

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: P1035624

Luminaire Tested: S125DIW-B850D470UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035624
REPORT IS A COMBINATION OF REPORTS P1004273 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D470UB30-4F0-XX-W2A-F
Description: Define 5 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

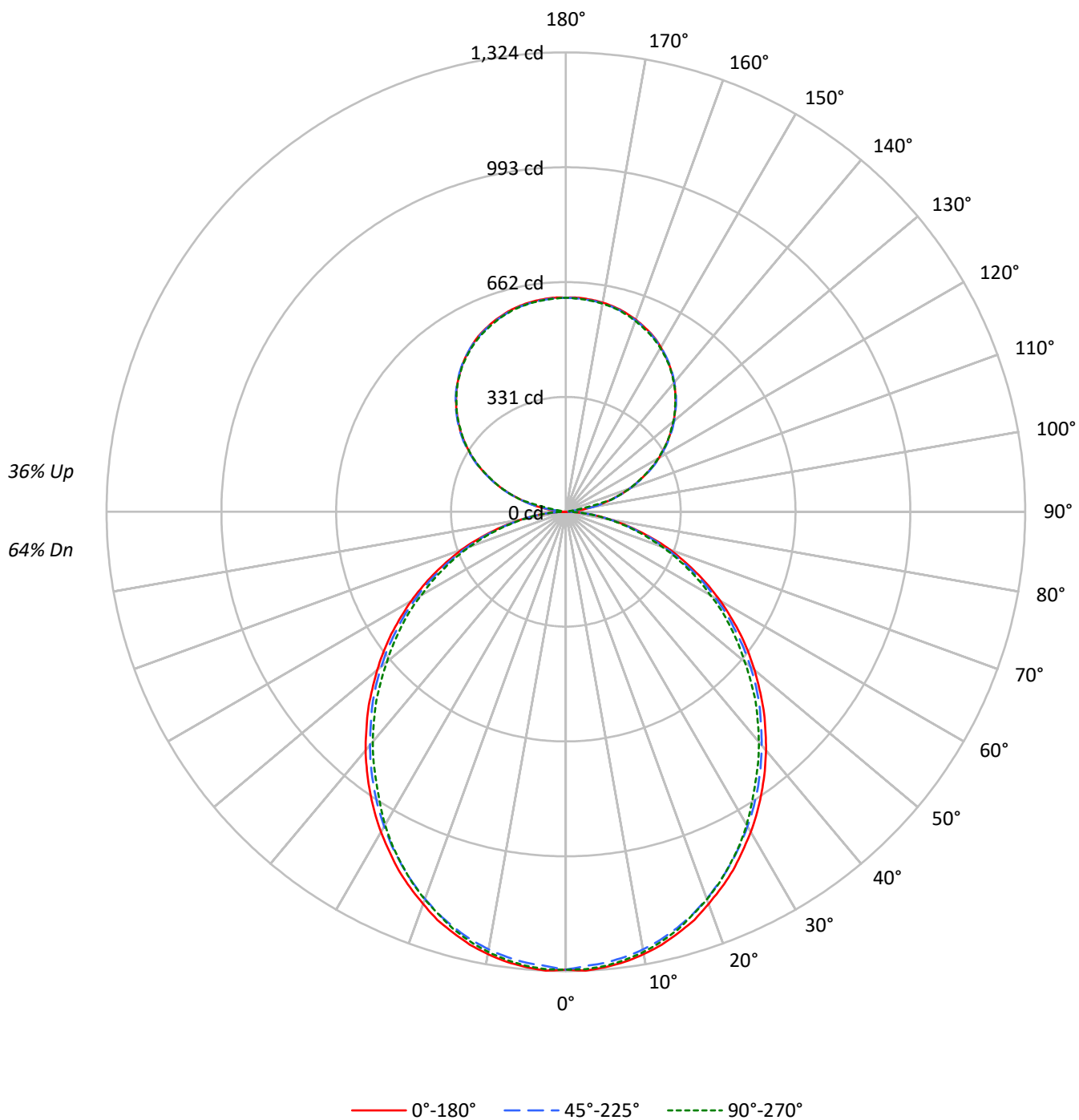
Lumens per Lamp: N/A
Luminaire Lumens: 5331.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	67	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°	8456	8456	8456
5°	8456	8259	8275
10°	8386	8070	8045
15°	8276	7843	7774
20°	8127	7581	7462
25°	7968	7295	7128
30°	7774	6996	6777
35°	7569	6683	6384
40°	7356	6353	6034
45°	7126	6030	5662
50°	6872	5665	5229
55°	6621	5262	4831
60°	6322	4837	4367
65°	5964	4345	3888
70°	5601	3780	3334
75°	4988	3112	2696
80°	4253	2325	1983
85°	3282	1376	1092

