

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: P1060709

Luminaire Tested: S124RDR-H1195D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D830-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

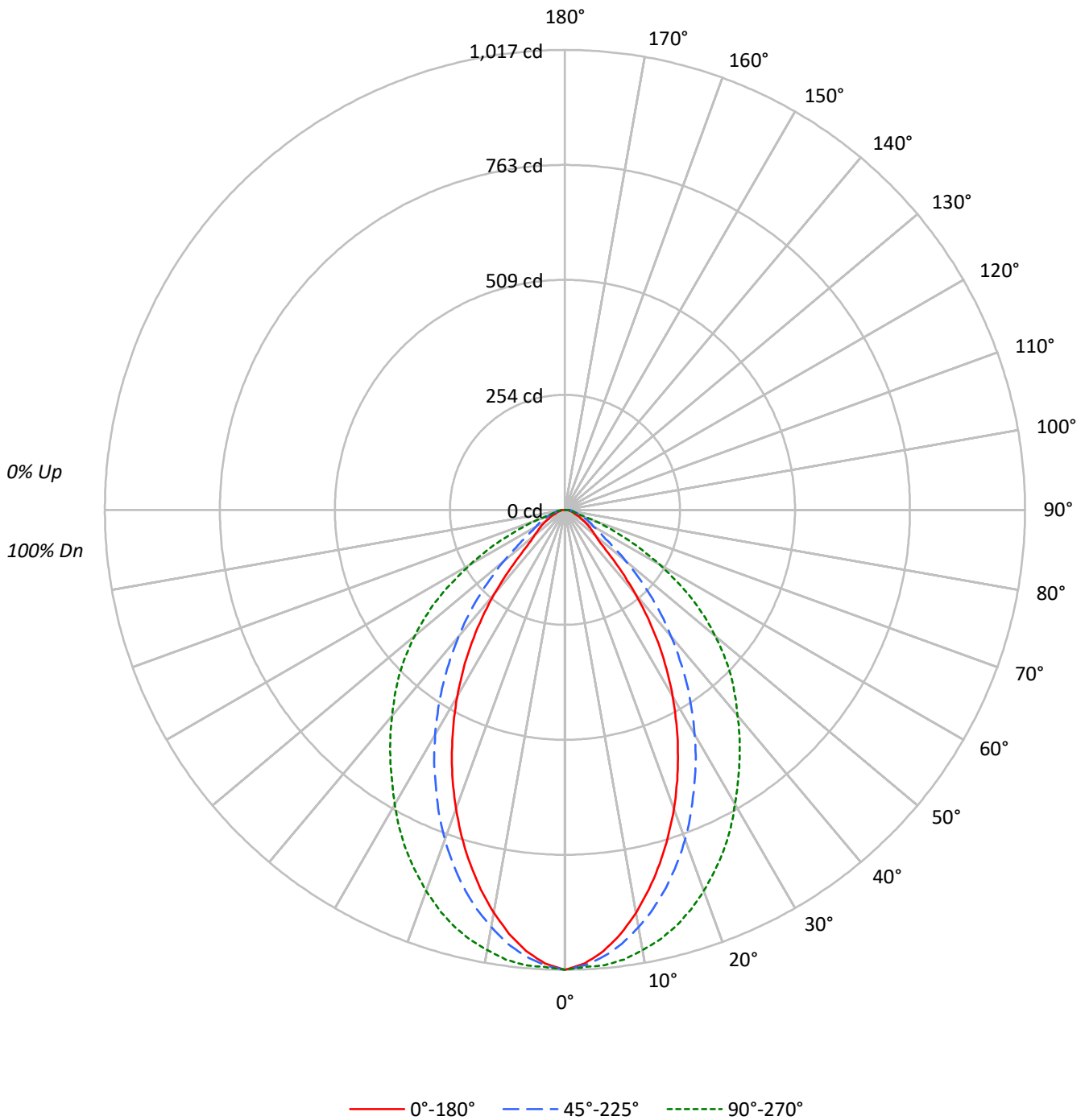
Lumens per Lamp: N/A
Luminaire Lumens: 1430.1 lumens
Efficiency: N/A
Efficacy: 39.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8758	8758	8758
5°	8467	8567	8735
10°	7908	8191	8643
15°	7221	7705	8490
20°	6450	7114	8217
25°	5618	6417	7893
30°	4735	5699	7475
35°	3781	4938	7073
40°	2720	4102	6676
45°	1639	3231	6319
50°	1179	2340	5807
55°	991	1573	5148
60°	803	1249	4145
65°	634	1133	2979
70°	554	944	1596
75°	516	862	775
80°	516	898	704
85°	771	1275	899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6319 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.4	6.5
10°-20°	244.6	17.1
20°-30°	317.4	22.2
30°-40°	305.1	21.3
40°-50°	226.4	15.8
50°-60°	138.7	9.7
60°-70°	67.4	4.7
70°-80°	25.7	1.8
80°-90°	11.5	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°	655.4	45.8
0°-40°	960.5	67.2
0°-60°	1325.6	92.7
0°-90°	1430.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1430.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	980	994	991	1000	1010	91
15°	810	833	864	916	952	226
25°	591	621	675	762	831	270
35°	360	392	470	581	673	223
45°	135	168	265	405	519	112
55°	66	69	105	237	343	59
65°	31	34	56	88	146	32
75°	16	25	26	23	23	17
85°	8	13	13	12	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1017.0	1017.0	1017.0	1017.0	1017.0
2.5°	1004.1	1015.7	1008.0	1010.5	1011.8
5°	979.5	993.7	991.1	1000.2	1010.5
7.5°	945.8	962.7	967.8	986.0	1002.8
10°	904.4	925.1	936.8	966.6	988.5
12.5°	859.2	881.2	903.2	943.3	973.0
15°	810.0	833.3	864.3	916.1	952.3
17.5°	758.2	784.1	821.6	883.7	926.4
20°	703.9	731.1	776.3	844.9	896.7
22.5°	648.3	676.7	727.2	803.5	864.3
25°	591.3	621.1	675.4	762.1	830.7
27.5°	533.1	564.1	626.3	718.1	793.2
30°	476.2	505.9	573.2	672.8	751.8
32.5°	417.9	449.0	521.4	626.3	711.7
