

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: P1060715

Luminaire Tested: S124RDR-H1195D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060715
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-H1195D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

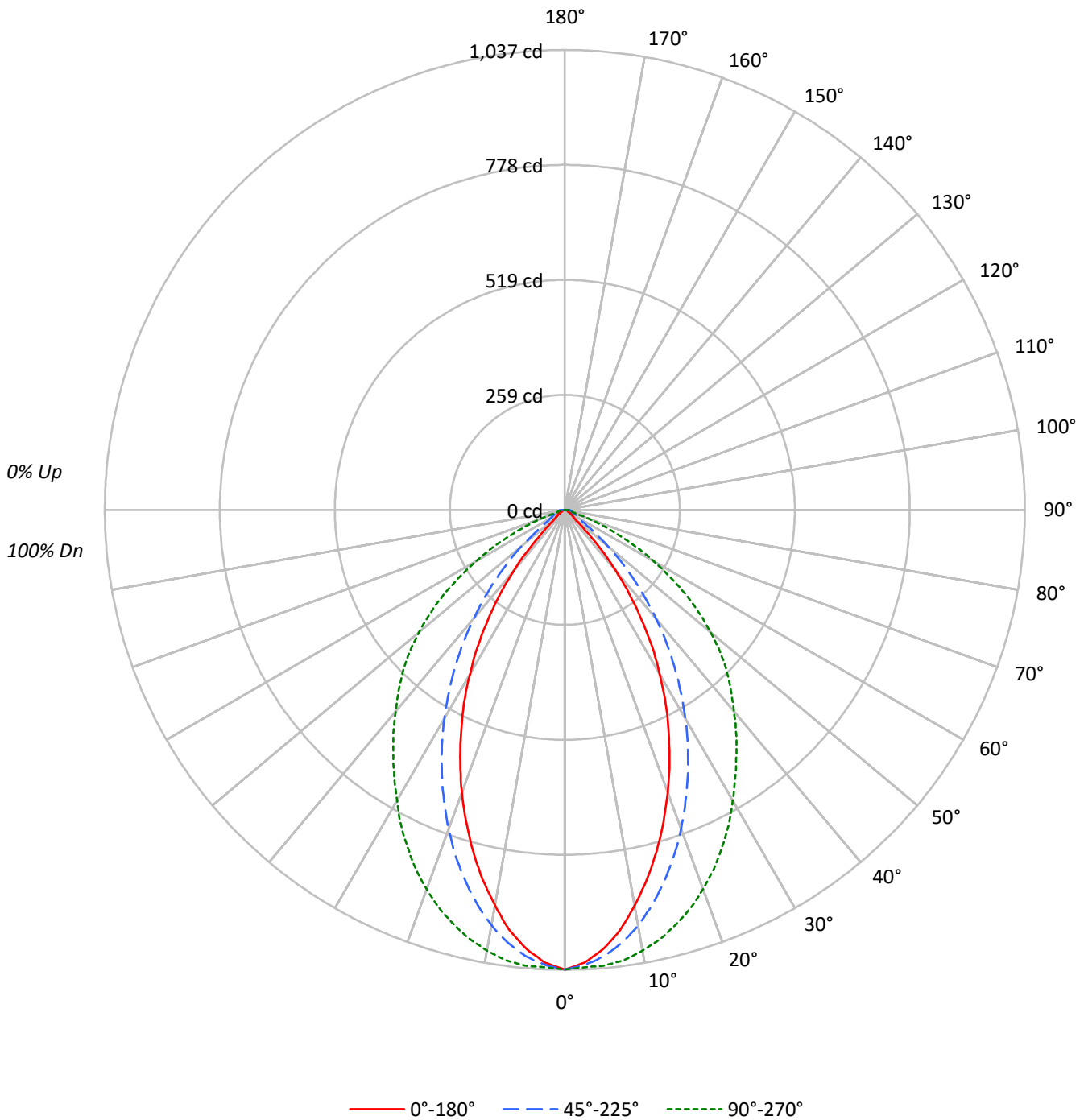
Lumens per Lamp: N/A
Luminaire Lumens: 1301.1 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	8927	8927	8927
5°	8593	8736	8914
10°	7924	8320	8824
15°	7112	7724	8630
20°	6216	7021	8343
25°	5258	6236	7972
30°	4246	5406	7523
35°	3161	4518	7087
40°	2007	3581	6668
45°	803	2626	6287
50°	350	1675	5739
55°	269	866	5010
60°	189	591	3973
65°	141	587	2714
70°	138	519	1244
75°	183	549	502
80°	273	615	545
85°	543	1087	810

