

DESCRIPTION

The VRM Series 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

A ... Construction

Housing die formed code gauge prime cold rolled steel. Smooth sides permit flush joint for continuous row mounting. 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.

B ... Electrical*

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock lampholders. UL/CUL listed. Suitable for damp locations.

C ... 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.

D ... Hinging/Latching

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

E ... Frame/Shielding

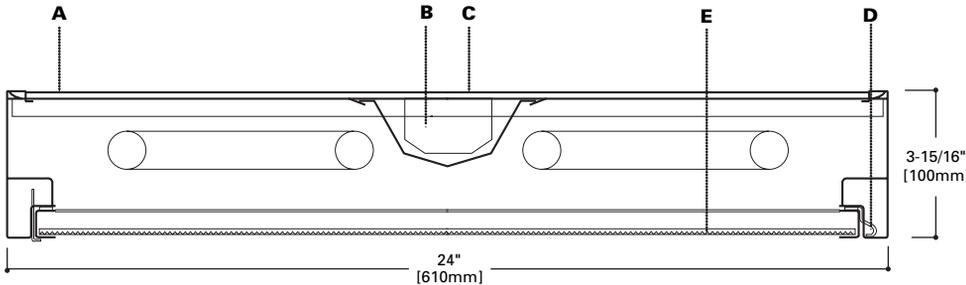
Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Positive light seals. Frame and lens are secured to housing with 4 or 6 stainless steel TORX screws.



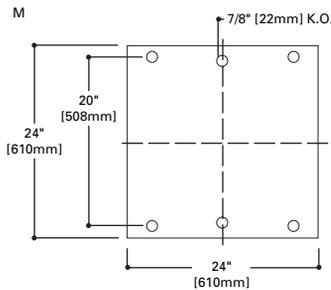
2VRM
 220, 217, 320,
 317, 420, 417
 2BX40, 3BX40
 2U6, 2U6T8
 2UI-5/8, 3UI-5/8

2' X 2' SURFACE
4 LAMPS LTS
2' X 2' SURFACE
2 LAMPS

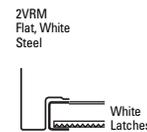
Vandal Resistant Luminaire



MOUNTING DATA



DOOR FRAME



ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
 417 (45), 2U6 (72), 2U6T8 (61)
 2U1-5/8 (61), 2BX40 (67)
 3U1-5/8 (91), 3BX40 (110)

ES Ballast & STD Lamps
 420 (116), 417 (90)
 2U6 (86), 2U6T8 (81)
 2U1-5/8 (71), 3U1-5/8 (108)

STD Ballast & STD Lamps
 2BX40 (82), 3BX40 (128)

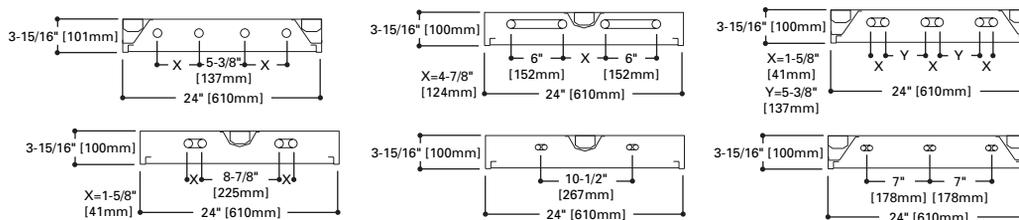
Luminaire Efficacy Rating
LER = FL-58

Catalog Number: 2VRM-2U6T8ACTF140

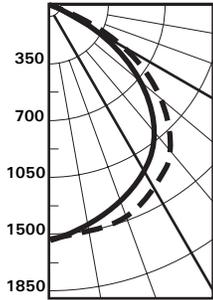
Yearly Cost of 1000 lumens,
 3000 hrs at .08 KWH = \$4.14

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

LAMP CONFIGURATIONS



Candlepower Distribution



Test No. M-3449
2VRM-2U6-ACTF140
 Lamp=F40T12/CW
 Lumens=3150
 Spacing Criteria
 I=1.2 II=1.3
 Efficiency=62.5%

Candlepower

Deg.	I	II
0	1515	1515
5	1506	1513
15	1452	1493
25	1337	1421
35	1141	1266
45	836	988
55	467	547
65	252	267
75	174	187
85	57	57
90	0	0

Typical VCP Percentages

Room Size (in Feet)	Height Along II		Height Across I	
	8'6"	10'0"	8'6"	10'0"
20 x 20	65	70	64	69
30 x 30	58	62	57	61
30 x 60	50	52	49	52
60 x 30	61	64	60	63
60 x 60	51	53	51	53

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	1196	20.8	33.3
0-40	1952	33.9	54.3
0-60	3115	54.2	86.7
0-90	3595	62.5	100.0
90-180	0	0.0	0.0
0-180	3595	62.5	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	74	74	74	74	73	73	73	69	69	67	67	64	64	63	
1	69	66	64	61	65	62	60	62	59	60	57	57	55	54	
2	63	59	55	51	57	54	51	55	50	53	49	51	47	46	
3	58	52	47	44	51	47	43	49	43	48	42	46	41	40	
4	54	47	42	38	46	41	38	44	37	43	37	42	36	35	
5	50	42	37	33	41	37	33	40	33	39	32	38	32	31	
6	46	38	33	29	38	33	29	37	29	35	29	35	28	27	
7	43	35	30	26	34	29	26	33	26	32	26	32	25	24	
8	40	32	27	23	31	27	23	31	23	30	23	29	23	22	
9	37	29	24	21	29	24	21	28	21	28	21	27	21	20	
10	35	27	22	19	27	22	19	26	19	26	19	25	19	18	

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

ORDERING INFORMATION

SAMPLE NUMBER: 2VRM-2U6T8A

Width	Series	Door Type	No. of Lamps	Wattage (Length)	Lens Type	Voltage	Voltage	Ballast Type	Options (add as suffix)
2 2=2'	VRM		2, 3 or 4 Lamps (Not included)	U6=40W (24") U6T8=32W (24") 20=20W (24") 17=17W T8 (24") U1-5/8=31W T8 (24") BX40=40W Biax (24")				LE3=Energy Saving Ballast LEOC8= Energy Saving Ballast (T-8 Lamp Only) EB _ _ = Generic Electronic Ballast No. of Ballasts 1 or 2 Lamp Size 2=T12 8=T8 5=T5 Biax (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=.187 Thick PA375=.250 polycarbonate with .125 prismatic overlay (standard with 6S option)					
				LTS=Low Trigger Start (20 Watt) HTS=Universal Voltage 120-277V					
				120=120V 277=277V 347=347V UNV=Universal Voltage 120-277V					

For additional options please consult Cooper Lighting Representative. Specifications and Dimensions subject to change without notice.

SHIPPING INFORMATION

Catalog No.	Wt.
2VRM-2U6-ACTF140	20 lbs.
2VRM-320-ACTF140	20 lbs.