

2C4U4VX065X12Fwxys5



Features

- Unique high port count panel antenna for 4G/5G small cell applications
- 20 total connectors to service the 696-960, 1695-2700 and 3300-4200 MHz bands
- Ideal for multi-carrier or 4x4 MIMO deployments
- Fixed tilt options

PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 696-960	(4x) 1695-2700	(4x) 3300-4200
	Array	■ R1, ■ R2	■ Y1, ■ Y2, ■ Y3, ■ Y4	■ P1, ■ P2, ■ P3, ■ P4
	Connector	4 PORTS	8 PORTS	8 PORTS
	Polarization	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	65°	65°	65°
	Electrical Downtilt	0°	2°, 4°, 6°	2°, 4°, 6°
	Maximum Continuous Power Per Port @ 50° C (122° F)	500 WATTS	300 WATTS	100 WATTS
	Maximum Total Continuous Power at 50° C (122° F)	5200 WATTS		
	Total Connector Count	20 PORTS		
	Connector Type	4.3-10 FEMALE		
	Dimensions	1219 x 344 x 246 mm (48.0 x 13.5 x 9.7)		
	Radome Color Options	GREY		

ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

Frequency Range		MHz	(2x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	(2x) ±45°	
Gain	BASTA	dBi	10.1 ± 0.8	10.2 ± 1.1
	MAX	dBi	10.9	11.3
Azimuth Beamwidth (3 dB)		degrees	85.9° ± 10.9°	78.4° ± 13.5°
Elevation Beamwidth (3 dB)		degrees	35.0° ± 3.9°	29.0° ± 5.3°
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 band	

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ELECTRICAL SPECIFICATIONS

Y1 Y2 Y3 Y4

Frequency Range	MHz	(4x) 1695-2700			
Frequency Sub-Range	MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization	---	(4x) $\pm 45^\circ$			
Gain	BASTA	dBi	13.7 ± 0.6	13.9 ± 0.5	13.6 ± 0.7
	MAX	dBi	14.3	14.4	14.3
Azimuth Beamwidth (3 dB)	degrees	$71.1^\circ \pm 8.1^\circ$	$71.2^\circ \pm 7.9^\circ$	$67.2^\circ \pm 8.9^\circ$	$72.7^\circ \pm 14.3^\circ$
Elevation Beamwidth (3 dB)	degrees	$18.4^\circ \pm 1.4^\circ$	$17.5^\circ \pm 1.2^\circ$	$16.0^\circ \pm 1.6^\circ$	$13.6^\circ \pm 1.4^\circ$
Electrical Downtilt	degrees	(x) $2^\circ, 4^\circ, 6^\circ$			
Impedance	Ohms	50 Ω			
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 band		

ELECTRICAL SPECIFICATIONS

P1 P2 P3 P4

Frequency Range	MHz	(4x) 3300-4200		
Frequency Sub-Range	MHz	3300-3550	3550-3700	3700-4200
Polarization	---	(4x) $\pm 45^\circ$		
Gain	BASTA	dBi	15.3 ± 0.6	15.4 ± 0.7
	MAX	dBi	15.9	16.1
Azimuth Beamwidth (3 dB)	degrees	$71.8^\circ \pm 11.2^\circ$	$77.6^\circ \pm 6.0^\circ$	$76.0^\circ \pm 12.9^\circ$
Elevation Beamwidth (3 dB)	degrees	$8.2^\circ \pm 0.7^\circ$	$7.6^\circ \pm 0.3^\circ$	$7.5^\circ \pm 0.7^\circ$
Electrical Downtilt	degrees	(y) $2^\circ, 4^\circ, 6^\circ$		
Impedance	Ohms	50 Ω		
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 band	

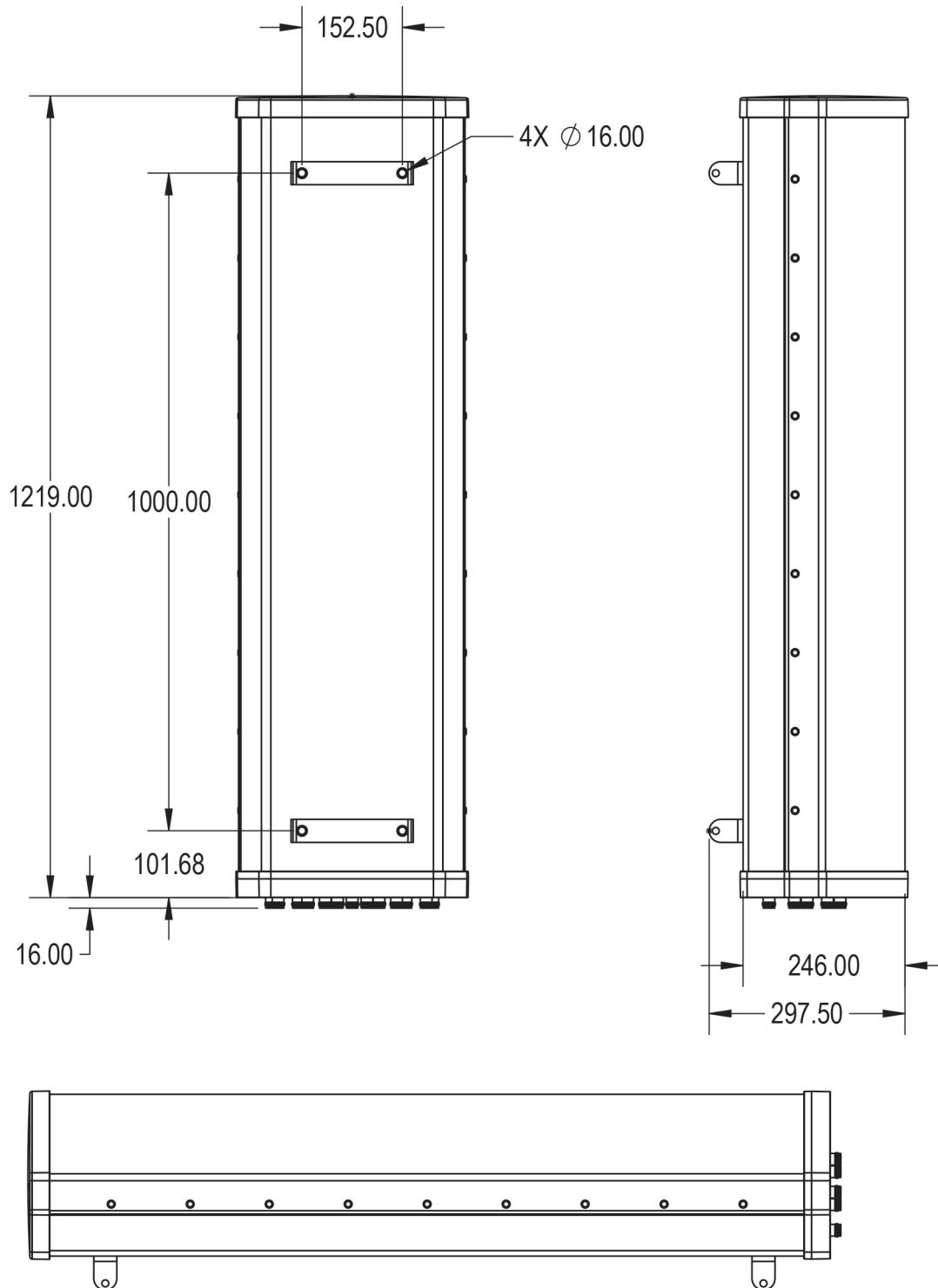
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MECHANICAL SPECIFICATIONS

