



Product specifications acknowledgment

Manufacturer: Shenzhen Helixun Technology Co., LTD

Description: Main Antenna

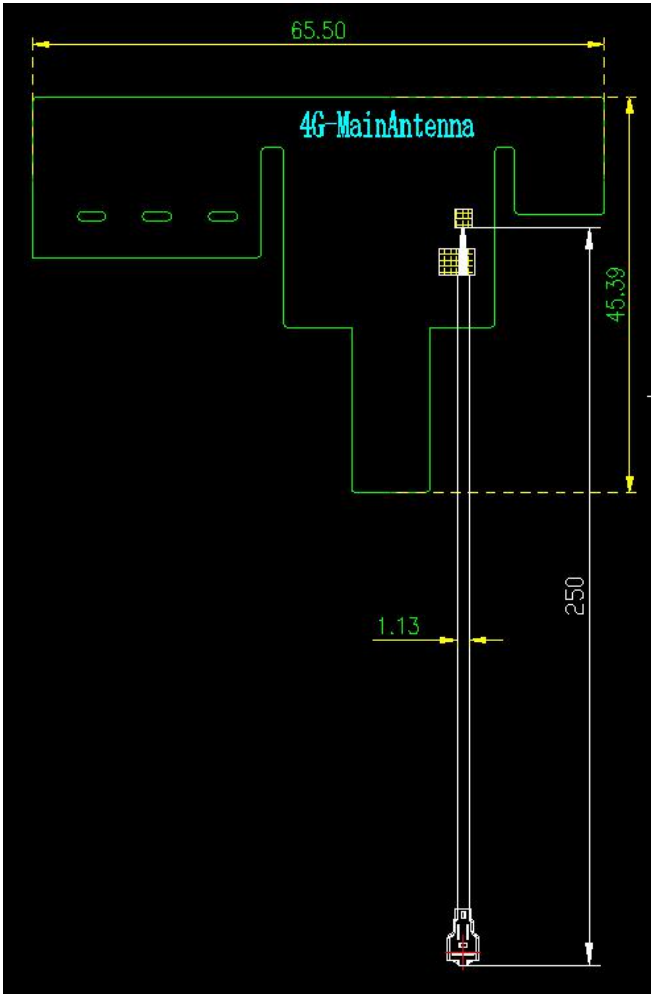
Product Type: YTX-TX-003019A

1、Cover.	1
2、Index.	2
3、Product Specification.	3
4、Product Drawing.	3
5、Test Equipment & Conditions.	4
6、Test Report.	5

Product Specification

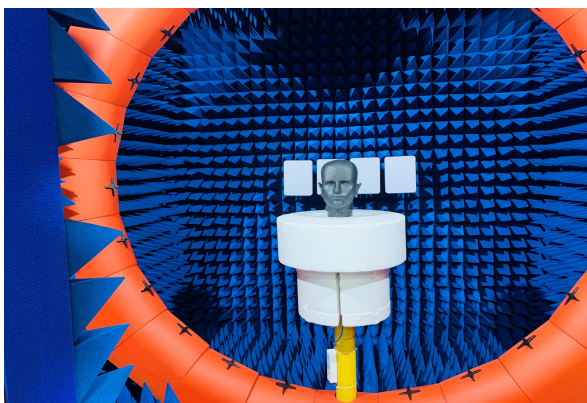
Main technical specifications			
Frequency Range (MHz)		691-960, 1710-2690MHz	
Impedance (Ω)		50	
Gain (dB)		2. 66	
VSWR		≤3. 5	
Physical Properties			
Size (mm)	65. 5*45. 39		
Material	FPC		
Cable	SY113	black	250mm

