

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: NEO-RAY

Report Number: P334802

Luminaire Tested: **S124IP-S810U840-4F0-1E-UDD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334802  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IP-S810U840-4F0-1E-UDD-4  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, BATWING OPTIC  
PENDANT MOUNT, 810 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

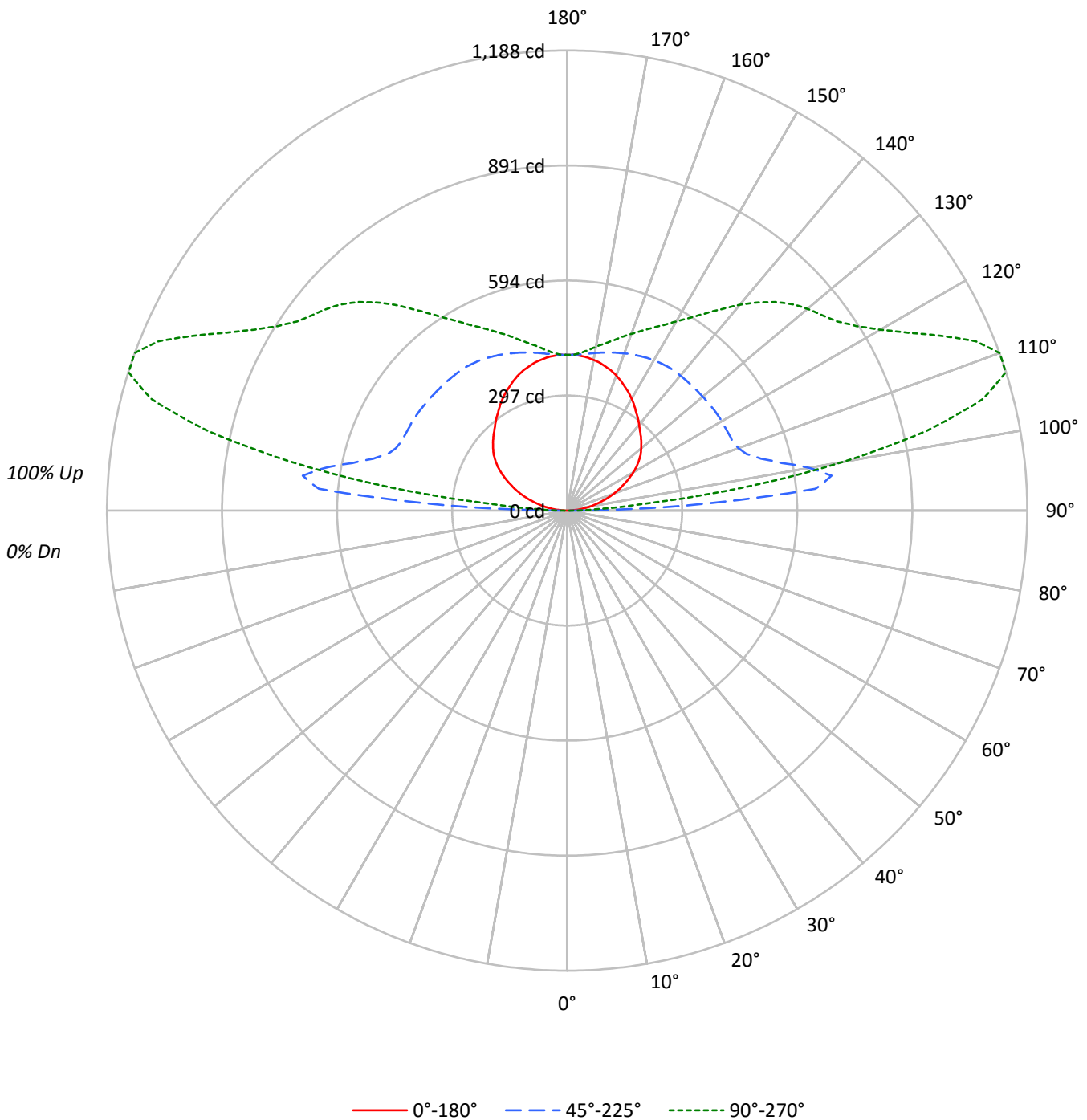
Lumens per Lamp: N/A  
Luminaire Lumens: 2928.9 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 26.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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 | 0 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 56 | 56 | 56 | 32 | 32 | 32 | 10 | 10 | 10 | 0 |
| 1   | 87 | 83 | 79 | 76 | 74 | 71 | 68 | 65 | 48 | 47 | 45 | 28 | 27 | 26 | 9  | 9  | 8  | 0 |
| 2   | 79 | 72 | 66 | 62 | 67 | 62 | 57 | 53 | 42 | 40 | 37 | 24 | 23 | 22 | 8  | 7  | 7  | 0 |
| 3   | 72 | 63 | 56 | 51 | 61 | 54 | 49 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7  | 6  | 6  | 0 |
| 4   | 65 | 56 | 48 | 43 | 56 | 48 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 16 | 6  | 6  | 5  | 0 |
| 5   | 60 | 49 | 42 | 36 | 51 | 42 | 36 | 32 | 29 | 25 | 22 | 17 | 15 | 13 | 5  | 5  | 4  | 0 |
| 6   | 55 | 44 | 36 | 31 | 47 | 38 | 32 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5  | 4  | 4  | 0 |
| 7   | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 17 | 14 | 11 | 10 | 4  | 4  | 3  | 0 |
| 8   | 47 | 35 | 28 | 23 | 40 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9  | 4  | 3  | 3  | 0 |
| 9   | 43 | 32 | 25 | 20 | 37 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9  | 8  | 4  | 3  | 3  | 0 |
| 10  | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8  | 7  | 3  | 3  | 2  | 0 |

