

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: P837965

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-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: P837965  
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-30-120-EDD-90  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

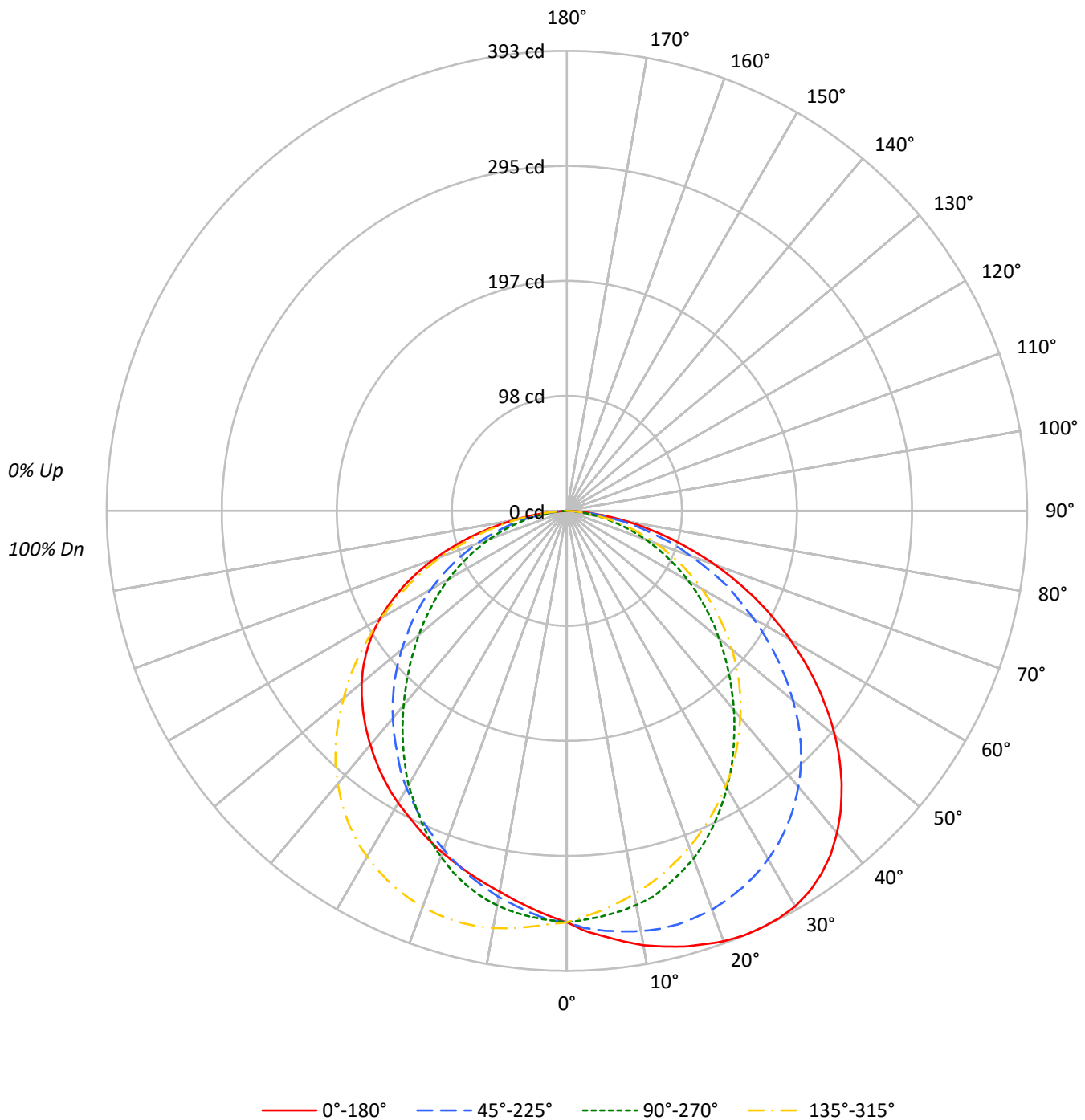
Lumens per Lamp: N/A  
Luminaire Lumens: 1031.1 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**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  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24  |    |    |

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

|     | 0°   | 90° | 180° | 270° |
|-----|------|-----|------|------|
| 0°  | 946  | 946 | 946  | 946  |
| 5°  | 986  | 939 | 921  | 941  |
| 10° | 1030 | 934 | 903  | 935  |
| 15° | 1074 | 922 | 894  | 922  |
| 20° | 1121 | 905 | 890  | 900  |
| 25° | 1167 | 880 | 890  | 871  |
| 30° | 1212 | 850 | 896  | 840  |
| 35° | 1244 | 815 | 905  | 802  |
| 40° | 1261 | 779 | 917  | 762  |
| 45° | 1263 | 744 | 935  | 725  |
| 50° | 1251 | 710 | 958  | 691  |
| 55° | 1225 | 678 | 979  | 660  |
| 60° | 1187 | 645 | 992  | 629  |
| 65° | 1134 | 607 | 987  | 593  |
| 70° | 1059 | 563 | 952  | 553  |
| 75° | 953  | 502 | 873  | 499  |
| 80° | 807  | 420 | 735  | 426  |
| 85° | 562  | 278 | 466  | 287  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 33.4   | 3.2       |
| 10°-20°   | 96.6   | 9.4       |
| 20°-30°   | 148.1  | 14.4      |
| 30°-40°   | 180.0  | 17.5      |
| 40°-50°   | 187.2  | 18.2      |
| 50°-60°   | 169.1  | 16.4      |
| 60°-70°   | 128.5  | 12.5      |
| 70°-80°   | 71.7   | 6.9       |
| 80°-90°   | 16.5   | 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°    | 278.1  | 27.0      |
| 0°-40°    | 458.1  | 44.4      |
| 0°-60°    | 814.4  | 79.0      |
| 0°-90°    | 1031.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1031.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 90° | 180° | 270° | 360° | Flux |
|-----|-----|-----|------|------|------|------|
