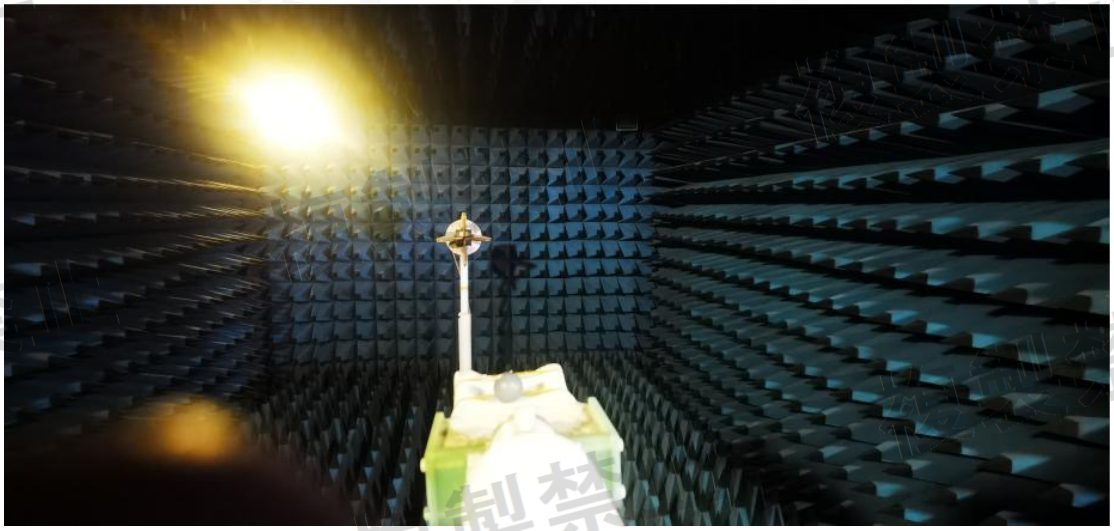
ANTENNA TEST REPORT

Product Name	FT305

Summary

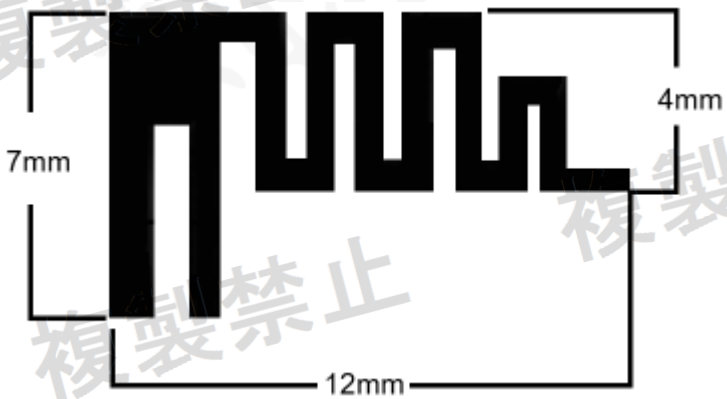
ITEM	SPEC.
Model Name	BT 2.4 GHz
MAX. GAIN	-0.33dBi
Polarization	Horizontal
Impedance	50 Ω
Antenna Type	PCB antenna
Manufacturer	Shenzhen Loyal Electronics Co.,Ltd
Manufacturer Address	Building 5, the Third Road, Shapu Yangchong Industry Park, Songgang Street, Bao'an District, Shenzhen

Laboratory Testing Environment and Equipment



Test Items	Test Equipment
S11、S12、VSWR、LOSS	Network AnalyzerE5071B、E5071C、E5062A
Efficiency、Gain、3DRadiation Pattern	Satimo SG16 Anechoic Chamber、GP7*4*3 Anechoic Chamber 、E5071B
TRP、TIS	Satimo SG16 Anechoic Chamber、GP7*4*3 Anechoic Chamber 、8960、CMW500、MT8820C、E4438C

