



Discover the QRH0422, a dual-polarized broadband horn antenna from the forefront of RF technology. Operating seamlessly across a wide frequency range from 4 GHz to 22 GHz, this antenna is a testament to superior engineering and design. The QRH0422 is not just about broad frequency coverage; it's about precision and quality. With its robust design and the reliability of an SMA connector, this antenna guarantees stable and consistent performance in various environments.

Cloned antenna series are available through [AU Technology](#), which guarantees constant parameters.

Manufactured with RF SPIN's [SPM Technology](#) to achieve the best mechanical and radio parameters.

Features and Specifications



Technical Performance

- Wide bandwidth
- Low return loss
- Individual calibration
- Covers 5G frequency band



Design and Surface Treatment

- Corrosion-resistant coating
- Includes standard mount



Manufacturing Technology

- High quality SMA type coaxial connector



Product Packaging Includes

- Linear polarized double ridged broadband horn antenna

Product Parameters

PRODUCT IDENTIFICATION

Product Name	QRH0422
Product Category	Quad Ridged Horn Antenna

ELECTRICAL SPECIFICATIONS

Frequency Range	3.6 GHz – 22 GHz
VSWR (max.)	2.4
VSWR (avg.)	1.4
Impedance	50 Ohm
Connector	SMA (female)
Power (CW / Peak)	120 W / 250 W
Antenna Factor	33 – 43 dB/m
Port Isolation	-32 dB
Polarization	Dual Linear, Circular (with hybrid)

PHYSICAL SPECIFICATIONS

Width	60 mm (2.362 in)
Height	97 mm (3.819 in)
Depth	60 mm (2.362 in)
Weight	0.193 kg (0.425 lb)

OPERATING CONDITIONS

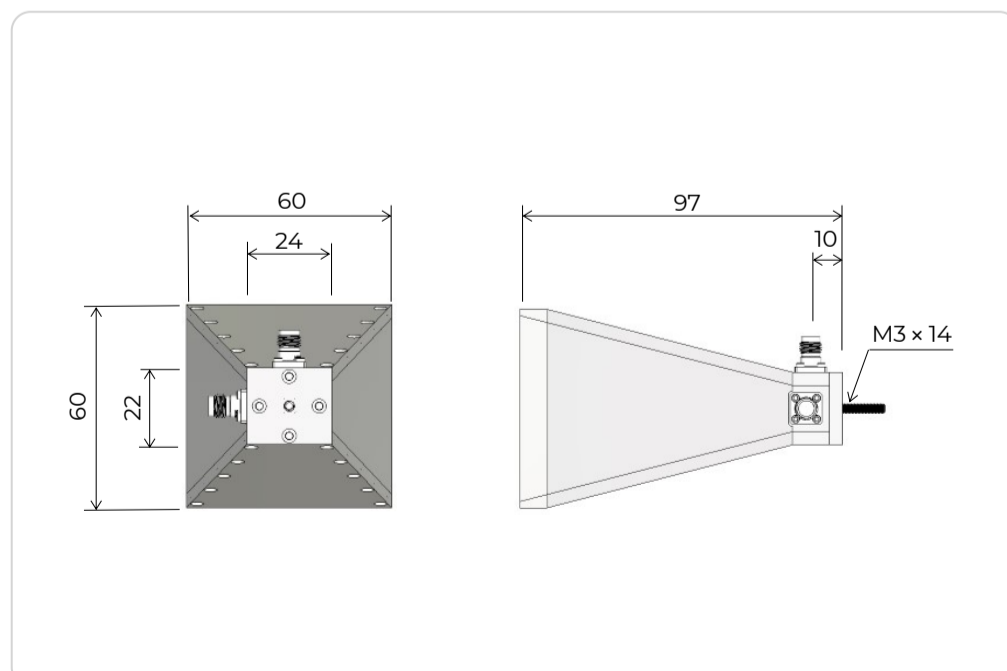
Rated Temperature Range	0°C – +50°C
Storage Temperature Range	-20°C – +60°C

MOUNTING FLANGE

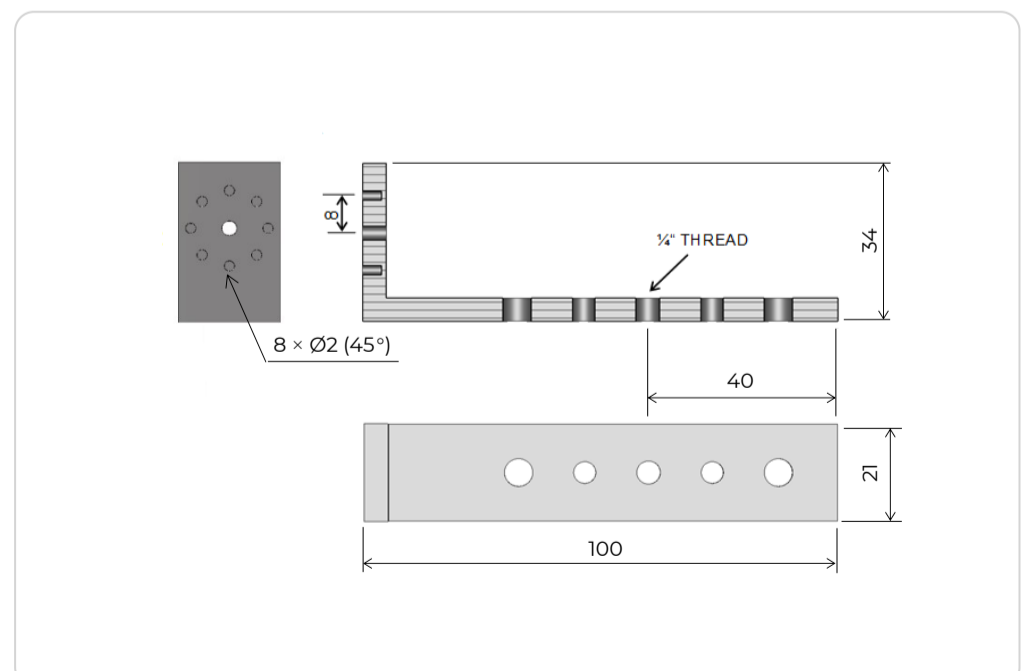
Mounting	Adapter with ¼ inch inner thread, supplied with antenna
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Mechanical Drawings

