

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: P1061025

Luminaire Tested: S124RDR-H795D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061025
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-H795D950-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

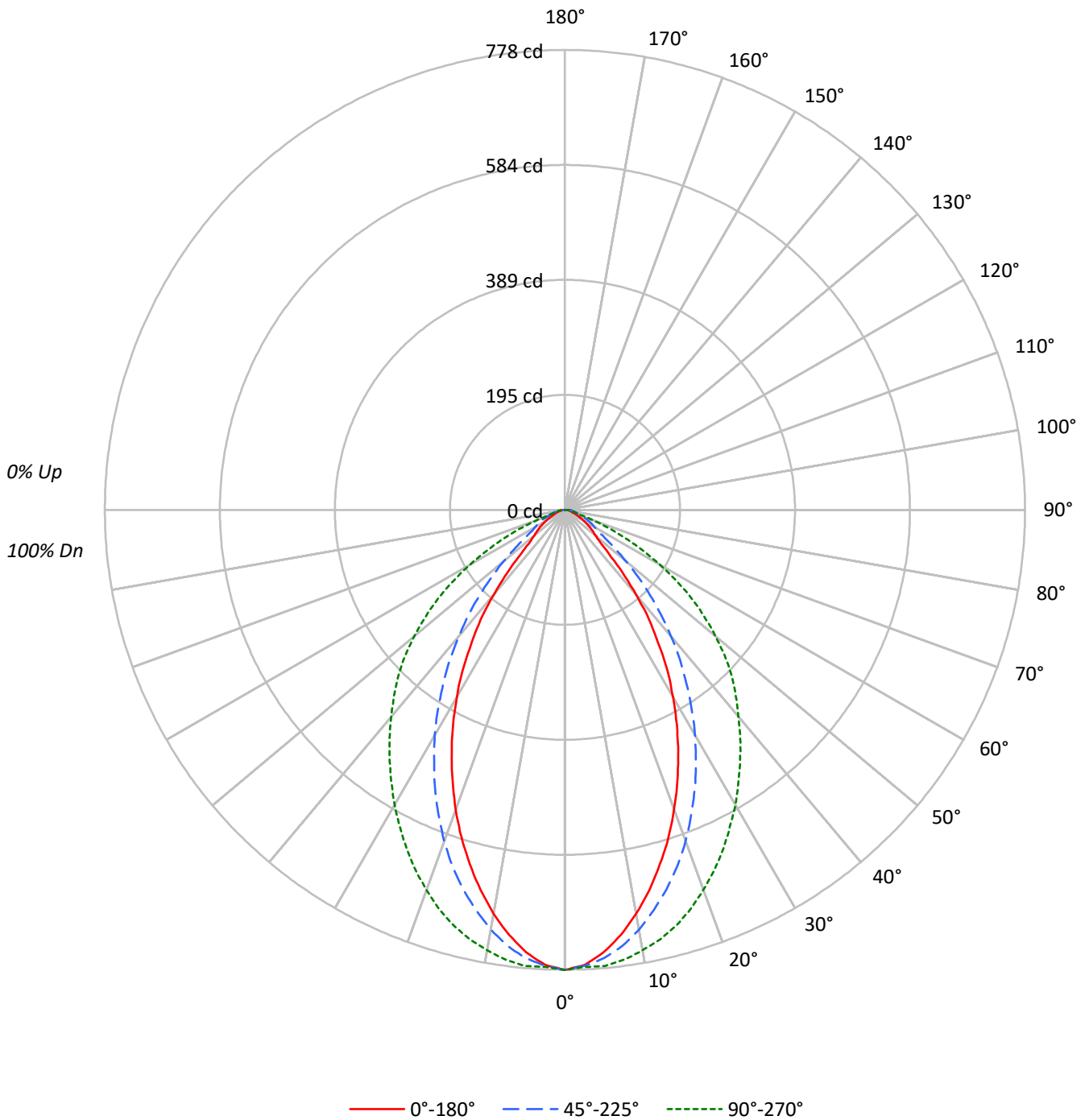
Lumens per Lamp: N/A
Luminaire Lumens: 1101.4 lumens
Efficiency: N/A
Efficacy: 46.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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									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	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°	6701	6701	6701
5°	6493	6576	6697
10°	6067	6303	6614
15°	5534	5922	6487
20°	4948	5466	6271
25°	4304	4940	6014
30°	3631	4375	5732
35°	2889	3765	5430
40°	2101	3137	5132
45°	1270	2478	4860
50°	908	1794	4449
55°	770	1215	3929
60°	629	989	3174
65°	495	886	2286
70°	415	745	1203
75°	376	695	609
80°	387	689	605
85°	514	1028	692

