

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: P1060782

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE 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

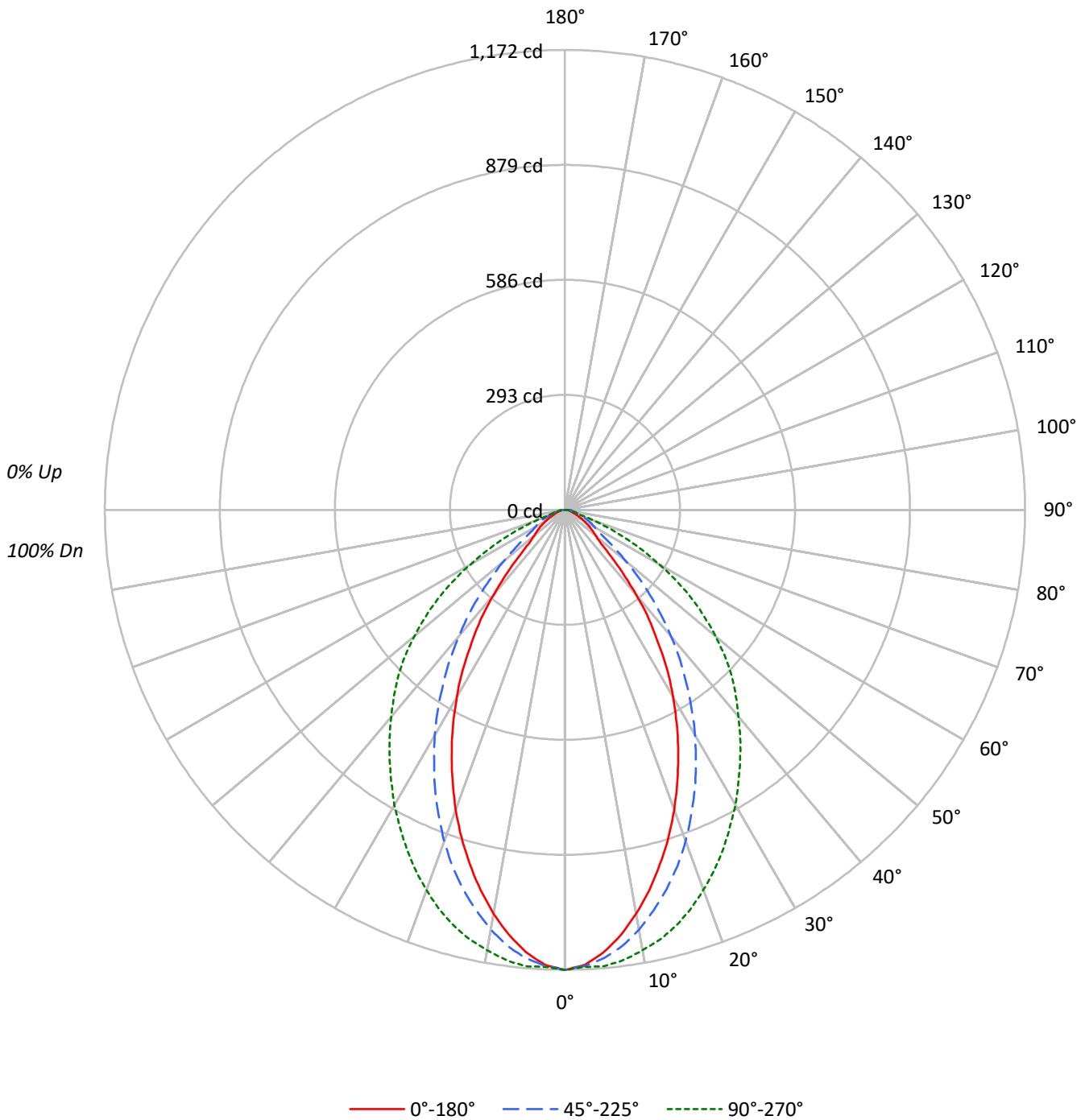
Lumens per Lamp: N/A
Luminaire Lumens: 1659.3 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10095	10095	10095
5°	9782	9908	10088
10°	9140	9495	9965
15°	8338	8922	9774
20°	7454	8235	9447
25°	6485	7442	9060
30°	5471	6590	8636
35°	4351	5673	8180
40°	3165	4727	7730
45°	1914	3733	7321
50°	1369	2702	6704
55°	1161	1829	5920
60°	947	1490	4783
65°	748	1335	3443
70°	627	1120	1813
75°	566	1045	915
80°	585	1041	907
85°	781	1551	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7321 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	6.5
10°-20°	282.8	17.0
20°-30°	366.8	22.1
30°-40°	353.1	21.3
40°-50°	262.7	15.8
50°-60°	161.5	9.7
60°-70°	79.3	4.8
70°-80°	30.9	1.9
80°-90°	14.1	0.9
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°	757.6	45.7
0°-40°	1110.7	66.9
0°-60°	1534.9	92.5
0°-90°	1659.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1659.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1132	1149	1146	1157	1167	105
15°	935	965	1001	1061	1096	261
25°	682	719	783	882	954	312
35°	414	453	540	675	778	259
45°	157	195	306	473	601	131
55°	77	80	122	278	394	70
65°	37	39	66	105	169	38
75°	17	30	31	29	28	19
85°	8	14	16	16	10	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1172.3	1172.3	1172.3	1172.3	1172.3
2.5°	1160.6	1173.7	1163.2	1164.5	1165.8
5°	1131.7	1148.8	1146.2	1156.6	1167.1
7.5°	1092.4	1112.1	1121.3	1142.2	1156.6
10°	1045.3	1067.6	1085.9	1120.0	1139.6
12.5°	992.9	1019.1	1045.3	1091.1	1121.3
15°	935.3	965.4	1000.8	1061.0	1096.4
17.5°	876.3	906.4	952.3	1021.7	1066.2
20°	813.4	846.2	898.6	975.9	1030.9
22.5°	747.9	783.3	840.9	928.7	994.2
25°	682.5	719.1	783.3	881.6	953.6
27.5°	617.0	652.3	721.7	831.8	910.4
30°	550.2	586.8	662.8	778.1	868.5
32.5°	486.0	520.0	601.2	727.0	822.6
