



MS-A2-5Q1-A

Mid Jellyfish_5 in 1 Antenna

4G LTE MIMO / Wi-Fi 6 MIMO / GNSS

Electrical Specifications

4G LTE MIMO-1 Antenna Characteristics

Frequency Range, MHz	698-960	1710-2170	2300-2690
VSWR	4.0 Max.	4.0 Max.	4.0 Max.
Peak Gain, dBi	2.5 Typ.	3.0 Typ.	3.0 Typ.
Efficiency, %	60	72	58
Polarization	Linear		
Impedance	50Ω		

4G LTE MIMO-2 Antenna Characteristics

Frequency Range, MHz	698-960	1710-2170	2300-2690
VSWR	4.0 Max.	4.0 Max.	4.0 Max.
Peak Gain, dBi	3.0 Typ.	3.0 Typ.	3.0 Typ.
Efficiency, %	70	65	51
Polarization	Linear		
Impedance	50Ω		

Wi-Fi 6 MIMO-1 Antenna Characteristics

Frequency Range, MHz	2400-2500	5150-5850
VSWR	2.0 Max.	2.0 Max.
Peak Gain, dBi	3.0 Typ.	5.0 Typ.
Efficiency, %	61	64
Polarization	Linear	
Impedance	50Ω	

Wi-Fi 6 MIMO-2 Antenna Characteristics

Frequency Range, MHz	2400-2500	5150-5850
VSWR	2.0 Max.	2.0 Max.
Peak Gain, dBi	3.0 Typ.	4.5 Typ.
Efficiency, %	64	65
Polarization	Linear	
Impedance	50Ω	

LTE & Wi-Fi test cable length : 1m (CFD-200)

GNSS Antenna Characteristics

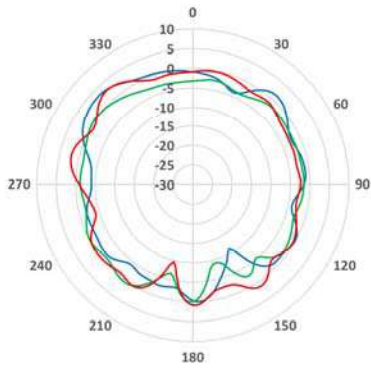
Center Frequency, MHz	1561±2	1575.42±3	1602±4
VSWR	3.0 Max.		
Gain@ Zenith, dBi	2.0 Typ.	1.0 Typ.	1.0 Typ.
Efficiency, %	40	30	35
Polarization	Linear		
Impedance	50Ω		

GNSS test cable length : 10cm

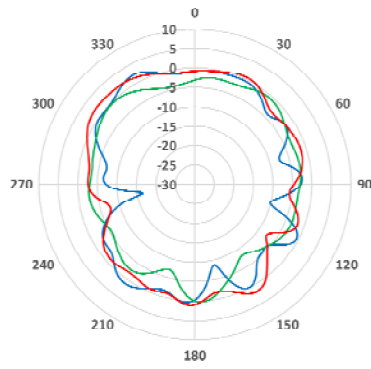
GNSS LNA Properties

Frequency Range, MHz	1559-1608
Impedance	50Ω
Output Return Loss(S ₁₁), dB	10 Min.
Gain@ 3.0V, dB	28±3
Noise Figure@ 3.0V, dB	1.5 Typ.
DC Power Input, V	3.3
Power Consumption@ 3.0V, mA	9±2.5
ESD Withstand Voltage, KV	±8 contact; ±15 air

