

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: P1060267

Luminaire Tested: S124RDRP-S1020D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

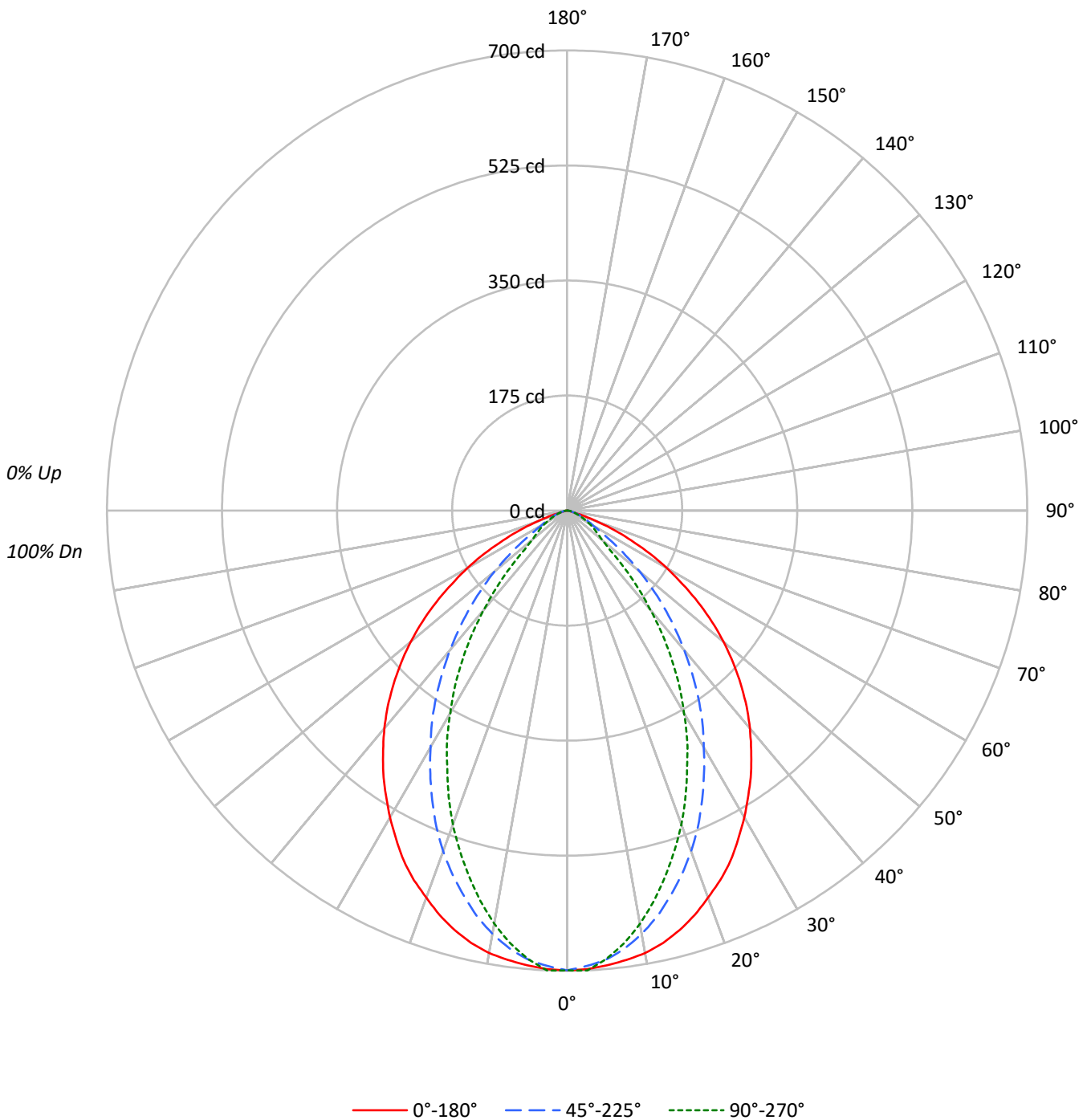
Lumens per Lamp: N/A
Luminaire Lumens: 1031.1 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6023	6023	6023
5°	6002	5926	5918
10°	5977	5719	5581
15°	5892	5410	5137
20°	5741	5055	4658
25°	5587	4614	4099
30°	5357	4133	3536
35°	5126	3655	2920
40°	4861	3112	2214
45°	4546	2543	1487
50°	4157	1926	924
55°	3653	1272	784
60°	3019	780	644
65°	2188	603	522
70°	1191	446	398
75°	263	329	359
80°	193	243	293
85°	198	198	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4546 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	6.3
10°-20°	172.1	16.7
20°-30°	228.0	22.1
30°-40°	226.3	21.9
40°-50°	174.1	16.9
50°-60°	103.8	10.1
60°-70°	47.2	4.6
70°-80°	12.2	1.2
80°-90°	2.7	0.3
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°	464.9	45.1
0°-40°	691.1	67.0
0°-60°	969.0	94.0
0°-90°	1031.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1031.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	694	695	686	686	685	66
15°	661	644	607	586	576	186
25°	588	546	486	445	431	270
35°	488	426	348	294	278	304
45°	373	300	209	146	122	287
55°	243	173	85	53	52	217
65°	107	64	30	26	26	108
75°	8	10	10	11	11	17
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	699.4	699.4	699.4	699.4	699.4
2.5°	698.4	699.4	693.4	698.4	700.3
5°	694.4	695.4	685.6	685.6	684.6
7.5°	689.5	687.5	671.8	665.9	663.9
10°	683.6	676.7	654.0	642.2	638.3
12.5°	673.7	662.9	632.4	615.6	608.7
15°	660.9	644.2	606.8	586.1	576.2
17.5°	645.2	624.5	580.2	553.6	542.7
20°	626.5	598.9	551.6	518.1	508.3
22.5°	608.7	574.3	520.1	481.7	470.8
25°	588.0	545.7	485.6	445.2	431.4
27.5°	563.4	518.1	451.1	409.8	396.0
30°	538.8	488.6	415.7	372.3	355.6
32.5°	513.2	458.0	383.2	333.9	318.2
35°	487.6	426.5	347.7	294.5	277.8
