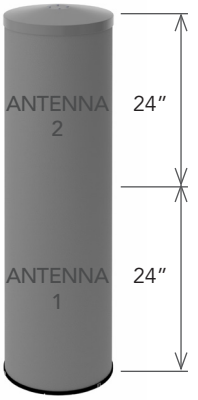
12-Port Canister Antenna

(1x) 696-960 | (2x) 1695-2700 | (2x) 3550-3700 | (1x) 5150-5925 MHz

PEANUT-SHAPE | 48.0 IN | FIXED TILT

C2U3MB180X12Fwxys0



Features

- 180° peanut-shape configuration with 12 connectors
- Dual antennas integrated under a single radome
- Ideal for multi-carrier or 4x4 MIMO deployments
- 5 GHz U-NII FCC compliant
- Available for order with a grey, brown or black radome

PRODUCT OVERVIEW								
	Frequency Range (MHz)	LOW BAND	MID BAND		CBRS BAND		LAA BAND
		(1x) 696-960	(2x) 1695-2700		(2x) 3550-3700		(1x) 5150-5925
	Array	R1	Y1	Y2	P1	P2	O1
	Connector	2 PORTS	4 PORTS		4 PORTS		2 PORTS
	Polarization	XPOL	XPOL		XPOL		XPOL
	Azimuth Beamwidth (avg)	80°	70°		53°		68°
	Electrical Downtilt	0°, 5°	2°, 6°		0°		0°
	Configuration	PEANUT-SHAPE CONFIGURATION					
	Total Connector Count	12 PORTS					
	Connector Type	4.3-10 FEMALE					
	Dimensions	1219 x Ø371 mm (48.0 x Ø14.6 in)					
	Radome Color Options	GREY, BROWN or BLACK					

ELECTRICAL SPECIFICATIONS Low Band — R1

Electrical specifications are shown for Sector #1. Back-to-back antennas are combined to form azimuth peanut pattern shape.

Frequency Range		MHz	(1x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	(1x) ±45°	
Gain	BASTA	dBi	10.2 ± 0.8	10.3 ± 0.9
	MAX	dBi	11.0	11.2
Azimuth Beamwidth (3 dB)		degrees	78.4° ± 2.2°	81.5° ± 10.1°
Elevation Beamwidth (3 dB)		degrees	22.6° ± 5.4°	20.2° ± 1.8°
Electrical Downtilt		degrees	(w) 0°, 5°	
Impedance		Ohms	50Ω	
VSWR		---	≤ 1.5:1	
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153	
Upper Sidelobe Suppression		dB	> 12	
Isolation	Intraband	dB	> 25	
	Interband	dB	> 28	
Input Power		Watts	500W	

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 Mid Band

■ Y1 ■ Y2

Electrical specifications are shown for Sector #1. Back-to-back antennas are combined to form azimuth peanut pattern shape.

Frequency Range		MHz	(2x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(2x) ±45°			
Gain	BASTA	dBi	10.5 ± 0.8	10.7 ± 0.7	10.6 ± 0.6	10.8 ± 1.3
	MAX	dBi	11.3	11.4	11.2	12.1
Azimuth Beamwidth (3 dB)		degrees	74.7° ± 6.7°	73.6° ± 11.5°	73.4° ± 8.7°	61.6° ± 15.3°
Elevation Beamwidth (3 dB)		degrees	20.3° ± 4.3°	19.1° ± 1.0°	18.1° ± 1.6°	15.1° ± 2.0°
Electrical Downtilt		degrees	(x) 2°, 6°			
Impedance		Ohms	50Ω			
VSWR		---	≤ 1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153			
Upper Sidelobe Suppression		dB	> 14			
Isolation	Intraband	dB	> 25			
	Interband	dB	> 28			
Input Power		Watts	300W			

ELECTRICAL SPECIFICATIONS CBRS Band

■ P1 ■ P2

Electrical specifications are shown for Sector #1. Back-to-back antennas are combined to form azimuth peanut pattern shape.

