

Kunshan Innowave Communication Technology Co., Ltd.

(SPECIFICATION FOR APPROVAL)

Customer Name: Hoymiles Power Electronics Inc.

Item name: External Antenna-HMS-400A

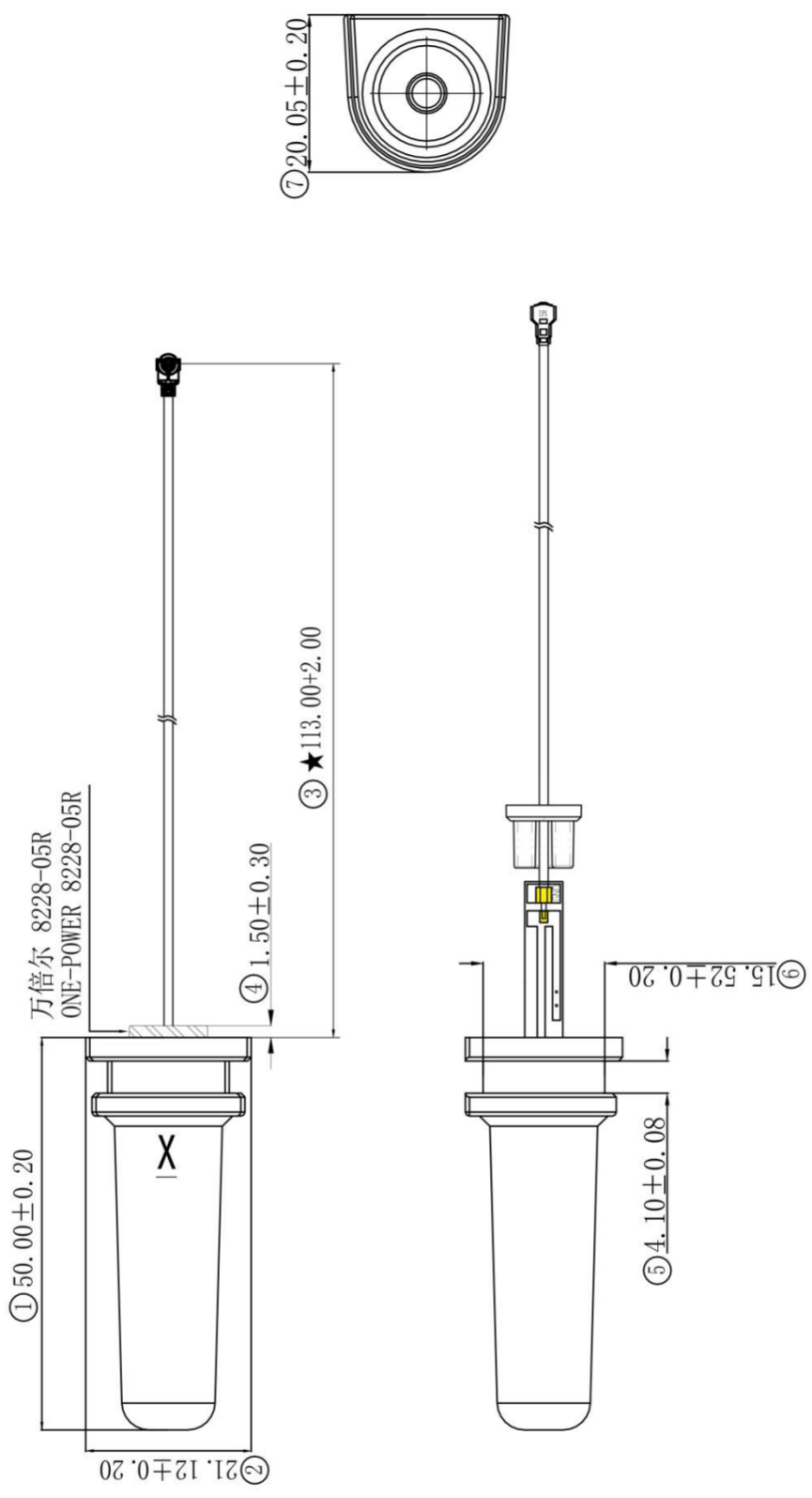
Frequency band 860~930MHz, impedance 50ohm, gain -0.93dBi max, exposed wire length
L=113mm, cable RF1.13 black cable, first generation IPEX terminal -40°C~85°C