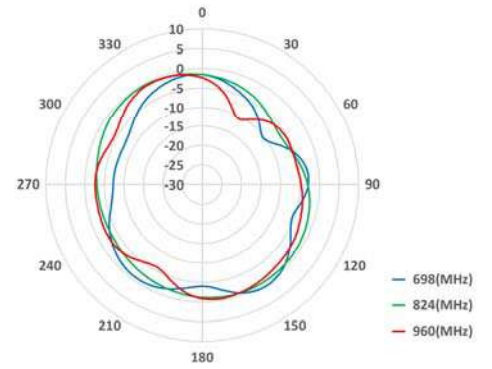
4G LTE MIMO-1 Antenna 2D Patterns



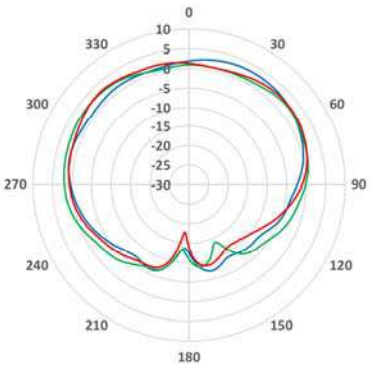
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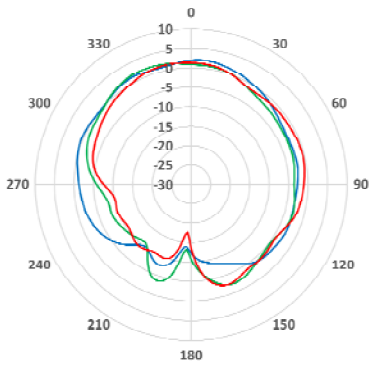
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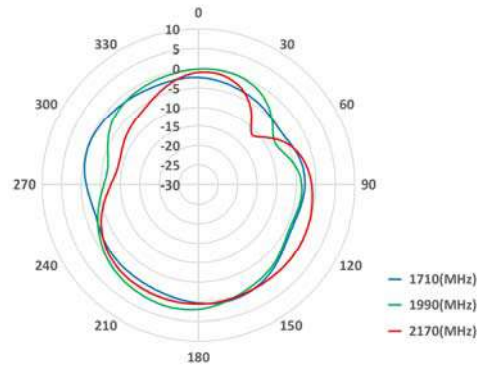
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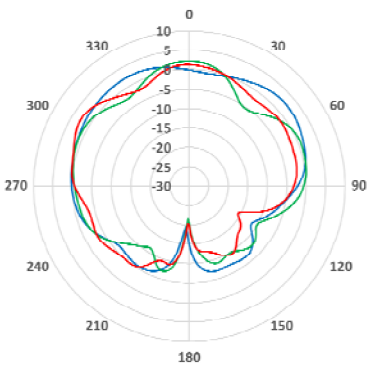
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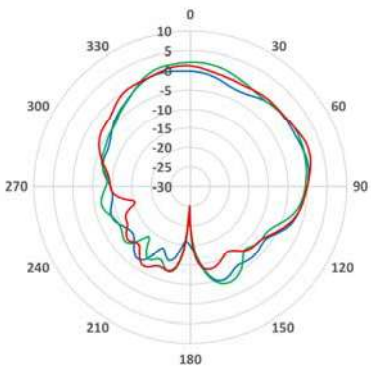
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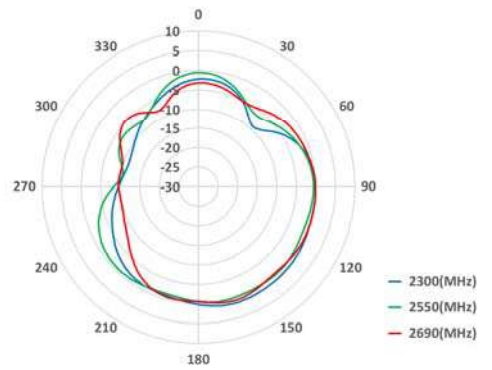
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X-Z

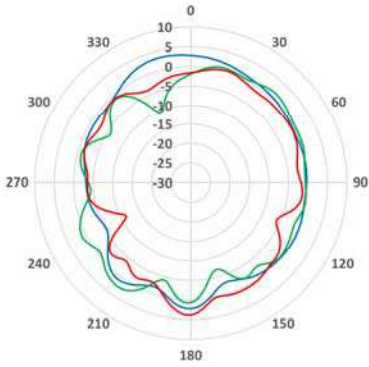


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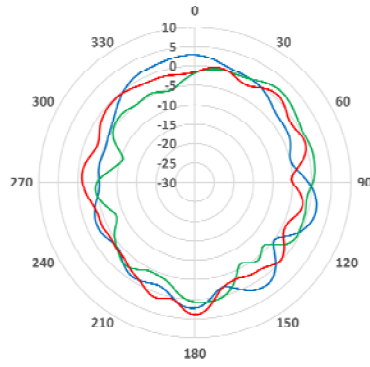


