

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: P1058119

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058119  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D830-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

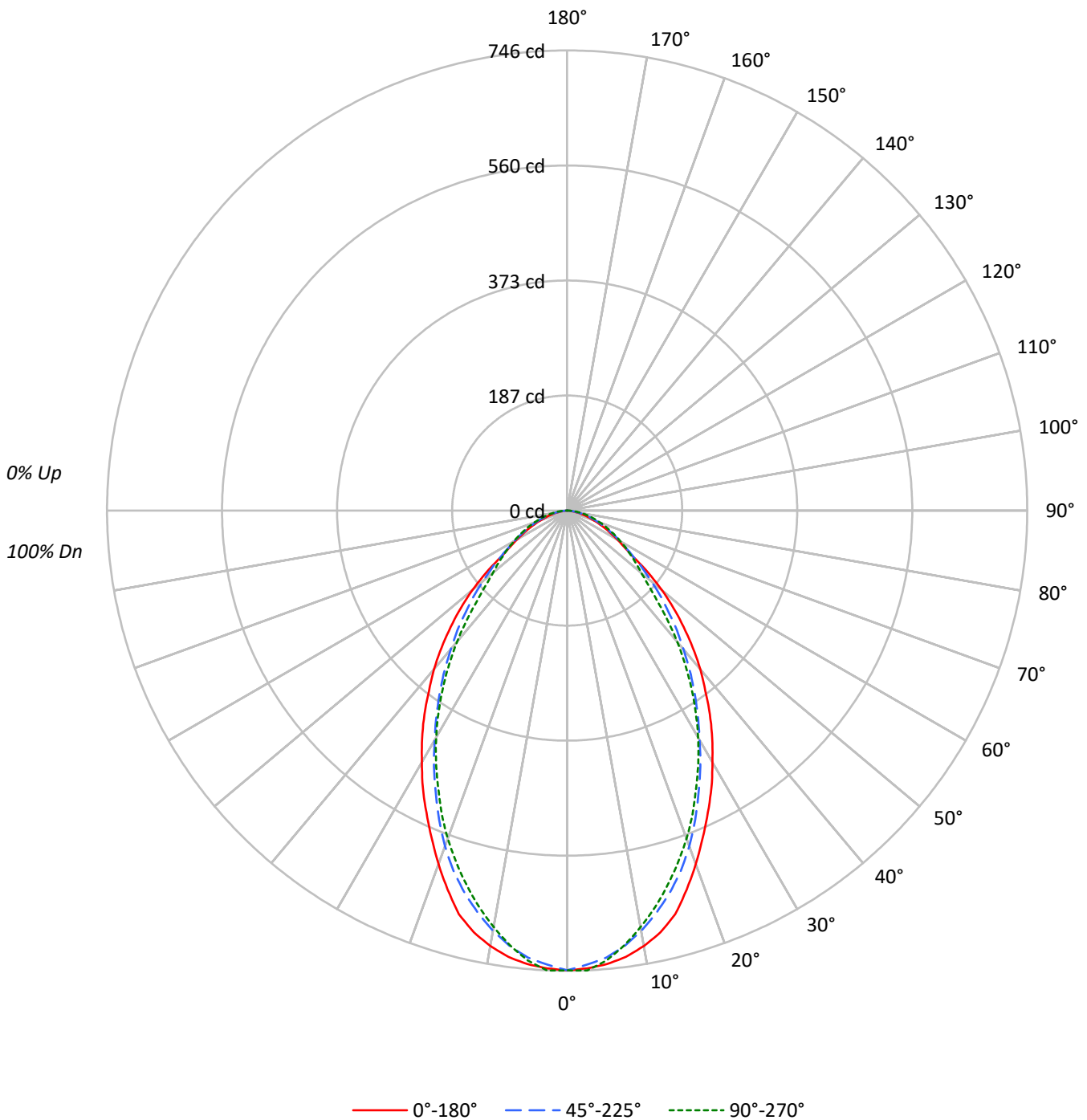
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1131.7 lumens  
Efficiency: N/A  
Efficacy: 32.3 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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<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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	13751	13751	13751
5°	13670	13474	13561
10°	13429	12962	12850
15°	12943	12262	12014
20°	11976	11370	11114
25°	10992	10268	10074
30°	10038	9151	9051
35°	9087	8098	7911
40°	8089	7060	6689
45°	6968	6070	5357
50°	5756	5110	4496
55°	4160	4237	4047
60°	3458	3635	3679
65°	2952	3161	3366
70°	2433	2816	3075
75°	2032	2367	2795
80°	1509	1891	2518
85°	508	995	2265

