

COOPER LIGHTING - METALUX®

DESCRIPTION

The VT2 Series is an energy efficient industrial Vaportite fixture that features rugged and durable construction. The VT2 incorporates a full metal fixture liner 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 VT2 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 nine embossments (4' unit) and thirteen embossments (8' unit), providing mounting flexibility on uneven surfaces. A watertight 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 (4' unit) and twelve (8' and tandem unit) clamp diffuser tightly for a positive seal between housing, gasketing and diffuser.

B ... Electrical*

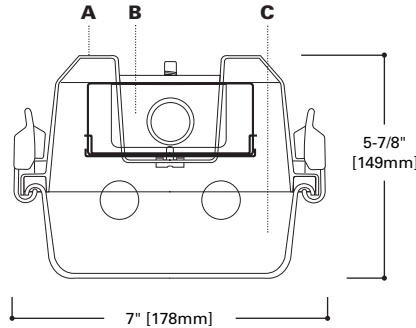
Unit has full metal liner (channel) secured by brass internal/external mounting studs for positive grounding, maximum protection and rigidity. Ballasts are CBM/ETL Class "P" certified suitable to plus 50°F. Spring loaded lampholders. Electrical components and fixtures are UL/CUL listed for Wet Locations.** IP65 approved (4' only).

C ... Lens

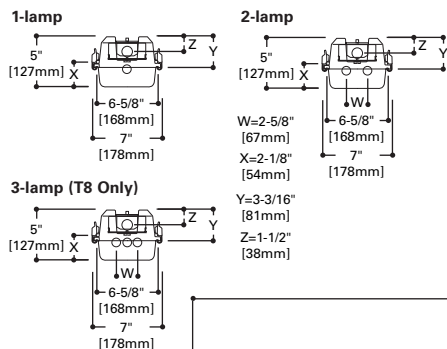
"DR" - Clear low brightness pattern acrylic with 15% high impact additive.
 "DR-100" - Clear low brightness pattern acrylic with 100% high impact additive.
 Example: VT2-296DR-100
 "LEX" - High impact clear low brightness pattern polycarbonate. LEXAN
 Example: VT2-296LEX.

D ... Reflectors

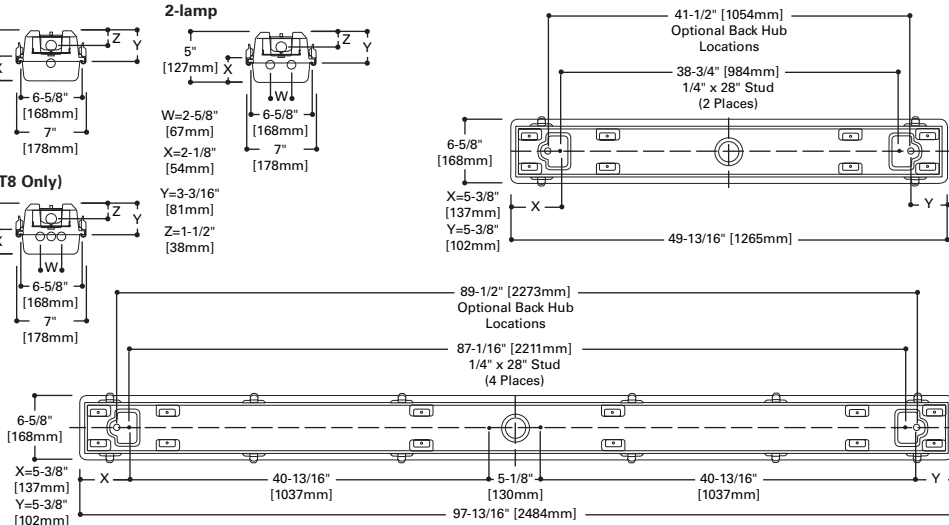
Optional die formed finished or 95% specular miro reflector.



