

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: P1062159

Luminaire Tested: S125RDRP-H610D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062159  
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-H610D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

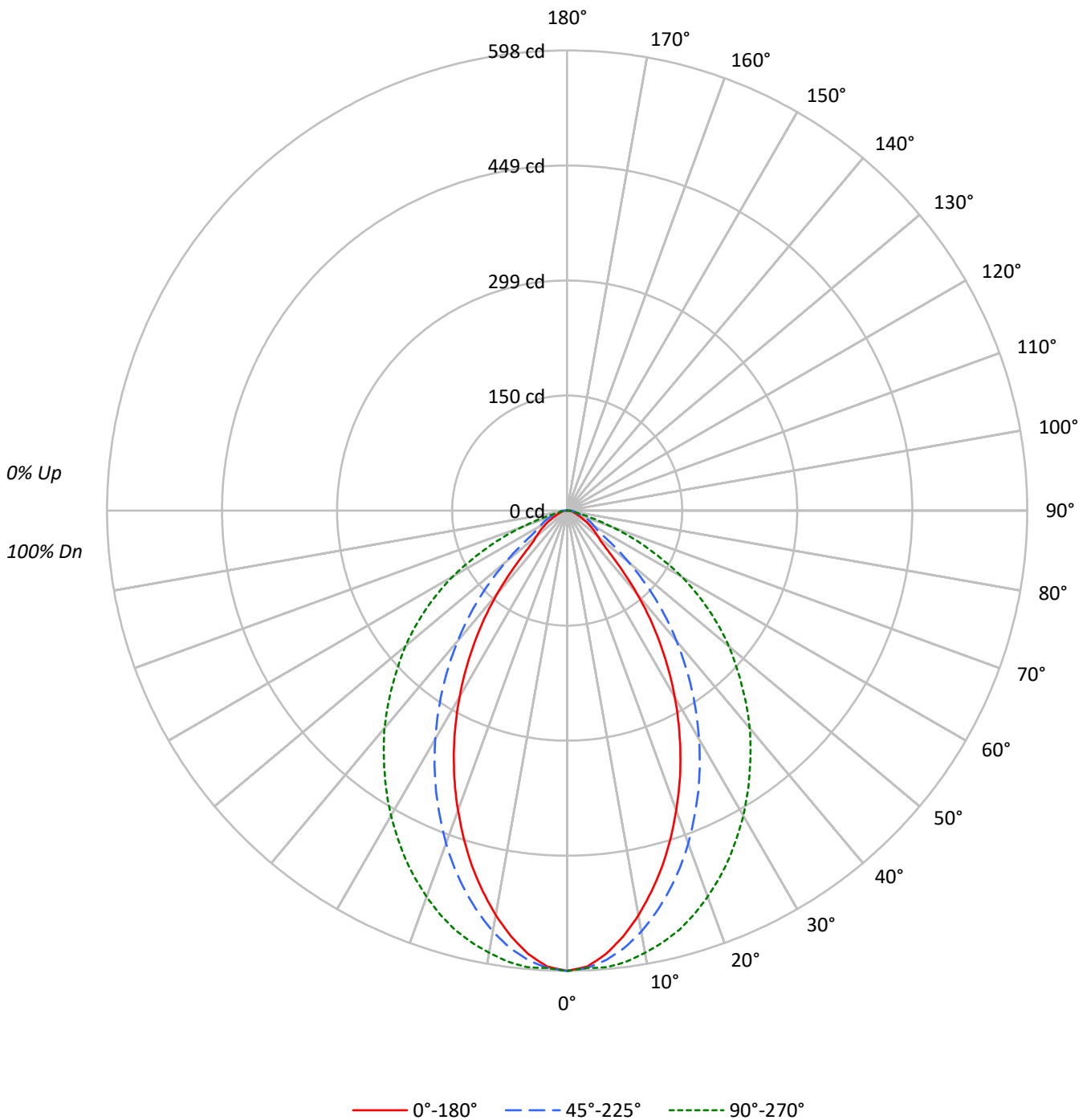
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 866.5 lumens  
Efficiency: N/A  
Efficacy: 49.8 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	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°	4119	4119	4119
5°	3998	4051	4117
10°	3733	3884	4080
15°	3408	3647	4020
20°	3037	3373	3913
25°	2647	3062	3786
30°	2224	2724	3639
35°	1768	2367	3478
40°	1275	1988	3319
45°	756	1578	3126
50°	558	1124	2941
55°	473	694	2694
60°	386	560	2373
65°	300	518	1875
70°	256	447	1254
75°	237	388	508
80°	254	404	353
85°	300	600	403

