



Specially developed for EMC/EMI testing. This dual-polarized antenna operates from 0.73 GHz up to 11 GHz and, with a proper 90deg hybrid coupler, can obtain circular polarization (LHCP or RHCP). Thanks to radome, this antenna is suitable for outdoor applications. It is equipped with the standard L-shape holder, hermetically sealed, and a Gore air vent.

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.

See the equivalent naked antenna [QRH11](#)

Features and Specifications



Technical Performance

- Wide bandwidth
- Low return loss
- Individual calibration
- Suitable for EMC/EMI applications



Design and Surface Treatment

- Corrosion-resistant coating
- Includes standard mount



Manufacturing Technology

- Manufactured using a high grade aluminum alloy
- High quality SMA type coaxial connector



Product Packaging Includes

- Antenna
- Adapter with 1/4 inch inner thread, supplied with antenna

Product Parameters

PRODUCT IDENTIFICATION

Product Name	QRH11R
Product Category	Quad Ridged Horn Outdoor Antenna

ELECTRICAL SPECIFICATIONS

Frequency Range	730 MHz – 11 GHz
VSWR (max.)	2.4
VSWR (avg.)	1.5
Impedance	50 Ohm
Connector	SMA (female)
Power (CW / Peak)	100 W / 170 W
Antenna Factor	23 – 38 dB/m
Port Isolation	-30 dB
Polarization	Dual Linear, Circular (with hybrid)

PHYSICAL SPECIFICATIONS

Width	360 mm (14.173 in)
Height	293 mm (11.535 in)
Depth	360 mm (14.173 in)
Weight	2.7 kg (5.952 lb)

OPERATING CONDITIONS

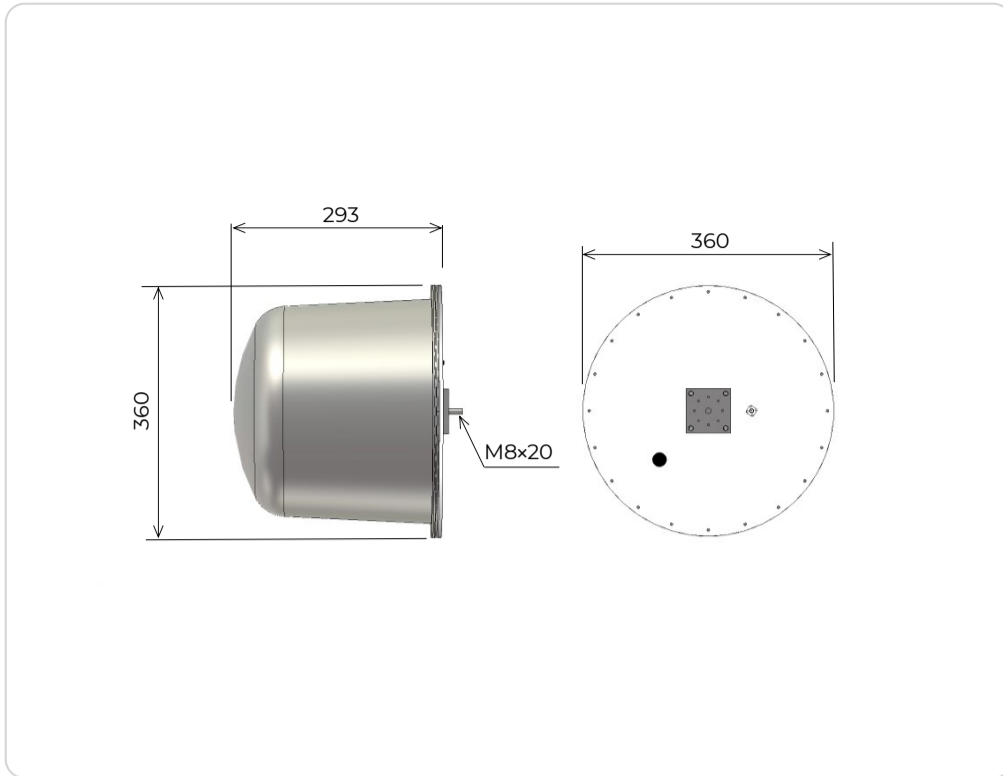
Rated Temperature Range	-10°C – +50°C
Storage Temperature Range	-20°C – +70°C

MOUNTING FLANGE

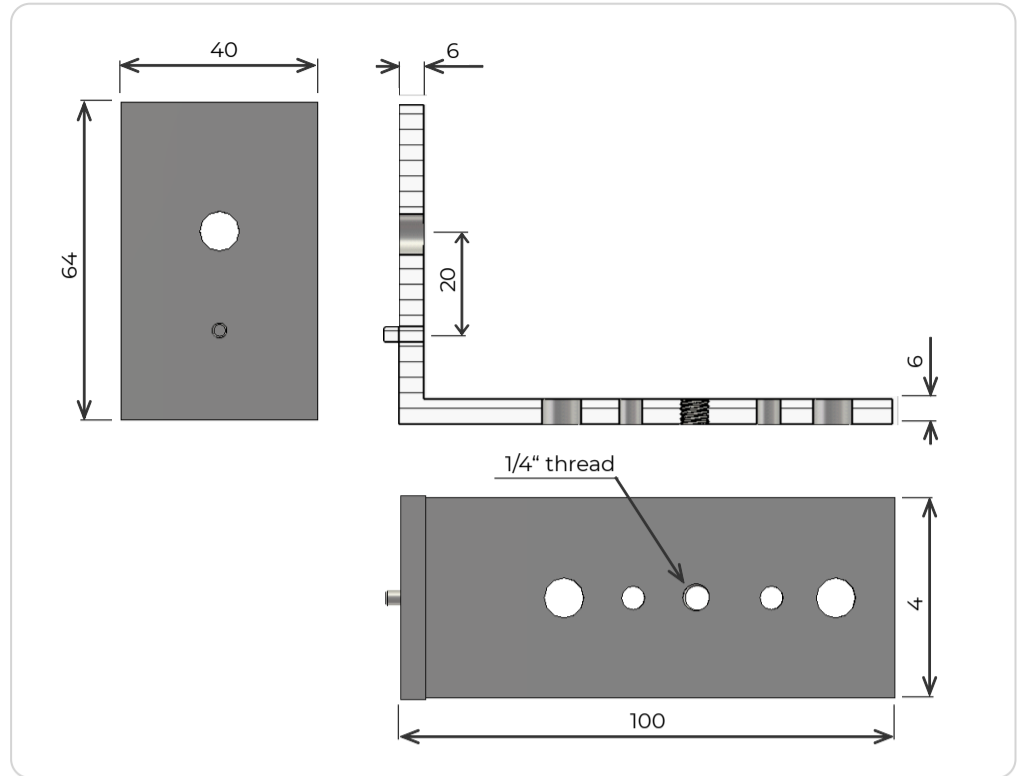
Mounting	Adapter with 1/4 inch inner thread, supplied with antenna
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Mechanical Drawings

