**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-5W-40-70CRI.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] LED-12566
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/03/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-5W-40-70CRI
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 4000

**CHARACTERISTICS**

| | |
|---|---|
| IES Classification | Type VS |
| Longitudinal Classification | Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 15212 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 149 |
| Total Luminaire Watts | 102 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.04 |
| Maximum Candela | 6838 |
| Maximum Candela Angle | 45H 72.5V |
| Maximum Candela (<90 Degrees Vertical) | 6838 |
| Maximum Candela Angle (<90 Degrees Vertical) | 45H 72.5V |
| Maximum Candela At 90 Degrees Vertical | 217 (1.4% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 1631 (10.7% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

| | Lumens | % Lamp | % Luminaire |
|---|---|---|---|
| FL - Front-Low (0-30) | 617.1 | N.A. | 4.1 |
| FM - Front-Medium (30-60) | 3035.1 | N.A. | 20.0 |
| FH - Front-High (60-80) | 3480.7 | N.A. | 22.9 |
| FVH - Front-Very High (80-90) | 173.5 | N.A. | 1.1 |
| BL - Back-Low (0-30) | 617.1 | N.A. | 4.1 |
| BM - Back-Medium (30-60) | 3035.1 | N.A. | 20.0 |
| BH - Back-High (60-80) | 3480.7 | N.A. | 22.9 |
| BVH - Back-Very High (80-90) | 173.5 | N.A. | 1.1 |
| UL - Uplight-Low (90-100) | 177.9 | N.A. | 1.2 |
| UH - Uplight-High (100-180) | 421.4 | N.A. | 2.8 |
| Total | 15212.1 | N.A. | 100.0 |
| BUG Rating | B4-U3-G2 | | |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**CANDELA TABULATION**

