



IES FLOOD REPORT

PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-13764
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUE DATE] 12/22/22
[TEST DATE] 11/23/22
[MANUFACT] LSI INDUSTRIES, INC.
[LUMCAT] ZNF-85L-WF-50
[TEST PROCEDURE] IESNA LM-79-19
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[FACTORED] SCALED FROM ORIGINAL TEST DATA
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor
[SEARCH_COLORTEMP] 5000

Note: Candela values converted from Type-C to Type-B

CHARACTERISTICS

| | |
|------------------------------|-----------------|
| NEMA Type | 6 H x 6 V |
| Maximum Candela | 87520 |
| Maximum Candela Angle | 0H -1V |
| Horizontal Beam Angle (50%) | 44.7 |
| Vertical Beam Angle (50%) | 45.1 |
| Horizontal Field Angle (10%) | 107.3 |
| Vertical Field Angle (10%) | 107.5 |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Beam Lumens | 31091 |
| Beam Efficiency | N.A. |
| Field Lumens | 73623 |
| Field Efficiency | N.A. |
| Spill Lumens | 7523 |
| Luminaire Lumens | 81146 |
| Total Efficiency | N.A. |
| Total Luminaire Watts | 574.2 |
| Ballast Factor | 1.00 |

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AXIAL CANDELA

| DEG. | HOR. | DEG. | VERT. |
|-------|-------|-------|-------|
| 90 | 0 | 90 | 0 |
| 85 | 127 | 85 | 125 |
| 75 | 827 | 75 | 842 |
| 65 | 2333 | 65 | 2364 |
| 55 | 7742 | 55 | 7804 |
| 47.5 | 13323 | 47.5 | 13401 |
| 42.5 | 17434 | 42.5 | 17496 |
| 37.5 | 21338 | 37.5 | 21311 |
| 33 | 25403 | 33 | 25443 |
| 29 | 29899 | 29 | 30001 |
| 25.5 | 35602 | 25.5 | 36189 |
| 22.5 | 43314 | 22.5 | 43858 |
| 19.5 | 53089 | 19.5 | 53204 |
| 17 | 60804 | 17 | 60886 |
| 15 | 66545 | 15 | 66647 |
| 13 | 71588 | 13 | 71781 |
| 11 | 76109 | 11 | 76270 |
| 9 | 80140 | 9 | 80102 |
| 7 | 83536 | 7 | 83268 |
| 5 | 85981 | 5 | 85764 |
| 3 | 87206 | 3 | 87202 |
| 1 | 87501 | 1 | 87520 |
| 0 | 87493 | 0 | 87493 |
| -1 | 87501 | -1 | 87520 |
| -3 | 87206 | -3 | 87202 |
| -5 | 85981 | -5 | 85764 |
| -7 | 83536 | -7 | 83268 |
| -9 | 80140 | -9 | 80102 |
| -11 | 76109 | -11 | 76270 |
| -13 | 71588 | -13 | 71781 |
| -15 | 66545 | -15 | 66647 |
| -17 | 60804 | -17 | 60886 |
| -19.5 | 53089 | -19.5 | 53204 |
| -22.5 | 43314 | -22.5 | 43858 |
| -25.5 | 35602 | -25.5 | 36189 |
| -29 | 29899 | -29 | 30001 |
| -33 | 25403 | -33 | 25443 |
| -37.5 | 21338 | -37.5 | 21311 |
| -42.5 | 17434 | -42.5 | 17496 |
| -47.5 | 13323 | -47.5 | 13401 |
| -55 | 7742 | -55 | 7804 |
| -65 | 2333 | -65 | 2364 |
| -75 | 827 | -75 | 842 |
| -85 | 127 | -85 | 125 |
| -90 | 0 | -90 | 0 |

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CANDELA TABULATION

Maximum Candela = 87520

Beam Edge = 43760 Cd (50% of Max.)

Field Edge = 8752 Cd (10% of Max.)

* Indicates Values Inside Field Edge

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-----------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | <u>-90.0</u> | <u>-85.0</u> | <u>-75.0</u> | <u>-65.0</u> | <u>-55.0</u> | <u>-47.5</u> | <u>-42.5</u> | <u>-37.5</u> | <u>-33.0</u> | <u>-29.0</u> |
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 85.0 | 0 | 7 | 22 | 34 | 53 | 72 | 83 | 92 | 100 | 106 |
| 75.0 | 0 | 21 | 88 | 191 | 321 | 419 | 490 | 557 | 612 | 663 |
| 65.0 | 0 | 34 | 189 | 436 | 749 | 1010 | 1197 | 1383 | 1550 | 1689 |
| 55.0 | 0 | 52 | 315 | 745 | 1321 | 1872 | 2324 | 3060 | 3911 | 4688 |
| 47.5 | 0 | 70 | 416 | 1007 | 1871 | 3121 | 4513 | 6103 | 7415 | 8626 |
| 42.5 | 0 | 81 | 488 | 1192 | 2335 | 4535 | 6395 | 8307 | 10068 * | 11584 * |
| 37.5 | 0 | 91 | 553 | 1376 | 3092 | 6144 | 8334 | 10689 * | 12822 * | 14601 * |
| 33.0 | 0 | 99 | 606 | 1548 | 3923 | 7461 | 10063 * | 12770 * | 15170 * | 17326 * |
| 29.0 | 0 | 105 | 657 | 1694 | 4657 | 8631 | 11554 * | 14524 * | 17289 * | 19466 * |
| 25.5 | 0 | 110 | 696 | 1818 | 5311 | 9586 * | 12765 * | 16005 * | 18833 * | 21094 * |
| 22.5 | 0 | 114 | 726 | 1918 | 5812 | 10389 * | 13725 * | 17229 * | 20035 * | 22618 * |
| 19.5 | 0 | 117 | 753 | 2020 | 6268 | 11115 * | 14616 * | 18218 * | 21147 * | 24082 * |
| 17.0 | 0 | 119 | 772 | 2095 | 6611 | 11655 * | 15286 * | 18919 * | 22078 * | 25219 * |
| 15.0 | 0 | 121 | 785 | 2148 | 6854 | 12024 * | 15781 * | 19423 * | 22757 * | 26064 * |
| 13.0 | 0 | 122 | 796 | 2195 | 7068 | 12350 * | 16205 * | 19891 * | 23347 * | 26884 * |
| 11.0 | 0 | 127 | 805 | 2235 | 7253 | 12630 * | 16564 * | 20298 * | 23874 * | 27595 * |
| 9.0 | 0 | 127 | 813 | 2268 | 7407 | 12864 * | 16866 * | 20639 * | 24339 * | 28192 * |
| 7.0 | 0 | 127 | 819 | 2294 | 7532 | 13050 * | 17109 * | 20913 * | 24725 * | 28756 * |
| 5.0 | 0 | 127 | 829 | 2314 | 7631 | 13189 * | 17291 * | 21118 * | 25016 * | 29249 * |
| 3.0 | 0 | 127 | 828 | 2334 | 7734 | 13336 * | 17473 * | 21256 * | 25217 * | 29590 * |
| 1.0 | 0 | 127 | 827 | 2333 | 7739 | 13327 * | 17447 * | 21337 * | 25365 * | 29836 * |
| 0.0 | 0 | 127 | 827 | 2333 | 7742 | 13323 * | 17434 * | 21338 * | 25403 * | 29899 * |
| -1.0 | 0 | 127 | 827 | 2333 | 7739 | 13327 * | 17447 * | 21337 * | 25365 * | 29836 * |
| -3.0 | 0 | 127 | 828 | 2334 | 7734 | 13336 * | 17473 * | 21256 * | 25217 * | 29590 * |
| -5.0 | 0 | 127 | 829 | 2314 | 7631 | 13189 * | 17291 * | 21118 * | 25016 * | 29249 * |
| -7.0 | 0 | 127 | 819 | 2294 | 7532 | 13050 * | 17109 * | 20913 * | 24725 * | 28756 * |
| -9.0 | 0 | 127 | 813 | 2268 | 7407 | 12864 * | 16866 * | 20639 * | 24339 * | 28192 * |
| -11.0 | 0 | 127 | 805 | 2235 | 7253 | 12630 * | 16564 * | 20298 * | 23874 * | 27595 * |
| -13.0 | 0 | 122 | 796 | 2195 | 7068 | 12350 * | 16205 * | 19891 * | 23347 * | 26884 * |
| -15.0 | 0 | 121 | 785 | 2148 | 6854 | 12024 * | 15781 * | 19423 * | 22757 * | 26064 * |
| -17.0 | 0 | 119 | 772 | 2095 | 6611 | 11655 * | 15286 * | 18919 * | 22078 * | 25219 * |
| -19.5 | 0 | 117 | 753 | 2020 | 6268 | 11115 * | 14616 * | 18218 * | 21147 * | 24082 * |
| -22.5 | 0 | 114 | 726 | 1918 | 5812 | 10389 * | 13725 * | 17229 * | 20035 * | 22618 * |
| -25.5 | 0 | 110 | 696 | 1818 | 5311 | 9586 * | 12765 * | 16005 * | 18833 * | 21094 * |
| -29.0 | 0 | 105 | 657 | 1694 | 4657 | 8631 | 11554 * | 14524 * | 17289 * | 19466 * |
| -33.0 | 0 | 99 | 606 | 1548 | 3923 | 7461 | 10063 * | 12770 * | 15170 * | 17326 * |
| -37.5 | 0 | 91 | 553 | 1376 | 3092 | 6144 | 8334 | 10689 * | 12822 * | 14601 * |
| -42.5 | 0 | 81 | 488 | 1192 | 2335 | 4535 | 6395 | 8307 | 10068 * | 11584 * |
| -47.5 | 0 | 70 | 416 | 1007 | 1871 | 3121 | 4513 | 6103 | 7415 | 8626 |
| -55.0 | 0 | 52 | 315 | 745 | 1321 | 1872 | 2324 | 3060 | 3911 | 4688 |
| -65.0 | 0 | 34 | 189 | 436 | 749 | 1010 | 1197 | 1383 | 1550 | 1689 |
| -75.0 | 0 | 21 | 88 | 191 | 321 | 419 | 490 | 557 | 612 | 663 |
| -85.0 | 0 | 7 | 22 | 34 | 53 | 72 | 83 | 92 | 100 | 106 |
| -90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