Product Drawing



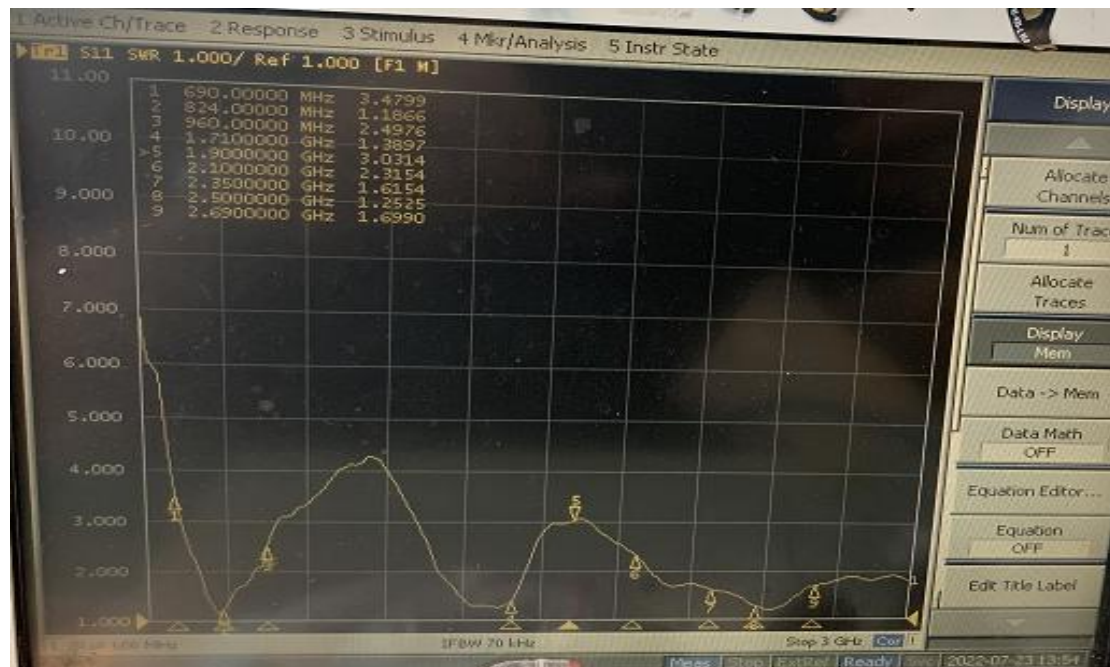
Test Equipment & Conditions

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C Agilent 5071B
OTA Test	TRP&TIS	Agilent 8960 RS CMW500 ETS SATIMO
Gain & Efficiency	Gain & Efficiency	ETS SATIMO Agilent 5071C