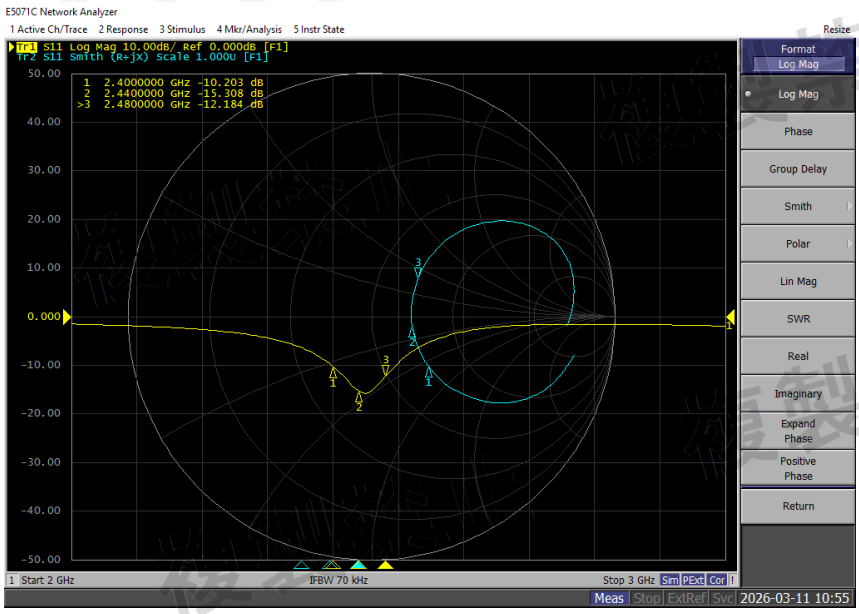
Antenna Photo & Length（mm）



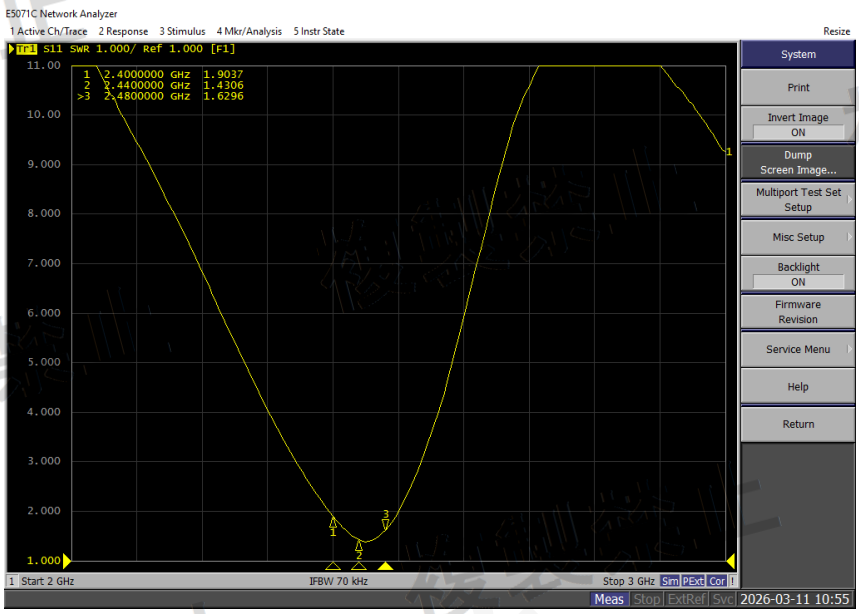
Electrical Performance Test Results

Number	Inspection Items	Unit	Performance Requirements	Test Results	
1	Frequency	MHz	2402-2483	2402-2483	
2	Gain	dBi	/	2400	-0.99
				2440	-0.54
				2480	-1.23
3	Efficient	%	/	2400	27.95
				2440	32.28
				2480	27.81
4	Returnloss	dB	≤-10	2400	-10.2
				2440	-15.3
				2480	-12.18
5	SWR	/	≤2	2400	1.9
				2440	1.43
				2480	1.62

