

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: P1060748

Luminaire Tested: S124RDR-H1195D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

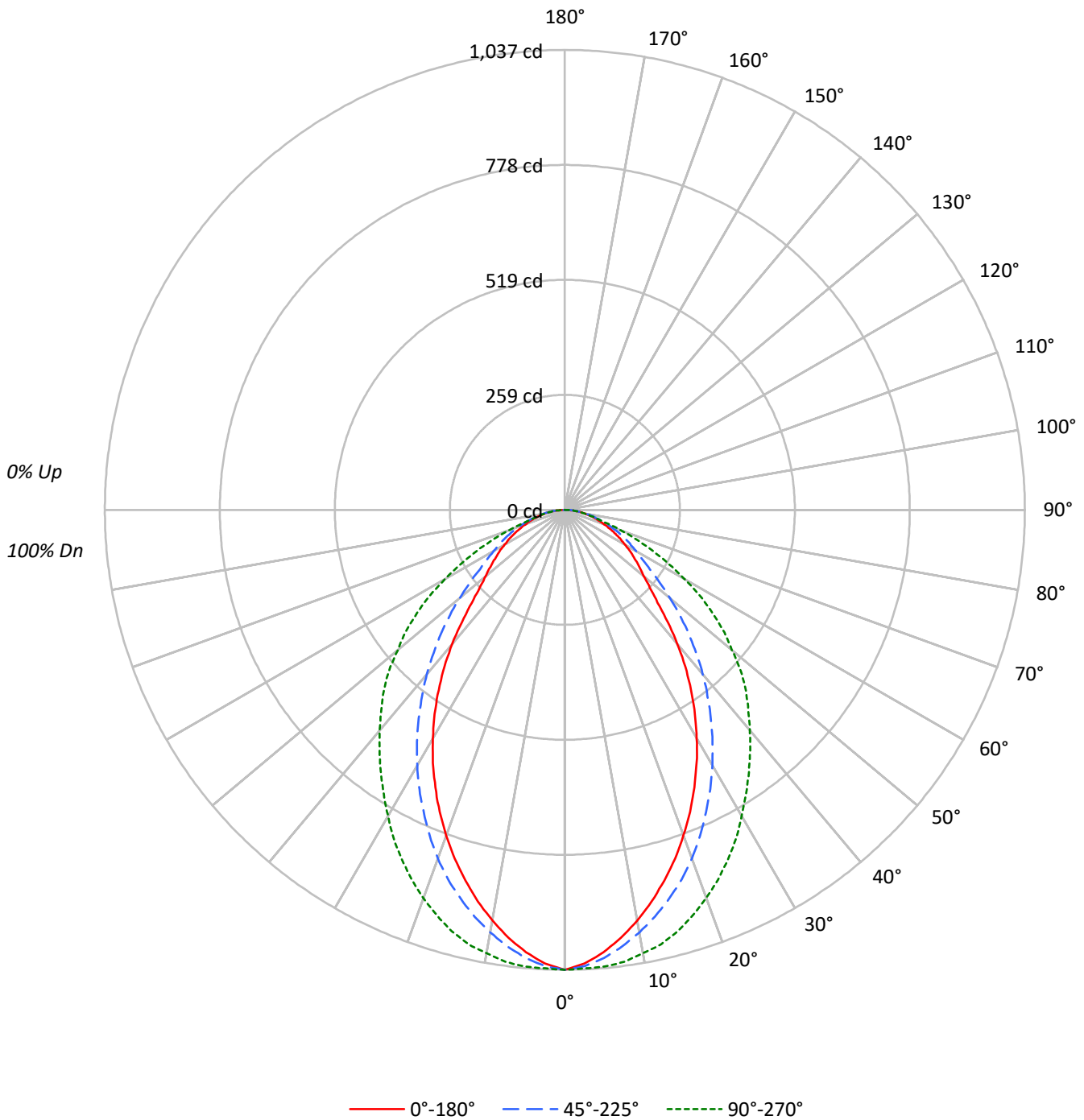
Lumens per Lamp: N/A
Luminaire Lumens: 1888.2 lumens
Efficiency: N/A
Efficacy: 51.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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										
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	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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8931	8931	8931
5°	8655	8768	8937
10°	8223	8461	8879
15°	7715	8093	8771
20°	7163	7671	8538
25°	6559	7148	8263
30°	5913	6615	7924
35°	5211	6034	7600
40°	4436	5438	7295
45°	3601	4805	7030
50°	3116	4136	6583
55°	2889	3509	6104
60°	2695	3164	5354
65°	2525	2969	4452
70°	2354	2737	3366
75°	2242	2532	2422
80°	2103	2316	2048
85°	1937	2144	1610