Antenna



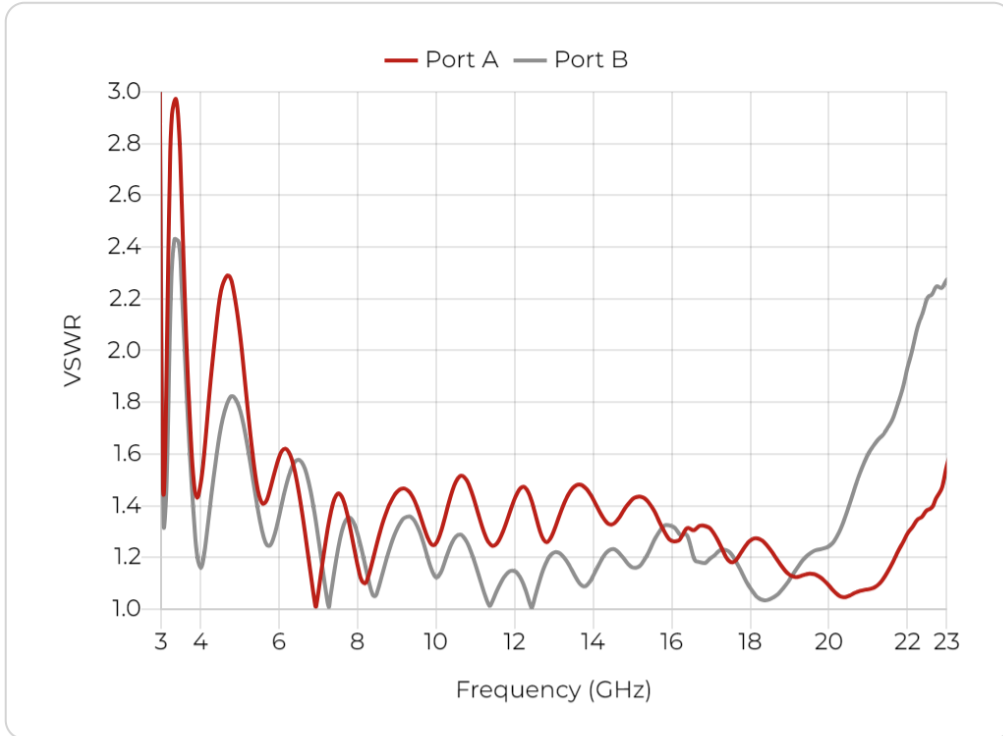
Mounting flange



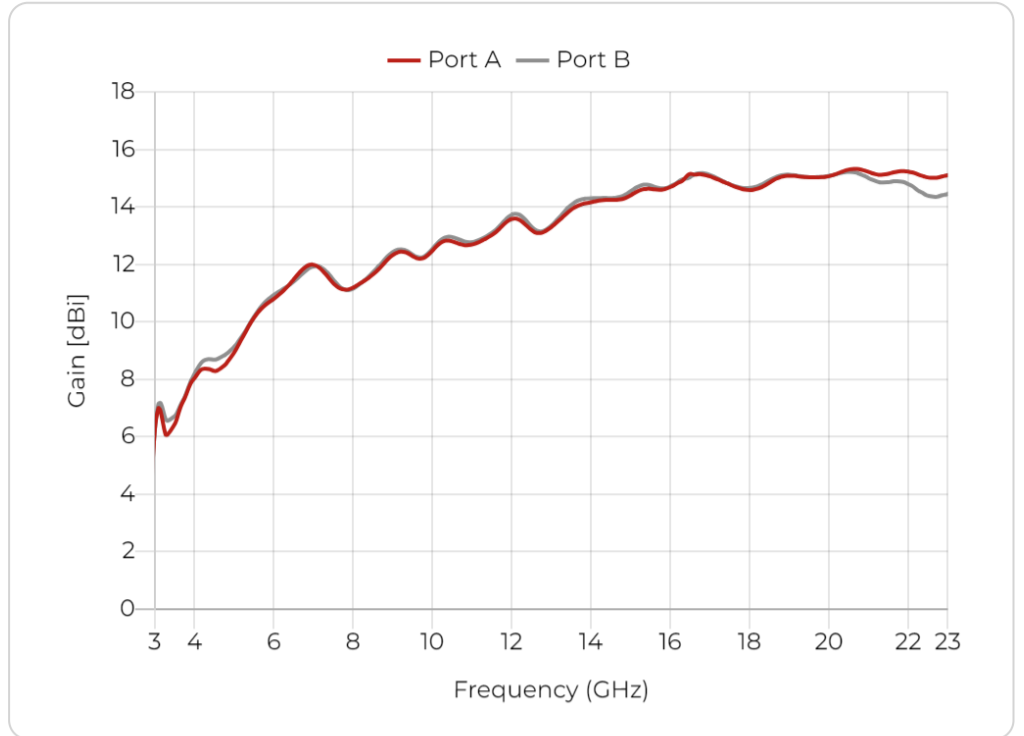
Parameters and Performance

Typical parameters

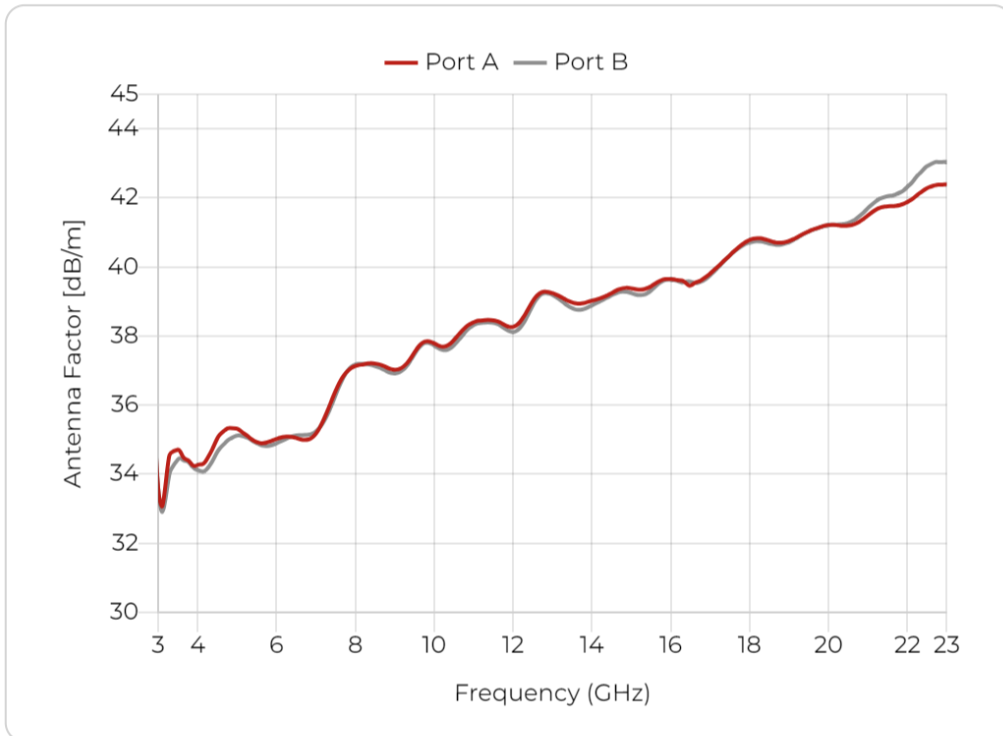
VSWR



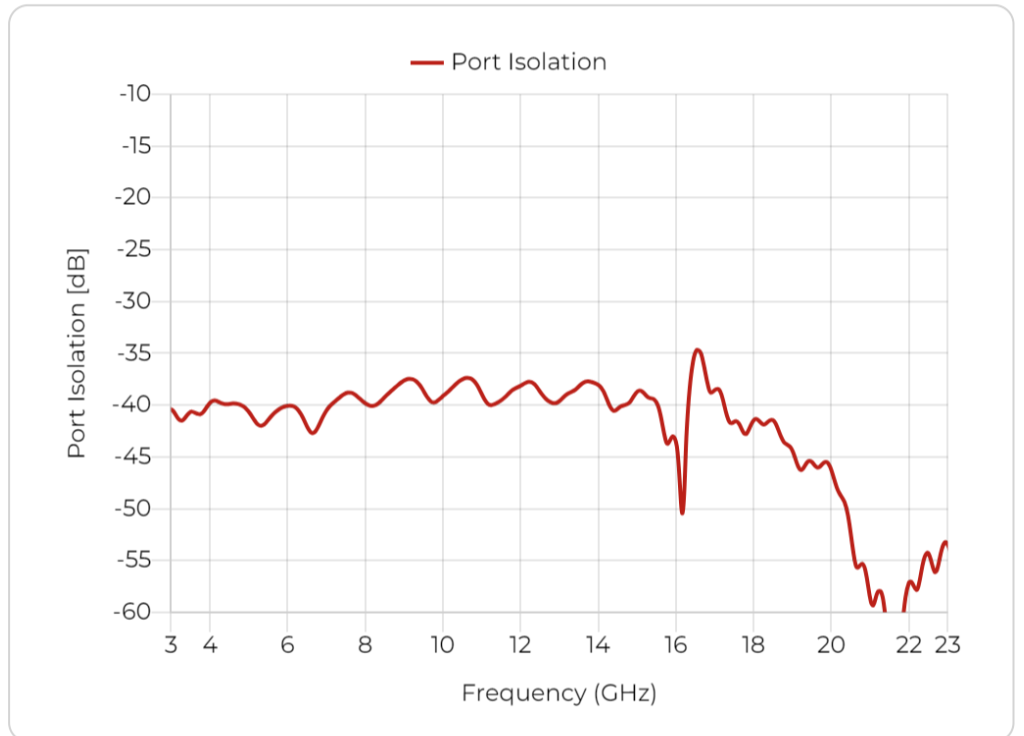
Gain



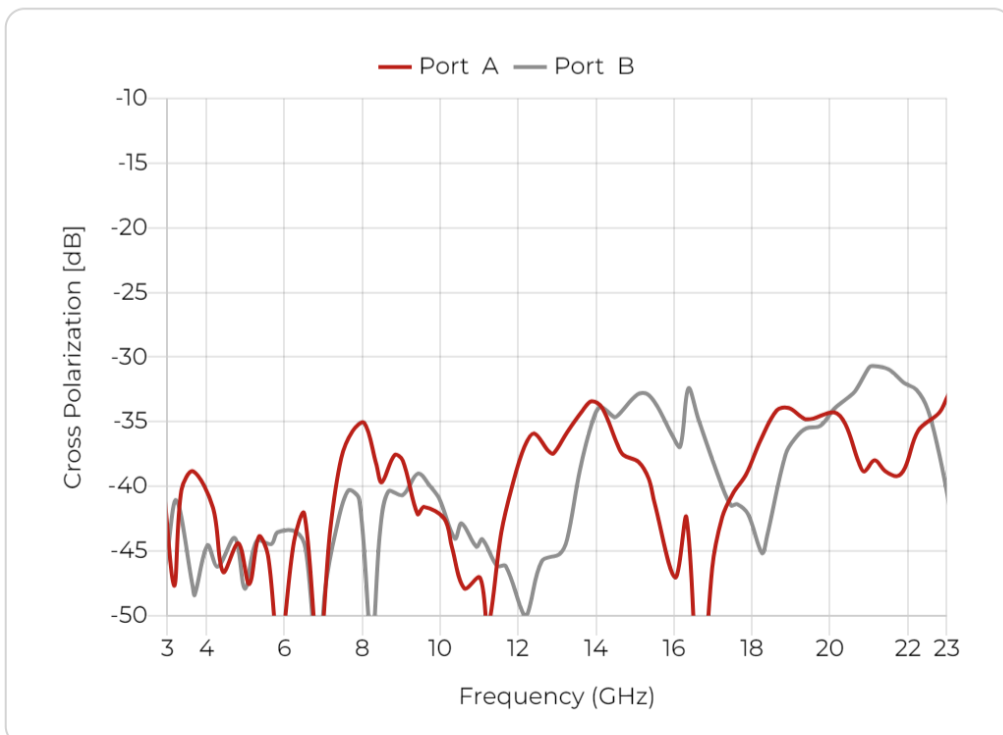
Antenna Factor



Port Isolation

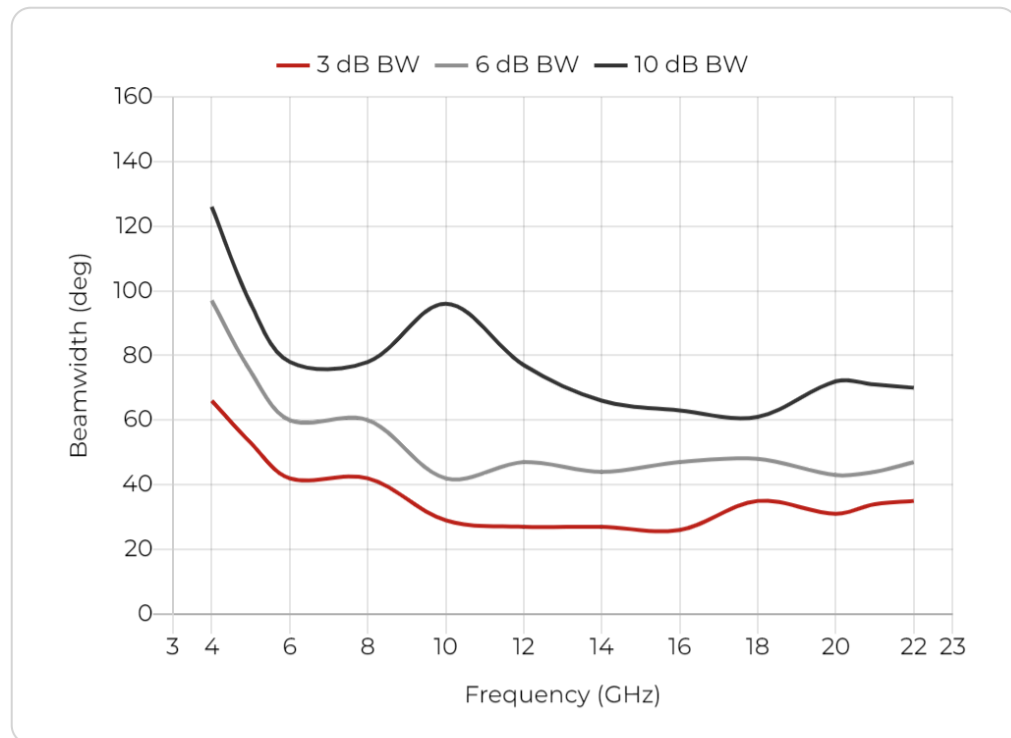


Cross Polarization

