



Shenzhen Qianmu Communication Technology Co.,Ltd.

Manufacturer	Shenzhen Qianmu Communication Technology Co.,Ltd
Address	No. 410, Building D2, Luogang Agile Plaza, Shui West Road, Science City, Huangpu District, Guangzhou
Model	OA-W01
Antenna type	Internal antenna



1. Test equipment and conditions:

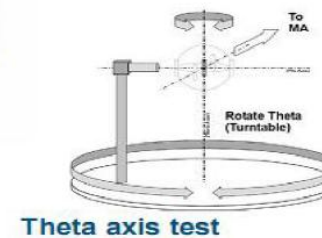
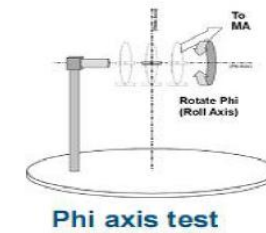
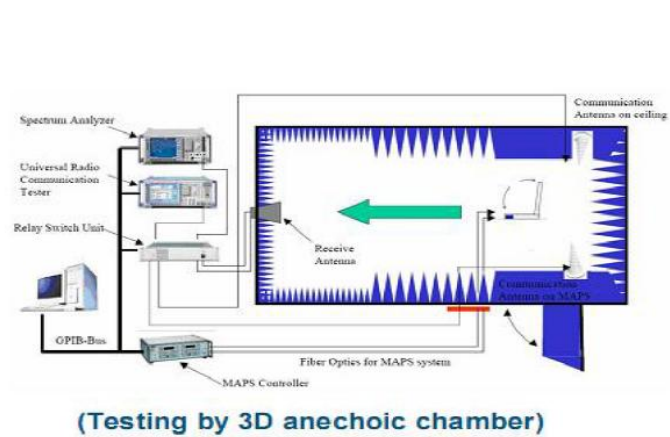
1.1. Network Analyzer