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6968 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.9	6.1
10°-20°	181.4	16.0
20°-30°	234.8	20.7
30°-40°	230.2	20.3
40°-50°	181.3	16.0
50°-60°	118.8	10.5
60°-70°	72.3	6.4
70°-80°	36.2	3.2
80°-90°	7.8	0.7
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°	485.0	42.9
0°-40°	715.3	63.2
0°-60°	1015.4	89.7
0°-90°	1131.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1131.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	738	738	727	732	732	70
15°	678	668	642	634	629	189
25°	540	522	504	502	495	248
35°	403	381	360	358	351	252
45°	267	250	233	216	205	206
55°	129	136	132	127	126	123
65°	68	69	72	76	77	67
75°	28	30	33	38	39	30
85°	2	4	5	8	11	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	745.2	745.2	745.2	745.2	745.2
2.5°	742.8	744.0	736.8	744.0	746.3
5°	738.0	738.0	727.4	732.1	732.1
7.5°	729.7	728.5	711.9	711.9	710.7
10°	716.7	711.9	691.8	688.2	685.8
12.5°	700.1	691.8	668.0	662.1	658.5
15°	677.5	668.0	641.9	633.6	628.9
17.5°	644.3	634.8	612.3	602.8	598.0
20°	609.9	595.6	579.0	570.7	566.0
22.5°	574.3	557.7	542.3	536.3	531.6
25°	539.9	522.1	504.3	501.9	494.8
27.5°	506.7	485.3	467.5	466.3	460.4
30°	471.1	448.5	429.5	430.7	424.8
32.5°	437.8	416.5	393.9	395.1	388.0
35°	403.4	380.9	359.5	358.3	351.2
37.5°	367.8	346.5	326.3	321.6	314.4
40°	335.8	314.4	293.1	284.8	277.7
42.5°	301.4	282.4	263.4	250.4	240.9
45°	267.0	250.4	232.6	216.0	205.3
47.5°	233.8	220.7	205.3	185.1	178.0
50°	200.5	191.0	178.0	160.2	156.6
52.5°	166.1	162.6	154.3	142.4	141.2
55°	129.3	136.5	131.7	127.0	125.8
57.5°	109.2	110.3	113.9	112.7	112.7
60°	93.7	93.7	98.5	99.7	99.7
62.5°	79.5	80.7	85.4	87.8	87.8
65°	67.6	68.8	72.4	75.9	77.1
67.5°	55.8	58.1	61.7	65.3	66.4
70°	45.1	47.5	52.2	55.8	57.0
72.5°	36.8	38.0	42.7	46.3	47.5
75°	28.5	29.7	33.2	38.0	39.2
77.5°	20.2	22.5	26.1	29.7	32.0
80°	14.2	15.4	17.8	22.5	23.7
82.5°	8.3	9.5	11.9	15.4	16.6
85°	2.4	3.6	4.7	8.3	10.7
87.5°	0.0	0.0	0.0	2.4	4.7
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	15.23	16.62	15.59	16.94	17.25	15.41	16.80	15.77	17.12	17.43
	3H	16.36	17.60	16.74	17.93	18.30	16.87	18.11	17.25	18.44	18.81
	4H	16.71	17.88	17.11	18.23	18.61	17.41	18.57	17.81	18.92	19.31
	6H	16.90	17.97	17.31	18.34	18.73	17.82	18.89	18.24	19.26	19.66
	8H	16.92	17.94	17.35	18.33	18.73	17.95	18.97	18.38	19.36	19.76
	12H	16.91	17.88	17.34	18.26	18.69	18.03	19.01	18.46	19.39	19.82
4H	2H	15.69	16.85	16.09	17.20	17.58	15.83	17.00	16.24	17.35	17.73
	3H	17.03	17.98	17.44	18.39	18.79	17.51	18.46	17.92	18.87	19.27
	4H	17.47	18.33	17.90	18.75	19.19	18.17	19.03	18.61	19.45	19.89
	6H	17.74	18.48	18.20	18.93	19.39	18.71	19.45	19.17	19.89	20.36
	8H	17.79	18.48	18.25	18.93	19.40	18.87	19.57	19.34	20.01	20.48
	12H	17.78	18.40	18.27	18.88	19.35	19.00	19.61	19.48	20.09	20.57
8H	4H	17.68	18.38	18.15	18.82	19.29	18.32	19.02	18.79	19.46	19.93
	6H	18.03	18.60	18.53	19.09	19.57	18.95	19.52	19.45	20.02	20.50
	8H	18.11	18.62	18.63	19.13	19.62	19.19	19.70	19.70	20.21	20.70
	12H	18.13	18.58	18.64	19.07	19.64	19.37	19.82	19.88	20.31	20.88
12H	4H	17.70	18.31	18.18	18.79	19.27	18.31	18.92	18.79	19.41	19.88
	6H	18.05	18.57	18.57	19.08	19.57	18.95	19.46	19.47	19.97	20.46
	8H	18.17	18.62	18.68	19.12	19.68	19.22	19.67	19.73	20.17	20.73