Amphenol ANTENNA SOLUTIONS

18-Port Canister Antenna

(2x) 696-960 | (4x) 1695-2700 | (2x) 3300-4200 | (1x) 5150-5925 MHz

PEANUT-SHAPE | 24 IN | FIXED TILT

2C4U3MB180X06Fwxys4

Features

- 180° peanut-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
- Can be ordered with an integrated GPS unit
- 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	Optional GPS BAND 1575.42 ± 10
	Array	R1, R2	Y1, Y2, Y3, Y4	P1, P2	O1	---
	Connector	4 PORTS	8 PORTS	4 PORTS	2 PORTS	1 PORT
	Polarization	XPOL	XPOL	XPOL	XPOL	RIGHT HAND CIRCULAR
	Azimuth Beamwidth (avg)	84°	65°	56°	67°	---
	Electrical Downtilt	0°	2°, 4°, 6°	0°	0°	---
	Configuration	PEANUT-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				(1x) N-TYPE FEMALE
	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	4.5 ± 0.5	4.7 ± 1.1
	MAX	dBi	5.0	5.8
Azimuth Beamwidth (3 dB)		degrees	95.9° ± 18.6°	73.3° ± 23.4°
Elevation Beamwidth (3 dB)		degrees	83.7° ± 11.7°	75.5° ± 14.9°
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	

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	7.6 ± 0.7	7.5 ± 0.7	7.4 ± 0.9	8.2 ± 0.9
	MAX	dBi	8.3	8.2	8.3	9.1
Azimuth Beamwidth (3 dB)		degrees	65.5° ± 15.6°	70.3° ± 12.0°	66.2° ± 16.8°	57.5° ± 13.0°
Elevation Beamwidth (3 dB)		degrees	37.3° ± 6.2°	34.8° ± 6.2°	33.0° ± 6.0°	26.7° ± 4.7°
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			

ELECTRICAL SPECIFICATIONS

■ P1 ■ P2

Frequency Range		MHz	(2x) 3300-4200
Polarization		---	(2x) ±45°
Gain	BASTA	dBi	6.7 ± 0.5
	MAX	dBi	7.2
Azimuth Beamwidth (3 dB)		degrees	56.4° ± 7.4°
Elevation Beamwidth (3 dB)		degrees	37.1° ± 7.6°
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

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ELECTRICAL SPECIFICATIONS			■ O1
Frequency Range		MHz	(1x) 5150-5925
Polarization		---	(1x) ±45°
Gain	BASTA	dBi	4.7± 0.7
	MAX	dBi	5.4
Azimuth Beamwidth (3 dB)		degrees	67.1° ± 41.1°
Elevation Beamwidth (3 dB)		degrees	20.5° ± 6.8°
Electrical Downtilt		degrees	(y) 0°
Impedance		Ohms	50Ω
VSWR		---	≤ 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

INTEGRATED GPS UNIT OPTIONAL

Frequency Range	1575.42 MHz ± 10 MHz
Polarization	Right Hand Circular
Nominal Gain	3 dBic at 90°; -2 dBic at 20°
Current Draw	22 mA @ 5V
Out-of-Band Rejection	> 55 dB at 1559 MHz; > 60 dB at 1625 MHz
Amplifier Gain	28 dB ± 3 dB
Nominal Impedance	50 ohm
Noise Figure	3.9 dB
DC Voltage	2.7-5.5 VDC
VSWR	< 2.0:1
Connector	N-Type Female

