

list

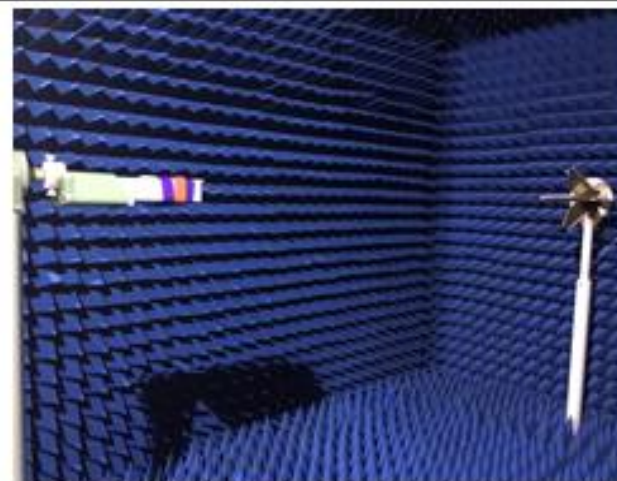
- 1、 Summary
- 2、 testing environment
- 3、 Circuit
- 4、 test data
- 5、 The position of the antenna on the PCB board
- 5、 3D pattern

1、Summary

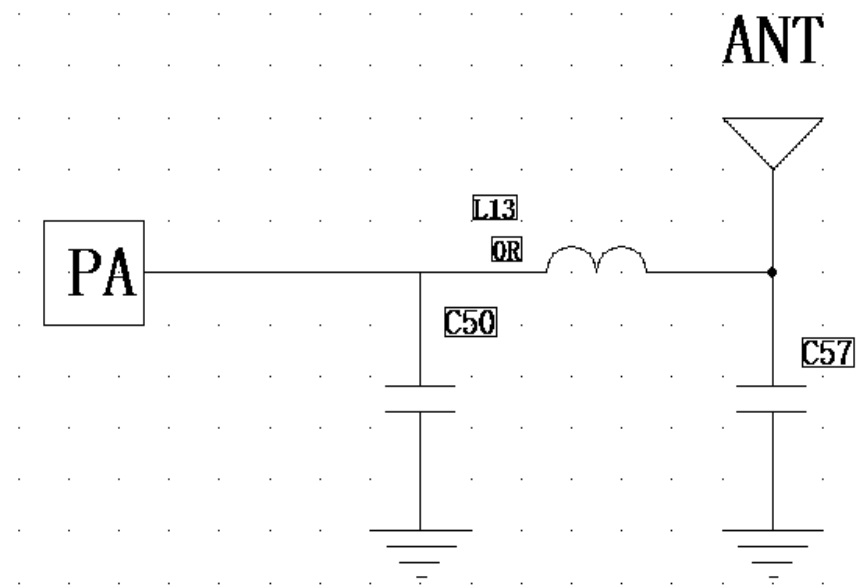
Manufacturer	SHENZHEN JIETENG CIRCUIT CO., LTD
Address	1st and 2nd floors, Building 1, Huafeng Technology Park, No. 54 Guangtian Road, Luotian Community, Songgang Street, Bao'an District, Shenzhen, China
Antenna Type	PCB Antenna
Antenna Model	D100
Antenna Gain	≤ -2.53 dBi (Peak)
Frequency Range	2400 – 2500 MHz
Input Impedance	50 ohms

2、TESTING ENVIRONMENT

	TEST ITEM	Instrument and equipment
1、S-parameter	1、Return Loss 2、Voltage standing wave ratio (VSWR)	Network analysis instrument: Agilent E5071B HP 8753D
2、Active testing	1、Transmission power (TRP) 2、Receiving sensitivity 3、Frequency error range	1. Testing room: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2.Network analysis instrument: Agilent 8960 E5515B ×2 StarPoint SP6011
3、Passive Test	1、Antenna gain 2、Efficiency	1. Testing room: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2.Network analysis instrument Agilent E5071B HP 8753D



