

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: P1057846

Luminaire Tested: S122RDRP-S1005D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057846
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-S1005D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

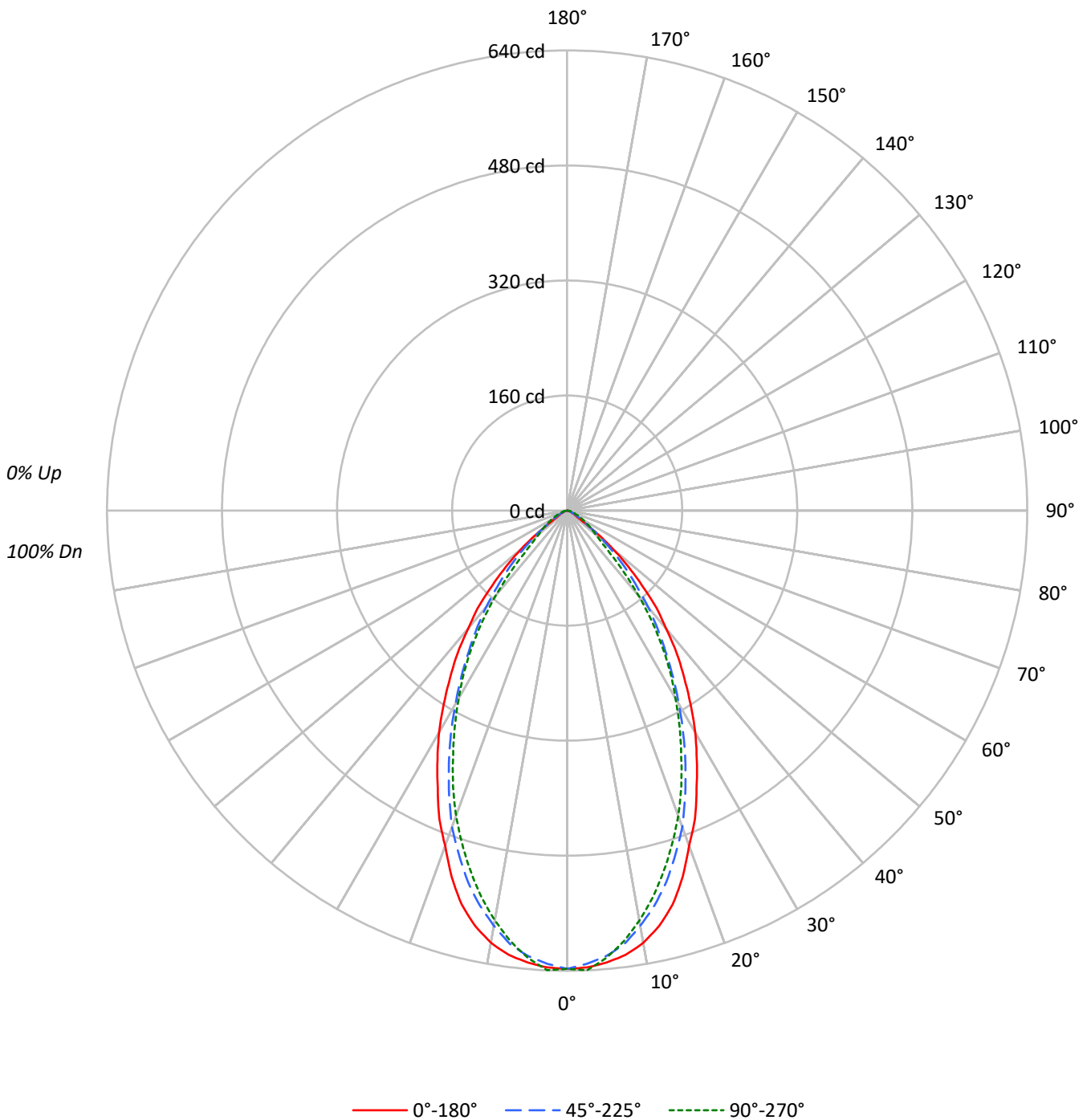
Lumens per Lamp: N/A
Luminaire Lumens: 685.4 lumens
Efficiency: N/A
Efficacy: 16.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	11760	11760	11760
5°	11686	11521	11568
10°	11439	10987	10843
15°	10837	10205	9915
20°	9742	9192	8866
25°	8675	7924	7639
30°	7587	6614	6424
35°	6388	5359	5186
40°	5148	4227	3738
45°	3849	3053	2223
50°	2409	1972	1461
55°	817	1065	1187
60°	469	657	937
65°	332	445	720
70°	275	345	550
75°	178	271	456
80°	138	266	404
85°	0	0	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3849 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	8.6
10°-20°	150.4	21.9
20°-30°	181.0	26.4
30°-40°	154.7	22.6
40°-50°	90.6	13.2
50°-60°	32.8	4.8
60°-70°	11.6	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°	390.1	56.9
0°-40°	544.8	79.5
0°-60°	668.2	97.5
0°-90°	685.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	631	632	622	624	624	60
15°	567	558	534	524	519	158
25°	426	408	389	383	375	196
35°	284	262	238	235	230	177
45°	148	132	117	98	85	114
55°	25	36	33	34	37	32
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°	637.3	637.3	637.3	637.3	637.3
2.5°	636.0	637.3	630.9	637.3	639.8
5°	630.9	632.2	622.0	624.5	624.5
7.5°	623.3	622.0	608.0	605.5	604.2
10°	610.5	606.7	586.4	582.6	578.7
12.5°	591.5	583.8	562.2	555.8	550.8
15°	567.3	558.4	534.2	524.0	519.0
17.5°	534.2	524.0	501.2	491.0	485.9
20°	496.1	485.9	468.1	456.6	451.5
22.5°	464.3	447.7	428.7	421.0	414.7
25°	426.1	408.3	389.2	382.9	375.2
