

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: P1060318

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060318
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: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

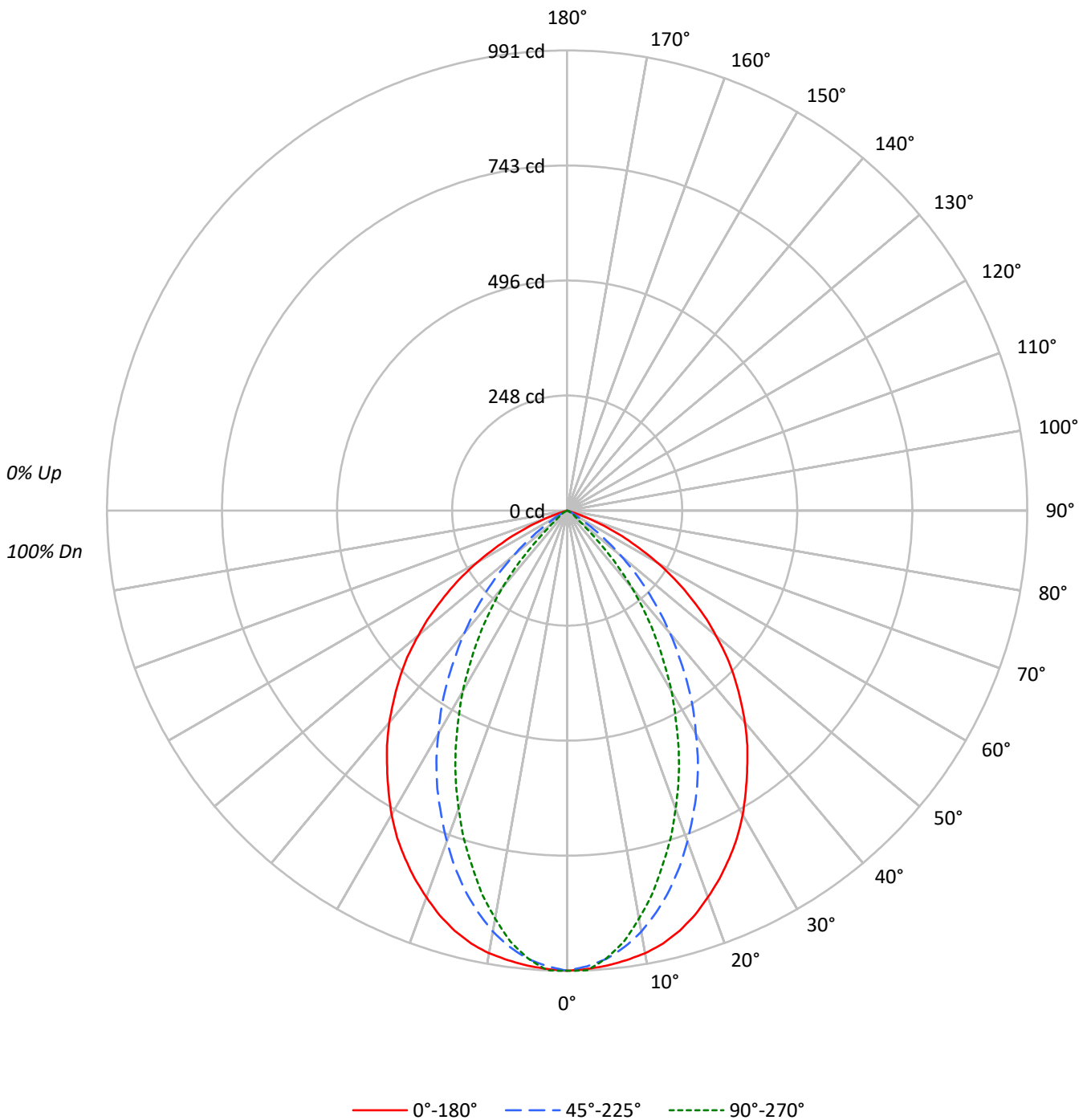
Lumens per Lamp: N/A
Luminaire Lumens: 1293.9 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	8533	8533	8533
5°	8503	8380	8367
10°	8464	8051	7800
15°	8349	7557	7059
20°	8122	6942	6259
25°	7850	6285	5402
30°	7517	5510	4470
35°	7105	4726	3477
40°	6696	3879	2430
45°	6208	2982	1203
50°	5601	2014	403
55°	4837	1031	279
60°	3872	370	198
65°	2655	204	88
70°	1191	108	73
75°	0	47	47
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6208 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	7.1
10°-20°	239.9	18.5
20°-30°	310.5	24.0
30°-40°	295.0	22.8
40°-50°	208.9	16.1
50°-60°	107.3	8.3
60°-70°	37.5	2.9
70°-80°	3.2	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°	641.9	49.6
0°-40°	936.9	72.4
0°-60°	1253.1	96.8
0°-90°	1293.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1293.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	984	985	969	969	968	93
15°	936	908	848	808	792	263
25°	826	762	662	591	568	380
35°	676	577	450	362	331	423
45°	510	392	245	140	99	392
55°	322	212	69	20	19	288
65°	130	63	10	6	4	130
75°	0	1	1	1	1	11
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°	990.9	990.9	990.9	990.9	990.9
2.5°	988.0	990.9	982.3	989.4	990.9
5°	983.7	985.1	969.4	969.4	968.0
7.5°	976.5	973.7	947.9	937.9	936.5
10°	968.0	957.9	920.7	899.2	892.1
12.5°	955.1	936.5	886.3	854.8	846.2
15°	936.5	907.8	847.7	807.6	791.8
17.5°	913.5	876.3	804.7	756.0	740.3
20°	886.3	839.1	757.5	703.1	683.0
22.5°	857.7	803.3	708.8	647.2	627.2
25°	826.2	761.8	661.5	591.4	568.5
27.5°	793.3	717.4	610.0	537.0	506.9
30°	756.0	673.0	554.1	478.3	449.6
