

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: P1058125

Luminaire Tested: S122RDRP-S865D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058125
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-S865D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

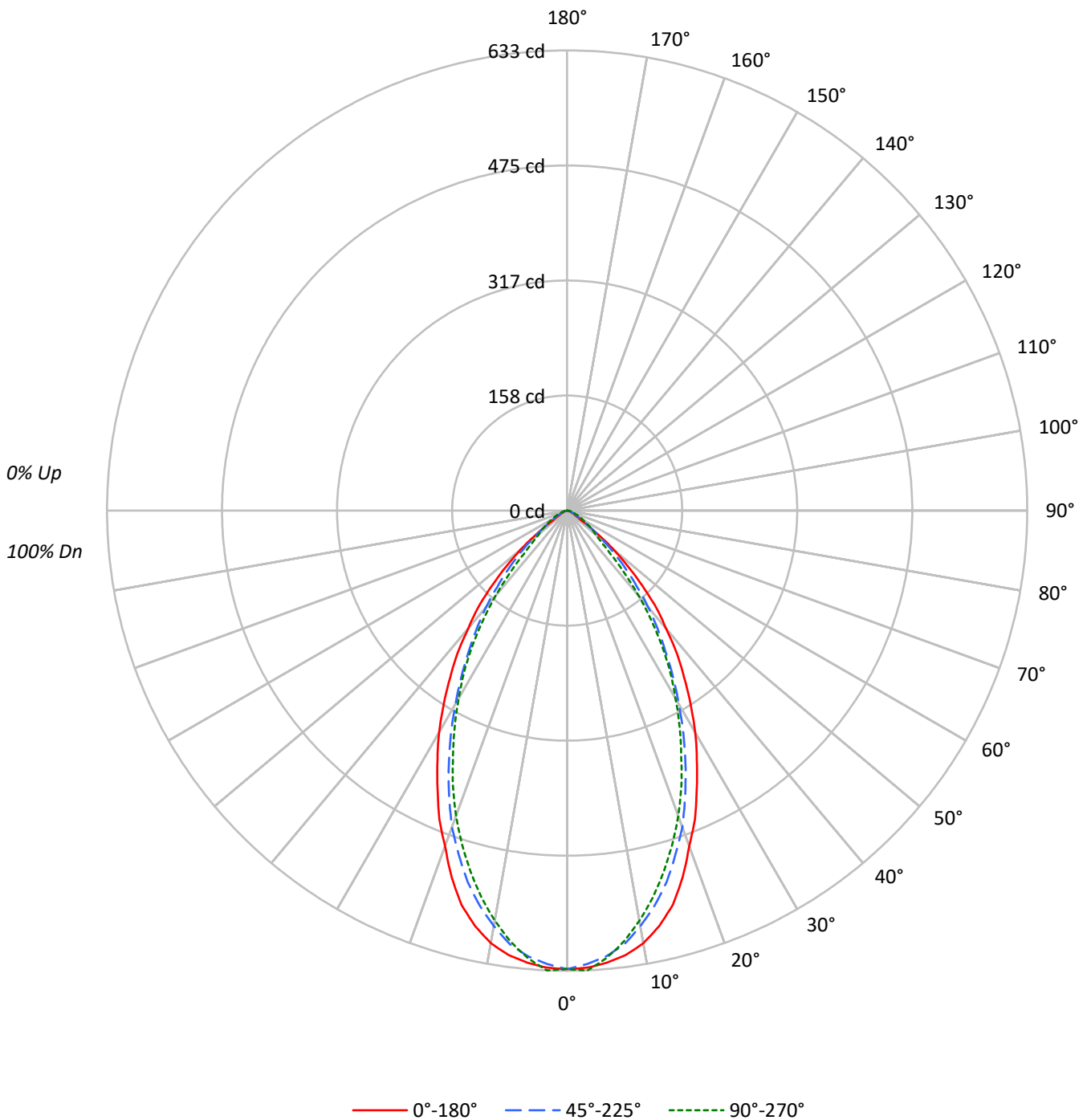
Lumens per Lamp: N/A
Luminaire Lumens: 678.3 lumens
Efficiency: N/A
Efficacy: 19.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11638	11638	11638
5°	11566	11401	11449
10°	11321	10873	10731
15°	10725	10100	9812
20°	9640	9096	8776
25°	8586	7843	7560
30°	7511	6543	6356
35°	6323	5303	5131
40°	5095	4184	3700
45°	3810	3022	2200
50°	2386	1952	1447
55°	811	1052	1174
60°	465	650	930
65°	332	441	716
70°	270	340	545
75°	178	271	449
80°	138	266	404
85°	0	0	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3810 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	8.6
10°-20°	148.8	21.9
20°-30°	179.2	26.4
30°-40°	153.1	22.6
40°-50°	89.7	13.2
50°-60°	32.5	4.8
60°-70°	11.5	1.7
70°-80°	4.6	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°	386.1	56.9
0°-40°	539.2	79.5
0°-60°	661.3	97.5
0°-90°	678.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	678.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	631	631	631	631	631	
5°	624	626	616	618	618	59
15°	561	553	529	519	514	156
25°	422	404	385	379	371	194
35°	281	259	235	233	228	175
45°	146	131	116	97	84	113
55°	25	35	33	34	36	31
65°	8	9	10	14	16	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	630.7	630.7	630.7	630.7	630.7
2.5°	629.4	630.7	624.4	630.7	633.2
5°	624.4	625.6	615.5	618.1	618.1
7.5°	616.8	615.5	601.7	599.2	597.9
10°	604.2	600.4	580.3	576.5	572.7
12.5°	585.3	577.8	556.4	550.1	545.1
15°	561.4	552.6	528.7	518.6	513.6
17.5°	528.7	518.6	496.0	485.9	480.9
20°	490.9	480.9	463.2	451.9	446.9
22.5°	459.5	443.1	424.2	416.7	410.4
25°	421.7	404.1	385.2	378.9	371.3
