

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: P1035606

Luminaire Tested: S125DIW-B850D1560UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035606
REPORT IS A COMBINATION OF REPORTS P1004225 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D1560UB40-4F0-XX-W2A-F
Description: Define 5 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

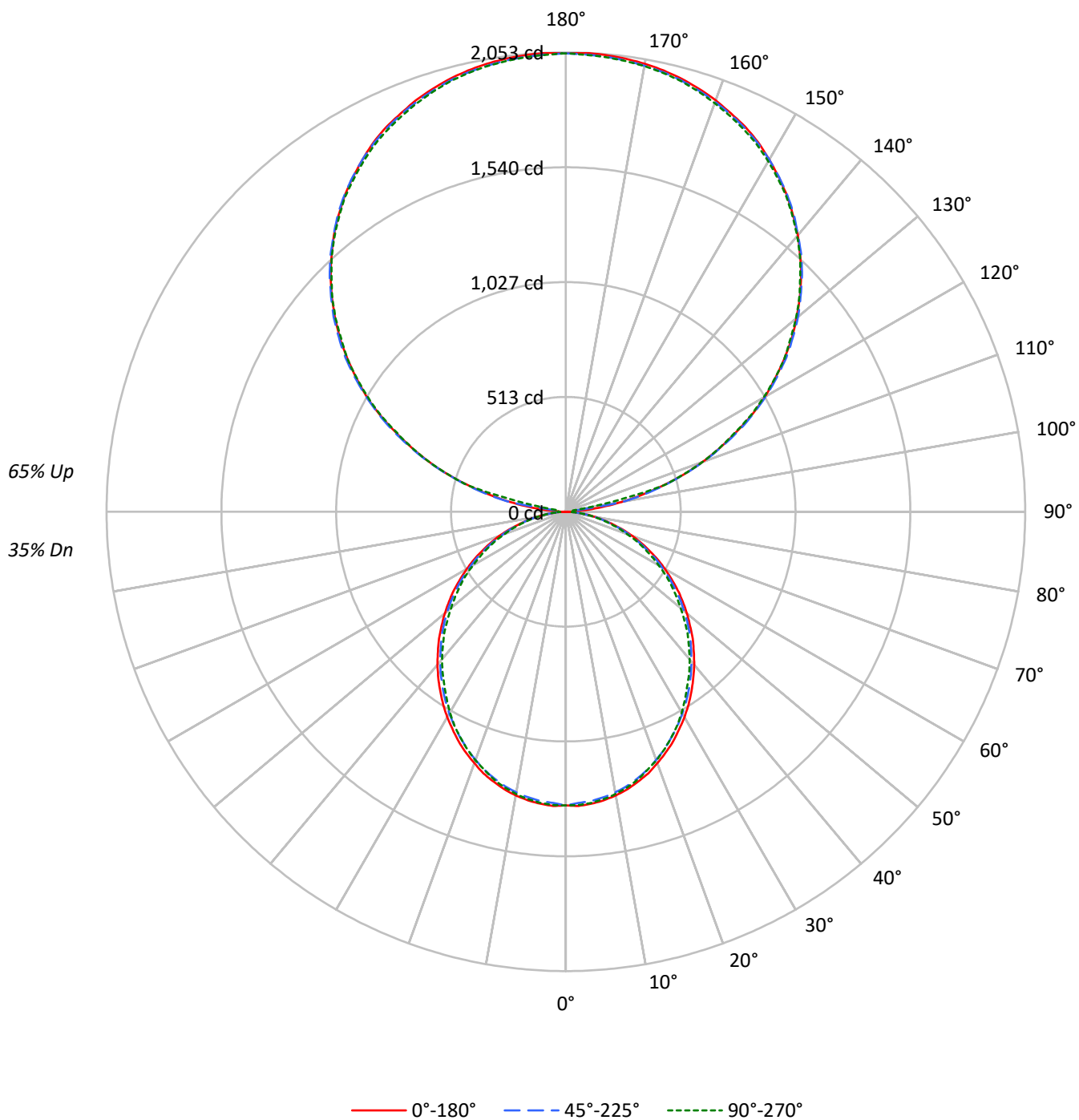
Lumens per Lamp: N/A
Luminaire Lumens: 9711.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43
1	94	90	86	83	85	82	78	76	66	63	61	51	50	48	37	37	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	40	36	34	29	27	26
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8407	8407	8407
5°	8407	8211	8227
10°	8338	8023	7998
15°	8228	7798	7728
20°	8080	7537	7418
25°	7921	7252	7087
30°	7729	6955	6738
35°	7525	6645	6347
40°	7313	6316	5999
45°	7084	5996	5629
50°	6833	5632	5198
55°	6583	5231	4802
60°	6285	4809	4341
65°	5930	4320	3865
70°	5567	3757	3315
75°	4959	3095	2681
80°	4227	2311	1972
85°	3265	1366	1086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.3
10°-20°	349.7	3.6
20°-30°	516.3	5.3
30°-40°	602.4	6.2
40°-50°	605.0	6.2
50°-60°	531.1	5.5
60°-70°	395.6	4.1
70°-80°	225.9	2.3
80°-90°	68.3	0.7
90°-100°	69.5	0.7
100°-110°	462.4	4.8
110°-120°	832.6	8.6
120°-130°	1068.7	11.0
130°-140°	1149.4	11.8
140°-150°	1078.8	11.1
150°-160°	872.6	9.0
160°-170°	564.3	5.8
170°-180°	194.6	2.0
0°-30°	989.8	10.2
0°-40°	1592.2	16.4
0°-60°	2728.3	28.1
0°-90°	3418.0	35.2
90°-120°	1364.5	14.1
90°-150°	4661.4	48.0
90°-180°	6293.0	64.8
0°-180°	9711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1310	1308	1298	1307	1306	124
15°	1249	1246	1234	1239	1239	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	960	955	947	612
45°	801	797	785	772	769	617
55°	610	607	593	583	576	545
65°	412	410	399	389	385	409
75°	219	217	212	209	204	233
85°	57	58	58	57	55	63
90°	2	14	24	32	36	8
95°	87	82	24	32	32	106
105°	446	453	453	453	451	473
115°	838	846	847	841	832	831
125°	1192	1203	1203	1197	1192	1065
135°	1487	1496	1493	1490	1481	1146
145°	1724	1727	1727	1728	1719	1078
155°	1898	1889	1892	1897	1885	875
165°	2003	1994	1996	2005	1992	566
175°	2049	2040	2041	2053	2040	195
180°	2049	2049	2049	2049	2049	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1316.2	1313.1	1302.7	1313.1	1312.1
5°	1310.0	1307.9	1297.5	1306.9	1305.8
7.5°	1300.7	1298.6	1287.2	1296.5	1295.5
10°	1287.2	1285.1	1273.7	1282.0	1280.9
12.5°	1270.6	1266.4	1256.0	1262.2	1262.2
15°	1248.8	1245.6	1234.2	1239.4	1239.4
17.5°	1225.9	1220.7	1209.3	1215.5	1210.3
