

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: P1059252

Luminaire Tested: S123RDR-S560D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059252  
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-S560D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

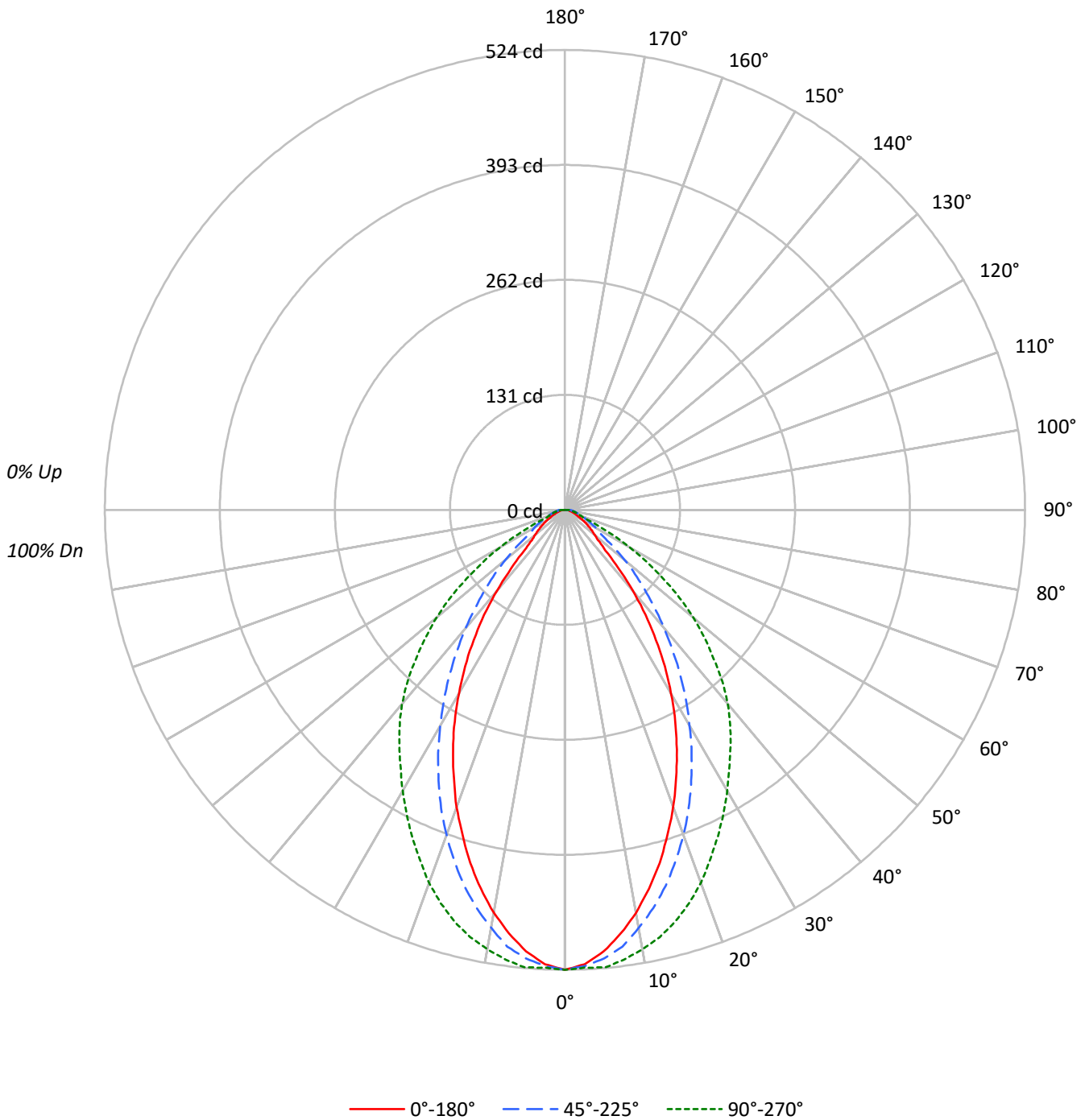
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 703.4 lumens  
Efficiency: N/A  
Efficacy: 35.9 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: P1059252

