



SWE037

PN: SW20284EB56



Features:

- Frequency bands from 698~960MHz ,1710~2170MHz.
- 4G / 3G/ 2G/NB-IoT Wide band Antenna.
- Small size.
- Impedance 50 Ohm.

Applications:

- Application of 4G/3G/2G/NB-IoT equipment.
- Small size IoT terminals
- Wide frequency coverage

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1. Electrical Specifications

Standards	4G&3G&2G&NB-IoT	
Frequency range (MHz)	698~960MHz	1710~2170MHz
Peak Gain (dBi)	-4.0~3.0	-0.5~3.5
Average Gain (dB)	-9.5~-3.5	-7.7~-4.0
VSWR	< 5.0	< 10.0
Return Loss (dB)	< -3.5	< -1.5
Efficiency (%)	11.0~45.0	17.0~40.0
Polarization mode	Linear	Linear
Radiation pattern	Omni-Directional	Omni-Directional
Output impedance (Ω)	50	50
Max. Input Power(W)	25	25

2. Mechanical and Environmental Specification

Mounting Type	Connector Mount
Connector Type	SMA-Male Standard (Right-Angle)
Antenna size(mm)	48.6X ϕ 8mm
Material	ABS
Operating Temperature (°C)	- 40 °C ~ + 85 °C
Storage Temperature(°C)	- 40 °C ~ + 85 °C

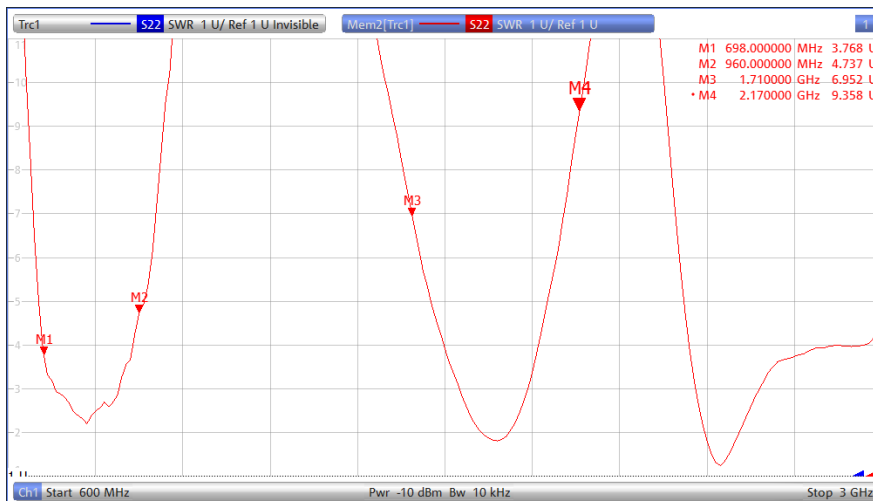


3. Antenna parameters

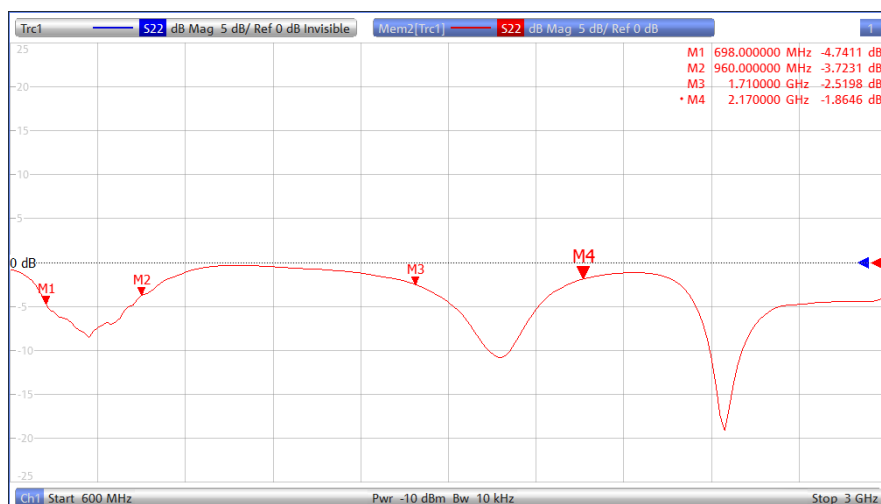
3.1 General Data

FRE (MHz)	698	960	1710	2170
VSWR	3.7	4.7	6.9	9.3
Return Loss	-4.7	-3.7	-2.5	-1.5
Eff (%)	11.1	17.2	18.1	17.0
Average Gain (dB)	-9.5	-7.6	-7.4	-7.7

