

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: P837929

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-1LO-20-120-EDD-90**

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: P837929  
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-20-120-EDD-90  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 2000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

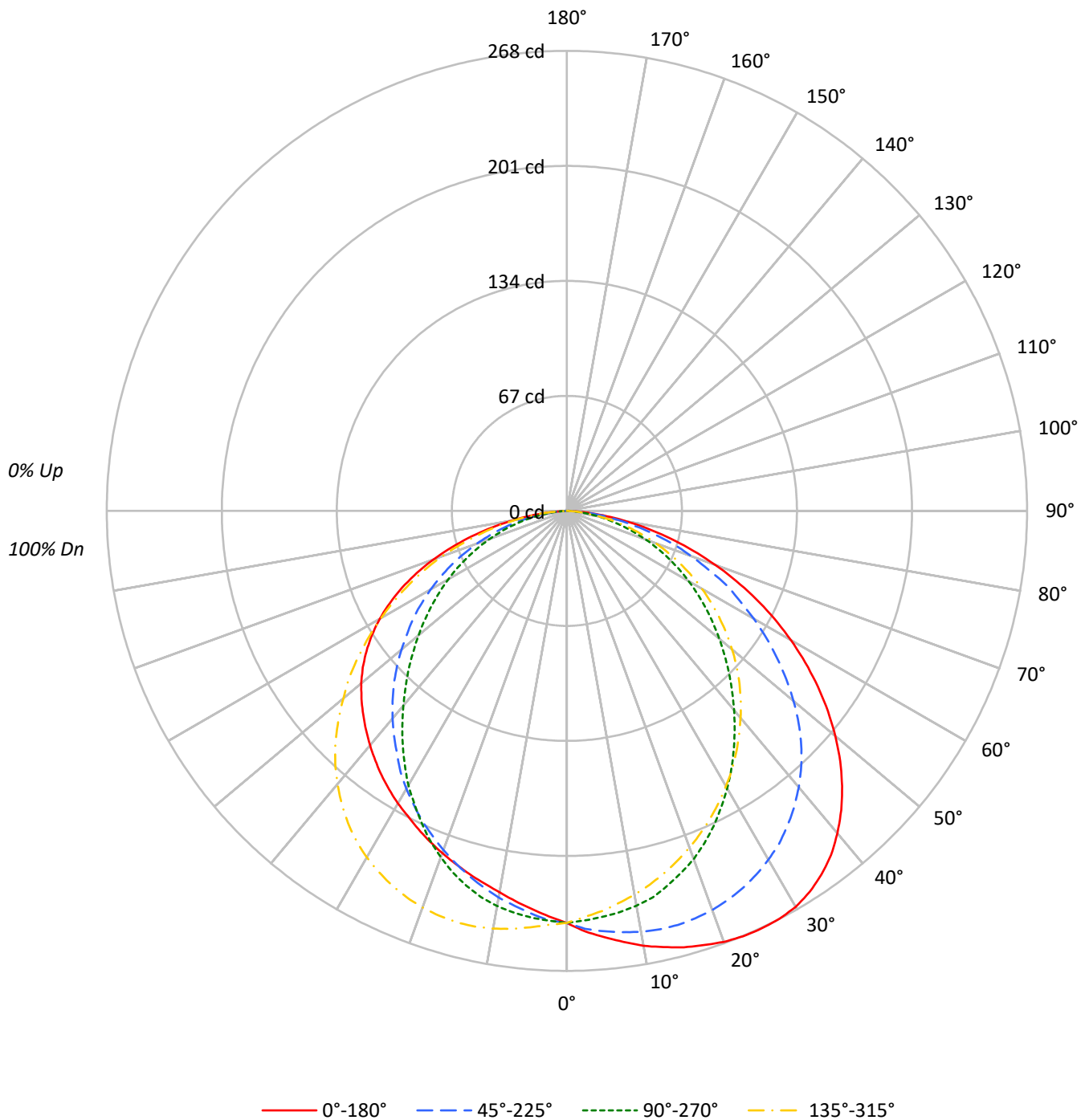
Lumens per Lamp: N/A  
Luminaire Lumens: 704.1 lumens  
Efficiency: N/A  
Efficacy: 60.2 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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



Cooper Lighting Solutions Photometric Lab

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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°  | 646 | 646 | 646  | 646  |
| 5°  | 673 | 641 | 629  | 642  |
| 10° | 703 | 638 | 616  | 639  |
| 15° | 733 | 630 | 610  | 630  |
| 20° | 765 | 618 | 608  | 615  |
| 25° | 797 | 601 | 607  | 595  |
| 30° | 828 | 580 | 612  | 574  |
| 35° | 850 | 556 | 618  | 548  |
| 40° | 861 | 532 | 626  | 520  |
| 45° | 863 | 508 | 639  | 495  |
| 50° | 854 | 485 | 654  | 472  |
| 55° | 837 | 464 | 669  | 450  |
| 60° | 811 | 441 | 678  | 429  |
| 65° | 774 | 415 | 674  | 406  |
| 70° | 723 | 385 | 650  | 378  |
| 75° | 651 | 343 | 597  | 341  |
| 80° | 552 | 287 | 502  | 291  |
| 85° | 383 | 191 | 318  | 195  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837929

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-20-120-EDD-90

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 22.8   | 3.2       |
| 10°-20°   | 66.0   | 9.4       |
| 20°-30°   | 101.1  | 14.4      |
| 30°-40°   | 123.0  | 17.5      |
| 40°-50°   | 127.8  | 18.2      |
| 50°-60°   | 115.5  | 16.4      |
| 60°-70°   | 87.8   | 12.5      |
| 70°-80°   | 48.9   | 7.0       |
| 80°-90°   | 11.3   | 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°    | 189.9  | 27.0      |
| 0°-40°    | 312.9  | 44.4      |
| 0°-60°    | 556.1  | 79.0      |
