



Spiral Antenna

18 to 42 GHz

Left Hand Circularly Polarised (LHCP)

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

Q-par reference: **QMS-00049**

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

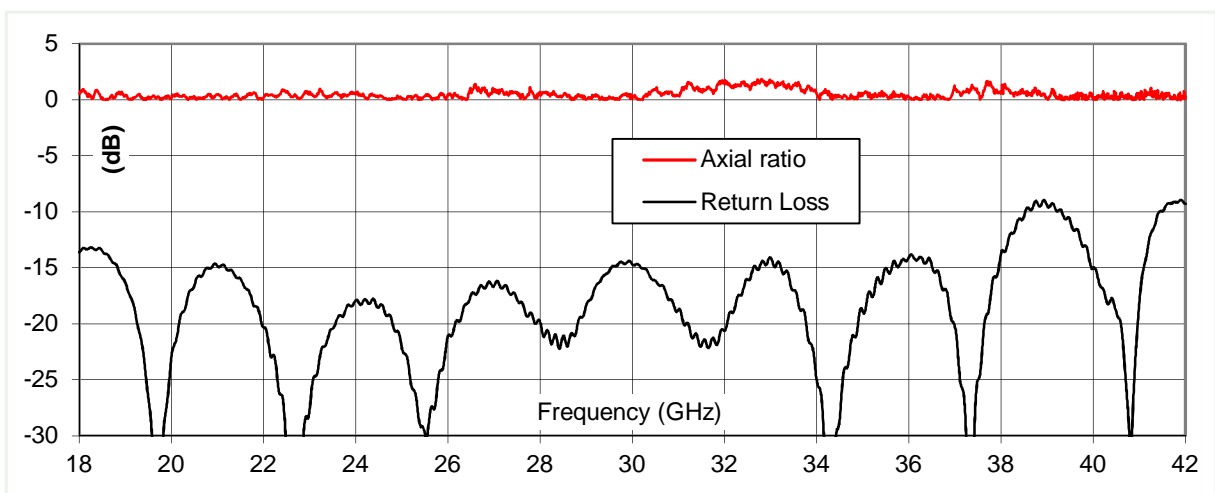
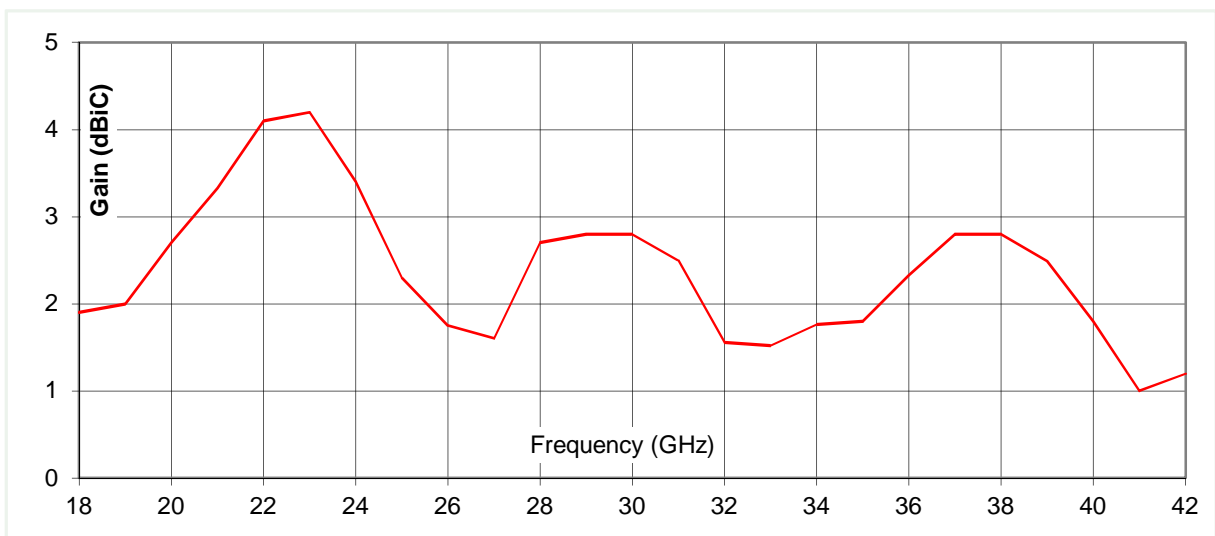


