

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: P1060426

Luminaire Tested: S124RDRP-S350D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060426
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-S350D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

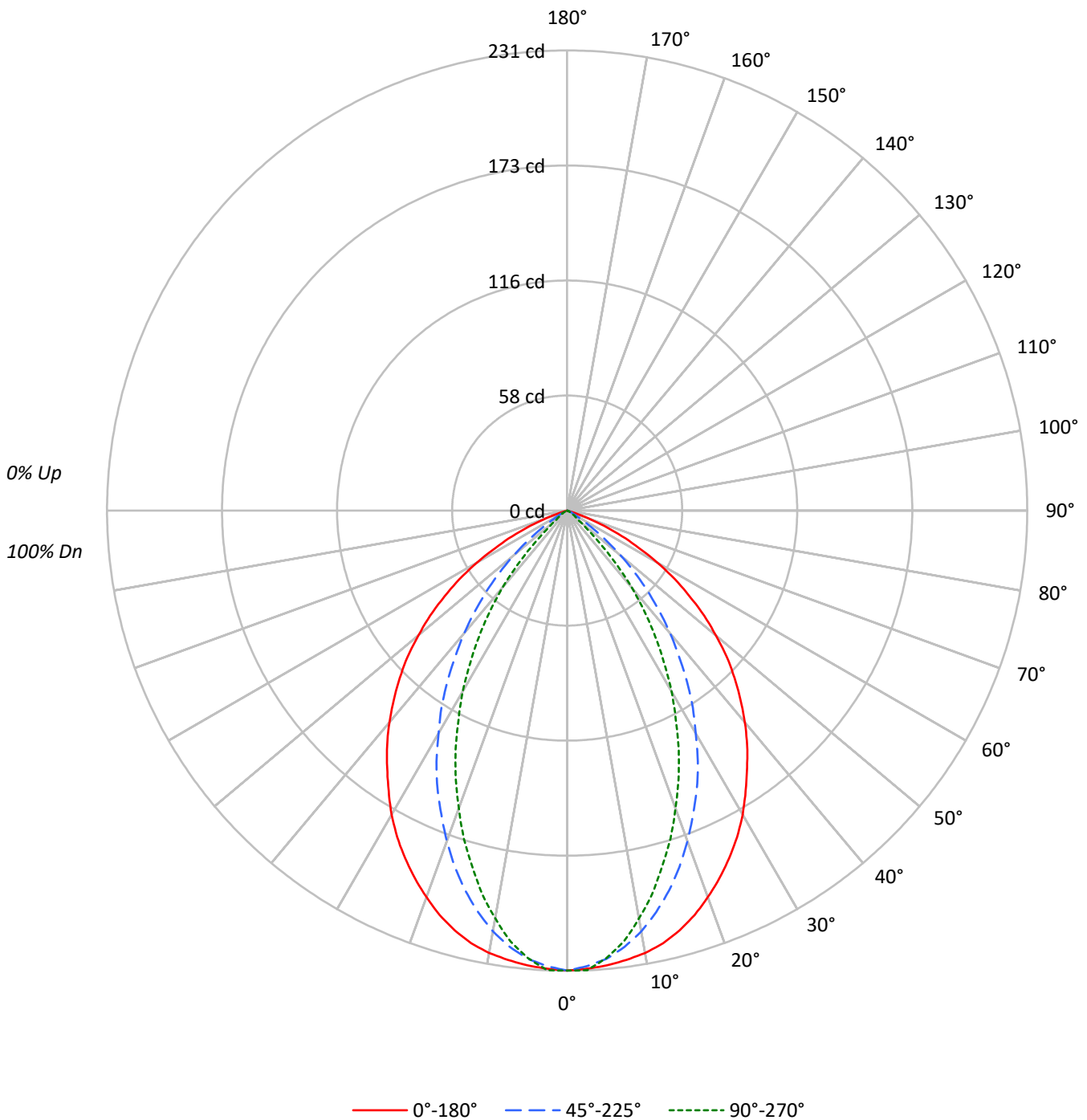
Lumens per Lamp: N/A
Luminaire Lumens: 301.5 lumens
Efficiency: N/A
Efficacy: 24.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	1988	1988	1988
5°	1981	1953	1949
10°	1972	1876	1818
15°	1945	1761	1645
20°	1892	1617	1458
25°	1829	1464	1259
30°	1752	1284	1042
35°	1656	1102	810
40°	1560	904	567
45°	1447	695	280
50°	1305	469	94
55°	1127	240	65
60°	902	86	47
65°	619	47	20
70°	277	25	18
75°	0	10	10
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1447 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	7.1
10°-20°	55.9	18.5
20°-30°	72.3	24.0
30°-40°	68.7	22.8
40°-50°	48.7	16.1
50°-60°	25.0	8.3
60°-70°	8.7	2.9
70°-80°	0.7	0.2
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°	149.6	49.6
0°-40°	218.3	72.4
0°-60°	292.0	96.9
0°-90°	301.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	229	230	226	226	226	22
15°	218	212	198	188	184	61
25°	192	178	154	138	132	89
35°	158	134	105	84	77	99
45°	119	91	57	33	23	91
55°	75	49	16	5	4	67
65°	30	15	2	1	1	30
75°	0	0	0	0	0	2
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°	230.9	230.9	230.9	230.9	230.9
2.5°	230.2	230.9	228.9	230.5	230.9
5°	229.2	229.5	225.9	225.9	225.5
7.5°	227.5	226.9	220.9	218.5	218.2
10°	225.5	223.2	214.5	209.5	207.9
12.5°	222.5	218.2	206.5	199.2	197.2
15°	218.2	211.5	197.5	188.2	184.5
17.5°	212.9	204.2	187.5	176.2	172.5
20°	206.5	195.5	176.5	163.8	159.1
22.5°	199.8	187.2	165.1	150.8	146.1
25°	192.5	177.5	154.1	137.8	132.5
27.5°	184.8	167.1	142.1	125.1	118.1
