

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P621947

Luminaire Tested: VLT-BB-M-075U-125D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621947  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/28/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-BB-M-075U-125D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

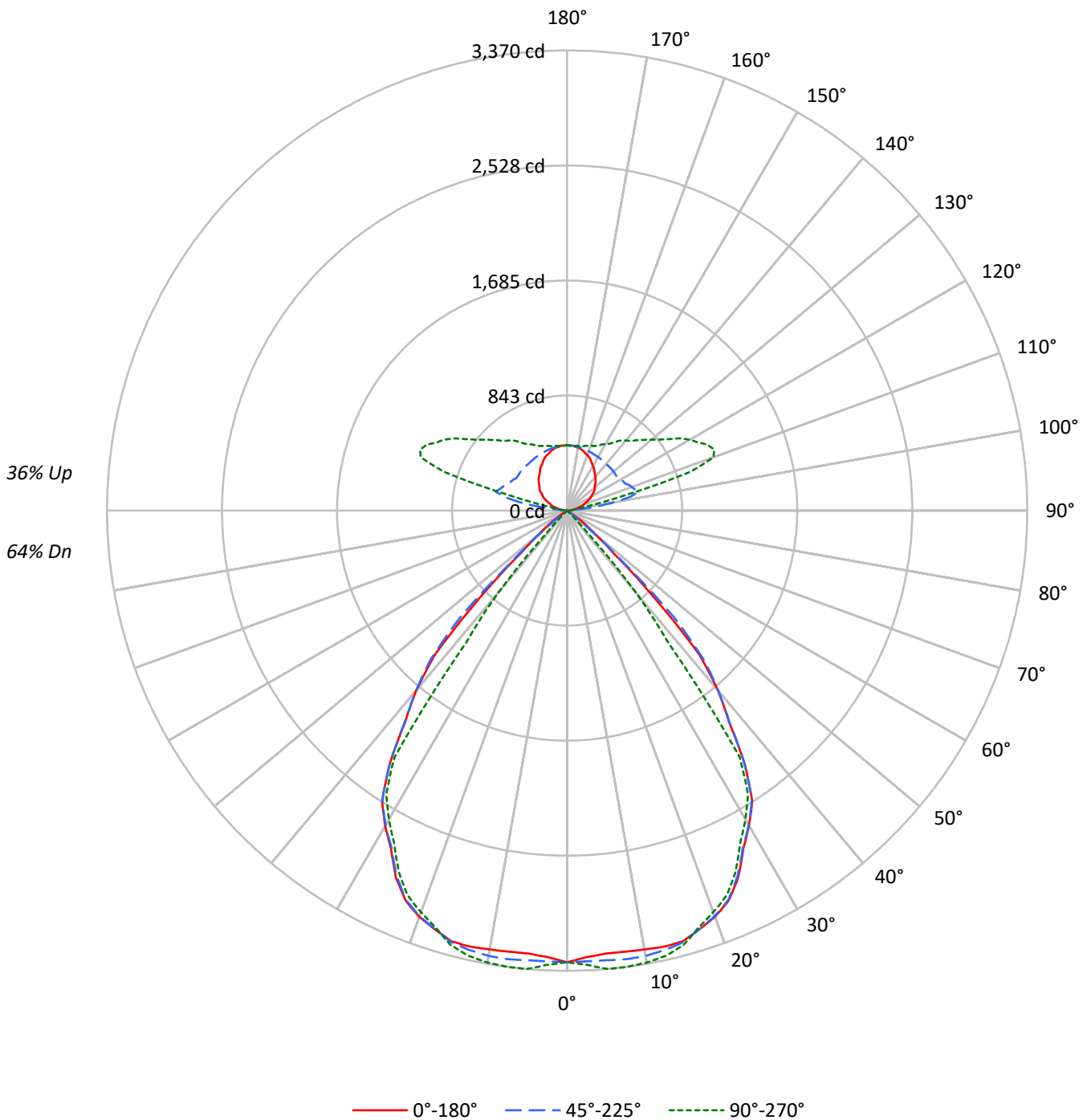
Lumens per Lamp: N/A  
Luminaire Lumens: 7120.7 lumens  
Efficiency: N/A  
Efficacy: 97.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 73.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |    | 20 |    |    |    |    |    |    |    |    | 20 |    |    |    |    |   |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |    | 70 |    |    |    |    |    |    |    |    | 30 |    |    |    |    |   |  |  |  | 10 |  |  |  |  |  |  |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 110 | 110 | 110 | 110 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 80 | 80 | 80 | 69 | 69 | 69 | 64 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 103 | 100 | 97  | 94  | 97  | 94  | 92  | 90  | 84 | 82 | 80 | 74 | 73 | 72 | 65 | 64 | 63 | 59 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 97  | 91  | 86  | 82  | 91  | 86  | 82  | 78  | 77 | 74 | 71 | 69 | 66 | 64 | 61 | 59 | 58 | 54 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 90  | 83  | 77  | 72  | 85  | 78  | 73  | 69  | 71 | 67 | 64 | 63 | 61 | 58 | 57 | 55 | 53 | 50 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 84  | 75  | 69  | 64  | 79  | 72  | 66  | 62  | 65 | 61 | 57 | 59 | 55 | 53 | 53 | 50 | 48 | 45 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 79  | 69  | 62  | 57  | 74  | 66  | 60  | 55  | 60 | 55 | 52 | 54 | 51 | 48 | 49 | 47 | 44 | 42 