

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: P1059279

Luminaire Tested: S123RDR-S560D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059279
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

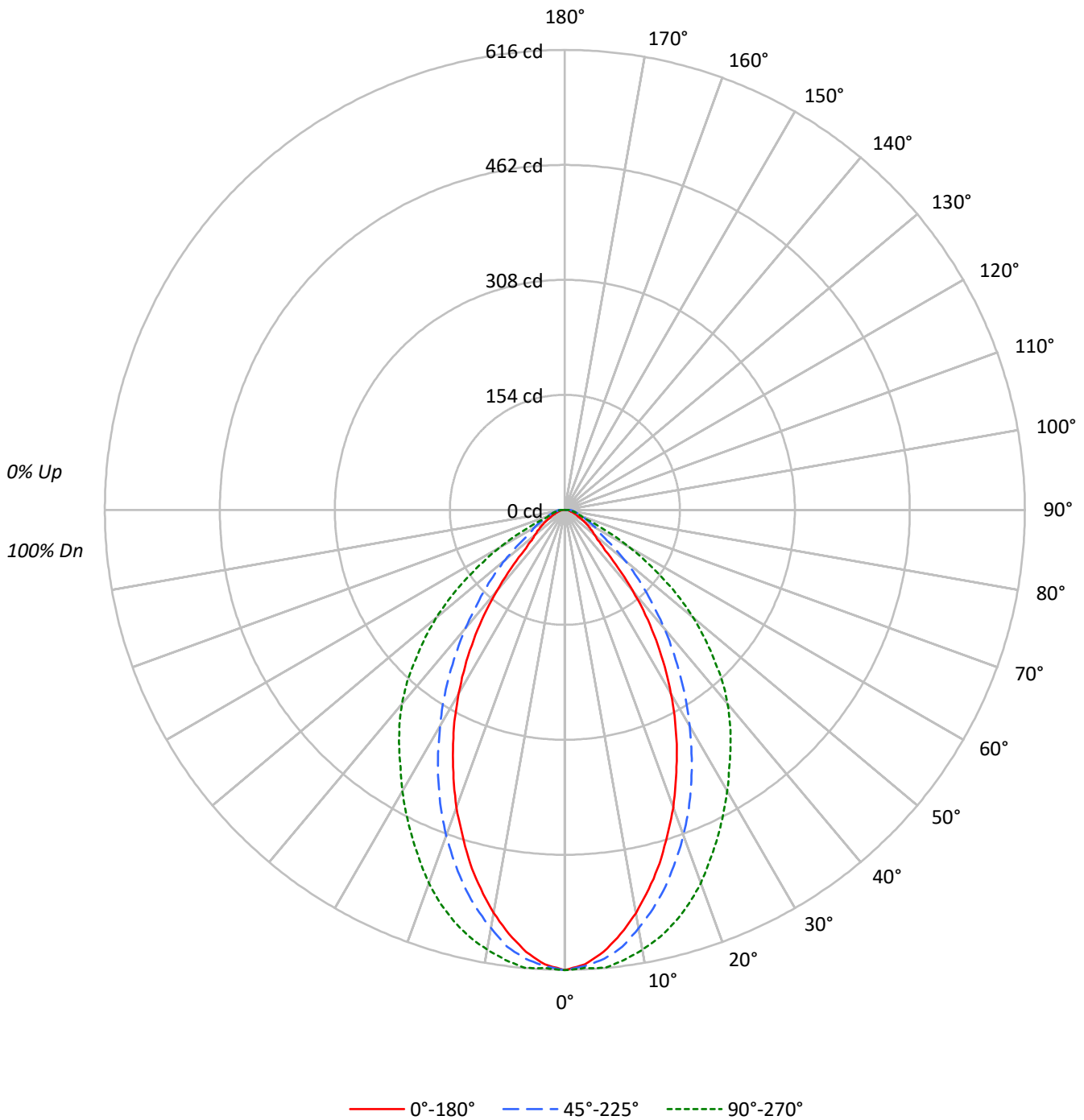
Lumens per Lamp: N/A
Luminaire Lumens: 827.6 lumens
Efficiency: N/A
Efficacy: 42.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

