

## 2C6U4VD120X06Fwxys4



### Features

- 120° heart-shape configuration with 24 connectors
- Ideal for multi-carrier or MIMO deployments
- Broadband networks 698-960 MHz, 1695-2700 and 3300-4200 MHz
- Easily removable lifting ring
- Improvements in gain, port isolation and VSWR

PRODUCT OVERVIEW	Frequency Range (MHz)	(2x) 698-960	(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)	120°	120°	120°
	Electrical Downtilt	0°	2°, 4°, 6°	0°
	Configuration	HEART-SHAPE CONFIGURATION		
	Maximum Continuous Power Per Port @ 50° C (122° F)	100 WATTS	80 WATTS	60 WATTS
	Maximum Total Continuous Power at 50° C (122° F)	1840 WATTS		
	Connector Type	(24x) 4.3-10 FEMALE		
Dimensions	608 x Ø371 mm (23.9 x Ø14.6 in)			
Radome Color Options	GREY, BROWN or BLACK			

### ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

Frequency Range	MHz	(2x) 698-960	
Frequency Sub-Range	MHz	698-806	806-960
Polarization	---	±45°	
Gain	BASTA	dBi	5.1 ± 0.8
	MAX	dBi	5.9
Azimuth Beamwidth (3 dB)	degrees	131.5° ± 17.9°	123.6° ± 29.6°
Elevation Beamwidth (3 dB)	degrees	71.9° ± 26.2°	67° ± 16.5°
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

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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	---	±45°				
Gain	BASTA	dBi	6.9 ± 0.9	6.9 ± 1.1	6.8 ± 1.1	7.4 ± 1.0
	MAX	dBi	7.8	8.0	7.9	8.4
Azimuth Beamwidth (3 dB)	degrees	110.2° ± 41°	122.9° ± 45.1°	121.3° ± 40.9°	102.8° ± 33.9°	
Elevation Beamwidth (3 dB)	degrees	43.6° ± 11.4°	42° ± 10.9°	38.5° ± 10.9°	32.4° ± 7.8°	
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

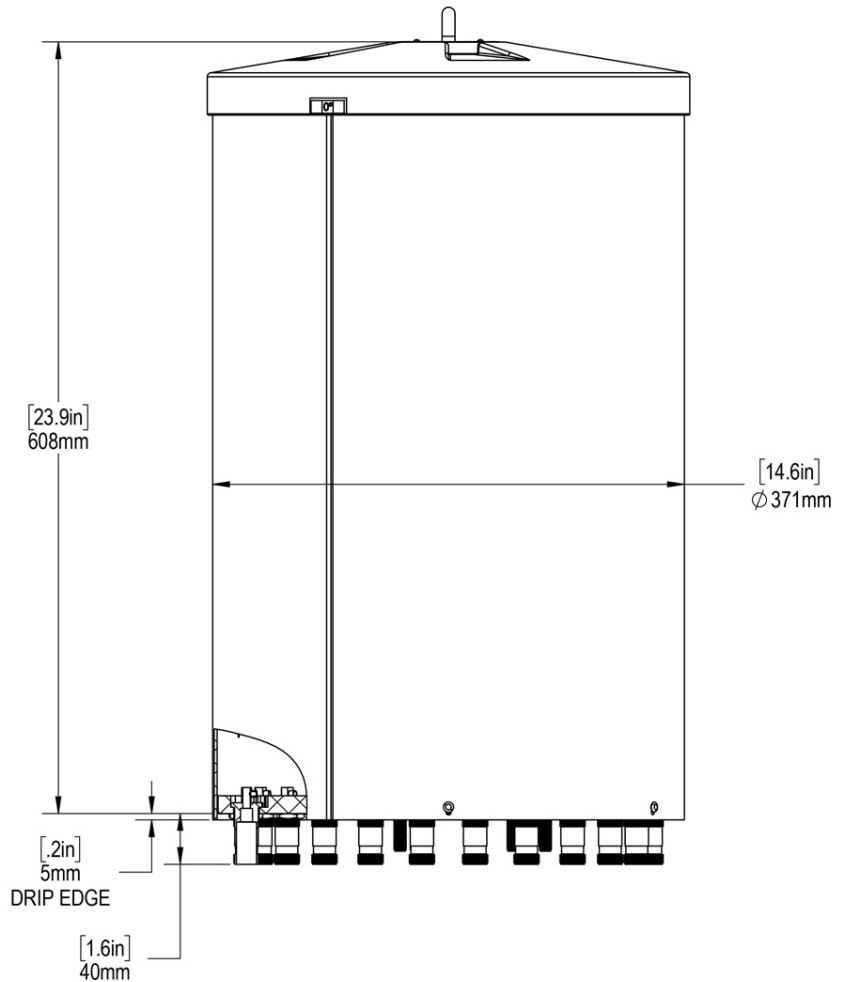
Frequency Range	MHz	(4x) 3300-4200			
Frequency Sub-Range	MHz	3300-3550	3550-3700	3700-4200	
Polarization	---	±45°			
Gain	BASTA	dBi	6.7 ± 0.9	6.7 ± 0.6	6.5 ± 0.8
	MAX	dBi	7.6	7.3	7.3
Azimuth Beamwidth (3 dB)	degrees	107.3° ± 34.6°	107.7° ± 36°	124.8° ± 33.6°	
Elevation Beamwidth (3 dB)	degrees	25.2° ± 6.2°	25.3° ± 7.1°	24.6° ± 6.6°	
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	Height	mm (in)	608 (23.9)
	Diameter	mm (in)	371 (14.6)
Net Weight - Antenna Only		kg (lbs)	18.1 (40)
Windload	Calculation	km/h (mph)	160 (100)
	Frontal	N (lbf)	191 (43)
Survival Wind Speed		km/h (mph)	241 (150)
Wind Area		m <sup>2</sup> (ft <sup>2</sup> )	0.22 (2.4)
Volume		m <sup>3</sup> (ft <sup>3</sup> )	0.07 (2.3)
Connector	Type	---	(24x) 4.3-10 Female
	Position	---	Bottom
Radome Color		---	Grey (RAL 7035) Brown (RAL 8022) Black (RAL 9011)
Lightning Protection (Grounding Type)		---	Direct Ground

