

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: P1060606

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060606
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-S795D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

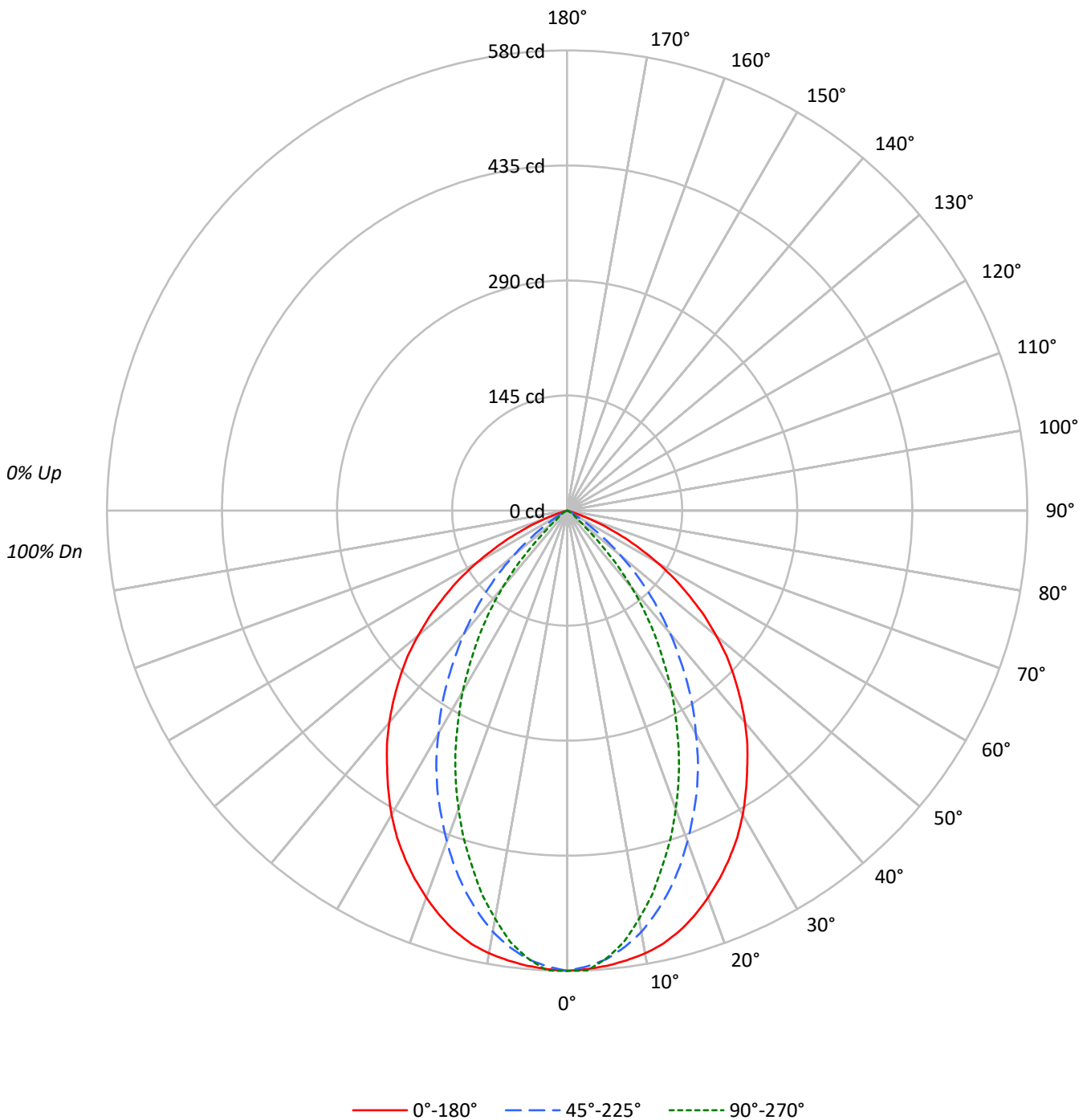
Lumens per Lamp: N/A
Luminaire Lumens: 757.5 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4995	4995	4995
5°	4978	4906	4899
10°	4955	4714	4567
15°	4888	4424	4133
20°	4755	4064	3665
25°	4596	3680	3162
30°	4401	3226	2617
35°	4160	2767	2036
40°	3921	2271	1423
45°	3635	1746	704
50°	3279	1179	236
55°	2831	604	164
60°	2266	217	115
65°	1555	120	51
70°	697	63	43
75°	0	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3635 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	7.1
10°-20°	140.4	18.5
20°-30°	181.8	24.0
30°-40°	172.7	22.8
40°-50°	122.3	16.1
50°-60°	62.8	8.3
60°-70°	22.0	2.9
70°-80°	1.9	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°	375.8	49.6
0°-40°	548.5	72.4
0°-60°	733.7	96.8
0°-90°	757.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	576	577	568	568	567	55
15°	548	532	496	473	464	154
25°	484	446	387	346	333	222
35°	396	338	263	212	194	248
45°	298	230	143	82	58	230
55°	189	124	40	12	11	169
65°	76	37	6	3	2	76
75°	0	1	1	1	1	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	580.1	580.1	580.1	580.1	580.1
2.5°	578.5	580.1	575.1	579.3	580.1
5°	575.9	576.8	567.6	567.6	566.7
7.5°	571.8	570.1	555.0	549.1	548.3
10°	566.7	560.9	539.1	526.5	522.3
12.5°	559.2	548.3	518.9	500.5	495.5
15°	548.3	531.5	496.3	472.8	463.6
17.5°	534.9	513.1	471.2	442.6	433.4
20°	518.9	491.3	443.5	411.6	399.9
22.5°	502.2	470.3	415.0	378.9	367.2
25°	483.7	446.0	387.3	346.2	332.8
27.5°	464.4	420.0	357.1	314.4	296.8
