

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: P1031490

Luminaire Tested: S123DIW-B1165D1535UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031490
REPORT IS A COMBINATION OF REPORTS P991044 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1535UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

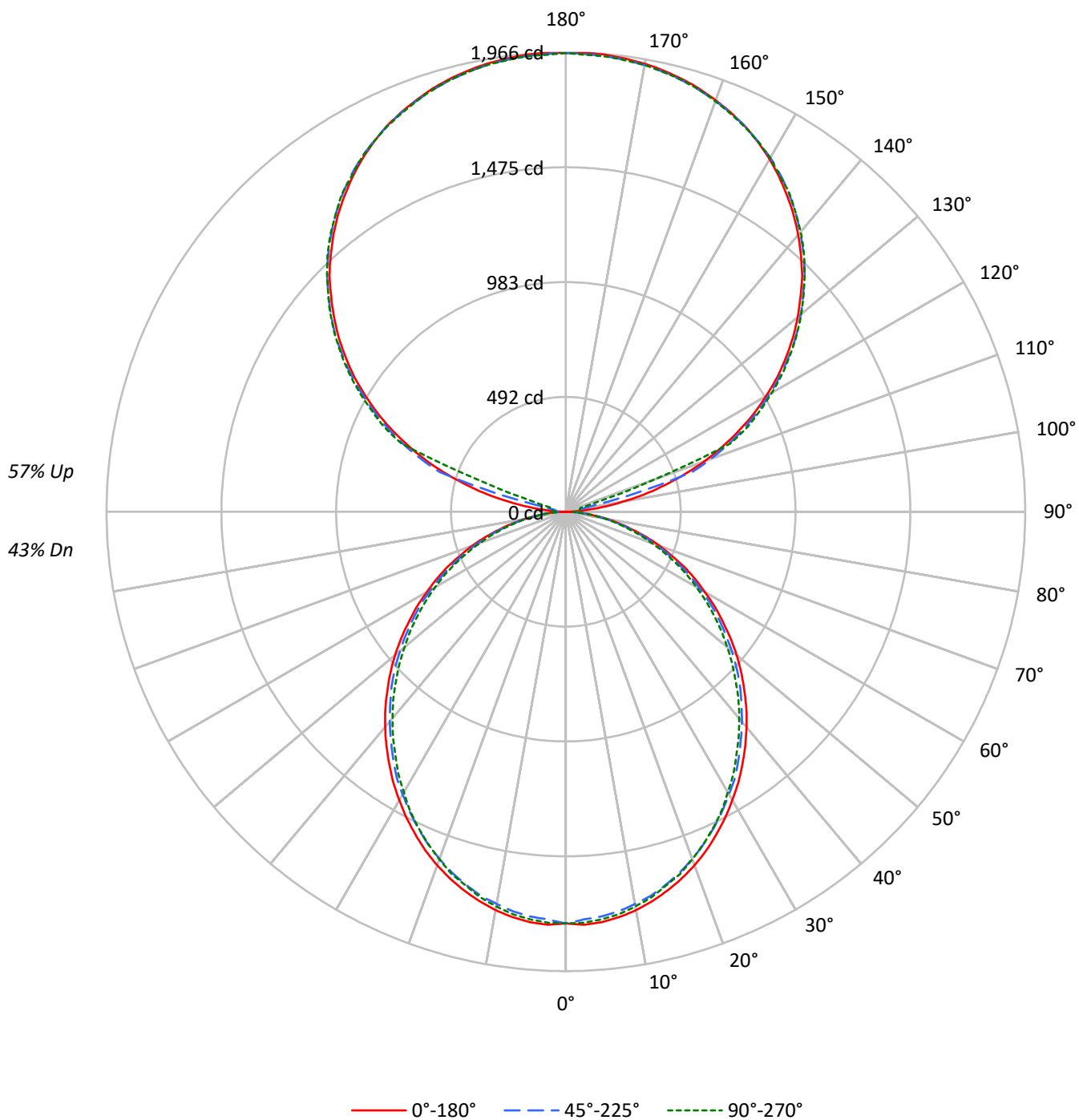
Lumens per Lamp: N/A
Luminaire Lumens: 10574.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	39	37	35
3	80	70	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30
4	73	62	54	49	66	57	50	45	48	43	39	39	35	32	31	28	26
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	38	33	29	32	27	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	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	19	16	14
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	1.6
10°-20°	469.0	4.4
20°-30°	692.6	6.6
30°-40°	808.9	7.6
40°-50°	813.2	7.7
50°-60°	714.4	6.8
60°-70°	532.0	5.0
70°-80°	302.8	2.9
80°-90°	90.0	0.9
90°-100°	69.2	0.7
100°-110°	334.7	3.2
110°-120°	820.2	7.8
120°-130°	1041.3	9.8
130°-140°	1112.4	10.5
140°-150°	1040.2	9.8
150°-160°	839.0	7.9
160°-170°	541.5	5.1
170°-180°	186.6	1.8
0°-30°	1327.7	12.6
0°-40°	2136.6	20.2
0°-60°	3664.1	34.7
0°-90°	4588.9	43.4
90°-120°	1224.2	11.6
90°-150°	4418.0	41.8
90°-180°	5985.0	56.6
0°-180°	10574.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	2	16	35	41	44	10
95°	89	29	45	55	55	106
105°	435	451	319	61	64	461
115°	815	824	837	852	858	805
125°	1149	1161	1167	1170	1173	1027
135°	1431	1440	1445	1450	1445	1102
145°	1651	1661	1664	1667	1667	1034
155°	1819	1816	1817	1825	1816	838
165°	1918	1914	1912	1924	1914	542
