

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: P1060433

Luminaire Tested: S124RDRP-S350D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

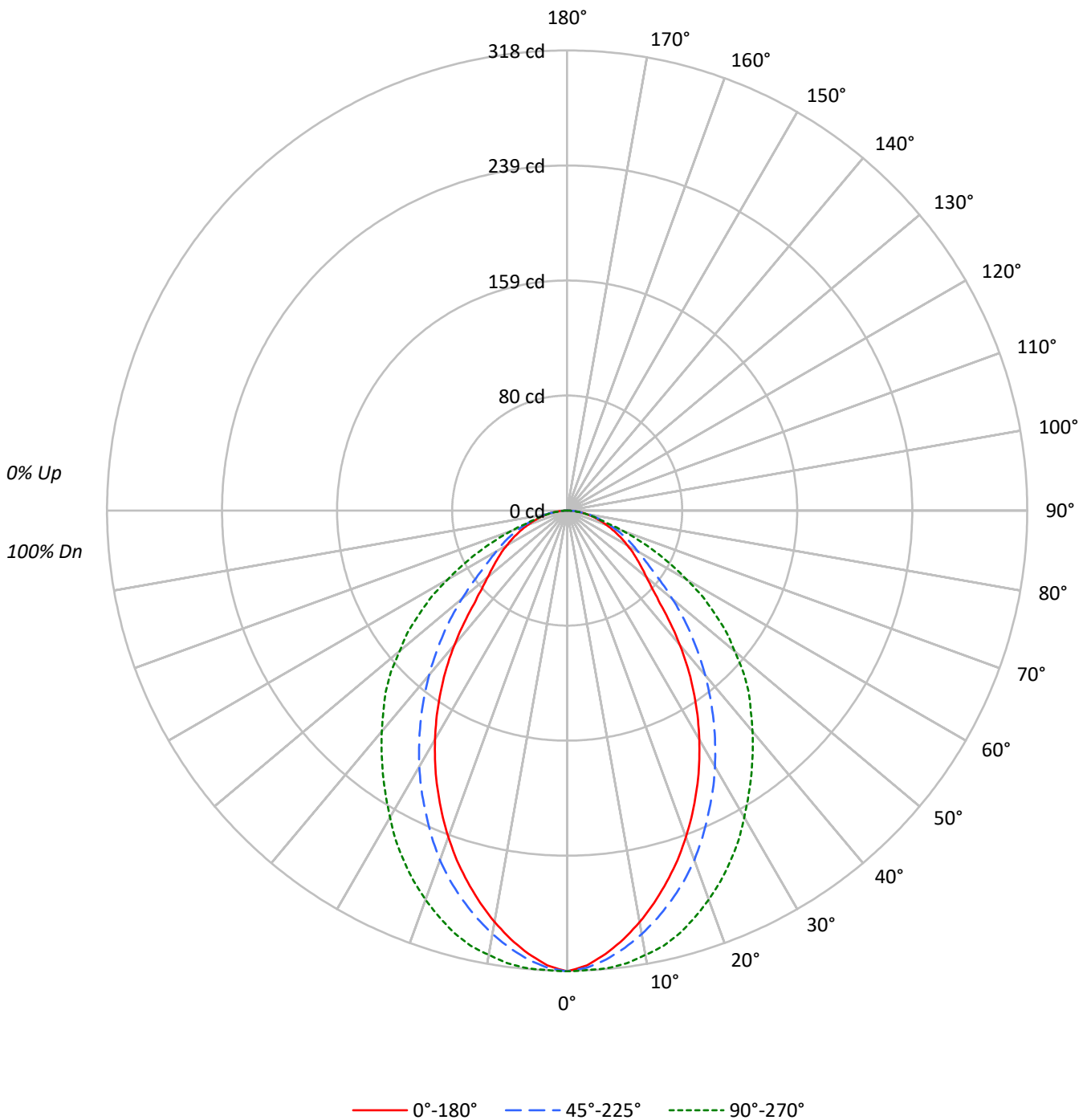
Lumens per Lamp: N/A
Luminaire Lumens: 579.8 lumens
Efficiency: N/A
Efficacy: 46.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2743	2743	2743
5°	2657	2692	2744
10°	2524	2598	2726
15°	2369	2485	2693
20°	2199	2355	2622
25°	2014	2195	2538
30°	1816	2031	2433
35°	1600	1853	2334
40°	1362	1669	2240
45°	1106	1476	2159
50°	957	1270	2022
55°	887	1078	1874
60°	828	971	1645
65°	776	911	1367
70°	723	841	1035
75°	689	779	745
80°	645	714	630
85°	593	662	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2159 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.4	5.1
10°-20°	79.0	13.6
20°-30°	107.9	18.6
30°-40°	113.1	19.5
40°-50°	97.9	16.9
50°-60°	73.5	12.7
60°-70°	47.4	8.2
70°-80°	24.3	4.2
80°-90°	7.3	1.3
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°	216.3	37.3
0°-40°	329.4	56.8
0°-60°	500.8	86.4
0°-90°	579.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	579.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	307	312	311	314	318	29
15°	266	272	279	291	302	74
25°	212	220	231	249	267	97
35°	152	161	176	200	222	95
45°	91	100	121	151	177	72
55°	59	61	72	102	125	53
65°	38	39	45	54	67	38
75°	21	23	23	23	22	22
85°	6	7	7	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	318.5	318.5	318.5	318.5	318.5
2.5°	314.5	318.5	316.1	316.8	317.8
5°	307.4	312.1	311.4	313.8	317.5
7.5°	298.8	303.8	304.8	310.1	315.5
10°	288.7	294.4	297.1	305.1	311.8
12.5°	277.7	283.7	288.4	298.4	308.1
15°	265.7	272.4	278.7	291.4	302.1
17.5°	253.4	260.0	268.4	282.4	294.4
20°	240.0	247.4	257.0	271.7	286.1
22.5°	226.3	234.0	244.4	260.4	277.1
25°	212.0	220.0	231.0	249.0	267.1
27.5°	197.6	205.6	218.0	237.0	256.7
30°	182.6	190.9	204.3	225.0	244.7
32.5°	167.6	176.6	190.3	212.3	233.3
35°	152.2	160.9	176.3	199.6	222.0
