

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: P1060582

Luminaire Tested: S124RDRP-S795D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060582  
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-S795D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

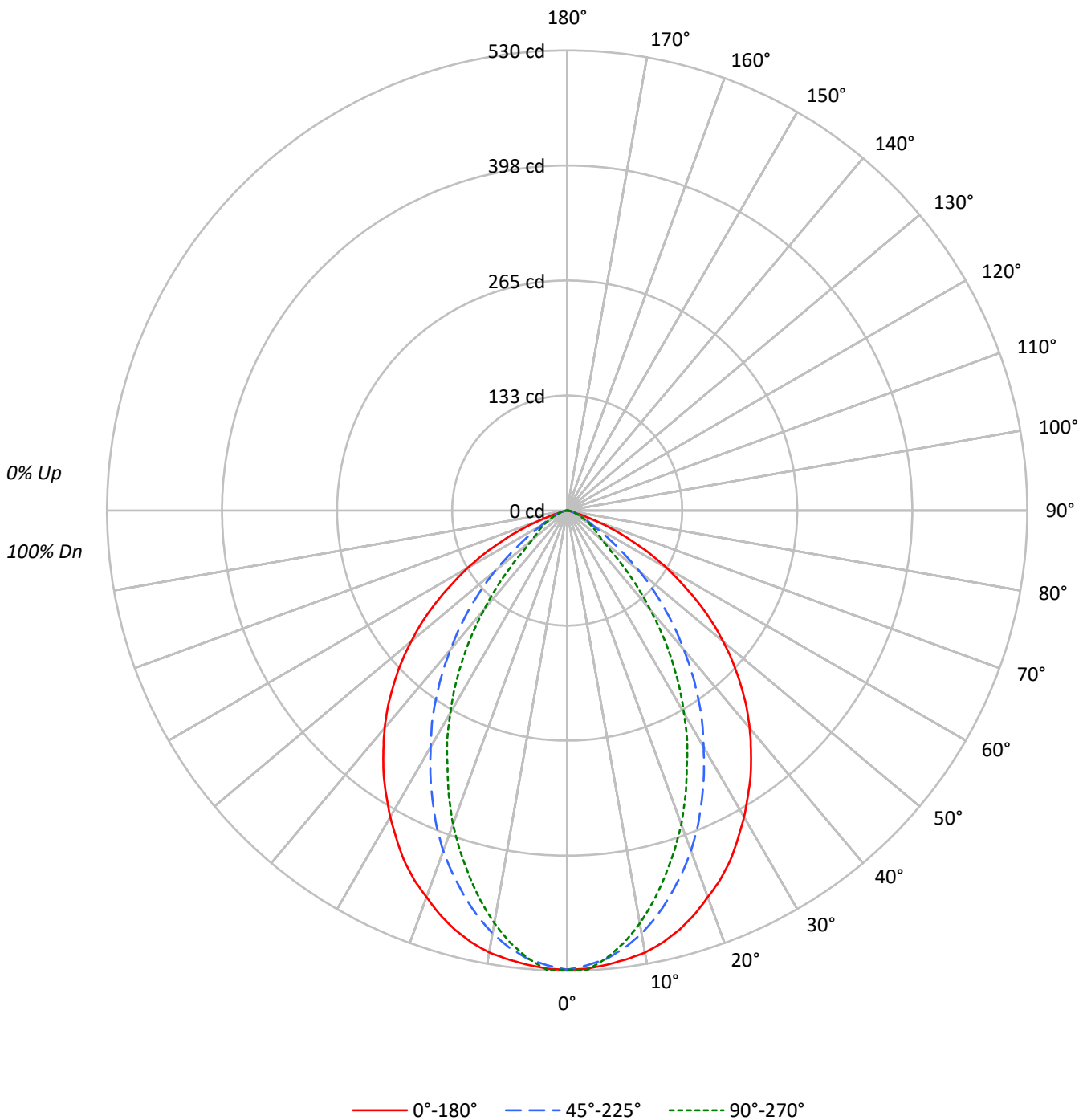
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 779.6 lumens  
Efficiency: N/A  
Efficacy: 30.2 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 (Ain): 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	108	105	102	109	106	103	101	102	100	97	98	96	94	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	76	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	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4554	4554	4554
5°	4539	4481	4474
10°	4520	4324	4220
15°	4455	4090	3884
20°	4341	3822	3522
25°	4224	3489	3099
30°	4051	3125	2674
35°	3876	2764	2208
40°	3676	2353	1675
45°	3438	1923	1125
50°	3143	1456	698
55°	2762	961	593
60°	2284	591	487
65°	1655	454	395
70°	899	337	300
75°	200	246	273
80°	149	183	223
85°	148	148	217

