

## Spiral Antenna

**18 to 42 GHz**

**Right Hand Circularly Polarised (RHCP)**

Catalogue number: **QSP-RC-18-42-K-SG**

Q-par reference: **QMS-00386**

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



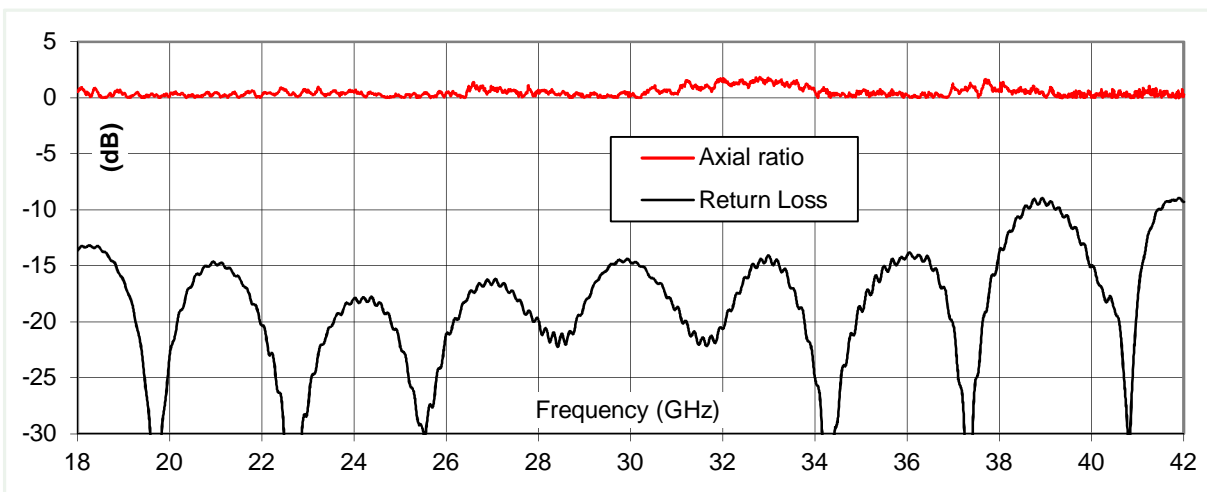
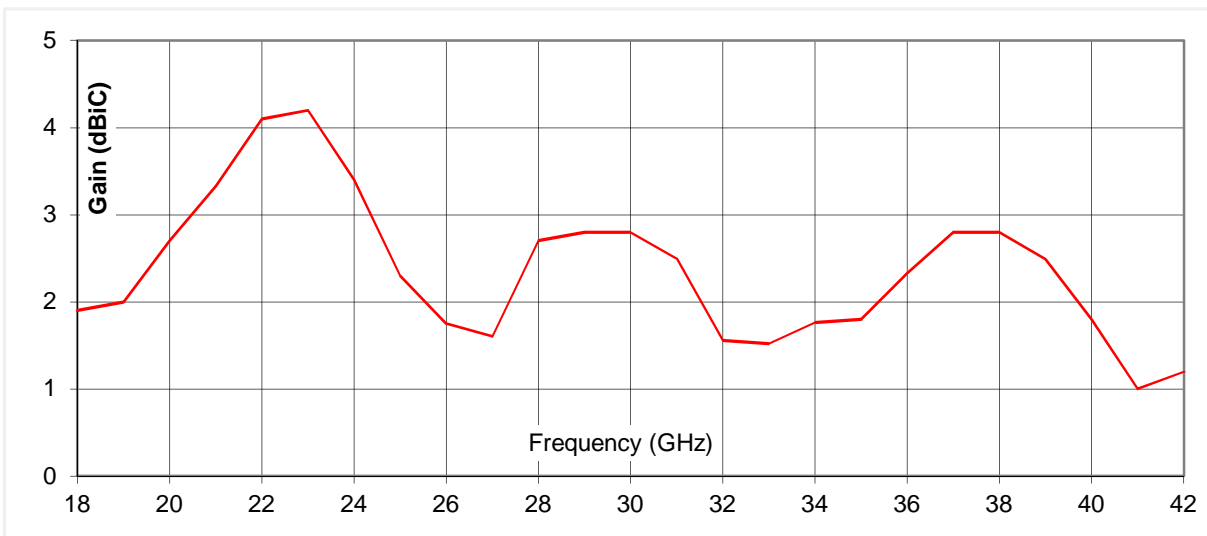
Test Report

