

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: P1060615

Luminaire Tested: S124RDRP-S795D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

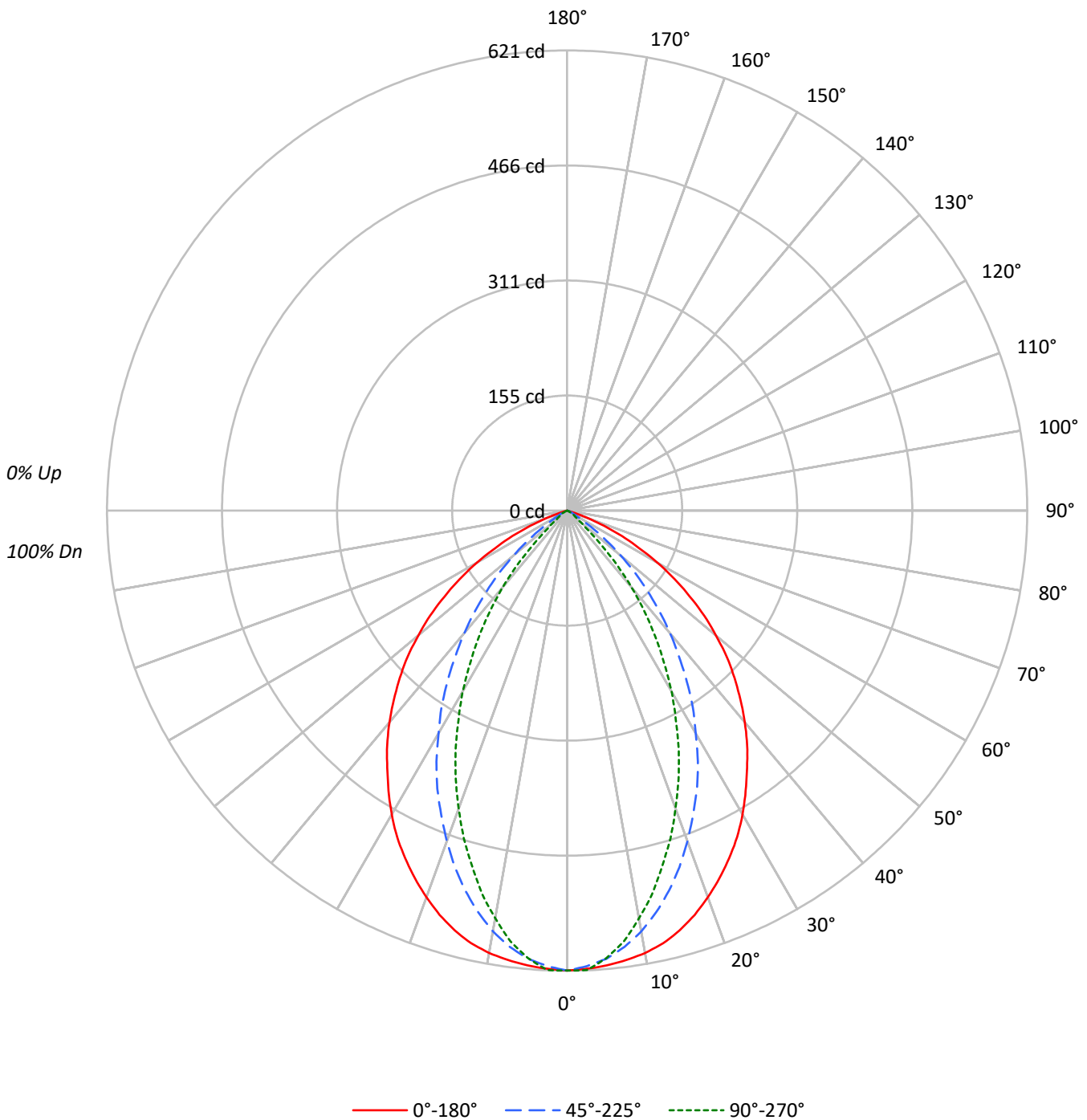
Lumens per Lamp: N/A
Luminaire Lumens: 810.5 lumens
Efficiency: N/A
Efficacy: 31.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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				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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5345	5345	5345
5°	5326	5249	5241
10°	5301	5043	4886
15°	5229	4734	4422
20°	5088	4348	3920
25°	4917	3937	3383
30°	4709	3451	2800
35°	4450	2960	2178
40°	4194	2430	1522
45°	3888	1868	754
50°	3509	1262	252
55°	3030	647	176
60°	2425	233	124
65°	1663	128	55
70°	745	68	45
75°	0	30	30
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3888 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	7.1
10°-20°	150.2	18.5
20°-30°	194.5	24.0
30°-40°	184.8	22.8
40°-50°	130.9	16.1
50°-60°	67.2	8.3
60°-70°	23.5	2.9
70°-80°	2.0	0.3
80°-90°	0.0	0.0
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°	402.1	49.6
0°-40°	586.9	72.4
0°-60°	784.9	96.8
0°-90°	810.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	616	617	607	607	606	58
15°	587	569	531	506	496	165
25°	518	477	414	370	356	238
35°	423	362	282	227	207	265
45°	319	246	153	88	62	246
55°	202	133	43	13	12	180
65°	82	40	6	4	3	81
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	620.7	620.7	620.7	620.7	620.7
2.5°	618.9	620.7	615.3	619.8	620.7
5°	616.2	617.1	607.2	607.2	606.3
7.5°	611.7	609.9	593.8	587.5	586.6
10°	606.3	600.0	576.7	563.3	558.8
12.5°	598.2	586.6	555.2	535.5	530.1
15°	586.6	568.6	531.0	505.9	496.0
17.5°	572.2	548.9	504.1	473.6	463.7
20°	555.2	525.6	474.5	440.4	427.8
22.5°	537.2	503.2	444.0	405.4	392.8
25°	517.5	477.2	414.4	370.4	356.1
