

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: McGRAW-EDISON

Report Number: P157280

Luminaire Tested: **VTS-E09-LED-E1-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157280
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-E09-LED-E1-5MQ
Description: VENTUS LED SITE LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (189) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

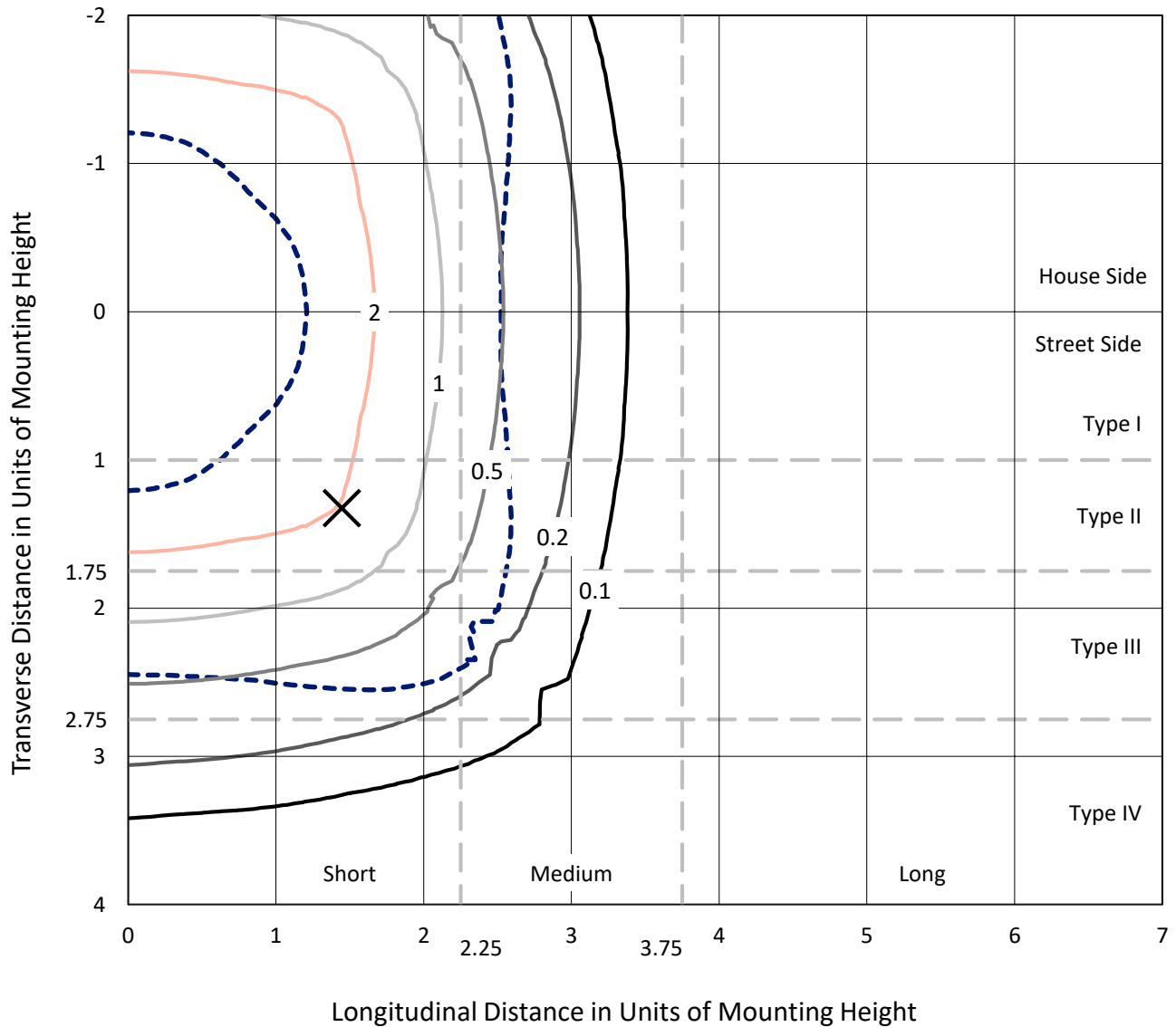
Lumens per Lamp: N/A
Luminaire Lumens: 28789.7 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 225.7
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: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

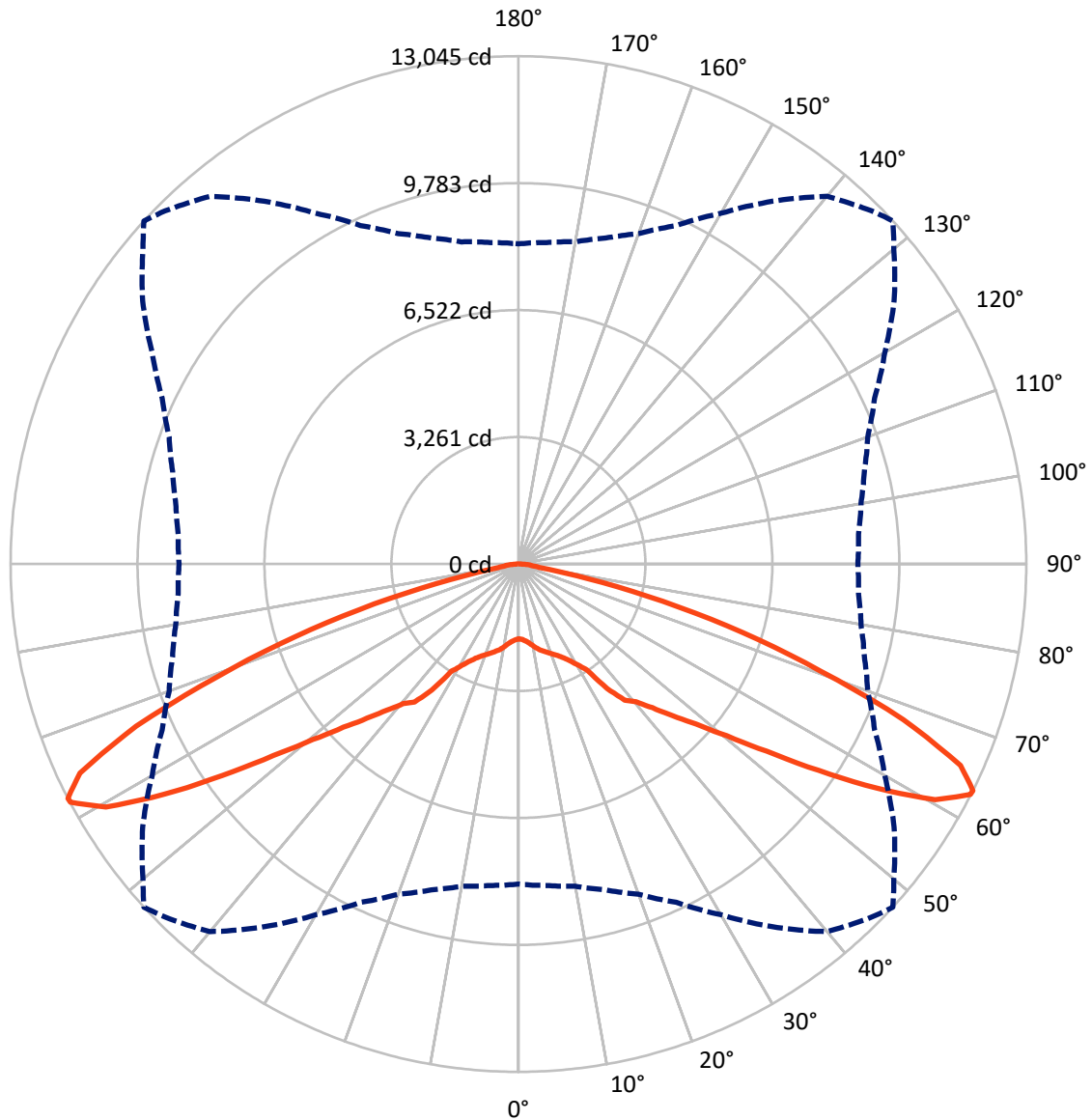
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14394.9 | 0.0 | 14394.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 14394.9 | 0.0 | 14394.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 28789.7 | 0.0 | 28789.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 193.0 | 0.7 |
| 10°-20° | 656.1 | 2.3 |
| 20°-30° | 1254.9 | 4.4 |
| 30°-40° | 2400.5 | 8.3 |
| 40°-50° | 4153.7 | 14.4 |
| 50°-60° | 7459.8 | 25.9 |
| 60°-70° | 9071.2 | 31.5 |
| 70°-80° | 3276.1 | 11.4 |
| 80°-90° | 324.5 | 1.1 |
| 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° | 28789.7 | 100.0 |
| 0°-180° | 28789.7 | 100.0 |

Coefficient of Utilization



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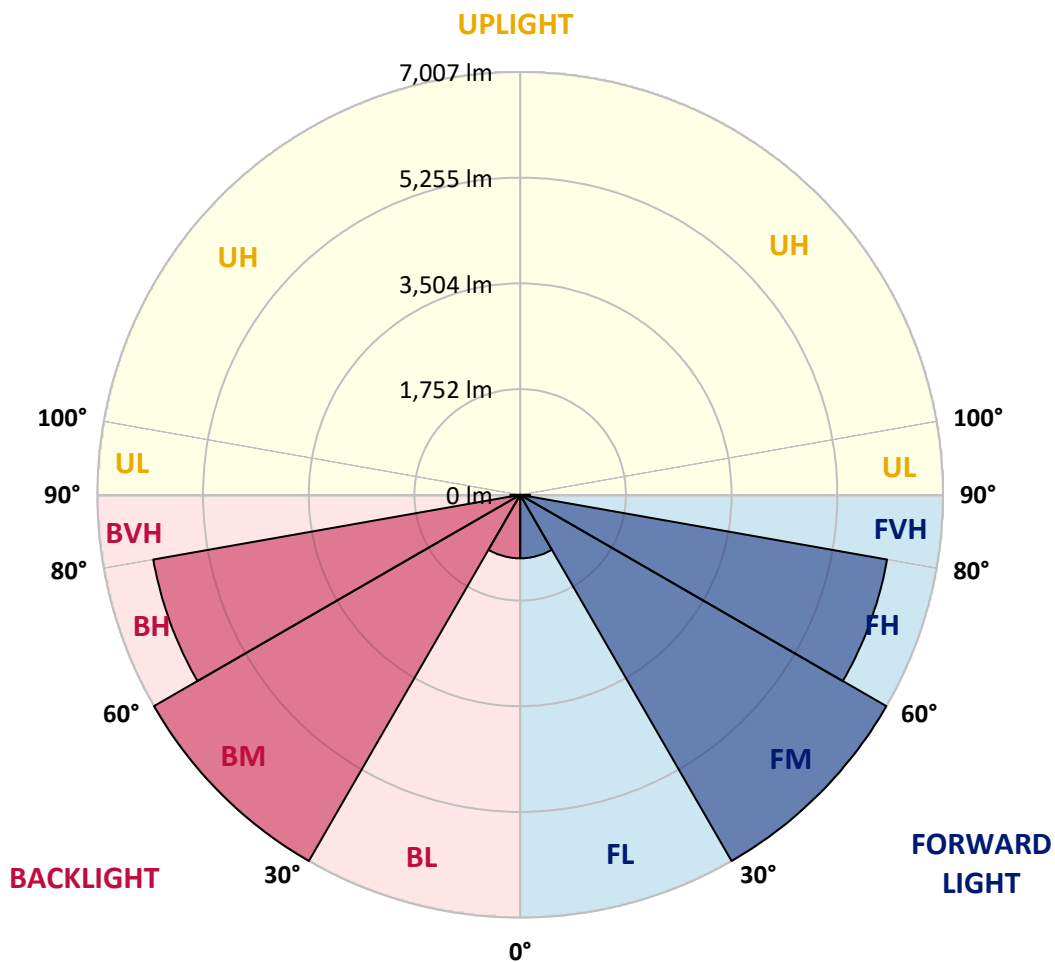
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1052.0 | 3.7 | | | |
| FM | (30°-60°) | 7007.0 | 24.3 | | | |