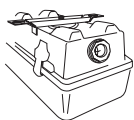
LAMP CONFIGURATIONS



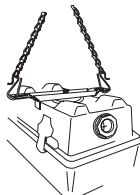
MOUNTING DATA



INSTALLATION DATA



MOUNTING BRACKETS
 Furnished
 Two per 2' and 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 2' or 4' Fixture
 Two (2) Kits Recommended For 8' Fixture



VT2
132
232
332
154T5
254T5

4' OR 8' INDUSTRIAL
1, 2 OR 3 LAMP T8
1 OR 2 LAMP T5HO

Vaportight Industrial

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
 132 (36), 232 (57), 332 (82)
EB Ballast & T5HO Lamps
 254T5 (121), 8T254T5 (242)
EB Ballast & T5HO Lamps
 154T5 (62), 254T5 (117)
EB Plus Ballast & STD Lamps
 132 (46), 232 (73), 332 (108)
 Luminaire Efficacy Rating
LER = FI-73
Catalog Number: VT-232DR
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.29

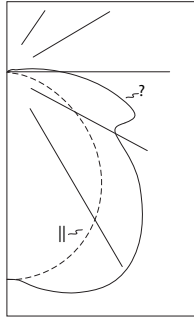
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**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

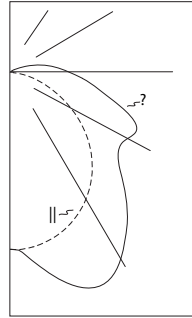




VT2-254DR-UNV-EB81-WL-M4-U
 Electronic Ballast
 (2) F54/T5/835 Lamps
 4460 Lumens each
 Spacing criterion:
 (H) 1.2 x mounting
 height, (?) 1.6 x
 mounting height
 Efficiency 74.3%
 Test Report:
 127P111
 LER = FI57
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$4.24

Candlepower

| Angle | Along H | 45° | Across ? |
|-------|---------|------|----------|
| 0 | 1615 | 1615 | 1615 |
| 5 | 1613 | 1632 | 1648 |
| 10 | 1592 | 1673 | 1723 |
| 15 | 1556 | 1704 | 1781 |
| 20 | 1504 | 1717 | 1820 |
| 25 | 1438 | 1712 | 1839 |
| 30 | 1357 | 1683 | 1815 |
| 35 | 1262 | 1625 | 1743 |
| 40 | 1154 | 1532 | 1635 |
| 45 | 1033 | 1412 | 1499 |
| 50 | 902 | 1263 | 1355 |
| 55 | 762 | 1101 | 1180 |
| 60 | 621 | 944 | 994 |
| 65 | 485 | 775 | 968 |
| 70 | 362 | 667 | 1051 |
| 75 | 253 | 677 | 992 |
| 80 | 158 | 612 | 827 |
| 85 | 74 | 455 | 647 |
| 90 | 26 | 297 | 463 |



VT2-232DR-UNV-EB81-WL-M4-U
 Electronic Ballast
 (2) T8 Lamps
 2850 Lumens each
 Spacing criterion:
 (H) 1.3 x mounting
 height, (?) 1.6 x
 mounting height
 Efficiency 81.7%
 Test Report:
 127P113
 LER = FI71
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.39

Candlepower

| Angle | Along H | 45° | Across ? |
|-------|---------|------|----------|
| 0 | 1036 | 1036 | 1036 |
| 5 | 1036 | 1059 | 1077 |
| 10 | 1023 | 1114 | 1175 |
| 15 | 1000 | 1175 | 1275 |
| 20 | 968 | 1227 | 1344 |
| 25 | 926 | 1255 | 1352 |
| 30 | 876 | 1245 | 1284 |
| 35 | 817 | 1184 | 1182 |
| 40 | 750 | 1080 | 1070 |
| 45 | 674 | 961 | 946 |
| 50 | 591 | 834 | 833 |
| 55 | 501 | 706 | 780 |
| 60 | 408 | 597 | 785 |
| 65 | 317 | 533 | 816 |
| 70 | 233 | 520 | 755 |
| 75 | 160 | 489 | 624 |
| 80 | 97 | 396 | 518 |
| 85 | 45 | 302 | 434 |
| 90 | 16 | 224 | 353 |

