

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: P1059251

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059251  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
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-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

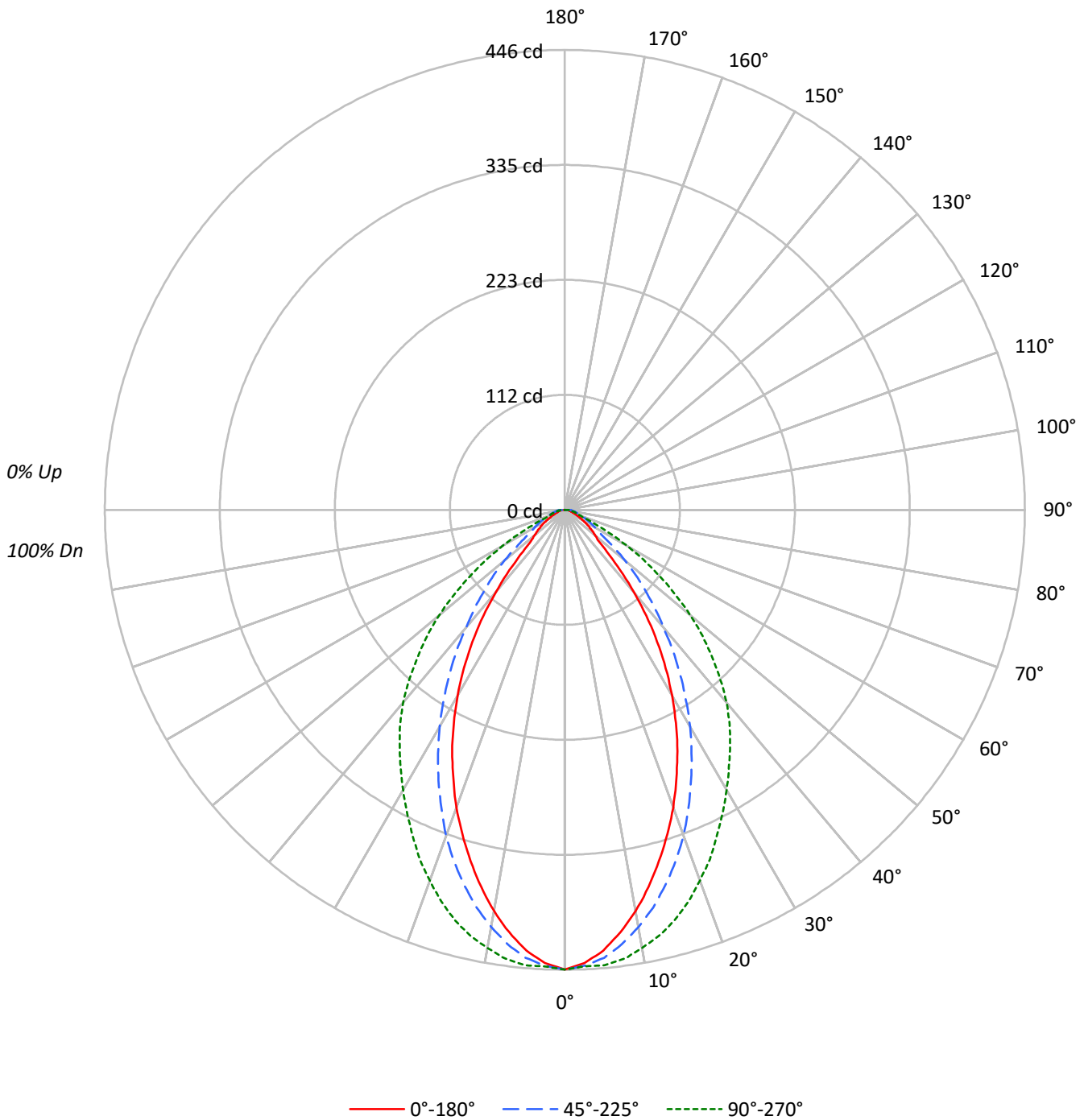
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 597.0 lumens  
Efficiency: N/A  
Efficacy: 30.5 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 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

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### Luminous Intensity Polar Plot





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

RF	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																												
1	111	108	105	102	109	106	103	100	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58																												
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37																												

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

	0°	45°	90°
0°	5235	5235	5235
5°	5056	5139	5224
10°	4710	4896	5145
15°	4288	4581	5007
20°	3839	4204	4781
25°	3348	3752	4519
30°	2815	3291	4253
35°	2239	2790	4002
40°	1596	2275	3740
45°	952	1827	3349
50°	701	1390	2901
55°	586	946	2305
60°	474	780	1620
65°	381	670	867
70°	312	580	536
75°	295	563	504
80°	311	615	487
85°	445	876	620

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3349 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.9	6.9
10°-20°	106.4	17.8
20°-30°	135.7	22.7
30°-40°	127.7	21.4
40°-50°	91.7	15.4
50°-60°	52.6	8.8
60°-70°	24.1	4.0
70°-80°	12.1	2.0
80°-90°	5.9	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°	283.0	47.4
0°-40°	410.7	68.8
0°-60°	555.0	93.0
0°-90°	597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	597.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	429	437	436	439	443	40
15°	353	365	377	397	412	99
25°	258	270	290	321	349	118
35°	156	167	195	239	279	97
45°	57	70	110	162	202	48
55°	29	29	46	85	113	26
65°	14	19	24	27	31	14
75°	6	13	12	11	11	7
85°	3	6	6	6	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	445.8	445.8	445.8	445.8	445.8
2.5°	439.9	446.4	442.5	442.5	443.2
5°	428.9	437.3	436.0	439.3	443.2
7.5°	413.2	422.3	424.9	432.8	439.3
10°	395.0	405.4	410.6	423.0	431.5
12.5°	374.8	386.6	395.0	410.6	423.0
15°	352.7	365.1	376.8	397.0	411.9
17.5°	329.9	342.3	357.3	380.7	398.3
20°	307.2	319.5	336.4	361.2	382.6
22.5°	282.4	294.8	313.0	341.0	367.0
25°	258.4	270.1	289.6	320.8	348.8
27.5°	233.0	244.7	266.2	300.0	331.2
30°	207.6	219.3	242.7	279.2	313.7
32.5°	182.2	193.3	218.7	259.0	296.1
35°	156.2	167.2	194.6	238.8	279.2
37.5°	129.5	140.6	172.5	220.6	262.3
40°	104.1	116.5	148.4	202.4	244.0
42.5°	79.4	92.4	128.9	182.9	223.2
45°	57.3	69.6	110.0	162.0	201.7
47.5°	43.6	50.1	93.1	141.2	180.9
50°	38.4	39.0	76.1	122.3	158.8
52.5°	33.2	33.8	59.2	104.1	135.4
55°	28.6	29.3	46.2	85.3	112.6
57.5°	24.1	25.4	37.7	67.7	90.5
60°	20.2	22.8	33.2	51.4	69.0
62.5°	16.3	20.8	28.6	37.7	49.5
65°	13.7	18.9	24.1	26.7	31.2
67.5°	11.1	17.6	20.2	18.9	18.9
70°	9.1	15.6	16.9	15.6	15.6
72.5°	7.8	15.0	14.3	13.0	13.0
75°	6.5	13.0	12.4	11.1	11.1
77.5°	5.9	11.1	10.4	9.8	9.1
80°	4.6	9.1	9.1	8.5	7.2
82.5°	3.9	7.8	7.8	7.2	5.9
85°	3.3	6.5	6.5	5.9	4.6
87.5°	2.6	5.9	5.9	5.2	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)