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

|     | 0° | 45° | 90° |
|-----|----|-----|-----|
| 0°  | 0  | 0   | 0   |
| 5°  | 0  | 0   | 0   |
| 10° | 0  | 0   | 0   |
| 15° | 0  | 0   | 0   |
| 20° | 0  | 0   | 0   |
| 25° | 0  | 0   | 0   |
| 30° | 0  | 0   | 0   |
| 35° | 0  | 0   | 0   |
| 40° | 0  | 0   | 0   |
| 45° | 0  | 0   | 0   |
| 50° | 0  | 0   | 0   |
| 55° | 0  | 0   | 0   |
| 60° | 0  | 0   | 0   |
| 65° | 0  | 0   | 0   |
| 70° | 0  | 0   | 0   |
| 75° | 0  | 0   | 0   |
| 80° | 0  | 0   | 0   |
| 85° | 0  | 0   | 0   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.0    | 0.0       |
| 10°-20°   | 0.0    | 0.0       |
| 20°-30°   | 0.0    | 0.0       |
| 30°-40°   | 0.0    | 0.0       |
| 40°-50°   | 0.0    | 0.0       |
| 50°-60°   | 0.0    | 0.0       |
| 60°-70°   | 0.0    | 0.0       |
| 70°-80°   | 0.0    | 0.0       |
| 80°-90°   | 1.6    | 0.1       |
| 90°-100°  | 291.3  | 9.9       |
| 100°-110° | 608.2  | 20.8      |
| 110°-120° | 540.6  | 18.5      |
| 120°-130° | 455.1  | 15.5      |
| 130°-140° | 379.7  | 13.0      |
| 140°-150° | 289.9  | 9.9       |
| 150°-160° | 203.8  | 7.0       |
| 160°-170° | 119.9  | 4.1       |
| 170°-180° | 39.0   | 1.3       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 1.6    | 0.1       |
| 90°-120°  | 1440.0 | 49.2      |
| 90°-150°  | 2564.7 | 87.6      |
| 90°-180°  | 2927.0 | 99.9      |
| 0°-180°   | 2928.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 0   | 0     | 0   | 0     | 0    |      |
| 5°   | 0   | 0     | 0   | 0     | 0    | 0    |
| 15°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 25°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 35°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 45°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 55°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 65°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 75°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 85°  | 0   | 0     | 0   | 0     | 0    | 0    |
| 90°  | 1   | 6     | 14  | 16    | 17   | 2    |
| 95°  | 26  | 82    | 644 | 319   | 193  | 29   |
| 105° | 92  | 134   | 518 | 1115  | 1111 | 98   |
| 115° | 163 | 204   | 462 | 888   | 1067 | 161  |
| 125° | 227 | 269   | 460 | 755   | 851  | 202  |
| 135° | 269 | 321   | 456 | 670   | 761  | 208  |
| 145° | 310 | 355   | 453 | 565   | 621  | 195  |
| 155° | 353 | 381   | 441 | 499   | 520  | 163  |
| 165° | 385 | 396   | 422 | 447   | 454  | 109  |
| 175° | 401 | 402   | 405 | 411   | 409  | 38   |
| 180° | 402 | 402   | 402 | 402   | 402  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 2.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 5°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 7.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 10°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 12.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 15°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 17.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 20°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 22.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 25°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 27.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 32.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 35°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 37.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 40°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 42.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 45°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 47.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 50°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5°  | 0.0   | 0.0   | 0.0   | 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   | 0.0   | 0.0   | 0.0   |
