

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: P1061834

Luminaire Tested: S125RDRP-S850D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061834  
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-S850D950-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, 90 CRI LEDS  
Ballast/Driver: -

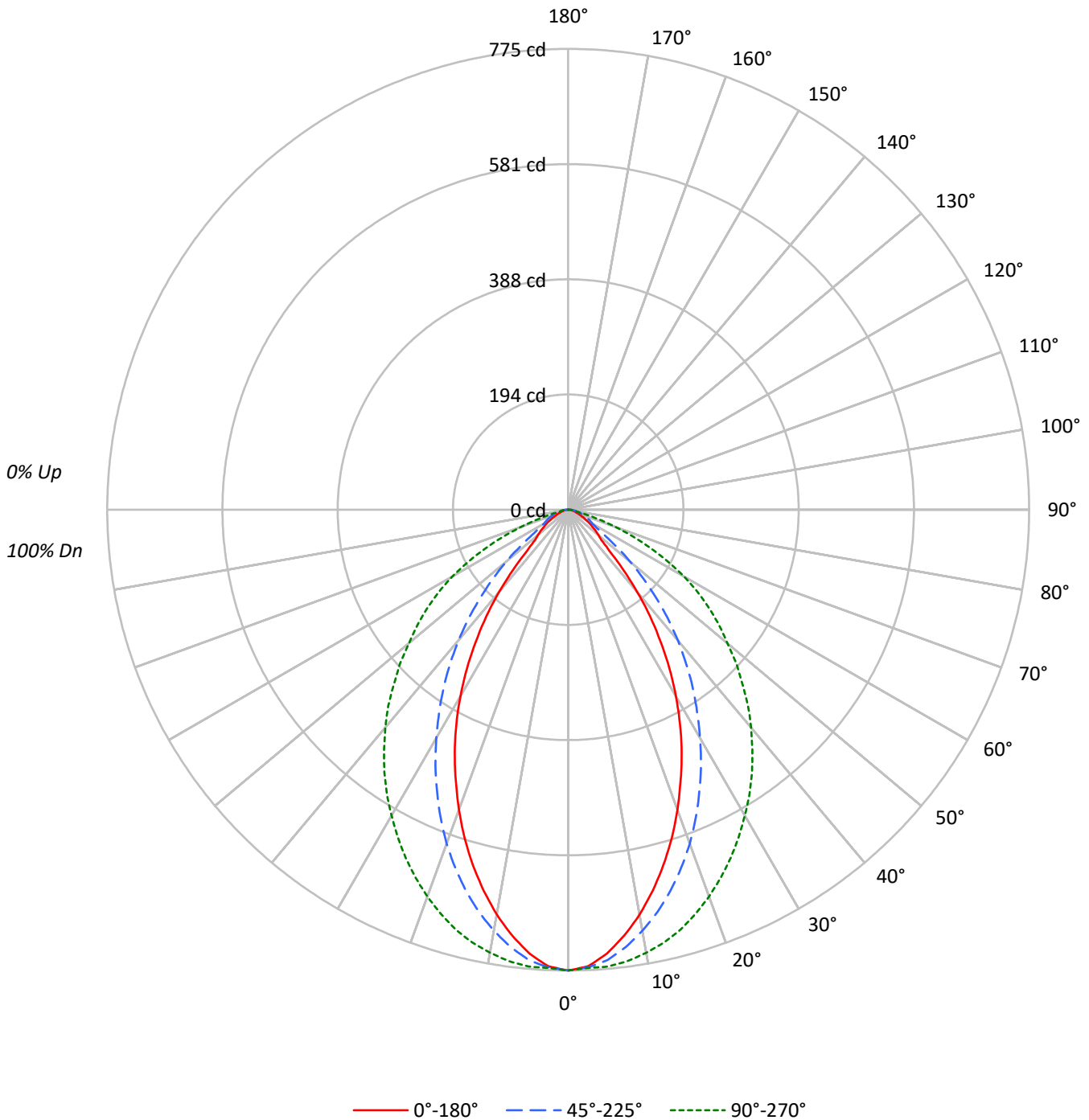
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1118.9 lumens  
Efficiency: N/A  
Efficacy: 43.4 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<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°	5335	5335	5335
5°	5178	5254	5330
10°	4833	5025	5289
15°	4409	4731	5209
20°	3933	4378	5072
25°	3429	3966	4909
30°	2880	3523	4721
35°	2272	3067	4528
40°	1628	2578	4296
45°	958	2022	4028
50°	709	1457	3742
55°	595	882	3476
60°	481	646	3101
65°	375	614	2486
70°	314	574	1685
75°	293	513	734
80°	293	511	476
85°	363	656	506

