

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: P1060696

Luminaire Tested: S124RDRP-H1020D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H1020D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

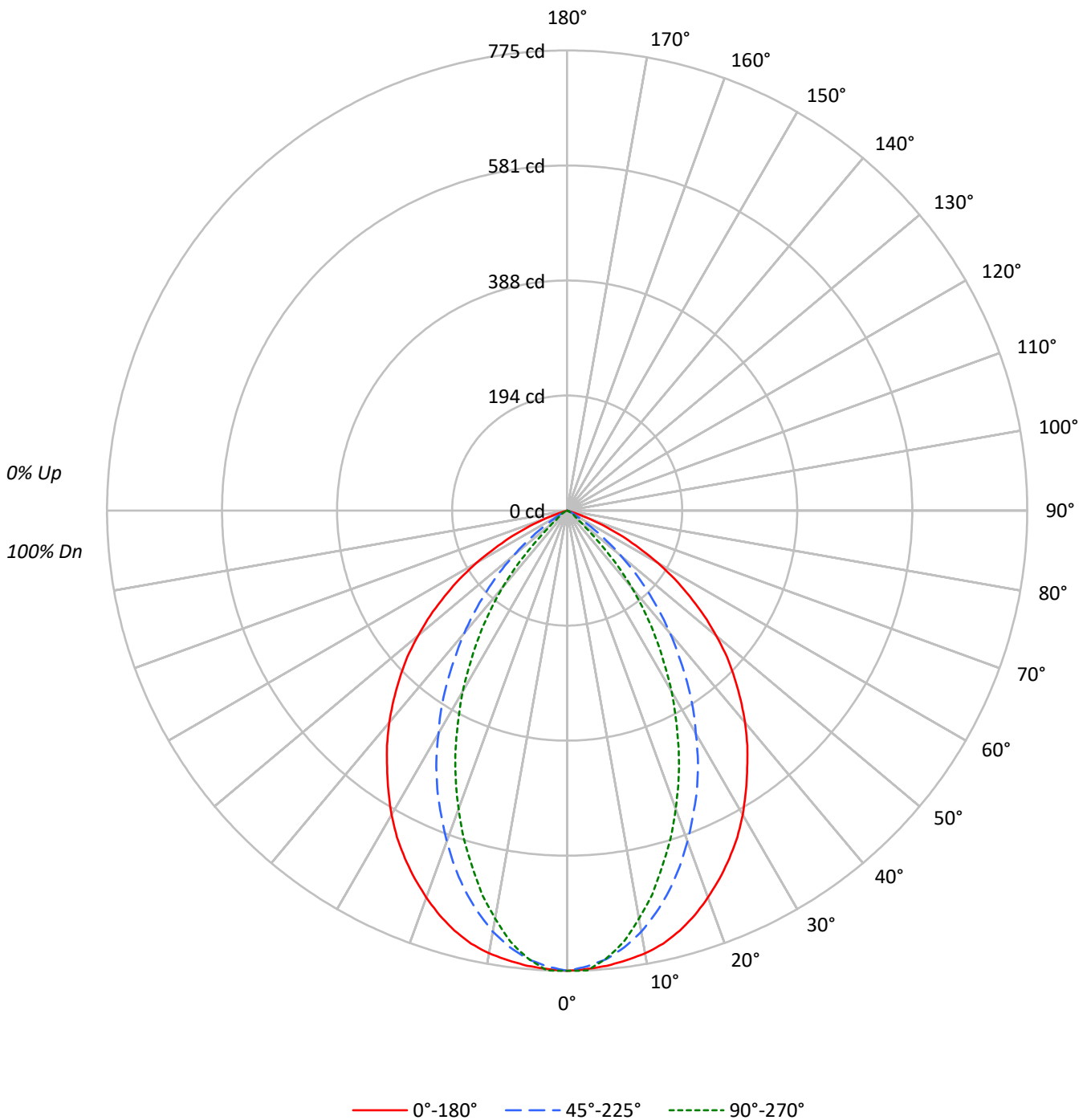
Lumens per Lamp: N/A
Luminaire Lumens: 1012.1 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91																												
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66																												
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55																												
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50																												
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42																												
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6674	6674	6674
5°	6652	6555	6545
10°	6621	6297	6102
15°	6530	5911	5522
20°	6353	5430	4896
25°	6141	4917	4225
30°	5880	4310	3497
35°	5558	3697	2720
40°	5238	3034	1901
45°	4857	2332	941
50°	4382	1575	315
55°	3783	808	219
60°	3029	289	155
65°	2076	159	69
70°	932	86	55
75°	0	37	37
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4857 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	7.1
10°-20°	187.6	18.5
20°-30°	242.9	24.0
30°-40°	230.8	22.8
40°-50°	163.4	16.1
50°-60°	83.9	8.3
60°-70°	29.3	2.9
70°-80°	2.5	0.2
80°-90°	0.0	0.0
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°	502.1	49.6
0°-40°	732.9	72.4
0°-60°	980.2	96.9
0°-90°	1012.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1012.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	770	771	758	758	757	73
15°	732	710	663	632	619	206
25°	646	596	518	463	445	297
35°	529	451	352	283	259	331
45°	399	307	192	110	77	307
55°	252	166	54	16	15	225
65°	102	49	8	4	3	101
75°	0	1	1	1	1	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	772.9	775.1	768.4	774.0	775.1
5°	769.5	770.6	758.3	758.3	757.2
7.5°	763.9	761.7	741.5	733.7	732.5
10°	757.2	749.3	720.2	703.4	697.8
12.5°	747.1	732.5	693.3	668.7	662.0
15°	732.5	710.1	663.1	631.7	619.4
