



1579 - Trilliant 5 GHz MIMO Array - Ph 2a Report

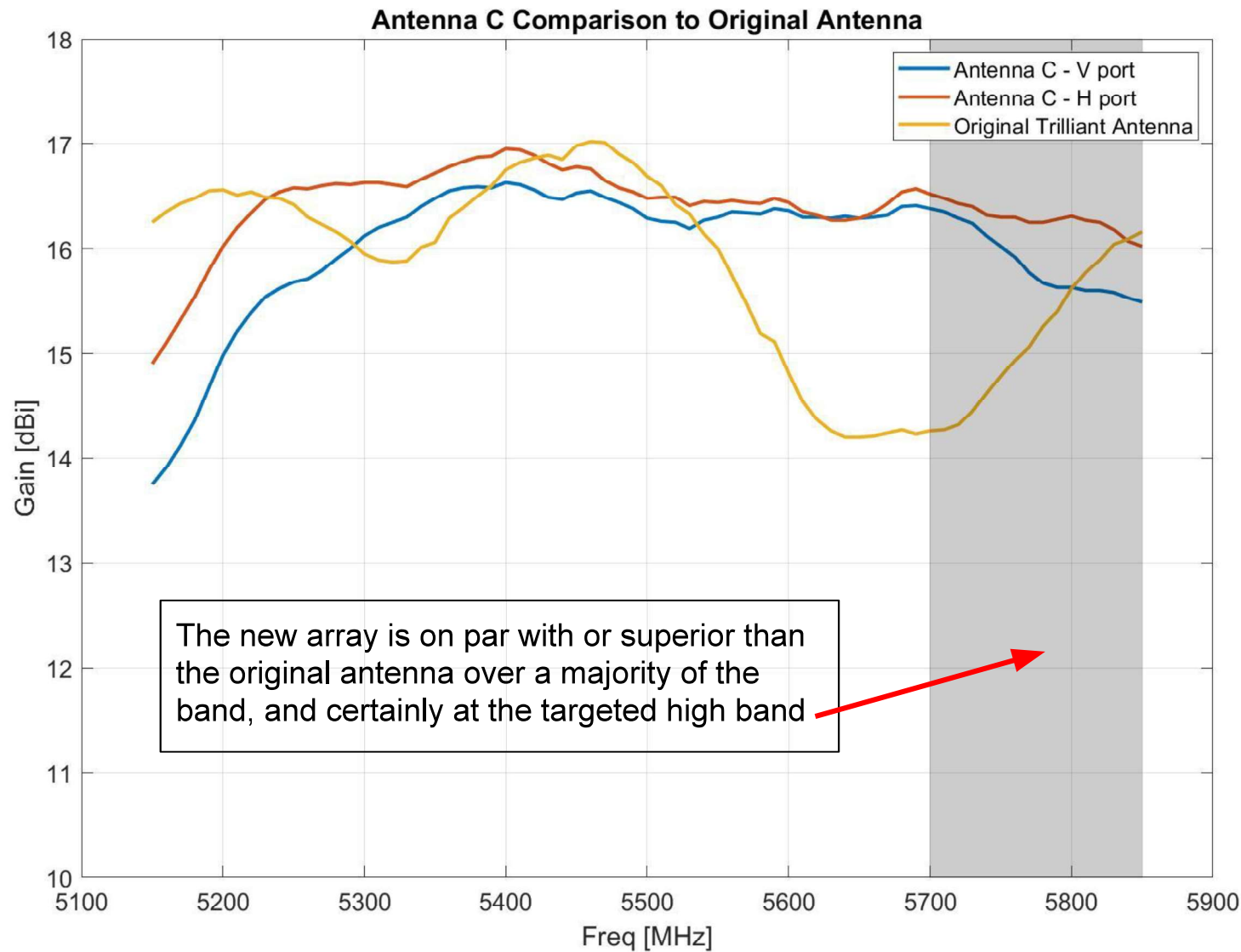
2019-05-30

BLUFLUX, LLC

- Executive Summary
- Material analysis
- Test Setup photos
- S-parameters and coupling
- All-antenna comparison
- Antenna C focus
- Antenna C patterns
- Conclusions

