



5G/4G Indoor/Outdoor Blade Omni Antenna

DBA6171xx Series - 617-960 / 1427-7125 MHz 5G Hinged Swivel Blade Antenna Datasheet

DBA6171xx series 5G swivel blade antennas support harsh environments with both IP67 (outdoor) and non-rated (indoor) configurations.

With excellent performance from 617-7125 MHz the design is ruggedized to support high shock, vibration and humidity environments that may be experienced over the life of the product.

The articulating/hinged/swivel connections allows for a wide variety of installation and mounting options making this an extremely diverse antenna family for IoT or gateway device applications. Options are available with or without embossed TE logo, see page 2 for more details.

FEATURES AND BENEFITS

- Global 5G coverage from 617-7125 MHz
- Ready for future 5G rollouts up to 7GHz
- Indoor and/or outdoor rated options
- Suitable for private 5G/Cellular installations
- Ideal for light industrial or factory settings where vibration may be present

- Ability to rotate and/or point the antennas for maximum coverage and efficiency
- Designed with firm connector resistance to avoid connectors loosening
- Robust hinge mechanism avoids the antenna drooping after installation

ELECTRICAL SPECIFICATION

Operating Frequency (MHz)	617-698	698-960	1427-1606	1710-2200	2300-2700	3300-4200	5150-6000	6000-7125
VSWR - Avg	<1.9:1	<1.7:1	<1.7:1	<2.2:1	<1.7:1	<1.9:1	<1.8:1	<2.0:1
VSWR - Max	<2.5:1	<2.0:1	<3.5:1	<2.5:1	<2.3:1	<2.3:1	<2.3:1	<5.0:1
Peak Gain - Average (dBi)	-0.3	0.2	0.6	0.8	1.4	2.8	3.0	3.0
Peak Gain - Max (dBi)	0.0	1.0	1.0	2.1	2.1	3.9	4.4	4.4
Nominal Impedance (Ohms)	50							
Max Power Handling - Ambient 25°C (W)	5							
Polarization	Linear							
Antenna Type	Dipole							
Azimuth Beamwidth	360°, Omnidirectional							

MECHANICAL SPECIFICATION

Dimensions - width x depth x height - mm (in.)	25 x 9.3 x 184 (0.98 x 0.37 x 7.24)
Weight - g (oz.)	30 (1.06)
Number of Ports	1
Connector	SMA male
Radome	Polycarbonate, UV-Rated for Outdoor Use

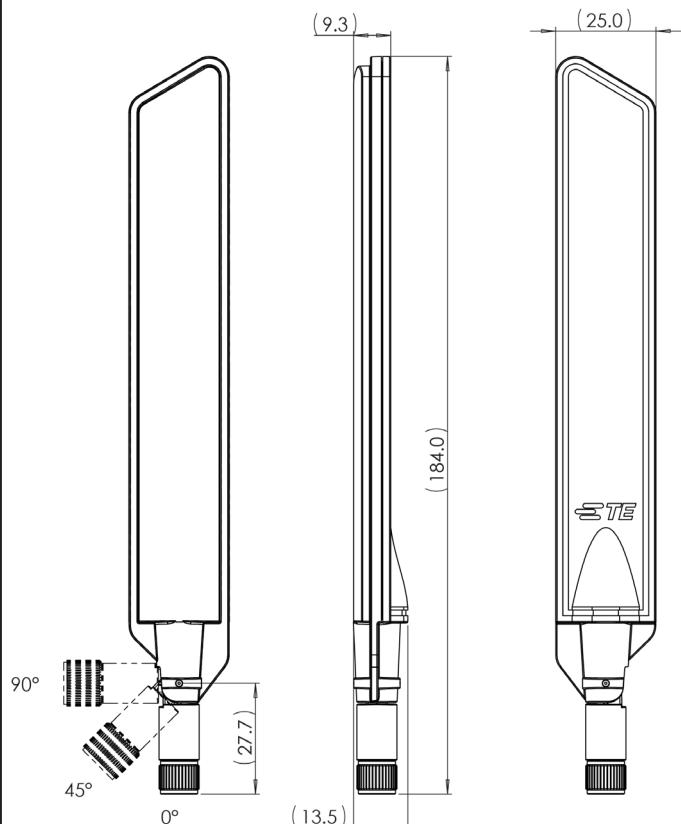
ENVIRONMENTAL SPECIFICATION

Operating Temperature - °C (°F)	-40 to +85°C (-22 to +158°F)
Storage Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)
Humidity Rating	MIL-STD-810G, 507.5, Procedure II, Aggravated Humidity @ 95%±4%
Flammability Rating	UL94-V2, US-FMVSS
Mechanical Shock Test Rating	IEC 60068-2-27, Structural Integrity of Mountings
Vibration Test Rating	IEC 60068-2-64, Stationary Installation, Category 3
Material Substance Compliance	RoHS Compliant

PART NUMBER	IP RATING	CONNECTOR	WIND SURVIVAL
DBA6171C1-BSMAM Indoor (TE Logo Embossed)	N/A	SMA male	N/A
DBA6171C2-BSMAM Indoor (No Logo)	N/A	SMA male	N/A
DBA6171C3-BSMAM Outdoor (TE Logo Embossed)	IP67	SMA male	60 MPH
DBA6171C4-BSMAM Outdoor (No Logo)	IP67	SMA male	60 MPH

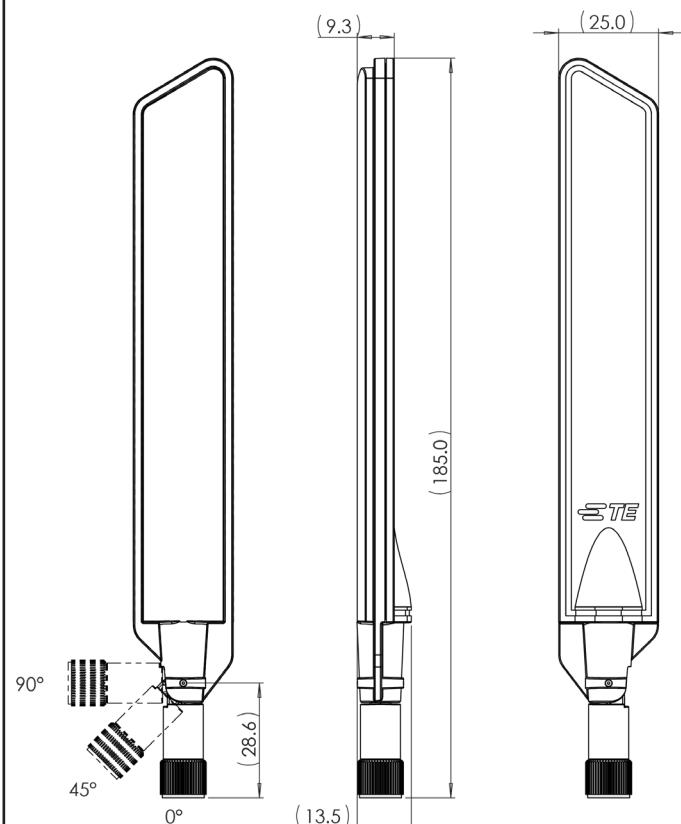
MECHANICAL DRAWINGS

DBA6171C1-BSMAM & DBA6171C2-BSMAM
(Non-IP Rated Indoor Only Models)



