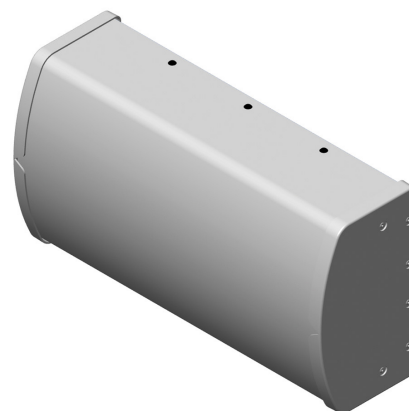


CUVX033S1F0

Features

- 33° split beam antenna
- 12-port fixed tilt
- 4-ports each for 696-960, 1695-2700 and 3300-4200 MHz
- Available with continuous adjustment "stadium" mounting option for azimuth and elevation adjustment



| PRODUCT OVERVIEW | Frequency Range (MHz) | (2x) 696-960 | (2x) 1695-2700 | (2x) 3300-4200 |
|------------------|--|---|----------------|----------------|
| | Array | ■ R1 ■ R2 | ■ Y1 ■ Y2 | ■ P1 ■ P2 |
| | Connector | 4 PORTS | 4 PORTS | 4 PORTS |
| | Polarization | XPOL | XPOL | XPOL |
| | Azimuth Beamwidth (avg) | 33° | 33° | 33° |
| | Electrical Downtilt | 0° | 0° | 0° |
| | Maximum Continuous Power Per Port @ 50° C (122° F) | 500 WATTS | 300 WATTS | 100 WATTS |
| | Maximum Total Continuous Power at 50° C (122° F) | 3600 WATTS | | |
| | Connector Type | (12x) 4.3-10 FEMALE | | |
| | Dimensions | 306 x 589 x 177 mm (12.0 x 23.2 x 7.0 in) | | |
| | Radome Color Options | GREY | | |

ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

| Frequency Range | | MHz | (2x) 696-960 | |
|---|-----------|---------|--------------|---------------|
| Frequency Sub-Range | | MHz | 696-806 | 806-960 |
| Polarization | | --- | (2x) ±45° | |
| Gain | BASTA | dBi | 10.4 ± 0.5 | 10.8 ± 0.7 |
| | MAX | dBi | 10.9 | 11.5 |
| Azimuth Beamwidth (3 dB) | | degrees | 38.6° ± 3.4° | 35.1° ± 5.3° |
| Elevation Beamwidth (3 dB) | | degrees | 72.2° ± 5.3° | 69.2° ± 10.0° |
| Electrical Downtilt | | degrees | 0° | |
| Impedance | | Ohms | 50Ω | |
| VSWR | | --- | ≤ 1.6:1 | |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBc | < -153 | |
| Upper Sidelobe Suppression | | dB | N/A | |
| Isolation | Intraband | dB | > 23 | |
| | Interband | dB | > 23 | |

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

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ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2

| | | | | | | |
|--|-----------|---------|-----------------------------|----------------------------|-----------------------------|-----------------------------|
| Frequency Range | | MHz | (2x) 1695-2700 | | | |
| Frequency Sub-Range | | MHz | 1695-1880 | 1850-1990 | 1920-2200 | 2300-2700 |
| Polarization | | --- | (2x) $\pm 45^\circ$ | | | |
| Gain | BASTA | dBi | 11.3 ± 1.2 | 11.4 ± 1.0 | 11.5 ± 0.7 | 12.0 ± 1.1 |
| | MAX | dBi | 12.5 | 12.4 | 12.2 | 13.1 |
| Azimuth Beamwidth (3 dB) | | degrees | $35.9^\circ \pm 6.4^\circ$ | $34.6^\circ \pm 5.6^\circ$ | $35.7^\circ \pm 6.6^\circ$ | $28.8^\circ \pm 6.6^\circ$ |
| Elevation Beamwidth (3 dB) | | degrees | $48.9^\circ \pm 10.7^\circ$ | $51.7^\circ \pm 9.4^\circ$ | $56.4^\circ \pm 10.9^\circ$ | $61.8^\circ \pm 20.1^\circ$ |
| Electrical Downtilt | | degrees | 0° | | | |
| Impedance | | Ohms | 50Ω | | | |
| VSWR | | --- | $\leq 1.6:1$ | | | |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBc | < -153 | | | |
| Upper Sidelobe Suppression | | dB | N/A | | | |
| Isolation | Intraband | dB | > 20 | | | |
| | Interband | dB | > 24 | | | |

