

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P147485

Luminaire Tested: **TMU-F05-LED-E-U-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P147485  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: TMU-F05-LED-E-U-5MQ  
Description: TALON MEDIUM LED AREA LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (35) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13306.5 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 133.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

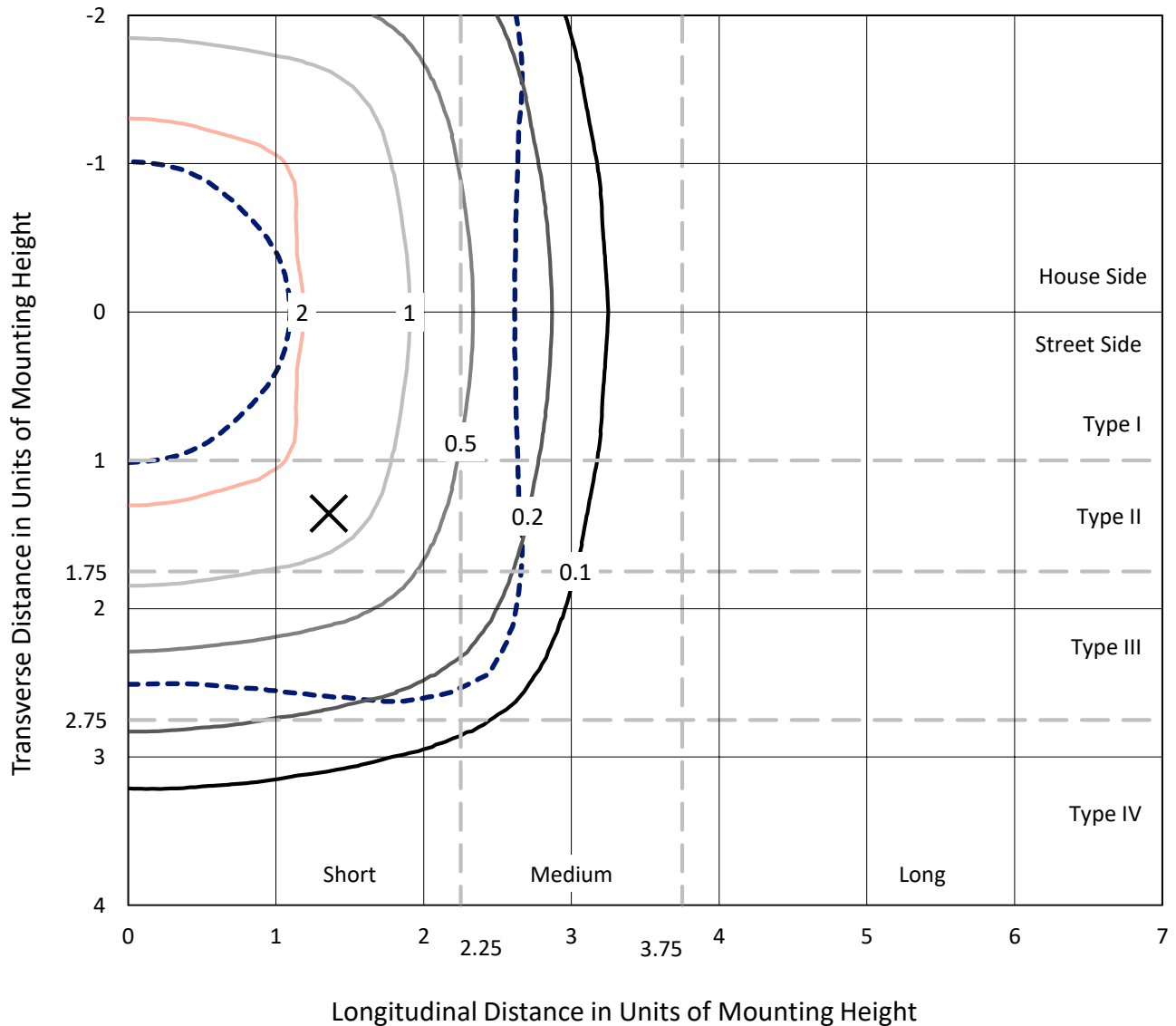


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

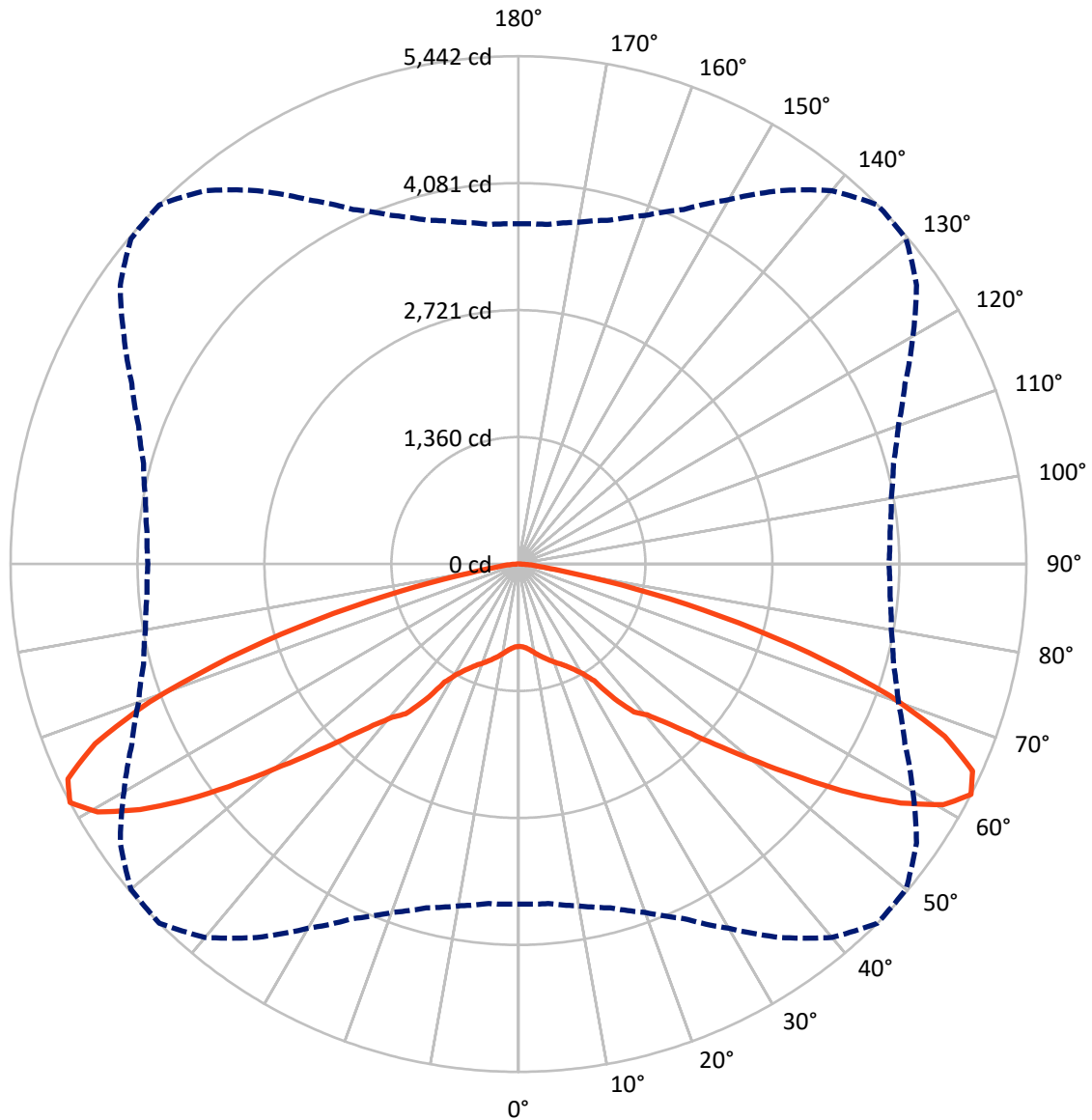


Based on 20 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6653.3   | 0.0    | 6653.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6653.3   | 0.0    | 6653.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 13306.5  | 0.0    | 13306.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 88.5    | 0.7       |
| 10°-20°   | 299.2   | 2.2       |
| 20°-30°   | 578.6   | 4.3       |
| 30°-40°   | 1120.2  | 8.4       |
| 40°-50°   | 2022.6  | 15.2      |
| 50°-60°   | 3517.0  | 26.4      |
| 60°-70°   | 3992.7  | 30.0      |
| 70°-80°   | 1548.0  | 11.6      |
| 80°-90°   | 139.7   | 1.0       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 13306.5 | 100.0     |
| 0°-180°   | 13306.5 | 100.0     |

**Coefficient of Utilization**



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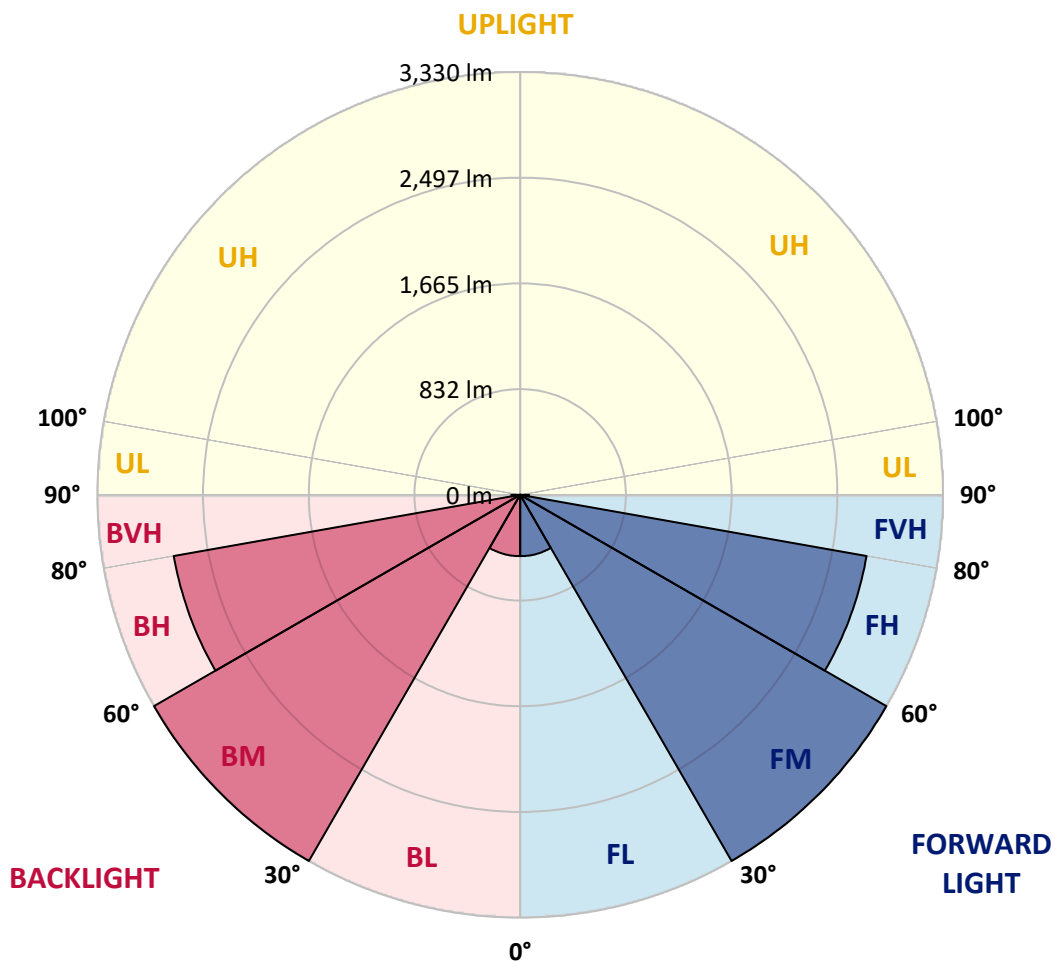
