

Specifications For Passive Antenna of Porject MT918

Customer/Project	MT918 A3 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 :

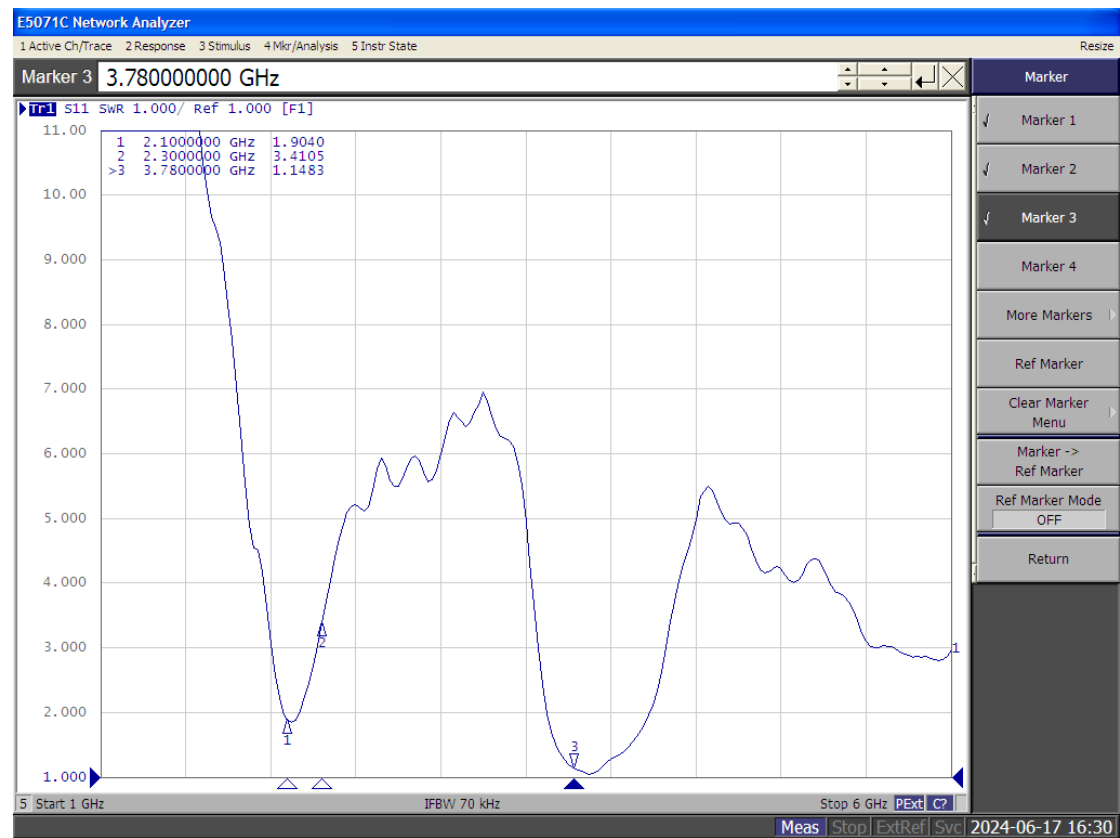


2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	1700-2700MHZ 3300-4200MHZ
Peak Gain	N/A
Efficiency	> 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