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 5 | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 |
| **0.0** | 958 | 958 | 958 | 958 | 958 | 958 | 958 | 958 | 958 | 958 |
| **2.5** | 969 | 969 | 971 | 972 | 968 | 968 | 971 | 962 | 956 | 949 |
| **5.0** | 977 | 977 | 987 | 996 | 1004 | 1009 | 1012 | 1000 | 983 | 963 |
| **7.5** | 993 | 992 | 986 | 990 | 1000 | 1004 | 1022 | 1021 | 1009 | 994 |
| **10.0** | 1030 | 1042 | 1038 | 1045 | 1049 | 1036 | 1020 | 1044 | 1045 | 1026 |
| **12.5** | 1127 | 1130 | 1131 | 1109 | 1109 | 1082 | 1080 | 1070 | 1120 | 1100 |
| **15.0** | 1186 | 1213 | 1226 | 1200 | 1220 | 1158 | 1171 | 1162 | 1182 | 1166 |
| **17.5** | 1337 | 1328 | 1349 | 1298 | 1312 | 1325 | 1244 | 1256 | 1268 | 1262 |
| **20.0** | 1411 | 1445 | 1460 | 1442 | 1453 | 1402 | 1410 | 1382 | 1341 | 1356 |
| **22.5** | 1611 | 1611 | 1642 | 1599 | 1615 | 1548 | 1537 | 1493 | 1470 | 1479 |
| **25.0** | 1731 | 1740 | 1763 | 1756 | 1750 | 1707 | 1667 | 1645 | 1579 | 1574 |
| **27.5** | 1934 | 1929 | 1949 | 1916 | 1930 | 1866 | 1816 | 1749 | 1686 | 1721 |
| **30.0** | 2096 | 2109 | 2097 | 2088 | 2099 | 2057 | 1991 | 1883 | 1832 | 1814 |
| **32.5** | 2213 | 2232 | 2290 | 2308 | 2279 | 2192 | 2139 | 2000 | 1946 | 1884 |
| **35.0** | 2296 | 2302 | 2373 | 2459 | 2503 | 2356 | 2264 | 2104 | 2008 | 1925 |
| **37.5** | 2352 | 2356 | 2443 | 2557 | 2652 | 2539 | 2345 | 2169 | 2074 | 1986 |
| **40.0** | 2420 | 2404 | 2505 | 2643 | 2756 | 2725 | 2446 | 2261 | 2087 | 2011 |
| **42.5** | 2485 | 2455 | 2562 | 2724 | 2853 | 2844 | 2535 | 2325 | 2113 | 2062 |
| **45.0** | 2540 | 2518 | 2622 | 2799 | 2941 | 2931 | 2724 | 2338 | 2166 | 2110 |
| **47.5** | 2608 | 2596 | 2696 | 2871 | 3029 | 3015 | 2859 | 2385 | 2236 | 2149 |
| **50.0** | 2693 | 2690 | 2771 | 2944 | 3123 | 3111 | 2944 | 2483 | 2334 | 2162 |
| **52.5** | 2794 | 2786 | 2864 | 3029 | 3223 | 3210 | 3034 | 2639 | 2473 | 2290 |
| **55.0** | 2907 | 2903 | 2971 | 3129 | 3335 | 3332 | 3148 | 2834 | 2555 | 2386 |
| **57.5** | 3030 | 3035 | 3097 | 3255 | 3457 | 3482 | 3298 | 3023 | 2596 | 2506 |
| **60.0** | 3175 | 3180 | 3247 | 3412 | 3617 | 3664 | 3455 | 3205 | 2718 | 2590 |
| **62.5** | 3340 | 3347 | 3406 | 3601 | 3819 | 3879 | 3632 | 3403 | 2898 | 2786 |
| **65.0** | 3512 | 3526 | 3594 | 3830 | 4108 | 4183 | 3875 | 3534 | 3218 | 2998 |
| **67.5** | 3667 | 3694 | 3793 | 4087 | 4554 | 4669 | 4241 | 3827 | 3622 | 3317 |
| **70.0** | 3624 | 3658 | 3839 | 4313 | 5178 | 5531 | 4945 | 4494 | 4140 | 3771 |
| **72.5** | 3168 | 3212 | 3528 | 4151 | 5722 | 6838 | 5892 | 4729 | 4077 | 3638 |
| **75.0** | 1483 | 1669 | 2173 | 3126 | 5147 | 6621 | 5333 | 3208 | 2237 | 1814 |
| **77.5** | 428 | 475 | 599 | 1177 | 3254 | 4757 | 2973 | 1234 | 724 | 593 |
| **80.0** | 295 | 336 | 390 | 475 | 869 | 1631 | 773 | 482 | 434 | 386 |
| **82.5** | 216 | 258 | 300 | 338 | 432 | 543 | 417 | 365 | 353 | 312 |
| **85.0** | 155 | 196 | 237 | 259 | 306 | 363 | 307 | 296 | 300 | 272 |
| **87.5** | 112 | 148 | 191 | 207 | 230 | 254 | 237 | 246 | 254 | 242 |
| **90.0** | 76 | 103 | 152 | 168 | 182 | 194 | 189 | 205 | 217 | 191 |
| **92.5** | 82 | 98 | 148 | 164 | 178 | 189 | 182 | 200 | 211 | 154 |
| **95.0** | 92 | 97 | 146 | 161 | 173 | 184 | 173 | 193 | 200 | 144 |
| **97.5** | 99 | 94 | 141 | 157 | 168 | 177 | 164 | 182 | 175 | 150 |
| **100.0** | 103 | 92 | 135 | 153 | 162 | 169 | 158 | 167 | 144 | 149 |
| **102.5** | 105 | 92 | 128 | 149 | 157 | 162 | 151 | 148 | 124 | 140 |
| **105.0** | 105 | 93 | 121 | 145 | 153 | 155 | 141 | 132 | 113 | 130 |
| **107.5** | 104 | 95 | 113 | 143 | 150 | 149 | 129 | 118 | 106 | 121 |
| **110.0** | 102 | 97 | 107 | 139 | 146 | 139 | 119 | 108 | 102 | 113 |
| **112.5** | 101 | 98 | 101 | 135 | 141 | 130 | 111 | 99 | 98 | 106 |
| **115.0** | 99 | 98 | 97 | 128 | 133 | 121 | 106 | 95 | 95 | 100 |
| **117.5** | 98 | 97 | 94 | 119 | 124 | 115 | 102 | 92 | 93 | 95 |
| **120.0** | 97 | 96 | 91 | 109 | 116 | 109 | 99 | 89 | 90 | 91 |
| **122.5** | 95 | 94 | 87 | 98 | 108 | 105 | 96 | 88 | 88 | 87 |
| **125.0** | 92 | 91 | 84 | 90 | 101 | 101 | 95 | 88 | 86 | 85 |
| **127.5** | 88 | 87 | 82 | 85 | 95 | 97 | 94 | 88 | 86 | 84 |
| **130.0** | 85 | 84 | 81 | 80 | 90 | 94 | 93 | 87 | 86 | 84 |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

