

Scaled data based on original data using
LM-79-2019 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: S123RDR-S560D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

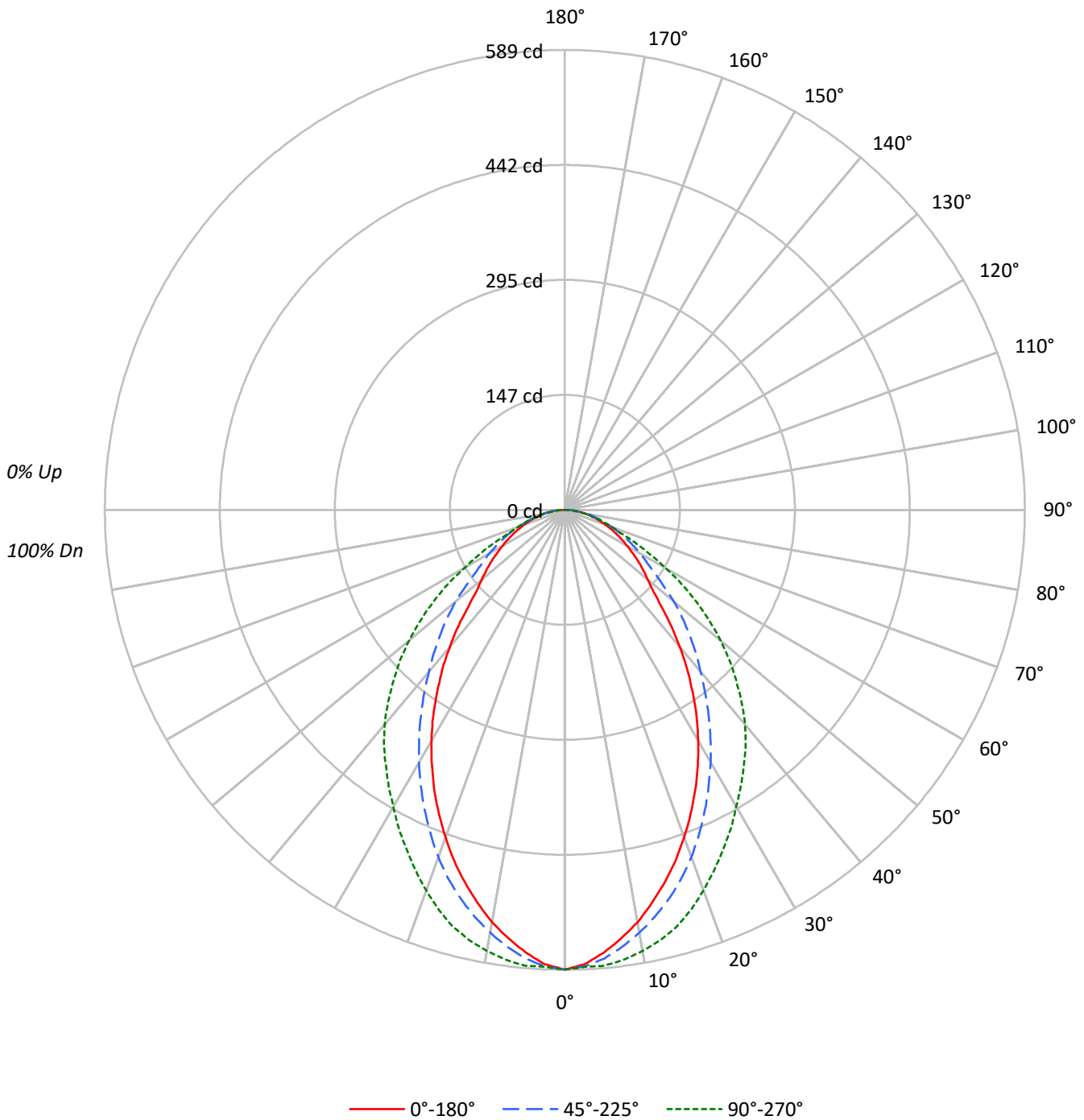
Lumens per Lamp: N/A
Luminaire Lumens: 1063.3 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): 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	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

(END OF REPORT)