Amphenol ANTENNA SOLUTIONS

24-Port Canister Antenna

(4x) 1695-2700 | (2x) 3550-3700 | (2x) 5150-5925 MHz

SECTOR / OMNI COMBINATION | 24.6 IN | FIXED TILT

4U4MTSP1X06Fxys0

Features

- Sector & Omni combination configuration with 24 connectors
- Utilizes 4x4 MIMO on *both* the sectorized and pseudo omni mid bands
- Ideal for Small Cell / DAS applications
- This antenna meets the requirements of the U-NII
- Available for order with a grey, brown or black radome

PRODUCT OVERVIEW															
	Frequency Range (MHz)	MID BAND								CBRS BAND		LAA BAND	
		(4x) 1695-2700								(2x) 3550-3700		(2x) 5150-5925	
	Array	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	P1	P2	O1	O2
	Connector	12 PORTS						4 PORTS		4 PORTS		4 PORTS	
	Polarization	XPOL						XPOL		XPOL		XPOL	
	Azimuth Beamwidth (avg)	SECTORIZED						OMNI		OMNI		OMNI	
	Electrical Downtilt	2°, 4°, 6°								0°		0°	
	Configuration	SECTOR & OMNI COMBINATION											
	Total Connector Count	24 PORTS											
	Connector Type	4.3-10 FEMALE											
	Dimensions	625 x Ø371 mm (24.6 x Ø14.6 in)											
	Radome Color Options	GREY, BROWN or BLACK											

ELECTRICAL SPECIFICATIONS Mid Band - Sectorized — **Y1 Y2 Y3 Y4 Y5 Y6**

Frequency Range		MHz	(4x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(4x) ±45°			
Gain	BASTA	dBi	12.4 ± 1.2	12.9 ± 1.2	13.1 ± 1.1	13.7 ± 1.1
	MAX	dBi	13.6	14.1	14.2	14.8
Azimuth Beamwidth (3 dB)		degrees	94.2° ± 18.9°	89.0° ± 15.8°	87.2° ± 8.6°	74.4° ± 13.9°
Elevation Beamwidth (3 dB)		degrees	22.2° ± 5.4°	21.0° ± 4.0°	20.1° ± 4.0°	16.6° ± 3.4°
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	> 14	> 14	> 14	> 14
Isolation	Intraband	dB	25			
	Interband	dB	28			
Input Power		Watts	300W			

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 - Omni

■ Y7 ■ Y8

Frequency Range		MHz	(4x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(4x) ±45°			
Gain	BASTA	dBi	8.8 ± 0.5	8.8 ± 0.5	9.0 ± 0.6	9.2 ± 0.7
	MAX	dBi	9.3	9.3	9.6	9.9
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	22.2° ± 5.4°	21.0° ± 4.0°	20.1° ± 4.0°	16.6° ± 3.4°
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	> 14	> 14	> 14	> 14
Isolation	Intraband	dB	25			
	Interband	dB	28			
Input Power		Watts	300W			

ELECTRICAL SPECIFICATIONS CBRS Band

■ P1 ■ P2

Frequency Range		MHz	(2x) 3550-3700
Polarization		---	(2x) ±45°
Gain	BASTA	dBi	5.0 ± 0.7
	MAX	dBi	5.7
Azimuth Beamwidth (3 dB)		degrees	360°
Elevation Beamwidth (3 dB)		degrees	39.9° ± 7.5°
Electrical Downtilt		degrees	(y) 0°
Impedance		Ohms	50Ω
VSWR		---	≤ 1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A
Isolation	Intraband	dB	25
	Interband	dB	28
Input Power		Watts	100W

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ELECTRICAL SPECIFICATIONS LAA Band			■ **O1** ■ **O2**
Frequency Range		MHz	(2x) 5150-5925
Polarization		---	(2x) ±45°
Gain	BASTA	dBi	5.1 ± 0.7
	MAX	dBi	5.8
Azimuth Beamwidth (3 dB)		degrees	360°
Elevation Beamwidth (3 dB)		degrees	23.2° ± 4.3°
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	> 14 dB
Isolation	Intraband	dB	25
	Interband	dB	28
Input Power		Watts	50W
U-NII Compliant		---	Yes

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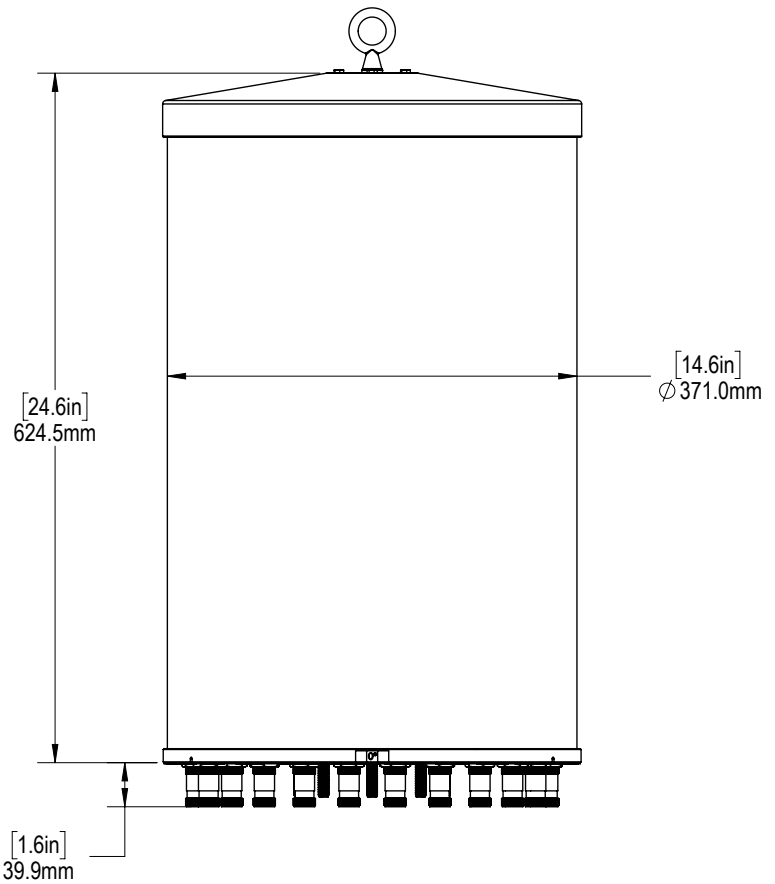
MECHANICAL SPECIFICATIONS