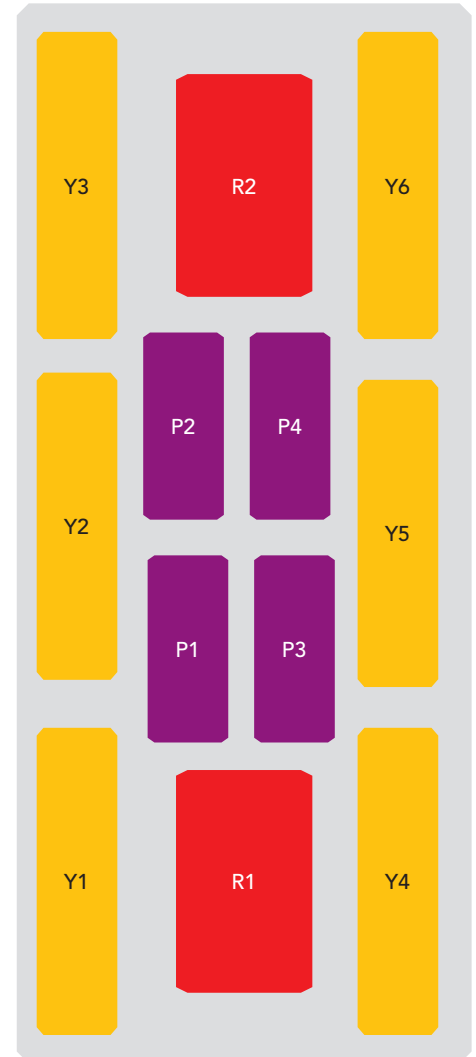


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### ARRAY LAYOUT Topology

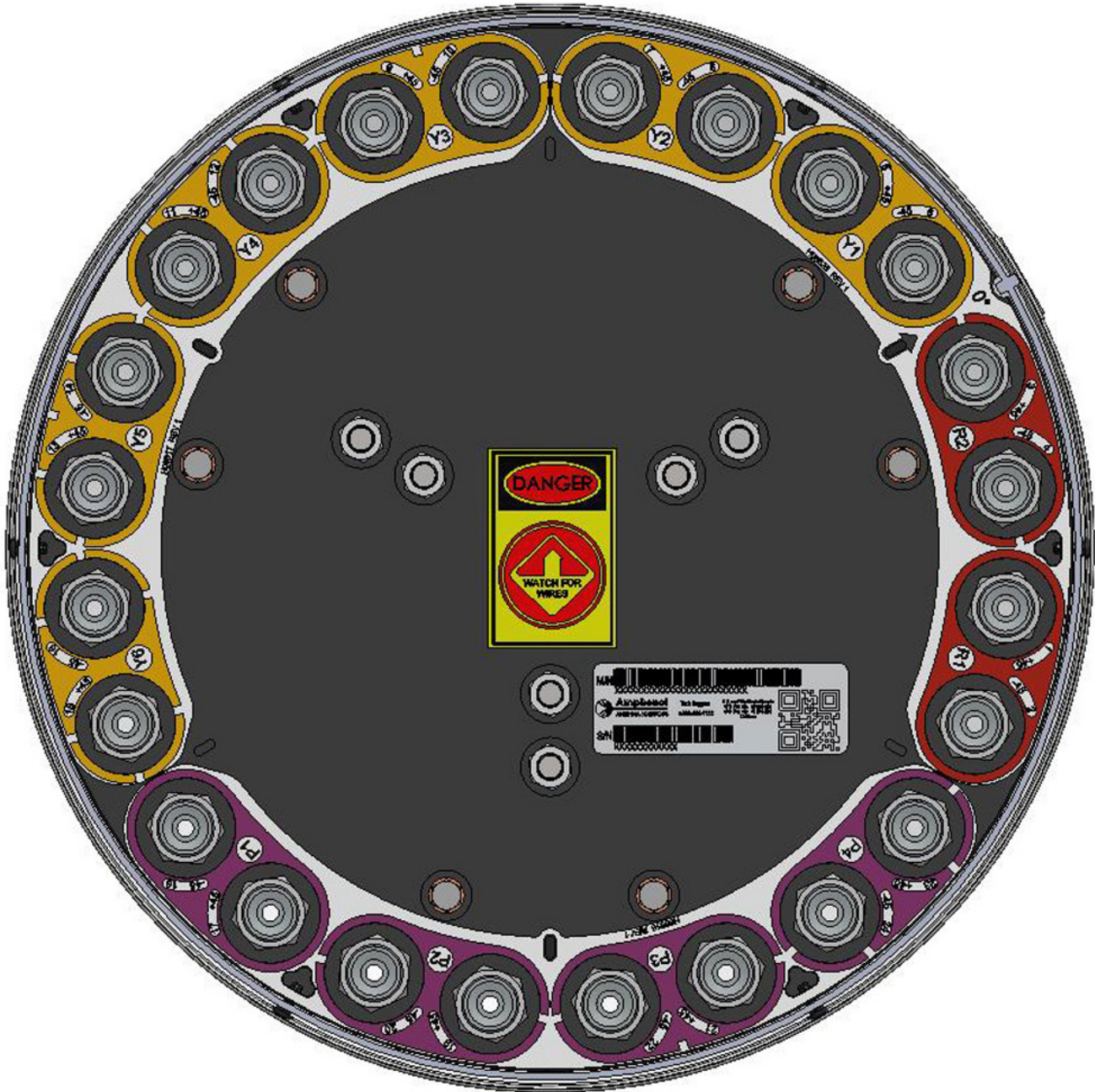
FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
698-960 MHz	<span style="color: red;">■</span> R1	1-2	(2x) 4.3-10 Female
698-960 MHz	<span style="color: red;">■</span> R1	3-4	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y1	5-6	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y2	7-8	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y3	9-10	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y4	11-12	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y5	13-14	(2x) 4.3-10 Female
1695-2700 MHz	<span style="color: yellow;">■</span> Y6	15-16	(2x) 4.3-10 Female
3300-4200 MHz	<span style="color: purple;">■</span> P1	17-18	(2x) 4.3-10 Female
3300-4200 MHz	<span style="color: purple;">■</span> P2	19-20	(2x) 4.3-10 Female
3300-4200 MHz	<span style="color: purple;">■</span> P3	21-22	(2x) 4.3-10 Female
3300-4200 MHz	<span style="color: purple;">■</span> P4	23-24	(2x) 4.3-10 Female



*The illustration is not shown to scale.*

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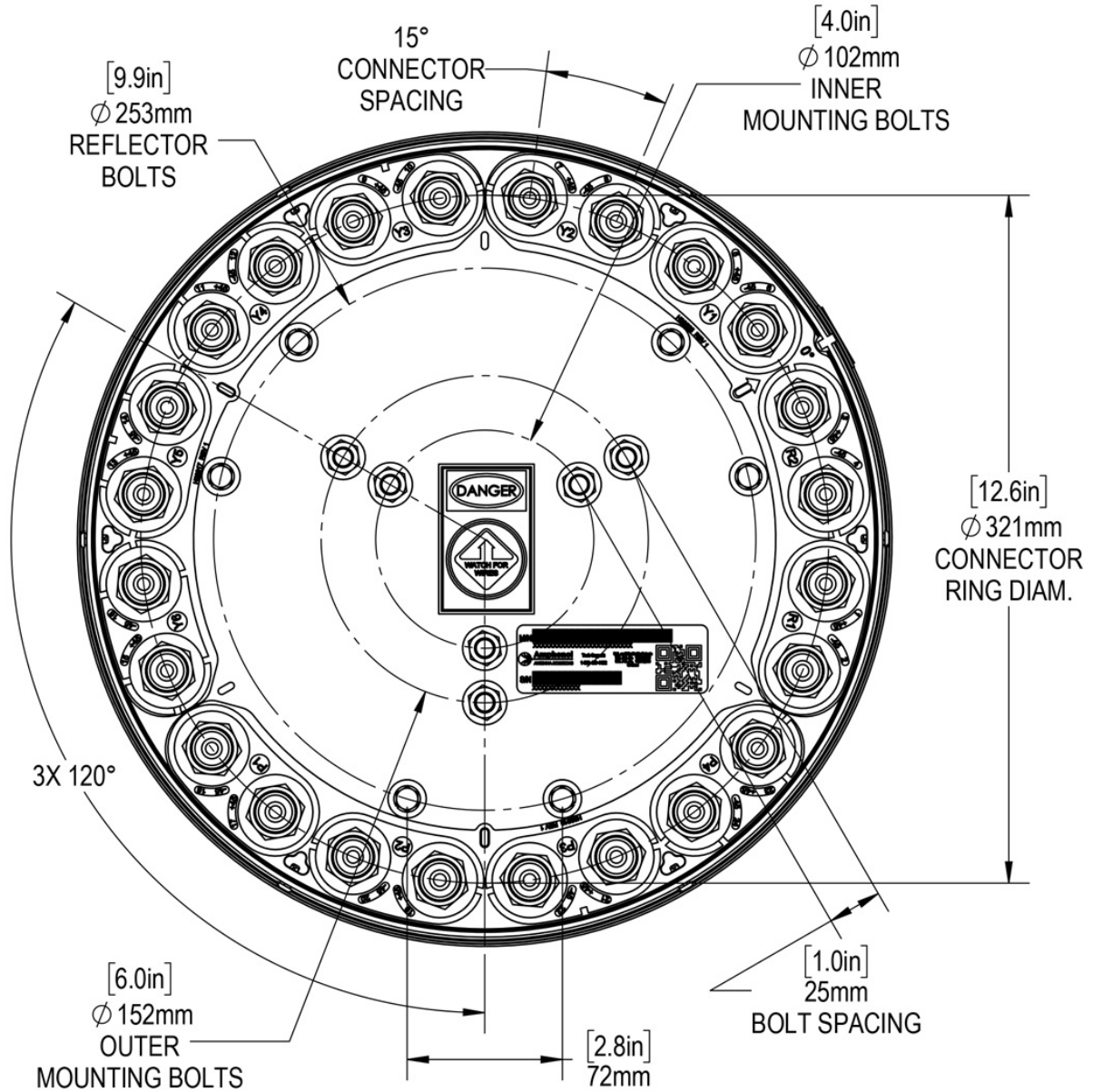
## BOTTOM VIEW - LABELING