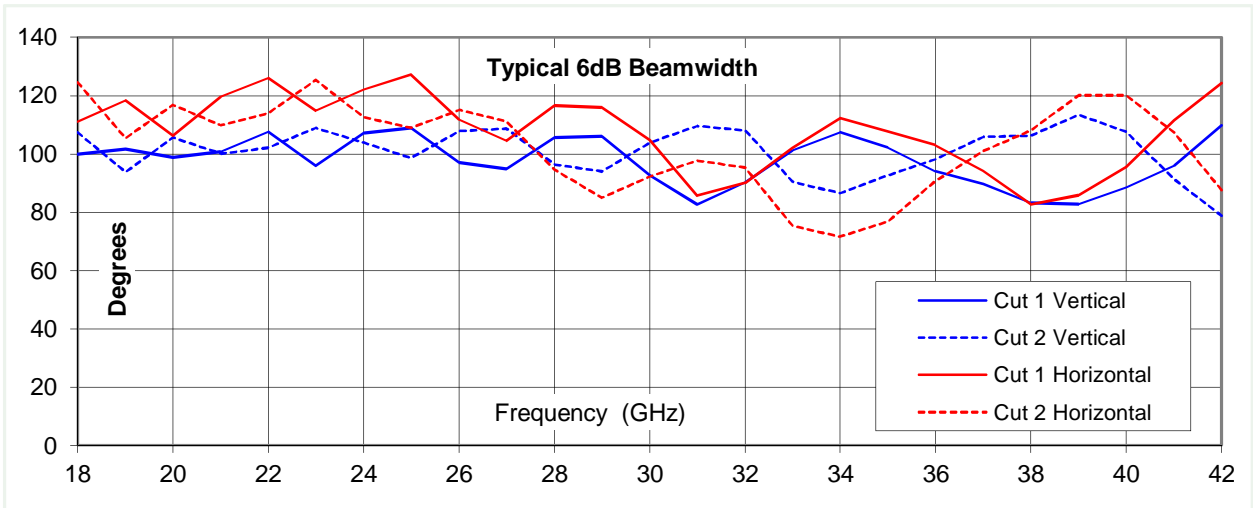
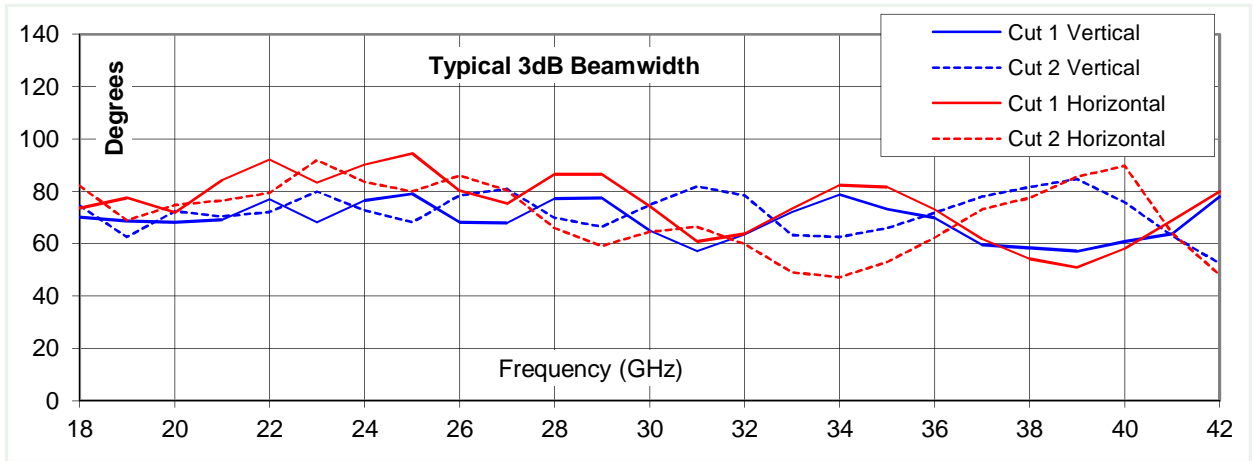
Typical Specification

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

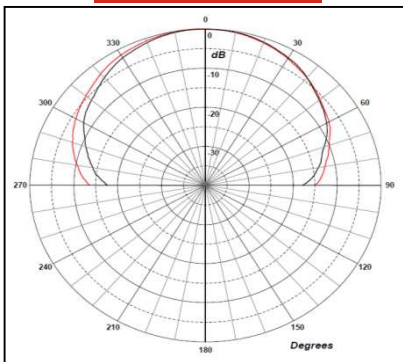
Typical Antenna Gain / Factor

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.

