

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: P1060761

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
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-W
Description: DEFINE 4 WHITE 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

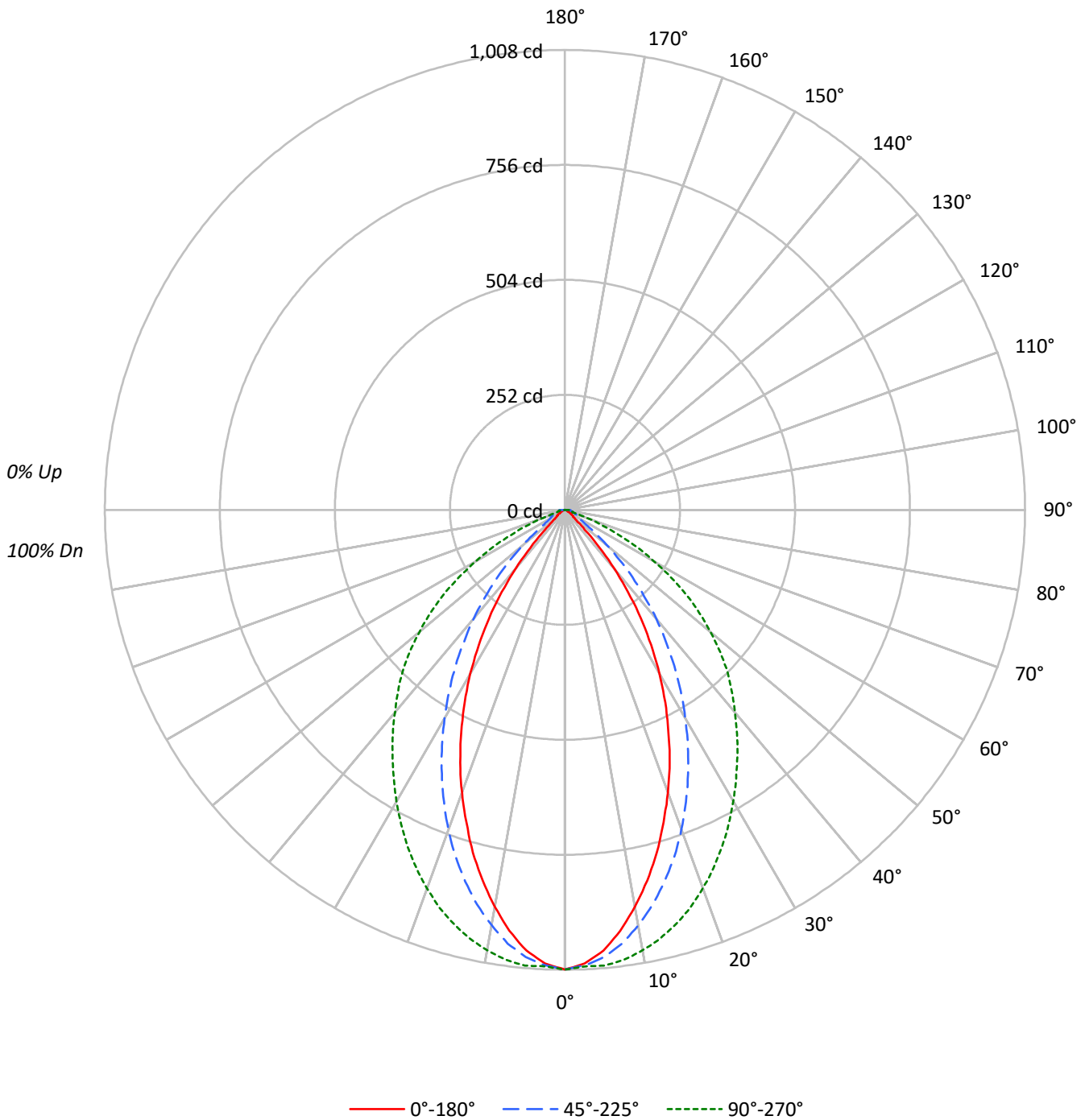
Lumens per Lamp: N/A
Luminaire Lumens: 1269.7 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8676	8676	8676
5°	8381	8504	8667
10°	7724	8086	8572
15°	6937	7516	8381
20°	6046	6837	8094
25°	5100	6067	7741
30°	4116	5244	7337
35°	3045	4388	6923
40°	1887	3496	6513
45°	749	2549	6134
50°	332	1600	5576
55°	266	835	4882
60°	183	632	3891
65°	120	626	2675
70°	118	566	1251
75°	156	552	552
80°	233	645	645
85°	464	1284	939