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 483.1  | 3.6       |                         |      |         |
| FM   | (30°-60°)   | 3329.9 | 25.0      |                         |      |         |
| FH   | (60°-80°)   | 2770.4 | 20.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 69.8   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 483.1  | 3.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 3329.9 | 25.0      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2770.4 | 20.8      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 69.8   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  |
| 2.5°  | 888.8  | 891.6  | 890.8  | 889.5  | 889.5  | 889.5  | 888.8  | 886.8  | 886.0  | 887.4  | 888.8  |
| 5°    | 909.4  | 909.4  | 909.4  | 909.4  | 908.0  | 908.0  | 906.7  | 905.4  | 906.0  | 904.6  | 904.0  |
| 7.5°  | 941.1  | 939.0  | 939.0  | 938.4  | 938.4  | 937.0  | 934.9  | 932.2  | 932.8  | 932.2  | 931.4  |
| 10°   | 978.2  | 978.9  | 976.8  | 979.0  | 975.5  | 974.8  | 972.1  | 970.7  | 970.0  | 968.0  | 968.0  |
| 12.5° | 1023.0 | 1020.9 | 1020.9 | 1019.5 | 1018.2 | 1016.8 | 1012.6 | 1012.0 | 1009.2 | 1007.8 | 1005.8 |
| 15°   | 1064.9 | 1064.2 | 1061.5 | 1058.7 | 1058.0 | 1056.7 | 1051.8 | 1049.1 | 1048.4 | 1045.0 | 1042.2 |
| 17.5° | 1106.9 | 1105.5 | 1102.1 | 1100.7 | 1098.0 | 1095.9 | 1091.8 | 1087.6 | 1085.6 | 1084.2 | 1080.8 |
| 20°   | 1151.6 | 1150.2 | 1146.8 | 1144.0 | 1140.6 | 1137.8 | 1131.7 | 1128.2 | 1126.2 | 1124.1 | 1121.4 |
