

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: P1060420

Luminaire Tested: S124RDRP-S350D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060420
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-S350D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

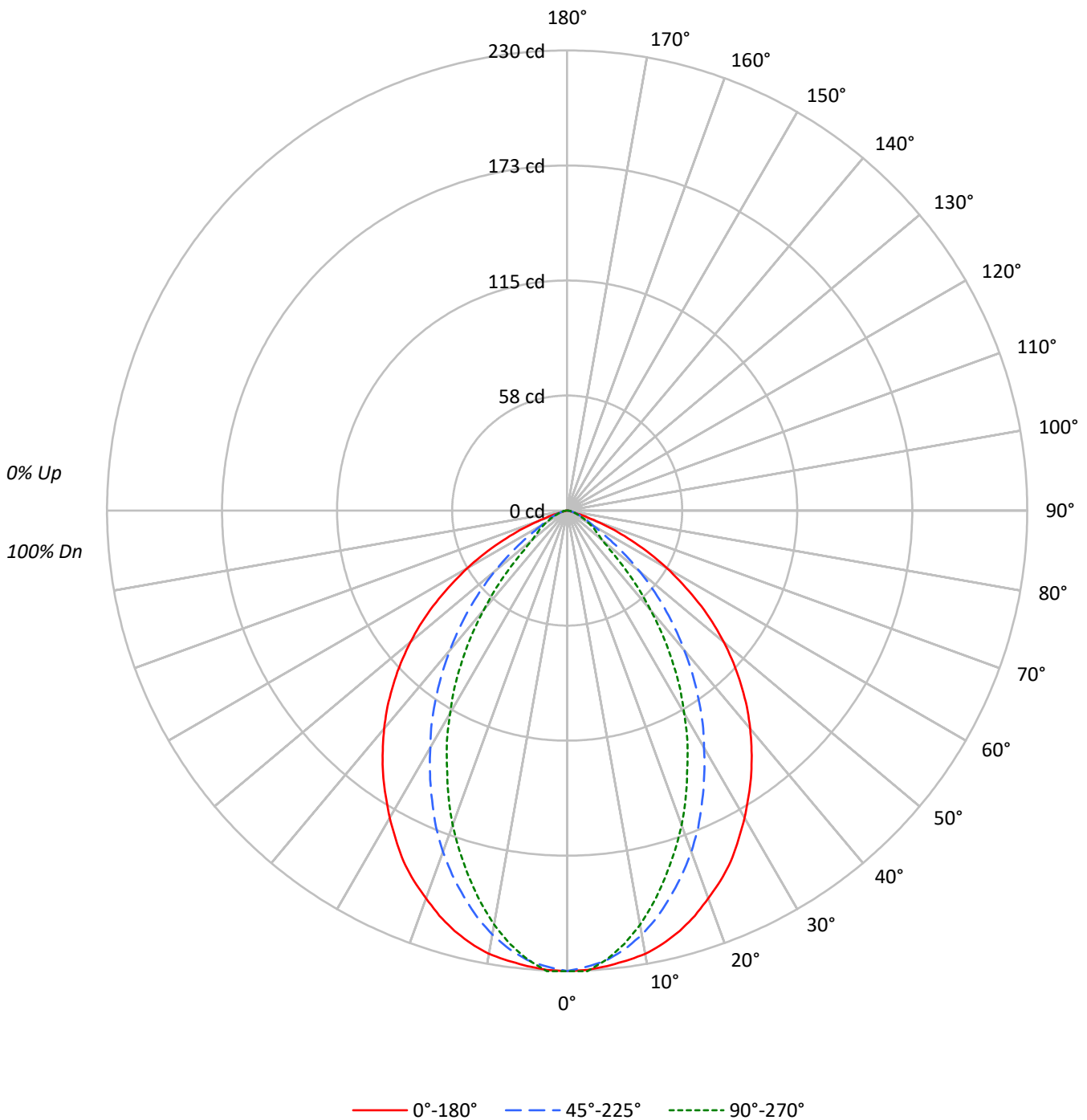
Lumens per Lamp: N/A
Luminaire Lumens: 339.3 lumens
Efficiency: N/A
Efficacy: 27.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	64	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°	1982	1982	1982
5°	1975	1950	1947
10°	1967	1882	1837
15°	1939	1780	1690
20°	1890	1663	1533
25°	1839	1518	1349
30°	1763	1360	1163
35°	1687	1203	961
40°	1600	1024	728
45°	1497	837	490
50°	1368	634	304
55°	1203	419	258
60°	994	257	212
65°	719	198	171
70°	393	146	131
75°	87	106	120
80°	64	79	94
85°	59	59	99

