

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: P1062085

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062085  
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-H610D830-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

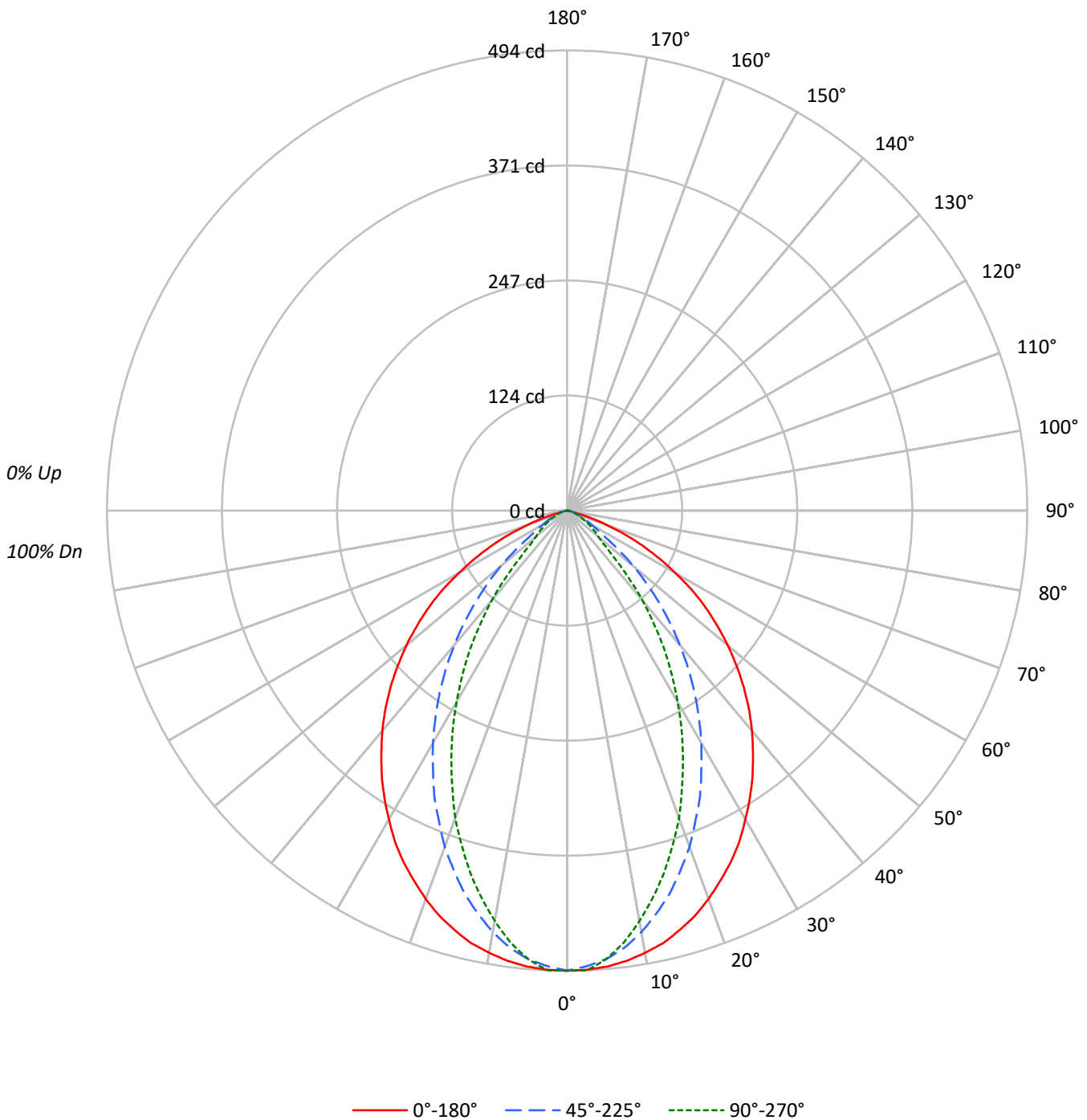
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 714.3 lumens  
Efficiency: N/A  
Efficacy: 41.1 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): 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

TEST NUMBER: P1062085

CATALOG NUMBER: S125RDRP-H610D830-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1062085

CATALOG NUMBER: S125RDRP-H610D830-X4F0-XX-UDD-SVL-B

**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°	3401	3401	3401
5°	3396	3340	3340
10°	3370	3212	3128
15°	3324	3033	2868
20°	3251	2814	2575
25°	3161	2565	2236
30°	3043	2290	1886
35°	2917	2005	1530
40°	2776	1692	1133
45°	2610	1356	685
50°	2413	995	470
55°	2178	610	391
60°	1849	414	311
65°	1461	318	246
70°	922	227	201
75°	301	168	168
80°	99	123	151
85°	47	103	103