| 0°-90°    | 704.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 704.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 90° | 180° | 270° | 360° | Flux |
|-----|-----|-----|------|------|------|------|
| 0°  | 240 | 240 | 240  | 240  | 240  |      |
| 5°  | 249 | 237 | 233  | 238  | 249  | 24   |
| 15° | 263 | 226 | 219  | 226  | 263  | 75   |
| 25° | 268 | 202 | 205  | 200  | 268  | 124  |
| 35° | 259 | 169 | 188  | 167  | 259  | 162  |
| 45° | 227 | 134 | 168  | 130  | 227  | 175  |
| 55° | 178 | 99  | 142  | 96   | 178  | 159  |
| 65° | 122 | 65  | 106  | 64   | 122  | 120  |
| 75° | 63  | 33  | 57   | 33   | 63   | 66   |
| 85° | 12  | 6   | 10   | 6    | 12   | 16   |
| 90° | 0   | 0   | 0    | 0    | 0    |      |

TEST NUMBER: P837929

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-20-120-EDD-90

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 |
| 2.5°  | 245.3 | 241.7 | 241.8 | 244.9 | 242.5 | 243.7 | 240.3 | 241.6 | 241.2 | 241.5 | 238.8 |
| 5°    | 249.2 | 245.3 | 245.3 | 248.0 | 245.3 | 245.8 | 241.5 | 242.4 | 241.1 | 240.3 | 237.4 |
| 7.5°  | 253.3 | 249.4 | 249.0 | 251.4 | 247.8 | 247.5 | 242.7 | 242.7 | 240.5 | 238.5 | 235.8 |
| 10°   | 257.3 | 253.3 | 252.8 | 254.6 | 250.3 | 249.0 | 243.3 | 242.4 | 239.4 | 236.5 | 233.5 |
| 12.5° | 260.3 | 256.3 | 255.9 | 257.0 | 252.1 | 249.7 | 243.3 | 241.5 | 237.1 | 233.1 | 230.7 |
| 15°   | 263.2 | 259.0 | 258.0 | 258.5 | 252.9 | 249.7 | 242.5 | 239.8 | 234.2 | 228.8 | 226.1 |
| 17.5° | 265.2 | 261.2 | 260.2 | 260.1 | 253.3 | 248.8 | 240.8 | 237.1 | 230.4 | 223.9 | 221.1 |
| 20°   | 267.2 | 263.2 | 261.9 | 260.9 | 253.2 | 247.5 | 238.3 | 233.3 | 225.5 | 218.2 | 215.9 |
| 22.5° | 268.2 | 264.1 | 262.7 | 261.2 | 252.4 | 245.2 | 235.3 | 229.0 | 220.0 | 211.3 | 209.4 |
| 25°   | 268.4 | 264.2 | 262.6 | 260.4 | 251.0 | 242.4 | 231.4 | 223.7 | 213.7 | 204.1 | 202.4 |
| 27.5° | 267.9 | 263.4 | 261.8 | 259.2 | 248.8 | 238.9 | 226.7 | 217.7 | 207.0 | 196.3 | 194.6 |
| 30°   | 266.4 | 261.7 | 260.2 | 256.8 | 245.7 | 234.7 | 221.6 | 211.1 | 199.5 | 188.2 | 186.7 |
| 32.5° | 263.2 | 258.7 | 257.5 | 254.1 | 242.4 | 229.9 | 215.7 | 203.9 | 191.3 | 180.5 | 178.3 |
