

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: P1060328

Luminaire Tested: S124RDRP-S1195D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060328
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D850-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

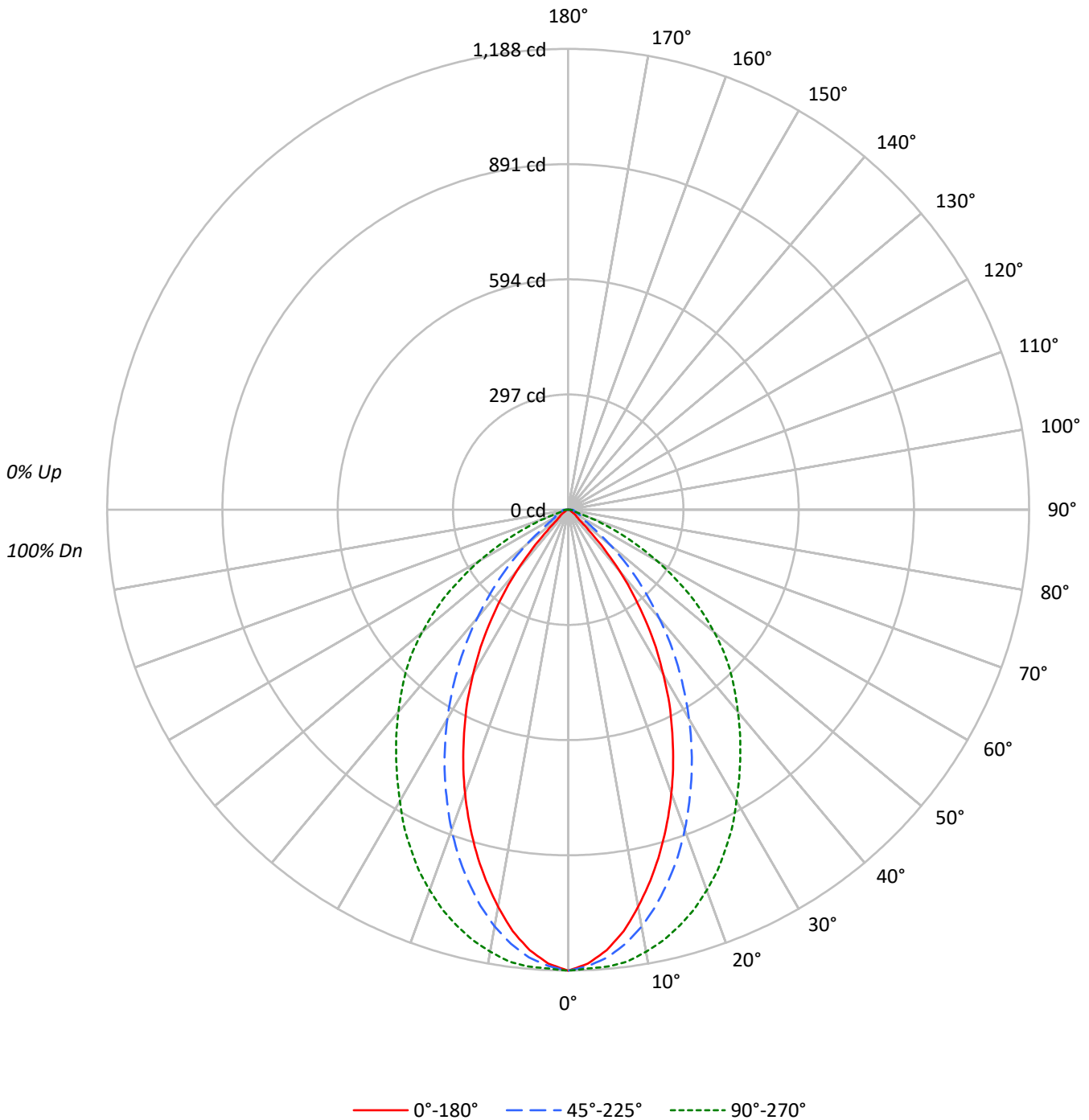
Lumens per Lamp: N/A
Luminaire Lumens: 1491.6 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10234	10234	10234
5°	9852	10015	10219
10°	9085	9539	10117
15°	8154	8855	9894
20°	7126	8049	9564
25°	6028	7150	9138
30°	4868	6199	8625
35°	3624	5179	8125
40°	2300	4105	7644
45°	921	3009	7208
50°	401	1918	6579
55°	308	992	5742
60°	217	679	4555
65°	161	674	3111
70°	159	594	1428
75°	210	629	576
80°	312	704	625
85°	622	1245	929