27.5°	496.9	449.4	382.1	336.3	317.5
30°	473.6	421.5	347.1	299.6	281.6
32.5°	448.5	391.1	315.7	264.6	243.1
35°	423.3	361.5	281.6	226.9	207.2
37.5°	399.1	333.7	247.5	190.1	171.3
40°	373.1	303.2	216.2	157.0	135.4
42.5°	346.2	273.6	183.9	122.9	99.6
45°	319.3	245.8	153.4	87.9	61.9
47.5°	292.4	216.2	123.8	55.6	33.2
50°	261.9	187.5	94.2	29.6	18.8
52.5°	233.2	160.5	67.3	17.0	14.4
55°	201.8	132.7	43.1	12.6	11.7
57.5°	172.2	105.8	24.2	9.9	9.0
60°	140.8	81.6	13.5	8.1	7.2
62.5°	109.4	59.2	9.0	5.4	4.5
65°	81.6	39.5	6.3	3.6	2.7
67.5°	53.8	22.4	4.5	1.8	1.8
70°	29.6	10.8	2.7	1.8	1.8
72.5°	10.8	3.6	1.8	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.35	15.61	14.71	15.92	16.23	0.00	0.00	0.00	0.00	0.00
	3H	14.63	15.73	15.01	16.06	16.43	0.00	0.00	0.00	0.00	0.00
	4H	14.55	15.58	14.95	15.93	16.31	0.00	0.00	0.00	0.00	0.00
	6H	14.47	15.40	14.88	15.77	16.17	0.00	0.00	0.00	0.00	0.00
	8H	14.42	15.30	14.85	15.70	16.10	0.00	0.00	0.00	0.00	0.00
	12H	14.37	15.22	14.81	15.60	16.03	0.00	0.00	0.00	0.00	0.00
4H	2H	14.12	15.15	14.53	15.50	15.88	0.00	0.00	0.00	0.00	0.00
	3H	14.41	15.23	14.82	15.64	16.04	0.00	0.00	0.00	0.00	0.00
	4H	14.31	15.05	14.75	15.47	15.92	0.00	0.00	0.00	0.00	0.00
	6H	14.23	14.86	14.69	15.30	15.77	0.00	0.00	0.00	0.00	0.00
	8H	14.17	14.75	14.64	15.20	15.67	0.00	0.00	0.00	0.00	0.00
	12H	14.11	14.63	14.60	15.12	15.59	0.00	0.00	0.00	0.00	0.00
8H	4H	14.17	14.75	14.64	15.20	15.67	0.00	0.00	0.00	0.00	0.00
	6H	14.06	14.53	14.56	15.03	15.52	0.00	0.00	0.00	0.00	0.00
	8H	13.99	14.42	14.51	14.94	15.43	0.00	0.00	0.00	0.00	0.00
	12H	13.94	14.32	14.46	14.81	15.39	0.00	0.00	0.00	0.00	0.00
12H	4H	14.11	14.63	14.60	15.12	15.59	0.00	0.00	0.00	0.00	0.00
	6H	13.99	14.42	14.51	14.94	15.43	0.00	0.00	0.00	0.00	0.00
	8H	13.94	14.32	14.46	14.81	15.39	0.00	0.00	0.00	0.00	0.00