

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: P1058115

Luminaire Tested: S122RDRP-S865D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

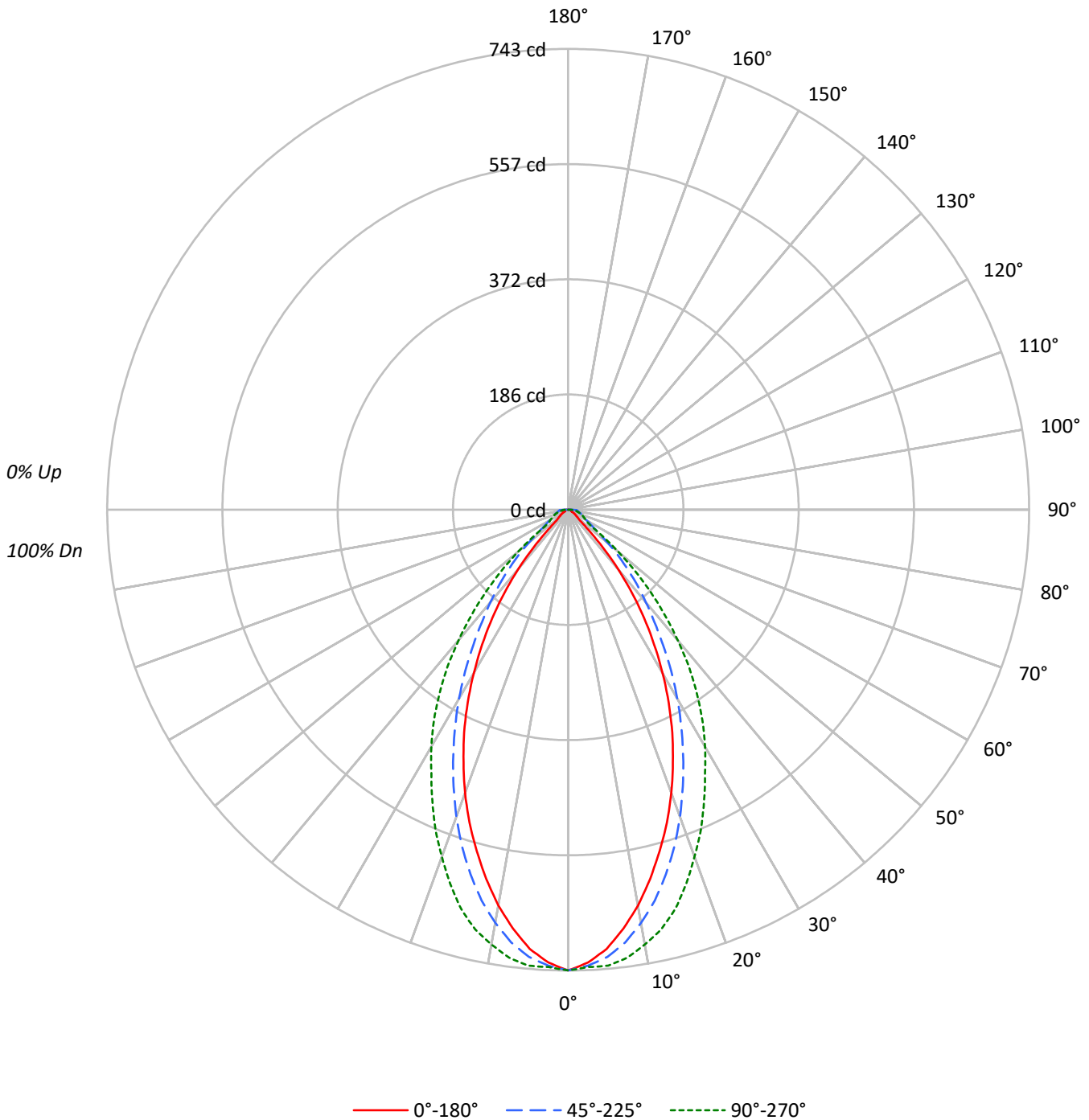
Lumens per Lamp: N/A
Luminaire Lumens: 808.5 lumens
Efficiency: N/A
Efficacy: 23.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92					90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83					81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75					74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69					67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58					56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46					45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13706	13706	13706
5°	13164	13407	13670
10°	12136	12670	13339
15°	10876	11624	12736
20°	9545	10339	11692
25°	8081	8928	10551
30°	6482	7496	9394
35°	4791	5997	8139
40°	3006	4695	6612
45°	1180	3536	4901
50°	580	2388	3003
55°	460	1567	1338
60°	351	1273	1229
65°	258	1192	1192
70°	318	1219	1219
75°	342	1355	1269
80°	510	1764	1392
85°	1016	3028	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5542 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	8.4
10°-20°	171.5	21.2
20°-30°	205.2	25.4
30°-40°	172.7	21.4
40°-50°	98.3	12.2
50°-60°	38.8	4.8
60°-70°	24.4	3.0
70°-80°	18.1	2.2
80°-90°	11.6	1.4
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°	444.5	55.0
0°-40°	617.2	76.3
0°-60°	754.4	93.3
0°-90°	808.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	711	726	724	732	738	66
15°	569	590	608	644	667	159
25°	397	415	438	484	518	181
35°	213	232	266	323	361	132
45°	45	80	136	170	188	43
55°	14	31	49	50	42	13
65°	6	27	27	26	27	7
75°	5	19	19	18	18	5
85°	5	13	14	13	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.8	742.8	742.8	742.8	742.8
2.5°	730.9	744.0	735.7	736.9	738.0
5°	710.7	726.2	723.8	732.1	738.0
7.5°	681.0	697.6	703.6	717.8	728.5
10°	647.7	666.7	676.2	698.8	711.9
12.5°	609.7	631.1	645.3	673.9	692.9
15°	569.3	589.5	608.5	644.1	666.7
17.5°	528.9	549.1	569.3	608.5	632.3
20°	486.1	505.1	526.5	568.1	595.4
22.5°	440.9	461.1	482.5	525.3	558.6