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7126 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	2.3
10°-20°	351.8	6.6
20°-30°	519.3	9.7
30°-40°	605.9	11.4
40°-50°	608.5	11.4
50°-60°	534.2	10.0
60°-70°	397.9	7.5
70°-80°	227.2	4.3
80°-90°	66.5	1.2
90°-100°	20.9	0.4
100°-110°	139.2	2.6
110°-120°	250.7	4.7
120°-130°	321.8	6.0
130°-140°	346.1	6.5
140°-150°	324.9	6.1
150°-160°	262.8	4.9
160°-170°	170.0	3.2
170°-180°	58.6	1.1
0°-30°	995.6	18.7
0°-40°	1601.5	30.0
0°-60°	2744.3	51.5
0°-90°	3435.9	64.5
90°-120°	410.9	7.7
90°-150°	1403.8	26.3
90°-180°	1895.0	35.5
0°-180°	5331.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1318	1316	1305	1314	1314	125
15°	1256	1253	1241	1247	1247	354
25°	1140	1135	1121	1124	1120	525
35°	985	980	966	961	952	616
45°	806	802	789	777	774	621
55°	614	611	596	587	580	548
65°	414	412	401	392	387	411
75°	220	218	213	210	206	235
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	136	142
115°	252	255	255	253	251	250
125°	359	362	362	360	359	321
135°	448	450	450	449	446	345
145°	519	520	520	520	518	325
155°	572	569	570	571	568	263
165°	603	600	601	604	600	170
175°	617	614	615	618	614	59
180°	617	617	617	617	617	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1319.8	1319.8	1319.8	1319.8	1319.8
2.5°	1323.9	1320.8	1310.4	1320.8	1319.8
5°	1317.7	1315.6	1305.1	1314.5	1313.5
7.5°	1308.3	1306.2	1294.7	1304.1	1303.1
10°	1294.7	1292.6	1281.1	1289.5	1288.4
12.5°	1278.0	1273.8	1263.4	1269.6	1269.6
15°	1256.1	1252.9	1241.4	1246.7	1246.7
17.5°	1233.1	1227.9	1216.4	1222.7	1217.4
20°	1202.8	1200.7	1187.2	1194.5	1189.2
22.5°	1172.5	1168.4	1155.8	1160.0	1156.9
25°	1140.2	1134.9	1121.4	1123.5	1120.3
27.5°	1102.6	1099.4	1085.9	1086.9	1083.8
30°	1066.0	1062.9	1047.2	1045.2	1042.0
32.5°	1026.4	1021.1	1007.6	1003.4	997.1
35°	984.6	980.4	965.8	960.6	952.2
37.5°	941.8	936.6	923.0	915.7	910.5
40°	897.9	892.7	878.1	868.7	865.6
42.5°	851.0	846.8	832.2	823.8	818.6
45°	806.1	801.9	789.3	776.8	773.7
47.5°	757.0	758.0	742.4	729.8	722.5
50°	710.0	706.9	694.3	680.8	673.5
52.5°	662.0	659.9	646.3	634.8	626.5
55°	613.9	610.8	596.2	586.8	579.5
57.5°	562.8	561.7	549.2	536.7	533.5
60°	514.7	510.6	499.1	488.6	481.3
62.5°	464.6	461.5	452.1	440.6	435.4
65°	414.5	412.4	400.9	391.5	387.4
67.5°	365.4	361.3	352.9	344.6	342.5
70°	319.5	314.3	304.9	298.6	294.4
72.5°	269.4	266.2	261.0	253.7	249.5
75°	220.3	218.2	213.0	209.9	205.7
77.5°	174.4	173.3	170.2	168.1	165.0
80°	131.6	131.6	129.5	128.4	126.3
82.5°	94.0	91.9	91.9	89.8	89.8
85°	57.4	58.5	58.5	57.4	55.3
87.5°	28.2	28.2	27.1	27.1	25.1
90°	0.5	4.1	7.3	9.6	11.0
92.5°	8.7	4.6	7.3	9.6	10.1
95°	26.1	24.7	7.3	9.6	9.6
97.5°	48.9	51.7	8.2	9.1	9.6
100°	76.4	77.7	79.6	11.4	9.6
102.5°	104.3	106.1	107.0	107.9	69.5
105°	134.5	136.3	136.3	136.3	135.8
107.5°	165.6	165.6	166.5	166.9	165.1
110°	195.7	195.7	196.6	195.3	195.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	224.1	225.5	225.9	224.1	223.2
115°	252.4	254.7	255.2	253.4	250.6
117.5°	282.2	282.2	284.0	281.3	280.3
120°	309.6	309.2	310.5	309.6	307.3
122.5°	333.8	336.1	336.6	335.7	332.9
125°	359.0	362.2	362.2	360.4	359.0
127.5°	383.2	385.5	385.1	384.2	380.5
130°	405.2	407.5	407.9	406.6	404.3
132.5°	427.1	429.9	428.5	428.5	426.2
135°	447.7	450.5	449.6	448.6	445.9
137.5°	466.9	469.7	468.8	468.8	466.5
140°	485.7	486.6	486.1	487.1	484.3
142.5°	502.6	503.1	504.0	504.0	501.2
145°	519.1	520.0	520.0	520.4	517.7
147.5°	533.7	533.7	534.2	534.6	531.4
150°	547.4	546.5	547.4	548.3	544.7
152.5°	560.7	558.4	559.3	560.2	557.0
155°	571.7	568.9	569.8	571.2	567.5
157.5°	580.3	579.0	579.0	580.3	576.7
160°	589.5	586.7	587.2	589.0	585.4
162.5°	596.8	594.1	594.5	597.3	593.2
165°	603.2	600.5	600.9	603.7	600.0
167.5°	608.2	605.5	606.0	609.2	605.0
170°	612.4	609.2	609.6	613.3	609.2
172.5°	615.1	611.9	612.8	616.0	611.9
175°	616.9	614.2	614.6	618.3	614.2
177.5°	618.3	615.6	616.0	619.2	615.6
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)