

Antenna

HGMB11S Datasheet

Antenna Services

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Status: Preliminary



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About the Document

Revision History

Version	Date	Author	Note
-	2025-03-05	Jaden Feng	Creation of the document
1.0	2025-03-05	Jaden Feng	First official release
1.1	2025-08-26	Jaden Feng	Update data

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1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for

2 Product Features

- BT&WIFI
- Excellent performance

3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz
Input Impedance	50 Ω
VSWR	≤ 3.2
Gain	≤ -13.6 dBi
Polarization Type	Linear
Antenna type	Ceramic SMD Antenna

Mechanical Specifications

Antenna Size(mm)	3.2 mm × 1.6 mm × 0.5 mm
Material	Ceramic
Color	Natural Colour
Working Temperature	-40 °C to +85 °C

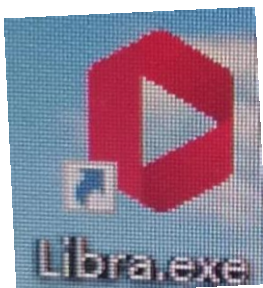
4 Overall Performance

4.1. Test Environment

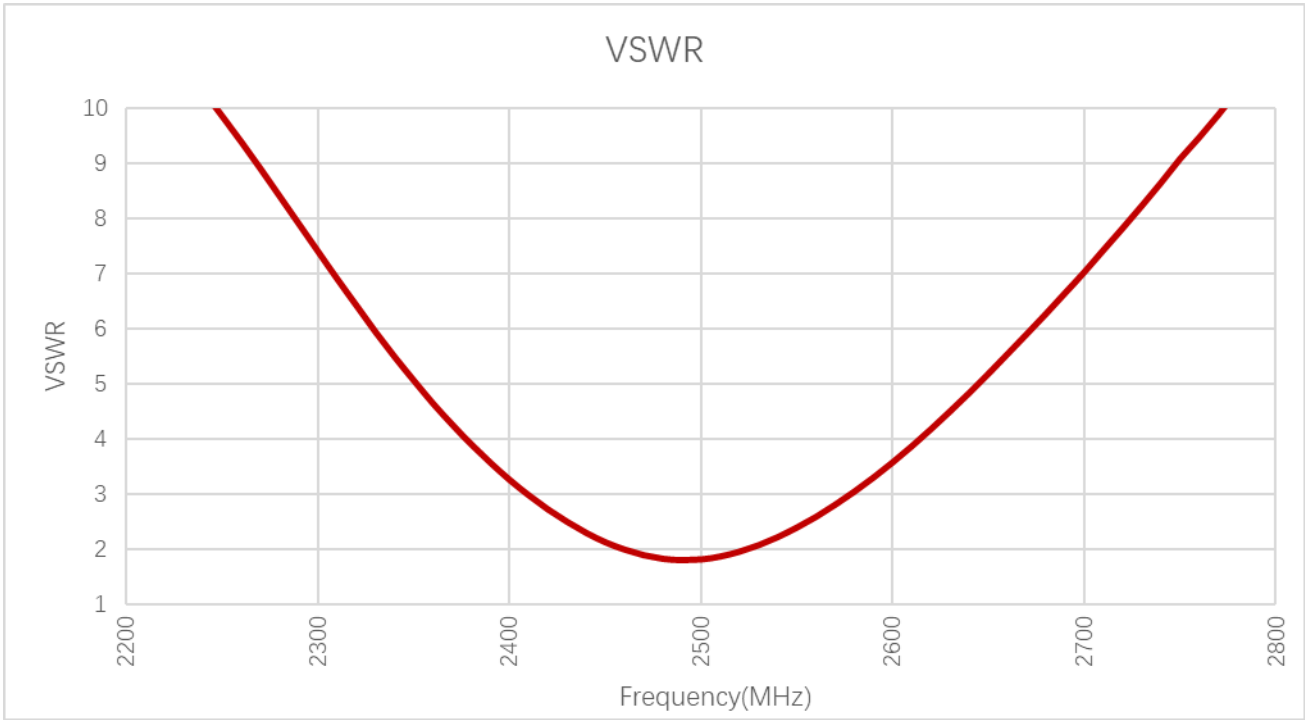
- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz
- Calibration date 2023/10/30



