

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: P1060590

Luminaire Tested: S124RDRP-S795D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060590  
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-S795D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

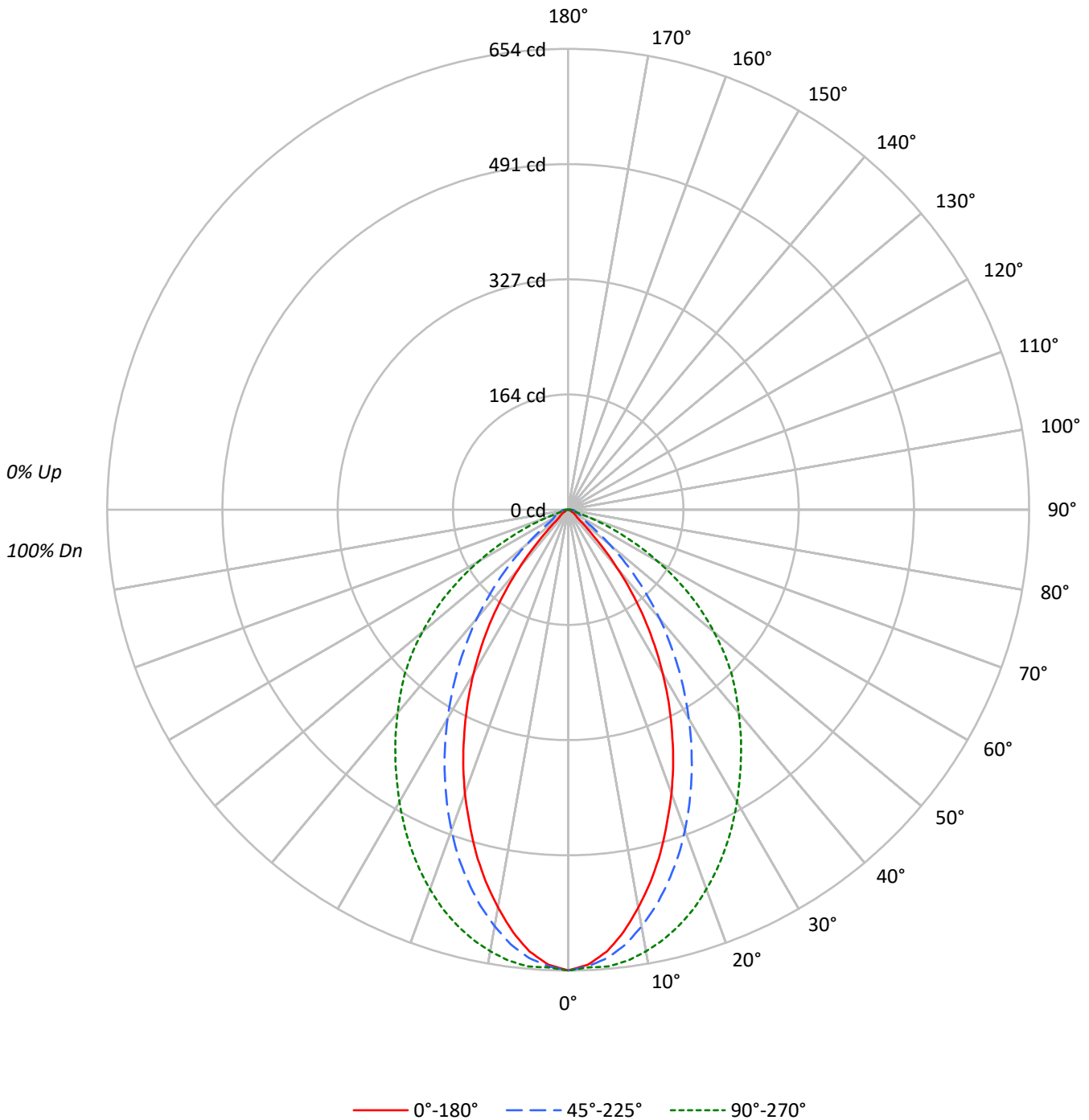
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 824.1 lumens  
Efficiency: N/A  
Efficacy: 31.9 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	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	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45					45			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39					39			

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

	0°	45°	90°
0°	5631	5631	5631
5°	5441	5520	5626
10°	5013	5248	5564
15°	4502	4878	5440
20°	3925	4438	5254
25°	3310	3938	5024
30°	2671	3404	4762
35°	1976	2848	4494
40°	1225	2270	4228
45°	486	1654	3982
50°	216	1038	3620
55°	173	542	3169
60°	119	410	2525
65°	77	408	1736
70°	78	368	811
75°	103	356	356
80°	154	417	417
85°	306	830	603