**CANDELA TABULATION - (Cont.)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **132.5** | 82 | 82 | 80 | 78 | 85 | 90 | 88 | 86 | 87 | 85 |
| **135.0** | 82 | 81 | 80 | 78 | 80 | 81 | 80 | 84 | 87 | 86 |
| **137.5** | 82 | 81 | 79 | 73 | 68 | 67 | 70 | 77 | 83 | 86 |
| **140.0** | 74 | 73 | 69 | 62 | 54 | 52 | 58 | 65 | 73 | 78 |
| **142.5** | 61 | 61 | 56 | 49 | 40 | 38 | 44 | 52 | 60 | 65 |
| **145.0** | 48 | 47 | 43 | 36 | 28 | 27 | 31 | 38 | 45 | 50 |
| **147.5** | 33 | 32 | 30 | 25 | 20 | 16 | 19 | 26 | 32 | 35 |
| **150.0** | 23 | 22 | 21 | 17 | 11 | 7 | 9 | 15 | 20 | 22 |
| **152.5** | 14 | 14 | 12 | 8 | 4 | 3 | 4 | 7 | 10 | 12 |
| **155.0** | 5 | 5 | 5 | 3 | 2 | 1 | 2 | 4 | 5 | 6 |
| **157.5** | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 3 |
| **160.0** | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| **162.5** | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| **165.0** | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| **167.5** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **170.0** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **172.5** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **175.0** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| **177.5** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **180.0** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

| **Vert. Angles** | **Horizontal Angles** |
|---|---|
| | **90** |
| **0.0** | 958 |
| **2.5** | 948 |
| **5.0** | 956 |
| **7.5** | 981 |
| **10.0** | 1012 |
| **12.5** | 1081 |
| **15.0** | 1154 |
| **17.5** | 1237 |
| **20.0** | 1326 |
| **22.5** | 1431 |
| **25.0** | 1585 |
| **27.5** | 1680 |
| **30.0** | 1779 |
| **32.5** | 1850 |
| **35.0** | 1872 |
| **37.5** | 1927 |
| **40.0** | 2003 |
| **42.5** | 2016 |
| **45.0** | 2049 |
| **47.5** | 2107 |
| **50.0** | 2192 |
| **52.5** | 2275 |
| **55.0** | 2368 |
| **57.5** | 2474 |
| **60.0** | 2588 |
| **62.5** | 2769 |
| **65.0** | 2961 |
| **67.5** | 3347 |
| **70.0** | 3736 |
| **72.5** | 3526 |
| **75.0** | 1780 |
| **77.5** | 596 |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

