

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: P1058116

Luminaire Tested: S122RDRP-S865D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

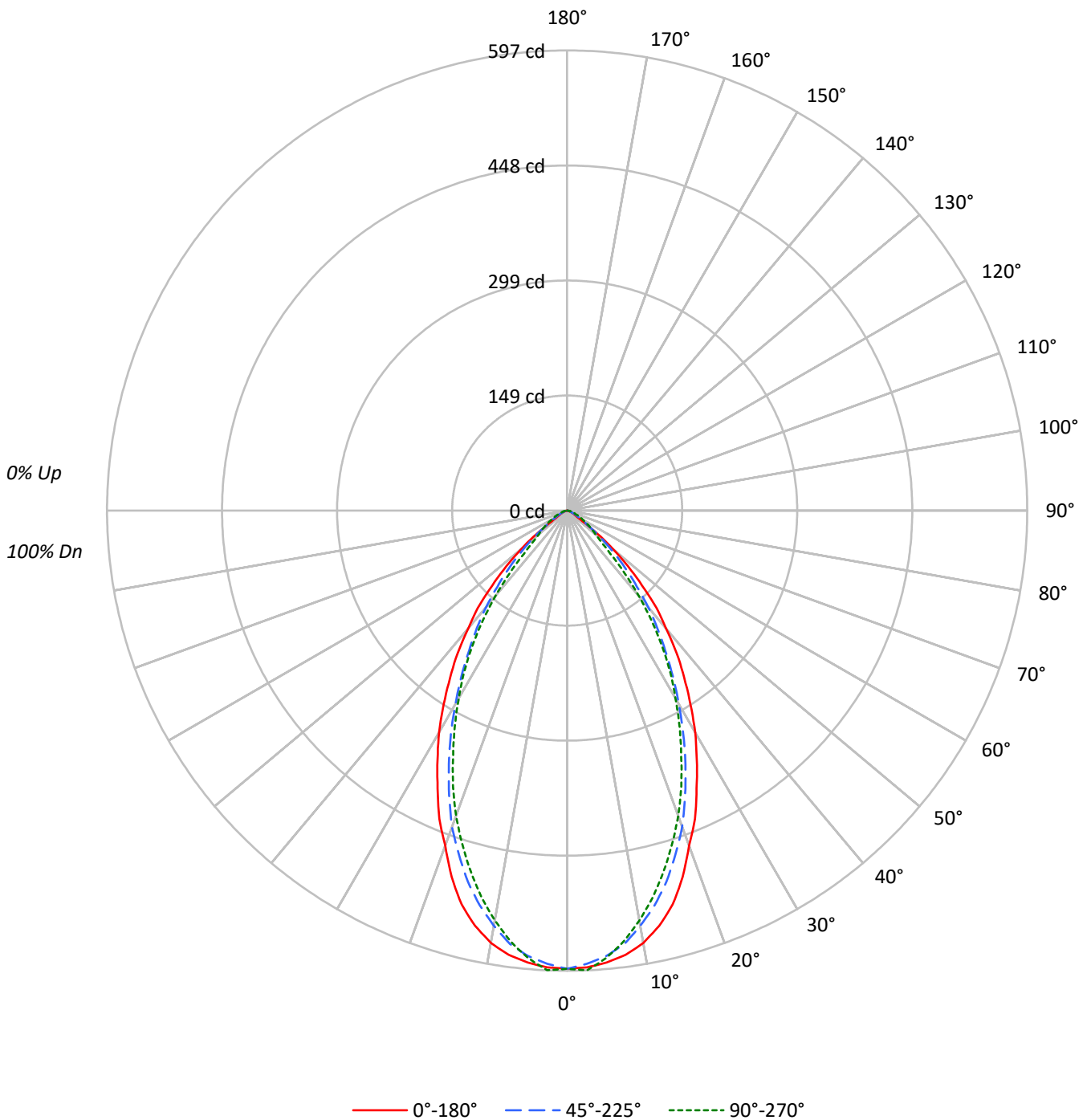
Lumens per Lamp: N/A
Luminaire Lumens: 639.3 lumens
Efficiency: N/A
Efficacy: 18.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10968	10968	10968
5°	10901	10747	10791
10°	10671	10249	10114
15°	10110	9519	9248
20°	9086	8573	8271
25°	8093	7393	7126
30°	7078	6168	5992
35°	5960	4999	4836
40°	4801	3943	3486
45°	3591	2850	2075
50°	2248	1840	1364
55°	762	991	1107
60°	439	613	875
65°	310	415	672
70°	254	318	513
75°	171	257	421
80°	128	255	383
85°	0	0	254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3591 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	8.6
10°-20°	140.3	21.9
20°-30°	168.9	26.4
30°-40°	144.3	22.6
40°-50°	84.5	13.2
50°-60°	30.6	4.8
60°-70°	10.9	1.7
70°-80°	4.3	0.7
80°-90°	0.8	0.1
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°	363.9	56.9
0°-40°	508.2	79.5
0°-60°	623.3	97.5
0°-90°	639.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	588	590	580	583	583	56
15°	529	521	498	489	484	147
25°	398	381	363	357	350	182
35°	265	244	222	220	215	165
45°	138	123	109	91	80	106
55°	24	33	31	32	34	29
65°	7	8	10	13	15	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	594.4	594.4	594.4	594.4	594.4
2.5°	593.2	594.4	588.5	594.4	596.8
5°	588.5	589.7	580.2	582.6	582.6
7.5°	581.4	580.2	567.1	564.8	563.6
10°	569.5	565.9	547.0	543.4	539.8
12.5°	551.7	544.6	524.4	518.5	513.7
15°	529.2	520.9	498.3	488.8	484.1
17.5°	498.3	488.8	467.5	458.0	453.2
20°	462.7	453.2	436.6	425.9	421.2
22.5°	433.1	417.6	399.8	392.7	386.8
25°	397.5	380.9	363.1	357.1	350.0
27.5°	364.2	344.1	326.3	321.5	315.6
30°	332.2	310.9	289.5	289.5	281.2
32.5°	297.8	277.6	255.1	253.9	249.2
