Amphenol ANTENNA SOLUTIONS

22-Port Canister Antenna

(1x) 696-960 | (2x) 1695-2700 | (2x) 3300-4200 MHz

SECTOR / OMNI COMBINATION | 24.0 IN | FIXED TILT

C2U2VTSP1X06Fwxys4

Features

- Sector & omni configuration with 22 connectors
- Sectorized arrays in both the 696-960 and 1695-2700 frequencies
- Omni arrays in the 3300-4200 frequency
- 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	(2x) 1695-2700	(2x) 3300-4200
Array	R1 R2 R3	Y1 Y2 Y3 Y4 Y5 Y6	P1 P2
Connector	6 PORTS	12 PORTS	4 PORTS
Polarization	XPOL	XPOL	XPOL
Azimuth Beamwidth (avg)	SECTORIZED	SECTORIZED	OMNI
Electrical Downtilt	0°	2°, 4°, 6°	6°
Configuration	SECTOR & OMNI COMBINATION		
Maximum Continuous Power Per Port @ 50° C (122° F)	100 WATTS	100 WATTS	50 WATTS
Maximum Total Continuous Power at 50° C (122° F)	2000 WATTS		
Connector Type	(22x) 4.3-10 FEMALE		
Dimensions	610 x Ø371 mm (24.0 x Ø14.6 in)		
Radome Color Options	GREY, BROWN or BLACK		

ELECTRICAL SPECIFICATIONS Sectorized			**R1 R2 R3**	
Frequency Range		MHz	(1x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	±45°	
Gain	BASTA	dBi	9.3 ± 0.7	9.7 ± 0.7
	MAX	dBi	10.0	10.4
Azimuth Beamwidth (3 dB)		degrees	90.4° ± 8.4°	80.3° ± 7.1°
Elevation Beamwidth (3 dB)		degrees	41.6° ± 3.8°	38.2° ± 3.5°
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	
Front-to-Back Ratio		dB	> 15.5	> 16.6
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.

C2U2VTSP1X06Fwxys4

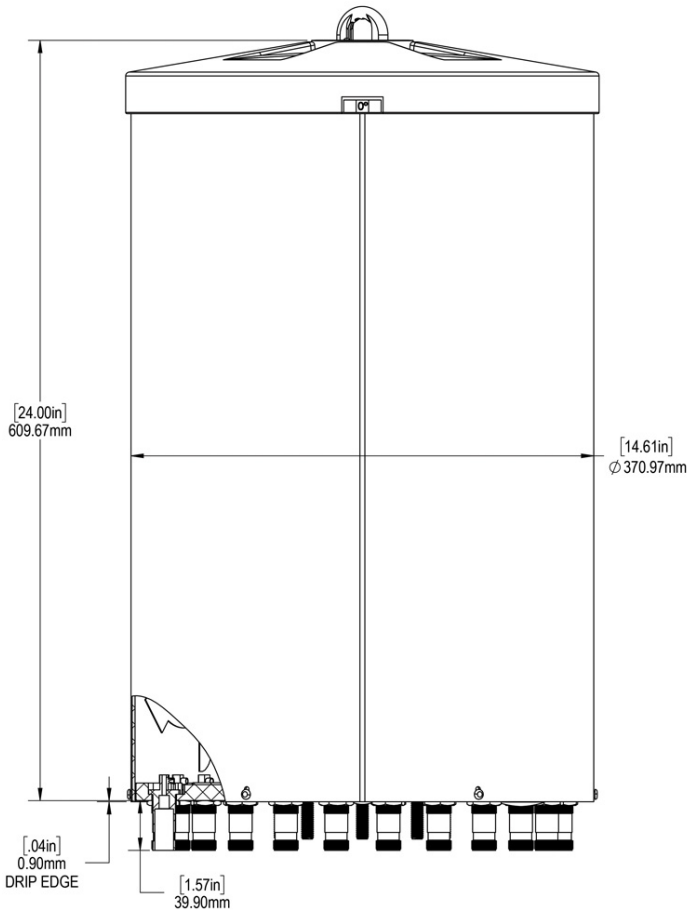
ELECTRICAL SPECIFICATIONS Sectorized			**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
Frequency Range		MHz	(2x) 1695-2700					
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700		
Polarization		---	±45°					
Gain	BASTA	dBi	12.4 ± 0.6	12.2 ± 0.6	12.2 ± 0.9	13.4 ± 0.9		
	MAX	dBi	13.0	12.8	13.1	14.3		
Azimuth Beamwidth (3 dB)		degrees	68.1° ± 13.7°	75.4° ± 13°	73.7° ± 12.5°	60.1° ± 10°		
Elevation Beamwidth (3 dB)		degrees	21.1° ± 1.8°	19.5° ± 1.6°	18.4° ± 1.8°	15.9° ± 1.8°		
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					
Front-to-Back Ratio		dB	> 22.7	> 21.0	> 20.2	> 21.6		
Isolation	Intraband	dB	> 25					
	Interband	dB	> 28 same band; > 30 different band					

ELECTRICAL SPECIFICATIONS Omni			**P1**	**P2**	
Frequency Range		MHz	(2x) 3300-4200		
Frequency Sub-Range		MHz	3300-3550	3550-3700	3700-4200
Polarization		---	±45°		
Gain	BASTA	dBi	8.6 ± 0.6	8.1 ± 0.9	7.5 ± 0.6
	MAX	dBi	9.2	9.0	8.1
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	20.3° ± 2.7°	17.9° ± 1.3°	17.5° ± 1.9°
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		
Isolation	Intraband	dB	> 25		
	Interband	dB	> 28 same band; > 30 different band		

C2U2VTSP1X06Fwxys4

MECHANICAL SPECIFICATIONS

Antenna	Height		mm (in)	610 (24.0)
	Diameter		mm (in)	371 (14.6)
Net Weight - Antenna Only			kg (lbs)	11 (25)
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	---	(22x) 4.3-10 Female
		Position	---	Bottom
Radome Color			---	Grey (RAL 7035), Brown (RAL 8022), Black (RAL 9011)
Lightning Protection (Grounding Type)			---	Direct Ground

