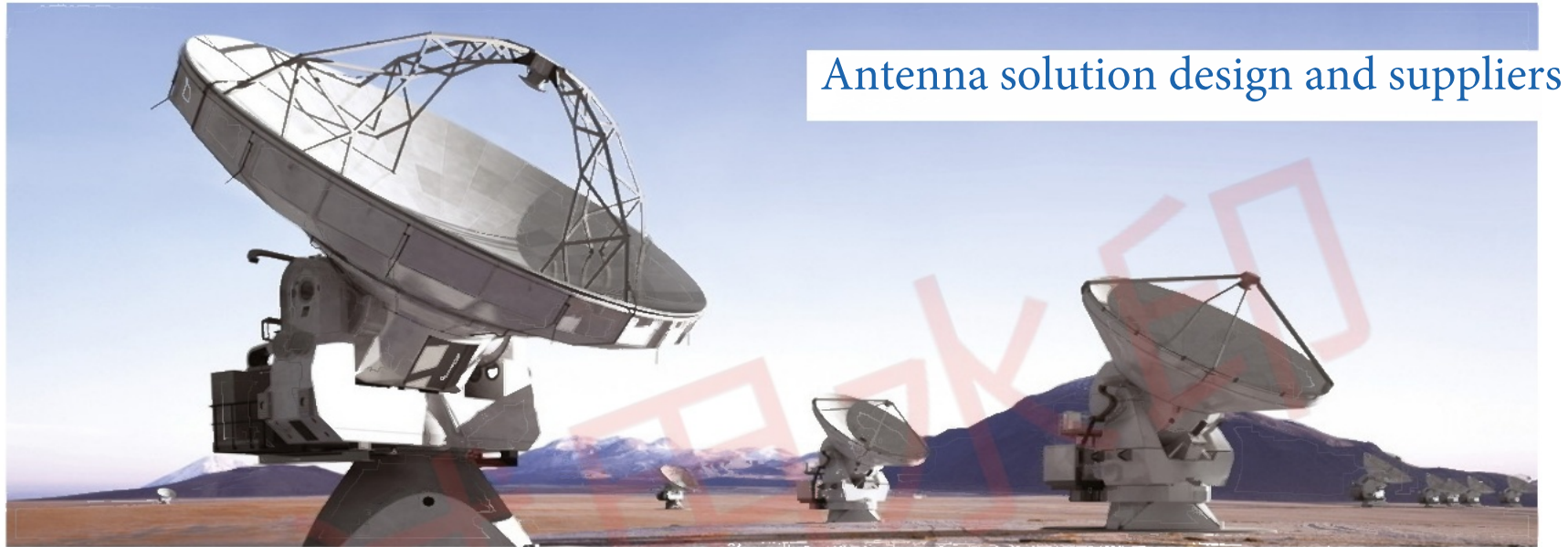


# Antenna Specification



Manufacturer:Shenzhen Sulang Technology Co.,ltd

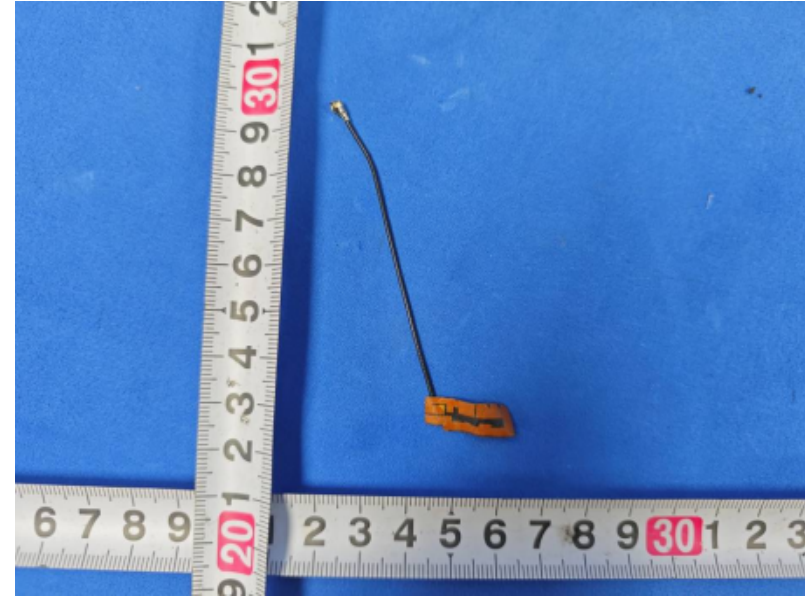
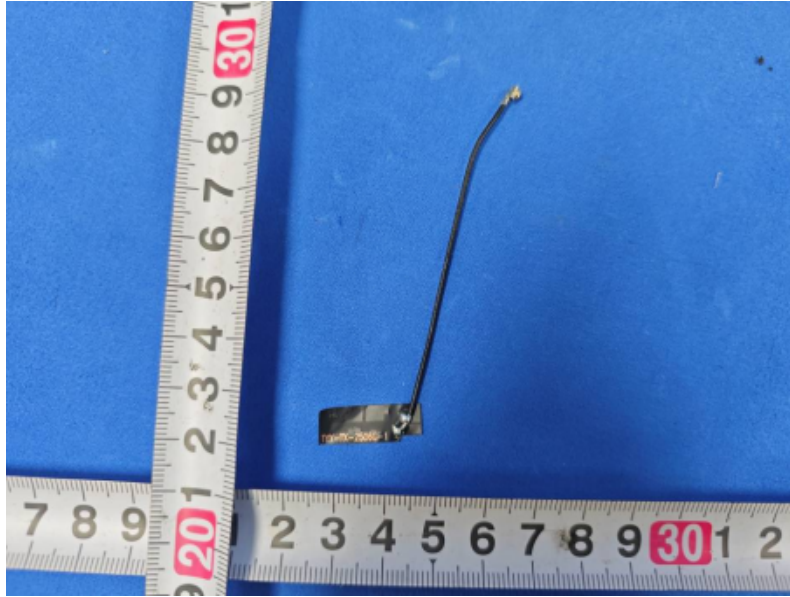
Manufacturer add.:Area C, 18th Floor, Building 12,Lehui Science and TechnologyInnovation Center, No.489 Jihua Road, Bantian Community,Longgang District,Shenzhen City, China.

