

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P855577

Luminaire Tested: **HLCE4079FS1EWH-5000K**

Issue Date: 7/16/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P855577
 Test Lab:
 Issue Date: 7/16/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: HLCE4079FS1EWH-5000K
 Description: 4IN 1000LM, 90CRI, DIMMING TO 10%, DAMP LOCATION
 Light Source: SELECTABLE CCT 90CRI / 5000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: 1049.6 (1 lamp)
 Luminaire Lumens: 1070.0 lumens
 Efficiency: 101.9%
 Efficacy: 83.6 lumens/watt
 Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
 Luminous Opening: Circular (Dia: 0.33' x H: 0')
 CIE Type: Direct

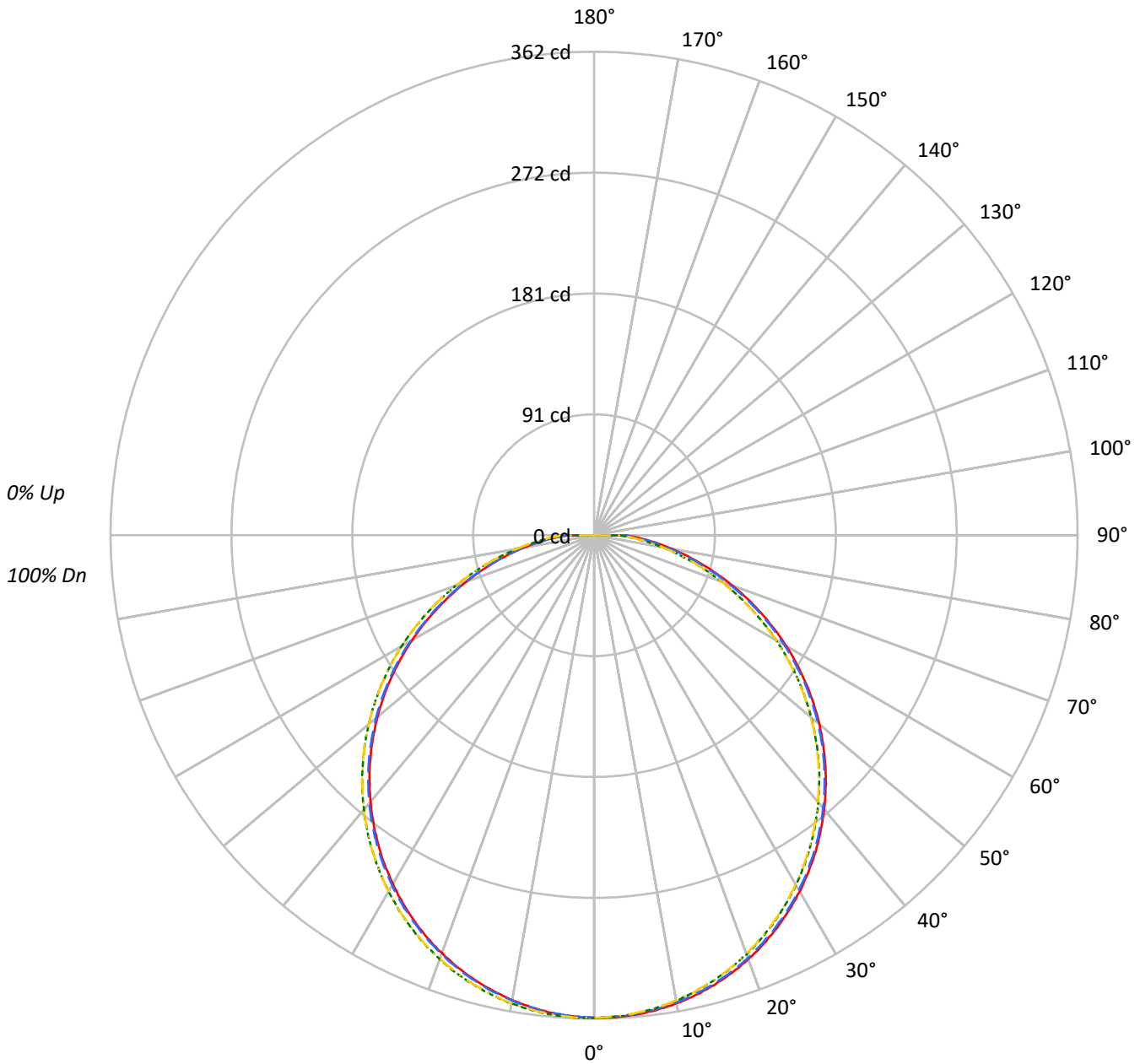
Input Watts (W): 12.8
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



| Meas | | Calibration Due Date | |
|------------------|-----------------------|----------------------|------------|
| Instrument | Identificatio | | |
| Photometer | GONIO 1 11111111 | 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: P855577
CATALOG NUMBER: HLCE4079FS1EWH-5000K

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°

TEST NUMBER: P855577
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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 121 | 121 | 121 | 121 | 119 | 119 | 119 | 119 | 113 | 113 | 113 | 108 | 108 | 108 | 104 | 104 | 104 | 102 | | | | |
| 1 | 110 | 105 | 100 | 96 | 107 | 102 | 98 | 94 | 98 | 94 | 91 | 94 | 91 | 88 | 90 | 88 | 86 | 83 | | | | |
| 2 | 100 | 91 | 83 | 77 | 97 | 89 | 82 | 76 | 85 | 79 | 75 | 82 | 77 | 73 | 79 | 75 | 71 | 69 | | | | |
| 3 | 91 | 79 | 71 | 64 | 88 | 78 | 70 | 63 | 75 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 | | | | |
| 4 | 83 | 70 | 61 | 54 | 81 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 62 | 56 | 51 | 49 | | | | |
| 5 | 76 | 63 | 53 | 46 | 74 | 62 | 53 | 46 | 59 | 52 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | |
| 6 | 70 | 56 | 47 | 40 | 68 | 55 | 47 | 40 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 37 | | | | |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 | | | | |
| 8 | 61 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | |
| 9 | 57 | 43 | 34 | 29 | 55 | 42 | 34 | 28 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 | | | | |
| 10 | 53 | 39 | 31 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 25 | 24 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|-------|-------|-------|
| 0° | 45470 | 45470 | 45470 | 45470 |
| 5° | 45517 | 45391 | 45353 | 45504 |
| 10° | 45468 | 45187 | 45174 | 45494 |
| 15° | 45419 | 45002 | 44898 | 45380 |
| 20° | 45214 | 44745 | 44584 | 45240 |
| 25° | 45032 | 44380 | 44227 | 45018 |
| 30° | 44758 | 43915 | 43799 | 44744 |
| 35° | 44446 | 43448 | 43309 | 44400 |
| 40° | 44012 | 42878 | 42796 | 44045 |
| 45° | 43640 | 42270 | 42145 | 43605 |
| 50° | 43132 | 41546 | 41429 | 43132 |
| 55° | 42500 | 40679 | 40635 | 42588 |
| 60° | 41858 | 39643 | 39618 | 41933 |
| 65° | 41124 | 38504 | 38534 | 41124 |
| 70° | 40512 | 37348 | 37495 | 40439 |
| 75° | 40602 | 36614 | 37052 | 40358 |
| 80° | 43122 | 37614 | 38556 | 42397 |
| 85° | 56892 | 47218 | 49528 | 54582 |

TEST NUMBER: P855577
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ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 34.2 | 3.2 | 3.3 |
| 10°-20° | 97.8 | 9.1 | 9.3 |
| 20°-30° | 148.1 | 13.8 | 14.1 |
| 30°-40° | 178.7 | 16.7 | 17.0 |
| 40°-50° | 185.9 | 17.4 | 17.7 |
| 50°-60° | 169.4 | 15.8 | 16.1 |
| 60°-70° | 132.3 | 12.4 | 12.6 |
| 70°-80° | 84.3 | 7.9 | 8.0 |
| 80°-90° | 39.3 | 3.7 | 3.7 |
| 90°-100° | 0.0 | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 | 0.0 |
| 0°-30° | 280.1 | 26.2 | 26.7 |
| 0°-40° | 458.8 | 42.9 | 43.7 |
| 0°-60° | 814.0 | 76.1 | 77.6 |
| 0°-90° | 1070.0 | 100.0 | 101.9 |
| 90°-120° | 0.0 | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 | 0.0 |
| 0°-180° | 1070.0 | 100.0 | 101.9 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|-----|-----|------|------|------|------|
| 0° | 361 | 361 | 361 | 361 | 361 | |