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6287 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	7.3
10°-20°	244.8	18.8
20°-30°	309.1	23.8
30°-40°	284.0	21.8
40°-50°	193.6	14.9
50°-60°	105.0	8.1
60°-70°	44.5	3.4
70°-80°	15.4	1.2
80°-90°	9.8	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°	648.8	49.9
0°-40°	932.8	71.7
0°-60°	1231.4	94.6
0°-90°	1301.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1301.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	994	1009	1011	1019	1031	92
15°	798	824	866	928	968	222
25°	553	589	656	758	839	253
35°	301	340	430	564	674	187
45°	66	106	216	382	516	61
55°	18	19	58	210	334	16
65°	7	8	29	66	133	7
75°	6	15	16	15	15	6
85°	6	11	11	11	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1036.7	1036.7	1036.7	1036.7	1036.7
2.5°	1021.6	1033.9	1027.1	1029.8	1032.6
5°	994.1	1009.2	1010.6	1018.8	1031.2
7.5°	955.7	973.5	984.5	1005.1	1024.3
10°	906.2	928.2	951.5	984.5	1009.2
12.5°	854.1	877.4	911.7	958.4	991.4
15°	797.8	823.8	866.4	928.2	968.0
17.5°	738.7	767.6	818.4	891.1	941.9
20°	678.3	709.9	766.2	848.6	910.4
22.5°	616.5	649.5	711.3	804.6	877.4
25°	553.4	589.1	656.3	757.9	839.0
27.5°	492.9	525.9	600.0	711.3	800.5
30°	427.0	464.1	543.7	663.2	756.6
32.5°	366.6	402.3	486.1	613.8	715.4
35°	300.7	340.5	429.8	564.3	674.2
37.5°	238.9	277.4	374.9	517.7	634.4
40°	178.5	218.3	318.6	471.0	593.2
42.5°	119.5	162.0	265.0	422.9	554.7
45°	65.9	105.7	215.6	381.7	516.3
47.5°	34.3	57.7	168.9	340.5	475.1
50°	26.1	31.6	125.0	295.2	428.4
52.5°	22.0	23.3	85.1	249.9	381.7
55°	17.9	19.2	57.7	210.1	333.7
57.5°	13.7	15.1	41.2	171.6	280.1
60°	11.0	12.4	34.3	131.8	230.7
62.5°	8.2	9.6	33.0	97.5	181.2
65°	6.9	8.2	28.8	65.9	133.2
67.5°	5.5	8.2	24.7	42.6	89.3
70°	5.5	11.0	20.6	27.5	49.4
72.5°	5.5	12.4	17.9	17.9	17.9
75°	5.5	15.1	16.5	15.1	15.1
77.5°	5.5	13.7	13.7	13.7	13.7
80°	5.5	12.4	12.4	12.4	11.0
82.5°	5.5	11.0	12.4	12.4	9.6
85°	5.5	11.0	11.0	11.0	8.2
87.5°	4.1	11.0	11.0	11.0	5.5
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	0.00	0.00	0.00	0.00	0.21	16.05	17.32	16.41	17.63	17.95
	3H	0.00	0.69	0.00	1.02	1.38	16.40	17.53	16.78	17.86	18.23
	4H	0.95	2.00	1.35	2.35	2.73	16.37	17.42	16.77	17.77	18.15
	6H	2.32	3.28	2.73	3.65	4.04	16.34	17.31	16.76	17.68	18.07
	8H	3.00	3.91	3.43	4.30	4.71	16.33	17.24	16.76	17.64	18.04
	12H	3.80	4.67	4.23	5.06	5.49	16.33	17.20	16.76	17.58	18.02
4H	2H	1.74	2.79	2.14	3.14	3.53	15.85	16.90	16.25	17.25	17.63
	3H	3.17	4.02	3.58	4.43	4.83	16.24	17.10	16.66	17.50	17.91
	4H	4.62	5.38	5.05	5.80	6.25	16.22	16.99	16.66	17.41	17.85
	6H	5.86	6.52	6.33	6.97	7.44	16.24	16.90	16.71	17.35	17.82
	8H	6.44	7.05	6.91	7.50	7.97	16.25	16.87	16.72	17.32	17.79
	12H	7.11	7.65	7.60	8.14	8.61	16.29	16.83	16.78	17.32	17.79
8H	4H	5.69	6.31	6.16	6.75	7.23	16.13	16.74	16.60	17.19	17.66
	6H	7.31	7.81	7.81	8.31	8.79	16.18	16.68	16.68	17.18	17.66
	8H	8.14	8.59	8.67	9.11	9.60	16.23	16.69	16.76	17.20	17.69
	12H	9.11	9.51	9.63	10.00	10.58	16.35	16.75	16.87	17.24	17.82
12H	4H	5.88	6.42	6.37	6.91	7.38	16.09	16.63	16.57	17.11	17.59
	6H	7.66	8.11	8.18	8.62	9.12	16.14	16.60	16.67	17.11	17.60
	8H	8.68	9.08	9.19	9.57	10.15	16.25	16.65	16.76	17.14	17.72