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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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## 2C6U4VD120X06Fwxy<sub>s</sub>4

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

NUMBER OF BANDS and OPERATING FREQUENCY			PATTERN TYPE	AZIMUTH BMWDTH	POLARIZATION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
2C	6U	4V	D	120	X	06	F	wxy	s	4	BK BR
(2x) 698-960	(6x) 1695-2700	(4x) 3300-4200	Dual Sector Heart-Shape	120°	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
	698-960 MHz	1695-2700 MHz	3300-4200 MHz	
Grey RAL 7035	0°	2°	0°	2C6U4VD120X06F020s4
	0°	4°	0°	2C6U4VD120X06F040s4
	0°	6°	0°	2C6U4VD120X06F060s4
Brown RAL 8022	0°	2°	0°	2C6U4VD120X06F020s4BR
	0°	4°	0°	2C6U4VD120X06F040s4BR
	0°	6°	0°	2C6U4VD120X06F060s4BR
Black RAL 9011	0°	2°	0°	2C6U4VD120X06F020s4BK
	0°	4°	0°	2C6U4VD120X06F040s4BK
	0°	6°	0°	2C6U4VD120X06F060s4BK

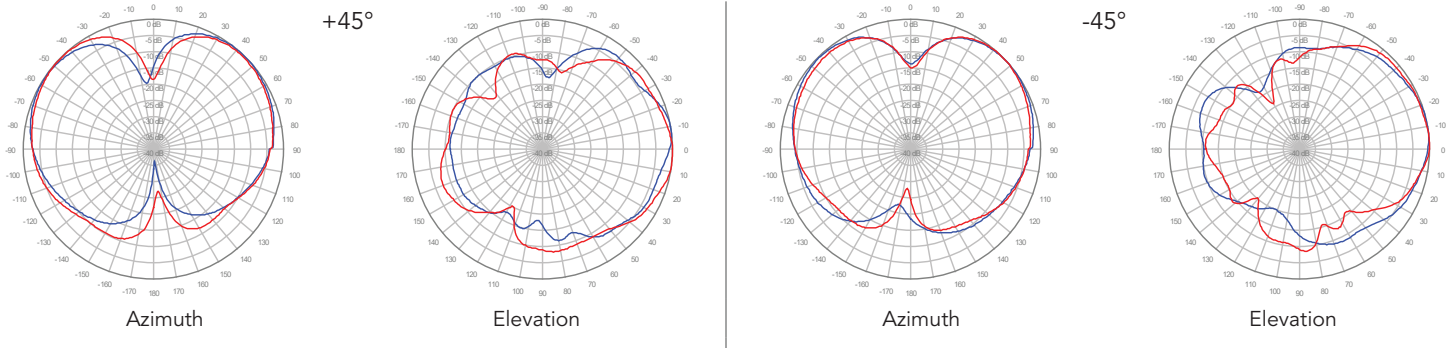
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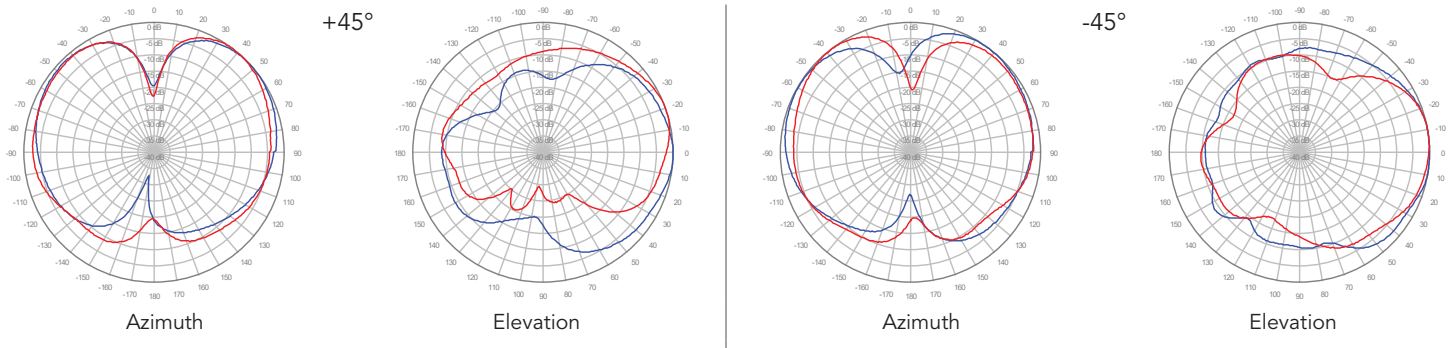
750 MHz ————  
850 MHz ————

