

Specifications For Passive Antenna of Porject MT918

Customer/Project	MT918 A4 Antenna		Frequency Band	1700-2700MHZ 3300-4200MHZ	
JHSCT P/N	F-KY-31-0080-000-K0		Version	V3.0	
Date	2024.06.17				
SPEED					
Checked by	RF	SXX	Design by	RF	LCX
	ME	WJ		ME	XYB
	QC		Remark		
Customer					
Date					
Confirmed by	RF				
	ME				

1. Project Overview

This document is the specifications of the MT918 with Passive antenna.

The antenna solution is to make LDS wiring on the outside of the exterior surface bracket. The installation position is shown in Figure 1 :

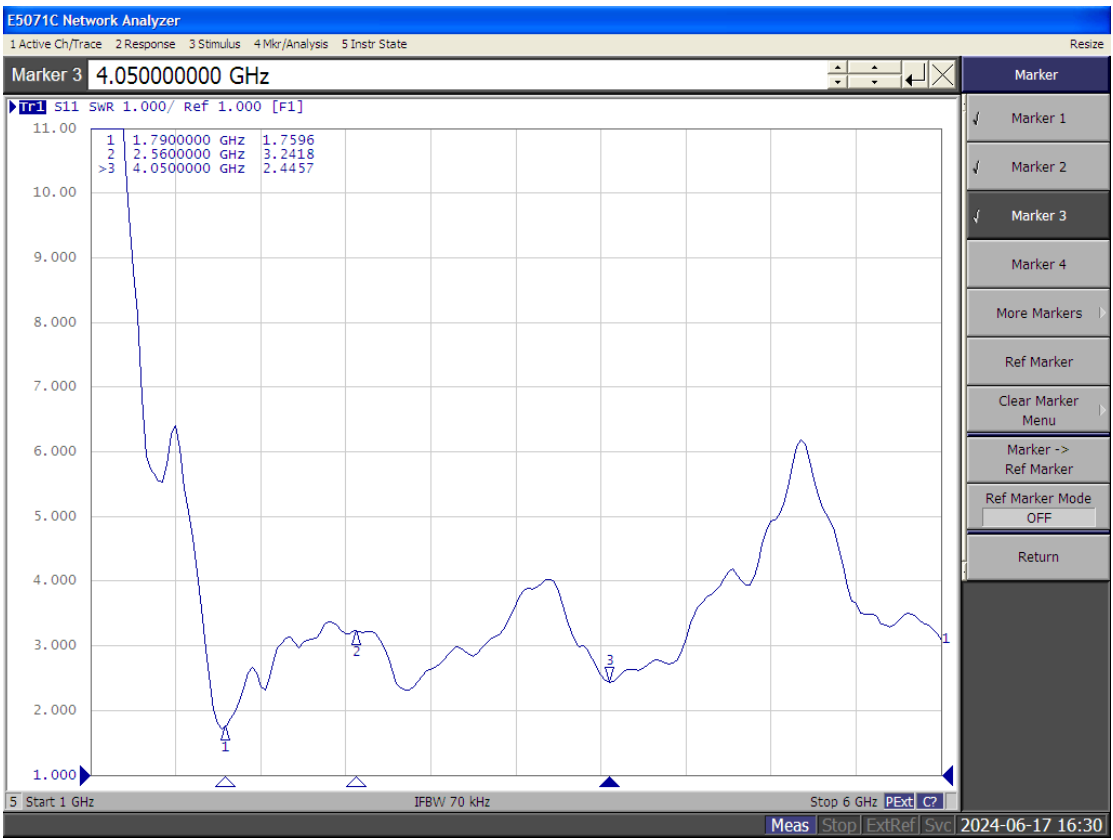


2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	1700-2700MHZ 3300-4200MHZ
Peak Gain	N/A
Efficency	> 30%
VSWR	<2
Impedance	500hm
Polarization	Linear polarization
A/R	N/A
Radiation Patten	Omnidirectional
Feed Mode	Pin
power capacity	33dBm
Size(L*W*H)	165mm*75mm*15mm
Weight	N/A
Operating temperature	-30 °C to +80 °C
Storage temperature	-30 °C to +80 °C

