**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-FT-30-70CRI-IH.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] LED-12642
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-20L-SIL-FT-30-70CRI-IH
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 3000

**CHARACTERISTICS**

| | |
|---|---|
| IES Classification | Type III |
| Longitudinal Classification | Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 14797 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 99 |
| Total Luminaire Watts | 149 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.05 |
| Maximum Candela | 9812 |
| Maximum Candela Angle | 45H 67.5V |
| Maximum Candela (<90 Degrees Vertical) | 9812 |
| Maximum Candela Angle (<90 Degrees Vertical) | 45H 67.5V |
| Maximum Candela At 90 Degrees Vertical | 213 (1.4% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 1140 (7.7% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

| | Lumens | % Lamp | % Luminaire |
|---|---|---|---|
| FL - Front-Low (0-30) | 939.7 | N.A. | 6.4 |
| FM - Front-Medium (30-60) | 5843.5 | N.A. | 39.5 |
| FH - Front-High (60-80) | 4773.3 | N.A. | 32.3 |
| FVH - Front-Very High (80-90) | 184.9 | N.A. | 1.2 |
| BL - Back-Low (0-30) | 609.2 | N.A. | 4.1 |
| BM - Back-Medium (30-60) | 1185.2 | N.A. | 8.0 |
| BH - Back-High (60-80) | 483.1 | N.A. | 3.3 |
| BVH - Back-Very High (80-90) | 106.4 | N.A. | 0.7 |
| UL - Uplight-Low (90-100) | 178.0 | N.A. | 1.2 |
| UH - Uplight-High (100-180) | 493.2 | N.A. | 3.3 |
| Total | 14796.5 | N.A. | 100.0 |
| BUG Rating | B2-U3-G2 | | |

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**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-FT-30-70CRI-IH.IES**