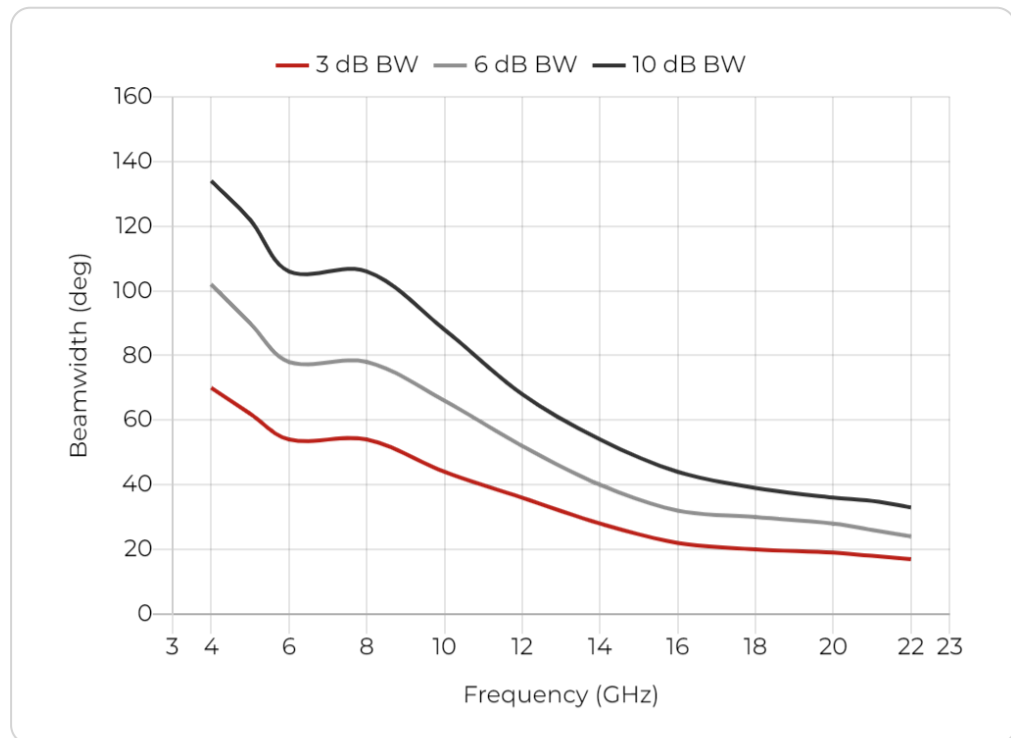


Beamwidth

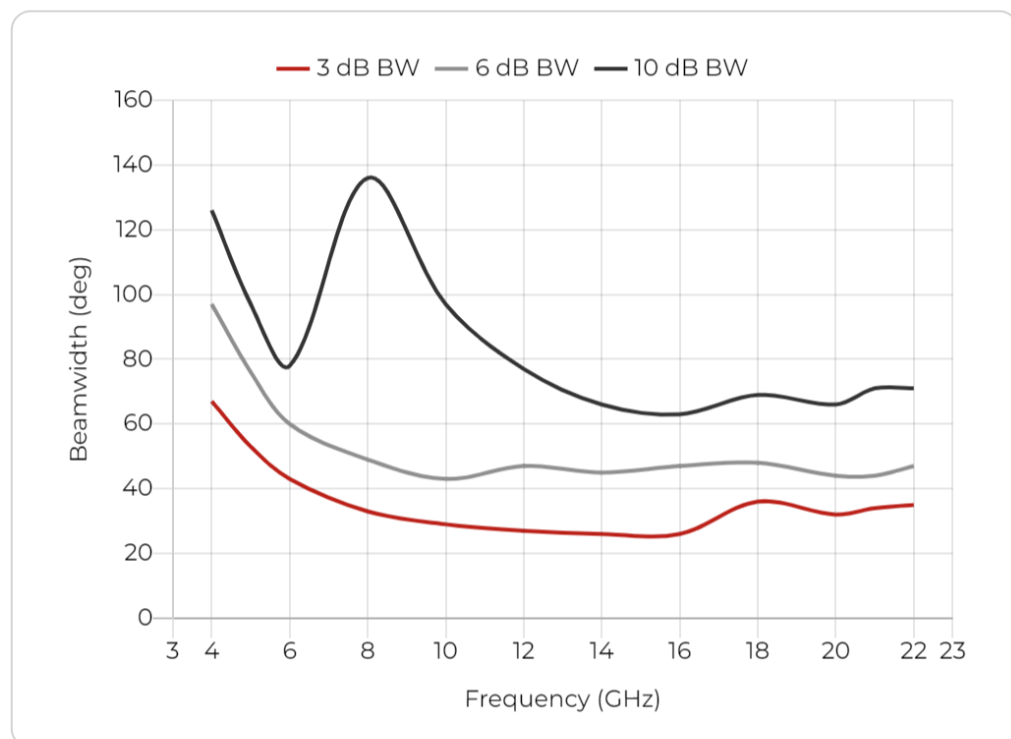
Port A, E plane



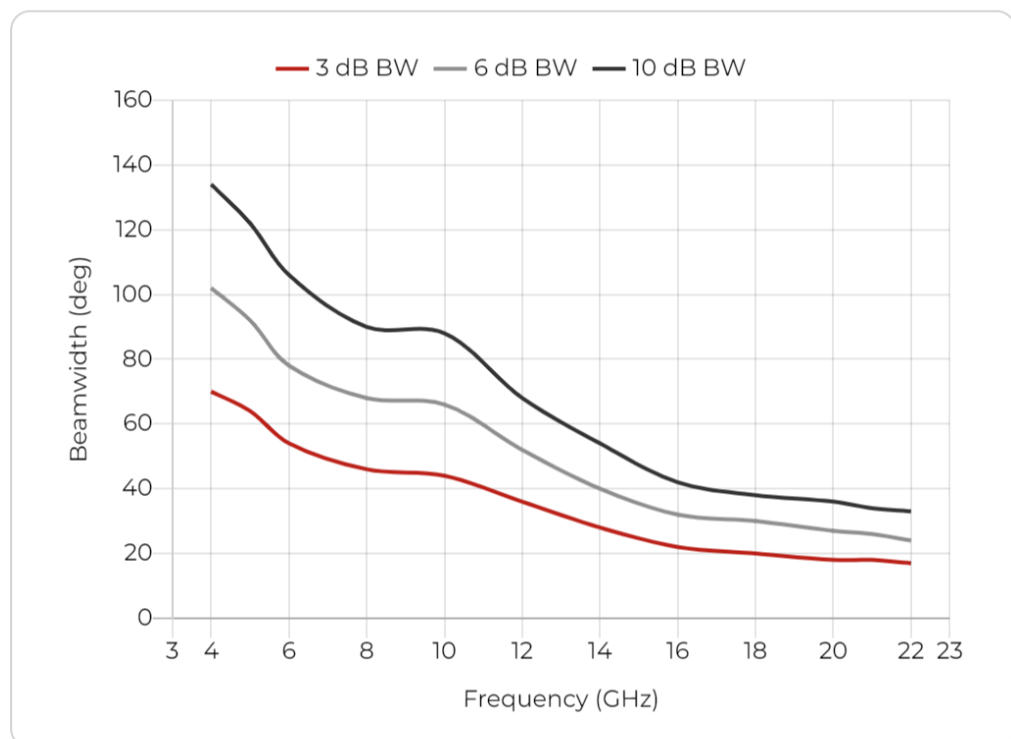
Port A, H plane



Port B, E plane

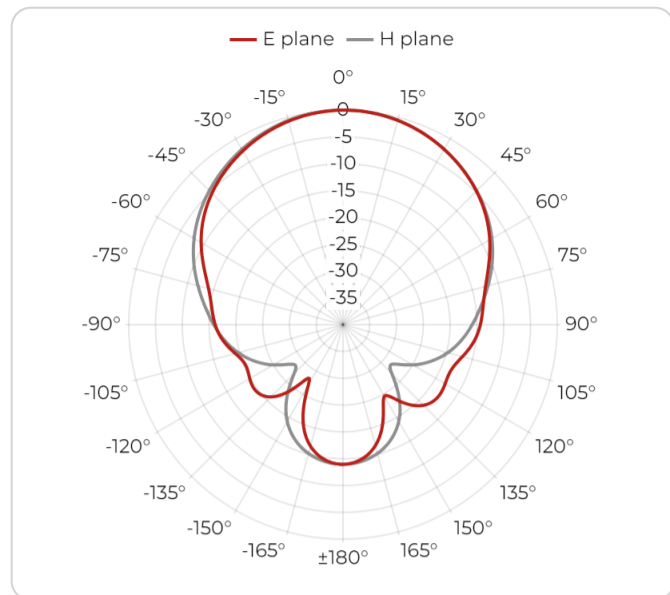


Port B, H plane

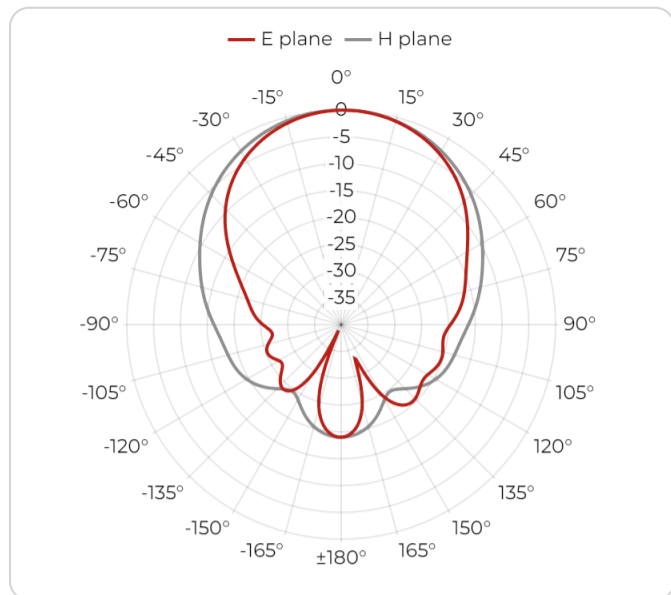


Radiation Patterns - Port A

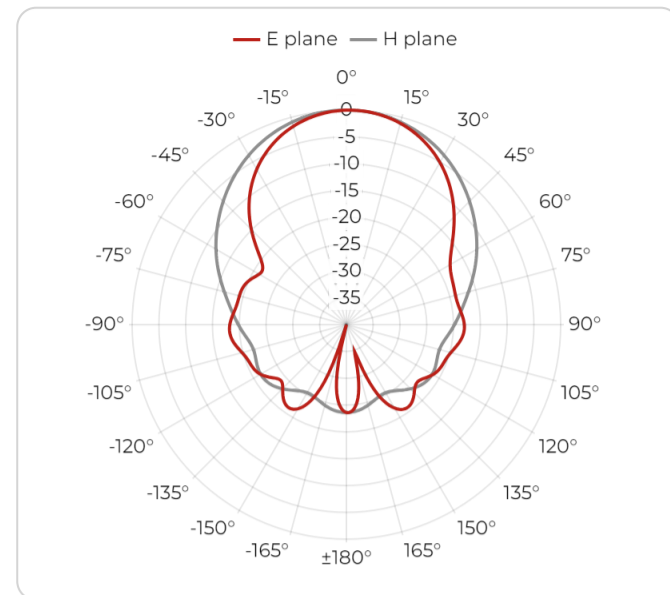
Port A, 4 GHz



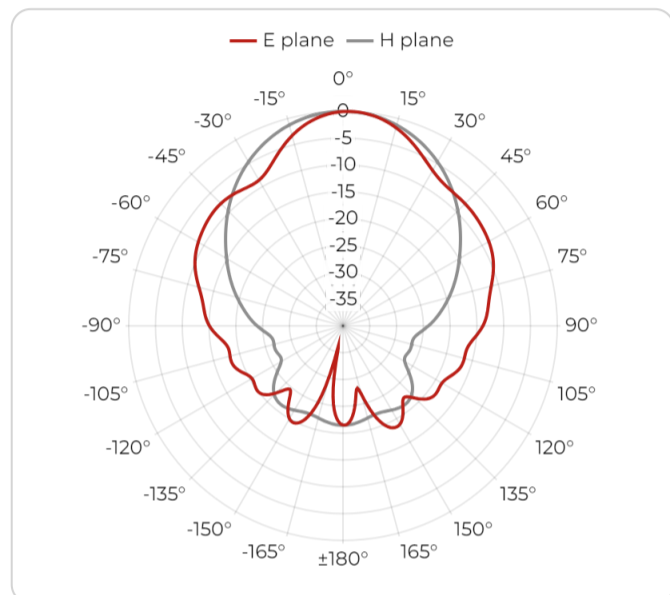
