

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058521

Luminaire Tested: S122RDR-H865D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058521
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: S122RDR-H865D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

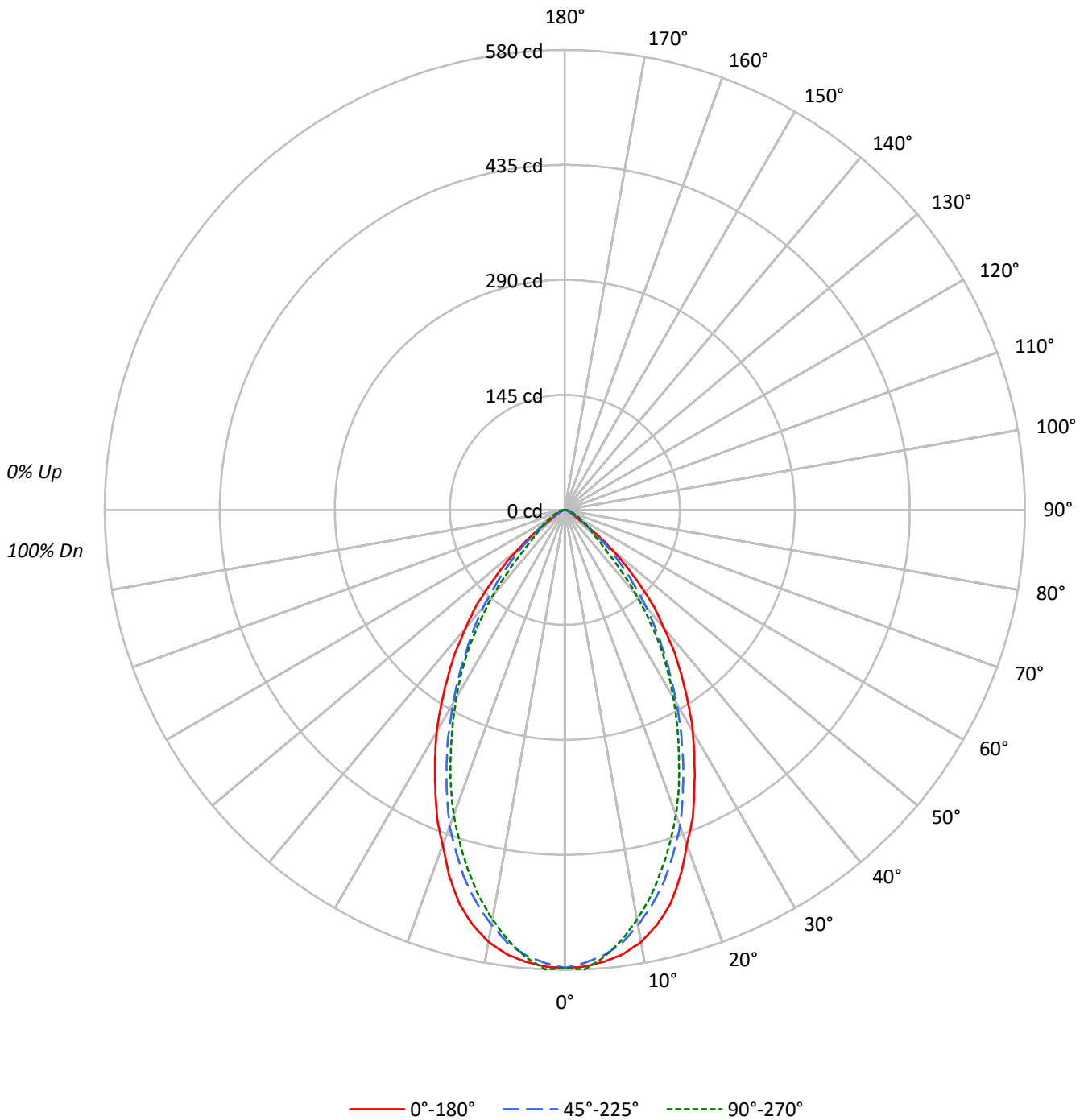
Lumens per Lamp: N/A
Luminaire Lumens: 621.3 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	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°	10660	10660	10660
5°	10593	10443	10486
10°	10369	9959	9829
15°	9823	9252	8986
20°	8831	8332	8037
25°	7865	7183	6924
30°	6878	5994	5823
35°	5792	4857	4701
40°	4666	3832	3389
45°	3492	2769	2017
50°	2185	1788	1323
55°	743	965	1075
60°	424	594	853
65°	301	402	655
70°	248	313	496
75°	164	250	414
80°	128	244	372
85°	0	0	254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3492 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	8.6
10°-20°	136.3	21.9
20°-30°	164.1	26.4
30°-40°	140.2	22.6
40°-50°	82.2	13.2
50°-60°	29.7	4.8
60°-70°	10.6	1.7
70°-80°	4.2	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°	353.7	56.9
0°-40°	493.9	79.5
0°-60°	605.8	97.5
0°-90°	621.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	572	573	564	566	566	54
15°	514	506	484	475	470	143
25°	386	370	353	347	340	177
35°	257	238	216	213	209	160
45°	134	120	106	89	77	103
55°	23	32	30	31	33	29
65°	7	8	9	13	15	7
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°	577.7	577.7	577.7	577.7	577.7
2.5°	576.5	577.7	571.9	577.7	580.0
5°	571.9	573.1	563.8	566.1	566.1
7.5°	565.0	563.8	551.1	548.8	547.7
10°	553.4	550.0	531.5	528.1	524.6
12.5°	536.2	529.2	509.6	503.9	499.3
15°	514.2	506.2	484.3	475.0	470.4
17.5°	484.3	475.0	454.3	445.1	440.5
20°	449.7	440.5	424.3	413.9	409.3
22.5°	420.9	405.9	388.6	381.6	375.9
25°	386.3	370.1	352.8	347.1	340.1