| 0°  | 351 | 351 | 351  | 351  | 351  |      |
| 5°  | 365 | 348 | 341  | 348  | 365  | 35   |
| 15° | 385 | 331 | 321  | 331  | 385  | 109  |
| 25° | 393 | 296 | 300  | 293  | 393  | 182  |
| 35° | 379 | 248 | 275  | 244  | 379  | 237  |
| 45° | 332 | 196 | 246  | 191  | 332  | 256  |
| 55° | 261 | 145 | 209  | 141  | 261  | 233  |
| 65° | 178 | 95  | 155  | 93   | 178  | 176  |
| 75° | 92  | 48  | 84   | 48   | 92   | 97   |
| 85° | 18  | 9   | 15   | 9    | 18   | 23   |
| 90° | 0   | 0   | 0    | 0    | 0    |      |

TEST NUMBER: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 |
| 2.5°  | 359.2 | 354.0 | 354.1 | 358.6 | 355.1 | 356.8 | 351.9 | 353.8 | 353.2 | 353.6 | 349.6 |
| 5°    | 364.9 | 359.2 | 359.1 | 363.1 | 359.1 | 359.9 | 353.6 | 354.9 | 353.1 | 351.9 | 347.6 |
| 7.5°  | 370.9 | 365.2 | 364.6 | 368.1 | 362.9 | 362.3 | 355.5 | 355.5 | 352.2 | 349.3 | 345.2 |
| 10°   | 376.8 | 370.9 | 370.2 | 372.8 | 366.4 | 364.6 | 356.2 | 354.9 | 350.5 | 346.3 | 341.8 |
| 12.5° | 381.2 | 375.3 | 374.7 | 376.4 | 369.1 | 365.7 | 356.2 | 353.6 | 347.3 | 341.3 | 337.8 |
| 15°   | 385.4 | 379.3 | 377.8 | 378.6 | 370.3 | 365.7 | 355.0 | 351.1 | 342.9 | 335.0 | 331.0 |
| 17.5° | 388.3 | 382.5 | 380.9 | 380.9 | 370.9 | 364.3 | 352.6 | 347.2 | 337.3 | 327.8 | 323.8 |
| 20°   | 391.3 | 385.5 | 383.5 | 382.0 | 370.7 | 362.4 | 349.0 | 341.7 | 330.2 | 319.5 | 316.2 |
| 22.5° | 392.8 | 386.8 | 384.6 | 382.4 | 369.6 | 359.0 | 344.5 | 335.3 | 322.2 | 309.5 | 306.7 |
| 25°   | 393.0 | 386.9 | 384.6 | 381.4 | 367.5 | 354.9 | 338.8 | 327.6 | 312.9 | 298.8 | 296.4 |
| 27.5° | 392.3 | 385.6 | 383.3 | 379.5 | 364.3 | 349.9 | 332.0 | 318.8 | 303.1 | 287.5 | 285.0 |
| 30°   | 390.0 | 383.2 | 381.0 | 376.0 | 359.8 | 343.7 | 324.5 | 309.1 | 292.2 | 275.6 | 273.4 |
| 32.5° | 385.5 | 378.8 | 377.0 | 372.0 | 354.9 | 336.6 | 315.9 | 298.6 | 280.1 | 264.3 | 261.0 |
| 35°   | 378.7 | 372.1 | 370.9 | 365.7 | 348.0 | 328.1 | 306.3 | 287.1 | 267.3 | 251.2 | 248.0 |
| 37.5° | 370.0 | 364.4 | 362.7 | 357.5 | 339.9 | 318.4 | 295.4 | 274.6 | 254.3 | 236.9 | 234.9 |
