

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060760

Luminaire Tested: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060760  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

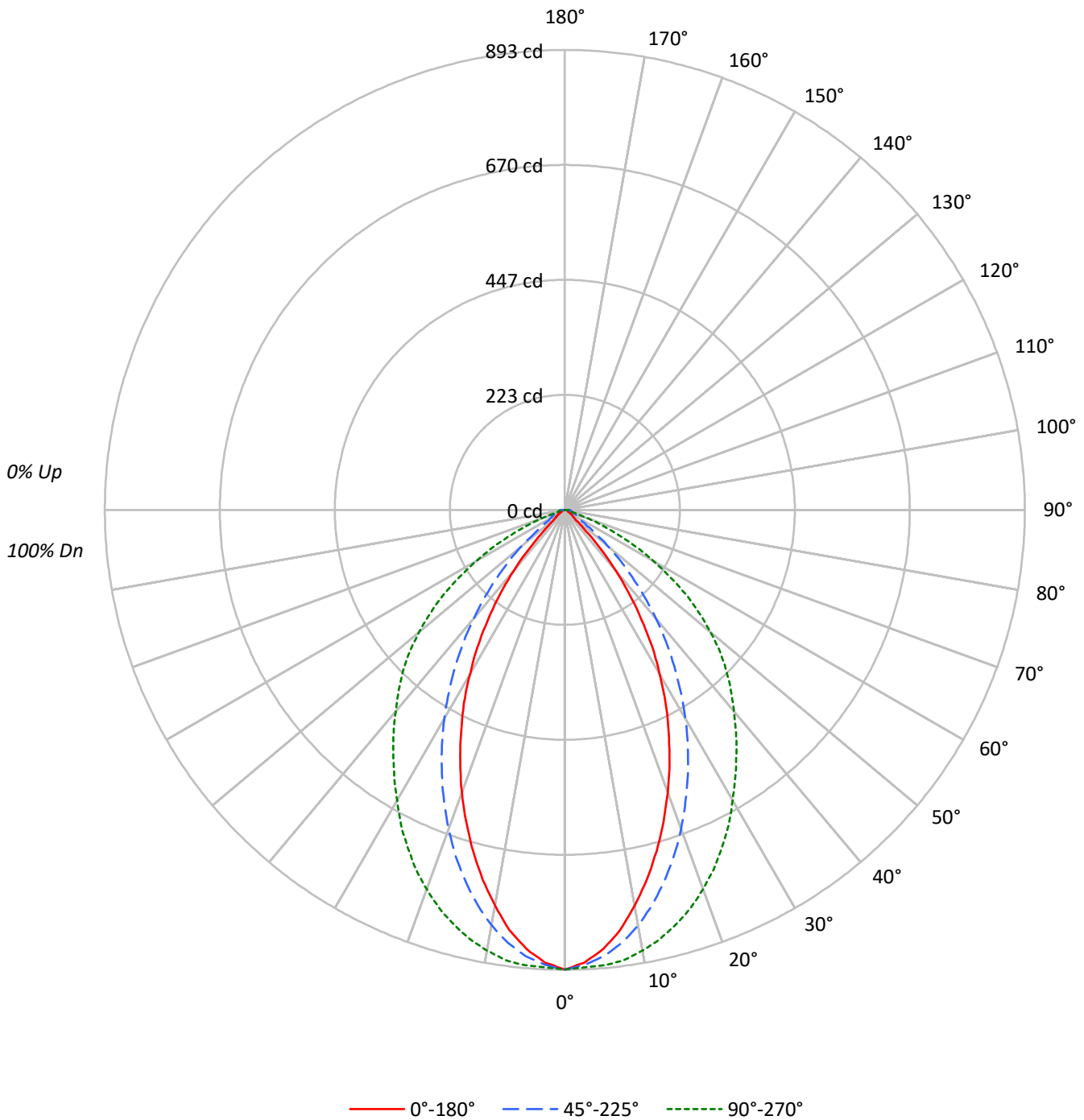
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1120.2 lumens  
Efficiency: N/A  
Efficacy: 30.7 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): 36.5  
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: P1060760

CATALOG NUMBER: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1060760

CATALOG NUMBER: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

**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	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	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

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

	0°	45°	90°
0°	7686	7686	7686
5°	7398	7521	7674
10°	6823	7164	7598
15°	6124	6651	7431
20°	5352	6045	7183
25°	4526	5369	6863
30°	3656	4655	6477
35°	2722	3890	6102
40°	1728	3083	5741
45°	690	2260	5413
50°	301	1441	4942
55°	231	746	4313
60°	164	510	3420
65°	120	505	2337
70°	118	446	1073
75°	156	472	433
80°	233	526	471
85°	464	939	701

