

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: P1060334

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060334
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: S124RDRP-S1195D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

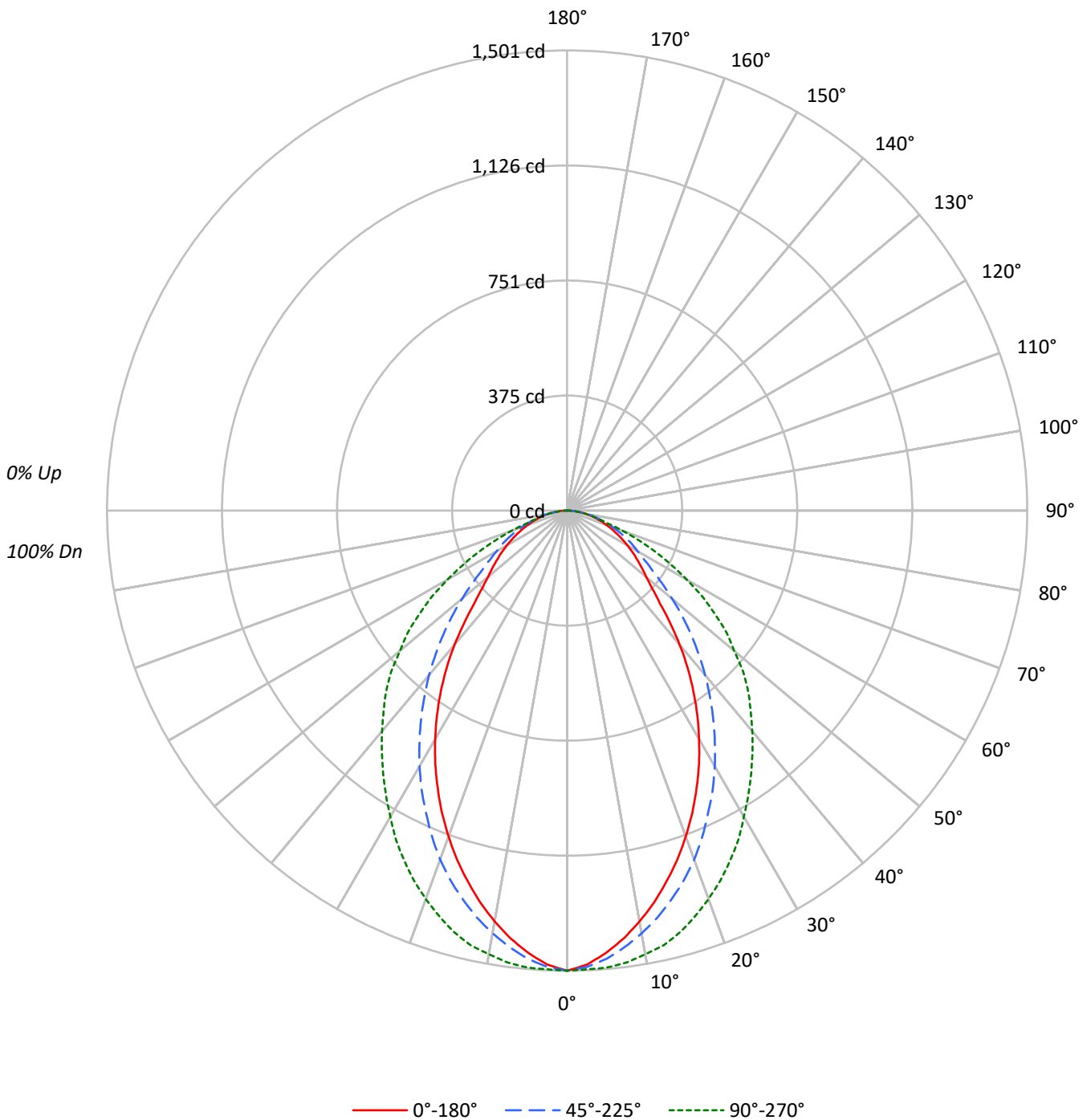
Lumens per Lamp: N/A
Luminaire Lumens: 2732.6 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12925	12925	12925
5°	12525	12689	12933
10°	11900	12244	12849
15°	11165	11712	12694
20°	10366	11102	12356
25°	9493	10344	11959
30°	8557	9574	11467
35°	7541	8733	10999
40°	6420	7870	10559
45°	5211	6955	10173
50°	4511	5986	9526
55°	4181	5079	8834
60°	3903	4579	7750
65°	3655	4295	6443
70°	3406	3960	4872
75°	3244	3663	3507
80°	3045	3357	2965
85°	2796	3112	2332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.6	5.1
10°-20°	372.5	13.6
20°-30°	508.6	18.6
30°-40°	532.8	19.5
40°-50°	461.2	16.9
50°-60°	346.6	12.7
60°-70°	223.5	8.2
70°-80°	114.6	4.2
80°-90°	34.2	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°	1019.7	37.3
0°-40°	1552.5	56.8
0°-60°	2360.3	86.4
0°-90°	2732.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1449	1471	1468	1479	1496	136
15°	1252	1284	1314	1374	1424	351
25°	999	1037	1089	1174	1259	458
35°	717	758	831	941	1046	447
45°	428	472	571	711	835	337
55°	278	288	338	483	588	250
65°	179	182	211	255	316	178
75°	98	109	110	109	105	103
85°	28	33	32	30	24	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1501.0	1501.0	1501.0	1501.0	1501.0
2.5°	1482.1	1501.0	1489.9	1493.1	1497.8
5°	1449.0	1471.1	1467.9	1478.9	1496.2
7.5°	1408.1	1431.7	1436.4	1461.6	1486.8
10°	1360.9	1387.7	1400.3	1438.0	1469.5
12.5°	1309.0	1337.3	1359.4	1406.6	1452.2
15°	1252.4	1283.8	1313.7	1373.5	1423.9
17.5°	1194.2	1225.6	1265.0	1331.0	1387.7
20°	1131.2	1165.8	1211.5	1280.7	1348.3
22.5°	1066.7	1102.9	1151.7	1227.2	1305.9
25°	999.1	1036.8	1088.7	1173.7	1258.7
27.5°	931.4	969.2	1027.4	1117.1	1209.9
30°	860.6	899.9	962.9	1060.4	1153.2
32.5°	789.8	832.3	896.8	1000.6	1099.8
35°	717.4	758.3	830.7	940.8	1046.3