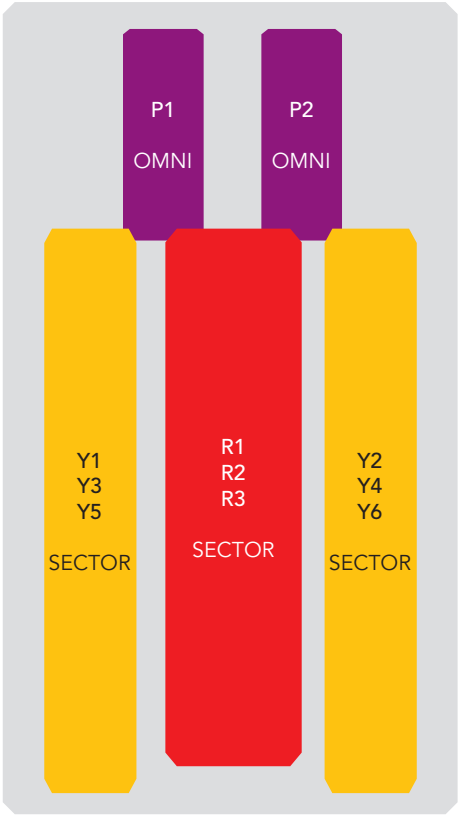


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

C2U2VTSP1X06Fwxys4

ARRAY LAYOUT Topology

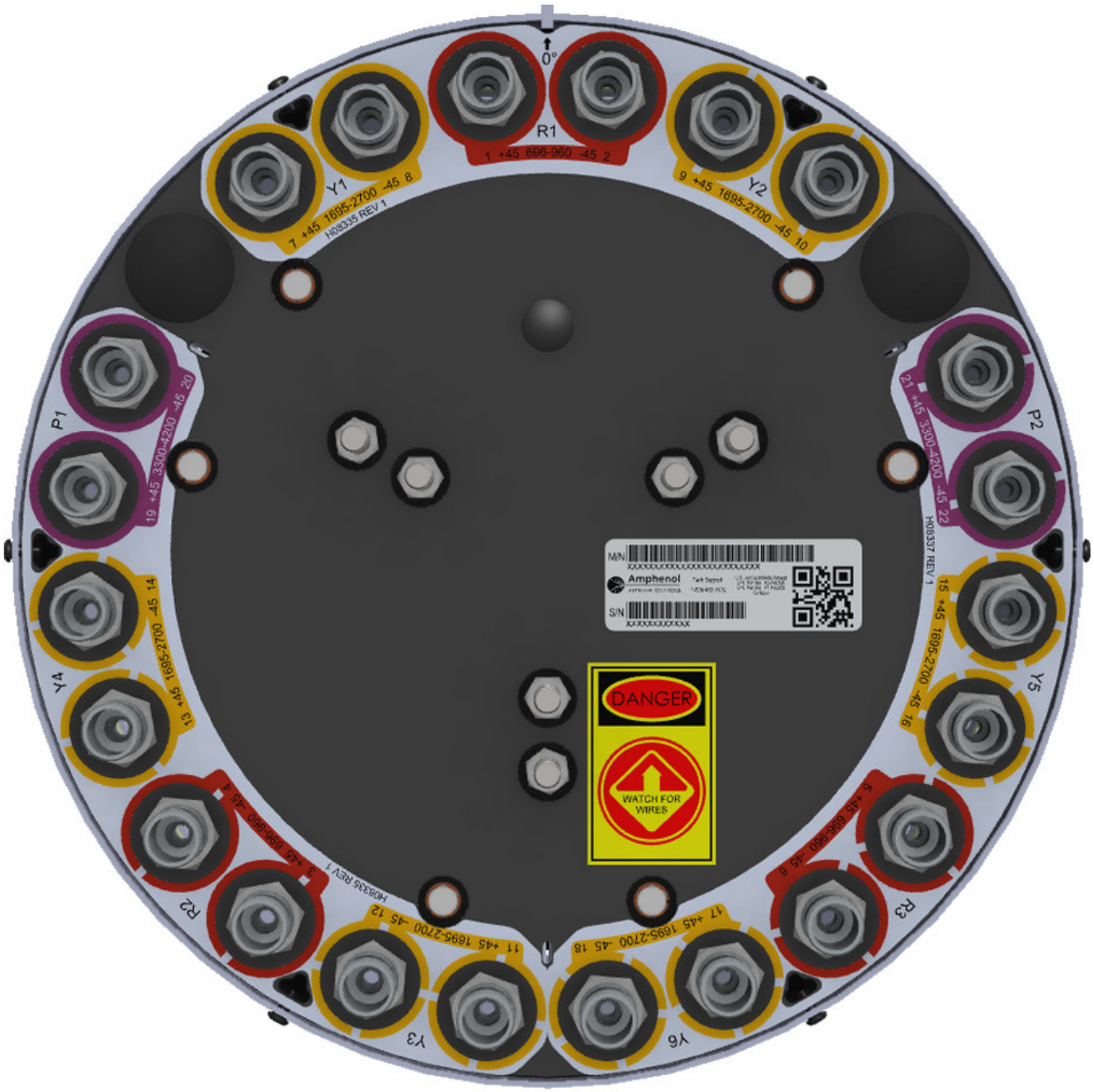
FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
696-960 MHz	R1	1-2	(2x) 4.3-10 Female
	R2	3-4	(2x) 4.3-10 Female
	R3	5-6	(2x) 4.3-10 Female
1695-2700 MHz	Y1	7-8	(2x) 4.3-10 Female
	Y3	11-12	(2x) 4.3-10 Female
	Y5	15-16	(2x) 4.3-10 Female
1695-2700 MHz	Y2	9-10	(2x) 4.3-10 Female
	Y4	13-14	(2x) 4.3-10 Female
	Y6	17-18	(2x) 4.3-10 Female
3300-4200 MHz	P1	19-20	(2x) 4.3-10 Female
3300-4200 MHz	P2	21-22	(2x) 4.3-10 Female



The illustration is not shown to scale.

