Amphenol ANTENNA SOLUTIONS

24-Port Panel Antenna

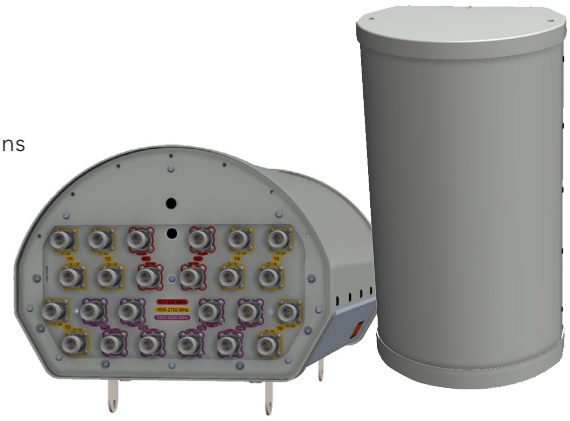
(2x) 617-906 | (6x) 1695-2700 | (4x) 3300-4200 MHz

65° | 25.0 in | FIXED TILT

2L6U4VX065X06Fwxys4

Features

- Unique high port count panel antenna for 4G/5G small cell applications
- 24 total connectors to service the 617-906, 1695-2700 and 3300-4200 MHz bands
- Ideal for multi-carrier or 4x4 MIMO deployments
- Fixed tilt options



PRODUCT OVERVIEW				
	Frequency Range (MHz)	(2x) 617-906	(6x) 1695-2700	(4x) 3300-4200
	Array	R1, R2	Y1, Y2, Y3, Y4, Y5, Y6	P1, P2, P3, P4
	Connector	4 PORTS	12 PORTS	8 PORTS
	Polarization	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	85°	65°	50°
	Electrical Downtilt	0°	2°, 4°, 6°	0°
	Maximum Continuous Power Per Port @ 50° C (122° F)	100 WATTS	100 WATTS	100 WATTS
	Maximum Total Continuous Power at 50° C (122° F)	2400 WATTS		
	Total Connector Count	24 PORTS		
	Connector Type	4.3-10 FEMALE		
	Dimensions	635 x 344 x 246 mm (25.0 x 13.5 x 9.7 in)		
	Radome Color Options	GREY		

ELECTRICAL SPECIFICATIONS

			R1	R2
Frequency Range		MHz	(2x) 617-906	
Frequency Sub-Range		MHz	617-806	806-906
Polarization		---	(2x) ±45°	
Gain	BASTA	dBi	7.7 ± 0.9	8.1 ± 1.0
	MAX	dBi	8.6	9.1
Azimuth Beamwidth (3 dB)		degrees	83.3° ± 10.6°	88.6° ± 16.6°
Elevation Beamwidth (3 dB)		degrees	75.7° ± 15.8°	67.1° ± 27.5°
Electrical Downtilt		degrees	(w) 0°	
Impedance		Ohms	50Ω	
VSWR		---	≤ 1.5:1	
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153	
Upper Sidelobe Suppression		dB	N/A	
Isolation	Intraband	dB	> 25	
	Interband	dB	> 28 same band; > 30 different bands	

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

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ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2 ■ Y3 ■ Y4 ■ Y5 ■ Y6

Frequency Range		MHz	(6x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(6x) ±45°			
Gain	BASTA	dBi	10.7 ± 1.0	11.1 ± 0.8	11.0 ± 0.9	11.8 ± 0.9
	MAX	dBi	11.7	11.9	11.9	12.7
Azimuth Beamwidth (3 dB)		degrees	67.2° ± 16.3°	63.3° ± 17.8°	61.5° ± 16.1°	59.1° ± 17°
Elevation Beamwidth (3 dB)		degrees	45.1° ± 10.9°	43.2° ± 10.5°	41.4° ± 9.3°	34.6° ± 7.2°
Electrical Downtilt		degrees	(x) 2°, 4°, 6°			
Impedance		Ohms	50Ω			
VSWR		---	≤ 1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153			
Upper Sidelobe Suppression		dB	N/A			
Isolation	Intraband	dB	> 25			
	Interband	dB	> 28 same band; > 30 different bands			

ELECTRICAL SPECIFICATIONS

■ P1 ■ P2 ■ P3 ■ P4

Frequency Range		MHz	(4x) 3300-4200		
Frequency Sub-Range		MHz	3300-3550	3550-3700	3700-4200
Polarization		---	(4x) ±45°		
Gain	BASTA	dBi	10.5 ± 0.8	10.9 ± 0.8	10.3 ± 0.9
	MAX	dBi	11.3	11.7	11.2
Azimuth Beamwidth (3 dB)		degrees	52.1° ± 20.5°	42.6° ± 11°	46.4° ± 14°
Elevation Beamwidth (3 dB)		degrees	29.9° ± 7.5°	28.6° ± 7.1°	27.2° ± 6°
Electrical Downtilt		degrees	(y) 0°		
Impedance		Ohms	50Ω		
VSWR		---	≤ 1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153		
Upper Sidelobe Suppression		dB	N/A		
Isolation	Intraband	dB	> 25		
	Interband	dB	> 28 same band; > 30 different bands		

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MECHANICAL SPECIFICATIONS

Antenna	Length		mm (in)	635 (25.0)
	Width		mm (in)	344 (13.5)
	Depth		mm (in)	246 (9.7)
Net Weight - Antenna Only			kg (lbs)	8.2 (18)
Windload		Calculation	km/h (mph)	160 (100)
		Frontal	N (lbf)	262 (59)
		Side	N (lbf)	107 (24)
Survival Wind Speed			km/h (mph)	241 (150)
Wind Area			m^2 (ft^2)	0.21 (2.3)
Connector		Type	---	4.3-10 Female
		Quantity	---	24
		Position	---	Bottom
Radome Color			---	Grey (RAL 7035)
Operating Temperature			degrees	-40 to +60 C (-40 to +140 F)
Lightning Protection (Grounding Type)			---	Direct Ground

