

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: P1060292

Luminaire Tested: S124RDRP-S1020D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060292
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

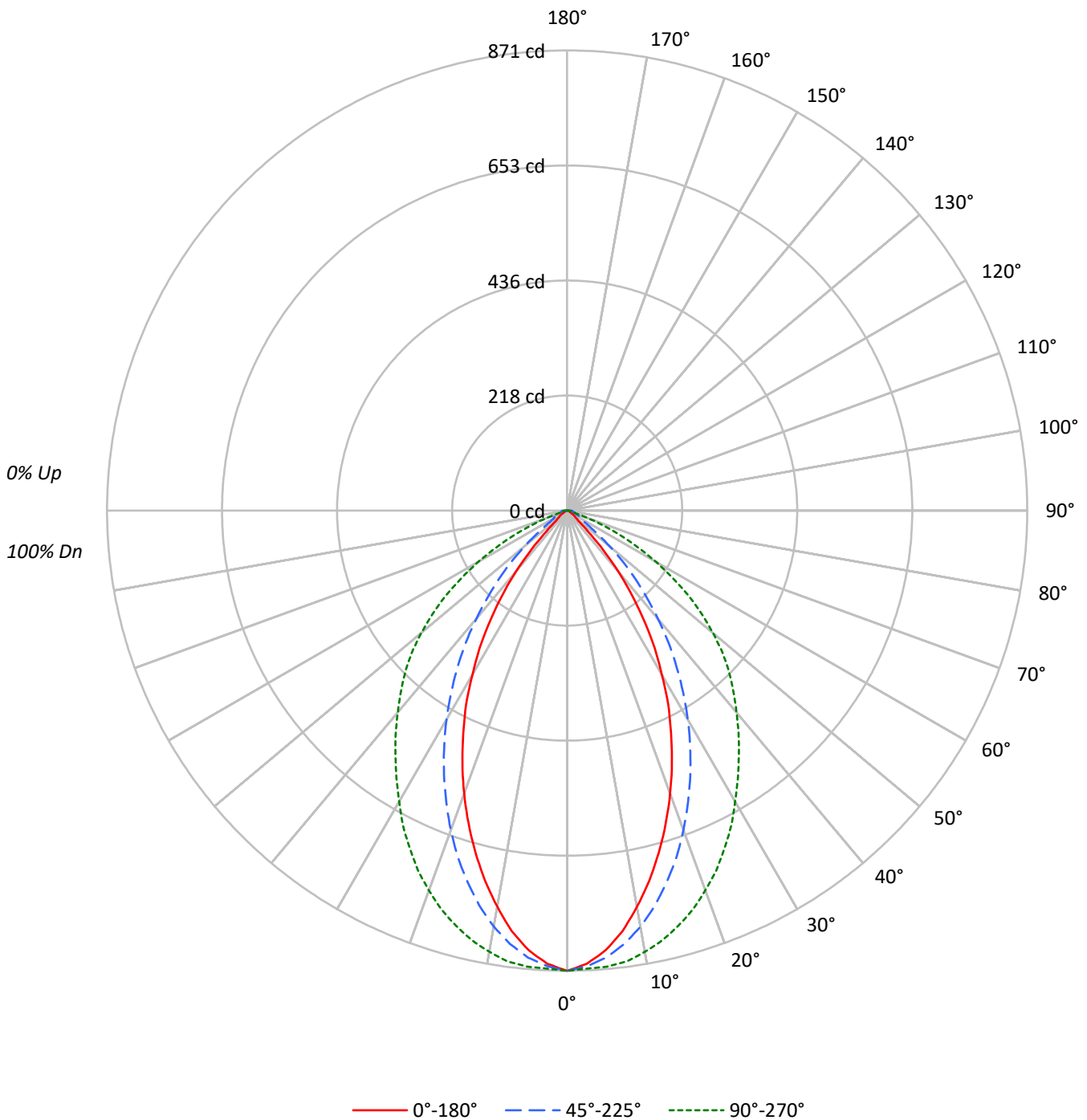
Lumens per Lamp: N/A
Luminaire Lumens: 1093.3 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			90									
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81																			81									
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73																			73									
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65																			65									
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59																			59									
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54																			54									
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50																			50									
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46																			46									
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																			42									
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39																			39									

