



RP20 lite

5G, 4G/LTE MIMO Fixed Wireless Access Antenna Datasheet - #PDD61606C-200SMAM

The RP20 lite antenna from TE Connectivity (TE) provides high-performance connectivity for current and emerging 4G and 5G frequencies. The incorporated 2x2 MiMo technology means that the RP20 lite can provide enhanced data rates and bandwidth can provide enhanced data rates and reliability on 4G and 5G frequency bands.

It comes in a stylish housing which is portable and suitable for multiple applications.

It is suitable for use globally on cellular networks and with any network operator. It fits most common routers/gateways currently on the market using the quickly attachable SMA connectors on the Twinax cable.

The RP20 lite fixed wireless access (FWA) MiMo antenna can be mounted on a wall, on a window, or placed freestanding on a desktop to provide increased bandwidth and signal strength. The antenna is supplied with all necessary mounting hardware, including: built-in foldout desk/tabletop stand, suction cups for window mount and wall anchors and screws for wall mount.

MOUNTING OPTIONS

Wall Mount



Window Mount



Desk Mount



APPLICATIONS

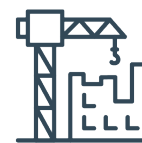
Remote Offices



Hotel Rooms



Construction Sites



Remote Schools



Rural Communities



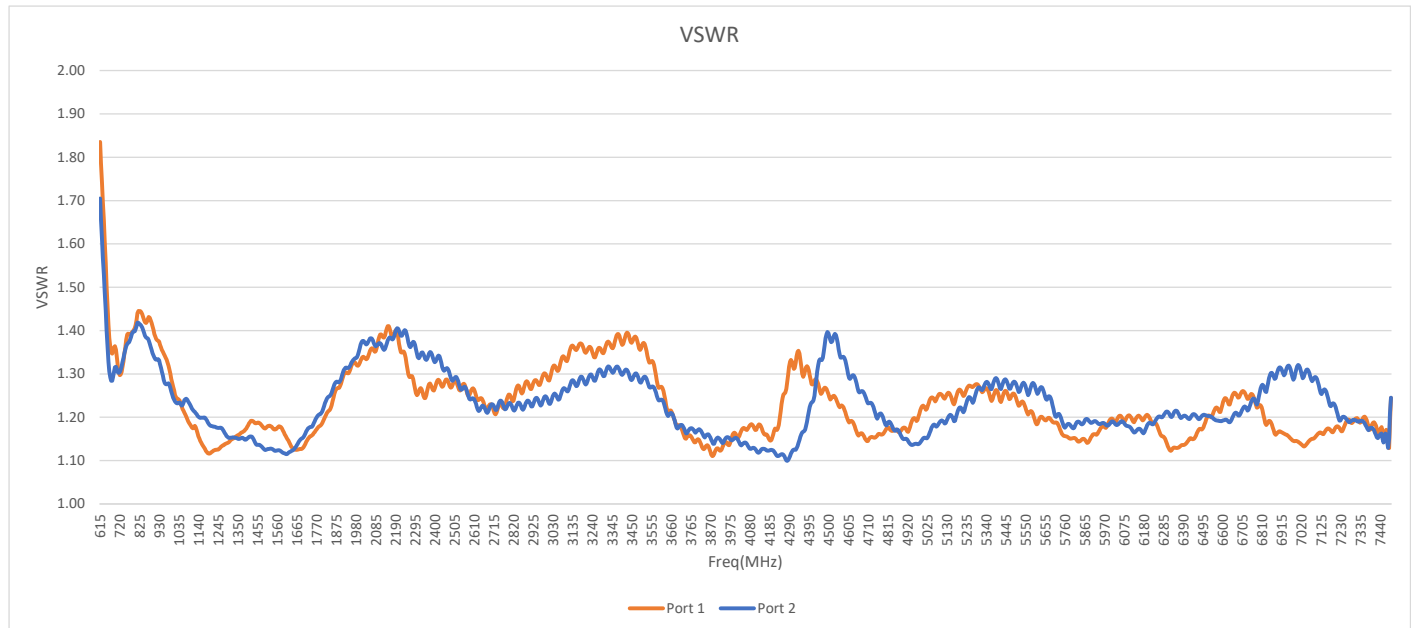
Temporary Usage



SPECIFICATION

ELECTRICAL SPECIFICATION						
Operating Frequency (MHz)	617-698	698-960	1452-1496	1559-1606	1690-4200	4200-6000
VSWR - Avg (Port 1)	<1.5	<1.3	<1.2	<1.2	<1.3	<1.4
VSWR - Avg (Port 2)	<1.5	<1.4	<1.2	<1.2	<1.3	<1.3
VSWR - Max	<3.0	<2.0	<2.0	<2.0	<2.0	<3.0
Isolation - Max (dB)	>10	>10	>15	>15	>15	>15
Peak Gain - Average (dBi)	2.4		5.5	4.6	2.8	
Peak Gain (dBi)	3.6		4.6	6.1	5.3	
Nominal Impedance (Ohms)	50					
Total Efficiency Average (%)	55		71	67	57	
Total Efficiency Average (dB)	-2.6		-1.5	-1.7	-2.4	
Max Power - Ambient 25°C (W)	5					
Polarization	Linear - Vertical					
Azimuth Beamwidth	360°, Omnidirectional					

