

## QUAD458LU000G-T



PRODUCT OVERVIEW	Frequency Range (MHz)	LOW BAND	MID BAND
		(1x) 617-897	(1x) 1695-2690
	Array	■ R1	■ Y1
	Connector	2 PORTS	2 PORTS
	Polarization	XPOL	XPOL
	Azimuth Beamwidth (avg)	45°	45°
	Electrical Downtilt	0-10°	2-10°
	Total Connector Count	4 PORTS	
	Connector Type	4.3-10 FEMALE LONG-NECK	
	Dimensions	2451 x 531 x 221 mm (96.5 x 20.8 x 8.7 in)	

### ELECTRICAL SPECIFICATIONS Low Band

■ R1

Frequency Range		MHz	617-897		
Frequency Sub-Range		MHz	617-698	698-798	800-897
Polarization		---	±45°		
Gain	Low Tilt	dBi	16.6	16.6	16.4
	Mid Tilt	dBi	16.4	16.5	16.3
	High Tilt	dBi	15.8	15.8	15.5
	Over all Tilts	dBi	16.4 ± 0.5	16.4 ± 0.5	16.2 ± 0.6
Azimuth Beamwidth (3 dB)		degrees	48.1 ± 3.6	41.5 ± 3.2	36.8 ± 2.4
Elevation Beamwidth (3 dB)		degrees	11.3 ± 0.9	9.9 ± 0.9	8.8 ± 0.8
Electrical Downtilt		degrees	0-10		
Impedance		Ohms	50Ω		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBm (dBc)	< -110 (< -153)		
Front-to-Back Ratio ± 30° @ 180° from boresite		dB	> 22.4	> 20.4	> 19.7
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 17.8	> 14.9	> 13.7
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	> 20.2	> 19.9	> 18.6
Maximum Power Per Port		Watts	500W		
Interband/Intraband Isolation		dB	25/30	25/30	25/30

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

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### ELECTRICAL SPECIFICATIONS Mid Band

■ Y1

Frequency Range	MHz	1695-2690				
Frequency Sub-Range	MHz	1695-1880	1850-1990	1920-2200	2300-2690	
Polarization	---	±45°				
Gain	Low Tilt	dBi	17.0	17.6	17.2	17.1
	Mid Tilt	dBi	17.4	17.6	17.3	17.2
	High Tilt	dBi	17.7	17.5	17.2	16.9
	Over all Tilts	dBi	17.5 ± 0.6	17.6 ± 0.3	17.3 ± 0.6	17.2 ± 0.4
Azimuth Beamwidth (3 dB)	degrees	43.3 ± 4.3	47.9 ± 4.3	49.7 ± 4.4	46.9 ± 3.7	
Elevation Beamwidth (3 dB)	degrees	6.0 ± 0.3	5.6 ± 0.2	5.3 ± 0.5	4.3 ± 0.4	
Electrical Downtilt	degrees	2-10				
Impedance	Ohms	50Ω				
VSWR	---	1.5:1				
Passive Intermodulation 3rd Order for 2x20 W Carriers	dBm (dBc)	< -110 (< -153)				
Front-to-Back Ratio ± 30° @ 180° from boresite	dB	> 24.1	> 26.7	> 29.5	> 33.0	
Upper Sidelobe Rejection 20° Sector Above Main Beam	dB	> 16.7	> 16.1	> 16.4	> 15.2	
Cross Polar Discrimination at Mechanical Boresight (0°)	dB	> 22.8	> 23.3	> 22.0	> 15.0	
Maximum Power Per Port	Watts	300W				
Interband/Intraband Isolation	dB	25/30	25/30	25/30	25/30	

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

### RET ACTUATOR

Amphenol's **RET-READY** antennas are delivered with the RET Actuator already installed and pre-commissioned with all antenna parameters. Every RET device is factory configured and calibrated so the antenna is ready to be used once delivered to the site which means that there is no need for further installation of RET devices or for programming their configuration or for running a calibration process.