| 5° | 360 | 359 | 359 | 360 | 360 | 34 |
| 15° | 349 | 345 | 345 | 348 | 349 | 98 |
| 25° | 324 | 320 | 318 | 324 | 324 | 149 |
| 35° | 289 | 283 | 282 | 289 | 289 | 181 |
| 45° | 245 | 238 | 237 | 245 | 245 | 189 |
| 55° | 194 | 185 | 185 | 194 | 194 | 173 |
| 65° | 138 | 129 | 129 | 138 | 138 | 137 |
| 75° | 84 | 75 | 76 | 83 | 84 | 89 |
| 85° | 39 | 33 | 34 | 38 | 39 | 43 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 0° | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 |
| 0.5° | 361.5 | 361.3 | 361.0 | 360.7 | 361.5 | 361.5 | 361.3 | 361.0 | 361.1 | 361.3 | 361.0 |
| 1° | 361.1 | 361.3 | 360.9 | 361.0 | 361.6 | 360.7 | 361.1 | 361.1 | 361.1 | 360.9 | 360.6 |
| 1.5° | 361.4 | 361.3 | 361.0 | 360.7 | 361.3 | 361.0 | 361.0 | 360.8 | 360.9 | 360.7 | 360.9 |
| 2° | 361.3 | 361.0 | 360.9 | 360.7 | 361.1 | 360.8 | 360.7 | 360.9 | 360.7 | 360.6 | 360.4 |
| 2.5° | 361.3 | 361.0 | 360.5 | 360.5 | 360.9 | 360.5 | 360.7 | 360.3 | 360.5 | 360.5 | 360.6 |
| 3° | 361.0 | 361.0 | 360.7 | 360.2 | 360.7 | 360.1 | 360.3 | 360.4 | 360.3 | 360.1 | 360.0 |
| 3.5° | 360.9 | 360.8 | 360.5 | 360.3 | 360.5 | 360.1 | 360.2 | 359.8 | 360.1 | 359.9 | 360.1 |
| 4° | 360.7 | 360.7 | 360.3 | 359.9 | 360.1 | 359.6 | 359.7 | 359.6 | 359.6 | 359.5 | 359.5 |
| 4.5° | 360.4 | 360.4 | 360.0 | 359.7 | 359.7 | 359.5 | 359.7 | 359.3 | 359.6 | 359.3 | 359.4 |
| 5° | 360.3 | 360.1 | 359.7 | 359.3 | 359.3 | 358.8 | 359.0 | 358.8 | 359.0 | 358.6 | 359.0 |
| 5.5° | 360.0 | 360.1 | 359.5 | 359.2 | 359.0 | 358.5 | 358.7 | 358.4 | 358.8 | 358.4 | 358.4 |
| 6° | 359.7 | 359.5 | 359.1 | 358.5 | 358.5 | 358.1 | 358.4 | 357.8 | 357.9 | 357.8 | 358.3 |
| 6.5° | 359.2 | 359.3 | 358.7 | 358.2 | 357.8 | 357.6 | 357.8 | 357.5 | 357.9 | 357.5 | 357.6 |
| 7° | 359.0 | 358.8 | 358.3 | 358.0 | 357.7 | 357.3 | 357.2 | 356.9 | 357.0 | 357.1 | 357.4 |
| 7.5° | 358.6 | 358.4 | 357.9 | 357.2 | 357.0 | 356.5 | 357.0 | 356.4 | 356.8 | 356.2 | 356.7 |
| 8° | 357.9 | 358.0 | 357.5 | 356.9 | 356.3 | 356.1 | 356.1 | 355.6 | 355.9 | 355.8 | 356.4 |
| 8.5° | 357.7 | 357.6 | 356.9 | 356.3 | 355.8 | 355.5 | 355.8 | 355.3 | 355.5 | 355.2 | 355.5 |
| 9° | 357.0 | 357.2 | 356.4 | 355.9 | 355.3 | 354.9 | 355.0 | 354.5 | 354.8 | 354.7 | 355.2 |
| 9.5° | 356.7 | 356.7 | 355.9 | 354.9 | 354.6 | 354.0 | 354.4 | 353.8 | 353.9 | 353.6 | 354.5 |
| 10° | 355.8 | 355.9 | 355.2 | 354.7 | 353.6 | 353.8 | 353.7 | 353.1 | 353.5 | 353.3 | 353.7 |
| 10.5° | 355.5 | 355.5 | 354.6 | 353.8 | 353.4 | 352.7 | 353.0 | 352.4 | 352.6 | 352.4 | 353.1 |
| 11° | 354.7 | 354.7 | 353.9 | 353.2 | 352.2 | 352.2 | 352.3 | 351.7 | 352.0 | 351.7 | 352.3 |
| 11.5° | 354.0 | 354.1 | 353.3 | 352.4 | 351.6 | 351.3 | 351.3 | 350.6 | 351.0 | 350.8 | 351.6 |
| 12° | 353.4 | 353.2 | 352.3 | 351.8 | 350.7 | 350.4 | 350.7 | 350.1 | 350.3 | 350.3 | 350.6 |
| 12.5° | 352.5 | 352.8 | 352.0 | 350.9 | 350.1 | 349.8 | 349.9 | 348.9 | 349.4 | 349.0 | 350.1 |
| 13° | 352.0 | 352.0 | 350.8 | 350.0 | 348.8 | 348.8 | 348.8 | 348.3 | 348.4 | 348.4 | 349.1 |
| 13.5° | 350.8 | 351.1 | 350.3 | 349.3 | 348.2 | 347.8 | 347.8 | 347.0 | 347.7 | 347.2 | 348.3 |
| 14° | 350.3 | 350.3 | 349.1 | 348.3 | 347.1 | 346.7 | 347.2 | 346.4 | 346.6 | 346.5 | 347.1 |
| 14.5° | 349.2 | 349.3 | 348.5 | 347.6 | 346.3 | 346.2 | 346.0 | 345.4 | 345.7 | 345.3 | 346.4 |
| 15° | 348.6 | 348.7 | 347.4 | 346.5 | 345.4 | 344.8 | 345.1 | 344.1 | 344.6 | 344.5 | 345.2 |
| 15.5° | 347.2 | 347.5 | 346.4 | 345.6 | 344.3 | 343.9 | 343.9 | 343.2 | 343.7 | 343.3 | 344.4 |
| 16° | 346.6 | 346.7 | 345.6 | 344.5 | 343.0 | 342.5 | 343.0 | 342.1 | 342.7 | 342.4 | 343.2 |
| 16.5° | 345.6 | 345.7 | 344.4 | 343.6 | 342.2 | 342.0 | 341.9 | 341.1 | 341.5 | 341.3 | 342.3 |
| 17° | 344.4 | 344.8 | 343.7 | 342.5 | 341.1 | 340.5 | 340.8 | 339.8 | 340.4 | 340.0 | 341.0 |
| 17.5° | 343.5 | 343.6 | 342.4 | 341.3 | 339.8 | 339.5 | 339.6 | 338.8 | 339.3 | 338.9 | 340.0 |
| 18° | 342.3 | 342.7 | 341.5 | 340.5 | 338.6 | 338.2 | 338.3 | 337.5 | 338.1 | 337.8 | 338.7 |
| 18.5° | 341.4 | 341.4 | 340.2 | 338.9 | 337.5 | 337.1 | 337.2 | 336.3 | 336.7 | 336.5 | 337.6 |