| 22.5° | 1207.3 | 1204.6 | 1199.1 | 1194.2 | 1186.7 | 1184.0 | 1175.7 | 1170.8 | 1167.4 | 1164.7 | 1163.3 |
| 25°   | 1267.9 | 1268.6 | 1261.0 | 1254.8 | 1245.8 | 1238.2 | 1228.0 | 1222.4 | 1219.0 | 1216.2 | 1215.6 |
| 27.5° | 1343.6 | 1344.2 | 1337.4 | 1328.4 | 1314.6 | 1306.4 | 1292.6 | 1285.8 | 1283.7 | 1280.9 | 1280.2 |
| 30°   | 1463.2 | 1457.0 | 1445.4 | 1431.0 | 1418.6 | 1400.6 | 1380.7 | 1373.8 | 1367.0 | 1364.8 | 1364.8 |
| 32.5° | 1683.4 | 1680.0 | 1670.3 | 1634.6 | 1618.0 | 1580.9 | 1545.8 | 1525.8 | 1503.2 | 1492.2 | 1485.2 |
| 35°   | 1837.4 | 1836.1 | 1828.6 | 1816.2 | 1805.8 | 1798.3 | 1777.6 | 1774.2 | 1770.0 | 1770.0 | 1775.6 |
| 37.5° | 1951.0 | 1942.7 | 1941.4 | 1943.4 | 1940.7 | 1942.0 | 1958.6 | 1981.2 | 2000.6 | 2010.2 | 2008.8 |
| 40°   | 2118.8 | 2107.2 | 2114.0 | 2109.2 | 2103.0 | 2101.6 | 2107.2 | 2116.1 | 2125.0 | 2125.0 | 2123.0 |
| 42.5° | 2338.3 | 2343.8 | 2346.6 | 2326.6 | 2313.6 | 2310.1 | 2323.2 | 2320.4 | 2329.4 | 2326.0 | 2317.0 |
| 45°   | 2664.4 | 2660.9 | 2656.1 | 2632.0 | 2611.4 | 2594.9 | 2598.4 | 2593.6 | 2594.2 | 2588.7 | 2581.9 |
| 47.5° | 2993.2 | 3004.9 | 2985.0 | 2973.3 | 2949.9 | 2938.2 | 2947.9 | 2939.5 | 2955.4 | 2926.5 | 2912.8 |
| 50°   | 3312.4 | 3320.7 | 3313.8 | 3297.3 | 3297.3 | 3313.8 | 3325.5 | 3340.6 | 3362.6 | 3329.6 | 3280.1 |
| 52.5° | 3573.8 | 3580.8 | 3591.0 | 3604.8 | 3638.5 | 3673.6 | 3723.1 | 3776.1 | 3818.0 | 3811.8 | 3755.4 |
