

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: P1060321

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060321
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-S1195D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

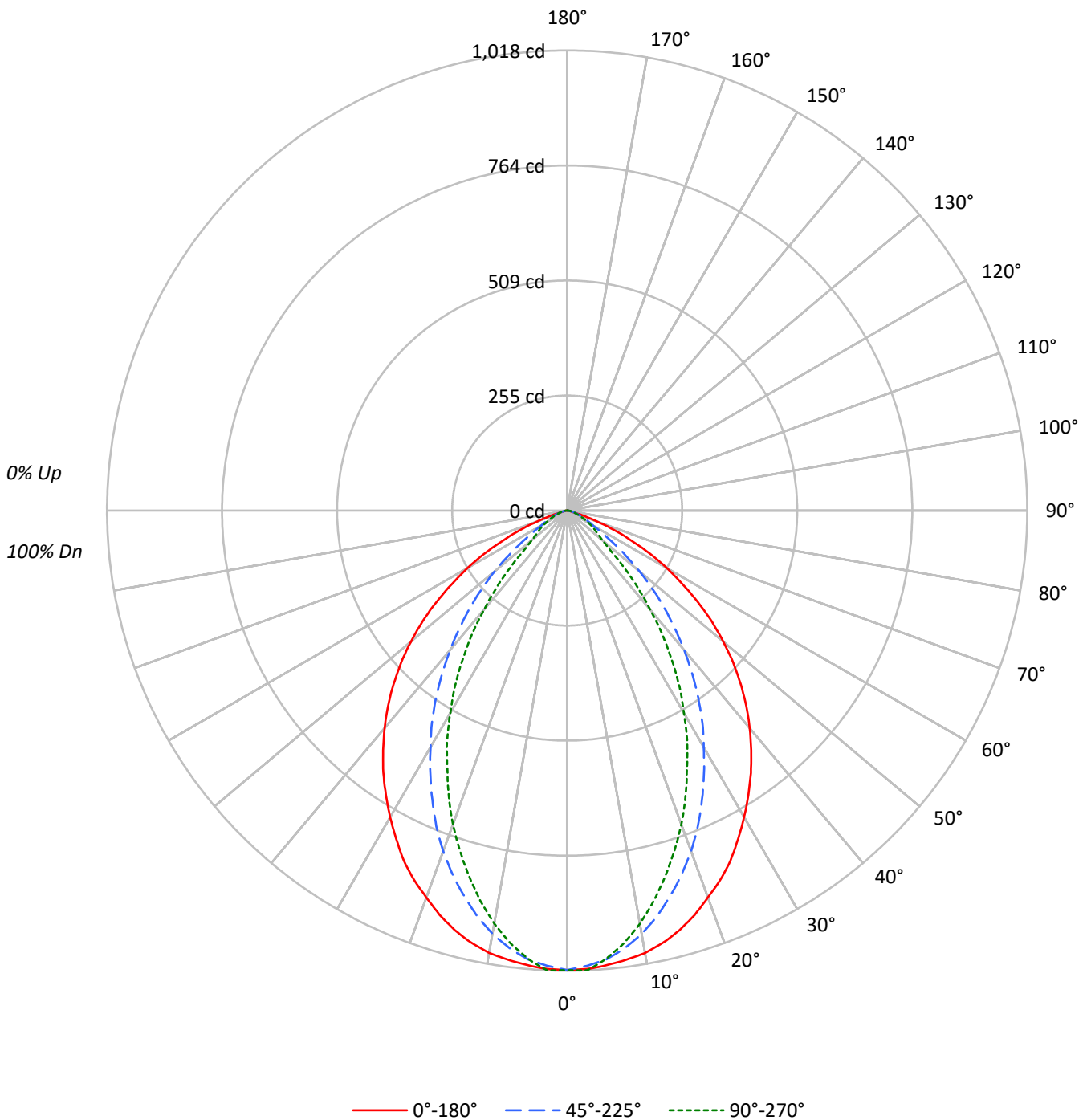
Lumens per Lamp: N/A
Luminaire Lumens: 1498.9 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	8754	8754	8754
5°	8726	8615	8603
10°	8689	8314	8114
15°	8565	7863	7467
20°	8345	7348	6770
25°	8122	6707	5959
30°	7788	6009	5140
35°	7451	5314	4245
40°	7066	4523	3219
45°	6609	3697	2163
50°	6042	2801	1342
55°	5310	1848	1139
60°	4390	1135	937
65°	3181	876	758
70°	1730	650	577
75°	383	476	526
80°	283	357	426
85°	287	287	425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6609 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	6.3
10°-20°	250.2	16.7
20°-30°	331.4	22.1
30°-40°	328.9	21.9
40°-50°	253.1	16.9
50°-60°	150.9	10.1
60°-70°	68.6	4.6
70°-80°	17.8	1.2
80°-90°	4.0	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°	675.7	45.1
0°-40°	1004.7	67.0
0°-60°	1408.6	94.0
0°-90°	1498.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1010	1011	997	997	995	96
15°	961	936	882	852	838	270
25°	855	793	706	647	627	392
35°	709	620	506	428	404	442
45°	543	437	304	212	178	418
55°	354	252	123	77	76	315
65°	156	93	43	37	37	157
75°	12	14	14	16	16	24
85°	3	3	3	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1016.6	1016.6	1016.6	1016.6	1016.6
2.5°	1015.2	1016.6	1008.0	1015.2	1018.1
5°	1009.5	1010.9	996.6	996.6	995.2
7.5°	1002.3	999.4	976.5	967.9	965.1
10°	993.7	983.7	950.8	933.6	927.9
12.5°	979.4	963.7	919.3	894.9	884.9
15°	960.8	936.4	882.0	852.0	837.6
17.5°	937.9	907.8	843.4	804.7	789.0
20°	910.7	870.6	801.8	753.2	738.8
22.5°	884.9	834.8	756.0	700.2	684.4
25°	854.8	793.3	705.9	647.2	627.2
27.5°	819.0	753.2	655.8	595.7	575.6
30°	783.2	710.2	604.3	541.2	516.9
32.5°	746.0	665.8	557.0	485.4	462.5
35°	708.8	620.0	505.5	428.1	403.8