Vender Part No : F062A9209110001

Customer Part No : A6040390

Revision : A/1

Date : 2024. 11. 22



Electrical properties

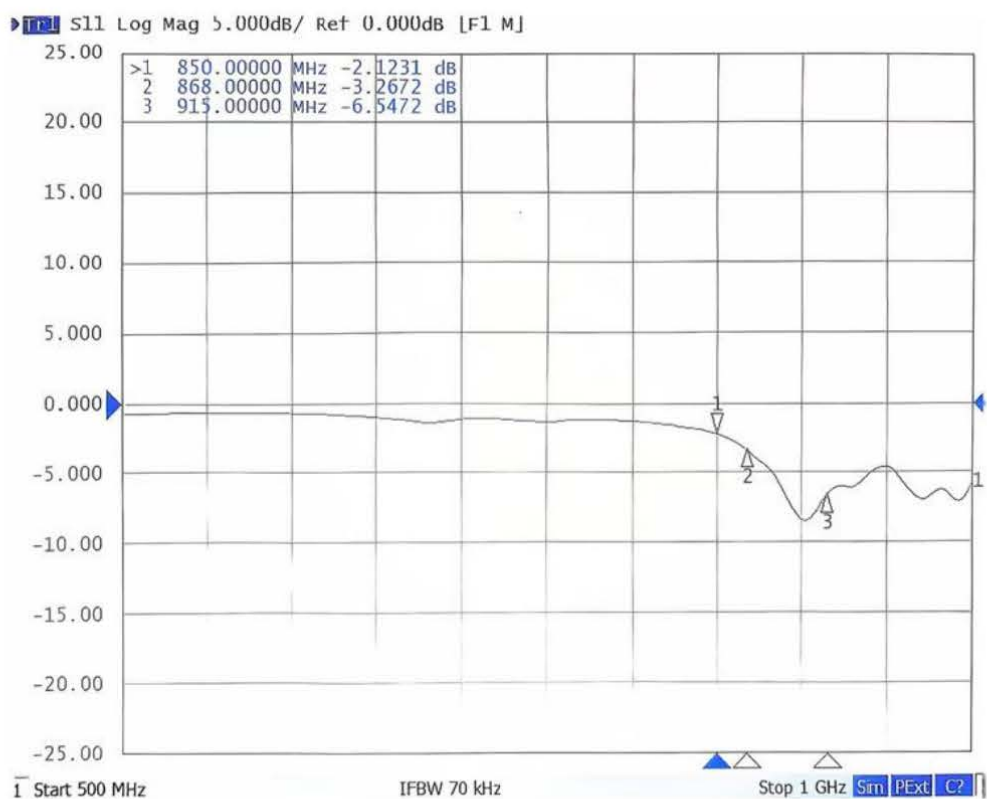
1.1 Electrical properties Reports

Test Reports

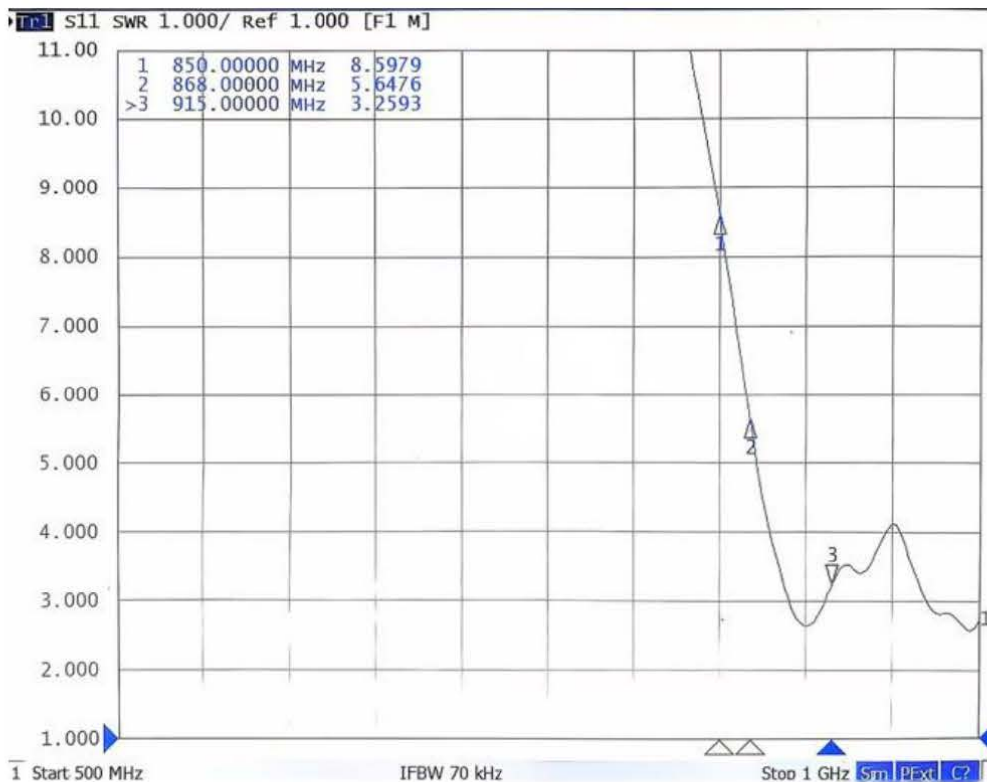
Electrical Properties	
Frequency	860MHz~930MHz
Antenna Type	External Antenna
S11	-3.27 (868MHz) ; -6.54 (915MHz)
Gain (Max)	-0.93dBi
Polarization	Linear, Vertical

1.2 S parameter :

S11:



SWR:



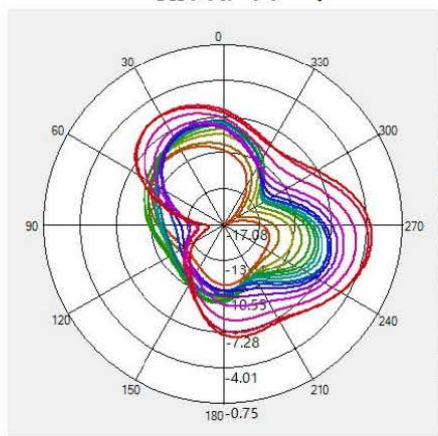