| 77.5°  | 0.0   | 0.0   | 0.0   | 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   | 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   | 0.0   | 0.0   | 0.0   |
| 90°    | 0.8   | 2.4   | 4.7   | 5.5   | 6.3   | 6.3   | 11.1  | 11.1  | 12.6  | 14.2  | 13.4  |
| 92.5°  | 11.1  | 15.8  | 24.5  | 36.3  | 50.5  | 71.1  | 120.0 | 196.6 | 270.8 | 309.5 | 257.4 |
| 95°    | 26.1  | 28.4  | 36.3  | 46.6  | 65.5  | 98.7  | 167.4 | 296.9 | 485.6 | 643.6 | 661.7 |
| 97.5°  | 43.4  | 43.4  | 50.5  | 60.0  | 76.6  | 105.0 | 159.5 | 270.8 | 465.1 | 688.6 | 829.9 |
| 100°   | 60.0  | 60.0  | 65.5  | 75.0  | 90.0  | 115.3 | 161.9 | 251.1 | 412.2 | 634.9 | 837.0 |
| 102.5° | 75.8  | 77.4  | 82.1  | 90.8  | 105.0 | 128.7 | 169.8 | 245.6 | 376.7 | 567.7 | 777.8 |
| 105°   | 92.4  | 94.8  | 98.7  | 108.2 | 122.4 | 145.3 | 183.2 | 248.7 | 359.3 | 518.0 | 703.6 |
| 107.5° | 110.5 | 112.1 | 116.1 | 126.3 | 139.8 | 162.7 | 197.4 | 258.2 | 354.5 | 485.6 | 642.8 |
| 110°   | 128.7 | 130.3 | 134.2 | 143.7 | 157.9 | 179.2 | 214.0 | 269.3 | 356.1 | 470.6 | 599.3 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 146.1 | 147.7 | 152.4 | 161.1 | 175.3 | 196.6 | 229.8 | 281.1 | 360.9 | 463.5 | 574.9 |
| 115°   | 162.7 | 165.0 | 170.6 | 178.5 | 193.5 | 214.8 | 246.4 | 293.7 | 367.2 | 461.9 | 561.4 |
| 117.5° | 180.0 | 182.4 | 187.1 | 195.8 | 210.0 | 232.2 | 262.2 | 306.4 | 373.5 | 461.1 | 554.3 |
| 120°   | 197.4 | 199.0 | 204.5 | 213.2 | 226.6 | 248.7 | 278.7 | 319.8 | 380.6 | 461.1 | 548.8 |
| 122.5° | 213.2 | 214.8 | 220.3 | 228.2 | 243.2 | 264.5 | 294.5 | 332.4 | 387.7 | 460.4 | 542.5 |
| 125°   | 226.6 | 229.8 | 234.5 | 243.2 | 258.2 | 280.3 | 308.7 | 345.1 | 394.8 | 459.6 | 535.4 |
| 127.5° | 239.3 | 241.6 | 247.2 | 256.6 | 272.4 | 294.5 | 322.2 | 356.1 | 400.3 | 458.0 | 525.9 |
| 130°   | 249.5 | 252.7 | 259.0 | 270.8 | 285.8 | 308.7 | 335.6 | 366.4 | 406.7 | 457.2 | 517.2 |
| 132.5° | 259.8 | 262.2 | 270.8 | 281.9 | 298.5 | 319.8 | 346.7 | 376.7 | 412.2 | 456.4 | 509.3 |
| 135°   | 269.3 | 272.4 | 280.3 | 293.7 | 310.3 | 330.9 | 356.9 | 385.3 | 417.7 | 455.6 | 501.4 |
| 137.5° | 278.7 | 281.9 | 290.6 | 303.2 | 320.6 | 340.3 | 364.8 | 391.7 | 420.9 | 455.6 | 494.3 |
| 140°   | 289.0 | 291.4 | 300.1 | 313.5 | 330.1 | 349.0 | 372.7 | 398.0 | 424.8 | 454.8 | 488.8 |
| 142.5° | 300.1 | 302.4 | 310.3 | 323.0 | 338.8 | 356.9 | 379.8 | 402.7 | 428.0 | 454.8 | 484.0 |
| 145°   | 310.3 | 312.7 | 320.6 | 331.6 | 346.7 | 364.0 | 384.6 | 405.9 | 428.8 | 453.3 | 478.5 |
| 147.5° | 322.2 | 323.0 | 330.1 | 341.9 | 354.5 | 370.3 | 390.1 | 409.0 | 429.6 | 450.9 | 473.8 |
| 150°   | 333.2 | 334.0 | 340.3 | 349.8 | 361.7 | 376.7 | 394.0 | 411.4 | 429.6 | 448.5 | 468.3 |
| 152.5° | 343.5 | 343.5 | 349.8 | 358.5 | 368.8 | 382.2 | 397.2 | 413.0 | 428.0 | 444.6 | 461.9 |
| 155°   | 353.0 | 353.8 | 358.5 | 366.4 | 375.1 | 386.9 | 400.3 | 413.8 | 426.4 | 440.6 | 455.6 |
| 157.5° | 362.4 | 362.4 | 367.2 | 373.5 | 381.4 | 390.9 | 402.7 | 413.8 | 424.8 | 436.7 | 449.3 |
| 160°   | 371.1 | 371.1 | 374.3 | 379.8 | 386.1 | 394.8 | 404.3 | 413.8 | 422.5 | 431.9 | 442.2 |
| 162.5° | 379.0 | 378.2 | 380.6 | 385.3 | 390.9 | 397.2 | 405.9 | 413.8 | 420.1 | 427.2 | 435.9 |
| 165°   | 384.6 | 384.6 | 386.1 | 390.1 | 394.0 | 398.8 | 405.9 | 412.2 | 416.9 | 422.5 | 428.8 |
| 167.5° | 390.9 | 390.1 | 390.9 | 394.0 | 396.4 | 400.3 | 405.9 | 410.6 | 413.8 | 417.7 | 422.5 |
| 170°   | 394.8 | 394.0 | 394.8 | 397.2 | 398.8 | 401.1 | 405.1 | 409.0 | 410.6 | 413.0 | 416.1 |
| 172.5° | 398.8 | 398.0 | 398.0 | 399.6 | 400.3 | 401.9 | 404.3 | 407.5 | 407.5 | 408.2 | 410.6 |
| 175°   | 401.1 | 400.3 | 400.3 | 401.1 | 401.9 | 401.9 | 403.5 | 405.9 | 405.1 | 405.1 | 406.7 |
| 177.5° | 402.7 | 401.9 | 401.1 | 401.9 | 401.9 | 401.9 | 402.7 | 404.3 | 402.7 | 402.7 | 403.5 |
| 180°   | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 | 401.9 |