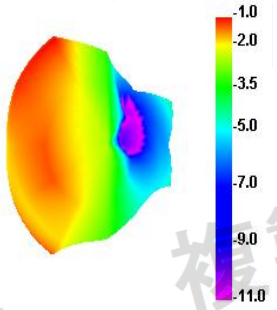
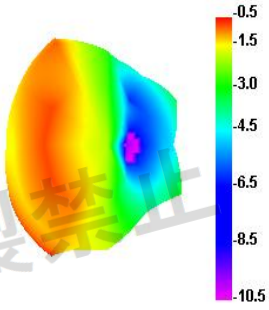
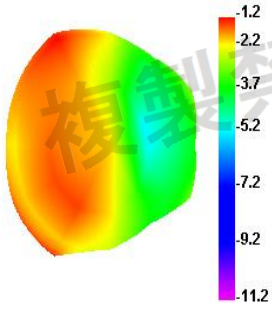
Return Loss Log Mag S11	
Frequency-MHz	2400-2500

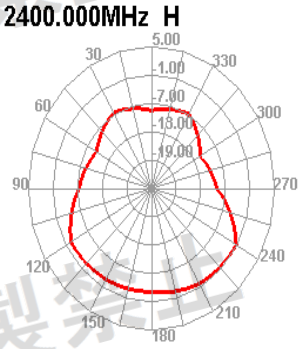


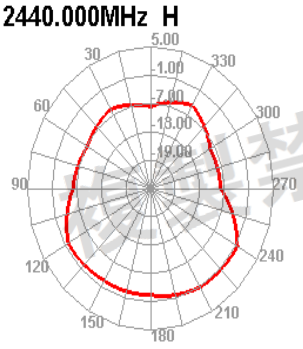
SWR S11		
Frequency-MHz	2400-2500	

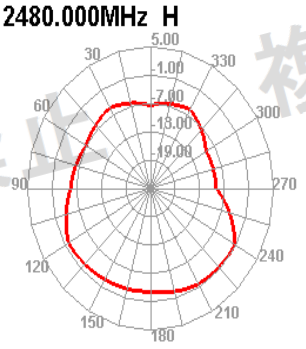


Radiation Parameter Test

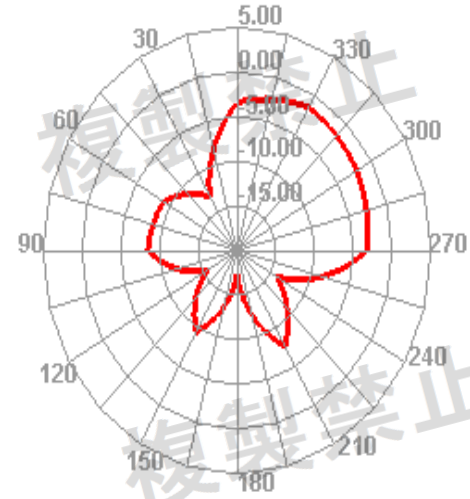
Radiation Pattern（3D）		
2400.000MHz	2440.000MHz	2480.000MHz
		
