

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: P1060787

Luminaire Tested: S124RDRP-H350D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H350D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

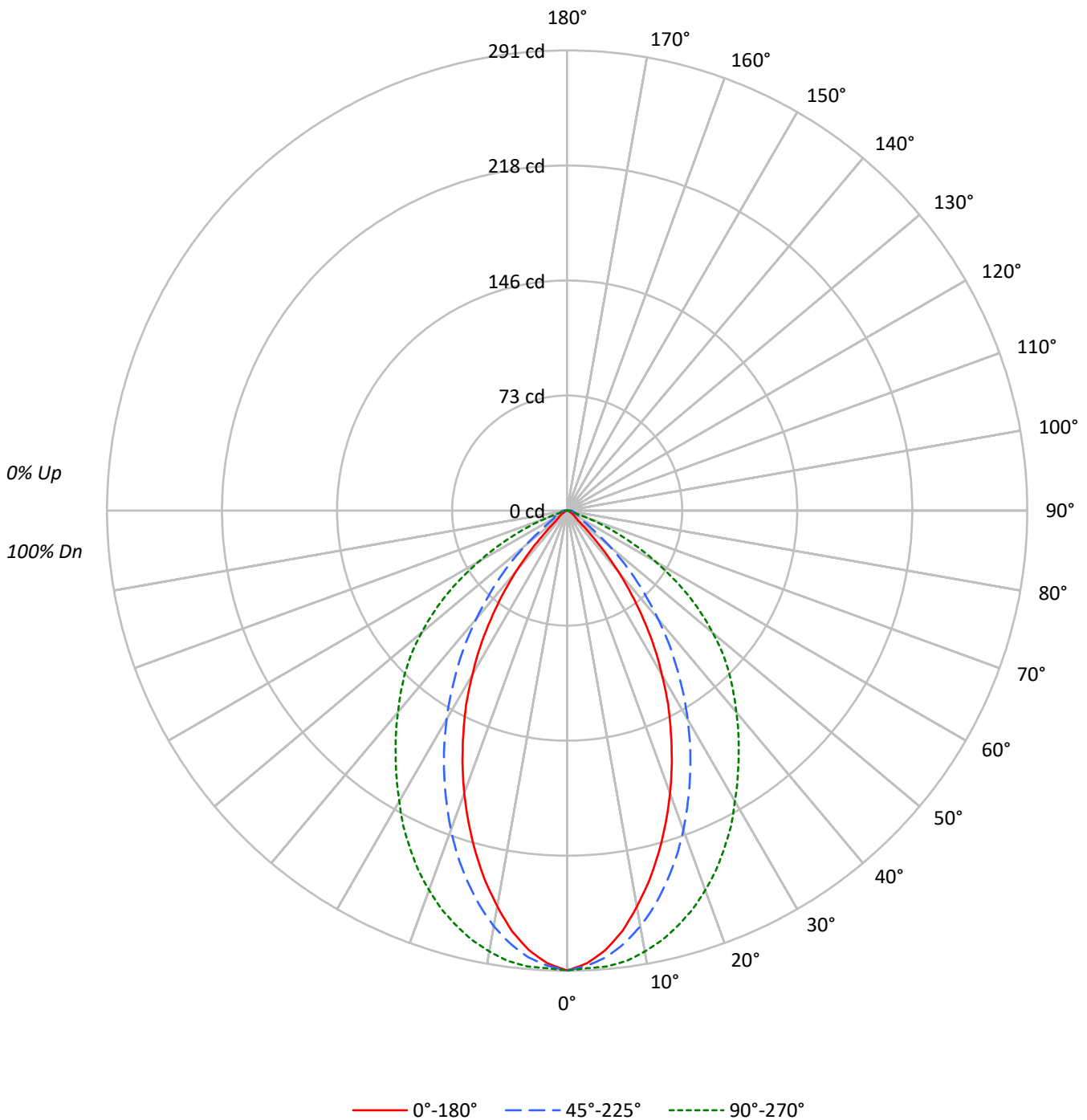
Lumens per Lamp: N/A
Luminaire Lumens: 365.0 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2504	2504	2504
5°	2411	2451	2501
10°	2223	2334	2475
15°	1995	2166	2420
20°	1744	1969	2340
25°	1475	1749	2236
30°	1191	1516	2110
35°	887	1268	1988
40°	563	1005	1871
45°	225	737	1763
50°	98	470	1610
55°	75	243	1405
60°	53	165	1114
65°	39	165	762
70°	38	146	350
75°	50	153	140
80°	74	174	154
85°	148	306	227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1763 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	7.3
10°-20°	68.7	18.8
20°-30°	86.7	23.8
30°-40°	79.7	21.8
40°-50°	54.3	14.9
50°-60°	29.5	8.1
60°-70°	12.5	3.4
70°-80°	4.3	1.2
80°-90°	2.8	0.8
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°	182.0	49.9
0°-40°	261.7	71.7
0°-60°	345.4	94.6
0°-90°	365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	279	283	284	286	289	26
15°	224	231	243	260	272	62
25°	155	165	184	213	235	71
35°	84	96	121	158	189	52
45°	18	30	60	107	145	17
55°	5	5	16	59	94	5
65°	2	2	8	18	37	2
75°	2	4	5	4	4	2
85°	2	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	290.8	290.8	290.8	290.8	290.8
2.5°	286.6	290.0	288.1	288.9	289.7
5°	278.9	283.1	283.5	285.8	289.3
7.5°	268.1	273.1	276.2	281.9	287.3
10°	254.2	260.4	266.9	276.2	283.1
12.5°	239.6	246.1	255.8	268.9	278.1
15°	223.8	231.1	243.0	260.4	271.5
17.5°	207.2	215.3	229.6	250.0	264.2
20°	190.3	199.1	214.9	238.0	255.4
22.5°	172.9	182.2	199.5	225.7	246.1
25°	155.2	165.2	184.1	212.6	235.3
27.5°	138.3	147.5	168.3	199.5	224.6
30°	119.8	130.2	152.5	186.0	212.2
32.5°	102.8	112.9	136.4	172.2	200.7