35°	264.6	244.4	221.9	219.5	214.7
37.5°	233.7	213.6	192.2	185.1	179.2
40°	199.3	181.5	163.7	151.9	144.7
42.5°	172.0	151.9	134.1	119.8	110.3
45°	137.6	123.4	109.2	91.4	79.5
47.5°	106.8	97.3	85.4	65.3	59.3
50°	78.3	73.6	64.1	48.6	47.5
52.5°	49.8	52.2	46.3	38.0	41.5
55°	23.7	33.2	30.8	32.0	34.4
57.5°	15.4	16.6	22.5	26.1	28.5
60°	11.9	11.9	16.6	21.4	23.7
62.5°	9.5	9.5	13.1	17.8	19.0
65°	7.1	8.3	9.5	13.1	15.4
67.5°	5.9	5.9	7.1	10.7	11.9
70°	4.7	4.7	5.9	8.3	9.5
72.5°	3.6	3.6	4.7	7.1	7.1
75°	2.4	3.6	3.6	4.7	5.9
77.5°	2.4	2.4	2.4	3.6	4.7
80°	1.2	1.2	2.4	2.4	3.6
82.5°	1.2	1.2	1.2	1.2	2.4
85°	0.0	0.0	0.0	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.0
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	4.20	5.36	4.57	5.67	5.99	7.60	8.77	7.97	9.08	9.39
	3H	4.71	5.73	5.09	6.07	6.43	8.33	9.36	8.71	9.69	10.05
	4H	4.85	5.80	5.26	6.15	6.54	8.55	9.49	8.95	9.85	10.23
	6H	4.93	5.80	5.35	6.17	6.57	8.70	9.56	9.11	9.94	10.33
	8H	4.94	5.75	5.37	6.15	6.55	8.73	9.55	9.16	9.94	10.35
	12H	4.90	5.68	5.34	6.07	6.50	8.73	9.51	9.17	9.90	10.33
4H	2H	4.51	5.46	4.92	5.81	6.20	7.57	8.52	7.97	8.87	9.26
	3H	5.16	5.93	5.58	6.34	6.74	8.45	9.21	8.86	9.62	10.03
	4H	5.41	6.09	5.85	6.52	6.96	8.72	9.41	9.16	9.83	10.27
	6H	5.54	6.12	6.00	6.57	7.04	8.95	9.53	9.42	9.98	10.45
	8H	5.55	6.10	6.03	6.55	7.02	9.00	9.54	9.47	9.99	10.47
	12H	5.52	6.00	6.01	6.48	6.96	9.02	9.50	9.51	9.98	10.46
8H	4H	5.52	6.07	5.99	6.52	6.99	8.65	9.20	9.13	9.65	10.12
	6H	5.69	6.13	6.20	6.63	7.12	8.92	9.36	9.42	9.86	10.34
	8H	5.74	6.14	6.27	6.66	7.15	8.98	9.38	9.51	9.90	10.39
	12H	5.72	6.07	6.24	6.56	7.14	9.04	9.39	9.56	9.89	10.46
12H	4H	5.51	5.98	6.00	6.47	6.95	8.61	9.08	9.10	9.57	10.05
	6H	5.69	6.09	6.22	6.61	7.10	8.87	9.26	9.40	9.78	10.28
	8H	5.77	6.12	6.29	6.61	7.19	8.96	9.30	9.47	9.80	10.38