

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: P1060552

Luminaire Tested: S124RDRP-S795D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060552  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

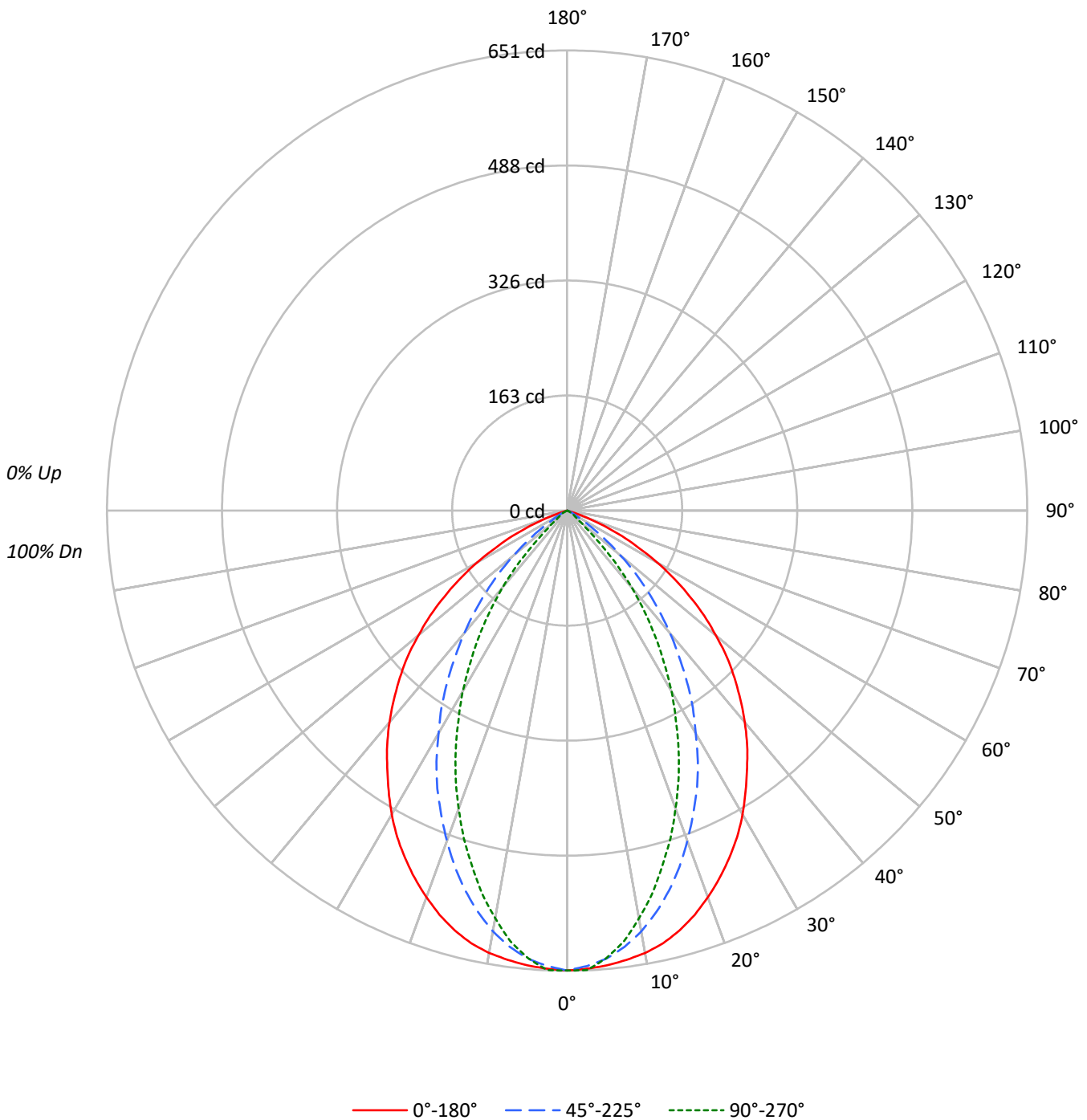
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 849.5 lumens  
Efficiency: N/A  
Efficacy: 32.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	5602	5602	5602
5°	5583	5502	5493
10°	5557	5286	5121
15°	5482	4962	4635
20°	5333	4557	4110
25°	5154	4127	3546
30°	4936	3617	2935
35°	4665	3103	2283
40°	4396	2547	1596
45°	4076	1958	790
50°	3677	1322	264
55°	3175	677	183
60°	2542	243	129
65°	1744	134	57
70°	780	70	48
75°	0	30	30
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4076 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	7.1
10°-20°	157.5	18.5
20°-30°	203.9	24.0
30°-40°	193.7	22.8
40°-50°	137.2	16.1
50°-60°	70.4	8.3
60°-70°	24.6	2.9
70°-80°	2.1	0.2
80°-90°	0.0	0.0
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°	421.5	49.6
0°-40°	615.2	72.4
0°-60°	822.8	96.8
0°-90°	849.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	646	647	636	636	636	61
15°	615	596	557	530	520	173
25°	542	500	434	388	373	249
35°	444	379	295	238	217	278
45°	335	258	161	92	65	258
55°	212	139	45	13	12	189
65°	86	41	7	4	3	85
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	648.7	650.6	644.9	649.6	650.6
5°	645.9	646.8	636.5	636.5	635.5
7.5°	641.2	639.3	622.4	615.8	614.9
10°	635.5	629.0	604.5	590.4	585.7
12.5°	627.1	614.9	582.0	561.3	555.6
15°	614.9	596.1	556.6	530.2	519.9
17.5°	599.8	575.4	528.4	496.4	486.1
20°	582.0	550.9	497.3	461.6	448.5
22.5°	563.2	527.4	465.4	425.0	411.8
25°	542.5	500.2	434.4	388.3	373.2
27.5°	520.8	471.0	400.5	352.6	332.8