Antenna



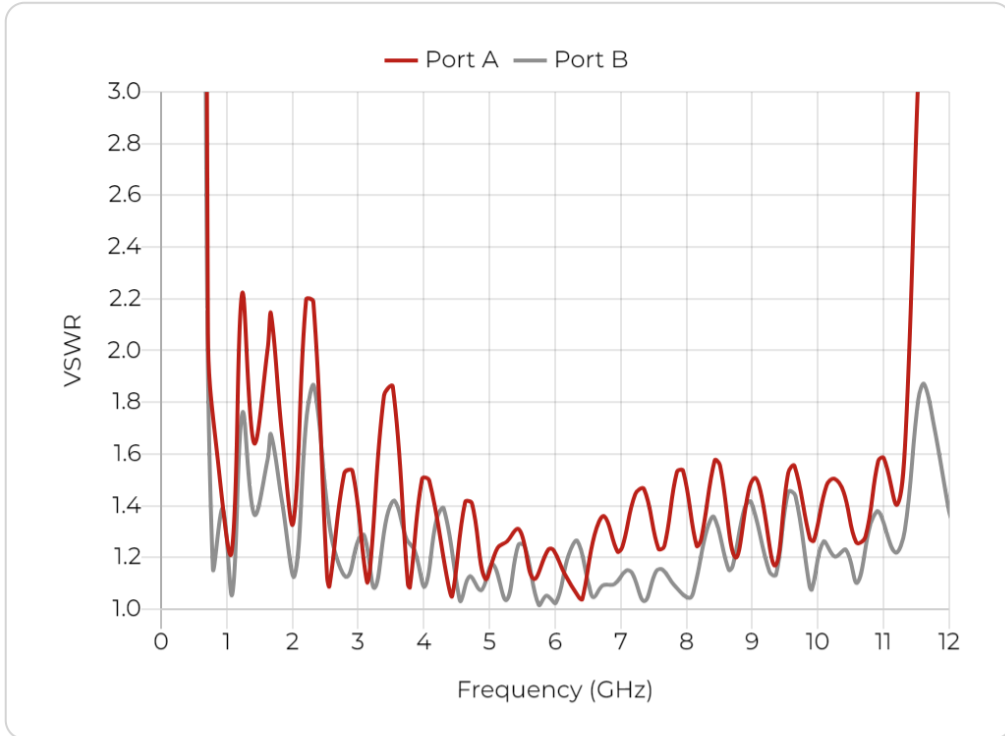
Mounting flange



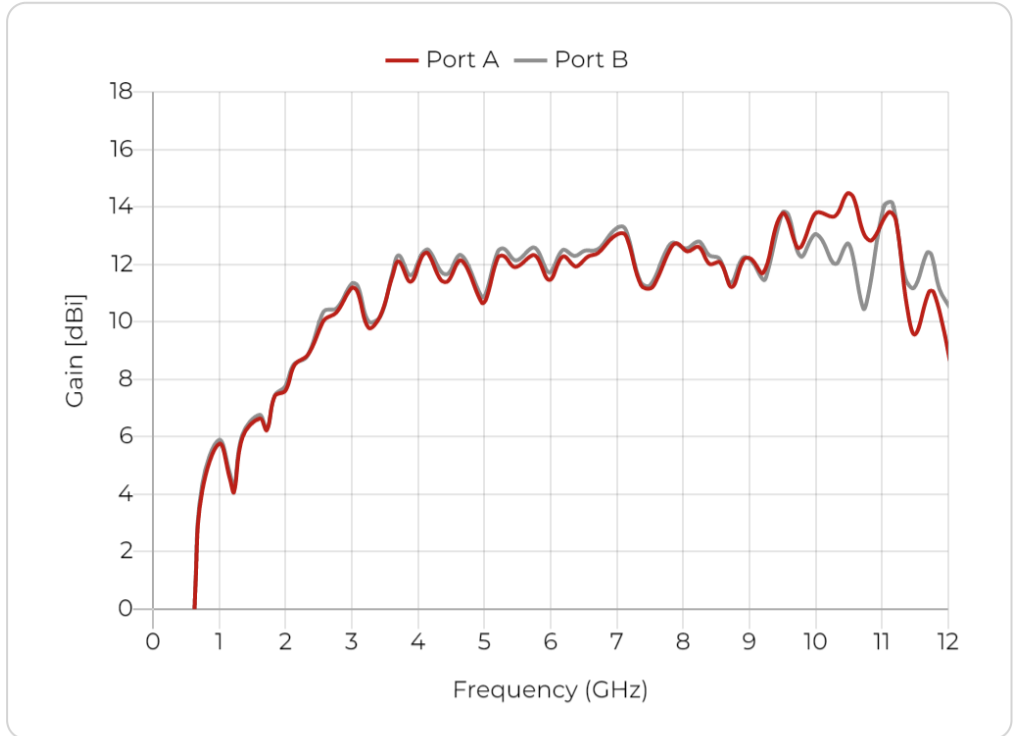
Parameters and Performance

Typical parameters

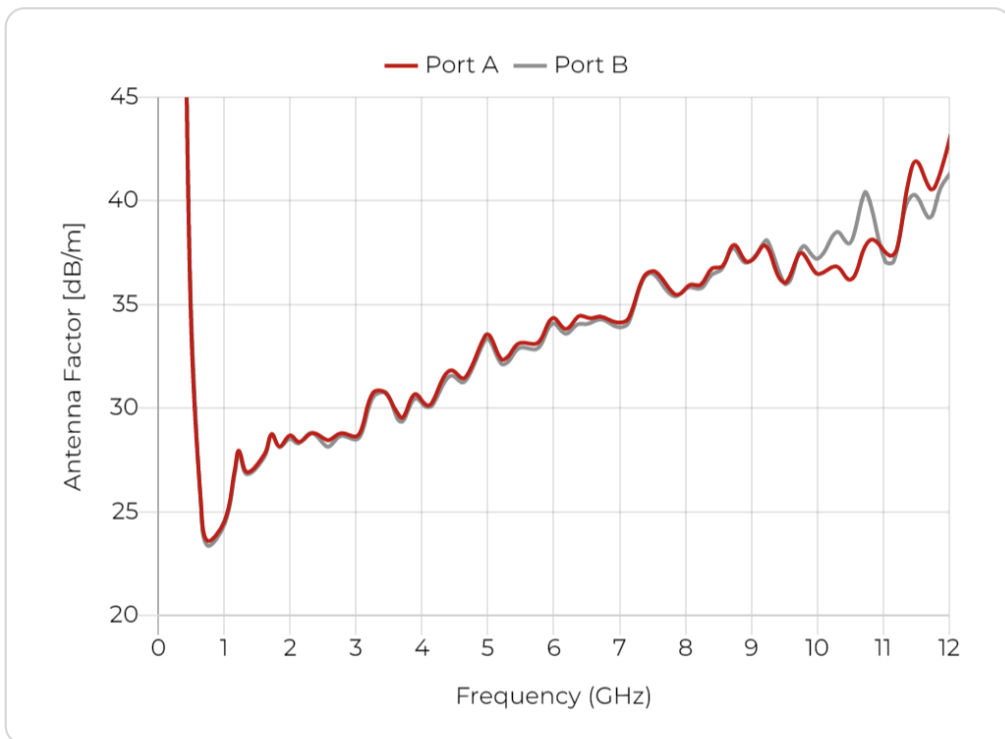
VSWR



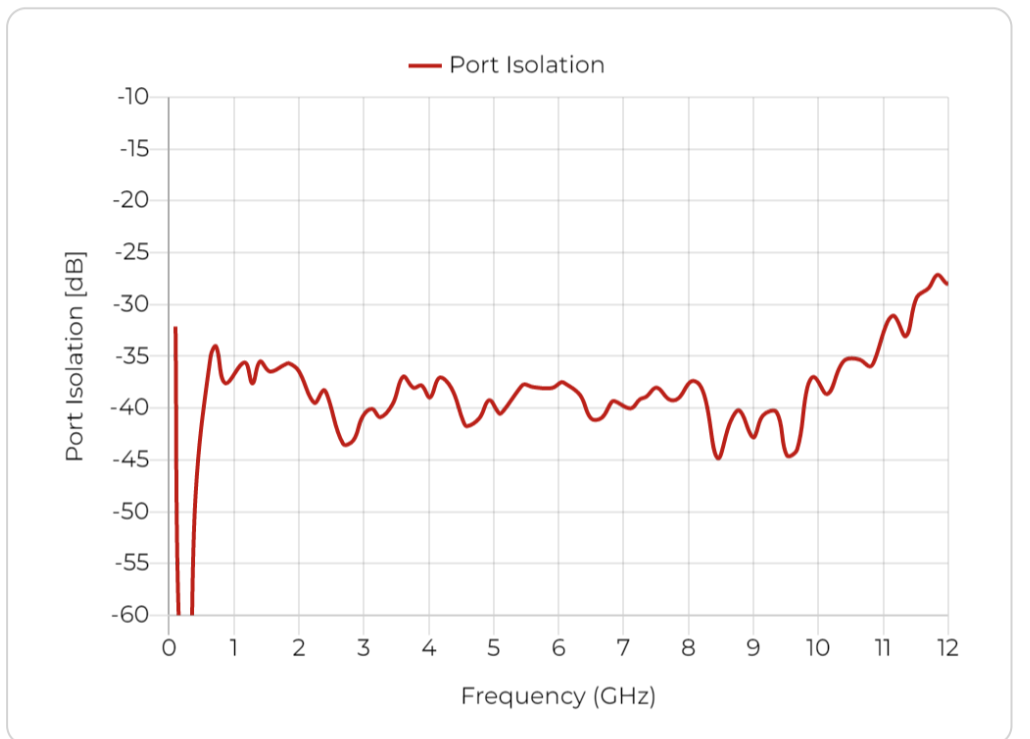
Gain



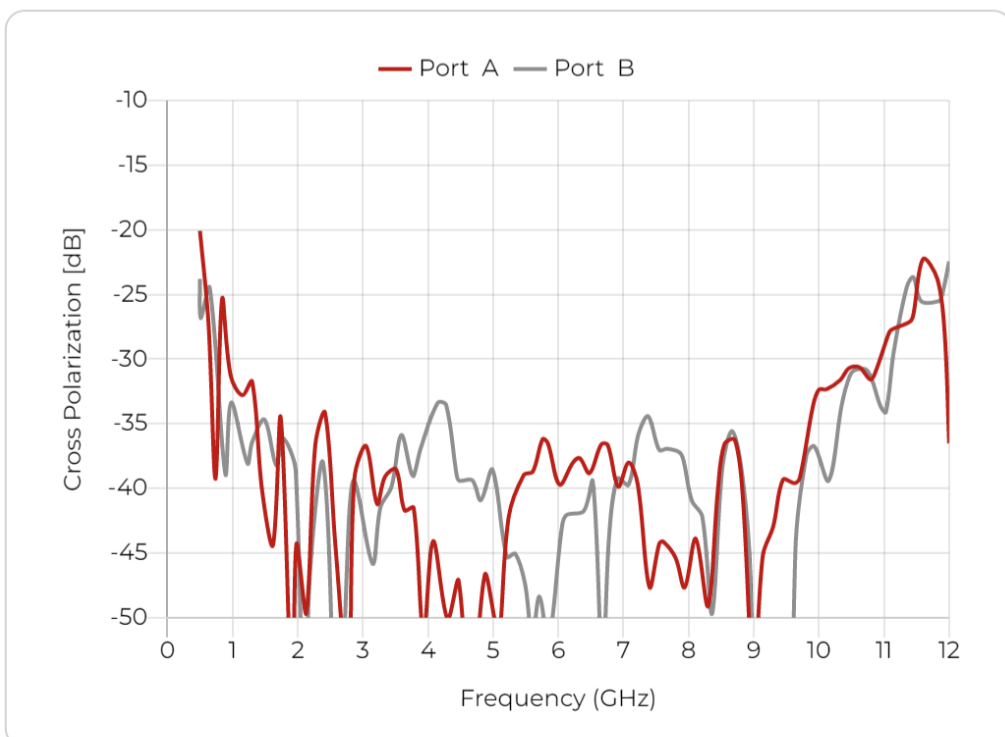
Antenna Factor



Port Isolation

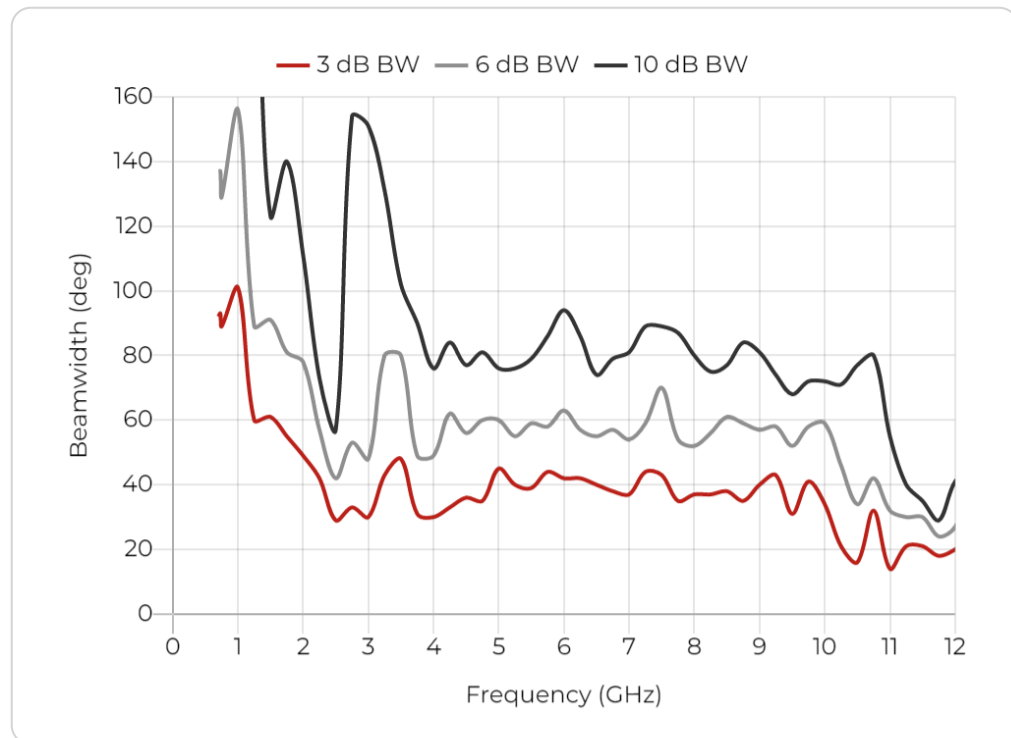