Antenna	Height		mm (in)	625 (24.6)
	Diameter		mm (in)	371 (14.6)
Net Weight - Antenna Only			kg (lbs)	13.6 (30.0)
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	---	4.3-10 Female
		Quantity	---	24
		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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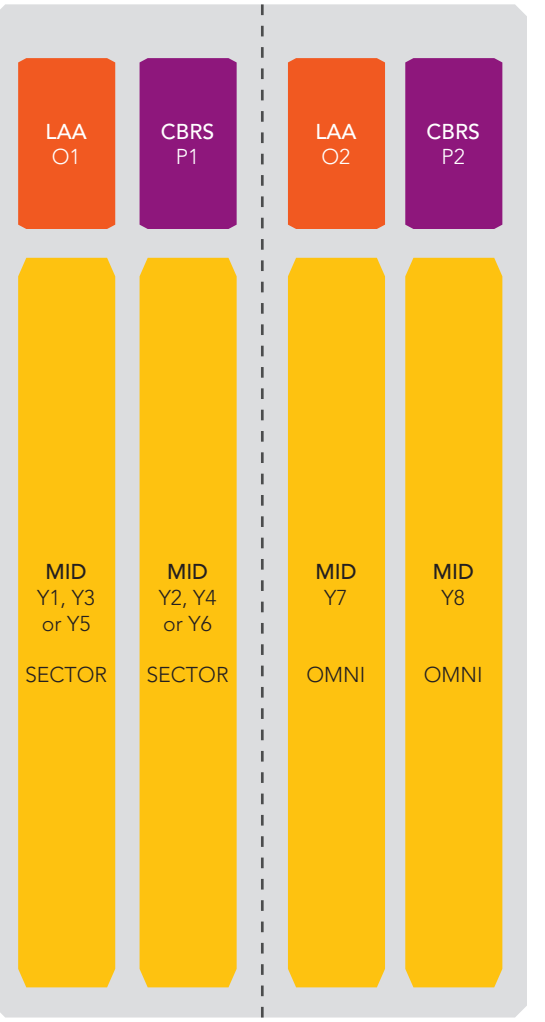
ARRAY LAYOUT Topology

FREQUENCY		ARRAY	CONNECTOR	CONNECTOR TYPE
MID BAND	1695-2700	Y1	1-2	(2x) 4.3-10 Female
	1695-2700	Y2	3-4	(2x) 4.3-10 Female
	1695-2700	Y3	5-6	(2x) 4.3-10 Female
	1695-2700	Y4	7-8	(2x) 4.3-10 Female
	1695-2700	Y5	9-10	(2x) 4.3-10 Female
	1695-2700	Y6	11-12	(2x) 4.3-10 Female
	1695-2700	Y7	13-14	(2x) 4.3-10 Female
	1695-2700	Y8	15-16	(2x) 4.3-10 Female
CBRS BAND	3550-3700	P1	17-18	(2x) 4.3-10 Female
	3550-3700	P2	19-20	(2x) 4.3-10 Female
LAA BAND	5150-5925	O1	21-22	(2x) 4.3-10 Female
	5150-5925	O2	23-24	(2x) 4.3-10 Female



The illustration is not shown to scale.

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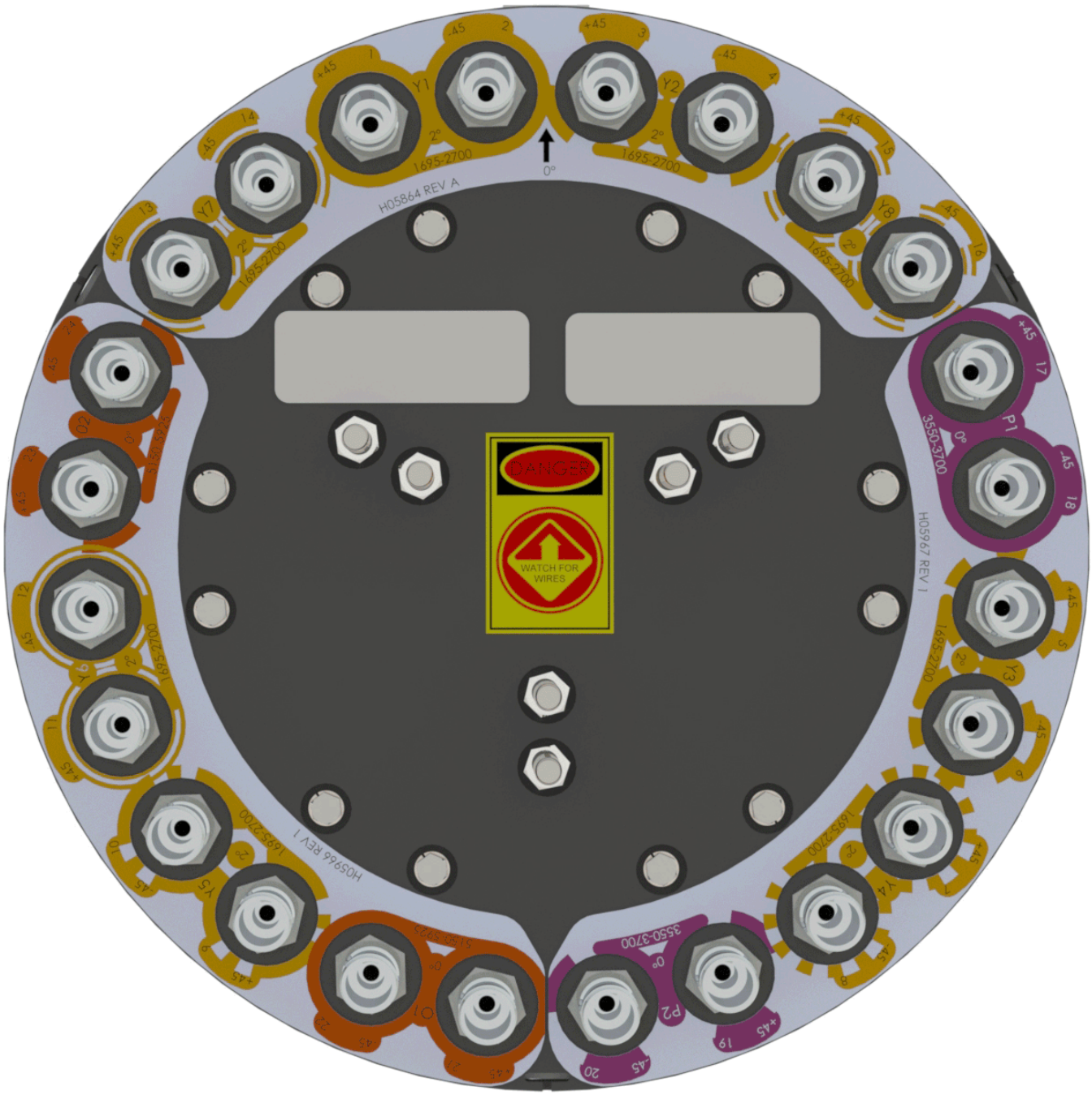
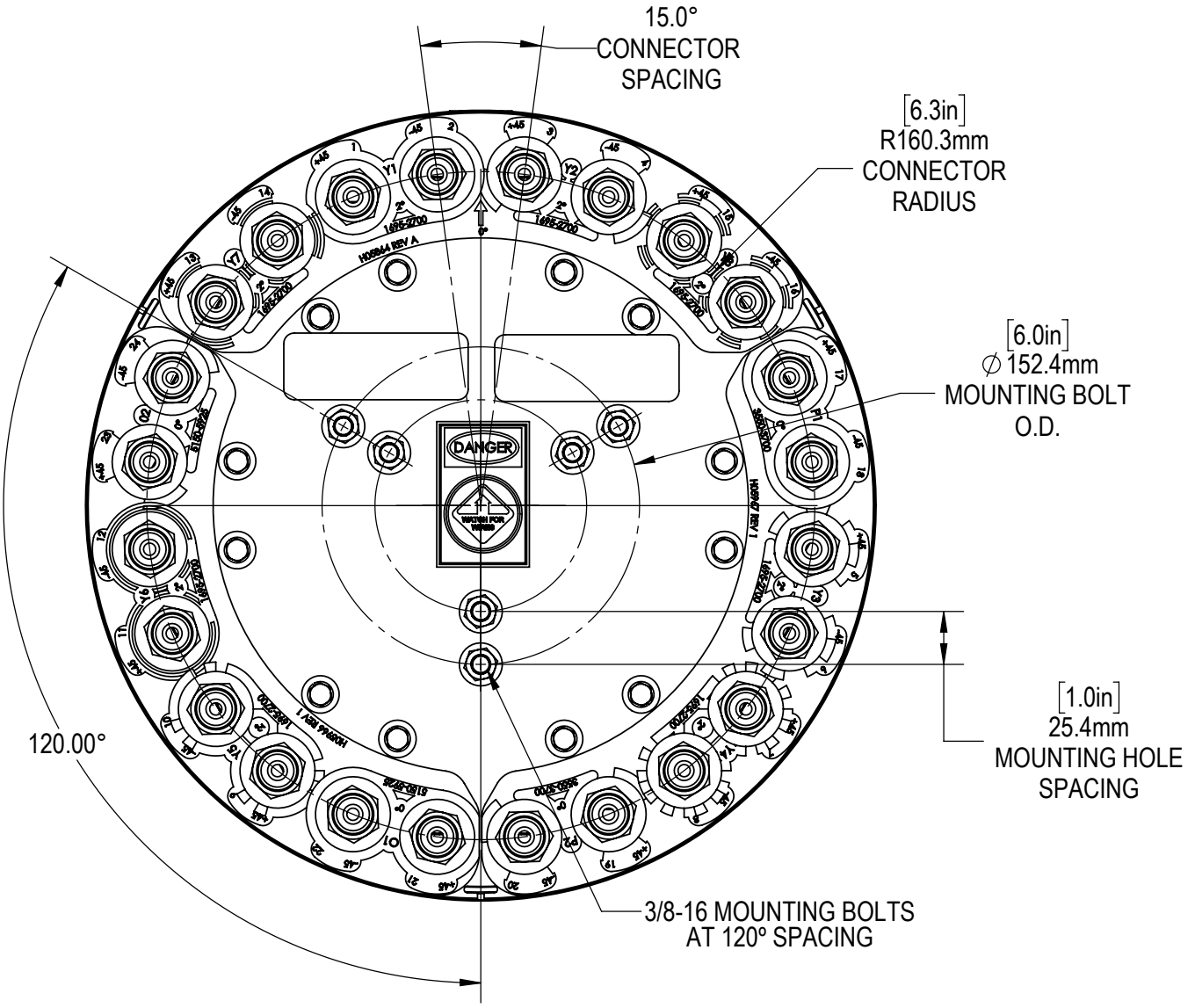
BOTTOM VIEW - LABELING



