The automated VA allows the user to quickly and accurately drive to a preset or selected luminance value. For cameras with wide angle FOV’s, SPARC features our WAF (Wide Angle Field Of View) domes as optional items. A built in photopic response detector continuously monitors the source luminance. Each system comes with a uniformity mapping and National Institute of Standards and Technology (NIST) traceable spectral radiance and luminance calibrations.

Types of test
- Luminance Responsivity
- Image Validation and Correction
- Uniformity
- Flat Fielding
- Variable CCT

Ideal for calibrating
- CCD and CMOS cameras
- Small area remote sensing devices
- Electronic imaging devices
- Medical endoscopes
- Ambient light sensors
- Security cameras

A 6 inch diameter integrating sphere with a 2 inch exit port, precision automated variable attenuator, and built in photopic response photodetector allows for continuous adjustability and good dynamic range up to 80,000 cd/m².
Specifications and Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>SPARC-A06L</th>
<th>SPARC-A06F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number:</td>
<td>AA-01578-001</td>
<td>AA-01578-000</td>
</tr>
</tbody>
</table>

**System Specifications**

- **Sphere Diameter: (ID)**: 6 inch (5.3 inches) 6 inch
- **Exit Port Diameter**: 2 inch 2 inch
- **Sphere Coating**: Spectralon® Spectraflect®
- **Estimated Uniformity*: Spatial (Angular 10°)**: 98% (95%) 98% (95%)
- **Dimensions**: (approximate) 39 cm x 32 cm x 30 cm (L x W x H) 39 cm x 32 cm x 30 cm (L x W x H)
- **Weight**: (approximate) 14 Kg 14 Kg

**Estimated QTH Performance**

<table>
<thead>
<tr>
<th></th>
<th>SPARC-A06L</th>
<th>SPARC-A06F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Correlated Color Temperature: CCT</td>
<td>2856K +/- 50K</td>
<td>3000K +/- 50K</td>
</tr>
<tr>
<td>Expected Maximum Illuminance at Port: Lux (ft-cd)</td>
<td>126,000 (11,700)</td>
<td>204,300 (18,980)</td>
</tr>
<tr>
<td>Expected Maximum Luminance Output: cd/m2 (IL)</td>
<td>40,000 (12,000)</td>
<td>65,000 (19,000)</td>
</tr>
<tr>
<td>Peak Radiance: W/m2 sr um @0.95um</td>
<td>1,440</td>
<td>1,980</td>
</tr>
<tr>
<td>Typical Lamp Lifetime: hrs</td>
<td>&gt;500</td>
<td>&gt;500</td>
</tr>
</tbody>
</table>

**System Components**

- **External QTH Lamp**: Yes Yes
- **Monitor Detector**: SD-S1, Silicon SD-S1, Silicon
- **Detector Filter**: Photopic Photopic
- **System Software**: Yes Yes

**Automated Variable Attenuator**

<table>
<thead>
<tr>
<th></th>
<th>SPARC-A06L</th>
<th>SPARC-A06F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Steps in Attenuator Range:</td>
<td>1.20E+04</td>
<td>1.20E+04</td>
</tr>
<tr>
<td>Dynamic Range/Bits/dB - Full Range of System:</td>
<td>4.85E+04/15/93</td>
<td>4.85E+04/15/93</td>
</tr>
</tbody>
</table>

**Standard System Calibrations (NIST traceable)**

- **Luminance**: Yes Yes
- **Correlated Color Temp**: Yes Yes
  
  *(All lamps matched & w/VA position)*
- **QTH Spectral Radiance: (350 - 2400 nm)**: Yes Yes
- **Exit Port Spatial Uniformity**: Yes Yes
- **Exit Port Angular Uniformity**: Yes Yes
- **Recommended Re-Lamp and Calibration: (QTH)**: Annually Annually

**Optional Accessories**

- 1.5 inch port reducer - This option will increase system luminance levels.
- WAF dome for wide angle field of view cameras

*Preliminary specifications subject to change pending testing.*