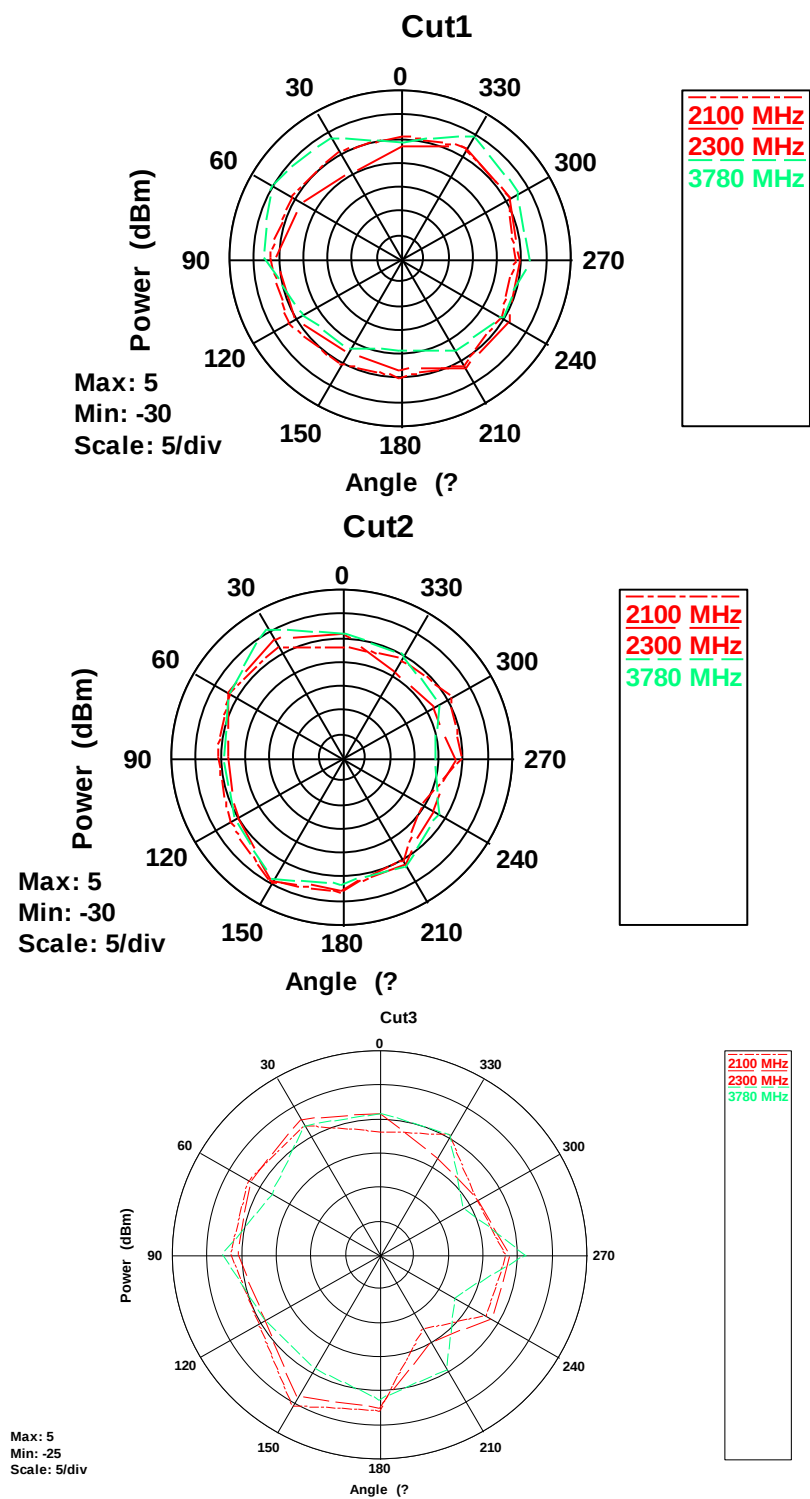
4.2 Passive Efficiency and Gain

Frequency	Efficiency	Gain (dBi)
1700	7.29357	-8.13648
1710	7.44145	-8.13825
1720	7.40789	-8.13382
1730	7.06304	-8.51413
1740	7.05807	-8.50139
1750	6.91285	-8.64094
1760	7.01724	-8.57598
1770	7.77958	-8.11442
1780	8.47542	-7.79752
1790	8.90223	-7.51867
1800	9.17519	-7.26281
1810	9.41817	-7.01458
1820	9.61435	-6.91235
1830	10.0031	-6.81221
1840	10.7535	-6.455
1850	12.0221	-5.95338
1860	13.9122	-5.33414
1870	15.7601	-4.65733
1880	17.7032	-3.85705
1890	20.0211	-3.15099
1900	22.2498	-2.74445
1910	24.359	-2.5194
1920	26.1085	-2.24597
1930	28.0634	-2.09289
1940	30.1917	-2.05298
1950	32.8285	-1.62141
1960	34.3259	-1.07584
1970	34.5549	-0.788703
1980	35.6205	-0.654334
1990	37.5211	-1.1448
2000	39.6409	-1.44327
2010	41.3726	-1.17633
2020	42.555	-0.928092
2030	42.8973	-0.728378
2040	41.934	-0.49099
2050	40.2391	-0.380495
2060	40.1613	-0.239207
2070	40.6014	-0.332029
2080	40.6072	-0.427614
2090	41.2464	-0.442226
2100	42.4331	-0.218454
2110	42.7896	-0.052687
2120	41.9905	0.0127342
2130	41.6016	0.102535
2140	40.7527	0.136764
2150	40.4851	0.218673
2160	40.2409	0.261275
2170	38.9742	0.212531
2180	38.8311	0.168936
2190	37.6746	0.0343558
2200	36.0375	-0.278924
2210	34.6178	-0.22553
2220	34.5228	-0.017904
2230	34.7347	0.140644
2240	34.2635	0.207678
2250	34.9191	0.379396
2260	34.582	0.41101
2270	34.8471	0.513077

