

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: P1061832

Luminaire Tested: S125RDRP-S850D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D950-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

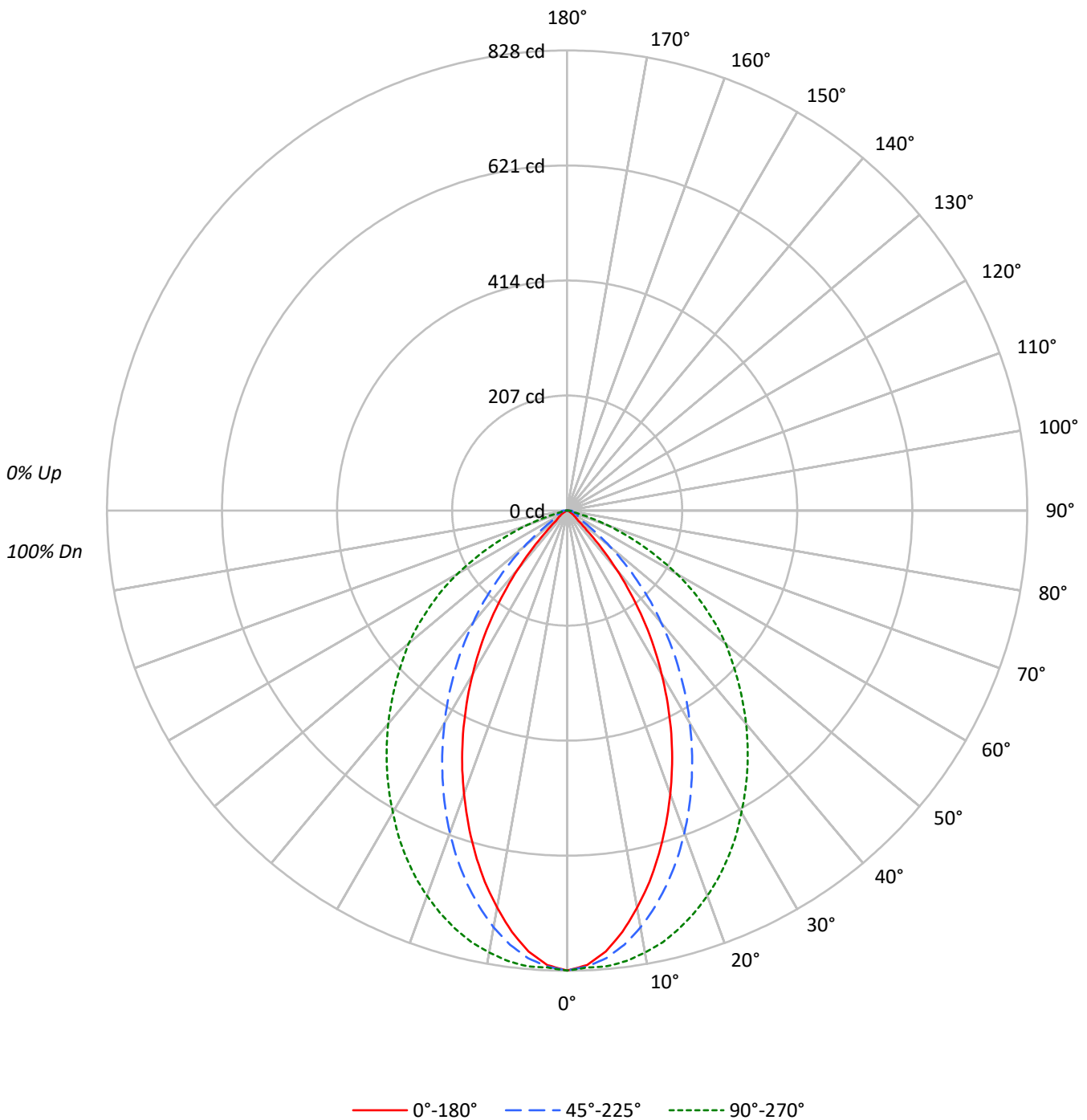
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1070.7 lumens  
Efficiency: N/A  
Efficacy: 41.5 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	5698	5698	5698
5°	5504	5587	5688
10°	5072	5323	5644
15°	4556	4955	5551
20°	3975	4521	5404
25°	3367	4031	5218
30°	2705	3509	4986
35°	2002	2960	4753
40°	1239	2364	4504
45°	484	1728	4235
50°	226	1083	3989
55°	166	463	3620
60°	114	329	3140
65°	75	344	2442
70°	74	314	1536
75°	98	319	489
80°	147	365	329
85°	221	727	506