Frequency Range		MHz	(2x) 3550-3700
Polarization		---	(2x) ±45°
Gain	BASTA	dBi	6.4 ± 0.4
	MAX	dBi	6.8
Azimuth Beamwidth (3 dB)		degrees	53.2° ± 5.8°
Elevation Beamwidth (3 dB)		degrees	34.6° ± 3.7°
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	N/A
Isolation	Intraband	dB	> 25
	Interband	dB	> 28
Input Power		Watts	100W

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ELECTRICAL SPECIFICATIONS LAA Band ■ **O1**

Electrical specifications are shown for Sector #1. Back-to-back antennas are combined to form azimuth peanut pattern shape.

Frequency Range		MHz	(1x) 5150-5925
Polarization		---	(1x) ±45°
Gain	BASTA	dBi	5.1 ± 0.7
	MAX	dBi	5.8
Azimuth Beamwidth (3 dB)		degrees	67.6° ± 17.1°
Elevation Beamwidth (3 dB)		degrees	22.2° ± 2.9°
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	> 16
Isolation	Intraband	dB	> 25
	Interband	dB	> 28
Input Power		Watts	50W
U-NII Compliant		---	Yes

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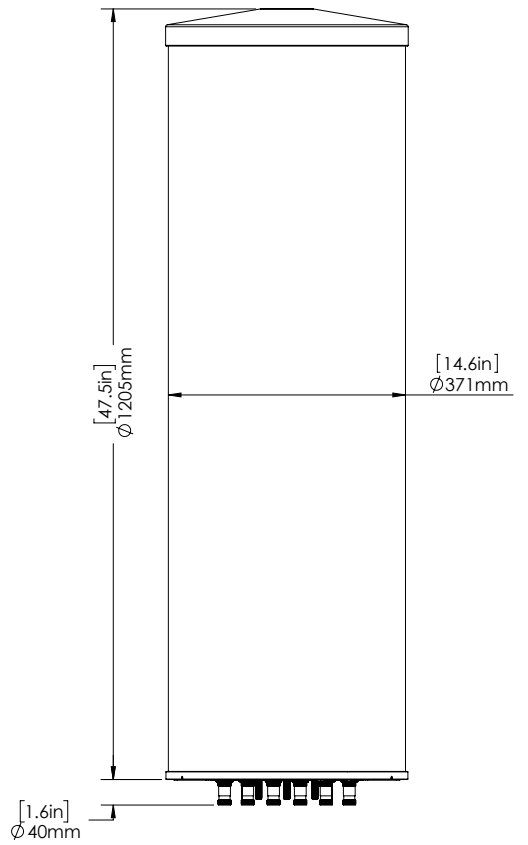
MECHANICAL SPECIFICATIONS

Antenna	Height		mm (in)	1219 (48.0)
	Diameter		mm (in)	371 (14.6)
Net Weight - Antenna Only			kg (lbs)	16.4 (36.2)
Windload		Calculation	km/h (mph)	160 (100)
		Frontal	N (lbf)	391 (88)
Survival Wind Speed			km/h (mph)	241 (150)
Wind Area			m^2 (ft^2)	0.13 (4.7)
Volume		Total	m^3 (ft^3)	0.13 (4.7)
		Each Antenna	m^3 (ft^3)	0.065 (2.33)
Connector		Type	---	4.3-10 Female
		Quantity	---	12
		Position	---	Bottom
Radome Color			---	Grey (Pantone 420 C), Brown (Pantone 476 C), Black (RAL 9011)



