

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: P1059314

Luminaire Tested: S123RDR-S560D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059314  
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-S560D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

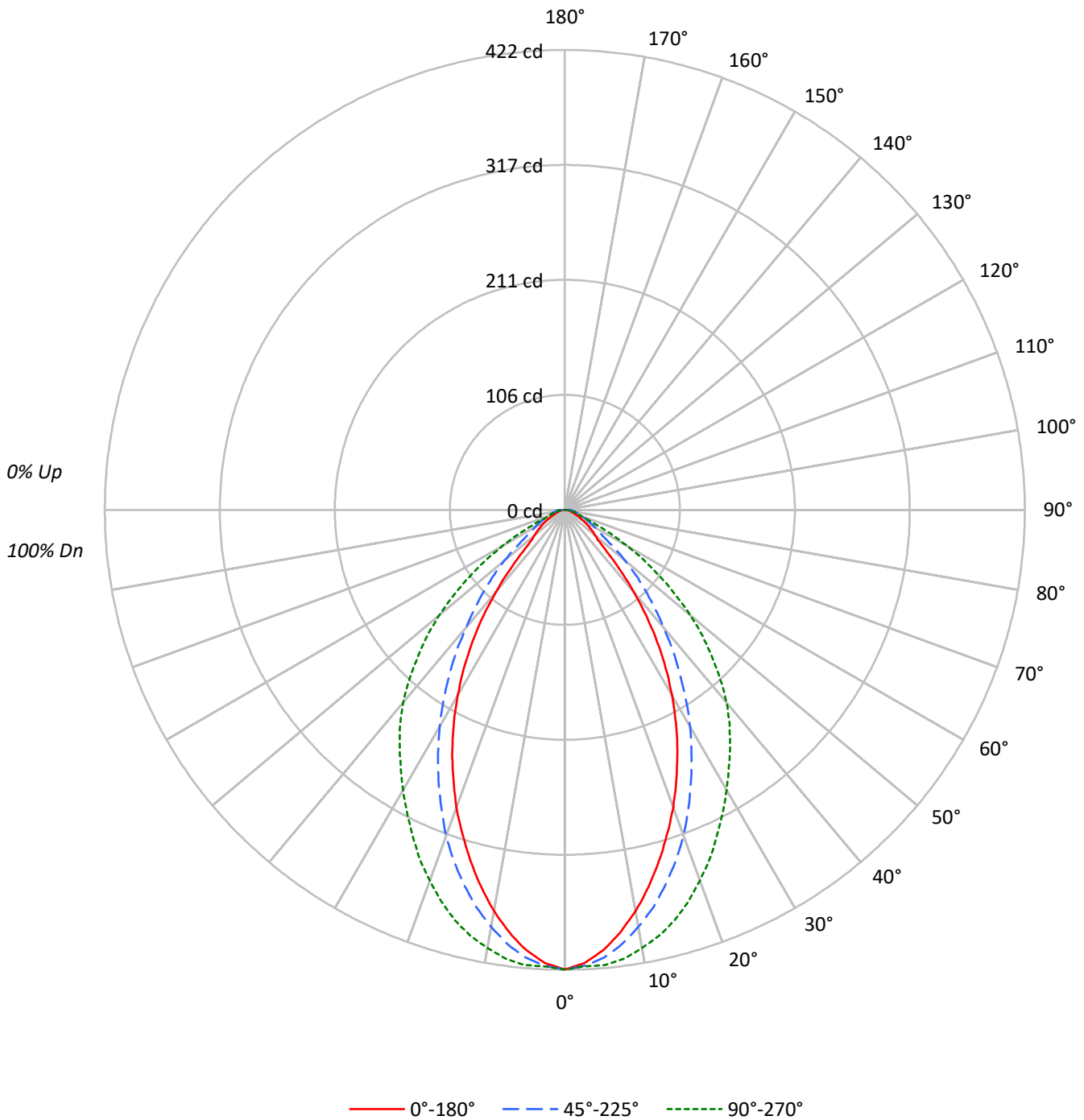
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 564.8 lumens  
Efficiency: N/A  
Efficacy: 28.8 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					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			100	
1	111	108	105	102	109	106	103	100	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58			58	
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37			37	

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

	0°	45°	90°
0°	4952	4952	4952
5°	4782	4862	4942
10°	4456	4632	4867
15°	4057	4334	4737
20°	3631	3977	4524
25°	3167	3550	4276
30°	2663	3113	4024
35°	2119	2639	3786
40°	1510	2152	3539
45°	900	1727	3170
50°	663	1315	2744
55°	555	895	2180
60°	449	737	1534
65°	358	633	822
70°	295	549	508
75°	281	531	476
80°	291	582	460
85°	418	835	579

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3170 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	6.9
10°-20°	100.6	17.8
20°-30°	128.4	22.7
30°-40°	120.8	21.4
40°-50°	86.8	15.4
50°-60°	49.7	8.8
60°-70°	22.8	4.0
70°-80°	11.4	2.0
80°-90°	5.6	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°	267.7	47.4
0°-40°	388.5	68.8
0°-60°	525.0	93.0
0°-90°	564.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	564.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	406	414	412	416	419	38
15°	334	345	356	376	390	93
25°	244	256	274	304	330	112
35°	148	158	184	226	264	91
45°	54	66	104	153	191	45
55°	27	28	44	81	106	24
65°	13	18	23	25	30	13
75°	6	12	12	10	10	7
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	421.7	421.7	421.7	421.7	421.7
2.5°	416.2	422.3	418.7	418.7	419.3
5°	405.7	413.7	412.5	415.6	419.3
7.5°	390.9	399.6	402.0	409.4	415.6
10°	373.7	383.6	388.5	400.2	408.2
12.5°	354.6	365.7	373.7	388.5	400.2
15°	333.7	345.4	356.5	375.6	389.7
17.5°	312.1	323.8	338.0	360.2	376.8
20°	290.6	302.3	318.3	341.7	362.0
22.5°	267.2	278.9	296.1	322.6	347.2
25°	244.4	255.5	274.0	303.5	330.0
27.5°	220.4	231.5	251.8	283.8	313.4
30°	196.4	207.5	229.6	264.1	296.8
32.5°	172.4	182.9	206.9	245.0	280.1
35°	147.8	158.2	184.1	226.0	264.1
37.5°	122.5	133.0	163.2	208.7	248.1
40°	98.5	110.2	140.4	191.5	230.9
42.5°	75.1	87.4	121.9	173.0	211.2
45°	54.2	65.9	104.0	153.3	190.9
47.5°	41.2	47.4	88.0	133.6	171.2
50°	36.3	36.9	72.0	115.7	150.2
52.5°	31.4	32.0	56.0	98.5	128.1
55°	27.1	27.7	43.7	80.7	106.5
57.5°	22.8	24.0	35.7	64.0	85.6
60°	19.1	21.5	31.4	48.6	65.3
62.5°	15.4	19.7	27.1	35.7	46.8
65°	12.9	17.9	22.8	25.2	29.6
67.5°	10.5	16.6	19.1	17.9	17.9
70°	8.6	14.8	16.0	14.8	14.8
72.5°	7.4	14.2	13.5	12.3	12.3
75°	6.2	12.3	11.7	10.5	10.5
77.5°	5.5	10.5	9.9	9.2	8.6
80°	4.3	8.6	8.6	8.0	6.8
82.5°	3.7	7.4	7.4	6.8	5.5
85°	3.1	6.2	6.2	5.5	4.3
87.5°	2.5	5.5	5.5	4.9	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)