

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: P1059447

Luminaire Tested: S123RDRP-H1000D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-H1000D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

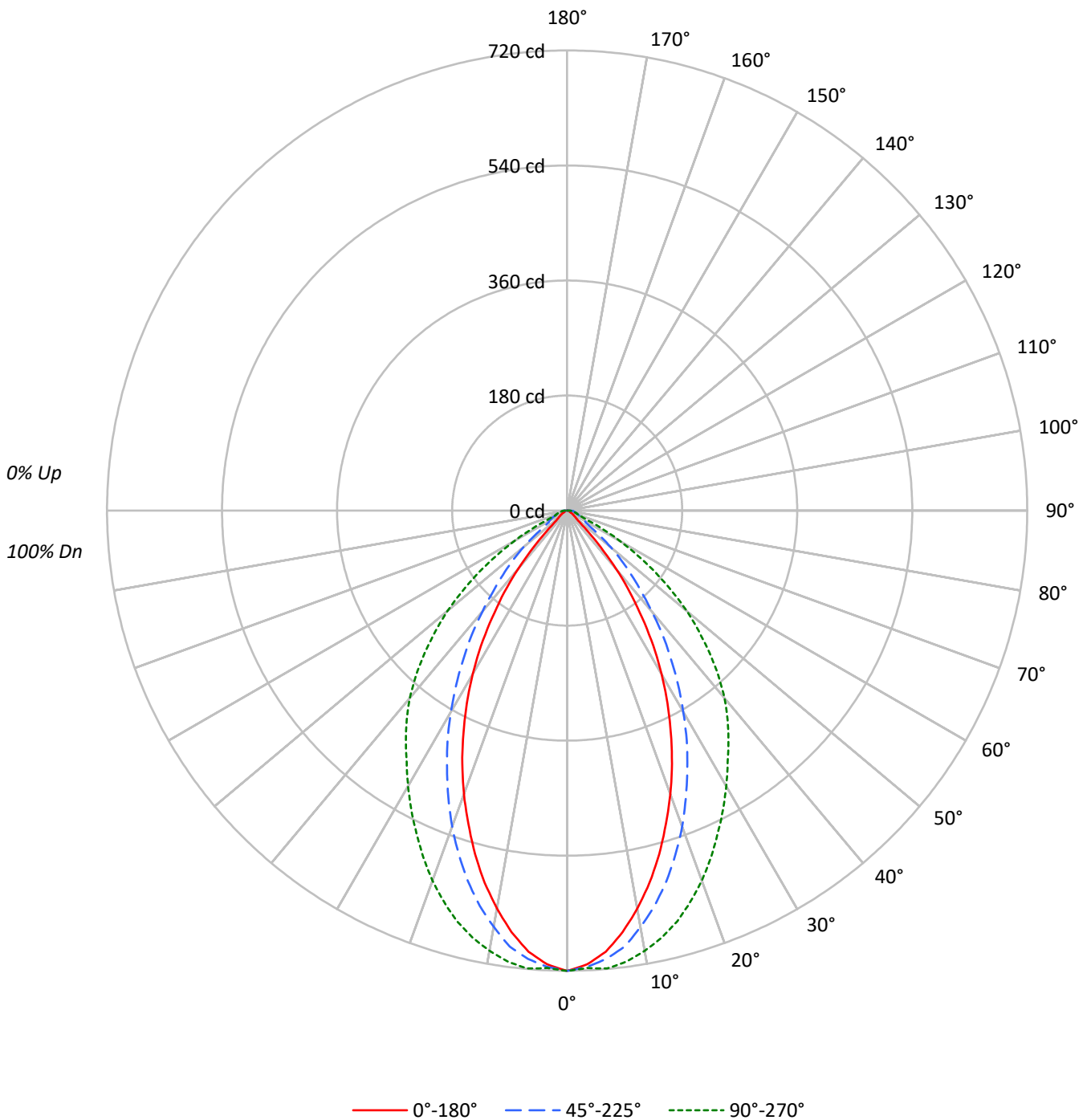
Lumens per Lamp: N/A
Luminaire Lumens: 864.6 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	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	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81																												
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73																												
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66																												
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55																												
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50																												
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47																												
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43																												
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8457	8457	8457
5°	8165	8299	8477
10°	7537	7887	8338
15°	6764	7294	8088
20°	5901	6575	7699
25°	4978	5763	7222
30°	4004	4927	6750
35°	2930	4057	6307
40°	1827	3162	5875
45°	691	2356	5233
50°	329	1626	4461
55°	252	891	3448
60°	178	756	2266
65°	131	659	947
70°	130	618	618
75°	172	644	644
80°	257	771	703
85°	512	1280	1024

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5233 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	7.6
10°-20°	169.5	19.6
20°-30°	209.8	24.3
30°-40°	188.1	21.8
40°-50°	123.3	14.3
50°-60°	61.7	7.1
60°-70°	24.1	2.8
70°-80°	13.6	1.6
80°-90°	8.4	1.0
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°	445.5	51.5
0°-40°	633.6	73.3
0°-60°	818.6	94.7
0°-90°	864.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	864.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	693	704	704	712	719	64
15°	556	579	600	640	665	155
25°	384	408	445	508	557	175
35°	204	232	283	368	440	127
45°	42	67	142	243	315	40
55°	12	15	44	119	168	11
65°	5	14	24	31	34	5
75°	4	14	14	14	14	4
85°	4	10	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.2	720.2	720.2	720.2	720.2
2.5°	710.7	721.1	714.5	715.4	716.4
5°	692.7	704.1	704.1	711.6	719.2
7.5°	665.3	678.5	688.0	701.2	711.6
10°	632.1	648.2	661.5	685.1	699.3
12.5°	596.2	616.1	633.1	664.3	684.2
15°	556.4	579.2	600.0	639.7	665.3
17.5°	513.9	536.6	564.0	610.4	641.6
20°	472.2	494.9	526.2	578.2	616.1
22.5°	428.7	452.3	485.5	543.2	587.7
25°	384.2	407.9	444.8	508.2	557.4
27.5°	339.7	363.4	405.0	474.1	528.1
30°	295.3	318.9	363.4	437.2	497.8
32.5°	250.8	276.3	322.7	403.1	467.5
35°	204.4	231.9	283.0	368.1	440.0
37.5°	161.8	187.4	245.1	337.8	412.6
40°	119.2	146.7	206.3	308.5	383.3
42.5°	77.6	106.9	171.3	276.3	350.1
45°	41.6	67.2	141.9	243.2	315.1
47.5°	22.7	36.9	114.5	208.2	279.2
50°	18.0	20.8	89.0	177.9	244.2
52.5°	15.1	17.0	63.4	149.5	205.4
55°	12.3	15.1	43.5	119.2	168.4
57.5°	10.4	13.2	34.1	92.7	131.5
60°	7.6	11.4	32.2	68.1	96.5
62.5°	5.7	12.3	28.4	47.3	63.4
65°	4.7	14.2	23.7	31.2	34.1
67.5°	3.8	15.1	20.8	19.9	19.9
70°	3.8	14.2	18.0	17.0	18.0
72.5°	3.8	15.1	16.1	15.1	16.1
75°	3.8	14.2	14.2	14.2	14.2
77.5°	3.8	13.2	13.2	12.3	12.3
80°	3.8	11.4	11.4	11.4	10.4
82.5°	3.8	10.4	10.4	10.4	8.5
85°	3.8	9.5	9.5	9.5	7.6
87.5°	2.8	8.5	9.5	8.5	5.7
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	1.01	0.12	1.32	1.64	14.02	15.27	14.38	15.59	15.90
	3H	2.10	3.21	2.48	3.54	3.90	14.10	15.21	14.48	15.54	15.91
	4H	3.20	4.24	3.61	4.59	4.97	14.18	15.21	14.58	15.56	15.95
	6H	4.20	5.15	4.61	5.52	5.91	14.28	15.23	14.70	15.60	16.00
	8H	4.68	5.58	5.11	5.97	6.38	14.34	15.24	14.77	15.63	16.03
	12H	5.24	6.10	5.68	6.49	6.92	14.42	15.28	14.85	15.66	16.09
4H	2H	3.02	4.06	3.43	4.41	4.79	13.87	14.91	14.28	15.26	15.64
	3H	5.34	6.19	5.75	6.59	6.99	14.05	14.90	14.46	15.30	15.70
	4H	6.71	7.47	7.15	7.89	8.33	14.20	14.96	14.64	15.38	15.82
	6H	7.80	8.45	8.26	8.90	9.37	14.43	15.08	14.89	15.53	15.99
	8H	8.26	8.87	8.73	9.32	9.79	14.55	15.16	15.02	15.61	16.08
	12H	8.76	9.29	9.24	9.78	10.25	14.73	15.26	15.21	15.75	16.22
8H	4H	7.68	8.29	8.16	8.74	9.21	14.20	14.81	14.67	15.26	15.73
	6H	9.21	9.71	9.71	10.21	10.69	14.54	15.04	15.04	15.53	16.02
	8H	9.98	10.43	10.51	10.95	11.44	14.77	15.22	15.29	15.74	16.23
	12H	10.79	11.19	11.31	11.69	12.26	15.11	15.50	15.62	16.00	16.57
12H	4H	7.86	8.40	8.35	8.88	9.36	14.18	14.72	14.67	15.21	15.68
	6H	9.53	9.98	10.05	10.49	10.98	14.56	15.01	15.08	15.52	16.02
	8H	10.48	10.88	11.00	11.38	11.95	14.87	15.26	15.38	15.76	16.33