

2C4U3MD120X06FwxyS4



Features

- 120° heart-shape configuration with 18 connectors
- Ideal for multi-carrier or 4x4 MIMO deployments
- Broadband networks 696-960, 1695-2700 and 3300-4200 MHz
- Easily removable lifting ring
- Improvements in gain, port isolation and VSWR
- This antenna meets the requirements of the U-NII

PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 696-960	(4x) 1695-2700	(2x) 3300-4200	(1x) 5150-5925
	Array	■ R1, ■ R2	■ Y1, ■ Y2, ■ Y3, ■ Y4	■ P1, ■ P2	■ O1
	Connector	4 PORTS	8 PORTS	4 PORTS	2 PORTS
	Polarization	XPOL	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	163°	155°	100°	124°
	Electrical Downtilt	0°	2°, 4°, 6°	0°	0°
	Configuration	HEART-SHAPE CONFIGURATION			
	Maximum Continuous Power Per Port @ 50° C (122° F)	500 WATTS	300 WATTS	100 WATTS	50 WATTS
	Maximum Total Continuous Power at 50° C (122° F)	4900 WATTS			
	Connector Type	(18x) 4.3-10 FEMALE CONNECTORS			
	Dimensions	608 x Ø371 mm (24.0 x Ø14.6 in)			
	Radome Color Options	GREY, BROWN or BLACK			

ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

Frequency Range		MHz	(2x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	(2x) ±45°	
Gain	BASTA	dBi	4.8 ± 0.6	5.1 ± 0.7
	MAX	dBi	5.4	5.8
Azimuth Beamwidth (3 dB)		degrees	180.2° ± 26°	150° ± 27°
Elevation Beamwidth (3 dB)		degrees	77.5° ± 27.5°	68.1° ± 18°
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) ±45°				
Gain	BASTA	dBi	7.6 ± 0.7	7.5 ± 0.8	7.4 ± 0.9	7.9 ± 1.0
	MAX	dBi	8.3	8.3	8.3	8.9
Azimuth Beamwidth (3 dB)	degrees	117.7° ± 28.3°	126.6° ± 30.1°	125.8° ± 34.3°	105.9° ± 31.7°	
Elevation Beamwidth (3 dB)	degrees	34° ± 5.8°	33° ± 5.6°	32° ± 5.6°	26° ± 4.0°	
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 band			

ELECTRICAL SPECIFICATIONS

■ P1 ■ P2

Frequency Range	MHz	(2x) 3300-4200	
Polarization	---	(2x) ±45°	
Gain	BASTA	dBi	10.3 ± 0.9
	MAX	dBi	11.2
Azimuth Beamwidth (3 dB)	degrees	98.6° ± 14.9°	
Elevation Beamwidth (3 dB)	degrees	30.5° ± 3.6°	
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 band