CANDELA TABULATION - (Cont.)

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-----------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|
| | <u>-25.5</u> | <u>-22.5</u> | <u>-19.5</u> | <u>-17.0</u> | <u>-15.0</u> | <u>-13.0</u> | <u>-11.0</u> | <u>-9.0</u> | <u>-7.0</u> | <u>-5.0</u> |
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 85.0 | 110 | 114 | 118 | 121 | 123 | 125 | 129 | 129 | 129 | 129 |
| 75.0 | 703 | 733 | 759 | 778 | 792 | 803 | 812 | 820 | 826 | 835 |
| 65.0 | 1808 | 1910 | 2021 | 2102 | 2160 | 2210 | 2253 | 2289 | 2318 | 2341 |
| 55.0 | 5356 | 5872 | 6328 | 6666 | 6908 | 7122 | 7306 | 7461 | 7583 | 7675 |
| 47.5 | 9612 * | 10406 * | 11116 * | 11643 * | 12029 * | 12374 * | 12677 * | 12933 * | 13141 * | 13299 * |
| 42.5 | 12789 * | 13752 * | 14624 * | 15254 * | 15758 * | 16216 * | 16615 * | 16940 * | 17197 * | 17394 * |
| 37.5 | 16087 * | 17260 * | 18247 * | 18973 * | 19496 * | 19958 * | 20359 * | 20700 * | 20985 * | 21200 * |
| 33.0 | 18878 * | 20105 * | 21231 * | 22136 * | 22802 * | 23397 * | 23951 * | 24433 * | 24831 * | 25139 * |
| 29.0 | 21128 * | 22621 * | 24067 * | 25217 * | 26083 * | 26995 * | 27760 * | 28379 * | 28943 * | 29468 * |
| 25.5 | 23170 * | 24930 * | 26745 * | 28283 * | 29590 * | 30856 * | 31975 * | 33204 * | 34264 * | 35082 * |
| 22.5 | 24963 * | 27036 * | 29289 * | 31378 * | 33326 * | 35325 * | 37197 * | 39274 * | 40917 * | 42160 * |
| 19.5 | 26769 * | 29304 * | 32209 * | 35349 * | 38246 * | 41368 * | 44269 * | 47113 * | 49319 * | 50992 * |
| 17.0 | 28227 * | 31346 * | 35388 * | 39618 * | 43353 * | 47378 * | 51042 * | 54112 * | 56691 * | 58822 * |
| 15.0 | 29463 * | 33205 * | 38264 * | 43388 * | 47951 * | 52329 * | 56194 * | 59545 * | 62179 * | 64383 * |
| 13.0 | 30653 * | 35104 * | 41299 * | 47408 * | 52348 * | 56963 * | 61042 * | 64527 * | 67343 * | 69440 * |
| 11.0 | 31663 * | 36828 * | 44098 * | 51052 * | 56220 * | 61033 * | 65315 * | 68919 * | 71834 * | 73960 * |
| 9.0 | 32804 * | 38785 * | 46918 * | 54139 * | 59588 * | 64457 * | 68836 * | 72779 * | 75603 * | 77848 * |
| 7.0 | 33770 * | 40390 * | 49260 * | 56701 * | 62228 * | 67322 * | 71719 * | 75498 * | 78807 * | 80898 * |
| 5.0 | 34605 * | 41707 * | 51089 * | 58682 * | 64356 * | 69475 * | 73975 * | 77812 * | 80896 * | 83411 * |
| 3.0 | 35197 * | 42630 * | 52267 * | 60063 * | 65858 * | 71027 * | 75613 * | 79469 * | 82716 * | 84908 * |
| 1.0 | 35534 * | 43232 * | 52928 * | 60747 * | 66668 * | 71639 * | 76249 * | 80241 * | 83512 * | 86044 * |
| 0.0 | 35602 * | 43314 * | 53089 * | 60804 * | 66545 * | 71588 * | 76109 * | 80140 * | 83536 * | 85981 * |
| -1.0 | 35534 * | 43232 * | 52928 * | 60747 * | 66668 * | 71639 * | 76249 * | 80241 * | 83512 * | 86044 * |
| -3.0 | 35197 * | 42630 * | 52267 * | 60063 * | 65858 * | 71027 * | 75613 * | 79469 * | 82716 * | 84908 * |
| -5.0 | 34605 * | 41707 * | 51089 * | 58682 * | 64356 * | 69475 * | 73975 * | 77812 * | 80896 * | 83411 * |
| -7.0 | 33770 * | 40390 * | 49260 * | 56701 * | 62228 * | 67322 * | 71719 * | 75498 * | 78807 * | 80898 * |
| -9.0 | 32804 * | 38785 * | 46918 * | 54139 * | 59588 * | 64457 * | 68836 * | 72779 * | 75603 * | 77848 * |
| -11.0 | 31663 * | 36828 * | 44098 * | 51052 * | 56220 * | 61033 * | 65315 * | 68919 * | 71834 * | 73960 * |
| -13.0 | 30653 * | 35104 * | 41299 * | 47408 * | 52348 * | 56963 * | 61042 * | 64527 * | 67343 * | 69440 * |
| -15.0 | 29463 * | 33205 * | 38264 * | 43388 * | 47951 * | 52329 * | 56194 * | 59545 * | 62179 * | 64383 * |
| -17.0 | 28227 * | 31346 * | 35388 * | 39618 * | 43353 * | 47378 * | 51042 * | 54112 * | 56691 * | 58822 * |
| -19.5 | 26769 * | 29304 * | 32209 * | 35349 * | 38246 * | 41368 * | 44269 * | 47113 * | 49319 * | 50992 * |
| -22.5 | 24963 * | 27036 * | 29289 * | 31378 * | 33326 * | 35325 * | 37197 * | 39274 * | 40917 * | 42160 * |
| -25.5 | 23170 * | 24930 * | 26745 * | 28283 * | 29590 * | 30856 * | 31975 * | 33204 * | 34264 * | 35082 * |
| -29.0 | 21128 * | 22621 * | 24067 * | 25217 * | 26083 * | 26995 * | 27760 * | 28379 * | 28943 * | 29468 * |
| -33.0 | 18878 * | 20105 * | 21231 * | 22136 * | 22802 * | 23397 * | 23951 * | 24433 * | 24831 * | 25139 * |
| -37.5 | 16087 * | 17260 * | 18247 * | 18973 * | 19496 * | 19958 * | 20359 * | 20700 * | 20985 * | 21200 * |
| -42.5 | 12789 * | 13752 * | 14624 * | 15254 * | 15758 * | 16216 * | 16615 * | 16940 * | 17197 * | 17394 * |
| -47.5 | 9612 * | 10406 * | 11116 * | 11643 * | 12029 * | 12374 * | 12677 * | 12933 * | 13141 * | 13299 * |
| -55.0 | 5356 | 5872 | 6328 | 6666 | 6908 | 7122 | 7306 | 7461 | 7583 | 7675 |
| -65.0 | 1808 | 1910 | 2021 | 2102 | 2160 | 2210 | 2253 | 2289 | 2318 | 2341 |
| -75.0 | 703 | 733 | 759 | 778 | 792 | 803 | 812 | 820 | 826 | 835 |
| -85.0 | 110 | 114 | 118 | 121 | 123 | 125 | 129 | 129 | 129 | 129 |
