LITHONIA LIGHTING®

FEATURES & SPECIFICATIONS

Rough Service Fixture

VR4C

H.I.D.
Ceiling/Wall Mounted

INTENDED USE

General illumination for rough service (vandal-resistant) applications. Ideal for areas that require higher levels of protection from physical assault, while providing proper illumination for safety or security.

CONSTRUCTION

Housing - Constructed from one-piece die-cast aluminum. Three threaded 1/2" NPS plugs allow conduit entry, or the housing can be mounted over the outlet box.

Gasket - One-piece silicone perimeter lens gasket and closed-cell neoprene housing gasket help to seal out moisture and contaminants.

FINISH

Post-painted after fabrication in dark bronze polyester powder coat. Additional colors available.

OPTICAL SYSTEM

Lens - Clear prismatic, UV-stabilized, polycarbonate lens, nominal thickness .125" (1/8"). Prism optics provide uniformity with maximum spacing-to-mounting height ratios. Lens secured by either stainless steel tamper-resistant Torx® T-20 or standard stainless steel slotted hex-head screws (four of each included).

Reflector - Horizontal internal reflector (IR) required for wall mounted units.

ELECTRICAL SYSTEM

Ballast - Copper wound and 100% factory tested. Ballast is High Reactance, High Power Factor (35S is Normal Power Factor).

Socket - Porcelain, medium-base, horizontally oriented socket with copper alloy nickel-plated screw shell and center contact.

Lamp - Reduced UV lamp standard in Metal Halide units. Lamp included unless specified L/LP.
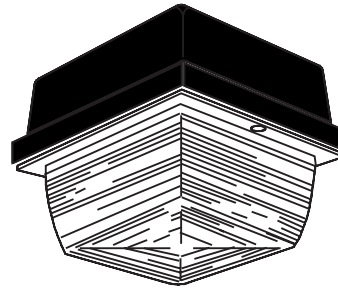
INSTALLATION

Unit may be ceiling or wall mounted. For maximum vandal-resistance, mount unit to structure through four mounting holes provided.

LISTING

UL Listed (standard). CSA Certified (see Options). NOM Certified (see Options). UL listed for wet locations for wall mount or covered ceiling applications.

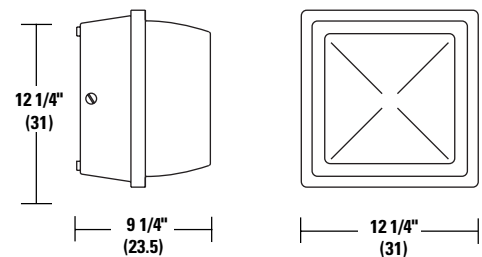Specifications subject to change without notice.

12 1/4" (31)

9 1/4" (23.5)

12 1/4" (31)

All dimensions are inches (centimeters).

ORDERING INFORMATION

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line. Order accessories as separate catalog number.

Example: **VR4C 100M 120 QRS LPI**

VR4C

Series	Wattage	Lens	Options	Lamp[8]
VR4C	**35S** 35W High Pressure Sodium[1] **50S** 50W High Pressure Sodium **70S** 70W High Pressure Sodium **100S** 100W High Pressure Sodium **50M** 50W Metal Halide[2] **70M** 70W Metal Halide[2] **100M** 100W Metal Halide	**(Blank)** Clear prismatic **WP** White polycarbonate	**Shipped installed in fixture** **DF** Double fuse (208, 240, 480)[4] **EC** Emergency circuit (Incandescent - 25W Max.)[5] **IR** Internal reflector[6] **NL** Night-light (Incandescent - 7W Max.)[1,5] **PE** Photoelectric cell (120V, 208V, 240V, 277V)[4] **QRS** Quartz restrike system[2,5] **QRSTD** Quartz restrike system time delay[2,5] **SF** Single fuse (120, 277, 347)[4] **CSA** CSA Certified	**LPI** Lamp included (standard) **L/LP** Less Lamp

Voltage

120
208
240
277
347
480
TB[3]

Shipped separately[7]
FV4C Steel vertical external visor

Accessories

Order as separate catalog numbers.

RK1 T20BIT Hex-base driver bit, Torx TX20, for tamper-resistant screws with center reject pin.

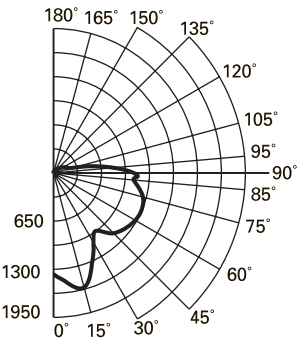**RK1 T20DRV** Torx TX20 screwdriver for use with tamper-resistant screws with center reject pin.

