

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: FAIL-SAFE

Report Number: P837839

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-1LO-27-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08  
Report Number: P837839  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-1LO-27-120-EDD  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

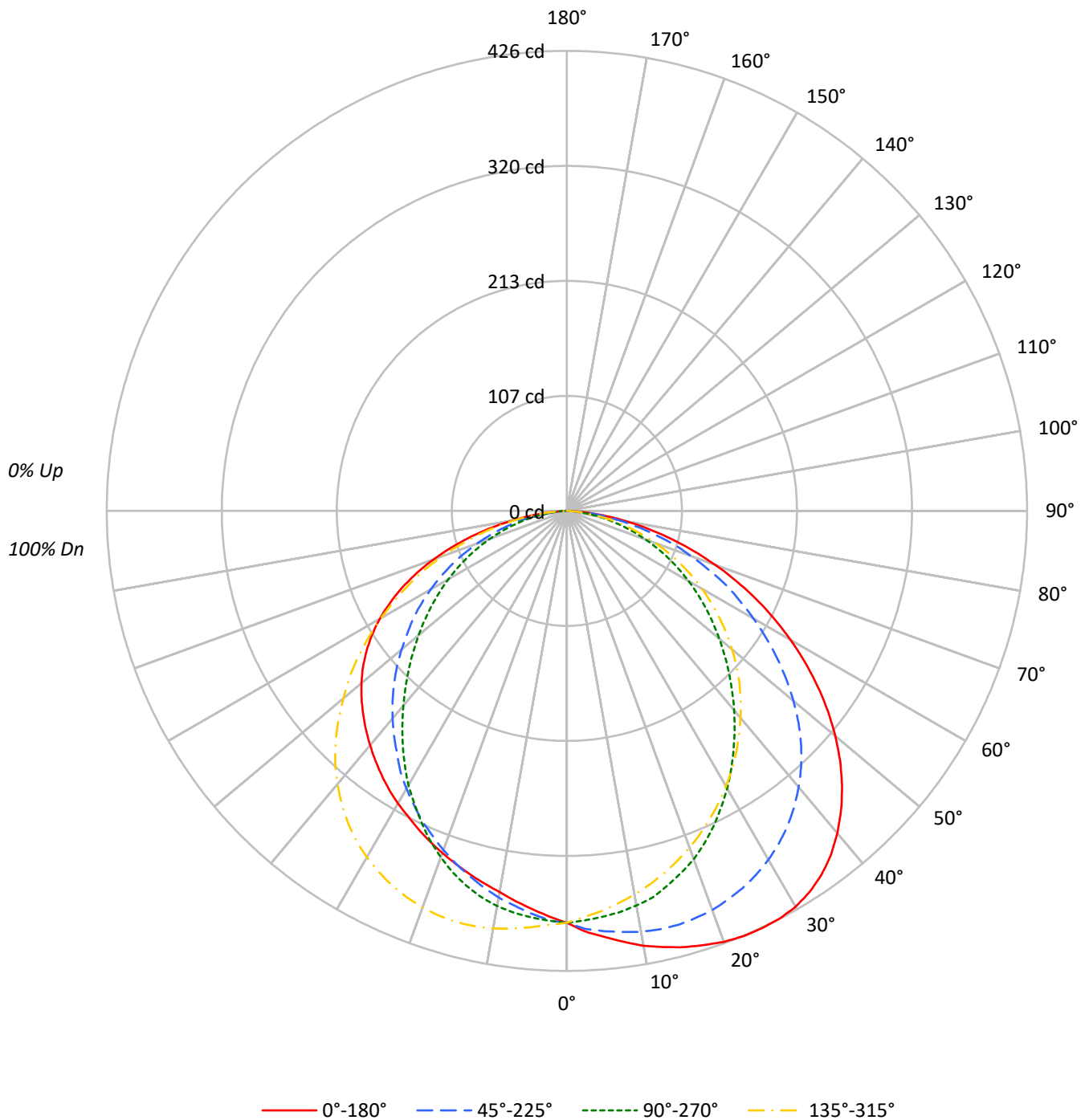
Lumens per Lamp: N/A  
Luminaire Lumens: 1119.1 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): 120  
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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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 94  | 91  | 89  |  | 90  |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  |  | 82  | 77  | 73  |  | 79  |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 62  |  | 69  |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  |  | 64  | 58  | 53  |  | 62  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  |  | 57  | 51  | 46  |  | 56  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  |  | 52  | 45  | 40  |  | 50  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  |  | 47  | 40  | 35  |  | 46  |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  |  | 40  | 33  | 28  |  | 39  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 1026 | 1026 | 1026 | 1026 |
| 5°  | 1070 | 1019 | 1000 | 1021 |
| 10° | 1117 | 1014 | 980  | 1015 |
| 15° | 1165 | 1001 | 970  | 1001 |
| 20° | 1216 | 983  | 966  | 977  |
| 25° | 1266 | 955  | 966  | 945  |
| 30° | 1315 | 922  | 972  | 912  |
| 35° | 1350 | 884  | 982  | 870  |
| 40° | 1368 | 846  | 996  | 827  |
| 45° | 1371 | 808  | 1015 | 787  |
| 50° | 1358 | 771  | 1039 | 750  |
| 55° | 1330 | 737  | 1063 | 716  |
| 60° | 1288 | 701  | 1077 | 682  |
| 65° | 1231 | 660  | 1072 | 644  |
| 70° | 1149 | 611  | 1033 | 600  |
| 75° | 1035 | 545  | 948  | 542  |
| 80° | 877  | 457  | 797  | 463  |
| 85° | 611  | 303  | 506  | 312  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

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TEST NUMBER: P837839

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-27-120-EDD

