

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: P1060468

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060468  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

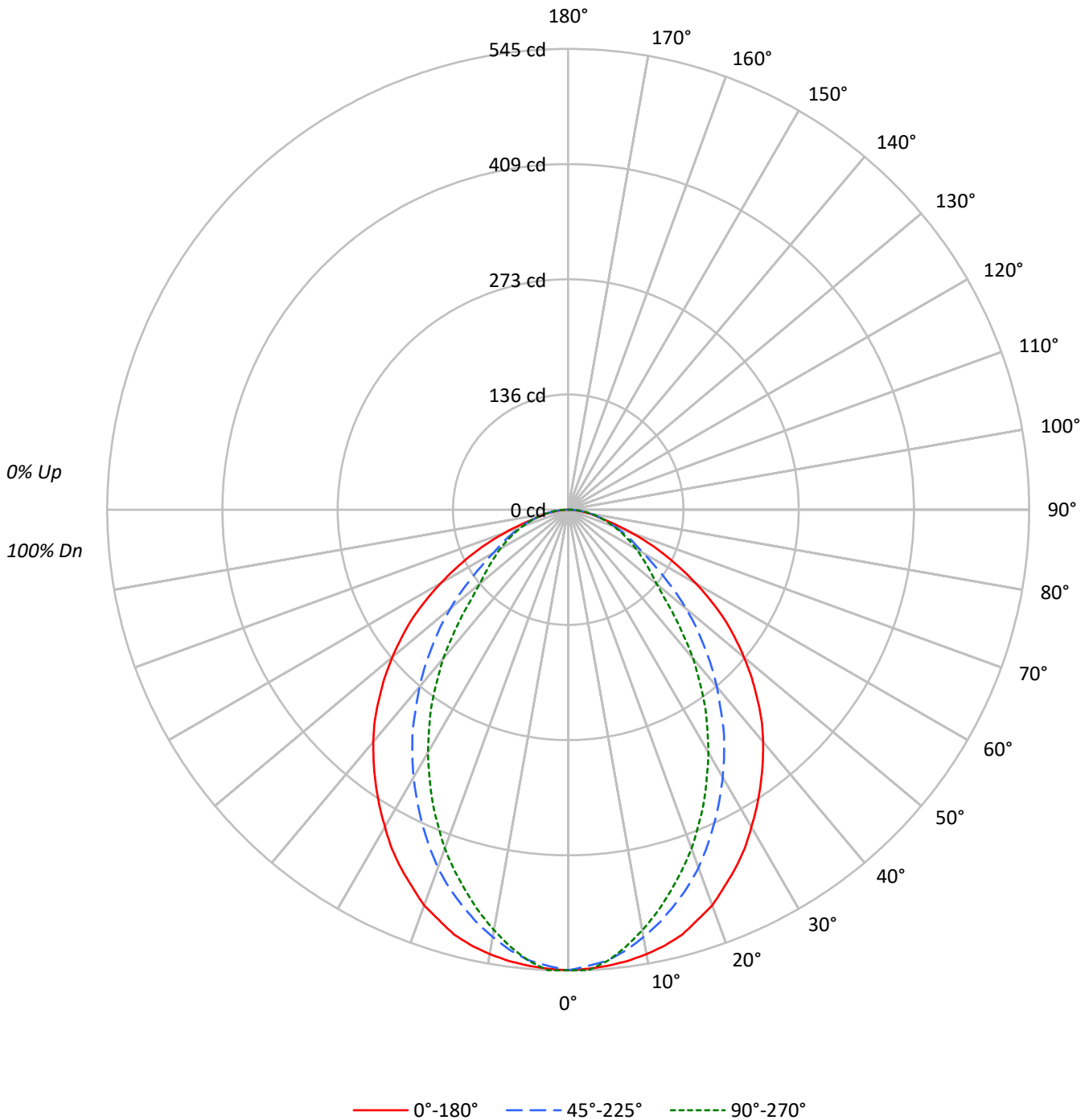
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1050.0 lumens  
Efficiency: N/A  
Efficacy: 53.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12  
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<sub>in</sub>): 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: P1060468

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot



TEST NUMBER: P1060468

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B

**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	50	30	10	50	30	10	50	30	10																			
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100																				
	1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86																			
	2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74																			
	3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64																		
	4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56																		
	5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50																		
	6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44																	
	7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40																	
	8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36																	
	9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33																	
	10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30																	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4690	4690	4690
5°	4680	4625	4630
10°	4667	4487	4415
15°	4638	4318	4164
20°	4563	4128	3906
25°	4445	3885	3611
30°	4307	3633	3296
35°	4170	3370	2960
40°	4029	3071	2582
45°	3849	2758	2159
50°	3634	2434	1826
55°	3382	2066	1690
60°	2998	1752	1598
65°	2555	1616	1512
70°	1997	1498	1435
75°	1364	1384	1384
80°	1175	1299	1334
85°	1008	1265	1393