| 35°   | 258.6 | 254.1 | 253.3 | 249.7 | 237.7 | 224.0 | 209.2 | 196.1 | 182.6 | 171.5 | 169.4 |
| 37.5° | 252.7 | 248.9 | 247.7 | 244.1 | 232.1 | 217.4 | 201.8 | 187.5 | 173.7 | 161.8 | 160.5 |
| 40°   | 245.1 | 241.5 | 240.6 | 237.5 | 225.7 | 210.1 | 193.7 | 178.8 | 164.5 | 153.5 | 151.5 |
| 42.5° | 236.5 | 233.1 | 232.6 | 229.4 | 217.7 | 202.0 | 185.0 | 169.6 | 154.9 | 144.3 | 142.4 |
| 45°   | 226.7 | 223.4 | 223.3 | 220.2 | 209.0 | 193.0 | 175.8 | 160.4 | 145.6 | 134.5 | 133.5 |
| 47.5° | 215.9 | 213.0 | 213.0 | 210.1 | 199.4 | 183.1 | 166.3 | 150.8 | 136.2 | 126.4 | 124.6 |
| 50°   | 204.1 | 201.4 | 200.5 | 199.1 | 188.7 | 172.3 | 156.4 | 141.4 | 126.9 | 117.6 | 115.8 |
| 52.5° | 191.6 | 189.2 | 189.8 | 187.2 | 177.1 | 161.0 | 146.3 | 130.8 | 117.5 | 109.1 | 107.3 |
| 55°   | 178.4 | 175.0 | 175.5 | 174.6 | 165.0 | 149.4 | 135.0 | 122.0 | 108.3 | 100.4 | 98.8  |
| 57.5° | 164.7 | 160.3 | 162.1 | 161.5 | 152.1 | 137.6 | 124.6 | 112.1 | 99.2  | 91.9  | 90.3  |
| 60°   | 150.6 | 146.4 | 148.2 | 147.7 | 138.9 | 125.7 | 113.9 | 102.3 | 90.1  | 83.5  | 81.9  |
| 62.5° | 136.2 | 132.3 | 134.0 | 133.6 | 125.5 | 113.5 | 103.3 | 92.7  | 81.0  | 75.0  | 73.6  |
| 65°   | 121.6 | 117.9 | 119.4 | 119.1 | 111.6 | 102.6 | 92.4  | 82.6  | 71.8  | 66.6  | 65.2  |
| 67.5° | 106.7 | 103.3 | 104.7 | 104.7 | 97.8  | 89.1  | 81.4  | 72.5  | 62.8  | 58.3  | 57.0  |
| 70°   | 91.9  | 88.7  | 90.0  | 89.9  | 84.0  | 77.0  | 70.3  | 62.4  | 53.7  | 50.0  | 48.9  |
| 72.5° | 77.0  | 74.2  | 75.4  | 75.2  | 70.4  | 65.8  | 59.2  | 52.3  | 44.8  | 41.8  | 40.8  |
| 75°   | 62.6  | 60.0  | 61.0  | 60.9  | 56.9  | 52.7  | 48.3  | 42.5  | 36.1  | 34.0  | 33.0  |
| 77.5° | 48.8  | 46.1  | 47.0  | 47.0  | 44.1  | 41.0  | 37.5  | 33.1  | 28.5  | 26.3  | 25.5  |
| 80°   | 35.6  | 34.3  | 33.9  | 33.9  | 32.0  | 30.0  | 28.2  | 23.9  | 20.5  | 19.0  | 18.5  |
| 82.5° | 23.4  | 22.3  | 21.9  | 22.0  | 20.9  | 19.7  | 18.5  | 15.6  | 13.3  | 12.4  | 12.1  |
| 85°   | 12.4  | 11.6  | 11.3  | 11.5  | 11.3  | 10.6  | 10.1  | 8.1   | 6.7   | 6.3   | 6.2   |