4U4MTSP1X06Fxys0

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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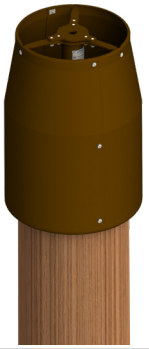
MOUNTING KITS Select from the following mounting options when ordering. Mounting kits for canister antennas are ordered as a separate line item.

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.

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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
4U	4M		T	SP1	X	06	F	xy	s	0	BK BR
(4x) 1695-2700	(2x) 3550-3700	(2x) 5150-5925	Tri-Sector	Sector and Pseudo 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	Original variation	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

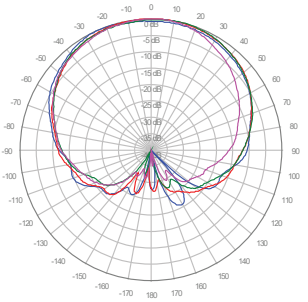
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND			ORDER MODEL NUMBER
	MID BAND	CBRS BAND	LAA BAND	
Grey Pantone 420 C	2°	0°	0°	4U4MTSP1X06F20s0
	4°	0°	0°	4U4MTSP1X06F40s0
	6°	0°	0°	4U4MTSP1X06F60s0
	Y1-Y6=6°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FAAs0
	Y1-Y6=4°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FBBs0
Brown Pantone 476 C	2°	0°	0°	4U4MTSP1X06F20s0BR
	4°	0°	0°	4U4MTSP1X06F40s0BR
	6°	0°	0°	4U4MTSP1X06F60s0BR
	Y1-Y6=6°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FAAs0BR
	Y1-Y6=4°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FBBs0BR
Black RAL 9011	2°	0°	0°	4U4MTSP1X06F20s0BK
	4°	0°	0°	4U4MTSP1X06F40s0BK
	6°	0°	0°	4U4MTSP1X06F60s0BK
	Y1-Y6=6°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FAAs0BK
	Y1-Y6=4°; Y7-Y8=2°	0°	0°	4U4MTSP1X06FBBs0BK

4U4MTSP1X06Fxys0

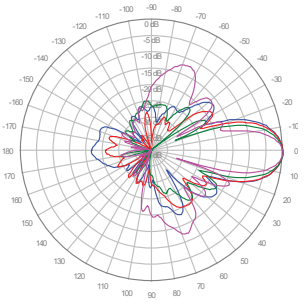
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 2° TILT

+45°

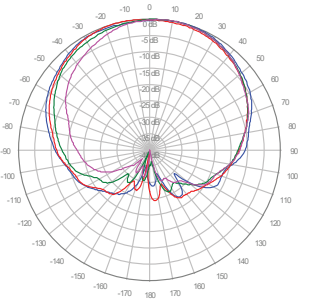


Azimuth



Elevation

-45°



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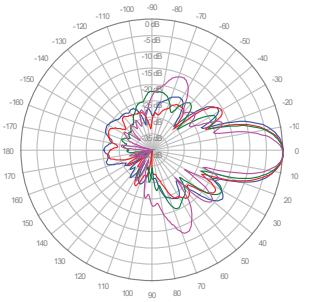
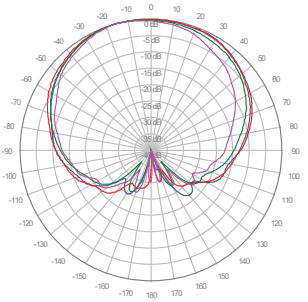


Elevation

Y2, 2° TILT

+45°



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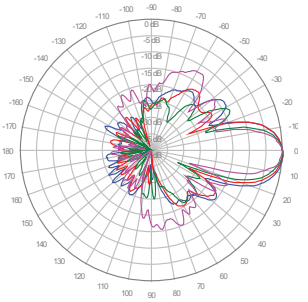
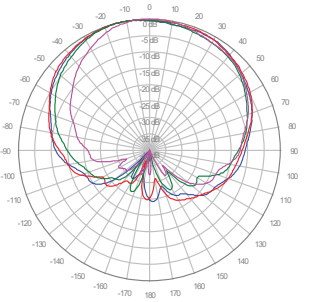


Elevation

-45°



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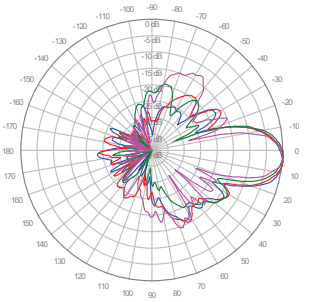
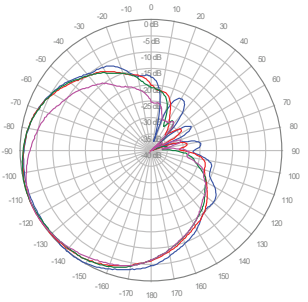


