

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: P192965

Luminaire Tested: **GLEON-AF-07-LED-E1-SL4-7030-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192965  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-07-LED-E1-SL4-7030-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36254.4 lumens  
Efficiency: N/A  
Efficacy: 80.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5

Input Watts (W): 448  
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



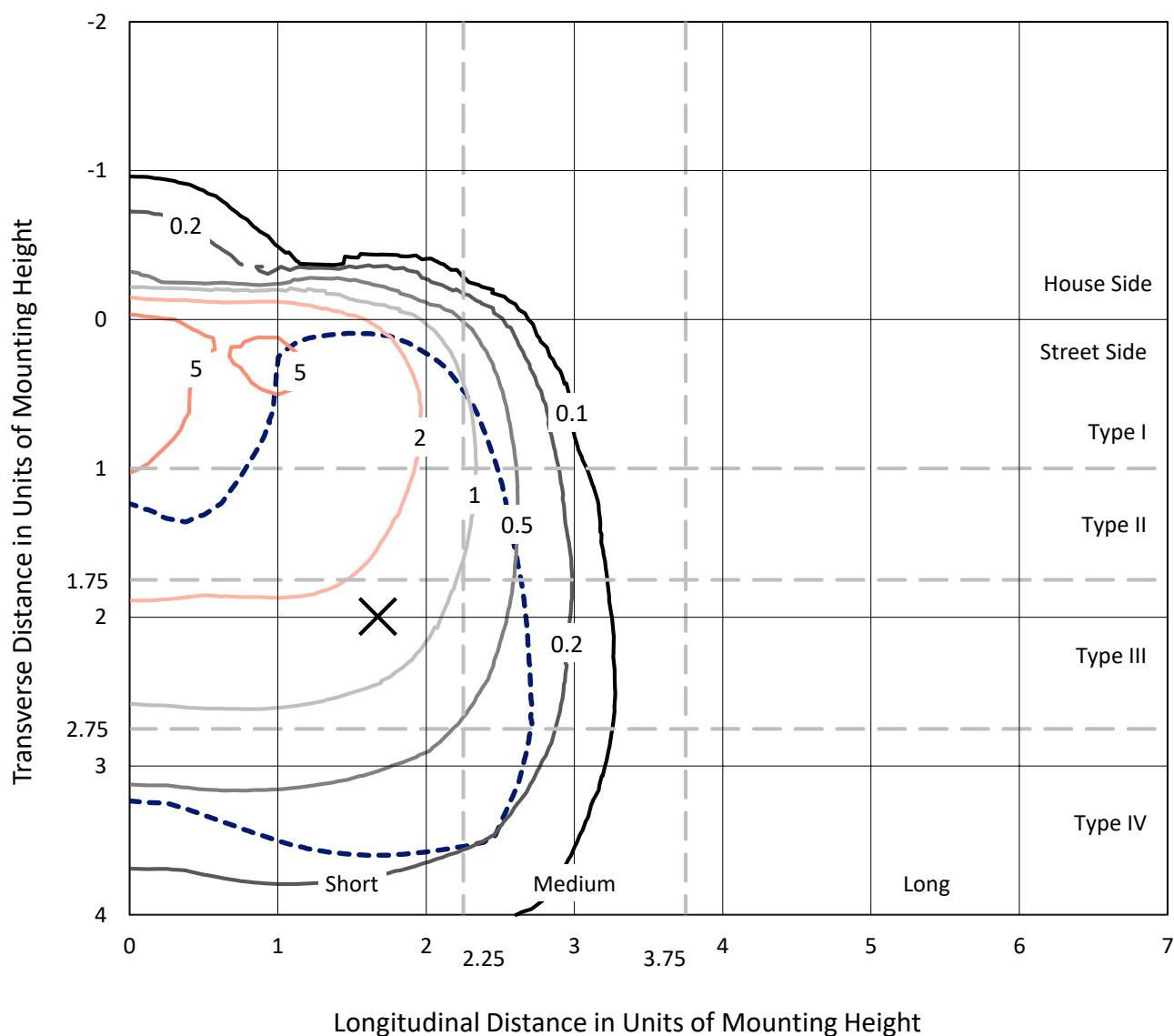
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

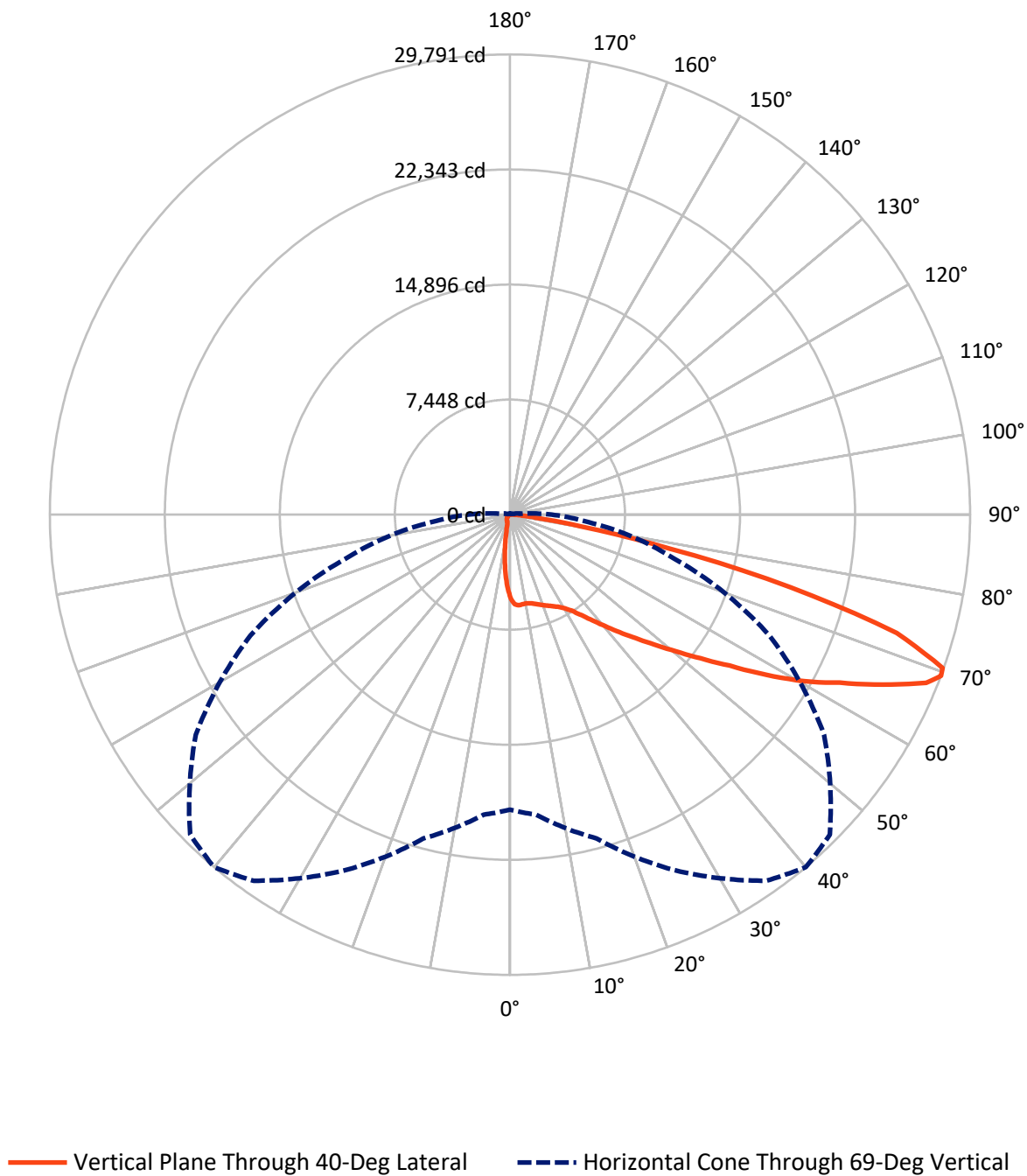


Based on 30 foot mounting height. Maximum calculated value = 6.6 fc  
Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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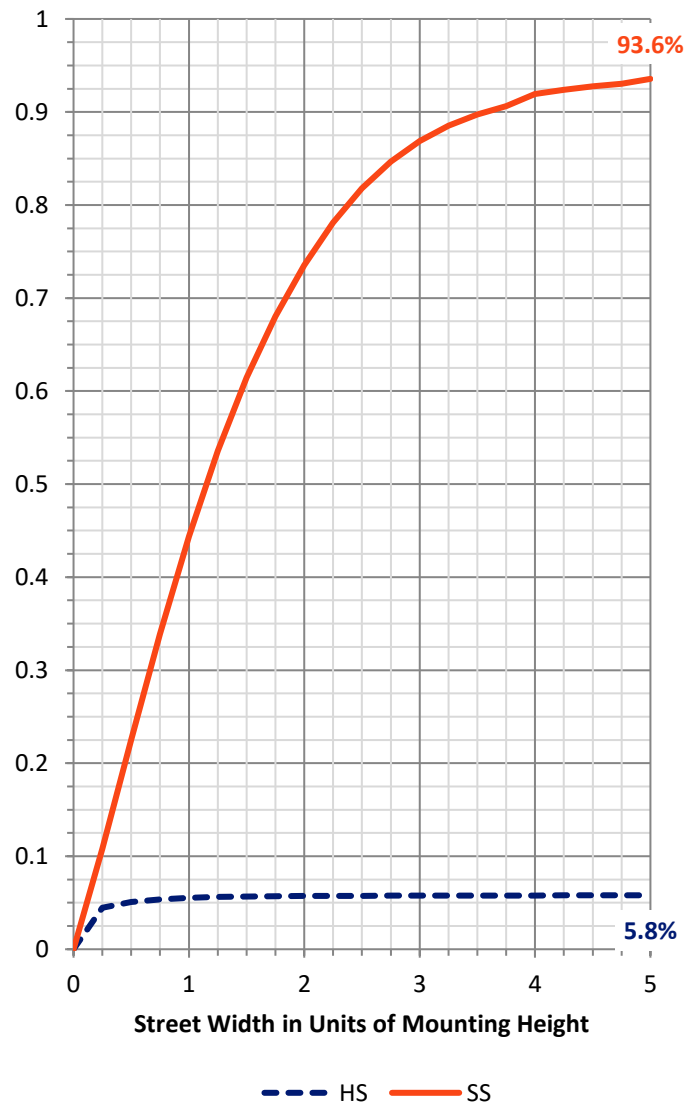
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2121.1   | 0.0    | 2121.1  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 34133.3  | 0.0    | 34133.3 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 36254.4  | 0.0    | 36254.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 439.2   | 1.2       |
| 10°-20°   | 1080.0  | 3.0       |
| 20°-30°   | 1819.1  | 5.0       |
| 30°-40°   | 2978.0  | 8.2       |
| 40°-50°   | 5156.3  | 14.2      |
| 50°-60°   | 8121.6  | 22.4      |
| 60°-70°   | 10606.5 | 29.3      |
| 70°-80°   | 5462.8  | 15.1      |
| 80°-90°   | 590.9   | 1.6       |
| 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°    | 36254.4 | 100.0     |
| 0°-180°   | 36254.4 | 100.0     |

