

**SENCITY® Spot-S 2x2 WiFi MIMO Antenna**  
**1356.17.0076****Description**

Small directional, planar, linear polarized WiFi antenna with 9 dBi gain  
Dual-slant +/- 45° for 2x2 WiFi MIMO antenna configuration  
WLAN IEEE 802.11 a/h/p/n - WiFi band 5.15 - 5.935 GHz  
Rugged design, meets EN 50155 and EN 50125-3 railway standards  
Fire retardant acc. to EN 45545-2 and NFPA130  
For outdoor and indoor applications  
Ingress protection IP 66 and IP 67

Wall mounting material included

**Product Configuration****Technical Data****Electrical Data**

|                              | Band 1      |
|------------------------------|-------------|
| Frequency (MHz)              | 5150 - 5935 |
| VSWR                         | 2           |
| Impedance (Ohm)              | 50          |
| Gain (dBi)                   | 9           |
| 3dB beamwidth (h) (°)        | 70          |
| 3dB beamwidth (v) (°)        | 60          |
| Composite power max (W)      | 30          |
| Ambient temperature (°C)     | 25          |
| Front to back ratio (dB)     | 20          |
| Vertical electrical tilt (°) | 0           |
| Port Isolation (dB)          | 20          |

**Ports**

|              | Port 1           | Port 2           |
|--------------|------------------|------------------|
| Connector    | N, jack (female) | N, jack (female) |
| Polarization | -45° slant       | +45° slant       |
| DC grounded  | Yes              | Yes              |

**Connections**

|        | Band 1 |
|--------|--------|
| Port 1 | X      |
| Port 2 | X      |

**General Data****Mechanical Data**

|                            |                                                           |
|----------------------------|-----------------------------------------------------------|
| Dimensions (mm)            | 101 x 81 x 36 (Height x Width x Depth)                    |
| Weight (kg)                | 0.11                                                      |
| Windload                   | frontal: 15 N at 160 km/h , Wind speed survival: 220 km/h |
| Included mounting material | Wall mounting material                                    |

**Environmental Data**

|                            |                |
|----------------------------|----------------|
| Environmental conditions   | indoor/outdoor |
| Operation temperature (°C) | -40 to 85      |
| Storage temperature (°C)   | -40 to 85      |
| Transport temperature (°C) | -40 to 85      |
| Flammability rating        | EN 45545-2     |

## SENCITY® Spot-S 2x2 WiFi MIMO Antenna 1356.17.0076

|                                                      |                        |
|------------------------------------------------------|------------------------|
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant              |
| Lead-free soldered                                   | yes                    |
| WEEE 2012/19/EU                                      | special marking needed |
| REACH 1907/2006/EC                                   | compliant              |

FLAMMABILITY: EN 45545-2 (2013) HL3 and NFPA130 (2013), also BS 6853 and DIN 5510-2  
ENVIRONMENT: EN 50155 (2016) and EN 50125-3 (2003), also EN 60068 related

IP RATING: IP 66 / IP 67 (IEC 60529)  
SOLAR RADIATION: EN 50125-3:2004 §4.9, 1120 W/m² for 20h  
AIR PRESSURE: EN 50125-3:2004 §4.2, Altitude Class A1 (up to 1400m)  
AIR PULE PRESSURE: EN 50125-3:2004 §4.2, 1 kPa/s  
RAIN: EN 50125-3:2004 §4.6, delivery rate: 6 mm/min  
VIBRATION / SHOCK: EN 50125-3:2004 §4.13, position profile: "outside the track"  
POLLUTION: EN 50125-3:2004 §4.11, pollution levels: 4B1, 4S1  
CORROSION: MIL-F-14072 E Type 1 "exposed"  
MECHANICAL IMPACT (HAMMER IMPACT): EN 60068-2-75 (IEC 62262/2002-02 IK06)

### Material Data

|                 |                    |
|-----------------|--------------------|
| Radome colour   | RAL 7044 (grey)    |
| Radome material | PC (Polycarbonate) |

### Related Products

9091.99.0238 SPOT-S Antenna Down- and Sidetilt Bracket  
9091.99.0237 L-Bracket for SPOT-S antennas

### Related Documents

|                      |                |
|----------------------|----------------|
| Mounting instruction | DOC-0000287053 |
| Painting instruction | DOC-0000256180 |
| Security instruction | DOC-0000278984 |
| Outline drawing      | DOU-00139092   |
| 3D-model             | DOC-0000339646 |

### Additional Information

Following Declaration of Conformity for SENCITY Spot-S antennas are available on request: \* Industrial standards EN 60068 / EN 60529 / IEC 61373: Ref. DOC-0000318049 \* Railway rolling stock, environmental standards EN 50155 and fire behaviour EN 45545-2k, NFPA130: Ref. DOC-0000380375 \* Railway trackside, environmental standards EN 50125-3 and fire behaviour EN 45545-2: Ref. DOC-0000411396



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

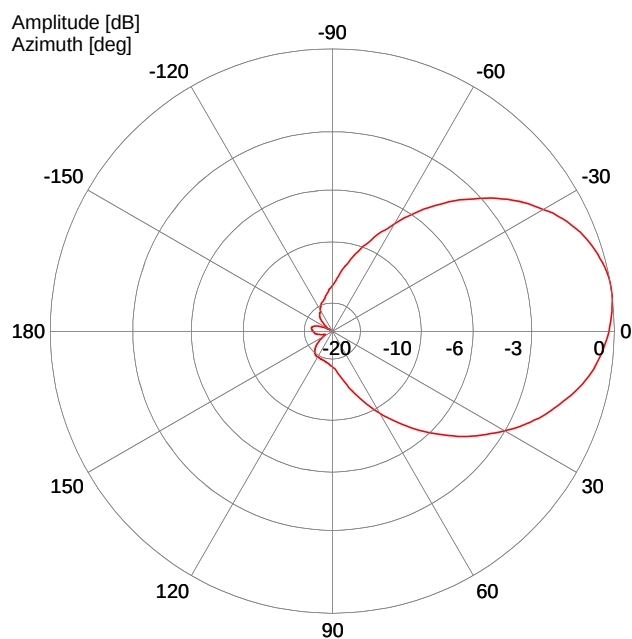
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

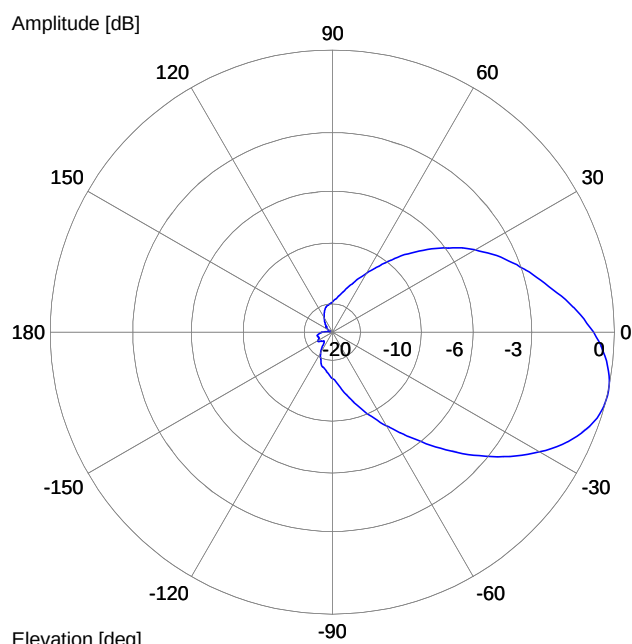
Frequency: 5250 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

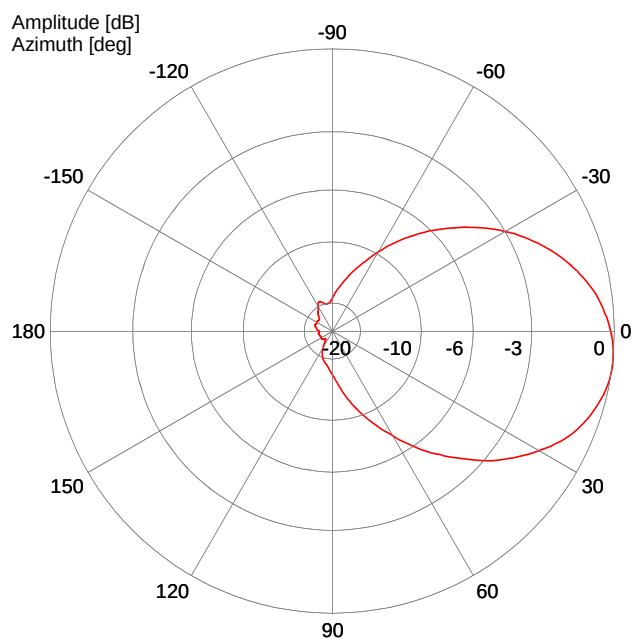
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

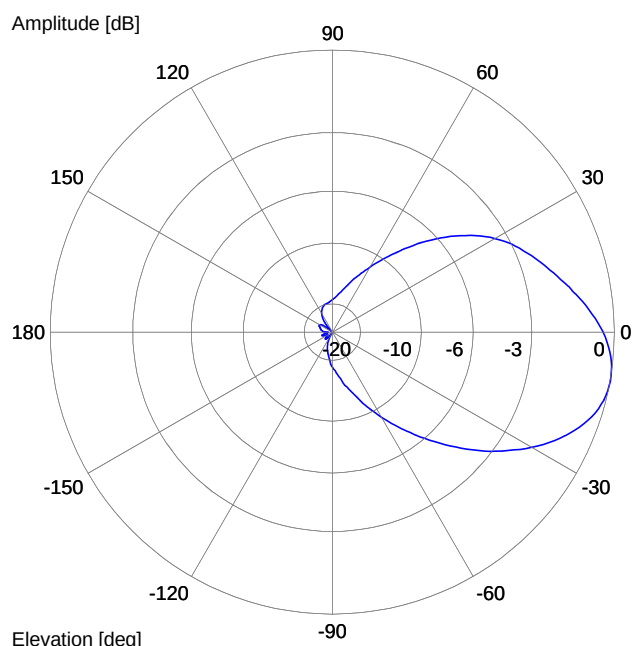
Frequency: 5300 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

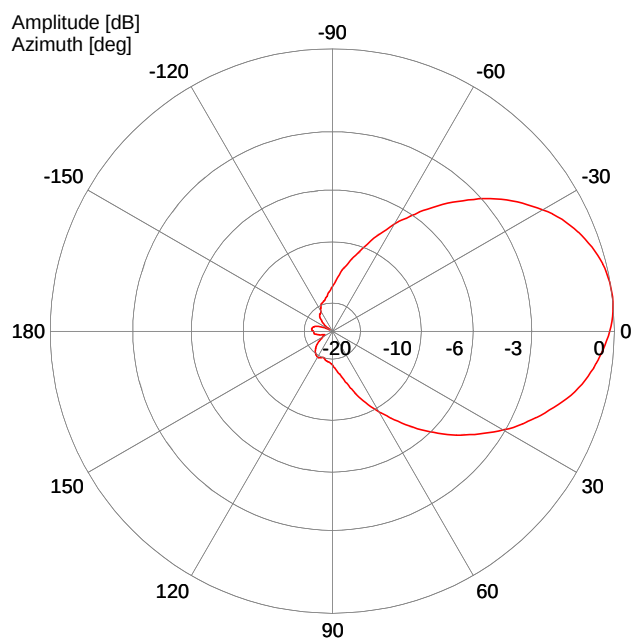
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

