

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: P1060319

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060319
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-S1195D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

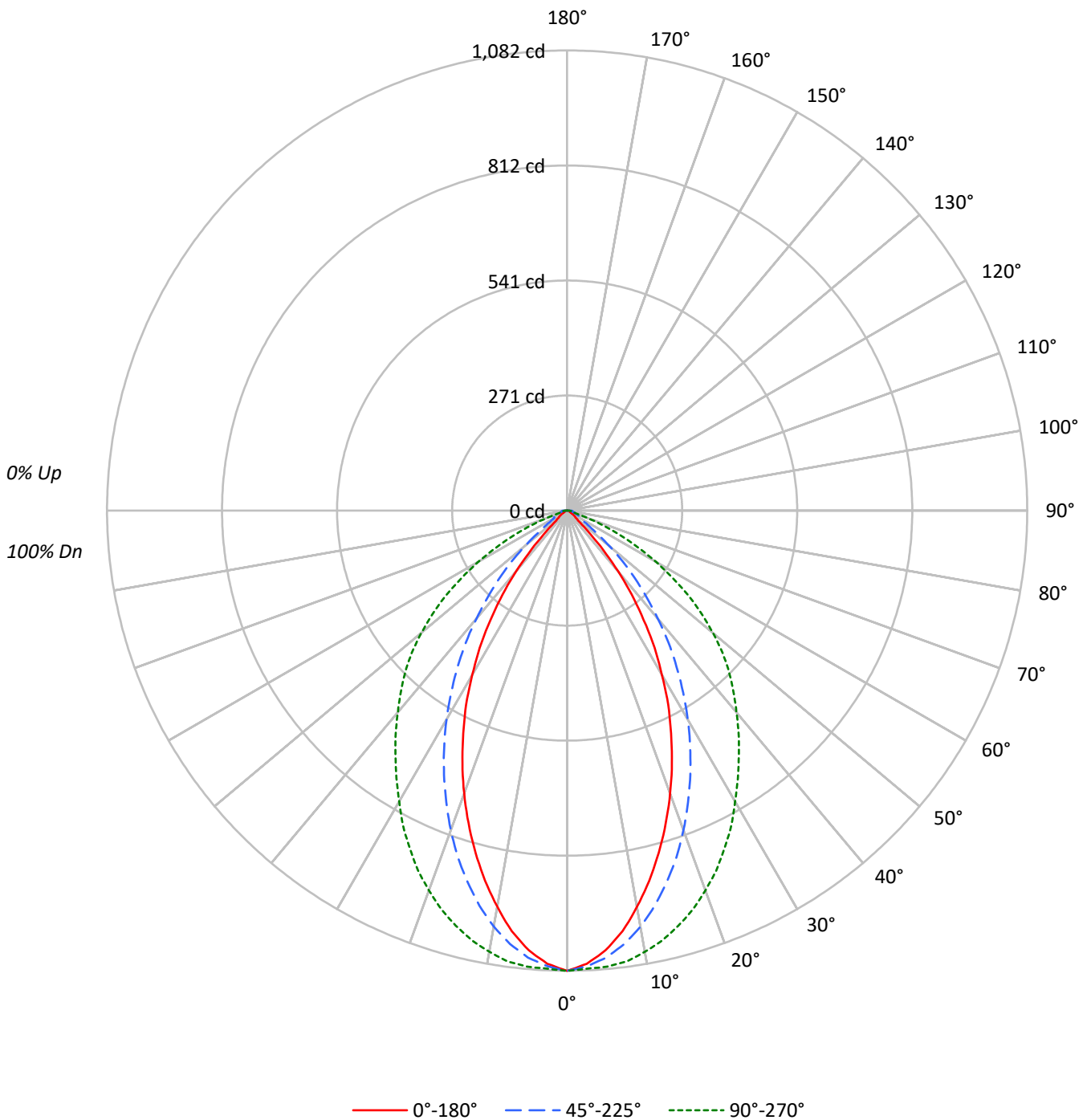
Lumens per Lamp: N/A
Luminaire Lumens: 1358.3 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	9320	9320	9320
5°	8971	9119	9305
10°	8273	8686	9213
15°	7424	8064	9009
20°	6489	7330	8709
25°	5489	6510	8321
30°	4433	5644	7853
35°	3300	4717	7399
40°	2094	3739	6962
45°	838	2741	6564
50°	364	1747	5991
55°	279	904	5229
60°	198	617	4147
65°	147	613	2832
70°	144	541	1299
75°	190	572	526
80°	283	640	570
85°	563	1136	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6564 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	7.3
10°-20°	255.5	18.8
20°-30°	322.7	23.8
30°-40°	296.4	21.8
40°-50°	202.1	14.9
50°-60°	109.6	8.1
60°-70°	46.5	3.4
70°-80°	16.1	1.2
80°-90°	10.2	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°	677.3	49.9
0°-40°	973.8	71.7
0°-60°	1285.5	94.6
0°-90°	1358.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1358.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1038	1054	1055	1064	1076	96
15°	833	860	904	969	1011	232
25°	578	615	685	791	876	264
35°	314	356	449	589	704	195
45°	69	110	225	398	539	63
55°	19	20	60	219	348	17
65°	7	9	30	69	139	7
75°	6	16	17	16	16	6
85°	6	12	12	12	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.3	1082.3	1082.3	1082.3	1082.3
2.5°	1066.5	1079.4	1072.2	1075.1	1078.0
5°	1037.8	1053.6	1055.0	1063.6	1076.5
7.5°	997.7	1016.3	1027.8	1049.3	1069.4
10°	946.1	969.0	993.4	1027.8	1053.6
12.5°	891.6	916.0	951.8	1000.6	1035.0
15°	832.8	860.1	904.5	969.0	1010.6
17.5°	771.2	801.3	854.3	930.3	983.4
20°	708.1	741.1	799.9	885.9	950.4
22.5°	643.6	678.0	742.5	840.0	916.0
25°	577.7	615.0	685.2	791.3	875.8
27.5°	514.6	549.0	626.4	742.5	835.7
30°	445.8	484.5	567.6	692.4	789.8