| -90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-----------------|-------------------|-------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| | <u>-3.0</u> | <u>-1.0</u> | <u>0.0</u> | <u>1.0</u> | <u>3.0</u> | <u>5.0</u> | <u>7.0</u> | <u>9.0</u> | <u>11.0</u> | <u>13.0</u> |
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 85.0 | 127 | 126 | 125 | 126 | 127 | 129 | 129 | 129 | 129 | 125 |
| 75.0 | 838 | 841 | 842 | 841 | 838 | 835 | 826 | 820 | 812 | 803 |
| 65.0 | 2363 | 2364 | 2364 | 2364 | 2363 | 2341 | 2318 | 2289 | 2253 | 2210 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 55.0 | 7781 | 7796 | 7804 | 7796 | 7781 | 7675 | 7583 | 7461 | 7306 | 7122 |
| 47.5 | 13451 * | 13418 * | 13401 * | 13418 * | 13451 * | 13299 * | 13141 * | 12933 * | 12677 * | 12374 * |
| 42.5 | 17591 * | 17528 * | 17496 * | 17528 * | 17591 * | 17394 * | 17197 * | 16940 * | 16615 * | 16216 * |
| 37.5 | 21344 * | 21348 * | 21311 * | 21348 * | 21344 * | 21200 * | 20985 * | 20700 * | 20359 * | 19958 * |
| 33.0 | 25350 * | 25439 * | 25443 * | 25439 * | 25350 * | 25139 * | 24831 * | 24433 * | 23951 * | 23397 * |
| 29.0 | 29822 * | 29986 * | 30001 * | 29986 * | 29822 * | 29468 * | 28943 * | 28379 * | 27760 * | 26995 * |
| 25.5 | 35630 * | 36038 * | 36189 * | 36038 * | 35630 * | 35082 * | 34264 * | 33204 * | 31975 * | 30856 * |
| 22.5 | 42983 * | 43644 * | 43858 * | 43644 * | 42983 * | 42160 * | 40917 * | 39274 * | 37197 * | 35325 * |
| 19.5 | 52359 * | 53083 * | 53204 * | 53083 * | 52359 * | 50992 * | 49319 * | 47113 * | 44269 * | 41368 * |
| 17.0 | 60155 * | 60780 * | 60886 * | 60780 * | 60155 * | 58822 * | 56691 * | 54112 * | 51042 * | 47378 * |
| 15.0 | 65903 * | 66743 * | 66647 * | 66743 * | 65903 * | 64383 * | 62179 * | 59545 * | 56194 * | 52329 * |
| 13.0 | 71028 * | 71880 * | 71781 * | 71880 * | 71028 * | 69440 * | 67343 * | 64527 * | 61042 * | 56963 * |
| 11.0 | 75554 * | 76396 * | 76270 * | 76396 * | 75554 * | 73960 * | 71834 * | 68919 * | 65315 * | 61033 * |
| 9.0 | 79412 * | 80193 * | 80102 * | 80193 * | 79412 * | 77848 * | 75603 * | 72779 * | 68836 * | 64457 * |
| 7.0 | 82488 * | 83318 * | 83268 * | 83318 * | 82488 * | 80898 * | 78807 * | 75498 * | 71719 * | 67322 * |
| 5.0 | 84823 * | 85849 * | 85764 * | 85849 * | 84823 * | 83411 * | 80896 * | 77812 * | 73975 * | 69475 * |
| 3.0 | 86415 * | 87072 * | 87202 * | 87072 * | 86415 * | 84908 * | 82716 * | 79469 * | 75613 * | 71027 * |
| 1.0 | 87143 * | 87509 * | 87520 * | 87509 * | 87143 * | 86044 * | 83512 * | 80241 * | 76249 * | 71639 * |
| 0.0 | 87206 * | 87501 * | 87493 * | 87501 * | 87206 * | 85981 * | 83536 * | 80140 * | 76109 * | 71588 * |
| -1.0 | 87143 * | 87509 * | 87520 * | 87509 * | 87143 * | 86044 * | 83512 * | 80241 * | 76249 * | 71639 * |
| -3.0 | 86415 * | 87072 * | 87202 * | 87072 * | 86415 * | 84908 * | 82716 * | 79469 * | 75613 * | 71027 * |
| -5.0 | 84823 * | 85849 * | 85764 * | 85849 * | 84823 * | 83411 * | 80896 * | 77812 * | 73975 * | 69475 * |
| -7.0 | 82488 * | 83318 * | 83268 * | 83318 * | 82488 * | 80898 * | 78807 * | 75498 * | 71719 * | 67322 * |
| -9.0 | 79412 * | 80193 * | 80102 * | 80193 * | 79412 * | 77848 * | 75603 * | 72779 * | 68836 * | 64457 * |
| -11.0 | 75554 * | 76396 * | 76270 * | 76396 * | 75554 * | 73960 * | 71834 * | 68919 * | 65315 * | 61033 * |
| -13.0 | 71028 * | 71880 * | 71781 * | 71880 * | 71028 * | 69440 * | 67343 * | 64527 * | 61042 * | 56963 * |
| -15.0 | 65903 * | 66743 * | 66647 * | 66743 * | 65903 * | 64383 * | 62179 * | 59545 * | 56194 * | 52329 * |
| -17.0 | 60155 * | 60780 * | 60886 * | 60780 * | 60155 * | 58822 * | 56691 * | 54112 * | 51042 * | 47378 * |
| -19.5 | 52359 * | 53083 * | 53204 * | 53083 * | 52359 * | 50992 * | 49319 * | 47113 * | 44269 * | 41368 * |
| -22.5 | 42983 * | 43644 * | 43858 * | 43644 * | 42983 * | 42160 * | 40917 * | 39274 * | 37197 * | 35325 * |
| -25.5 | 35630 * | 36038 * | 36189 * | 36038 * | 35630 * | 35082 * | 34264 * | 33204 * | 31975 * | 30856 * |
| -29.0 | 29822 * | 29986 * | 30001 * | 29986 * | 29822 * | 29468 * | 28943 * | 28379 * | 27760 * | 26995 * |
| -33.0 | 25350 * | 25439 * | 25443 * | 25439 * | 25350 * | 25139 * | 24831 * | 24433 * | 23951 * | 23397 * |
| -37.5 | 21344 * | 21348 * | 21311 * | 21348 * | 21344 * | 21200 * | 20985 * | 20700 * | 20359 * | 19958 * |
| -42.5 | 17591 * | 17528 * | 17496 * | 17528 * | 17591 * | 17394 * | 17197 * | 16940 * | 16615 * | 16216 * |
| -47.5 | 13451 * | 13418 * | 13401 * | 13418 * | 13451 * | 13299 * | 13141 * | 12933 * | 12677 * | 12374 * |
| -55.0 | 7781 | 7796 | 7804 | 7796 | 7781 | 7675 | 7583 | 7461 | 7306 | 7122 |
| -65.0 | 2363 | 2364 | 2364 | 2364 | 2363 | 2341 | 2318 | 2289 | 2253 | 2210 |
| -75.0 | 838 | 841 | 842 | 841 | 838 | 835 | 826 | 820 | 812 | 803 |
| -85.0 | 127 | 126 | 125 | 126 | 127 | 129 | 129 | 129 | 129 | 125 |
| -90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Vert. Horizontal Angles

