

DESCRIPTION

The VRM combines a low-profile, surface modular design with the latest in energy-efficient technology. The dihedral recessed top design allows for cooler fixture operation. Other features include a die-formed housing, surface or stem mounting (single or continuous row), full seam-welded corners and a broad selection of attractive door frames. The durable, versatile VRM is perfect for use in commercial spaces, schools, hospitals, correctional or industrial facilities and high volume public access areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Housing is die-formed, code gauge, prime cold-rolled steel. Smooth sides permit flush joint for continuous row mounting. Full seam-welded corners. Dihedral recessed top design insures cooler ballast operation. Die-formed captive lampholder bracket fully encloses wiring permitting easy lampholder replacement. Ballast covers easily removed without tools.

Finish

Painted after fabrication. Electrostatically-applied baked white polyester powder enamel finish. Multistage cleaning cycle, iron phosphate coating with rust inhibitor. Conveyorized application and baking timing accurately controlled at an elevated temperature.

Hinging/Latching

Positive cam action steel latches with baked white enamel finish. Safety lock T-hinges allow hinging and latching either side.

Frame/Shielding

Die-formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Positive light seals. Frame and lens are secured to housing with 4 or 6 T20 stainless steel TORX® screws.

Electrical*

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock lampholders.

Labels

UL/cUL listed for damp locations.

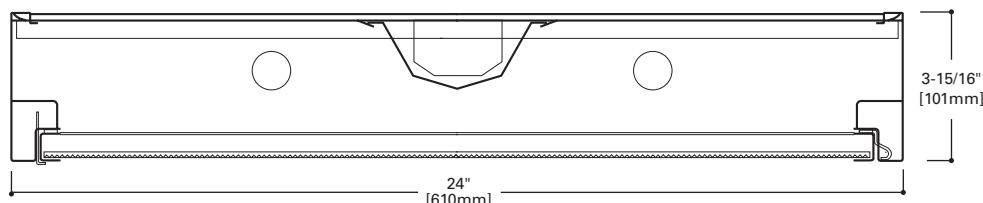


2VRM

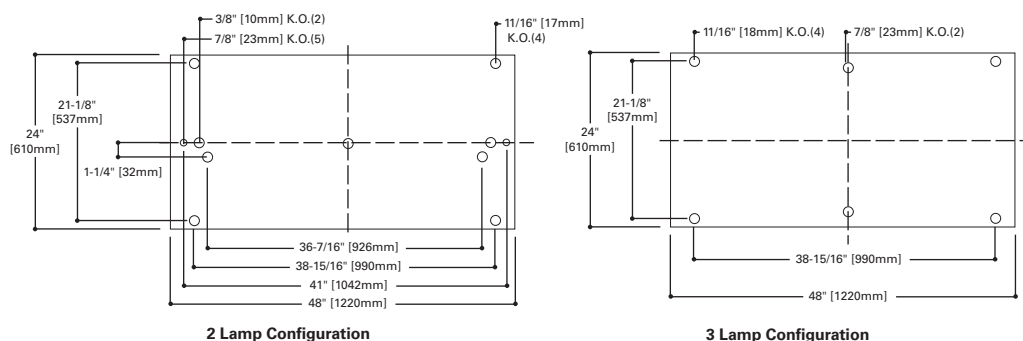
2x4
Vandal Resistant

SURFACE

Lens Troffer



MOUNTING DATA

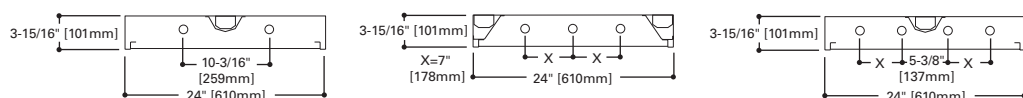


DOOR FRAMES

2VRM
Flat, White
Steel



LAMP CONFIGURATIONS



ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
232 (61)
432 (122)

ES Ballast & STD Lamps
232 (71)
432 (142)