**CANDELA TABULATION**

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0.0 | 5.0 | 15.0 | 25.0 | 35.0 | 42.5 | 45.0 | 55.0 | 65.0 | 75.0 |
| 0.0 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 |
| 2.5 | 1661 | 1669 | 1672 | 1665 | 1670 | 1662 | 1665 | 1649 | 1642 | 1638 |
| 5.0 | 1534 | 1514 | 1541 | 1625 | 1696 | 1715 | 1728 | 1720 | 1707 | 1674 |
| 7.5 | 1566 | 1568 | 1552 | 1575 | 1593 | 1556 | 1552 | 1618 | 1716 | 1696 |
| 10.0 | 1559 | 1544 | 1578 | 1596 | 1600 | 1606 | 1610 | 1636 | 1655 | 1745 |
| 12.5 | 1621 | 1677 | 1712 | 1684 | 1683 | 1667 | 1648 | 1669 | 1680 | 1880 |
| 15.0 | 1737 | 1734 | 1794 | 1745 | 1822 | 1800 | 1808 | 1802 | 1839 | 1885 |
| 17.5 | 1942 | 1922 | 1969 | 1959 | 1897 | 1924 | 1975 | 1937 | 1985 | 2009 |
| 20.0 | 2138 | 2171 | 2138 | 2109 | 2182 | 2062 | 2064 | 2148 | 2147 | 2117 |
| 22.5 | 2358 | 2349 | 2415 | 2377 | 2309 | 2300 | 2312 | 2263 | 2271 | 2301 |
| 25.0 | 2803 | 2755 | 2683 | 2557 | 2609 | 2518 | 2456 | 2418 | 2442 | 2369 |
| 27.5 | 3003 | 3059 | 2936 | 2909 | 2816 | 2801 | 2786 | 2612 | 2514 | 2535 |
| 30.0 | 3472 | 3499 | 3458 | 3186 | 3115 | 3061 | 2988 | 2811 | 2642 | 2635 |
| 32.5 | 3767 | 3768 | 3703 | 3607 | 3486 | 3373 | 3297 | 3060 | 2836 | 2744 |
| 35.0 | 4061 | 4034 | 3958 | 3867 | 3861 | 3752 | 3668 | 3281 | 2975 | 2804 |
| 37.5 | 4395 | 4321 | 4231 | 4163 | 4120 | 4149 | 4101 | 3584 | 3140 | 2848 |
| 40.0 | 4762 | 4654 | 4567 | 4506 | 4425 | 4484 | 4461 | 3915 | 3373 | 2877 |
| 42.5 | 5142 | 5075 | 4951 | 4902 | 4815 | 4864 | 4803 | 4395 | 3538 | 2918 |
| 45.0 | 5598 | 5546 | 5426 | 5376 | 5268 | 5268 | 5227 | 4839 | 3818 | 3197 |
| 47.5 | 6225 | 6126 | 6022 | 5953 | 5819 | 5741 | 5742 | 5306 | 4149 | 3480 |
| 50.0 | 6809 | 6752 | 6697 | 6658 | 6470 | 6383 | 6340 | 5854 | 4658 | 3777 |
| 52.5 | 7143 | 7149 | 7178 | 7341 | 7193 | 7051 | 7005 | 6568 | 5293 | 4172 |
| 55.0 | 7259 | 7304 | 7396 | 7772 | 7869 | 7774 | 7721 | 7271 | 6003 | 4503 |
| 57.5 | 7264 | 7332 | 7505 | 8025 | 8370 | 8511 | 8355 | 7947 | 6636 | 4704 |
| 60.0 | 7207 | 7292 | 7554 | 8211 | 8696 | 8997 | 8919 | 8586 | 7068 | 5013 |
| 62.5 | 6903 | 7016 | 7437 | 8352 | 8954 | 9253 | 9390 | 9061 | 7268 | 5604 |
| 65.0 | 5541 | 5682 | 6439 | 8030 | 9248 | 9587 | 9730 | 8968 | 7293 | 5719 |
| 67.5 | 3725 | 3757 | 4632 | 6571 | 8996 | 9781 | 9812 | 8504 | 7197 | 5529 |
| 70.0 | 1985 | 2200 | 2955 | 4539 | 7137 | 8735 | 8892 | 7925 | 6582 | 4730 |
| 72.5 | 1046 | 1165 | 1985 | 2907 | 4485 | 5802 | 6333 | 6959 | 5180 | 3092 |
| 75.0 | 752 | 805 | 1538 | 2254 | 3011 | 3645 | 3864 | 4379 | 2727 | 1471 |
| 77.5 | 582 | 620 | 896 | 1537 | 2207 | 2117 | 2163 | 2329 | 1522 | 902 |
| 80.0 | 439 | 475 | 640 | 824 | 1089 | 1124 | 1140 | 1138 | 803 | 642 |
| 82.5 | 345 | 375 | 497 | 618 | 567 | 454 | 422 | 358 | 344 | 464 |
| 85.0 | 274 | 292 | 390 | 373 | 245 | 210 | 205 | 211 | 237 | 282 |
| 87.5 | 147 | 156 | 185 | 155 | 145 | 156 | 160 | 172 | 187 | 214 |
| 90.0 | 60 | 69 | 98 | 115 | 133 | 147 | 152 | 162 | 175 | 190 |
| 92.5 | 67 | 73 | 101 | 118 | 137 | 151 | 156 | 164 | 179 | 191 |
| 95.0 | 76 | 77 | 103 | 122 | 138 | 152 | 156 | 164 | 180 | 187 |
| 97.5 | 84 | 82 | 106 | 125 | 140 | 153 | 157 | 162 | 176 | 160 |
| 100.0 | 91 | 86 | 108 | 128 | 142 | 153 | 156 | 159 | 164 | 121 |
| 102.5 | 97 | 91 | 109 | 130 | 144 | 153 | 156 | 154 | 145 | 104 |
| 105.0 | 102 | 96 | 110 | 132 | 145 | 152 | 154 | 142 | 126 | 95 |
| 107.5 | 105 | 101 | 112 | 135 | 146 | 150 | 149 | 127 | 108 | 95 |
| 110.0 | 108 | 106 | 114 | 137 | 145 | 142 | 138 | 112 | 95 | 95 |
| 112.5 | 111 | 109 | 114 | 137 | 140 | 132 | 126 | 103 | 88 | 92 |
| 115.0 | 114 | 113 | 116 | 135 | 132 | 120 | 114 | 98 | 85 | 91 |
| 117.5 | 116 | 115 | 116 | 130 | 123 | 112 | 108 | 94 | 84 | 90 |
| 120.0 | 118 | 118 | 114 | 121 | 115 | 107 | 104 | 92 | 84 | 88 |
| 122.5 | 118 | 116 | 110 | 113 | 110 | 104 | 101 | 90 | 84 | 87 |
| 125.0 | 115 | 114 | 107 | 107 | 107 | 103 | 99 | 91 | 84 | 86 |
| 127.5 | 110 | 110 | 105 | 104 | 105 | 101 | 99 | 92 | 86 | 87 |
| 130.0 | 108 | 108 | 104 | 102 | 104 | 102 | 101 | 94 | 87 | 90 |

