

Report of Test

LLIA001413-001

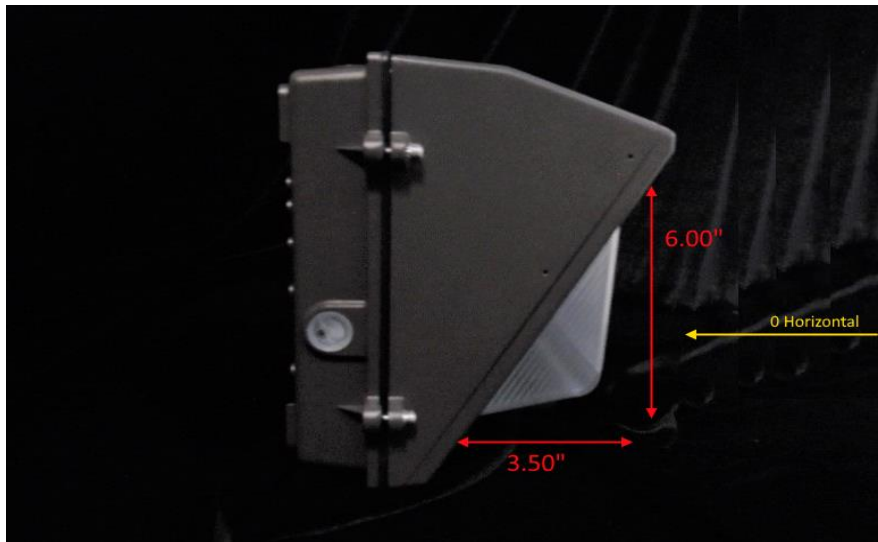
Roadway/Area Light Distribution Photometry Test Report

Catalog Number: F-WPE/120W/50K/BZ/PC

Wall mounted, cast aluminum housing, clear prismatic plastic lens.

420 white LEDs, one SWP05M-120W-2835-42C10B-A0 LED board with white plastic reflector tray

One DRMA MP-120TG130A LED driver



Prepared For:

Topaz Lighting Corp

925 Waverly Avenue

Holtsville, NY 11742, USA

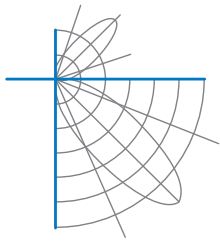
| Performance Summary | | | |
|---------------------|----------|----------------|----------------|
| Input Voltage | 120.0 V | Luminous Flux | 16068.8 Lumens |
| Input Current | 0.9642 A | Total Efficacy | 139.7 Lm/W |
| Input Power | 115.0 W | | |
| Frequency | 60.00 Hz | | |
| Power Factor | 0.994 | Roadway Type | Area Light |
| Current THD | 6.8 % | IES BUG Rating | B2 - U5 - G5 |

