

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: P1060269

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

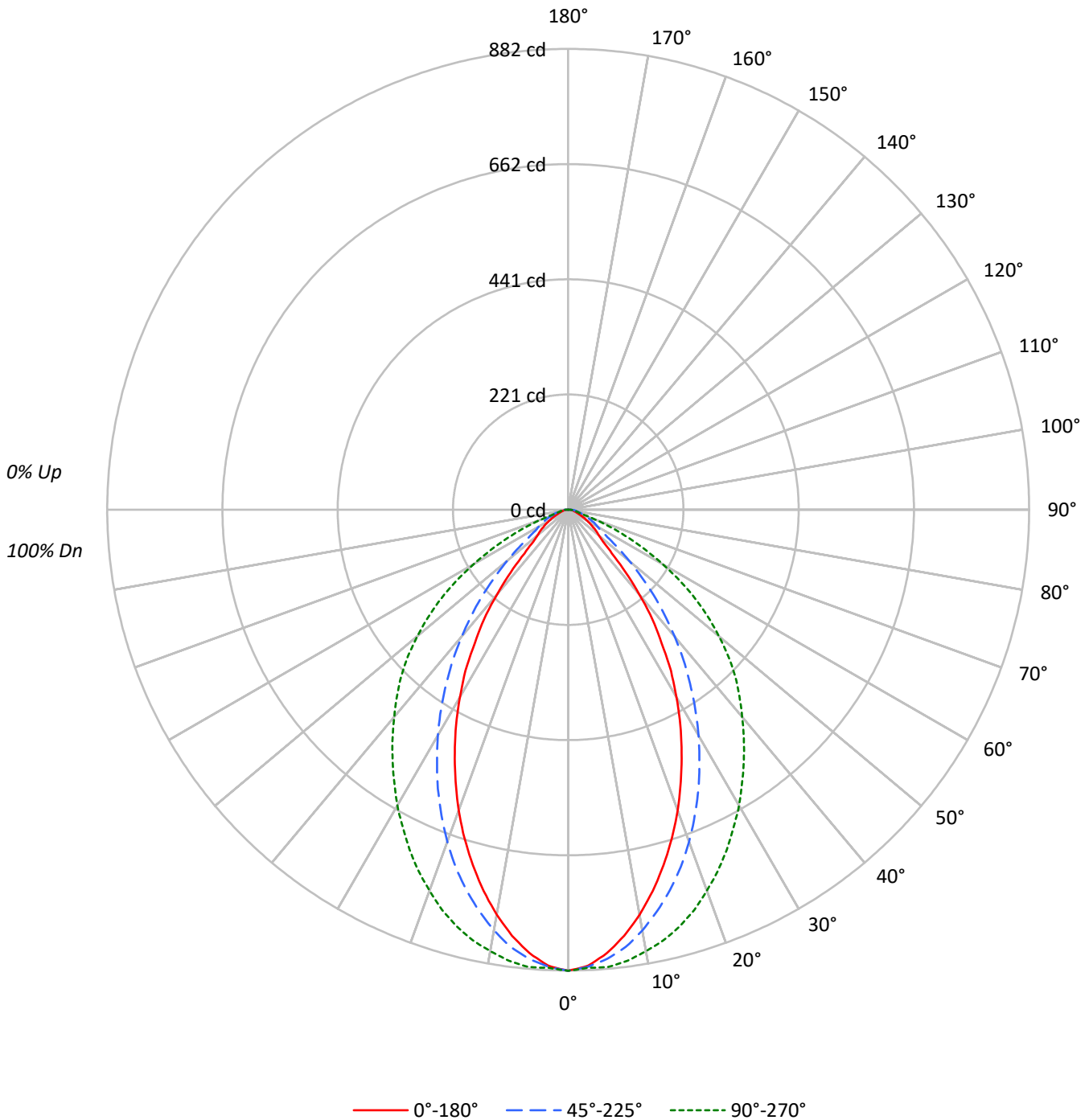
Lumens per Lamp: N/A
Luminaire Lumens: 1249.1 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7599	7599	7599
5°	7365	7458	7595
10°	6881	7148	7501
15°	6277	6716	7357
20°	5611	6198	7111
25°	4881	5603	6821
30°	4118	4962	6501
35°	3276	4271	6157
40°	2383	3558	5819
45°	1441	2809	5512
50°	1030	2035	5046
55°	874	1377	4456
60°	713	1121	3599
65°	562	1005	2592
70°	471	843	1365
75°	426	789	689
80°	441	784	684
85°	583	1166	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5512 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	6.5
10°-20°	212.9	17.0
20°-30°	276.1	22.1
30°-40°	265.8	21.3
40°-50°	197.7	15.8
50°-60°	121.6	9.7
60°-70°	59.7	4.8
70°-80°	23.3	1.9
80°-90°	10.6	0.9
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°	570.3	45.7
0°-40°	836.1	66.9
0°-60°	1155.5	92.5
0°-90°	1249.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	852	865	863	871	879	79
15°	704	727	753	799	825	197
25°	514	541	590	664	718	235
35°	312	341	406	508	586	195
45°	118	147	231	356	453	98
55°	58	60	92	209	297	52
65°	28	30	49	79	127	28
75°	13	23	24	22	21	14
85°	6	11	12	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.5	882.5	882.5	882.5	882.5
2.5°	873.7	883.5	875.6	876.6	877.6
5°	852.0	864.8	862.8	870.7	878.6
7.5°	822.4	837.2	844.1	859.9	870.7
10°	786.9	803.6	817.5	843.1	857.9
12.5°	747.4	767.2	786.9	821.4	844.1
15°	704.1	726.7	753.4	798.7	825.3
17.5°	659.7	682.4	716.9	769.1	802.7
20°	612.3	637.0	676.4	734.6	776.0
22.5°	563.0	589.7	633.1	699.1	748.4
25°	513.7	541.4	589.7	663.6	717.9
27.5°	464.4	491.1	543.3	626.2	685.3
30°	414.1	441.8	499.0	585.7	653.8
32.5°	365.8	391.5	452.6	547.3	619.3
35°	311.6	341.2	406.3	507.8	585.7
37.5°	265.3	291.9	361.9	468.4	552.2
40°	212.0	241.6	316.5	429.9	517.7
