

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: P#

Luminaire Tested: **FLDSQ4C10D010 FEU4C109030 F4LC-SQLWW-H**

Issue Date: 12/13/2022

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P#  
 Test Lab: INNOVATION CENTER  
 Issue Date: 12/13/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: FAIL-SAFE  
 Catalog Number: FLDSQ4C10D010 FEU4C109030 F4LC-SQLWW-H  
 Description: 4 INCH 1000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH H FINISH  
 Light Source: -  
 Ballast/Driver: -

**Summary**

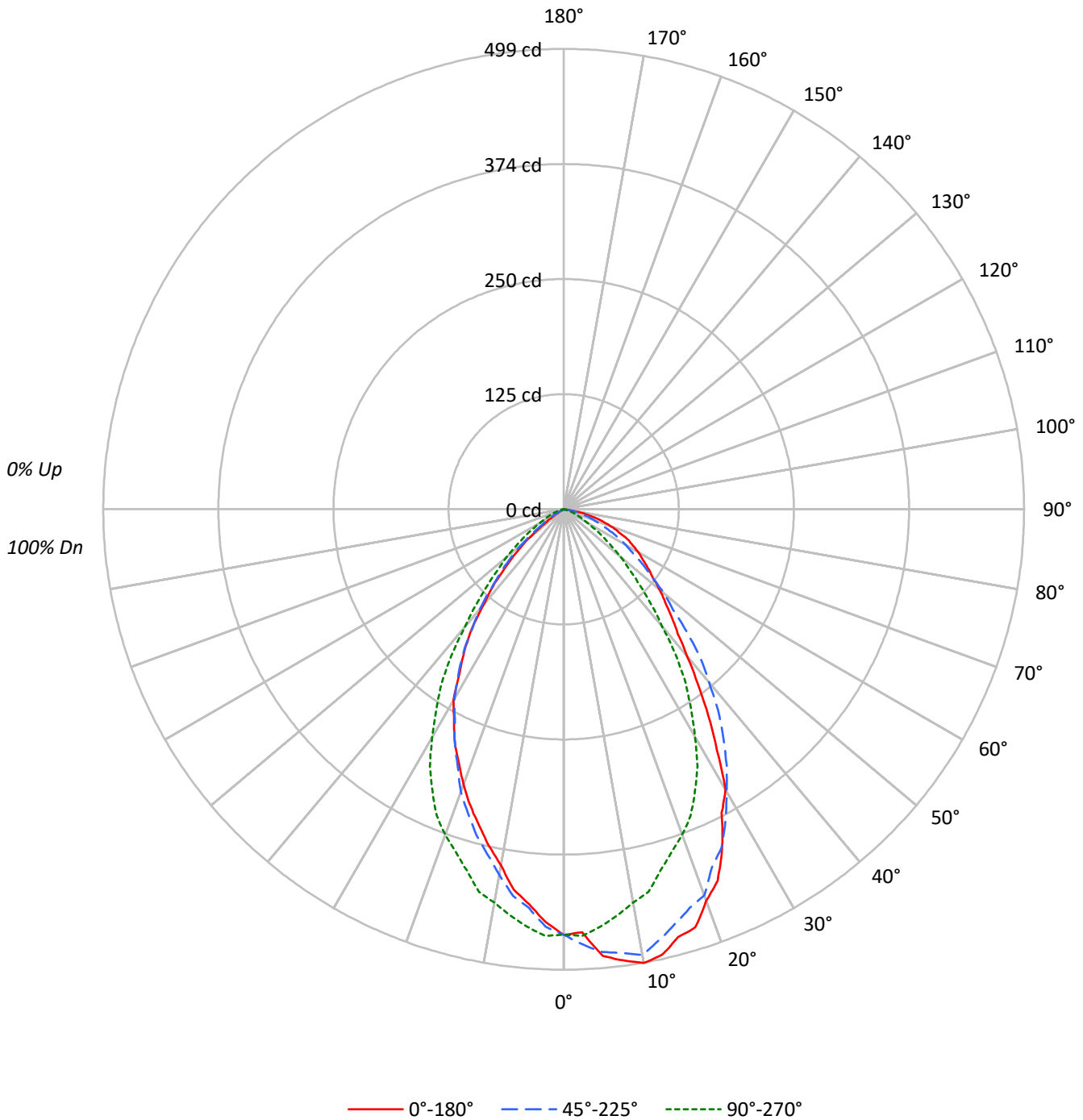
Lumens per Lamp: N/A  
 Luminaire Lumens: 661.0 lumens  
 Efficiency: N/A  
 Efficacy: 67.4 lumens/watt  
 Spacing Criteria (0/90/45): 1.01 / 1 / 1.06  
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
 CIE Type: Direct

