Product Datasheet

CW-WZ-0194

868/915MHz External Antenna

Key Features

Frequency: 868/915MHz

SMA Male Connector

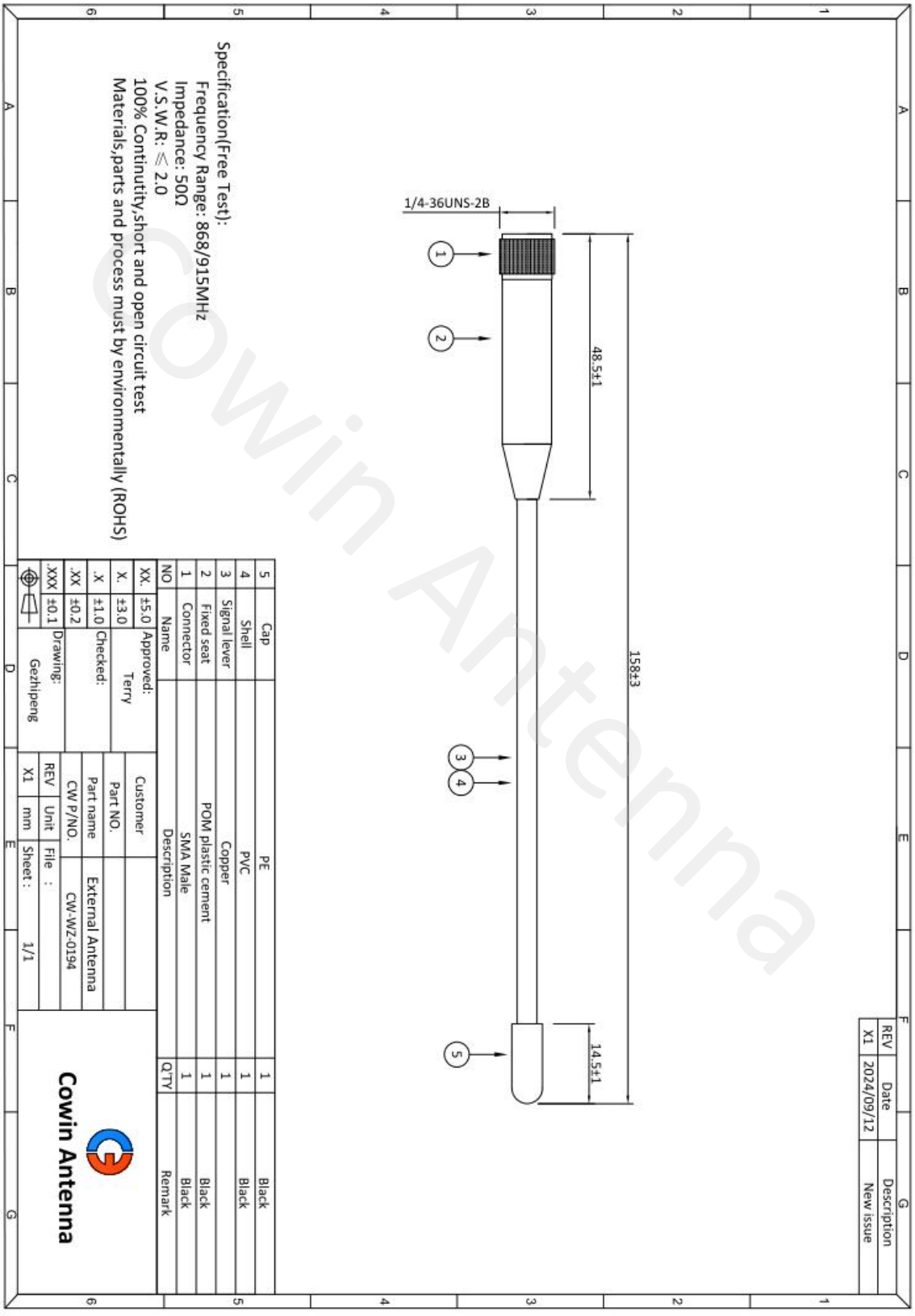
Dimensions: 158mm

1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	868/915
VSWR	≤2.0
Efficiency (%)	67.05
Peak Gain (dBi)	0.87
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Male