27.5°	386.4	365.0	346.2	341.1	334.8
30°	352.5	329.8	307.1	307.1	298.3
32.5°	316.0	294.6	270.6	269.4	264.3
35°	280.7	259.3	235.4	232.9	227.8
37.5°	248.0	226.6	203.9	196.4	190.1
40°	211.5	192.6	173.7	161.1	153.6
42.5°	182.5	161.1	142.2	127.1	117.1
45°	146.0	130.9	115.8	96.9	84.3
47.5°	113.3	103.2	90.6	69.2	62.9
50°	83.1	78.0	68.0	51.6	50.4
52.5°	52.9	55.4	49.1	40.3	44.1
55°	25.2	35.2	32.7	34.0	36.5
57.5°	16.4	17.6	23.9	27.7	30.2
60°	12.6	12.6	17.6	22.7	25.2
62.5°	10.1	10.1	13.8	18.9	20.1
65°	7.6	8.8	10.1	13.8	16.4
67.5°	6.3	6.3	7.6	11.3	12.6
70°	5.0	5.0	6.3	8.8	10.1
72.5°	3.8	3.8	5.0	7.6	7.6
75°	2.5	3.8	3.8	5.0	6.3
77.5°	2.5	2.5	2.5	3.8	5.0
80°	1.3	1.3	2.5	2.5	3.8
82.5°	1.3	1.3	1.3	1.3	2.5
85°	0.0	0.0	0.0	1.3	1.3
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	4.41	5.57	4.77	5.88	6.20	7.81	8.97	8.17	9.28	9.60
	3H	4.92	5.95	5.31	6.28	6.64	8.54	9.56	8.92	9.89	10.26
	4H	5.06	6.01	5.46	6.36	6.75	8.75	9.70	9.16	10.05	10.44
	6H	5.13	6.00	5.55	6.37	6.77	8.90	9.77	9.32	10.14	10.54
	8H	5.14	5.96	5.58	6.35	6.76	8.94	9.75	9.37	10.14	10.55
	12H	5.11	5.89	5.54	6.27	6.70	8.94	9.72	9.37	10.10	10.53
4H	2H	4.72	5.67	5.12	6.02	6.40	7.78	8.72	8.18	9.08	9.46
	3H	5.37	6.14	5.79	6.55	6.95	8.65	9.42	9.07	9.83	10.23
	4H	5.62	6.30	6.05	6.72	7.17	8.93	9.61	9.37	10.04	10.48
	6H	5.74	6.32	6.21	6.77	7.24	9.16	9.74	9.62	10.19	10.66
	8H	5.76	6.30	6.23	6.75	7.23	9.20	9.75	9.67	10.20	10.67
	12H	5.73	6.20	6.22	6.69	7.17	9.22	9.70	9.71	10.19	10.66
8H	4H	5.72	6.27	6.20	6.72	7.19	8.86	9.41	9.33	9.86	10.33
	6H	5.89	6.33	6.40	6.83	7.32	9.12	9.56	9.63	10.06	10.55
	8H	5.95	6.34	6.47	6.86	7.36	9.18	9.58	9.71	10.10	10.59
	12H	5.92	6.27	6.44	6.77	7.35	9.25	9.60	9.77	10.09	10.67
12H	4H	5.71	6.19	6.20	6.67	7.15	8.81	9.29	9.30	9.78	10.25
	6H	5.89	6.29	6.42	6.81	7.30	9.07	9.47	9.60	9.99	10.48
	8H	5.97	6.32	6.49	6.82	7.39	9.16	9.51	9.68	10.00	10.58