32.5°	715.9	624.3	504.0	422.4	388.0
35°	675.9	577.1	449.6	362.3	330.8
37.5°	637.2	532.7	395.2	303.6	273.5
40°	595.7	484.0	345.1	250.6	216.2
42.5°	552.7	436.7	293.5	196.2	158.9
45°	509.8	392.3	244.9	140.3	98.8
47.5°	466.8	345.1	197.6	88.8	53.0
50°	418.1	299.3	150.3	47.3	30.1
52.5°	372.3	256.3	107.4	27.2	22.9
55°	322.2	211.9	68.7	20.0	18.6
57.5°	274.9	169.0	38.7	15.8	14.3
60°	224.8	130.3	21.5	12.9	11.5
62.5°	174.7	94.5	14.3	8.6	7.2
65°	130.3	63.0	10.0	5.7	4.3
67.5°	85.9	35.8	7.2	2.9	2.9
70°	47.3	17.2	4.3	2.9	2.9
72.5°	17.2	5.7	2.9	1.4	1.4
75°	0.0	1.4	1.4	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	1.4
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	15.98	17.23	16.34	17.55	17.86	0.00	0.00	0.00	0.23	0.54
	3H	16.26	17.36	16.64	17.69	18.06	0.00	0.00	0.00	0.18	0.54
	4H	16.18	17.20	16.58	17.56	17.94	0.00	0.00	0.00	0.10	0.48
	6H	16.09	17.03	16.51	17.40	17.80	0.00	0.00	0.00	0.00	0.37
	8H	16.05	16.93	16.48	17.32	17.73	0.00	0.00	0.00	0.00	0.30
	12H	16.00	16.85	16.43	17.23	17.66	0.00	0.00	0.00	0.00	0.23
4H	2H	15.75	16.78	16.16	17.13	17.51	0.00	0.14	0.00	0.49	0.88
	3H	16.03	16.86	16.45	17.27	17.67	0.00	0.08	0.00	0.49	0.89
	4H	15.94	16.68	16.38	17.10	17.54	0.00	0.00	0.00	0.39	0.84
	6H	15.85	16.49	16.32	16.93	17.40	0.00	0.00	0.00	0.25	0.72
	8H	15.79	16.38	16.27	16.83	17.30	0.00	0.00	0.00	0.15	0.62
	12H	15.74	16.26	16.23	16.74	17.22	0.00	0.00	0.00	0.06	0.54
8H	4H	15.79	16.38	16.27	16.83	17.30	0.00	0.00	0.00	0.33	0.81
	6H	15.69	16.16	16.19	16.66	17.14	0.00	0.00	0.00	0.19	0.67
	8H	15.62	16.05	16.14	16.56	17.06	0.00	0.00	0.00	0.09	0.58
	12H	15.57	15.95	16.08	16.44	17.02	0.00	0.00	0.00	0.00	0.54
12H	4H	15.74	16.26	16.23	16.74	17.22	0.00	0.00	0.00	0.25	0.72
	6H	15.62	16.05	16.14	16.56	17.06	0.00	0.00	0.00	0.09	0.58
	8H	15.57	15.95	16.08	16.44	17.02	0.00	0.00	0.00	0.00	0.54