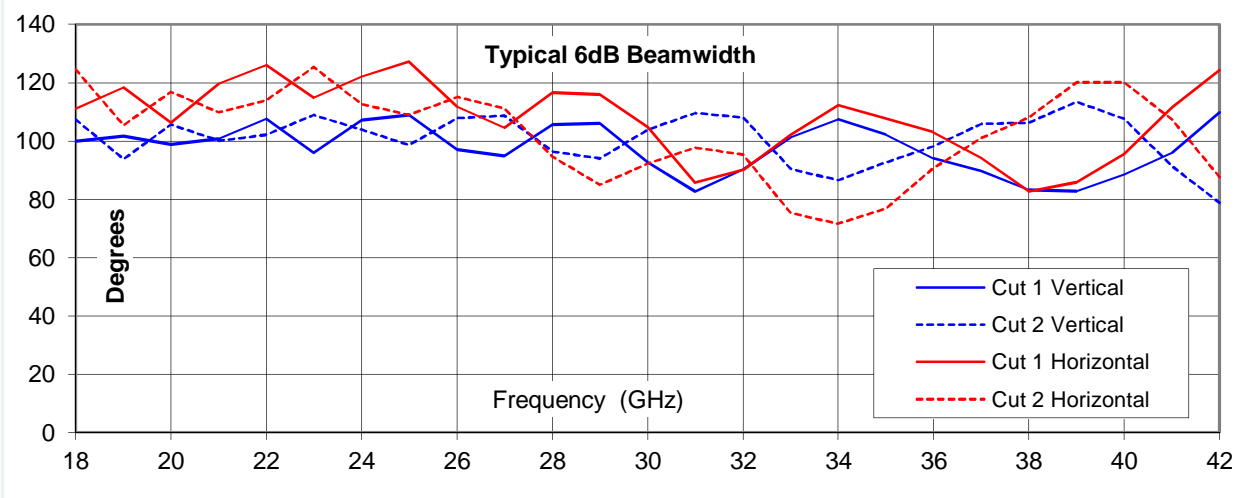
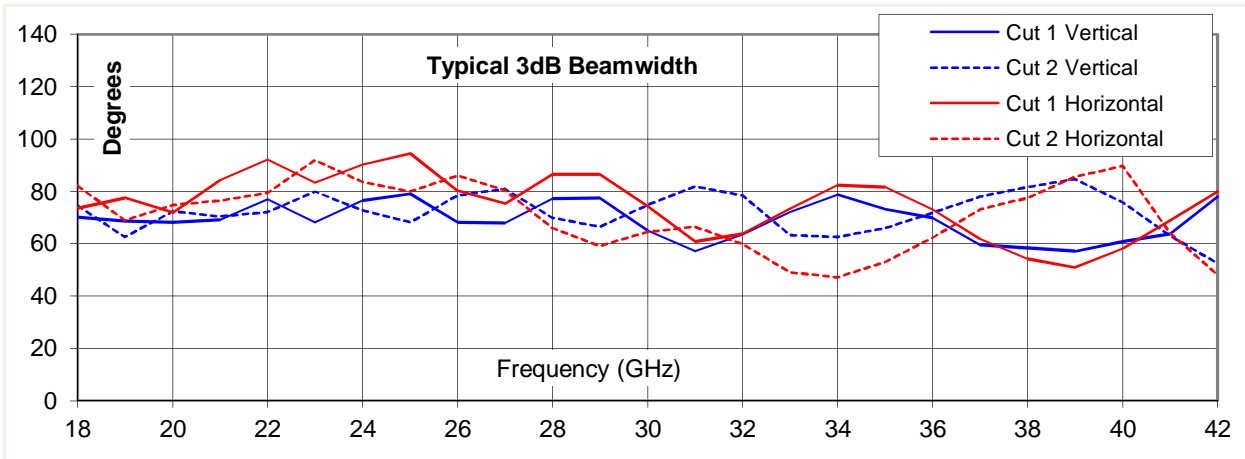
### Typical Specification

<b>Frequency</b>	18 to 42 GHz
<b>Connector type</b>	K type (2.92mm) jack
<b>Power Handling</b>	2 Watt c.w.
<b>VSWR</b>	Typically <2.5:1
<b>Axial Ratio</b>	< 2 dB
<b>Gain</b>	1 to 4.2 dBiC
<b>Antenna Factor</b>	53 to 61.5 dB/m
<b>3dB Beamwidth</b>	47 to 94 degrees
<b>6dB Beamwidth</b>	72 to 127 degrees
<b>Weight</b>	30 g nominal
<b>Size- max.</b>	35.4 mm diameter flange x 45 mm long
<b>Mounting</b>	6 holes, diameter 3.2 mm, 30 mm p.c.d.
<b>Construction</b>	Aluminium and Engineering Plastics

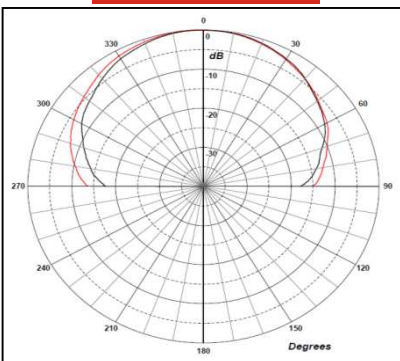
### Typical Antenna Gain / Factor

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.

