

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: P1035642

Luminaire Tested: S125DIW-B850D470UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035642
REPORT IS A COMBINATION OF REPORTS P1004300 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D470UB50-4F0-XX-W2A-F
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

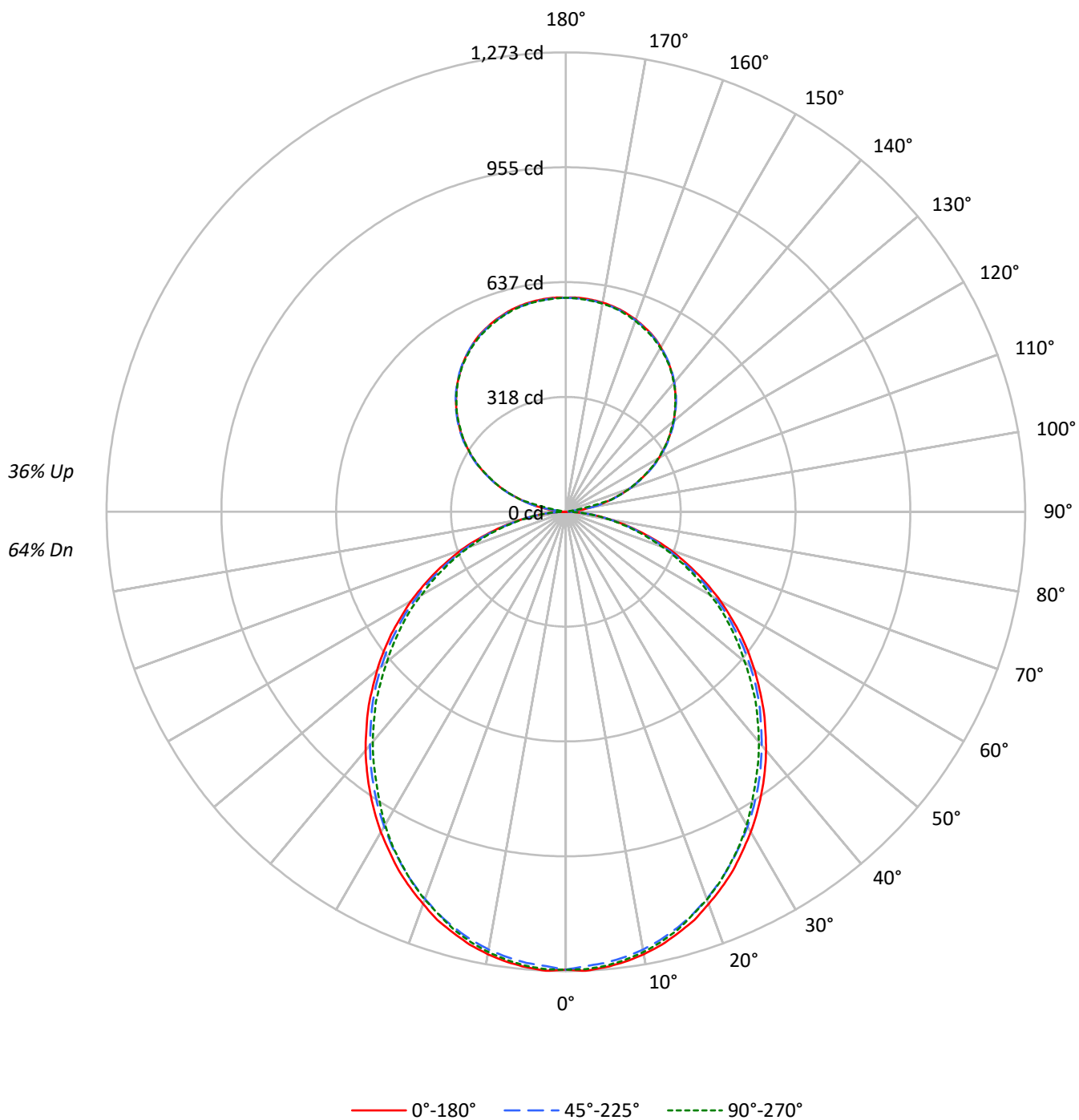
Lumens per Lamp: N/A
Luminaire Lumens: 5126.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1035642

CATALOG NUMBER: S125DIW-B850D470UB50-4F0-XX-W2A-F

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°	8131	8131	8131
5°	8131	7942	7957
10°	8064	7760	7735
15°	7958	7542	7475
20°	7815	7289	7175
25°	7662	7014	6855
30°	7476	6727	6517
35°	7278	6427	6138
40°	7073	6109	5802
45°	6852	5799	5445
50°	6608	5448	5028
55°	6367	5060	4645
60°	6080	4651	4199
65°	5735	4178	3738
70°	5385	3635	3206
75°	4796	2992	2593
80°	4088	2235	1907
85°	3156	1321	1051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6852 cd/sqm

