



专业的4G/3G/GPS/WIFI等天线方案设计及供应商

客户名称	柚石物联	客户项目负责人	晏工
项目名称	YSWL-小网关P1603M 天线	调试频段	915M
天线类型	弹簧	测试日期	2022-11-08
射频工程师	庄工	结构工程师	黄工

Shenzhen HX Antenna Co., LTD

Tel: 0755-232052199

Web: <http://www.hxrf-antenna.com/>

Address: West Floor 2, Building C10, Xin'an Second Industrial Zone, Gushu Second Road, Xixiang Baoan District, Shenzhen China.



Shenzhen HX Antenna Co., LTD

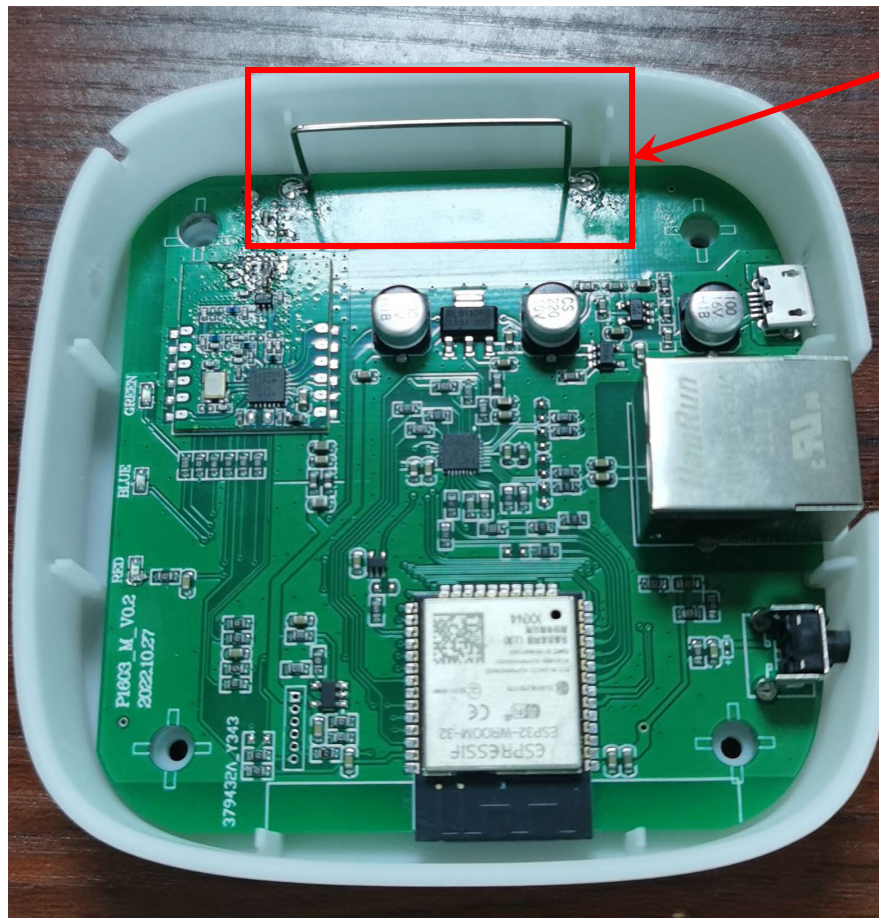
Tel: 0755-232052199

Web: <http://www.hxrf-antenna.com/>

Address: West Floor 2, Building C10, Xin'an Second Industrial Zone, Gushu Second Road, Xixiang Baoan District, Shenzhen China.

