

Specifications For Passive Antenna of
Porject MT918

Customer/Project	MT918 A0 Antenna		Frequency Band	600-1000MHZ/ 1700-2700MHZ	
SCT 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 :

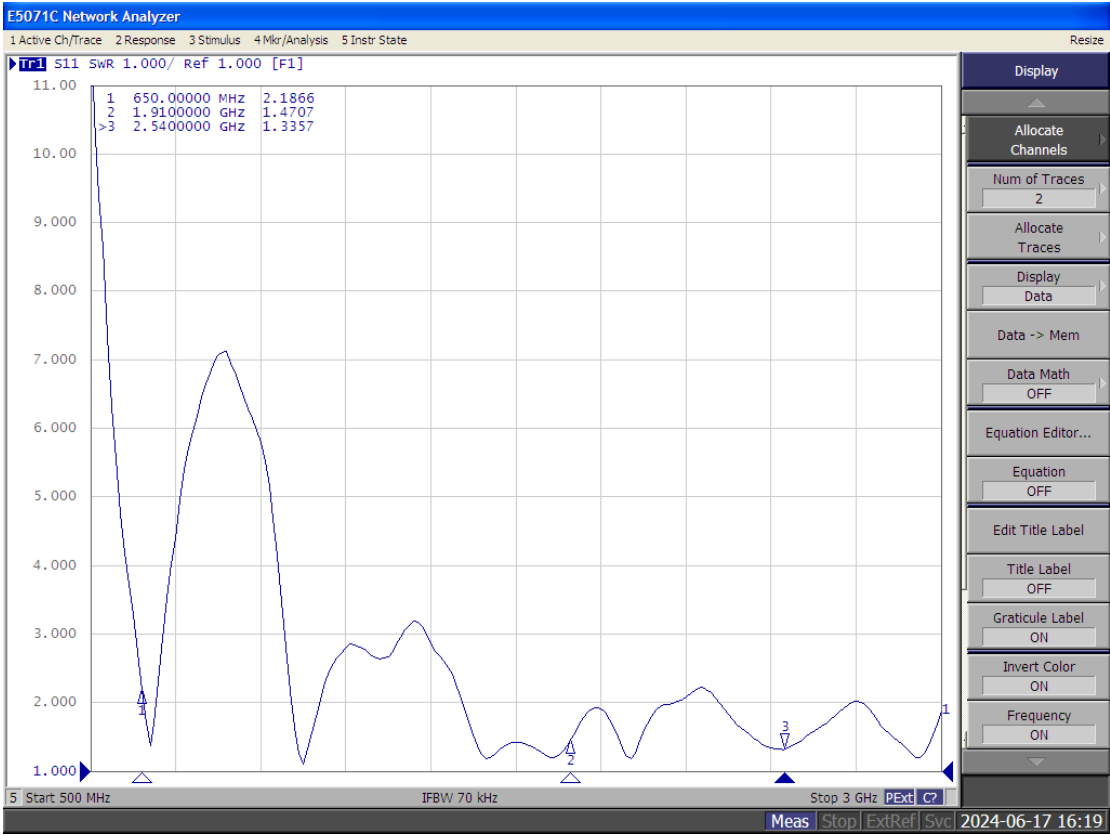


2. Antenna Specification

Antenna Form	Plastic Stent+LDS
Working Bands	600-1000MHZ/1700-2700MHZ
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

