

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: P1028441

Luminaire Tested: S125RDIP-B1090D1090UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028441  
REPORT IS A COMBINATION OF REPORTS P1004956 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-B1090D1090UB50-4F0-XX-W2A-F  
Description: Define 5 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

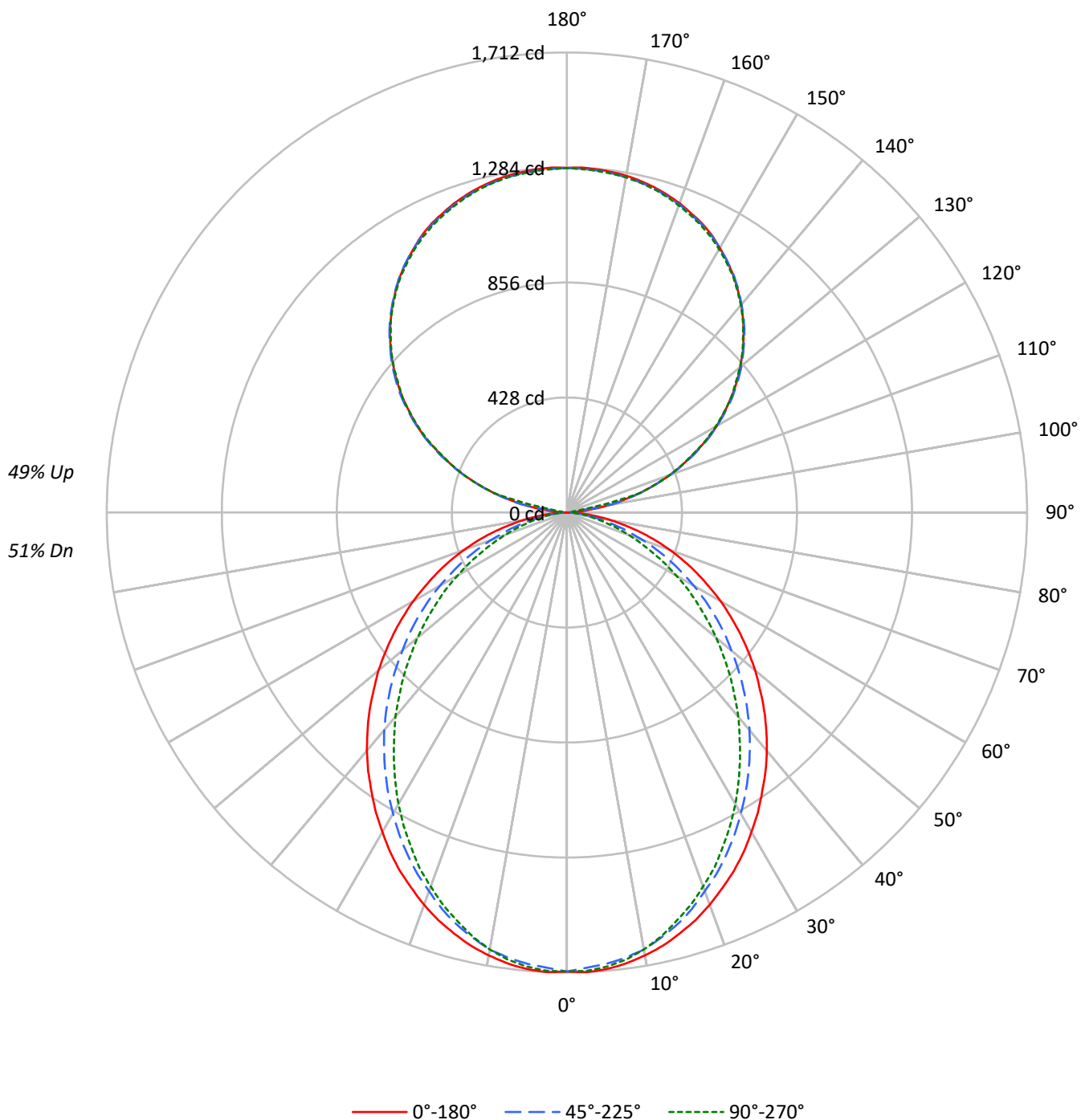
Lumens per Lamp: N/A  
Luminaire Lumens: 7976.1 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 |
| 1   | 98  | 94  | 90  | 87  | 91 | 87 | 84 | 81 | 74 | 71 | 69 | 62 | 60 | 58 | 50 | 49 | 48 |
| 2   | 90  | 82  | 76  | 71  | 82 | 76 | 71 | 67 | 65 | 61 | 58 | 54 | 52 | 49 | 45 | 43 | 41 |
| 3   | 82  | 72  | 65  | 59  | 75 | 67 | 61 | 56 | 57 | 53 | 49 | 48 | 45 | 42 | 40 | 37 | 35 |
| 4   | 75  | 64  | 56  | 50  | 69 | 60 | 53 | 48 | 51 | 46 | 42 | 43 | 39 | 36 | 36 | 33 | 30 |
| 5   | 69  | 57  | 49  | 43  | 63 | 53 | 46 | 41 | 46 | 40 | 36 | 39 | 35 | 31 | 32 | 29 | 27 |
| 6   | 63  | 52  | 43  | 38  | 58 | 48 | 41 | 36 | 41 | 36 | 32 | 35 | 31 | 27 | 29 | 26 | 24 |
| 7   | 59  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 38 | 32 | 28 | 32 | 28 | 24 | 27 | 23 | 21 |
| 8   | 55  | 42  | 35  | 29  | 50 | 40 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 22 | 25 | 21 | 19 |
| 9   | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 27 | 23 | 20 | 23 | 19 | 17 |
| 10  | 47  | 35  | 28  | 24  | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 18 | 21 | 18 | 16 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10945 | 10945 | 10945 |
| 5°  | 10946 | 10672 | 10689 |
| 10° | 10839 | 10403 | 10312 |
| 15° | 10686 | 10027 | 9815  |
| 20° | 10496 | 9574  | 9294  |
| 25° | 10279 | 9132  | 8735  |
| 30° | 10012 | 8646  | 8148  |
| 35° | 9739  | 8152  | 7525  |
| 40° | 9481  | 7645  | 6917  |
| 45° | 9170  | 7097  | 6279  |
| 50° | 8855  | 6516  | 5630  |
| 55° | 8488  | 5944  | 4958  |
| 60° | 8114  | 5290  | 4261  |
| 65° | 7668  | 4558  | 3510  |
| 70° | 7147  | 3710  | 2762  |
| 75° | 6426  | 2791  | 2012  |
| 80° | 5419  | 1806  | 1356  |