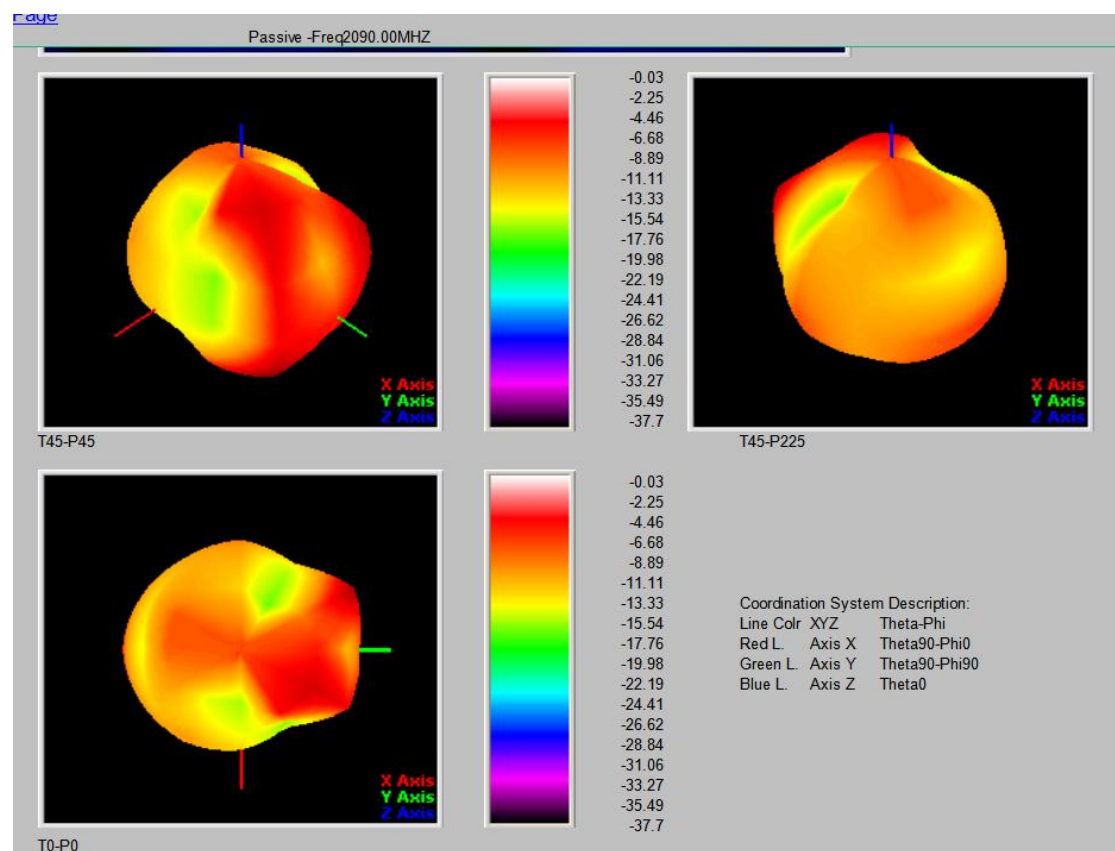
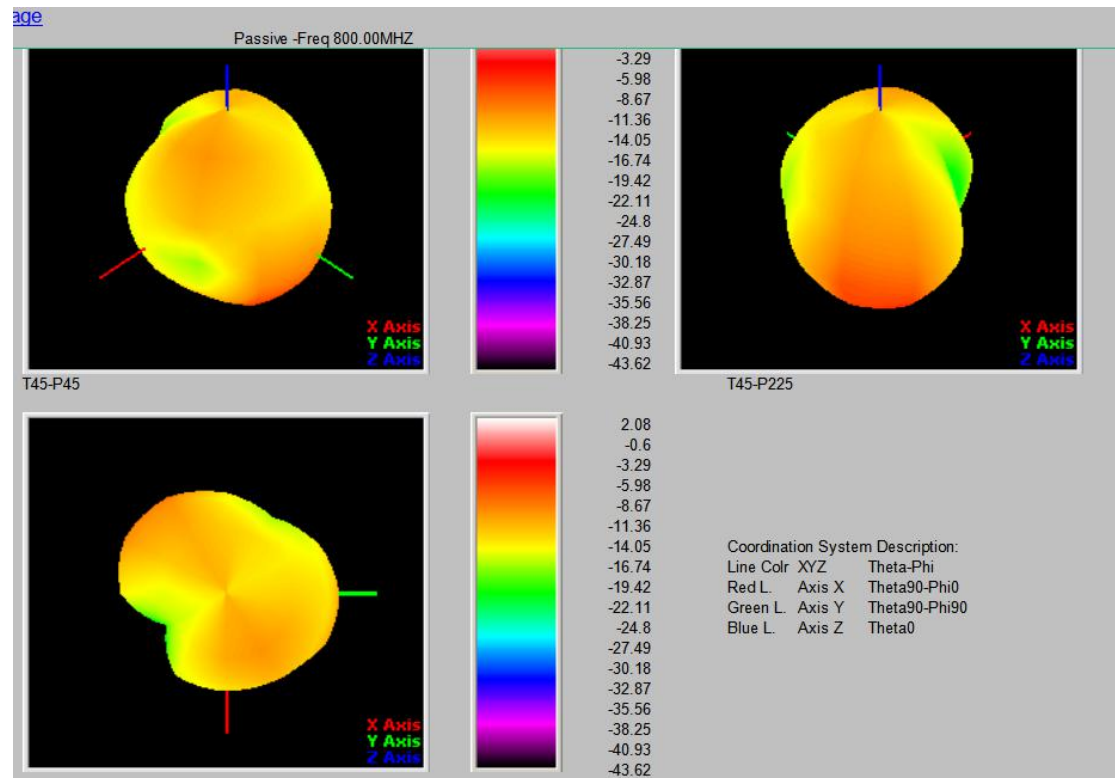
Test Report

