20-Port Panel Antenna

(2x) 696-896 | (4x) 1695-2700 | (4x) 3300-4200 MHz

45° | 54.8 IN | FIXED TILT

2C4U4VX045X14Fwxys5

Features

- Unique high port count panel antenna for 4G/5G small cell applications
- 20 total connectors to service the 696-896, 1695-2700 and 3300-4200 MHz bands
- Ideal for multi-carrier or 4x4 MIMO deployments
- Fixed tilt options

PRODUCT OVERVIEW				
	Frequency Range (MHz)	(2x) 696-896	(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)	45°	45°	45°
	Electrical Downtilt	0°	0°, 5°	0°, 5°
	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	1392 x 407 x 179 mm (54.8 x 16.0 x 7.1)		
	Radome Color Options	GREY		

ELECTRICAL SPECIFICATIONS

			R1 R2	
Frequency Range		MHz	(2x) 696-896	
Frequency Sub-Range		MHz	696-806	806-896
Polarization		---	(2x) ±45°	
Gain	BASTA	dBi	12.4 ± 0.6	13.3 ± 0.5
	MAX	dBi	13.0	13.8
Azimuth Beamwidth (3 dB)		degrees	46.4° ± 2.1°	41.8° ± 3.1°
Elevation Beamwidth (3 dB)		degrees	41.1° ± 3.9°	36.1° ± 3.2°
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	> 22	
	Interband	dB	> 28 same band; > 30 different band	

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

Frequency Range		MHz	(4x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(4x) ±45°			
Gain	BASTA	dBi	14.1 ± 0.5	14.8 ± 0.4	15.3 ± 0.7	15.9 ± 0.5
	MAX	dBi	14.6	15.2	16.0	16.4
Azimuth Beamwidth (3 dB)		degrees	55.1° ± 7.4°	47.0° ± 5.1°	43.6° ± 6.3°	37.8° ± 5.4°
Elevation Beamwidth (3 dB)		degrees	20.7° ± 1.1°	20.0° ± 1.1°	18.9° ± 2.0°	16.3° ± 1.3°
Electrical Downtilt		degrees	(x) 0°, 5°			
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	> 22			
	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) ±45°		
Gain	BASTA	dBi	17.9 ± 0.6	18.3 ± 0.5	18.2 ± 0.7
	MAX	dBi	18.5	18.8	18.9
Azimuth Beamwidth (3 dB)		degrees	43.3° ± 6.9°	38.3° ± 5.6°	34.5° ± 5.6°
Elevation Beamwidth (3 dB)		degrees	10.8° ± 0.4°	10.4° ± 0.4°	9.6° ± 0.6°
Electrical Downtilt		degrees	(y) 0°, 5°		
Impedance		Ohms	50Ω		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153		
Upper Sidelobe Suppression		dB	> 13.8		
Isolation	Intraband	dB	> 25		
	Interband	dB	> 28 same band; > 30 different band		

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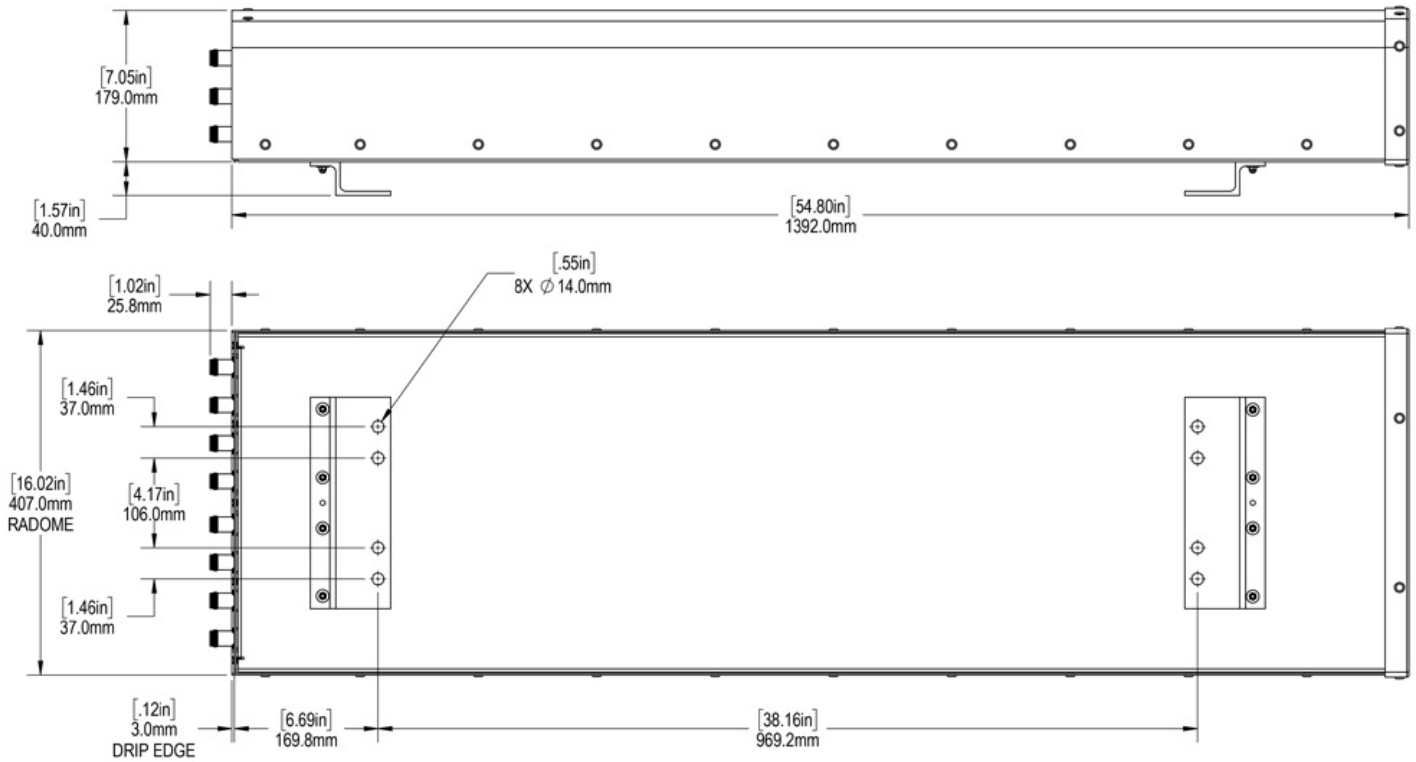
MECHANICAL SPECIFICATIONS

