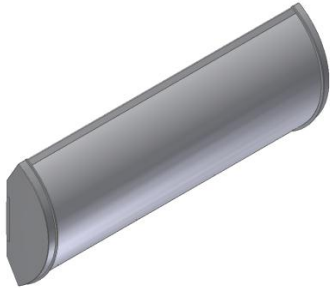




# X7CAP-FRO-124

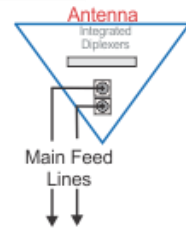
X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams



- Ideal for Indoor Arena Use
- Includes flexible stadium bracket
- Suitable for LTE/CDMA/UMTS/GSM
- Appealing Ergonomic Design

### Available with Intergrated Diplexers

Reduces mainline cables  
Eliminates external tower devices



## Electrical Specifications

Frequency Band, MHz	698-824	824-896	1710-1880	1850-1990	1920-2170
Horizontal Beamwidth, 3dB points	25°	23°	26°	25°	24°
Gain, dBi	11.7	12.4	12.2	12.7	12.8
Vertical Beamwidth, 3dB points	70°	65°	65°	63°	62°
Front-to-Back at 180°, dB	21	24	24	25	25
Front-to-Back at 180° +/-20°, dB	18	22	24	25	25
Polarization	+/-45°		+/-45°		
Electrical Downtilt	0°		0°		
VSWR/Return Loss, dB, Maximum	1.7:1/11.7		1.7:1/11.7		
Isolation Between Ports, dB, Mimimum	-25		-25		
Intermodulation (2x20w), IM3, dBc, Maximum	-150		-150		
Impedance, ohms	50		50		
Maximum Power Per Connector, CW	250 @ 800MHz		125 @ 1900MHz		
Lightning Protection	DC Ground		DC Ground		

## Mechanical Specifications

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All Specifications are subject to change.  
Refer to [www.cssantenna.com](http://www.cssantenna.com) for the most current information

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Page 1 of 12  
2/16/2012



# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

Dimensions, Length/Width/Depth	13.9/36.0/6.2in (354/914/158mm)
Connector (Quantity) Type	(2 or 4) 7-16 DIN Female or Type-N Female
Connector Torque	220-265 lbf-in (23-30 N-m)
Connector Location	Back or Bottom
Antenna Weight	13.8 lb (6.3 kg)
Bracket Weight	5.0 lb (2.3 kg)
Standard Bracket Kit	CSS P/N 919050
Mechanical Downtilt Range	+/- 20° Lateral & +/- 55° Vertical
Radome Material	High Strength Luran, UV Stabilized, ASTM D1925
Wind Survival	120 mph (193 km/h)
Front Wind Load	83.8lbf (372.8 N) @100mph
Equivalent Flat Plate	1.67 sq-ft (c=2) @ 100mph

## RET Information

Model	CSS-RET-200
Mounting Location	Rear of Antenna
Weight	1.2 lb (0.54 kg)
Communication Standard	AISG 2.0
Control System	CSS-PCU-220

## Order Information

<b>Model</b>	<b>Description</b>
X7CAP-FRO-124	Antenna with four(4) back 7-16 DIN Female Connectors
X7CAP-FRO-124-I	Antenna with two(2) back 7-16 DIN Female Connectors
X7CAP-FRO-124-N	Antenna with four(4) back Type-N Female Connectors
X7CAP-FRO-124-I-N	Antenna with two(2) back Type-N Female Connectors

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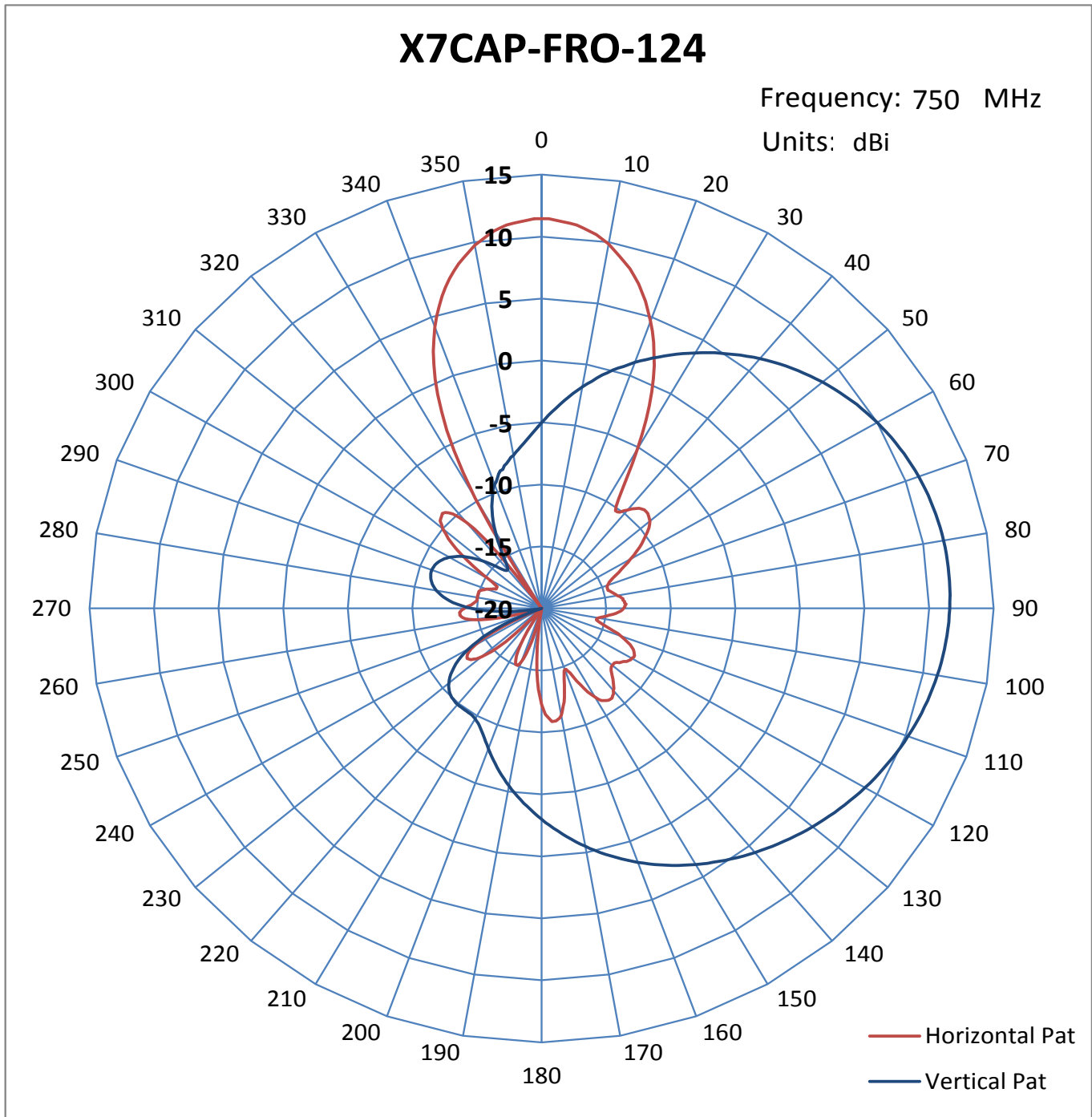
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# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