| 85° | 4059  | 971   | 764   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9170 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 160.8  | 2.0       |
| 10°-20°   | 449.3  | 5.6       |
| 20°-30°   | 651.5  | 8.2       |
| 30°-40°   | 742.2  | 9.3       |
| 40°-50°   | 723.5  | 9.1       |
| 50°-60°   | 608.8  | 7.6       |
| 60°-70°   | 426.7  | 5.3       |
| 70°-80°   | 218.7  | 2.7       |
| 80°-90°   | 56.5   | 0.7       |
| 90°-100°  | 43.5   | 0.5       |
| 100°-110° | 289.3  | 3.6       |
| 110°-120° | 521.0  | 6.5       |
| 120°-130° | 668.8  | 8.4       |
| 130°-140° | 719.3  | 9.0       |
| 140°-150° | 675.1  | 8.5       |
| 150°-160° | 546.1  | 6.8       |
| 160°-170° | 353.2  | 4.4       |
| 170°-180° | 121.8  | 1.5       |
| 0°-30°    | 1261.6 | 15.8      |
| 0°-40°    | 2003.8 | 25.1      |
| 0°-60°    | 3336.1 | 41.8      |
| 0°-90°    | 4037.9 | 50.6      |
| 90°-120°  | 853.9  | 10.7      |
| 90°-150°  | 2917.1 | 36.6      |
| 90°-180°  | 3938.0 | 49.4      |
| 0°-180°   | 7976.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1708 | 1708  | 1708 | 1708  | 1708 |      |
| 5°   | 1706 | 1700  | 1686 | 1699  | 1697 | 162  |
| 15°  | 1622 | 1614  | 1587 | 1586  | 1574 | 457  |
| 25°  | 1471 | 1452  | 1404 | 1387  | 1373 | 677  |
| 35°  | 1267 | 1236  | 1178 | 1141  | 1122 | 793  |
| 45°  | 1037 | 1000  | 929  | 877   | 858  | 800  |
| 55°  | 787  | 746   | 674  | 615   | 595  | 704  |
| 65°  | 533  | 489   | 421  | 369   | 350  | 528  |
| 75°  | 284  | 245   | 191  | 163   | 154  | 300  |
| 85°  | 71   | 48    | 41   | 40    | 39   | 78   |
| 90°  | 1    | 9     | 15   | 20    | 23   | 7    |
| 95°  | 54   | 51    | 15   | 20    | 20   | 66   |
| 105° | 279  | 283   | 283  | 283   | 282  | 296  |
| 115° | 525  | 529   | 530  | 526   | 521  | 520  |
| 125° | 746  | 753   | 753  | 749   | 746  | 666  |
| 135° | 930  | 936   | 934  | 932   | 927  | 717  |
| 145° | 1079 | 1080  | 1080 | 1082  | 1076 | 675  |
| 155° | 1188 | 1182  | 1184 | 1187  | 1179 | 547  |
| 165° | 1254 | 1248  | 1249 | 1254  | 1247 | 354  |
| 175° | 1282 | 1276  | 1277 | 1285  | 1276 | 122  |
