Specifications For Passive Antenna of Porject MT918

<table>
<tr><td colspan="2">Customer/Project</td><td colspan="2">MT918
A5 Antenna</td><td colspan="2">Frequency Band</td><td>1000-2000MHZ</td></tr>
<tr><td colspan="2">JHSCT P/N</td><td colspan="2">F-KY-31-0080-000-K0</td><td colspan="2">Version</td><td>V3.0</td></tr>
<tr><td colspan="2">Date</td><td colspan="5">2024.06.17</td></tr>
<tr><td colspan="7">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 colspan="2">LCX</td></tr>
<tr><td>ME</td><td>WJ</td><td>ME</td><td colspan="2">XYB</td></tr>
<tr><td>QC</td><td></td><td colspan="2">Remark</td><td colspan="2"></td></tr>
<tr><td colspan="7">Customer</td></tr>
<tr><td colspan="2">Date</td><td colspan="5"></td></tr>
<tr><td colspan="2" rowspan="2">Confirmed by</td><td>RF</td><td colspan="4"></td></tr>
<tr><td>ME</td><td colspan="4"></td></tr>
</table>

1. Project Overview

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

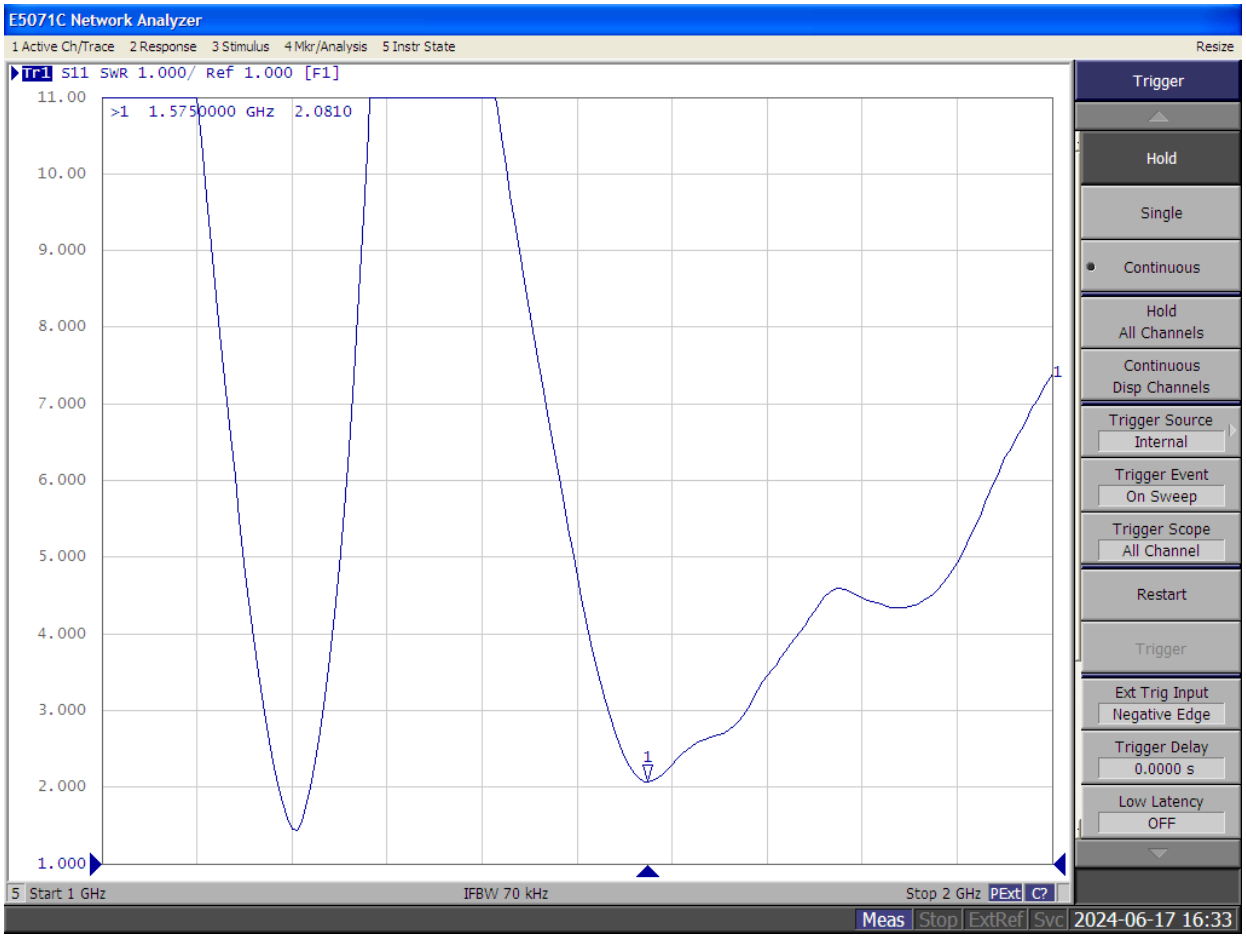
The antenna solution is to make LDS wiring on the outside of the exterior surface bracket. The installation position is shown in Figure 1 :

