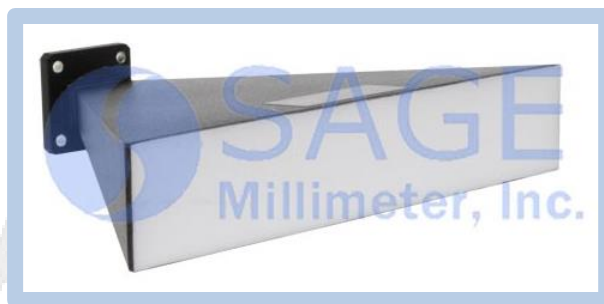




K-Band Sector Rectangular Lens Corrected Antenna, 23.7 to 24.3 GHz

Description:

Model SAK-AL223263-42-C1 is a custom built, K-band sector rectangular lens antenna that delivers a nominal half-power beam width of 10.4 degrees vertically and 3 degrees horizontally and 31 dBi nominal gain at a center frequency of 24 GHz. The sidelobe level of the antenna is -15 dB or better across the frequency range of 23.7 to 24.3 GHz and the return loss is 15 dB or higher. The standard model is equipped with a WR-42 rectangular waveguide and a UG-595/U flange as its input port.



Features:

- Low Sidelobes
- High Aperture Efficiency
- High Cross-Pol Isolation
- Light Weight

Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Sensor Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	23.7 GHz	24 GHz	24.3 GHz
Gain		31 dB	
3 dB Beamwidth, Vertical		10.4°	
3 dB Beamwidth, Horizontal		3°	
Sidelobe Level, Vertical		-20 dB	
Sidelobe Level, Horizontal		-20 dB	
Polarization		Linear	
Cross Polarization		-30 dB	
Return Loss		15 dB	
Specification Temperature		+25 C°	
Operating Temperature	-40 C°		+85 C°

Mechanical Specifications:

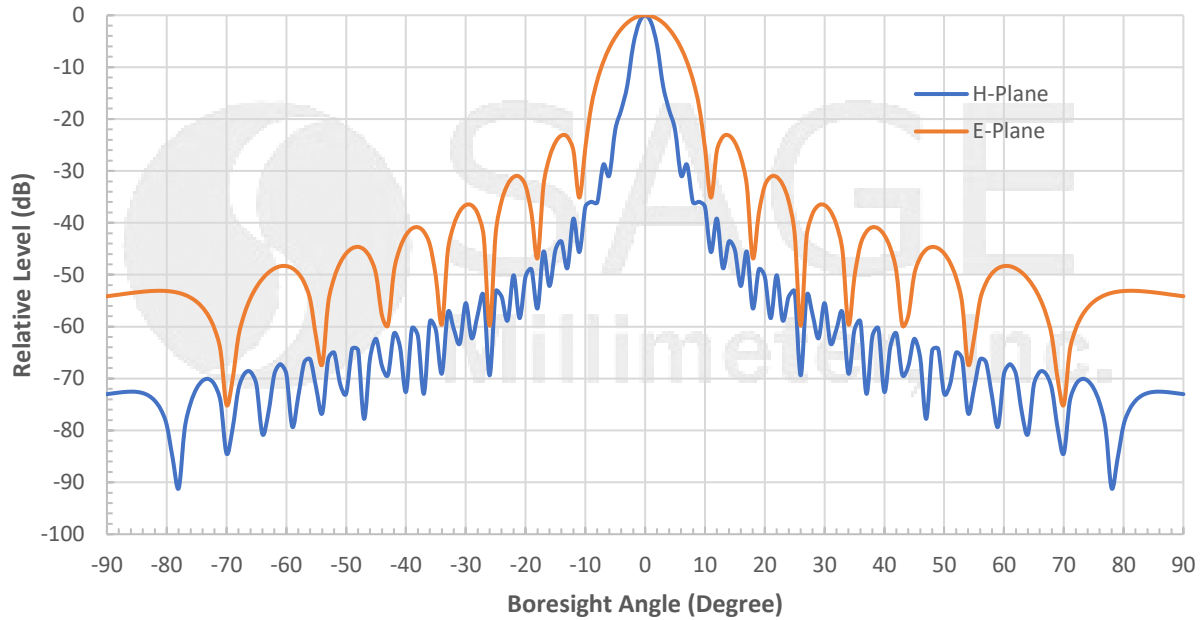
Item	Specification
Antenna Port	WR-42 Rectangular Waveguide with UG-595/U Flange
Case Material	Aluminum
Inner Finish	Silver Plated
Outer Finish	Black Paint
Weight	15 Oz
Dimensions	15.80" (L) X 11.91" (W) x 4.04" (H)
Outline	AK-RK31-C1