| | <u>15.0</u> | <u>17.0</u> | <u>19.5</u> | <u>22.5</u> | <u>25.5</u> | <u>29.0</u> | <u>33.0</u> | <u>37.5</u> | <u>42.5</u> | <u>47.5</u> |
|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 85.0 | 123 | 121 | 118 | 114 | 110 | 106 | 100 | 92 | 83 | 72 |
| 75.0 | 792 | 778 | 759 | 733 | 703 | 663 | 612 | 557 | 490 | 419 |
| 65.0 | 2160 | 2102 | 2021 | 1910 | 1808 | 1689 | 1550 | 1383 | 1197 | 1010 |
| 55.0 | 6908 | 6666 | 6328 | 5872 | 5356 | 4688 | 3911 | 3060 | 2324 | 1872 |
| 47.5 | 12029 * | 11643 * | 11116 * | 10406 * | 9612 * | 8626 | 7415 | 6103 | 4513 | 3121 |
| 42.5 | 15758 * | 15254 * | 14624 * | 13752 * | 12789 * | 11584 * | 10068 * | 8307 | 6395 | 4535 |
| 37.5 | 19496 * | 18973 * | 18247 * | 17260 * | 16087 * | 14601 * | 12822 * | 10689 * | 8334 | 6144 |
| 33.0 | 22802 * | 22136 * | 21231 * | 20105 * | 18878 * | 17326 * | 15170 * | 12770 * | 10063 * | 7461 |
| 29.0 | 26083 * | 25217 * | 24067 * | 22621 * | 21128 * | 19466 * | 17289 * | 14524 * | 11554 * | 8631 |
| 25.5 | 29590 * | 28283 * | 26745 * | 24930 * | 23170 * | 21094 * | 18833 * | 16005 * | 12765 * | 9586 * |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 22.5 | 33326 * | 31378 * | 29289 * | 27036 * | 24963 * | 22618 * | 20035 * | 17229 * | 13725 * | 10389 * |
| 19.5 | 38246 * | 35349 * | 32209 * | 29304 * | 26769 * | 24082 * | 21147 * | 18218 * | 14616 * | 11115 * |
| 17.0 | 43353 * | 39618 * | 35388 * | 31346 * | 28227 * | 25219 * | 22078 * | 18919 * | 15286 * | 11655 * |
| 15.0 | 47951 * | 43388 * | 38264 * | 33205 * | 29463 * | 26064 * | 22757 * | 19423 * | 15781 * | 12024 * |
| 13.0 | 52348 * | 47408 * | 41299 * | 35104 * | 30653 * | 26884 * | 23347 * | 19891 * | 16205 * | 12350 * |
| 11.0 | 56220 * | 51052 * | 44098 * | 36828 * | 31663 * | 27595 * | 23874 * | 20298 * | 16564 * | 12630 * |
| 9.0 | 59588 * | 54139 * | 46918 * | 38785 * | 32804 * | 28192 * | 24339 * | 20639 * | 16866 * | 12864 * |
| 7.0 | 62228 * | 56701 * | 49260 * | 40390 * | 33770 * | 28756 * | 24725 * | 20913 * | 17109 * | 13050 * |
| 5.0 | 64356 * | 58682 * | 51089 * | 41707 * | 34605 * | 29249 * | 25016 * | 21118 * | 17291 * | 13189 * |
| 3.0 | 65858 * | 60063 * | 52267 * | 42630 * | 35197 * | 29590 * | 25217 * | 21256 * | 17473 * | 13336 * |
| 1.0 | 66668 * | 60747 * | 52928 * | 43232 * | 35534 * | 29836 * | 25365 * | 21337 * | 17447 * | 13327 * |
| 0.0 | 66545 * | 60804 * | 53089 * | 43314 * | 35602 * | 29899 * | 25403 * | 21338 * | 17434 * | 13323 * |
| -1.0 | 66668 * | 60747 * | 52928 * | 43232 * | 35534 * | 29836 * | 25365 * | 21337 * | 17447 * | 13327 * |
| -3.0 | 65858 * | 60063 * | 52267 * | 42630 * | 35197 * | 29590 * | 25217 * | 21256 * | 17473 * | 13336 * |
| -5.0 | 64356 * | 58682 * | 51089 * | 41707 * | 34605 * | 29249 * | 25016 * | 21118 * | 17291 * | 13189 * |
| -7.0 | 62228 * | 56701 * | 49260 * | 40390 * | 33770 * | 28756 * | 24725 * | 20913 * | 17109 * | 13050 * |
| -9.0 | 59588 * | 54139 * | 46918 * | 38785 * | 32804 * | 28192 * | 24339 * | 20639 * | 16866 * | 12864 * |
| -11.0 | 56220 * | 51052 * | 44098 * | 36828 * | 31663 * | 27595 * | 23874 * | 20298 * | 16564 * | 12630 * |
| -13.0 | 52348 * | 47408 * | 41299 * | 35104 * | 30653 * | 26884 * | 23347 * | 19891 * | 16205 * | 12350 * |
| -15.0 | 47951 * | 43388 * | 38264 * | 33205 * | 29463 * | 26064 * | 22757 * | 19423 * | 15781 * | 12024 * |
| -17.0 | 43353 * | 39618 * | 35388 * | 31346 * | 28227 * | 25219 * | 22078 * | 18919 * | 15286 * | 11655 * |
| -19.5 | 38246 * | 35349 * | 32209 * | 29304 * | 26769 * | 24082 * | 21147 * | 18218 * | 14616 * | 11115 * |
| -22.5 | 33326 * | 31378 * | 29289 * | 27036 * | 24963 * | 22618 * | 20035 * | 17229 * | 13725 * | 10389 * |
| -25.5 | 29590 * | 28283 * | 26745 * | 24930 * | 23170 * | 21094 * | 18833 * | 16005 * | 12765 * | 9586 * |
| -29.0 | 26083 * | 25217 * | 24067 * | 22621 * | 21128 * | 19466 * | 17289 * | 14524 * | 11554 * | 8631 |
| -33.0 | 22802 * | 22136 * | 21231 * | 20105 * | 18878 * | 17326 * | 15170 * | 12770 * | 10063 * | 7461 |
| -37.5 | 19496 * | 18973 * | 18247 * | 17260 * | 16087 * | 14601 * | 12822 * | 10689 * | 8334 | 6144 |
| -42.5 | 15758 * | 15254 * | 14624 * | 13752 * | 12789 * | 11584 * | 10068 * | 8307 | 6395 | 4535 |
| -47.5 | 12029 * | 11643 * | 11116 * | 10406 * | 9612 * | 8626 | 7415 | 6103 | 4513 | 3121 |
| -55.0 | 6908 | 6666 | 6328 | 5872 | 5356 | 4688 | 3911 | 3060 | 2324 | 1872 |
| -65.0 | 2160 | 2102 | 2021 | 1910 | 1808 | 1689 | 1550 | 1383 | 1197 | 1010 |
| -75.0 | 792 | 778 | 759 | 733 | 703 | 663 | 612 | 557 | 490 | 419 |
| -85.0 | 123 | 121 | 118 | 114 | 110 | 106 | 100 | 92 | 83 | 72 |
| -90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Vert. Angles | Horizontal Angles | | | | |
|-----------------|-------------------|-------------|-------------|-------------|-------------|
| | <u>55.0</u> | <u>65.0</u> | <u>75.0</u> | <u>85.0</u> | <u>90.0</u> |
| 90.0 | 0 | 0 | 0 | 0 | 0 |
| 85.0 | 53 | 34 | 22 | 7 | 0 |
| 75.0 | 321 | 191 | 88 | 21 | 0 |
| 65.0 | 749 | 436 | 189 | 34 | 0 |
| 55.0 | 1321 | 745 | 315 | 52 | 0 |
| 47.5 | 1871 | 1007 | 416 | 70 | 0 |
| 42.5 | 2335 | 1192 | 488 | 81 | 0 |
| 37.5 | 3092 | 1376 | 553 | 91 | 0 |
| 33.0 | 3923 | 1548 | 606 | 99 | 0 |
| 29.0 | 4657 | 1694 | 657 | 105 | 0 |
| 25.5 | 5311 | 1818 | 696 | 110 | 0 |
| 22.5 | 5812 | 1918 | 726 | 114 | 0 |
| 19.5 | 6268 | 2020 | 753 | 117 | 0 |
| 17.0 | 6611 | 2095 | 772 | 119 | 0 |
| 15.0 | 6854 | 2148 | 785 | 121 | 0 |
| 13.0 | 7068 | 2195 | 796 | 122 | 0 |
| 11.0 | 7253 | 2235 | 805 | 127 | 0 |
| 9.0 | 7407 | 2268 | 813 | 127 | 0 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

