

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060996

Luminaire Tested: S124RDR-H795D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060996
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: S124RDR-H795D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

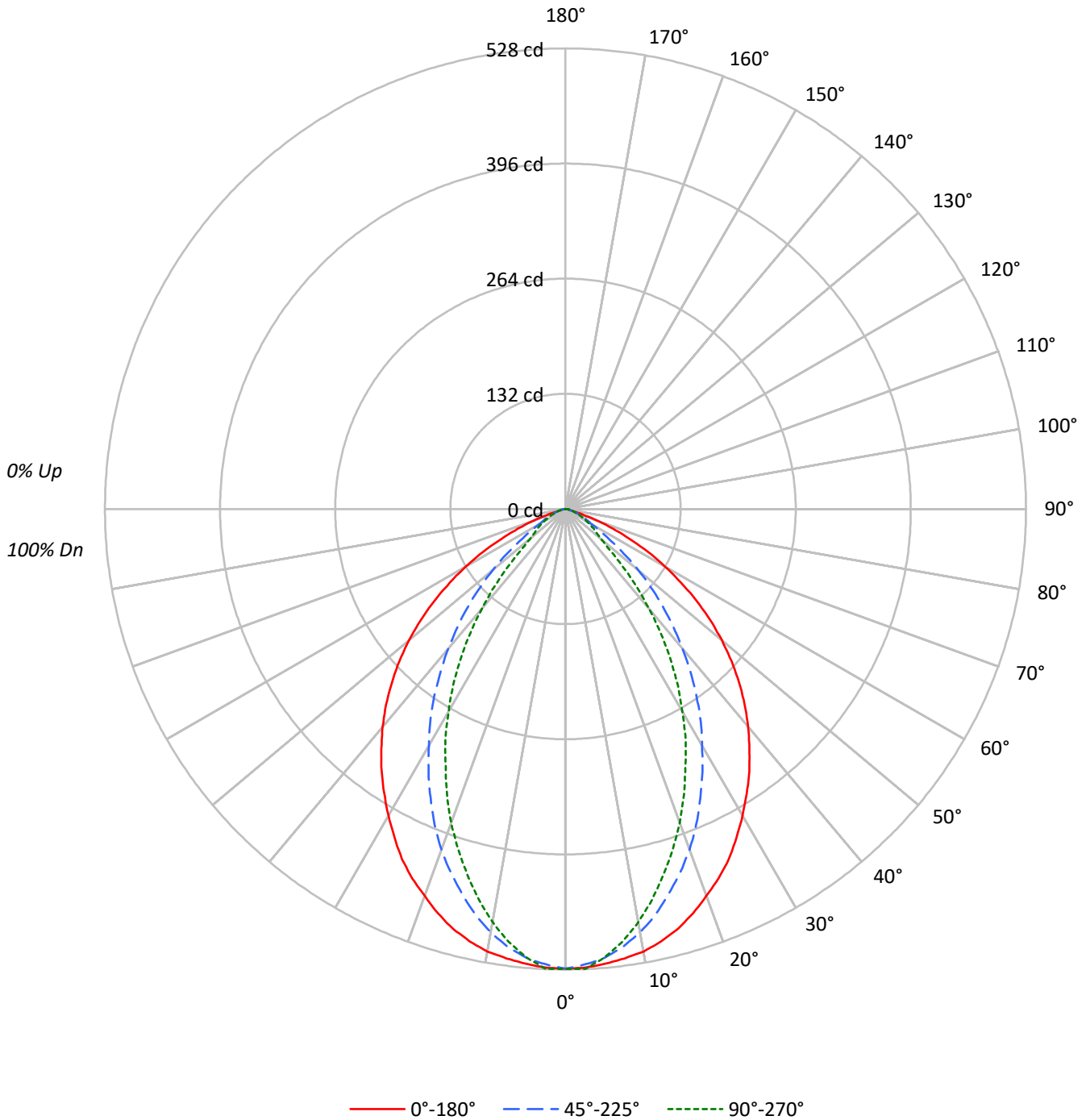
Lumens per Lamp: N/A
Luminaire Lumens: 777.0 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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°	4538	4538	4538
5°	4523	4466	4459
10°	4504	4310	4206
15°	4441	4076	3871
20°	4326	3809	3510
25°	4210	3477	3089
30°	4037	3114	2665
35°	3862	2754	2200
40°	3663	2345	1669
45°	3426	1917	1120
50°	3132	1452	697
55°	2752	958	590
60°	2275	587	486
65°	1648	454	393
70°	896	337	300
75°	196	246	273
80°	149	183	223
85°	148	148	217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3426 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	6.3
10°-20°	129.7	16.7
20°-30°	171.8	22.1
30°-40°	170.5	21.9
40°-50°	131.2	16.9
50°-60°	78.2	10.1
60°-70°	35.5	4.6
70°-80°	9.2	1.2
80°-90°	2.0	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°	350.3	45.1
0°-40°	520.8	67.0
0°-60°	730.2	94.0
0°-90°	777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	777.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	523	524	517	517	516	50
15°	498	485	457	442	434	140
25°	443	411	366	336	325	203
35°	367	321	262	222	209	229
45°	281	226	157	110	92	217
55°	183	131	64	40	39	163
65°	81	48	22	19	19	81
75°	6	7	7	8	8	12
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.0	527.0	527.0	527.0	527.0
2.5°	526.3	527.0	522.5	526.3	527.7
5°	523.3	524.0	516.6	516.6	515.9
7.5°	519.6	518.1	506.2	501.8	500.3
10°	515.1	509.9	492.9	484.0	481.0
12.5°	507.7	499.5	476.5	463.9	458.7
15°	498.1	485.4	457.2	441.6	434.2
17.5°	486.2	470.6	437.2	417.1	409.0
20°	472.1	451.3	415.7	390.4	383.0
22.5°	458.7	432.7	391.9	363.0	354.8
25°	443.1	411.2	365.9	335.5	325.1
27.5°	424.6	390.4	340.0	308.8	298.4
