

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060305

Luminaire Tested: S124RDRP-S1195D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060305
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: S124RDRP-S1195D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

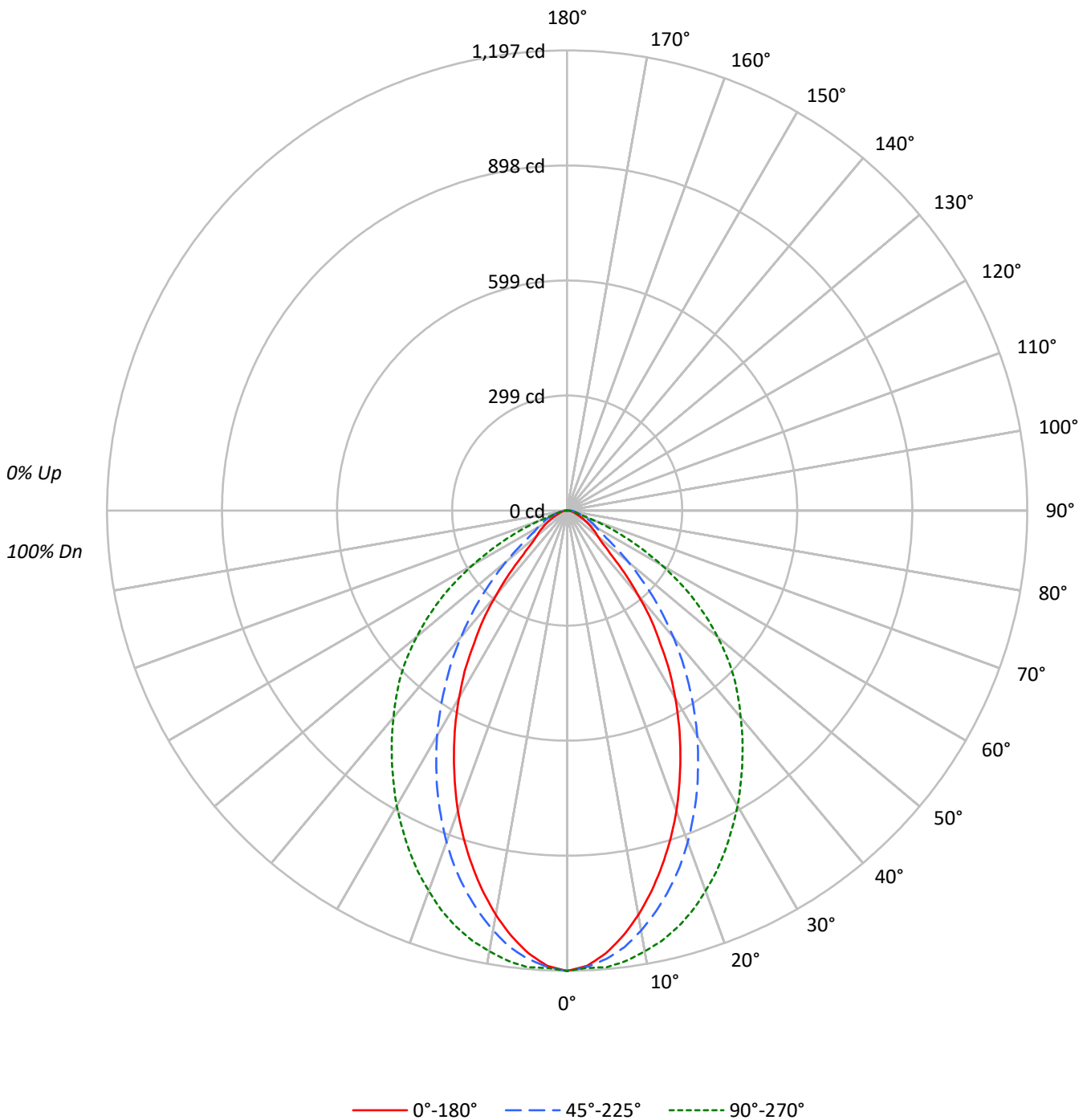
Lumens per Lamp: N/A
Luminaire Lumens: 1694.7 lumens
Efficiency: N/A
Efficacy: 40.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10311	10311	10311
5°	9992	10119	10304
10°	9335	9698	10177
15°	8516	9112	9983
20°	7613	8411	9649
25°	6622	7601	9254
30°	5587	6732	8820
35°	4445	5794	8354
40°	3233	4828	7896
45°	1955	3813	7478
50°	1399	2760	6847
55°	1185	1868	6046
60°	968	1521	4884
65°	764	1363	3517
70°	640	1146	1853
75°	579	1068	935
80°	595	1061	927
85°	790	1591	1057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7478 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	6.5
10°-20°	288.9	17.0
20°-30°	374.6	22.1
30°-40°	360.7	21.3
40°-50°	268.3	15.8
50°-60°	165.0	9.7
60°-70°	81.0	4.8
70°-80°	31.6	1.9
80°-90°	14.4	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°	773.7	45.7
0°-40°	1134.4	66.9
0°-60°	1567.7	92.5
0°-90°	1694.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1694.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1156	1173	1171	1181	1192	108
15°	955	986	1022	1084	1120	267
25°	697	734	800	900	974	319
35°	423	463	551	689	795	264
45°	160	199	313	483	614	133
55°	79	82	124	284	403	71
65°	38	40	67	107	173	38
75°	17	31	32	29	28	19
85°	8	15	16	16	11	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.4	1197.4	1197.4	1197.4	1197.4
2.5°	1185.3	1198.7	1188.0	1189.4	1190.7
5°	1155.9	1173.3	1170.6	1181.3	1192.0
7.5°	1115.8	1135.8	1145.2	1166.6	1181.3
10°	1067.6	1090.4	1109.1	1143.9	1163.9
12.5°	1014.1	1040.9	1067.6	1114.4	1145.2
15°	955.2	986.0	1022.1	1083.7	1119.8
17.5°	895.0	925.8	972.6	1043.5	1089.0
20°	830.8	864.3	917.8	996.7	1052.9
22.5°	763.9	800.0	858.9	948.5	1015.4
25°	697.0	734.5	800.0	900.4	974.0
27.5°	630.1	666.3	737.2	849.5	929.8
