
Bluetooth onboard antenna specification

2400-2500MHz onboard

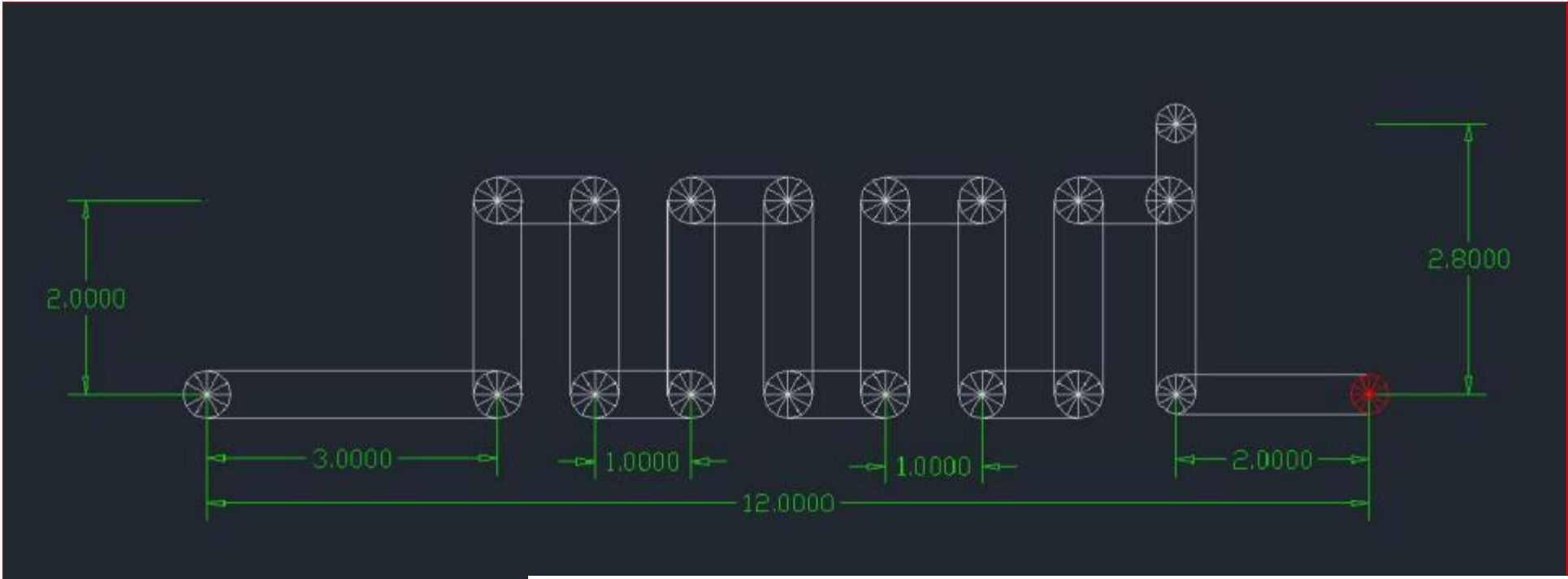
Establishment: Zengxiaofeng

Audit: Liming

Date: 2024.01.03

REV	DESCRIPTION	DATE	APPD

GENERAL TOLERANCE		
DIMENTION	ANGLES	
. ±0.20	. ±2°	
.0 ±0.15	.0 ±1°	
.00 ±0.10	.00 ±1°	
.000 ±0.05		



- Technical Requirements:
- 1. All units are MM
 - 2. Material: FR4 Surface Green
 - 3. Copper-free solder pad antioxidant treatment
 - 4. All sizes marked with * symbol before for the control size

										Name		
Unit MM	Ratio 1:1	Material s		General Processin g		Surface roughne ss	Surface treatme nt			Part number		
Quantit y 1	Color	Desi gn	Y	Drawin g LFL	Y	RF	Y	A u d i t	Y	Approve d	Y	Page 1
			M		M		M		M		M	Total 1 page r