Port A, 5 GHz



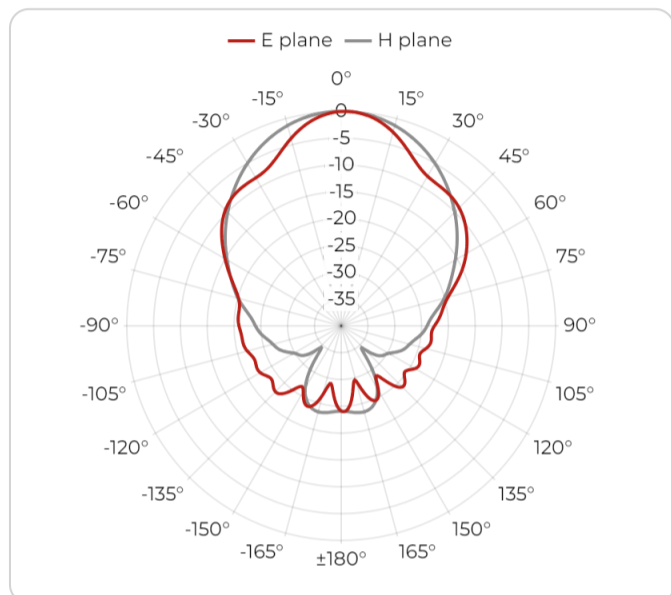
Port A, 6 GHz



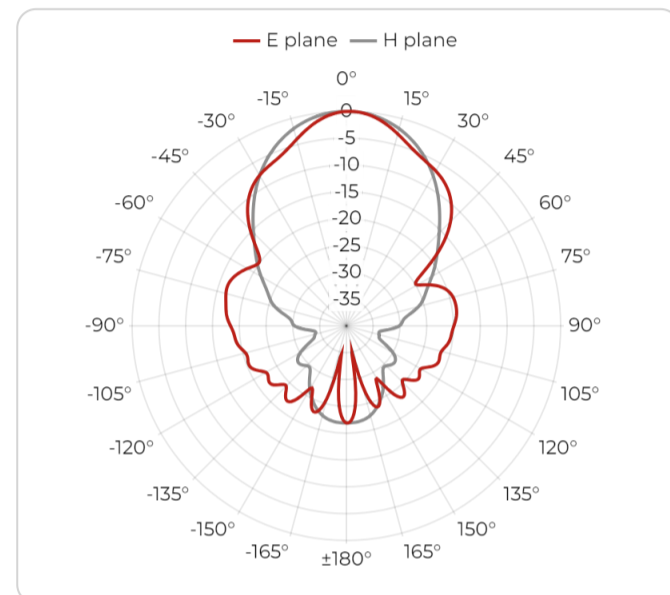
Port A, 8 GHz



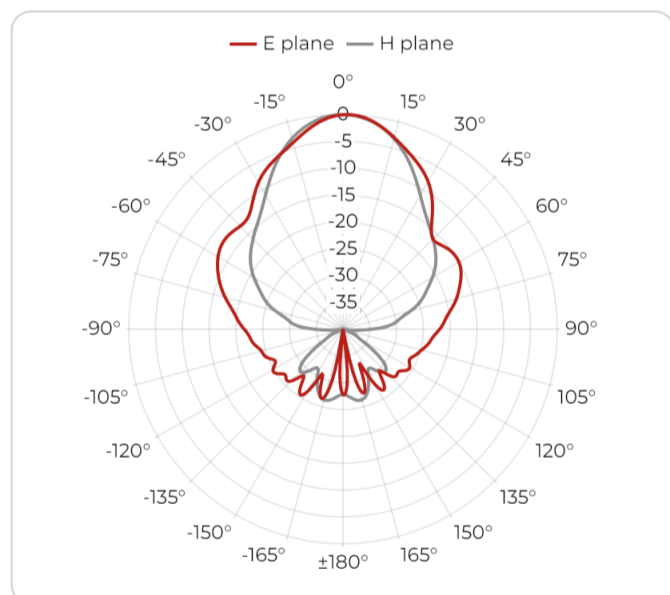
Port A, 10 GHz



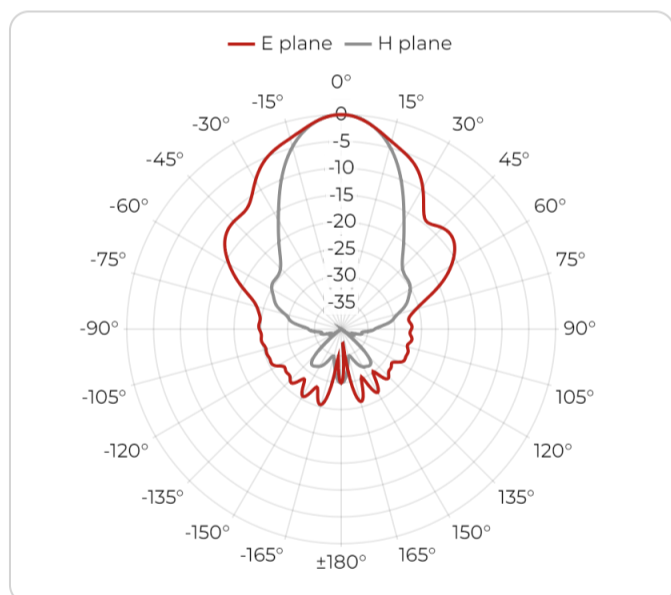
Port A, 12 GHz



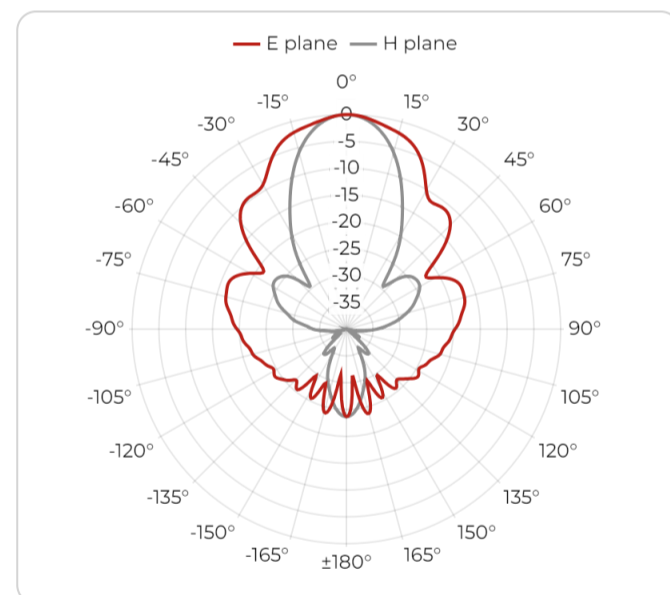
Port A, 14 GHz



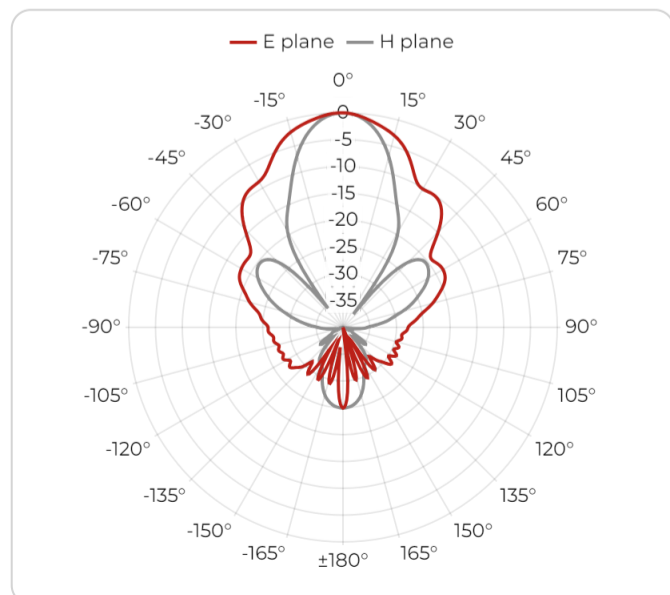
Port A, 16 GHz



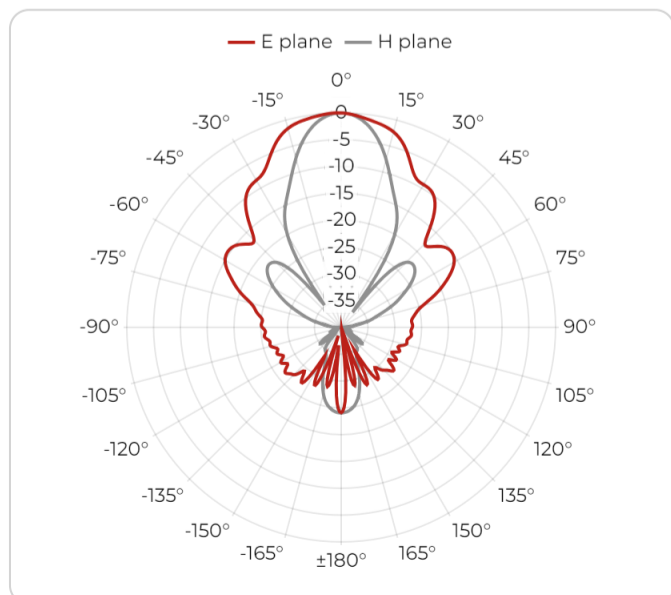
