

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: P1060465

Luminaire Tested: S124RDRP-S575D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060465
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-S575D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

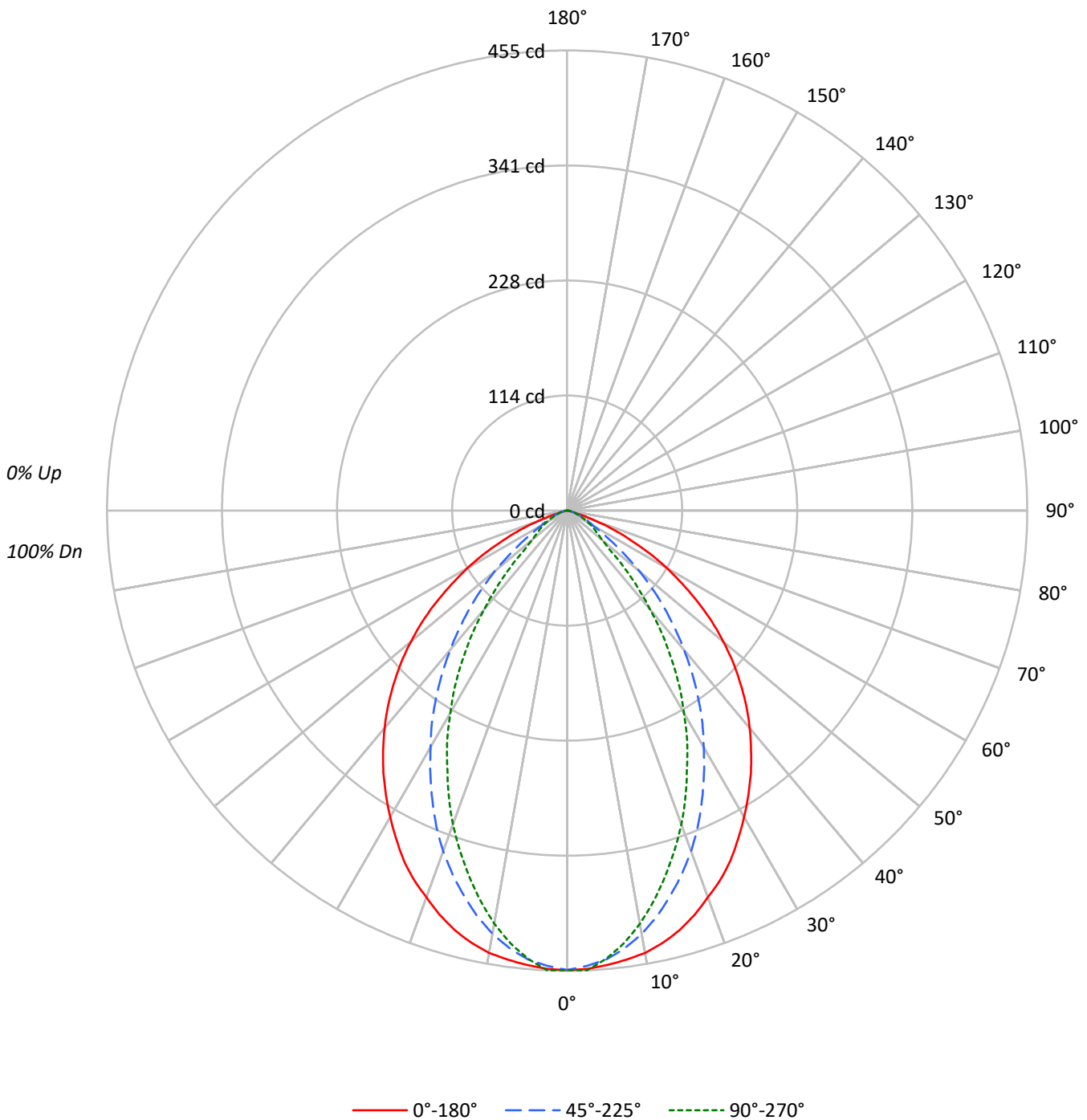
Lumens per Lamp: N/A
Luminaire Lumens: 669.8 lumens
Efficiency: N/A
Efficacy: 34.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3912	3912	3912
5°	3899	3850	3844
10°	3883	3715	3626
15°	3828	3514	3337
20°	3730	3284	3026
25°	3630	2998	2663
30°	3480	2685	2297
35°	3330	2375	1897
40°	3158	2021	1439
45°	2953	1653	966
50°	2701	1251	600
55°	2374	826	509
60°	1962	506	419
65°	1422	391	338
70°	773	290	257
75°	170	213	233
80°	129	159	188
85°	128	128	188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2953 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	6.3
10°-20°	111.8	16.7
20°-30°	148.1	22.1
30°-40°	147.0	21.9
40°-50°	113.1	16.9
50°-60°	67.4	10.1
60°-70°	30.6	4.6
70°-80°	7.9	1.2
80°-90°	1.8	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°	302.0	45.1
0°-40°	449.0	67.0
0°-60°	629.5	94.0
0°-90°	669.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	454	454	454	454	454	
5°	451	452	445	445	445	43
15°	429	418	394	381	374	121
25°	382	354	316	289	280	175
35°	317	277	226	191	180	198
45°	242	195	136	95	79	187
55°	158	113	55	35	34	141
65°	70	42	19	17	17	70
75°	5	6	6	7	7	11
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°	454.3	454.3	454.3	454.3	454.3
2.5°	453.7	454.3	450.5	453.7	455.0
5°	451.1	451.8	445.4	445.4	444.7
7.5°	447.9	446.7	436.4	432.6	431.3
10°	444.1	439.6	424.9	417.2	414.7
12.5°	437.7	430.7	410.8	399.9	395.5
15°	429.4	418.5	394.2	380.7	374.3
17.5°	419.1	405.7	376.9	359.6	352.6
20°	407.0	389.1	358.4	336.6	330.2
22.5°	395.5	373.1	337.9	312.9	305.9
25°	382.0	354.5	315.5	289.2	280.3
27.5°	366.0	336.6	293.1	266.2	257.2
30°	350.0	317.4	270.0	241.9	231.0
