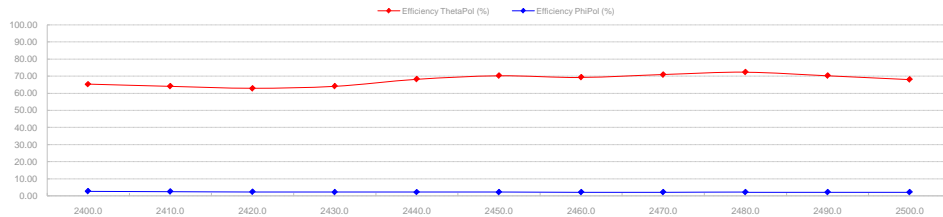
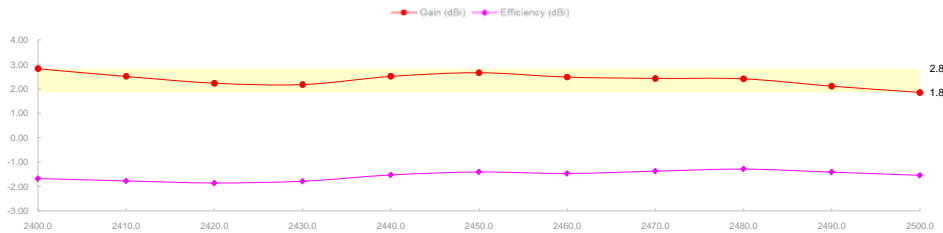
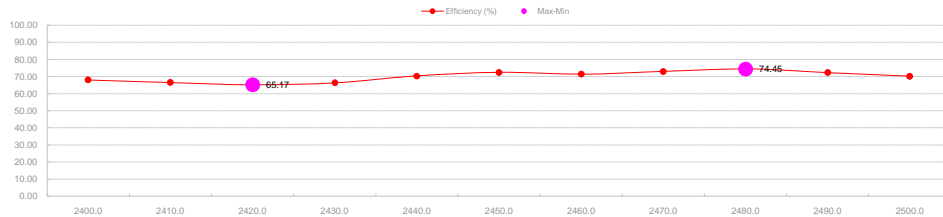
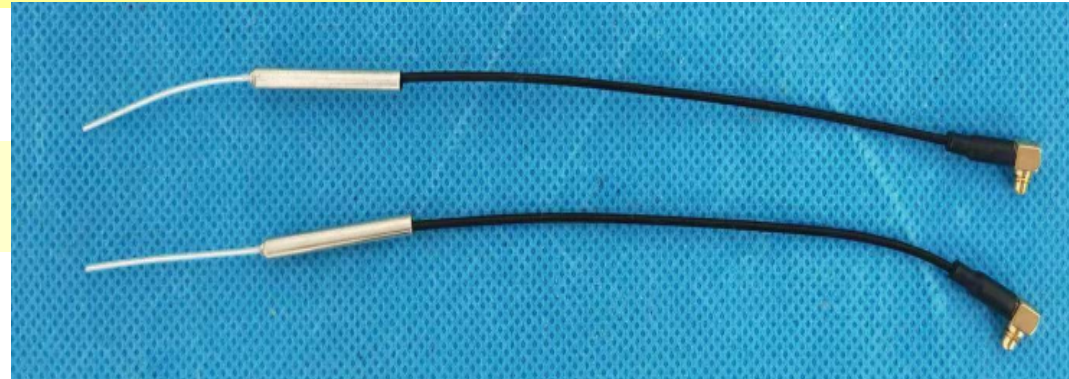


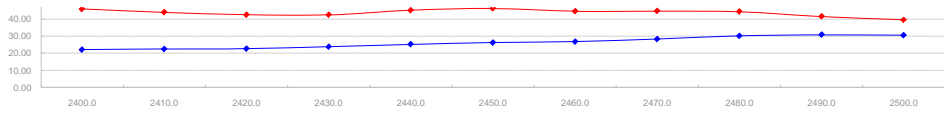
Manufacturer : Suzhou Cowin Antenna Electronics Co., Ltd  
 Address: No.156, Gangpuzhong Road, Zhangpu Town, Kunshan City, Jiangsu Province, China  
 215321

