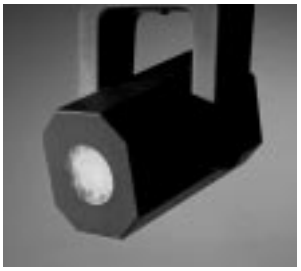
VL4™

wash luminaire



The VARI✻LITE® VL4™ wash luminaire features a 400W, 5000˚K metal halide arc source, and incorporates the crossfadable DICHRO✻TUNE™ color tuning system. It features a high-speed douser for instantaneous blackouts, bumps and strobe-like effects. Continuous adjustment of diffusion and beam angle provides enhanced control of the beam characteristics.

The VL4 luminaire is a Series 200™ product and can be controlled by any VARI✻LITE console.

Programmable Functions

COLOR:	DICHRO✻TUNE crossfadable dichroic colors featuring independent cyan, magenta and amber color panel control. Smooth timed color crossfades or color changes occur in less than 0.3 second.
COLOR CORRECTION:	3200˚K preset selectable from console.
INTENSITY CONTROL:	Mechanical dimmer provides smooth full-field control at all light levels. Blackout time of 0.5 second.
BEAM SIZE CONTROL:	Position of lamp in reflector may be remotely varied via the console to change the beam angle from spot to flood.
HIGH-SPEED DOUSER:	Shutter/douser provides instantaneous blackouts, bumps, and strobe-like effects. Open or close in less than 0.1 second.
BEAM DIFFUSER:	Textured glass panels intercept the beam providing diffusion. Changes occur in less than 0.5 second.
PAN AND TILT:	Smooth continuous motion is controlled by a digital servo system over a 240:1 speed range.
RANGE:	Pan - 360˚, Tilt - 270˚.
MAX VELOCITY:	240˚ per second.
ACCURACY:	.3˚ resolution.

Description

SOURCE:	HTI® SE, OSRAM metal halide arc lamp, 400W, 5000˚K, 250 hour life.
POWER REQUIREMENTS:	85 to 265 VAC, 50/60 Hz, 3 to 8A depending on the line voltage (approximately 750W).
REFLECTOR:	Chemically brightened aluminum parabola efficiently collects the full lamp spectrum.
OPERATIONAL TEMPERATURE:	0˚ to 120˚F (-18˚ to 49˚C).
COOLING:	Forced air.
CONTROL:	Completely compatible with the VARI✻LITE automated lighting system, featuring the Artisan®Plus and mini-Artisan®2 control consoles.
SPACING:	Hangs on 18 in. (460 mm) centers.
WEIGHT:	38 lbs (17.24 kg).

Accessories

71.2524.0001	HTI 400 w/SE-400W Lamp
71.2524.0002	HTI 404 w/SE-400W Lamp
22.9620.0217	Series 200 Truss Hook
22.9620.0194	Series 200 Safety Cable
20.9628.0222	Sound Baffle
22.9628.0227	Top Hat
25.7030.0006	6 ft. Series 200 Lamp Cable
25.7030.0012	12 ft. Series 200 Lamp Cable
25.7030.0020	20 ft. Series 200 Lamp Cable
25.7030.0050	50 ft. Series 200 Lamp Cable
25.7030.0100	100 ft. Series 200 Lamp Cable
25.7030.0XXX	Custom Length Series 200 Lamp Cable* *Cannot exceed 100 ft. in length.
20.9625.0014	VL4 luminaire Three-Hole Case
20.9625.0011	VL4 luminaire Five-Hole Case
22.5011.0024	Spare Components Set
22.5011.0004	Spare Assemblies Set