37.5°	136.9	145.9	162.2	187.3	210.6
40°	121.2	130.5	148.5	174.9	199.3
42.5°	105.5	115.5	134.5	162.2	187.9
45°	90.8	100.1	121.2	150.9	177.3
47.5°	79.8	86.1	107.8	139.9	165.2
50°	71.4	74.8	94.8	127.9	150.9
52.5°	65.1	67.4	82.8	114.8	139.2
55°	59.1	61.1	71.8	102.5	124.8
57.5°	53.7	54.7	63.4	90.5	111.2
60°	48.1	49.1	56.4	77.4	95.5
62.5°	43.1	43.7	50.7	65.1	81.1
65°	38.1	38.7	44.7	54.1	67.1
67.5°	33.4	34.4	39.1	44.1	53.4
70°	28.7	30.7	33.4	35.7	41.1
72.5°	24.7	26.7	28.0	28.7	29.0
75°	20.7	23.0	23.4	23.0	22.4
77.5°	16.7	18.7	18.7	18.0	17.4
80°	13.0	14.7	14.4	13.7	12.7
82.5°	9.7	10.7	10.3	9.7	8.7
85°	6.0	7.0	6.7	6.3	5.0
87.5°	3.0	4.0	3.7	3.3	2.0
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	9.93	11.42	10.30	11.73	12.04	13.71	15.20	14.08	15.51	15.83
	3H	11.59	12.92	11.97	13.25	13.61	14.83	16.16	15.21	16.48	16.85
	4H	12.26	13.51	12.66	13.86	14.23	15.12	16.36	15.52	16.71	17.09
	6H	12.77	13.92	13.19	14.29	14.68	15.31	16.46	15.73	16.83	17.22
	8H	12.96	14.05	13.38	14.44	14.84	15.37	16.46	15.80	16.85	17.25
	12H	13.08	14.13	13.51	14.51	14.94	15.39	16.44	15.83	16.82	17.25
4H	2H	10.71	11.96	11.12	12.31	12.69	13.87	15.12	14.27	15.47	15.84
	3H	12.58	13.61	12.99	14.01	14.41	15.18	16.22	15.59	16.62	17.02
	4H	13.39	14.32	13.82	14.73	15.17	15.59	16.52	16.02	16.94	17.37
	6H	14.03	14.84	14.49	15.29	15.75	15.91	16.71	16.36	17.16	17.62
	8H	14.26	15.02	14.73	15.46	15.93	16.00	16.75	16.46	17.20	17.67
	12H	14.43	15.11	14.92	15.59	16.06	16.06	16.73	16.54	17.21	17.68
8H	4H	13.74	14.49	14.20	14.94	15.40	15.72	16.48	16.19	16.92	17.39
	6H	14.53	15.15	15.03	15.65	16.12	16.14	16.76	16.63	17.25	17.73
	8H	14.85	15.41	15.37	15.92	16.41	16.29	16.85	16.80	17.36	17.85
	12H	15.12	15.61	15.63	16.10	16.67	16.41	16.90	16.92	17.40	17.96
12H	4H	13.77	14.44	14.25	14.92	15.39	15.73	16.40	16.21	16.88	17.35
	6H	14.59	15.15	15.11	15.66	16.15	16.16	16.72	16.67	17.23	17.72
	8H	14.98	15.48	15.49	15.97	16.53	16.36	16.85	16.87	17.35	17.91