

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: P1059033

Luminaire Tested: S123RDR-S1000D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059033
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-S1000D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

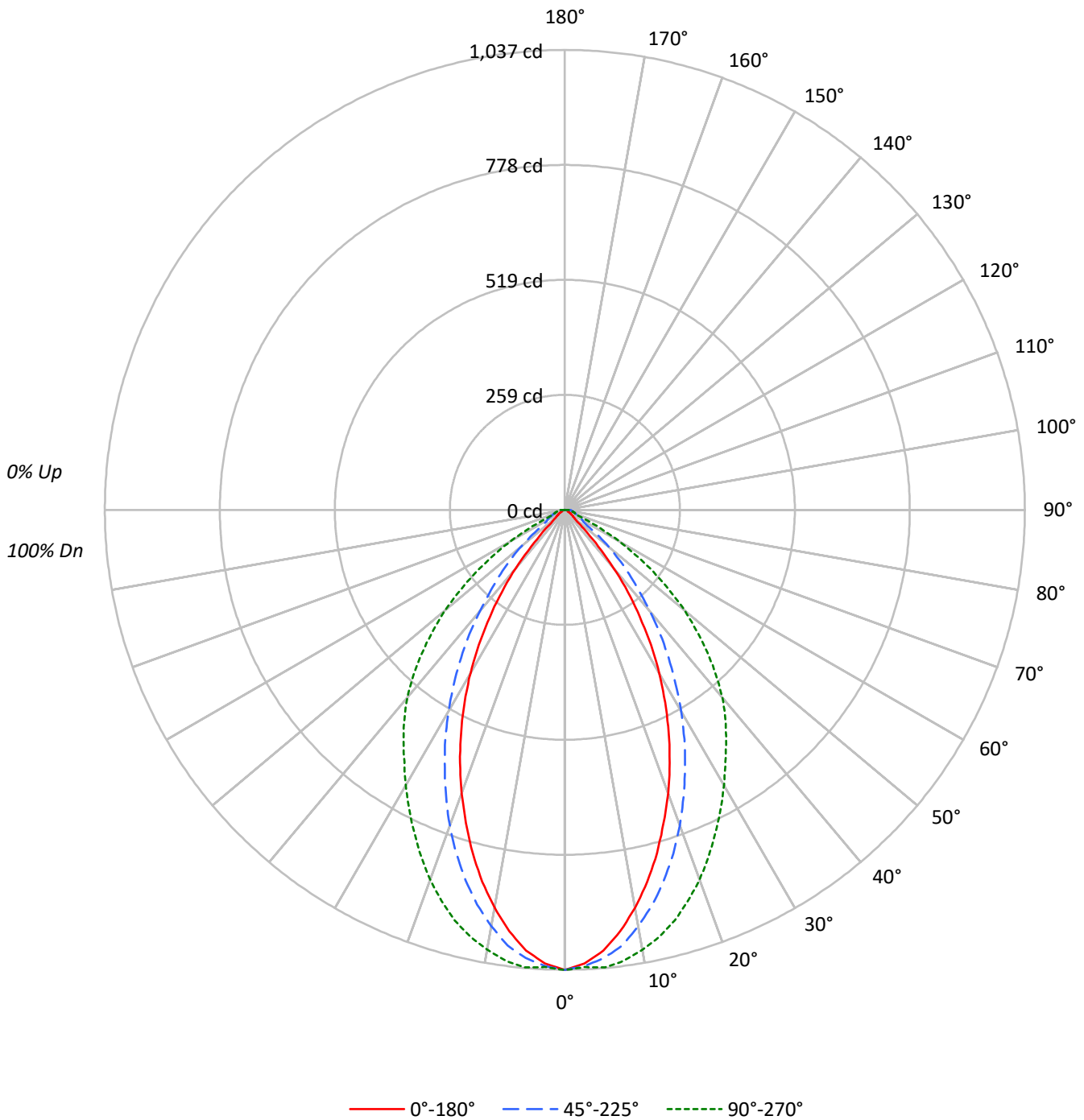
Lumens per Lamp: N/A
Luminaire Lumens: 1245.5 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	12182	12182	12182
5°	11763	11955	12212
10°	10858	11362	12012
15°	9745	10507	11650
20°	8500	9471	11090
25°	7171	8301	10403
30°	5767	7098	9723
35°	4222	5843	9087
40°	2633	4556	8463
45°	996	3396	7539
50°	473	2340	6425
55°	362	1284	4969
60°	256	1087	3264
65°	189	947	1364
70°	189	889	889
75°	250	926	926
80°	372	1109	1014
85°	741	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7539 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	7.6
10°-20°	244.2	19.6
20°-30°	302.3	24.3
30°-40°	271.0	21.8
40°-50°	177.7	14.3
50°-60°	88.9	7.1
60°-70°	34.7	2.8
70°-80°	19.5	1.6
80°-90°	12.1	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°	641.7	51.5
0°-40°	912.7	73.3
0°-60°	1179.3	94.7
0°-90°	1245.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1245.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	998	1014	1014	1025	1036	92
15°	802	834	864	922	958	223
25°	554	588	641	732	803	253
35°	294	334	408	530	634	183
45°	60	97	204	350	454	57
55°	18	22	63	172	243	16
65°	7	20	34	45	49	7
75°	6	20	20	20	20	6
85°	6	14	14	14	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1037.4	1037.4	1037.4	1037.4	1037.4
2.5°	1023.8	1038.8	1029.2	1030.6	1032.0
5°	997.9	1014.2	1014.2	1025.1	1036.0
7.5°	958.3	977.4	991.1	1010.1	1025.1
10°	910.6	933.8	952.9	987.0	1007.4
12.5°	858.8	887.5	912.0	957.0	985.6
15°	801.6	834.3	864.3	921.5	958.3
17.5°	740.2	772.9	812.5	879.3	924.3
20°	680.2	713.0	757.9	832.9	887.5
22.5°	617.5	651.6	699.3	782.5	846.6
25°	553.5	587.5	640.7	732.0	802.9
27.5°	489.4	523.5	583.5	683.0	760.7
30°	425.3	459.4	523.5	629.8	717.1
32.5°	361.3	398.1	464.9	580.7	673.4
35°	294.5	334.0	407.6	530.3	633.9
37.5°	233.1	269.9	353.1	486.7	594.4
40°	171.8	211.3	297.2	444.4	552.1
42.5°	111.8	154.0	246.7	398.1	504.4
45°	60.0	96.8	204.5	350.3	454.0
47.5°	32.7	53.2	164.9	299.9	402.1
50°	25.9	30.0	128.1	256.3	351.7
52.5°	21.8	24.5	91.3	215.4	295.8
55°	17.7	21.8	62.7	171.8	242.7
57.5°	15.0	19.1	49.1	133.6	189.5
60°	10.9	16.4	46.3	98.2	139.0
62.5°	8.2	17.7	40.9	68.2	91.3
65°	6.8	20.4	34.1	45.0	49.1
67.5°	5.5	21.8	30.0	28.6	28.6
70°	5.5	20.4	25.9	24.5	25.9
72.5°	5.5	21.8	23.2	21.8	23.2
75°	5.5	20.4	20.4	20.4	20.4
77.5°	5.5	19.1	19.1	17.7	17.7
80°	5.5	16.4	16.4	16.4	15.0
82.5°	5.5	15.0	15.0	15.0	12.3
85°	5.5	13.6	13.6	13.6	10.9
87.5°	4.1	12.3	13.6	12.3	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)