

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: P1060528

Luminaire Tested: S124RDRP-S575D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060528
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

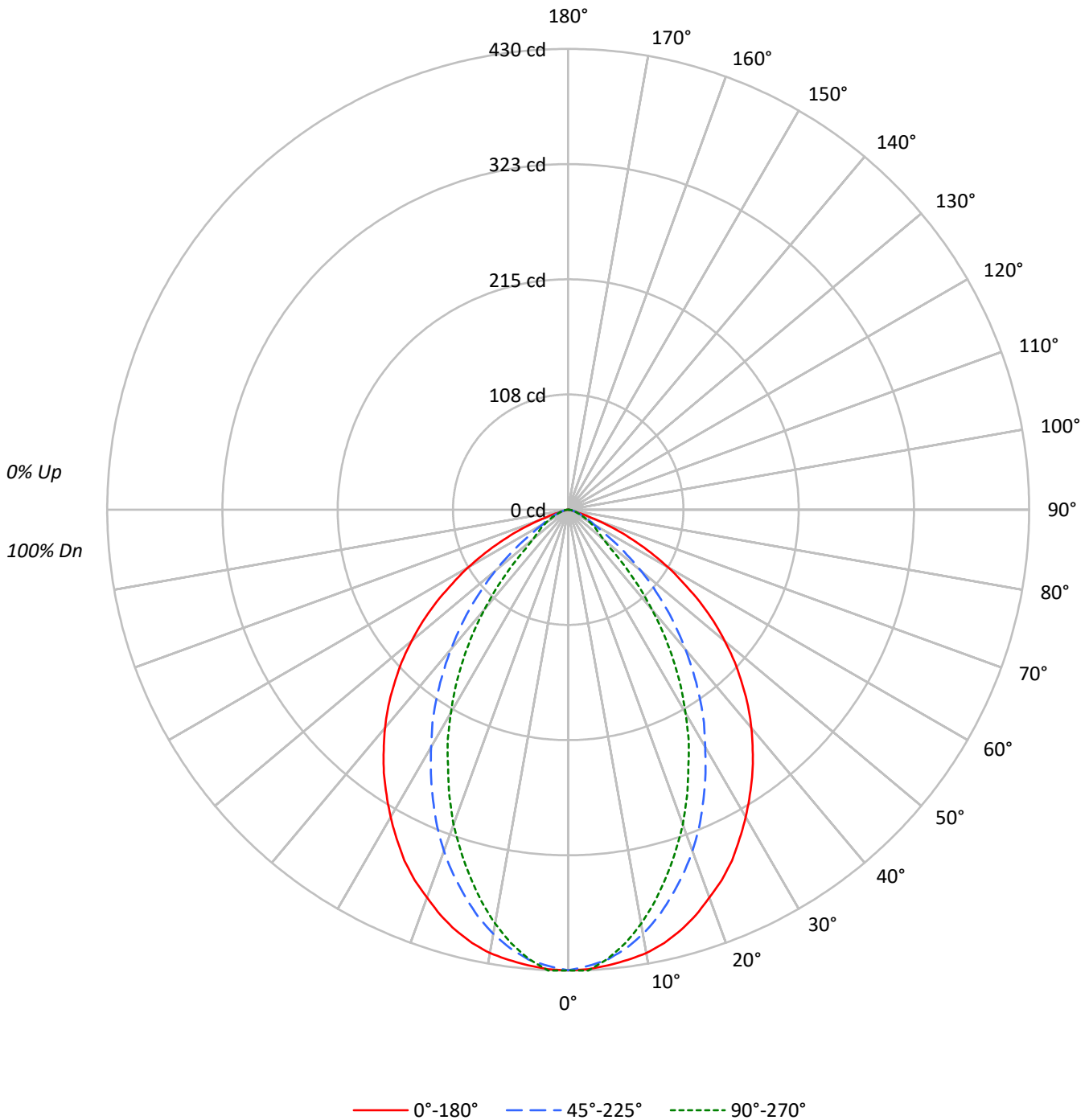
Lumens per Lamp: N/A
Luminaire Lumens: 633.7 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3701	3701	3701
5°	3689	3643	3637
10°	3673	3515	3430
15°	3621	3324	3158
20°	3528	3107	2863
25°	3434	2836	2520
30°	3293	2541	2173
35°	3151	2246	1794
40°	2988	1912	1361
45°	2794	1562	915
50°	2555	1184	568
55°	2244	782	482
60°	1857	479	396
65°	1345	371	320
70°	733	274	244
75°	160	203	223
80°	119	149	179
85°	119	119	178

