

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: P1060494

Luminaire Tested: S124RDRP-S575D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

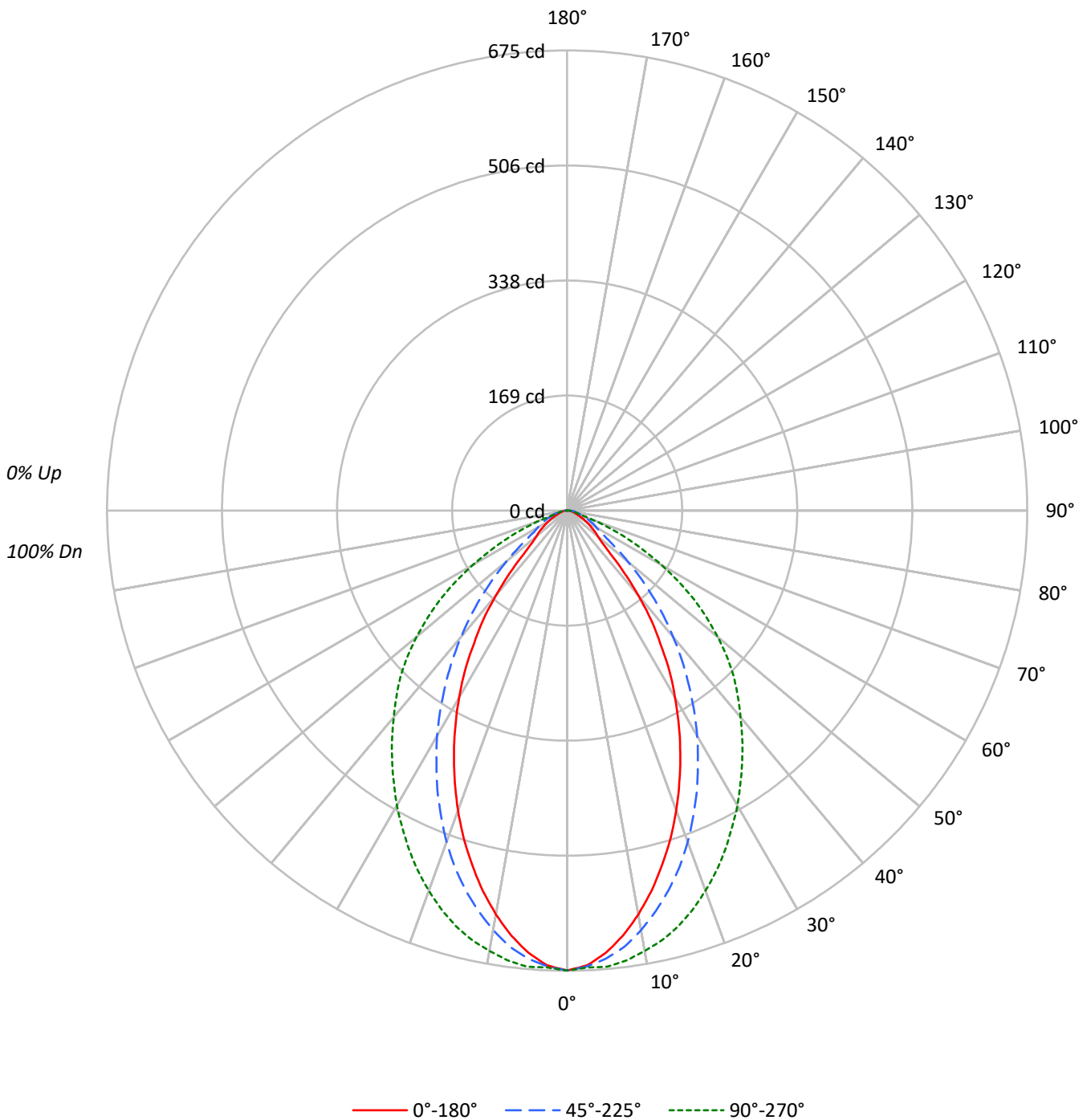
Lumens per Lamp: N/A
Luminaire Lumens: 954.8 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	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	104	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	66	75	70	66	73	68	65	63																												
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57																												
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51																												
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43																												
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5809	5809	5809
5°	5629	5701	5805
10°	5259	5463	5734
15°	4798	5134	5624
20°	4290	4739	5436
25°	3731	4282	5213
30°	3148	3792	4969
35°	2504	3264	4706
40°	1822	2719	4448
45°	1101	2148	4214
50°	788	1555	3857
55°	668	1052	3406
60°	546	856	2752
65°	430	768	1981
70°	360	645	1045
75°	326	602	526
80°	337	600	526
85°	445	889	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4214 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	6.5
10°-20°	162.8	17.0
20°-30°	211.1	22.1
30°-40°	203.2	21.3
40°-50°	151.2	15.8
50°-60°	93.0	9.7
60°-70°	45.7	4.8
70°-80°	17.8	1.9
80°-90°	8.1	0.9
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°	435.9	45.7
0°-40°	639.1	66.9
0°-60°	883.2	92.5
0°-90°	954.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	651	661	660	666	672	61
15°	538	556	576	610	631	150
25°	393	414	451	507	549	180
35°	238	261	310	388	448	149
45°	90	112	176	272	346	75
55°	44	46	70	160	227	40
65°	21	23	38	60	97	22
75°	10	17	18	17	16	11
85°	4	8	9	9	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.6	674.6	674.6	674.6	674.6
2.5°	667.8	675.3	669.3	670.1	670.8
5°	651.2	661.0	659.5	665.6	671.6
7.5°	628.6	639.9	645.2	657.3	665.6
10°	601.5	614.3	624.8	644.4	655.8
12.5°	571.3	586.4	601.5	627.9	645.2
15°	538.2	555.5	575.9	610.5	630.9
17.5°	504.3	521.6	548.0	587.9	613.5
20°	468.1	486.9	517.1	561.5	593.2