CANDELA TABULATION - (Cont.)

| | | | | | |
|--------------|------|------|-----|-----|---|
| 7.0 | 7532 | 2294 | 819 | 127 | 0 |
| 5.0 | 7631 | 2314 | 829 | 127 | 0 |
| 3.0 | 7734 | 2334 | 828 | 127 | 0 |
| 1.0 | 7739 | 2333 | 827 | 127 | 0 |
| 0.0 | 7742 | 2333 | 827 | 127 | 0 |
| -1.0 | 7739 | 2333 | 827 | 127 | 0 |
| -3.0 | 7734 | 2334 | 828 | 127 | 0 |
| -5.0 | 7631 | 2314 | 829 | 127 | 0 |
| -7.0 | 7532 | 2294 | 819 | 127 | 0 |
| -9.0 | 7407 | 2268 | 813 | 127 | 0 |
| -11.0 | 7253 | 2235 | 805 | 127 | 0 |
| -13.0 | 7068 | 2195 | 796 | 122 | 0 |
| -15.0 | 6854 | 2148 | 785 | 121 | 0 |
| -17.0 | 6611 | 2095 | 772 | 119 | 0 |
| -19.5 | 6268 | 2020 | 753 | 117 | 0 |
| -22.5 | 5812 | 1918 | 726 | 114 | 0 |
| -25.5 | 5311 | 1818 | 696 | 110 | 0 |
| -29.0 | 4657 | 1694 | 657 | 105 | 0 |
| -33.0 | 3923 | 1548 | 606 | 99 | 0 |
| -37.5 | 3092 | 1376 | 553 | 91 | 0 |
| -42.5 | 2335 | 1192 | 488 | 81 | 0 |
| -47.5 | 1871 | 1007 | 416 | 70 | 0 |
| -55.0 | 1321 | 745 | 315 | 52 | 0 |
| -65.0 | 749 | 436 | 189 | 34 | 0 |
| -75.0 | 321 | 191 | 88 | 21 | 0 |
| -85.0 | 53 | 34 | 22 | 7 | 0 |
| -90.0 | 0 | 0 | 0 | 0 | 0 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMEN TABULATION

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 40572.75

Total Field Lumens (one side of beam only) = 36811.5

* Indicates Values Inside Field Edge

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-----------------|-------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| | <u>0</u> | <u>1</u> | <u>3</u> | <u>5</u> | <u>7</u> | <u>9</u> | <u>11</u> | <u>13</u> | <u>15</u> | <u>17</u> |
| 90 | | | | | | | | | | |
| 85 | 0.10 | 0.19 | 0.19 | 0.20 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.22 |
| 75 | 1.47 | 2.94 | 2.93 | 2.91 | 2.87 | 2.83 | 2.78 | 2.72 | 2.66 | 3.21 |
| 65 | 4.88 | 9.75 | 9.69 | 9.57 | 9.43 | 9.26 | 9.05 | 8.81 | 8.54 | 10.23 |
| 55 | 15.48 | 30.90 | 30.63 | 30.17 | 29.64 | 28.96 | 28.14 | 27.19 | 26.11 | 30.95 |
| 47.5 | 24.23 * | 48.45 * | 48.09 * | 47.37 * | 46.51 * | 45.42 * | 44.11 * | 42.60 * | 40.90 * | 48.48 * |
| 42.5 | 23.55 * | 47.18 * | 46.90 * | 46.22 * | 45.40 * | 44.37 * | 43.11 * | 41.66 * | 40.03 * | 47.58 * |
| 37.5 | 29.58 * | 59.22 * | 58.89 * | 58.15 * | 57.18 * | 55.96 * | 54.49 * | 52.78 * | 50.86 * | 60.65 * |
| 33 | 32.05 * | 64.03 * | 63.61 * | 62.81 * | 61.73 * | 60.37 * | 58.77 * | 56.96 * | 54.95 * | 65.56 * |
| 29 | 33.77 * | 67.34 * | 66.71 * | 65.66 * | 64.30 * | 62.71 * | 60.84 * | 58.68 * | 56.36 * | 67.00 * |
| 25.5 | 35.24 * | 70.04 * | 69.13 * | 67.73 * | 65.87 * | 63.69 * | 61.31 * | 58.72 * | 55.94 * | 66.01 * |
| 22.5 | 36.49 * | 72.28 * | 71.04 * | 69.26 * | 66.81 * | 63.74 * | 60.49 * | 57.23 * | 53.84 * | 62.75 * |
| 19.5 | 44.27 * | 87.70 * | 85.91 * | 83.33 * | 79.91 * | 75.53 * | 70.68 * | 65.73 * | 60.74 * | 69.55 * |
| 17 | 43.40 * | 86.14 * | 84.45 * | 81.73 * | 78.14 * | 73.69 * | 68.55 * | 62.93 * | 57.30 * | 64.44 * |
| 15 | 38.85 * | 77.19 * | 75.74 * | 73.33 * | 70.14 * | 66.26 * | 61.66 * | 56.45 * | 51.04 * | 56.65 * |
| 13 | 42.20 * | 83.88 * | 82.27 * | 79.78 * | 76.49 * | 72.39 * | 67.49 * | 61.95 * | 55.95 * | 61.60 * |
| 11 | 45.13 * | 89.76 * | 88.11 * | 85.60 * | 82.23 * | 77.93 * | 72.80 * | 66.96 * | 60.62 * | 66.48 * |
| 9 | 47.66 * | 94.84 * | 93.22 * | 90.65 * | 87.21 * | 82.75 * | 77.36 * | 71.32 * | 64.71 * | 70.95 * |
| 7 | 49.78 * | 99.06 * | 97.43 * | 94.87 * | 91.30 * | 86.64 * | 81.14 * | 74.95 * | 68.12 * | 74.86 * |
| 5 | 51.51 * | 102.43 * | 100.77 * | 98.15 * | 94.42 * | 89.69 * | 84.17 * | 77.84 * | 70.85 * | 78.01 * |
| 3 | 52.68 * | 104.77 * | 103.18 * | 100.55 * | 96.79 * | 92.05 * | 86.43 * | 80.01 * | 72.90 * | 80.31 * |
| 1 | 53.20 * | 105.98 * | 104.68 * | 102.14 * | 98.32 * | 93.46 * | 87.75 * | 81.33 * | 74.18 * | 81.72 * |
| 0 | 26.65 * | 53.18 * | 52.62 * | 51.36 * | 49.38 * | 46.91 * | 44.03 * | 40.85 * | 37.30 * | 41.14 * |
| -1 | 26.65 * | 53.18 * | 52.62 * | 51.36 * | 49.38 * | 46.91 * | 44.03 * | 40.85 * | 37.30 * | 41.14 * |
| | 53.20 * | 105.98 * | 104.68 * | 102.14 * | 98.32 * | 93.46 * | 87.75 * | 81.33 * | 74.18 * | 81.72 * |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMENS TABULATION - (Cont.)

