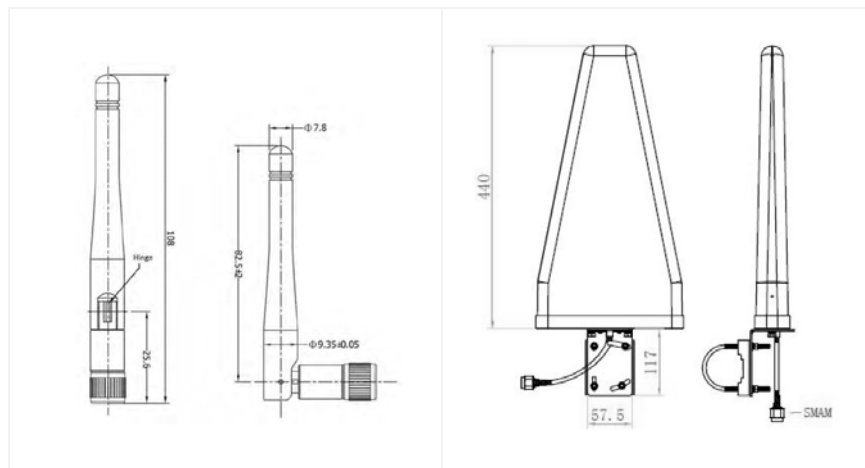




NAN-E Series External WiFi, GSM & LTE Antennas

<i>Page</i>	<i>Size (L x DØ)</i>	<i>Protocol</i>	<i>Coverage</i>	<i>NIC PN</i>
<i>Page 2</i>	108 mm x 9.35mm	WiFi	Dual Band	NAN-E108X9B2AMF
<i>Page 6</i>	108.5mm x 10mm	WiFi	Single Band	NAN-E108X10B1AMF
<i>Page 9</i>	108.5mm x 10mm	GSM	Dual Band	NAN-E108X10B2AMF
<i>Page 12</i>	198mm x 13mm	GSM	Dual Band	NAN-E198X13B2AMF
<i>Page 15</i>	198 mm x 13 mm	LTE	Tri-Band	NAN-E198X13B3AMF
<i>Page 18</i>	440 mm x 210 mm	LTE	Dual Band	NAN-E440210B2AMEF



FEATURES

- Up to 90° flexibility
- Dual band Frequency
- RoHS Complaint

APPLICATIONS

- Meters
- Routers
- Gateways



RoHS Compliant

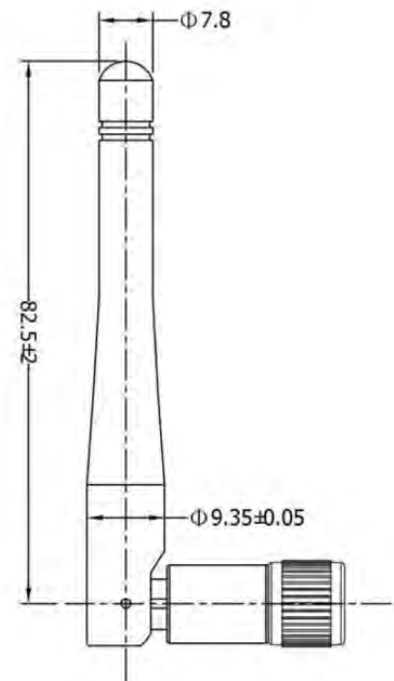
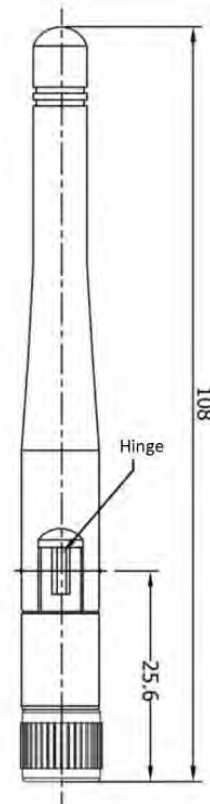
includes all homogeneous materials
(see part numbering system for details)

SPECIFICATIONS

Electrical	
Frequency Range	2.4~2.5GHz 4.9~5.825GHz
Polarization	Linear
Gain	3 dBi
V.S.W.R	<2.0
Impedance	50Ω
Dimensions (mm):	
Body Length	108.0
Diameter	9.35 ± 0.05
Connection Type	SMA Male

