

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: P1060607

Luminaire Tested: S124RDRP-S795D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060607
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-S795D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

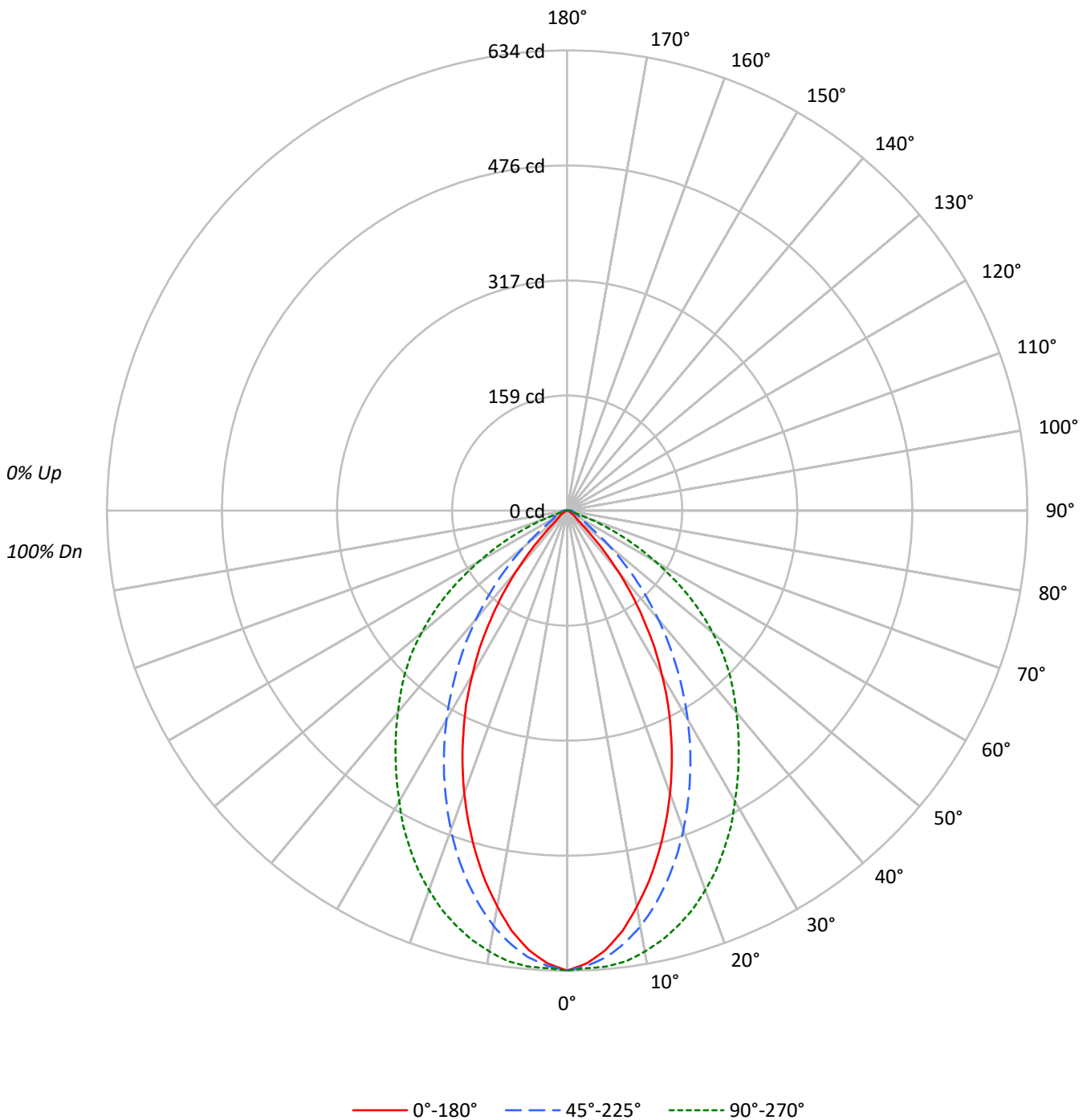
Lumens per Lamp: N/A
Luminaire Lumens: 795.3 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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°	5456	5456	5456
5°	5252	5339	5448
10°	4843	5085	5394
15°	4347	4721	5275
20°	3799	4291	5099
25°	3213	3812	4872
30°	2595	3304	4598
35°	1932	2762	4332
40°	1226	2189	4076
45°	491	1605	3843
50°	213	1023	3509
55°	164	528	3061
60°	115	362	2428
65°	86	359	1659
70°	86	317	760
75°	113	336	306
80°	169	377	332
85°	336	662	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3843 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	7.3
10°-20°	149.6	18.8
20°-30°	189.0	23.8
30°-40°	173.6	21.8
40°-50°	118.3	14.9
50°-60°	64.2	8.1
60°-70°	27.2	3.4
70°-80°	9.4	1.2
80°-90°	6.0	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°	396.6	49.9
0°-40°	570.1	71.7
0°-60°	752.6	94.6
0°-90°	795.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	795.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	608	617	618	623	630	56
15°	488	504	530	567	592	136
25°	338	360	401	463	513	155
35°	184	208	263	345	412	114
45°	40	65	132	233	316	37
55°	11	12	35	128	204	10
65°	4	5	18	40	81	4
75°	3	9	10	9	9	4
85°	3	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.6	633.6	633.6	633.6	633.6
2.5°	624.4	632.0	627.8	629.4	631.1
5°	607.6	616.9	617.7	622.7	630.3
7.5°	584.1	595.0	601.8	614.3	626.1
10°	553.9	567.3	581.6	601.8	616.9
12.5°	522.0	536.3	557.3	585.8	605.9
15°	487.6	503.6	529.6	567.3	591.7
17.5°	451.5	469.1	500.2	544.7	575.7
20°	414.6	433.9	468.3	518.7	556.4
22.5°	376.8	397.0	434.7	491.8	536.3
25°	338.2	360.0	401.2	463.3	512.8
27.5°	301.3	321.4	366.8	434.7	489.3