Antenna Bend Position

DBA6171C3-BSMAM & DBA6171C4-BSMAM
(IP67 Rated Indoor/Outdoor Models)



Antenna Bend Position

Please note the small difference in connector lengths and overall height between Non-IP and IP67 rated models above.

RADIATION PATTERNS

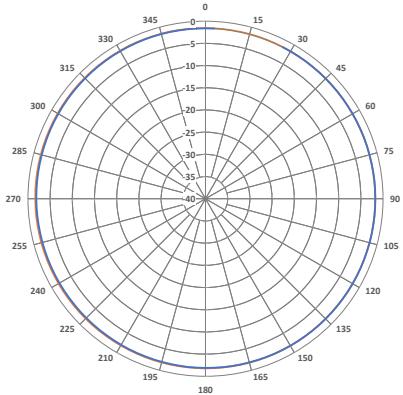
Key

Non-IP Rated Indoor Only - DBA6171C1-BSMAM & DBA6171C2-BSMAM

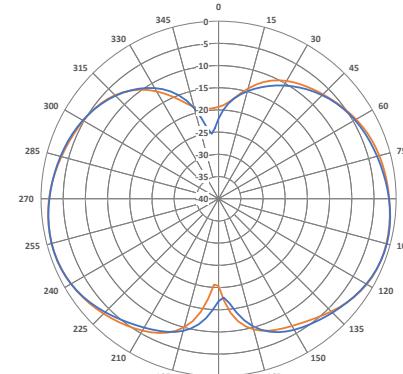
IP-67 Rated Indoor/Outdoor - DBA6171C3-BSMAM & DBA6171C4-BSMAM