2. Material and environmental characteristics

External Structure	PVC+POM plastic cement
Inner Structure	Signal lever
Cable Type	N/A
Connector Type	SMA Male
Dimensions (mm)	158
Antenna Colour	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS


Specification(Free Test):
Frequency Range: 868/915MHz
Impedance: 50Ω
V.S.W.R: ⩽ 2.0
100% Continutity,short and open circuit test
Materials,parts and process must by environmentally (ROHS)
1/4-36UNS-2B
48.5±1
158±3
14.5±1
NO Name Description QTY Remark
5 Cap PE 1 Black
4 Shell PVC 1 Black
3 Signal lever Copper 1
2 Fixed seat POM plastic cement 1 Black
1 Connector SMA Male 1 Black
XX. ±5.0
X. ±3.0
.X ±1.0
.XX ±0.2
.XXX ±0.1
Approved: Terry
Checked:
Drawing: Gezhipeng
Customer
Part NO.
Part name External Antenna
CW P/NO. CW-WZ-0194
REV X1
Unit mm
File :
Sheet : 1/1
Cowin Antenna
REV X1
Date 2024/09/12
Description New issue
Cowin Antenna

4. Antenna test parameters

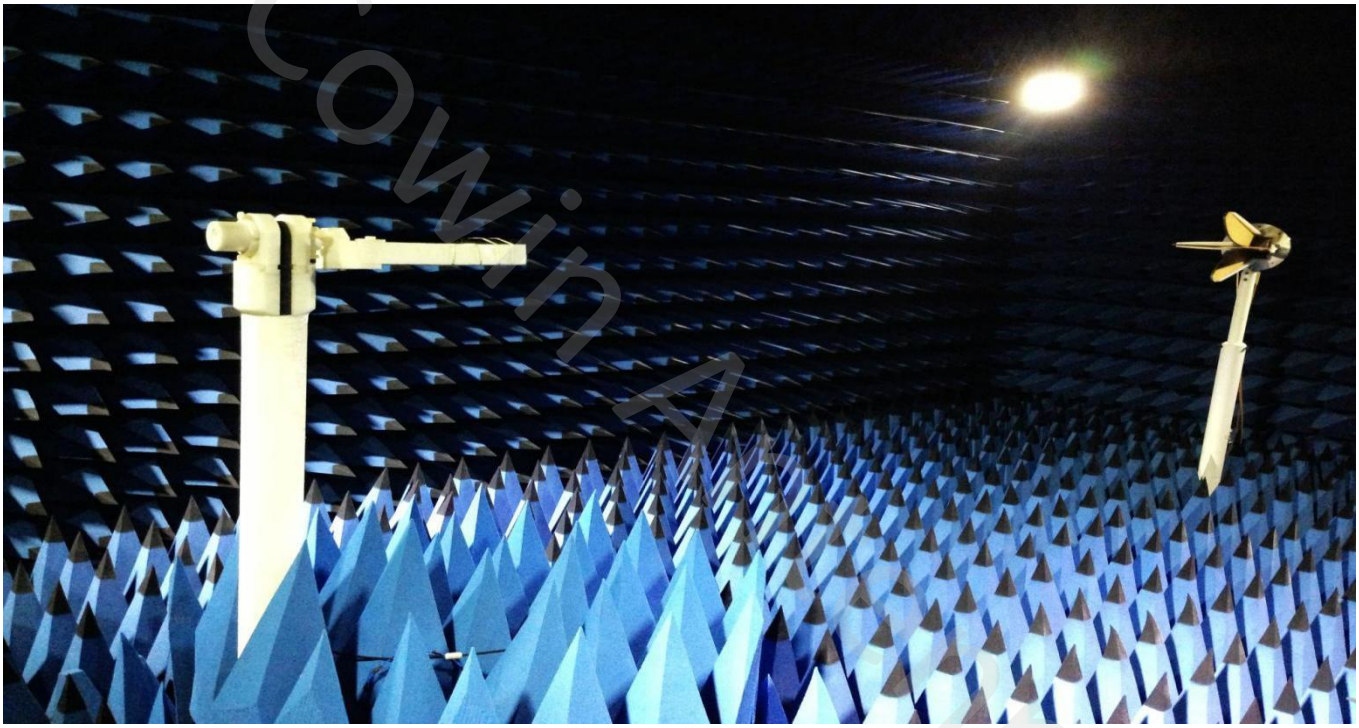
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

