

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: P1061833

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061833  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

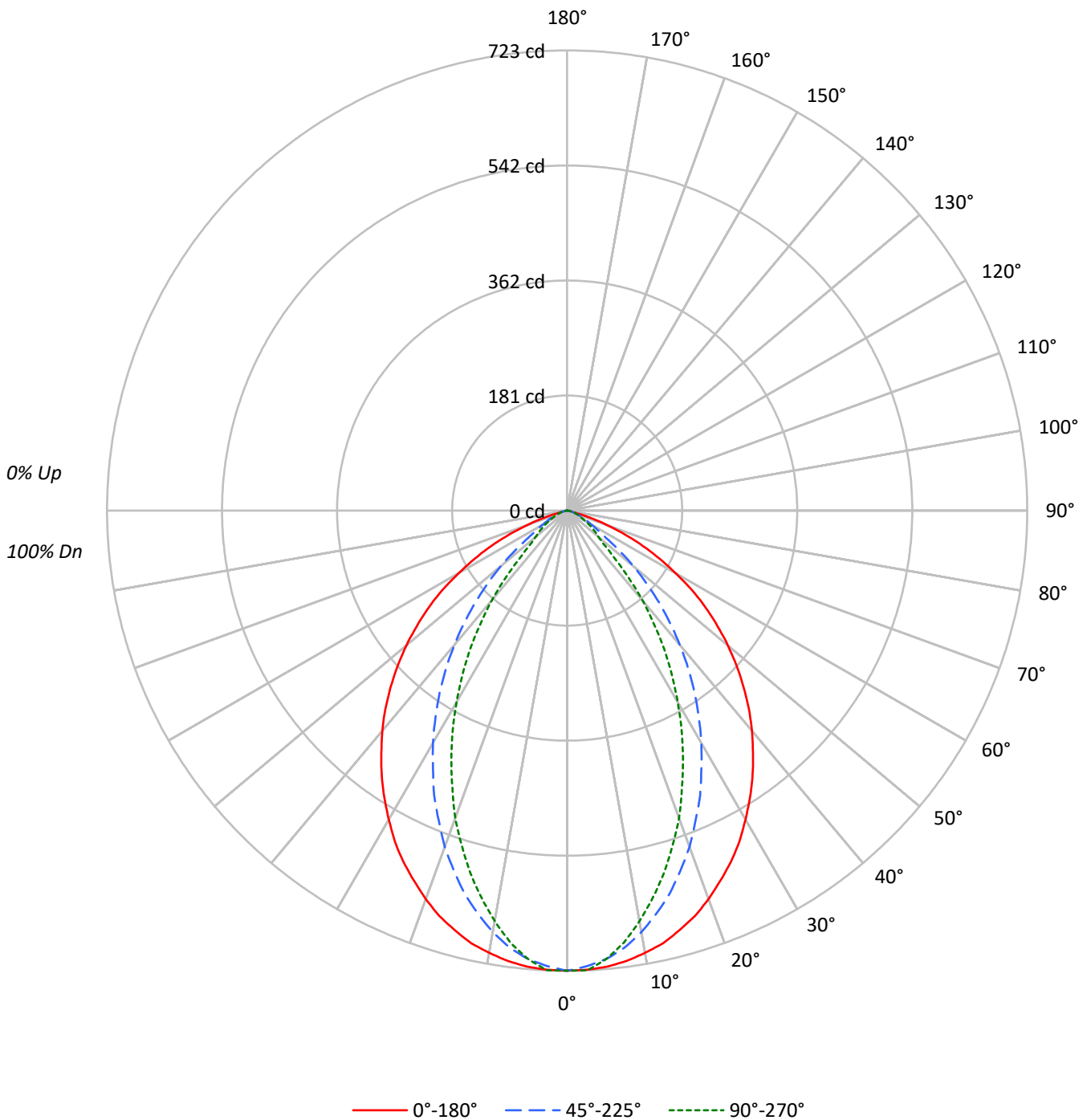
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1045.5 lumens  
Efficiency: N/A  
Efficacy: 40.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4977	4977	4977
5°	4971	4889	4889
10°	4932	4701	4579
15°	4865	4439	4197
20°	4759	4119	3769
25°	4627	3754	3273
30°	4455	3352	2760
35°	4270	2934	2239
40°	4063	2477	1659
45°	3819	1985	1002
50°	3533	1457	689
55°	3187	893	574
60°	2707	607	456
65°	2141	464	358
70°	1351	332	296
75°	439	245	245
80°	147	182	218
85°	71	142	142