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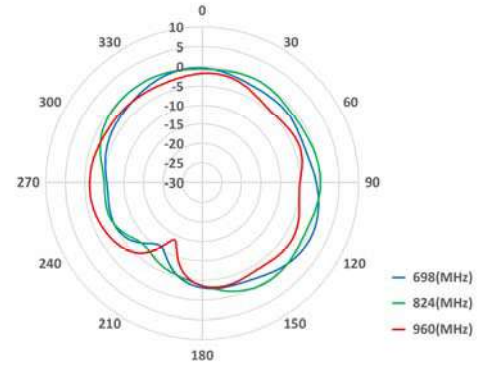
4G LTE MIMO-2 Antenna 2D Patterns



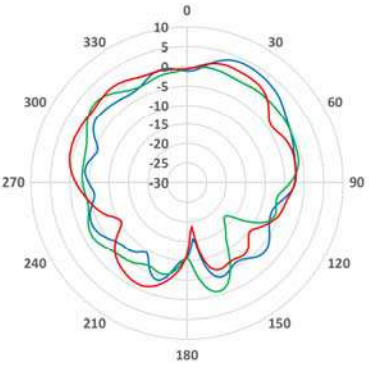
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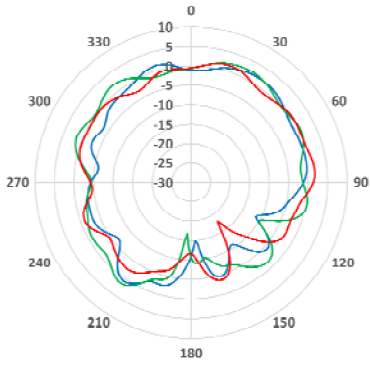
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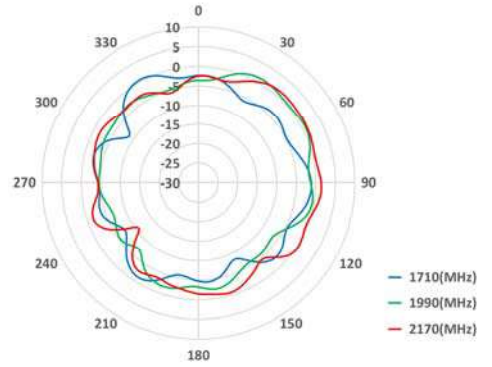
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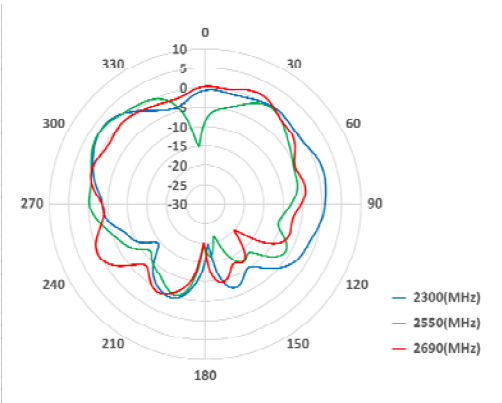
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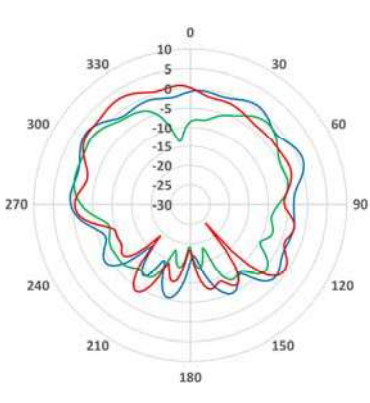
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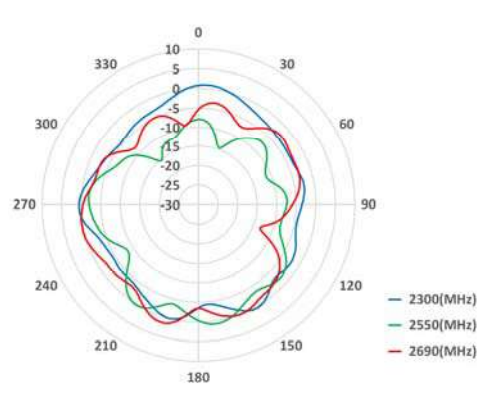
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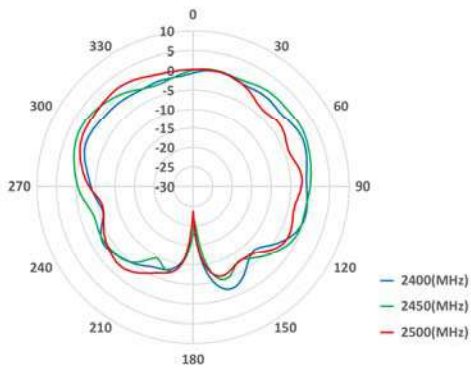


