

VL5Arc™ Wash Luminaire

The compact, lightweight VARI*LITE® VL5Arc™ wash luminaire uses a 575W, 5600°K arc lamp operating at 625W 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. An internal douser provides intensity control.

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

The VL5Arc 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:

29 lbs (14 kg)

Please see diagram on back

Ordering Information

20.9647.0001	VL5Arc Wash Luminaire
71.2528.0575	575W Arc Lamp
22.9634.0206	Top Hat/Gel Holder with Rings
22.9634.0207	Top Hat/Gel Holder without Rings
22.9634.0217	Series 300 Truss Hook
22.9634.0145	Series 300 Safety Cable
22.9634.0161	Series 300 Floor Stand
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
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*
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

* Cannot exceed 300 ft. in length.

Features

SOURCE:

575W arc lamp operating at 625W, 5600°K integrated color temperature, 90 CRI.

POWER & DIMMING:

Lamps are powered by an APS6™ module installed in the Series 300™ Modular Power Distribution Rack. The APS6 module operates at 85 to 265 VAC, 50/60 Hz, requiring 5 to 10A, depending on line voltage.

Luminaires are powered through a Smart Repeater™ or Smart Repeater™ Plus processing unit.

REFLECTOR:

8-inch glass, dichroic cold-mirror reflector.

OPERATING TEMP:

20° to 120°F (-29° to 49°C).

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:

29 lbs (14 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 CONTROL:

An internal douser provides intensity control.

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.

RANGE:

Pan - 360°, Tilt - 270°

MAX VELOCITY:

220° per second.

ACCURACY:

0.3° resolution.

VL5Arc™ 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. The lamp shall be a 575W arc lamp that shall run at 625 watts and operate at a color temperature of 5600°K. 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.

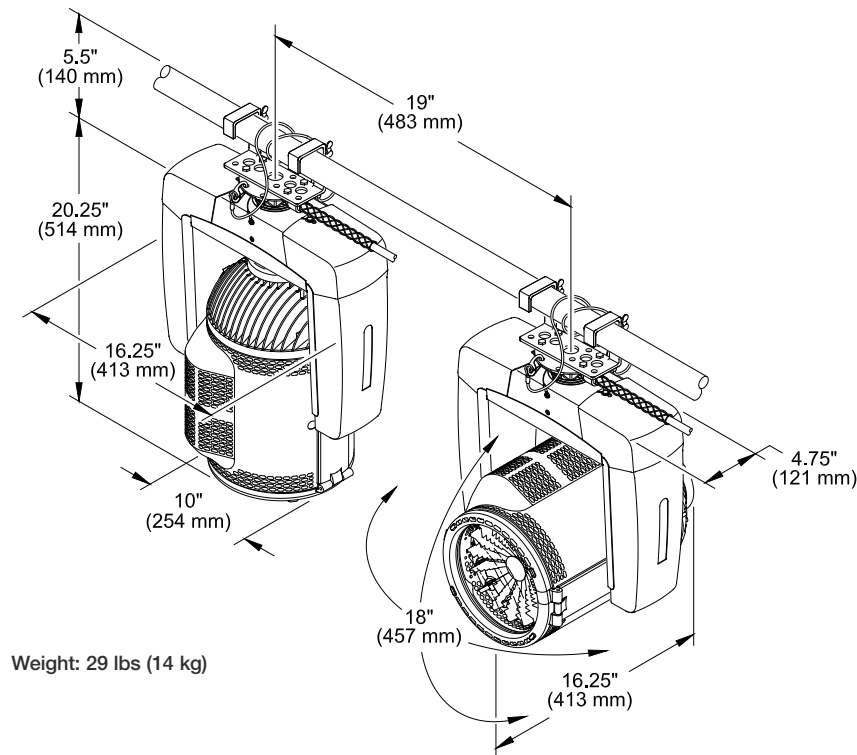
The unit shall have three color changers holding a minimum of 16 frames of dichroic media of a typical color set: magenta, amber, and cyan. Three motors shall provide independent drive regardless of direction of movement. Positional accuracy of the dichroic filters in reference to the beam shall be ensured 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 seconds.

The unit shall contain a dimmer mechanism holding a minimum of 16 black aluminum dimmer panels that intercept the beam, providing a continuously variable dimmer range. The dimmer mechanism shall be capable of movement from fully open to fully closed in less than 0.7 seconds.

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 29 lbs (14 kg).

Dimensions



Photometric Data

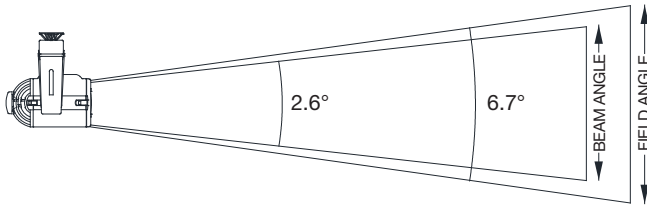
VL5Arc Wash Luminaire - 575W MSR lamp (operating at 625 watts)						
LENS TYPE	DIFFUSION (cd)	CANDELA (degrees)	BEAM ANGLE TN ¹	BEAM DIAMETER (degrees)	FULL FIELD ANGLE TN ¹	FIELD DIAMETER
Clear (Very Narrow)	N/A	2,293,000	2.6°	.05	6.7°	.12
Light Stipple (Narrow Spot)	N/A	1,168,000	5°	.09	10°	.17
8-Row Lenticular (Narrow Flood)	N/A	240,000	7.9° x 22.5°	.14/.4	13° x 29°	.23/.52
10-Row Lenticular (Medium Flood)	N/A	200,000	9° x 18°	.16/.32	16° X 31°	.28/.55
12-Row Lenticular (Wide Flood)	N/A	50,000	17° x 47°	.30/.86	26° x 60°	.47/1.17

