

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: P1060432

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
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-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

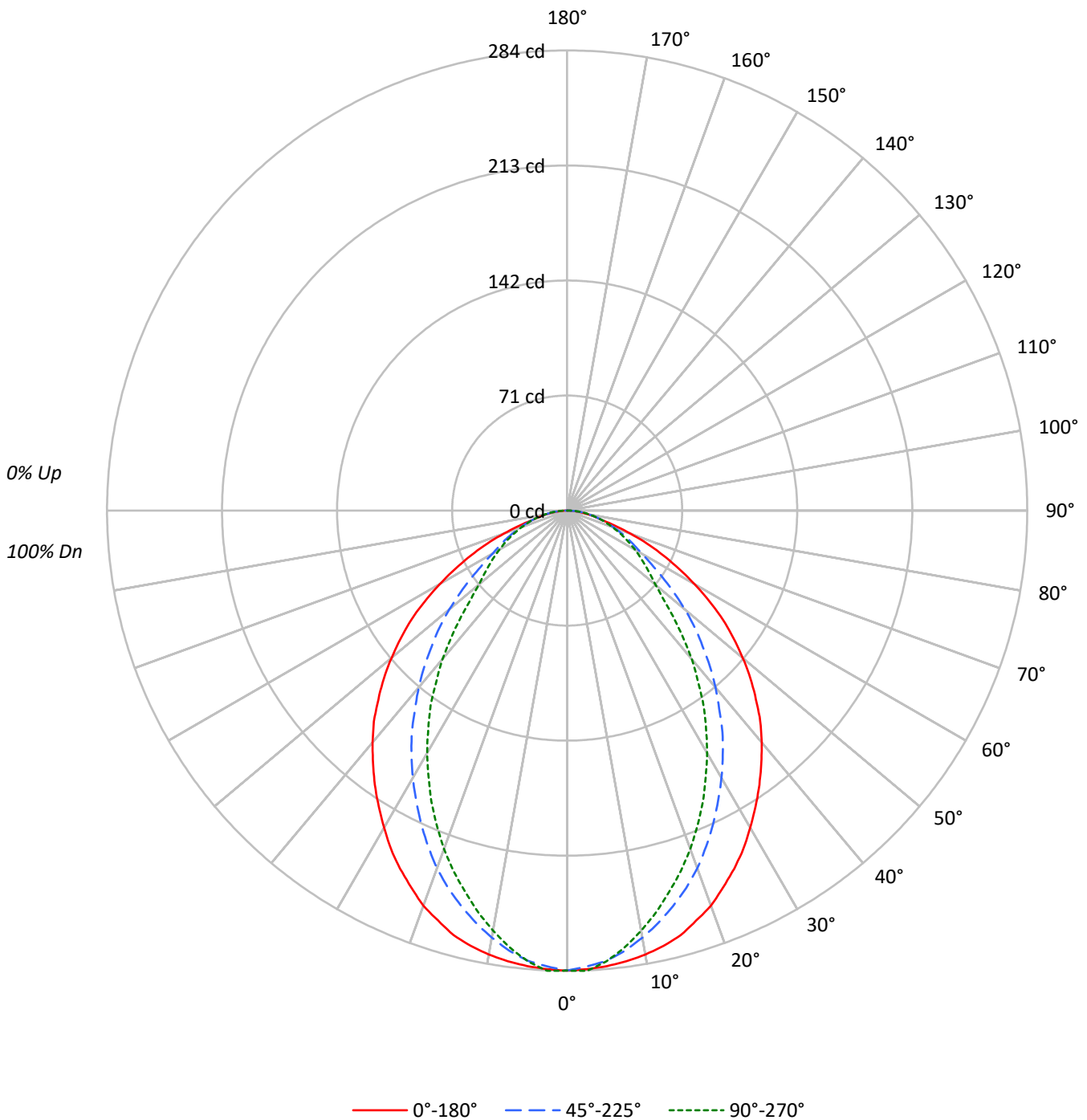
Lumens per Lamp: N/A
Luminaire Lumens: 547.4 lumens
Efficiency: N/A
Efficacy: 43.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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													100															
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86													86															
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74													74															
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64													64															
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56													56															
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50													50															
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44													44															
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36													36															
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33													33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30													30															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2445	2445	2445
5°	2439	2411	2413
10°	2433	2340	2301
15°	2418	2252	2171
20°	2379	2153	2036
25°	2317	2026	1883
30°	2246	1894	1718
35°	2174	1757	1543
40°	2100	1602	1347
45°	2007	1438	1125
50°	1896	1270	952
55°	1763	1076	881
60°	1562	913	834
65°	1333	844	789
70°	1042	780	748
75°	712	722	722
80°	610	679	694
85°	524	662	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2007 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	4.8
10°-20°	71.7	13.1
20°-30°	99.6	18.2
30°-40°	106.8	19.5
40°-50°	94.6	17.3
50°-60°	71.3	13.0
60°-70°	46.1	8.4
70°-80°	23.7	4.3
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°	197.7	36.1
0°-40°	304.5	55.6
0°-60°	470.4	85.9
0°-90°	547.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	547.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	284	284	284	284	284	
5°	282	283	279	279	279	27
15°	271	265	253	246	244	76
25°	244	231	213	202	198	112
35°	207	188	167	152	147	129
45°	165	144	118	100	92	127
55°	117	98	72	60	59	104
65°	65	53	41	39	39	65
75°	21	22	22	22	22	25
85°	5	6	7	7	7	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	283.9	283.9	283.9	283.9	283.9