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ELECTRICAL SPECIFICATIONS

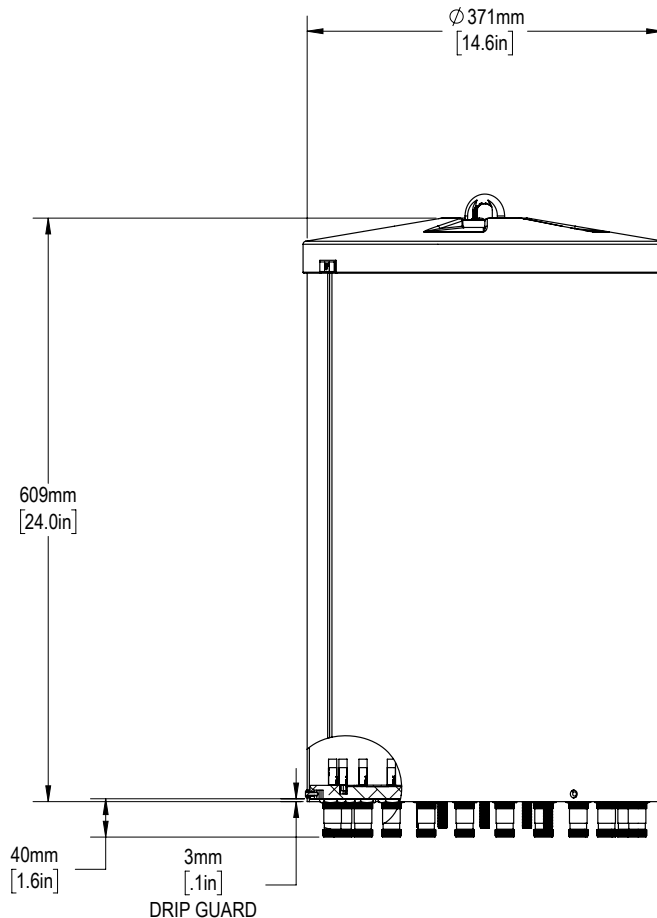
■ O1

Frequency Range		MHz	(1x) 5150-5925
Polarization		---	(1x) $\pm 45^\circ$
Gain	BASTA	dBi	4.3 ± 0.7
	MAX	dBi	5.0
Azimuth Beamwidth (3 dB)		degrees	$134^\circ \pm 47.3^\circ$
Elevation Beamwidth (3 dB)		degrees	$19.3^\circ \pm 2.6^\circ$
Electrical Downtilt		degrees	0°
Impedance		Ohms	50 Ω
VSWR		---	$\leq 1.5:1$
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A
Upper Sidelobe Suppression		dB	Meets FCC requirements upper pattern control for use in LAA outdoor network
Isolation	Intraband	dB	> 25
	Interband	dB	> 28
U-NII Compliant		---	Yes

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MECHANICAL SPECIFICATIONS

Antenna	Height	mm (in)	608 (24.0)
	Diameter	mm (in)	371 (14.6)
Net Weight - Antenna Only		kg (lbs)	13 (29.0)
Windload	Calculation	km/h (mph)	160 (100)
	Frontal	N (lbf)	191 (43)
Survival Wind Speed		km/h (mph)	241 (150)
Wind Area		m ² (ft ²)	0.22 (2.4)
Volume		m ³ (ft ³)	0.07 (2.3)
Connector	Type	---	(18x) 4.3-10 Female
	Position	---	Bottom
Radome Color		---	Grey (RAL 7035) Brown (RAL 8022) Black (RAL 9011)
Lightning Protection (Grounding Type)		---	Direct Ground

