### SAY-2243345303-03-S1

#### WR-03 Cassegrain Antenna, 220 to 330 GHz, 9", 53 dBi Gain

SAY-2243345303-03-S1 is a WR-03 Cassegrain antenna that offers a nominal gain of 53 dBi and a typical half power beamwidth of 0.3 degrees from 220 to 330 GHz. A rectangular horn antenna acts as the feed for the antenna and provides full WR-03 bandwidth coverage. The aluminum reflector offers a lightweight and rugged mechanical structure and is treated with a chem film conversion coating for corrosion resistance. The antenna port is a WR-03 waveguide with UG-387/U-M anti-cocking flange and can support linear polarized waveforms.

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	220 GHz		330 GHz
Gain		53 dBi	
3 dB Beamwidth		0.3°	
Sidelobes		-15 dB	
Return Loss		15 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

#### **Mechanical Specifications:**

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Item	Specification	
Antenna Port	WR-03 Waveguide with UG-387/U-M Anti-Cocking Flange	
Reflector Diameter	9"	
<b>Reflector Material</b>	Aluminum	
Finish	Chem Film	
Weight	2.1 lbs.	
Outline	AY-R0353-09-A	



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**FEATURES** 

**APPLICATIONS** 

 Full WR-03 Bandwidth Linear Polarization Low Side Lobe Levels

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SUDDI EMENITAL DETAILS

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0 -10 -20 Return Loss (dB) -30 -40 -50 -60 230 240 250 260 270 280 290 300 310 220 320 330 Frequency (GHz) Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters]) 3.86[98.1] Ø9.85[250.2]

#### Measured Return loss vs Frequency



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#### NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

#### CAUTION:

• Any foreign objects in the waveguide or antenna will cause performance degradation and may damage or destroy the unit.

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