Input Watts (W): 9.8  
 Input Voltage (V):  
 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

| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | GONIO 1 IN0055        | 4/22/2021        | 10/22/2021           |
| Power Meter                    | XITRON 2801 IN0197    | 12/1/2020        | 12/1/2021            |
| AC Power Source                | CHROMA 61505 IN0196   | 12/1/2020        | 12/1/2021            |
| DC Power Supply                | AGILENT E3634A IN0198 | 11/30/2020       | 11/30/2021           |
| Room Thermometer               | ONSET IN0143          | 12/1/2020        | 12/1/2021            |

TEST NUMBER: P#  
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### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: FLDSQ4C10D010 FEU4C109030 F4LC-SQLWW-H

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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |
| 2   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 84  | 82  | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 72  |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |
| 5   | 85  | 75  | 67  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 61  | 70  | 65  | 60  | 68  | 64  | 60  | 58  |
| 6   | 80  | 69  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  | 53  |
| 7   | 75  | 63  | 56  | 51  | 73  | 63  | 56  | 51  | 61  | 55  | 50  | 60  | 54  | 50  | 59  | 54  | 50  | 48  |
| 8   | 70  | 59  | 52  | 47  | 69  | 58  | 51  | 46  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 44  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 43  | 52  | 46  | 42  | 51  | 46  | 42  | 41  |
| 10  | 62  | 51  | 44  | 40  | 61  | 51  | 44  | 40  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 38  |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 44491 | 44491 | 44491 |
| 5°  | 47073 | 43973 | 41610 |
| 10° | 48920 | 42414 | 38358 |
| 15° | 47938 | 40486 | 35402 |
| 20° | 46381 | 38547 | 32591 |
| 25° | 43267 | 35846 | 29725 |
| 30° | 39062 | 31731 | 26617 |
| 35° | 32169 | 27163 | 22074 |
| 40° | 26262 | 20959 | 16992 |
| 45° | 22556 | 15924 | 12226 |
| 50° | 20415 | 12114 | 7716  |
| 55° | 18791 | 8748  | 2793  |
| 60° | 18043 | 5982  | 425   |
| 65° | 17420 | 4041  | 137   |
| 70° | 15601 | 2793  | 169   |
| 75° | 12787 | 1454  | 0     |
| 80° | 8001  | 611   | 0     |
| 85° | 0     | 0     | 0     |