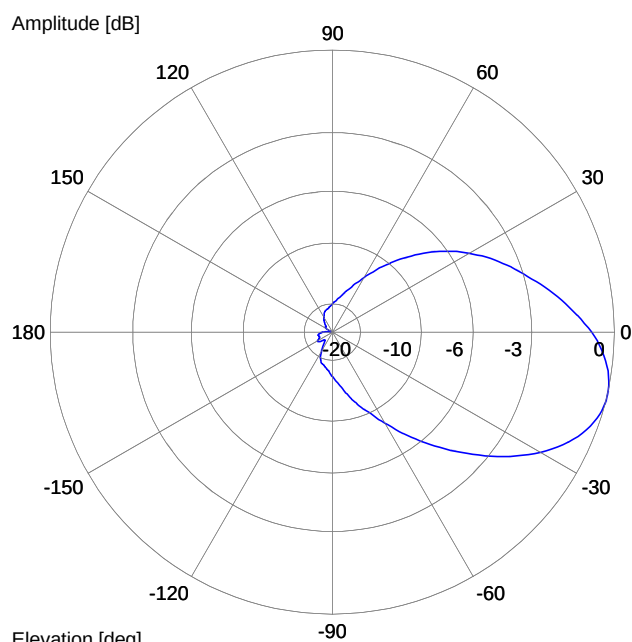
Frequency: 5300 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

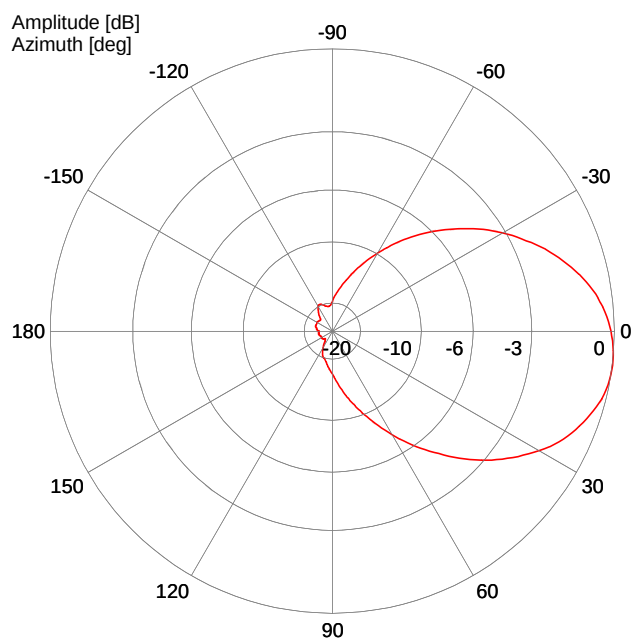
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

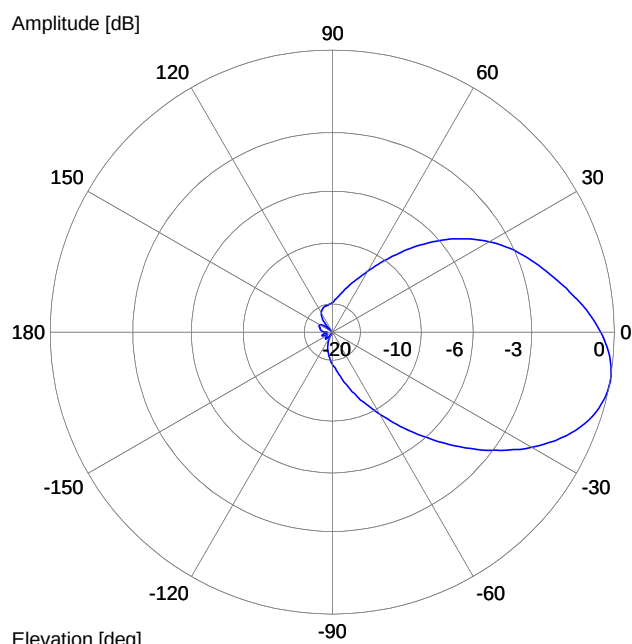
Frequency: 5350 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

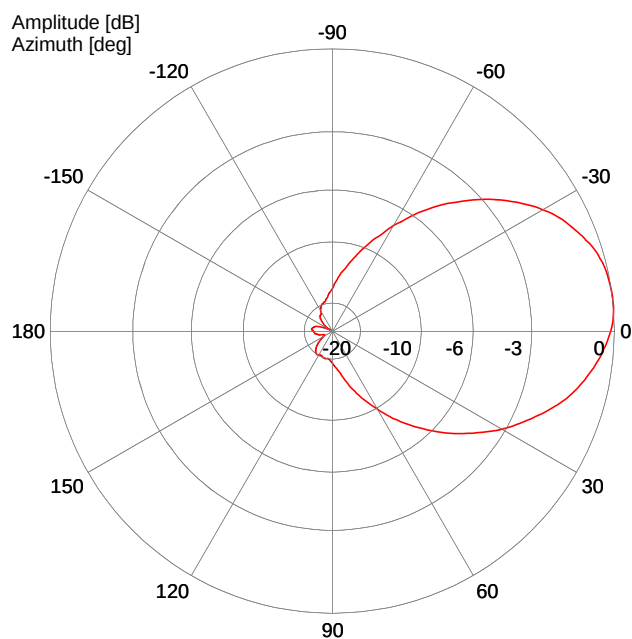
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

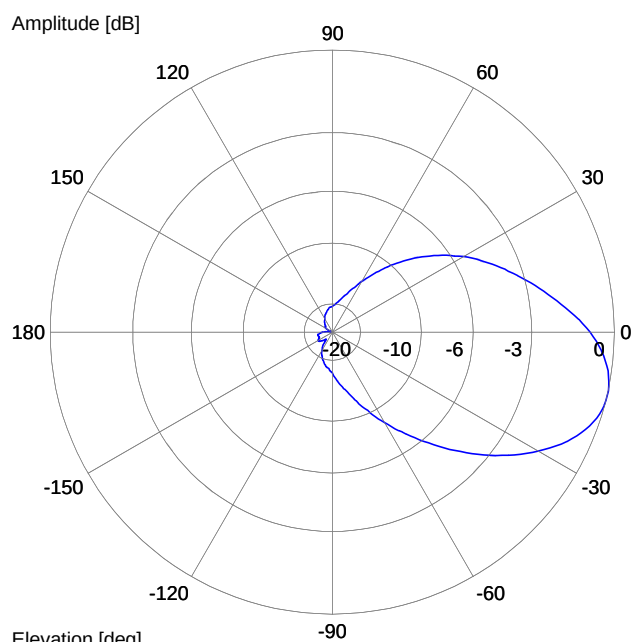
Frequency: 5350 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

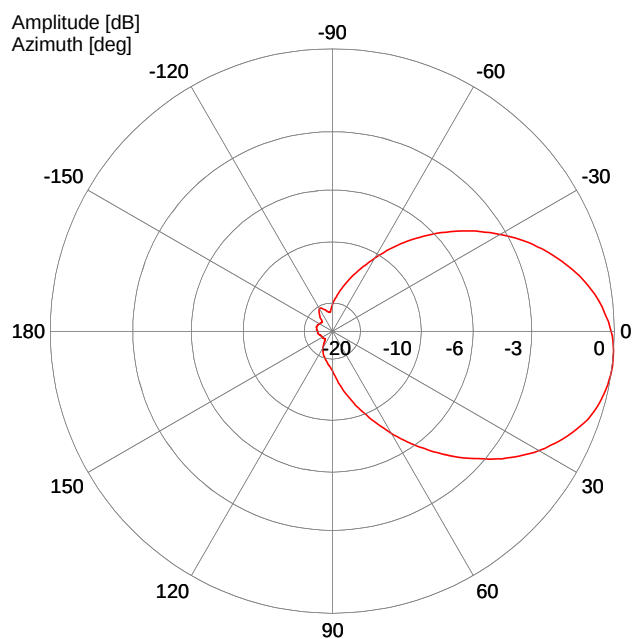
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

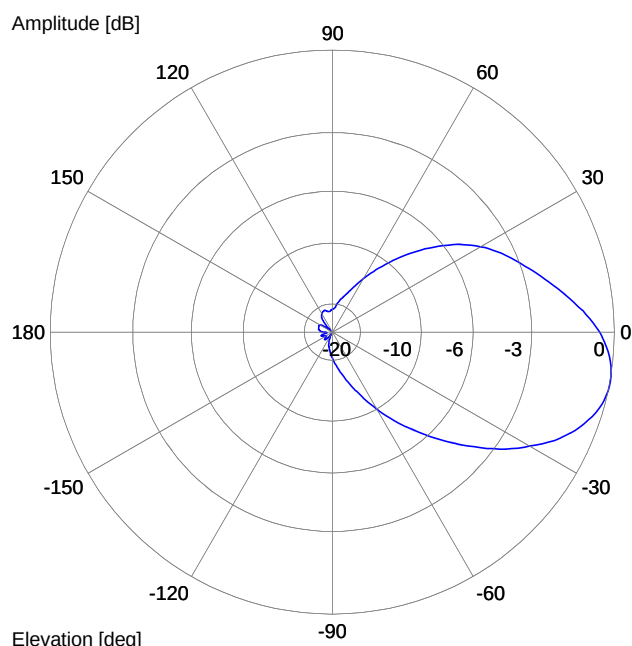
Frequency: 5470 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar





## SPA 5600/70/9/0/DS

Type: 1356.17.0076

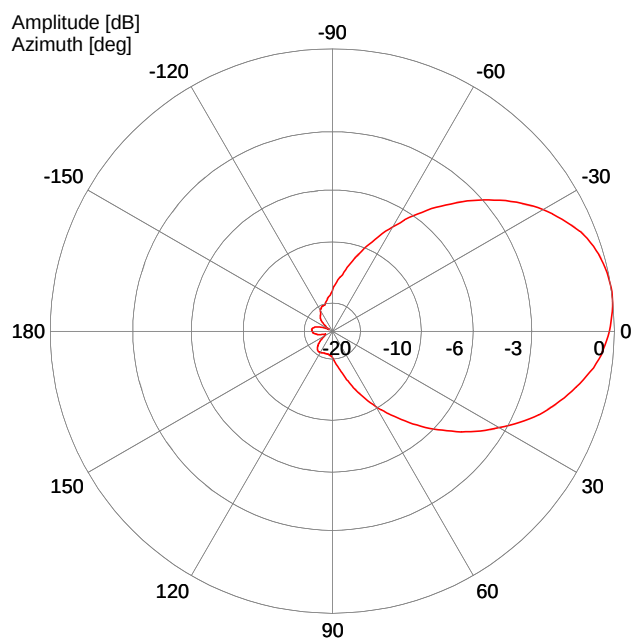
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

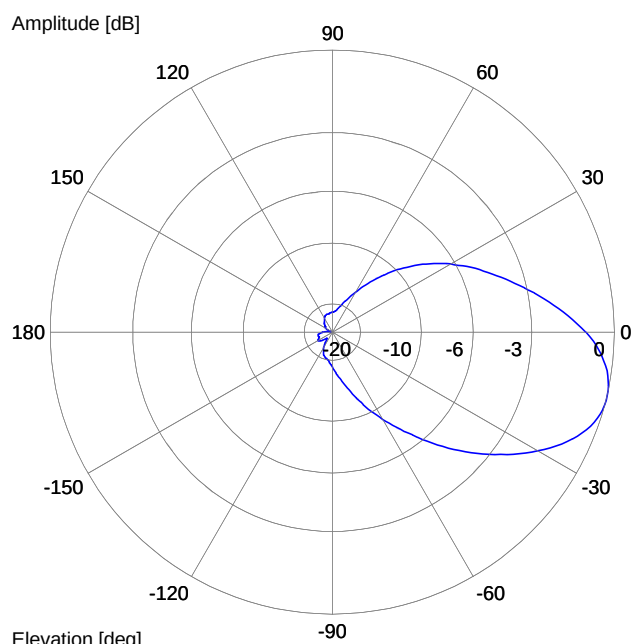
Frequency: 5470 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

