Circularly Polarised Spiral Antenna

0.5 to 22 GHz

Right Hand Circularly Polarised

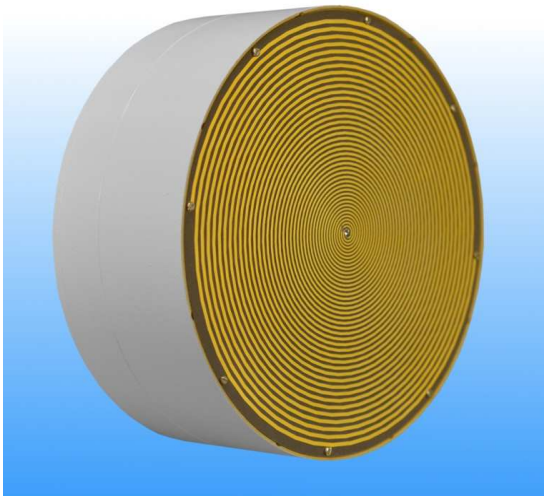
Test Report

Catalogue number: **QSP-RC-0.5-22-S-SG**

Q-par reference: **QMS-00314**

Contents:

Summary
Typical Antenna Gain
Typical Axial Ratio / Return Loss
Typical Beamwidth / Patterns
Pattern Cut Definition
VSWR



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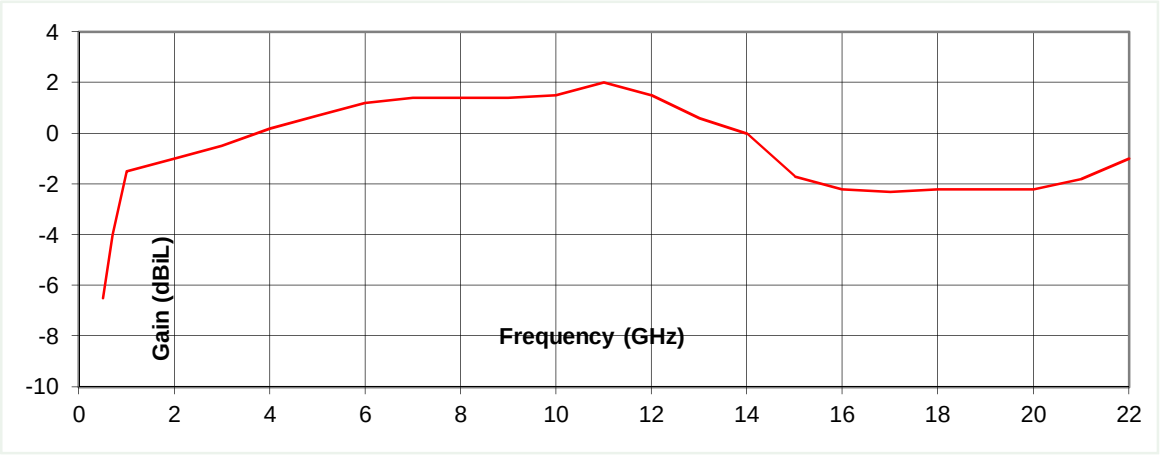
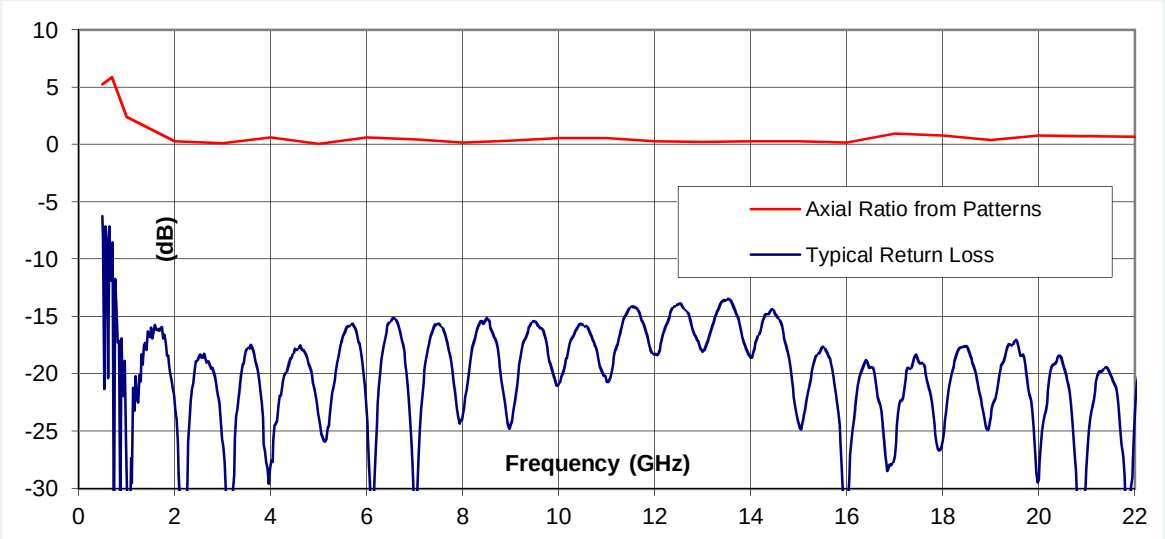
Typical Specification

