

Specification For Approval

DEWEIMA Antenna laboratory

ShenZhen R&D Center

Mobile communication terminal antenna

Customer: _____

Product Name: _____ 2.4G 3dB Antenna

Customer P/N: _____ 31080500031

DEWEIMA Checked By:		DATE: 2022-10-05
Test	Check	Approved

Customer Approved By:		DATE: 2022-10-15
Test	Check	Approved

Address: Floor 3, Building 1, Friendship Building, District 23, Chuangye Second Road, Bao 'an, Shenzhen

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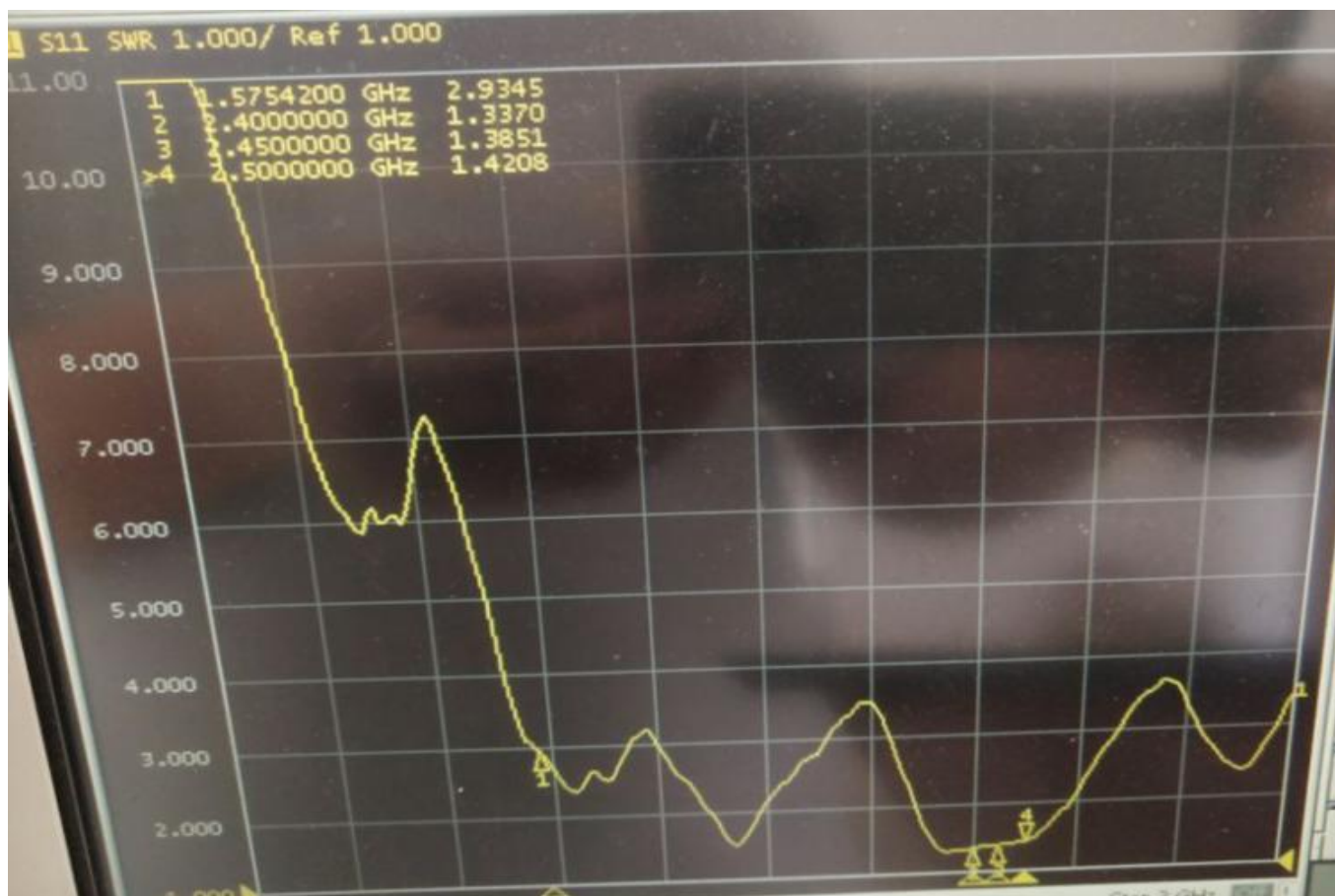
<http://www.hqdwm.com/>

1. Specification

A. Electrical Characteristics	
Frequency	2400~ 2500MHz
S.W.R.	<2.0
Antenna Gain	5.05 dBi
Polarization	Linear
Impedance	50 ohm
Connector Type	SMA Female
Operation Temperature	- 30°C ~ + 85 °C
Storage Temperature	- 30°C ~ + 85 °C

