

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: P1060572

Luminaire Tested: S124RDRP-S795D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060572
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

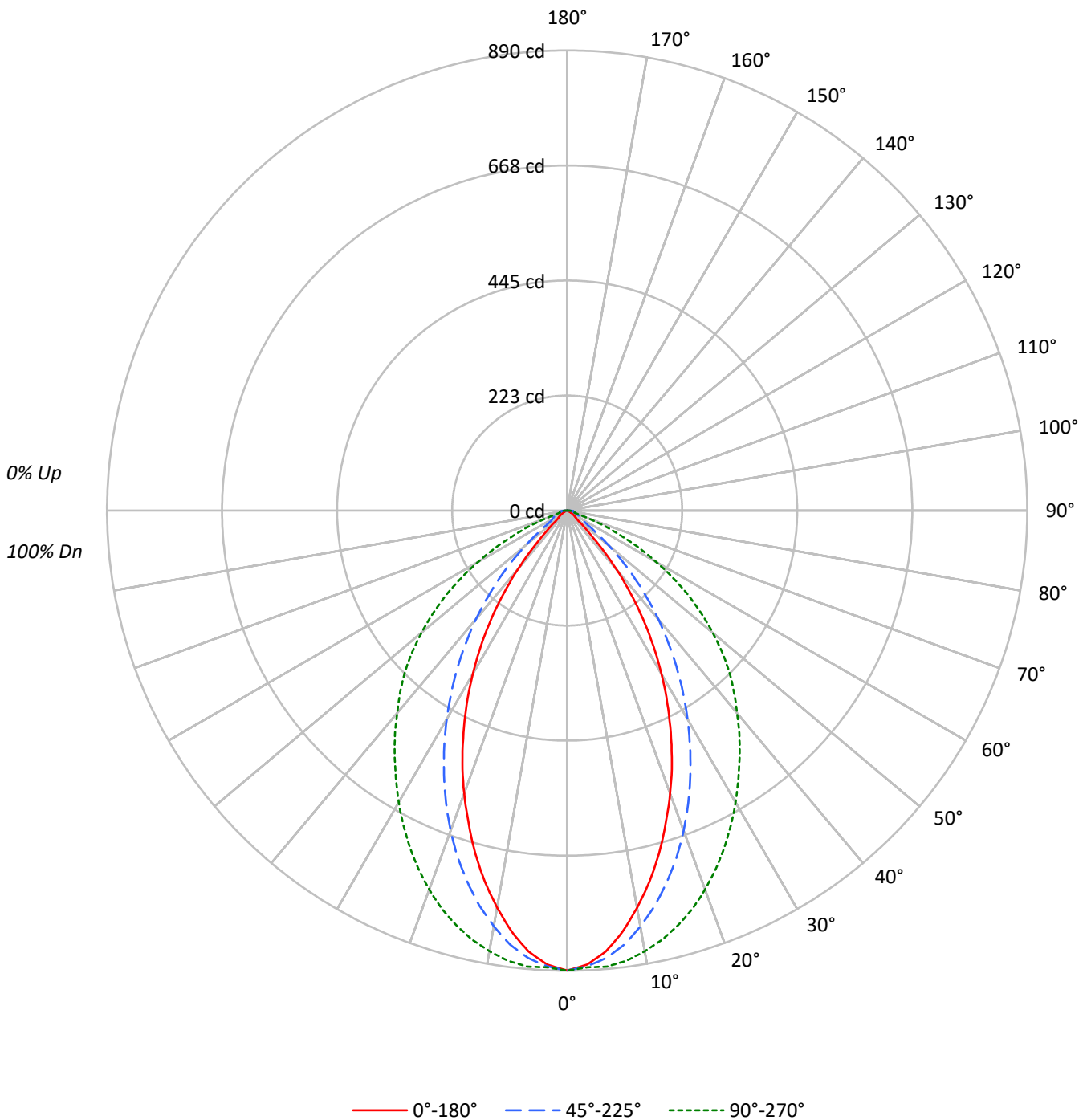
Lumens per Lamp: N/A
Luminaire Lumens: 1121.1 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7660	7660	7660
5°	7400	7508	7653
10°	6819	7139	7568
15°	6124	6636	7399
20°	5338	6037	7147
25°	4504	5357	6834
30°	3633	4630	6478
35°	2689	3874	6113
40°	1666	3087	5751
45°	661	2250	5416
50°	293	1412	4923
55°	236	737	4310
60°	162	558	3434
65°	106	552	2362
70°	106	499	1103
75°	140	486	486
80°	208	570	570
85°	415	1136	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5416 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	7.3
10°-20°	210.6	18.8
20°-30°	265.8	23.7
30°-40°	243.9	21.8
40°-50°	166.1	14.8
50°-60°	90.5	8.1
60°-70°	39.2	3.5
70°-80°	14.3	1.3
80°-90°	9.2	0.8
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°	558.0	49.8
0°-40°	801.9	71.5
0°-60°	1058.4	94.4
0°-90°	1121.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1121.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	856	868	869	878	885	79
15°	687	711	744	798	830	191
25°	474	507	564	654	719	217
35°	256	293	368	486	582	158
45°	54	91	185	328	445	50
55°	16	17	49	181	287	14
65°	5	7	27	56	116	6
75°	4	14	15	15	15	4
85°	4	9	12	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.5	889.5	889.5	889.5	889.5
2.5°	879.0	889.5	882.2	884.3	884.3
5°	856.1	867.6	868.6	878.0	885.3
7.5°	821.6	838.3	846.7	865.5	878.0
10°	779.9	799.7	816.4	848.8	865.5
12.5°	735.0	757.9	783.0	825.8	849.8
15°	686.9	711.0	744.4	797.6	830.0
17.5°	633.7	662.9	703.7	767.3	807.0
20°	582.5	611.8	658.8	730.8	779.9
22.5°	529.3	559.6	611.8	692.2	750.6
25°	474.0	507.4	563.8	653.5	719.3
27.5°	419.7	455.2	514.7	612.8	685.9
30°	365.4	400.9	465.6	571.1	651.5
32.5°	310.1	346.6	416.6	527.2	616.0