Frequency	0.5 to 22 GHz
Connector type	SMA type jack
Power Handling	2 Watt c.w.
VSWR	Typically < 1.5:1 above 0.8 GHz
Gain	-3 to 2 dBiL above 0.85 GHz, -6.5 dBiL at 0.5 GHz
Squint	Typically better than +/- 10 degrees across the band
3dB Beamwidth	60 to 115 degrees
Axial ratio	< 2dB above 1 GHz
Weight	610 g
Size- max.	152 mm diameter face x 120 mm long inc. connector
Mounting	4 holes, M5 x 7.5 mm deep, 137.2 mm PCD
Construction	Aluminium and Engineering Plastics

Typical Linear Antenna Gain / Axial Ratio / Return Loss

Gain 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.





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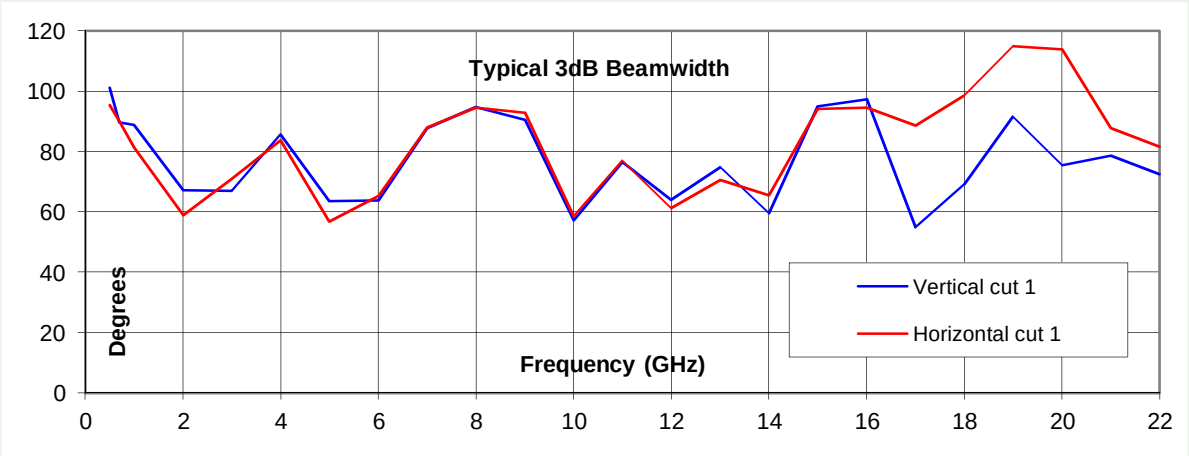
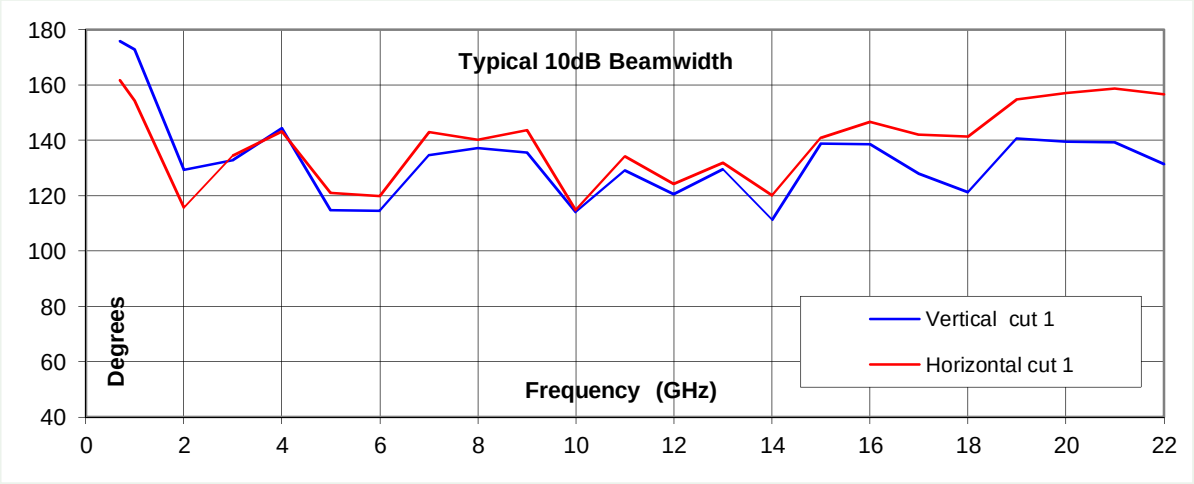
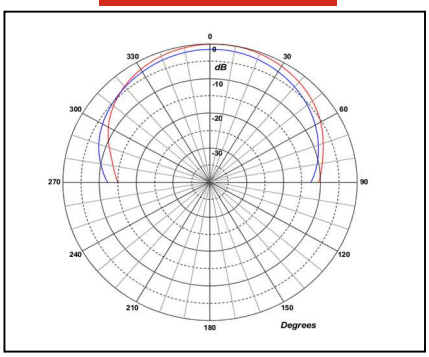
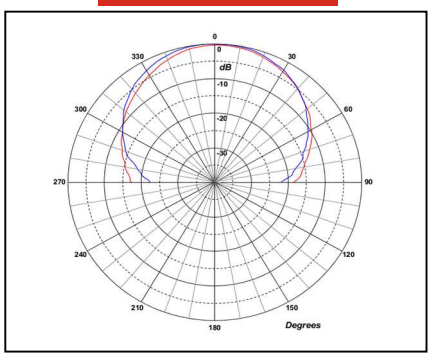