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5413 cd/sqm



TEST NUMBER: P1060760

CATALOG NUMBER: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.7	7.3
10°-20°	210.8	18.8
20°-30°	266.2	23.8
30°-40°	244.5	21.8
40°-50°	166.7	14.9
50°-60°	90.4	8.1
60°-70°	38.4	3.4
70°-80°	13.3	1.2
80°-90°	8.4	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°	558.6	49.9
0°-40°	803.1	71.7
0°-60°	1060.2	94.6
0°-90°	1120.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	856	869	870	877	888	79
15°	687	709	746	799	834	191
25°	476	507	565	653	722	218
35°	259	293	370	486	580	161
45°	57	91	186	329	444	52
55°	15	17	50	181	287	14
65°	6	7	25	57	115	6
75°	5	13	14	13	13	5
85°	5	10	10	10	7	4
90°	0	0	0	0	0	



TEST NUMBER: P1060760

CATALOG NUMBER: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	892.6	892.6	892.6	892.6	892.6
2.5°	879.6	890.2	884.3	886.7	889.0
5°	855.9	868.9	870.1	877.2	887.8
7.5°	822.8	838.2	847.7	865.4	881.9
10°	780.3	799.2	819.3	847.7	868.9
12.5°	735.3	755.4	785.0	825.2	853.6
15°	686.9	709.3	746.0	799.2	833.5
17.5°	636.0	660.9	704.6	767.3	811.0
20°	584.0	611.2	659.7	730.6	783.8
22.5°	530.8	559.2	612.4	692.8	755.4
25°	476.4	507.2	565.1	652.6	722.3
27.5°	424.4	452.8	516.6	612.4	689.2
30°	367.7	399.6	468.2	571.0	651.4
32.5°	315.7	346.4	418.5	528.5	615.9
35°	258.9	293.2	370.0	485.9	580.5
37.5°	205.7	238.8	322.7	445.7	546.2
40°	153.7	188.0	274.3	405.5	510.7
42.5°	102.9	139.5	228.2	364.1	477.6
45°	56.7	91.0	185.6	328.7	444.5
47.5°	29.6	49.7	145.4	293.2	409.0
50°	22.5	27.2	107.6	254.2	368.9
52.5°	18.9	20.1	73.3	215.2	328.7
55°	15.4	16.6	49.7	180.9	287.3
57.5°	11.8	13.0	35.5	147.8	241.2
60°	9.5	10.6	29.6	113.5	198.6
62.5°	7.1	8.3	28.4	83.9	156.1
65°	5.9	7.1	24.8	56.7	114.7
67.5°	4.7	7.1	21.3	36.6	76.8
70°	4.7	9.5	17.7	23.6	42.6
72.5°	4.7	10.6	15.4	15.4	15.4
75°	4.7	13.0	14.2	13.0	13.0
77.5°	4.7	11.8	11.8	11.8	11.8
80°	4.7	10.6	10.6	10.6	9.5
82.5°	4.7	9.5	10.6	10.6	8.3
85°	4.7	9.5	9.5	9.5	7.1
87.5°	3.5	9.5	9.5	9.5	4.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060760  
 CATALOG NUMBER: S124RDR-H1195D935-X4F0-XX-UDD-BVL-S

**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	15.53	16.80	15.89	17.12	17.43
	3H	0.00	0.17	0.00	0.50	0.86	15.88	17.01	16.26	17.34	17.71
	4H	0.42	1.46	0.82	1.82	2.20	15.85	16.90	16.25	17.25	17.63
	6H	1.78	2.74	2.19	3.11	3.50	15.82	16.79	16.24	17.16	17.55
	8H	2.46	3.37	2.89	3.76	4.16	15.81	16.73	16.25	17.12	17.52
	12H	3.26	4.13	3.69	4.51	4.94	15.81	16.68	16.25	17.07	17.50
4H	2H	1.22	2.27	1.62	2.62	3.00	15.33	16.38	15.73	16.73	17.12
	3H	2.64	3.50	3.06	3.90	4.31	15.73	16.58	16.14	16.99	17.39
	4H	4.09	4.86	4.53	5.28	5.72	15.71	16.47	16.14	16.89	17.33
	6H	5.33	5.99	5.80	6.44	6.90	15.72	16.38	16.19	16.83	17.30
	8H	5.90	6.52	6.37	6.96	7.43	15.73	16.35	16.20	16.80	17.27
	12H	6.58	7.12	7.06	7.60	8.08	15.77	16.31	16.26	16.80	17.27
8H	4H	5.17	5.78	5.64	6.23	6.70	15.61	16.22	16.08	16.67	17.14
	6H	6.77	7.27	7.28	7.77	8.25	15.66	16.16	16.16	16.66	17.14
	8H	7.61	8.06	8.13	8.58	9.07	15.71	16.16	16.24	16.68	17.17
	12H	8.58	8.98	9.10	9.47	10.05	15.83	16.23	16.35	16.72	17.30
12H	4H	5.35	5.90	5.84	6.38	6.86	15.57	16.11	16.05	16.59	17.07
	6H	7.12	7.57	7.64	8.09	8.58	15.62	16.08	16.15	16.59	17.08
	8H	8.14	8.54	8.66	9.04	9.61	15.73	16.13	16.24	16.62	17.19