

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: P1060384

Luminaire Tested: S124RDRP-S350D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

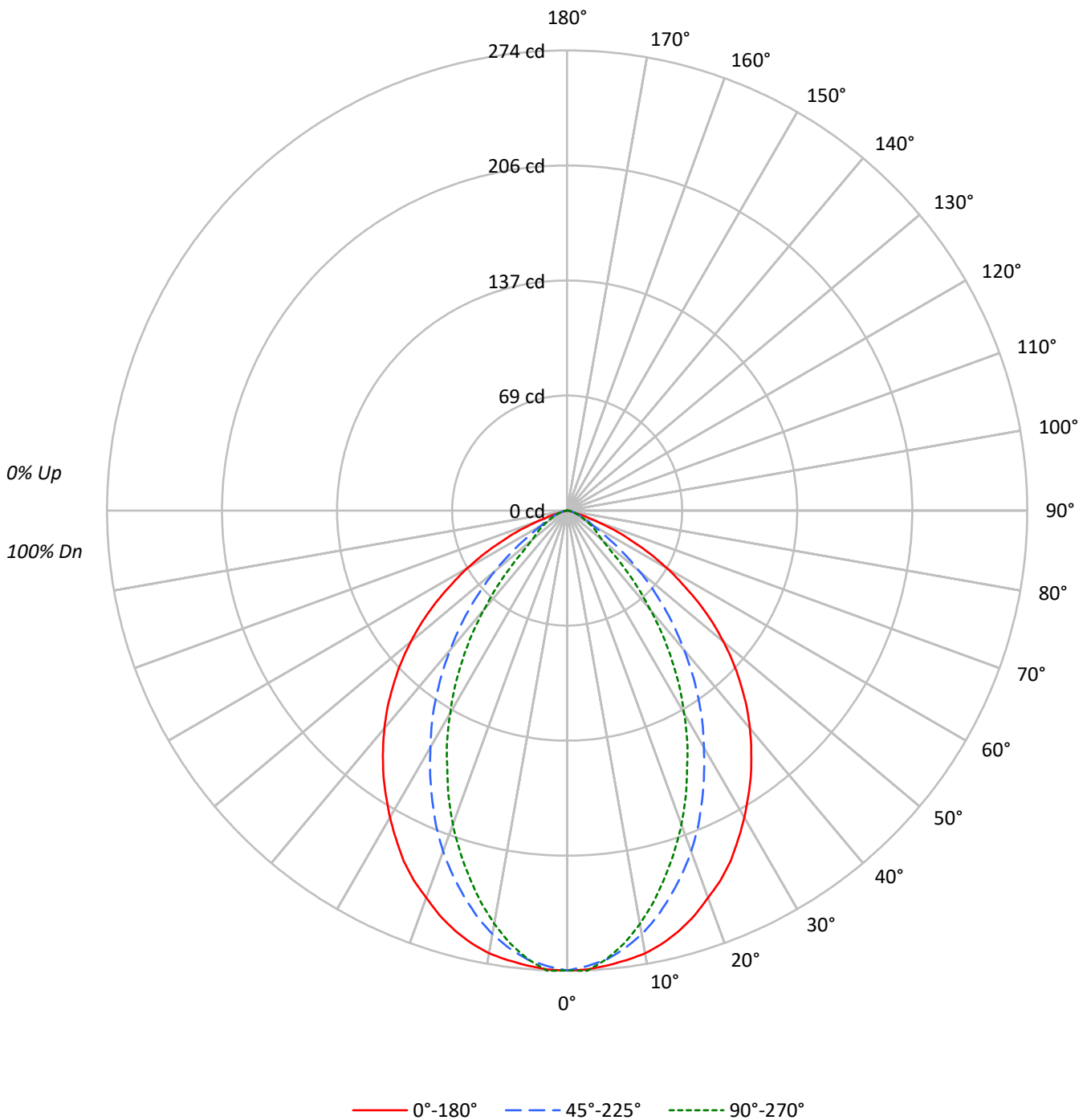
Lumens per Lamp: N/A
Luminaire Lumens: 403.8 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80																												
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71																												
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63																												
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57																												
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51																												
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43																												
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2358	2358	2358
5°	2350	2320	2317
10°	2341	2239	2185
15°	2307	2118	2011
20°	2248	1979	1824
25°	2188	1806	1605
30°	2098	1619	1384
35°	2007	1432	1144
40°	1903	1219	867
45°	1780	996	582
50°	1628	754	362
55°	1431	498	306
60°	1183	305	253
65°	856	236	204
70°	466	174	156
75°	103	130	140
80°	74	94	114
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	6.3
10°-20°	67.4	16.7
20°-30°	89.3	22.1
30°-40°	88.6	21.9
40°-50°	68.2	16.9
50°-60°	40.6	10.1
60°-70°	18.5	4.6
70°-80°	4.8	1.2
80°-90°	1.1	0.3
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°	182.0	45.1
0°-40°	270.6	67.0
0°-60°	379.4	94.0
0°-90°	403.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	403.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	274	274	274	274	274	
5°	272	272	268	268	268	26
15°	259	252	238	230	226	73
25°	230	214	190	174	169	106
35°	191	167	136	115	109	119
45°	146	118	82	57	48	113
55°	95	68	33	21	20	85
65°	42	25	12	10	10	42
75°	3	4	4	4	4	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	273.8	273.8	273.8	273.8	273.8
2.5°	273.5	273.8	271.5	273.5	274.2
5°	271.9	272.3	268.4	268.4	268.1
7.5°	270.0	269.2	263.0	260.7	260.0
10°	267.7	265.0	256.1	251.5	249.9
12.5°	263.8	259.6	247.6	241.1	238.4
15°	258.8	252.2	237.6	229.5	225.6
17.5°	252.6	244.5	227.2	216.8	212.5