32.5°	333.4	297.6	248.9	216.9	206.7
35°	316.8	277.1	225.9	191.3	180.5
37.5°	298.8	256.6	202.9	167.0	154.9
40°	280.9	236.8	179.8	143.3	128.0
42.5°	262.4	216.3	157.4	119.0	103.7
45°	242.5	195.2	135.7	94.7	79.3
47.5°	222.7	175.3	113.9	71.0	57.0
50°	201.6	154.2	93.4	51.8	44.8
52.5°	180.5	133.7	72.9	40.3	38.4
55°	158.1	112.6	55.0	34.6	33.9
57.5°	135.0	93.4	39.7	30.1	28.8
60°	113.9	75.5	29.4	25.6	24.3
62.5°	92.1	57.0	24.3	21.1	19.8
65°	69.8	41.6	19.2	16.6	16.6
67.5°	50.6	28.2	15.4	13.4	12.8
70°	30.7	17.3	11.5	10.9	10.2
72.5°	15.4	10.2	9.0	8.3	8.3
75°	5.1	6.4	6.4	7.0	7.0
77.5°	3.8	4.5	4.5	5.1	5.1
80°	2.6	3.2	3.2	3.8	3.8
82.5°	1.9	1.9	2.6	2.6	3.2
85°	1.3	1.3	1.3	1.9	1.9
87.5°	0.6	0.6	0.6	1.3	1.3
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	13.86	15.19	14.22	15.50	15.82	5.41	6.75	5.78	7.06	7.37
	3H	14.37	15.55	14.75	15.88	16.24	6.23	7.41	6.61	7.74	8.10
	4H	14.33	15.43	14.74	15.78	16.16	6.51	7.60	6.91	7.95	8.34
	6H	14.27	15.28	14.68	15.65	16.04	6.67	7.68	7.09	8.05	8.45
	8H	14.23	15.18	14.66	15.58	15.98	6.74	7.69	7.17	8.08	8.49
	12H	14.19	15.10	14.62	15.49	15.92	6.78	7.69	7.22	8.08	8.51
4H	2H	13.70	14.80	14.10	15.15	15.53	5.85	6.95	6.26	7.30	7.68
	3H	14.25	15.15	14.67	15.55	15.96	6.81	7.71	7.23	8.11	8.52
	4H	14.22	15.02	14.66	15.44	15.88	7.17	7.97	7.61	8.39	8.83
	6H	14.17	14.86	14.63	15.30	15.77	7.42	8.11	7.88	8.55	9.02
	8H	14.12	14.76	14.59	15.21	15.68	7.51	8.15	7.98	8.60	9.07
	12H	14.09	14.65	14.57	15.13	15.61	7.59	8.15	8.07	8.63	9.11
8H	4H	14.11	14.75	14.58	15.20	15.67	7.26	7.90	7.73	8.35	8.82
	6H	14.05	14.57	14.55	15.07	15.55	7.57	8.09	8.07	8.59	9.07
	8H	14.00	14.47	14.53	14.99	15.48	7.70	8.17	8.23	8.69	9.18
	12H	13.97	14.39	14.49	14.88	15.45	7.84	8.25	8.35	8.75	9.32
12H	4H	14.07	14.63	14.56	15.12	15.59	7.24	7.80	7.72	8.29	8.76
	6H	14.00	14.46	14.52	14.98	15.47	7.55	8.02	8.07	8.53	9.03
	8H	13.97	14.38	14.48	14.88	15.45	7.72	8.14	8.24	8.63	9.20