Antenna	Length		mm (in)	1392 (54.8)
	Width		mm (in)	407 (16.0)
	Depth		mm (in)	179 (7.1)
Net Weight - Antenna Only			kg (lbs)	16.3 (36)
Windload		Calculation	km/h (mph)	160 (100)
		Frontal	N (lbf)	792 (178)
		Side	N (lbf)	361 (81)
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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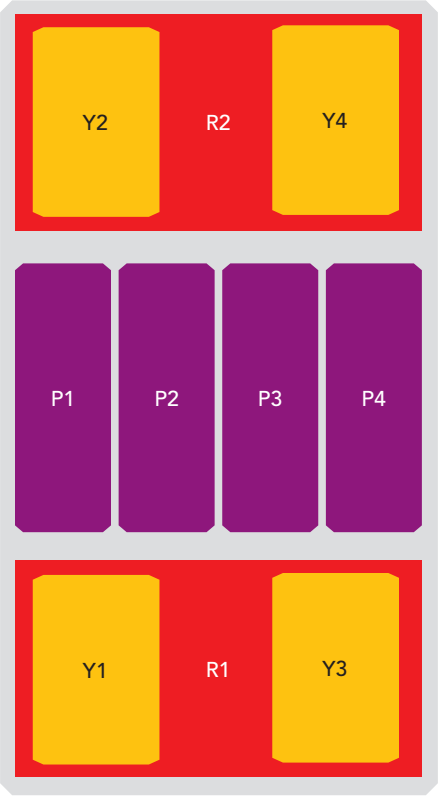
ARRAY LAYOUT Topology

FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
696-896 MHz	R1	1-2	(2x) 4.3-10 Female
696-896 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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BOTTOM VIEW - LABELING

