

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: P1060597

Luminaire Tested: S124RDRP-S795D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060597
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-S795D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

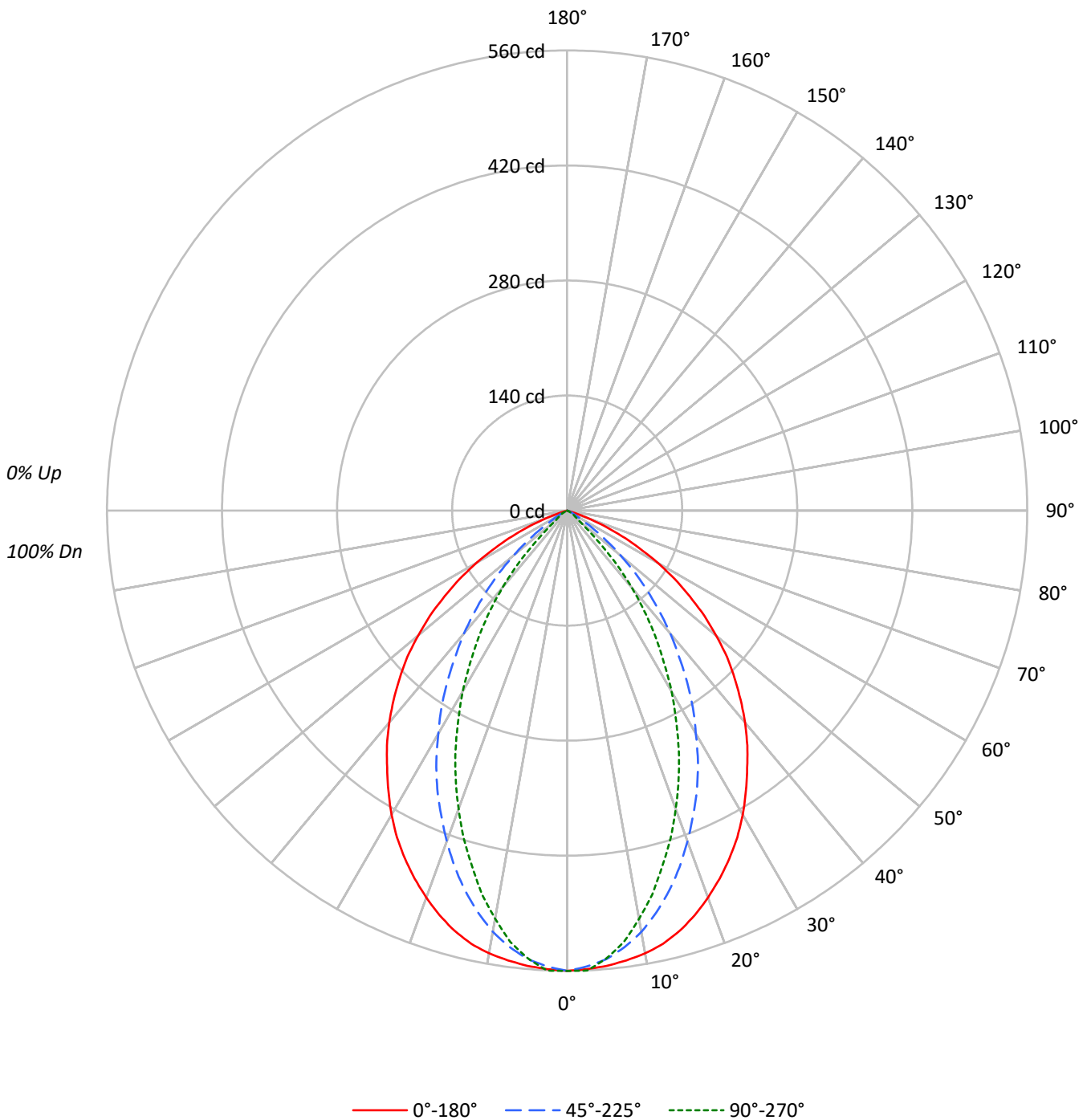
Lumens per Lamp: N/A
Luminaire Lumens: 731.4 lumens
Efficiency: N/A
Efficacy: 28.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	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°	4824	4824	4824
5°	4807	4737	4730
10°	4785	4551	4410
15°	4720	4272	3990
20°	4592	3924	3538
25°	4438	3553	3054
30°	4250	3115	2528
35°	4017	2672	1966
40°	3785	2193	1374
45°	3510	1685	681
50°	3167	1139	228
55°	2734	584	158
60°	2189	208	112
65°	1502	116	49
70°	672	60	40
75°	0	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3510 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.7	7.1
10°-20°	135.6	18.5
20°-30°	175.5	24.0
30°-40°	166.8	22.8
40°-50°	118.1	16.1
50°-60°	60.6	8.3
60°-70°	21.2	2.9
70°-80°	1.8	0.2
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°	362.9	49.6
0°-40°	529.7	72.4
0°-60°	708.4	96.9
0°-90°	731.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	556	557	548	548	547	53
15°	529	513	479	456	448	149
25°	467	431	374	334	321	215
35°	382	326	254	205	187	239
45°	288	222	138	79	56	222
55°	182	120	39	11	10	163
65°	74	36	6	3	2	73
75°	0	1	1	1	1	6
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°	560.2	560.2	560.2	560.2	560.2
2.5°	558.5	560.2	555.3	559.3	560.2
5°	556.1	556.9	548.0	548.0	547.2
7.5°	552.1	550.4	535.9	530.2	529.4
10°	547.2	541.5	520.5	508.3	504.3
12.5°	539.9	529.4	501.1	483.3	478.4
15°	529.4	513.2	479.2	456.5	447.6
17.5°	516.4	495.4	454.9	427.4	418.5
20°	501.1	474.4	428.2	397.5	386.1
22.5°	484.9	454.1	400.7	365.9	354.5
25°	467.1	430.6	374.0	334.3	321.4