Cross Polarization

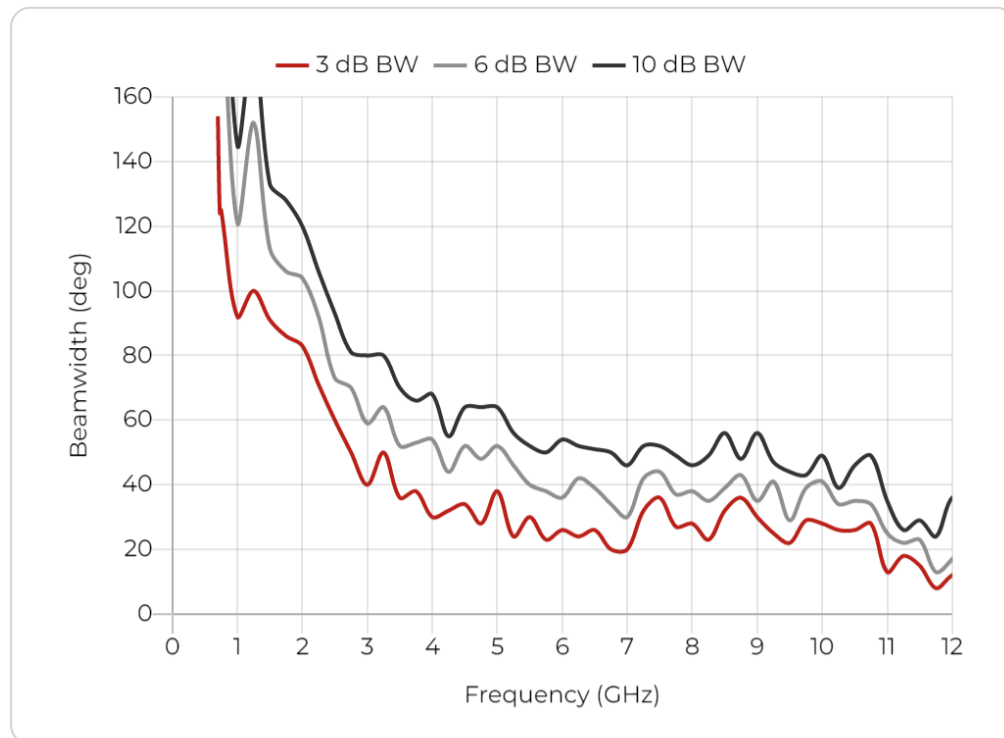


Beamwidth

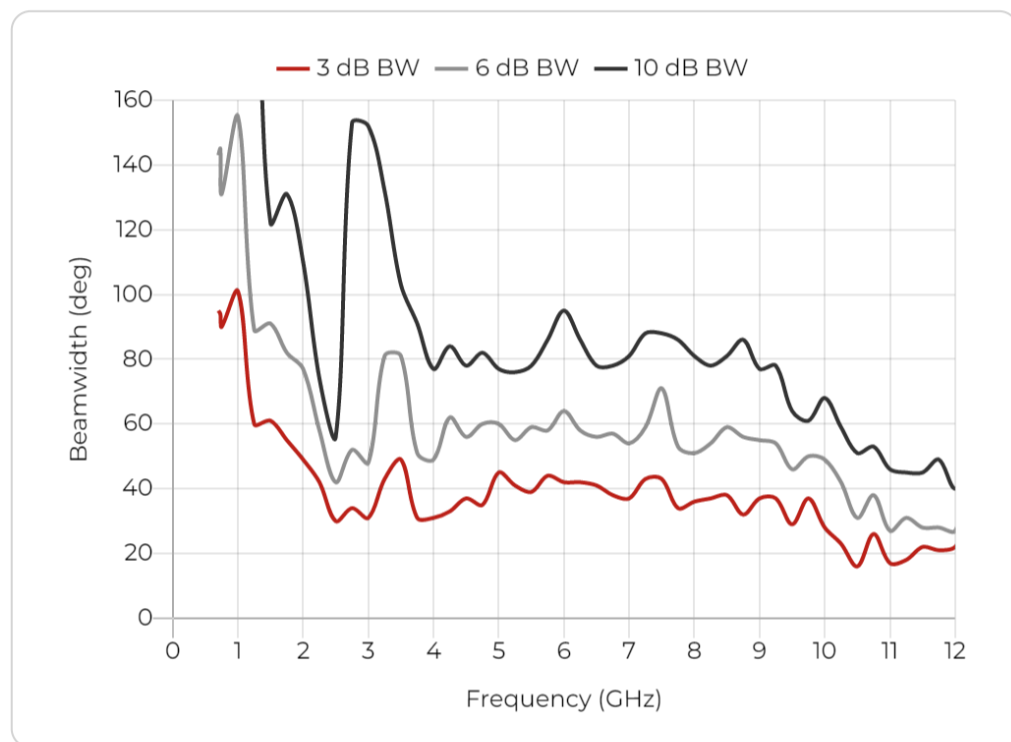
Port A, E plane



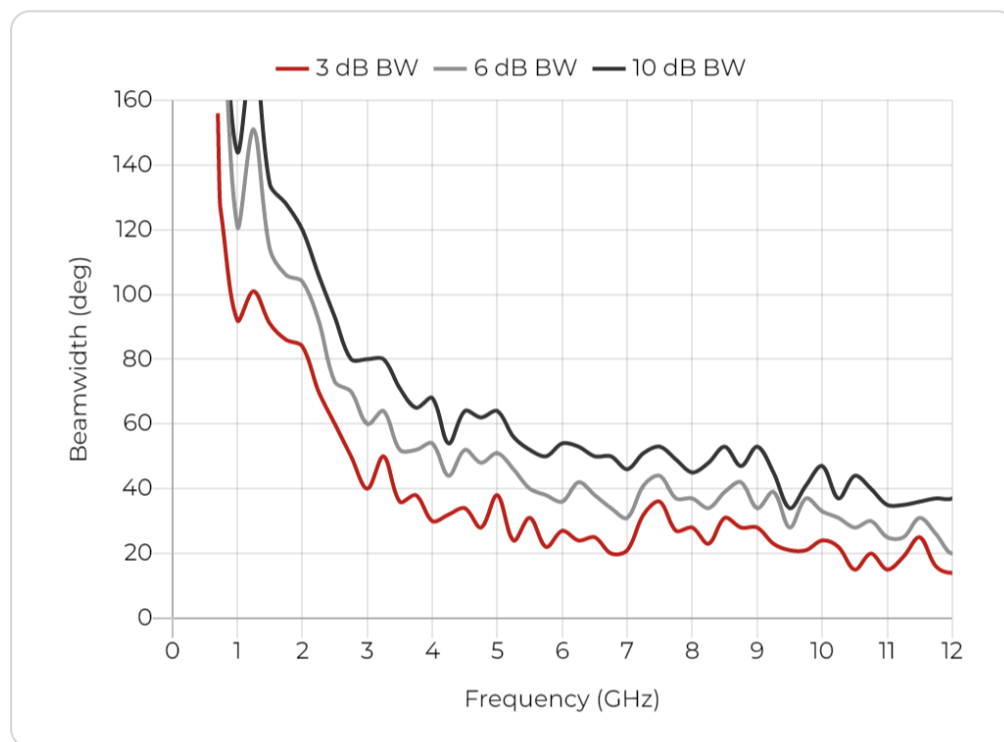
Port A, H plane



Port B, E plane

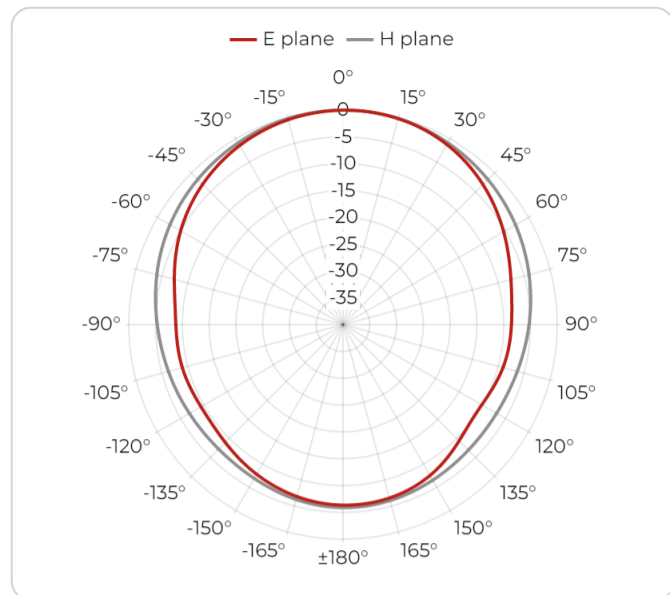


Port B, H plane

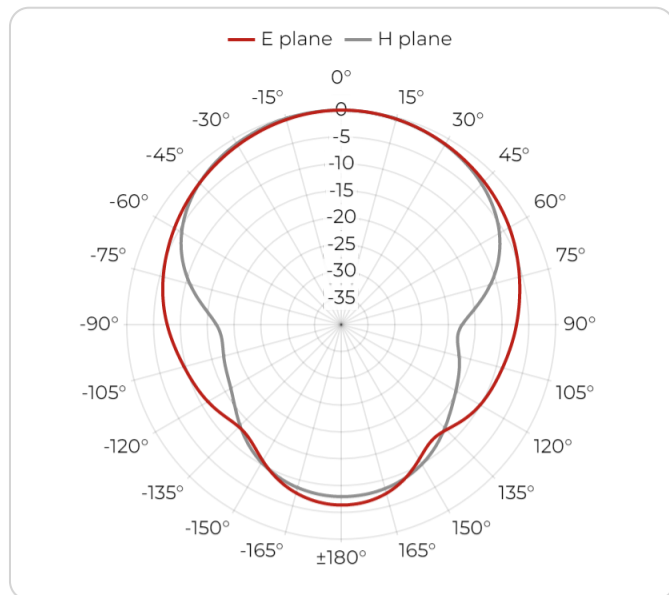


Radiation Patterns - Port A

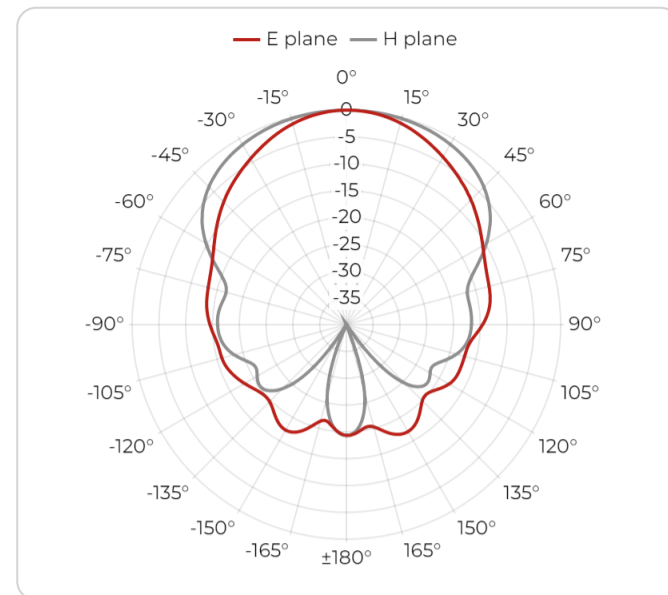
