Amphenol ANTENNA SOLUTIONS

20-Port Canister Antenna

(1x) 696-960 | (1x) 1695-2700 | (3x) 3300-4200 MHz

2-SECTOR BACK-TO-BACK CONFIGURATION | 24.0 IN | FIXED TILT

CU3VB070X06Fwxys4

Features

- 2 sector back-to-back configuration with 20 connectors
- Sectors are 180° in rotation
- R1, Y1, P1, P2, P3 on 1st sector; R2, Y2, P4, P5, P6 on 2nd sector
- Ideal for multi-carrier or 4x4 MIMO deployments
- Broadband networks 696-960, 1695-2700 and 3300-4200 MHz
- Easily removable lifting ring

PRODUCT OVERVIEW			
Frequency Range (MHz)	(1x) 696-960	(1x) 1695-2700	(3x) 3300-4200
Array	R1 R2	Y1 Y2	P1 P2 P3 P4 P5 P6
Connector	4 PORTS	4 PORTS	12 PORTS
Polarization	XPOL	XPOL	XPOL
Azimuth Beamwidth (avg)	SECTORIZED	SECTORIZED	SECTORIZED
Electrical Downtilt	0°	2°, 4°, 6°	6°
Configuration	2-SECTOR BACK-TO-BACK		
Maximum Continuous Power Per Port @ 50° C (122° F)	100 WATTS	100 WATTS	50 WATTS
Maximum Total Continuous Power at 50° C (122° F)	1400 WATTS		
Connector Type	(20x) 4.3-10 FEMALE		
Dimensions	610 x Ø371 mm (24.0 x Ø14.6 in)		
Radome Color Options	GREY, BROWN or BLACK		

ELECTRICAL SPECIFICATIONS			R1 R2	
Frequency Range		MHz	(1x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	±45°	
Gain	BASTA	dBi	9.0 ± 1.7	9.7 ± 1.0
	MAX	dBi	10.7	10.7
Azimuth Beamwidth (3 dB)		degrees	90.5° ± 12.6°	84.0° ± 9.6°
Elevation Beamwidth (3 dB)		degrees	44.8° ± 7.0°	37.5° ± 5.0°
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	N/A
Front-to-Back Ratio		dB	> 15.6	> 15.9
Isolation	Intraband	dB	> 25	
	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

Frequency Range		MHz	(1x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	±45°			
Gain	BASTA	dBi	12.6 ± 0.6	12.7 ± 0.7	12.9 ± 0.7	13.9 ± 0.7
	MAX	dBi	13.2	13.4	13.6	14.6
Azimuth Beamwidth (3 dB)		degrees	63.6° ± 13.2°	75.5° ± 10.6°	73.3° ± 10°	54.6° ± 10.2°
Elevation Beamwidth (3 dB)		degrees	21.6° ± 1.5°	20.2° ± 1.2°	19.5° ± 1.4°	15.7° ± 2.5°
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	> 12	N/A	N/A	N/A
Front-to-Back Ratio		dB	> 22.6	> 21.5	> 20.9	> 21.7
Isolation	Intraband	dB	> 25			
	Interband	dB	> 28 same band; > 30 different band			

ELECTRICAL SPECIFICATIONS Sectorized

■ P1 ■ P2 ■ P3 ■ P4 ■ P5 ■ P6

Frequency Range		MHz	(3x) 3300-4200		
Frequency Sub-Range		MHz	3300-3550	3550-3700	3700-4200
Polarization		---	±45°		
Gain	BASTA	dBi	12.6 ± 1.1	12.1 ± 1.5	12.0 ± 1.3
	MAX	dBi	13.7	13.6	13.3
Azimuth Beamwidth (3 dB)		degrees	69.4° ± 14.7°	70.3° ± 20.6°	65.9° ± 25.7°
Elevation Beamwidth (3 dB)		degrees	21.3° ± 2.6°	21.1° ± 3.2°	19.3° ± 3.5°
Electrical Downtilt		degrees	(y) 6°		
Impedance		Ohms	50Ω		
VSWR		---	≤ 1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153		
Upper Sidelobe Suppression		dB	N/A	N/A	N/A
Front-to-Back Ratio		dB	> 26.7	> 27.4	> 26.4
Isolation	Intraband	dB	> 25		
	Interband	dB	> 28 same band; > 30 different band		

