

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: P1027347

Luminaire Tested: S125DIP-B1090D1090UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027347  
REPORT IS A COMBINATION OF REPORTS P1001277 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B1090D1090UB50-4F0-XX-W2A-F1  
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

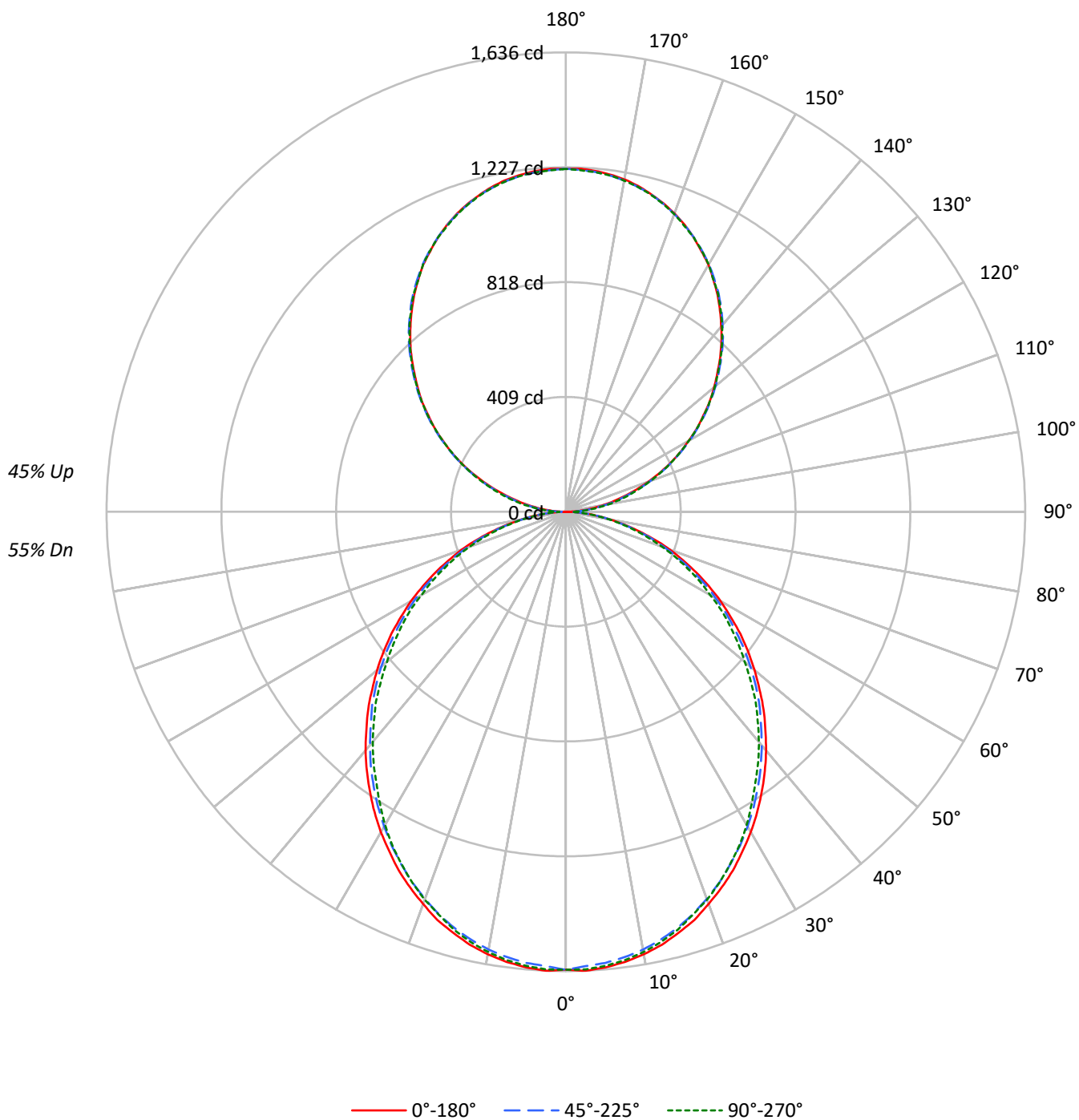
Lumens per Lamp: N/A  
Luminaire Lumens: 7655.0 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 75.3  
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

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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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 |
| 1   | 99  | 95  | 91  | 87  | 92  | 88  | 85  | 81  | 76 | 73 | 71 | 64 | 63 | 61 | 54 | 53 | 52 |
| 2   | 90  | 83  | 76  | 71  | 83  | 77  | 71  | 67  | 66 | 62 | 59 | 56 | 53 | 51 | 47 | 45 | 43 |
| 3   | 82  | 73  | 65  | 59  | 76  | 68  | 61  | 56  | 58 | 53 | 49 | 50 | 46 | 43 | 42 | 39 | 37 |
| 4   | 75  | 64  | 56  | 50  | 70  | 60  | 53  | 47  | 52 | 46 | 42 | 44 | 40 | 37 | 38 | 34 | 32 |
| 5   | 69  | 57  | 49  | 43  | 64  | 54  | 46  | 41  | 46 | 41 | 36 | 40 | 35 | 32 | 34 | 30 | 28 |
| 6   | 64  | 51  | 43  | 37  | 59  | 48  | 41  | 35  | 42 | 36 | 32 | 36 | 31 | 28 | 31 | 27 | 24 |
| 7   | 59  | 46  | 38  | 33  | 55  | 44  | 36  | 31  | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 24 | 22 |
| 8   | 55  | 42  | 34  | 29  | 51  | 40  | 32  | 28  | 35 | 29 | 25 | 30 | 25 | 22 | 26 | 22 | 19 |
| 9   | 51  | 39  | 31  | 26  | 47  | 36  | 29  | 25  | 32 | 26 | 22 | 28 | 23 | 20 | 24 | 20 | 18 |
| 10  | 48  | 35  | 28  | 23  | 44  | 33  | 27  | 22  | 29 | 24 | 20 | 26 | 21 | 18 | 22 | 18 | 16 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10450 | 10450 | 10450 |
| 5°  | 10450 | 10207 | 10227 |
| 10° | 10364 | 9973  | 9942  |
| 15° | 10228 | 9693  | 9606  |
| 20° | 10043 | 9369  | 9222  |
| 25° | 9846  | 9015  | 8810  |
| 30° | 9608  | 8646  | 8375  |
| 35° | 9354  | 8259  | 7889  |
| 40° | 9091  | 7851  | 7457  |
| 45° | 8806  | 7453  | 6997  |
| 50° | 8493  | 7001  | 6462  |
| 55° | 8183  | 6503  | 5969  |
