

# VL5™

## w a s h l u m i n a i r e



The compact, lightweight VARI\*LITE® VL5™ 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 in the saturated colors.

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

The VL5 luminaire can be controlled from any VARI\*LITE console, or can be controlled from a wide variety of DMX consoles.

### Programmable Functions

COLOR:	Enhanced DICHRO*TUNE cross-fadable dichroic colors feature independent cyan, magenta and amber color control. Smooth, timed color crossfades can occur in as little as 0.7 second.
INTENSITY CONTROL:	The incandescent source is powered by conventional dimmers or C3 dimmer modules through the Smart Repeater processing 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 AND TILT:	Smooth, time controlled continuous motion by way of a digital servo system.
RANGE:	Pan - 360°, Tilt - 270°.
MAX VELOCITY:	220° per second.
ACCURACY:	0.3° resolution.

### Description

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 AND DIMMING REQUIREMENTS:	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 worldwide with the C3™ dimmer module. Luminaires are powered through the Smart Repeater™ processing unit.
REFLECTOR:	8 in. glass dichroic cold-mirror reflector.
OPERATIONAL TEMPERATURE:	-20° to 120°F (-29° to 49°C).
COOLING:	Convection cooled.
CONTROL:	Completely compatible with either the VARI*LITE automated lighting system, featuring the Artisan®Plus and mini-Artisan®2 control consoles, or by consoles with DMX-512 output.
MOUNTING POSITION:	The VL5 wash luminaire can be mounted and operated in any orientation.
SPACING:	Hangs on 18 in. (460 mm) centers.
WEIGHT:	25 lbs (12 kg).

### Accessories

71.2526.0100	1000W 100 VAC Tungsten Lamp
71.2526.0120	1000W 120 VAC Tungsten Lamp
71.2526.0230	1000W 230 VAC Tungsten Lamp
71.2529.0120	1200W 120 VAC Tungsten Lamp
22.9634.0206	Top Hat/Gel Holder with Rings
22.9634.0207	Top Hat/Gel Holder without Rings
42.5002.0004	Clear Lens
42.5002.0005	Stipple Lens
42.5002.0006	8-Row Lenticular Lens
42.5002.0007	10-Row Lenticular Lens
42.5002.0008	12-Row Lenticular Lens
22.9634.0217	Series 300™ Truss Hook
22.9634.0145	Series 300 Safety Cable
22.9634.0161	Series 300 Floor Stand
25.7042.0006	6 ft. Shielded Series 300 Lamp Cable
25.7042.0012	12 ft. Shielded Series 300 Lamp Cable
25.7042.0020	20 ft. Shielded Series 300 Lamp Cable
25.7042.0050	50 ft. Shielded Series 300 Lamp Cable
25.7042.0100	100 ft. Shielded Series 300 Lamp Cable
25.7042.0XXX	Custom Length Shielded Series 300 Lamp Cable*
	*Cannot exceed 300 ft. in length.
20.9625.0018	Series 300 Molded Plastic Six Luminaire Case
20.9625.0024	Series 300 Molded Plastic Work Trunk
22.5011.0056	Spare Components Set
22.5011.0057	Spare Assemblies Set

# VL5 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.

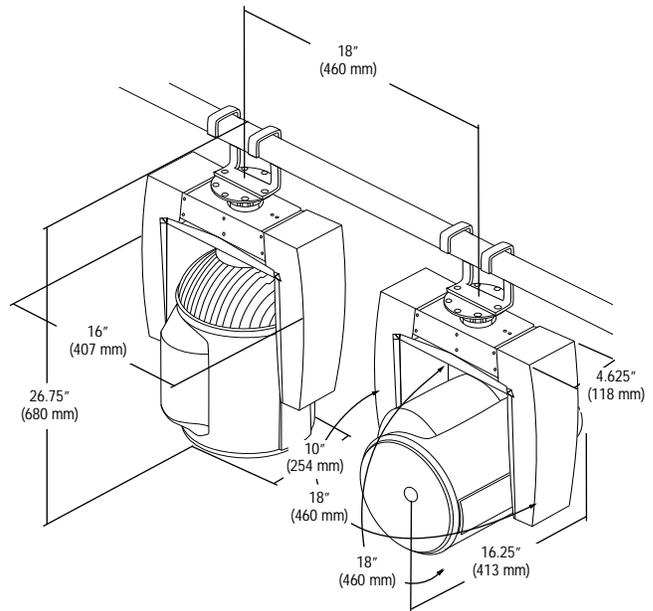
Two enclosed, high torque servomotors shall be provided to permit movement of the head on a horizontal plane of 360° and on a vertical plane of 270°. Control cabling shall be run internally to prevent tangling. The low voltage motors shall be belt driven, providing positional resolution and repeatability 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 cross-fades, with a wide range in the saturated 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.

The unit shall contain one diffuser mechanism holding a minimum of 16 glass diffuser panels that intercept the beam and provide continuous time variable diffusion range for each of the available lenses. The diffuser mechanism shall be capable of movement from no diffusion to full diffusion 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. 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 (data for other sources is also available)

VL5 Wash Luminaire - 1200W 120V lamp						
LENS	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN <sup>1</sup>	FULL FIELD ANGLE (DEGREES)	FIELD DIAMETER TN <sup>1</sup>
Clear (Very Narrow)	None	516,000	6 x 6	.10	11 x 11	.19
	Full	34,650	19 x 19	.33	41 x 41	.74
Light Stipple (Narrow Spot)	None	330,400	8 x 8	.13	15 x 15	.26
	Full	33,516	20 x 20	.35	42 x 42	.77
8-Row Lenticular (Narrow Flood)	None	114,733	21 x 8	.37 / .35	31 x 18	.55 / .32
	Full	26,195	27 x 21	.48 / .37	46 x 40	.85 / .73
10-Row Lenticular (Medium Flood)	None	111,720	19 x 11	.33 / .19	34 x 19	.61 / .33
	Full	25,920	25 x 20	.44 / .35	51 x 43	.95 / .79
12-Row Lenticular (Wide Flood)	None	30,600	44 x 19	.80 / .33	61 x 29	1.18 / .52
	Full	14,336	41 x 24	.74 / .42	72 x 48	1.45 / .89

<sup>1</sup> Multiply distance by Tn to determine coverage.