| 19° | 339.9 | 340.6 | 339.2 | 338.1 | 336.3 | 335.6 | 336.0 | 335.1 | 335.5 | 335.2 | 336.5 |
| 19.5° | 339.1 | 339.0 | 337.9 | 336.7 | 334.8 | 334.8 | 334.6 | 333.8 | 334.5 | 334.0 | 335.0 |
| 20° | 337.6 | 338.2 | 336.8 | 335.8 | 334.1 | 333.0 | 333.5 | 332.6 | 332.9 | 332.7 | 333.9 |
| 20.5° | 336.6 | 336.7 | 335.6 | 334.0 | 332.3 | 331.8 | 332.1 | 330.9 | 331.9 | 331.3 | 332.5 |
| 21° | 335.3 | 335.8 | 334.2 | 333.1 | 331.3 | 330.7 | 330.6 | 329.9 | 330.3 | 330.0 | 331.1 |
| 21.5° | 334.1 | 334.0 | 332.9 | 331.7 | 329.7 | 329.1 | 329.4 | 328.3 | 329.1 | 328.8 | 329.7 |
| 22° | 332.7 | 333.2 | 331.6 | 330.3 | 328.4 | 327.7 | 327.9 | 327.0 | 327.4 | 327.1 | 328.5 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 22.5° | 331.2 | 331.6 | 330.3 | 329.0 | 326.9 | 326.3 | 326.6 | 325.3 | 326.2 | 325.9 | 327.2 |
| 23° | 330.1 | 330.4 | 328.6 | 327.5 | 325.6 | 324.9 | 324.9 | 324.2 | 324.7 | 324.2 | 325.4 |
| 23.5° | 328.3 | 328.8 | 327.6 | 326.2 | 323.8 | 323.3 | 323.6 | 322.5 | 323.1 | 322.9 | 324.2 |
| 24° | 327.3 | 327.6 | 325.9 | 324.6 | 322.4 | 322.0 | 322.0 | 320.9 | 321.8 | 321.2 | 322.6 |
| 24.5° | 325.5 | 326.0 | 324.6 | 323.3 | 320.9 | 320.2 | 320.6 | 319.5 | 320.1 | 319.9 | 320.9 |
| 25° | 324.3 | 324.6 | 323.0 | 321.6 | 319.6 | 318.8 | 318.8 | 317.9 | 318.5 | 318.0 | 319.6 |
| 25.5° | 322.6 | 323.0 | 321.5 | 320.1 | 317.5 | 317.0 | 317.4 | 316.1 | 316.9 | 316.6 | 317.9 |
| 26° | 321.2 | 321.5 | 320.1 | 318.5 | 316.3 | 315.7 | 315.7 | 314.6 | 315.4 | 315.0 | 316.4 |
| 26.5° | 319.5 | 320.0 | 318.5 | 317.0 | 314.3 | 313.8 | 314.1 | 312.9 | 313.7 | 313.3 | 314.5 |
| 27° | 317.9 | 318.5 | 316.8 | 315.4 | 312.9 | 312.3 | 312.2 | 311.4 | 312.0 | 311.4 | 313.3 |
| 27.5° | 316.3 | 316.7 | 315.2 | 313.6 | 311.0 | 310.6 | 310.8 | 309.4 | 310.4 | 310.0 | 311.2 |
| 28° | 314.7 | 315.3 | 313.6 | 312.1 | 309.5 | 308.9 | 308.9 | 307.9 | 308.5 | 308.1 | 309.7 |
| 28.5° | 312.9 | 313.6 | 311.8 | 310.2 | 307.5 | 307.0 | 307.3 | 305.9 | 307.0 | 306.3 | 308.0 |
| 29° | 311.5 | 311.8 | 310.2 | 308.9 | 305.8 | 305.4 | 305.3 | 304.2 | 304.9 | 304.5 | 306.2 |
| 29.5° | 309.3 | 310.0 | 308.5 | 306.8 | 304.2 | 303.4 | 303.8 | 302.3 | 303.3 | 302.8 | 304.5 |
| 30° | 308.0 | 308.3 | 306.8 | 305.3 | 302.2 | 301.9 | 301.7 | 300.5 | 301.4 | 301.0 | 302.6 |
| 30.5° | 306.2 | 306.7 | 304.8 | 303.3 | 300.5 | 299.8 | 300.0 | 298.7 | 299.6 | 299.1 | 300.7 |
| 31° | 304.3 | 304.6 | 303.1 | 301.7 | 298.6 | 298.0 | 298.0 | 296.8 | 297.6 | 297.2 | 298.8 |
| 31.5° | 302.4 | 303.1 | 301.3 | 299.6 | 296.8 | 296.1 | 296.3 | 294.8 | 295.7 | 295.2 | 297.2 |
| 32° | 300.6 | 301.2 | 299.5 | 297.9 | 294.7 | 294.3 | 294.4 | 292.9 | 294.0 | 293.5 | 295.0 |
| 32.5° | 298.8 | 299.3 | 297.4 | 296.0 | 293.0 | 292.2 | 292.3 | 291.0 | 291.9 | 291.3 | 293.3 |
| 33° | 296.8 | 297.3 | 295.7 | 294.1 | 290.8 | 290.3 | 290.3 | 288.9 | 290.1 | 289.5 | 291.2 |
| 33.5° | 294.9 | 295.5 | 293.6 | 292.1 | 288.8 | 288.3 | 288.4 | 287.0 | 288.2 | 287.4 | 289.3 |
| 34° | 293.1 | 293.6 | 291.8 | 290.2 | 287.0 | 286.3 | 286.4 | 285.1 | 285.9 | 285.6 | 287.3 |
| 34.5° | 290.8 | 291.6 | 289.8 | 288.2 | 284.8 | 284.2 | 284.3 | 282.9 | 284.1 | 283.3 | 285.4 |
| 35° | 289.3 | 289.8 | 287.8 | 286.1 | 282.8 | 282.1 | 282.4 | 280.8 | 281.9 | 281.5 | 283.4 |
| 35.5° | 287.1 | 287.5 | 285.9 | 284.1 | 280.7 | 280.3 | 280.3 | 278.7 | 280.0 | 279.3 | 281.1 |
| 36° | 285.1 | 285.8 | 283.7 | 282.1 | 278.7 | 278.0 | 278.2 | 276.6 | 277.7 | 277.1 | 279.2 |
| 36.5° | 282.9 | 283.5 | 281.8 | 280.1 | 276.3 | 276.1 | 275.9 | 274.4 | 275.9 | 275.0 | 277.0 |
| 37° | 280.9 | 281.6 | 279.5 | 278.0 | 274.5 | 273.8 | 274.0 | 272.4 | 273.6 | 273.1 | 274.8 |
| 37.5° | 278.8 | 279.4 | 277.5 | 275.9 | 272.2 | 271.7 | 271.7 | 270.1 | 271.4 | 270.9 | 272.7 |
| 38° | 276.5 | 277.5 | 275.2 | 273.9 | 270.0 | 269.5 | 269.7 | 267.9 | 269.3 | 268.6 | 270.8 |
| 38.5° | 274.6 | 275.1 | 273.4 | 271.4 | 267.7 | 267.4 | 267.2 | 265.6 | 267.1 | 266.5 | 268.6 |
| 39° | 272.2 | 273.1 | 271.2 | 269.5 | 265.6 | 265.1 | 265.2 | 263.6 | 264.9 | 264.3 | 266.2 |
