

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: P1060864

Luminaire Tested: S124RDRP-H350D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060864
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-H350D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

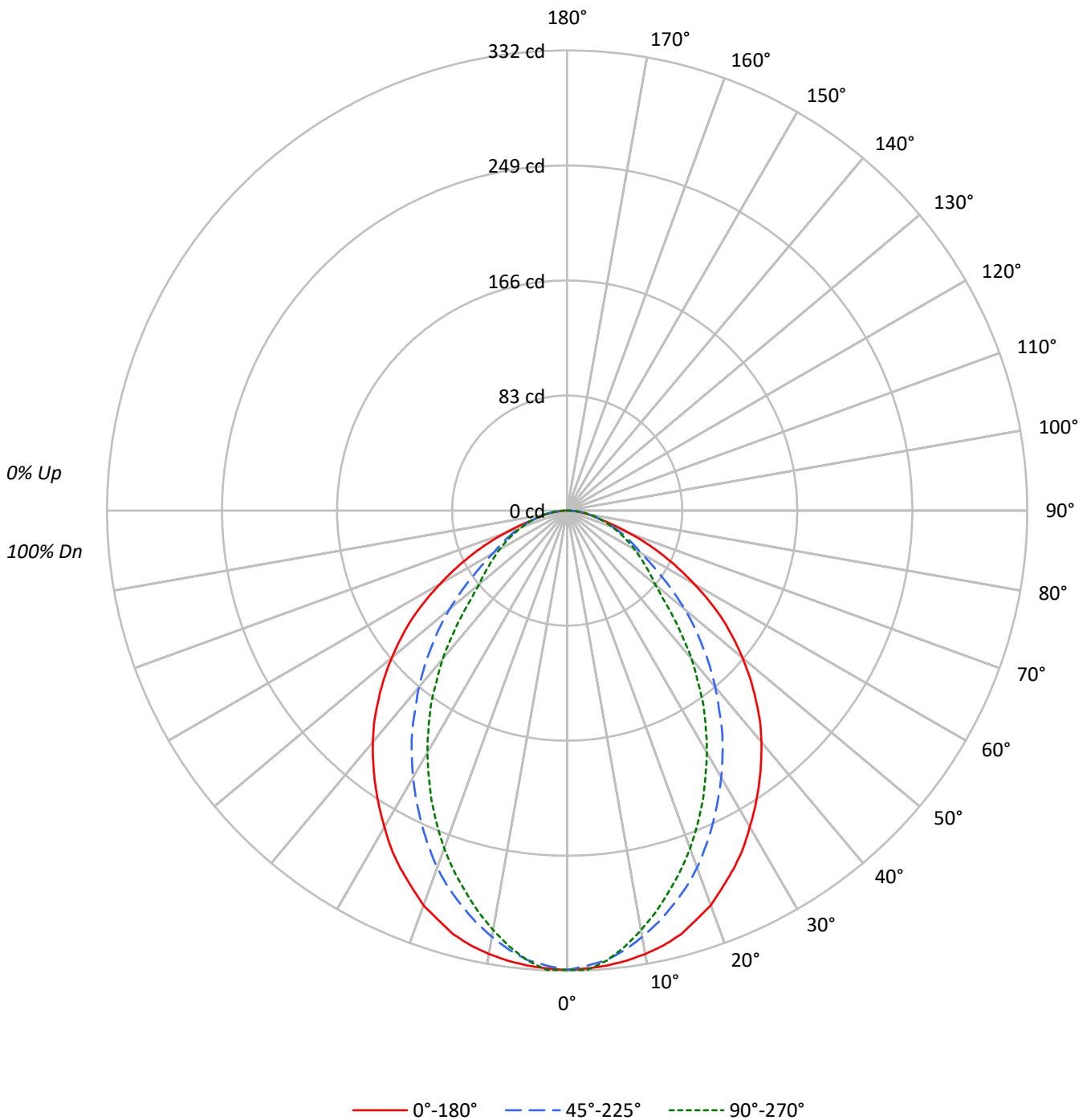
Lumens per Lamp: N/A
Luminaire Lumens: 639.0 lumens
Efficiency: N/A
Efficacy: 54.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	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°	2854	2854	2854
5°	2848	2814	2818
10°	2840	2731	2687
15°	2822	2628	2535
20°	2777	2513	2377
25°	2705	2364	2198
30°	2621	2211	2006
35°	2538	2051	1801
40°	2452	1869	1571
45°	2343	1679	1314
50°	2212	1482	1111
55°	2058	1257	1028
60°	1824	1066	973
65°	1555	984	921
70°	1216	911	874
75°	828	842	842
80°	714	793	813
85°	613	771	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	4.8
10°-20°	83.7	13.1
20°-30°	116.2	18.2
30°-40°	124.6	19.5
40°-50°	110.4	17.3
50°-60°	83.2	13.0
60°-70°	53.9	8.4
70°-80°	27.6	4.3
80°-90°	8.5	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°	230.8	36.1
0°-40°	355.4	55.6
0°-60°	549.0	85.9
0°-90°	639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	331	331	331	331	331	
5°	330	330	326	326	326	31
15°	317	310	295	287	284	89
25°	285	270	249	236	231	131
35°	241	220	195	178	171	151
45°	192	168	138	116	108	148
55°	137	114	84	70	68	122
65°	76	62	48	46	45	76
75°	25	26	25	25	25	29
85°	6	7	8	9	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	331.4	331.4	331.4	331.4	331.4
2.5°	330.6	331.8	328.7	331.0	331.8
5°	329.5	329.8	325.6	326.0	326.0
7.5°	327.5	326.7	319.7	317.8	317.4
10°	324.8	322.4	312.3	308.4	307.3
12.5°	321.3	317.0	304.1	298.7	296.4
15°	316.6	309.6	294.8	287.4	284.3
17.5°	309.6	300.6	285.1	275.7	272.2
20°	303.0	290.9	274.2	262.5	259.4
22.5°	293.6	280.8	261.7	249.2	245.3
25°	284.7	269.5	248.8	235.6	231.3
27.5°	274.9	257.8	235.6	221.6	216.1
30°	263.6	245.3	222.4	207.6	201.7
32.5°	252.7	233.3	208.7	192.4	186.1