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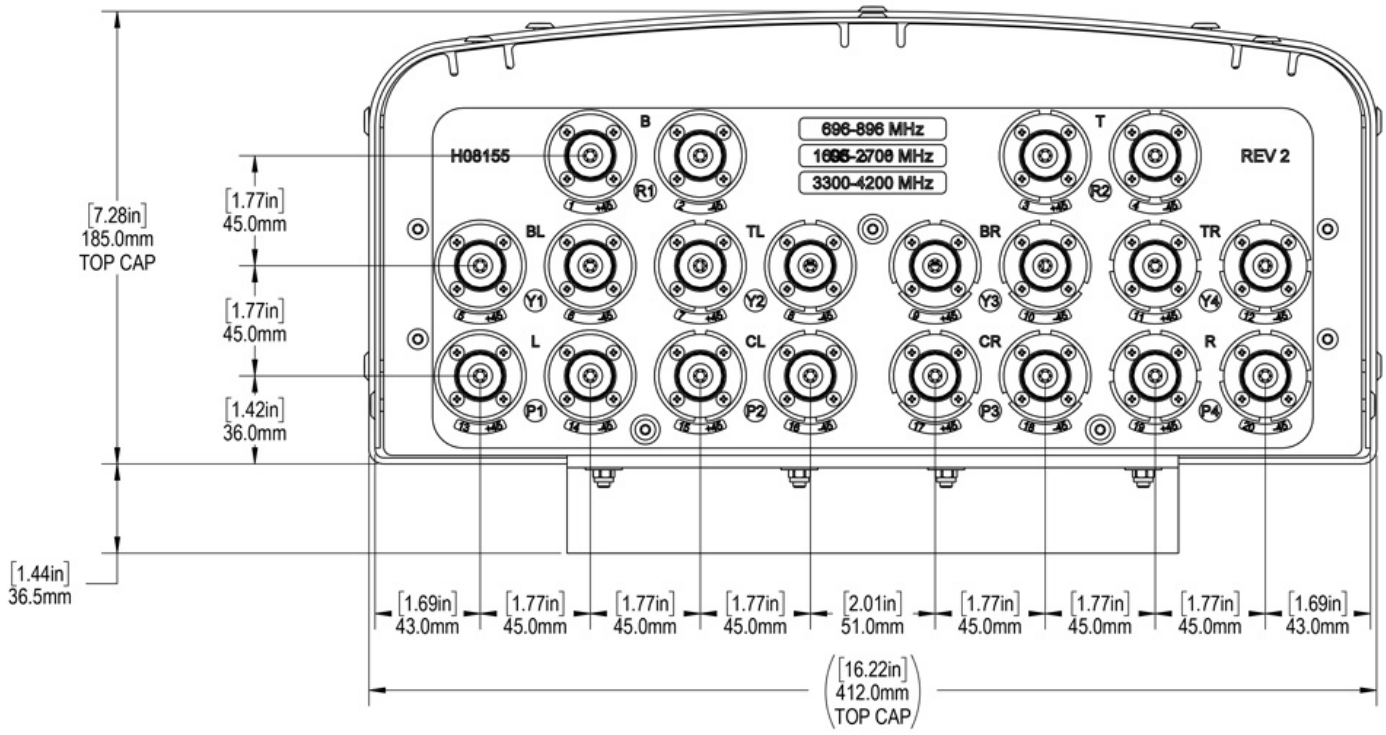
BOTTOM VIEW - CONNECTOR DIAGRAM



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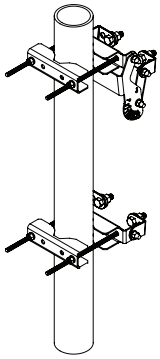
MOUNTING KITS Select from the following mounting options when ordering.

MODEL NUMBER	DESCRIPTION	FITS PIPE DIAMETER	WEIGHT
36210006 	2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT	40-115 mm (1.57-4.5 in)	4.1 kg (9 lbs)

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 BMWDTH	POLARIZA-TION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	ORDERING OPTION
2C	4U	4V	X	045	X	14	F	wxy	s	5	-T
(2x) 696-896	(4x) 1695-2700	(4x) 3300-4200	Standard Panel Antenna	45°	XPOL	1.4 meters	Fixed Tilt	These letters are placeholders for fixed tilt options. Refer to Electrical Specifications for available tilt options.	4.3-10 Connector	5th generation mechanical package	To order the antenna and mounting kit together as one line item, add a -T for the 2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT (36210006) to the end of the model number. If -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
	696-896 MHz	1695-2700 MHz	3300-4200 MHz	
ANTENNA ONLY - NO MOUNTING KIT	0°	0°	0°	2C4U4VX045X14F000s5
	0°	0°	5°	2C4U4VX045X14F005s5
	0°	5°	0°	2C4U4VX045X14F050s5
	0°	5°	5°	2C4U4VX045X14F055s5
ANTENNA WITH **36210006** MOUNTING KIT 2-Point, Scissor Tilt, Mounting & Downtilt Bracket Kit	0°	0°	0°	2C4U4VX045X14F000s5-T
	0°	0°	5°	2C4U4VX045X14F005s5-T
	0°	5°	0°	2C4U4VX045X14F050s5-T
	0°	5°	5°	2C4U4VX045X14F055s5-T

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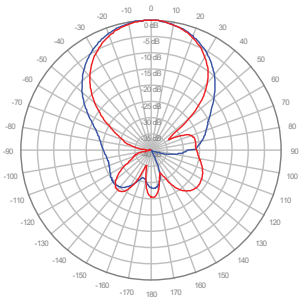
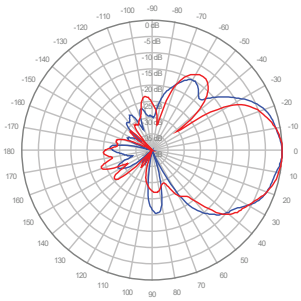
750 MHz
850 MHz

