

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: P1060391

Luminaire Tested: S124RDRP-S350D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

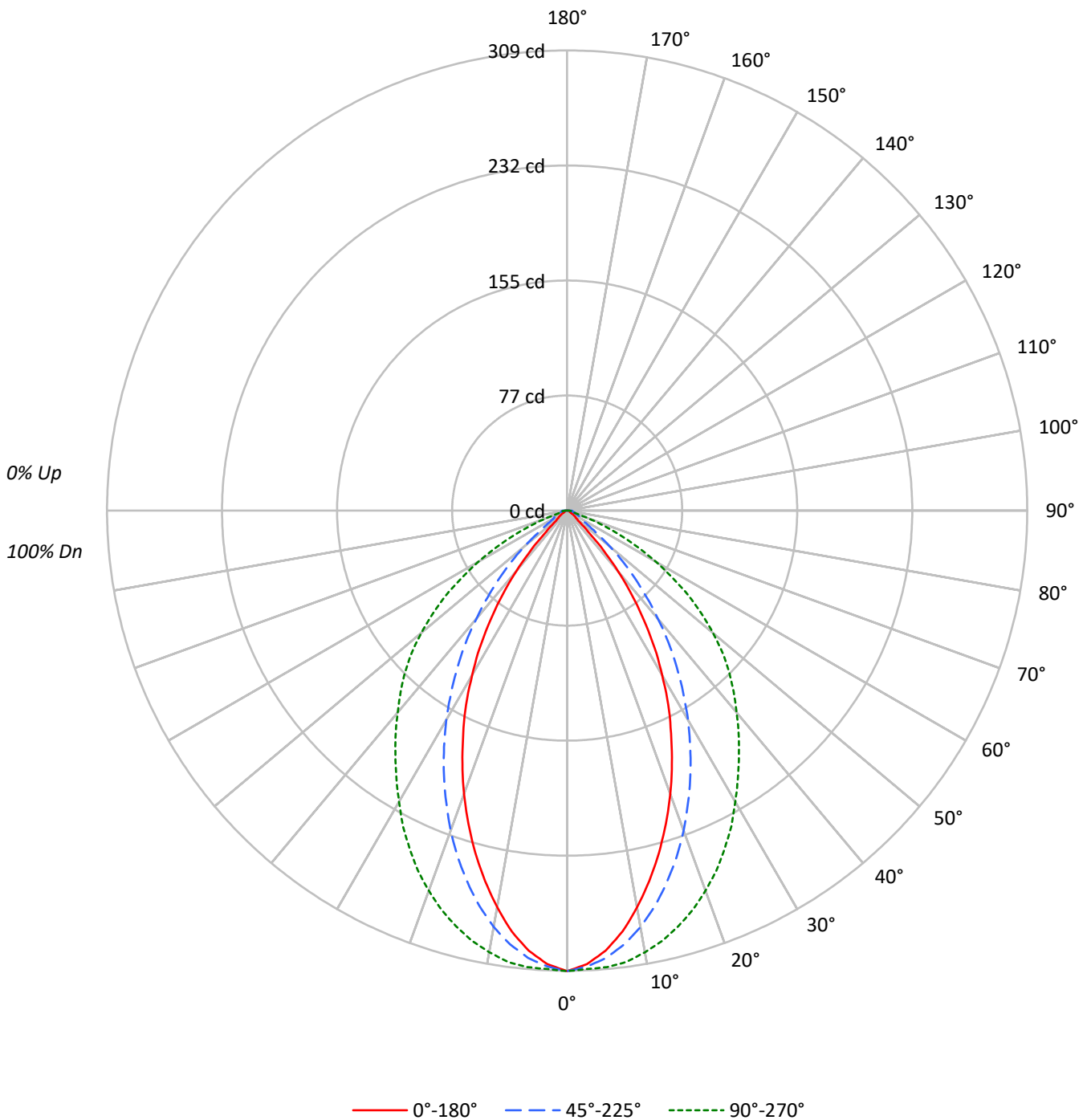
Lumens per Lamp: N/A
Luminaire Lumens: 388.2 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2663	2663	2663
5°	2564	2606	2660
10°	2364	2482	2633
15°	2122	2305	2575
20°	1855	2095	2489
25°	1569	1860	2378
30°	1267	1613	2244
35°	943	1348	2114
40°	599	1068	1990
45°	240	783	1875
50°	104	500	1712
55°	80	258	1494
60°	57	176	1185
65°	41	175	809
70°	40	154	370
75°	53	163	150
80°	79	183	164
85°	158	326	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1875 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	7.3
10°-20°	73.0	18.8
20°-30°	92.2	23.8
30°-40°	84.7	21.8
40°-50°	57.8	14.9
50°-60°	31.3	8.1
60°-70°	13.3	3.4
70°-80°	4.6	1.2
80°-90°	2.9	0.8
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°	193.6	49.9
0°-40°	278.3	71.7
0°-60°	367.4	94.6
0°-90°	388.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	297	301	302	304	308	27
15°	238	246	258	277	289	66
25°	165	176	196	226	250	75
35°	90	102	128	168	201	56
45°	20	32	64	114	154	18
55°	5	6	17	63	100	5
65°	2	2	9	20	40	2
75°	2	4	5	4	4	2
85°	2	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	309.3	309.3	309.3	309.3	309.3
2.5°	304.8	308.5	306.4	307.2	308.1
5°	296.6	301.1	301.5	304.0	307.7
7.5°	285.1	290.4	293.7	299.9	305.6
10°	270.4	276.9	283.9	293.7	301.1
12.5°	254.8	261.8	272.0	285.9	295.8
15°	238.0	245.8	258.5	276.9	288.8
17.5°	220.4	229.0	244.2	265.9	281.0
20°	202.4	211.8	228.6	253.2	271.6
22.5°	183.9	193.8	212.2	240.1	261.8
25°	165.1	175.7	195.8	226.1	250.3
27.5°	147.1	156.9	179.0	212.2	238.8
30°	127.4	138.5	162.2	197.9	225.7
32.5°	109.4	120.0	145.0	183.1	213.4
35°	89.7	101.6	128.2	168.4	201.1