| | | | | | | | | | | |
|--------------|---------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| -3 | 52.68 * | 104.77 * | 103.18 * | 100.55 * | 96.79 * | 92.05 * | 86.43 * | 80.01 * | 72.90 * | 80.31 * |
| -5 | 51.51 * | 102.43 * | 100.77 * | 98.15 * | 94.42 * | 89.69 * | 84.17 * | 77.84 * | 70.85 * | 78.01 * |
| -7 | 49.78 * | 99.06 * | 97.43 * | 94.87 * | 91.30 * | 86.64 * | 81.14 * | 74.95 * | 68.12 * | 74.86 * |
| -9 | 47.66 * | 94.84 * | 93.22 * | 90.65 * | 87.21 * | 82.75 * | 77.36 * | 71.32 * | 64.71 * | 70.95 * |
| -11 | 45.13 * | 89.76 * | 88.11 * | 85.60 * | 82.23 * | 77.93 * | 72.80 * | 66.96 * | 60.62 * | 66.48 * |
| -13 | 42.20 * | 83.88 * | 82.27 * | 79.78 * | 76.49 * | 72.39 * | 67.49 * | 61.95 * | 55.95 * | 61.60 * |
| -15 | 38.85 * | 77.19 * | 75.74 * | 73.33 * | 70.14 * | 66.26 * | 61.66 * | 56.45 * | 51.04 * | 56.65 * |
| -17 | 43.40 * | 86.14 * | 84.45 * | 81.73 * | 78.14 * | 73.69 * | 68.55 * | 62.93 * | 57.30 * | 64.44 * |
| -19.5 | 44.27 * | 87.70 * | 85.91 * | 83.33 * | 79.91 * | 75.53 * | 70.68 * | 65.73 * | 60.74 * | 69.55 * |
| -22.5 | 36.49 * | 72.28 * | 71.04 * | 69.26 * | 66.81 * | 63.74 * | 60.49 * | 57.23 * | 53.84 * | 62.75 * |
| -25.5 | 35.24 * | 70.04 * | 69.13 * | 67.73 * | 65.87 * | 63.69 * | 61.31 * | 58.72 * | 55.94 * | 66.01 * |
| -29 | 33.77 * | 67.34 * | 66.71 * | 65.66 * | 64.30 * | 62.71 * | 60.84 * | 58.68 * | 56.36 * | 67.00 * |
| -33 | 32.05 * | 64.03 * | 63.61 * | 62.81 * | 61.73 * | 60.37 * | 58.77 * | 56.96 * | 54.95 * | 65.56 * |
| -37.5 | 29.58 * | 59.22 * | 58.89 * | 58.15 * | 57.18 * | 55.96 * | 54.49 * | 52.78 * | 50.86 * | 60.65 * |
| -42.5 | 23.55 * | 47.18 * | 46.90 * | 46.22 * | 45.40 * | 44.37 * | 43.11 * | 41.66 * | 40.03 * | 47.58 * |
| -47.5 | 24.23 * | 48.45 * | 48.09 * | 47.37 * | 46.51 * | 45.42 * | 44.11 * | 42.60 * | 40.90 * | 48.48 * |
| -55 | 15.48 | 30.90 | 30.63 | 30.17 | 29.64 | 28.96 | 28.14 | 27.19 | 26.11 | 30.95 |
| -65 | 4.88 | 9.75 | 9.69 | 9.57 | 9.43 | 9.26 | 9.05 | 8.81 | 8.54 | 10.23 |
| -75 | 1.47 | 2.94 | 2.93 | 2.91 | 2.87 | 2.83 | 2.78 | 2.72 | 2.66 | 3.21 |
| -85 | 0.10 | 0.19 | 0.19 | 0.20 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.22 |
| -90 | | | | | | | | | | |
| Total | 1464.33 | 2914.52 | 2872.4 | 2803.07 | 2708.55 | 2589.62 | 2450.73 | 2295.73 | 2128.12 | 2416.69 |

Vert. Horizontal Angles

| Angles | 19.5 | 22.5 | 25.5 | 29 | 33 | 37.5 | 42.5 | 47.5 | 55 | 65 |
|---------------|-------------|-------------|-------------|-----------|-----------|-------------|-------------|-------------|-----------|-----------|
| 90 | 0.25 | 0.23 | 0.26 | 0.27 | 0.27 | 0.26 | 0.21 | 0.22 | 0.17 | 0.07 |
| 85 | 3.68 | 3.46 | 3.75 | 3.87 | 3.81 | 3.56 | 2.86 | 3.09 | 2.28 | 0.87 |
| 75 | 11.57 | 10.76 | 11.52 | 11.78 | 11.48 | 10.58 | 8.39 | 8.93 | 6.45 | 2.35 |
| 65 | 34.40 | 31.19 | 32.08 | 30.90 | 27.71 | 23.22 | 17.23 | 17.69 | 12.36 | 4.38 |
| 55 | 53.94 | 48.90 | 50.25 | 48.24 | 42.99 | 34.99 | 23.88 | 21.93 | 14.10 | 4.84 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMENS TABULATION - (Cont.)

| | | | | | | | | | | |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|-------|------|
| 47.5 | 53.21 * | 48.58 * | 50.48 * | 49.20 * | 44.62 | 36.91 | 24.98 | 21.19 | 12.18 | 4.04 |
| 42.5 | 68.12 * | 62.49 * | 65.23 * | 64.06 * | 58.60 * | 49.17 | 34.19 | 28.77 | 15.20 | 4.69 |
| 37.5 | 73.75 * | 67.92 * | 71.32 * | 70.39 * | 64.78 * | 54.92 * | 38.76 | 33.15 | 17.01 | 4.78 |
| 33 | 75.09 * | 69.06 * | 72.78 * | 72.31 * | 66.87 * | 57.05 * | 40.60 * | 35.26 | 17.98 | 4.69 |
| 29 | 73.42 * | 67.09 * | 70.37 * | 70.06 * | 65.27 * | 55.98 * | 40.07 * | 35.24 | 17.94 | 4.43 |
| 25.5 | 69.10 * | 62.67 * | 65.28 * | 64.67 * | 60.52 * | 52.25 * | 37.52 * | 33.33 | 16.95 | 4.03 |
| 22.5 | 75.39 * | 67.66 * | 69.96 * | 68.83 * | 64.32 * | 55.80 * | 40.25 * | 35.99 | 18.27 | 4.23 |
| 19.5 | 68.38 * | 60.33 * | 61.78 * | 60.39 * | 56.21 * | 48.87 * | 35.44 * | 31.84 * | 16.16 | 3.67 |
| 17 | 58.95 * | 51.02 * | 51.64 * | 50.18 * | 46.54 * | 40.48 * | 29.47 * | 26.54 * | 13.47 | 3.02 |
| 15 | 63.07 * | 53.60 * | 53.57 * | 51.72 * | 47.80 * | 41.58 * | 30.34 * | 27.36 * | 13.89 | 3.08 |
| 13 | 67.11 * | 56.03 * | 55.34 * | 53.10 * | 48.91 * | 42.55 * | 31.09 * | 28.08 * | 14.26 | 3.14 |
| 11 | 71.07 * | 58.47 * | 56.98 * | 54.30 * | 49.89 * | 43.37 * | 31.72 * | 28.69 * | 14.57 | 3.18 |
| 9 | 74.79 * | 60.83 * | 58.53 * | 55.35 * | 50.71 * | 44.05 * | 32.24 * | 29.19 * | 14.83 | 3.22 |
| 7 | 77.82 * | 62.80 * | 59.88 * | 56.26 * | 51.35 * | 44.57 * | 32.64 * | 29.58 * | 15.04 | 3.25 |
| 5 | 80.06 * | 64.33 * | 60.96 * | 56.95 * | 51.82 * | 44.99 * | 32.99 * | 29.93 * | 15.22 | 3.28 |
| 3 | 81.49 * | 65.36 * | 61.67 * | 57.44 * | 52.14 * | 45.20 * | 33.15 * | 30.11 * | 15.32 | 3.29 |
| 1 | 41.07 * | 32.91 * | 31.01 * | 28.85 * | 26.14 * | 22.61 * | 16.56 * | 15.05 * | 7.66 | 1.64 |
| 0 | 41.07 * | 32.91 * | 31.01 * | 28.85 * | 26.14 * | 22.61 * | 16.56 * | 15.05 * | 7.66 | 1.64 |
| -1 | 81.49 * | 65.36 * | 61.67 * | 57.44 * | 52.14 * | 45.20 * | 33.15 * | 30.11 * | 15.32 | 3.29 |
| -3 | 80.06 * | 64.33 * | 60.96 * | 56.95 * | 51.82 * | 44.99 * | 32.99 * | 29.93 * | 15.22 | 3.28 |
| -5 | 77.82 * | 62.80 * | 59.88 * | 56.26 * | 51.35 * | 44.57 * | 32.64 * | 29.58 * | 15.04 | 3.25 |
| -7 | 74.79 * | 60.83 * | 58.53 * | 55.35 * | 50.71 * | 44.05 * | 32.24 * | 29.19 * | 14.83 | 3.22 |
| -9 | 71.07 * | 58.47 * | 56.98 * | 54.30 * | 49.89 * | 43.37 * | 31.72 * | 28.69 * | 14.57 | 3.18 |
| -11 | 67.11 * | 56.03 * | 55.34 * | 53.10 * | 48.91 * | 42.55 * | 31.09 * | 28.08 * | 14.26 | 3.14 |
| -13 | 63.07 * | 53.60 * | 53.57 * | 51.72 * | 47.80 * | 41.58 * | 30.34 * | 27.36 * | 13.89 | 3.08 |
| -15 | 58.95 * | 51.02 * | 51.64 * | 50.18 * | 46.54 * | 40.48 * | 29.47 * | 26.54 * | 13.47 | 3.02 |
| -17 | 68.38 * | 60.33 * | 61.78 * | 60.39 * | 56.21 * | 48.87 * | 35.44 * | 31.84 * | 16.16 | 3.67 |
| -19.5 | 75.39 * | 67.66 * | 69.96 * | 68.83 * | 64.32 * | 55.80 * | 40.25 * | 35.99 | 18.27 | 4.23 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMENS TABULATION - (Cont.)