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 36.2   | 3.2       |
| 10°-20°   | 104.9  | 9.4       |
| 20°-30°   | 160.7  | 14.4      |
| 30°-40°   | 195.4  | 17.5      |
| 40°-50°   | 203.2  | 18.2      |
| 50°-60°   | 183.5  | 16.4      |
| 60°-70°   | 139.5  | 12.5      |
| 70°-80°   | 77.8   | 7.0       |
| 80°-90°   | 17.9   | 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°-30°    | 301.8  | 27.0      |
| 0°-40°    | 497.2  | 44.4      |
| 0°-60°    | 883.9  | 79.0      |
| 0°-90°    | 1119.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1119.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 90° | 180° | 270° | 360° | Flux |
|-----|-----|-----|------|------|------|------|
| 0°  | 381 | 381 | 381  | 381  | 381  |      |
| 5°  | 396 | 377 | 370  | 378  | 396  | 38   |
| 15° | 418 | 359 | 348  | 359  | 418  | 119  |
| 25° | 426 | 322 | 325  | 318  | 426  | 197  |
| 35° | 411 | 269 | 299  | 265  | 411  | 257  |
| 45° | 360 | 212 | 267  | 207  | 360  | 277  |
| 55° | 284 | 157 | 226  | 153  | 284  | 253  |
| 65° | 193 | 104 | 168  | 101  | 193  | 191  |
| 75° | 100 | 52  | 91   | 52   | 100  | 106  |
| 85° | 20  | 10  | 16   | 10   | 20   | 25   |
| 90° | 0   | 0   | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 |
| 2.5°  | 389.9 | 384.2 | 384.3 | 389.3 | 385.4 | 387.3 | 382.0 | 384.0 | 383.4 | 383.8 | 379.5 |
| 5°    | 396.0 | 389.9 | 389.8 | 394.1 | 389.8 | 390.6 | 383.8 | 385.2 | 383.2 | 382.0 | 377.3 |
| 7.5°  | 402.5 | 396.4 | 395.8 | 399.5 | 393.9 | 393.3 | 385.8 | 385.8 | 382.2 | 379.1 | 374.7 |
| 10°   | 408.9 | 402.6 | 401.8 | 404.7 | 397.7 | 395.7 | 386.6 | 385.2 | 380.5 | 375.8 | 371.0 |
| 12.5° | 413.7 | 407.3 | 406.7 | 408.5 | 400.7 | 396.9 | 386.6 | 383.8 | 376.9 | 370.4 | 366.7 |
| 15°   | 418.3 | 411.7 | 410.0 | 410.9 | 401.9 | 396.9 | 385.4 | 381.1 | 372.2 | 363.6 | 359.3 |
| 17.5° | 421.5 | 415.2 | 413.5 | 413.4 | 402.5 | 395.4 | 382.7 | 376.8 | 366.1 | 355.8 | 351.5 |
| 20°   | 424.7 | 418.4 | 416.2 | 414.6 | 402.3 | 393.4 | 378.8 | 370.8 | 358.4 | 346.8 | 343.2 |
| 22.5° | 426.3 | 419.8 | 417.5 | 415.1 | 401.2 | 389.6 | 374.0 | 363.9 | 349.7 | 335.9 | 332.9 |