1.3 Passive test data :

Test equipment : GTS RayZone 1800

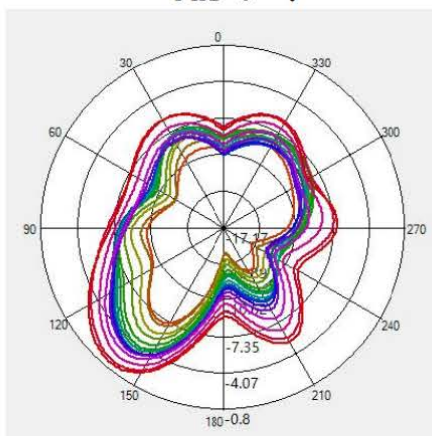
Freq(MHz)	Effi (db)	Effi (%)	Gain (dBi)
808	-10.72	8.47	-6.9
818	-10.43	9.06	-6.36
828	-9.8	10.48	-5.43
838	-9.38	11.52	-4.84
848	-8.91	12.87	-4.18
858	-8.81	13.14	-3.76
868	-8.83	13.1	-3.56
878	-8.74	13.38	-3.35
888	-8.69	13.52	-3.37
898	-8.77	13.27	-3.39
908	-8.65	13.64	-3.41
918	-8.43	14.34	-3.23
928	-7.92	16.13	-2.78
938	-7.11	19.47	-2.01
948	-6.33	23.29	-1.29
958	-6.22	23.86	-0.93