27.5°	448.4	405.5	344.8	303.6	286.6
30°	427.4	380.5	313.3	270.4	254.2
32.5°	404.7	352.9	284.9	238.8	219.4
35°	382.1	326.2	254.2	204.8	187.0
37.5°	360.2	301.1	223.4	171.6	154.6
40°	336.7	273.6	195.1	141.7	122.2
42.5°	312.5	246.9	165.9	110.9	89.9
45°	288.2	221.8	138.4	79.3	55.9
47.5°	263.9	195.1	111.7	50.2	30.0
50°	236.4	169.2	85.0	26.7	17.0
52.5°	210.5	144.9	60.7	15.4	13.0
55°	182.1	119.8	38.9	11.3	10.5
57.5°	155.4	95.5	21.9	8.9	8.1
60°	127.1	73.7	12.1	7.3	6.5
62.5°	98.8	53.4	8.1	4.9	4.0
65°	73.7	35.6	5.7	3.2	2.4
67.5°	48.6	20.2	4.0	1.6	1.6
70°	26.7	9.7	2.4	1.6	1.6
72.5°	9.7	3.2	1.6	0.8	0.8
75°	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.8
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	13.99	15.25	14.36	15.56	15.88	0.00	0.00	0.00	0.00	0.00
	3H	14.27	15.38	14.65	15.71	16.07	0.00	0.00	0.00	0.00	0.00
	4H	14.20	15.22	14.60	15.57	15.96	0.00	0.00	0.00	0.00	0.00
	6H	14.11	15.05	14.53	15.42	15.81	0.00	0.00	0.00	0.00	0.00
	8H	14.06	14.95	14.49	15.34	15.75	0.00	0.00	0.00	0.00	0.00
	12H	14.02	14.86	14.45	15.25	15.68	0.00	0.00	0.00	0.00	0.00
4H	2H	13.77	14.79	14.17	15.14	15.53	0.00	0.00	0.00	0.00	0.00
	3H	14.05	14.88	14.47	15.28	15.69	0.00	0.00	0.00	0.00	0.00
	4H	13.96	14.69	14.39	15.11	15.56	0.00	0.00	0.00	0.00	0.00
	6H	13.87	14.50	14.34	14.95	15.42	0.00	0.00	0.00	0.00	0.00
	8H	13.81	14.40	14.28	14.85	15.32	0.00	0.00	0.00	0.00	0.00
	12H	13.76	14.27	14.25	14.76	15.23	0.00	0.00	0.00	0.00	0.00
8H	4H	13.81	14.40	14.28	14.85	15.32	0.00	0.00	0.00	0.00	0.00
	6H	13.70	14.18	14.21	14.68	15.16	0.00	0.00	0.00	0.00	0.00
	8H	13.63	14.06	14.16	14.58	15.07	0.00	0.00	0.00	0.00	0.00
	12H	13.58	13.96	14.10	14.46	15.03	0.00	0.00	0.00	0.00	0.00
12H	4H	13.76	14.27	14.25	14.76	15.23	0.00	0.00	0.00	0.00	0.00
	6H	13.63	14.06	14.16	14.58	15.07	0.00	0.00	0.00	0.00	0.00
	8H	13.58	13.96	14.10	14.46	15.03	0.00	0.00	0.00	0.00	0.00