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 74  | 63  | 56  | 52  | 70  | 61  | 54  | 50  | 55 | 50 | 47 | 51 | 47 | 44 | 46 | 43 | 41 | 38 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 69  | 58  | 51  | 47  | 65  | 56  | 50  | 45  | 51 | 46 | 43 | 47 | 43 | 40 | 43 | 40 | 37 | 35 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 65  | 54  | 47  | 42  | 61  | 52  | 46  | 41  | 48 | 43 | 39 | 44 | 40 | 37 | 40 | 37 | 35 | 33 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 61  | 50  | 43  | 39  | 58  | 48  | 42  | 38  | 44 | 39 | 36 | 41 | 37 | 34 | 38 | 34 | 32 | 30 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 57  | 46  | 40  | 36  | 54  | 45  | 39  | 35  | 41 | 36 | 33 | 38 | 34 | 31 | 35 | 32 | 30 | 28 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 23739 | 23739 | 23739 |
| 5°  | 23456 | 23812 | 24274 |
| 10° | 23781 | 24123 | 24483 |
| 15° | 24265 | 24320 | 24466 |
| 20° | 24170 | 24132 | 23906 |
| 25° | 23478 | 23380 | 23107 |
| 30° | 22077 | 22035 | 21627 |
| 35° | 19838 | 19860 | 19299 |
| 40° | 16107 | 16107 | 7371  |
| 45° | 9263  | 11266 | 150   |
| 50° | 2919  | 2699  | 137   |
| 55° | 1018  | 216   | 124   |
| 60° | 70    | 142   | 142   |
| 65° | 42    | 126   | 126   |
| 70° | 52    | 155   | 155   |
| 75° | 0     | 136   | 136   |
| 80° | 0     | 202   | 202   |
| 85° | 0     | 206   | 206   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11266 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 316.1  | 4.4       |
| 10°-20°   | 922.4  | 13.0      |
| 20°-30°   | 1347.5 | 18.9      |
| 30°-40°   | 1334.6 | 18.7      |
| 40°-50°   | 558.7  | 7.8       |
| 50°-60°   | 59.8   | 0.8       |
| 60°-70°   | 8.4    | 0.1       |
| 70°-80°   | 5.0    | 0.1       |
| 80°-90°   | 3.5    | 0.0       |