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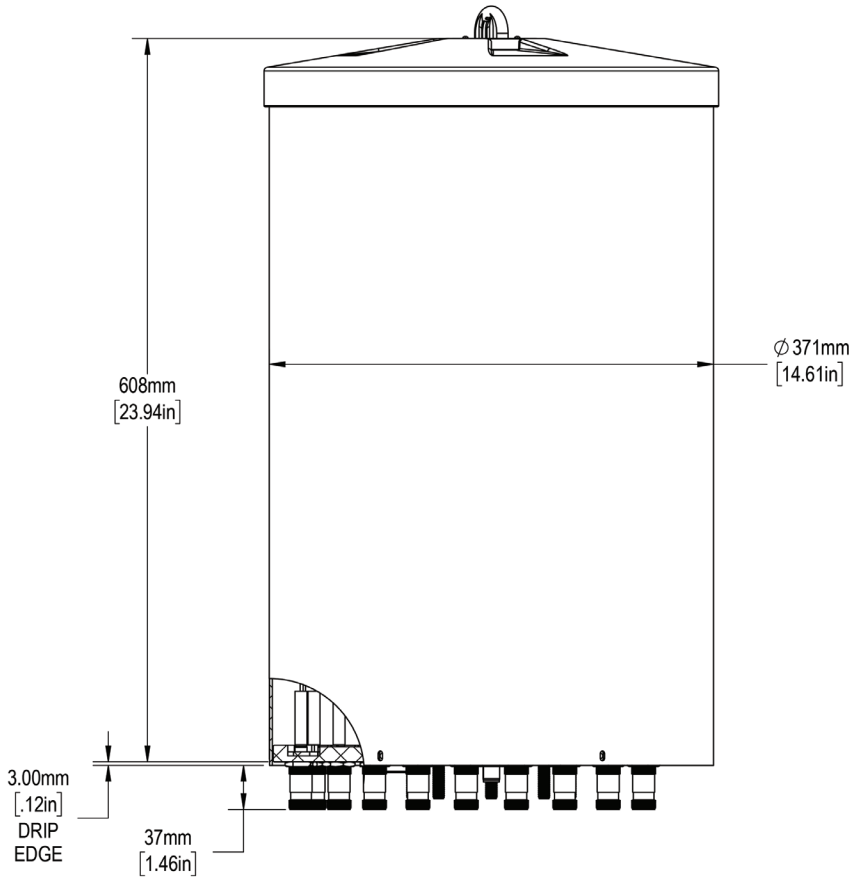
MECHANICAL SPECIFICATIONS

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; (1x) N-Type Female for optional GPS Unit
		Position	---	Bottom
Radome Color			---	Grey (Pantone 420 C), Brown (Pantone 476 C), Black (RAL 9011)
Lightning Protection (Grounding Type)			---	Direct Ground



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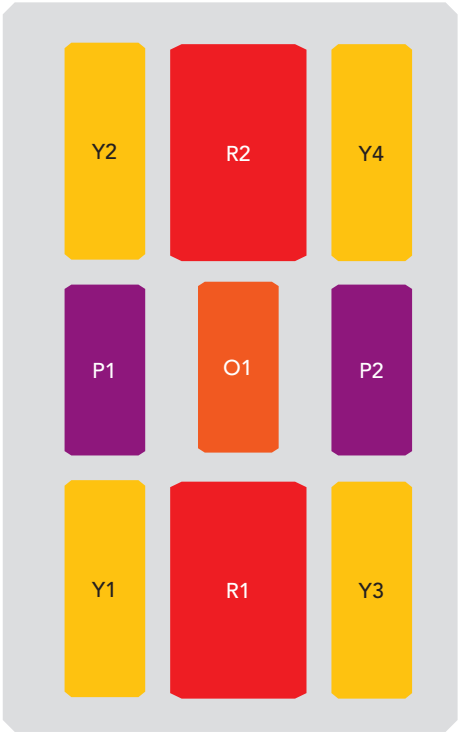
ARRAY LAYOUT Topology

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
Optional GPS BAND 1575.42 MHz	---	---	(1x) N-Type Female



The illustration is not shown to scale.

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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.