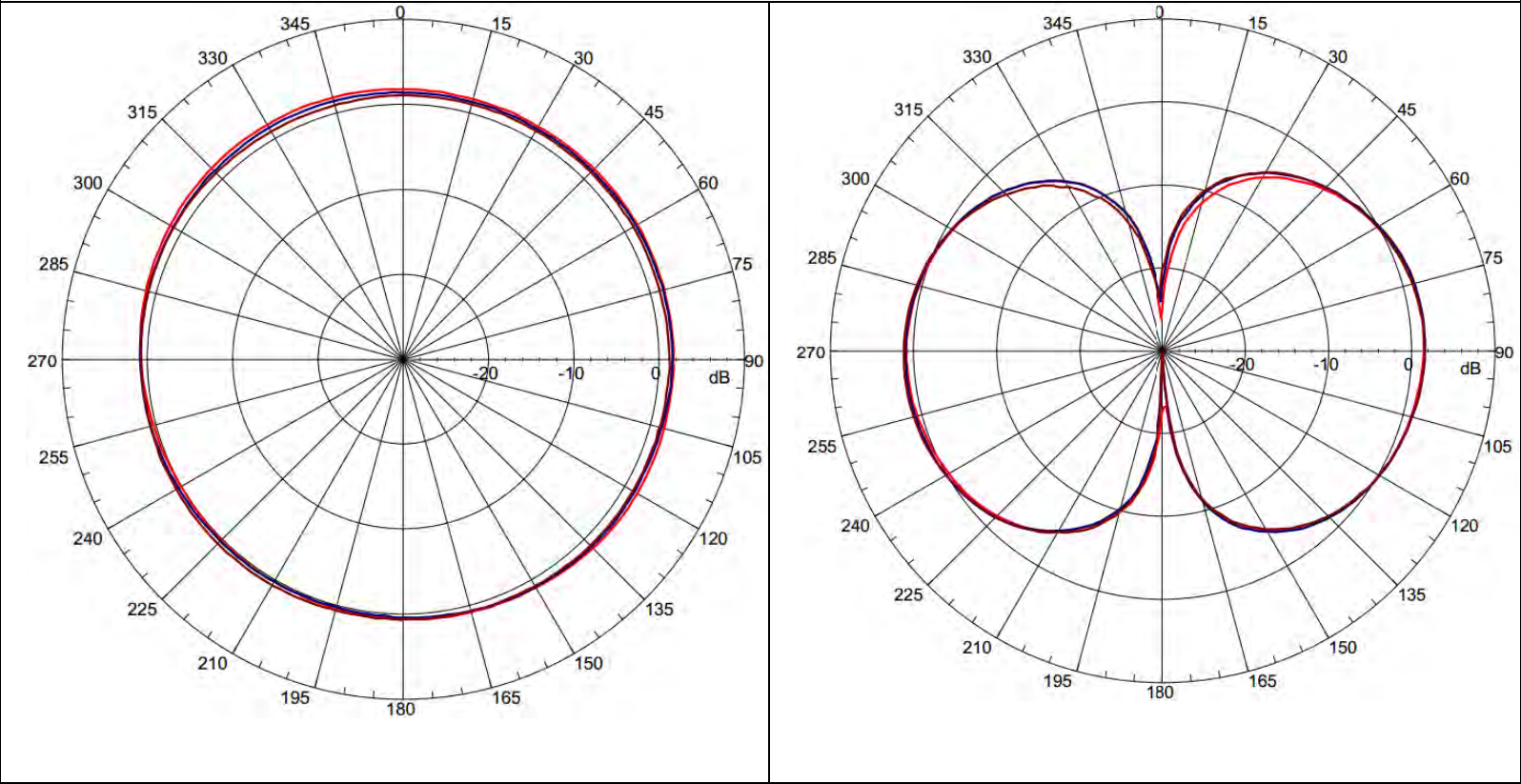
NAN-E 108x9 B2 A M F

↳ F = RoHS compliant
↳ M = SMA Connector
↳ A = Revision Code (See Page 4)
↳ B2 = 2 Band Frequencies
↳ 108x9 = Size (108 mm x 9.35mm)
↳ NAN-E = Series

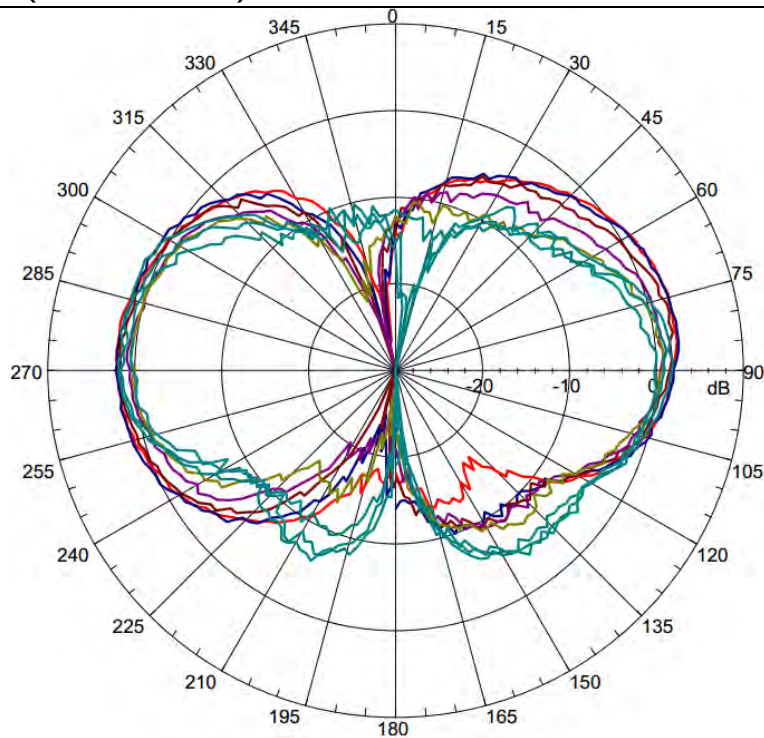
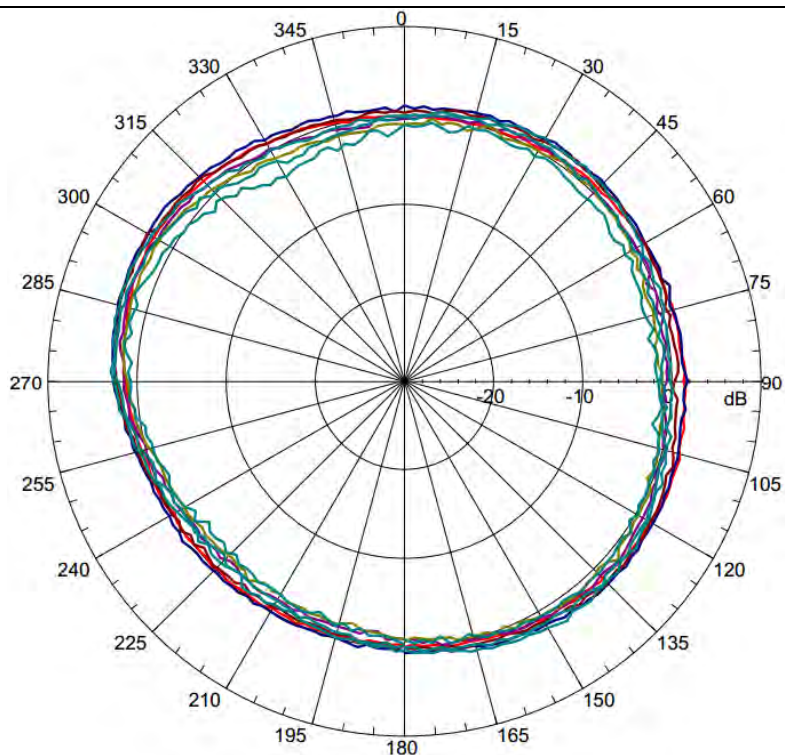


Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 ~ 55Hz with 1.5mm Amplitude 2 Hours
RoHS Compliant	Yes

Radiation Patterns (2.4~2.5GHz)



Radiation Patterns (4.9~5.8GHz)



Revision History and Status

Revision	Date Issued	Details	Status
A	Nov 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com

FEATURES

- Up to 90° flexibility
- RoHs Complaint
- Single band frequency

APPLICATIONS

- Meters
- Routers
- Gateways



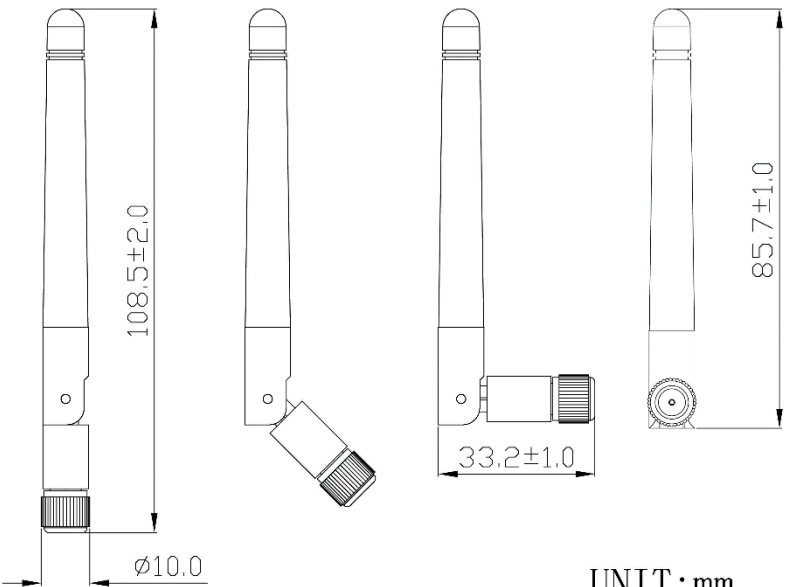
RoHS Compliant

includes all homogeneous materials
(see part numbering system for details)

SPECIFICATIONS

Electrical	
Frequency Range	2400~2483.5MHz
Bandwidth	83.5 MHz
Polarization	Linear
Gain	3 dBi
V.S.W.R	<2.0
Impedance	50Ω
Dimensions (mm):	
Body Length	108.5 ± 2.0
Diameter	10.0
Connection Type	SMA Male

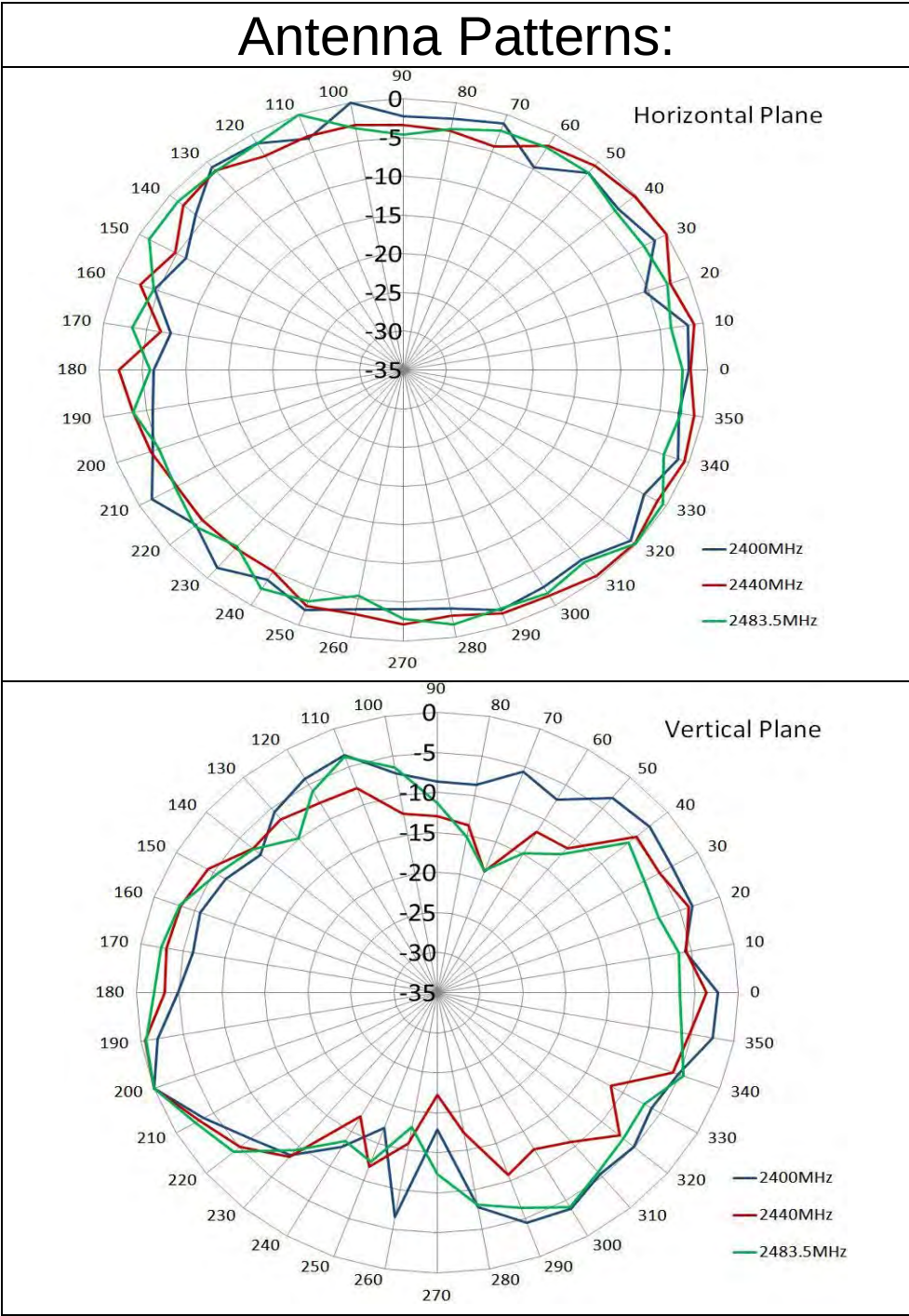
NAN-E 108x10 B1 A M F
F= RoHs compliant
M = SMA connector
A = Revision Code (See Page 3)
B1 = 1 Band Frequency
108x10 = Size (108.5 mm x 10 mm)
NAN-E = Series