| 39.5° | 270.2 | 270.9 | 268.9 | 267.1 | 263.4 | 263.1 | 262.8 | 261.2 | 262.6 | 262.0 | 264.2 |
| 40° | 267.9 | 268.9 | 266.7 | 265.2 | 261.0 | 260.5 | 260.7 | 259.1 | 260.5 | 259.8 | 261.8 |
| 40.5° | 265.8 | 266.3 | 264.6 | 262.6 | 258.8 | 258.4 | 258.3 | 256.6 | 258.1 | 257.5 | 259.5 |
| 41° | 263.5 | 264.4 | 262.3 | 260.6 | 256.4 | 256.1 | 256.1 | 254.3 | 255.8 | 255.2 | 257.2 |
| 41.5° | 261.2 | 261.9 | 259.9 | 258.2 | 254.3 | 253.8 | 253.8 | 252.1 | 253.7 | 253.0 | 255.0 |
| 42° | 259.1 | 259.8 | 257.8 | 256.0 | 251.8 | 251.3 | 251.3 | 249.9 | 251.2 | 250.5 | 252.7 |
| 42.5° | 256.6 | 257.3 | 255.3 | 253.6 | 249.6 | 249.1 | 249.1 | 247.3 | 248.9 | 248.3 | 250.3 |
| 43° | 254.8 | 255.3 | 253.1 | 251.3 | 247.2 | 246.7 | 246.7 | 244.9 | 246.5 | 245.9 | 248.0 |
| 43.5° | 251.9 | 252.8 | 250.7 | 249.0 | 244.9 | 244.4 | 244.4 | 242.6 | 244.2 | 243.5 | 245.6 |
| 44° | 249.9 | 250.6 | 248.4 | 246.5 | 242.3 | 241.8 | 241.8 | 240.1 | 241.8 | 240.8 | 243.3 |
| 44.5° | 247.3 | 248.1 | 245.9 | 244.2 | 240.1 | 239.5 | 239.6 | 237.8 | 239.3 | 238.7 | 240.8 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 45° | 245.2 | 245.8 | 243.6 | 241.8 | 237.5 | 237.2 | 237.1 | 235.3 | 236.8 | 236.2 | 238.4 |
| 45.5° | 242.4 | 243.3 | 241.3 | 239.5 | 235.1 | 234.6 | 234.6 | 233.0 | 234.4 | 233.8 | 236.0 |
| 46° | 240.1 | 241.1 | 238.7 | 236.9 | 232.5 | 232.2 | 232.0 | 230.2 | 232.1 | 231.2 | 233.3 |
| 46.5° | 237.7 | 238.4 | 236.4 | 234.6 | 230.2 | 229.6 | 229.7 | 228.1 | 229.5 | 228.7 | 230.9 |
| 47° | 235.1 | 236.1 | 233.7 | 232.1 | 227.6 | 227.2 | 227.0 | 225.3 | 227.0 | 226.3 | 228.4 |
| 47.5° | 232.8 | 233.6 | 231.4 | 229.6 | 225.0 | 224.7 | 224.7 | 223.0 | 224.6 | 223.5 | 226.0 |
| 48° | 230.3 | 231.2 | 228.9 | 227.1 | 222.6 | 222.2 | 222.0 | 220.3 | 222.0 | 221.2 | 223.4 |
| 48.5° | 227.6 | 228.4 | 226.4 | 224.5 | 220.0 | 219.6 | 219.7 | 217.9 | 219.3 | 218.6 | 220.9 |
| 49° | 225.2 | 226.0 | 223.6 | 222.1 | 217.4 | 216.9 | 216.8 | 215.1 | 216.9 | 216.1 | 218.4 |
| 49.5° | 222.7 | 223.5 | 221.3 | 219.4 | 214.8 | 214.3 | 214.4 | 212.8 | 214.3 | 213.4 | 215.7 |
| 50° | 220.3 | 221.0 | 218.7 | 216.8 | 212.2 | 211.8 | 211.6 | 209.9 | 211.6 | 210.9 | 213.2 |
| 50.5° | 217.5 | 218.3 | 216.1 | 214.3 | 209.7 | 209.1 | 209.2 | 207.4 | 209.1 | 208.3 | 210.6 |
| 51° | 215.1 | 215.9 | 213.5 | 211.7 | 206.9 | 206.6 | 206.5 | 204.7 | 206.5 | 205.8 | 208.1 |
| 51.5° | 212.3 | 213.1 | 210.9 | 209.0 | 204.5 | 203.8 | 203.9 | 202.3 | 203.9 | 203.0 | 205.2 |
| 52° | 209.6 | 210.7 | 208.3 | 206.6 | 201.8 | 201.3 | 201.2 | 199.4 | 201.2 | 200.4 | 202.8 |
| 52.5° | 207.2 | 208.0 | 205.5 | 203.8 | 199.1 | 198.5 | 198.7 | 196.9 | 198.5 | 197.8 | 200.0 |
| 53° | 204.5 | 205.3 | 202.9 | 201.3 | 196.4 | 195.9 | 195.9 | 194.1 | 195.9 | 195.0 | 197.4 |
| 53.5° | 201.8 | 202.7 | 200.3 | 198.3 | 193.6 | 193.2 | 193.2 | 191.4 | 193.1 | 192.5 | 194.7 |
| 54° | 199.1 | 200.0 | 197.6 | 195.9 | 190.9 | 190.5 | 190.4 | 188.6 | 190.6 | 189.7 | 192.0 |
| 54.5° | 196.6 | 197.3 | 194.9 | 193.0 | 188.2 | 187.8 | 187.8 | 186.1 | 187.7 | 187.1 | 189.4 |
| 55° | 193.7 | 194.6 | 192.2 | 190.6 | 185.4 | 185.2 | 185.0 | 183.2 | 185.2 | 184.2 | 186.5 |
| 55.5° | 191.0 | 192.1 | 189.5 | 187.6 | 182.8 | 182.2 | 182.2 | 180.5 | 182.2 | 181.5 | 184.0 |
| 56° | 188.4 | 189.1 | 186.8 | 185.1 | 179.9 | 179.4 | 179.5 | 177.8 | 179.7 | 178.8 | 181.1 |
| 56.5° | 185.6 | 186.5 | 184.0 | 182.2 | 177.1 | 176.8 | 176.7 | 175.0 | 176.8 | 176.0 | 178.3 |
| 57° | 183.0 | 183.7 | 181.3 | 179.5 | 174.4 | 174.0 | 174.0 | 172.2 | 174.1 | 173.2 | 175.6 |
| 57.5° | 180.1 | 181.1 | 178.5 | 176.6 | 171.7 | 171.2 | 171.2 | 169.5 | 171.3 | 170.5 | 172.8 |
| 58° | 177.4 | 178.2 | 175.8 | 173.9 | 168.9 | 168.3 | 168.5 | 166.7 | 168.5 | 167.7 | 170.1 |
| 58.5° | 174.6 | 175.6 | 172.9 | 171.2 | 166.0 | 165.6 | 165.6 | 163.9 | 165.8 | 164.9 | 167.3 |
| 59° | 171.9 | 172.7 | 170.2 | 168.3 | 163.2 | 162.7 | 162.9 | 161.1 | 162.9 | 162.1 | 164.5 |
| 59.5° | 169.1 | 169.9 | 167.5 | 165.6 | 160.4 | 160.1 | 160.0 | 158.3 | 160.2 | 159.4 | 161.7 |
| 60° | 166.3 | 167.1 | 164.5 | 162.8 | 157.5 | 157.1 | 157.3 | 155.5 | 157.4 | 156.4 | 158.8 |