**Coefficient of Utilization**



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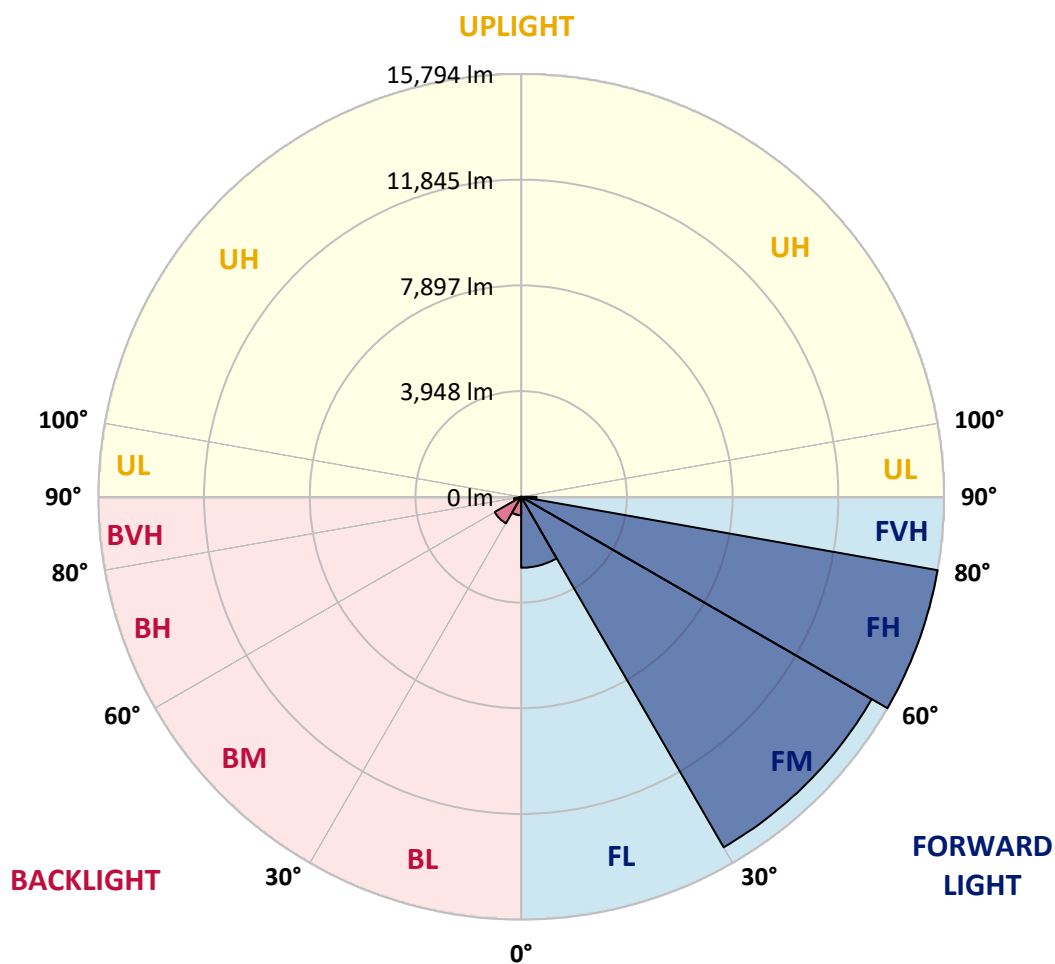
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 2651.2  | 7.3       |                         |      |        |
| FM   | (30°-60°)   | 15115.8 | 41.7      |                         |      |        |
| FH   | (60°-80°)   | 15793.9 | 43.6      |                         |      | G5     |
| FVH  | (80°-90°)   | 572.4   | 1.6       |                         |      | G4/750 |
| BL   | (0°-30°)    | 687.1   | 1.9       | B2/1000                 |      |        |
| BM   | (30°-60°)   | 1140.0  | 3.1       | B2/2500                 |      |        |
| BH   | (60°-80°)   | 275.4   | 0.8       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 18.6    | 0.1       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  | 5416.6  |
| 2.5°  | 5947.4  | 5915.1  | 5895.6  | 5869.7  | 5837.4  | 5809.4  | 5798.6  | 5718.7  | 5643.1  | 5539.6  | 5420.9  |
| 5°    | 6057.6  | 6046.7  | 6012.2  | 5977.7  | 5938.8  | 5895.6  | 5871.9  | 5777.0  | 5669.1  | 5518.0  | 5310.9  |
| 7.5°  | 6068.3  | 6055.3  | 6012.2  | 5964.7  | 5910.8  | 5859.0  | 5817.9  | 5723.0  | 5623.8  | 5470.5  | 5218.0  |
| 10°   | 6051.0  | 6035.9  | 6003.6  | 5951.8  | 5884.9  | 5835.2  | 5794.2  | 5703.7  | 5619.4  | 5481.3  | 5200.7  |
| 12.5° | 6031.6  | 6016.5  | 6001.4  | 5975.5  | 5917.3  | 5882.7  | 5848.2  | 5761.9  | 5686.4  | 5569.8  | 5263.3  |
| 15°   | 6051.0  | 6042.4  | 6059.6  | 6048.9  | 6016.5  | 5986.4  | 5951.8  | 5874.1  | 5805.1  | 5707.9  | 5377.7  |
