

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: P1060780

Luminaire Tested: S124RDR-H1195D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

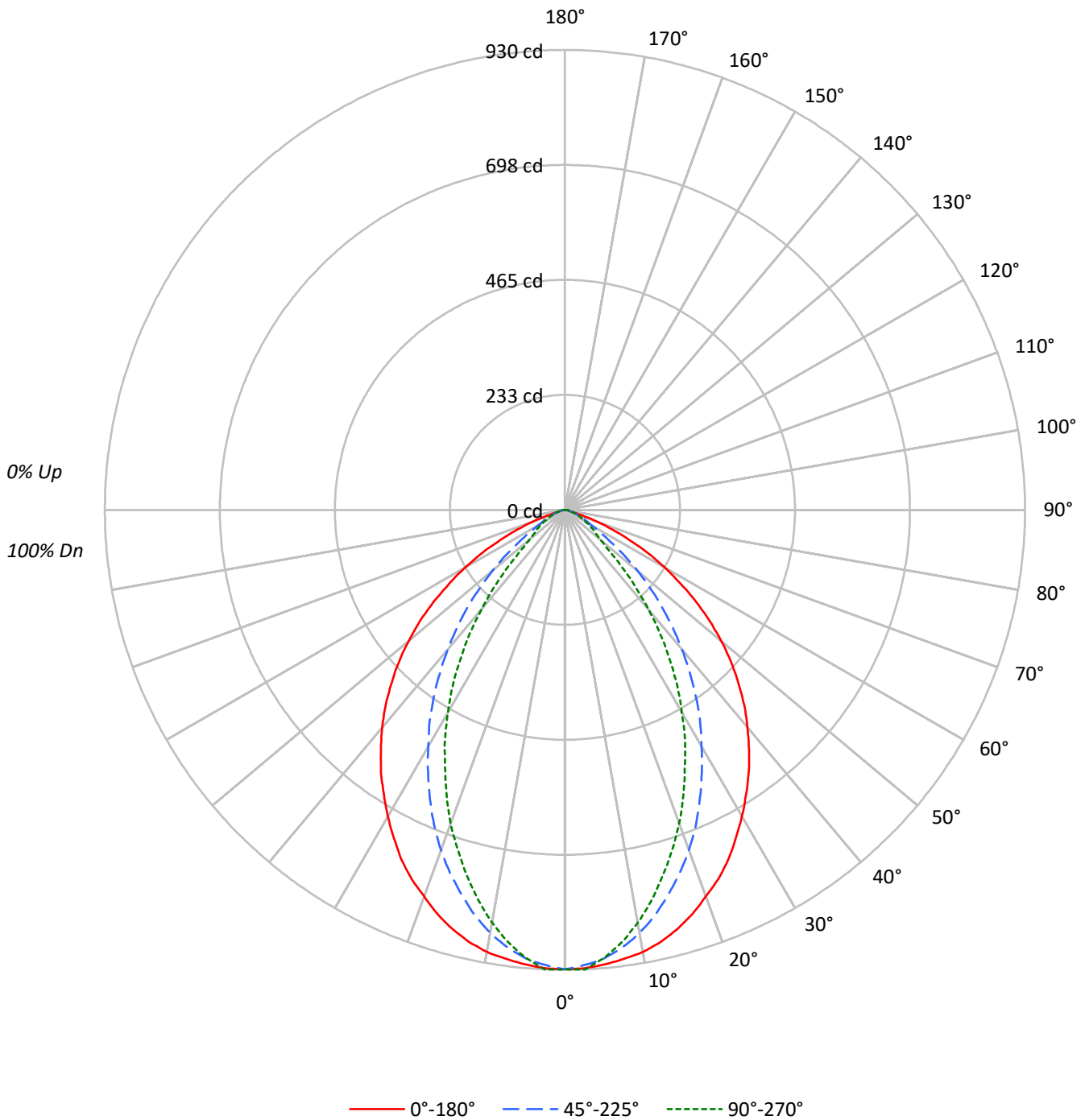
Lumens per Lamp: N/A
Luminaire Lumens: 1369.7 lumens
Efficiency: N/A
Efficacy: 37.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8000	8000	8000
5°	7974	7872	7861
10°	7940	7597	7414
15°	7827	7185	6824
20°	7626	6714	6187
25°	7422	6129	5445
30°	7116	5491	4697
35°	6809	4856	3879
40°	6457	4133	2942
45°	6039	3378	1976
50°	5522	2559	1227
55°	4852	1689	1040
60°	4011	1037	856
65°	2906	801	693
70°	1581	594	526
75°	349	436	479
80°	258	322	392
85°	257	257	385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6039 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	6.3
10°-20°	228.6	16.7
20°-30°	302.8	22.1
30°-40°	300.6	21.9
40°-50°	231.3	16.9
50°-60°	137.9	10.1
60°-70°	62.7	4.6
70°-80°	16.2	1.2
80°-90°	3.6	0.3
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°	617.5	45.1
0°-40°	918.1	67.0
0°-60°	1287.2	94.0
0°-90°	1369.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1369.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	922	924	911	911	909	88
15°	878	856	806	778	766	247
25°	781	725	645	591	573	359
35°	648	567	462	391	369	404
45°	496	399	277	194	162	382
55°	323	230	112	71	69	288
65°	143	85	39	34	34	143
75°	10	13	13	14	14	22
85°	3	3	3	4	4	3
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.0	929.0	929.0	929.0	929.0
2.5°	927.7	929.0	921.2	927.7	930.3
5°	922.5	923.8	910.7	910.7	909.4
7.5°	915.9	913.3	892.4	884.5	881.9
10°	908.1	898.9	868.8	853.1	847.9
12.5°	895.0	880.6	840.0	817.8	808.6
15°	878.0	855.7	806.0	778.5	765.5
17.5°	857.0	829.6	770.7	735.4	721.0
20°	832.2	795.6	732.7	688.3	675.2
22.5°	808.6	762.8	690.9	639.8	625.4
25°	781.2	724.9	645.1	591.4	573.1
27.5°	748.4	688.3	599.3	544.3	526.0
30°	715.7	649.0	552.2	494.6	472.4
32.5°	681.7	608.4	509.0	443.6	422.6
35°	647.7	566.6	461.9	391.2	369.0
