

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: P1061825

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061825  
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-S850D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

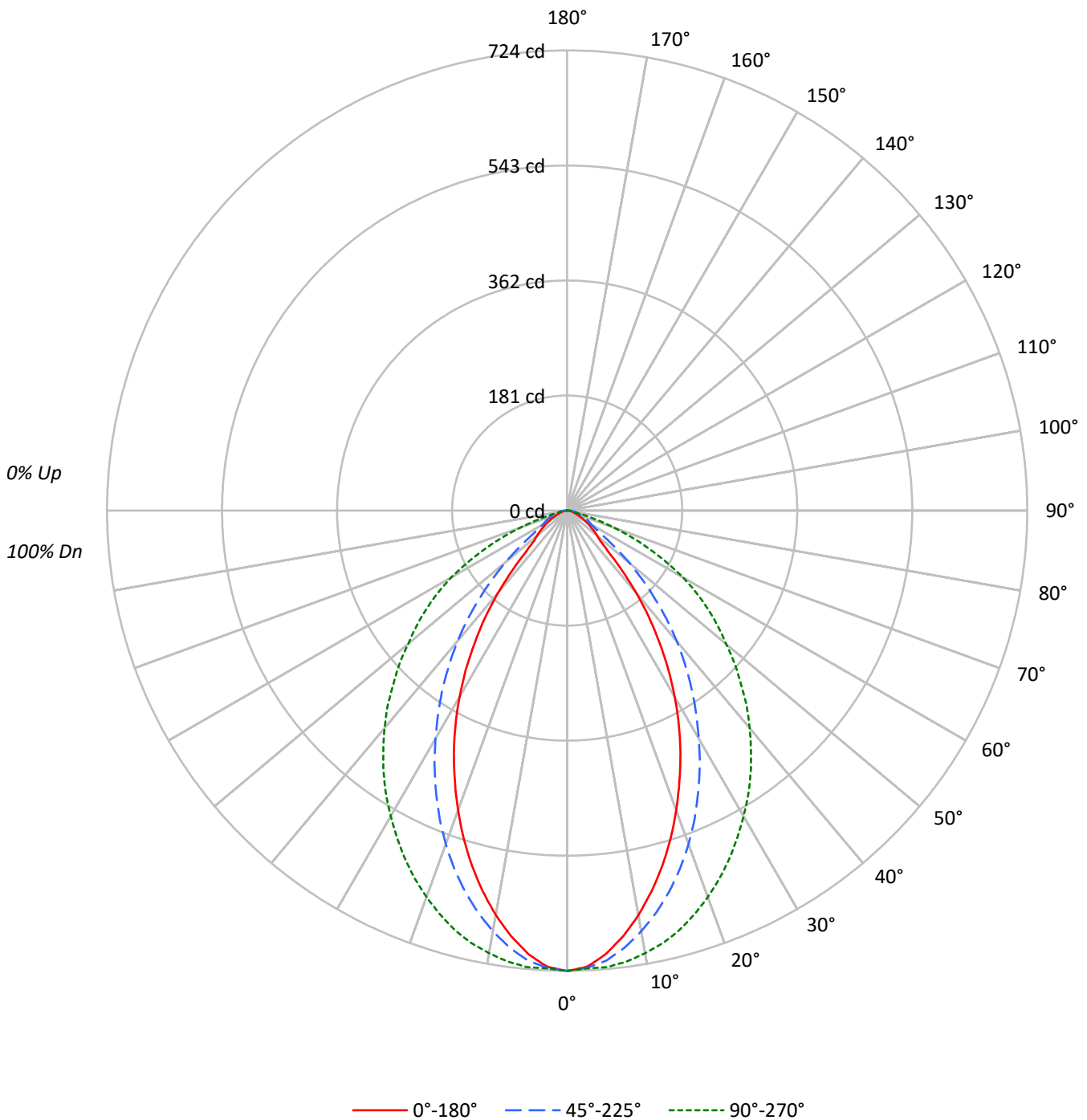
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1045.9 lumens  
Efficiency: N/A  
Efficacy: 40.5 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<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	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°	4987	4987	4987
5°	4840	4911	4983
10°	4517	4698	4944
15°	4122	4422	4869
20°	3677	4092	4741
25°	3205	3707	4589
30°	2691	3292	4413
35°	2123	2867	4232
40°	1522	2410	4016
45°	895	1891	3764
50°	663	1363	3497
55°	557	825	3249
60°	450	603	2899
65°	350	573	2323
70°	294	535	1574
75°	274	479	686
80°	274	476	444
85°	340	608	474