| 17.5° | 6133.0  | 6133.0  | 6187.1  | 6193.5  | 6163.4  | 6120.1  | 6070.5  | 5992.8  | 5934.5  | 5852.5  | 5513.7  |
| 20°   | 6325.1  | 6318.7  | 6387.8  | 6400.6  | 6327.3  | 6260.3  | 6187.1  | 6092.1  | 6046.7  | 5994.9  | 5647.5  |
| 22.5° | 6655.3  | 6625.1  | 6666.1  | 6653.2  | 6508.6  | 6405.0  | 6314.3  | 6197.8  | 6174.0  | 6150.3  | 5796.4  |
| 25°   | 7084.7  | 7067.4  | 7095.6  | 6968.2  | 6713.6  | 6573.2  | 6465.4  | 6333.8  | 6333.8  | 6357.5  | 5964.7  |
| 27.5° | 7708.4  | 7643.7  | 7548.7  | 7324.3  | 6942.4  | 6763.1  | 6646.7  | 6506.4  | 6543.1  | 6631.6  | 6187.1  |
| 30°   | 8347.2  | 8276.0  | 8058.0  | 7712.7  | 7220.7  | 7032.9  | 6897.0  | 6750.2  | 6836.6  | 6998.4  | 6484.7  |
| 32.5° | 8977.3  | 8897.4  | 8588.9  | 8152.9  | 7620.0  | 7432.2  | 7300.4  | 7138.7  | 7283.2  | 7555.2  | 6920.7  |
| 35°   | 9588.0  | 9516.8  | 9160.8  | 8647.1  | 8150.7  | 7995.4  | 7874.6  | 7734.3  | 7919.8  | 8299.7  | 7535.7  |
| 37.5° | 10274.3 | 10196.6 | 9762.9  | 9206.0  | 8796.0  | 8683.8  | 8595.3  | 8455.0  | 8778.8  | 9335.5  | 8392.5  |
| 40°   | 11118.0 | 10986.4 | 10401.6 | 9847.0  | 9542.7  | 9488.7  | 9428.3  | 9408.9  | 9911.7  | 10682.2 | 9534.1  |
| 42.5° | 12084.8 | 11869.1 | 11070.5 | 10522.4 | 10362.7 | 10401.6 | 10386.5 | 10472.8 | 11329.5 | 12356.7 | 10923.8 |
| 45°   | 13051.7 | 12773.3 | 11815.1 | 11243.3 | 11264.7 | 11400.7 | 11484.9 | 11830.1 | 13105.5 | 14277.4 | 12419.3 |
| 47.5° | 13871.7 | 13597.7 | 12529.5 | 12022.3 | 12281.2 | 12548.8 | 12777.6 | 13431.5 | 14931.3 | 16167.7 | 13582.4 |
