

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: P236099

Luminaire Tested: **CFA-2-LD4-UNV-STD-35-OP-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-243-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CFA-2-LD4-UNV-STD-35-OP-EDC1
Description: FAILSAFE CFA LED FIXTURE
2ft
Light Source: (42) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

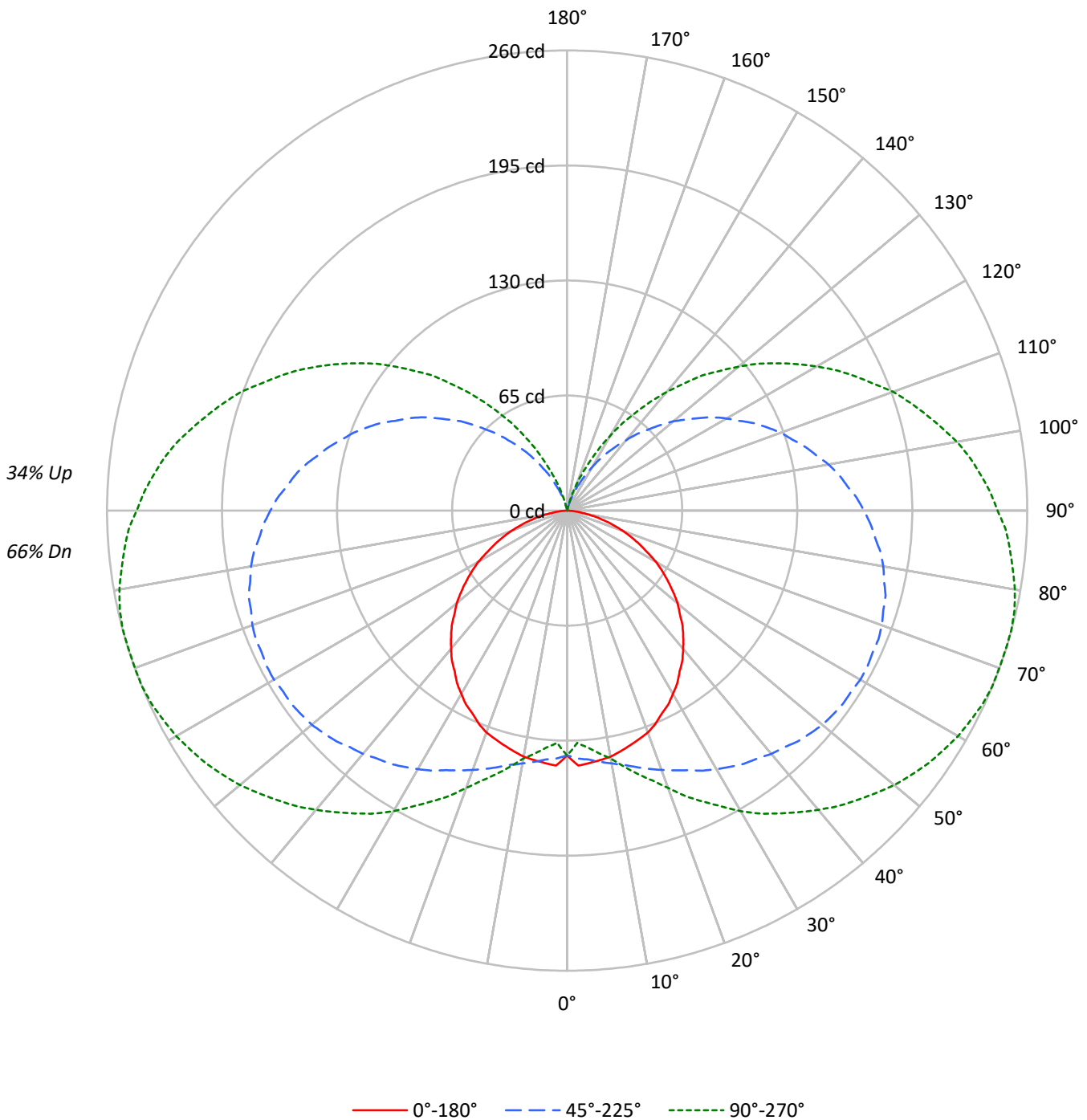
Lumens per Lamp: N/A
Luminaire Lumens: 1590.2 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.26 / 2.09
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 2' x H: 0.27')
CIE Type: Semi-Direct

Input Watts (W): 17.02
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: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 | 66 |
| 1 | 96 | 89 | 83 | 78 | 90 | 84 | 78 | 73 | 73 | 69 | 65 | 63 | 60 | 57 | 54 | 52 | 49 | 44 |
| 2 | 85 | 75 | 66 | 59 | 79 | 70 | 62 | 56 | 61 | 55 | 49 | 52 | 48 | 43 | 45 | 41 | 37 | 33 |
| 3 | 77 | 64 | 55 | 47 | 71 | 60 | 51 | 44 | 52 | 45 | 39 | 45 | 39 | 34 | 38 | 33 | 29 | 26 |
| 4 | 69 | 56 | 46 | 38 | 64 | 52 | 43 | 36 | 45 | 38 | 32 | 39 | 33 | 28 | 33 | 28 | 24 | 21 |
| 5 | 63 | 49 | 39 | 32 | 59 | 46 | 37 | 30 | 40 | 32 | 27 | 34 | 28 | 23 | 29 | 24 | 20 | 17 |
| 6 | 58 | 44 | 34 | 27 | 54 | 41 | 32 | 26 | 36 | 28 | 23 | 31 | 24 | 20 | 26 | 21 | 17 | 14 |
| 7 | 53 | 39 | 30 | 23 | 49 | 37 | 28 | 22 | 32 | 25 | 20 | 28 | 22 | 17 | 23 | 18 | 15 | 12 |
| 8 | 49 | 35 | 26 | 20 | 46 | 33 | 25 | 19 | 29 | 22 | 17 | 25 | 19 | 15 | 21 | 16 | 13 | 10 |
| 9 | 46 | 32 | 24 | 18 | 43 | 30 | 22 | 17 | 26 | 20 | 15 | 23 | 17 | 13 | 20 | 15 | 11 | 9 |
| 10 | 43 | 29 | 21 | 16 | 40 | 28 | 20 | 15 | 24 | 18 | 13 | 21 | 16 | 12 | 18 | 13 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4466 | 4466 | 4466 |
| 5° | 4587 | 4127 | 3814 |
| 10° | 4522 | 3901 | 3624 |
| 15° | 4429 | 3760 | 3587 |
| 20° | 4369 | 3687 | 3600 |
| 25° | 4239 | 3648 | 3677 |
| 30° | 4136 | 3660 | 3773 |
| 35° | 3990 | 3678 | 3852 |