R1, 0° TILT

+45°

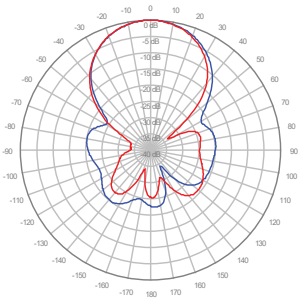


Azimuth



Elevation

-45°



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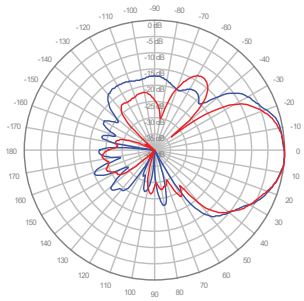
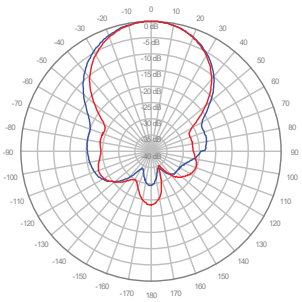


Elevation

R2, 0° TILT

+45°



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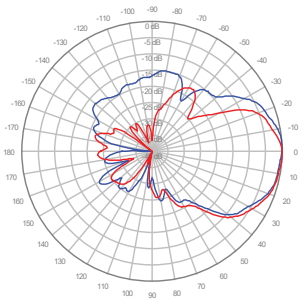
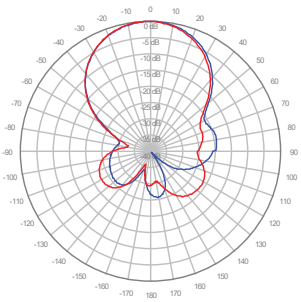


Elevation

-45°



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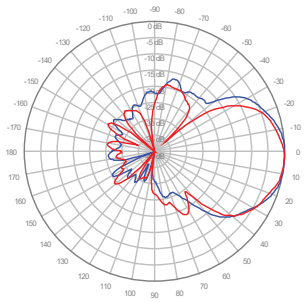

Elevation

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20-Port Panel Antenna

(2x) 696-896 | (4x) 1695-2700 | (4x) 3300-4200 MHz

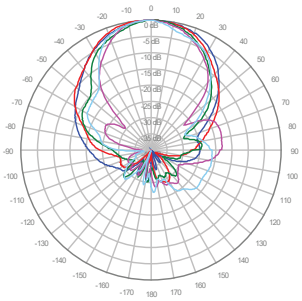
45° | 54.8 IN | FIXED TILT

2C4U4VX045X14Fwxys5

1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 0° TILT

+45°



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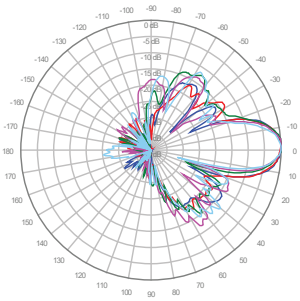
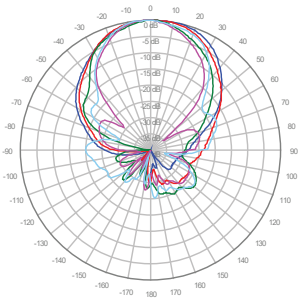


Elevation

-45°



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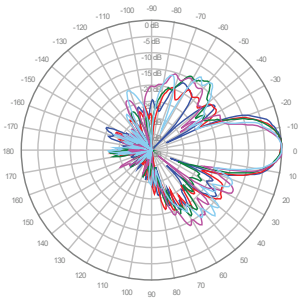
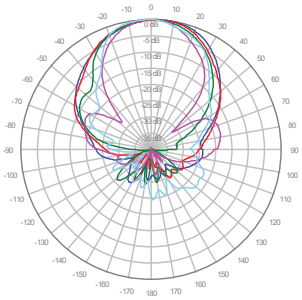


Elevation

Y2, 0° TILT

+45°



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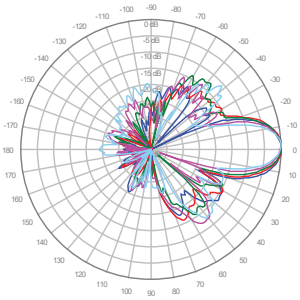
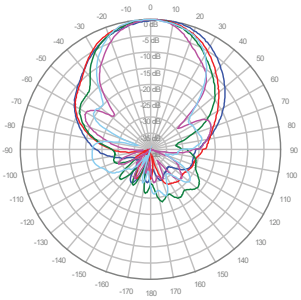


Elevation

-45°



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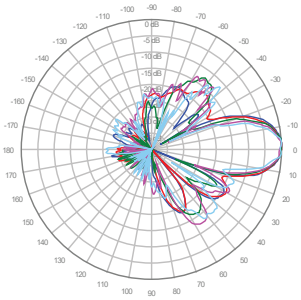
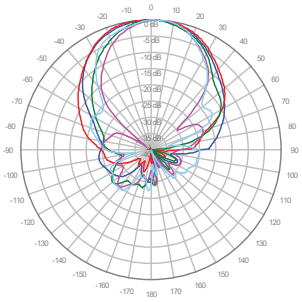