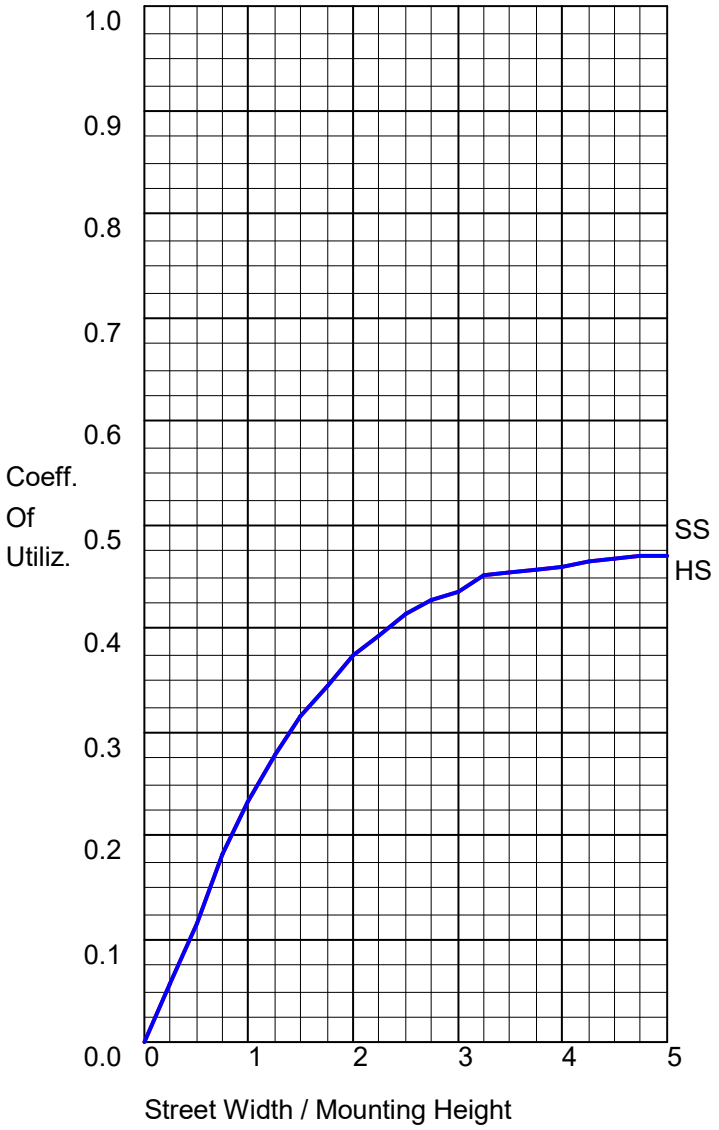
**CANDELA TABULATION - (Cont.)**

| | |
|---|---|
| **80.0** | 411 |
| **82.5** | 329 |
| **85.0** | 226 |
| **87.5** | 124 |
| **90.0** | 97 |
| **92.5** | 153 |
| **95.0** | 185 |
| **97.5** | 181 |
| **100.0** | 166 |
| **102.5** | 151 |
| **105.0** | 137 |
| **107.5** | 125 |
| **110.0** | 116 |
| **112.5** | 108 |
| **115.0** | 102 |
| **117.5** | 96 |
| **120.0** | 92 |
| **122.5** | 87 |
| **125.0** | 84 |
| **127.5** | 83 |
| **130.0** | 83 |
| **132.5** | 84 |
| **135.0** | 86 |
| **137.5** | 86 |
| **140.0** | 78 |
| **142.5** | 66 |
| **145.0** | 51 |
| **147.5** | 35 |
| **150.0** | 22 |
| **152.5** | 12 |
| **155.0** | 6 |
| **157.5** | 3 |
| **160.0** | 2 |
| **162.5** | 2 |
| **165.0** | 2 |
| **167.5** | 2 |
| **170.0** | 3 |
| **172.5** | 3 |
| **175.0** | 3 |
| **177.5** | 2 |
| **180.0** | 2 |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**COEFFICIENTS OF UTILIZATION**