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

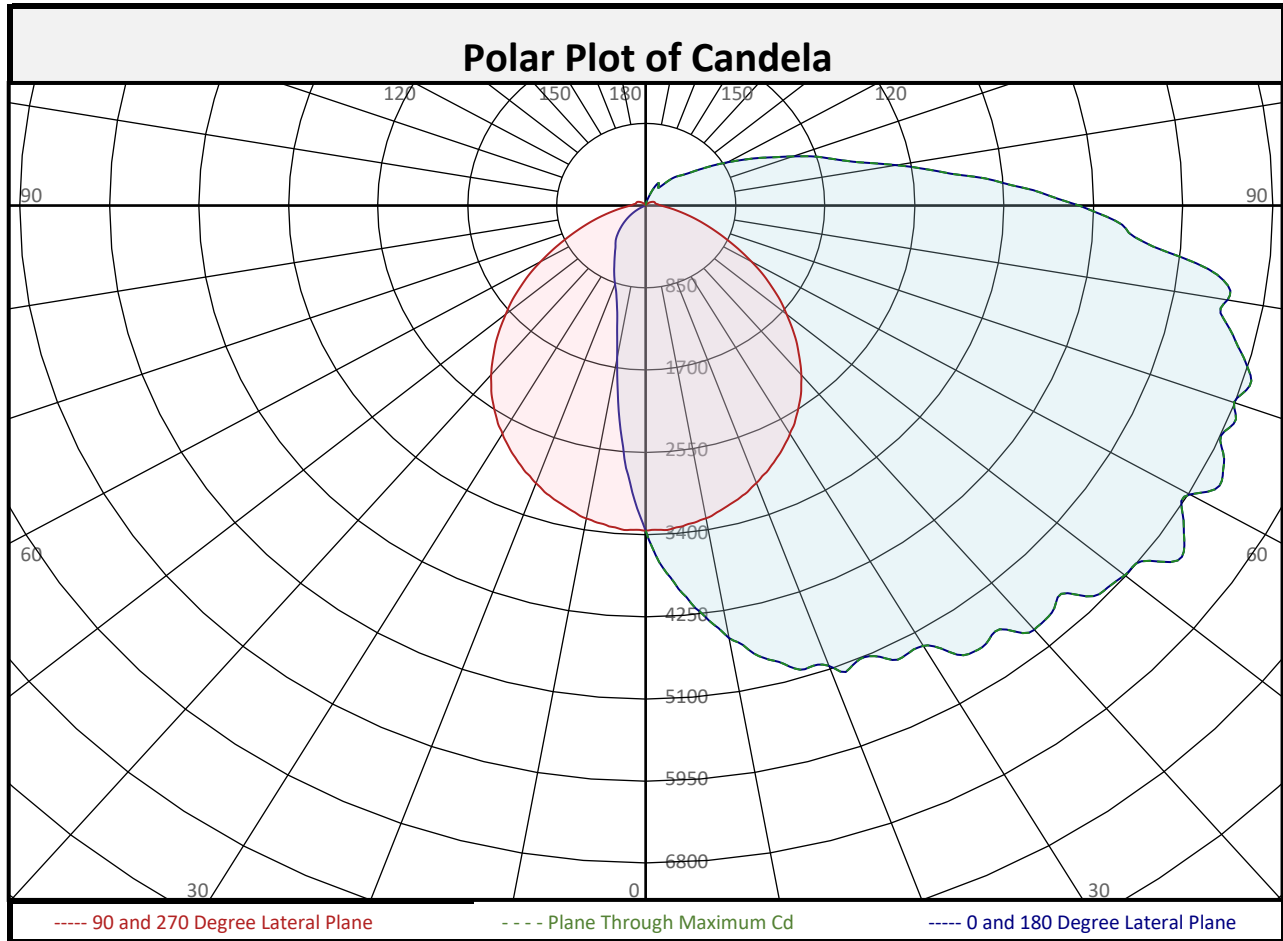
Test date: 02/22/2021

Report date: 02/23/2021

Signed: _____

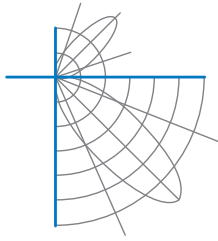


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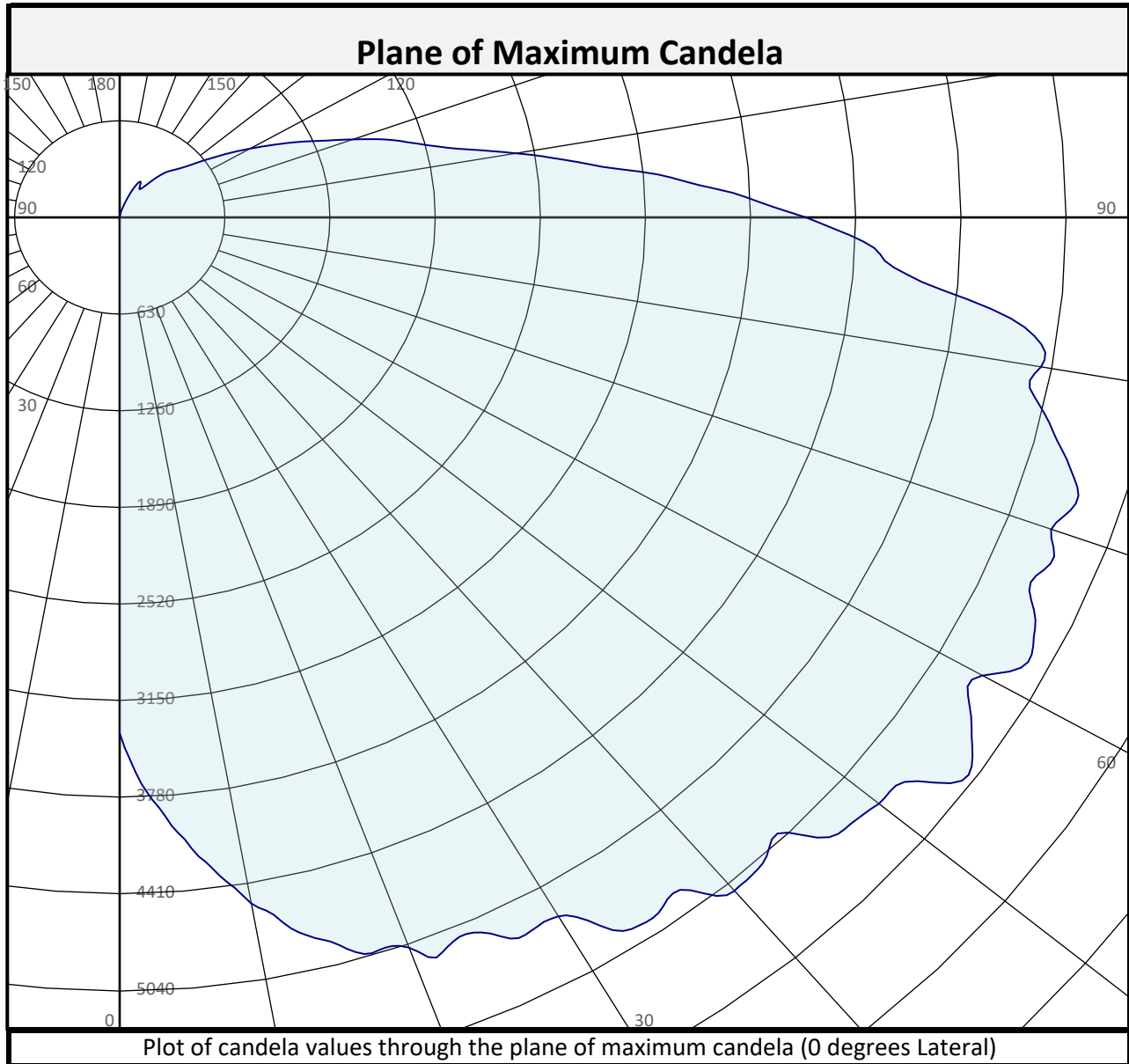


Zonal Flux Summary

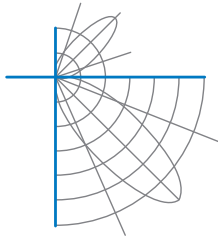
| Zone (Deg Vert) | Flux (Lumens) | Percent of Total | Zone (Deg Vert) | Flux (Lumens) | Percent of Total | Zone (Deg Vert) | Flux (Lumens) | Percent of Total |
|-----------------|---------------|------------------|-----------------|---------------|------------------|-----------------|---------------|------------------|
| 0-10 | 310.8 | 1.9% | 90-100 | 970.1 | 6.0% | 0-20 | 1166 | 7.3% |
| 10-20 | 855.5 | 5.3% | 100-110 | 554.4 | 3.5% | 0-30 | 2479 | 15.4% |
| 20-30 | 1312 | 8.2% | 110-120 | 331.9 | 2.1% | 0-40 | 4167 | 25.9% |
| 30-40 | 1689 | 10.5% | 120-130 | 190.8 | 1.2% | 0-60 | 8227 | 51.2% |
| 40-50 | 1957 | 12.2% | 130-140 | 104.3 | 0.6% | 0-80 | 12248 | 76.2% |
| 50-60 | 2102 | 13.1% | 140-150 | 54.8 | 0.3% | 10-90 | 13518 | 84.1% |
| 60-70 | 2072 | 12.9% | 150-160 | 28.4 | 0.2% | 20-50 | 4959 | 30.9% |
| 70-80 | 1950 | 12.1% | 160-170 | 4.7 | 0.0% | 40-90 | 9662 | 60.1% |
| 80-90 | 1581 | 9.8% | 170-180 | 0.1 | 0.0% | 60-90 | 5602 | 34.9% |
| 0-90 | 13829 | 86.1% | 90-180 | 2240 | 13.9% | 0-180 | 16069 | 100.0% |