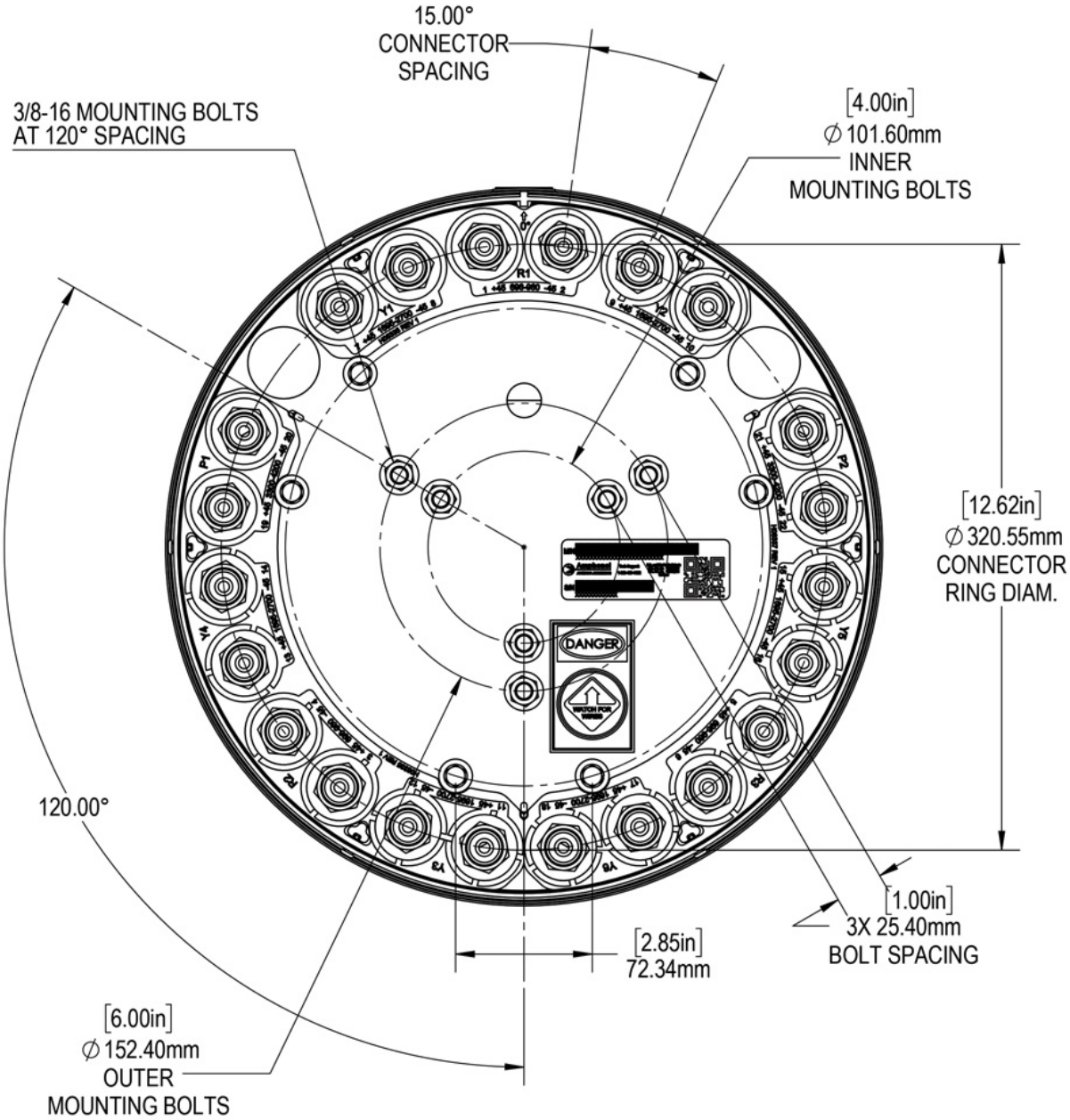
C2U2VTSP1X06Fwxys4

BOTTOM VIEW - LABELING



C2U2VTSP1X06Fwxys4

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.

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.

C2U2VTSP1X06Fwxys4

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.

C2U2VTSP1X06Fwxys4

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	2U	2V	T	SP1	X	06	F	wxy	s	4	BK BR
(1x) 696-960	(2x) 1695-2700	(2x) 3300-4200	Tri-Sector	Sector & Omni Combination	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

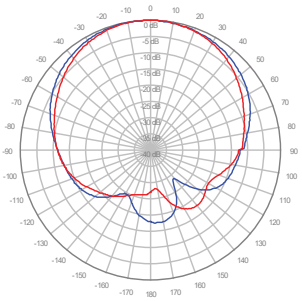
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND			ANTENNA MODEL
	696-960 MHz	1695-2700 MHz	3300-4200 MHz	
Grey RAL 7035	0°	2°	6°	C2U2VTSP1X06F026s4
	0°	4°	6°	C2U2VTSP1X06F046s4
	0°	6°	6°	C2U2VTSP1X06F066s4
Black RAL 9011	0°	2°	6°	C2U2VTSP1X06F026s4BK
	0°	4°	6°	C2U2VTSP1X06F046s4BK
	0°	6°	6°	C2U2VTSP1X06F066s4BK
Brown RAL 8022	0°	2°	6°	C2U2VTSP1X06F026s4BR
	0°	4°	6°	C2U2VTSP1X06F046s4BR
	0°	6°	6°	C2U2VTSP1X06F066s4BR