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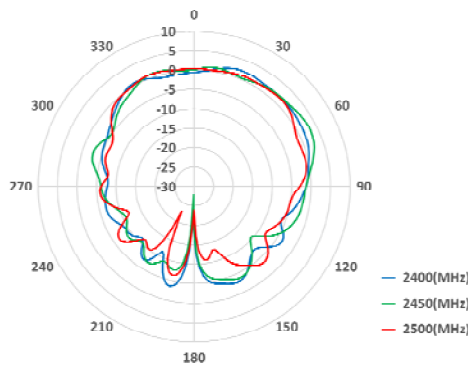


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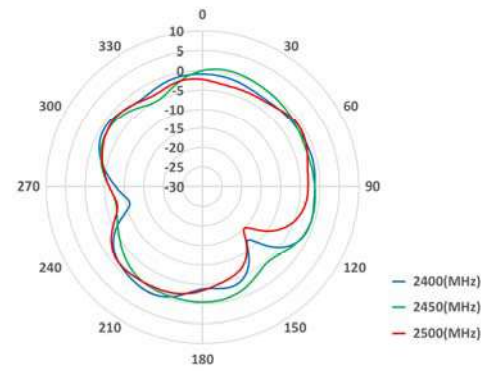
Wi-Fi 6 MIMO-1 Antenna 2D Patterns



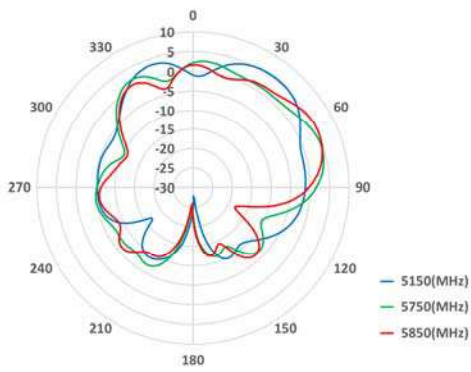
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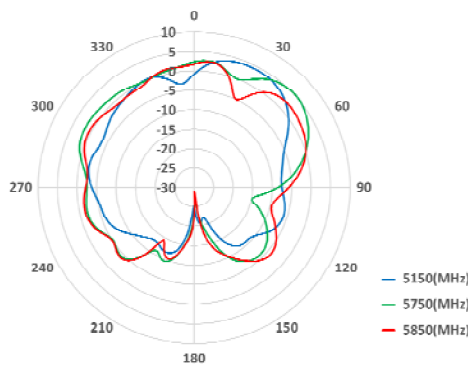
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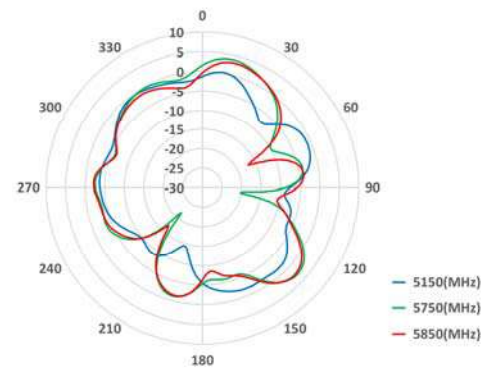
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X-Z

