VL5B™ Wash Luminaire

The compact, lightweight VARI-LITE® VL5B™ wash luminaire uses a 3200°K tungsten halogen lamp and cold mirror reflector that removes heat from the light beam, eliminates fans and associated fan noise, and reduces heat on stage.

The innovative DICHRO-TUNE™ radial color changer with enhanced dichroic filters produces smooth, full color spectrum crossfades with the fullest range of unsaturated colors and tints.

Interchangeable front lenses work with the internal diffusion mechanism to provide a wide range of beam control options.

The VL5B luminaire can be controlled by PRG consoles or a wide variety of DMX512 consoles.

Dimensions

POSITIONING: 
Can be mounted and operated in any orientation.

SPACING: 
Hangs on 18 inch (460 mm) centers.

WEIGHT: 
25 lbs (12 kg)

Please see diagram on back

Ordering Information

SOURCE: 
Philips 1000W tungsten lamp, available in 120 VAC, 230 VAC or 100 VAC, 3200 K.
Philips 1200W tungsten lamp, 120 VAC, 3200 K.

POWER & DIMMING: 
1000W lamp is available in world-wide voltages permitting the use of locally available AC power and dimmers. 1200W lamp is available in 120 VAC, and can be used world-wide with a C3™ dimmer module installed in the Series 300™ Modular Power Distribution Rack. Luminaires are powered through a Smart Repeater™ or Smart Repeater™ Plus processing unit. *

REFLECTOR: 
8-inch glass, dichroic cold-mirror reflector.

COOLING: 
Convection cooled.

CONTROL: 
Compatible with all PRG consoles and a wide variety of DMX512 consoles.

POSITIONING: 
Can be mounted and operated in any orientation.

SPACING: 
Hangs on 18 inch (460 mm) centers.

WEIGHT: 
25 lbs (12 kg)

PROGRAMMABLE FUNCTIONS

COLOR: 
Enhanced DICHRO-TUNE™ crossfadable dichroic colors feature independent cyan, magenta and amber color control. Smooth, timed color crossfades can occur in as little as 0.7 second.

INTENSITY: 
The incandescent source is powered by conventional dimmers or C3 dimmer modules through the Smart Repeaterprocessing unit.

BEAM SIZE CONTROL: 
A selection of easily interchangeable front lenses work with the internal diffusing mechanism to provide a variety of beam sizes and shapes.

BEAM DIFFUSION: 
Textured diffusion panels intercept the beam, providing a continuous, time variable diffusion range for each of the available lenses.

PAN & TILT: 
Smooth, time controlled continuous motion by way of a digital servo system.

MAX VELOCITY: 
220° per second.

ACCURACY: 
0.3° resolution.
VL5B™ Wash Luminaire Specifications

The unit shall be an integrally designed, remote controlled motorized wash luminaire. The housing and yoke shall be constructed of aluminum alloy and steel for lightweight strength. The front nose ring and rear housing shall be hinged and latched, providing ease of access to the lamp and lens for replacement. Two lamp types shall be available; 1000 or 1200W tungsten. Five easily removable lenses shall be available; clear, stipple, 8-row lenticular, 10-row lenticular, and 12-row lenticular.

Two enclosed, high torque servomotors shall be provided to permit movement of the head on a horizontal plane of 360° and on a vertical plane of 270°. Control cabling shall be run internally to prevent tangling. The low voltage motors shall be belt driven, providing positional resolution and repeatability within 0.3° on either axis. Manual override under power shall result in no harm to the drive mechanism.

Each unit shall be equipped with an on-board microprocessor providing diagnostic and self-calibration functions. In the event the luminaire encounters any physical obstruction during calibration, the pan and tilt motors will automatically be disabled preventing damage to the mechanisms.

The unit shall have three color changers holding a minimum of 16 frames of dichroic media: cyan, amber, and magenta, providing full spectrum color crossfades, with a wide range in the unsaturated colors. Three motors shall provide independent drive regardless of direction of movement. Positional accuracy of the dichroic filters in reference to the beam shall be ensured through specialized software controlling the motors. The color changers shall be capable of movement from fully opened to fully closed in less than 0.7 second.

Control cable to luminaire shall provide both digital control signal and power from the Smart Repeater unit. A safety cable shall be provided with unit. A floor stand and an optional top hat shall be available. Exterior finish shall be a black epoxy coat. Total weight shall not exceed 25 lbs (12 kg). The unit shall be UL and C-UL listed and CE-marked.

Photometric Data

**NOTE:** Refer to the VL5 Feature Comparison document for additional Photometric charts using other lamp types.

<table>
<thead>
<tr>
<th>LENS TYPE</th>
<th>DIFFUSION</th>
<th>CANDELA (cd) **</th>
<th>BEAM ANGLE (degrees)</th>
<th>BEAM DIAMETER (Tn) *</th>
<th>FIELD ANGLE (degrees)</th>
<th>FIELD DIAMETER (Tn) *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear (Very Narrow)</td>
<td>None</td>
<td>516,000</td>
<td>6 x 6</td>
<td>.10</td>
<td>11 x 11</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>Full</td>
<td>34,650</td>
<td>19 x 19</td>
<td>.33</td>
<td>41 x 41</td>
<td>.74</td>
</tr>
<tr>
<td>Light Stipple (Narrow Spot)</td>
<td>None</td>
<td>330,400</td>
<td>8 x 8</td>
<td>.13</td>
<td>15 x 15</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Full</td>
<td>33,516</td>
<td>20 x 20</td>
<td>.35</td>
<td>42 x 42</td>
<td>.77</td>
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<tr>
<td>8-Row Lenticular (Narrow Flood)</td>
<td>None</td>
<td>114,733</td>
<td>21 x 8</td>
<td>.37 / .35</td>
<td>31 x 18</td>
<td>.55 / .32</td>
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<tr>
<td></td>
<td>Full</td>
<td>26,195</td>
<td>27 x 21</td>
<td>.48 / .37</td>
<td>46 x 40</td>
<td>.85 / .73</td>
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<tr>
<td>10-Row Lenticular (Medium Flood)</td>
<td>None</td>
<td>111,720</td>
<td>19 x 11</td>
<td>.33 / .19</td>
<td>34 x 19</td>
<td>.61 / .33</td>
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<tr>
<td></td>
<td>Full</td>
<td>25,920</td>
<td>25 x 20</td>
<td>.44 / .35</td>
<td>51 x 43</td>
<td>.95 / .79</td>
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<tr>
<td>12-Row Lenticular (Wide Flood)</td>
<td>None</td>
<td>30,600</td>
<td>44 x 19</td>
<td>.80 / .33</td>
<td>61 x 29</td>
<td>1.18 / .52</td>
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<tr>
<td></td>
<td>Full</td>
<td>14,336</td>
<td>41 x 24</td>
<td>.74 / .42</td>
<td>72 x 48</td>
<td>1.45 / .89</td>
</tr>
</tbody>
</table>

* Multiply throw distance by Tn to determine coverage.
** To calculate center beam illuminance (I) at a specific distance (D): \[ I = \frac{cd}{(D)^2} \]

If (D) is in feet, (I) is in foot candles / If (D) is in meters, (I) is in lux

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Diagram

![Diagram Image]