

The Main Antenna Sample Confirmation

Customer			
Project Name	A1665-R	Date	2026-9-22
Project NO.	SN1605-BT-R	Notes	FPC
Frequency Range	2400MHz-2480MHz		
Designed By	RF Engineer	Structural Engineer	
Checked By	Engineering Manager		
Client' s Approval			

Designer: SINAWELL Electronics(Shenzhen) Co., Ltd.

Add: 5th Floor, Building C, Sanhe Industrial Park, Yongxin Street, Yingrenshi Community, Shiyan Sub-district, Bao'an District, Shenzhen City, Guangdong Province,P.R.China

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1. Specification description

This specification describes the status of the **A1665-R** internal antenna with a frequency band of **2400MHz-2480MHz**

2. Antenna appearance



3. Electrical performance

3.1. Antenna band

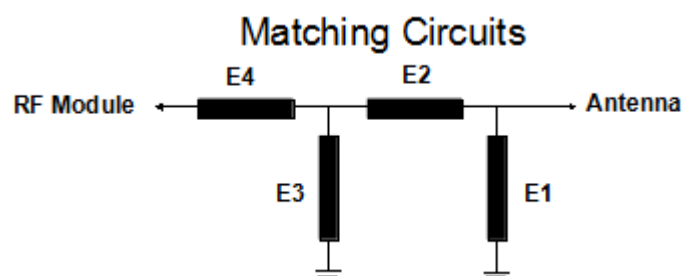
	BT
Transmitting band(MHz)	2400MHz-2480MHz

3.2. Matching Circuit

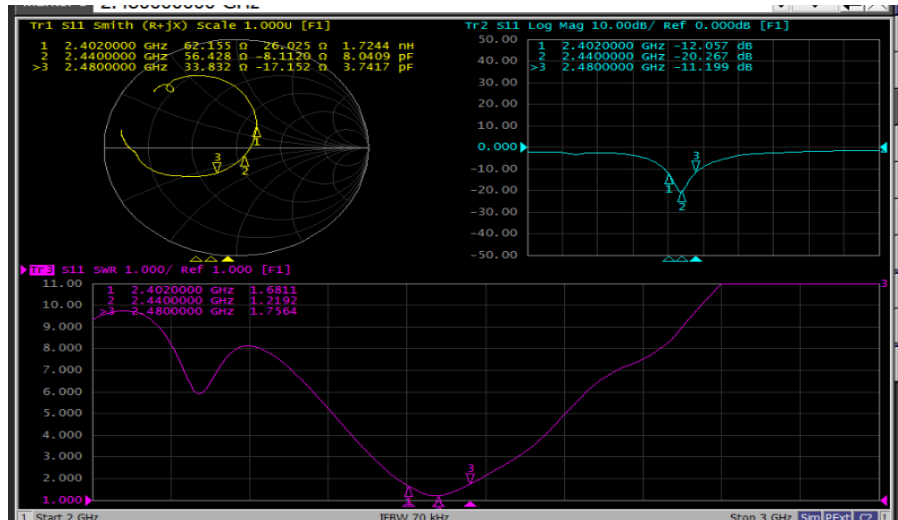
After the test point is at the antenna connector (RF test port), see the figure below.

