

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: P1060484

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060484  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

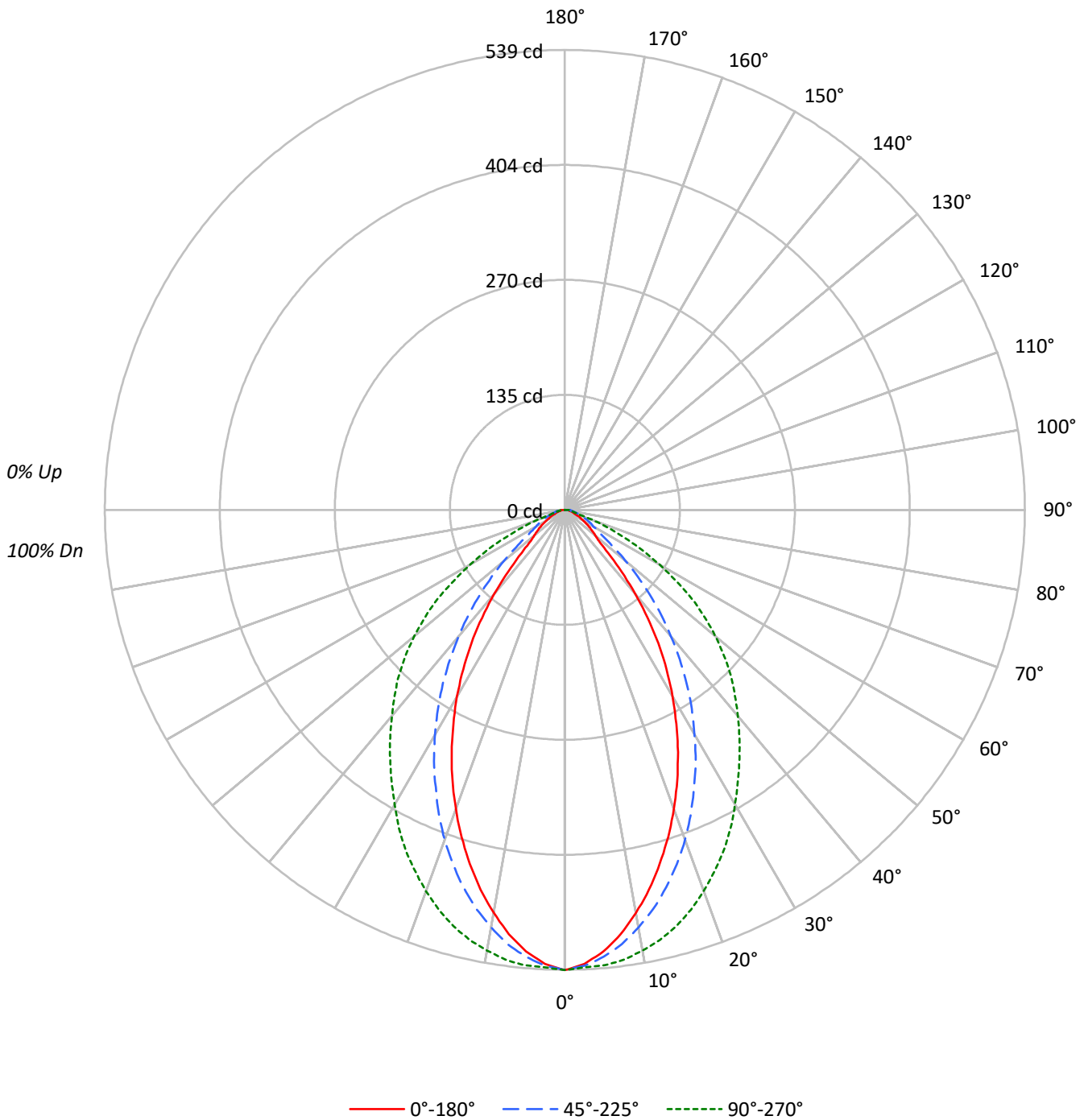
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 758.4 lumens  
Efficiency: N/A  
Efficacy: 38.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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	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	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

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

	0°	45°	90°
0°	4645	4645	4645
5°	4491	4544	4632
10°	4194	4344	4584
15°	3830	4087	4503
20°	3421	3773	4358
25°	2980	3403	4186
30°	2511	3023	3964
35°	2006	2619	3751
40°	1442	2175	3541
45°	870	1713	3351
50°	626	1241	3080
55°	525	835	2731
60°	425	661	2198
65°	336	601	1579
70°	295	501	846
75°	273	456	413
80°	273	476	372
85°	405	682	474

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3351 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	6.5
10°-20°	129.7	17.1
20°-30°	168.3	22.2
30°-40°	161.8	21.3
40°-50°	120.1	15.8
50°-60°	73.6	9.7
60°-70°	35.7	4.7
70°-80°	13.6	1.8
80°-90°	6.1	0.8
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°	347.6	45.8
0°-40°	509.4	67.2
0°-60°	703.0	92.7
0°-90°	758.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	758.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	520	527	526	530	536	48
15°	430	442	458	486	505	120
25°	314	329	358	404	441	143
35°	191	208	249	308	357	118
45°	71	89	141	215	275	59
55°	35	36	56	126	182	31
65°	16	18	30	47	78	17
75°	8	13	14	12	12	9
85°	4	7	7	6	5	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	539.4	539.4	539.4	539.4	539.4
2.5°	532.5	538.7	534.6	535.9	536.6
5°	519.5	527.0	525.7	530.5	535.9
7.5°	501.6	510.6	513.3	522.9	531.8
10°	479.7	490.7	496.8	512.6	524.3
12.5°	455.7	467.3	479.0	500.3	516.0
15°	429.6	441.9	458.4	485.9	505.1
17.5°	402.1	415.9	435.8	468.7	491.3
20°	373.3	387.7	411.7	448.1	475.6
22.5°	343.8	358.9	385.7	426.1	458.4
25°	313.6	329.4	358.2	404.2	440.6
27.5°	282.7	299.2	332.1	380.9	420.7
30°	252.5	268.3	304.0	356.8	398.7
32.5°	221.7	238.1	276.6	332.1	377.4
35°	190.8	207.9	249.1	308.1	356.8
37.5°	159.2	177.7	221.0	284.8	336.3
40°	128.3	146.2	193.5	260.8	315.0
42.5°	98.1	117.3	167.4	236.7	295.1
45°	71.4	89.2	140.7	214.8	275.2
47.5°	53.5	64.5	116.0	194.2	253.2
50°	46.7	48.7	92.6	171.6	229.9
52.5°	40.5	41.9	72.1	146.9	206.6
55°	35.0	36.4	55.6	125.6	181.9
57.5°	29.5	30.9	44.6	105.0	153.7
60°	24.7	26.1	38.4	83.7	127.6
62.5°	20.6	21.3	34.3	63.8	102.2
65°	16.5	17.8	29.5	46.7	77.5
67.5°	13.7	15.1	24.0	32.3	54.2
70°	11.7	15.1	19.9	22.6	33.6
72.5°	9.6	13.7	16.5	15.8	15.8
75°	8.2	13.0	13.7	12.4	12.4
77.5°	6.9	11.7	11.0	10.3	9.6
80°	5.5	9.6	9.6	8.2	7.5
82.5°	4.8	7.5	7.5	7.5	6.2
85°	4.1	6.9	6.9	6.2	4.8
87.5°	2.7	5.5	6.2	5.5	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)