30°	261.0	283.7	332.3	405.4	462.4
32.5°	224.1	245.9	297.1	375.2	437.3
35°	183.8	208.1	262.7	344.9	412.1
37.5°	146.0	169.5	229.1	316.4	387.7
40°	109.1	133.4	194.7	287.9	362.6
42.5°	73.0	99.0	162.0	258.5	339.1
45°	40.3	64.6	131.8	233.3	315.6
47.5°	21.0	35.2	103.2	208.1	290.4
50°	15.9	19.3	76.4	180.4	261.9
52.5°	13.4	14.3	52.0	152.7	233.3
55°	10.9	11.7	35.2	128.4	203.9
57.5°	8.4	9.2	25.2	104.9	171.2
60°	6.7	7.6	21.0	80.6	141.0
62.5°	5.0	5.9	20.1	59.6	110.8
65°	4.2	5.0	17.6	40.3	81.4
67.5°	3.4	5.0	15.1	26.0	54.6
70°	3.4	6.7	12.6	16.8	30.2
72.5°	3.4	7.6	10.9	10.9	10.9
75°	3.4	9.2	10.1	9.2	9.2
77.5°	3.4	8.4	8.4	8.4	8.4
80°	3.4	7.6	7.6	7.6	6.7
82.5°	3.4	6.7	7.6	7.6	5.9
85°	3.4	6.7	6.7	6.7	5.0
87.5°	2.5	6.7	6.7	6.7	3.4
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	0.00	0.00	0.00	0.00	0.00	14.34	15.61	14.70	15.93	16.24
	3H	0.00	0.00	0.00	0.00	0.00	14.69	15.82	15.07	16.15	16.52
	4H	0.00	0.29	0.00	0.64	1.03	14.66	15.71	15.06	16.06	16.44
	6H	0.63	1.59	1.04	1.96	2.36	14.63	15.60	15.05	15.97	16.36
	8H	1.32	2.23	1.75	2.62	3.02	14.62	15.53	15.05	15.93	16.33
	12H	2.13	3.00	2.56	3.38	3.81	14.62	15.49	15.05	15.87	16.31
4H	2H	0.02	1.07	0.43	1.42	1.81	14.14	15.19	14.54	15.54	15.92
	3H	1.45	2.31	1.87	2.71	3.12	14.53	15.39	14.95	15.79	16.20
	4H	2.90	3.67	3.34	4.09	4.53	14.51	15.28	14.95	15.70	16.14
	6H	4.16	4.82	4.63	5.27	5.74	14.53	15.19	15.00	15.64	16.11
	8H	4.74	5.35	5.21	5.80	6.27	14.54	15.16	15.01	15.61	16.08
	12H	5.42	5.96	5.90	6.44	6.92	14.58	15.12	15.07	15.61	16.08
8H	4H	3.98	4.60	4.45	5.04	5.52	14.41	15.03	14.89	15.48	15.95
	6H	5.61	6.11	6.11	6.61	7.09	14.47	14.97	14.97	15.47	15.95
	8H	6.44	6.89	6.96	7.41	7.90	14.52	14.98	15.05	15.49	15.99
	12H	7.41	7.81	7.92	8.30	8.88	14.64	15.04	15.16	15.54	16.11
12H	4H	4.17	4.71	4.66	5.20	5.67	14.38	14.92	14.86	15.40	15.88
	6H	5.96	6.41	6.48	6.92	7.42	14.43	14.89	14.96	15.40	15.90
	8H	6.98	7.38	7.49	7.87	8.44	14.54	14.94	15.06	15.43	16.01