| 180° | 1282 | 1282  | 1282 | 1282  | 1282 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1708.3 | 1708.3 | 1708.3 | 1708.3 | 1708.3 |
| 2.5°   | 1712.1 | 1708.3 | 1695.4 | 1708.3 | 1707.0 |
| 5°     | 1705.7 | 1700.5 | 1686.3 | 1699.2 | 1696.6 |
| 7.5°   | 1692.8 | 1687.6 | 1670.8 | 1681.2 | 1678.6 |
| 10°    | 1673.4 | 1669.5 | 1651.5 | 1655.4 | 1651.5 |
| 12.5°  | 1651.5 | 1646.3 | 1620.5 | 1623.1 | 1616.6 |
| 15°    | 1621.8 | 1614.1 | 1587.0 | 1585.7 | 1574.1 |
| 17.5°  | 1590.8 | 1579.2 | 1547.0 | 1540.5 | 1531.5 |
| 20°    | 1553.4 | 1540.5 | 1499.2 | 1492.8 | 1481.2 |
| 22.5°  | 1512.1 | 1499.2 | 1455.4 | 1441.2 | 1432.1 |
| 25°    | 1470.9 | 1451.5 | 1403.8 | 1387.0 | 1372.8 |
| 27.5°  | 1424.4 | 1401.2 | 1350.9 | 1328.9 | 1314.7 |
| 30°    | 1372.8 | 1348.3 | 1294.1 | 1264.4 | 1252.8 |
| 32.5°  | 1322.5 | 1292.8 | 1237.3 | 1203.8 | 1188.3 |
| 35°    | 1267.0 | 1236.0 | 1178.0 | 1140.6 | 1122.5 |
| 37.5°  | 1214.1 | 1176.7 | 1117.3 | 1073.5 | 1055.4 |
| 40°    | 1157.3 | 1118.6 | 1056.7 | 1007.7 | 992.2  |
| 42.5°  | 1098.0 | 1058.0 | 993.5  | 947.0  | 922.5  |
| 45°    | 1037.3 | 999.9  | 929.0  | 877.4  | 858.0  |
| 47.5°  | 974.1  | 935.4  | 864.4  | 811.6  | 789.6  |
| 50°    | 914.8  | 872.2  | 798.6  | 744.5  | 725.1  |
| 52.5°  | 850.3  | 806.4  | 738.0  | 678.7  | 659.3  |
| 55°    | 787.0  | 745.7  | 673.5  | 615.4  | 594.8  |
| 57.5°  | 722.5  | 678.7  | 609.0  | 552.2  | 534.2  |
| 60°    | 660.6  | 615.4  | 545.8  | 489.0  | 469.6  |
| 62.5°  | 594.8  | 552.2  | 481.3  | 429.6  | 410.3  |
| 65°    | 532.9  | 489.0  | 420.6  | 369.0  | 349.7  |
| 67.5°  | 470.9  | 427.1  | 361.3  | 312.2  | 296.8  |
| 70°    | 407.7  | 363.8  | 299.3  | 259.3  | 243.9  |
| 72.5°  | 345.8  | 303.2  | 243.9  | 207.7  | 198.7  |
| 75°    | 283.8  | 245.1  | 191.0  | 162.6  | 153.5  |
| 77.5°  | 220.6  | 189.7  | 144.5  | 122.6  | 114.8  |
| 80°    | 167.7  | 136.8  | 100.6  | 89.0   | 86.4   |
| 82.5°  | 116.1  | 89.0   | 67.1   | 63.2   | 61.9   |
| 85°    | 71.0   | 47.7   | 41.3   | 40.0   | 38.7   |
| 87.5°  | 29.7   | 20.6   | 19.4   | 19.4   | 18.1   |
