

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: P1060546

Luminaire Tested: S124RDRP-S795D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060546
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: S124RDRP-S795D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

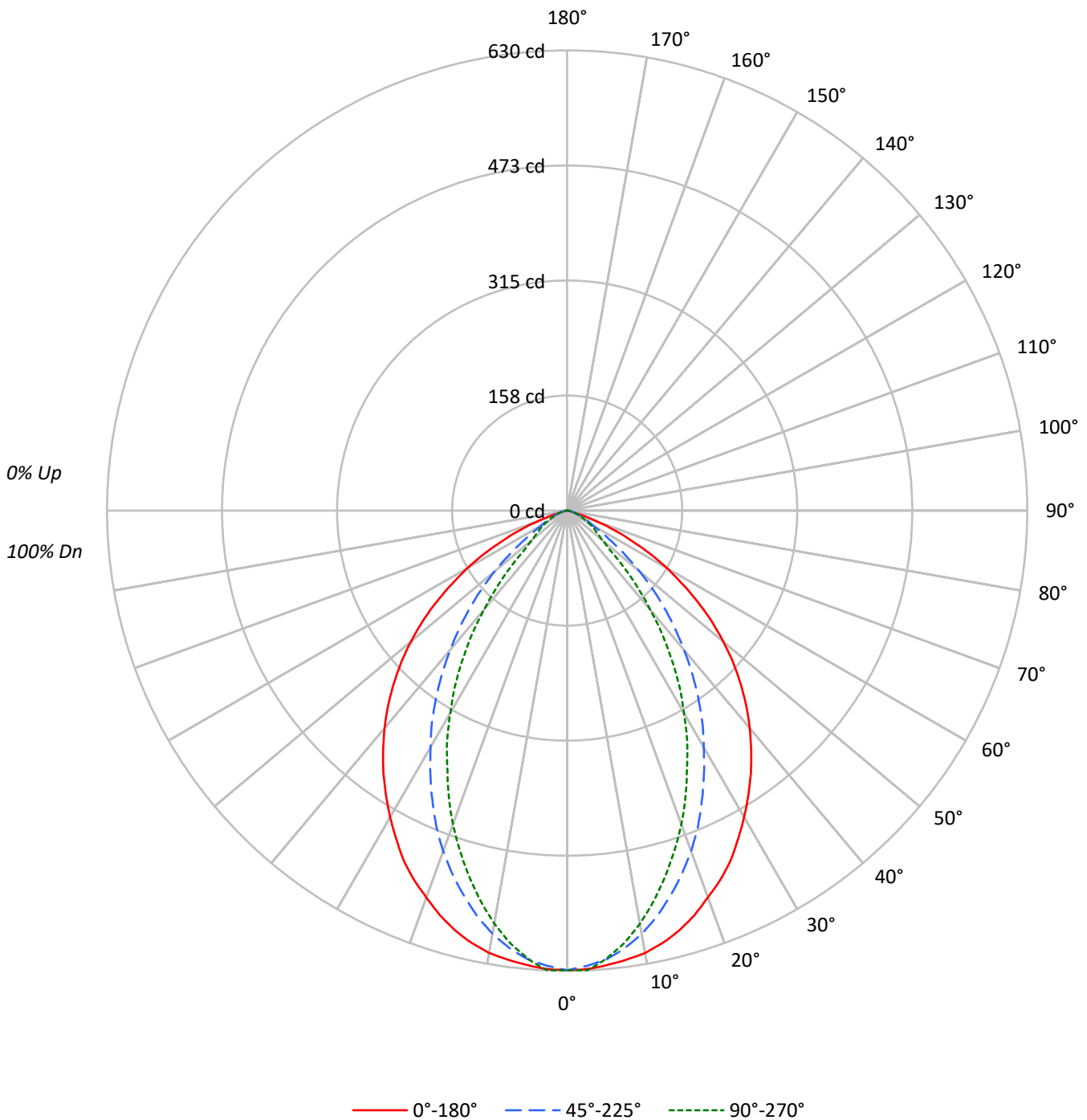
Lumens per Lamp: N/A
Luminaire Lumens: 927.6 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5418	5418	5418
5°	5400	5331	5324
10°	5378	5145	5021
15°	5301	4867	4621
20°	5165	4547	4190
25°	5026	4151	3687
30°	4820	3718	3181
35°	4611	3288	2627
40°	4373	2799	1992
45°	4089	2288	1338
50°	3739	1734	831
55°	3286	1144	706
60°	2716	703	580
65°	1968	542	469
70°	1070	403	358
75°	236	296	323
80°	174	218	263
85°	178	178	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4089 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	6.3
10°-20°	154.8	16.7
20°-30°	205.1	22.1
30°-40°	203.6	21.9
40°-50°	156.6	16.9
50°-60°	93.4	10.1
60°-70°	42.4	4.6
70°-80°	11.0	1.2
80°-90°	2.4	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°	418.2	45.1
0°-40°	621.7	67.0
0°-60°	871.7	94.0
0°-90°	927.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	927.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	625	626	617	617	616	59
15°	595	580	546	527	518	167
25°	529	491	437	400	388	243
35°	439	384	313	265	250	274
45°	336	270	188	131	110	259
55°	219	156	76	48	47	195
65°	97	58	27	23	23	97
75°	7	9	9	10	10	15
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	629.2	629.2	629.2	629.2	629.2
2.5°	628.3	629.2	623.8	628.3	630.0
5°	624.7	625.6	616.7	616.7	615.9
7.5°	620.3	618.5	604.3	599.0	597.3
10°	615.0	608.8	588.4	577.8	574.2
12.5°	606.1	596.4	568.9	553.8	547.6
15°	594.6	579.5	545.9	527.2	518.4
17.5°	580.4	561.8	521.9	498.0	488.3
20°	563.6	538.8	496.2	466.1	457.2
22.5°	547.6	516.6	467.9	433.3	423.6
25°	529.0	490.9	436.9	400.5	388.1
27.5°	506.9	466.1	405.8	368.6	356.2
30°	484.7	439.5	373.9	335.0	319.9