1. antenna matching。

Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4	0 Ω



3.3. Return Loss



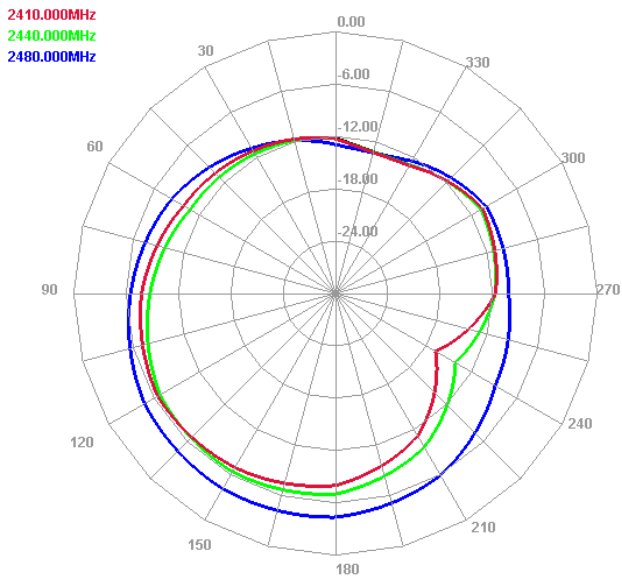
3.4. passive test data

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	17.51	-7.57	-2.52
2410	19.9	-7.01	-2.45
2420	19.76	-7.04	-2.48
2430	20.17	-6.95	-2.42
2440	18.74	-7.27	-2.44
2450	18.24	-7.39	-2.37
2460	19.9	-7.01	-2.46
2470	19.02	-7.21	-3.46
2480	19.55	-7.09	-3.6
2490	16.03	-7.95	-4.05
2500	16.38	-7.86	-3.98

