

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: P1060491

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060491  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D850-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

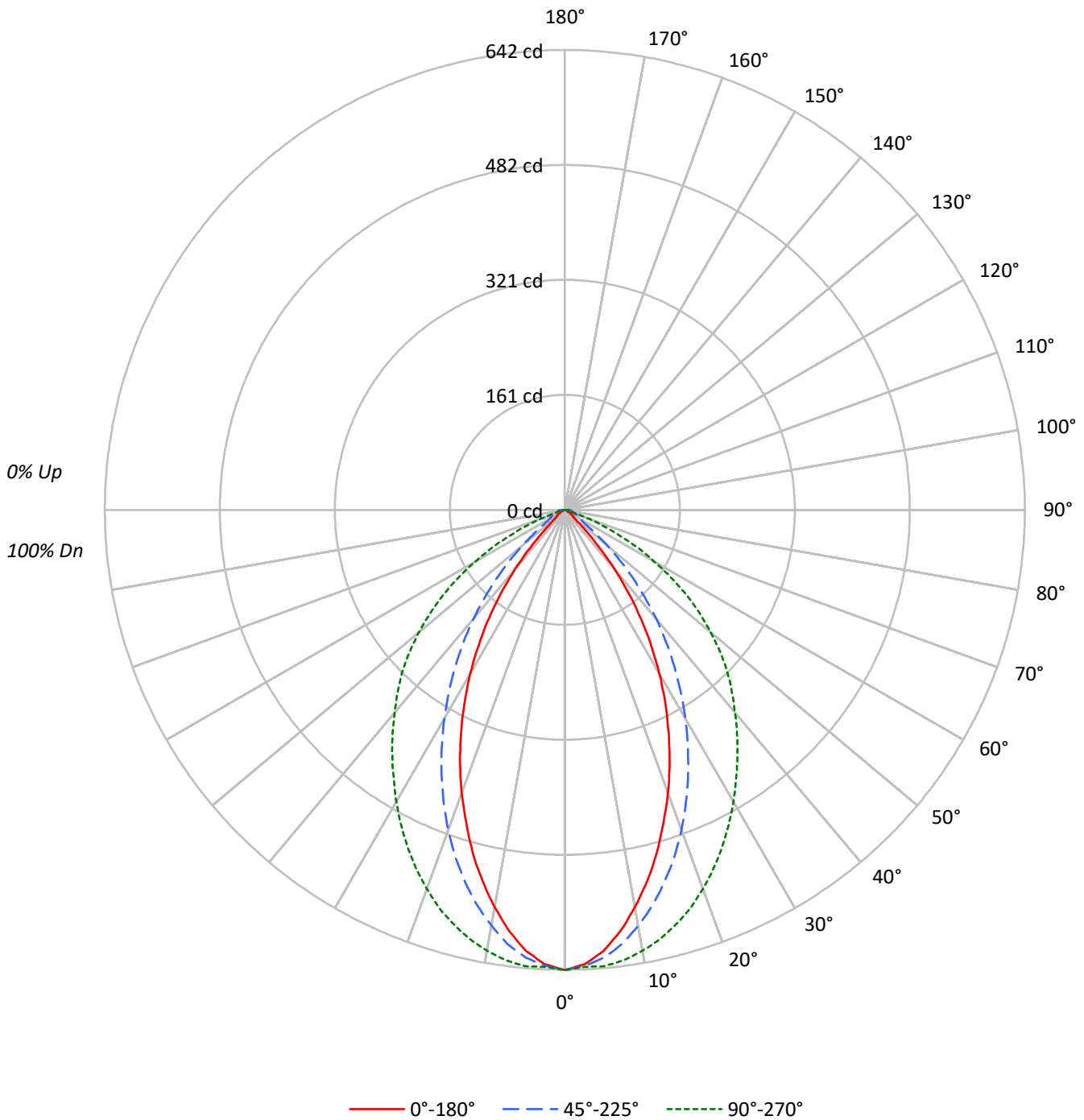
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 809.5 lumens  
Efficiency: N/A  
Efficacy: 41.3 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

TEST NUMBER: P1060491

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1060491

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-BVL-W

**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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	5531	5531	5531
5°	5344	5422	5526
10°	4925	5155	5465
15°	4423	4792	5344
20°	3855	4359	5161
25°	3252	3868	4935
30°	2624	3343	4677
35°	1942	2797	4414
40°	1204	2229	4152
45°	477	1625	3912
50°	212	1019	3555
55°	170	531	3112
60°	117	403	2480
65°	77	399	1705
70°	76	360	798
75°	100	353	353
80°	149	412	412
85°	296	820	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3912 cd/sqm



TEST NUMBER: P1060491

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.9	7.3
10°-20°	152.1	18.8
20°-30°	191.9	23.7
30°-40°	176.1	21.8
40°-50°	119.9	14.8
50°-60°	65.3	8.1
60°-70°	28.3	3.5
70°-80°	10.3	1.3
80°-90°	6.6	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°	402.9	49.8
0°-40°	579.0	71.5
0°-60°	764.3	94.4
0°-90°	809.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	809.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	642	642	642	642	642	
5°	618	626	627	634	639	57
15°	496	513	538	576	599	138
25°	342	366	407	472	519	156
35°	185	212	266	351	420	114
45°	39	66	133	237	321	36
55°	11	12	35	130	207	10
65°	4	5	20	41	84	4
75°	3	10	11	11	11	3
85°	3	7	8	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1060491

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	642.3	642.3	642.3	642.3	642.3
2.5°	634.8	642.3	637.1	638.6	638.6
5°	618.2	626.5	627.3	634.0	639.3
7.5°	593.3	605.4	611.4	625.0	634.0
10°	563.2	577.5	589.6	612.9	625.0
12.5°	530.8	547.3	565.4	596.3	613.7
15°	496.1	513.4	537.5	576.0	599.4
17.5°	457.6	478.7	508.1	554.1	582.8
20°	420.7	441.8	475.7	527.7	563.2
22.5°	382.2	404.1	441.8	499.8	542.1
25°	342.3	366.4	407.1	471.9	519.4
27.5°	303.1	328.7	371.7	442.5	495.3
30°	263.9	289.5	336.2	412.4	470.4
32.5°	223.9	250.3	300.8	380.7	444.8
35°	184.7	211.8	266.1	350.6	419.9
37.5°	144.8	173.4	231.5	321.2	395.0
40°	107.1	135.7	198.3	291.8	369.4
42.5°	71.6	100.3	164.4	263.1	345.3
45°	39.2	65.6	133.4	236.7	321.2
47.5°	21.1	36.2	103.3	211.1	294.0
50°	15.8	19.6	76.1	184.0	265.4
52.5°	13.6	15.1	52.8	155.3	236.7
55°	11.3	12.1	35.4	130.4	207.3
57.5°	9.0	9.8	26.4	105.5	175.7
60°	6.8	8.3	23.4	81.4	144.0
62.5°	5.3	6.8	21.9	59.6	113.8
65°	3.8	5.3	19.6	40.7	83.7
67.5°	3.8	6.0	16.6	26.4	56.5
70°	3.0	8.3	14.3	17.3	31.7
72.5°	3.0	9.0	12.1	12.1	12.1
75°	3.0	9.8	10.6	10.6	10.6
77.5°	3.0	9.0	9.8	9.0	9.0
80°	3.0	8.3	8.3	8.3	8.3
82.5°	3.0	7.5	8.3	8.3	6.8
85°	3.0	6.8	8.3	8.3	6.0
87.5°	2.3	6.8	7.5	7.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)