

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: P1061699

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061699  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

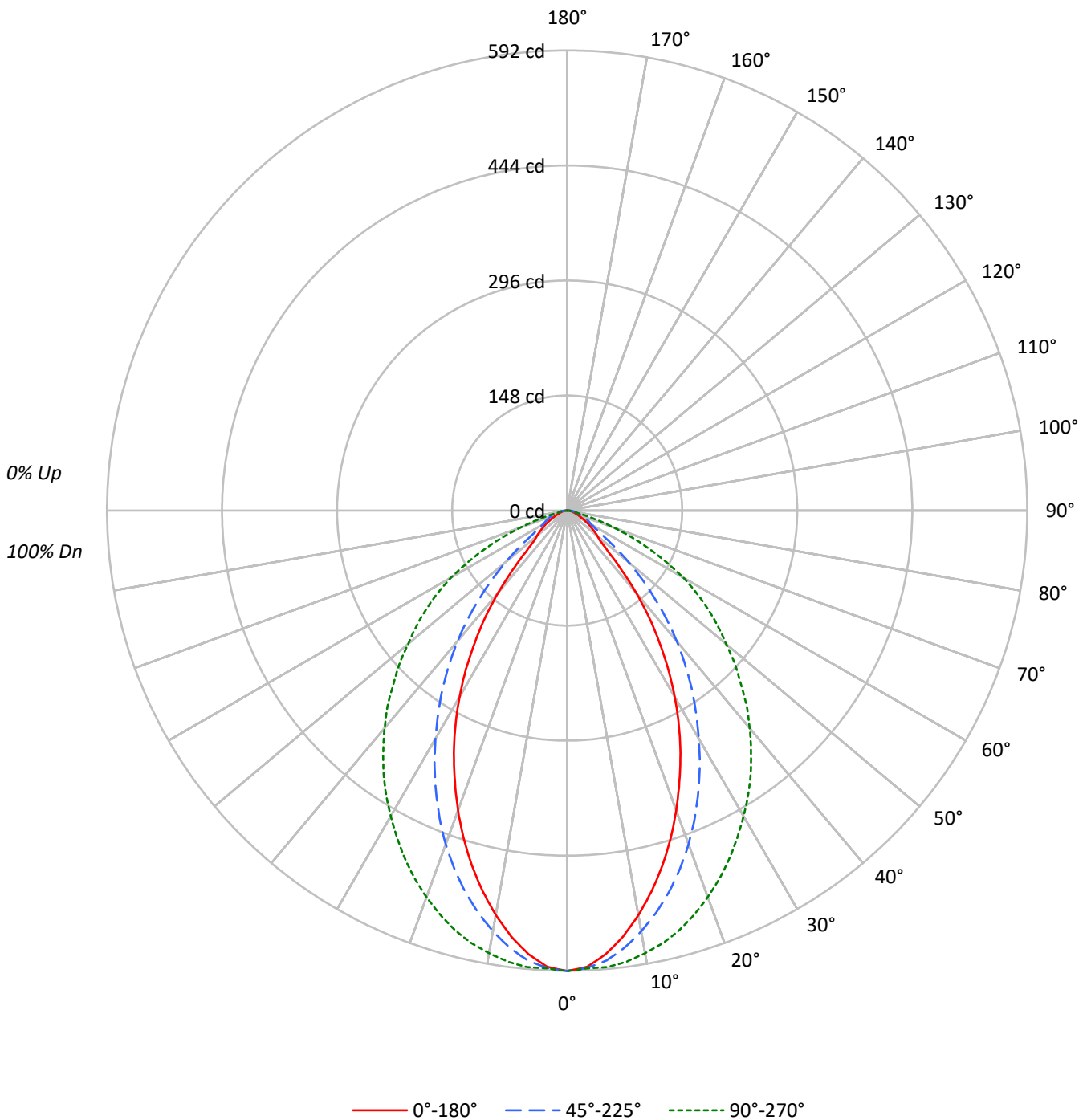
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 855.3 lumens  
Efficiency: N/A  
Efficacy: 43.6 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): 19.6  
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	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	87	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	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	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	41	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36					36			

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

	0°	45°	90°
0°	4079	4079	4079
5°	3958	4016	4075
10°	3694	3842	4043
15°	3371	3616	3982
20°	3007	3347	3877
25°	2621	3032	3753
30°	2201	2693	3609
35°	1737	2345	3461
40°	1244	1970	3284
45°	732	1546	3079
50°	542	1114	2860
55°	455	675	2656
60°	368	493	2371
65°	287	469	1900
70°	240	439	1286
75°	223	394	561
80°	222	389	361
85°	276	498	387

