

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: P1060492

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060492
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-S575D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

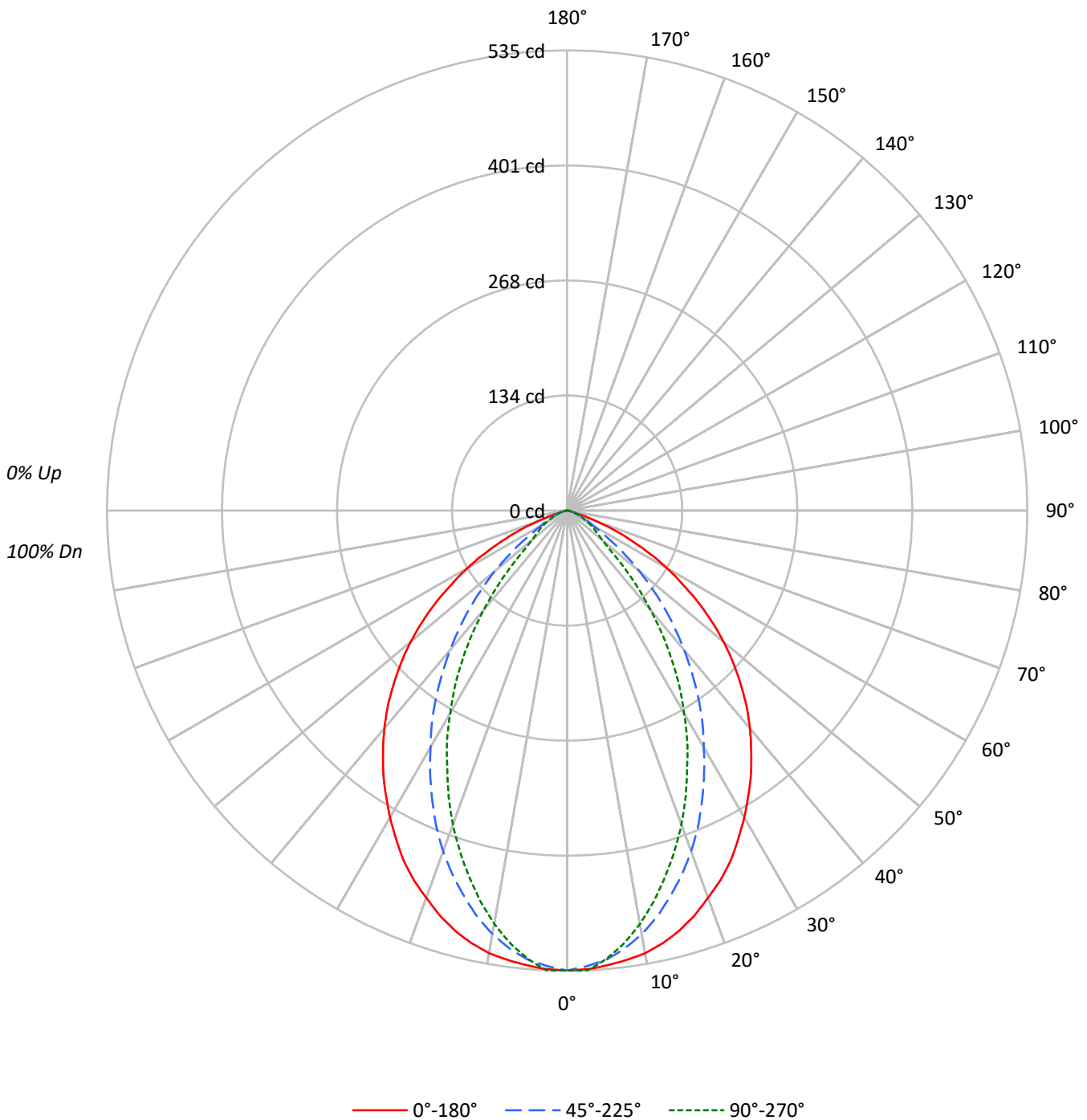
Lumens per Lamp: N/A
Luminaire Lumens: 788.2 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	63	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°	4604	4604	4604
5°	4588	4529	4523
10°	4569	4371	4266
15°	4504	4135	3927
20°	4389	3863	3560
25°	4271	3527	3134
30°	4095	3159	2703
35°	3918	2794	2232
40°	3715	2379	1693
45°	3476	1944	1137
50°	3178	1472	706
55°	2792	973	599
60°	2308	596	493
65°	1673	460	399
70°	909	342	302
75°	200	250	276
80°	149	188	223
85°	148	148	227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3476 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	6.3
10°-20°	131.5	16.7
20°-30°	174.3	22.1
30°-40°	173.0	21.9
40°-50°	133.1	16.9
50°-60°	79.3	10.1
60°-70°	36.1	4.6
70°-80°	9.3	1.2
80°-90°	2.1	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°	355.3	45.1
0°-40°	528.3	67.0
0°-60°	740.7	94.0
0°-90°	788.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	788.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	535	535	535	535	535	
5°	531	532	524	524	523	50
15°	505	492	464	448	440	142
25°	450	417	371	340	330	206
35°	373	326	266	225	212	233
45°	285	230	160	111	93	220
55°	186	132	65	41	40	166
65°	82	49	23	20	20	83
75°	6	8	8	8	8	13
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	534.6	534.6	534.6	534.6	534.6
2.5°	533.8	534.6	530.1	533.8	535.3
5°	530.8	531.6	524.0	524.0	523.3
7.5°	527.0	525.5	513.5	509.0	507.5
10°	522.5	517.3	499.9	490.9	487.9
12.5°	515.0	506.7	483.4	470.6	465.3
15°	505.2	492.4	463.8	448.0	440.5
17.5°	493.2	477.4	443.5	423.1	414.9
20°	478.9	457.8	421.6	396.0	388.5
22.5°	465.3	439.0	397.5	368.2	359.9
25°	449.5	417.1	371.2	340.3	329.8
27.5°	430.7	396.0	344.8	313.2	302.7
