

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: P1035607

Luminaire Tested: S125DIW-B850D1560UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035607
REPORT IS A COMBINATION OF REPORTS P1004226 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-F1
Description: Define 5 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

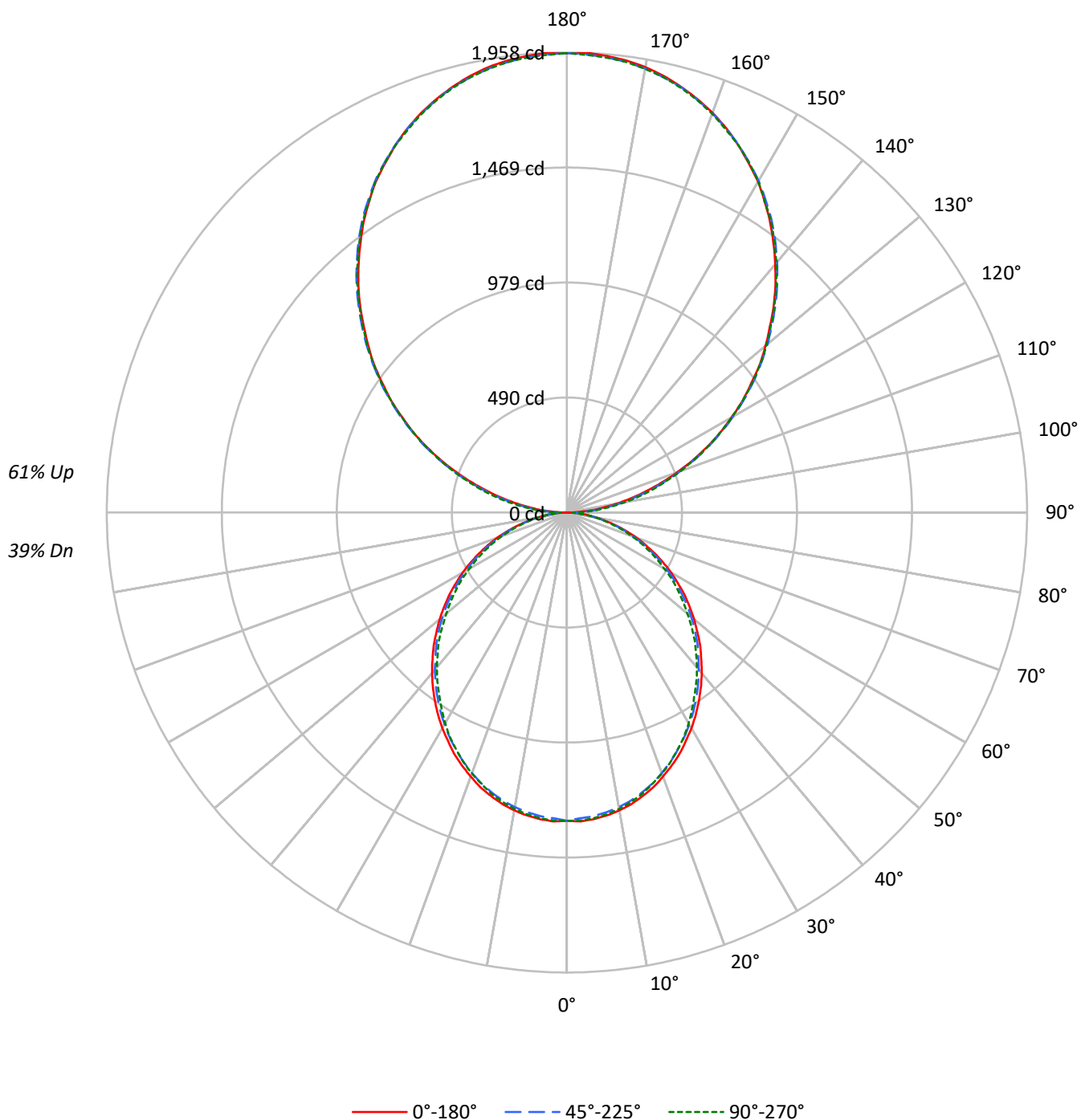
Lumens per Lamp: N/A
Luminaire Lumens: 8875.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	79	76	67	65	63	53	52	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32
3	79	70	62	57	71	64	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	30	25	22	25	21	18	19	16	14
9	48	36	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

