# ANTENNA REPORT



# 1. Antenna Specifications

## 1.1. Electrical Specifications

Elect	rical Specifications	
Frequency Range	2400MHz~2500MHz	5150MHz~5850MHz
Peak gain	2.0dBi	5.0dBi
VSWR	≤2.	0
Input Impedance	50 9	D.
Polarization	Verti	cal
Radiation Patten	Omni Dire	ectional
Maximum Input Power	50V	V
Input connector	SMA	-K
Working Temperature	-20°C~+	- 80°C
Storage Temperature	-40°C~+	-85°C
Working Humidity	20~8	0%

## 1.2. Environmental performance test

	Environmental performance test	
Item	Test Conditions	Specifications
Storage environment	When not specified, the test temperature, humidity, and air pressure are as follows: 1. Temperature is -30°C ~ +80°C 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Perform 5 cycles between 70°C and 40°C, then place under normal conditions for 1-2H and check the appearance quality.	The dimensions should meet the requirements and should meet the mechanical and electrical performance.
Constant humidity and heat resistance test	Relative humidity: 95±3%, test temperature: 40°C. After 2 hours of continuous action, the electrical performance of the test sample shall be measured within 5 minutes after the test sample is taken out. The test sample shall be placed under normal conditions for 1-2 hours to check the appearance quality.	The dimensions should meet the requirements and should meet the mechanical and electrical performance.
Vibration test	Frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep cycle number: 30 times	Electrical and mechanical performance is normal
Drop test	The electrical and mechanical performance is normal after falling freely 3 times from 1M in mutually perpendicular axes.	Electrical and mechanical performance is normal

# 1.3. Environmental performance test



# 2. Antenna S11 Property

#### 2.1. Return Loss



2.2. VSWR



# 3. 3D Radiation Property

## 3.1. Radiation Efficiency









## 3.3. Average Gain





Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
2400000000	66.98%	-1.740624096	2400000000	4.223412738
2410000000	65.78%	-1.818843612	2410000000	4.410007793
2420000000	64.95%	-1.87446588	2420000000	4.546801778
2430000000	67.50%	-1.706990162	2430000000	4.477849078
2440000000	67.02%	-1.738079093	2440000000	4.138790333
2450000000	65.77%	-1.820025518	2450000000	4.153333975
2460000000	66.28%	-1.785873353	2460000000	3.970231893
2470000000	68.69%	-1.631279001	2470000000	3.41401879
2480000000	68.49%	-1.643835505	2480000000	3.058968811
2490000000	68.66%	-1.633241003	2490000000	3.141098831
2500000000	69.82%	-1.560223736	2500000000	3.25448129

Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
5200000000	65.97%	-1.806375897	5200000000	6.774205475
5230000000	57.07%	-2.436054284	5230000000	6.706278725
5260000000	53.71%	-2.699387692	5260000000	5.850995724
5290000000	49.45%	-3.058096495	5290000000	5.815473375
5320000000	43.83%	-3.582338842	5320000000	5.016589156
5350000000	40.67%	-3.907639704	5350000000	4.149894386
5380000000	41.50%	-3.81991895	5380000000	3.685889261
5410000000	49.14%	-3.085634593	5410000000	3.803894342
5440000000	57.10%	-2.433885656	5440000000	4.305369979
5470000000	57.37%	-2.413025723	5470000000	4.629135228
5500000000	62.92%	-2.012004505	5500000000	5.302142024
5530000000	65.64%	-1.828409599	5530000000	5.83761895
5560000000	64.83%	-1.88257217	5560000000	5.988824548
5590000000	58.77%	-2.308498803	5590000000	5.490754544
5620000000	54.94%	-2.600873494	5620000000	5.014318175
5650000000	52.94%	-2.761833026	5650000000	4.550567105
5680000000	54.03%	-2.673719185	5680000000	4.239952858
5710000000	52.37%	-2.809260826	5710000000	3.763343523
5740000000	54.67%	-2.622848205	5740000000	3.376936232
5770000000	61.28%	-2.127085009	5770000000	4.327945139
5800000000	60.95%	-2.150222297	5800000000	4.204692206

#### 3.4. Radiation Pattern

- E-Plane Radiation of Straight Position



- H-Plane Radiation of Straight Position



品型号: xxx			
、标签要求:			
需方	xxx		
供方	xxxxx		
物料编码	xx		
产品型号	xx		
数量/单	XXX PCS	出厂日期	x 年 x 月 x 日
备注/其他			1
各注/其他 、 装箱要求: 作业说明: 内包装: 产品 XXpcs 一袋, ) 外包装: XxPCS 一箱; 注意事项:	故入小 PE 袭;		PE 袞