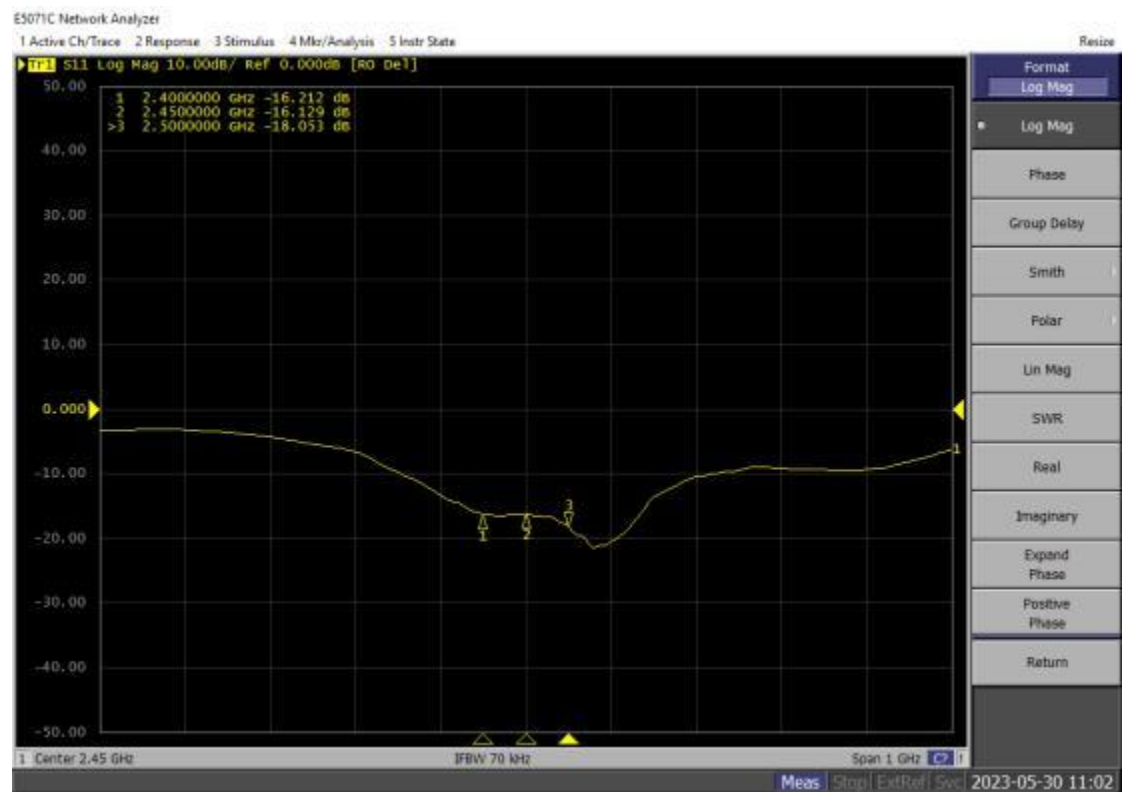
零件编号	
电版图编号	
底图编号	
日期	签名

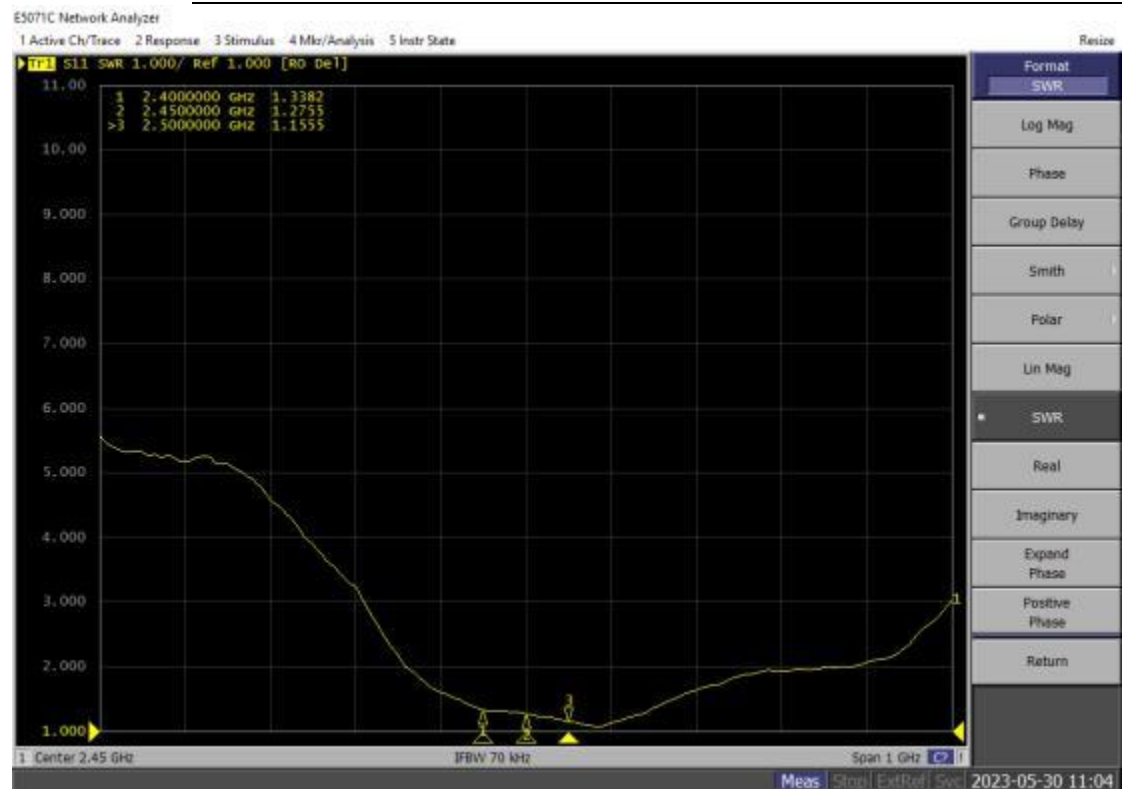
Test environment: Temperature: 10℃——+30℃ Relative humidity: ≤80% (+40℃) Atmospheric pressure: 750mmkg±30mmkg	Test equipment: Network analyzer KEYSIGHT E5071C 4x4x4m 24Probe anechoic chamber
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4.22.1 Product electrical performance test data:

S11 diagram of the antenna:

Marker (MHZ)	2400	2450	2500
Returnloss	-18.2	-18.9	-12.2
VSWR	1.3	1.2	1.1

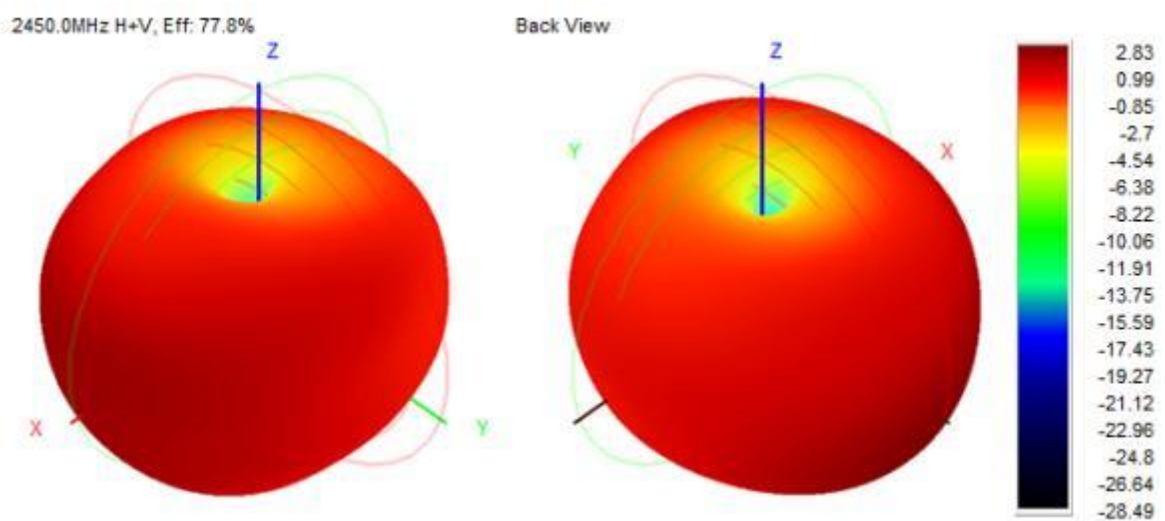


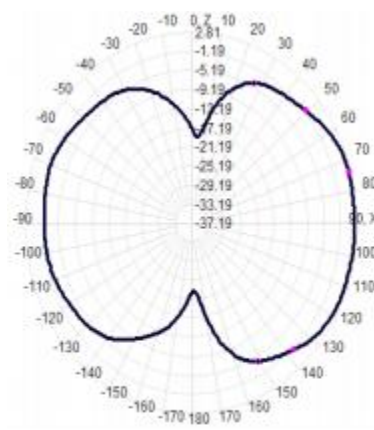


3 Gain efficiency of the antenna:

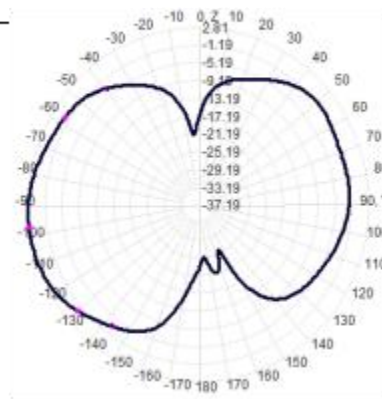
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.17	2.49	2.62	2.67	2.74	2.83	2.77	2.56	2.22	1.95	1.89
Efficient (%)	75.17	77.18	77.18	77.02	77.29	77.76	77.65	76.88	75.19	74.67	75.12

4.22.3 The radiation pattern of an antenna:

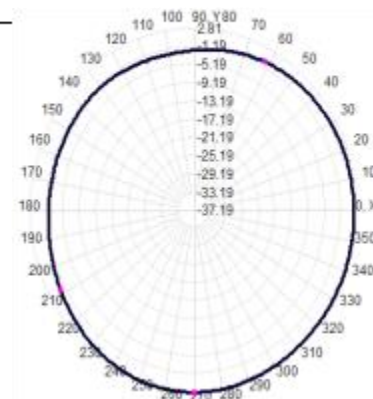




E1



E2



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