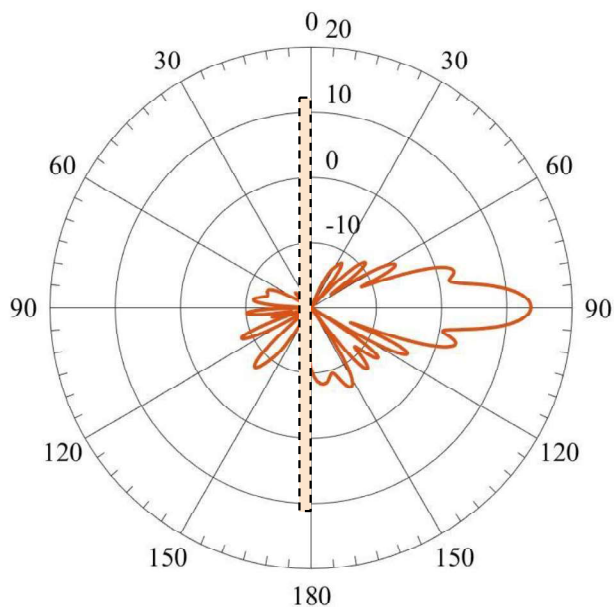
- The downselection process has revealed that Antenna C strikes the best balance between gain performance at the lower channels and the performance at high-band or the target-band of coverage
 - The H-port of Antennas A and B is tuned too low - it is superior to C at the low-band, but rolls off too quickly at the high band, causing poor gain performance in the 5700 - 5850 MHz band
- Antenna C is the preferred choice
- H-to-V coupling of all antennas is better than 20 dB
- Because of the excellent coupling and cross-polarization performance, plus the gain performance across the band, Antenna C should offer a nearly theoretical doubling of your throughput

Antenna C Compared to Original Array



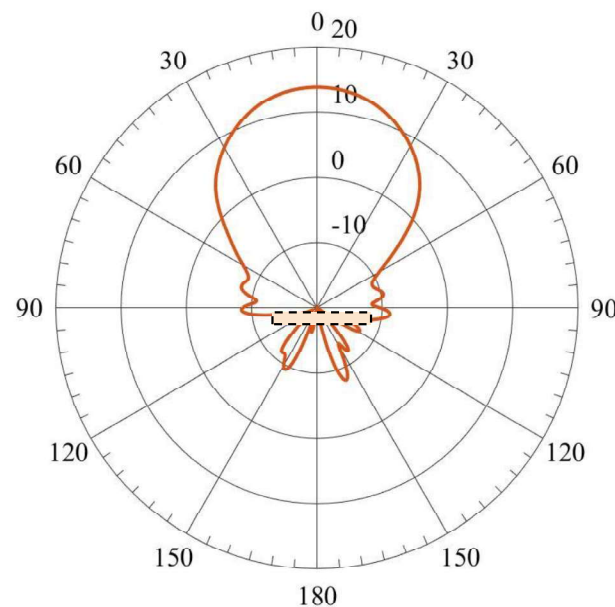
V-Port, F=5150 MHz Azimuth and Elevation pattern