Port A, 0.75 GHz



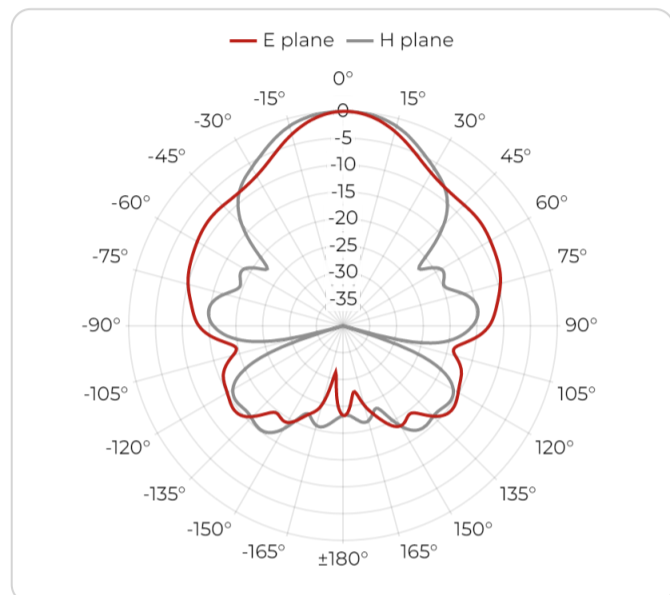
Port A, 1 GHz



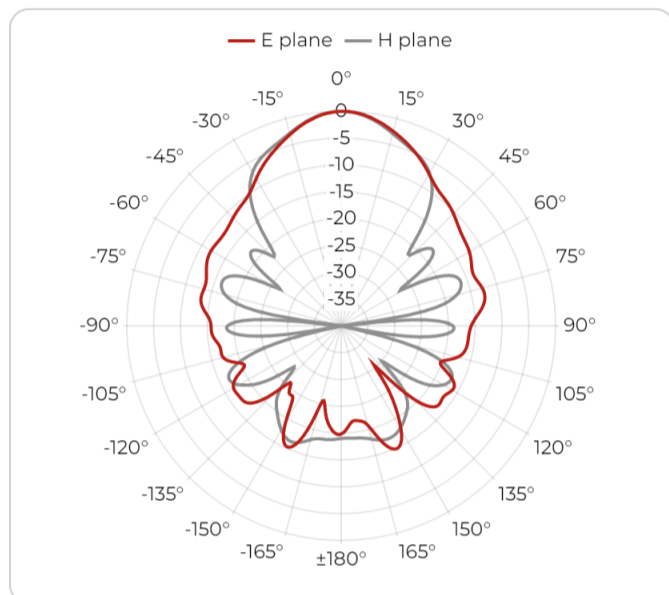
Port A, 2 GHz



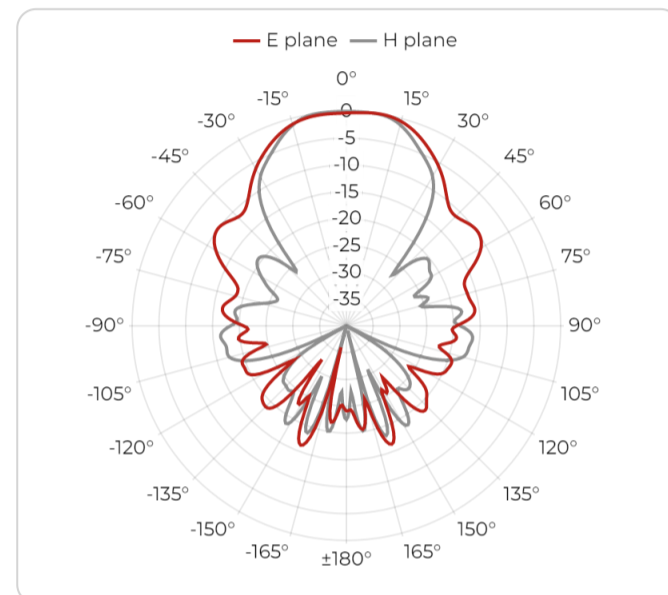
Port A, 3 GHz



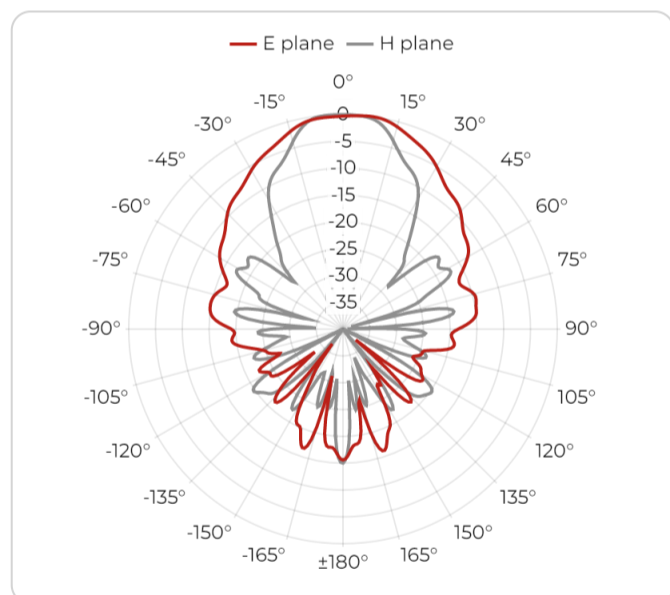
Port A, 4 GHz



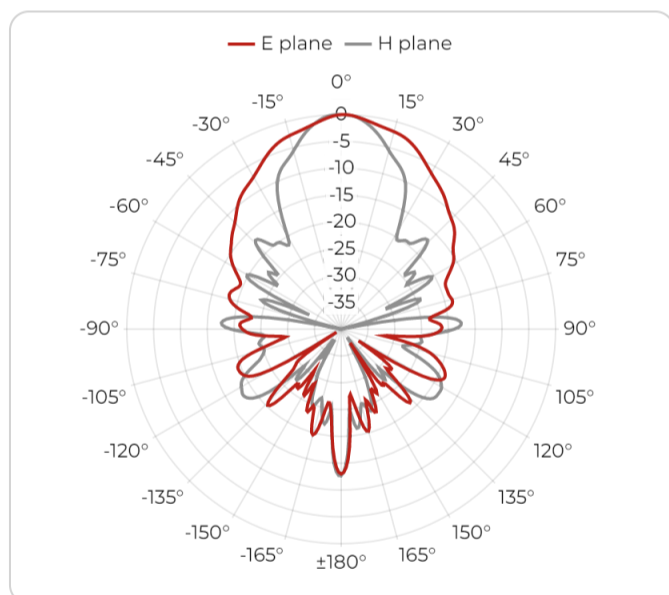
Port A, 5 GHz



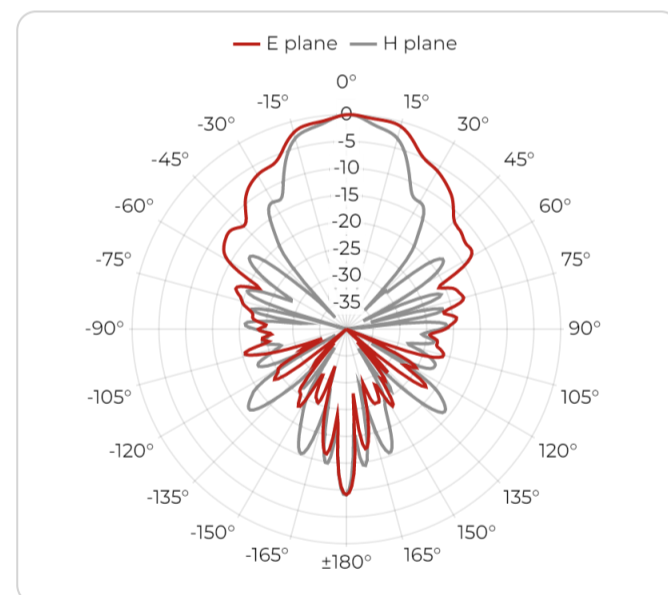
Port A, 6 GHz