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4235 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.9	7.1
10°-20°	196.6	18.4
20°-30°	250.5	23.4
30°-40°	233.1	21.8
40°-50°	160.5	15.0
50°-60°	90.8	8.5
60°-70°	42.9	4.0
70°-80°	13.4	1.3
80°-90°	7.0	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°	523.0	48.8
0°-40°	756.1	70.6
0°-60°	1007.4	94.1
0°-90°	1070.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1070.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	796	807	808	816	823	74
15°	639	660	695	748	779	178
25°	443	472	531	620	687	202
35°	238	271	352	473	566	147
45°	50	79	178	321	435	47
55°	14	16	39	185	302	13
65°	5	6	21	66	150	5
75°	4	8	12	13	18	4
85°	3	7	9	8	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	827.6	827.6	827.6	827.6	827.6
2.5°	818.4	826.7	821.1	822.1	823.0
5°	796.3	807.3	808.3	815.6	823.0
7.5°	764.1	777.9	788.0	805.5	817.5
10°	725.5	742.1	761.4	789.9	807.3
12.5°	684.1	703.4	730.1	770.6	795.4
15°	639.1	660.2	695.2	747.6	778.8
17.5°	591.3	615.2	657.5	720.0	759.5
20°	542.5	568.3	617.0	688.7	737.5
22.5°	493.8	520.5	574.7	654.7	713.6
25°	443.2	471.7	530.6	619.8	686.9
27.5°	391.7	421.1	486.4	583.9	658.4
30°	340.2	371.5	441.4	547.1	627.1
32.5°	289.7	320.9	397.2	510.3	596.8
35°	238.2	271.3	352.2	472.6	565.5
37.5°	186.7	222.5	308.0	434.0	533.3
40°	137.9	172.0	263.0	396.3	501.1
42.5°	92.0	125.1	222.5	358.6	468.0
45°	49.7	79.1	177.5	320.9	434.9
47.5°	26.7	42.3	138.8	284.1	402.8
50°	21.1	23.9	101.1	250.1	372.4
52.5°	17.5	19.3	66.2	217.9	337.5
55°	13.8	15.6	38.6	184.8	301.6
57.5°	11.0	12.9	24.8	153.6	266.7
60°	8.3	10.1	23.9	123.2	228.0
62.5°	6.4	7.4	22.1	94.7	187.6
65°	4.6	5.5	21.1	66.2	149.9
67.5°	3.7	4.6	19.3	42.3	112.2
70°	3.7	3.7	15.6	27.6	76.3
72.5°	3.7	6.4	13.8	18.4	46.0
75°	3.7	8.3	12.0	12.9	18.4
77.5°	3.7	9.2	10.1	10.1	10.1
80°	3.7	8.3	9.2	9.2	8.3
82.5°	3.7	7.4	8.3	9.2	7.4
85°	2.8	7.4	9.2	8.3	6.4
87.5°	2.8	7.4	8.3	7.4	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	0.00	0.00	0.00	0.00	0.00	15.29	16.58	15.66	16.90	17.21
	3H	0.00	0.00	0.00	0.00	0.00	16.01	17.15	16.39	17.48	17.85
	4H	0.00	0.00	0.00	0.00	0.18	16.04	17.10	16.44	17.45	17.83
	6H	0.00	0.62	0.06	0.99	1.38	15.99	16.96	16.40	17.33	17.73
	8H	0.29	1.21	0.72	1.60	2.01	15.96	16.89	16.39	17.28	17.68
	12H	0.89	1.77	1.32	2.15	2.58	15.95	16.83	16.38	17.21	17.64
4H	2H	0.00	0.86	0.20	1.21	1.59	15.08	16.15	15.49	16.50	16.88
	3H	0.61	1.48	1.02	1.88	2.29	15.84	16.71	16.25	17.11	17.51
	4H	1.62	2.40	2.06	2.82	3.26	15.87	16.64	16.30	17.06	17.51
	6H	2.91	3.58	3.37	4.02	4.49	15.85	16.51	16.31	16.96	17.43
	8H	3.49	4.12	3.96	4.56	5.04	15.83	16.45	16.30	16.90	17.37
	12H	4.06	4.61	4.55	5.10	5.57	15.84	16.39	16.33	16.87	17.35
8H	4H	3.04	3.66	3.51	4.11	4.58	15.75	16.37	16.22	16.82	17.29
	6H	4.61	5.11	5.11	5.61	6.09	15.74	16.25	16.24	16.75	17.23
	8H	5.41	5.86	5.93	6.38	6.87	15.75	16.21	16.28	16.73	17.22
	12H	6.25	6.66	6.77	7.15	7.73	15.81	16.22	16.33	16.71	17.28
12H	4H	3.26	3.81	3.75	4.29	4.77	15.71	16.26	16.20	16.74	17.22
	6H	4.98	5.43	5.50	5.95	6.44	15.69	16.15	16.22	16.67	17.16
	8H	5.97	6.38	6.49	6.87	7.45	15.74	16.15	16.26	16.64	17.21