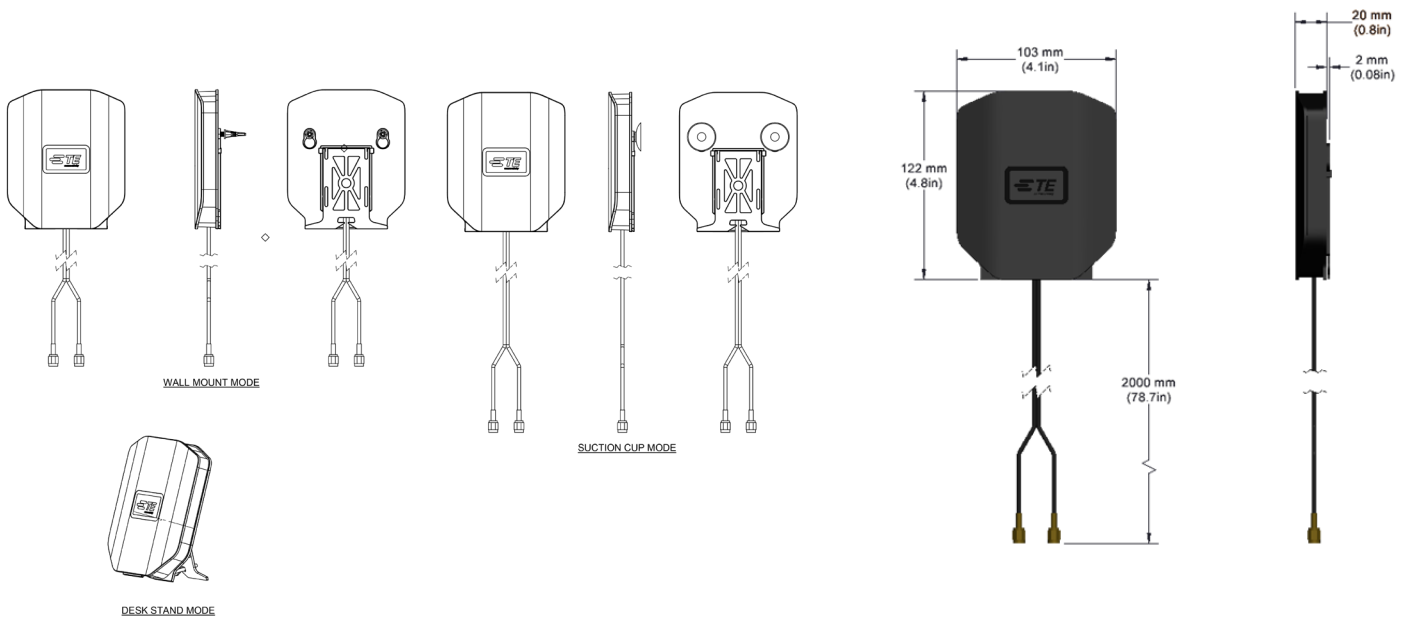
VSWR



MECHANICAL SPECIFICATION

Dimensions - Height x Width x Depth - mm (in.)	122 x 103 x 22.3 (4.8 x 4.1 x 0.88)
Weight - g (oz.)	132 (4.66)
Ports	2
Cable Length mm (in.) / Type / Connector	Standard 2000mm (78.7in) / RG174, Twin Cable / SMA Male
Radome Color / Material	Black / PC ABS
Mounting	Wall Mount (Screw Fixings) Freestanding (Fold Out Stand) Window (Suction Cup)

MECHANICAL DRAWINGS



ENVIRONMENTAL SPECIFICATION

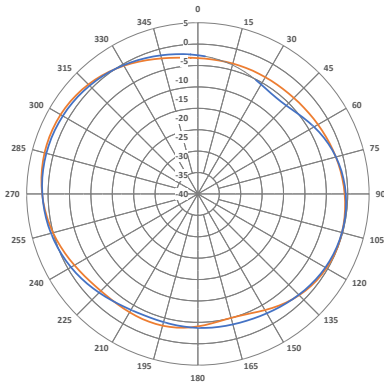
Operating Temp. (°C)	-40 to +85
Storage Temperature (°C)	-40 to +85
Flammability Rating	UL94-V0
Material Substance Compliance	RoHS Compliant CE & UKCA Compliant

