RDM-MBJ4-A-8116-1M-X-001

■ ELECTRICAL SPECIFICATION

GPS ANTENNA

Parameters	Value	Unit
Frequency Range	1575.420 ±3	MHz
Band Width	CF ±5	MHz
Polarization	RHCP	-
Gain (Zenith)	2.0	dBic
VSWR, max	1.5	-
Impedance	50	Ω
Axial Ratio, max	3	dB

LNA

Parameters	Value	Unit
Gain, typ	28 ±2	dB
Noise Figure, max	1.5	dB
VSWR, max	2.0	-
Supply Voltage	2.2 ~ 5	VDC
Current Consumption, max	15	mA

LTE ANTENNA

Parameters	Value		Unit
Frequency Range	698 ~ 960	1710 ~ 2690	MHz
Polarization	Linear		-
Gain	2.0		dBi
VSWR, max	2.0		-
Impedance	50		Ω

WIFI ANTENNA

Parameters	Value		Unit
Frequency Range	2400 ~ 2483.5	4900 ~ 5825	MHz
Polarization	Linear		-
Gain	3.0		dBi
VSWR, max	2.0		-
Impedance	50		Ω

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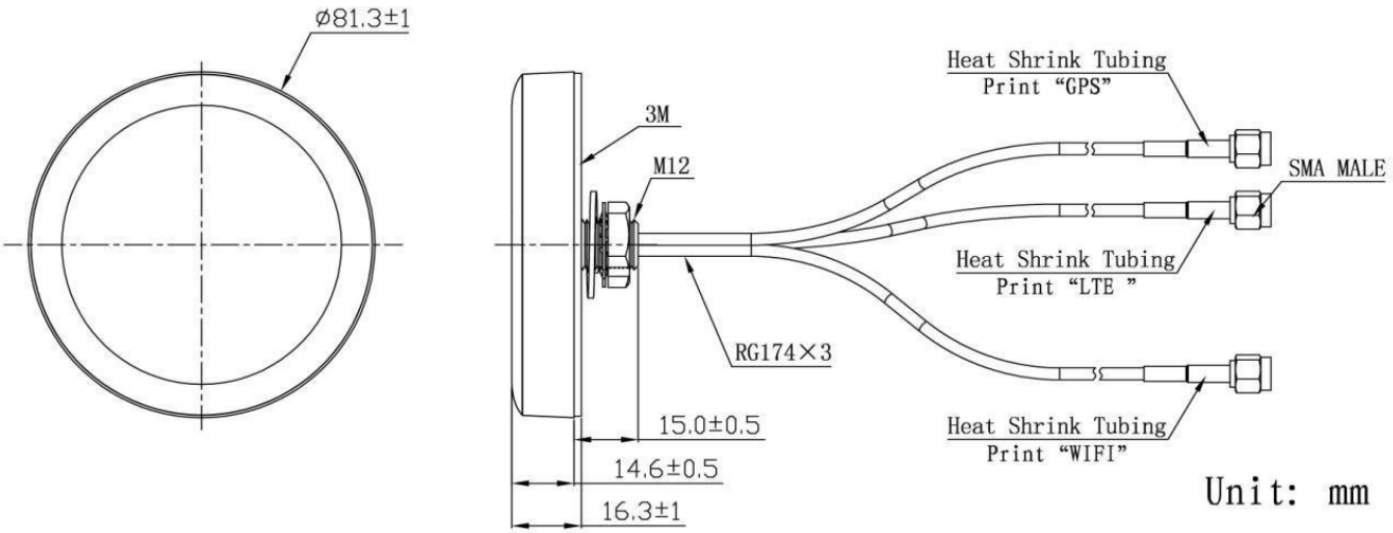
■ MECHANICAL SPECIFICATION

