

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: P1061799

Luminaire Tested: S125RDRP-S850D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061799  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

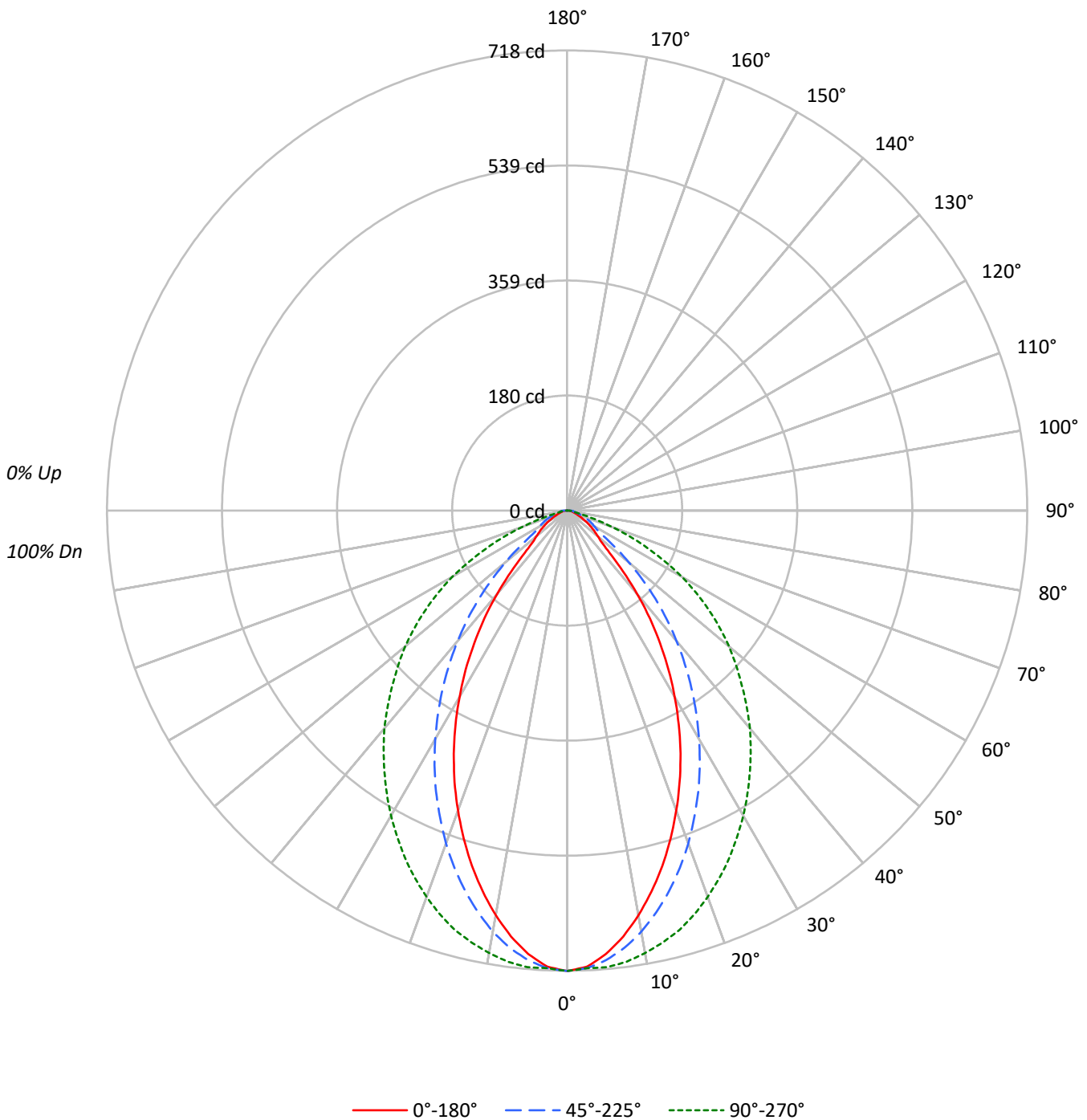
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1040.6 lumens  
Efficiency: N/A  
Efficacy: 40.3 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	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	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	62					62			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56					56			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36					36			