Elevation

Y3, 0° TILT

+45°



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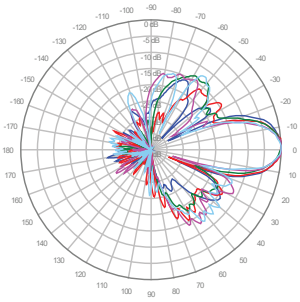
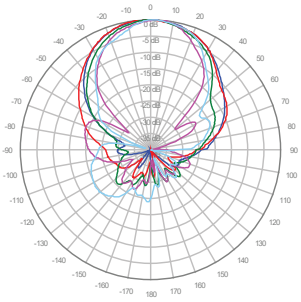


Elevation

-45°



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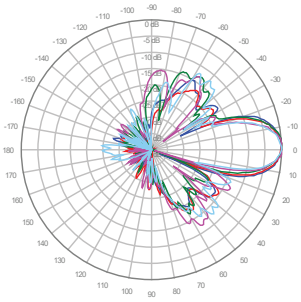
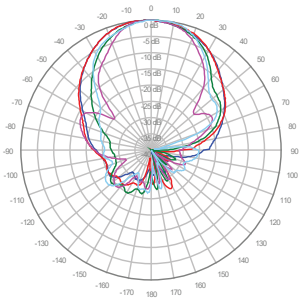


Elevation

Y4, 0° TILT

+45°



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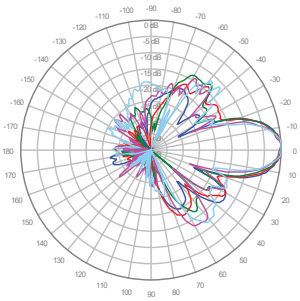
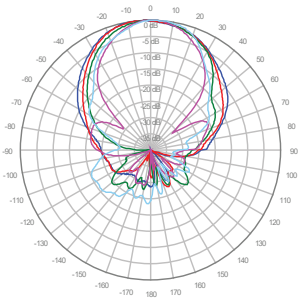


Elevation

-45°



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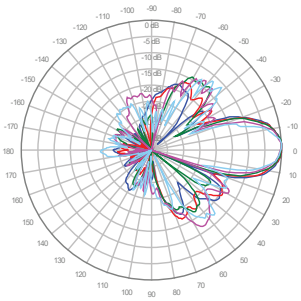

Elevation

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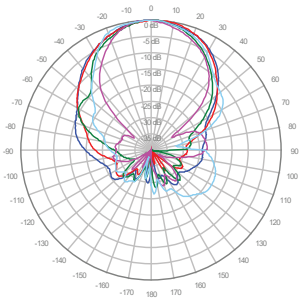
45° | 54.8 IN | FIXED TILT

2C4U4VX045X14Fwxys5

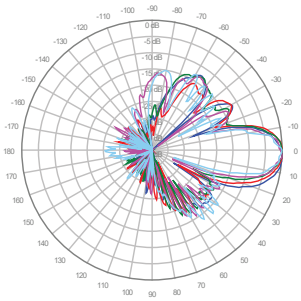
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 5° TILT

+45°

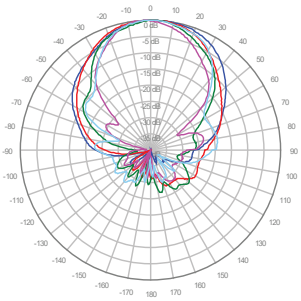


Azimuth



Elevation

-45°



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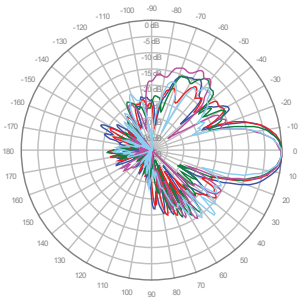
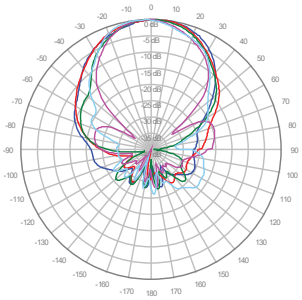