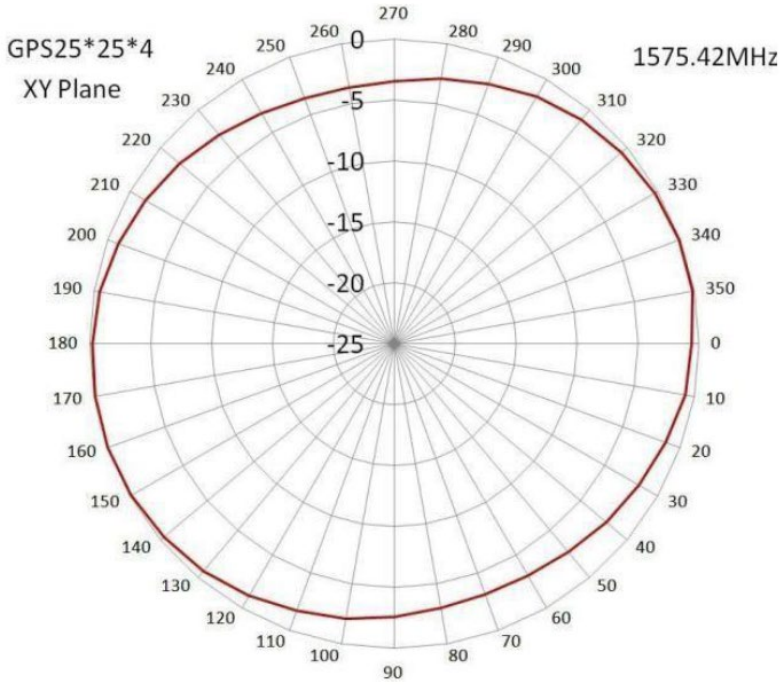
Parameters		Value	Unit
Connector		SMA	-
Cable	Type	RG174	-
	Length	3000	mm
Radome Material		ABS	-
Mounting Method		Screw	-
Operating Temperature Range		-40 ~ +85	˚C
Relative Humidity, max		95	%
Ingress Protection	@ Exclude Cable Outlet	IP67	-
Vibration	@ 1.5 mm amplitude 2hours	10 ~ 55	Hz
ROHS Compliant		YES	-