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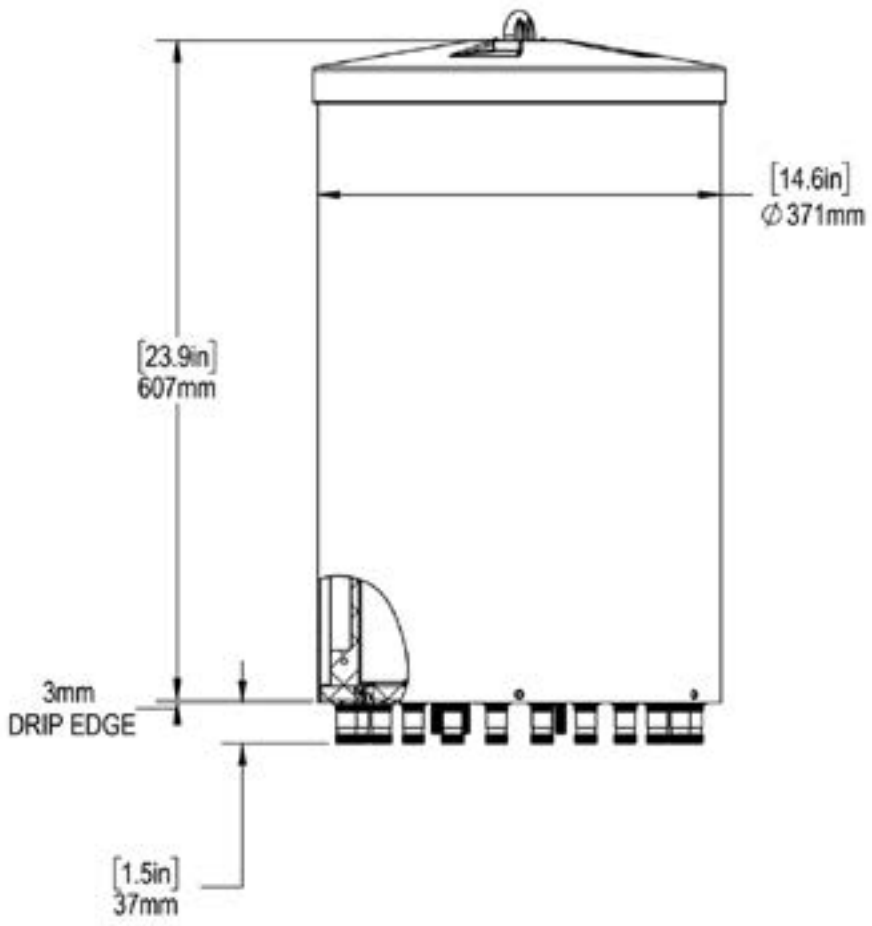
MECHANICAL SPECIFICATIONS

Antenna	Height		mm (in)	610 (24.0)
	Diameter		mm (in)	371 (14.6)
Net Weight - Antenna Only			kg (lbs)	10 (22)
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	---	(20x) 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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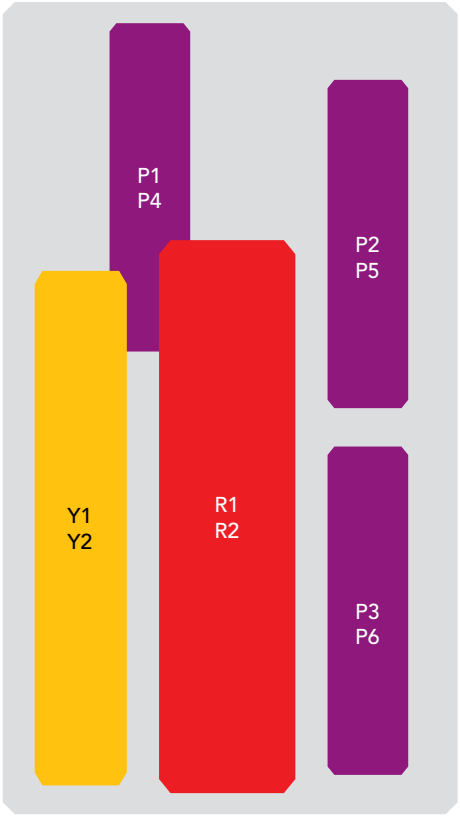
ARRAY LAYOUT Topology

FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
696-960 MHz	R1	1-2	(2x) 4.3-10 Female
	R2	3-4	(2x) 4.3-10 Female
1695-2700 MHz	Y1	5-6	(2x) 4.3-10 Female
	Y2	7-8	(2x) 4.3-10 Female
3300-4200 MHz	P1	9-10	(2x) 4.3-10 Female
	P2	11-12	(2x) 4.3-10 Female
3300-4200 MHz	P3	13-14	(2x) 4.3-10 Female
	P4	15-16	(2x) 4.3-10 Female
3300-4200 MHz	P5	17-18	(2x) 4.3-10 Female
	P6	19-20	(2x) 4.3-10 Female



The illustration is not shown to scale.

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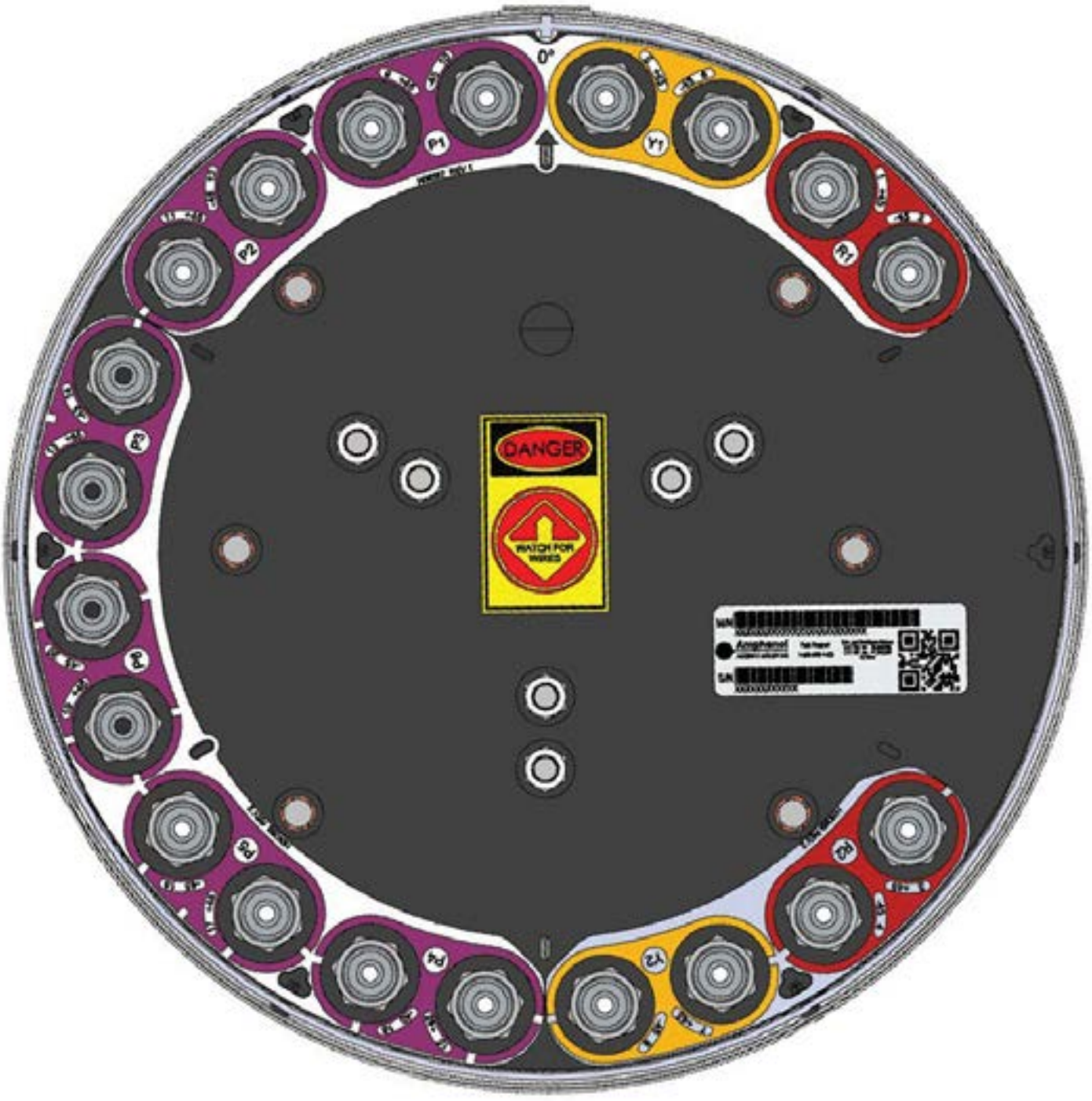
BOTTOM VIEW - LABELING