## 2C6U4VD120X06Fwxys4

### R1, 0° TILT



### R2, 0° TILT

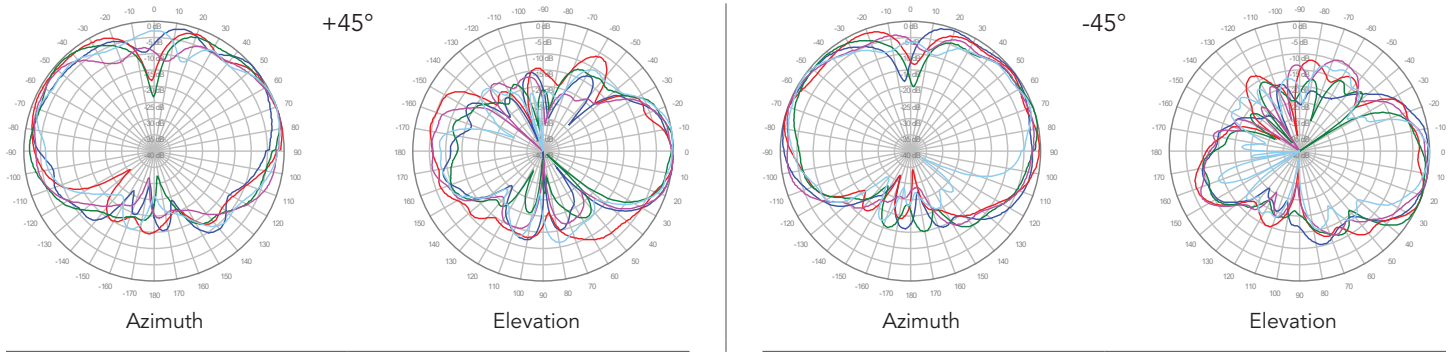


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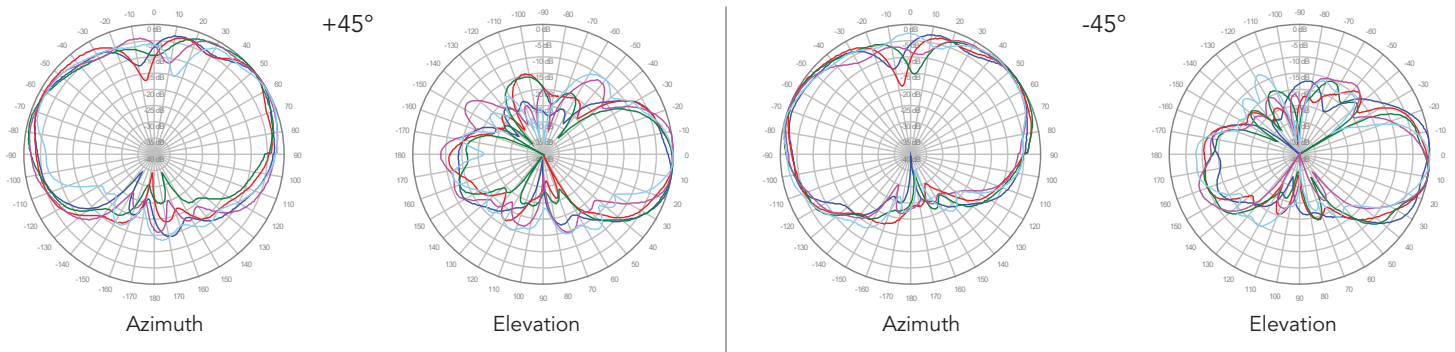
## 2C6U4VD120X06Fwxys4