| 60.5° | 163.4 | 164.3 | 161.8 | 160.0 | 154.8 | 154.4 | 154.4 | 152.7 | 154.7 | 153.7 | 156.0 |
| 61° | 160.6 | 161.6 | 158.9 | 157.1 | 151.9 | 151.5 | 151.5 | 150.0 | 151.7 | 150.9 | 153.3 |
| 61.5° | 157.8 | 158.6 | 156.2 | 154.3 | 149.1 | 148.8 | 148.8 | 147.0 | 149.0 | 148.2 | 150.5 |
| 62° | 155.2 | 155.9 | 153.2 | 151.5 | 146.3 | 145.9 | 146.0 | 144.4 | 146.2 | 145.3 | 147.6 |
| 62.5° | 152.3 | 153.0 | 150.6 | 148.7 | 143.5 | 143.2 | 143.2 | 141.5 | 143.3 | 142.4 | 144.8 |
| 63° | 149.4 | 150.3 | 147.7 | 145.9 | 140.6 | 140.2 | 140.2 | 138.7 | 140.7 | 139.6 | 141.9 |
| 63.5° | 146.5 | 147.3 | 144.8 | 143.0 | 137.7 | 137.4 | 137.5 | 135.7 | 137.7 | 136.9 | 139.2 |
| 64° | 143.9 | 144.5 | 141.9 | 140.1 | 134.8 | 134.5 | 134.7 | 133.1 | 135.0 | 134.1 | 136.3 |
| 64.5° | 140.9 | 141.7 | 139.2 | 137.3 | 132.1 | 131.8 | 131.9 | 130.2 | 132.1 | 131.1 | 133.5 |
| 65° | 138.1 | 139.0 | 136.4 | 134.5 | 129.3 | 128.8 | 129.0 | 127.4 | 129.4 | 128.5 | 130.7 |
| 65.5° | 135.3 | 136.0 | 133.5 | 131.6 | 126.4 | 126.1 | 126.3 | 124.6 | 126.5 | 125.7 | 127.8 |
| 66° | 132.5 | 133.2 | 130.7 | 128.8 | 123.5 | 123.2 | 123.4 | 121.9 | 123.7 | 122.8 | 125.1 |
| 66.5° | 129.6 | 130.4 | 127.8 | 126.0 | 120.8 | 120.5 | 120.7 | 118.9 | 121.0 | 120.2 | 122.3 |
| 67° | 126.9 | 127.7 | 125.1 | 123.1 | 118.0 | 117.7 | 117.8 | 116.3 | 118.3 | 117.2 | 119.5 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 67.5° | 124.1 | 124.7 | 122.3 | 120.4 | 115.2 | 114.9 | 115.2 | 113.5 | 115.4 | 114.5 | 116.6 |
| 68° | 121.2 | 121.9 | 119.4 | 117.6 | 112.4 | 112.0 | 112.2 | 111.0 | 112.6 | 111.7 | 114.0 |
| 68.5° | 118.6 | 119.1 | 116.7 | 114.7 | 109.6 | 109.3 | 109.6 | 108.1 | 109.9 | 109.1 | 111.2 |
| 69° | 115.7 | 116.4 | 113.9 | 112.0 | 106.9 | 106.6 | 106.7 | 105.3 | 107.2 | 106.3 | 108.4 |
| 69.5° | 113.0 | 113.6 | 111.1 | 109.3 | 104.1 | 103.9 | 104.2 | 102.5 | 104.5 | 103.7 | 105.6 |
| 70° | 110.1 | 110.8 | 108.4 | 106.5 | 101.5 | 101.2 | 101.4 | 100.0 | 101.9 | 100.9 | 102.9 |
| 70.5° | 107.4 | 108.1 | 105.4 | 103.8 | 98.6 | 98.4 | 98.8 | 97.3 | 99.2 | 98.2 | 100.3 |
| 71° | 104.7 | 105.2 | 102.9 | 101.0 | 96.0 | 95.8 | 96.0 | 94.7 | 96.6 | 95.6 | 97.5 |
| 71.5° | 102.1 | 102.7 | 100.0 | 98.3 | 93.3 | 93.1 | 93.4 | 92.0 | 93.8 | 92.9 | 94.9 |
| 72° | 99.4 | 99.9 | 97.5 | 95.6 | 90.8 | 90.5 | 90.7 | 89.6 | 91.3 | 90.4 | 92.2 |
| 72.5° | 96.7 | 97.2 | 94.7 | 93.0 | 88.2 | 87.9 | 88.2 | 86.9 | 88.7 | 87.9 | 89.7 |
| 73° | 94.0 | 94.5 | 92.2 | 90.3 | 85.6 | 85.4 | 85.7 | 84.4 | 86.2 | 85.3 | 87.0 |
| 73.5° | 91.3 | 91.9 | 89.3 | 87.6 | 83.1 | 82.8 | 83.1 | 81.8 | 83.7 | 82.8 | 84.4 |
| 74° | 88.7 | 89.2 | 86.8 | 85.0 | 80.5 | 80.3 | 80.6 | 79.2 | 81.2 | 80.3 | 81.8 |
| 74.5° | 86.1 | 86.6 | 84.2 | 82.4 | 77.9 | 77.6 | 78.1 | 76.8 | 78.7 | 77.7 | 79.2 |
| 75° | 83.5 | 84.0 | 81.7 | 79.8 | 75.3 | 75.1 | 75.6 | 74.3 | 76.2 | 75.2 | 76.9 |
| 75.5° | 81.0 | 81.4 | 79.1 | 77.3 | 72.8 | 72.6 | 73.1 | 71.9 | 73.7 | 72.7 | 74.4 |
| 76° | 78.5 | 79.0 | 76.7 | 74.8 | 70.3 | 70.2 | 70.6 | 69.5 | 71.4 | 70.3 | 71.9 |
| 76.5° | 76.0 | 76.3 | 74.1 | 72.3 | 67.9 | 67.7 | 68.2 | 67.2 | 68.9 | 67.9 | 69.5 |
| 77° | 73.5 | 74.0 | 71.7 | 69.9 | 65.5 | 65.4 | 65.8 | 64.8 | 66.7 | 65.6 | 67.1 |
| 77.5° | 71.2 | 71.5 | 69.1 | 67.5 | 63.2 | 63.1 | 63.5 | 62.5 | 64.3 | 63.2 | 64.7 |
| 78° | 68.8 | 69.1 | 66.9 | 65.1 | 60.9 | 60.8 | 61.2 | 60.2 | 62.0 | 60.9 | 62.4 |
| 78.5° | 66.4 | 66.7 | 64.5 | 62.7 | 58.6 | 58.5 | 59.0 | 58.0 | 59.8 | 58.7 | 60.1 |
| 79° | 64.0 | 64.4 | 62.1 | 60.5 | 56.3 | 56.2 | 56.7 | 55.8 | 57.5 | 56.5 | 57.8 |
| 79.5° | 61.8 | 62.1 | 59.8 | 58.1 | 54.1 | 54.0 | 54.7 | 53.7 | 55.4 | 54.3 | 55.6 |
| 80° | 59.5 | 59.7 | 57.6 | 55.9 | 51.9 | 51.9 | 52.5 | 51.6 | 53.2 | 52.2 | 53.4 |
| 80.5° | 57.3 | 57.5 | 55.4 | 53.7 | 49.8 | 49.7 | 50.4 | 49.4 | 51.2 | 50.2 | 51.3 |
| 81° | 55.2 | 55.3 | 53.1 | 51.5 | 47.8 | 47.8 | 48.3 | 47.4 | 49.1 | 48.2 | 49.2 |
| 81.5° | 53.0 | 53.2 | 51.1 | 49.4 | 45.8 | 45.7 | 46.3 | 45.5 | 47.1 | 46.2 | 47.1 |