| 25°   | 426.5 | 419.9 | 417.4 | 413.9 | 398.9 | 385.2 | 367.7 | 355.5 | 339.6 | 324.3 | 321.7 |
| 27.5° | 425.8 | 418.5 | 416.0 | 411.9 | 395.4 | 379.7 | 360.3 | 346.0 | 328.9 | 312.0 | 309.3 |
| 30°   | 423.3 | 416.0 | 413.6 | 408.1 | 390.5 | 373.1 | 352.3 | 335.4 | 317.1 | 299.1 | 296.7 |
| 32.5° | 418.4 | 411.2 | 409.2 | 403.8 | 385.2 | 365.3 | 342.8 | 324.0 | 304.0 | 286.9 | 283.3 |
| 35°   | 411.1 | 403.9 | 402.6 | 396.9 | 377.7 | 356.1 | 332.5 | 311.6 | 290.1 | 272.6 | 269.1 |
| 37.5° | 401.5 | 395.5 | 393.6 | 388.0 | 368.9 | 345.6 | 320.7 | 298.1 | 276.0 | 257.1 | 255.0 |
| 40°   | 389.5 | 383.8 | 382.4 | 377.4 | 358.7 | 333.9 | 307.9 | 284.1 | 261.4 | 243.9 | 240.9 |
| 42.5° | 375.8 | 370.5 | 369.7 | 364.5 | 346.0 | 321.0 | 294.0 | 269.6 | 246.2 | 229.3 | 226.3 |
| 45°   | 360.3 | 355.1 | 354.9 | 350.0 | 332.2 | 306.7 | 279.4 | 254.9 | 231.3 | 213.8 | 212.2 |
| 47.5° | 343.1 | 338.5 | 338.5 | 333.9 | 316.8 | 290.9 | 264.3 | 239.6 | 216.4 | 200.9 | 198.1 |
| 50°   | 324.4 | 320.0 | 318.7 | 316.5 | 299.8 | 273.8 | 248.5 | 224.7 | 201.6 | 186.8 | 184.1 |
| 52.5° | 304.5 | 300.7 | 301.6 | 297.5 | 281.4 | 255.9 | 232.5 | 207.8 | 186.8 | 173.3 | 170.6 |
| 55°   | 283.5 | 278.1 | 278.9 | 277.4 | 262.2 | 237.5 | 214.5 | 194.0 | 172.2 | 159.5 | 157.0 |
| 57.5° | 261.7 | 254.7 | 257.6 | 256.7 | 241.7 | 218.6 | 198.1 | 178.2 | 157.7 | 146.0 | 143.5 |
| 60°   | 239.3 | 232.7 | 235.6 | 234.8 | 220.7 | 199.7 | 181.1 | 162.6 | 143.3 | 132.7 | 130.2 |
| 62.5° | 216.4 | 210.2 | 212.9 | 212.3 | 199.4 | 180.4 | 164.2 | 147.3 | 128.7 | 119.2 | 116.9 |
| 65°   | 193.3 | 187.4 | 189.8 | 189.3 | 177.4 | 163.0 | 146.8 | 131.3 | 114.2 | 105.9 | 103.6 |
| 67.5° | 169.6 | 164.2 | 166.4 | 166.4 | 155.4 | 141.6 | 129.4 | 115.2 | 99.8  | 92.7  | 90.6  |
| 70°   | 146.1 | 141.0 | 143.0 | 142.8 | 133.6 | 122.3 | 111.8 | 99.1  | 85.3  | 79.5  | 77.7  |
| 72.5° | 122.4 | 118.0 | 119.8 | 119.6 | 111.8 | 104.6 | 94.1  | 83.2  | 71.2  | 66.5  | 64.9  |
| 75°   | 99.5  | 95.3  | 97.0  | 96.8  | 90.5  | 83.7  | 76.7  | 67.6  | 57.3  | 54.0  | 52.4  |