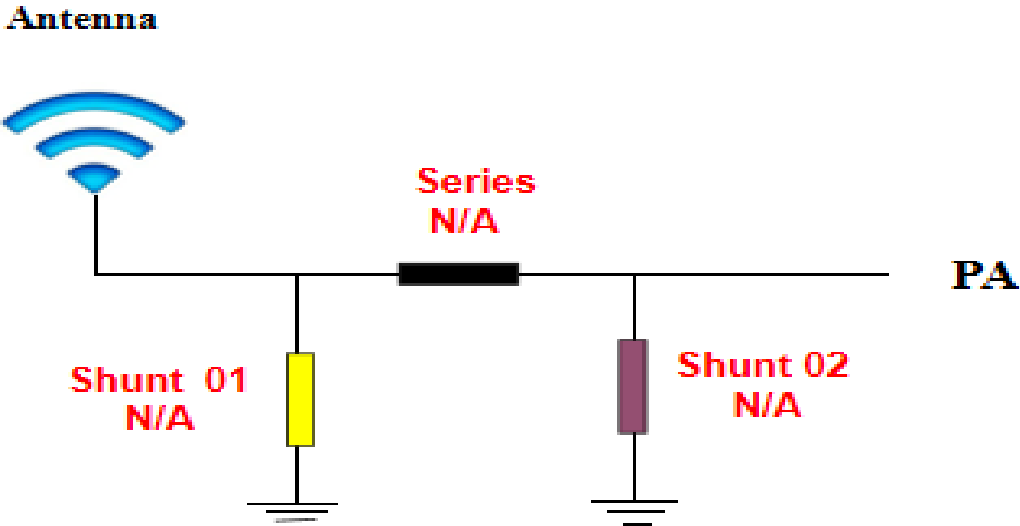
Contents

- 1: Antenna Overview & Dimension
- 2: The test project
 - 1. Antenna Matching Network
 - 2. VSWR
 - 3. Gain & Efficiency
 - 4. 3D Date
- 5. The Free Space 3D Date/The Free Space 2D Date 3 :
Ground processing



HX-TH915-3516-YSWL





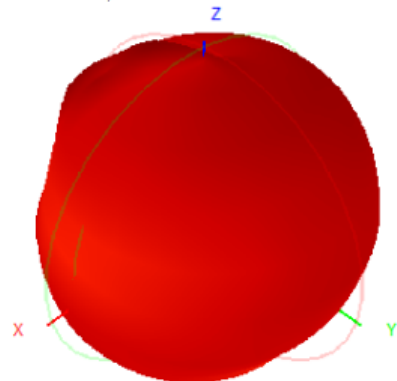
Location	Description
Shunt 01	N/A
Series	N/A
Shunt 02	N/A

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	800.0	805.0	810.0	815.0	820.0	825.0	830.0	835.0	840.0	845.0	850.0	855.0	860.0	865.0	870.0
Efficiency (dBi)	-9.06	-8.88	-8.73	-8.49	-8.20	-7.91	-7.62	-7.28	-6.97	-6.71	-6.50	-6.32	-6.16	-6.03	-5.95
Gain (dBi)	-4.97	-4.74	-4.63	-4.58	-4.44	-4.34	-4.11	-3.88	-3.66	-3.60	-3.64	-3.43	-3.16	-2.88	-2.66
Efficiency (%)	12.41	12.93	13.41	14.16	15.12	16.17	17.30	18.69	20.07	21.32	22.39	23.32	24.20	24.95	25.40

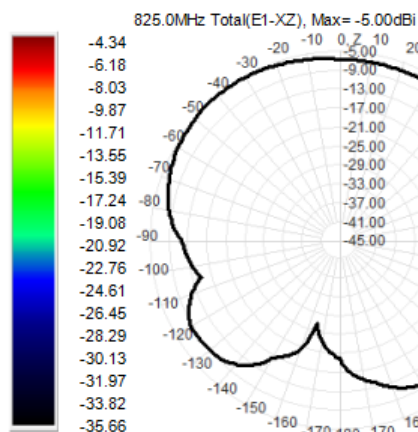
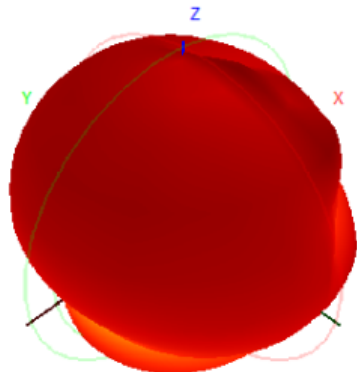
Frequency ID	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Frequency (MHz)	875.0	880.0	885.0	890.0	895.0	900.0	905.0	910.0	915.0	920.0	925.0	930.0	935.0	940.0	945.0
Efficiency (dBi)	-5.87	-5.79	-5.74	-5.65	-5.48	-5.33	-5.20	-5.07	-4.93	-4.79	-4.67	-4.62	-4.54	-4.43	-4.37
Gain (dBi)	-2.48	-2.28	-2.20	-2.14	-1.95	-1.85	-1.80	-1.71	-1.63	-1.51	-1.43	-1.33	-1.22	-1.03	-0.89
Efficiency (%)	25.86	26.39	26.65	27.22	28.31	29.33	30.20	31.13	32.14	33.20	34.10	34.48	35.17	36.10	36.55