Port A, 18 GHz



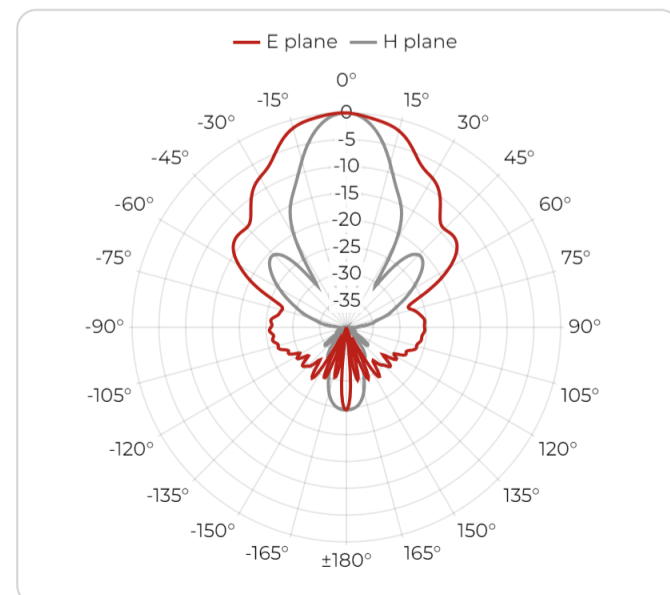
Port A, 20 GHz



Port A, 21 GHz

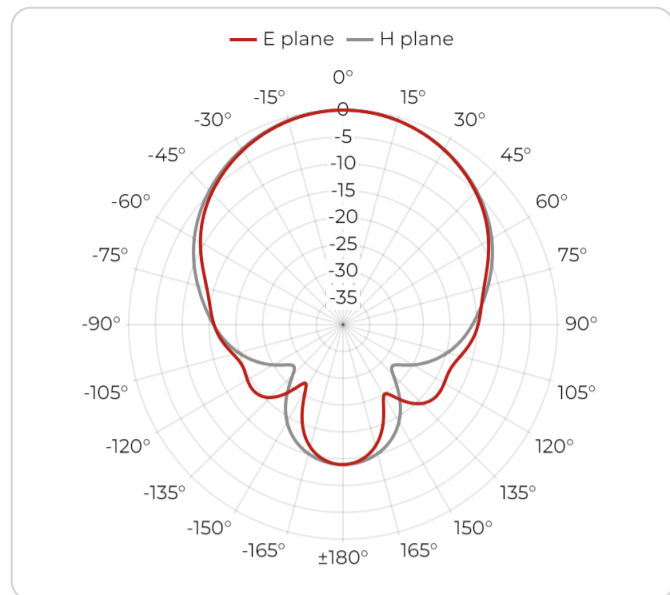


Port A, 22 GHz

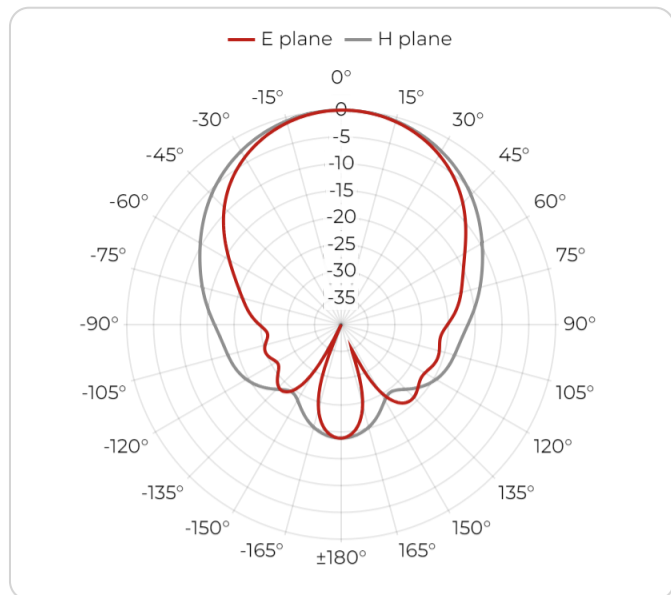


Radiation Patterns - Port B

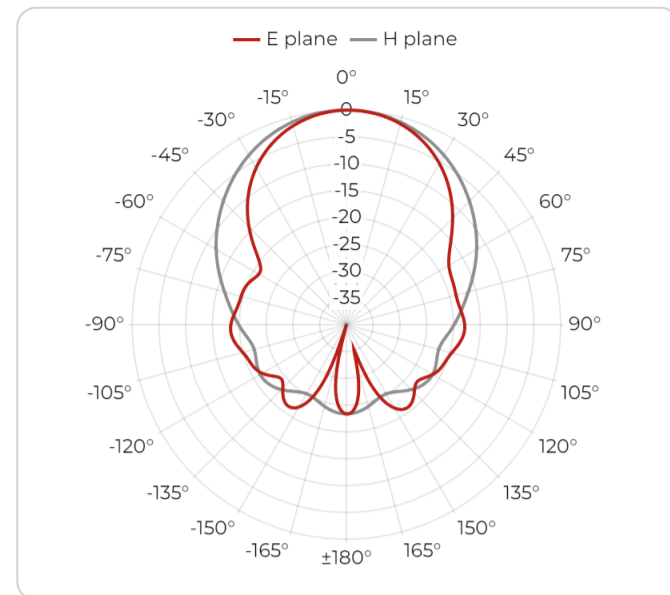
Port B, 4 GHz



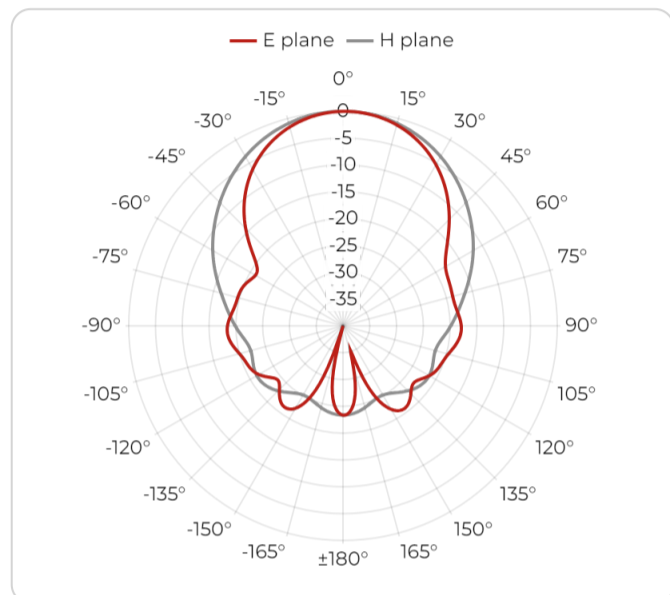
Port B, 5 GHz



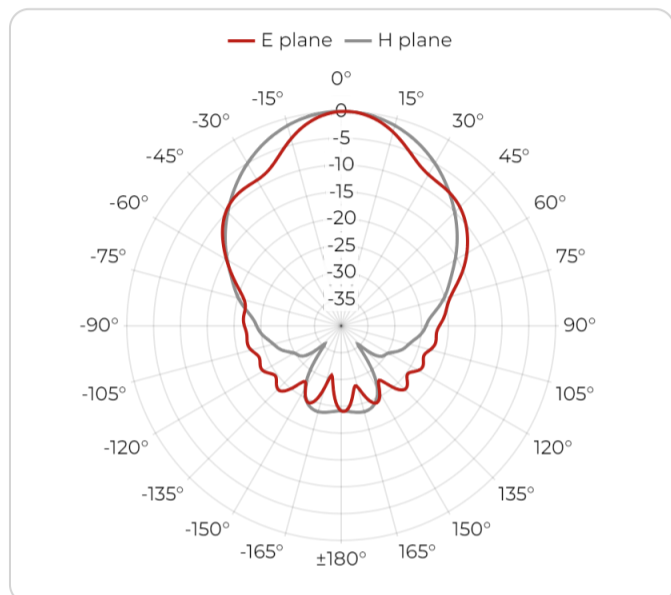