| 60° | 7813  | 5978  | 5396  |
| 65° | 7372  | 5370  | 4804  |
| 70° | 6920  | 4671  | 4121  |
| 75° | 6166  | 3846  | 3332  |
| 80° | 5254  | 2873  | 2451  |
| 85° | 4059  | 1700  | 1351  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8806 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 153.9  | 2.0       |
| 10°-20°   | 434.7  | 5.7       |
| 20°-30°   | 641.8  | 8.4       |
| 30°-40°   | 748.8  | 9.8       |
| 40°-50°   | 752.0  | 9.8       |
| 50°-60°   | 660.2  | 8.6       |
| 60°-70°   | 491.7  | 6.4       |
| 70°-80°   | 280.8  | 3.7       |
| 80°-90°   | 83.0   | 1.1       |
| 90°-100°  | 81.2   | 1.1       |
| 100°-110° | 241.2  | 3.2       |
| 110°-120° | 409.1  | 5.3       |
| 120°-130° | 538.6  | 7.0       |
| 130°-140° | 603.5  | 7.9       |
| 140°-150° | 591.6  | 7.7       |
| 150°-160° | 496.9  | 6.5       |
| 160°-170° | 330.3  | 4.3       |
| 170°-180° | 115.6  | 1.5       |
| 0°-30°    | 1230.4 | 16.1      |
| 0°-40°    | 1979.2 | 25.9      |
| 0°-60°    | 3391.4 | 44.3      |
| 0°-90°    | 4246.9 | 55.5      |
| 90°-120°  | 731.6  | 9.6       |
| 90°-150°  | 2465.3 | 32.2      |
| 90°-180°  | 3408.0 | 44.5      |
| 0°-180°   | 7655.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1631 | 1631  | 1631 | 1631  | 1631 |      |
| 5°   | 1628 | 1626  | 1613 | 1624  | 1623 | 155  |
| 15°  | 1552 | 1548  | 1534 | 1541  | 1541 | 438  |
| 25°  | 1409 | 1403  | 1386 | 1388  | 1384 | 648  |
| 35°  | 1217 | 1212  | 1194 | 1187  | 1177 | 761  |
| 45°  | 996  | 991   | 976  | 960   | 956  | 767  |
| 55°  | 759  | 755   | 737  | 725   | 716  | 677  |
| 65°  | 512  | 510   | 496  | 484   | 479  | 508  |
| 75°  | 272  | 270   | 263  | 259   | 254  | 290  |
| 85°  | 71   | 72    | 72   | 71    | 68   | 78   |
| 90°  | 1    | 9     | 15   | 20    | 23   | 9    |
| 95°  | 62   | 64    | 73   | 80    | 82   | 65   |
| 105° | 217  | 221   | 227  | 233   | 236  | 231  |
| 115° | 410  | 413   | 415  | 414   | 413  | 405  |
| 125° | 598  | 603   | 604  | 602   | 602  | 536  |
| 135° | 777  | 783   | 784  | 784   | 780  | 599  |
| 145° | 942  | 946   | 948  | 948   | 946  | 589  |
| 155° | 1078 | 1078  | 1079 | 1082  | 1078 | 496  |