ELECTRICAL SPECIFICATIONS

■ P1 ■ P2

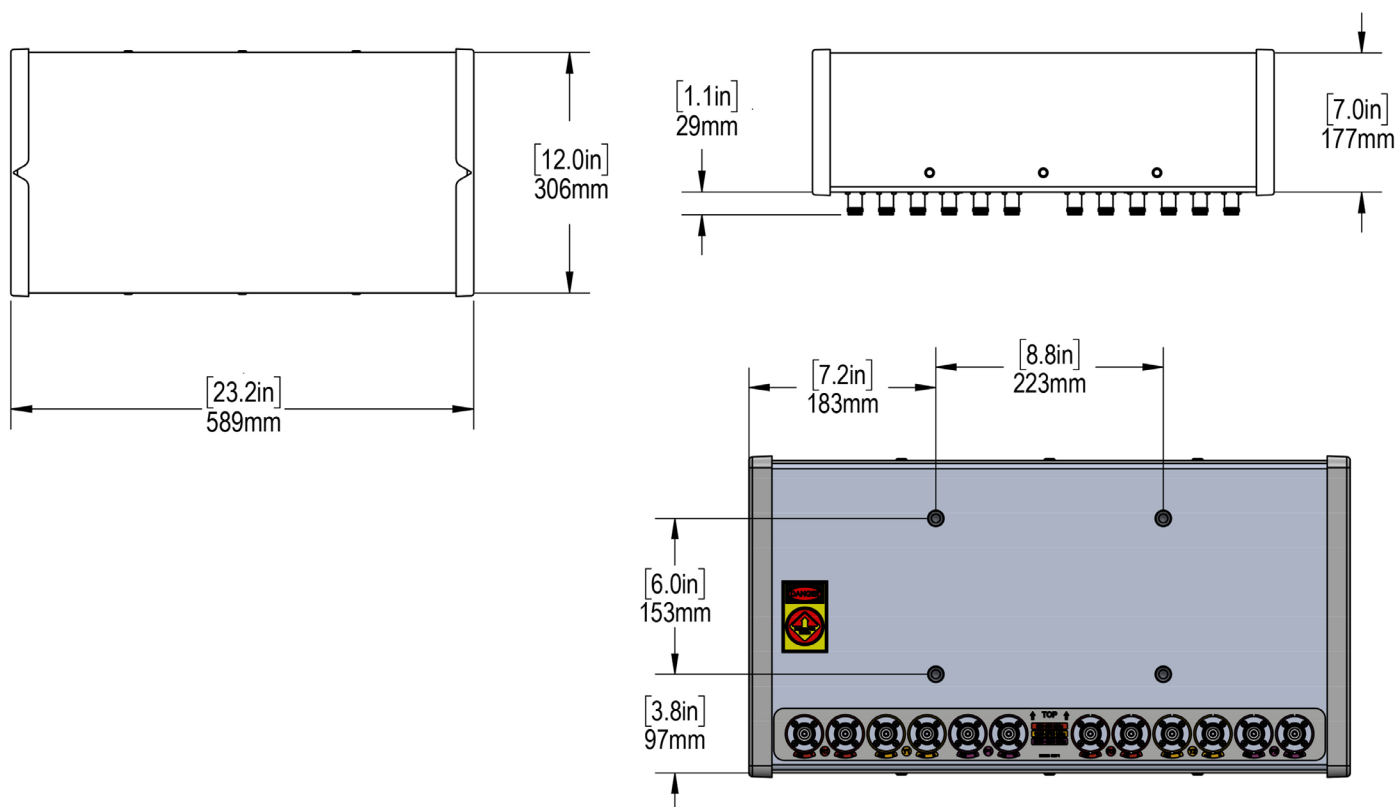
| | | | | | |
|--|-----------|---------|-----------------------------|-----------------------------|----------------------------|
| Frequency Range | | MHz | (2x) 3300-4200 | | |
| Frequency Sub-Range | | MHz | 3300-3550 | 3550-3700 | 3700-4200 |
| Polarization | | --- | (2x) $\pm 45^\circ$ | | |
| Gain | BASTA | dBi | 11.7 ± 0.7 | 11.9 ± 0.6 | 11.9 ± 0.6 |
| | MAX | dBi | 12.4 | 12.5 | 12.5 |
| Azimuth Beamwidth (3 dB) | | degrees | $36.4^\circ \pm 4.6^\circ$ | $34.5^\circ \pm 2.0^\circ$ | $31.3^\circ \pm 4.4^\circ$ |
| Elevation Beamwidth (3 dB) | | degrees | $60.2^\circ \pm 11.4^\circ$ | $59.3^\circ \pm 10.2^\circ$ | $58.8^\circ \pm 9.6^\circ$ |
| Electrical Downtilt | | degrees | 0° | | |
| Impedance | | Ohms | 50Ω | | |
| VSWR | | --- | $\leq 1.6:1$ | | |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBc | < -153 | | |
| Upper Sidelobe Suppression | | dB | N/A | | |
| Isolation | Intraband | dB | > 20 | | |
| | Interband | dB | > 24 | | |