175°	1963	1956	1957	1968	1956	187
180°	1963	1963	1963	1963	1963	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	1.5	16.0	35.0	40.8	43.8
92.5°	33.5	24.8	37.9	48.1	49.6
95°	89.0	29.2	45.2	55.4	55.4
97.5°	161.9	121.1	46.7	58.3	59.8
100°	246.5	275.7	48.1	59.8	61.3
102.5°	342.8	361.7	107.9	59.8	62.7
105°	434.7	450.7	319.4	61.3	64.2
107.5°	532.4	545.5	567.4	342.8	151.7
110°	630.1	641.8	657.8	609.7	401.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	723.4	733.7	749.7	762.8	759.9
115°	815.3	824.1	837.2	851.8	857.6
117.5°	905.8	916.0	923.3	934.9	936.4
120°	988.9	1002.0	1006.4	1018.1	1018.1
122.5°	1073.5	1083.7	1089.5	1096.8	1098.3
125°	1149.4	1161.0	1166.9	1169.8	1172.7
127.5°	1225.2	1236.9	1244.2	1248.5	1245.6
130°	1295.2	1306.9	1312.7	1318.5	1315.6
132.5°	1362.3	1374.0	1378.3	1384.2	1379.8
135°	1430.9	1439.6	1445.4	1449.8	1445.4
137.5°	1489.2	1500.9	1503.8	1511.1	1508.2
140°	1547.5	1556.3	1560.7	1566.5	1563.6
142.5°	1601.5	1610.3	1614.6	1619.0	1614.6
145°	1651.1	1661.3	1664.2	1667.1	1667.1
147.5°	1699.2	1706.5	1709.4	1712.4	1705.1
150°	1743.0	1747.4	1750.3	1753.2	1748.8
152.5°	1782.4	1783.8	1785.3	1791.1	1783.8
155°	1818.8	1815.9	1817.4	1824.7	1815.9
157.5°	1848.0	1848.0	1846.5	1855.3	1843.6
160°	1874.3	1872.8	1871.3	1880.1	1869.9
162.5°	1899.1	1894.7	1893.2	1903.4	1894.7
165°	1918.0	1913.6	1912.2	1923.9	1913.6
167.5°	1934.1	1928.2	1928.2	1939.9	1928.2
170°	1947.2	1941.4	1941.4	1953.0	1941.4
172.5°	1955.9	1948.6	1950.1	1961.8	1948.6
175°	1963.2	1955.9	1957.4	1967.6	1955.9
177.5°	1966.1	1958.9	1960.3	1972.0	1957.4
180°	1963.2	1963.2	1963.2	1963.2	1963.2

(END OF REPORT)