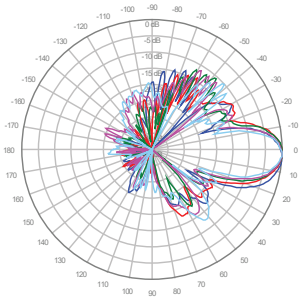
Elevation

Y2, 5° TILT

+45°

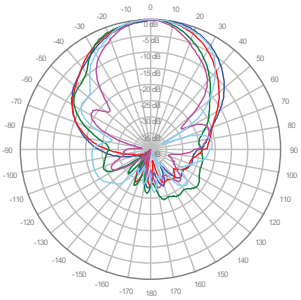


Azimuth

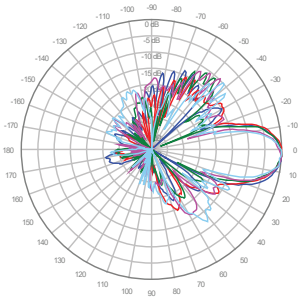


Elevation

-45°



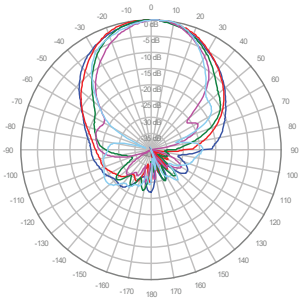
Azimuth



Elevation

Y3, 5° TILT

+45°



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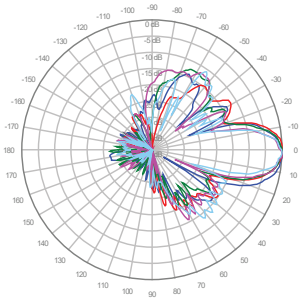
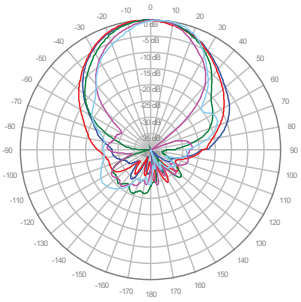
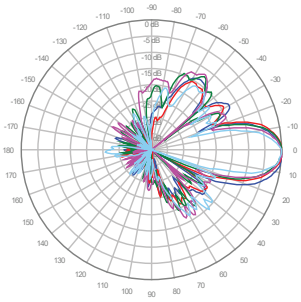


