

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062210

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062210  
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: S125RDR-H850D930-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

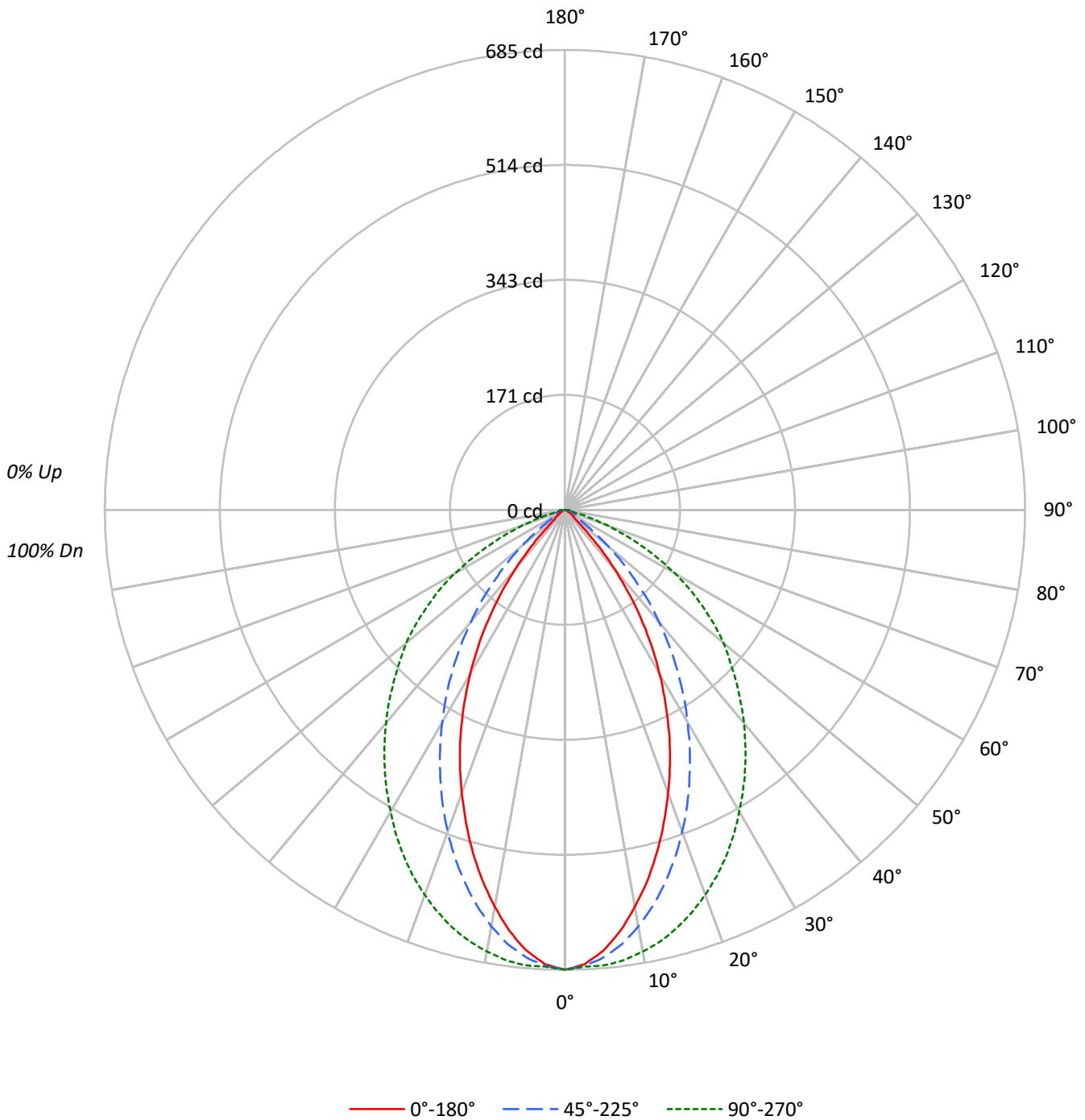
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 886.1 lumens  
Efficiency: N/A  
Efficacy: 37.7 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): 23.5  
Input Voltage (V): 120  
Input Current (Ain): 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	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°	4716	4716	4716
5°	4555	4623	4707
10°	4198	4405	4671
15°	3770	4101	4595
20°	3290	3741	4472
25°	2787	3336	4319
30°	2239	2904	4126
35°	1657	2450	3934
40°	1026	1956	3727
45°	400	1430	3504
50°	187	897	3301
55°	137	384	2996
60°	94	273	2598
65°	62	285	2020
70°	60	260	1272
75°	80	263	404
80°	119	301	270
85°	182	600	419

