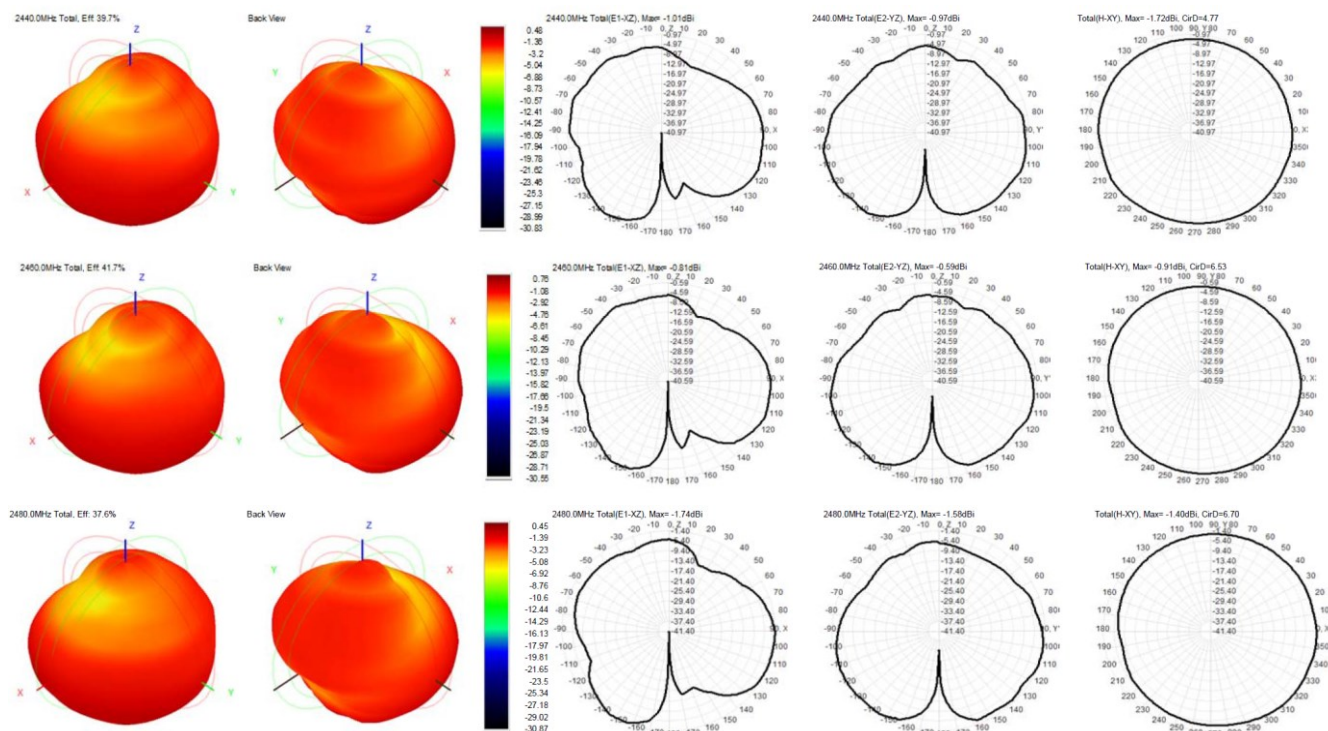


3.1 Return Loss



3.2 Radiation Pattern





3.3 Efficiency and Gain

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	33	-1.0
2410	36	-0.3
2420	37	-0.1
2430	38	0.3
2440	40	0.5
2450	40	0.7
2460	42	0.8
2470	41	0.5
2480	38	0.5
2490	36	0.4
2500	31	-0.3

4. Revision History

Revision	Remark	Date
V1.0	Initial release	2024/6/3

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