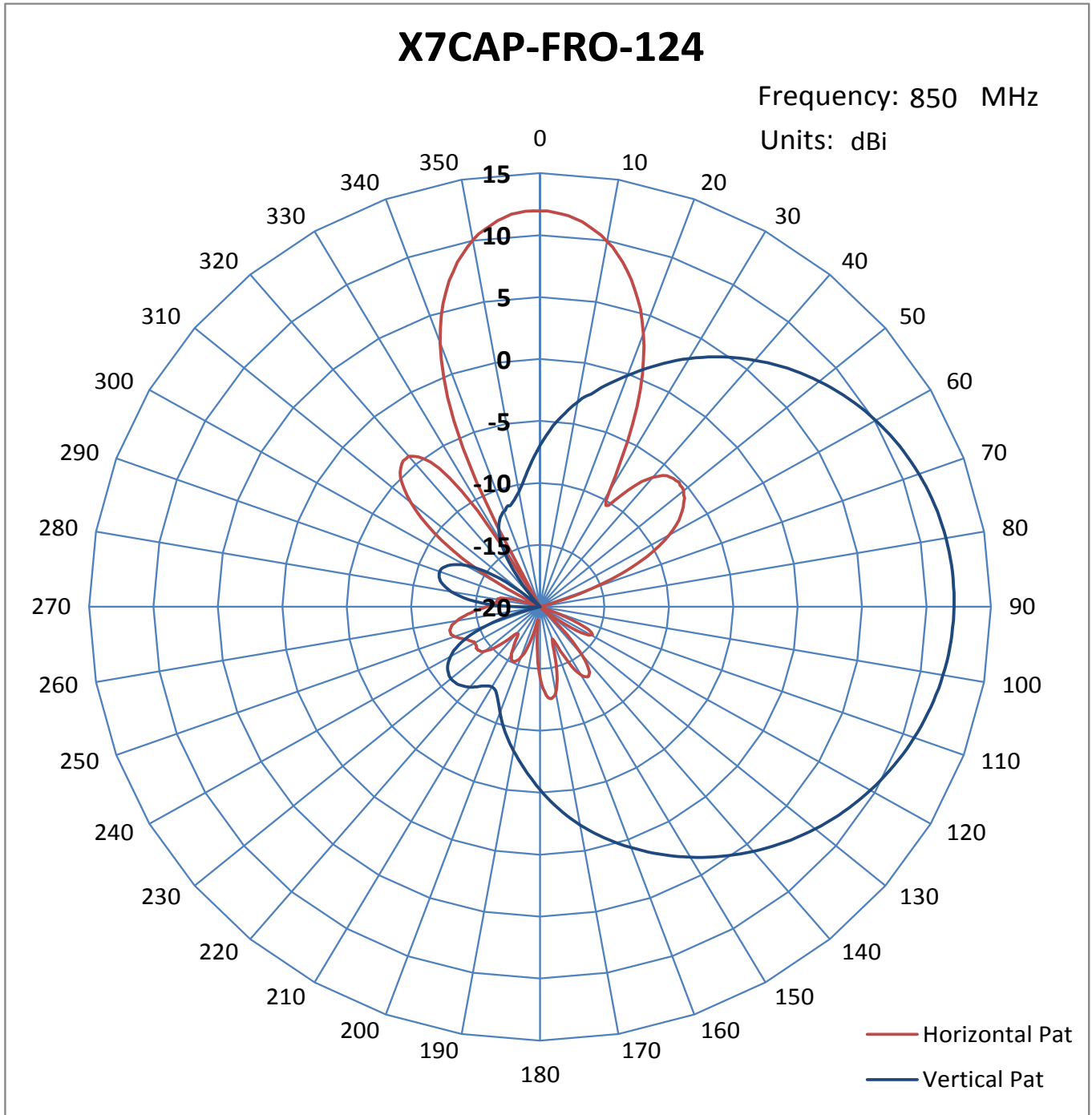
Patterns Measured @ 750MHz



Center = -20dB, with 5 dB/radial division and 10° angular division



Patterns Measured @ 850MHz



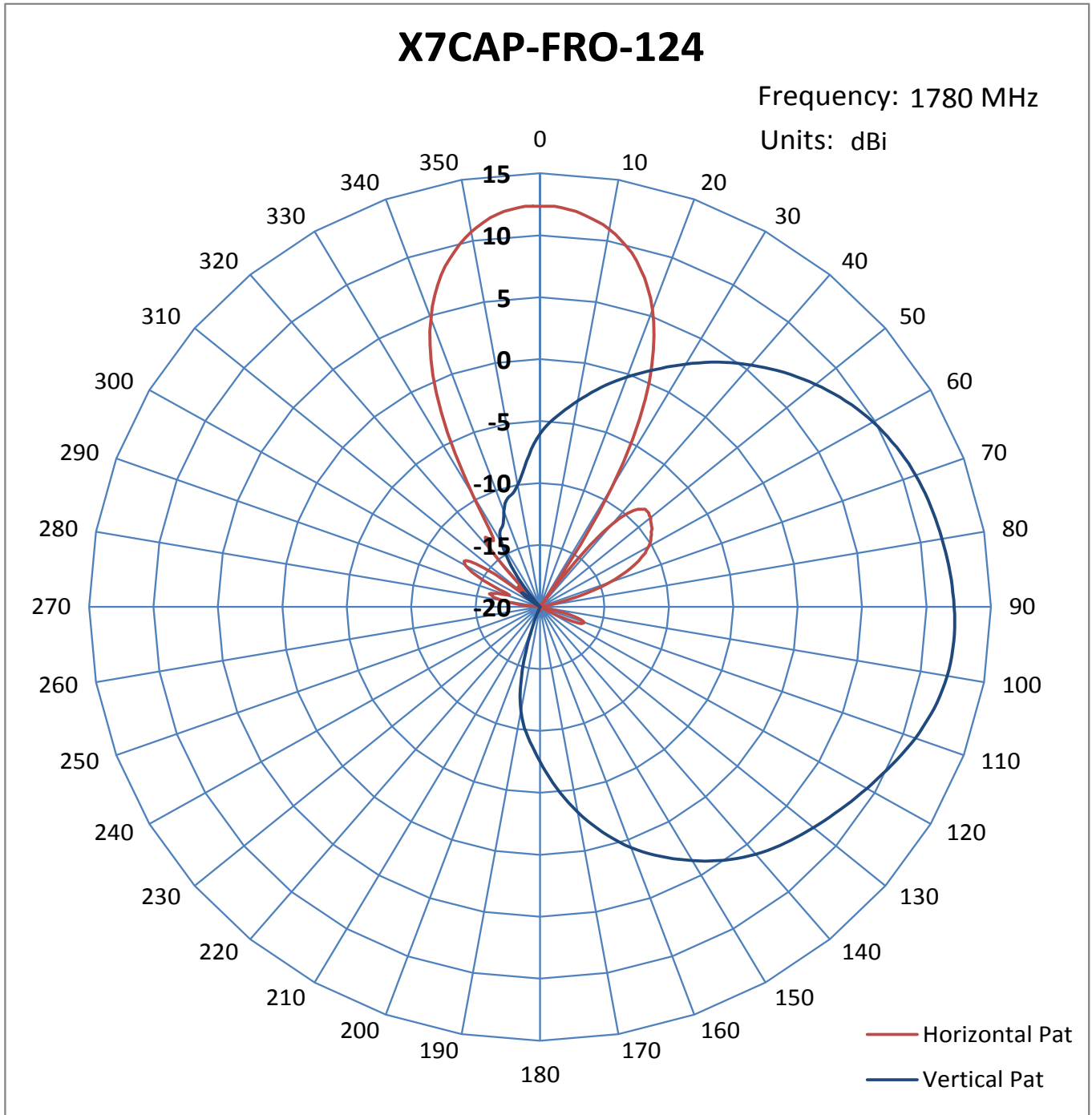
Center = -20dB, with 5 dB/radial division and 10° angular division



# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

Patterns Measured @ 1780MHz



Center = -20dB, with 5 dB/radial division and 10° angular division

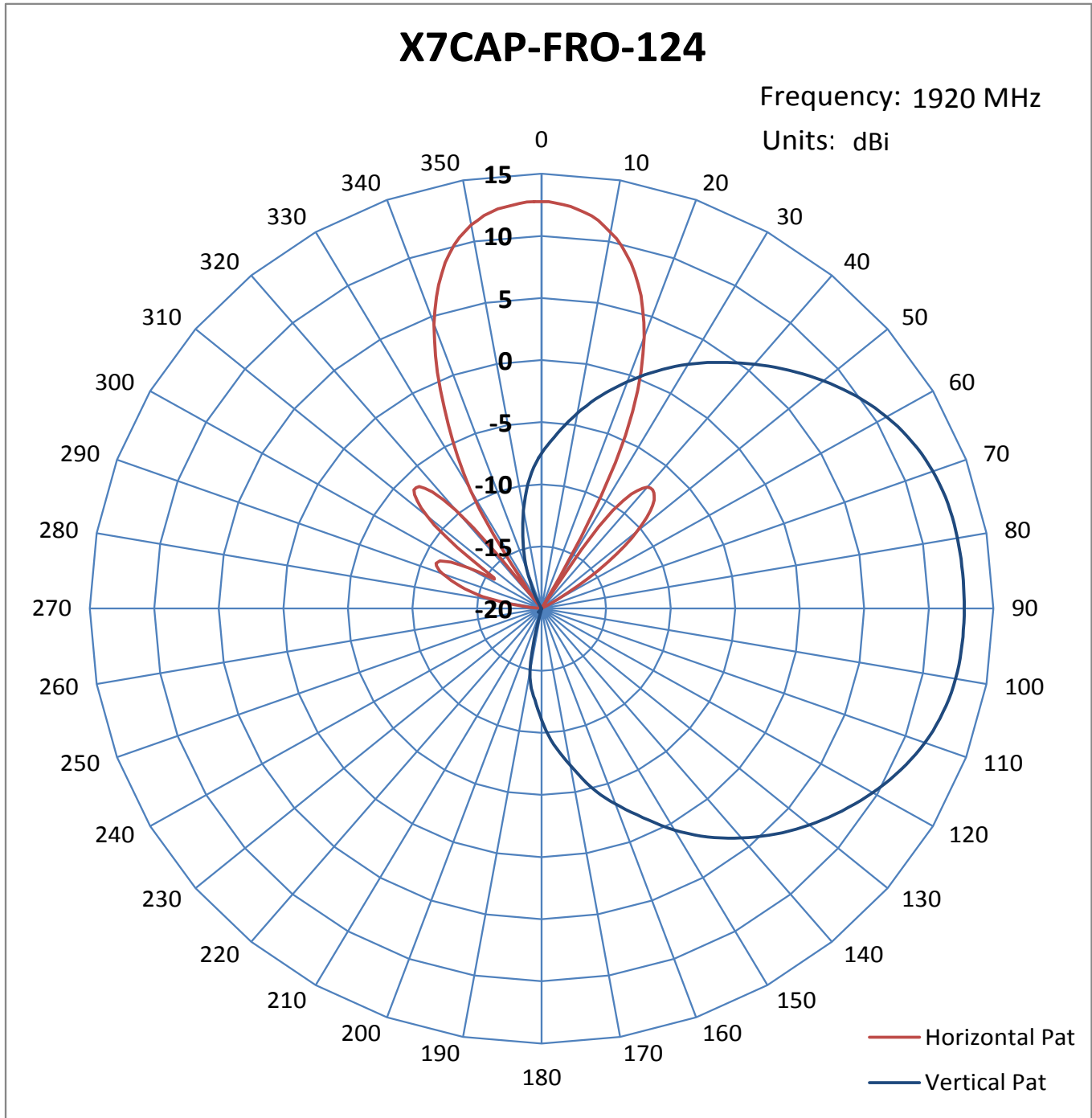