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2610 cd/sqm



TEST NUMBER: P1062085

CATALOG NUMBER: S125RDRP-H610D830-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	6.4
10°-20°	120.6	16.9
20°-30°	158.7	22.2
30°-40°	155.9	21.8
40°-50°	118.0	16.5
50°-60°	71.5	10.0
60°-70°	33.8	4.7
70°-80°	8.8	1.2
80°-90°	1.3	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°	325.0	45.5
0°-40°	480.9	67.3
0°-60°	670.4	93.9
0°-90°	714.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	714.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	491	490	483	484	483	47
15°	466	454	426	409	402	131
25°	416	385	338	306	294	191
35°	347	301	238	196	182	217
45°	268	211	139	88	70	206
55°	181	124	51	34	33	161
65°	90	46	20	16	15	88
75°	11	8	6	6	6	18
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P1062085

CATALOG NUMBER: S125RDRP-H610D830-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	493.9	493.9	493.9	493.9	493.9
2.5°	493.3	493.3	489.5	493.9	493.9
5°	491.4	490.1	483.2	483.8	483.2
7.5°	487.6	485.1	473.2	470.0	467.5
10°	482.0	476.9	459.4	451.8	447.4
12.5°	475.7	466.9	443.0	432.4	425.5
15°	466.3	453.7	425.5	409.2	402.3
17.5°	456.2	438.0	404.8	385.3	376.5
20°	443.7	422.3	384.1	360.2	351.4
22.5°	429.9	404.8	360.2	333.9	321.9
25°	416.1	384.7	337.6	306.2	294.3
27.5°	400.4	364.6	311.9	279.3	266.1
30°	382.8	344.5	288.0	254.2	237.2
32.5°	365.2	323.8	262.9	225.9	209.0
35°	347.0	300.6	238.5	196.4	182.0
37.5°	327.6	278.6	213.4	169.4	152.5
40°	308.8	256.7	188.3	141.8	126.1
42.5°	288.7	234.7	163.2	114.8	97.3
45°	268.0	210.9	139.3	88.5	70.3
47.5°	246.6	189.5	115.5	65.3	52.7
50°	225.3	166.9	92.9	48.3	43.9
52.5°	203.3	145.0	70.3	40.2	38.3
55°	181.4	124.3	50.8	34.5	32.6
57.5°	158.8	101.7	38.3	29.5	27.6
60°	134.3	81.6	30.1	24.5	22.6
62.5°	111.7	64.0	24.5	20.1	18.8
65°	89.7	45.8	19.5	16.3	15.1
67.5°	67.1	30.7	15.1	12.6	12.6
70°	45.8	20.1	11.3	10.0	10.0
72.5°	27.6	11.9	8.2	8.2	8.2
75°	11.3	7.5	6.3	6.3	6.3
77.5°	3.8	4.4	4.4	5.0	5.0
80°	2.5	2.5	3.1	3.8	3.8
82.5°	1.3	1.9	1.9	2.5	2.5
85°	0.6	0.6	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062085  
 CATALOG NUMBER: S125RDRP-H610D830-X4F0-XX-UDD-SVL-B

**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	13.58	14.92	13.95	15.23	15.54	4.24	5.57	4.60	5.88	6.20
	3H	14.29	15.47	14.67	15.80	16.16	5.02	6.20	5.40	6.53	6.89
	4H	14.30	15.40	14.71	15.75	16.13	5.27	6.37	5.67	6.72	7.10
	6H	14.24	15.24	14.65	15.61	16.00	5.45	6.46	5.87	6.83	7.22
	8H	14.19	15.15	14.62	15.54	15.94	5.49	6.45	5.93	6.84	7.24
	12H	14.15	15.06	14.59	15.44	15.88	5.50	6.41	5.94	6.80	7.23
4H	2H	13.41	14.51	13.82	14.86	15.24	4.73	5.82	5.13	6.17	6.56
	3H	14.16	15.05	14.57	15.46	15.86	5.64	6.53	6.05	6.93	7.33
	4H	14.18	14.97	14.61	15.39	15.83	5.95	6.75	6.39	7.17	7.61
	6H	14.12	14.80	14.58	15.25	15.71	6.21	6.90	6.67	7.34	7.81
	8H	14.06	14.70	14.53	15.15	15.62	6.28	6.91	6.75	7.36	7.83
	12H	14.02	14.58	14.51	15.07	15.54	6.30	6.87	6.79	7.35	7.82
8H	4H	14.06	14.70	14.53	15.14	15.62	6.06	6.70	6.53	7.15	7.62
	6H	13.98	14.50	14.49	15.00	15.48	6.38	6.90	6.88	7.40	7.88
	8H	13.93	14.40	14.45	14.91	15.40	6.49	6.95	7.01	7.47	7.96
	12H	13.89	14.30	14.41	14.80	15.37	6.55	6.96	7.07	7.46	8.03
12H	4H	14.02	14.58	14.50	15.06	15.54	6.03	6.60	6.52	7.08	7.56
	6H	13.93	14.39	14.45	14.91	15.40	6.35	6.82	6.88	7.34	7.83
	8H	13.89	14.30	14.41	14.80	15.37	6.49	6.90	7.01	7.40	7.97