Antenna	Length	mm (in)	1219 (48.0)
	Width	mm (in)	344 (13.5)
	Depth	mm (in)	246 (9.7)
Net Weight - Antenna Only		kg (lbs)	10.9 (24)
Windload	Calculation	km/h (mph)	160 (100)
	Frontal	N (lbf)	480 (108)
	Side	N (lbf)	285 (64)
Survival Wind Speed		km/h (mph)	241 (150)
Connector	Type	---	4.3-10 Female
	Quantity	---	20
	Position	---	Bottom
Radome Color		---	Grey
Operating Temperature		degrees	-40 to +60 C (-40 to +140 F)
Lightning Protection (Grounding Type)		---	Direct Ground

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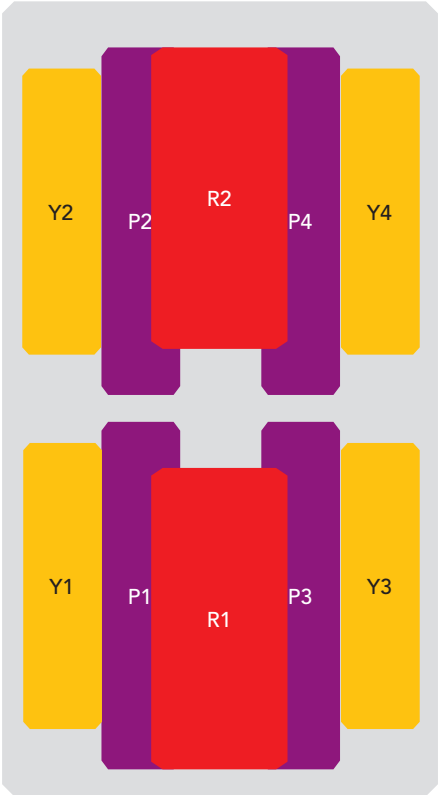


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ARRAY LAYOUT Topology

FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
696-960 MHz	■ R1	1-2	(2x) 4.3-10 Female
696-960 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
3300-4200 MHz	■ P1	13-14	(2x) 4.3-10 Female
3300-4200 MHz	■ P2	15-16	(2x) 4.3-10 Female
3300-4200 MHz	■ P3	17-18	(2x) 4.3-10 Female
3300-4200 MHz	■ P4	19-20	(2x) 4.3-10 Female

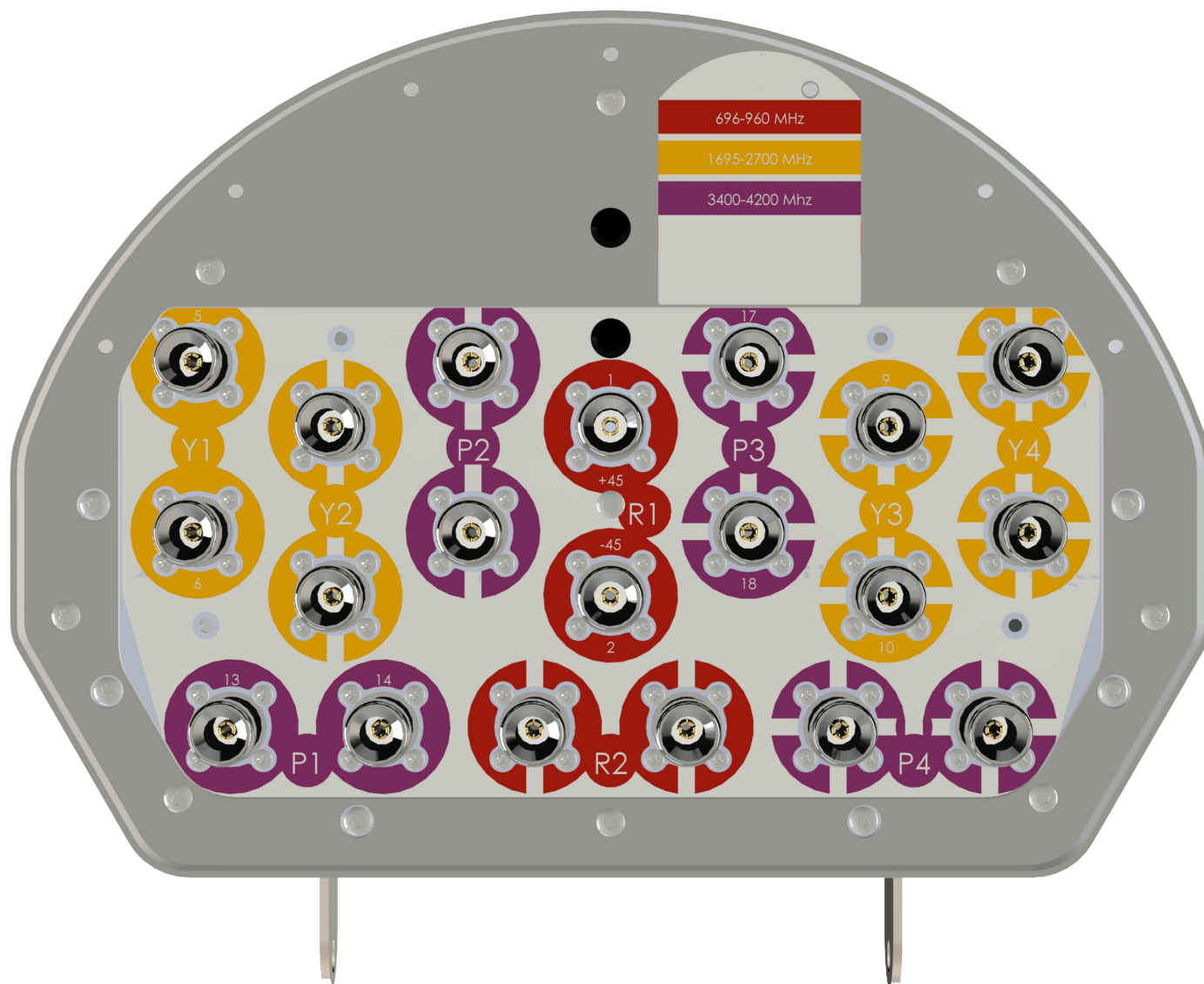


The illustration is not shown to scale.

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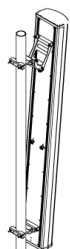

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BOTTOM VIEW - LABELING



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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.

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.

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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 BWWIDTH	POLARIZATION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	ORDERING OPTION
2C	4U	4V	X	065	X	12	F	wxy	s	5	-P -T
(2x) 696-960	(4x) 1695-2700	(4x) 3300-4200	Standard Panel Antenna	65°	XPOL	1.2 meters	Fixed Tilt	<p>These letters are placeholders for fixed tilt options.</p> <p>Refer to Electrical Specifications for available tilt options.</p>	4.3-10 Connector	5th generation mechanical package	<p>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.</p> <p>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.</p> <p>Refer to the ordering options on the following page for further detail.</p>

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ORDERING OPTIONS Select from the following ordering options