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7502	7502	7502
5°	7221	7341	7490
10°	6659	6992	7416
15°	5977	6491	7252
20°	5223	5900	7010
25°	4418	5240	6698
30°	3568	4543	6322
35°	2656	3797	5955
40°	1686	3009	5604
45°	675	2207	5283
50°	293	1407	4823
55°	225	728	4210
60°	158	496	3338
65°	118	493	2280
70°	116	436	1045
75°	153	459	423
80°	228	516	456
85°	454	909	682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5283 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	7.3
10°-20°	205.7	18.8
20°-30°	259.8	23.8
30°-40°	238.6	21.8
40°-50°	162.7	14.9
50°-60°	88.2	8.1
60°-70°	37.4	3.4
70°-80°	12.9	1.2
80°-90°	8.2	0.8
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°	545.2	49.9
0°-40°	783.8	71.7
0°-60°	1034.8	94.6
0°-90°	1093.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	835	848	849	856	866	77
15°	670	692	728	780	814	187
25°	465	495	552	637	705	213
35°	253	286	361	474	566	157
45°	55	89	181	321	434	51
55°	15	16	48	176	280	13
65°	6	7	24	55	112	6
75°	5	13	14	13	13	5
85°	5	9	9	9	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.2	871.2	871.2	871.2	871.2
2.5°	858.5	868.8	863.1	865.4	867.7
5°	835.4	848.1	849.2	856.2	866.5
7.5°	803.1	818.1	827.3	844.6	860.8
10°	761.5	780.0	799.6	827.3	848.1
12.5°	717.7	737.3	766.2	805.4	833.1
15°	670.4	692.3	728.1	780.0	813.5
17.5°	620.8	645.0	687.7	748.8	791.5
20°	570.0	596.5	643.8	713.1	765.0
22.5°	518.1	545.8	597.7	676.2	737.3
25°	465.0	495.0	551.5	636.9	705.0
27.5°	414.2	441.9	504.2	597.7	672.7
30°	358.8	390.0	456.9	557.3	635.8
32.5°	308.1	338.1	408.5	515.8	601.2
35°	252.7	286.2	361.2	474.2	566.5
37.5°	200.8	233.1	315.0	435.0	533.1
40°	150.0	183.5	267.7	395.8	498.5
42.5°	100.4	136.2	222.7	355.4	466.2
45°	55.4	88.8	181.2	320.8	433.8
47.5°	28.8	48.5	141.9	286.2	399.2
50°	21.9	26.5	105.0	248.1	360.0
52.5°	18.5	19.6	71.5	210.0	320.8
55°	15.0	16.2	48.5	176.5	280.4
57.5°	11.5	12.7	34.6	144.2	235.4
60°	9.2	10.4	28.8	110.8	193.8
62.5°	6.9	8.1	27.7	81.9	152.3
65°	5.8	6.9	24.2	55.4	111.9
67.5°	4.6	6.9	20.8	35.8	75.0
70°	4.6	9.2	17.3	23.1	41.5
72.5°	4.6	10.4	15.0	15.0	15.0
75°	4.6	12.7	13.8	12.7	12.7
77.5°	4.6	11.5	11.5	11.5	11.5
80°	4.6	10.4	10.4	10.4	9.2
82.5°	4.6	9.2	10.4	10.4	8.1
85°	4.6	9.2	9.2	9.2	6.9
87.5°	3.5	9.2	9.2	9.2	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	0.00	0.00	0.00	0.00	0.00	15.44	16.72	15.81	17.03	17.35
	3H	0.00	0.08	0.00	0.41	0.77	15.80	16.93	16.18	17.26	17.62
	4H	0.34	1.38	0.74	1.74	2.12	15.76	16.81	16.17	17.17	17.55
	6H	1.70	2.66	2.11	3.03	3.43	15.74	16.70	16.15	17.07	17.47
	8H	2.38	3.29	2.81	3.68	4.09	15.73	16.64	16.16	17.03	17.44
	12H	3.18	4.05	3.61	4.43	4.86	15.73	16.60	16.16	16.98	17.41
4H	2H	1.14	2.19	1.54	2.54	2.92	15.25	16.29	15.65	16.65	17.03
	3H	2.56	3.41	2.97	3.82	4.22	15.64	16.50	16.05	16.90	17.30
	4H	4.01	4.77	4.44	5.19	5.64	15.62	16.38	16.06	16.80	17.25
	6H	5.25	5.91	5.72	6.36	6.82	15.64	16.30	16.10	16.74	17.21
	8H	5.82	6.43	6.29	6.88	7.35	15.65	16.26	16.12	16.71	17.18
	12H	6.49	7.03	6.98	7.52	7.99	15.69	16.23	16.17	16.71	17.19
8H	4H	5.08	5.70	5.55	6.14	6.61	15.52	16.14	15.99	16.58	17.05
	6H	6.69	7.20	7.20	7.69	8.17	15.57	16.07	16.07	16.57	17.05
	8H	7.52	7.98	8.05	8.49	8.98	15.63	16.08	16.15	16.60	17.09
	12H	8.49	8.89	9.00	9.38	9.95	15.74	16.14	16.26	16.64	17.21
12H	4H	5.27	5.81	5.76	6.30	6.77	15.48	16.02	15.97	16.51	16.98
	6H	7.04	7.49	7.56	8.01	8.50	15.54	15.99	16.06	16.51	17.00
	8H	8.06	8.46	8.57	8.95	9.53	15.64	16.04	16.16	16.54	17.11