Port B, 6 GHz



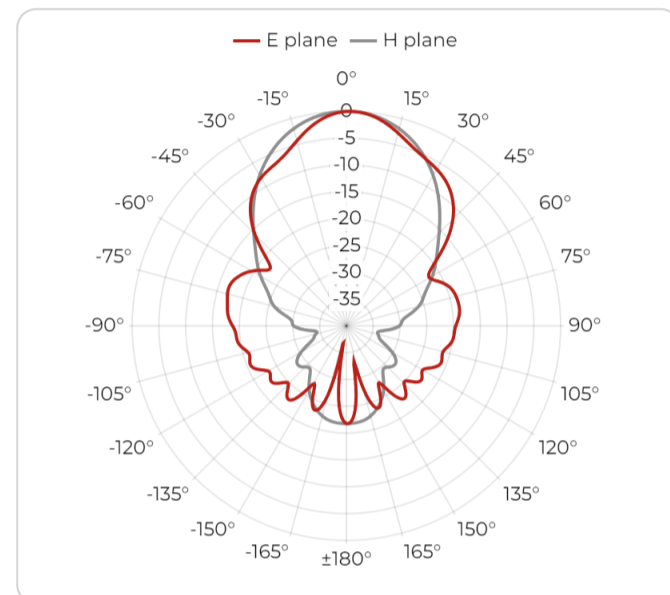
Port B, 8 GHz



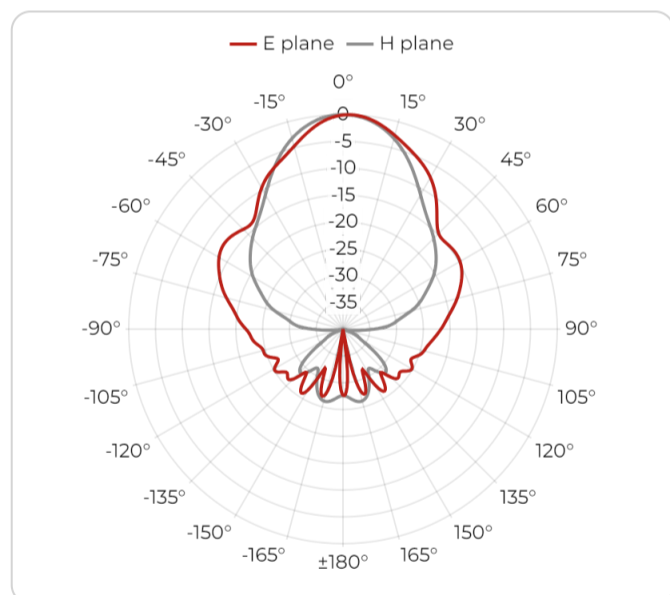
Port B, 10 GHz



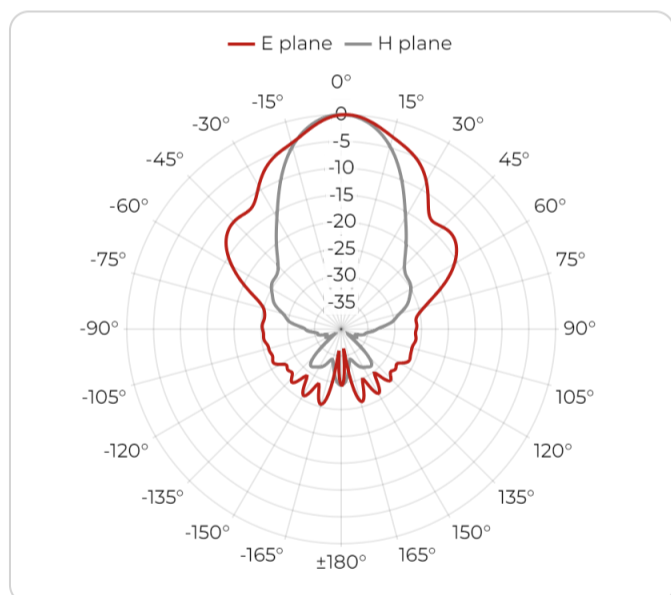
Port B, 12 GHz



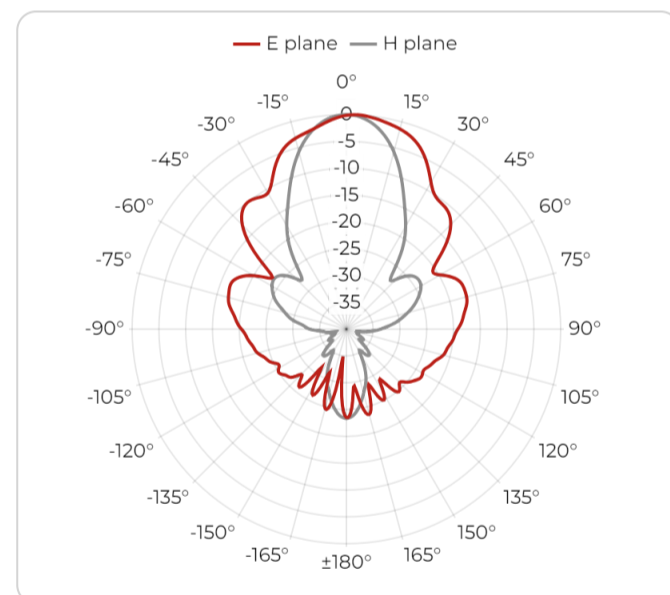
Port B, 14 GHz



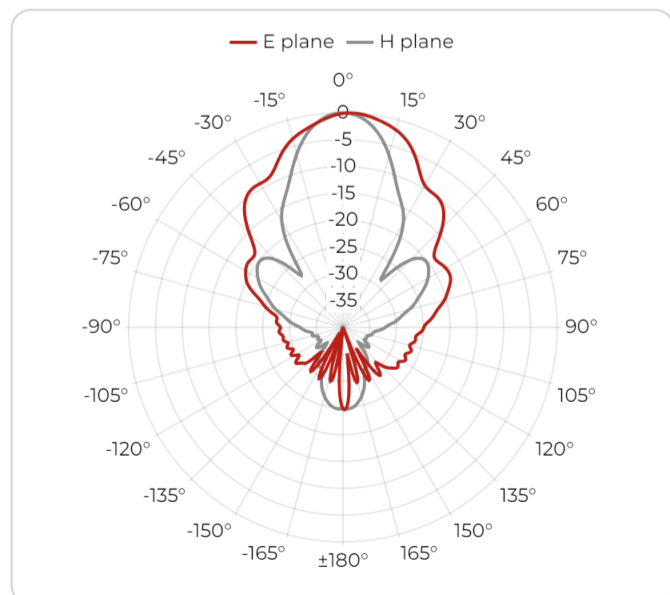
Port B, 16 GHz



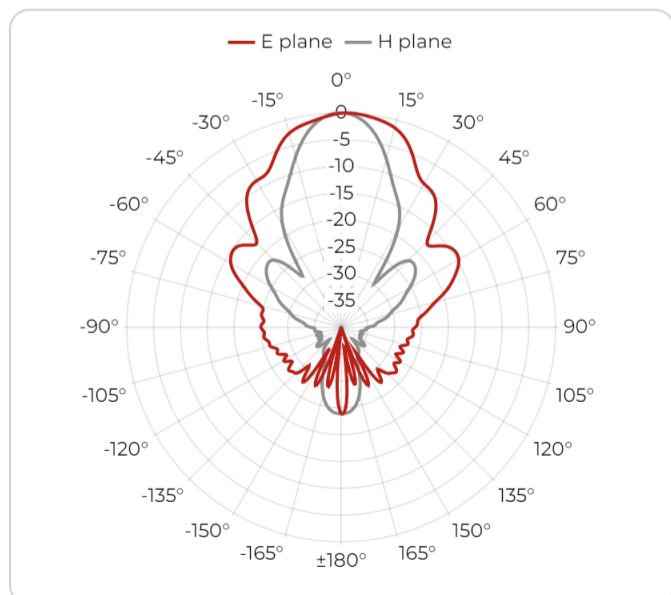
Port B, 18 GHz



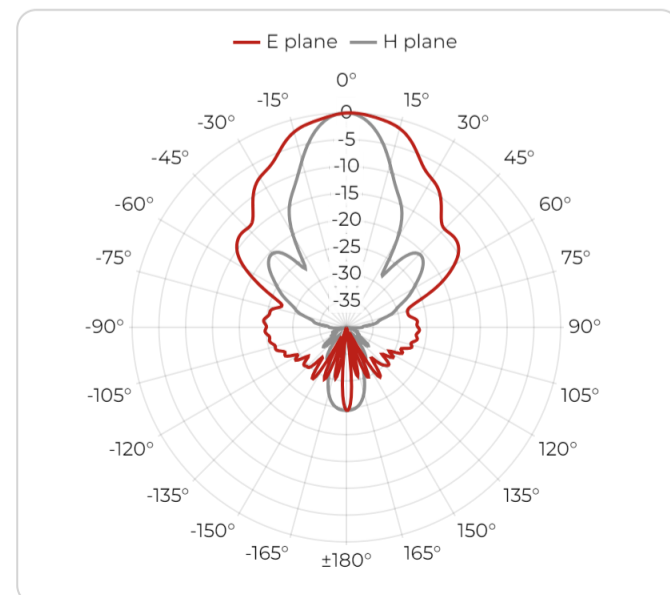
Port B, 20 GHz



Port B, 21 GHz



Port B, 22 GHz



Packaging and Accessories

What's in a box

- QRH0422 Antenna
- Antenna specific mount adapter with ¼ inch inner thread
- Factory calibration certificate
- Full calibration report of each antenna
- QR code accessing online portal
- Calibration test dataset (available online)
- Universal antenna mount

Accessories

- Standard mounting flange

Optional Accessories

- **Private:** AHS22-M3 Antenna Fixture

Custom services

- Custom mounting solutions
- Custom calibration data
- Radome waterproof enclosure

Manufacturer Information

About Datasheet

Product information available also online at
<https://www.rfspin.com/product/grh0422/>

Data and specifications subject to change without notice.

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