30°	406.0	368.2	313.2	280.6	268.0
32.5°	386.7	345.1	288.7	251.6	239.7
35°	367.4	321.4	262.0	221.9	209.3
37.5°	346.6	297.6	235.3	193.7	179.6
40°	325.9	274.6	208.6	166.3	148.5
42.5°	304.3	250.9	182.6	138.1	120.2
45°	281.3	226.4	157.4	109.9	92.0
47.5°	258.3	203.4	132.1	82.4	66.1
50°	233.8	178.9	108.4	60.1	52.0
52.5°	209.3	155.1	84.6	46.8	44.5
55°	183.3	130.6	63.8	40.1	39.3
57.5°	156.6	108.4	46.0	34.9	33.4
60°	132.1	87.6	34.1	29.7	28.2
62.5°	106.9	66.1	28.2	24.5	23.0
65°	80.9	48.2	22.3	19.3	19.3
67.5°	58.6	32.7	17.8	15.6	14.8
70°	35.6	20.0	13.4	12.6	11.9
72.5°	17.8	11.9	10.4	9.6	9.6
75°	5.9	7.4	7.4	8.2	8.2
77.5°	4.5	5.2	5.2	5.9	5.9
80°	3.0	3.7	3.7	4.5	4.5
82.5°	2.2	2.2	3.0	3.0	3.7
85°	1.5	1.5	1.5	2.2	2.2
87.5°	0.7	0.7	0.7	1.5	1.5
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	14.37	15.71	14.74	16.02	16.34	5.93	7.26	6.29	7.57	7.89
	3H	14.88	16.06	15.26	16.39	16.76	6.74	7.92	7.12	8.25	8.62
	4H	14.85	15.95	15.25	16.30	16.68	7.02	8.12	7.43	8.47	8.86
	6H	14.79	15.79	15.20	16.16	16.56	7.19	8.20	7.61	8.57	8.97
	8H	14.75	15.70	15.18	16.09	16.50	7.26	8.21	7.69	8.61	9.01
	12H	14.71	15.62	15.14	16.00	16.43	7.30	8.22	7.74	8.60	9.03
4H	2H	14.22	15.32	14.62	15.67	16.05	6.37	7.47	6.77	7.82	8.20
	3H	14.77	15.66	15.18	16.07	16.47	7.33	8.22	7.74	8.63	9.03
	4H	14.74	15.54	15.17	15.95	16.40	7.70	8.49	8.13	8.91	9.35
	6H	14.69	15.37	15.15	15.82	16.29	7.95	8.63	8.41	9.08	9.54
	8H	14.64	15.28	15.11	15.73	16.20	8.04	8.68	8.51	9.12	9.59
	12H	14.60	15.17	15.09	15.65	16.12	8.11	8.67	8.60	9.16	9.63
8H	4H	14.63	15.27	15.10	15.72	16.19	7.78	8.42	8.25	8.87	9.34
	6H	14.57	15.09	15.07	15.59	16.07	8.10	8.62	8.60	9.11	9.59
	8H	14.52	14.99	15.04	15.50	16.00	8.23	8.70	8.75	9.21	9.70
	12H	14.49	14.90	15.00	15.40	15.97	8.36	8.78	8.88	9.27	9.84
12H	4H	14.59	15.15	15.07	15.63	16.11	7.76	8.32	8.24	8.80	9.28
	6H	14.51	14.98	15.03	15.50	15.99	8.07	8.54	8.60	9.06	9.55
	8H	14.49	14.90	15.00	15.39	15.97	8.25	8.66	8.76	9.16	9.73