

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: P1058170

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058170
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-S865D935-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

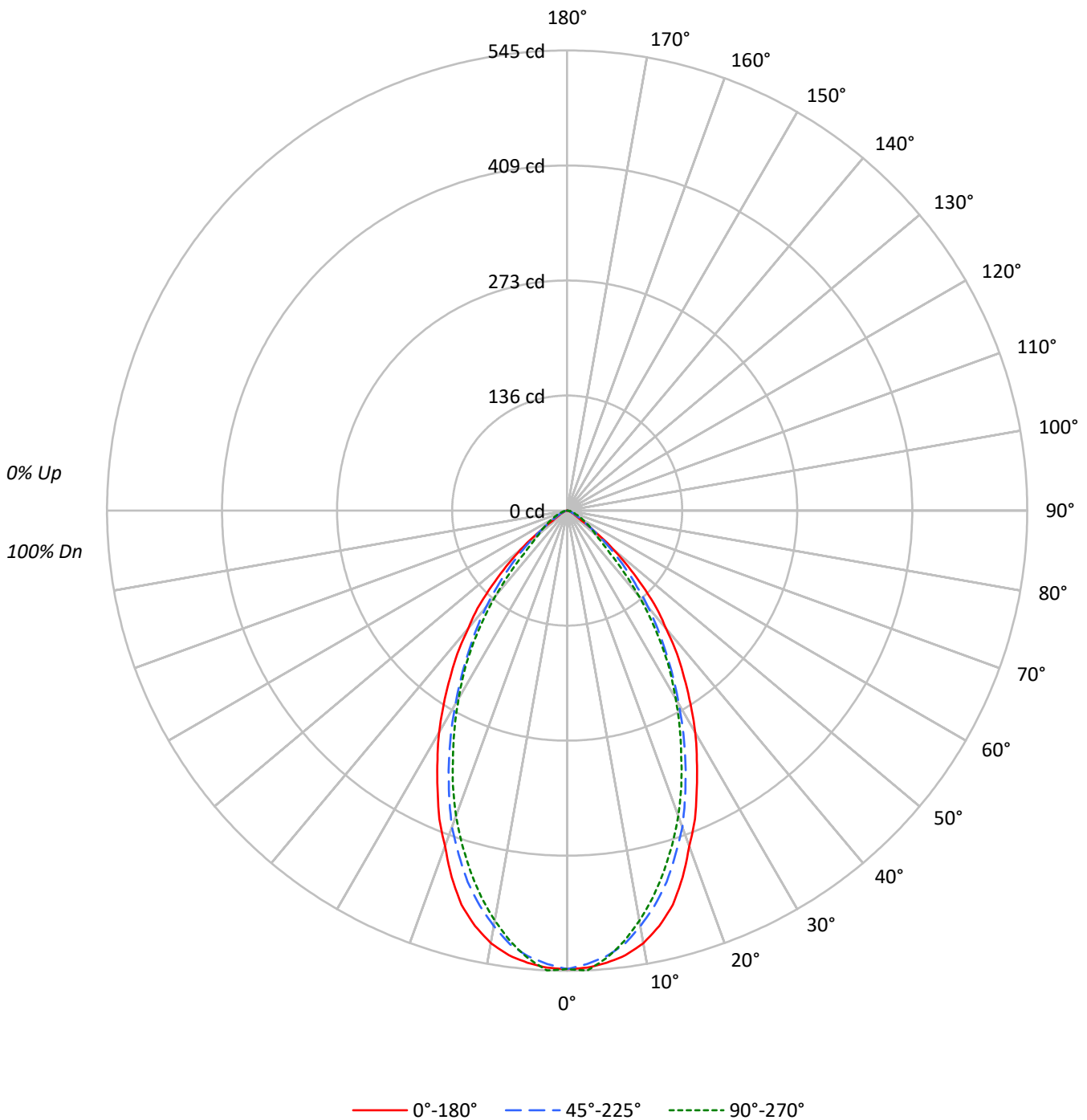
Lumens per Lamp: N/A
Luminaire Lumens: 584.0 lumens
Efficiency: N/A
Efficacy: 16.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	10020	10020	10020
5°	9958	9817	9858
10°	9747	9361	9239
15°	9235	8696	8448
20°	8300	7831	7556
25°	7393	6751	6509
30°	6467	5636	5474
35°	5445	4566	4420
40°	4386	3604	3184
45°	3280	2602	1895
50°	2053	1679	1246
55°	698	907	1010
60°	399	561	801
65°	284	380	616
70°	232	291	469
75°	157	235	385
80°	117	234	351
85°	0	0	233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3280 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	8.6
10°-20°	128.1	21.9
20°-30°	154.3	26.4
30°-40°	131.8	22.6
40°-50°	77.2	13.2
50°-60°	28.0	4.8
60°-70°	9.9	1.7
70°-80°	4.0	0.7
80°-90°	0.7	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°	332.4	56.9
0°-40°	464.2	79.5
0°-60°	569.4	97.5
0°-90°	584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	538	539	530	532	532	51
15°	483	476	455	446	442	134
25°	363	348	332	326	320	167
35°	242	223	203	200	196	151
45°	126	113	100	84	73	97
55°	22	30	28	29	31	27
65°	6	8	9	12	14	7
75°	2	3	3	4	5	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°	543.0	543.0	543.0	543.0	543.0
2.5°	541.9	543.0	537.6	543.0	545.2
5°	537.6	538.7	530.0	532.2	532.2
7.5°	531.1	530.0	518.1	515.9	514.8
10°	520.2	517.0	499.6	496.4	493.1
12.5°	504.0	497.5	479.0	473.6	469.3
15°	483.4	475.8	455.2	446.5	442.2
17.5°	455.2	446.5	427.0	418.4	414.0
20°	422.7	414.0	398.8	389.1	384.8
22.5°	395.6	381.5	365.2	358.7	353.3
25°	363.1	347.9	331.6	326.2	319.7