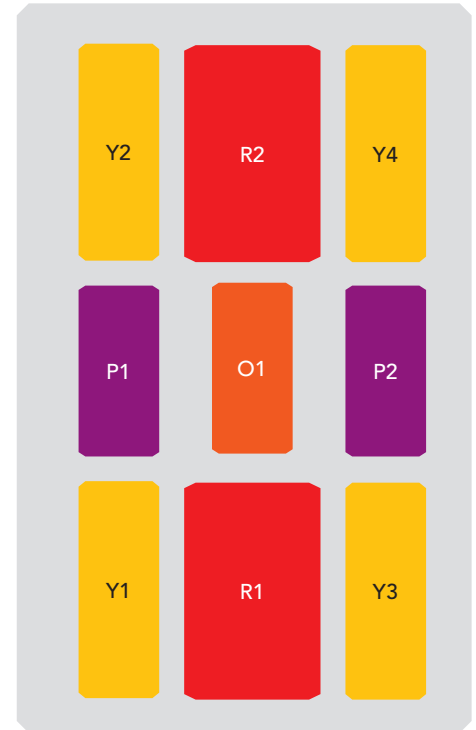


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ARRAY LAYOUT Topology

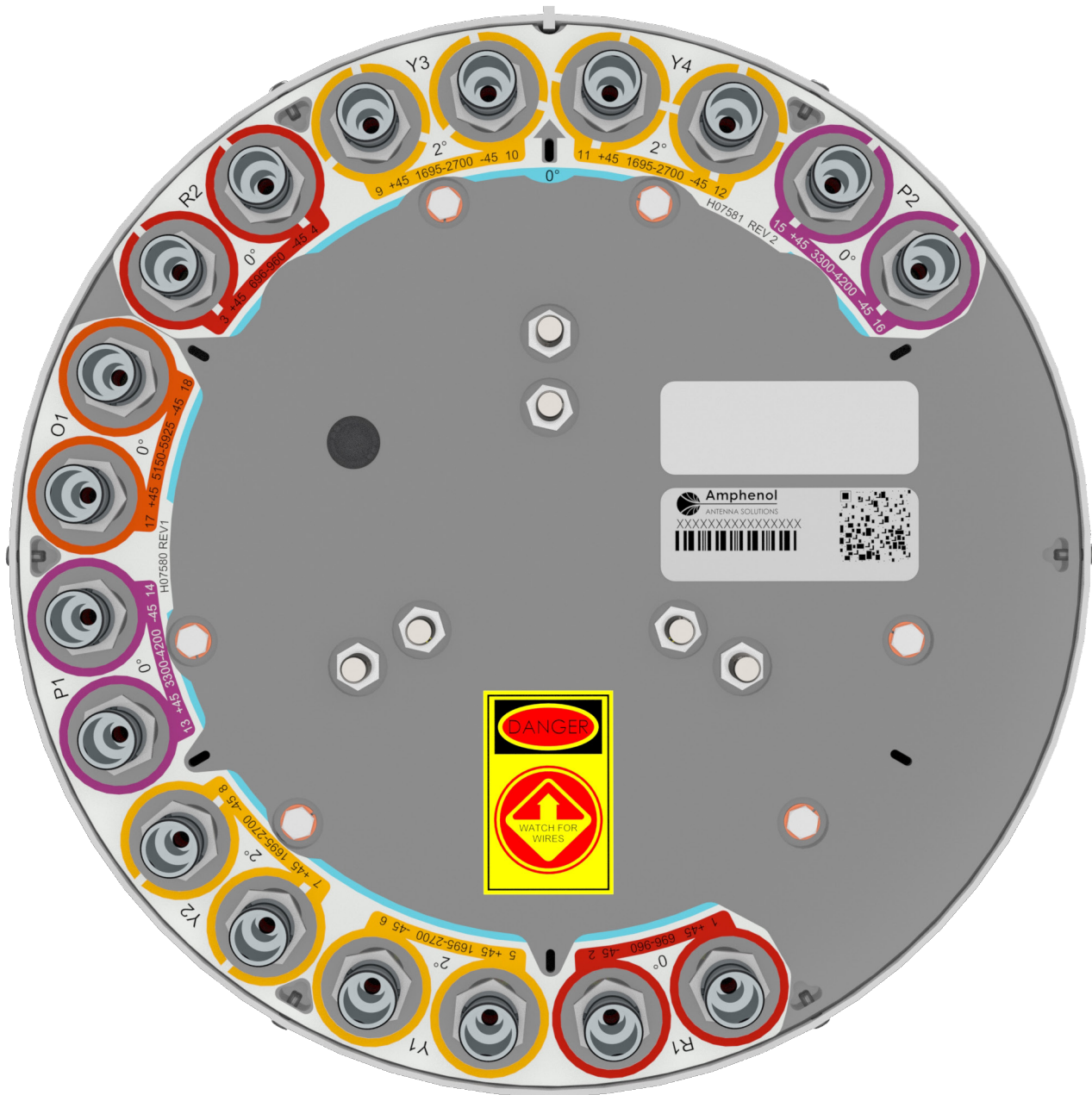
FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
696-960 MHz	■ R1	1-2	(2x) 4.3-10 Female
696-960 MHz	■ R2	3-4	(2x) 4.3-10 Female
1695-2700 MHz	■ Y1	5-6	(2x) 4.3-10 Female
1695-2700 MHz	■ Y2	7-8	(2x) 4.3-10 Female
1695-2700 MHz	■ Y3	9-10	(2x) 4.3-10 Female
1695-2700 MHz	■ Y4	11-12	(2x) 4.3-10 Female
3300-4200 MHz	■ P1	13-14	(2x) 4.3-10 Female
3300-4200 MHz	■ P2	15-16	(2x) 4.3-10 Female
5150-5925 MHz	■ O1	17-18	(2x) 4.3-10 Female



The illustration is not shown to scale.