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | |
|-----|------------------------------------|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 80% | | 70% | | 20% | | | | | | | | | | | | | |
| rw | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 87 | 87 | 87 | 87 | 85 | 85 | 85 | 85 | 80 | 80 | 80 | 76 | 76 | 76 | 72 | 72 | 72 | 70 |
| 1 | 78 | 73 | 70 | 66 | 75 | 71 | 68 | 65 | 67 | 64 | 62 | 64 | 61 | 59 | 60 | 59 | 57 | 55 |
| 2 | 70 | 63 | 57 | 52 | 68 | 61 | 56 | 51 | 58 | 53 | 50 | 55 | 51 | 48 | 52 | 49 | 46 | 44 |
| 3 | 64 | 55 | 48 | 43 | 61 | 53 | 47 | 42 | 51 | 45 | 41 | 48 | 43 | 40 | 45 | 42 | 39 | 37 |
| 4 | 58 | 48 | 41 | 36 | 56 | 47 | 40 | 35 | 45 | 39 | 34 | 42 | 38 | 34 | 40 | 36 | 33 | 31 |
| 5 | 53 | 43 | 36 | 31 | 51 | 42 | 35 | 30 | 40 | 34 | 30 | 38 | 33 | 29 | 36 | 32 | 28 | 26 |
| 6 | 49 | 39 | 32 | 27 | 47 | 38 | 31 | 26 | 36 | 30 | 26 | 34 | 29 | 25 | 33 | 28 | 25 | 23 |
| 7 | 45 | 35 | 28 | 23 | 44 | 34 | 28 | 23 | 32 | 27 | 23 | 31 | 26 | 22 | 30 | 25 | 22 | 20 |
| 8 | 42 | 32 | 25 | 21 | 41 | 31 | 25 | 20 | 30 | 24 | 20 | 28 | 23 | 20 | 27 | 23 | 19 | 18 |
| 9 | 39 | 29 | 23 | 18 | 38 | 28 | 22 | 18 | 27 | 22 | 18 | 26 | 21 | 18 | 25 | 21 | 17 | 16 |
| 10 | 37 | 27 | 21 | 17 | 36 | 26 | 20 | 16 | 25 | 20 | 16 | 24 | 19 | 16 | 23 | 19 | 16 | 14 |

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | |
|-----|------------------------------------|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 80% | | 70% | | 20% | | | | | | | | | | | | | |
| rw | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 96 | 96 | 96 | 96 | 93 | 93 | 93 | 93 | 87 | 87 | 87 | 82 | 82 | 82 | 78 | 78 | 78 | 76 |
| 1 | 86 | 81 | 77 | 73 | 83 | 78 | 74 | 71 | 74 | 70 | 68 | 69 | 67 | 64 | 65 | 63 | 61 | 59 |
| 2 | 77 | 69 | 63 | 58 | 74 | 67 | 61 | 57 | 63 | 58 | 54 | 60 | 56 | 52 | 56 | 53 | 50 | 48 |
| 3 | 70 | 60 | 53 | 47 | 67 | 59 | 52 | 46 | 55 | 49 | 45 | 52 | 47 | 43 | 49 | 45 | 42 | 40 |
| 4 | 64 | 53 | 45 | 40 | 61 | 52 | 44 | 39 | 49 | 43 | 38 | 46 | 41 | 37 | 44 | 39 | 35 | 33 |
| 5 | 58 | 47 | 39 | 34 | 56 | 46 | 39 | 33 | 44 | 37 | 32 | 41 | 36 | 31 | 39 | 34 | 31 | 29 |
| 6 | 54 | 42 | 35 | 29 | 52 | 41 | 34 | 29 | 39 | 33 | 28 | 37 | 32 | 27 | 35 | 30 | 27 | 25 |
| 7 | 50 | 38 | 31 | 26 | 48 | 37 | 30 | 25 | 35 | 29 | 25 | 34 | 28 | 24 | 32 | 27 | 24 | 22 |
| 8 | 46 | 35 | 28 | 23 | 45 | 34 | 27 | 22 | 32 | 26 | 22 | 31 | 25 | 21 | 29 | 25 | 21 | 19 |
| 9 | 43 | 32 | 25 | 20 | 42 | 31 | 25 | 20 | 30 | 24 | 20 | 28 | 23 | 19 | 27 | 22 | 19 | 17 |
| 10 | 40 | 29 | 23 | 18 | 39 | 29 | 22 | 18 | 27 | 22 | 18 | 26 | 21 | 17 | 25 | 20 | 17 | 15 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 1411 | 15.8 | 21.3 |
| 0-40 | 2397 | 26.9 | 36.2 |
| 0-60 | 4380 | 49.1 | 66.2 |
| 0-90 | 6268 | 70.3 | 94.8 |
| 0-180 | 6614 | 74.2 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 7779 | 10632 | 11288 |
| 55 | 7074 | 10221 | 10954 |
| 65 | 6110 | 9764 | 12196 |
| 75 | 5205 | 13928 | 20408 |
| 85 | 4251 | 27797 | 39527 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 985 | 17.3 | 21.1 |
| 0-40 | 1675 | 29.4 | 36.0 |
| 0-60 | 2999 | 52.6 | 64.4 |
| 0-90 | 4316 | 75.7 | 92.7 |
| 0-180 | 4658 | 81.7 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 4874 | 6095 | 5343 |
| 55 | 4392 | 5171 | 4906 |
| 65 | 3669 | 4791 | 5995 |
| 75 | 2853 | 5921 | 5721 |
| 85 | 1868 | 5874 | 5512 |

