SUNNYWAY

SWE013

PN: SW19043EB56



Sunnyway Technology

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1. Electrical Specification

Standards	**4G/3G/2G/NB-IoT/CAT M1**	
Frequency range (MHz)	824~960MHz	1710~2690MHz
Peak Gain (dBi)	-1.5~0.5dBi	-5.0~-0.5dBi
Average Gain (dB)	-5.0~-3.1dB	-10.0~-6.0dB
VSWR	< 2.5	< 2.5
Return Loss	< -7.5	< -7.5
Efficiency (%)	31.0~49.5%	10~25%
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	5	5

2. Mechanical and Environmental Specification

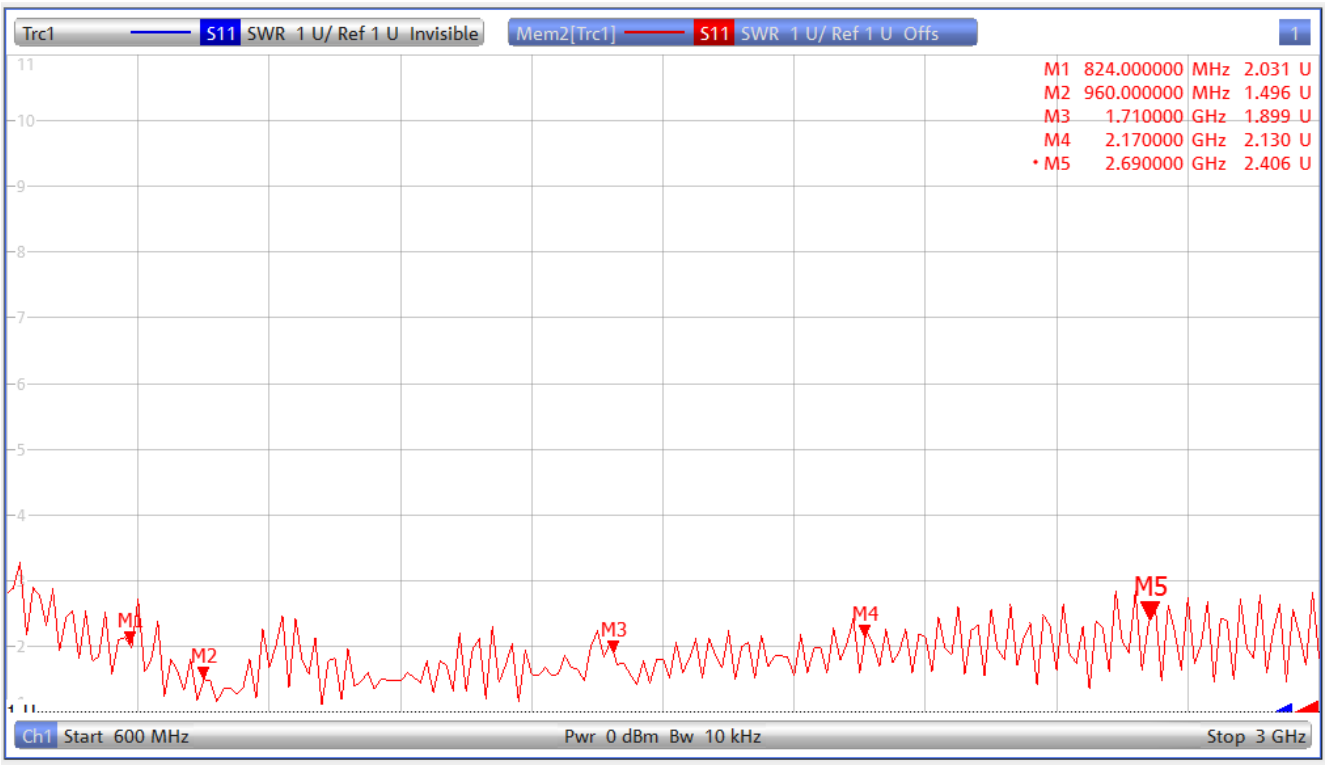
Mounting Type	Connector Mount
Connector Type	SMA Male + 3M cable length
Antenna size(mm)	116.0*22.0*5.3mm
Material	ABS
Operating Temperature (˚C)	- 40 ˚C ~ + 85 ˚C
Storage Temperature(˚C)	- 40 ˚C ~ + 85 ˚C