25°	396.9	414.8	438.5	483.7	518.2
27.5°	350.6	368.4	394.6	440.9	477.8
30°	304.2	322.1	351.8	399.3	440.9
32.5°	257.9	276.9	309.0	361.3	402.9
35°	212.7	231.8	266.2	323.3	361.3
37.5°	168.8	190.2	228.2	284.0	319.7
40°	124.8	149.7	194.9	244.8	274.5
42.5°	83.2	114.1	164.0	205.6	230.6
45°	45.2	79.6	135.5	170.0	187.8
47.5°	25.0	51.1	108.2	135.5	146.2
50°	20.2	35.7	83.2	103.4	104.6
52.5°	16.6	32.1	61.8	73.7	67.7
55°	14.3	30.9	48.7	49.9	41.6
57.5°	11.9	29.7	40.4	35.7	35.7
60°	9.5	29.7	34.5	32.1	33.3
62.5°	7.1	29.7	30.9	28.5	29.7
65°	5.9	27.3	27.3	26.1	27.3
67.5°	5.9	25.0	25.0	23.8	25.0
70°	5.9	23.8	22.6	22.6	22.6
72.5°	4.8	21.4	21.4	20.2	20.2
75°	4.8	19.0	19.0	17.8	17.8
77.5°	4.8	17.8	17.8	16.6	15.5
80°	4.8	15.5	16.6	15.5	13.1
82.5°	4.8	14.3	15.5	14.3	10.7
85°	4.8	13.1	14.3	13.1	9.5
87.5°	3.6	13.1	13.1	10.7	7.1
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	6.78	8.01	7.15	8.32	8.63	8.82	10.04	9.18	10.35	10.67
	3H	8.33	9.41	8.71	9.75	10.11	10.79	11.88	11.17	12.21	12.57
	4H	8.89	9.90	9.29	10.25	10.64	11.70	12.72	12.11	13.07	13.45
	6H	9.45	10.38	9.86	10.75	11.15	12.59	13.52	13.00	13.89	14.28
	8H	9.75	10.63	10.18	11.02	11.43	12.99	13.87	13.42	14.26	14.67
	12H	10.11	10.95	10.55	11.34	11.77	13.43	14.28	13.87	14.66	15.09
4H	2H	7.97	8.98	8.37	9.33	9.72	9.44	10.45	9.84	10.80	11.18
	3H	10.17	11.01	10.59	11.41	11.82	11.68	12.52	12.10	12.92	13.32
	4H	11.23	11.97	11.66	12.39	12.84	12.75	13.50	13.18	13.92	14.36
	6H	12.13	12.77	12.59	13.22	13.69	13.86	14.51	14.33	14.96	15.42
	8H	12.52	13.12	12.99	13.57	14.04	14.39	14.99	14.86	15.44	15.91
	12H	12.94	13.47	13.43	13.96	14.43	14.96	15.50	15.45	15.98	16.46
8H	4H	12.03	12.63	12.50	13.08	13.55	13.24	13.85	13.71	14.29	14.76
	6H	13.41	13.91	13.92	14.41	14.89	14.64	15.14	15.14	15.63	16.12
	8H	14.14	14.58	14.66	15.10	15.59	15.38	15.83	15.91	16.34	16.84
	12H	14.89	15.29	15.41	15.78	16.35	16.21	16.61	16.73	17.10	17.68
12H	4H	12.19	12.72	12.68	13.21	13.68	13.34	13.87	13.83	14.36	14.83
	6H	13.74	14.19	14.27	14.71	15.20	14.86	15.30	15.38	15.82	16.31
	8H	14.67	15.06	15.18	15.55	16.13	15.75	16.14	16.26	16.64	17.21