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3982 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.0	7.3
10°-20°	154.8	18.8
20°-30°	195.4	23.7
30°-40°	179.3	21.8
40°-50°	122.1	14.8
50°-60°	66.5	8.1
60°-70°	28.8	3.5
70°-80°	10.5	1.3
80°-90°	6.7	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°	410.2	49.8
0°-40°	589.5	71.5
0°-60°	778.1	94.4
0°-90°	824.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	824.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	654	654	654	654	654	
5°	629	638	639	646	651	58
15°	505	523	547	586	610	140
25°	348	373	414	480	529	159
35°	188	216	271	357	428	116
45°	40	67	136	241	327	37
55°	12	12	36	133	211	10
65°	4	5	20	41	85	4
75°	3	10	11	11	11	3
85°	3	7	8	8	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	653.9	653.9	653.9	653.9	653.9
2.5°	646.2	653.9	648.5	650.1	650.1
5°	629.4	637.8	638.6	645.5	650.8
7.5°	604.0	616.3	622.4	636.3	645.5
10°	573.3	587.9	600.2	624.0	636.3
12.5°	540.3	557.2	575.6	607.1	624.8
15°	505.0	522.7	547.2	586.4	610.2
17.5°	465.9	487.4	517.3	564.1	593.3
20°	428.3	449.8	484.3	537.3	573.3
22.5°	389.1	411.4	449.8	508.9	551.8
25°	348.4	373.0	414.5	480.5	528.8
27.5°	308.5	334.6	378.4	450.5	504.3
30°	268.6	294.7	342.3	419.8	478.9
32.5°	227.9	254.8	306.2	387.6	452.8
35°	188.0	215.7	270.9	356.9	427.5
37.5°	147.4	176.5	235.6	327.0	402.2
40°	109.0	138.2	201.9	297.0	376.1
42.5°	72.9	102.1	167.3	267.9	351.5
45°	39.9	66.8	135.8	241.0	327.0
47.5°	21.5	36.8	105.1	214.9	299.3
50°	16.1	20.0	77.5	187.3	270.2
52.5°	13.8	15.4	53.7	158.1	241.0
55°	11.5	12.3	36.1	132.8	211.1
57.5°	9.2	10.0	26.9	107.5	178.8
60°	6.9	8.4	23.8	82.9	146.6
62.5°	5.4	6.9	22.3	60.6	115.9
65°	3.8	5.4	20.0	41.4	85.2
67.5°	3.8	6.1	16.9	26.9	57.6
70°	3.1	8.4	14.6	17.7	32.2
72.5°	3.1	9.2	12.3	12.3	12.3
75°	3.1	10.0	10.7	10.7	10.7
77.5°	3.1	9.2	10.0	9.2	9.2
80°	3.1	8.4	8.4	8.4	8.4
82.5°	3.1	7.7	8.4	8.4	6.9
85°	3.1	6.9	8.4	8.4	6.1
87.5°	2.3	6.9	7.7	7.7	4.6
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	0.00	0.00	0.00	0.00	0.00	14.42	15.69	14.78	16.01	16.32
	3H	0.00	0.00	0.00	0.00	0.29	14.79	15.92	15.17	16.25	16.62
	4H	0.00	0.75	0.10	1.10	1.48	14.77	15.82	15.17	16.17	16.56
	6H	0.88	1.85	1.30	2.22	2.61	14.76	15.72	15.17	16.09	16.49
	8H	1.48	2.39	1.91	2.78	3.19	14.76	15.67	15.19	16.06	16.47
	12H	2.16	3.03	2.59	3.41	3.84	14.77	15.64	15.20	16.03	16.46
4H	2H	0.67	1.72	1.07	2.07	2.46	14.23	15.28	14.63	15.63	16.01
	3H	2.24	3.10	2.66	3.51	3.91	14.65	15.51	15.06	15.91	16.31
	4H	3.54	4.31	3.98	4.73	5.17	14.64	15.41	15.08	15.83	16.28
	6H	4.67	5.33	5.13	5.78	6.25	14.68	15.35	15.15	15.79	16.26
	8H	5.18	5.80	5.65	6.25	6.72	14.71	15.33	15.18	15.78	16.25
	12H	5.74	6.28	6.23	6.77	7.24	14.77	15.32	15.26	15.80	16.28
8H	4H	4.63	5.24	5.10	5.69	6.16	14.55	15.17	15.02	15.62	16.09
	6H	6.16	6.67	6.66	7.16	7.65	14.63	15.14	15.13	15.63	16.12
	8H	6.97	7.43	7.50	7.95	8.44	14.71	15.17	15.24	15.68	16.18
	12H	7.81	8.21	8.33	8.71	9.28	14.88	15.28	15.40	15.78	16.35
12H	4H	4.81	5.36	5.30	5.84	6.32	14.52	15.06	15.00	15.55	16.02
	6H	6.51	6.97	7.04	7.49	7.98	14.60	15.06	15.13	15.57	16.07
	8H	7.53	7.93	8.05	8.43	9.00	14.74	15.14	15.26	15.64	16.21