30°	442.6	394.0	324.4	280.0	263.2
32.5°	419.2	365.5	295.1	247.3	227.2
35°	395.7	337.9	263.2	212.1	193.7
37.5°	373.1	311.9	231.4	177.7	160.1
40°	348.8	283.4	202.0	146.7	126.6
42.5°	323.6	255.7	171.9	114.9	93.1
45°	298.5	229.7	143.4	82.2	57.8
47.5°	273.3	202.0	115.7	52.0	31.0
50°	244.8	175.2	88.0	27.7	17.6
52.5°	218.0	150.1	62.9	15.9	13.4
55°	188.6	124.1	40.2	11.7	10.9
57.5°	161.0	98.9	22.6	9.2	8.4
60°	131.6	76.3	12.6	7.5	6.7
62.5°	102.3	55.3	8.4	5.0	4.2
65°	76.3	36.9	5.9	3.4	2.5
67.5°	50.3	21.0	4.2	1.7	1.7
70°	27.7	10.1	2.5	1.7	1.7
72.5°	10.1	3.4	1.7	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	14.12	15.37	14.48	15.69	16.00	0.00	0.00	0.00	0.00	0.00
	3H	14.40	15.50	14.78	15.83	16.20	0.00	0.00	0.00	0.00	0.00
	4H	14.32	15.34	14.72	15.69	16.08	0.00	0.00	0.00	0.00	0.00
	6H	14.23	15.17	14.65	15.54	15.94	0.00	0.00	0.00	0.00	0.00
	8H	14.19	15.07	14.62	15.46	15.87	0.00	0.00	0.00	0.00	0.00
	12H	14.14	14.99	14.57	15.37	15.80	0.00	0.00	0.00	0.00	0.00
4H	2H	13.89	14.91	14.29	15.27	15.65	0.00	0.00	0.00	0.00	0.00
	3H	14.17	15.00	14.59	15.41	15.81	0.00	0.00	0.00	0.00	0.00
	4H	14.08	14.82	14.52	15.24	15.68	0.00	0.00	0.00	0.00	0.00
	6H	13.99	14.62	14.46	15.07	15.54	0.00	0.00	0.00	0.00	0.00
	8H	13.93	14.52	14.40	14.97	15.44	0.00	0.00	0.00	0.00	0.00
	12H	13.88	14.40	14.37	14.88	15.36	0.00	0.00	0.00	0.00	0.00
8H	4H	13.93	14.52	14.40	14.97	15.44	0.00	0.00	0.00	0.00	0.00
	6H	13.82	14.30	14.33	14.80	15.28	0.00	0.00	0.00	0.00	0.00
	8H	13.76	14.19	14.28	14.70	15.20	0.00	0.00	0.00	0.00	0.00
	12H	13.71	14.09	14.22	14.58	15.16	0.00	0.00	0.00	0.00	0.00
12H	4H	13.88	14.40	14.37	14.88	15.36	0.00	0.00	0.00	0.00	0.00
	6H	13.76	14.19	14.28	14.70	15.20	0.00	0.00	0.00	0.00	0.00
	8H	13.71	14.09	14.22	14.58	15.16	0.00	0.00	0.00	0.00	0.00