| 40°   | 358.9 | 353.6 | 352.3 | 347.7 | 330.4 | 307.7 | 283.6 | 261.8 | 240.8 | 224.7 | 221.9 |
| 42.5° | 346.3 | 341.4 | 340.6 | 335.9 | 318.8 | 295.8 | 270.9 | 248.4 | 226.8 | 211.3 | 208.5 |
| 45°   | 331.9 | 327.2 | 327.0 | 322.5 | 306.1 | 282.6 | 257.4 | 234.9 | 213.1 | 197.0 | 195.5 |
| 47.5° | 316.1 | 311.8 | 311.8 | 307.7 | 291.9 | 268.1 | 243.6 | 220.8 | 199.4 | 185.1 | 182.5 |
| 50°   | 298.9 | 294.9 | 293.6 | 291.6 | 276.3 | 252.2 | 229.0 | 207.0 | 185.8 | 172.2 | 169.6 |
| 52.5° | 280.5 | 277.1 | 277.9 | 274.1 | 259.3 | 235.8 | 214.2 | 191.5 | 172.1 | 159.7 | 157.2 |
| 55°   | 261.2 | 256.3 | 257.0 | 255.6 | 241.6 | 218.8 | 197.6 | 178.7 | 158.6 | 147.0 | 144.6 |
| 57.5° | 241.1 | 234.7 | 237.3 | 236.5 | 222.7 | 201.4 | 182.5 | 164.2 | 145.3 | 134.5 | 132.2 |
| 60°   | 220.5 | 214.4 | 217.1 | 216.3 | 203.4 | 184.0 | 166.8 | 149.9 | 132.0 | 122.2 | 119.9 |
| 62.5° | 199.4 | 193.7 | 196.2 | 195.6 | 183.7 | 166.2 | 151.2 | 135.7 | 118.6 | 109.8 | 107.7 |
| 65°   | 178.1 | 172.6 | 174.9 | 174.4 | 163.5 | 150.2 | 135.3 | 121.0 | 105.2 | 97.6  | 95.4  |
| 67.5° | 156.2 | 151.2 | 153.3 | 153.3 | 143.2 | 130.5 | 119.2 | 106.2 | 92.0  | 85.4  | 83.5  |
| 70°   | 134.6 | 129.9 | 131.7 | 131.6 | 123.0 | 112.7 | 103.0 | 91.3  | 78.6  | 73.2  | 71.6  |
| 72.5° | 112.8 | 108.7 | 110.3 | 110.2 | 103.0 | 96.4  | 86.7  | 76.6  | 65.6  | 61.2  | 59.8  |
| 75°   | 91.7  | 87.8  | 89.4  | 89.2  | 83.4  | 77.1  | 70.7  | 62.3  | 52.8  | 49.8  | 48.3  |
| 77.5° | 71.5  | 67.5  | 68.9  | 68.9  | 64.6  | 60.1  | 54.9  | 48.4  | 41.7  | 38.4  | 37.4  |
| 80°   | 52.1  | 50.3  | 49.6  | 49.7  | 46.8  | 43.9  | 41.2  | 35.0  | 30.1  | 27.9  | 27.1  |
| 82.5° | 34.3  | 32.7  | 32.1  | 32.2  | 30.6  | 28.8  | 27.1  | 22.8  | 19.5  | 18.2  | 17.8  |
| 85°   | 18.2  | 17.1  | 16.5  | 16.9  | 16.6  | 15.6  | 14.8  | 11.8  | 9.8   | 9.3   | 9.0   |
| 87.5° | 5.7   | 5.0   | 4.6   | 6.1   | 5.2   | 4.6   | 4.4   | 3.5   | 2.7   | 2.7   | 2.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  | 185°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 |