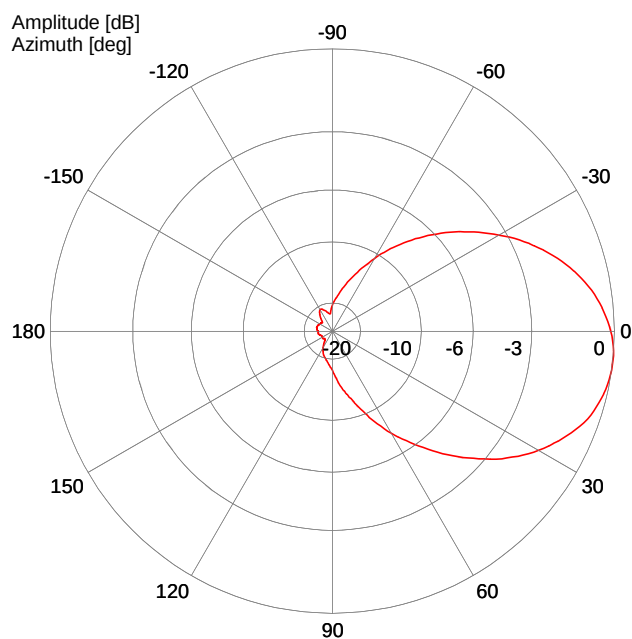
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

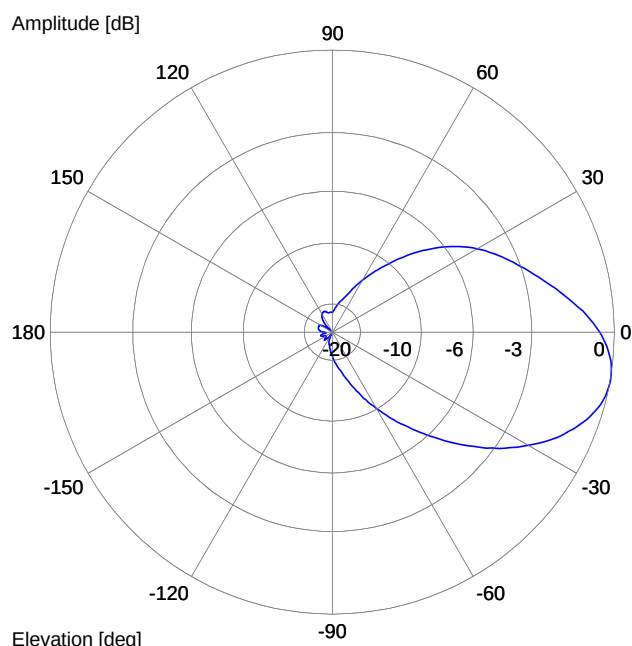
Frequency: 5500 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

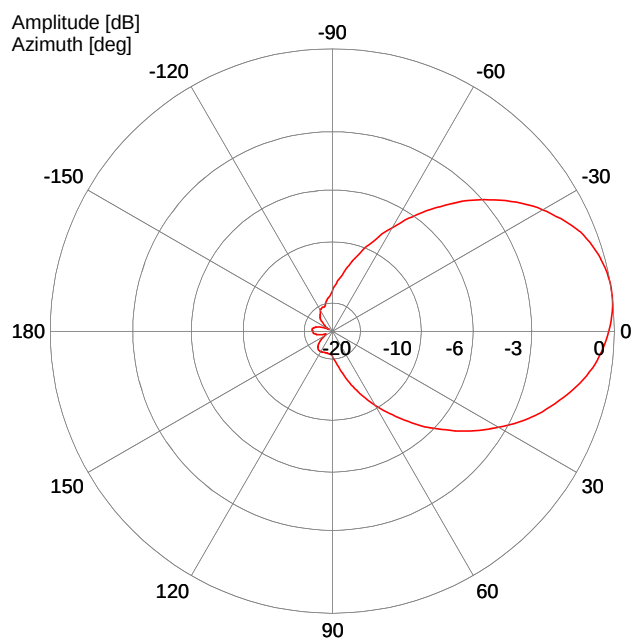
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

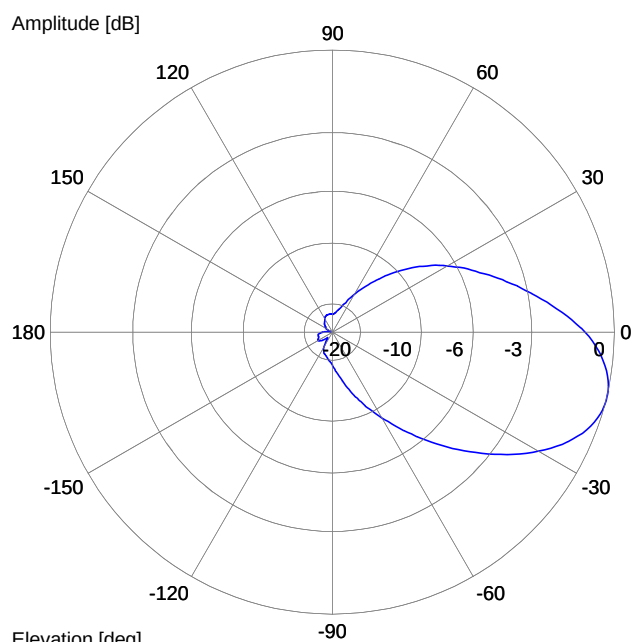
Frequency: 5500 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

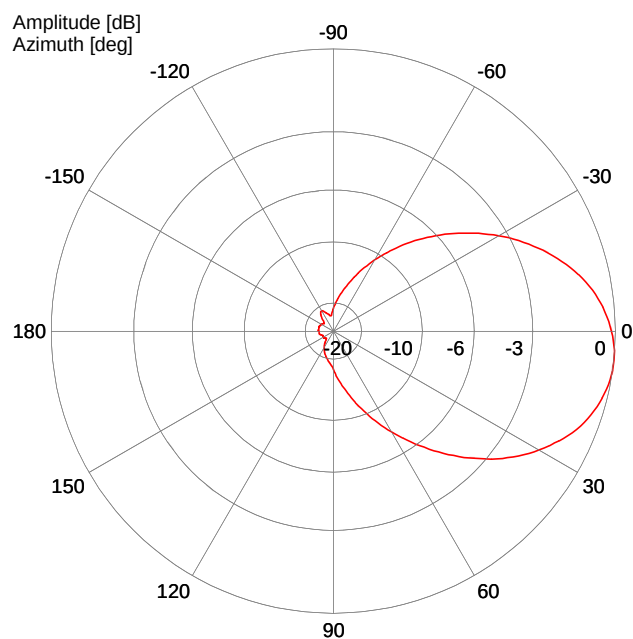
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

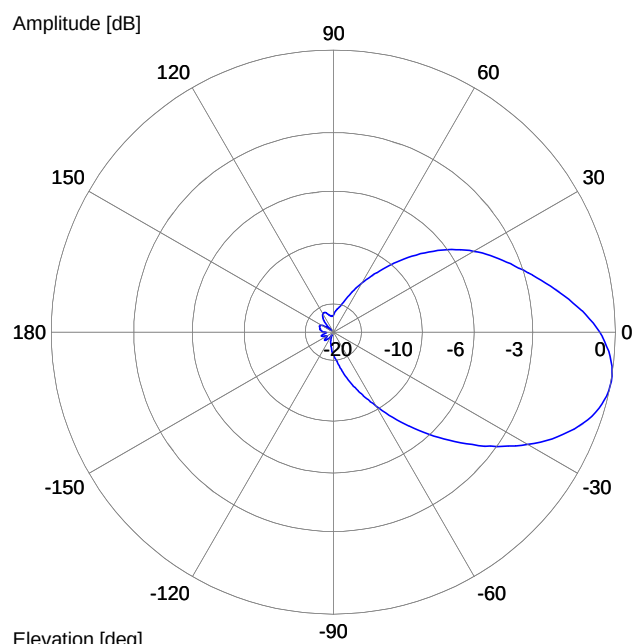
Frequency: 5550 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

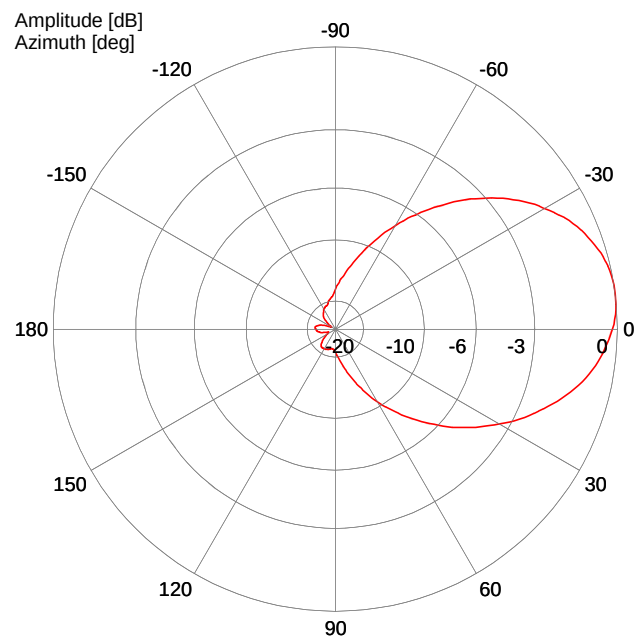
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

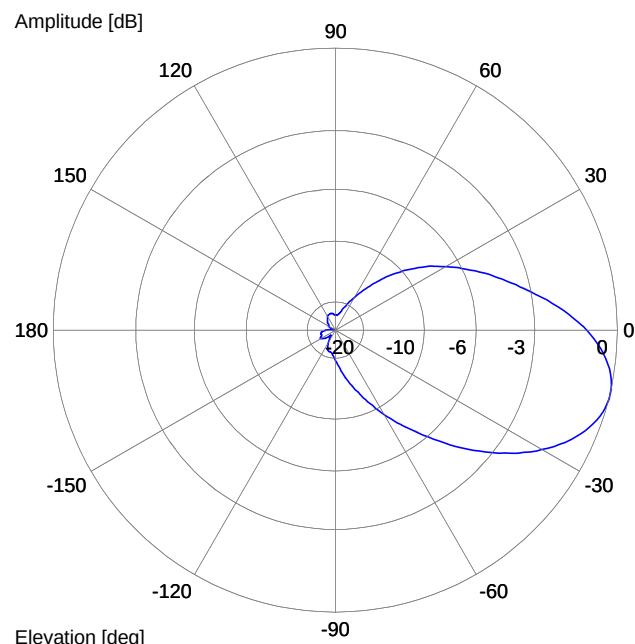
Frequency: 5550 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

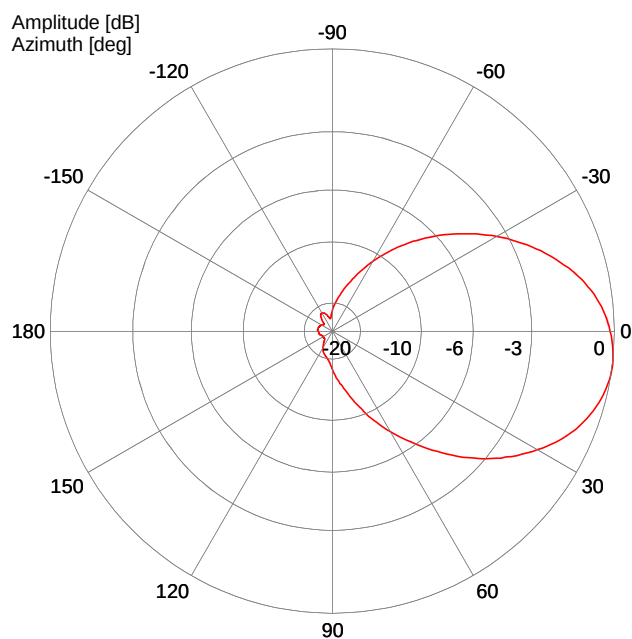
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

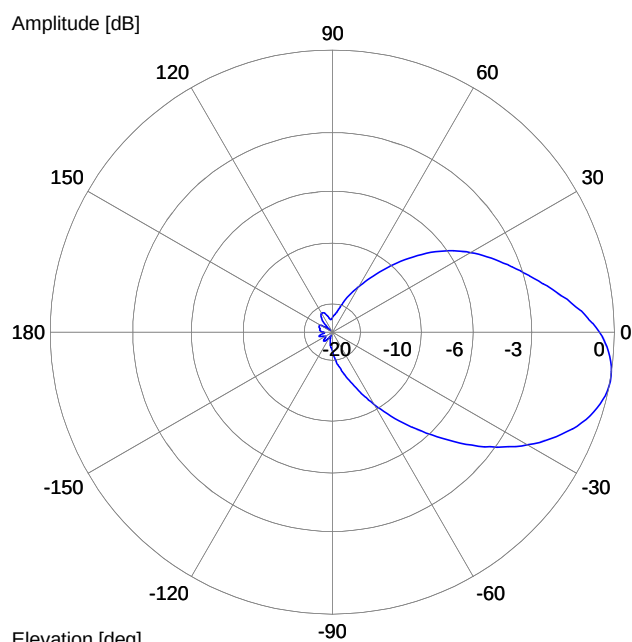
Frequency: 5600 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

