

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: P1060600

Luminaire Tested: S124RDRP-S795D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060600  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D935-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

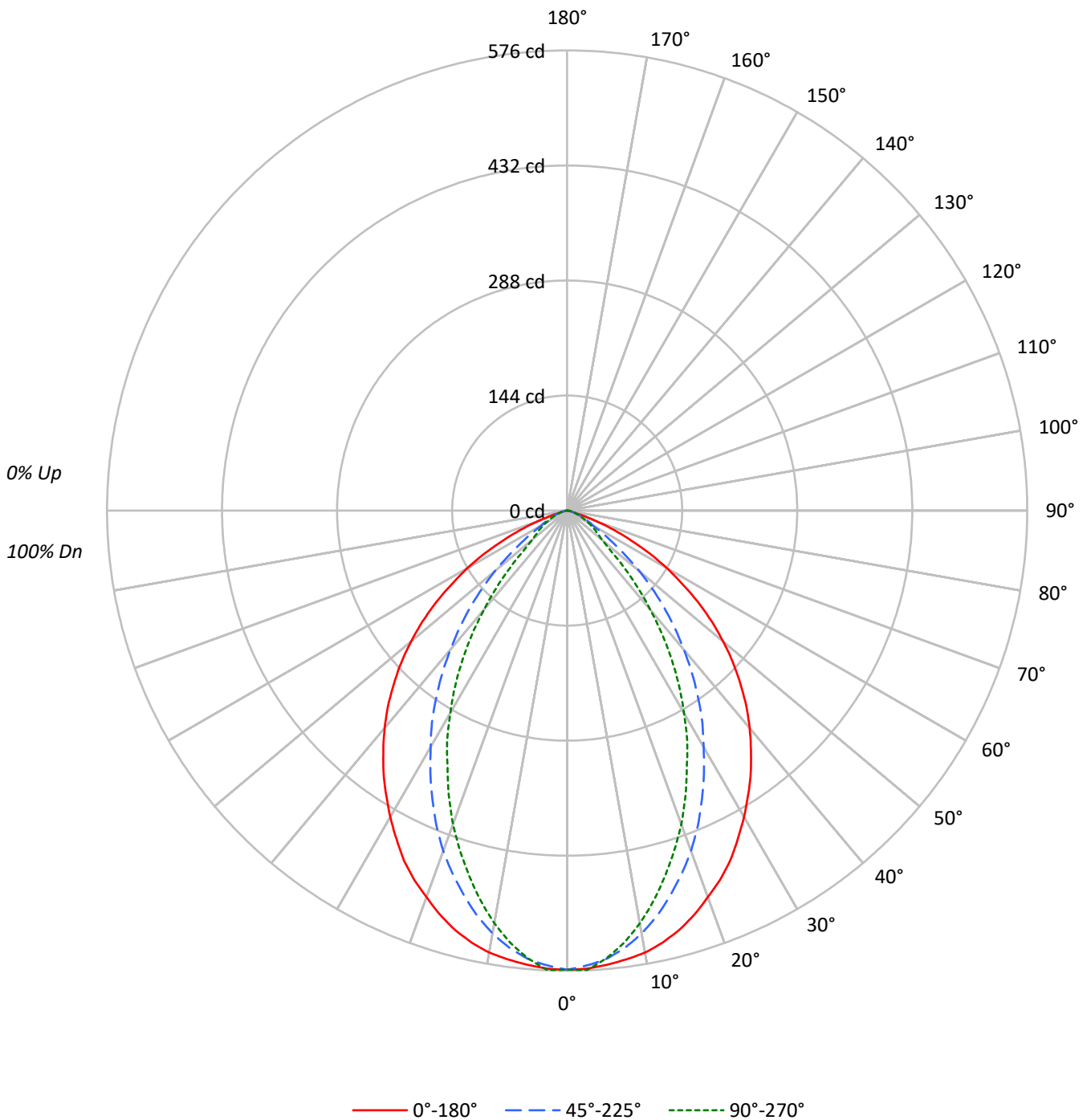
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 847.4 lumens  
Efficiency: N/A  
Efficacy: 32.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