| 2.5°  | 350.9 | 350.9 | 347.7 | 347.0 | 346.7 | 347.1 | 343.9 | 343.3 | 347.9 | 346.4 | 342.8 |
| 5°    | 348.2 | 348.0 | 343.5 | 342.7 | 342.7 | 342.2 | 338.6 | 337.7 | 342.3 | 341.0 | 337.2 |
| 7.5°  | 344.7 | 344.2 | 338.9 | 338.3 | 337.5 | 337.2 | 333.2 | 332.6 | 336.5 | 335.7 | 332.1 |
| 10°   | 340.5 | 340.0 | 333.7 | 333.3 | 332.4 | 331.8 | 328.0 | 327.6 | 331.6 | 330.3 | 327.4 |
| 12.5° | 335.0 | 334.1 | 327.7 | 327.3 | 326.5 | 326.3 | 322.6 | 322.4 | 326.8 | 325.5 | 322.5 |
| 15°   | 327.8 | 327.1 | 319.9 | 320.0 | 320.1 | 320.1 | 317.2 | 317.0 | 321.4 | 320.8 | 317.5 |
| 17.5° | 319.9 | 318.9 | 312.0 | 312.5 | 313.1 | 313.7 | 311.4 | 311.8 | 316.4 | 315.7 | 312.7 |
| 20°   | 310.9 | 309.9 | 303.2 | 304.5 | 305.8 | 307.1 | 305.6 | 306.8 | 311.0 | 310.7 | 308.5 |
| 22.5° | 300.8 | 299.8 | 293.6 | 295.7 | 297.7 | 300.2 | 299.5 | 300.9 | 305.4 | 305.3 | 303.3 |
| 25°   | 288.5 | 288.7 | 283.2 | 285.9 | 289.3 | 292.7 | 293.0 | 295.1 | 300.1 | 299.6 | 297.8 |
| 27.5° | 277.0 | 277.3 | 271.5 | 275.9 | 280.5 | 285.0 | 286.0 | 289.0 | 294.1 | 293.6 | 292.1 |
| 30°   | 265.0 | 265.4 | 259.7 | 265.8 | 271.3 | 276.8 | 279.1 | 283.1 | 288.2 | 288.2 | 286.6 |
| 32.5° | 252.4 | 253.1 | 247.2 | 255.4 | 261.8 | 268.1 | 272.2 | 276.3 | 282.2 | 282.1 | 280.7 |
| 35°   | 239.5 | 240.4 | 234.9 | 245.3 | 251.8 | 259.5 | 264.5 | 270.0 | 275.3 | 275.4 | 274.3 |
| 37.5° | 226.4 | 227.4 | 222.5 | 233.8 | 241.2 | 250.3 | 256.7 | 262.2 | 268.1 | 268.4 | 267.4 |
| 40°   | 213.4 | 214.5 | 210.2 | 221.1 | 230.4 | 240.6 | 248.0 | 254.5 | 260.9 | 261.1 | 260.4 |
| 42.5° | 200.4 | 201.5 | 198.3 | 209.0 | 219.5 | 230.4 | 239.1 | 246.6 | 253.1 | 253.6 | 252.8 |
| 45°   | 187.6 | 188.6 | 186.3 | 198.0 | 208.1 | 220.0 | 230.0 | 238.5 | 245.1 | 245.7 | 245.4 |
| 47.5° | 175.0 | 175.9 | 173.9 | 184.5 | 196.3 | 208.9 | 220.4 | 229.8 | 236.8 | 237.5 | 237.3 |
| 50°   | 162.6 | 163.4 | 161.2 | 172.3 | 184.0 | 197.4 | 209.5 | 220.3 | 228.1 | 228.8 | 228.7 |