Elevation

Y3, 2° TILT

+45°



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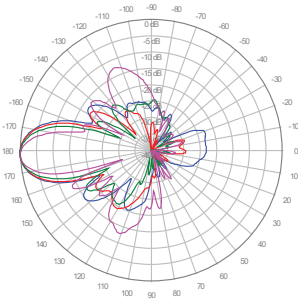
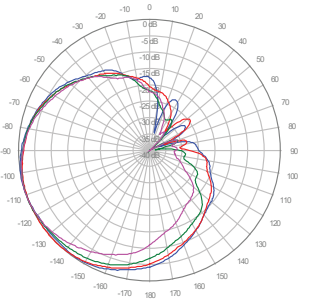


Elevation

-45°



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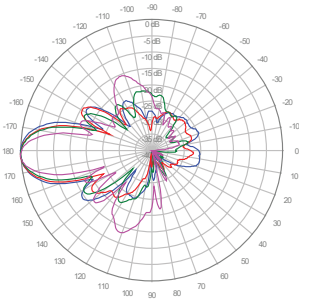
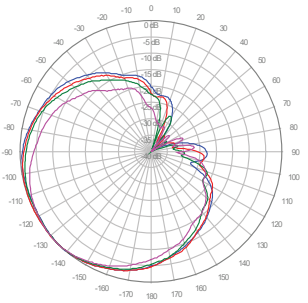


Elevation

Y4, 2° TILT

+45°



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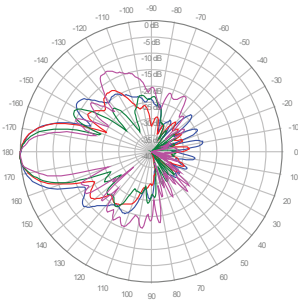
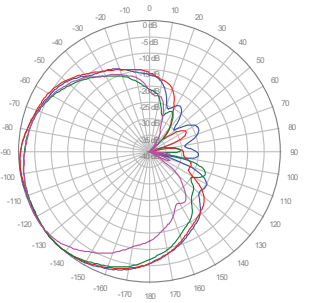


Elevation

-45°



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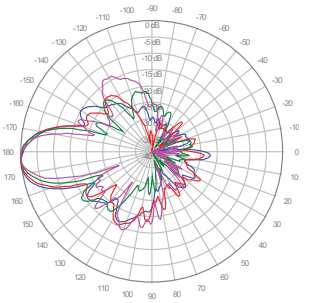
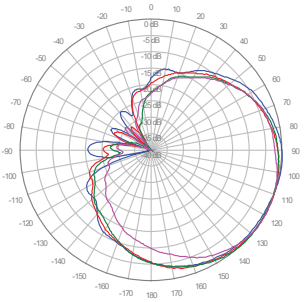


Elevation

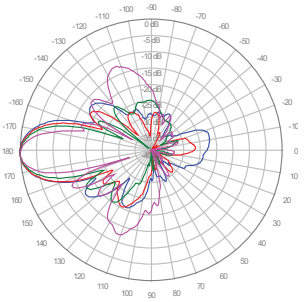
4U4MTSP1X06Fxys0

1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y5, 2° TILT


Azimuth

+45°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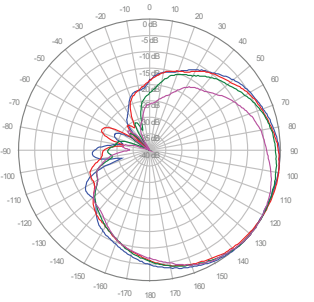
Azimuth

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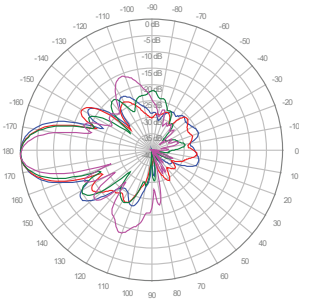
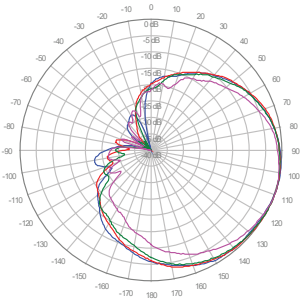

Elevation

Y6, 2° TILT


Azimuth

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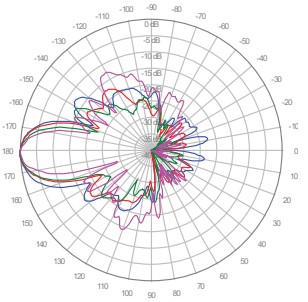
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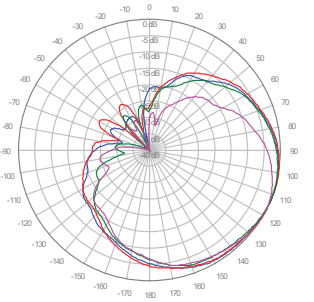
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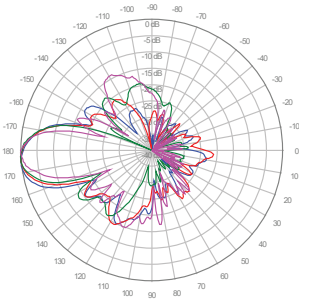
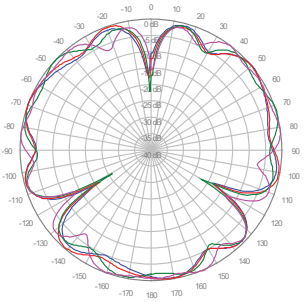

Elevation

4U4MTSP1X06Fxys0

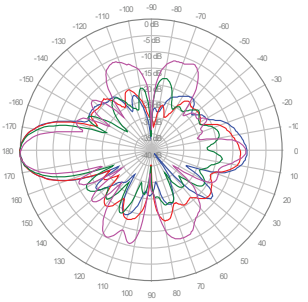
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y7, 2° TILT

+45°

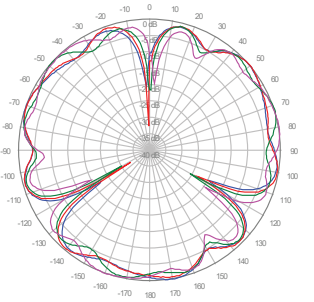


Azimuth



Elevation

-45°



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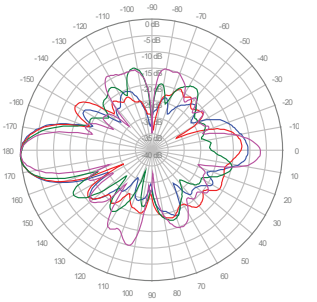
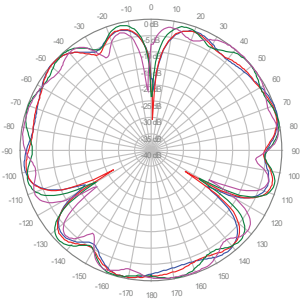


