

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060456

Luminaire Tested: S124RDRP-S350D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060456
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: S124RDRP-S350D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

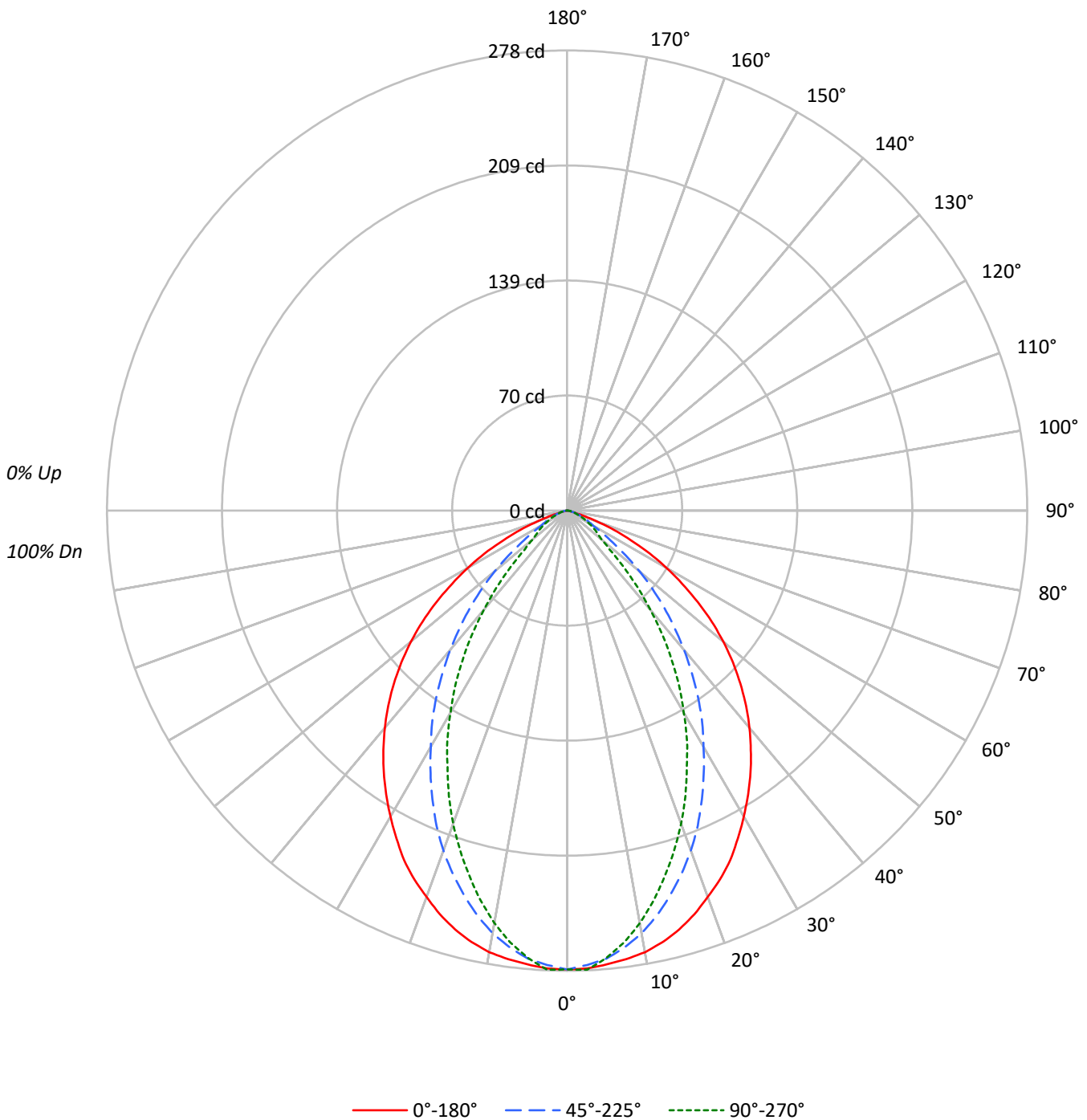
Lumens per Lamp: N/A
Luminaire Lumens: 408.7 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	2387	2387	2387
5°	2379	2349	2345
10°	2369	2266	2212
15°	2335	2144	2036
20°	2275	2003	1846
25°	2215	1829	1625
30°	2123	1638	1401
35°	2031	1449	1157
40°	1927	1233	878
45°	1802	1008	589
50°	1648	764	366
55°	1447	504	311
60°	1197	310	255
65°	868	238	206
70°	471	176	156
75°	103	130	143
80°	79	99	114
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1802 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.7	6.3
10°-20°	68.2	16.7
20°-30°	90.4	22.1
30°-40°	89.7	21.9
40°-50°	69.0	16.9
50°-60°	41.1	10.1
60°-70°	18.7	4.6
70°-80°	4.8	1.2
80°-90°	1.1	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°	184.2	45.1
0°-40°	273.9	67.0
0°-60°	384.0	94.0
0°-90°	408.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	408.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	277	277	277	277	277	
5°	275	276	272	272	271	26
15°	262	255	240	232	228	74
25°	233	216	192	176	171	107
35°	193	169	138	117	110	121
45°	148	119	83	58	48	114
55°	96	69	34	21	21	86
65°	43	25	12	10	10	43
75°	3	4	4	4	4	7
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	277.2	277.2	277.2	277.2	277.2
2.5°	276.8	277.2	274.8	276.8	277.6
5°	275.2	275.6	271.7	271.7	271.3
7.5°	273.3	272.5	266.2	263.9	263.1
10°	270.9	268.2	259.2	254.5	253.0
12.5°	267.0	262.7	250.6	244.0	241.3
15°	261.9	255.3	240.5	232.3	228.4
17.5°	255.7	247.5	229.9	219.4	215.1
20°	248.3	237.4	218.6	205.3	201.4
22.5°	241.3	227.6	206.1	190.9	186.6
25°	233.1	216.3	192.5	176.5	171.0
27.5°	223.3	205.3	178.8	162.4	156.9
30°	213.5	193.6	164.7	147.6	140.9