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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	POLARIZATION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS	GPS
2C	4U	3M		B	180	X	06	F	wxy	s	4	BK BR	-GPS
(2x) 696-960	(4x) 1695-2700	(2x) 3300-4200	(1x) 5150-5925	Back-to-Back	~180° Peanut-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.	Indicates an integrated GPS unit

ORDERING OPTIONS Select from the following ordering options

SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND				SELECT ANTENNA TYPE	
	696-960 MHz	1695-2700 MHz	3300-4200 MHz	5150-5925 MHz	WITHOUT GPS UNIT	WITH GPS UNIT
Grey Pantone 420 C	0°	2°	0°	0°	2C4U3MB180X06F020s4	2C4U3MB180X06F020s4-GPS
	0°	4°	0°	0°	2C4U3MB180X06F040s4	2C4U3MB180X06F040s4-GPS
	0°	6°	0°	0°	2C4U3MB180X06F060s4	2C4U3MB180X06F060s4-GPS
Brown Pantone 476 C	0°	2°	0°	0°	2C4U3MB180X06F020s4BR	2C4U3MB180X06F020s4BR-GPS
	0°	4°	0°	0°	2C4U3MB180X06F040s4BR	2C4U3MB180X06F040s4BR-GPS
	0°	6°	0°	0°	2C4U3MB180X06F060s4BR	2C4U3MB180X06F060s4BR-GPS
Black RAL 9011	0°	2°	0°	0°	2C4U3MB180X06F020s4BK	2C4U3MB180X06F020s4BK-GPS
	0°	4°	0°	0°	2C4U3MB180X06F040s4BK	2C4U3MB180X06F040s4BK-GPS
	0°	6°	0°	0°	2C4U3MB180X06F060s4BK	2C4U3MB180X06F060s4BK-GPS

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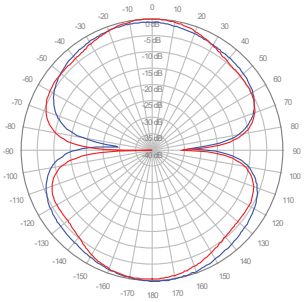
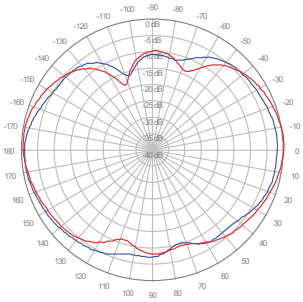
750 MHz
850 MHz

R1, 0° TILT

+45°

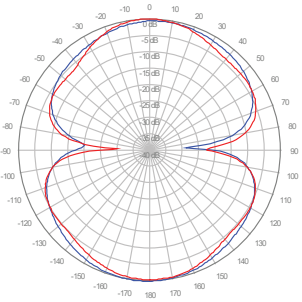


Azimuth



Elevation

-45°



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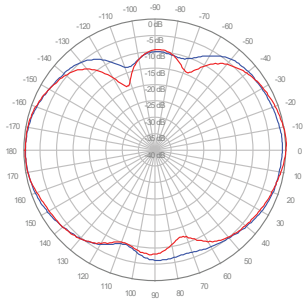
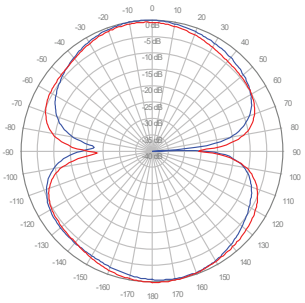


Elevation

R2, 0° TILT

+45°



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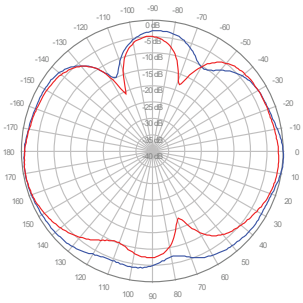
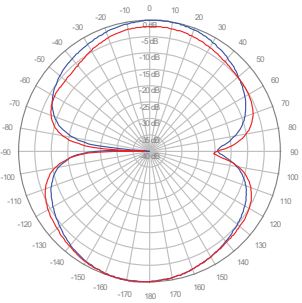


Elevation

-45°



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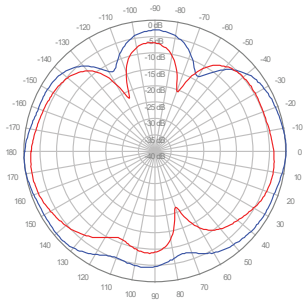


