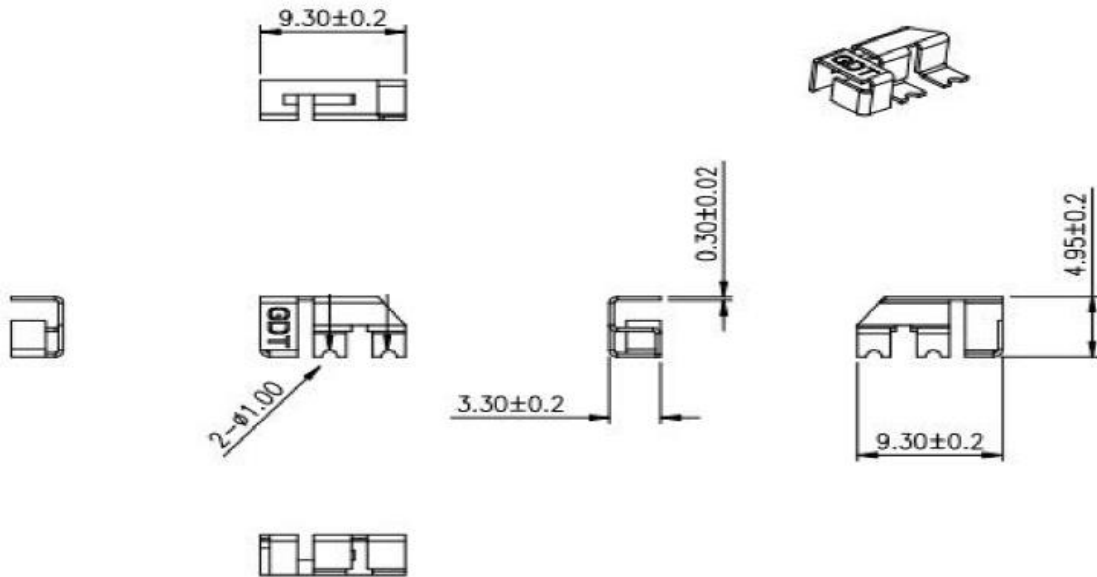


Antenna Specification

1. Antenna Describe

Antenna Manufacturer	Shenzhen Guandetong Electronic Co., Ltd.
Antenna Address	3rd Floor, Building D, Maoyuan Industrial Park, Huanguan South, Guanhu Street, Longhua District, Shenzhen China
Antenna Model	GDT-X50-2.4G-38
Antenna Type	SUS Antenna
Antenna Gain	2.5dBi Max
Frequency Rang	2400-2500MHz
VSWR	≤ 2
Input Impedance	50 Ω

