

## Wideband Horn Antenna

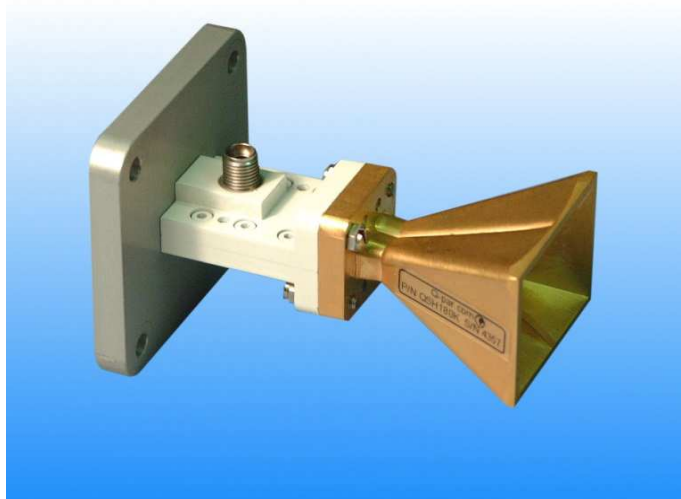
**18 to 40 GHz**

**WRD180**

Catalogue number: **QWH-SL-18-40-K-SG**

Q-par reference: **QMS-00361**

Contents: **Summary**  
**Typical Gain / Antenna Factor**  
**Typical Beamwidth / Patterns**  
**VSWR**



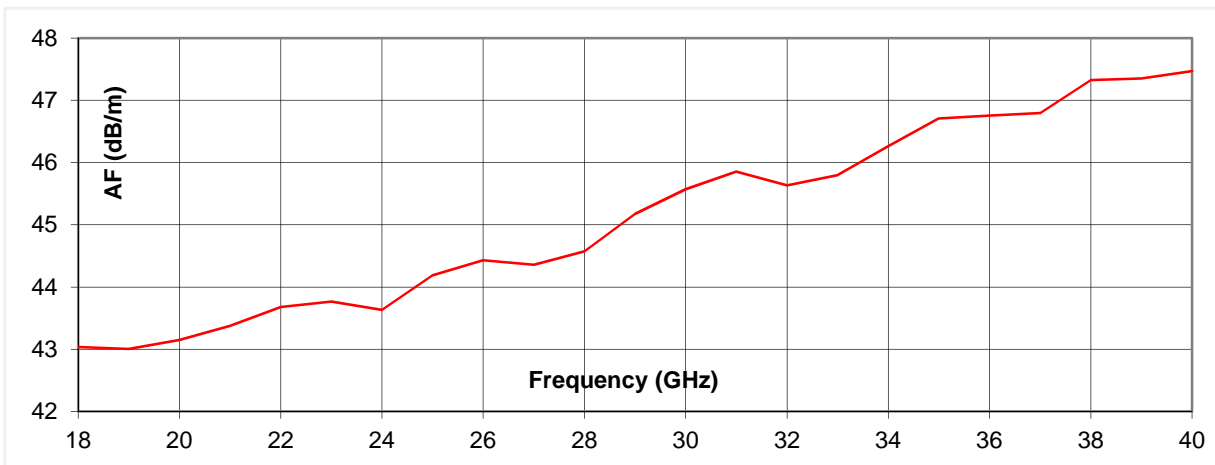
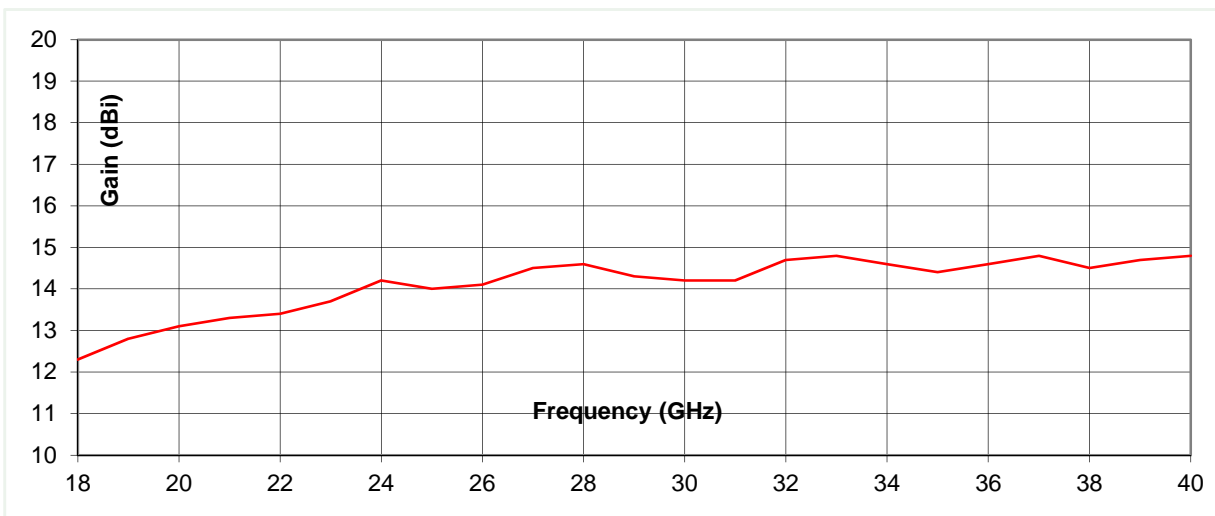
Test Report