| 52.5° | 150.3 | 151.1 | 149.2 | 160.9 | 171.5 | 185.7 | 198.8 | 210.5 | 218.3 | 219.3 | 219.5 |
| 55°   | 138.5 | 138.8 | 137.3 | 148.5 | 158.8 | 173.6 | 188.7 | 200.1 | 207.9 | 208.7 | 209.2 |
| 57.5° | 126.6 | 126.7 | 125.4 | 136.2 | 146.0 | 161.2 | 177.0 | 189.0 | 196.3 | 197.2 | 197.9 |
| 60°   | 114.8 | 114.7 | 113.3 | 123.7 | 133.1 | 148.1 | 164.6 | 176.5 | 183.6 | 184.4 | 185.4 |
| 62.5° | 103.0 | 102.8 | 101.6 | 111.2 | 120.0 | 134.9 | 151.4 | 162.9 | 169.7 | 170.2 | 171.5 |
| 65°   | 91.4  | 91.2  | 90.0  | 98.9  | 106.9 | 121.1 | 137.3 | 148.2 | 154.4 | 155.0 | 154.8 |
| 67.5° | 79.9  | 79.4  | 78.5  | 86.5  | 93.8  | 106.9 | 122.5 | 132.9 | 138.0 | 138.5 | 140.1 |
| 70°   | 68.5  | 67.9  | 65.8  | 74.3  | 80.7  | 92.4  | 106.9 | 116.2 | 120.4 | 121.0 | 120.8 |
| 72.5° | 57.1  | 56.6  | 54.4  | 62.1  | 67.5  | 77.8  | 90.7  | 98.5  | 102.1 | 102.6 | 102.6 |
| 75°   | 46.2  | 45.8  | 44.4  | 50.3  | 54.8  | 63.2  | 74.2  | 80.6  | 83.5  | 84.0  | 83.9  |
| 77.5° | 35.6  | 35.3  | 33.9  | 39.0  | 42.5  | 48.8  | 57.6  | 62.6  | 64.8  | 65.4  | 66.8  |
| 80°   | 25.5  | 25.4  | 23.2  | 28.2  | 29.8  | 35.0  | 41.5  | 45.3  | 46.5  | 47.4  | 48.4  |
| 82.5° | 16.3  | 16.4  | 14.2  | 18.4  | 19.1  | 22.5  | 26.5  | 28.9  | 29.7  | 30.4  | 31.2  |
| 85°   | 8.0   | 8.3   | 7.1   | 9.8   | 9.8   | 11.6  | 13.3  | 14.2  | 14.5  | 15.1  | 15.7  |
| 87.5° | 2.0   | 2.4   | 1.3   | 2.8   | 2.5   | 3.2   | 3.7   | 3.9   | 3.9   | 4.3   | 4.5   |
| 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: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 195°  | 205°  | 215°  | 225°  | 235°  | 245°  | 255°  | 265°  | 270°  | 275°  | 285°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 |
| 2.5°  | 344.0 | 346.6 | 345.3 | 349.6 | 351.2 | 348.6 | 353.2 | 353.2 | 350.0 | 353.8 | 355.9 |
| 5°    | 338.6 | 341.4 | 340.5 | 345.0 | 347.0 | 344.7 | 350.3 | 351.4 | 348.2 | 352.5 | 355.9 |
| 7.5°  | 333.2 | 336.4 | 335.4 | 339.9 | 342.3 | 340.5 | 346.5 | 348.2 | 345.8 | 350.5 | 355.1 |
