

Specifications For Passive Antenna of
Porject MT918

Customer/Project	MT918 A2 Antenna		Frequency Band	1700-2700MHZ 3300-4200MHZ 5150-5950MHZ	
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 :

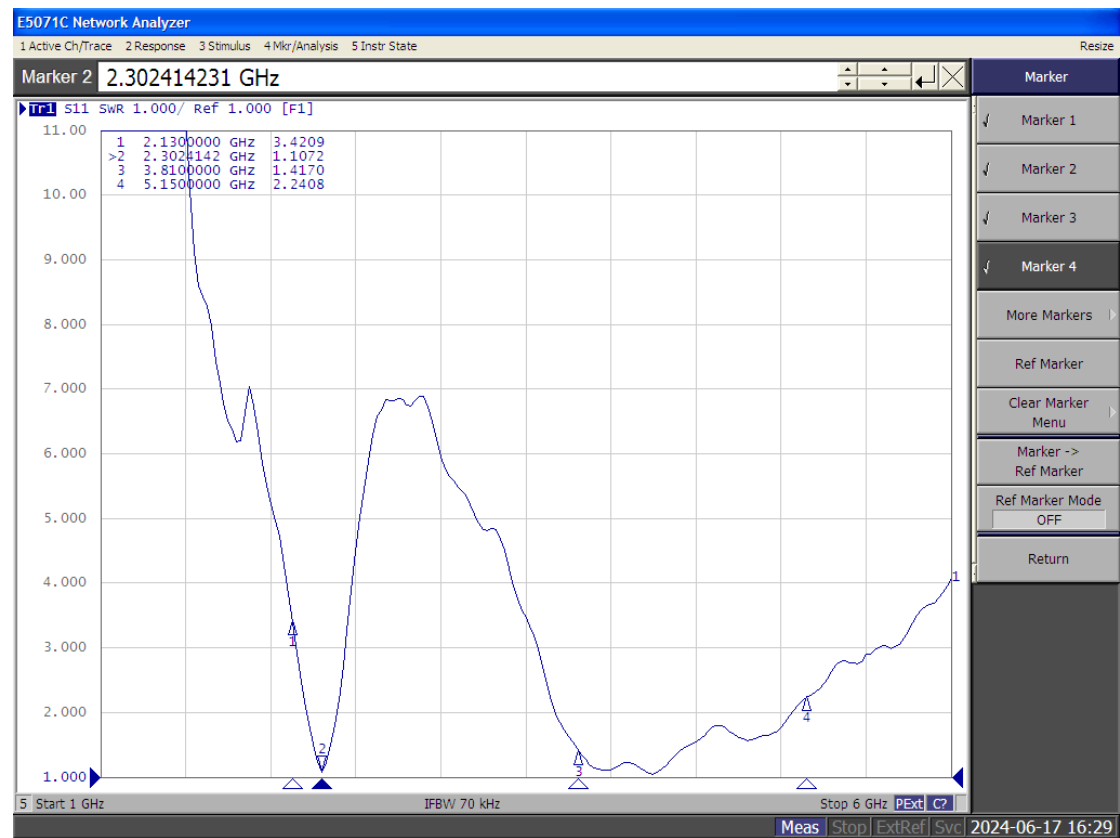


2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	1700-2700MHZ 3300-4200MHZ / 5150-5950MHZ
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