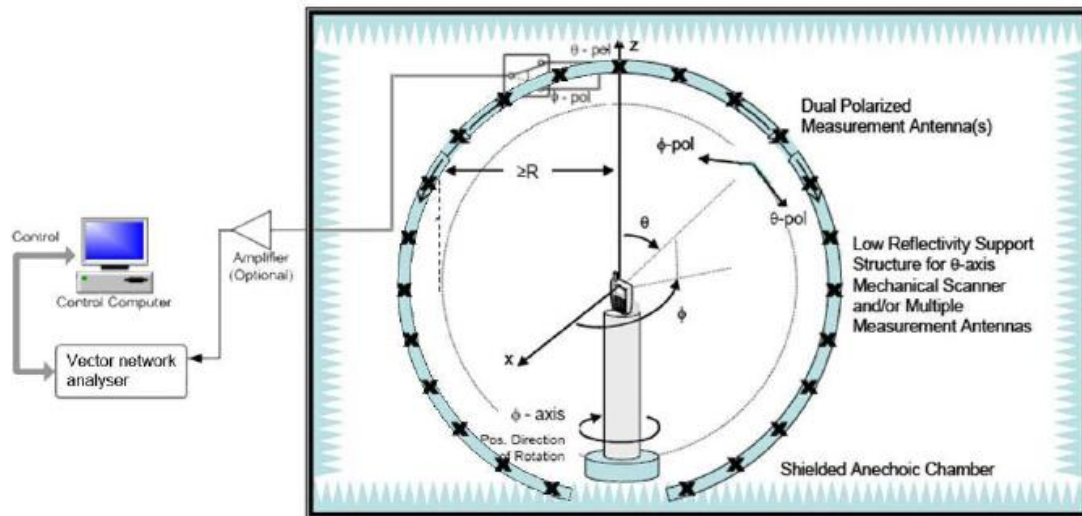
2. External View Drawing



Unit: mm

3. Measurement Result

3.1 Test Setup



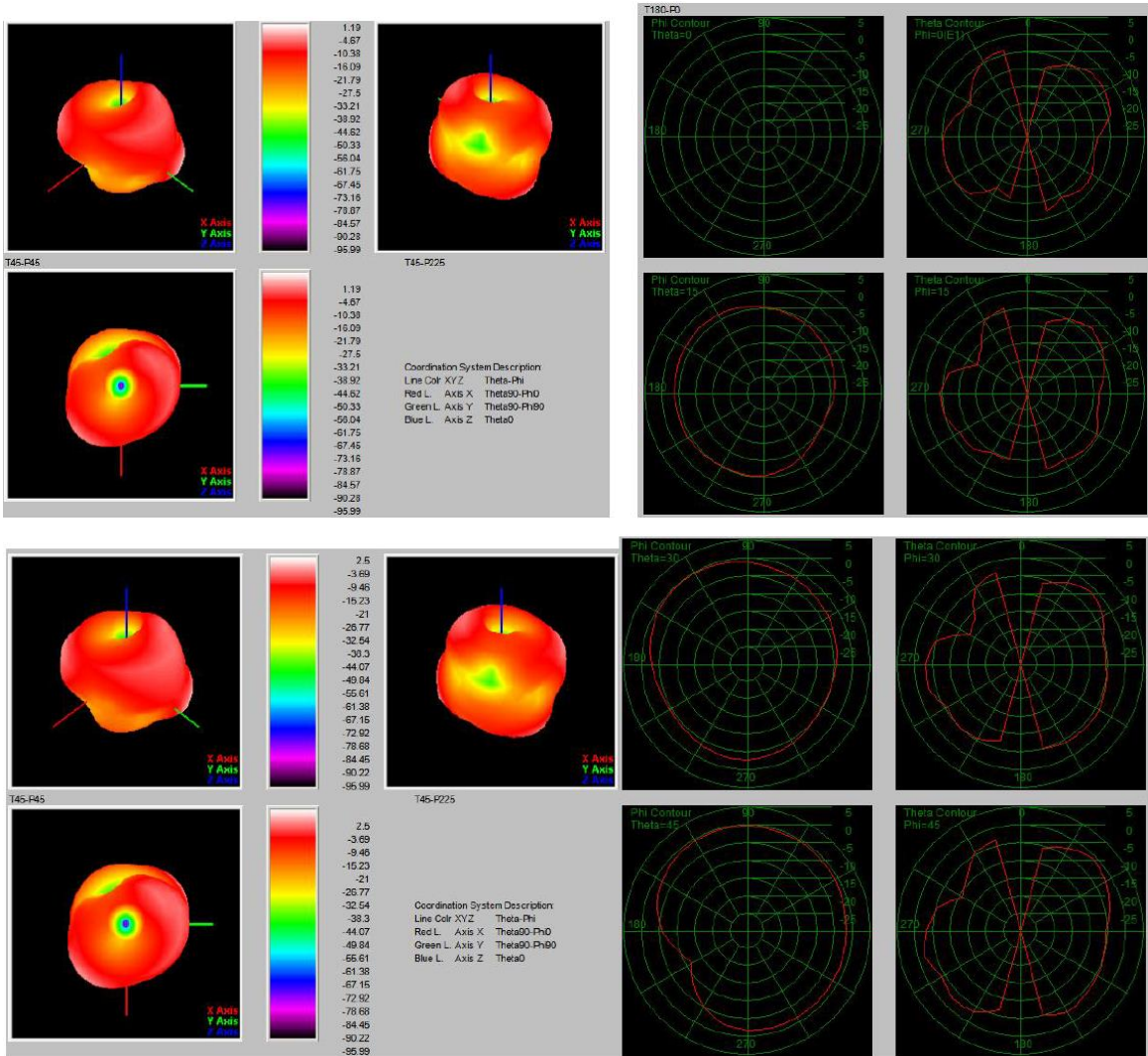
3.2 S11 Parameter

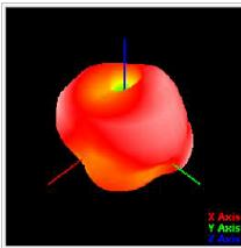


3.3 Antenna test data

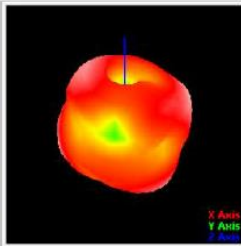
FETUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-4.57	-4.83	-5.18	-5.14	-5.56	-6.13	-6.65	-6.92	-7.10	-7.39	-7.59
Peak EIRP (dBm)	1.19	1.26	1.26	1.55	2.20	2.50	2.10	2.16	1.78	1.20	1.63
Directivity (dBi)	4.77	5.09	5.44	5.69	5.76	5.88	5.98	5.76	5.32	5.19	4.96
Efficiency (dB)	-4.57	-4.83	-5.18	-5.14	-5.56	-6.13	-6.65	-6.92	-7.10	-7.39	-7.59
Efficiency (%)	34.90	32.90	30.30	30.70	27.80	34.40	31.60	30.30	39.50	38.20	37.40
Gain (dBi)	1.19	1.26	1.26	1.55	2.20	2.50	2.10	2.16	1.78	1.20	1.63
NHPRP $\pm \pi/4$ (dBm)	-5.24	-5.28	-5.39	-5.22	-5.73	-6.32	-6.85	-7.31	-7.85	-8.21	-8.47
NHPRP $\pm \pi/6$ (dBm)	-6.56	-6.60	-6.73	-6.57	-7.10	-7.70	-8.24	-8.71	-9.26	-9.64	-9.91