| 77.5° | 77.6  | 73.3  | 74.7  | 74.7  | 70.1  | 65.2  | 59.6  | 52.6  | 45.3  | 41.7  | 40.6  |
| 80°   | 56.6  | 54.5  | 53.8  | 53.9  | 50.8  | 47.6  | 44.8  | 38.0  | 32.7  | 30.3  | 29.5  |
| 82.5° | 37.2  | 35.5  | 34.8  | 35.0  | 33.2  | 31.2  | 29.5  | 24.7  | 21.2  | 19.8  | 19.3  |
| 85°   | 19.8  | 18.5  | 17.9  | 18.3  | 18.0  | 16.9  | 16.0  | 12.8  | 10.6  | 10.1  | 9.8   |
| 87.5° | 6.2   | 5.4   | 5.0   | 6.6   | 5.6   | 5.0   | 4.8   | 3.8   | 2.9   | 2.9   | 2.8   |
| 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):**

|       | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  | 185°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 |
| 2.5°  | 380.9 | 380.9 | 377.4 | 376.6 | 376.3 | 376.7 | 373.3 | 372.6 | 377.6 | 375.9 | 372.1 |
| 5°    | 377.9 | 377.7 | 372.8 | 371.9 | 371.9 | 371.4 | 367.5 | 366.6 | 371.6 | 370.1 | 366.0 |
| 7.5°  | 374.1 | 373.6 | 367.8 | 367.2 | 366.3 | 366.0 | 361.6 | 361.0 | 365.2 | 364.4 | 360.4 |
| 10°   | 369.6 | 369.1 | 362.2 | 361.8 | 360.8 | 360.1 | 356.0 | 355.5 | 359.9 | 358.5 | 355.4 |
| 12.5° | 363.6 | 362.7 | 355.6 | 355.2 | 354.4 | 354.1 | 350.1 | 349.9 | 354.7 | 353.3 | 350.0 |
| 15°   | 355.8 | 355.0 | 347.2 | 347.4 | 347.4 | 347.4 | 344.2 | 344.1 | 348.8 | 348.2 | 344.6 |
| 17.5° | 347.2 | 346.1 | 338.6 | 339.2 | 339.8 | 340.5 | 338.0 | 338.5 | 343.4 | 342.6 | 339.4 |
| 20°   | 337.4 | 336.3 | 329.0 | 330.5 | 331.9 | 333.3 | 331.7 | 332.9 | 337.6 | 337.2 | 334.8 |
| 22.5° | 326.4 | 325.4 | 318.6 | 320.9 | 323.2 | 325.8 | 325.1 | 326.5 | 331.4 | 331.3 | 329.2 |
| 25°   | 313.1 | 313.4 | 307.4 | 310.3 | 314.0 | 317.7 | 318.0 | 320.3 | 325.7 | 325.2 | 323.2 |
| 27.5° | 300.6 | 301.0 | 294.7 | 299.5 | 304.5 | 309.3 | 310.4 | 313.6 | 319.2 | 318.7 | 317.0 |
| 30°   | 287.6 | 288.0 | 281.9 | 288.5 | 294.5 | 300.4 | 302.9 | 307.2 | 312.8 | 312.8 | 311.1 |
| 32.5° | 274.0 | 274.8 | 268.3 | 277.2 | 284.2 | 291.0 | 295.4 | 299.9 | 306.3 | 306.2 | 304.7 |
| 35°   | 260.0 | 260.9 | 255.0 | 266.2 | 273.2 | 281.6 | 287.0 | 293.1 | 298.8 | 298.9 | 297.7 |
| 37.5° | 245.7 | 246.8 | 241.5 | 253.8 | 261.8 | 271.6 | 278.6 | 284.6 | 290.9 | 291.3 | 290.2 |