1.4 2D drawing :

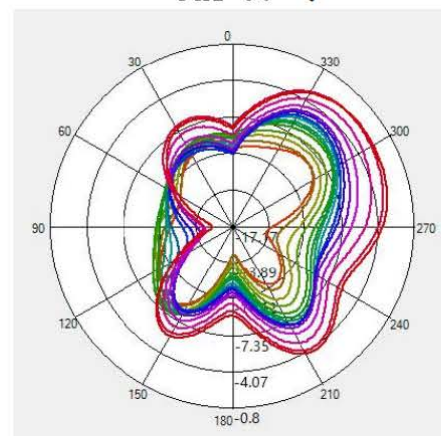
Theta=90° :



Phi=0° :

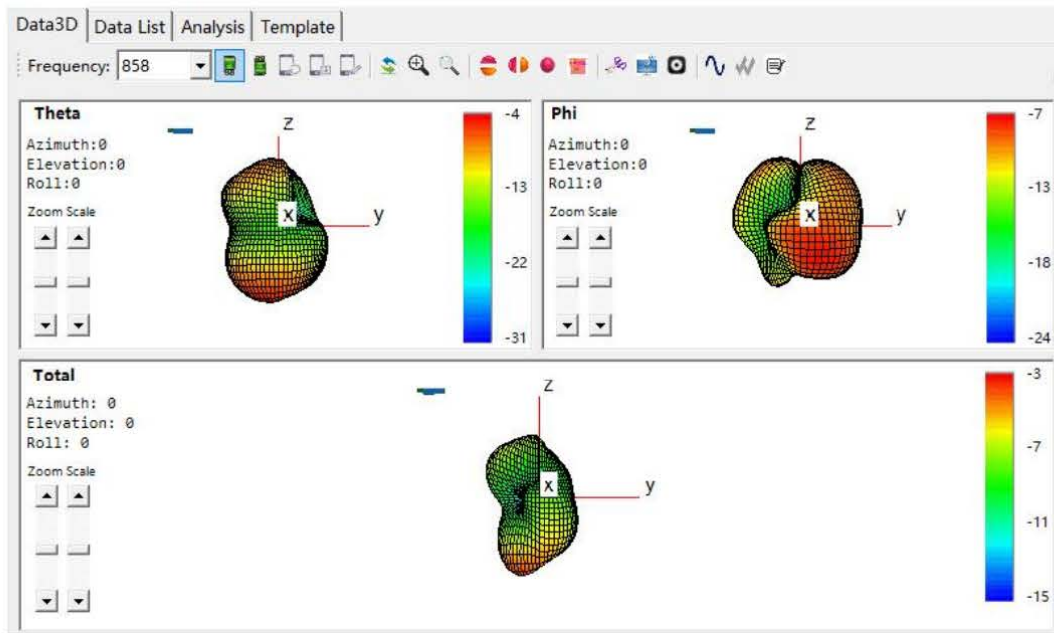


Phi=90° :