27.5°	354.0	334.4	317.1	312.5	306.7
30°	322.8	302.1	281.3	281.3	273.3
32.5°	289.4	269.8	247.9	246.7	242.1
35°	257.1	237.5	215.6	213.3	208.7
37.5°	227.1	207.5	186.8	179.9	174.1
40°	193.7	176.4	159.1	147.6	140.7
42.5°	167.2	147.6	130.3	116.5	107.2
45°	133.8	119.9	106.1	88.8	77.3
47.5°	103.8	94.5	83.0	63.4	57.7
50°	76.1	71.5	62.3	47.3	46.1
52.5°	48.4	50.7	45.0	36.9	40.4
55°	23.1	32.3	30.0	31.1	33.4
57.5°	15.0	16.1	21.9	25.4	27.7
60°	11.5	11.5	16.1	20.8	23.1
62.5°	9.2	9.2	12.7	17.3	18.4
65°	6.9	8.1	9.2	12.7	15.0
67.5°	5.8	5.8	6.9	10.4	11.5
70°	4.6	4.6	5.8	8.1	9.2
72.5°	3.5	3.5	4.6	6.9	6.9
75°	2.3	3.5	3.5	4.6	5.8
77.5°	2.3	2.3	2.3	3.5	4.6
80°	1.2	1.2	2.3	2.3	3.5
82.5°	1.2	1.2	1.2	1.2	2.3
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	4.09	5.25	4.46	5.57	5.88	7.51	8.67	7.88	8.99	9.30
	3H	4.62	5.64	5.00	5.97	6.34	8.24	9.26	8.62	9.59	9.96
	4H	4.75	5.70	5.16	6.05	6.44	8.45	9.40	8.86	9.75	10.14
	6H	4.83	5.70	5.25	6.07	6.47	8.61	9.47	9.02	9.85	10.24
	8H	4.84	5.66	5.27	6.05	6.46	8.64	9.46	9.07	9.85	10.25
	12H	4.81	5.59	5.24	5.97	6.40	8.64	9.42	9.07	9.80	10.23
4H	2H	4.40	5.35	4.80	5.70	6.09	7.48	8.42	7.88	8.78	9.16
	3H	5.07	5.83	5.48	6.24	6.65	8.35	9.12	8.76	9.52	9.93
	4H	5.31	6.00	5.75	6.42	6.86	8.63	9.31	9.07	9.74	10.18
	6H	5.44	6.02	5.90	6.47	6.94	8.86	9.44	9.32	9.89	10.36
	8H	5.46	6.00	5.93	6.45	6.93	8.90	9.45	9.38	9.90	10.37
	12H	5.43	5.90	5.91	6.39	6.87	8.93	9.41	9.42	9.89	10.37
8H	4H	5.42	5.97	5.89	6.42	6.89	8.56	9.11	9.03	9.56	10.03
	6H	5.59	6.03	6.10	6.54	7.02	8.82	9.26	9.33	9.77	10.25
	8H	5.65	6.04	6.18	6.56	7.06	8.89	9.28	9.42	9.80	10.30
	12H	5.63	5.97	6.15	6.47	7.05	8.95	9.30	9.47	9.80	10.37
12H	4H	5.41	5.88	5.90	6.37	6.85	8.51	8.99	9.00	9.48	9.95
	6H	5.59	5.99	6.12	6.51	7.00	8.77	9.17	9.30	9.69	10.18
	8H	5.68	6.02	6.19	6.52	7.10	8.86	9.21	9.38	9.71	10.28