| 40°   | 231.6 | 232.8 | 228.1 | 240.0 | 250.1 | 261.1 | 269.1 | 276.3 | 283.2 | 283.4 | 282.7 |
| 42.5° | 217.5 | 218.7 | 215.2 | 226.8 | 238.3 | 250.1 | 259.5 | 267.6 | 274.8 | 275.2 | 274.4 |
| 45°   | 203.7 | 204.7 | 202.2 | 214.9 | 225.9 | 238.8 | 249.7 | 258.8 | 266.0 | 266.7 | 266.4 |
| 47.5° | 190.0 | 190.9 | 188.7 | 200.3 | 213.0 | 226.7 | 239.3 | 249.4 | 257.0 | 257.8 | 257.6 |
| 50°   | 176.5 | 177.3 | 174.9 | 187.0 | 199.7 | 214.3 | 227.3 | 239.1 | 247.6 | 248.3 | 248.2 |
| 52.5° | 163.2 | 164.0 | 161.9 | 174.7 | 186.1 | 201.5 | 215.8 | 228.5 | 236.9 | 238.0 | 238.2 |
| 55°   | 150.3 | 150.6 | 149.0 | 161.2 | 172.3 | 188.4 | 204.8 | 217.2 | 225.6 | 226.5 | 227.1 |
| 57.5° | 137.4 | 137.5 | 136.1 | 147.8 | 158.5 | 174.9 | 192.1 | 205.1 | 213.1 | 214.0 | 214.8 |
| 60°   | 124.6 | 124.5 | 123.0 | 134.3 | 144.5 | 160.8 | 178.7 | 191.6 | 199.3 | 200.1 | 201.2 |
| 62.5° | 111.8 | 111.6 | 110.2 | 120.7 | 130.3 | 146.4 | 164.3 | 176.8 | 184.2 | 184.7 | 186.1 |
| 65°   | 99.2  | 98.9  | 97.7  | 107.3 | 116.0 | 131.4 | 149.0 | 160.9 | 167.5 | 168.3 | 168.0 |
| 67.5° | 86.8  | 86.2  | 85.2  | 93.9  | 101.8 | 116.0 | 132.9 | 144.2 | 149.7 | 150.4 | 152.1 |
| 70°   | 74.3  | 73.7  | 71.4  | 80.6  | 87.6  | 100.3 | 116.0 | 126.1 | 130.7 | 131.3 | 131.1 |
| 72.5° | 62.0  | 61.4  | 59.0  | 67.4  | 73.3  | 84.4  | 98.5  | 106.9 | 110.9 | 111.4 | 111.4 |
| 75°   | 50.1  | 49.7  | 48.2  | 54.6  | 59.5  | 68.6  | 80.5  | 87.5  | 90.6  | 91.2  | 91.0  |
| 77.5° | 38.6  | 38.3  | 36.8  | 42.4  | 46.2  | 52.9  | 62.5  | 68.0  | 70.3  | 71.0  | 72.5  |
| 80°   | 27.7  | 27.6  | 25.2  | 30.6  | 32.3  | 38.0  | 45.0  | 49.2  | 50.4  | 51.4  | 52.5  |
| 82.5° | 17.7  | 17.8  | 15.4  | 20.0  | 20.7  | 24.4  | 28.7  | 31.3  | 32.2  | 33.0  | 33.8  |
| 85°   | 8.6   | 9.0   | 7.7   | 10.6  | 10.7  | 12.5  | 14.4  | 15.4  | 15.7  | 16.4  | 17.1  |
| 87.5° | 2.2   | 2.6   | 1.4   | 3.0   | 2.7   | 3.5   | 4.0   | 4.3   | 4.2   | 4.6   | 4.9   |
| 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):**

|       | 195°  | 205°  | 215°  | 225°  | 235°  | 245°  | 255°  | 265°  | 270°  | 275°  | 285°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 |
