

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: P1059015

Luminaire Tested: S123RDRP-S1000D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059015
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-S1000D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

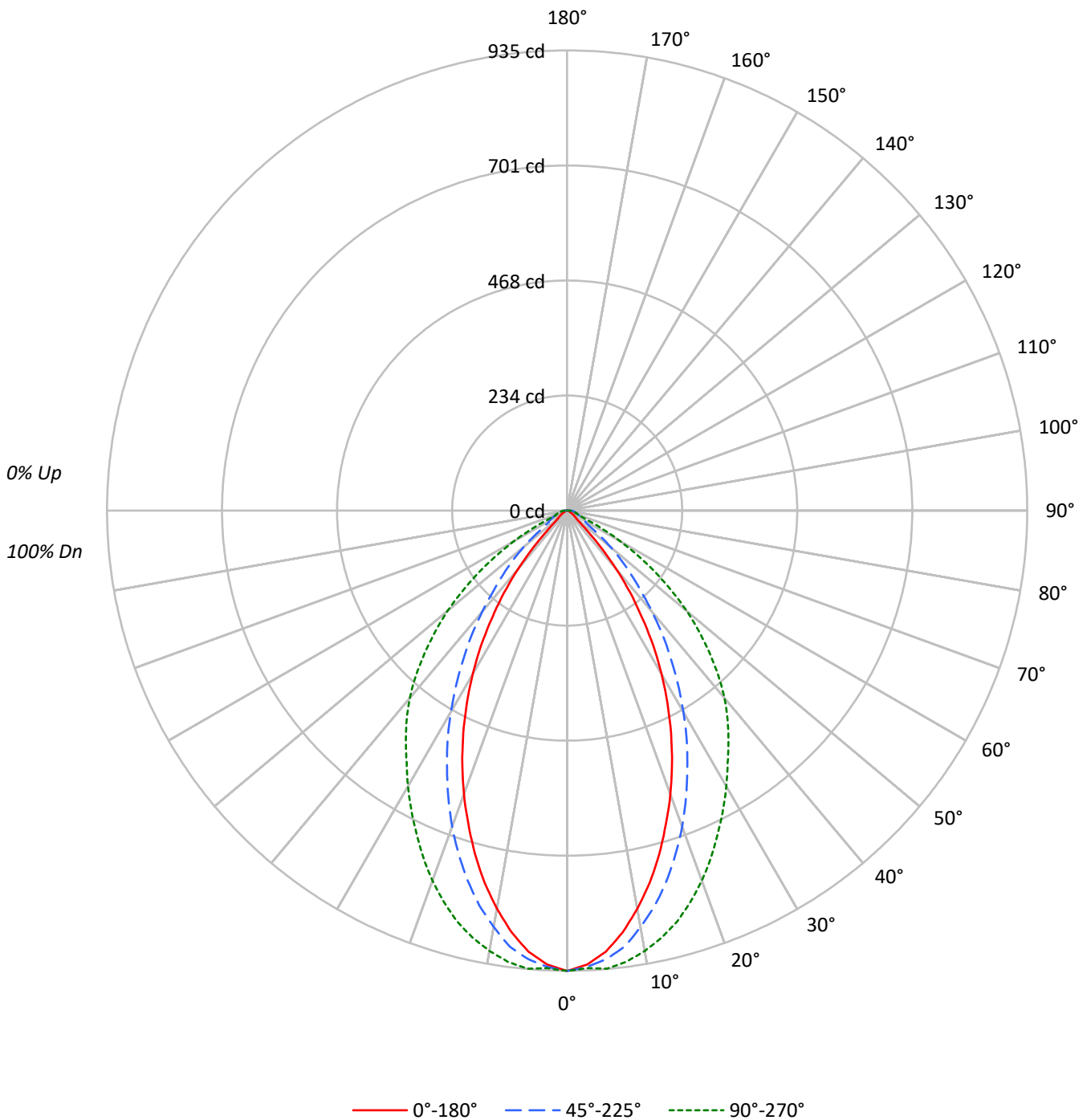
Lumens per Lamp: N/A
Luminaire Lumens: 1123.1 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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	98	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55					55			
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47					47			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10984	10984	10984
5°	10606	10779	11012
10°	9790	10245	10831
15°	8787	9474	10505
20°	7665	8541	9999
25°	6467	7485	9380
30°	5200	6400	8767
35°	3806	5268	8194
40°	2374	4108	7631
45°	898	3062	6797
50°	427	2110	5793
55°	328	1157	4479
60°	230	982	2945
65°	169	853	1231
70°	168	803	803
75°	222	835	835
80°	331	1001	913
85°	660	1657	1320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6797 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	7.6
10°-20°	220.2	19.6
20°-30°	272.6	24.3
30°-40°	244.3	21.8
40°-50°	160.2	14.3
50°-60°	80.2	7.1
60°-70°	31.3	2.8
70°-80°	17.6	1.6
80°-90°	10.9	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°	578.6	51.5
0°-40°	823.0	73.3
0°-60°	1063.4	94.7
0°-90°	1123.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	900	914	914	924	934	83
15°	723	752	779	831	864	201
25°	499	530	578	660	724	228
35°	266	301	368	478	572	165
45°	54	87	184	316	409	52
55°	16	20	56	155	219	15
65°	6	18	31	41	44	6
75°	5	18	18	18	18	5
85°	5	12	12	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.4	935.4	935.4	935.4	935.4
2.5°	923.2	936.7	928.1	929.3	930.5
5°	899.8	914.5	914.5	924.4	934.2
7.5°	864.1	881.4	893.6	910.9	924.4
10°	821.1	842.0	859.2	890.0	908.4
12.5°	774.4	800.2	822.4	862.9	888.7
15°	722.8	752.3	779.3	831.0	864.1
17.5°	667.5	697.0	732.6	792.9	833.4
20°	613.4	642.9	683.5	751.1	800.2
22.5°	556.8	587.6	630.6	705.6	763.4
25°	499.1	529.8	577.7	660.1	724.0
27.5°	441.3	472.0	526.1	615.8	685.9
30°	383.5	414.3	472.0	567.9	646.6
32.5°	325.7	358.9	419.2	523.7	607.2
35°	265.5	301.2	367.5	478.2	571.6
37.5°	210.2	243.4	318.4	438.8	535.9
40°	154.9	190.5	268.0	400.7	497.8
42.5°	100.8	138.9	222.5	358.9	454.8
45°	54.1	87.3	184.4	315.9	409.3
47.5°	29.5	47.9	148.7	270.4	362.6
50°	23.4	27.0	115.5	231.1	317.1
52.5°	19.7	22.1	82.4	194.2	266.7
55°	16.0	19.7	56.5	154.9	218.8
57.5°	13.5	17.2	44.3	120.5	170.9
60°	9.8	14.8	41.8	88.5	125.4
62.5°	7.4	16.0	36.9	61.5	82.4
65°	6.1	18.4	30.7	40.6	44.3
67.5°	4.9	19.7	27.0	25.8	25.8
70°	4.9	18.4	23.4	22.1	23.4
72.5°	4.9	19.7	20.9	19.7	20.9
75°	4.9	18.4	18.4	18.4	18.4
77.5°	4.9	17.2	17.2	16.0	16.0
80°	4.9	14.8	14.8	14.8	13.5
82.5°	4.9	13.5	13.5	13.5	11.1
85°	4.9	12.3	12.3	12.3	9.8
87.5°	3.7	11.1	12.3	11.1	7.4
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	0.68	1.94	1.04	2.25	2.56	14.93	16.19	15.30	16.50	16.82
	3H	3.01	4.12	3.39	4.45	4.82	15.01	16.12	15.39	16.45	16.82
	4H	4.11	5.15	4.52	5.50	5.88	15.09	16.12	15.49	16.47	16.86
	6H	5.10	6.05	5.52	6.42	6.82	15.19	16.14	15.61	16.51	16.91
	8H	5.58	6.48	6.01	6.87	7.28	15.25	16.15	15.68	16.54	16.95
	12H	6.14	7.00	6.57	7.38	7.81	15.33	16.19	15.77	16.57	17.00
4H	2H	3.93	4.96	4.33	5.31	5.70	14.79	15.82	15.19	16.17	16.56
	3H	6.25	7.09	6.66	7.50	7.90	14.96	15.81	15.38	16.21	16.62
	4H	7.62	8.37	8.05	8.79	9.24	15.11	15.87	15.55	16.29	16.73
	6H	8.70	9.36	9.17	9.80	10.27	15.34	15.99	15.80	16.44	16.91
	8H	9.16	9.77	9.63	10.22	10.69	15.46	16.07	15.93	16.52	16.99
	12H	9.65	10.19	10.14	10.67	11.15	15.64	16.18	16.12	16.66	17.13
8H	4H	8.59	9.20	9.06	9.65	10.12	15.11	15.72	15.58	16.17	16.64
	6H	10.12	10.62	10.62	11.11	11.59	15.45	15.95	15.95	16.45	16.93
	8H	10.89	11.34	11.41	11.85	12.35	15.68	16.13	16.20	16.65	17.14
	12H	11.69	12.09	12.21	12.59	13.16	16.02	16.41	16.53	16.91	17.48
12H	4H	8.77	9.31	9.25	9.79	10.26	15.09	15.63	15.58	16.12	16.59
	6H	10.43	10.88	10.96	11.40	11.89	15.47	15.92	15.99	16.43	16.93
	8H	11.39	11.78	11.90	12.28	12.85	15.78	16.18	16.29	16.67	17.24