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**CANDELA TABULATION - (Cont.)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **132.5** | 107 | 107 | 103 | 102 | 104 | 102 | 99 | 91 | 88 | 92 |
| **135.0** | 107 | 107 | 105 | 102 | 99 | 93 | 91 | 84 | 88 | 94 |
| **137.5** | 107 | 107 | 101 | 92 | 84 | 80 | 77 | 76 | 84 | 92 |
| **140.0** | 95 | 94 | 87 | 77 | 67 | 62 | 60 | 63 | 72 | 82 |
| **142.5** | 77 | 77 | 71 | 60 | 49 | 46 | 45 | 50 | 58 | 68 |
| **145.0** | 59 | 58 | 52 | 42 | 34 | 33 | 33 | 35 | 43 | 52 |
| **147.5** | 38 | 38 | 36 | 29 | 22 | 17 | 16 | 20 | 29 | 36 |
| **150.0** | 28 | 27 | 25 | 17 | 7 | 6 | 6 | 10 | 15 | 22 |
| **152.5** | 13 | 12 | 9 | 5 | 3 | 3 | 3 | 6 | 9 | 12 |
| **155.0** | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 3 | 6 | 7 |
| **157.5** | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 5 |
| **160.0** | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **162.5** | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| **165.0** | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **167.5** | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| **170.0** | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| **172.5** | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **175.0** | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **177.5** | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| **180.0** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

| **Vert. Angles** | **Horizontal Angles** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **85.0** | **90.0** | **95.0** | **105.0** | **115.0** | **125.0** | **135.0** | **145.0** | **155.0** | **165.0** |
| **0.0** | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 | 1591 |
| **2.5** | 1625 | 1610 | 1602 | 1568 | 1556 | 1552 | 1545 | 1544 | 1549 | 1551 |
| **5.0** | 1665 | 1614 | 1588 | 1572 | 1648 | 1680 | 1671 | 1662 | 1661 | 1641 |
| **7.5** | 1682 | 1655 | 1606 | 1645 | 1685 | 1705 | 1680 | 1599 | 1511 | 1490 |
| **10.0** | 1755 | 1705 | 1636 | 1711 | 1686 | 1641 | 1540 | 1534 | 1479 | 1476 |
| **12.5** | 1907 | 1845 | 1753 | 1833 | 1720 | 1581 | 1514 | 1473 | 1441 | 1439 |
| **15.0** | 2012 | 1937 | 1841 | 1932 | 1711 | 1614 | 1499 | 1482 | 1431 | 1368 |
| **17.5** | 2134 | 2071 | 2014 | 2028 | 1801 | 1638 | 1565 | 1395 | 1248 | 1169 |
| **20.0** | 2247 | 2191 | 2160 | 2058 | 1854 | 1620 | 1428 | 1217 | 1091 | 986 |
| **22.5** | 2431 | 2343 | 2335 | 2141 | 1841 | 1600 | 1266 | 1071 | 892 | 817 |
| **25.0** | 2497 | 2481 | 2426 | 2196 | 1817 | 1456 | 1111 | 887 | 784 | 727 |
| **27.5** | 2642 | 2570 | 2550 | 2270 | 1750 | 1284 | 953 | 805 | 699 | 659 |
| **30.0** | 2708 | 2627 | 2630 | 2355 | 1636 | 1133 | 868 | 724 | 656 | 630 |
| **32.5** | 2729 | 2635 | 2623 | 2322 | 1481 | 1013 | 796 | 678 | 625 | 656 |
| **35.0** | 2731 | 2624 | 2654 | 2210 | 1298 | 931 | 744 | 648 | 648 | 679 |
| **37.5** | 2761 | 2641 | 2673 | 2093 | 1135 | 859 | 702 | 655 | 655 | 734 |
| **40.0** | 2809 | 2701 | 2665 | 1956 | 1031 | 798 | 687 | 643 | 686 | 832 |
| **42.5** | 2792 | 2685 | 2681 | 1801 | 967 | 749 | 686 | 636 | 734 | 1042 |
| **45.0** | 2907 | 2686 | 2735 | 1676 | 895 | 752 | 679 | 621 | 787 | 1063 |
| **47.5** | 2960 | 2794 | 2672 | 1582 | 822 | 776 | 660 | 601 | 812 | 674 |
| **50.0** | 3095 | 2909 | 2673 | 1562 | 787 | 768 | 636 | 574 | 695 | 471 |
| **52.5** | 3311 | 2975 | 2740 | 1541 | 788 | 744 | 604 | 551 | 557 | 397 |
| **55.0** | 3549 | 3142 | 2790 | 1576 | 810 | 683 | 557 | 510 | 450 | 360 |
| **57.5** | 3629 | 3109 | 2748 | 1482 | 758 | 595 | 484 | 458 | 393 | 337 |
| **60.0** | 3767 | 3238 | 2759 | 1465 | 636 | 477 | 408 | 394 | 349 | 314 |
| **62.5** | 3958 | 3260 | 2725 | 1432 | 471 | 377 | 347 | 343 | 316 | 288 |
| **65.0** | 3887 | 3195 | 2548 | 1220 | 362 | 325 | 314 | 310 | 285 | 262 |
| **67.5** | 3593 | 2890 | 2223 | 814 | 319 | 301 | 293 | 285 | 254 | 240 |
| **70.0** | 2904 | 2159 | 1527 | 504 | 298 | 284 | 275 | 253 | 233 | 266 |
| **72.5** | 1692 | 1243 | 887 | 327 | 277 | 269 | 252 | 237 | 273 | 330 |
| **75.0** | 824 | 738 | 555 | 284 | 260 | 246 | 234 | 246 | 242 | 227 |
| **77.5** | 551 | 504 | 319 | 269 | 242 | 226 | 223 | 211 | 205 | 206 |

