

REX3GT581 Antenna Spec

■ 1. Overview

Name of Customer	Rexense
Name of Product	2.4GHz PCB Antenna
Antenna manufacturer	Shenzhen Huachuangxiang Technology Co., LTD
Antenna manufacturer's Address	403A, South Area, Jingji Yujing Times Building, No. 1, Second Gexi Road, Longcheng Street, Longgang District, Shenzhen

■ 2. Product technical specifications

Frequency Range(MHz)	2400-2500
Impedance of input(Ω)	50
Voltage standing wave ratio	1.91 MAX
Return Loss (dB)	-15.3
Peak Gain(dBi)	1.77
Polarization	Linear Vertical
Antenna Material	PCB
Operating Temp (°C)	-40 ~ 105
Port of antenna	SMA
Efficiency of antenna (%)	32.55

■ 3. Antenna Gain

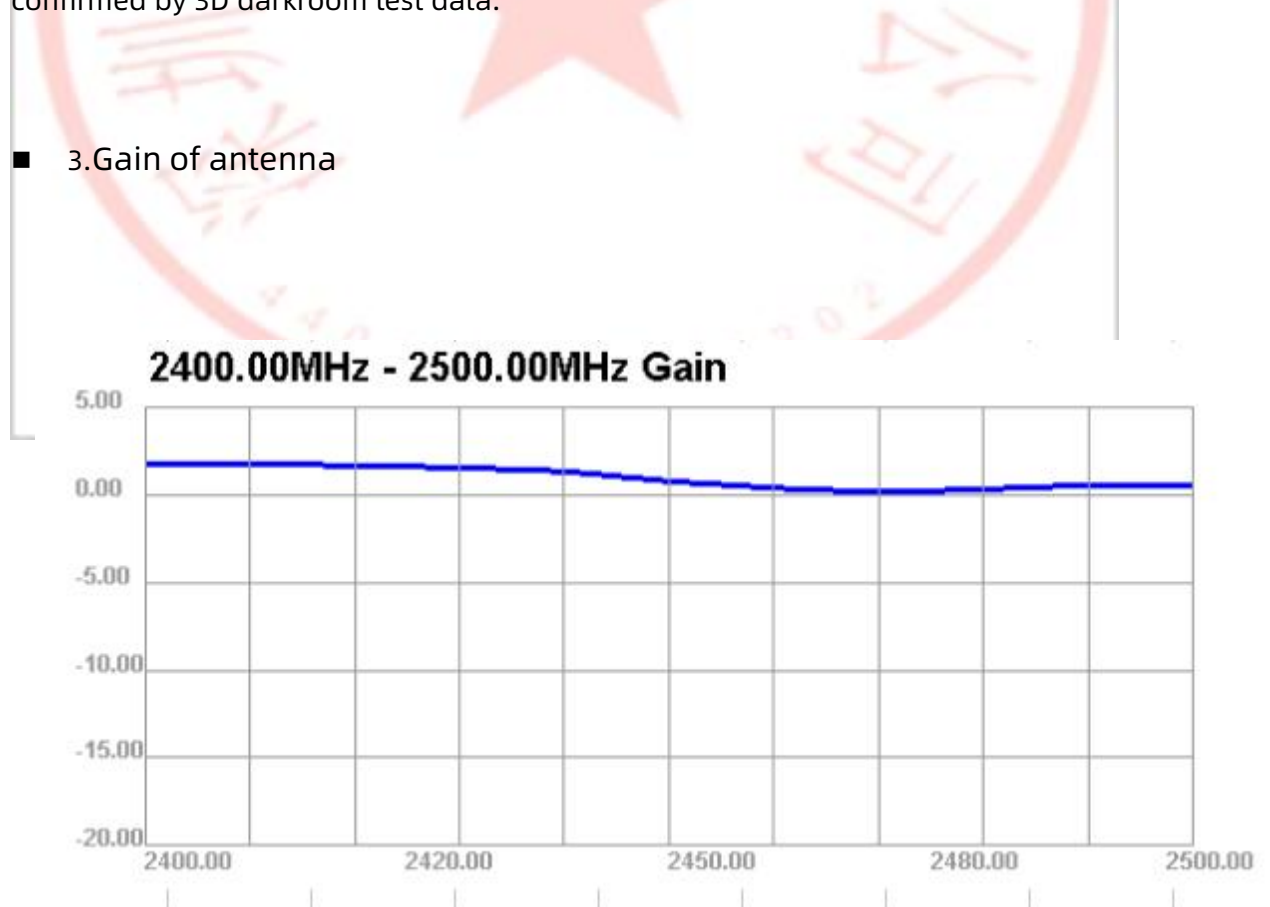
Test Lab: SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