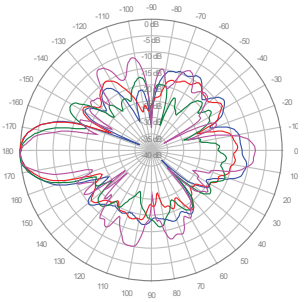
Elevation

Y8, 2° TILT

+45°

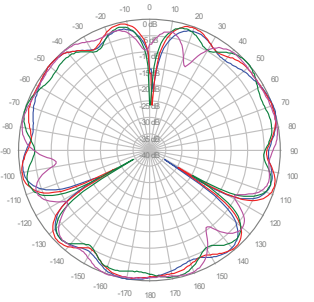


Azimuth

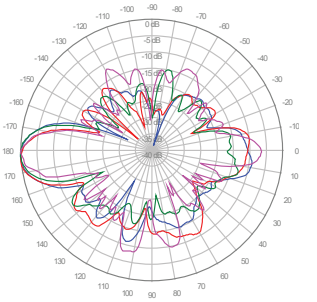


Elevation

-45°



Azimuth



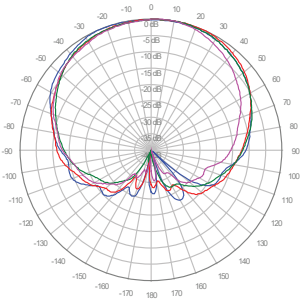
Elevation

4U4MTSP1X06Fxys0

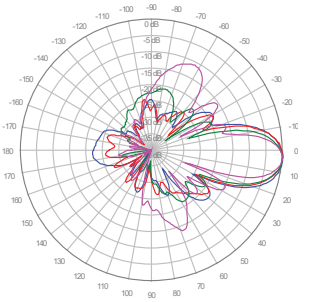
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 4° TILT

+45°

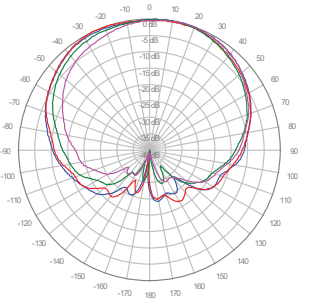


Azimuth

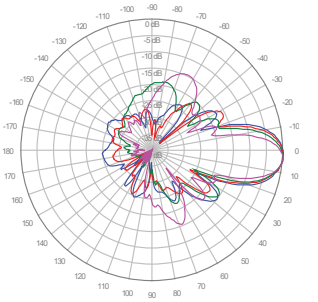


Elevation

-45°



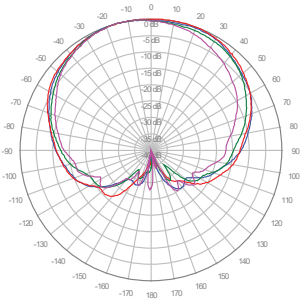
Azimuth



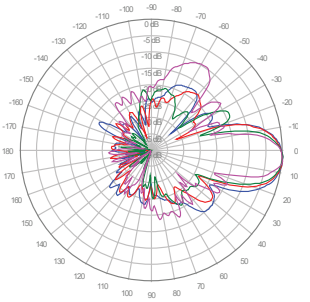
Elevation

Y2, 4° TILT

+45°

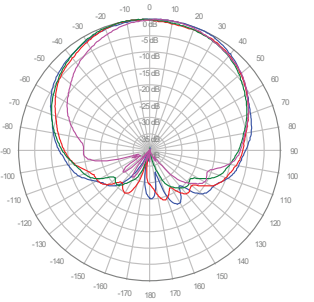


Azimuth

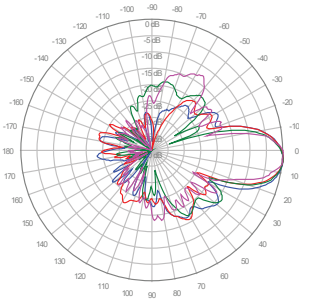


Elevation

-45°



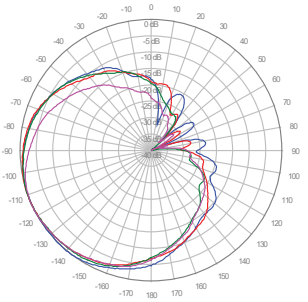
Azimuth



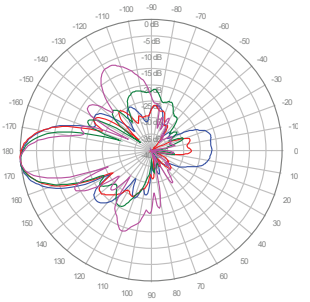
Elevation

Y3, 4° TILT

+45°

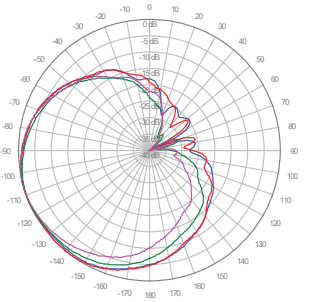


Azimuth

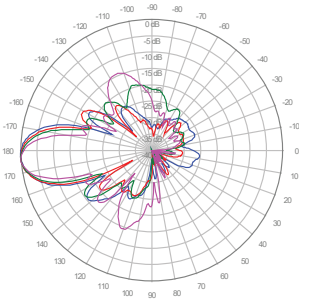


Elevation

-45°



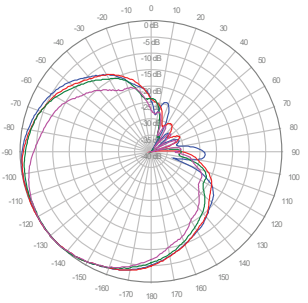
Azimuth



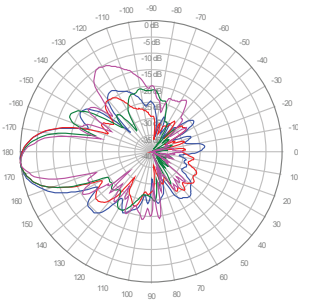
Elevation

Y4, 4° TILT

+45°

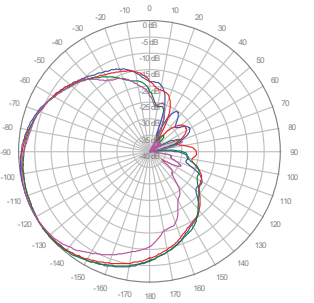


Azimuth

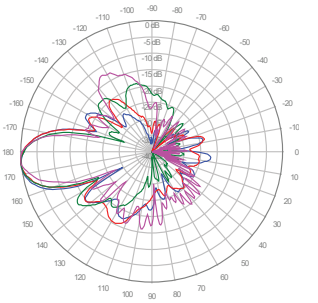


Elevation

-45°



Azimuth



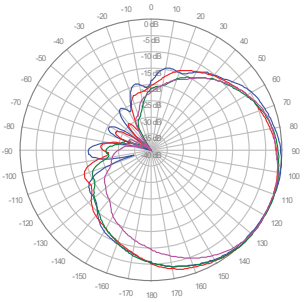
Elevation

4U4MTSP1X06Fxys0

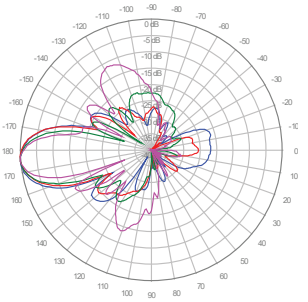
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y5, 4° TILT