Radiation Pattern（2D）Horizontal Plane		

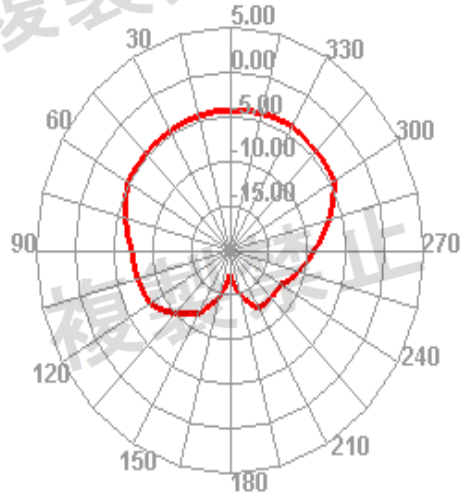


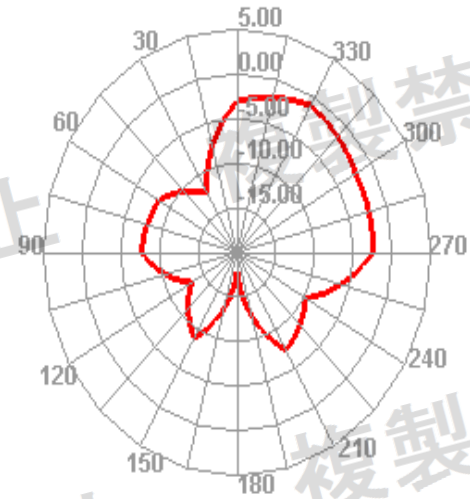


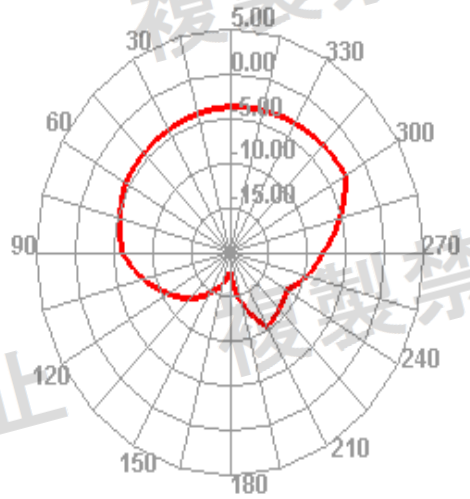


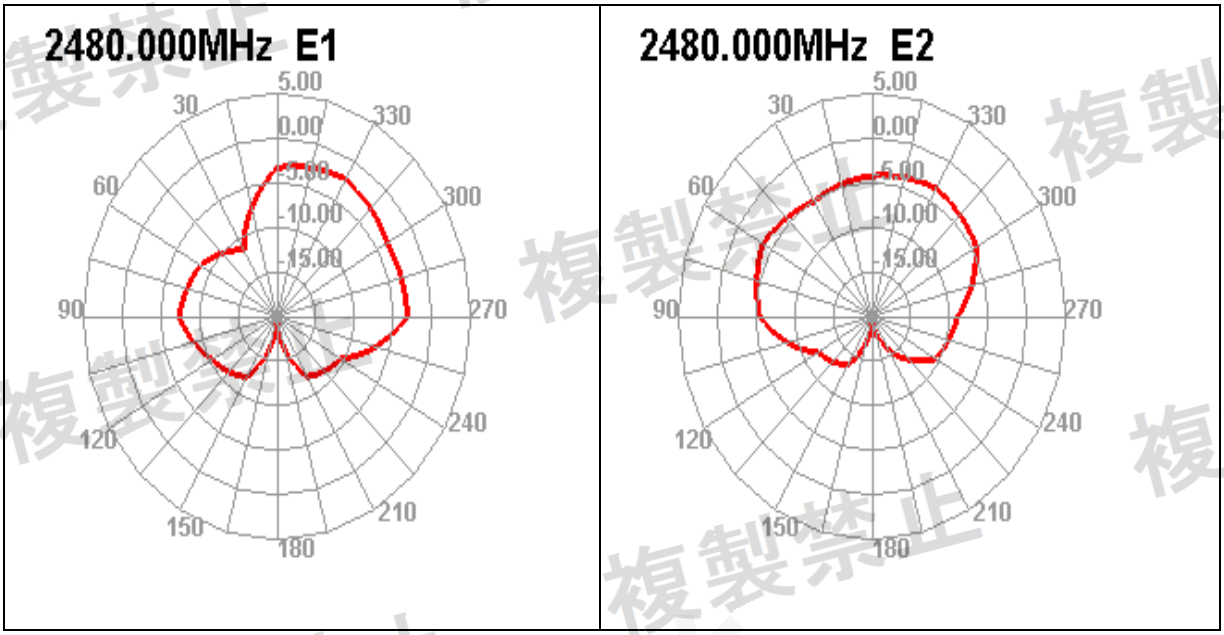
Vertical Plane











Antenna Passive Efficiency		
Frequency	E Total. dB(dBi)	Efficiency(%)
2400MHz	-0.99	27.95
2410MHz	-1.01	28.87
2420MHz	-0.93	29.92
2430MHz	-0.83	30.87
2440MHz	-0.54	32.28
2450MHz	-0.33	33.32
2460MHz	-0.46	31.72
2470MHz	-0.86	28.73
2480MHz	-1.23	27.81
2490MHz	-1.13	28.68
2500MHz	-1.92	25