

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: P1060778

Luminaire Tested: S124RDR-H1195D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060778
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-H1195D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

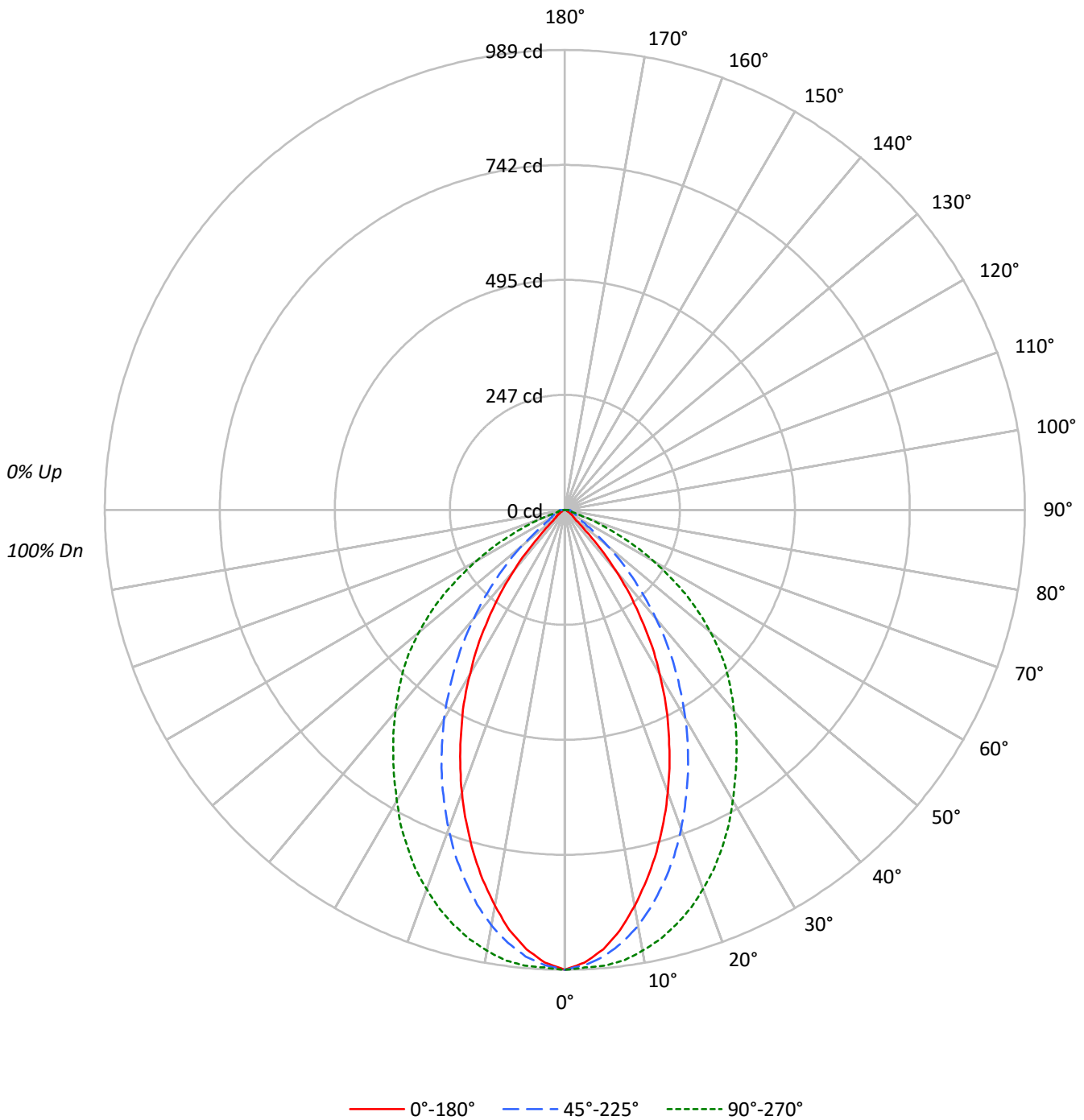
Lumens per Lamp: N/A
Luminaire Lumens: 1241.2 lumens
Efficiency: N/A
Efficacy: 34.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	8516	8516	8516
5°	8198	8334	8503
10°	7559	7938	8419
15°	6785	7369	8233
20°	5930	6698	7959
25°	5016	5949	7605
30°	4051	5158	7177
35°	3016	4310	6761
40°	1914	3416	6361
45°	766	2505	5998
50°	334	1597	5475
55°	255	826	4779
60°	181	563	3791
65°	132	560	2590
70°	131	493	1188
75°	173	522	479
80°	258	585	521
85°	514	1037	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5998 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	7.3
10°-20°	233.5	18.8
20°-30°	294.9	23.8
30°-40°	270.9	21.8
40°-50°	184.7	14.9
50°-60°	100.2	8.1
60°-70°	42.5	3.4
70°-80°	14.7	1.2
80°-90°	9.3	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°	618.9	49.9
0°-40°	889.8	71.7
0°-60°	1174.7	94.6
0°-90°	1241.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1241.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	948	963	964	972	984	88
15°	761	786	827	886	924	212
25°	528	562	626	723	800	241
35°	287	325	410	538	643	178
45°	63	101	206	364	492	58
55°	17	18	55	200	318	15
65°	6	8	28	63	127	7
75°	5	14	16	14	14	6
85°	5	10	10	10	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	989.0	989.0	989.0	989.0	989.0
2.5°	974.6	986.4	979.8	982.4	985.1
5°	948.4	962.8	964.1	972.0	983.7
7.5°	911.7	928.7	939.2	958.9	977.2
10°	864.5	885.5	907.8	939.2	962.8
12.5°	814.8	837.0	869.8	914.3	945.8
15°	761.1	786.0	826.6	885.5	923.5
17.5°	704.7	732.2	780.7	850.1	898.6
20°	647.1	677.2	730.9	809.5	868.5
22.5°	588.2	619.6	678.5	767.6	837.0
25°	527.9	562.0	626.1	723.1	800.4
27.5°	470.3	501.7	572.4	678.5	763.7