35°	413.9	453.2	539.7	674.6	778.1
37.5°	352.4	387.7	480.7	622.2	733.5
40°	281.6	320.9	420.5	571.1	687.7
42.5°	216.1	255.4	362.8	520.0	644.5
45°	157.2	195.2	306.5	472.9	601.2
47.5°	119.2	141.5	251.5	427.0	552.8
50°	102.2	108.7	201.7	377.2	500.4
52.5°	90.4	93.0	157.2	327.5	448.0
55°	77.3	79.9	121.8	277.7	394.3
57.5°	65.5	66.8	98.2	230.5	336.6
60°	55.0	56.3	86.5	184.7	277.7
62.5°	45.8	47.2	77.3	142.8	221.4
65°	36.7	39.3	65.5	104.8	169.0
67.5°	30.1	35.4	55.0	73.4	117.9
70°	24.9	34.1	44.5	51.1	72.0
72.5°	21.0	31.4	38.0	36.7	35.4
75°	17.0	30.1	31.4	28.8	27.5
77.5°	14.4	26.2	26.2	23.6	22.3
80°	11.8	21.0	21.0	21.0	18.3
82.5°	10.5	17.0	18.3	18.3	14.4
85°	7.9	14.4	15.7	15.7	10.5
87.5°	5.2	13.1	14.4	13.1	7.9
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	7.82	9.16	8.18	9.47	9.79	16.98	18.33	17.35	18.64	18.95
	3H	8.93	10.12	9.31	10.45	10.81	17.49	18.68	17.87	19.01	19.38
	4H	9.45	10.56	9.85	10.91	11.29	17.51	18.62	17.91	18.97	19.36
	6H	9.88	10.90	10.29	11.27	11.66	17.52	18.54	17.94	18.91	19.31
	8H	10.07	11.04	10.50	11.43	11.83	17.53	18.49	17.96	18.88	19.29
	12H	10.25	11.18	10.69	11.56	11.99	17.53	18.45	17.96	18.84	19.27
4H	2H	8.96	10.07	9.36	10.42	10.81	16.88	17.99	17.28	18.34	18.72
	3H	10.30	11.21	10.72	11.62	12.02	17.47	18.38	17.88	18.78	19.18
	4H	11.04	11.85	11.47	12.27	12.71	17.53	18.34	17.96	18.76	19.20
	6H	11.65	12.35	12.11	12.80	13.26	17.60	18.30	18.06	18.75	19.22
	8H	11.89	12.55	12.36	12.99	13.46	17.63	18.29	18.10	18.73	19.20
	12H	12.13	12.71	12.61	13.19	13.66	17.67	18.25	18.16	18.74	19.21
8H	4H	11.50	12.16	11.97	12.61	13.08	17.48	18.14	17.95	18.59	19.06
	6H	12.36	12.89	12.86	13.39	13.87	17.61	18.15	18.11	18.64	19.12
	8H	12.76	13.24	13.28	13.76	14.25	17.69	18.18	18.21	18.69	19.18
	12H	13.18	13.61	13.70	14.11	14.68	17.81	18.24	18.33	18.74	19.31
12H	4H	11.56	12.14	12.04	12.62	13.10	17.46	18.04	17.94	18.52	18.99
	6H	12.49	12.97	13.01	13.49	13.98	17.59	18.08	18.11	18.59	19.08
	8H	13.01	13.44	13.52	13.93	14.50	17.73	18.15	18.24	18.65	19.22