| 50°   | 14573.0 | 14314.0 | 13286.8 | 12878.9 | 13461.7 | 13893.2 | 14264.5 | 15233.4 | 16895.0 | 17607.1 | 14398.1 |
| 52.5° | 15147.0 | 14974.4 | 14072.4 | 13860.8 | 14810.4 | 15442.7 | 15986.5 | 17147.4 | 18634.3 | 18776.9 | 15032.7 |
| 55°   | 15706.0 | 15583.0 | 14916.2 | 15028.4 | 16394.4 | 17255.5 | 17943.8 | 19178.2 | 20132.0 | 19752.2 | 15641.2 |
| 57.5° | 16349.0 | 16236.8 | 15878.6 | 16508.7 | 18476.9 | 19560.1 | 20311.2 | 20978.0 | 21450.6 | 20749.2 | 16215.2 |
| 60°   | 17005.1 | 16940.3 | 16949.0 | 18153.1 | 20867.9 | 21908.1 | 22322.4 | 22495.1 | 22745.4 | 21688.0 | 16247.6 |
| 62.5° | 17630.9 | 17753.9 | 18172.5 | 19983.1 | 23157.6 | 23956.0 | 24165.3 | 24335.9 | 24042.4 | 21836.9 | 15011.1 |
| 65°   | 18690.4 | 18891.2 | 19890.3 | 22432.4 | 25675.9 | 26530.6 | 26746.3 | 26161.5 | 24247.4 | 19912.0 | 12210.0 |
| 67.5° | 19208.5 | 19575.3 | 21357.8 | 24715.6 | 28118.9 | 29068.3 | 28988.4 | 26280.2 | 21759.2 | 15183.8 | 7835.7  |
| 69°   | 19100.4 | 19491.1 | 21696.6 | 25414.8 | 28930.2 | 29791.2 | 29284.1 | 24827.8 | 18537.3 | 10999.3 | 4810.2  |
| 70°   | 18673.2 | 19068.2 | 21521.8 | 25388.9 | 29033.8 | 29715.8 | 28736.1 | 23034.6 | 15673.6 | 8042.9  | 3008.2  |
| 72.5° | 15593.7 | 15934.7 | 19106.9 | 22948.3 | 26746.3 | 26191.7 | 24040.2 | 15958.4 | 7637.2  | 2190.4  | 677.6   |
| 75°   | 9598.9  | 9788.7  | 13709.9 | 17287.8 | 20201.1 | 18776.9 | 16016.8 | 7939.4  | 2276.8  | 619.4   | 375.6   |
| 77.5° | 5071.3  | 5157.6  | 7505.6  | 10190.1 | 12805.6 | 10595.9 | 8209.0  | 3096.7  | 1048.8  | 388.4   | 271.9   |