4 Test Results

4.1 VSWR



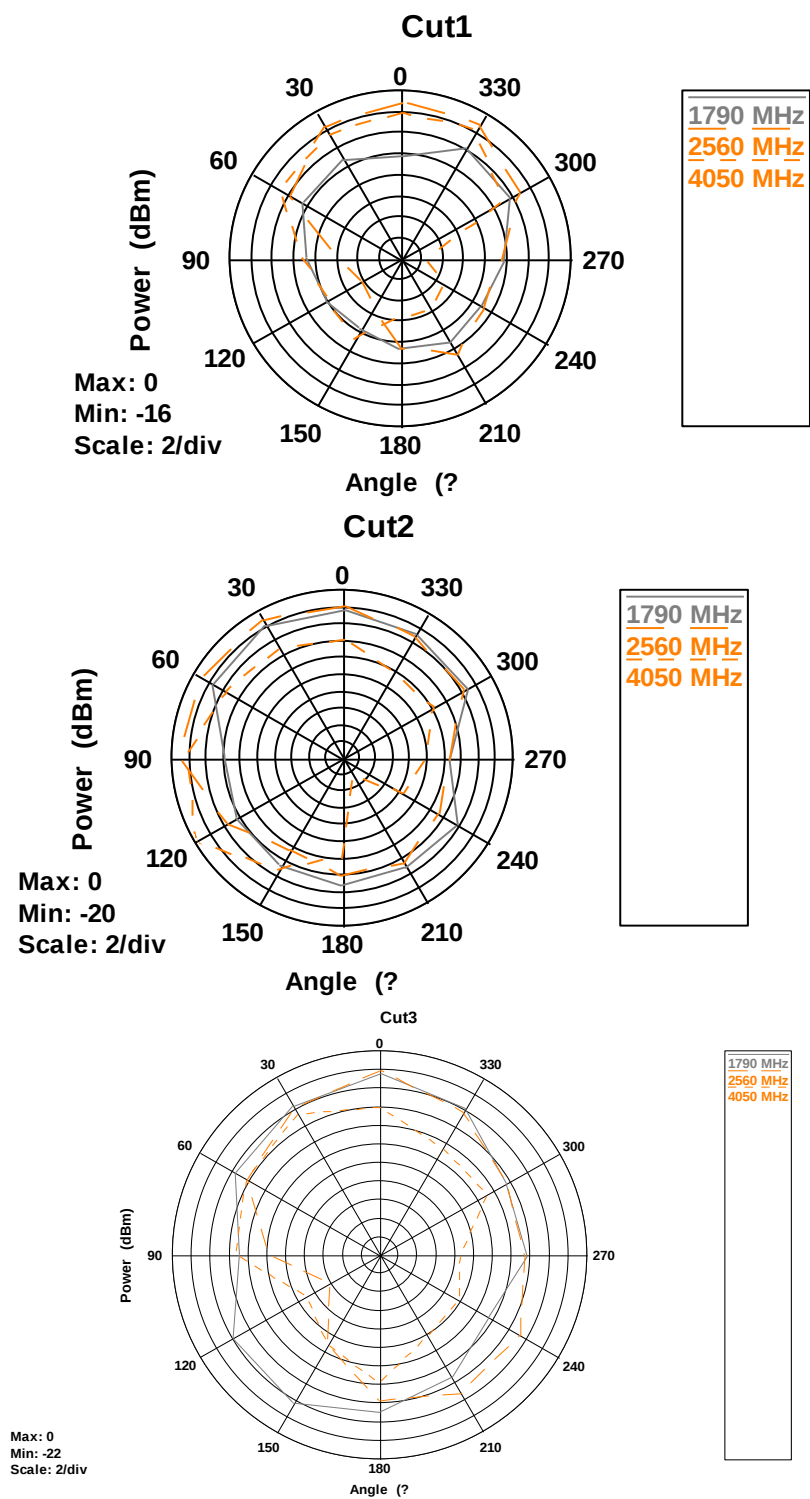
4.2 Passive Efficiency and Gain

Frequency	Efficiency	Gain (dBi)	1980	20.1936	-2.3823
1700	21.9744	-2.97985	1990	20.2797	-2.31303
1710	24.7695	-2.05858	2000	20.6932	-2.24931
1720	27.6907	-1.34213	2010	21.3645	-2.21075
1730	28.36	-1.30214	2020	22.0796	-2.15029
1740	29.6497	-1.32884	2030	22.5734	-2.24381
1750	29.5048	-1.68712	2040	22.5298	-2.41038
1760	28.9681	-2.07978	2050	22.0399	-2.69792
1770	30.0108	-2.11539	2060	22.4043	-2.67407
1780	31.3166	-2.04423	2070	23.3935	-2.43718
1790	32.2179	-1.94338	2080	24.8111	-1.96342
1800	32.2128	-1.91348	2090	26.3983	-1.59142
1810	31.801	-1.98548	2100	28.0183	-1.34972
1820	31.0924	-2.05027	2110	28.8908	-1.2473
1830	30.1485	-1.93249	2120	28.8255	-1.40924
1840	28.9493	-1.86378	2130	27.9369	-1.62883
1850	28.2051	-1.83919	2140	26.981	-1.90753
1860	28.1153	-1.72004	2150	26.5852	-1.95767
1870	27.4082	-1.76876	2160	26.7356	-1.95727
1880	26.5521	-1.91321	2170	26.5604	-1.92583
1890	26.1663	-2.10231	2180	26.7049	-1.96937
1900	25.7712	-2.3214	2190	27.294	-1.8519
1910	25.2578	-2.43579	2200	27.5443	-1.89808
1920	24.3393	-2.55865	2210	27.6037	-2.00622
1930	23.5066	-2.49546	2220	27.5004	-2.2217
1940	22.5661	-2.43653	2230	27.9736	-2.37955
1950	22.1818	-2.27954	2240	28.0582	-2.28099
1960	21.4114	-2.27423	2250	27.2996	-2.43908
1970	20.4053	-2.41203	2260	27.3075	-2.71198
			2270	27.1621	-2.94742