Agilent 8753D Agilent 5071B

1.2. Communication test equipment

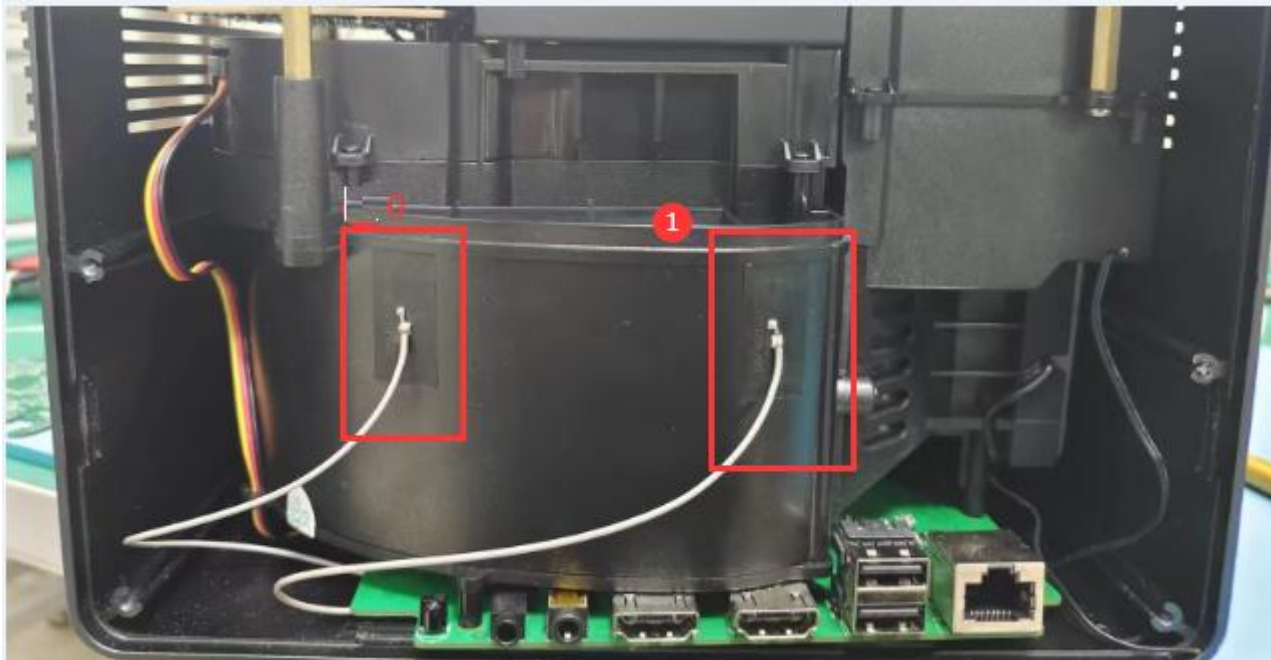
Agilent E5515C R&S CMW500

1.3. Test system





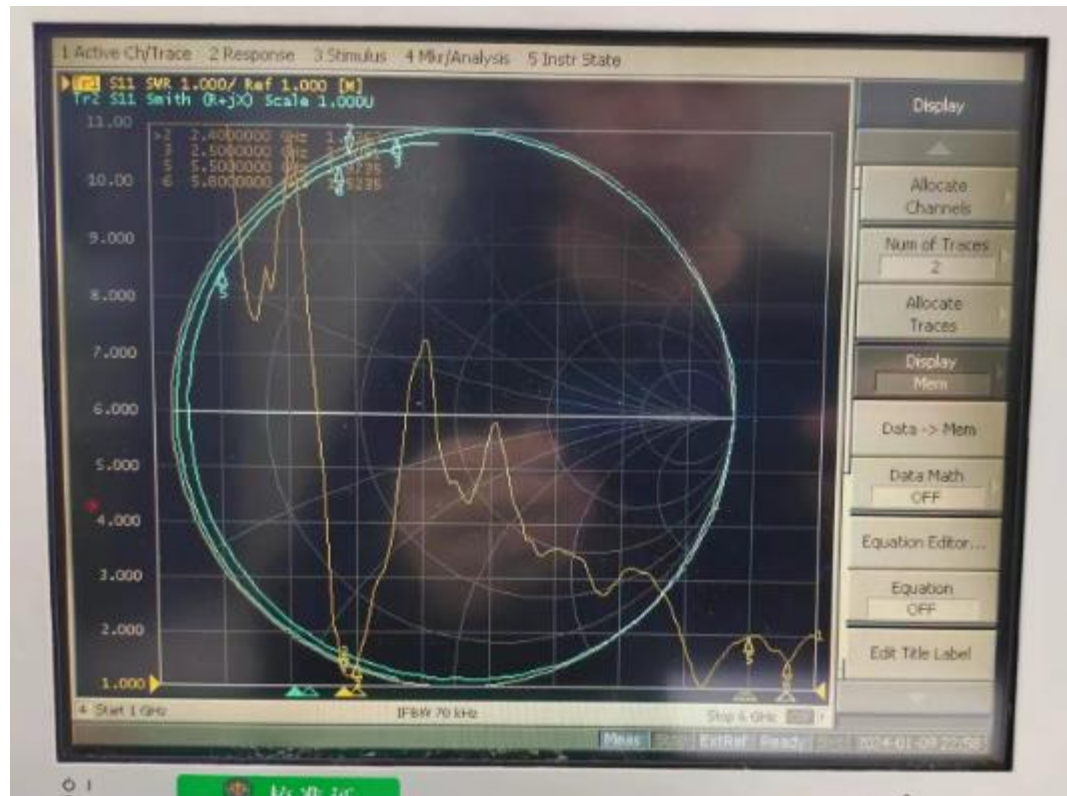
Antenna placement position





2. 0#Antenna Standing wave ratio

0#





2.4G Efficiency

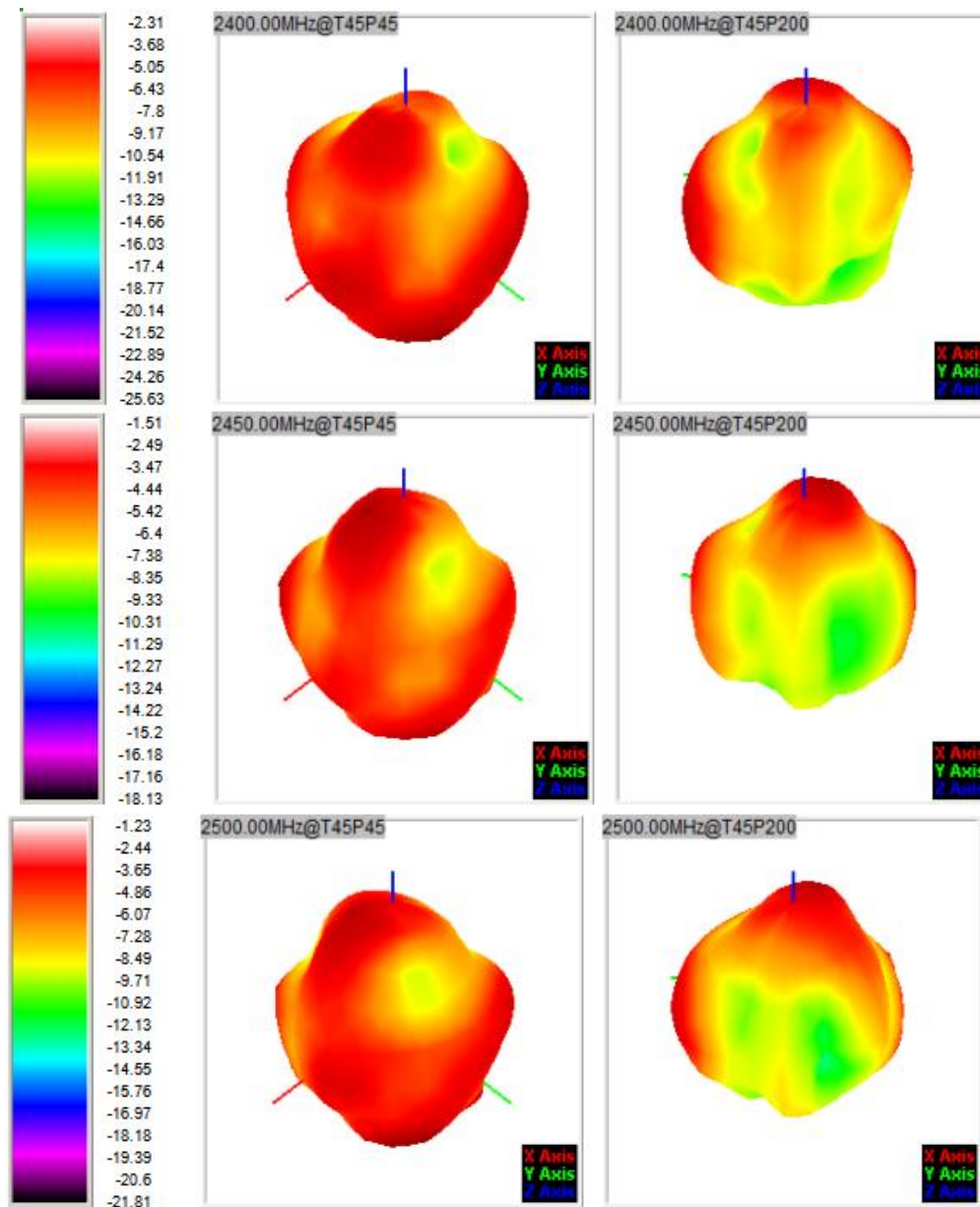
0#

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)	-6.99	-6.89	-6.71	-6.71	-6.58	-6.53	-6.36	-6.34	-6.32	-6.26	-6.21
Peak EIRP (dBm)	-2.31	-2.38	-2.49	-1.88	-1.52	-1.51	-1.63	-1.53	-1.34	-1.22	-1.23
Directivity (dBi)	4.68	4.51	4.22	4.83	5.06	5.02	4.73	4.81	4.98	5.04	4.98
Efficiency (dB)	-6.99	-6.89	-6.71	-6.71	-6.58	-6.53	-6.36	-6.34	-6.32	-6.26	-6.21
Efficiency (%)	20.00	20.50	21.30	21.30	22.00	22.20	23.10	23.20	23.30	23.60	23.90
Gain (dBi)	-2.31	-2.38	-2.49	-1.88	-1.52	-1.51	-1.63	-1.53	-1.34	-1.22	-1.23
NHPRP $\pm\pi/4$ (dBm)	-8.25	-8.16	-8.00	-8.02	-7.91	-7.87	-7.70	-7.67	-7.65	-7.60	-7.57
NHPRP $\pm\pi/6$ (dBm)	-9.53	-9.36	-9.14	-9.12	-9.04	-9.04	-8.90	-8.89	-8.89	-8.84	-8.81
NHPRP $\pm\pi/8$ (dBm)	-10.52	-10.30	-10.03	-10.00	-9.93	-9.97	-9.87	-9.88	-9.88	-9.82	-9.79