TEST NUMBER: P#  
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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 43.2   | 6.5       |
| 10°-20°   | 116.4  | 17.6      |
| 20°-30°   | 155.4  | 23.5      |
| 30°-40°   | 147.6  | 22.3      |
| 40°-50°   | 102.0  | 15.4      |
| 50°-60°   | 56.4   | 8.5       |
| 60°-70°   | 28.0   | 4.2       |
| 70°-80°   | 11.0   | 1.7       |
| 80°-90°   | 1.1    | 0.2       |
| 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°    | 315.0  | 47.7      |
| 0°-40°    | 462.6  | 70.0      |
| 0°-60°    | 620.9  | 93.9      |
| 0°-90°    | 661.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 661.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 461 | 461 | 461 | 461  | 461  |      |
| 5°  | 486 | 482 | 454 | 434  | 430  | 47   |
| 15° | 480 | 466 | 405 | 366  | 354  | 136  |
| 25° | 406 | 405 | 337 | 279  | 279  | 185  |
| 35° | 273 | 302 | 231 | 190  | 187  | 171  |
| 45° | 165 | 190 | 117 | 96   | 90   | 129  |
| 55° | 112 | 105 | 52  | 26   | 17   | 101  |
| 65° | 76  | 55  | 18  | 1    | 1    | 74   |
| 75° | 34  | 21  | 4   | 0    | 0    | 37   |
| 85° | 0   | 1   | 0   | 0    | 0    | 3    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P#  
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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 |
| 2.5°  | 458.9 | 471.6 | 472.7 | 471.6 | 473.3 | 472.7 | 475.5 | 472.7 | 476.1 | 471.1 | 472.2 |
| 5°    | 486.0 | 481.0 | 491.5 | 486.0 | 486.0 | 485.5 | 483.8 | 483.2 | 485.5 | 478.3 | 481.6 |
| 7.5°  | 493.2 | 500.4 | 509.8 | 498.2 | 498.7 | 498.7 | 495.4 | 494.3 | 494.3 | 481.0 | 484.9 |
| 10°   | 499.3 | 494.9 | 499.8 | 495.4 | 499.3 | 498.7 | 500.9 | 493.8 | 498.7 | 491.0 | 490.4 |
| 12.5° | 494.3 | 492.6 | 499.3 | 492.1 | 489.9 | 490.4 | 487.7 | 486.0 | 487.7 | 478.8 | 478.3 |
| 15°   | 479.9 | 481.6 | 491.5 | 483.8 | 482.7 | 481.6 | 478.3 | 472.7 | 477.2 | 465.0 | 465.6 |
| 17.5° | 475.0 | 472.2 | 473.9 | 467.2 | 468.9 | 467.8 | 467.2 | 462.3 | 461.1 | 453.4 | 453.4 |
| 20°   | 451.7 | 457.8 | 457.8 | 453.4 | 453.4 | 452.9 | 445.7 | 450.1 | 445.1 | 442.9 | 445.1 |
| 22.5° | 435.7 | 436.3 | 436.3 | 432.4 | 432.9 | 430.7 | 426.9 | 424.1 | 426.9 | 424.1 | 419.7 |
| 25°   | 406.4 | 407.5 | 414.1 | 407.0 | 405.8 | 408.1 | 404.7 | 403.1 | 402.5 | 395.9 | 404.7 |
| 27.5° | 371.0 | 382.1 | 381.5 | 378.7 | 382.1 | 377.6 | 376.0 | 376.5 | 378.2 | 377.6 | 379.9 |
| 30°   | 350.6 | 352.2 | 353.9 | 351.7 | 352.2 | 350.6 | 350.6 | 351.1 | 355.5 | 353.9 | 353.3 |
| 32.5° | 309.1 | 314.6 | 319.0 | 319.0 | 319.6 | 321.3 | 320.7 | 332.3 | 335.1 | 329.6 | 328.4 |
| 35°   | 273.1 | 277.0 | 280.9 | 281.4 | 288.6 | 289.2 | 289.7 | 293.0 | 300.8 | 302.5 | 301.9 |