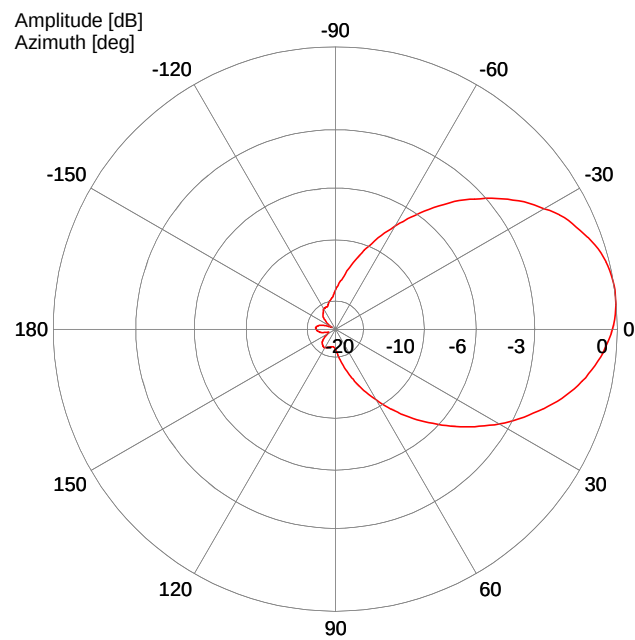
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

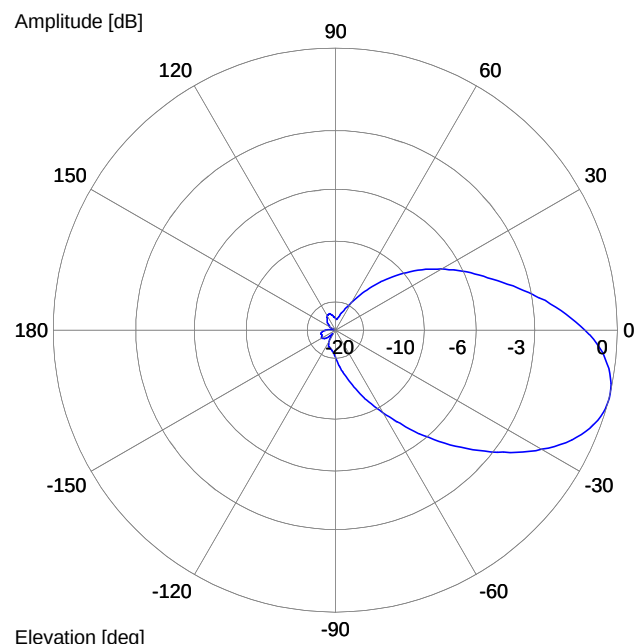
Frequency: 5600 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

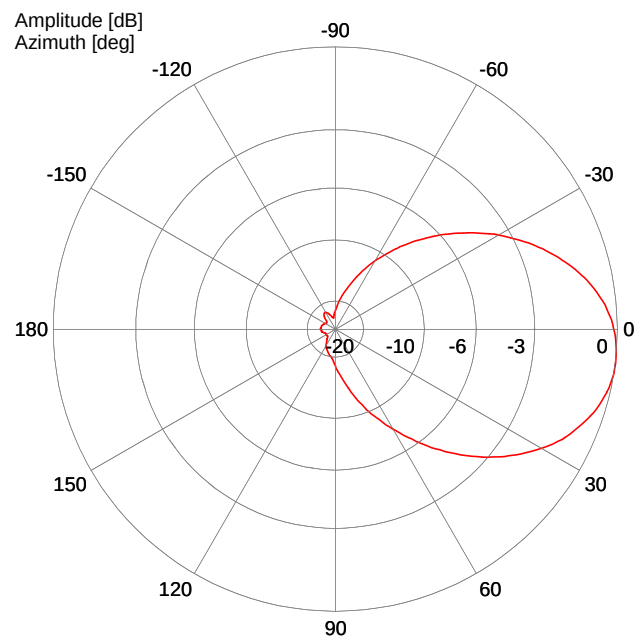
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

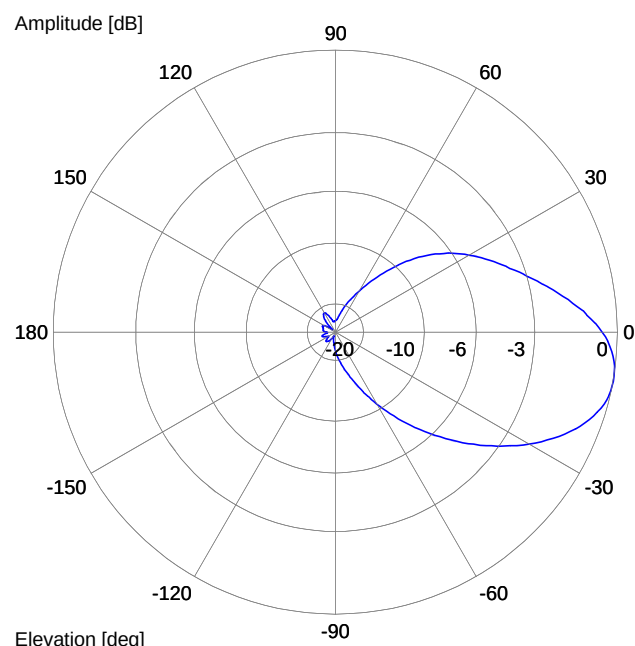
Frequency: 5650 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar





## SPA 5600/70/9/0/DS

Type: 1356.17.0076

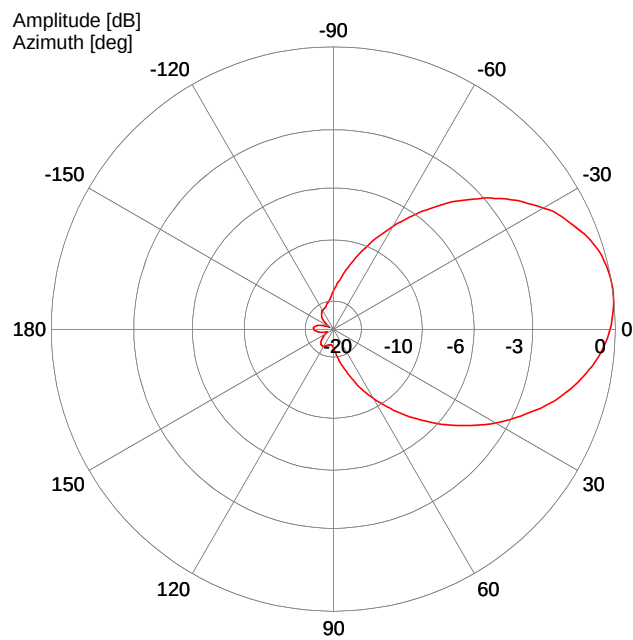
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Lot-No.: 4276

Port: right slant

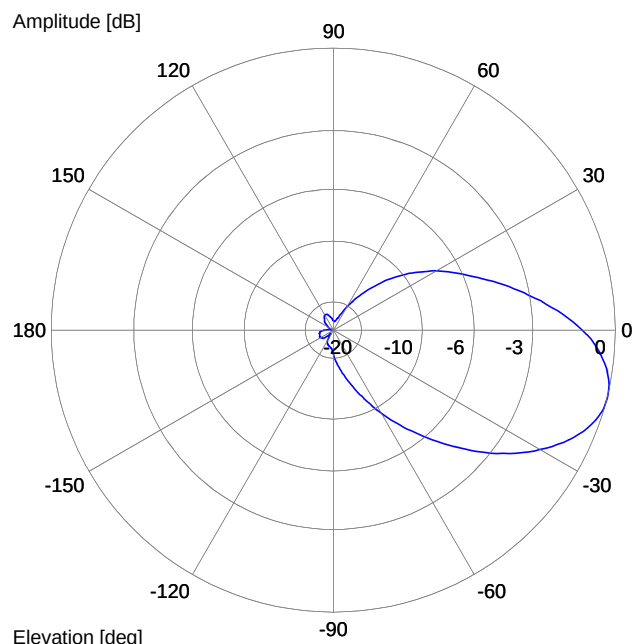
Frequency: 5650 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

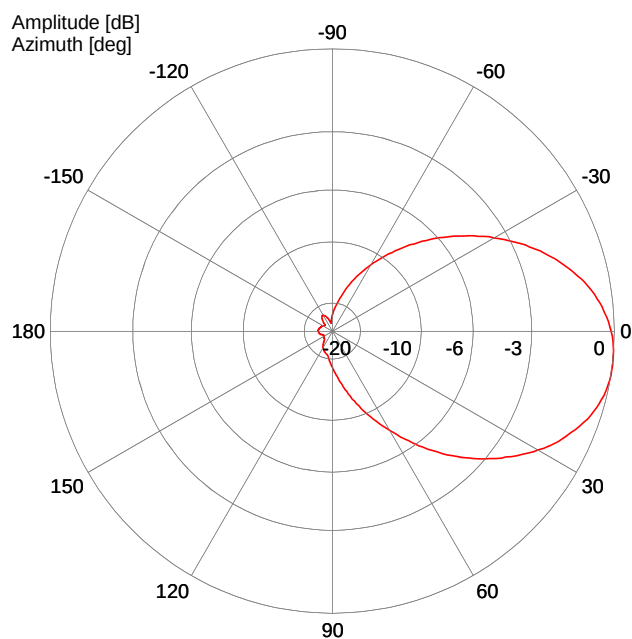
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

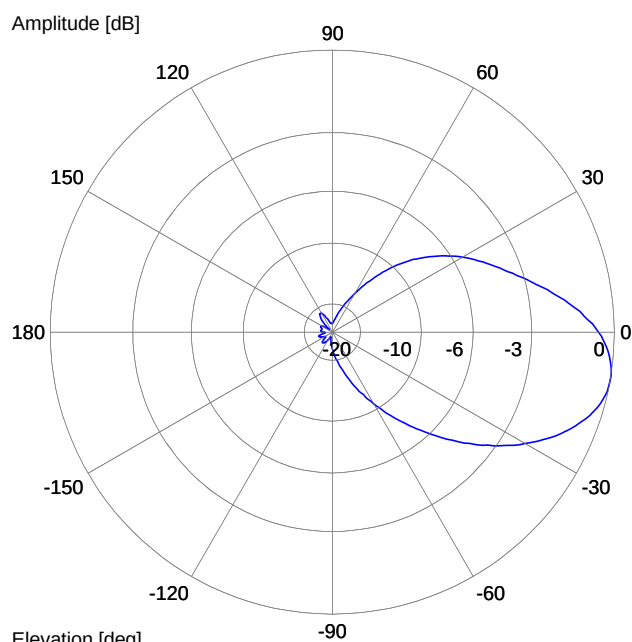
Frequency: 5700 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

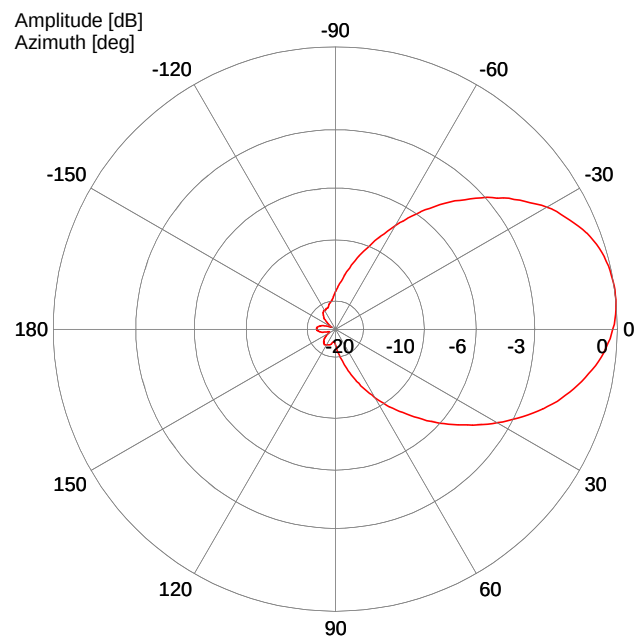
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