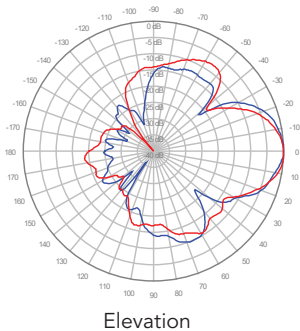
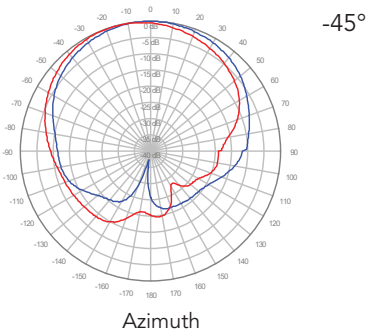
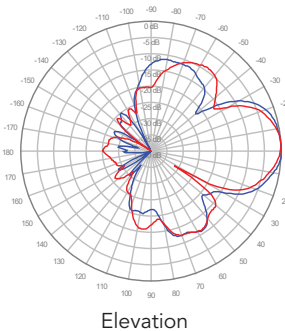
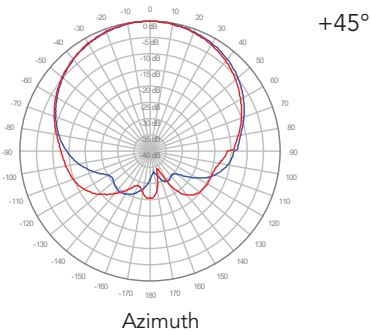
SELECT MOUNTING KIT	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND			ORDER MODEL NUMBER
	696-960 MHz	1695-2700 MHz	3300-4200 MHz	
ANTENNA ONLY - NO MOUNTING KIT	0°	2°	2°	2C4U4VX065X12F022s5
	0°	2°	4°	2C4U4VX065X12F024s5
	0°	2°	6°	2C4U4VX065X12F026s5
	0°	4°	2°	2C4U4VX065X12F042s5
	0°	4°	4°	2C4U4VX065X12F044s5
	0°	4°	6°	2C4U4VX065X12F046s5
	0°	6°	2°	2C4U4VX065X12F062s5
	0°	6°	4°	2C4U4VX065X12F064s5
	0°	6°	6°	2C4U4VX065X12F066s5
ANTENNA WITH MKS09P01 MOUNTING KIT 2-Point Mounting Bracket Kit	0°	2°	2°	2C4U4VX065X12F022s5-P
	0°	2°	4°	2C4U4VX065X12F024s5-P
	0°	2°	6°	2C4U4VX065X12F026s5-P
	0°	4°	2°	2C4U4VX065X12F042s5-P
	0°	4°	4°	2C4U4VX065X12F044s5-P
	0°	4°	6°	2C4U4VX065X12F046s5-P
	0°	6°	2°	2C4U4VX065X12F062s5-P
	0°	6°	4°	2C4U4VX065X12F064s5-P
	0°	6°	6°	2C4U4VX065X12F066s5-P
ANTENNA WITH MKS09T01 MOUNTING KIT 2-Point, Scissor Tilt, Mounting & Down-tilt Bracket Kit	0°	2°	2°	2C4U4VX065X12F022s5-T
	0°	2°	4°	2C4U4VX065X12F024s5-T
	0°	2°	6°	2C4U4VX065X12F026s5-T
	0°	4°	2°	2C4U4VX065X12F042s5-T
	0°	4°	4°	2C4U4VX065X12F044s5-T
	0°	4°	6°	2C4U4VX065X12F046s5-T
	0°	6°	2°	2C4U4VX065X12F062s5-T
	0°	6°	4°	2C4U4VX065X12F064s5-T
	0°	6°	6°	2C4U4VX065X12F066s5-T

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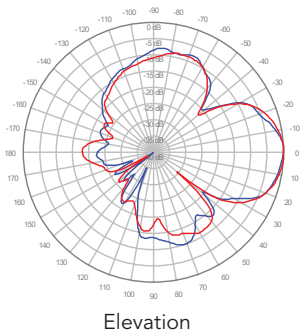
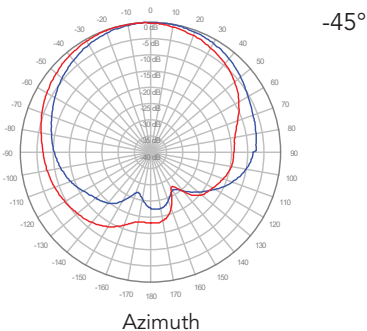
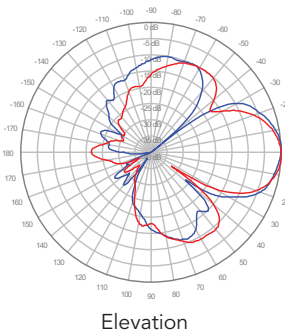
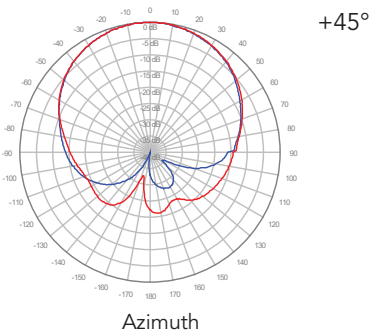
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750 MHz —————
850 MHz —————

R1, 0° TILT



R2, 0° TILT

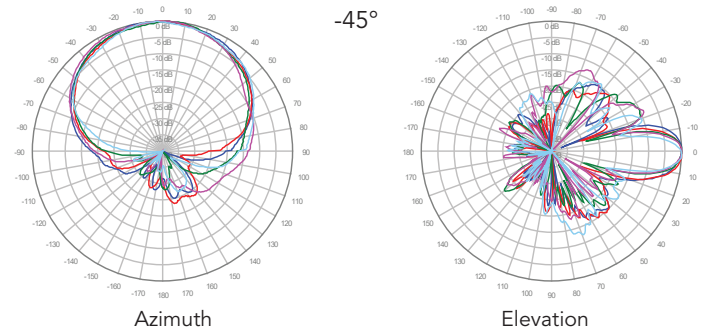
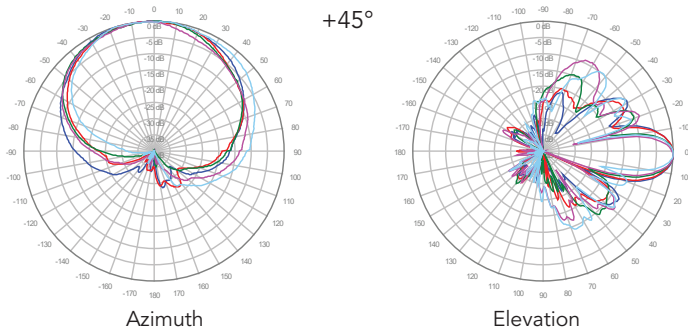


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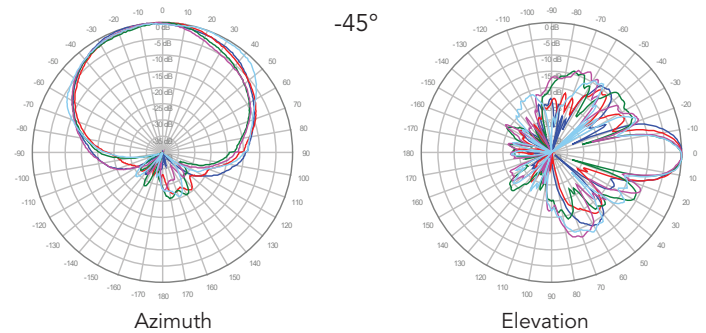
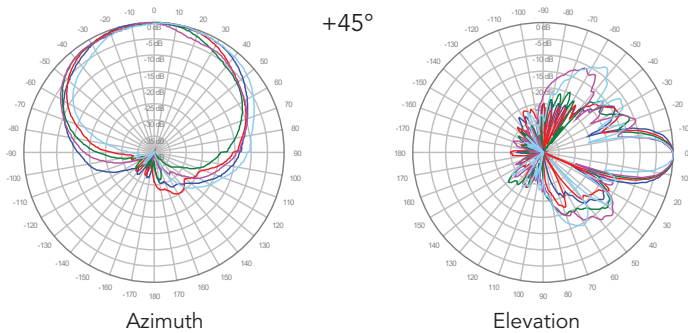
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1800 MHz —
1900 MHz —
2100 MHz —
2300 MHz —
2600 MHz —