5150 GHz, V-port, Elevation



Antenna Side View

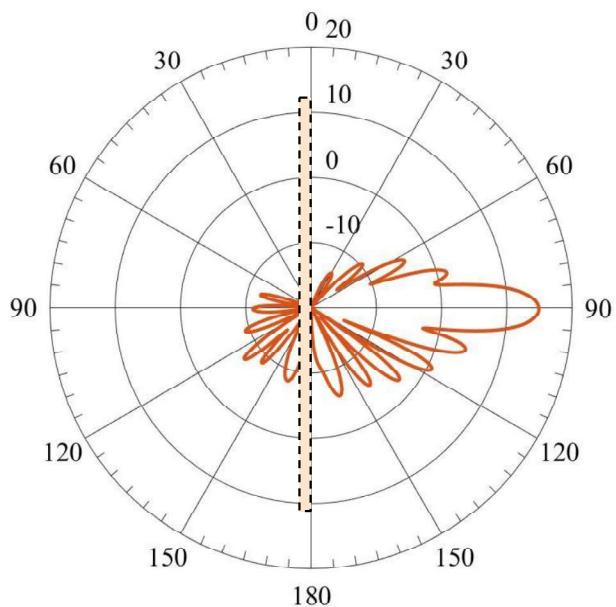
5150 GHz, V-port, Azimuth



Antenna Top View

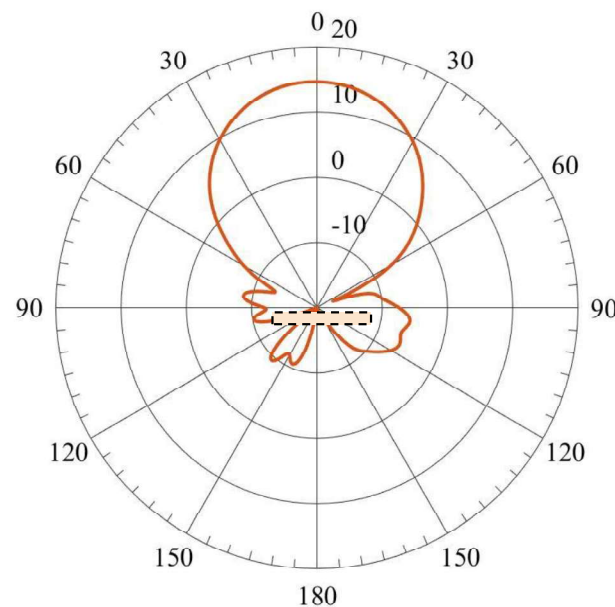
H-Port, F=5150 MHz Azimuth and Elevation pattern

5150 GHz, H-port, Elevation



Antenna Side View

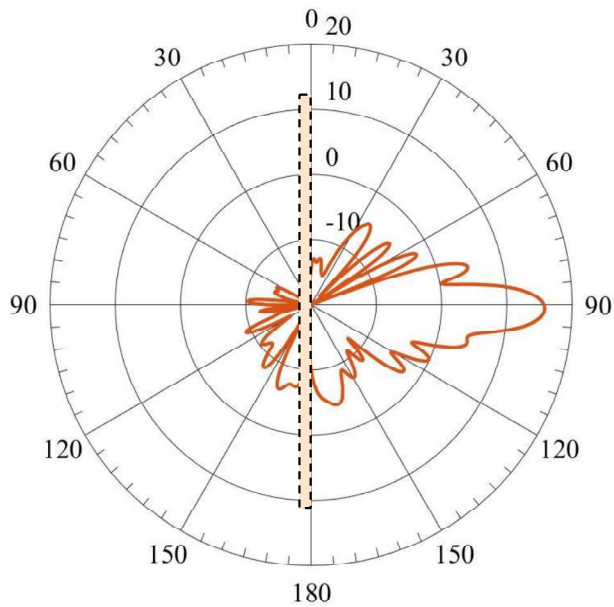
5150 GHz, H-port, Azimuth



Antenna Top View

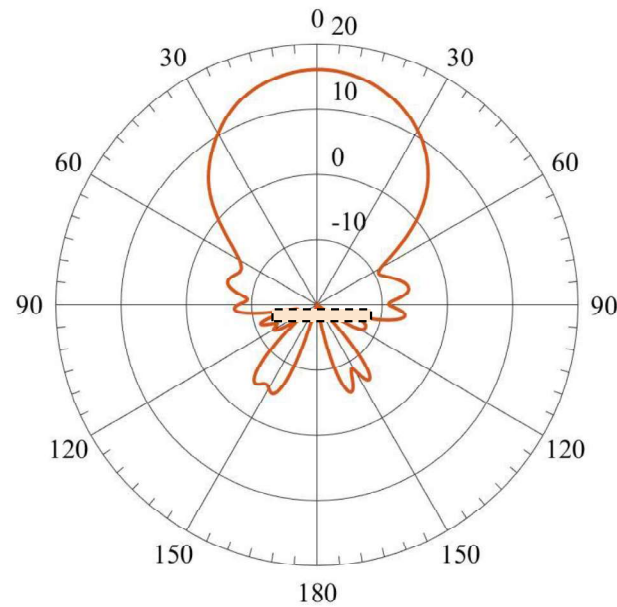
V-Port, F=5290 MHz Azimuth and Elevation pattern