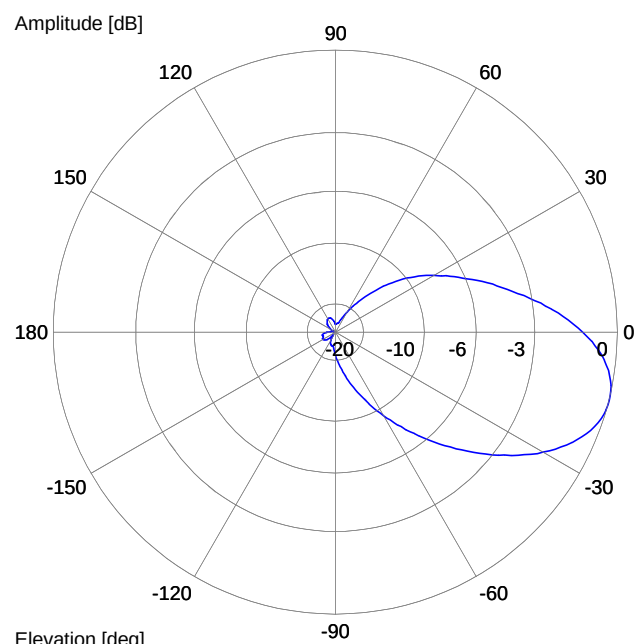
Frequency: 5700 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

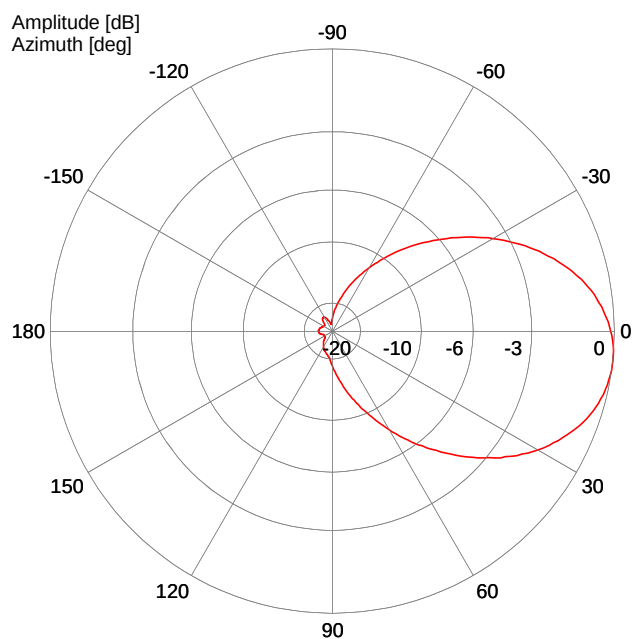
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

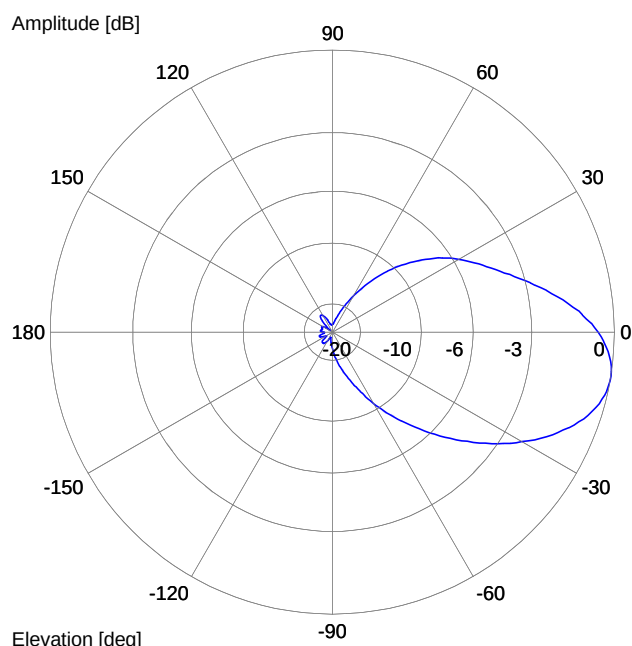
Frequency: 5750 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

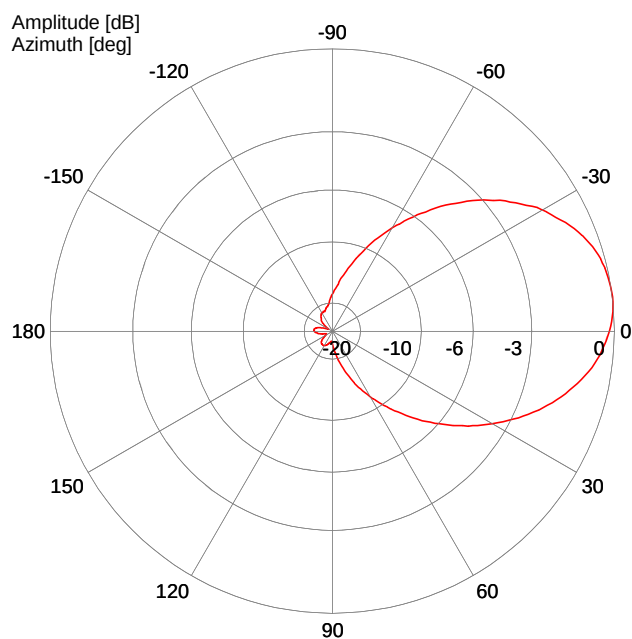
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

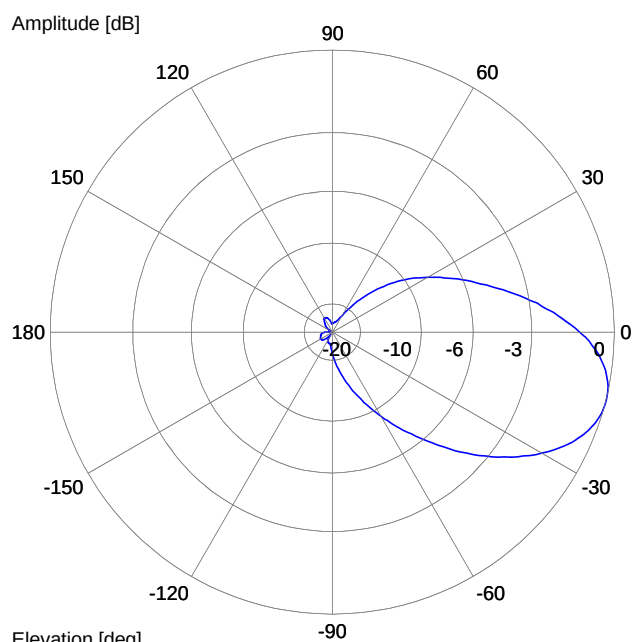
Frequency: 5750 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

**Type: 1356.17.0076**

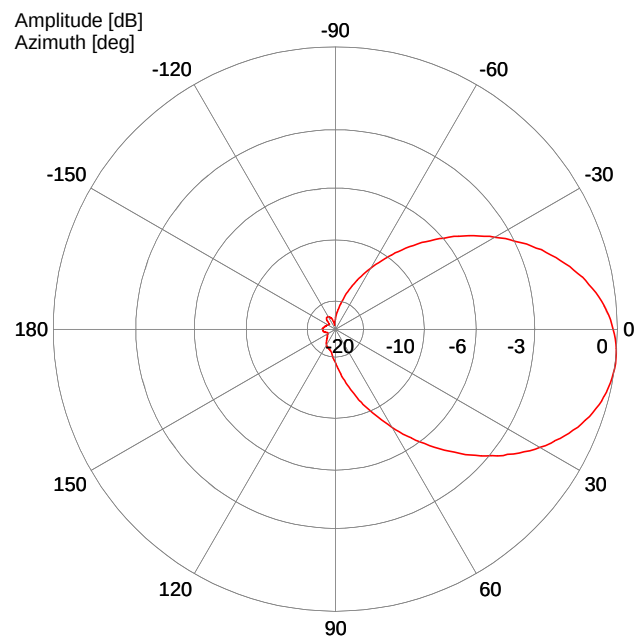
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

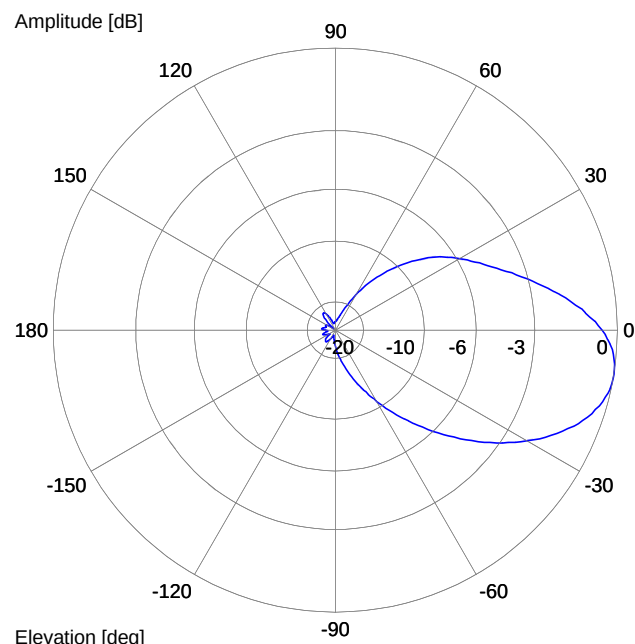
Frequency: 5800 MHz

**Radiation Pattern**



— Horizontal-Plane: Copolar

**Radiation Pattern**



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

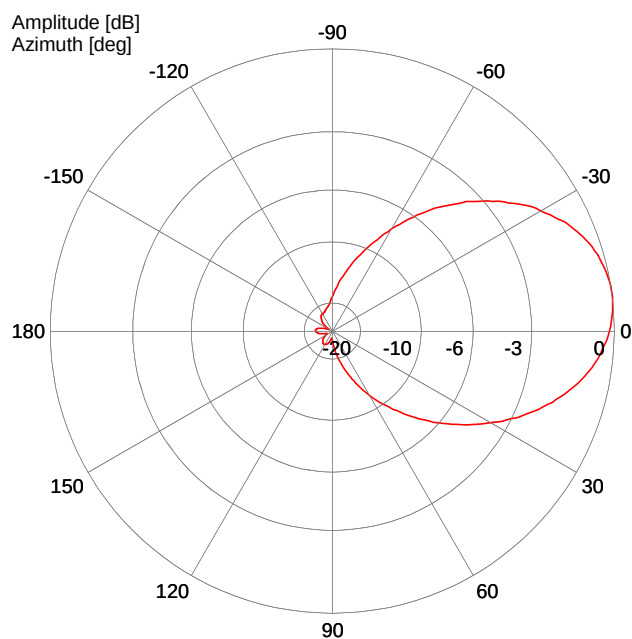
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

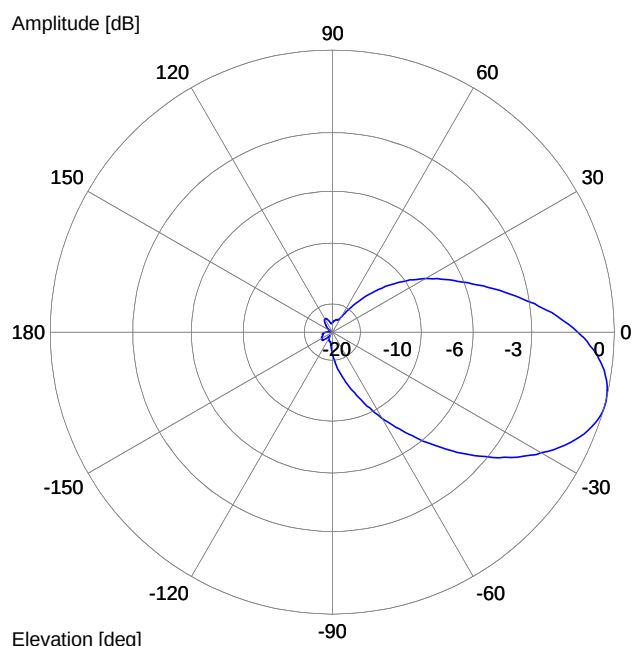
Frequency: 5800 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