| 87.5° | 3.9   | 3.4   | 3.1   | 4.1   | 3.5   | 3.1   | 3.0   | 2.4   | 1.8   | 1.8   | 1.8   |
| 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°    | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 |
| 2.5°  | 239.7 | 239.7 | 237.5 | 237.0 | 236.8 | 237.0 | 234.9 | 234.5 | 237.6 | 236.5 | 234.1 |
| 5°    | 237.8 | 237.7 | 234.6 | 234.0 | 234.0 | 233.7 | 231.2 | 230.7 | 233.8 | 232.9 | 230.3 |
| 7.5°  | 235.4 | 235.1 | 231.4 | 231.0 | 230.5 | 230.3 | 227.5 | 227.1 | 229.8 | 229.3 | 226.8 |
| 10°   | 232.6 | 232.2 | 227.9 | 227.6 | 227.0 | 226.6 | 224.0 | 223.7 | 226.5 | 225.6 | 223.6 |
| 12.5° | 228.8 | 228.2 | 223.8 | 223.5 | 223.0 | 222.8 | 220.3 | 220.2 | 223.2 | 222.3 | 220.2 |
| 15°   | 223.9 | 223.4 | 218.5 | 218.6 | 218.6 | 218.6 | 216.6 | 216.5 | 219.5 | 219.1 | 216.8 |
| 17.5° | 218.5 | 217.8 | 213.1 | 213.4 | 213.8 | 214.3 | 212.7 | 213.0 | 216.1 | 215.6 | 213.6 |
| 20°   | 212.3 | 211.6 | 207.0 | 208.0 | 208.8 | 209.7 | 208.7 | 209.5 | 212.4 | 212.2 | 210.7 |
| 22.5° | 205.4 | 204.7 | 200.5 | 201.9 | 203.3 | 205.0 | 204.6 | 205.5 | 208.5 | 208.5 | 207.1 |
| 25°   | 197.0 | 197.2 | 193.4 | 195.2 | 197.6 | 199.9 | 200.1 | 201.5 | 205.0 | 204.6 | 203.4 |
| 27.5° | 189.2 | 189.4 | 185.4 | 188.4 | 191.6 | 194.6 | 195.3 | 197.3 | 200.8 | 200.5 | 199.5 |
| 30°   | 180.9 | 181.2 | 177.4 | 181.5 | 185.3 | 189.0 | 190.6 | 193.3 | 196.8 | 196.8 | 195.7 |
| 32.5° | 172.4 | 172.9 | 168.8 | 174.4 | 178.8 | 183.1 | 185.9 | 188.7 | 192.8 | 192.6 | 191.7 |
| 35°   | 163.6 | 164.1 | 160.5 | 167.5 | 171.9 | 177.2 | 180.6 | 184.4 | 188.0 | 188.1 | 187.3 |
| 37.5° | 154.6 | 155.3 | 151.9 | 159.7 | 164.7 | 170.9 | 175.3 | 179.1 | 183.1 | 183.3 | 182.6 |
| 40°   | 145.7 | 146.5 | 143.5 | 151.0 | 157.4 | 164.3 | 169.4 | 173.8 | 178.2 | 178.3 | 177.9 |
| 42.5° | 136.8 | 137.6 | 135.4 | 142.7 | 149.9 | 157.4 | 163.3 | 168.4 | 172.9 | 173.2 | 172.7 |
| 45°   | 128.1 | 128.8 | 127.3 | 135.2 | 142.1 | 150.3 | 157.1 | 162.9 | 167.4 | 167.8 | 167.6 |
| 47.5° | 119.5 | 120.1 | 118.7 | 126.0 | 134.0 | 142.6 | 150.5 | 156.9 | 161.7 | 162.2 | 162.1 |