| 10°   | 328.6 | 331.3 | 330.1 | 334.9 | 337.0 | 335.5 | 341.4 | 344.6 | 342.3 | 348.2 | 353.6 |
| 12.5° | 324.0 | 326.2 | 324.9 | 328.8 | 330.9 | 329.0 | 336.2 | 339.1 | 337.5 | 343.6 | 350.6 |
| 15°   | 318.1 | 320.5 | 318.7 | 322.3 | 323.8 | 322.2 | 328.1 | 333.2 | 331.1 | 337.7 | 345.5 |
| 17.5° | 313.6 | 315.0 | 312.5 | 315.3 | 316.2 | 314.0 | 320.0 | 325.0 | 323.5 | 330.7 | 339.7 |
| 20°   | 308.6 | 309.7 | 306.3 | 307.8 | 307.7 | 305.0 | 310.4 | 315.4 | 314.4 | 322.3 | 332.6 |
| 22.5° | 303.0 | 303.6 | 299.5 | 299.9 | 299.7 | 295.1 | 300.0 | 305.0 | 304.6 | 312.7 | 324.1 |
| 25°   | 297.1 | 297.2 | 292.0 | 291.8 | 290.0 | 284.6 | 289.0 | 294.6 | 293.4 | 302.1 | 314.1 |
| 27.5° | 291.3 | 290.4 | 284.2 | 282.7 | 279.9 | 273.4 | 277.2 | 282.3 | 281.6 | 290.1 | 303.5 |
| 30°   | 285.0 | 284.0 | 276.3 | 273.6 | 269.5 | 262.0 | 265.2 | 270.0 | 270.4 | 277.8 | 291.8 |
| 32.5° | 279.1 | 276.4 | 268.0 | 264.0 | 258.8 | 250.1 | 251.8 | 256.7 | 257.3 | 264.9 | 279.3 |
| 35°   | 271.5 | 269.7 | 259.3 | 252.6 | 247.4 | 237.9 | 239.7 | 243.1 | 244.0 | 251.4 | 266.1 |
| 37.5° | 264.3 | 261.4 | 250.4 | 242.2 | 235.5 | 225.5 | 226.0 | 229.5 | 230.4 | 237.9 | 252.4 |
| 40°   | 256.8 | 252.7 | 240.8 | 231.3 | 223.6 | 213.1 | 212.6 | 216.2 | 216.9 | 224.2 | 237.3 |
| 42.5° | 248.9 | 244.0 | 230.6 | 220.1 | 211.3 | 200.7 | 199.5 | 202.6 | 203.5 | 210.6 | 223.5 |
| 45°   | 240.8 | 234.9 | 220.1 | 208.6 | 199.0 | 188.1 | 187.0 | 189.4 | 190.6 | 197.3 | 209.7 |
| 47.5° | 232.3 | 225.4 | 209.3 | 196.5 | 186.6 | 175.7 | 174.3 | 176.7 | 177.6 | 184.3 | 196.0 |
| 50°   | 223.4 | 215.0 | 198.1 | 184.0 | 174.2 | 163.5 | 161.4 | 164.2 | 165.1 | 171.3 | 182.8 |
| 52.5° | 213.6 | 204.3 | 186.3 | 171.5 | 161.7 | 151.4 | 149.0 | 151.7 | 152.7 | 158.8 | 169.4 |
| 55°   | 203.1 | 193.1 | 174.3 | 159.9 | 149.3 | 139.3 | 137.2 | 138.3 | 140.6 | 146.3 | 156.2 |
| 57.5° | 191.4 | 181.5 | 161.7 | 147.1 | 136.8 | 127.2 | 125.5 | 126.5 | 128.6 | 134.2 | 143.1 |
| 60°   | 179.0 | 168.5 | 148.8 | 134.2 | 124.3 | 115.2 | 113.6 | 114.5 | 116.8 | 121.9 | 130.1 |