| 40° | 3861 | 3701 | 3936 |
| 45° | 3708 | 3751 | 4026 |
| 50° | 3521 | 3809 | 4128 |
| 55° | 3283 | 3857 | 4223 |
| 60° | 3029 | 3913 | 4317 |
| 65° | 2671 | 3963 | 4411 |
| 70° | 2291 | 4044 | 4490 |
| 75° | 1790 | 4117 | 4590 |
| 80° | 1136 | 4185 | 4676 |
| 85° | 567 | 4248 | 4753 |



TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 13.5 | 0.8 |
| 10°-20° | 42.2 | 2.7 |
| 20°-30° | 73.6 | 4.6 |
| 30°-40° | 105.5 | 6.6 |
| 40°-50° | 134.7 | 8.5 |
| 50°-60° | 158.4 | 10.0 |
| 60°-70° | 173.0 | 10.9 |
| 70°-80° | 177.2 | 11.1 |
| 80°-90° | 170.1 | 10.7 |
| 90°-100° | 154.2 | 9.7 |
| 100°-110° | 131.0 | 8.2 |
| 110°-120° | 103.2 | 6.5 |
| 120°-130° | 74.0 | 4.7 |
| 130°-140° | 46.4 | 2.9 |
| 140°-150° | 23.9 | 1.5 |
| 150°-160° | 8.5 | 0.5 |
| 160°-170° | 1.1 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 129.3 | 8.1 |
| 0°-40° | 234.7 | 14.8 |
| 0°-60° | 527.8 | 33.2 |
| 0°-90° | 1048.0 | 65.9 |
| 90°-120° | 388.3 | 24.4 |
| 90°-150° | 532.6 | 33.5 |
| 90°-180° | 542.0 | 34.1 |
| 0°-180° | 1590.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 138 | 138 | 138 | 138 | 138 | |
| 5° | 143 | 143 | 141 | 138 | 134 | 14 |
| 15° | 137 | 142 | 150 | 155 | 154 | 39 |
| 25° | 126 | 139 | 162 | 178 | 181 | 58 |
| 35° | 111 | 135 | 175 | 202 | 209 | 70 |
| 45° | 92 | 128 | 184 | 221 | 231 | 71 |
| 55° | 70 | 122 | 190 | 235 | 249 | 62 |
| 65° | 45 | 112 | 190 | 242 | 259 | 45 |
| 75° | 22 | 100 | 186 | 242 | 260 | 23 |
| 85° | 4 | 86 | 175 | 233 | 251 | 5 |
| 90° | 0 | 79 | 168 | 225 | 243 | 0 |
| 95° | 0 | 72 | 159 | 217 | 234 | 0 |
| 105° | 0 | 58 | 139 | 193 | 210 | 0 |
| 115° | 0 | 44 | 117 | 165 | 180 | 0 |
| 125° | 0 | 32 | 91 | 132 | 145 | 0 |
| 135° | 0 | 22 | 65 | 97 | 108 | 0 |
| 145° | 0 | 14 | 40 | 62 | 68 | 0 |
| 155° | 0 | 6 | 18 | 29 | 31 | 0 |
| 165° | 0 | 1 | 3 | 4 | 4 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 |
| 2.5° | 144.2 | 144.2 | 144.2 | 144.2 | 143.2 | 143.2 | 143.2 | 142.2 | 142.2 | 141.2 | 140.2 |