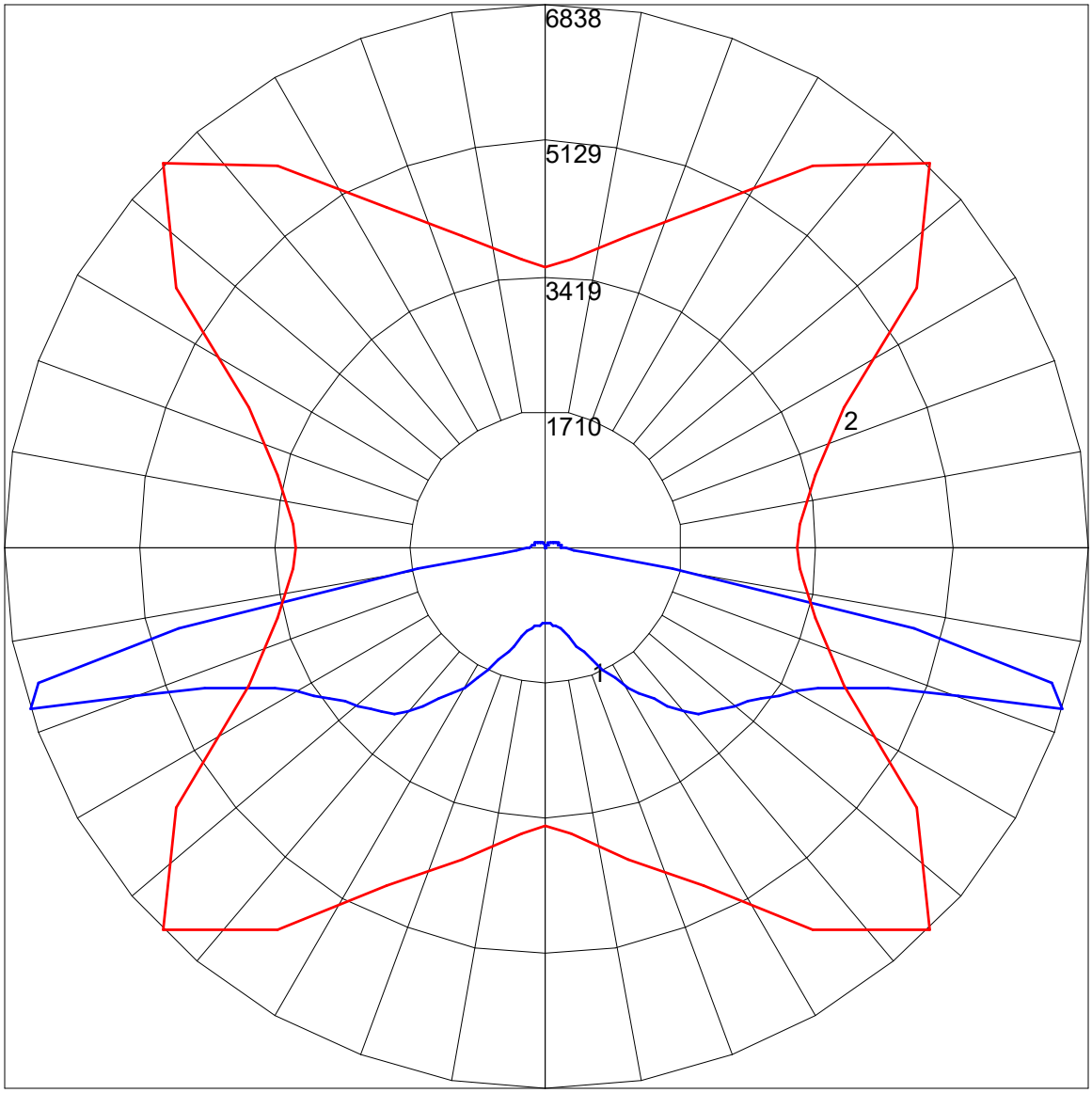

**FLUX DISTRIBUTION**

| | Lumens | Percent Of Luminaire |
|---|---|---|
| Downward Street Side | 7306.4 | 48.0 |
| Downward House Side | 7306.4 | 48.0 |
| Downward Total | 14612.8 | 96.1 |
| Upward Street Side | 299.7 | 2.0 |
| Upward House Side | 299.7 | 2.0 |
| Upward Total | 599.4 | 3.9 |
| Total Flux | 15212.2 | 100.0 |

