

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: P1061824

Luminaire Tested: S125RDRP-S850D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061824  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

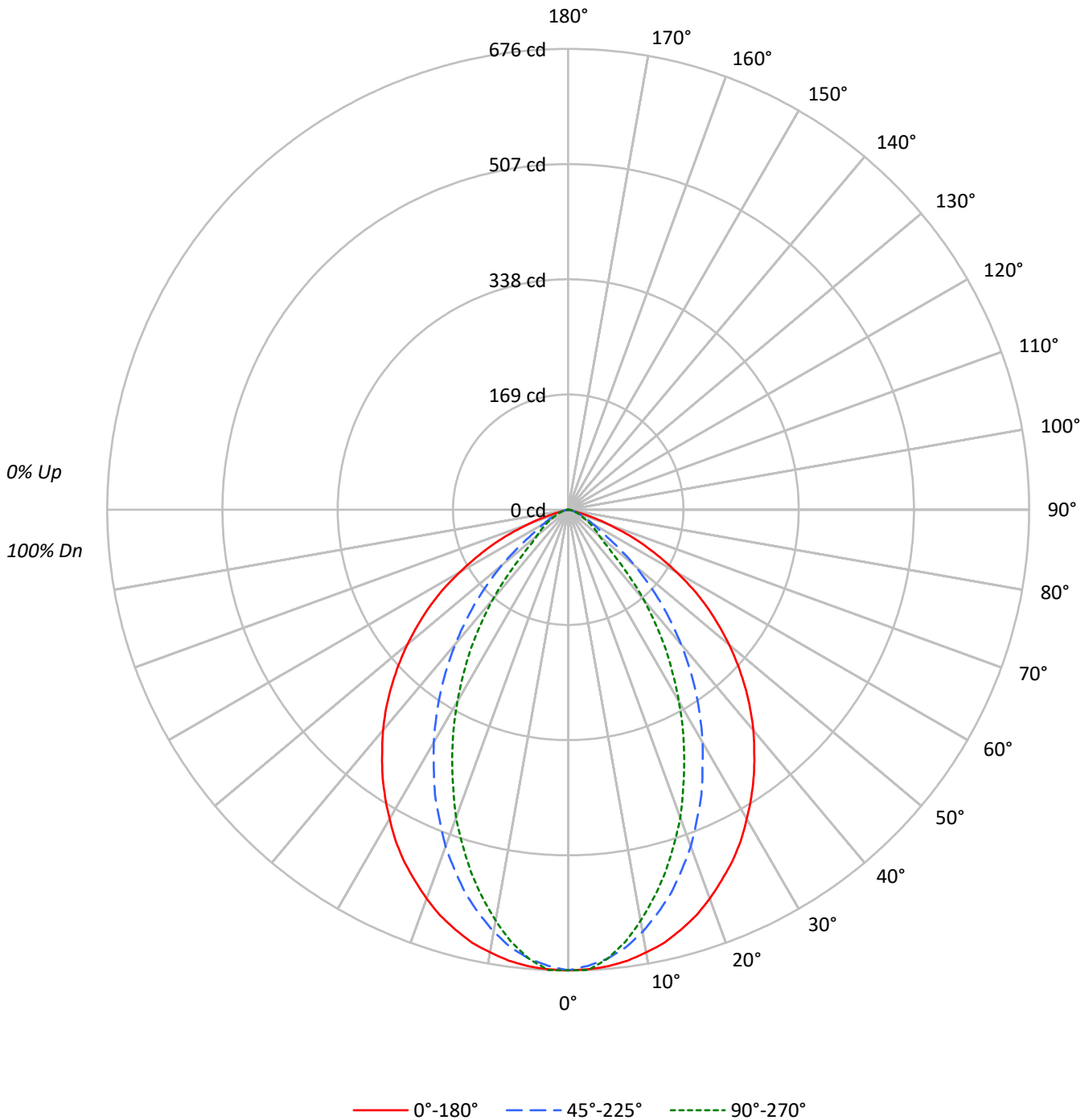
Lumens per Lamp: N/A  
Luminaire Lumens: 977.3 lumens  
Efficiency: N/A  
Efficacy: 37.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 25.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4652	4652	4652
5°	4647	4569	4569
10°	4610	4394	4280
15°	4548	4150	3923
20°	4448	3850	3523
25°	4325	3509	3059
30°	4164	3133	2581
35°	3991	2743	2093
40°	3797	2315	1551
45°	3570	1856	937
50°	3301	1361	644
55°	2978	834	535
60°	2530	567	426
65°	2001	433	336
70°	1262	312	276
75°	412	229	229
80°	135	170	206
85°	71	134	134

