Specifications For Passive Antenna of Porject MT918

<table>
<tr><td colspan="2">Customer/Project</td><td colspan="2">MT918
A1 Antenna</td><td>Frequency Band</td><td>600-1000MHZ
1700-2700MHZ
3300-4200MHZ
5150-5950MHZ</td></tr>
<tr><td colspan="2">JHSCT P/N</td><td colspan="2">F-KY-31-0080-000-K0</td><td>Version</td><td>V3.0</td></tr>
<tr><td colspan="2">Date</td><td colspan="4">2024.06.17</td></tr>
<tr><td colspan="6">SPEED</td></tr>
<tr><td rowspan="3">Checked by</td><td>RF</td><td>SXX</td><td rowspan="2">Design by</td><td>RF</td><td>LCX</td></tr>
<tr><td>ME</td><td>WJ</td><td>ME</td><td>XYB</td></tr>
<tr><td>QC</td><td></td><td colspan="2">Remark</td><td></td></tr>
<tr><td colspan="6">Customer</td></tr>
<tr><td colspan="2">Date</td><td colspan="4"></td></tr>
<tr><td colspan="2" rowspan="2">Confirmed by</td><td>RF</td><td colspan="3"></td></tr>
<tr><td>ME</td><td colspan="3"></td></tr>
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1. Project Overview

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

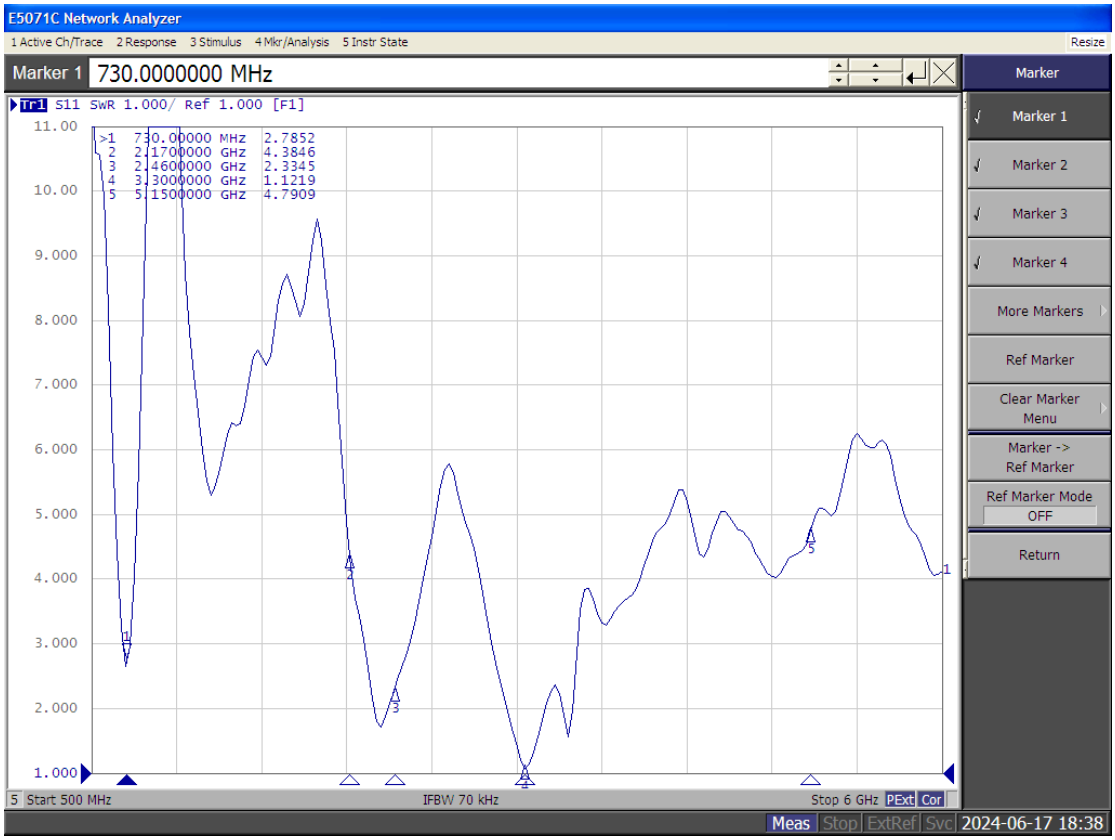
The antenna solution is to make LDS wiring on the outside of the exterior surface bracket. The installation position is shown in Figure 1 :