C2U2VTSP1X06Fwxys4

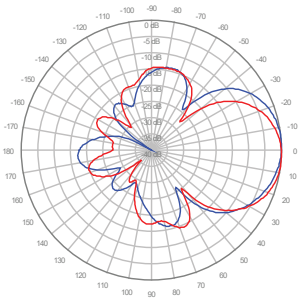
750 MHz
850 MHz

R1, 0° TILT

+45°

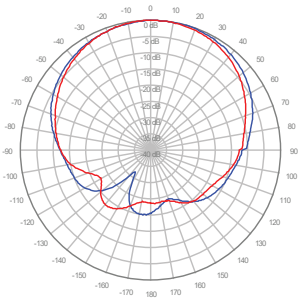


Azimuth

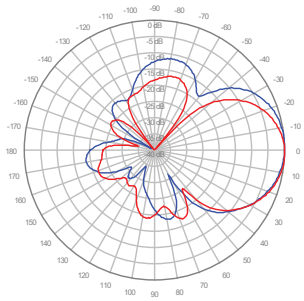


Elevation

-45°



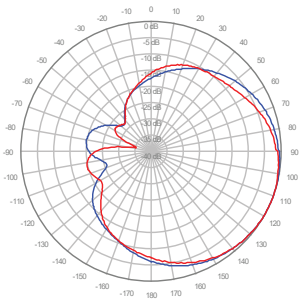
Azimuth



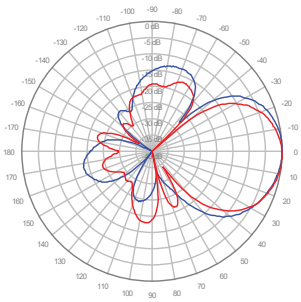
Elevation

R2, 0° TILT

+45°

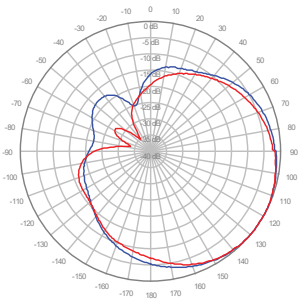


Azimuth

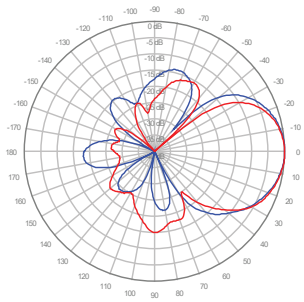


Elevation

-45°



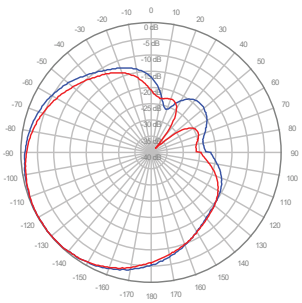
Azimuth



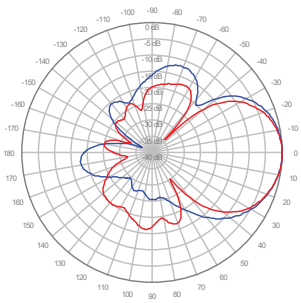
Elevation

R3, 0° TILT

+45°

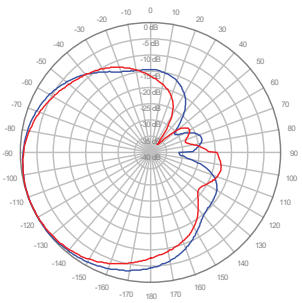


Azimuth

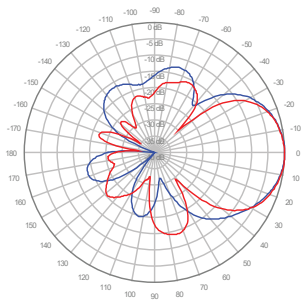


Elevation

-45°



Azimuth



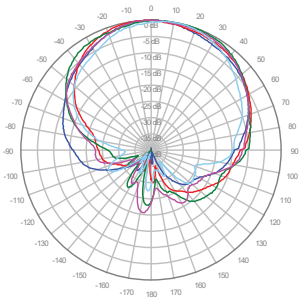
Elevation

C2U2VTSP1X06Fwxys4

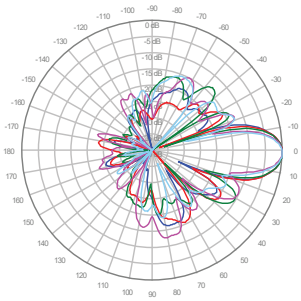
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 2° TILT