| 2.5°  | 373.3 | 376.2 | 374.8 | 379.4 | 381.2 | 378.3 | 383.3 | 383.4 | 379.8 | 384.0 | 386.3 |
| 5°    | 367.6 | 370.5 | 369.6 | 374.4 | 376.6 | 374.1 | 380.2 | 381.3 | 377.9 | 382.6 | 386.3 |
| 7.5°  | 361.7 | 365.2 | 364.0 | 368.9 | 371.6 | 369.6 | 376.1 | 378.0 | 375.3 | 380.5 | 385.4 |
| 10°   | 356.6 | 359.5 | 358.3 | 363.5 | 365.8 | 364.2 | 370.6 | 374.1 | 371.6 | 377.9 | 383.8 |
| 12.5° | 351.6 | 354.0 | 352.6 | 356.9 | 359.1 | 357.1 | 364.9 | 368.1 | 366.3 | 372.9 | 380.5 |
| 15°   | 345.2 | 347.9 | 345.9 | 349.8 | 351.5 | 349.7 | 356.1 | 361.6 | 359.4 | 366.6 | 375.0 |
| 17.5° | 340.3 | 341.8 | 339.2 | 342.2 | 343.2 | 340.8 | 347.3 | 352.7 | 351.1 | 358.9 | 368.7 |
| 20°   | 334.9 | 336.1 | 332.4 | 334.1 | 334.0 | 331.0 | 336.9 | 342.3 | 341.2 | 349.9 | 361.0 |
| 22.5° | 328.9 | 329.5 | 325.1 | 325.5 | 325.3 | 320.3 | 325.6 | 331.1 | 330.6 | 339.4 | 351.8 |
| 25°   | 322.4 | 322.5 | 316.9 | 316.8 | 314.8 | 308.9 | 313.6 | 319.8 | 318.4 | 327.9 | 341.0 |
| 27.5° | 316.1 | 315.2 | 308.5 | 306.9 | 303.8 | 296.7 | 300.9 | 306.4 | 305.6 | 314.9 | 329.4 |
| 30°   | 309.4 | 308.2 | 299.9 | 297.0 | 292.5 | 284.4 | 287.8 | 293.0 | 293.4 | 301.5 | 316.8 |
| 32.5° | 303.0 | 300.0 | 290.9 | 286.6 | 280.9 | 271.5 | 273.3 | 278.6 | 279.3 | 287.5 | 303.1 |
| 35°   | 294.7 | 292.7 | 281.4 | 274.1 | 268.5 | 258.2 | 260.2 | 263.8 | 264.9 | 272.9 | 288.8 |
| 37.5° | 286.9 | 283.7 | 271.7 | 262.8 | 255.6 | 244.8 | 245.3 | 249.0 | 250.1 | 258.2 | 274.0 |
| 40°   | 278.8 | 274.3 | 261.4 | 251.0 | 242.7 | 231.3 | 230.7 | 234.6 | 235.4 | 243.3 | 257.6 |
| 42.5° | 270.1 | 264.8 | 250.3 | 238.9 | 229.4 | 217.8 | 216.6 | 219.9 | 220.8 | 228.6 | 242.5 |
| 45°   | 261.4 | 255.0 | 238.9 | 226.4 | 216.0 | 204.2 | 203.0 | 205.5 | 206.9 | 214.2 | 227.6 |
| 47.5° | 252.2 | 244.7 | 227.2 | 213.3 | 202.5 | 190.7 | 189.2 | 191.7 | 192.8 | 200.0 | 212.7 |
| 50°   | 242.5 | 233.4 | 215.1 | 199.7 | 189.1 | 177.4 | 175.2 | 178.2 | 179.2 | 186.0 | 198.4 |
| 52.5° | 231.8 | 221.7 | 202.2 | 186.1 | 175.5 | 164.3 | 161.7 | 164.6 | 165.8 | 172.3 | 183.8 |
| 55°   | 220.5 | 209.6 | 189.2 | 173.6 | 162.0 | 151.2 | 148.9 | 150.1 | 152.6 | 158.8 | 169.5 |