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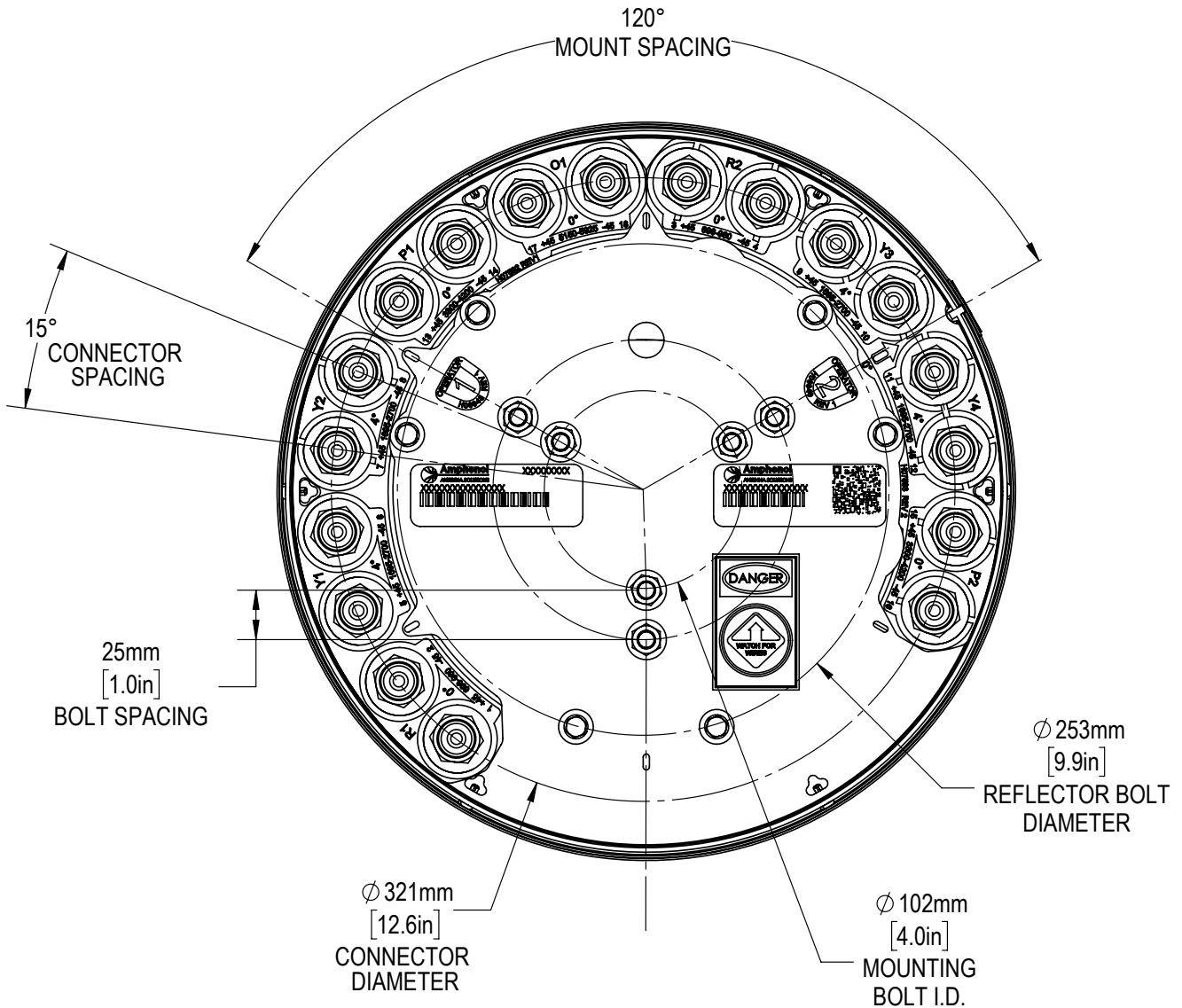
BOTTOM VIEW - LABELING



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BOTTOM VIEW - CONNECTOR DIAGRAM



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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MOUNTING KITS Select from the following mounting options when ordering. Mounting kits for canister antennas are ordered as a separate line item.

MODEL NUMBER	DESCRIPTION
CWT-MKS-SIDE	 <p>SIDE MOUNTING BRACKET KIT FOR CANISTER ANTENNA</p>
CWT-MKS-TOP	 <p>TOP MOUNTING BRACKET KIT FOR CANISTER ANTENNA</p>
WB3X-MKS-01	 <p>UTILITY POLE MOUNTING BRACKET KIT FOR CANISTER ANTENNA</p>
CWT-MKS-BASE-xx	 <p>WIDE DIAMETER POLE TOP MOUNTING BRACKET KIT FOR CANISTER ANTENNA. AVAILABLE IN BROWN, BLACK AND GREY TO MATCH ANTENNA RADOME AND/OR MOUNTING STRUCTURE.</p>