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Patterns Measured @ 1920MHz



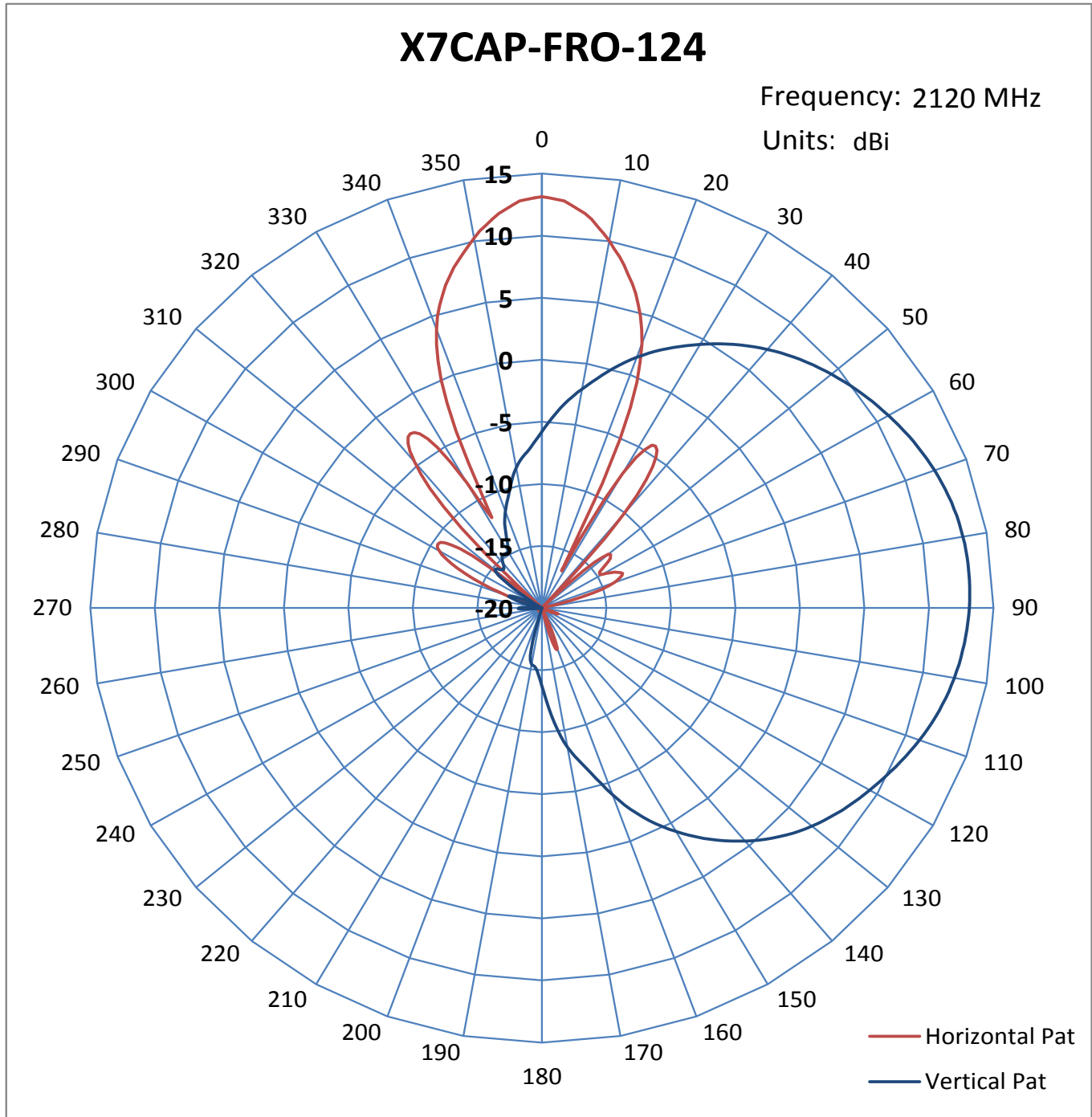
Center = -20dB, with 5 dB/radial division and 10° angular division



# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

Patterns Measured @ 2120MHz



Center = -20dB, with 5 dB/radial division and 10° angular division

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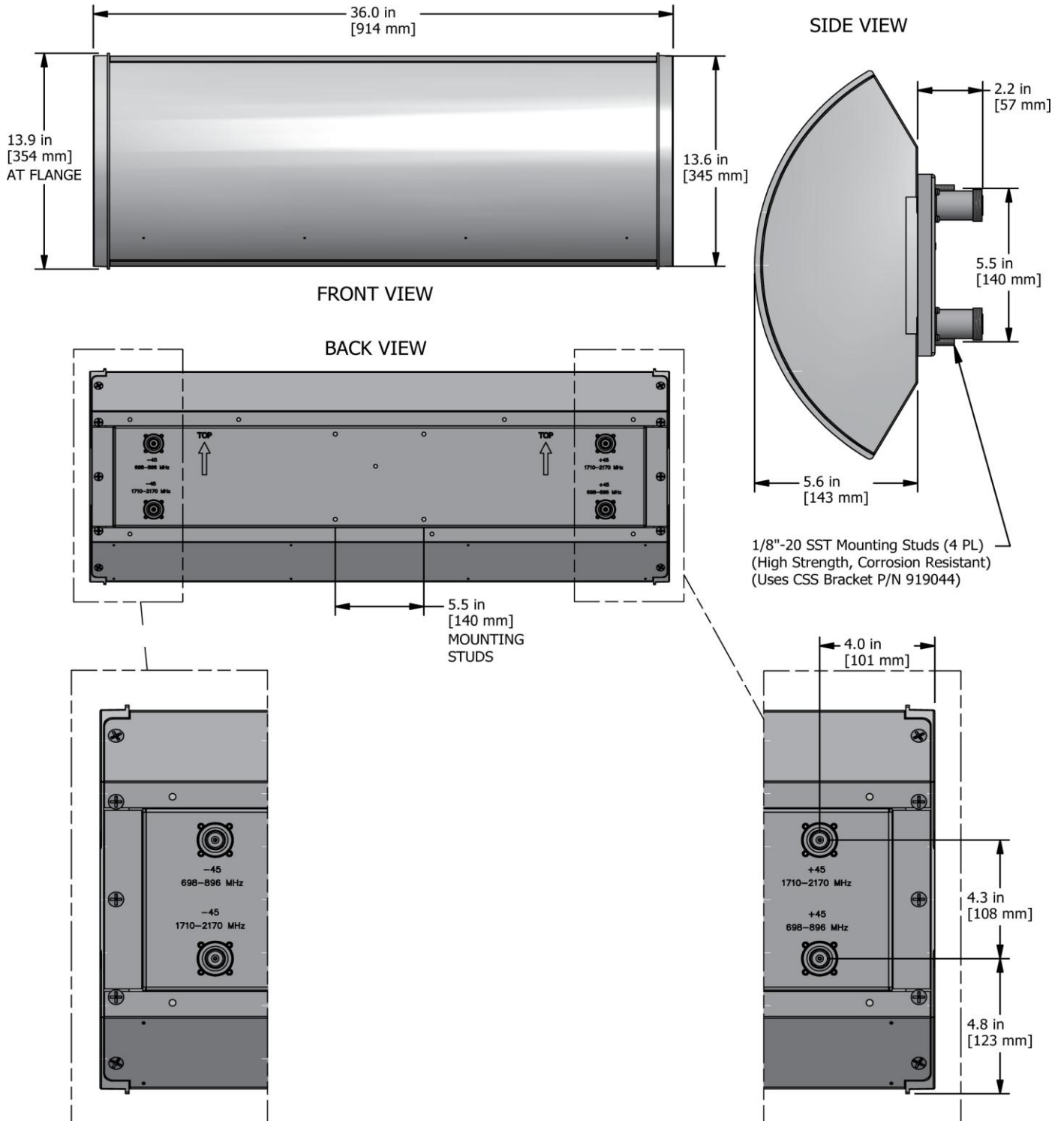


# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

## Mechanical Outline Drawing

### X7CAP-FRO-124



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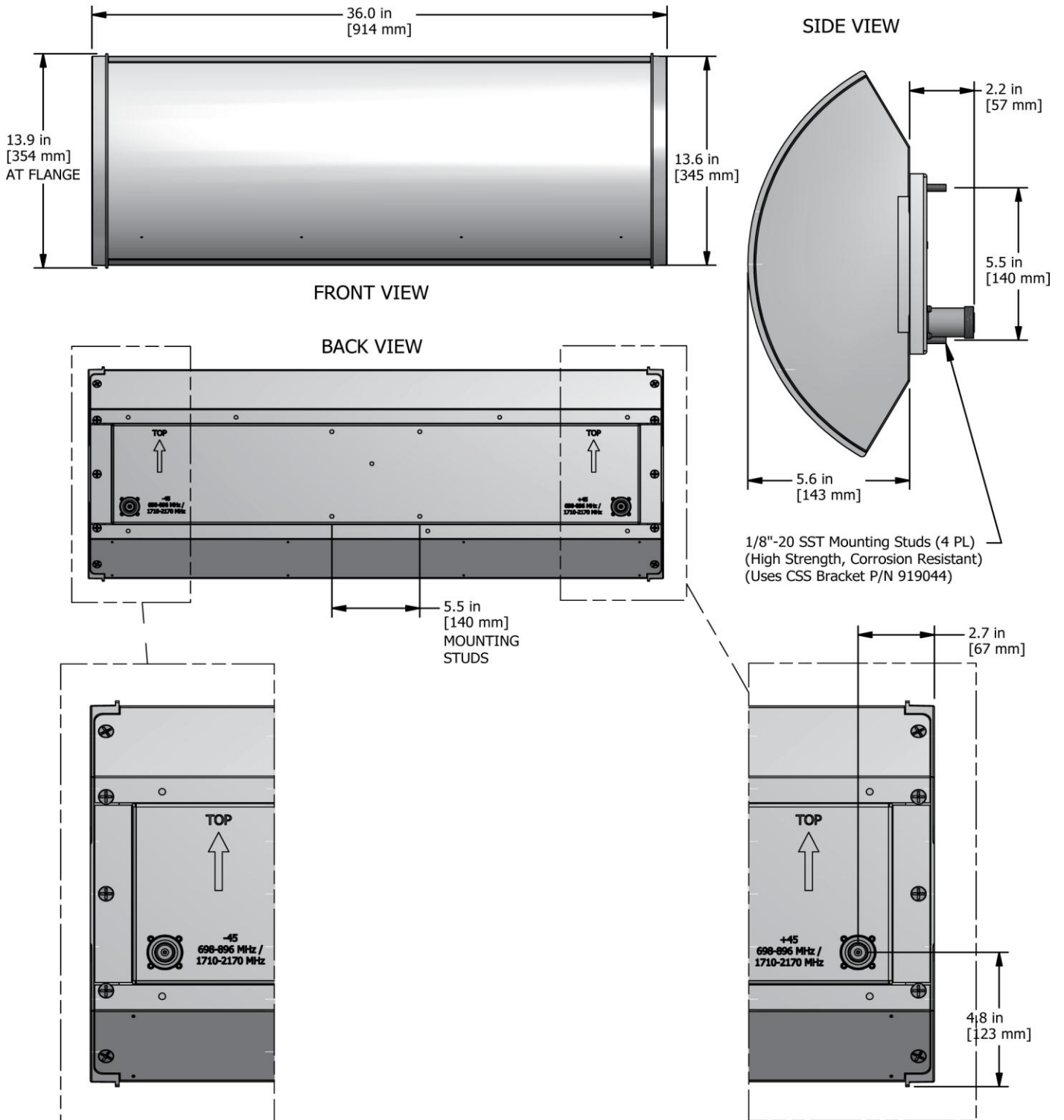


# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

## Mechanical Outline Drawing

### X7CAP-FRO-124-I



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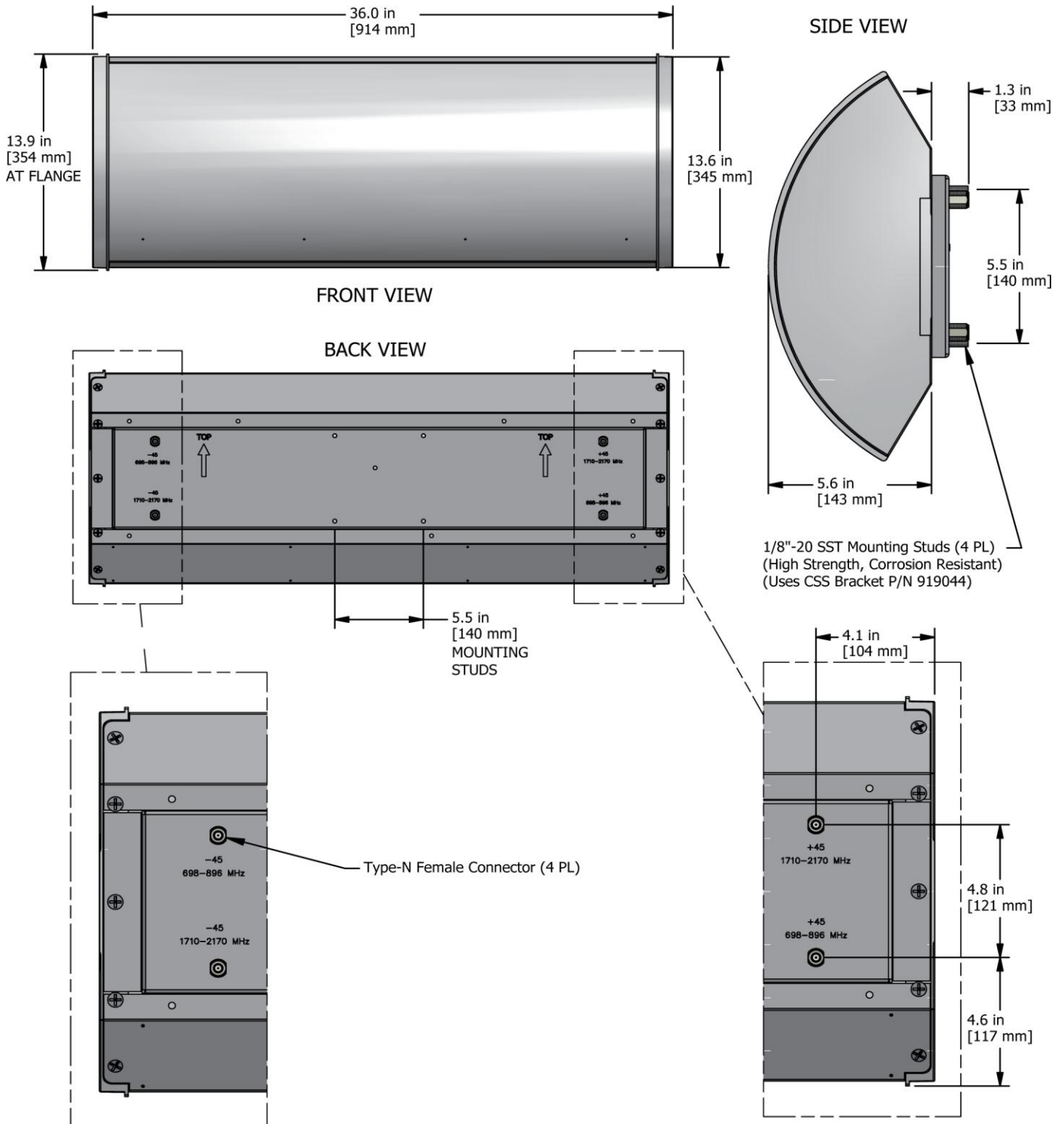


# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

## Mechanical Outline Drawing

### X7CAP-FRO-124-N



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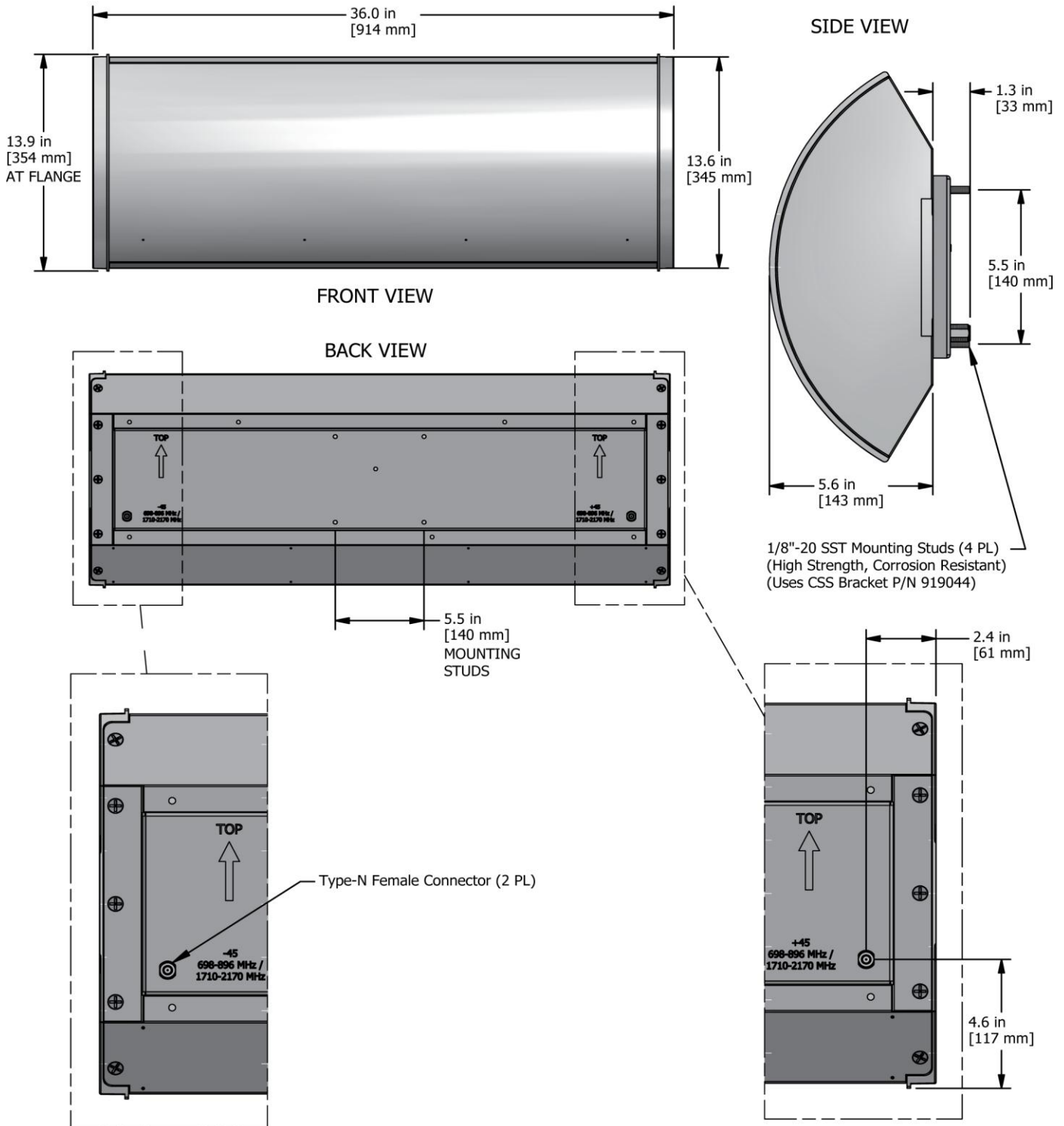


