

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: P1060451

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060451  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

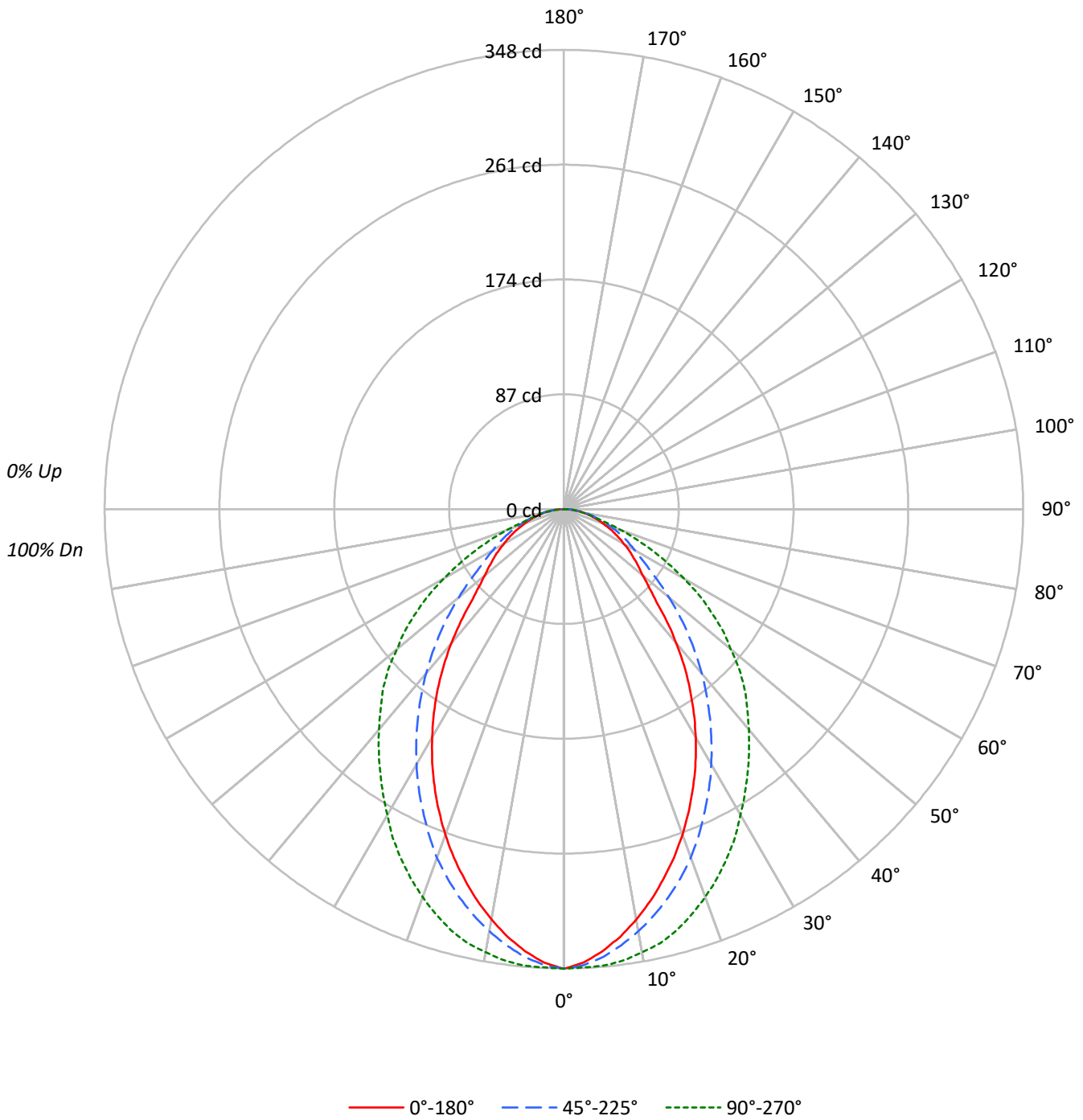
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 634.1 lumens  
Efficiency: N/A  
Efficacy: 50.7 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 1.15 / 1.1  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31				

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

	0°	45°	90°
0°	2999	2999	2999
5°	2907	2944	3001
10°	2761	2841	2982
15°	2591	2718	2945
20°	2405	2576	2867
25°	2202	2400	2775
30°	1986	2221	2661
35°	1750	2027	2552
40°	1489	1827	2451
45°	1209	1614	2361
50°	1046	1389	2210
55°	970	1179	2049
60°	906	1063	1798
65°	848	996	1496
70°	791	919	1130
75°	752	852	815
80°	704	779	689
85°	652	721	543

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2361 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.2	5.1
10°-20°	86.4	13.6
20°-30°	118.0	18.6
30°-40°	123.6	19.5
40°-50°	107.0	16.9
50°-60°	80.4	12.7
60°-70°	51.9	8.2
70°-80°	26.6	4.2
80°-90°	8.0	1.3
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°	236.6	37.3
0°-40°	360.3	56.8
0°-60°	547.7	86.4
0°-90°	634.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	634.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	336	341	341	343	347	31
15°	291	298	305	319	330	81
25°	232	241	253	272	292	106
35°	166	176	193	218	243	104
45°	99	110	132	165	194	78
55°	65	67	78	112	136	58
65°	42	42	49	59	73	41
75°	23	25	26	25	24	24
85°	7	8	7	7	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	348.3	348.3	348.3	348.3	348.3
2.5°	343.9	348.3	345.8	346.5	347.6
5°	336.3	341.4	340.6	343.2	347.2
7.5°	326.8	332.2	333.3	339.2	345.0
10°	315.8	322.0	324.9	333.7	341.0
12.5°	303.8	310.3	315.4	326.4	337.0
15°	290.6	297.9	304.9	318.7	330.4
17.5°	277.1	284.4	293.5	308.9	322.0
20°	262.5	270.5	281.1	297.2	312.9
22.5°	247.5	255.9	267.3	284.8	303.0
25°	231.8	240.6	252.6	272.4	292.1
27.5°	216.1	224.9	238.4	259.2	280.8
30°	199.7	208.8	223.4	246.1	267.6
32.5°	183.3	193.1	208.1	232.2	255.2
35°	166.5	176.0	192.8	218.3	242.8
37.5°	149.7	159.5	177.4	204.8	230.4
40°	132.5	142.8	162.5	191.3	218.0
42.5°	115.4	126.3	147.1	177.4	205.6
45°	99.3	109.5	132.5	165.0	193.9
47.5°	87.3	94.2	117.9	153.0	180.7
50°	78.1	81.8	103.7	139.8	165.0
52.5°	71.2	73.8	90.5	125.6	152.2
55°	64.6	66.8	78.5	112.1	136.5
57.5°	58.8	59.9	69.4	98.9	121.6
60°	52.6	53.7	61.7	84.7	104.4
62.5°	47.1	47.8	55.5	71.2	88.7
65°	41.6	42.4	48.9	59.1	73.4
67.5°	36.5	37.6	42.7	48.2	58.4
70°	31.4	33.6	36.5	39.1	44.9
72.5°	27.0	29.2	30.7	31.4	31.8
75°	22.6	25.2	25.6	25.2	24.5
77.5°	18.3	20.4	20.4	19.7	19.0
80°	14.2	16.1	15.7	15.0	13.9
82.5°	10.6	11.7	11.3	10.6	9.5
85°	6.6	7.7	7.3	6.9	5.5
87.5°	3.3	4.4	4.0	3.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)