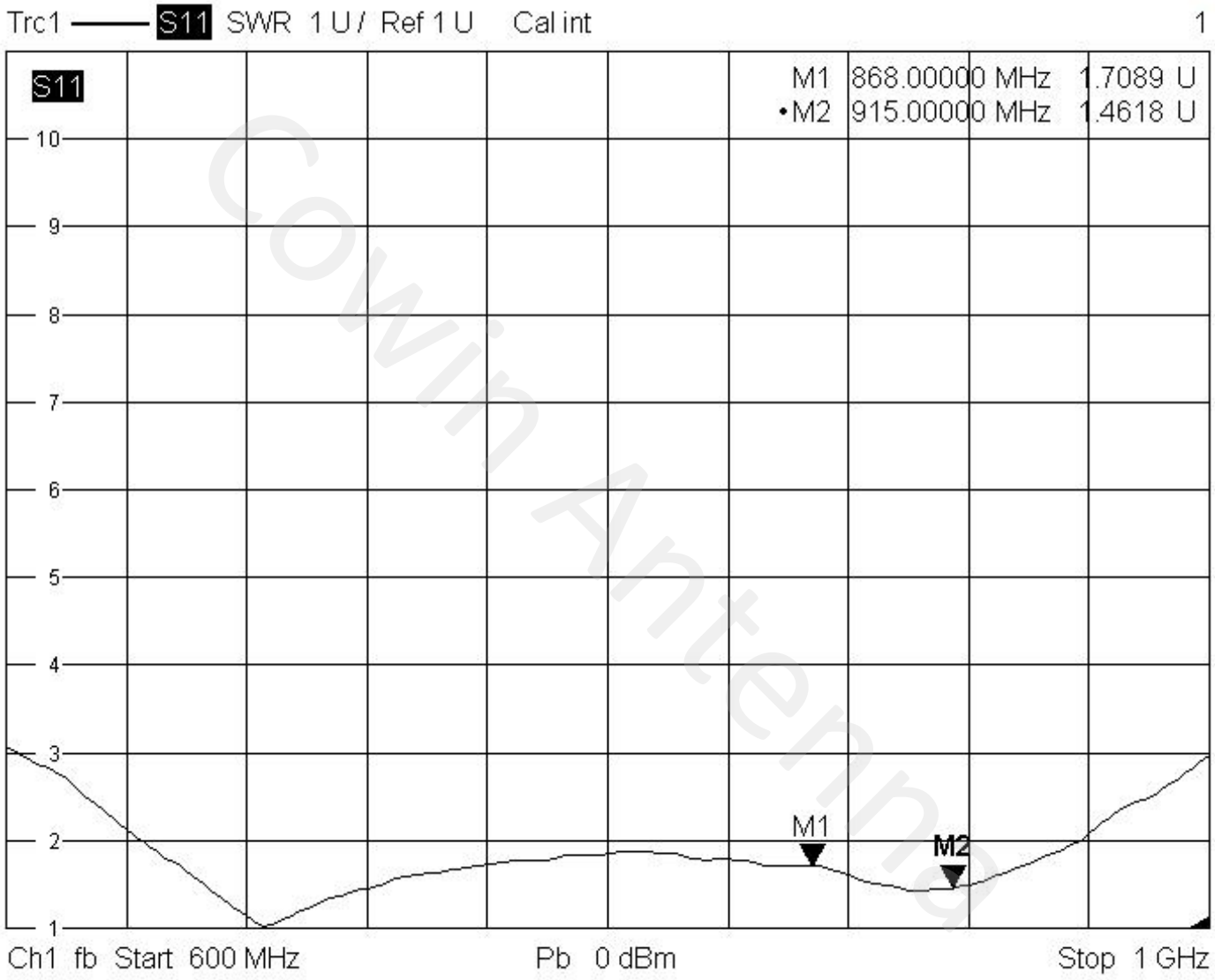
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