| 5° | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 142.2 | 142.2 | 141.2 |
| 7.5° | 142.2 | 142.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 | 143.2 |
| 10° | 141.2 | 141.2 | 141.2 | 142.2 | 142.2 | 143.2 | 143.2 | 144.2 | 144.2 | 145.1 | 145.1 |
| 12.5° | 139.3 | 140.2 | 140.2 | 141.2 | 142.2 | 142.2 | 143.2 | 144.2 | 145.1 | 146.1 | 147.1 |
| 15° | 137.3 | 138.3 | 139.3 | 140.2 | 141.2 | 142.2 | 143.2 | 145.1 | 147.1 | 148.1 | 150.0 |
| 17.5° | 135.3 | 136.3 | 137.3 | 138.3 | 141.2 | 142.2 | 143.2 | 145.1 | 148.1 | 151.0 | 153.0 |
| 20° | 133.4 | 133.4 | 135.3 | 137.3 | 140.2 | 141.2 | 143.2 | 146.1 | 149.1 | 153.0 | 155.9 |
| 22.5° | 130.4 | 130.4 | 132.4 | 135.3 | 138.3 | 140.2 | 142.2 | 147.1 | 151.0 | 154.9 | 158.9 |
| 25° | 126.5 | 128.5 | 130.4 | 133.4 | 137.3 | 139.3 | 142.2 | 147.1 | 152.0 | 156.9 | 161.8 |
| 27.5° | 123.6 | 124.5 | 127.5 | 131.4 | 136.3 | 139.3 | 141.2 | 147.1 | 154.0 | 159.9 | 165.7 |
| 30° | 119.6 | 120.6 | 124.5 | 128.5 | 134.4 | 137.3 | 141.2 | 148.1 | 154.9 | 161.8 | 168.7 |
| 32.5° | 115.7 | 116.7 | 120.6 | 126.5 | 132.4 | 136.3 | 140.2 | 148.1 | 155.9 | 163.8 | 171.6 |
| 35° | 110.8 | 112.8 | 117.7 | 123.6 | 131.4 | 135.3 | 139.3 | 148.1 | 156.9 | 165.7 | 174.6 |
| 37.5° | 106.9 | 108.9 | 113.8 | 120.6 | 128.5 | 133.4 | 138.3 | 148.1 | 157.9 | 167.7 | 176.5 |
| 40° | 102.0 | 104.0 | 109.8 | 117.7 | 126.5 | 132.4 | 137.3 | 148.1 | 158.9 | 169.7 | 179.5 |
| 42.5° | 97.1 | 99.1 | 105.9 | 114.7 | 124.5 | 130.4 | 136.3 | 148.1 | 159.9 | 171.6 | 181.4 |
| 45° | 92.2 | 94.1 | 102.0 | 110.8 | 122.6 | 128.5 | 135.3 | 148.1 | 160.8 | 172.6 | 184.4 |
| 47.5° | 86.3 | 89.2 | 97.1 | 107.9 | 120.6 | 127.5 | 134.4 | 148.1 | 160.8 | 173.6 | 186.3 |
| 50° | 81.4 | 84.3 | 93.2 | 104.9 | 118.7 | 125.5 | 132.4 | 147.1 | 161.8 | 175.5 | 188.3 |
| 52.5° | 75.5 | 79.4 | 88.3 | 101.0 | 115.7 | 123.6 | 131.4 | 147.1 | 161.8 | 175.5 | 189.3 |
| 55° | 69.6 | 73.6 | 84.3 | 98.1 | 113.8 | 121.6 | 129.5 | 146.1 | 161.8 | 176.5 | 190.3 |
