

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: P1032385

Luminaire Tested: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1032385  
REPORT IS A COMBINATION OF REPORTS P994641 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1  
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

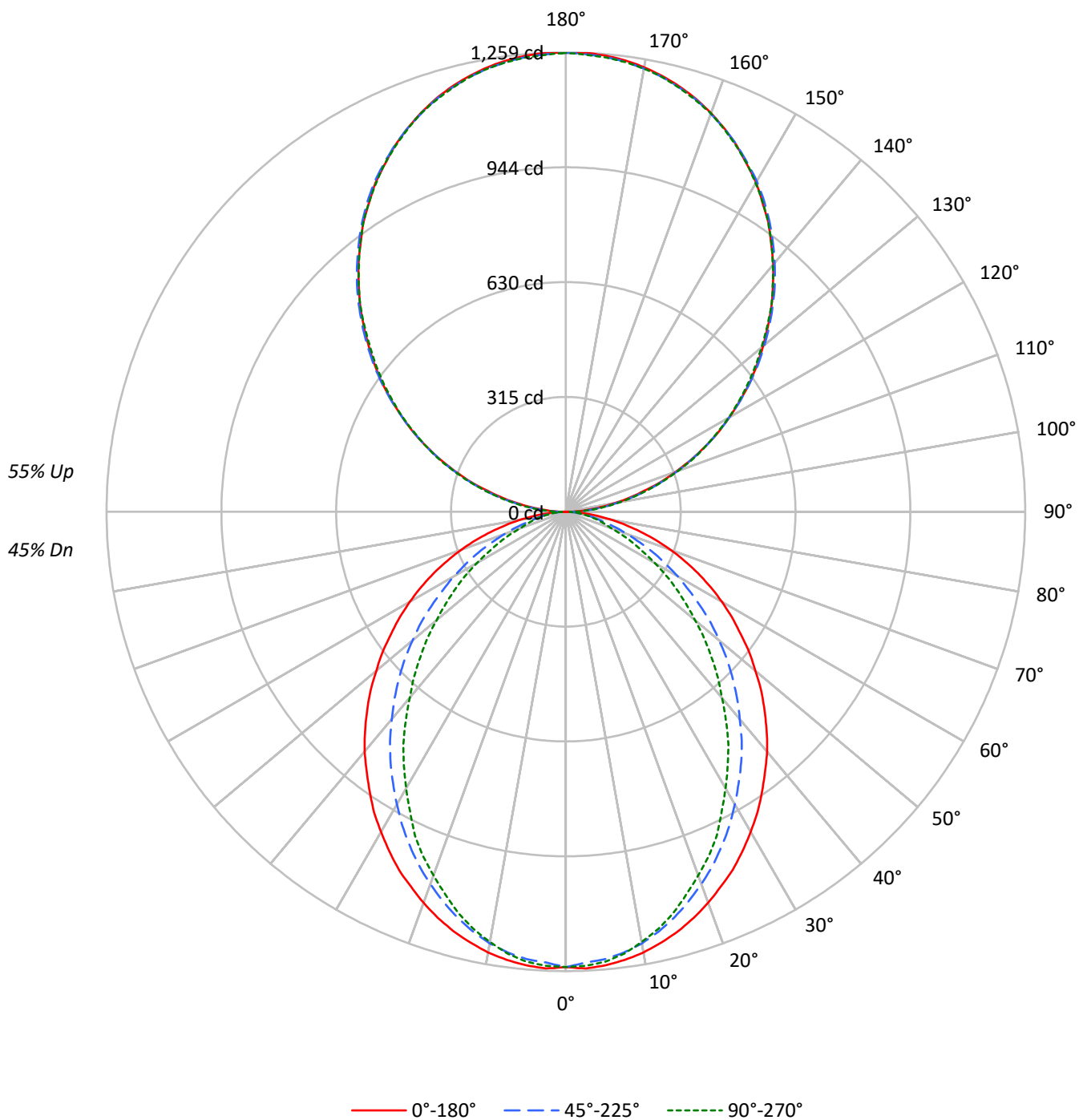
Lumens per Lamp: N/A  
Luminaire Lumens: 6307.0 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 67.4  
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: P1032385