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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 BMWIDTH	POLARIZATION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
2C	4U	3M		D	120	X	06	F	wxy	s	4	BK BR
(2x) 696-960	(4x) 1695-2700	(2x) 3300-4200	(1x) 5150-5925	Dual Sector	~120° Heart-Shape	XPOL	0.6 meters	Fixed Tilt	These letters are placeholders for fixed tilt options. Refer to Electrical Specifications for available tilt options.	4.3-10 Connector	4th generation enhanced mechanical package	BK indicates a Black radome. BR indicates a Brown radome. The default radome color is Grey. No letters are required for a Grey radome.

ORDERING OPTIONS Select from the following ordering options

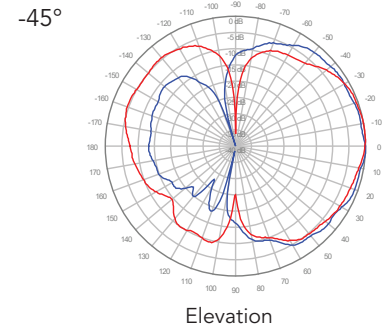
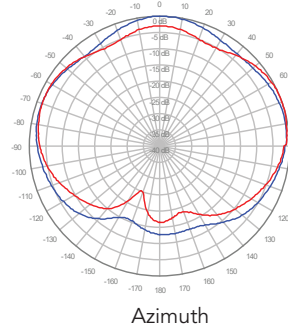
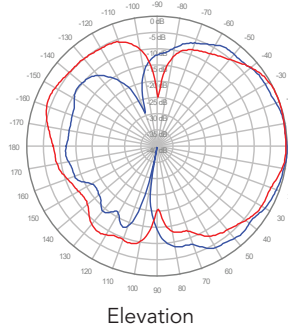
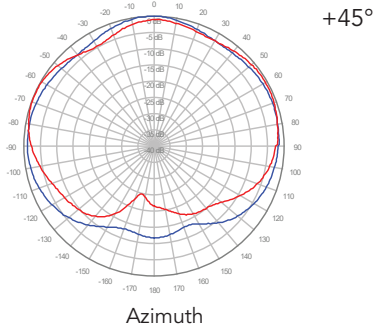
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND				MODEL NUMBER
	696-960 MHz	1695-2700 MHz	3300-4200 MHz	5150-5925 MHz	
Grey RAL 7035	0°	2°	0°	0°	2C4U3MD120X06F020s4
	0°	4°	0°	0°	2C4U3MD120X06F040s4
	0°	6°	0°	0°	2C4U3MD120X06F060s4
Brown RAL 8022	0°	2°	0°	0°	2C4U3MD120X06F020s4BR
	0°	4°	0°	0°	2C4U3MD120X06F040s4BR
	0°	6°	0°	0°	2C4U3MD120X06F060s4BR
Black RAL 9011	0°	2°	0°	0°	2C4U3MD120X06F020s4BK
	0°	4°	0°	0°	2C4U3MD120X06F040s4BK
	0°	6°	0°	0°	2C4U3MD120X06F060s4BK

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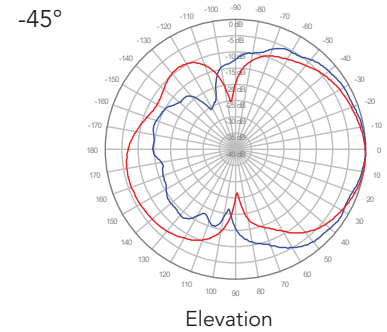
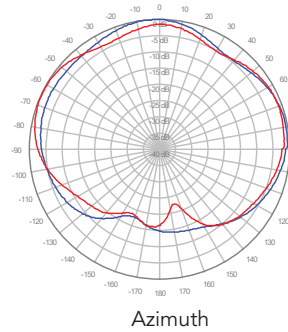
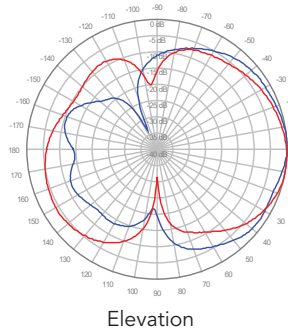
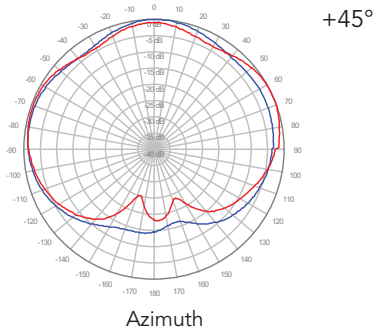
750 MHz ————
 850 MHz ————

