

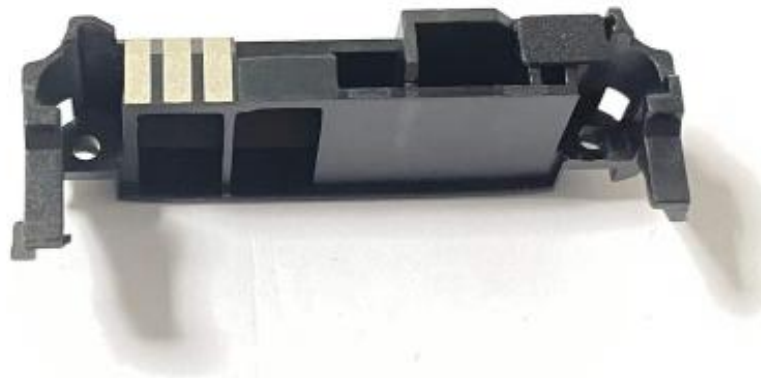
Antenna Specifications

Design Specifications	Typical	Units
Antenna type	frame LDS+foam	
working Frequency	824-960,1710-2690	MHz
Gain	-5.91 ~ 1.91	dBi
Antenna efficiency	14.04 ~ 40.99	%
VSWR	<7	
Ploriaztion	Linear polarization	
Axial Ratio	When the antenna is circular polarization, note the axial ratio in the working bandwidth	N/A
Radiation pattern	omnidirectional	
impedance	50 ohm	
Power handling	33	dBm
Interface	Spring foot contact	
Overall dimensions	See drawing section	
Weight	no requirement	
Operatin Temp	-30 ----- 70	°
Storing Temp	-30 ----- 70	°

407D Law Enforcement Camera 4G Antenna Specification

1、 Indication

The report mainly provides the test status of various electrical performance parameters of the 407D Law Enforcement Camera 4G Antenna. (As shown in Figure 1 below)



2、 Electrical Performance

2.1 Specification standard

407D Law Enforcement Camera 4G Antenna working band is at 824-960,1710-2690MHz.

2.2 Antenna matching circuit

407D Law Enforcement Camera 4G Antenna matches the original matching circuit.