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**CANDELA TABULATION - (Cont.)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **80.0** | 431 | 377 | 250 | 255 | 223 | 216 | 222 | 203 | 193 | 189 |
| **82.5** | 349 | 292 | 201 | 239 | 214 | 209 | 210 | 201 | 191 | 185 |
| **85.0** | 286 | 192 | 188 | 223 | 207 | 195 | 209 | 201 | 192 | 183 |
| **87.5** | 235 | 95 | 206 | 215 | 203 | 192 | 210 | 203 | 194 | 183 |
| **90.0** | 161 | 84 | 199 | 213 | 204 | 194 | 212 | 205 | 196 | 183 |
| **92.5** | 108 | 152 | 185 | 218 | 210 | 198 | 217 | 210 | 202 | 188 |
| **95.0** | 106 | 187 | 177 | 215 | 209 | 189 | 215 | 210 | 205 | 193 |
| **97.5** | 140 | 186 | 171 | 200 | 199 | 172 | 203 | 203 | 202 | 189 |
| **100.0** | 148 | 175 | 166 | 180 | 187 | 165 | 195 | 196 | 197 | 183 |
| **102.5** | 142 | 160 | 157 | 162 | 177 | 162 | 187 | 191 | 192 | 175 |
| **105.0** | 133 | 147 | 146 | 148 | 164 | 160 | 180 | 186 | 188 | 164 |
| **107.5** | 124 | 134 | 137 | 137 | 153 | 156 | 176 | 183 | 184 | 154 |
| **110.0** | 115 | 125 | 128 | 130 | 141 | 152 | 172 | 180 | 180 | 142 |
| **112.5** | 108 | 117 | 120 | 123 | 132 | 147 | 168 | 179 | 175 | 131 |
| **115.0** | 104 | 110 | 114 | 120 | 127 | 144 | 163 | 176 | 169 | 122 |
| **117.5** | 99 | 107 | 109 | 117 | 123 | 141 | 158 | 170 | 160 | 116 |
| **120.0** | 97 | 103 | 107 | 114 | 120 | 138 | 155 | 163 | 150 | 114 |
| **122.5** | 94 | 99 | 103 | 111 | 119 | 136 | 150 | 156 | 137 | 110 |
| **125.0** | 91 | 95 | 100 | 109 | 118 | 133 | 146 | 148 | 126 | 109 |
| **127.5** | 91 | 95 | 99 | 109 | 118 | 133 | 141 | 138 | 116 | 108 |
| **130.0** | 93 | 96 | 101 | 110 | 118 | 132 | 137 | 130 | 109 | 108 |
| **132.5** | 95 | 98 | 103 | 110 | 116 | 128 | 131 | 121 | 104 | 107 |
| **135.0** | 99 | 101 | 105 | 111 | 113 | 115 | 119 | 113 | 103 | 106 |
| **137.5** | 100 | 103 | 107 | 108 | 107 | 100 | 100 | 98 | 102 | 106 |
| **140.0** | 92 | 95 | 97 | 96 | 90 | 84 | 76 | 79 | 88 | 99 |
| **142.5** | 79 | 82 | 83 | 79 | 72 | 63 | 56 | 60 | 71 | 81 |
| **145.0** | 60 | 63 | 63 | 60 | 52 | 44 | 38 | 41 | 53 | 62 |
| **147.5** | 41 | 44 | 44 | 41 | 36 | 29 | 25 | 30 | 36 | 44 |
| **150.0** | 25 | 26 | 27 | 25 | 20 | 13 | 12 | 19 | 25 | 29 |
| **152.5** | 13 | 14 | 13 | 13 | 10 | 8 | 7 | 8 | 14 | 19 |
| **155.0** | 9 | 9 | 9 | 8 | 7 | 6 | 4 | 5 | 5 | 7 |
| **157.5** | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 2 | 2 |
| **160.0** | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 2 | 1 |
| **162.5** | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 0 |
| **165.0** | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 0 |
| **167.5** | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 2 | 1 | 0 |
| **170.0** | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 1 | 0 |
| **172.5** | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 0 |
| **175.0** | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 0 |
| **177.5** | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 0 |
| **180.0** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

| **Vert. Angles** | **Horizontal Angles** | |
|---|---|---|
| | **175.0** | **180.0** |
| **0.0** | 1591 | 1591 |
| **2.5** | 1557 | 1562 |
| **5.0** | 1638 | 1655 |
| **7.5** | 1471 | 1471 |
| **10.0** | 1463 | 1494 |
| **12.5** | 1427 | 1417 |
| **15.0** | 1321 | 1355 |
| **17.5** | 1139 | 1132 |
| **20.0** | 935 | 932 |
| **22.5** | 782 | 771 |
| **25.0** | 692 | 688 |