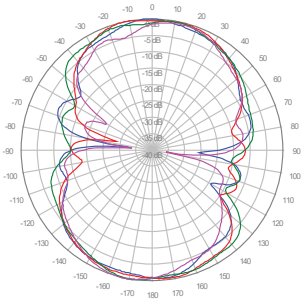
Elevation

2C4U3MB180X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 2° TILT

+45°



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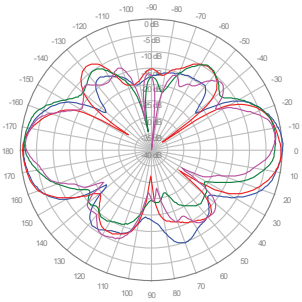
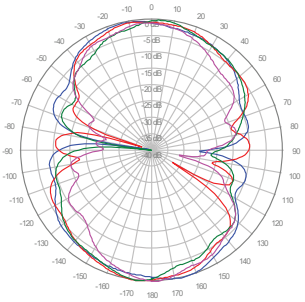


Elevation

-45°



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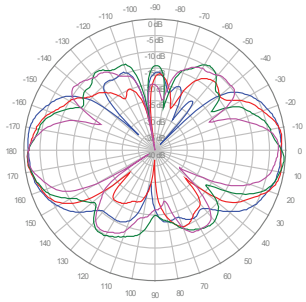
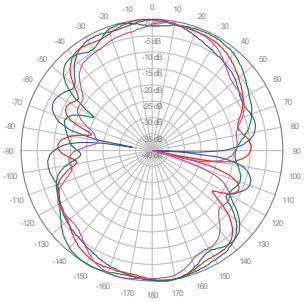


Elevation

Y2, 2° TILT

+45°



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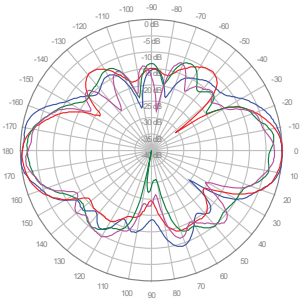
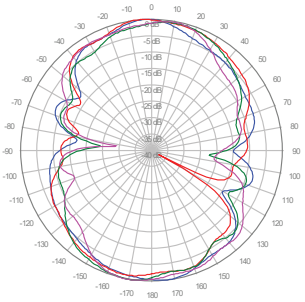


Elevation

-45°



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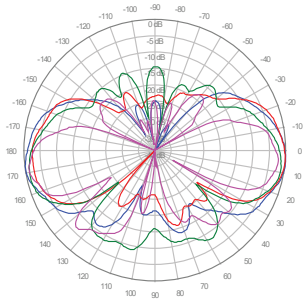
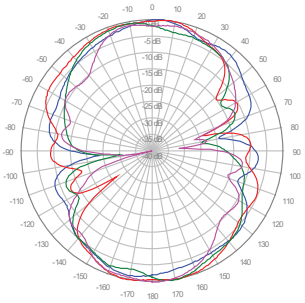


Elevation

Y3, 2° TILT

+45°



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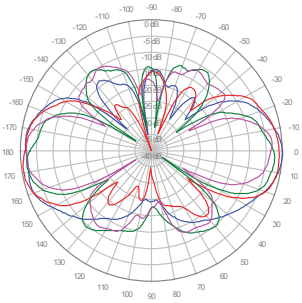
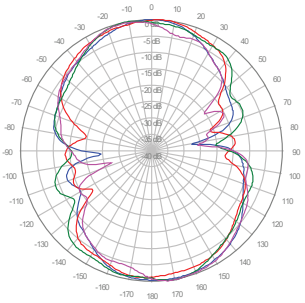


Elevation

-45°



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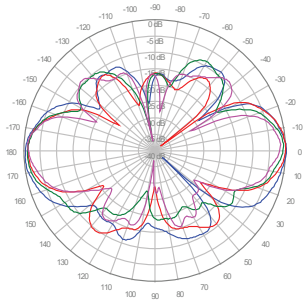
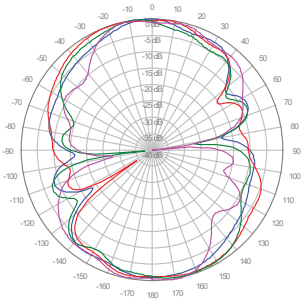