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R1, 0° TILT



R2, 0° TILT

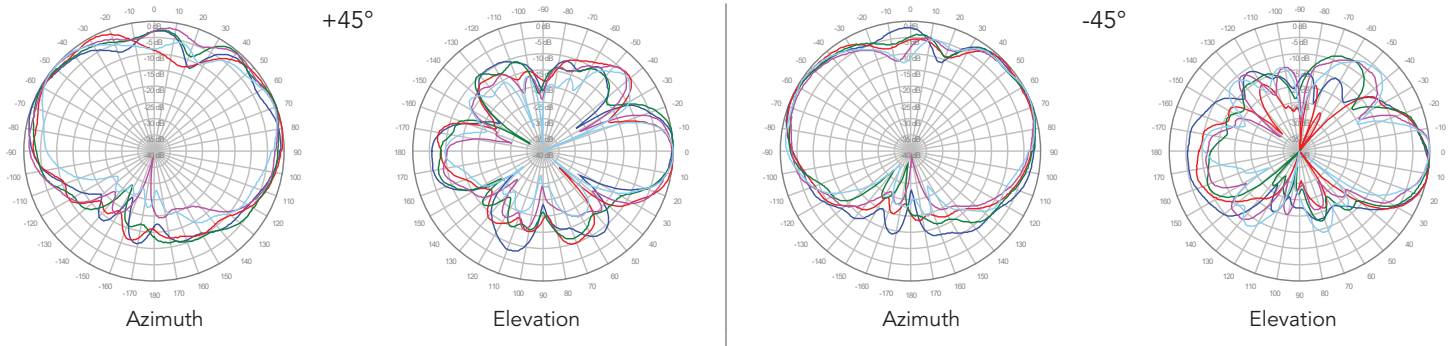


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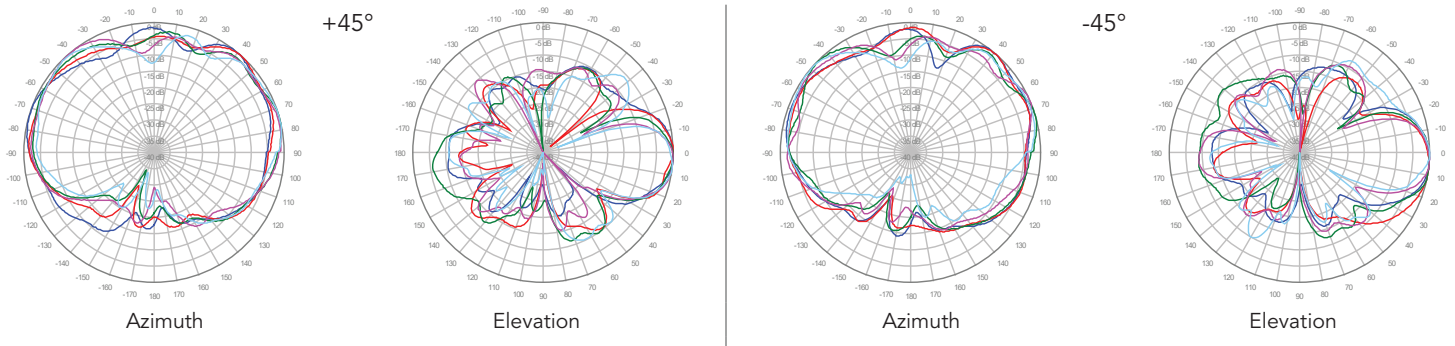
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- 1800 MHz ———
- 1900 MHz ———
- 2100 MHz ———
- 2300 MHz ———
- 2600 MHz ———