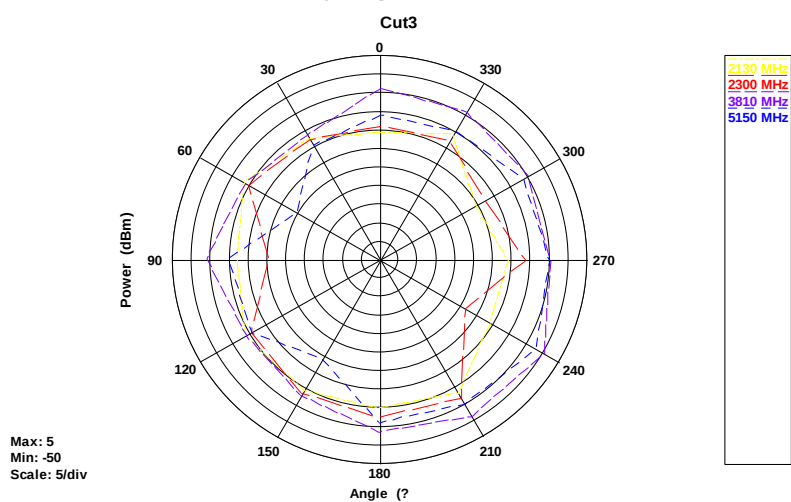
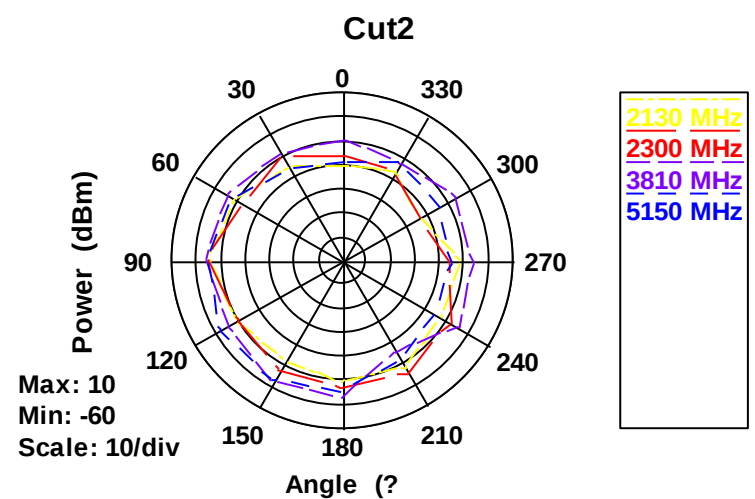
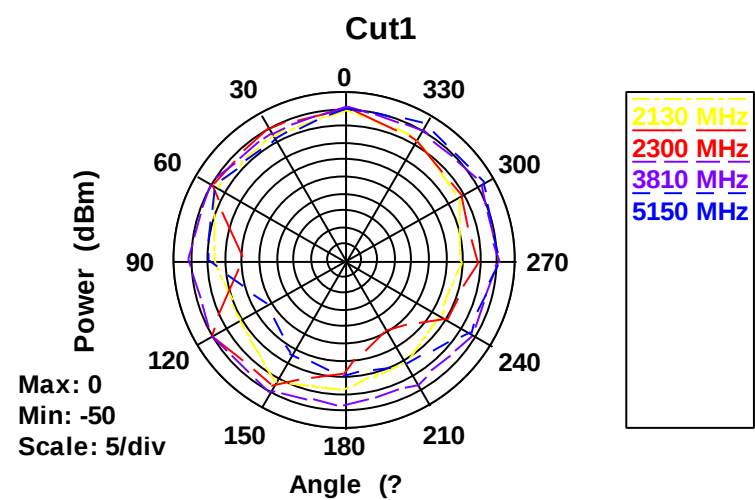