| 82° | 50.9 | 51.0 | 48.9 | 47.3 | 43.8 | 43.8 | 44.3 | 43.6 | 45.1 | 44.1 | 45.1 |
| 82.5° | 48.9 | 49.0 | 46.9 | 45.4 | 41.8 | 41.8 | 42.3 | 41.6 | 43.3 | 42.2 | 43.2 |
| 83° | 46.9 | 46.9 | 44.9 | 43.3 | 39.8 | 39.9 | 40.4 | 39.7 | 41.4 | 40.3 | 41.3 |
| 83.5° | 44.9 | 45.0 | 42.9 | 41.4 | 37.9 | 38.0 | 38.7 | 38.0 | 39.5 | 38.5 | 39.4 |
| 84° | 43.1 | 43.1 | 41.0 | 39.5 | 36.2 | 36.3 | 36.8 | 36.2 | 37.7 | 36.7 | 37.5 |
| 84.5° | 41.2 | 41.2 | 39.1 | 37.7 | 34.5 | 34.5 | 35.0 | 34.5 | 35.9 | 34.9 | 35.7 |
| 85° | 39.4 | 39.4 | 37.3 | 35.9 | 32.7 | 32.8 | 33.3 | 32.7 | 34.3 | 33.2 | 34.0 |
| 85.5° | 37.5 | 37.5 | 35.6 | 34.3 | 30.9 | 31.0 | 31.7 | 31.1 | 32.5 | 31.5 | 32.2 |
| 86° | 35.8 | 35.8 | 34.0 | 32.6 | 29.4 | 29.5 | 30.1 | 29.6 | 30.9 | 29.9 | 30.6 |
| 86.5° | 34.2 | 34.2 | 32.3 | 30.9 | 27.8 | 27.9 | 28.4 | 28.0 | 29.3 | 28.2 | 28.9 |
| 87° | 32.6 | 32.6 | 30.6 | 29.3 | 26.2 | 26.3 | 27.0 | 26.5 | 27.7 | 26.8 | 27.5 |
| 87.5° | 30.9 | 30.9 | 28.9 | 27.6 | 24.8 | 24.9 | 25.4 | 25.0 | 26.1 | 25.2 | 25.9 |
| 88° | 29.3 | 29.3 | 27.5 | 26.1 | 23.3 | 23.4 | 24.0 | 23.6 | 24.7 | 23.7 | 24.5 |
| 88.5° | 27.6 | 27.7 | 25.9 | 24.6 | 21.8 | 22.0 | 22.6 | 22.2 | 23.1 | 22.4 | 23.0 |
| 89° | 26.0 | 26.1 | 24.5 | 23.2 | 20.5 | 20.7 | 21.2 | 20.9 | 21.6 | 21.0 | 21.6 |
| 89.5° | 24.5 | 24.6 | 23.0 | 21.7 | 19.2 | 19.3 | 20.0 | 19.5 | 20.4 | 19.6 | 20.3 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



TEST NUMBER: P855577
CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | | | | | | | | | | | |
|-----|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
| 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: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 0° | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 | 361.3 |
| 0.5° | 360.7 | 361.8 | 361.5 | 361.6 | 361.4 | 361.5 |
| 1° | 361.0 | 361.5 | 361.1 | 361.1 | 361.3 | 361.1 |
| 1.5° | 360.5 | 361.6 | 361.4 | 361.5 | 361.6 | 361.4 |
| 2° | 360.7 | 361.6 | 361.1 | 361.4 | 361.3 | 361.3 |
| 2.5° | 360.5 | 361.6 | 360.9 | 361.3 | 361.5 | 361.3 |
| 3° | 360.3 | 361.0 | 360.8 | 360.9 | 361.0 | 361.0 |
| 3.5° | 360.1 | 361.1 | 360.7 | 360.9 | 361.3 | 360.9 |
| 4° | 359.9 | 360.7 | 360.6 | 360.5 | 360.7 | 360.7 |
| 4.5° | 359.5 | 360.7 | 360.5 | 360.6 | 360.8 | 360.4 |
| 5° | 359.0 | 360.2 | 360.1 | 360.1 | 360.4 | 360.3 |
| 5.5° | 359.1 | 360.2 | 359.7 | 359.9 | 360.2 | 360.0 |
| 6° | 358.4 | 359.7 | 359.7 | 359.4 | 360.0 | 359.7 |
| 6.5° | 358.1 | 359.6 | 359.2 | 359.4 | 359.5 | 359.2 |
| 7° | 357.5 | 358.8 | 358.7 | 358.8 | 359.3 | 359.0 |
| 7.5° | 357.2 | 358.7 | 358.3 | 358.3 | 358.8 | 358.6 |
| 8° | 356.5 | 358.0 | 358.0 | 358.0 | 358.5 | 357.9 |
| 8.5° | 356.0 | 357.8 | 357.3 | 357.5 | 357.8 | 357.7 |
| 9° | 355.7 | 356.9 | 357.2 | 356.9 | 357.6 | 357.0 |
| 9.5° | 354.7 | 356.5 | 356.1 | 356.3 | 357.0 | 356.7 |
| 10° | 354.5 | 356.0 | 355.7 | 355.9 | 356.2 | 355.8 |
| 10.5° | 353.5 | 355.5 | 355.3 | 355.1 | 355.7 | 355.5 |
| 11° | 353.0 | 354.6 | 354.6 | 354.8 | 355.2 | 354.7 |
| 11.5° | 352.1 | 354.2 | 353.7 | 353.7 | 354.7 | 354.0 |
| 12° | 351.6 | 353.2 | 353.1 | 353.2 | 353.6 | 353.4 |
| 12.5° | 350.6 | 352.7 | 352.4 | 352.3 | 353.3 | 352.5 |
| 13° | 349.9 | 351.7 | 351.6 | 351.8 | 352.2 | 352.0 |
| 13.5° | 348.9 | 351.1 | 350.8 | 350.6 | 351.6 | 350.8 |
| 14° | 348.0 | 350.1 | 350.0 | 350.0 | 350.6 | 350.3 |
| 14.5° | 346.8 | 349.4 | 349.1 | 349.0 | 350.1 | 349.2 |
| 15° | 346.3 | 348.3 | 348.2 | 348.3 | 349.0 | 348.6 |
| 15.5° | 345.1 | 347.6 | 347.4 | 346.9 | 348.1 | 347.2 |
| 16° | 344.2 | 346.6 | 346.2 | 346.5 | 347.1 | 346.6 |
| 16.5° | 342.9 | 345.5 | 345.5 | 345.2 | 346.1 | 345.6 |
| 17° | 342.1 | 344.6 | 344.4 | 344.3 | 345.4 | 344.4 |
| 17.5° | 340.7 | 343.5 | 343.2 | 343.2 | 344.0 | 343.5 |
| 18° | 339.7 | 342.7 | 342.1 | 342.1 | 343.2 | 342.3 |
| 18.5° | 338.6 | 341.3 | 341.3 | 340.9 | 341.9 | 341.4 |
| 19° | 337.2 | 340.1 | 339.9 | 340.0 | 341.0 | 339.9 |
| 19.5° | 336.2 | 339.1 | 339.0 | 338.6 | 339.6 | 339.1 |
| 20° | 334.7 | 337.8 | 337.5 | 337.5 | 338.6 | 337.6 |
| 20.5° | 333.6 | 336.5 | 336.7 | 336.2 | 337.5 | 336.6 |