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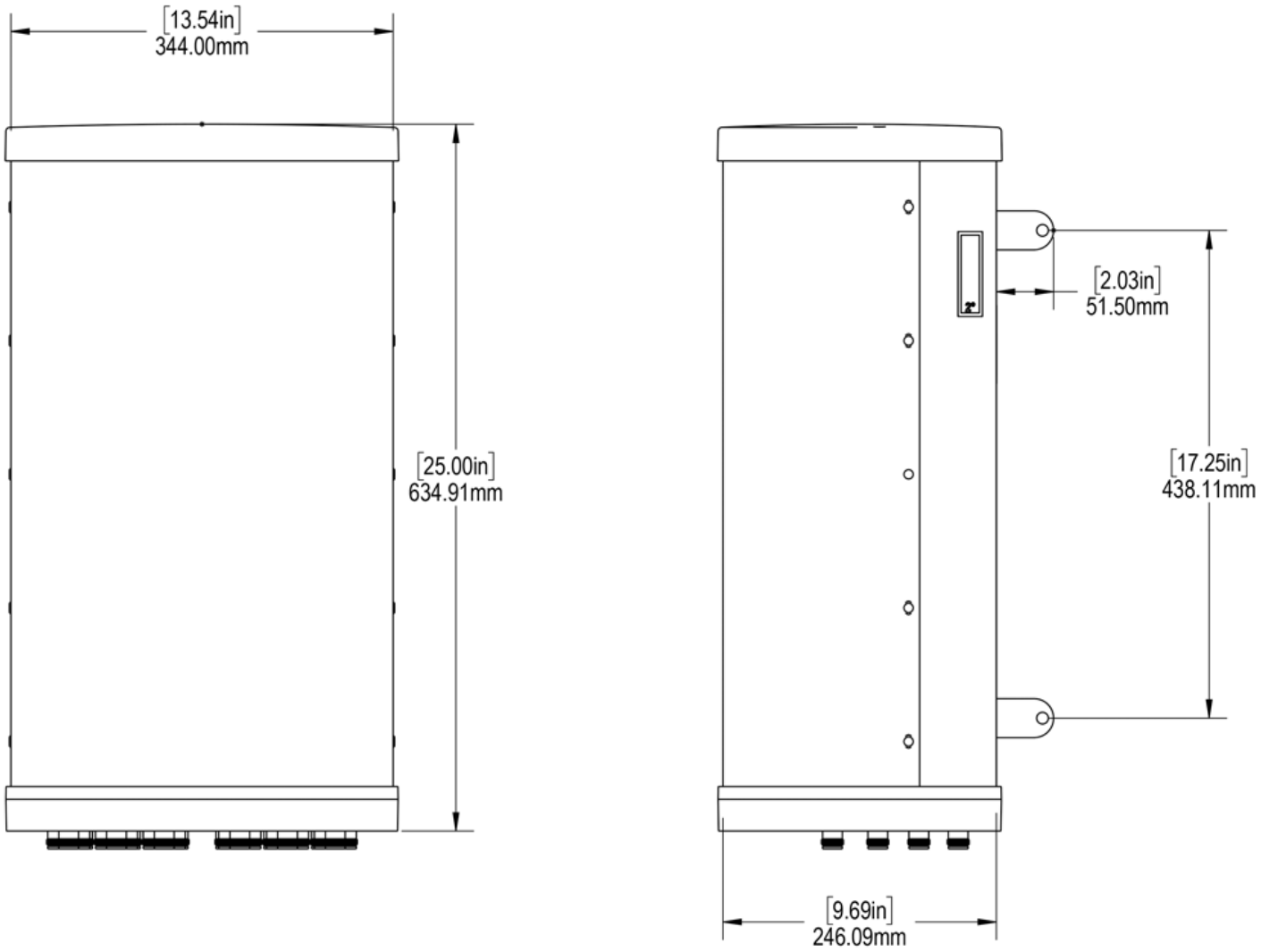

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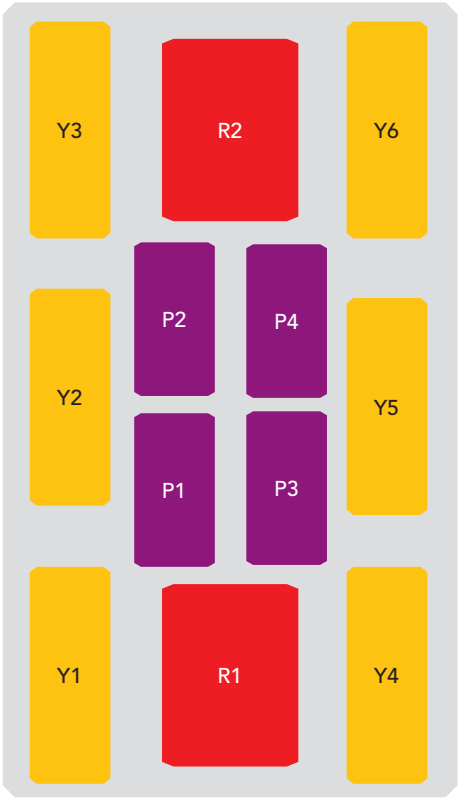
ARRAY LAYOUT Topology

