

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: P1060412

Luminaire Tested: S124RDRP-S350D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060412
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-S350D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

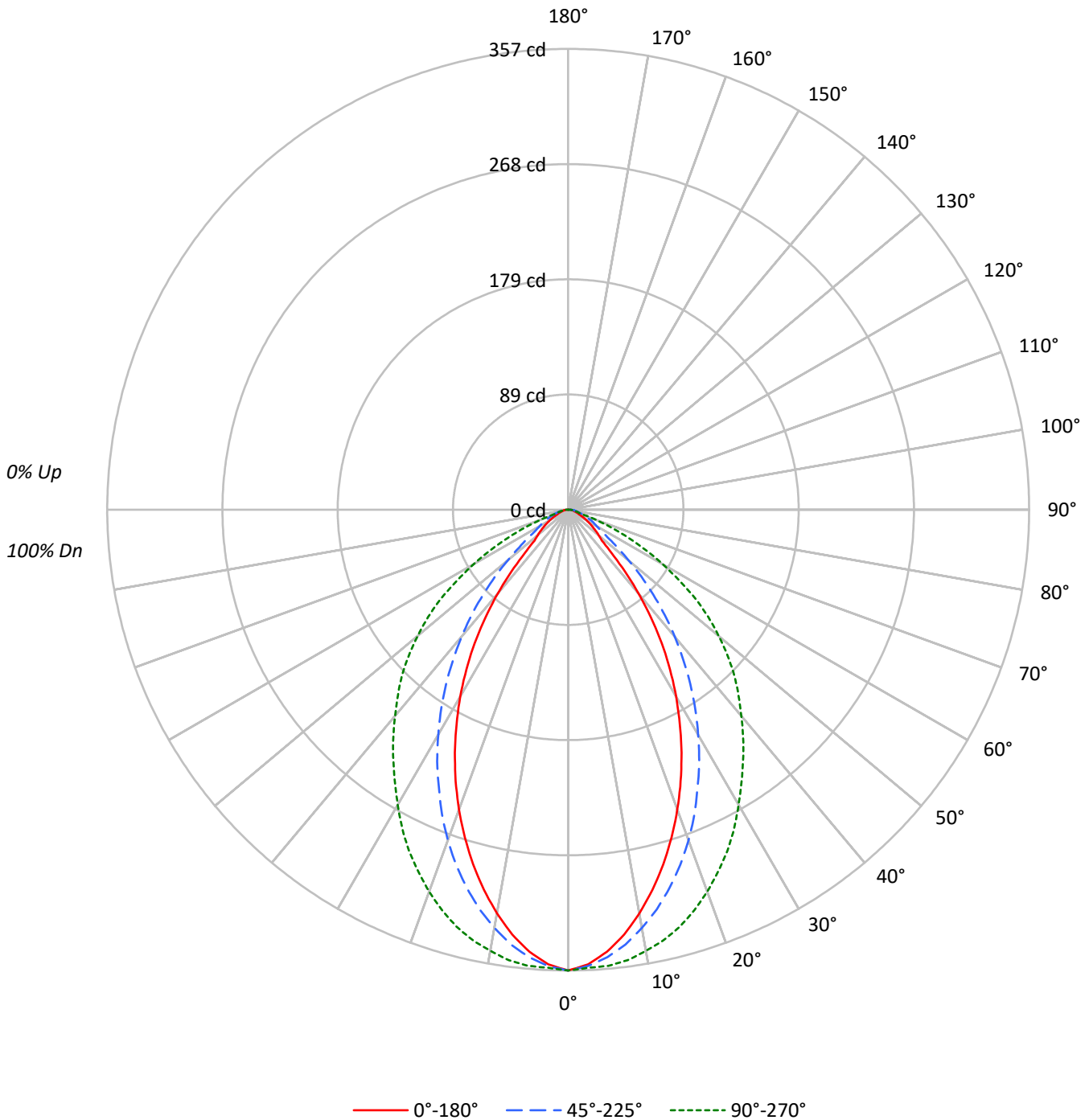
Lumens per Lamp: N/A
Luminaire Lumens: 502.0 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	3074	3074	3074
5°	2972	3007	3066
10°	2776	2876	3034
15°	2535	2705	2980
20°	2264	2497	2885
25°	1972	2253	2771
30°	1663	2001	2624
35°	1328	1733	2483
40°	954	1440	2344
45°	575	1134	2218
50°	414	821	2039
55°	348	552	1808
60°	282	437	1455
65°	222	397	1045
70°	194	332	561
75°	183	303	273
80°	179	317	248
85°	267	445	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2218 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	6.5
10°-20°	85.9	17.1
20°-30°	111.4	22.2
30°-40°	107.1	21.3
40°-50°	79.5	15.8
50°-60°	48.7	9.7
60°-70°	23.6	4.7
70°-80°	9.0	1.8
80°-90°	4.0	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°	230.1	45.8
0°-40°	337.2	67.2
0°-60°	465.3	92.7
0°-90°	502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	357	357	357	357	357	
5°	344	349	348	351	355	32
15°	284	292	303	322	334	79
25°	208	218	237	268	292	95
35°	126	138	165	204	236	78
45°	47	59	93	142	182	39
55°	23	24	37	83	120	21
65°	11	12	20	31	51	11
75°	6	9	9	8	8	6
85°	3	4	4	4	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.0	357.0	357.0	357.0	357.0
2.5°	352.5	356.6	353.8	354.7	355.2
5°	343.8	348.8	347.9	351.1	354.7
7.5°	332.0	337.9	339.8	346.1	352.0
10°	317.5	324.8	328.9	339.3	347.0
12.5°	301.6	309.3	317.0	331.1	341.6
15°	284.3	292.5	303.4	321.6	334.3
17.5°	266.2	275.3	288.4	310.2	325.2
20°	247.1	256.6	272.5	296.6	314.8
22.5°	227.6	237.6	255.3	282.1	303.4
25°	207.6	218.0	237.1	267.5	291.6
27.5°	187.1	198.0	219.8	252.1	278.4
30°	167.2	177.6	201.2	236.2	263.9