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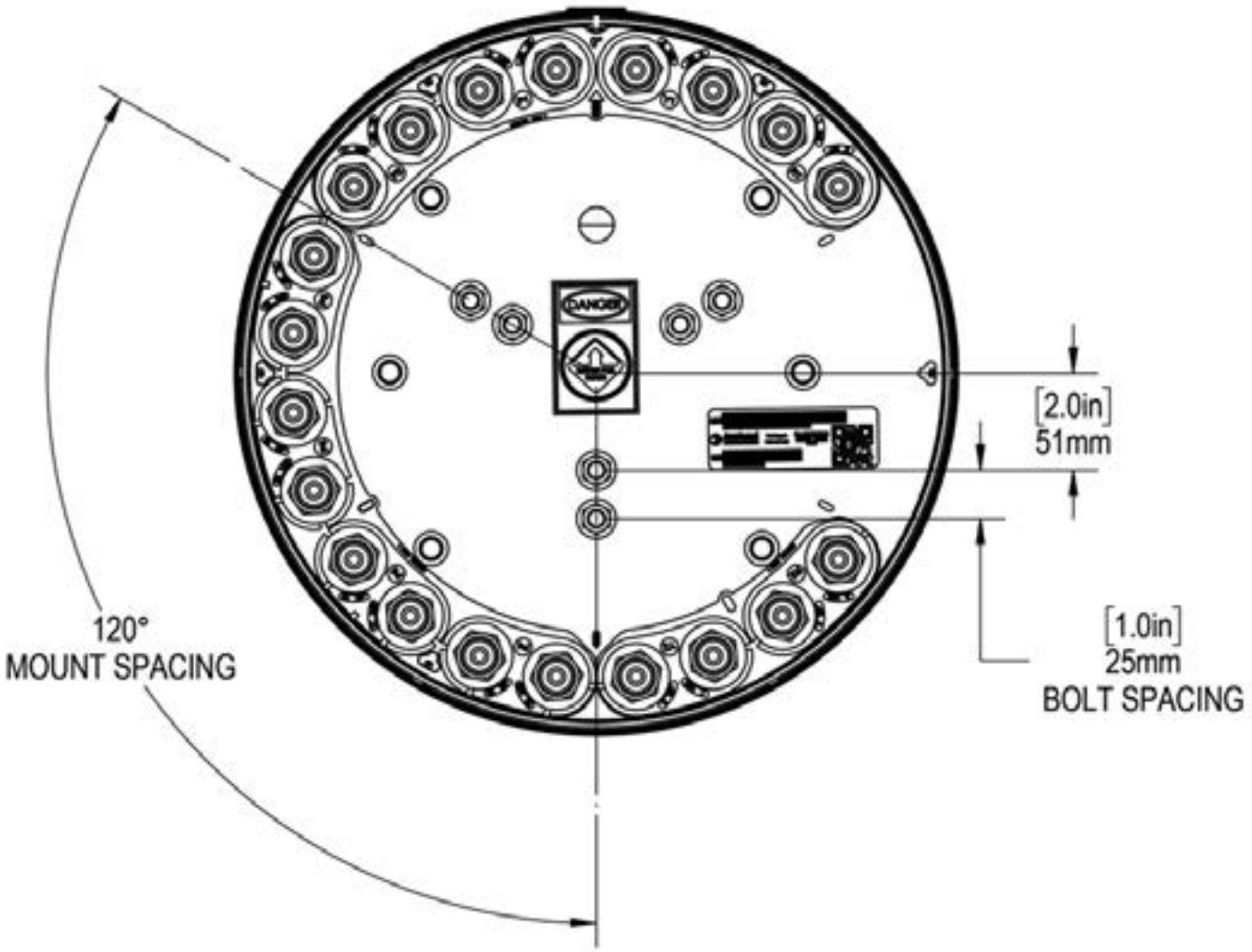
BOTTOM VIEW - CONNECTOR DIAGRAM