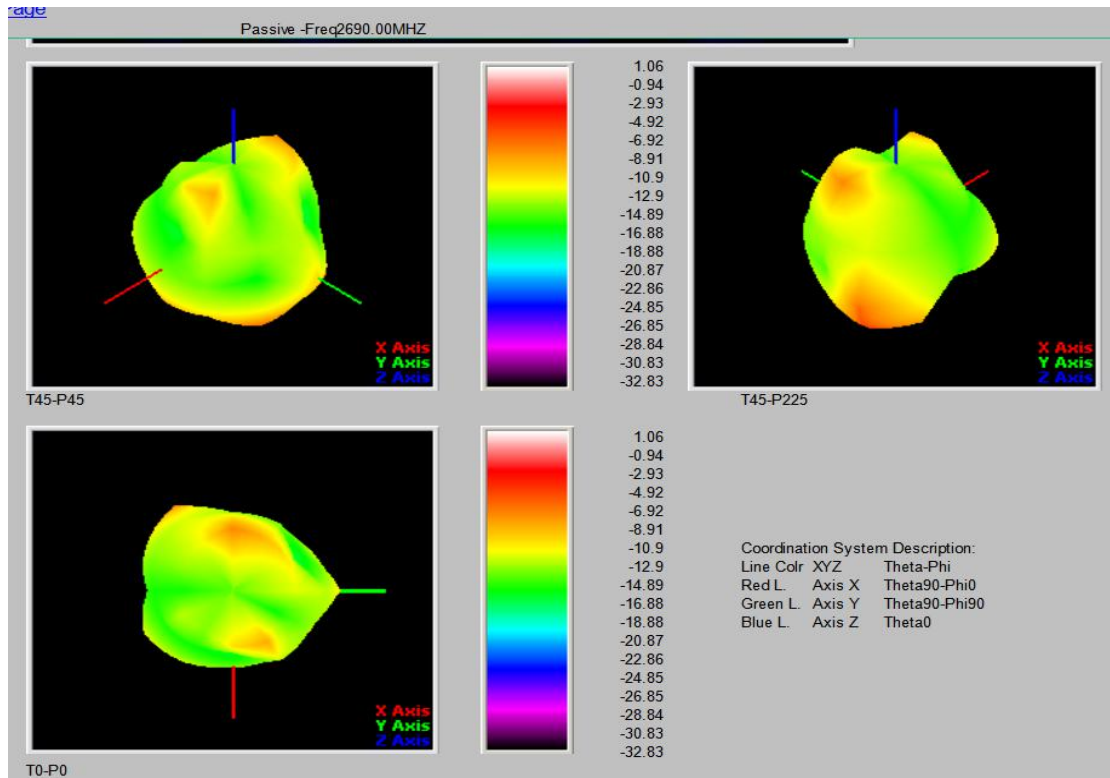
S11 Parameter-VSWR



Frequency	690	824	960	1710	1900	2100	2500	2690
VSWR	3.47	1.18	2.49	1.38	3.04	2.31	1.25	1.69

Radiation Pattern (3D)





Efficiency

Freq (MHz)	Gain(dB)	Eff(dB)	Freq (MHz)	Gain(dB)	Eff(dB)
700	-0.62	-6.13	840	1.54	-2.4
710	-0.24	-4.94	850	1.18	-2.84
720	0.31	-3.94	860	1.75	-2.96
730	0.62	-3.29	870	1.99	-3.19
740	0.46	-3.11	880	2.28	-3.28
750	0.36	-2.93	890	2.37	-3.27
760	1.01	-2.43	900	2.21	-3.20
770	1.47	-2.28	910	2.08	-3.08
780	1.82	-1.98	920	1.73	-3.09
790	2.06	-1.8	930	1.25	-3.19
800	2.08	-1.76	940	0.86	-3.43
810	2.04	-1.7	950	0.75	-3.49
820	1.51	-2.06	960	0.36	-3.55
830	1.42	-2.2			

Freq (MHz)	Gain(dB)	Eff(dB)	Freq (MHz)	Gain(dB)	Eff(dB)
1710	2.66	-3.19	2290	0.92	-4.44
1730	2.42	-3.24	2310	1.29	-4.55
1750	2.23	-3.36	2330	1.48	-4.37
1770	1.88	-3.54	2350	1.24	-4.26
1790	1.3	-3.83	2370	0.71	-4.21
1810	0.52	-3.9	2390	0.29	-4.19
1830	0.59	-4.01	2410	0.08	-4
1850	0.66	-4.33	2430	-0.11	-4.02
1870	0.97	-4.81	2450	-0.07	-4.06
1890	1.09	-5.02	2470	-0.08	-3.92
1910	1.41	-4.92	2490	0.4	-3.7
1930	1.18	-4.99	2510	0.43	-3.74
1950	0.86	-4.85	2530	0.52	-3.72
1970	0.34	-4.78	2550	0.75	-3.58
1990	0.49	-4.52	2570	1.04	-3.73
2010	0.06	-4.45	2590	0.81	-3.79
2030	0.38	-4.6	2610	0.58	-3.98
2050	0.8	-4.67	2630	0.56	-3.85
2070	0.42	-4.79	2650	0.54	-3.7
2090	-0.03	-4.57	2670	0.54	-3.77
2110	-0.03	-4.43	2690	1.06	-3.8
2130	0.66	-4.12			
2150	1.13	-3.78			
2170	0.98	-3.7			