

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: P1059014

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059014
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
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-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

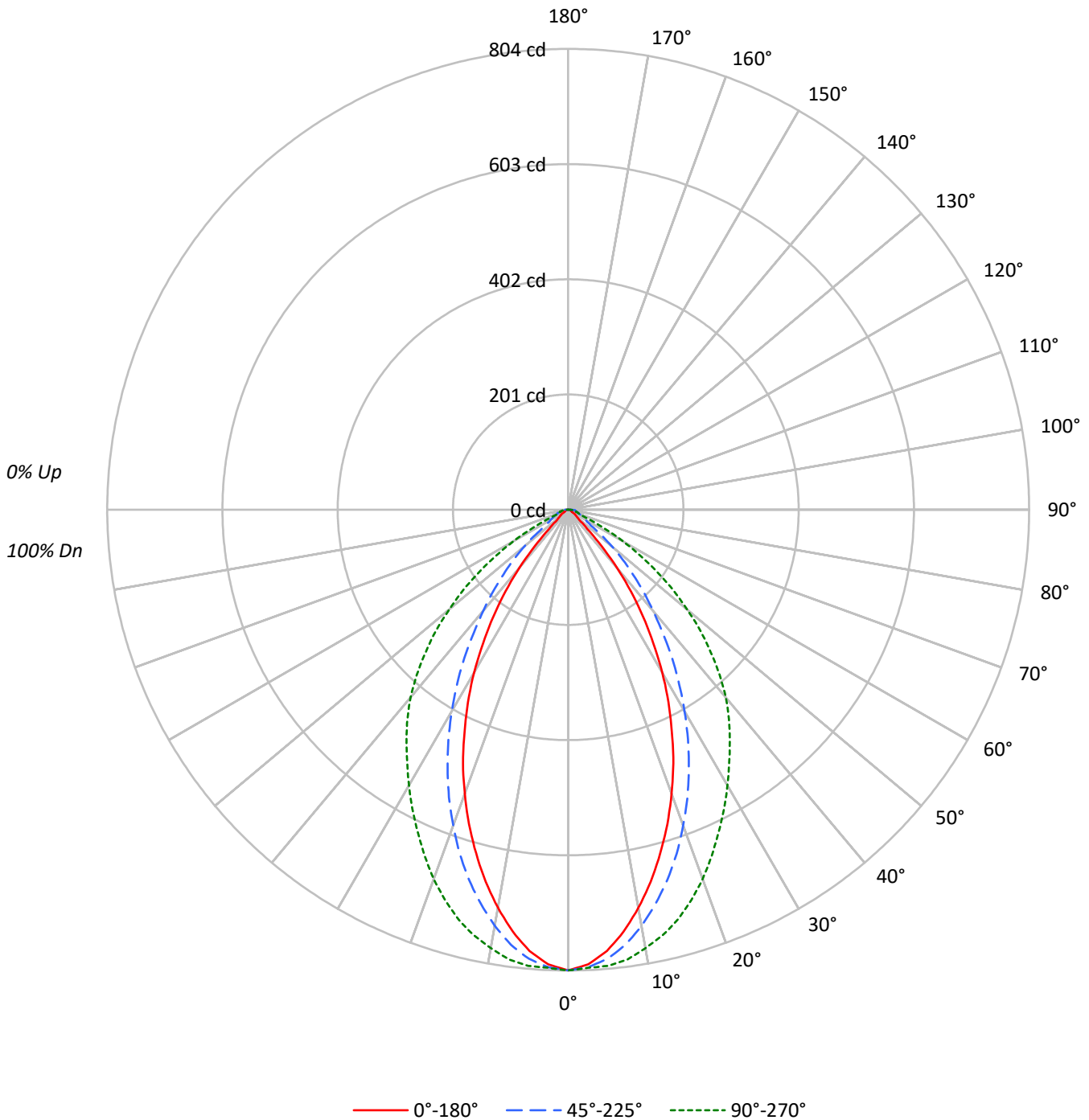
Lumens per Lamp: N/A
Luminaire Lumens: 965.4 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81													81															
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73													73															
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66													66															
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50													50															
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46													46															
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	41	40													40															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9437	9437	9437
5°	9112	9271	9416
10°	8411	8791	9261
15°	7544	8127	8994
20°	6588	7325	8569
25°	5541	6448	8041
30°	4449	5498	7532
35°	3258	4527	7047
40°	2016	3523	6556
45°	776	2654	5837
50°	382	1818	4940
55°	301	1007	3873
60°	202	836	2597
65°	169	750	1161
70°	168	676	676
75°	222	726	667
80°	331	913	751
85°	498	1495	997