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

CU3VB070X06Fwxys4

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

NUMBER OF BANDS & OPERATING FREQUENCY			PATTERN TYPE	AZIMUTH BMWDTH	POLARIZA-TION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
C	U	3V	B	070	X	06	F	wxy	s	4	BK BR
(1x) 696-960	(1x) 1695-2700	(3x) 3300-4200	Back-to-Back (2 Sector)	~70°	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 mehcanical 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

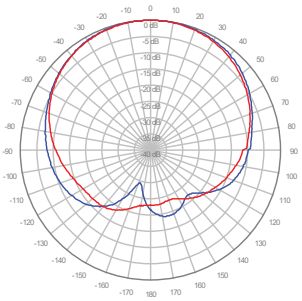
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND			ANTENNA MODEL
	696-960 MHz	1695-2700 MHz	3300-4200 MHz	
Grey RAL 7035	0°	2°	6°	CU3VB070X06F026s4
	0°	4°	6°	CU3VB070X06F046s4
	0°	6°	6°	CU3VB070X06F066s4
Black RAL 9011	0°	2°	6°	CU3VB070X06F026s4BK
	0°	4°	6°	CU3VB070X06F046s4BK
	0°	6°	6°	CU3VB070X06F066s4BK
Brown RAL 8022	0°	2°	6°	CU3VB070X06F026s4BR
	0°	4°	6°	CU3VB070X06F046s4BR
	0°	6°	6°	CU3VB070X06F066s4BR

CU3VB070X06Fwxys4

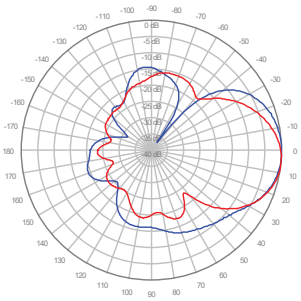
750 MHz
850 MHz

R1, 0° TILT

+45°

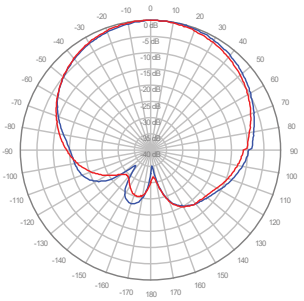


Azimuth



Elevation

-45°



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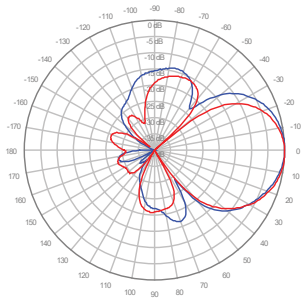
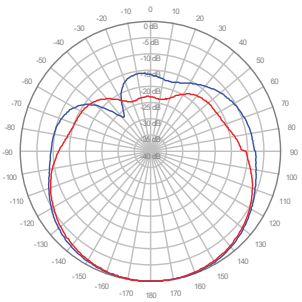


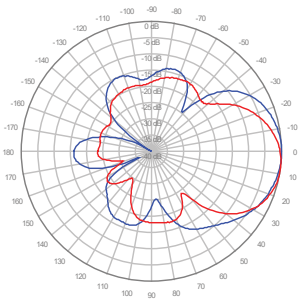
Elevation

R2, 0° TILT

+45°

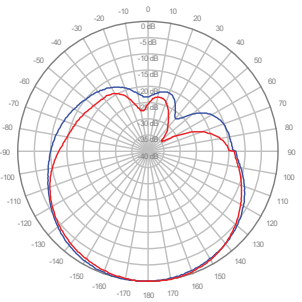


Azimuth

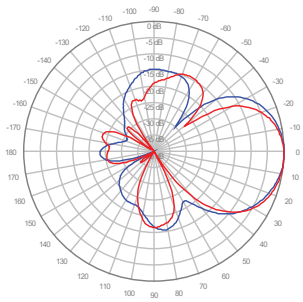


Elevation

-45°



Azimuth



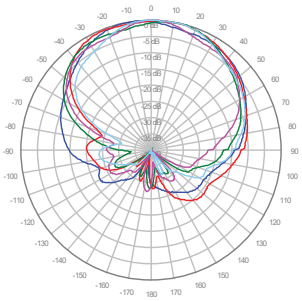
Elevation

CU3VB070X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 2° TILT

+45°



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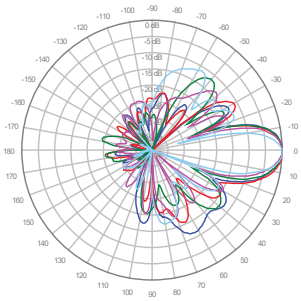
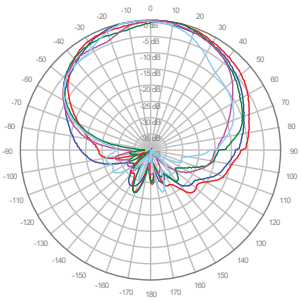