Model: 2.4G Copper Tube ANT

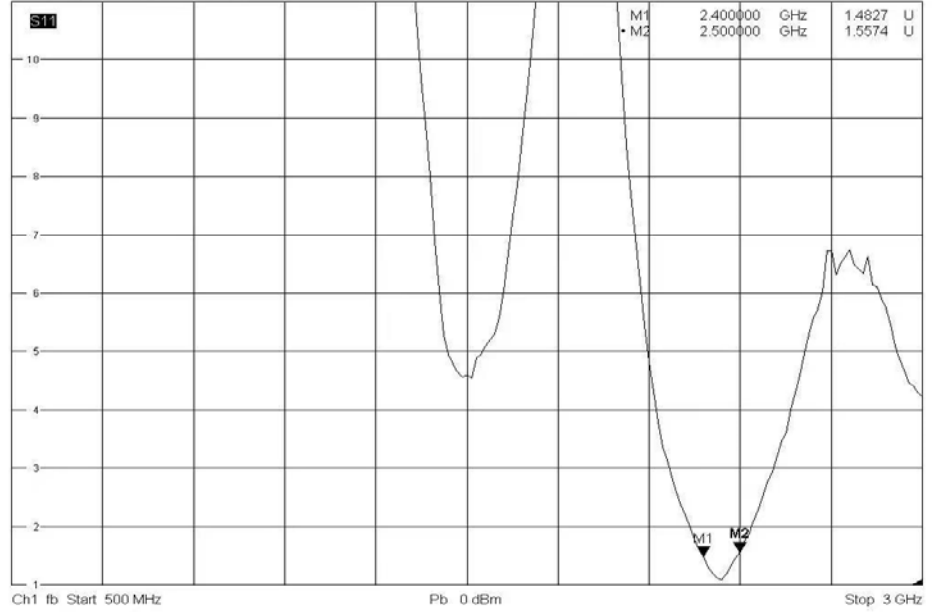
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-1.68	-1.77	-1.86	-1.79	-1.53	-1.40	-1.46	-1.37	-1.28	-1.41	-1.54
Gain (dBi)	2.83	2.51	2.23	2.17	2.51	2.66	2.48	2.43	2.41	2.11	1.85
Efficiency (%)	68.00	66.48	65.17	66.27	70.38	72.41	71.38	72.97	74.45	72.31	70.12
Directivity (dB)	4.51	4.28	4.09	3.96	4.04	4.07	3.95	3.80	3.69	3.52	3.39
Peak Gain Position (Theta)	58.00	59.00	58.00	58.00	58.00	58.00	59.00	60.00	69.00	90.00	91.00
Peak Gain Position (Phi)	171.00	176.00	170.00	166.00	163.00	163.00	169.00	178.00	231.00	172.00	175.00
Efficiency ThetaPol (%)	65.34	64.03	62.89	64.08	68.19	70.24	69.28	70.88	72.34	70.23	68.03
Efficiency PhiPol (%)	2.66	2.44	2.28	2.19	2.20	2.17	2.10	2.10	2.11	2.08	2.08
Upper Hem. Efficiency (%)	45.88	43.98	42.51	42.49	45.16	46.17	44.60	44.66	44.32	41.52	39.59
Lower Hem. Efficiency (%)	22.12	22.50	22.65	23.78	25.22	26.24	26.78	28.31	30.13	30.80	30.53
T90(H)	3.65	3.73	3.64	3.34	2.89	2.58	2.61	2.93	3.40	3.83	3.96
Gain 15deg (dBi)											
E1(XZ)	25.00	25.00	25.00	26.00	27.00	51.00	52.00	52.00	54.00	55.00	29.00
E1(XZ)	8.37	8.67	8.91	8.68	8.31	7.93	7.64	7.45	7.27	7.09	6.66
E2(YZ)	52.00	55.00	56.00	58.00	59.00	58.00	58.00	57.00	60.00	64.00	68.00
E2(YZ)	6.92	6.98	6.88	6.55	6.19	5.96	5.94	6.03	6.05	5.76	5.17
Axis ratio at maximum gain	22.52	24.63	23.22	23.18	23.35	23.69	25.88	31.84	21.38	23.75	25.00
Worst (largest) axis ratio at an elevation of 10 degrees (°)	93.62	91.22	100.36	60.66	60.37	61.98	95.93	75.01	74.53	79.86	64.80
Hc(XY)	302.00	296.00	298.00	316.00	360.00	360.00	360.00	360.00	311.00	283.00	275.00
Left-handed circular polarization efficiency (%)	1.60	1.53	1.51	1.51	1.53	1.54	1.48	1.33	1.22	1.22	1.33
Right-handed circular polarization efficiency (%)	32.11	31.50	30.99	31.74	34.04	35.16	34.69	35.60	36.46	35.39	34.34
Empty											