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3438 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	6.3
10°-20°	130.1	16.7
20°-30°	172.4	22.1
30°-40°	171.1	21.9
40°-50°	131.7	16.9
50°-60°	78.5	10.1
60°-70°	35.7	4.6
70°-80°	9.2	1.2
80°-90°	2.0	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°	351.5	45.1
0°-40°	522.6	67.0
0°-60°	732.7	94.0
0°-90°	779.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	779.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	525	526	518	518	518	50
15°	500	487	459	443	436	141
25°	445	413	367	337	326	204
35°	369	322	263	223	210	230
45°	282	227	158	110	92	217
55°	184	131	64	40	40	164
65°	81	48	22	19	19	82
75°	6	7	7	8	8	13
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°	528.8	528.8	528.8	528.8	528.8
2.5°	528.0	528.8	524.3	528.0	529.5
5°	525.1	525.8	518.4	518.4	517.6
7.5°	521.3	519.8	507.9	503.5	502.0
10°	516.9	511.7	494.5	485.6	482.6
12.5°	509.4	501.2	478.1	465.5	460.3
15°	499.7	487.1	458.8	443.1	435.7
17.5°	487.8	472.2	438.7	418.6	410.4
20°	473.7	452.8	417.1	391.7	384.3
22.5°	460.3	434.2	393.2	364.2	356.0
25°	444.6	412.6	367.2	336.6	326.2
27.5°	426.0	391.7	341.1	309.8	299.4
30°	407.4	369.4	314.3	281.5	268.9
32.5°	388.0	346.3	289.7	252.5	240.6
35°	368.7	322.5	262.9	222.7	210.0
37.5°	347.8	298.7	236.1	194.4	180.2
40°	327.0	275.6	209.3	166.8	149.0
42.5°	305.4	251.7	183.2	138.5	120.7
45°	282.3	227.2	157.9	110.2	92.4
47.5°	259.2	204.1	132.6	82.7	66.3
50°	234.6	179.5	108.7	60.3	52.1
52.5°	210.0	155.7	84.9	46.9	44.7
55°	184.0	131.1	64.0	40.2	39.5
57.5°	157.1	108.7	46.2	35.0	33.5
60°	132.6	87.9	34.3	29.8	28.3
62.5°	107.2	66.3	28.3	24.6	23.1
65°	81.2	48.4	22.3	19.4	19.4
67.5°	58.8	32.8	17.9	15.6	14.9
70°	35.7	20.1	13.4	12.7	11.9
72.5°	17.9	11.9	10.4	9.7	9.7
75°	6.0	7.4	7.4	8.2	8.2
77.5°	4.5	5.2	5.2	6.0	6.0
80°	3.0	3.7	3.7	4.5	4.5
82.5°	2.2	2.2	3.0	3.0	3.7
85°	1.5	1.5	1.5	2.2	2.2
87.5°	0.7	0.7	0.7	1.5	1.5
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	14.38	15.72	14.75	16.03	16.35	5.93	7.27	6.30	7.58	7.90
	3H	14.89	16.07	15.27	16.40	16.77	6.75	7.93	7.13	8.26	8.63
	4H	14.86	15.96	15.26	16.31	16.69	7.03	8.13	7.44	8.48	8.87
	6H	14.79	15.80	15.21	16.17	16.57	7.21	8.22	7.62	8.59	8.98
	8H	14.76	15.71	15.19	16.10	16.51	7.27	8.23	7.70	8.62	9.02
	12H	14.72	15.63	15.15	16.01	16.44	7.32	8.23	7.75	8.61	9.04
4H	2H	14.23	15.32	14.63	15.67	16.06	6.37	7.47	6.78	7.82	8.21
	3H	14.78	15.67	15.19	16.08	16.48	7.34	8.23	7.75	8.64	9.04
	4H	14.75	15.54	15.18	15.96	16.41	7.70	8.50	8.14	8.92	9.36
	6H	14.70	15.38	15.16	15.83	16.29	7.96	8.64	8.42	9.09	9.56
	8H	14.65	15.29	15.12	15.74	16.21	8.05	8.69	8.52	9.13	9.61
	12H	14.61	15.17	15.10	15.66	16.13	8.12	8.69	8.61	9.17	9.64
8H	4H	14.64	15.28	15.11	15.72	16.20	7.79	8.43	8.26	8.88	9.35
	6H	14.58	15.10	15.08	15.59	16.08	8.11	8.63	8.61	9.13	9.61
	8H	14.53	15.00	15.05	15.51	16.00	8.24	8.71	8.76	9.22	9.71
	12H	14.50	14.91	15.01	15.41	15.98	8.37	8.79	8.89	9.28	9.85
12H	4H	14.60	15.16	15.08	15.64	16.12	7.76	8.33	8.25	8.81	9.29
	6H	14.52	14.99	15.04	15.50	16.00	8.09	8.56	8.61	9.07	9.56
	8H	14.49	14.91	15.01	15.40	15.97	8.26	8.67	8.77	9.17	9.74