

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: P1062230

Luminaire Tested: S125RDRP-H850D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062230  
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-H850D940-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

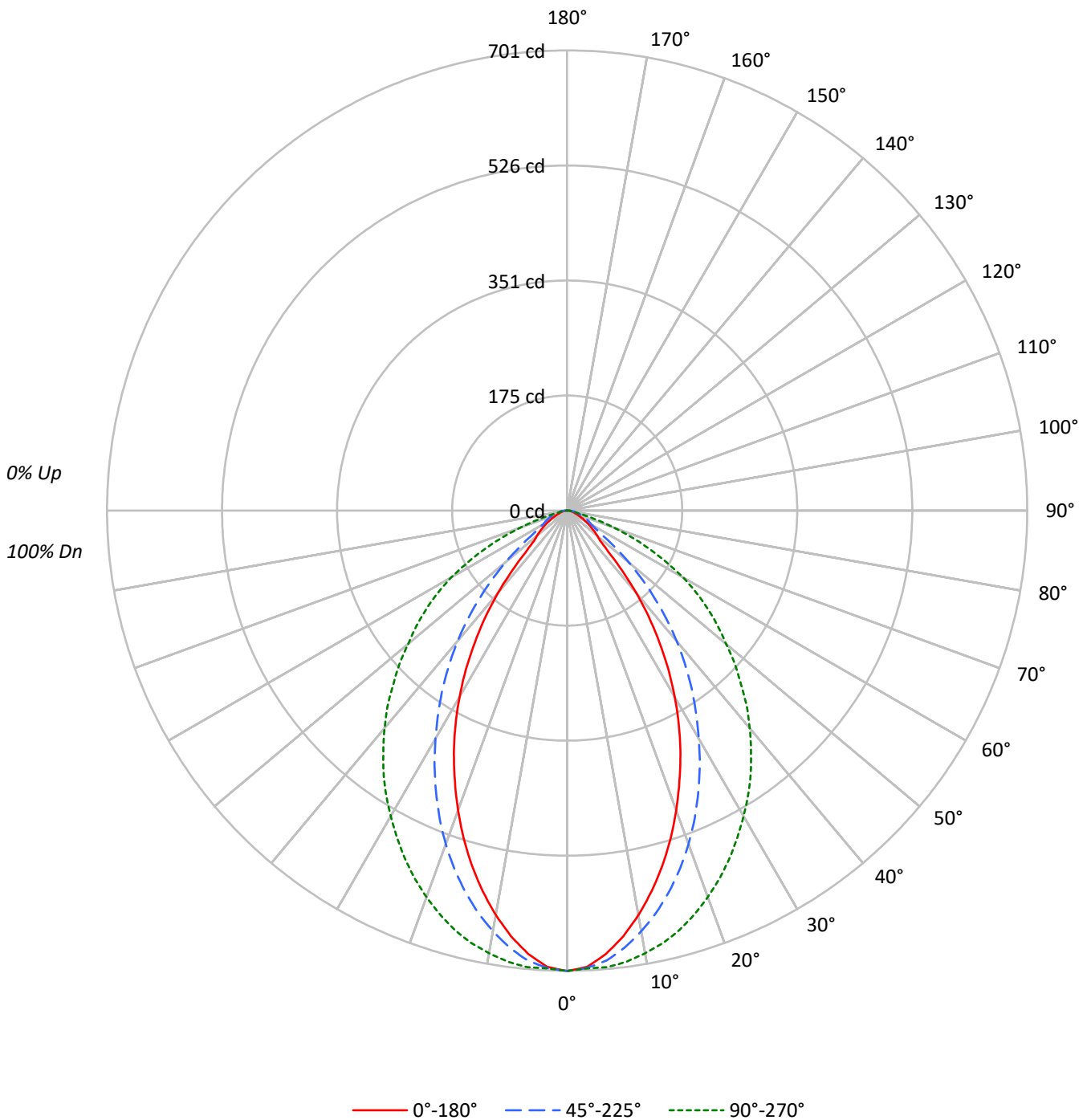
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1012.8 lumens  
Efficiency: N/A  
Efficacy: 43.1 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): 23.5  
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°	4829	4829	4829
5°	4687	4756	4825
10°	4375	4549	4788
15°	3992	4282	4715
20°	3560	3963	4590
25°	3103	3590	4443
30°	2606	3188	4273
35°	2056	2776	4098
40°	1473	2333	3889
45°	867	1831	3646
50°	642	1319	3387
55°	539	799	3146
60°	435	584	2808
65°	339	556	2250
70°	284	519	1524
75°	266	466	665
80°	266	460	428
85°	332	592	458