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MECHANICAL SPECIFICATIONS

| | | | |
|---------------------------------------|-------------|------------|----------------------------------|
| Antenna | Length | mm (in) | 306 (12.0) |
| | Width | mm (in) | 589 (23.2) |
| | Depth | mm (in) | 177 (7.0) |
| Net Weight - Antenna Only | | kg (lbs) | 4.6 (10) |
| Windload | Calculation | km/h (mph) | 161 (100) |
| | Frontal | N (lbf) | 219 (49) |
| | Lateral | N (lbf) | 80 (18) |
| Survival Wind Speed | | km/h (mph) | 241 (150) |
| Connector | Type | --- | 4.3-10 Female |
| | Quantity | --- | 12 |
| | Position | --- | Back |
| Radome Color | | --- | Grey |
| Operating Temperature | | degree | -40° to +60° C (-40° to +140° F) |
| Lightning Protection (Grounding Type) | | --- | Direct Ground |

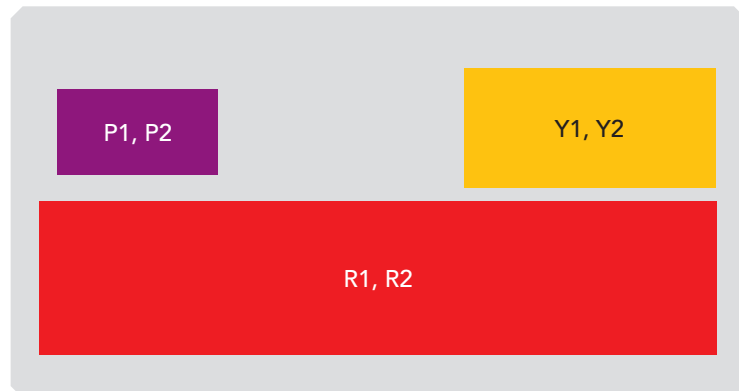


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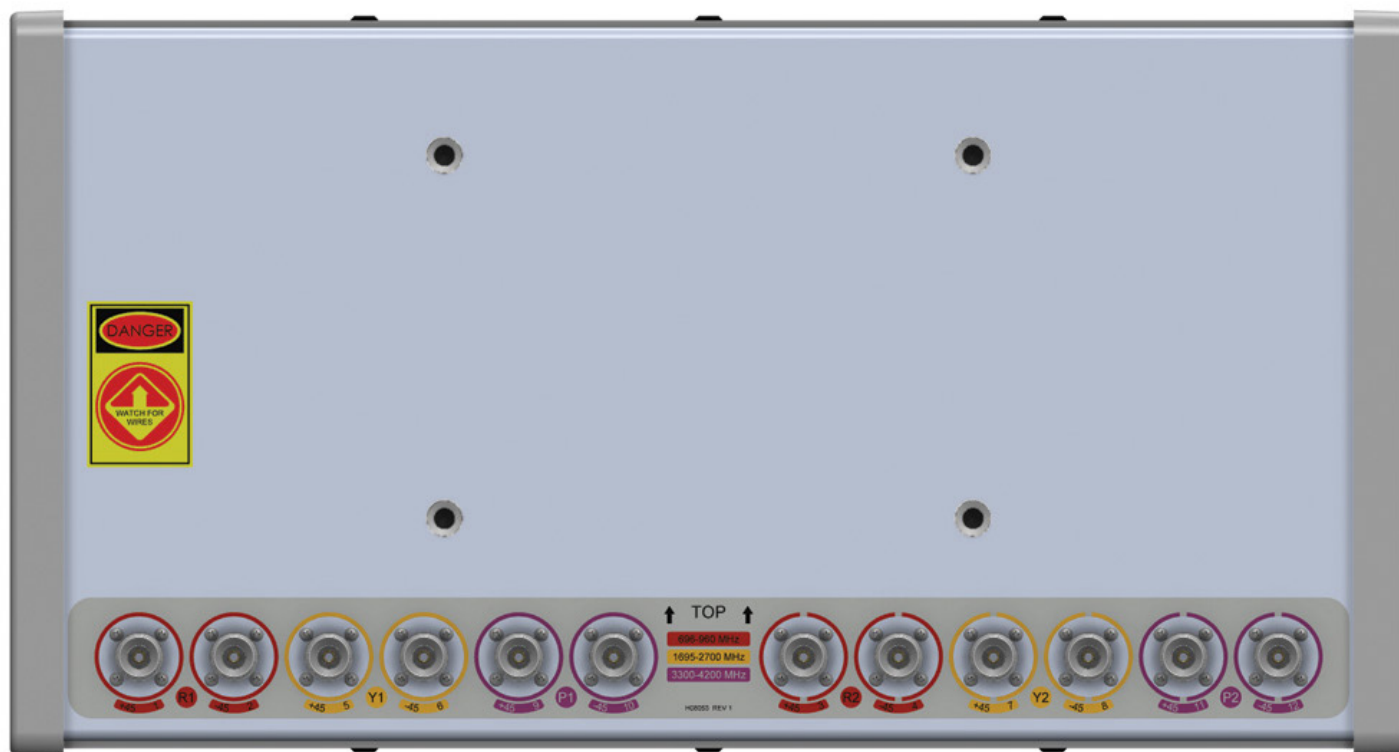
ARRAY LAYOUT Topology