2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	1000-2000MHZ
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

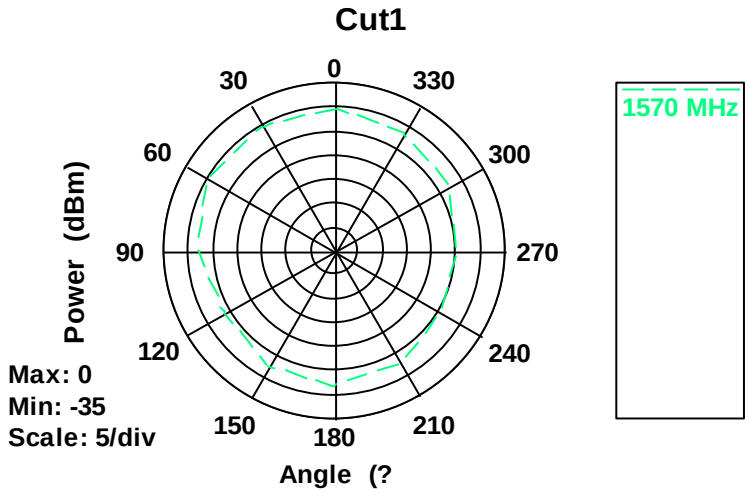


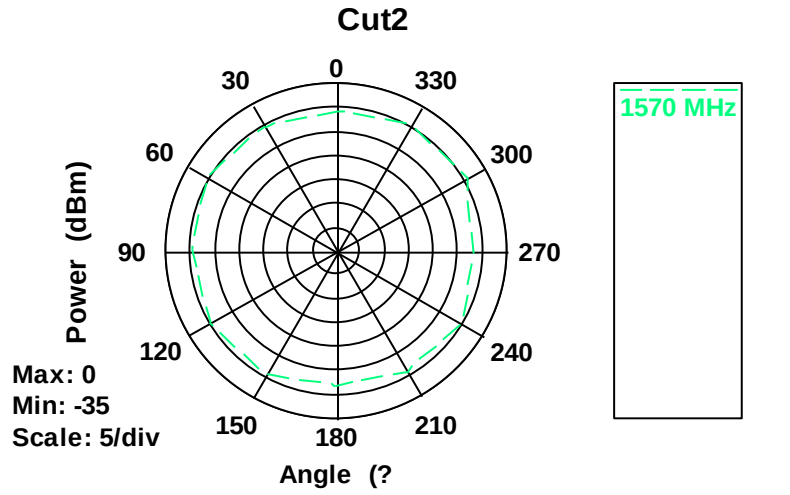
4.2Passive Efficency and Gain

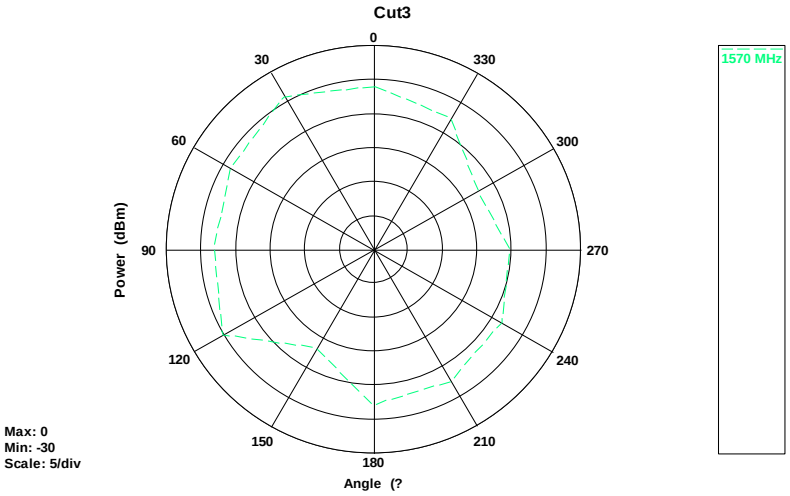
Frequency	Efficiency	Gain (dBi)
1000	2.34364	-11.956
1010	2.48047	-11.6419
1020	2.86342	-10.955
1030	3.80843	-9.66726
1040	5.08862	-8.57803
1050	6.70792	-7.69003
1060	8.8551	-6.87592
1070	11.3446	-5.99842
1080	14.0256	-5.18842
1090	16.4875	-4.57429
1100	19.3515	-3.92937
1110	23.1392	-3.1834
1120	27.5252	-2.45945
1130	29.3237	-2.30773
1140	32.1934	-2.11561
1150	33.3513	-1.91034
1160	28.3996	-2.52326
1170	21.4724	-3.57102
1180	14.8667	-5.05795
1190	9.48685	-6.9479
1200	6.27082	-8.68606
1210	4.24	-10.2891
1220	2.8955	-11.8574
1230	1.8346	-13.8535
1240	1.13039	-15.9642
1250	0.778982	-18.0818
1260	0.668938	-19.395
1270	0.766634	-19.0207
1280	1.07878	-17.4801
1290	1.65494	-15.5596
1300	2.44467	-13.7478
1310	3.3962	-12.2278
1320	4.41622	-10.9495
1330	5.60992	-9.80181
1340	7.25326	-8.59284
1350	9.0687	-7.49587
1360	11.2094	-6.49962
1370	13.6599	-5.39719
1380	16.3387	-4.48907
1390	18.4587	-4.09566
1400	20.2013	-4.02012
1410	21.4886	-3.72545
1420	22.6033	-3.37172
