

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: P1060441

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060441
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-S350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

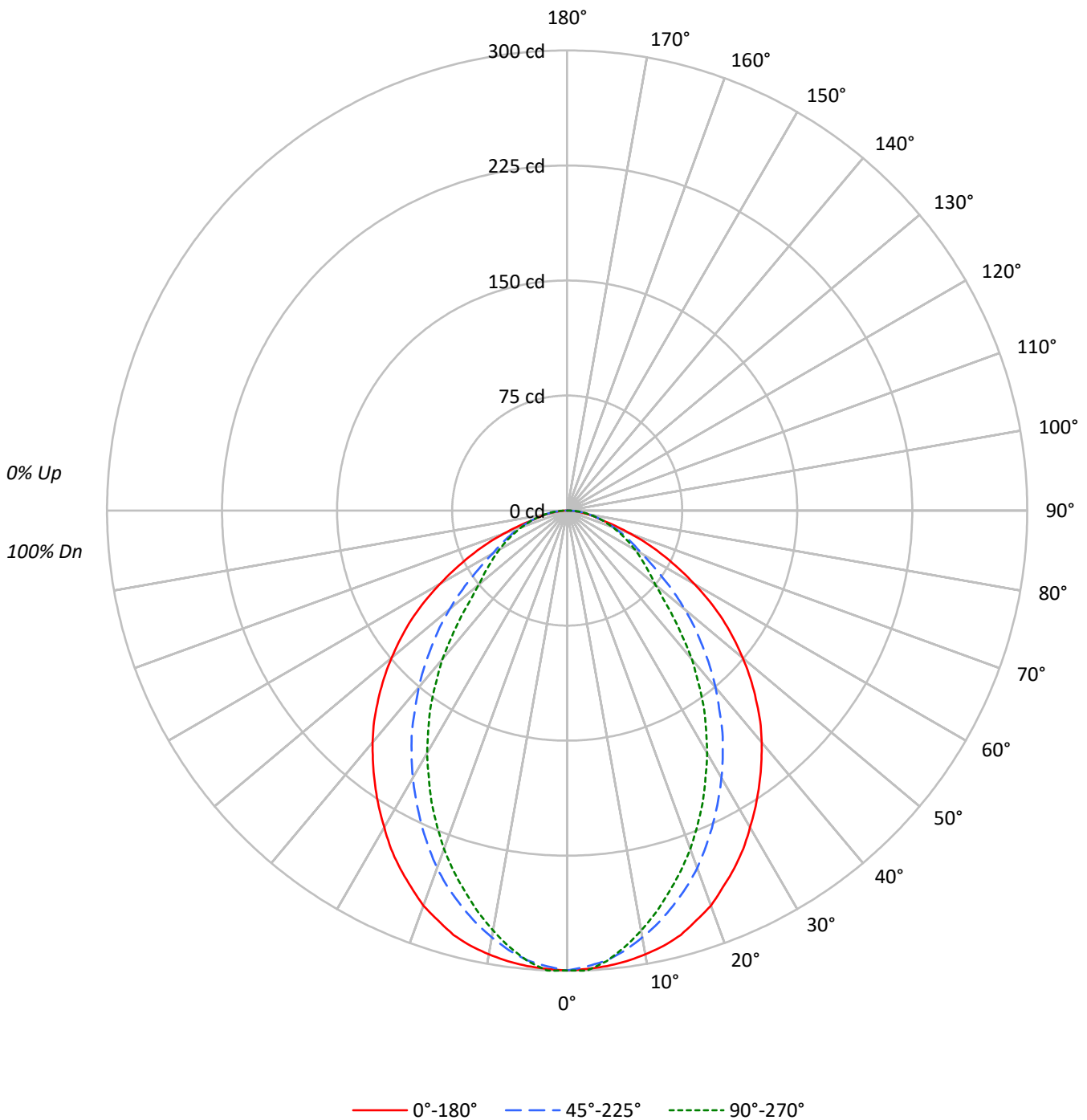
Lumens per Lamp: N/A
Luminaire Lumens: 578.1 lumens
Efficiency: N/A
Efficacy: 46.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2582	2582	2582
5°	2577	2546	2549
10°	2569	2471	2431
15°	2553	2378	2293
20°	2512	2273	2151
25°	2448	2139	1989
30°	2371	2001	1815
35°	2296	1855	1629
40°	2218	1691	1422
45°	2120	1519	1189
50°	2001	1341	1005
55°	1862	1138	931
60°	1650	964	880
65°	1408	890	833
70°	1100	826	791
75°	749	762	762
80°	645	714	734
85°	553	692	771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2120 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	4.8
10°-20°	75.8	13.1
20°-30°	105.2	18.2
30°-40°	112.7	19.5
40°-50°	99.9	17.3
50°-60°	75.3	13.0
60°-70°	48.7	8.4
70°-80°	25.0	4.3
80°-90°	7.7	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°	208.8	36.1
0°-40°	321.6	55.6
0°-60°	496.7	85.9
0°-90°	578.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	298	298	294	295	295	28
15°	286	280	267	260	257	81
25°	258	244	225	213	209	119
35°	218	199	176	161	155	137
45°	174	152	125	105	98	134
55°	124	103	76	64	62	110
65°	69	56	44	41	41	68
75°	22	24	23	23	23	27
85°	6	6	7	8	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	299.8	299.8	299.8	299.8	299.8
2.5°	299.1	300.2	297.4	299.5	300.2
5°	298.1	298.4	294.5	294.9	294.9
7.5°	296.3	295.6	289.3	287.5	287.1
10°	293.8	291.7	282.6	279.0	278.0
12.5°	290.7	286.8	275.2	270.2	268.1
15°	286.4	280.1	266.7	260.0	257.2
17.5°	280.1	272.0	257.9	249.4	246.3
20°	274.1	263.2	248.0	237.5	234.7
22.5°	265.7	254.0	236.8	225.5	222.0
25°	257.6	243.8	225.1	213.2	209.3
27.5°	248.7	233.2	213.2	200.5	195.5
30°	238.5	222.0	201.2	187.8	182.5
32.5°	228.7	211.0	188.8	174.1	168.4
35°	218.4	198.7	176.5	160.7	155.0