| 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 |
| 3300-4200 MHz | ■ P1 | 9-10 | (2x) 4.3-10 Female |
| 3300-4200 MHz | ■ P2 | 11-12 | (2x) 4.3-10 Female |



The illustration is not shown to scale.

CONNECTOR VIEW - LABELING



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MOUNTING KITS Select from the following mounting options when ordering.

| MODEL NUMBER | DESCRIPTION | FITS PIPE DIAMETER | WEIGHT |
|--------------|--|------------------------|------------------|
| MKS09P01 |  <p>2-POINT MOUNTING BRACKET KIT</p> | 50-115 mm (2.0-4.5 in) | 2.9 kg (6 lbs) |
| 11100010 |  <p>CONTINUOUS ADJUSTMENT MOUNTING BRACKET KIT FOR WALL OR POLE MOUNT</p> <p><i>Allows continuous adjustment of the azimuth and elevation; Straps for Pole Mounting are NOT included.</i></p> | 50-203 mm (2.0-8.0 in) | 2.4 kg (5.4 lbs) |



The antennas shown in the mounting kit illustrations above are generic representations and may not resemble the antenna described within this data sheet.

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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HOW TO READ THE MODEL NUMBER

Each letter and number has meaning.

| OPERATING FREQUENCY | | | POLARIZATION | AZIMUTH BEAMWIDTH | ANTENNA TYPE | LENGTH IN FEET | TILT TYPE | DEGREE OF ELECTRICAL TILT | ORDERING OPTION |
|---------------------|-----------|-----------|--------------|-------------------|--------------|----------------|------------|---------------------------|---|
| C | U | V | X | 033 | S | 1 | F | 0 | -P -S |
| 696-960 | 1695-2700 | 3300-4200 | XPOL | 33° | Split Beam | ~ 1.0 ft | Fixed Tilt | 0° for all bands | <p>To order the antenna and mounting kit together as one line item...</p> <p>Add a -P for the 2-POINT MOUNTING BRACKET KIT (MKS09P01)</p> <p>-or-</p> <p>Add a -S for the CONTINUOUS ADJUSTMENT MOUNTING BRACKET KIT (11100010)</p> <p>If -P or -S is not added, the bracket kit can be added as a separate line item, or the antenna shipped without a bracket.</p> <p>Refer to the ordering options for further detail.</p> |

