

STY-MAA-AP-28KF-R1

WR-28 Open Ended Waveguide Probe Assembly, 6.5 dBi Directivity

STY-MAA-AP-28KF-R1 is a Ka-band open ended waveguide probe assembly that operates from 26.5 GHz to 40 GHz. The antenna offers 6.5 dBi nominal directivity, a typical half power beamwidth of 115 degrees on the E-plane and 60 degrees on the H-plane. The antenna supports linear polarized waveforms. The RF port is a right angle (90°) 2.92 mm coax connector. The antenna is mounted on a universal mounting cage, which is constructed from sturdy black anodized aluminum plates and optical grade stainless steel posts. The cage includes an integrated bubble level and a removable Velcro fastened absorber shield. The open ended waveguide probe assembly is offered for near-field antenna range gain and pattern measurement purposes, but it can be also used for general purpose system set ups.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|----------|---------|-----------|
| Frequency | 26.5 GHz | | 40 GHz |
| Directivity | | 6.5 dBi | |
| Polarization | | Linear | |
| 3 dB Beamwidth, E-Plane | | 115° | |
| 3 dB Beamwidth, H-Plane | | 60° | |
| Sidelobes, E-Plane | | -10 dB | |
| Sidelobes, H-Plane | | -14 dB | |
| Return Loss | | 11 dB | |
| Power Handling | | | 50 W (CW) |
| Specification Temperature | | +25 °C | |
| Operation Temperature | -40 °C | | +85 °C |

Mechanical Specifications:

| Item | Specification |
|----------|---|
| RF Port | 2.92 mm Female Coax Connector |
| Material | Brass, Aluminum, Stainless Steel |
| Finish | Gold Plated (Brass), Black Anodized (Aluminum), Passivated (Stainless Steel), |
| Weight | 10.5 lbs. |
| Outline | TY-MAA-AP-AC-R |

ECCN

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FEATURES

- Robust Universal Mounting Cage
- Bubble Level and Absorber Shield
- Right Angle Connector Configuration
- Linear Polarization
- DC Open Circuit

APPLICATIONS

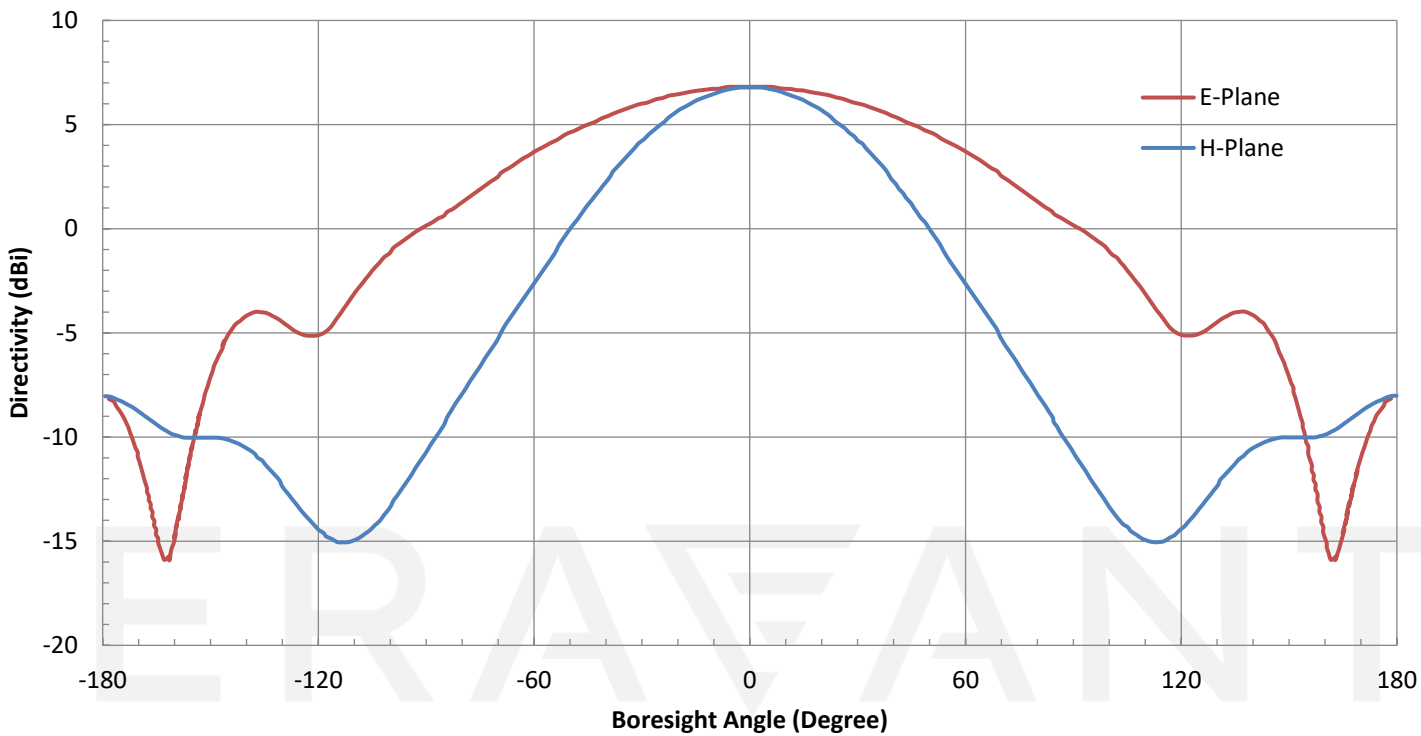
- Near Field Range Testing
- General System Setups