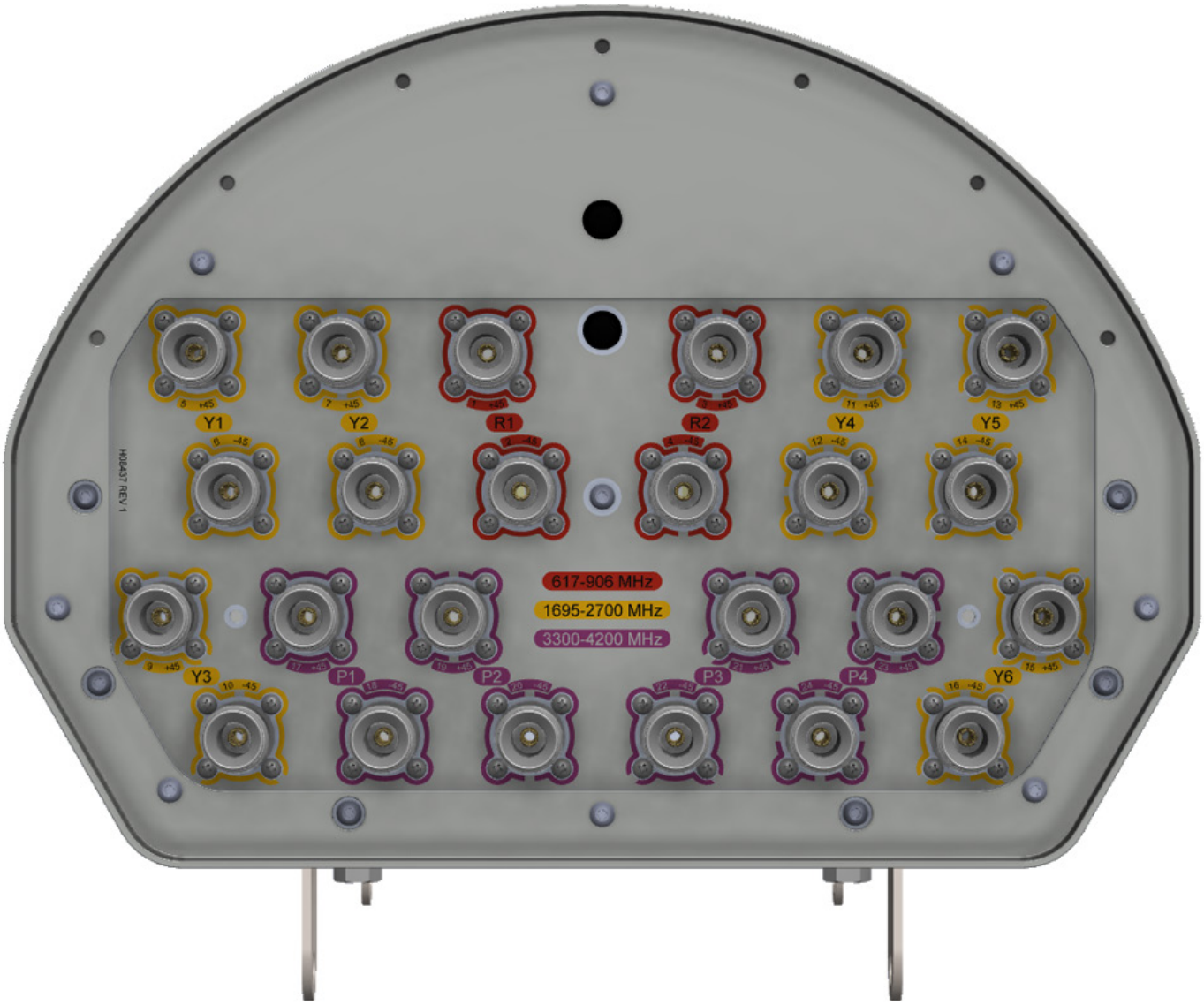
FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
617-906 MHz	R1	1-2	(2x) 4.3-10 Female
617-906 MHz	R2	3-4	(2x) 4.3-10 Female
1695-2700 MHz	Y1	5-6	(2x) 4.3-10 Female
1695-2700 MHz	Y2	7-8	(2x) 4.3-10 Female
1695-2700 MHz	Y3	9-10	(2x) 4.3-10 Female
1695-2700 MHz	Y4	11-12	(2x) 4.3-10 Female
1695-2700 MHz	Y5	13-14	(2x) 4.3-10 Female
1695-2700 MHz	Y6	15-16	(2x) 4.3-10 Female
3300-4200 MHz	P1	17-18	(2x) 4.3-10 Female
3300-4200 MHz	P2	19-20	(2x) 4.3-10 Female
3300-4200 MHz	P3	21-22	(2x) 4.3-10 Female
3300-4200 MHz	P4	23-24	(2x) 4.3-10 Female



The illustration is not shown to scale.

2L6U4VX065X06Fwxys4

BOTTOM VIEW - LABELING



INSTALLATION Please read all installation notes before installing this product.

⚠	Always attach the antenna using all mounting points.
	Do not install the antenna with the connectors facing upwards.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

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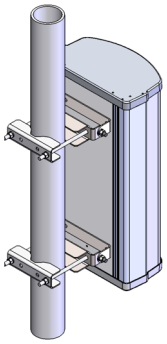
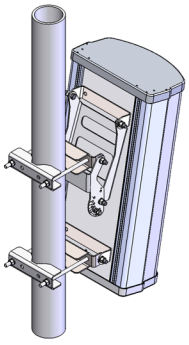
MOUNTING KITS Select from the following mounting options when ordering.

MODEL NUMBER	DESCRIPTION	FITS PIPE DIAMETER	WEIGHT
MKS09P01 	2-POINT MOUNTING BRACKET KIT	50-115 mm (2.0-4.5 in)	2.9 kg (6 lbs)
MKS09T01 	2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT	50-115 mm (2.0-4.5 in)	4.5 kg (10 lbs)

The antennas shown in the mounting kit illustrations above are generic representations and may not resemble the antenna described within this data sheet.

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HOW TO READ THE MODEL NUMBER Each letter and number has meaning.

NUMBER OF BANDS and OPERATING FREQUENCY			PATTERN TYPE	AZIMUTH BMWDTH	POLARIZA-TION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	ORDERING OPTION
2L	6U	4V	X	065	X	06	F	wxy	s	4	-P -T
(2x) 617-906	(6x) 1695-2700	(4x) 3300-4200	Standard Panel Antenna	65°	XPOL	0.6 meters	Fixed Tilt	These letters are placehold-ers for fixed tilt options. Refer to Electrical Specifications for available tilt options.	4.3-10 Connector	4th generation mechanical package	To order the antenna and mounting kit together as one line item, add a -P for the 2-POINT MOUNTING BRACKET KIT (MKS09P01) or a -T for the 2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT (MKS09T01) to the end of the model number. If -P or -T is not added, the bracket kit can be added as a separate line item, or the antenna shipped without a bracket. Refer to the ordering options on the following page for further detail.

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ORDERING OPTIONS Select from the following ordering options

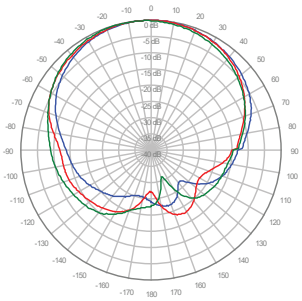
SELECT MOUNTING KIT	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND			ORDER MODEL NUMBER
	617-906 MHz	1695-2700 MHz	3300-4200 MHz	
ANTENNA ONLY - NO MOUNTING KIT	0°	2°	0°	2L6U4VX065X06F020s4
	0°	4°	0°	2L6U4VX065X06F040s4
	0°	6°	0°	2L6U4VX065X06F060s4
	0°	Y1 & Y2 = 6°; Y3-Y6 = 2°	0°	2L6U4VX065X06FAAAs4
	0°	Y1 & Y2 = 4°; Y3-Y6 = 2°	0°	2L6U4VX065X06FBBBs4
	0°	Y1 & Y2 = 6°; Y3-Y6 = 4°	0°	2L6U4VX065X06FCCCs4
ANTENNA WITH **MKS09P01** MOUNTING KIT 2-Point Mounting Bracket Kit	0°	2°	0°	2L6U4VX065X06F020s4-P
	0°	4°	0°	2L6U4VX065X06F040s4-P
	0°	6°	0°	2L6U4VX065X06F060s4-P
	0°	Y1 & Y2 = 6°; Y3-Y6 = 2°	0°	2L6U4VX065X06FAAAs4-P
	0°	Y1 & Y2 = 4°; Y3-Y6 = 2°	0°	2L6U4VX065X06FBBBs4-P
	0°	Y1 & Y2 = 6°; Y3-Y6 = 4°	0°	2L6U4VX065X06FCCCs4-P
ANTENNA WITH **MKS09T01** MOUNTING KIT 2-Point, Scissor Tilt, Mounting & Downtilt Bracket Kit	0°	2°	0°	2L6U4VX065X06F020s4-T
	0°	4°	0°	2L6U4VX065X06F040s4-T
	0°	6°	0°	2L6U4VX065X06F060s4-T
	0°	Y1 & Y2 = 6°; Y3-Y6 = 2°	0°	2L6U4VX065X06FAAAs4-T
	0°	Y1 & Y2 = 4°; Y3-Y6 = 2°	0°	2L6U4VX065X06FBBBs4-T
	0°	Y1 & Y2 = 6°; Y3-Y6 = 4°	0°	2L6U4VX065X06FCCCs4-T