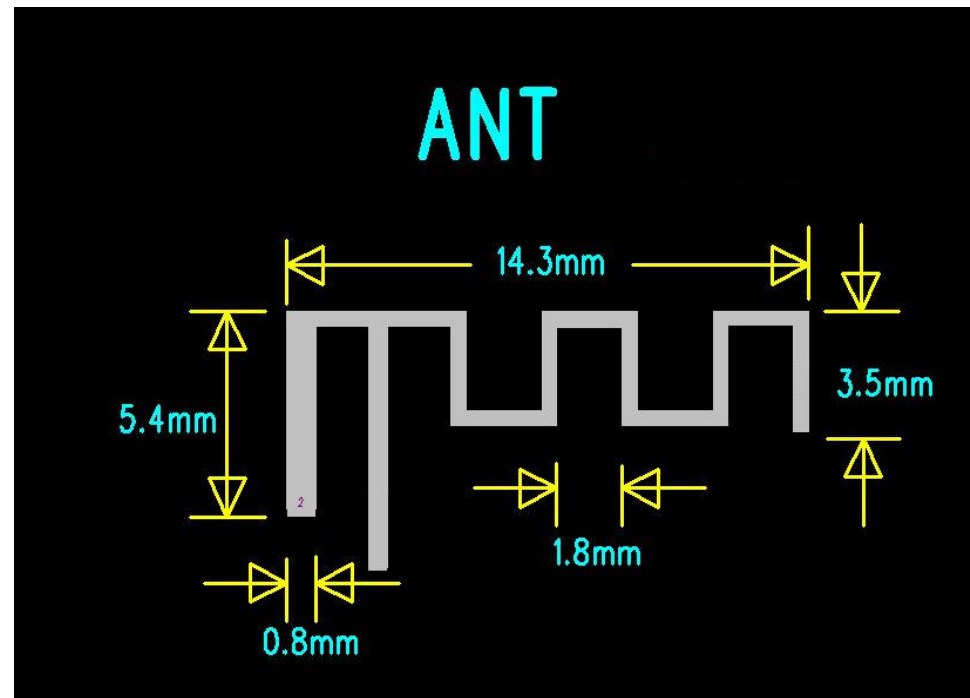
3、Circuit



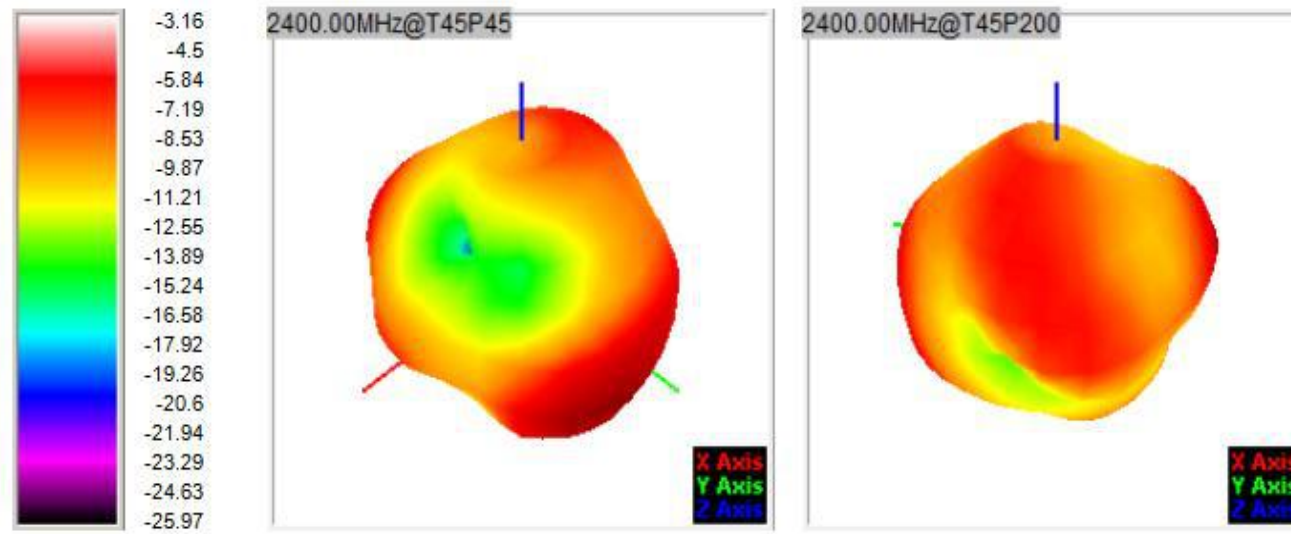
4、Passive efficiency and gain data of antenna