Frequency ID	31	32	33	34	35	36	37								
Frequency (MHz)	950.0	955.0	960.0	965.0	970.0	975.0	980.0								
Efficiency (dBi)	-4.40	-4.41	-4.39	-4.40	-4.45	-4.50	-4.50								
Gain (dBi)	-0.81	-0.72	-0.58	-0.52	-0.46	-0.48	-0.48								
Efficiency (%)	36.34	36.23	36.36	36.28	35.89	35.46	35.45								

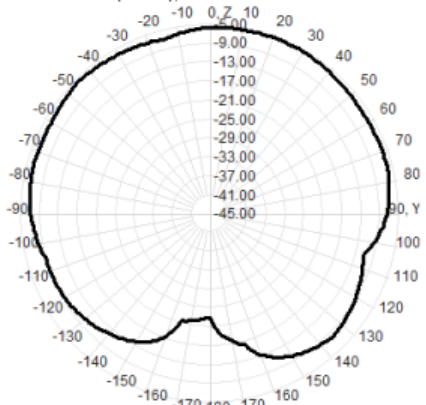
825.0MHz H+V, Eff: 16.2%



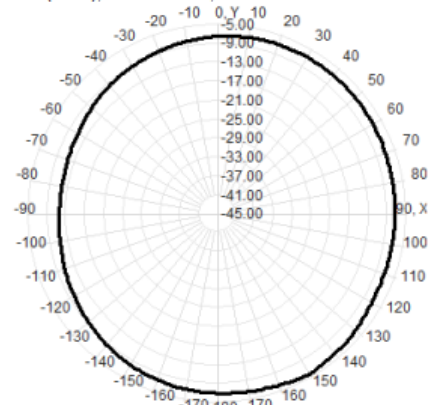
Back View



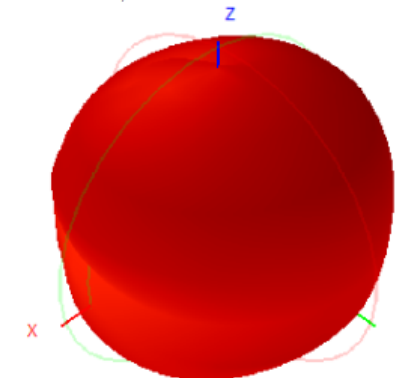
825.0MHz Total(E2-YZ), Max=-5.54dBi



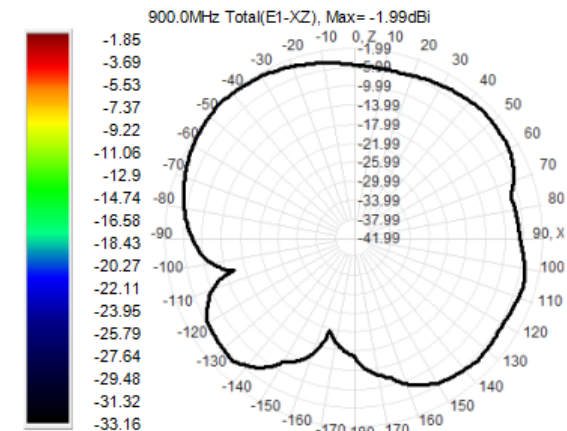
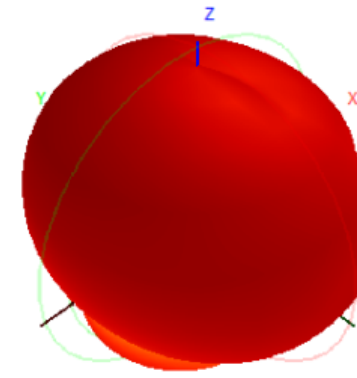
Total(H-XY), Max=-6.05dBi, CirD=5.72