Radiation Patterns at 633 MHz

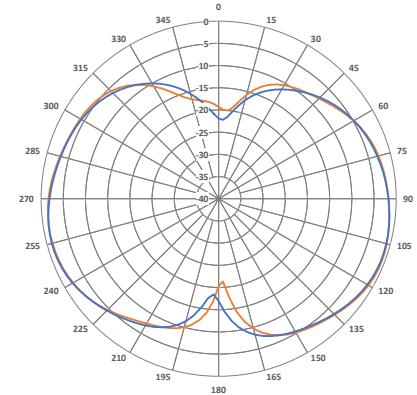
Theta = 90°



Phi = 0°

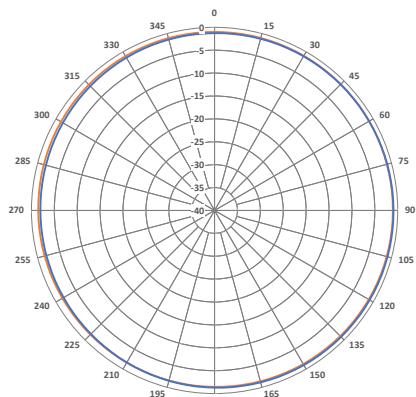


Phi = 90°

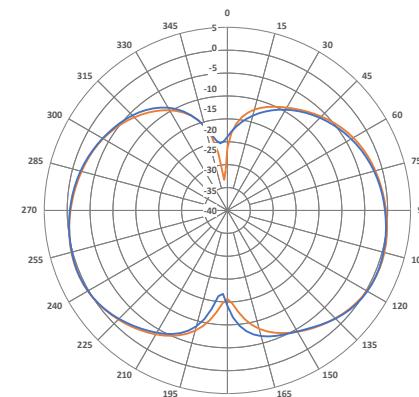


Radiation Patterns at 725 MHz

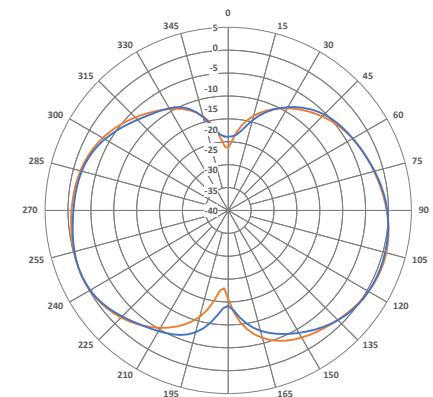
Theta = 90°



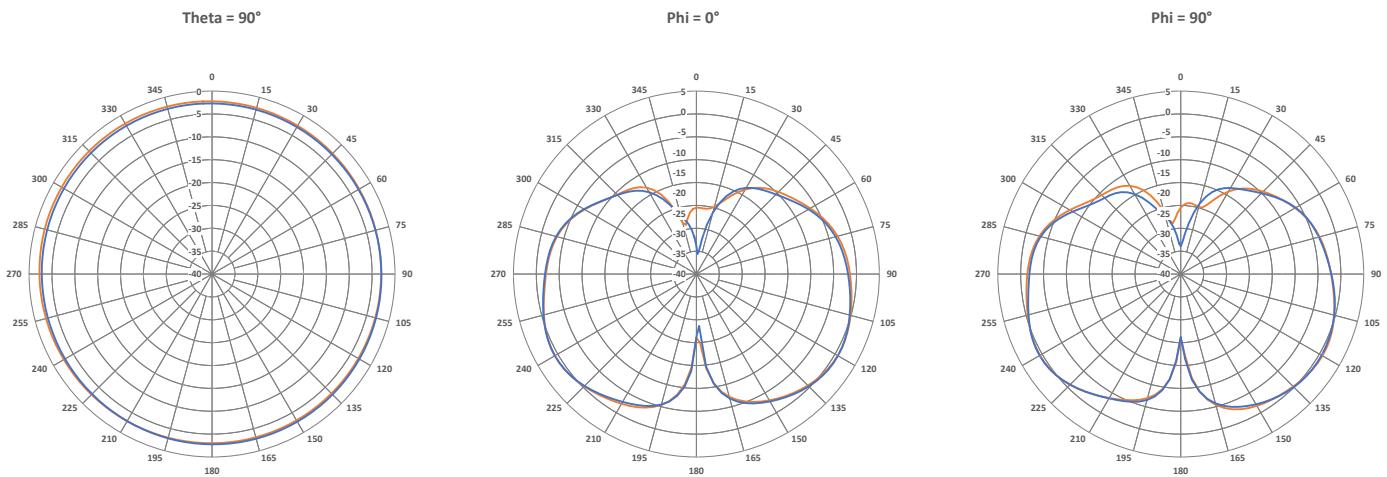
Phi = 0°



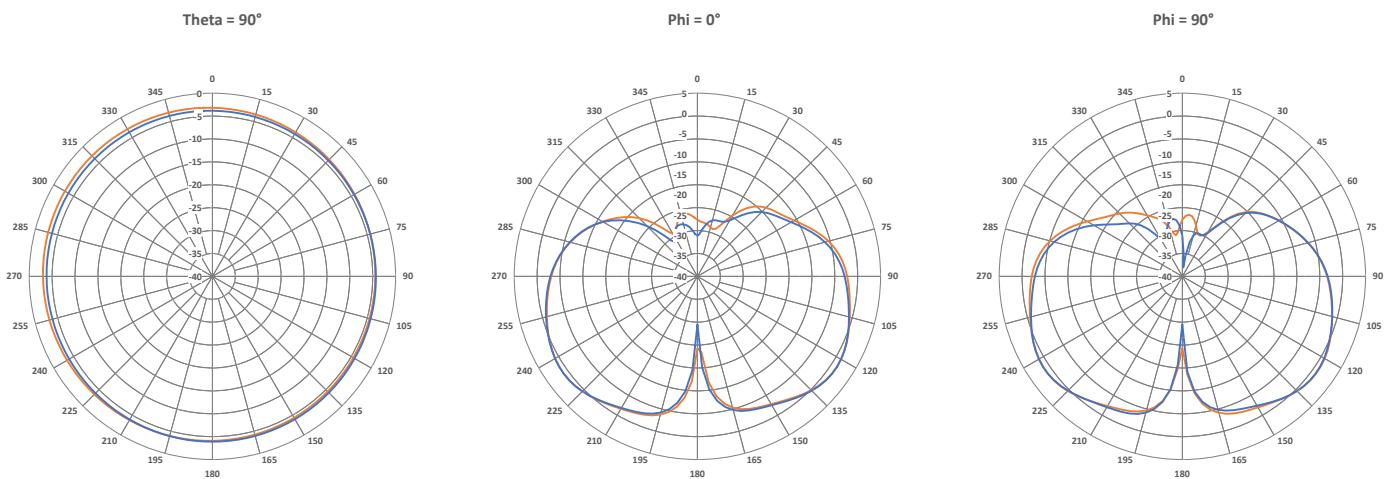
Phi = 90°



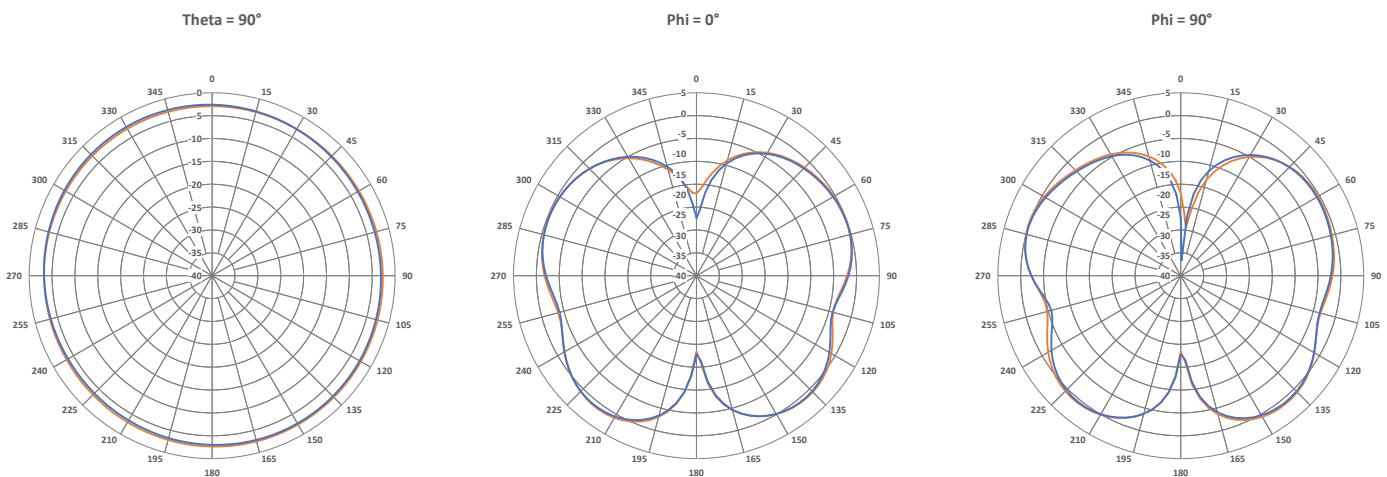
Radiation Patterns at 850 MHz



Radiation Patterns at 925 MHz

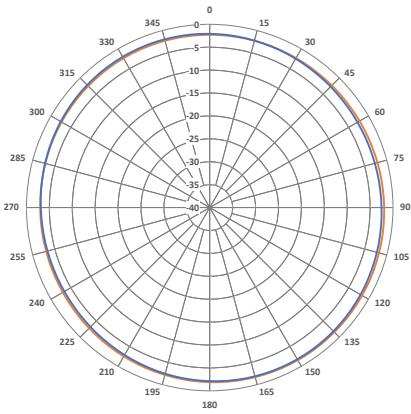


Radiation Patterns at 1448 MHz

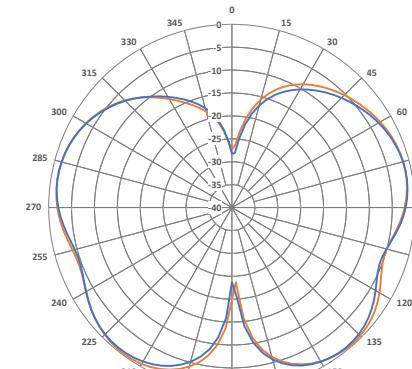