To calculate Illuminance (I) at a specific distance (D):  $I = \frac{cd}{D^2} (\cos \theta)$

# VL5™ & VL5B™

## Luminaire photometric data

1000W 230V lamp						
LENS	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN <sup>1</sup>	FIELD ANGLE (DEGREES)	FIELD DIAMETER TN <sup>1</sup>
Clear (Very Narrow)	None	272,000	6 x 6	.10	12 x 12	.21
	Full	22,050	20 x 20	.35	41 x 41	.74
Light Stipple (Narrow Spot)	None	186,800	8 x 8	.13	16 x 16	.28
	Full	21,364	21 x 21	.37	42 x 42	.77
8-Row Lenticular (Narrow Flood)	None	73,695	22 x 9	.39 / .16	32 x 18	.57 / .32
	Full	16,416	27 x 22	.48 / .39	46 x 41	.85 / .74
10-Row Lenticular (Medium Flood)	None	68,600	20 x 10	.35 / .17	34 x 19	.61 / .33
	Full	16,416	27 x 22	.48 / .39	51 x 43	.95 / .79
12-Row Lenticular (Wide Flood)	None	19,400	46 x 20	.85 / .35	63 x 30	1.22 / .54
	Full	8,704	44 x 26	.80 / .46	74 x 51	1.51 / .95

1000W 100V lamp						
LENS	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN <sup>1</sup>	FIELD ANGLE (DEGREES)	FIELD DIAMETER TN <sup>1</sup>
Clear (Very Narrow)	None	512,000	5 x 5	.08	11 x 11	.19
	Full	27,900	19 x 19	.33	42 x 42	.77
Light Stipple (Narrow Spot)	None	326,800	7 x 7	.12	14 x 14	.24
	Full	26,656	21 x 21	.37	43 x 43	.79
8-Row Lenticular (Narrow Flood)	None	97,971	21 x 8	.37 / .13	30 x 16	.54 / .28
	Full	21,125	26 x 21	.46 / .37	48 x 44	.89 / .81
10-Row Lenticular (Medium Flood)	None	90,160	19 x 10	.33 / .17	33 x 19	.59 / .33
	Full	20,592	27 x 20	.48 / .35	52 x 44	.97 / .8
12-Row Lenticular (Wide Flood)	None	25,700	44 x 19	.8 / .33	60 x 27	1.15 / .48
	Full	11,520	42 x 24	.77 / .42	71 x 49	1.43 / .91

<sup>1</sup> Multiply distance by Tn to determine coverage.

To calculate Illuminance (I) at a specific distance (D):  $I = \frac{cd}{D^2} (\cos \theta)$

# VL5 & VL5B photometric data

1000W 120V lamp						
LENS	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN <sup>1</sup>	FIELD ANGLE (DEGREES)	FIELD DIAMETER TN <sup>1</sup>
Clear (Very Narrow)	None	516,000	6 x 6	.10	11 x 11	.19
	Full	27,675	19 x 19	.33	41 x 41	.74
Light Stipple (Narrow Spot)	None	318,000	8 x 8	.13	15 x 15	.25
	Full	26,852	20 x 20	.35	42 x 42	.77
8-Row Lenticular (Narrow Flood)	None	96,815	24 x 10	.42 / .17	31 x 17	.55 / .30
	Full	20,956	27 x 20	.48 / .35	47 x 43	.87 / .79
10-Row Lenticular (Medium Flood)	None	89,572	19 x 11	.33 / .19	32 x 19	.57 / .33
	Full	21,600	25 x 21	.44 / .37	50 x 43	.93 / .79
12-Row Lenticular (Wide Flood)	None	25,300	44 x 19	.80 / .33	61 x 28	1.15 / .50
	Full	11,584	41 x 24	.74 / .42	72 x 49	1.45 / .91

1200W 120V lamp						
LENS	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN <sup>1</sup>	FULL FIELD ANGLE (DEGREES)	FIELD DIAMETER TN <sup>1</sup>
Clear (Very Narrow)	None	516,000	6 x 6	.10	11 x 11	.19
	Full	34,650	19 x 19	.33	41 x 41	.74
Light Stipple (Narrow Spot)	None	330,400	8 x 8	.13	15 x 15	.26
	Full	33,516	20 x 20	.35	42 x 42	.77
8-Row Lenticular (Narrow Flood)	None	114,733	21 x 8	.37 / .35	31 x 18	.55 / .32
	Full	26,195	27 x 21	.48 / .37	46 x 40	.85 / .73
10-Row Lenticular (Medium Flood)	None	111,720	19 x 11	.33 / .19	34 x 19	.61 / .33
	Full	25,920	25 x 20	.44 / .35	51 x 43	.95 / .79
12-Row Lenticular (Wide Flood)	None	30,600	44 x 19	.80 / .33	61 x 29	1.18 / .52
	Full	14,336	41 x 24	.74 / .42	72 x 48	1.45 / .89

<sup>1</sup> Multiply distance by Tn to determine coverage.

To calculate Illuminance (I) at a specific distance (D):  $I = \frac{cd}{D^2} (\cos \theta)$