| | | | | | | | | | | |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| -22.5 | 69.10 * | 62.67 * | 65.28 * | 64.67 * | 60.52 * | 52.25 * | 37.52 * | 33.33 | 16.95 | 4.03 |
| -25.5 | 73.42 * | 67.09 * | 70.37 * | 70.06 * | 65.27 * | 55.98 * | 40.07 * | 35.24 | 17.94 | 4.43 |
| -29 | 75.09 * | 69.06 * | 72.78 * | 72.31 * | 66.87 * | 57.05 * | 40.60 * | 35.26 | 17.98 | 4.69 |
| -33 | 73.75 * | 67.92 * | 71.32 * | 70.39 * | 64.78 * | 54.92 * | 38.76 | 33.15 | 17.01 | 4.78 |
| -37.5 | 68.12 * | 62.49 * | 65.23 * | 64.06 * | 58.60 * | 49.17 | 34.19 | 28.77 | 15.20 | 4.69 |
| -42.5 | 53.21 * | 48.58 * | 50.48 * | 49.20 * | 44.62 | 36.91 | 24.98 | 21.19 | 12.18 | 4.04 |
| -47.5 | 53.94 | 48.90 | 50.25 | 48.24 | 42.99 | 34.99 | 23.88 | 21.93 | 14.10 | 4.84 |
| -55 | 34.40 | 31.19 | 32.08 | 30.90 | 27.71 | 23.22 | 17.23 | 17.69 | 12.36 | 4.38 |
| -65 | 11.57 | 10.76 | 11.52 | 11.78 | 11.48 | 10.58 | 8.39 | 8.93 | 6.45 | 2.35 |
| -75 | 3.68 | 3.46 | 3.75 | 3.87 | 3.81 | 3.56 | 2.86 | 3.09 | 2.28 | 0.87 |
| -85 | 0.25 | 0.23 | 0.26 | 0.27 | 0.27 | 0.26 | 0.21 | 0.22 | 0.17 | 0.07 |
| -90 | | | | | | | | | | |
| Total | 2551.4 | 2211.42 | 2229.27 | 2158.22 | 1985.48 | 1705.93 | 1229.21 | 1102.31 | 582.65 | 148.37 |

| Vert. Angles | Horizontal Angles | | | |
|-----------------|-------------------|-----------|-----------|--------------|
| | <u>75</u> | <u>85</u> | <u>90</u> | <u>Total</u> |
| 90 | | | | |
| | 0.02 | 0.00 | | 4.05 |
| 85 | | | | |
| | 0.18 | 0.00 | | 58.75 |
| 75 | | | | |
| | 0.44 | 0.01 | | 183.47 |
| 65 | | | | |
| | 0.78 | 0.01 | | 510.15 |
| 55 | | | | |
| | 0.84 | 0.02 | | 781.10 |
| 47.5 | | | | |
| | 0.70 | 0.01 | | 772.09 |
| 42.5 | | | | |
| | 0.80 | 0.01 | | 989.08 |
| 37.5 | | | | |
| | 0.80 | 0.01 | | 1078.43 |
| 33 | | | | |
| | 0.78 | 0.01 | | 1115.86 |
| 29 | | | | |
| | 0.72 | 0.01 | | 1114.28 |
| 25.5 | | | | |
| | 0.65 | 0.01 | | 1080.9 |
| 22.5 | | | | |
| | 0.68 | 0.01 | | 1224.76 |
| 19.5 | | | | |
| | 0.58 | 0.01 | | 1144.41 |
| 17 | | | | |
| | 0.47 | 0.01 | | 999.10 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMENS TABULATION - (Cont.)