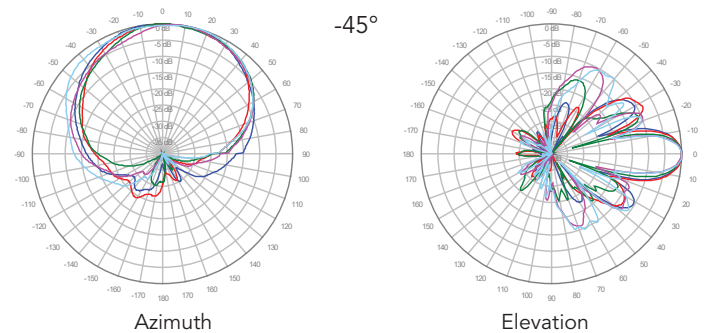
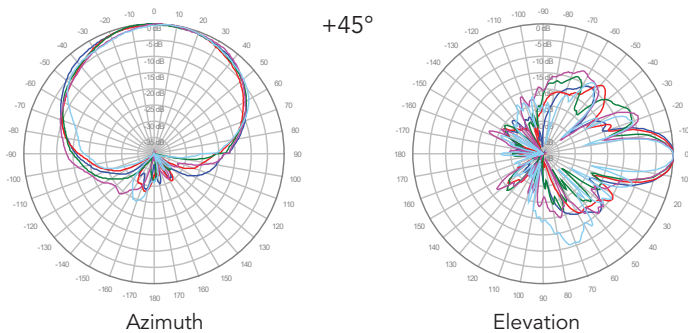
■ Y1, 2° TILT



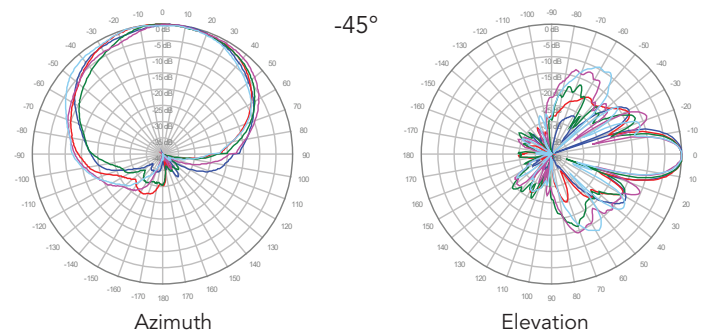
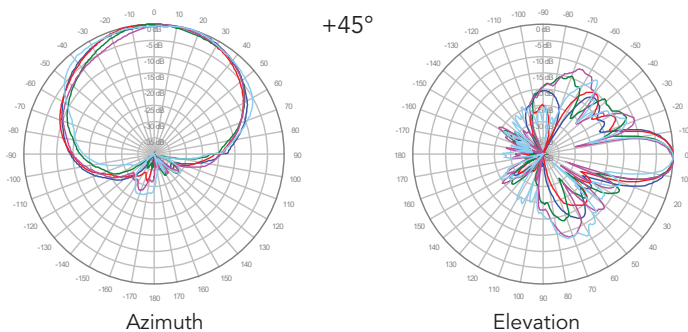
■ Y2, 2° TILT



■ Y3, 2° TILT



■ Y4, 2° TILT

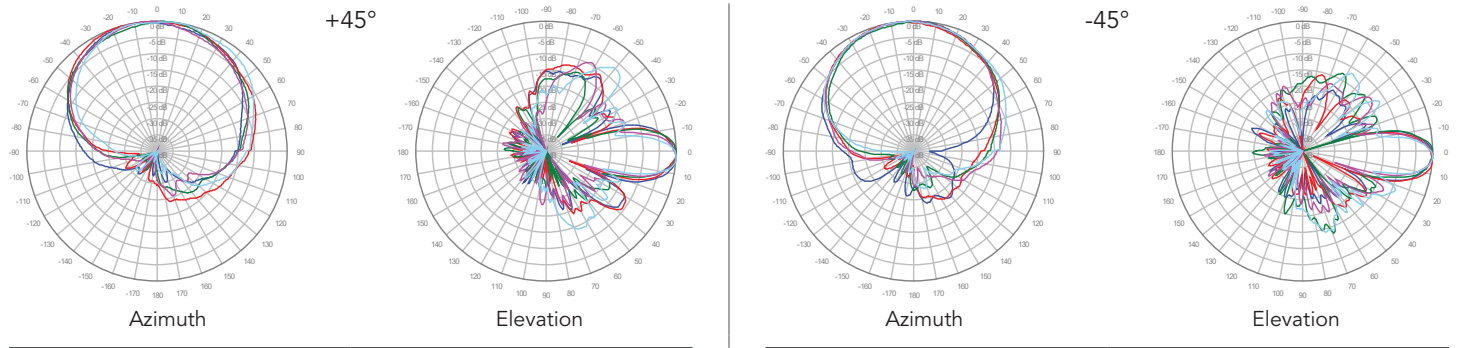


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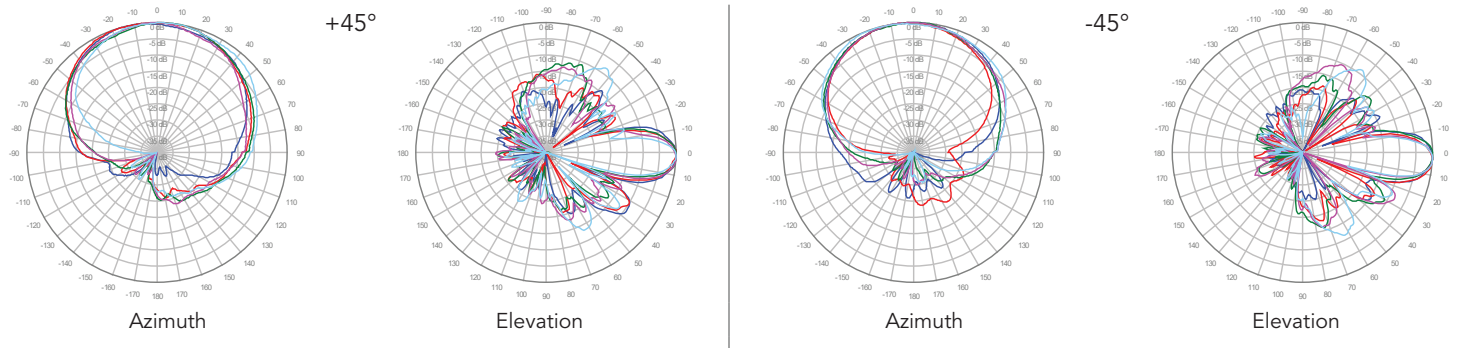
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1800 MHz —
1900 MHz —
2100 MHz —
2300 MHz —
2600 MHz —