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3504 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.8	7.1
10°-20°	162.7	18.4
20°-30°	207.3	23.4
30°-40°	192.9	21.8
40°-50°	132.8	15.0
50°-60°	75.2	8.5
60°-70°	35.5	4.0
70°-80°	11.1	1.3
80°-90°	5.8	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°	432.8	48.8
0°-40°	625.7	70.6
0°-60°	833.7	94.1
0°-90°	886.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	886.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	659	668	669	675	681	61
15°	529	546	575	619	645	147
25°	367	390	439	513	568	167
35°	197	224	292	391	468	122
45°	41	65	147	266	360	39
55°	11	13	32	153	250	10
65°	4	5	18	55	124	4
75°	3	7	10	11	15	3
85°	2	6	8	7	5	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	684.9	684.9	684.9	684.9	684.9
2.5°	677.3	684.1	679.6	680.3	681.1
5°	659.0	668.1	668.9	675.0	681.1
7.5°	632.4	643.8	652.2	666.6	676.5
10°	600.4	614.1	630.1	653.7	668.1
12.5°	566.2	582.2	604.2	637.7	658.2
15°	528.9	546.4	575.3	618.7	644.6
17.5°	489.3	509.1	544.1	595.8	628.6
20°	449.0	470.3	510.6	570.0	610.3
22.5°	408.6	430.7	475.6	541.8	590.5
25°	366.8	390.4	439.1	512.9	568.5
27.5°	324.2	348.5	402.6	483.2	544.9
30°	281.6	307.4	365.3	452.8	519.0
32.5°	239.7	265.6	328.7	422.3	493.9
35°	197.1	224.5	291.5	391.1	468.0
37.5°	154.5	184.2	254.9	359.2	441.4
40°	114.1	142.3	217.6	328.0	414.7
42.5°	76.1	103.5	184.2	296.8	387.3
45°	41.1	65.4	146.9	265.6	359.9
47.5°	22.1	35.0	114.9	235.1	333.3
50°	17.5	19.8	83.7	207.0	308.2
52.5°	14.5	16.0	54.8	180.4	279.3
55°	11.4	12.9	32.0	153.0	249.6
57.5°	9.1	10.7	20.5	127.1	220.7
60°	6.8	8.4	19.8	102.0	188.7
62.5°	5.3	6.1	18.3	78.4	155.2
65°	3.8	4.6	17.5	54.8	124.0
67.5°	3.0	3.8	16.0	35.0	92.8
70°	3.0	3.0	12.9	22.8	63.2
72.5°	3.0	5.3	11.4	15.2	38.0
75°	3.0	6.8	9.9	10.7	15.2
77.5°	3.0	7.6	8.4	8.4	8.4
80°	3.0	6.8	7.6	7.6	6.8
82.5°	3.0	6.1	6.8	7.6	6.1
85°	2.3	6.1	7.6	6.8	5.3
87.5°	2.3	6.1	6.8	6.1	3.8
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	14.63	15.92	15.00	16.24	16.55
	3H	0.00	0.00	0.00	0.00	0.00	15.35	16.50	15.73	16.83	17.19
	4H	0.00	0.00	0.00	0.00	0.00	15.38	16.44	15.78	16.79	17.17
	6H	0.00	0.00	0.00	0.29	0.68	15.33	16.30	15.74	16.67	17.07
	8H	0.00	0.50	0.00	0.89	1.29	15.30	16.23	15.73	16.62	17.02
	12H	0.17	1.05	0.60	1.43	1.87	15.29	16.17	15.72	16.55	16.98
4H	2H	0.00	0.21	0.00	0.57	0.95	14.43	15.49	14.83	15.84	16.22
	3H	0.00	0.82	0.37	1.22	1.63	15.18	16.05	15.59	16.45	16.86
	4H	0.95	1.72	1.38	2.14	2.59	15.21	15.98	15.65	16.40	16.85
	6H	2.22	2.88	2.68	3.33	3.80	15.19	15.86	15.65	16.30	16.77
	8H	2.79	3.42	3.26	3.86	4.34	15.17	15.80	15.64	16.24	16.71
	12H	3.36	3.91	3.85	4.39	4.87	15.18	15.73	15.67	16.21	16.69
8H	4H	2.37	2.99	2.84	3.44	3.91	15.09	15.72	15.56	16.16	16.64
	6H	3.92	4.43	4.42	4.93	5.41	15.08	15.59	15.59	16.09	16.57
	8H	4.71	5.17	5.24	5.69	6.18	15.09	15.55	15.62	16.07	16.56
	12H	5.56	5.96	6.08	6.46	7.03	15.15	15.56	15.67	16.05	16.62
12H	4H	2.59	3.14	3.08	3.62	4.10	15.05	15.60	15.54	16.08	16.56
	6H	4.29	4.75	4.81	5.26	5.76	15.04	15.49	15.56	16.01	16.50
	8H	5.28	5.68	5.80	6.18	6.75	15.08	15.49	15.60	15.98	16.55