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3849 cd/sqm



TEST NUMBER: P1060468

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.7	4.8
10°-20°	137.6	13.1
20°-30°	191.0	18.2
30°-40°	204.8	19.5
40°-50°	181.4	17.3
50°-60°	136.7	13.0
60°-70°	88.5	8.4
70°-80°	45.4	4.3
80°-90°	13.9	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°	379.3	36.1
0°-40°	584.0	55.6
0°-60°	902.1	85.9
0°-90°	1050.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1050.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	545	545	545	545	545	
5°	541	542	535	536	536	51
15°	520	509	484	472	467	146
25°	468	443	409	387	380	215
35°	397	361	321	292	282	248
45°	316	275	226	191	177	244
55°	225	188	138	116	113	200
65°	125	101	79	75	74	124
75°	41	43	42	42	42	48
85°	10	11	13	14	14	12
90°	0	0	0	0	0	



TEST NUMBER: P1060468

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	544.6	544.6	544.6	544.6	544.6
2.5°	543.3	545.2	540.1	543.9	545.2
5°	541.4	542.0	535.0	535.6	535.6
7.5°	538.2	536.9	525.4	522.2	521.5
10°	533.7	529.9	513.2	506.8	504.9
12.5°	527.9	520.9	499.8	490.8	487.0
15°	520.3	508.7	484.4	472.3	467.1
17.5°	508.7	494.0	468.4	453.1	447.3
20°	497.9	478.0	450.5	431.3	426.2
22.5°	482.5	461.4	430.0	409.5	403.1
25°	467.8	442.8	408.9	387.1	380.1
27.5°	451.8	423.6	387.1	364.1	355.2
30°	433.2	403.1	365.4	341.1	331.5
32.5°	415.3	383.3	343.0	316.1	305.9
35°	396.7	360.9	320.6	291.8	281.6
37.5°	377.6	339.8	295.6	267.5	254.0
40°	358.4	318.7	273.2	241.2	229.7
42.5°	338.5	296.9	250.2	216.9	202.2
45°	316.1	275.2	226.5	191.3	177.3
47.5°	294.4	254.0	204.8	166.4	153.6
50°	271.3	231.6	181.7	144.6	136.3
52.5°	248.3	208.6	159.3	128.0	124.1
55°	225.3	187.5	137.6	115.8	112.6
57.5°	199.7	165.7	118.4	104.9	102.4
60°	174.1	142.1	101.7	94.7	92.8
62.5°	149.1	121.6	90.2	84.5	83.2
65°	125.4	101.1	79.3	74.9	74.2
67.5°	102.4	83.2	69.1	66.6	65.3
70°	79.3	66.6	59.5	58.2	57.0
72.5°	58.9	53.8	50.6	49.9	49.3
75°	41.0	42.9	41.6	41.6	41.6
77.5°	32.6	33.3	33.9	34.6	33.9
80°	23.7	25.6	26.2	27.5	26.9
82.5°	16.6	17.9	19.8	20.5	21.1
85°	10.2	10.9	12.8	14.1	14.1
87.5°	4.5	5.1	6.4	7.7	8.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060468

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-WVL-B

**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	15.81	17.31	16.17	17.62	17.93	12.37	13.87	12.74	14.18	14.50
	3H	17.01	18.36	17.39	18.68	19.05	14.07	15.41	14.45	15.74	16.10
	4H	17.32	18.58	17.72	18.93	19.31	14.75	16.01	15.15	16.35	16.73
	6H	17.52	18.69	17.94	19.05	19.45	15.29	16.46	15.71	16.82	17.22
	8H	17.58	18.69	18.01	19.08	19.48	15.51	16.62	15.94	17.01	17.41
	12H	17.61	18.67	18.04	19.06	19.48	15.69	16.75	16.12	17.13	17.56
4H	2H	15.95	17.21	16.35	17.56	17.94	13.03	14.29	13.43	14.64	15.02
	3H	17.35	18.40	17.76	18.80	19.20	14.94	15.99	15.35	16.39	16.79
	4H	17.78	18.72	18.21	19.14	19.57	15.74	16.68	16.18	17.10	17.54
	6H	18.10	18.92	18.56	19.36	19.82	16.43	17.25	16.89	17.69	18.15
	8H	18.20	18.97	18.66	19.41	19.88	16.71	17.47	17.17	17.91	18.38
	12H	18.27	18.95	18.75	19.43	19.90	16.94	17.62	17.42	18.10	18.57
8H	4H	17.91	18.67	18.37	19.11	19.58	16.06	16.83	16.52	17.27	17.74
	6H	18.33	18.96	18.82	19.45	19.93	16.89	17.52	17.39	18.01	18.49
	8H	18.48	19.05	19.00	19.56	20.05	17.26	17.82	17.77	18.33	18.82
	12H	18.61	19.11	19.12	19.61	20.17	17.59	18.09	18.10	18.58	19.15
12H	4H	17.91	18.59	18.39	19.07	19.54	16.09	16.77	16.57	17.25	17.72
	6H	18.35	18.92	18.87	19.43	19.92	16.95	17.52	17.46	18.03	18.52
	8H	18.56	19.06	19.07	19.55	20.12	17.38	17.88	17.89	18.38	18.94