+45°

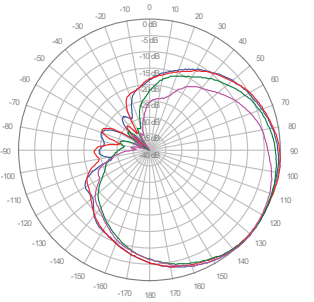


Azimuth

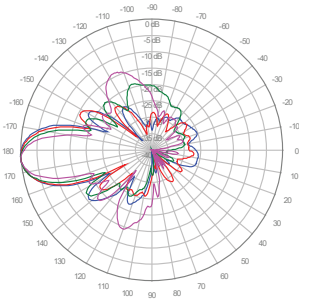


Elevation

-45°



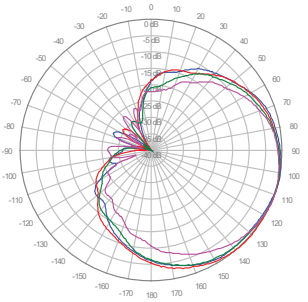
Azimuth



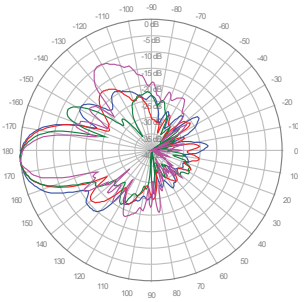
Elevation

Y6, 4° TILT

+45°

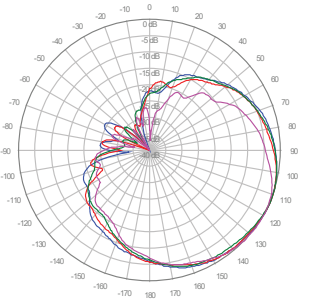


Azimuth

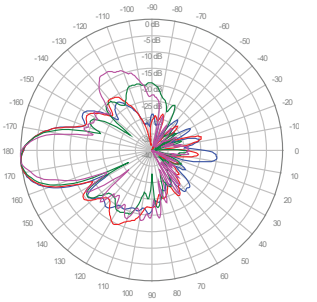


Elevation

-45°



Azimuth



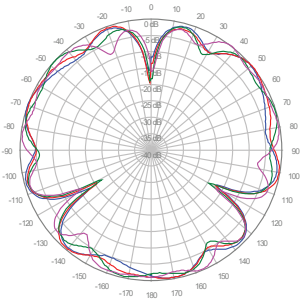
Elevation

4U4MTSP1X06Fxys0

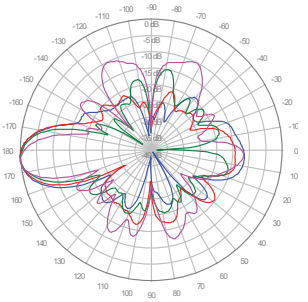
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y7, 4° TILT

+45°

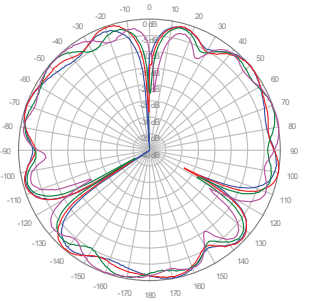


Azimuth

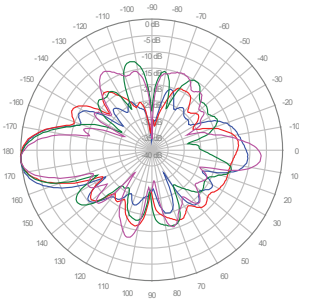


Elevation

-45°



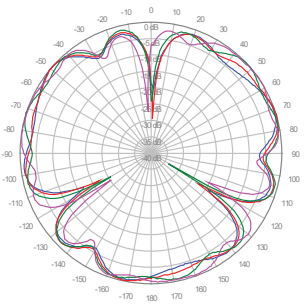
Azimuth



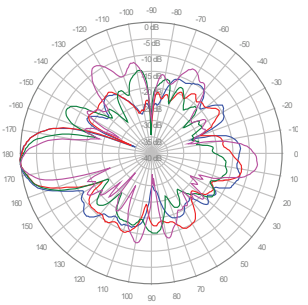
Elevation

Y8, 4° TILT

+45°

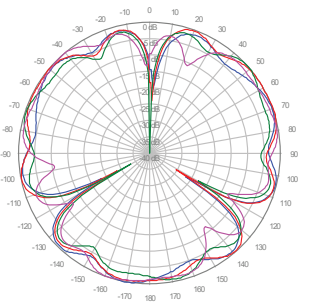


Azimuth

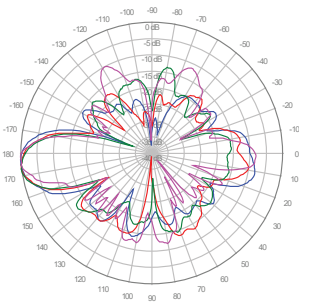


Elevation

-45°



Azimuth



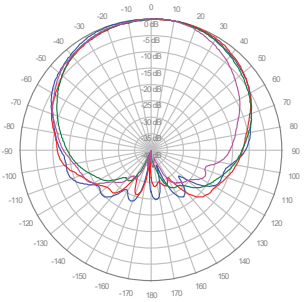
Elevation

4U4MTSP1X06Fxys0

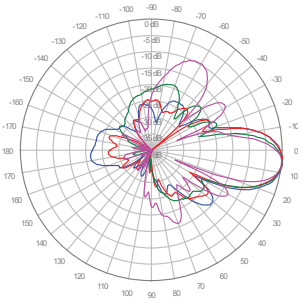
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y1, 6° TILT