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

	0°	45°	90°
0°	4946	4946	4946
5°	4801	4865	4944
10°	4484	4665	4900
15°	4092	4381	4827
20°	3647	4050	4699
25°	3179	3677	4547
30°	2671	3272	4370
35°	2124	2843	4177
40°	1530	2388	3987
45°	907	1896	3754
50°	671	1350	3533
55°	568	834	3235
60°	463	673	2849
65°	360	622	2252
70°	308	538	1506
75°	285	468	609
80°	301	484	424
85°	363	727	482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3754 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	6.4
10°-20°	173.9	16.7
20°-30°	227.3	21.8
30°-40°	221.4	21.3
40°-50°	166.1	16.0
50°-60°	104.1	10.0
60°-70°	54.2	5.2
70°-80°	19.6	1.9
80°-90°	7.8	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°	467.4	44.9
0°-40°	688.8	66.2
0°-60°	959.0	92.2
0°-90°	1040.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1040.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	695	704	704	709	715	65
15°	574	591	615	653	677	160
25°	418	441	484	550	598	191
35°	253	279	338	428	497	157
45°	93	121	195	301	386	78
55°	47	50	70	182	270	42
65°	22	24	38	73	138	23
75°	11	14	18	18	23	12
85°	5	8	9	8	6	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	718.4	718.4	718.4	718.4	718.4
2.5°	712.3	719.2	714.6	714.6	714.6
5°	694.7	703.9	703.9	709.2	715.3
7.5°	670.3	681.0	687.9	700.8	710.0
10°	641.3	654.3	667.2	688.6	700.8
12.5°	608.5	623.7	642.1	671.8	690.2
15°	574.1	590.9	614.6	652.7	677.2
17.5°	536.7	556.5	584.8	630.6	660.4
20°	497.8	517.6	552.7	604.6	641.3
22.5°	458.8	480.2	518.4	577.2	620.7
25°	418.4	441.3	484.0	549.7	598.5
27.5°	377.1	400.8	448.1	521.4	574.1
30°	335.9	360.3	411.5	490.9	549.7
32.5°	294.7	320.6	374.9	459.6	523.7
35°	252.7	279.4	338.2	428.3	497.0
37.5°	212.2	239.0	301.6	396.2	470.3
40°	170.2	199.3	265.7	364.2	443.6
42.5°	129.0	158.8	229.8	332.1	414.5
45°	93.1	120.6	194.7	300.8	385.5
47.5°	71.8	87.0	158.8	268.7	357.3
50°	62.6	67.2	126.0	239.0	329.8
52.5°	54.2	57.3	94.7	211.5	300.0
55°	47.3	49.6	69.5	181.7	269.5
57.5°	39.7	42.8	55.0	152.7	238.2
60°	33.6	35.1	48.9	126.0	206.9
62.5°	27.5	29.0	43.5	99.2	171.8
65°	22.1	23.7	38.2	73.3	138.2
67.5°	18.3	19.1	32.1	51.9	106.1
70°	15.3	16.0	26.7	35.9	74.8
72.5°	13.0	15.3	21.4	26.0	47.3
75°	10.7	14.5	17.6	18.3	22.9
77.5°	9.2	13.7	14.5	14.5	13.0
80°	7.6	11.5	12.2	11.5	10.7
82.5°	6.1	9.2	9.9	9.9	8.4
85°	4.6	7.6	9.2	8.4	6.1
87.5°	3.1	6.9	7.6	6.9	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	5.48	6.83	5.84	7.14	7.46	15.08	16.44	15.45	16.75	17.06
	3H	6.33	7.53	6.71	7.86	8.23	15.93	17.13	16.30	17.46	17.82
	4H	6.76	7.88	7.16	8.23	8.61	16.00	17.12	16.40	17.47	17.85
	6H	7.19	8.21	7.60	8.58	8.98	15.98	17.01	16.40	17.38	17.78
	8H	7.36	8.34	7.79	8.73	9.13	15.97	16.95	16.40	17.34	17.74
	12H	7.53	8.46	7.96	8.84	9.27	15.96	16.89	16.39	17.27	17.70
4H	2H	6.44	7.56	6.84	7.91	8.29	14.95	16.07	15.35	16.42	16.80
	3H	7.49	8.41	7.90	8.81	9.21	15.86	16.78	16.27	17.18	17.58
	4H	8.05	8.87	8.49	9.29	9.73	15.96	16.78	16.39	17.20	17.64
	6H	8.65	9.36	9.11	9.81	10.27	15.99	16.70	16.45	17.14	17.61
	8H	8.89	9.55	9.36	10.00	10.47	15.99	16.65	16.46	17.10	17.57
	12H	9.12	9.70	9.60	10.18	10.66	16.00	16.59	16.49	17.07	17.54
8H	4H	8.52	9.18	8.99	9.63	10.10	15.88	16.55	16.35	16.99	17.46
	6H	9.34	9.88	9.84	10.37	10.85	15.94	16.48	16.44	16.98	17.46
	8H	9.72	10.20	10.24	10.72	11.21	15.97	16.46	16.49	16.97	17.46
	12H	10.11	10.54	10.62	11.03	11.60	16.04	16.47	16.55	16.96	17.53
12H	4H	8.58	9.16	9.06	9.64	10.12	15.85	16.44	16.34	16.92	17.39
	6H	9.46	9.95	9.98	10.46	10.95	15.91	16.39	16.43	16.91	17.40
	8H	9.95	10.38	10.46	10.87	11.44	15.98	16.41	16.49	16.90	17.47