

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: P1060599

Luminaire Tested: S124RDRP-S795D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

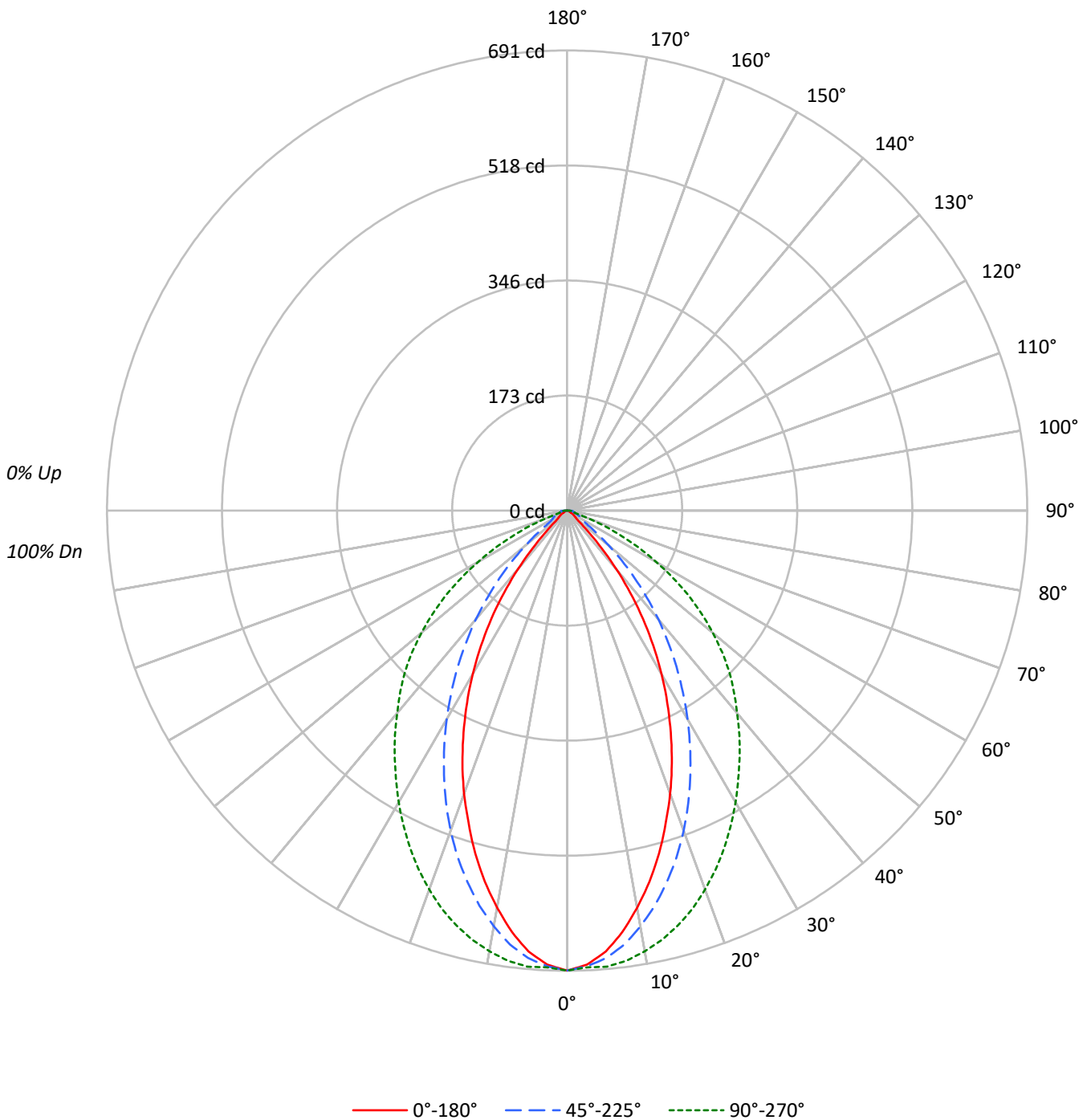
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 870.3 lumens  
Efficiency: N/A  
Efficacy: 33.7 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	5947	5947	5947
5°	5745	5830	5941
10°	5294	5542	5875
15°	4754	5152	5745
20°	4145	4686	5549
25°	3496	4159	5306
30°	2821	3594	5029
35°	2088	3008	4746
40°	1294	2397	4465
45°	513	1748	4205
50°	228	1097	3822
55°	183	572	3346
60°	126	432	2666
65°	84	430	1834
70°	81	388	856
75°	106	376	376
80°	159	441	441
85°	316	879	642