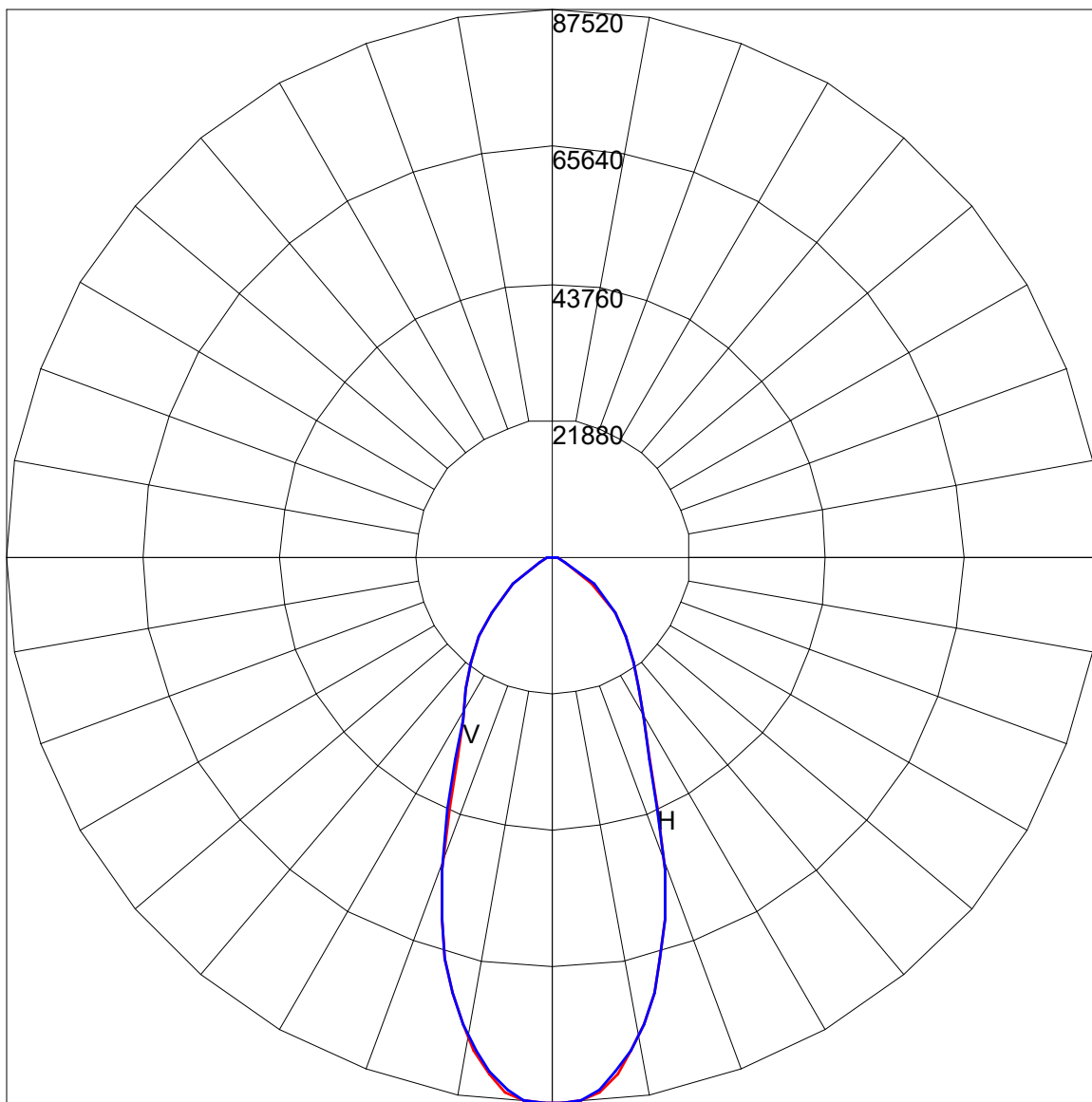
| | | | |
|--------------|------|------|---------|
| 15 | | | |
| | 0.48 | 0.01 | 1070.51 |
| 13 | | | |
| | 0.49 | 0.01 | 1135.74 |
| 11 | | | |
| | 0.49 | 0.01 | 1193.41 |
| 9 | | | |
| | 0.50 | 0.01 | 1242.4 |
| 7 | | | |
| | 0.50 | 0.01 | 1281.55 |
| 5 | | | |
| | 0.50 | 0.01 | 1310.71 |
| 3 | | | |
| | 0.50 | 0.01 | 1328.45 |
| 1 | | | |
| | 0.25 | 0.00 | 667.19 |
| 0 | | | |
| | 0.25 | 0.00 | 667.19 |
| -1 | | | |
| | 0.50 | 0.01 | 1328.45 |
| -3 | | | |
| | 0.50 | 0.01 | 1310.71 |
| -5 | | | |
| | 0.50 | 0.01 | 1281.55 |
| -7 | | | |
| | 0.50 | 0.01 | 1242.4 |
| -9 | | | |
| | 0.49 | 0.01 | 1193.41 |
| -11 | | | |
| | 0.49 | 0.01 | 1135.74 |
| -13 | | | |
| | 0.48 | 0.01 | 1070.51 |
| -15 | | | |
| | 0.47 | 0.01 | 999.10 |
| -17 | | | |
| | 0.58 | 0.01 | 1144.41 |
| -19.5 | | | |
| | 0.68 | 0.01 | 1224.76 |
| -22.5 | | | |
| | 0.65 | 0.01 | 1080.9 |
| -25.5 | | | |
| | 0.72 | 0.01 | 1114.28 |
| -29 | | | |
| | 0.78 | 0.01 | 1115.86 |
| -33 | | | |
| | 0.80 | 0.01 | 1078.43 |
| -37.5 | | | |
| | 0.80 | 0.01 | 989.08 |
| -42.5 | | | |
| | 0.70 | 0.01 | 772.09 |
| -47.5 | | | |
| | 0.84 | 0.02 | 781.10 |
| -55 | | | |
| | 0.78 | 0.01 | 510.15 |
| -65 | | | |
| | 0.44 | 0.01 | 183.47 |

IES FLOOD REPORT
PHOTOMETRIC FILENAME : ZNF-85L-WF-50.IES

LUMENS TABULATION - (Cont.)

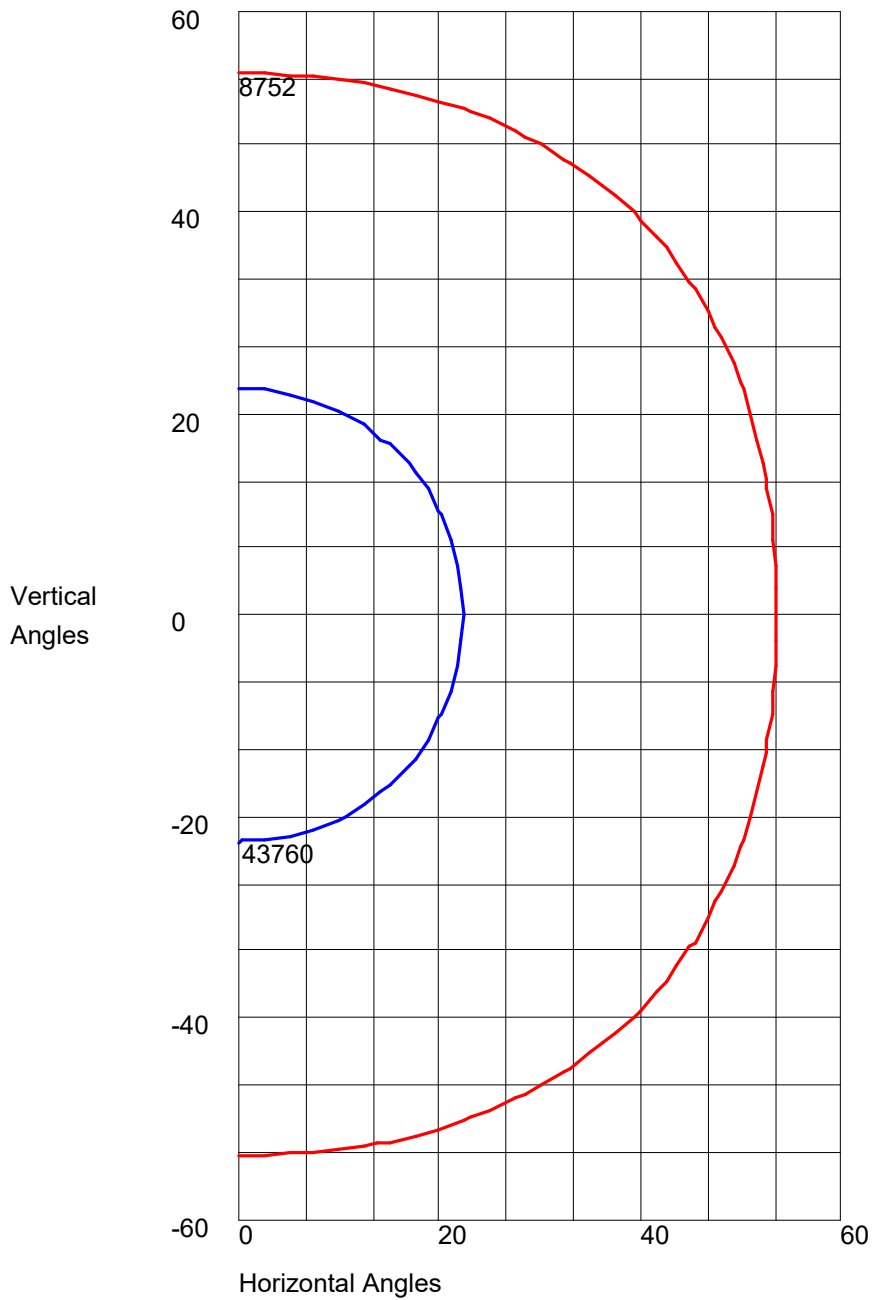
| | | | |
|--------------|-------|------|----------|
| -75 | 0.18 | 0.00 | 58.75 |
| -85 | 0.02 | 0.00 | 4.05 |
| -90 | | | |
| Total | 24.35 | 0.43 | 40572.77 |

AXIAL CANDELA DISPLAY



Maximum Candela = 87520 Located At Horizontal Angle = 0, Vertical Angle = -1
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 87520 Located At Horizontal Angle = 0, Vertical Angle = -1
50% Maximum Candela = 43760
10% Maximum Candela = 8752