

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: P1060464

Luminaire Tested: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

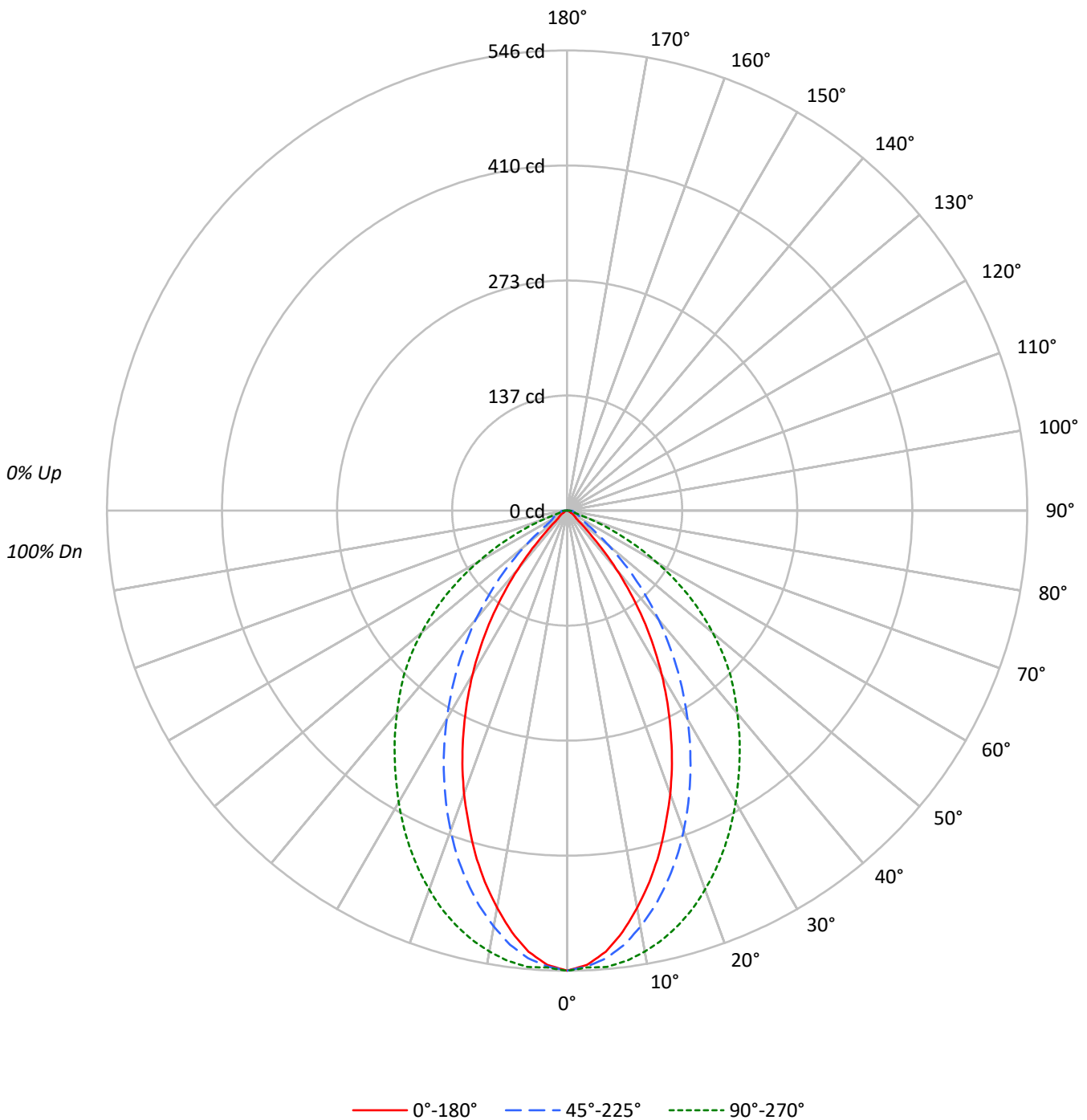
Lumens per Lamp: N/A
Luminaire Lumens: 688.0 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060464

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot



TEST NUMBER: P1060464

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

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	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45					45			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4701	4701	4701
5°	4542	4608	4697
10°	4185	4382	4645
15°	3759	4073	4541
20°	3276	3705	4386
25°	2764	3287	4195
30°	2230	2842	3975
35°	1650	2378	3752
40°	1023	1894	3530
45°	406	1381	3325
50°	181	867	3021
55°	144	452	2645
60°	100	343	2108
65°	65	340	1449
70°	65	307	677
75°	87	299	299
80°	129	347	347
85°	257	692	504

