

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: P1060435

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

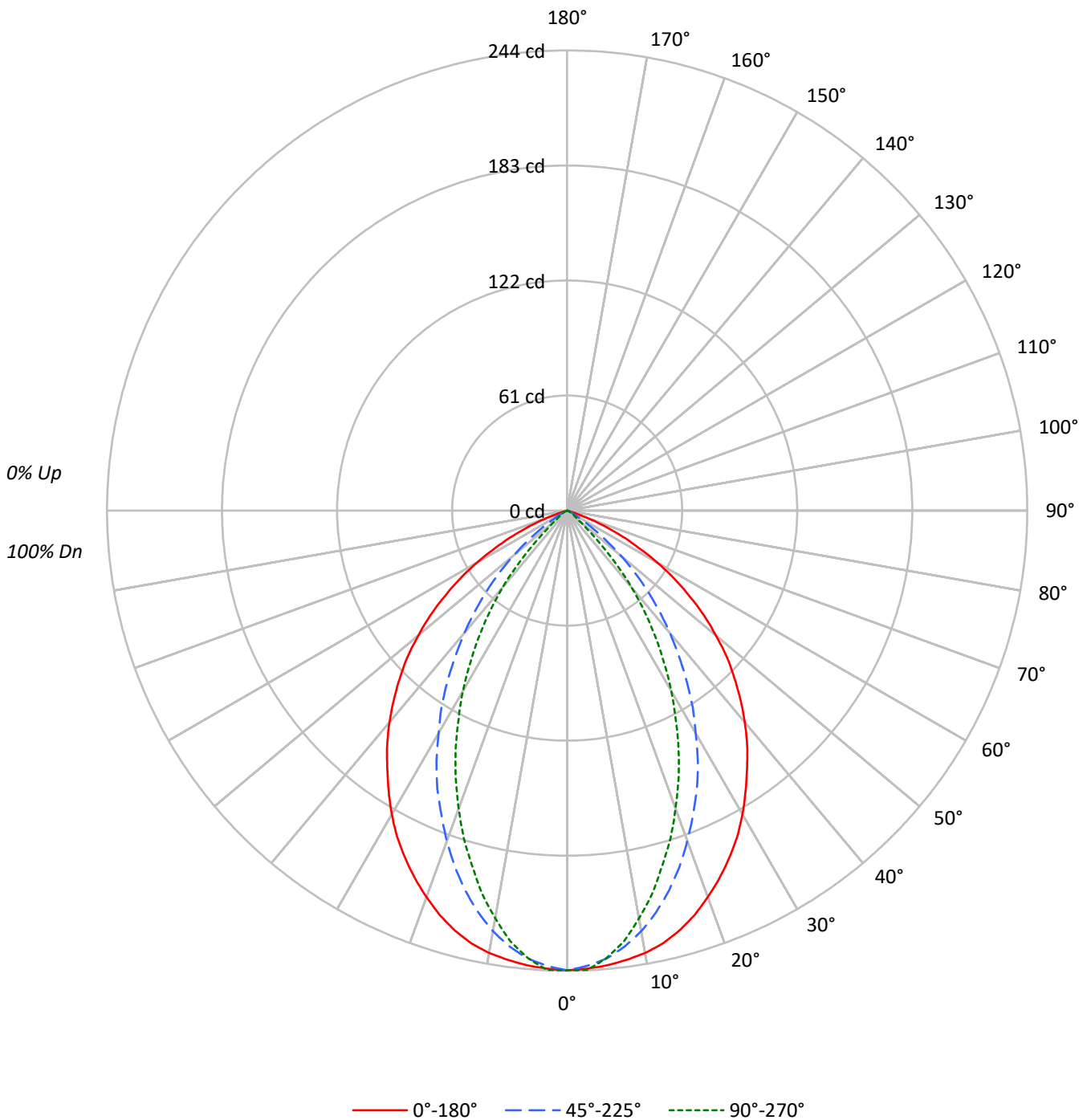
Lumens per Lamp: N/A
Luminaire Lumens: 318.4 lumens
Efficiency: N/A
Efficacy: 25.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2099	2099	2099
5°	2093	2062	2059
10°	2083	1981	1919
15°	2054	1860	1737
20°	1999	1708	1540
25°	1932	1547	1329
30°	1849	1356	1100
35°	1748	1163	856
40°	1648	954	598
45°	1527	733	296
50°	1379	496	99
55°	1191	254	69
60°	952	91	48
65°	654	51	22
70°	292	28	18
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1527 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.5	7.1
10°-20°	59.0	18.5
20°-30°	76.4	24.0
30°-40°	72.6	22.8
40°-50°	51.4	16.1
50°-60°	26.4	8.3
60°-70°	9.2	2.9
70°-80°	0.8	0.3
80°-90°	0.0	0.0
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°	157.9	49.6
0°-40°	230.5	72.4
0°-60°	308.3	96.8
0°-90°	318.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	318.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	244	244	244	244	244	
5°	242	242	238	238	238	23
15°	230	223	209	199	195	65
25°	203	187	163	146	140	93
35°	166	142	111	89	81	104
45°	125	96	60	34	24	97
55°	79	52	17	5	5	71
65°	32	16	2	1	1	32
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	243.8	243.8	243.8	243.8	243.8
2.5°	243.1	243.8	241.7	243.5	243.8
5°	242.1	242.4	238.5	238.5	238.2
7.5°	240.3	239.6	233.2	230.8	230.4
10°	238.2	235.7	226.5	221.3	219.5
12.5°	235.0	230.4	218.1	210.3	208.2
15°	230.4	223.4	208.6	198.7	194.8
17.5°	224.8	215.6	198.0	186.0	182.2
20°	218.1	206.5	186.4	173.0	168.1
22.5°	211.0	197.7	174.4	159.3	154.3
25°	203.3	187.4	162.8	145.5	139.9
27.5°	195.2	176.5	150.1	132.1	124.7