2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	600-1000MHZ / 1700-2700MHZ / 3300-4200MHZ / 5150-5950MHZ
Peak Gain	N/A
Efficency	> 30%
VSWR	<2
Impedance	500hm
Polarization	Linear polarization
A/R	N/A
Radiation Pattem	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



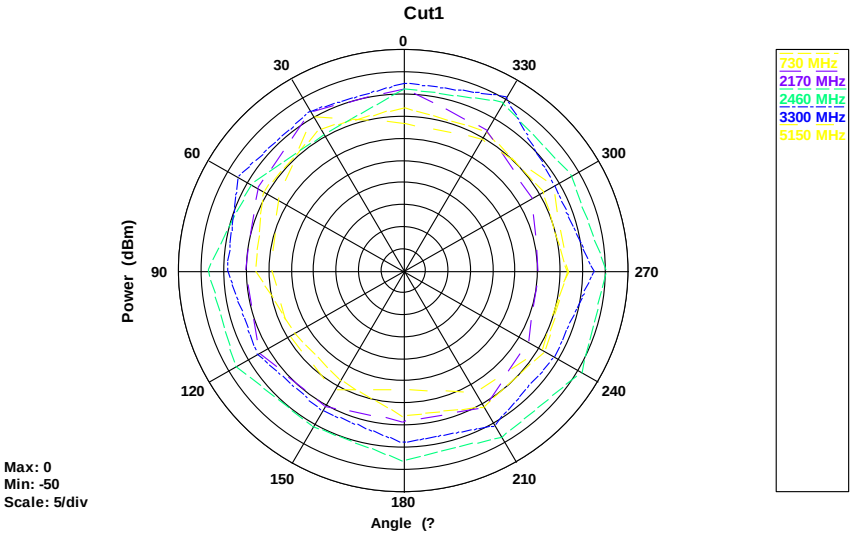
4.2Passive Efficency and Gain

Frequency	Efficiency	Gain (dBi)
600	0.844396	-17.6433
610	1.1167	-16.3747
620	1.48441	-15.1967
630	1.97322	-14.085
640	2.42876	-13.3017
650	2.95049	-12.3292
660	3.57103	-11.3239
670	4.31914	-10.404
680	4.46843	-10.2402
690	5.59349	-9.26143
700	6.70344	-8.38941
710	7.582	-7.74961
720	8.33918	-7.24878
730	8.69349	-7.10827
740	8.60702	-7.27354
750	8.28131	-7.58007
760	7.70108	-7.79099
770	6.94346	-8.20175
780	5.94987	-8.89116
790	5.35685	-9.45668
800	4.94351	-9.95732
810	4.42948	-10.4811
820	4.10281	-10.7502
830	3.72315	-11.0912
840	3.4308	-11.394
850	3.10987	-11.8214
860	2.80155	-12.3726
870	2.47277	-13.0287
880	1.09929	-13.7052
890	1.26015	-13.2682
900	1.48214	-12.7107
910	1.76917	-11.5652
920	2.1166	-10.5117
930	2.51108	-9.76318
940	2.97362	-8.9946
950	3.31409	-8.62742
960	3.4735	-8.57825
970	3.5608	-8.62373
980	3.67246	-8.66954
990	3.80304	-8.83405
1000	3.87238	-8.89746
1700	3.96926	-8.88908
1710	0.531285	-15.9261
1720	0.509049	-15.9976
1730	0.448759	-17.0724
1740	0.417105	-17.5514
1750	0.368058	-18.623
1760	0.314124	-20.0285
1770	0.287187	-20.9207
1780	0.253048	-21.4049
1790	0.217341	-21.5802
1800	0.181788	-22.8242
1810	0.153374	-22.8999
1820	0.133282	-23.4562
1830	0.125237	-23.6269