2. Antenna electrical performance parameters

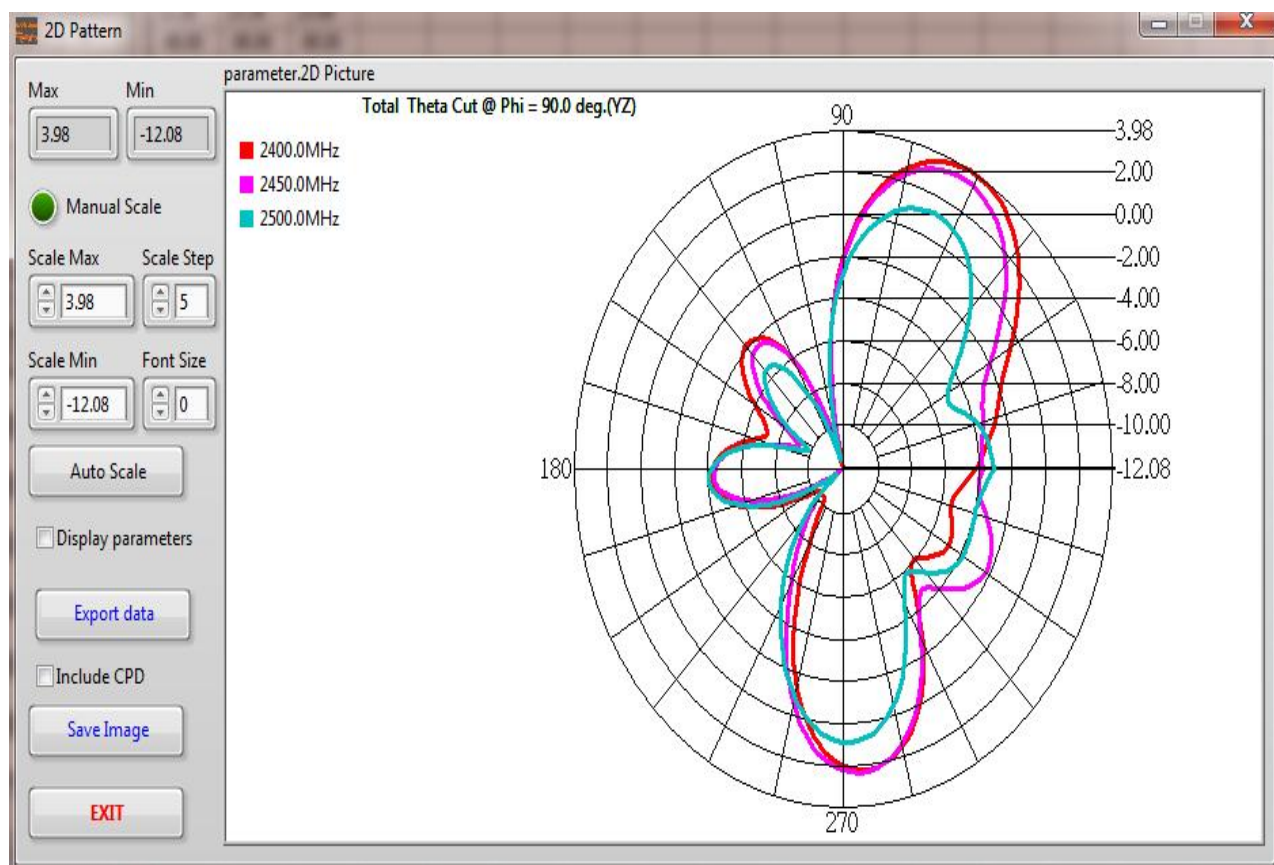