17.5°	714.6	685.5	629.5	591.4	579.1
20°	693.3	656.4	592.5	550.0	534.3
22.5°	670.9	628.4	554.5	506.3	490.6
25°	646.3	595.9	517.5	462.6	444.7
27.5°	620.5	561.2	477.2	420.0	396.5
30°	591.4	526.4	433.5	374.1	351.7
32.5°	560.1	488.4	394.3	330.4	303.5
35°	528.7	451.4	351.7	283.4	258.7
37.5°	498.4	416.7	309.1	237.5	213.9
40°	466.0	378.6	269.9	196.0	169.1
42.5°	432.4	341.6	229.6	153.5	124.3
45°	398.8	306.9	191.5	109.8	77.3
47.5°	365.2	269.9	154.6	69.4	41.4
50°	327.1	234.1	117.6	37.0	23.5
52.5°	291.2	200.5	84.0	21.3	17.9
55°	252.0	165.8	53.8	15.7	14.6
57.5°	215.1	132.2	30.2	12.3	11.2
60°	175.9	101.9	16.8	10.1	9.0
62.5°	136.7	73.9	11.2	6.7	5.6
65°	101.9	49.3	7.8	4.5	3.4
67.5°	67.2	28.0	5.6	2.2	2.2
70°	37.0	13.4	3.4	2.2	2.2
72.5°	13.4	4.5	2.2	1.1	1.1
75°	0.0	1.1	1.1	1.1	1.1
77.5°	0.0	0.0	0.0	0.0	1.1
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	15.13	16.38	15.49	16.69	17.01	0.00	0.00	0.00	0.00	0.00
	3H	15.40	16.51	15.78	16.84	17.20	0.00	0.00	0.00	0.00	0.00
	4H	15.33	16.35	15.73	16.70	17.09	0.00	0.00	0.00	0.00	0.00
	6H	15.24	16.18	15.66	16.55	16.94	0.00	0.00	0.00	0.00	0.00
	8H	15.19	16.08	15.63	16.47	16.88	0.00	0.00	0.00	0.00	0.00
	12H	15.15	15.99	15.58	16.38	16.81	0.00	0.00	0.00	0.00	0.00
4H	2H	14.90	15.92	15.30	16.28	16.66	0.00	0.00	0.00	0.00	0.00
	3H	15.18	16.01	15.60	16.42	16.82	0.00	0.00	0.00	0.00	0.01
	4H	15.09	15.82	15.53	16.25	16.69	0.00	0.00	0.00	0.00	0.00
	6H	15.00	15.63	15.47	16.08	16.55	0.00	0.00	0.00	0.00	0.00
	8H	14.94	15.53	15.41	15.98	16.45	0.00	0.00	0.00	0.00	0.00
	12H	14.89	15.40	15.38	15.89	16.37	0.00	0.00	0.00	0.00	0.00
8H	4H	14.94	15.53	15.41	15.98	16.45	0.00	0.00	0.00	0.00	0.00
	6H	14.83	15.31	15.34	15.81	16.29	0.00	0.00	0.00	0.00	0.00
	8H	14.76	15.19	15.29	15.71	16.20	0.00	0.00	0.00	0.00	0.00
	12H	14.71	15.09	15.23	15.59	16.16	0.00	0.00	0.00	0.00	0.00
12H	4H	14.89	15.41	15.38	15.89	16.37	0.00	0.00	0.00	0.00	0.00
	6H	14.76	15.19	15.29	15.71	16.20	0.00	0.00	0.00	0.00	0.00
	8H	14.71	15.09	15.23	15.59	16.16	0.00	0.00	0.00	0.00	0.00