| 50°   | 111.1 | 111.6 | 110.1 | 117.7 | 125.6 | 134.8 | 143.0 | 150.4 | 155.8 | 156.3 | 156.2 |
| 52.5° | 102.7 | 103.2 | 101.9 | 109.9 | 117.1 | 126.8 | 135.8 | 143.8 | 149.1 | 149.8 | 149.9 |
| 55°   | 94.6  | 94.8  | 93.8  | 101.4 | 108.4 | 118.6 | 128.9 | 136.7 | 142.0 | 142.5 | 142.9 |
| 57.5° | 86.4  | 86.5  | 85.7  | 93.0  | 99.7  | 110.1 | 120.9 | 129.0 | 134.1 | 134.6 | 135.1 |
| 60°   | 78.4  | 78.3  | 77.4  | 84.5  | 90.9  | 101.2 | 112.4 | 120.5 | 125.4 | 125.9 | 126.6 |
| 62.5° | 70.4  | 70.2  | 69.4  | 75.9  | 82.0  | 92.1  | 103.4 | 111.2 | 115.9 | 116.2 | 117.1 |
| 65°   | 62.4  | 62.3  | 61.5  | 67.5  | 73.0  | 82.7  | 93.8  | 101.2 | 105.4 | 105.9 | 105.7 |
| 67.5° | 54.6  | 54.2  | 53.6  | 59.1  | 64.0  | 73.0  | 83.6  | 90.8  | 94.2  | 94.6  | 95.7  |
| 70°   | 46.7  | 46.4  | 45.0  | 50.7  | 55.1  | 63.1  | 73.0  | 79.3  | 82.2  | 82.6  | 82.5  |
| 72.5° | 39.0  | 38.6  | 37.1  | 42.4  | 46.1  | 53.1  | 62.0  | 67.2  | 69.8  | 70.1  | 70.1  |
| 75°   | 31.5  | 31.3  | 30.3  | 34.4  | 37.5  | 43.2  | 50.7  | 55.0  | 57.0  | 57.4  | 57.3  |
| 77.5° | 24.3  | 24.1  | 23.2  | 26.6  | 29.1  | 33.3  | 39.4  | 42.8  | 44.2  | 44.7  | 45.6  |
| 80°   | 17.4  | 17.4  | 15.8  | 19.3  | 20.3  | 23.9  | 28.3  | 31.0  | 31.7  | 32.4  | 33.0  |
| 82.5° | 11.1  | 11.2  | 9.7   | 12.6  | 13.0  | 15.3  | 18.1  | 19.7  | 20.3  | 20.8  | 21.3  |
| 85°   | 5.4   | 5.7   | 4.8   | 6.7   | 6.7   | 7.9   | 9.1   | 9.7   | 9.9   | 10.3  | 10.7  |
| 87.5° | 1.4   | 1.6   | 0.9   | 1.9   | 1.7   | 2.2   | 2.5   | 2.7   | 2.6   | 2.9   | 3.1   |
| 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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Peachtree City, GA 30269



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CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-20-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 195°  | 205°  | 215°  | 225°  | 235°  | 245°  | 255°  | 265°  | 270°  | 275°  | 285°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 |
| 2.5°  | 234.9 | 236.7 | 235.8 | 238.7 | 239.8 | 238.0 | 241.2 | 241.2 | 239.0 | 241.6 | 243.1 |