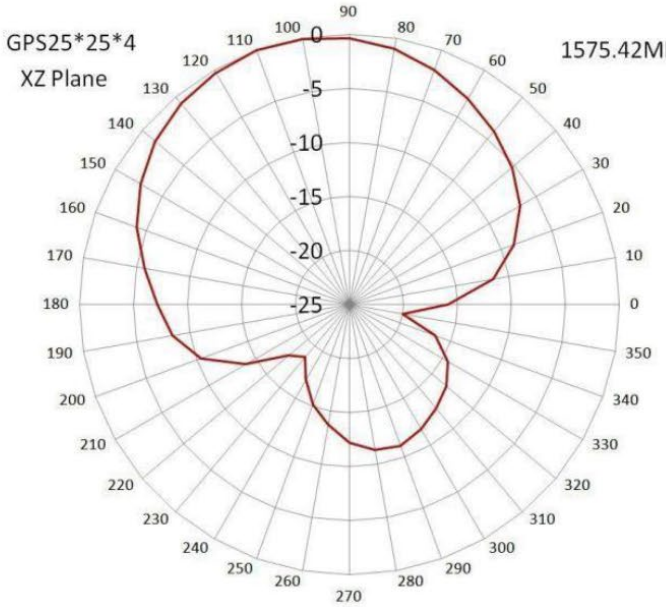
■ DIMENSIONS

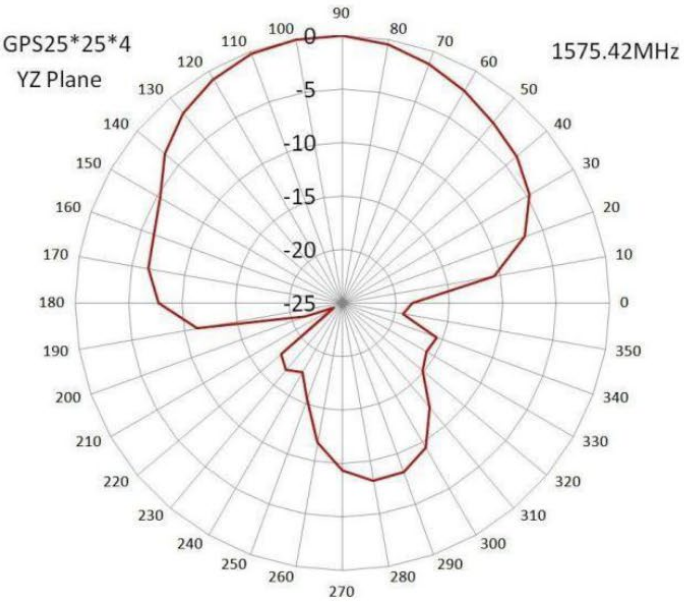


RADIATION PATTERN

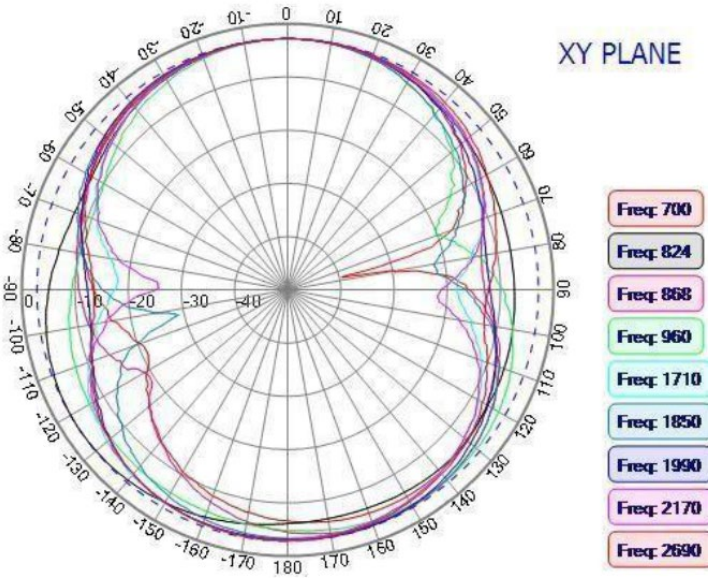
GPS ANTENNA







GSM ANTENNA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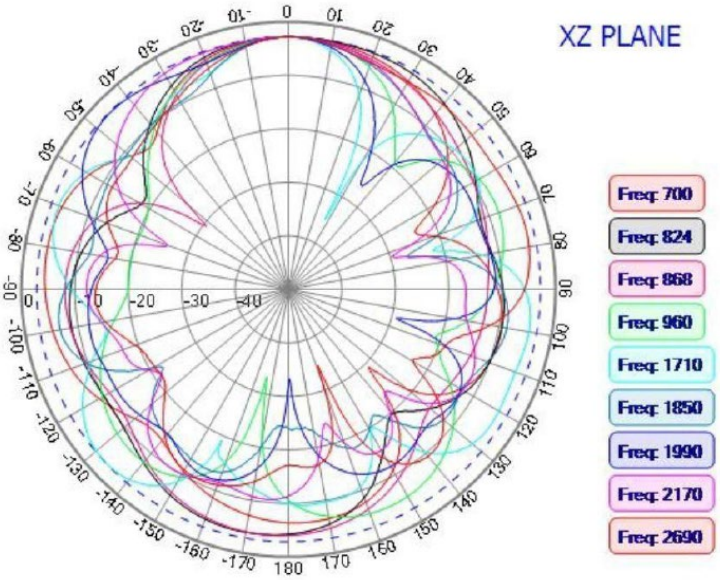
Freq: 868
Freq: 960
Freq: 1710
Freq: 1850
Freq: 1990
Freq: 2170
Freq: 2690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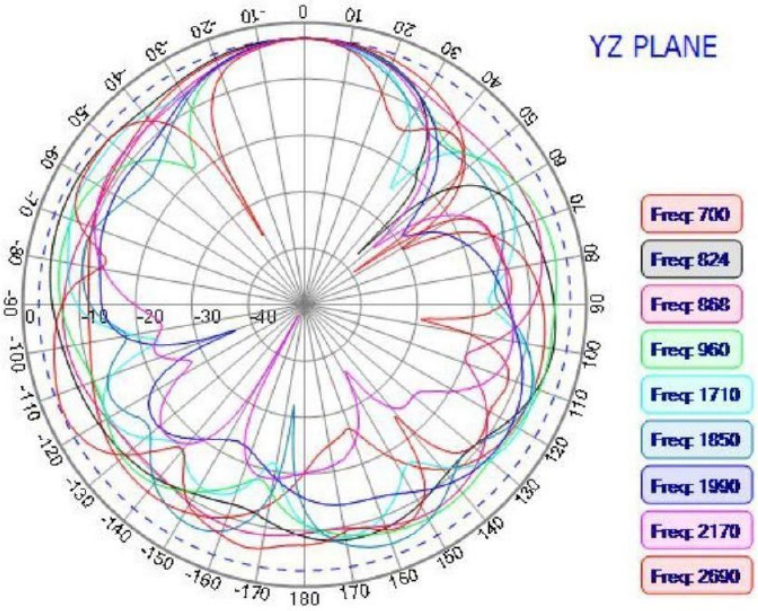
