

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: P1062087

Luminaire Tested: S125RDRP-H610D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062087  
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-H610D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

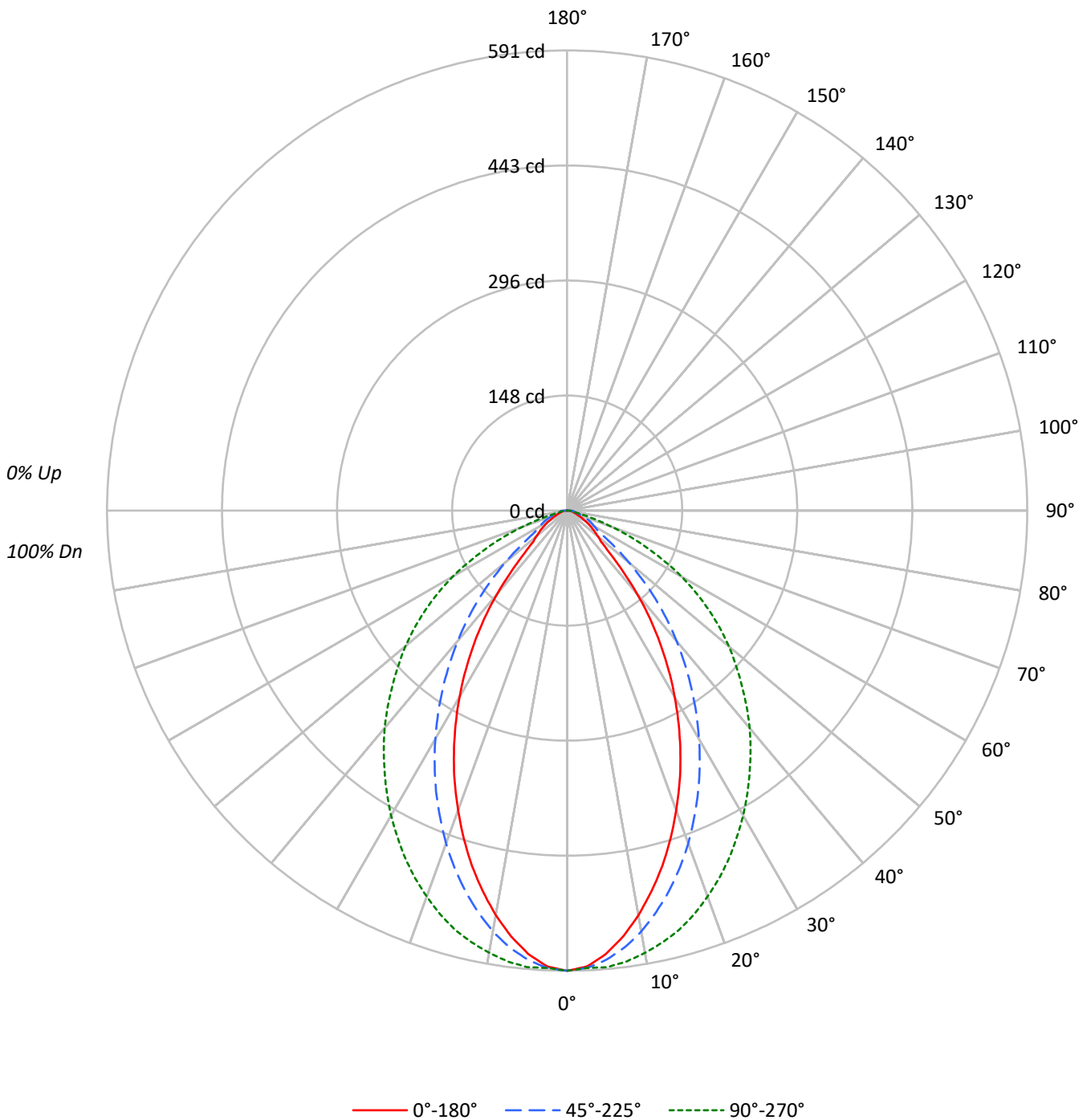
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 856.1 lumens  
Efficiency: N/A  
Efficacy: 49.2 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): 17.4  
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°	4069	4069	4069
5°	3951	4002	4067
10°	3689	3838	4031
15°	3367	3604	3971
20°	3000	3332	3866
25°	2615	3025	3741
30°	2197	2691	3595
35°	1747	2338	3437
40°	1259	1965	3280
45°	746	1560	3089
50°	552	1110	2906
55°	467	687	2661
60°	380	554	2344
65°	297	512	1852
70°	254	443	1240
75°	234	383	500
80°	250	397	349
85°	300	592	395