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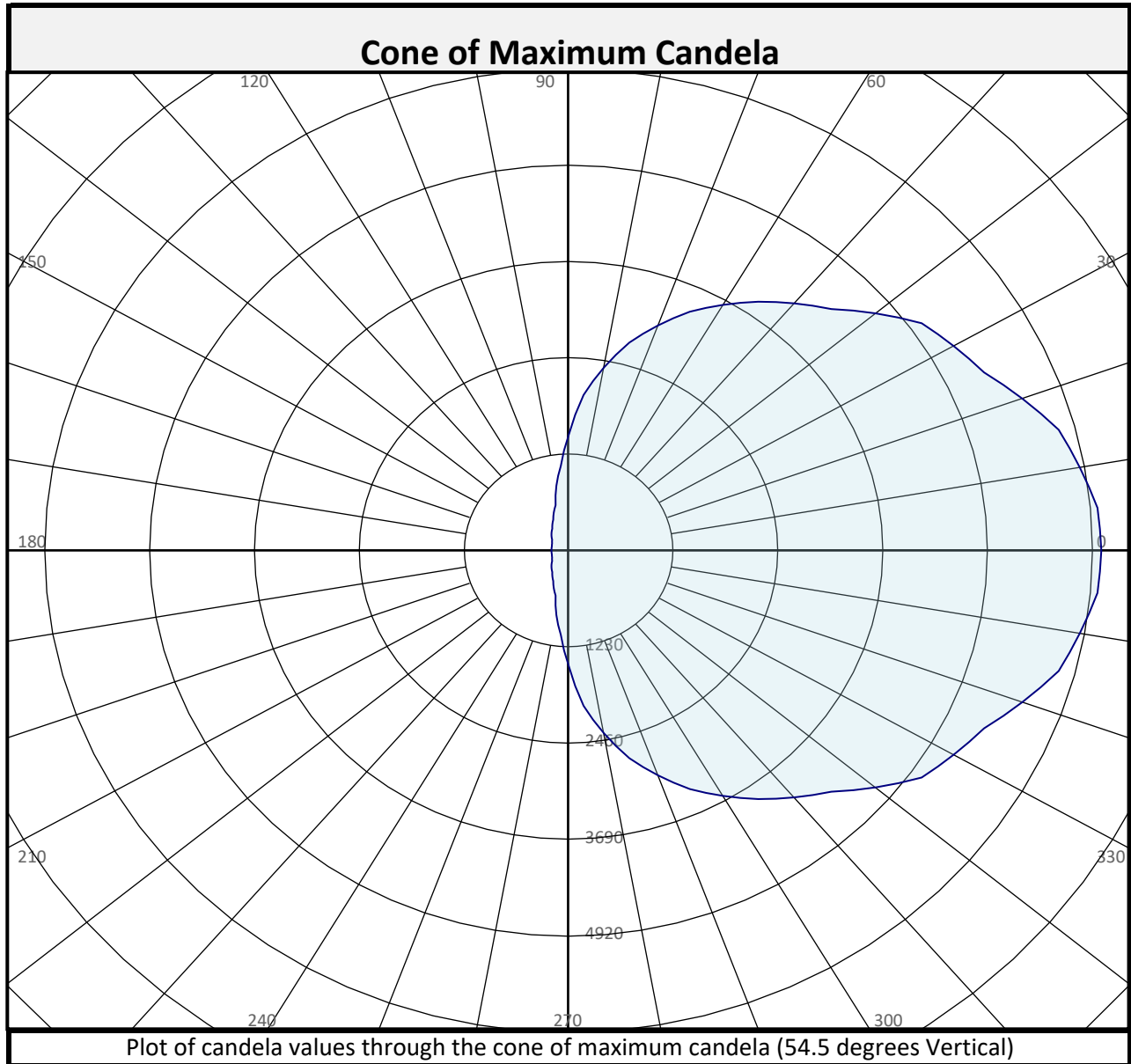


| Street and House Side Flux Summary | | | | | | |
|------------------------------------|----------------|--------------|---------------|--------------|----------------|---------------|
| | Downward | | Upward | | Total | |
| | Lumens | % of Total | Lumens | % of Total | Lumens | % of Total |
| Street Side | 12305.5 | 76.6% | 2183.1 | 13.6% | 14488.6 | 90.2% |
| House Side | 1523.7 | 9.5% | 56.5 | 0.4% | 1580.1 | 9.8% |
| Total | 13829.2 | 86.1% | 2239.6 | 13.9% | 16068.8 | 100.0% |

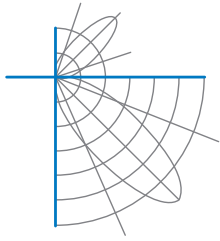


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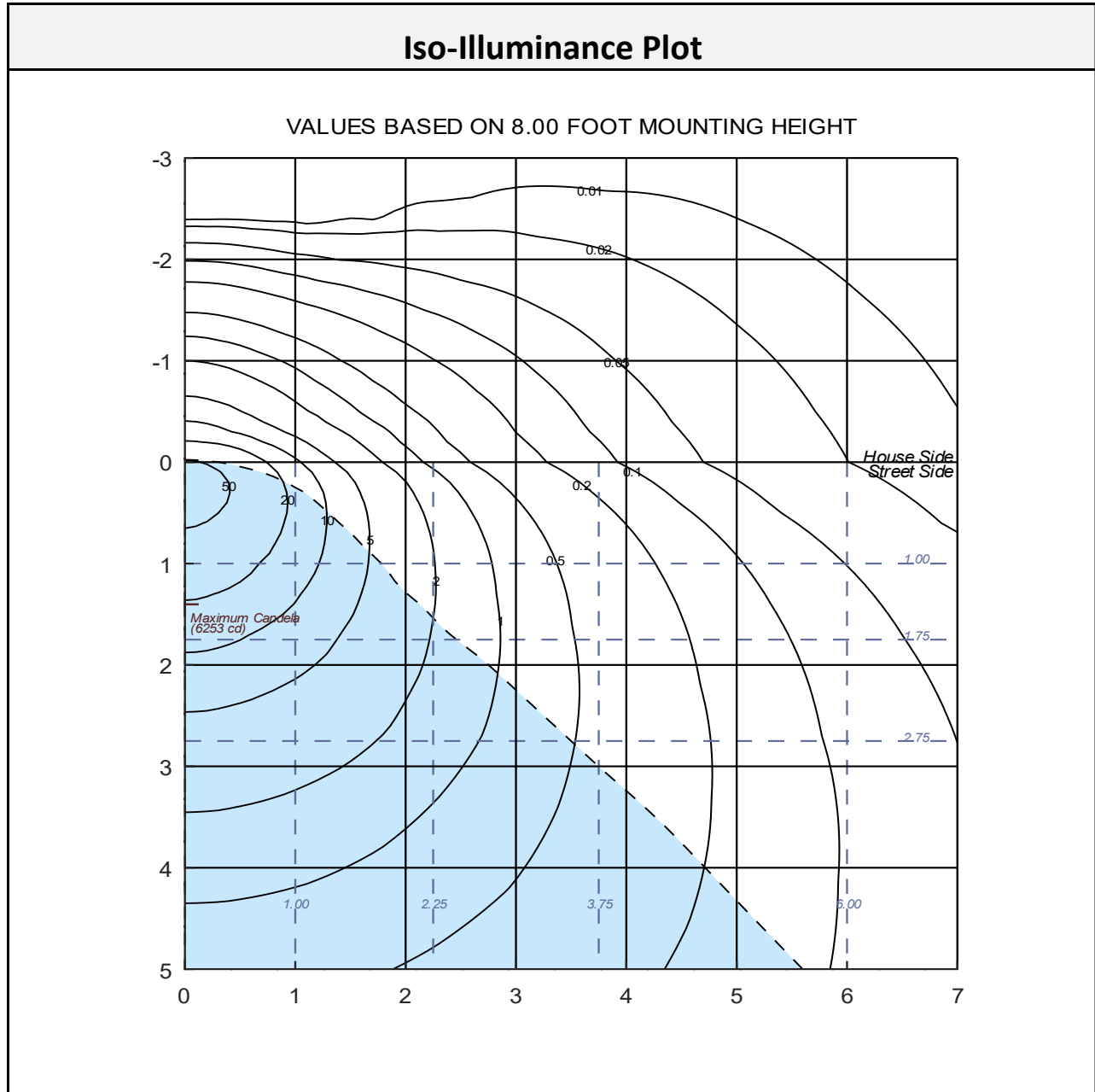
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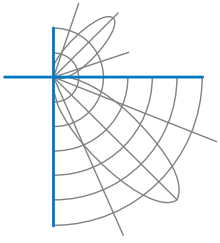
| Street and House Side Flux Summary | | | | | | |
|------------------------------------|----------------|--------------|---------------|--------------|----------------|---------------|
| | Downward | | Upward | | Total | |
| | Lumens | % of Total | Lumens | % of Total | Lumens | % of Total |
| Street Side | 12305.5 | 76.6% | 2183.1 | 13.6% | 14488.6 | 90.2% |
| House Side | 1523.7 | 9.5% | 56.5 | 0.4% | 1580.1 | 9.8% |
| Total | 13829.2 | 86.1% | 2239.6 | 13.9% | 16068.8 | 100.0% |