1430	24.9821	-2.9245
1440	26.8909	-2.60246
1450	27.9593	-2.36979
1460	30.0799	-1.99092
1470	30.7418	-1.86222
1480	31.0256	-1.78709
1490	30.1454	-1.96243
1500	29.5918	-2.13573
1510	29.0038	-2.26584
1520	28.5577	-2.26728
1530	28.9865	-2.22067
1540	28.2492	-2.4219
1550	28.2365	-2.53449
1560	28.2222	-2.64447
1570	27.9479	-2.7652

1580	27.4304	-2.93445
1590	26.4485	-3.1774
1600	25.611	-3.35429
1610	24.41	-3.50721
1620	23.5778	-3.6009
1630	22.2469	-3.70449
1640	20.8854	-3.85409
1650	20.5054	-3.76208
1660	20.3003	-3.72019
1670	20.0593	-3.7943
1680	19.6287	-4.0381
1690	19.6214	-4.1659
1700	20.0077	-4.14097
1710	20.1644	-4.12846
1720	20.0655	-4.11604
1730	19.05	-4.38175
1740	18.6092	-4.35974
1750	17.2911	-4.60163
1760	15.5181	-5.00891
1770	14.4332	-5.23534
1780	13.9139	-5.30454
1790	13.8963	-5.1863
1800	13.597	-5.1753
1810	13.098	-5.26741
1820	12.7759	-5.29353
1830	12.2954	-5.45862
1840	11.6045	-5.78796
1850	10.584	-6.38866
1860	10.0623	-6.44391
1870	10.1612	-6.29208
1880	10.3552	-6.20005
1890	10.4198	-6.26509
1900	10.5238	-6.3211
1910	10.9009	-6.36485
1920	11.116	-6.55145
1930	11.1132	-6.15399
1940	10.8662	-6.00898
1950	10.6965	-6.01921
1960	10.7212	-5.9895
1970	10.2581	-6.16319
1980	9.35207	-6.59041
1990	8.70551	-6.84852
2000	8.31245	-7.03098

