

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: P1060861

Luminaire Tested: S124RDRP-H350D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060861
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-H350D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK 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

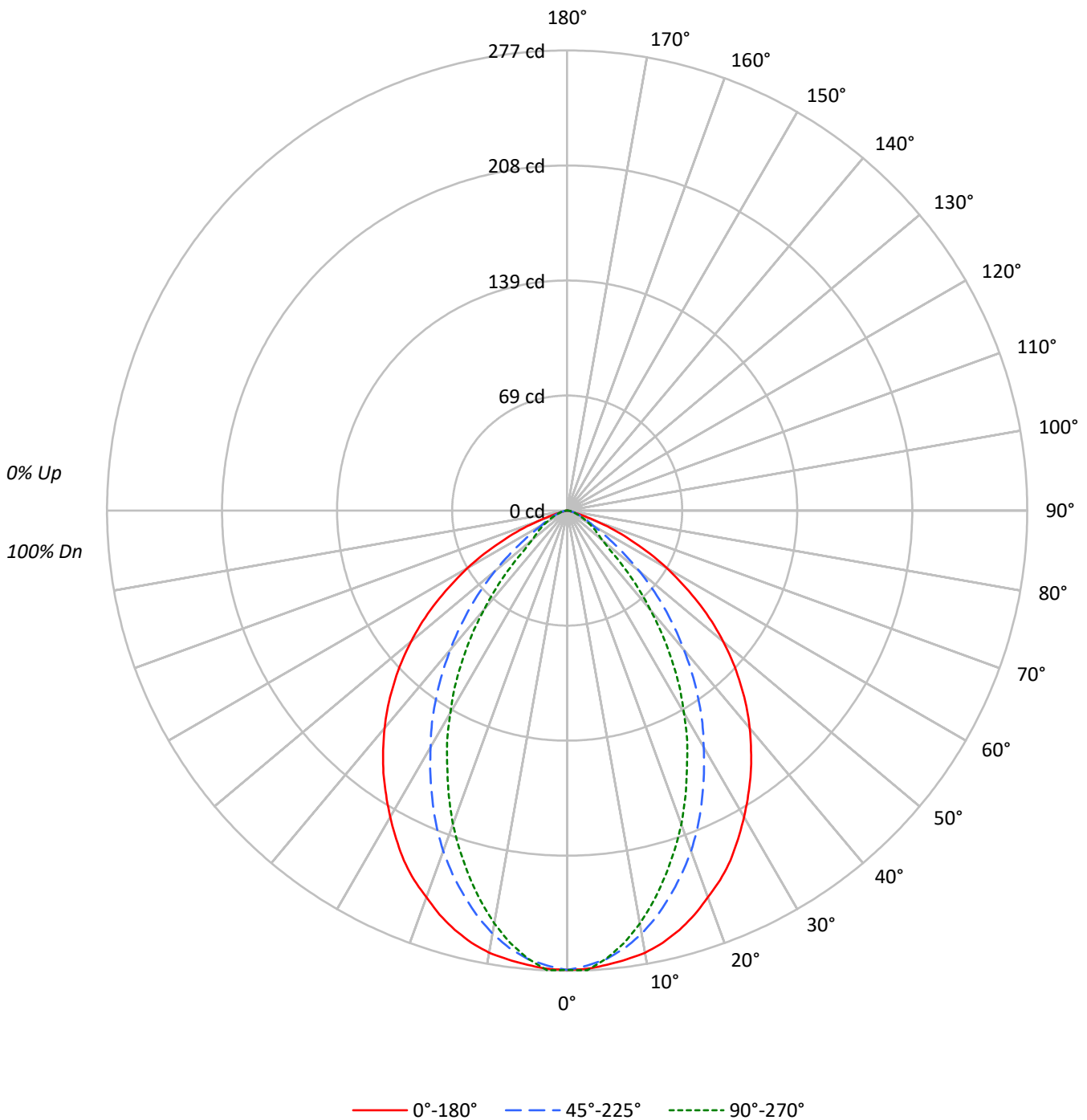
Lumens per Lamp: N/A
Luminaire Lumens: 407.7 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	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°	2381	2381	2381
5°	2373	2343	2340
10°	2363	2261	2206
15°	2329	2139	2031
20°	2270	1999	1841
25°	2209	1824	1621
30°	2118	1634	1398
35°	2027	1445	1154
40°	1922	1230	876
45°	1797	1006	588
50°	1644	762	366
55°	1444	503	309
60°	1194	308	255
65°	864	238	206
70°	471	176	156
75°	103	130	143
80°	79	94	114
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1797 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.6	6.3
10°-20°	68.0	16.7
20°-30°	90.1	22.1
30°-40°	89.5	21.9
40°-50°	68.8	16.9
50°-60°	41.0	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°	183.8	45.1
0°-40°	273.2	67.0
0°-60°	383.1	94.0
0°-90°	407.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	407.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	276	276	276	276	276	
5°	274	275	271	271	271	26
15°	261	255	240	232	228	74
25°	232	216	192	176	171	107
35°	193	169	138	116	110	120
45°	148	119	83	58	48	114
55°	96	68	34	21	21	86
65°	42	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°	276.5	276.5	276.5	276.5	276.5
2.5°	276.1	276.5	274.2	276.1	276.9
5°	274.5	274.9	271.0	271.0	270.7
7.5°	272.6	271.8	265.6	263.3	262.5
10°	270.3	267.5	258.6	253.9	252.3
12.5°	266.4	262.1	250.0	243.4	240.7
15°	261.3	254.7	239.9	231.7	227.8
17.5°	255.1	246.9	229.4	218.9	214.6
20°	247.7	236.8	218.1	204.8	200.9
22.5°	240.7	227.0	205.6	190.4	186.1