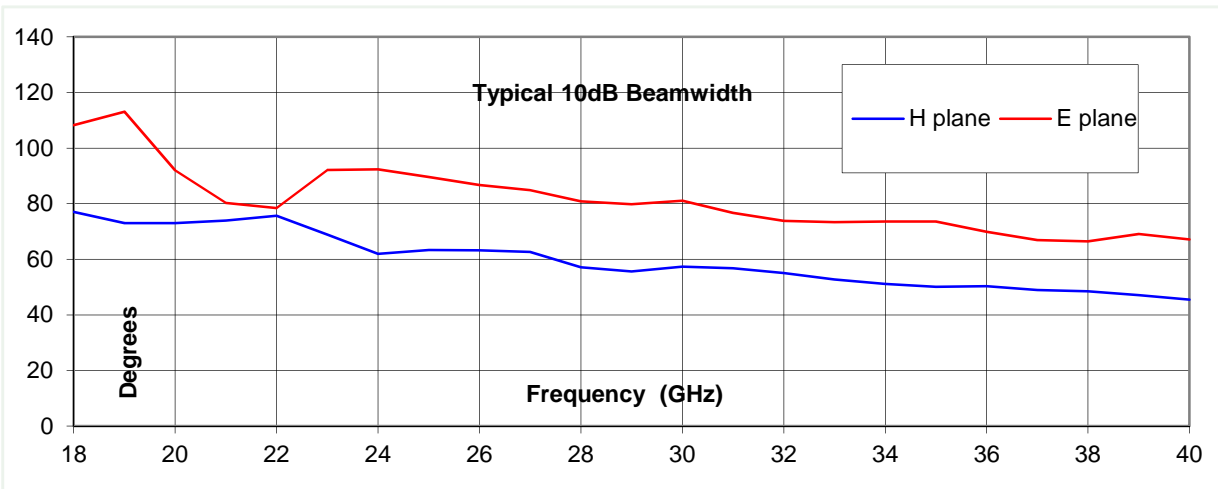
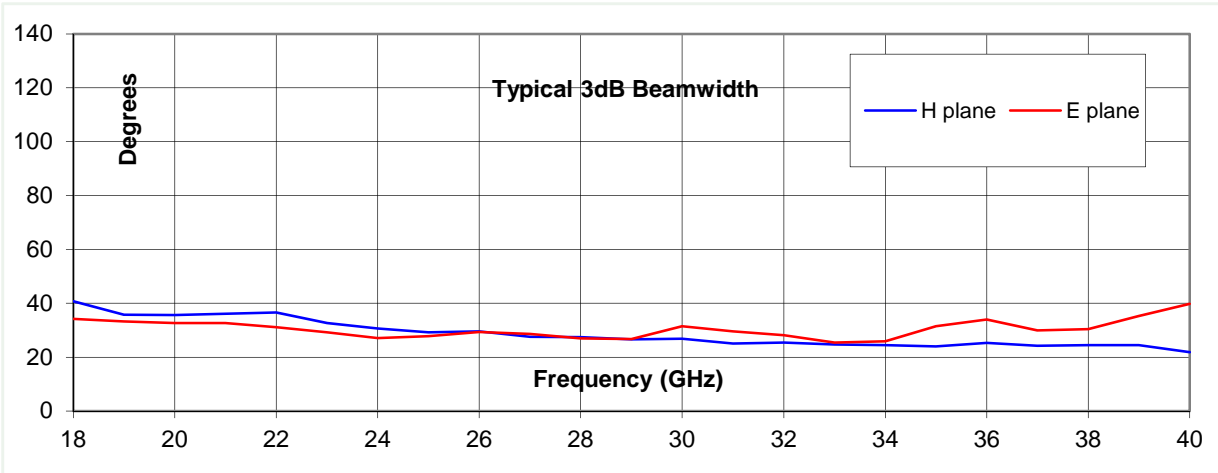
### Typical Specification