3.2 VSWR



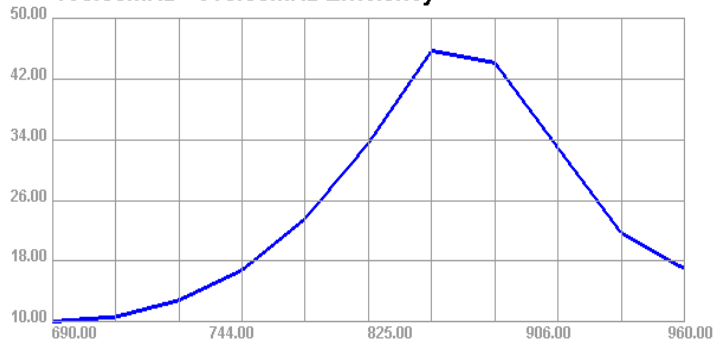
3.3 Return Loss



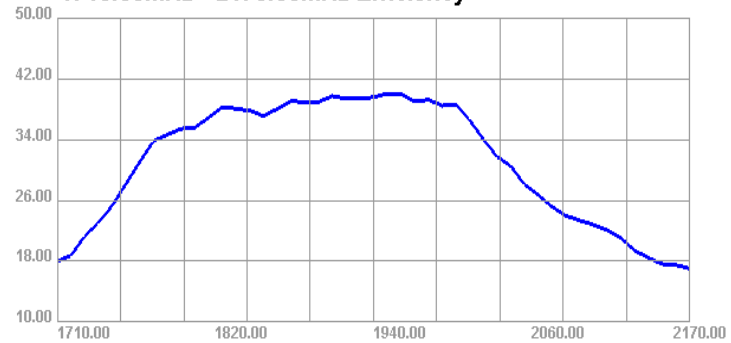


3.4 Efficiency

690.00MHz - 960.00MHz Efficiency

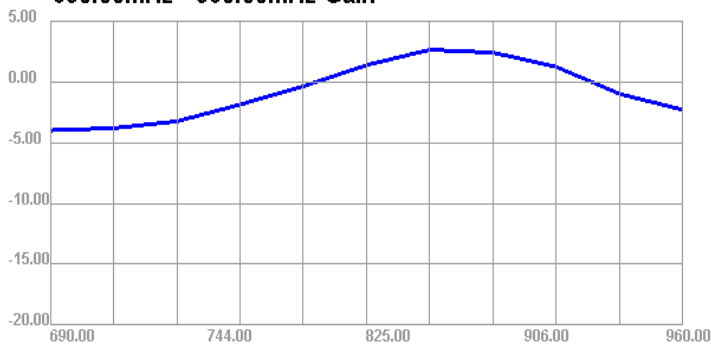


1710.00MHz - 2170.00MHz Efficiency

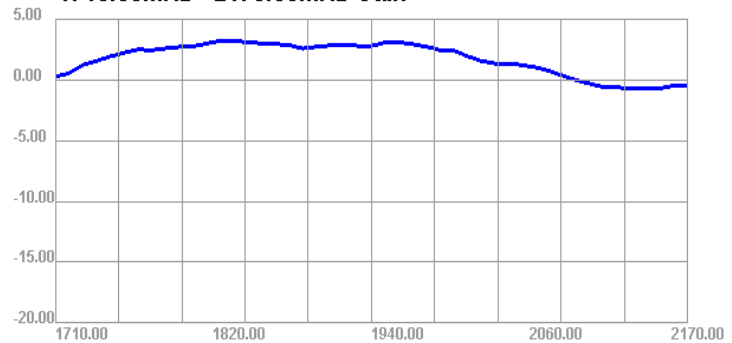


3.5 Gain

690.00MHz - 960.00MHz Gain

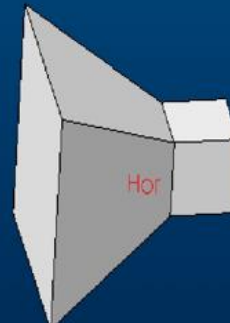
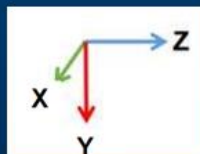
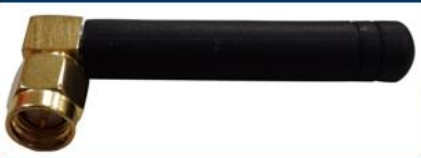


1710.00MHz - 2170.00MHz Gain