37.5°	71.3	82.8	111.8	154.4	189.3
40°	53.3	65.1	95.0	140.5	177.0
42.5°	35.6	48.3	79.1	126.2	165.5
45°	19.7	31.5	64.3	113.9	154.0
47.5°	10.2	17.2	50.4	101.6	141.7
50°	7.8	9.4	37.3	88.1	127.8
52.5°	6.6	7.0	25.4	74.6	113.9
55°	5.3	5.7	17.2	62.7	99.5
57.5°	4.1	4.5	12.3	51.2	83.6
60°	3.3	3.7	10.2	39.3	68.8
62.5°	2.5	2.9	9.8	29.1	54.1
65°	2.0	2.5	8.6	19.7	39.7
67.5°	1.6	2.5	7.4	12.7	26.6
70°	1.6	3.3	6.1	8.2	14.7
72.5°	1.6	3.7	5.3	5.3	5.3
75°	1.6	4.5	4.9	4.5	4.5
77.5°	1.6	4.1	4.1	4.1	4.1
80°	1.6	3.7	3.7	3.7	3.3
82.5°	1.6	3.3	3.7	3.7	2.9
85°	1.6	3.3	3.3	3.3	2.5
87.5°	1.2	3.3	3.3	3.3	1.6
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	0.00	0.00	0.00	0.00	0.00	11.85	13.12	12.21	13.43	13.75
	3H	0.00	0.00	0.00	0.00	0.00	12.20	13.33	12.58	13.66	14.02
	4H	0.00	0.00	0.00	0.00	0.00	12.17	13.22	12.57	13.57	13.95
	6H	0.00	0.00	0.00	0.00	0.00	12.14	13.10	12.56	13.47	13.87
	8H	0.00	0.00	0.00	0.04	0.44	12.13	13.04	12.56	13.43	13.84
	12H	0.00	0.40	0.00	0.78	1.21	12.13	13.00	12.56	13.38	13.81
4H	2H	0.00	0.00	0.00	0.00	0.00	11.65	12.70	12.05	13.05	13.43
	3H	0.00	0.00	0.00	0.22	0.62	12.04	12.90	12.45	13.30	13.71
	4H	0.40	1.17	0.84	1.59	2.03	12.02	12.78	12.46	13.21	13.65
	6H	1.64	2.30	2.11	2.75	3.21	12.04	12.70	12.50	13.15	13.61
	8H	2.21	2.82	2.68	3.27	3.74	12.05	12.67	12.52	13.11	13.59
	12H	2.87	3.41	3.36	3.90	4.37	12.09	12.63	12.58	13.12	13.59
8H	4H	1.48	2.09	1.95	2.54	3.01	11.92	12.54	12.39	12.98	13.46
	6H	3.09	3.59	3.60	4.09	4.57	11.97	12.47	12.48	12.97	13.45
	8H	3.93	4.38	4.45	4.90	5.39	12.03	12.48	12.55	13.00	13.49
	12H	4.89	5.29	5.41	5.79	6.36	12.15	12.55	12.67	13.05	13.62
12H	4H	1.67	2.21	2.16	2.70	3.17	11.88	12.43	12.37	12.91	13.38
	6H	3.44	3.89	3.97	4.41	4.90	11.94	12.39	12.46	12.91	13.40
	8H	4.47	4.87	4.98	5.36	5.93	12.05	12.45	12.56	12.94	13.51