Elevation

-45°



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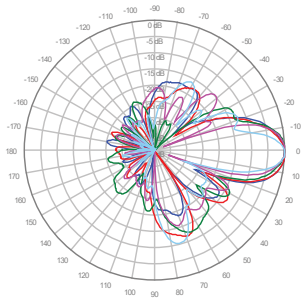
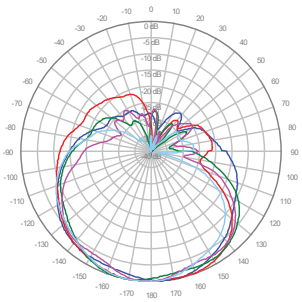


Elevation

Y2, 2° TILT

+45°



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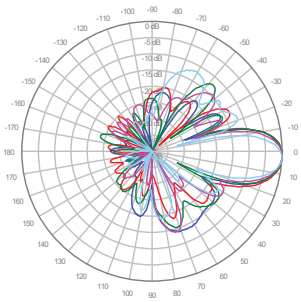
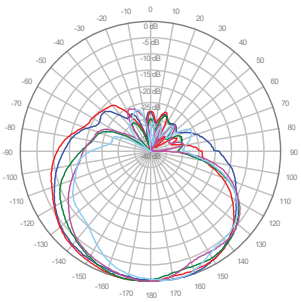


Elevation

-45°



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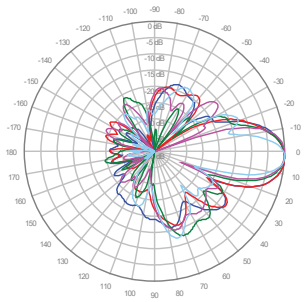
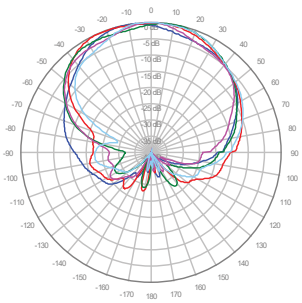


Elevation

Y1, 6° TILT

+45°



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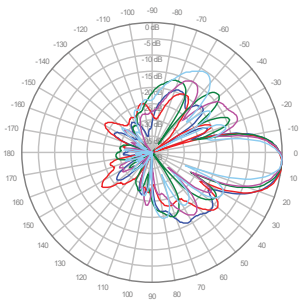
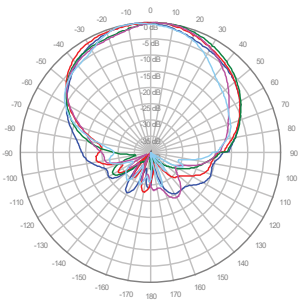


Elevation

-45°



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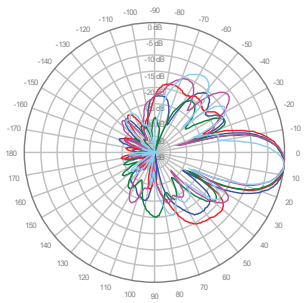
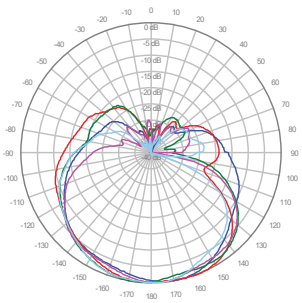


Elevation

Y2, 6° TILT

+45°



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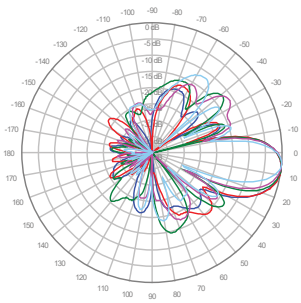
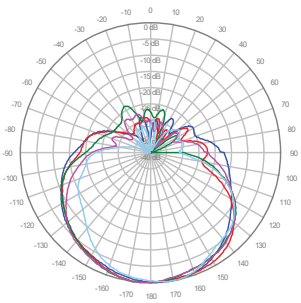