**Type: 1356.17.0076**

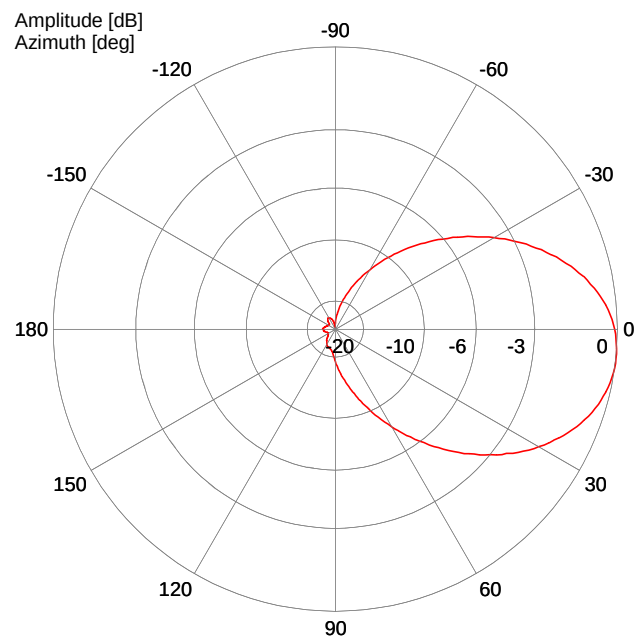
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

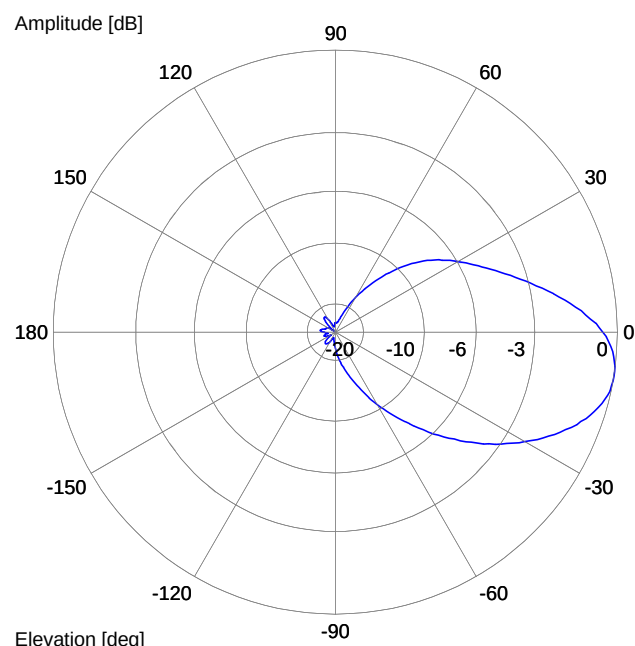
Frequency: 5850 MHz

**Radiation Pattern**



— Horizontal-Plane: Copolar

**Radiation Pattern**



— Vertical-Plane: Copolar





## SPA 5600/70/9/0/DS

Type: 1356.17.0076

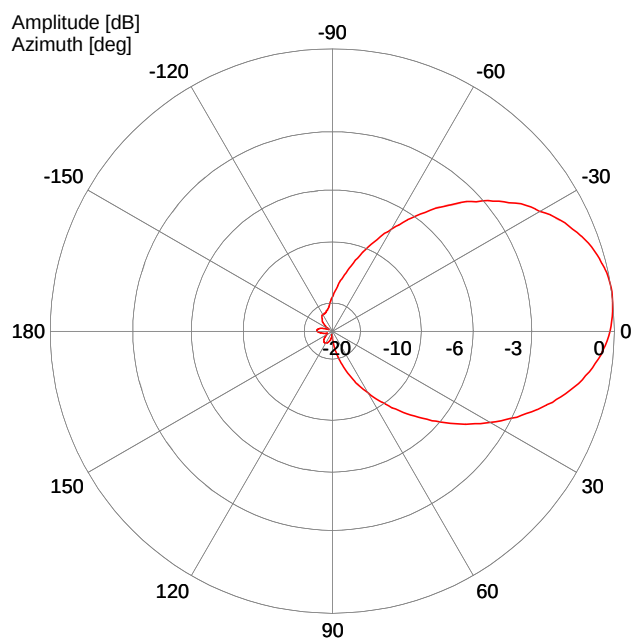
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

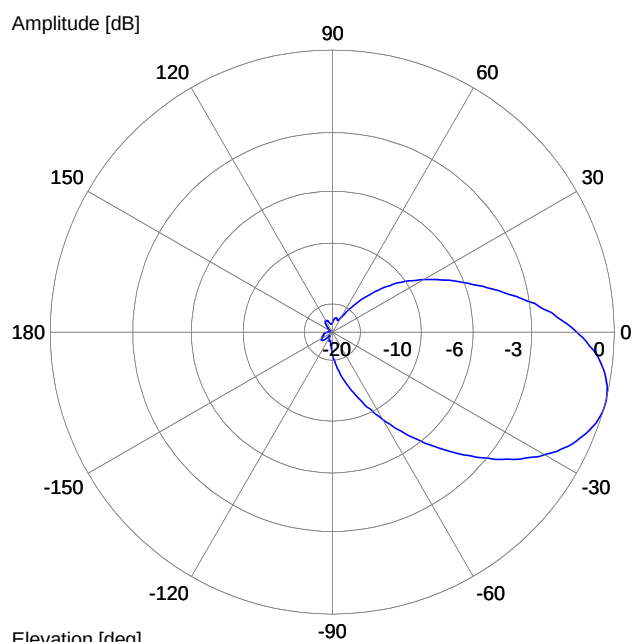
Frequency: 5850 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

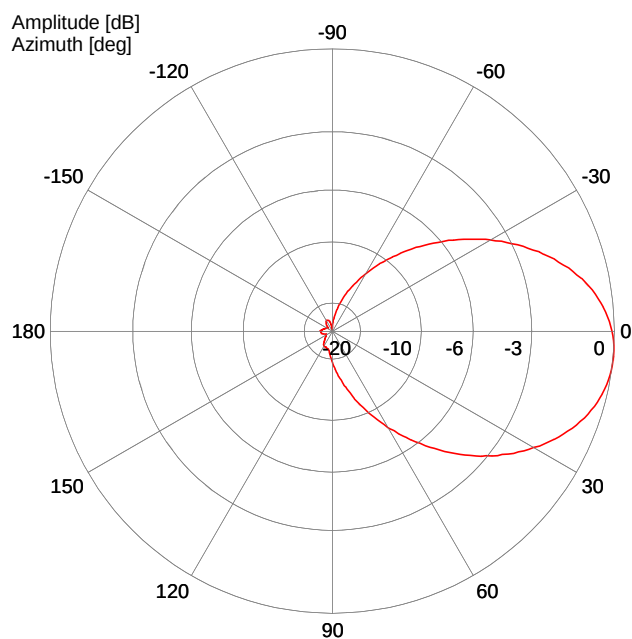
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

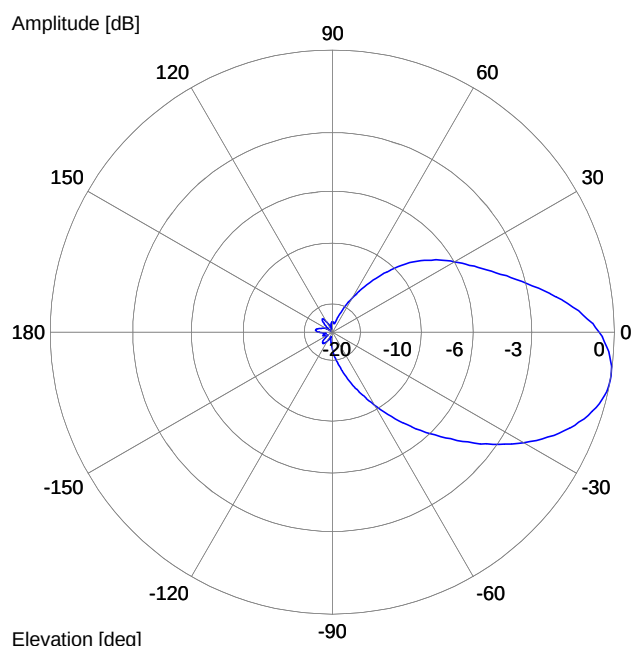
Frequency: 5900 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

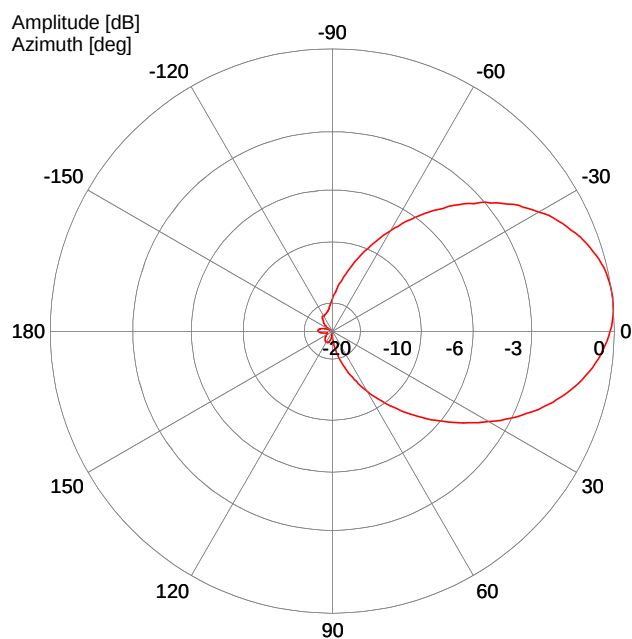
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

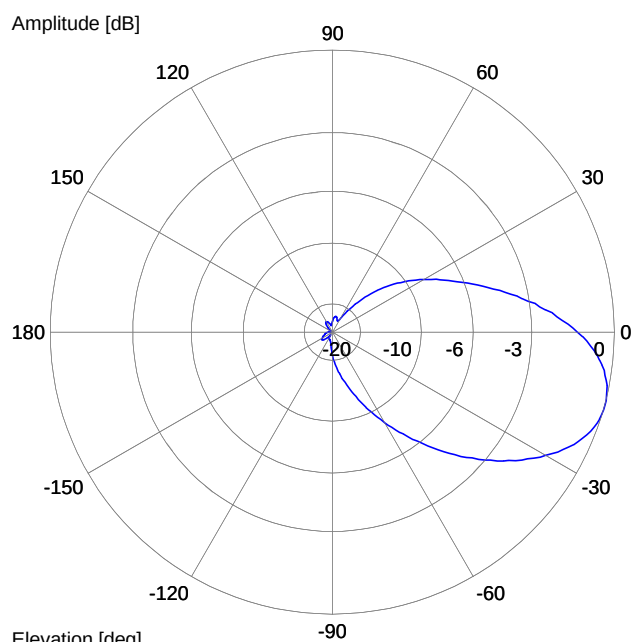
Frequency: 5900 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

