

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: P1059183

Luminaire Tested: S123RDR-S340D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

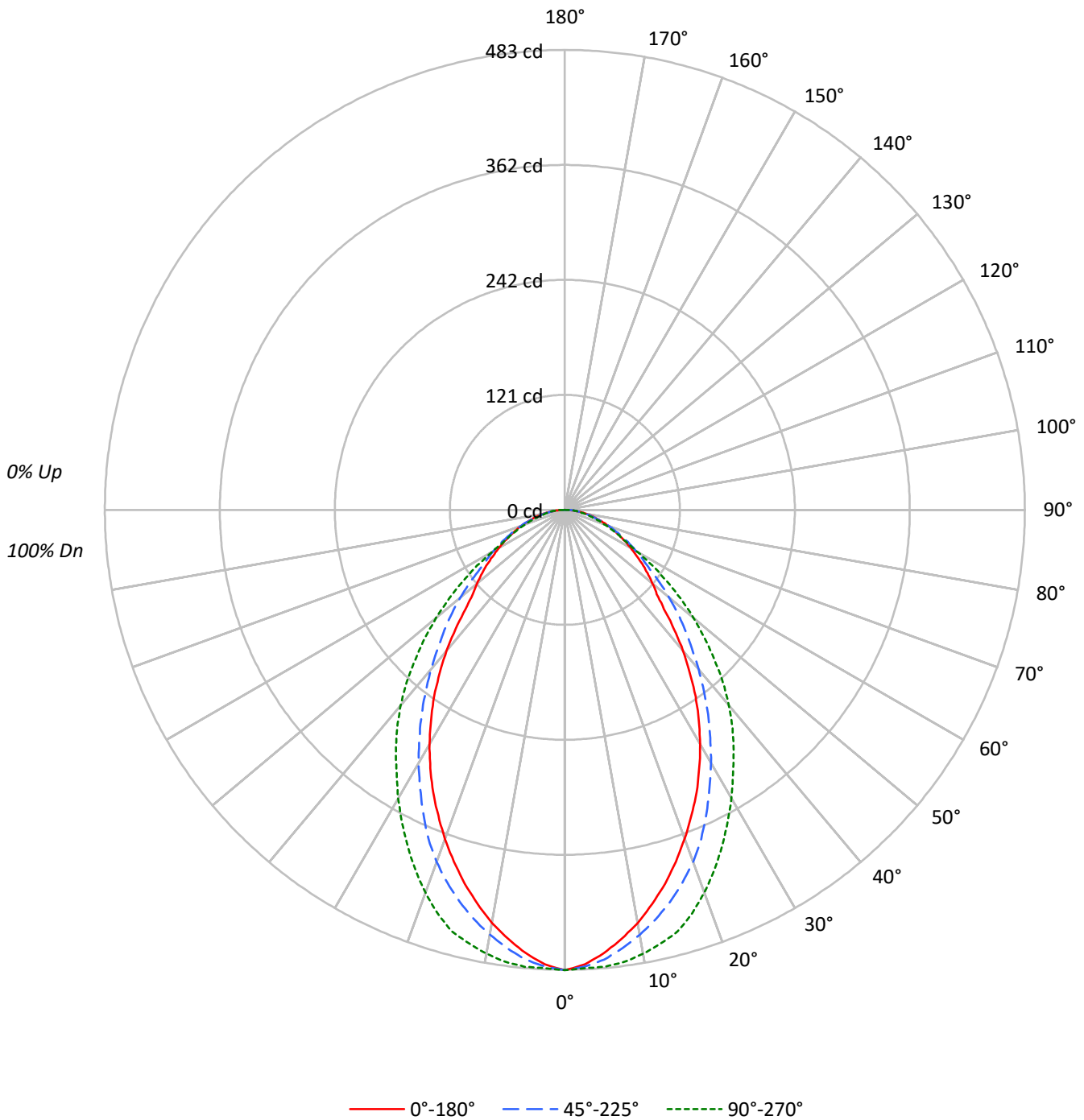
Lumens per Lamp: N/A
Luminaire Lumens: 849.4 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5676	5676	5676
5°	5512	5590	5678
10°	5252	5401	5645
15°	4940	5184	5573
20°	4595	4917	5348
25°	4242	4559	5056
30°	3852	4163	4743
35°	3429	3757	4431
40°	2958	3348	4107
45°	2446	2964	3682
50°	2196	2614	3215
55°	2035	2231	2665
60°	1876	2031	2041
65°	1745	1837	1712
70°	1641	1672	1500
75°	1547	1493	1320
80°	1461	1352	1237
85°	1401	1509	1401

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3682 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	5.3
10°-20°	120.6	14.2
20°-30°	163.2	19.2
30°-40°	167.7	19.7
40°-50°	140.8	16.6
50°-60°	101.0	11.9
60°-70°	64.3	7.6
70°-80°	35.3	4.2
80°-90°	11.8	1.4
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°	328.5	38.7
0°-40°	496.2	58.4
0°-60°	738.0	86.9
0°-90°	849.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	468	476	474	478	482	44
15°	406	418	426	445	458	114
25°	327	340	352	371	390	150
35°	239	252	262	285	309	149
45°	147	160	178	204	222	116
55°	99	102	109	124	130	89
65°	63	67	66	62	62	63
75°	34	37	33	30	29	36
85°	10	11	11	12	10	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	483.4	483.4	483.4	483.4	483.4
2.5°	478.0	484.6	480.0	480.5	481.7
5°	467.6	475.9	474.2	477.5	481.7
7.5°	454.7	463.8	464.2	472.1	478.8
10°	440.5	450.1	453.0	465.1	473.4
12.5°	423.9	434.3	440.5	455.5	466.3
15°	406.4	417.6	426.4	444.7	458.4
17.5°	387.3	399.3	410.6	430.1	444.3
20°	367.7	380.6	393.5	411.8	428.0
22.5°	347.3	360.7	374.0	391.9	409.7
25°	327.4	339.9	351.9	371.1	390.2
27.5°	305.7	318.6	329.0	350.3	370.2
30°	284.1	297.0	307.0	329.0	349.8
32.5°	261.7	275.0	284.1	307.0	328.6
35°	239.2	252.1	262.1	285.4	309.1
37.5°	215.5	229.6	239.6	265.8	289.1
40°	193.0	206.3	218.4	245.8	267.9
42.5°	169.7	183.4	197.2	225.5	245.8
45°	147.3	160.2	178.5	204.2	221.7
47.5°	131.0	139.4	160.6	182.2	198.8
50°	120.2	123.5	143.1	162.2	176.0
52.5°	109.4	111.9	125.2	142.7	153.1
55°	99.4	101.5	109.0	123.5	130.2
57.5°	88.6	90.7	96.9	105.2	109.0
60°	79.9	81.5	86.5	87.8	86.9
62.5°	71.1	73.6	76.1	73.2	72.0
65°	62.8	66.6	66.1	62.4	61.6
67.5°	55.3	59.1	57.0	53.2	52.0
70°	47.8	51.6	48.7	44.9	43.7
72.5°	40.8	44.9	40.4	37.0	36.2
75°	34.1	37.4	32.9	30.4	29.1
77.5°	27.9	30.4	26.2	24.1	23.3
80°	21.6	23.3	20.0	18.7	18.3
82.5°	15.8	16.6	14.6	15.4	15.0
85°	10.4	10.8	11.2	11.6	10.4
87.5°	5.0	7.1	7.1	6.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)