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Freq: 960
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Freq: 2170
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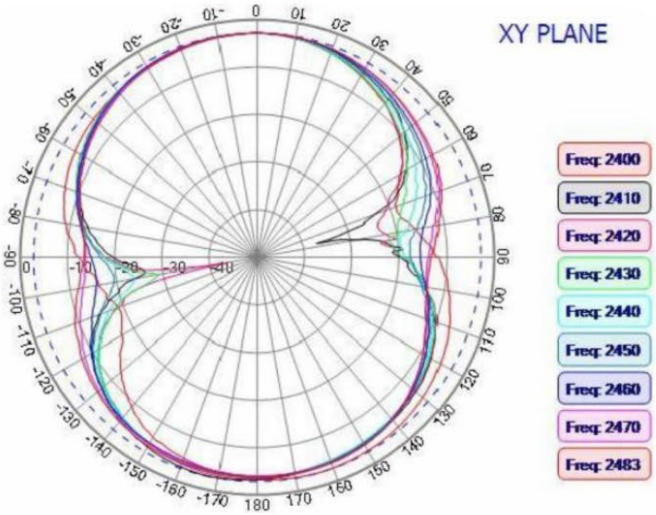
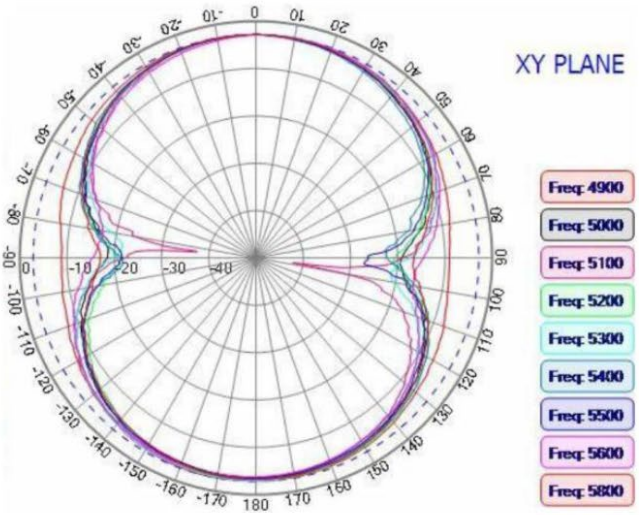
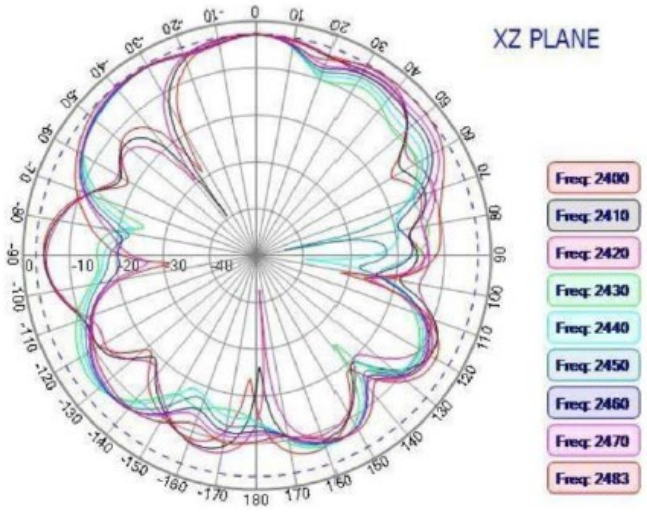
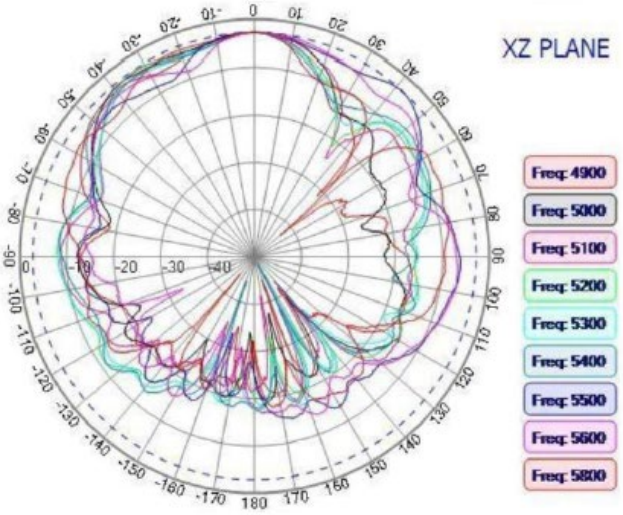
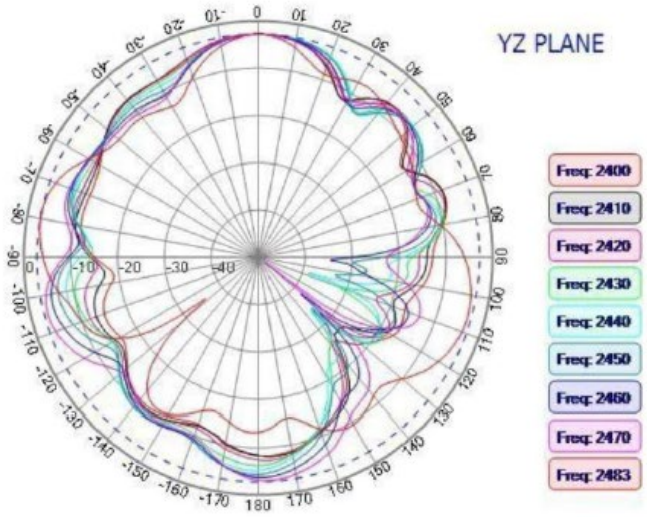
WIFI ANTENNA