TEST NUMBER: P1035642

CATALOG NUMBER: S125DIW-B850D470UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	2.3
10°-20°	338.2	6.6
20°-30°	499.4	9.7
30°-40°	582.6	11.4
40°-50°	585.2	11.4
50°-60°	513.6	10.0
60°-70°	382.6	7.5
70°-80°	218.5	4.3
80°-90°	64.0	1.2
90°-100°	20.1	0.4
100°-110°	133.9	2.6
110°-120°	241.1	4.7
120°-130°	309.4	6.0
130°-140°	332.8	6.5
140°-150°	312.4	6.1
150°-160°	252.7	4.9
160°-170°	163.4	3.2
170°-180°	56.4	1.1
0°-30°	957.4	18.7
0°-40°	1540.0	30.0
0°-60°	2638.8	51.5
0°-90°	3303.9	64.5
90°-120°	395.1	7.7
90°-150°	1349.7	26.3
90°-180°	1822.0	35.5
0°-180°	5126.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1267	1265	1255	1264	1263	120
15°	1208	1205	1194	1199	1199	341
25°	1096	1091	1078	1080	1077	504
35°	947	943	929	924	916	592
45°	775	771	759	747	744	597
55°	590	587	573	564	557	527
65°	399	397	386	376	372	395
75°	212	210	205	202	198	226
85°	55	56	56	55	53	60
90°	0	4	7	9	11	5
95°	25	24	7	9	9	31
105°	129	131	131	131	131	137
115°	243	245	245	244	241	241
125°	345	348	348	346	345	308
135°	430	433	432	431	429	332
145°	499	500	500	500	498	312
155°	550	547	548	549	546	253
165°	580	577	578	580	577	164
175°	593	590	591	594	590	56
180°	593	593	593	593	593	

TEST NUMBER: P1035642

CATALOG NUMBER: S125DIW-B850D470UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.0	1269.0	1269.0	1269.0	1269.0
2.5°	1273.1	1270.0	1260.0	1270.0	1269.0
5°	1267.0	1265.0	1255.0	1264.0	1263.0
7.5°	1258.0	1256.0	1244.9	1254.0	1253.0
10°	1244.9	1242.9	1231.9	1239.9	1238.9
12.5°	1228.9	1224.9	1214.8	1220.8	1220.8
15°	1207.8	1204.8	1193.7	1198.8	1198.8
17.5°	1185.7	1180.7	1169.6	1175.7	1170.6
20°	1156.6	1154.6	1141.5	1148.6	1143.5
22.5°	1127.5	1123.5	1111.4	1115.4	1112.4
25°	1096.4	1091.3	1078.3	1080.3	1077.3
27.5°	1060.2	1057.2	1044.1	1045.2	1042.1
30°	1025.1	1022.1	1007.0	1005.0	1002.0
32.5°	986.9	981.9	968.8	964.8	958.8
35°	946.8	942.7	928.7	923.7	915.6
37.5°	905.6	900.6	887.5	880.5	875.5
40°	863.4	858.4	844.4	835.3	832.3
42.5°	818.2	814.2	800.2	792.1	787.1
45°	775.1	771.1	759.0	747.0	744.0
47.5°	727.9	728.9	713.8	701.8	694.8
50°	682.7	679.7	667.7	654.6	647.6
52.5°	636.5	634.5	621.5	610.4	602.4
55°	590.3	587.3	573.3	564.2	557.2
57.5°	541.1	540.1	528.1	516.0	513.0
60°	495.0	490.9	479.9	469.9	462.8
62.5°	446.8	443.8	434.7	423.7	418.7
65°	398.6	396.6	385.5	376.5	372.5
67.5°	351.4	347.4	339.3	331.3	329.3
70°	307.2	302.2	293.2	287.1	283.1
72.5°	259.0	256.0	251.0	244.0	240.0
75°	211.8	209.8	204.8	201.8	197.8
77.5°	167.7	166.7	163.6	161.6	158.6
80°	126.5	126.5	124.5	123.5	121.5
82.5°	90.4	88.4	88.4	86.3	86.3
85°	55.2	56.2	56.2	55.2	53.2
87.5°	27.1	27.1	26.1	26.1	24.1
90°	0.4	4.0	7.0	9.2	10.6
92.5°	8.4	4.4	7.0	9.2	9.7
95°	25.1	23.7	7.0	9.2	9.2
97.5°	47.0	49.7	7.9	8.8	9.2
100°	73.4	74.8	76.5	11.0	9.2
102.5°	100.3	102.0	102.9	103.8	66.8
105°	129.3	131.0	131.0	131.0	130.6
107.5°	159.2	159.2	160.1	160.5	158.7
110°	188.2	188.2	189.1	187.8	188.2



TEST NUMBER: P1035642

CATALOG NUMBER: S125DIW-B850D470UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.5	216.8	217.2	215.5	214.6
115°	242.7	244.9	245.4	243.6	241.0
117.5°	271.3	271.3	273.1	270.4	269.5
120°	297.7	297.2	298.6	297.7	295.5
122.5°	321.0	323.2	323.6	322.8	320.1
125°	345.2	348.3	348.3	346.5	345.2
127.5°	368.5	370.7	370.2	369.4	365.8
130°	389.6	391.8	392.2	390.9	388.7
132.5°	410.7	413.3	412.0	412.0	409.8
135°	430.5	433.1	432.2	431.4	428.7
137.5°	449.0	451.6	450.7	450.7	448.5
140°	467.0	467.9	467.4	468.3	465.7
142.5°	483.2	483.7	484.6	484.6	481.9
145°	499.1	500.0	500.0	500.4	497.8
147.5°	513.2	513.2	513.6	514.0	511.0
150°	526.3	525.5	526.3	527.2	523.7
152.5°	539.1	536.9	537.8	538.7	535.6
155°	549.6	547.0	547.9	549.2	545.7
157.5°	558.0	556.7	556.7	558.0	554.5
160°	566.8	564.2	564.6	566.4	562.8
162.5°	573.8	571.2	571.6	574.3	570.3
165°	580.0	577.3	577.8	580.4	576.9
167.5°	584.8	582.2	582.6	585.7	581.7
170°	588.8	585.7	586.1	589.7	585.7
172.5°	591.4	588.3	589.2	592.3	588.3
175°	593.2	590.5	591.0	594.5	590.5
177.5°	594.5	591.9	592.3	595.4	591.9
180°	593.2	593.2	593.2	593.2	593.2

(END OF REPORT)