32.5°	382.7	420.0	507.4	640.8	746.8
35°	313.9	355.5	448.7	589.2	703.8
37.5°	249.4	289.6	391.3	540.4	662.3
40°	186.3	227.9	332.6	491.7	619.3
42.5°	124.7	169.1	276.7	441.5	579.1
45°	68.8	110.4	225.1	398.5	539.0
47.5°	35.8	60.2	176.3	355.5	496.0
50°	27.2	33.0	130.4	308.2	447.2
52.5°	22.9	24.4	88.9	260.9	398.5
55°	18.6	20.1	60.2	219.3	348.3
57.5°	14.3	15.8	43.0	179.2	292.4
60°	11.5	12.9	35.8	137.6	240.8
62.5°	8.6	10.0	34.4	101.8	189.2
65°	7.2	8.6	30.1	68.8	139.0
67.5°	5.7	8.6	25.8	44.4	93.2
70°	5.7	11.5	21.5	28.7	51.6
72.5°	5.7	12.9	18.6	18.6	18.6
75°	5.7	15.8	17.2	15.8	15.8
77.5°	5.7	14.3	14.3	14.3	14.3
80°	5.7	12.9	12.9	12.9	11.5
82.5°	5.7	11.5	12.9	12.9	10.0
85°	5.7	11.5	11.5	11.5	8.6
87.5°	4.3	11.5	11.5	11.5	5.7
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	0.06	0.37	16.20	17.47	16.56	17.79	18.10
	3H	0.00	0.84	0.10	1.17	1.54	16.55	17.68	16.93	18.01	18.38
	4H	1.09	2.14	1.50	2.49	2.88	16.52	17.57	16.92	17.92	18.30
	6H	2.45	3.42	2.87	3.79	4.18	16.49	17.46	16.91	17.83	18.22
	8H	3.13	4.04	3.56	4.43	4.84	16.48	17.39	16.91	17.79	18.19
	12H	3.93	4.80	4.36	5.18	5.61	16.48	17.35	16.91	17.74	18.17
4H	2H	1.90	2.95	2.30	3.30	3.68	16.00	17.05	16.40	17.40	17.78
	3H	3.32	4.17	3.73	4.58	4.98	16.39	17.25	16.81	17.65	18.06
	4H	4.77	5.53	5.21	5.95	6.40	16.38	17.14	16.81	17.56	18.00
	6H	6.01	6.67	6.47	7.11	7.58	16.39	17.05	16.86	17.50	17.97
	8H	6.58	7.19	7.05	7.64	8.11	16.40	17.02	16.87	17.47	17.94
	12H	7.25	7.79	7.74	8.28	8.75	16.44	16.98	16.93	17.47	17.94
8H	4H	5.84	6.46	6.31	6.90	7.38	16.28	16.89	16.75	17.34	17.81
	6H	7.45	7.95	7.95	8.45	8.93	16.33	16.83	16.83	17.33	17.81
	8H	8.28	8.74	8.81	9.25	9.75	16.38	16.83	16.91	17.35	17.84
	12H	9.25	9.65	9.77	10.15	10.72	16.50	16.90	17.01	17.39	17.97
12H	4H	6.03	6.57	6.52	7.06	7.53	16.24	16.78	16.72	17.26	17.74
	6H	7.80	8.25	8.32	8.76	9.26	16.29	16.75	16.82	17.26	17.75
	8H	8.82	9.22	9.33	9.71	10.29	16.40	16.80	16.91	17.29	17.87