

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: P198205

Luminaire Tested: **TT-C1-LED-E1-DL-CG-MS/DIM-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198205  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34708)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: TT-C1-LED-E1-DL-CG-MS/DIM-8030  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR  
Light Source: (160) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2204.2 lumens  
Efficiency: N/A  
Efficacy: 65.8 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 33.5  
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



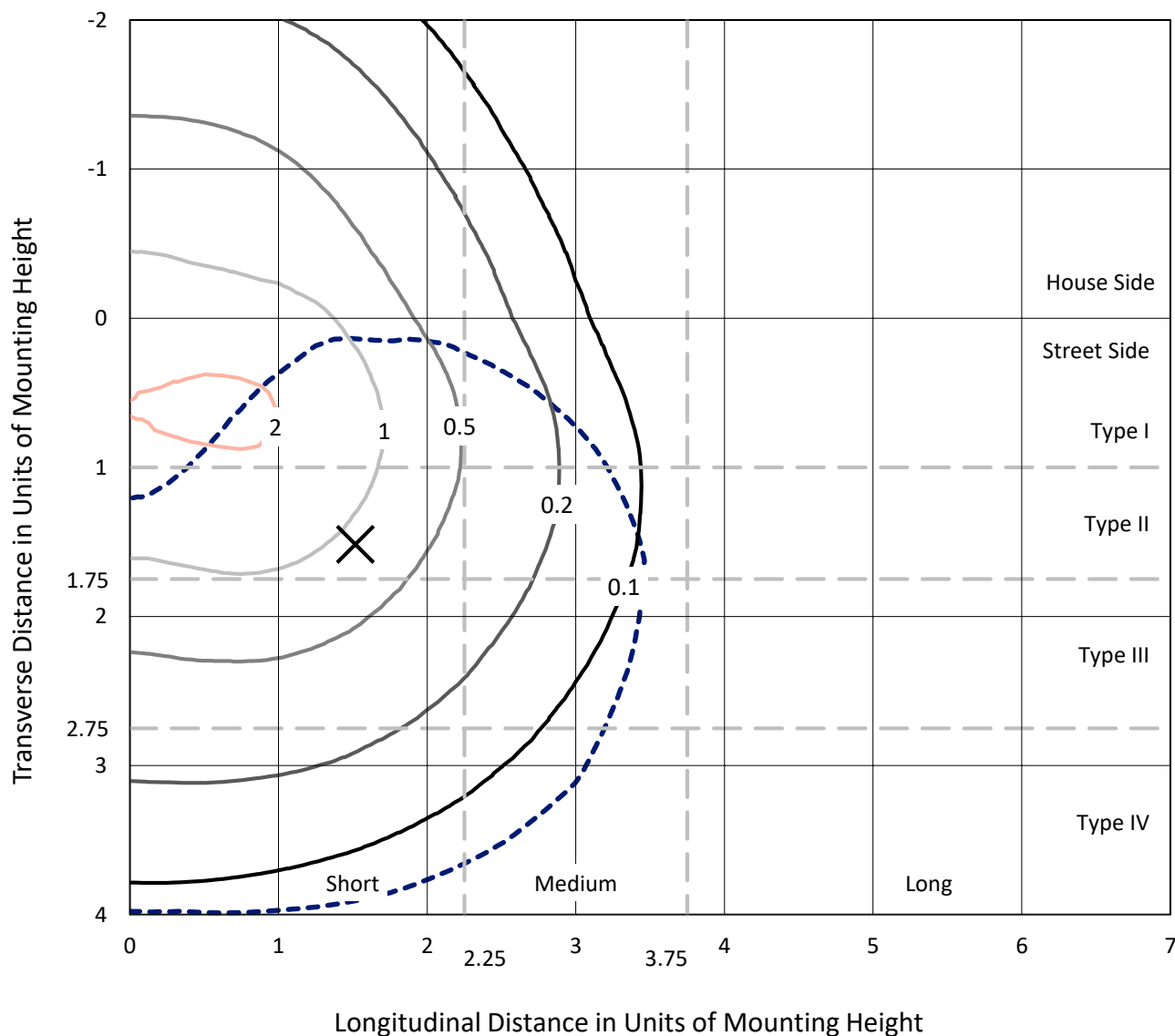
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

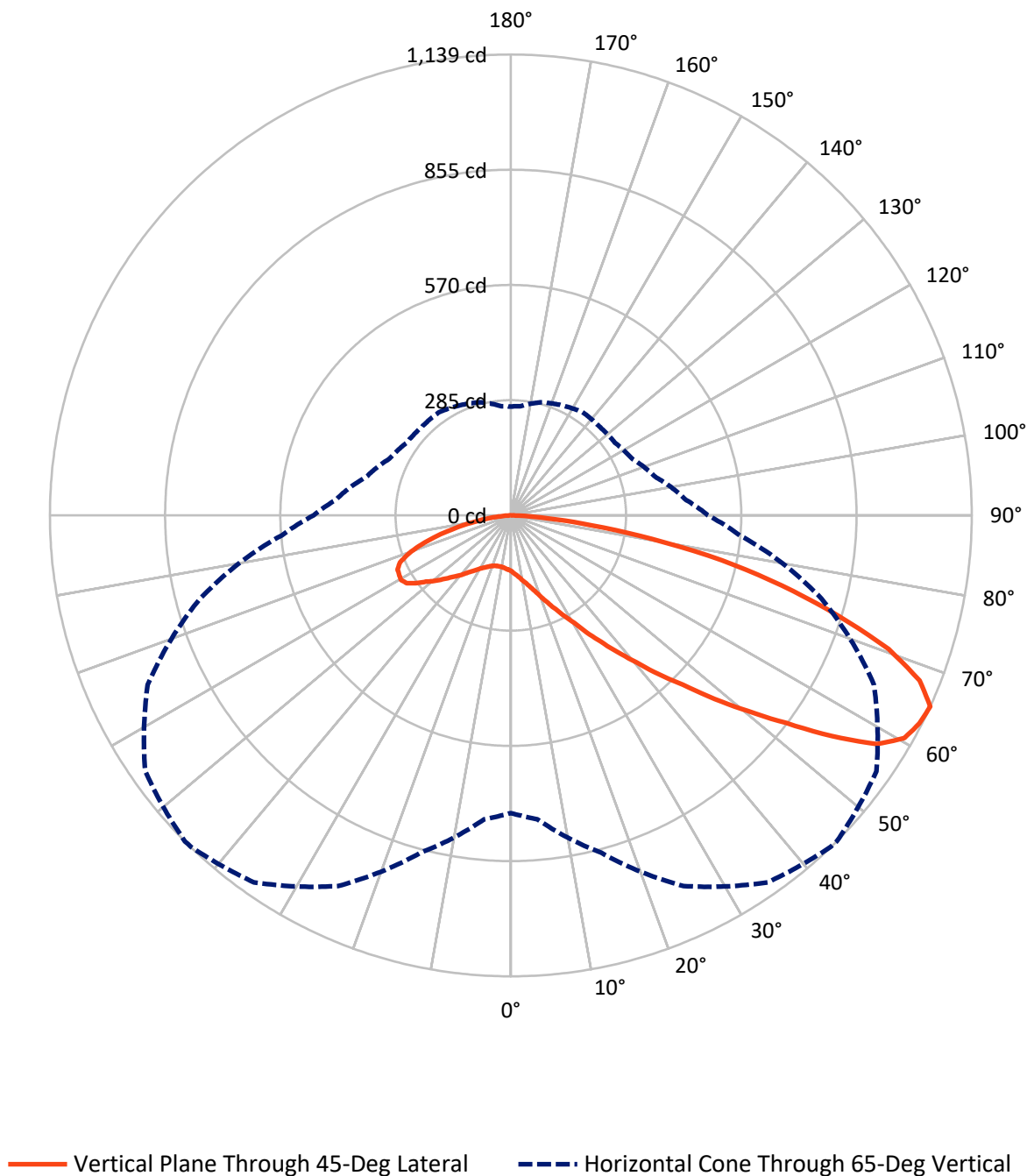


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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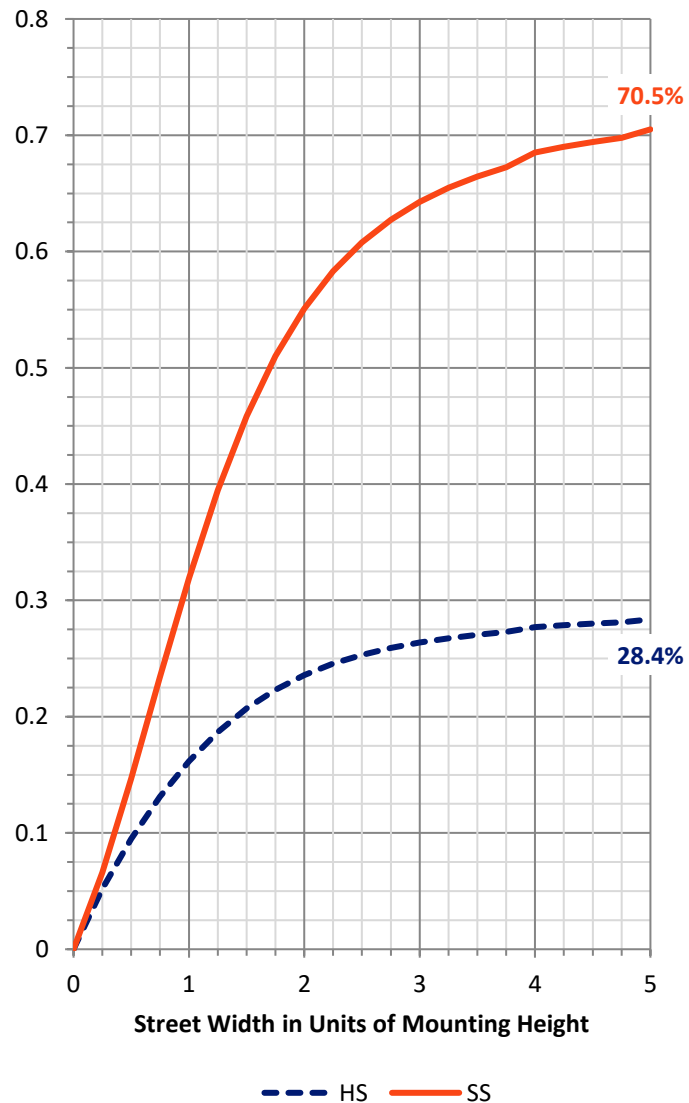
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 631.2    | 0.0    | 631.2  |
|                    | % Fixture | 28.6     | 0.0    | 28.6   |
| <b>Street Side</b> | Lumens    | 1573.0   | 0.0    | 1573.0 |
|                    | % Fixture | 71.4     | 0.0    | 71.4   |
| <b>Total</b>       | Lumens    | 2204.2   | 0.0    | 2204.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 13.6   | 0.6       |
| 10°-20°   | 45.1   | 2.0       |
| 20°-30°   | 91.6   | 4.2       |
| 30°-40°   | 168.6  | 7.6       |