| 90°-100°  | 58.7   | 0.8       |
| 100°-110° | 418.3  | 5.9       |
| 110°-120° | 567.9  | 8.0       |
| 120°-130° | 462.2  | 6.5       |
| 130°-140° | 371.7  | 5.2       |
| 140°-150° | 293.1  | 4.1       |
| 150°-160° | 214.3  | 3.0       |
| 160°-170° | 133.1  | 1.9       |
| 170°-180° | 45.4   | 0.6       |
| 0°-30°    | 2586.1 | 36.3      |
| 0°-40°    | 3920.6 | 55.1      |
| 0°-60°    | 4539.1 | 63.7      |
| 0°-90°    | 4556.0 | 64.0      |
| 90°-120°  | 1044.9 | 14.7      |
| 90°-150°  | 2171.9 | 30.5      |
| 90°-180°  | 2565.0 | 36.0      |
| 0°-180°   | 7120.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3308 | 3308  | 3308 | 3308  | 3308 |      |
| 5°   | 3256 | 3314  | 3306 | 3314  | 3370 | 311  |
| 15°  | 3266 | 3334  | 3274 | 3250  | 3293 | 918  |
| 25°  | 2965 | 3016  | 2953 | 2882  | 2918 | 1354 |
| 35°  | 2265 | 2270  | 2267 | 2222  | 2203 | 1389 |
| 45°  | 913  | 1084  | 1110 | 22    | 15   | 716  |
| 55°  | 81   | 108   | 17   | 12    | 10   | 91   |
| 65°  | 2    | 10    | 7    | 7     | 7    | 3    |
| 75°  | 0    | 5     | 5    | 5     | 5    | 0    |
| 85°  | 0    | 2     | 2    | 2     | 2    | 0    |
| 90°  | 0    | 3     | 6    | 9     | 9    | 1    |
| 95°  | 24   | 45    | 24   | 27    | 33   | 27   |
| 105° | 93   | 143   | 544  | 694   | 459  | 98   |
| 115° | 165  | 200   | 468  | 974   | 1138 | 164  |
| 125° | 237  | 270   | 441  | 772   | 913  | 211  |
| 135° | 294  | 327   | 444  | 636   | 730  | 226  |
| 145° | 348  | 378   | 447  | 554   | 613  | 219  |
| 155° | 408  | 423   | 456  | 502   | 526  | 187  |
| 165° | 453  | 459   | 468  | 481   | 490  | 127  |
| 175° | 478  | 480   | 478  | 474   | 471  | 45   |
| 180° | 478  | 478   | 478  | 478   | 478  |      |



