

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: P1060382

Luminaire Tested: S124RDRP-S350D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060382
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-S350D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

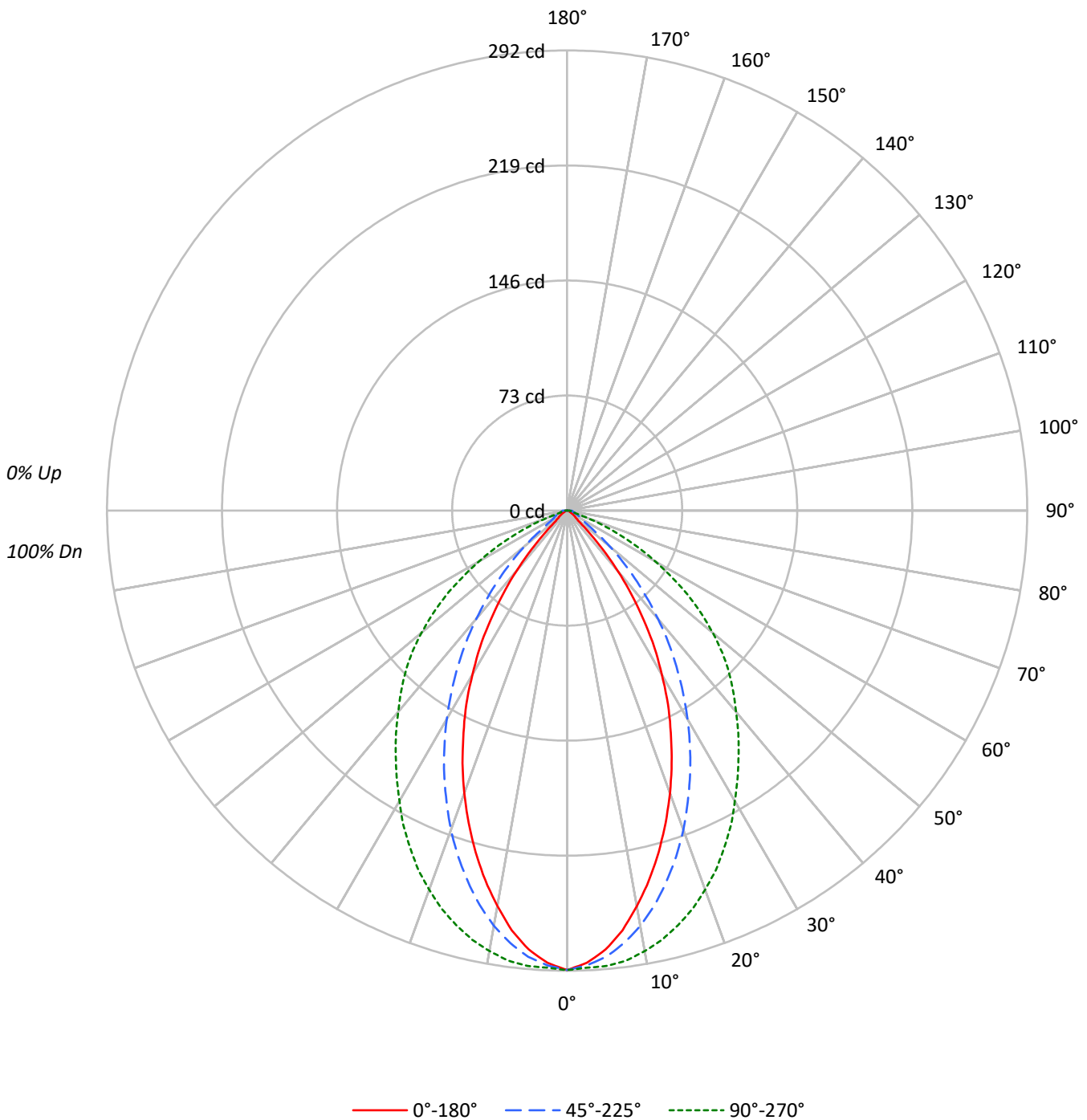
Lumens per Lamp: N/A
Luminaire Lumens: 365.9 lumens
Efficiency: N/A
Efficacy: 29.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2510	2510	2510
5°	2417	2457	2507
10°	2228	2340	2482
15°	2000	2172	2427
20°	1748	1975	2346
25°	1478	1754	2241
30°	1194	1520	2116
35°	889	1271	1993
40°	564	1007	1875
45°	225	738	1768
50°	98	470	1614
55°	75	243	1408
60°	53	167	1118
65°	39	165	764
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: 1768 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	7.3
10°-20°	68.8	18.8
20°-30°	86.9	23.8
30°-40°	79.9	21.8
40°-50°	54.4	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°	182.4	49.9
0°-40°	262.3	71.7
0°-60°	346.3	94.6
0°-90°	365.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	365.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	280	284	284	286	290	26
15°	224	232	244	261	272	62
25°	156	166	185	213	236	71
35°	85	96	121	159	190	53
45°	18	30	61	107	145	17
55°	5	5	16	59	94	5
65°	2	2	8	18	38	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°	291.5	291.5	291.5	291.5	291.5
2.5°	287.3	290.7	288.8	289.6	290.4
5°	279.6	283.8	284.2	286.5	290.0
7.5°	268.7	273.8	276.8	282.6	288.0
10°	254.8	261.0	267.6	276.8	283.8
12.5°	240.2	246.7	256.4	269.5	278.8
15°	224.3	231.7	243.6	261.0	272.2
17.5°	207.7	215.8	230.1	250.6	264.9
20°	190.7	199.6	215.5	238.6	256.0
22.5°	173.4	182.6	200.0	226.3	246.7
25°	155.6	165.6	184.6	213.1	235.9