Elevation

Y4, 2° TILT

+45°



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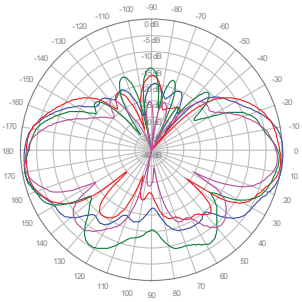
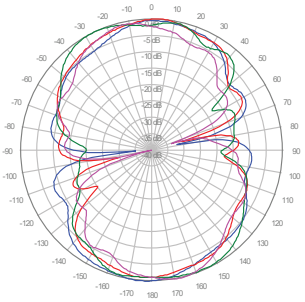


Elevation

-45°



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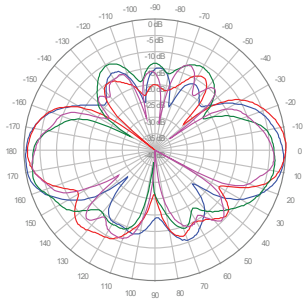


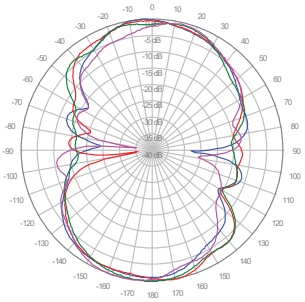
Elevation

2C4U3MB180X06Fwxys4

1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 4° TILT

+45°



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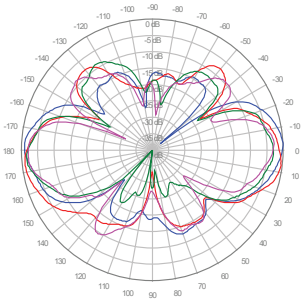
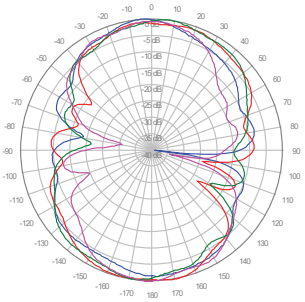


Elevation

-45°



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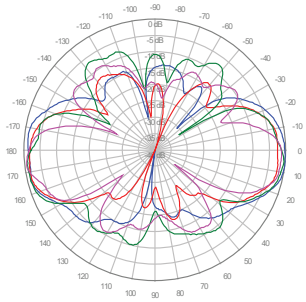
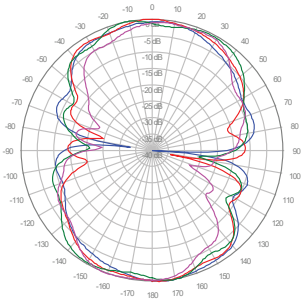