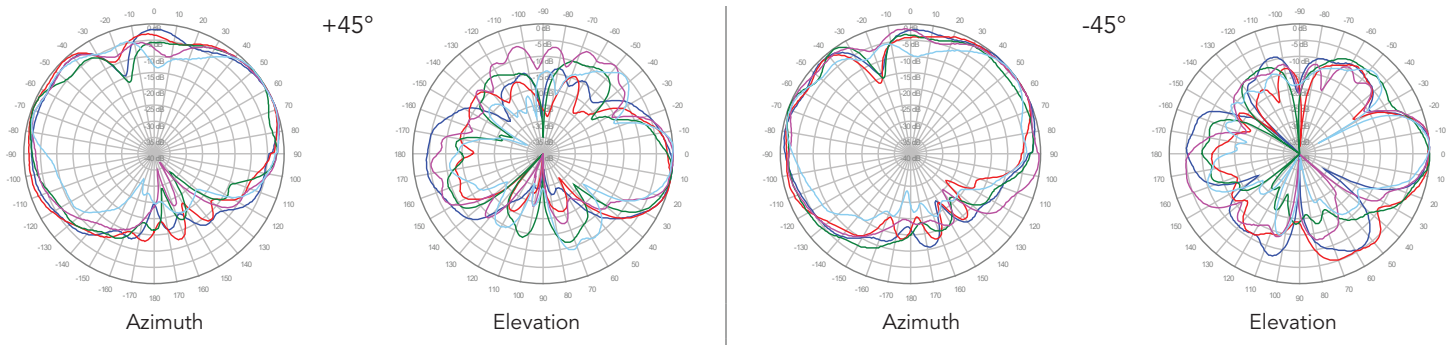
■ **Y1, 4° TILT**



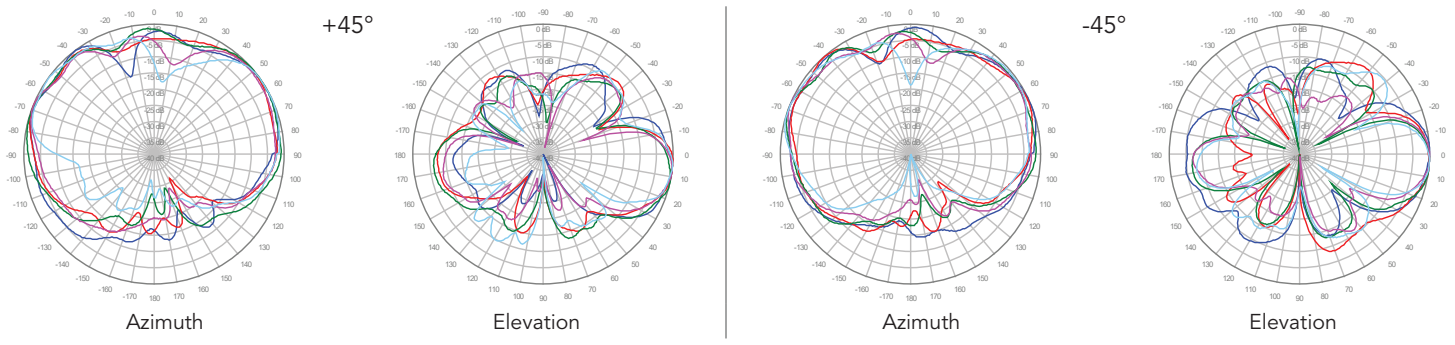
■ **Y2, 4° TILT**



■ **Y3, 4° TILT**



■ **Y4, 4° TILT**

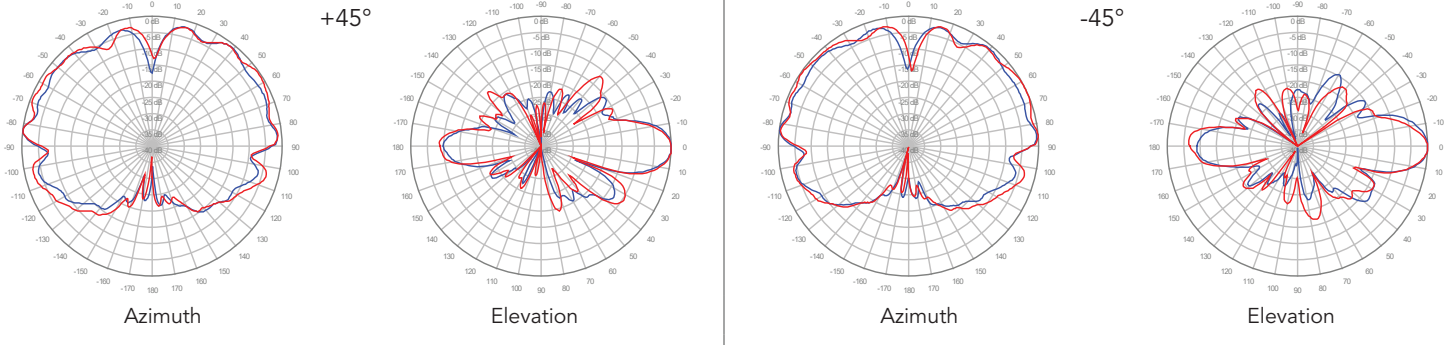


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