CATALOG NUMBER: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

### Luminous Intensity Polar Plot



TEST NUMBER: P1032385

CATALOG NUMBER: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

**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   | 97  | 93  | 89  | 86  | 89 | 85 | 82 | 79 | 71 | 69 | 67 | 58 | 56 | 55 | 46 | 45 | 44 |
| 2   | 88  | 81  | 75  | 70  | 81 | 75 | 70 | 65 | 62 | 59 | 56 | 51 | 49 | 46 | 41 | 39 | 37 |
| 3   | 81  | 72  | 65  | 59  | 74 | 66 | 60 | 55 | 55 | 51 | 47 | 45 | 42 | 39 | 36 | 34 | 32 |
| 4   | 74  | 64  | 56  | 50  | 68 | 59 | 52 | 47 | 49 | 44 | 40 | 41 | 37 | 34 | 33 | 30 | 28 |
| 5   | 68  | 57  | 49  | 43  | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 37 | 33 | 30 | 29 | 27 | 24 |
| 6   | 63  | 51  | 43  | 37  | 57 | 47 | 40 | 35 | 40 | 35 | 30 | 33 | 29 | 26 | 27 | 24 | 22 |
| 7   | 58  | 46  | 38  | 33  | 53 | 43 | 36 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 25 | 22 | 19 |
| 8   | 54  | 42  | 34  | 29  | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 17 |
| 9   | 50  | 38  | 31  | 26  | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 25 | 21 | 19 | 21 | 18 | 16 |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 19 | 16 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13431 | 13431 | 13431 |
| 5°  | 13453 | 12956 | 12921 |
| 10° | 13347 | 12468 | 12223 |
| 15° | 13174 | 11866 | 11459 |
| 20° | 12946 | 11212 | 10605 |
| 25° | 12712 | 10531 | 9795  |
| 30° | 12412 | 9808  | 8839  |
| 35° | 12102 | 9096  | 7968  |
| 40° | 11811 | 8324  | 7005  |
| 45° | 11437 | 7570  | 6140  |
| 50° | 11025 | 6763  | 5245  |
| 55° | 10598 | 5900  | 4424  |
| 60° | 10191 | 5015  | 3590  |
| 65° | 9662  | 4106  | 2802  |
| 70° | 9000  | 3105  | 2003  |
| 75° | 8045  | 2103  | 1587  |
| 80° | 6868  | 1462  | 1113  |
| 85° | 5149  | 788   | 583   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11437 cd/sqm

TEST NUMBER: P1032385

CATALOG NUMBER: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 117.3  | 1.9       |
| 10°-20°   | 326.3  | 5.2       |
| 20°-30°   | 469.8  | 7.4       |
| 30°-40°   | 529.1  | 8.4       |
| 40°-50°   | 506.1  | 8.0       |
| 50°-60°   | 414.3  | 6.6       |
| 60°-70°   | 279.3  | 4.4       |
| 70°-80°   | 140.1  | 2.2       |
| 80°-90°   | 39.3   | 0.6       |
| 90°-100°  | 81.0   | 1.3       |
| 100°-110° | 245.1  | 3.9       |
| 110°-120° | 417.2  | 6.6       |
| 120°-130° | 548.9  | 8.7       |
| 130°-140° | 617.0  | 9.8       |
| 140°-150° | 606.5  | 9.6       |
| 150°-160° | 510.6  | 8.1       |
| 160°-170° | 340.0  | 5.4       |
| 170°-180° | 119.0  | 1.9       |
| 0°-30°    | 913.4  | 14.5      |
| 0°-40°    | 1442.6 | 22.9      |
| 0°-60°    | 2363.0 | 37.5      |
| 0°-90°    | 2821.6 | 44.7      |
| 90°-120°  | 743.3  | 11.8      |
| 90°-150°  | 2515.7 | 39.9      |
| 90°-180°  | 3485.0 | 55.3      |
| 0°-180°   | 6307.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1248 | 1248  | 1248 | 1248  | 1248 |      |
| 5°   | 1248 | 1243  | 1231 | 1240  | 1238 | 118  |
| 15°  | 1190 | 1179  | 1151 | 1146  | 1138 | 335  |
| 25°  | 1083 | 1058  | 1011 | 990   | 979  | 498  |
| 35°  | 937  | 901   | 838  | 794   | 776  | 587  |
| 45°  | 770  | 725   | 647  | 589   | 565  | 594  |
| 55°  | 585  | 535   | 449  | 391   | 370  | 525  |
| 65°  | 400  | 344   | 265  | 216   | 204  | 396  |
| 75°  | 212  | 163   | 107  | 97    | 95   | 225  |
| 85°  | 54   | 31    | 28   | 26    | 26   | 59   |
| 90°  | 1    | 11    | 24   | 28    | 30   | 8    |
| 95°  | 58   | 65    | 73   | 77    | 77   | 64   |
| 105° | 222  | 224   | 233  | 233   | 235  | 238  |
| 115° | 420  | 423   | 421  | 422   | 421  | 416  |
| 125° | 615  | 618   | 616  | 612   | 608  | 548  |
| 135° | 797  | 803   | 802  | 798   | 796  | 614  |
| 145° | 967  | 969   | 972  | 971   | 967  | 604  |
| 155° | 1108 | 1108  | 1109 | 1113  | 1106 | 510  |
| 165° | 1206 | 1204  | 1204 | 1210  | 1202 | 340  |
| 175° | 1255 | 1251  | 1251 | 1257  | 1250 | 119  |
| 180° | 1258 | 1258  | 1258 | 1258  | 1258 |      |