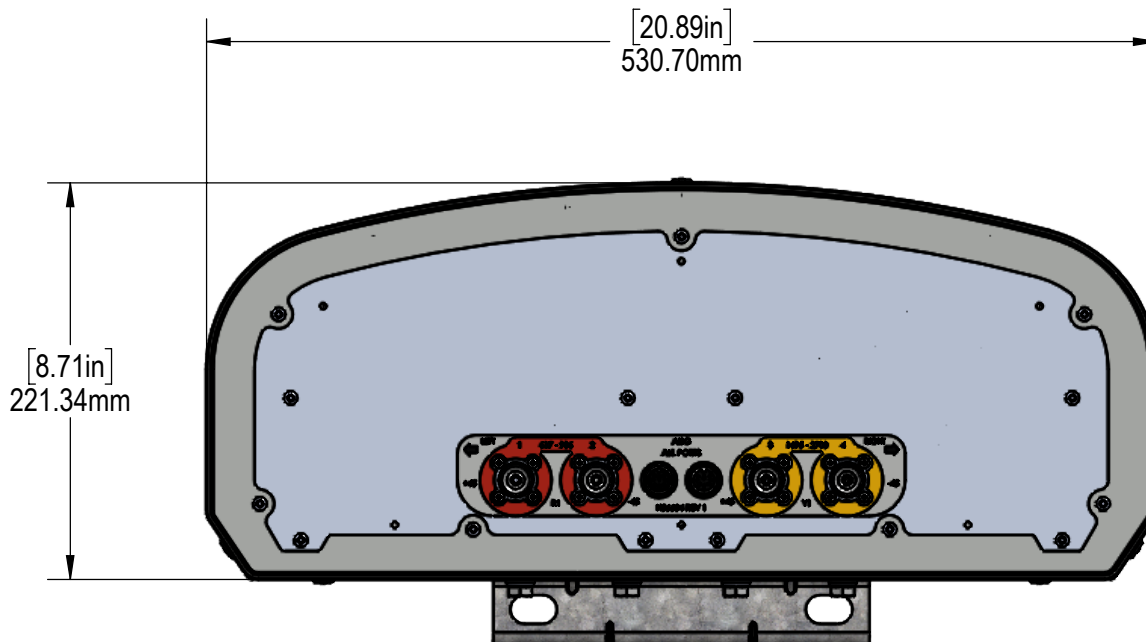
Input Voltage	Vdc	10-30
Power Consumption	Idle State, maximum	Watts 0.5
	Normal Conditions, maximum	Watts 10.0
Protocol	---	3GPP/AISG v2.0 (Single RET)
RET Interface	---	DIN Male and DIN Female
Field Replaceable Unit	---	No

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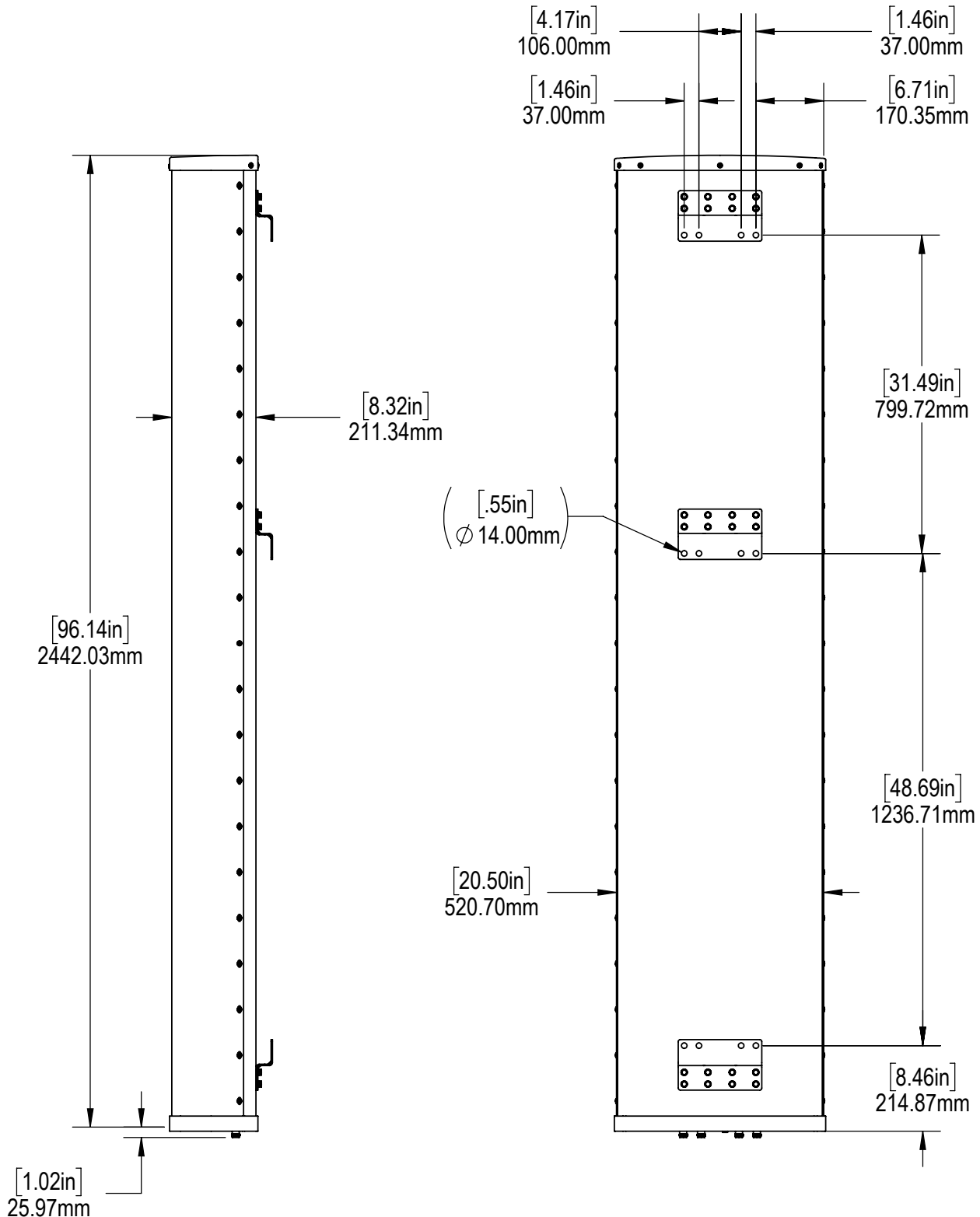
### MECHANICAL SPECIFICATIONS