NHPRP $\pm \pi/8$ (dBm)	-7.56	-7.59	-7.72	-7.57	-8.11	-8.71	-9.26	-9.75	-10.32	-10.72	-11.01
Upper Hem. PRP (dBm)	-9.50	-9.73	-10.03	-9.96	-10.39	-10.93	-11.41	-11.52	-11.47	-11.43	-11.27
Lower Hem. PRP (dBm)	-6.26	-6.53	-6.90	-6.87	-7.29	-7.87	-8.42	-8.77	-9.07	-9.57	-10.03
Upper Hem. PRP (%)	11.22	10.65	9.93	10.09	9.13	8.07	7.23	7.05	7.13	7.19	7.47
Lower Hem. PRP (%)	23.67	22.25	20.40	20.56	18.68	16.33	14.38	13.28	12.38	11.03	9.93

3.4 Antenna test diagram

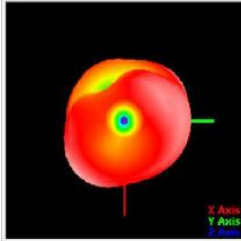




1.63
-3.9
-9.66
-16.41
-21.17
-26.92
-32.68
-38.44
-44.19
-49.95
-55.7
-61.46
-67.21
-72.97
-78.72
-84.48
-90.23
-95.99



T45-P45



1.63
-3.9
-9.66
-16.41
-21.17
-26.92
-32.68
-38.44
-44.19
-49.95
-55.7
-61.46
-67.21
-72.97
-78.72
-84.48
-90.23
-95.99

T45-P225

Coordination System Description:
Line Color XYZ Theta-Phi
Red L Axis X Theta90-Phi0
Green L Axis Y Theta90-Phi90
Blue L Axis Z Theta0