4.2 Passive Efficiency and Gain

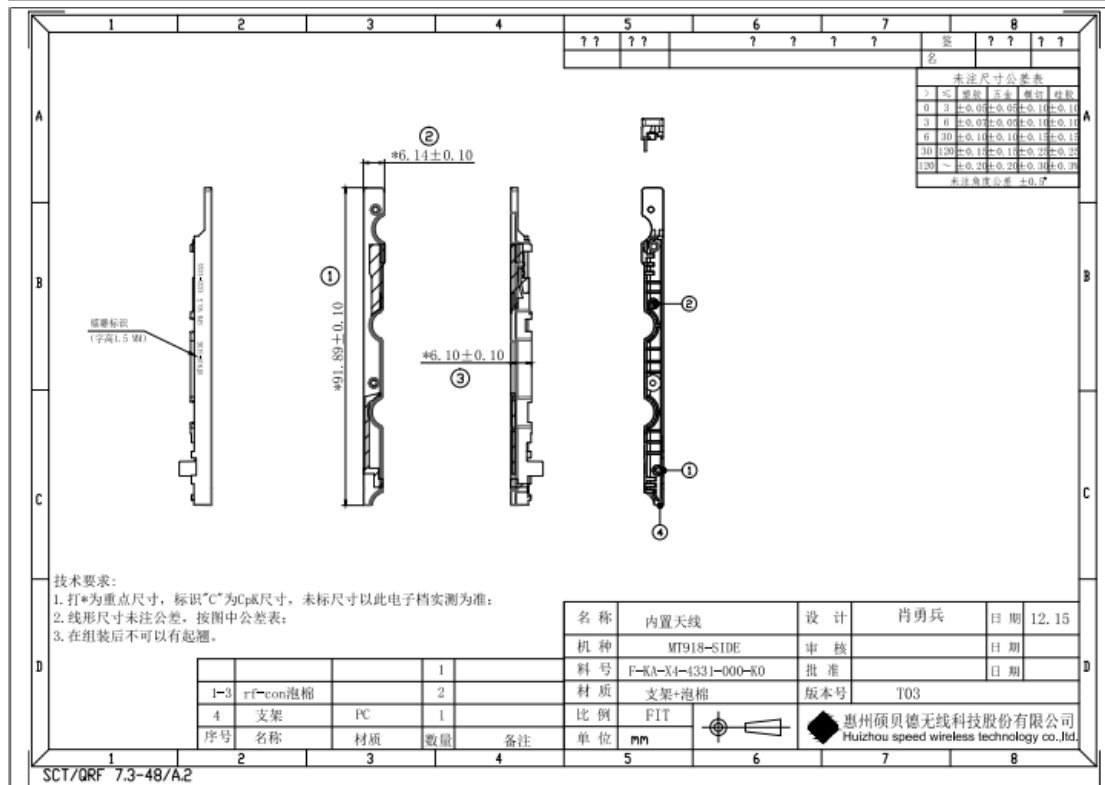
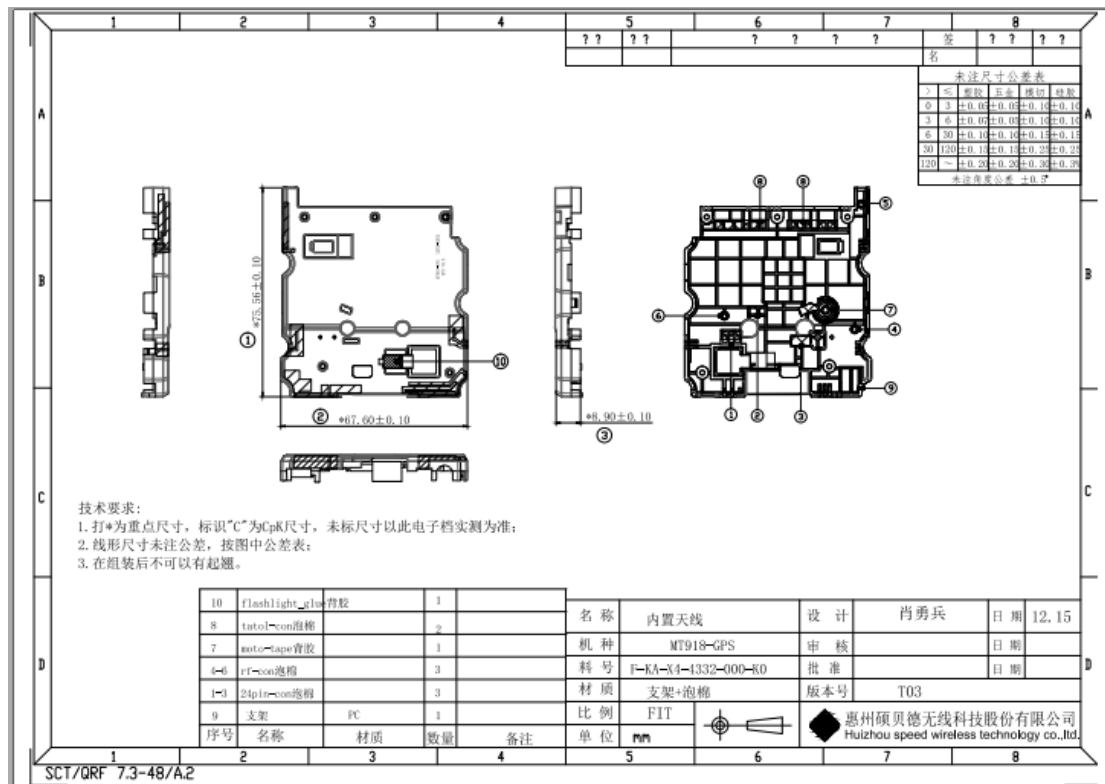
Frequency	Efficiency	Gain (dBi)	1980	7.23219	-5.70861
1700	6.16336	-7.94885	1990	7.63078	-5.44633
1710	6.63427	-7.6255	2000	8.24968	-5.17274
1720	7.06417	-7.38459	2010	8.96453	-4.91558
1730	7.18837	-7.25048	2020	9.70801	-4.66517
1740	7.45202	-7.05742	2030	10.4535	-4.42473
1750	7.39103	-7.0487	2040	11.0349	-4.21509
1760	7.0394	-7.35546	2050	11.2101	-4.06787
1770	6.74821	-7.82565	2060	11.695	-3.84746
1780	6.69941	-7.87615	2070	12.1798	-3.58237
1790	6.98887	-7.36645	2080	12.6962	-3.41346
1800	7.2712	-7.18388	2090	13.1159	-3.2992
1810	7.46287	-7.17605	2100	13.758	-3.14668
1820	7.6429	-7.1299	2110	14.4574	-3.10992
1830	7.7279	-7.1252	2120	14.8477	-3.18949
1840	7.70849	-7.16162	2130	14.9164	-3.38761
1850	7.40724	-7.32507	2140	14.7259	-3.67847
1860	7.18789	-7.27048	2150	14.7322	-3.95994
1870	6.99796	-7.22452	2160	14.8736	-4.30117
1880	6.78446	-7.26955	2170	14.9696	-4.58807
1890	6.4755	-7.31325	2180	15.3609	-4.64549
1900	6.13789	-7.38168	2190	15.966	-4.26935
1910	5.89245	-7.33244	2200	16.6014	-3.87663
1920	5.64029	-7.40295	2210	17.2499	-3.47558
1930	5.83325	-8.26397	2220	18.0159	-3.17611
1940	6.36043	-7.71033	2230	18.8768	-2.82907
1950	6.74647	-6.92497	2240	19.5754	-2.54745
1960	6.85081	-6.4389	2250	19.7664	-2.5141
1970	6.88659	-6.12043	2260	19.9627	-2.33701
			2270	20.2857	-2.27418