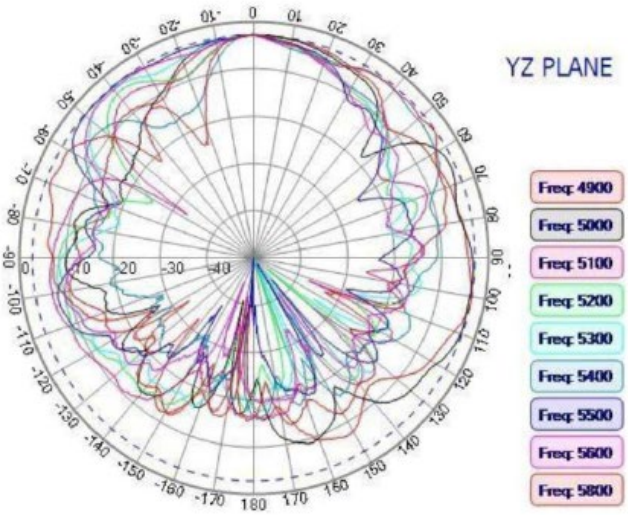












ENVIRONMENTAL

PARAMETER	VALUE
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant

APPROVAL

RALTRON	
DRAWN BY:	AR, July 13, 2022
APPROVED BY:	CP, July 13, 2022
REVISION:	A, Initial Release
	B, AR, January 31, 2024 Added cable length

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