| 80°   | 2997.4  | 3062.2  | 4041.9  | 4659.2  | 5541.7  | 4628.9  | 3282.3  | 1901.2  | 750.9   | 243.8   | 241.7   |
| 82.5° | 1715.6  | 1756.7  | 2930.6  | 2589.6  | 2183.9  | 1864.5  | 1633.7  | 1801.9  | 451.0   | 164.0   | 250.3   |
| 85°   | 630.1   | 638.7   | 1648.7  | 1970.3  | 1299.1  | 772.6   | 811.4   | 1493.3  | 120.8   | 103.6   | 196.3   |
| 87.5° | 293.5   | 287.1   | 848.1   | 1206.3  | 759.6   | 489.9   | 632.3   | 328.0   | 47.5    | 66.8    | 54.0    |
| 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):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5416.6  | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 | 5416.6 |
| 2.5°  | 5351.8  | 5272.0 | 5127.4 | 4978.5 | 4827.5 | 4710.9 | 4596.5 | 4506.0 | 4475.7 | 4419.6 | 4423.9 |
| 5°    | 5187.8  | 5041.1 | 4739.0 | 4432.5 | 4113.2 | 3849.9 | 3601.7 | 3401.0 | 3303.9 | 3204.7 | 3204.7 |
| 7.5°  | 5045.4  | 4831.8 | 4359.2 | 3860.6 | 3344.9 | 2911.1 | 2520.5 | 2227.0 | 2065.2 | 1935.7 | 1933.6 |
| 10°   | 4991.5  | 4702.3 | 4041.9 | 3327.6 | 2609.0 | 2017.7 | 1553.7 | 1255.9 | 1102.8 | 1003.4 | 999.1  |
| 12.5° | 5015.2  | 4656.9 | 3798.1 | 2835.6 | 1933.6 | 1296.9 | 899.9  | 707.8  | 643.1  | 612.8  | 612.8  |
| 15°   | 5084.3  | 4644.1 | 3554.2 | 2354.4 | 1366.1 | 811.4  | 597.7  | 546.0  | 541.7  | 541.7  | 541.7  |
| 17.5° | 5168.4  | 4648.3 | 3303.9 | 1886.2 | 930.2  | 580.5  | 515.8  | 509.2  | 513.6  | 513.6  | 513.6  |
| 20°   | 5254.8  | 4650.5 | 3034.1 | 1452.4 | 656.0  | 505.0  | 485.5  | 483.4  | 487.8  | 487.8  | 489.9  |