ORDERING INFORMATION

SAMPLE NUMBER: 8TVT2-254DR-UNV-EB82-M4-U

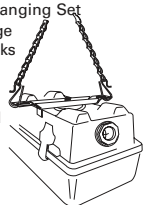
| | | | | | |
|--|---|--|-------------------------------------|--|---|
| <p>Width Blank=4' Length 8T=8' Length</p> <p>Series VT2=Vapor-Tite</p> <p>Number of Lamps⁽³⁾ 1=1 lamp (T5 or T8) 2=2 lamps (T5 or T8) 3=3 lamps (T8 only) (Lamps not included)</p> <p>Lamp Type 32=32W T8 Lamp (4' Long) 54T5=54WT5HO Lamp (4' Long)</p> <p>Lens DR=Internal Prismatic Lens/15% DR High Impact Additive (Standard) DR-100%=100% High Impact Additive LEX=High Impact Clear Polycarbonate LEXAN Lens/Low Brightness Pattern</p> | <p>Voltage⁽¹⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt 480V=480 Volt UNV=Universal Voltage 120/277V UNC=Universal Voltage 347/480V (T5 Linear Only)</p> <p>Fusing GL=Single Element Fuse GM=Double Element Fuse Emergency=EM Installed, see EM options table⁽³⁾⁽⁴⁾</p> | <p>Ballast Type⁽¹⁾ T8 Systems EB8 =T8 Electronic Instant Start.⁽⁴⁾ Total Harmonic Distortion < 20% 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 ER8 /PLUS=T8 Electronic Program Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EB8 /L=T8 Electronic Instant Start w/0.80 Ballast Factor. No. of Ballast 1 or 2 T5 Systems EBT =T5HO Electronic Program Start. No. of Ballast 1 or 2</p> | <p>WL=Wet Location Label</p> | <p>Options RIF1=Radio Interference Suppressor TH=(2) Top Watertite Hubs TEH=(2) Top & (2) End Watertite Hubs (all Watertite Hubs have 1/2" Conduit Entry) TILW=Tandem In-Line Wiring Option (Consult TILW Option Catalog Page) PI/CPI=Plug-In Option DD=Deep Diffuser (4' Length) (Available for 4' Fixture Length) To Complement Deep Diffuser Depth of 8' Fixture M4=Specular Reflector SSL=Stainless Steel Latches</p> | <p>Packaging U=Unit Pack PALC=Job Pack in Carton</p> |
|--|---|--|-------------------------------------|--|---|

NOTES: ⁽¹⁾Ballast type used only if ballast & voltage is chosen ⁽²⁾Not available when specifying emergencies, voltage must be specific. ⁽³⁾T5HO is only available in 1 or 2-lamp versions only. ⁽⁴⁾Emergency option in 3 lamp version must use remote mount test switch.

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 2' or 4' Fixture
- Two (2) Kits Recommended For 8' Fixture
- VT2-SS-MBK=Stainless Steel Mounting Bracket



SHIPPING DATA

| Catalog No. | Wt. |
|--------------|---------|
| VT2-132DR-WL | 35 lbs. |
| VT2-232DR-WL | 35 lbs. |