UNIT : mm



Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 ~ 55Hz with 1.5mm Amplitude 2 Hours
RoHS Compliant	Yes



Revision History and Status

Revision	Date Issued	Details	Status
A	Nov 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com

FEATURES

- Dual band Frequency
- Up to 90° flexibility
- RoHs Complaint

APPLICATIONS

- Cellular Communication
- Alarm systems

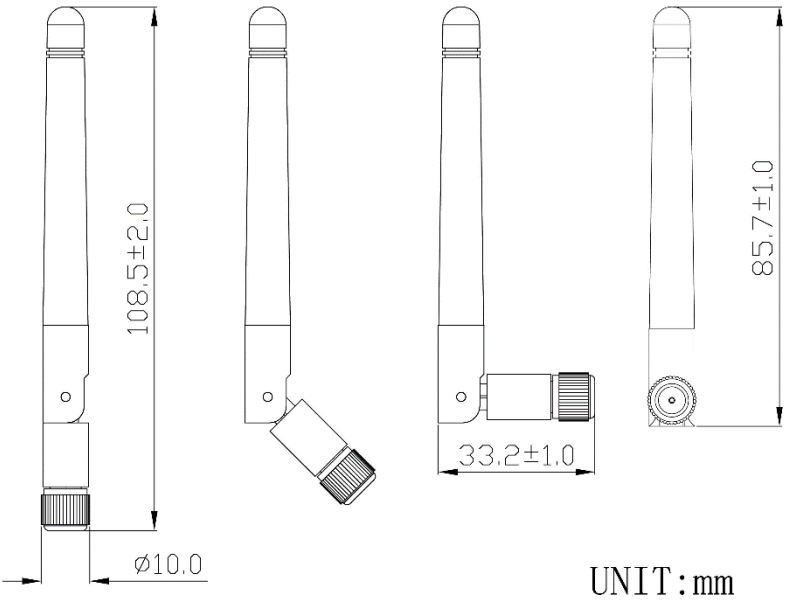


RoHS Compliant
includes all homogeneous materials
(see part numbering system for details)

SPECIFICATIONS

Electrical	
Frequency Range	824~894/1710~1990MHz or 880~960/1710~1990MHz
Polarization	Linear
Gain	2 dBi (Zenith)
V.S.W.R	<2.5
Impedance	50Ω
Dimensions (mm):	
Body Length (L)	108.5 ± 2.0
Width (W)	10.0
Connection Type	SMA Male

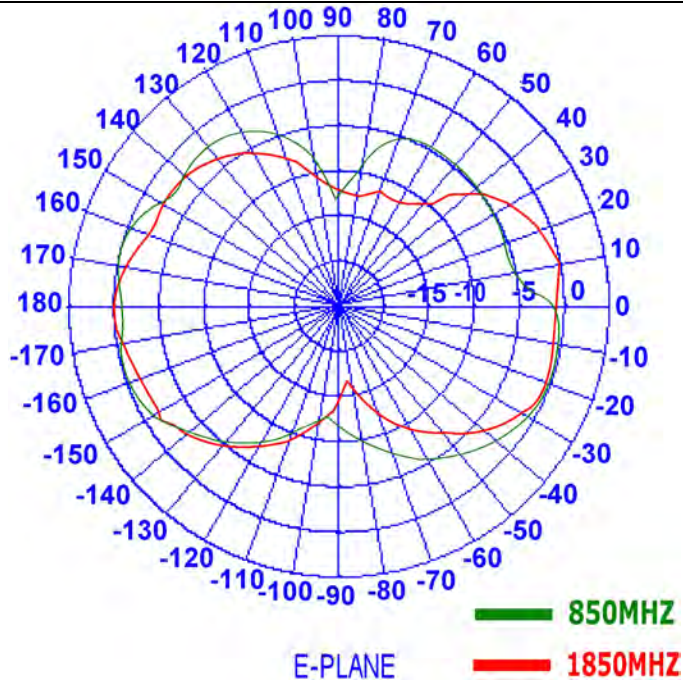
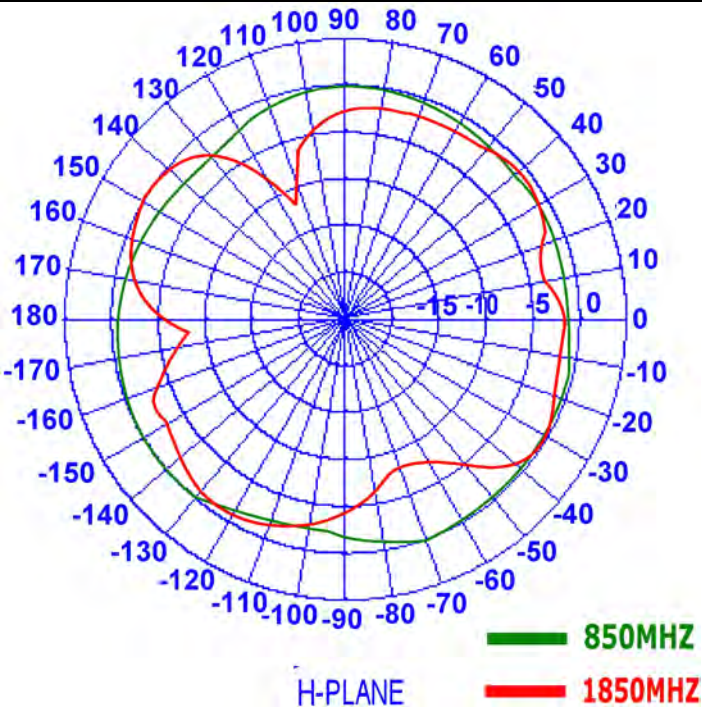
NAN-E 108x10 B2 A M F
↓ ↓ ↓ ↓ ↓
NAN-E = Series 108x10 = Size (108.5 mm x 10 mm)
B2 = 2 Band Frequencies
A = Revision Code (See Page 3)
M = SMA connector
F = RoHs compliant