1840	0.124488	-23.8762
1850	0.13369	-23.8747
1860	0.149052	-23.483
1870	0.180361	-23.4546
1880	0.208695	-22.6531
1890	0.237347	-22.1071
1900	0.276928	-21.5137
1910	0.341863	-20.5889
1920	0.415366	-19.6344
1930	0.509458	-18.6072
1940	0.611224	-17.8626
1950	0.749397	-17.0884
1960	0.894819	-16.2976
1970	1.02102	-15.8546
1980	1.13171	-15.4792
1990	1.29058	-14.8791
2000	1.51518	-14.236
2010	1.7892	-13.3508
2020	2.16361	-12.3786
2030	2.7146	-11.0383
2040	3.44117	-9.87723
2050	4.31909	-8.78589
2060	5.14648	-7.98384
2070	5.89481	-7.46055
2080	7.00689	-6.7321
2090	8.14038	-6.13836
2100	9.46064	-5.48789
2110	11.1233	-4.71778
2120	12.8953	-3.97726
2130	14.7155	-3.34
2140	15.6638	-2.92352
2150	16.2949	-2.60511
2160	16.6386	-2.46088
2170	16.8067	-2.39077
2180	17.0224	-2.35617
2190	16.9037	-2.55854
2200	17.0283	-2.77098
2210	17.1909	-2.97705
2220	17.7133	-2.8382
2230	18.0939	-2.65291
2240	18.6902	-2.41635
2250	19.8936	-2.03844
2260	20.6879	-1.81432
2270	21.4521	-1.55406
2280	21.8682	-1.36068
2290	21.6887	-1.20809
2300	20.9693	-1.09659
2310	19.9427	-0.986831
2320	19.2204	-0.820619
2330	18.3883	-0.833205
2340	17.8894	-0.953499
2350	17.4478	-1.24232
2360	18.034	-1.61173
2370	18.8626	-1.30825
2380	19.6002	-0.911472
2390	20.415	-0.630072
2400	21.2871	-0.257101
2410	22.0333	-0.05452
2420	22.2684	0.0256546
2430	22.6039	-0.060264

2440	23.2245	-0.053836
2450	23.3627	-0.242775
2460	23.96	-0.222009
2470	23.9242	-0.355753
2480	23.8573	-0.498379
2490	23.1555	-0.689276
2500	22.3632	-0.948778
2510	21.6042	-1.27554
2520	21.1949	-1.53741
2530	21.0012	-1.74001
2540	20.3946	-2.04435
2550	19.972	-2.18947
2560	19.361	-2.53549
2570	18.5858	-2.75359
2580	18.1184	-3.01507
2590	17.6628	-3.34353
2600	17.6292	-3.25521
2610	17.7117	-3.03787
2620	17.6295	-2.92582
2630	17.003	-2.70483
2640	16.2507	-2.59038
2650	15.0134	-2.42917
2660	14.5338	-2.53092
2670	14.3152	-2.62999
2680	13.9037	-2.77826
2690	13.2122	-1.59642
2700	12.9253	-0.827571
3300	24.5526	-0.406061
3330	24.1836	-0.32923
3360	22.2918	-1.07008
3390	19.6762	-2.10348
3420	18.0187	-2.69682
3450	15.0272	-3.45891
3480	13.6241	-3.54885
3510	14.067	-3.07655
3540	16.3869	-2.25225
3570	20.6901	-1.48054
3600	23.1948	-1.63528
3630	17.5015	-1.65961
3660	13.1558	-1.16667
3690	10.1146	-1.4534
3720	8.30829	-2.27045
3750	8.05123	-2.36584
3780	8.88444	-2.63281
3810	9.29915	-2.92117
3840	8.82215	-2.48252
3870	9.14913	-2.76633
3900	10.4724	-3.16916
3930	10.3226	-2.86821
3960	11.1235	-3.21125
3990	13.15	-3.68577
4020	13.0677	-3.61255
4050	13.7209	-3.37973
4080	14.0002	-2.91841
4110	13.9989	-2.89289
4140	15.7305	-3.28068
4170	15.202	-3.33121
4200	12.6013	-3.76745
5150	4.72833	-6.74408
5180	3.82019	-6.60073
5210	2.859	-6.23363
5240	2.55964	-6.92873
5270	2.47446	-7.34631
5300	2.52055	-6.9956
5330	2.8875	-7.1552
5360	2.83939	-5.75681
5390	2.22731	-5.64592
5420	2.21472	-6.557
5450	2.35094	-6.59982
5480	2.25607	-6.87102
5510	2.5189	-6.90701
5540	2.6706	-6.37628
5570	2.59971	-6.93623
5600	2.4991	-7.06729
5630	2.5566	-6.40978
5660	2.83049	-6.25347
5690	3.12657	-6.45536
5720	3.1538	-6.22536
5750	2.56319	-6.65887
5780	2.6771	-7.15534
5810	3.29295	-8.35603
5840	3.30966	-8.20285
5850	3.31709	-7.30242

4.3 Antenna 2D pattern



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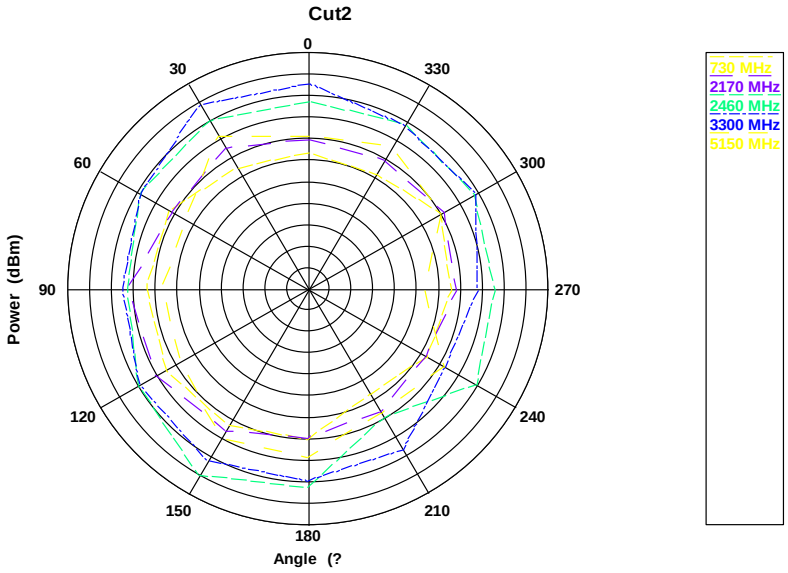

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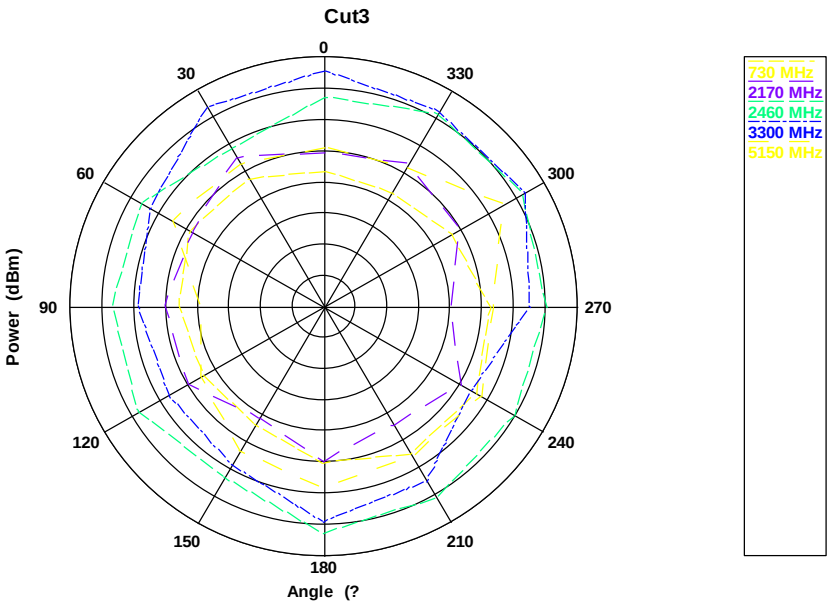