Upper Hem. PRP (dBm)	-9.59	-9.42	-9.18	-9.15	-9.07	-9.06	-8.97	-8.99	-9.00	-8.96	-8.89
Lower Hem. PRP (dBm)	-10.47	-10.44	-10.35	-10.37	-10.19	-10.07	-9.81	-9.74	-9.70	-9.61	-9.57
Upper Hem. PRP (%)	11.00	11.44	12.09	12.15	12.39	12.40	12.67	12.61	12.59	12.70	12.90
Lower Hem. PRP (%)	8.98	9.03	9.22	9.19	9.58	9.84	10.44	10.61	10.72	10.94	11.04



2.4G Directivity diagram

0#





Standing wave ratio:

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mix/Analysis 5 Instr State

► [F2] S11 SWR 1.000/ Ref 1.000 [W]
Tr2 S11 Smith (R+jX) Scale 1.000U

11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000

2.400000 GHz 1.000000
2.500000 GHz 1.000000
2.600000 GHz 1.000000
2.700000 GHz 1.000000
2.800000 GHz 1.000000

4 Scan 1 GHz IFBW 70 kHz Step 6 GHz

Menu [F1] ExtRef Ready 2024-01-09 22:59

Display
Allocate Channels
Num of Traces 2
Allocate Traces
Display Mem
Data -> Mem
Data Math OFF
Equation Editor...
Equation OFF
Edit Title Label



2.4G Efficiency

1#

