

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: P1060489

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060489
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
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-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

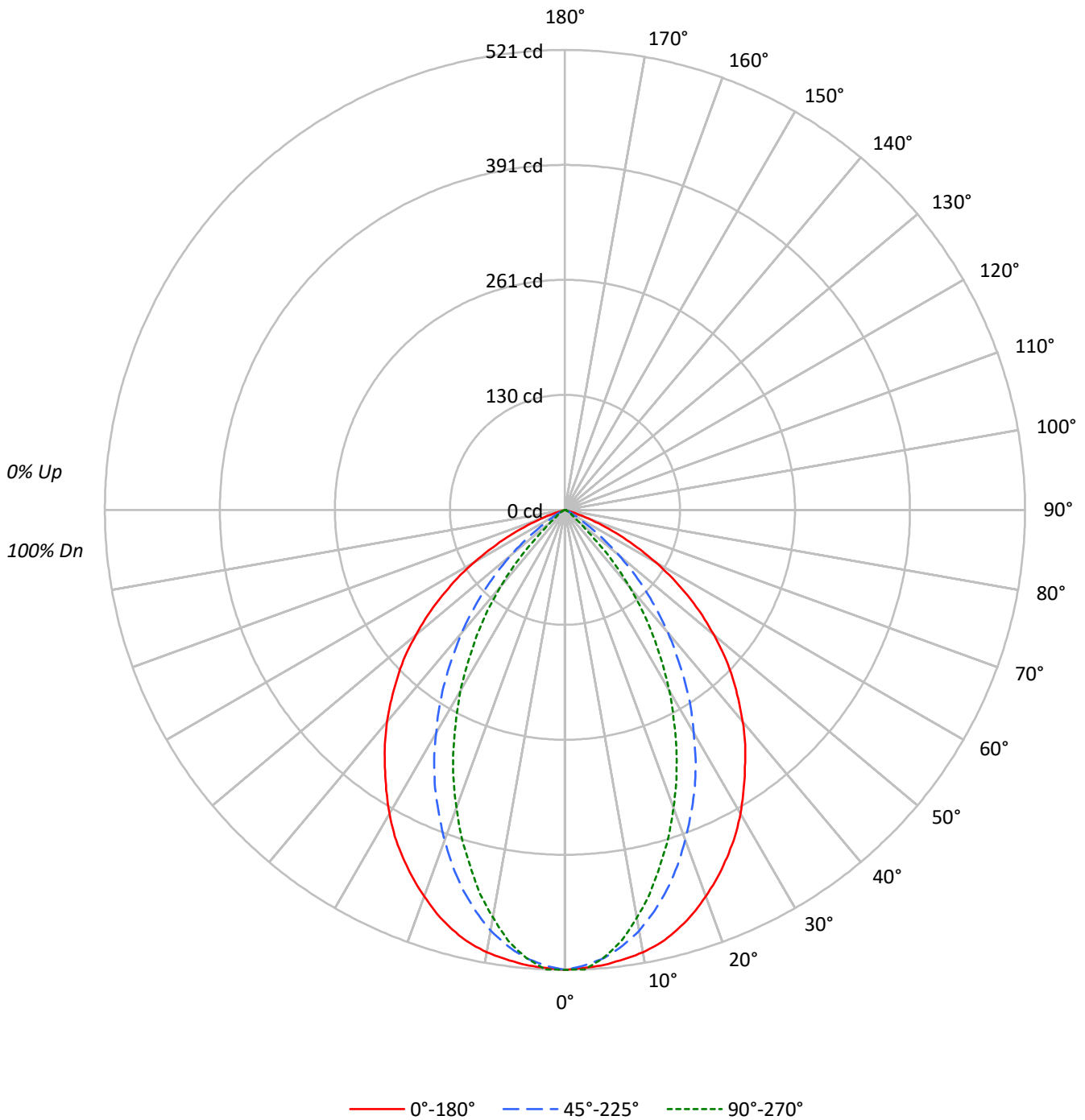
Lumens per Lamp: N/A
Luminaire Lumens: 680.4 lumens
Efficiency: N/A
Efficacy: 34.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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: P1060489

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

Luminous Intensity Polar Plot





TEST NUMBER: P1060489

CATALOG NUMBER: S124RDR-S575D850-X4F0-XX-UDD-BVL-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	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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4486	4486	4486
5°	4472	4406	4400
10°	4451	4233	4102
15°	4390	3973	3712
20°	4271	3650	3291
25°	4127	3306	2840
30°	3952	2897	2351
35°	3736	2485	1828
40°	3521	2040	1278
45°	3264	1569	633
50°	2946	1060	212
55°	2543	542	147
60°	2036	195	103
65°	1396	108	47
70°	624	58	38
75°	0	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3264 cd/sqm



TEST NUMBER: P1060489

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	7.1
10°-20°	126.1	18.5
20°-30°	163.3	24.0
30°-40°	155.1	22.8
40°-50°	109.9	16.1
50°-60°	56.4	8.3
60°-70°	19.7	2.9
70°-80°	1.7	0.3
80°-90°	0.0	0.0
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°	337.5	49.6
0°-40°	492.7	72.4
0°-60°	658.9	96.8
0°-90°	680.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	517	518	510	510	509	49
15°	492	477	446	425	416	138
25°	434	401	348	311	299	200
35°	355	303	236	190	174	222
45°	268	206	129	74	52	206
55°	169	111	36	10	10	151
65°	68	33	5	3	2	68
75°	0	1	1	1	1	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1060489

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.0	521.0	521.0	521.0	521.0
2.5°	519.5	521.0	516.5	520.3	521.0
5°	517.3	518.0	509.7	509.7	509.0
7.5°	513.5	512.0	498.4	493.2	492.4
10°	509.0	503.7	484.1	472.8	469.1
12.5°	502.2	492.4	466.1	449.5	445.0
15°	492.4	477.4	445.7	424.7	416.4
17.5°	480.4	460.8	423.1	397.5	389.3
20°	466.1	441.2	398.3	369.7	359.1
22.5°	451.0	422.4	372.7	340.3	329.8
25°	434.4	400.6	347.9	311.0	298.9
27.5°	417.1	377.2	320.7	282.3	266.5
30°	397.5	353.9	291.4	251.5	236.4
32.5°	376.5	328.3	265.0	222.1	204.0
35°	355.4	303.4	236.4	190.5	173.9
37.5°	335.1	280.1	207.8	159.6	143.8
40°	313.2	254.5	181.5	131.8	113.7
42.5°	290.6	229.6	154.4	103.2	83.6
45°	268.0	206.3	128.8	73.8	52.0
47.5°	245.5	181.5	103.9	46.7	27.9
50°	219.9	157.4	79.1	24.8	15.8
52.5°	195.8	134.8	56.5	14.3	12.0
55°	169.4	111.4	36.1	10.5	9.8
57.5°	144.6	88.8	20.3	8.3	7.5
60°	118.2	68.5	11.3	6.8	6.0
62.5°	91.9	49.7	7.5	4.5	3.8
65°	68.5	33.1	5.3	3.0	2.3
67.5°	45.2	18.8	3.8	1.5	1.5
70°	24.8	9.0	2.3	1.5	1.5
72.5°	9.0	3.0	1.5	0.8	0.8
75°	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)