

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: P1060759

Luminaire Tested: S124RDR-H1195D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060759
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: S124RDR-H1195D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

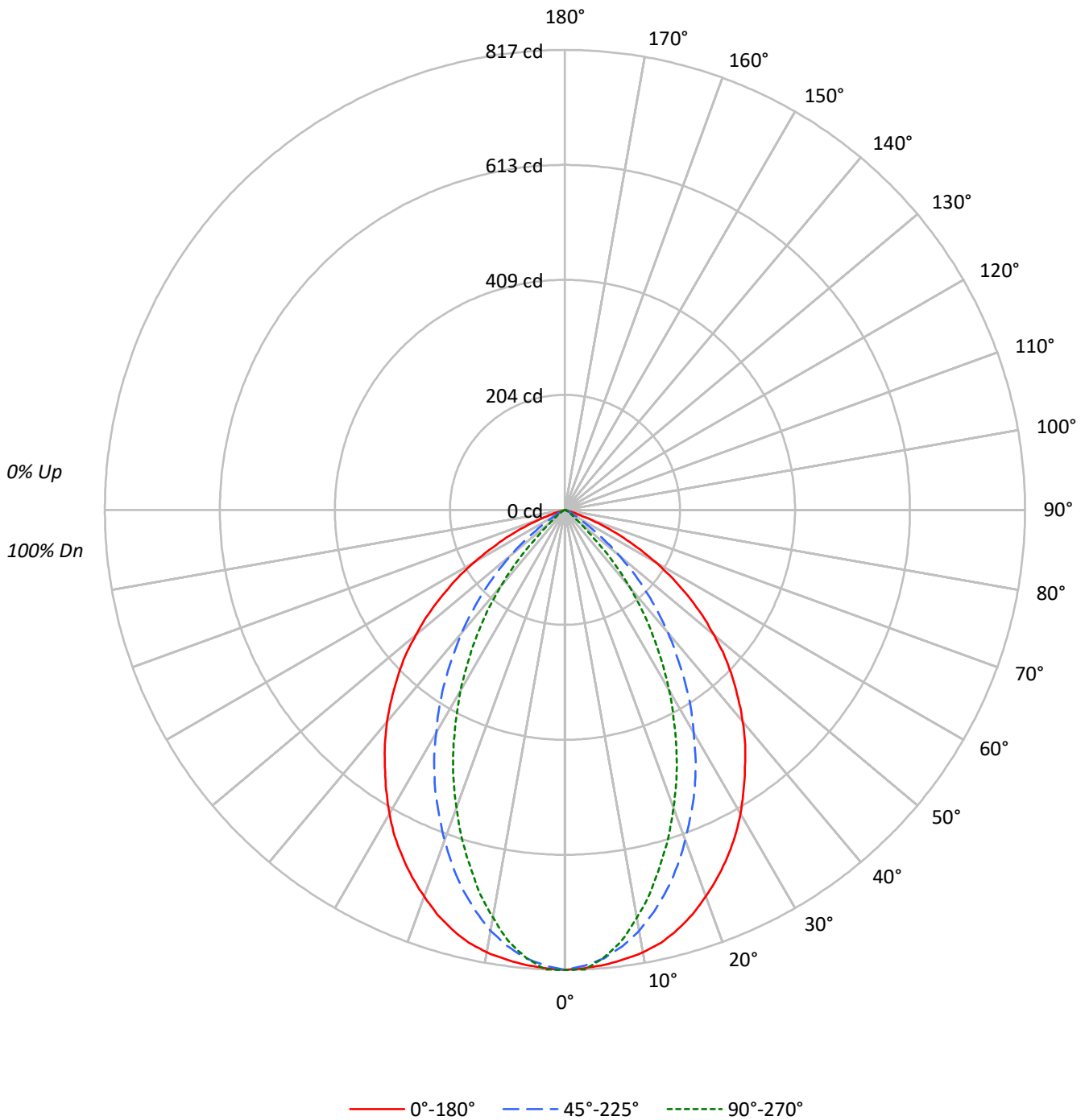
Lumens per Lamp: N/A
Luminaire Lumens: 1067.1 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	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°	7037	7037	7037
5°	7013	6911	6901
10°	6980	6639	6433
15°	6885	6232	5822
20°	6699	5725	5162
25°	6474	5184	4454
30°	6200	4544	3687
35°	5860	3898	2868
40°	5523	3199	2004
45°	5120	2459	993
50°	4619	1661	332
55°	3989	851	231
60°	3193	305	162
65°	2190	169	71
70°	982	88	60
75°	0	40	40
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5120 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	7.1
10°-20°	197.8	18.5
20°-30°	256.1	24.0
30°-40°	243.3	22.8
40°-50°	172.3	16.1
50°-60°	88.4	8.3
60°-70°	30.9	2.9
70°-80°	2.7	0.3
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°	529.4	49.6
0°-40°	772.7	72.4
0°-60°	1033.5	96.8
0°-90°	1067.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1067.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	817	817	817	817	817	
5°	811	812	800	800	798	77
15°	772	749	699	666	653	217
25°	681	628	546	488	469	313
35°	557	476	371	299	273	349
45°	420	324	202	116	82	324
55°	266	175	57	16	15	237
65°	108	52	8	5	4	107
75°	0	1	1	1	1	9
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	817.2	817.2	817.2	817.2	817.2
2.5°	814.8	817.2	810.1	816.0	817.2
5°	811.3	812.5	799.5	799.5	798.3
7.5°	805.4	803.0	781.8	773.5	772.3
10°	798.3	790.0	759.3	741.6	735.7
12.5°	787.7	772.3	731.0	705.0	697.9
15°	772.3	748.7	699.1	666.0	653.1
17.5°	753.4	722.7	663.7	623.5	610.5
20°	731.0	692.0	624.7	579.8	563.3
22.5°	707.4	662.5	584.6	533.8	517.2