Elevation

-45°



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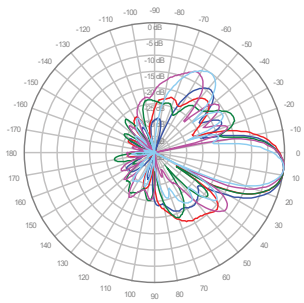


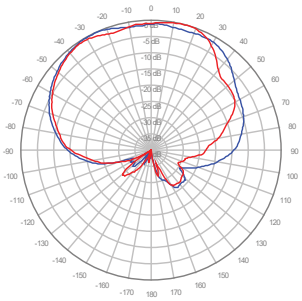
Elevation

CU3VB070X06Fwxys4

3600 MHz
4000 MHz

P1, 6° TILT

+45°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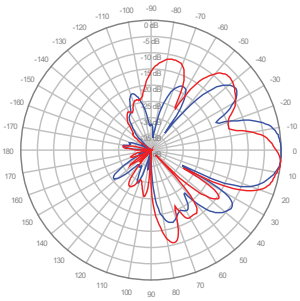
Elevation

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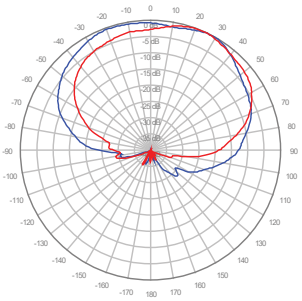
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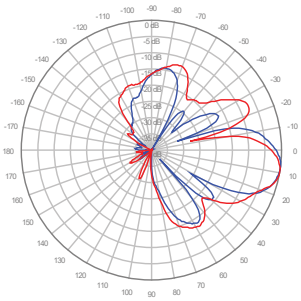
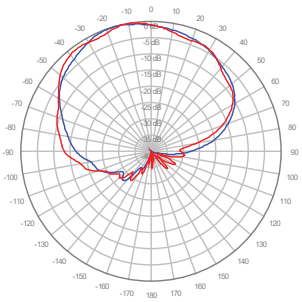

Elevation

P2, 6° TILT

+45°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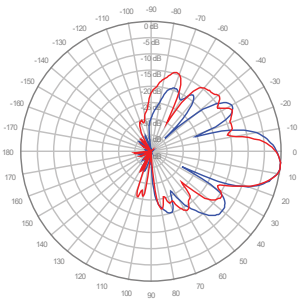
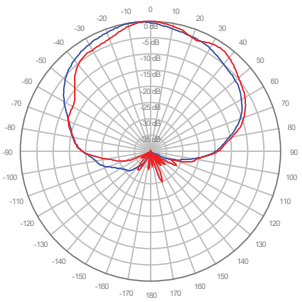

Elevation

-45°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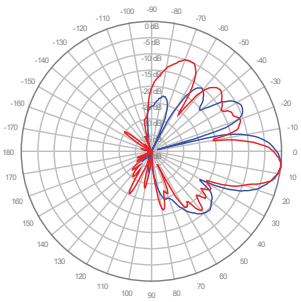
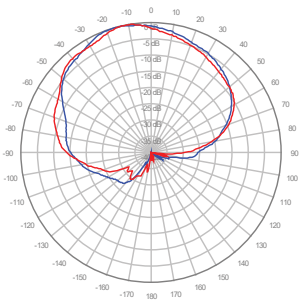
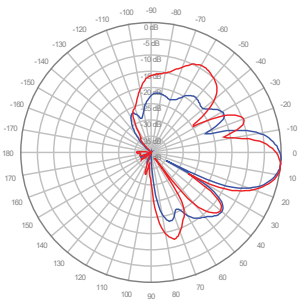