| 5°    | 231.3 | 233.1 | 232.6 | 235.6 | 237.0 | 235.4 | 239.2 | 239.9 | 237.8 | 240.7 | 243.1 |
| 7.5°  | 227.6 | 229.8 | 229.0 | 232.1 | 233.8 | 232.6 | 236.6 | 237.8 | 236.1 | 239.4 | 242.5 |
| 10°   | 224.4 | 226.2 | 225.4 | 228.7 | 230.2 | 229.1 | 233.2 | 235.4 | 233.8 | 237.8 | 241.5 |
| 12.5° | 221.3 | 222.8 | 221.9 | 224.6 | 226.0 | 224.7 | 229.6 | 231.6 | 230.5 | 234.6 | 239.4 |
| 15°   | 217.2 | 218.9 | 217.7 | 220.1 | 221.1 | 220.0 | 224.0 | 227.5 | 226.1 | 230.7 | 236.0 |
| 17.5° | 214.1 | 215.1 | 213.4 | 215.3 | 215.9 | 214.4 | 218.5 | 221.9 | 220.9 | 225.8 | 232.0 |
| 20°   | 210.7 | 211.5 | 209.2 | 210.2 | 210.2 | 208.3 | 212.0 | 215.4 | 214.7 | 220.1 | 227.1 |
| 22.5° | 206.9 | 207.3 | 204.6 | 204.8 | 204.7 | 201.5 | 204.9 | 208.3 | 208.0 | 213.5 | 221.4 |
| 25°   | 202.9 | 202.9 | 199.4 | 199.3 | 198.1 | 194.4 | 197.3 | 201.2 | 200.4 | 206.3 | 214.5 |
| 27.5° | 198.9 | 198.4 | 194.1 | 193.1 | 191.1 | 186.7 | 189.3 | 192.8 | 192.3 | 198.1 | 207.3 |
| 30°   | 194.7 | 193.9 | 188.7 | 186.9 | 184.0 | 178.9 | 181.1 | 184.4 | 184.6 | 189.7 | 199.3 |
| 32.5° | 190.6 | 188.8 | 183.0 | 180.3 | 176.7 | 170.8 | 172.0 | 175.3 | 175.7 | 180.9 | 190.7 |
| 35°   | 185.4 | 184.2 | 177.1 | 172.5 | 169.0 | 162.5 | 163.7 | 166.0 | 166.7 | 171.7 | 181.7 |
| 37.5° | 180.5 | 178.5 | 171.0 | 165.4 | 160.8 | 154.0 | 154.3 | 156.7 | 157.4 | 162.5 | 172.4 |
| 40°   | 175.4 | 172.6 | 164.5 | 157.9 | 152.7 | 145.6 | 145.2 | 147.6 | 148.1 | 153.1 | 162.1 |
| 42.5° | 170.0 | 166.6 | 157.5 | 150.3 | 144.3 | 137.0 | 136.3 | 138.4 | 139.0 | 143.8 | 152.6 |
| 45°   | 164.5 | 160.5 | 150.3 | 142.5 | 135.9 | 128.5 | 127.7 | 129.3 | 130.2 | 134.8 | 143.2 |
| 47.5° | 158.7 | 154.0 | 142.9 | 134.2 | 127.4 | 120.0 | 119.0 | 120.6 | 121.3 | 125.9 | 133.9 |
| 50°   | 152.6 | 146.8 | 135.3 | 125.7 | 119.0 | 111.6 | 110.2 | 112.1 | 112.8 | 117.0 | 124.8 |
| 52.5° | 145.8 | 139.5 | 127.2 | 117.1 | 110.4 | 103.4 | 101.7 | 103.6 | 104.3 | 108.4 | 115.7 |
| 55°   | 138.7 | 131.9 | 119.0 | 109.2 | 101.9 | 95.1  | 93.7  | 94.4  | 96.0  | 99.9  | 106.7 |