42.5°	162.7	192.3	273.1	391.5	485.1
45°	118.3	146.9	230.7	356.0	452.6
47.5°	89.7	106.5	189.3	321.5	416.1
50°	76.9	81.8	151.9	284.0	376.7
52.5°	68.0	70.0	118.3	246.5	337.2
55°	58.2	60.2	91.7	209.0	296.8
57.5°	49.3	50.3	74.0	173.5	253.4
60°	41.4	42.4	65.1	139.0	209.0
62.5°	34.5	35.5	58.2	107.5	166.6
65°	27.6	29.6	49.3	78.9	127.2
67.5°	22.7	26.6	41.4	55.2	88.7
70°	18.7	25.6	33.5	38.5	54.2
72.5°	15.8	23.7	28.6	27.6	26.6
75°	12.8	22.7	23.7	21.7	20.7
77.5°	10.8	19.7	19.7	17.7	16.8
80°	8.9	15.8	15.8	15.8	13.8
82.5°	7.9	12.8	13.8	13.8	10.8
85°	5.9	10.8	11.8	11.8	7.9
87.5°	3.9	9.9	10.8	9.9	5.9
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	6.83	8.17	7.20	8.49	8.80	16.00	17.34	16.36	17.65	17.97
	3H	7.94	9.13	8.32	9.46	9.83	16.50	17.70	16.88	18.02	18.39
	4H	8.46	9.57	8.86	9.92	10.30	16.52	17.63	16.93	17.98	18.37
	6H	8.89	9.91	9.31	10.28	10.68	16.54	17.56	16.95	17.93	18.32
	8H	9.08	10.05	9.51	10.44	10.85	16.54	17.51	16.97	17.90	18.30
	12H	9.26	10.19	9.70	10.57	11.00	16.54	17.47	16.97	17.85	18.28
4H	2H	7.98	9.09	8.38	9.44	9.82	15.89	17.00	16.29	17.35	17.73
	3H	9.32	10.23	9.73	10.63	11.03	16.48	17.39	16.89	17.79	18.19
	4H	10.05	10.86	10.49	11.28	11.73	16.54	17.35	16.97	17.77	18.21
	6H	10.66	11.36	11.12	11.81	12.27	16.61	17.32	17.08	17.76	18.23
	8H	10.90	11.56	11.37	12.01	12.48	16.64	17.30	17.11	17.75	18.22
	12H	11.14	11.72	11.62	12.20	12.68	16.68	17.26	17.17	17.75	18.22
8H	4H	10.52	11.17	10.99	11.62	12.09	16.50	17.15	16.96	17.60	18.07
	6H	11.37	11.91	11.87	12.40	12.88	16.62	17.16	17.12	17.66	18.14
	8H	11.77	12.26	12.29	12.77	13.26	16.71	17.19	17.23	17.70	18.20
	12H	12.19	12.62	12.71	13.12	13.69	16.83	17.25	17.34	17.75	18.32
12H	4H	10.57	11.15	11.06	11.64	12.11	16.47	17.05	16.95	17.53	18.01
	6H	11.50	11.98	12.02	12.50	12.99	16.60	17.09	17.13	17.60	18.09
	8H	12.02	12.45	12.54	12.94	13.51	16.74	17.17	17.25	17.66	18.23