| 40°-50°   | 298.6  | 13.5      |
| 50°-60°   | 489.8  | 22.2      |
| 60°-70°   | 601.9  | 27.3      |
| 70°-80°   | 414.1  | 18.8      |
| 80°-90°   | 80.8   | 3.7       |
| 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°    | 2204.2 | 100.0     |
| 0°-180°   | 2204.2 | 100.0     |

**Coefficient of Utilization**



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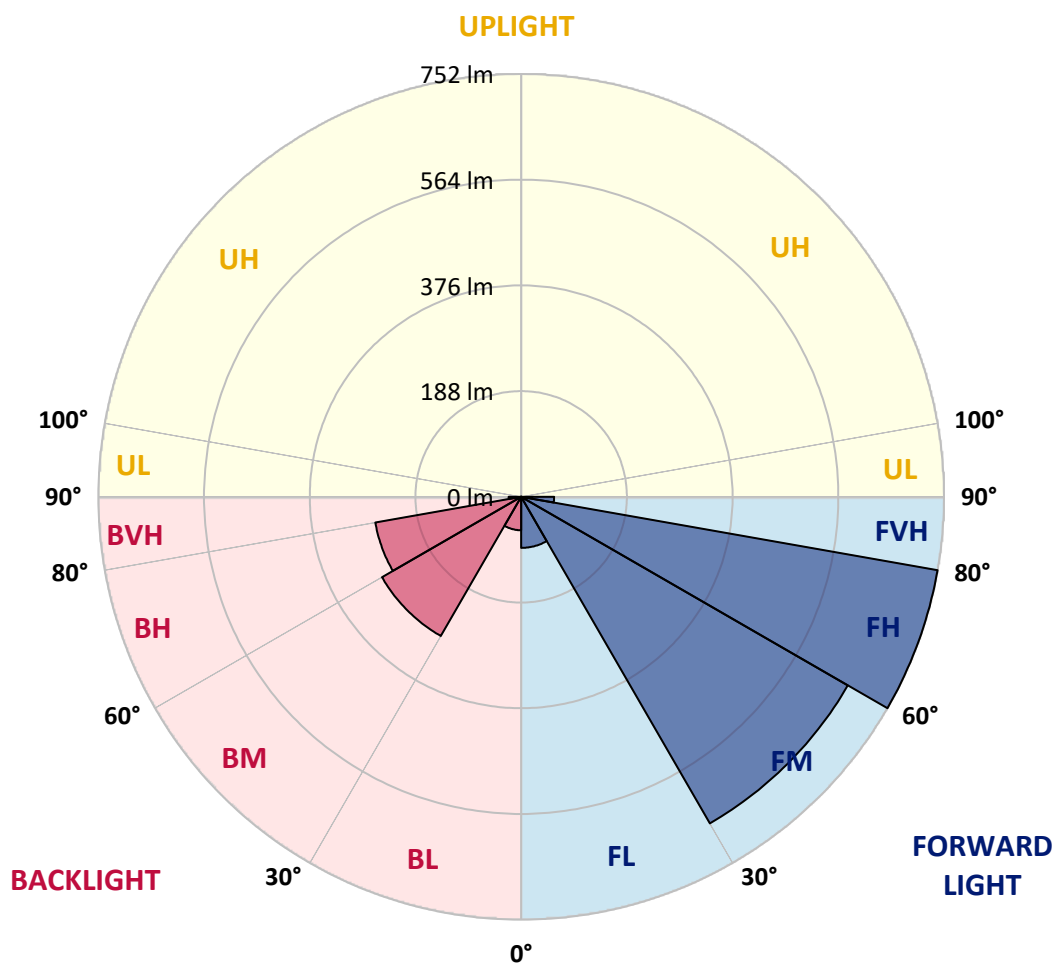
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 90.9   | 4.1       |                         |      |         |
| FM   | (30°-60°)   | 671.0  | 30.4      |                         |      |         |
| FH   | (60°-80°)   | 752.4  | 34.1      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 58.7   | 2.7       |                         |      | G1/100  |
| BL   | (0°-30°)    | 59.5   | 2.7       | B0/110                  |      |         |
| BM   | (30°-60°)   | 286.0  | 13.0      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 263.6  | 12.0      | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 22.1   | 1.0       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°    | 35°    | 44°    | 45°    | 55°    | 65°   | 75°   | 85°   |
|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 137.4 | 137.4 | 137.4 | 137.4  | 137.4  | 137.4  | 137.4  | 137.4  | 137.4 | 137.4 | 137.4 |
| 2.5°  | 144.9 | 144.9 | 144.5 | 144.0  | 143.6  | 143.1  | 143.1  | 142.3  | 141.4 | 140.5 | 139.6 |