NOTES:
1 120V only.
2 Not available in 480V.
3 Multi-tap ballast (120V, 208V, 240V, 277V).
4 Must specify voltage. Not available with TB.
5 Lamp by others.
6 Wall-mounted units require IR option.
7 For aluminum visor add **AL** (Example: **FV4C AL**).
8 Lamp included unless specified L/LP.

VR4C Rough Service Ceiling-Mounted Fixture, H.I.D.

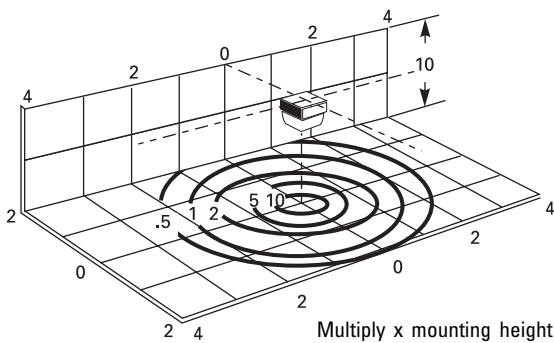**VR4C 175M,** 175W, Metal Halide lamp, 14,000 rated lumens. Test number 1194053101.

Distribution curves

Output data

Zone	Lumens	%lamp
0°–30°	1063	7
0°–90°	6689	47
90°–180°	1505	10
0°–180°	8194	58

Distribution curves

Multiply x mounting height

Distribution data

	0°	45°	90°
0°	1369	1369	1369
5°	1296	1351	1418
15°	1167	1350	1481
25°	1019	1148	1152
35°	894	822	1076
45°	864	898	1201
55°	924	1048	1135
65°	935	1168	1032
75°	803	1209	935
85°	622	1090	695
90°	641	1161	669

Coefficient of utilization

ρf	20%						
ρc	80%		50%		30%		
ρw	50%	30%	50%	30%	50%	30%	0%
1	53	50	46	43	42	40	33
2	45	39	38	35	35	32	24
3	38	32	33	28	30	26	19
4	33	27	29	24	26	22	16
5	29	23	25	21	23	19	13
6	26	20	23	18	20	16	11
7	23	18	20	16	19	15	9
8	21	16	18	14	17	13	8
9	19	14	17	13	16	12	7
10	18	13	16	11	14	11	6

Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurements. Dimensions and specifications on this sheet are based on the most current available data and are subject to change without notice.

Mounting Height Correction Factor

To obtain the footcandle value for different mounting heights multiply the footcandle value by the above correction factor.

MH	7.5'	15'	20'
10'	1.77	0.44	0.25

Steel Backplate, Square

VR3
VR4

VR3

VR4

Intended Use

General illumination for rough service (vandal-resistant) applications. Ideal for interior or exterior applications where safety and security are a concern.

Features

Lens – Clear prismatic, UV-stabilized polycarbonate, nominal thickness .125". Prism optics provide uniformity with maximum spacing-to-mounting height ratios. Torx® T-20 and standard stainless steel slotted hex-head screw (one each included).

Backplate – Heavy-duty, 16-gauge cold-rolled steel. White polyester powder coat for high reflectance, durability, and corrosion resistance. Closed-cell neoprene gasket seals out moisture and contaminants.

Ballast – VR3: electromagnetic, NPF, with starting temperature of 0°F for 7W and 25°F for 9W.

VR4: Class P, electronic, HPF multi-volt,

THD<10%, starting temperature 0°F. Exceptions are 7TT, 9TT, 13TT, 22DTT, 28DTT. Electromagnetic, NPF, 120V only.

Socket – Compact fluorescent: thermoplastic socket. Incandescent: unglazed porcelain snap-in socket with aluminum screw shell. Spring-loaded steel clips hold socket tightly in place. VR3 provided with one socket and VR4 provided with two sockets. SM1 single socket option available.

Lamps – 35K compact fluorescent lamp(s) included unless L/LP is specified. Incandescent lamp(s) not included.