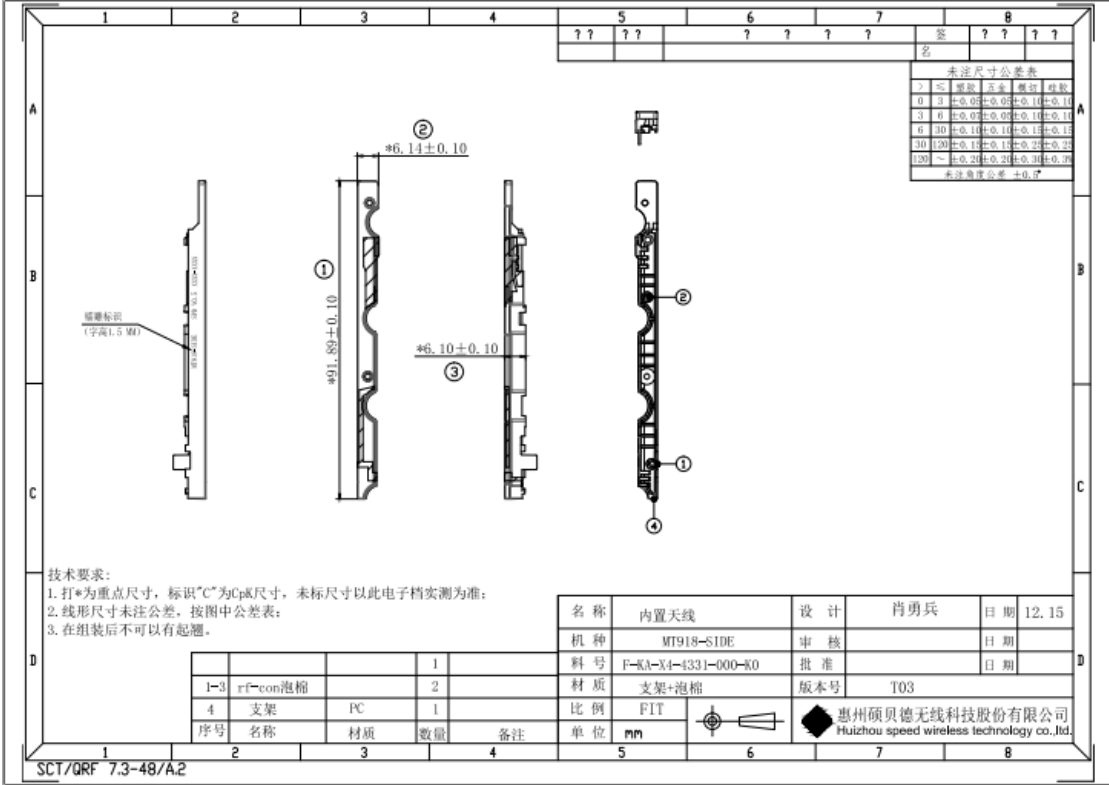
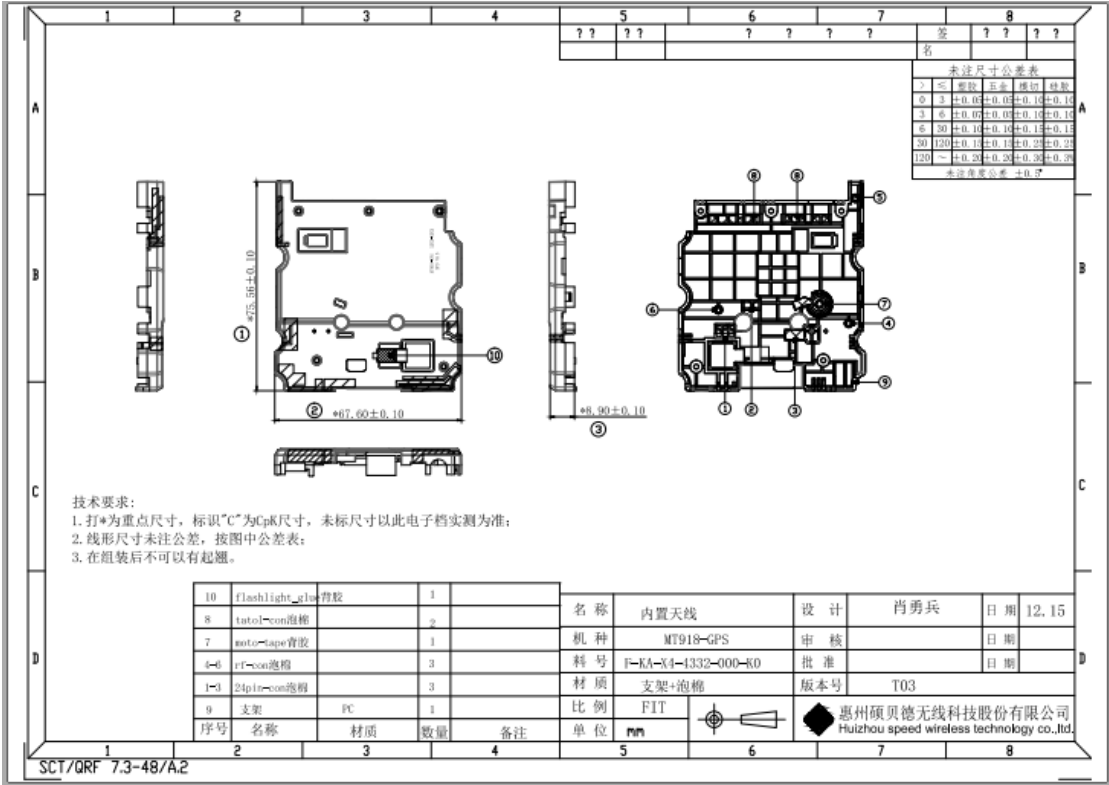
2280	35.1855	0.706248			
2290	35.0612	0.81706			
2300	35.2818	1.09095	2580	36.1254	1.66526
2310	35.1592	1.30788	2590	35.0792	1.56018
2320	35.3058	1.45835	2600	33.9386	1.5312
2330	34.7607	1.45486	2610	33.5842	1.59446
2340	34.6161	1.40242	2620	33.2151	1.64574
2350	34.3634	1.26833	2630	33.4235	1.77024
2360	33.8817	1.17296	2640	32.8773	1.79508
2370	33.6521	1.13658	2650	32.6332	1.83537
2380	33.5653	1.14293	2660	31.5787	1.69698
2390	34.6289	1.32852	2670	30.3425	1.53578
2400	35.9431	1.4929	2680	28.9776	1.27891
2410	36.842	1.59709	2690	27.3736	0.978521
2420	37.5037	1.70909	2700	26.6357	0.869563
2430	37.3275	1.71962	3300	21.6011	0.129362
2440	37.8235	1.77914	3330	20.142	-0.071534
2450	37.5287	1.7304	3360	17.5977	-0.500606
2460	38.2113	1.75954	3390	16.3397	-0.416097
2470	38.185	1.71749	3420	12.8521	-1.47787
2480	38.0187	1.70459	3450	9.44217	-3.55503
2490	38.9404	1.77617	3480	8.29217	-5.21325
2500	38.2218	1.68086	3510	10.1259	-4.18708
2510	37.6091	1.63552	3540	18.3639	-2.0513
2520	36.6239	1.53534	3570	30.2357	-0.702674