Part No: 20.9628.0001

Specifications

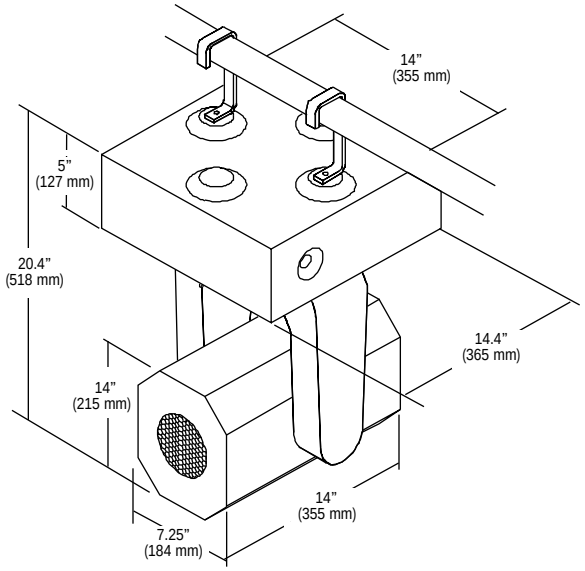
Unit shall be an integrally designed, remote controlled motorized wash luminaire. Head and upper enclosure shall be constructed of aluminum alloy for lightweight strength and shall be forced-air cooled. Head shall be mechanically attached to upper enclosure. A 400W arc source shall be used to produce a light beam that maintains a 5000˚K color temperature. Unit shall be operable in voltages ranging from 85 to 265 volts, 50/60 Hz. Head shall contain intensity, color, and focus components. Upper enclosure shall contain on-board microprocessor, arc power supply, low voltage supply, and cooling fan.

Head color bulkhead shall contain crossfadable dichroic color featuring independent cyan, magenta and amber color panel control. Smooth timed crossfades or color changes shall occur in less than 0.3 second. Motors shall provide independent drive of color regardless of direction of movement. Positional accuracy of the dichroic filters in reference to beam shall be ensured by microprocessor, which maintains count of all stepper motors.

Unit shall contain mechanical iris dimmer mechanism that provides full field dimming and allows for smooth timed fades and fast blackouts. Continuous beam size control for both rapid changes and smooth timed beam angle changes shall be provided by adjusting the position of the lamp in the reflector. Mechanical douser shall provide instantaneous blackout, bumps, and strobe-like effects, with douser open/close speed of 0.1 second. Unit shall contain a mechanism that provides diffusion by utilizing ten textured glass panels to obscure light beam. Rear of luminaire head shall allow for easy access to lamp. Chemically brightened aluminum parabolic reflector directs light from arc lamp forward through color filters, dimming iris, and douser mechanism.

Two enclosed, high torque servomotors shall be provided to permit head movement on horizontal plane of 360˚ and on a vertical plane of 270˚. Control cabling shall be run internally and through the yoke to prevent tangling. 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 drive mechanism.

Arc power supply shall provide controlled square-wave current, ignition voltage, and operating voltage required by arc lamp. Control cable to luminaire shall provide both digital control signal and power. Up to four truss hooks may be inserted into upper enclosure allowing the unit to be easily hung from truss or piping. A safety cable shall be provided with unit. Optional sound baffle and top hat shall be easily installed as needed. Exterior finish shall be a black epoxy coat. Total weight shall not exceed 38 lbs (17.24 kg).



Photometric Data

VL4 Wash Luminaire - 400W Metal Halide						
LAMP AND LENS SETTING	DIFFUSION	CANDELA (cd)	BEAM ANGLE (DEGREES)	BEAM DIAMETER TN[1]	FIELD ANGLE (DEGREES)	FIELD DIAMETER TN[1]
HTI 400 W/SE	Spot	876,000	4	.07	11	.19
(Narrow Beam)	Flood	126,400	11	.19	24	.42
HTI 400 W/SE	Spot	235,200	9	.16	20	.35
(Wide Beam)	Flood	81,200	14	.24	29	.52
HTI 404 W/SE	Spot	1,012,000	4	.07	10	.17
(Narrow Beam)	Flood	146,400	11	.19	24	.42
HTI 404 W/SE	Spot	576,000	5	.09	15	.26
(Wide Beam)	Flood	107,200	13	.23	28	.5

[1] Multiply distance by Tn to determine coverage.

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

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