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**POLAR GRAPH**

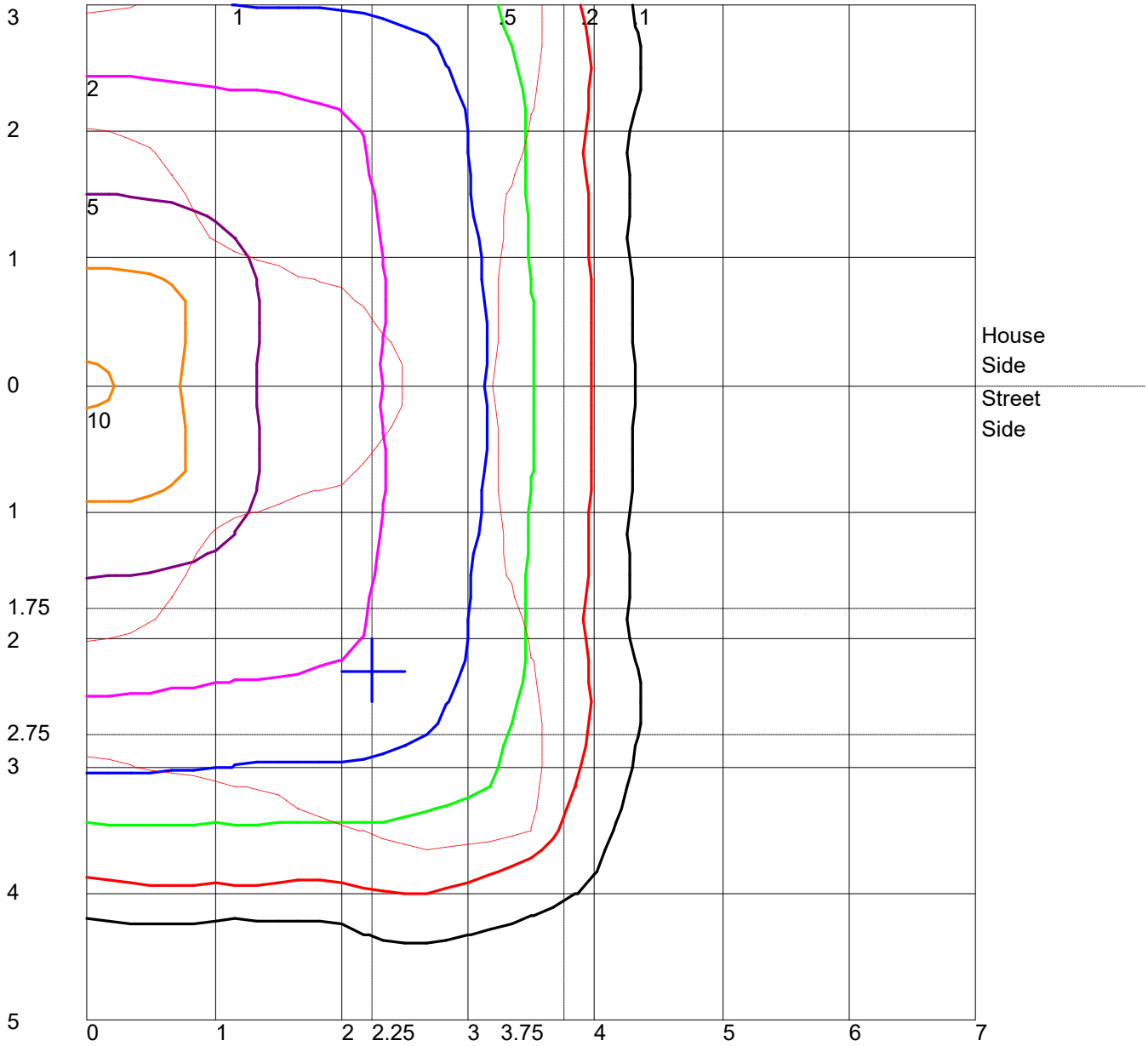



Maximum Candela = 6838  Located At Horizontal Angle = 45, Vertical Angle = 72.5
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
# 2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE**