| 90°    | 1.0    | 8.6    | 15.2   | 20.0   | 22.8   |
| 92.5°  | 18.1   | 9.5    | 15.2   | 20.0   | 20.9   |
| 95°    | 54.2   | 51.3   | 15.2   | 20.0   | 20.0   |
| 97.5°  | 101.7  | 107.4  | 17.1   | 19.0   | 20.0   |
| 100°   | 158.7  | 161.6  | 165.4  | 23.8   | 20.0   |
| 102.5° | 216.7  | 220.5  | 222.4  | 224.3  | 144.5  |
| 105°   | 279.4  | 283.2  | 283.2  | 283.2  | 282.3  |
| 107.5° | 344.0  | 344.0  | 345.9  | 346.9  | 343.1  |
| 110°   | 406.7  | 406.7  | 408.7  | 405.8  | 406.7  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 465.7  | 468.5  | 469.5  | 465.7  | 463.8  |
| 115°   | 524.6  | 529.3  | 530.3  | 526.5  | 520.8  |
| 117.5° | 586.4  | 586.4  | 590.2  | 584.5  | 582.6  |
| 120°   | 643.4  | 642.4  | 645.3  | 643.4  | 638.6  |
| 122.5° | 693.8  | 698.5  | 699.5  | 697.6  | 691.9  |
| 125°   | 746.0  | 752.7  | 752.7  | 748.9  | 746.0  |
| 127.5° | 796.4  | 801.1  | 800.2  | 798.3  | 790.7  |
| 130°   | 842.0  | 846.8  | 847.7  | 844.9  | 840.1  |
| 132.5° | 887.6  | 893.3  | 890.5  | 890.5  | 885.7  |
| 135°   | 930.4  | 936.1  | 934.2  | 932.3  | 926.6  |
| 137.5° | 970.3  | 976.0  | 974.1  | 974.1  | 969.4  |
| 140°   | 1009.3 | 1011.2 | 1010.2 | 1012.1 | 1006.4 |
| 142.5° | 1044.4 | 1045.4 | 1047.3 | 1047.3 | 1041.6 |
| 145°   | 1078.6 | 1080.5 | 1080.5 | 1081.5 | 1075.8 |
| 147.5° | 1109.1 | 1109.1 | 1110.0 | 1111.0 | 1104.3 |
| 150°   | 1137.6 | 1135.7 | 1137.6 | 1139.5 | 1131.9 |
| 152.5° | 1165.1 | 1160.4 | 1162.3 | 1164.2 | 1157.5 |
| 155°   | 1187.9 | 1182.2 | 1184.1 | 1187.0 | 1179.4 |
| 157.5° | 1206.0 | 1203.1 | 1203.1 | 1206.0 | 1198.4 |
| 160°   | 1225.0 | 1219.3 | 1220.2 | 1224.1 | 1216.4 |
| 162.5° | 1240.2 | 1234.5 | 1235.5 | 1241.2 | 1232.6 |
| 165°   | 1253.5 | 1247.8 | 1248.8 | 1254.5 | 1246.9 |
| 167.5° | 1264.0 | 1258.3 | 1259.2 | 1265.9 | 1257.3 |
| 170°   | 1272.5 | 1265.9 | 1266.8 | 1274.4 | 1265.9 |
| 172.5° | 1278.2 | 1271.6 | 1273.5 | 1280.1 | 1271.6 |
| 175°   | 1282.0 | 1276.3 | 1277.3 | 1284.9 | 1276.3 |
| 177.5° | 1284.9 | 1279.2 | 1280.1 | 1286.8 | 1279.2 |
| 180°   | 1282.0 | 1282.0 | 1282.0 | 1282.0 | 1282.0 |

(END OF REPORT)