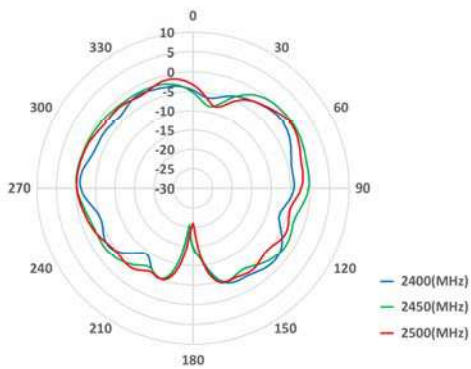


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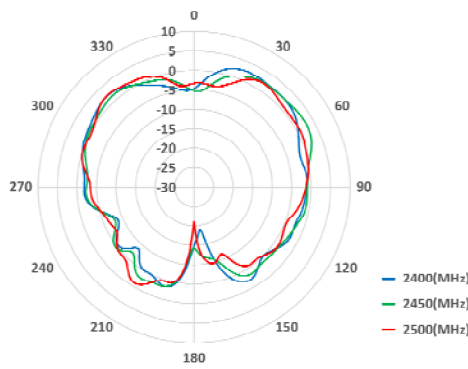


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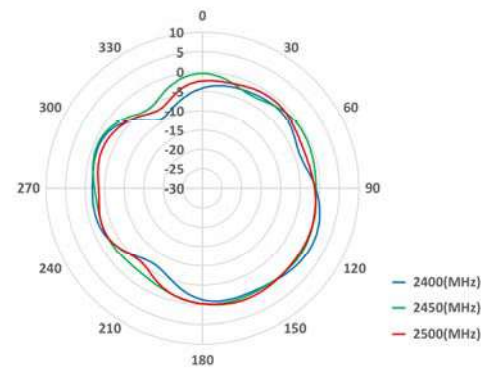
Wi-Fi 6 MIMO-2 Antenna 2D Patterns



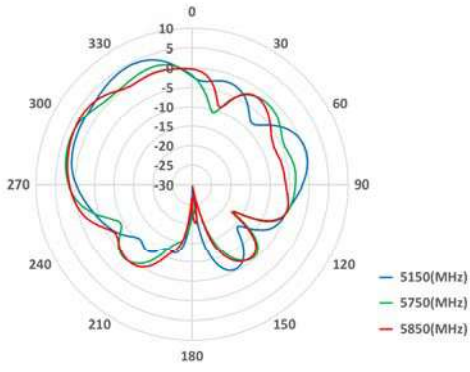
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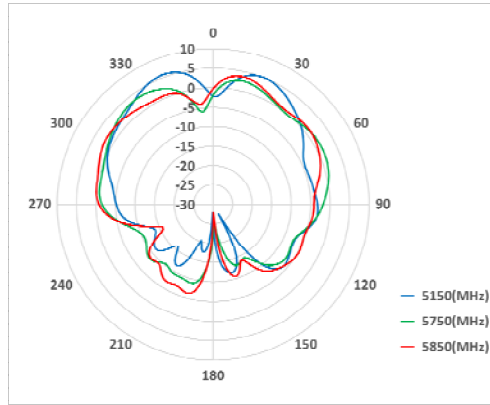
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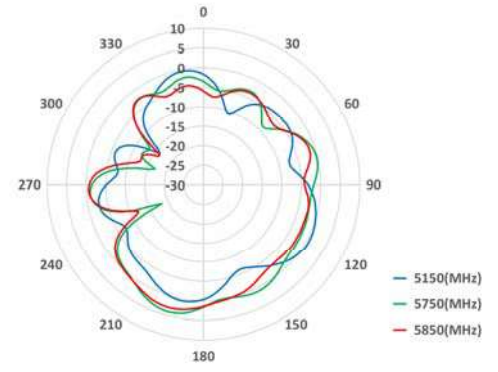
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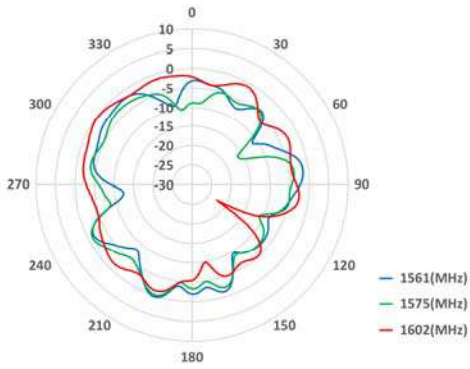