| FH | (60°-80°) | 6173.6 | 21.4 | | | G3/7500 |
| FVH | (80°-90°) | 162.2 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 1052.0 | 3.7 | B3/2500 | | |
| BM | (30°-60°) | 7007.0 | 24.3 | B4/8500 | | |
| BH | (60°-80°) | 6173.6 | 21.4 | B5 | | G3/7500 |
| BVH | (80°-90°) | 162.2 | 0.6 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 47.5° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 |
| 2.5° | 1935.0 | 1931.4 | 1933.2 | 1935.0 | 1933.2 | 1931.4 | 1931.4 | 1931.4 | 1935.0 | 1931.4 | 1940.4 |
| 5° | 1972.8 | 1969.2 | 1971.0 | 1971.0 | 1971.0 | 1967.4 | 1967.4 | 1967.4 | 1965.6 | 1967.4 | 1987.2 |
| 7.5° | 2044.8 | 2039.4 | 2037.6 | 2041.2 | 2037.6 | 2035.8 | 2034.0 | 2034.0 | 2030.4 | 2030.4 | 2055.6 |
| 10° | 2131.2 | 2124.0 | 2127.6 | 2129.4 | 2124.0 | 2120.4 | 2120.4 | 2120.4 | 2115.0 | 2113.2 | 2145.6 |
| 12.5° | 2226.6 | 2223.0 | 2223.0 | 2219.4 | 2217.6 | 2214.0 | 2212.2 | 2214.0 | 2206.8 | 2206.8 | 2239.2 |
| 15° | 2318.4 | 2311.2 | 2313.0 | 2307.6 | 2304.0 | 2300.4 | 2298.6 | 2296.8 | 2293.2 | 2293.2 | 2313.0 |
| 17.5° | 2403.0 | 2397.6 | 2395.8 | 2390.4 | 2385.0 | 2379.6 | 2376.0 | 2374.2 | 2368.8 | 2368.8 | 2386.8 |
| 20° | 2491.2 | 2485.8 | 2482.2 | 2473.2 | 2464.2 | 2458.8 | 2451.6 | 2448.0 | 2440.8 | 2442.6 | 2462.4 |
| 22.5° | 2592.0 | 2583.0 | 2575.8 | 2568.6 | 2552.4 | 2541.6 | 2532.6 | 2525.4 | 2521.8 | 2521.8 | 2548.8 |
| 25° | 2727.0 | 2721.6 | 2710.8 | 2687.4 | 2667.6 | 2651.4 | 2637.0 | 2629.8 | 2622.6 | 2619.0 | 2660.4 |
