

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: P1060554

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060554  
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-S795D835-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, 80 CRI LEDS  
Ballast/Driver: -

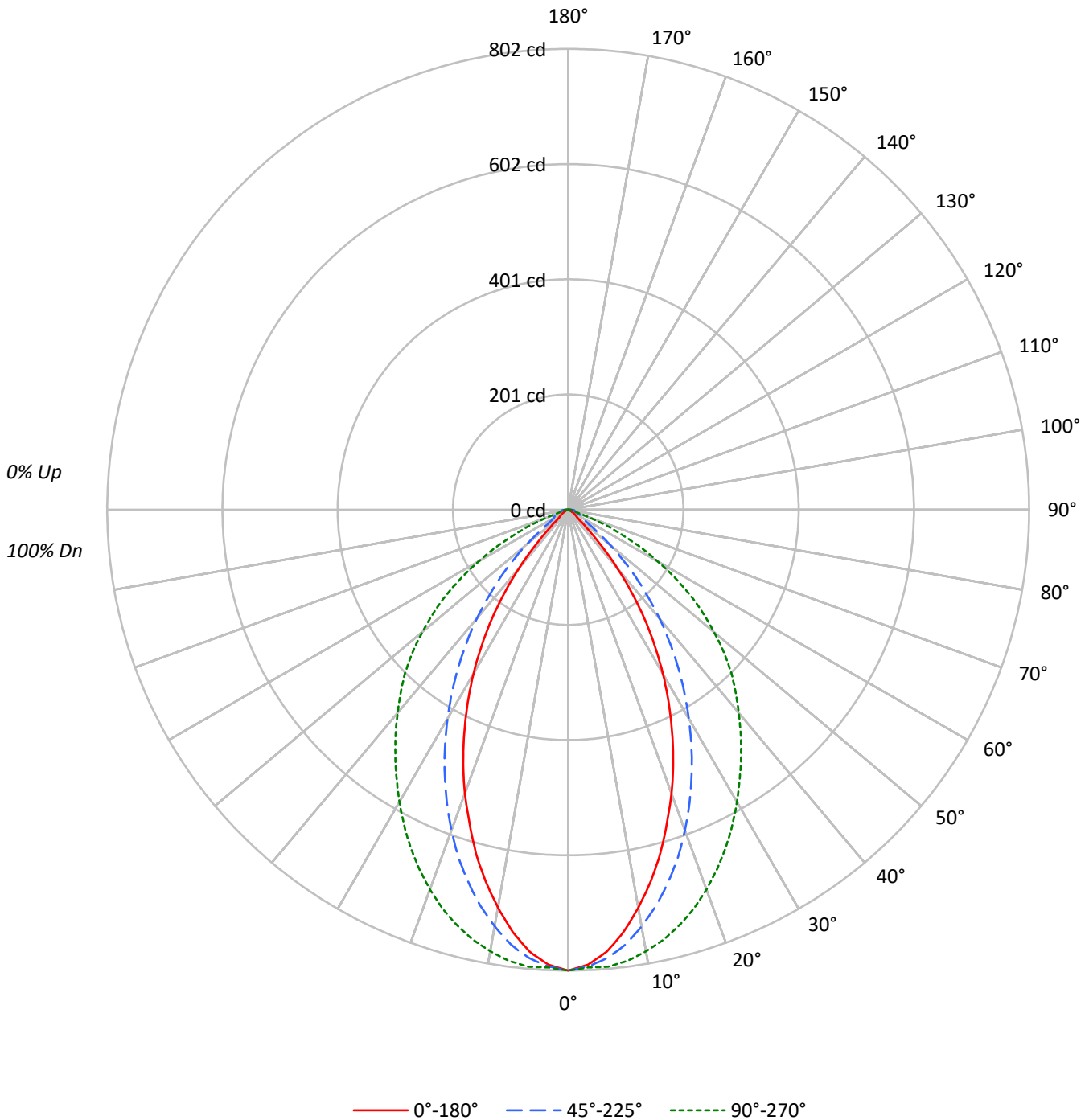
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1010.9 lumens  
Efficiency: N/A  
Efficacy: 39.2 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°	6907	6907	6907
5°	6672	6770	6901
10°	6149	6437	6824
15°	5522	5984	6672
20°	4814	5443	6444
25°	4061	4830	6163
30°	3276	4175	5841
35°	2424	3493	5512
40°	1503	2783	5185
45°	597	2029	4883
50°	265	1274	4440
55°	212	664	3887
60°	146	503	3097
65°	96	499	2129
70°	96	451	995
75°	126	439	439
80°	188	516	516
85°	375	1028	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4883 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	7.3
10°-20°	189.9	18.8
20°-30°	239.7	23.7
30°-40°	219.9	21.8
40°-50°	149.8	14.8
50°-60°	81.6	8.1
60°-70°	35.3	3.5
70°-80°	12.9	1.3
80°-90°	8.3	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°	503.1	49.8
0°-40°	723.0	71.5
0°-60°	954.4	94.4
0°-90°	1010.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	772	782	783	792	798	71
15°	619	641	671	719	748	172
25°	427	458	508	589	649	195
35°	231	264	332	438	524	142
45°	49	82	167	296	401	46
55°	14	15	44	163	259	13
65°	5	7	24	51	104	5
75°	4	12	13	13	13	4
85°	4	8	10	10	8	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	802.1	802.1	802.1	802.1	802.1
2.5°	792.6	802.1	795.5	797.3	797.3
5°	771.9	782.3	783.2	791.7	798.3
7.5°	740.9	755.9	763.5	780.4	791.7
10°	703.2	721.1	736.2	765.3	780.4
12.5°	662.7	683.4	706.0	744.6	766.3
15°	619.4	641.1	671.2	719.2	748.4
17.5°	571.4	597.8	634.5	691.9	727.7
20°	525.3	551.6	594.0	659.0	703.2
22.5°	477.3	504.6	551.6	624.1	676.9
25°	427.4	457.5	508.3	589.3	648.6
27.5°	378.4	410.4	464.1	552.6	618.5