5290 GHz, V-port, Elevation



Antenna Side View

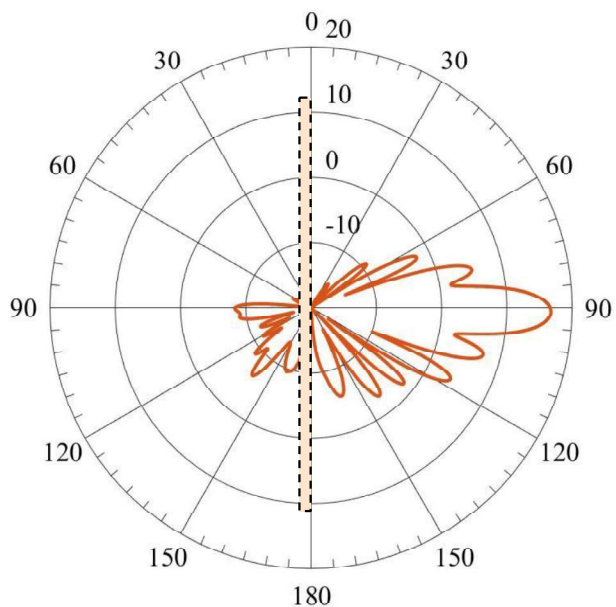
5290 GHz, V-port, Azimuth



Antenna Top View

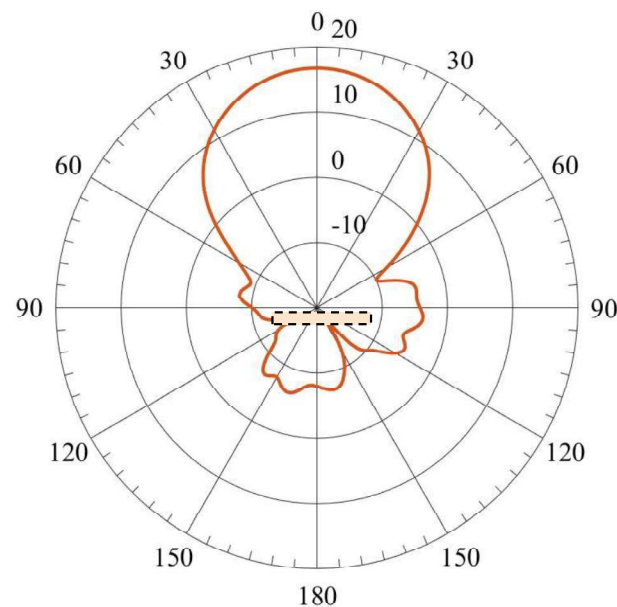
H-Port, F=5290 MHz Azimuth and Elevation pattern

5290 GHz, H-port, Elevation



Antenna Side View

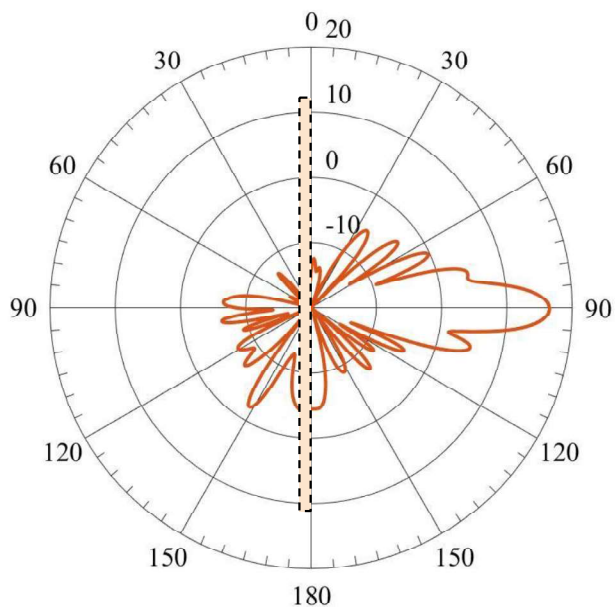
5290 GHz, H-port, Azimuth



Antenna Top View

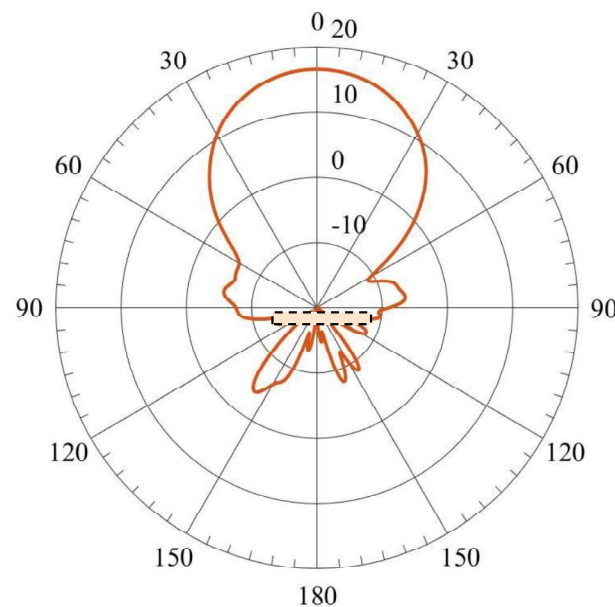
V-Port, F=5430 MHz Azimuth and Elevation pattern