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	1.4
10°-20°	349.7	3.9
20°-30°	516.3	5.8
30°-40°	602.4	6.8
40°-50°	605.0	6.8
50°-60°	531.1	6.0
60°-70°	395.6	4.5
70°-80°	225.9	2.5
80°-90°	68.3	0.8
90°-100°	130.0	1.5
100°-110°	386.3	4.4
110°-120°	655.1	7.4
120°-130°	862.4	9.7
130°-140°	966.4	10.9
140°-150°	947.2	10.7
150°-160°	795.6	9.0
160°-170°	528.9	6.0
170°-180°	185.1	2.1
0°-30°	989.8	11.2
0°-40°	1592.2	17.9
0°-60°	2728.3	30.7
0°-90°	3418.0	38.5
90°-120°	1171.4	13.2
90°-150°	3947.4	44.5
90°-180°	5457.0	61.5
0°-180°	8875.0	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	10
95°	99	102	117	128	131	103
105°	347	354	364	373	377	370
115°	656	662	665	663	662	649
125°	957	966	968	965	963	858
135°	1245	1254	1255	1255	1249	959
145°	1508	1514	1519	1519	1514	943
155°	1726	1726	1727	1733	1726	795
165°	1876	1873	1875	1881	1872	529
175°	1951	1945	1945	1954	1943	185
180°	1955	1955	1955	1955	1955	

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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	32.0	36.5
92.5°	45.6	53.3	67.0	77.6	80.6
95°	98.9	101.9	117.2	127.8	130.9
97.5°	152.2	153.7	175.0	184.1	185.6
100°	213.0	213.0	232.8	246.5	249.5
102.5°	278.5	286.1	293.7	308.9	313.4
105°	346.9	354.5	363.7	372.8	377.4
107.5°	421.5	429.1	436.7	441.3	441.3
110°	499.1	506.7	511.3	515.8	514.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	578.2	581.3	587.3	588.9	585.8
115°	655.8	661.9	664.9	663.4	661.9
117.5°	734.9	736.5	739.5	741.0	734.9
120°	808.0	815.6	817.1	817.1	811.0
122.5°	887.1	888.6	893.2	891.7	887.1
125°	957.1	966.2	967.7	964.7	963.2
127.5°	1034.7	1039.3	1040.8	1039.3	1036.2
130°	1103.2	1110.8	1113.8	1112.3	1109.2
132.5°	1171.6	1185.3	1183.8	1182.3	1177.7
135°	1244.7	1253.8	1255.3	1255.3	1249.2
137.5°	1313.1	1322.3	1325.3	1326.8	1319.2
140°	1378.6	1386.2	1390.7	1393.8	1386.2
142.5°	1444.0	1450.1	1456.2	1457.7	1450.1
145°	1507.9	1514.0	1518.6	1518.6	1514.0
147.5°	1567.2	1571.8	1574.9	1579.4	1567.2
150°	1626.6	1625.1	1631.2	1631.2	1628.1
152.5°	1675.3	1678.3	1679.8	1684.4	1678.3
155°	1725.5	1725.5	1727.0	1733.1	1725.5
157.5°	1771.1	1768.1	1769.6	1775.7	1765.1
160°	1810.7	1806.1	1807.7	1813.7	1806.1
162.5°	1845.7	1842.7	1842.7	1850.3	1841.1
165°	1876.1	1873.1	1874.6	1880.7	1871.6
167.5°	1903.5	1897.4	1897.4	1906.6	1897.4
170°	1924.8	1918.7	1918.7	1927.9	1917.2
172.5°	1940.0	1934.0	1934.0	1943.1	1934.0
175°	1950.7	1944.6	1944.6	1953.7	1943.1
177.5°	1958.3	1952.2	1950.7	1959.8	1949.2
180°	1955.3	1955.3	1955.3	1955.3	1955.3

(END OF REPORT)