20°	245.3	234.5	216.0	202.9	199.0
22.5°	238.4	224.9	203.6	188.6	184.4
25°	230.3	213.7	190.1	174.3	168.9
27.5°	220.6	202.9	176.6	160.4	155.0
30°	211.0	191.3	162.8	145.8	139.2
32.5°	200.9	179.3	150.0	130.8	124.6
35°	190.9	167.0	136.2	115.3	108.8
37.5°	180.1	154.7	122.3	100.7	93.3
40°	169.3	142.7	108.4	86.4	77.1
42.5°	158.1	130.4	94.9	71.7	62.5
45°	146.2	117.6	81.8	57.1	47.8
47.5°	134.2	105.7	68.7	42.8	34.3
50°	121.5	93.0	56.3	31.2	27.0
52.5°	108.8	80.6	44.0	24.3	23.1
55°	95.3	67.9	33.2	20.8	20.4
57.5°	81.4	56.3	23.9	18.1	17.4
60°	68.7	45.5	17.7	15.4	14.7
62.5°	55.5	34.3	14.7	12.7	12.0
65°	42.0	25.1	11.6	10.0	10.0
67.5°	30.5	17.0	9.3	8.1	7.7
70°	18.5	10.4	6.9	6.6	6.2
72.5°	9.3	6.2	5.4	5.0	5.0
75°	3.1	3.9	3.9	4.2	4.2
77.5°	2.3	2.7	2.7	3.1	3.1
80°	1.5	1.9	1.9	2.3	2.3
82.5°	1.2	1.2	1.5	1.5	1.9
85°	0.8	0.8	0.8	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8
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	12.10	13.43	12.46	13.75	14.06	3.64	4.98	4.01	5.29	5.61
	3H	12.61	13.79	12.99	14.12	14.48	4.46	5.64	4.84	5.97	6.34
	4H	12.57	13.67	12.98	14.02	14.41	4.74	5.84	5.14	6.19	6.57
	6H	12.51	13.52	12.92	13.89	14.28	4.91	5.92	5.33	6.29	6.69
	8H	12.47	13.43	12.90	13.82	14.22	4.98	5.93	5.41	6.32	6.73
	12H	12.43	13.35	12.87	13.73	14.16	5.02	5.93	5.46	6.32	6.75
4H	2H	11.94	13.04	12.34	13.39	13.77	4.09	5.19	4.49	5.54	5.92
	3H	12.50	13.39	12.91	13.79	14.20	5.06	5.95	5.47	6.35	6.76
	4H	12.46	13.26	12.90	13.68	14.12	5.41	6.21	5.85	6.63	7.07
	6H	12.41	13.10	12.88	13.54	14.01	5.66	6.35	6.13	6.80	7.26
	8H	12.37	13.01	12.84	13.45	13.92	5.75	6.39	6.22	6.84	7.31
	12H	12.33	12.89	12.81	13.38	13.85	5.83	6.39	6.31	6.88	7.35
8H	4H	12.36	12.99	12.82	13.44	13.91	5.50	6.14	5.97	6.59	7.06
	6H	12.29	12.81	12.80	13.31	13.79	5.81	6.33	6.31	6.83	7.31
	8H	12.25	12.71	12.77	13.23	13.72	5.94	6.41	6.46	6.92	7.41
	12H	12.22	12.63	12.73	13.12	13.70	6.08	6.49	6.59	6.99	7.56
12H	4H	12.31	12.88	12.80	13.36	13.83	5.48	6.04	5.96	6.52	7.00
	6H	12.24	12.71	12.76	13.22	13.71	5.79	6.26	6.31	6.77	7.27
	8H	12.21	12.62	12.73	13.12	13.69	5.95	6.37	6.47	6.86	7.43