27.5°	138.6	147.9	168.7	200.0	225.1
30°	120.1	130.5	152.9	186.5	212.8
32.5°	103.1	113.1	136.7	172.6	201.2
35°	84.6	95.8	120.9	158.7	189.6
37.5°	67.2	78.0	105.4	145.6	178.4
40°	50.2	61.4	89.6	132.4	166.8
42.5°	33.6	45.6	74.5	118.9	156.0
45°	18.5	29.7	60.6	107.3	145.2
47.5°	9.7	16.2	47.5	95.8	133.6
50°	7.3	8.9	35.1	83.0	120.5
52.5°	6.2	6.6	23.9	70.3	107.3
55°	5.0	5.4	16.2	59.1	93.8
57.5°	3.9	4.2	11.6	48.3	78.8
60°	3.1	3.5	9.7	37.1	64.9
62.5°	2.3	2.7	9.3	27.4	51.0
65°	1.9	2.3	8.1	18.5	37.5
67.5°	1.5	2.3	7.0	12.0	25.1
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	11.64	12.92	12.01	13.23	13.55
	3H	0.00	0.00	0.00	0.00	0.00	12.00	13.13	12.38	13.46	13.82
	4H	0.00	0.00	0.00	0.00	0.00	11.97	13.01	12.37	13.37	13.75
	6H	0.00	0.00	0.00	0.00	0.00	11.94	12.90	12.36	13.27	13.67
	8H	0.00	0.00	0.00	0.00	0.21	11.93	12.84	12.36	13.23	13.64
	12H	0.00	0.16	0.00	0.54	0.97	11.93	12.80	12.36	13.18	13.61
4H	2H	0.00	0.00	0.00	0.00	0.00	11.45	12.50	11.85	12.85	13.23
	3H	0.00	0.00	0.00	0.00	0.41	11.84	12.70	12.25	13.10	13.50
	4H	0.17	0.94	0.61	1.36	1.80	11.82	12.58	12.26	13.00	13.45
	6H	1.43	2.08	1.89	2.53	3.00	11.84	12.50	12.30	12.95	13.41
	8H	1.99	2.60	2.46	3.05	3.52	11.85	12.47	12.32	12.91	13.38
	12H	2.65	3.19	3.14	3.68	4.15	11.89	12.43	12.37	12.91	13.39
8H	4H	1.26	1.87	1.73	2.32	2.79	11.72	12.34	12.19	12.78	13.25
	6H	2.89	3.39	3.39	3.89	4.37	11.77	12.27	12.28	12.77	13.25
	8H	3.72	4.17	4.24	4.69	5.18	11.83	12.28	12.35	12.80	13.29
	12H	4.68	5.08	5.19	5.57	6.14	11.95	12.35	12.46	12.84	13.41
12H	4H	1.45	2.00	1.94	2.48	2.96	11.68	12.22	12.17	12.71	13.18
	6H	3.24	3.69	3.76	4.21	4.70	11.74	12.19	12.26	12.71	13.20
	8H	4.26	4.66	4.78	5.16	5.73	11.85	12.25	12.36	12.74	13.31