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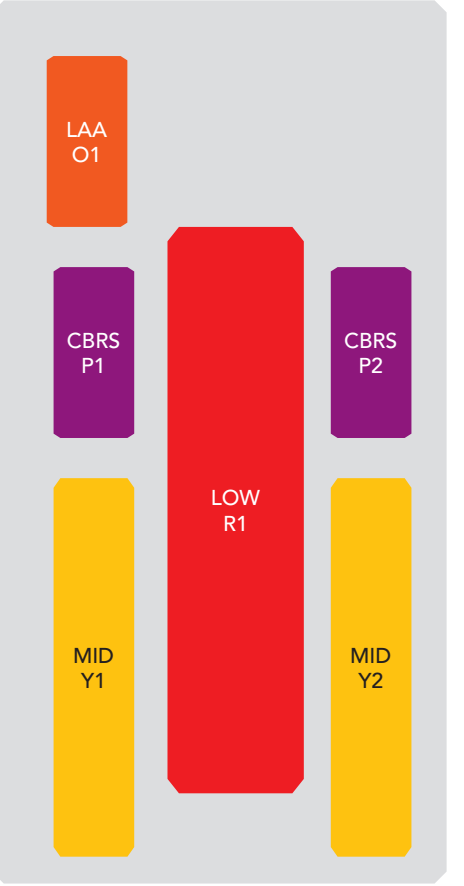
ARRAY LAYOUT Topology

FREQUENCY		ARRAY	CONNECTOR	CONNECTOR TYPE
LOW BAND	696-960	R1	1-2	(2x) 4.3-10 Female
MID BAND	1695-2700	Y1	3-4	(2x) 4.3-10 Female
	1695-2700	Y2	5-6	(2x) 4.3-10 Female
CBRS BAND	3550-3700	P1	7-8	(2x) 4.3-10 Female
	3550-3700	P2	9-10	(2x) 4.3-10 Female
LAA BAND	5150-5925	O1	11-12	(2x) 4.3-10 Female



The illustration is not shown to scale.

