

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: P1060901

Luminaire Tested: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

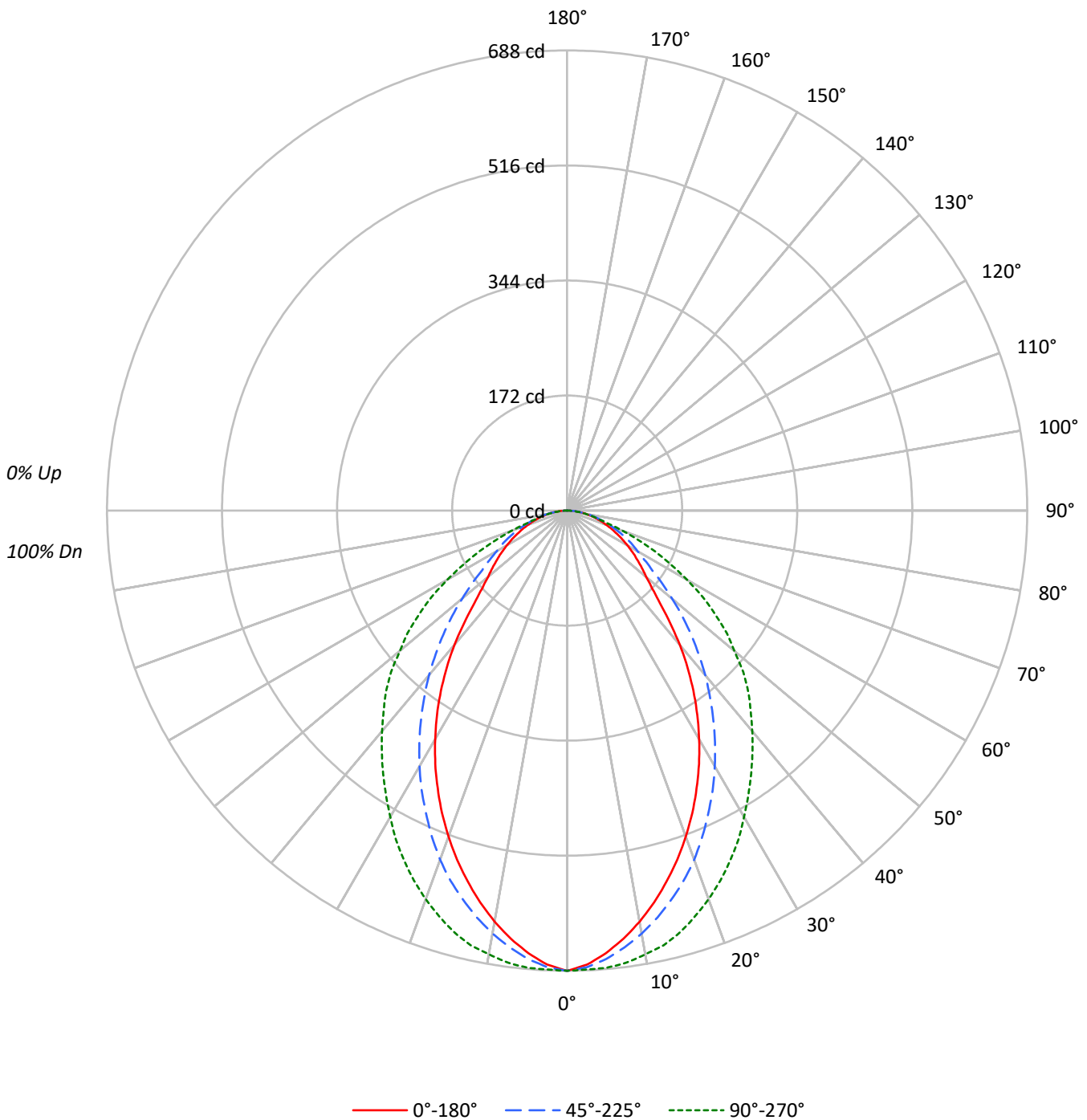
Lumens per Lamp: N/A
Luminaire Lumens: 1252.8 lumens
Efficiency: N/A
Efficacy: 72.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

TEST NUMBER: P1060901

CATALOG NUMBER: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060901

CATALOG NUMBER: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

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	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																												
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																												
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																												
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																												
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																												
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																												
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5925	5925	5925
5°	5742	5817	5930
10°	5456	5614	5891
15°	5119	5369	5820
20°	4752	5090	5665
25°	4352	4743	5483
30°	3924	4390	5257
35°	3457	4004	5043
40°	2943	3608	4840
45°	2389	3188	4664
50°	2068	2745	4367
55°	1917	2329	4051
60°	1789	2099	3553
65°	1675	1970	2954
70°	1561	1815	2233
75°	1487	1680	1607
80°	1393	1537	1359
85°	1284	1423	1067