+45°

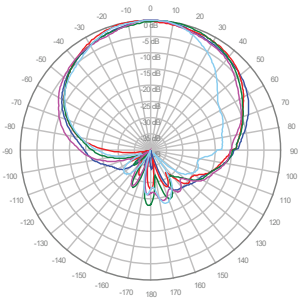


Azimuth

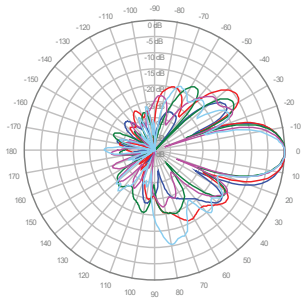


Elevation

-45°



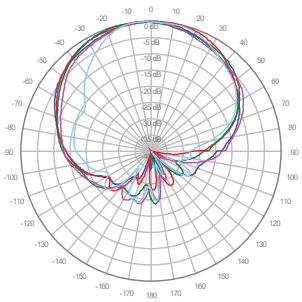
Azimuth



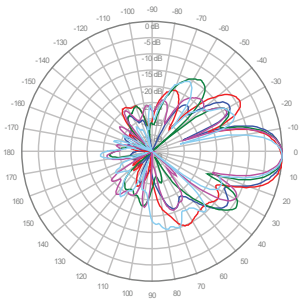
Elevation

Y2, 2° TILT

+45°

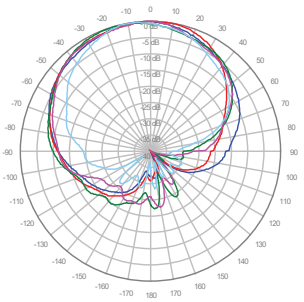


Azimuth

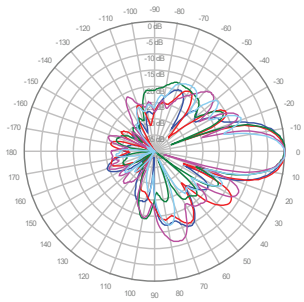


Elevation

-45°



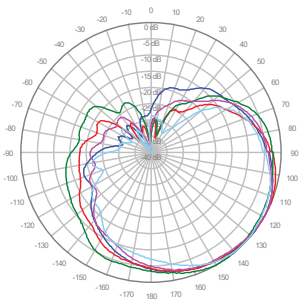
Azimuth



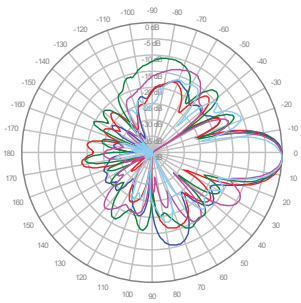
Elevation

Y3, 2° TILT

+45°

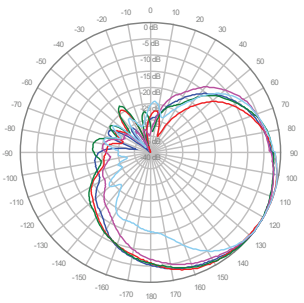


Azimuth

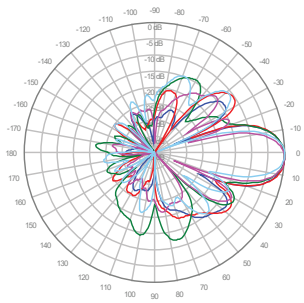


Elevation

-45°



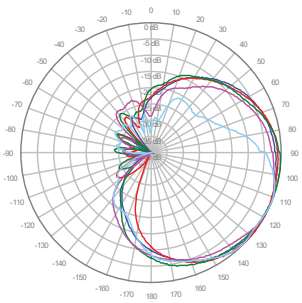
Azimuth



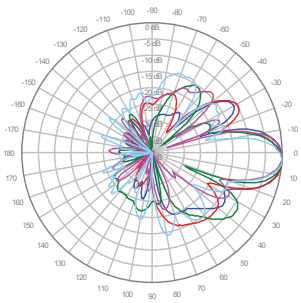
Elevation

Y4, 2° TILT

+45°

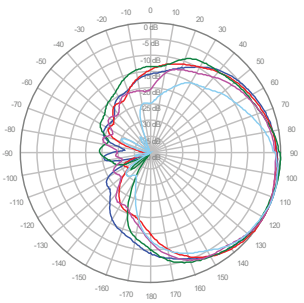


Azimuth

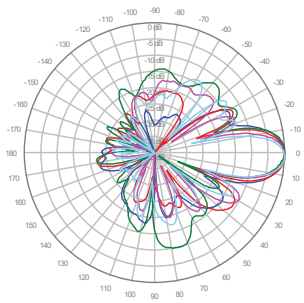


Elevation

-45°



Azimuth



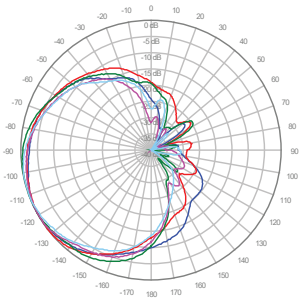
Elevation

C2U2VTSP1X06Fwxys4

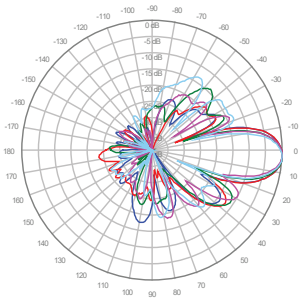
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 2° TILT

+45°

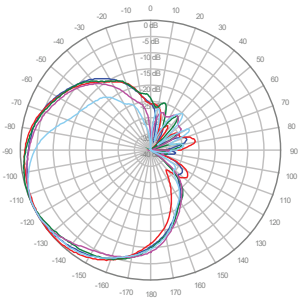


Azimuth

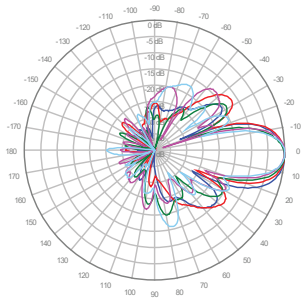


Elevation

-45°



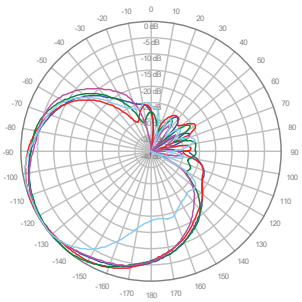
Azimuth



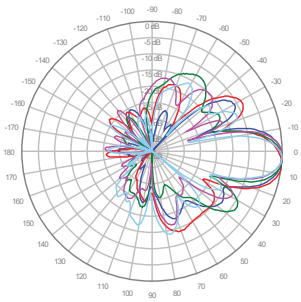
Elevation

Y6, 2° TILT

+45°

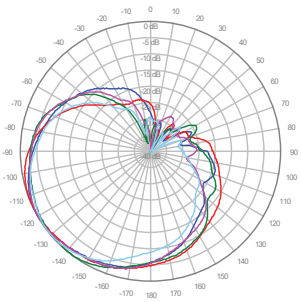


Azimuth

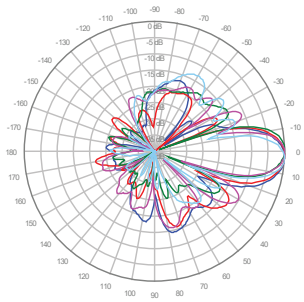


Elevation

-45°



Azimuth



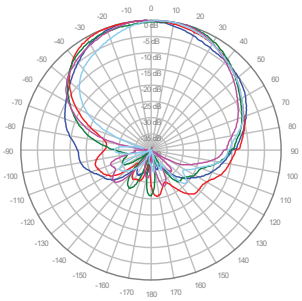
Elevation

C2U2VTSP1X06Fwxys4

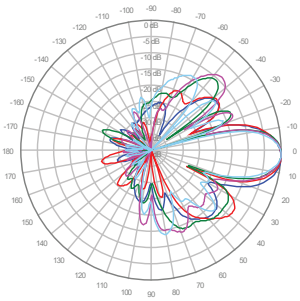
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 4° TILT