Antenna	Length	mm (in)	2451 (96.5)
	Width	mm (in)	527 (20.75)
	Depth	mm (in)	221 (8.7)
Net Weight - Antenna Only		kg (lbs)	35.4 (78)
Windload	Calculation	km/h (mph)	161 (100)
	Frontal	N (lbf)	1113 (250)
	Lateral	N (lbf)	249 (56)
Survival Wind Speed		km/h (mph)	241 (150)
Connector	Type	---	4.3-10 Female
	Quantity	---	4
	Position	---	Bottom
Radome Color		---	ANSI 70 Gray
Radome Material		---	UV Stabilized ABS or Hips
Lightning Protection (Grounding Type)		---	Direct Ground



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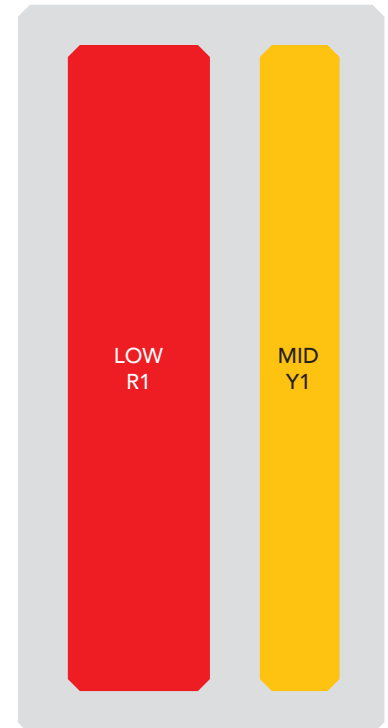


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ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	■ R1	617-897	1-2	4.3-10 Female Long Neck
	■ Y1	1695-2690	3-4	4.3-10 Female Long Neck





The illustration is not shown to scale.

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## QUAD458LU000G-T

**MOUNTING KITS** The default mounting kit is included in the price of the antenna. Any other mounting kits are optional and must be ordered separately.

	MODEL NUMBER	DESCRIPTION	FITS PIPE DIAMETER	WEIGHT
DEFAULT MOUNTING KIT <i>Shipped as standard and included in the price of the antenna</i> 	MKS10T02	3-Point Scissor Tilt Mounting & Downtilt Bracket Kit	50-115 mm (2.0-4.5 in)	21.26 kg (47 lbs)
OPTIONAL MOUNTING KIT <i>Refer to ordering options</i> 	MKS10P02	3-Point Mounting Bracket Kit	50-115 mm (2.0-4.5 in)	26.53 kg (58 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.

PORT COUNT	AZIMUTH BEAMWIDTH	LENGTH	OPERATING FREQUENCY		VARIATION	TILT TYPE	ORDERING OPTION
QUAD	45	8	L	U	000	G	-T -P
4 PORT	45°	Approximately 8 Feet	617-960 MHz	1695-2700 MHz	Original Variation  Variations of this antenna or similar antenna models may exist.  These characters are used to differentiate similar antenna models.	Remote Variable Tilt for 3GPP / AISG v2.0	The -T at the end of the model number indicates that the antenna is shipped standard with the 3-POINT SCISSOR TILT MOUNTING & DOWNTILT BRACKET KIT (MKS10T02).  To order the antenna with the 3-POINT MOUNTING BRACKET KIT (MKS10P02) replace -T with -P when ordering.  If -P or -T is not added, the bracket kit can be added as a separate line item, or the antenna shipped without a bracket.  Refer to the ordering options for more detail.

