

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: P1060312

Luminaire Tested: S124RDRP-S1195D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060312  
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-S1195D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

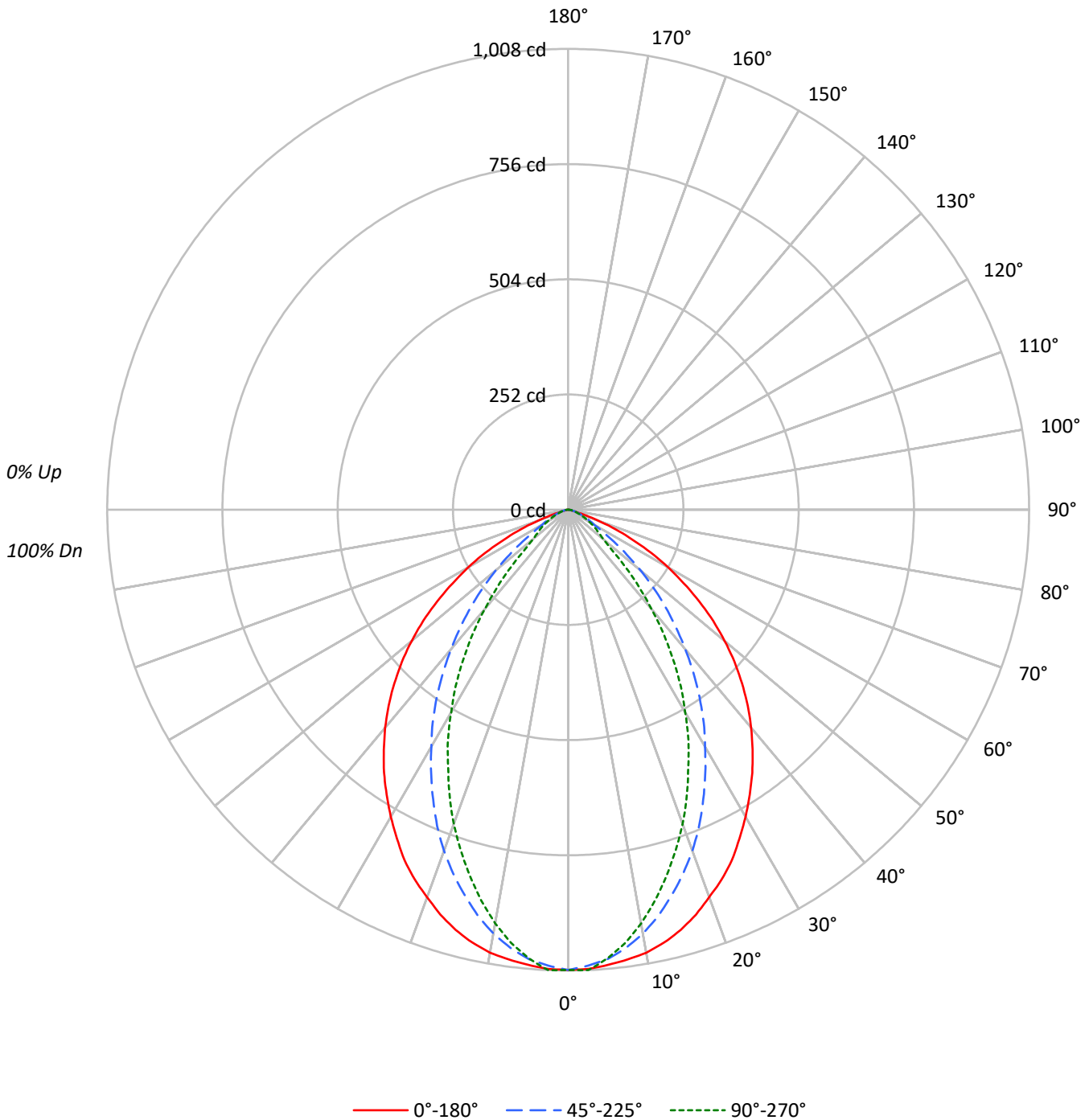
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1484.2 lumens  
Efficiency: N/A  
Efficacy: 35.5 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): 41.8  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38

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

	0°	45°	90°
0°	8669	8669	8669
5°	8641	8530	8518
10°	8604	8232	8034
15°	8482	7786	7395
20°	8264	7276	6704
25°	8043	6641	5900
30°	7712	5949	5090
35°	7379	5261	4203
40°	6998	4478	3188
45°	6544	3661	2141
50°	5983	2773	1330
55°	5258	1830	1127
60°	4347	1123	928
65°	3148	866	752
70°	1715	642	572
75°	376	472	519
80°	283	352	422
85°	277	277	425

