

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1011937

Luminaire Tested: S123DIP-B775D1025UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011937  
REPORT IS A COMBINATION OF REPORTS P990276 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B775D1025UB50-4F0-XX-W2A-F  
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

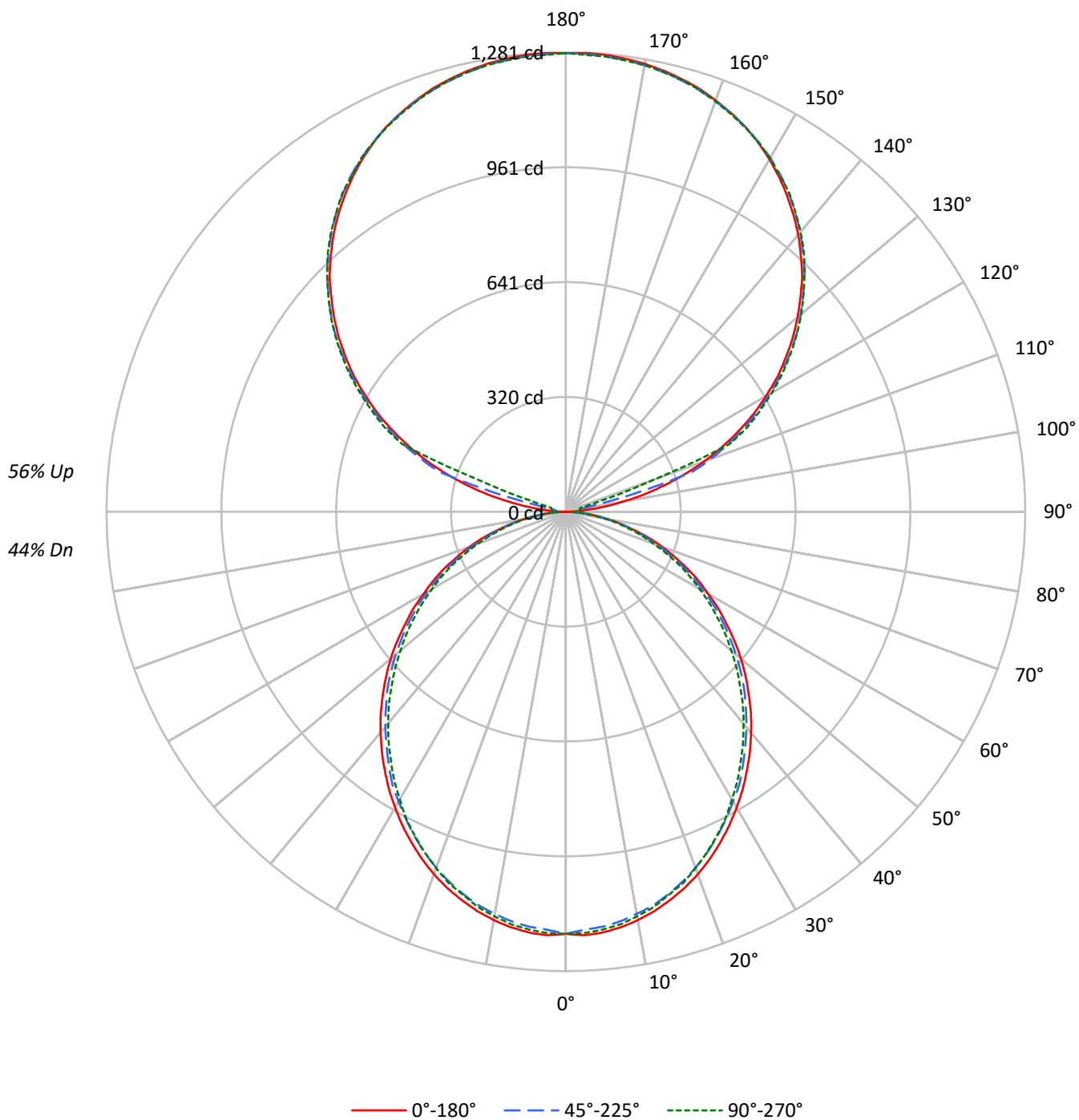
Lumens per Lamp: N/A  
Luminaire Lumens: 6964.0 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 64.4  
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: 24 FT