5430 GHz, V-port, Elevation



Antenna Side View

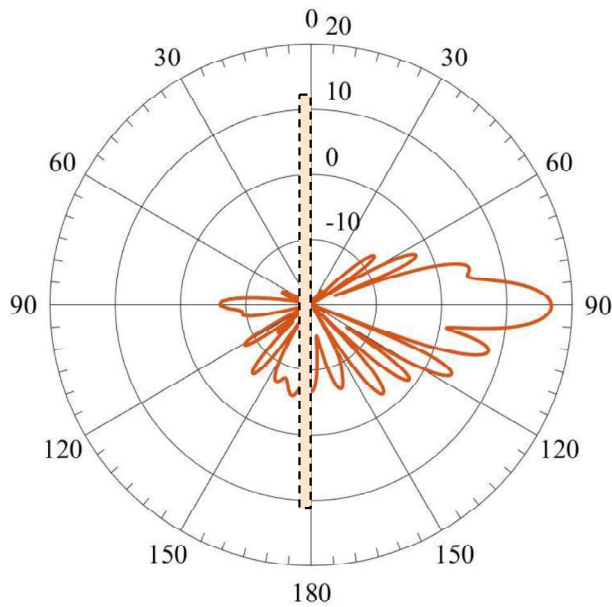
5430 GHz, V-port, Azimuth



Antenna Top View

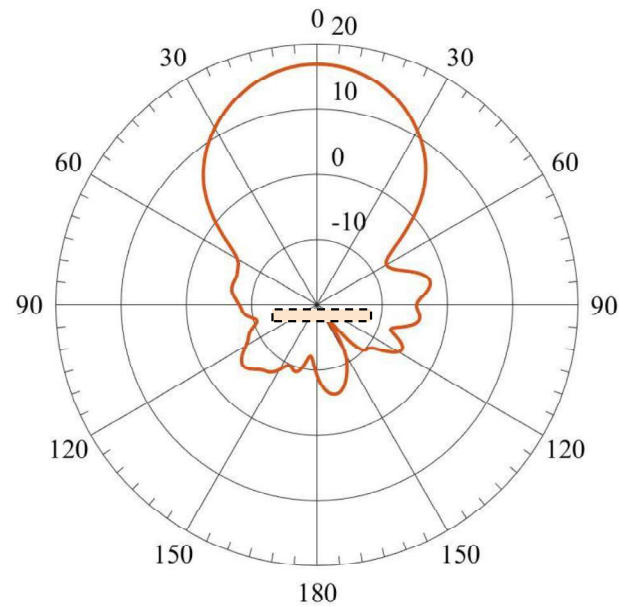
H-Port, F=5430 MHz Azimuth and Elevation pattern

5430 GHz, H-port, Elevation



Antenna Side View

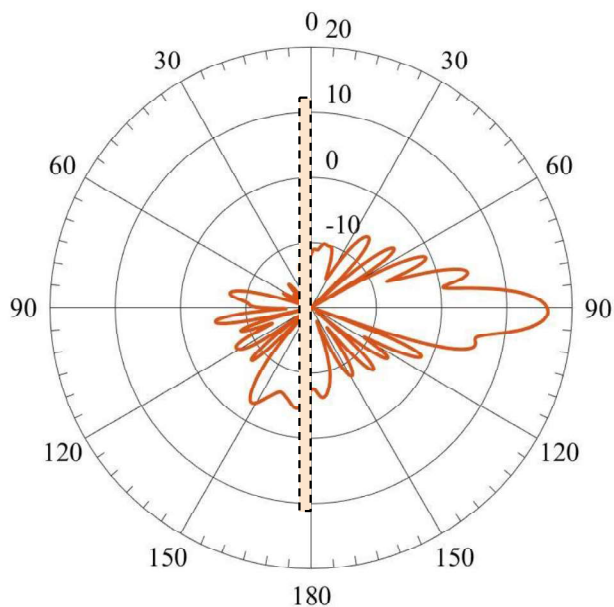
5430 GHz, H-port, Azimuth



Antenna Top View

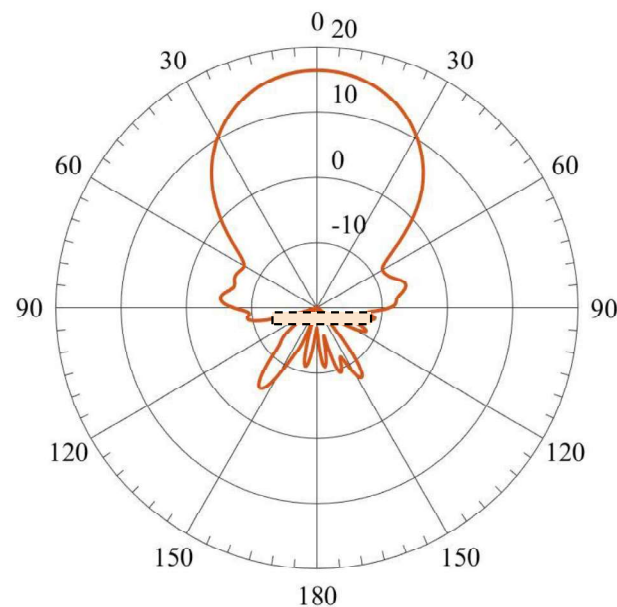
V-Port, F=5570 MHz Azimuth and Elevation pattern