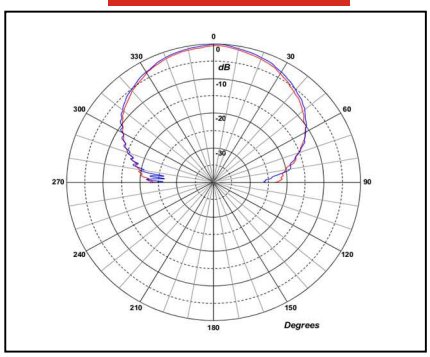
1 GHz



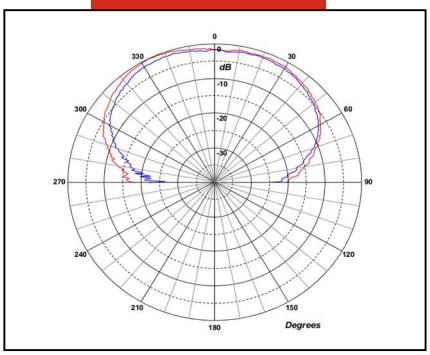
5 GHz



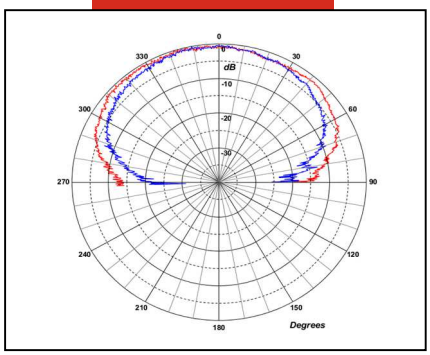
10 GHz



15 GHz

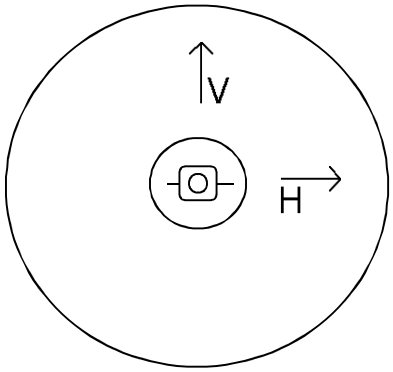


20 GHz

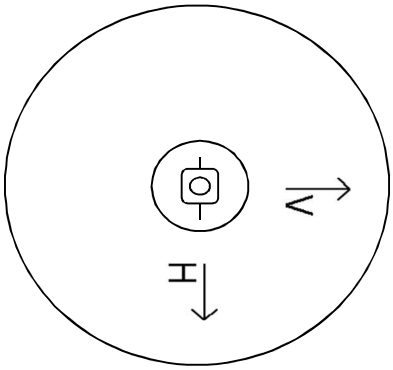


Pattern Cut Definition

Patterns are measured using a linear source antenna. The polarisation refers to the electric field polarisation of the source antenna.



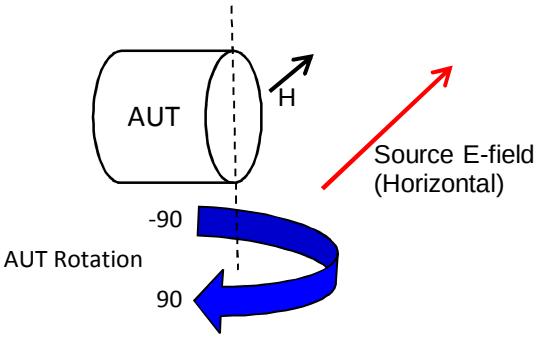
Horizontal Cut (Cut 1)



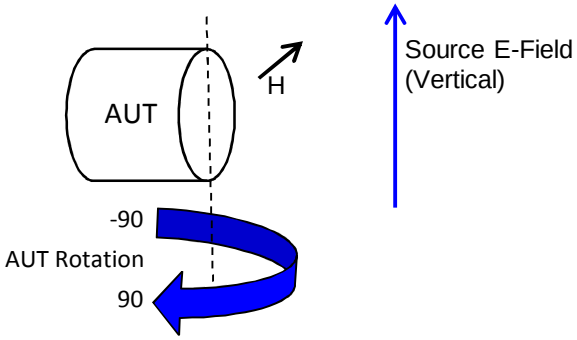
Vertical Cut (Cut 2)

Antenna viewed from back

Horizontal source polarisation



Vertical source polarisation



On the typical antennas patterns shown above the :-

Red trace = Sweep with horizontal source polarisation and antenna under test in horizontal cut (cut 1)

Blue trace = Sweep with vertical source polarisation and antenna under test in horizontal cut (cut 1).