2.3 VSWR Test

A. Test setup

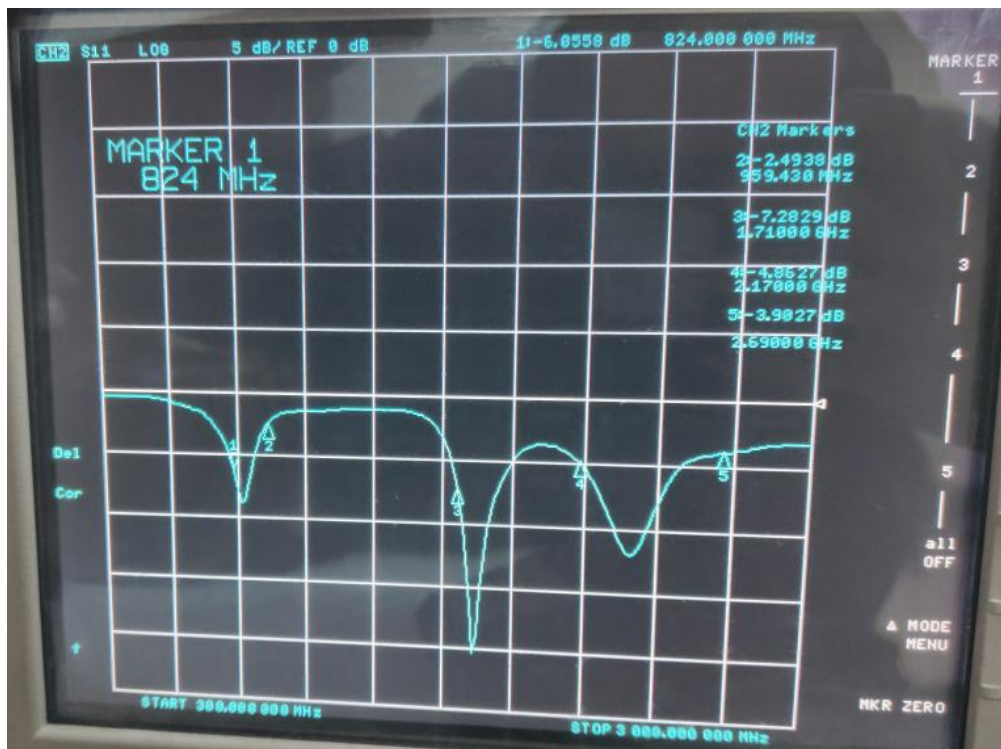
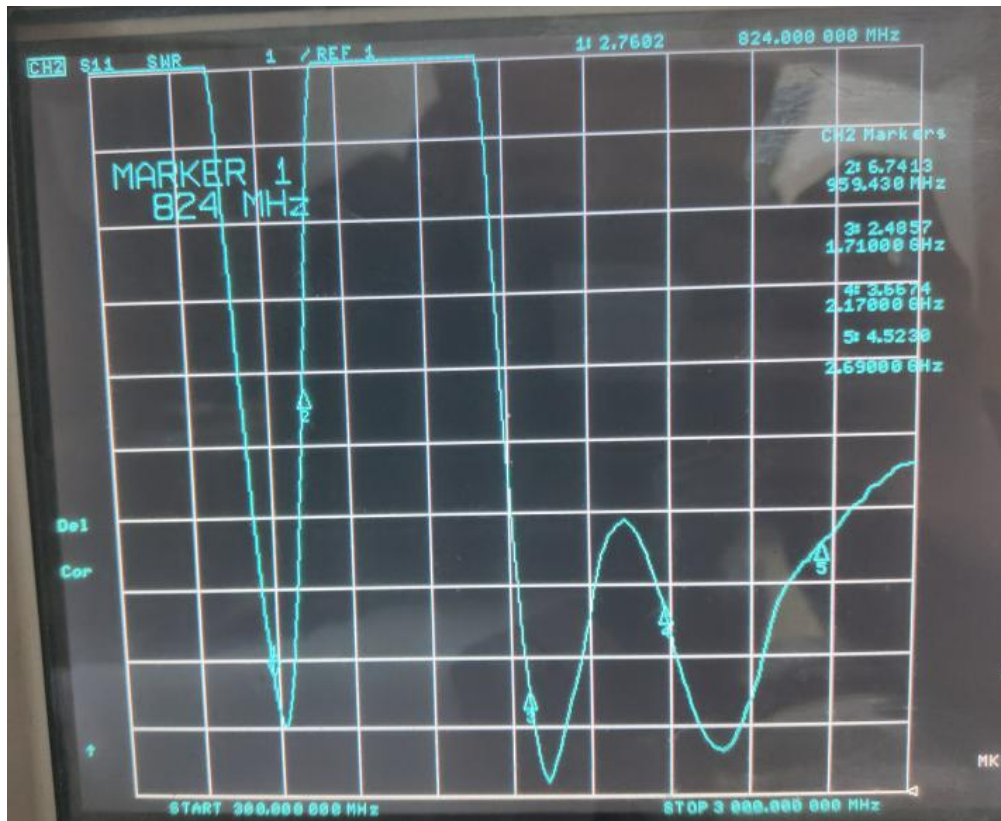
VSWR measurements (S11) were performed using Agilent E5071B Network Analyzer and the previously described test fixture. A ferrite-loaded coaxial cable was used to mitigate surface currents on the outside of the cabling. The testing was performed in free space ETS AMP8500S chamber.

B. VSWR

The table below shows the standing wave ratio value of the edge frequency of the working band of 407D Law Enforcement Camera 4G Antenna matches the original matching circuit.