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3126 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	6.4
10°-20°	144.8	16.7
20°-30°	189.3	21.8
30°-40°	184.4	21.3
40°-50°	138.3	16.0
50°-60°	86.7	10.0
60°-70°	45.1	5.2
70°-80°	16.3	1.9
80°-90°	6.5	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°	389.2	44.9
0°-40°	573.6	66.2
0°-60°	798.5	92.2
0°-90°	866.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	866.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	578	586	586	591	596	54
15°	478	492	512	544	564	133
25°	348	367	403	458	498	159
35°	210	233	282	357	414	131
45°	78	100	162	250	321	65
55°	39	41	58	151	224	35
65°	18	20	32	61	115	19
75°	9	12	15	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°	598.2	598.2	598.2	598.2	598.2
2.5°	593.1	598.8	595.0	595.0	595.0
5°	578.5	586.1	586.1	590.6	595.7
7.5°	558.2	567.1	572.8	583.6	591.2
10°	534.0	544.8	555.6	573.4	583.6
12.5°	506.7	519.4	534.6	559.4	574.7
15°	478.1	492.0	511.7	543.5	563.9
17.5°	446.9	463.4	487.0	525.1	549.9
20°	414.5	431.0	460.3	503.5	534.0
22.5°	382.1	399.9	431.6	480.6	516.8
25°	348.4	367.4	403.0	457.7	498.4
27.5°	314.0	333.7	373.2	434.2	478.1
30°	279.7	300.1	342.6	408.8	457.7
32.5°	245.4	267.0	312.1	382.7	436.1
35°	210.4	232.7	281.6	356.6	413.8
37.5°	176.7	199.0	251.1	329.9	391.6
40°	141.8	165.9	221.2	303.2	369.3
42.5°	107.4	132.2	191.3	276.5	345.2
45°	77.6	100.4	162.1	250.5	321.0
47.5°	59.8	72.5	132.2	223.8	297.5
50°	52.1	55.9	104.9	199.0	274.6
52.5°	45.1	47.7	78.8	176.1	249.8
55°	39.4	41.3	57.8	151.3	224.4
57.5°	33.1	35.6	45.8	127.1	198.3
60°	28.0	29.2	40.7	104.9	172.3
62.5°	22.9	24.2	36.2	82.6	143.0
65°	18.4	19.7	31.8	61.0	115.1
67.5°	15.3	15.9	26.7	43.2	88.4
70°	12.7	13.3	22.2	29.9	62.3
72.5°	10.8	12.7	17.8	21.6	39.4
75°	8.9	12.1	14.6	15.3	19.1
77.5°	7.6	11.4	12.1	12.1	10.8
80°	6.4	9.5	10.2	9.5	8.9
82.5°	5.1	7.6	8.3	8.3	7.0
85°	3.8	6.4	7.6	7.0	5.1
87.5°	2.5	5.7	6.4	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	4.84	6.19	5.20	6.50	6.82	14.45	15.80	14.81	16.11	16.43
	3H	5.69	6.90	6.07	7.22	7.59	15.29	16.49	15.67	16.82	17.18
	4H	6.12	7.24	6.52	7.59	7.97	15.36	16.48	15.77	16.83	17.22
	6H	6.55	7.57	6.96	7.94	8.34	15.35	16.37	15.76	16.74	17.14
	8H	6.73	7.70	7.15	8.09	8.50	15.33	16.31	15.76	16.70	17.10
	12H	6.89	7.82	7.32	8.20	8.63	15.32	16.25	15.75	16.64	17.07
4H	2H	5.80	6.92	6.20	7.27	7.65	14.31	15.43	14.71	15.78	16.16
	3H	6.85	7.77	7.26	8.17	8.57	15.22	16.14	15.63	16.54	16.94
	4H	7.41	8.23	7.85	8.65	9.09	15.32	16.14	15.76	16.56	17.00
	6H	8.01	8.72	8.47	9.16	9.63	15.35	16.06	15.81	16.50	16.97
	8H	8.25	8.91	8.72	9.36	9.83	15.35	16.01	15.82	16.46	16.93
	12H	8.48	9.06	8.96	9.54	10.02	15.36	15.95	15.85	16.43	16.91
8H	4H	7.89	8.55	8.35	8.99	9.46	15.25	15.91	15.72	16.36	16.83
	6H	8.70	9.24	9.20	9.73	10.21	15.30	15.84	15.80	16.34	16.82
	8H	9.08	9.56	9.60	10.08	10.57	15.34	15.82	15.86	16.34	16.83
	12H	9.47	9.90	9.98	10.39	10.96	15.40	15.83	15.91	16.32	16.90
12H	4H	7.94	8.52	8.42	9.00	9.48	15.22	15.80	15.70	16.28	16.76
	6H	8.82	9.31	9.34	9.82	10.31	15.27	15.76	15.79	16.27	16.76
	8H	9.31	9.74	9.82	10.23	10.80	15.34	15.77	15.86	16.27	16.84