Radiation Patterns at 1730 MHz

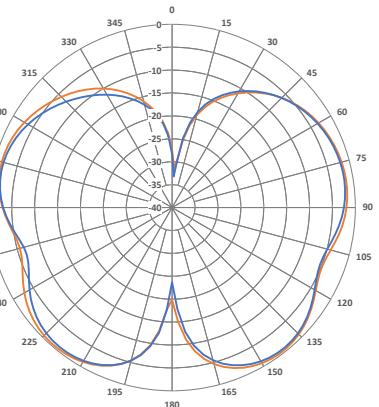
Theta = 90°



Phi = 0°

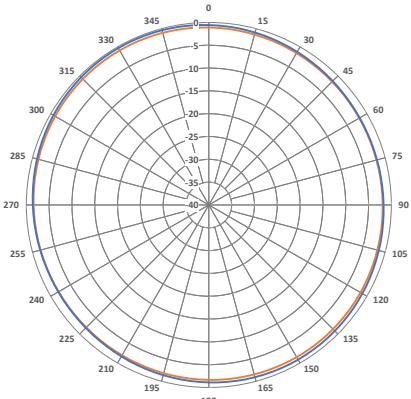


Phi = 90°

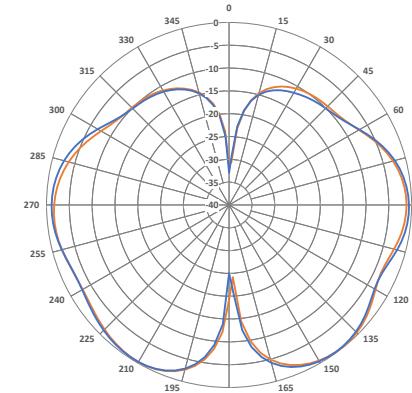


Radiation Patterns at 1930 MHz

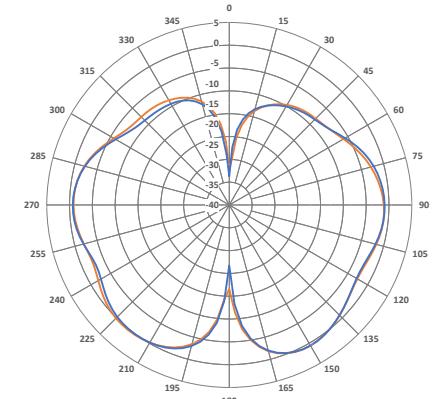
Theta = 90°



Phi = 0°

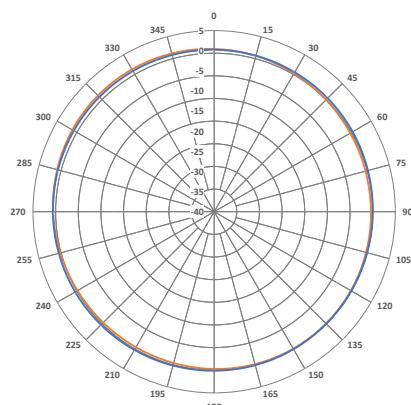


Phi = 90°

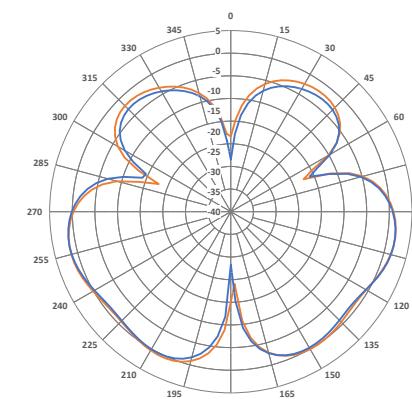


Radiation Patterns at 2130 MHz

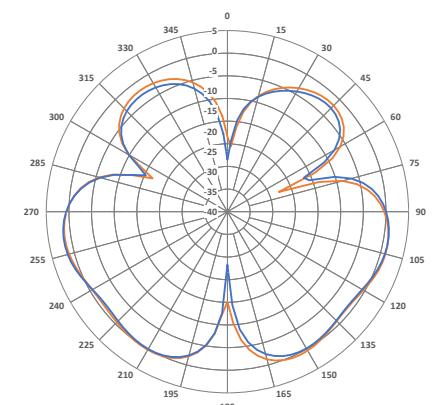
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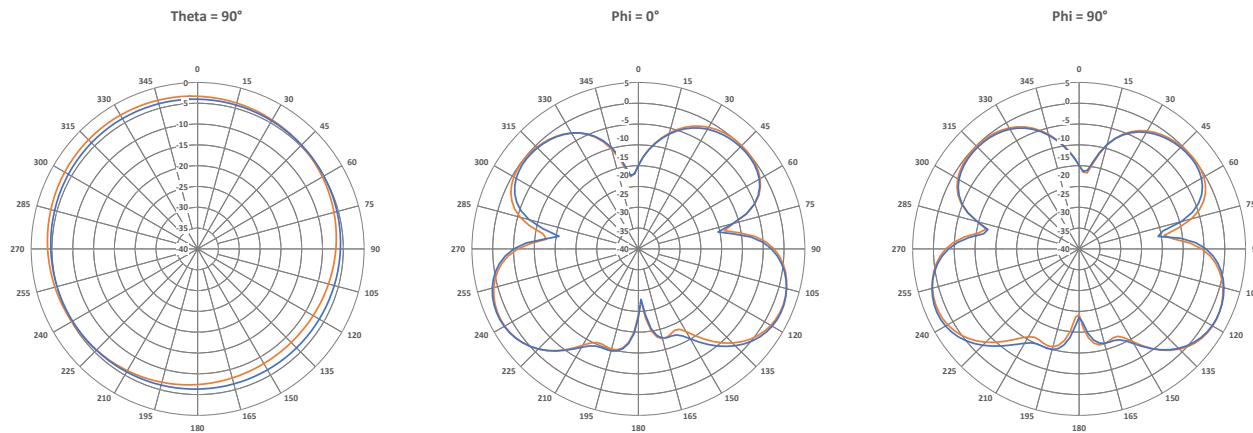
Phi = 0°