* 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

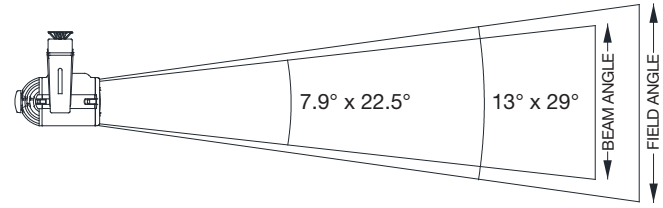
Photometric Data (continued)

VL5Arc Wash Luminaire with Clear Lens



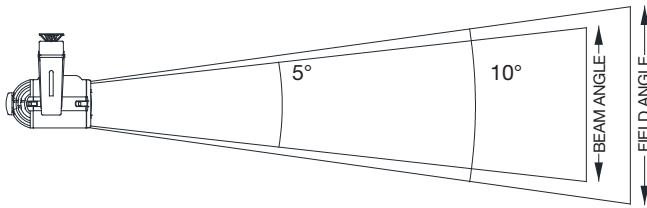
Throw Distance (D)	feet	30	50	70	85
	meters	9.1	15.2	21.3	25.9
Beam Diameter	feet	1.5	2.5	3.5	4.3
	meters	0.5	0.8	1.1	1.3
Field Diameter	feet	3.6	6.0	8.4	10.2
	meters	1.1	1.8	2.6	3.1
Illuminance (I)	fc	2548	917	468	317
	lux	27424	9873	5037	3416

VL5Arc Wash Luminaire with 8 Row Lenticular Lens



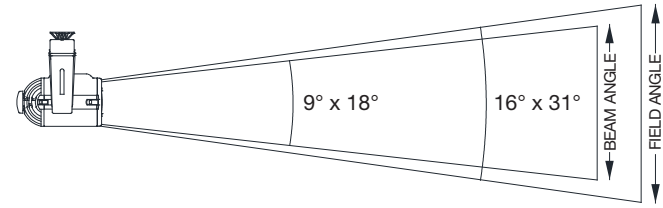
Throw Distance (D)	feet	10	16	22	27
	meters	3.0	4.9	6.7	8.2
Beam Dimensions	feet	1.4 x 4.0	2.2 x 6.4	3.1 x 8.8	3.8 x 10.8
	meters	0.4 x 1.2	0.7 x 2.0	0.9 x 2.7	1.2 x 3.3
Field Dimensions	feet	2.3 x 5.2	3.7 x 8.3	5.1 x 11.4	6.2 x 14.0
	meters	0.7 x 1.6	1.1 x 2.5	1.5 x 3.5	1.9 x 4.3
Illuminance (I)	fc	2400	938	496	329
	lux	25833	10091	5337	3544

VL5Arc Wash Luminaire with Light Stipple Lens



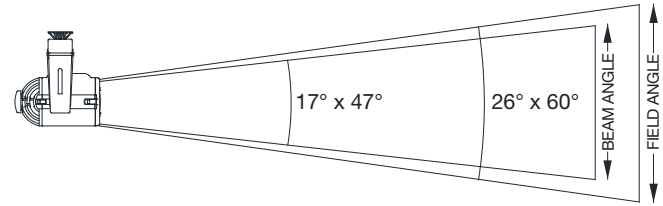
Throw Distance (D)	feet	21	36	50	60
	meters	6.4	11.0	15.2	18.3
Beam Diameter	feet	1.9	3.2	4.5	5.4
	meters	0.6	1.0	1.4	1.6
Field Diameter	feet	3.6	6.1	8.5	10.2
	meters	1.1	1.9	2.6	3.1
Illuminance (I)	fc	2649	901	467	324
	lux	28508	9701	5029	3492

VL5Arc Wash Luminaire with 10 Row Lenticular Lens



Throw Distance (D)	feet	9	14	20	25
	meters	2.7	4.3	6.1	7.6
Beam Dimensions	feet	1.4 x 2.9	2.2 x 4.5	3.2 x 6.4	4.0 x 8.0
	meters	0.4 x 0.9	0.7 x 1.4	1.0 x 2.0	1.2 x 2.4
Field Dimensions	feet	2.5 x 5.0	3.9 x 7.7	5.6 x 11.0	7.0 x 13.8
	meters	0.8 x 1.5	1.2 x 2.3	1.7 x 3.4	2.1 x 4.2
Illuminance (I)	fc	2469	1020	500	320
	lux	26578	9	5382	3444

VL5Arc Wash Luminaire with 12 Row Lenticular Lens



Throw Distance (D)	feet	5	7	10	12
	meters	1.5	2.1	3.0	3.7
Beam Dimensions	feet	0.7 x 2.0	1.0 x 2.8	1.4 x 4.0	1.7 x 4.8
	meters	0.2 x 0.6	0.3 x 0.9	0.4 x 1.2	0.5 x 1.5
Field Dimensions	feet	1.2 x 2.6	1.6 x 3.6	2.3 x 5.2	2.8 x 6.2
	meters	0.4 x 0.8	0.5 x 1.1	0.7 x 1.6	0.8 x 1.9
Illuminance (I)	fc	2000	1020	500	347
	lux	21528	10984	5382	3737