RADIATION PATTERNS

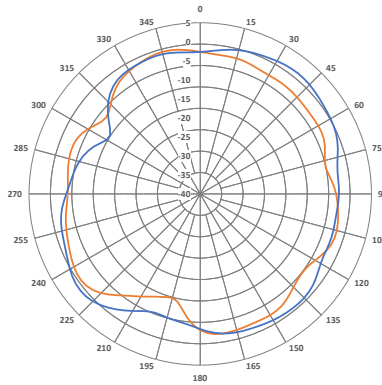
- Port 1
- Port 2

633 MHz

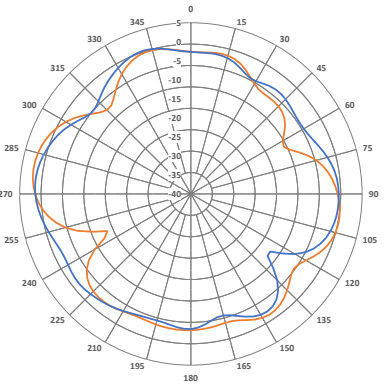
Theta = 90°



Phi = 0°

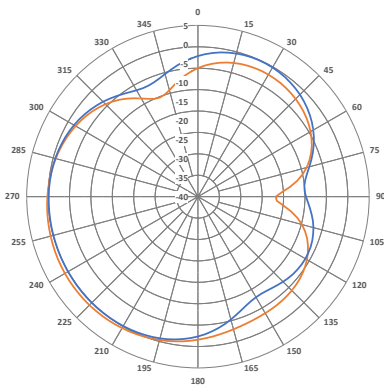


Phi = 90°

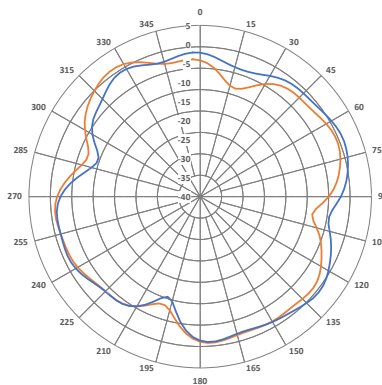


725 MHz

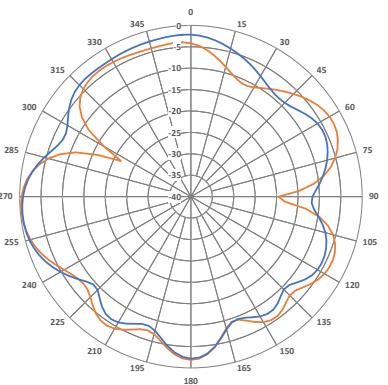
Theta = 90°



Phi = 0°

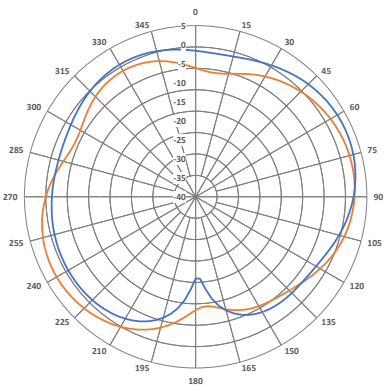


Phi = 90°

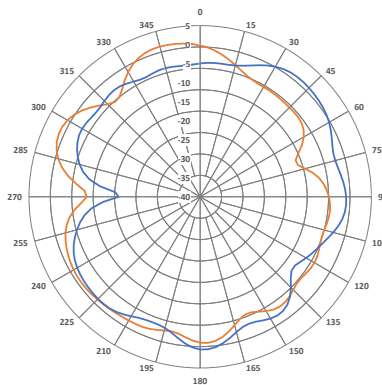


850 MHz

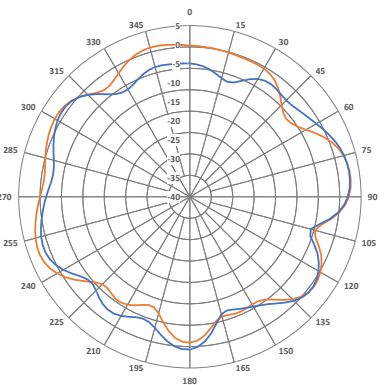
Theta = 90°



Phi = 0°



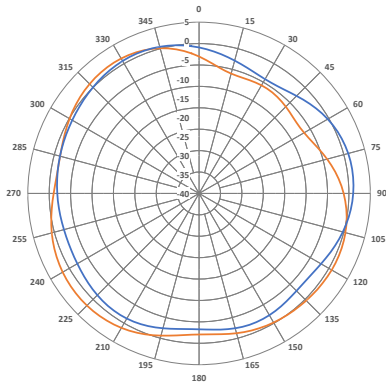
Phi = 90°



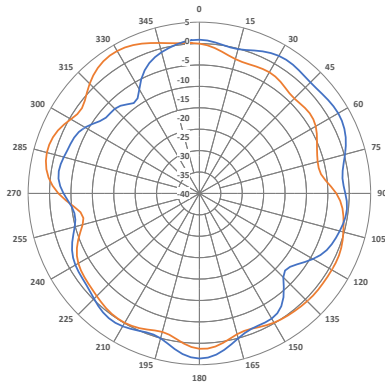
