

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: P1060309

Luminaire Tested: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

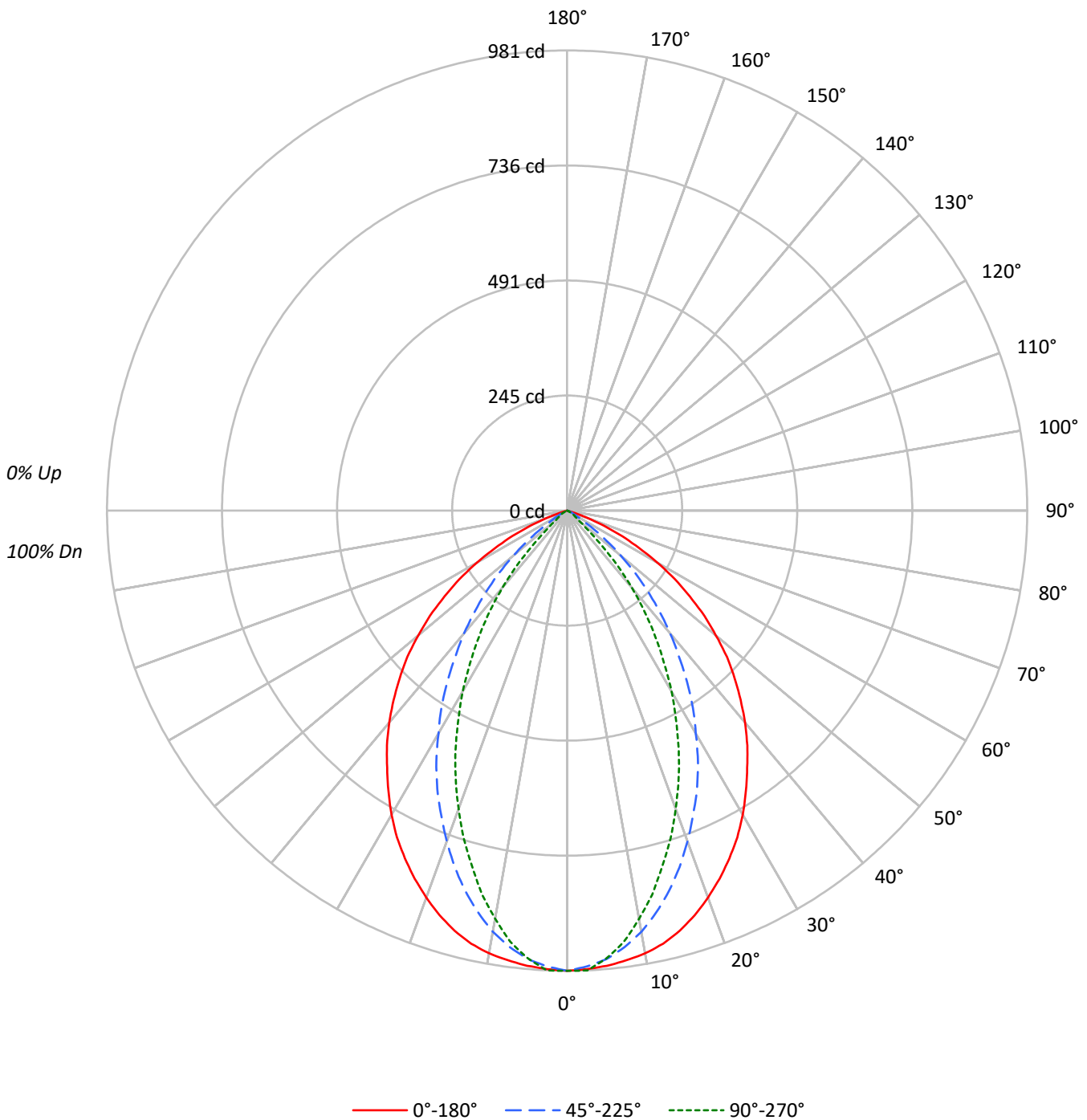
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1281.2 lumens  
Efficiency: N/A  
Efficacy: 30.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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: P1060309

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060309

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42					42			
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39					39			

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

	0°	45°	90°
0°	8449	8449	8449
5°	8420	8297	8285
10°	8381	7972	7724
15°	8267	7483	6990
20°	8043	6874	6197
25°	7773	6224	5348
30°	7445	5456	4427
35°	7035	4680	3443
40°	6630	3841	2407
45°	6147	2953	1191
50°	5546	1995	399
55°	4789	1022	276
60°	3834	367	195
65°	2628	202	88
70°	1178	108	70
75°	0	47	47
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6147 cd/sqm