| 37.5° | 238.9 | 242.7 | 243.8 | 248.8 | 252.7 | 256.5 | 261.0 | 265.4 | 272.0 | 277.6 | 274.8 |
| 40°   | 208.5 | 210.1 | 212.9 | 215.1 | 222.8 | 222.8 | 225.0 | 233.9 | 241.1 | 245.5 | 244.9 |
| 42.5° | 183.0 | 183.6 | 185.8 | 189.7 | 196.8 | 195.2 | 196.8 | 202.9 | 213.4 | 214.0 | 220.1 |
| 45°   | 165.3 | 164.8 | 166.4 | 167.0 | 171.4 | 173.6 | 174.7 | 179.1 | 188.0 | 189.1 | 189.7 |
| 47.5° | 149.3 | 148.7 | 151.5 | 152.6 | 154.3 | 156.5 | 156.5 | 157.0 | 160.3 | 163.1 | 160.9 |
| 50°   | 136.0 | 136.0 | 136.0 | 137.1 | 139.9 | 139.3 | 139.9 | 142.1 | 143.8 | 142.6 | 142.1 |
| 52.5° | 121.6 | 123.8 | 125.5 | 126.1 | 126.6 | 126.6 | 127.2 | 126.1 | 125.5 | 123.8 | 120.5 |
| 55°   | 111.7 | 113.9 | 113.9 | 113.9 | 113.9 | 116.1 | 113.4 | 113.9 | 113.9 | 109.5 | 105.1 |
| 57.5° | 101.7 | 104.0 | 105.6 | 103.4 | 105.6 | 103.4 | 102.3 | 101.7 | 100.6 | 96.2  | 89.6  |
| 60°   | 93.5  | 94.6  | 94.0  | 93.5  | 94.6  | 92.9  | 91.8  | 89.6  | 88.5  | 82.4  | 78.0  |
| 62.5° | 84.1  | 84.6  | 85.2  | 84.1  | 82.9  | 82.4  | 80.2  | 76.9  | 74.6  | 69.7  | 65.8  |
| 65°   | 76.3  | 74.6  | 74.1  | 73.5  | 72.4  | 70.8  | 69.1  | 65.2  | 63.6  | 59.2  | 55.3  |
| 67.5° | 64.7  | 64.1  | 65.2  | 63.6  | 60.8  | 60.8  | 59.2  | 55.8  | 52.0  | 49.2  | 45.3  |
| 70°   | 55.3  | 54.7  | 53.6  | 52.0  | 51.4  | 49.2  | 49.2  | 45.3  | 44.2  | 39.3  | 35.9  |
| 72.5° | 45.3  | 45.3  | 43.7  | 42.0  | 40.4  | 39.3  | 38.7  | 35.9  | 34.3  | 31.5  | 28.7  |
| 75°   | 34.3  | 34.3  | 33.7  | 32.1  | 31.0  | 29.9  | 29.3  | 27.1  | 25.4  | 22.7  | 21.0  |
| 77.5° | 24.3  | 24.3  | 22.1  | 21.0  | 21.6  | 20.4  | 19.3  | 18.8  | 18.2  | 16.6  | 14.4  |
| 80°   | 14.4  | 13.8  | 12.2  | 12.7  | 12.2  | 12.2  | 11.6  | 11.0  | 9.9   | 8.8   | 7.7   |
| 82.5° | 3.9   | 4.4   | 4.4   | 4.4   | 5.0   | 3.9   | 3.9   | 3.9   | 4.4   | 4.4   | 2.8   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   | 0.6   | 0.6   |
| 87.5° | 0.6   | 1.1   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 1.7   | 1.7   | 1.7   | 1.1   |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 |
| 2.5°  | 466.7 | 466.1 | 466.7 | 462.8 | 471.6 | 465.0 | 463.9 | 462.8 | 466.7 | 462.8 | 457.3 |
| 5°    | 476.6 | 471.1 | 469.4 | 467.8 | 472.7 | 465.0 | 463.4 | 463.9 | 461.1 | 454.0 | 454.5 |
| 7.5°  | 479.9 | 475.0 | 470.0 | 459.5 | 463.9 | 462.3 | 457.8 | 454.5 | 450.1 | 444.0 | 442.9 |
| 10°   | 481.0 | 475.5 | 468.3 | 465.0 | 458.4 | 456.2 | 454.5 | 449.0 | 443.5 | 432.9 | 430.2 |
| 12.5° | 477.7 | 471.1 | 462.3 | 459.5 | 454.5 | 447.3 | 443.5 | 437.9 | 432.9 | 424.6 | 418.6 |
| 15°   | 463.4 | 457.8 | 455.1 | 445.7 | 443.5 | 439.0 | 431.3 | 423.5 | 416.4 | 405.3 | 402.0 |
| 17.5° | 446.8 | 444.6 | 441.8 | 434.6 | 434.1 | 429.6 | 422.4 | 415.8 | 406.4 | 389.3 | 383.7 |