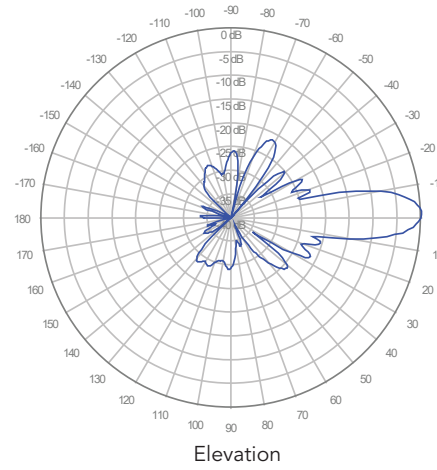
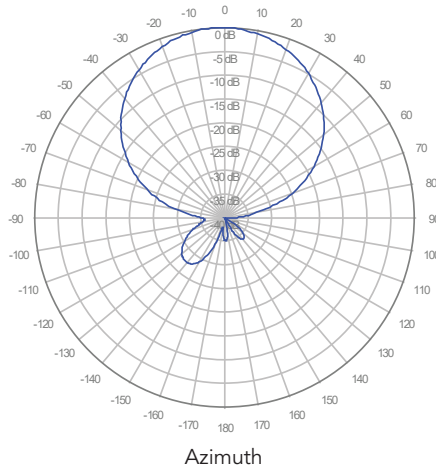
### ORDERING OPTIONS Select from the following ordering options

SELECT MOUNTING KIT	ORDER MODEL NUMBER
ANTENNA ONLY - NO MOUNTING KIT	QUAD458LU000G
ANTENNA WITH <b>MKS10P02</b> MOUNTING KIT 3-Point Mounting Bracket Kit	QUAD458LU000G-P
ANTENNA WITH <b>MKS10T02</b> MOUNTING KIT 3-Point Scissor Tilt Mounting & Downtilt Bracket Kit	QUAD458LU000G-T

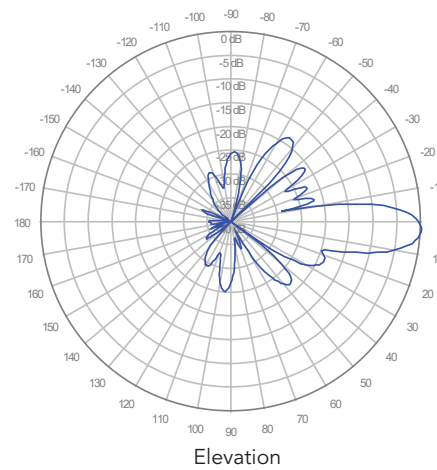
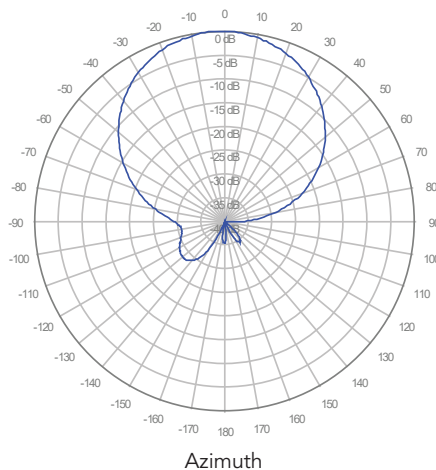
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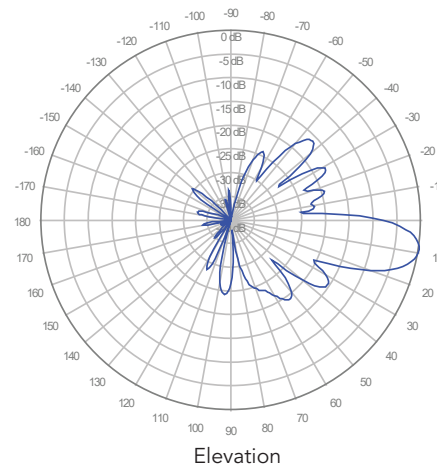
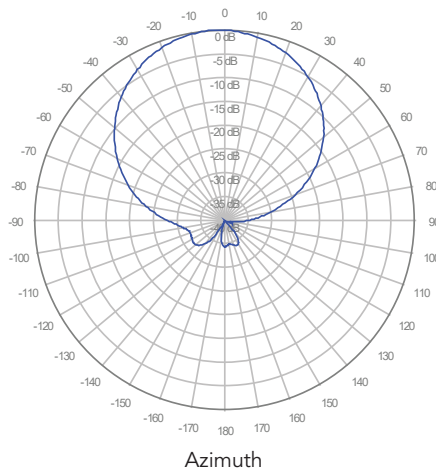
**R1, 0° TILT**