| 21° | 332.1 | 335.3 | 335.0 | 335.2 | 336.0 | 335.3 |
| 21.5° | 331.1 | 333.8 | 334.1 | 333.6 | 334.9 | 334.1 |
| 22° | 329.4 | 332.7 | 332.4 | 332.3 | 333.6 | 332.7 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 22.5° | 328.1 | 331.2 | 331.4 | 331.2 | 332.4 | 331.2 |
| 23° | 326.9 | 330.0 | 329.8 | 329.7 | 330.6 | 330.1 |
| 23.5° | 325.2 | 328.4 | 328.8 | 328.2 | 329.8 | 328.3 |
| 24° | 323.8 | 327.3 | 326.9 | 326.9 | 327.9 | 327.3 |
| 24.5° | 322.3 | 325.4 | 325.6 | 325.3 | 326.7 | 325.5 |
| 25° | 320.9 | 324.2 | 324.2 | 323.9 | 325.1 | 324.3 |
| 25.5° | 319.0 | 322.6 | 322.7 | 322.5 | 323.7 | 322.6 |
| 26° | 317.8 | 321.2 | 321.1 | 320.8 | 322.1 | 321.2 |
| 26.5° | 315.9 | 319.5 | 319.6 | 319.3 | 320.5 | 319.5 |
| 27° | 314.3 | 318.1 | 318.1 | 317.8 | 319.1 | 317.9 |
| 27.5° | 312.7 | 316.3 | 316.4 | 316.2 | 317.4 | 316.3 |
| 28° | 311.1 | 314.7 | 314.9 | 314.3 | 315.9 | 314.7 |
| 28.5° | 309.4 | 312.8 | 313.0 | 312.9 | 314.1 | 312.9 |
| 29° | 307.4 | 311.5 | 311.5 | 311.2 | 312.6 | 311.5 |
| 29.5° | 305.9 | 309.6 | 309.6 | 309.5 | 310.8 | 309.3 |
| 30° | 304.0 | 307.9 | 308.2 | 307.6 | 309.1 | 308.0 |
| 30.5° | 302.3 | 306.0 | 306.1 | 306.1 | 307.3 | 306.2 |
| 31° | 300.2 | 304.3 | 304.5 | 304.0 | 305.4 | 304.3 |
| 31.5° | 298.6 | 302.5 | 302.6 | 302.4 | 303.9 | 302.4 |
| 32° | 296.7 | 300.5 | 300.9 | 300.4 | 301.7 | 300.6 |
| 32.5° | 294.8 | 298.8 | 298.9 | 298.7 | 300.1 | 298.8 |
| 33° | 292.7 | 296.7 | 297.2 | 296.8 | 298.1 | 296.8 |
| 33.5° | 290.8 | 295.1 | 295.1 | 295.0 | 296.5 | 294.9 |
| 34° | 288.9 | 292.9 | 293.3 | 292.8 | 294.2 | 293.1 |
| 34.5° | 286.7 | 291.0 | 291.2 | 290.9 | 292.6 | 290.8 |
| 35° | 284.9 | 289.0 | 289.3 | 288.9 | 290.4 | 289.3 |
| 35.5° | 282.8 | 287.2 | 287.4 | 287.1 | 288.4 | 287.1 |
| 36° | 280.9 | 285.1 | 285.3 | 284.9 | 286.4 | 285.1 |
| 36.5° | 278.6 | 283.2 | 283.2 | 282.9 | 284.4 | 282.9 |
| 37° | 276.7 | 281.1 | 281.2 | 280.9 | 282.4 | 280.9 |
| 37.5° | 274.4 | 278.8 | 279.1 | 278.8 | 280.2 | 278.8 |
| 38° | 272.2 | 276.8 | 277.0 | 276.7 | 278.2 | 276.5 |
| 38.5° | 270.0 | 274.6 | 274.8 | 274.5 | 275.9 | 274.6 |
| 39° | 267.9 | 272.7 | 272.8 | 272.3 | 273.9 | 272.2 |
| 39.5° | 265.7 | 270.3 | 270.8 | 270.3 | 271.7 | 270.2 |
| 40° | 263.3 | 268.1 | 268.4 | 267.9 | 269.5 | 267.9 |
| 40.5° | 261.2 | 265.8 | 266.4 | 265.8 | 267.3 | 265.8 |
| 41° | 258.9 | 263.8 | 263.9 | 263.6 | 265.1 | 263.5 |
| 41.5° | 256.8 | 261.4 | 261.8 | 261.5 | 262.9 | 261.2 |
| 42° | 254.3 | 259.2 | 259.5 | 258.9 | 260.5 | 259.1 |
| 42.5° | 252.1 | 256.9 | 257.3 | 256.8 | 258.5 | 256.6 |
| 43° | 249.8 | 254.5 | 254.8 | 254.6 | 255.8 | 254.8 |
| 43.5° | 247.2 | 252.2 | 252.7 | 252.3 | 253.7 | 251.9 |
| 44° | 245.0 | 249.9 | 250.2 | 249.6 | 251.3 | 249.9 |
| 44.5° | 242.5 | 247.5 | 247.9 | 247.6 | 249.1 | 247.3 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 45° | 240.2 | 245.0 | 245.4 | 244.9 | 246.4 | 245.2 |
| 45.5° | 237.6 | 242.7 | 243.1 | 242.9 | 244.3 | 242.4 |
| 46° | 235.3 | 240.2 | 240.7 | 240.2 | 241.8 | 240.1 |
| 46.5° | 232.7 | 237.8 | 238.3 | 237.8 | 239.3 | 237.7 |
| 47° | 230.3 | 235.2 | 235.6 | 235.2 | 236.9 | 235.1 |
| 47.5° | 227.8 | 233.0 | 233.2 | 233.0 | 234.5 | 232.8 |
| 48° | 225.3 | 230.2 | 230.7 | 230.3 | 232.0 | 230.3 |
| 48.5° | 222.8 | 228.1 | 228.4 | 228.0 | 229.4 | 227.6 |
| 49° | 220.2 | 225.3 | 225.7 | 225.3 | 227.1 | 225.2 |
| 49.5° | 217.7 | 222.9 | 223.3 | 223.0 | 224.4 | 222.7 |
| 50° | 215.0 | 220.3 | 220.7 | 220.2 | 222.0 | 220.3 |
| 50.5° | 212.5 | 217.8 | 218.1 | 217.8 | 219.3 | 217.5 |
| 51° | 209.9 | 215.2 | 215.6 | 215.1 | 216.7 | 215.1 |
| 51.5° | 207.3 | 212.5 | 212.9 | 212.5 | 214.2 | 212.3 |
| 52° | 204.6 | 210.0 | 210.4 | 209.9 | 211.5 | 209.6 |
| 52.5° | 202.0 | 207.2 | 207.7 | 207.3 | 208.8 | 207.2 |
| 53° | 199.3 | 204.7 | 205.1 | 204.7 | 206.3 | 204.5 |
| 53.5° | 196.6 | 202.0 | 202.4 | 202.1 | 203.8 | 201.8 |
| 54° | 194.1 | 199.4 | 199.8 | 199.4 | 201.0 | 199.1 |
| 54.5° | 191.2 | 196.6 | 197.1 | 196.8 | 198.2 | 196.6 |
| 55° | 188.6 | 194.1 | 194.4 | 193.9 | 195.6 | 193.7 |