27.5°	390.5	368.9	349.8	344.7	338.3
30°	356.1	333.3	310.4	310.4	301.5
32.5°	319.3	297.6	273.5	272.2	267.1
35°	283.6	262.0	237.9	235.3	230.2
37.5°	250.6	229.0	206.1	198.4	192.1
40°	213.7	194.6	175.5	162.8	155.2
42.5°	184.4	162.8	143.7	128.5	118.3
45°	147.5	132.3	117.0	97.9	85.2
47.5°	114.5	104.3	91.6	70.0	63.6
50°	83.9	78.9	68.7	52.2	50.9
52.5°	53.4	56.0	49.6	40.7	44.5
55°	25.4	35.6	33.1	34.3	36.9
57.5°	16.5	17.8	24.2	28.0	30.5
60°	12.7	12.7	17.8	22.9	25.4
62.5°	10.2	10.2	14.0	19.1	20.4
65°	7.6	8.9	10.2	14.0	16.5
67.5°	6.4	6.4	7.6	11.4	12.7
70°	5.1	5.1	6.4	8.9	10.2
72.5°	3.8	3.8	5.1	7.6	7.6
75°	2.5	3.8	3.8	5.1	6.4
77.5°	2.5	2.5	2.5	3.8	5.1
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	4.44	5.60	4.81	5.92	6.23	7.84	9.01	8.21	9.32	9.64
	3H	4.97	5.99	5.35	6.32	6.69	8.57	9.59	8.95	9.92	10.29
	4H	5.10	6.05	5.50	6.40	6.79	8.79	9.74	9.19	10.09	10.48
	6H	5.17	6.04	5.59	6.41	6.81	8.94	9.81	9.36	10.18	10.57
	8H	5.18	5.99	5.61	6.39	6.79	8.97	9.79	9.40	10.18	10.59
	12H	5.14	5.92	5.58	6.31	6.74	8.97	9.75	9.40	10.13	10.56
4H	2H	4.75	5.70	5.16	6.05	6.44	7.81	8.76	8.22	9.11	9.50
	3H	5.42	6.19	5.83	6.59	7.00	8.69	9.45	9.10	9.86	10.26
	4H	5.65	6.34	6.09	6.76	7.21	8.97	9.65	9.40	10.07	10.52
	6H	5.77	6.36	6.24	6.81	7.28	9.19	9.78	9.66	10.22	10.70
	8H	5.79	6.34	6.26	6.78	7.26	9.23	9.78	9.71	10.23	10.70
	12H	5.76	6.23	6.25	6.72	7.20	9.25	9.73	9.74	10.22	10.69
8H	4H	5.76	6.30	6.23	6.75	7.23	8.90	9.44	9.37	9.89	10.37
	6H	5.92	6.36	6.43	6.86	7.35	9.15	9.59	9.66	10.09	10.58
	8H	5.97	6.37	6.50	6.89	7.38	9.21	9.61	9.74	10.13	10.62
	12H	5.95	6.30	6.47	6.80	7.37	9.28	9.62	9.80	10.12	10.70
12H	4H	5.74	6.22	6.23	6.71	7.18	8.85	9.33	9.34	9.81	10.29
	6H	5.92	6.32	6.45	6.84	7.33	9.10	9.50	9.63	10.02	10.51
	8H	6.00	6.35	6.52	6.84	7.42	9.19	9.54	9.71	10.03	10.61