37.5°	668.7	574.2	453.9	373.7	346.5
40°	628.6	529.8	402.4	320.7	286.4
42.5°	587.1	484.0	352.2	266.3	232.0
45°	542.7	436.7	303.6	211.9	177.6
47.5°	498.3	392.3	254.9	158.9	127.4
50°	451.0	345.1	209.1	116.0	100.2
52.5°	403.8	299.3	163.2	90.2	85.9
55°	353.7	252.0	123.1	77.3	75.9
57.5°	302.1	209.1	88.8	67.3	64.4
60°	254.9	169.0	65.9	57.3	54.4
62.5°	206.2	127.4	54.4	47.3	44.4
65°	156.1	93.1	43.0	37.2	37.2
67.5°	113.1	63.0	34.4	30.1	28.6
70°	68.7	38.7	25.8	24.3	22.9
72.5°	34.4	22.9	20.0	18.6	18.6
75°	11.5	14.3	14.3	15.8	15.8
77.5°	8.6	10.0	10.0	11.5	11.5
80°	5.7	7.2	7.2	8.6	8.6
82.5°	4.3	4.3	5.7	5.7	7.2
85°	2.9	2.9	2.9	4.3	4.3
87.5°	1.4	1.4	1.4	2.9	2.9
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	16.66	17.99	17.02	18.30	18.62	8.21	9.54	8.57	9.85	10.17
	3H	17.17	18.35	17.55	18.68	19.04	9.02	10.20	9.40	10.53	10.90
	4H	17.13	18.23	17.54	18.58	18.96	9.31	10.40	9.71	10.75	11.14
	6H	17.07	18.08	17.48	18.45	18.84	9.48	10.49	9.89	10.86	11.25
	8H	17.03	17.98	17.46	18.37	18.78	9.54	10.50	9.97	10.89	11.29
	12H	16.99	17.90	17.42	18.29	18.72	9.59	10.50	10.02	10.88	11.31
4H	2H	16.50	17.60	16.90	17.95	18.33	8.65	9.75	9.05	10.10	10.48
	3H	17.05	17.95	17.47	18.35	18.75	9.61	10.50	10.02	10.91	11.31
	4H	17.02	17.82	17.46	18.24	18.68	9.98	10.77	10.41	11.19	11.64
	6H	16.97	17.66	17.43	18.10	18.57	10.23	10.92	10.69	11.36	11.83
	8H	16.92	17.56	17.39	18.01	18.48	10.32	10.96	10.79	11.41	11.88
	12H	16.88	17.45	17.37	17.93	18.41	10.39	10.96	10.88	11.44	11.92
8H	4H	16.91	17.55	17.38	18.00	18.47	10.06	10.70	10.53	11.15	11.62
	6H	16.85	17.37	17.35	17.87	18.35	10.38	10.90	10.88	11.40	11.88
	8H	16.80	17.27	17.33	17.79	18.28	10.51	10.98	11.03	11.49	11.98
	12H	16.77	17.19	17.29	17.68	18.25	10.65	11.06	11.16	11.55	12.13
12H	4H	16.87	17.43	17.36	17.92	18.39	10.04	10.60	10.53	11.09	11.56
	6H	16.79	17.26	17.32	17.78	18.27	10.36	10.83	10.88	11.34	11.83
	8H	16.77	17.18	17.28	17.68	18.25	10.53	10.94	11.04	11.44	12.01