

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: P1060434

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

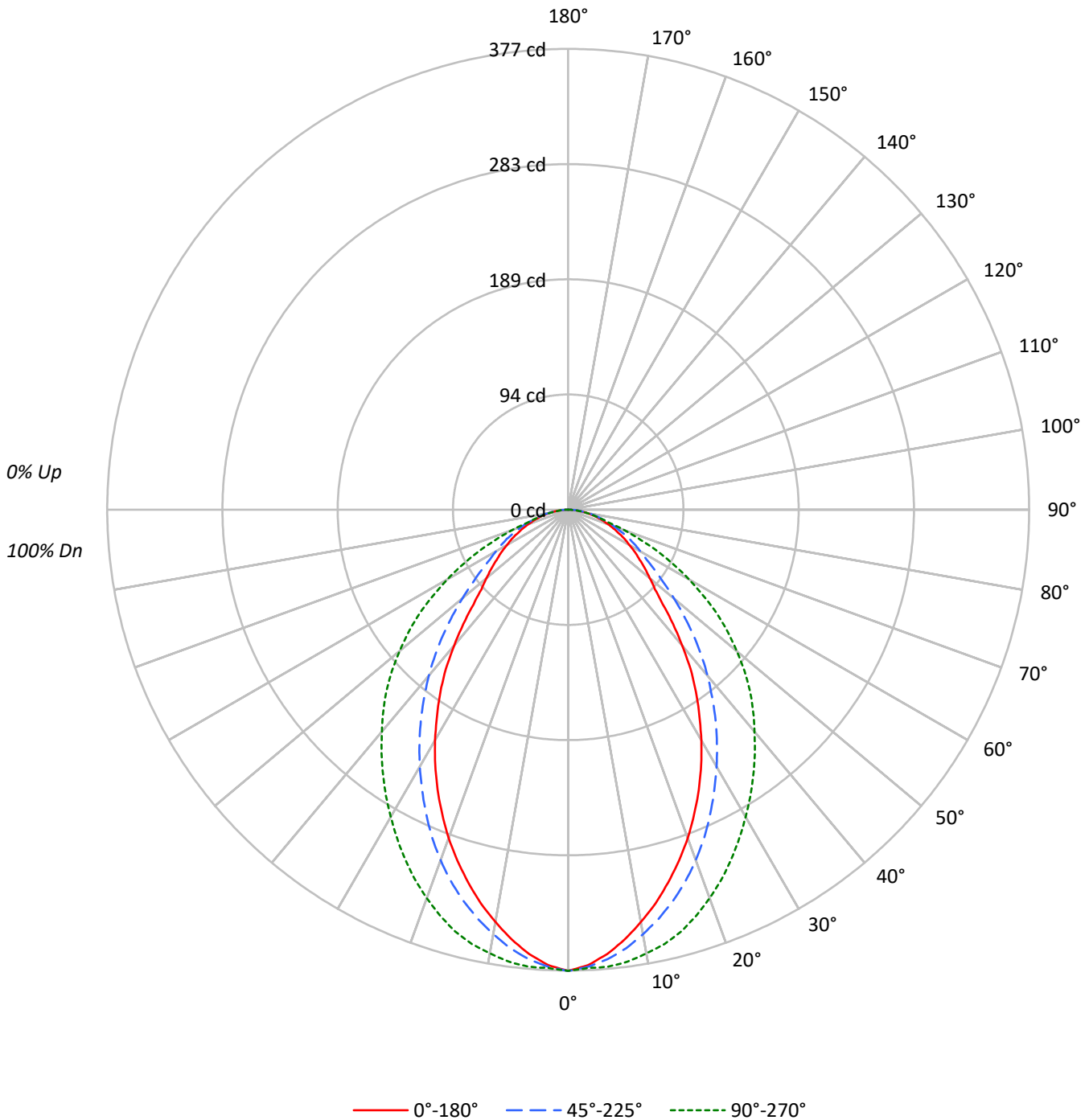
Lumens per Lamp: N/A
Luminaire Lumens: 692.2 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: S124RDRP-S350D930-X4F0-XX-UDD-WVL-W