2L6U4VX065X06Fwxys4

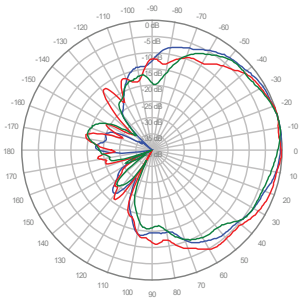
650 MHz
750 MHz
850 MHz

R1, 0° TILT

+45°

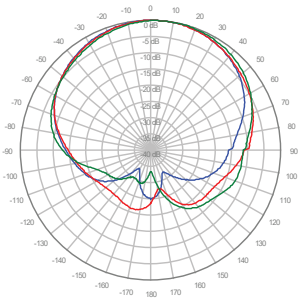


Azimuth

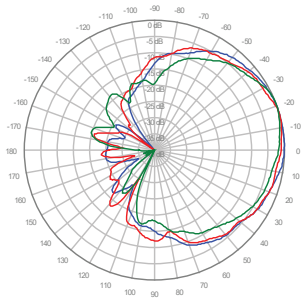


Elevation

-45°



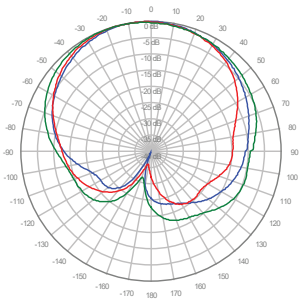
Azimuth



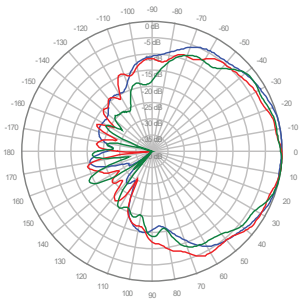
Elevation

R2, 0° TILT

+45°

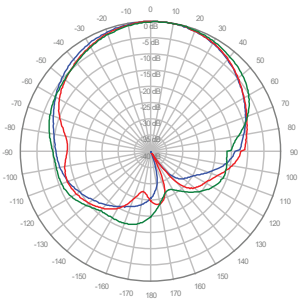


Azimuth



Elevation

-45°



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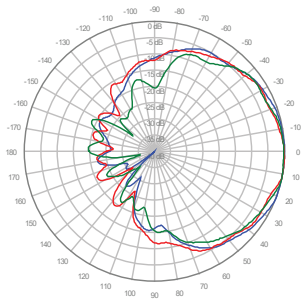


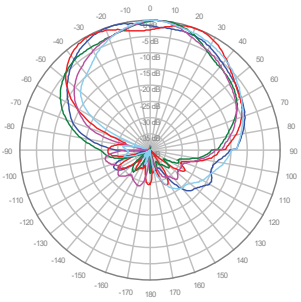
Elevation

2L6U4VX065X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 2° TILT

+45°



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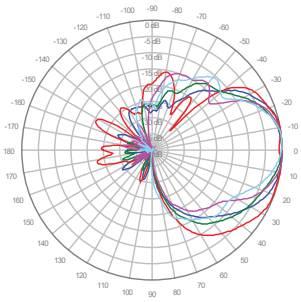
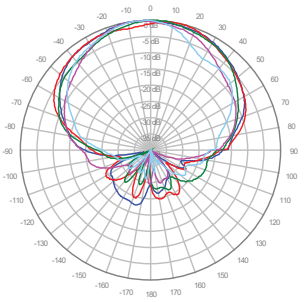


Elevation

-45°



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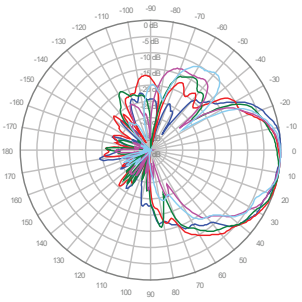
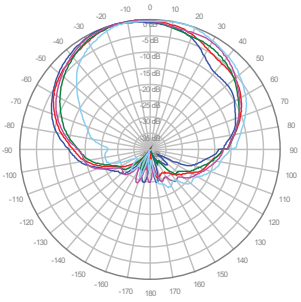


Elevation

Y2, 2° TILT

+45°



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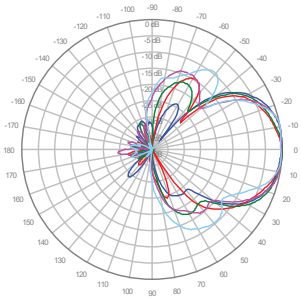
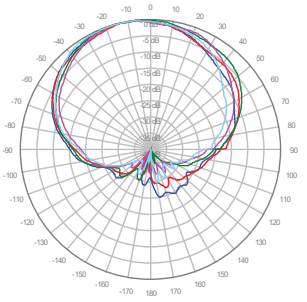


Elevation

-45°



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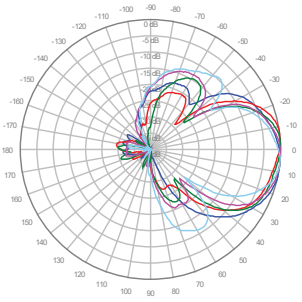
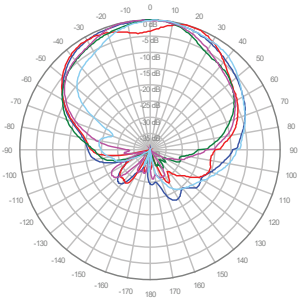