Luminaire Efficacy Rating

LER = FL-71

Catalog Number:

Yearly Cost of 1000 lumens:
3000 hrs at .08 KWH = \$3.38

* Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

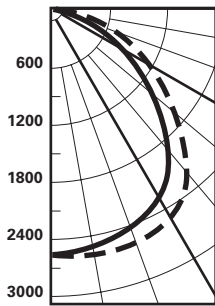
ORDERING INFORMATION

SAMPLE NUMBER: VRM-432A

Width	Series	Door Type	No. of Lamps	Wattage (Length)	Lens Type	Voltage	Ballast Type	Options (Add as Suffix)	Accessories (Order Separately)
2	VRM								
2= 2'	VRM		2, 3 or 4 Lamps (Not included)	28T5 =28W T5 (48") 32 =32W T8 (48") 54T5 =54W T5HO (48")			EB = Generic Electronic Ballast No. of Ballasts 1 or 2 Lamp Size 8=T8 5=T5 Biax T=T5 Linear (For specific Electronic Ballast specify Brand and Catalog Number.)	GL= Internal Single Element Fusing GM= Dual Element Fusing EL4= Emergency Lighting, self contained SMB= Side-Mounted Ballast for Stem Applications (Recommended for 4-Point Suspension) RIF1 = Radio Interference Suppressor EKO= End Plate with 7/8" KO (Required for Continuous Row Mounting) RLS= Rotor-Lock Socket (T8 Lamps only) 6S= Six TORX®-head Screws (3 per side) SC =Safety Chain	
Standard = Flat White Steel Door (Leave Blank)				ACTF140= .140 Thick ACTF187= .187Thick PA375 = .250 polycarbonate with .125 prismatic overlay (standard with 6S option)					
				120=120V 277=277V 347=347V UNV=Universal Voltage (120-277V)					VRSD=T20 Center Pin TamperproofTORX®-head bit

PHOTOMETRICS

Candlepower Distribution



Test No. M-2071
2VRM-340-ACTF140
Lamp=F40T12/CW
Lumens=3150
Spacing Criteria
1=1.4 11=1.2
Efficiency=70.3%

--- 1
--- 11

Candlepower

Deg.	1	11
0	2659	2659
5	2650	2663
15	2559	2650
25	2373	2587
35	2056	2391
45	1553	1839
55	986	1127
65	541	526
75	253	259
85	105	111
90	0	0

Typical VCP Percentages

Room Size (in Feet)	Height Along 8'6"	Height Along 10'0"	Height Across 8'6"	Height Across 10'0"
20 x 20	68	71	67	70
30 x 30	60	65	60	64
30 x 60	52	56	51	55
60 x 30	62	66	61	66
60 x 60	52	55	51	54

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	2136	22.6	32.2
0-40	3540	37.5	53.3
0-60	5746	61.1	56.9
0-90	6641	70.3	100.0
90-180	0	0.0	0.0
0-180	6641	70.3	100.0

Coefficient of Utilization

rc	80%				70%			50%		30%		10%		0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	84	84	84	84	82	82	82	78	78	75	75	72	72	70
1	77	74	71	69	73	70	68	70	66	67	64	64	62	60
2	71	66	61	58	64	60	57	62	56	60	54	58	53	52
3	65	58	53	49	57	52	49	55	48	53	47	52	46	45
4	60	52	47	42	51	46	42	50	41	48	41	47	40	39
5	56	47	41	37	46	41	37	45	36	44	36	42	36	34
6	51	43	37	32	42	36	32	41	32	40	32	39	32	30
7	48	39	33	29	38	33	29	37	29	36	28	35	28	27
8	45	36	30	26	35	30	26	34	26	33	26	32	25	24
9	42	33	27	23	32	27	23	31	23	31	23	30	23	22
10	39	30	25	21	30	25	21	29	21	28	21	28	21	20

rc=Ceiling reflectance, rw=W all reflectance, RCR=Room cavity ratio
CU Data Based on 20% Effective Floor Cavity Reflectance.