

COOPER LIGHTING - METALUX®

DESCRIPTION

The VT3 Series is a contemporary looking energy efficient industrial Vaportite fixture that features rugged and durable construction. The VT3 incorporates a full metal clear tray inside a reinforced fiberglass housing with a high impact diffuser. This Vaportite series is suitable for interior and exterior applications and can be surface or chain mounted.

The VT3 Series has been designed for maximum operation in commercial institutional and industrial environments where weathering, high temperature, humidity and dust or corrosive fumes are present.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A ... Construction

Fiberglass housing is reinforced polyester and self-extinguishing (ASTM-D635-74) plastic of a permanent pearl gray color. Top of housing has five embossments (2' unit), nine embossments (4' unit) and thirteen embossments (8' unit), providing mounting flexibility on uneven surfaces. A watertite hub for 1/2" conduit entry is provided at each end of housing (standard) for continuous feed. Polyurethane gasketing is formed in the housing providing a continuous seamless seal for the diffuser. Six sturdy cam latches clamp diffuser tightly for a positive seal between housing, gasketing and diffuser.

B ... Electrical*

Unit has full metal gear tray secured by internal fasteners and tethers providing maximum protection and rigidity. Ballasts are CBM/ETL Class "P" certified suitable to 70°F. (Cold temperature ballasts are available for less than 0°F starting with EHT (T5HO only), EB/PLUS and ER/PLUS Ballasts). Rotor lock lampholders. Electrical components and fixtures are UL/CUL listed for Wet Locations.** IP65 approved with optional IP67 rating (4' only) with 8 latches.

C ... Shielding

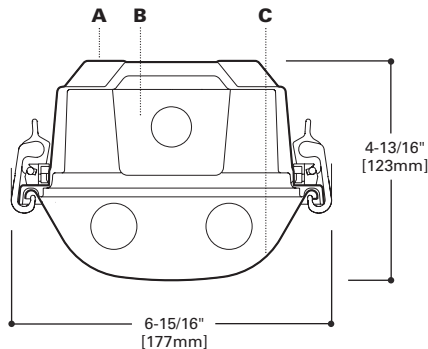
New contemporary styled lens clear acrylic w/impact resistant additives and linear prisms. "DR" - Clear low brightness pattern acrylic with 15% high impact additive. "DR-100" - Clear low brightness pattern acrylic with 100% high impact additive. Example: VT3-232DR-100



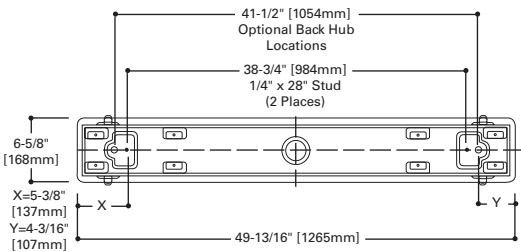
VT3
132
232
332
154T5
254T5

4' INDUSTRIAL
1, 2 OR 3 LAMP

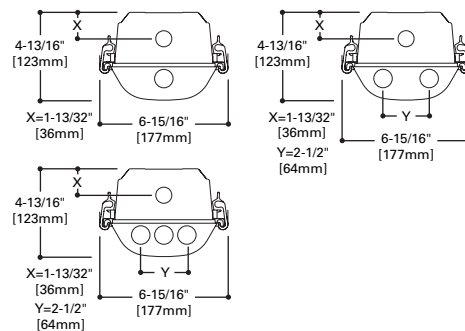
Vaportite Industrial



MOUNTING DATA



LAMP CONFIGURATIONS



ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
132 (30)
232 (61)
154T5 (54)
254T5 (106)
Luminaire Efficacy Rating
LER = FI-73
Catalog Number: VT3-232DR
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.29

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

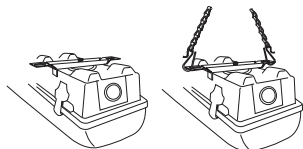
**Not Suitable for Wet Locations if EL4 Option is added. Consult Pre Sales Technical Support.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT
Safe and convenient means of disconnecting power



INSTALLATION DATA



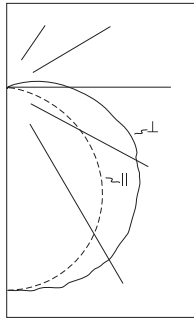
MOUNTING BRACKETS
Furnished
Two per 4' Unit
Four per 8' Unit

OPTIONAL CHAIN HANGING SET (VT2-CHAIN/SET-U)
Includes 6 ft. of chain, 4 large S-Hooks and 4 small S-Hooks
Order One (1) Kit for each 4' Fixture
Two (2) Kits Recommended For 8' Fixture

Relative Light Output Factors

To accurately predict how luminaires will perform in cold temperatures, Cooper Lighting individually tested each configuration in the different ambient environments. The relative light output factor should be applied as an additional light loss factor component.