| 20°   | 429.6 | 429.6 | 420.8 | 418.0 | 423.5 | 414.7 | 409.2 | 403.1 | 383.7 | 375.4 | 365.5 |
| 22.5° | 416.9 | 410.8 | 405.8 | 401.4 | 402.0 | 396.4 | 388.7 | 376.5 | 369.3 | 359.4 | 347.8 |
| 25°   | 392.0 | 394.2 | 383.2 | 381.5 | 383.2 | 370.4 | 366.6 | 356.6 | 346.1 | 336.7 | 327.9 |
| 27.5° | 376.5 | 370.4 | 363.3 | 357.2 | 357.2 | 352.2 | 341.2 | 339.0 | 322.9 | 314.1 | 303.0 |
| 30°   | 353.3 | 348.9 | 342.8 | 334.0 | 332.9 | 329.0 | 320.1 | 314.6 | 298.0 | 284.8 | 278.7 |
| 32.5° | 324.0 | 322.4 | 317.4 | 307.4 | 304.1 | 299.7 | 288.6 | 279.2 | 271.5 | 256.5 | 249.4 |
| 35°   | 303.0 | 296.9 | 286.4 | 278.1 | 275.4 | 267.6 | 258.8 | 252.1 | 243.8 | 230.6 | 221.2 |
| 37.5° | 271.5 | 265.4 | 255.4 | 245.5 | 245.5 | 237.8 | 225.6 | 219.0 | 207.4 | 199.6 | 191.9 |
| 40°   | 243.8 | 236.1 | 226.2 | 214.5 | 212.9 | 201.8 | 196.8 | 185.8 | 178.6 | 166.4 | 165.3 |
| 42.5° | 212.9 | 205.7 | 196.8 | 188.0 | 181.4 | 175.8 | 163.1 | 154.8 | 147.1 | 141.0 | 139.3 |
| 45°   | 184.7 | 175.3 | 167.5 | 156.5 | 149.8 | 143.2 | 134.9 | 129.4 | 123.3 | 116.7 | 112.8 |
| 47.5° | 160.3 | 152.6 | 141.5 | 131.6 | 125.0 | 121.6 | 112.2 | 106.2 | 101.2 | 96.8  | 94.0  |
| 50°   | 135.5 | 126.1 | 120.0 | 108.9 | 107.8 | 100.1 | 92.3  | 87.4  | 84.6  | 80.7  | 76.9  |
| 52.5° | 116.7 | 107.8 | 99.5  | 91.2  | 86.8  | 84.1  | 76.9  | 71.9  | 68.0  | 65.2  | 63.0  |
| 55°   | 98.4  | 90.7  | 84.1  | 75.8  | 73.0  | 69.1  | 60.8  | 59.7  | 55.8  | 52.0  | 49.2  |
| 57.5° | 84.6  | 77.4  | 69.7  | 64.1  | 59.2  | 56.4  | 49.8  | 45.3  | 43.1  | 39.8  | 37.0  |
| 60°   | 71.9  | 64.1  | 58.1  | 51.4  | 49.2  | 45.3  | 40.4  | 36.5  | 33.7  | 31.0  | 28.2  |
| 62.5° | 60.3  | 53.6  | 47.0  | 41.5  | 38.1  | 35.9  | 32.1  | 28.7  | 26.0  | 23.8  | 21.6  |
| 65°   | 49.8  | 43.7  | 38.1  | 32.6  | 31.0  | 28.2  | 25.4  | 22.7  | 20.4  | 17.7  | 15.5  |
| 67.5° | 40.9  | 35.4  | 29.9  | 26.0  | 24.3  | 23.2  | 19.9  | 17.1  | 15.5  | 13.8  | 11.6  |
| 70°   | 32.1  | 28.2  | 23.8  | 20.4  | 18.8  | 17.1  | 14.9  | 13.3  | 11.0  | 9.9   | 8.3   |
| 72.5° | 24.9  | 21.6  | 17.7  | 14.9  | 13.8  | 12.7  | 10.5  | 8.8   | 7.7   | 6.6   | 5.5   |
| 75°   | 17.7  | 14.9  | 12.7  | 9.9   | 9.4   | 8.8   | 7.2   | 6.1   | 5.0   | 3.9   | 3.3   |
| 77.5° | 12.2  | 9.9   | 7.7   | 6.6   | 6.1   | 5.0   | 4.4   | 3.3   | 2.8   | 2.2   | 1.7   |
| 80°   | 6.6   | 5.0   | 3.9   | 3.3   | 2.8   | 2.2   | 2.2   | 1.7   | 1.1   | 1.1   | 0.6   |
| 82.5° | 2.2   | 1.7   | 1.1   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.0   | 0.6   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.0   | 0.0   | 0.0   |
| 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: P#  
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**CANDELA DISTRIBUTION (continued):**