5570 GHz, V-port, Elevation



Antenna Side View

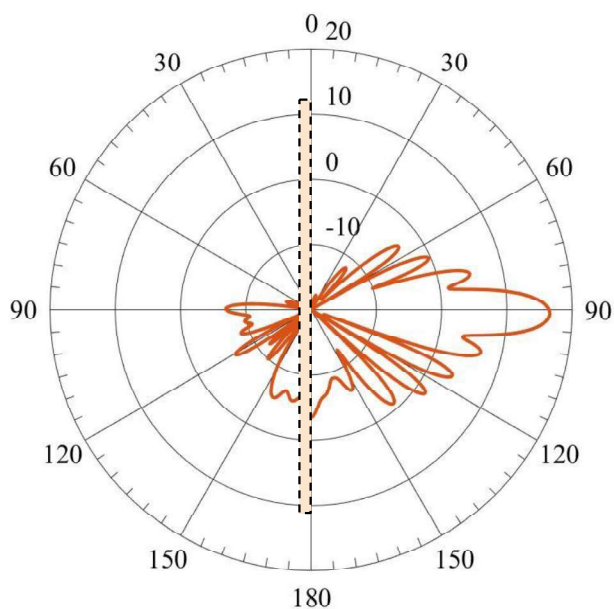
5570 GHz, V-port, Azimuth



Antenna Top View

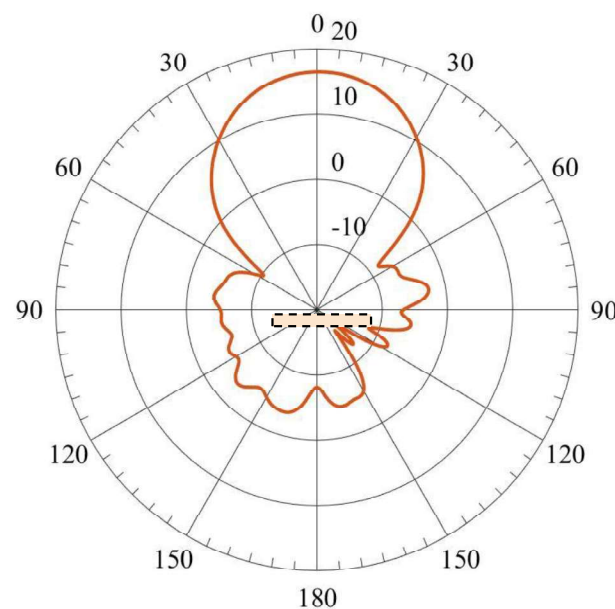
H-Port, F=5570 MHz Azimuth and Elevation pattern