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7030 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.8	5.1
10°-20°	257.4	13.6
20°-30°	351.4	18.6
30°-40°	368.2	19.5
40°-50°	318.7	16.9
50°-60°	239.5	12.7
60°-70°	154.4	8.2
70°-80°	79.2	4.2
80°-90°	23.6	1.3
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°	704.6	37.3
0°-40°	1072.8	56.8
0°-60°	1630.9	86.4
0°-90°	1888.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1888.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1001	1016	1014	1022	1034	94
15°	865	887	908	949	984	243
25°	690	716	752	811	870	317
35°	496	524	574	650	723	309
45°	296	326	395	491	577	233
55°	192	199	234	334	407	173
65°	124	126	146	176	218	123
75°	67	75	76	75	73	71
85°	20	23	22	21	16	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1037.1	1037.1	1037.1	1037.1	1037.1
2.5°	1024.1	1037.1	1029.5	1031.7	1035.0
5°	1001.3	1016.5	1014.3	1021.9	1033.9
7.5°	973.0	989.3	992.6	1010.0	1027.4
10°	940.4	958.9	967.6	993.6	1015.4
12.5°	904.5	924.1	939.3	971.9	1003.4
15°	865.4	887.1	907.8	949.1	983.9
17.5°	825.1	846.9	874.1	919.7	958.9
20°	781.7	805.6	837.1	884.9	931.7
22.5°	737.1	762.1	795.8	848.0	902.3
25°	690.3	716.4	752.3	811.0	869.7
27.5°	643.6	669.7	709.9	771.9	836.0
30°	594.7	621.8	665.3	732.7	796.9
32.5°	545.7	575.1	619.7	691.4	759.9
35°	495.7	524.0	574.0	650.1	723.0
37.5°	445.7	475.1	528.4	609.9	686.0
40°	394.6	425.1	483.8	569.7	649.0
42.5°	343.5	376.2	438.1	528.4	612.1
45°	295.7	326.1	394.6	491.4	577.3
47.5°	259.8	280.5	351.1	455.5	538.1
50°	232.6	243.5	308.7	416.4	491.4
52.5°	212.0	219.6	269.6	374.0	453.3
55°	192.4	198.9	233.7	333.8	406.6
57.5°	175.0	178.3	206.6	294.6	362.0
60°	156.5	159.8	183.7	252.2	310.9
62.5°	140.2	142.4	165.2	212.0	264.2
65°	123.9	126.1	145.7	176.1	218.5
67.5°	108.7	112.0	127.2	143.5	173.9
70°	93.5	100.0	108.7	116.3	133.7
72.5°	80.4	87.0	91.3	93.5	94.6
75°	67.4	75.0	76.1	75.0	72.8
77.5°	54.4	60.9	60.9	58.7	56.5
80°	42.4	47.8	46.7	44.6	41.3
82.5°	31.5	34.8	33.7	31.5	28.3
85°	19.6	22.8	21.7	20.7	16.3
87.5°	9.8	13.0	12.0	10.9	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	14.04	15.52	14.40	15.84	16.15	17.81	19.30	18.18	19.61	19.92
	3H	15.69	17.02	16.07	17.35	17.71	18.93	20.26	19.30	20.58	20.95
	4H	16.36	17.61	16.77	17.96	18.34	19.22	20.46	19.62	20.81	21.19
	6H	16.88	18.03	17.29	18.39	18.79	19.41	20.56	19.83	20.93	21.32
	8H	17.06	18.15	17.49	18.54	18.95	19.47	20.56	19.89	20.95	21.35
	12H	17.19	18.23	17.62	18.61	19.04	19.49	20.54	19.92	20.92	21.35
4H	2H	14.82	16.07	15.22	16.42	16.80	17.97	19.22	18.37	19.57	19.95
	3H	16.68	17.72	17.09	18.12	18.52	19.28	20.32	19.69	20.72	21.12
	4H	17.49	18.42	17.93	18.84	19.28	19.69	20.62	20.12	21.04	21.48
	6H	18.14	18.95	18.60	19.39	19.85	20.01	20.81	20.47	21.26	21.72
	8H	18.37	19.12	18.83	19.57	20.04	20.10	20.85	20.56	21.30	21.77
	12H	18.54	19.21	19.02	19.69	20.16	20.16	20.83	20.64	21.31	21.79
8H	4H	17.84	18.60	18.31	19.04	19.51	19.82	20.58	20.29	21.02	21.49
	6H	18.64	19.26	19.13	19.75	20.23	20.24	20.86	20.73	21.35	21.83
	8H	18.96	19.51	19.47	20.03	20.51	20.39	20.95	20.90	21.46	21.95
	12H	19.22	19.71	19.73	20.21	20.77	20.51	21.01	21.02	21.50	22.06
12H	4H	17.87	18.54	18.35	19.02	19.50	19.83	20.50	20.31	20.98	21.45
	6H	18.70	19.26	19.21	19.77	20.26	20.26	20.82	20.77	21.33	21.82
	8H	19.08	19.58	19.59	20.07	20.64	20.46	20.95	20.97	21.45	22.01