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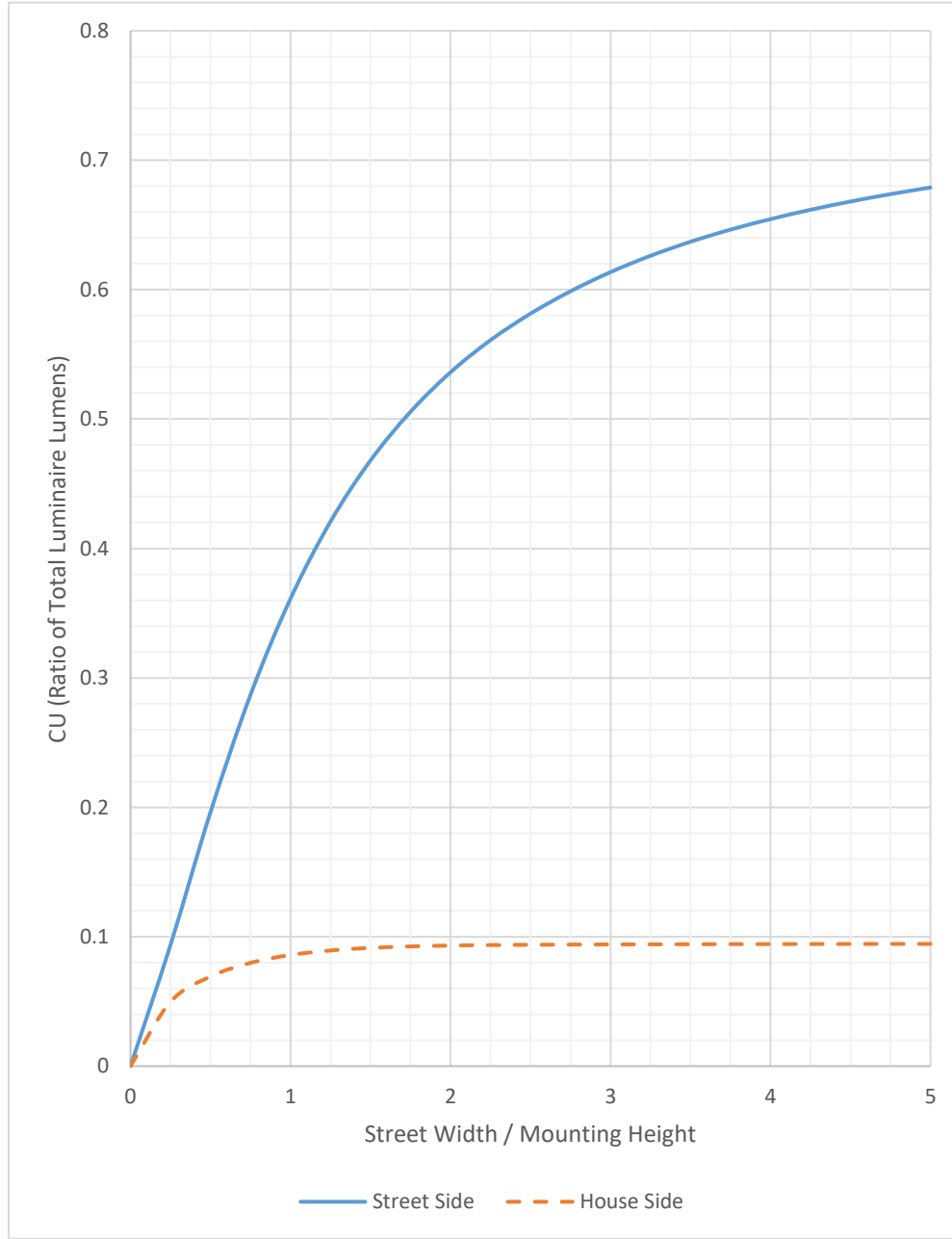


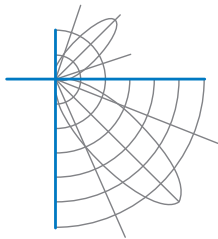
The isofootcandle values shown in the plot above are based on a mounting height of $h = 8.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.