2280	20.3216	-2.34307			
2290	20.2908	-2.50763			
2300	19.9563	-2.84635	2580	8.87112	-5.32389
2310	19.304	-3.10907	2590	8.3205	-5.86146
2320	18.3394	-3.49843	2600	7.91197	-5.82699
2330	17.0906	-3.90867	2610	7.81447	-5.4662
2340	15.8831	-4.26741	2620	7.72253	-5.06847
2350	14.8726	-4.50099	2630	7.79197	-4.9974
2360	14.1142	-4.68007	2640	7.82665	-4.81392
2370	13.5821	-4.91809	2650	7.94959	-4.63689
2380	13.1325	-4.9824	2660	7.92231	-4.5966
2390	12.813	-4.9982	2670	7.82985	-4.61439
2400	12.6086	-5.01102	2680	7.48329	-4.8951
2410	12.3056	-5.13938	2690	7.19504	-5.0959
2420	11.8662	-5.26436	2700	7.09891	-5.30984
2430	11.384	-5.2588	3300	9.13666	-6.84583
2440	11.1552	-5.20442	3330	9.86835	-6.79984
2450	10.7398	-5.26094	3360	11.2061	-6.38206
2460	10.7303	-5.31679	3390	11.6093	-6.0092
2470	10.4417	-5.4824	3420	13.383	-4.82449
2480	10.3187	-5.53452	3450	14.8712	-3.70148
2490	10.1975	-5.62988	3480	16.6457	-2.92407
2500	9.8977	-5.65019	3510	19.4648	-1.7032
2510	9.60954	-5.55663	3540	20.8679	-1.02705
2520	9.4188	-5.43041	3570	23.0641	-0.649289
2530	9.5254	-5.13124	3600	27.9951	0.296828
2540	9.35859	-5.03965	3630	30.9378	0.785321
2550	9.40945	-5.08469	3660	33.4172	1.44359
2560	9.40519	-4.97649	3690	35.2957	1.7921
2570	8.99612	-5.35181	3720	36.3763	1.59883
			3750	37.1128	1.07531
			3780	40.5141	1.51267
3810	41.6334	1.83663			
3840	40.5551	2.01428			
3870	39.5372	1.61576			
3900	40.311	1.68929			
3930	39.971	1.54814			
3960	39.0134	1.48001			
3990	37.2874	1.51793			
4020	34.7985	1.25265			
4050	32.9351	1.29437			
4080	30.9295	1.36613			
4110	29.5086	1.42098			
4140	28.5144	1.23342			
4170	27.9394	1.33228			
4200	25.7946	1.16657			
5150	23.4633	0.0328997			
5180	20.127	-0.622775			
5210	17.8527	-1.09287			
5240	16.3852	-1.62346	5570	12.212	-3.1952
5270	15.42	-2.19221	5600	11.365	-3.59568
5300	15.5736	-2.51789	5630	12.5777	-3.27053
5330	14.0827	-3.33366	5660	12.8248	-3.60267
5360	13.4728	-3.08908	5690	11.4484	-3.72285
5390	13.3919	-3.31071	5720	11.5858	-3.14232
5420	12.3522	-3.31706	5750	11.6091	-3.04636
5450	12.3494	-3.5555	5780	11.2253	-3.33519
5480	12.8082	-3.11911	5810	11.2213	-3.35899
5510	12.6632	-3.29573	5840	11.2897	-3.74976
5540	12.1443	-3.49554	5850	11.3836	-3.62545