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

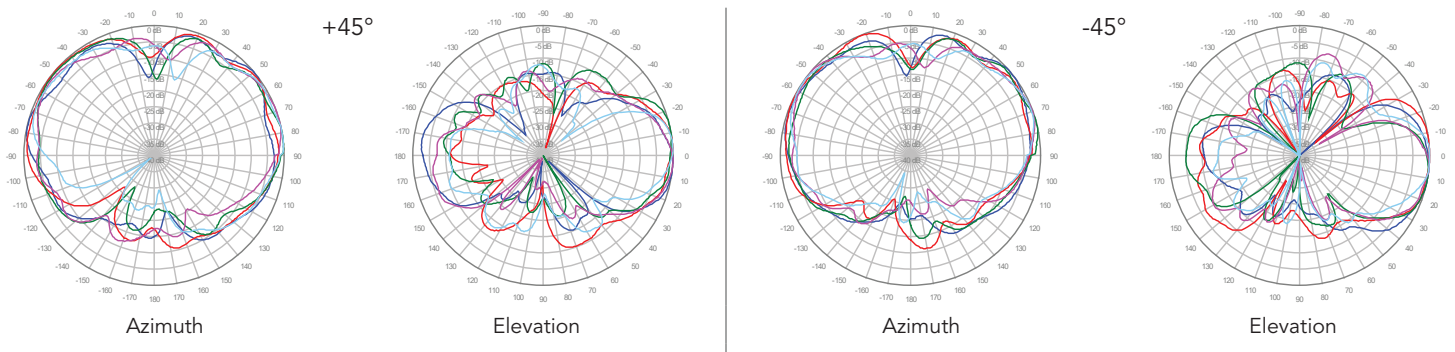
### Y1, 2° TILT



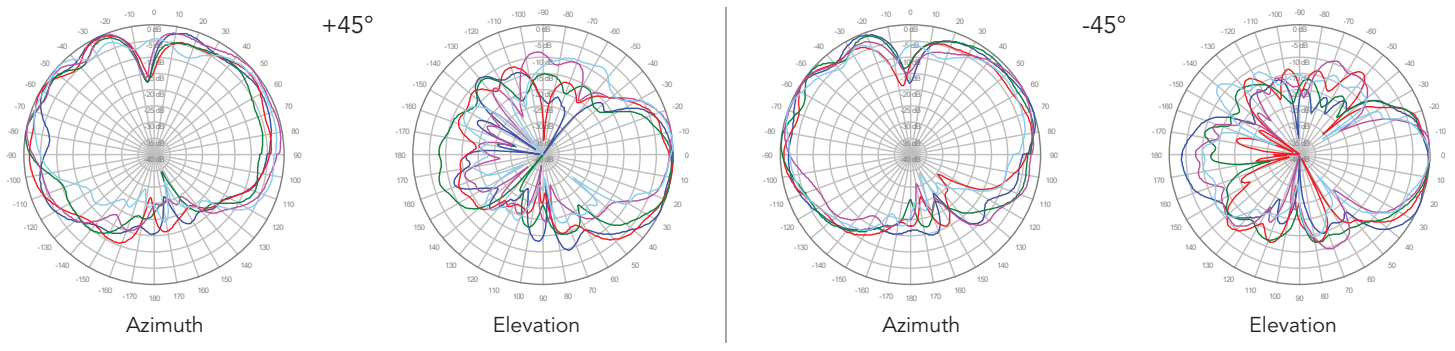
### Y2, 2° TILT



### Y3, 2° TILT



### Y4, 2° TILT

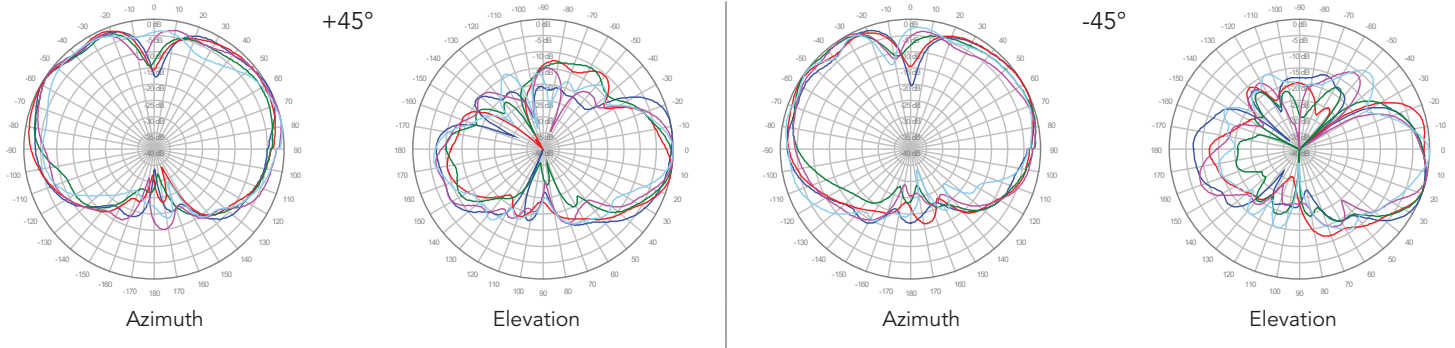


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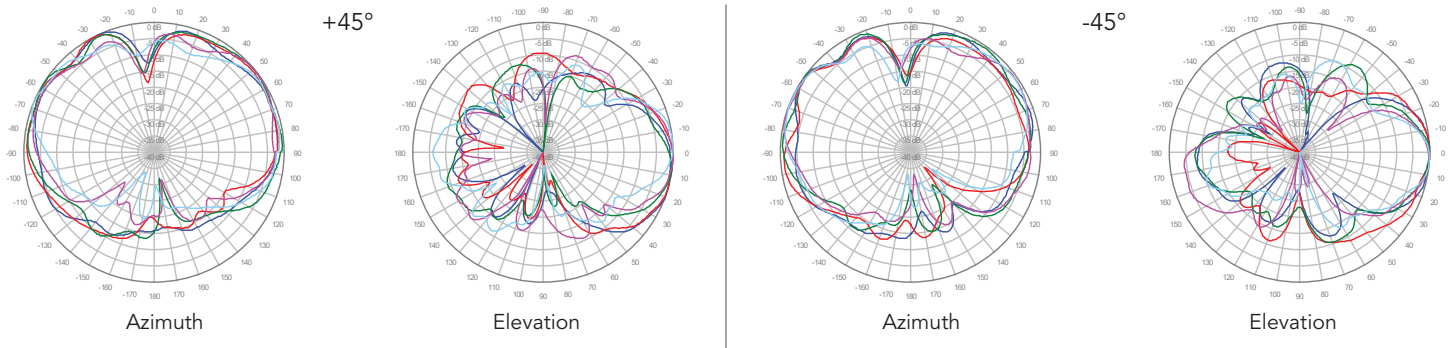
## 2C6U4VD120X06Fwxys4

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

### ■ Y5, 2° TILT



### ■ Y6, 2° TILT

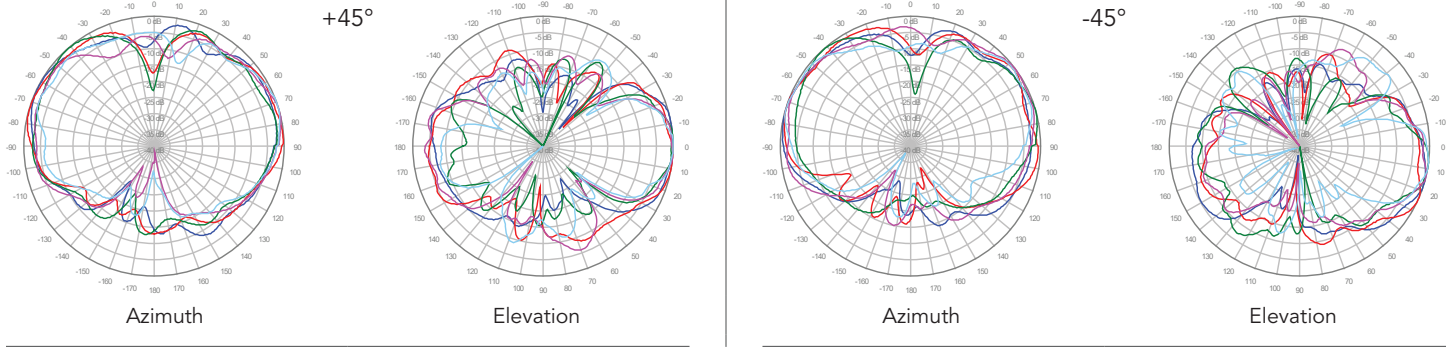


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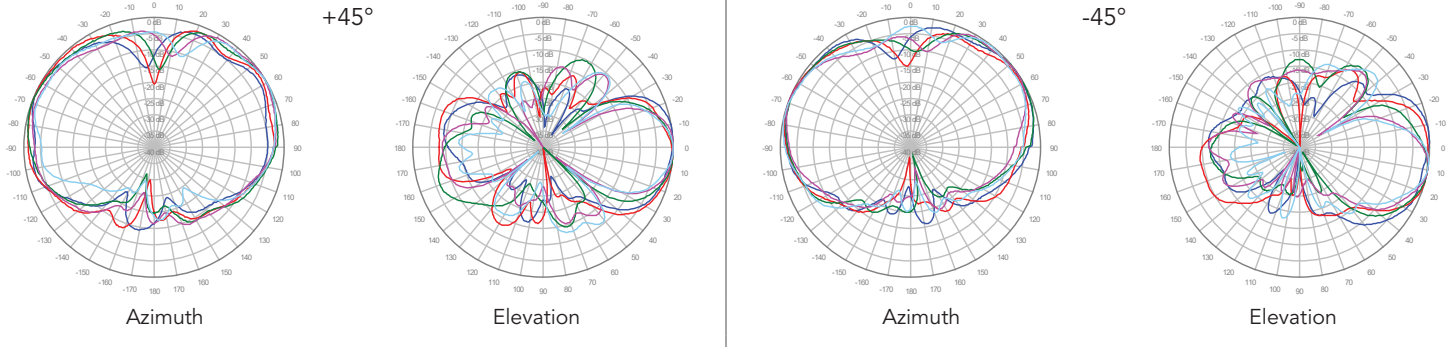
## 2C6U4VD120X06Fwxys4