| 22.5° | 5360.5  | 4661.3 | 2764.4 | 1085.5 | 541.7  | 476.9  | 461.8  | 461.8  | 464.1  | 464.1  | 461.8  |
| 25°   | 5481.3  | 4682.9 | 2483.9 | 804.9  | 494.2  | 457.5  | 444.5  | 442.4  | 444.5  | 442.4  | 440.2  |
| 27.5° | 5632.5  | 4713.1 | 2171.0 | 630.1  | 472.6  | 438.1  | 427.3  | 427.3  | 425.1  | 423.0  | 420.7  |
| 30°   | 5822.3  | 4747.7 | 1819.1 | 535.2  | 451.0  | 420.7  | 410.0  | 407.9  | 405.7  | 401.4  | 401.4  |
| 32.5° | 6111.5  | 4823.1 | 1471.7 | 485.5  | 427.3  | 397.0  | 388.4  | 388.4  | 384.1  | 379.7  | 377.6  |
| 35°   | 6556.0  | 4972.1 | 1161.0 | 455.4  | 401.4  | 371.2  | 360.3  | 360.3  | 356.0  | 353.9  | 351.7  |
| 37.5° | 7171.0  | 5198.7 | 902.1  | 427.3  | 375.6  | 343.1  | 332.3  | 330.2  | 325.8  | 321.6  | 319.4  |
| 40°   | 7988.9  | 5479.2 | 709.9  | 401.4  | 349.6  | 315.1  | 306.5  | 302.1  | 293.5  | 287.1  | 287.1  |
| 42.5° | 9016.2  | 5798.6 | 576.3  | 373.3  | 319.4  | 289.2  | 282.7  | 276.2  | 261.1  | 254.7  | 252.5  |
| 45°   | 10090.8 | 6085.5 | 487.8  | 341.0  | 289.2  | 263.4  | 259.0  | 248.1  | 228.8  | 222.3  | 222.3  |
| 47.5° | 10865.5 | 6152.5 | 429.4  | 310.8  | 261.1  | 235.2  | 233.0  | 213.6  | 196.3  | 192.1  | 189.9  |
| 50°   | 11349.0 | 6020.8 | 382.0  | 280.6  | 235.2  | 209.3  | 202.9  | 179.0  | 168.4  | 164.0  | 161.8  |
| 52.5° | 11674.8 | 5785.6 | 343.1  | 254.7  | 211.5  | 185.6  | 170.5  | 153.2  | 144.5  | 140.3  | 140.3  |
| 55°   | 11935.9 | 5453.2 | 304.3  | 230.9  | 192.1  | 166.2  | 144.5  | 131.6  | 123.0  | 118.6  | 118.6  |