CATALOG NUMBER: S123RDR-S560D830-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1059252

CATALOG NUMBER: S123RDR-S560D830-X4F0-XX-UDD-SVL-W

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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													100															
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89													89															
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79													79															
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71													71															
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64													64															
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58													58															
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52													52															
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48													48															
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44													44															
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40													40															
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37													37															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6153	6153	6153
5°	5954	6046	6168
10°	5558	5766	6062
15°	5064	5389	5903
20°	4506	4930	5653
25°	3905	4410	5330
30°	3274	3848	5013
35°	2595	3276	4712
40°	1836	2693	4421
45°	1081	2129	3977
50°	809	1617	3484
55°	680	1093	2799
60°	550	932	1987
65°	433	795	1050
70°	381	694	649
75°	354	649	622
80°	352	703	615
85°	445	1051	795

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3977 cd/sqm

TEST NUMBER: P1059252

CATALOG NUMBER: S123RDR-S560D830-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.2	6.9
10°-20°	125.3	17.8
20°-30°	159.6	22.7
30°-40°	150.1	21.3
40°-50°	108.1	15.4
50°-60°	62.4	8.9
60°-70°	28.5	4.1
70°-80°	14.3	2.0
80°-90°	6.8	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°	333.2	47.4
0°-40°	483.3	68.7
0°-60°	653.9	93.0
0°-90°	703.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	703.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	505	514	513	518	523	47
15°	417	432	443	468	486	116
25°	301	317	340	378	411	138
35°	181	197	228	281	329	112
45°	65	81	128	193	240	55
55°	33	34	53	102	137	30
65°	16	22	29	32	38	16
75°	8	15	14	14	14	8
85°	3	7	8	7	6	4
90°	0	0	0	0	0	



TEST NUMBER: P1059252

CATALOG NUMBER: S123RDR-S560D830-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	524.0	524.0	524.0	524.0	524.0
2.5°	518.1	524.6	520.1	520.7	522.0
5°	505.1	513.6	512.9	518.1	523.3
7.5°	486.9	496.7	501.9	509.7	516.8
10°	466.1	477.1	483.6	498.0	508.4
12.5°	442.0	456.3	464.8	483.6	498.6
15°	416.6	431.6	443.3	468.0	485.6
17.5°	387.9	404.2	419.2	448.5	470.0
20°	360.6	376.2	394.5	426.4	452.4
22.5°	330.7	347.6	368.4	402.3	431.6
25°	301.4	317.0	340.4	378.2	411.4
27.5°	272.1	287.7	312.4	354.1	390.6
30°	241.5	257.8	283.8	330.0	369.7
32.5°	211.5	227.2	256.5	306.6	348.2
35°	181.0	196.6	228.5	281.2	328.7
37.5°	151.0	167.3	201.1	260.4	309.2
40°	119.8	137.3	175.7	238.9	288.4
42.5°	90.5	109.4	150.4	216.8	265.6
45°	65.1	81.4	128.2	192.7	239.5
47.5°	50.8	59.2	108.1	167.9	215.5
50°	44.3	45.6	88.5	145.2	190.7
52.5°	38.4	39.7	69.6	123.7	164.7
55°	33.2	34.5	53.4	101.5	136.7
57.5°	28.0	29.9	44.3	80.7	110.0
60°	23.4	26.0	39.7	61.8	84.6
62.5°	18.9	23.4	33.8	45.6	60.5
65°	15.6	22.1	28.6	31.9	37.8
67.5°	13.0	20.2	24.1	22.8	22.1
70°	11.1	18.2	20.2	18.2	18.9
72.5°	9.1	16.9	16.9	15.6	15.6
75°	7.8	15.0	14.3	13.7	13.7
77.5°	6.5	13.0	12.4	11.7	11.1
80°	5.2	10.4	10.4	9.8	9.1
82.5°	4.6	8.5	8.5	8.5	7.2
85°	3.3	7.2	7.8	7.2	5.9
87.5°	2.6	6.5	6.5	5.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)