32.5°	461.7	412.0	344.7	300.4	286.2
35°	438.6	383.7	312.8	265.0	249.9
37.5°	413.8	355.3	280.9	231.3	214.4
40°	389.0	327.9	249.0	198.5	177.2
42.5°	363.3	299.5	218.0	164.8	143.6
45°	335.8	270.3	187.9	131.1	109.9
47.5°	308.4	242.8	157.7	98.4	78.9
50°	279.1	213.6	129.4	71.8	62.0
52.5°	249.9	185.2	101.0	55.8	53.2
55°	218.9	156.0	76.2	47.9	47.0
57.5°	187.0	129.4	54.9	41.6	39.9
60°	157.7	104.6	40.8	35.4	33.7
62.5°	127.6	78.9	33.7	29.2	27.5
65°	96.6	57.6	26.6	23.0	23.0
67.5°	70.0	39.0	21.3	18.6	17.7
70°	42.5	23.9	16.0	15.1	14.2
72.5°	21.3	14.2	12.4	11.5	11.5
75°	7.1	8.9	8.9	9.7	9.7
77.5°	5.3	6.2	6.2	7.1	7.1
80°	3.5	4.4	4.4	5.3	5.3
82.5°	2.7	2.7	3.5	3.5	4.4
85°	1.8	1.8	1.8	2.7	2.7
87.5°	0.9	0.9	0.9	1.8	1.8
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	14.99	16.32	15.36	16.64	16.95	6.53	7.87	6.90	8.18	8.50
	3H	15.50	16.68	15.88	17.01	17.37	7.35	8.53	7.73	8.86	9.23
	4H	15.47	16.56	15.87	16.91	17.30	7.63	8.73	8.03	9.08	9.46
	6H	15.40	16.41	15.82	16.78	17.17	7.80	8.81	8.22	9.18	9.58
	8H	15.36	16.32	15.79	16.71	17.11	7.87	8.82	8.30	9.21	9.62
	12H	15.32	16.24	15.76	16.62	17.05	7.91	8.82	8.35	9.21	9.64
4H	2H	14.83	15.93	15.24	16.28	16.66	6.98	8.07	7.38	8.42	8.81
	3H	15.39	16.28	15.80	16.68	17.09	7.94	8.84	8.36	9.24	9.64
	4H	15.35	16.15	15.79	16.57	17.01	8.30	9.10	8.74	9.52	9.96
	6H	15.30	15.99	15.77	16.43	16.90	8.55	9.24	9.02	9.69	10.15
	8H	15.26	15.90	15.73	16.34	16.81	8.64	9.28	9.11	9.73	10.20
	12H	15.22	15.78	15.70	16.27	16.74	8.72	9.28	9.20	9.77	10.24
8H	4H	15.25	15.88	15.71	16.33	16.80	8.39	9.03	8.86	9.48	9.95
	6H	15.18	15.70	15.69	16.20	16.68	8.70	9.22	9.21	9.72	10.20
	8H	15.14	15.60	15.66	16.12	16.61	8.83	9.30	9.35	9.81	10.31
	12H	15.10	15.52	15.62	16.01	16.59	8.97	9.38	9.48	9.88	10.45
12H	4H	15.20	15.77	15.69	16.25	16.72	8.37	8.93	8.85	9.41	9.89
	6H	15.13	15.60	15.65	16.11	16.60	8.68	9.15	9.20	9.67	10.16
	8H	15.10	15.52	15.62	16.01	16.58	8.85	9.26	9.36	9.76	10.33