SUPPLEMENTAL DETAILS

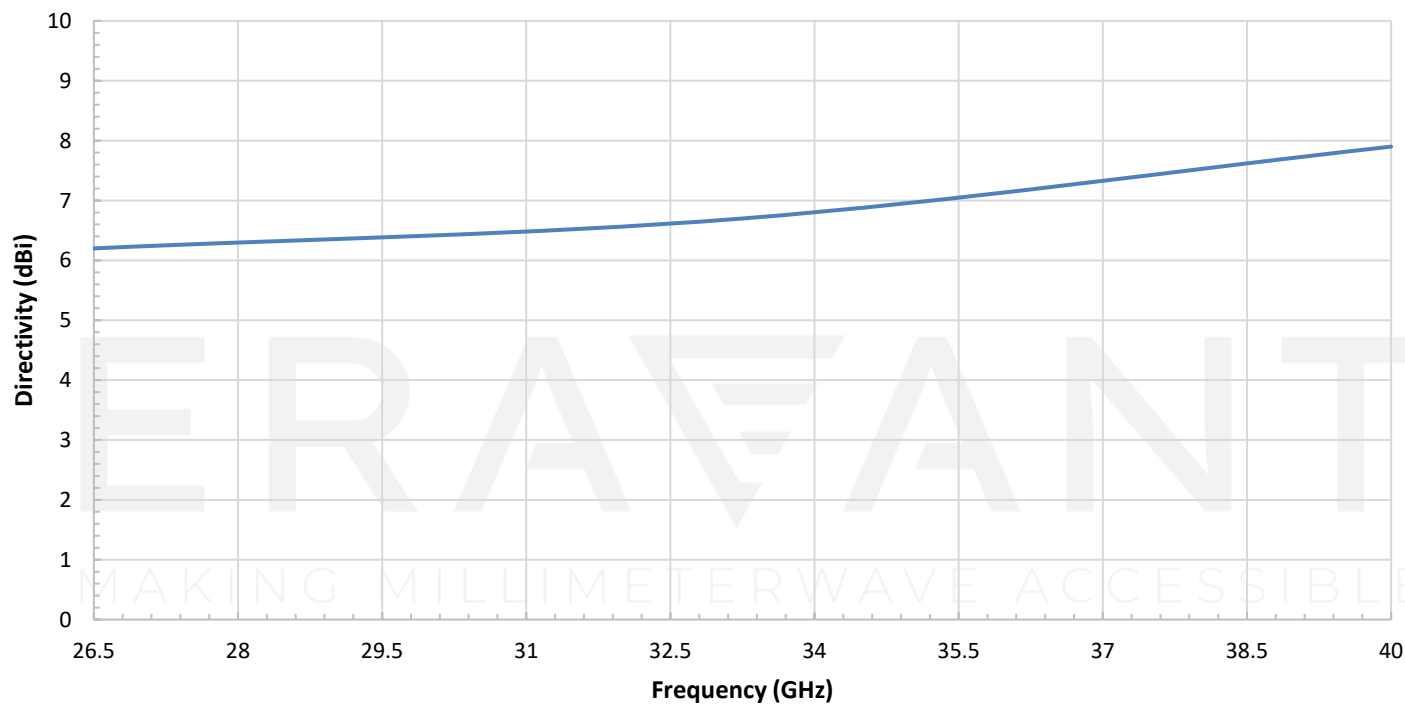


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Simulated Antenna Pattern @ 33.25 GHz