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)	-6.50	-6.35	-6.18	-6.24	-6.16	-5.88	-5.70	-5.70	-5.72	-5.62	-5.51
Peak EIRP (dBm)	-0.54	-0.55	-0.25	-0.10	0.17	0.59	0.52	0.40	0.45	0.94	1.41
Directivity (dBi)	5.96	5.80	5.93	6.14	6.33	6.47	6.21	6.10	6.17	6.56	6.92
Efficiency (dB)	-6.50	-6.35	-6.18	-6.24	-6.16	-5.88	-5.70	-5.70	-5.72	-5.62	-5.51
Efficiency (%)	22.40	23.20	24.10	23.80	24.20	25.80	26.90	26.90	26.80	27.40	28.10
Gain (dBi)	-0.54	-0.55	-0.25	-0.10	0.17	0.59	0.52	0.40	0.45	0.94	1.41
NHPRP $\pm\pi/4$ (dBm)	-8.86	-8.74	-8.63	-8.77	-8.67	-8.33	-8.16	-8.10	-8.16	-8.14	-8.13
NHPRP $\pm\pi/6$ (dBm)	-11.06	-10.99	-10.90	-11.04	-10.92	-10.46	-10.25	-10.13	-10.21	-10.20	-10.18
NHPRP $\pm\pi/8$ (dBm)	-12.74	-12.71	-12.64	-12.79	-12.68	-12.09	-11.81	-11.63	-11.71	-11.69	-11.66
Upper Hem. PRP (dBm)	-7.41	-7.25	-7.08	-7.15	-7.09	-6.85	-6.70	-6.72	-6.76	-6.65	-6.49
Lower Hem. PRP (dBm)	-13.73	-13.63	-13.44	-13.45	-13.29	-12.83	-12.53	-12.49	-12.42	-12.39	-12.44
Upper Hem. PRP (%)	18.17	18.85	19.60	19.26	19.54	20.63	21.36	21.28	21.08	21.62	22.42
Lower Hem. PRP (%)	4.23	4.34	4.52	4.52	4.69	5.21	5.58	5.64	5.73	5.77	5.70