TEST NUMBER: P1011937

CATALOG NUMBER: S123DIP-B775D1025UB50-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P1011937

CATALOG NUMBER: S123DIP-B775D1025UB50-4F0-XX-W2A-F

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

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 45 | 44 | 43 |
| 2   | 88  | 80  | 74  | 69  | 80 | 74 | 68 | 64 | 61 | 57 | 54 | 50 | 47 | 45 | 39 | 37 | 36 |
| 3   | 80  | 71  | 63  | 58  | 73 | 65 | 59 | 53 | 54 | 49 | 46 | 44 | 41 | 38 | 35 | 32 | 30 |
| 4   | 73  | 62  | 55  | 49  | 67 | 57 | 51 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 43 | 37 | 33 | 35 | 31 | 28 | 28 | 25 | 23 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 25 | 22 | 20 |
| 7   | 57  | 45  | 37  | 31  | 52 | 41 | 34 | 29 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 32 | 26 | 23 | 26 | 22 | 19 | 21 | 18 | 16 |
| 9   | 49  | 37  | 30  | 25  | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 20 | 17 | 14 |
| 10  | 46  | 34  | 27  | 22  | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 18 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12668 | 12668 | 12668 |
| 5°  | 12699 | 12231 | 12212 |
| 10° | 12587 | 11818 | 11695 |
| 15° | 12412 | 11387 | 11133 |
| 20° | 12211 | 10909 | 10574 |
| 25° | 11951 | 10404 | 9978  |
| 30° | 11668 | 9882  | 9350  |
| 35° | 11370 | 9349  | 8726  |
| 40° | 11058 | 8790  | 8112  |
| 45° | 10715 | 8244  | 7471  |
| 50° | 10367 | 7636  | 6828  |
| 55° | 9920  | 7003  | 6176  |
| 60° | 9459  | 6305  | 5482  |
| 65° | 9026  | 5548  | 4759  |
| 70° | 8405  | 4710  | 3915  |
| 75° | 7505  | 3730  | 3040  |
| 80° | 6482  | 2622  | 2149  |
| 85° | 5052  | 1409  | 1077  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

TEST NUMBER: P1011937

CATALOG NUMBER: S123DIP-B775D1025UB50-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 111.0  | 1.6       |
| 10°-20°   | 313.3  | 4.5       |
| 20°-30°   | 462.7  | 6.6       |
| 30°-40°   | 540.4  | 7.8       |
| 40°-50°   | 543.3  | 7.8       |
| 50°-60°   | 477.2  | 6.9       |
| 60°-70°   | 355.4  | 5.1       |
| 70°-80°   | 202.3  | 2.9       |
| 80°-90°   | 60.1   | 0.9       |
| 90°-100°  | 45.1   | 0.6       |
| 100°-110° | 218.0  | 3.1       |
| 110°-120° | 534.3  | 7.7       |
| 120°-130° | 678.2  | 9.7       |
| 130°-140° | 724.6  | 10.4      |
| 140°-150° | 677.5  | 9.7       |
| 150°-160° | 546.5  | 7.8       |
| 160°-170° | 352.7  | 5.1       |
| 170°-180° | 121.5  | 1.7       |
| 0°-30°    | 886.9  | 12.7      |
| 0°-40°    | 1427.3 | 20.5      |
| 0°-60°    | 2447.8 | 35.1      |
| 0°-90°    | 3065.6 | 44.0      |
| 90°-120°  | 797.4  | 11.5      |
| 90°-150°  | 2877.8 | 41.3      |
| 90°-180°  | 3898.0 | 56.0      |
| 0°-180°   | 6964.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1177 | 1177  | 1177 | 1177  | 1177 |      |
| 5°   | 1178 | 1173  | 1162 | 1172  | 1170 | 112  |
| 15°  | 1121 | 1117  | 1104 | 1112  | 1106 | 316  |
| 25°  | 1018 | 1012  | 999  | 1000  | 997  | 469  |
| 35°  | 880  | 874   | 861  | 855   | 850  | 551  |
| 45°  | 722  | 718   | 704  | 692   | 687  | 557  |
| 55°  | 548  | 546   | 533  | 522   | 517  | 490  |
| 65°  | 373  | 368   | 358  | 350   | 347  | 368  |
| 75°  | 197  | 193   | 190  | 185   | 182  | 211  |
| 85°  | 53   | 51    | 51   | 49    | 49   | 56   |
| 90°  | 1    | 10    | 23   | 27    | 28   | 7    |
| 95°  | 58   | 19    | 30   | 36    | 36   | 69   |
| 105° | 283  | 294   | 208  | 40    | 42   | 300  |
| 115° | 531  | 537   | 545  | 555   | 559  | 524  |
| 125° | 749  | 756   | 760  | 762   | 764  | 669  |
| 135° | 932  | 938   | 942  | 944   | 942  | 718  |
| 145° | 1076 | 1082  | 1084 | 1086  | 1086 | 673  |
| 155° | 1185 | 1183  | 1184 | 1188  | 1183 | 546  |
| 165° | 1249 | 1246  | 1246 | 1253  | 1246 | 353  |
| 175° | 1279 | 1274  | 1275 | 1282  | 1274 | 122  |
| 180° | 1279 | 1279  | 1279 | 1279  | 1279 |      |

