

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: P1059263

Luminaire Tested: S123RDRP-S560D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S560D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

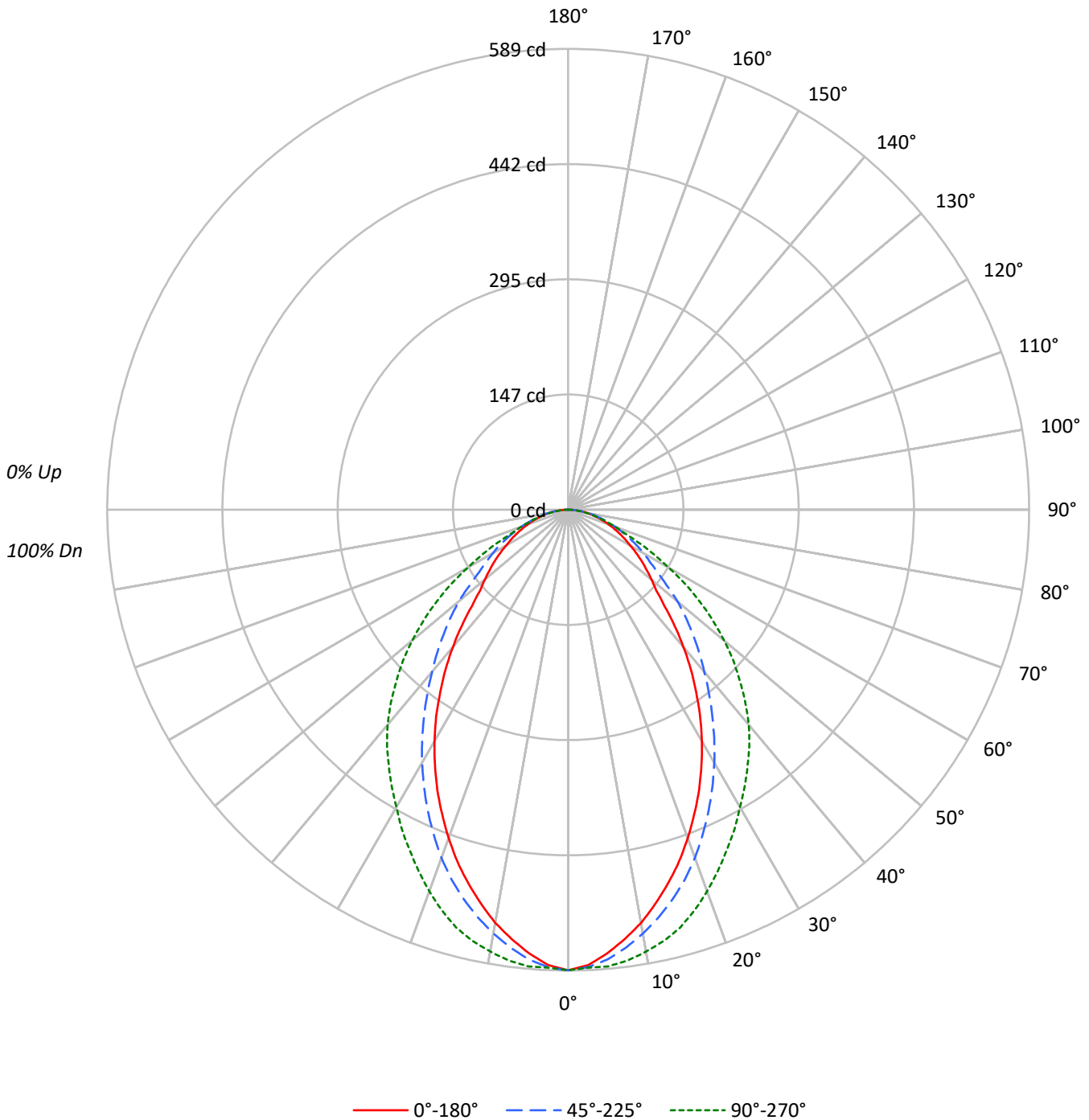
Lumens per Lamp: N/A
Luminaire Lumens: 1063.3 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6913	6913	6913
5°	6711	6800	6906
10°	6393	6558	6838
15°	6007	6267	6720
20°	5579	5916	6485
25°	5123	5499	6214
30°	4632	5062	5951
35°	4085	4600	5728
40°	3512	4146	5501
45°	2888	3736	5156
50°	2534	3328	4753
55°	2346	2840	4211
60°	2156	2609	3485
65°	2014	2398	2742
70°	1895	2180	2180
75°	1783	2005	1878
80°	1677	1819	1589
85°	1576	1765	1213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5156 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	5.1
10°-20°	145.9	13.7
20°-30°	197.8	18.6
30°-40°	206.8	19.5
40°-50°	179.4	16.9
50°-60°	133.5	12.6
60°-70°	85.6	8.1
70°-80°	45.9	4.3
80°-90°	13.9	1.3
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°	398.2	37.4
0°-40°	605.0	56.9
0°-60°	917.9	86.3
0°-90°	1063.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1063.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	569	579	577	581	586	53
15°	494	506	516	536	553	138
25°	395	408	424	453	480	181
35°	285	299	321	362	400	178
45°	174	187	225	273	310	137
55°	115	117	139	178	206	103
65°	72	79	86	92	99	72
75°	39	46	44	42	41	42
85°	12	14	13	11	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.7	588.7	588.7	588.7	588.7
2.5°	582.5	590.7	585.2	585.2	585.9
5°	569.3	579.0	576.9	581.1	585.9
7.5°	553.5	563.8	564.5	574.2	581.1
10°	536.2	546.6	550.0	563.8	573.5
12.5°	515.5	527.2	533.5	550.7	564.5
15°	494.1	505.9	515.5	536.2	552.8
17.5°	471.3	483.1	495.5	519.0	536.9
20°	446.5	458.9	473.4	496.9	519.0
22.5°	421.0	434.1	449.3	474.8	499.6
25°	395.4	407.9	424.4	452.7	479.6
27.5°	368.5	381.6	398.9	429.9	460.3
30°	341.6	354.7	373.3	406.5	438.9
32.5°	314.0	327.1	347.1	384.4	419.6
35°	285.0	298.8	320.9	361.6	399.6