Elevation

Y3, 2° TILT

+45°



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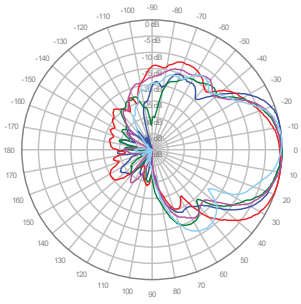
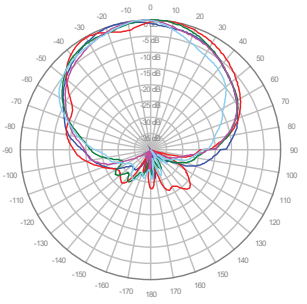


Elevation

-45°



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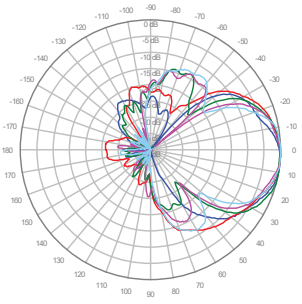
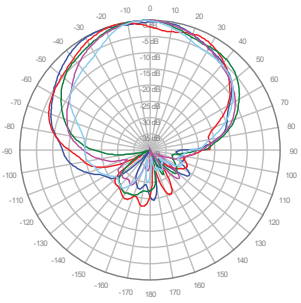


Elevation

Y4, 2° TILT

+45°



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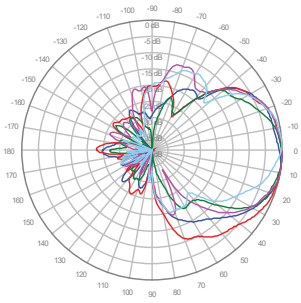
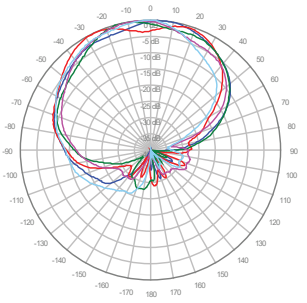
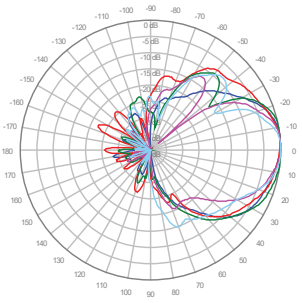


Elevation

-45°



Azimuth



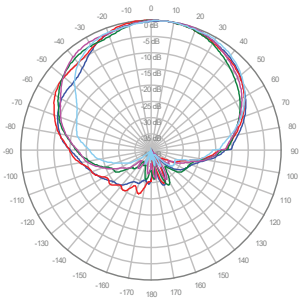
Elevation

2L6U4VX065X06Fwxys4

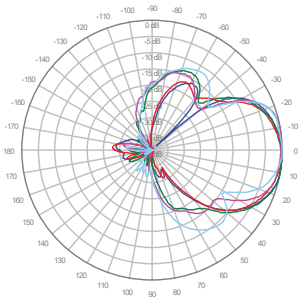
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 2° TILT

+45°

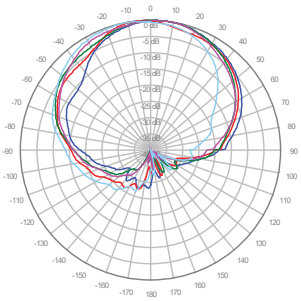


Azimuth

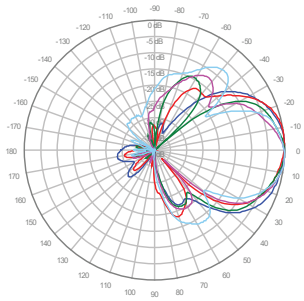


Elevation

-45°



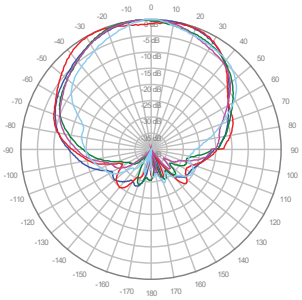
Azimuth



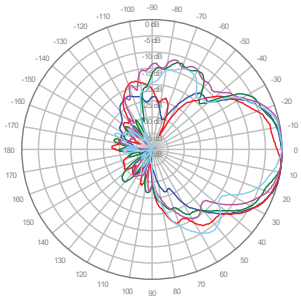
Elevation

Y6, 2° TILT

+45°

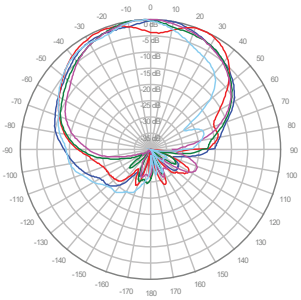


Azimuth

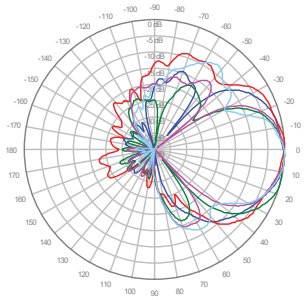


Elevation

-45°



Azimuth



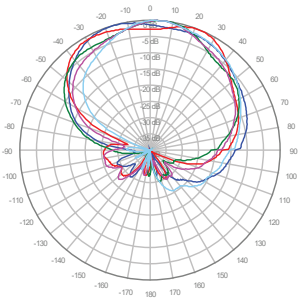
Elevation

2L6U4VX065X06Fwxys4

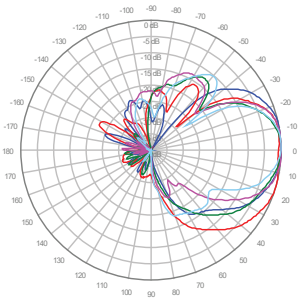
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 4° TILT