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

	0°	45°	90°
0°	4949	4949	4949
5°	4933	4870	4863
10°	4912	4700	4586
15°	4843	4445	4221
20°	4718	4154	3828
25°	4591	3792	3368
30°	4403	3397	2905
35°	4212	3003	2400
40°	3995	2557	1820
45°	3736	2090	1223
50°	3416	1583	760
55°	3001	1045	644
60°	2482	641	530
65°	1797	495	428
70°	979	368	327
75°	216	269	296
80°	159	198	243
85°	158	158	237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3736 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.2	6.3
10°-20°	141.4	16.7
20°-30°	187.3	22.1
30°-40°	185.9	21.9
40°-50°	143.1	16.9
50°-60°	85.3	10.1
60°-70°	38.8	4.6
70°-80°	10.0	1.2
80°-90°	2.2	0.3
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°	382.0	45.1
0°-40°	568.0	67.0
0°-60°	796.3	94.0
0°-90°	847.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	847.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	571	572	563	563	563	54
15°	543	529	499	482	474	153
25°	483	448	399	366	354	222
35°	401	350	286	242	228	250
45°	307	247	172	120	100	236
55°	200	142	70	44	43	178
65°	88	53	24	21	21	89
75°	6	8	8	9	9	14
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	574.7	574.7	574.7	574.7	574.7
2.5°	573.9	574.7	569.9	573.9	575.5
5°	570.7	571.5	563.4	563.4	562.6
7.5°	566.6	565.0	552.1	547.2	545.6
10°	561.8	556.1	537.5	527.8	524.5
12.5°	553.7	544.8	519.7	505.9	500.2
15°	543.2	529.4	498.6	481.6	473.5
17.5°	530.2	513.2	476.8	454.9	446.0
20°	514.8	492.2	453.3	425.8	417.7
22.5°	500.2	471.9	427.4	395.8	386.9
25°	483.2	448.4	399.1	365.9	354.5
27.5°	463.0	425.8	370.7	336.7	325.4
30°	442.8	401.5	341.6	306.0	292.2
32.5°	421.7	376.4	314.9	274.4	261.5
35°	400.7	350.5	285.7	242.0	228.3
37.5°	378.0	324.6	256.6	211.3	195.9
40°	355.4	299.5	227.5	181.3	161.9
42.5°	331.9	273.6	199.1	150.6	131.1
45°	306.8	246.9	171.6	119.8	100.4
47.5°	281.7	221.8	144.1	89.9	72.0
50°	255.0	195.1	118.2	65.6	56.7
52.5°	228.3	169.2	92.3	51.0	48.6
55°	199.9	142.5	69.6	43.7	42.9
57.5°	170.8	118.2	50.2	38.0	36.4
60°	144.1	95.5	37.2	32.4	30.8
62.5°	116.6	72.0	30.8	26.7	25.1
65°	88.2	52.6	24.3	21.0	21.0
67.5°	63.9	35.6	19.4	17.0	16.2
70°	38.9	21.9	14.6	13.8	13.0
72.5°	19.4	13.0	11.3	10.5	10.5
75°	6.5	8.1	8.1	8.9	8.9
77.5°	4.9	5.7	5.7	6.5	6.5
80°	3.2	4.0	4.0	4.9	4.9
82.5°	2.4	2.4	3.2	3.2	4.0
85°	1.6	1.6	1.6	2.4	2.4
87.5°	0.8	0.8	0.8	1.6	1.6
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	14.68	16.01	15.04	16.32	16.64	6.22	7.55	6.58	7.86	8.18
	3H	15.18	16.37	15.56	16.70	17.06	7.04	8.22	7.42	8.55	8.91
	4H	15.15	16.25	15.55	16.60	16.98	7.32	8.42	7.72	8.77	9.15
	6H	15.09	16.09	15.50	16.46	16.86	7.49	8.50	7.91	8.87	9.27
	8H	15.05	16.00	15.48	16.39	16.80	7.56	8.51	7.99	8.90	9.31
	12H	15.01	15.92	15.44	16.30	16.73	7.60	8.51	8.03	8.90	9.33
4H	2H	14.52	15.62	14.92	15.97	16.35	6.66	7.76	7.06	8.11	8.49
	3H	15.07	15.97	15.49	16.37	16.77	7.63	8.52	8.04	8.93	9.33
	4H	15.04	15.84	15.48	16.26	16.70	7.99	8.79	8.43	9.21	9.65
	6H	14.99	15.67	15.45	16.12	16.59	8.25	8.93	8.71	9.38	9.85
	8H	14.94	15.58	15.41	16.03	16.50	8.33	8.97	8.80	9.42	9.89
	12H	14.90	15.47	15.39	15.95	16.42	8.41	8.97	8.89	9.45	9.93
8H	4H	14.93	15.57	15.40	16.02	16.49	8.08	8.72	8.55	9.17	9.64
	6H	14.87	15.39	15.37	15.89	16.37	8.40	8.92	8.90	9.41	9.90
	8H	14.82	15.29	15.34	15.81	16.30	8.52	8.99	9.05	9.51	10.00
	12H	14.79	15.20	15.30	15.70	16.27	8.66	9.07	9.17	9.57	10.14
12H	4H	14.89	15.45	15.37	15.94	16.41	8.06	8.62	8.54	9.10	9.58
	6H	14.81	15.28	15.34	15.80	16.29	8.37	8.84	8.90	9.36	9.85
	8H	14.79	15.20	15.30	15.70	16.27	8.54	8.96	9.06	9.45	10.02