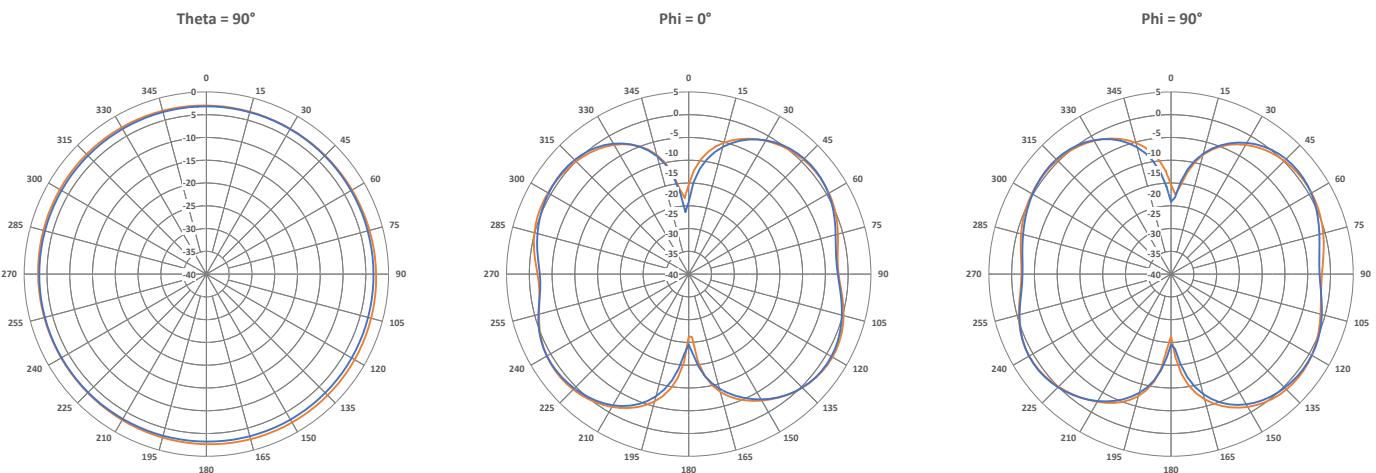
Phi = 90°



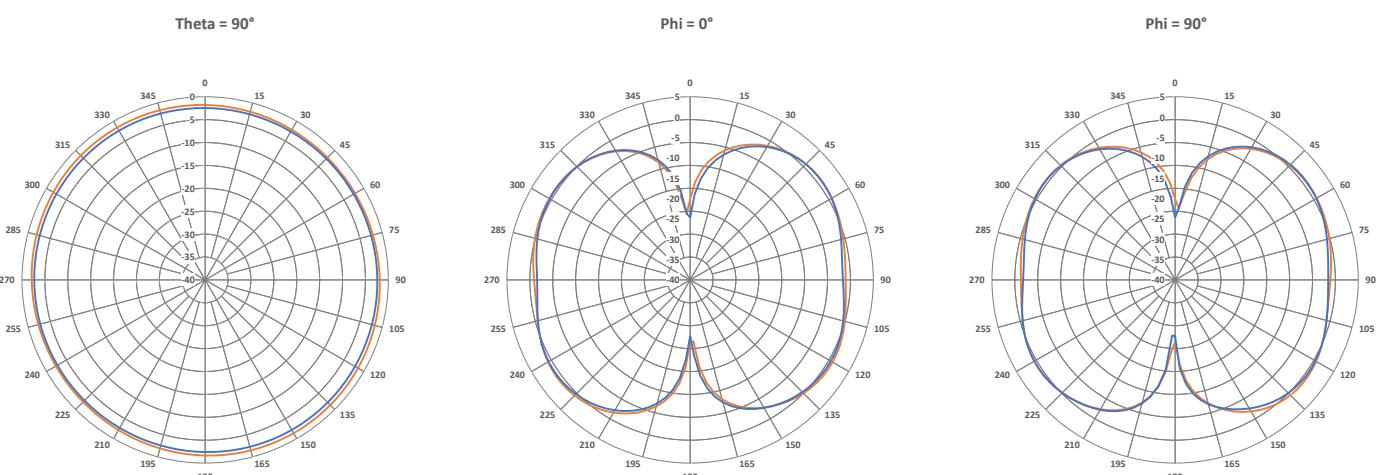
Radiation Patterns at 2310 MHz



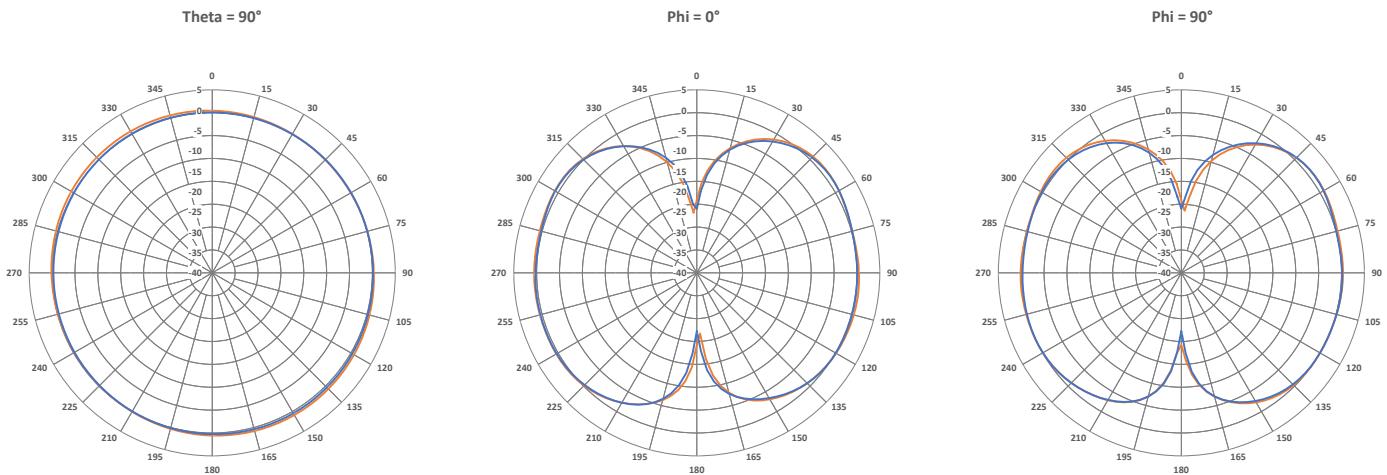
Radiation Patterns at 2450 MHz



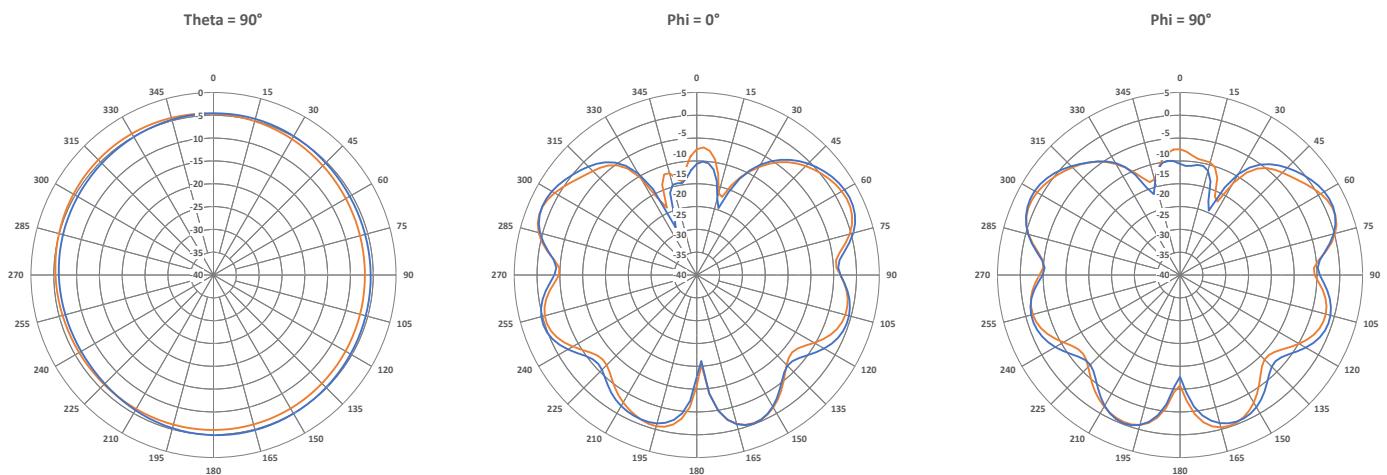
Radiation Patterns at 2500 MHz



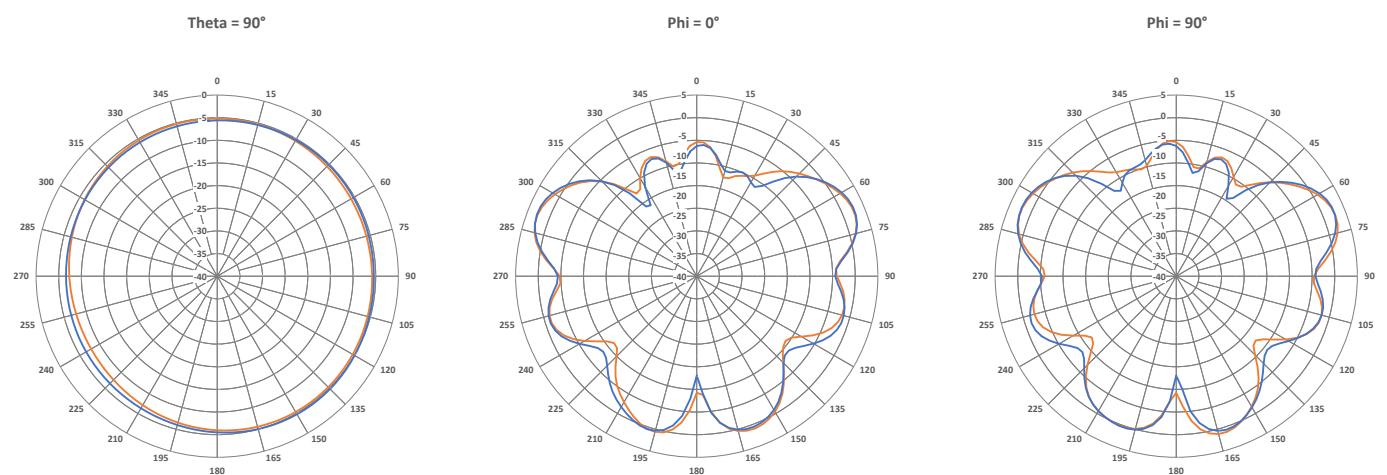
Radiation Patterns at 2600 MHz



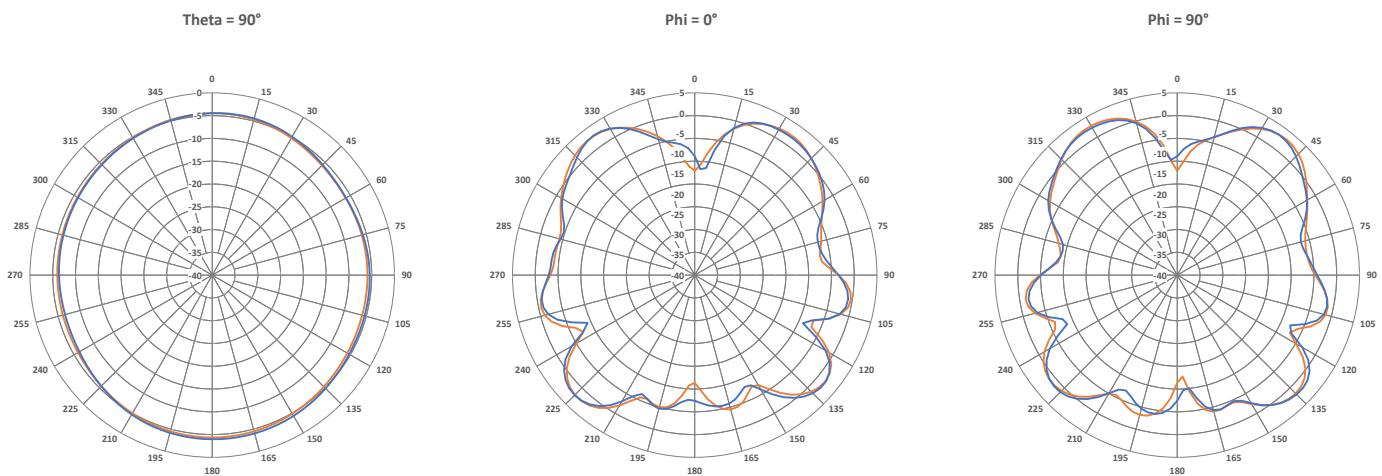
Radiation Patterns at 3500 MHz



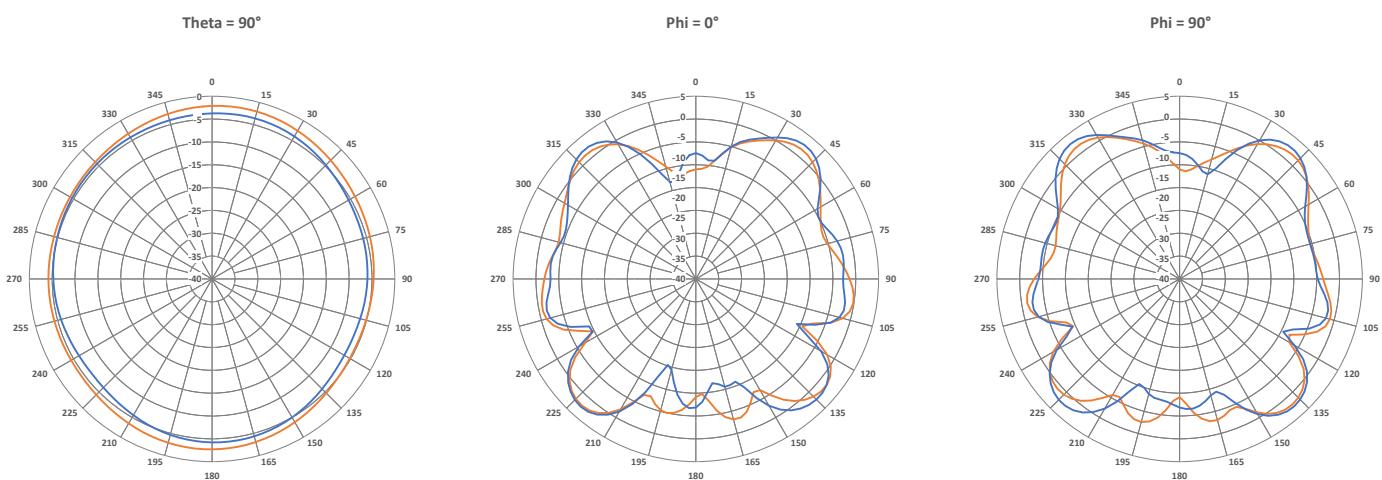