30°	176.2	156.8	129.1	111.4	104.8
32.5°	166.8	145.5	117.4	98.4	90.4
35°	157.5	134.5	104.8	84.4	77.1
37.5°	148.5	124.1	92.1	70.7	63.7
40°	138.8	112.8	80.4	58.4	50.4
42.5°	128.8	101.8	68.4	45.7	37.0
45°	118.8	91.4	57.1	32.7	23.0
47.5°	108.8	80.4	46.0	20.7	12.3
50°	97.4	69.7	35.0	11.0	7.0
52.5°	86.7	59.7	25.0	6.3	5.3
55°	75.1	49.4	16.0	4.7	4.3
57.5°	64.1	39.4	9.0	3.7	3.3
60°	52.4	30.4	5.0	3.0	2.7
62.5°	40.7	22.0	3.3	2.0	1.7
65°	30.4	14.7	2.3	1.3	1.0
67.5°	20.0	8.3	1.7	0.7	0.7
70°	11.0	4.0	1.0	0.7	0.7
72.5°	4.0	1.3	0.7	0.3	0.3
75°	0.0	0.3	0.3	0.3	0.3
77.5°	0.0	0.0	0.0	0.0	0.3
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	10.92	12.18	11.29	12.49	12.81	0.00	0.00	0.00	0.00	0.00
	3H	11.20	12.30	11.58	12.63	13.00	0.00	0.00	0.00	0.00	0.00
	4H	11.12	12.15	11.52	12.50	12.88	0.00	0.00	0.00	0.00	0.00
	6H	11.03	11.97	11.45	12.34	12.74	0.00	0.00	0.00	0.00	0.00
	8H	10.99	11.87	11.42	12.27	12.67	0.00	0.00	0.00	0.00	0.00
	12H	10.94	11.79	11.38	12.17	12.60	0.00	0.00	0.00	0.00	0.00
4H	2H	10.69	11.72	11.10	12.07	12.46	0.00	0.00	0.00	0.00	0.00
	3H	10.98	11.80	11.39	12.21	12.61	0.00	0.00	0.00	0.00	0.00
	4H	10.88	11.62	11.32	12.04	12.48	0.00	0.00	0.00	0.00	0.00
	6H	10.80	11.43	11.26	11.87	12.34	0.00	0.00	0.00	0.00	0.00
	8H	10.73	11.32	11.21	11.77	12.24	0.00	0.00	0.00	0.00	0.00
	12H	10.68	11.20	11.17	11.68	12.16	0.00	0.00	0.00	0.00	0.00
8H	4H	10.74	11.32	11.21	11.77	12.24	0.00	0.00	0.00	0.00	0.00
	6H	10.63	11.10	11.13	11.60	12.08	0.00	0.00	0.00	0.00	0.00
	8H	10.56	10.99	11.08	11.50	12.00	0.00	0.00	0.00	0.00	0.00
	12H	10.51	10.89	11.03	11.38	11.96	0.00	0.00	0.00	0.00	0.00
12H	4H	10.68	11.20	11.17	11.68	12.16	0.00	0.00	0.00	0.00	0.00
	6H	10.56	10.99	11.08	11.50	12.00	0.00	0.00	0.00	0.00	0.00
	8H	10.51	10.89	11.03	11.38	11.96	0.00	0.00	0.00	0.00	0.00