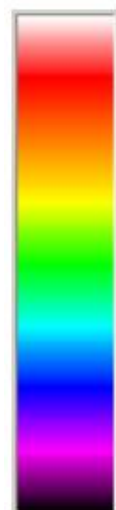
FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-8.00	-8.03	-8.07	-8.17	-8.16	-8.09	-8.05	-8.10	-8.19	-8.25	-8.30
Peak EIRP (dBm)	-3.16	-3.17	-3.11	-3.23	-3.46	-2.99	-2.60	-2.53	-2.73	-3.08	-3.07
Directivity (dBi)	4.84	4.86	4.97	4.94	4.71	5.10	5.44	5.57	5.46	5.17	5.24
Efficiency (dB)	-8.00	-8.03	-8.07	-8.17	-8.16	-8.09	-8.05	-8.10	-8.19	-8.25	-8.30
Efficiency (%)	15.90	15.70	15.60	15.20	15.30	15.50	15.70	15.50	15.20	15.00	14.80
Gain (dBi)	-3.16	-3.17	-3.11	-3.23	-3.46	-2.99	-2.60	-2.53	-2.73	-3.08	-3.07
NHPRP $\pm$ Pi/4 (dBm)	-9.34	-9.34	-9.34	-9.40	-9.38	-9.32	-9.31	-9.40	-9.52	-9.59	-9.63
NHPRP $\pm$ Pi/6 (dBm)	-10.53	-10.53	-10.53	-10.59	-10.57	-10.50	-10.48	-10.57	-10.69	-10.75	-10.78
NHPRP $\pm$ Pi/8 (dBm)	-11.38	-11.38	-11.38	-11.45	-11.44	-11.37	-11.33	-11.40	-11.49	-11.53	-11.55
Upper Hem. PRP (dBm)	-10.99	-11.00	-11.07	-11.23	-11.30	-11.33	-11.38	-11.51	-11.62	-11.64	-11.55
Lower Hem. PRP (dBm)	-11.02	-11.08	-11.10	-11.13	-11.05	-10.88	-10.75	-10.74	-10.82	-10.91	-11.09
Upper Hem. PRP (%)	7.96	7.94	7.81	7.53	7.41	7.36	7.27	7.07	6.88	6.86	6.99
Lower Hem. PRP (%)	7.90	7.80	7.77	7.71	7.85	8.17	8.41	8.43	8.28	8.11	7.78

5、Antenna dimension



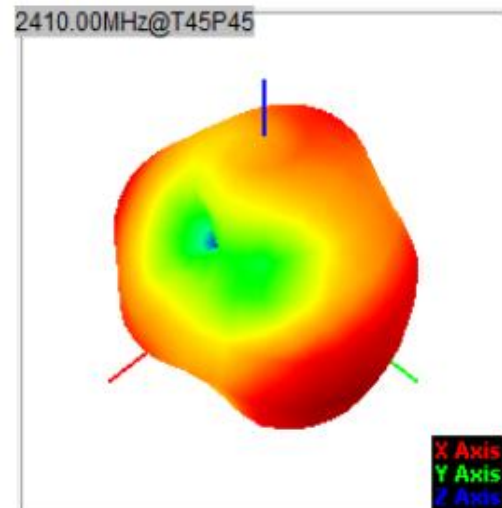
6、3D pattern



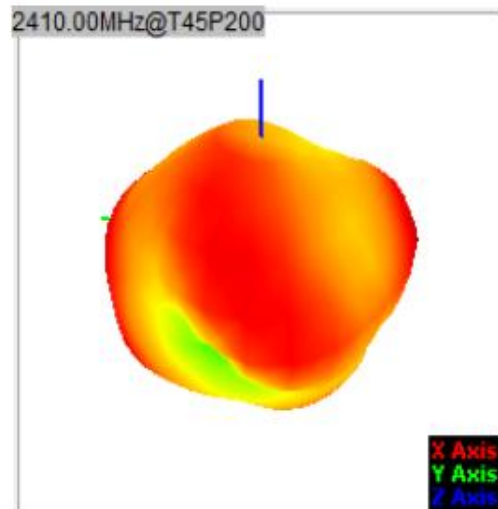


-3.17
-4.64
-6.11
-7.58
-9.05
-10.52
-11.99
-13.46
-14.93
-16.4
-17.87
-19.34
-20.81
-22.28
-23.75
-25.22
-26.69
-28.16