UNIT : mm

Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 ~ 55Hz with 1.5mm Amplitude 2 Hours
RoHS Compliant	Yes

Radiation Patterns



Revision History and Status

Revision	Date Issued	Details	Status
A	Nov 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com

FEATURES

- Dual band Frequency
- Up to 90° flexibility
- RoHs Compliant

Applications

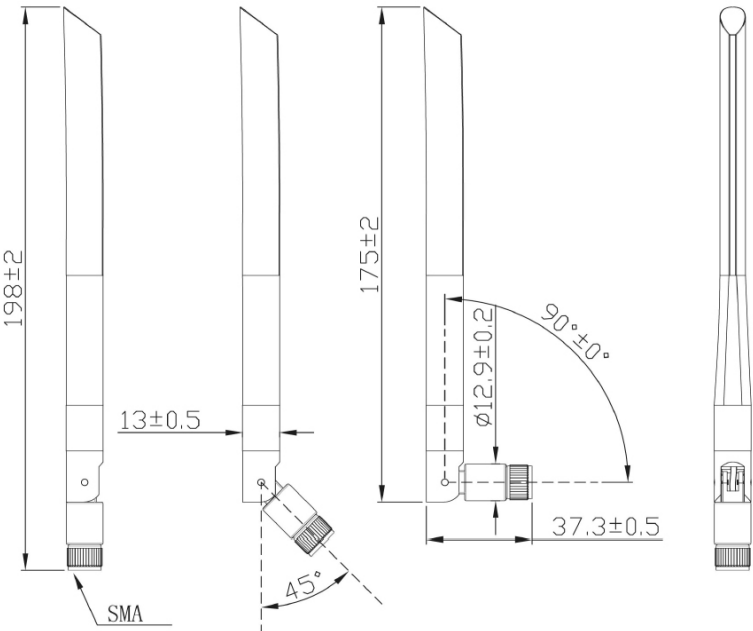
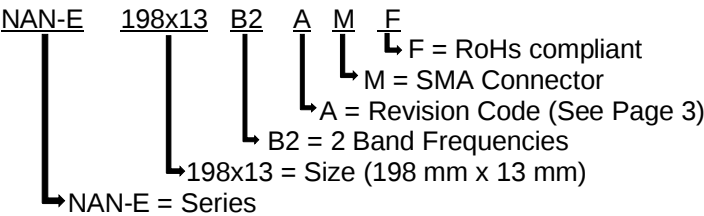
- Meters
- Gateways
- Routers