photo



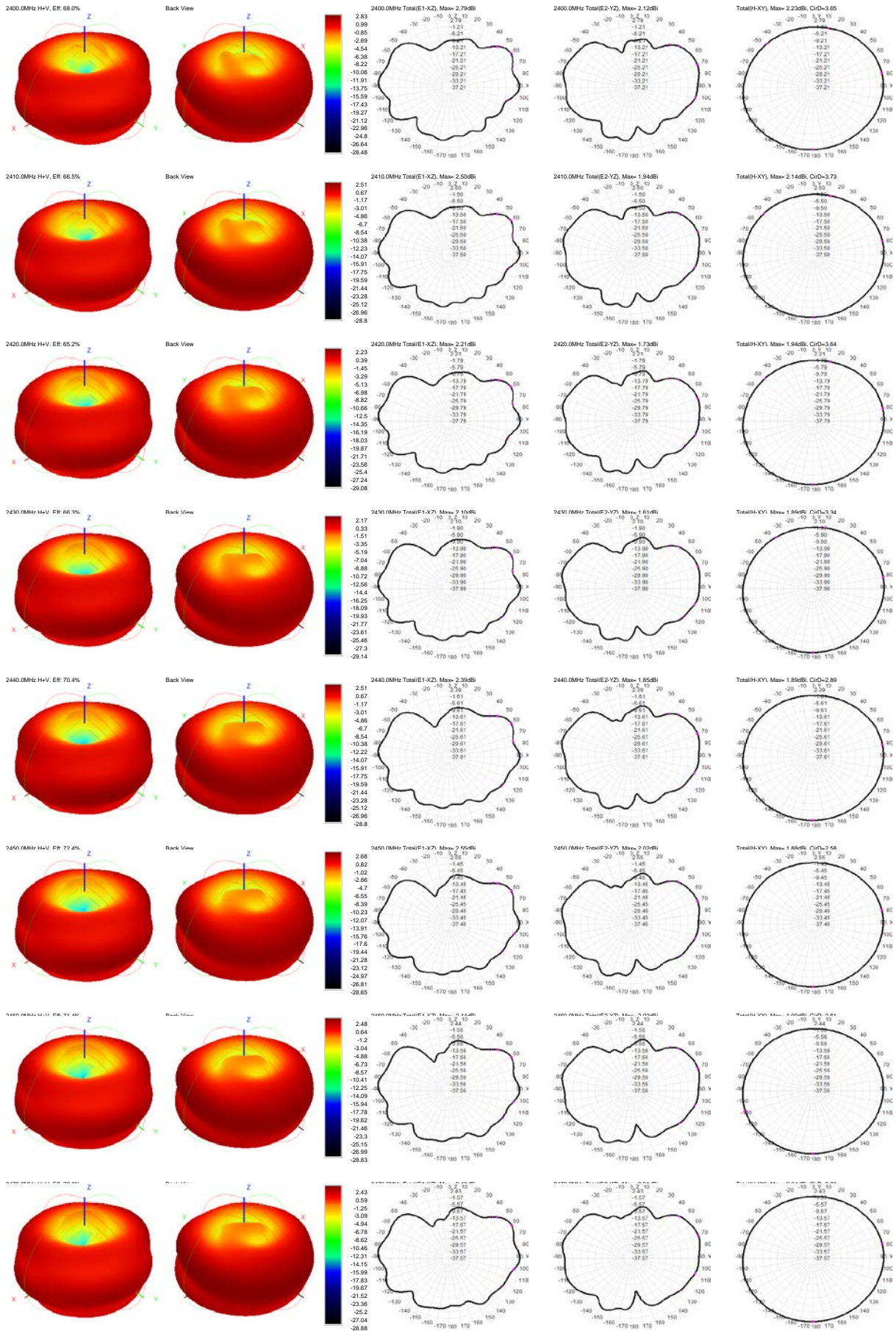


Trc1 S11 SWR 1 U / Ref 1 U Cal Int Offs 1

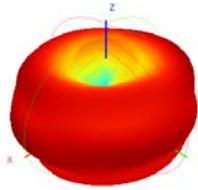


3/31/2023, 7:10 AM

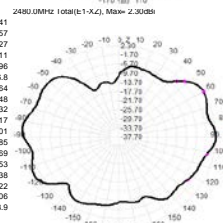
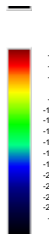
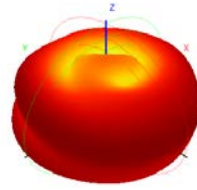




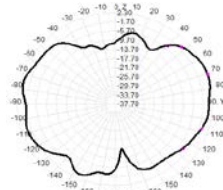
2490.0MHz HH-V, EIR: 74.5%



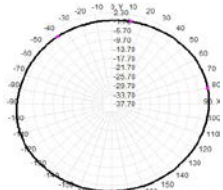
Back View



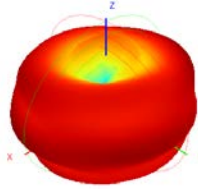
2490.0MHz Total(E1-XZ), Max= 2.30dB



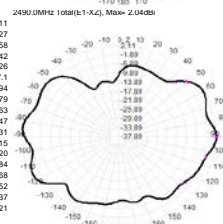
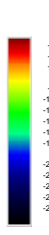