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**CANDELA TABULATION - (Cont.)**

| | | |
|---|---|---|
| **27.5** | 656 | 655 |
| **30.0** | 636 | 636 |
| **32.5** | 675 | 678 |
| **35.0** | 719 | 720 |
| **37.5** | 792 | 797 |
| **40.0** | 911 | 930 |
| **42.5** | 1127 | 1080 |
| **45.0** | 663 | 635 |
| **47.5** | 482 | 479 |
| **50.0** | 412 | 410 |
| **52.5** | 373 | 373 |
| **55.0** | 345 | 348 |
| **57.5** | 319 | 322 |
| **60.0** | 292 | 294 |
| **62.5** | 266 | 269 |
| **65.0** | 245 | 250 |
| **67.5** | 229 | 233 |
| **70.0** | 290 | 291 |
| **72.5** | 326 | 277 |
| **75.0** | 203 | 187 |
| **77.5** | 182 | 153 |
| **80.0** | 156 | 115 |
| **82.5** | 143 | 92 |
| **85.0** | 132 | 80 |
| **87.5** | 127 | 83 |
| **90.0** | 119 | 80 |
| **92.5** | 118 | 94 |
| **95.0** | 122 | 114 |
| **97.5** | 120 | 128 |
| **100.0** | 118 | 137 |
| **102.5** | 117 | 141 |
| **105.0** | 119 | 142 |
| **107.5** | 123 | 141 |
| **110.0** | 126 | 137 |
| **112.5** | 127 | 133 |
| **115.0** | 126 | 130 |
| **117.5** | 125 | 126 |
| **120.0** | 122 | 124 |
| **122.5** | 120 | 122 |
| **125.0** | 118 | 119 |
| **127.5** | 115 | 116 |
| **130.0** | 112 | 113 |
| **132.5** | 110 | 110 |
| **135.0** | 108 | 108 |
| **137.5** | 107 | 107 |
| **140.0** | 103 | 104 |
| **142.5** | 87 | 87 |
| **145.0** | 67 | 68 |
| **147.5** | 48 | 48 |
| **150.0** | 31 | 32 |
| **152.5** | 21 | 21 |
| **155.0** | 10 | 10 |
| **157.5** | 2 | 2 |
| **160.0** | 0 | 0 |
| **162.5** | 0 | 0 |
| **165.0** | 0 | 0 |

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Results derived from content of manufacturers photometric file.

**CANDELA TABULATION - (Cont.)**

| | | |
|---|---|---|
| **167.5** | 0 | 0 |
| **170.0** | 0 | 0 |
| **172.5** | 0 | 0 |
| **175.0** | 0 | 0 |
| **177.5** | 0 | 0 |
| **180.0** | 2 | 2 |

