

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: P1035636

Luminaire Tested: S125DIW-B850D470UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035636
REPORT IS A COMBINATION OF REPORTS P1004291 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D470UB40-4F0-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

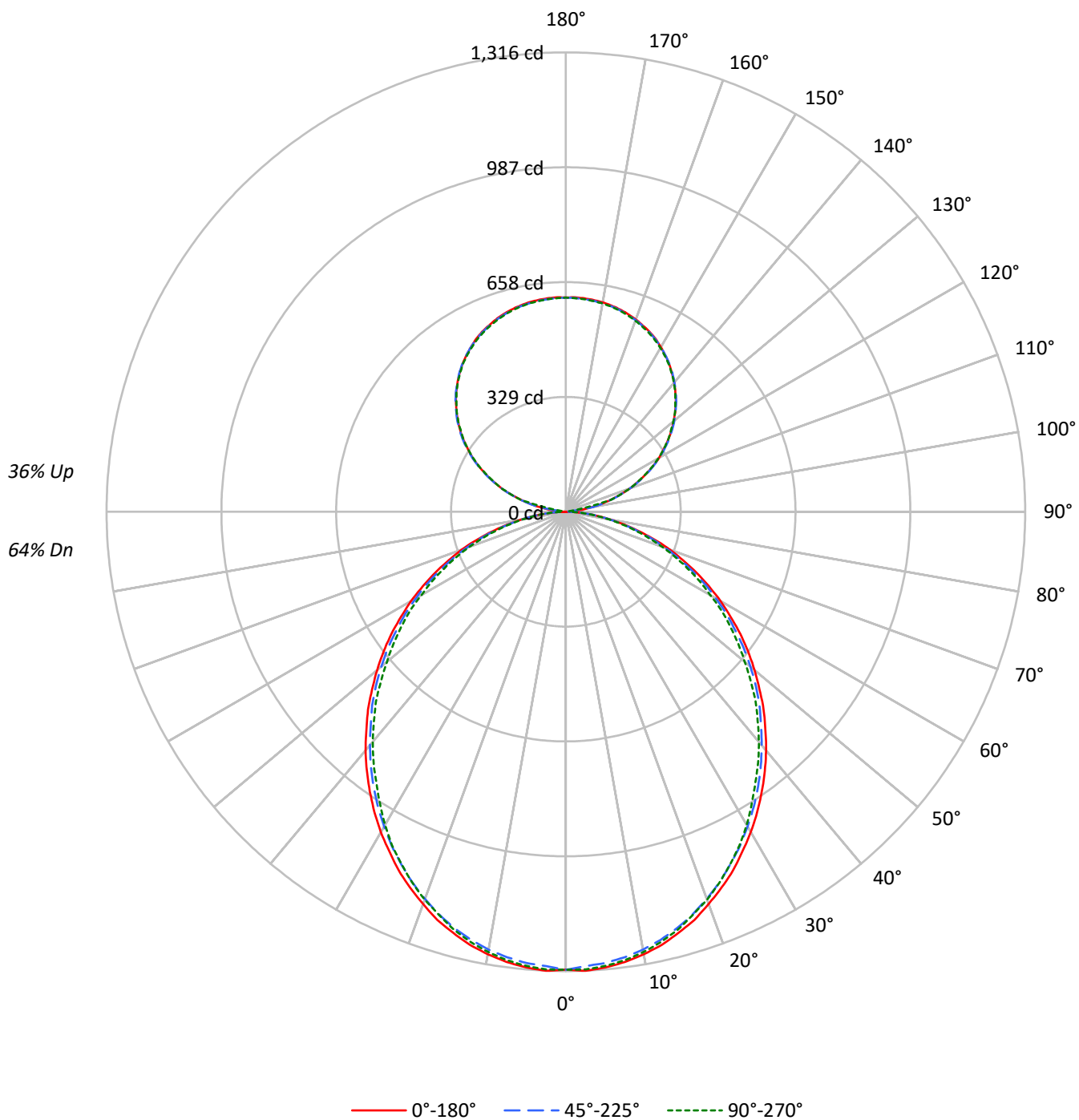
Lumens per Lamp: N/A
Luminaire Lumens: 5301.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	96	92	89	95	91	87	84	80	77	75	70	68	66	61	60	58
2	92	84	78	73	86	79	74	69	70	66	62	62	58	55	54	51	49
3	84	74	66	60	78	70	63	58	62	57	52	55	50	47	48	45	42
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36
5	71	59	50	44	66	55	48	42	49	43	38	44	39	35	38	35	31
6	65	53	44	38	61	50	42	37	44	38	34	40	34	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