Radiation Patterns at 3700 MHz



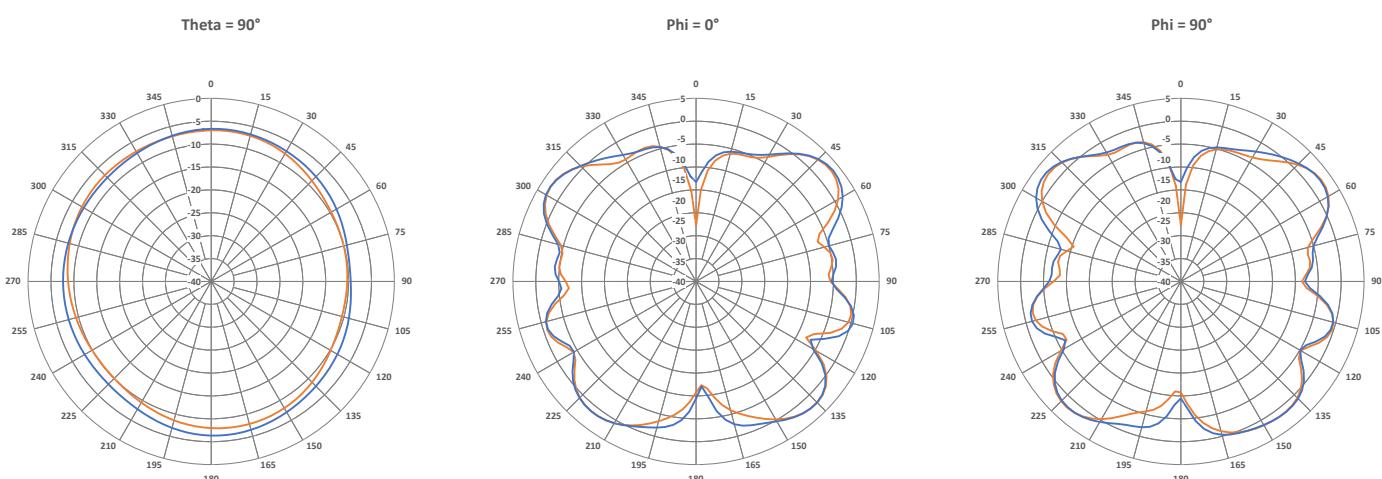
Radiation Patterns at 5150 MHz



Radiation Patterns at 5450 MHz

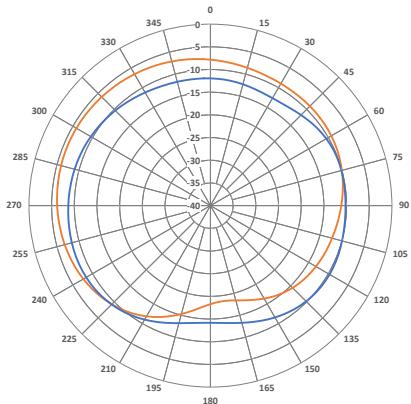


Radiation Patterns at 5725 MHz

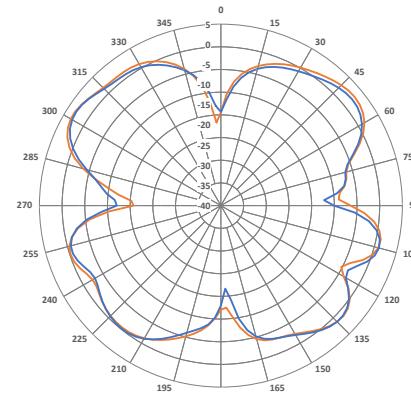


Radiation Patterns at 5925 MHz

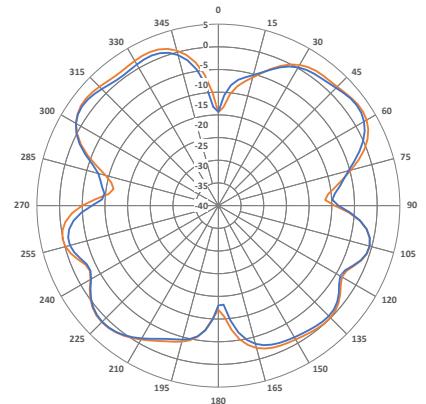
Theta = 90°



Phi = 0°

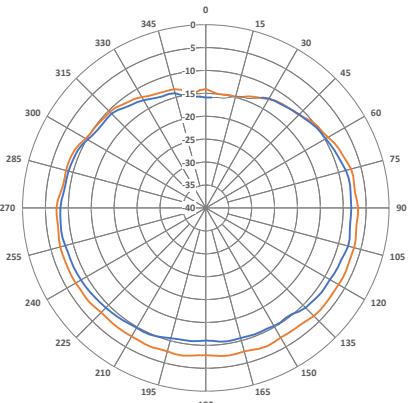


Phi = 90°

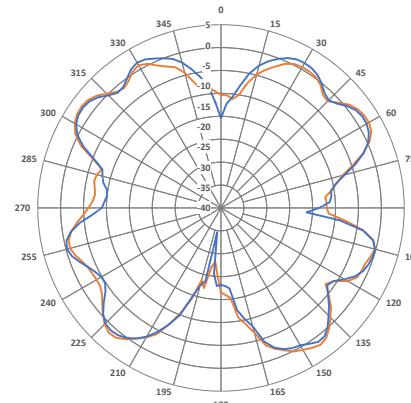


Radiation Patterns at 6525 MHz