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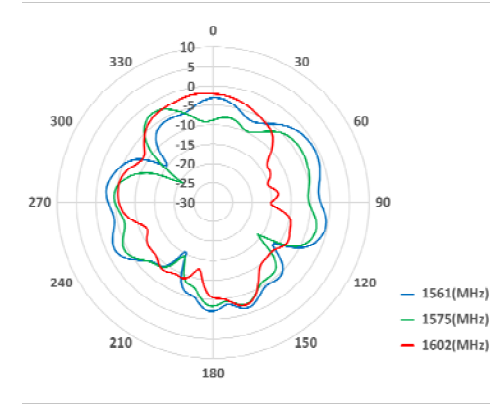


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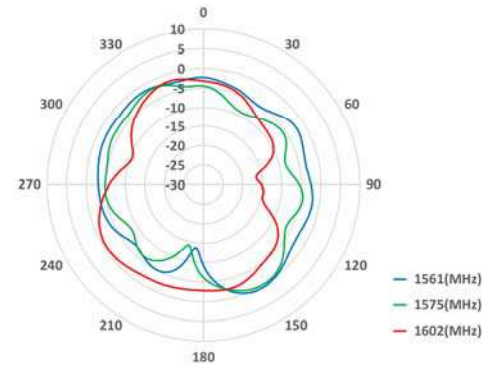
GNSS Antenna 2D Patterns