30°	407.4	442.8	518.7	632.7	721.8
32.5°	349.7	383.8	463.7	585.5	682.5
35°	286.9	324.9	410.0	538.4	643.2
37.5°	227.9	264.6	357.6	493.8	605.2
40°	170.3	208.3	303.9	449.3	565.9
42.5°	114.0	154.6	252.8	403.5	529.2
45°	62.9	100.9	205.7	364.2	492.5
47.5°	32.7	55.0	161.1	324.9	453.2
50°	24.9	30.1	119.2	281.6	408.7
52.5°	21.0	22.3	81.2	238.4	364.2
55°	17.0	18.3	55.0	200.4	318.3
57.5°	13.1	14.4	39.3	163.7	267.2
60°	10.5	11.8	32.7	125.8	220.1
62.5°	7.9	9.2	31.4	93.0	172.9
65°	6.5	7.9	27.5	62.9	127.1
67.5°	5.2	7.9	23.6	40.6	85.1
70°	5.2	10.5	19.6	26.2	47.2
72.5°	5.2	11.8	17.0	17.0	17.0
75°	5.2	14.4	15.7	14.4	14.4
77.5°	5.2	13.1	13.1	13.1	13.1
80°	5.2	11.8	11.8	11.8	10.5
82.5°	5.2	10.5	11.8	11.8	9.2
85°	5.2	10.5	10.5	10.5	7.9
87.5°	3.9	10.5	10.5	10.5	5.2
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	0.05	15.88	17.16	16.25	17.47	17.79
	3H	0.00	0.52	0.00	0.85	1.22	16.24	17.37	16.62	17.70	18.06
	4H	0.77	1.82	1.18	2.17	2.56	16.21	17.25	16.61	17.61	17.99
	6H	2.13	3.10	2.55	3.47	3.86	16.18	17.14	16.60	17.51	17.91
	8H	2.81	3.72	3.24	4.11	4.52	16.17	17.08	16.60	17.47	17.88
	12H	3.61	4.48	4.04	4.86	5.29	16.17	17.04	16.60	17.42	17.85
4H	2H	1.58	2.63	1.98	2.98	3.36	15.69	16.73	16.09	17.09	17.47
	3H	3.00	3.86	3.41	4.26	4.67	16.08	16.94	16.49	17.34	17.74
	4H	4.45	5.21	4.88	5.63	6.08	16.06	16.82	16.50	17.24	17.69
	6H	5.69	6.35	6.16	6.80	7.27	16.08	16.74	16.54	17.18	17.65
	8H	6.26	6.87	6.73	7.32	7.79	16.09	16.70	16.56	17.15	17.62
	12H	6.93	7.47	7.42	7.96	8.43	16.13	16.67	16.61	17.15	17.63
8H	4H	5.52	6.14	5.99	6.59	7.06	15.96	16.58	16.43	17.02	17.49
	6H	7.14	7.64	7.64	8.14	8.62	16.01	16.51	16.51	17.01	17.49
	8H	7.97	8.42	8.49	8.94	9.43	16.07	16.52	16.59	17.04	17.53
	12H	8.94	9.33	9.45	9.83	10.40	16.19	16.59	16.70	17.08	17.65
12H	4H	5.71	6.26	6.20	6.74	7.21	15.92	16.46	16.41	16.95	17.42
	6H	7.48	7.94	8.01	8.45	8.94	15.98	16.43	16.50	16.95	17.44
	8H	8.51	8.90	9.02	9.40	9.97	16.08	16.48	16.60	16.98	17.55