| 5°    | 152.5 | 152.0 | 152.0 | 151.6  | 150.7  | 148.9  | 148.5  | 147.6  | 145.8 | 143.6 | 141.8 |
| 7.5°  | 160.4 | 160.4 | 160.4 | 159.1  | 157.3  | 156.0  | 155.1  | 153.3  | 150.7 | 147.6 | 144.5 |
| 10°   | 169.7 | 170.2 | 169.3 | 168.4  | 166.6  | 164.0  | 164.0  | 160.4  | 156.4 | 152.5 | 148.5 |
| 12.5° | 180.8 | 181.3 | 181.3 | 179.5  | 175.9  | 173.7  | 172.8  | 168.9  | 164.0 | 158.7 | 152.9 |
| 15°   | 192.3 | 194.1 | 193.2 | 192.3  | 188.4  | 185.2  | 184.4  | 178.2  | 172.8 | 165.7 | 158.7 |
| 17.5° | 210.5 | 209.6 | 207.9 | 205.6  | 203.4  | 199.0  | 198.1  | 191.5  | 183.5 | 174.6 | 165.3 |
| 20°   | 227.4 | 227.4 | 225.6 | 223.8  | 221.1  | 214.9  | 215.8  | 207.0  | 196.3 | 185.7 | 173.3 |
| 22.5° | 246.0 | 246.4 | 245.1 | 243.3  | 241.1  | 236.2  | 234.9  | 225.6  | 211.8 | 197.7 | 183.0 |
| 25°   | 264.6 | 265.5 | 266.3 | 266.3  | 263.2  | 257.5  | 256.6  | 244.6  | 230.5 | 211.8 | 194.1 |
| 27.5° | 286.7 | 289.0 | 288.1 | 289.0  | 287.6  | 281.0  | 281.0  | 268.6  | 252.6 | 229.6 | 206.5 |
| 30°   | 307.6 | 310.2 | 311.6 | 315.1  | 315.1  | 311.1  | 308.0  | 296.5  | 277.4 | 250.4 | 222.5 |
| 32.5° | 335.0 | 335.0 | 337.7 | 345.2  | 349.2  | 343.5  | 345.2  | 332.4  | 307.1 | 275.2 | 240.6 |
| 35°   | 363.0 | 363.0 | 367.8 | 378.0  | 382.0  | 383.3  | 383.3  | 367.4  | 342.1 | 304.0 | 262.8 |
| 37.5° | 392.2 | 393.1 | 402.4 | 416.1  | 427.7  | 426.3  | 428.1  | 415.3  | 385.6 | 338.1 | 288.5 |