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4028 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	6.4
10°-20°	187.6	16.8
20°-30°	245.1	21.9
30°-40°	238.6	21.3
40°-50°	178.3	15.9
50°-60°	110.6	9.9
60°-70°	58.1	5.2
70°-80°	21.2	1.9
80°-90°	8.0	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°	504.1	45.1
0°-40°	742.7	66.4
0°-60°	1031.7	92.2
0°-90°	1118.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	749	759	760	765	771	70
15°	619	637	664	704	731	173
25°	451	474	522	593	646	206
35°	270	300	365	462	539	168
45°	98	129	208	324	414	83
55°	50	52	74	191	290	45
65°	23	25	38	81	153	24
75°	11	13	19	21	28	12
85°	5	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°	774.9	774.9	774.9	774.9	774.9
2.5°	768.5	774.9	770.3	770.3	771.2
5°	749.2	759.3	760.2	764.8	771.2
7.5°	722.5	734.5	741.8	755.6	765.7
10°	691.3	705.1	718.8	741.8	756.5
12.5°	656.3	672.9	693.1	724.4	745.5
15°	618.6	637.0	663.7	704.1	730.8
17.5°	579.1	598.4	631.5	680.2	712.4
20°	536.8	558.0	597.5	652.7	692.2
22.5°	493.6	517.5	560.7	623.2	670.1
25°	451.3	474.3	522.1	592.9	646.2
27.5°	407.2	431.1	483.5	561.7	620.5
30°	362.2	387.9	443.1	529.5	593.8
32.5°	317.1	343.8	403.5	496.4	567.2
35°	270.3	299.7	364.9	462.4	538.7
37.5°	226.1	257.4	325.4	427.4	508.3
40°	181.1	213.3	286.8	393.4	478.0
42.5°	137.0	170.1	247.3	358.5	447.7
45°	98.4	128.7	207.7	324.5	413.7
47.5°	75.4	92.8	171.0	289.6	383.3
50°	66.2	71.7	136.0	255.5	349.3
52.5°	57.9	61.6	101.1	222.5	319.9
55°	49.6	52.4	73.5	191.2	289.6
57.5°	42.3	45.0	56.1	162.7	258.3
60°	34.9	37.7	46.9	134.2	225.2
62.5°	29.4	30.3	42.3	107.6	188.4
65°	23.0	24.8	37.7	80.9	152.6
67.5°	19.3	20.2	33.1	57.9	117.7
70°	15.6	16.5	28.5	40.4	83.7
72.5°	13.8	13.8	23.9	29.4	53.3
75°	11.0	12.9	19.3	21.1	27.6
77.5°	9.2	12.9	16.5	15.6	14.7
80°	7.4	12.0	12.9	12.9	12.0
82.5°	6.4	10.1	11.0	10.1	9.2
85°	4.6	8.3	8.3	8.3	6.4
87.5°	3.7	7.4	6.4	6.4	4.6
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	5.60	6.95	5.96	7.26	7.58	15.31	16.66	15.67	16.97	17.29
	3H	6.44	7.64	6.82	7.97	8.33	16.22	17.42	16.60	17.75	18.11
	4H	6.80	7.91	7.20	8.26	8.65	16.32	17.44	16.72	17.79	18.17
	6H	7.17	8.20	7.59	8.57	8.96	16.30	17.33	16.72	17.70	18.09
	8H	7.35	8.33	7.78	8.72	9.12	16.29	17.27	16.72	17.66	18.06
	12H	7.52	8.45	7.95	8.83	9.26	16.28	17.21	16.71	17.59	18.02
4H	2H	6.43	7.55	6.83	7.90	8.28	15.16	16.28	15.56	16.63	17.01
	3H	7.49	8.40	7.90	8.80	9.21	16.15	17.06	16.56	17.47	17.87
	4H	7.94	8.76	8.38	9.18	9.62	16.28	17.09	16.71	17.51	17.96
	6H	8.51	9.21	8.97	9.66	10.12	16.31	17.02	16.77	17.46	17.93
	8H	8.76	9.42	9.23	9.87	10.34	16.31	16.97	16.78	17.42	17.89
	12H	9.01	9.59	9.49	10.07	10.55	16.32	16.90	16.80	17.38	17.86
8H	4H	8.50	9.16	8.97	9.60	10.07	16.20	16.86	16.67	17.31	17.78
	6H	9.28	9.82	9.78	10.32	10.80	16.26	16.80	16.76	17.30	17.78
	8H	9.70	10.18	10.22	10.70	11.19	16.29	16.78	16.81	17.29	17.78
	12H	10.11	10.54	10.63	11.04	11.61	16.34	16.77	16.86	17.27	17.84
12H	4H	8.56	9.14	9.05	9.63	10.10	16.17	16.75	16.65	17.23	17.71
	6H	9.42	9.91	9.95	10.42	10.92	16.23	16.71	16.75	17.23	17.72
	8H	9.95	10.38	10.47	10.87	11.44	16.29	16.72	16.81	17.22	17.79