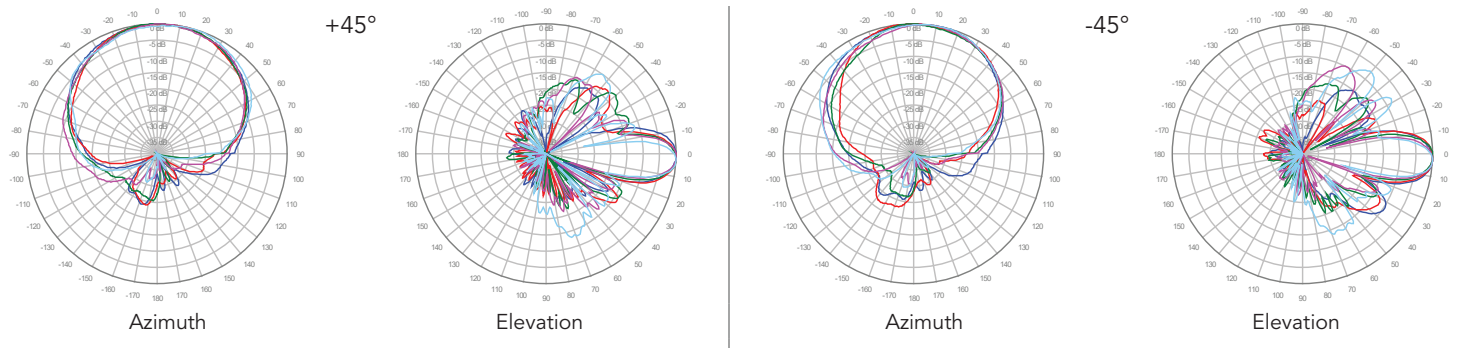
Y1, 4° TILT



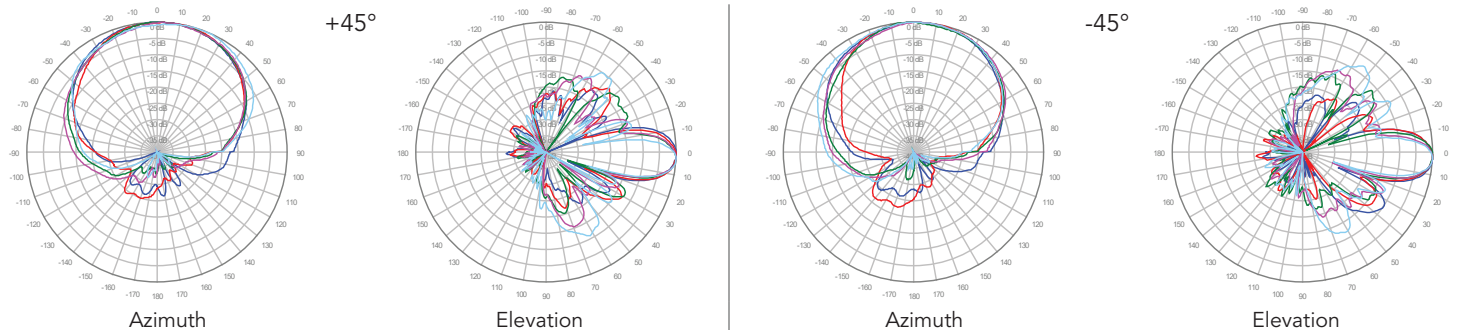
Y2, 4° TILT



Y3, 4° TILT



Y4, 4° TILT

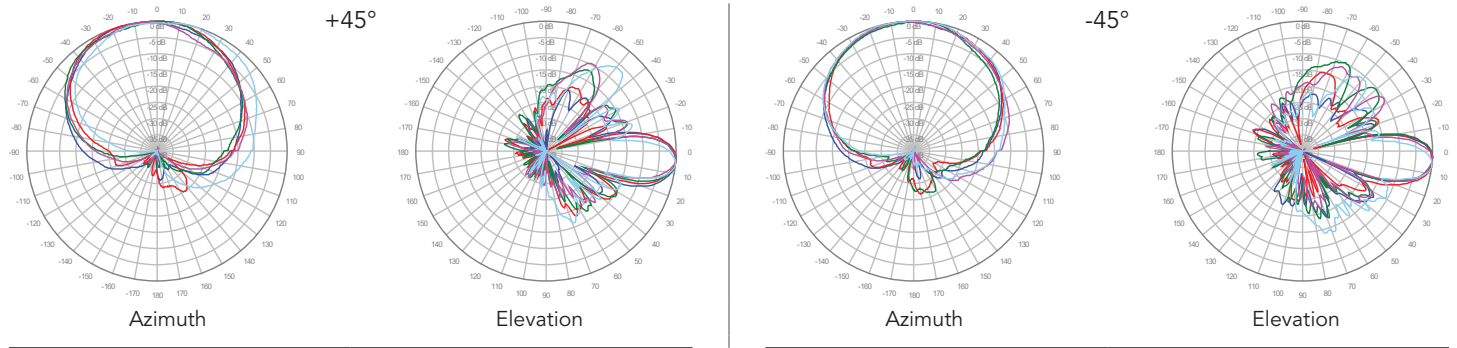


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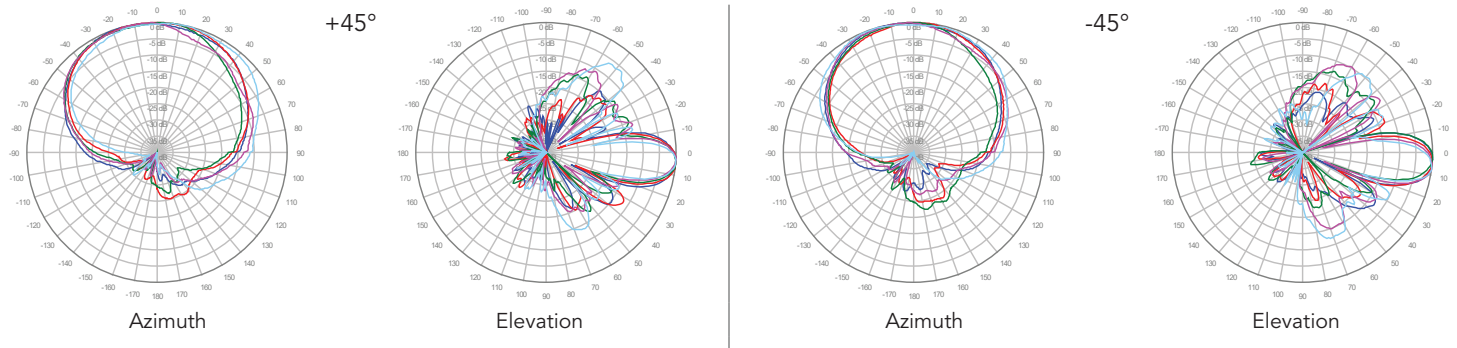
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1800 MHz —
1900 MHz —
2100 MHz —
2300 MHz —
2600 MHz —