3. Antenna parameters

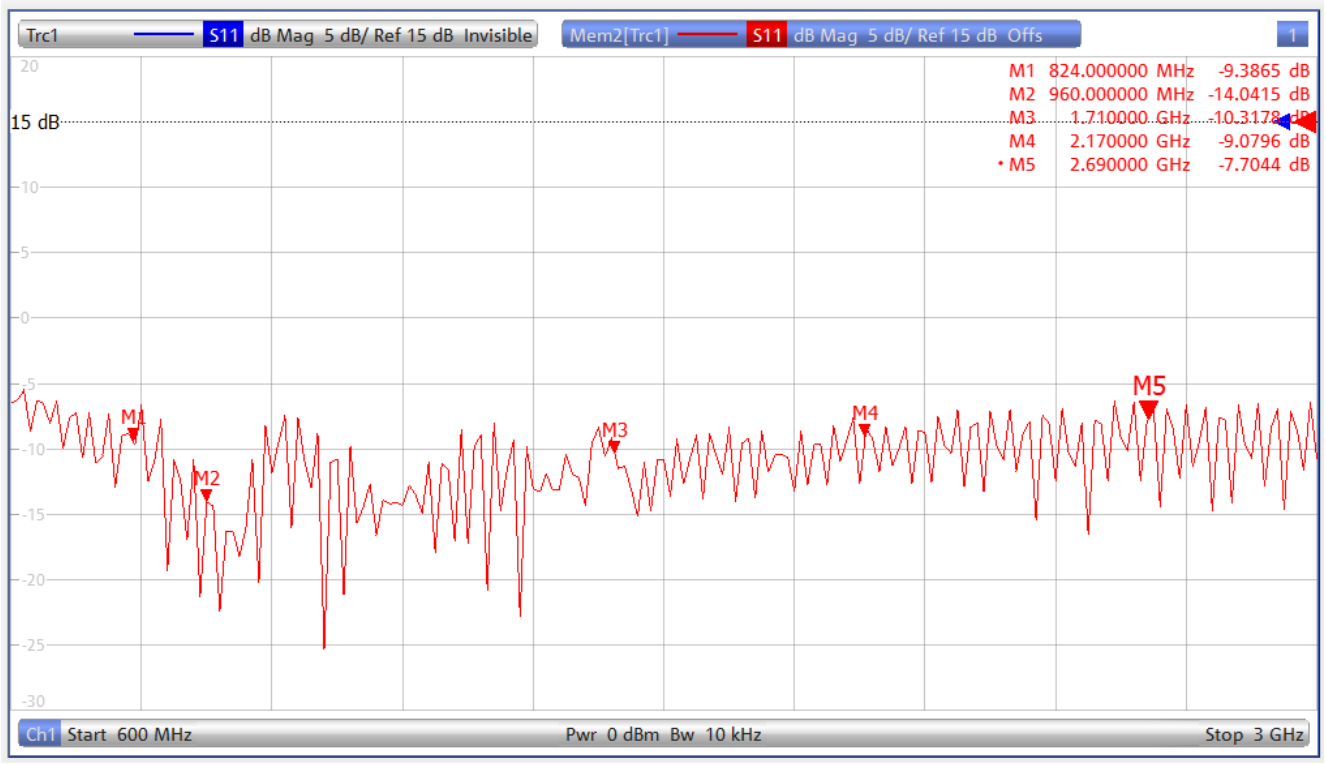
3.1 General Specification

FRE（MHz）	824	960	1710	2170	2690
VSWR	2.03	1.49	1.89	2.13	2.40
Return Loss	-9.38	-14.0	-10.3	-9.07	-7.70
Eff (%)	31.0	49.5	23.3	19.0	10.7
PEAK Gain (dBi)	-0.79	-0.07	-2.26	-2.24	-4.16