| 55°   | 3733.4 | 3741.7 | 3758.9 | 3806.4 | 3866.9 | 3959.1 | 4071.2 | 4194.4 | 4290.6 | 4337.4 | 4296.2 |
| 57.5° | 3787.1 | 3793.2 | 3840.0 | 3897.2 | 3991.4 | 4128.3 | 4316.1 | 4528.7 | 4713.8 | 4831.4 | 4812.8 |
| 60°   | 3774.8 | 3774.7 | 3822.2 | 3900.6 | 4032.7 | 4214.3 | 4479.8 | 4774.3 | 5057.8 | 5233.8 | 5207.7 |
| 62.5° | 3644.7 | 3651.6 | 3719.6 | 3813.9 | 3973.6 | 4190.9 | 4507.4 | 4883.7 | 5222.8 | 5441.6 | 5420.3 |
| 65°   | 3359.9 | 3364.7 | 3438.3 | 3550.4 | 3728.6 | 3985.9 | 4331.9 | 4748.8 | 5137.5 | 5348.0 | 5308.1 |
| 67.5° | 2899.6 | 2904.4 | 2964.4 | 3090.9 | 3279.4 | 3548.4 | 3922.0 | 4380.8 | 4761.2 | 4927.7 | 4808.0 |
| 70°   | 2306.6 | 2320.4 | 2358.9 | 2493.1 | 2636.2 | 2899.7 | 3243.6 | 3702.5 | 4061.6 | 4219.2 | 4087.0 |
| 72.5° | 1571.9 | 1607.0 | 1653.8 | 1772.8 | 1909.7 | 2128.5 | 2402.2 | 2788.9 | 3077.1 | 3259.4 | 3141.8 |
| 75°   | 885.4  | 934.9  | 949.4  | 1039.5 | 1152.3 | 1325.0 | 1525.2 | 1802.4 | 2093.4 | 2241.3 | 2099.6 |
| 77.5° | 382.5  | 423.1  | 441.0  | 483.0  | 571.0  | 643.2  | 765.0  | 952.1  | 1177.0 | 1281.0 | 1111.0 |
| 80°   | 188.5  | 198.2  | 205.7  | 218.8  | 243.6  | 266.9  | 324.8  | 406.6  | 498.8  | 522.1  | 415.6  |
| 82.5° | 145.8  | 152.7  | 165.8  | 176.2  | 182.3  | 188.4  | 194.0  | 205.0  | 214.0  | 218.8  | 206.4  |
| 85°   | 102.5  | 111.4  | 125.9  | 137.6  | 144.5  | 149.2  | 154.1  | 157.6  | 149.2  | 136.2  | 143.1  |
| 87.5° | 26.8   | 35.1   | 48.8   | 53.0   | 59.8   | 63.3   | 61.9   | 64.0   | 57.8   | 42.0   | 46.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  | 883.3  |