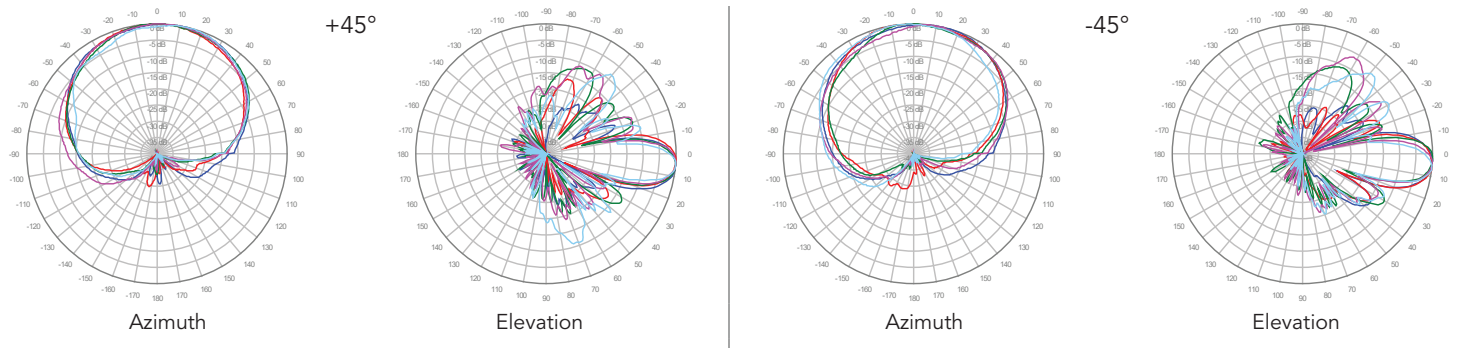
Y1, 6° TILT



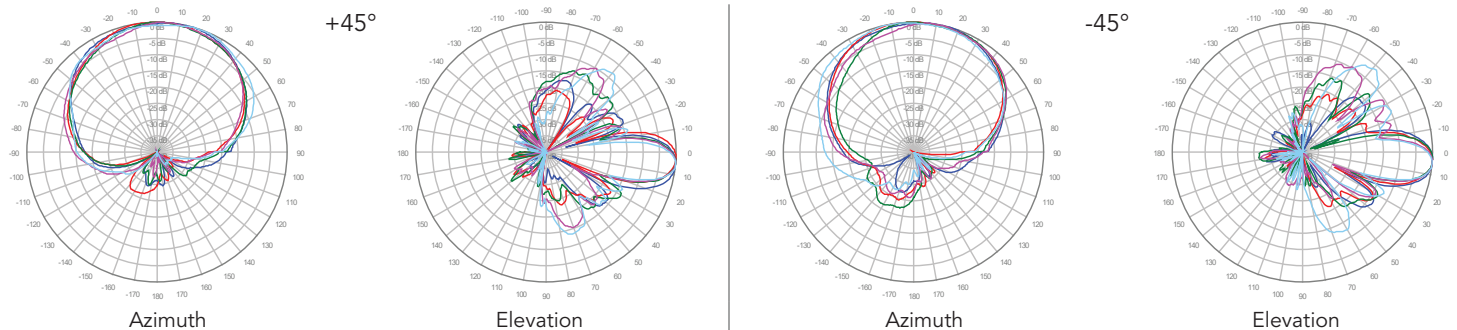
Y2, 6° TILT



Y3, 6° TILT



Y4, 6° TILT

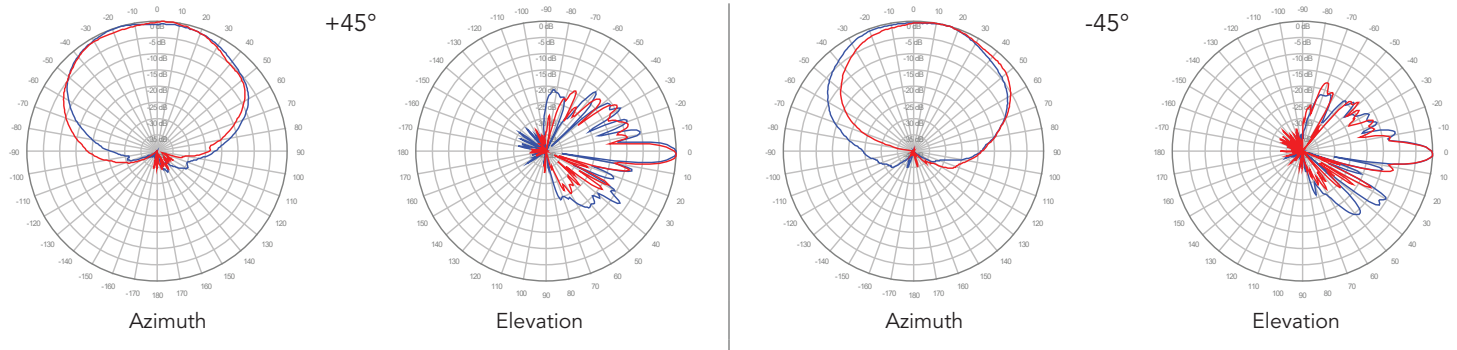


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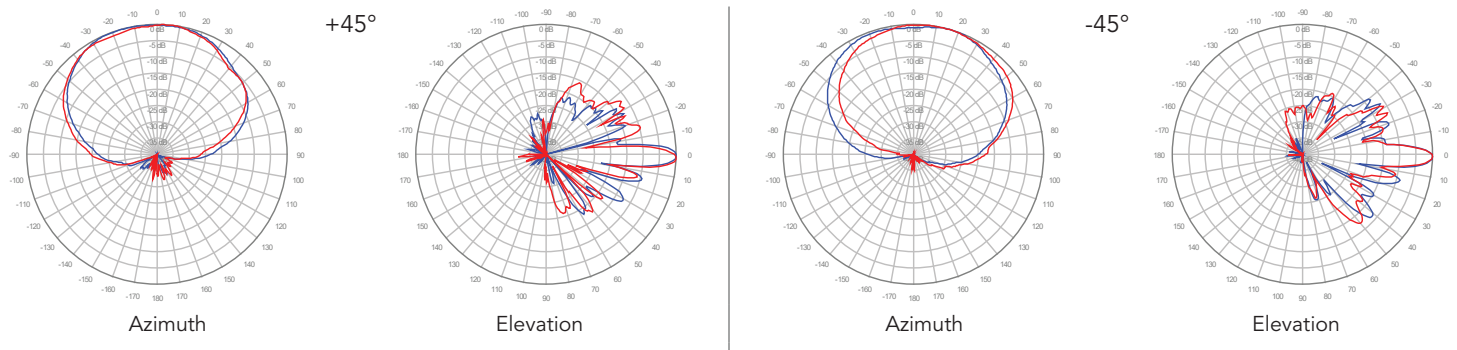
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3600 MHz ————
4000 MHz ————