25°	681.4	628.3	545.6	487.7	468.8
27.5°	654.2	591.6	503.1	442.8	418.0
30°	623.5	555.0	457.0	394.4	370.8
32.5°	590.5	514.9	415.7	348.4	320.0
35°	557.4	475.9	370.8	298.8	272.8
37.5°	525.5	439.3	325.9	250.4	225.6
40°	491.3	399.2	284.6	206.7	178.3
42.5°	455.8	360.2	242.1	161.8	131.1
45°	420.4	323.6	201.9	115.7	81.5
47.5°	385.0	284.6	163.0	73.2	43.7
50°	344.8	246.8	124.0	39.0	24.8
52.5°	307.0	211.4	88.6	22.4	18.9
55°	265.7	174.8	56.7	16.5	15.4
57.5°	226.7	139.3	31.9	13.0	11.8
60°	185.4	107.5	17.7	10.6	9.4
62.5°	144.1	77.9	11.8	7.1	5.9
65°	107.5	52.0	8.3	4.7	3.5
67.5°	70.9	29.5	5.9	2.4	2.4
70°	39.0	14.2	3.5	2.4	2.4
72.5°	14.2	4.7	2.4	1.2	1.2
75°	0.0	1.2	1.2	1.2	1.2
77.5°	0.0	0.0	0.0	0.0	1.2
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	15.31	16.56	15.67	16.87	17.19	0.00	0.00	0.00	0.00	0.00
	3H	15.58	16.69	15.96	17.02	17.39	0.00	0.00	0.00	0.00	0.00
	4H	15.51	16.53	15.91	16.88	17.27	0.00	0.00	0.00	0.00	0.00
	6H	15.42	16.36	15.84	16.73	17.13	0.00	0.00	0.00	0.00	0.00
	8H	15.38	16.26	15.81	16.65	17.06	0.00	0.00	0.00	0.00	0.00
	12H	15.33	16.17	15.76	16.56	16.99	0.00	0.00	0.00	0.00	0.00
4H	2H	15.08	16.10	15.48	16.46	16.84	0.00	0.00	0.00	0.00	0.20
	3H	15.36	16.19	15.78	16.60	17.00	0.00	0.00	0.00	0.00	0.22
	4H	15.27	16.01	15.71	16.43	16.87	0.00	0.00	0.00	0.00	0.17
	6H	15.18	15.81	15.65	16.26	16.73	0.00	0.00	0.00	0.00	0.06
	8H	15.12	15.71	15.59	16.16	16.63	0.00	0.00	0.00	0.00	0.00
	12H	15.07	15.59	15.56	16.07	16.55	0.00	0.00	0.00	0.00	0.00
8H	4H	15.12	15.71	15.59	16.16	16.63	0.00	0.00	0.00	0.00	0.14
	6H	15.01	15.49	15.52	15.99	16.47	0.00	0.00	0.00	0.00	0.01
	8H	14.95	15.37	15.47	15.89	16.39	0.00	0.00	0.00	0.00	0.00
	12H	14.90	15.27	15.41	15.77	16.34	0.00	0.00	0.00	0.00	0.00
12H	4H	15.07	15.59	15.56	16.07	16.55	0.00	0.00	0.00	0.00	0.06
	6H	14.95	15.37	15.47	15.89	16.39	0.00	0.00	0.00	0.00	0.00
	8H	14.90	15.27	15.41	15.77	16.34	0.00	0.00	0.00	0.00	0.00