5570 GHz, H-port, Elevation



Antenna Side View

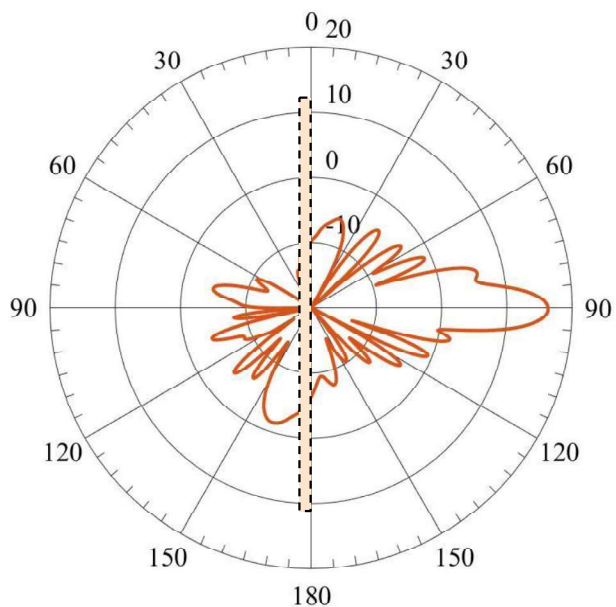
5570 GHz, H-port, Azimuth



Antenna Top View

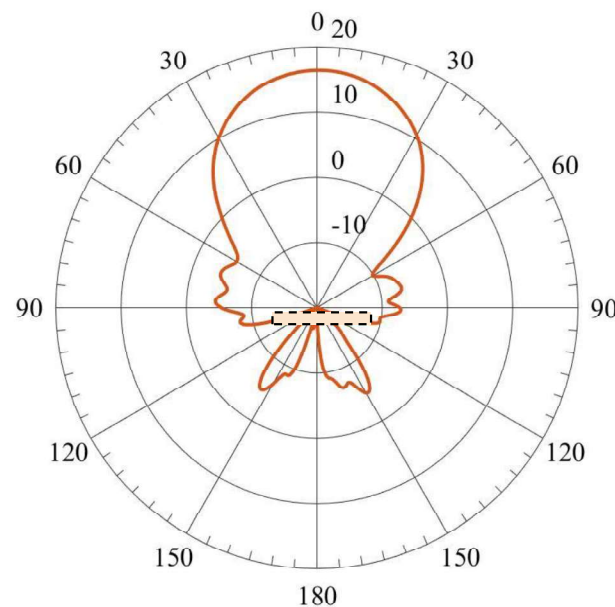
V-Port, F=5710 MHz Azimuth and Elevation pattern

5710 GHz, V-port, Elevation



Antenna Side View

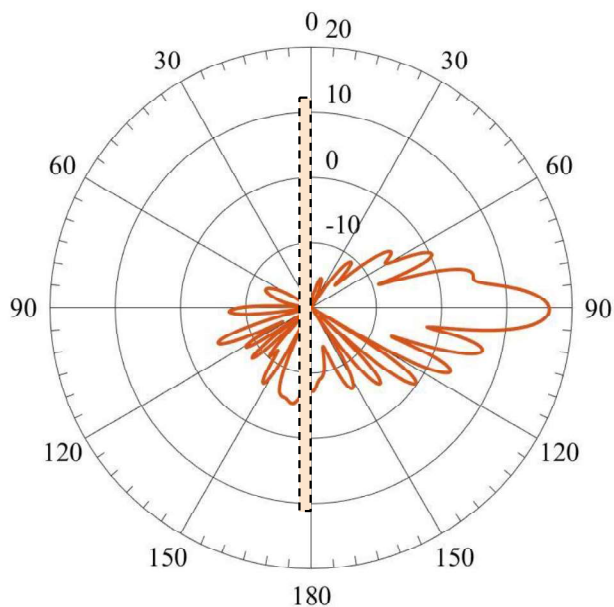
5710 GHz, V-port, Azimuth



Antenna Top View

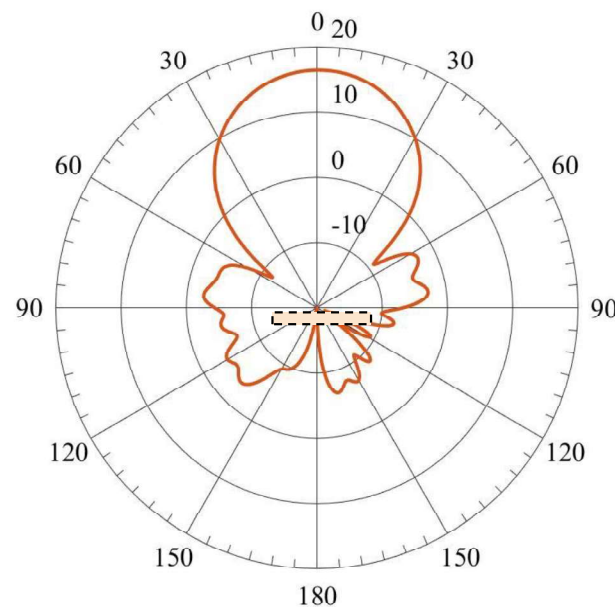
H-Port, F=5710 MHz Azimuth and Elevation pattern