Test Environment: 3D darkroom laboratory test data

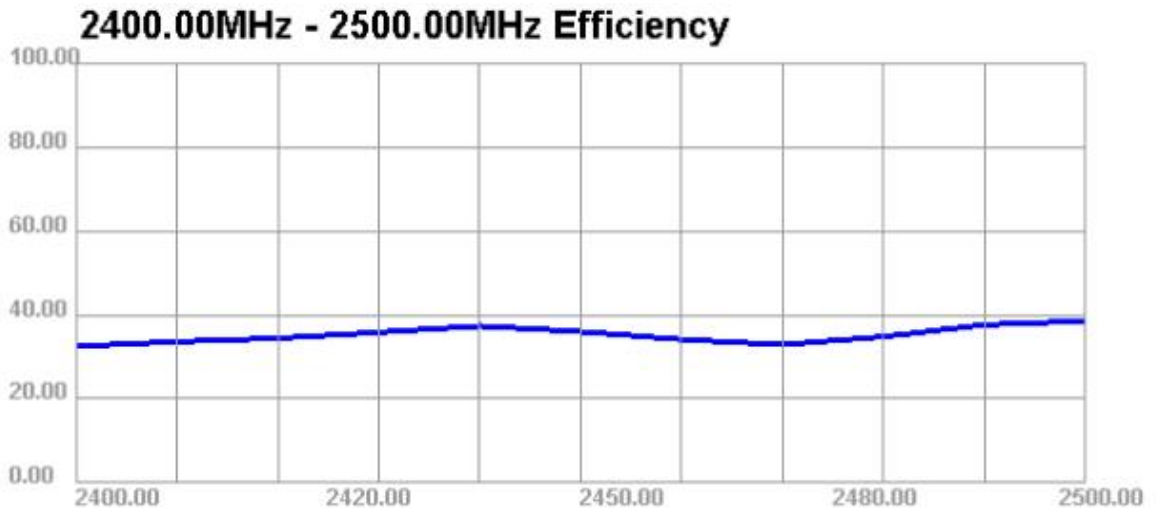
Passive Test For Zigbee2.4									
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Directivity (dBi)
2400	32.55	-4.87	1.69	-0.46	11.806	20.742	1.69	-20.02	6.57
2410	33.65	-4.73	1.77	-0.38	12.226	21.429	1.77	-17.14	6.5
2420	34.47	-4.63	1.66	-0.49	12.823	21.643	1.66	-15.5	6.29
2430	35.89	-4.45	1.55	-0.6	13.842	22.045	1.55	-15.24	6
2440	37.39	-4.27	1.33	-0.82	15.045	22.348	1.33	-15.71	5.61
2450	36.06	-4.43	0.77	-1.38	14.879	21.184	0.77	-18.11	5.2
2460	34.17	-4.66	0.39	-1.76	14.24	19.93	0.39	-19.83	5.05
2470	32.94	-4.82	0.14	-2.01	13.545	19.398	0.14	-20.19	4.96
2480	34.84	-4.58	0.31	-1.84	13.908	20.933	0.31	-17.63	4.89
2490	37.67	-4.24	0.55	-1.6	14.594	23.081	0.55	-15.48	4.79
2500	38.58	-4.14	0.56	-1.59	14.818	23.763	0.56	-14.75	4.7

Note: Effi(%) and Gain(dBi) are the main parameters for product performance confirmed by 3D darkroom test data.

■ 3. Gain of antenna

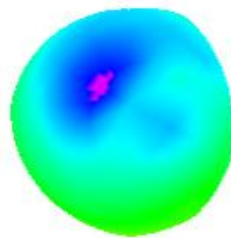


4. Efficiency curve:

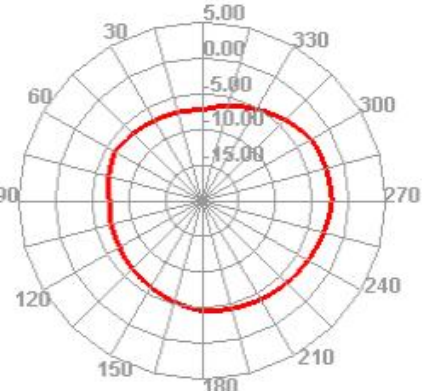


5. Antenna anechoic chamber 2D, 3DRaditation Pattern (machine data)
Frequency and frequency value: 2.40GHz Peak Gain:1.70dBi Efficiency:32.55%