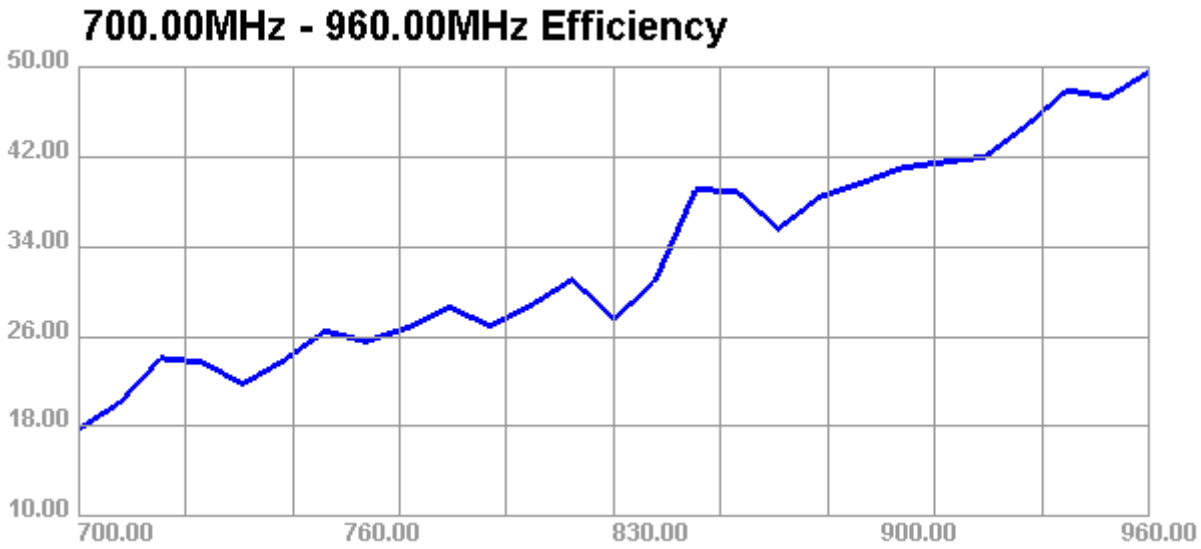
3.2 VSWR

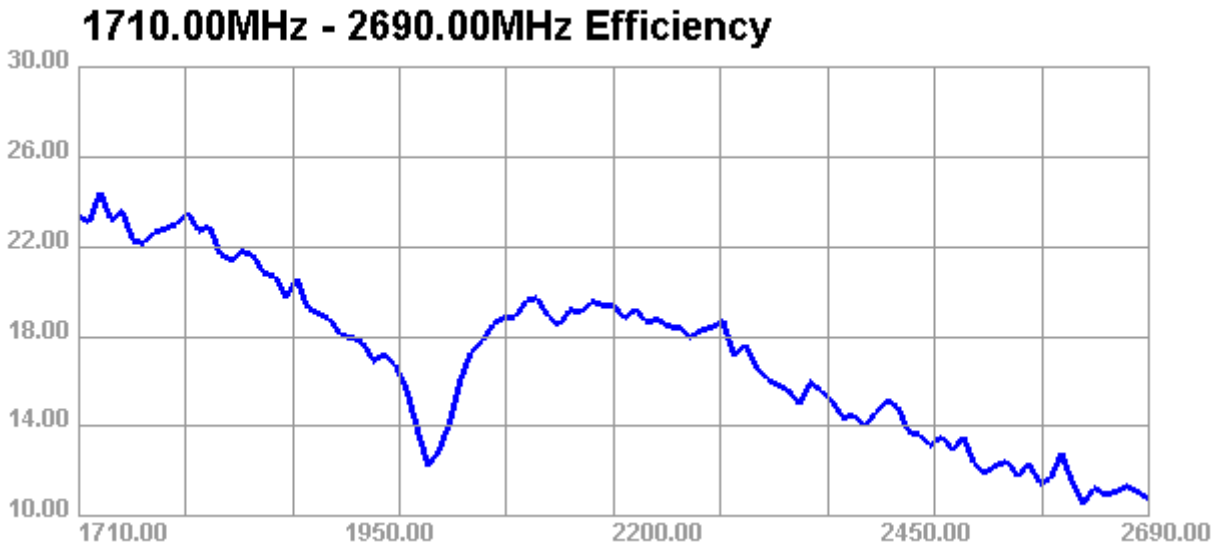


3.3 Return Loss

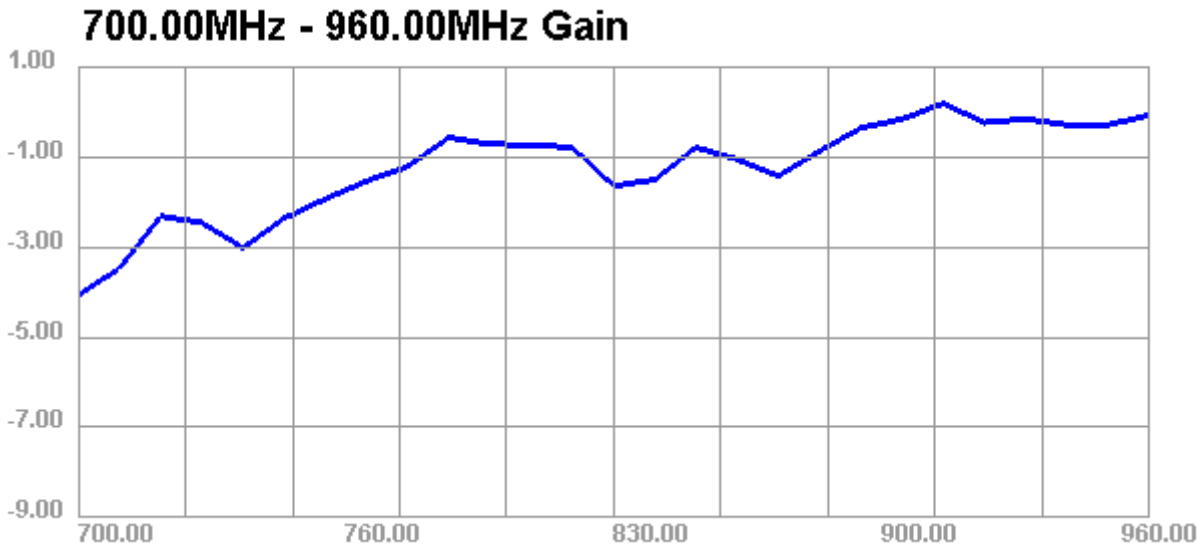


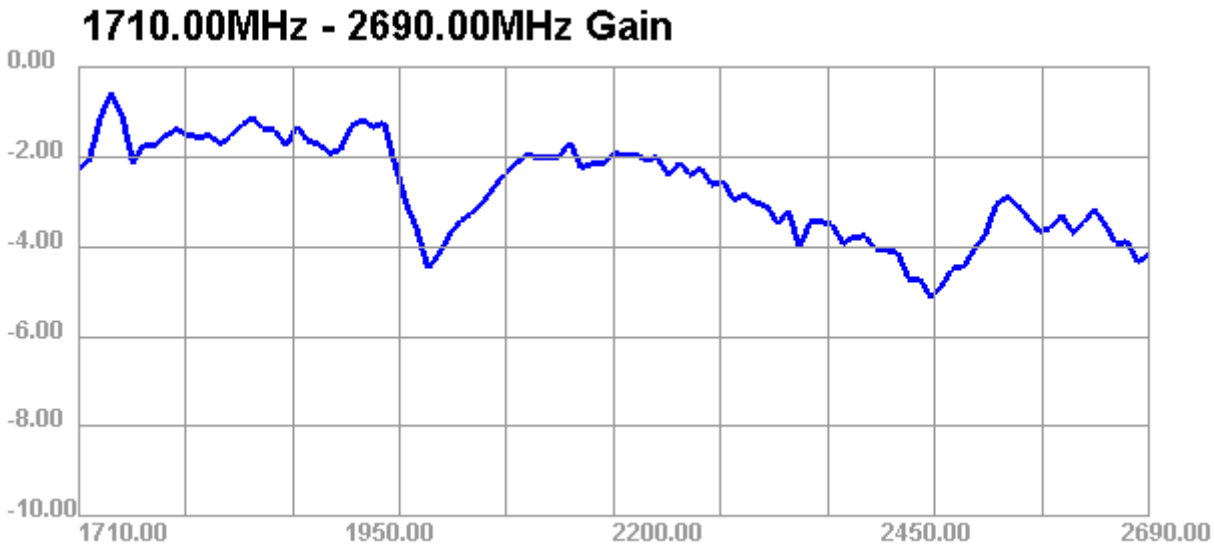
3.4 Efficiency