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

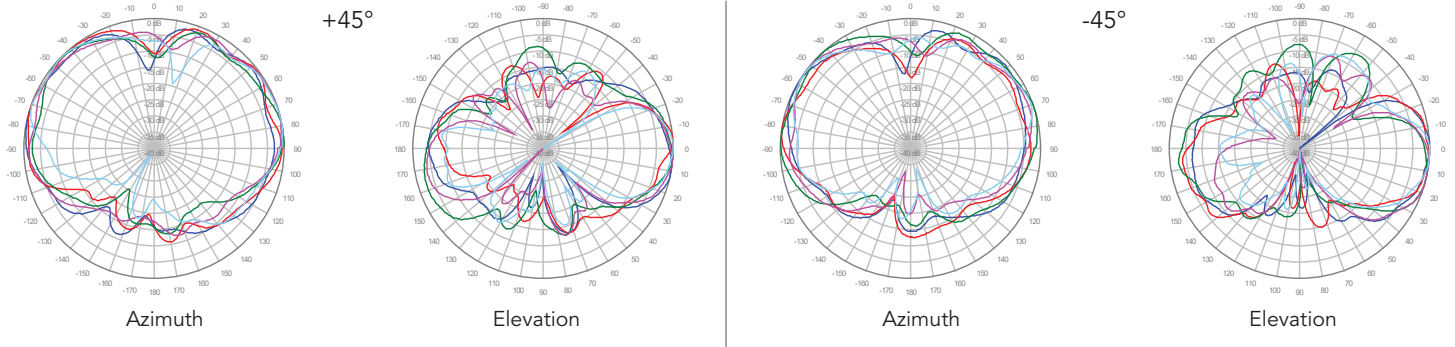
### Y1, 4° TILT



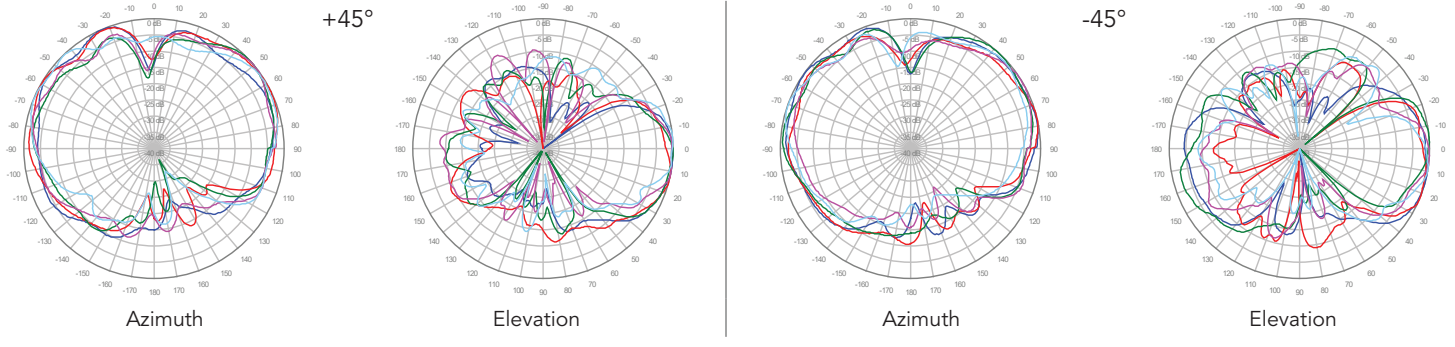
### Y2, 4° TILT



### Y3, 4° TILT



### Y4, 4° TILT

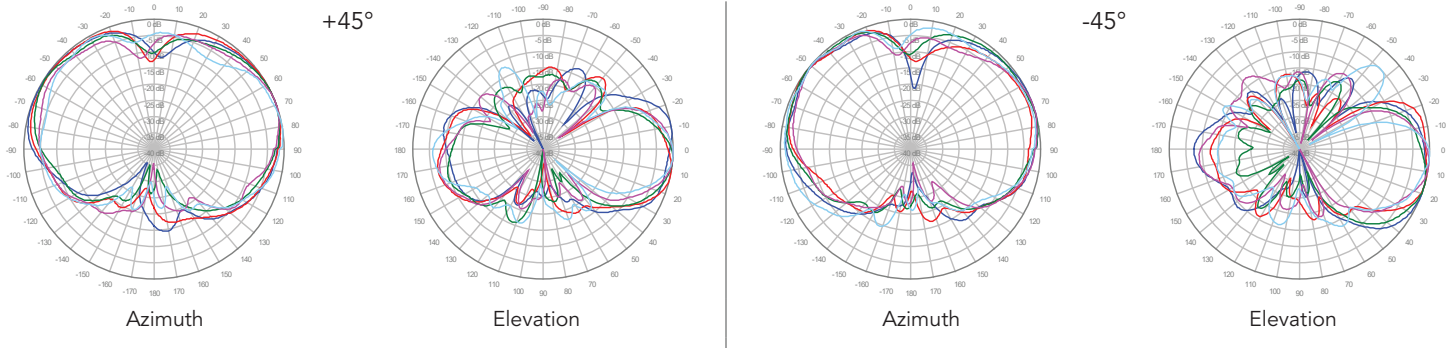


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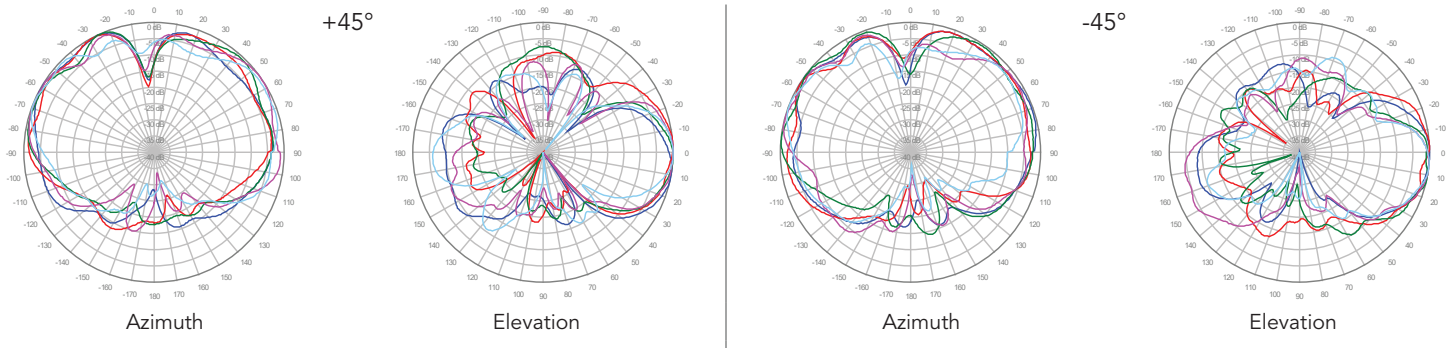
## 2C6U4VD120X06Fwxys4

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

■ Y5, 4° TILT



■ Y6, 4° TILT

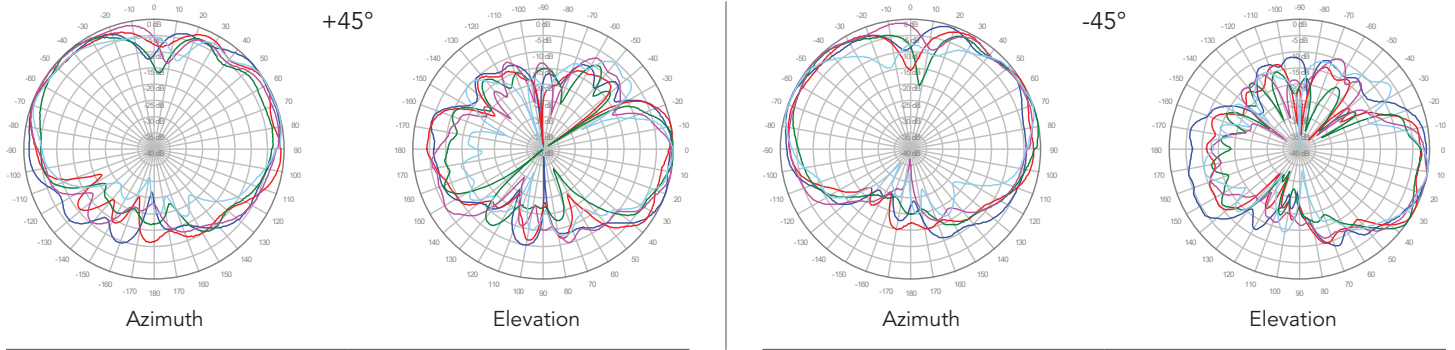


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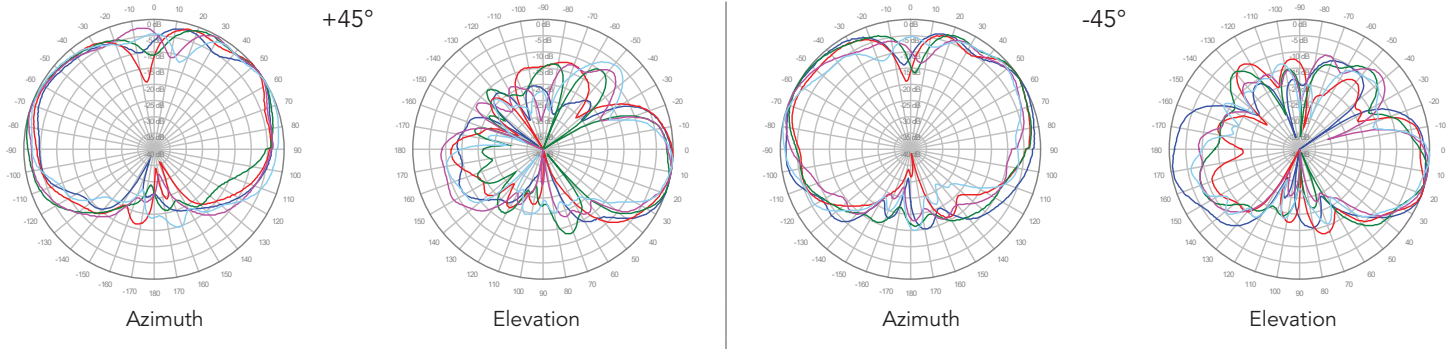
## 2C6U4VD120X06Fwxys4