|       | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 461.1 | 461.1 | 461.1 | 461.1  | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 |
| 2.5°  | 460.6 | 454.5 | 456.2 | 456.2  | 455.1 | 455.1 | 454.0 | 452.3 | 452.9 | 449.5 | 442.3 |
| 5°    | 455.6 | 447.9 | 446.8 | 447.9  | 443.5 | 442.3 | 440.1 | 443.5 | 433.5 | 437.4 | 432.9 |
| 7.5°  | 441.2 | 434.1 | 432.4 | 436.3  | 430.7 | 427.4 | 426.9 | 431.3 | 422.4 | 418.0 | 413.0 |
| 10°   | 425.2 | 422.4 | 417.5 | 414.7  | 413.0 | 413.6 | 409.2 | 403.6 | 402.0 | 400.9 | 396.4 |
| 12.5° | 410.8 | 404.7 | 400.3 | 397.0  | 395.9 | 395.9 | 388.7 | 387.6 | 382.6 | 381.5 | 374.9 |
| 15°   | 393.7 | 386.5 | 383.7 | 379.3  | 375.4 | 377.6 | 369.3 | 367.1 | 365.5 | 358.3 | 359.4 |
| 17.5° | 378.7 | 371.0 | 364.4 | 361.6  | 358.3 | 355.0 | 347.2 | 348.9 | 345.0 | 345.0 | 335.1 |
| 20°   | 359.4 | 351.1 | 346.1 | 340.6  | 340.6 | 336.2 | 330.7 | 331.2 | 326.2 | 321.3 | 312.4 |
| 22.5° | 339.0 | 330.1 | 324.0 | 321.8  | 316.3 | 315.2 | 308.5 | 306.9 | 300.2 | 300.8 | 293.0 |
| 25°   | 317.4 | 308.5 | 300.2 | 300.8  | 295.8 | 293.6 | 289.7 | 282.0 | 279.2 | 275.9 | 273.7 |
| 27.5° | 291.9 | 285.9 | 278.7 | 278.1  | 268.7 | 269.3 | 264.3 | 262.1 | 255.4 | 257.1 | 252.1 |
| 30°   | 268.7 | 259.9 | 253.2 | 251.6  | 247.7 | 246.6 | 238.9 | 235.5 | 236.7 | 232.2 | 229.5 |
| 32.5° | 244.9 | 231.7 | 228.9 | 225.6  | 223.4 | 220.6 | 215.1 | 217.3 | 212.3 | 213.4 | 209.0 |
| 35°   | 213.4 | 207.9 | 200.7 | 200.7  | 198.5 | 196.3 | 192.4 | 194.6 | 189.7 | 187.4 | 183.0 |
| 37.5° | 186.9 | 181.9 | 174.7 | 176.9  | 173.1 | 169.7 | 166.4 | 167.0 | 162.6 | 162.0 | 157.6 |
| 40°   | 158.1 | 155.4 | 150.4 | 150.4  | 147.6 | 147.6 | 146.0 | 144.3 | 141.5 | 138.2 | 133.2 |
| 42.5° | 131.0 | 128.8 | 126.6 | 127.2  | 123.3 | 126.6 | 122.2 | 125.0 | 116.1 | 115.6 | 112.2 |
| 45°   | 111.1 | 106.2 | 106.7 | 104.5  | 102.3 | 103.4 | 99.5  | 100.6 | 95.7  | 94.6  | 91.2  |
| 47.5° | 90.1  | 88.5  | 85.2  | 84.1   | 84.1  | 82.4  | 80.7  | 80.2  | 78.0  | 75.2  | 70.8  |
| 50°   | 74.1  | 68.0  | 66.9  | 65.2   | 64.1  | 64.1  | 61.9  | 58.6  | 59.2  | 56.4  | 52.0  |
| 52.5° | 58.1  | 53.1  | 50.9  | 50.3   | 48.1  | 47.0  | 44.2  | 42.0  | 40.4  | 39.3  | 36.5  |
| 55°   | 44.8  | 40.4  | 37.6  | 37.6   | 34.3  | 34.3  | 30.4  | 28.7  | 26.5  | 24.3  | 22.7  |
| 57.5° | 33.7  | 31.5  | 28.7  | 26.5   | 25.4  | 22.7  | 20.4  | 17.7  | 16.0  | 12.7  | 10.5  |
| 60°   | 25.4  | 23.2  | 20.4  | 18.8   | 17.7  | 14.9  | 12.2  | 9.9   | 6.1   | 5.0   | 4.4   |
| 62.5° | 18.8  | 16.6  | 13.8  | 12.7   | 11.6  | 9.4   | 6.6   | 3.3   | 1.7   | 1.7   | 1.7   |
| 65°   | 13.8  | 11.0  | 8.8   | 7.7    | 6.6   | 5.0   | 2.2   | 1.1   | 0.6   | 0.6   | 0.6   |
| 67.5° | 9.4   | 7.2   | 5.0   | 4.4    | 3.3   | 1.7   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 70°   | 6.1   | 4.4   | 2.2   | 1.7    | 1.1   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 72.5° | 3.9   | 2.2   | 1.1   | 0.6    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 2.2   | 1.1   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 1.1   | 0.6   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.6   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   | 0.6   | 0.6   |
| 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: P#  
 CATALOG NUMBER: FLDSQ4C10D010 FEU4C109030 F4LC-SQLWW-H