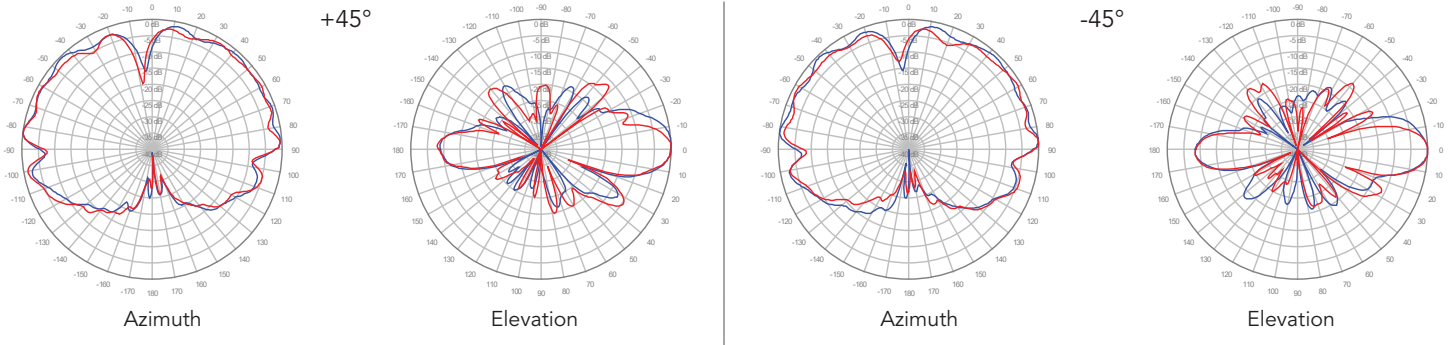
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3600 MHz ————
4000 MHz ————

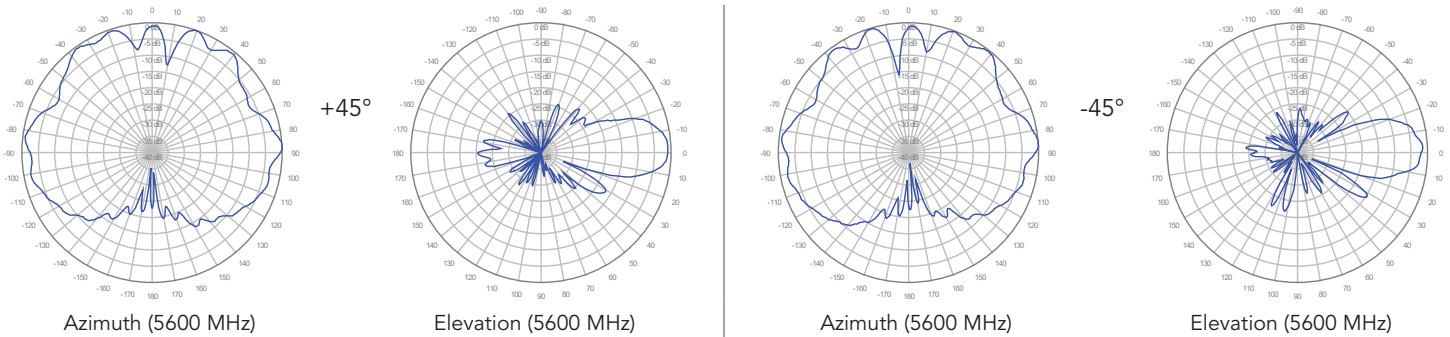
P1, 0° TILT



P2, 0° TILT



O1, 0° TILT



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