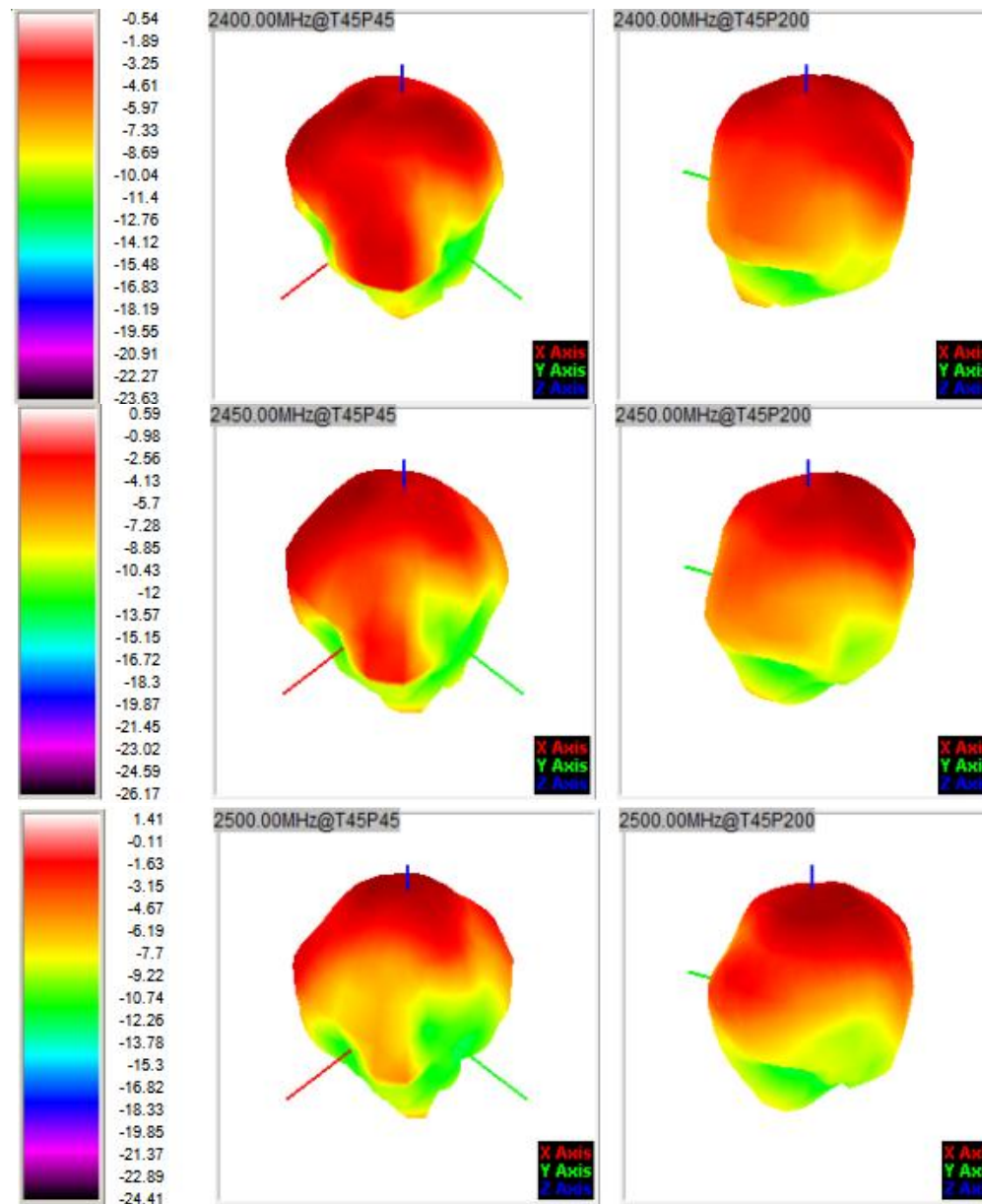


5G Efficiency 1#

FEITUKEJI															
Frequency ID	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
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	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-6.25	-6.31	-6.29	-6.25	-6.71	-6.82	-6.63	-6.55	-6.28	-6.15	-6.30	-6.38	-6.38	-6.72	-7.08
Peak EIRP (dBm)	1.08	1.17	0.75	0.46	0.62	0.93	1.36	1.53	1.92	2.01	2.39	2.34	1.77	0.93	-0.06
Directivity (dBi)	7.33	7.48	7.05	6.71	7.33	7.75	7.99	8.08	8.20	8.16	8.69	8.72	8.15	7.65	7.01
Efficiency (dB)	-6.25	-6.31	-6.29	-6.25	-6.71	-6.82	-6.63	-6.55	-6.28	-6.15	-6.30	-6.38	-6.38	-6.72	-7.08
Efficiency (%)	23.70	23.40	23.50	23.70	21.30	20.80	21.70	22.10	23.50	24.30	23.40	23.00	23.00	21.30	19.60
Gain (dBi)	1.08	1.17	0.75	0.46	0.62	0.93	1.36	1.53	1.92	2.01	2.39	2.34	1.77	0.93	-0.06
