

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061789

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

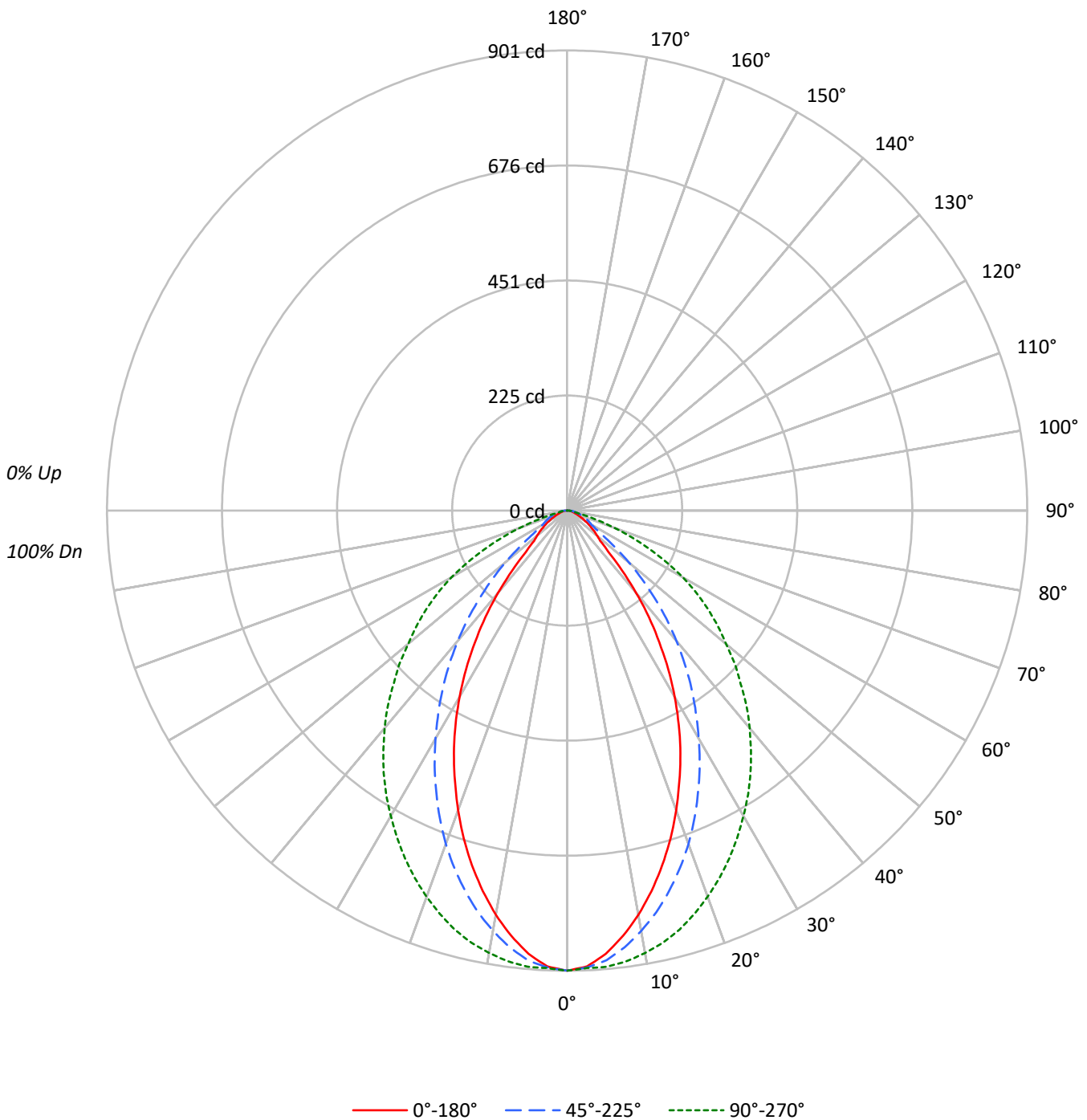
Lumens per Lamp: N/A
Luminaire Lumens: 1300.8 lumens
Efficiency: N/A
Efficacy: 50.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6202	6202	6202
5°	6019	6108	6196
10°	5618	5842	6149
15°	5127	5499	6055
20°	4573	5089	5895
25°	3986	4611	5707
30°	3347	4095	5488
35°	2641	3566	5263
40°	1892	2997	4995
45°	1113	2352	4683
50°	824	1695	4350
55°	693	1026	4041
60°	559	750	3605
65°	435	714	2890
70°	366	666	1957
75°	341	596	854
80°	337	595	551
85°	419	758	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4683 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	6.4
10°-20°	218.1	16.8
20°-30°	285.0	21.9
30°-40°	277.4	21.3
40°-50°	207.3	15.9
50°-60°	128.6	9.9
60°-70°	67.5	5.2
70°-80°	24.6	1.9
80°-90°	9.3	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	586.0	45.1
0°-40°	863.4	66.4
0°-60°	1199.3	92.2
0°-90°	1300.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1300.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	871	883	884	889	896	81
15°	719	740	772	818	850	201
25°	525	551	607	689	751	240
35°	314	348	424	538	626	196
45°	114	150	242	377	481	96
55°	58	61	86	222	337	52
65°	27	29	44	94	177	28
75°	13	15	22	25	32	14
85°	5	10	10	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	900.8	900.8	900.8	900.8	900.8
2.5°	893.3	900.8	895.5	895.5	896.5
5°	870.9	882.7	883.7	889.1	896.5
7.5°	839.9	853.8	862.4	878.4	890.1
10°	803.6	819.6	835.6	862.4	879.5
12.5°	763.0	782.2	805.7	842.1	866.6
15°	719.2	740.5	771.5	818.5	849.5
17.5°	673.2	695.7	734.1	790.8	828.2
20°	624.1	648.6	694.6	758.7	804.6
22.5°	573.8	601.6	651.8	724.5	779.0
25°	524.7	551.4	607.0	689.2	751.2
27.5°	473.4	501.2	562.1	652.9	721.3
30°	421.0	450.9	515.1	615.5	690.3
32.5°	368.7	399.7	469.1	577.0	659.3
35°	314.2	348.4	424.2	537.5	626.2