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Coefficients of Utilization Plot

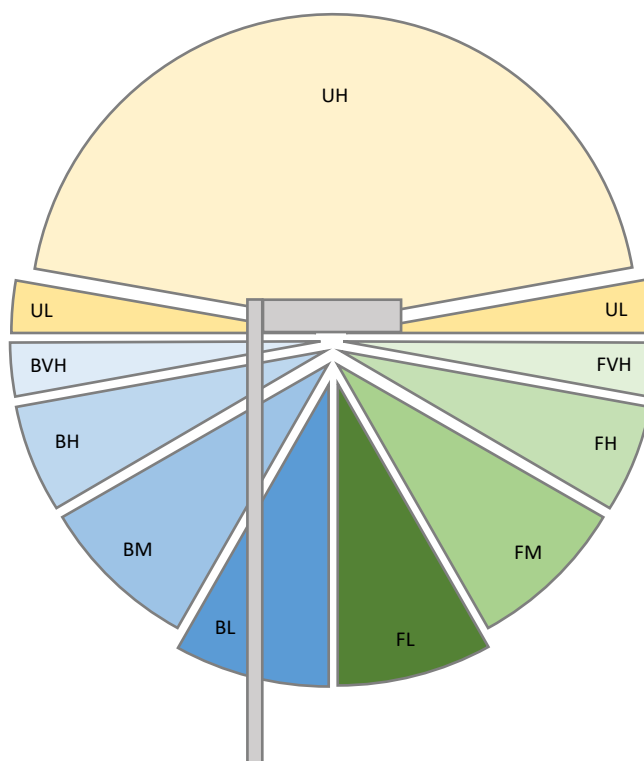




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LCS Tables and Bug Classification



Back Light

| | |
|--------------------------------|----------|
| BL - Back Low (0°-30°) | 644.0 Lm |
| BM - Back Mid (30°-60°) | 688.4 Lm |
| BH - Back High (60°-80°) | 160.4 Lm |
| BVH - Back Very High (80°-90°) | 30.9 Lm |

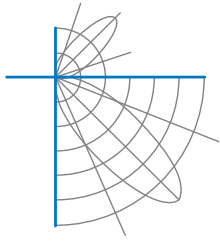
Forward Light

| | |
|-----------------------------------|-----------|
| FL - Forward Low (0°-30°) | 1834.6 Lm |
| FM - Forward Mid (30°-60°) | 5059.9 Lm |
| FH - Forward High (60°-80°) | 3861.1 Lm |
| FVH - Forward Very High (80°-90°) | 1549.9 Lm |

Uplight

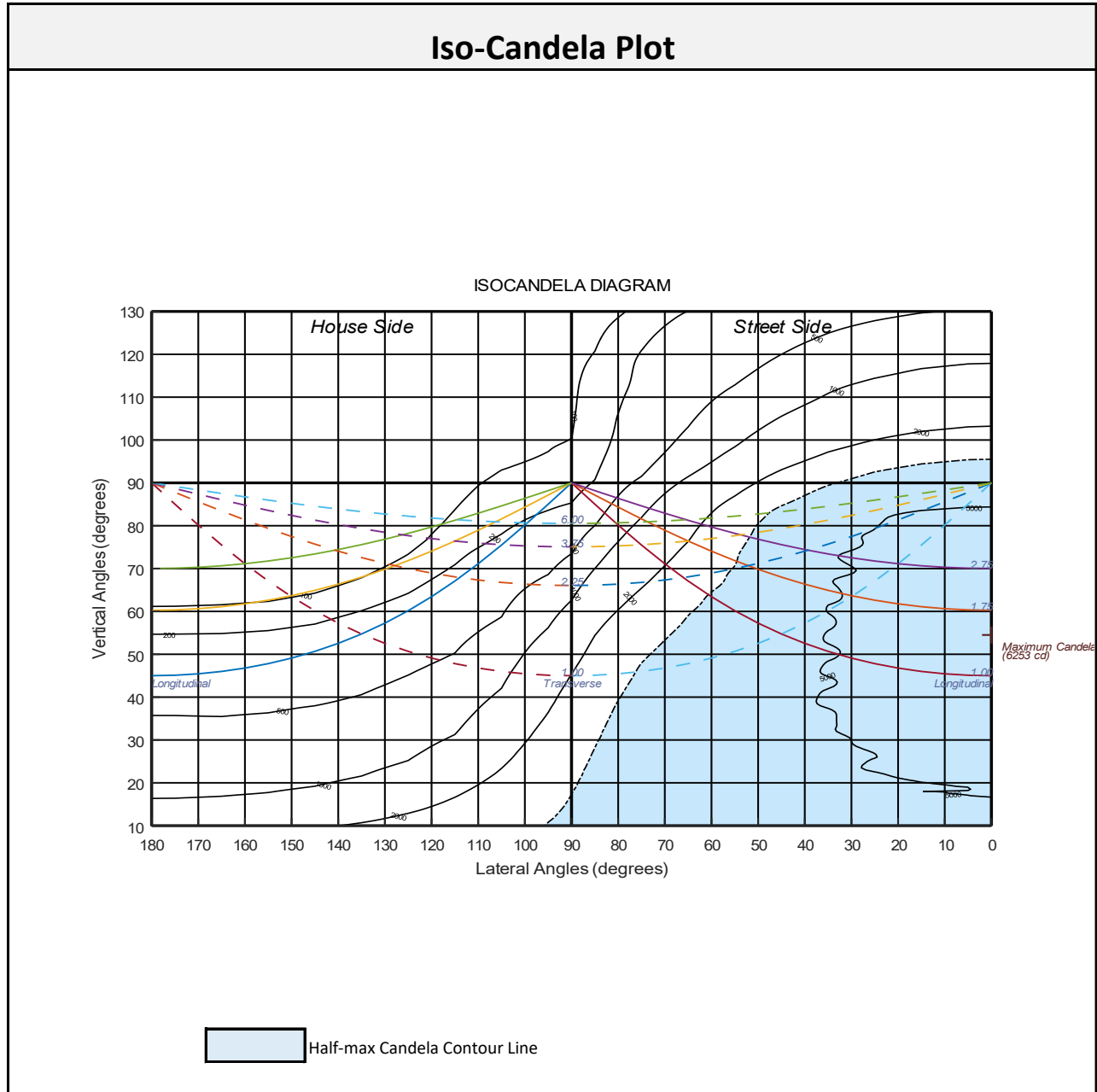
| | |
|------------------------------|-----------|
| UL - Upward Low (90°-100°) | 970.1 Lm |
| UH - Upward High (100°-180°) | 1269.5 Lm |