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	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3154	3191	3244
10°	2995	3083	3223
15°	2815	2953	3184
20°	2619	2796	3099
25°	2401	2611	2998
30°	2165	2413	2885
35°	1916	2208	2776
40°	1629	1993	2664
45°	1333	1761	2561
50°	1167	1511	2410
55°	1072	1303	2231
60°	995	1173	1967
65°	931	1102	1646
70°	874	1010	1236
75°	822	922	898
80°	764	843	764
85°	692	820	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2561 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	5.0
10°-20°	93.8	13.6
20°-30°	128.2	18.5
30°-40°	134.8	19.5
40°-50°	117.0	16.9
50°-60°	88.2	12.7
60°-70°	57.2	8.3
70°-80°	29.4	4.2
80°-90°	8.9	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°	256.9	37.1
0°-40°	391.7	56.6
0°-60°	596.8	86.2
0°-90°	692.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	365	370	369	372	375	34
15°	316	324	331	346	357	89
25°	253	262	275	296	316	116
35°	182	192	210	238	264	113
45°	110	120	145	181	210	86
55°	71	73	87	123	149	64
65°	46	47	54	65	81	46
75°	25	28	28	28	27	26
85°	7	9	8	8	7	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	377.3	377.3	377.3	377.3	377.3
2.5°	372.9	377.6	374.3	374.9	375.3
5°	364.9	369.9	369.2	372.2	375.3
7.5°	354.6	360.6	361.9	367.9	372.9
10°	342.5	349.2	352.6	362.2	368.6
12.5°	329.9	336.5	342.5	354.9	363.9
15°	315.8	323.5	331.2	346.2	357.2
17.5°	301.1	309.2	318.8	335.2	348.2
20°	285.8	293.8	305.1	322.8	338.2
22.5°	269.4	278.4	290.5	309.5	327.5
25°	252.7	261.7	274.8	295.8	315.5
27.5°	235.4	244.7	258.7	282.1	303.1
30°	217.7	227.7	242.7	267.4	290.1
32.5°	199.6	210.3	226.4	252.7	277.4
35°	182.3	192.3	210.0	238.0	264.1
37.5°	164.3	174.3	193.3	223.7	250.7
40°	144.9	155.9	177.3	208.7	237.0
42.5°	126.9	137.9	160.9	194.3	224.0
45°	109.5	119.9	144.6	180.6	210.3
47.5°	96.2	103.5	128.2	167.3	195.6
50°	87.1	90.5	112.8	152.6	179.9
52.5°	79.1	81.8	98.8	137.9	164.6
55°	71.4	73.4	86.8	123.2	148.6
57.5°	64.8	65.8	76.1	108.5	131.2
60°	57.8	59.1	68.1	93.5	114.2
62.5°	52.1	52.7	61.1	79.1	97.2
65°	45.7	46.7	54.1	65.4	80.8
67.5°	40.1	41.7	46.7	53.4	63.8
70°	34.7	37.1	40.1	43.4	49.1
72.5°	29.7	32.4	34.1	35.4	34.4
75°	24.7	27.7	27.7	28.0	27.0
77.5°	20.0	22.7	22.4	22.0	20.7
80°	15.4	17.7	17.0	16.7	15.4
82.5°	11.4	13.0	12.4	12.0	10.3
85°	7.0	8.7	8.3	8.0	6.7
87.5°	3.3	5.0	4.7	4.3	3.0
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	10.60	12.09	10.96	12.40	12.71	14.33	15.82	14.70	16.13	16.45
	3H	12.27	13.60	12.64	13.93	14.29	15.46	16.79	15.84	17.12	17.48
	4H	12.93	14.18	13.33	14.53	14.91	15.76	17.00	16.16	17.35	17.73
	6H	13.44	14.59	13.85	14.96	15.35	15.96	17.11	16.37	17.48	17.87
	8H	13.62	14.71	14.04	15.10	15.50	16.01	17.11	16.44	17.50	17.90
	12H	13.74	14.79	14.17	15.17	15.60	16.04	17.09	16.47	17.48	17.91
4H	2H	11.39	12.64	11.79	12.99	13.37	14.50	15.75	14.90	16.10	16.48
	3H	13.26	14.30	13.67	14.70	15.10	15.83	16.87	16.24	17.27	17.67
	4H	14.07	15.00	14.50	15.41	15.85	16.25	17.18	16.68	17.59	18.03
	6H	14.71	15.52	15.17	15.96	16.42	16.57	17.38	17.03	17.82	18.28
	8H	14.93	15.69	15.40	16.14	16.60	16.66	17.42	17.13	17.86	18.33
	12H	15.10	15.77	15.58	16.25	16.72	16.73	17.41	17.22	17.89	18.36
8H	4H	14.41	15.17	14.88	15.62	16.08	16.38	17.14	16.84	17.58	18.05
	6H	15.20	15.83	15.70	16.32	16.80	16.80	17.42	17.30	17.92	18.39
	8H	15.52	16.08	16.04	16.59	17.08	16.96	17.52	17.47	18.03	18.52
	12H	15.79	16.28	16.30	16.78	17.34	17.09	17.59	17.61	18.08	18.65
12H	4H	14.44	15.12	14.93	15.60	16.07	16.38	17.06	16.87	17.54	18.01
	6H	15.27	15.83	15.78	16.34	16.83	16.82	17.38	17.34	17.89	18.38
	8H	15.65	16.15	16.16	16.64	17.21	17.03	17.53	17.54	18.02	18.58