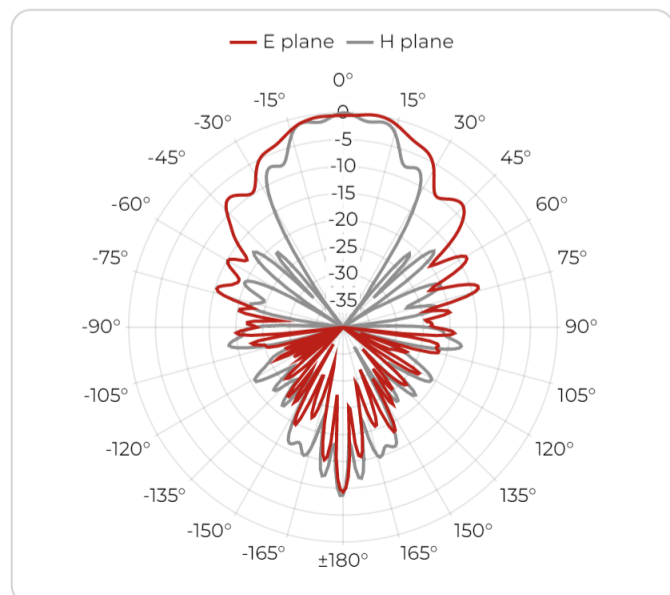
Port A, 7 GHz



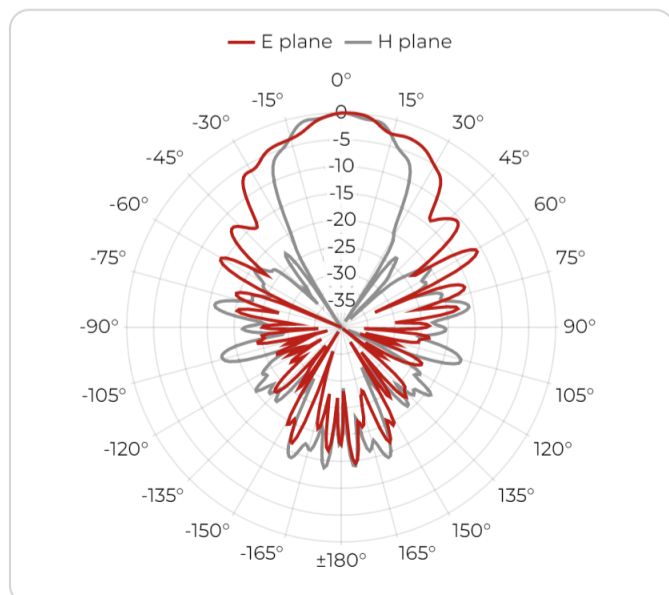
Port A, 8 GHz



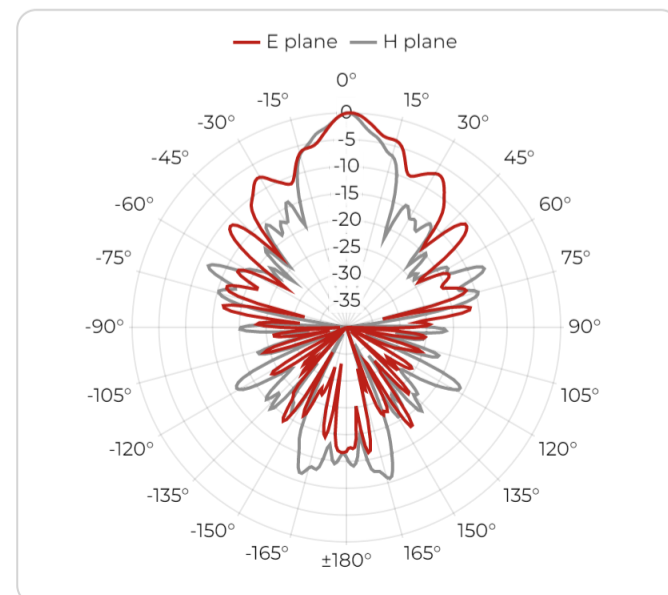
Port A, 9 GHz



Port A, 10 GHz

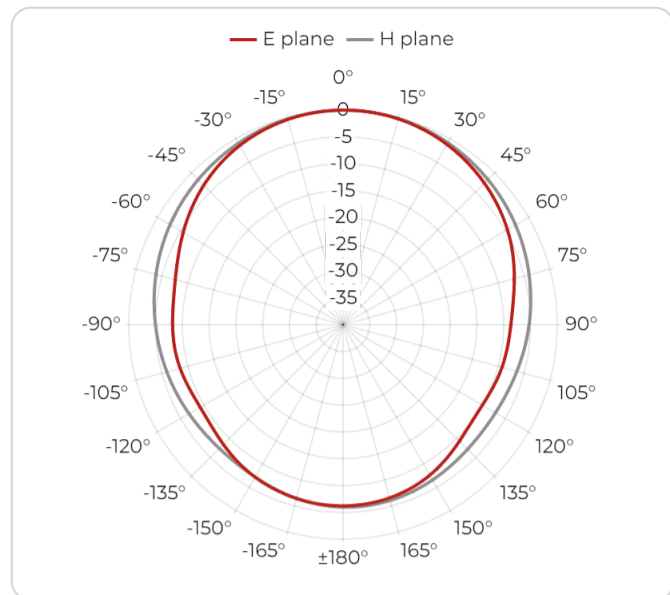


Port A, 11 GHz

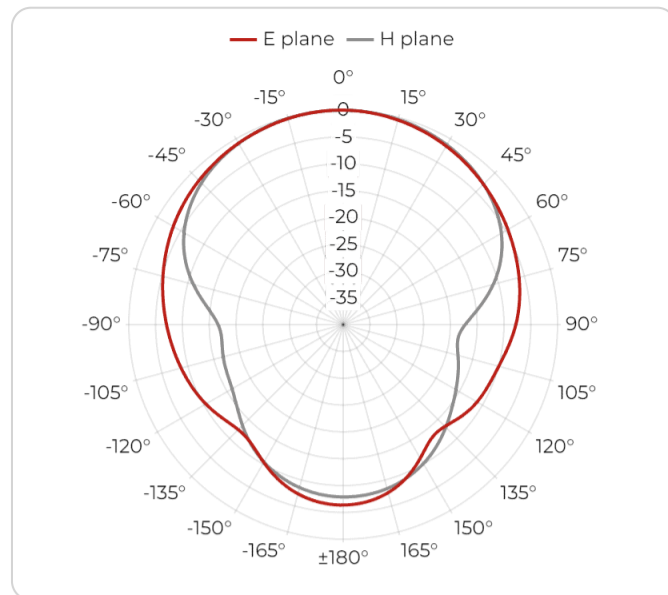


Radiation Patterns - Port B

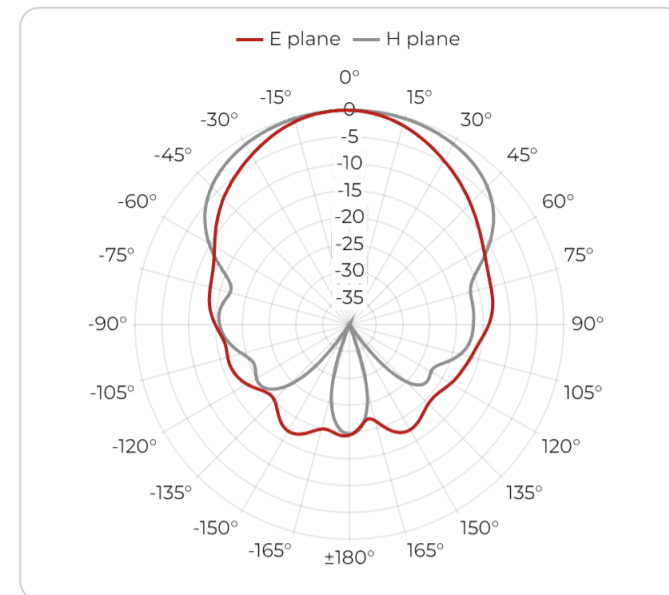