# X7CAP-FRO-124

X-Pol Antenna, 698-896/1710-2170MHz, 36", Fast Roll Off 24° H-Beams

## Mechanical Outline Drawing

### X7CAP-FRO-124-I-N



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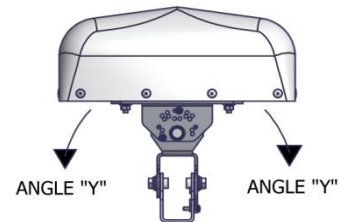
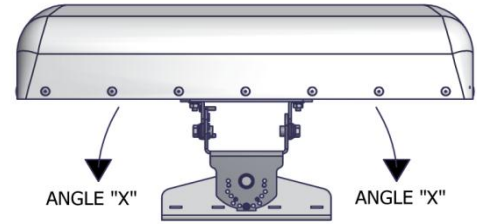
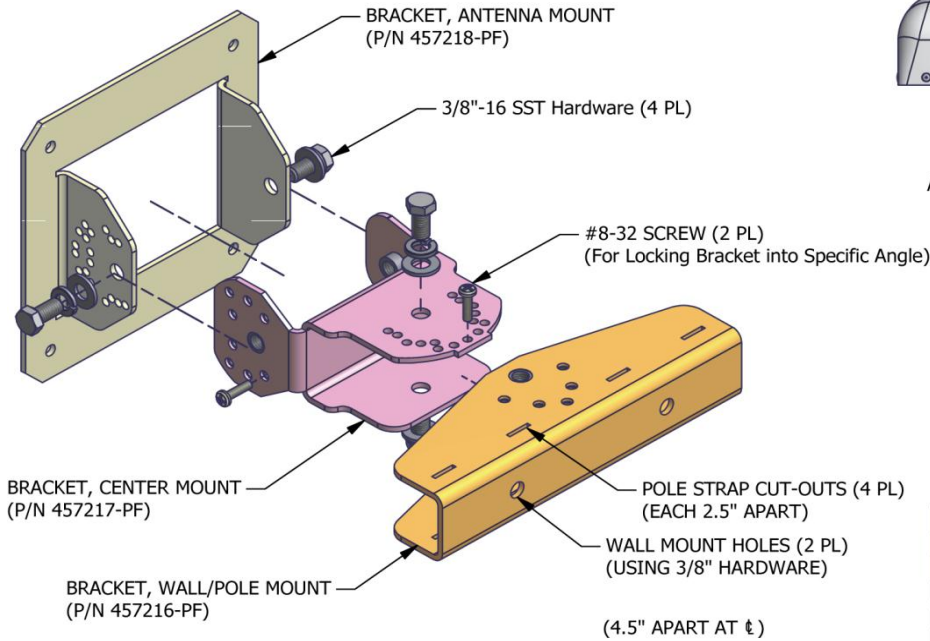
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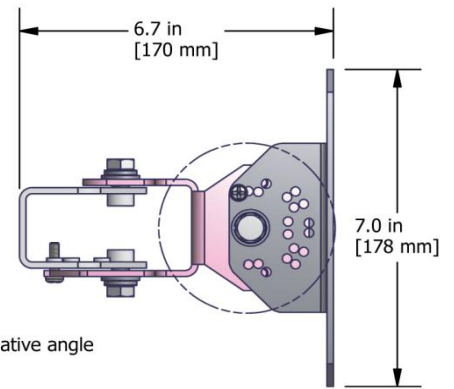
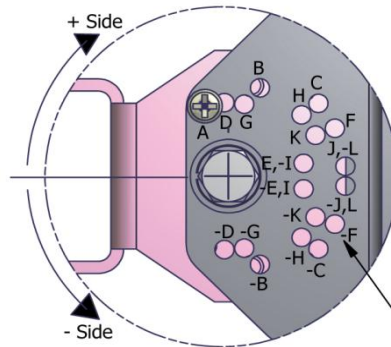
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## Standard Bracket Kit

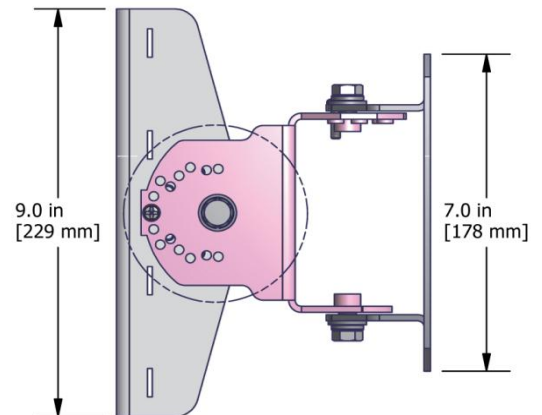
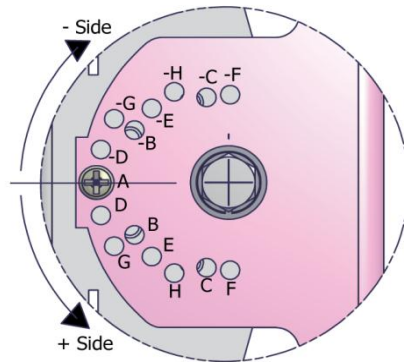


Maximum Angle				
	Pole Mount		Wall Mount	
Legend	X	Y	X	Y
1' Wide	35°	55°	35°	55°
2' Wide	25°	55°	25°	55°
3' Wide	20°	55°	20°	55°

Mech. Downtilt Table	
Legend	Mech. Downtilt
A	0°
B	5°
C	10°
D	15°
E	20°
F	25°
G	30°
H	35°
I	40°
J	45°
K	50°
L	55°



Mech. Downtilt Table	
Legend	Azimuth Rotation
A	0°
B	5°
C	10°
D	15°
E	20°
F	25°
G	30°
H	35°



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