TEST NUMBER: P1059279

CATALOG NUMBER: S123RDR-S560D850-X4F0-XX-UDD-SVL-W

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7239	7239	7239
5°	7005	7114	7259
10°	6539	6785	7133
15°	5959	6341	6945
20°	5302	5799	6652
25°	4594	5190	6271
30°	3852	4527	5898
35°	3052	3853	5545
40°	2160	3170	5201
45°	1272	2506	4680
50°	952	1904	4099
55°	800	1286	3292
60°	648	1097	2339
65°	511	936	1234
70°	446	814	762
75°	417	762	730
80°	412	832	724
85°	512	1240	930

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4680 cd/sqm



TEST NUMBER: P1059279

CATALOG NUMBER: S123RDR-S560D850-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.7	6.9
10°-20°	147.5	17.8
20°-30°	187.8	22.7
30°-40°	176.7	21.3
40°-50°	127.2	15.4
50°-60°	73.5	8.9
60°-70°	33.6	4.1
70°-80°	16.8	2.0
80°-90°	7.9	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°	392.0	47.4
0°-40°	568.7	68.7
0°-60°	769.3	93.0
0°-90°	827.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	827.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	594	604	604	610	616	55
15°	490	508	522	551	571	137
25°	355	373	401	445	484	162
35°	213	231	269	331	387	132
45°	77	96	151	227	282	65
55°	39	41	63	120	161	35
65°	18	26	34	38	44	19
75°	9	18	17	16	16	10
85°	4	8	9	8	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.5	616.5	616.5	616.5	616.5
2.5°	609.6	617.3	611.9	612.7	614.2
5°	594.3	604.3	603.5	609.6	615.8
7.5°	572.9	584.4	590.5	599.7	608.1
10°	548.4	561.4	569.0	585.9	598.2
12.5°	520.0	536.9	546.8	569.0	586.7
15°	490.2	507.8	521.6	550.7	571.3
17.5°	456.5	475.6	493.2	527.7	553.0
20°	424.3	442.7	464.1	501.6	532.3
22.5°	389.1	409.0	433.5	473.3	507.8
25°	354.6	373.0	400.6	445.0	484.0
27.5°	320.1	338.5	367.6	416.6	459.5
30°	284.1	303.3	333.9	388.3	435.0
32.5°	248.9	267.3	301.8	360.7	409.7
35°	212.9	231.3	268.8	330.9	386.8
37.5°	177.7	196.8	236.7	306.4	363.8
40°	140.9	161.6	206.8	281.1	339.3
42.5°	106.5	128.7	176.9	255.0	312.5
45°	76.6	95.7	150.9	226.7	281.8
47.5°	59.7	69.7	127.1	197.6	253.5
50°	52.1	53.6	104.2	170.8	224.4
52.5°	45.2	46.7	81.9	145.5	193.8
55°	39.1	40.6	62.8	119.5	160.8
57.5°	32.9	35.2	52.1	95.0	129.4
60°	27.6	30.6	46.7	72.8	99.6
62.5°	22.2	27.6	39.8	53.6	71.2
65°	18.4	26.0	33.7	37.5	44.4
67.5°	15.3	23.7	28.3	26.8	26.0
70°	13.0	21.4	23.7	21.4	22.2
72.5°	10.7	19.9	19.9	18.4	18.4
75°	9.2	17.6	16.8	16.1	16.1
77.5°	7.7	15.3	14.6	13.8	13.0
80°	6.1	12.3	12.3	11.5	10.7
82.5°	5.4	10.0	10.0	10.0	8.4
85°	3.8	8.4	9.2	8.4	6.9
87.5°	3.1	7.7	7.7	6.9	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)