25°	232.5	215.7	192.0	176.0	170.6
27.5°	222.8	204.8	178.4	162.0	156.5
30°	213.0	193.2	164.3	147.2	140.6
32.5°	202.9	181.1	151.5	132.0	125.8
35°	192.8	168.6	137.5	116.4	109.8
37.5°	181.9	156.2	123.4	101.6	94.2
40°	171.0	144.1	109.4	87.2	77.9
42.5°	159.7	131.6	95.8	72.4	63.1
45°	147.6	118.8	82.6	57.6	48.3
47.5°	135.5	106.7	69.3	43.2	34.7
50°	122.7	93.9	56.9	31.5	27.3
52.5°	109.8	81.4	44.4	24.5	23.4
55°	96.2	68.5	33.5	21.0	20.6
57.5°	82.2	56.9	24.1	18.3	17.5
60°	69.3	46.0	17.9	15.6	14.8
62.5°	56.1	34.7	14.8	12.9	12.1
65°	42.4	25.3	11.7	10.1	10.1
67.5°	30.8	17.1	9.3	8.2	7.8
70°	18.7	10.5	7.0	6.6	6.2
72.5°	9.3	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	1.9	1.9	2.3	2.3
82.5°	1.2	1.2	1.6	1.6	1.9
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	13.47	12.50	13.78	14.10	3.68	5.01	4.05	5.33	5.64
	3H	12.65	13.83	13.03	14.16	14.52	4.50	5.68	4.88	6.01	6.37
	4H	12.61	13.71	13.01	14.06	14.44	4.78	5.88	5.19	6.23	6.62
	6H	12.55	13.55	12.96	13.92	14.32	4.95	5.96	5.37	6.33	6.72
	8H	12.51	13.46	12.94	13.85	14.26	5.01	5.97	5.44	6.36	6.76
	12H	12.47	13.38	12.90	13.76	14.20	5.06	5.97	5.49	6.35	6.78
4H	2H	11.98	13.08	12.38	13.43	13.81	4.12	5.22	4.53	5.57	5.96
	3H	12.53	13.43	12.95	13.83	14.23	5.09	5.98	5.50	6.39	6.79
	4H	12.50	13.30	12.94	13.72	14.16	5.46	6.25	5.89	6.67	7.11
	6H	12.45	13.13	12.91	13.58	14.05	5.70	6.39	6.16	6.83	7.30
	8H	12.40	13.04	12.87	13.49	13.96	5.79	6.43	6.26	6.87	7.34
	12H	12.36	12.93	12.85	13.41	13.89	5.86	6.43	6.35	6.91	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	12.85	12.83	13.35	13.83	5.85	6.37	6.35	6.86	7.35
	8H	12.28	12.75	12.80	13.27	13.76	5.98	6.45	6.50	6.96	7.45
	12H	12.25	12.66	12.77	13.16	13.73	6.12	6.53	6.63	7.03	7.60
12H	4H	12.35	12.91	12.83	13.40	13.87	5.52	6.08	6.00	6.56	7.04
	6H	12.27	12.74	12.79	13.26	13.75	5.83	6.29	6.35	6.81	7.30
	8H	12.25	12.66	12.76	13.16	13.73	6.00	6.41	6.51	6.91	7.48