2.5°	283.3	284.3	281.6	283.6	284.3
5°	282.2	282.6	278.9	279.2	279.2
7.5°	280.6	279.9	273.9	272.2	271.9
10°	278.2	276.2	267.6	264.2	263.2
12.5°	275.2	271.6	260.6	255.9	253.9
15°	271.2	265.2	252.6	246.2	243.5
17.5°	265.2	257.6	244.2	236.2	233.2
20°	259.6	249.2	234.9	224.9	222.2
22.5°	251.6	240.5	224.2	213.5	210.2
25°	243.9	230.9	213.2	201.8	198.2
27.5°	235.5	220.9	201.8	189.8	185.2
30°	225.9	210.2	190.5	177.8	172.8
32.5°	216.5	199.8	178.8	164.8	159.5
35°	206.8	188.2	167.1	152.1	146.8
37.5°	196.8	177.2	154.1	139.5	132.5
40°	186.8	166.1	142.5	125.8	119.8
42.5°	176.5	154.8	130.4	113.1	105.4
45°	164.8	143.5	118.1	99.8	92.4
47.5°	153.5	132.5	106.8	86.7	80.1
50°	141.5	120.8	94.8	75.4	71.1
52.5°	129.4	108.8	83.1	66.7	64.7
55°	117.4	97.8	71.7	60.4	58.7
57.5°	104.1	86.4	61.7	54.7	53.4
60°	90.7	74.1	53.0	49.4	48.4
62.5°	77.7	63.4	47.0	44.0	43.4
65°	65.4	52.7	41.4	39.0	38.7
67.5°	53.4	43.4	36.0	34.7	34.0
70°	41.4	34.7	31.0	30.4	29.7
72.5°	30.7	28.0	26.4	26.0	25.7
75°	21.4	22.4	21.7	21.7	21.7
77.5°	17.0	17.3	17.7	18.0	17.7
80°	12.3	13.3	13.7	14.3	14.0
82.5°	8.7	9.3	10.3	10.7	11.0
85°	5.3	5.7	6.7	7.3	7.3
87.5°	2.3	2.7	3.3	4.0	4.3
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	13.55	15.04	13.91	15.36	15.67	10.11	11.61	10.47	11.92	12.24
	3H	14.75	16.09	15.13	16.42	16.78	11.80	13.15	12.18	13.48	13.84
	4H	15.06	16.32	15.46	16.67	17.05	12.48	13.74	12.88	14.09	14.47
	6H	15.26	16.42	15.67	16.79	17.18	13.03	14.19	13.44	14.56	14.95
	8H	15.32	16.42	15.74	16.81	17.22	13.25	14.36	13.68	14.75	15.15
	12H	15.35	16.41	15.78	16.79	17.22	13.42	14.48	13.85	14.86	15.29
4H	2H	13.69	14.95	14.09	15.30	15.67	10.77	12.03	11.17	12.38	12.76
	3H	15.09	16.13	15.50	16.54	16.94	12.68	13.73	13.09	14.13	14.53
	4H	15.52	16.46	15.95	16.87	17.31	13.48	14.42	13.92	14.84	15.28
	6H	15.84	16.66	16.30	17.10	17.56	14.17	14.99	14.63	15.43	15.89
	8H	15.94	16.70	16.40	17.15	17.61	14.44	15.21	14.91	15.65	16.12
	12H	16.01	16.69	16.49	17.17	17.64	14.67	15.35	15.15	15.83	16.30
8H	4H	15.64	16.41	16.11	16.85	17.32	13.80	14.56	14.26	15.01	15.48
	6H	16.06	16.70	16.56	17.19	17.66	14.63	15.26	15.12	15.75	16.23
	8H	16.22	16.79	16.73	17.30	17.79	14.99	15.56	15.51	16.07	16.56
	12H	16.35	16.85	16.86	17.34	17.91	15.32	15.83	15.83	16.32	16.88
12H	4H	15.65	16.33	16.13	16.81	17.28	13.83	14.51	14.31	14.99	15.46
	6H	16.09	16.66	16.60	17.17	17.65	14.69	15.25	15.20	15.76	16.25
	8H	16.30	16.80	16.81	17.29	17.86	15.12	15.62	15.63	16.11	16.68