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2794 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	6.3
10°-20°	105.8	16.7
20°-30°	140.1	22.1
30°-40°	139.1	21.9
40°-50°	107.0	16.9
50°-60°	63.8	10.1
60°-70°	29.0	4.6
70°-80°	7.5	1.2
80°-90°	1.7	0.3
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°	285.7	45.1
0°-40°	424.8	67.0
0°-60°	595.6	94.0
0°-90°	633.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	633.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	427	427	421	421	421	41
15°	406	396	373	360	354	114
25°	361	335	298	274	265	166
35°	300	262	214	181	171	187
45°	229	185	128	90	75	177
55°	150	107	52	33	32	133
65°	66	39	18	16	16	66
75°	5	6	6	7	7	10
85°	1	1	1	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	429.8	429.8	429.8	429.8	429.8
2.5°	429.2	429.8	426.2	429.2	430.4
5°	426.8	427.4	421.4	421.4	420.8
7.5°	423.8	422.6	412.9	409.3	408.0
10°	420.1	415.9	402.0	394.7	392.3
12.5°	414.1	407.4	388.7	378.4	374.1
15°	406.2	395.9	372.9	360.2	354.2
17.5°	396.5	383.8	356.6	340.2	333.6
20°	385.0	368.1	339.0	318.4	312.4
22.5°	374.1	352.9	319.7	296.0	289.4
25°	361.4	335.4	298.5	273.6	265.2
27.5°	346.3	318.4	277.3	251.8	243.4
30°	331.2	300.3	255.5	228.8	218.5
32.5°	315.4	281.5	235.5	205.2	195.5
35°	299.7	262.1	213.7	181.0	170.7
37.5°	282.7	242.8	191.9	158.0	146.5
40°	265.8	224.0	170.1	135.6	121.1
42.5°	248.2	204.6	148.9	112.6	98.1
45°	229.4	184.6	128.3	89.6	75.1
47.5°	210.7	165.9	107.8	67.2	53.9
50°	190.7	145.9	88.4	49.0	42.4
52.5°	170.7	126.5	69.0	38.1	36.3
55°	149.5	106.6	52.1	32.7	32.1
57.5°	127.7	88.4	37.5	28.5	27.2
60°	107.8	71.4	27.8	24.2	23.0
62.5°	87.2	53.9	23.0	20.0	18.8
65°	66.0	39.4	18.2	15.7	15.7
67.5°	47.8	26.6	14.5	12.7	12.1
70°	29.1	16.3	10.9	10.3	9.7
72.5°	14.5	9.7	8.5	7.9	7.9
75°	4.8	6.1	6.1	6.7	6.7
77.5°	3.6	4.2	4.2	4.8	4.8
80°	2.4	3.0	3.0	3.6	3.6
82.5°	1.8	1.8	2.4	2.4	3.0
85°	1.2	1.2	1.2	1.8	1.8
87.5°	0.6	0.6	0.6	1.2	1.2
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	13.67	15.00	14.03	15.31	15.63	5.22	6.56	5.59	6.87	7.18
	3H	14.17	15.35	14.55	15.68	16.05	6.04	7.22	6.42	7.55	7.91
	4H	14.14	15.24	14.54	15.59	15.97	6.32	7.42	6.73	7.77	8.15
	6H	14.08	15.08	14.49	15.45	15.85	6.49	7.50	6.90	7.87	8.26
	8H	14.04	14.99	14.47	15.38	15.79	6.55	7.51	6.98	7.90	8.30
	12H	14.00	14.91	14.43	15.29	15.72	6.60	7.51	7.03	7.89	8.32
4H	2H	13.51	14.61	13.91	14.96	15.34	5.66	6.76	6.07	7.11	7.50
	3H	14.06	14.96	14.47	15.36	15.76	6.63	7.52	7.04	7.92	8.33
	4H	14.03	14.83	14.47	15.25	15.69	6.99	7.79	7.43	8.21	8.65
	6H	13.98	14.66	14.44	15.11	15.58	7.24	7.92	7.70	8.37	8.84
	8H	13.93	14.57	14.40	15.02	15.49	7.33	7.96	7.79	8.41	8.88
	12H	13.89	14.46	14.38	14.94	15.41	7.40	7.96	7.88	8.45	8.92
8H	4H	13.92	14.56	14.39	15.01	15.48	7.08	7.72	7.55	8.17	8.64
	6H	13.86	14.38	14.36	14.88	15.36	7.39	7.91	7.89	8.40	8.88
	8H	13.81	14.28	14.33	14.79	15.29	7.51	7.98	8.04	8.50	8.99
	12H	13.78	14.19	14.29	14.69	15.26	7.65	8.06	8.16	8.55	9.13
12H	4H	13.88	14.44	14.36	14.93	15.40	7.06	7.62	7.54	8.10	8.58
	6H	13.80	14.27	14.32	14.79	15.28	7.36	7.83	7.89	8.35	8.84
	8H	13.78	14.19	14.29	14.68	15.26	7.53	7.94	8.05	8.44	9.01