| 57.5° | 63.7 | 68.6 | 79.4 | 94.1 | 110.8 | 119.6 | 127.5 | 145.1 | 160.8 | 176.5 | 190.3 |
| 60° | 57.9 | 62.8 | 74.5 | 90.2 | 107.9 | 116.7 | 125.5 | 143.2 | 160.8 | 176.5 | 191.2 |
| 62.5° | 51.0 | 56.9 | 70.6 | 87.3 | 104.9 | 114.7 | 123.6 | 142.2 | 158.9 | 175.5 | 191.2 |
| 65° | 45.1 | 51.0 | 65.7 | 83.4 | 102.0 | 111.8 | 121.6 | 140.2 | 157.9 | 174.6 | 190.3 |
| 67.5° | 39.2 | 46.1 | 60.8 | 79.4 | 99.1 | 108.9 | 118.7 | 138.3 | 156.9 | 173.6 | 190.3 |
| 70° | 33.3 | 40.2 | 55.9 | 75.5 | 96.1 | 105.9 | 115.7 | 136.3 | 154.9 | 172.6 | 189.3 |
| 72.5° | 27.5 | 35.3 | 52.0 | 71.6 | 92.2 | 103.0 | 113.8 | 133.4 | 153.0 | 170.6 | 187.3 |
| 75° | 21.6 | 30.4 | 47.1 | 67.7 | 89.2 | 100.0 | 110.8 | 131.4 | 150.0 | 168.7 | 186.3 |
| 77.5° | 16.7 | 25.5 | 43.2 | 63.7 | 86.3 | 97.1 | 106.9 | 128.5 | 148.1 | 166.7 | 183.4 |
| 80° | 10.8 | 20.6 | 39.2 | 59.8 | 82.4 | 93.2 | 104.0 | 125.5 | 145.1 | 163.8 | 181.4 |
| 82.5° | 6.9 | 16.7 | 35.3 | 56.9 | 78.5 | 90.2 | 101.0 | 121.6 | 142.2 | 160.8 | 178.5 |
| 85° | 3.9 | 13.7 | 31.4 | 53.0 | 75.5 | 86.3 | 97.1 | 118.7 | 138.3 | 156.9 | 174.6 |
| 87.5° | 1.0 | 10.8 | 28.4 | 49.0 | 71.6 | 82.4 | 93.2 | 114.7 | 135.3 | 154.0 | 171.6 |
| 90° | 0.0 | 8.8 | 25.5 | 46.1 | 68.6 | 79.4 | 90.2 | 110.8 | 131.4 | 150.0 | 167.7 |
| 92.5° | 0.0 | 6.9 | 23.5 | 43.2 | 64.7 | 75.5 | 86.3 | 107.9 | 127.5 | 146.1 | 163.8 |
| 95° | 0.0 | 5.9 | 20.6 | 40.2 | 61.8 | 71.6 | 82.4 | 104.0 | 123.6 | 142.2 | 158.9 |
| 97.5° | 0.0 | 4.9 | 18.6 | 37.3 | 57.9 | 68.6 | 78.5 | 99.1 | 118.7 | 137.3 | 154.9 |
| 100° | 0.0 | 3.9 | 16.7 | 34.3 | 54.9 | 64.7 | 75.5 | 95.1 | 114.7 | 132.4 | 150.0 |
| 102.5° | 0.0 | 3.9 | 15.7 | 32.4 | 51.0 | 61.8 | 71.6 | 91.2 | 109.8 | 127.5 | 144.2 |
| 105° | 0.0 | 3.9 | 13.7 | 29.4 | 48.1 | 57.9 | 67.7 | 87.3 | 105.9 | 122.6 | 139.3 |
| 107.5° | 0.0 | 2.9 | 12.7 | 27.5 | 45.1 | 54.9 | 63.7 | 82.4 | 101.0 | 117.7 | 133.4 |
| 110° | 0.0 | 2.9 | 11.8 | 25.5 | 42.2 | 51.0 | 59.8 | 78.5 | 96.1 | 112.8 | 128.5 |



TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|------|------|------|-------|------|------|------|-------|-------|
| 112.5° | 0.0 | 2.9 | 10.8 | 23.5 | 39.2 | 48.1 | 56.9 | 73.6 | 91.2 | 106.9 | 122.6 |
| 115° | 0.0 | 2.9 | 9.8 | 21.6 | 36.3 | 44.1 | 53.0 | 69.6 | 86.3 | 102.0 | 116.7 |
| 117.5° | 0.0 | 2.9 | 8.8 | 19.6 | 33.3 | 41.2 | 49.0 | 64.7 | 81.4 | 96.1 | 109.8 |
| 120° | 0.0 | 2.9 | 8.8 | 18.6 | 31.4 | 38.2 | 45.1 | 60.8 | 75.5 | 90.2 | 104.0 |
| 122.5° | 0.0 | 2.0 | 7.8 | 16.7 | 28.4 | 35.3 | 42.2 | 56.9 | 70.6 | 84.3 | 98.1 |
| 125° | 0.0 | 2.0 | 7.8 | 15.7 | 26.5 | 32.4 | 38.2 | 52.0 | 65.7 | 78.5 | 91.2 |
| 127.5° | 0.0 | 2.0 | 6.9 | 13.7 | 23.5 | 29.4 | 35.3 | 48.1 | 59.8 | 72.6 | 84.3 |
| 130° | 0.0 | 2.0 | 5.9 | 12.7 | 21.6 | 26.5 | 32.4 | 43.2 | 54.9 | 66.7 | 78.5 |
| 132.5° | 0.0 | 2.0 | 5.9 | 11.8 | 19.6 | 24.5 | 28.4 | 39.2 | 50.0 | 60.8 | 71.6 |
| 135° | 0.0 | 2.0 | 4.9 | 10.8 | 17.7 | 21.6 | 26.5 | 35.3 | 45.1 | 54.9 | 64.7 |
| 137.5° | 0.0 | 2.0 | 4.9 | 9.8 | 15.7 | 19.6 | 23.5 | 31.4 | 40.2 | 50.0 | 58.8 |
| 140° | 0.0 | 2.0 | 3.9 | 8.8 | 14.7 | 17.7 | 20.6 | 28.4 | 36.3 | 44.1 | 52.0 |
| 142.5° | 0.0 | 1.0 | 3.9 | 7.8 | 12.7 | 15.7 | 18.6 | 25.5 | 31.4 | 39.2 | 46.1 |
| 145° | 0.0 | 1.0 | 3.9 | 6.9 | 10.8 | 13.7 | 15.7 | 21.6 | 27.5 | 34.3 | 40.2 |
| 147.5° | 0.0 | 1.0 | 2.9 | 5.9 | 8.8 | 10.8 | 13.7 | 18.6 | 23.5 | 29.4 | 34.3 |
| 150° | 0.0 | 1.0 | 2.9 | 4.9 | 7.8 | 9.8 | 10.8 | 14.7 | 19.6 | 24.5 | 28.4 |
| 152.5° | 0.0 | 1.0 | 2.0 | 3.9 | 5.9 | 7.8 | 8.8 | 11.8 | 15.7 | 19.6 | 23.5 |
| 155° | 0.0 | 1.0 | 2.0 | 2.9 | 4.9 | 5.9 | 6.9 | 9.8 | 11.8 | 14.7 | 17.7 |
| 157.5° | 0.0 | 1.0 | 1.0 | 2.0 | 3.9 | 4.9 | 5.9 | 7.8 | 9.8 | 11.8 | 13.7 |
| 160° | 0.0 | 1.0 | 1.0 | 2.0 | 2.9 | 2.9 | 3.9 | 5.9 | 6.9 | 7.8 | 9.8 |
| 162.5° | 0.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 2.0 | 3.9 | 4.9 | 4.9 | 5.9 |
| 165° | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 2.9 | 2.9 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 | 138.3 |