## Test system

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



# Antenna Size





Efficiency & Gain

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Frequency (MHz)	2300.0	2310.0	2320.0	2330.0	2340.0	2350.0	2360.0	2370.0	2380.0	2390.0	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	2510.0	2520.0	2530.0	2540.0	2550.0	2560.0	2570.0	2580.0	2590.0	2600.0	
Efficiency (dBi)	-11.75	-11.55	-11.34	-9.98	-9.47	-9.57	-9.47	-8.94	-8.16	-7.40	-6.86	-6.55	-6.58	-5.89	-5.82	-5.70	-5.60	-5.71	-5.80	-5.96	-6.23	-6.11	-6.95	-7.29	-7.29	-7.60	-7.87	-8.84	-9.13	-9.76	-9.16	
Gain (dBi)	-7.14	-6.71	-6.75	-5.36	-4.86	-4.96	-4.68	-3.80	-3.09	-2.18	-1.86	-1.52	-1.49	-0.76	-0.45	-0.23	0.30	0.10	0.41	0.32	-0.24	0.14	-0.90	-1.07	-1.03	-1.53	-1.50	-2.52	-2.59	-3.35	-2.66	
Efficiency (%)	6.69	7.00	7.34	10.04	11.29	11.05	11.30	12.77	15.29	18.21	20.61	22.15	22.00	25.75	26.16	26.92	27.53	26.86	26.29	25.33	23.81	24.48	20.20	18.64	18.67	17.39	16.34	13.06	12.23	10.57	12.13	
Directivity (dB)	4.60	4.84	4.59	4.62	4.61	4.61	4.79	5.14	5.06	5.22	5.00	5.03	5.08	5.13	5.37	5.47	5.90	5.81	6.21	6.29	5.99	6.26	6.05	6.23	6.26	6.07	6.36	6.32	6.53	6.41	6.50	
Peak Gain Position (Theta)	150.00	150.00	150.00	45.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	
Peak Gain Position (Phi)	315.00	315.00	315.00	330.00	315.00	315.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	315.00	315.00	315.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	
Efficiency ThetaPol (%)	2.24	2.34	2.42	3.25	3.58	3.46	3.50	3.97	4.66	5.51	6.13	6.58	6.47	7.50	7.37	7.40	7.39	7.18	6.97	6.78	6.46	6.60	5.51	5.12	5.07	4.81	4.49	3.59	3.33	2.85	3.31	
Efficiency PhiPol (%)	4.45	4.66	4.92	6.80	7.70	7.59	7.79	8.81	10.62	12.69	14.48	15.58	15.52	18.25	18.80	19.52	20.14	19.68	19.32	18.55	17.36	17.88	14.68	13.53	13.60	12.58	11.85	9.48	8.90	7.72	8.81	
Upper Hem. Efficiency (%)	3.24	3.39	3.55	4.95	5.52	5.55	5.70	6.31	7.70	8.96	10.15	10.88	10.79	12.57	12.85	13.45	13.47	13.62	12.81	12.24	11.82	11.60	9.64	8.87	8.57	8.24	7.57	6.06	5.71	4.99	5.69	
Lower Hem. Efficiency (%)	3.45	3.62	3.79	5.09	5.76	5.49	5.60	6.46	7.59	9.25	10.46	11.28	11.21	13.18	13.31	13.46	14.06	13.24	13.48	13.09	11.99	12.88	10.55	9.78	10.10	9.15	8.76	7.00	6.52	5.57	6.44	
T90(H)圆度	14.25	16.46	16.42	17.70	17.40	18.23	18.76	19.65	19.86	23.22	20.73	22.93	26.28	25.24	21.65	20.05	19.31	18.45	20.28	22.67	24.09	22.56	20.88	19.70	21.42	23.55	23.37	22.44	19.05	16.82	16.02	
Gain 15deg (dBi)																																
E1(XZ)波瓣宽度	48.00	51.00	56.00	64.00	61.00	64.00	63.00	54.00	62.00	60.00	59.00	56.00	57.00	59.00	62.00	52.00	59.00	55.00	53.00	48.00	50.00	49.00	50.00	59.00	51.00	53.00	55.00	54.00	55.00	56.00		
E1(XZ)前后比	0.65	0.57	0.59	0.25	0.55	0.85	1.23	1.07	1.48	0.71	0.24	0.33	0.63	0.46	0.25	0.00	0.00	0.24	0.45	0.58	1.12	0.94	0.55	0.31	0.00	0.07	0.56	0.12	0.25	0.00	0.00	
E2(YZ)波瓣宽度	114.00	115.00	145.00	145.00	144.00	179.00	181.00	130.00	129.00	124.00	122.00	121.00	121.00	118.00	123.00	125.00	125.00	127.00	126.00	127.00	129.00	129.00	132.00	137.00	132.00	139.00	137.00	136.00	137.00	136.00	135.00	
E2(YZ)前后比	1.00	0.95	0.37	0.50	0.72	0.85	0.38	0.51	0.18	0.45	0.26	0.51	0.49	0.89	0.82	0.86	0.86	0.94	1.05	0.90	1.01	0.94	1.02	1.09	1.66	1.28	1.53	1.73	1.73	1.52	1.44	
最大增益处轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
顶点(Theta=0)处轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
仰角10度最差(大)轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
Hc(XY)波瓣宽度	77.00	79.00	77.00	75.00	75.00	74.00	73.00	72.00	70.00	72.00	74.00	71.00	70.00	68.00	67.00	66.00	65.00	64.00	66.00	64.00	63.00	66.00	66.00	64.00	64.00	65.00	63.00	64.00	62.00	60.00	59.00	
Hc(XY)前后比	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	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	0.00	
Empty																																