VT3 Series	-15°F (-26°C)	0°F (-18°C)	20°F (-6°C)	33°F (0°C)	50°F (10°C)
VT3-232	-	-	0.67	0.97	0.99
VT3-254	0.73	0.76	0.86	0.90	0.94
VT3-332	-	-	0.96	0.98	0.98
VT3-354	0.91	0.93	-	-	-



VT3-232DR-UNV-EB81-WL-U

(1) Electronic Ballasts
 (2) 32W T8 lamps
 2850 lumens
 Spacing criterion:
 (II) 1.3 x mounting height, (L) 1.5 x mounting height
 Efficiency 77.4%
 Test Report:
 LTL10864.IES
 LER =FL72
 Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$3.34

Candela

Angle	Along II	45°	Across ⊥
0	1103	1103	1103
5	1097	1108	1107
10	1083	1107	1106
15	1059	1091	1127
20	1025	1089	1113
25	983	1058	1098
30	932	1035	1088
35	870	991	1052
40	801	952	1024
45	725	892	971
50	640	831	920
55	548	753	878
60	451	683	814
65	352	611	771
70	251	550	698
75	155	471	592
80	77	367	513
85	28	290	427
90	6	217	342

Coefficients of Utilization

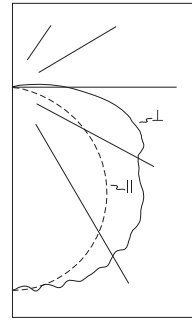
rc	Effective floor cavity reflectance																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																										
0	91	91	91	91	89	89	89	89	84	84	84	79	79	79	75	75	75	73								
1	82	78	74	70	79	75	72	69	71	68	66	67	65	63	64	62	60	58								
2	74	67	61	56	71	65	60	55	61	57	53	58	54	51	55	52	49	47								
3	67	58	52	46	65	57	51	46	54	49	44	51	47	43	49	45	42	40								
4	61	51	44	39	59	50	43	38	48	42	37	45	40	36	43	39	35	33								
5	56	45	38	32	54	44	37	32	42	36	31	40	34	30	38	33	30	28								
6	51	40	33	28	49	39	32	27	37	31	27	36	30	26	34	29	26	24								
7	47	36	29	24	45	35	28	23	33	27	23	32	27	23	30	26	22	20								
8	43	32	25	20	42	31	25	20	30	24	20	29	23	19	27	23	19	17								
9	40	29	22	17	38	28	22	17	27	21	17	26	20	17	25	20	16	15								
10	37	26	20	15	36	26	19	15	24	19	15	23	18	15	22	18	14	13								

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	899	15.8	20.4
0-40	1512	26.5	34.3
0-60	2847	49.9	64.5
0-90	4169	73.1	94.5
0-180	4413	77.4	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	5519	7213	7212
55	5083	6756	7098
65	4347	6377	7074
75	3001	6097	6510
85	1349	5151	6092



VT3-254T5DR-UNV-EHT1-WL-U

(1) Electronic Ballasts
 (2) 54W T5 lamps
 4400 lumens
 Spacing criterion:
 (II) 1.2 x mounting height, (L) 1.5 x mounting height
 Efficiency 69.7%
 Test Report:
 LTL10777.IES
 LER =FL59
 Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$4.05

Candela

Angle	Along II	45°	Across ⊥
0	1546	1546	1546
5	1540	1525	1533
10	1519	1548	1525
15	1483	1514	1546
20	1436	1509	1566
25	1375	1487	1530
30	1300	1446	1509
35	1215	1396	1502
40	1118	1315	1425
45	1012	1267	1384
50	896	1174	1308
55	770	1081	1179
60	634	954	1107
65	496	827	1101
70	352	771	1044
75	219	704	936
80	113	578	807
85	47	432	614
90	13	285	431