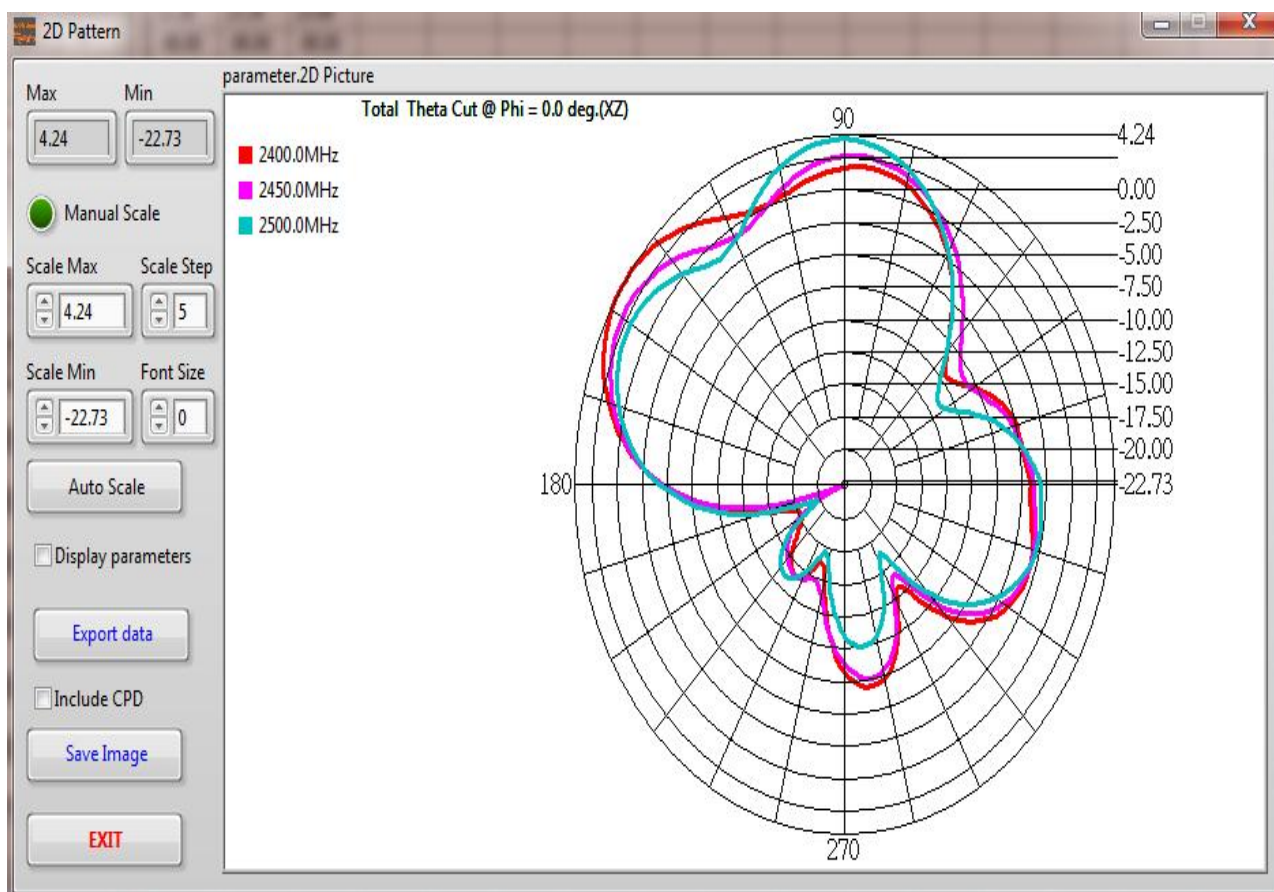
2.1 VSWR

