

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: P1060526

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060526  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

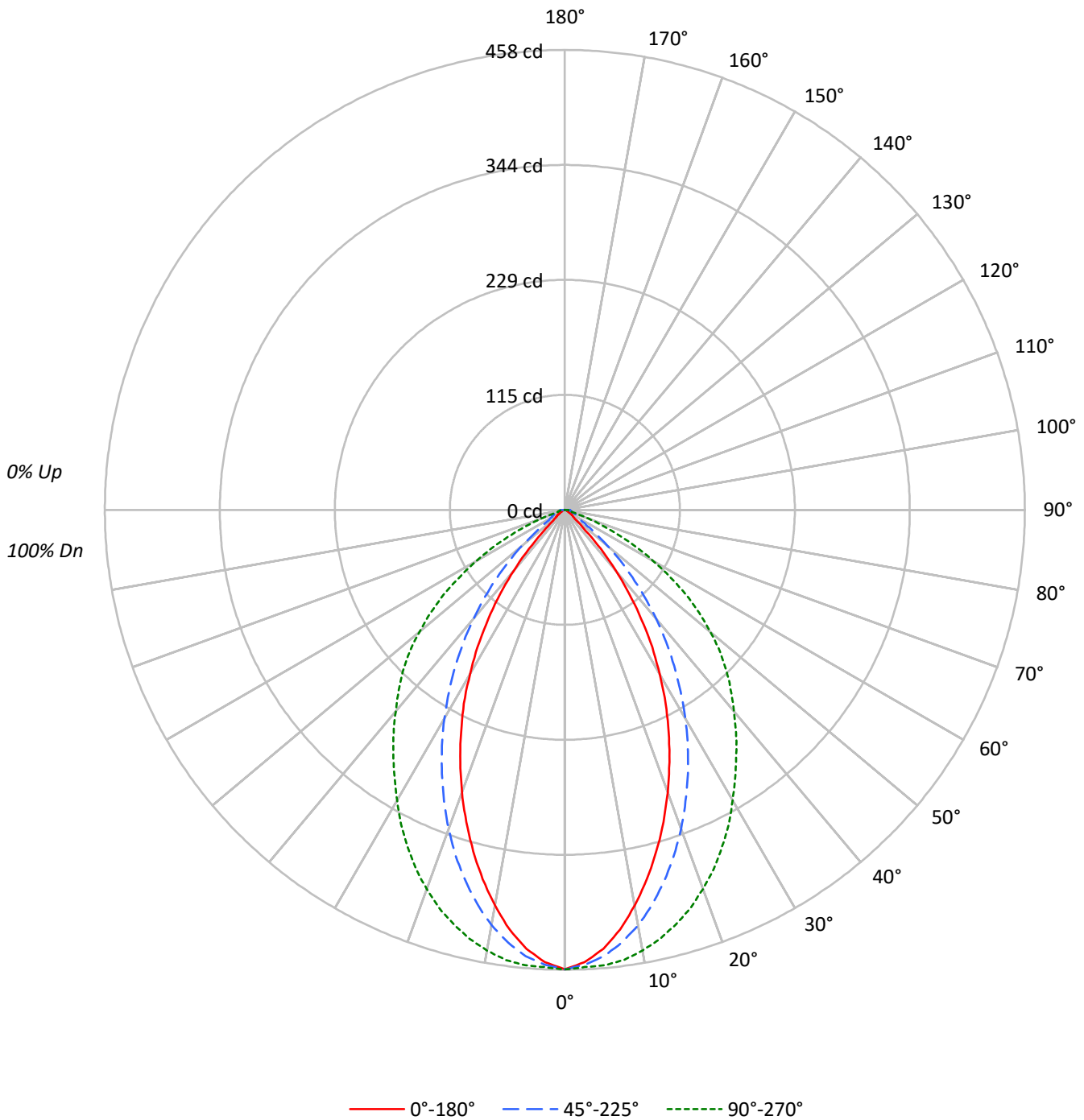
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 574.3 lumens  
Efficiency: N/A  
Efficacy: 29.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
Luminous Opening: Rectangular (W 0.31' 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	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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	3940	3940	3940
5°	3793	3856	3935
10°	3498	3672	3895
15°	3139	3409	3809
20°	2744	3099	3682
25°	2320	2753	3518
30°	1874	2386	3320
35°	1395	1994	3128
40°	886	1580	2943
45°	354	1159	2775
50°	154	739	2533
55°	119	383	2211
60°	83	262	1753
65°	61	259	1198
70°	60	229	549
75°	80	243	223
80°	119	273	238
85°	237	474	356

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2775 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.9	7.3
10°-20°	108.0	18.8
20°-30°	136.5	23.8
30°-40°	125.3	21.8
40°-50°	85.5	14.9
50°-60°	46.4	8.1
60°-70°	19.6	3.4
70°-80°	6.8	1.2
80°-90°	4.3	0.7
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°	286.4	49.9
0°-40°	411.7	71.7
0°-60°	543.5	94.6
0°-90°	574.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	574.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	458	458	458	458	458	
5°	439	446	446	450	455	41
15°	352	364	382	410	427	98
25°	244	260	290	335	370	112
35°	133	150	190	249	298	82
45°	29	47	95	168	228	27
55°	8	8	26	93	147	7
65°	3	4	13	29	59	3
75°	2	7	7	7	7	3
85°	2	5	5	5	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	457.6	457.6	457.6	457.6	457.6
2.5°	450.9	456.4	453.3	454.6	455.8
5°	438.8	445.5	446.1	449.7	455.2
7.5°	421.8	429.7	434.6	443.6	452.1
10°	400.0	409.7	420.0	434.6	445.5
12.5°	377.0	387.3	402.4	423.0	437.6
15°	352.1	363.6	382.4	409.7	427.3
17.5°	326.1	338.8	361.2	393.3	415.8
20°	299.4	313.3	338.2	374.6	401.8
22.5°	272.1	286.7	313.9	355.2	387.3
25°	244.2	260.0	289.7	334.6	370.3
27.5°	217.6	232.1	264.9	313.9	353.3
30°	188.5	204.9	240.0	292.7	333.9
32.5°	161.8	177.6	214.5	270.9	315.8
35°	132.7	150.3	189.7	249.1	297.6
37.5°	105.5	122.4	165.5	228.5	280.0
40°	78.8	96.4	140.6	207.9	261.8
42.5°	52.7	71.5	117.0	186.7	244.9
45°	29.1	46.7	95.2	168.5	227.9
47.5°	15.2	25.5	74.5	150.3	209.7
50°	11.5	13.9	55.2	130.3	189.1
52.5°	9.7	10.3	37.6	110.3	168.5
55°	7.9	8.5	25.5	92.7	147.3
57.5°	6.1	6.7	18.2	75.8	123.6
60°	4.8	5.5	15.2	58.2	101.8
62.5°	3.6	4.2	14.5	43.0	80.0
65°	3.0	3.6	12.7	29.1	58.8
67.5°	2.4	3.6	10.9	18.8	39.4
70°	2.4	4.8	9.1	12.1	21.8
72.5°	2.4	5.5	7.9	7.9	7.9
75°	2.4	6.7	7.3	6.7	6.7
77.5°	2.4	6.1	6.1	6.1	6.1
80°	2.4	5.5	5.5	5.5	4.8
82.5°	2.4	4.8	5.5	5.5	4.2
85°	2.4	4.8	4.8	4.8	3.6
87.5°	1.8	4.8	4.8	4.8	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)