TEST NUMBER: P334802

CATALOG NUMBER: S124IP-S810U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 2.5°   | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 5°     | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 7.5°   | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 10°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 12.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 15°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 17.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 20°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 22.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 25°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 27.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 30°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 32.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 35°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 37.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 40°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 42.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 45°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 47.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 50°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 52.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 55°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 57.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 60°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5°  | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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°    | 14.2  | 15.0   | 15.8   | 15.8   | 16.6   | 17.4   | 16.6   | 16.6   |
| 92.5°  | 190.3 | 142.1  | 112.1  | 92.4   | 80.5   | 75.0   | 71.9   | 71.9   |
| 95°    | 585.1 | 462.7  | 356.9  | 280.3  | 241.6  | 217.1  | 202.9  | 192.7  |
| 97.5°  | 842.5 | 781.7  | 694.9  | 606.4  | 552.7  | 505.4  | 481.7  | 462.7  |
| 100°   | 952.3 | 968.1  | 929.4  | 871.0  | 802.3  | 754.1  | 730.4  | 724.1  |
| 102.5° | 946.8 | 1040.7 | 1064.4 | 1048.6 | 1013.1 | 981.5  | 956.2  | 951.5  |
| 105°   | 884.4 | 1021.0 | 1099.2 | 1131.5 | 1133.1 | 1126.8 | 1115.8 | 1111.0 |
| 107.5° | 807.8 | 955.5  | 1064.4 | 1130.8 | 1165.5 | 1179.7 | 1186.0 | 1186.8 |
| 110°   | 739.9 | 876.5  | 991.0  | 1077.9 | 1133.9 | 1167.1 | 1181.3 | 1188.4 |