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3079 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.6	6.4
10°-20°	143.4	16.8
20°-30°	187.4	21.9
30°-40°	182.4	21.3
40°-50°	136.3	15.9
50°-60°	84.6	9.9
60°-70°	44.4	5.2
70°-80°	16.2	1.9
80°-90°	6.1	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°	385.4	45.1
0°-40°	567.8	66.4
0°-60°	788.7	92.2
0°-90°	855.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	855.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	573	580	581	585	590	53
15°	473	487	507	538	559	132
25°	345	363	399	453	494	158
35°	207	229	279	354	412	129
45°	75	98	159	248	316	63
55°	38	40	56	146	221	34
65°	18	19	29	62	117	18
75°	8	10	15	16	21	9
85°	4	6	6	6	5	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	592.4	592.4	592.4	592.4	592.4
2.5°	587.5	592.4	588.9	588.9	589.6
5°	572.7	580.4	581.1	584.6	589.6
7.5°	552.3	561.5	567.1	577.6	585.3
10°	528.4	539.0	549.5	567.1	578.3
12.5°	501.7	514.4	529.8	553.7	569.9
15°	472.9	487.0	507.3	538.3	558.6
17.5°	442.7	457.5	482.8	520.0	544.6
20°	410.4	426.5	456.8	498.9	529.1
22.5°	377.3	395.6	428.6	476.4	512.3
25°	345.0	362.6	399.1	453.2	494.0
27.5°	311.3	329.6	369.6	429.3	474.3
30°	276.9	296.5	338.7	404.8	453.9
32.5°	242.4	262.8	308.5	379.5	433.6
35°	206.6	229.1	279.0	353.5	411.8
37.5°	172.9	196.8	248.8	326.8	388.6
40°	138.4	163.0	219.2	300.8	365.4
42.5°	104.7	130.0	189.0	274.1	342.2
45°	75.2	98.4	158.8	248.1	316.2
47.5°	57.6	71.0	130.7	221.3	293.0
50°	50.6	54.8	104.0	195.3	267.0
52.5°	44.3	47.1	77.3	170.1	244.5
55°	37.9	40.1	56.2	146.2	221.3
57.5°	32.3	34.4	42.9	124.4	197.5
60°	26.7	28.8	35.8	102.6	172.2
62.5°	22.5	23.2	32.3	82.2	144.1
65°	17.6	19.0	28.8	61.8	116.6
67.5°	14.8	15.5	25.3	44.3	89.9
70°	11.9	12.6	21.8	30.9	63.9
72.5°	10.5	10.5	18.3	22.5	40.8
75°	8.4	9.8	14.8	16.2	21.1
77.5°	7.0	9.8	12.6	11.9	11.2
80°	5.6	9.1	9.8	9.8	9.1
82.5°	4.9	7.7	8.4	7.7	7.0
85°	3.5	6.3	6.3	6.3	4.9
87.5°	2.8	5.6	4.9	4.9	3.5
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	4.66	6.01	5.03	6.33	6.64	14.38	15.73	14.74	16.04	16.35
	3H	5.51	6.70	5.89	7.03	7.40	15.29	16.49	15.67	16.82	17.18
	4H	5.86	6.98	6.26	7.33	7.71	15.39	16.50	15.79	16.85	17.24
	6H	6.23	7.26	6.65	7.63	8.02	15.37	16.40	15.79	16.77	17.16
	8H	6.41	7.39	6.84	7.78	8.18	15.36	16.33	15.79	16.72	17.13
	12H	6.57	7.51	7.01	7.89	8.32	15.35	16.28	15.78	16.66	17.09
4H	2H	5.50	6.61	5.90	6.96	7.35	14.23	15.34	14.63	15.69	16.08
	3H	6.55	7.47	6.97	7.87	8.27	15.22	16.13	15.63	16.53	16.94
	4H	7.01	7.82	7.44	8.24	8.68	15.34	16.16	15.78	16.58	17.02
	6H	7.56	8.27	8.02	8.71	9.18	15.38	16.08	15.84	16.53	16.99
	8H	7.82	8.48	8.29	8.92	9.40	15.38	16.04	15.84	16.48	16.95
	12H	8.06	8.64	8.54	9.12	9.60	15.38	15.97	15.87	16.45	16.92
8H	4H	7.56	8.22	8.03	8.67	9.14	15.27	15.93	15.74	16.38	16.85
	6H	8.34	8.87	8.84	9.37	9.85	15.33	15.87	15.83	16.36	16.84
	8H	8.75	9.23	9.27	9.75	10.24	15.36	15.84	15.88	16.36	16.85
	12H	9.16	9.59	9.68	10.09	10.66	15.41	15.84	15.92	16.33	16.90
12H	4H	7.62	8.20	8.11	8.69	9.16	15.24	15.82	15.72	16.30	16.77
	6H	8.48	8.96	9.00	9.48	9.97	15.29	15.78	15.81	16.29	16.78
	8H	9.00	9.43	9.52	9.93	10.50	15.36	15.79	15.87	16.28	16.85