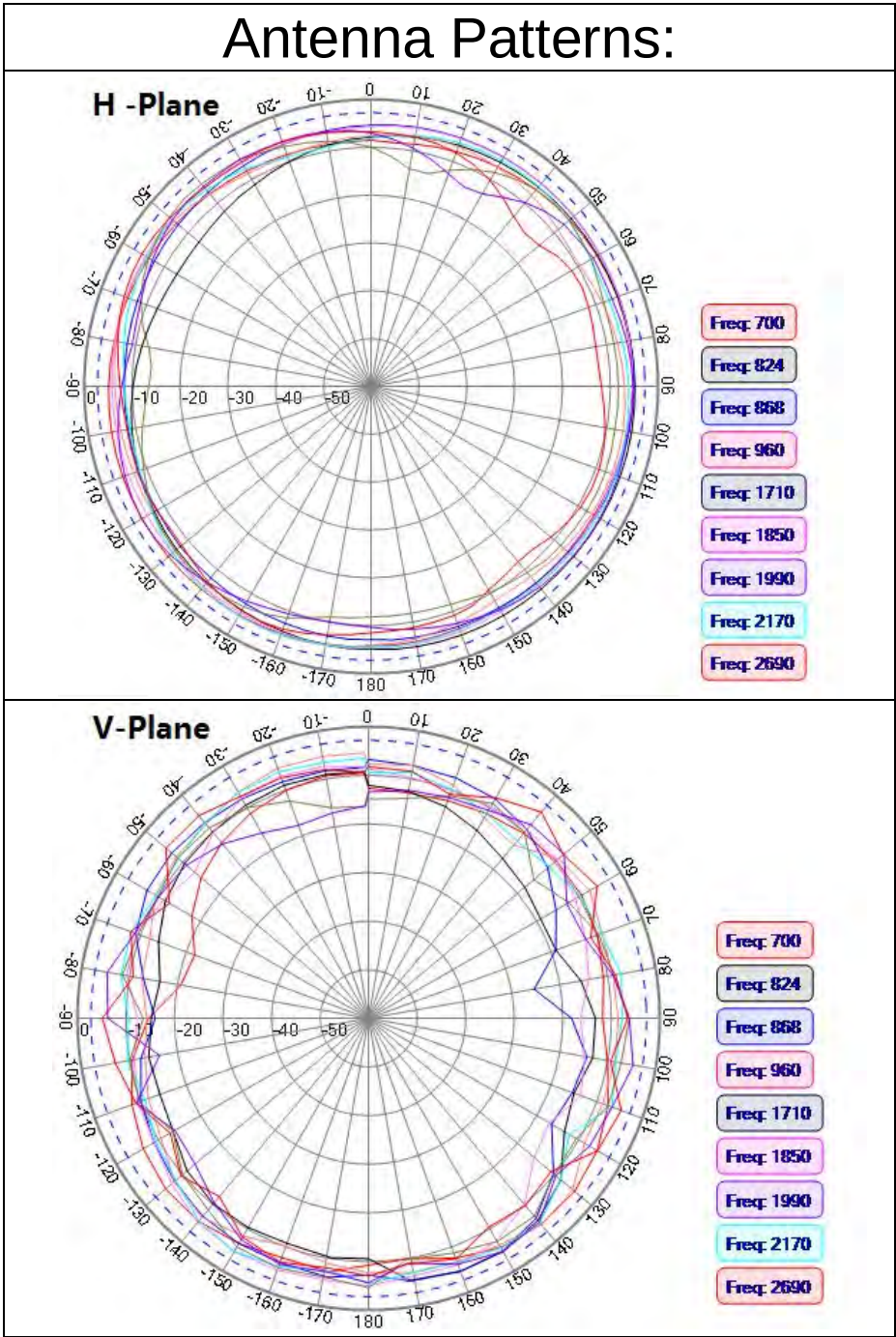
RoHS Compliant
includes all homogeneous materials
(see part numbering system for details)

SPECIFICATIONS

Electrical	
Frequency Range	698~960/1710~2655MHz
Polarization	Linear
Gain	3dBi
V.S.W.R	<3.0
Impedance	50Ω
Dimensions (mm):	
Body Length (L)	198.0 ± 2.0
Width (W)	13 ± 0.5
Connection Type	SMA Male



Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 ~ 55Hz 1.5mm Amplitude 2 Hours
RoHS Compliant	Yes



Revision History and Status

Revision	Date Issued	Details	Status
A	Nov 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com

FEATURES

- Tri band Frequency
- Up to 90° flexibility
- RoHs Complaint

Applications

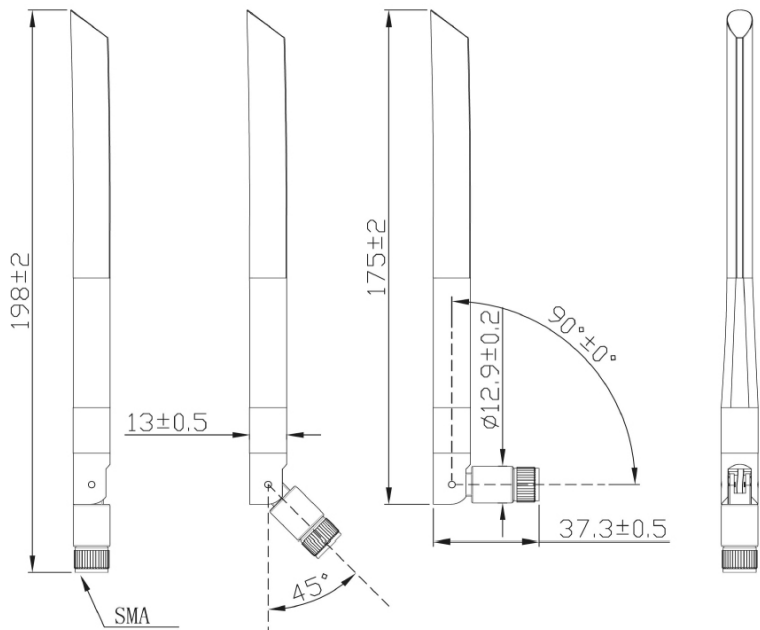
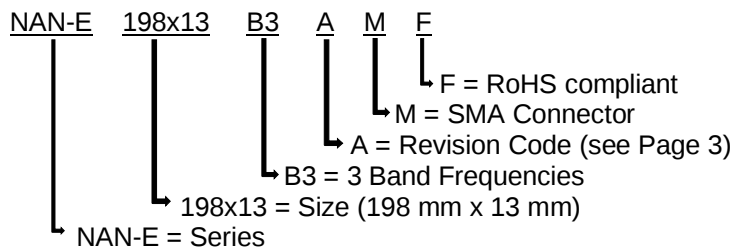
- Meters
- Gateways
- Routers



RoHS Compliant
includes all homogeneous materials
(see part numbering system for details)

