

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: P1059034

Luminaire Tested: S123RDR-S1000D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

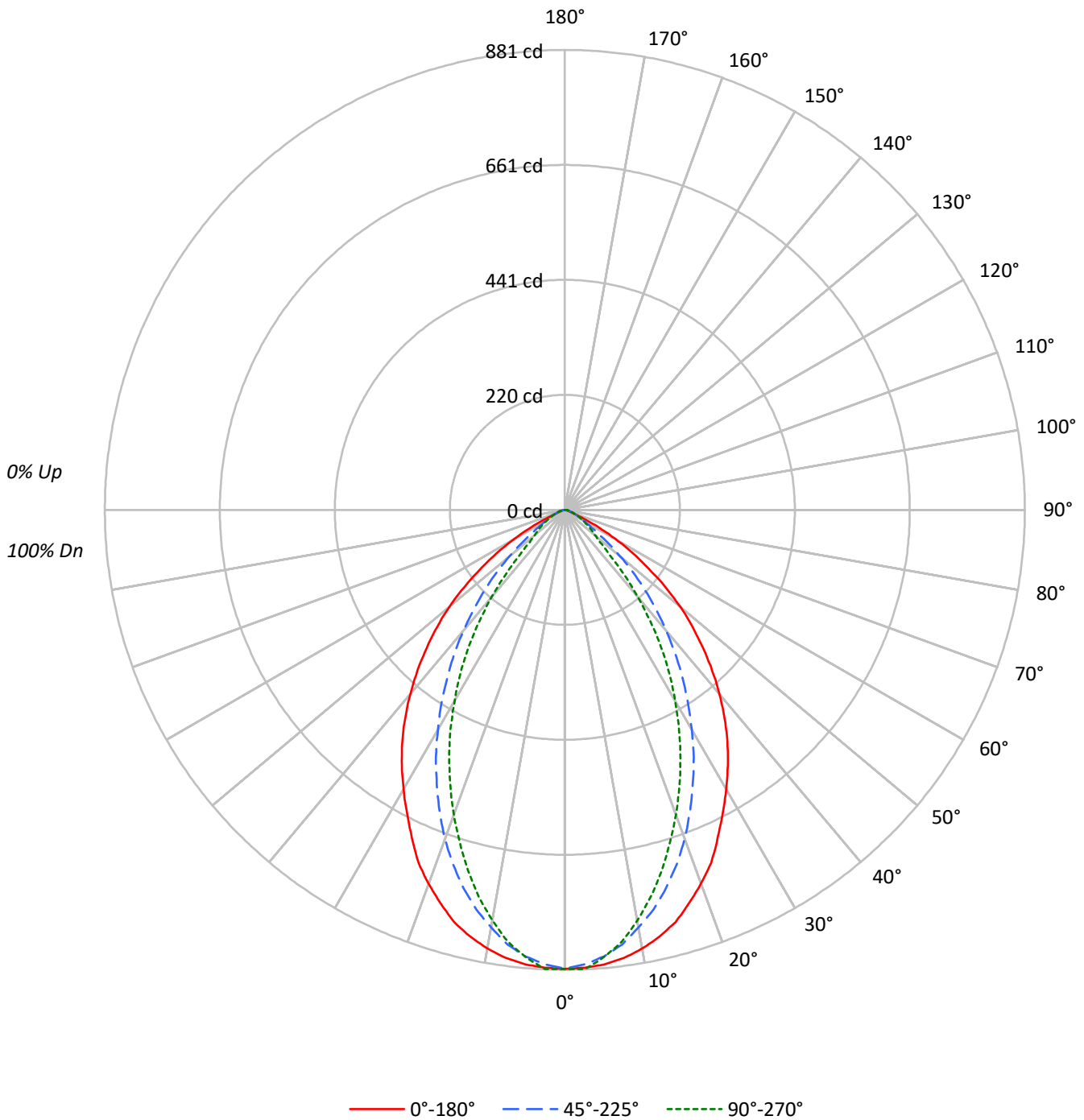
Lumens per Lamp: N/A
Luminaire Lumens: 1135.1 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10325	10325	10325
5°	10300	10124	10139
10°	10176	9689	9527
15°	9944	9117	8703
20°	9524	8385	7773
25°	8976	7512	6789
30°	8378	6588	5721
35°	7785	5619	4604
40°	7053	4632	3339
45°	6216	3594	2011
50°	5272	2512	1368
55°	4013	1505	1142
60°	2621	958	895
65°	1098	720	720
70°	374	515	560
75°	309	372	431
80°	183	277	365
85°	189	189	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6216 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	7.2
10°-20°	212.5	18.7
20°-30°	272.5	24.0
30°-40°	255.7	22.5
40°-50°	178.4	15.7
50°-60°	92.3	8.1
60°-70°	31.6	2.8
70°-80°	9.0	0.8
80°-90°	1.9	0.2
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°	566.3	49.9
0°-40°	822.0	72.4
0°-60°	1092.7	96.3
0°-90°	1135.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1135.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	874	872	859	863	860	83
15°	818	798	750	726	716	229
25°	693	649	580	540	524	319
35°	543	476	392	342	321	338
45°	374	306	216	150	121	288
55°	196	147	74	57	56	176
65°	40	34	26	24	26	47
75°	7	7	8	10	10	7
85°	1	1	1	1	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.3	879.3	879.3	879.3	879.3
2.5°	877.9	879.3	871.1	879.3	880.6
5°	873.8	872.5	858.9	862.9	860.2
7.5°	865.7	861.6	839.8	834.4	834.4
10°	853.4	845.3	812.6	803.1	799.0
12.5°	837.1	826.2	784.0	766.3	759.5
15°	818.0	797.6	750.0	725.5	715.9
17.5°	790.8	763.6	711.9	683.3	668.3
20°	762.2	728.2	671.0	637.0	622.0
22.5°	732.3	691.4	626.1	589.4	573.0
25°	692.8	649.3	579.8	540.4	524.0
27.5°	654.7	608.4	534.9	490.0	473.7
30°	617.9	563.5	485.9	442.4	421.9
32.5°	581.2	519.9	439.6	392.0	372.9
35°	543.1	476.4	392.0	341.6	321.2
37.5°	502.3	434.2	347.1	292.6	268.1
40°	460.1	389.3	302.2	240.9	217.8
42.5°	417.9	348.4	257.3	194.6	167.4
45°	374.3	306.3	216.4	149.7	121.1
47.5°	330.8	264.1	176.9	108.9	91.2
50°	288.6	224.6	137.5	80.3	74.9
52.5°	242.3	186.5	103.4	66.7	65.3
55°	196.0	147.0	73.5	57.2	55.8
57.5°	155.2	114.3	53.1	47.6	46.3
60°	111.6	81.7	40.8	39.5	38.1
62.5°	73.5	55.8	32.7	31.3	31.3
65°	39.5	34.0	25.9	24.5	25.9
67.5°	16.3	19.1	19.1	20.4	20.4
70°	10.9	12.3	15.0	16.3	16.3
72.5°	8.2	9.5	10.9	12.3	12.3
75°	6.8	6.8	8.2	9.5	9.5
77.5°	4.1	5.4	5.4	6.8	8.2
80°	2.7	4.1	4.1	5.4	5.4
82.5°	1.4	2.7	2.7	4.1	4.1
85°	1.4	1.4	1.4	1.4	2.7
87.5°	0.0	0.0	0.0	0.0	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)