30°	186.0	165.6	136.4	117.7	110.6
32.5°	176.2	153.6	124.0	103.9	95.5
35°	166.3	142.0	110.6	89.1	81.4
37.5°	156.8	131.1	97.2	74.7	67.3
40°	146.6	119.1	84.9	61.7	53.2
42.5°	136.0	107.5	72.2	48.3	39.1
45°	125.4	96.5	60.2	34.5	24.3
47.5°	114.9	84.9	48.6	21.8	13.0
50°	102.9	73.6	37.0	11.6	7.4
52.5°	91.6	63.1	26.4	6.7	5.6
55°	79.3	52.1	16.9	4.9	4.6
57.5°	67.6	41.6	9.5	3.9	3.5
60°	55.3	32.1	5.3	3.2	2.8
62.5°	43.0	23.3	3.5	2.1	1.8
65°	32.1	15.5	2.5	1.4	1.1
67.5°	21.1	8.8	1.8	0.7	0.7
70°	11.6	4.2	1.1	0.7	0.7
72.5°	4.2	1.4	0.7	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.11	12.36	11.47	12.68	12.99	0.00	0.00	0.00	0.00	0.00
	3H	11.38	12.49	11.76	12.82	13.18	0.00	0.00	0.00	0.00	0.00
	4H	11.31	12.33	11.71	12.68	13.07	0.00	0.00	0.00	0.00	0.00
	6H	11.22	12.16	11.64	12.53	12.92	0.00	0.00	0.00	0.00	0.00
	8H	11.17	12.06	11.61	12.45	12.86	0.00	0.00	0.00	0.00	0.00
	12H	11.13	11.97	11.56	12.36	12.79	0.00	0.00	0.00	0.00	0.00
4H	2H	10.88	11.91	11.28	12.26	12.64	0.00	0.00	0.00	0.00	0.00
	3H	11.16	11.99	11.58	12.40	12.80	0.00	0.00	0.00	0.00	0.00
	4H	11.07	11.81	11.51	12.23	12.67	0.00	0.00	0.00	0.00	0.00
	6H	10.98	11.61	11.45	12.06	12.53	0.00	0.00	0.00	0.00	0.00
	8H	10.92	11.51	11.39	11.96	12.43	0.00	0.00	0.00	0.00	0.00
	12H	10.87	11.39	11.36	11.87	12.35	0.00	0.00	0.00	0.00	0.00
8H	4H	10.92	11.51	11.39	11.96	12.43	0.00	0.00	0.00	0.00	0.00
	6H	10.81	11.29	11.32	11.79	12.27	0.00	0.00	0.00	0.00	0.00
	8H	10.75	11.17	11.27	11.69	12.18	0.00	0.00	0.00	0.00	0.00
	12H	10.70	11.07	11.21	11.57	12.14	0.00	0.00	0.00	0.00	0.00
12H	4H	10.87	11.39	11.36	11.87	12.35	0.00	0.00	0.00	0.00	0.00
	6H	10.75	11.17	11.27	11.69	12.18	0.00	0.00	0.00	0.00	0.00
	8H	10.70	11.07	11.21	11.57	12.14	0.00	0.00	0.00	0.00	0.00