22.5°	430.4	450.7	483.9	534.4	572.1
25°	392.7	413.8	450.7	507.3	548.7
27.5°	355.0	375.4	415.3	478.6	523.8
30°	316.6	337.7	381.4	447.7	499.7
32.5°	279.6	299.2	346.0	418.3	473.3
35°	238.2	260.8	310.5	388.2	447.7
37.5°	202.8	223.1	276.6	358.0	422.1
40°	162.1	184.7	241.9	328.6	395.7
42.5°	124.4	147.0	208.8	299.2	370.8
45°	90.4	112.3	176.4	272.1	346.0
47.5°	68.6	81.4	144.7	245.7	318.1
50°	58.8	62.6	116.1	217.1	287.9
52.5°	52.0	53.5	90.4	188.4	257.8
55°	44.5	46.0	70.1	159.8	226.9
57.5°	37.7	38.4	56.5	132.7	193.7
60°	31.7	32.4	49.7	106.3	159.8
62.5°	26.4	27.1	44.5	82.2	127.4
65°	21.1	22.6	37.7	60.3	97.2
67.5°	17.3	20.4	31.7	42.2	67.8
70°	14.3	19.6	25.6	29.4	41.5
72.5°	12.1	18.1	21.9	21.1	20.4
75°	9.8	17.3	18.1	16.6	15.8
77.5°	8.3	15.1	15.1	13.6	12.8
80°	6.8	12.1	12.1	12.1	10.6
82.5°	6.0	9.8	10.6	10.6	8.3
85°	4.5	8.3	9.0	9.0	6.0
87.5°	3.0	7.5	8.3	7.5	4.5
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	5.89	7.23	6.26	7.55	7.86	15.07	16.41	15.43	16.72	17.04
	3H	7.00	8.20	7.38	8.53	8.89	15.57	16.76	15.95	17.09	17.46
	4H	7.52	8.63	7.93	8.98	9.37	15.59	16.70	16.00	17.05	17.44
	6H	7.96	8.98	8.37	9.35	9.74	15.60	16.63	16.02	17.00	17.39
	8H	8.15	9.12	8.58	9.51	9.91	15.61	16.58	16.04	16.97	17.37
	12H	8.33	9.25	8.76	9.64	10.07	15.61	16.54	16.04	16.92	17.35
4H	2H	7.04	8.15	7.44	8.50	8.88	14.96	16.07	15.36	16.42	16.80
	3H	8.38	9.29	8.79	9.69	10.10	15.55	16.46	15.96	16.86	17.26
	4H	9.11	9.93	9.55	10.35	10.79	15.61	16.42	16.04	16.84	17.28
	6H	9.73	10.43	10.19	10.88	11.34	15.68	16.39	16.15	16.83	17.30
	8H	9.97	10.63	10.44	11.07	11.54	15.71	16.37	16.18	16.82	17.29
	12H	10.20	10.79	10.69	11.27	11.74	15.75	16.33	16.24	16.82	17.29
8H	4H	9.58	10.24	10.05	10.69	11.16	15.57	16.22	16.03	16.67	17.14
	6H	10.44	10.98	10.94	11.47	11.95	15.69	16.23	16.19	16.73	17.21
	8H	10.84	11.33	11.36	11.84	12.33	15.78	16.26	16.30	16.78	17.27
	12H	11.26	11.69	11.78	12.19	12.76	15.90	16.33	16.41	16.82	17.39
12H	4H	9.64	10.22	10.12	10.70	11.18	15.54	16.12	16.02	16.60	17.08
	6H	10.57	11.05	11.09	11.57	12.06	15.68	16.16	16.20	16.67	17.17
	8H	11.09	11.52	11.61	12.02	12.59	15.81	16.24	16.32	16.73	17.30