Elevation

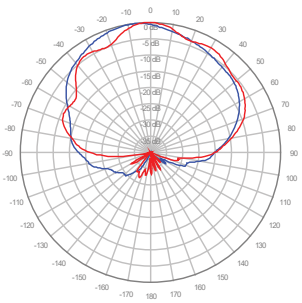
P3, 6° TILT

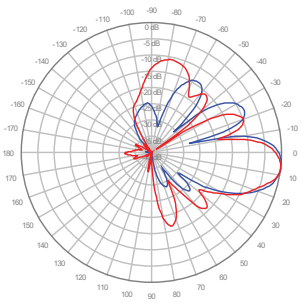
+45°


Azimuth


Elevation

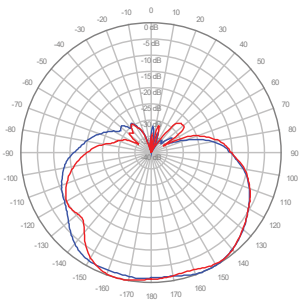
-45°

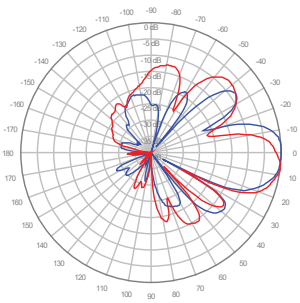

Azimuth


Elevation

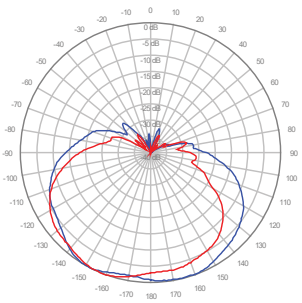
P4, 6° TILT

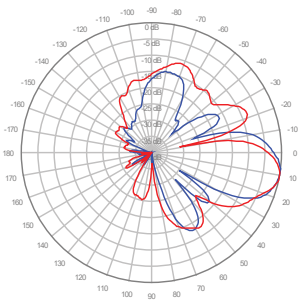
+45°


Azimuth


Elevation

-45°


Azimuth

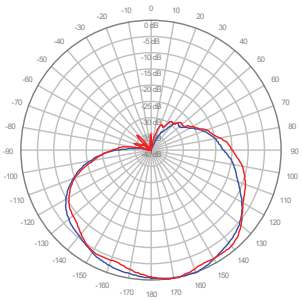

Elevation

CU3VB070X06Fwxys4

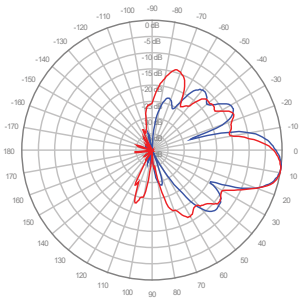
3600 MHz
4000 MHz

P5, 6° TILT

+45°

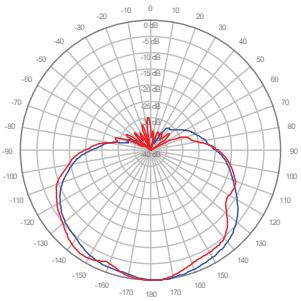


Azimuth

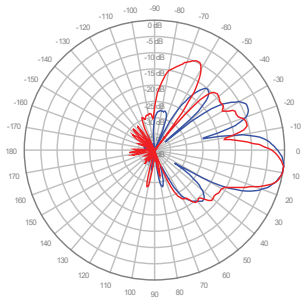


Elevation

-45°



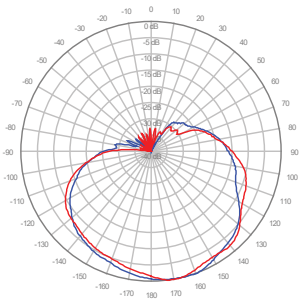
Azimuth



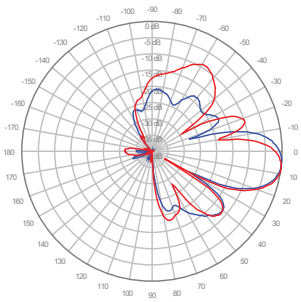
Elevation

P6, 6° TILT

+45°

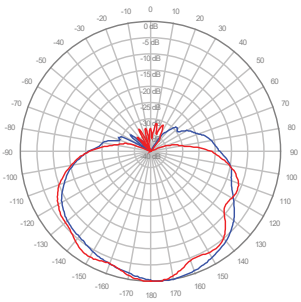


Azimuth

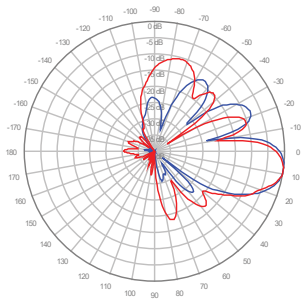


Elevation

-45°



Azimuth



Elevation