| 40°   | 421.5 | 424.1 | 438.7 | 454.7  | 474.2  | 480.4  | 477.7  | 469.8  | 432.5 | 378.5 | 317.3 |
| 42.5° | 453.4 | 458.2 | 474.6 | 499.5  | 520.3  | 537.1  | 537.6  | 524.7  | 487.9 | 425.5 | 351.9 |
| 45°   | 486.6 | 494.1 | 511.4 | 543.8  | 577.5  | 597.4  | 597.0  | 598.3  | 561.5 | 484.0 | 396.2 |
| 47.5° | 524.7 | 529.6 | 554.0 | 593.4  | 638.6  | 678.5  | 678.1  | 676.7  | 629.3 | 538.0 | 431.2 |
| 50°   | 562.8 | 565.5 | 598.7 | 655.9  | 716.6  | 755.6  | 760.5  | 765.4  | 701.1 | 605.8 | 474.2 |
| 52.5° | 602.3 | 604.1 | 645.3 | 714.0  | 800.8  | 858.4  | 852.2  | 854.4  | 805.7 | 694.0 | 542.4 |
| 55°   | 640.4 | 640.8 | 692.7 | 789.3  | 894.3  | 953.7  | 963.0  | 973.2  | 891.2 | 741.9 | 562.8 |
| 57.5° | 673.2 | 676.7 | 745.9 | 864.6  | 990.1  | 1071.2 | 1066.7 | 1053.9 | 938.7 | 760.9 | 565.9 |
| 60°   | 701.6 | 710.0 | 798.6 | 934.7  | 1063.2 | 1112.8 | 1117.7 | 1074.3 | 953.7 | 768.9 | 562.4 |
| 62.5° | 722.4 | 736.1 | 844.7 | 987.8  | 1105.7 | 1136.3 | 1133.2 | 1083.1 | 979.0 | 800.4 | 584.1 |
| 65°   | 735.7 | 753.8 | 863.3 | 1010.9 | 1107.1 | 1138.5 | 1139.4 | 1103.1 | 990.5 | 795.1 | 568.6 |
| 67.5° | 737.0 | 762.7 | 857.5 | 994.9  | 1086.2 | 1094.6 | 1089.8 | 1036.1 | 937.3 | 746.3 | 524.3 |
| 70°   | 726.8 | 745.9 | 829.2 | 934.7  | 998.9  | 994.0  | 990.9  | 935.1  | 841.6 | 674.5 | 467.1 |
| 72.5° | 686.9 | 700.7 | 757.8 | 831.8  | 860.7  | 858.0  | 845.1  | 802.6  | 727.3 | 577.5 | 395.3 |