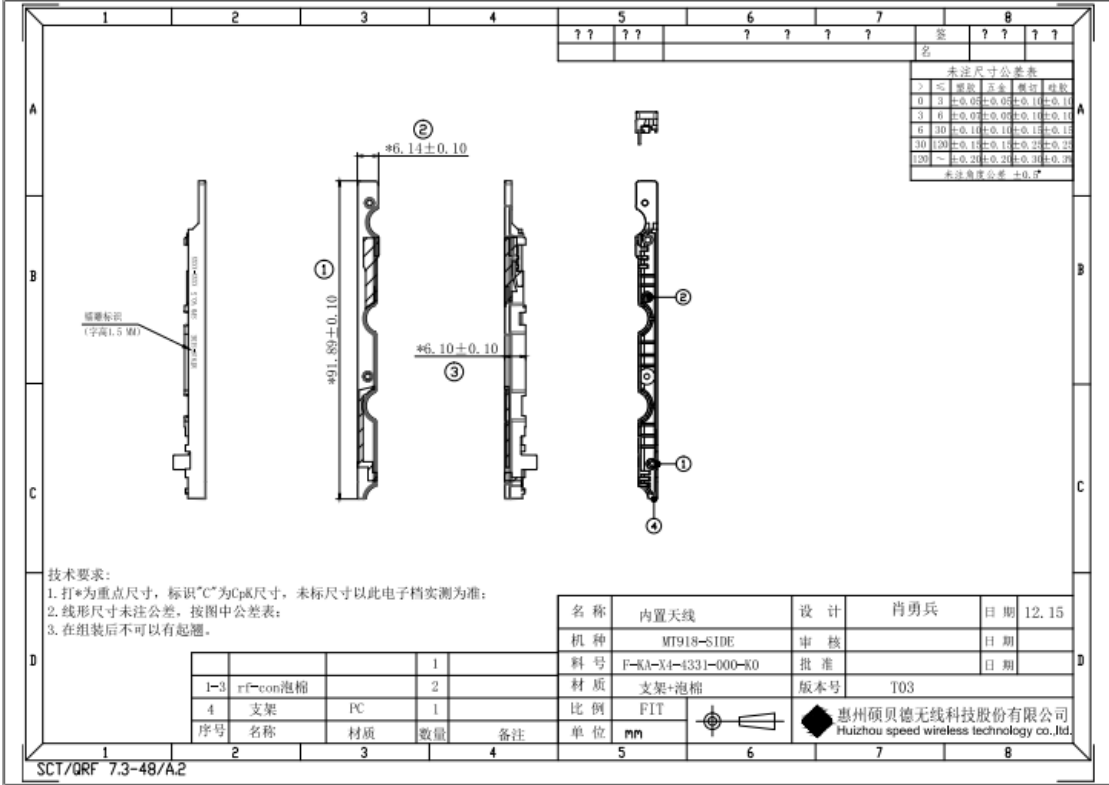
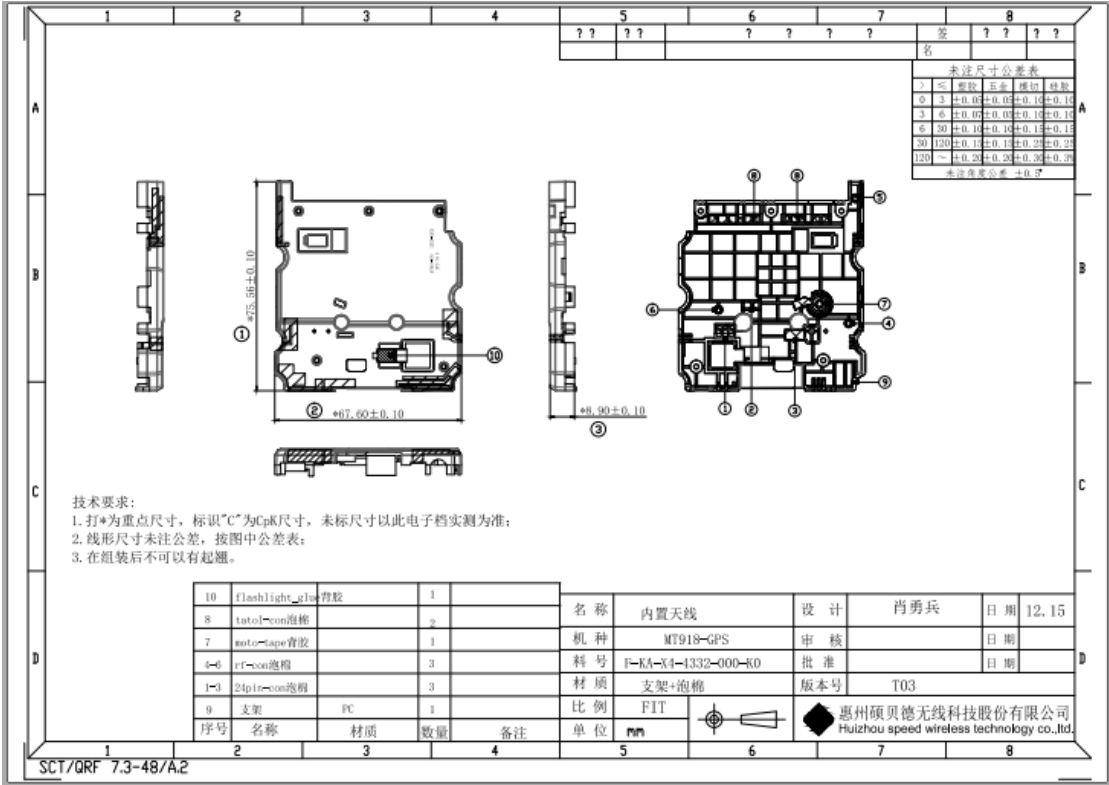
2280	27.3687	-3.20914	2580	33.4636	-0.950256
2290	27.7982	-3.14393	2590	33.2652	-0.934991
2300	27.5867	-3.05661	2600	32.0805	-0.980628
2310	27.6697	-3.0913	2610	31.1197	-1.08241
2320	28.3581	-3.02884	2620	30.0098	-1.24104
2330	29.0399	-2.97221	2630	29.6275	-1.34131
2340	29.5226	-2.89335	2640	28.936	-1.40828
2350	30.1007	-2.75563	2650	28.7101	-1.38786
2360	29.937	-2.46561	2660	28.841	-1.3159
2370	30.138	-2.10235	2670	28.7911	-1.21809
2380	29.7889	-1.83201	2680	28.5767	-0.998277
2390	29.0529	-1.75272	2690	27.4074	-1.01987
2400	29.4973	-1.55147	2700	26.8454	-0.992204
2410	30.0697	-1.36954	3300	20.6072	-0.928468
2420	30.7873	-1.27489	3330	20.392	-0.895003
2430	31.3427	-1.24982	3360	19.6755	-1.03238
2440	31.7355	-1.21829	3390	18.7567	-1.32076
2450	31.6424	-1.19563	3420	19.0164	-1.28415
2460	31.8191	-1.30863	3450	18.062	-1.38753
2470	31.5397	-1.48801	3480	17.9985	-1.49393
2480	31.2005	-1.70398	3510	17.8402	-1.62326
2490	31.3975	-1.58952	3540	17.4251	-1.49002
2500	31.3223	-1.50402	3570	19.6205	-1.07943
2510	31.8694	-1.51304	3600	19.8109	-1.13093
2520	32.2874	-1.54584	3630	18.8772	-1.53649
2530	32.6775	-1.54206	3660	19.4091	-1.60261
2540	33.3275	-1.43394	3690	18.8808	-1.98942
2550	33.2961	-1.26789	3720	18.0835	-2.1181
2560	33.886	-1.05558	3750	18.7697	-2.02802
2570	33.7582	-1.00603	3780	20.6402	-1.95209