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	2.3
10°-20°	349.7	6.6
20°-30°	516.3	9.7
30°-40°	602.4	11.4
40°-50°	605.0	11.4
50°-60°	531.1	10.0
60°-70°	395.6	7.5
70°-80°	225.9	4.3
80°-90°	66.1	1.2
90°-100°	20.8	0.4
100°-110°	138.5	2.6
110°-120°	249.4	4.7
120°-130°	320.1	6.0
130°-140°	344.3	6.5
140°-150°	323.1	6.1
150°-160°	261.4	4.9
160°-170°	169.1	3.2
170°-180°	58.3	1.1
0°-30°	989.8	18.7
0°-40°	1592.2	30.0
0°-60°	2728.3	51.5
0°-90°	3415.9	64.4
90°-120°	408.8	7.7
90°-150°	1396.4	26.3
90°-180°	1885.0	35.6
0°-180°	5301.0	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°	0	4	7	10	11	5
95°	26	25	7	10	10	32
105°	134	136	136	136	135	142
115°	251	253	254	252	249	249
125°	357	360	360	358	357	319
135°	445	448	447	446	444	343
145°	516	517	517	518	515	323
155°	569	566	567	568	564	262
165°	600	597	598	600	597	170
175°	614	611	611	615	611	58
180°	614	614	614	614	614	

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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°	0.5	4.1	7.3	9.6	10.9
92.5°	8.6	4.5	7.3	9.6	10.0
95°	25.9	24.6	7.3	9.6	9.6
97.5°	48.7	51.4	8.2	9.1	9.6
100°	76.0	77.3	79.2	11.4	9.6
102.5°	103.7	105.5	106.4	107.4	69.1
105°	133.7	135.6	135.6	135.6	135.1
107.5°	164.7	164.7	165.6	166.0	164.2
110°	194.7	194.7	195.6	194.2	194.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.9	224.3	224.7	222.9	222.0
115°	251.1	253.4	253.8	252.0	249.3
117.5°	280.7	280.7	282.5	279.8	278.9
120°	308.0	307.5	308.9	308.0	305.7
122.5°	332.1	334.4	334.8	333.9	331.2
125°	357.1	360.3	360.3	358.5	357.1
127.5°	381.2	383.5	383.0	382.1	378.5
130°	403.1	405.3	405.8	404.4	402.1
132.5°	424.9	427.6	426.3	426.3	424.0
135°	445.4	448.1	447.2	446.3	443.5
137.5°	464.5	467.2	466.3	466.3	464.0
140°	483.1	484.0	483.6	484.5	481.8
142.5°	499.9	500.4	501.3	501.3	498.6
145°	516.3	517.2	517.2	517.7	515.0
147.5°	530.9	530.9	531.3	531.8	528.6
150°	544.5	543.6	544.5	545.4	541.8
152.5°	557.7	555.4	556.4	557.3	554.1
155°	568.6	565.9	566.8	568.2	564.5
157.5°	577.3	575.9	575.9	577.3	573.6
160°	586.4	583.7	584.1	585.9	582.3
162.5°	593.7	590.9	591.4	594.1	590.0
165°	600.0	597.3	597.8	600.5	596.8
167.5°	605.0	602.3	602.8	605.9	601.9
170°	609.1	605.9	606.4	610.0	605.9
172.5°	611.9	608.7	609.6	612.8	608.7
175°	613.7	610.9	611.4	615.0	610.9
177.5°	615.0	612.3	612.8	616.0	612.3
180°	613.7	613.7	613.7	613.7	613.7

(END OF REPORT)