

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: P1061816

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061816  
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-S850D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

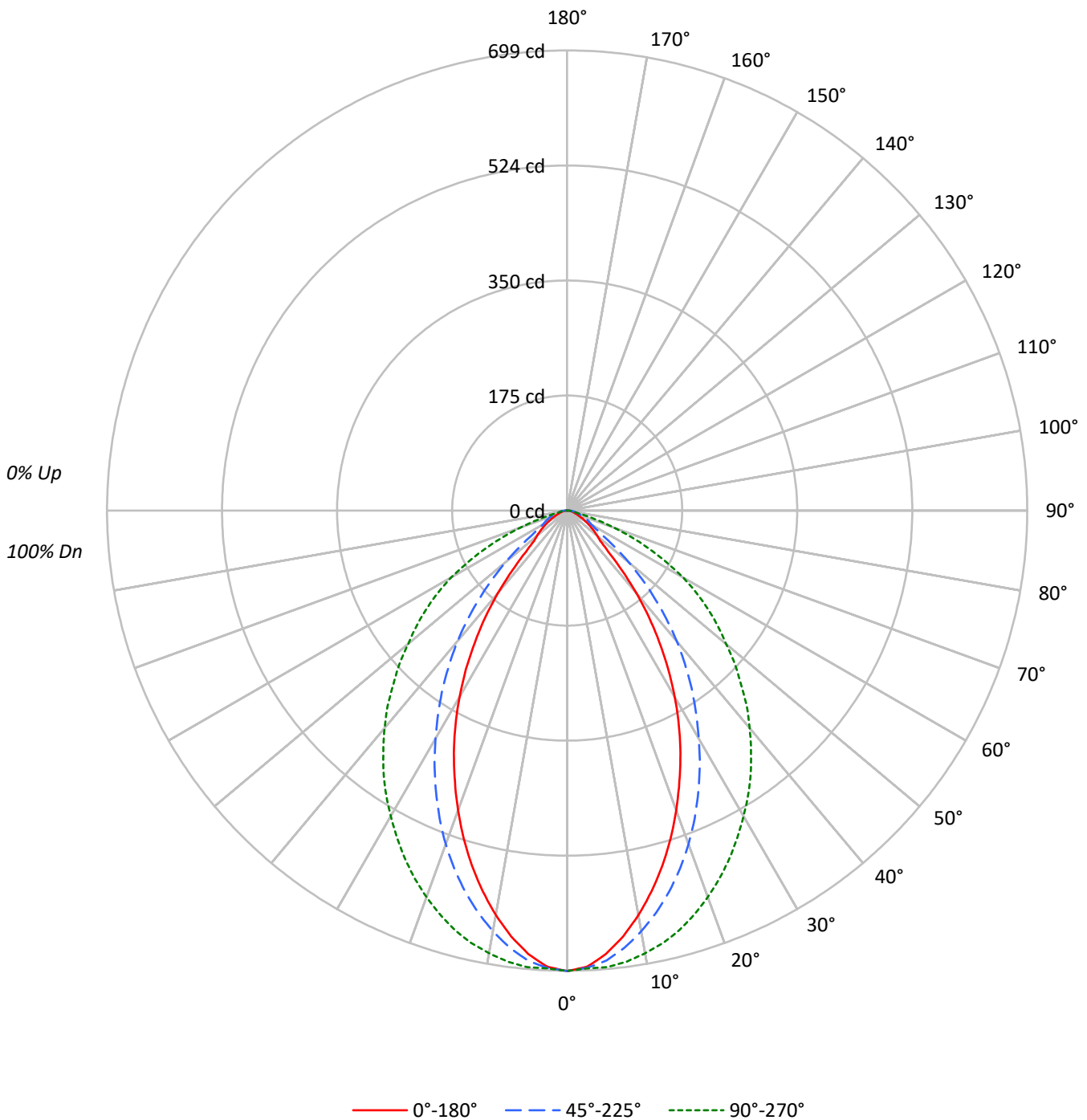
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1009.9 lumens  
Efficiency: N/A  
Efficacy: 39.1 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): 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	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					100			
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36					36			

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

	0°	45°	90°
0°	4816	4816	4816
5°	4673	4742	4811
10°	4362	4536	4774
15°	3980	4270	4702
20°	3550	3952	4577
25°	3094	3580	4431
30°	2599	3179	4261
35°	2050	2769	4087
40°	1469	2326	3877
45°	865	1826	3635
50°	639	1315	3377
55°	538	797	3137
60°	434	582	2800
65°	337	554	2243
70°	284	517	1520
75°	266	463	662
80°	262	460	428
85°	324	592	458