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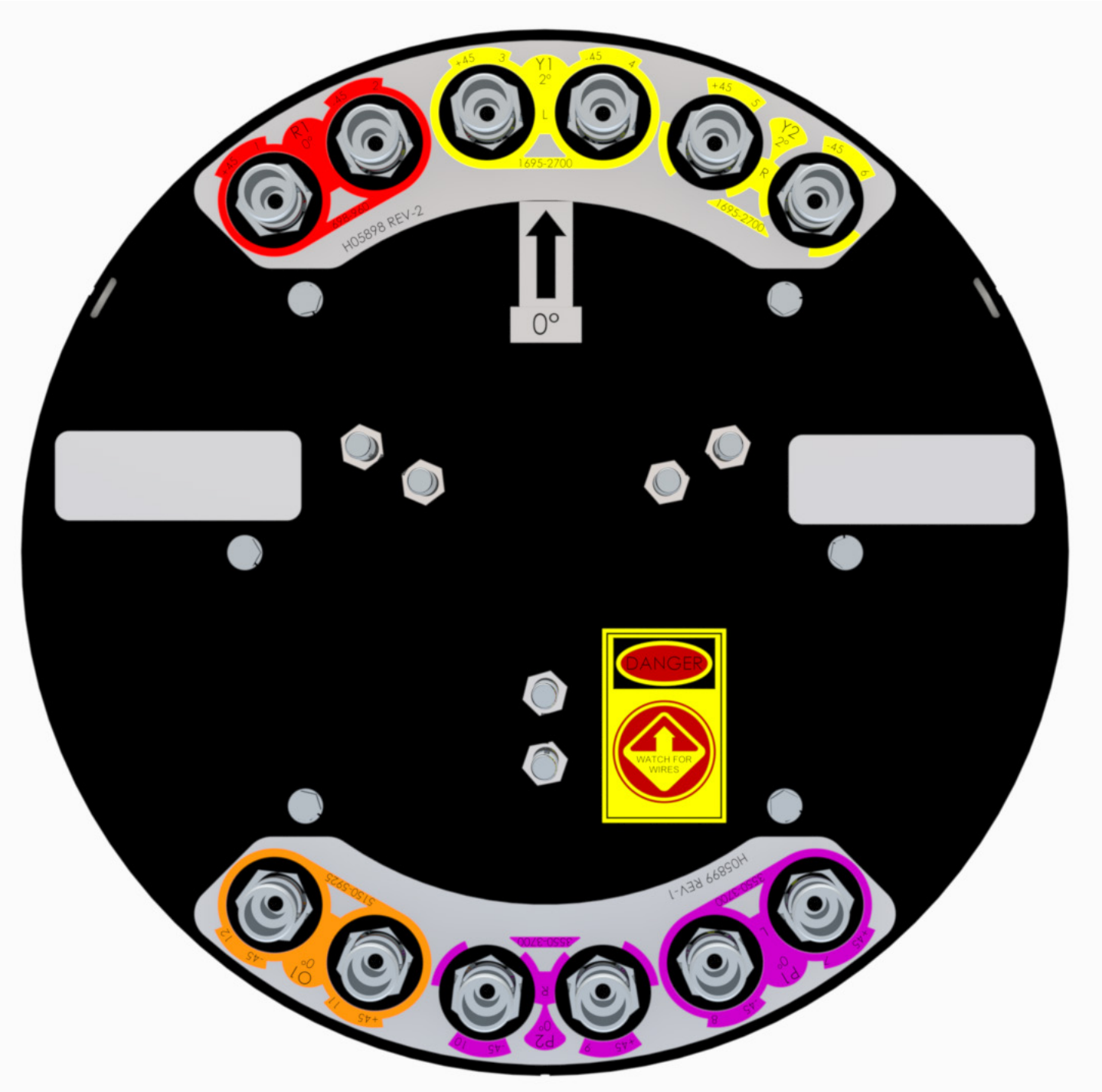
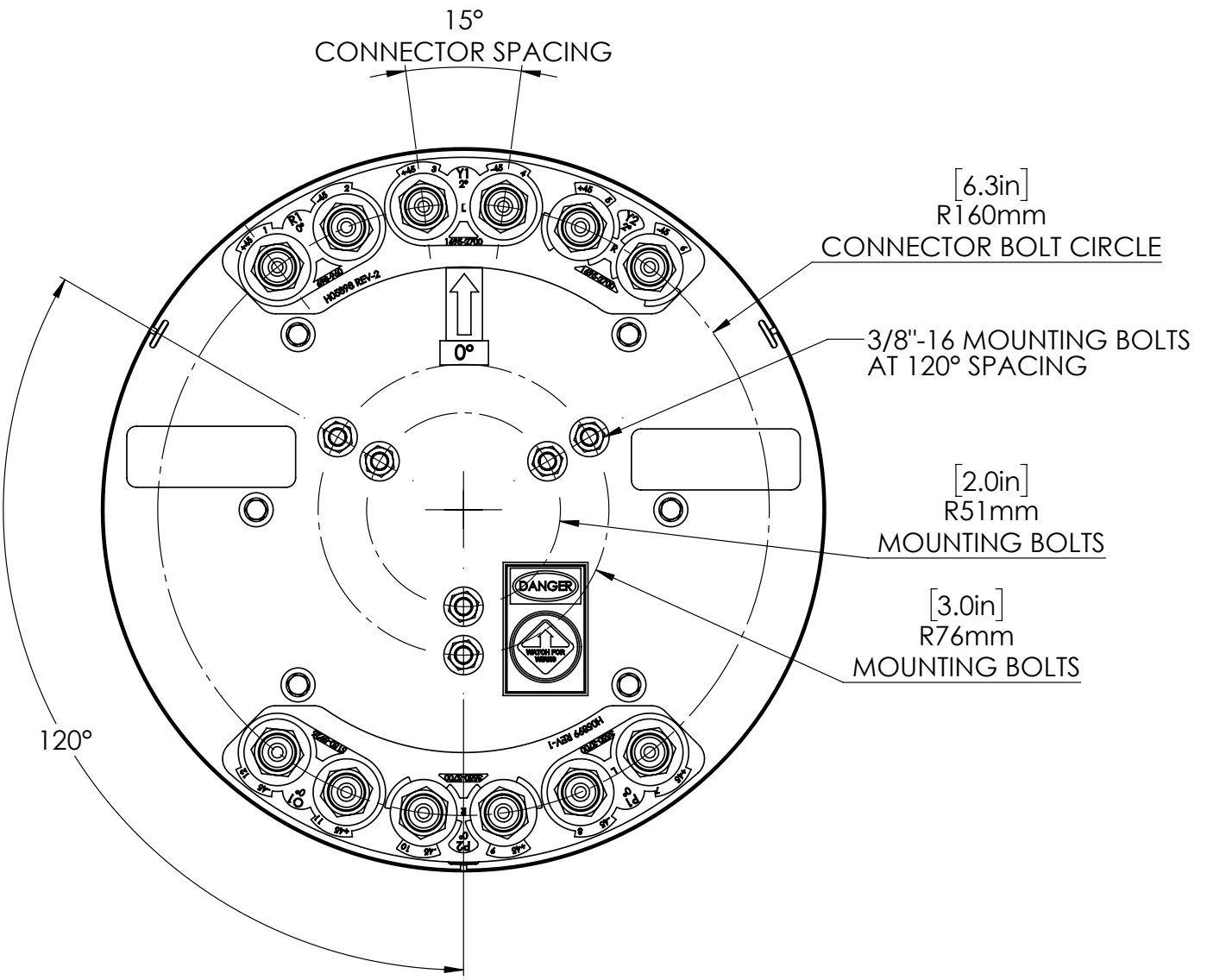
BOTTOM VIEW - LABELING