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3089 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	6.4
10°-20°	143.1	16.7
20°-30°	187.0	21.8
30°-40°	182.2	21.3
40°-50°	136.6	16.0
50°-60°	85.7	10.0
60°-70°	44.6	5.2
70°-80°	16.1	1.9
80°-90°	6.4	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°	384.5	44.9
0°-40°	566.7	66.2
0°-60°	789.0	92.2
0°-90°	856.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	856.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	591	591	591	591	591	
5°	572	579	579	584	588	53
15°	472	486	506	537	557	132
25°	344	363	398	452	492	157
35°	208	230	278	352	409	129
45°	77	99	160	248	317	64
55°	39	41	57	150	222	35
65°	18	20	31	60	114	19
75°	9	12	14	15	19	10
85°	4	6	8	7	5	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	591.0	591.0	591.0	591.0	591.0
2.5°	586.0	591.6	587.9	587.9	587.9
5°	571.6	579.1	579.1	583.5	588.5
7.5°	551.5	560.2	565.9	576.6	584.1
10°	527.6	538.3	548.9	566.5	576.6
12.5°	500.6	513.1	528.2	552.7	567.8
15°	472.3	486.1	505.6	537.0	557.1
17.5°	441.5	457.9	481.1	518.8	543.3
20°	409.5	425.8	454.7	497.4	527.6
22.5°	377.5	395.1	426.5	474.8	510.6
25°	344.2	363.0	398.2	452.2	492.4
27.5°	310.3	329.7	368.7	429.0	472.3
30°	276.4	296.5	338.5	403.9	452.2
32.5°	242.4	263.8	308.4	378.1	430.9
35°	207.9	229.9	278.2	352.4	408.9
37.5°	174.6	196.6	248.1	326.0	386.9
40°	140.1	163.9	218.6	299.6	364.9
42.5°	106.1	130.6	189.1	273.2	341.0
45°	76.6	99.2	160.2	247.5	317.2
47.5°	59.0	71.6	130.6	221.1	293.9
50°	51.5	55.3	103.6	196.6	271.3
52.5°	44.6	47.1	77.9	174.0	246.8
55°	38.9	40.8	57.2	149.5	221.7
57.5°	32.7	35.2	45.2	125.6	196.0
60°	27.6	28.9	40.2	103.6	170.2
62.5°	22.6	23.9	35.8	81.7	141.3
65°	18.2	19.5	31.4	60.3	113.7
67.5°	15.1	15.7	26.4	42.7	87.3
70°	12.6	13.2	22.0	29.5	61.6
72.5°	10.7	12.6	17.6	21.4	38.9
75°	8.8	11.9	14.4	15.1	18.8
77.5°	7.5	11.3	11.9	11.9	10.7
80°	6.3	9.4	10.0	9.4	8.8
82.5°	5.0	7.5	8.2	8.2	6.9
85°	3.8	6.3	7.5	6.9	5.0
87.5°	2.5	5.7	6.3	5.7	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	4.80	6.15	5.16	6.46	6.78	14.41	15.76	14.77	16.07	16.39
	3H	5.66	6.86	6.04	7.19	7.55	15.25	16.45	15.63	16.78	17.14
	4H	6.08	7.20	6.48	7.55	7.93	15.32	16.44	15.72	16.79	17.17
	6H	6.51	7.54	6.92	7.91	8.30	15.30	16.33	15.72	16.70	17.10
	8H	6.68	7.66	7.11	8.05	8.45	15.29	16.27	15.72	16.66	17.06
	12H	6.85	7.78	7.28	8.16	8.59	15.28	16.21	15.71	16.59	17.02
4H	2H	5.76	6.88	6.16	7.23	7.61	14.27	15.39	14.67	15.74	16.12
	3H	6.81	7.73	7.23	8.13	8.54	15.18	16.10	15.59	16.50	16.90
	4H	7.37	8.19	7.81	8.61	9.06	15.28	16.10	15.72	16.52	16.96
	6H	7.97	8.68	8.43	9.13	9.59	15.31	16.02	15.77	16.46	16.93
	8H	8.21	8.87	8.68	9.32	9.79	15.31	15.97	15.78	16.42	16.89
	12H	8.44	9.02	8.92	9.50	9.98	15.32	15.91	15.81	16.39	16.86
8H	4H	7.84	8.50	8.31	8.95	9.42	15.21	15.87	15.67	16.31	16.78
	6H	8.65	9.19	9.16	9.69	10.17	15.26	15.80	15.76	16.30	16.78
	8H	9.03	9.52	9.55	10.03	10.52	15.29	15.78	15.81	16.29	16.79
	12H	9.43	9.85	9.94	10.35	10.92	15.36	15.79	15.87	16.28	16.85
12H	4H	7.89	8.48	8.38	8.96	9.44	15.17	15.76	15.66	16.24	16.71
	6H	8.78	9.26	9.30	9.78	10.27	15.23	15.71	15.75	16.23	16.72
	8H	9.26	9.69	9.78	10.19	10.76	15.30	15.73	15.81	16.22	16.79