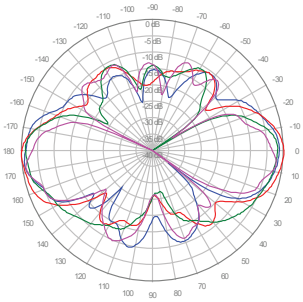
Elevation

Y2, 4° TILT

+45°

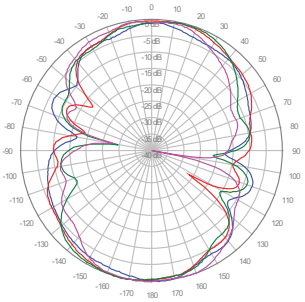


Azimuth

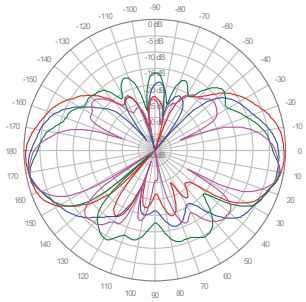


Elevation

-45°



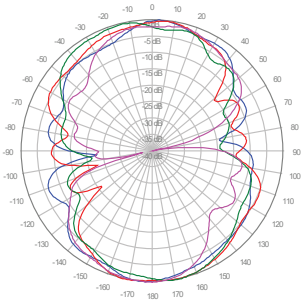
Azimuth



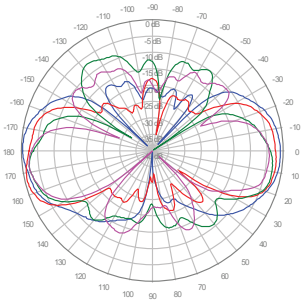
Elevation

Y3, 4° TILT

+45°

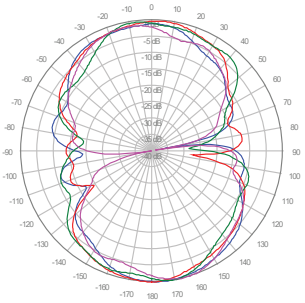


Azimuth

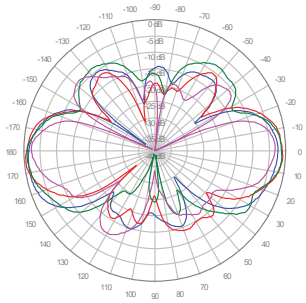


Elevation

-45°



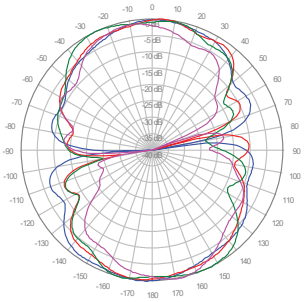
Azimuth



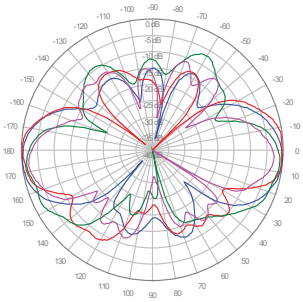
Elevation

Y4, 4° TILT

+45°

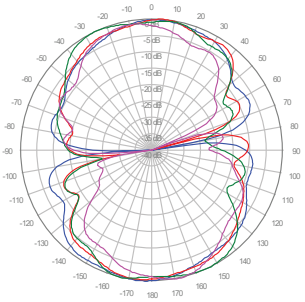


Azimuth

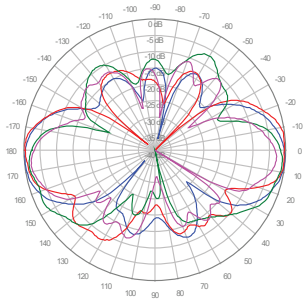


Elevation

-45°



Azimuth



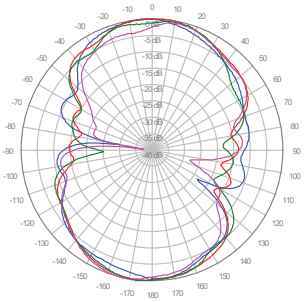
Elevation

2C4U3MB180X06Fwxys4

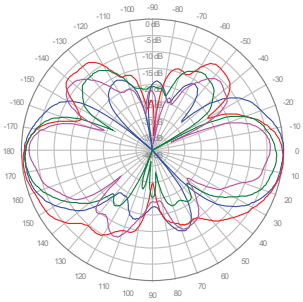
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 6° TILT

