

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: P1060393

Luminaire Tested: S124RDRP-S350D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060393
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-S350D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

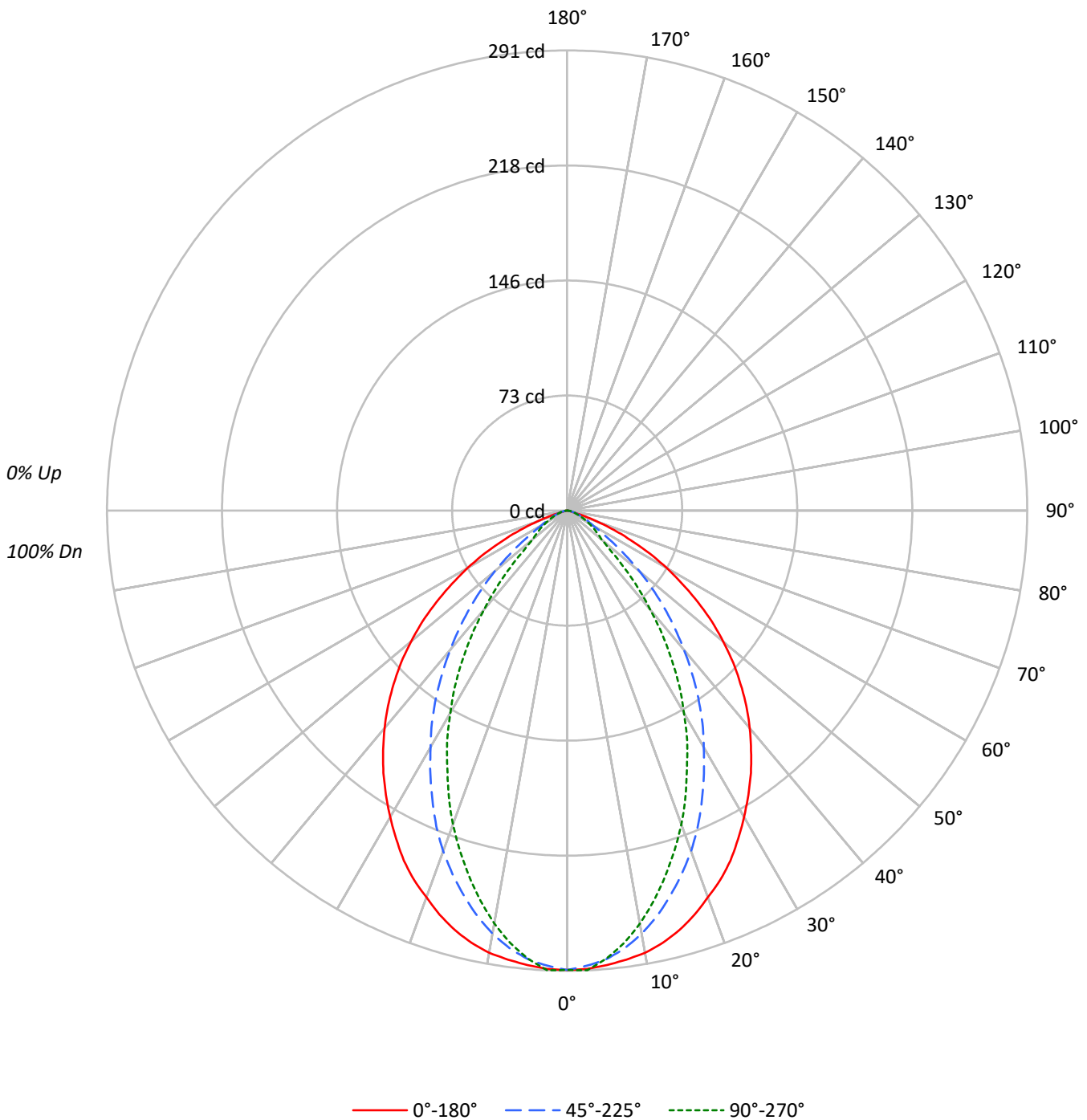
Lumens per Lamp: N/A
Luminaire Lumens: 428.3 lumens
Efficiency: N/A
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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	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	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2502	2502	2502
5°	2494	2462	2458
10°	2483	2376	2319
15°	2448	2247	2134
20°	2385	2100	1935
25°	2321	1916	1703
30°	2225	1717	1469
35°	2130	1519	1213
40°	2019	1293	920
45°	1889	1057	617
50°	1727	800	383
55°	1518	528	326
60°	1254	324	267
65°	909	251	216
70°	493	186	164
75°	110	136	150
80°	79	99	124
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1889 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	6.3
10°-20°	71.5	16.7
20°-30°	94.7	22.1
30°-40°	94.0	21.9
40°-50°	72.3	16.9
50°-60°	43.1	10.1
60°-70°	19.6	4.6
70°-80°	5.1	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°	193.1	45.1
0°-40°	287.1	67.0
0°-60°	402.6	94.0
0°-90°	428.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	428.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	288	289	285	285	284	27
15°	275	268	252	244	239	77
25°	244	227	202	185	179	112
35°	203	177	144	122	115	126
45°	155	125	87	61	51	119
55°	101	72	35	22	22	90
65°	45	27	12	11	11	45
75°	3	4	4	4	4	7
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°	290.5	290.5	290.5	290.5	290.5
2.5°	290.1	290.5	288.1	290.1	290.9
5°	288.5	288.9	284.8	284.8	284.4
7.5°	286.4	285.6	279.1	276.6	275.8
10°	284.0	281.1	271.7	266.8	265.2
12.5°	279.9	275.4	262.7	255.8	252.9
15°	274.6	267.6	252.1	243.5	239.4
17.5°	268.0	259.4	241.0	230.0	225.5
20°	260.3	248.8	229.2	215.2	211.2
22.5°	252.9	238.6	216.1	200.1	195.6