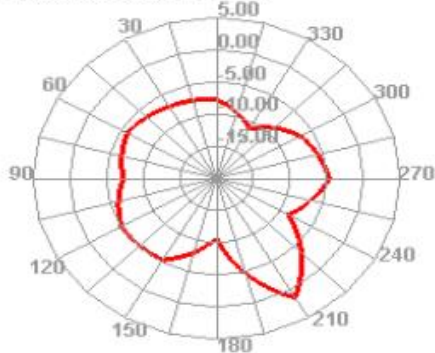
2400.000MHz



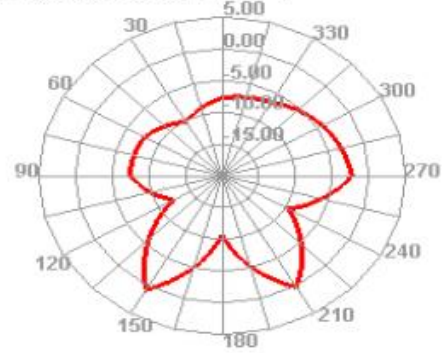
2400.000MHz H



2400.000MHz E1

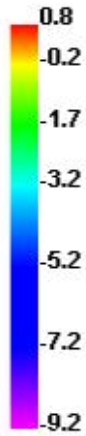
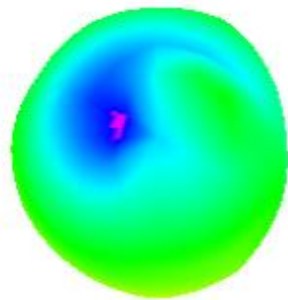


2400.000MHz E2

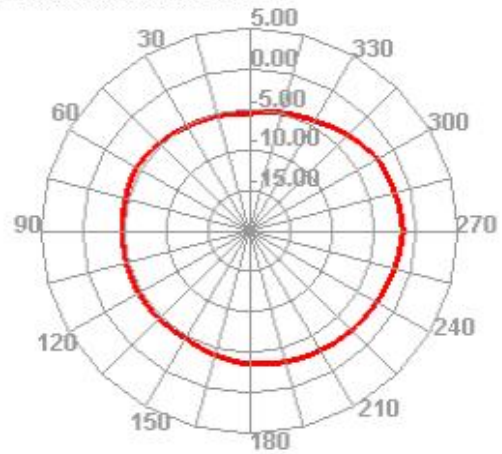


- 6. Frequency and frequency value: 2.45GHz
Peak Gain:0.80dBi Efficiency:36.06%

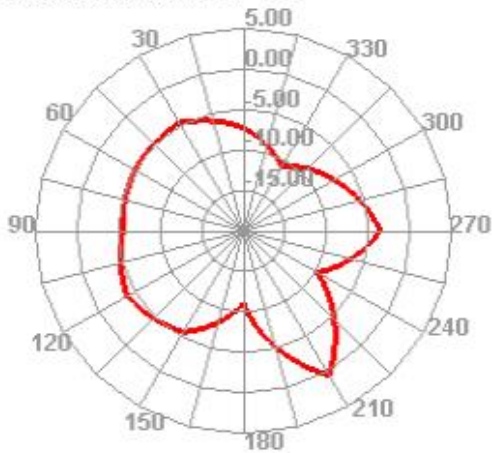
2450.000MHz



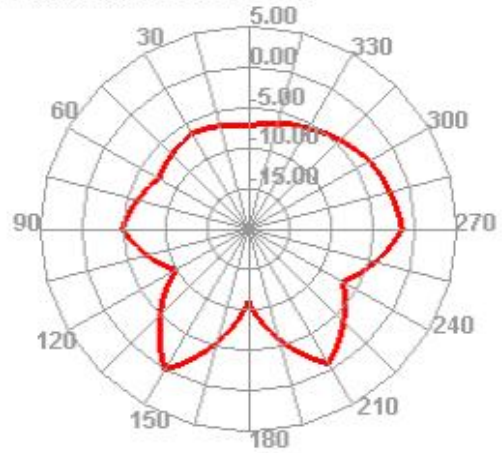
2450.000MHz H



2450.000MHz E1



2450.000MHz E2



7. Frequency and frequency value: 2.50GHz Peak Gain:0.60dBi

Efficiency:38.58%