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7208 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	7.3
10°-20°	280.6	18.8
20°-30°	354.4	23.8
30°-40°	325.5	21.8
40°-50°	222.0	14.9
50°-60°	120.4	8.1
60°-70°	51.1	3.4
70°-80°	17.7	1.2
80°-90°	11.2	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°	743.8	49.9
0°-40°	1069.3	71.7
0°-60°	1411.7	94.6
0°-90°	1491.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1140	1157	1159	1168	1182	106
15°	915	944	993	1064	1110	255
25°	634	675	752	869	962	290
35°	345	390	493	647	773	214
45°	76	121	247	438	592	70
55°	20	22	66	241	382	18
65°	8	9	33	76	153	8
75°	6	17	19	17	17	7
85°	6	13	13	13	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1188.5	1188.5	1188.5	1188.5	1188.5
2.5°	1171.2	1185.4	1177.5	1180.6	1183.8
5°	1139.7	1157.0	1158.6	1168.0	1182.2
7.5°	1095.6	1116.1	1128.7	1152.3	1174.3
10°	1039.0	1064.1	1090.9	1128.7	1157.0
12.5°	979.1	1005.9	1045.3	1098.8	1136.6
15°	914.6	944.5	993.3	1064.1	1109.8
17.5°	846.9	880.0	938.2	1021.6	1079.9
20°	777.6	813.8	878.4	972.8	1043.7
22.5°	706.8	744.6	815.4	922.5	1005.9
25°	634.4	675.3	752.5	868.9	961.8
27.5°	565.1	602.9	687.9	815.4	917.7
30°	489.6	532.1	623.4	760.3	867.4
32.5°	420.3	461.2	557.3	703.7	820.1
35°	344.7	390.4	492.7	647.0	772.9
37.5°	273.9	318.0	429.7	593.5	727.3
40°	204.6	250.3	365.2	539.9	680.0
42.5°	137.0	185.8	303.8	484.8	636.0
45°	75.6	121.2	247.1	437.6	591.9
47.5°	39.4	66.1	193.6	390.4	544.7
50°	29.9	36.2	143.2	338.4	491.1
52.5°	25.2	26.8	97.6	286.5	437.6
55°	20.5	22.0	66.1	240.8	382.5
57.5°	15.7	17.3	47.2	196.8	321.1
60°	12.6	14.2	39.4	151.1	264.5
62.5°	9.4	11.0	37.8	111.8	207.8
65°	7.9	9.4	33.1	75.6	152.7
67.5°	6.3	9.4	28.3	48.8	102.3
70°	6.3	12.6	23.6	31.5	56.7
72.5°	6.3	14.2	20.5	20.5	20.5
75°	6.3	17.3	18.9	17.3	17.3
77.5°	6.3	15.7	15.7	15.7	15.7
80°	6.3	14.2	14.2	14.2	12.6
82.5°	6.3	12.6	14.2	14.2	11.0
85°	6.3	12.6	12.6	12.6	9.4
87.5°	4.7	12.6	12.6	12.6	6.3
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	0.05	0.00	0.37	0.68	16.52	17.80	16.89	18.11	18.43
	3H	0.03	1.16	0.41	1.49	1.85	16.88	18.01	17.26	18.34	18.70
	4H	1.42	2.47	1.82	2.82	3.20	16.85	17.89	17.25	18.25	18.63
	6H	2.79	3.75	3.20	4.12	4.51	16.82	17.78	17.24	18.15	18.55
	8H	3.47	4.38	3.90	4.77	5.18	16.81	17.72	17.24	18.11	18.52
	12H	4.27	5.14	4.70	5.52	5.96	16.81	17.68	17.24	18.06	18.49
4H	2H	2.22	3.27	2.63	3.62	4.01	16.33	17.38	16.73	17.73	18.11
	3H	3.65	4.50	4.06	4.91	5.31	16.72	17.58	17.13	17.98	18.38
	4H	5.09	5.86	5.53	6.28	6.72	16.70	17.46	17.14	17.88	18.33
	6H	6.34	7.00	6.80	7.44	7.91	16.72	17.38	17.18	17.82	18.29
	8H	6.91	7.52	7.38	7.97	8.44	16.73	17.34	17.20	17.79	18.26
	12H	7.58	8.13	8.07	8.61	9.08	16.77	17.31	17.25	17.79	18.27
8H	4H	6.17	6.78	6.64	7.23	7.70	16.60	17.22	17.07	17.66	18.14
	6H	7.78	8.28	8.28	8.78	9.26	16.65	17.15	17.15	17.65	18.13
	8H	8.61	9.07	9.14	9.58	10.08	16.71	17.16	17.23	17.68	18.17
	12H	9.58	9.98	10.10	10.48	11.05	16.82	17.22	17.34	17.72	18.29
12H	4H	6.36	6.90	6.84	7.38	7.86	16.56	17.11	17.05	17.59	18.06
	6H	8.13	8.58	8.65	9.10	9.59	16.62	17.07	17.14	17.59	18.08
	8H	9.15	9.55	9.66	10.04	10.62	16.72	17.12	17.24	17.62	18.19