

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: P1061839

Luminaire Tested: S125RDRP-H1090D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1090D830-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

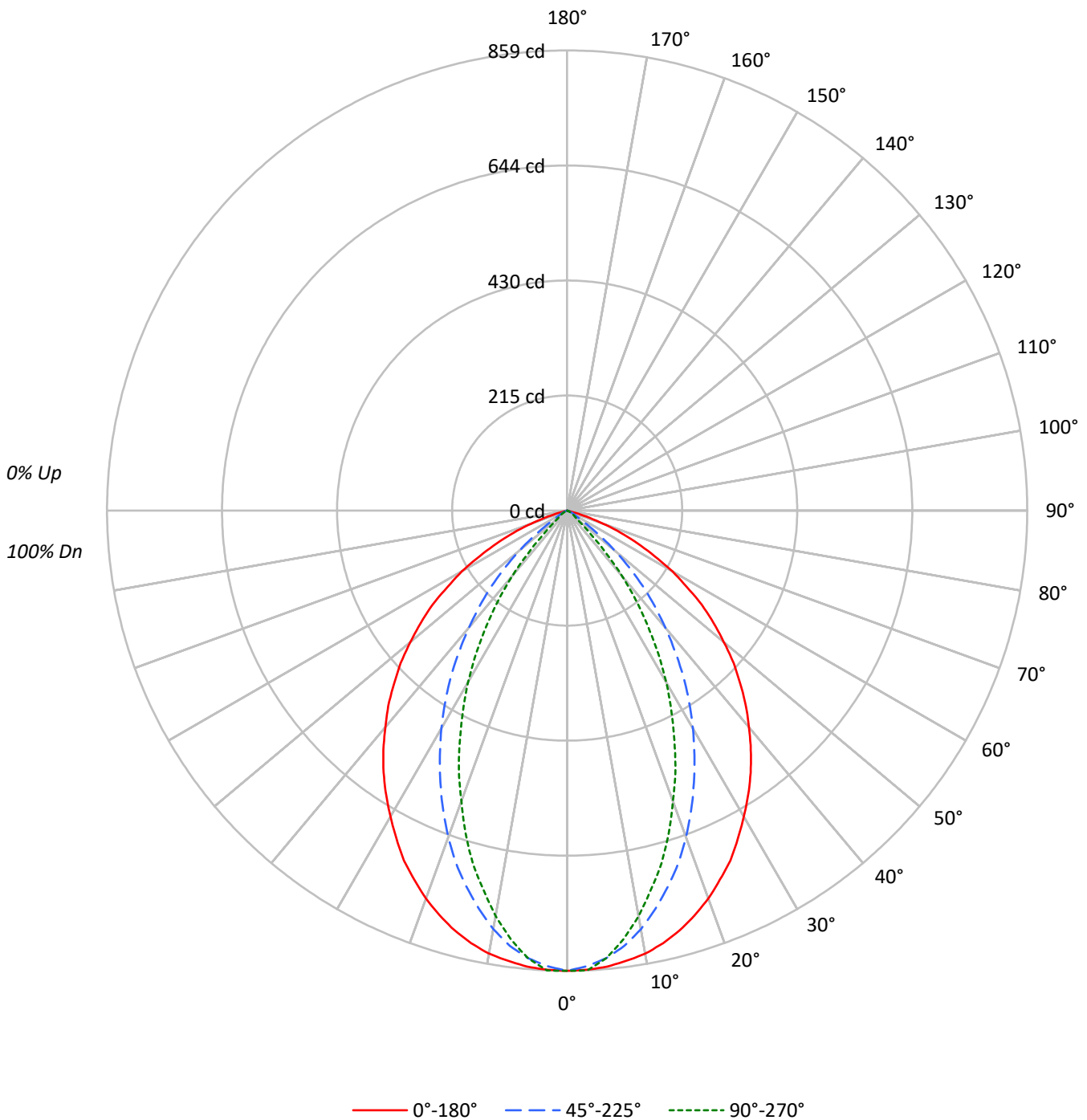
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1109.8 lumens  
Efficiency: N/A  
Efficacy: 35.6 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.2  
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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	5915	5915	5915
5°	5906	5797	5797
10°	5871	5546	5372
15°	5784	5179	4855
20°	5647	4750	4227
25°	5476	4254	3599
30°	5244	3730	2938
35°	5021	3181	2201
40°	4747	2567	1426
45°	4447	1943	618
50°	4091	1238	230
55°	3686	544	163
60°	3122	234	109
65°	2364	148	55
70°	1437	68	22
75°	301	29	29
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4447 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.2	7.1
10°-20°	206.4	18.6
20°-30°	265.1	23.9
30°-40°	249.5	22.5
40°-50°	174.4	15.7
50°-60°	93.2	8.4
60°-70°	37.2	3.3
70°-80°	4.8	0.4
80°-90°	0.0	0.0
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°	550.7	49.6
0°-40°	800.2	72.1
0°-60°	1067.8	96.2
0°-90°	1109.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1109.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	854	852	839	841	839	81
15°	812	785	726	692	681	228
25°	721	657	560	499	474	331
35°	597	502	378	292	262	373
45°	457	342	200	96	64	352
55°	307	188	45	16	14	272
65°	145	58	9	4	3	144
75°	11	3	1	1	1	22
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.1	859.1	859.1	859.1	859.1
2.5°	857.9	859.1	851.1	857.9	859.1
5°	854.5	852.3	838.7	840.9	838.7
7.5°	847.7	842.1	819.4	811.5	806.9
10°	839.8	827.3	793.3	776.3	768.4
12.5°	827.3	809.2	761.6	735.5	724.2
15°	811.5	785.4	726.5	692.5	681.1
17.5°	792.2	758.2	690.2	648.3	631.3
20°	770.7	725.3	648.3	598.4	576.9
22.5°	745.7	693.6	605.2	549.7	528.1