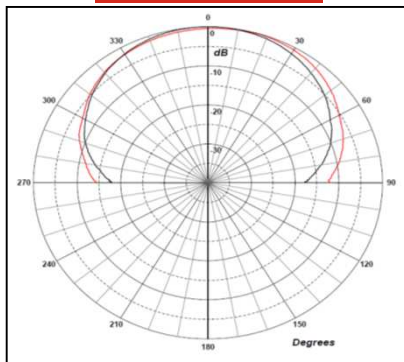




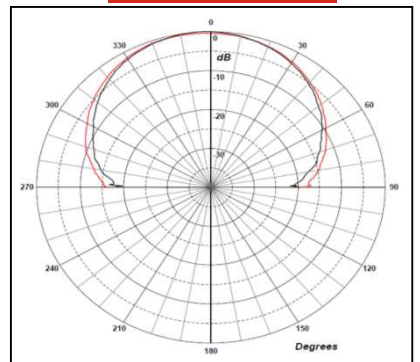
18 GHz



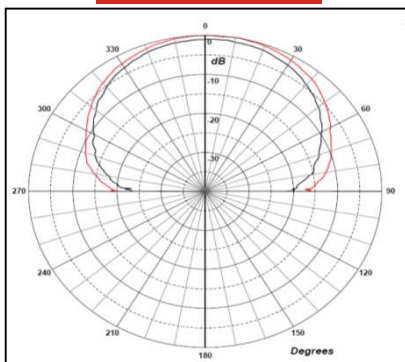
24 GHz



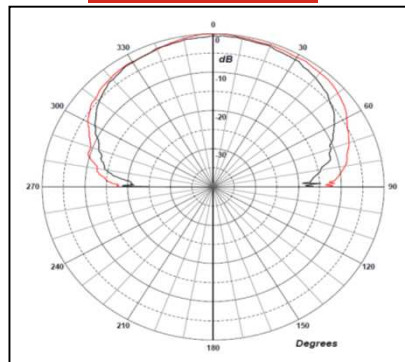
30 GHz



36 GHz

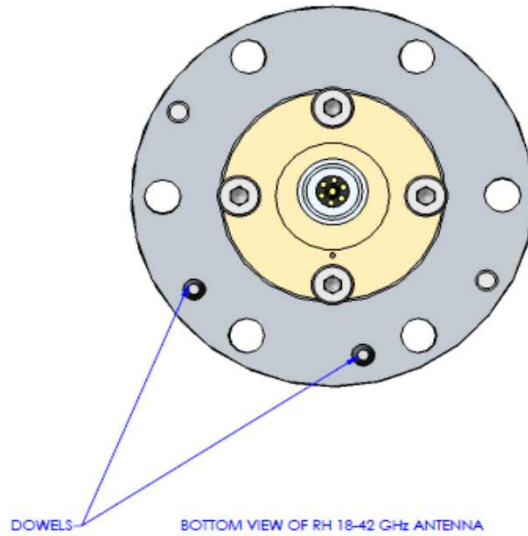


42 GHz

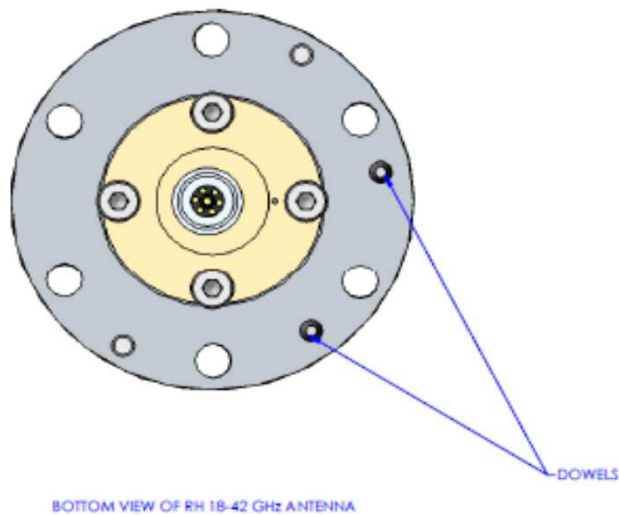


Patterns are done using a linear source antenna , polarisation refers to the polarisation of the source horn.
 Pattern plots: **Red trace = Horizontal pol source, Black trace = Vertical pol source**

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