35°	84.4	95.5	120.6	158.3	189.1
37.5°	67.0	77.8	105.2	145.2	178.0
40°	50.1	61.2	89.4	132.1	166.4
42.5°	33.5	45.5	74.3	118.6	155.6
45°	18.5	29.7	60.5	107.1	144.8
47.5°	9.6	16.2	47.4	95.5	133.3
50°	7.3	8.9	35.1	82.8	120.2
52.5°	6.2	6.5	23.9	70.1	107.1
55°	5.0	5.4	16.2	58.9	93.6
57.5°	3.9	4.2	11.6	48.1	78.6
60°	3.1	3.5	9.6	37.0	64.7
62.5°	2.3	2.7	9.2	27.3	50.8
65°	1.9	2.3	8.1	18.5	37.4
67.5°	1.5	2.3	6.9	11.9	25.0
70°	1.5	3.1	5.8	7.7	13.9
72.5°	1.5	3.5	5.0	5.0	5.0
75°	1.5	4.2	4.6	4.2	4.2
77.5°	1.5	3.9	3.9	3.9	3.9
80°	1.5	3.5	3.5	3.5	3.1
82.5°	1.5	3.1	3.5	3.5	2.7
85°	1.5	3.1	3.1	3.1	2.3
87.5°	1.2	3.1	3.1	3.1	1.5
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	0.00	0.00	0.00	0.00	0.00	11.63	12.90	11.99	13.22	13.53
	3H	0.00	0.00	0.00	0.00	0.00	11.98	13.11	12.36	13.44	13.81
	4H	0.00	0.00	0.00	0.00	0.00	11.95	13.00	12.35	13.35	13.73
	6H	0.00	0.00	0.00	0.00	0.00	11.92	12.89	12.34	13.26	13.65
	8H	0.00	0.00	0.00	0.00	0.22	11.91	12.83	12.35	13.22	13.62
	12H	0.00	0.17	0.00	0.55	0.98	11.91	12.78	12.35	13.17	13.60
4H	2H	0.00	0.00	0.00	0.00	0.00	11.43	12.48	11.83	12.83	13.21
	3H	0.00	0.00	0.00	0.01	0.41	11.82	12.68	12.24	13.08	13.49
	4H	0.18	0.94	0.61	1.36	1.81	11.80	12.57	12.24	12.99	13.43
	6H	1.43	2.09	1.90	2.54	3.01	11.82	12.48	12.29	12.93	13.40
	8H	2.00	2.61	2.47	3.06	3.53	11.84	12.45	12.31	12.90	13.37
	12H	2.66	3.20	3.14	3.68	4.16	11.87	12.41	12.36	12.90	13.37
8H	4H	1.27	1.88	1.74	2.33	2.80	11.70	12.32	12.17	12.77	13.24
	6H	2.90	3.40	3.40	3.90	4.38	11.76	12.26	12.26	12.76	13.24
	8H	3.73	4.18	4.25	4.70	5.19	11.82	12.27	12.34	12.79	13.28
	12H	4.68	5.08	5.20	5.58	6.15	11.93	12.33	12.45	12.83	13.40
12H	4H	1.46	2.00	1.95	2.49	2.96	11.67	12.21	12.15	12.69	13.17
	6H	3.25	3.70	3.77	4.22	4.71	11.73	12.18	12.25	12.70	13.19
	8H	4.27	4.67	4.78	5.16	5.74	11.83	12.23	12.35	12.73	13.30