| 27.5° | 2892.6 | 2887.2 | 2872.8 | 2849.4 | 2822.4 | 2795.4 | 2779.2 | 2766.6 | 2757.6 | 2752.2 | 2811.6 |
| 30° | 3112.2 | 3103.2 | 3090.6 | 3052.8 | 3029.4 | 2988.0 | 2970.0 | 2952.0 | 2932.2 | 2937.6 | 3007.8 |
| 32.5° | 3542.4 | 3529.8 | 3490.2 | 3448.8 | 3376.8 | 3321.0 | 3263.4 | 3220.2 | 3178.8 | 3173.4 | 3249.0 |
| 35° | 3933.0 | 3927.6 | 3920.4 | 3891.6 | 3864.6 | 3830.4 | 3803.4 | 3758.4 | 3720.6 | 3711.6 | 3924.0 |
| 37.5° | 4143.6 | 4156.2 | 4145.4 | 4141.8 | 4141.8 | 4158.0 | 4208.4 | 4258.8 | 4294.8 | 4316.4 | 4435.2 |
| 40° | 4465.8 | 4465.8 | 4453.2 | 4446.0 | 4431.6 | 4453.2 | 4474.8 | 4512.6 | 4528.8 | 4530.6 | 4651.2 |
| 42.5° | 4831.2 | 4833.0 | 4820.4 | 4798.8 | 4791.6 | 4811.4 | 4840.2 | 4876.2 | 4897.8 | 4903.2 | 5043.6 |
| 45° | 5238.0 | 5232.6 | 5221.8 | 5214.6 | 5220.0 | 5238.0 | 5272.2 | 5342.4 | 5374.8 | 5400.0 | 5553.0 |
| 47.5° | 5679.0 | 5715.0 | 5684.4 | 5689.8 | 5689.8 | 5745.6 | 5823.0 | 5880.6 | 5932.8 | 5981.4 | 6143.4 |
| 50° | 6256.8 | 6262.2 | 6267.6 | 6283.8 | 6294.6 | 6368.4 | 6465.6 | 6534.0 | 6609.6 | 6672.6 | 6937.2 |
| 52.5° | 7029.0 | 7018.2 | 7045.2 | 7063.2 | 7124.4 | 7164.0 | 7326.0 | 7412.4 | 7516.8 | 7597.8 | 7984.8 |
| 55° | 7952.4 | 7947.0 | 7986.6 | 8001.0 | 8082.0 | 8179.2 | 8359.2 | 8548.2 | 8726.4 | 8825.4 | 9354.6 |
| 57.5° | 8614.8 | 8629.2 | 8697.6 | 8793.0 | 8951.4 | 9158.4 | 9426.6 | 9844.2 | 10182.6 | 10290.6 | 10873.8 |
| 60° | 8760.6 | 8807.4 | 8910.0 | 9100.8 | 9372.6 | 9757.8 | 10285.2 | 10924.2 | 11543.4 | 11750.4 | 12297.6 |
| 62.5° | 8352.0 | 8406.0 | 8557.2 | 8785.8 | 9140.4 | 9711.0 | 10472.4 | 11374.2 | 12294.0 | 12754.8 | 13030.2 |