25°	720.8	657.3	559.9	498.7	473.7
27.5°	690.2	619.9	514.5	448.8	421.6
30°	659.6	582.5	469.2	397.8	369.5
32.5°	629.0	542.9	423.9	344.5	316.2
35°	597.3	502.1	378.5	292.4	261.8
37.5°	563.3	461.3	329.8	242.5	210.8
40°	528.1	421.6	285.6	193.8	158.7
42.5°	494.1	381.9	241.4	146.2	107.7
45°	456.7	342.3	199.5	96.3	63.5
47.5°	421.6	303.7	156.4	55.5	32.9
50°	381.9	264.1	115.6	29.5	21.5
52.5°	344.5	225.5	77.1	19.3	17.0
55°	307.1	188.1	45.3	15.9	13.6
57.5°	264.1	151.9	24.9	12.5	10.2
60°	226.7	119.0	17.0	9.1	7.9
62.5°	183.6	87.3	12.5	6.8	5.7
65°	145.1	57.8	9.1	4.5	3.4
67.5°	107.7	34.0	5.7	2.3	2.3
70°	71.4	18.1	3.4	1.1	1.1
72.5°	37.4	7.9	2.3	1.1	1.1
75°	11.3	3.4	1.1	1.1	1.1
77.5°	0.0	1.1	0.0	0.0	1.1
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	15.12	16.38	15.49	16.70	17.01	0.00	0.00	0.00	0.00	0.00
	3H	15.70	16.82	16.09	17.15	17.51	0.00	0.00	0.00	0.00	0.00
	4H	15.67	16.70	16.07	17.05	17.44	0.00	0.00	0.00	0.00	0.00
	6H	15.58	16.53	16.00	16.90	17.29	0.00	0.00	0.00	0.00	0.00
	8H	15.54	16.43	15.97	16.82	17.23	0.00	0.00	0.00	0.00	0.00
	12H	15.49	16.34	15.92	16.73	17.16	0.00	0.00	0.00	0.00	0.00
4H	2H	14.89	15.93	15.30	16.28	16.66	0.00	0.00	0.00	0.00	0.00
	3H	15.49	16.32	15.90	16.73	17.13	0.00	0.00	0.00	0.00	0.00
	4H	15.43	16.18	15.87	16.60	17.04	0.00	0.00	0.00	0.00	0.00
	6H	15.35	15.98	15.81	16.43	16.90	0.00	0.00	0.00	0.00	0.00
	8H	15.29	15.88	15.76	16.33	16.80	0.00	0.00	0.00	0.00	0.00
	12H	15.24	15.76	15.72	16.24	16.72	0.00	0.00	0.00	0.00	0.00
8H	4H	15.29	15.88	15.76	16.33	16.80	0.00	0.00	0.00	0.00	0.00
	6H	15.18	15.66	15.69	16.16	16.64	0.00	0.00	0.00	0.00	0.00
	8H	15.11	15.55	15.64	16.06	16.56	0.00	0.00	0.00	0.00	0.00
	12H	15.07	15.45	15.58	15.94	16.52	0.00	0.00	0.00	0.00	0.00
12H	4H	15.24	15.76	15.72	16.24	16.72	0.00	0.00	0.00	0.00	0.00
	6H	15.11	15.55	15.64	16.06	16.56	0.00	0.00	0.00	0.00	0.00
	8H	15.07	15.45	15.58	15.94	16.52	0.00	0.00	0.00	0.00	0.00