Port B, 0.75 GHz



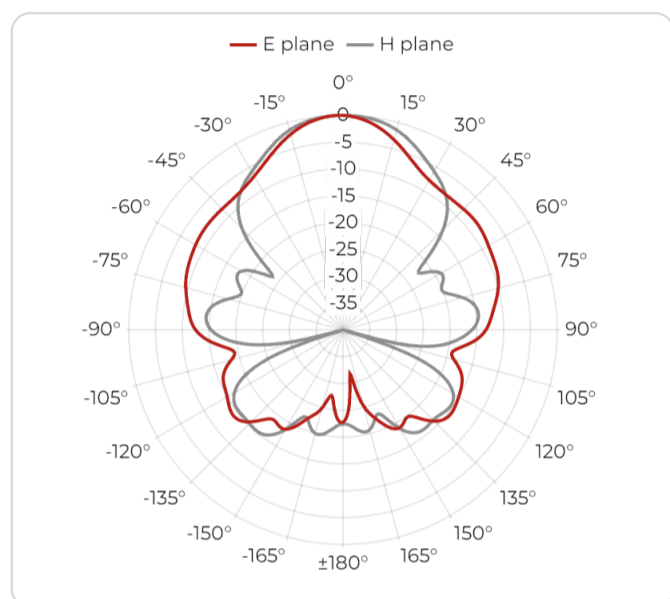
Port B, 1 GHz



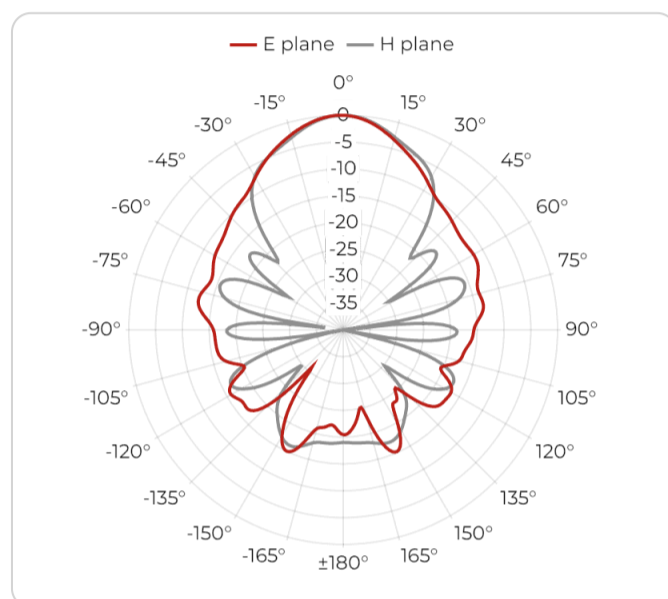
Port B, 2 GHz



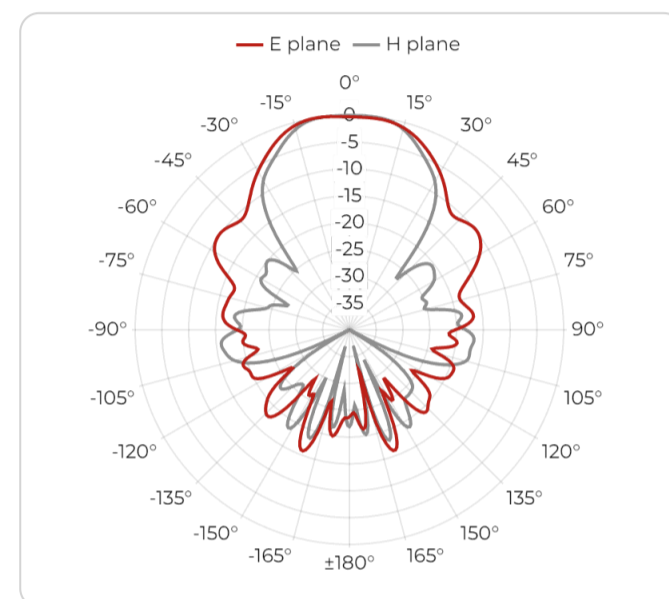
Port B, 3 GHz



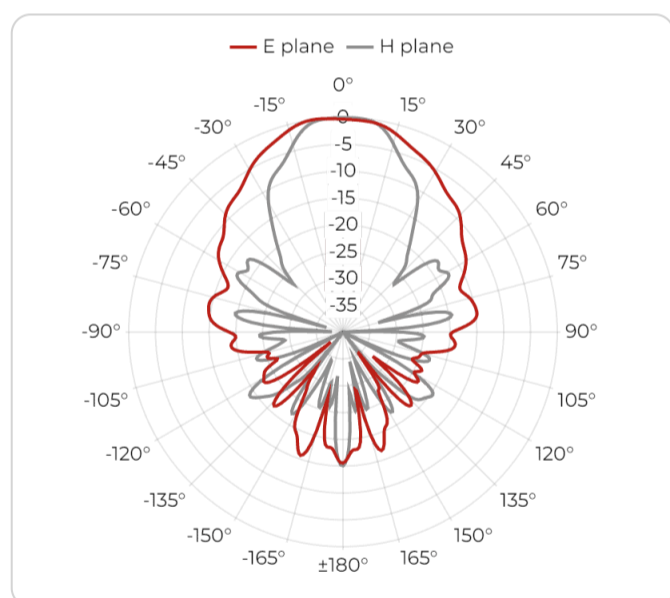
Port B, 4 GHz



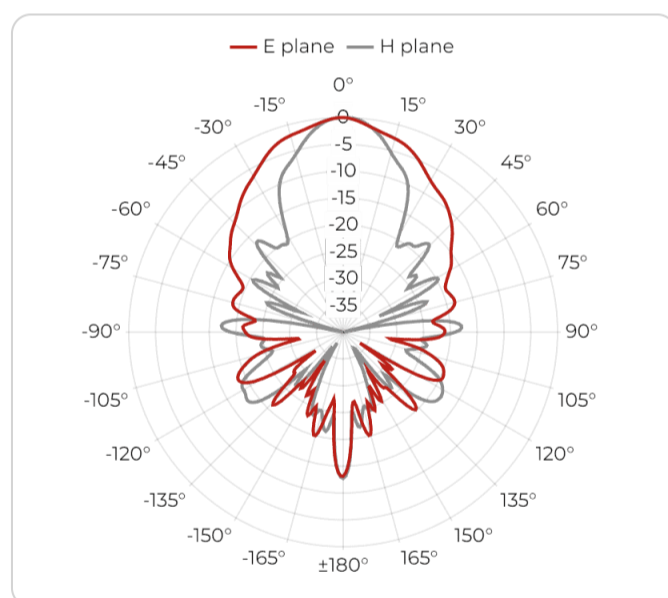
Port B, 5 GHz



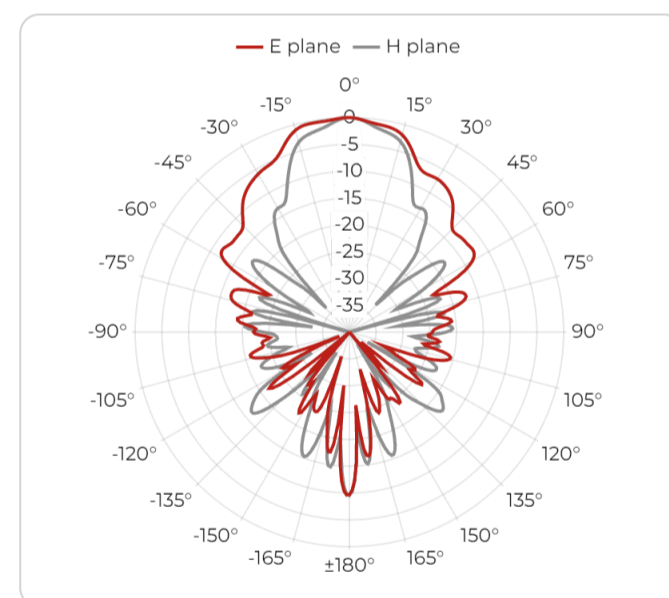
Port B, 6 GHz