+45°

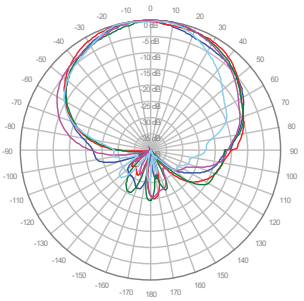


Azimuth

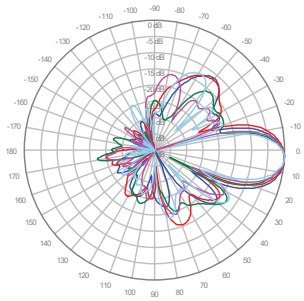


Elevation

-45°



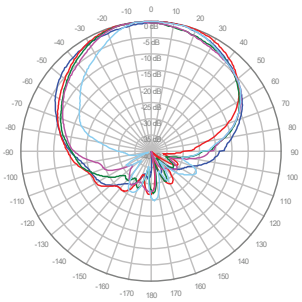
Azimuth



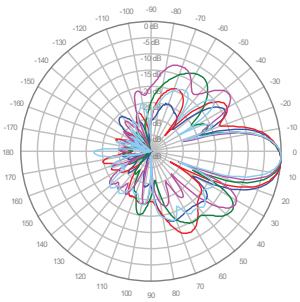
Elevation

Y2, 4° TILT

+45°

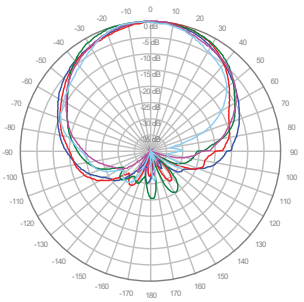


Azimuth

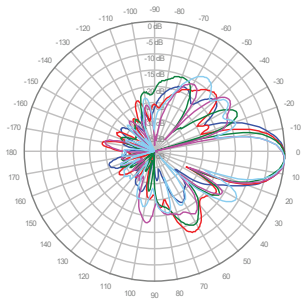


Elevation

-45°



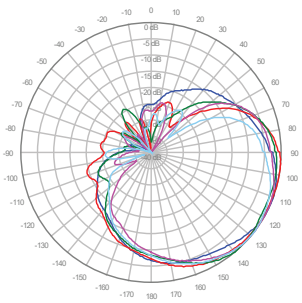
Azimuth



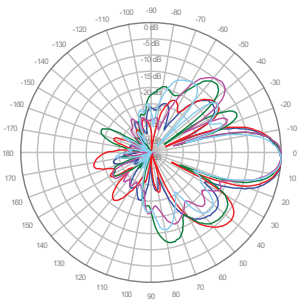
Elevation

Y3, 4° TILT

+45°

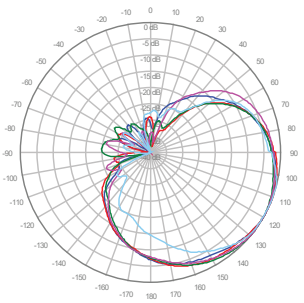


Azimuth

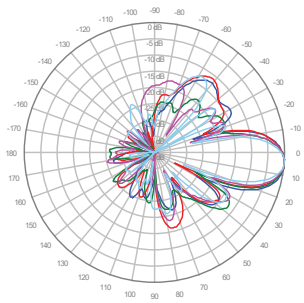


Elevation

-45°



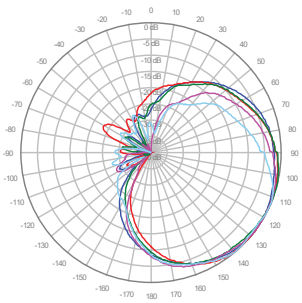
Azimuth



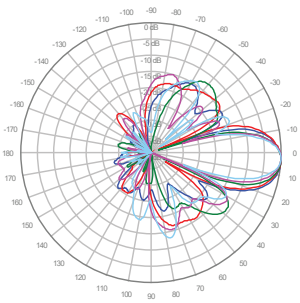
Elevation

Y4, 4° TILT

+45°

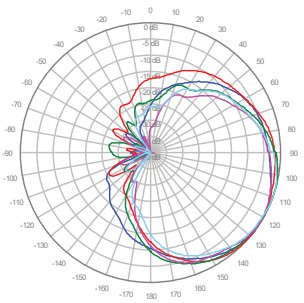


Azimuth

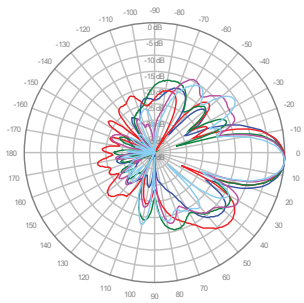


Elevation

-45°



Azimuth



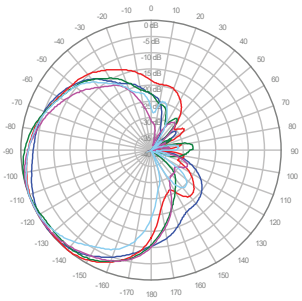
Elevation

C2U2VTSP1X06Fwxys4

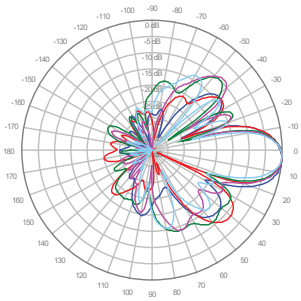
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 4° TILT