2530	36.2275	1.55168	3600	39.0355	0.577598
2540	35.932	1.52828	3630	39.828	0.629691
2550	36.039	1.55627	3660	38.8053	0.478783
2560	36.4456	1.67583	3690	34.0994	-0.087978
2570	35.8391	1.56916	3720	30.4068	-0.552966
			3750	28.5724	-0.552223
			3780	27.2073	-0.035771

3810	23.6501	0.192697
3840	18.8717	-0.344284
3870	15.9008	-1.09704
3900	11.915	-2.85511
3930	8.01641	-5.40309
3960	6.80475	-6.82196
3990	6.87046	-5.68564
4020	8.83311	-3.84596
4050	11.8448	-2.41313
4080	15.1441	-1.41097
4110	18.1761	-0.747989
4140	17.8165	-0.977383
4170	19.3419	-0.694081
4200	22.9379	-0.329486

4.3 Antenna 2D pattern



5 Structure Diagram



		1		2		3		4		5		6		7		8	
		??		??													

未注尺寸公差表					
尺寸	公差	尺寸	公差	尺寸	公差
0 ~ 3	±0.05	3 ~ 6	±0.10	6 ~ 10	±0.15
10 ~ 30	±0.20	30 ~ 60	±0.30	60 ~ 120	±0.40

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。

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-A-4330-000-K0		批准				日期			
材质		支架+泡棉		版本号		T03					
比例		FIT									
单位		mm									

5		air-fpc泡棉		1							
6		rfeon泡棉		3							
序号		名称		材质		数量		备注			
1		2		3		4		5		6	

SCT/GRF 7.3-48/A.2

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