NHPRP $\pm\pi/4$ (dBm)	-7.87	-7.94	-7.93	-7.88	-8.38	-8.53	-8.27	-8.26	-8.00	-7.75	-7.96	-8.09	-8.17	-8.50	-8.76
NHPRP $\pm\pi/6$ (dBm)	-9.59	-9.69	-9.69	-9.61	-10.20	-10.39	-9.98	-10.03	-9.81	-9.44	-9.73	-9.89	-9.98	-10.29	-10.45
NHPRP $\pm\pi/8$ (dBm)	-11.08	-11.21	-11.20	-11.04	-11.68	-11.97	-11.42	-11.55	-11.38	-10.89	-11.24	-11.40	-11.39	-11.61	-11.64
Upper Hem. PRP (dBm)	-9.15	-8.92	-8.94	-8.87	-9.13	-9.30	-9.22	-8.99	-8.75	-8.60	-8.56	-8.63	-8.73	-8.99	-9.43
Lower Hem. PRP (dBm)	-9.38	-9.76	-9.70	-9.69	-10.40	-10.43	-10.11	-10.22	-9.91	-9.80	-10.22	-10.31	-10.17	-10.62	-10.85
Upper Hem. PRP (%)	12.17	12.83	12.75	12.97	12.20	11.76	11.96	12.62	13.34	13.80	13.94	13.72	13.39	12.62	11.39
Lower Hem. PRP (%)	11.54	10.56	10.73	10.75	9.12	9.05	9.75	9.51	10.21	10.47	9.51	9.31	9.62	8.68	8.22