| 75°   | 607.6 | 616.9 | 642.2 | 682.5  | 709.1  | 699.8  | 691.8  | 650.6  | 588.1 | 471.5 | 313.8 |
| 77.5° | 499.9 | 489.7 | 502.6 | 518.5  | 531.8  | 534.9  | 533.1  | 491.0  | 445.8 | 355.0 | 238.9 |
| 80°   | 350.1 | 347.0 | 345.7 | 352.8  | 364.7  | 360.3  | 353.2  | 336.8  | 301.4 | 242.0 | 167.5 |
| 82.5° | 207.9 | 204.3 | 203.0 | 206.5  | 200.3  | 201.2  | 201.6  | 184.8  | 175.5 | 147.6 | 96.2  |
| 85°   | 91.7  | 91.7  | 89.5  | 89.5   | 89.1   | 89.5   | 91.7   | 86.0   | 80.2  | 66.9  | 46.1  |
| 87.5° | 13.7  | 12.4  | 17.3  | 16.0   | 18.6   | 21.3   | 19.5   | 18.6   | 15.5  | 12.0  | 9.3   |
| 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°    | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 |
| 2.5°  | 139.2 | 138.7 | 137.4 | 136.5 | 135.2 | 134.3 | 133.4 | 133.0 | 133.0 | 132.5 | 133.0 |
| 5°    | 140.9 | 140.0 | 137.8 | 136.1 | 134.3 | 133.0 | 131.6 | 130.3 | 129.4 | 129.0 | 129.0 |
| 7.5°  | 142.7 | 141.4 | 138.3 | 135.6 | 133.0 | 130.7 | 129.0 | 128.1 | 126.7 | 126.3 | 125.9 |
| 10°   | 145.8 | 144.0 | 139.6 | 135.6 | 132.5 | 129.4 | 127.2 | 125.9 | 125.0 | 124.5 | 124.5 |
| 12.5° | 150.2 | 147.1 | 141.8 | 136.9 | 132.5 | 129.0 | 126.3 | 124.5 | 123.6 | 122.8 | 123.2 |
| 15°   | 154.7 | 151.1 | 144.5 | 137.8 | 133.0 | 129.4 | 126.3 | 124.5 | 123.2 | 122.8 | 122.3 |
| 17.5° | 160.4 | 156.4 | 148.5 | 140.9 | 134.7 | 130.3 | 127.2 | 125.4 | 124.1 | 123.6 | 123.6 |