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3635 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.4	6.4
10°-20°	169.3	16.8
20°-30°	221.2	21.9
30°-40°	215.4	21.3
40°-50°	160.9	15.9
50°-60°	99.8	9.9
60°-70°	52.4	5.2
70°-80°	19.1	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°	455.0	45.1
0°-40°	670.3	66.4
0°-60°	931.1	92.2
0°-90°	1009.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1009.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	676	685	686	690	696	63
15°	558	575	599	636	660	156
25°	407	428	471	535	583	186
35°	244	270	329	417	486	152
45°	89	116	188	293	373	75
55°	45	47	66	173	261	40
65°	21	22	34	73	138	22
75°	10	12	17	19	25	11
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	699.4	699.4	699.4	699.4	699.4
2.5°	693.6	699.4	695.2	695.2	696.1
5°	676.1	685.3	686.1	690.2	696.1
7.5°	652.1	662.9	669.5	682.0	691.1
10°	623.9	636.3	648.8	669.5	682.8
12.5°	592.4	607.3	625.5	653.7	672.8
15°	558.3	574.9	599.0	635.5	659.6
17.5°	522.7	540.1	570.0	613.9	643.0
20°	484.5	503.6	539.3	589.0	624.7
22.5°	445.5	467.1	506.1	562.5	604.8
25°	407.3	428.1	471.2	535.1	583.2
27.5°	367.5	389.1	436.4	506.9	560.0
30°	326.9	350.1	399.9	477.9	535.9
32.5°	286.2	310.3	364.2	448.0	511.9
35°	243.9	270.5	329.4	417.3	486.2
37.5°	204.1	232.3	293.7	385.8	458.8
40°	163.4	192.5	258.8	355.1	431.4
42.5°	123.6	153.5	223.2	323.6	404.0
45°	88.8	116.1	187.5	292.9	373.3
47.5°	68.0	83.8	154.3	261.3	346.0
50°	59.7	64.7	122.8	230.6	315.3
52.5°	52.3	55.6	91.3	200.8	288.7
55°	44.8	47.3	66.4	172.6	261.3
57.5°	38.2	40.7	50.6	146.8	233.1
60°	31.5	34.0	42.3	121.1	203.3
62.5°	26.5	27.4	38.2	97.1	170.1
65°	20.7	22.4	34.0	73.0	137.7
67.5°	17.4	18.3	29.9	52.3	106.2
70°	14.1	14.9	25.7	36.5	75.5
72.5°	12.4	12.4	21.6	26.5	48.1
75°	10.0	11.6	17.4	19.1	24.9
77.5°	8.3	11.6	14.9	14.1	13.3
80°	6.6	10.8	11.6	11.6	10.8
82.5°	5.8	9.1	10.0	9.1	8.3
85°	4.1	7.5	7.5	7.5	5.8
87.5°	3.3	6.6	5.8	5.8	4.1
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	5.25	6.60	5.62	6.92	7.23	14.95	16.30	15.32	16.61	16.93
	3H	6.09	7.29	6.47	7.62	7.98	15.86	17.06	16.24	17.39	17.76
	4H	6.45	7.57	6.85	7.92	8.30	15.96	17.08	16.36	17.43	17.81
	6H	6.82	7.85	7.24	8.22	8.61	15.95	16.97	16.36	17.34	17.74
	8H	7.00	7.97	7.43	8.37	8.77	15.93	16.91	16.36	17.30	17.70
	12H	7.16	8.09	7.59	8.48	8.91	15.92	16.85	16.35	17.23	17.66
4H	2H	6.08	7.20	6.48	7.55	7.93	14.80	15.92	15.20	16.27	16.65
	3H	7.14	8.05	7.55	8.45	8.86	15.79	16.71	16.20	17.11	17.51
	4H	7.59	8.41	8.03	8.83	9.27	15.92	16.74	16.35	17.16	17.60
	6H	8.15	8.85	8.61	9.30	9.77	15.95	16.66	16.41	17.10	17.57
	8H	8.41	9.07	8.87	9.51	9.98	15.95	16.61	16.42	17.06	17.53
	12H	8.65	9.23	9.13	9.71	10.19	15.96	16.54	16.45	17.03	17.50
8H	4H	8.14	8.80	8.61	9.25	9.72	15.84	16.50	16.31	16.95	17.42
	6H	8.92	9.46	9.42	9.96	10.44	15.90	16.44	16.41	16.94	17.42
	8H	9.34	9.82	9.86	10.34	10.83	15.93	16.42	16.45	16.93	17.42
	12H	9.75	10.18	10.27	10.68	11.25	15.99	16.41	16.50	16.91	17.48
12H	4H	8.21	8.79	8.69	9.27	9.75	15.81	16.39	16.30	16.88	17.35
	6H	9.07	9.55	9.59	10.07	10.56	15.87	16.36	16.39	16.87	17.36
	8H	9.59	10.02	10.11	10.52	11.09	15.94	16.36	16.45	16.86	17.43