



REGULATORY TESTING FROM START TO CERTIFICATE

Intro

Antenna gain documentation required for all FCC Part 15 devices. Must provide either an antenna datasheet/ specification or a test report with gain measurements and plots. This Information cannot be held confidential. Additionally, proprietary information of the design itself can remain confidential in either the ' operational description' or 'schematic'.

Flipper HQ Module Antenna Specifications

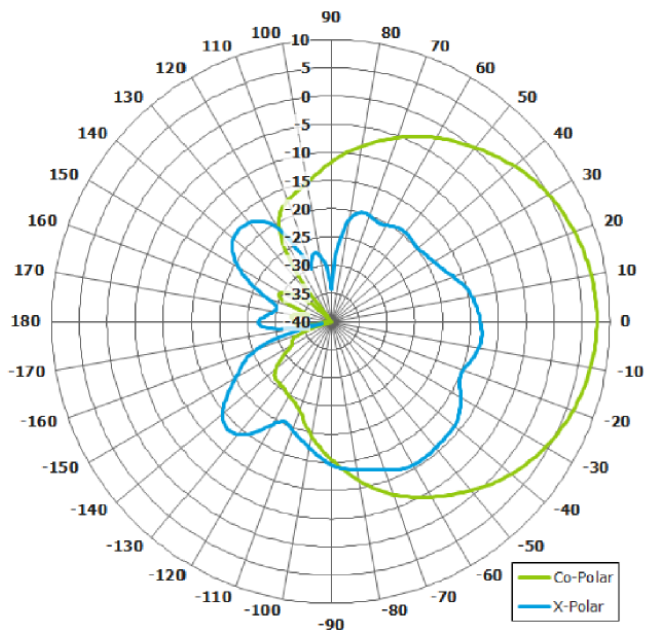
1. Company: Commcrete Ltd
2. Product name: Flipper HQ Module Antenna
VTS-301 Antenna (directional)
3. RF module/chip: None (passive)
4. Antenna description

Antenna type	Directional 4 Patch Array
Antenna manufacturer	PN: PA45-1592-175SA Manufacturer: API – Spectrum Control Antennas
Antenna datasheet	Attached
Frequency range	Tx: 1626.5-1660.5 MHz Rx: 1525-1559 MHz
Modulation	N/A
Antenna gain max (peak)	8dBi max 7.5dBi average
Cable loss	0dB
Connector type	TNC

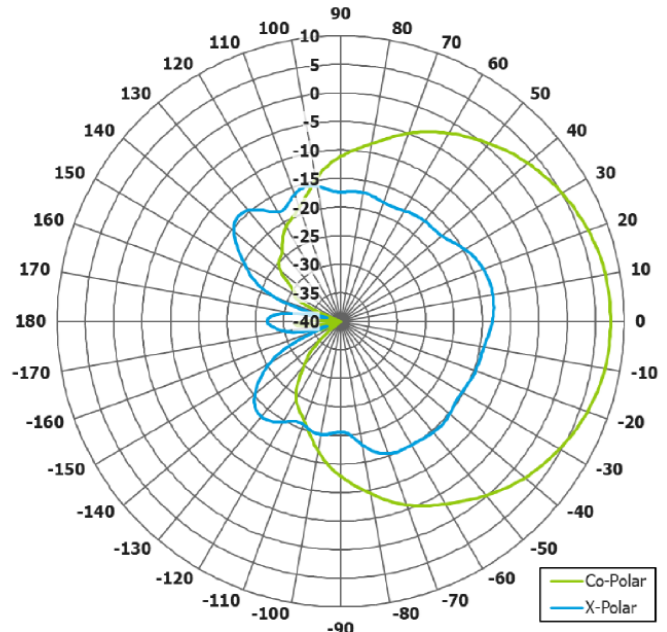
Antenna radiation pattern
Please refer to [appendix A >>](#)

Appendix A - Radiation Pattern

RP – Rx & Tx (similar)



**Azimuth Polar Plot
(@ 1.56 GHz)**



**Elevation Polar Plot
(@ 1.56 GHz)**

Having the antenna covered with a radome, the average effective gain is 7.5dBi