ORDERING OPTIONS

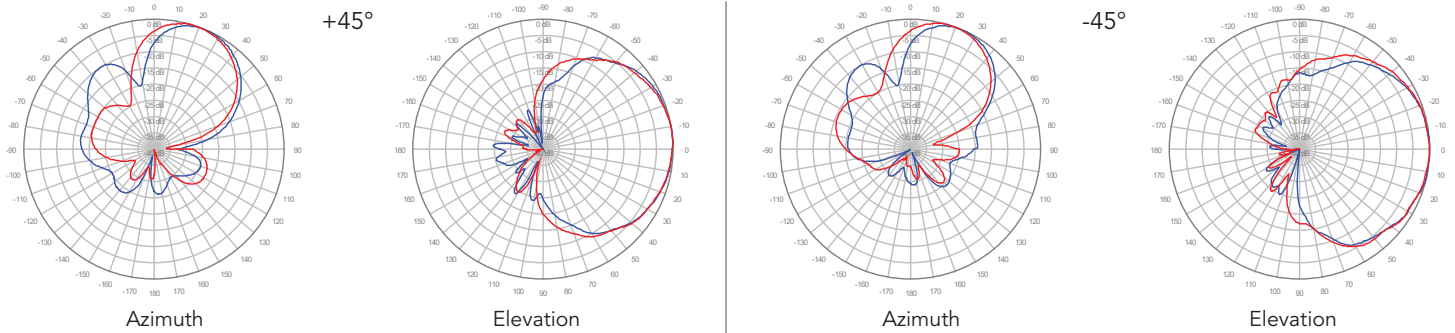
Select from the following ordering options

| SELECT MOUNTING KIT | SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND | | | ORDER MODEL NUMBER |
|--|--|---------------|---------------|--------------------|
| | 696-960 MHz | 1695-2700 MHz | 3300-4200 MHz | |
| ANTENNA ONLY - NO MOUNTING KIT | 0° | 0° | 0° | CUVX033S1F0 |
| ANTENNA WITH MKS09P01 MOUNTING KIT 2-Point Mounting Bracket Kit | 0° | 0° | 0° | CUVX033S1F0-P |
| ANTENNA WITH 11100010 MOUNTING KIT Continuous Adjustment Mounting Bracket Kit | 0° | 0° | 0° | CUVX033S1F0-S |