Frequency band	frequency (MHz)	VSWR
4G	824	2.85
	960	6.74
	1710	2.48
	2170	3.66

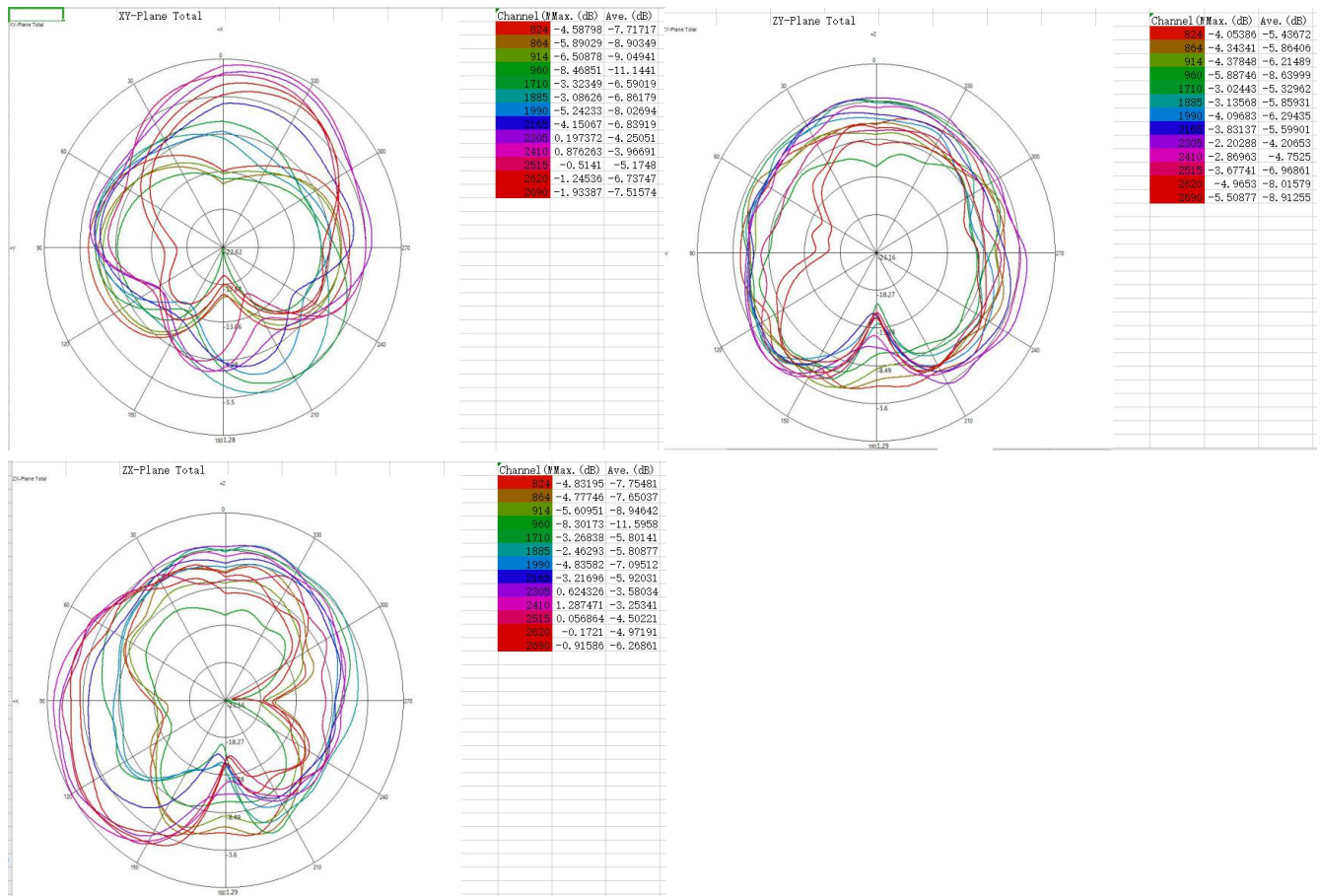
2.3.1 S11 parameter



2.3.2 Antenna Passive Efficiency

Freq(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)	Freq(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
824	-4.05	-6.89	20.45	1710	-2.67	-5.58	27.66
834	-3.99	-6.57	22.05	1745	-1.49	-4.77	33.35
844	-4.15	-6.53	22.25	1780	-1.24	-4.50	35.50
854	-4.41	-6.87	20.55	1815	-1.36	-4.71	33.84
864	-4.47	-7.09	19.52	1850	-1.64	-5.32	29.37
874	-4.54	-7.23	18.93	1885	-2.46	-6.08	24.67
884	-4.75	-7.33	18.49	1920	-3.51	-6.78	21.01
894	-4.77	-7.38	18.27	1955	-4.14	-6.97	20.10
904	-4.77	-7.57	17.51	1990	-4.04	-6.95	20.16
914	-4.45	-7.54	17.61	2025	-4.67	-7.66	17.14
924	-4.59	-7.73	16.88	2060	-4.16	-7.61	17.34
934	-4.94	-7.80	16.67	2095	-3.59	-7.45	17.97
944	-5.55	-8.17	15.25	2130	-3.68	-6.93	20.30
954	-5.67	-8.26	14.93	2165	-3.22	-6.17	24.15
960	-5.91	-8.54	14.04	2200	-2.47	-5.71	26.88
				2235	-1.56	-5.32	29.38
				2270	-0.82	-4.90	32.33
				2305	0.58	-4.24	37.63
				2340	1.54	-3.87	40.99
				2375	1.91	-3.99	39.89
				2410	1.28	-4.12	38.71
				2445	0.99	-4.33	36.93
				2480	0.79	-4.70	33.88
				2515	0.01	-5.61	27.46
				2550	0.52	-6.15	24.28
				2585	0.47	-6.17	24.15
				2620	-0.27	-6.12	24.43
				2655	0.07	-5.91	25.65
				2690	-0.94	-7.14	19.32

2.3.3 Pattern



3、Suggestion And Solution

This report is according to the customer provide 407D Law Enforcement Camera 4G Antenna the final version of the electrical performance of antenna.

As can be seen from the above test data, this antenna provides better electrical performance.

We are looking forward to your confirmation. Thank you for your cooperation!

4、Appearance Drawing