C2U3MB180X12Fwxys0

BOTTOM VIEW - CONNECTOR DIAGRAM



BOTTOM VIEW

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.

C2U3MB180X12Fwxys0

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

NUMBER OF BANDS and OPERATING FREQUENCY				PATTERN TYPE	AZIMUTH BMWDTH	POLARIZA-TION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
C	2U	3M		B	180	X	12	F	wxy	s	0	BK BR
(1x) 696-960	(2x) 1695-2700	(2x) 3550-3700	(1x) 5150-5925	Back-to-Back	~180° Peanut-Shape	XPOL	1.2 meters	Fixed Tilt	These letters are placeholders for fixed tilt options. Refer to Electrical Specifications for available tilt options.	4.3-10 Connector	Original Design	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

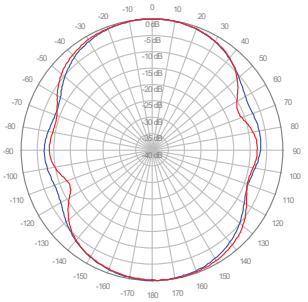
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND				ORDER MODEL NUMBER
	LOW BAND	MID BAND	CBRS BAND	LAA BAND	
Grey Pantone 420 C	0°	2°	0°	0°	C2U3MB180X12F020s0
	0°	6°	0°	0°	C2U3MB180X12F060s0
	5°	2°	0°	0°	C2U3MB180X12F520s0
	5°	6°	0°	0°	C2U3MB180X12F560s0
Brown Pantone 476 C	0°	2°	0°	0°	C2U3MB180X12F020s0BR
	0°	6°	0°	0°	C2U3MB180X12F060s0BR
	5°	2°	0°	0°	C2U3MB180X12F520s0BR
	5°	6°	0°	0°	C2U3MB180X12F560s0BR
Black RAL 9011	0°	2°	0°	0°	C2U3MB180X12F020s0BK
	0°	6°	0°	0°	C2U3MB180X12F060s0BK
	5°	2°	0°	0°	C2U3MB180X12F520s0BK
	5°	6°	0°	0°	C2U3MB180X12F560s0BK

C2U3MB180X12Fwxys0

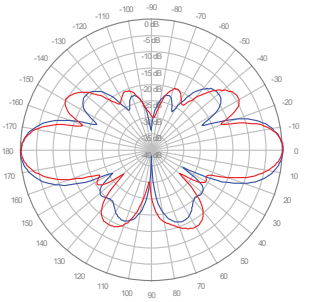
750 MHz
850 MHz

R1, 0° TILT

+45°

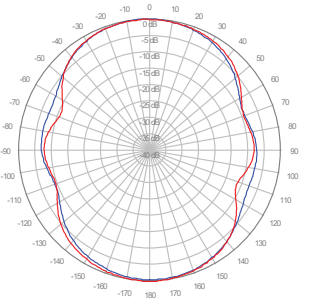


Azimuth



Elevation

-45°



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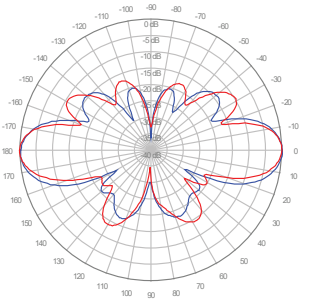
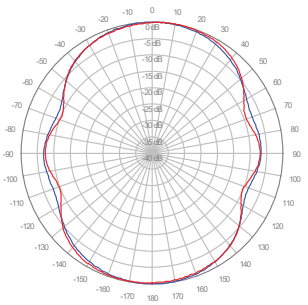


Elevation

R1, 5° TILT

+45°



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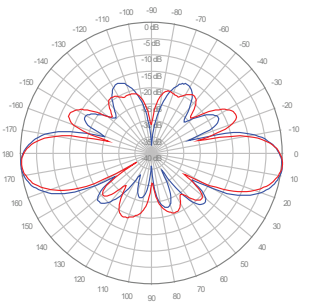
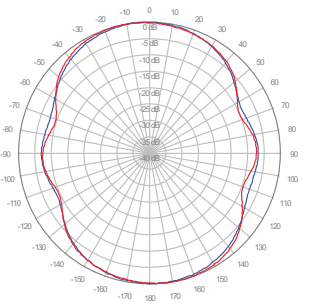


Elevation

-45°



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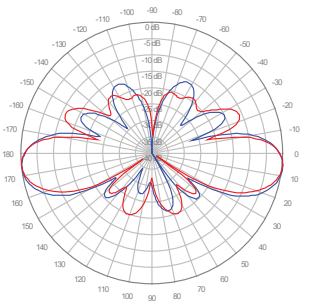

Elevation

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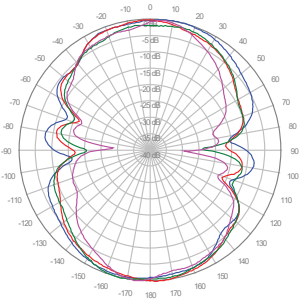
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 2° TILT

+45°



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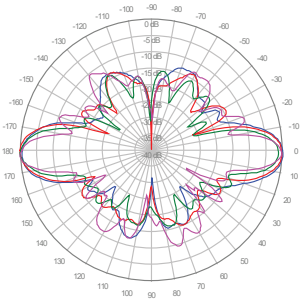
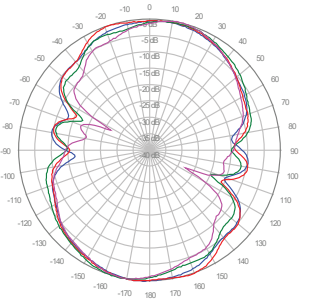


Elevation

-45°



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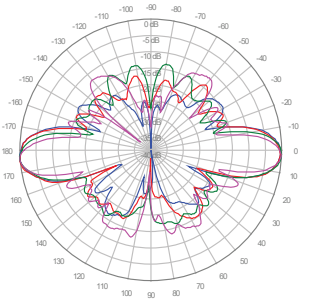
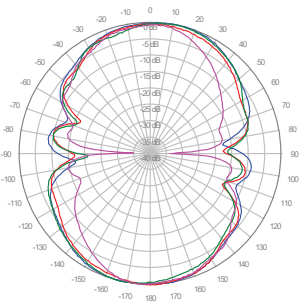


Elevation

Y1, 6° TILT

+45°



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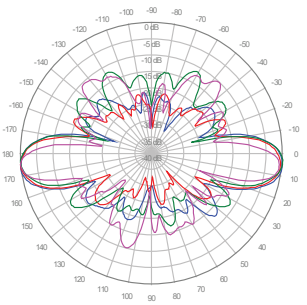
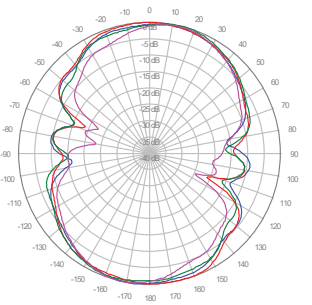