| 62.5° | 166.7 | 154.9 | 135.5 | 121.0 | 112.0 | 103.5 | 103.1 | 102.8 | 104.9 | 109.8 | 117.1 |
| 65°   | 151.7 | 140.4 | 121.7 | 107.9 | 99.7  | 92.1  | 90.4  | 91.2  | 93.2  | 97.7  | 105.3 |
| 67.5° | 135.8 | 125.5 | 107.5 | 94.8  | 87.5  | 80.7  | 79.3  | 79.6  | 81.7  | 85.7  | 92.2  |
| 70°   | 118.8 | 109.8 | 93.0  | 81.6  | 75.4  | 69.0  | 68.1  | 68.2  | 70.3  | 73.7  | 79.4  |
| 72.5° | 101.0 | 92.9  | 78.3  | 68.5  | 63.5  | 58.9  | 58.0  | 57.1  | 58.9  | 61.9  | 66.8  |
| 75°   | 82.9  | 75.7  | 63.7  | 55.7  | 51.7  | 47.9  | 47.1  | 46.2  | 48.0  | 50.6  | 54.4  |
| 77.5° | 64.6  | 58.9  | 49.5  | 43.4  | 40.3  | 37.4  | 36.7  | 35.7  | 37.5  | 39.4  | 42.5  |
| 80°   | 46.7  | 42.5  | 37.0  | 30.5  | 29.4  | 27.5  | 26.9  | 25.7  | 27.5  | 28.8  | 31.1  |
| 82.5° | 30.2  | 27.4  | 24.2  | 19.7  | 19.5  | 18.1  | 17.8  | 16.5  | 18.1  | 18.9  | 20.6  |
| 85°   | 15.2  | 13.9  | 13.1  | 10.0  | 10.3  | 9.4   | 9.3   | 8.0   | 9.3   | 9.6   | 10.6  |
| 87.5° | 4.3   | 4.6   | 4.1   | 2.5   | 3.1   | 3.0   | 3.0   | 2.1   | 3.0   | 3.0   | 3.4   |
| 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: P837965

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-1LO-30-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°  | 305°  | 315°  | 325°  | 335°  | 345°  | 355°  | 360°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 | 351.4 |
| 2.5°  | 351.8 | 353.2 | 353.5 | 353.4 | 354.3 | 359.2 | 357.6 | 359.2 |
| 5°    | 352.6 | 355.7 | 356.5 | 357.7 | 359.1 | 364.7 | 362.9 | 364.9 |
| 7.5°  | 353.1 | 357.7 | 359.6 | 361.8 | 364.1 | 370.4 | 368.9 | 370.9 |
| 10°   | 353.1 | 359.1 | 361.8 | 365.5 | 368.7 | 375.9 | 374.5 | 376.8 |
| 12.5° | 351.6 | 359.4 | 363.1 | 368.2 | 372.3 | 380.1 | 379.6 | 381.2 |
| 15°   | 348.6 | 358.2 | 363.2 | 369.9 | 375.0 | 383.7 | 383.4 | 385.4 |
| 17.5° | 344.5 | 356.0 | 362.2 | 370.5 | 376.9 | 386.7 | 387.3 | 388.3 |
| 20°   | 339.3 | 352.0 | 360.0 | 370.3 | 378.3 | 389.1 | 389.8 | 391.3 |