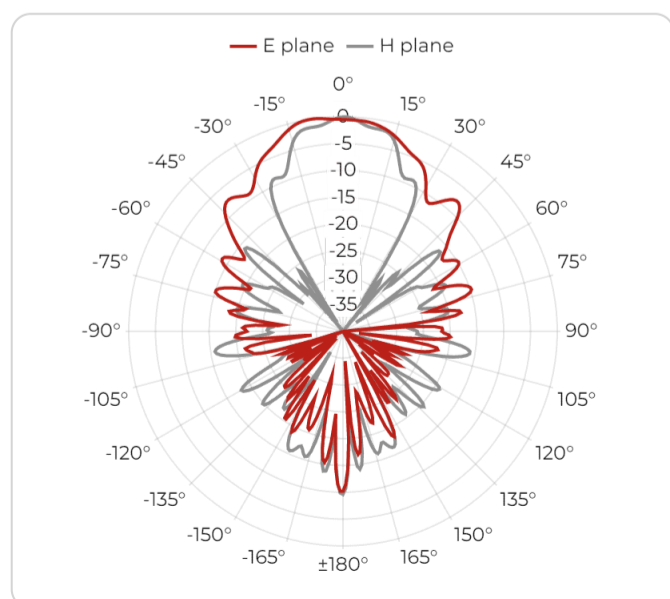
Port B, 7 GHz



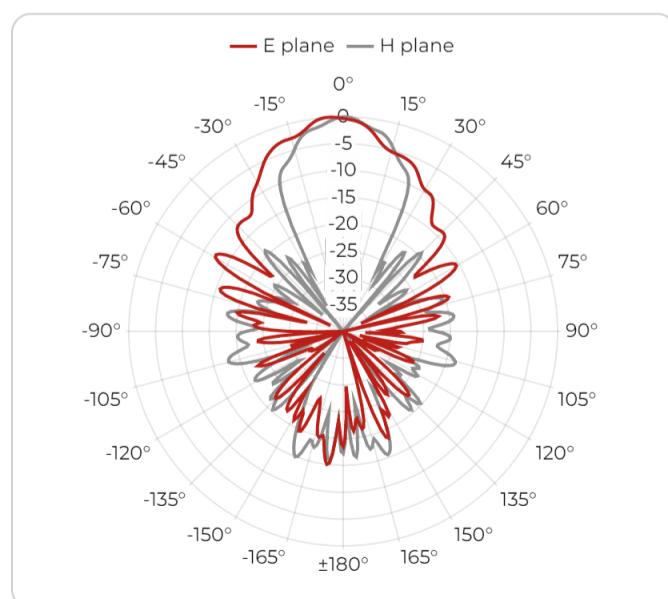
Port B, 8 GHz



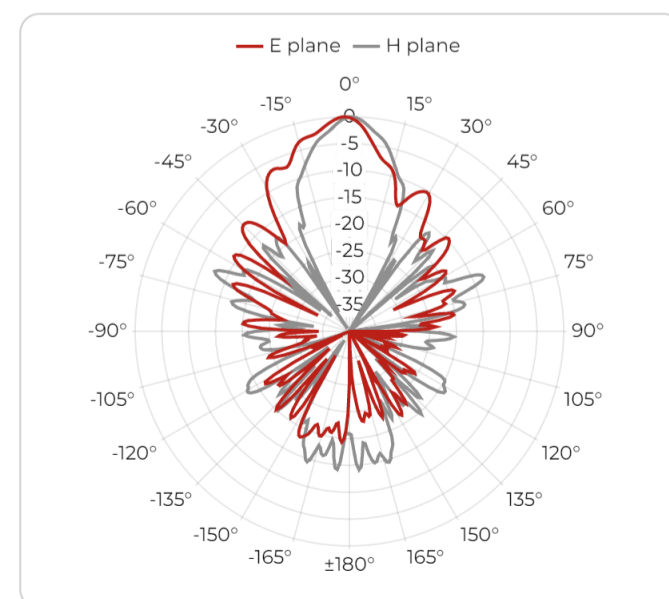
Port B, 9 GHz



Port B, 10 GHz



Port B, 11 GHz



Packaging and Accessories

What's in a box

- QRH11R 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)

Accessories

- Standard mounting flange

Optional Accessories

- [AHS22-10 Antenna Fixture](#)
- [PAS02 Antenna Stand](#)

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/grh11r/>

Data and specifications subject to change without notice.

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📍 Address

RFspin s.r.o.
Na Beránce 57/2
160 00 Prague 6
Czech Republic

✉ E-mail

info@rfspin.com

📞 Phone

[+420 245 008 847](tel:+420245008847)