+45°

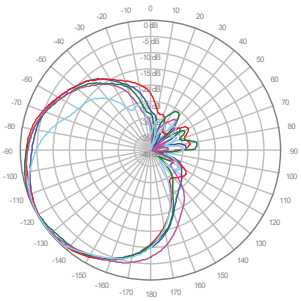


Azimuth

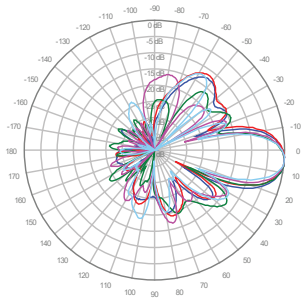


Elevation

-45°



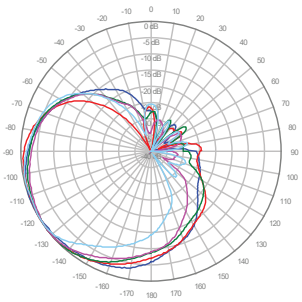
Azimuth



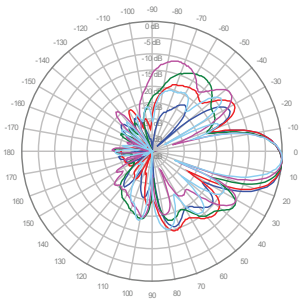
Elevation

Y6, 4° TILT

+45°

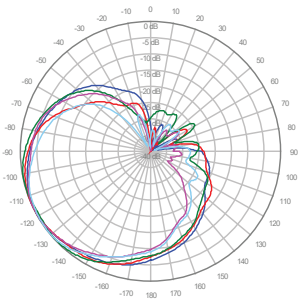


Azimuth

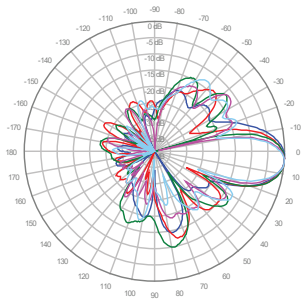


Elevation

-45°



Azimuth



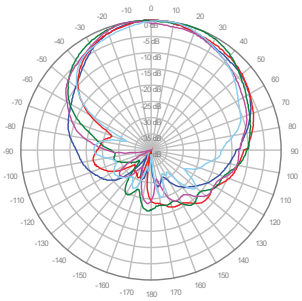
Elevation

C2U2VTSP1X06Fwxys4

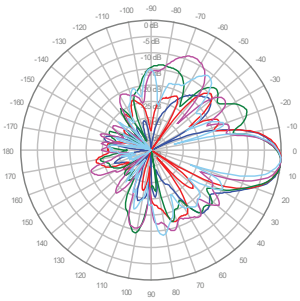
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 6° TILT

