

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: P1060394

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
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-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

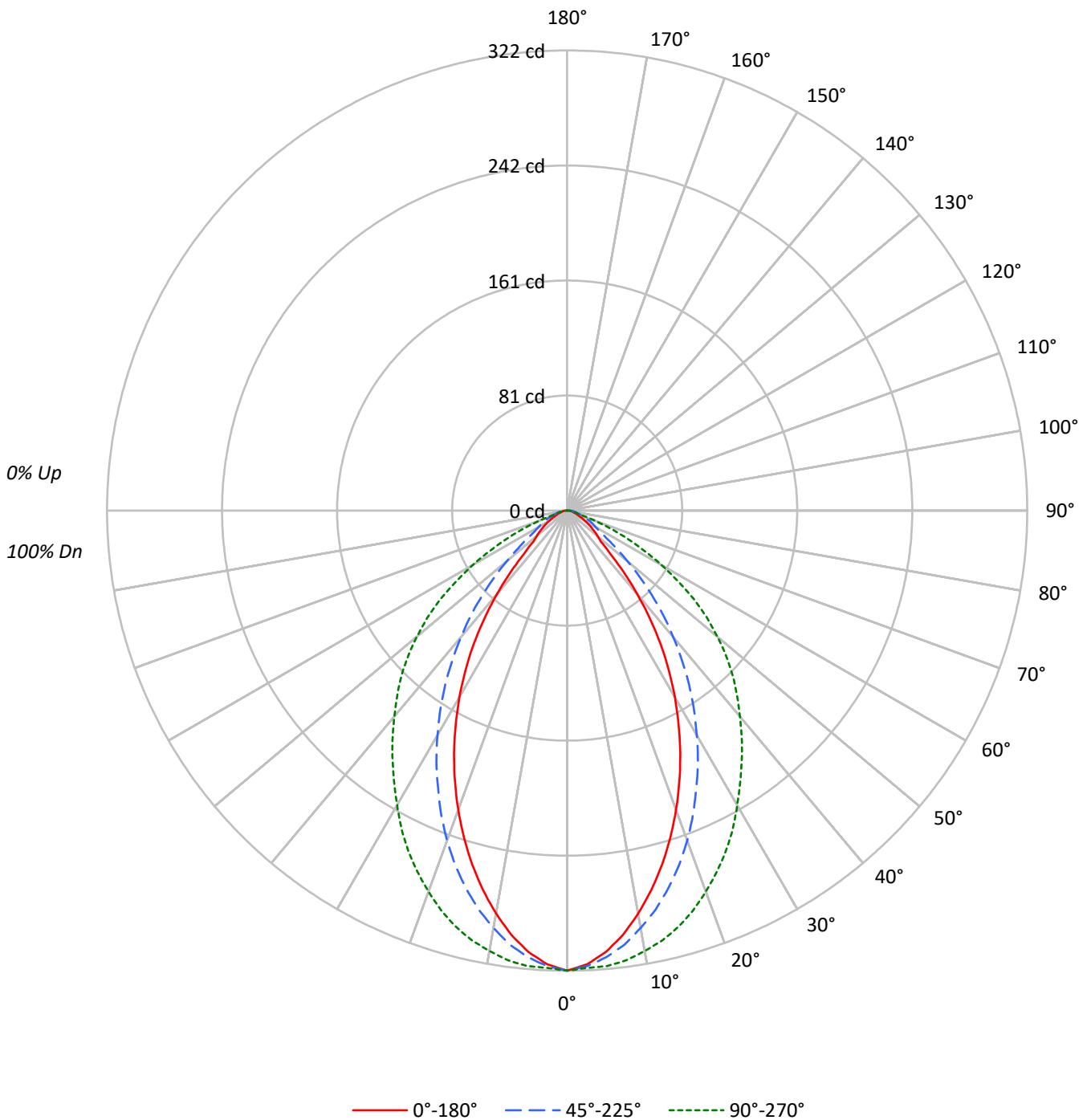
Lumens per Lamp: N/A
Luminaire Lumens: 452.7 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	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	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2772	2772	2772
5°	2680	2712	2765
10°	2503	2593	2736
15°	2286	2439	2687
20°	2042	2252	2601
25°	1779	2031	2498
30°	1498	1804	2367
35°	1197	1563	2239
40°	861	1298	2113
45°	519	1023	2000
50°	374	741	1838
55°	314	498	1629
60°	253	394	1312
65°	200	359	943
70°	176	300	506
75°	163	273	246
80°	164	283	223
85°	247	405	287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2000 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.6	6.5
10°-20°	77.4	17.1
20°-30°	100.5	22.2
30°-40°	96.6	21.3
40°-50°	71.6	15.8
50°-60°	43.9	9.7
60°-70°	21.3	4.7
70°-80°	8.1	1.8
80°-90°	3.7	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°	207.5	45.8
0°-40°	304.0	67.2
0°-60°	419.6	92.7
0°-90°	452.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	452.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	322	322	322	322	322	
5°	310	315	314	317	320	29
15°	256	264	274	290	301	72
25°	187	197	214	241	263	86
35°	114	124	149	184	213	71
45°	43	53	84	128	164	35
55°	21	22	33	75	108	19
65°	10	11	18	28	46	10
75°	5	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	321.9	321.9	321.9	321.9	321.9
2.5°	317.8	321.5	319.1	319.9	320.3
5°	310.0	314.6	313.7	316.6	319.9
7.5°	299.4	304.7	306.4	312.1	317.4
10°	286.3	292.8	296.5	306.0	312.9
12.5°	272.0	278.9	285.9	298.6	308.0
15°	256.4	263.8	273.6	290.0	301.4
17.5°	240.0	248.2	260.1	279.7	293.3
20°	222.8	231.4	245.7	267.5	283.8
22.5°	205.2	214.2	230.2	254.3	273.6
25°	187.2	196.6	213.8	241.2	262.9