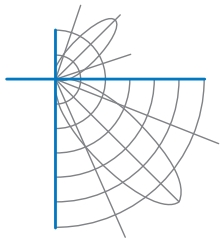
BUG Ratings: B2 - U5 - G5



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Iso-Candela Plot





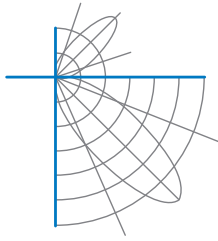
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Luminous Intensity (Candela) Table

| | Lateral (C-Plane) Angles | | | | | | | | | | | |
|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | 0 | 5 | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 | 90 | |
| 0 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 |
| 2.5 | 3747 | 3744 | 3736 | 3713 | 3680 | 3639 | 3584 | 3521 | 3458 | 3389 | 3353 | |
| 5 | 4025 | 4025 | 4002 | 3961 | 3908 | 3844 | 3769 | 3673 | 3549 | 3407 | 3337 | |
| 7.5 | 4280 | 4280 | 4239 | 4210 | 4134 | 4017 | 3905 | 3762 | 3617 | 3415 | 3310 | |
| 10 | 4537 | 4531 | 4479 | 4413 | 4307 | 4171 | 4023 | 3851 | 3662 | 3419 | 3281 | |
| 12.5 | 4743 | 4732 | 4690 | 4580 | 4493 | 4317 | 4133 | 3926 | 3685 | 3406 | 3230 | |
| 15 | 4884 | 4870 | 4854 | 4765 | 4639 | 4458 | 4229 | 3987 | 3705 | 3386 | 3177 | |
| 17.5 | 5026 | 5006 | 4990 | 4888 | 4750 | 4575 | 4336 | 4017 | 3722 | 3365 | 3123 | |
| 20 | 5061 | 5035 | 4995 | 4937 | 4851 | 4649 | 4399 | 4079 | 3717 | 3323 | 3052 | |
| 22.5 | 5141 | 5122 | 5133 | 4996 | 4836 | 4700 | 4465 | 4122 | 3702 | 3274 | 2982 | |
| 25 | 5140 | 5117 | 5071 | 5019 | 4903 | 4708 | 4484 | 4150 | 3682 | 3214 | 2899 | |
| 27.5 | 5269 | 5253 | 5214 | 5018 | 4893 | 4695 | 4476 | 4155 | 3660 | 3146 | 2816 | |
| 30 | 5258 | 5240 | 5200 | 5134 | 4869 | 4741 | 4450 | 4140 | 3641 | 3080 | 2724 | |
| 32.5 | 5506 | 5482 | 5313 | 5102 | 4981 | 4663 | 4424 | 4114 | 3619 | 3010 | 2630 | |
| 35 | 5573 | 5558 | 5481 | 5271 | 4941 | 4693 | 4410 | 4050 | 3591 | 2924 | 2522 | |
| 37.5 | 5521 | 5501 | 5429 | 5337 | 5009 | 4737 | 4372 | 3996 | 3530 | 2842 | 2413 | |
| 40 | 5730 | 5716 | 5572 | 5211 | 5103 | 4646 | 4303 | 3936 | 3452 | 2733 | 2287 | |
| 42.5 | 5707 | 5695 | 5597 | 5384 | 4948 | 4713 | 4315 | 3865 | 3364 | 2610 | 2154 | |
| 45 | 5667 | 5641 | 5485 | 5353 | 5014 | 4730 | 4251 | 3795 | 3257 | 2493 | 2021 | |
| 47.5 | 5897 | 5878 | 5696 | 5208 | 5056 | 4507 | 4120 | 3711 | 3151 | 2363 | 1878 | |
| 50 | 5942 | 5922 | 5745 | 5430 | 4857 | 4606 | 4146 | 3579 | 3022 | 2233 | 1734 | |
| 52.5 | 6032 | 5996 | 5732 | 5448 | 5003 | 4568 | 4008 | 3466 | 2874 | 2102 | 1598 | |
| 55 | 6237 | 6218 | 6004 | 5401 | 5037 | 4345 | 3875 | 3334 | 2717 | 1965 | 1447 | |
| 57.5 | 6054 | 6041 | 5898 | 5613 | 4870 | 4474 | 3893 | 3200 | 2556 | 1823 | 1305 | |
| 60 | 5970 | 5940 | 5694 | 5427 | 5022 | 4290 | 3666 | 3071 | 2389 | 1661 | 1150 | |
| 62.5 | 6166 | 6150 | 5929 | 5351 | 4893 | 4193 | 3610 | 2898 | 2214 | 1490 | 1005 | |
| 65 | 6049 | 6036 | 5870 | 5550 | 4812 | 4254 | 3443 | 2730 | 2031 | 1319 | 866 | |
| 67.5 | 5998 | 5971 | 5704 | 5337 | 4946 | 4026 | 3282 | 2545 | 1857 | 1153 | 744 | |
| 70 | 5944 | 5933 | 5731 | 5258 | 4650 | 4064 | 3166 | 2387 | 1699 | 1001 | 633 | |
| 72.5 | 6028 | 6007 | 5811 | 5464 | 4871 | 3959 | 3071 | 2224 | 1555 | 866 | 535 | |
| 75 | 5850 | 5830 | 5591 | 5168 | 4653 | 3923 | 2951 | 2081 | 1405 | 739 | 447 | |
| 77.5 | 5650 | 5640 | 5475 | 5154 | 4594 | 3756 | 2822 | 1928 | 1252 | 616 | 368 | |
| 80 | 5609 | 5578 | 5345 | 4970 | 4456 | 3684 | 2656 | 1781 | 1109 | 501 | 303 | |
| 82.5 | 5473 | 5450 | 5230 | 4831 | 4234 | 3438 | 2448 | 1620 | 970 | 400 | 250 | |
| 85 | 4831 | 4813 | 4617 | 4279 | 3787 | 3068 | 2207 | 1465 | 838 | 317 | 205 | |
| 87.5 | 4528 | 4505 | 4292 | 3914 | 3418 | 2712 | 1940 | 1294 | 706 | 254 | 171 | |
| 90 | 4118 | 4091 | 3885 | 3521 | 3033 | 2386 | 1684 | 1109 | 575 | 210 | 147 | |

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.

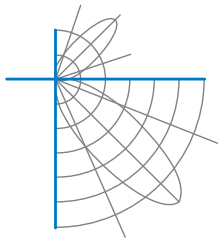


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Luminous Intensity (Candela) Table