Elevation

-45°



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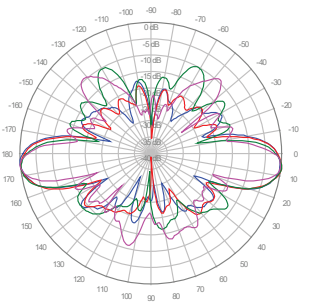
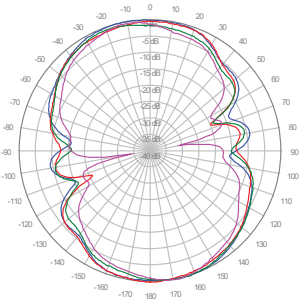


Elevation

Y2, 2° TILT

+45°



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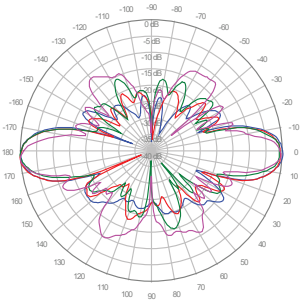
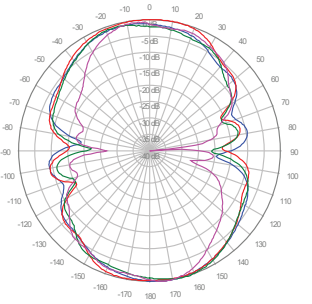


Elevation

-45°



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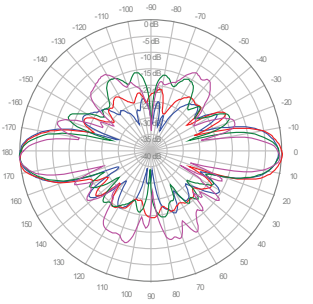
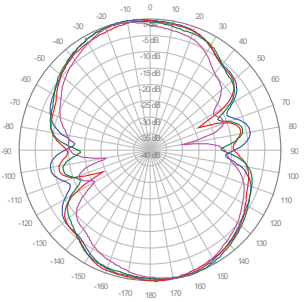


Elevation

Y2, 6° TILT

+45°



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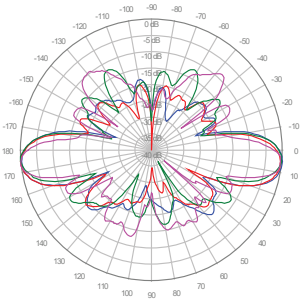
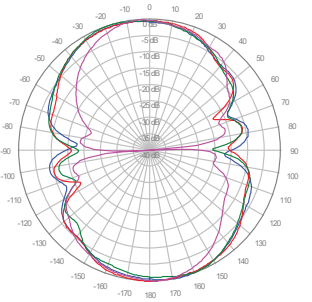


Elevation

-45°



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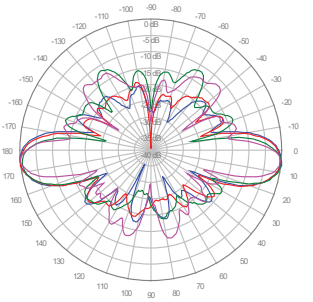

Elevation

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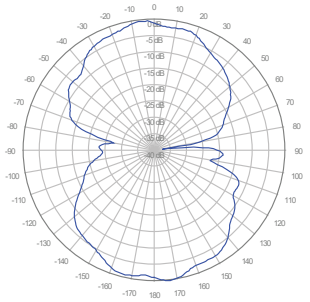
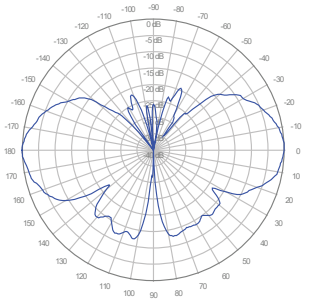
P1, 0° TILT