35°	241.4	219.6	195.1	177.6	171.3
37.5°	229.8	206.8	179.9	162.8	154.6
40°	218.1	193.9	166.3	146.8	139.8
42.5°	206.0	180.7	152.3	132.0	123.1
45°	192.4	167.5	137.9	116.4	107.9
47.5°	179.1	154.6	124.6	101.3	93.5
50°	165.1	141.0	110.6	88.0	82.9
52.5°	151.1	127.0	97.0	77.9	75.5
55°	137.1	114.1	83.7	70.5	68.5
57.5°	121.5	100.9	72.0	63.9	62.3
60°	105.9	86.5	61.9	57.6	56.5
62.5°	90.7	74.0	54.9	51.4	50.6
65°	76.3	61.5	48.3	45.6	45.2
67.5°	62.3	50.6	42.1	40.5	39.7
70°	48.3	40.5	36.2	35.4	34.7
72.5°	35.8	32.7	30.8	30.4	30.0
75°	24.9	26.1	25.3	25.3	25.3
77.5°	19.9	20.3	20.6	21.0	20.6
80°	14.4	15.6	16.0	16.7	16.4
82.5°	10.1	10.9	12.1	12.5	12.9
85°	6.2	6.6	7.8	8.6	8.6
87.5°	2.7	3.1	3.9	4.7	5.1
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	14.08	15.58	14.45	15.90	16.21	10.65	12.15	11.01	12.46	12.78
	3H	15.29	16.63	15.67	16.96	17.32	12.34	13.69	12.72	14.01	14.38
	4H	15.59	16.85	15.99	17.20	17.58	13.02	14.28	13.42	14.63	15.01
	6H	15.80	16.96	16.21	17.33	17.72	13.57	14.73	13.98	15.10	15.49
	8H	15.86	16.96	16.28	17.35	17.75	13.79	14.89	14.21	15.28	15.69
	12H	15.89	16.95	16.32	17.33	17.76	13.96	15.02	14.39	15.40	15.83
4H	2H	14.23	15.49	14.63	15.83	16.21	11.31	12.57	11.71	12.92	13.30
	3H	15.63	16.67	16.04	17.07	17.47	13.22	14.26	13.63	14.66	15.06
	4H	16.05	16.99	16.49	17.41	17.85	14.02	14.96	14.45	15.37	15.81
	6H	16.38	17.20	16.84	17.64	18.10	14.71	15.52	15.16	15.97	16.43
	8H	16.48	17.24	16.94	17.69	18.15	14.98	15.74	15.44	16.19	16.66
	12H	16.55	17.23	17.03	17.71	18.18	15.21	15.90	15.70	16.37	16.85
8H	4H	16.18	16.94	16.64	17.39	17.86	14.34	15.10	14.80	15.54	16.01
	6H	16.60	17.23	17.10	17.73	18.20	15.16	15.79	15.66	16.29	16.76
	8H	16.76	17.33	17.27	17.84	18.33	15.53	16.10	16.04	16.61	17.10
	12H	16.89	17.39	17.40	17.88	18.45	15.87	16.37	16.38	16.86	17.43
12H	4H	16.19	16.87	16.67	17.35	17.82	14.36	15.05	14.85	15.53	16.00
	6H	16.63	17.20	17.14	17.71	18.19	15.22	15.79	15.74	16.30	16.79
	8H	16.84	17.34	17.35	17.83	18.40	15.66	16.16	16.17	16.65	17.22