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3570 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	6.4
10°-20°	165.1	16.9
20°-30°	217.1	22.2
30°-40°	213.3	21.8
40°-50°	161.4	16.5
50°-60°	97.8	10.0
60°-70°	46.2	4.7
70°-80°	12.1	1.2
80°-90°	1.8	0.2
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°	444.7	45.5
0°-40°	658.0	67.3
0°-60°	917.2	93.9
0°-90°	977.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	977.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	672	671	661	662	661	64
15°	638	621	582	560	550	180
25°	569	526	462	419	403	262
35°	475	411	326	269	249	296
45°	367	288	191	121	96	282
55°	248	170	70	47	45	221
65°	123	63	27	22	21	121
75°	16	10	9	9	9	24
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	675.7	675.7	675.7	675.7	675.7
2.5°	674.9	674.9	669.7	675.7	675.7
5°	672.3	670.6	661.1	662.0	661.1
7.5°	667.2	663.7	647.4	643.1	639.7
10°	659.4	652.6	628.5	618.2	612.2
12.5°	650.8	638.8	606.2	591.6	582.2
15°	638.0	620.8	582.2	559.8	550.4
17.5°	624.2	599.3	553.8	527.2	515.2
20°	607.1	577.9	525.5	492.9	480.8
22.5°	588.2	553.8	492.9	456.8	440.5
25°	569.3	526.3	461.9	419.0	402.7
27.5°	547.8	498.9	426.7	382.1	364.1
30°	523.8	471.4	394.1	347.7	324.6
32.5°	499.7	443.1	359.8	309.1	285.9
35°	474.8	411.3	326.3	268.8	249.0
37.5°	448.2	381.2	291.9	231.8	208.6
40°	422.4	351.2	257.6	194.1	172.6
42.5°	395.0	321.1	223.2	157.1	133.1
45°	366.6	288.5	190.6	121.1	96.2
47.5°	337.4	259.3	158.0	89.3	72.1
50°	308.2	228.4	127.1	66.1	60.1
52.5°	278.2	198.3	96.2	55.0	52.4
55°	248.1	170.0	69.5	47.2	44.6
57.5°	217.2	139.1	52.4	40.4	37.8
60°	183.7	111.6	41.2	33.5	30.9
62.5°	152.8	87.6	33.5	27.5	25.8
65°	122.8	62.7	26.6	22.3	20.6
67.5°	91.9	42.1	20.6	17.2	17.2
70°	62.7	27.5	15.5	13.7	13.7
72.5°	37.8	16.3	11.2	11.2	11.2
75°	15.5	10.3	8.6	8.6	8.6
77.5°	5.2	6.0	6.0	6.9	6.9
80°	3.4	3.4	4.3	5.2	5.2
82.5°	1.7	2.6	2.6	3.4	3.4
85°	0.9	0.9	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.9	0.9
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	14.67	16.00	15.04	16.31	16.63	5.33	6.66	5.70	6.98	7.29
	3H	15.38	16.55	15.76	16.88	17.25	6.11	7.29	6.49	7.62	7.98
	4H	15.39	16.49	15.80	16.84	17.22	6.36	7.46	6.76	7.81	8.19
	6H	15.32	16.33	15.74	16.70	17.09	6.54	7.55	6.96	7.92	8.31
	8H	15.28	16.24	15.71	16.63	17.03	6.59	7.54	7.02	7.93	8.34
	12H	15.24	16.15	15.67	16.53	16.96	6.59	7.50	7.03	7.89	8.32
4H	2H	14.50	15.60	14.90	15.95	16.33	5.82	6.91	6.22	7.26	7.65
	3H	15.25	16.14	15.66	16.54	16.95	6.72	7.62	7.14	8.02	8.42
	4H	15.27	16.06	15.70	16.48	16.92	7.04	7.83	7.47	8.25	8.70
	6H	15.21	15.89	15.67	16.34	16.80	7.30	7.99	7.77	8.43	8.90
	8H	15.15	15.79	15.62	16.24	16.71	7.37	8.01	7.84	8.45	8.92
	12H	15.11	15.67	15.60	16.16	16.63	7.39	7.95	7.88	8.44	8.91
8H	4H	15.15	15.79	15.62	16.23	16.71	7.15	7.79	7.62	8.24	8.71
	6H	15.07	15.59	15.58	16.09	16.57	7.47	7.99	7.98	8.49	8.97
	8H	15.02	15.49	15.54	16.00	16.49	7.58	8.04	8.10	8.56	9.05
	12H	14.98	15.39	15.49	15.89	16.46	7.64	8.05	8.15	8.54	9.12
12H	4H	15.11	15.67	15.59	16.15	16.63	7.12	7.69	7.61	8.17	8.64
	6H	15.02	15.48	15.54	16.00	16.49	7.45	7.91	7.97	8.43	8.92
	8H	14.98	15.39	15.50	15.89	16.46	7.58	7.99	8.10	8.49	9.06