27.5°	168.7	178.6	198.2	227.3	251.1
30°	150.7	160.1	181.4	213.0	238.0
32.5°	132.3	142.1	165.1	198.2	225.3
35°	113.9	124.1	148.7	183.9	213.0
37.5°	95.0	106.1	131.9	170.0	200.7
40°	76.6	87.2	115.5	155.6	188.0
42.5°	58.6	70.0	99.9	141.3	176.1
45°	42.6	53.2	84.0	128.2	164.2
47.5°	31.9	38.5	69.2	115.9	151.1
50°	27.9	29.1	55.3	102.4	137.2
52.5°	24.2	25.0	43.0	87.6	123.3
55°	20.9	21.7	33.2	75.0	108.5
57.5°	17.6	18.4	26.6	62.7	91.7
60°	14.7	15.6	22.9	50.0	76.2
62.5°	12.3	12.7	20.5	38.1	61.0
65°	9.8	10.6	17.6	27.9	46.3
67.5°	8.2	9.0	14.3	19.2	32.4
70°	7.0	9.0	11.9	13.5	20.1
72.5°	5.7	8.2	9.8	9.4	9.4
75°	4.9	7.8	8.2	7.4	7.4
77.5°	4.1	7.0	6.6	6.1	5.7
80°	3.3	5.7	5.7	4.9	4.5
82.5°	2.9	4.5	4.5	4.5	3.7
85°	2.5	4.1	4.1	3.7	2.9
87.5°	1.6	3.3	3.7	3.3	2.0
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	3.35	4.69	3.71	5.00	5.31	12.46	13.80	12.82	14.11	14.42
	3H	4.40	5.58	4.77	5.91	6.28	12.96	14.15	13.34	14.48	14.84
	4H	4.91	6.02	5.31	6.37	6.75	12.97	14.08	13.38	14.43	14.81
	6H	5.36	6.38	5.78	6.75	7.14	12.97	13.99	13.39	14.36	14.75
	8H	5.56	6.52	5.99	6.91	7.32	12.97	13.93	13.40	14.32	14.73
	12H	5.78	6.70	6.21	7.08	7.51	12.97	13.89	13.40	14.27	14.70
4H	2H	4.44	5.55	4.85	5.90	6.28	12.35	13.45	12.75	13.80	14.19
	3H	5.72	6.62	6.13	7.03	7.43	12.92	13.83	13.34	14.23	14.64
	4H	6.42	7.23	6.86	7.65	8.10	12.97	13.78	13.41	14.20	14.64
	6H	7.06	7.76	7.52	8.20	8.67	13.02	13.72	13.48	14.17	14.63
	8H	7.30	7.96	7.77	8.40	8.88	13.04	13.69	13.51	14.14	14.61
	12H	7.59	8.16	8.07	8.65	9.12	13.07	13.65	13.56	14.13	14.61
8H	4H	6.85	7.51	7.32	7.95	8.42	12.92	13.57	13.39	14.02	14.49
	6H	7.73	8.26	8.23	8.76	9.24	13.01	13.55	13.51	14.04	14.52
	8H	8.14	8.62	8.66	9.13	9.62	13.07	13.55	13.59	14.07	14.56
	12H	8.62	9.05	9.14	9.54	10.11	13.17	13.60	13.69	14.09	14.67
12H	4H	6.90	7.47	7.38	7.96	8.43	12.89	13.47	13.38	13.95	14.43
	6H	7.84	8.32	8.36	8.84	9.33	12.99	13.47	13.51	13.99	14.48
	8H	8.36	8.78	8.87	9.28	9.85	13.10	13.52	13.61	14.02	14.59