30°	329.5	361.5	419.9	514.9	587.4
32.5°	279.6	312.5	375.6	475.4	555.4
35°	230.6	264.5	332.3	437.7	524.3
37.5°	180.7	216.5	289.0	401.0	493.3
40°	133.7	169.4	247.6	364.3	461.3
42.5°	89.4	125.2	205.2	328.5	431.2
45°	49.0	81.9	166.6	295.6	401.0
47.5°	26.4	45.2	129.0	263.6	367.1
50°	19.8	24.5	95.1	229.7	331.4
52.5°	16.9	18.8	65.9	193.9	295.6
55°	14.1	15.1	44.2	162.9	258.9
57.5°	11.3	12.2	32.9	131.8	219.3
60°	8.5	10.4	29.2	101.7	179.8
62.5°	6.6	8.5	27.3	74.4	142.1
65°	4.7	6.6	24.5	50.8	104.5
67.5°	4.7	7.5	20.7	32.9	70.6
70°	3.8	10.4	17.9	21.7	39.5
72.5°	3.8	11.3	15.1	15.1	15.1
75°	3.8	12.2	13.2	13.2	13.2
77.5°	3.8	11.3	12.2	11.3	11.3
80°	3.8	10.4	10.4	10.4	10.4
82.5°	3.8	9.4	10.4	10.4	8.5
85°	3.8	8.5	10.4	10.4	7.5
87.5°	2.8	8.5	9.4	9.4	5.6
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	15.12	16.40	15.49	16.71	17.03
	3H	0.00	0.30	0.00	0.63	1.00	15.50	16.63	15.88	16.96	17.32
	4H	0.40	1.45	0.80	1.80	2.19	15.48	16.53	15.88	16.88	17.26
	6H	1.59	2.56	2.01	2.93	3.32	15.47	16.43	15.88	16.80	17.20
	8H	2.19	3.10	2.62	3.49	3.90	15.47	16.38	15.90	16.77	17.18
	12H	2.86	3.74	3.30	4.12	4.55	15.48	16.35	15.91	16.74	17.17
4H	2H	1.37	2.42	1.77	2.77	3.15	14.93	15.99	15.34	16.34	16.72
	3H	2.96	3.81	3.37	4.22	4.62	15.35	16.21	15.77	16.62	17.02
	4H	4.25	5.01	4.68	5.43	5.88	15.35	16.12	15.79	16.54	16.98
	6H	5.38	6.04	5.85	6.49	6.96	15.39	16.05	15.86	16.50	16.97
	8H	5.89	6.51	6.36	6.96	7.43	15.42	16.04	15.89	16.49	16.96
	12H	6.45	6.99	6.94	7.48	7.95	15.49	16.03	15.97	16.51	16.99
8H	4H	5.33	5.95	5.80	6.40	6.87	15.26	15.88	15.73	16.33	16.80
	6H	6.88	7.39	7.39	7.88	8.37	15.34	15.85	15.84	16.34	16.83
	8H	7.69	8.15	8.21	8.66	9.15	15.43	15.88	15.95	16.40	16.89
	12H	8.53	8.93	9.04	9.42	10.00	15.60	16.00	16.11	16.49	17.07
12H	4H	5.52	6.07	6.01	6.55	7.03	15.23	15.77	15.71	16.25	16.73
	6H	7.24	7.70	7.76	8.21	8.70	15.31	15.77	15.84	16.29	16.78
	8H	8.25	8.65	8.77	9.15	9.72	15.45	15.86	15.97	16.35	16.92