

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: P1060410

Luminaire Tested: S124RDR-S350D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060410
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-S350D850-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

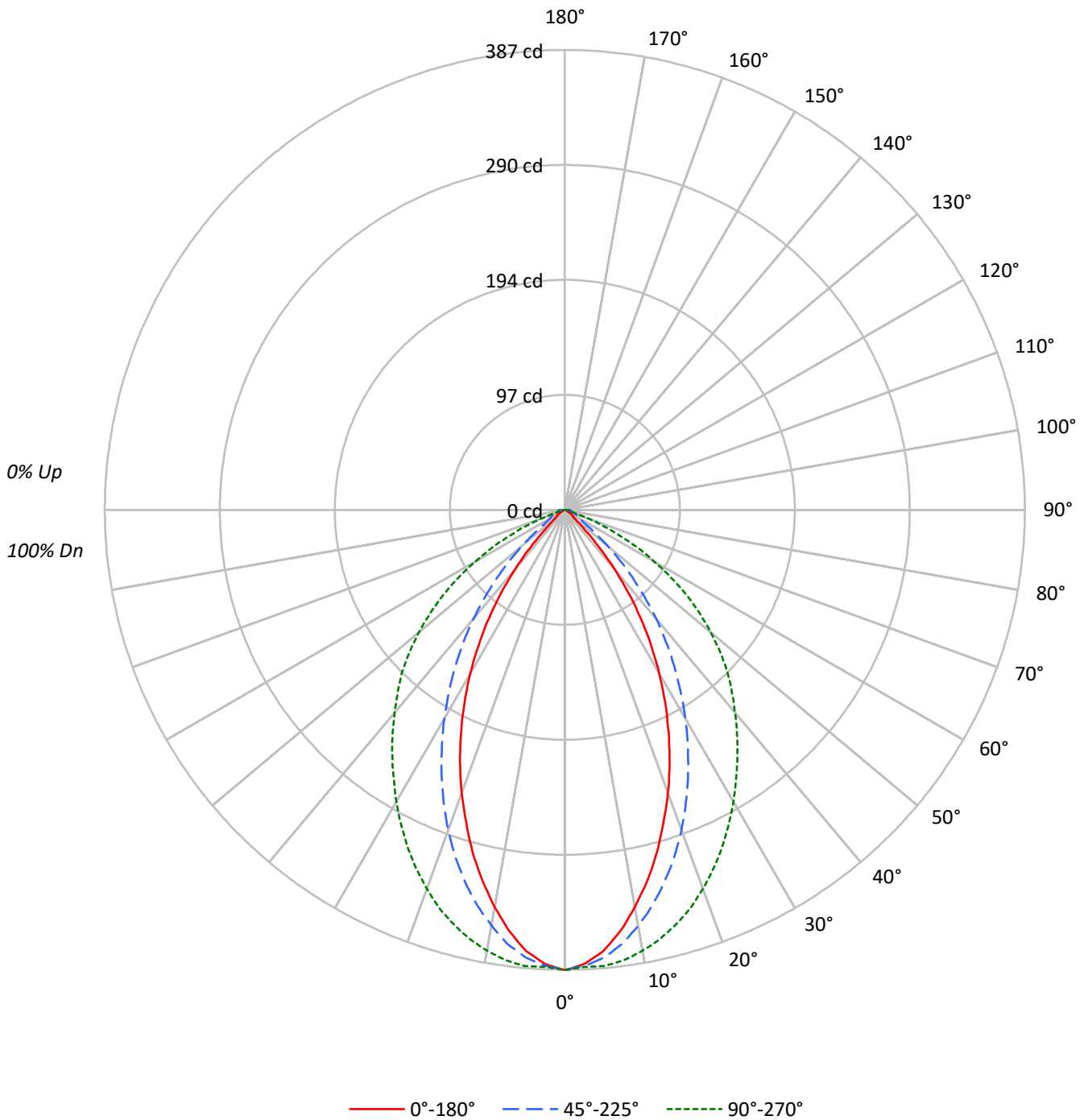
Lumens per Lamp: N/A
Luminaire Lumens: 488.0 lumens
Efficiency: N/A
Efficacy: 39.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1060410

CATALOG NUMBER: S124RDR-S350D850-X4F0-XX-UDD-BVL-W

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				
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°	3334	3334	3334
5°	3221	3268	3331
10°	2968	3107	3294
15°	2666	2888	3221
20°	2324	2627	3110
25°	1960	2332	2975
30°	1581	2016	2819
35°	1170	1686	2661
40°	725	1343	2503
45°	287	979	2358
50°	127	615	2143
55°	102	321	1877
60°	71	243	1495
65°	47	240	1027
70°	45	217	481
75°	60	213	213
80°	89	248	248
85°	178	494	356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2358 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	7.3
10°-20°	91.7	18.8
20°-30°	115.7	23.7
30°-40°	106.2	21.8
40°-50°	72.3	14.8
50°-60°	39.4	8.1
60°-70°	17.0	3.5
70°-80°	6.2	1.3
80°-90°	4.0	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°	242.9	49.8
0°-40°	349.0	71.5
0°-60°	460.7	94.4
0°-90°	488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	387	387	387	387	387	
5°	373	378	378	382	385	35
15°	299	310	324	347	361	83
25°	206	221	245	284	313	94
35°	111	128	160	211	253	69
45°	24	40	80	143	194	22
55°	7	7	21	79	125	6
65°	2	3	12	24	50	3
75°	2	6	6	6	6	2
85°	2	4	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°	387.2	387.2	387.2	387.2	387.2
2.5°	382.6	387.2	384.0	384.9	384.9
5°	372.6	377.6	378.1	382.2	385.3
7.5°	357.6	364.9	368.5	376.7	382.2
10°	339.4	348.1	355.3	369.4	376.7
12.5°	319.9	329.9	340.8	359.4	369.9
15°	299.0	309.5	324.0	347.2	361.3
17.5°	275.8	288.5	306.3	334.0	351.3
20°	253.6	266.3	286.7	318.1	339.4
22.5°	230.4	243.6	266.3	301.3	326.7
25°	206.3	220.8	245.4	284.5	313.1
27.5°	182.7	198.1	224.0	266.7	298.5
30°	159.0	174.5	202.7	248.6	283.5
32.5°	135.0	150.9	181.3	229.5	268.1
35°	111.3	127.7	160.4	211.3	253.1
37.5°	87.2	104.5	139.5	193.6	238.1
40°	64.5	81.8	119.5	175.9	222.7
42.5°	43.2	60.4	99.1	158.6	208.1
45°	23.6	39.5	80.4	142.7	193.6
47.5°	12.7	21.8	62.3	127.2	177.2
50°	9.5	11.8	45.9	110.9	160.0
52.5°	8.2	9.1	31.8	93.6	142.7
55°	6.8	7.3	21.4	78.6	125.0
57.5°	5.5	5.9	15.9	63.6	105.9
60°	4.1	5.0	14.1	49.1	86.8
62.5°	3.2	4.1	13.2	35.9	68.6
65°	2.3	3.2	11.8	24.5	50.4
67.5°	2.3	3.6	10.0	15.9	34.1
70°	1.8	5.0	8.6	10.5	19.1
72.5°	1.8	5.5	7.3	7.3	7.3
75°	1.8	5.9	6.4	6.4	6.4
77.5°	1.8	5.5	5.9	5.5	5.5
80°	1.8	5.0	5.0	5.0	5.0
82.5°	1.8	4.5	5.0	5.0	4.1
85°	1.8	4.1	5.0	5.0	3.6
87.5°	1.4	4.1	4.5	4.5	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)