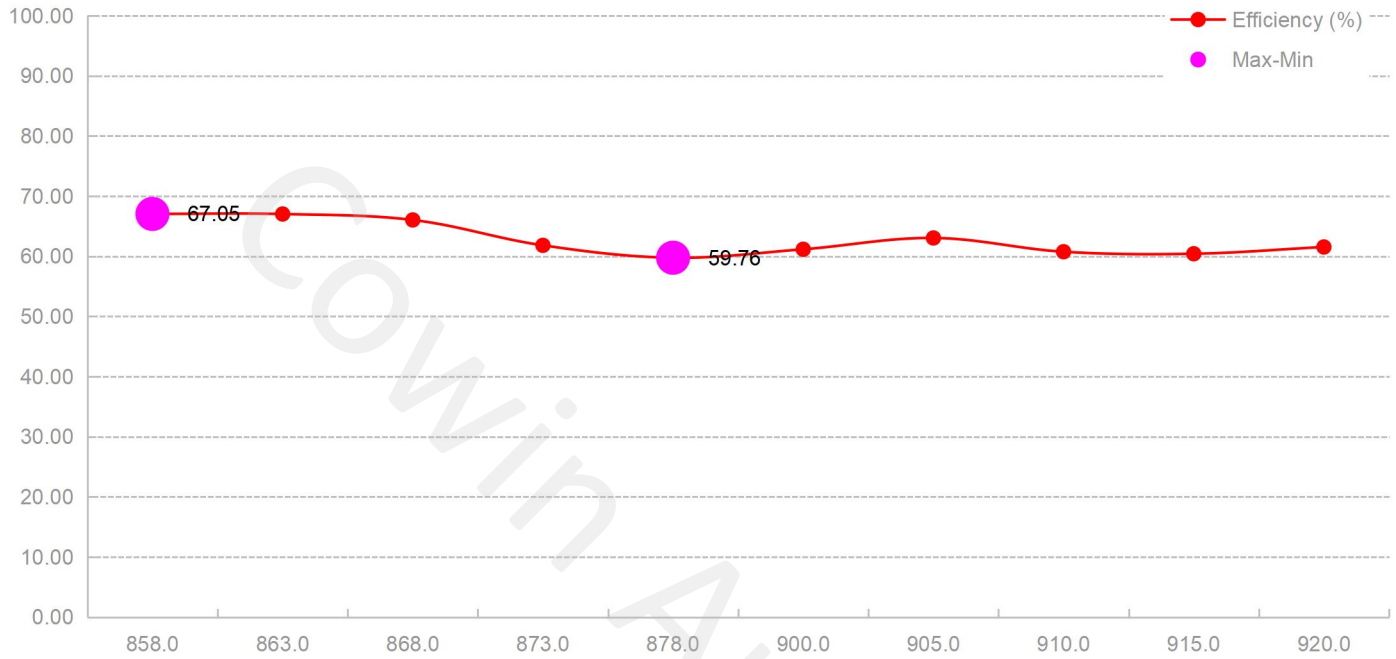
The comprehensive tester is Agilent cmv500