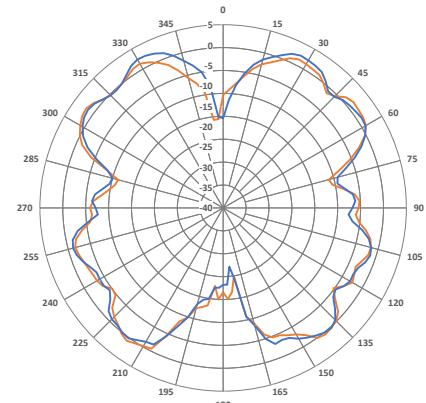
Theta = 90°



Phi = 0°

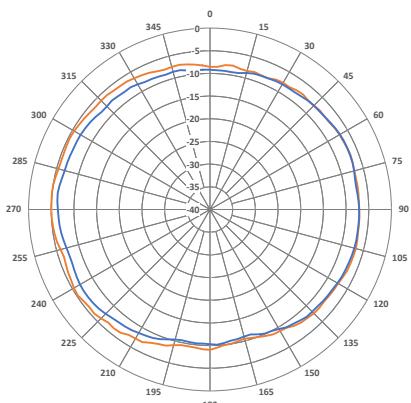


Phi = 90°

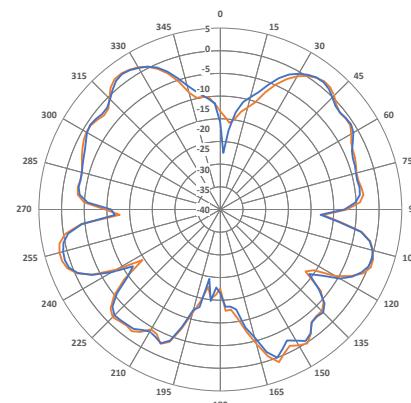


Radiation Patterns at 7125 MHz

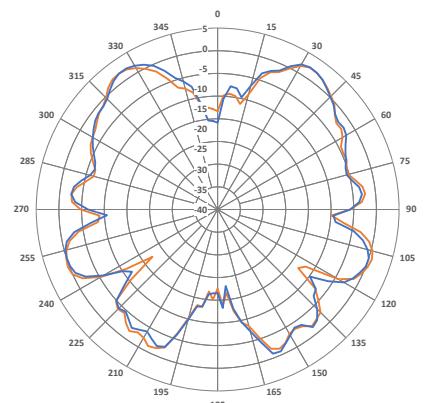
Theta = 90°



Phi = 0°

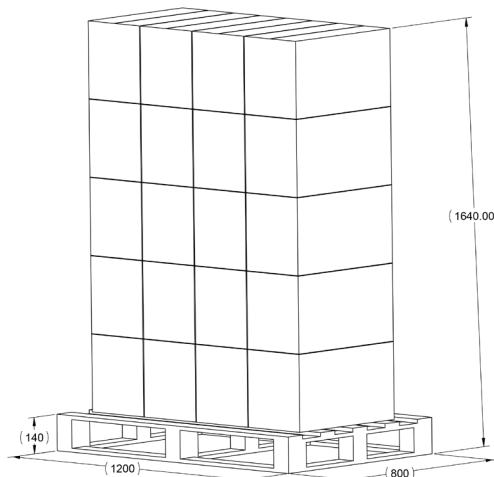


Phi = 90°

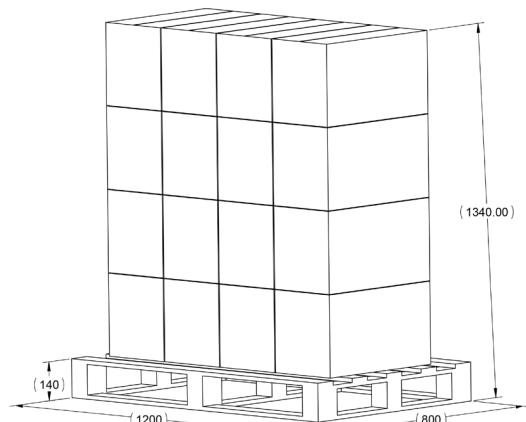


PACKING INFORMATION

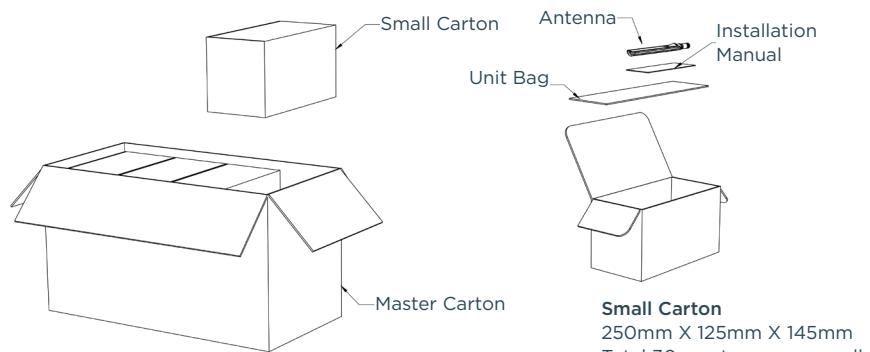
PACKAGING - INDIVIDUAL CARTON



PACKAGING - BULK PACK



PACKAGED DIMENSIONS	UNIT CARTON	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	30	240	3840	4800
Height cm(in)	14.5 (5.7)	29.5 (11.6)	134 (52.8)	164.0 (64.6)
Length cm(in)	25.0 (9.8)	52.0 (20.5)	120 (47.2)	120 (47.2)
Width cm(in)	12.5 (4.9)	26.0 (10.2)	80 (31.5)	80 (31.5)
Est. Shipping Weight kg (lbs)	1.1 (2.4)	9.4 (20.7)	152.4 (336.0)	190.0 (418.9)



Small Carton
250mm X 125mm X 145mm
Total 30 x antenna per small carton.

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