+45°

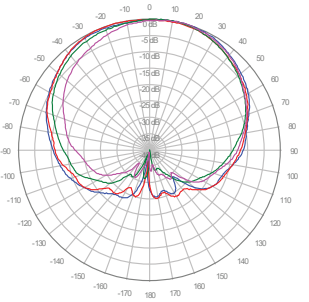


Azimuth

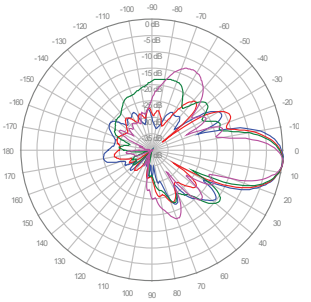


Elevation

-45°



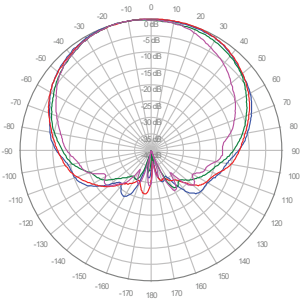
Azimuth



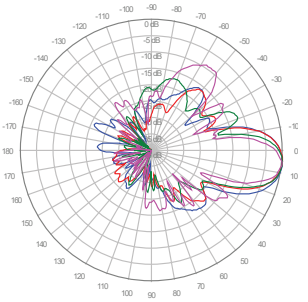
Elevation

Y2, 6° TILT

+45°

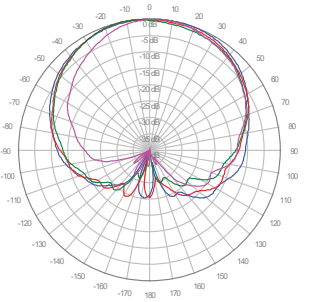


Azimuth

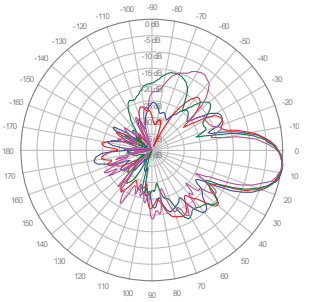


Elevation

-45°



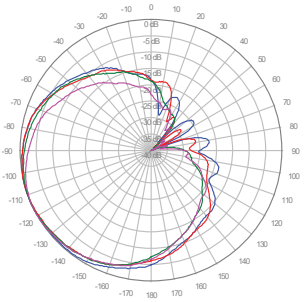
Azimuth



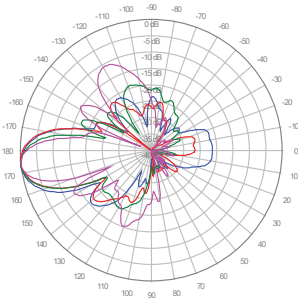
Elevation

Y3, 6° TILT

+45°

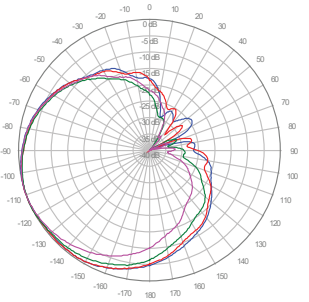


Azimuth

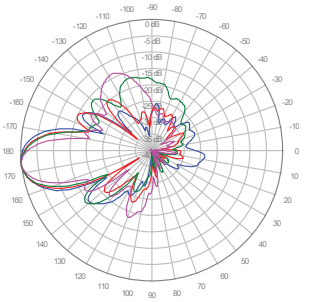


Elevation

-45°



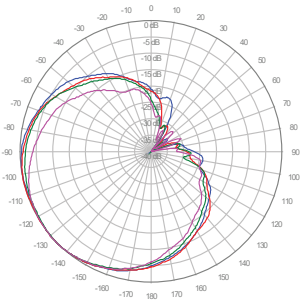
Azimuth



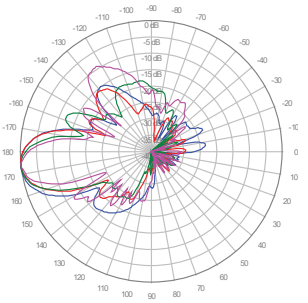
Elevation

Y4, 6° TILT

+45°

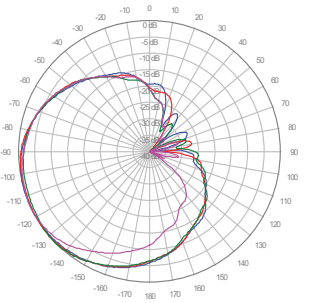


Azimuth

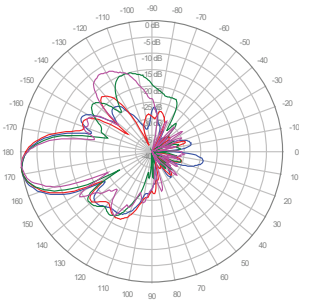


Elevation

-45°



Azimuth



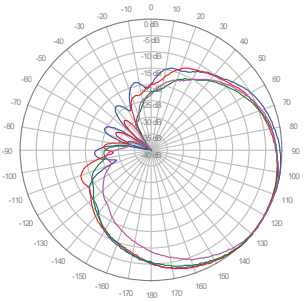
Elevation

4U4MTSP1X06Fxys0

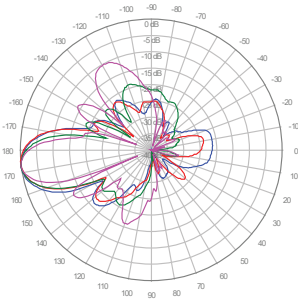
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y5, 6° TILT