| 2.5°  | 888.1  | 887.4  | 888.1  | 888.1  | 888.2  | 887.4  | 887.4  | 887.4  |
| 5°    | 904.0  | 904.0  | 904.6  | 903.3  | 903.2  | 904.0  | 903.2  | 902.6  |
| 7.5°  | 930.8  | 930.1  | 930.1  | 929.4  | 930.1  | 929.4  | 929.4  | 928.7  |
| 10°   | 966.6  | 965.2  | 965.8  | 963.8  | 963.8  | 963.2  | 963.1  | 963.1  |
| 12.5° | 1005.1 | 1003.0 | 1003.7 | 1001.6 | 998.2  | 998.8  | 999.6  | 998.9  |
| 15°   | 1042.2 | 1040.2 | 1038.1 | 1036.8 | 1034.6 | 1035.4 | 1035.4 | 1034.7 |
| 17.5° | 1080.1 | 1076.0 | 1075.2 | 1073.2 | 1072.5 | 1072.5 | 1072.5 | 1073.2 |
| 20°   | 1119.3 | 1116.6 | 1115.8 | 1113.8 | 1113.1 | 1115.2 | 1115.8 | 1114.5 |
| 22.5° | 1161.2 | 1159.8 | 1161.2 | 1159.8 | 1162.0 | 1163.3 | 1164.0 | 1162.6 |
| 25°   | 1214.2 | 1212.8 | 1214.9 | 1219.7 | 1222.5 | 1223.8 | 1227.3 | 1225.9 |
| 27.5° | 1282.3 | 1280.9 | 1285.8 | 1292.6 | 1296.8 | 1303.6 | 1307.1 | 1308.5 |
| 30°   | 1370.4 | 1376.6 | 1379.3 | 1393.1 | 1395.8 | 1406.8 | 1406.8 | 1411.6 |
| 32.5° | 1498.3 | 1510.0 | 1530.6 | 1551.9 | 1581.6 | 1602.8 | 1602.9 | 1613.9 |
| 35°   | 1779.0 | 1783.8 | 1799.6 | 1803.1 | 1809.3 | 1816.2 | 1809.2 | 1814.8 |
| 37.5° | 1994.4 | 1973.0 | 1957.8 | 1936.6 | 1923.5 | 1923.4 | 1924.8 | 1923.5 |
| 40°   | 2104.4 | 2096.2 | 2089.2 | 2071.4 | 2068.6 | 2067.9 | 2068.0 | 2070.7 |
| 42.5° | 2301.2 | 2281.2 | 2270.2 | 2255.0 | 2250.2 | 2248.9 | 2248.2 | 2249.6 |