Installation: Keyhole slots simplify wall or ceiling installation. For maximum vandal resistance, use four-hole mounting pattern.
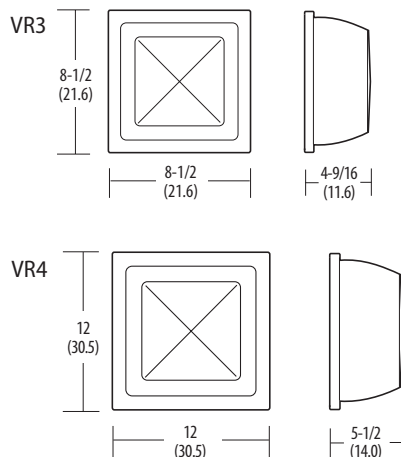
Listings

UL Listed (standard). CSA Certified (see Options). UL listed for 25°C ambient and wet locations for wall mount or in covered ceiling applications.

Ordering Information

Example: **VR4 26DTT MVOLT EC LPI**

Series			Lamp type				Voltage	Options		Lamps[13]	

Series

VR3 8¹/₂" x 8¹/₂"
VR4 12" x 12"

Lamp type

VR3:	VR4:		VR3:	VR4:
(blank)	Incandescent[1]		Double twin-tube	
—	2/60W		—	13DTT
75W[2]	2/75W[3]		—	2/13DTT
100W[3]	100W[5]		—	18DTT
150W[3, 4]	150W[3, 5]		—	2/18DTT
Twin-tube[6]			—	22DTT[6,7]
7TT	7TT		—	2/22DTT[6,7]
2/7TT	2/7TT		—	26DTT
9TT	9TT		—	2/26DTT
2/9TT	2/9TT		—	28DTT[6,7]
—	13TT		—	2/28DTT[6,7]
—	2/13TT		Triple-tube	
			—	26TRT
			—	2/26TRT
			—	32TRT
			—	42TRT

Voltage

120
277
347
MVOLT[8]

Lens type

(blank) Clear prismatic
WP White polycarbonate

Options

AL Aluminum backplate
EC Emergency circuit (Incandescent, 25W max.)[9]
DS Dual switching
4S Four screws per unit
GLR Internal fast-blow fusing[10,11]
GMF Internal slow-blow fusing[10,11]
IR Internal reflector
NL Night-light (Incandescent, 7W max.)[6,9]
SM1 Single medium-base incandescent socket[5]
XT Low-energy diode extended lamp life[12]
CSA CSA Certified

For other options and accessories, see below and pages 418-419.

Lamps[13]

LPI Lamp(s) included (standard)
L/LP Less lamp(s)

Dimensions are shown in **inches (centimeters)** unless otherwise noted.

VR3

8-1/2
(21.6)

8-1/2
(21.6)

4-9/16
(11.6)

VR4

12
(30.5)

12
(30.5)

5-1/2
(14.0)

Accessories (Order separately)

RK1 T20BIT Torx TX20 hex-base driver bit for tamper-resistant screws with center reject pin.

RK1 T20DRV Torx TX20 screwdriver for tamper-resistant screws with center reject pin.

For extension boxes and external visors, see page 418.

Lamp/Fixture Data

Wattage	Ballast	Weight lbs.	Lamp base
Incandescent			
60W	–	5.80	A19IF
75W	–	5.50	A19IF
100W	–	5.50	A21IF
150W	–	5.50	A21IF
Fluorescent			
7W	Electromagnetic, NPF	5.00	G23
9W	Electromagnetic	5.80	G23
13W	Electromagnetic, NPF	5.45	GX23
13W	Electronic, HPF	5.45	G24q-1
18W	Electronic, HPF	5.60	G24q-2
22W	Electromagnetic, HPF	5.60	GX32d-2
26W	Electronic, HPF	4.65	G/GX24q-3
28W	Electromagnetic, HPF	5.75	GX32d-3
32W	Electronic, HPF	6.00	GX24q-3
42W	Electronic, HPF	6.25	GX24q-4

NOTES:
1 Leave lamp type information blank.
2 Maximum ceiling-mount wattage.
3 Wall-mount only.
4 Available for base-up wall mounting using an A21 lamp.
5 Single socket Incandescent on wall: order **SM1** option.
6 120V only.
7 2-pin 15mm lamp.
8 Multi-volt electronic ballast (for DTT and TRT lamps) capable of operating on any line voltage between 120V and 277V.
9 Maximum wattage lamp provided.
10 Available for compact fluorescent units only.
11 Must specify voltage. Not available with MVOLT.
12 Available for Incandescent units only.
13 Compact fluorescent lamp(s) included unless L/LP is specified.

LITHONIA LIGHTING®

www.lithonia.com, keywords: VR3 and VR4

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