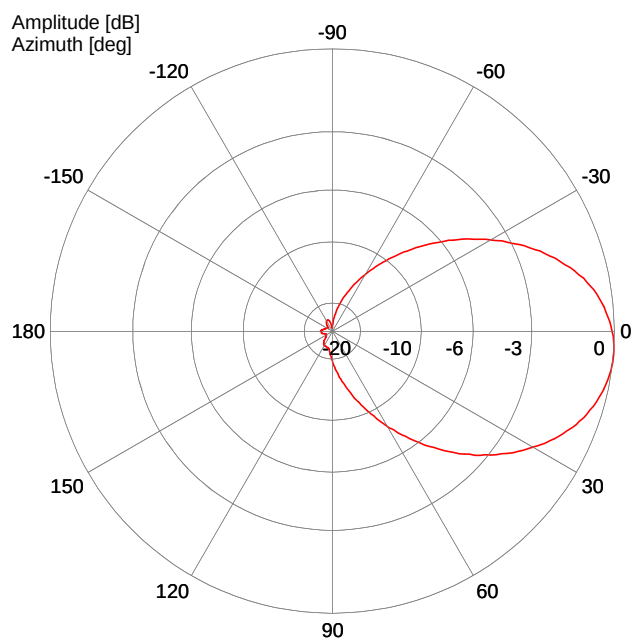
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

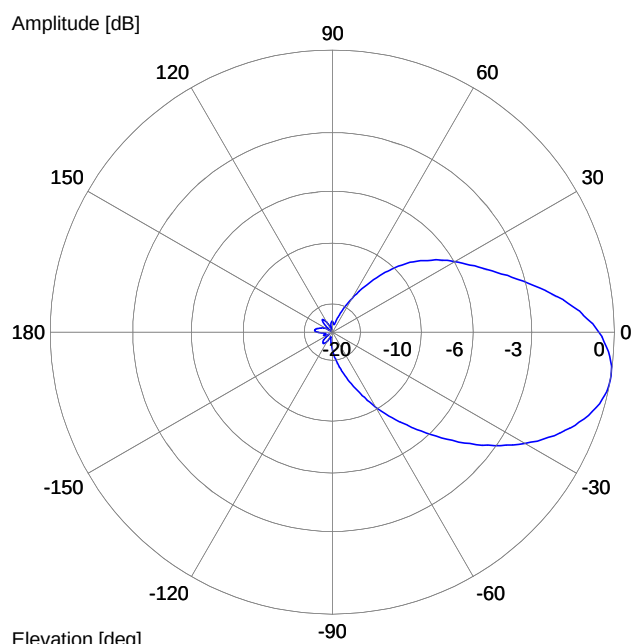
Frequency: 5925 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

**Type: 1356.17.0076**

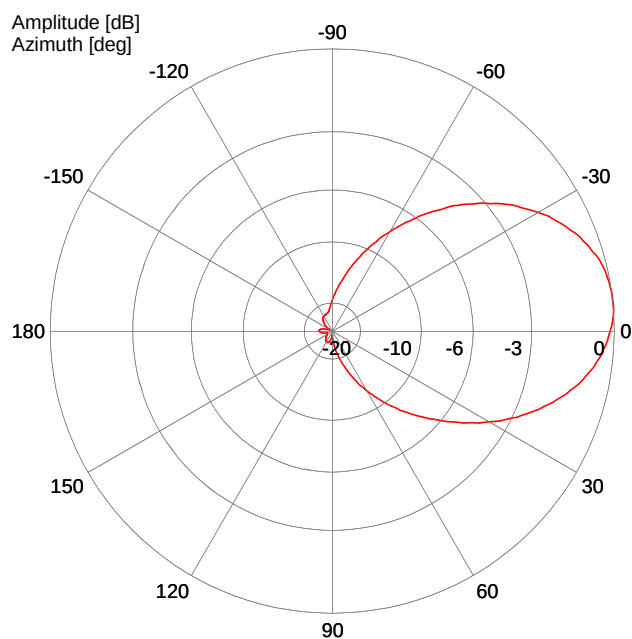
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

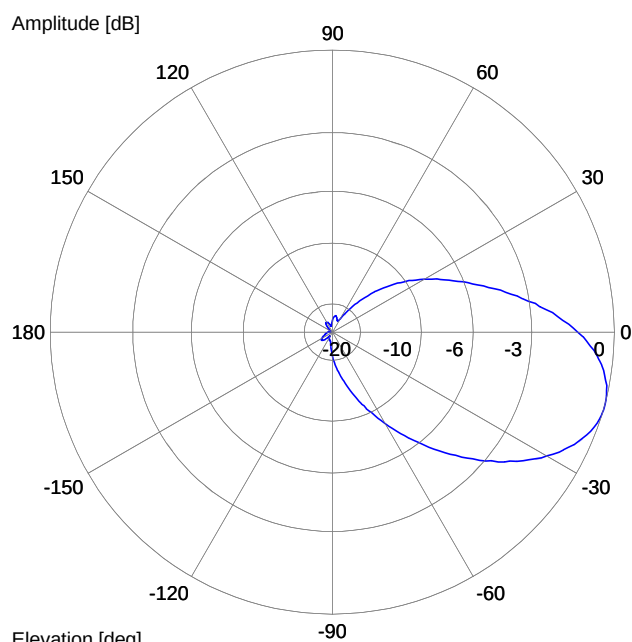
Frequency: 5925 MHz

**Radiation Pattern**



— Horizontal-Plane: Copolar

**Radiation Pattern**



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

**Type: 1356.17.0076**

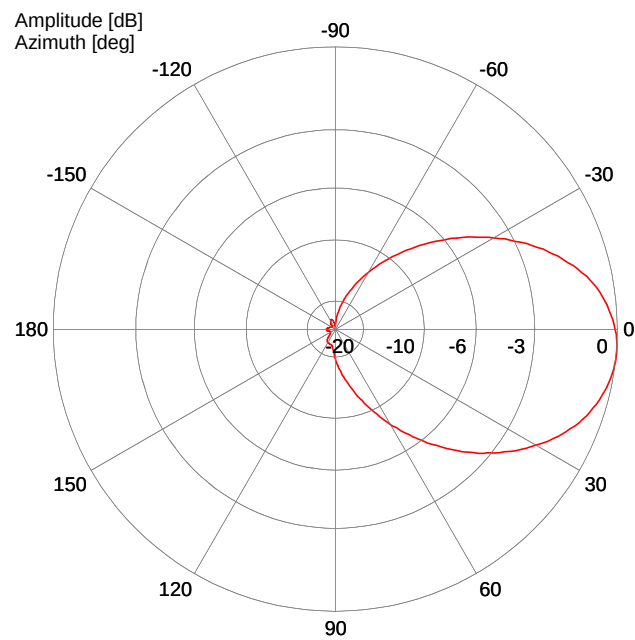
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

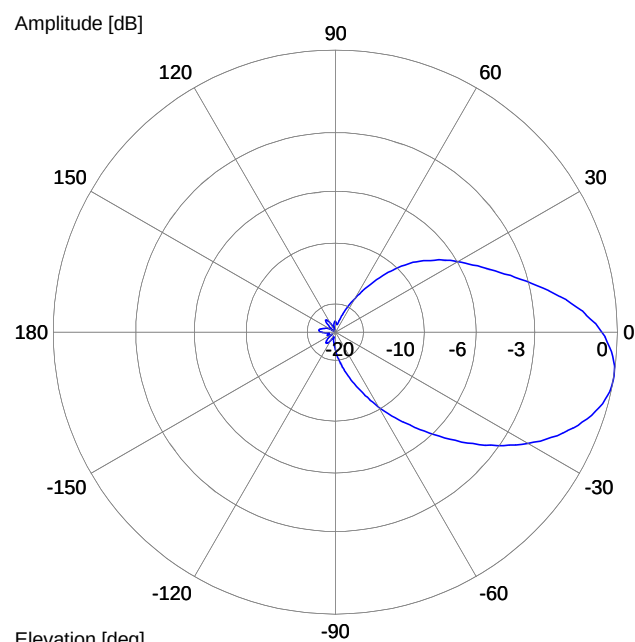
Frequency: 5935 MHz

**Radiation Pattern**



— Horizontal-Plane: Copolar

**Radiation Pattern**



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

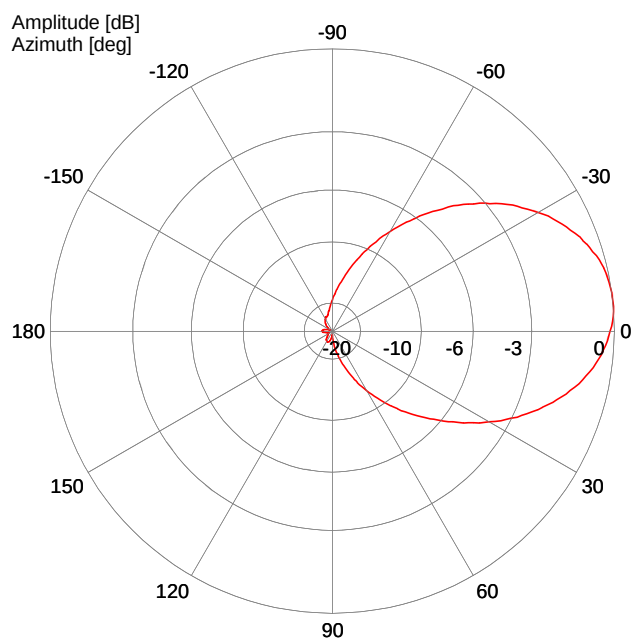
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

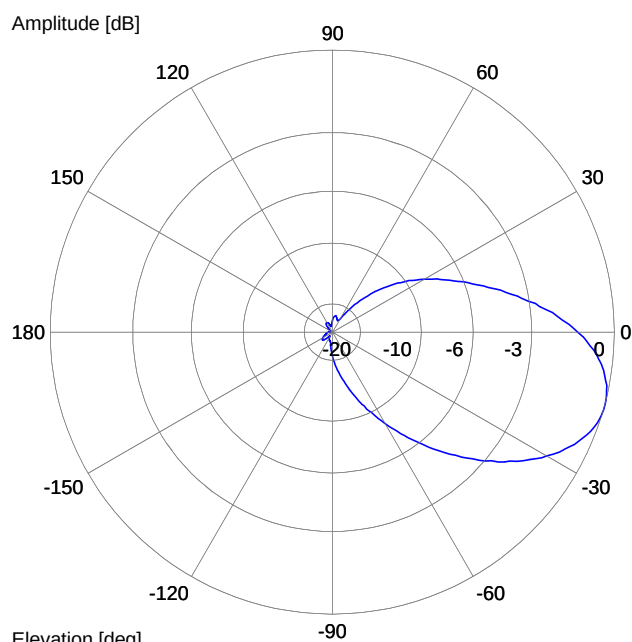
Frequency: 5935 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

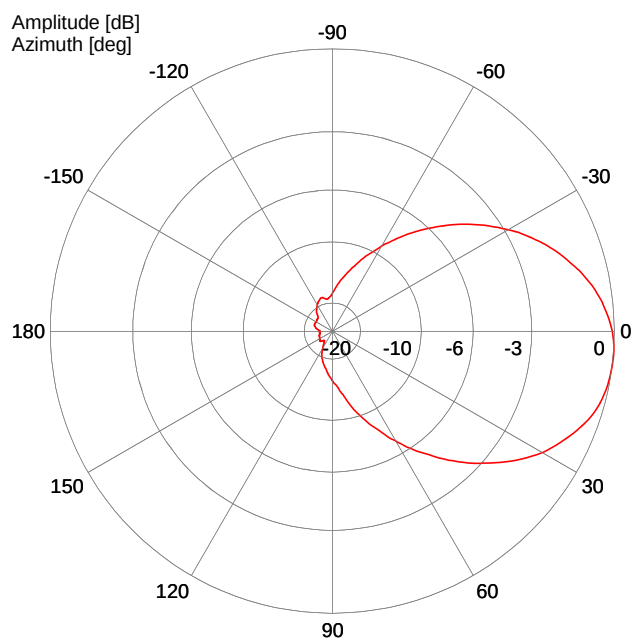
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