+45°

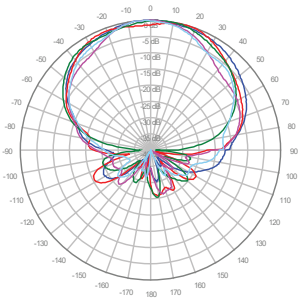


Azimuth

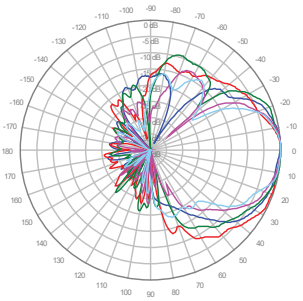


Elevation

-45°



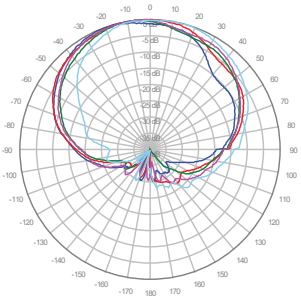
Azimuth



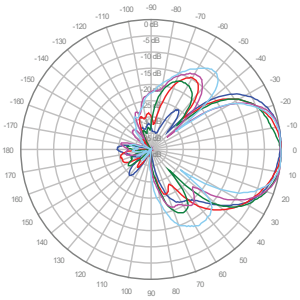
Elevation

Y2, 4° TILT

+45°

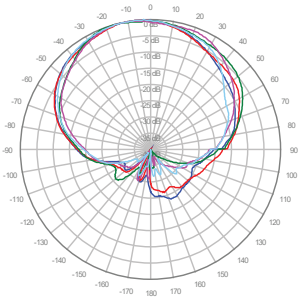


Azimuth

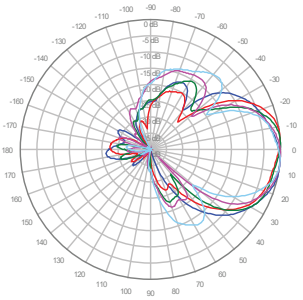


Elevation

-45°



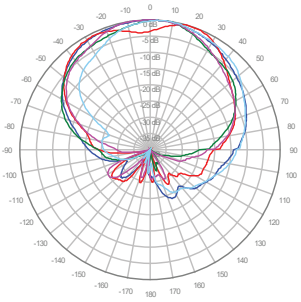
Azimuth



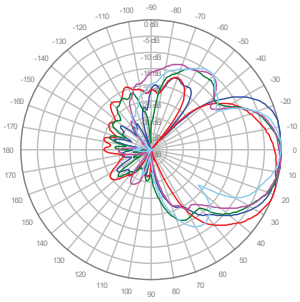
Elevation

Y3, 4° TILT

+45°

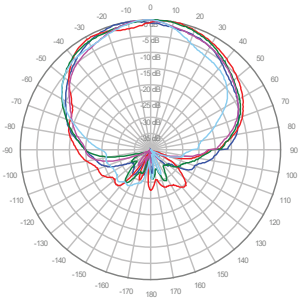


Azimuth

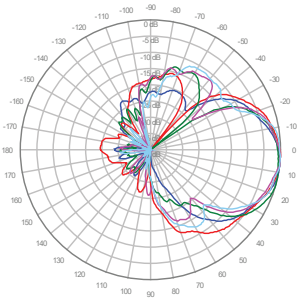


Elevation

-45°



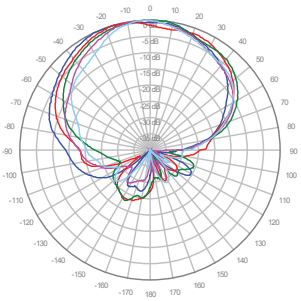
Azimuth



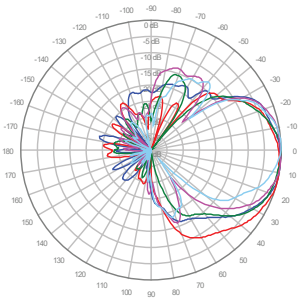
Elevation

Y4, 4° TILT

+45°

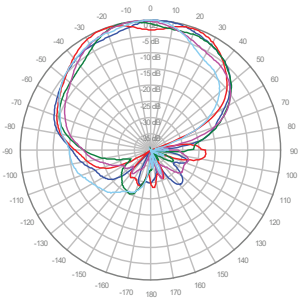


Azimuth

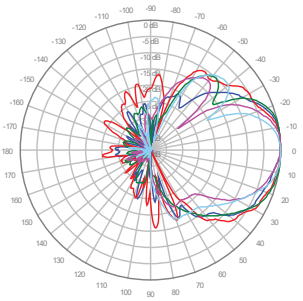


Elevation

-45°



Azimuth



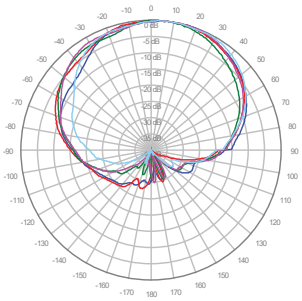
Elevation

2L6U4VX065X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 4° TILT

+45°



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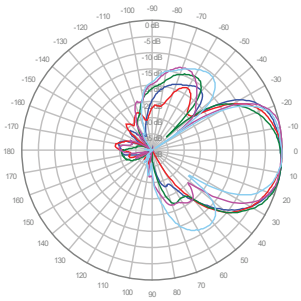
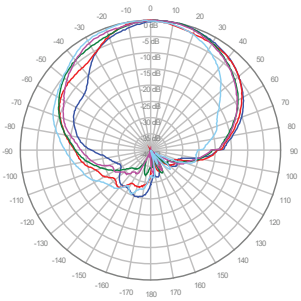
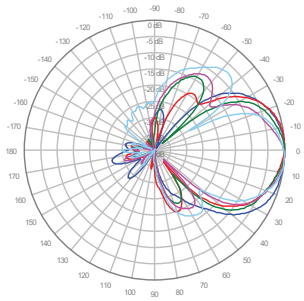


Elevation

-45°



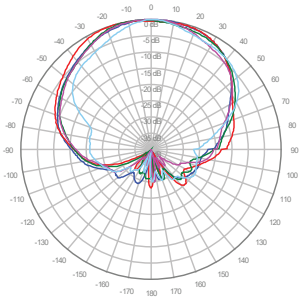
Azimuth



Elevation

Y6, 4° TILT

+45°



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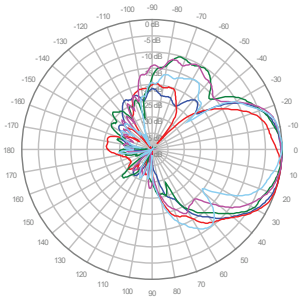
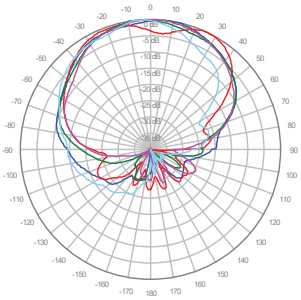
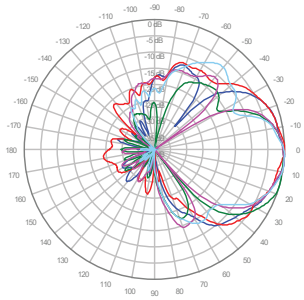