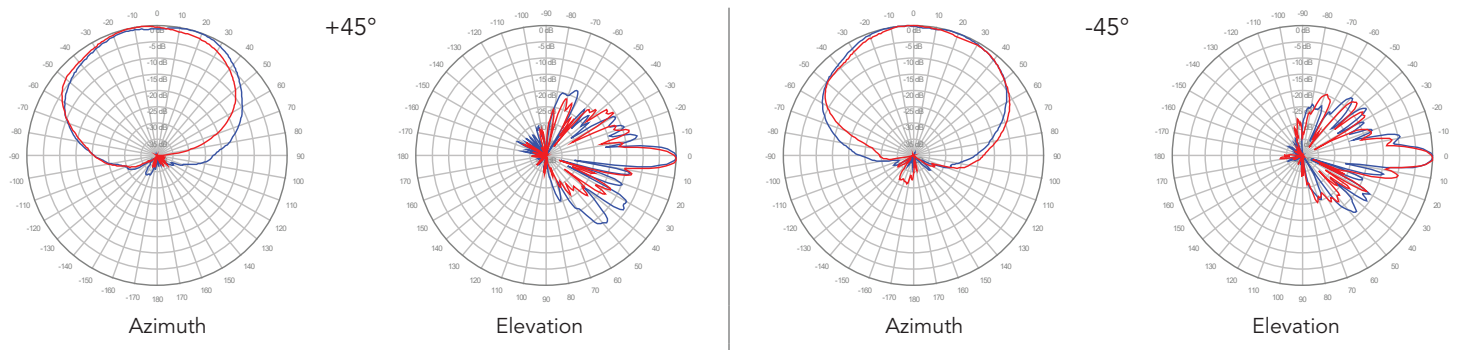
P1, 2° TILT



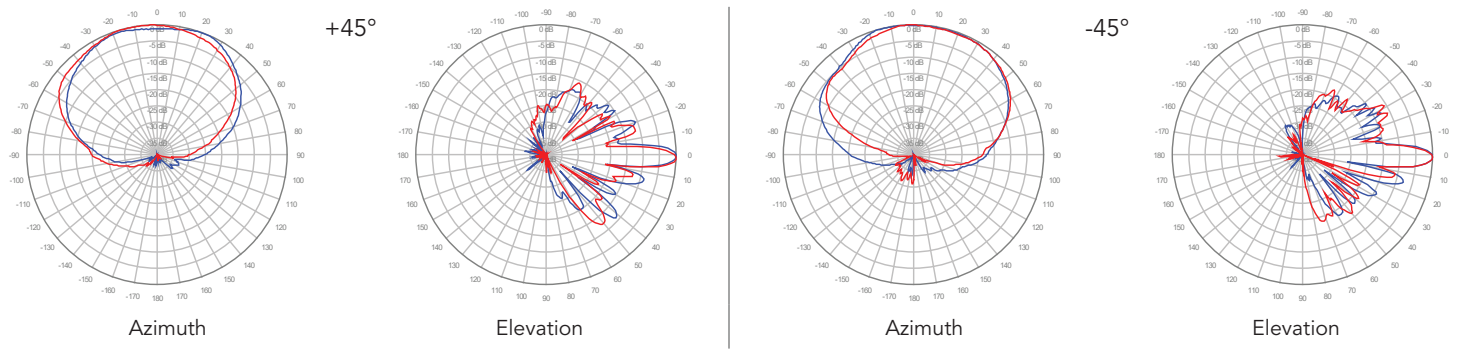
P2, 2° TILT



P3, 2° TILT



P4, 2° TILT

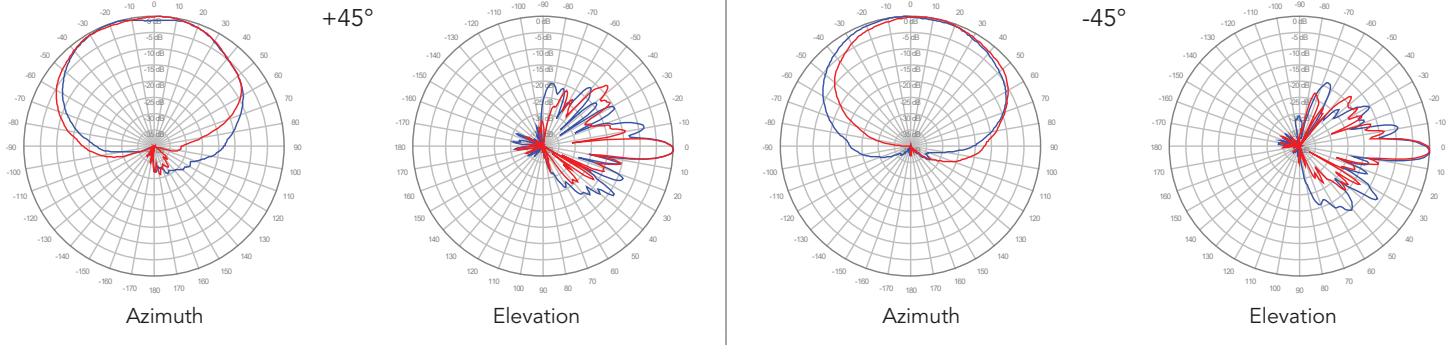


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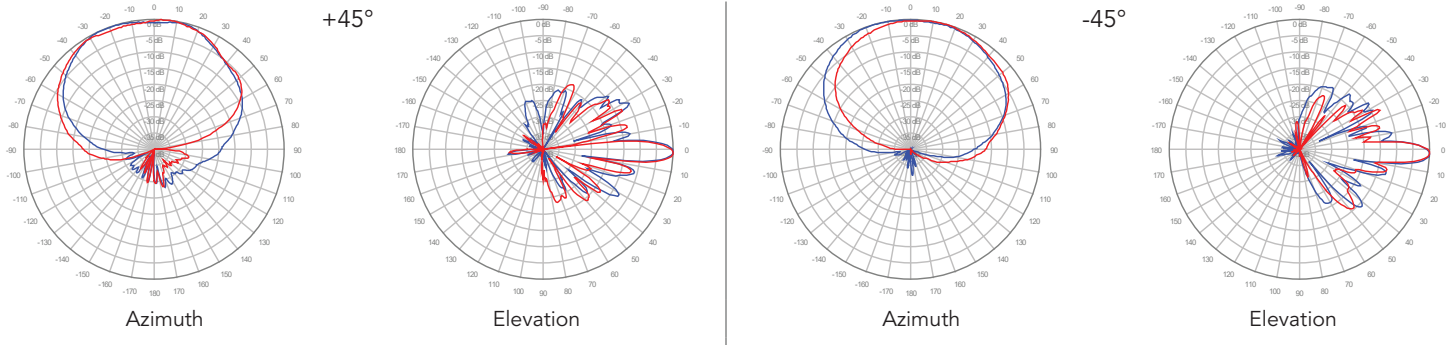
2C4U4VX065X12Fwxys5