+45°

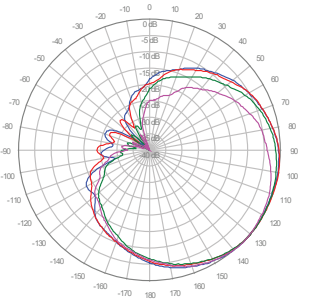


Azimuth

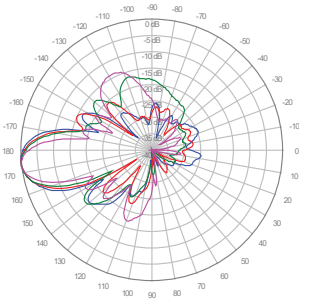


Elevation

-45°



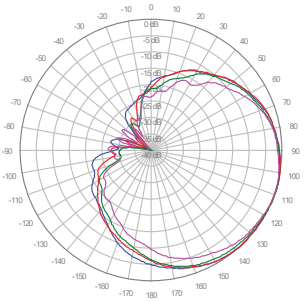
Azimuth



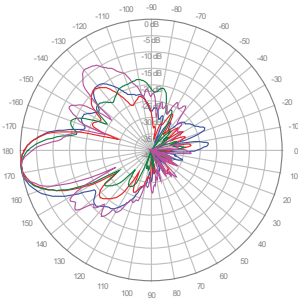
Elevation

Y6, 6° TILT

+45°

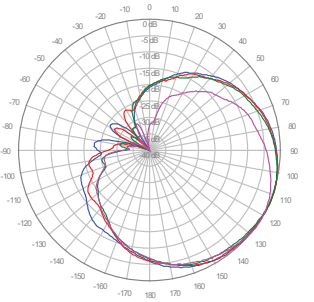


Azimuth

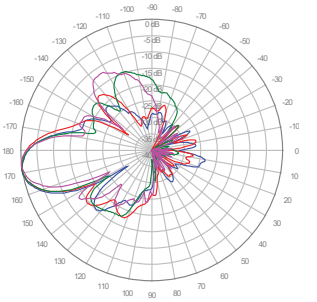


Elevation

-45°



Azimuth



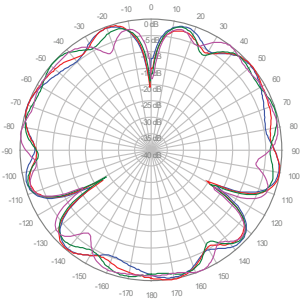
Elevation

4U4MTSP1X06Fxys0

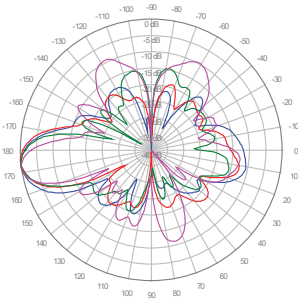
1800 MHz
1900 MHz
2100 MHz
2600 MHz

Y7, 6° TILT

+45°

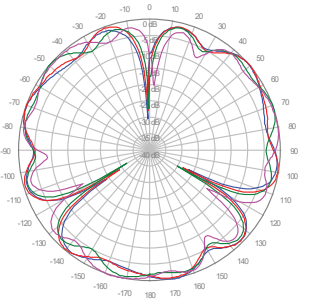


Azimuth

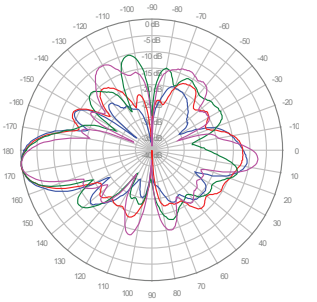


Elevation

-45°



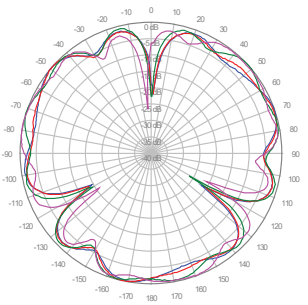
Azimuth



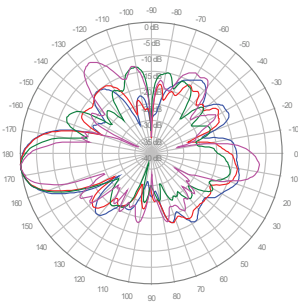
Elevation

Y8, 6° TILT

+45°

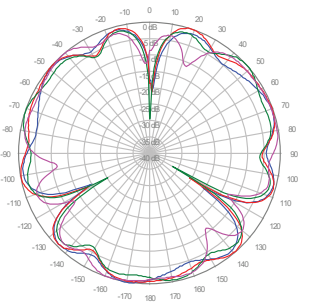


Azimuth

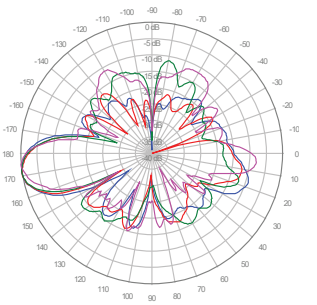


Elevation

-45°



Azimuth

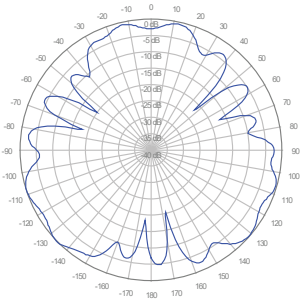


Elevation

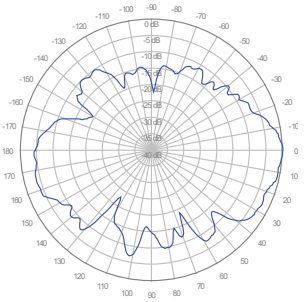
4U4MTSP1X06Fxys0

P1, 0° TILT

+45°

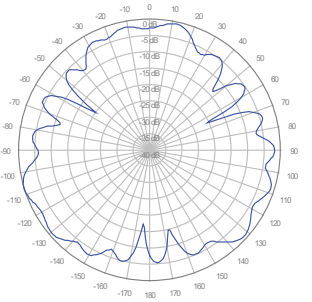


Azimuth (3600 MHz)

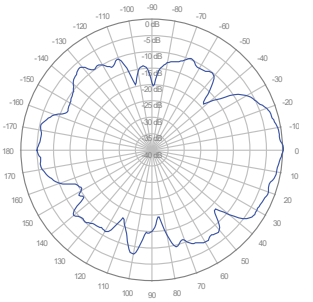


Elevation (3600 MHz)

-45°



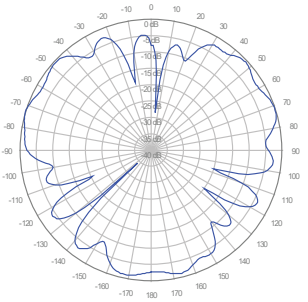
Azimuth (3600 MHz)



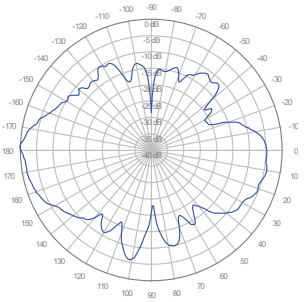
Elevation (3600 MHz)

P2, 0° TILT

+45°

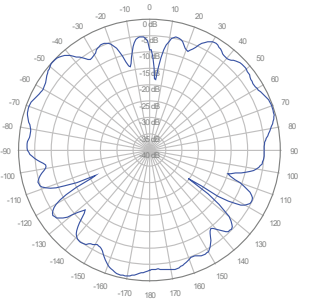


Azimuth (3600 MHz)

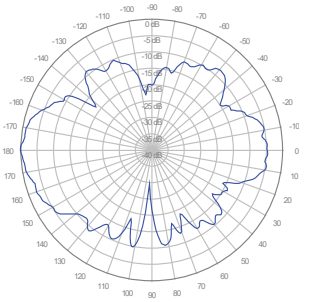


Elevation (3600 MHz)

-45°



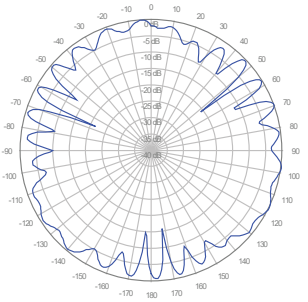
Azimuth (3600 MHz)



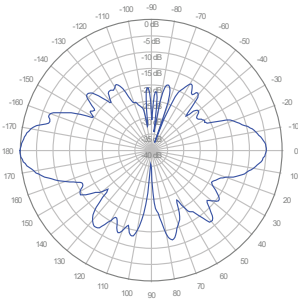
Elevation (3600 MHz)

O1, 0° TILT

+45°

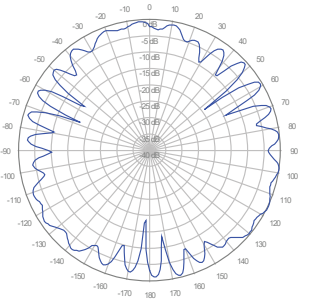


Azimuth (5600 MHz)

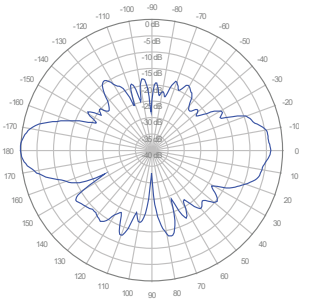


Elevation (5600 MHz)

-45°



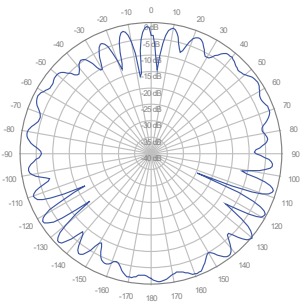
Azimuth (5600 MHz)



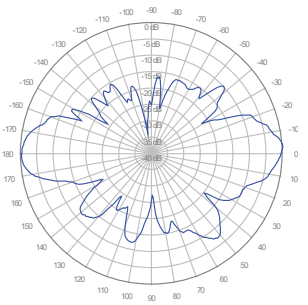
Elevation (5600 MHz)

O2, 0° TILT

+45°

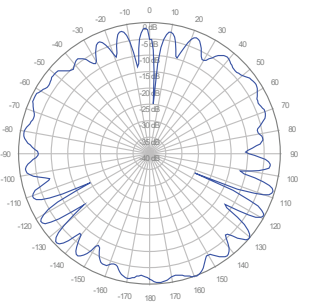


Azimuth (5600 MHz)

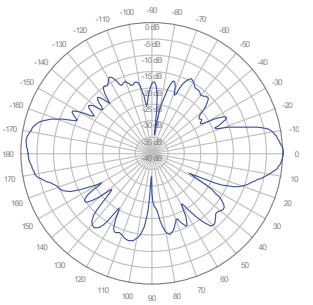


Elevation (5600 MHz)

-45°



Azimuth (5600 MHz)



Elevation (5600 MHz)