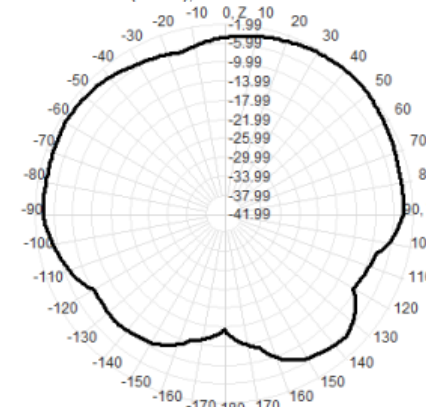
900.0MHz H+V, Eff: 29.3%



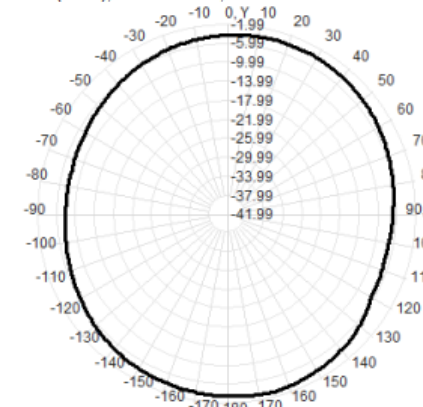
Back View



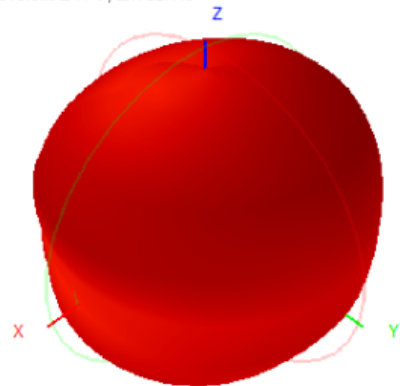
900.0MHz Total(E2-YZ), Max=-2.23dBi



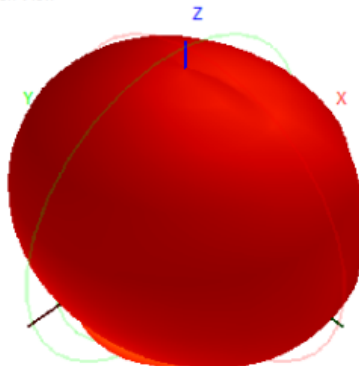
Total(H-XY), Max=-3.36dBi, CirD=4.65



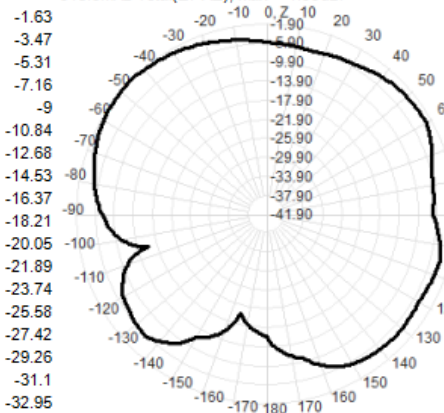
915.0MHz H+V, Eff: 32.1%



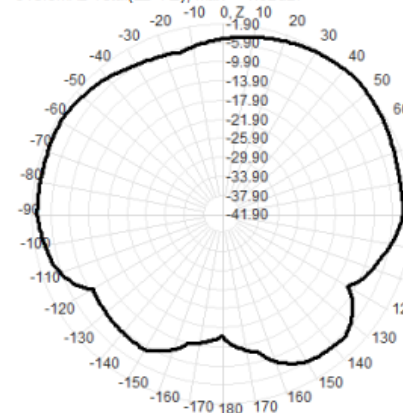
Back View



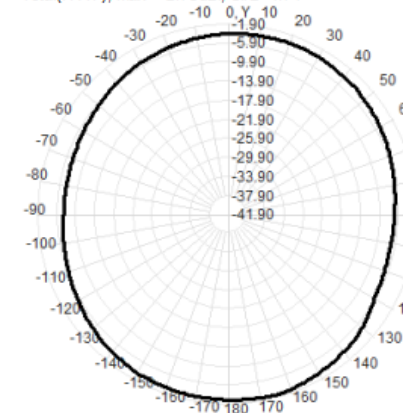
915.0MHz Total(E1-XZ), Max=-1.90dBi



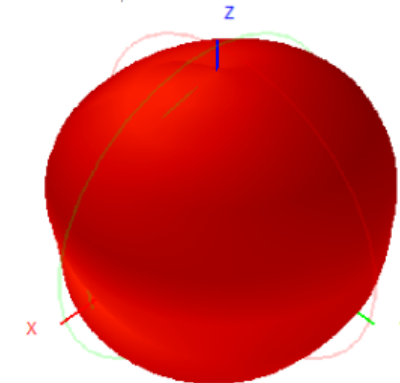
915.0MHz Total(E2-YZ), Max=-1.92dBi



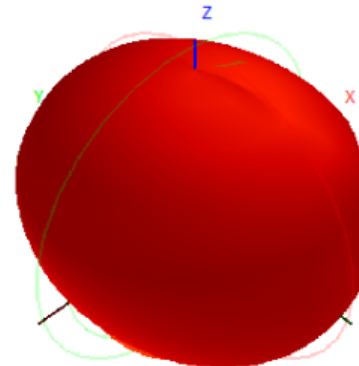