TEST NUMBER: P334802

CATALOG NUMBER: S124IP-S810U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|-------|-------|-------|--------|--------|--------|--------|--------|
| 112.5° | 690.1 | 807.0 | 913.6 | 1000.5 | 1066.0 | 1107.9 | 1129.2 | 1141.8 |
| 115°   | 660.1 | 757.3 | 849.6 | 925.5  | 987.8  | 1035.2 | 1060.5 | 1066.8 |
| 117.5° | 642.8 | 724.9 | 799.9 | 866.2  | 921.5  | 962.6  | 989.4  | 993.4  |
| 120°   | 631.7 | 705.1 | 768.3 | 824.4  | 869.4  | 904.1  | 924.7  | 933.4  |
| 122.5° | 622.2 | 692.5 | 748.6 | 796.0  | 832.3  | 860.7  | 877.3  | 886.0  |
| 125°   | 611.2 | 679.1 | 733.6 | 777.0  | 808.6  | 831.5  | 846.5  | 851.2  |
| 127.5° | 598.5 | 664.1 | 718.6 | 759.6  | 791.2  | 811.7  | 824.4  | 829.1  |
| 130°   | 582.8 | 645.1 | 698.8 | 740.7  | 773.1  | 792.8  | 805.4  | 810.2  |
| 132.5° | 566.2 | 623.8 | 675.9 | 717.8  | 749.4  | 772.3  | 784.1  | 788.8  |
| 135°   | 551.2 | 602.5 | 650.7 | 690.1  | 721.7  | 743.8  | 756.5  | 761.2  |
| 137.5° | 537.0 | 582.0 | 623.8 | 660.1  | 690.1  | 713.0  | 723.3  | 728.8  |
| 140°   | 525.1 | 562.2 | 597.8 | 630.9  | 658.6  | 675.9  | 687.0  | 693.3  |
| 142.5° | 514.1 | 545.6 | 574.9 | 602.5  | 626.2  | 642.0  | 651.4  | 655.4  |
| 145°   | 503.8 | 530.6 | 554.3 | 576.4  | 596.2  | 609.6  | 617.5  | 621.4  |
| 147.5° | 495.1 | 517.2 | 537.0 | 555.1  | 570.1  | 582.0  | 588.3  | 589.9  |
| 150°   | 487.2 | 505.4 | 521.2 | 535.4  | 548.0  | 558.3  | 563.0  | 563.8  |
| 152.5° | 478.5 | 493.5 | 507.7 | 518.8  | 529.1  | 537.0  | 539.3  | 540.1  |
| 155°   | 469.8 | 482.5 | 494.3 | 503.8  | 511.7  | 518.0  | 520.4  | 520.4  |
| 157.5° | 460.4 | 471.4 | 481.7 | 489.6  | 495.9  | 500.6  | 502.2  | 502.2  |
| 160°   | 451.7 | 460.4 | 469.0 | 475.4  | 480.1  | 484.8  | 485.6  | 485.6  |
| 162.5° | 443.0 | 450.1 | 456.4 | 461.9  | 465.1  | 469.8  | 470.6  | 469.8  |
| 165°   | 435.1 | 439.8 | 445.4 | 449.3  | 452.5  | 455.6  | 454.8  | 454.0  |
| 167.5° | 427.2 | 431.1 | 435.9 | 438.2  | 439.8  | 442.2  | 442.2  | 441.4  |
| 170°   | 420.1 | 422.5 | 425.6 | 428.0  | 429.6  | 430.4  | 429.6  | 429.6  |
| 172.5° | 413.8 | 415.3 | 416.9 | 418.5  | 419.3  | 420.1  | 419.3  | 417.7  |
| 175°   | 408.2 | 409.0 | 410.6 | 410.6  | 410.6  | 412.2  | 410.6  | 409.0  |
| 177.5° | 404.3 | 405.1 | 405.1 | 405.9  | 405.1  | 405.9  | 404.3  | 402.7  |
| 180°   | 401.9 | 401.9 | 401.9 | 401.9  | 401.9  | 401.9  | 401.9  | 401.9  |

(END OF REPORT)