| 22.5° | 332.5 | 347.2 | 356.8 | 369.2 | 378.5 | 390.0 | 391.4 | 392.8 |
| 25°   | 324.5 | 341.4 | 352.7 | 367.2 | 377.7 | 390.0 | 391.8 | 393.0 |
| 27.5° | 315.3 | 333.8 | 347.3 | 363.9 | 375.4 | 388.7 | 390.9 | 392.3 |
| 30°   | 304.6 | 325.8 | 341.3 | 359.6 | 372.3 | 386.2 | 388.6 | 390.0 |
| 32.5° | 293.6 | 316.9 | 334.1 | 354.1 | 367.7 | 382.3 | 384.3 | 385.5 |
| 35°   | 281.7 | 306.2 | 325.4 | 347.1 | 361.9 | 375.9 | 377.5 | 378.7 |
| 37.5° | 268.6 | 294.5 | 315.4 | 339.1 | 353.7 | 367.2 | 368.6 | 370.0 |
| 40°   | 255.2 | 282.3 | 304.3 | 329.4 | 344.0 | 356.4 | 357.9 | 358.9 |
| 42.5° | 241.7 | 268.8 | 292.4 | 317.9 | 332.4 | 344.4 | 345.3 | 346.3 |
| 45°   | 228.0 | 254.8 | 279.1 | 305.2 | 319.5 | 330.8 | 331.1 | 331.9 |
| 47.5° | 214.0 | 240.3 | 264.4 | 290.7 | 304.9 | 315.1 | 315.4 | 316.1 |
| 50°   | 200.0 | 225.8 | 248.7 | 275.0 | 288.9 | 299.7 | 298.2 | 298.9 |
| 52.5° | 186.3 | 210.5 | 234.0 | 258.1 | 271.8 | 281.4 | 281.8 | 280.5 |
| 55°   | 172.7 | 195.6 | 217.2 | 240.4 | 253.5 | 260.9 | 260.7 | 261.2 |
| 57.5° | 159.0 | 180.5 | 200.3 | 221.6 | 234.3 | 241.3 | 242.8 | 241.1 |
| 60°   | 145.1 | 165.3 | 183.0 | 202.2 | 214.5 | 220.4 | 222.2 | 220.5 |
| 62.5° | 131.2 | 149.8 | 165.8 | 182.6 | 194.0 | 201.3 | 201.2 | 199.4 |
| 65°   | 117.4 | 134.2 | 148.5 | 162.8 | 172.7 | 180.0 | 179.7 | 178.1 |
| 67.5° | 104.6 | 118.5 | 131.3 | 142.9 | 151.5 | 156.5 | 158.2 | 156.2 |
| 70°   | 90.5  | 102.5 | 113.8 | 123.0 | 130.2 | 134.7 | 136.3 | 134.6 |
| 72.5° | 76.4  | 86.6  | 94.5  | 103.5 | 108.9 | 112.7 | 114.4 | 112.8 |
| 75°   | 62.5  | 70.8  | 77.3  | 84.3  | 88.1  | 91.3  | 93.3  | 91.7  |
| 77.5° | 48.9  | 55.4  | 60.6  | 65.7  | 70.1  | 70.8  | 72.5  | 71.5  |
| 80°   | 36.1  | 40.7  | 44.5  | 47.9  | 51.1  | 51.4  | 52.8  | 52.1  |
| 82.5° | 24.0  | 27.1  | 28.1  | 31.6  | 33.7  | 33.4  | 34.8  | 34.3  |
| 85°   | 12.7  | 14.6  | 16.3  | 17.4  | 18.5  | 17.5  | 18.7  | 18.2  |
| 87.5° | 4.3   | 4.5   | 3.9   | 5.6   | 6.1   | 5.2   | 6.0   | 5.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)