TEST NUMBER: P1032385

CATALOG NUMBER: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1247.8 | 1247.8 | 1247.8 | 1247.8 | 1247.8 |
| 2.5°   | 1252.9 | 1248.8 | 1236.7 | 1247.8 | 1245.8 |
| 5°     | 1247.8 | 1242.7 | 1230.6 | 1239.7 | 1237.7 |
| 7.5°   | 1238.7 | 1233.6 | 1218.5 | 1224.5 | 1221.5 |
| 10°    | 1226.5 | 1219.5 | 1201.2 | 1202.3 | 1197.2 |
| 12.5°  | 1209.3 | 1201.2 | 1178.0 | 1177.0 | 1170.9 |
| 15°    | 1190.1 | 1179.0 | 1150.6 | 1145.6 | 1138.5 |
| 17.5°  | 1166.8 | 1154.7 | 1119.3 | 1109.2 | 1099.0 |
| 20°    | 1140.5 | 1124.3 | 1085.9 | 1072.7 | 1060.6 |
| 22.5°  | 1111.2 | 1092.0 | 1050.5 | 1033.3 | 1022.1 |
| 25°    | 1082.8 | 1057.5 | 1011.0 | 989.7  | 978.6  |
| 27.5°  | 1048.4 | 1021.1 | 970.5  | 942.2  | 925.0  |
| 30°    | 1013.0 | 982.7  | 926.0  | 891.6  | 875.4  |
| 32.5°  | 977.6  | 942.2  | 881.5  | 843.0  | 825.8  |
| 35°    | 937.1  | 900.7  | 837.9  | 794.4  | 776.2  |
| 37.5°  | 896.6  | 857.2  | 791.4  | 742.8  | 720.5  |
| 40°    | 858.2  | 813.7  | 741.8  | 689.2  | 665.9  |
| 42.5°  | 814.7  | 770.1  | 695.2  | 636.5  | 616.3  |
| 45°    | 770.1  | 724.6  | 646.7  | 589.0  | 564.7  |
| 47.5°  | 726.6  | 676.0  | 599.1  | 536.4  | 515.1  |
| 50°    | 678.0  | 630.5  | 548.5  | 485.8  | 462.5  |
| 52.5°  | 634.5  | 581.9  | 500.9  | 435.2  | 414.9  |
| 55°    | 584.9  | 535.3  | 449.3  | 390.6  | 370.4  |
| 57.5°  | 540.4  | 486.8  | 399.7  | 344.1  | 326.9  |
| 60°    | 493.9  | 438.2  | 354.2  | 299.6  | 282.3  |
| 62.5°  | 447.3  | 391.6  | 307.6  | 257.0  | 238.8  |
| 65°    | 399.7  | 344.1  | 265.1  | 215.6  | 204.4  |
| 67.5°  | 352.2  | 295.5  | 218.6  | 181.1  | 169.0  |
| 70°    | 305.6  | 251.0  | 180.1  | 144.7  | 133.6  |
| 72.5°  | 259.1  | 205.4  | 142.7  | 115.4  | 112.3  |
| 75°    | 211.5  | 162.9  | 107.3  | 97.2   | 95.1   |
| 77.5°  | 168.0  | 123.5  | 84.0   | 77.9   | 75.9   |
| 80°    | 126.5  | 85.0   | 63.8   | 60.7   | 58.7   |
| 82.5°  | 87.0   | 52.6   | 45.5   | 42.5   | 42.5   |
| 85°    | 53.6   | 31.4   | 28.3   | 26.3   | 26.3   |
| 87.5°  | 24.3   | 13.2   | 13.2   | 12.1   | 11.1   |
| 90°    | 1.0    | 10.9   | 23.7   | 27.7   | 29.6   |
| 92.5°  | 29.6   | 35.6   | 41.5   | 44.5   | 42.5   |
| 95°    | 58.3   | 65.2   | 73.1   | 77.1   | 77.1   |
| 97.5°  | 95.8   | 100.8  | 106.7  | 111.7  | 110.7  |
| 100°   | 134.4  | 140.3  | 145.3  | 148.2  | 150.2  |
| 102.5° | 178.8  | 181.8  | 188.7  | 191.7  | 190.7  |
| 105°   | 222.3  | 224.3  | 233.2  | 233.2  | 235.2  |
| 107.5° | 273.7  | 274.7  | 278.6  | 281.6  | 280.6  |
| 110°   | 321.1  | 323.1  | 325.1  | 329.0  | 327.1  |