35°	255.8	293.4	368.5	485.5	581.5
37.5°	200.4	240.1	320.5	444.7	547.1
40°	148.2	187.9	274.6	404.0	511.6
42.5°	99.2	138.9	227.6	364.4	478.1
45°	54.3	90.8	184.8	327.8	444.7
47.5°	29.2	50.1	143.0	292.3	407.2
50°	21.9	27.1	105.4	254.7	367.5
52.5°	18.8	20.9	73.1	215.1	327.8
55°	15.7	16.7	49.1	180.6	287.1
57.5°	12.5	13.6	36.5	146.2	243.3
60°	9.4	11.5	32.4	112.8	199.4
62.5°	7.3	9.4	30.3	82.5	157.6
65°	5.2	7.3	27.1	56.4	115.9
67.5°	5.2	8.4	23.0	36.5	78.3
70°	4.2	11.5	19.8	24.0	43.8
72.5°	4.2	12.5	16.7	16.7	16.7
75°	4.2	13.6	14.6	14.6	14.6
77.5°	4.2	12.5	13.6	12.5	12.5
80°	4.2	11.5	11.5	11.5	11.5
82.5°	4.2	10.4	11.5	11.5	9.4
85°	4.2	9.4	11.5	11.5	8.4
87.5°	3.1	9.4	10.4	10.4	6.3
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	0.00	0.00	0.00	0.00	0.02	15.48	16.76	15.85	17.08	17.39
	3H	0.00	0.68	0.00	1.01	1.38	15.86	16.99	16.24	17.32	17.69
	4H	0.77	1.82	1.17	2.17	2.56	15.84	16.89	16.24	17.24	17.62
	6H	1.95	2.92	2.37	3.29	3.69	15.83	16.79	16.24	17.16	17.56
	8H	2.55	3.46	2.98	3.85	4.26	15.83	16.74	16.26	17.13	17.54
	12H	3.22	4.09	3.65	4.48	4.91	15.84	16.71	16.27	17.10	17.53
4H	2H	1.72	2.78	2.13	3.13	3.51	15.29	16.35	15.70	16.70	17.08
	3H	3.31	4.17	3.72	4.57	4.98	15.71	16.57	16.13	16.98	17.38
	4H	4.61	5.38	5.04	5.80	6.24	15.71	16.48	16.15	16.90	17.34
	6H	5.74	6.40	6.20	6.85	7.31	15.75	16.41	16.22	16.86	17.33
	8H	6.25	6.87	6.72	7.31	7.78	15.78	16.40	16.25	16.84	17.32
	12H	6.80	7.35	7.29	7.83	8.30	15.85	16.39	16.33	16.87	17.35
8H	4H	5.69	6.31	6.16	6.76	7.23	15.62	16.24	16.09	16.69	17.16
	6H	7.24	7.74	7.74	8.24	8.72	15.70	16.21	16.20	16.70	17.18
	8H	8.04	8.50	8.56	9.01	9.51	15.78	16.24	16.31	16.75	17.25
	12H	8.88	9.28	9.39	9.77	10.34	15.95	16.36	16.47	16.85	17.42
12H	4H	5.88	6.43	6.37	6.91	7.39	15.59	16.13	16.07	16.61	17.09
	6H	7.59	8.05	8.12	8.56	9.06	15.67	16.13	16.20	16.64	17.14
	8H	8.60	9.00	9.12	9.50	10.07	15.81	16.21	16.33	16.71	17.28