

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: P1057789

Luminaire Tested: S122RDRP-S1005D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057789
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-S1005D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

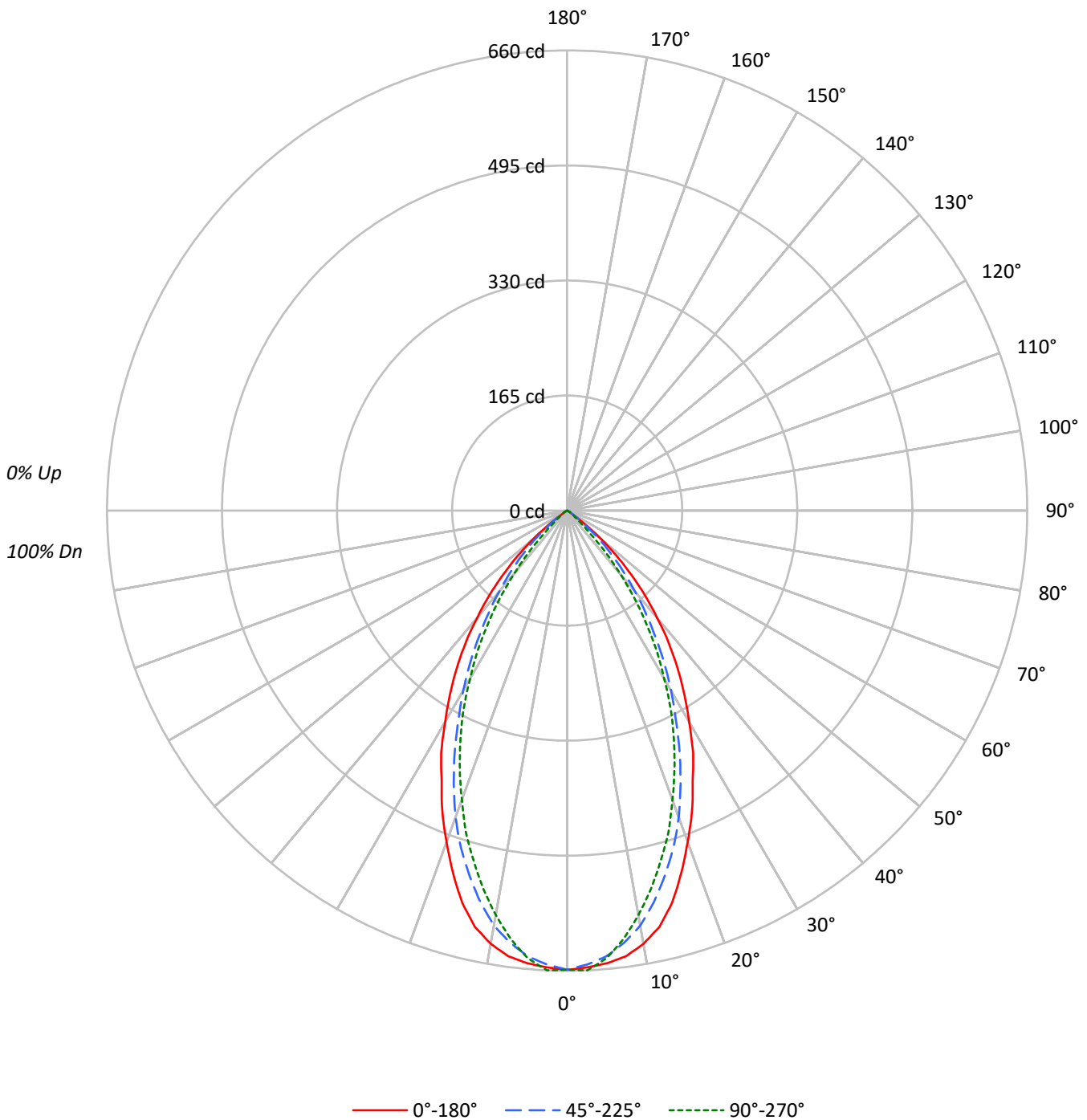
Lumens per Lamp: N/A
Luminaire Lumens: 619.4 lumens
Efficiency: N/A
Efficacy: 14.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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					100			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93					93			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86					86			
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67					67			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62					62			
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58					58			
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54					54			
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51					51			
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12153	12153	12153
5°	12071	11890	11942
10°	11819	11323	11036
15°	11120	10348	9922
20°	9926	9188	8668
25°	8675	7767	7370
30°	7447	6350	5934
35°	6211	4956	4453
40°	4830	3657	2852
45°	3379	2435	1234
50°	1840	1280	439
55°	270	447	312
60°	52	103	207
65°	0	61	122
70°	0	0	76
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	9.8
10°-20°	152.5	24.6
20°-30°	177.8	28.7
30°-40°	142.5	23.0
40°-50°	70.8	11.4
50°-60°	14.0	2.3
60°-70°	1.2	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°	390.8	63.1
0°-40°	533.3	86.1
0°-60°	618.0	99.8
0°-90°	619.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	619.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	652	652	642	643	645	62
15°	582	571	542	528	519	162
25°	426	405	382	373	362	196
35°	276	248	220	210	198	171
45°	130	114	93	63	47	100
55°	8	17	14	8	10	17
65°	0	0	1	1	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°	658.6	658.6	658.6	658.6	658.6
2.5°	655.9	658.6	651.7	658.6	660.0
5°	651.7	651.7	641.9	643.3	644.7
7.5°	644.7	641.9	625.2	622.4	619.7
10°	630.8	625.2	604.3	593.2	589.0
12.5°	611.3	602.9	575.1	562.6	555.6
15°	582.1	570.9	541.7	527.8	519.4
17.5°	544.5	534.7	506.9	491.5	483.2
20°	505.5	491.5	467.9	452.6	441.4
22.5°	467.9	449.8	424.7	413.6	402.4
25°	426.1	405.2	381.5	373.2	362.0
27.5°	391.3	364.8	337.0	331.4	321.7
30°	349.5	324.4	298.0	289.6	278.5
32.5°	313.3	285.5	259.0	249.3	239.5
35°	275.7	247.9	220.0	210.3	197.7
37.5°	239.5	213.1	185.2	169.9	158.7
40°	200.5	178.2	151.8	132.3	118.4
42.5°	165.7	146.2	121.1	96.1	82.2
45°	129.5	114.2	93.3	62.7	47.3
47.5°	96.1	84.9	68.2	36.2	25.1
50°	64.1	59.9	44.6	18.1	15.3
52.5°	34.8	37.6	26.5	11.1	12.5
55°	8.4	16.7	13.9	8.4	9.7
57.5°	1.4	2.8	7.0	7.0	7.0
60°	1.4	1.4	2.8	4.2	5.6
62.5°	1.4	0.0	1.4	2.8	4.2
65°	0.0	0.0	1.4	1.4	2.8
67.5°	0.0	0.0	0.0	1.4	1.4
70°	0.0	0.0	0.0	1.4	1.4
72.5°	0.0	0.0	0.0	0.0	1.4
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	0.00	0.00	0.00	0.17
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	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
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	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
	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	0.00
	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
	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