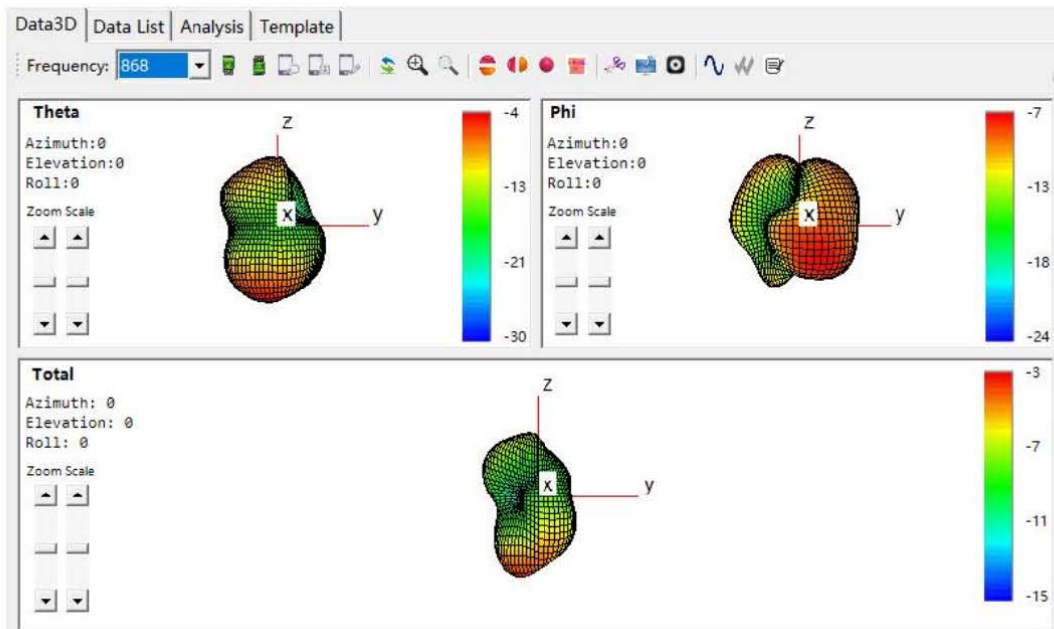


1.5 3D drawing :

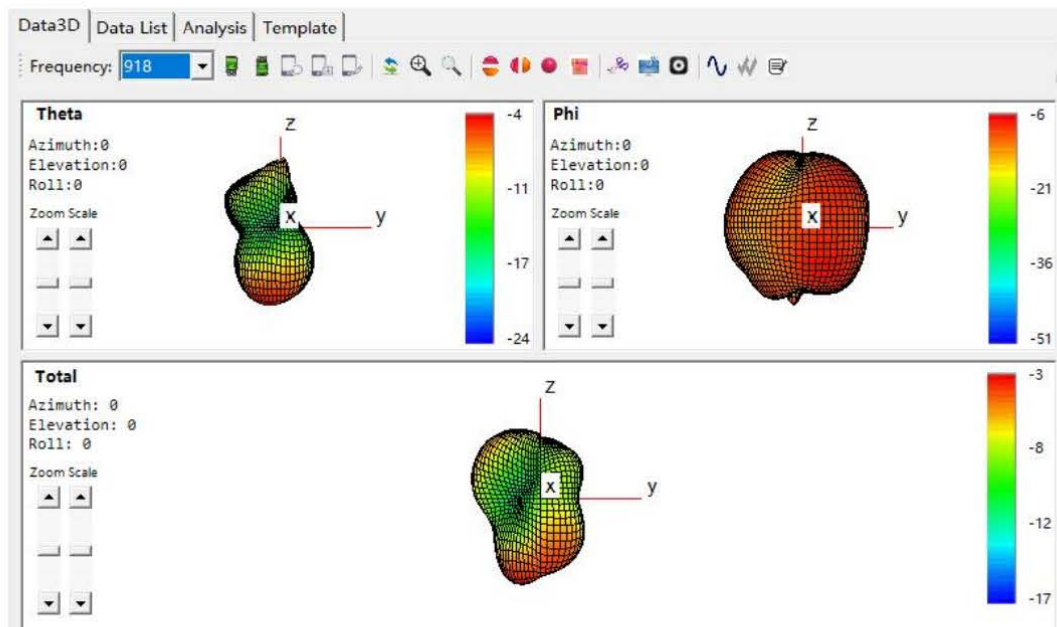
858MHz:



868MHz:



918MHz:



1.6 Physical diagram of the antenna :