+45°

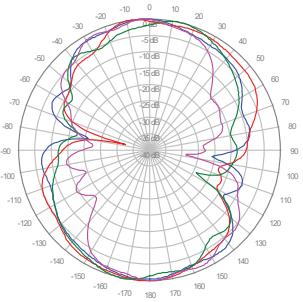


Azimuth

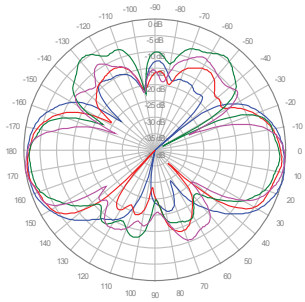


Elevation

-45°



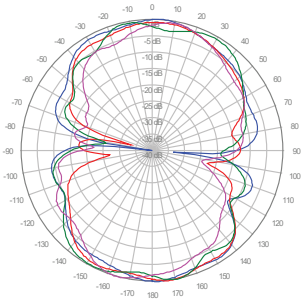
Azimuth



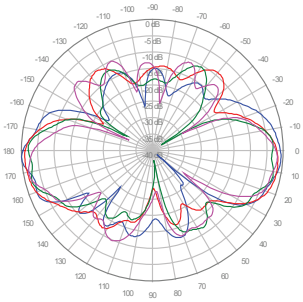
Elevation

Y2, 6° TILT

+45°

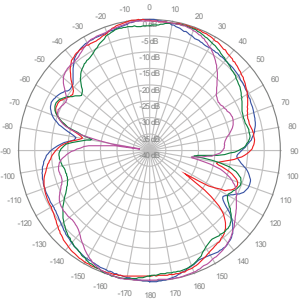


Azimuth

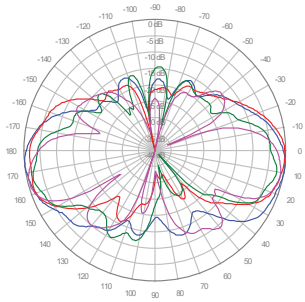


Elevation

-45°



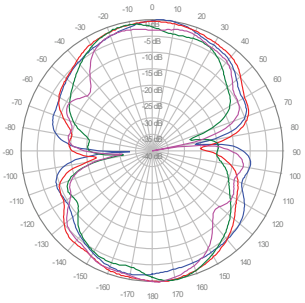
Azimuth



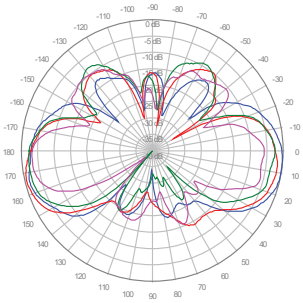
Elevation

Y3, 6° TILT

+45°

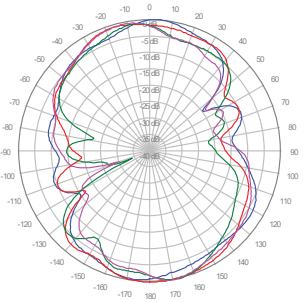


Azimuth

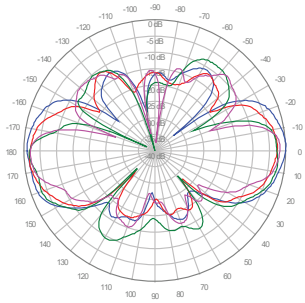


Elevation

-45°



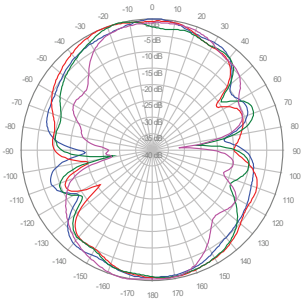
Azimuth



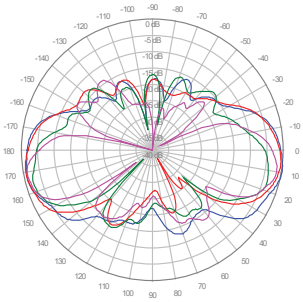
Elevation

Y4, 6° TILT

+45°

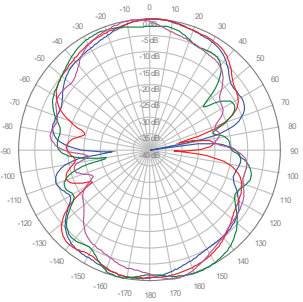


Azimuth

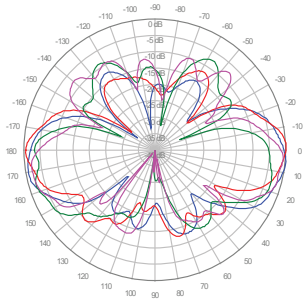


Elevation

-45°



Azimuth