Elevation

-45°



Azimuth



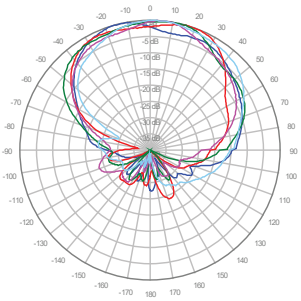
Elevation

2L6U4VX065X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 6° TILT

+45°



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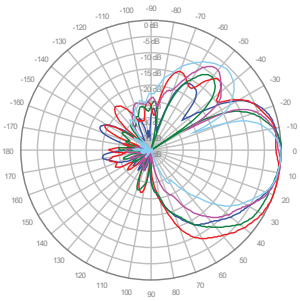
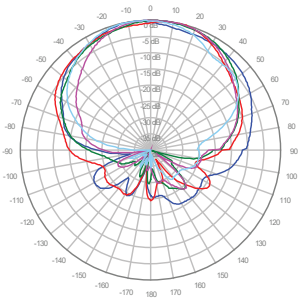
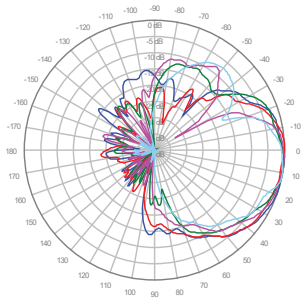


Elevation

-45°



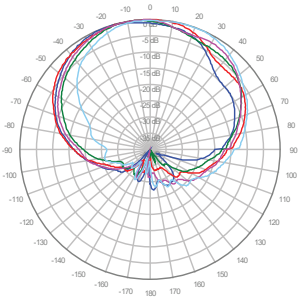
Azimuth



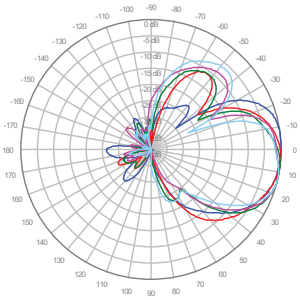
Elevation

Y2, 6° TILT

+45°

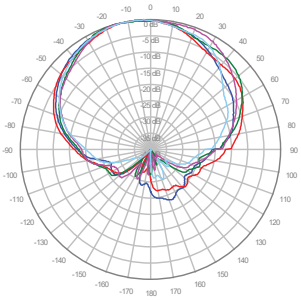


Azimuth

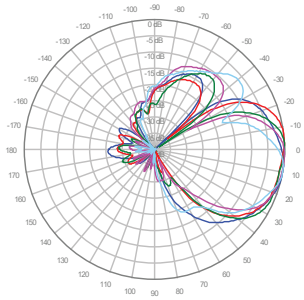


Elevation

-45°



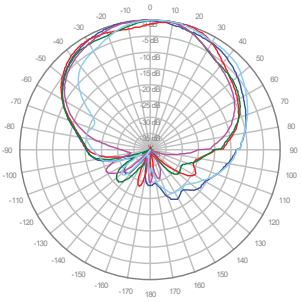
Azimuth



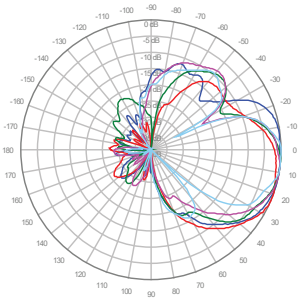
Elevation

Y3, 6° TILT

+45°

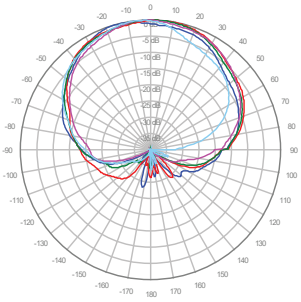


Azimuth

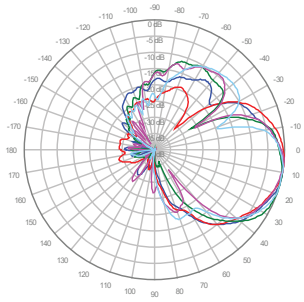


Elevation

-45°



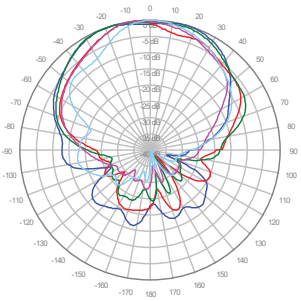
Azimuth



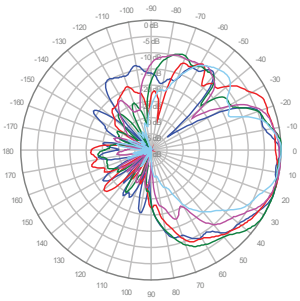
Elevation

Y4, 6° TILT

+45°

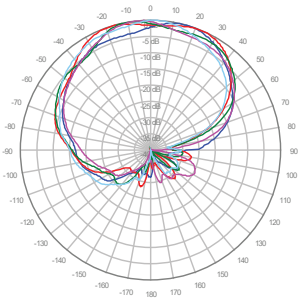


Azimuth

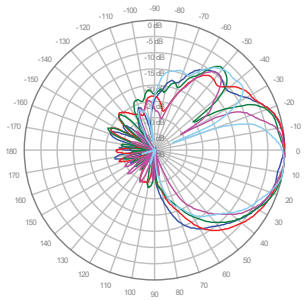


Elevation

-45°



Azimuth



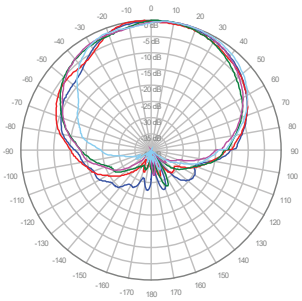
Elevation

2L6U4VX065X06Fwxys4

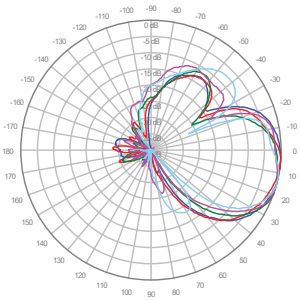
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 6° TILT