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3325 cd/sqm



TEST NUMBER: P1060464

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	7.3
10°-20°	129.2	18.8
20°-30°	163.1	23.7
30°-40°	149.7	21.8
40°-50°	101.9	14.8
50°-60°	55.5	8.1
60°-70°	24.0	3.5
70°-80°	8.8	1.3
80°-90°	5.6	0.8
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°	342.5	49.8
0°-40°	492.1	71.5
0°-60°	649.6	94.4
0°-90°	688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	525	532	533	539	543	49
15°	422	436	457	490	509	117
25°	291	311	346	401	442	133
35°	157	180	226	298	357	97
45°	33	56	113	201	273	31
55°	10	10	30	111	176	9
65°	3	4	17	35	71	4
75°	3	8	9	9	9	3
85°	3	6	7	7	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1060464

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	545.9	545.9	545.9	545.9	545.9
2.5°	539.5	545.9	541.4	542.7	542.7
5°	525.4	532.5	533.1	538.9	543.4
7.5°	504.3	514.5	519.6	531.2	538.9
10°	478.6	490.8	501.1	520.9	531.2
12.5°	451.1	465.2	480.6	506.8	521.6
15°	421.6	436.4	456.9	489.5	509.4
17.5°	388.9	406.9	431.9	471.0	495.3
20°	357.5	375.5	404.3	448.5	478.6
22.5°	324.9	343.4	375.5	424.8	460.7
25°	290.9	311.4	346.0	401.1	441.5
27.5°	257.6	279.4	315.9	376.1	421.0
30°	224.3	246.0	285.8	350.5	399.8
32.5°	190.3	212.7	255.7	323.6	378.0
35°	157.0	180.1	226.2	297.9	356.9
37.5°	123.0	147.4	196.7	273.0	335.8
40°	91.0	115.3	168.5	248.0	314.0
42.5°	60.9	85.2	139.7	223.6	293.5
45°	33.3	55.7	113.4	201.2	273.0
47.5°	17.9	30.8	87.8	179.4	249.9
50°	13.5	16.7	64.7	156.3	225.5
52.5°	11.5	12.8	44.9	132.0	201.2
55°	9.6	10.3	30.1	110.8	176.2
57.5°	7.7	8.3	22.4	89.7	149.3
60°	5.8	7.0	19.9	69.2	122.4
62.5°	4.5	5.8	18.6	50.6	96.8
65°	3.2	4.5	16.7	34.6	71.1
67.5°	3.2	5.1	14.1	22.4	48.1
70°	2.6	7.0	12.2	14.7	26.9
72.5°	2.6	7.7	10.3	10.3	10.3
75°	2.6	8.3	9.0	9.0	9.0
77.5°	2.6	7.7	8.3	7.7	7.7
80°	2.6	7.0	7.0	7.0	7.0
82.5°	2.6	6.4	7.0	7.0	5.8
85°	2.6	5.8	7.0	7.0	5.1
87.5°	1.9	5.8	6.4	6.4	3.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060464

CATALOG NUMBER: S124RDRP-S575D830-X4F0-XX-UDD-BVL-W

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	0.00	0.00	0.00	0.00	0.00	13.79	15.06	14.15	15.38	15.69
	3H	0.00	0.00	0.00	0.00	0.00	14.16	15.29	14.54	15.62	15.99
	4H	0.00	0.11	0.00	0.46	0.84	14.14	15.19	14.54	15.54	15.93
	6H	0.25	1.22	0.67	1.59	1.99	14.13	15.09	14.54	15.47	15.86
	8H	0.85	1.77	1.28	2.16	2.56	14.13	15.04	14.56	15.43	15.84
	12H	1.53	2.41	1.97	2.79	3.22	14.14	15.01	14.57	15.40	15.83
4H	2H	0.04	1.09	0.44	1.44	1.82	13.60	14.65	14.00	15.00	15.38
	3H	1.62	2.47	2.03	2.88	3.28	14.02	14.88	14.43	15.28	15.68
	4H	2.91	3.67	3.34	4.09	4.54	14.02	14.78	14.45	15.20	15.65
	6H	4.04	4.70	4.50	5.15	5.61	14.06	14.72	14.52	15.16	15.63
	8H	4.55	5.17	5.02	5.62	6.09	14.08	14.70	14.55	15.15	15.62
	12H	5.11	5.66	5.60	6.14	6.62	14.15	14.69	14.63	15.18	15.65
8H	4H	3.99	4.61	4.46	5.06	5.53	13.92	14.54	14.40	14.99	15.46
	6H	5.53	6.04	6.03	6.53	7.01	14.00	14.51	14.51	15.01	15.49
	8H	6.34	6.80	6.86	7.31	7.80	14.09	14.54	14.61	15.06	15.55
	12H	7.18	7.59	7.70	8.08	8.65	14.25	14.66	14.77	15.15	15.72
12H	4H	4.18	4.73	4.67	5.21	5.68	13.89	14.43	14.38	14.92	15.39
	6H	5.88	6.34	6.41	6.85	7.35	13.98	14.43	14.50	14.95	15.44
	8H	6.90	7.30	7.41	7.79	8.36	14.11	14.51	14.63	15.01	15.58