37.5°	460.0	395.0	312.2	257.1	238.4
40°	432.4	364.5	276.8	220.6	197.0
42.5°	403.9	332.9	242.3	183.2	159.6
45°	373.3	300.4	208.8	145.8	122.1
47.5°	342.8	269.9	175.3	109.3	87.7
50°	310.3	237.4	143.8	79.8	69.0
52.5°	277.8	205.9	112.3	62.1	59.1
55°	243.3	173.4	84.7	53.2	52.2
57.5°	207.8	143.8	61.1	46.3	44.3
60°	175.3	116.2	45.3	39.4	37.4
62.5°	141.8	87.7	37.4	32.5	30.5
65°	107.4	64.0	29.6	25.6	25.6
67.5°	77.8	43.3	23.6	20.7	19.7
70°	47.3	26.6	17.7	16.7	15.8
72.5°	23.6	15.8	13.8	12.8	12.8
75°	7.9	9.9	9.9	10.8	10.8
77.5°	5.9	6.9	6.9	7.9	7.9
80°	3.9	4.9	4.9	5.9	5.9
82.5°	3.0	3.0	3.9	3.9	4.9
85°	2.0	2.0	2.0	3.0	3.0
87.5°	1.0	1.0	1.0	2.0	2.0
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	15.36	16.69	15.72	17.00	17.32	6.91	8.24	7.27	8.55	8.87
	3H	15.87	17.05	16.24	17.38	17.74	7.72	8.90	8.10	9.23	9.60
	4H	15.83	16.93	16.23	17.28	17.66	8.00	9.10	8.41	9.45	9.84
	6H	15.77	16.77	16.18	17.14	17.54	8.18	9.18	8.59	9.55	9.95
	8H	15.73	16.68	16.16	17.07	17.48	8.24	9.19	8.67	9.59	9.99
	12H	15.69	16.60	16.12	16.98	17.41	8.29	9.20	8.72	9.58	10.01
4H	2H	15.20	16.30	15.60	16.65	17.03	7.35	8.45	7.75	8.80	9.18
	3H	15.75	16.65	16.17	17.05	17.45	8.31	9.21	8.73	9.61	10.01
	4H	15.72	16.52	16.16	16.94	17.38	8.67	9.47	9.11	9.89	10.33
	6H	15.67	16.35	16.13	16.80	17.27	8.93	9.61	9.39	10.06	10.52
	8H	15.62	16.26	16.09	16.71	17.18	9.01	9.65	9.48	10.10	10.57
	12H	15.58	16.15	16.07	16.63	17.11	9.09	9.65	9.58	10.14	10.61
8H	4H	15.61	16.25	16.08	16.70	17.17	8.76	9.40	9.23	9.85	10.32
	6H	15.55	16.07	16.05	16.57	17.05	9.07	9.60	9.58	10.09	10.57
	8H	15.50	15.97	16.02	16.49	16.98	9.20	9.67	9.73	10.19	10.68
	12H	15.47	15.88	15.99	16.38	16.95	9.34	9.76	9.86	10.25	10.82
12H	4H	15.57	16.13	16.05	16.62	17.09	8.74	9.30	9.22	9.78	10.26
	6H	15.49	15.96	16.02	16.48	16.97	9.05	9.52	9.58	10.04	10.53
	8H	15.47	15.88	15.98	16.38	16.95	9.22	9.64	9.74	10.13	10.70