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

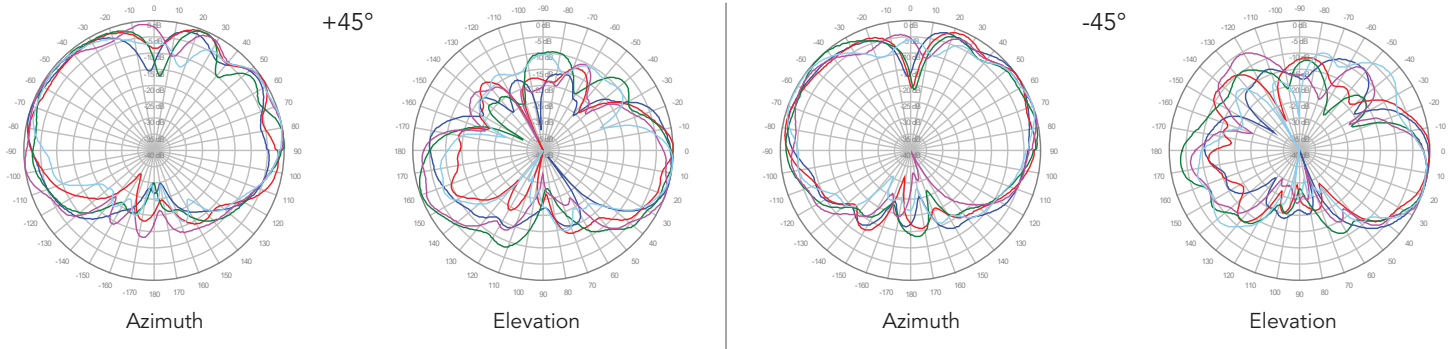
### Y1, 6° TILT



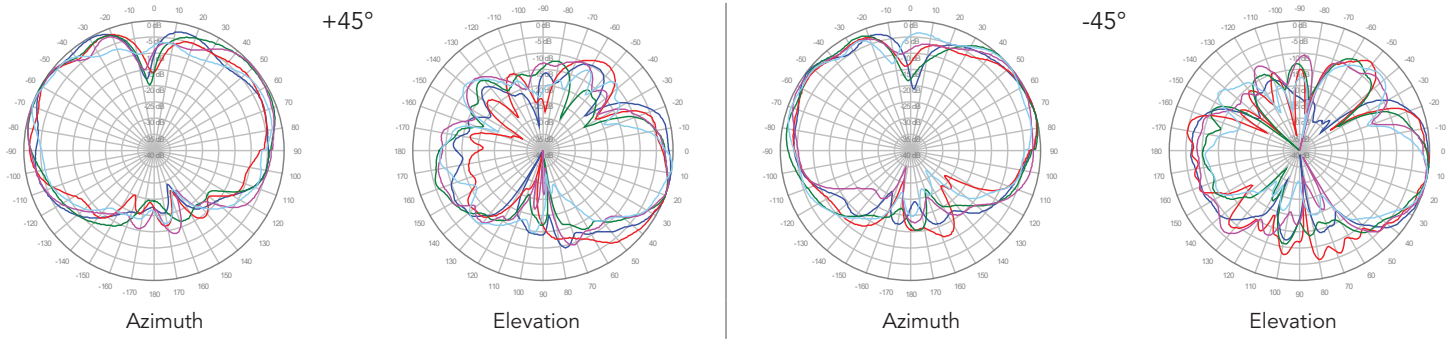
### Y2, 6° TILT



### Y3, 6° TILT



### Y4, 6° TILT

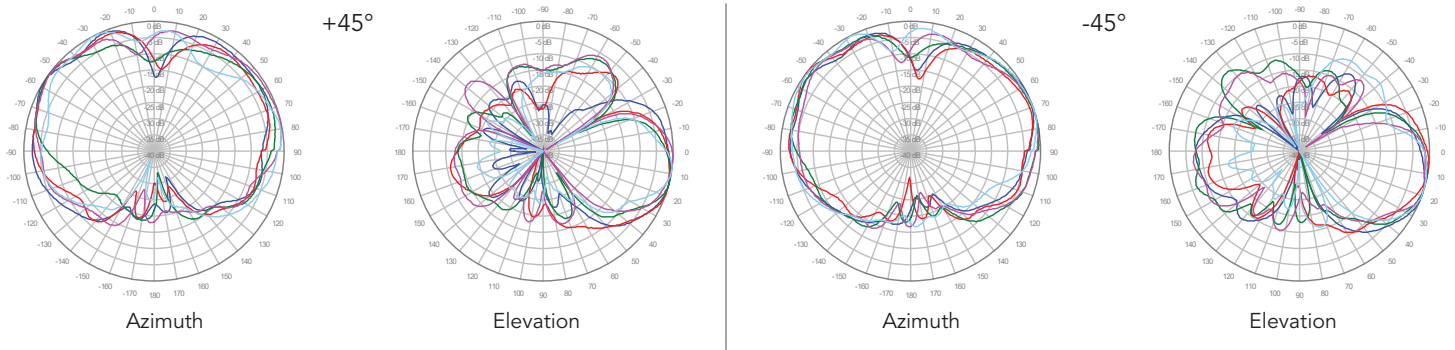


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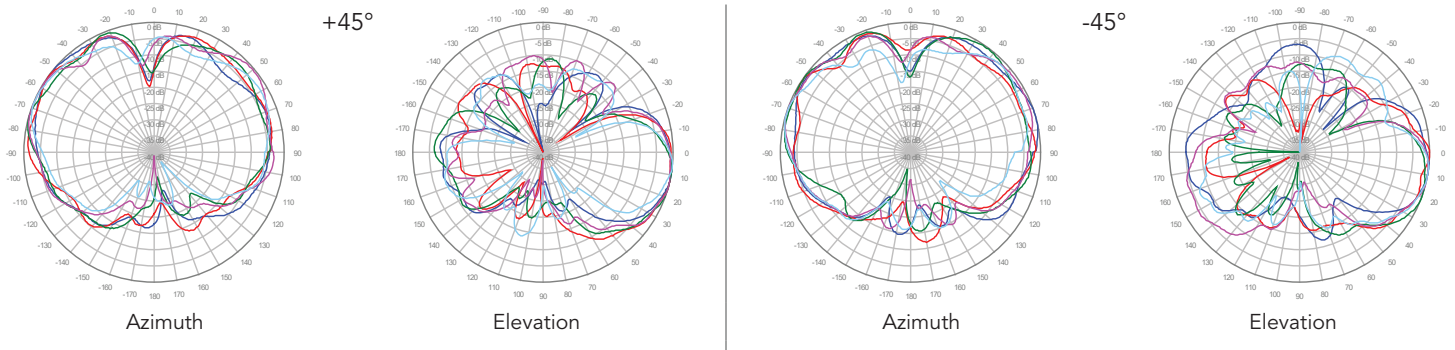
## 2C6U4VD120X06Fwxys4