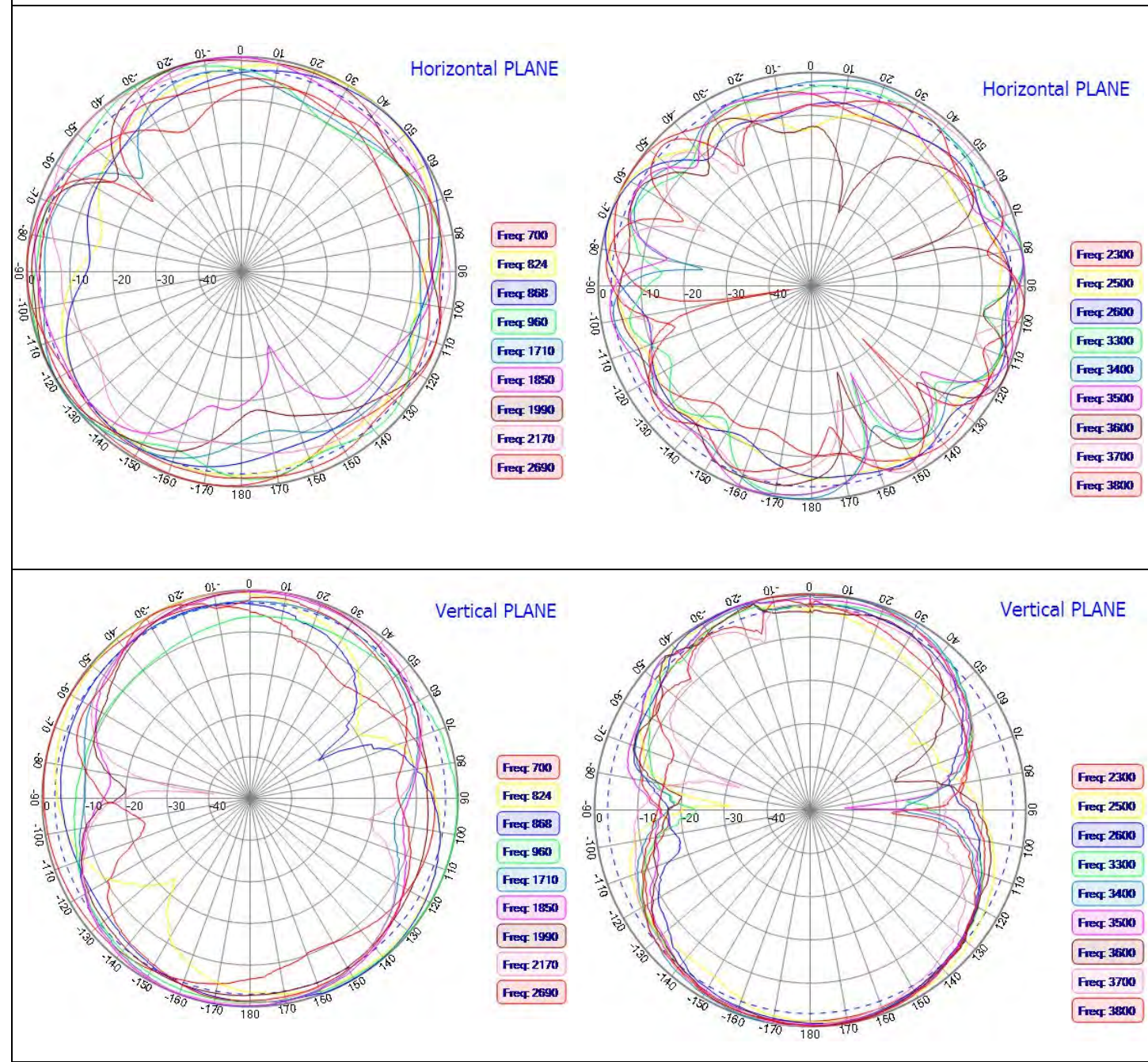
SPECIFICATIONS

Electrical	
Frequency Range	698~960/1710~2690/3300~3800MHz
Polarization	Linear
Gain	3dBi
V.S.W.R	<3.0
Impedance	50Ω
Dimensions (mm):	
Body Length (L)	198.0 ± 2.0
Width (W)	13 ± 0.5
Connection Type	SMA Male



Environmental	
Operating Temperature	-40°C~+85°C
Vibration	10 ~ 55Hz 1.5mm Amplitude 2 Hours
RoHS Compliant	Yes

Antenna Patterns:



Revision History and Status

Revision	Date Issued	Details	Status
A	Nov 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com

FEATURES

- LTE Protocols
- Dual Band Frequencies
- RoHS Complaint

APPLICATION

- Meters
- Gateways
- Routers

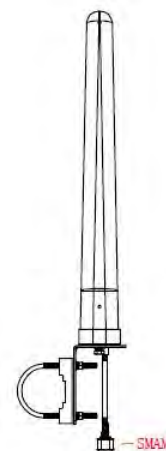
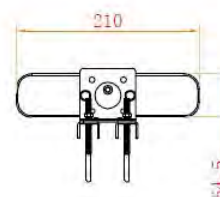
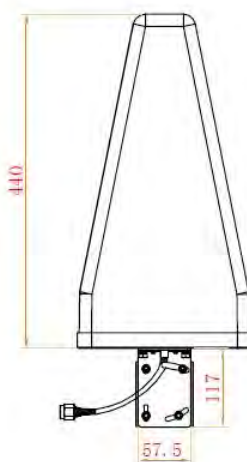
SPECIFICATIONS

Electrical	
Frequency Range	698~960MHz / 1710~2700MHz
Bandwidth	262/ 990 MHz
Polarization	Vertical / Horizontal
Gain	11 / 15 dBi
F/B Ratio	> 16dB
Horizontal Beam Width	90°
Vertical Beam Width	60°
V.S.W.R	≤1.5
Radiation	Direction
Maximum Input Power	50W
Impedance	50Ω
Dimensions (mm):	
Length (L)	440
Width (W)	210
Height (H)	64.5
Connection Type	SMA Male
Cable	RG58
Mounting	Pole