5710 GHz, H-port, Elevation



Antenna Side View

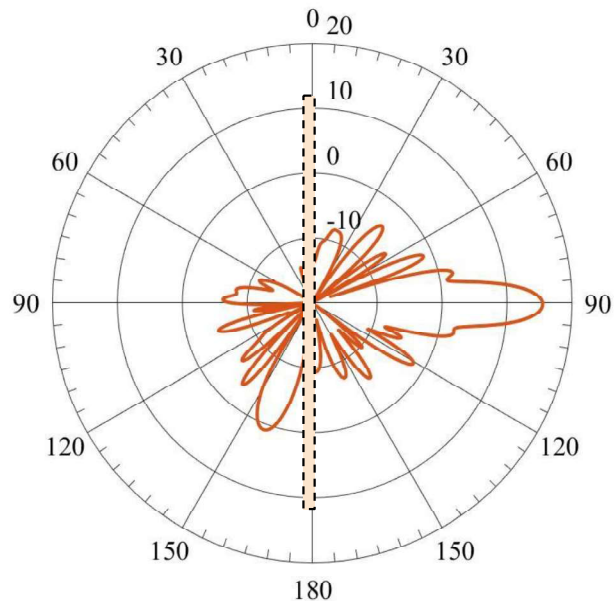
5710 GHz, H-port, Azimuth



Antenna Top View

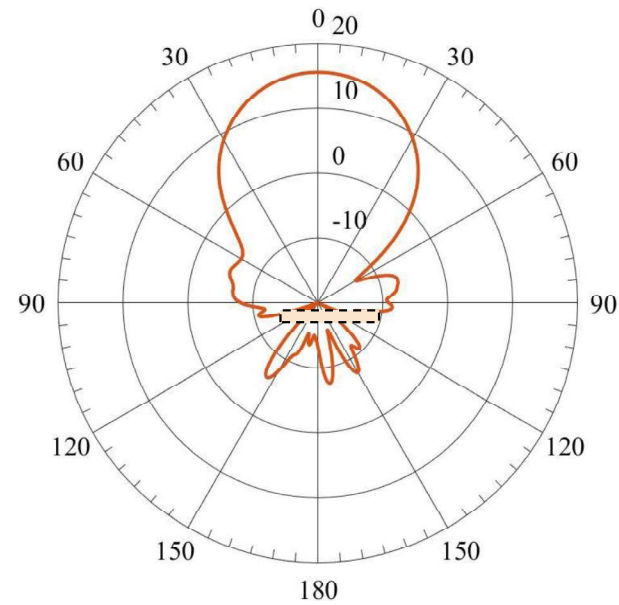
V-Port, F=5850 MHz Azimuth and Elevation pattern

5850 GHz, V-port, Elevation



Antenna Side View

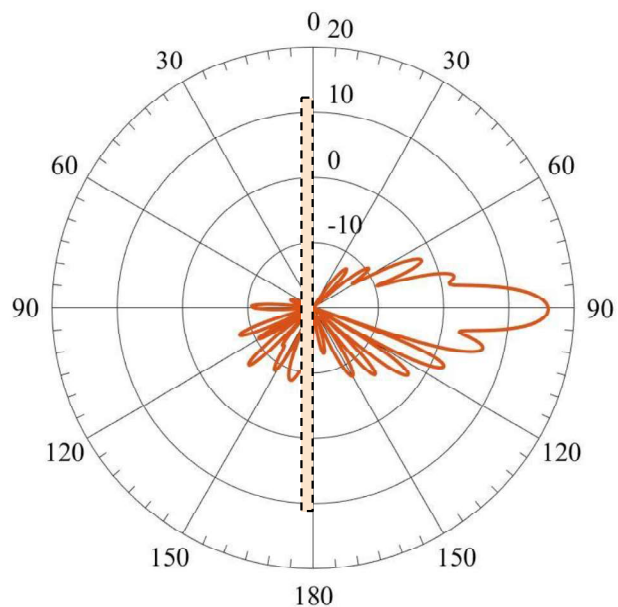
5850 GHz, V-port, Azimuth



Antenna Top View

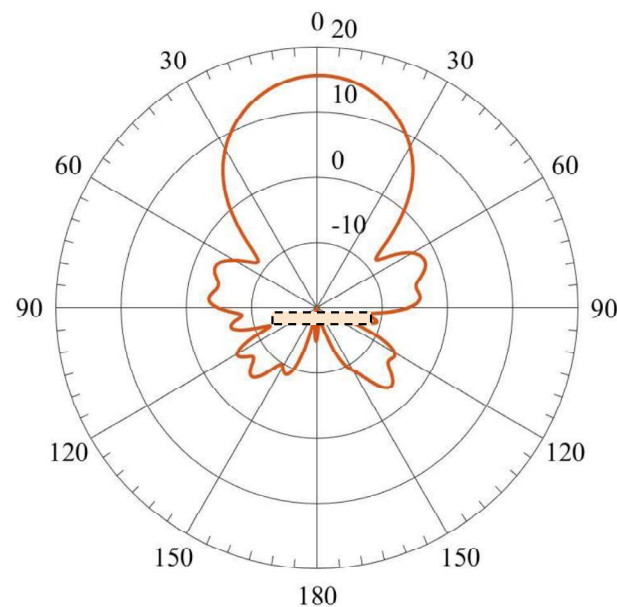
H-Port, F=5850 MHz Azimuth and Elevation pattern

5850 GHz, H-port, Elevation



Antenna Side View

5850 GHz, H-port, Azimuth



Antenna Top View