

**Raytron Ltd.**

*Microwave, antenna and array technology*

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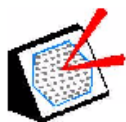
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***Specification  
for:***

***SPR Subscriber  
Antenna 5.8Ghz***

***Raytron P/N: 5803-SV  
Airspar P/N: 901-000-26***



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## **SPR subscriber Antenna 5.8GHz**

**Raytron P/N: 5803-SV**

**Antenna Type:** Flat Printed Antenna.

### **Specifications:**

#### *Electrical:*

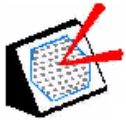
|                                                       |                                      |
|-------------------------------------------------------|--------------------------------------|
| <b>Freq. Range (Mhz)</b>                              | <b>: 5725-5875</b>                   |
| <b>Gain (dBi)</b>                                     | <b>: 16min</b>                       |
| <b>-3dB Beam Width E-Plane (Deg)</b>                  | <b>: <math>12 \pm 1^\circ</math></b> |
| <b>-3dB Beam Width H-Plane (Deg)</b>                  | <b>: <math>21 \pm 2^\circ</math></b> |
| <b>Polarization</b>                                   | <b>: Linear Vertical</b>             |
| <b>VSWR Max</b>                                       | <b>: 1:1.6</b>                       |
| <b>Impedance (<math>\Omega</math>)</b>                | <b>: 50</b>                          |
| <b>Power Handling (Watt)</b>                          | <b>: 20</b>                          |
| <b>Sidelobes Level (dB)</b>                           | <b>: -12</b>                         |
| <b>Front-to-back Ratio (dB)</b>                       | <b>: 25</b>                          |
| <b>Sidelobe in the Invisible Range (120-240) (dB)</b> | <b>: -17</b>                         |

#### *Mechanical*

|                            |                             |
|----------------------------|-----------------------------|
| <b>Dimensions WxH (mm)</b> | <b>: 116x190</b>            |
| <b>Input RF Interface</b>  | <b>: OSX male connector</b> |

#### *Environmental:*

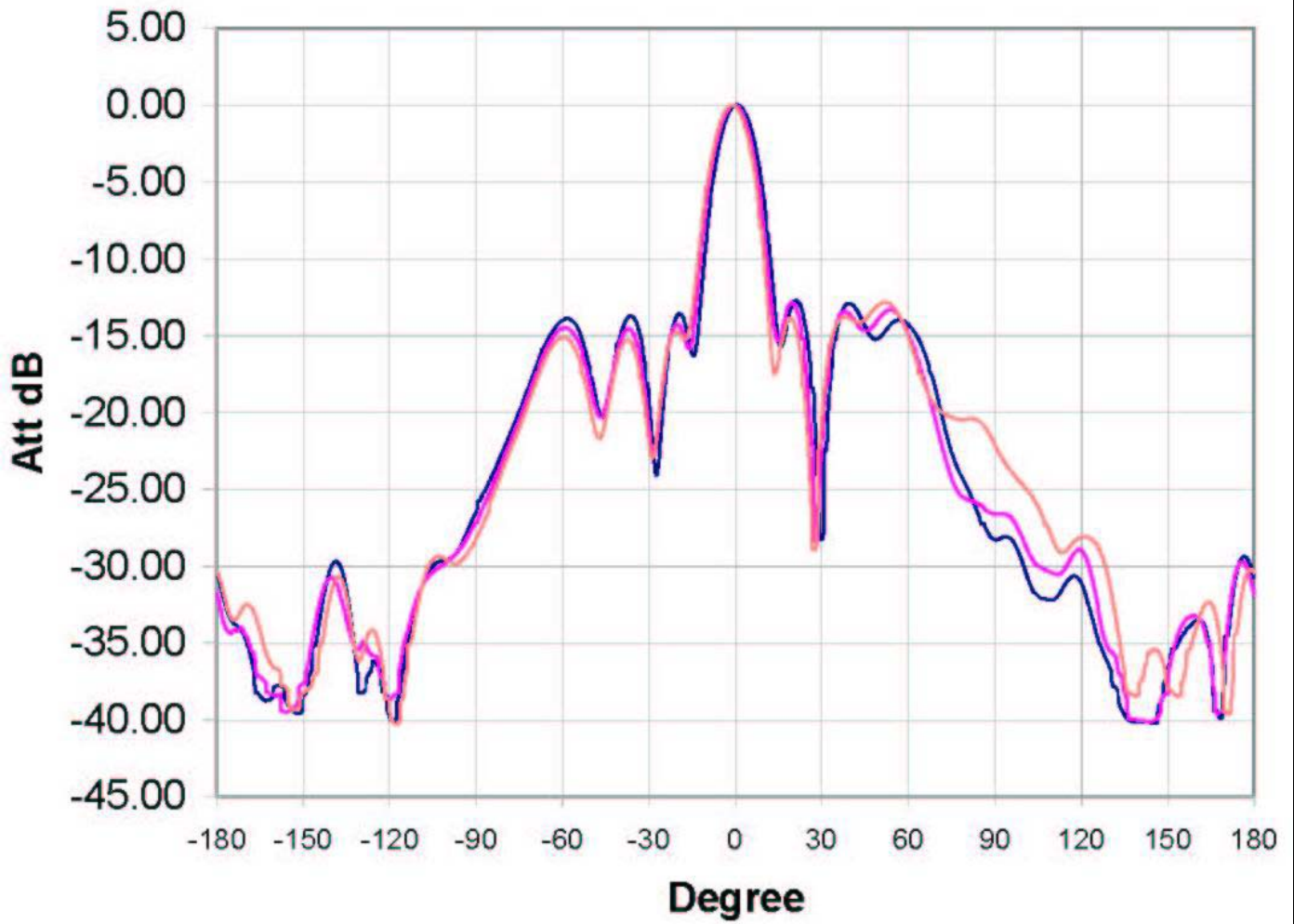
|                                  |                                              |
|----------------------------------|----------------------------------------------|
| <b>Operating Temperature</b>     | <b>: <math>-30 \div +70</math></b>           |
| <b>Lightning Protection</b>      | <b>: Radiating elements-<br/>DC grounded</b> |
| <b>Flammability UL (Std. 94)</b> | <b>: UL 94V-0</b>                            |