| 63° | 8222.4 | 8289.0 | 8402.4 | 8667.0 | 9027.0 | 9590.4 | 10400.4 | 11372.4 | 12326.4 | 12828.6 | 13044.6 |
| 65° | 7614.0 | 7626.6 | 7795.8 | 8060.4 | 8465.4 | 9050.4 | 9867.6 | 10990.8 | 12049.2 | 12628.8 | 12479.4 |
| 67.5° | 6552.0 | 6604.2 | 6746.4 | 7012.8 | 7407.0 | 8015.4 | 8902.8 | 9941.4 | 10872.0 | 11334.6 | 10666.8 |
| 70° | 5293.8 | 5290.2 | 5466.6 | 5680.8 | 6028.2 | 6562.8 | 7340.4 | 8278.2 | 9016.2 | 9352.8 | 8235.0 |
| 72.5° | 3781.8 | 3688.2 | 3817.8 | 4055.4 | 4339.8 | 4766.4 | 5382.0 | 6111.0 | 6771.6 | 7063.2 | 6021.0 |
| 75° | 1722.6 | 1697.4 | 1812.6 | 2048.4 | 2336.4 | 2716.2 | 3222.0 | 3852.0 | 4485.6 | 4827.6 | 3835.8 |
| 77.5° | 579.6 | 586.8 | 631.8 | 716.4 | 871.2 | 1062.0 | 1377.0 | 1780.2 | 2293.2 | 2631.6 | 1800.0 |
| 80° | 388.8 | 399.6 | 414.0 | 426.6 | 444.6 | 473.4 | 541.8 | 646.2 | 804.6 | 973.8 | 568.8 |
| 82.5° | 318.6 | 331.2 | 363.6 | 378.0 | 388.8 | 397.8 | 403.2 | 410.4 | 410.4 | 414.0 | 360.0 |
| 85° | 228.6 | 250.2 | 293.4 | 320.4 | 331.2 | 338.4 | 347.4 | 358.2 | 342.0 | 327.6 | 279.0 |
| 87.5° | 79.2 | 108.0 | 158.4 | 174.6 | 187.2 | 189.0 | 201.6 | 223.2 | 212.4 | 172.8 | 84.6 |
| 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):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| 0° | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 | 1922.4 |
| 2.5° | 1931.4 | 1929.6 | 1931.4 | 1933.2 | 1933.2 | 1933.2 | 1935.0 | 1936.8 | 1936.8 |
| 5° | 1967.4 | 1969.2 | 1967.4 | 1969.2 | 1969.2 | 1971.0 | 1971.0 | 1974.6 | 1974.6 |