TEST NUMBER: P1032385

CATALOG NUMBER: S123RDIW-B775D1030UB50-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 370.5  | 371.5  | 371.5  | 376.5  | 376.5  |
| 115°   | 420.0  | 422.9  | 420.9  | 421.9  | 420.9  |
| 117.5° | 470.3  | 471.3  | 469.4  | 469.4  | 466.4  |
| 120°   | 516.8  | 522.7  | 517.8  | 516.8  | 514.8  |
| 122.5° | 565.2  | 569.2  | 567.2  | 564.2  | 561.3  |
| 125°   | 614.6  | 617.6  | 615.6  | 611.6  | 607.7  |
| 127.5° | 660.1  | 666.0  | 664.0  | 658.1  | 654.1  |
| 130°   | 705.5  | 713.4  | 710.5  | 706.5  | 699.6  |
| 132.5° | 751.0  | 758.9  | 756.9  | 752.0  | 747.0  |
| 135°   | 797.4  | 803.3  | 802.4  | 798.4  | 796.4  |
| 137.5° | 839.9  | 844.8  | 847.8  | 842.9  | 839.9  |
| 140°   | 884.4  | 889.3  | 890.3  | 889.3  | 882.4  |
| 142.5° | 924.9  | 929.8  | 931.8  | 930.8  | 925.9  |
| 145°   | 967.4  | 969.3  | 972.3  | 971.3  | 967.4  |
| 147.5° | 1003.9 | 1007.9 | 1010.8 | 1010.8 | 1004.9 |
| 150°   | 1042.5 | 1044.4 | 1046.4 | 1046.4 | 1040.5 |
| 152.5° | 1074.1 | 1077.0 | 1078.0 | 1080.0 | 1075.1 |
| 155°   | 1107.7 | 1107.7 | 1108.7 | 1112.6 | 1105.7 |
| 157.5° | 1136.3 | 1135.3 | 1136.3 | 1140.3 | 1134.4 |
| 160°   | 1163.0 | 1161.0 | 1161.0 | 1166.0 | 1162.0 |
| 162.5° | 1186.7 | 1183.8 | 1184.8 | 1189.7 | 1182.8 |
| 165°   | 1206.5 | 1203.5 | 1203.5 | 1209.5 | 1202.5 |
| 167.5° | 1223.3 | 1219.3 | 1220.3 | 1226.3 | 1220.3 |
| 170°   | 1237.1 | 1233.2 | 1233.2 | 1240.1 | 1233.2 |
| 172.5° | 1248.0 | 1244.0 | 1244.0 | 1250.0 | 1243.1 |
| 175°   | 1254.9 | 1251.0 | 1251.0 | 1256.9 | 1250.0 |
| 177.5° | 1258.9 | 1254.9 | 1254.9 | 1260.8 | 1253.9 |
| 180°   | 1257.9 | 1257.9 | 1257.9 | 1257.9 | 1257.9 |

(END OF REPORT)