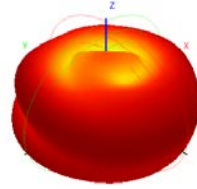
Total(H-XY), Max= 2.18dB, CirD=3.40



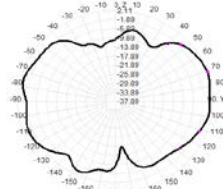
2490.0MHz HH-V, EIR: 72.3%



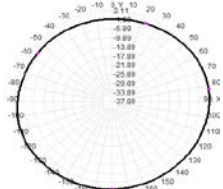
Back View



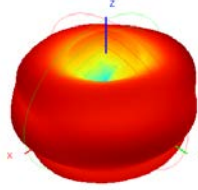
2490.0MHz Total(E2-YZ), Max= 1.84dB



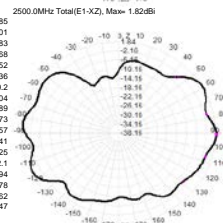
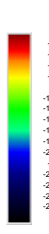
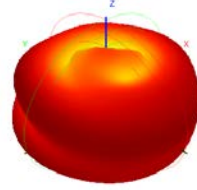
Total(H-XY), Max= 2.11dB, CirD=3.83



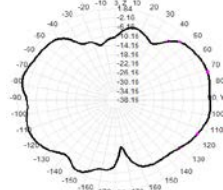
2500.0MHz HH-V, EIR: 70.1%



Back View



2500.0MHz Total(E2-YZ), Max= 1.44dB



Total(H-XY), Max= 1.84dB, CirD=3.96