+45°

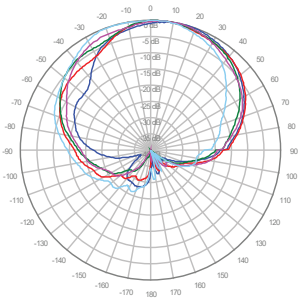


Azimuth

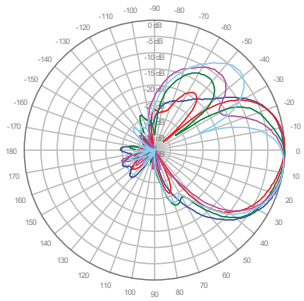


Elevation

-45°



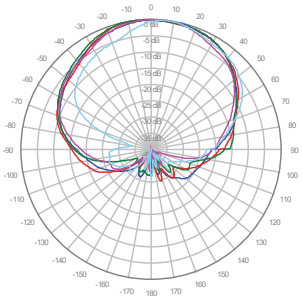
Azimuth



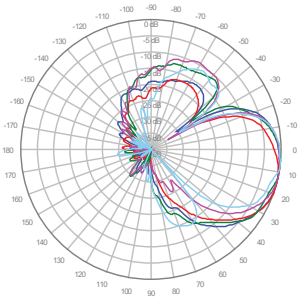
Elevation

Y6, 6° TILT

+45°

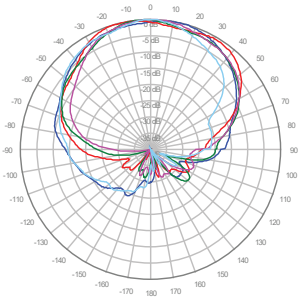


Azimuth

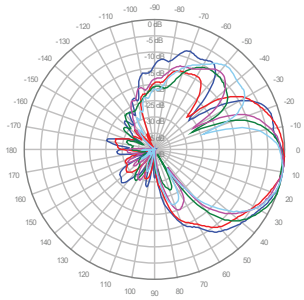


Elevation

-45°



Azimuth



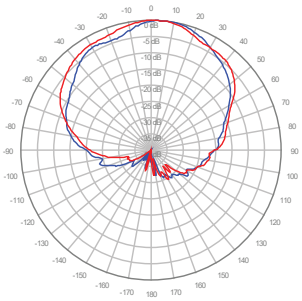
Elevation

2L6U4VX065X06Fwxys4

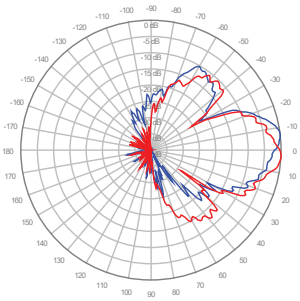
3600 MHz
4000 MHz

P1, 0° TILT

+45°

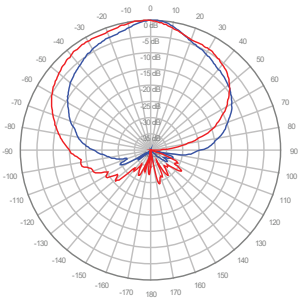


Azimuth

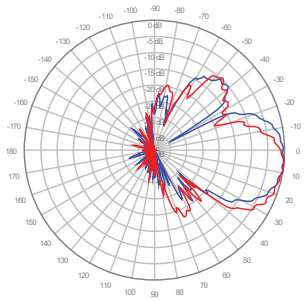


Elevation

-45°



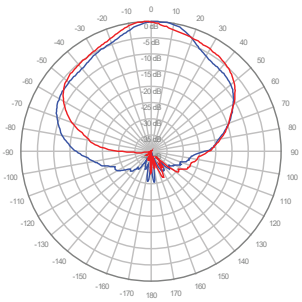
Azimuth



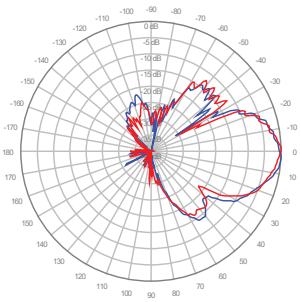
Elevation

P2, 0° TILT

+45°

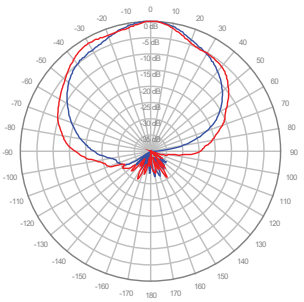


Azimuth

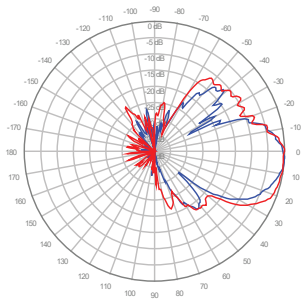


Elevation

-45°



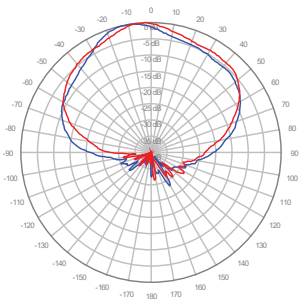
Azimuth



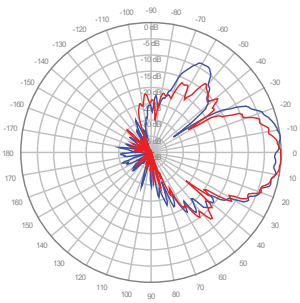
Elevation

P3, 0° TILT

+45°

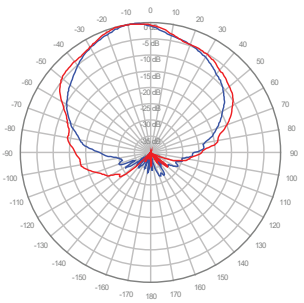


Azimuth

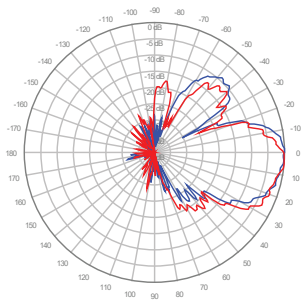


Elevation

-45°



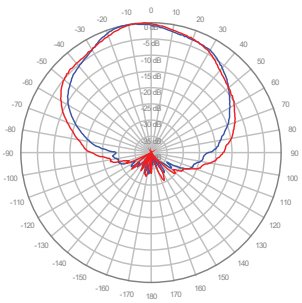
Azimuth



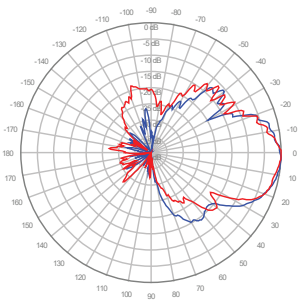
Elevation

P4, 0° TILT

+45°

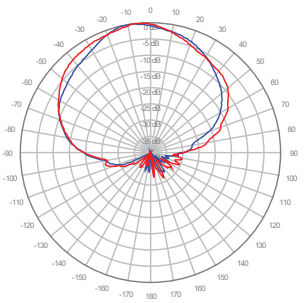


Azimuth

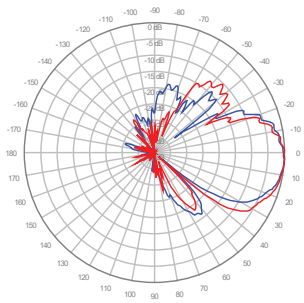


Elevation

-45°



Azimuth



Elevation