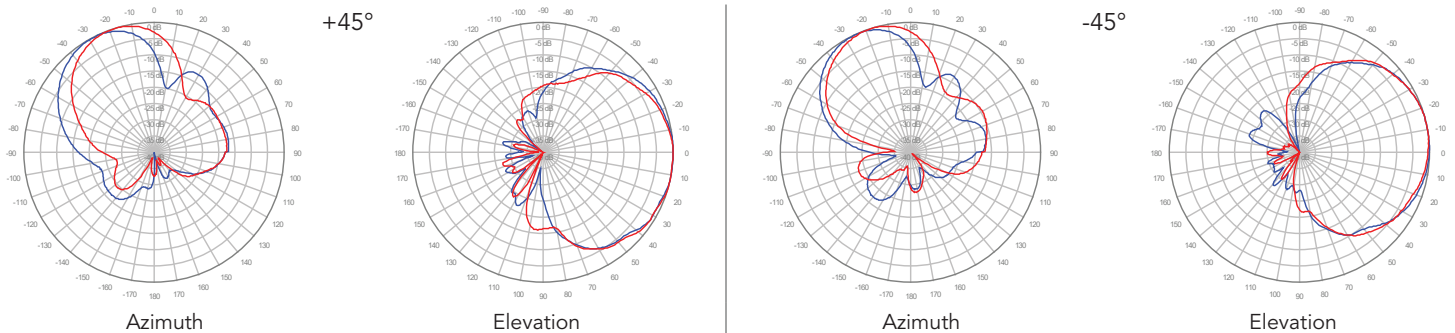
CUVX033S1F0

750 MHz ————
850 MHz ————

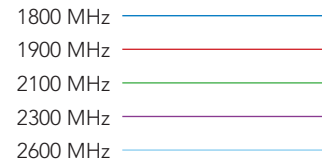
R1, 0° TILT



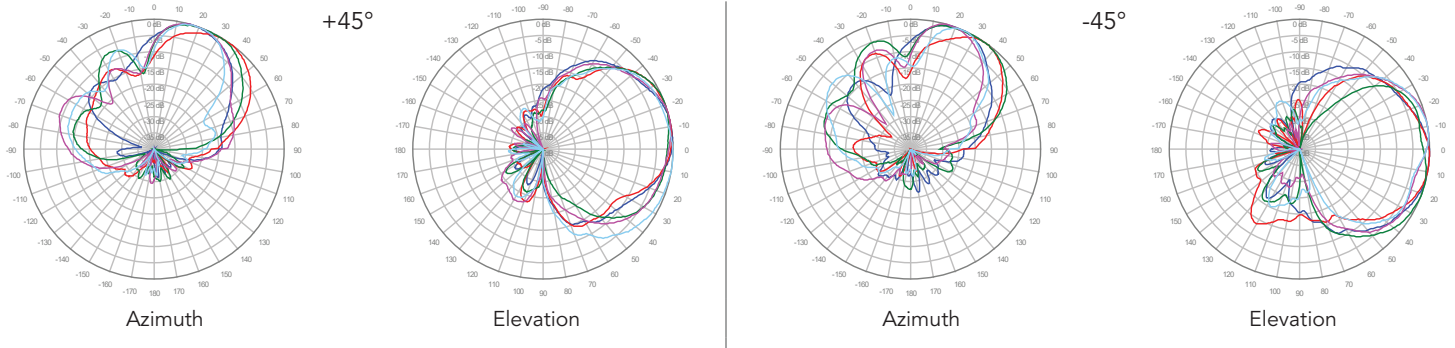
R2, 0° TILT



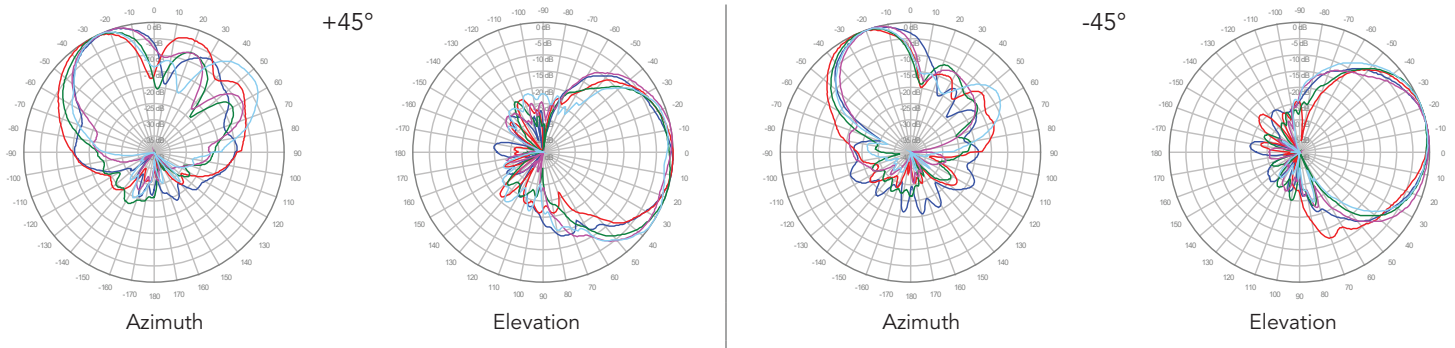
CUVX033S1F0



Y1, 0° TILT



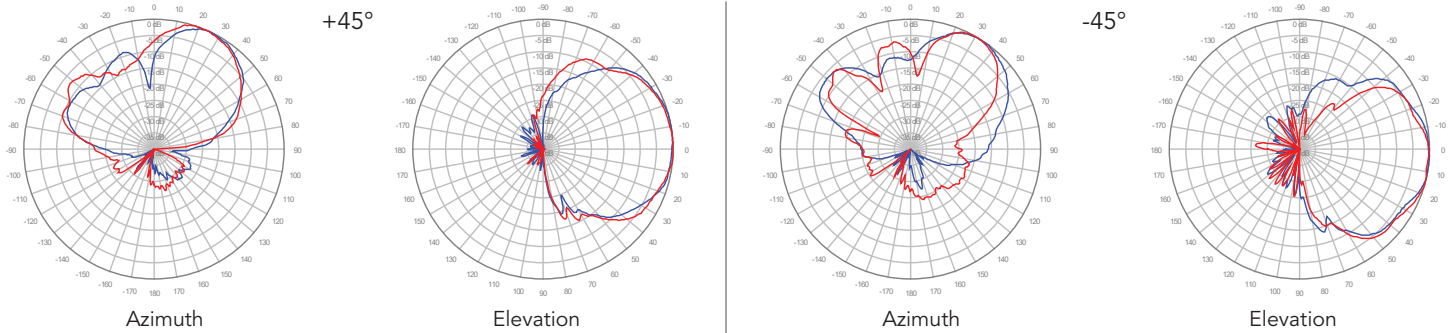
Y2, 0° TILT



CUVX033S1F0

3600 MHz ————
4000 MHz ————

P1, 0° TILT



P2, 0° TILT