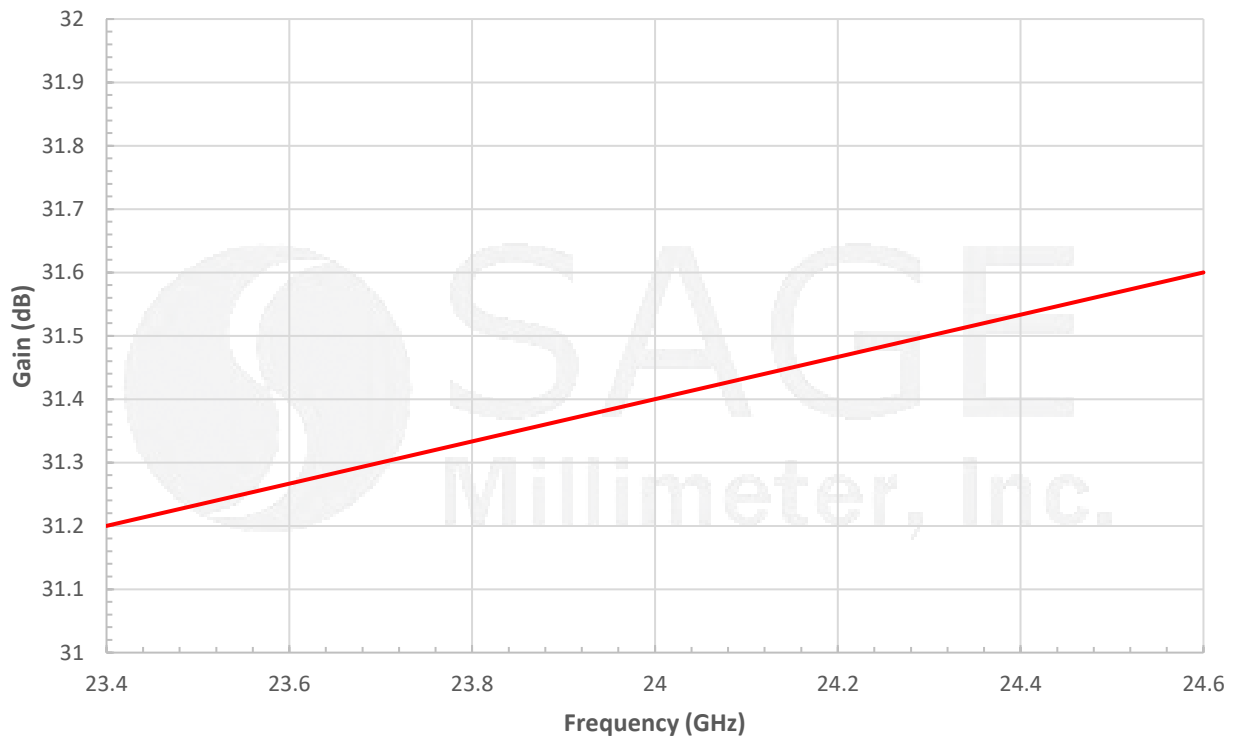


K-Band Sector Rectangular Lens Corrected Antenna, 23.7 to 24.3 GHz

Typical Antenna Pattern @ 24 GHz



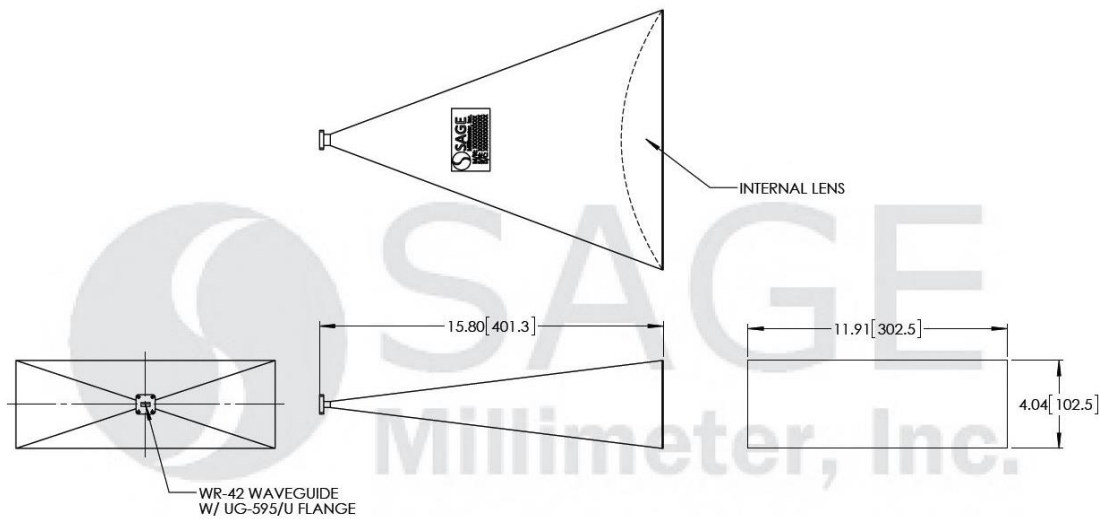
Typical Gain vs. Frequency





K-Band Sector Rectangular Lens Corrected Antenna, 23.7 to 24.3 GHz

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is simulated. Actual data may vary.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the antenna will cause performance degradation and possible device damage.

