

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: P1059015

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059015
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

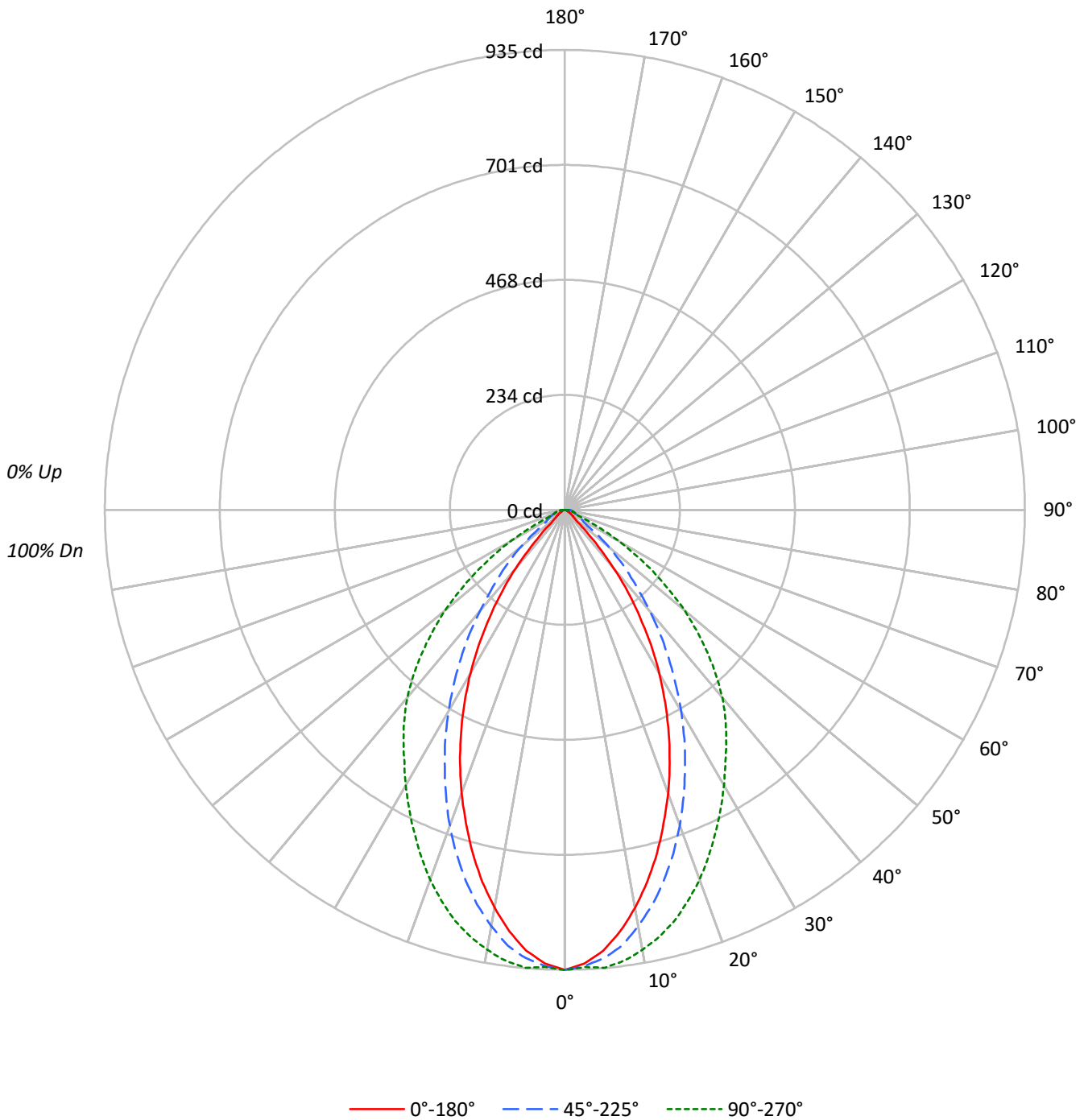
Lumens per Lamp: N/A
Luminaire Lumens: 1123.1 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10984	10984	10984
5°	10606	10779	11012
10°	9790	10245	10831
15°	8787	9474	10505
20°	7665	8541	9999
25°	6467	7485	9380
30°	5200	6400	8767
35°	3806	5268	8194
40°	2374	4108	7631
45°	898	3062	6797
50°	427	2110	5793
55°	328	1157	4479
60°	230	982	2945
65°	169	853	1231
70°	168	803	803
75°	222	835	835
80°	331	1001	913
85°	660	1657	1320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6797 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	7.6
10°-20°	220.2	19.6
20°-30°	272.6	24.3
30°-40°	244.3	21.8
40°-50°	160.2	14.3
50°-60°	80.2	7.1
60°-70°	31.3	2.8
70°-80°	17.6	1.6
80°-90°	10.9	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°	578.6	51.5
0°-40°	823.0	73.3
0°-60°	1063.4	94.7
0°-90°	1123.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	900	914	914	924	934	83
15°	723	752	779	831	864	201
25°	499	530	578	660	724	228
35°	266	301	368	478	572	165
45°	54	87	184	316	409	52
55°	16	20	56	155	219	15
65°	6	18	31	41	44	6
75°	5	18	18	18	18	5
85°	5	12	12	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.4	935.4	935.4	935.4	935.4
2.5°	923.2	936.7	928.1	929.3	930.5
5°	899.8	914.5	914.5	924.4	934.2
7.5°	864.1	881.4	893.6	910.9	924.4
10°	821.1	842.0	859.2	890.0	908.4
12.5°	774.4	800.2	822.4	862.9	888.7
15°	722.8	752.3	779.3	831.0	864.1
17.5°	667.5	697.0	732.6	792.9	833.4
20°	613.4	642.9	683.5	751.1	800.2
22.5°	556.8	587.6	630.6	705.6	763.4
25°	499.1	529.8	577.7	660.1	724.0
27.5°	441.3	472.0	526.1	615.8	685.9
30°	383.5	414.3	472.0	567.9	646.6
32.5°	325.7	358.9	419.2	523.7	607.2
35°	265.5	301.2	367.5	478.2	571.6
37.5°	210.2	243.4	318.4	438.8	535.9
40°	154.9	190.5	268.0	400.7	497.8
42.5°	100.8	138.9	222.5	358.9	454.8
45°	54.1	87.3	184.4	315.9	409.3
47.5°	29.5	47.9	148.7	270.4	362.6
50°	23.4	27.0	115.5	231.1	317.1
52.5°	19.7	22.1	82.4	194.2	266.7
55°	16.0	19.7	56.5	154.9	218.8
57.5°	13.5	17.2	44.3	120.5	170.9
60°	9.8	14.8	41.8	88.5	125.4
62.5°	7.4	16.0	36.9	61.5	82.4
65°	6.1	18.4	30.7	40.6	44.3
67.5°	4.9	19.7	27.0	25.8	25.8
70°	4.9	18.4	23.4	22.1	23.4
72.5°	4.9	19.7	20.9	19.7	20.9
75°	4.9	18.4	18.4	18.4	18.4
77.5°	4.9	17.2	17.2	16.0	16.0
80°	4.9	14.8	14.8	14.8	13.5
82.5°	4.9	13.5	13.5	13.5	11.1
85°	4.9	12.3	12.3	12.3	9.8
87.5°	3.7	11.1	12.3	11.1	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)