**R1, 5° TILT**



**R1, 10° TILT**

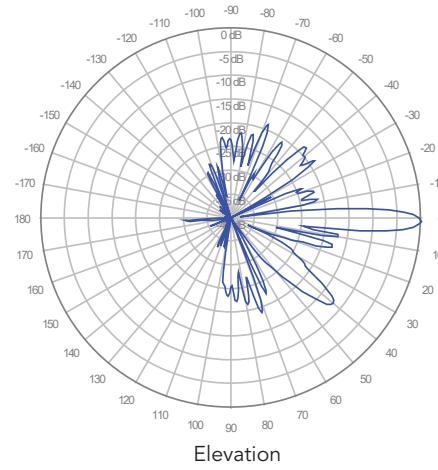
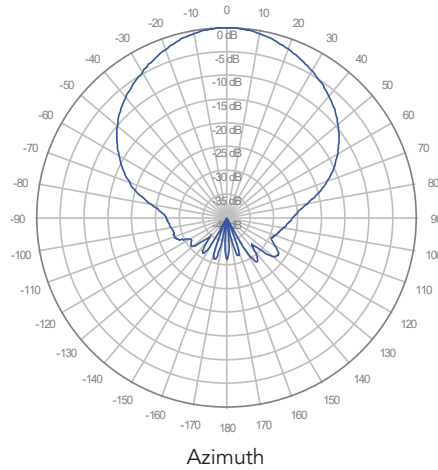


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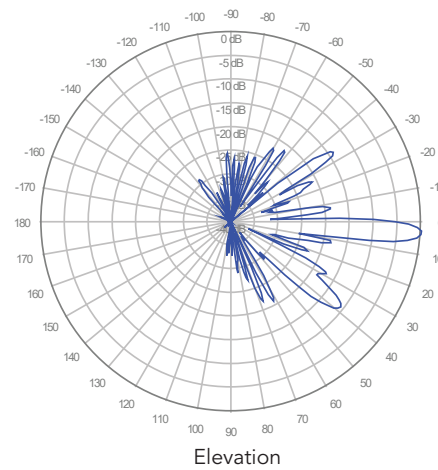
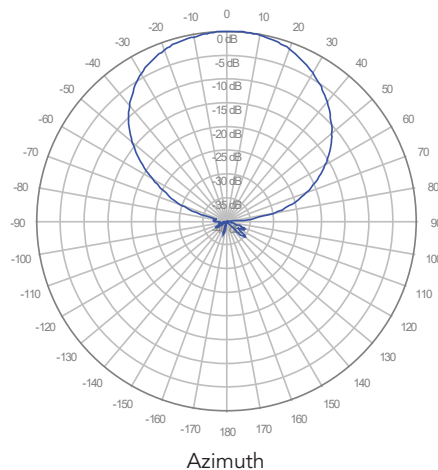


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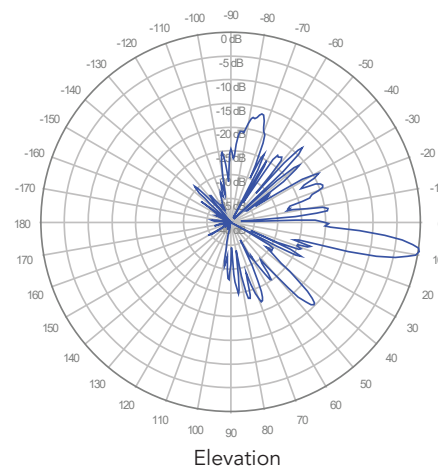
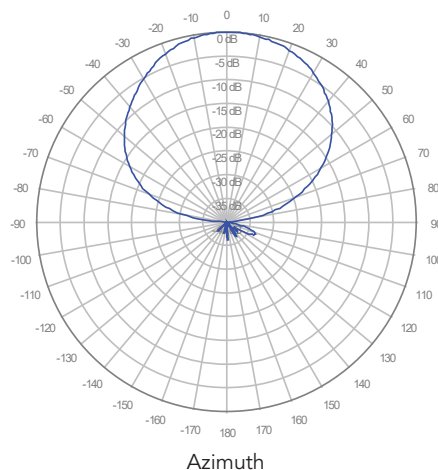
■ Y1, 2° TILT



■ Y1, 5° TILT



■ Y1, 10° TILT



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