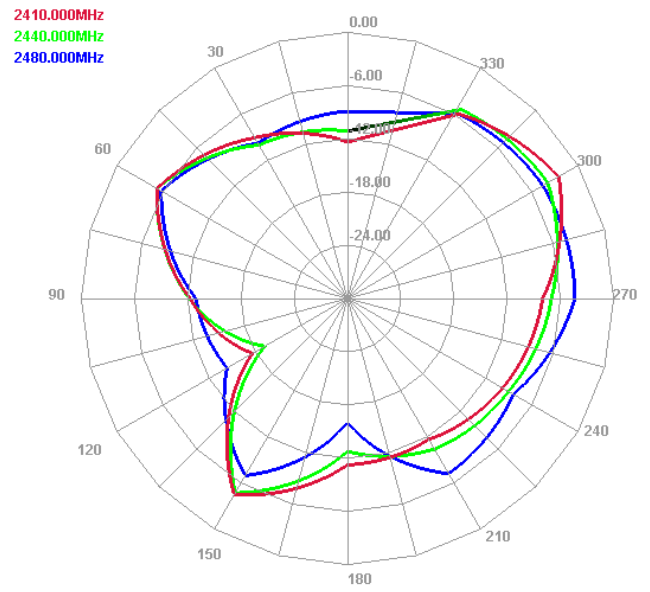
3.5. Field intensity pattern

2D Pattern

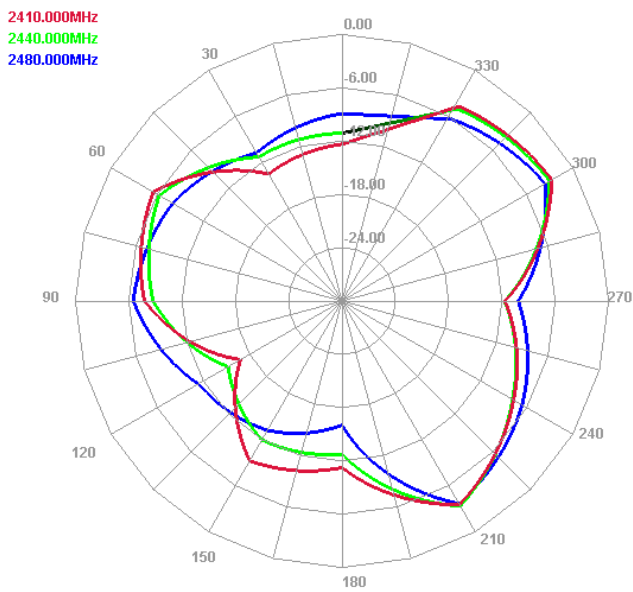
Horizontal



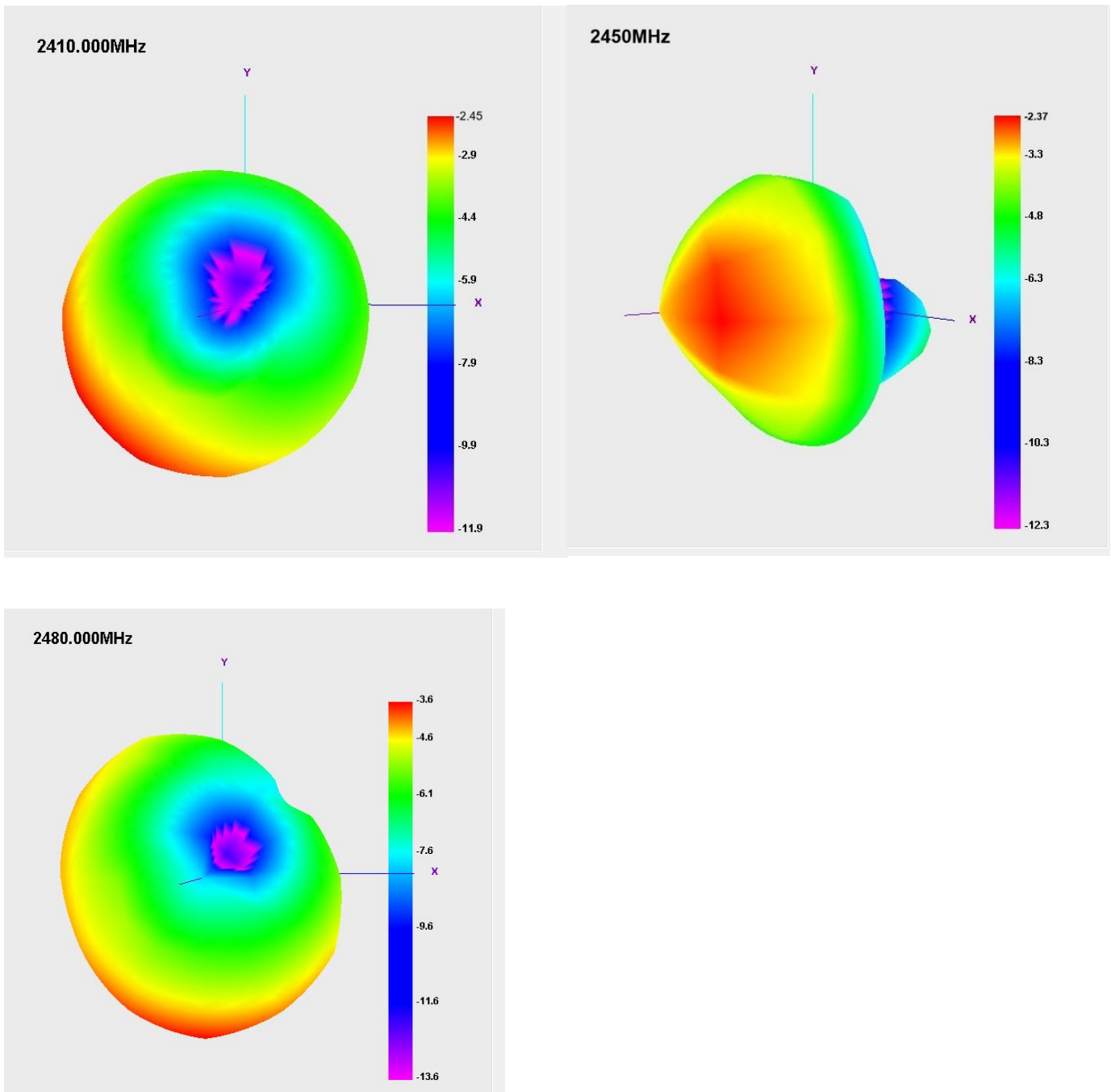
E1 Face



E2 Face



3D Patter



4.Structural Drawing