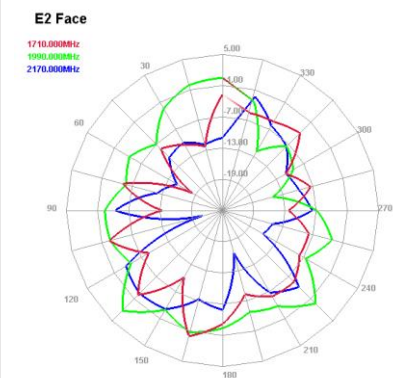
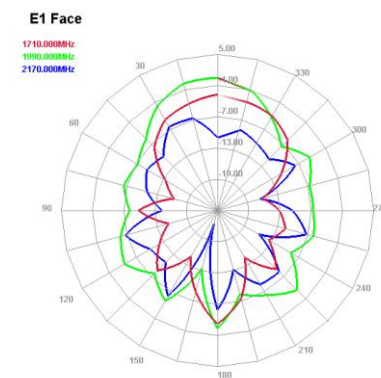
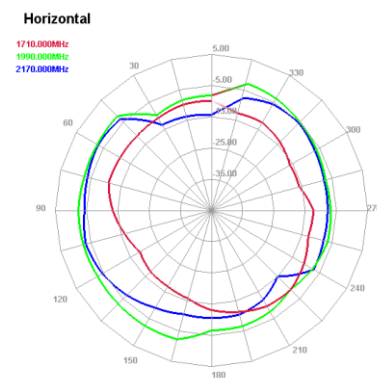
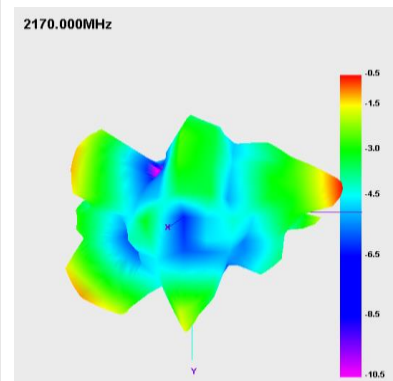
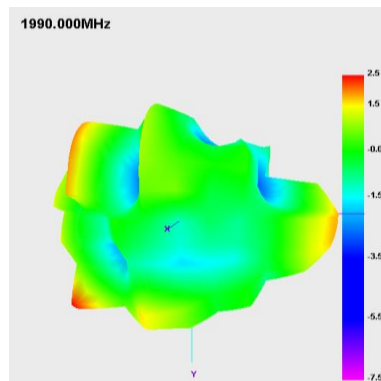
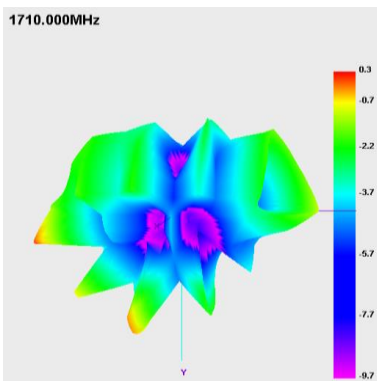
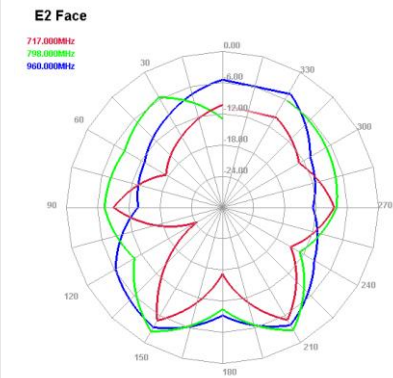
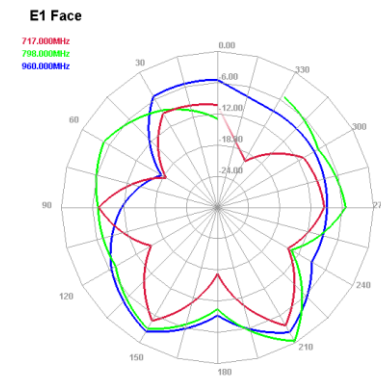
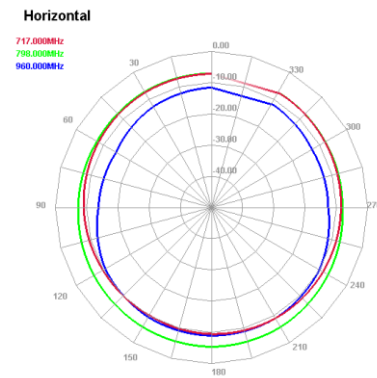
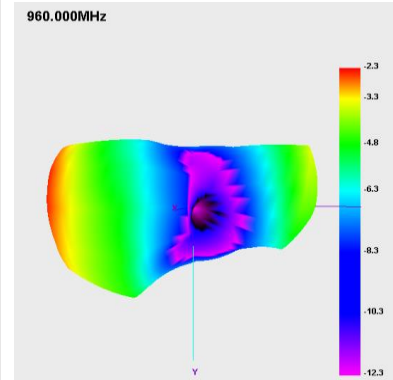
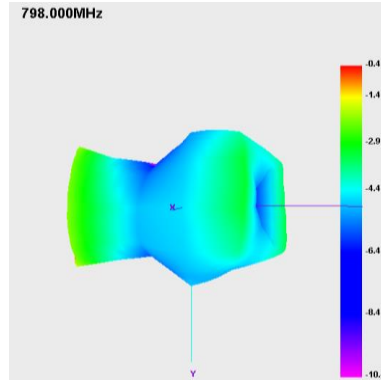
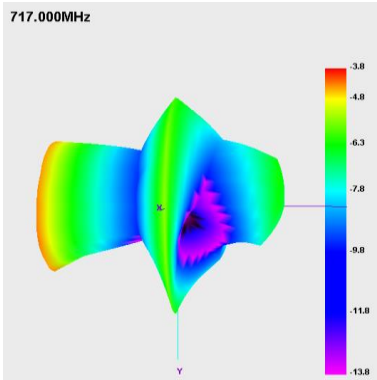