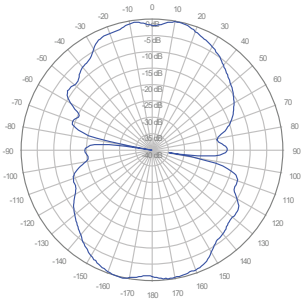


Elevation

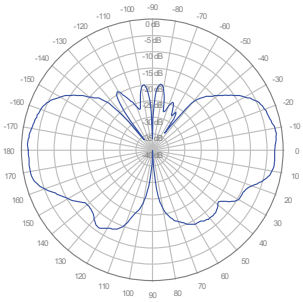
2C4U3MB180X06Fwxys4

P1, 0° TILT

+45°

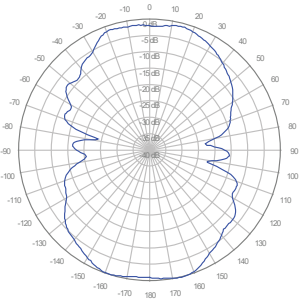


Azimuth (3600 MHz)

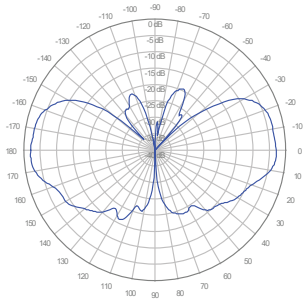


Elevation (3600 MHz)

-45°



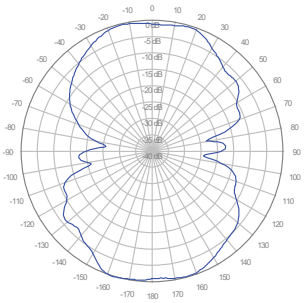
Azimuth (3600 MHz)



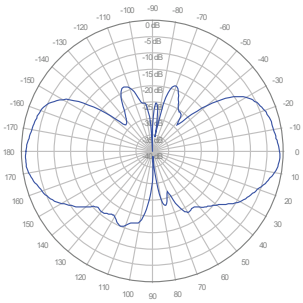
Elevation (3600 MHz)

P2, 0° TILT

+45°

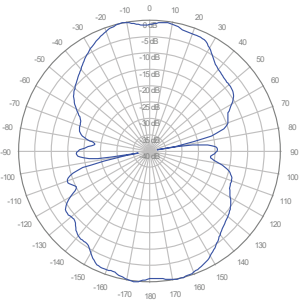


Azimuth (3600 MHz)

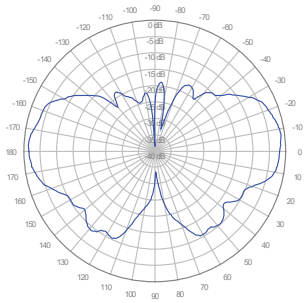


Elevation (3600 MHz)

-45°



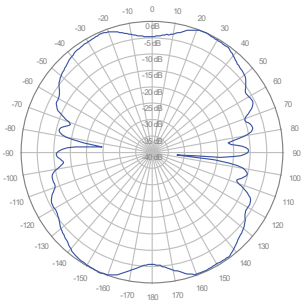
Azimuth (3600 MHz)



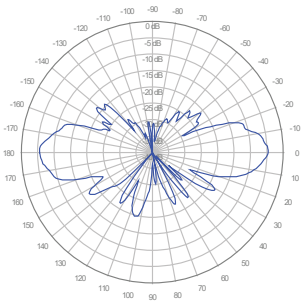
Elevation (3600 MHz)

O1, 0° TILT

+45°

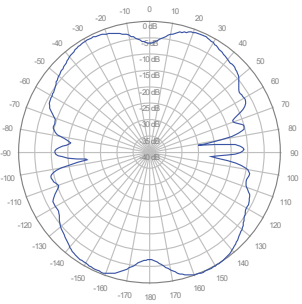


Azimuth (5600 MHz)

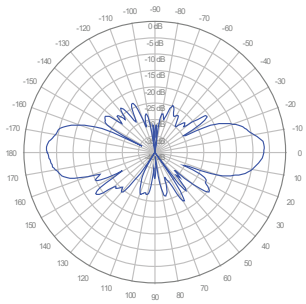


Elevation (5600 MHz)

-45°



Azimuth (5600 MHz)



Elevation (5600 MHz)