TEST NUMBER: P621947

CATALOG NUMBER: VLT-BB-M-075U-125D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3308.1 | 3308.1 | 3308.1 | 3308.1 | 3308.1 |
| 2.5°   | 3272.6 | 3318.9 | 3304.2 | 3300.9 | 3329.9 |
| 5°     | 3256.3 | 3314.2 | 3305.7 | 3314.3 | 3369.8 |
| 7.5°   | 3257.8 | 3311.4 | 3314.6 | 3314.3 | 3369.8 |
| 10°    | 3263.7 | 3319.2 | 3310.6 | 3304.5 | 3360.0 |
| 12.5°  | 3271.6 | 3329.0 | 3296.8 | 3286.7 | 3340.2 |
| 15°    | 3266.2 | 3333.7 | 3273.6 | 3249.9 | 3293.3 |
| 17.5°  | 3216.4 | 3294.5 | 3215.4 | 3169.7 | 3201.6 |
| 20°    | 3165.1 | 3247.1 | 3160.1 | 3096.8 | 3130.5 |
| 22.5°  | 3092.0 | 3168.3 | 3085.1 | 3012.0 | 3051.6 |
| 25°    | 2965.2 | 3015.9 | 2952.9 | 2882.2 | 2918.4 |
| 27.5°  | 2792.6 | 2821.5 | 2785.7 | 2722.0 | 2744.2 |
| 30°    | 2664.3 | 2683.6 | 2659.3 | 2595.5 | 2610.0 |
| 32.5°  | 2522.2 | 2531.8 | 2517.3 | 2459.2 | 2465.9 |
| 35°    | 2264.6 | 2269.5 | 2267.1 | 2222.3 | 2203.0 |
| 37.5°  | 1946.4 | 1956.1 | 1950.4 | 1755.4 | 1211.3 |
| 40°    | 1719.4 | 1729.1 | 1719.4 | 1028.2 | 786.9  |
| 42.5°  | 1435.3 | 1497.0 | 1480.6 | 701.1  | 224.5  |
| 45°    | 912.8  | 1084.0 | 1110.1 | 22.0   | 14.8   |
| 47.5°  | 451.0  | 635.7  | 522.0  | 14.3   | 14.3   |
| 50°    | 261.5  | 374.9  | 241.8  | 12.3   | 12.3   |
| 52.5°  | 174.7  | 228.2  | 70.1   | 12.3   | 12.3   |
| 55°    | 81.4   | 107.9  | 17.3   | 12.3   | 9.9    |
| 57.5°  | 28.6   | 54.2   | 11.8   | 9.9    | 9.9    |
| 60°    | 4.9    | 26.6   | 9.9    | 9.9    | 9.9    |
| 62.5°  | 3.0    | 15.0   | 9.9    | 7.9    | 9.9    |
| 65°    | 2.5    | 9.7    | 7.4    | 7.4    | 7.4    |
| 67.5°  | 2.5    | 7.3    | 7.4    | 7.4    | 7.4    |
| 70°    | 2.5    | 7.3    | 7.4    | 7.4    | 7.4    |
| 72.5°  | 0.5    | 5.3    | 5.4    | 5.5    | 7.4    |
| 75°    | 0.0    | 4.8    | 4.9    | 4.9    | 4.9    |
| 77.5°  | 0.0    | 4.8    | 4.9    | 4.9    | 4.9    |
| 80°    | 0.0    | 4.8    | 4.9    | 4.9    | 4.9    |
| 82.5°  | 0.0    | 2.9    | 3.0    | 3.0    | 4.9    |
| 85°    | 0.0    | 2.4    | 2.5    | 2.5    | 2.5    |
| 87.5°  | 0.0    | 2.5    | 3.2    | 3.8    | 3.8    |
| 90°    | 0.0    | 2.9    | 6.0    | 9.0    | 9.0    |
| 92.5°  | 7.2    | 10.1   | 13.2   | 18.7   | 21.0   |
| 95°    | 24.0   | 44.6   | 24.0   | 27.2   | 33.0   |
| 97.5°  | 42.6   | 85.5   | 176.6  | 52.1   | 45.0   |
| 100°   | 57.1   | 107.0  | 354.3  | 104.3  | 69.1   |
| 102.5° | 71.5   | 123.7  | 479.3  | 275.2  | 150.7  |
| 105°   | 93.1   | 143.0  | 543.5  | 694.3  | 459.4  |
| 107.5° | 114.7  | 152.3  | 518.9  | 1010.5 | 946.5  |
| 110°   | 129.1  | 164.4  | 504.5  | 1061.8 | 1141.1 |