2410.00MHz@T45P45

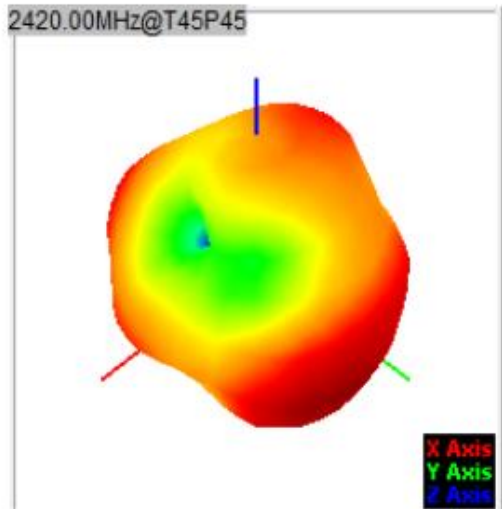


2410.00MHz@T45P200

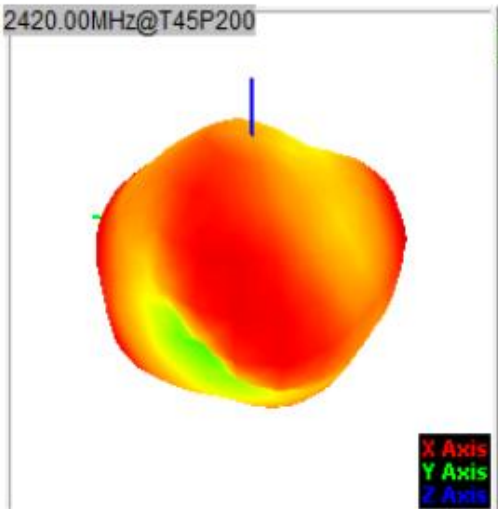


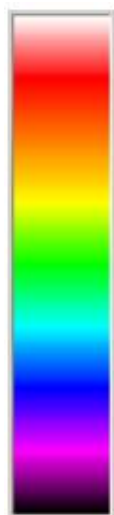
-3.11
-4.6
-6.09
-7.58
-9.08
-10.57
-12.06
-13.55
-15.04
-16.53
-18.03
-19.52
-21.01
-22.5
-23.99
-25.48
-26.98
-28.47

2420.00MHz@T45P45



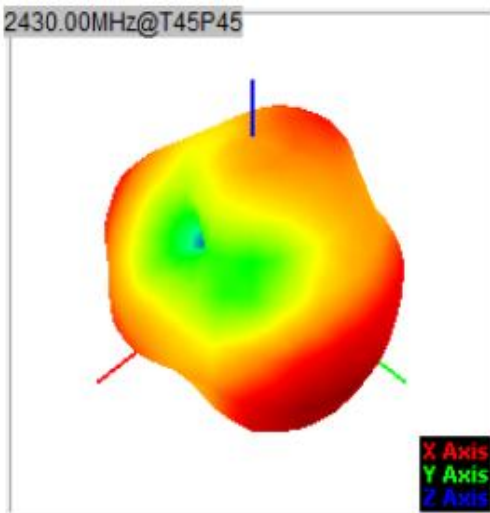
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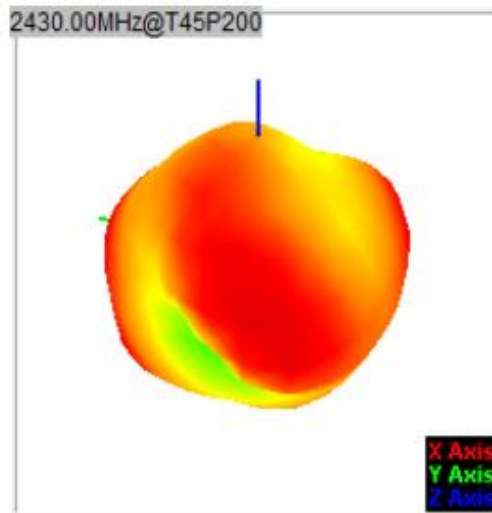


-3.23
-4.58
-5.92
-7.26
-8.61
-9.95
-11.3
-12.64
-13.98
-15.33
-16.67
-18.02
-19.36
-20.7
-22.05
-23.39
-24.74
-26.08