— Port 1
— Port 2

925 MHz

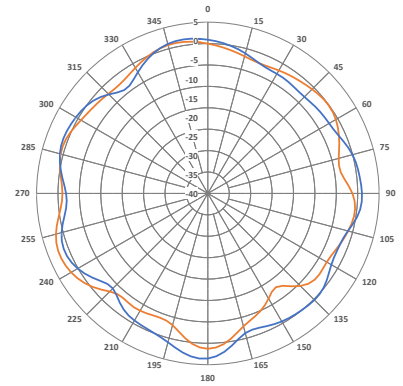
Theta = 90°



Phi = 0°

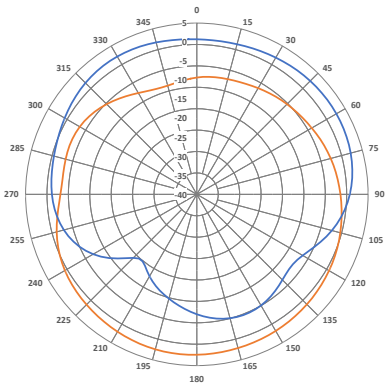


Phi = 90°

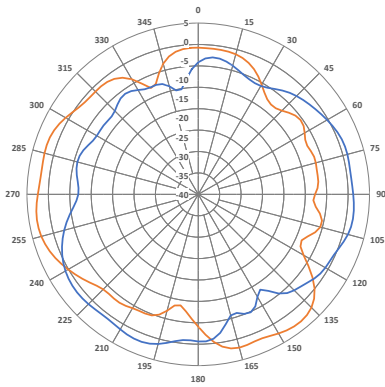


1580 MHz

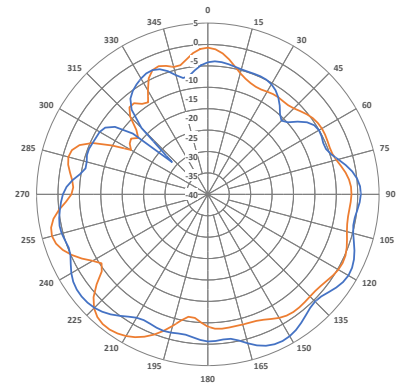
Theta = 90°



Phi = 0°

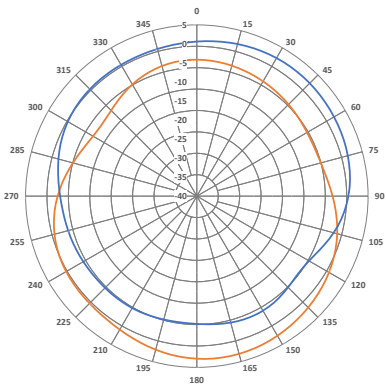


Phi = 90°

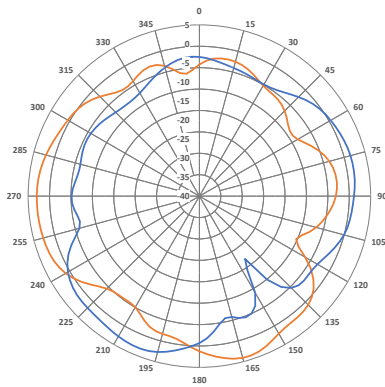


1730 MHz

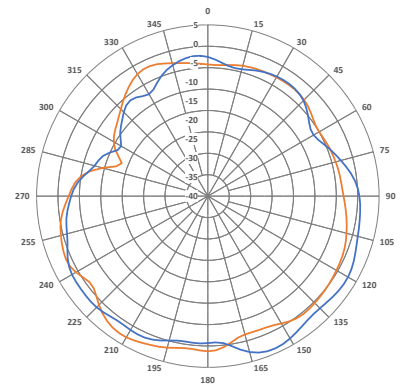
Theta = 90°



Phi = 0°



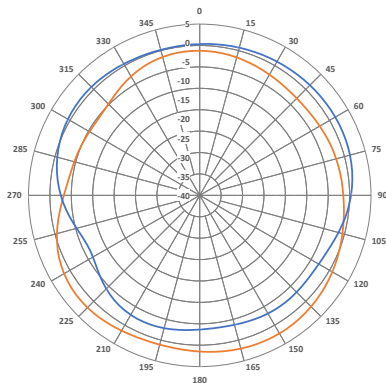
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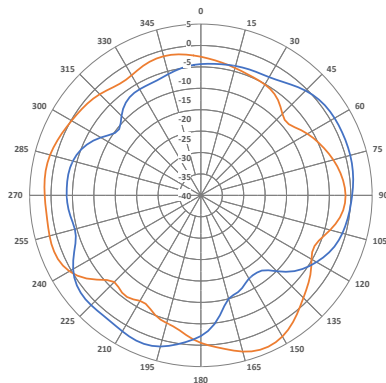
— Port 1
— Port 2