TEST NUMBER: P1011937

CATALOG NUMBER: S123DIP-B775D1025UB50-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1176.9 | 1176.9 | 1176.9 | 1176.9 | 1176.9 |
| 2.5°   | 1182.0 | 1177.9 | 1166.8 | 1176.9 | 1175.9 |
| 5°     | 1177.9 | 1172.9 | 1161.7 | 1171.9 | 1169.8 |
| 7.5°   | 1168.8 | 1163.8 | 1152.6 | 1161.7 | 1160.7 |
| 10°    | 1156.7 | 1151.6 | 1138.5 | 1147.6 | 1145.5 |
| 12.5°  | 1140.5 | 1136.4 | 1124.3 | 1130.4 | 1129.4 |
| 15°    | 1121.3 | 1117.2 | 1104.1 | 1112.2 | 1106.1 |
| 17.5°  | 1100.0 | 1095.0 | 1081.8 | 1087.9 | 1085.8 |
| 20°    | 1075.7 | 1069.7 | 1056.5 | 1060.5 | 1057.5 |
| 22.5°  | 1048.4 | 1042.3 | 1029.2 | 1032.2 | 1028.2 |
| 25°    | 1018.0 | 1012.0 | 998.8  | 999.8  | 996.8  |
| 27.5°  | 986.7  | 980.6  | 966.4  | 967.4  | 964.4  |
| 30°    | 952.3  | 947.2  | 933.0  | 933.0  | 926.0  |
| 32.5°  | 917.9  | 910.8  | 900.7  | 893.6  | 890.5  |
| 35°    | 880.4  | 874.3  | 861.2  | 855.1  | 850.1  |
| 37.5°  | 843.0  | 834.9  | 821.7  | 814.6  | 811.6  |
| 40°    | 803.5  | 797.4  | 783.3  | 775.2  | 771.1  |
| 42.5°  | 764.0  | 757.0  | 742.8  | 734.7  | 730.6  |
| 45°    | 721.5  | 717.5  | 704.3  | 692.2  | 687.1  |
| 47.5°  | 680.0  | 674.0  | 661.8  | 649.7  | 645.6  |
| 50°    | 637.5  | 632.5  | 619.3  | 608.2  | 602.1  |
| 52.5°  | 593.0  | 590.0  | 575.8  | 566.7  | 560.6  |
| 55°    | 547.5  | 546.5  | 533.3  | 522.2  | 517.1  |
| 57.5°  | 505.0  | 500.9  | 490.8  | 480.7  | 474.6  |
| 60°    | 458.4  | 457.4  | 445.3  | 436.2  | 431.1  |
| 62.5°  | 416.9  | 413.9  | 401.8  | 392.6  | 389.6  |
| 65°    | 373.4  | 368.4  | 358.2  | 350.1  | 347.1  |
| 67.5°  | 326.9  | 322.8  | 314.7  | 307.6  | 303.6  |
| 70°    | 285.4  | 279.3  | 273.2  | 266.1  | 261.1  |
| 72.5°  | 241.9  | 237.8  | 230.7  | 224.7  | 222.6  |
| 75°    | 197.3  | 193.3  | 190.3  | 185.2  | 182.2  |
| 77.5°  | 157.9  | 155.8  | 151.8  | 147.7  | 147.7  |
| 80°    | 119.4  | 116.4  | 114.4  | 113.3  | 113.3  |
| 82.5°  | 82.0   | 82.0   | 82.0   | 79.9   | 78.9   |
| 85°    | 52.6   | 50.6   | 50.6   | 48.6   | 48.6   |
| 87.5°  | 26.3   | 23.3   | 22.3   | 21.3   | 21.3   |
| 90°    | 1.0    | 10.5   | 22.8   | 26.6   | 28.5   |
| 92.5°  | 21.9   | 16.2   | 24.7   | 31.4   | 32.3   |
| 95°    | 58.0   | 19.0   | 29.5   | 36.1   | 36.1   |
| 97.5°  | 105.5  | 78.9   | 30.4   | 38.0   | 39.0   |
| 100°   | 160.6  | 179.6  | 31.4   | 39.0   | 39.9   |
| 102.5° | 223.3  | 235.6  | 70.3   | 39.0   | 40.9   |
| 105°   | 283.1  | 293.6  | 208.1  | 39.9   | 41.8   |
| 107.5° | 346.8  | 355.3  | 369.6  | 223.3  | 98.8   |
| 110°   | 410.4  | 418.0  | 428.5  | 397.1  | 261.3  |