- Test the software: Libra

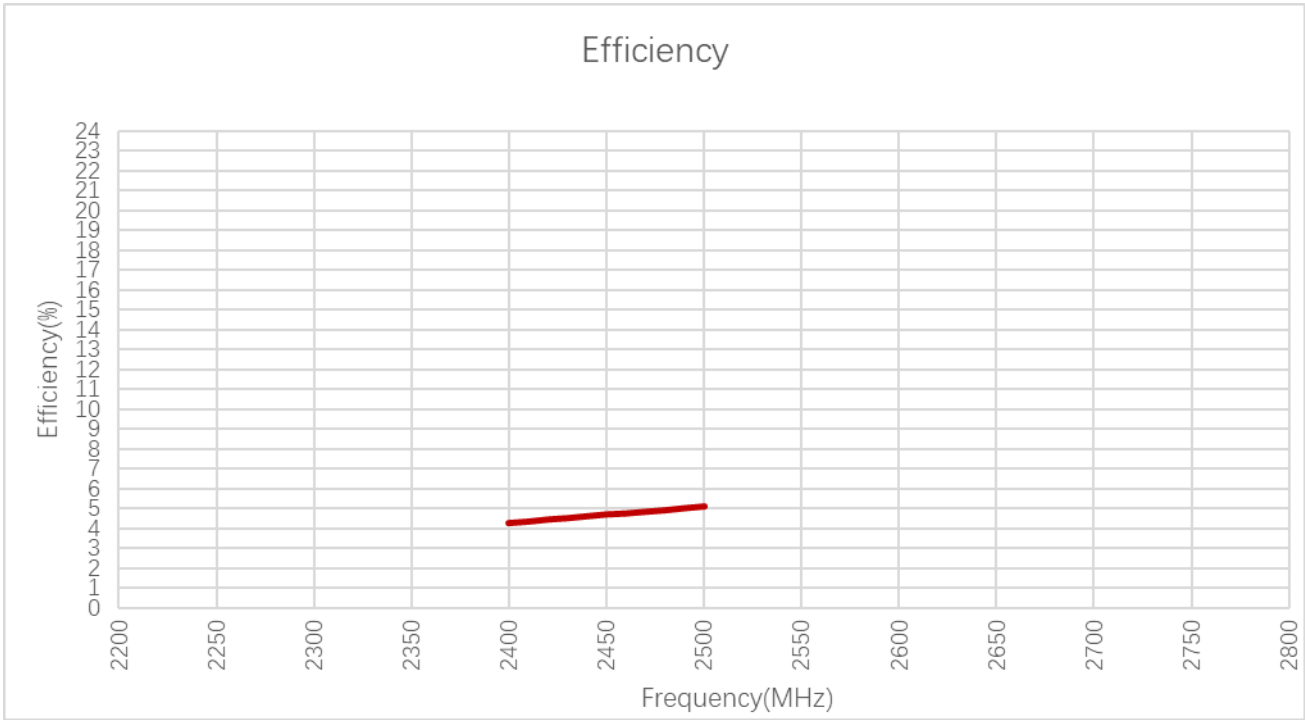


4.2. VSWR