| 57.5° | 207.8 | 197.0 | 175.5 | 159.6 | 148.5 | 138.1 | 136.2 | 137.3 | 139.6 | 145.7 | 155.3 |
| 60°   | 194.2 | 182.8 | 161.5 | 145.7 | 134.9 | 125.0 | 123.3 | 124.3 | 126.8 | 132.3 | 141.2 |
| 62.5° | 180.9 | 168.1 | 147.1 | 131.3 | 121.5 | 112.4 | 111.9 | 111.6 | 113.9 | 119.2 | 127.1 |
| 65°   | 164.7 | 152.4 | 132.0 | 117.1 | 108.2 | 99.9  | 98.1  | 98.9  | 101.2 | 106.1 | 114.2 |
| 67.5° | 147.3 | 136.2 | 116.6 | 102.9 | 94.9  | 87.6  | 86.0  | 86.4  | 88.7  | 93.0  | 100.1 |
| 70°   | 128.9 | 119.1 | 100.9 | 88.5  | 81.9  | 74.9  | 73.9  | 74.0  | 76.3  | 80.0  | 86.2  |
| 72.5° | 109.6 | 100.8 | 85.0  | 74.4  | 68.9  | 63.9  | 63.0  | 61.9  | 64.0  | 67.2  | 72.5  |
| 75°   | 90.0  | 82.2  | 69.1  | 60.5  | 56.1  | 52.0  | 51.2  | 50.1  | 52.1  | 54.9  | 59.1  |
| 77.5° | 70.1  | 63.9  | 53.7  | 47.1  | 43.7  | 40.6  | 39.9  | 38.7  | 40.8  | 42.8  | 46.1  |
| 80°   | 50.7  | 46.2  | 40.1  | 33.1  | 31.9  | 29.9  | 29.2  | 27.9  | 29.9  | 31.2  | 33.7  |
| 82.5° | 32.7  | 29.7  | 26.2  | 21.4  | 21.2  | 19.7  | 19.3  | 17.9  | 19.7  | 20.5  | 22.3  |
| 85°   | 16.5  | 15.1  | 14.2  | 10.9  | 11.2  | 10.2  | 10.1  | 8.6   | 10.1  | 10.4  | 11.5  |
| 87.5° | 4.7   | 5.0   | 4.4   | 2.7   | 3.4   | 3.2   | 3.2   | 2.3   | 3.2   | 3.2   | 3.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

TEST NUMBER: P837839

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-27-120-EDD

**CANDELA DISTRIBUTION (continued):**

|       | 295°  | 305°  | 315°  | 325°  | 335°  | 345°  | 355°  | 360°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 | 381.4 |
| 2.5°  | 381.8 | 383.3 | 383.7 | 383.6 | 384.6 | 389.9 | 388.1 | 389.9 |
| 5°    | 382.7 | 386.1 | 387.0 | 388.2 | 389.8 | 395.9 | 393.9 | 396.0 |
| 7.5°  | 383.2 | 388.3 | 390.2 | 392.6 | 395.2 | 402.0 | 400.4 | 402.5 |
| 10°   | 383.2 | 389.8 | 392.6 | 396.7 | 400.1 | 408.0 | 406.4 | 408.9 |
| 12.5° | 381.6 | 390.1 | 394.1 | 399.7 | 404.1 | 412.6 | 412.0 | 413.7 |
| 15°   | 378.3 | 388.7 | 394.2 | 401.5 | 407.0 | 416.4 | 416.1 | 418.3 |
| 17.5° | 373.9 | 386.4 | 393.1 | 402.2 | 409.1 | 419.7 | 420.3 | 421.5 |