**CANDELA DISTRIBUTION (continued):**

|       | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°    | 461.1 | 461.1 | 461.1  | 461.1 | 461.1 | 461.1 | 461.1 | 461.1 |
| 2.5°  | 450.1 | 446.2 | 448.4  | 443.5 | 445.7 | 449.5 | 446.8 | 447.9 |
| 5°    | 434.6 | 432.4 | 429.6  | 422.4 | 428.0 | 432.4 | 430.2 | 429.6 |
| 7.5°  | 418.0 | 410.3 | 414.1  | 411.9 | 410.8 | 415.2 | 410.3 | 415.8 |
| 10°   | 400.9 | 395.3 | 394.8  | 390.9 | 390.9 | 394.2 | 394.8 | 391.5 |
| 12.5° | 375.4 | 372.7 | 372.7  | 372.1 | 371.6 | 374.9 | 375.4 | 373.8 |
| 15°   | 357.2 | 356.1 | 353.3  | 352.8 | 349.5 | 354.4 | 355.0 | 354.4 |
| 17.5° | 335.1 | 335.6 | 332.9  | 332.9 | 335.1 | 336.7 | 332.3 | 336.7 |
| 20°   | 320.1 | 317.4 | 316.3  | 311.3 | 314.1 | 316.8 | 316.8 | 317.4 |
| 22.5° | 298.6 | 294.2 | 295.8  | 293.0 | 291.4 | 295.3 | 295.3 | 296.9 |
| 25°   | 274.2 | 274.2 | 275.4  | 273.7 | 274.8 | 277.0 | 275.4 | 279.2 |
| 27.5° | 251.0 | 253.2 | 253.2  | 251.0 | 252.1 | 258.8 | 261.5 | 257.1 |
| 30°   | 229.5 | 230.0 | 231.7  | 230.6 | 233.9 | 236.1 | 235.5 | 238.9 |
| 32.5° | 205.1 | 207.9 | 209.0  | 207.4 | 208.5 | 213.4 | 210.7 | 210.1 |
| 35°   | 186.3 | 181.4 | 180.8  | 181.4 | 183.6 | 184.7 | 183.6 | 187.4 |
| 37.5° | 159.2 | 157.6 | 155.4  | 155.9 | 157.6 | 159.8 | 160.9 | 163.7 |
| 40°   | 133.2 | 131.0 | 131.0  | 130.5 | 128.8 | 134.9 | 134.9 | 134.9 |
| 42.5° | 110.6 | 110.0 | 107.3  | 107.3 | 109.5 | 111.1 | 110.0 | 113.9 |
| 45°   | 90.7  | 88.5  | 86.8   | 86.8  | 88.5  | 88.5  | 90.1  | 89.6  |
| 47.5° | 71.3  | 69.1  | 69.7   | 68.0  | 69.7  | 71.9  | 69.1  | 69.7  |
| 50°   | 53.6  | 53.6  | 52.5   | 53.6  | 53.1  | 53.6  | 52.5  | 51.4  |
| 52.5° | 36.5  | 41.5  | 42.0   | 39.8  | 34.8  | 30.4  | 27.6  | 29.9  |
| 55°   | 21.0  | 18.8  | 18.8   | 18.2  | 17.1  | 16.6  | 14.9  | 16.6  |
| 57.5° | 10.5  | 9.4   | 9.4    | 9.4   | 8.8   | 8.3   | 7.2   | 7.2   |
| 60°   | 4.4   | 3.9   | 3.9    | 3.3   | 2.8   | 2.2   | 1.7   | 2.2   |
| 62.5° | 1.7   | 1.1   | 1.1    | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   |
| 65°   | 0.6   | 0.6   | 0.6    | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 67.5° | 0.6   | 0.6   | 0.6    | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 70°   | 0.6   | 0.6   | 0.6    | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 72.5° | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)