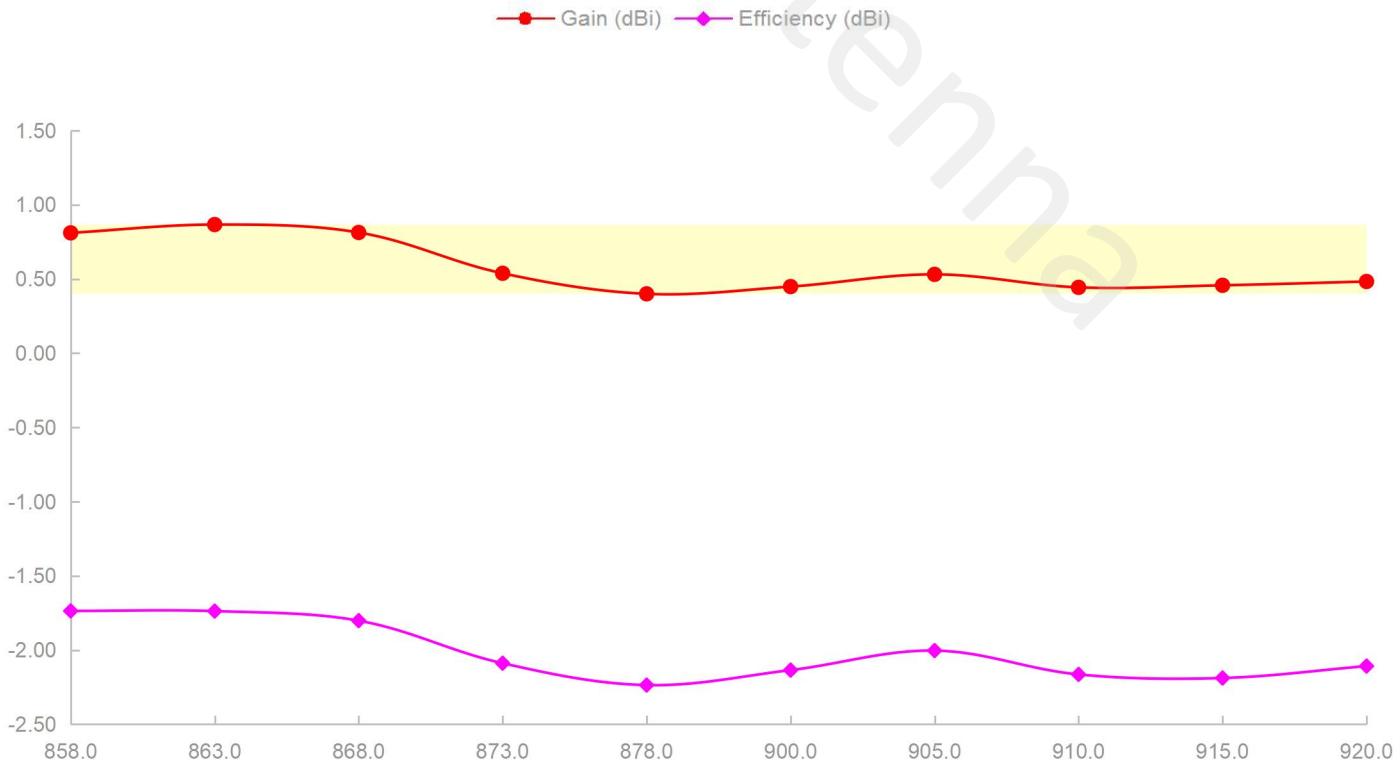
4.1 VSWR



4.2 Efficiency



4.3 Peak gain



4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
858.0	0.81	67.05
863.0	0.87	67.03
868.0	0.81	66.04
873.0	0.54	61.82
878.0	0.40	59.76
900.0	0.45	61.16
905.0	0.53	63.04
910.0	0.44	60.76
915.0	0.46	60.42
920.0	0.48	61.54

4.5 3D&2D Radiation Patterns