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6544 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.3	6.3
10°-20°	247.7	16.7
20°-30°	328.2	22.1
30°-40°	325.7	21.9
40°-50°	250.6	16.9
50°-60°	149.4	10.1
60°-70°	67.9	4.6
70°-80°	17.6	1.2
80°-90°	3.9	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°	669.1	45.1
0°-40°	994.9	67.0
0°-60°	1394.9	94.0
0°-90°	1484.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1484.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1007	1007	1007	1007	1007	
5°	1000	1001	987	987	985	95
15°	951	927	873	844	830	268
25°	846	786	699	641	621	389
35°	702	614	500	424	400	438
45°	537	432	301	210	176	414
55°	350	250	122	77	75	312
65°	154	92	42	37	37	155
75°	11	14	14	16	16	24
85°	3	3	3	4	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1006.7	1006.7	1006.7	1006.7	1006.7
2.5°	1005.3	1006.7	998.2	1005.3	1008.1
5°	999.6	1001.0	986.8	986.8	985.4
7.5°	992.5	989.7	967.0	958.5	955.7
10°	984.0	974.1	941.5	924.5	918.8
12.5°	969.8	954.2	910.3	886.2	876.3
15°	951.4	927.3	873.4	843.6	829.5
17.5°	928.7	898.9	835.1	796.9	781.3
20°	901.8	862.1	794.0	745.8	731.6
22.5°	876.3	826.6	748.6	693.3	677.7
25°	846.5	785.5	699.0	640.9	621.0
27.5°	811.0	745.8	649.4	589.8	570.0
30°	775.6	703.3	598.3	536.0	511.9
32.5°	738.7	659.3	551.6	480.7	458.0
35°	701.9	613.9	500.5	423.9	399.8
37.5°	662.2	568.6	449.5	370.1	343.1
40°	622.5	524.6	398.4	317.6	283.6
42.5°	581.3	479.2	348.8	263.7	229.7
45°	537.4	432.5	300.6	209.8	175.8
47.5°	493.4	388.5	252.4	157.4	126.2
50°	446.6	341.7	207.0	114.8	99.3
52.5°	399.8	296.3	161.6	89.3	85.1
55°	350.2	249.5	121.9	76.6	75.1
57.5°	299.2	207.0	87.9	66.6	63.8
60°	252.4	167.3	65.2	56.7	53.9
62.5°	204.2	126.2	53.9	46.8	44.0
65°	154.5	92.2	42.5	36.9	36.9
67.5°	112.0	62.4	34.0	29.8	28.4
70°	68.1	38.3	25.5	24.1	22.7
72.5°	34.0	22.7	19.9	18.4	18.4
75°	11.3	14.2	14.2	15.6	15.6
77.5°	8.5	9.9	9.9	11.3	11.3
80°	5.7	7.1	7.1	8.5	8.5
82.5°	4.3	4.3	5.7	5.7	7.1
85°	2.8	2.8	2.8	4.3	4.3
87.5°	1.4	1.4	1.4	2.8	2.8
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	16.62	17.96	16.99	18.27	18.58	8.17	9.50	8.53	9.82	10.13
	3H	17.13	18.31	17.51	18.64	19.01	8.99	10.17	9.37	10.50	10.86
	4H	17.10	18.20	17.50	18.55	18.93	9.27	10.37	9.67	10.72	11.10
	6H	17.03	18.04	17.45	18.41	18.80	9.44	10.45	9.85	10.82	11.21
	8H	16.99	17.95	17.43	18.34	18.74	9.51	10.46	9.94	10.85	11.26
	12H	16.96	17.87	17.39	18.25	18.68	9.55	10.46	9.98	10.85	11.28
4H	2H	16.46	17.56	16.87	17.91	18.30	8.61	9.71	9.01	10.06	10.44
	3H	17.02	17.91	17.43	18.32	18.72	9.58	10.47	9.99	10.87	11.28
	4H	16.99	17.78	17.42	18.20	18.65	9.94	10.74	10.37	11.16	11.60
	6H	16.93	17.62	17.40	18.07	18.53	10.19	10.87	10.65	11.32	11.79
	8H	16.89	17.53	17.36	17.98	18.45	10.28	10.92	10.75	11.37	11.84
	12H	16.85	17.41	17.34	17.90	18.37	10.36	10.92	10.84	11.40	11.88
8H	4H	16.88	17.52	17.35	17.96	18.43	10.03	10.67	10.50	11.11	11.59
	6H	16.82	17.34	17.32	17.83	18.32	10.34	10.86	10.84	11.36	11.84
	8H	16.77	17.24	17.29	17.75	18.24	10.47	10.94	10.99	11.45	11.95
	12H	16.74	17.15	17.25	17.65	18.22	10.61	11.02	11.12	11.52	12.09
12H	4H	16.83	17.40	17.32	17.88	18.36	10.00	10.57	10.49	11.05	11.52
	6H	16.76	17.23	17.28	17.74	18.24	10.32	10.79	10.84	11.30	11.79
	8H	16.73	17.15	17.25	17.64	18.21	10.49	10.90	11.00	11.40	11.97