27.5°	332.7	314.3	298.0	293.7	288.3
30°	303.5	284.0	264.5	264.5	256.9
32.5°	272.0	253.6	233.0	231.9	227.6
35°	241.7	223.3	202.7	200.5	196.2
37.5°	213.5	195.1	175.6	169.1	163.7
40°	182.1	165.8	149.6	138.7	132.2
42.5°	157.2	138.7	122.5	109.5	100.8
45°	125.7	112.7	99.7	83.5	72.6
47.5°	97.5	88.9	78.0	59.6	54.2
50°	71.5	67.2	58.5	44.4	43.4
52.5°	45.5	47.7	42.3	34.7	37.9
55°	21.7	30.3	28.2	29.3	31.4
57.5°	14.1	15.2	20.6	23.8	26.0
60°	10.8	10.8	15.2	19.5	21.7
62.5°	8.7	8.7	11.9	16.3	17.3
65°	6.5	7.6	8.7	11.9	14.1
67.5°	5.4	5.4	6.5	9.8	10.8
70°	4.3	4.3	5.4	7.6	8.7
72.5°	3.3	3.3	4.3	6.5	6.5
75°	2.2	3.3	3.3	4.3	5.4
77.5°	2.2	2.2	2.2	3.3	4.3
80°	1.1	1.1	2.2	2.2	3.3
82.5°	1.1	1.1	1.1	1.1	2.2
85°	0.0	0.0	0.0	1.1	1.1
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	3.90	5.06	4.26	5.37	5.69	7.28	8.44	7.64	8.75	9.07
	3H	4.41	5.43	4.79	5.76	6.13	8.01	9.03	8.39	9.36	9.73
	4H	4.55	5.50	4.96	5.85	6.24	8.22	9.17	8.63	9.52	9.91
	6H	4.63	5.50	5.05	5.87	6.27	8.38	9.24	8.79	9.62	10.01
	8H	4.64	5.45	5.07	5.85	6.25	8.41	9.23	8.84	9.62	10.03
	12H	4.60	5.38	5.04	5.77	6.20	8.41	9.19	8.85	9.58	10.01
4H	2H	4.21	5.16	4.61	5.51	5.90	7.25	8.19	7.65	8.54	8.93
	3H	4.86	5.63	5.27	6.03	6.44	8.12	8.89	8.54	9.30	9.70
	4H	5.11	5.79	5.55	6.22	6.66	8.40	9.09	8.84	9.51	9.95
	6H	5.24	5.82	5.70	6.27	6.74	8.63	9.22	9.10	9.67	10.14
	8H	5.25	5.80	5.73	6.25	6.72	8.68	9.23	9.15	9.68	10.15
	12H	5.22	5.70	5.71	6.18	6.66	8.70	9.18	9.19	9.67	10.14
8H	4H	5.22	5.77	5.69	6.21	6.69	8.33	8.88	8.81	9.33	9.80
	6H	5.39	5.83	5.90	6.33	6.82	8.60	9.04	9.11	9.54	10.03
	8H	5.44	5.84	5.97	6.36	6.85	8.67	9.06	9.19	9.58	10.08
	12H	5.42	5.77	5.94	6.26	6.84	8.73	9.08	9.25	9.57	10.15
12H	4H	5.21	5.68	5.70	6.17	6.65	8.29	8.76	8.78	9.25	9.73
	6H	5.39	5.79	5.92	6.31	6.80	8.55	8.95	9.08	9.47	9.96
	8H	5.47	5.82	5.99	6.31	6.89	8.64	8.99	9.16	9.49	10.06