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4205 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.3	7.3
10°-20°	163.5	18.8
20°-30°	206.4	23.7
30°-40°	189.3	21.8
40°-50°	128.9	14.8
50°-60°	70.2	8.1
60°-70°	30.4	3.5
70°-80°	11.1	1.3
80°-90°	7.1	0.8
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°	433.2	49.8
0°-40°	622.5	71.5
0°-60°	821.7	94.4
0°-90°	870.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	870.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	665	674	674	682	687	62
15°	533	552	578	619	644	148
25°	368	394	438	507	558	168
35°	199	228	286	377	452	123
45°	42	70	144	254	345	39
55°	12	13	38	140	223	11
65°	4	6	21	44	90	5
75°	3	10	11	11	11	3
85°	3	7	9	9	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	690.6	690.6	690.6	690.6	690.6
2.5°	682.5	690.6	684.9	686.5	686.5
5°	664.6	673.5	674.4	681.7	687.3
7.5°	637.9	650.9	657.3	671.9	681.7
10°	605.5	620.9	633.8	659.0	671.9
12.5°	570.6	588.4	607.9	641.1	659.8
15°	533.3	552.0	577.9	619.2	644.4
17.5°	492.0	514.7	546.3	595.7	626.5
20°	452.3	475.0	511.4	567.4	605.5
22.5°	410.9	434.4	475.0	537.4	582.8
25°	368.0	393.9	437.7	507.4	558.5
27.5°	325.8	353.4	399.6	475.8	532.5
30°	283.7	311.2	361.5	443.4	505.8
32.5°	240.7	269.1	323.4	409.3	478.2
35°	198.6	227.8	286.1	376.9	451.5
37.5°	155.6	186.4	248.8	345.3	424.7
40°	115.1	145.9	213.2	313.7	397.2
42.5°	77.0	107.8	176.7	282.9	371.2
45°	42.1	70.5	143.5	254.5	345.3
47.5°	22.7	38.9	111.0	226.9	316.1
50°	17.0	21.1	81.9	197.8	285.3
52.5°	14.6	16.2	56.7	167.0	254.5
55°	12.2	13.0	38.1	140.2	222.9
57.5°	9.7	10.5	28.4	113.5	188.9
60°	7.3	8.9	25.1	87.5	154.8
62.5°	5.7	7.3	23.5	64.0	122.4
65°	4.1	5.7	21.1	43.8	90.0
67.5°	4.1	6.5	17.8	28.4	60.8
70°	3.2	8.9	15.4	18.6	34.0
72.5°	3.2	9.7	13.0	13.0	13.0
75°	3.2	10.5	11.3	11.3	11.3
77.5°	3.2	9.7	10.5	9.7	9.7
80°	3.2	8.9	8.9	8.9	8.9
82.5°	3.2	8.1	8.9	8.9	7.3
85°	3.2	7.3	8.9	8.9	6.5
87.5°	2.4	7.3	8.1	8.1	4.9
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	0.00	0.00	0.00	0.00	0.00	14.60	15.88	14.97	16.20	16.51
	3H	0.00	0.00	0.00	0.11	0.47	14.98	16.11	15.36	16.44	16.81
	4H	0.00	0.91	0.26	1.26	1.64	14.96	16.01	15.36	16.36	16.75
	6H	1.03	1.99	1.44	2.36	2.76	14.95	15.91	15.36	16.28	16.68
	8H	1.61	2.53	2.05	2.92	3.33	14.95	15.86	15.38	16.25	16.66
	12H	2.28	3.15	2.71	3.54	3.97	14.96	15.83	15.39	16.22	16.65
4H	2H	0.85	1.90	1.25	2.25	2.63	14.42	15.47	14.82	15.82	16.20
	3H	2.43	3.29	2.84	3.69	4.10	14.83	15.69	15.25	16.10	16.50
	4H	3.71	4.48	4.15	4.90	5.35	14.83	15.60	15.27	16.02	16.46
	6H	4.84	5.50	5.30	5.95	6.41	14.87	15.53	15.34	15.98	16.45
	8H	5.34	5.96	5.81	6.41	6.88	14.90	15.52	15.37	15.96	16.44
	12H	5.89	6.43	6.38	6.92	7.39	14.96	15.51	15.45	15.99	16.47
8H	4H	4.80	5.42	5.27	5.86	6.33	14.74	15.36	15.21	15.81	16.28
	6H	6.34	6.84	6.84	7.34	7.82	14.82	15.32	15.32	15.82	16.30
	8H	7.14	7.60	7.67	8.11	8.61	14.90	15.36	15.43	15.87	16.37
	12H	7.98	8.38	8.49	8.87	9.44	15.07	15.47	15.59	15.97	16.54
12H	4H	4.99	5.53	5.47	6.02	6.49	14.71	15.25	15.19	15.73	16.21
	6H	6.69	7.15	7.22	7.66	8.16	14.79	15.25	15.32	15.76	16.26
	8H	7.70	8.11	8.22	8.60	9.17	14.93	15.33	15.45	15.83	16.40