2430.00MHz@T45P45

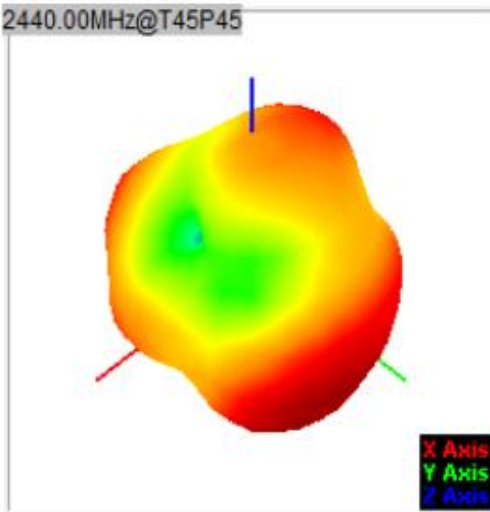


2430.00MHz@T45P200

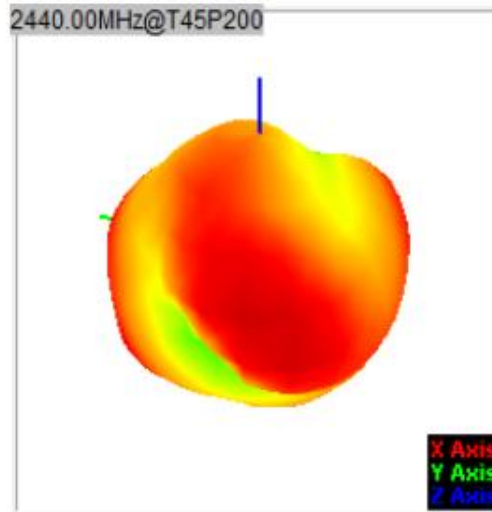


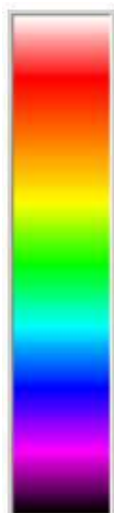
-3.46
-4.63
-5.81
-6.98
-8.16
-9.34
-10.51
-11.69
-12.86
-14.04
-15.22
-16.39
-17.57
-18.74
-19.92
-21.09
-22.27
-23.45

2440.00MHz@T45P45



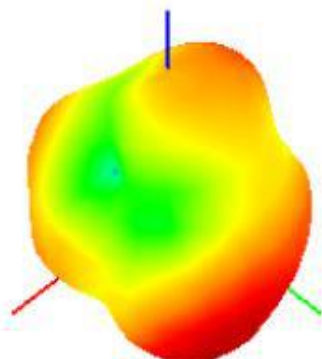
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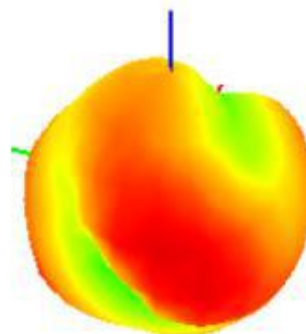
-2.99
-4.07
-5.15
-6.22
-7.3
-8.38
-9.46
-10.53
-11.61
-12.69
-13.77
-14.84
-15.92
-17
-18.07
-19.15
-20.23
-21.31

2450.00MHz@T45P45

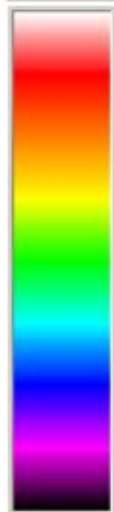


X Axis
Y Axis
Z Axis

2450.00MHz@T45P200

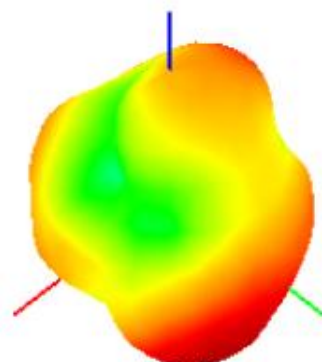


X Axis
Y Axis
Z Axis



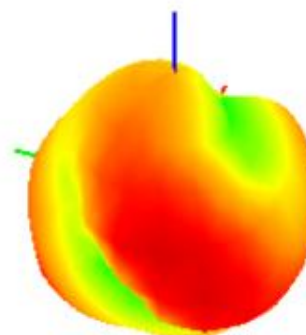
-2.6
-3.61
-4.62
-5.63
-6.64
-7.65
-8.66
-9.67
-10.68
-11.69
-12.7
-13.71
-14.72
-15.73
-16.74
-17.75
-18.76
-19.77