20°	1195.8	1193.7	1180.2	1187.5	1182.3
22.5°	1165.7	1161.6	1149.1	1153.3	1150.1
25°	1133.5	1128.3	1114.8	1116.9	1113.8
27.5°	1096.2	1093.0	1079.6	1080.6	1077.5
30°	1059.8	1056.7	1041.1	1039.1	1036.0
32.5°	1020.4	1015.2	1001.7	997.5	991.3
35°	978.9	974.7	960.2	955.0	946.7
37.5°	936.3	931.1	917.6	910.4	905.2
40°	892.7	887.5	873.0	863.6	860.5
42.5°	846.0	841.8	827.3	819.0	813.8
45°	801.4	797.2	784.8	772.3	769.2
47.5°	752.6	753.6	738.0	725.6	718.3
50°	705.9	702.7	690.3	676.8	669.5
52.5°	658.1	656.0	642.5	631.1	622.8
55°	610.4	607.2	592.7	583.4	576.1
57.5°	559.5	558.5	546.0	533.5	530.4
60°	511.7	507.6	496.2	485.8	478.5
62.5°	461.9	458.8	449.5	438.0	432.9
65°	412.1	410.0	398.6	389.3	385.1
67.5°	363.3	359.2	350.9	342.6	340.5
70°	317.6	312.4	303.1	296.9	292.7
72.5°	267.8	264.7	259.5	252.2	248.1
75°	219.0	216.9	211.8	208.6	204.5
77.5°	173.4	172.3	169.2	167.1	164.0
80°	130.8	130.8	128.7	127.7	125.6
82.5°	93.4	91.3	91.3	89.3	89.3
85°	57.1	58.1	58.1	57.1	55.0
87.5°	28.0	28.0	27.0	27.0	24.9
90°	1.5	13.7	24.3	31.9	36.4
92.5°	28.9	15.2	24.3	31.9	33.4
95°	86.6	82.0	24.3	31.9	31.9
97.5°	162.5	171.6	27.3	30.4	31.9
100°	253.6	258.2	264.2	38.0	31.9
102.5°	346.2	352.3	355.4	358.4	230.8
105°	446.5	452.6	452.6	452.6	451.0
107.5°	549.7	549.7	552.8	554.3	548.2
110°	650.0	650.0	653.0	648.5	650.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	744.1	748.7	750.2	744.1	741.1
115°	838.3	845.9	847.4	841.3	832.2
117.5°	937.0	937.0	943.1	934.0	930.9
120°	1028.1	1026.6	1031.1	1028.1	1020.5
122.5°	1108.6	1116.2	1117.7	1114.7	1105.6
125°	1192.1	1202.8	1202.8	1196.7	1192.1
127.5°	1272.6	1280.2	1278.7	1275.6	1263.5
130°	1345.5	1353.1	1354.6	1350.1	1342.5
132.5°	1418.4	1427.5	1423.0	1423.0	1415.4
135°	1486.7	1495.8	1492.8	1489.8	1480.7
137.5°	1550.5	1559.6	1556.6	1556.6	1549.0
140°	1612.8	1615.8	1614.3	1617.3	1608.2
142.5°	1669.0	1670.5	1673.5	1673.5	1664.4
145°	1723.6	1726.7	1726.7	1728.2	1719.1
147.5°	1772.2	1772.2	1773.8	1775.3	1764.6
150°	1817.8	1814.8	1817.8	1820.8	1808.7
152.5°	1861.8	1854.2	1857.3	1860.3	1849.7
155°	1898.3	1889.2	1892.2	1896.8	1884.6
157.5°	1927.1	1922.6	1922.6	1927.1	1915.0
160°	1957.5	1948.4	1949.9	1956.0	1943.8
162.5°	1981.8	1972.7	1974.2	1983.3	1969.7
165°	2003.1	1994.0	1995.5	2004.6	1992.4
167.5°	2019.8	2010.7	2012.2	2022.8	2009.1
170°	2033.4	2022.8	2024.3	2036.5	2022.8
172.5°	2042.6	2031.9	2035.0	2045.6	2031.9
175°	2048.6	2039.5	2041.0	2053.2	2039.5
177.5°	2053.2	2044.1	2045.6	2056.2	2044.1
180°	2048.6	2048.6	2048.6	2048.6	2048.6

(END OF REPORT)