TEST NUMBER: P1060309

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	7.1
10°-20°	237.5	18.5
20°-30°	307.5	24.0
30°-40°	292.1	22.8
40°-50°	206.9	16.1
50°-60°	106.2	8.3
60°-70°	37.1	2.9
70°-80°	3.2	0.3
80°-90°	0.0	0.0
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°	635.6	49.6
0°-40°	927.8	72.4
0°-60°	1240.9	96.9
0°-90°	1281.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1281.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	974	976	960	960	958	92
15°	927	899	839	800	784	261
25°	818	754	655	586	563	376
35°	669	571	445	359	328	419
45°	505	388	242	139	98	389
55°	319	210	68	20	18	285
65°	129	62	10	6	4	128
75°	0	1	1	1	1	11
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1060309

CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.2	981.2	981.2	981.2	981.2
2.5°	978.4	981.2	972.7	979.8	981.2
5°	974.1	975.5	959.9	959.9	958.5
7.5°	967.0	964.2	938.7	928.7	927.3
10°	958.5	948.6	911.7	890.4	883.4
12.5°	945.7	927.3	877.7	846.5	838.0
15°	927.3	898.9	839.4	799.7	784.1
17.5°	904.6	867.8	796.9	748.7	733.1
20°	877.7	830.9	750.1	696.2	676.3
22.5°	849.3	795.4	701.9	640.9	621.0
25°	818.1	754.3	655.1	585.6	562.9
27.5°	785.5	710.4	604.0	531.7	501.9
30°	748.7	666.4	548.7	473.6	445.2
32.5°	709.0	618.2	499.1	418.3	384.3
35°	669.2	571.4	445.2	358.7	327.5
37.5°	631.0	527.5	391.3	300.6	270.8
40°	589.8	479.3	341.7	248.1	214.1
42.5°	547.3	432.5	290.7	194.3	157.4
45°	504.8	388.5	242.5	139.0	97.8
47.5°	462.2	341.7	195.7	87.9	52.5
50°	414.0	296.3	148.9	46.8	29.8
52.5°	368.7	253.8	106.3	26.9	22.7
55°	319.0	209.8	68.1	19.9	18.4
57.5°	272.2	167.3	38.3	15.6	14.2
60°	222.6	129.0	21.3	12.8	11.3
62.5°	173.0	93.6	14.2	8.5	7.1
65°	129.0	62.4	9.9	5.7	4.3
67.5°	85.1	35.4	7.1	2.8	2.8
70°	46.8	17.0	4.3	2.8	2.8
72.5°	17.0	5.7	2.8	1.4	1.4
75°	0.0	1.4	1.4	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	1.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060309  
 CATALOG NUMBER: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-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	15.94	17.20	16.31	17.51	17.83	0.00	0.00	0.00	0.18	0.50
	3H	16.22	17.33	16.60	17.66	18.02	0.00	0.00	0.00	0.12	0.49
	4H	16.14	17.17	16.55	17.52	17.90	0.00	0.00	0.00	0.04	0.43
	6H	16.06	17.00	16.47	17.37	17.76	0.00	0.00	0.00	0.00	0.32
	8H	16.01	16.90	16.44	17.29	17.69	0.00	0.00	0.00	0.00	0.25
	12H	15.96	16.81	16.40	17.19	17.62	0.00	0.00	0.00	0.00	0.18
4H	2H	15.72	16.74	16.12	17.09	17.48	0.00	0.10	0.00	0.45	0.83
	3H	16.00	16.83	16.41	17.23	17.64	0.00	0.03	0.00	0.44	0.84
	4H	15.91	16.64	16.34	17.06	17.51	0.00	0.00	0.00	0.34	0.79
	6H	15.82	16.45	16.28	16.90	17.37	0.00	0.00	0.00	0.20	0.67
	8H	15.76	16.35	16.23	16.79	17.27	0.00	0.00	0.00	0.10	0.57
	12H	15.71	16.22	16.19	16.71	17.18	0.00	0.00	0.00	0.01	0.49
8H	4H	15.76	16.35	16.23	16.79	17.27	0.00	0.00	0.00	0.28	0.75
	6H	15.65	16.13	16.15	16.62	17.11	0.00	0.00	0.00	0.14	0.62
	8H	15.58	16.01	16.11	16.53	17.02	0.00	0.00	0.00	0.04	0.53
	12H	15.53	15.91	16.05	16.41	16.98	0.00	0.00	0.00	0.00	0.49
12H	4H	15.71	16.22	16.19	16.71	17.18	0.00	0.00	0.00	0.20	0.67
	6H	15.58	16.01	16.11	16.53	17.02	0.00	0.00	0.00	0.04	0.53
	8H	15.53	15.91	16.05	16.41	16.98	0.00	0.00	0.00	0.00	0.49