| 57.5° | 130.7 | 123.9 | 110.4 | 100.4 | 93.4  | 86.9  | 85.7  | 86.4  | 87.8  | 91.6  | 97.7  |
| 60°   | 122.2 | 115.0 | 101.6 | 91.6  | 84.9  | 78.7  | 77.6  | 78.2  | 79.8  | 83.2  | 88.8  |
| 62.5° | 113.8 | 105.8 | 92.5  | 82.6  | 76.5  | 70.7  | 70.4  | 70.2  | 71.7  | 75.0  | 79.9  |
| 65°   | 103.6 | 95.9  | 83.1  | 73.7  | 68.1  | 62.9  | 61.8  | 62.3  | 63.7  | 66.7  | 71.9  |
| 67.5° | 92.7  | 85.7  | 73.4  | 64.7  | 59.7  | 55.1  | 54.1  | 54.4  | 55.8  | 58.5  | 63.0  |
| 70°   | 81.1  | 75.0  | 63.5  | 55.7  | 51.5  | 47.1  | 46.5  | 46.6  | 48.0  | 50.3  | 54.2  |
| 72.5° | 69.0  | 63.4  | 53.5  | 46.8  | 43.3  | 40.2  | 39.6  | 39.0  | 40.3  | 42.3  | 45.6  |
| 75°   | 56.6  | 51.7  | 43.5  | 38.1  | 35.3  | 32.7  | 32.2  | 31.5  | 32.8  | 34.5  | 37.2  |
| 77.5° | 44.1  | 40.2  | 33.8  | 29.6  | 27.5  | 25.5  | 25.1  | 24.4  | 25.6  | 26.9  | 29.0  |
| 80°   | 31.9  | 29.1  | 25.2  | 20.8  | 20.1  | 18.8  | 18.4  | 17.6  | 18.8  | 19.7  | 21.2  |
| 82.5° | 20.6  | 18.7  | 16.5  | 13.4  | 13.3  | 12.4  | 12.1  | 11.3  | 12.4  | 12.9  | 14.1  |
| 85°   | 10.4  | 9.5   | 9.0   | 6.8   | 7.1   | 6.4   | 6.4   | 5.4   | 6.3   | 6.6   | 7.2   |
| 87.5° | 3.0   | 3.1   | 2.8   | 1.7   | 2.1   | 2.0   | 2.0   | 1.5   | 2.0   | 2.0   | 2.3   |
| 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: P837929

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-20-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°  | 305°  | 315°  | 325°  | 335°  | 345°  | 355°  | 360°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 | 240.0 |
| 2.5°  | 240.2 | 241.2 | 241.4 | 241.3 | 242.0 | 245.3 | 244.2 | 245.3 |
| 5°    | 240.8 | 242.9 | 243.5 | 244.3 | 245.3 | 249.1 | 247.8 | 249.2 |
| 7.5°  | 241.1 | 244.3 | 245.5 | 247.1 | 248.7 | 252.9 | 251.9 | 253.3 |
| 10°   | 241.1 | 245.3 | 247.1 | 249.6 | 251.8 | 256.7 | 255.7 | 257.3 |
| 12.5° | 240.1 | 245.4 | 248.0 | 251.5 | 254.3 | 259.6 | 259.2 | 260.3 |
| 15°   | 238.0 | 244.6 | 248.1 | 252.6 | 256.1 | 262.0 | 261.8 | 263.2 |
| 17.5° | 235.2 | 243.1 | 247.3 | 253.0 | 257.4 | 264.1 | 264.5 | 265.2 |
| 20°   | 231.7 | 240.4 | 245.9 | 252.9 | 258.4 | 265.7 | 266.2 | 267.2 |