| 20°   | 368.3 | 382.1 | 390.8 | 401.9 | 410.6 | 422.3 | 423.1 | 424.7 |
| 22.5° | 360.9 | 376.8 | 387.3 | 400.7 | 410.8 | 423.3 | 424.8 | 426.3 |
| 25°   | 352.2 | 370.5 | 382.8 | 398.5 | 409.9 | 423.3 | 425.2 | 426.5 |
| 27.5° | 342.2 | 362.3 | 377.0 | 395.0 | 407.4 | 421.8 | 424.2 | 425.8 |
| 30°   | 330.6 | 353.6 | 370.4 | 390.3 | 404.0 | 419.2 | 421.7 | 423.3 |
| 32.5° | 318.7 | 344.0 | 362.6 | 384.4 | 399.1 | 414.9 | 417.1 | 418.4 |
| 35°   | 305.7 | 332.3 | 353.1 | 376.7 | 392.8 | 408.0 | 409.7 | 411.1 |
| 37.5° | 291.6 | 319.7 | 342.4 | 368.1 | 383.9 | 398.5 | 400.0 | 401.5 |
| 40°   | 277.0 | 306.4 | 330.3 | 357.5 | 373.3 | 386.9 | 388.5 | 389.5 |
| 42.5° | 262.3 | 291.7 | 317.4 | 345.0 | 360.8 | 373.8 | 374.8 | 375.8 |
| 45°   | 247.4 | 276.5 | 302.9 | 331.3 | 346.8 | 359.0 | 359.4 | 360.3 |
| 47.5° | 232.3 | 260.8 | 286.9 | 315.5 | 330.9 | 342.0 | 342.4 | 343.1 |
| 50°   | 217.1 | 245.0 | 270.0 | 298.5 | 313.5 | 325.3 | 323.7 | 324.4 |
| 52.5° | 202.2 | 228.5 | 253.9 | 280.2 | 295.0 | 305.5 | 305.9 | 304.5 |
| 55°   | 187.5 | 212.3 | 235.7 | 261.0 | 275.1 | 283.2 | 282.9 | 283.5 |
| 57.5° | 172.6 | 195.9 | 217.4 | 240.5 | 254.3 | 261.9 | 263.5 | 261.7 |
| 60°   | 157.5 | 179.4 | 198.6 | 219.5 | 232.8 | 239.3 | 241.1 | 239.3 |
| 62.5° | 142.4 | 162.6 | 180.0 | 198.2 | 210.6 | 218.5 | 218.3 | 216.4 |
| 65°   | 127.4 | 145.7 | 161.2 | 176.7 | 187.5 | 195.4 | 195.0 | 193.3 |
| 67.5° | 113.5 | 128.6 | 142.5 | 155.1 | 164.4 | 169.9 | 171.7 | 169.6 |
| 70°   | 98.2  | 111.2 | 123.5 | 133.6 | 141.3 | 146.2 | 148.0 | 146.1 |
| 72.5° | 82.9  | 94.0  | 102.6 | 112.3 | 118.2 | 122.3 | 124.2 | 122.4 |
| 75°   | 67.8  | 76.9  | 83.9  | 91.5  | 95.6  | 99.1  | 101.3 | 99.5  |
| 77.5° | 53.1  | 60.1  | 65.8  | 71.3  | 76.1  | 76.9  | 78.7  | 77.6  |
| 80°   | 39.1  | 44.2  | 48.3  | 52.0  | 55.4  | 55.8  | 57.3  | 56.6  |
| 82.5° | 26.1  | 29.5  | 30.5  | 34.3  | 36.6  | 36.2  | 37.7  | 37.2  |
| 85°   | 13.8  | 15.8  | 17.7  | 18.9  | 20.1  | 19.0  | 20.3  | 19.8  |
| 87.5° | 4.6   | 4.9   | 4.3   | 6.1   | 6.7   | 5.7   | 6.5   | 6.2   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)