| 165° | 1172 | 1170  | 1171 | 1175  | 1169 | 331  |
| 175° | 1218 | 1214  | 1214 | 1220  | 1214 | 116  |
| 180° | 1221 | 1221  | 1221 | 1221  | 1221 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1631.0 | 1631.0 | 1631.0 | 1631.0 | 1631.0 |
| 2.5°   | 1636.1 | 1632.3 | 1619.4 | 1632.3 | 1631.0 |
| 5°     | 1628.4 | 1625.8 | 1612.9 | 1624.5 | 1623.2 |
| 7.5°   | 1616.8 | 1614.2 | 1600.0 | 1611.6 | 1610.3 |
| 10°    | 1600.0 | 1597.4 | 1583.2 | 1593.5 | 1592.3 |
| 12.5°  | 1579.4 | 1574.2 | 1561.3 | 1569.0 | 1569.0 |
| 15°    | 1552.3 | 1548.4 | 1534.2 | 1540.6 | 1540.6 |
| 17.5°  | 1523.9 | 1517.4 | 1503.2 | 1511.0 | 1504.5 |
| 20°    | 1486.4 | 1483.9 | 1467.1 | 1476.1 | 1469.7 |
| 22.5°  | 1449.0 | 1443.9 | 1428.4 | 1433.5 | 1429.7 |
| 25°    | 1409.0 | 1402.6 | 1385.8 | 1388.4 | 1384.5 |
| 27.5°  | 1362.6 | 1358.7 | 1341.9 | 1343.2 | 1339.4 |
| 30°    | 1317.4 | 1313.5 | 1294.2 | 1291.6 | 1287.7 |
| 32.5°  | 1268.4 | 1261.9 | 1245.2 | 1240.0 | 1232.3 |
| 35°    | 1216.8 | 1211.6 | 1193.5 | 1187.1 | 1176.8 |
| 37.5°  | 1163.9 | 1157.4 | 1140.6 | 1131.6 | 1125.2 |
| 40°    | 1109.7 | 1103.2 | 1085.2 | 1073.5 | 1069.7 |
| 42.5°  | 1051.6 | 1046.4 | 1028.4 | 1018.1 | 1011.6 |
| 45°    | 996.1  | 991.0  | 975.5  | 960.0  | 956.1  |
| 47.5°  | 935.5  | 936.8  | 917.4  | 901.9  | 892.9  |
| 50°    | 877.4  | 873.5  | 858.1  | 841.3  | 832.3  |
| 52.5°  | 818.1  | 815.5  | 798.7  | 784.5  | 774.2  |
| 55°    | 758.7  | 754.8  | 736.8  | 725.2  | 716.1  |
| 57.5°  | 695.5  | 694.2  | 678.7  | 663.2  | 659.4  |
| 60°    | 636.1  | 631.0  | 616.8  | 603.9  | 594.8  |
| 62.5°  | 574.2  | 570.3  | 558.7  | 544.5  | 538.1  |
| 65°    | 512.3  | 509.7  | 495.5  | 483.9  | 478.7  |
| 67.5°  | 451.6  | 446.5  | 436.1  | 425.8  | 423.2  |
| 70°    | 394.8  | 388.4  | 376.8  | 369.0  | 363.9  |
| 72.5°  | 332.9  | 329.0  | 322.6  | 313.5  | 308.4  |
| 75°    | 272.3  | 269.7  | 263.2  | 259.4  | 254.2  |
| 77.5°  | 215.5  | 214.2  | 210.3  | 207.7  | 203.9  |
| 80°    | 162.6  | 162.6  | 160.0  | 158.7  | 156.1  |
| 82.5°  | 116.1  | 113.5  | 113.5  | 111.0  | 111.0  |
| 85°    | 71.0   | 72.3   | 72.3   | 71.0   | 68.4   |