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3646 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.6	6.4
10°-20°	169.8	16.8
20°-30°	221.9	21.9
30°-40°	216.0	21.3
40°-50°	161.4	15.9
50°-60°	100.1	9.9
60°-70°	52.6	5.2
70°-80°	19.2	1.9
80°-90°	7.2	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°	456.3	45.1
0°-40°	672.3	66.4
0°-60°	933.8	92.2
0°-90°	1012.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1012.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	678	687	688	692	698	63
15°	560	577	601	637	662	156
25°	408	429	473	537	585	187
35°	245	271	330	418	488	152
45°	89	116	188	294	374	75
55°	45	47	67	173	262	40
65°	21	22	34	73	138	22
75°	10	12	18	19	25	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°	701.4	701.4	701.4	701.4	701.4
2.5°	695.6	701.4	697.3	697.3	698.1
5°	678.1	687.3	688.1	692.3	698.1
7.5°	654.0	664.8	671.5	683.9	693.1
10°	625.7	638.2	650.7	671.5	684.8
12.5°	594.1	609.1	627.4	655.6	674.8
15°	560.0	576.6	600.7	637.3	661.5
17.5°	524.2	541.7	571.6	615.7	644.8
20°	485.9	505.0	540.8	590.8	626.5
22.5°	446.8	468.4	507.5	564.1	606.6
25°	408.5	429.3	472.6	536.7	584.9
27.5°	368.6	390.2	437.7	508.4	561.6
30°	327.8	351.1	401.0	479.3	537.5
32.5°	287.1	311.2	365.3	449.3	513.4
35°	244.6	271.2	330.3	418.5	487.6
37.5°	204.7	233.0	294.5	386.9	460.1
40°	163.9	193.0	259.6	356.1	432.7
42.5°	124.0	153.9	223.8	324.5	405.2
45°	89.0	116.5	188.0	293.7	374.4
47.5°	68.2	84.0	154.8	262.1	347.0
50°	59.9	64.9	123.1	231.3	316.2
52.5°	52.4	55.7	91.5	201.4	289.6
55°	44.9	47.4	66.6	173.1	262.1
57.5°	38.3	40.8	50.8	147.3	233.8
60°	31.6	34.1	42.4	121.5	203.9
62.5°	26.6	27.5	38.3	97.3	170.6
65°	20.8	22.5	34.1	73.2	138.1
67.5°	17.5	18.3	30.0	52.4	106.5
70°	14.1	15.0	25.8	36.6	75.7
72.5°	12.5	12.5	21.6	26.6	48.3
75°	10.0	11.6	17.5	19.1	25.0
77.5°	8.3	11.6	15.0	14.1	13.3
80°	6.7	10.8	11.6	11.6	10.8
82.5°	5.8	9.2	10.0	9.2	8.3
85°	4.2	7.5	7.5	7.5	5.8
87.5°	3.3	6.7	5.8	5.8	4.2
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	5.26	6.61	5.63	6.92	7.24	14.96	16.31	15.33	16.63	16.94
	3H	6.10	7.30	6.48	7.63	7.99	15.87	17.07	16.25	17.40	17.77
	4H	6.46	7.58	6.86	7.93	8.31	15.97	17.09	16.38	17.44	17.82
	6H	6.83	7.86	7.25	8.23	8.62	15.96	16.99	16.37	17.35	17.75
	8H	7.01	7.99	7.44	8.38	8.78	15.95	16.92	16.38	17.31	17.71
	12H	7.18	8.11	7.61	8.49	8.92	15.93	16.86	16.36	17.25	17.68
4H	2H	6.09	7.21	6.49	7.56	7.94	14.81	15.93	15.22	16.28	16.66
	3H	7.15	8.06	7.56	8.47	8.87	15.80	16.72	16.21	17.12	17.52
	4H	7.60	8.42	8.03	8.84	9.28	15.93	16.75	16.37	17.17	17.61
	6H	8.16	8.86	8.62	9.31	9.77	15.96	16.67	16.42	17.11	17.58
	8H	8.42	9.08	8.89	9.52	9.99	15.96	16.62	16.43	17.07	17.54
	12H	8.66	9.24	9.15	9.73	10.20	15.97	16.56	16.46	17.04	17.51
8H	4H	8.15	8.81	8.62	9.26	9.73	15.86	16.52	16.32	16.96	17.43
	6H	8.93	9.47	9.43	9.97	10.45	15.92	16.45	16.42	16.95	17.43
	8H	9.35	9.83	9.87	10.35	10.84	15.94	16.43	16.46	16.94	17.43
	12H	9.77	10.20	10.28	10.69	11.26	16.00	16.43	16.51	16.92	17.49
12H	4H	8.22	8.80	8.70	9.28	9.75	15.82	16.40	16.31	16.89	17.36
	6H	9.07	9.56	9.60	10.07	10.57	15.88	16.37	16.40	16.88	17.37
	8H	9.61	10.03	10.12	10.53	11.10	15.95	16.37	16.46	16.87	17.44