X-Z



Y-Z



X-Y

Mechanical Specifications

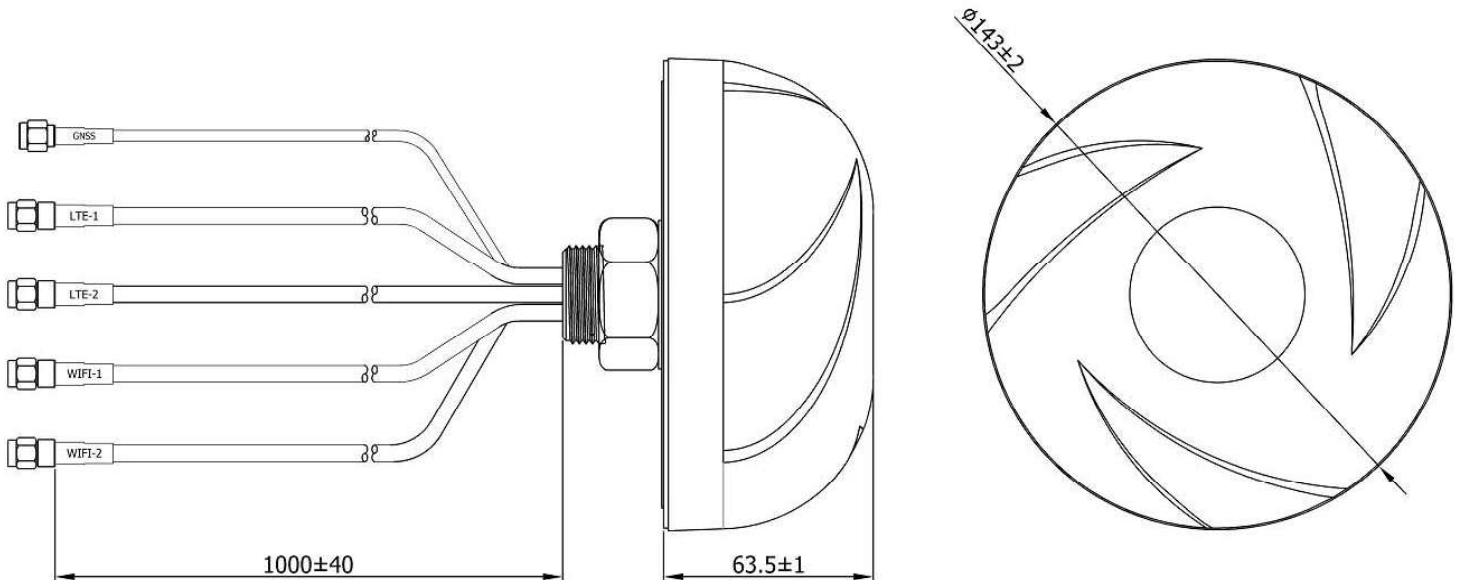
Environmental

Antenna Dimensions	$\Phi 143 \times 63.5 \text{mm}^3$
Weight	740g
Mounting Function	Screw Mount
Operating Temperature	-40~ + 85°C
Housing Material & Color	PC+ABS & Black
Cable	4G LTE MIMO : CFD-200 Wi-Fi 6 MIMO : CFD-200 GNSS : RG-174
Connector	SMA / FAKRA or your specification
Waterproof	IPX7

Reliability Test

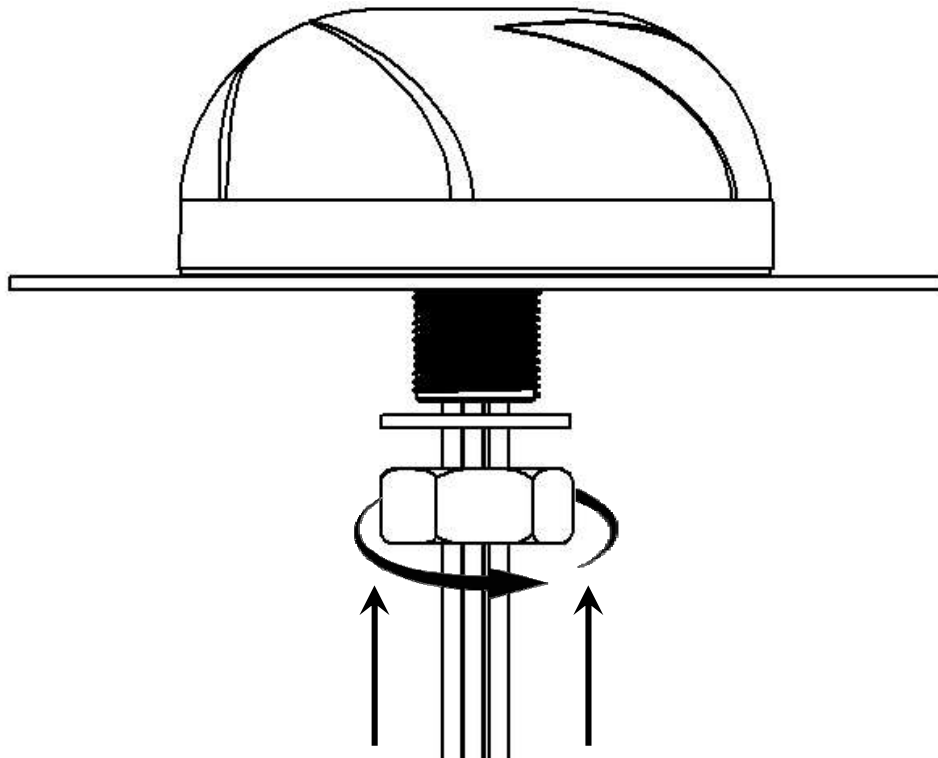
Cold Temperature	-40°C, 72Hr
High Temperature	+85°C, 72Hr
Composite Temperature/Humidity Cycling	-40~+85°C, 95%RH, 1 Cycle(8Hr), 48Hr

Mechanical Drawing



Unit : mm

Installation



- Recommended assembly diameter 31~33 mm
- Recommended installation torque 49~59 Nm