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4860 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	6.5
10°-20°	187.7	17.0
20°-30°	243.5	22.1
30°-40°	234.4	21.3
40°-50°	174.4	15.8
50°-60°	107.2	9.7
60°-70°	52.7	4.8
70°-80°	20.5	1.9
80°-90°	9.4	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°	502.9	45.7
0°-40°	737.2	66.9
0°-60°	1018.8	92.5
0°-90°	1101.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	751	762	761	768	775	70
15°	621	641	664	704	728	173
25°	453	477	520	585	633	207
35°	275	301	358	448	516	172
45°	104	130	204	314	399	87
55°	51	53	81	184	262	46
65°	24	26	44	70	112	25
75°	11	20	21	19	18	12
85°	5	10	10	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	778.2	778.2	778.2	778.2	778.2
2.5°	770.4	779.0	772.1	773.0	773.8
5°	751.2	762.5	760.8	767.7	774.7
7.5°	725.1	738.2	744.3	758.2	767.7
10°	693.8	708.6	720.8	743.4	756.4
12.5°	659.1	676.4	693.8	724.3	744.3
15°	620.8	640.8	664.3	704.3	727.7
17.5°	581.7	601.7	632.1	678.2	707.7
20°	539.9	561.7	596.5	647.8	684.3
22.5°	496.5	519.9	558.2	616.5	659.9
25°	453.0	477.3	519.9	585.2	633.0
27.5°	409.5	433.0	479.1	552.1	604.3
30°	365.2	389.5	440.0	516.5	576.5
32.5°	322.6	345.2	399.1	482.6	546.0
35°	274.8	300.8	358.2	447.8	516.5
37.5°	233.9	257.4	319.1	413.0	486.9
40°	186.9	213.0	279.1	379.1	456.5
42.5°	143.5	169.5	240.8	345.2	427.8
45°	104.3	129.6	203.5	313.9	399.1
47.5°	79.1	93.9	166.9	283.4	366.9
50°	67.8	72.2	133.9	250.4	332.1
52.5°	60.0	61.7	104.3	217.4	297.4
55°	51.3	53.0	80.9	184.3	261.7
57.5°	43.5	44.3	65.2	153.0	223.5
60°	36.5	37.4	57.4	122.6	184.3
62.5°	30.4	31.3	51.3	94.8	146.9
65°	24.3	26.1	43.5	69.6	112.2
67.5°	20.0	23.5	36.5	48.7	78.3
70°	16.5	22.6	29.6	33.9	47.8
72.5°	13.9	20.9	25.2	24.3	23.5
75°	11.3	20.0	20.9	19.1	18.3
77.5°	9.6	17.4	17.4	15.7	14.8
80°	7.8	13.9	13.9	13.9	12.2
82.5°	7.0	11.3	12.2	12.2	9.6
85°	5.2	9.6	10.4	10.4	7.0
87.5°	3.5	8.7	9.6	8.7	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	6.39	7.73	6.75	8.04	8.36	15.56	16.90	15.93	17.22	17.53
	3H	7.50	8.69	7.88	9.02	9.39	16.07	17.26	16.45	17.59	17.95
	4H	8.02	9.13	8.42	9.48	9.86	16.09	17.20	16.49	17.55	17.93
	6H	8.45	9.48	8.87	9.85	10.24	16.10	17.12	16.51	17.49	17.88
	8H	8.65	9.61	9.08	10.00	10.41	16.10	17.07	16.53	17.46	17.87
	12H	8.83	9.75	9.26	10.14	10.57	16.11	17.03	16.54	17.41	17.84
4H	2H	7.54	8.65	7.94	9.00	9.38	15.45	16.56	15.86	16.91	17.30
	3H	8.88	9.79	9.29	10.19	10.59	16.04	16.95	16.46	17.36	17.76
	4H	9.61	10.43	10.05	10.85	11.29	16.10	16.91	16.54	17.33	17.78
	6H	10.22	10.93	10.69	11.37	11.84	16.18	16.88	16.64	17.33	17.79
	8H	10.47	11.12	10.94	11.57	12.04	16.21	16.86	16.68	17.31	17.78
	12H	10.70	11.28	11.19	11.77	12.24	16.25	16.83	16.74	17.31	17.79
8H	4H	10.08	10.74	10.55	11.18	11.66	16.06	16.72	16.53	17.16	17.63
	6H	10.93	11.47	11.43	11.96	12.44	16.19	16.72	16.69	17.22	17.70
	8H	11.34	11.82	11.86	12.34	12.83	16.27	16.76	16.79	17.27	17.76
	12H	11.76	12.19	12.28	12.68	13.25	16.39	16.82	16.91	17.31	17.89
12H	4H	10.14	10.72	10.62	11.20	11.67	16.03	16.61	16.52	17.10	17.57
	6H	11.06	11.55	11.58	12.06	12.55	16.17	16.65	16.69	17.17	17.66
	8H	11.59	12.01	12.10	12.51	13.08	16.30	16.73	16.82	17.23	17.80