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6134 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	7.3
10°-20°	238.5	18.8
20°-30°	301.1	23.7
30°-40°	276.2	21.8
40°-50°	188.1	14.8
50°-60°	102.5	8.1
60°-70°	44.3	3.5
70°-80°	16.2	1.3
80°-90°	10.4	0.8
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°	632.0	49.8
0°-40°	908.2	71.5
0°-60°	1198.8	94.4
0°-90°	1269.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1269.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1008	1008	1008	1008	1008	
5°	970	983	984	994	1003	90
15°	778	805	843	903	940	216
25°	537	575	638	740	815	245
35°	290	332	417	550	659	179
45°	62	103	209	371	504	57
55°	18	19	56	205	325	16
65°	6	8	31	64	131	7
75°	5	15	17	17	17	5
85°	5	11	13	13	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1007.5	1007.5	1007.5	1007.5	1007.5
2.5°	995.6	1007.5	999.2	1001.5	1001.5
5°	969.6	982.6	983.8	994.5	1002.7
7.5°	930.6	949.5	959.0	980.3	994.5
10°	883.3	905.8	924.7	961.3	980.3
12.5°	832.5	858.5	886.8	935.3	962.5
15°	778.1	805.3	843.1	903.4	940.1
17.5°	717.8	750.9	797.0	869.1	914.0
20°	659.8	692.9	746.1	827.7	883.3
22.5°	599.5	633.8	692.9	784.0	850.2
25°	536.8	574.7	638.5	740.2	814.7
27.5°	475.4	515.6	583.0	694.1	776.9
30°	413.9	454.1	527.4	646.8	737.9
32.5°	351.2	392.6	471.8	597.1	697.7
35°	289.7	332.3	417.4	549.8	658.6
37.5°	227.0	272.0	363.0	503.7	619.6
40°	167.9	212.8	311.0	457.6	579.4
42.5°	112.3	157.3	257.8	412.7	541.6
45°	61.5	102.9	209.3	371.3	503.7
47.5°	33.1	56.8	162.0	331.1	461.2
50°	24.8	30.7	119.4	288.5	416.2
52.5°	21.3	23.6	82.8	243.6	371.3
55°	17.7	18.9	55.6	204.6	325.2
57.5°	14.2	15.4	41.4	165.5	275.5
60°	10.6	13.0	36.7	127.7	225.9
62.5°	8.3	10.6	34.3	93.4	178.6
65°	5.9	8.3	30.7	63.9	131.3
67.5°	5.9	9.5	26.0	41.4	88.7
70°	4.7	13.0	22.5	27.2	49.7
72.5°	4.7	14.2	18.9	18.9	18.9
75°	4.7	15.4	16.6	16.6	16.6
77.5°	4.7	14.2	15.4	14.2	14.2
80°	4.7	13.0	13.0	13.0	13.0
82.5°	4.7	11.8	13.0	13.0	10.6
85°	4.7	10.6	13.0	13.0	9.5
87.5°	3.5	10.6	11.8	11.8	7.1
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	0.00	0.00	0.00	0.14	0.45	15.91	17.19	16.28	17.50	17.82
	3H	0.00	1.11	0.36	1.44	1.80	16.29	17.42	16.67	17.75	18.12
	4H	1.19	2.24	1.60	2.60	2.98	16.27	17.32	16.67	17.67	18.06
	6H	2.37	3.33	2.78	3.70	4.10	16.26	17.22	16.67	17.59	17.99
	8H	2.95	3.87	3.38	4.26	4.66	16.26	17.17	16.69	17.56	17.97
	12H	3.62	4.49	4.05	4.88	5.31	16.27	17.14	16.70	17.53	17.96
4H	2H	2.16	3.21	2.56	3.56	3.94	15.72	16.78	16.13	17.13	17.51
	3H	3.74	4.60	4.16	5.01	5.41	16.14	17.00	16.56	17.41	17.81
	4H	5.04	5.81	5.47	6.23	6.67	16.14	16.91	16.58	17.33	17.77
	6H	6.16	6.83	6.63	7.27	7.74	16.18	16.85	16.65	17.29	17.76
	8H	6.67	7.29	7.14	7.74	8.21	16.21	16.83	16.68	17.28	17.75
	12H	7.22	7.76	7.70	8.25	8.72	16.28	16.82	16.76	17.30	17.78
8H	4H	6.13	6.74	6.60	7.19	7.66	16.05	16.67	16.52	17.12	17.59
	6H	7.67	8.17	8.17	8.67	9.15	16.13	16.64	16.64	17.13	17.62
	8H	8.47	8.92	8.99	9.44	9.93	16.21	16.67	16.74	17.19	17.68
	12H	9.30	9.70	9.81	10.19	10.77	16.39	16.79	16.90	17.28	17.85
12H	4H	6.32	6.86	6.80	7.34	7.82	16.02	16.56	16.50	17.05	17.52
	6H	8.02	8.48	8.54	8.99	9.48	16.11	16.56	16.63	17.08	17.57
	8H	9.03	9.43	9.54	9.93	10.50	16.24	16.64	16.76	17.14	17.71