32.5°	146.7	157.6	183.0	219.8	249.8
35°	126.3	137.6	164.9	203.9	236.2
37.5°	105.4	117.6	146.3	188.5	222.6
40°	84.9	96.7	128.1	172.6	208.5
42.5°	65.0	77.7	110.8	156.7	195.3
45°	47.2	59.0	93.1	142.2	182.1
47.5°	35.4	42.7	76.8	128.5	167.6
50°	30.9	32.2	61.3	113.6	152.2
52.5°	26.8	27.7	47.7	97.2	136.7
55°	23.2	24.1	36.8	83.1	120.4
57.5°	19.5	20.4	29.5	69.5	101.7
60°	16.4	17.3	25.4	55.4	84.5
62.5°	13.6	14.1	22.7	42.2	67.7
65°	10.9	11.8	19.5	30.9	51.3
67.5°	9.1	10.0	15.9	21.3	35.9
70°	7.7	10.0	13.2	15.0	22.3
72.5°	6.4	9.1	10.9	10.4	10.4
75°	5.5	8.6	9.1	8.2	8.2
77.5°	4.5	7.7	7.3	6.8	6.4
80°	3.6	6.4	6.4	5.5	5.0
82.5°	3.2	5.0	5.0	5.0	4.1
85°	2.7	4.5	4.5	4.1	3.2
87.5°	1.8	3.6	4.1	3.6	2.3
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	3.70	5.04	4.07	5.36	5.67	12.81	14.15	13.18	14.47	14.78
	3H	4.75	5.94	5.13	6.27	6.63	13.32	14.50	13.70	14.83	15.20
	4H	5.27	6.38	5.68	6.73	7.11	13.33	14.44	13.73	14.79	15.17
	6H	5.72	6.73	6.13	7.10	7.50	13.33	14.35	13.74	14.72	15.11
	8H	5.91	6.87	6.34	7.26	7.67	13.33	14.29	13.76	14.68	15.08
	12H	6.12	7.04	6.55	7.43	7.86	13.33	14.25	13.76	14.63	15.06
4H	2H	4.80	5.91	5.20	6.26	6.64	12.70	13.81	13.11	14.16	14.54
	3H	6.07	6.98	6.49	7.38	7.79	13.28	14.19	13.69	14.59	14.99
	4H	6.78	7.59	7.22	8.01	8.45	13.33	14.14	13.76	14.56	15.00
	6H	7.41	8.11	7.87	8.55	9.02	13.38	14.08	13.84	14.53	14.99
	8H	7.66	8.31	8.13	8.76	9.23	13.40	14.05	13.87	14.50	14.97
	12H	7.93	8.51	8.42	8.99	9.46	13.43	14.01	13.92	14.49	14.97
8H	4H	7.21	7.86	7.68	8.31	8.78	13.28	13.93	13.75	14.38	14.85
	6H	8.09	8.62	8.59	9.12	9.60	13.37	13.91	13.88	14.40	14.89
	8H	8.50	8.98	9.02	9.49	9.98	13.43	13.92	13.96	14.43	14.92
	12H	8.97	9.39	9.48	9.89	10.46	13.54	13.96	14.05	14.46	15.03
12H	4H	7.25	7.83	7.74	8.31	8.79	13.25	13.83	13.74	14.31	14.79
	6H	8.20	8.68	8.72	9.20	9.69	13.35	13.83	13.87	14.35	14.84
	8H	8.72	9.15	9.23	9.64	10.21	13.46	13.88	13.97	14.38	14.95