TEST NUMBER: P621947

CATALOG NUMBER: VLT-BB-M-075U-125D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 143.5 | 178.8 | 490.1 | 1031.8 | 1165.1 |
| 115°   | 165.2 | 200.4 | 468.4 | 973.7  | 1138.1 |
| 117.5° | 187.4 | 222.0 | 463.0 | 910.7  | 1079.8 |
| 120°   | 204.2 | 236.5 | 453.4 | 862.8  | 1039.0 |
| 122.5° | 216.2 | 250.9 | 441.4 | 821.7  | 983.7  |
| 125°   | 237.2 | 269.5 | 441.4 | 771.9  | 912.9  |
| 127.5° | 254.6 | 287.5 | 442.0 | 714.2  | 853.4  |
| 130°   | 264.3 | 299.5 | 444.4 | 675.6  | 807.8  |
| 132.5° | 276.3 | 311.5 | 444.4 | 658.3  | 766.9  |
| 135°   | 294.3 | 326.6 | 444.4 | 635.7  | 729.7  |
| 137.5° | 309.3 | 343.9 | 444.4 | 610.8  | 691.3  |
| 140°   | 321.3 | 353.6 | 444.4 | 596.2  | 669.6  |
| 142.5° | 333.3 | 363.3 | 446.8 | 579.3  | 648.0  |
| 145°   | 348.3 | 377.7 | 447.4 | 553.9  | 612.6  |
| 147.5° | 366.3 | 392.2 | 451.0 | 535.5  | 580.8  |
| 150°   | 378.4 | 401.8 | 453.4 | 523.4  | 561.5  |
| 152.5° | 390.4 | 411.5 | 453.4 | 513.6  | 544.7  |
| 155°   | 408.4 | 423.1 | 456.4 | 502.0  | 525.5  |
| 157.5° | 422.8 | 436.9 | 460.0 | 494.7  | 511.7  |
| 160°   | 432.4 | 444.2 | 462.4 | 489.8  | 504.5  |
| 162.5° | 439.6 | 451.4 | 464.8 | 487.3  | 497.3  |
| 165°   | 453.4 | 459.3 | 468.4 | 480.7  | 489.5  |
| 167.5° | 461.2 | 466.5 | 471.4 | 477.6  | 482.9  |
| 170°   | 468.4 | 471.4 | 471.4 | 477.5  | 480.5  |
| 172.5° | 470.8 | 476.1 | 473.8 | 475.1  | 478.1  |
| 175°   | 477.5 | 480.4 | 477.5 | 474.4  | 471.4  |
| 177.5° | 477.5 | 479.8 | 477.5 | 477.4  | 475.1  |
| 180°   | 477.5 | 477.5 | 477.5 | 477.5  | 477.5  |



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**CIE UGR TABLE:**

| Reflectances:   |      |                  |      |      |      |      |                |      |      |      |      |
|-----------------|------|------------------|------|------|------|------|----------------|------|------|------|------|
| Ceiling         |      | 0.7              | 0.7  | 0.5  | 0.5  | 0.3  | 0.7            | 0.7  | 0.5  | 0.5  | 0.3  |
| Wall            |      | 0.5              | 0.3  | 0.5  | 0.3  | 0.3  | 0.5            | 0.3  | 0.5  | 0.3  | 0.3  |
| Reference plane |      | 0.2              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2            | 0.2  | 0.2  | 0.2  | 0.2  |
| Room dimensions |      | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |
| X=2H            | Y=2H | 0.00             | 0.41 | 0.53 | 1.27 | 2.34 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 0.00             | 0.19 | 0.41 | 1.06 | 2.16 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 0.00             | 0.06 | 0.33 | 0.93 | 2.04 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.24 | 0.79 | 1.91 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.19 | 0.71 | 1.83 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.13 | 0.62 | 1.76 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H              | 2H   | 0.00             | 0.01 | 0.30 | 0.89 | 2.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 0.00             | 0.00 | 0.22 | 0.73 | 1.85 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 0.00             | 0.00 | 0.16 | 0.61 | 1.76 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.12 | 0.51 | 1.66 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.07 | 0.43 | 1.59 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.03 | 0.34 | 1.51 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H              | 4H   | 0.00             | 0.00 | 0.08 | 0.43 | 1.60 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.13 | 0.43 | 1.60 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.14 | 0.39 | 1.58 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.12 | 0.33 | 1.56 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H             | 4H   | 0.00             | 0.00 | 0.04 | 0.36 | 1.53 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.13 | 0.38 | 1.56 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.16 | 0.37 | 1.60 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |