

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: P1059009

Luminaire Tested: S123RDRP-S1000D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

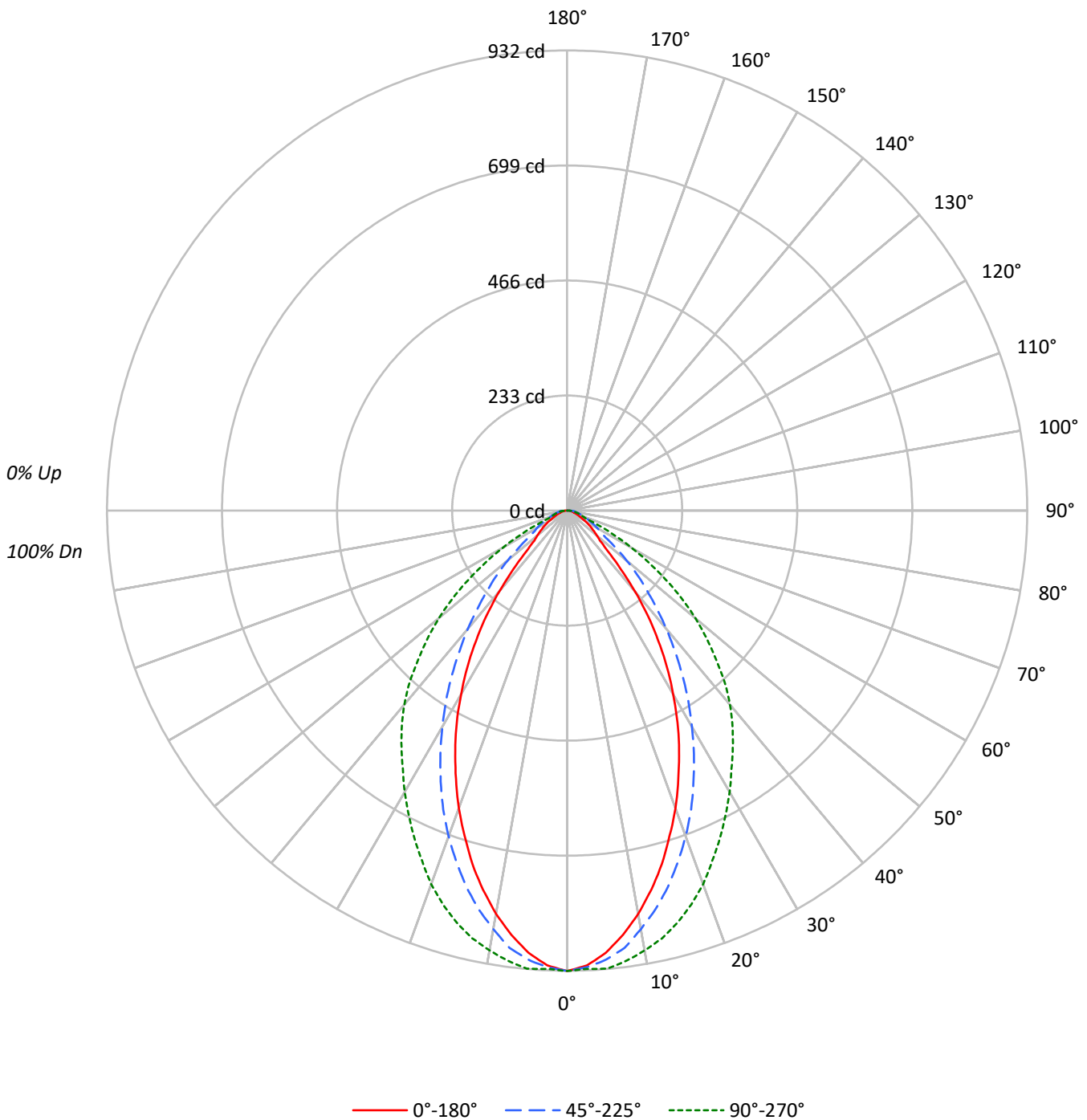
Lumens per Lamp: N/A
Luminaire Lumens: 1251.7 lumens
Efficiency: N/A
Efficacy: 35.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10950	10950	10950
5°	10596	10759	10978
10°	9889	10261	10787
15°	9012	9589	10505
20°	8019	8771	10059
25°	6948	7849	9485
30°	5826	6847	8920
35°	4616	5829	8386
40°	3267	4793	7865
45°	1923	3790	7079
50°	1440	2877	6200
55°	1210	1945	4979
60°	979	1660	3537
65°	772	1417	1867
70°	676	1233	1154
75°	631	1157	1102
80°	629	1251	1095
85°	781	1873	1401

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7079 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	6.9
10°-20°	223.0	17.8
20°-30°	284.0	22.7
30°-40°	267.2	21.3
40°-50°	192.4	15.4
50°-60°	111.1	8.9
60°-70°	50.8	4.1
70°-80°	25.4	2.0
80°-90°	12.0	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°	592.9	47.4
0°-40°	860.0	68.7
0°-60°	1163.6	93.0
0°-90°	1251.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	899	914	913	922	931	84
15°	741	768	789	833	864	207
25°	536	564	606	673	732	245
35°	322	350	407	500	585	200
45°	116	145	228	343	426	98
55°	59	61	95	181	243	53
65°	28	39	51	57	67	28
75°	14	27	26	24	24	15
85°	6	13	14	13	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	932.5	932.5	932.5	932.5	932.5
2.5°	922.0	933.6	925.5	926.7	929.0
5°	898.9	913.9	912.8	922.0	931.3
7.5°	866.4	883.8	893.1	907.0	919.7
10°	829.4	849.1	860.6	886.1	904.7
12.5°	786.5	812.0	827.0	860.6	887.3
15°	741.3	768.0	788.8	832.8	864.1
17.5°	690.4	719.3	746.0	798.1	836.3
20°	641.7	669.5	701.9	758.7	805.0
22.5°	588.4	618.5	655.6	715.8	768.0
25°	536.3	564.1	605.8	673.0	732.1
27.5°	484.2	512.0	556.0	630.1	695.0
30°	429.7	458.7	505.0	587.3	657.9
32.5°	376.5	404.3	456.4	545.6	619.7
35°	322.0	349.8	406.6	500.4	585.0
37.5°	268.7	297.7	357.9	463.3	550.2
40°	213.1	244.4	312.7	425.1	513.1
42.5°	161.0	194.6	267.6	385.7	472.6
45°	115.8	144.8	228.2	342.9	426.3
47.5°	90.3	105.4	192.3	298.8	383.4
50°	78.8	81.1	157.5	258.3	339.4
52.5°	68.3	70.7	123.9	220.1	293.1
55°	59.1	61.4	95.0	180.7	243.2
57.5°	49.8	53.3	78.8	143.6	195.8
60°	41.7	46.3	70.7	110.0	150.6
62.5°	33.6	41.7	60.2	81.1	107.7
65°	27.8	39.4	51.0	56.8	67.2
67.5°	23.2	35.9	42.9	40.5	39.4
70°	19.7	32.4	35.9	32.4	33.6
72.5°	16.2	30.1	30.1	27.8	27.8
75°	13.9	26.6	25.5	24.3	24.3
77.5°	11.6	23.2	22.0	20.8	19.7
80°	9.3	18.5	18.5	17.4	16.2
82.5°	8.1	15.1	15.1	15.1	12.7
85°	5.8	12.7	13.9	12.7	10.4
87.5°	4.6	11.6	11.6	10.4	6.9
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	8.29	9.61	8.65	9.92	10.23	15.65	16.97	16.01	17.28	17.59
	3H	9.68	10.85	10.05	11.18	11.54	15.88	17.05	16.26	17.38	17.74
	4H	10.23	11.32	10.63	11.67	12.05	15.99	17.08	16.40	17.43	17.82
	6H	10.66	11.67	11.08	12.04	12.43	16.11	17.11	16.52	17.48	17.87
	8H	10.84	11.79	11.27	12.18	12.59	16.16	17.11	16.59	17.50	17.90
	12H	11.00	11.90	11.43	12.29	12.72	16.22	17.13	16.65	17.51	17.94
4H	2H	9.39	10.48	9.79	10.83	11.21	15.61	16.70	16.01	17.05	17.43
	3H	11.05	11.94	11.46	12.35	12.75	15.97	16.86	16.38	17.26	17.67
	4H	11.86	12.66	12.29	13.08	13.52	16.16	16.96	16.60	17.38	17.82
	6H	12.49	13.18	12.96	13.63	14.10	16.39	17.08	16.85	17.53	17.99
	8H	12.73	13.38	13.20	13.82	14.29	16.49	17.14	16.96	17.59	18.06
	12H	12.94	13.51	13.43	14.00	14.47	16.62	17.19	17.11	17.68	18.15
8H	4H	12.30	12.95	12.77	13.39	13.86	16.20	16.85	16.67	17.29	17.76
	6H	13.21	13.74	13.71	14.24	14.72	16.53	17.06	17.03	17.55	18.04
	8H	13.63	14.11	14.15	14.62	15.11	16.72	17.20	17.24	17.71	18.20
	12H	14.05	14.47	14.56	14.96	15.54	16.97	17.39	17.48	17.88	18.45
12H	4H	12.36	12.93	12.84	13.41	13.88	16.19	16.76	16.68	17.24	17.72
	6H	13.34	13.82	13.87	14.34	14.83	16.54	17.02	17.07	17.54	18.03
	8H	13.89	14.31	14.40	14.80	15.37	16.80	17.22	17.32	17.72	18.29