| 57.5° | 12009.3 | 5002.2 | 265.4  | 211.5  | 172.6  | 146.7  | 123.0  | 114.4  | 103.6  | 101.4  | 101.4  |
| 60°   | 11476.3 | 4188.7 | 235.2  | 187.7  | 155.3  | 127.3  | 107.9  | 97.1   | 86.4   | 84.1   | 82.1   |
| 62.5° | 10071.4 | 3241.2 | 207.1  | 166.2  | 135.9  | 110.1  | 92.8   | 79.9   | 71.2   | 71.2   | 71.2   |
| 65°   | 7682.4  | 2173.0 | 181.3  | 144.5  | 118.6  | 92.8   | 79.9   | 64.8   | 60.4   | 60.4   | 62.6   |
| 67.5° | 4598.7  | 1182.6 | 155.3  | 123.0  | 101.4  | 77.7   | 66.8   | 56.2   | 54.0   | 56.2   | 56.2   |
| 69°   | 2695.3  | 694.9  | 140.3  | 110.1  | 88.5   | 69.1   | 58.2   | 49.6   | 54.0   | 56.2   | 56.2   |
| 70°   | 1663.8  | 468.2  | 129.5  | 99.3   | 79.9   | 62.6   | 54.0   | 47.5   | 51.8   | 54.0   | 54.0   |
| 72.5° | 464.1   | 241.7  | 103.6  | 77.7   | 64.8   | 51.8   | 43.1   | 43.1   | 49.6   | 51.8   | 51.8   |
| 75°   | 302.1   | 179.0  | 79.9   | 58.2   | 49.6   | 41.0   | 36.7   | 41.0   | 47.5   | 49.6   | 49.6   |
| 77.5° | 250.3   | 146.7  | 64.8   | 47.5   | 41.0   | 38.9   | 34.5   | 36.7   | 43.1   | 45.4   | 45.4   |
| 80°   | 228.8   | 103.6  | 51.8   | 43.1   | 36.7   | 34.5   | 32.3   | 30.3   | 38.9   | 41.0   | 41.0   |
| 82.5° | 218.0   | 82.1   | 45.4   | 38.9   | 34.5   | 30.3   | 28.1   | 30.3   | 34.5   | 36.7   | 38.9   |
| 85°   | 135.9   | 54.0   | 41.0   | 36.7   | 30.3   | 28.1   | 28.1   | 28.1   | 32.3   | 34.5   | 34.5   |
| 87.5° | 49.6    | 43.1   | 36.7   | 30.3   | 25.9   | 25.9   | 25.9   | 25.9   | 28.1   | 32.3   | 32.3   |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)