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3764 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.7	6.4
10°-20°	175.3	16.8
20°-30°	229.1	21.9
30°-40°	223.0	21.3
40°-50°	166.7	15.9
50°-60°	103.4	9.9
60°-70°	54.3	5.2
70°-80°	19.8	1.9
80°-90°	7.5	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°	471.2	45.1
0°-40°	694.2	66.4
0°-60°	964.3	92.2
0°-90°	1045.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	700	710	711	715	721	65
15°	578	595	620	658	683	161
25°	422	443	488	554	604	193
35°	253	280	341	432	504	157
45°	92	120	194	303	387	77
55°	46	49	69	179	271	42
65°	22	23	35	76	143	22
75°	10	12	18	20	26	11
85°	4	8	8	8	6	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	724.3	724.3	724.3	724.3	724.3
2.5°	718.3	724.3	720.0	720.0	720.9
5°	700.3	709.7	710.6	714.9	720.9
7.5°	675.3	686.5	693.4	706.3	715.7
10°	646.1	659.0	671.9	693.4	707.1
12.5°	613.5	628.9	647.9	677.1	696.8
15°	578.3	595.4	620.4	658.2	683.1
17.5°	541.3	559.4	590.3	635.8	665.9
20°	501.8	521.5	558.5	610.0	647.0
22.5°	461.4	483.7	524.1	582.6	626.4
25°	421.9	443.4	488.0	554.2	604.0
27.5°	380.6	403.0	451.9	525.0	580.0
30°	338.5	362.6	414.1	494.9	555.1
32.5°	296.4	321.3	377.2	464.0	530.1
35°	252.6	280.1	341.1	432.2	503.5
37.5°	211.4	240.6	304.2	399.5	475.1
40°	169.3	199.3	268.1	367.7	446.8
42.5°	128.0	159.0	231.1	335.1	418.4
45°	91.9	120.3	194.2	303.3	386.6
47.5°	70.5	86.8	159.8	270.7	358.3
50°	61.9	67.0	127.2	238.9	326.5
52.5°	54.1	57.6	94.5	207.9	299.0
55°	46.4	49.0	68.7	178.7	270.7
57.5°	39.5	42.1	52.4	152.1	241.4
60°	32.7	35.2	43.8	125.4	210.5
62.5°	27.5	28.4	39.5	100.5	176.1
65°	21.5	23.2	35.2	75.6	142.6
67.5°	18.0	18.9	30.9	54.1	110.0
70°	14.6	15.5	26.6	37.8	78.2
72.5°	12.9	12.9	22.3	27.5	49.8
75°	10.3	12.0	18.0	19.8	25.8
77.5°	8.6	12.0	15.5	14.6	13.7
80°	6.9	11.2	12.0	12.0	11.2
82.5°	6.0	9.5	10.3	9.5	8.6
85°	4.3	7.7	7.7	7.7	6.0
87.5°	3.4	6.9	6.0	6.0	4.3
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	5.37	6.72	5.73	7.03	7.35	15.07	16.42	15.44	16.74	17.05
	3H	6.21	7.41	6.59	7.73	8.10	15.99	17.18	16.37	17.51	17.88
	4H	6.57	7.68	6.97	8.03	8.42	16.08	17.20	16.49	17.55	17.93
	6H	6.94	7.97	7.36	8.34	8.73	16.07	17.10	16.48	17.47	17.86
	8H	7.12	8.09	7.55	8.49	8.89	16.06	17.03	16.49	17.42	17.83
	12H	7.28	8.21	7.72	8.60	9.03	16.04	16.97	16.48	17.36	17.79
4H	2H	6.20	7.31	6.60	7.66	8.05	14.92	16.04	15.33	16.39	16.77
	3H	7.25	8.17	7.67	8.57	8.98	15.91	16.83	16.33	17.23	17.63
	4H	7.71	8.53	8.14	8.95	9.39	16.04	16.86	16.48	17.28	17.72
	6H	8.27	8.97	8.73	9.42	9.89	16.07	16.78	16.54	17.23	17.69
	8H	8.53	9.19	9.00	9.63	10.11	16.08	16.73	16.54	17.18	17.65
	12H	8.77	9.35	9.26	9.84	10.31	16.08	16.67	16.57	17.15	17.62
8H	4H	8.26	8.92	8.73	9.37	9.84	15.97	16.63	16.44	17.07	17.54
	6H	9.04	9.58	9.55	10.08	10.56	16.03	16.57	16.53	17.06	17.54
	8H	9.46	9.95	9.98	10.46	10.95	16.06	16.54	16.58	17.06	17.55
	12H	9.88	10.31	10.39	10.80	11.37	16.11	16.54	16.62	17.03	17.60
12H	4H	8.32	8.91	8.81	9.39	9.86	15.93	16.52	16.42	17.00	17.47
	6H	9.19	9.67	9.71	10.19	10.68	15.99	16.48	16.51	16.99	17.48
	8H	9.72	10.15	10.23	10.64	11.21	16.06	16.49	16.57	16.98	17.55