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1497 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	6.3
10°-20°	56.6	16.7
20°-30°	75.0	22.1
30°-40°	74.5	21.9
40°-50°	57.3	16.9
50°-60°	34.2	10.1
60°-70°	15.5	4.6
70°-80°	4.0	1.2
80°-90°	0.9	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°	153.0	45.1
0°-40°	227.4	67.0
0°-60°	318.9	94.0
0°-90°	339.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	230	230	230	230	230	
5°	228	229	226	226	225	22
15°	218	212	200	193	190	61
25°	194	180	160	146	142	89
35°	160	140	114	97	91	100
45°	123	99	69	48	40	95
55°	80	57	28	18	17	71
65°	35	21	10	8	8	36
75°	3	3	3	4	4	5
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°	230.2	230.2	230.2	230.2	230.2
2.5°	229.8	230.2	228.2	229.8	230.5
5°	228.5	228.9	225.6	225.6	225.3
7.5°	226.9	226.3	221.1	219.1	218.5
10°	225.0	222.7	215.2	211.4	210.1
12.5°	221.7	218.2	208.1	202.6	200.3
15°	217.5	212.0	199.7	192.9	189.6
17.5°	212.3	205.5	190.9	182.2	178.6
20°	206.2	197.1	181.5	170.5	167.3
22.5°	200.3	189.0	171.2	158.5	155.0
25°	193.5	179.6	159.8	146.5	142.0
27.5°	185.4	170.5	148.5	134.9	130.3
30°	177.3	160.8	136.8	122.5	117.0
32.5°	168.9	150.7	126.1	109.9	104.7
35°	160.5	140.4	114.4	96.9	91.4
37.5°	151.4	130.0	102.8	84.6	78.4
40°	142.3	119.9	91.1	72.6	64.8
42.5°	132.9	109.6	79.7	60.3	52.5
45°	122.9	98.9	68.7	48.0	40.2
47.5°	112.8	88.8	57.7	36.0	28.9
50°	102.1	78.1	47.3	26.3	22.7
52.5°	91.4	67.8	37.0	20.4	19.4
55°	80.1	57.1	27.9	17.5	17.2
57.5°	68.4	47.3	20.1	15.2	14.6
60°	57.7	38.3	14.9	13.0	12.3
62.5°	46.7	28.9	12.3	10.7	10.0
65°	35.3	21.1	9.7	8.4	8.4
67.5°	25.6	14.3	7.8	6.8	6.5
70°	15.6	8.8	5.8	5.5	5.2
72.5°	7.8	5.2	4.5	4.2	4.2
75°	2.6	3.2	3.2	3.6	3.6
77.5°	1.9	2.3	2.3	2.6	2.6
80°	1.3	1.6	1.6	1.9	1.9
82.5°	1.0	1.0	1.3	1.3	1.6
85°	0.6	0.6	0.6	1.0	1.0
87.5°	0.3	0.3	0.3	0.6	0.6
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	11.49	12.83	11.86	13.14	13.46	3.03	4.37	3.40	4.68	5.00
	3H	12.00	13.19	12.38	13.51	13.88	3.85	5.04	4.23	5.36	5.73
	4H	11.97	13.07	12.37	13.42	13.80	4.14	5.24	4.54	5.59	5.97
	6H	11.91	12.91	12.32	13.28	13.68	4.31	5.32	4.72	5.69	6.08
	8H	11.87	12.82	12.30	13.21	13.62	4.37	5.33	4.80	5.72	6.12
	12H	11.83	12.74	12.26	13.12	13.55	4.42	5.33	4.85	5.71	6.14
4H	2H	11.34	12.43	11.74	12.78	13.17	3.47	4.57	3.88	4.92	5.31
	3H	11.89	12.79	12.30	13.19	13.59	4.44	5.33	4.85	5.74	6.14
	4H	11.86	12.66	12.29	13.08	13.52	4.81	5.61	5.25	6.03	6.47
	6H	11.81	12.49	12.27	12.94	13.41	5.06	5.74	5.52	6.19	6.66
	8H	11.76	12.40	12.23	12.85	13.32	5.14	5.78	5.61	6.23	6.70
	12H	11.72	12.29	12.21	12.77	13.24	5.22	5.79	5.71	6.27	6.74
8H	4H	11.75	12.39	12.22	12.84	13.31	4.90	5.54	5.37	5.99	6.46
	6H	11.69	12.21	12.19	12.71	13.19	5.20	5.72	5.71	6.22	6.70
	8H	11.64	12.11	12.16	12.62	13.12	5.33	5.80	5.85	6.32	6.81
	12H	11.61	12.02	12.12	12.52	13.09	5.47	5.89	5.99	6.38	6.95
12H	4H	11.71	12.27	12.19	12.75	13.23	4.87	5.44	5.36	5.92	6.39
	6H	11.63	12.10	12.15	12.62	13.11	5.18	5.65	5.71	6.17	6.66
	8H	11.61	12.02	12.12	12.51	13.09	5.35	5.76	5.87	6.26	6.83