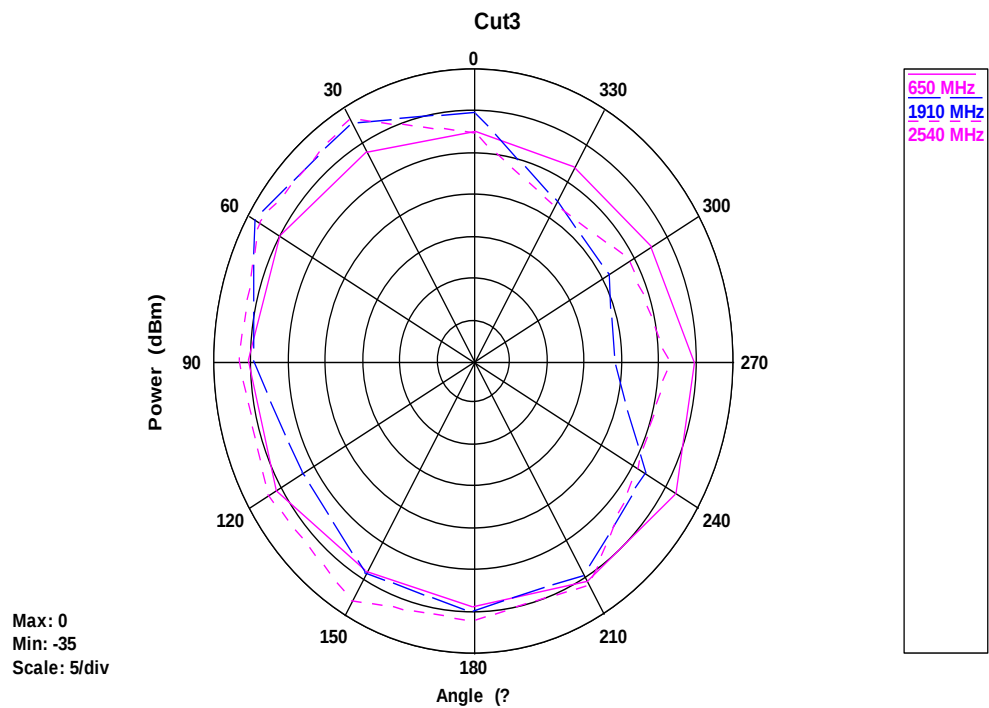
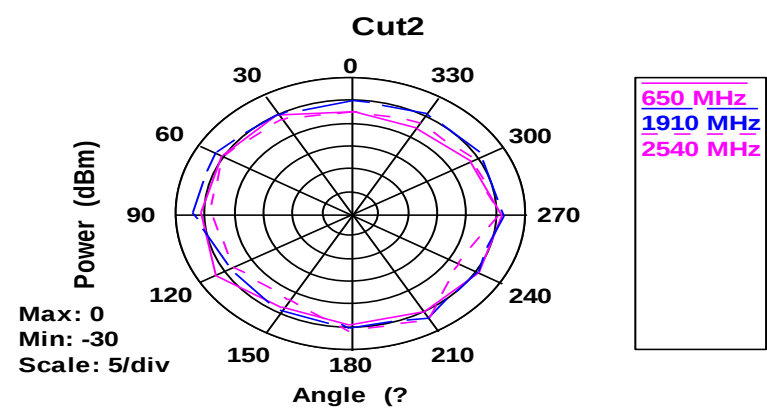
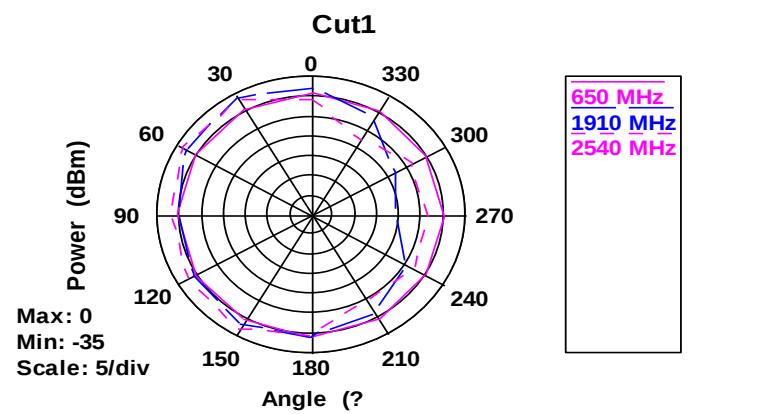