37.5°	611.1	524.7	414.8	341.5	316.6
40°	574.4	484.1	367.7	293.1	261.7
42.5°	536.5	442.3	321.9	243.4	212.0
45°	495.9	399.1	277.4	193.7	162.3
47.5°	455.3	358.5	232.9	145.2	116.5
50°	412.2	315.3	191.0	106.0	91.6
52.5°	369.0	273.5	149.2	82.4	78.5
55°	323.2	230.3	112.5	70.7	69.3
57.5°	276.1	191.0	81.1	61.5	58.9
60°	232.9	154.4	60.2	52.3	49.7
62.5°	188.4	116.5	49.7	43.2	40.6
65°	142.6	85.1	39.3	34.0	34.0
67.5°	103.4	57.6	31.4	27.5	26.2
70°	62.8	35.3	23.6	22.2	20.9
72.5°	31.4	20.9	18.3	17.0	17.0
75°	10.5	13.1	13.1	14.4	14.4
77.5°	7.9	9.2	9.2	10.5	10.5
80°	5.2	6.5	6.5	7.9	7.9
82.5°	3.9	3.9	5.2	5.2	6.5
85°	2.6	2.6	2.6	3.9	3.9
87.5°	1.3	1.3	1.3	2.6	2.6
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	16.34	17.68	16.71	17.99	18.30	7.89	9.23	8.26	9.54	9.86
	3H	16.85	18.03	17.23	18.36	18.73	8.71	9.89	9.09	10.22	10.58
	4H	16.82	17.92	17.22	18.27	18.65	8.99	10.09	9.39	10.44	10.82
	6H	16.75	17.76	17.17	18.13	18.53	9.17	10.17	9.58	10.54	10.94
	8H	16.72	17.67	17.15	18.06	18.47	9.23	10.18	9.66	10.58	10.98
	12H	16.68	17.59	17.11	17.97	18.40	9.27	10.19	9.71	10.57	11.00
4H	2H	16.19	17.28	16.59	17.63	18.02	8.34	9.43	8.74	9.78	10.17
	3H	16.74	17.63	17.15	18.04	18.44	9.30	10.19	9.71	10.60	11.00
	4H	16.71	17.50	17.14	17.92	18.37	9.66	10.46	10.10	10.88	11.32
	6H	16.66	17.34	17.12	17.79	18.25	9.92	10.60	10.38	11.05	11.52
	8H	16.61	17.25	17.08	17.70	18.17	10.00	10.64	10.47	11.09	11.56
	12H	16.57	17.13	17.06	17.62	18.09	10.08	10.64	10.56	11.13	11.60
8H	4H	16.60	17.24	17.07	17.68	18.16	9.75	10.39	10.22	10.84	11.31
	6H	16.54	17.06	17.04	17.55	18.04	10.07	10.59	10.57	11.08	11.57
	8H	16.49	16.96	17.01	17.47	17.96	10.20	10.66	10.72	11.18	11.67
	12H	16.46	16.87	16.97	17.37	17.94	10.33	10.74	10.84	11.24	11.81
12H	4H	16.56	17.12	17.04	17.60	18.08	9.73	10.29	10.21	10.77	11.25
	6H	16.48	16.95	17.00	17.46	17.96	10.04	10.51	10.57	11.03	11.52
	8H	16.45	16.87	16.97	17.36	17.93	10.21	10.63	10.73	11.12	11.69