Total(H-XY), Max=-2.75dBi, CirD=4.74



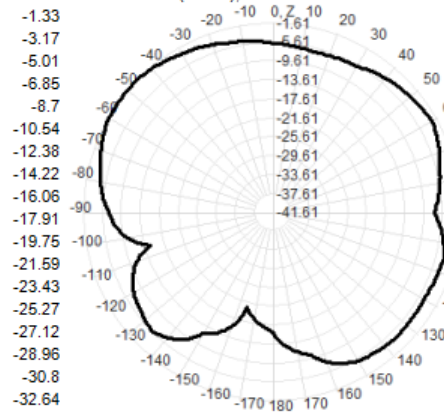
930.0MHz H+V, Eff: 34.5%



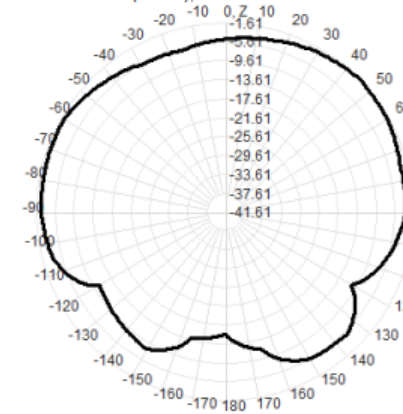
Back View



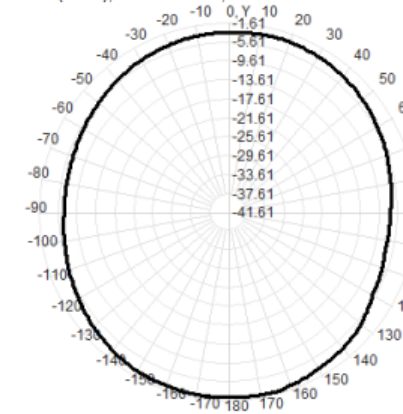
930.0MHz Total(E1-XZ), Max=-1.61dBi



930.0MHz Total(E2-YZ), Max=-1.71dBi

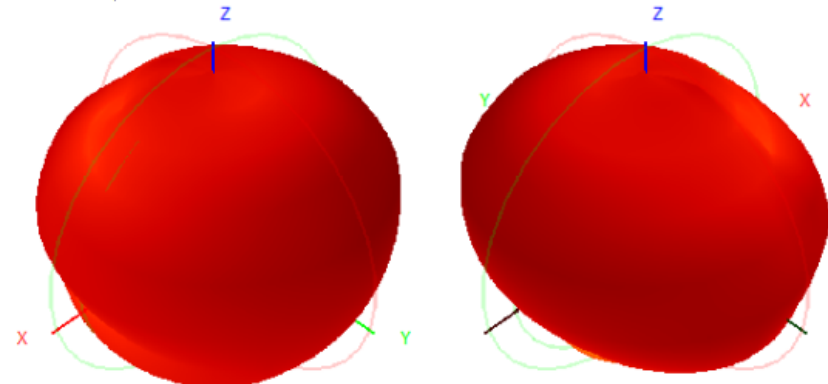


Total(H-XY), Max=-2.46dBi, CirD=5.08

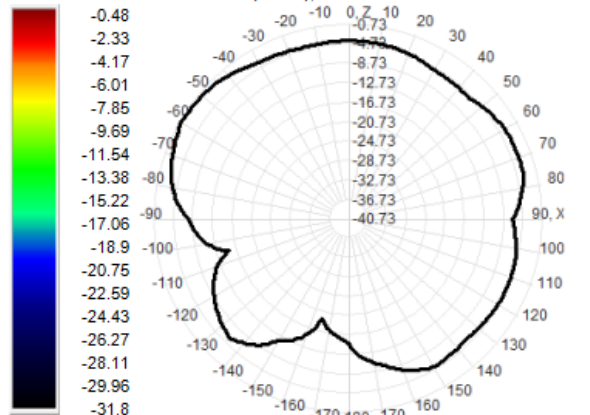


980.0MHz H+V, Eff: 35.5%

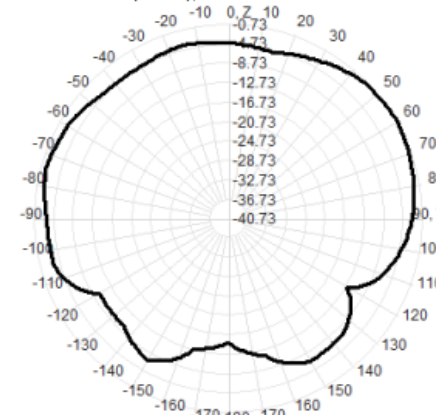
Back View



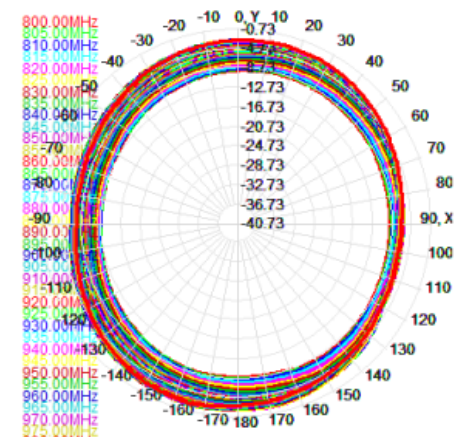
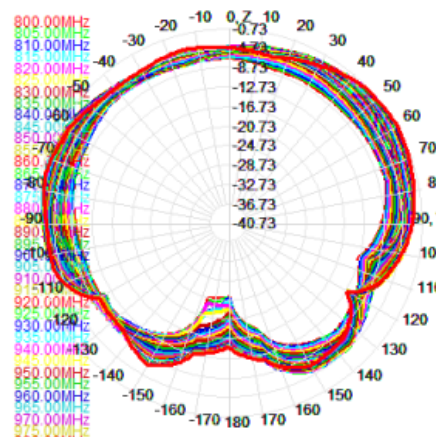
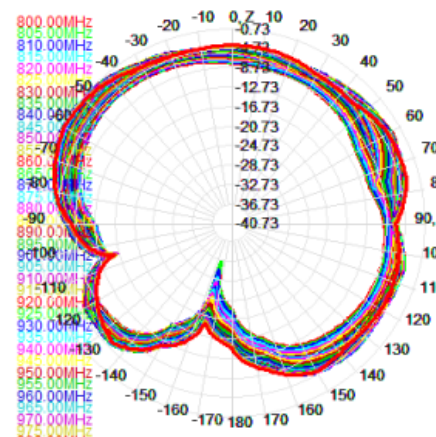
