

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1060862

Luminaire Tested: S124RDR-H350D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060862
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-H350D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

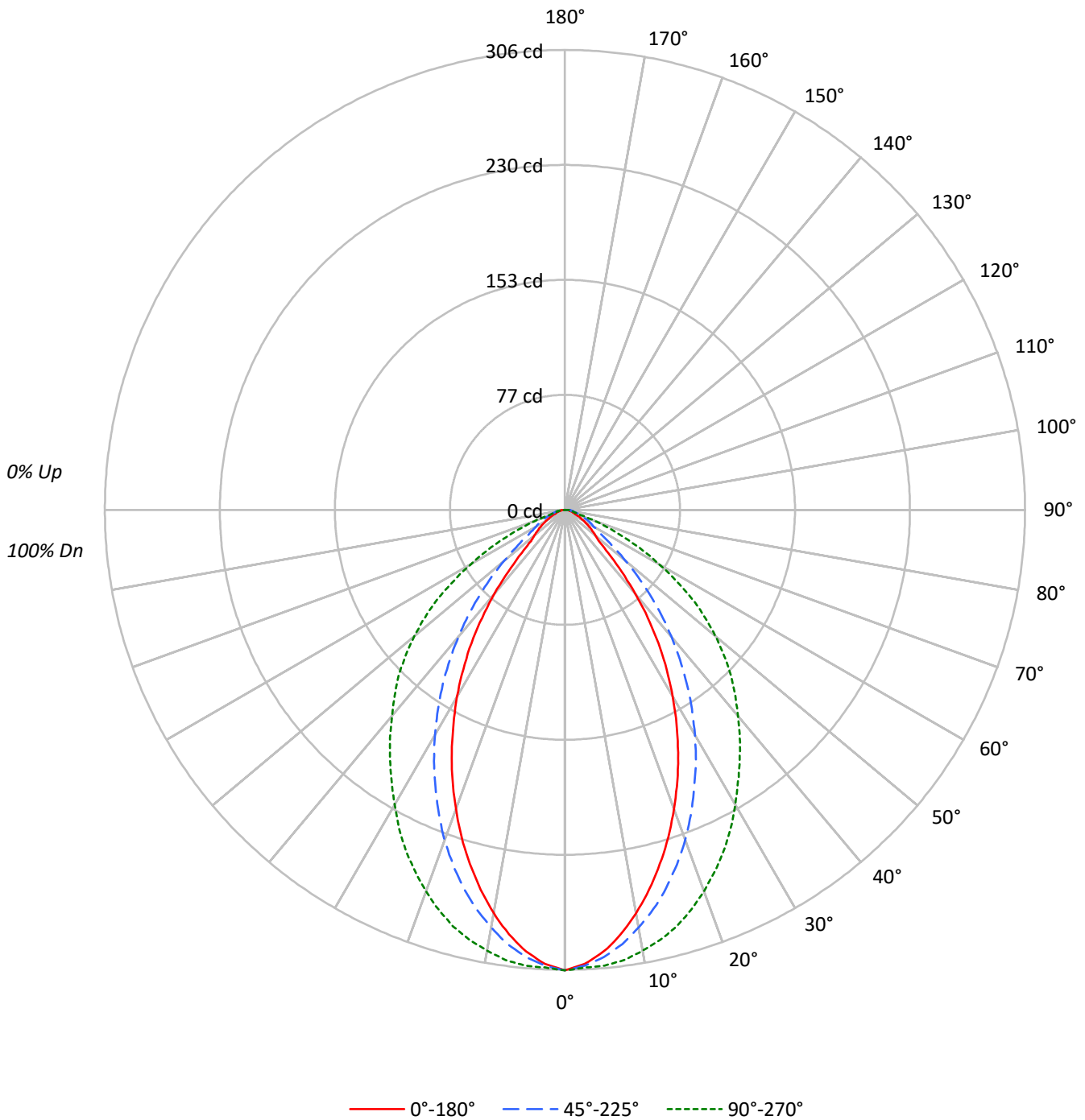
Lumens per Lamp: N/A
Luminaire Lumens: 430.8 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	2638	2638	2638
5°	2551	2581	2631
10°	2383	2468	2604
15°	2175	2321	2558
20°	1943	2143	2475
25°	1692	1934	2377
30°	1426	1717	2252
35°	1140	1487	2131
40°	819	1235	2011
45°	493	973	1903
50°	355	705	1750
55°	299	474	1551
60°	241	375	1249
65°	192	342	897
70°	166	285	481
75°	156	260	233
80°	154	273	213
85°	227	385	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1903 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.1	6.5
10°-20°	73.7	17.1
20°-30°	95.6	22.2
30°-40°	91.9	21.3
40°-50°	68.2	15.8
50°-60°	41.8	9.7
60°-70°	20.3	4.7
70°-80°	7.7	1.8
80°-90°	3.5	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°	197.4	45.8
0°-40°	289.4	67.2
0°-60°	399.3	92.7
0°-90°	430.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	430.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	295	299	299	301	304	27
15°	244	251	260	276	287	68
25°	178	187	204	230	250	81
35°	108	118	142	175	203	67
45°	40	51	80	122	156	34
55°	20	21	32	71	103	18
65°	9	10	17	26	44	10
75°	5	7	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	306.4	306.4	306.4	306.4	306.4
2.5°	302.5	306.0	303.6	304.4	304.8
5°	295.1	299.3	298.6	301.3	304.4
7.5°	284.9	290.0	291.6	297.0	302.1
10°	272.5	278.7	282.2	291.2	297.8
12.5°	258.8	265.4	272.1	284.1	293.1
15°	244.0	251.0	260.4	276.0	286.9
17.5°	228.4	236.2	247.5	266.2	279.1
20°	212.0	220.2	233.9	254.5	270.1
22.5°	195.3	203.9	219.1	242.1	260.4
25°	178.1	187.1	203.5	229.6	250.2
27.5°	160.6	169.9	188.7	216.3	238.9
30°	143.4	152.4	172.7	202.7	226.5