| | Lateral (C-Plane) Angles | | | | | | | | | | | |
|--|--------------------------|------|------|------|------|------|------|------|------|-----|-----|-----|
| | 0 | 5 | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 | 90 | |
| Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown. | 90 | 4118 | 4091 | 3885 | 3521 | 3033 | 2386 | 1684 | 1109 | 575 | 210 | 147 |
| | 92.5 | 3682 | 3660 | 3468 | 3137 | 2642 | 2070 | 1444 | 917 | 460 | 181 | 132 |
| | 95 | 3235 | 3210 | 3013 | 2682 | 2262 | 1770 | 1233 | 751 | 387 | 162 | 121 |
| | 97.5 | 2770 | 2749 | 2585 | 2305 | 1966 | 1518 | 1056 | 641 | 339 | 149 | 113 |
| | 100 | 2412 | 2397 | 2254 | 2006 | 1706 | 1332 | 913 | 566 | 309 | 141 | 101 |
| | 102.5 | 2073 | 2058 | 1950 | 1751 | 1494 | 1167 | 805 | 511 | 289 | 136 | 97 |
| | 105 | 1857 | 1841 | 1724 | 1544 | 1312 | 1027 | 717 | 463 | 277 | 133 | 95 |
| | 107.5 | 1687 | 1677 | 1583 | 1392 | 1161 | 906 | 644 | 420 | 263 | 126 | 94 |
| | 110 | 1489 | 1480 | 1409 | 1265 | 1037 | 799 | 576 | 380 | 246 | 123 | 93 |
| | 112.5 | 1307 | 1298 | 1231 | 1112 | 933 | 711 | 509 | 342 | 230 | 120 | 91 |
| | 115 | 1162 | 1154 | 1088 | 969 | 821 | 632 | 449 | 312 | 222 | 116 | 88 |
| | 117.5 | 1021 | 1014 | 957 | 850 | 710 | 560 | 405 | 299 | 217 | 111 | 84 |
| | 120 | 896 | 889 | 835 | 739 | 620 | 500 | 378 | 292 | 206 | 103 | 78 |
| | 122.5 | 783 | 777 | 728 | 644 | 550 | 457 | 358 | 280 | 189 | 93 | 72 |
| | 125 | 677 | 672 | 633 | 568 | 498 | 423 | 336 | 262 | 169 | 83 | 65 |
| | 127.5 | 590 | 585 | 553 | 507 | 457 | 390 | 312 | 237 | 143 | 73 | 58 |
| | 130 | 516 | 513 | 492 | 460 | 418 | 357 | 283 | 202 | 118 | 64 | 52 |
| | 132.5 | 467 | 465 | 449 | 421 | 379 | 316 | 242 | 167 | 103 | 56 | 46 |
| | 135 | 431 | 429 | 413 | 382 | 330 | 265 | 202 | 146 | 93 | 48 | 39 |
| | 137.5 | 391 | 389 | 368 | 328 | 274 | 222 | 179 | 137 | 85 | 41 | 34 |
| | 140 | 335 | 333 | 311 | 273 | 233 | 200 | 171 | 135 | 76 | 35 | 29 |
| | 142.5 | 277 | 275 | 259 | 234 | 211 | 194 | 174 | 131 | 66 | 29 | 24 |
| | 145 | 236 | 235 | 227 | 216 | 209 | 201 | 176 | 121 | 54 | 24 | 20 |
| | 147.5 | 221 | 221 | 222 | 224 | 224 | 210 | 166 | 102 | 41 | 19 | 16 |
| | 150 | 248 | 249 | 251 | 248 | 232 | 195 | 139 | 80 | 29 | 15 | 12 |
| | 152.5 | 263 | 263 | 256 | 238 | 207 | 161 | 108 | 59 | 18 | 11 | 9 |
| | 155 | 234 | 232 | 222 | 199 | 164 | 122 | 80 | 42 | 11 | 8 | 7 |
| | 157.5 | 184 | 183 | 171 | 149 | 120 | 88 | 57 | 27 | 7 | 6 | 5 |
| | 160 | 131 | 130 | 121 | 105 | 84 | 62 | 39 | 16 | 5 | 4 | 2 |
| | 162.5 | 89 | 88 | 82 | 72 | 59 | 43 | 25 | 6 | 3 | 2 | 0 |
| 165 | 62 | 61 | 57 | 50 | 40 | 28 | 13 | 1 | 0 | 0 | 0 | |
| 167.5 | 42 | 41 | 38 | 33 | 25 | 15 | 3 | 0 | 0 | 0 | 0 | |
| 170 | 23 | 22 | 20 | 16 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | |
| 172.5 | 4 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 177.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



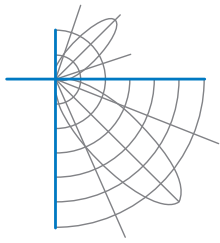
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Luminous Intensity (Candela) Table

| | Lateral (C-Plane) Angles | | | | | | | | | | | |
|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | 90 | 95 | 105 | 115 | 125 | 135 | 145 | 155 | 165 | 175 | 180 | |
| 0 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 | 3359 |
| 2.5 | 3353 | 3316 | 3250 | 3186 | 3132 | 3080 | 3032 | 2993 | 2972 | 2961 | 2965 | 2965 |
| 5 | 3337 | 3266 | 3142 | 3018 | 2885 | 2775 | 2695 | 2612 | 2534 | 2504 | 2503 | 2503 |
| 7.5 | 3310 | 3208 | 3018 | 2801 | 2634 | 2423 | 2287 | 2173 | 2086 | 2042 | 2042 | 2042 |
| 10 | 3281 | 3146 | 2876 | 2613 | 2325 | 2092 | 1894 | 1747 | 1644 | 1589 | 1589 | 1589 |
| 12.5 | 3230 | 3069 | 2719 | 2358 | 2045 | 1756 | 1531 | 1396 | 1319 | 1278 | 1276 | 1276 |
| 15 | 3177 | 2985 | 2571 | 2140 | 1758 | 1457 | 1275 | 1160 | 1104 | 1077 | 1074 | 1074 |
| 17.5 | 3123 | 2899 | 2409 | 1922 | 1502 | 1239 | 1088 | 1010 | 969 | 949 | 947 | 947 |
| 20 | 3052 | 2797 | 2223 | 1705 | 1297 | 1075 | 966 | 905 | 881 | 869 | 866 | 866 |
| 22.5 | 2982 | 2689 | 2053 | 1507 | 1134 | 960 | 872 | 830 | 807 | 795 | 793 | 793 |
| 25 | 2899 | 2569 | 1896 | 1330 | 1009 | 865 | 800 | 758 | 735 | 723 | 722 | 722 |
| 27.5 | 2816 | 2453 | 1743 | 1181 | 908 | 792 | 731 | 690 | 666 | 657 | 655 | 655 |
| 30 | 2724 | 2325 | 1589 | 1057 | 821 | 724 | 667 | 627 | 606 | 600 | 598 | 598 |
| 32.5 | 2630 | 2202 | 1447 | 949 | 748 | 661 | 609 | 573 | 554 | 551 | 550 | 550 |
| 35 | 2522 | 2071 | 1315 | 863 | 687 | 604 | 557 | 525 | 507 | 509 | 509 | 509 |
| 37.5 | 2413 | 1946 | 1195 | 787 | 633 | 553 | 509 | 482 | 474 | 479 | 479 | 479 |
| 40 | 2287 | 1813 | 1082 | 715 | 587 | 509 | 463 | 448 | 441 | 445 | 445 | 445 |
| 42.5 | 2154 | 1686 | 984 | 651 | 544 | 468 | 425 | 414 | 402 | 404 | 403 | 403 |
| 45 | 2021 | 1558 | 896 | 596 | 502 | 429 | 389 | 373 | 360 | 361 | 360 | 360 |
| 47.5 | 1878 | 1426 | 807 | 549 | 460 | 393 | 350 | 331 | 318 | 318 | 318 | 318 |
| 50 | 1734 | 1305 | 726 | 505 | 413 | 358 | 309 | 288 | 277 | 276 | 276 | 276 |
| 52.5 | 1598 | 1180 | 654 | 463 | 369 | 319 | 269 | 248 | 236 | 235 | 235 | 235 |
| 55 | 1447 | 1055 | 585 | 424 | 331 | 279 | 231 | 208 | 197 | 195 | 194 | 194 |
| 57.5 | 1305 | 939 | 526 | 383 | 294 | 240 | 193 | 170 | 160 | 156 | 155 | 155 |
| 60 | 1150 | 826 | 475 | 344 | 258 | 203 | 158 | 133 | 122 | 118 | 117 | 117 |
| 62.5 | 1005 | 721 | 430 | 304 | 222 | 167 | 123 | 98 | 87 | 81 | 81 | 81 |
| 65 | 866 | 625 | 390 | 270 | 190 | 134 | 91 | 64 | 53 | 46 | 45 | 45 |
| 67.5 | 744 | 536 | 352 | 239 | 160 | 104 | 60 | 32 | 18 | 10 | 8 | 8 |
| 70 | 633 | 459 | 313 | 210 | 133 | 77 | 31 | 1 | 1 | 0 | 0 | 0 |
| 72.5 | 535 | 397 | 277 | 183 | 108 | 52 | 12 | 0 | 0 | 0 | 0 | 0 |
| 75 | 447 | 344 | 239 | 157 | 86 | 36 | 10 | 0 | 0 | 0 | 0 | 0 |
| 77.5 | 368 | 297 | 206 | 135 | 70 | 31 | 8 | 0 | 0 | 0 | 0 | 0 |
| 80 | 303 | 254 | 180 | 117 | 62 | 27 | 7 | 0 | 0 | 0 | 0 | 0 |
| 82.5 | 250 | 216 | 158 | 105 | 56 | 24 | 5 | 0 | 0 | 0 | 0 | 0 |
| 85 | 205 | 182 | 140 | 95 | 51 | 21 | 5 | 0 | 0 | 0 | 0 | 0 |
| 87.5 | 171 | 157 | 126 | 87 | 46 | 19 | 4 | 0 | 0 | 0 | 0 | 0 |
| 90 | 147 | 137 | 115 | 80 | 42 | 16 | 3 | 0 | 0 | 0 | 0 | 0 |