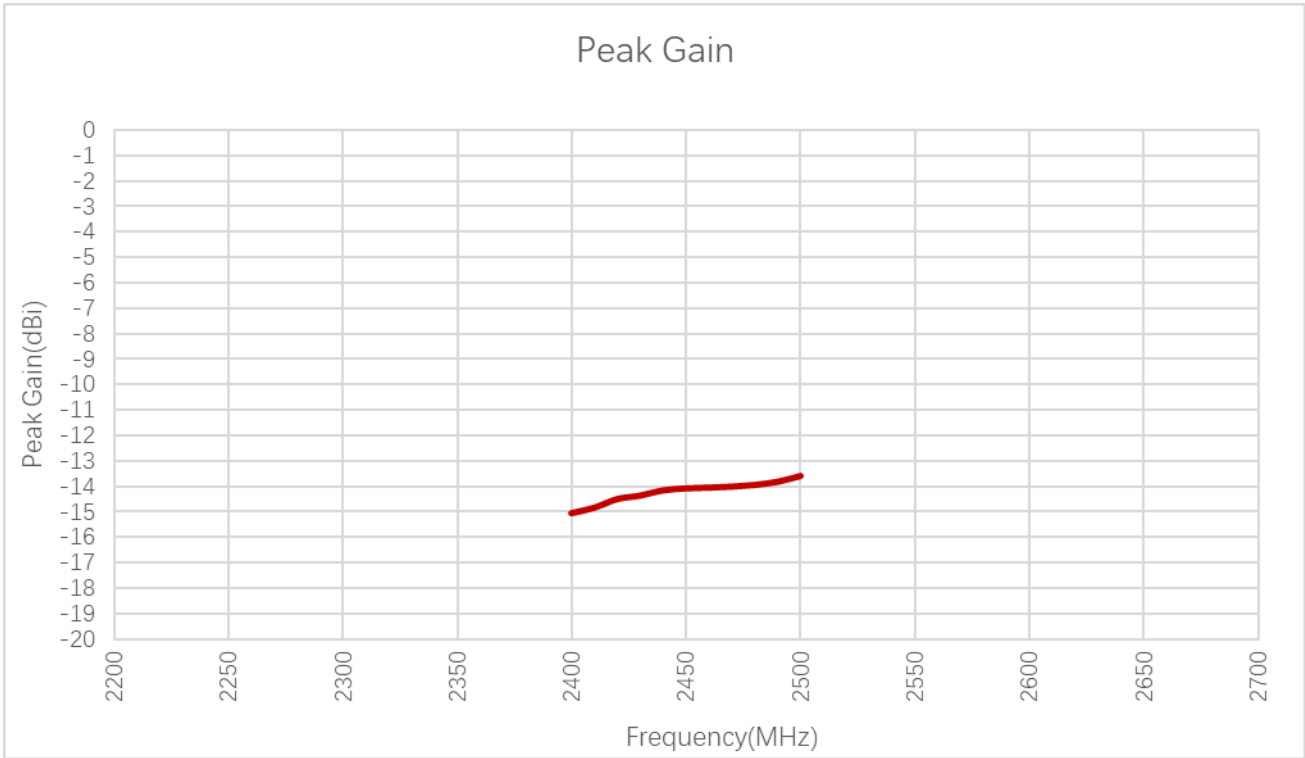
Frequency (MHz)	2400	2450	2500	5150	5350	5500	5750	5850
VSWR	3.2	2.1	1.8	-	-	-	-	-