32.5°	125.9	135.3	157.1	188.7	214.4
35°	108.4	118.1	141.5	175.0	202.7
37.5°	90.4	101.0	125.5	161.8	191.0
40°	72.9	83.0	109.9	148.1	178.9
42.5°	55.7	66.7	95.1	134.5	167.6
45°	40.5	50.7	79.9	122.0	156.3
47.5°	30.4	36.6	65.9	110.3	143.8
50°	26.5	27.7	52.6	97.4	130.6
52.5°	23.0	23.8	40.9	83.4	117.3
55°	19.9	20.7	31.6	71.3	103.3
57.5°	16.8	17.5	25.3	59.6	87.3
60°	14.0	14.8	21.8	47.6	72.5
62.5°	11.7	12.1	19.5	36.2	58.1
65°	9.4	10.1	16.8	26.5	44.0
67.5°	7.8	8.6	13.6	18.3	30.8
70°	6.6	8.6	11.3	12.9	19.1
72.5°	5.5	7.8	9.4	9.0	9.0
75°	4.7	7.4	7.8	7.0	7.0
77.5°	3.9	6.6	6.2	5.8	5.5
80°	3.1	5.5	5.5	4.7	4.3
82.5°	2.7	4.3	4.3	4.3	3.5
85°	2.3	3.9	3.9	3.5	2.7
87.5°	1.6	3.1	3.5	3.1	1.9
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	3.17	4.51	3.54	4.82	5.14	12.28	13.62	12.65	13.93	14.25
	3H	4.22	5.41	4.60	5.74	6.10	12.78	13.97	13.16	14.30	14.66
	4H	4.74	5.85	5.14	6.20	6.58	12.80	13.90	13.20	14.25	14.64
	6H	5.19	6.21	5.61	6.58	6.97	12.80	13.81	13.21	14.18	14.58
	8H	5.38	6.34	5.81	6.73	7.14	12.79	13.76	13.22	14.15	14.55
	12H	5.59	6.51	6.02	6.89	7.32	12.79	13.71	13.22	14.10	14.53
4H	2H	4.28	5.38	4.68	5.73	6.12	12.17	13.28	12.57	13.63	14.01
	3H	5.55	6.46	5.96	6.86	7.26	12.75	13.65	13.16	14.06	14.46
	4H	6.26	7.07	6.69	7.49	7.93	12.80	13.61	13.23	14.02	14.47
	6H	6.89	7.59	7.35	8.03	8.50	12.85	13.55	13.31	13.99	14.46
	8H	7.13	7.78	7.60	8.23	8.70	12.87	13.52	13.33	13.97	14.44
	12H	7.40	7.98	7.89	8.46	8.94	12.90	13.48	13.38	13.96	14.43
8H	4H	6.68	7.34	7.15	7.78	8.25	12.74	13.40	13.21	13.84	14.32
	6H	7.56	8.10	8.06	8.59	9.07	12.84	13.37	13.34	13.87	14.35
	8H	7.97	8.45	8.49	8.96	9.46	12.90	13.38	13.42	13.90	14.39
	12H	8.44	8.87	8.96	9.36	9.93	13.00	13.42	13.51	13.92	14.49
12H	4H	6.73	7.30	7.21	7.79	8.26	12.72	13.30	13.20	13.78	14.25
	6H	7.68	8.16	8.20	8.67	9.16	12.82	13.30	13.34	13.81	14.31
	8H	8.19	8.62	8.71	9.11	9.68	12.92	13.35	13.44	13.84	14.42