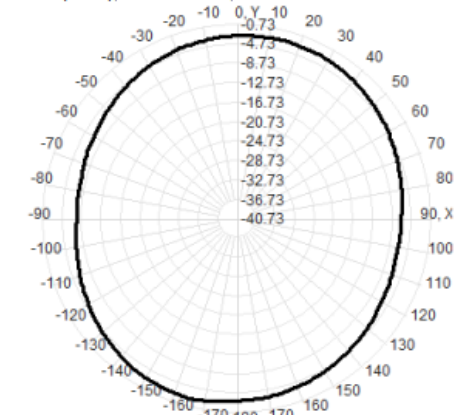
980.0MHz Total(E1-XZ), Max=-1.14dBi



980.0MHz Total(E2-YZ), Max=-0.73dBi



Total(H-XY), Max=-2.57dBi, CirD=5.26



Shenzhen HX Antenna Co., LTD

Tel: 0755-232052199

Web: <http://www.hxrf-antenna.com/>

Address: West Floor 2, Building C10, Xin'an Second Industrial Zone, Gushu Second Road, Xixiang Baoan District, Shenzhen China.

THANKS

Shenzhen HX Antenna Co., LTD

Tel: 0755-23205219

Web: <http://www.hxrf-antenna.com/>

Address: West Floor 2, Building C10, Xin'an Second Industrial Zone, Gushu Second Road, Xixiang Baoan District, Shenzhen China.