| 7.5° | 2028.6 | 2032.2 | 2030.4 | 2034.0 | 2034.0 | 2037.6 | 2035.8 | 2041.2 | 2041.2 |
| 10° | 2111.4 | 2115.0 | 2118.6 | 2120.4 | 2118.6 | 2122.2 | 2125.8 | 2127.6 | 2125.8 |
| 12.5° | 2205.0 | 2206.8 | 2205.0 | 2208.6 | 2208.6 | 2212.2 | 2212.2 | 2217.6 | 2217.6 |
| 15° | 2291.4 | 2289.6 | 2287.8 | 2293.2 | 2296.8 | 2298.6 | 2302.2 | 2307.6 | 2302.2 |
| 17.5° | 2368.8 | 2370.6 | 2367.0 | 2372.4 | 2379.6 | 2385.0 | 2388.6 | 2395.8 | 2394.0 |
| 20° | 2446.2 | 2442.6 | 2446.2 | 2455.2 | 2462.4 | 2469.6 | 2476.8 | 2487.6 | 2485.8 |
| 22.5° | 2521.8 | 2525.4 | 2534.4 | 2541.6 | 2554.2 | 2565.0 | 2574.0 | 2588.4 | 2593.8 |
| 25° | 2628.0 | 2628.0 | 2642.4 | 2651.4 | 2669.4 | 2683.8 | 2703.6 | 2719.8 | 2728.8 |
| 27.5° | 2763.0 | 2763.0 | 2779.2 | 2799.0 | 2826.0 | 2851.2 | 2872.8 | 2894.4 | 2890.8 |
| 30° | 2946.6 | 2955.6 | 2970.0 | 2995.2 | 3031.2 | 3061.8 | 3090.6 | 3112.2 | 3114.0 |
| 32.5° | 3187.8 | 3198.6 | 3241.8 | 3306.6 | 3382.2 | 3439.8 | 3483.0 | 3535.2 | 3542.4 |
| 35° | 3735.0 | 3762.0 | 3817.8 | 3870.0 | 3900.6 | 3934.8 | 3956.4 | 3958.2 | 3961.8 |
| 37.5° | 4311.0 | 4264.2 | 4221.0 | 4181.4 | 4163.4 | 4159.8 | 4159.8 | 4167.0 | 4170.6 |
| 40° | 4521.6 | 4498.2 | 4478.4 | 4453.2 | 4460.4 | 4458.6 | 4471.2 | 4482.0 | 4489.2 |
| 42.5° | 4881.6 | 4863.6 | 4845.6 | 4813.2 | 4831.2 | 4825.8 | 4843.8 | 4860.0 | 4869.0 |
| 45° | 5383.8 | 5328.0 | 5288.4 | 5236.2 | 5254.2 | 5243.4 | 5243.4 | 5263.2 | 5266.8 |
| 47.5° | 5938.2 | 5873.4 | 5792.4 | 5727.6 | 5706.0 | 5686.2 | 5704.2 | 5704.2 | 5684.4 |