| 22.5° | 227.1 | 237.1 | 243.7 | 252.2 | 258.5 | 266.4 | 267.3 | 268.2 |
| 25°   | 221.6 | 233.1 | 240.8 | 250.8 | 257.9 | 266.3 | 267.5 | 268.4 |
| 27.5° | 215.3 | 228.0 | 237.2 | 248.5 | 256.4 | 265.4 | 266.9 | 267.9 |
| 30°   | 208.0 | 222.5 | 233.1 | 245.6 | 254.2 | 263.7 | 265.4 | 266.4 |
| 32.5° | 200.5 | 216.4 | 228.1 | 241.9 | 251.1 | 261.1 | 262.5 | 263.2 |
| 35°   | 192.4 | 209.1 | 222.2 | 237.0 | 247.2 | 256.7 | 257.8 | 258.6 |
| 37.5° | 183.5 | 201.2 | 215.4 | 231.6 | 241.6 | 250.8 | 251.7 | 252.7 |
| 40°   | 174.3 | 192.8 | 207.8 | 224.9 | 234.9 | 243.4 | 244.4 | 245.1 |
| 42.5° | 165.0 | 183.6 | 199.7 | 217.1 | 227.0 | 235.2 | 235.8 | 236.5 |
| 45°   | 155.7 | 174.0 | 190.6 | 208.4 | 218.2 | 225.9 | 226.1 | 226.7 |
| 47.5° | 146.2 | 164.1 | 180.5 | 198.5 | 208.2 | 215.2 | 215.4 | 215.9 |
| 50°   | 136.6 | 154.2 | 169.9 | 187.8 | 197.3 | 204.7 | 203.7 | 204.1 |
| 52.5° | 127.2 | 143.8 | 159.8 | 176.3 | 185.6 | 192.2 | 192.5 | 191.6 |
| 55°   | 118.0 | 133.6 | 148.3 | 164.2 | 173.1 | 178.2 | 178.0 | 178.4 |
| 57.5° | 108.6 | 123.3 | 136.8 | 151.3 | 160.0 | 164.8 | 165.8 | 164.7 |
| 60°   | 99.1  | 112.9 | 125.0 | 138.1 | 146.5 | 150.5 | 151.7 | 150.6 |
| 62.5° | 89.6  | 102.3 | 113.3 | 124.7 | 132.5 | 137.5 | 137.4 | 136.2 |
| 65°   | 80.2  | 91.6  | 101.4 | 111.2 | 118.0 | 122.9 | 122.7 | 121.6 |
| 67.5° | 71.4  | 80.9  | 89.7  | 97.6  | 103.5 | 106.9 | 108.0 | 106.7 |
| 70°   | 61.8  | 70.0  | 77.7  | 84.0  | 88.9  | 92.0  | 93.1  | 91.9  |
| 72.5° | 52.2  | 59.1  | 64.5  | 70.7  | 74.4  | 77.0  | 78.2  | 77.0  |
| 75°   | 42.7  | 48.4  | 52.8  | 57.6  | 60.2  | 62.4  | 63.7  | 62.6  |
| 77.5° | 33.4  | 37.8  | 41.4  | 44.8  | 47.9  | 48.4  | 49.5  | 48.8  |
| 80°   | 24.6  | 27.8  | 30.4  | 32.7  | 34.9  | 35.1  | 36.1  | 35.6  |
| 82.5° | 16.4  | 18.5  | 19.2  | 21.6  | 23.0  | 22.8  | 23.7  | 23.4  |
| 85°   | 8.7   | 10.0  | 11.1  | 11.9  | 12.7  | 11.9  | 12.8  | 12.4  |
| 87.5° | 2.9   | 3.1   | 2.7   | 3.8   | 4.2   | 3.6   | 4.1   | 3.9   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)