30°	411.8	373.4	317.7	284.6	271.8
32.5°	392.3	350.1	292.9	255.2	243.2
35°	372.7	326.0	265.8	225.1	212.3
37.5°	351.6	301.9	238.7	196.5	182.2
40°	330.5	278.6	211.6	168.7	150.6
42.5°	308.7	254.5	185.2	140.0	122.0
45°	285.4	229.6	159.6	111.4	93.4
47.5°	262.0	206.3	134.0	83.6	67.0
50°	237.2	181.5	109.9	61.0	52.7
52.5°	212.3	157.4	85.8	47.4	45.2
55°	186.0	132.5	64.8	40.7	39.9
57.5°	158.9	109.9	46.7	35.4	33.9
60°	134.0	88.8	34.6	30.1	28.6
62.5°	108.4	67.0	28.6	24.8	23.3
65°	82.1	48.9	22.6	19.6	19.6
67.5°	59.5	33.1	18.1	15.8	15.1
70°	36.1	20.3	13.6	12.8	12.0
72.5°	18.1	12.0	10.5	9.8	9.8
75°	6.0	7.5	7.5	8.3	8.3
77.5°	4.5	5.3	5.3	6.0	6.0
80°	3.0	3.8	3.8	4.5	4.5
82.5°	2.3	2.3	3.0	3.0	3.8
85°	1.5	1.5	1.5	2.3	2.3
87.5°	0.8	0.8	0.8	1.5	1.5
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	14.42	15.76	14.79	16.07	16.38	5.98	7.31	6.34	7.62	7.94
	3H	14.93	16.11	15.31	16.44	16.81	6.79	7.97	7.17	8.30	8.67
	4H	14.90	16.00	15.30	16.35	16.73	7.07	8.17	7.48	8.52	8.91
	6H	14.83	15.84	15.25	16.21	16.60	7.24	8.25	7.66	8.62	9.02
	8H	14.79	15.75	15.22	16.14	16.54	7.31	8.26	7.74	8.66	9.06
	12H	14.76	15.67	15.19	16.05	16.48	7.36	8.27	7.79	8.65	9.08
4H	2H	14.26	15.36	14.67	15.71	16.10	6.42	7.51	6.82	7.87	8.25
	3H	14.82	15.71	15.23	16.12	16.52	7.38	8.27	7.79	8.68	9.08
	4H	14.79	15.58	15.22	16.00	16.45	7.75	8.54	8.18	8.96	9.40
	6H	14.73	15.42	15.20	15.87	16.33	7.99	8.68	8.46	9.13	9.59
	8H	14.69	15.33	15.16	15.77	16.25	8.08	8.72	8.55	9.17	9.64
	12H	14.65	15.21	15.14	15.70	16.17	8.16	8.73	8.65	9.21	9.68
8H	4H	14.68	15.32	15.15	15.76	16.23	7.83	8.47	8.30	8.92	9.39
	6H	14.62	15.14	15.12	15.63	16.11	8.14	8.66	8.64	9.16	9.64
	8H	14.57	15.04	15.09	15.55	16.04	8.27	8.74	8.80	9.26	9.75
	12H	14.54	14.95	15.05	15.45	16.02	8.41	8.83	8.93	9.32	9.89
12H	4H	14.63	15.20	15.12	15.68	16.16	7.81	8.37	8.29	8.86	9.33
	6H	14.56	15.03	15.08	15.54	16.04	8.12	8.59	8.64	9.11	9.60
	8H	14.53	14.95	15.05	15.44	16.01	8.29	8.71	8.81	9.20	9.77