3.6 Directional pattern

H plane: the tangent of XY
E1 plane: the tangent of XZ
E2 plane: the tangent of YZ

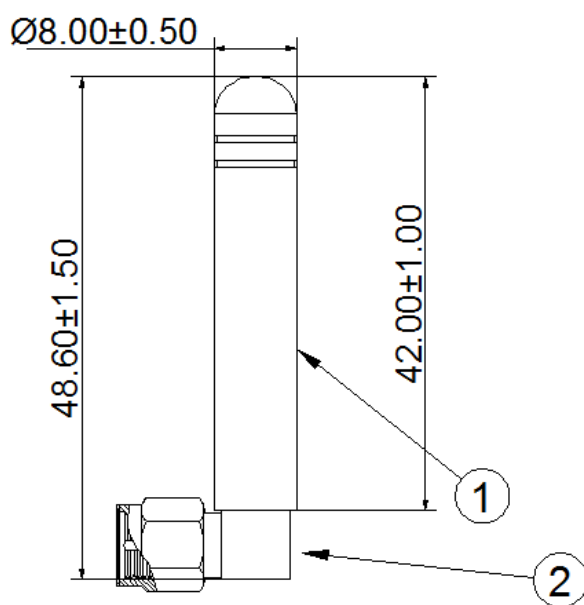


Theta = 0
Phi = 0





4. Antenna Drawings



Series	Component name	Specification	Color	Quantity
1	noumenon	ABS	black	1
2	SMA	SMA-J	Gold	1