25°	244.3	226.7	201.7	185.0	179.2
27.5°	234.1	215.2	187.4	170.2	164.5
30°	223.8	203.0	172.7	154.7	147.7
32.5°	213.2	190.3	159.2	138.7	132.2
35°	202.6	177.2	144.5	122.4	115.4
37.5°	191.1	164.1	129.7	106.8	99.0
40°	179.6	151.4	115.0	91.7	81.8
42.5°	167.8	138.3	100.7	76.1	66.3
45°	155.1	124.8	86.8	60.6	50.7
47.5°	142.4	112.1	72.8	45.4	36.4
50°	128.9	98.6	59.7	33.1	28.6
52.5°	115.4	85.5	46.6	25.8	24.6
55°	101.1	72.0	35.2	22.1	21.7
57.5°	86.3	59.7	25.4	19.2	18.4
60°	72.8	48.3	18.8	16.4	15.5
62.5°	58.9	36.4	15.5	13.5	12.7
65°	44.6	26.6	12.3	10.6	10.6
67.5°	32.3	18.0	9.8	8.6	8.2
70°	19.6	11.0	7.4	7.0	6.5
72.5°	9.8	6.5	5.7	5.3	5.3
75°	3.3	4.1	4.1	4.5	4.5
77.5°	2.5	2.9	2.9	3.3	3.3
80°	1.6	2.0	2.0	2.5	2.5
82.5°	1.2	1.2	1.6	1.6	2.0
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	12.30	13.64	12.67	13.95	14.26	3.85	5.18	4.21	5.49	5.81
	3H	12.81	13.99	13.19	14.32	14.68	4.67	5.85	5.05	6.18	6.54
	4H	12.78	13.87	13.18	14.22	14.61	4.95	6.05	5.35	6.40	6.78
	6H	12.71	13.72	13.13	14.09	14.48	5.12	6.13	5.54	6.50	6.90
	8H	12.67	13.63	13.10	14.02	14.42	5.19	6.14	5.62	6.53	6.94
	12H	12.63	13.55	13.07	13.93	14.36	5.23	6.14	5.66	6.52	6.95
4H	2H	12.14	13.24	12.55	13.59	13.98	4.29	5.39	4.69	5.74	6.12
	3H	12.70	13.59	13.11	13.99	14.40	5.26	6.15	5.67	6.56	6.96
	4H	12.66	13.46	13.10	13.88	14.32	5.62	6.42	6.06	6.84	7.28
	6H	12.61	13.30	13.08	13.74	14.21	5.88	6.57	6.34	7.01	7.48
	8H	12.57	13.21	13.03	13.65	14.12	5.97	6.61	6.44	7.05	7.52
	12H	12.53	13.09	13.01	13.57	14.05	6.04	6.60	6.52	7.08	7.56
8H	4H	12.56	13.19	13.02	13.64	14.11	5.71	6.35	6.18	6.80	7.27
	6H	12.49	13.01	13.00	13.51	13.99	6.03	6.55	6.53	7.05	7.53
	8H	12.45	12.91	12.97	13.43	13.92	6.16	6.62	6.68	7.14	7.63
	12H	12.41	12.83	12.93	13.32	13.89	6.28	6.70	6.80	7.19	7.76
12H	4H	12.51	13.08	13.00	13.56	14.03	5.68	6.25	6.17	6.73	7.21
	6H	12.44	12.91	12.96	13.42	13.91	6.01	6.48	6.53	6.99	7.48
	8H	12.41	12.82	12.93	13.32	13.89	6.17	6.59	6.69	7.08	7.65