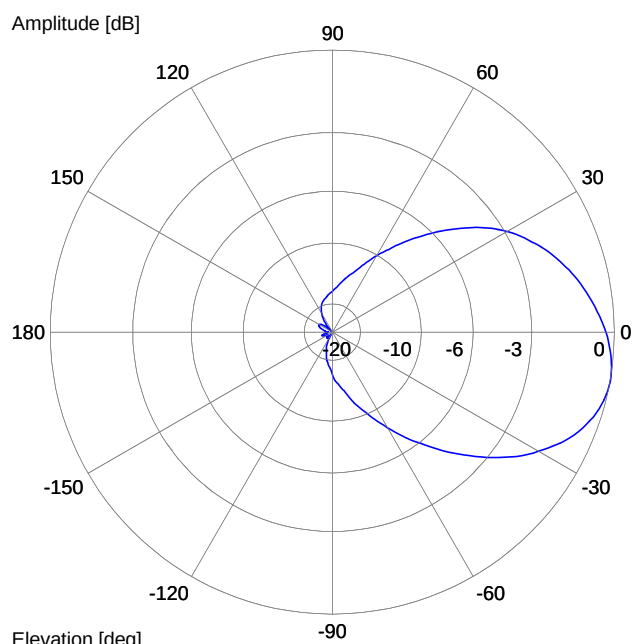
Frequency: 5150 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar





## SPA 5600/70/9/0/DS

Type: 1356.17.0076

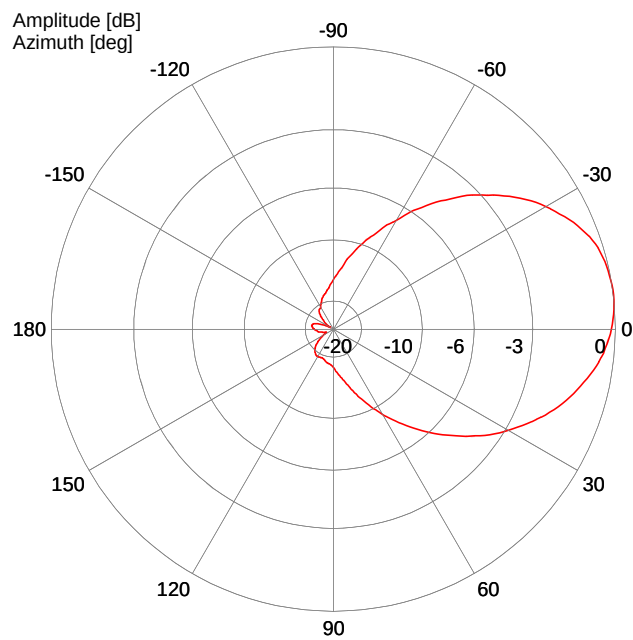
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

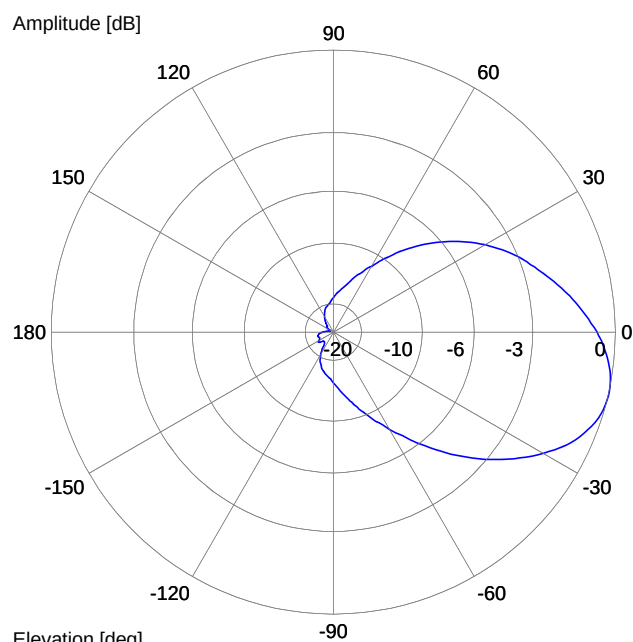
Frequency: 5150 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

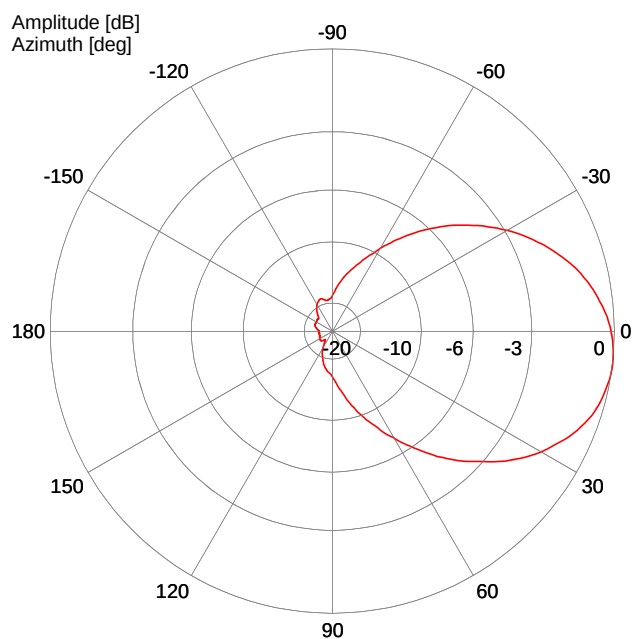
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

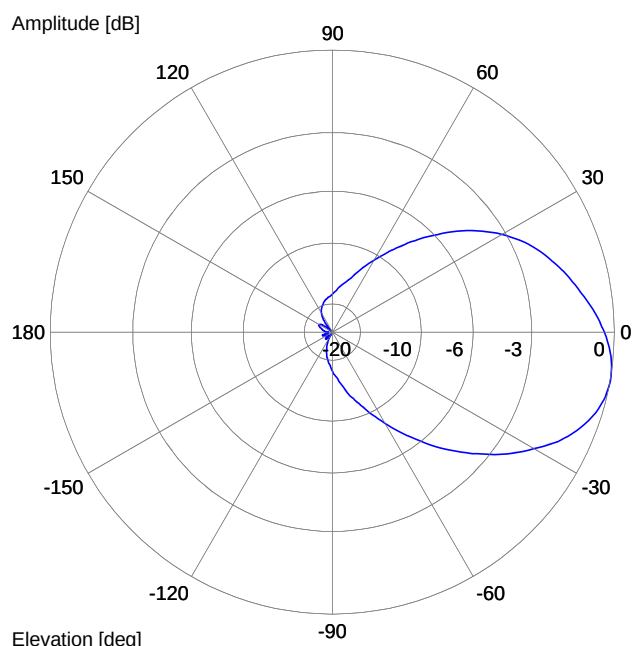
Frequency: 5200 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

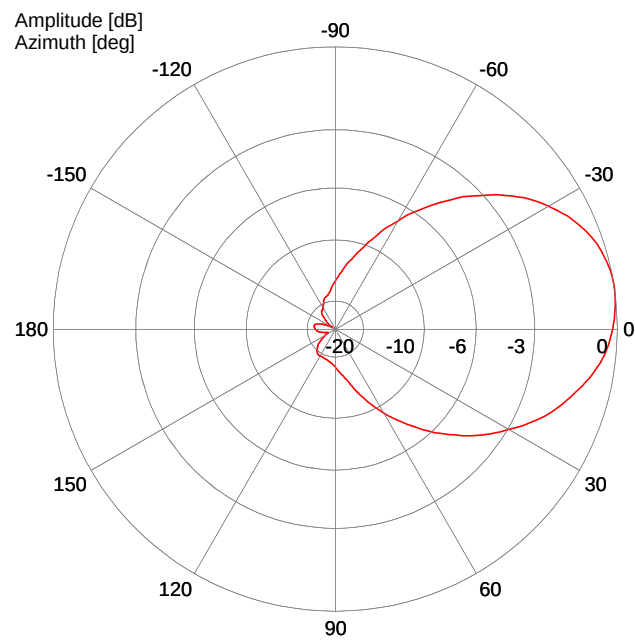
Article-No.: 84078980

Lot-No.: 4276

Port: right slant

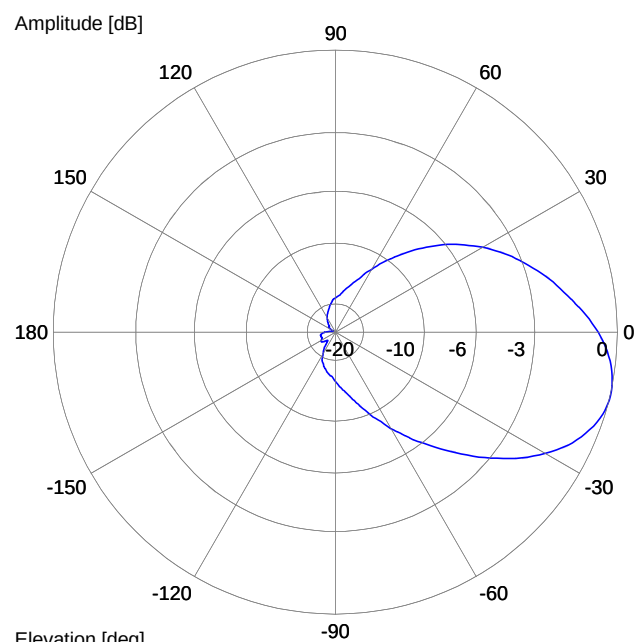
Frequency: 5200 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar



## SPA 5600/70/9/0/DS

Type: 1356.17.0076

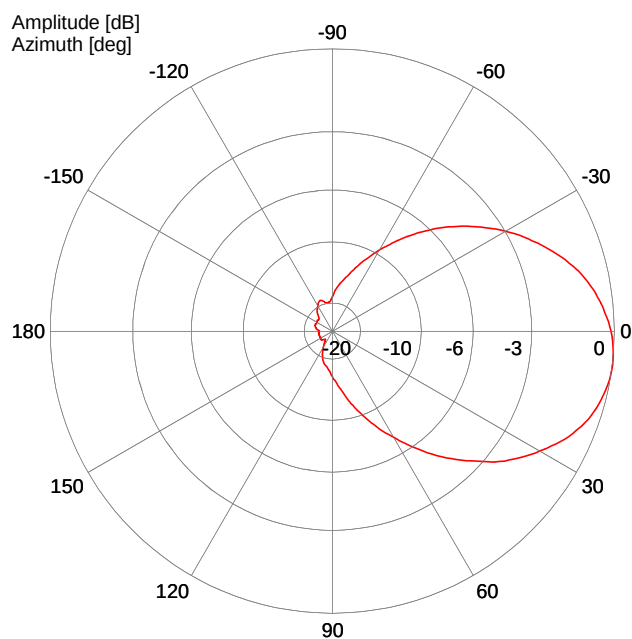
Article-No.: 84078980

Lot-No.: 4276

Port: left slant

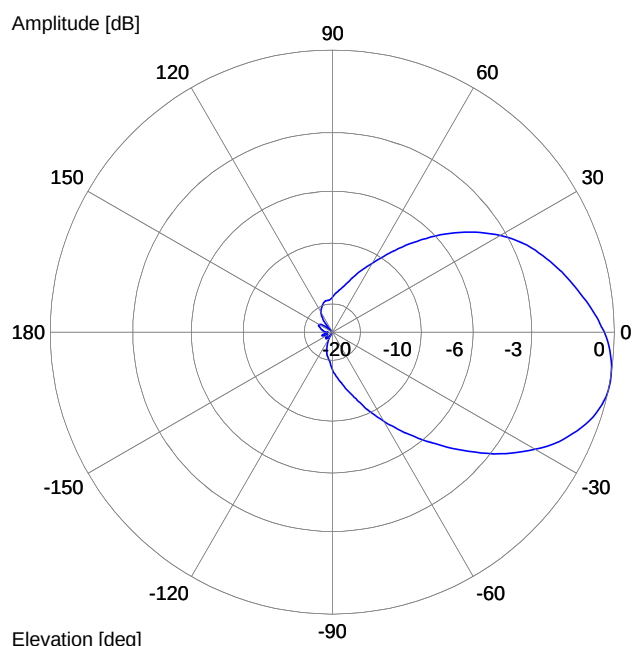
Frequency: 5250 MHz

Radiation Pattern



— Horizontal-Plane: Copolar

Radiation Pattern



— Vertical-Plane: Copolar