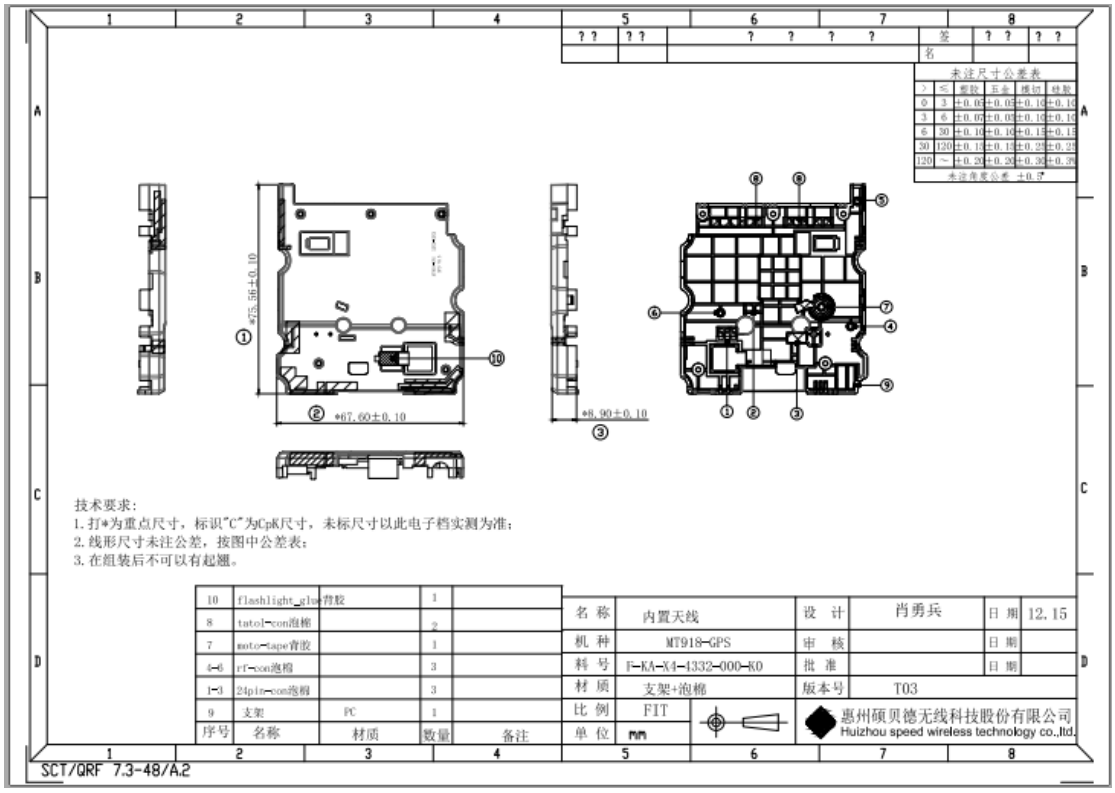
4.3 Antenna 2D pattern

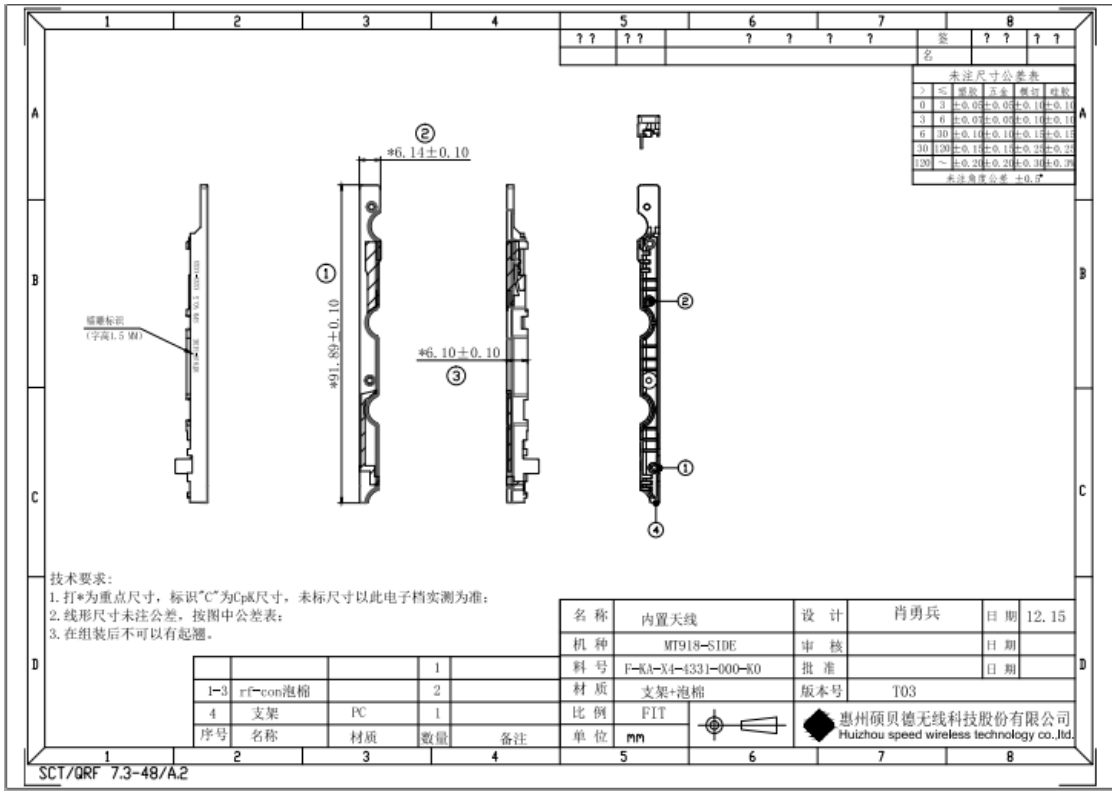


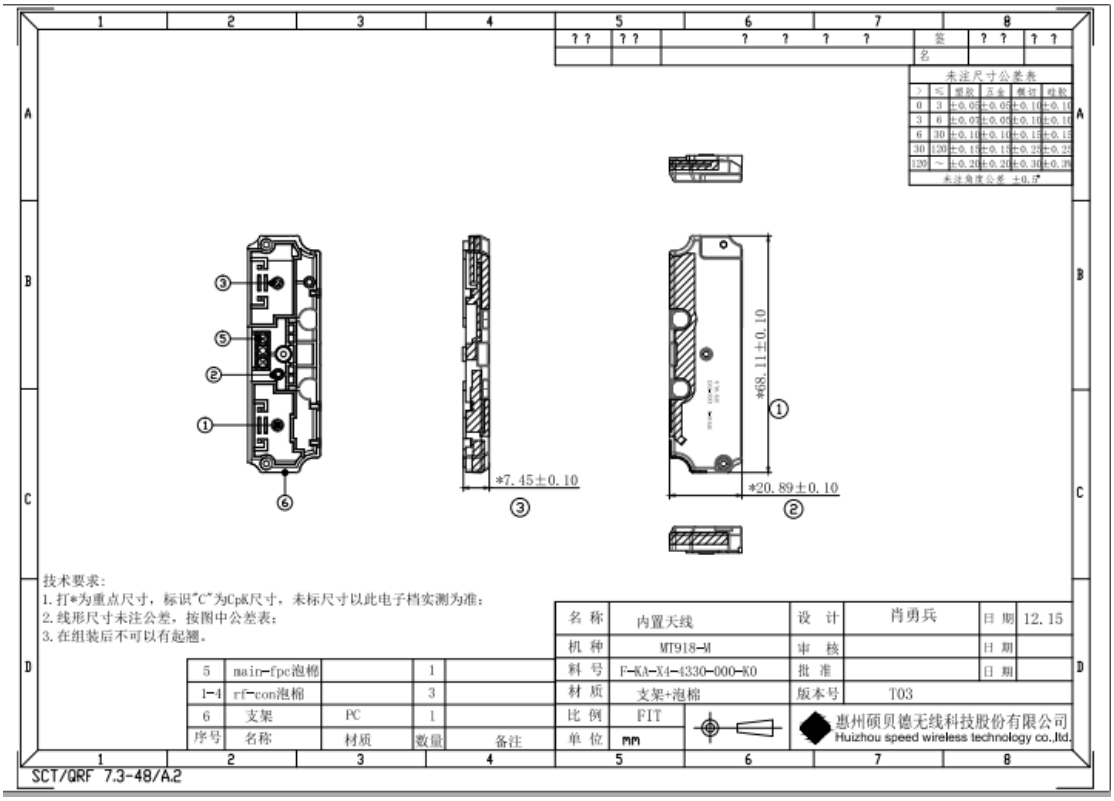

Cut2
0
30
330
60
300
90
270
120
240
150
210
180
Power (dBm)
Max: 0
Min: -35
Scale: 5/div
Angle (?
1570 MHz


Cut3
0
30
330
60
300
90
270
120
240
150
210
180
Power (dBm)
Max: 0
Min: -30
Scale: 5/div
Angle (?
1570 MHz

5 Structure Diagram






未注尺寸公差表
*8.11±0.10
*20.89±0.10
*7.45±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。
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
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
日 期 12.15
版本号 T03
惠州硕贝德无线科技股份有限公司
Huizhou speed wireless technology co.,ltd.
SCT/QRF 7.3-48/A.2