30°	561.9	599.4	677.0	794.7	887.0
32.5°	496.3	531.1	614.1	742.5	840.2
35°	422.8	462.9	551.2	689.0	794.7
37.5°	359.9	396.0	491.0	635.5	749.2
40°	287.6	327.8	429.5	583.3	702.4
42.5°	220.7	260.9	370.6	531.1	658.2
45°	160.5	199.3	313.1	483.0	614.1
47.5°	121.7	144.5	256.9	436.1	564.6
50°	104.4	111.0	206.0	385.3	511.1
52.5°	92.3	95.0	160.5	334.5	457.5
55°	78.9	81.6	124.4	283.6	402.7
57.5°	66.9	68.2	100.3	235.5	343.8
60°	56.2	57.5	88.3	188.6	283.6
62.5°	46.8	48.2	78.9	145.8	226.1
65°	37.5	40.1	66.9	107.0	172.6
67.5°	30.8	36.1	56.2	74.9	120.4
70°	25.4	34.8	45.5	52.2	73.6
72.5°	21.4	32.1	38.8	37.5	36.1
75°	17.4	30.8	32.1	29.4	28.1
77.5°	14.7	26.8	26.8	24.1	22.7
80°	12.0	21.4	21.4	21.4	18.7
82.5°	10.7	17.4	18.7	18.7	14.7
85°	8.0	14.7	16.1	16.1	10.7
87.5°	5.4	13.4	14.7	13.4	8.0
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	7.89	9.23	8.25	9.54	9.86	17.06	18.40	17.42	18.71	19.03
	3H	9.00	10.19	9.38	10.52	10.89	17.57	18.76	17.95	19.09	19.45
	4H	9.52	10.63	9.92	10.98	11.36	17.59	18.70	17.99	19.05	19.43
	6H	9.95	10.97	10.37	11.34	11.74	17.60	18.62	18.01	18.99	19.38
	8H	10.14	11.11	10.57	11.50	11.90	17.60	18.57	18.03	18.96	19.36
	12H	10.32	11.25	10.75	11.63	12.06	17.60	18.53	18.04	18.91	19.34
4H	2H	9.03	10.14	9.44	10.50	10.88	16.95	18.06	17.35	18.41	18.80
	3H	10.38	11.29	10.79	11.69	12.09	17.54	18.45	17.95	18.85	19.26
	4H	11.11	11.92	11.55	12.34	12.79	17.60	18.41	18.03	18.83	19.27
	6H	11.72	12.42	12.18	12.87	13.33	17.67	18.38	18.14	18.82	19.29
	8H	11.96	12.62	12.43	13.07	13.54	17.70	18.36	18.17	18.81	19.28
	12H	12.20	12.78	12.68	13.26	13.74	17.75	18.33	18.23	18.81	19.28
8H	4H	11.58	12.24	12.05	12.68	13.15	17.56	18.21	18.03	18.66	19.13
	6H	12.43	12.97	12.93	13.46	13.94	17.68	18.22	18.19	18.72	19.20
	8H	12.83	13.32	13.36	13.83	14.32	17.77	18.25	18.29	18.77	19.26
	12H	13.26	13.68	13.77	14.18	14.75	17.89	18.32	18.40	18.81	19.38
12H	4H	11.63	12.21	12.12	12.70	13.17	17.53	18.11	18.02	18.59	19.07
	6H	12.56	13.04	13.08	13.56	14.05	17.67	18.15	18.19	18.66	19.16
	8H	13.08	13.51	13.60	14.00	14.58	17.80	18.23	18.31	18.72	19.29