| 20°   | 168.0 | 162.6 | 152.5 | 144.0 | 137.4 | 132.5 | 129.0 | 127.2 | 125.9 | 125.9 | 125.9 |
| 22.5° | 175.5 | 168.9 | 156.9 | 147.6 | 140.5 | 135.2 | 132.1 | 130.3 | 129.0 | 128.5 | 129.0 |
| 25°   | 184.4 | 176.8 | 163.1 | 152.0 | 144.5 | 139.6 | 136.5 | 134.3 | 133.0 | 133.0 | 133.0 |
| 27.5° | 196.3 | 187.5 | 169.7 | 158.7 | 149.8 | 144.5 | 140.9 | 139.6 | 138.7 | 138.3 | 137.8 |
| 30°   | 209.6 | 198.1 | 179.5 | 165.3 | 156.4 | 150.7 | 147.6 | 146.2 | 144.9 | 144.0 | 143.6 |
| 32.5° | 225.6 | 212.3 | 188.8 | 174.2 | 164.0 | 158.2 | 155.1 | 153.3 | 152.0 | 151.6 | 151.6 |
| 35°   | 245.5 | 229.1 | 202.1 | 184.8 | 173.3 | 167.1 | 164.0 | 162.2 | 160.9 | 160.4 | 160.9 |
| 37.5° | 265.5 | 246.4 | 216.3 | 196.3 | 184.4 | 176.8 | 173.7 | 171.5 | 170.6 | 169.7 | 170.2 |
| 40°   | 289.8 | 266.3 | 232.7 | 210.5 | 196.3 | 190.1 | 185.2 | 182.6 | 181.3 | 179.9 | 179.0 |
| 42.5° | 319.5 | 292.9 | 253.1 | 225.6 | 210.5 | 202.1 | 197.2 | 194.1 | 191.5 | 190.6 | 189.2 |
| 45°   | 357.2 | 324.8 | 279.6 | 244.6 | 226.5 | 215.8 | 210.1 | 206.1 | 202.1 | 201.2 | 199.9 |
| 47.5° | 388.2 | 353.2 | 301.8 | 266.8 | 246.0 | 231.8 | 223.8 | 218.0 | 213.2 | 212.3 | 211.0 |
| 50°   | 422.8 | 383.3 | 322.6 | 285.4 | 261.9 | 250.0 | 239.8 | 231.8 | 226.5 | 223.8 | 224.7 |
| 52.5° | 481.7 | 432.1 | 359.9 | 311.1 | 281.4 | 265.9 | 257.9 | 247.3 | 238.9 | 234.9 | 235.8 |