Elevation

-45°



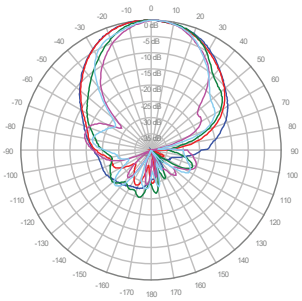
Azimuth



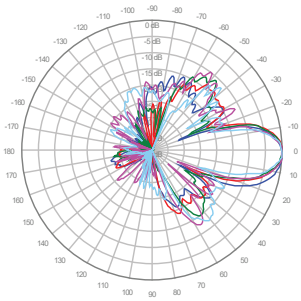
Elevation

Y4, 5° TILT

+45°

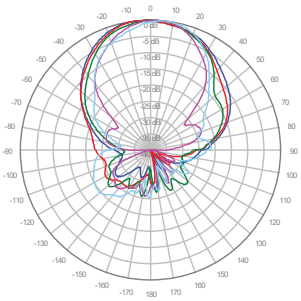


Azimuth

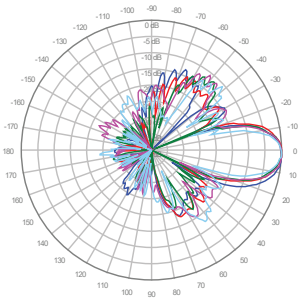


Elevation

-45°



Azimuth



Elevation

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20-Port Panel Antenna

(2x) 696-896 | (4x) 1695-2700 | (4x) 3300-4200 MHz

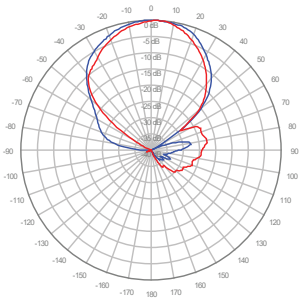
45° | 54.8 IN | FIXED TILT

3600 MHz
4000 MHz

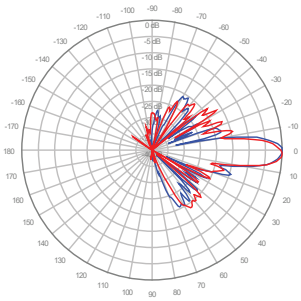
2C4U4VX045X14Fwxys5

P1, 0° TILT

+45°

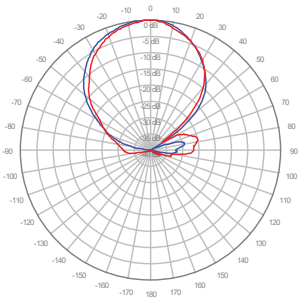


Azimuth

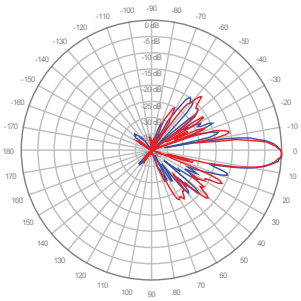


Elevation

-45°



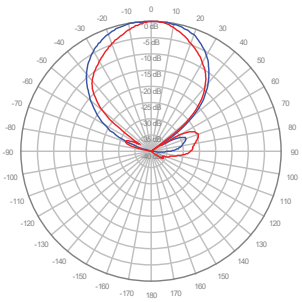
Azimuth



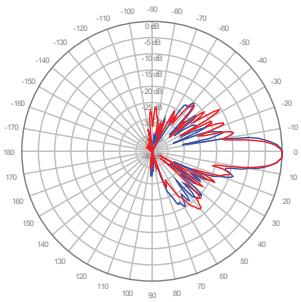
Elevation

P2, 0° TILT

+45°

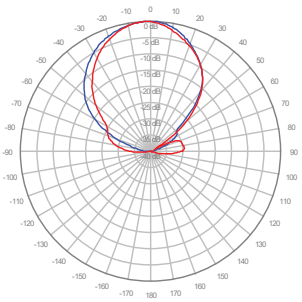


Azimuth



Elevation

-45°



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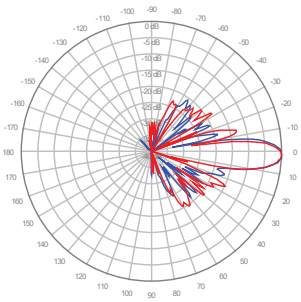
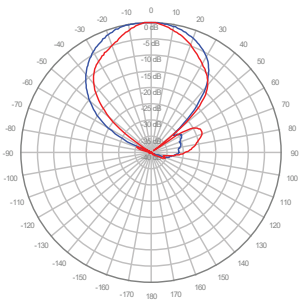


Elevation

P3, 0° TILT

+45°



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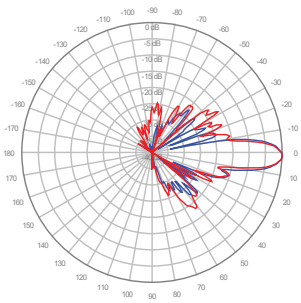
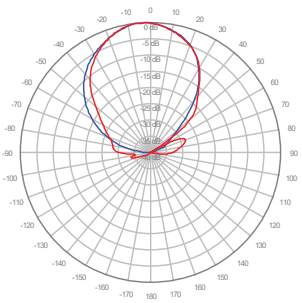
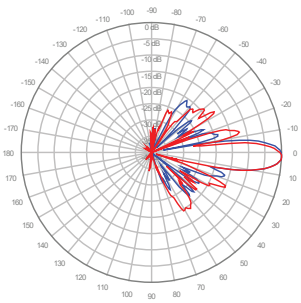


Elevation

-45°



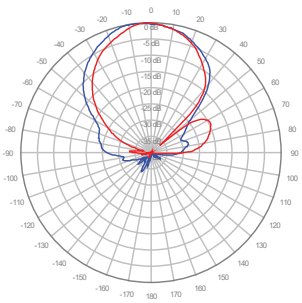
Azimuth



Elevation

P4, 0° TILT

+45°



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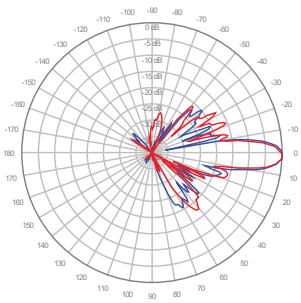
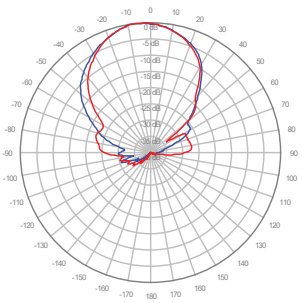
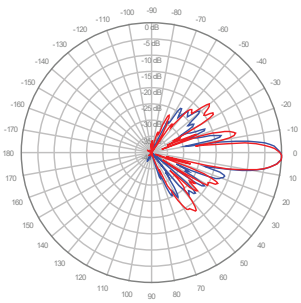


Elevation

-45°



Azimuth



Elevation

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20-Port Panel Antenna

(2x) 696-896 | (4x) 1695-2700 | (4x) 3300-4200 MHz

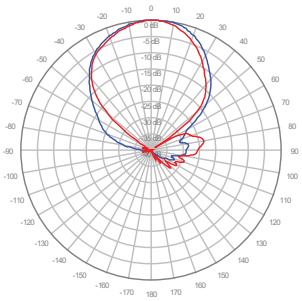
45° | 54.8 IN | FIXED TILT

3600 MHz
4000 MHz

2C4U4VX045X14Fwxys5

P1, 5° TILT

+45°



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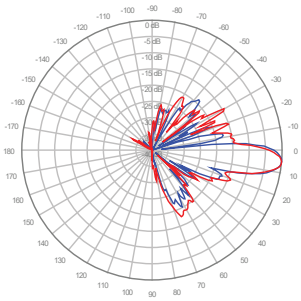
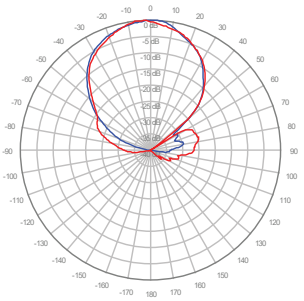