2460.00MHz@T45P45

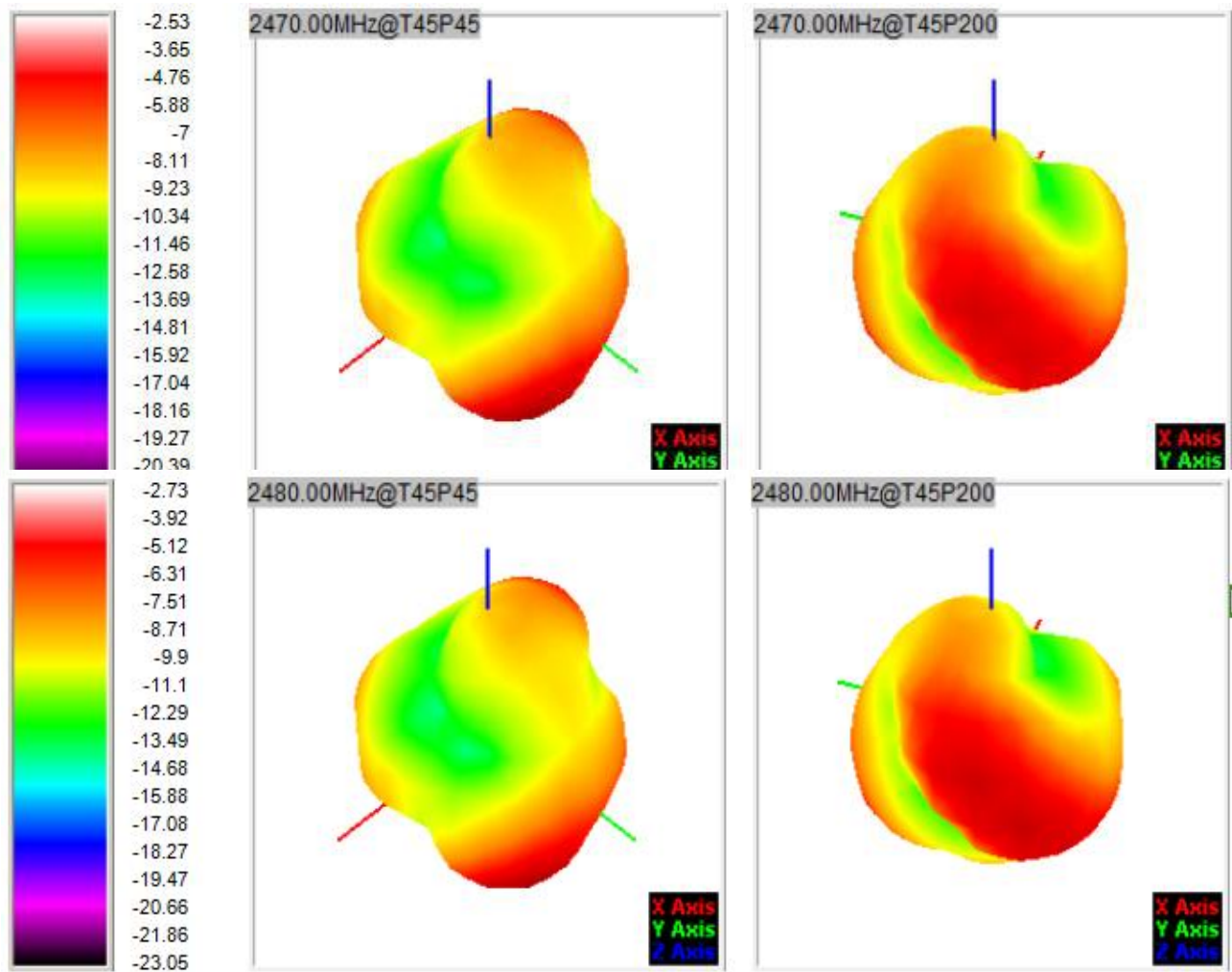


X Axis
Y Axis
Z Axis

2460.00MHz@T45P200



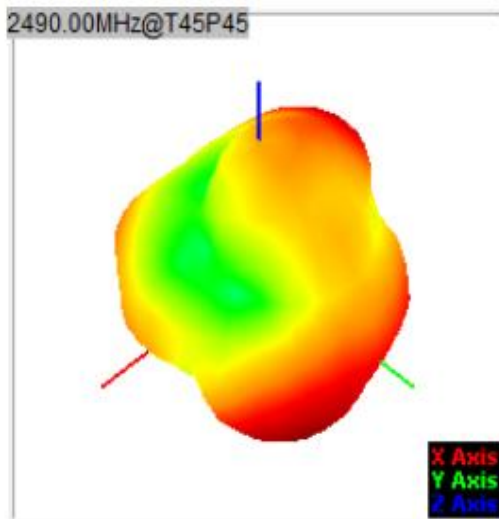
X Axis
Y Axis
Z Axis





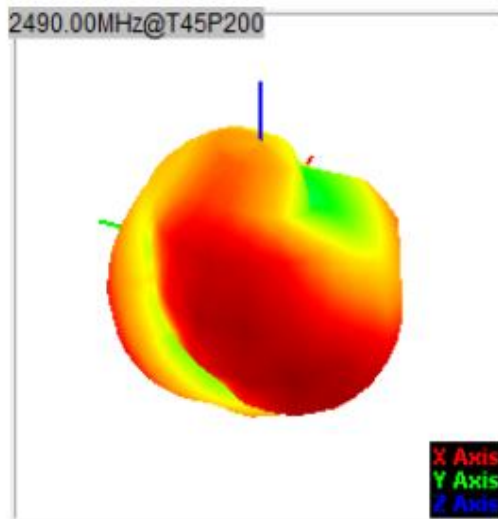
-3.08
-4.41
-5.74
-7.07
-8.4
-9.73
-11.06
-12.4
-13.73
-15.06
-16.39
-17.72
-19.05
-20.38
-21.71
-23.04
-24.37
-25.7

2490.00MHz@T45P45

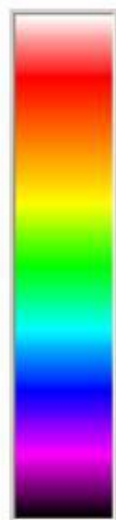


