

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: P1057816

Luminaire Tested: S122RDRP-S1005D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

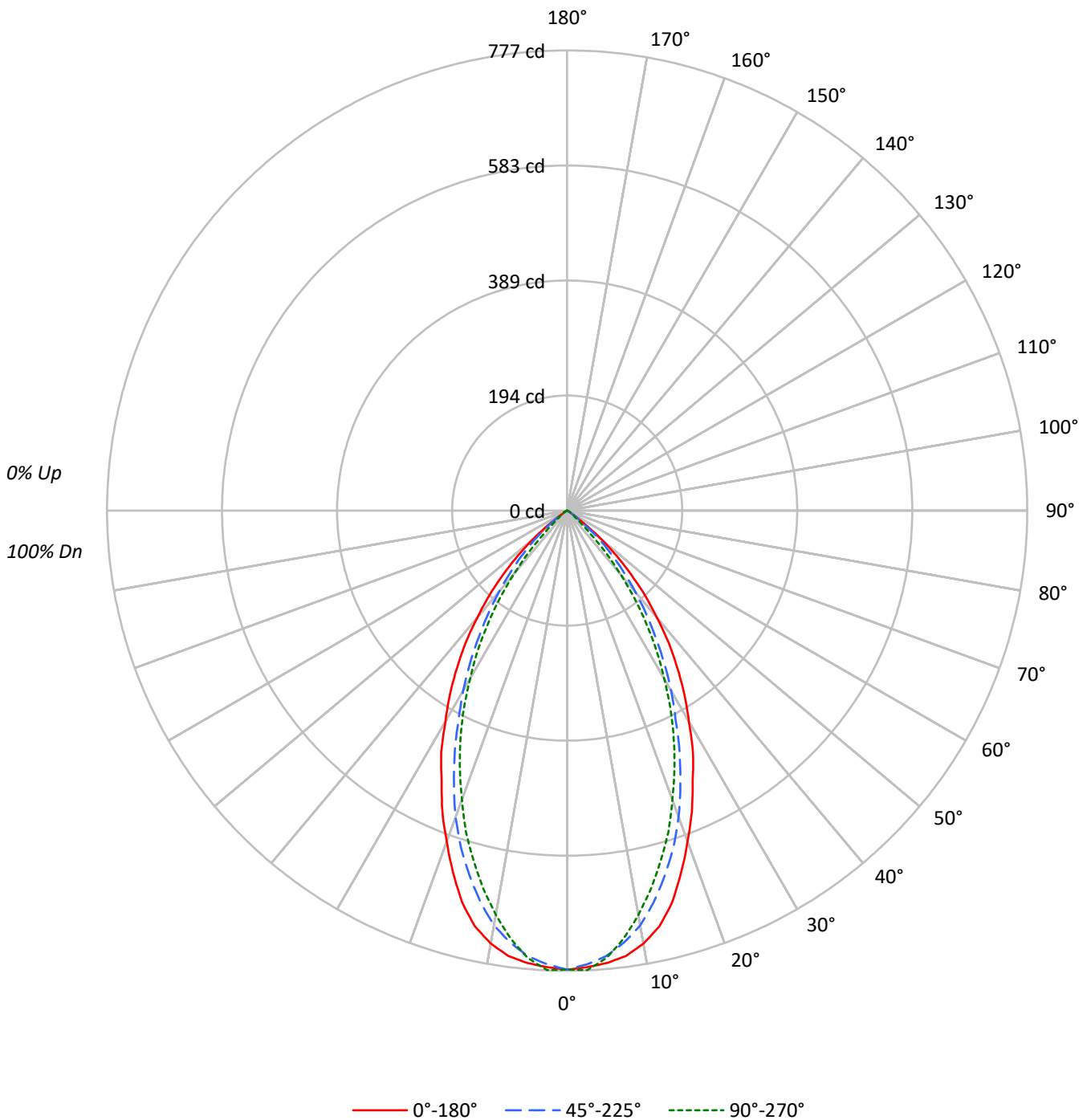
Lumens per Lamp: N/A
Luminaire Lumens: 728.7 lumens
Efficiency: N/A
Efficacy: 17.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14301	14301	14301
5°	14203	13990	14052
10°	13907	13324	12985
15°	13084	12175	11674
20°	11678	10810	10199
25°	10209	9140	8673
30°	8761	7470	6982
35°	7308	5832	5242
40°	5682	4302	3355
45°	3977	2865	1454
50°	2165	1504	517
55°	315	528	370
60°	59	122	244
65°	0	70	144
70°	0	0	86
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3977 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	9.8
10°-20°	179.5	24.6
20°-30°	209.2	28.7
30°-40°	167.6	23.0
40°-50°	83.3	11.4
50°-60°	16.4	2.3
60°-70°	1.4	0.2
70°-80°	0.1	0.0
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°	459.8	63.1
0°-40°	627.5	86.1
0°-60°	727.2	99.8
0°-90°	728.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	728.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	767	767	755	757	759	72
15°	685	672	637	621	611	190
25°	501	477	449	439	426	231
35°	324	292	259	247	233	202
45°	152	134	110	74	56	118
55°	10	20	16	10	12	20
65°	0	0	2	2	3	1
75°	0	0	0	0	0	0
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°	775.0	775.0	775.0	775.0	775.0
2.5°	771.7	775.0	766.8	775.0	776.6
5°	766.8	766.8	755.3	756.9	758.6
7.5°	758.6	755.3	735.6	732.4	729.1
10°	742.2	735.6	711.1	698.0	693.0
12.5°	719.3	709.4	676.7	661.9	653.7
15°	684.9	671.7	637.3	621.0	611.1
17.5°	640.6	629.1	596.4	578.4	568.5
20°	594.7	578.4	550.5	532.5	519.4
22.5°	550.5	529.2	499.7	486.6	473.5
25°	501.4	476.8	448.9	439.1	426.0
27.5°	460.4	429.3	396.5	389.9	378.5
30°	411.2	381.7	350.6	340.8	327.7
32.5°	368.6	335.9	304.7	293.3	281.8
35°	324.4	291.6	258.9	247.4	232.7
37.5°	281.8	250.7	217.9	199.9	186.8
40°	235.9	209.7	178.6	155.6	139.3
42.5°	195.0	172.0	142.5	113.0	96.7
45°	152.4	134.3	109.8	73.7	55.7
47.5°	113.0	99.9	80.3	42.6	29.5
50°	75.4	70.5	52.4	21.3	18.0
52.5°	41.0	44.2	31.1	13.1	14.7
55°	9.8	19.7	16.4	9.8	11.5
57.5°	1.6	3.3	8.2	8.2	8.2
60°	1.6	1.6	3.3	4.9	6.6
62.5°	1.6	0.0	1.6	3.3	4.9
65°	0.0	0.0	1.6	1.6	3.3
67.5°	0.0	0.0	0.0	1.6	1.6
70°	0.0	0.0	0.0	1.6	1.6
72.5°	0.0	0.0	0.0	0.0	1.6
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.39	0.70
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.35	0.72
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.61
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.46
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.40
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00