| 87.5°  | 34.8   | 34.8   | 33.5   | 33.5   | 31.0   |
| 90°    | 1.0    | 8.6    | 15.2   | 20.0   | 22.8   |
| 92.5°  | 28.5   | 33.3   | 41.8   | 48.5   | 50.4   |
| 95°    | 61.8   | 63.7   | 73.2   | 79.8   | 81.7   |
| 97.5°  | 95.0   | 96.0   | 109.3  | 115.0  | 115.9  |
| 100°   | 133.0  | 133.0  | 145.4  | 153.9  | 155.8  |
| 102.5° | 173.9  | 178.7  | 183.4  | 192.9  | 195.8  |
| 105°   | 216.7  | 221.4  | 227.1  | 232.8  | 235.7  |
| 107.5° | 263.2  | 268.0  | 272.7  | 275.6  | 275.6  |
| 110°   | 311.7  | 316.5  | 319.3  | 322.2  | 321.2  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 361.1  | 363.0  | 366.8  | 367.8  | 365.9  |
| 115°   | 409.6  | 413.4  | 415.3  | 414.3  | 413.4  |
| 117.5° | 459.0  | 459.9  | 461.8  | 462.8  | 459.0  |
| 120°   | 504.6  | 509.4  | 510.3  | 510.3  | 506.5  |
| 122.5° | 554.0  | 555.0  | 557.8  | 556.9  | 554.0  |
| 125°   | 597.7  | 603.4  | 604.4  | 602.5  | 601.5  |
| 127.5° | 646.2  | 649.1  | 650.0  | 649.1  | 647.2  |
| 130°   | 689.0  | 693.7  | 695.6  | 694.7  | 692.8  |
| 132.5° | 731.7  | 740.3  | 739.3  | 738.4  | 735.5  |
| 135°   | 777.3  | 783.0  | 784.0  | 784.0  | 780.2  |
| 137.5° | 820.1  | 825.8  | 827.7  | 828.7  | 823.9  |
| 140°   | 861.0  | 865.7  | 868.6  | 870.5  | 865.7  |
| 142.5° | 901.8  | 905.6  | 909.4  | 910.4  | 905.6  |
| 145°   | 941.7  | 945.6  | 948.4  | 948.4  | 945.6  |
| 147.5° | 978.8  | 981.7  | 983.6  | 986.4  | 978.8  |
| 150°   | 1015.9 | 1014.9 | 1018.7 | 1018.7 | 1016.8 |
| 152.5° | 1046.3 | 1048.2 | 1049.1 | 1052.0 | 1048.2 |
| 155°   | 1077.6 | 1077.6 | 1078.6 | 1082.4 | 1077.6 |
| 157.5° | 1106.2 | 1104.3 | 1105.2 | 1109.0 | 1102.4 |
| 160°   | 1130.9 | 1128.0 | 1129.0 | 1132.8 | 1128.0 |
| 162.5° | 1152.7 | 1150.8 | 1150.8 | 1155.6 | 1149.9 |
| 165°   | 1171.7 | 1169.8 | 1170.8 | 1174.6 | 1168.9 |
| 167.5° | 1188.8 | 1185.0 | 1185.0 | 1190.7 | 1185.0 |
| 170°   | 1202.1 | 1198.3 | 1198.3 | 1204.0 | 1197.4 |
| 172.5° | 1211.6 | 1207.8 | 1207.8 | 1213.5 | 1207.8 |
| 175°   | 1218.3 | 1214.5 | 1214.5 | 1220.2 | 1213.5 |
| 177.5° | 1223.0 | 1219.2 | 1218.3 | 1224.0 | 1217.3 |
| 180°   | 1221.1 | 1221.1 | 1221.1 | 1221.1 | 1221.1 |

(END OF REPORT)