3600 MHz ————
4000 MHz ————

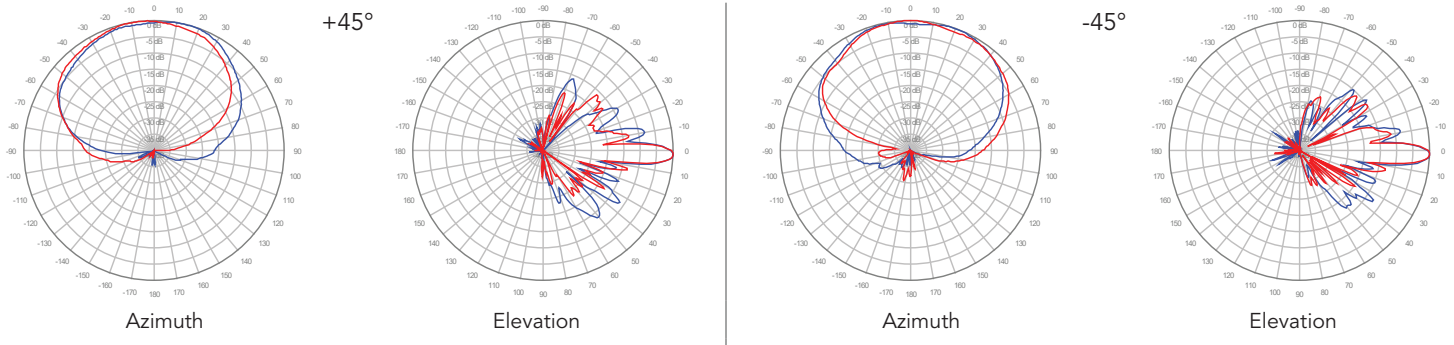
P1, 4° TILT



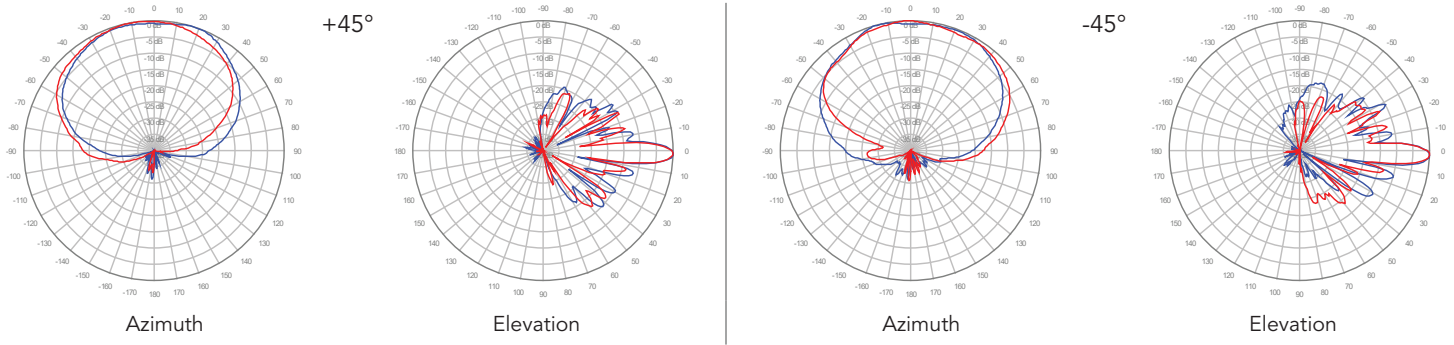
P2, 4° TILT



P3, 4° TILT



P4, 4° TILT

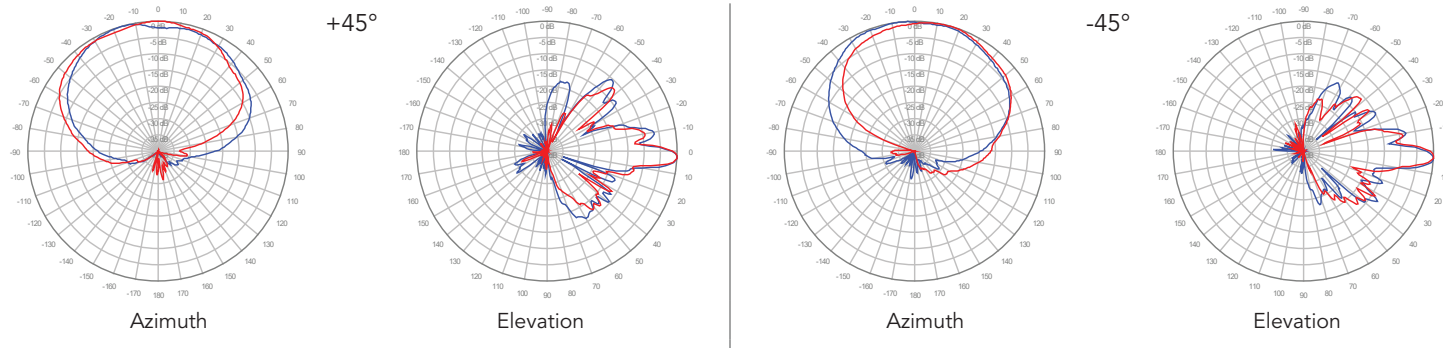


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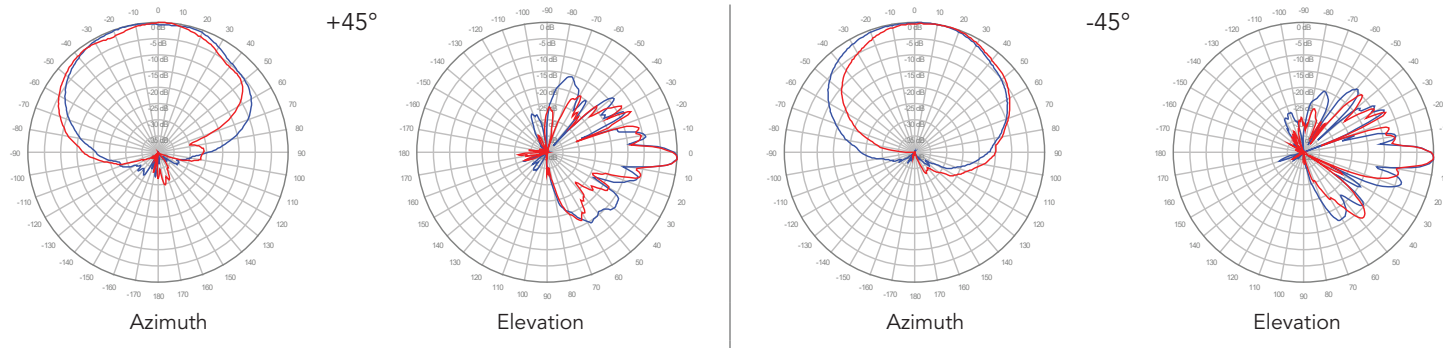
2C4U4VX065X12Fwxys5

3600 MHz ————
4000 MHz ————

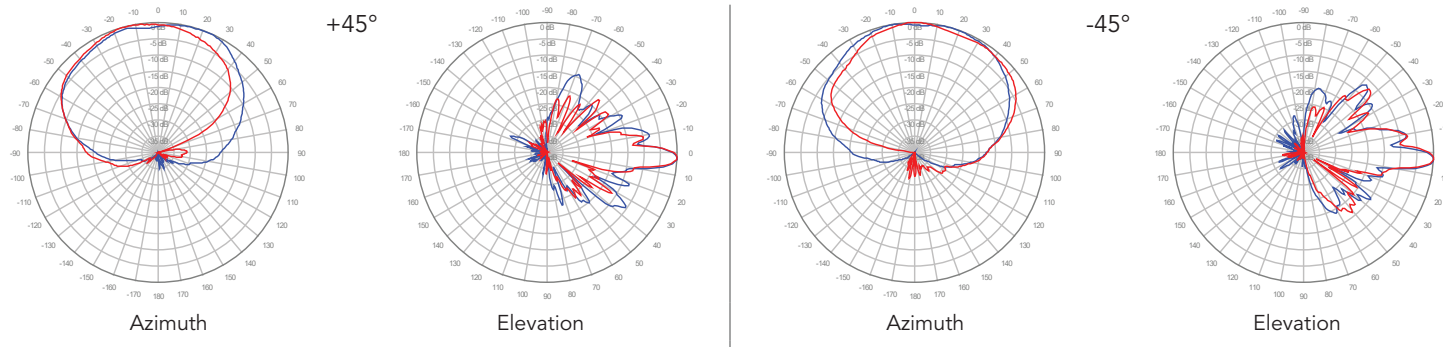
P1, 6° TILT



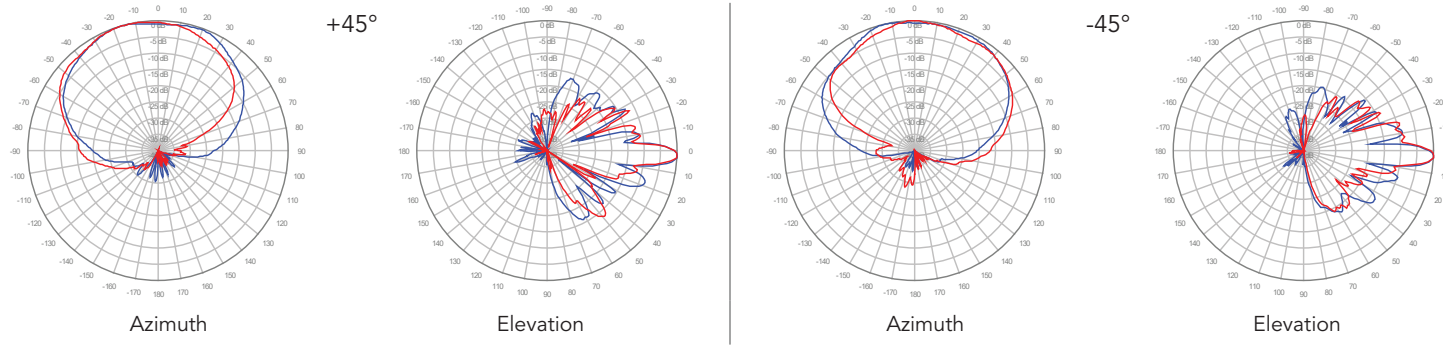
P2, 6° TILT



P3, 6° TILT



P4, 6° TILT



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