35°	359.7	392.1	469.7	581.0	672.8
37.5°	300.2	335.1	416.6	537.0	634.0
40°	242.0	275.6	364.9	491.7	593.9
42.5°	185.0	221.3	315.7	446.4	556.4
45°	134.6	168.2	265.3	405.0	518.9
47.5°	100.9	121.6	218.7	366.2	477.5
50°	88.0	91.9	174.7	323.5	433.5
52.5°	76.3	78.9	135.9	276.9	389.5
55°	66.0	68.6	104.8	236.8	342.9
57.5°	55.6	58.2	84.1	198.0	289.8
60°	46.6	49.2	72.5	157.9	240.7
62.5°	38.8	40.1	64.7	120.3	192.8
65°	31.1	33.6	55.6	88.0	146.2
67.5°	25.9	28.5	45.3	60.8	102.2
70°	22.0	28.5	37.5	42.7	63.4
72.5°	18.1	25.9	31.1	29.8	29.8
75°	15.5	24.6	25.9	23.3	23.3
77.5°	12.9	22.0	20.7	19.4	18.1
80°	10.4	18.1	18.1	15.5	14.2
82.5°	9.1	14.2	14.2	14.2	11.6
85°	7.8	12.9	12.9	11.6	9.1
87.5°	5.2	10.4	11.6	10.4	6.5
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	7.35	8.69	7.71	9.00	9.32	16.45	17.79	16.82	18.10	18.42
	3H	8.40	9.58	8.78	9.91	10.28	16.95	18.14	17.33	18.47	18.84
	4H	8.91	10.02	9.31	10.37	10.75	16.97	18.07	17.37	18.43	18.81
	6H	9.36	10.38	9.78	10.75	11.14	16.97	17.98	17.38	18.35	18.75
	8H	9.55	10.52	9.98	10.91	11.31	16.96	17.93	17.39	18.32	18.72
	12H	9.77	10.69	10.20	11.07	11.50	16.96	17.88	17.39	18.27	18.70
4H	2H	8.44	9.55	8.85	9.90	10.28	16.34	17.45	16.74	17.80	18.18
	3H	9.72	10.62	10.13	11.03	11.43	16.92	17.82	17.33	18.23	18.63
	4H	10.42	11.23	10.86	11.65	12.09	16.97	17.78	17.40	18.19	18.64
	6H	11.05	11.75	11.52	12.20	12.66	17.02	17.72	17.48	18.16	18.63
	8H	11.30	11.95	11.77	12.40	12.87	17.03	17.69	17.50	18.14	18.61
	12H	11.58	12.15	12.06	12.64	13.11	17.07	17.65	17.55	18.13	18.60
8H	4H	10.85	11.50	11.32	11.95	12.42	16.92	17.57	17.38	18.02	18.49
	6H	11.73	12.26	12.23	12.76	13.24	17.01	17.54	17.51	18.04	18.52
	8H	12.13	12.61	12.65	13.13	13.62	17.07	17.55	17.59	18.06	18.56
	12H	12.61	13.04	13.12	13.53	14.10	17.17	17.59	17.68	18.09	18.66
12H	4H	10.89	11.47	11.38	11.95	12.43	16.89	17.47	17.37	17.95	18.42
	6H	11.84	12.32	12.36	12.83	13.33	16.99	17.47	17.51	17.98	18.48
	8H	12.35	12.78	12.87	13.27	13.84	17.09	17.52	17.61	18.01	18.58