37.5°	207.9	187.1	162.8	147.3	139.9
40°	197.3	175.5	150.4	132.8	126.5
42.5°	186.4	163.5	137.8	119.4	111.3
45°	174.1	151.5	124.7	105.3	97.6
47.5°	162.1	139.9	112.7	91.6	84.6
50°	149.4	127.5	100.1	79.6	75.0
52.5°	136.7	114.9	87.7	70.5	68.4
55°	124.0	103.2	75.8	63.8	62.0
57.5°	109.9	91.3	65.2	57.8	56.4
60°	95.8	78.2	56.0	52.1	51.1
62.5°	82.1	66.9	49.7	46.5	45.8
65°	69.1	55.7	43.7	41.2	40.9
67.5°	56.4	45.8	38.1	36.6	35.9
70°	43.7	36.6	32.8	32.1	31.4
72.5°	32.4	29.6	27.8	27.5	27.1
75°	22.5	23.6	22.9	22.9	22.9
77.5°	18.0	18.3	18.7	19.0	18.7
80°	13.0	14.1	14.4	15.2	14.8
82.5°	9.2	9.9	10.9	11.3	11.6
85°	5.6	6.0	7.0	7.8	7.8
87.5°	2.5	2.8	3.5	4.2	4.6
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	13.74	15.24	14.10	15.55	15.86	10.30	11.80	10.67	12.11	12.43
	3H	14.94	16.28	15.32	16.61	16.97	12.00	13.34	12.37	13.67	14.03
	4H	15.25	16.51	15.65	16.86	17.23	12.67	13.93	13.07	14.28	14.66
	6H	15.45	16.61	15.86	16.98	17.37	13.22	14.39	13.63	14.75	15.14
	8H	15.51	16.61	15.93	17.00	17.41	13.44	14.55	13.87	14.94	15.34
	12H	15.54	16.60	15.97	16.98	17.41	13.61	14.67	14.04	15.06	15.48
4H	2H	13.88	15.14	14.28	15.49	15.87	10.96	12.22	11.36	12.57	12.95
	3H	15.28	16.32	15.69	16.72	17.13	12.87	13.92	13.28	14.32	14.72
	4H	15.71	16.65	16.14	17.06	17.50	13.67	14.61	14.10	15.03	15.47
	6H	16.03	16.85	16.49	17.29	17.75	14.36	15.18	14.82	15.62	16.08
	8H	16.13	16.89	16.59	17.34	17.80	14.63	15.40	15.10	15.84	16.31
	12H	16.20	16.88	16.68	17.36	17.83	14.87	15.55	15.35	16.03	16.50
8H	4H	15.83	16.60	16.30	17.04	17.51	13.99	14.75	14.45	15.20	15.66
	6H	16.25	16.89	16.75	17.38	17.85	14.82	15.45	15.32	15.94	16.42
	8H	16.41	16.98	16.93	17.49	17.98	15.18	15.75	15.70	16.26	16.75
	12H	16.54	17.04	17.05	17.53	18.10	15.52	16.02	16.03	16.51	17.08
12H	4H	15.84	16.52	16.32	17.00	17.47	14.02	14.70	14.50	15.18	15.65
	6H	16.28	16.85	16.79	17.36	17.84	14.88	15.45	15.39	15.96	16.44
	8H	16.49	16.99	17.00	17.48	18.05	15.31	15.81	15.82	16.30	16.87