| 45°   | 2557.0 | 2524.8 | 2495.1 | 2480.0 | 2467.0 | 2454.6 | 2458.7 | 2458.7 |
| 47.5° | 2855.0 | 2804.7 | 2756.6 | 2730.4 | 2707.8 | 2697.4 | 2690.5 | 2688.5 |
| 50°   | 3217.5 | 3147.3 | 3085.4 | 3036.5 | 3003.6 | 3002.8 | 3006.2 | 2984.3 |
| 52.5° | 3661.9 | 3551.1 | 3474.1 | 3408.0 | 3377.1 | 3373.6 | 3362.6 | 3350.3 |
| 55°   | 4154.4 | 4023.0 | 3895.8 | 3825.0 | 3784.4 | 3762.4 | 3749.3 | 3728.6 |
| 57.5° | 4662.2 | 4485.4 | 4302.4 | 4188.8 | 4117.4 | 4067.8 | 4041.6 | 4029.9 |
| 60°   | 5053.6 | 4812.1 | 4570.7 | 4388.4 | 4269.4 | 4195.8 | 4150.4 | 4131.8 |
| 62.5° | 5207.7 | 4880.2 | 4570.6 | 4331.2 | 4159.2 | 4057.4 | 3996.2 | 3969.4 |
| 65°   | 5024.0 | 4636.0 | 4283.8 | 4019.6 | 3827.7 | 3714.2 | 3647.4 | 3618.6 |
| 67.5° | 4510.8 | 4168.2 | 3785.0 | 3522.2 | 3324.8 | 3212.6 | 3140.4 | 3119.1 |
| 70°   | 3781.6 | 3431.4 | 3065.4 | 2830.8 | 2654.8 | 2563.2 | 2488.2 | 2479.3 |
| 72.5° | 2841.8 | 2539.9 | 2226.2 | 2032.2 | 1890.4 | 1739.1 | 1700.6 | 1719.8 |
| 75°   | 1821.6 | 1538.9 | 1259.6 | 1084.8 | 955.6  | 811.1  | 755.4  | 769.1  |
| 77.5° | 862.7  | 668.0  | 482.2  | 372.8  | 313.0  | 267.6  | 256.0  | 249.0  |
| 80°   | 319.9  | 259.4  | 229.0  | 217.4  | 209.1  | 201.6  | 196.0  | 189.9  |
| 82.5° | 207.1  | 202.2  | 196.0  | 194.0  | 187.8  | 178.1  | 160.3  | 152.7  |
| 85°   | 154.8  | 154.8  | 146.6  | 147.2  | 142.4  | 130.0  | 113.5  | 104.6  |
| 87.5° | 45.4   | 40.6   | 37.2   | 34.4   | 33.7   | 30.2   | 22.0   | 19.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)