<b>Frequency</b>	18 to 40 GHz
<b>Connector type</b>	K type jack (2.9 mm)
<b>Power Handling</b>	20 Watt c.w.
<b>VSWR</b>	Typically < 1.7 :1
<b>Gain</b>	12.3 to 14.8 dBi
<b>Antenna Factor</b>	43 to 47.5 dB/m
<b>3dB Beamwidth</b>	22 to 41 degrees
<b>10dB Beamwidth</b>	46 to 113 degrees
<b>Weight</b>	140 g nominal
<b>Size- max.</b>	35 mm x 28 mm external aperture x 73 mm long
<b>Mounting</b>	Horn mount plate with 4 holes, diameter 4.1 mm, 38 x 38 mm centres
<b>Construction</b>	Electroformed copper horn, aluminium transition with anodised aluminium mounting plate

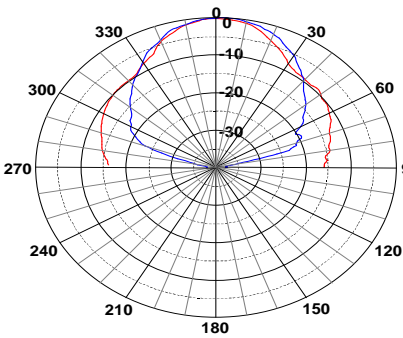
### Typical Antenna Gain / Factor

This is calculated by reference to standard gain horn antennas, and cross checked with reference to the antenna beamwidth, with an estimated error of +/- 0.8dB.

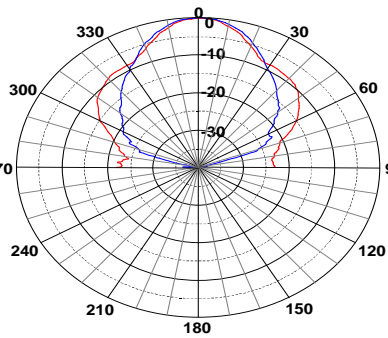




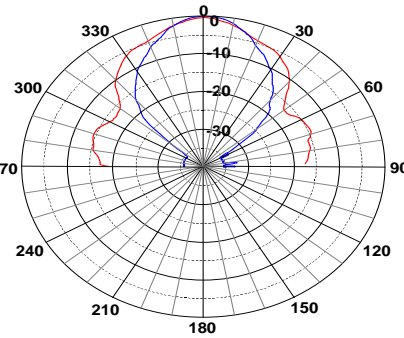
**18 GHz**



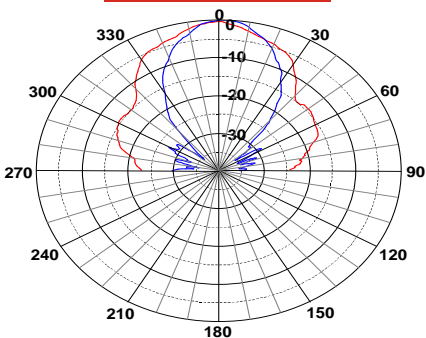
**24 GHz**



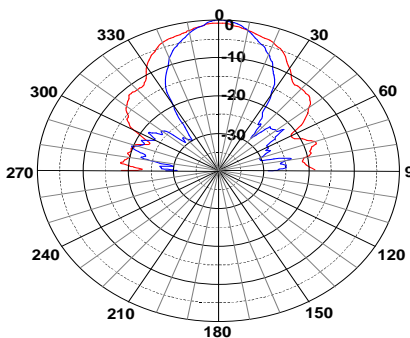
**30 GHz**



**35 GHz**



**40 GHz**



Red trace = E-plane, Blue trace = H-plane cut