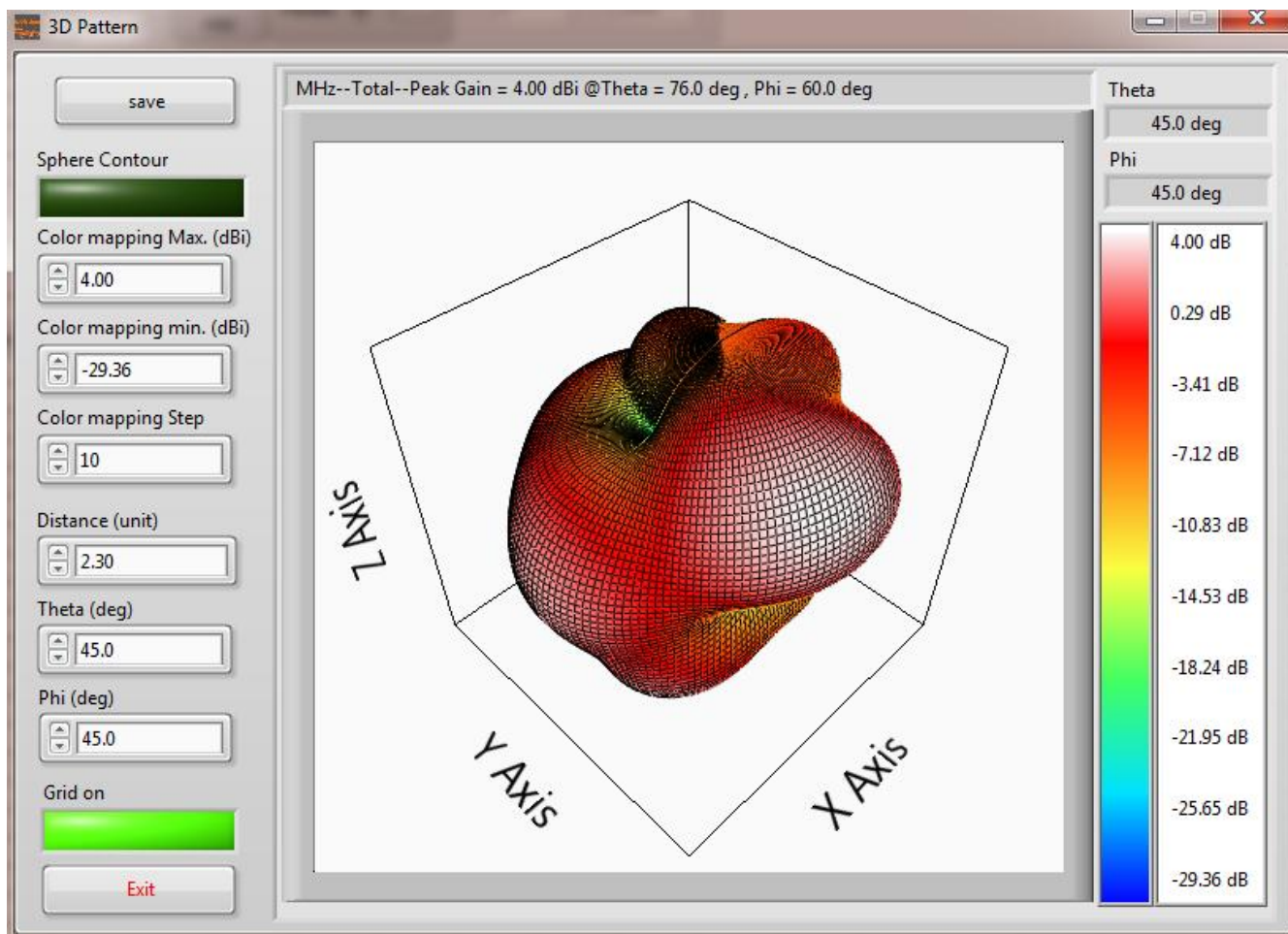


2.2 Efficiency and Gain

Frequency(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Peak Gain(dBi)	5.05	4.78	4.55	4.40	4.29	4.00	4.09	3.59	3.53	3.92	3.91
Directivity(dBi)	7.14	6.61	6.58	6.43	6.31	6.35	6.41	6.17	6.36	6.72	6.97
Average Gain(dBi)	-2.09	-1.83	-2.03	-2.03	-2.02	-2.35	-2.31	-2.58	-2.83	-2.80	-3.06
Efficiency(%)	61.81	65.59	62.70	62.67	62.83	58.26	58.71	55.23	52.16	52.44	49.42
Upper HEM . EIRP(dB)	-4.66	-4.28	-4.47	-4.37	-4.37	-4.64	-4.59	-4.92	-5.25	-5.36	-5.79
Lower HEM . EIRP(dB)	-5.59	-5.48	-5.69	-5.83	-5.80	-6.22	-6.21	-6.38	-6.52	-6.32	-6.37
Upper HEM . EIRP(%)	34.19	37.30	35.73	36.56	36.53	34.35	34.78	32.20	29.88	29.09	26.34
Lower HEM . EIRP(%)	27.62	28.28	26.98	26.11	26.30	23.90	23.93	23.03	22.28	23.34	23.08
Peak Gain @ Theta(degree)	140.00	140.00	140.00	58.00	58.00	60.00	60.00	60.00	-88.00	-90.00	-90.00
Peak Gain @ Phi(degree)	20.00	20.00	22.00	76.00	76.00	76.00	76.00	76.00	176.00	178.00	178.00
Null @ Phi(degree)	-40.00	-40.00	-38.00	-154.00	-154.00	-156.00	158.00	108.00	-82.00	108.00	-82.00
Null @ Theta(degree)	132.00	134.00	140.00	52.00	56.00	50.00	178.00	166.00	34.00	166.00	32.00
Roundness @90degree	14.71	14.98	15.44	15.49	16.04	16.44	17.60	18.59	19.28	20.06	20.14
Roundness @60degree	17.30	18.86	20.20	20.41	18.44	17.90	17.49	17.13	18.11	17.90	18.85
Roundness @30degree	11.05	12.08	12.78	13.18	13.09	12.75	12.54	12.14	11.96	11.27	10.57

2.3 Antenna 2D and 3D polar diagram





3. Mechanical Drawing

See attached files