Coefficients of Utilization

rc	Effective floor cavity reflectance																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																										
0	82	82	82	82	80	80	80	80	76	76	76	72	72	72	69	69	69	67								
1	74	70	66	63	72	68	65	62	65	62	59	61	59	57	58	57	55	53								
2	66	60	55	50	64	58	54	49	55	51	48	53	49	46	50	47	45	43								
3	60	52	46	41	58	51	45	41	49	44	40	46	42	39	44	41	38	36								
4	55	46	40	35	53	45	39	34	43	38	33	41	36	33	39	35	32	30								
5	50	40	34	29	48	40	33	29	38	32	28	36	31	27	34	30	27	25								
6	46	36	29	25	44	35	29	24	34	28	24	32	27	24	31	26	23	22								
7	42	32	26	21	41	32	25	21	30	25	21	29	24	20	28	23	20	18								
8	39	29	23	18	38	28	22	18	27	22	18	26	21	17	25	20	17	16								
9	36	26	20	16	35	25	19	15	24	19	15	23	18	15	22	18	15	13								
10	33	23	18	14	32	23	17	14	22	17	13	21	17	13	20	16	13	12								

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1253	14.2	20.4
0-40	2112	24.0	34.4
0-60	3985	45.3	64.9
0-90	5908	67.1	96.3
0-180	6137	69.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	7704	10245	10279
55	7142	9700	9531
65	6126	8631	10102
75	4240	9114	10293
85	2265	7674	8760

ORDERING INFORMATION

SAMPLE NUMBER: VT3-232DR-UNV-EB81-WL-U

Tandem Blank= 4' Length 8T=8' Length	Voltage⁽¹⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120/277 ⁽²⁾ UNC=Universal Voltage 347/480
Series VT3=Vaportite	GL=Single Element Fuse GM=Double Element Fuse EL=Emergency Installed^{(3),(4)}
Number of Lamps⁽³⁾ 1, 2 or 3 Lamps (Not included)	
Wattage (Length) 32=32W T8 (48") 28T5=28W T5 (48") 54T5=54W T5HO (48") ⁽⁵⁾	
Lens DR=Internal Prismatic Lens/15% DR High Impact Additive (Standard) DR-50=50% High Impact Additive (High Impact) DR-100=100% High Impact Additive (Extreme)	

Ballast Type^{(1),(4)} EB8 =T8 Electronic Instant Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EB8 /PLUS=T8 Electronic Instant Start. High Ballast Factor >1.13.Total Harmonic Distortion < 20% No. of Ballast 1 or 2 ER8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EBT =T5 Linear Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EHT =T5 Linear Electronic Start High Ambient. Total Harmonic Distortion < 10% No. of Ballast ⁽³⁾ 1 or 2	WL=Wet Label	Packaging U=Unit Pack
Options 8L=8 Latches (IP67 Rating) M4=Miro 4 Interior Reflector RIF1=Radio Interference Suppressor TH=(2) Top Watertite Hubs only, no End Hubs ⁽⁵⁾ TEH=(2) Top & (2) End ⁽⁵⁾ Watertite Hubs (all Watertite Hubs have 1/2" Conduit Entry) SSL=Stainless Steel Latches		

NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. ⁽²⁾ Not available when specifying emergencies, voltage must be specific. ⁽³⁾ 3 Lamp 54W T5HO is recommended for ambient temperatures below 102°F (40°C) with EHT2 ballasts, and below 0°F (-18°C) with EHT1 ballast. ⁽⁴⁾Emergency option in 3 lamp version must use remote mount test switch. ⁽⁵⁾Top Hub required when stem mounting. For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

ACCESSORIES

Accessories (order separately)
VT2-Chain/Set-U=Chain Hanging Set
 Includes 6 ft. of chain, 4 large S-Hooks and 4 small S-Hooks
 Order One (1) Kit for each 4' Fixture
 Two (2) Kits Recommended For 8' Fixtures.
VT2-SS-MBK=Stainless Steel Mounting Bracket

SHIPPING INFORMATION

Catalog No.	Wt.
VT3-132 DR-WL	16 lbs.
VT3-232 DR-WL	16 lbs.
VT3-154T5	16 lbs.
VT3-254T5	16 lbs.