| 55.5° | 185.8 | 191.2 | 191.7 | 191.4 | 192.9 | 191.0 |
| 56° | 183.2 | 188.6 | 188.9 | 188.5 | 190.2 | 188.4 |
| 56.5° | 180.3 | 185.8 | 186.2 | 185.9 | 187.4 | 185.6 |
| 57° | 177.6 | 183.2 | 183.4 | 183.2 | 184.8 | 183.0 |
| 57.5° | 174.8 | 180.3 | 180.7 | 180.4 | 181.9 | 180.1 |
| 58° | 172.0 | 177.8 | 177.9 | 177.6 | 179.2 | 177.4 |
| 58.5° | 169.3 | 174.7 | 175.3 | 174.8 | 176.4 | 174.6 |
| 59° | 166.5 | 172.1 | 172.4 | 172.0 | 173.8 | 171.9 |
| 59.5° | 163.6 | 169.2 | 169.7 | 169.3 | 170.9 | 169.1 |
| 60° | 160.7 | 166.6 | 166.9 | 166.5 | 168.1 | 166.3 |
| 60.5° | 158.1 | 163.5 | 164.1 | 163.6 | 165.3 | 163.4 |
| 61° | 155.2 | 160.8 | 161.2 | 160.8 | 162.4 | 160.6 |
| 61.5° | 152.5 | 158.1 | 158.4 | 158.1 | 159.8 | 157.8 |
| 62° | 149.5 | 155.2 | 155.7 | 155.3 | 156.9 | 155.2 |
| 62.5° | 146.7 | 152.3 | 152.8 | 152.5 | 154.0 | 152.3 |
| 63° | 143.8 | 149.5 | 149.9 | 149.6 | 151.1 | 149.4 |
| 63.5° | 141.0 | 146.7 | 147.0 | 146.8 | 148.4 | 146.5 |
| 64° | 138.3 | 143.8 | 144.2 | 143.9 | 145.5 | 143.9 |
| 64.5° | 135.4 | 141.0 | 141.4 | 141.1 | 142.8 | 140.9 |
| 65° | 132.6 | 138.1 | 138.6 | 138.4 | 139.8 | 138.1 |
| 65.5° | 129.7 | 135.3 | 135.7 | 135.4 | 137.1 | 135.3 |
| 66° | 127.0 | 132.5 | 132.9 | 132.7 | 134.3 | 132.5 |
| 66.5° | 124.1 | 129.6 | 130.1 | 129.7 | 131.4 | 129.6 |
| 67° | 121.3 | 126.8 | 127.3 | 127.0 | 128.6 | 126.9 |

TEST NUMBER: P855577
 CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 67.5° | 118.4 | 124.0 | 124.4 | 124.1 | 125.7 | 124.1 |
| 68° | 115.7 | 121.1 | 121.6 | 121.4 | 123.0 | 121.2 |
| 68.5° | 112.9 | 118.3 | 118.8 | 118.5 | 120.2 | 118.6 |
| 69° | 110.1 | 115.5 | 116.0 | 115.8 | 117.5 | 115.7 |
| 69.5° | 107.3 | 112.8 | 113.2 | 113.0 | 114.6 | 113.0 |
| 70° | 104.6 | 109.9 | 110.5 | 110.2 | 111.8 | 110.1 |
| 70.5° | 101.8 | 107.1 | 107.5 | 107.3 | 109.1 | 107.4 |
| 71° | 99.2 | 104.5 | 104.9 | 104.7 | 106.3 | 104.7 |
| 71.5° | 96.5 | 101.7 | 102.1 | 102.0 | 103.7 | 102.1 |
| 72° | 93.8 | 98.9 | 99.4 | 99.3 | 100.8 | 99.4 |
| 72.5° | 91.1 | 96.2 | 96.7 | 96.6 | 98.2 | 96.7 |
| 73° | 88.5 | 93.5 | 94.0 | 93.8 | 95.5 | 94.0 |
| 73.5° | 86.0 | 90.8 | 91.2 | 91.2 | 92.9 | 91.3 |
| 74° | 83.4 | 88.2 | 88.7 | 88.6 | 90.2 | 88.7 |
| 74.5° | 80.8 | 85.6 | 86.0 | 85.9 | 87.7 | 86.1 |
| 75° | 78.2 | 83.0 | 83.4 | 83.3 | 85.1 | 83.5 |
| 75.5° | 75.7 | 80.4 | 80.7 | 80.8 | 82.4 | 81.0 |
| 76° | 73.3 | 77.9 | 78.3 | 78.2 | 79.8 | 78.5 |
| 76.5° | 70.7 | 75.2 | 75.7 | 75.7 | 77.4 | 76.0 |
| 77° | 68.3 | 72.8 | 73.1 | 73.3 | 74.9 | 73.5 |
| 77.5° | 65.9 | 70.3 | 70.6 | 70.7 | 72.4 | 71.2 |
| 78° | 63.5 | 67.9 | 68.3 | 68.3 | 70.0 | 68.8 |
| 78.5° | 61.2 | 65.5 | 65.8 | 65.9 | 67.6 | 66.4 |
| 79° | 58.9 | 63.1 | 63.5 | 63.5 | 65.2 | 64.0 |
| 79.5° | 56.6 | 60.7 | 61.0 | 61.2 | 62.9 | 61.8 |
| 80° | 54.4 | 58.5 | 58.8 | 58.9 | 60.6 | 59.5 |
| 80.5° | 52.2 | 56.3 | 56.6 | 56.7 | 58.3 | 57.3 |
| 81° | 50.2 | 53.9 | 54.4 | 54.4 | 56.1 | 55.2 |
| 81.5° | 48.1 | 51.8 | 52.1 | 52.4 | 54.0 | 53.0 |
| 82° | 46.1 | 49.7 | 50.1 | 50.3 | 51.7 | 50.9 |
| 82.5° | 44.0 | 47.7 | 48.0 | 48.2 | 49.7 | 48.9 |
| 83° | 42.0 | 45.6 | 46.0 | 46.1 | 47.7 | 46.9 |
| 83.5° | 40.1 | 43.6 | 43.9 | 44.1 | 45.7 | 44.9 |
| 84° | 38.2 | 41.6 | 42.0 | 42.1 | 43.7 | 43.1 |
| 84.5° | 36.4 | 39.7 | 40.0 | 40.2 | 41.8 | 41.2 |
| 85° | 34.7 | 37.8 | 38.1 | 38.4 | 39.8 | 39.4 |
| 85.5° | 32.9 | 36.2 | 36.6 | 36.8 | 38.0 | 37.5 |
| 86° | 31.2 | 34.5 | 34.8 | 35.0 | 36.4 | 35.8 |
| 86.5° | 29.6 | 32.8 | 33.1 | 33.3 | 34.7 | 34.2 |
| 87° | 28.1 | 31.0 | 31.5 | 31.6 | 33.0 | 32.6 |
| 87.5° | 26.5 | 29.4 | 29.7 | 29.9 | 31.3 | 30.9 |
| 88° | 25.0 | 27.8 | 28.1 | 28.3 | 29.7 | 29.3 |
| 88.5° | 23.6 | 26.2 | 26.5 | 26.8 | 28.1 | 27.6 |
| 89° | 22.2 | 24.8 | 25.1 | 25.2 | 26.5 | 26.0 |
| 89.5° | 20.8 | 23.3 | 23.6 | 23.7 | 25.1 | 24.5 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



TEST NUMBER: P855577
CATALOG NUMBER: HLCE4079FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-----|--------|------|--------|------|--------|------|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)