

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: P1058122

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058122
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D835-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

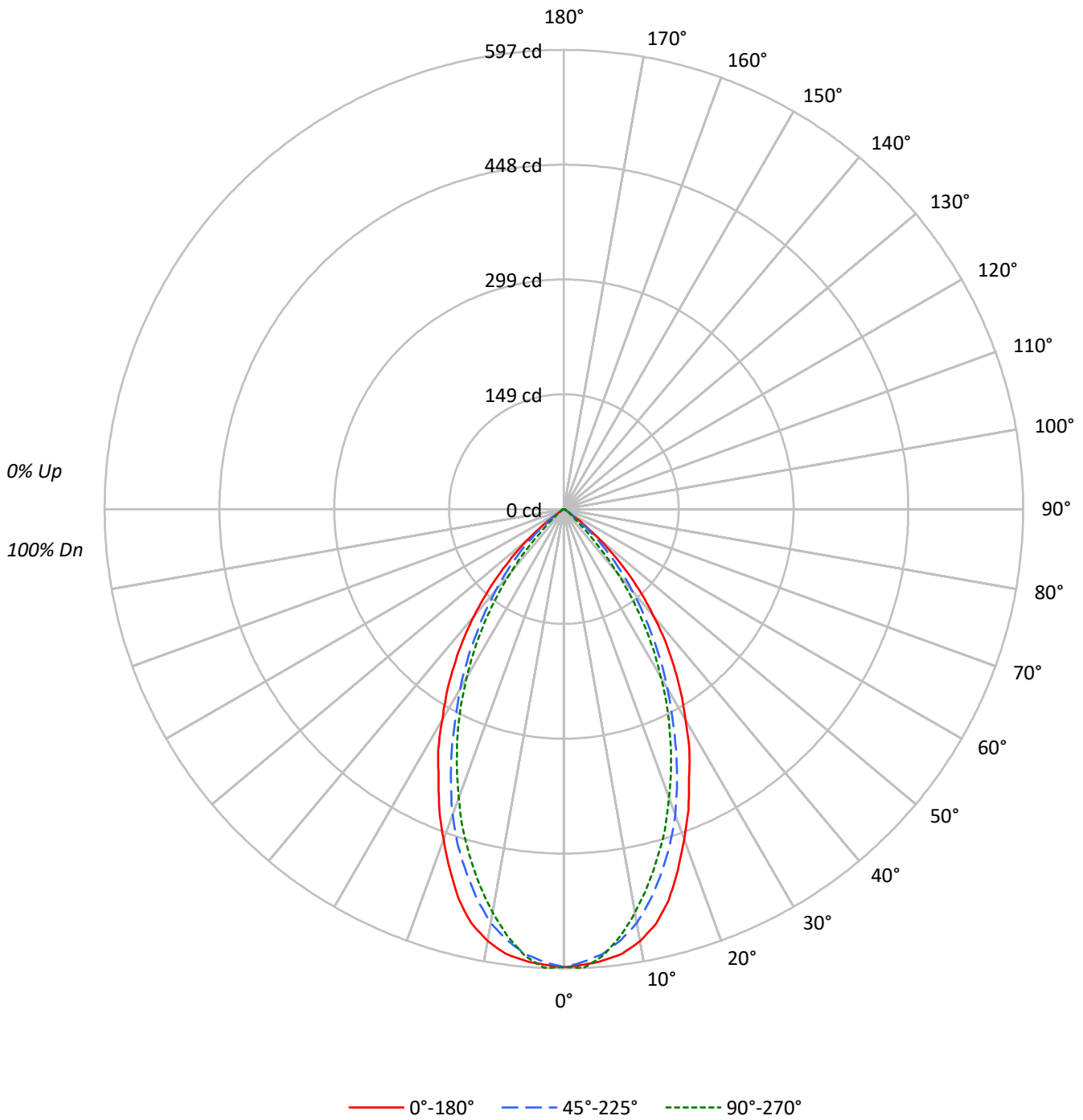
Lumens per Lamp: N/A
Luminaire Lumens: 559.9 lumens
Efficiency: N/A
Efficacy: 16.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10987	10987	10987
5°	10912	10749	10795
10°	10686	10236	9978
15°	10052	9355	8969
20°	8974	8306	7837
25°	7843	7022	6664
30°	6733	5740	5365
35°	5614	4480	4028
40°	4367	3305	2577
45°	3056	2200	1117
50°	1662	1157	396
55°	244	405	283
60°	48	92	185
65°	0	57	109
70°	0	0	70
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3056 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	9.8
10°-20°	137.9	24.6
20°-30°	160.7	28.7
30°-40°	128.8	23.0
40°-50°	64.0	11.4
50°-60°	12.6	2.3
60°-70°	1.1	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	353.3	63.1
0°-40°	482.1	86.1
0°-60°	558.7	99.8
0°-90°	559.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	559.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	589	589	580	582	583	56
15°	526	516	490	477	470	146
25°	385	366	345	337	327	177
35°	249	224	199	190	179	155
45°	117	103	84	57	43	90
55°	8	15	13	8	9	15
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	595.4	595.4	595.4	595.4	595.4
2.5°	592.9	595.4	589.1	595.4	596.7
5°	589.1	589.1	580.3	581.6	582.8
7.5°	582.8	580.3	565.2	562.7	560.2
10°	570.3	565.2	546.3	536.3	532.5
12.5°	552.6	545.1	519.9	508.6	502.3
15°	526.2	516.1	489.7	477.1	469.5
17.5°	492.2	483.4	458.2	444.4	436.8
20°	457.0	444.4	423.0	409.1	399.1
22.5°	423.0	406.6	383.9	373.9	363.8
25°	385.2	366.3	344.9	337.4	327.3
27.5°	353.7	329.8	304.6	299.6	290.8
30°	316.0	293.3	269.4	261.8	251.8
32.5°	283.2	258.1	234.1	225.3	216.5
35°	249.2	224.1	198.9	190.1	178.8
37.5°	216.5	192.6	167.4	153.6	143.5
40°	181.3	161.1	137.2	119.6	107.0
42.5°	149.8	132.2	109.5	86.9	74.3
45°	117.1	103.2	84.3	56.6	42.8
47.5°	86.9	76.8	61.7	32.7	22.7
50°	57.9	54.1	40.3	16.4	13.8
52.5°	31.5	34.0	23.9	10.1	11.3
55°	7.6	15.1	12.6	7.6	8.8
57.5°	1.3	2.5	6.3	6.3	6.3
60°	1.3	1.3	2.5	3.8	5.0
62.5°	1.3	0.0	1.3	2.5	3.8
65°	0.0	0.0	1.3	1.3	2.5
67.5°	0.0	0.0	0.0	1.3	1.3
70°	0.0	0.0	0.0	1.3	1.3
72.5°	0.0	0.0	0.0	0.0	1.3
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)