32.5°	203.4	181.5	151.9	132.3	126.1
35°	193.2	169.0	137.8	116.7	110.1
37.5°	182.3	156.5	123.8	101.9	94.5
40°	171.4	144.4	109.7	87.4	78.1
42.5°	160.1	131.9	96.0	72.6	63.2
45°	148.0	119.1	82.8	57.8	48.4
47.5°	135.9	107.0	69.5	43.3	34.7
50°	123.0	94.1	57.0	31.6	27.3
52.5°	110.1	81.6	44.5	24.6	23.4
55°	96.4	68.7	33.6	21.1	20.7
57.5°	82.4	57.0	24.2	18.3	17.6
60°	69.5	46.1	18.0	15.6	14.8
62.5°	56.2	34.7	14.8	12.9	12.1
65°	42.6	25.4	11.7	10.1	10.1
67.5°	30.8	17.2	9.4	8.2	7.8
70°	18.7	10.5	7.0	6.6	6.2
72.5°	9.4	6.2	5.5	5.1	5.1
75°	3.1	3.9	3.9	4.3	4.3
77.5°	2.3	2.7	2.7	3.1	3.1
80°	1.6	2.0	2.0	2.3	2.3
82.5°	1.2	1.2	1.6	1.6	2.0
85°	0.8	0.8	0.8	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8
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	12.14	13.48	12.51	13.79	14.10	3.68	5.01	4.04	5.33	5.64
	3H	12.65	13.83	13.03	14.16	14.52	4.49	5.67	4.87	6.00	6.37
	4H	12.62	13.71	13.02	14.06	14.45	4.78	5.88	5.18	6.23	6.61
	6H	12.55	13.56	12.97	13.93	14.32	4.95	5.95	5.36	6.32	6.72
	8H	12.51	13.47	12.94	13.86	14.26	5.01	5.97	5.44	6.36	6.76
	12H	12.48	13.39	12.91	13.77	14.20	5.06	5.98	5.50	6.36	6.79
4H	2H	11.98	13.08	12.39	13.43	13.82	4.12	5.22	4.52	5.57	5.95
	3H	12.54	13.43	12.95	13.83	14.24	5.08	5.98	5.50	6.38	6.78
	4H	12.50	13.30	12.94	13.72	14.16	5.45	6.25	5.89	6.67	7.11
	6H	12.45	13.14	12.92	13.58	14.05	5.70	6.38	6.16	6.83	7.29
	8H	12.41	13.05	12.88	13.49	13.96	5.79	6.43	6.26	6.87	7.35
	12H	12.37	12.93	12.85	13.42	13.89	5.87	6.43	6.36	6.92	7.39
8H	4H	12.39	13.03	12.86	13.48	13.95	5.54	6.18	6.01	6.63	7.10
	6H	12.33	12.86	12.84	13.35	13.83	5.84	6.36	6.35	6.86	7.34
	8H	12.29	12.76	12.81	13.27	13.76	5.98	6.45	6.50	6.96	7.46
	12H	12.26	12.67	12.77	13.16	13.74	6.13	6.54	6.64	7.03	7.61
12H	4H	12.35	12.92	12.84	13.40	13.87	5.51	6.08	6.00	6.56	7.03
	6H	12.28	12.75	12.80	13.26	13.75	5.82	6.29	6.35	6.81	7.30
	8H	12.25	12.67	12.77	13.16	13.73	6.00	6.42	6.52	6.91	7.48