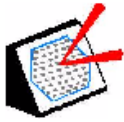


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## 5803-SV Azimuth

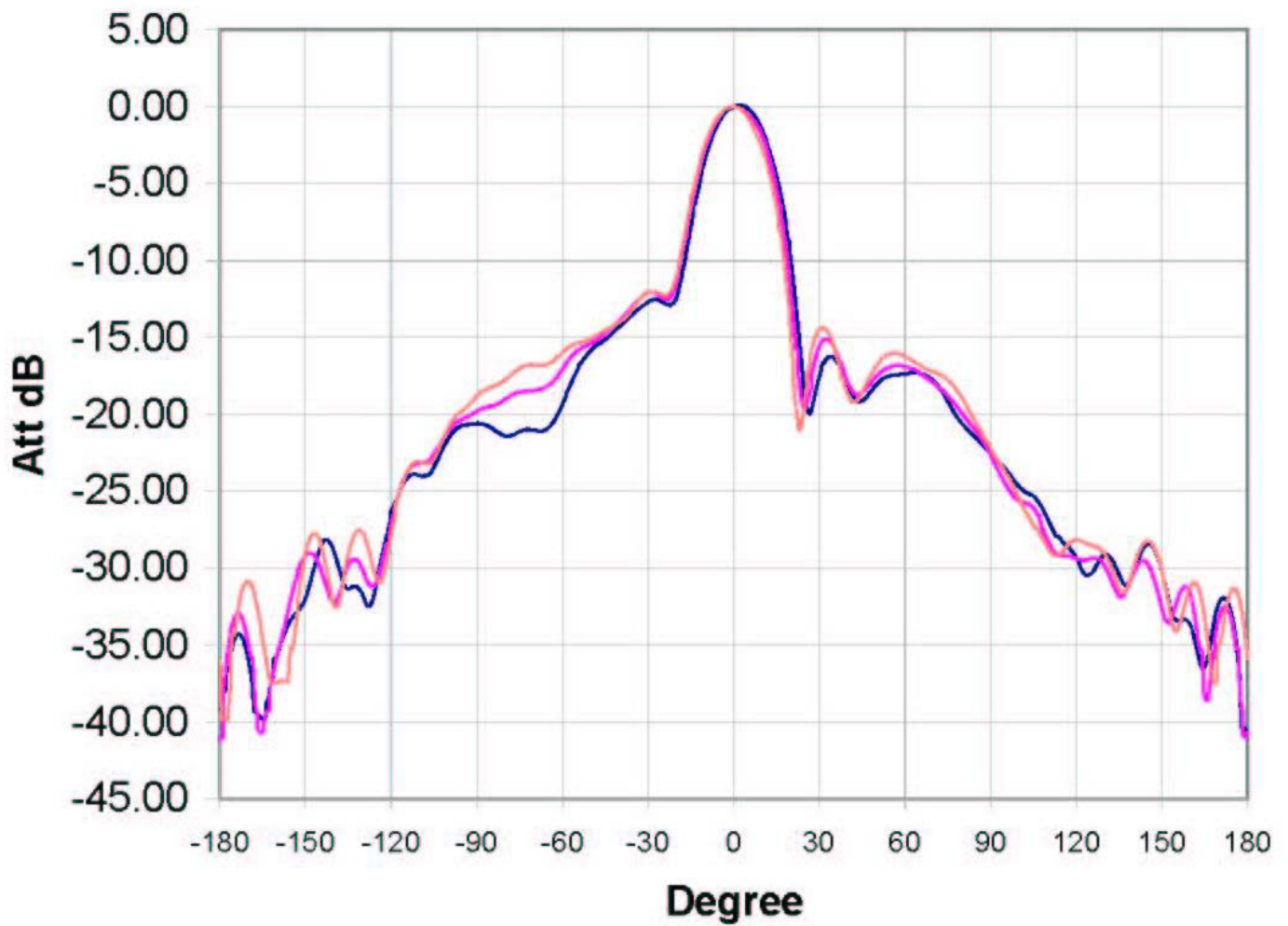




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## 5803-SV Elevation



## Comparison table

### BSR and SPR antennas characteristics

| <b>Frequency</b><br><br><b>MHz</b> | <b>Product</b> | <b>Matrix</b><br><b>(XxY)</b> | <b>Beam</b><br><b>Width</b><br><b>(HxV)</b> | <b>Gain dBi</b> | <b>Pol</b> | <b>Raytron</b><br><b>P/N</b> | <b>Notes</b> |
|------------------------------------|----------------|-------------------------------|---------------------------------------------|-----------------|------------|------------------------------|--------------|
| 5725-5875                          | BSR            | 1x4                           | 60x15                                       | 11              | Ver        | 5803BV                       | Diversity    |
|                                    | SPR            | 5x3                           | 21x12                                       | 16              | Ver        | 5803SV                       |              |