| 50° | 6602.4 | 6525.0 | 6429.6 | 6325.2 | 6289.2 | 6269.4 | 6276.6 | 6285.6 | 6229.8 |
| 52.5° | 7504.2 | 7417.8 | 7282.8 | 7124.4 | 7090.2 | 7074.0 | 7070.4 | 7057.8 | 7043.4 |
| 55° | 8726.4 | 8564.4 | 8398.8 | 8190.0 | 8127.0 | 8109.0 | 8110.8 | 8096.4 | 8130.6 |
| 57.5° | 10168.2 | 9930.6 | 9549.0 | 9295.2 | 9144.0 | 9086.4 | 9034.2 | 9012.6 | 9014.4 |
| 60° | 11595.6 | 11111.4 | 10540.8 | 10098.0 | 9781.2 | 9579.6 | 9421.2 | 9333.0 | 9307.8 |
| 62.5° | 12515.4 | 11754.0 | 10897.2 | 10179.0 | 9658.8 | 9325.8 | 9075.6 | 8917.2 | 8866.8 |
| 63° | 12587.4 | 11781.0 | 10864.8 | 10094.4 | 9547.2 | 9198.0 | 8935.2 | 8771.4 | 8717.4 |
| 65° | 12430.8 | 11509.2 | 10441.8 | 9523.8 | 8924.4 | 8537.4 | 8253.0 | 8098.2 | 8056.8 |
| 67.5° | 11214.0 | 10447.2 | 9360.0 | 8411.4 | 7806.6 | 7414.2 | 7088.4 | 6940.8 | 6894.0 |
| 70° | 9122.4 | 8596.8 | 7705.8 | 6895.8 | 6332.4 | 5954.4 | 5625.0 | 5502.6 | 5500.8 |
| 72.5° | 6762.6 | 6080.4 | 5549.4 | 4955.4 | 4464.0 | 4163.4 | 3877.2 | 3740.4 | 3672.0 |
| 75° | 4473.0 | 3742.2 | 3148.2 | 2647.8 | 2158.2 | 1888.2 | 1566.0 | 1427.4 | 1346.4 |
| 77.5° | 2253.6 | 1670.4 | 1197.0 | 829.8 | 644.4 | 529.2 | 484.2 | 460.8 | 459.0 |
| 80° | 750.6 | 563.4 | 484.2 | 453.6 | 444.6 | 446.4 | 441.0 | 432.0 | 421.2 |
| 82.5° | 415.8 | 437.4 | 441.0 | 428.4 | 428.4 | 421.2 | 414.0 | 379.8 | 361.8 |
| 85° | 356.4 | 392.4 | 396.0 | 388.8 | 387.0 | 376.2 | 363.6 | 316.8 | 289.8 |
| 87.5° | 223.2 | 257.4 | 252.0 | 225.0 | 248.4 | 232.2 | 219.6 | 142.2 | 104.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)