

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: P1060492

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060492  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D850-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

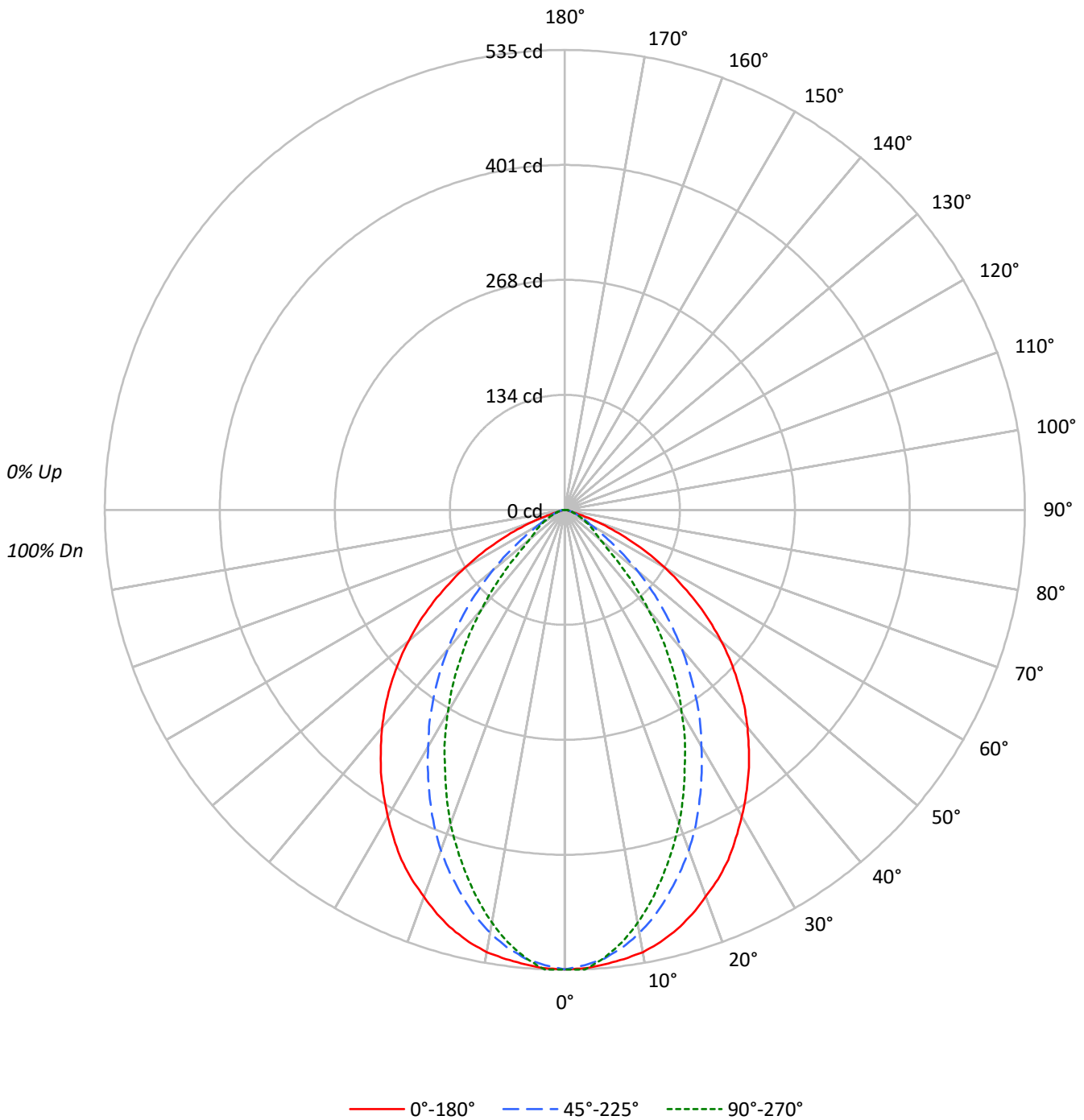
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 788.2 lumens  
Efficiency: N/A  
Efficacy: 40.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
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

TEST NUMBER: P1060492

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060492

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-SVL-B

**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	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4604	4604	4604
5°	4588	4529	4523
10°	4569	4371	4266
15°	4504	4135	3927
20°	4389	3863	3560
25°	4271	3527	3134
30°	4095	3159	2703
35°	3918	2794	2232
40°	3715	2379	1693
45°	3476	1944	1137
50°	3178	1472	706
55°	2792	973	599
60°	2308	596	493
65°	1673	460	399
70°	909	342	302
75°	200	250	276
80°	149	188	223
85°	148	148	227

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3476 cd/sqm



TEST NUMBER: P1060492

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	6.3
10°-20°	131.5	16.7
20°-30°	174.3	22.1
30°-40°	173.0	21.9
40°-50°	133.1	16.9
50°-60°	79.3	10.1
60°-70°	36.1	4.6
70°-80°	9.3	1.2
80°-90°	2.1	0.3
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°	355.3	45.1
0°-40°	528.3	67.0
0°-60°	740.7	94.0
0°-90°	788.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	788.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	535	535	535	535	535	
5°	531	532	524	524	523	50
15°	505	492	464	448	440	142
25°	450	417	371	340	330	206
35°	373	326	266	225	212	233
45°	285	230	160	111	93	220
55°	186	132	65	41	40	166
65°	82	49	23	20	20	83
75°	6	8	8	8	8	13
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1060492

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	534.6	534.6	534.6	534.6	534.6
2.5°	533.8	534.6	530.1	533.8	535.3
5°	530.8	531.6	524.0	524.0	523.3
7.5°	527.0	525.5	513.5	509.0	507.5
10°	522.5	517.3	499.9	490.9	487.9
12.5°	515.0	506.7	483.4	470.6	465.3
15°	505.2	492.4	463.8	448.0	440.5
17.5°	493.2	477.4	443.5	423.1	414.9
20°	478.9	457.8	421.6	396.0	388.5
22.5°	465.3	439.0	397.5	368.2	359.9
25°	449.5	417.1	371.2	340.3	329.8
27.5°	430.7	396.0	344.8	313.2	302.7
30°	411.8	373.4	317.7	284.6	271.8
32.5°	392.3	350.1	292.9	255.2	243.2
35°	372.7	326.0	265.8	225.1	212.3
37.5°	351.6	301.9	238.7	196.5	182.2
40°	330.5	278.6	211.6	168.7	150.6
42.5°	308.7	254.5	185.2	140.0	122.0
45°	285.4	229.6	159.6	111.4	93.4
47.5°	262.0	206.3	134.0	83.6	67.0
50°	237.2	181.5	109.9	61.0	52.7
52.5°	212.3	157.4	85.8	47.4	45.2
55°	186.0	132.5	64.8	40.7	39.9
57.5°	158.9	109.9	46.7	35.4	33.9
60°	134.0	88.8	34.6	30.1	28.6
62.5°	108.4	67.0	28.6	24.8	23.3
65°	82.1	48.9	22.6	19.6	19.6
67.5°	59.5	33.1	18.1	15.8	15.1
70°	36.1	20.3	13.6	12.8	12.0
72.5°	18.1	12.0	10.5	9.8	9.8
75°	6.0	7.5	7.5	8.3	8.3
77.5°	4.5	5.3	5.3	6.0	6.0
80°	3.0	3.8	3.8	4.5	4.5
82.5°	2.3	2.3	3.0	3.0	3.8
85°	1.5	1.5	1.5	2.3	2.3
87.5°	0.8	0.8	0.8	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)