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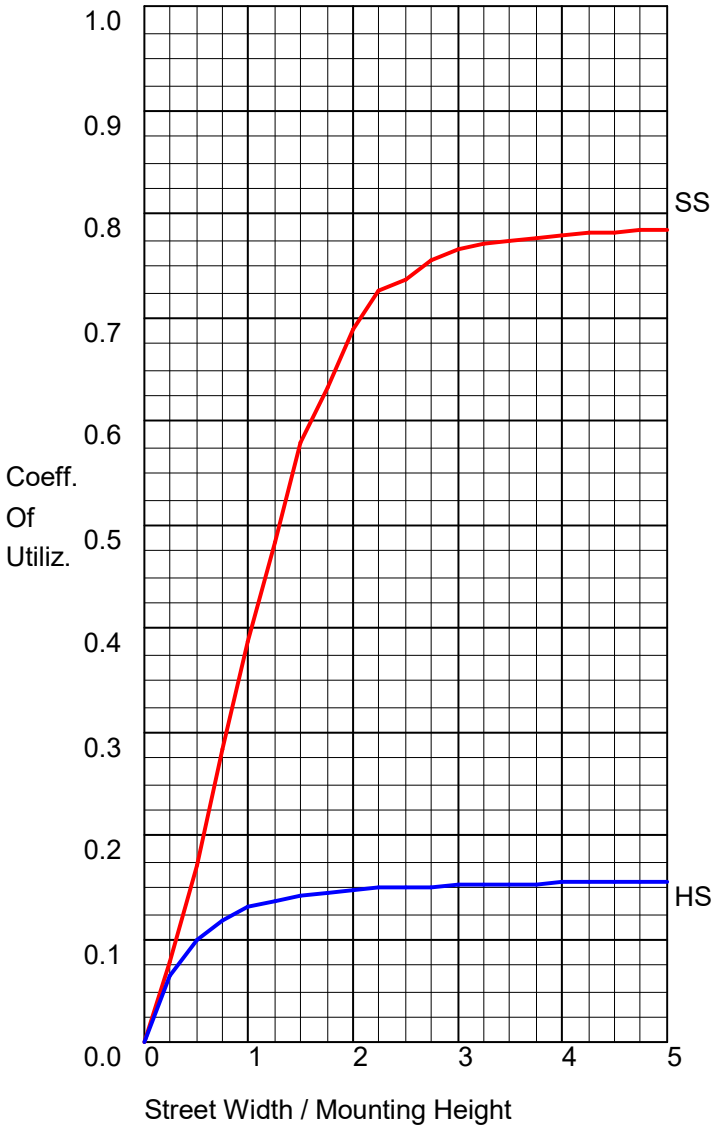
**COEFFICIENTS OF UTILIZATION**




**FLUX DISTRIBUTION**

| | Lumens | Percent Of Luminaire |
|---|---|---|
| Downward Street Side | 11741.4 | 79.4 |
| Downward House Side | 2383.9 | 16.1 |
| Downward Total | 14125.3 | 95.5 |
| Upward Street Side | 294.9 | 2.0 |
| Upward House Side | 376.3 | 2.5 |
| Upward Total | 671.2 | 4.5 |
| Total Flux | 14796.5 | 100.0 |

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**IES ROAD REPORT**
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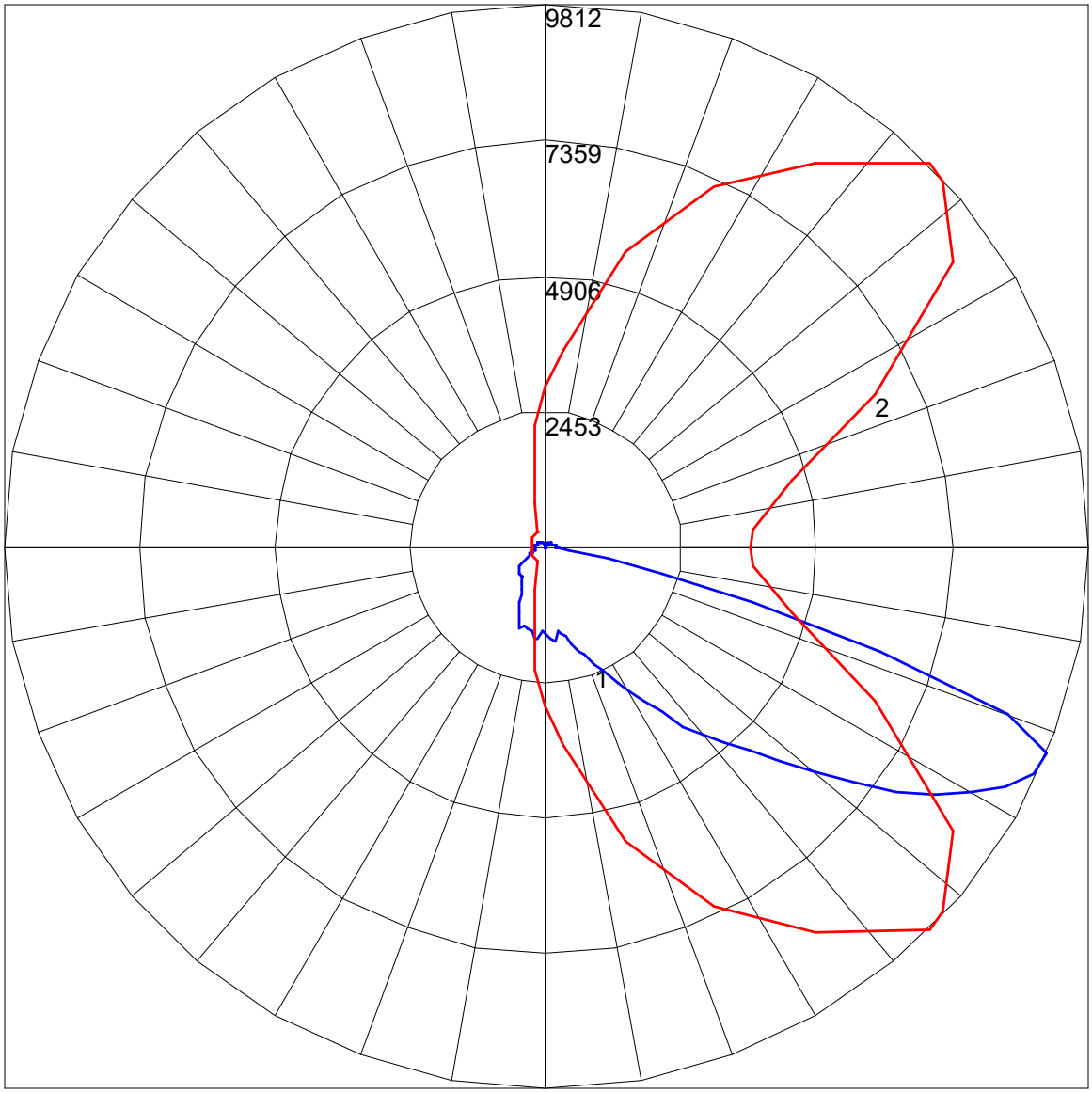
**POLAR GRAPH**