4.3. Efficiency



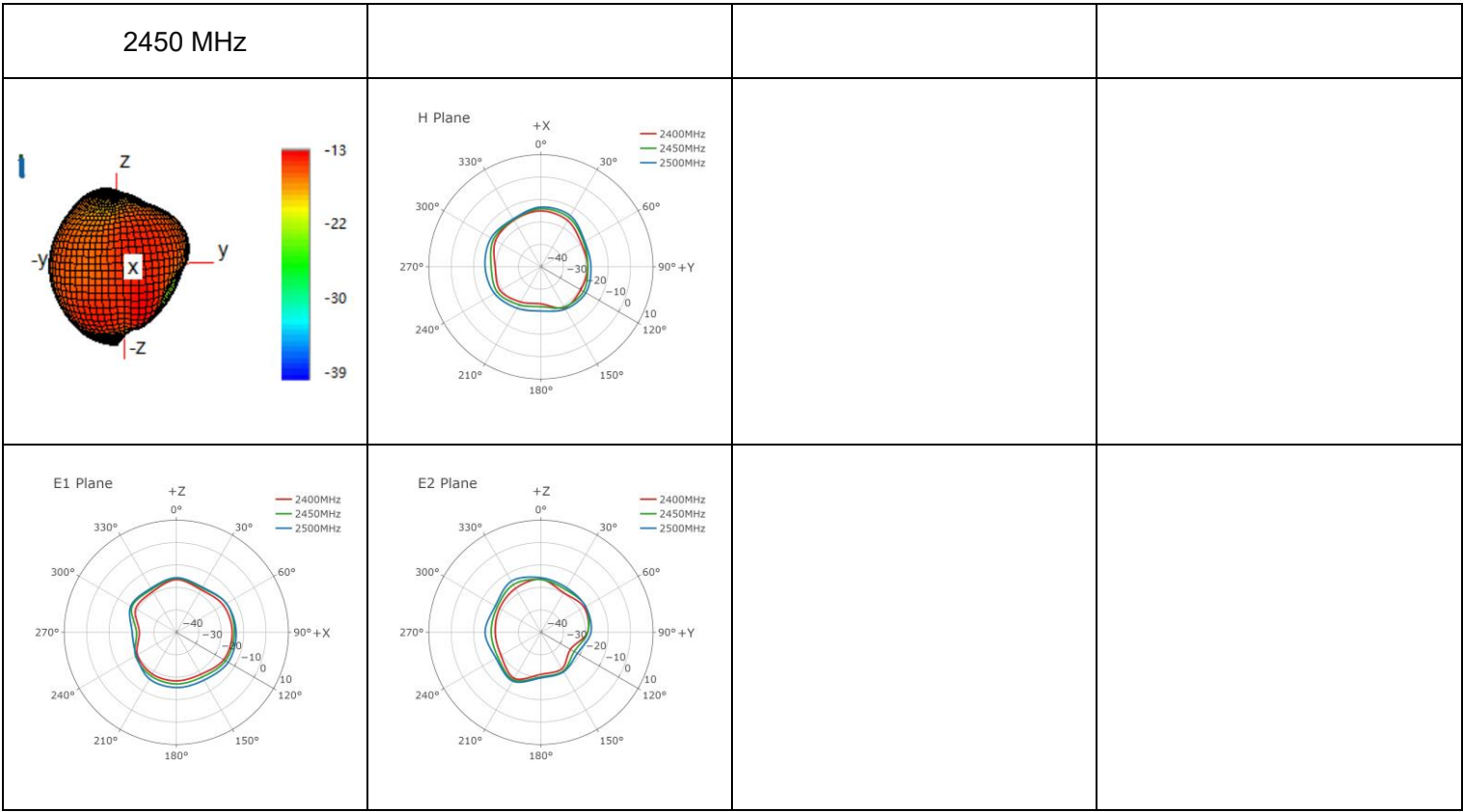
Frequency (MHz)	2400	2450	2500	5150	5350	5500	5750	5850
Efficiency (%)	4.3	4.7	5.1	-	-	-	-	-

4.4. Gain

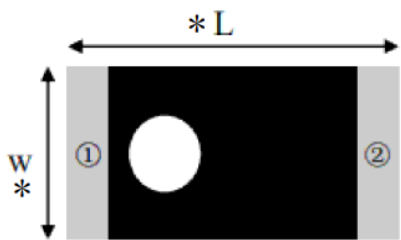


Frequency (MHz)	2400-2450	2450-2500	5150-5250	5250-5350	5470-5725	5725-5850
Gain (dBi)	-14.1	-13.6	-	-	-	-

4.5. Radiation Pattern

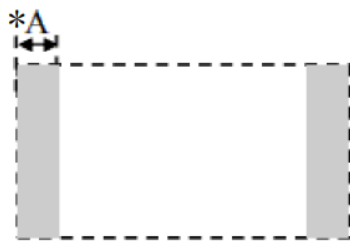


5 Product Size (mm)



Number	Terminal Name
①	INPUT
②	NC

(Top View)



(Bottom View)



(Side View)

Symbols	L	W	T	A
Dimensions	3.2+/-0.2	1.6+/-0.2	0.5+/-0.1	0.4+/-0.1