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	7.6
10°-20°	188.7	19.5
20°-30°	234.1	24.3
30°-40°	209.8	21.7
40°-50°	137.9	14.3
50°-60°	69.1	7.2
60°-70°	27.3	2.8
70°-80°	15.3	1.6
80°-90°	9.6	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°	496.5	51.4
0°-40°	706.3	73.2
0°-60°	913.2	94.6
0°-90°	965.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	965.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	773	785	786	791	799	72
15°	621	640	668	714	740	173
25°	428	455	498	568	621	196
35°	227	258	316	413	492	141
45°	47	77	160	269	352	44
55°	15	17	49	133	189	13
65°	6	17	27	34	42	6
75°	5	16	16	15	15	5
85°	4	11	11	11	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	803.7	803.7	803.7	803.7	803.7
2.5°	793.9	804.9	798.8	798.8	800.0
5°	773.0	785.3	786.5	791.4	798.8
7.5°	742.2	758.2	765.6	780.3	791.4
10°	705.4	722.6	737.3	763.1	776.7
12.5°	664.8	682.0	704.2	739.8	760.7
15°	620.6	640.2	668.5	714.0	739.8
17.5°	575.1	594.8	629.2	680.8	714.0
20°	527.2	549.3	586.2	645.2	685.7
22.5°	479.3	503.8	543.2	607.1	653.8
25°	427.7	454.7	497.7	567.7	620.6
27.5°	378.5	406.8	452.2	528.4	588.6
30°	328.1	356.4	405.5	487.9	555.5
32.5°	276.5	308.5	360.1	449.8	522.3
35°	227.3	258.1	315.8	412.9	491.6
37.5°	179.4	210.1	270.4	377.3	460.8
40°	131.5	163.4	229.8	342.9	427.7
42.5°	86.0	119.2	194.2	308.5	390.8
45°	46.7	77.4	159.8	269.1	351.5
47.5°	25.8	41.8	129.0	232.3	313.4
50°	20.9	23.3	99.5	197.9	270.4
52.5°	17.2	19.7	71.3	164.7	231.0
55°	14.7	17.2	49.2	132.7	189.2
57.5°	12.3	14.7	39.3	102.0	148.7
60°	8.6	14.7	35.6	75.0	110.6
62.5°	7.4	14.7	30.7	51.6	73.7
65°	6.1	17.2	27.0	34.4	41.8
67.5°	4.9	17.2	23.3	22.1	22.1
70°	4.9	17.2	19.7	18.4	19.7
72.5°	4.9	18.4	18.4	17.2	17.2
75°	4.9	16.0	16.0	14.7	14.7
77.5°	4.9	14.7	14.7	13.5	13.5
80°	4.9	13.5	13.5	12.3	11.1
82.5°	4.9	12.3	12.3	11.1	9.8
85°	3.7	11.1	11.1	11.1	7.4
87.5°	3.7	9.8	11.1	9.8	6.1
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	0.24	1.50	0.60	1.81	2.12	14.35	15.60	14.71	15.92	16.23
	3H	2.77	3.88	3.15	4.21	4.58	14.42	15.54	14.80	15.87	16.23
	4H	3.94	4.97	4.34	5.32	5.71	14.49	15.52	14.89	15.87	16.26
	6H	4.99	5.94	5.40	6.31	6.70	14.59	15.54	15.00	15.91	16.30
	8H	5.53	6.42	5.96	6.82	7.22	14.65	15.54	15.08	15.94	16.34
	12H	6.01	6.87	6.44	7.25	7.68	14.72	15.58	15.15	15.96	16.39
4H	2H	3.51	4.54	3.91	4.89	5.28	14.21	15.24	14.61	15.59	15.98
	3H	5.97	6.82	6.39	7.22	7.63	14.38	15.23	14.79	15.63	16.03
	4H	7.32	8.08	7.76	8.50	8.94	14.51	15.26	14.94	15.68	16.13
	6H	8.45	9.10	8.91	9.55	10.02	14.72	15.38	15.19	15.82	16.29
	8H	8.96	9.57	9.43	10.02	10.49	14.85	15.46	15.32	15.91	16.38
	12H	9.42	9.96	9.91	10.44	10.92	15.01	15.55	15.49	16.03	16.51
8H	4H	8.24	8.85	8.71	9.30	9.77	14.51	15.12	14.98	15.57	16.04
	6H	9.83	10.33	10.34	10.83	11.31	14.84	15.34	15.34	15.84	16.32
	8H	10.66	11.11	11.19	11.63	12.12	15.07	15.52	15.59	16.04	16.53
	12H	11.45	11.85	11.96	12.34	12.91	15.40	15.79	15.91	16.29	16.86
12H	4H	8.40	8.94	8.89	9.43	9.90	14.50	15.04	14.98	15.52	16.00
	6H	10.15	10.60	10.67	11.12	11.61	14.87	15.32	15.39	15.84	16.33
	8H	11.16	11.56	11.68	12.06	12.63	15.18	15.58	15.70	16.08	16.65