3810	21.6271	-1.99363
3840	20.2277	-2.60875
3870	18.9123	-2.9753
3900	20.4924	-2.65436
3930	22.6985	-2.50356
3960	23.5736	-2.01727
3990	23.9363	-1.43018
4020	23.9564	-0.844606
4050	24.3644	-0.35618
4080	23.5685	-0.456072
4110	22.3264	-0.917716
4140	23.7024	-0.543066
4170	23.3048	-0.447782
4200	19.6799	-1.26937

4.3 Antenna 2D pattern



5 Structure Diagram



				5	6	7	8
				??	??	??	??
						名	

未注尺寸公差表							
尺寸	公差	尺寸	公差	尺寸	公差	尺寸	公差
0	±0.05	0.05	±0.10	0.10	±0.15	0.15	±0.20
3	±0.07	0.07	±0.10	0.10	±0.15	0.15	±0.20
6	±0.10	0.10	±0.15	0.15	±0.20	0.20	±0.25
30	±0.15	0.15	±0.20	0.20	±0.25	0.25	±0.30
120	±0.20	0.20	±0.25	0.25	±0.30	0.30	±0.35
未注角度公差 ±0.5°							

技术要求:

- 打*为重点尺寸, 标识“C”为Cpk尺寸, 未标尺寸以此电子档实测为准;
- 线形尺寸未注公差, 按图中公差表;
- 在组装后不可以有起翘。

5	main-fpc泡棉	1					
6	rf-con泡棉	3					
6		PC	1				
序号	名称	材质	数量	备注	单位	mm	

名称	内置天线	设计	肖勇兵	日期	12.15
机种	MT918-M	审核		日期	
料号	F-A-A4-4330-000-K0	批准		日期	
材质	支架+泡棉	版本号	T03		
比例	FIT				
单位	mm				

惠州硕贝德无线科技股份有限公司
Huizhou speed wireless technology co.,ltd.