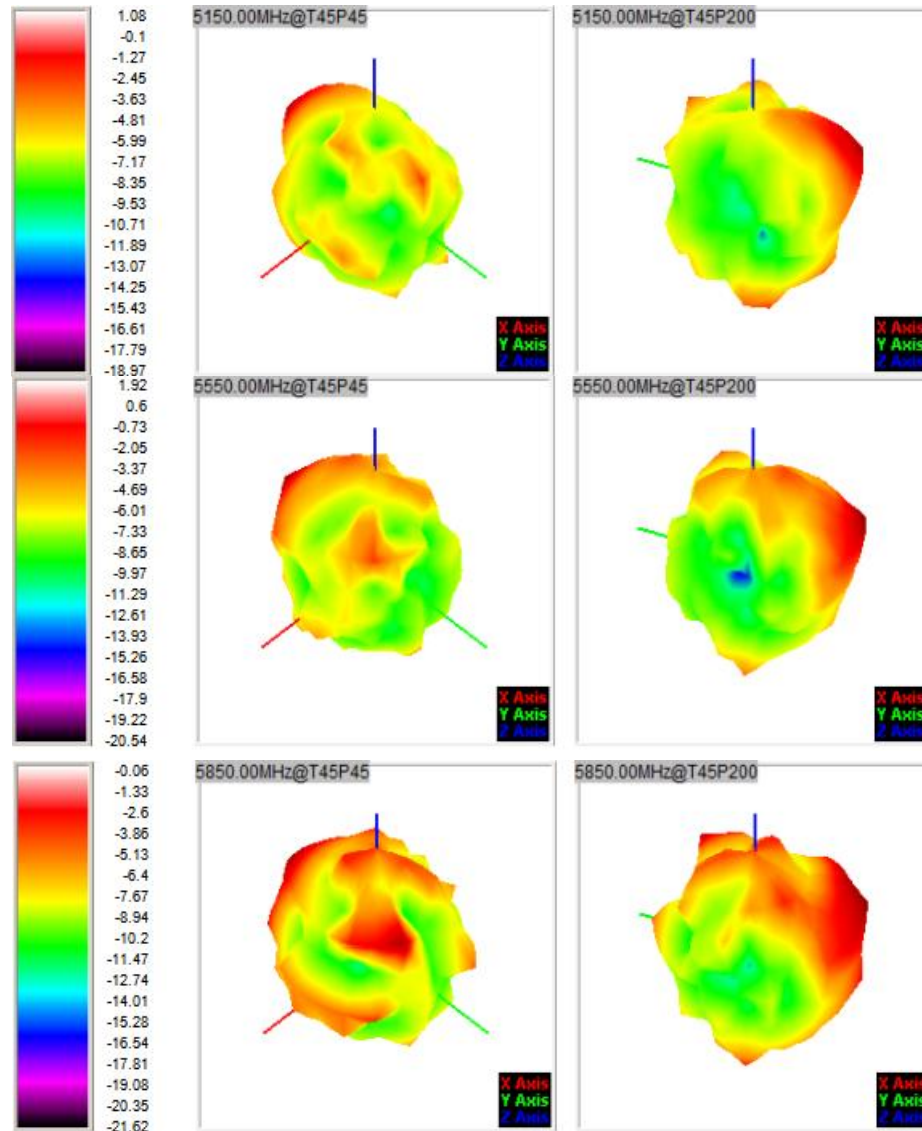


2.4G Directivity diagram



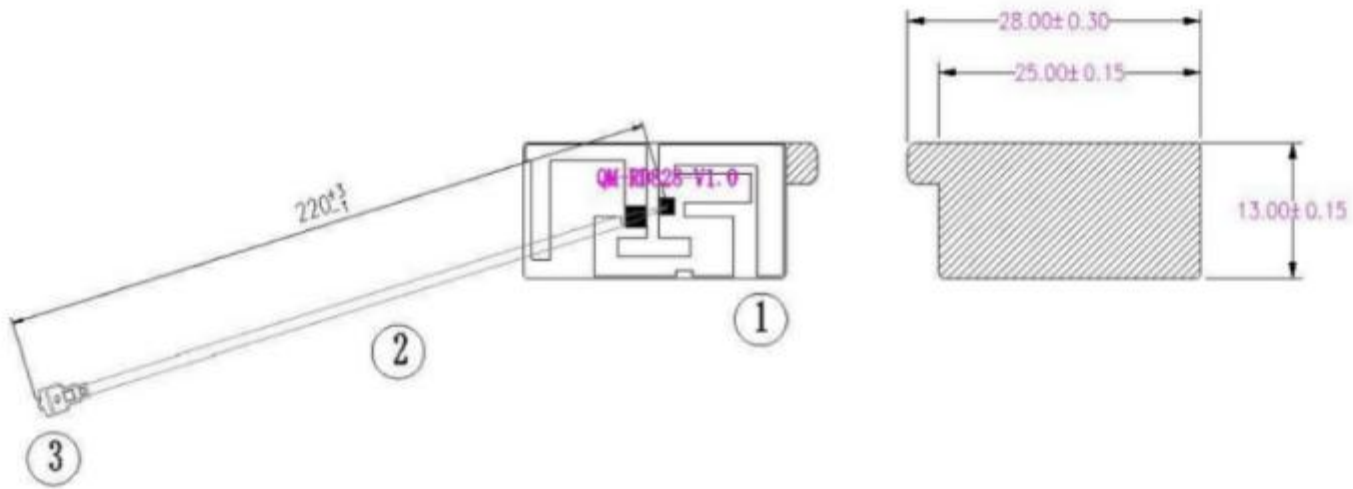


5G Directivity diagram





4. Antenna drawing: AN0





4. Antenna drawing: AN1