Maximum Candela = 9812  Located At Horizontal Angle = 45, Vertical Angle = 67.5
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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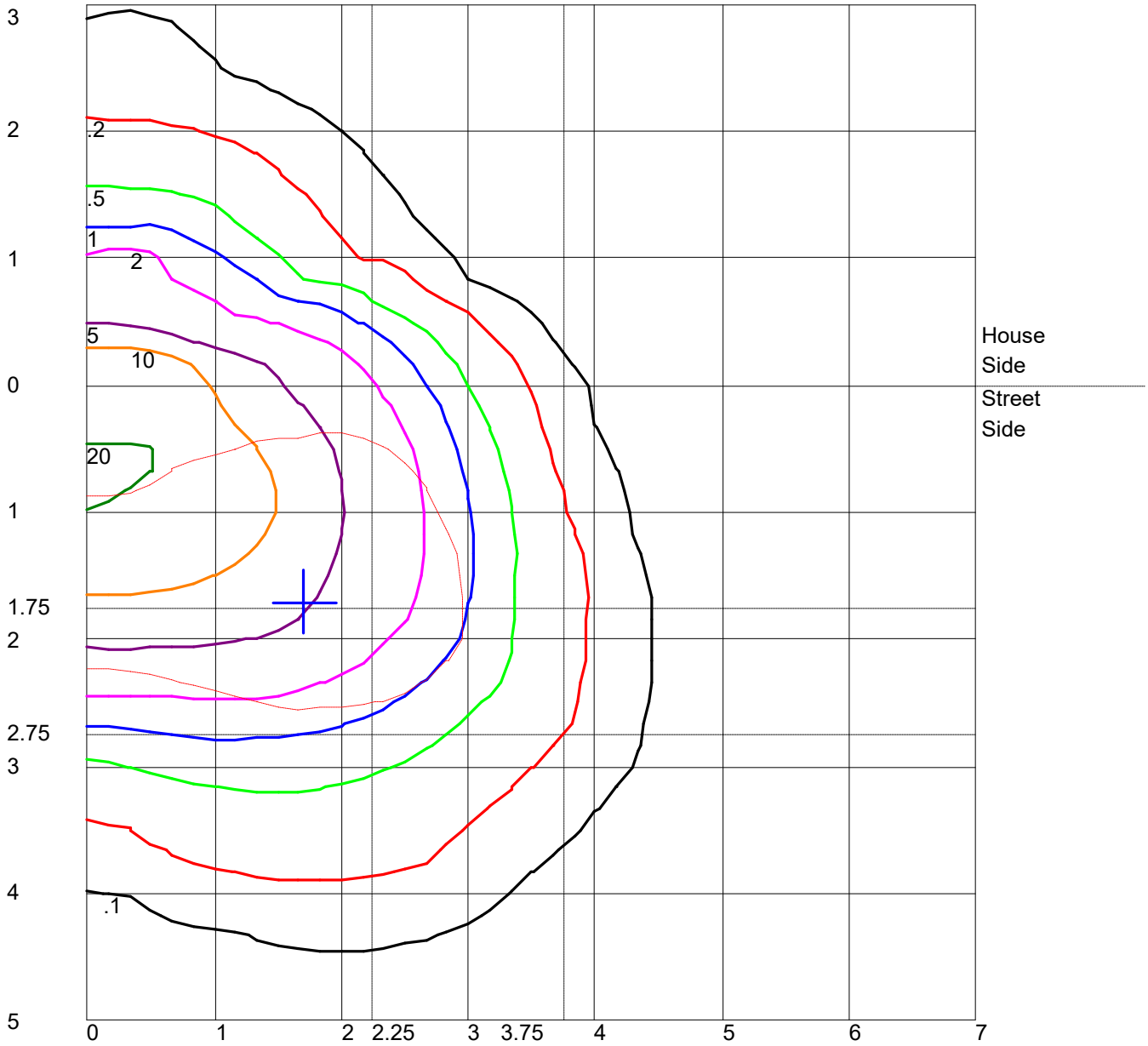
**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-FT-30-70CRI-IH.IES**

**ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE**




Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

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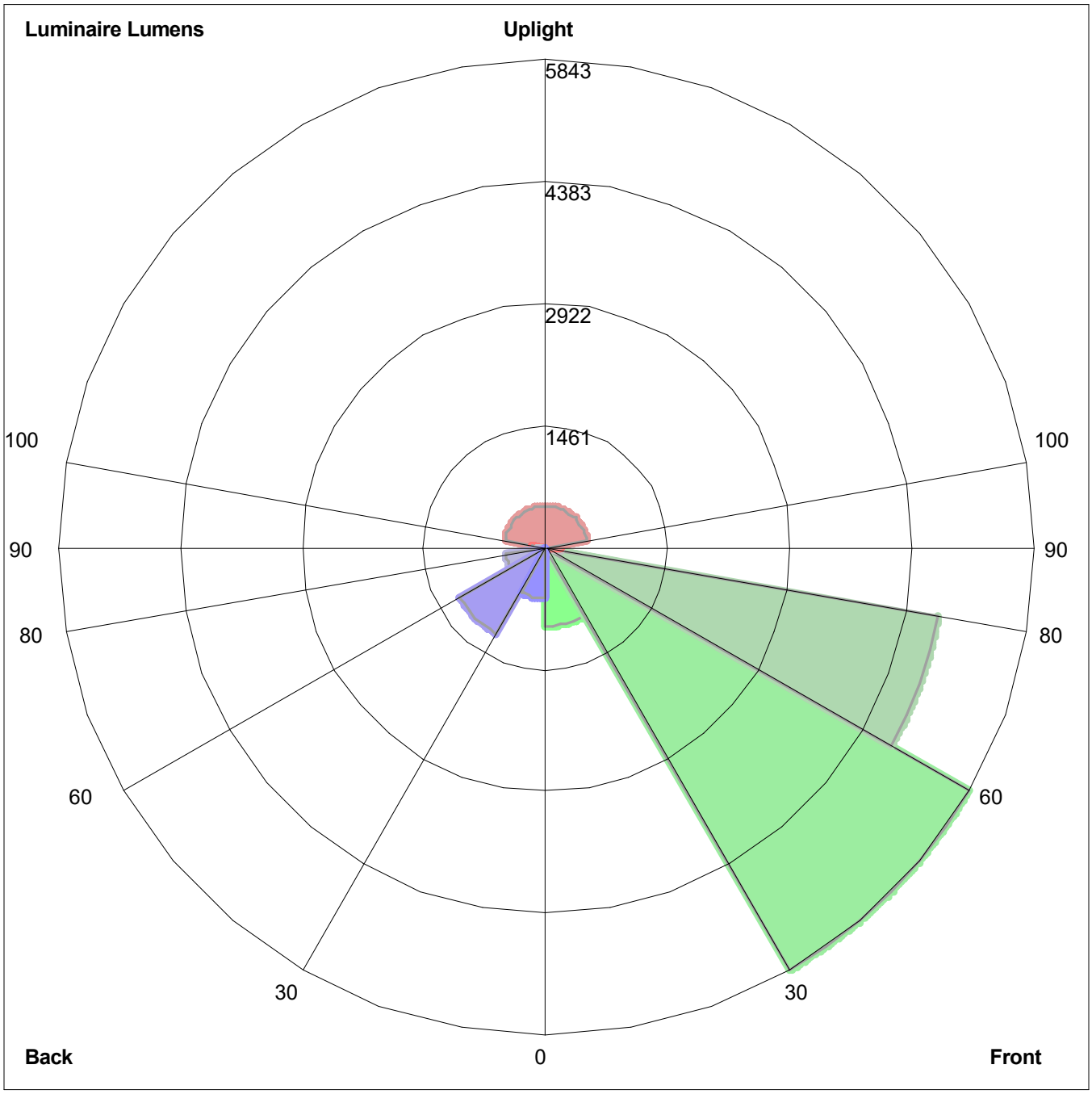
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-FT-30-70CRI-IH.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH**




Luminaire Lumens:
Front: Low=939.7, Medium=5843.5, High=4773.3, Very High=184.9
Back: Low=609.2, Medium=1185.2, High=483.1, Very High=106.4
Uplight: Low=178.0, High=493.2

BUG Rating : B2-U3-G2

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