| 2.5° | 139.3 | 138.3 | 137.3 | 136.3 | 135.3 | 135.3 | 133.4 | 132.4 | 131.4 | 131.4 |
| 5° | 141.2 | 140.2 | 139.3 | 138.3 | 138.3 | 137.3 | 136.3 | 135.3 | 134.4 | 134.4 |
| 7.5° | 143.2 | 142.2 | 142.2 | 141.2 | 141.2 | 141.2 | 139.3 | 139.3 | 138.3 | 138.3 |
| 10° | 145.1 | 145.1 | 145.1 | 145.1 | 145.1 | 145.1 | 144.2 | 143.2 | 142.2 | 142.2 |
| 12.5° | 148.1 | 149.1 | 149.1 | 150.0 | 150.0 | 150.0 | 149.1 | 149.1 | 148.1 | 148.1 |
| 15° | 152.0 | 153.0 | 154.0 | 154.9 | 154.9 | 154.9 | 154.9 | 154.9 | 154.0 | 154.0 |
| 17.5° | 154.9 | 156.9 | 158.9 | 159.9 | 160.8 | 160.8 | 160.8 | 160.8 | 160.8 | 159.9 |
| 20° | 158.9 | 161.8 | 163.8 | 165.7 | 165.7 | 166.7 | 167.7 | 167.7 | 167.7 | 166.7 |
| 22.5° | 162.8 | 165.7 | 168.7 | 171.6 | 172.6 | 172.6 | 173.6 | 174.6 | 174.6 | 174.6 |
| 25° | 166.7 | 170.6 | 174.6 | 177.5 | 178.5 | 179.5 | 180.4 | 181.4 | 181.4 | 181.4 |
| 27.5° | 170.6 | 175.5 | 179.5 | 183.4 | 184.4 | 185.4 | 187.3 | 188.3 | 188.3 | 188.3 |
| 30° | 174.6 | 180.4 | 185.4 | 188.3 | 190.3 | 192.2 | 194.2 | 195.2 | 195.2 | 196.1 |
| 32.5° | 178.5 | 184.4 | 190.3 | 194.2 | 196.1 | 198.1 | 200.1 | 202.0 | 203.0 | 203.0 |
| 35° | 182.4 | 189.3 | 195.2 | 200.1 | 202.0 | 204.0 | 205.9 | 207.9 | 208.9 | 208.9 |
| 37.5° | 185.4 | 193.2 | 199.1 | 205.0 | 206.9 | 208.9 | 211.8 | 213.8 | 214.8 | 214.8 |
| 40° | 188.3 | 196.1 | 204.0 | 209.9 | 211.8 | 213.8 | 217.7 | 219.7 | 220.7 | 220.7 |
| 42.5° | 191.2 | 200.1 | 207.9 | 213.8 | 216.7 | 218.7 | 222.6 | 224.6 | 225.6 | 226.5 |
| 45° | 194.2 | 204.0 | 211.8 | 217.7 | 220.7 | 223.6 | 226.5 | 229.5 | 231.4 | 231.4 |
| 47.5° | 197.1 | 206.9 | 214.8 | 221.6 | 225.6 | 227.5 | 231.4 | 234.4 | 236.3 | 236.3 |
| 50° | 199.1 | 209.9 | 218.7 | 225.6 | 229.5 | 231.4 | 236.3 | 239.3 | 241.3 | 241.3 |
| 52.5° | 201.0 | 211.8 | 221.6 | 228.5 | 232.4 | 235.4 | 240.3 | 243.2 | 245.2 | 245.2 |
| 55° | 203.0 | 213.8 | 223.6 | 231.4 | 235.4 | 238.3 | 243.2 | 247.1 | 248.1 | 249.1 |