TEST NUMBER: P1011937

CATALOG NUMBER: S123DIP-B775D1025UB50-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 471.2  | 477.9  | 488.3  | 496.9  | 495.0  |
| 115°   | 531.1  | 536.8  | 545.3  | 554.8  | 558.6  |
| 117.5° | 590.0  | 596.6  | 601.4  | 609.0  | 609.9  |
| 120°   | 644.1  | 652.7  | 655.5  | 663.1  | 663.1  |
| 122.5° | 699.2  | 705.9  | 709.7  | 714.4  | 715.4  |
| 125°   | 748.6  | 756.2  | 760.0  | 761.9  | 763.8  |
| 127.5° | 798.0  | 805.6  | 810.4  | 813.2  | 811.3  |
| 130°   | 843.6  | 851.2  | 855.0  | 858.8  | 856.9  |
| 132.5° | 887.4  | 895.0  | 897.8  | 901.6  | 898.8  |
| 135°   | 932.0  | 937.7  | 941.5  | 944.4  | 941.5  |
| 137.5° | 970.0  | 977.6  | 979.5  | 984.3  | 982.4  |
| 140°   | 1008.0 | 1013.7 | 1016.6 | 1020.4 | 1018.5 |
| 142.5° | 1043.2 | 1048.9 | 1051.7 | 1054.6 | 1051.7 |
| 145°   | 1075.5 | 1082.1 | 1084.0 | 1085.9 | 1085.9 |
| 147.5° | 1106.8 | 1111.6 | 1113.5 | 1115.4 | 1110.6 |
| 150°   | 1135.3 | 1138.2 | 1140.1 | 1142.0 | 1139.1 |
| 152.5° | 1161.0 | 1161.9 | 1162.9 | 1166.7 | 1161.9 |
| 155°   | 1184.7 | 1182.8 | 1183.8 | 1188.5 | 1182.8 |
| 157.5° | 1203.7 | 1203.7 | 1202.8 | 1208.5 | 1200.9 |
| 160°   | 1220.8 | 1219.9 | 1218.9 | 1224.6 | 1218.0 |
| 162.5° | 1237.0 | 1234.1 | 1233.2 | 1239.8 | 1234.1 |
| 165°   | 1249.3 | 1246.5 | 1245.5 | 1253.1 | 1246.5 |
| 167.5° | 1259.8 | 1256.0 | 1256.0 | 1263.6 | 1256.0 |
| 170°   | 1268.3 | 1264.5 | 1264.5 | 1272.1 | 1264.5 |
| 172.5° | 1274.0 | 1269.3 | 1270.2 | 1277.8 | 1269.3 |
| 175°   | 1278.8 | 1274.0 | 1275.0 | 1281.6 | 1274.0 |
| 177.5° | 1280.7 | 1275.9 | 1276.9 | 1284.5 | 1275.0 |
| 180°   | 1278.8 | 1278.8 | 1278.8 | 1278.8 | 1278.8 |

(END OF REPORT)