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
0 ~ 3	±0.05	3 ~ 6	±0.10	6 ~ 10
3 ~ 6	±0.05	6 ~ 10	±0.10	10 ~ 15
6 ~ 10	±0.10	10 ~ 15	±0.15	15 ~ 20
10 ~ 15	±0.15	15 ~ 20	±0.20	20 ~ 25
20 ~ 25	±0.20	25 ~ 30	±0.25	30 ~ 35
35 ~ 40	±0.30	40 ~ 45	±0.35	45 ~ 50
50 ~ 55	±0.40	55 ~ 60	±0.45	60 ~ 65
65 ~ 70	±0.50	70 ~ 75	±0.55	75 ~ 80
80 ~ 85	±0.60	85 ~ 90	±0.65	90 ~ 95
95 ~ 100	±0.70	100 ~ 105	±0.75	105 ~ 110
110 ~ 115	±0.80	115 ~ 120	±0.85	120 ~ 125
125 ~ 130	±0.90	130 ~ 135	±0.95	135 ~ 140
140 ~ 145	±1.00	145 ~ 150	±1.05	150 ~ 155
155 ~ 160	±1.10	160 ~ 165	±1.15	165 ~ 170
170 ~ 175	±1.20	175 ~ 180	±1.25	180 ~ 185
185 ~ 190	±1.30	190 ~ 195	±1.35	195 ~ 200
200 ~ 205	±1.40	205 ~ 210	±1.45	210 ~ 215
215 ~ 220	±1.50	220 ~ 225	±1.55	225 ~ 230
230 ~ 235	±1.60	235 ~ 240	±1.65	240 ~ 245
245 ~ 250	±1.70	250 ~ 255	±1.75	255 ~ 260
260 ~ 265	±1.80	265 ~ 270	±1.85	270 ~ 275
275 ~ 280	±1.90	280 ~ 285	±1.95	285 ~ 290
290 ~ 295	±2.00	295 ~ 300	±2.05	300 ~ 305
305 ~ 310	±2.10	310 ~ 315	±2.15	315 ~ 320
320 ~ 325	±2.20	325 ~ 330	±2.25	330 ~ 335
335 ~ 340	±2.30	340 ~ 345	±2.35	345 ~ 350
350 ~ 355	±2.40	355 ~ 360	±2.45	360 ~ 365
365 ~ 370	±2.50	370 ~ 375	±2.55	375 ~ 380
380 ~ 385	±2.60	385 ~ 390	±2.65	390 ~ 395
395 ~ 400	±2.70	400 ~ 405	±2.75	405 ~ 410
410 ~ 415	±2.80	415 ~ 420	±2.85	420 ~ 425
425 ~ 430	±2.90	430 ~ 435	±2.95	435 ~ 440
440 ~ 445	±3.00	445 ~ 450	±3.05	450 ~ 455
455 ~ 460	±3.10	460 ~ 465	±3.15	465 ~ 470
470 ~ 475	±3.20	475 ~ 480	±3.25	480 ~ 485
485 ~ 490	±3.30	490 ~ 495	±3.35	495 ~ 500
500 ~ 505	±3.40	505 ~ 510	±3.45	510 ~ 515
515 ~ 520	±3.50	520 ~ 525	±3.55	525 ~ 530
530 ~ 535	±3.60	535 ~ 540	±3.65	540 ~ 545
545 ~ 550	±3.70	550 ~ 555	±3.75	555 ~ 560
560 ~ 565	±3.80	565 ~ 570	±3.85	570 ~ 575
575 ~ 580	±3.90	580 ~ 585	±3.95	585 ~ 590
590 ~ 595	±4.00	595 ~ 600	±4.05	600 ~ 605
605 ~ 610	±4.10	610 ~ 615	±4.15	615 ~ 620
620 ~ 625	±4.20	625 ~ 630	±4.25	630 ~ 635
635 ~ 640	±4.30	640 ~ 645	±4.35	645 ~ 650
650 ~ 655	±4.40	655 ~ 660	±4.45	660 ~ 665
665 ~ 670	±4.50	670 ~ 675	±4.55	675 ~ 680
680 ~ 685	±4.60	685 ~ 690	±4.65	690 ~ 695
695 ~ 700	±4.70	700 ~ 705	±4.75	705 ~ 710
710 ~ 715	±4.80	715 ~ 720	±4.85	720 ~ 725
725 ~ 730	±4.90	730 ~ 735	±4.95	735 ~ 740
740 ~ 745	±5.00	745 ~ 750	±5.05	750 ~ 755
755 ~ 760	±5.10	760 ~ 765	±5.15	765 ~ 770
770 ~ 775	±5.20	775 ~ 780	±5.25	780 ~ 785
785 ~ 790	±5.30	790 ~ 795	±5.35	795 ~ 800
800 ~ 805	±5.40	805 ~ 810	±5.45	810 ~ 815
815 ~ 820	±5.50	820 ~ 825	±5.55	825 ~ 830
830 ~ 835	±5.60	835 ~ 840	±5.65	840 ~ 845
845 ~ 850	±5.70	850 ~ 855	±5.75	855 ~ 860
860 ~ 865	±5.80	865 ~ 870	±5.85	870 ~ 875
875 ~ 880	±5.90	880 ~ 885	±5.95	885 ~ 890
890 ~ 895	±6.00	895 ~ 900	±6.05	900 ~ 905
905 ~ 910	±6.10	910 ~ 915	±6.15	915 ~ 920
920 ~ 925	±6.20	925 ~ 930	±6.25	930 ~ 935
935 ~ 940	±6.30	940 ~ 945	±6.35	945 ~ 950
950 ~ 955	±6.40	955 ~ 960	±6.45	960 ~ 965
965 ~ 970	±6.50	970 ~ 975	±6.55	975 ~ 980
980 ~ 985	±6.60	985 ~ 990	±6.65	990 ~ 995
995 ~ 1000	±6.70			

技术要求:

1. 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；
2. 线形尺寸未注公差，按图中公差表；
3. 在组装后不可以有起翘。

5	air-fpc泡棉		1	
1-4	rf-con泡棉		3	
6		PC	1	
序号	名称	材质	数量	备注

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-4-4330-000-K0	批准		日期	
材质	支架+泡棉	版本号	T03		
比例	FIT				
单位	mm				