| 57.5° | 204.0 | 215.8 | 225.6 | 234.4 | 237.3 | 241.3 | 246.2 | 250.1 | 251.1 | 252.0 |
| 60° | 205.0 | 216.7 | 226.5 | 236.3 | 240.3 | 243.2 | 248.1 | 252.0 | 254.0 | 255.0 |
| 62.5° | 205.0 | 217.7 | 227.5 | 237.3 | 241.3 | 245.2 | 250.1 | 254.0 | 256.0 | 256.9 |
| 65° | 205.0 | 217.7 | 228.5 | 238.3 | 242.2 | 246.2 | 252.0 | 256.0 | 257.9 | 258.9 |
| 67.5° | 205.0 | 217.7 | 229.5 | 239.3 | 244.2 | 247.1 | 253.0 | 256.9 | 259.9 | 259.9 |
| 70° | 204.0 | 216.7 | 228.5 | 239.3 | 243.2 | 247.1 | 253.0 | 257.9 | 259.9 | 259.9 |
| 72.5° | 203.0 | 216.7 | 228.5 | 238.3 | 243.2 | 247.1 | 253.0 | 257.9 | 259.9 | 259.9 |
| 75° | 201.0 | 214.8 | 227.5 | 237.3 | 242.2 | 246.2 | 253.0 | 256.9 | 259.9 | 259.9 |
| 77.5° | 200.1 | 213.8 | 226.5 | 236.3 | 241.3 | 245.2 | 252.0 | 256.0 | 257.9 | 258.9 |
| 80° | 197.1 | 210.8 | 223.6 | 234.4 | 238.3 | 243.2 | 249.1 | 254.0 | 256.0 | 256.9 |
| 82.5° | 194.2 | 208.9 | 220.7 | 231.4 | 236.3 | 240.3 | 246.2 | 251.1 | 254.0 | 254.0 |
| 85° | 191.2 | 205.0 | 217.7 | 228.5 | 233.4 | 237.3 | 243.2 | 248.1 | 251.1 | 251.1 |
| 87.5° | 187.3 | 201.0 | 213.8 | 224.6 | 228.5 | 233.4 | 240.3 | 244.2 | 247.1 | 248.1 |
| 90° | 183.4 | 197.1 | 209.9 | 220.7 | 224.6 | 229.5 | 236.3 | 240.3 | 242.2 | 243.2 |
| 92.5° | 179.5 | 193.2 | 205.9 | 216.7 | 220.7 | 224.6 | 231.4 | 236.3 | 238.3 | 239.3 |
| 95° | 174.6 | 189.3 | 201.0 | 211.8 | 216.7 | 220.7 | 227.5 | 231.4 | 233.4 | 234.4 |
| 97.5° | 170.6 | 184.4 | 196.1 | 206.9 | 211.8 | 215.8 | 221.6 | 226.5 | 228.5 | 229.5 |
| 100° | 164.8 | 178.5 | 191.2 | 201.0 | 205.9 | 209.9 | 215.8 | 220.7 | 222.6 | 223.6 |
| 102.5° | 159.9 | 173.6 | 185.4 | 195.2 | 200.1 | 203.0 | 209.9 | 213.8 | 215.8 | 216.7 |
| 105° | 154.0 | 167.7 | 179.5 | 189.3 | 193.2 | 197.1 | 203.0 | 206.9 | 209.9 | 209.9 |
| 107.5° | 148.1 | 161.8 | 172.6 | 182.4 | 186.3 | 190.3 | 196.1 | 200.1 | 202.0 | 203.0 |
| 110° | 142.2 | 154.9 | 166.7 | 176.5 | 179.5 | 183.4 | 189.3 | 193.2 | 195.2 | 196.1 |



TEST NUMBER: P236099