+45°

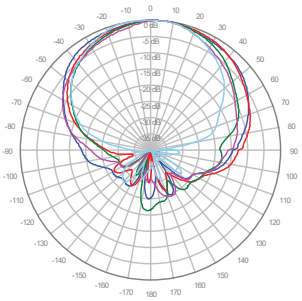


Azimuth

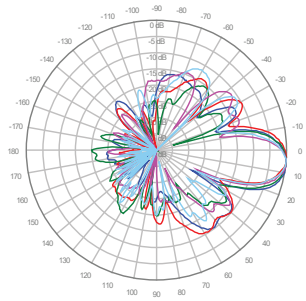


Elevation

-45°



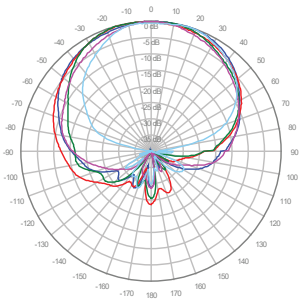
Azimuth



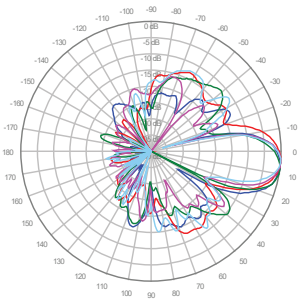
Elevation

Y2, 6° TILT

+45°

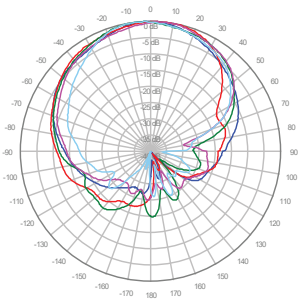


Azimuth

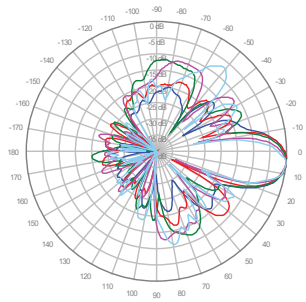


Elevation

-45°



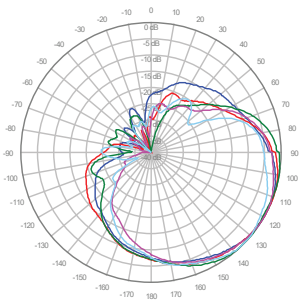
Azimuth



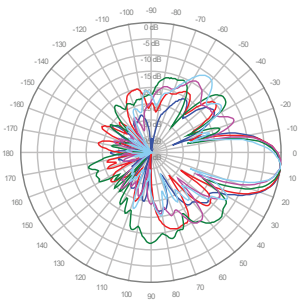
Elevation

Y3, 6° TILT

+45°

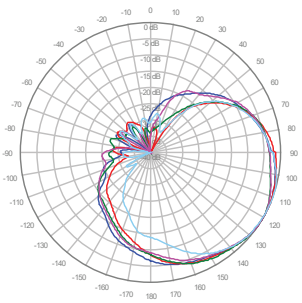


Azimuth

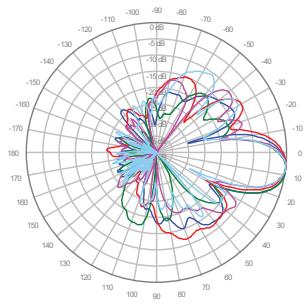


Elevation

-45°



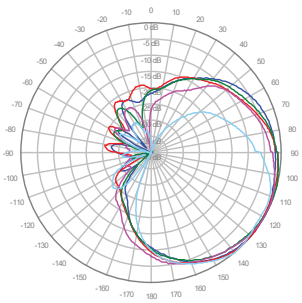
Azimuth



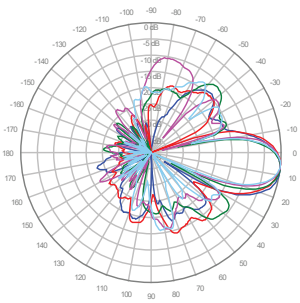
Elevation

Y4, 6° TILT

+45°

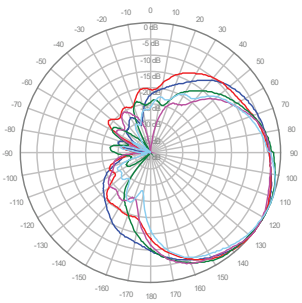


Azimuth

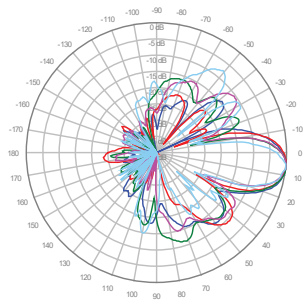


Elevation

-45°



Azimuth



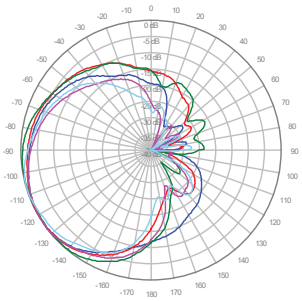
Elevation

C2U2VTSP1X06Fwxys4

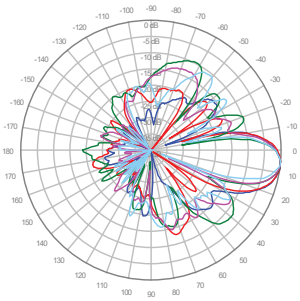
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 6° TILT

+45°

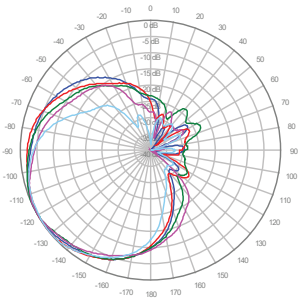


Azimuth

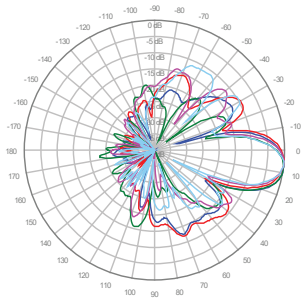


Elevation

-45°



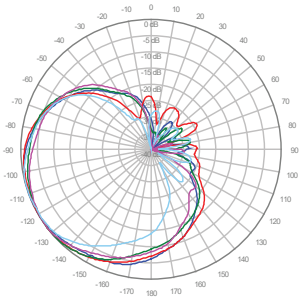
Azimuth



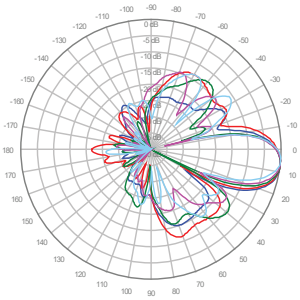
Elevation

Y6, 6° TILT

+45°

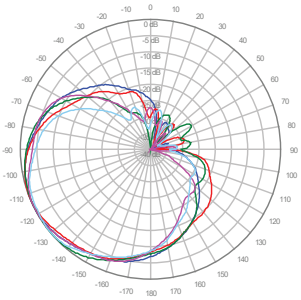


Azimuth

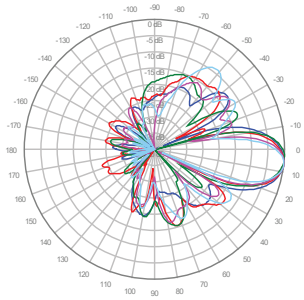


Elevation

-45°



Azimuth



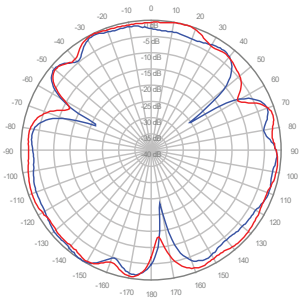
Elevation

C2U2VTSP1X06Fwxys4

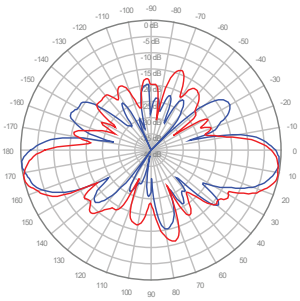
3600 MHz
4000 MHz

P1, 6° TILT

+45°

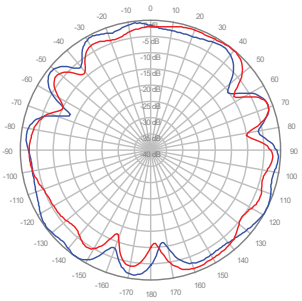


Azimuth

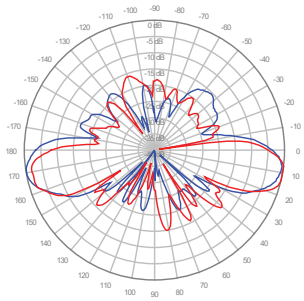


Elevation

-45°



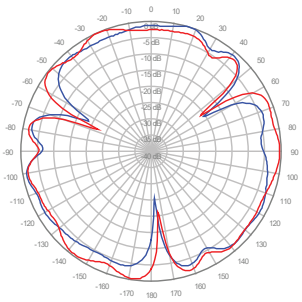
Azimuth



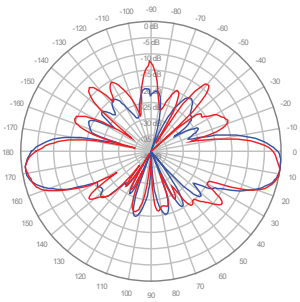
Elevation

P2, 6° TILT

+45°

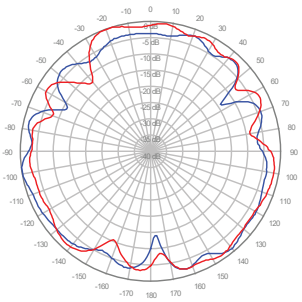


Azimuth

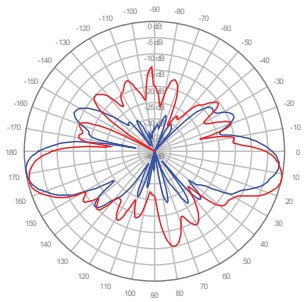


Elevation

-45°



Azimuth



Elevation