Elevation

-45°



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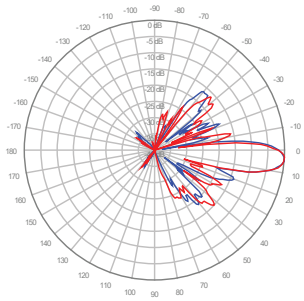
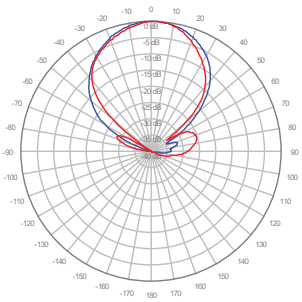


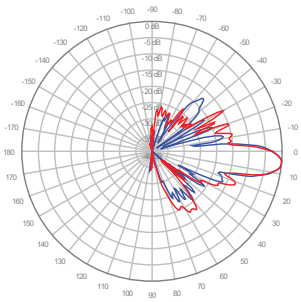
Elevation

P2, 5° TILT

+45°

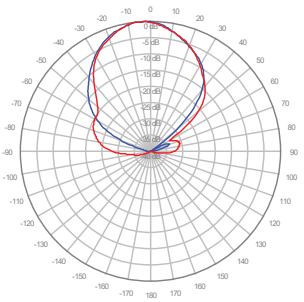


Azimuth

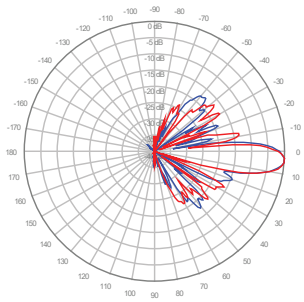


Elevation

-45°



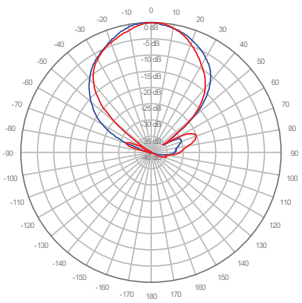
Azimuth



Elevation

P3, 5° TILT

+45°



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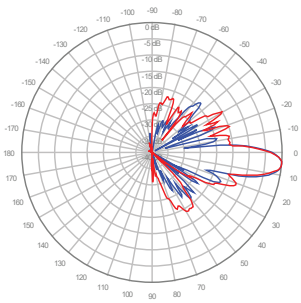
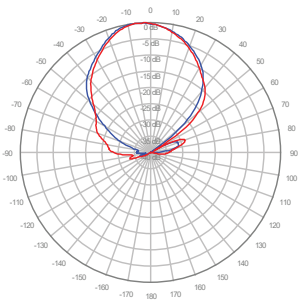
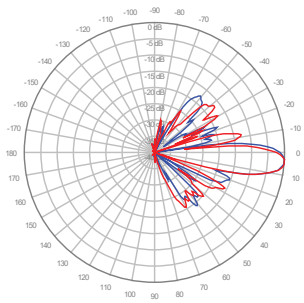


Elevation

-45°



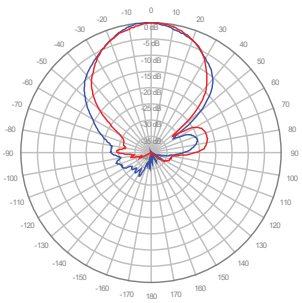
Azimuth



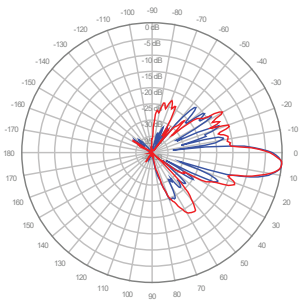
Elevation

P4, 5° TILT

+45°

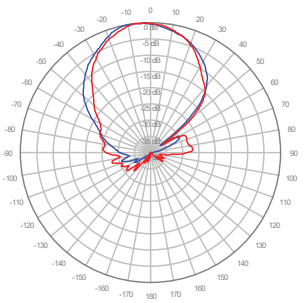


Azimuth



Elevation

-45°



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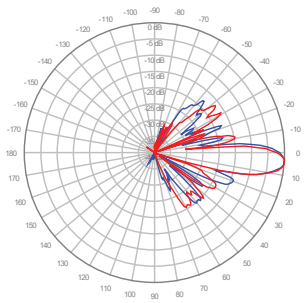

Elevation

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