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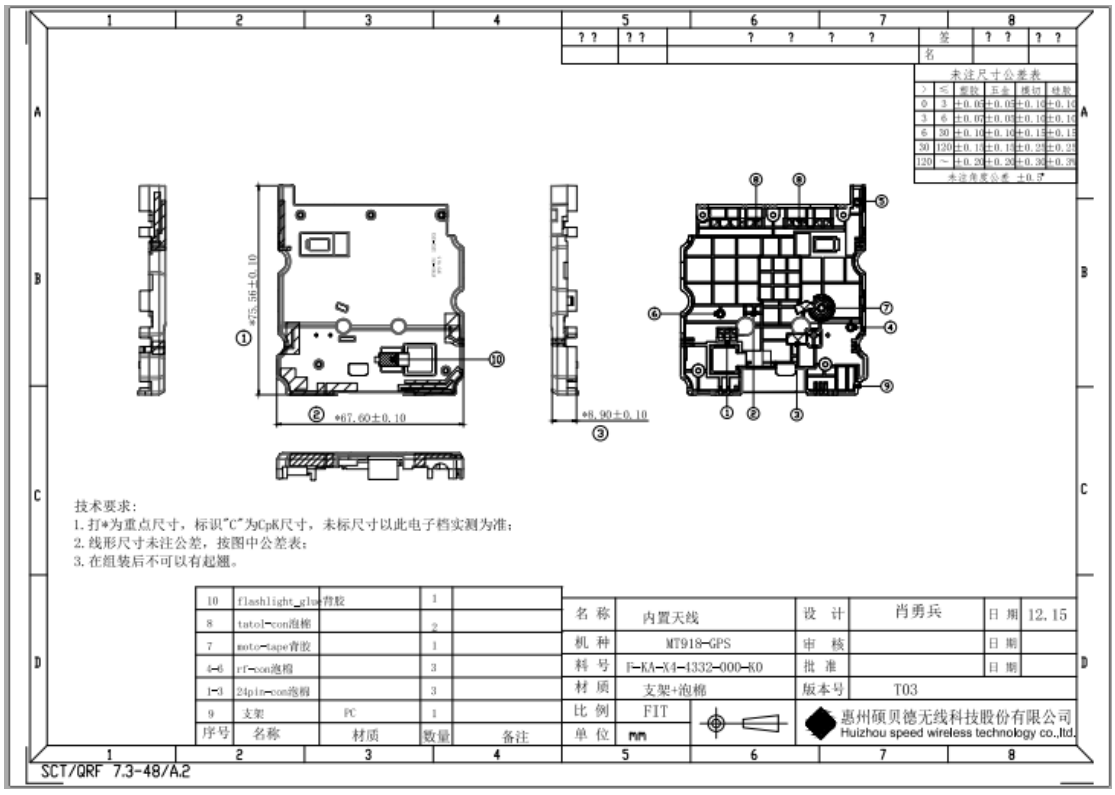
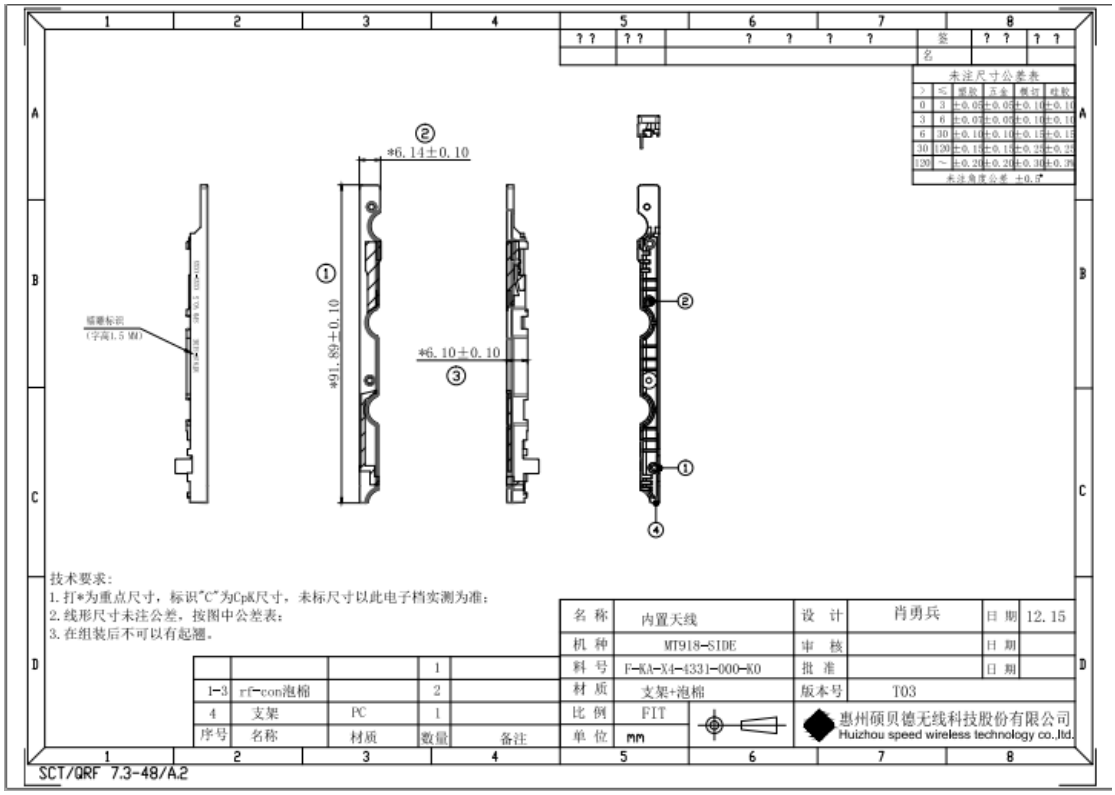
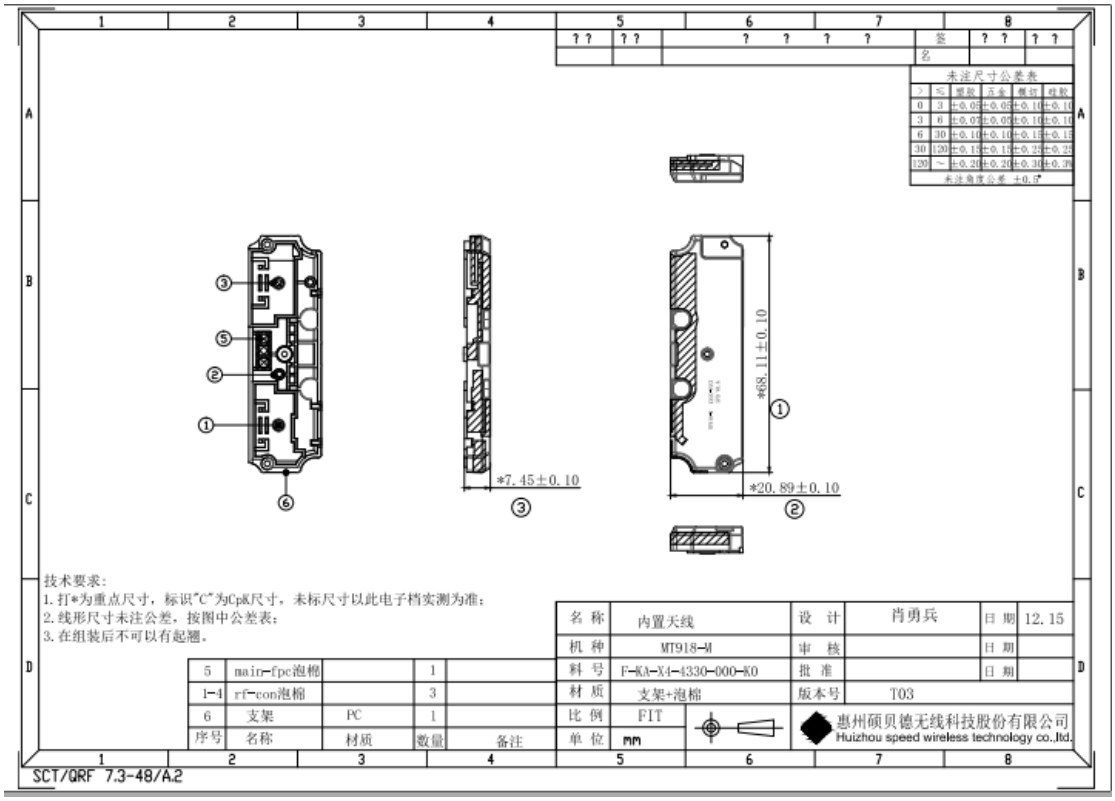
5 Structure Diagram




*6.14±0.10
*16.10±0.10
*6.10±0.10
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。
名称 内置天线
机种 MT918-SIDE
料号 F-KA-X4-4331-000-K0
材质 支架+泡棉
比例 FIT
单位 mm
设计 肖勇兵
审核
批准
版本号 T03
日期 12.15
惠州硕贝德无线科技股份有限公司
Huizhou speed wireless technology co.,ltd.
1 rf-con泡棉 2
4 支架 PC 1
序号 名称 材质 数量 备注
SCT/QRF 7.3-48/A.2


*7.45±0.10
*20.89±0.10
*68.11±0.10
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。
名称 内置天线
机种 MT918-M
料号 F-KA-X4-4330-000-K0
材质 支架+泡棉
比例 FIT
单位 mm
设计 肖勇兵
审核
批准
版本号 T03
日期 12.15
惠州硕贝德无线科技股份有限公司
Huizhou speed wireless technology co.,ltd.
5 main-fpc泡棉 1
1-4 rf-con泡棉 3
6 支架 PC 1
序号 名称 材质 数量 备注
SCT/QRF 7.3-48/A.2