X Axis
Y Axis
Z Axis

2490.00MHz@T45P200

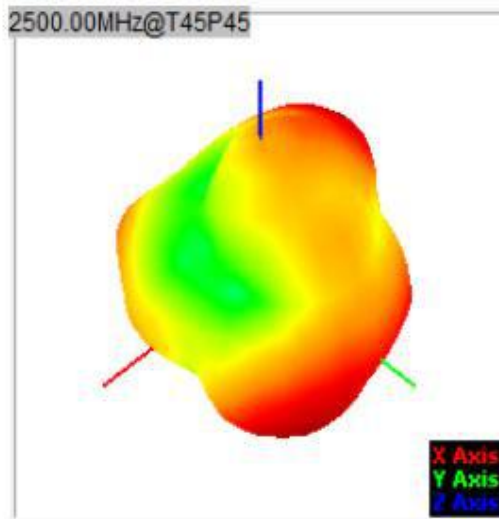


X Axis
Y Axis
Z Axis



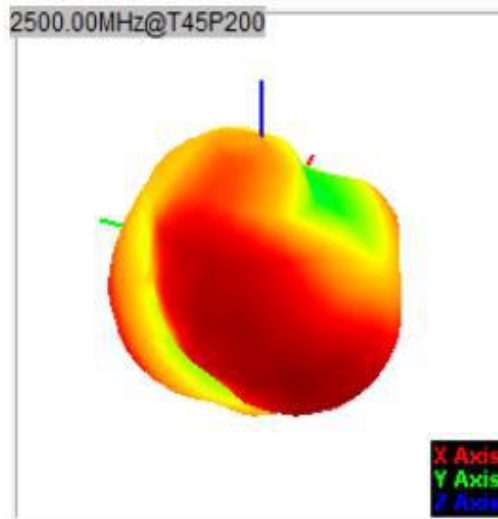
-3.07
-4.72
-6.37
-8.03
-9.68
-11.34
-12.99
-14.64
-16.3
-17.95
-19.61
-21.26
-22.91
-24.57
-26.22
-27.88
-29.53
-31.18

2500.00MHz@T45P45



X Axis
Y Axis
Z Axis

2500.00MHz@T45P200



X Axis
Y Axis
Z Axis