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.

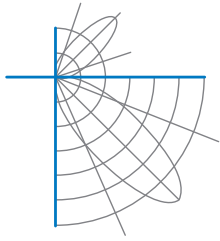


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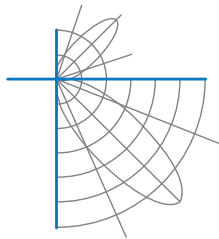
| | Lateral (C-Plane) Angles | | | | | | | | | | | |
|--|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | 90 | 95 | 105 | 115 | 125 | 135 | 145 | 155 | 165 | 175 | 180 | |
| Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown. | 90 | 147 | 137 | 115 | 80 | 42 | 16 | 3 | 0 | 0 | 0 | 0 |
| | 92.5 | 132 | 118 | 102 | 72 | 38 | 15 | 3 | 0 | 0 | 0 | 0 |
| | 95 | 121 | 107 | 92 | 65 | 33 | 13 | 3 | 0 | 0 | 0 | 0 |
| | 97.5 | 113 | 99 | 83 | 58 | 30 | 12 | 3 | 0 | 0 | 0 | 0 |
| | 100 | 101 | 93 | 76 | 51 | 26 | 10 | 3 | 0 | 0 | 0 | 0 |
| | 102.5 | 97 | 88 | 69 | 46 | 24 | 10 | 3 | 0 | 0 | 0 | 0 |
| | 105 | 95 | 84 | 64 | 41 | 21 | 9 | 4 | 0 | 0 | 0 | 0 |
| | 107.5 | 94 | 80 | 60 | 38 | 20 | 9 | 4 | 0 | 0 | 0 | 0 |
| | 110 | 93 | 78 | 56 | 34 | 18 | 8 | 5 | 0 | 0 | 0 | 0 |
| | 112.5 | 91 | 77 | 52 | 31 | 17 | 8 | 6 | 0 | 0 | 0 | 0 |
| | 115 | 88 | 74 | 48 | 29 | 16 | 8 | 6 | 0 | 0 | 0 | 0 |
| | 117.5 | 84 | 70 | 45 | 26 | 15 | 8 | 7 | 0 | 0 | 0 | 0 |
| | 120 | 78 | 65 | 41 | 24 | 14 | 8 | 7 | 0 | 0 | 0 | 0 |
| | 122.5 | 72 | 59 | 38 | 22 | 13 | 8 | 8 | 0 | 0 | 0 | 0 |
| | 125 | 65 | 54 | 35 | 20 | 12 | 8 | 8 | 0 | 0 | 0 | 0 |
| | 127.5 | 58 | 49 | 31 | 19 | 11 | 8 | 8 | 0 | 0 | 0 | 0 |
| | 130 | 52 | 43 | 28 | 17 | 11 | 8 | 9 | 0 | 0 | 0 | 0 |
| | 132.5 | 46 | 38 | 25 | 15 | 10 | 8 | 9 | 0 | 0 | 0 | 0 |
| | 135 | 39 | 33 | 22 | 14 | 9 | 8 | 9 | 0 | 0 | 0 | 0 |
| | 137.5 | 34 | 28 | 19 | 12 | 8 | 7 | 8 | 0 | 0 | 0 | 0 |
| | 140 | 29 | 24 | 16 | 10 | 7 | 7 | 7 | 0 | 0 | 0 | 0 |
| | 142.5 | 24 | 20 | 13 | 8 | 6 | 6 | 7 | 0 | 0 | 0 | 0 |
| | 145 | 20 | 16 | 10 | 7 | 5 | 6 | 6 | 0 | 0 | 0 | 0 |
| | 147.5 | 16 | 13 | 8 | 6 | 5 | 5 | 6 | 0 | 0 | 0 | 0 |
| | 150 | 12 | 10 | 7 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 |
| | 152.5 | 9 | 8 | 5 | 4 | 4 | 4 | 5 | 0 | 0 | 0 | 0 |
| | 155 | 7 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 157.5 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 160 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 162.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 167.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 172.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 177.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



Report of Test
LLIA001413-001

Additional Pictures of Test Subject





Report of Test

LLIA001413-001

Test Distance 9.5 m
Ambient Temperature 24.9 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-19. Format of reports and angular increments based on IES LM-31-95 and LM-10-96.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the IES C-Type spherical coordinate system as defined in IES LM-75-01.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.