1930 MHz

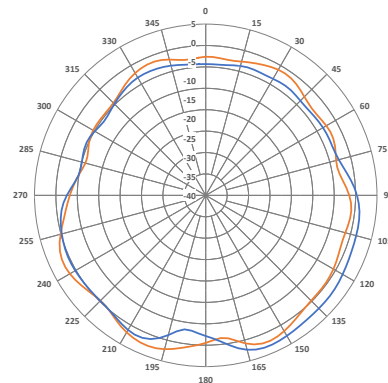
Theta = 90°



Phi = 0°

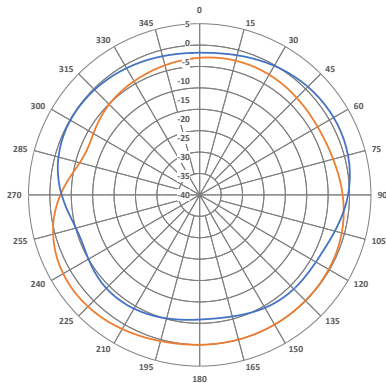


Phi = 90°

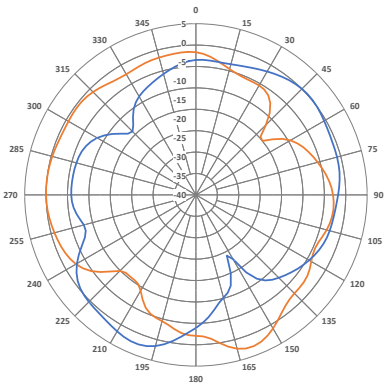


2130 MHz

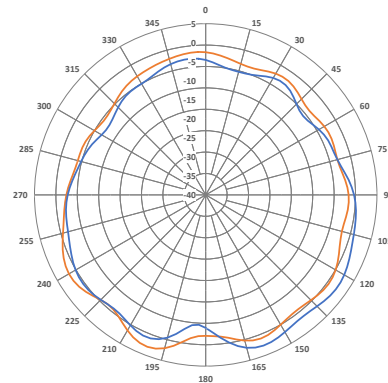
Theta = 90°



Phi = 0°

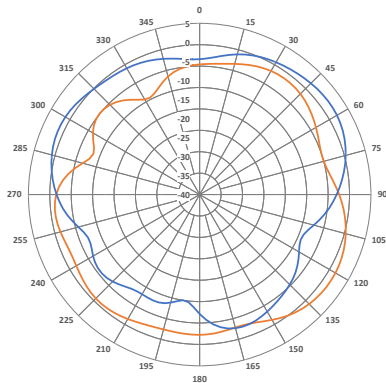


Phi = 90°

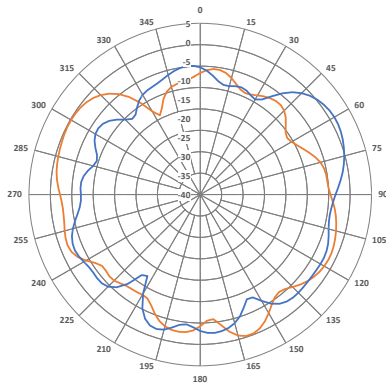


2310 MHz

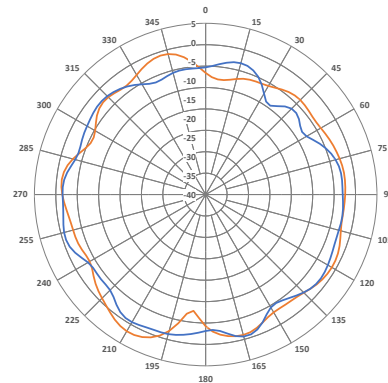
Theta = 90°



Phi = 0°



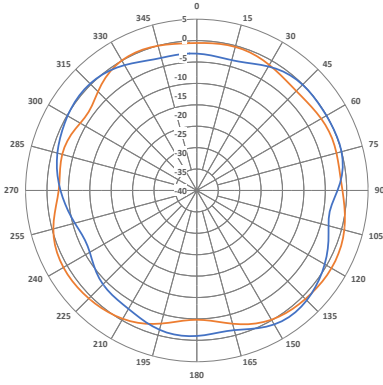
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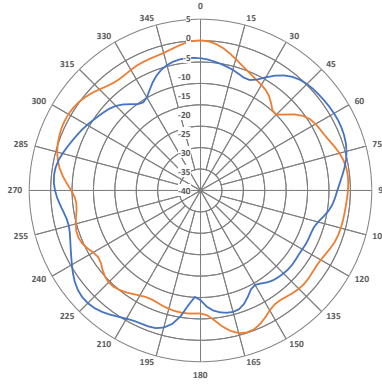
— Port 1
— Port 2

2450 MHz

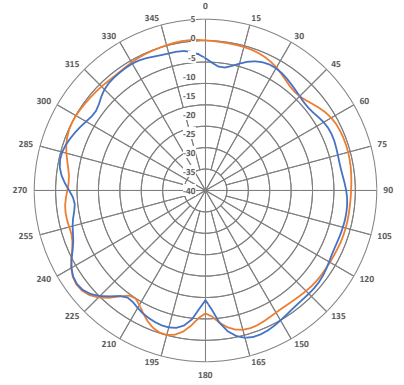
Theta = 90°



Phi = 0°

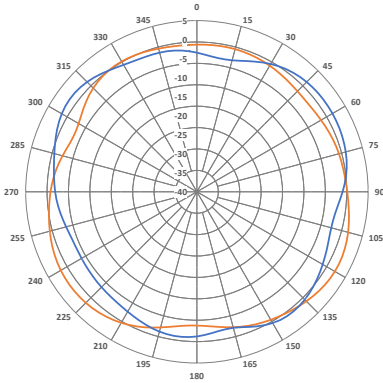


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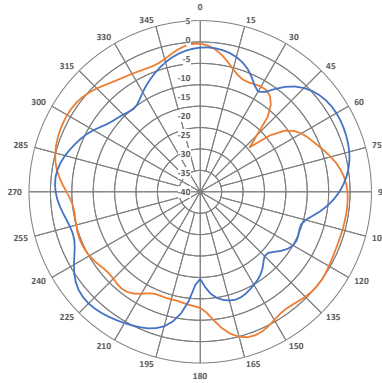


2500 MHz

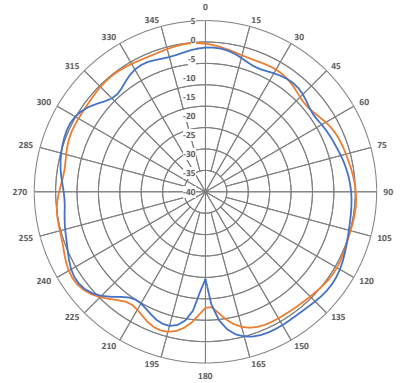
Theta = 90°



Phi = 0°

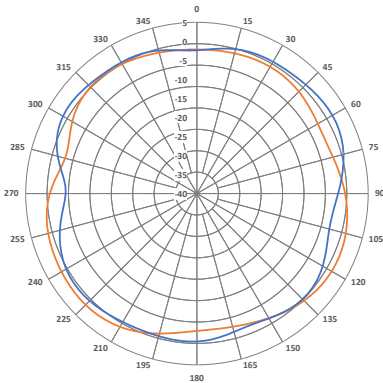


Phi = 90°

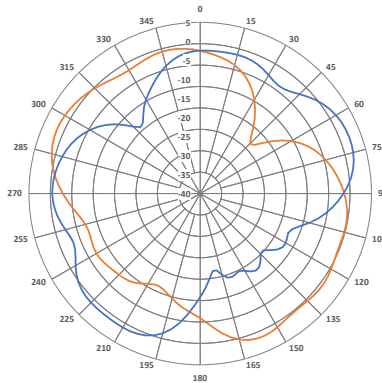


2600 MHz

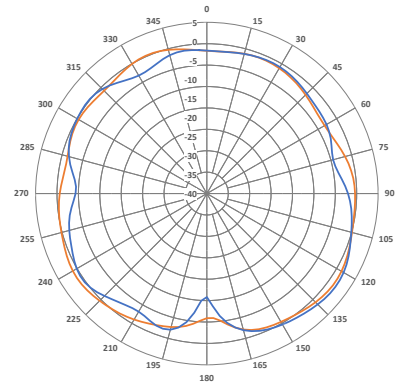
Theta = 90°



Phi = 0°



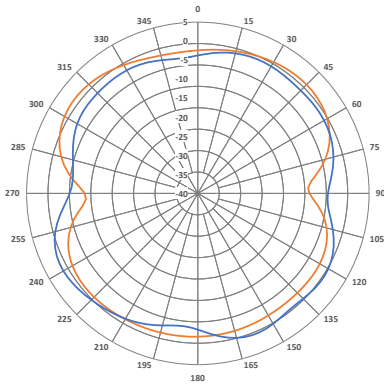
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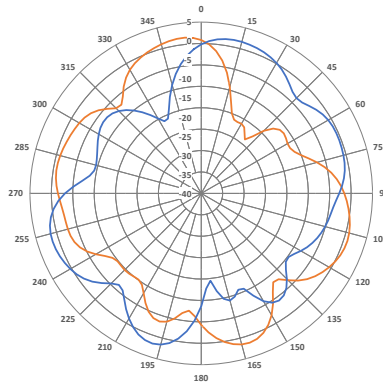
— Port 1
— Port 2

3500 MHz

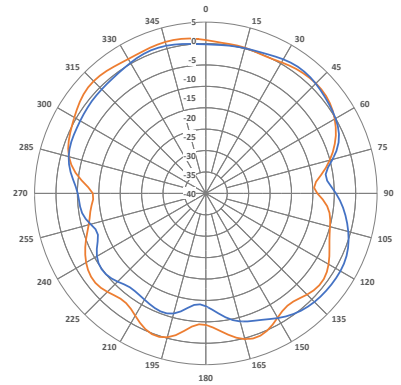
Theta = 90°



Phi = 0°

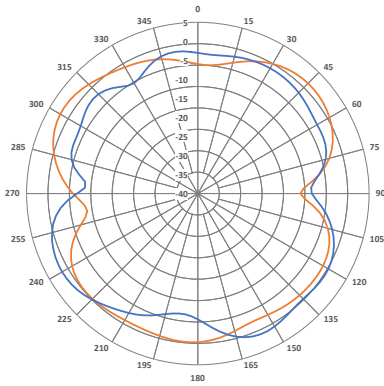


Phi = 90°

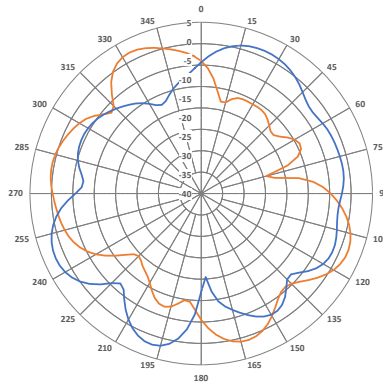


3700 MHz

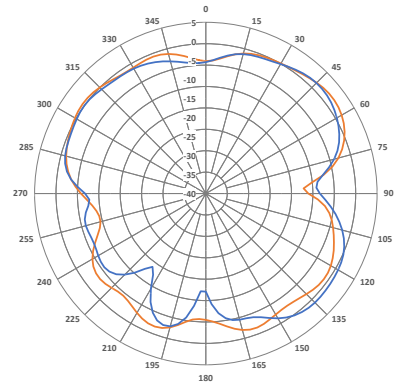
Theta = 90°



Phi = 0°

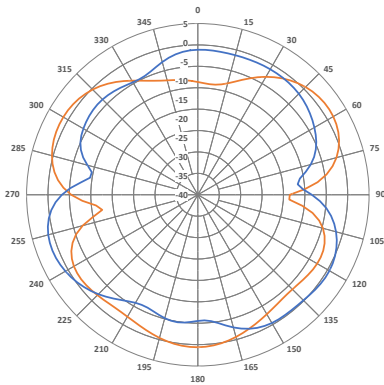


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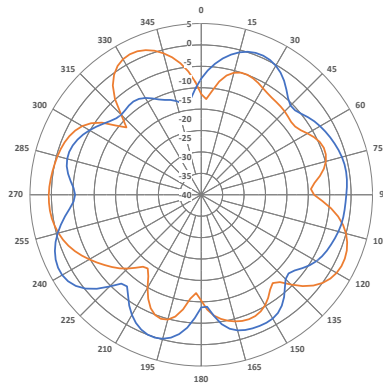


4000 MHz

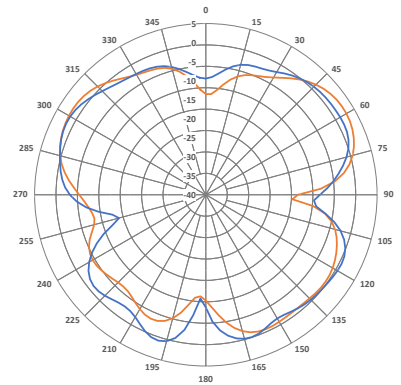
Theta = 90°



Phi = 0°



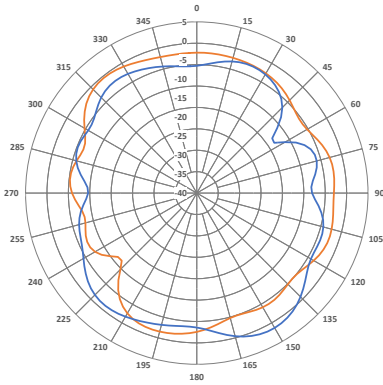
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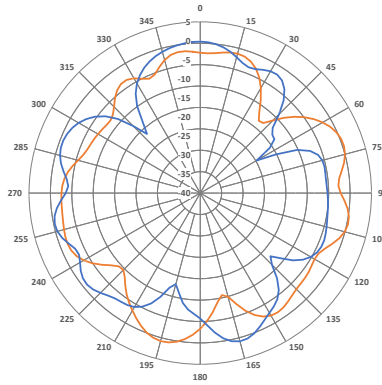
— Port 1
— Port 2

5150 MHz

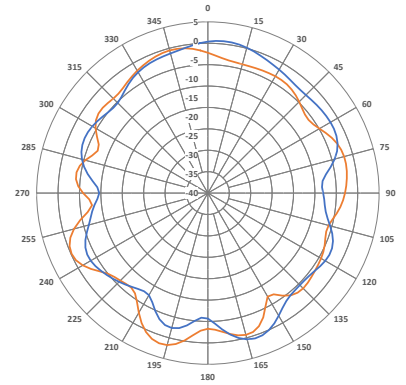
Theta = 90°



Phi = 0°

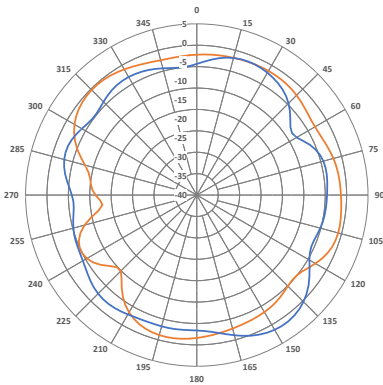


Phi = 90°

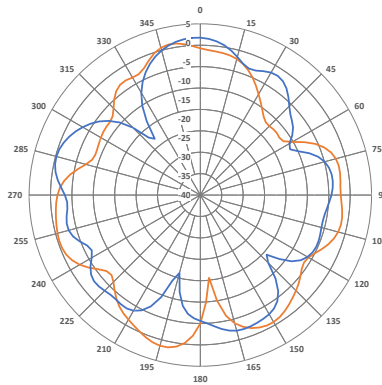


5450 MHz

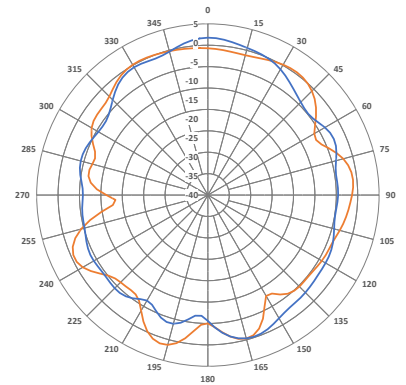
Theta = 90°



Phi = 0°

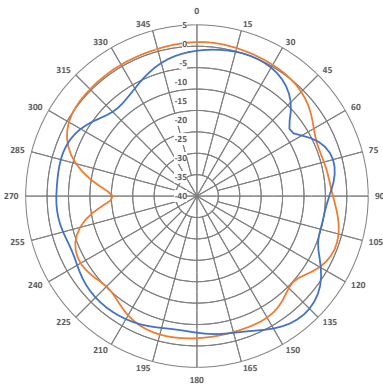


Phi = 90°

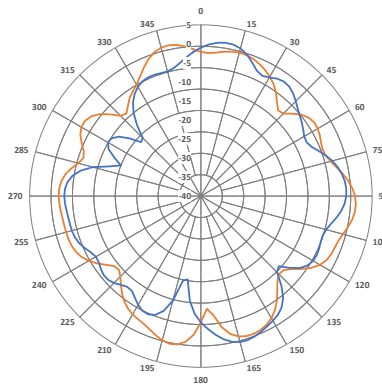


5725 MHz

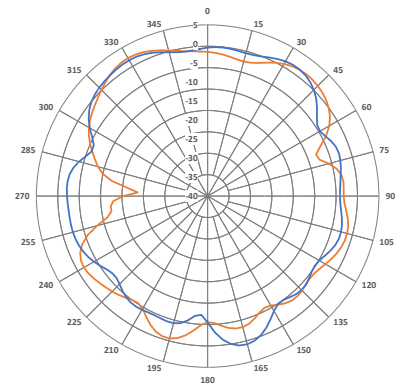
Theta = 90°



Phi = 0°



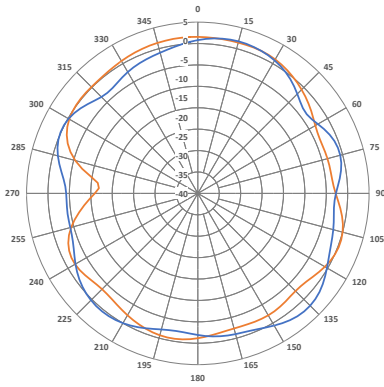
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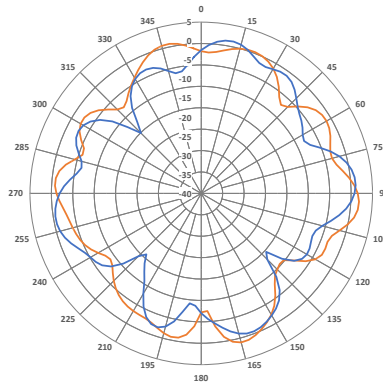
— Port 1
— Port 2

5850 MHz

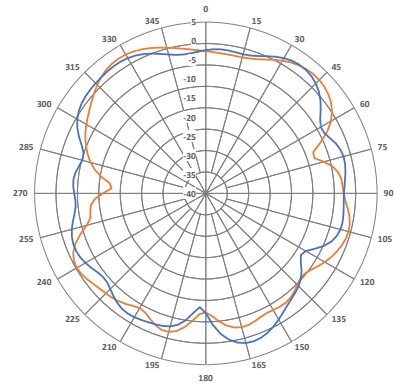
Theta = 90°



Phi = 0°

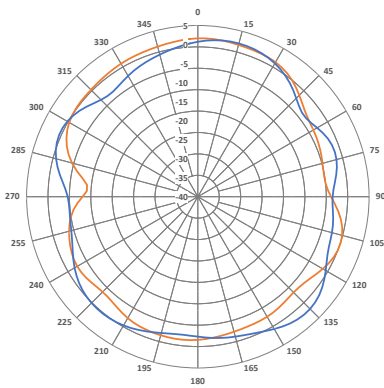


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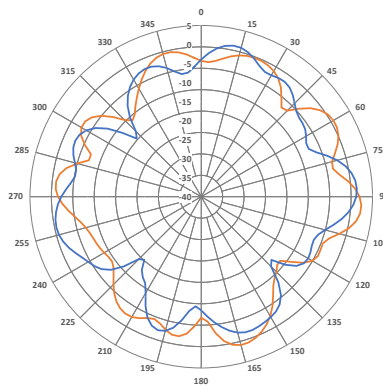


5925 MHz

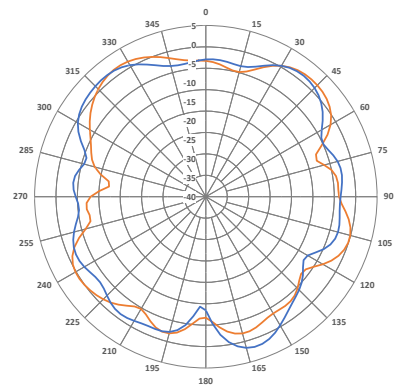
Theta = 90°



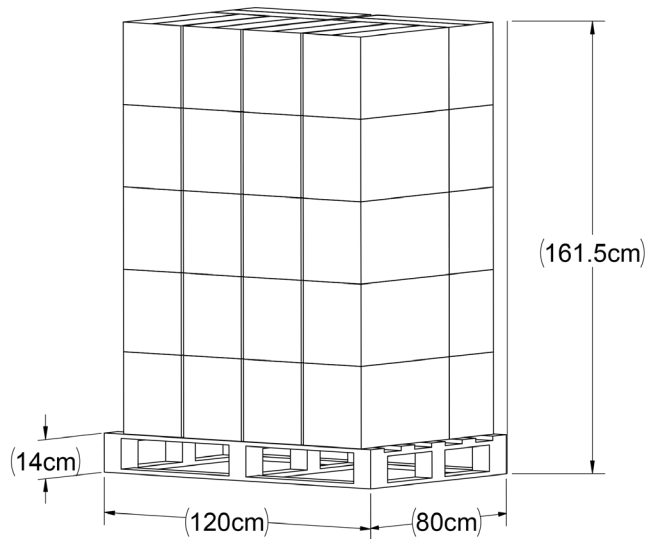
Phi = 0°



Phi = 90°

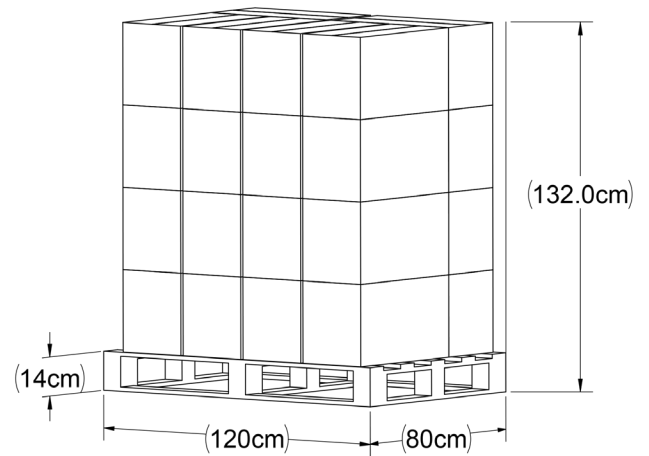


PACKAGING



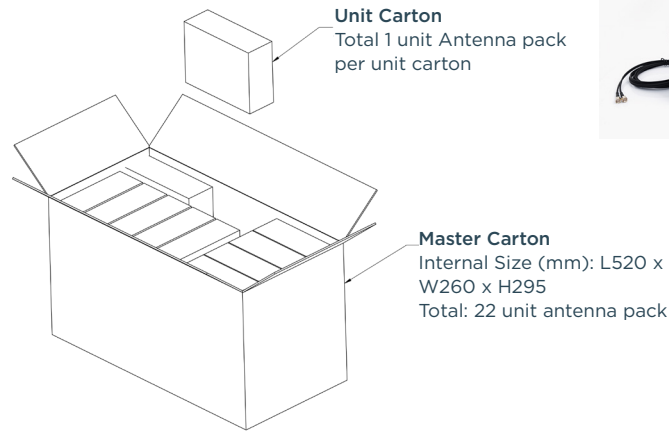
Ocean Shipping Standard Configuration Information

- Pallet 120cm x 80cm x 14cm, Weight 12kg
- Single unit carton: Weight 254.0g
- Master carton @ 22 unit: Weight 6.3kg
- For ocean shipments 30 master carton with pallet: Weight 201kg (120cm x 80cm x 161.5cm) 660 total unit per pallet



Air Shipping Standard Configuration Information

- Pallet 120cm x 80cm x 14cm, Weight 12kg
- Single unit carton: Weight 254.0g
- Master carton @ 22 unit: Weight 6.3kg
- For Air shipments 24 master carton with pallet: Weight 163.2kg (120cm x 80cm x 132cm) 528 total unit per pallet



TE TECHNICAL SUPPORT CENTER

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09/22 Original