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4664 cd/sqm

TEST NUMBER: P1060901

CATALOG NUMBER: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	5.1
10°-20°	170.8	13.6
20°-30°	233.2	18.6
30°-40°	244.3	19.5
40°-50°	211.5	16.9
50°-60°	158.9	12.7
60°-70°	102.5	8.2
70°-80°	52.5	4.2
80°-90°	15.7	1.3
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°	467.5	37.3
0°-40°	711.8	56.8
0°-60°	1082.1	86.4
0°-90°	1252.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1252.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	664	674	673	678	686	62
15°	574	589	602	630	653	161
25°	458	475	499	538	577	210
35°	329	348	381	431	480	205
45°	196	216	262	326	383	155
55°	128	132	155	221	270	115
65°	82	84	97	117	145	82
75°	45	50	50	50	48	47
85°	13	15	14	14	11	15
90°	0	0	0	0	0	



TEST NUMBER: P1060901

CATALOG NUMBER: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.1	688.1	688.1	688.1	688.1
2.5°	679.5	688.1	683.1	684.5	686.7
5°	664.3	674.4	673.0	678.1	686.0
7.5°	645.6	656.4	658.6	670.1	681.7
10°	624.0	636.2	642.0	659.3	673.7
12.5°	600.1	613.1	623.2	644.9	665.8
15°	574.2	588.6	602.3	629.7	652.8
17.5°	547.5	561.9	580.0	610.2	636.2
20°	518.6	534.5	555.4	587.2	618.2
22.5°	489.1	505.7	528.0	562.6	598.7
25°	458.0	475.4	499.2	538.1	577.1
27.5°	427.0	444.3	471.0	512.1	554.7
30°	394.6	412.6	441.5	486.2	528.7
32.5°	362.1	381.6	411.2	458.8	504.2
35°	328.9	347.7	380.9	431.4	479.7
37.5°	295.7	315.2	350.6	404.7	455.2
40°	261.8	282.0	321.0	378.0	430.6
42.5°	227.9	249.6	290.7	350.6	406.1
45°	196.2	216.4	261.8	326.0	383.0
47.5°	172.4	186.1	233.0	302.2	357.1
50°	154.4	161.6	204.9	276.3	326.0
52.5°	140.7	145.7	178.9	248.1	300.8
55°	127.7	132.0	155.1	221.4	269.8
57.5°	116.1	118.3	137.1	195.5	240.2
60°	103.9	106.0	121.9	167.3	206.3
62.5°	93.1	94.5	109.6	140.7	175.3
65°	82.2	83.7	96.7	116.9	145.0
67.5°	72.1	74.3	84.4	95.2	115.4
70°	62.0	66.4	72.1	77.2	88.7
72.5°	53.4	57.7	60.6	62.0	62.8
75°	44.7	49.8	50.5	49.8	48.3
77.5°	36.1	40.4	40.4	39.0	37.5
80°	28.1	31.7	31.0	29.6	27.4
82.5°	20.9	23.1	22.4	20.9	18.8
85°	13.0	15.1	14.4	13.7	10.8
87.5°	6.5	8.7	7.9	7.2	4.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060901
 CATALOG NUMBER: S124RDRP-H575D850-X4F0-XX-UDD-WVL-S

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	12.61	14.10	12.98	14.41	14.73	16.39	17.87	16.75	18.19	18.50
	3H	14.27	15.60	14.65	15.93	16.29	17.50	18.83	17.88	19.16	19.52
	4H	14.94	16.18	15.34	16.53	16.91	17.79	19.04	18.19	19.39	19.77
	6H	15.45	16.60	15.86	16.97	17.36	17.99	19.14	18.40	19.51	19.90
	8H	15.63	16.73	16.06	17.12	17.52	18.04	19.14	18.47	19.53	19.93
	12H	15.76	16.81	16.19	17.19	17.62	18.07	19.12	18.50	19.50	19.93
4H	2H	13.40	14.64	13.80	14.99	15.37	16.55	17.79	16.95	18.14	18.52
	3H	15.26	16.29	15.67	16.69	17.09	17.86	18.89	18.27	19.29	19.69
	4H	16.07	17.00	16.50	17.41	17.85	18.27	19.20	18.70	19.61	20.05
	6H	16.71	17.52	17.17	17.96	18.43	18.58	19.39	19.04	19.83	20.29
	8H	16.94	17.70	17.41	18.14	18.61	18.68	19.43	19.14	19.87	20.34
	12H	17.11	17.79	17.60	18.27	18.74	18.74	19.41	19.22	19.89	20.36
8H	4H	16.42	17.17	16.88	17.62	18.08	18.40	19.15	18.86	19.60	20.07
	6H	17.21	17.83	17.71	18.32	18.80	18.81	19.44	19.31	19.93	20.41
	8H	17.53	18.09	18.05	18.60	19.09	18.96	19.52	19.48	20.03	20.52
	12H	17.79	18.29	18.31	18.78	19.35	19.09	19.58	19.60	20.07	20.64
12H	4H	16.45	17.12	16.93	17.60	18.07	18.40	19.08	18.89	19.56	20.03
	6H	17.27	17.83	17.79	18.34	18.83	18.83	19.39	19.35	19.90	20.39
	8H	17.66	18.15	18.17	18.65	19.21	19.04	19.53	19.55	20.02	20.59