37.5°	262.9	299.2	378.3	496.9	590.9
40°	210.5	247.9	333.4	457.4	555.7
42.5°	159.2	197.7	287.5	416.8	520.4
45°	114.3	149.6	241.5	377.2	480.9
47.5°	87.6	107.9	198.8	336.6	445.6
50°	76.9	83.4	158.2	297.1	406.1
52.5°	67.3	71.6	117.5	258.6	371.9
55°	57.7	60.9	85.5	222.3	336.6
57.5°	49.2	52.4	65.2	189.1	300.3
60°	40.6	43.8	54.5	156.0	261.8
62.5°	34.2	35.3	49.2	125.0	219.1
65°	26.7	28.9	43.8	94.0	177.4
67.5°	22.4	23.5	38.5	67.3	136.8
70°	18.2	19.2	33.1	47.0	97.2
72.5°	16.0	16.0	27.8	34.2	62.0
75°	12.8	15.0	22.4	24.6	32.1
77.5°	10.7	15.0	19.2	18.2	17.1
80°	8.5	13.9	15.0	15.0	13.9
82.5°	7.5	11.8	12.8	11.8	10.7
85°	5.3	9.6	9.6	9.6	7.5
87.5°	4.3	8.5	7.5	7.5	5.3
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	6.13	7.48	6.50	7.79	8.11	15.83	17.18	16.20	17.49	17.81
	3H	6.97	8.17	7.35	8.50	8.86	16.74	17.94	17.12	18.27	18.63
	4H	7.33	8.44	7.73	8.79	9.18	16.84	17.96	17.24	18.31	18.69
	6H	7.70	8.73	8.11	9.10	9.49	16.83	17.85	17.24	18.22	18.62
	8H	7.88	8.85	8.31	9.24	9.65	16.81	17.79	17.24	18.18	18.58
	12H	8.04	8.97	8.47	9.36	9.79	16.80	17.73	17.23	18.11	18.54
4H	2H	6.96	8.08	7.36	8.43	8.81	15.68	16.80	16.08	17.15	17.53
	3H	8.01	8.93	8.43	9.33	9.74	16.67	17.58	17.08	17.99	18.39
	4H	8.47	9.29	8.91	9.71	10.15	16.80	17.62	17.23	18.04	18.48
	6H	9.03	9.73	9.49	10.18	10.65	16.83	17.54	17.29	17.98	18.45
	8H	9.29	9.95	9.76	10.40	10.87	16.83	17.49	17.30	17.94	18.41
	12H	9.53	10.11	10.02	10.60	11.07	16.84	17.43	17.33	17.91	18.38
8H	4H	9.02	9.68	9.49	10.13	10.60	16.72	17.38	17.19	17.83	18.30
	6H	9.80	10.34	10.31	10.84	11.32	16.78	17.32	17.29	17.82	18.30
	8H	10.22	10.71	10.74	11.22	11.71	16.81	17.30	17.33	17.81	18.30
	12H	10.64	11.07	11.15	11.56	12.13	16.87	17.30	17.38	17.79	18.36
12H	4H	9.09	9.67	9.57	10.15	10.63	16.69	17.27	17.18	17.76	18.23
	6H	9.95	10.43	10.47	10.95	11.44	16.75	17.24	17.27	17.75	18.24
	8H	10.48	10.91	10.99	11.40	11.97	16.82	17.24	17.33	17.74	18.31