30°	496.4	441.9	363.8	314.0	295.2
32.5°	470.1	409.9	330.9	277.3	254.8
35°	443.8	378.9	295.2	237.9	217.2
37.5°	418.4	349.7	259.5	199.3	179.6
40°	391.1	317.8	226.6	164.5	142.0
42.5°	362.9	286.7	192.7	128.8	104.4
45°	334.7	257.6	160.8	92.1	64.9
47.5°	306.5	226.6	129.7	58.3	34.8
50°	274.5	196.5	98.7	31.0	19.7
52.5°	244.4	168.3	70.5	17.9	15.0
55°	211.5	139.1	45.1	13.2	12.2
57.5°	180.5	110.9	25.4	10.3	9.4
60°	147.6	85.6	14.1	8.5	7.5
62.5°	114.7	62.1	9.4	5.6	4.7
65°	85.6	41.4	6.6	3.8	2.8
67.5°	56.4	23.5	4.7	1.9	1.9
70°	31.0	11.3	2.8	1.9	1.9
72.5°	11.3	3.8	1.9	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.51	15.77	14.88	16.08	16.40	0.00	0.00	0.00	0.00	0.00
	3H	14.79	15.90	15.17	16.23	16.59	0.00	0.00	0.00	0.00	0.00
	4H	14.72	15.74	15.12	16.09	16.48	0.00	0.00	0.00	0.00	0.00
	6H	14.63	15.57	15.04	15.94	16.33	0.00	0.00	0.00	0.00	0.00
	8H	14.58	15.47	15.01	15.86	16.27	0.00	0.00	0.00	0.00	0.00
	12H	14.54	15.38	14.97	15.77	16.20	0.00	0.00	0.00	0.00	0.00
4H	2H	14.29	15.31	14.69	15.66	16.05	0.00	0.00	0.00	0.00	0.00
	3H	14.57	15.40	14.98	15.80	16.21	0.00	0.00	0.00	0.00	0.00
	4H	14.48	15.21	14.91	15.63	16.08	0.00	0.00	0.00	0.00	0.00
	6H	14.39	15.02	14.86	15.47	15.94	0.00	0.00	0.00	0.00	0.00
	8H	14.33	14.92	14.80	15.37	15.84	0.00	0.00	0.00	0.00	0.00
	12H	14.28	14.79	14.77	15.28	15.75	0.00	0.00	0.00	0.00	0.00
8H	4H	14.33	14.92	14.80	15.37	15.84	0.00	0.00	0.00	0.00	0.00
	6H	14.22	14.70	14.73	15.20	15.68	0.00	0.00	0.00	0.00	0.00
	8H	14.15	14.58	14.68	15.10	15.59	0.00	0.00	0.00	0.00	0.00
	12H	14.10	14.48	14.62	14.98	15.55	0.00	0.00	0.00	0.00	0.00
12H	4H	14.28	14.79	14.77	15.28	15.75	0.00	0.00	0.00	0.00	0.00
	6H	14.15	14.58	14.68	15.10	15.59	0.00	0.00	0.00	0.00	0.00
	8H	14.10	14.48	14.62	14.98	15.55	0.00	0.00	0.00	0.00	0.00