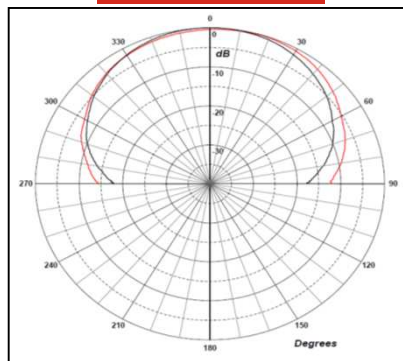




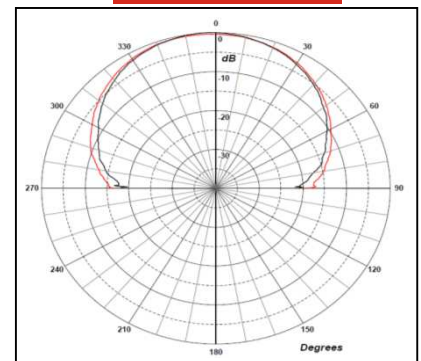
18 GHz



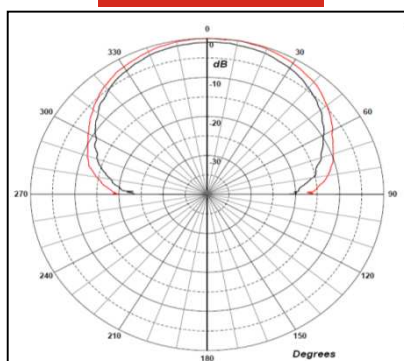
24 GHz



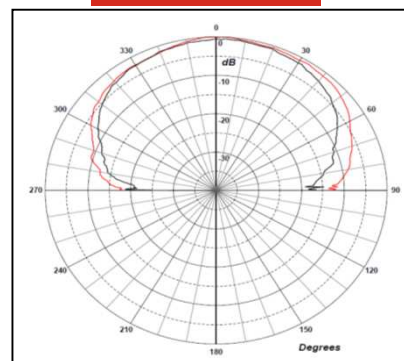
30 GHz



36 GHz

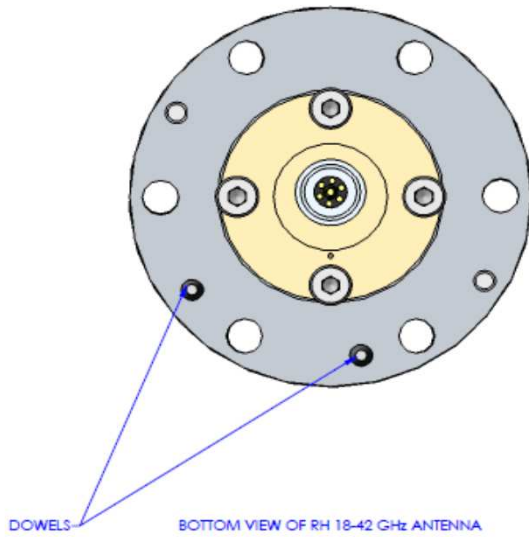


42 GHz

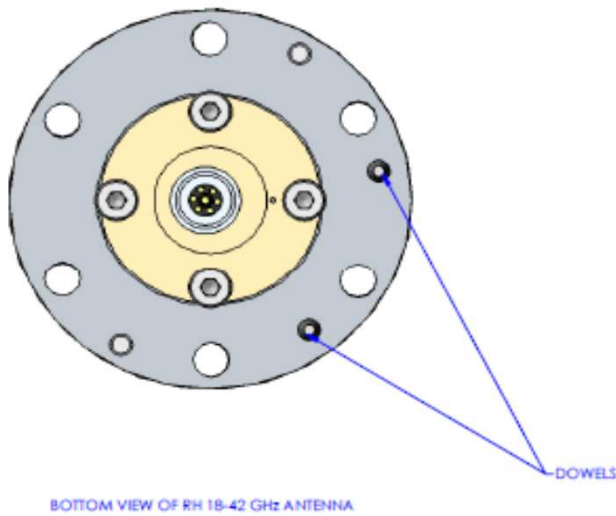


Patterns are done using a linear source antenna, polarisation refers to the polarisation of the source horn.  
 Pattern plots: **Red trace = Horizontal pol source**, **Black trace = Vertical pol source**

Cut 1 and Cut 2 definitions, viewed from rear of antenna  
Vertical and Horizontal refers to the polarisation of the linear source antenna.



**Cut 1**



**Cut 2**