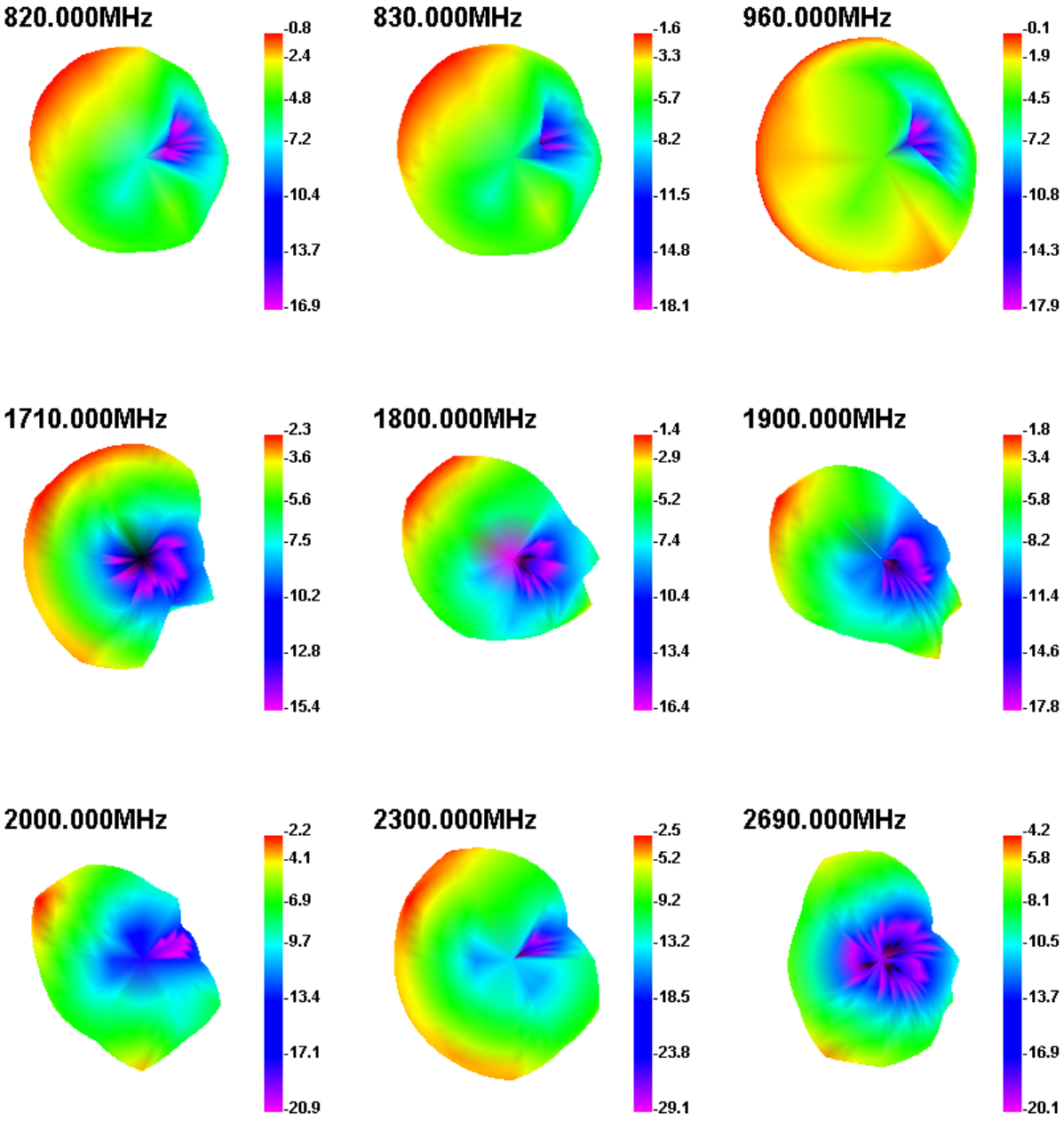

1710.00MHz - 2690.00MHz Efficiency
30.00
26.00
22.00
18.00
14.00
10.00
1710.00
1950.00
2200.00
2450.00
2690.00

3.5 Gain

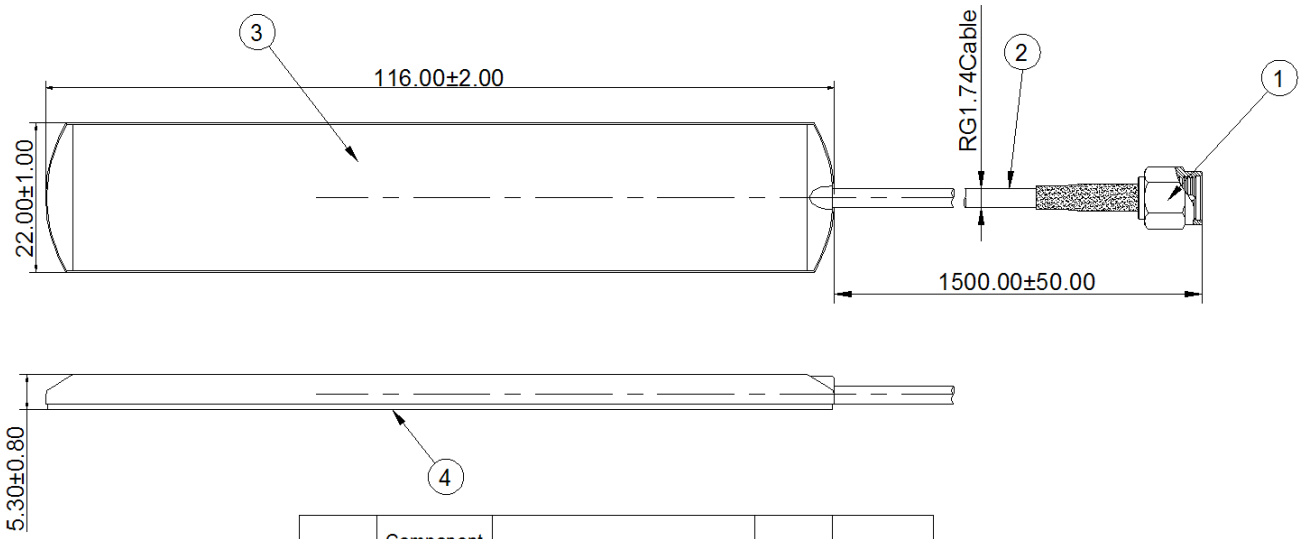

700.00MHz - 960.00MHz Gain
1.00
-1.00
-3.00
-5.00
-7.00
-9.00
700.00
760.00
830.00
900.00
960.00


1710.00MHz - 2690.00MHz Gain
0.00
-2.00
-4.00
-6.00
-8.00
-10.00
1710.00
1950.00
2200.00
2450.00
2690.00

3.6 Directional pattern



4. Antenna Drawing(Unit:mm)



Series	Component name	Specification	Color	Quantity
1	SMA	SMA-Internal thread Internal needle	gold	1
2	RG174cable	RG174 cable，3010mm	black	1
3	shell	ABS	black	1
4	Adhesive	VHB 0.8mm	black	1