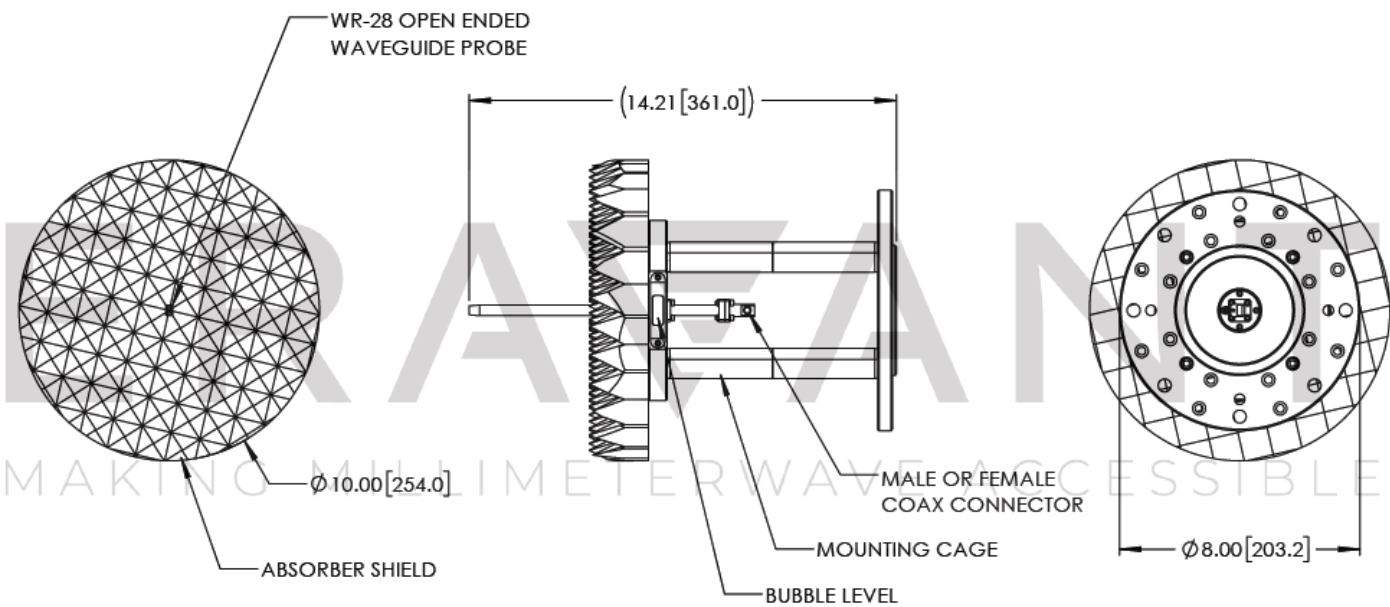
Simulated Directivity vs Frequency



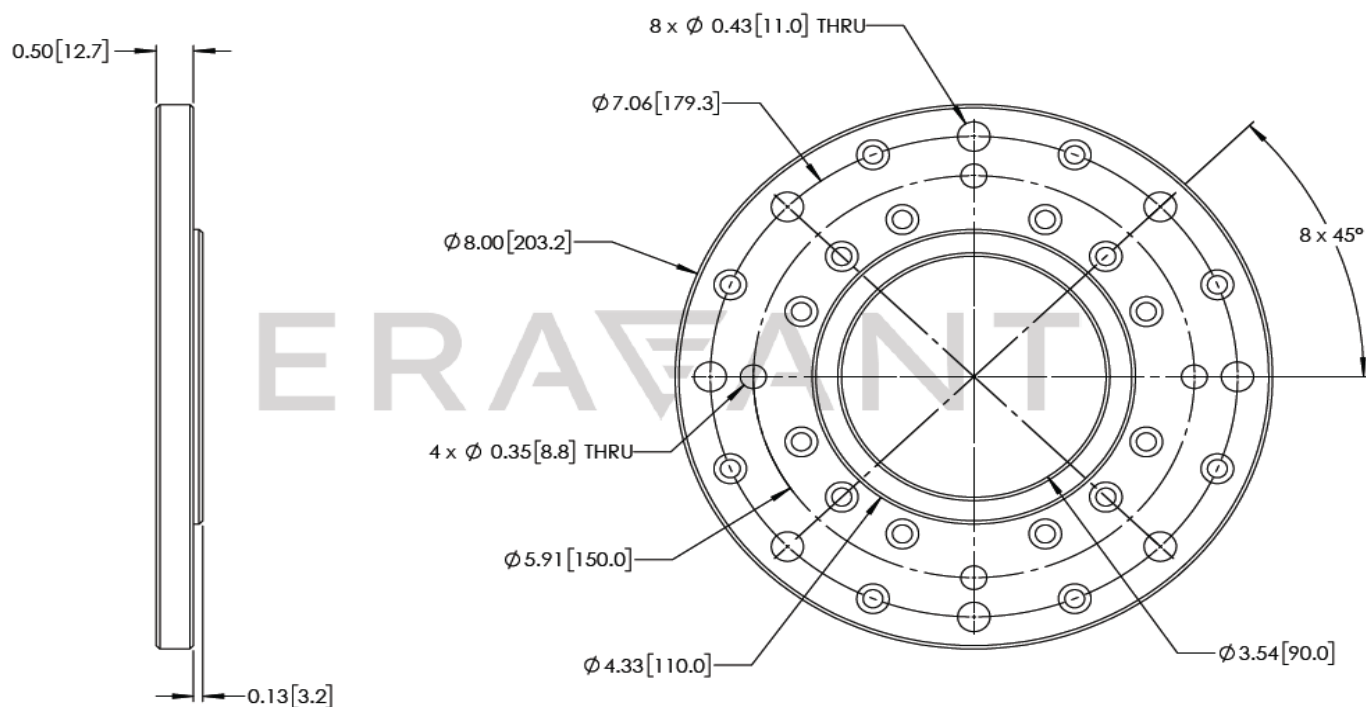
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Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



MOUNTING INTERFACE



NOTE:

- All data presented is simulated. Actual data may vary slightly.
- Eravant 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.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.

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