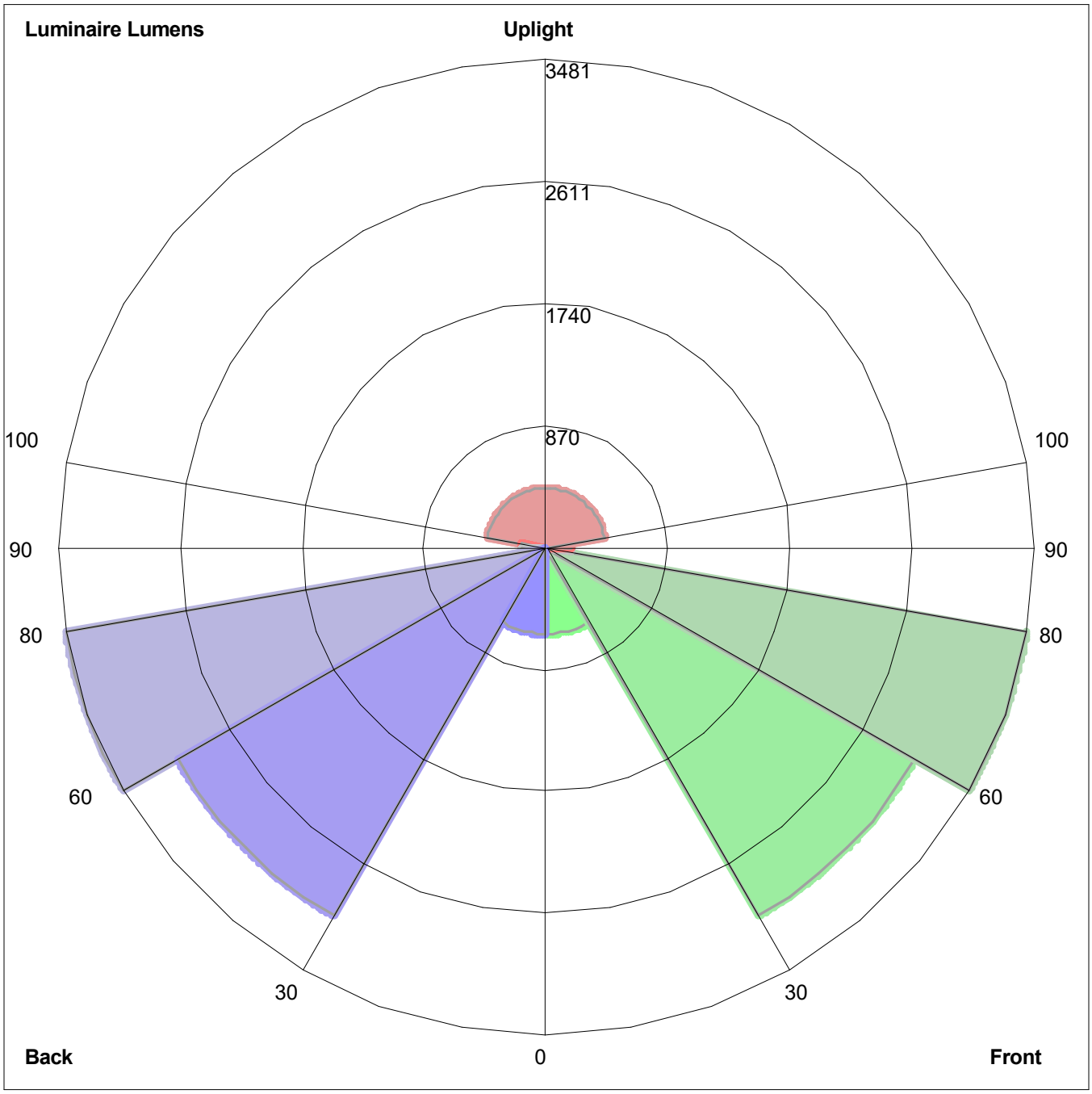



Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
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-15L-SIL-5W-40-70CRI.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH**




Luminaire Lumens:
Front: Low=617.1, Medium=3035.1, High=3480.7, Very High=173.5
Back: Low=617.1, Medium=3035.1, High=3480.7, Very High=173.5
Uplight: Low=177.9, High=421.4

BUG Rating : B4-U3-G2

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.