

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: P1059293

Luminaire Tested: S123RDR-S560D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059293  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D930-X4F0-XX-UDD-BVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

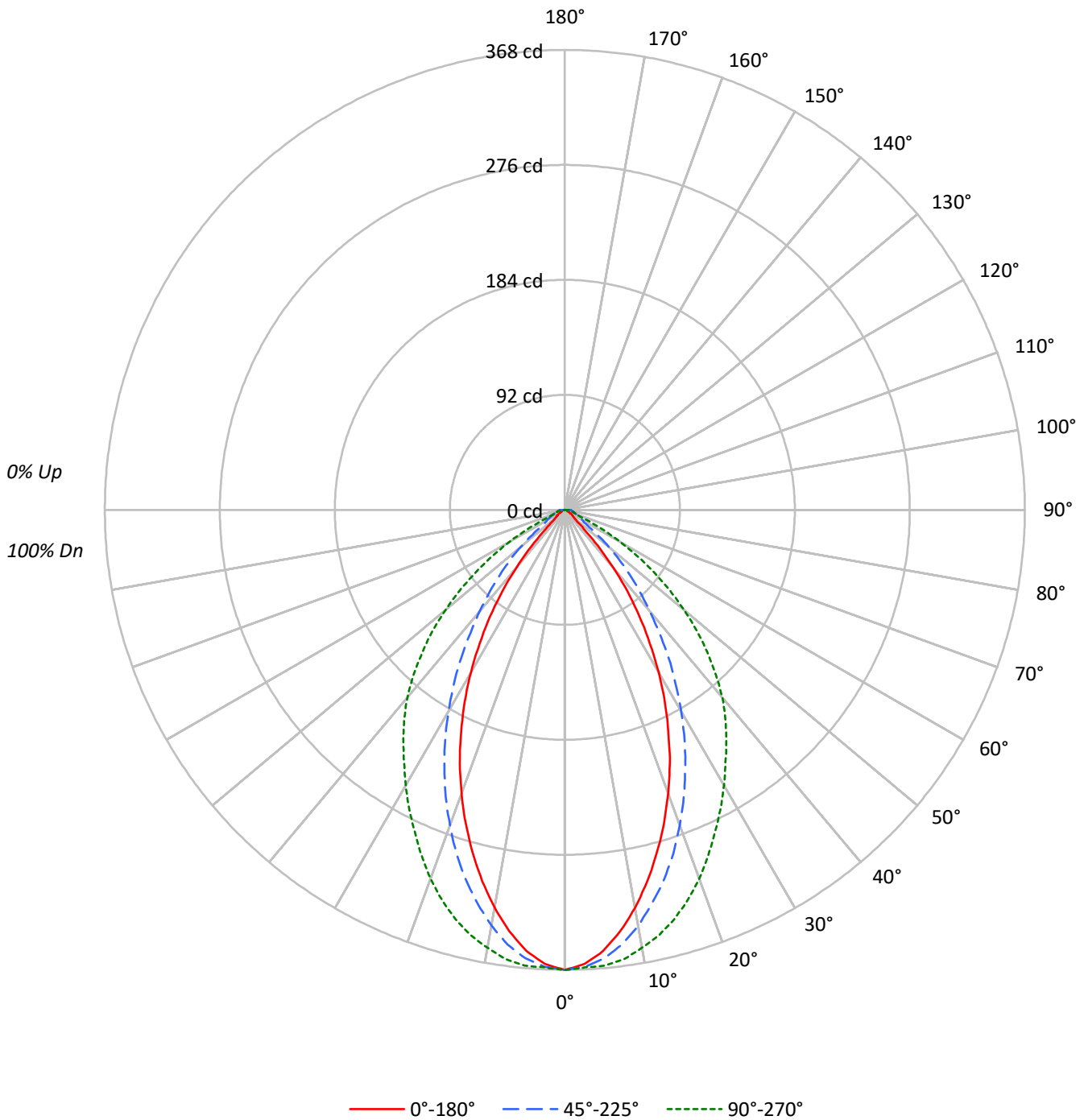
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 442.3 lumens  
Efficiency: N/A  
Efficacy: 22.6 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): 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					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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
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	41	40				

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

	0°	45°	90°
0°	4324	4324	4324
5°	4174	4247	4314
10°	3854	4028	4242
15°	3456	3724	4120
20°	3018	3356	3926
25°	2538	2954	3683
30°	2038	2519	3451
35°	1494	2074	3228
40°	923	1614	3003
45°	355	1216	2674
50°	175	833	2263
55°	139	461	1775
60°	92	383	1191
65°	78	345	531
70°	79	309	309
75°	104	331	309
80°	156	419	345
85°	229	687	458

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2674 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.8	7.6
10°-20°	86.4	19.5
20°-30°	107.3	24.3
30°-40°	96.1	21.7
40°-50°	63.2	14.3
50°-60°	31.7	7.2
60°-70°	12.5	2.8
70°-80°	7.0	1.6
80°-90°	4.4	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°	227.5	51.4
0°-40°	323.6	73.2
0°-60°	418.4	94.6
0°-90°	442.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	442.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	368	368	368	368	368	
5°	354	360	360	363	366	33
15°	284	293	306	327	339	79
25°	196	208	228	260	284	90
35°	104	118	145	189	225	65
45°	21	36	73	123	161	20
55°	7	8	22	61	87	6
65°	3	8	12	16	19	3
75°	2	7	7	7	7	2
85°	2	5	5	5	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	368.2	368.2	368.2	368.2	368.2
2.5°	363.7	368.8	366.0	366.0	366.5
5°	354.1	359.8	360.3	362.6	366.0
7.5°	340.1	347.4	350.8	357.5	362.6
10°	323.2	331.1	337.8	349.6	355.8
12.5°	304.6	312.5	322.6	338.9	348.5
15°	284.3	293.3	306.3	327.1	338.9
17.5°	263.5	272.5	288.3	311.9	327.1
20°	241.5	251.7	268.6	295.6	314.2
22.5°	219.6	230.8	248.9	278.1	299.5
25°	195.9	208.3	228.0	260.1	284.3
27.5°	173.4	186.4	207.2	242.1	269.7
30°	150.3	163.3	185.8	223.5	254.5
32.5°	126.7	141.3	165.0	206.1	239.3
35°	104.2	118.2	144.7	189.2	225.2
37.5°	82.2	96.3	123.9	172.8	211.1
40°	60.2	74.9	105.3	157.1	195.9
42.5°	39.4	54.6	89.0	141.3	179.0
45°	21.4	35.5	73.2	123.3	161.0
47.5°	11.8	19.1	59.1	106.4	143.6
50°	9.6	10.7	45.6	90.6	123.9
52.5°	7.9	9.0	32.7	75.4	105.8
55°	6.8	7.9	22.5	60.8	86.7
57.5°	5.6	6.8	18.0	46.7	68.1
60°	3.9	6.8	16.3	34.3	50.7
62.5°	3.4	6.8	14.1	23.6	33.8
65°	2.8	7.9	12.4	15.8	19.1
67.5°	2.3	7.9	10.7	10.1	10.1
70°	2.3	7.9	9.0	8.4	9.0
72.5°	2.3	8.4	8.4	7.9	7.9
75°	2.3	7.3	7.3	6.8	6.8
77.5°	2.3	6.8	6.8	6.2	6.2
80°	2.3	6.2	6.2	5.6	5.1
82.5°	2.3	5.6	5.6	5.1	4.5
85°	1.7	5.1	5.1	5.1	3.4
87.5°	1.7	4.5	5.1	4.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)