37.5°	257.4	270.5	295.4	340.2	380.3
40°	229.1	242.9	270.5	318.8	358.9
42.5°	201.5	215.3	247.7	296.1	335.4
45°	173.9	187.0	225.0	273.3	310.5
47.5°	152.5	162.2	203.6	249.1	286.4
50°	138.7	142.2	182.2	225.7	260.2
52.5°	126.3	129.1	158.7	202.2	233.3
55°	114.6	117.3	138.7	178.0	205.7
57.5°	102.8	106.3	123.5	153.2	178.0
60°	91.8	95.9	111.1	131.1	148.4
62.5°	82.1	87.0	98.7	111.1	122.8
65°	72.5	78.7	86.3	91.8	98.7
67.5°	63.5	70.4	74.5	75.9	76.6
70°	55.2	62.1	63.5	63.5	63.5
72.5°	46.9	54.5	53.1	52.4	51.8
75°	39.3	45.5	44.2	42.1	41.4
77.5°	31.7	37.3	35.2	33.8	31.7
80°	24.8	29.0	26.9	25.5	23.5
82.5°	18.6	21.4	19.3	17.9	15.9
85°	11.7	14.5	13.1	11.0	9.0
87.5°	6.2	8.3	6.9	6.2	3.5
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	13.50	14.99	13.87	15.30	15.61	16.26	17.74	16.62	18.05	18.37
	3H	15.21	16.54	15.59	16.87	17.23	17.28	18.61	17.66	18.94	19.30
	4H	15.87	17.12	16.27	17.47	17.85	17.64	18.89	18.05	19.24	19.62
	6H	16.37	17.52	16.79	17.89	18.28	17.90	19.05	18.31	19.42	19.81
	8H	16.55	17.65	16.98	18.03	18.44	17.97	19.06	18.40	19.45	19.86
	12H	16.68	17.72	17.11	18.11	18.54	18.01	19.05	18.44	19.44	19.86
4H	2H	14.28	15.53	14.68	15.87	16.25	16.53	17.78	16.93	18.12	18.50
	3H	16.21	17.24	16.62	17.64	18.04	17.78	18.82	18.20	19.22	19.62
	4H	17.01	17.94	17.45	18.36	18.80	18.27	19.20	18.70	19.62	20.06
	6H	17.65	18.46	18.11	18.91	19.37	18.65	19.46	19.11	19.90	20.36
	8H	17.88	18.64	18.35	19.08	19.55	18.76	19.52	19.23	19.96	20.43
	12H	18.05	18.73	18.54	19.21	19.68	18.83	19.51	19.32	19.99	20.46
8H	4H	17.33	18.09	17.80	18.53	19.00	18.46	19.22	18.93	19.66	20.13
	6H	18.13	18.75	18.62	19.24	19.72	18.95	19.57	19.45	20.07	20.54
	8H	18.45	19.01	18.97	19.52	20.01	19.13	19.69	19.64	20.20	20.69
	12H	18.73	19.23	19.24	19.72	20.28	19.26	19.75	19.77	20.25	20.81
12H	4H	17.36	18.03	17.84	18.51	18.98	18.48	19.15	18.96	19.63	20.10
	6H	18.18	18.74	18.69	19.25	19.74	18.99	19.55	19.50	20.06	20.55
	8H	18.57	19.07	19.08	19.56	20.13	19.22	19.71	19.73	20.20	20.77