CATALOG NUMBER: CFA-2-LD4-UNV-STD-35-OP-EDC1

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 136.3 | 148.1 | 158.9 | 168.7 | 172.6 | 175.5 | 181.4 | 185.4 | 187.3 | 187.3 |
| 115° | 129.5 | 141.2 | 152.0 | 160.8 | 164.8 | 168.7 | 173.6 | 176.5 | 179.5 | 179.5 |
| 117.5° | 123.6 | 134.4 | 145.1 | 153.0 | 156.9 | 159.9 | 165.7 | 168.7 | 170.6 | 171.6 |
| 120° | 116.7 | 128.5 | 137.3 | 146.1 | 149.1 | 153.0 | 157.9 | 160.8 | 162.8 | 162.8 |
| 122.5° | 109.8 | 120.6 | 130.4 | 137.3 | 141.2 | 144.2 | 149.1 | 152.0 | 154.0 | 154.0 |
| 125° | 103.0 | 112.8 | 121.6 | 129.5 | 132.4 | 136.3 | 140.2 | 143.2 | 145.1 | 145.1 |
| 127.5° | 95.1 | 104.9 | 113.8 | 121.6 | 123.6 | 127.5 | 131.4 | 134.4 | 135.3 | 136.3 |
| 130° | 88.3 | 98.1 | 105.9 | 112.8 | 115.7 | 117.7 | 122.6 | 124.5 | 125.5 | 126.5 |
| 132.5° | 81.4 | 90.2 | 97.1 | 104.0 | 106.9 | 108.9 | 112.8 | 115.7 | 116.7 | 116.7 |
| 135° | 74.5 | 82.4 | 89.2 | 95.1 | 97.1 | 100.0 | 103.0 | 105.9 | 106.9 | 107.9 |
| 137.5° | 66.7 | 74.5 | 80.4 | 86.3 | 88.3 | 91.2 | 94.1 | 96.1 | 97.1 | 97.1 |
| 140° | 59.8 | 66.7 | 72.6 | 77.5 | 79.4 | 81.4 | 84.3 | 86.3 | 87.3 | 87.3 |
| 142.5° | 53.0 | 58.8 | 64.7 | 68.6 | 70.6 | 72.6 | 75.5 | 76.5 | 77.5 | 77.5 |
| 145° | 46.1 | 51.0 | 55.9 | 60.8 | 61.8 | 63.7 | 65.7 | 67.7 | 67.7 | 67.7 |
| 147.5° | 40.2 | 44.1 | 48.1 | 52.0 | 53.9 | 54.9 | 56.9 | 57.9 | 58.8 | 58.8 |
| 150° | 33.3 | 37.3 | 41.2 | 44.1 | 46.1 | 46.1 | 48.1 | 49.0 | 49.0 | 49.0 |
| 152.5° | 27.5 | 31.4 | 34.3 | 36.3 | 38.2 | 38.2 | 39.2 | 40.2 | 40.2 | 40.2 |
| 155° | 20.6 | 23.5 | 27.5 | 29.4 | 29.4 | 30.4 | 31.4 | 31.4 | 32.4 | 31.4 |
| 157.5° | 15.7 | 17.7 | 19.6 | 22.6 | 23.5 | 23.5 | 23.5 | 24.5 | 24.5 | 23.5 |
| 160° | 10.8 | 12.7 | 13.7 | 15.7 | 15.7 | 16.7 | 17.7 | 17.7 | 17.7 | 16.7 |
| 162.5° | 6.9 | 7.8 | 8.8 | 8.8 | 9.8 | 9.8 | 10.8 | 10.8 | 10.8 | 10.8 |
| 165° | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 4.9 | 4.9 | 3.9 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)