37.5°	645.1	687.5	764.6	882.6	992.8
40°	571.1	615.2	700.1	824.4	939.3
42.5°	497.2	544.4	634.1	764.6	885.8
45°	427.9	472.0	571.1	711.1	835.4
47.5°	376.0	405.9	508.2	659.2	778.8
50°	336.7	352.4	446.8	602.6	711.1
52.5°	306.8	317.8	390.2	541.2	656.1
55°	278.5	287.9	338.3	483.0	588.4
57.5°	253.3	258.0	298.9	426.4	523.9
60°	226.6	231.3	265.9	365.0	450.0
62.5°	203.0	206.1	239.1	306.8	382.3
65°	179.4	182.5	210.8	254.9	316.2
67.5°	157.3	162.1	184.1	207.7	251.7
70°	135.3	144.7	157.3	168.3	193.5
72.5°	116.4	125.9	132.2	135.3	136.9
75°	97.5	108.6	110.1	108.6	105.4
77.5°	78.7	88.1	88.1	85.0	81.8
80°	61.4	69.2	67.7	64.5	59.8
82.5°	45.6	50.3	48.8	45.6	40.9
85°	28.3	33.0	31.5	29.9	23.6
87.5°	14.2	18.9	17.3	15.7	9.4
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	15.32	16.81	15.69	17.12	17.43	19.10	20.58	19.46	20.89	21.21
	3H	16.98	18.31	17.36	18.64	19.00	20.21	21.54	20.59	21.87	22.23
	4H	17.65	18.89	18.05	19.24	19.62	20.50	21.75	20.90	22.10	22.48
	6H	18.16	19.31	18.57	19.68	20.07	20.70	21.85	21.11	22.22	22.61
	8H	18.34	19.44	18.77	19.83	20.23	20.75	21.85	21.18	22.24	22.64
	12H	18.47	19.52	18.90	19.90	20.33	20.78	21.83	21.21	22.21	22.64
4H	2H	16.11	17.35	16.51	17.70	18.08	19.26	20.50	19.66	20.85	21.23
	3H	17.97	19.00	18.38	19.40	19.80	20.57	21.60	20.98	22.00	22.40
	4H	18.78	19.71	19.21	20.12	20.56	20.98	21.90	21.41	22.32	22.76
	6H	19.42	20.23	19.88	20.67	21.13	21.29	22.10	21.75	22.54	23.00
	8H	19.65	20.41	20.12	20.85	21.32	21.38	22.14	21.85	22.58	23.05
	12H	19.82	20.50	20.31	20.97	21.45	21.45	22.12	21.93	22.60	23.07
8H	4H	19.13	19.88	19.59	20.32	20.79	21.11	21.86	21.57	22.31	22.78
	6H	19.92	20.54	20.42	21.03	21.51	21.52	22.14	22.02	22.64	23.11
	8H	20.24	20.80	20.75	21.31	21.80	21.67	22.23	22.19	22.74	23.23
	12H	20.50	21.00	21.01	21.49	22.06	21.80	22.29	22.31	22.78	23.35
12H	4H	19.16	19.83	19.64	20.31	20.78	21.11	21.79	21.60	22.27	22.74
	6H	19.98	20.54	20.50	21.05	21.54	21.54	22.10	22.06	22.61	23.10
	8H	20.37	20.86	20.88	21.35	21.92	21.74	22.24	22.26	22.73	23.30