4.2 Passive Efficiency and Gain

Frequency (MHz)	Efficiency (dB)	Gain (dBi)
600	16.9222	-4.91867
610	19.6779	-4.38469
620	23.7364	-3.73236
630	27.7732	-3.20485
640	28.8931	-3.23598
650	30.6353	-2.20952
660	32.1594	-2.07895
670	33.0022	-2.01984
680	33.2987	-1.98324
690	32.9398	-1.98125
700	31.8273	-2.04735
710	29.1842	-2.36798
720	26.887	-2.71415
730	24.3984	-3.18341
740	21.2322	-3.88615
750	18.6755	-4.52717
760	16.0035	-5.29334
770	31.0585	-2.53188
780	32.6801	-2.31808
790	33.3702	-2.30187
800	33.9148	-2.09955
810	29.1976	-2.57043
820	28.6587	-2.4647
830	28.8503	-2.2305
840	27.4984	-2.17952
850	26.0183	-2.13563
860	24.2359	-2.7214
870	26.4144	-2.20209
880	29.0626	-1.65449
890	31.8842	-1.01247
900	34.0227	-0.50209
910	35.7042	-0.07959
920	35.829	0.125699
930	34.9884	0.19693
940	34.8496	0.313935
950	34.3212	0.302417
960	33.9488	0.217489
970	33.5279	0.083694
980	33.8898	0.093701
990	33.7724	-0.00563
1000	32.3371	-0.26983
1700	22.8466	-3.54713
1710	22.5816	-3.37214
1720	22.7095	-3.01129

1730	21.705	-2.99268			
1740	21.9685	-2.72062			
1750	21.9661	-2.64395	1990	27.0457	-0.78014
1760	21.7131	-2.67496	2000	26.9904	-0.94544
1770	21.5973	-2.75269	2010	27.2018	-1.17095
1780	22.1412	-2.73754	2020	27.5687	-1.45116
1790	23.459	-2.66752	2030	27.7813	-1.67325
1800	24.7093	-2.74566	2040	27.9715	-1.62432
1810	26.2192	-2.42171	2050	27.8059	-1.6206
1820	27.8716	-2.01148	2060	28.1017	-1.53484
1830	28.9292	-1.89234	2070	28.3659	-1.50851
1840	29.3128	-2.05071	2080	28.6128	-1.62131
1850	29.3957	-1.60656	2090	28.6929	-1.69837
1860	29.8366	-1.2289	2100	29.151	-1.69374
1870	30.4888	-0.9486	2110	29.6418	-1.59516
1880	30.9699	-0.73328	2120	29.4752	-1.38372
1890	31.3272	-0.5502	2130	29.0456	-1.2522
1900	31.5242	-0.40088	2140	28.0362	-1.51512
1910	31.8228	-0.34136	2150	27.1707	-1.80345
1920	31.6784	-0.32441	2160	26.7885	-1.89676
1930	31.6	-0.42749	2170	26.3246	-1.99814
1940	31.1252	-0.64063	2180	26.1601	-2.03691
1950	30.8593	-0.57975	2190	26.2049	-1.90252
1960	29.8549	-0.49472	2200	26.1976	-1.87113
1970	28.2455	-0.60104	2210	25.8536	-1.89542
1980	27.4499	-0.68778	2220	25.4008	-1.91069
2230	25.4119	-1.89159	2470	33.6362	-0.17026
2240	25.3982	-1.7647	2480	33.7457	-0.2676
2250	25.186	-1.77481	2490	34.0046	-0.53326
2260	25.4789	-1.66022	2500	33.8376	-0.71186
2270	25.9893	-1.51434	2510	33.9015	-0.94343
2280	26.7913	-1.4081	2520	33.9875	-0.80048
2290	27.85	-1.15038	2530	34.3187	-0.51688
2300	28.1669	-1.16967	2540	34.3526	-0.33805
2310	28.6546	-1.21012	2550	34.2206	-0.24123
2320	29.2351	-1.02903	2560	34.1556	-0.23135
2330	29.9902	-0.75732	2570	33.679	-0.28108
2340	30.2718	-0.61684	2580	33.4058	-0.40995
2350	30.5116	-0.52047	2590	33.2159	-0.53005
2360	30.1654	-0.4707	2600	32.8777	-0.43056
2370	29.9357	-0.53901	2610	32.5977	-0.31061
2380	29.2375	-0.66245	2620	31.4412	-0.45085
2390	28.3539	-0.7815	2630	30.1373	-0.57637
2400	28.7031	-0.66376	2640	28.8229	-0.68559
2410	29.2099	-0.59796	2650	27.2998	-0.8971
2420	30.0826	-0.38315	2660	26.3659	-0.98578
2430	30.7754	-0.28771	2670	25.6617	-1.07168
2440	31.7296	-0.09312	2680	24.8609	-1.23303
2450	32.3207	-0.0767	2690	24.1263	-1.42183
2460	33.263	-0.09777	2700	23.325	-1.67002

4.3 Antenna 2D pattern



5 Structure Diagram