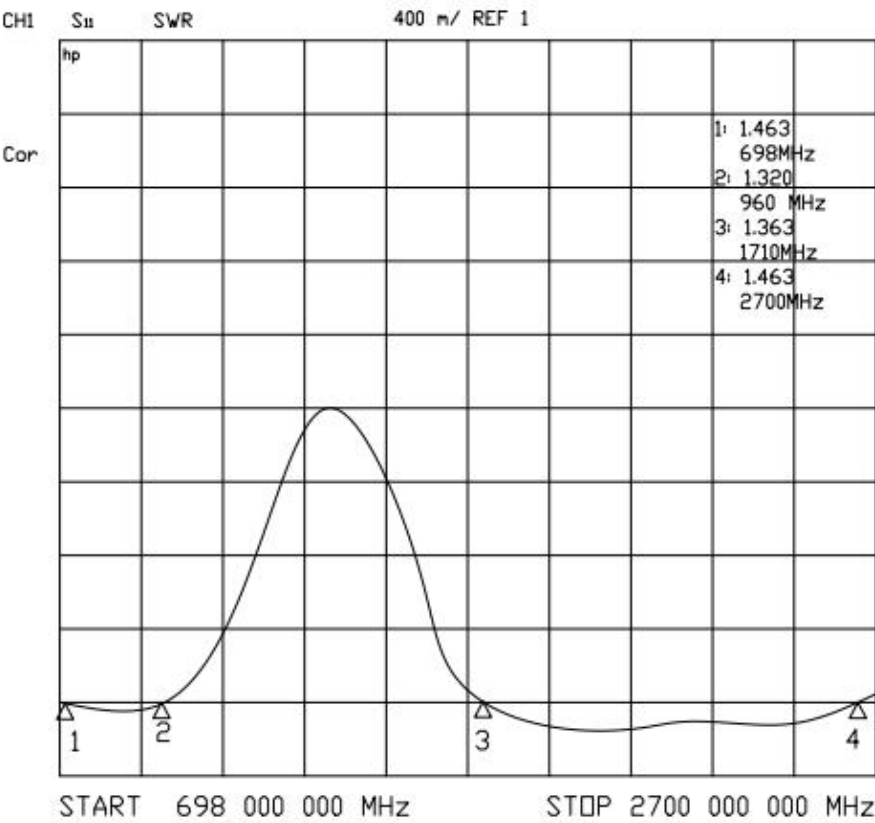
RoHS Compliant
includes all homogeneous materials
(see part numbering system for details)

NAN-E 440210 B2 A M E F
 ↳ F = RoHS compliant
 ↳ E = RG58 Cable
 ↳ M = SMA connector
 ↳ A = REV 1 (See Page 4)
 ↳ B2 = 2 Frequency Bands
 ↳ 440210 = Size (440 mm x 210 mm)
 ↳ NAN-E = Series

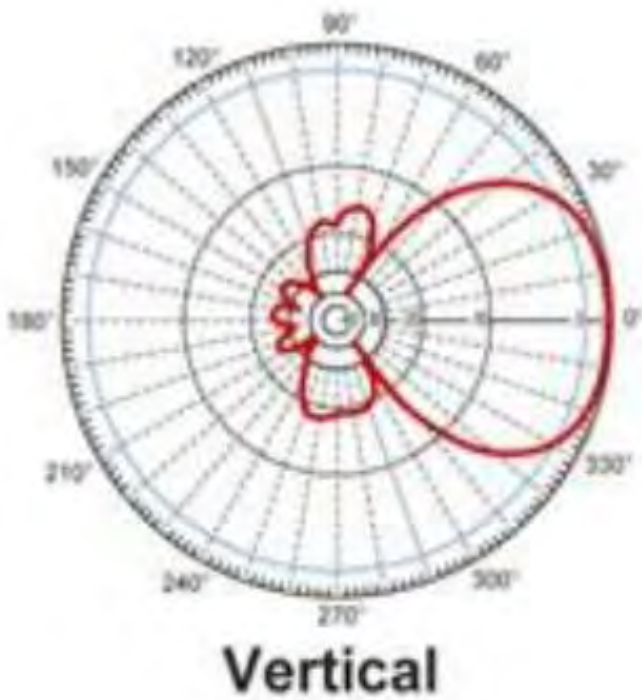
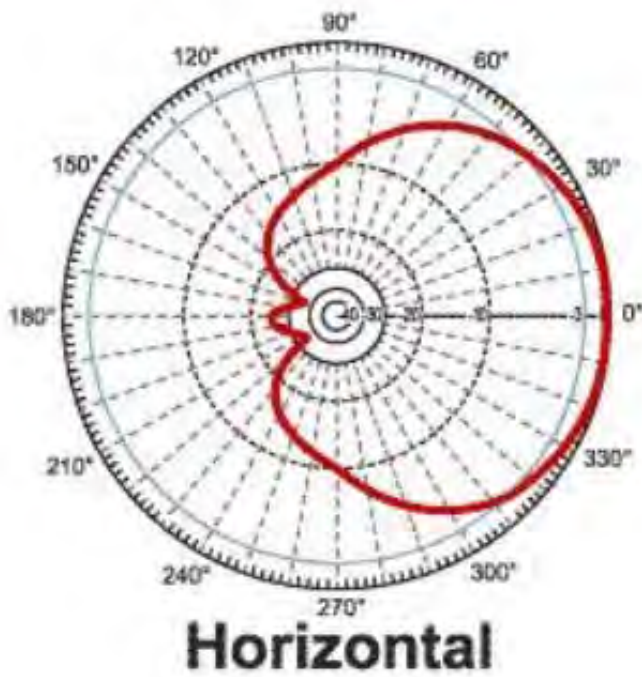


Environmental	
Operating Temperature	-40°C~+80°C
Storage Temperature	-40°C - +80°C
RoHS Compliant	Yes

VSWR



RADIATION PATTERN



Revision History and Status

Revision	Date Issued	Details	Status
A	Dec 4 th , 2020	Initial Release	Supported

- NIC Technical Support: tpmg@niccomp.com
- Compliance Support: rohs@niccomp.com