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

■ Y5, 6° TILT



■ Y6, 6° TILT

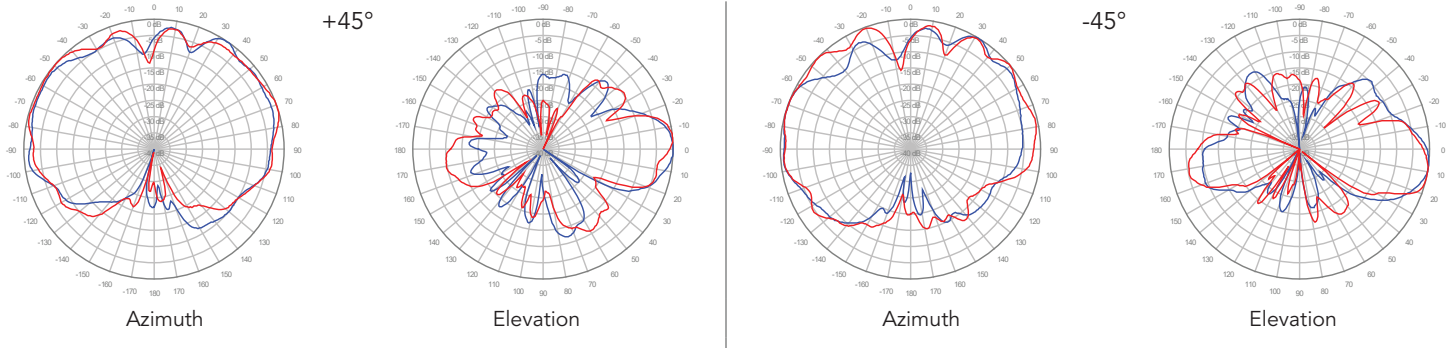


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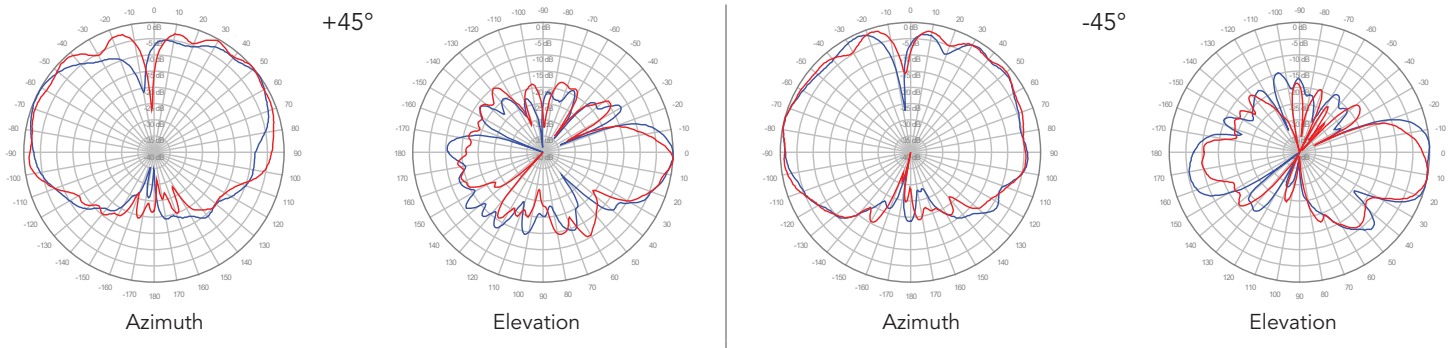
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3600 MHz ————  
4000 MHz ————

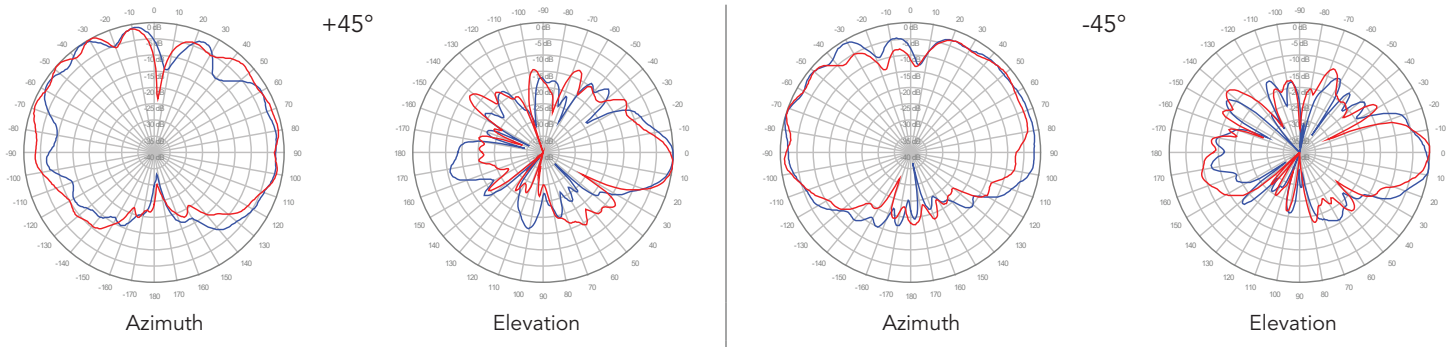
### P1, 0° TILT



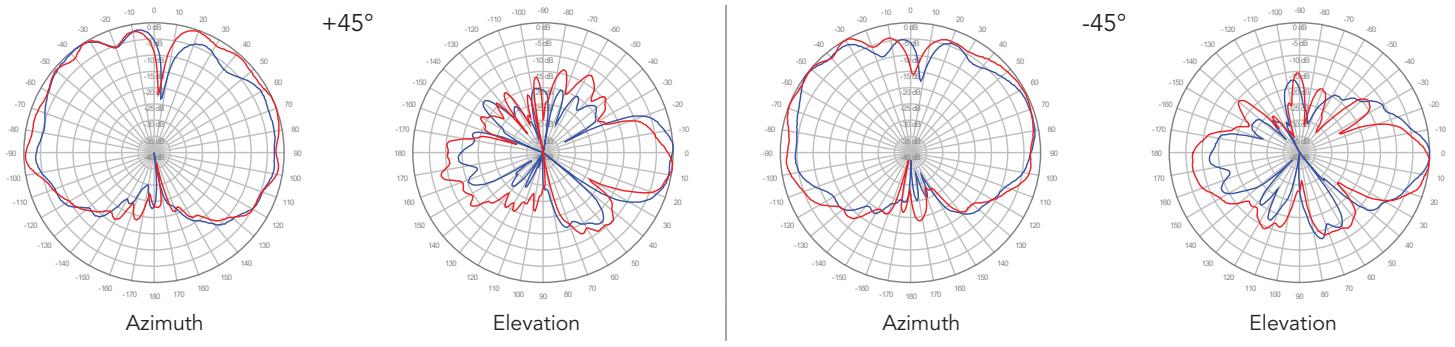
### P2, 0° TILT



### P3, 0° TILT



### P4, 0° TILT



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