+45°

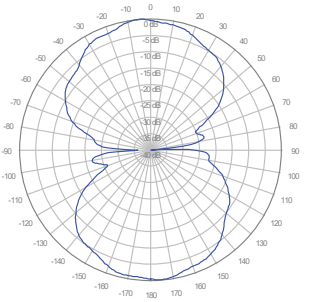


Azimuth (3600 MHz)

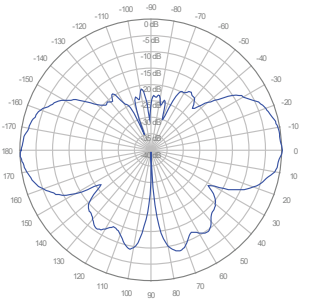


Elevation (3600 MHz)

-45°



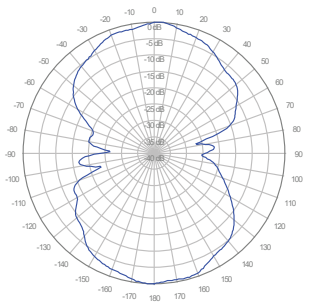
Azimuth (3600 MHz)



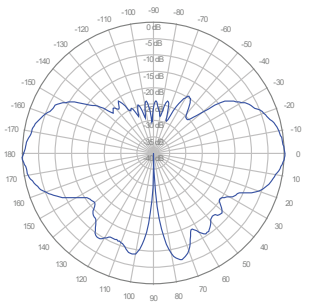
Elevation (3600 MHz)

P2, 0° TILT

+45°

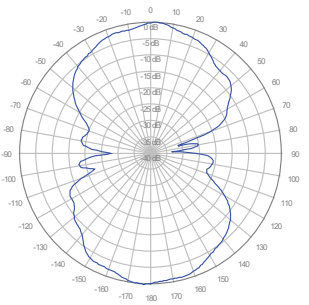


Azimuth (3600 MHz)

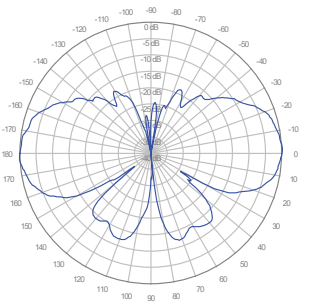


Elevation (3600 MHz)

-45°



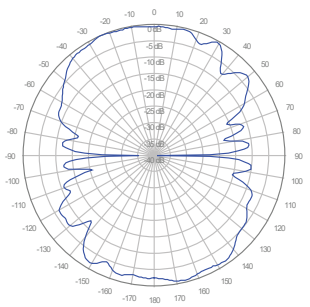
Azimuth (3600 MHz)



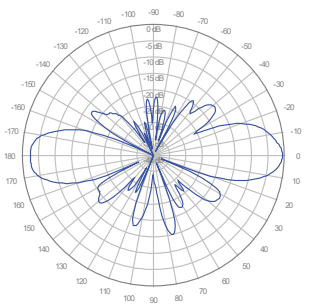
Elevation (3600 MHz)

O1, 0° TILT

+45°

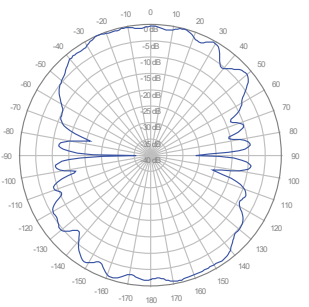


Azimuth (5600 MHz)

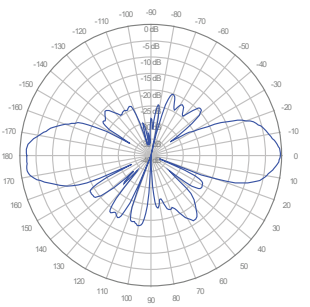


Elevation (5600 MHz)

-45°



Azimuth (5600 MHz)



Elevation (5600 MHz)