| 55°   | 494.6 | 447.6 | 379.8 | 335.9 | 306.7 | 288.5 | 274.3 | 263.7 | 253.1 | 246.0 | 245.5 |
| 57.5° | 494.1 | 445.8 | 378.5 | 339.5 | 319.1 | 307.1 | 294.7 | 277.4 | 264.6 | 255.3 | 254.8 |
| 60°   | 488.4 | 439.2 | 371.8 | 333.3 | 318.6 | 315.1 | 308.5 | 295.6 | 274.8 | 264.6 | 262.4 |
| 62.5° | 502.6 | 451.2 | 377.1 | 332.4 | 314.2 | 312.4 | 310.7 | 302.7 | 284.1 | 269.9 | 267.7 |
| 65°   | 487.5 | 435.2 | 369.2 | 331.1 | 313.8 | 310.2 | 310.7 | 300.0 | 289.4 | 271.2 | 269.0 |
| 67.5° | 443.6 | 398.9 | 337.7 | 304.9 | 296.5 | 297.4 | 300.5 | 295.6 | 283.6 | 268.6 | 266.8 |
| 70°   | 394.9 | 353.7 | 299.6 | 270.3 | 264.1 | 269.0 | 277.4 | 277.9 | 269.9 | 257.9 | 258.4 |
| 72.5° | 332.4 | 297.4 | 253.9 | 230.5 | 228.2 | 232.2 | 238.9 | 246.8 | 244.6 | 241.1 | 241.5 |
| 75°   | 269.5 | 241.1 | 201.6 | 186.1 | 185.7 | 188.8 | 197.7 | 203.9 | 208.3 | 209.6 | 212.7 |
| 77.5° | 199.9 | 183.5 | 153.3 | 140.5 | 139.2 | 143.1 | 152.9 | 158.2 | 164.4 | 169.3 | 173.7 |
| 80°   | 140.0 | 125.0 | 105.5 | 95.7  | 97.5  | 100.2 | 106.4 | 113.0 | 117.4 | 121.4 | 121.4 |
| 82.5° | 82.0  | 74.0  | 62.9  | 58.5  | 59.4  | 63.4  | 64.7  | 70.5  | 70.9  | 73.6  | 75.3  |
| 85°   | 38.6  | 33.2  | 30.1  | 29.7  | 29.7  | 30.1  | 32.8  | 33.2  | 33.7  | 34.6  | 38.1  |
| 87.5° | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 9.3   | 9.7   | 10.6  | 10.2  | 10.6  | 10.2  |
| 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)