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.9	6.4
10°-20°	176.6	16.9
20°-30°	232.3	22.2
30°-40°	228.2	21.8
40°-50°	172.7	16.5
50°-60°	104.7	10.0
60°-70°	49.4	4.7
70°-80°	12.9	1.2
80°-90°	1.9	0.2
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°	475.7	45.5
0°-40°	703.9	67.3
0°-60°	981.3	93.9
0°-90°	1045.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	719	717	707	708	707	68
15°	682	664	623	599	589	192
25°	609	563	494	448	431	280
35°	508	440	349	288	266	317
45°	392	309	204	130	103	302
55°	266	182	74	50	48	236
65°	131	67	28	24	22	129
75°	16	11	9	9	9	26
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	722.9	722.9	722.9	722.9	722.9
2.5°	722.0	722.0	716.5	722.9	722.9
5°	719.3	717.4	707.3	708.2	707.3
7.5°	713.8	710.1	692.6	688.0	684.4
10°	705.5	698.1	672.4	661.4	655.0
12.5°	696.3	683.4	648.5	632.9	622.8
15°	682.5	664.2	622.8	598.9	588.8
17.5°	667.8	641.2	592.5	564.0	551.2
20°	649.5	618.2	562.2	527.3	514.4
22.5°	629.2	592.5	527.3	488.7	471.2
25°	609.0	563.1	494.2	448.3	430.8
27.5°	586.1	533.7	456.5	408.8	389.5
30°	560.4	504.3	421.6	372.0	347.2
32.5°	534.6	474.0	384.9	330.7	305.9
35°	508.0	440.0	349.1	287.5	266.4
37.5°	479.5	407.9	312.3	248.0	223.2
40°	452.0	375.7	275.6	207.6	184.6
42.5°	422.6	343.6	238.8	168.1	142.4
45°	392.2	308.7	203.9	129.5	102.9
47.5°	361.0	277.4	169.0	95.5	77.2
50°	329.8	244.4	136.0	70.7	64.3
52.5°	297.6	212.2	102.9	58.8	56.0
55°	265.5	181.9	74.4	50.5	47.8
57.5°	232.4	148.8	56.0	43.2	40.4
60°	196.6	119.4	44.1	35.8	33.1
62.5°	163.5	93.7	35.8	29.4	27.6
65°	131.4	67.1	28.5	23.9	22.0
67.5°	98.3	45.0	22.0	18.4	18.4
70°	67.1	29.4	16.5	14.7	14.7
72.5°	40.4	17.5	11.9	11.9	11.9
75°	16.5	11.0	9.2	9.2	9.2
77.5°	5.5	6.4	6.4	7.3	7.3
80°	3.7	3.7	4.6	5.5	5.5
82.5°	1.8	2.8	2.8	3.7	3.7
85°	0.9	0.9	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.9	0.9
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	14.90	16.24	15.27	16.55	16.86	5.56	6.90	5.93	7.21	7.52
	3H	15.61	16.79	15.99	17.12	17.48	6.35	7.52	6.73	7.85	8.22
	4H	15.63	16.72	16.03	17.07	17.46	6.59	7.69	7.00	8.04	8.42
	6H	15.56	16.56	15.97	16.93	17.33	6.77	7.78	7.18	8.15	8.54
	8H	15.52	16.47	15.95	16.86	17.26	6.82	7.77	7.25	8.16	8.56
	12H	15.48	16.39	15.91	16.77	17.20	6.82	7.73	7.25	8.11	8.54
4H	2H	14.74	15.83	15.14	16.18	16.57	6.05	7.15	6.45	7.50	7.88
	3H	15.48	16.37	15.90	16.78	17.18	6.96	7.85	7.37	8.25	8.66
	4H	15.50	16.30	15.94	16.71	17.16	7.27	8.07	7.71	8.48	8.93
	6H	15.44	16.12	15.90	16.57	17.04	7.53	8.21	7.99	8.66	9.12
	8H	15.39	16.03	15.86	16.47	16.94	7.59	8.23	8.06	8.68	9.15
	12H	15.34	15.91	15.83	16.39	16.86	7.62	8.18	8.10	8.66	9.14
8H	4H	15.38	16.02	15.85	16.47	16.94	7.38	8.02	7.85	8.47	8.94
	6H	15.31	15.83	15.81	16.32	16.81	7.70	8.22	8.20	8.71	9.20
	8H	15.25	15.72	15.78	16.24	16.73	7.80	8.27	8.33	8.79	9.28
	12H	15.21	15.62	15.73	16.12	16.69	7.87	8.28	8.38	8.77	9.34
12H	4H	15.34	15.90	15.83	16.38	16.86	7.35	7.92	7.84	8.40	8.87
	6H	15.25	15.72	15.77	16.23	16.72	7.67	8.14	8.19	8.65	9.14
	8H	15.22	15.63	15.73	16.12	16.69	7.81	8.22	8.33	8.72	9.29