

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: P1057798

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057798
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-S1005D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

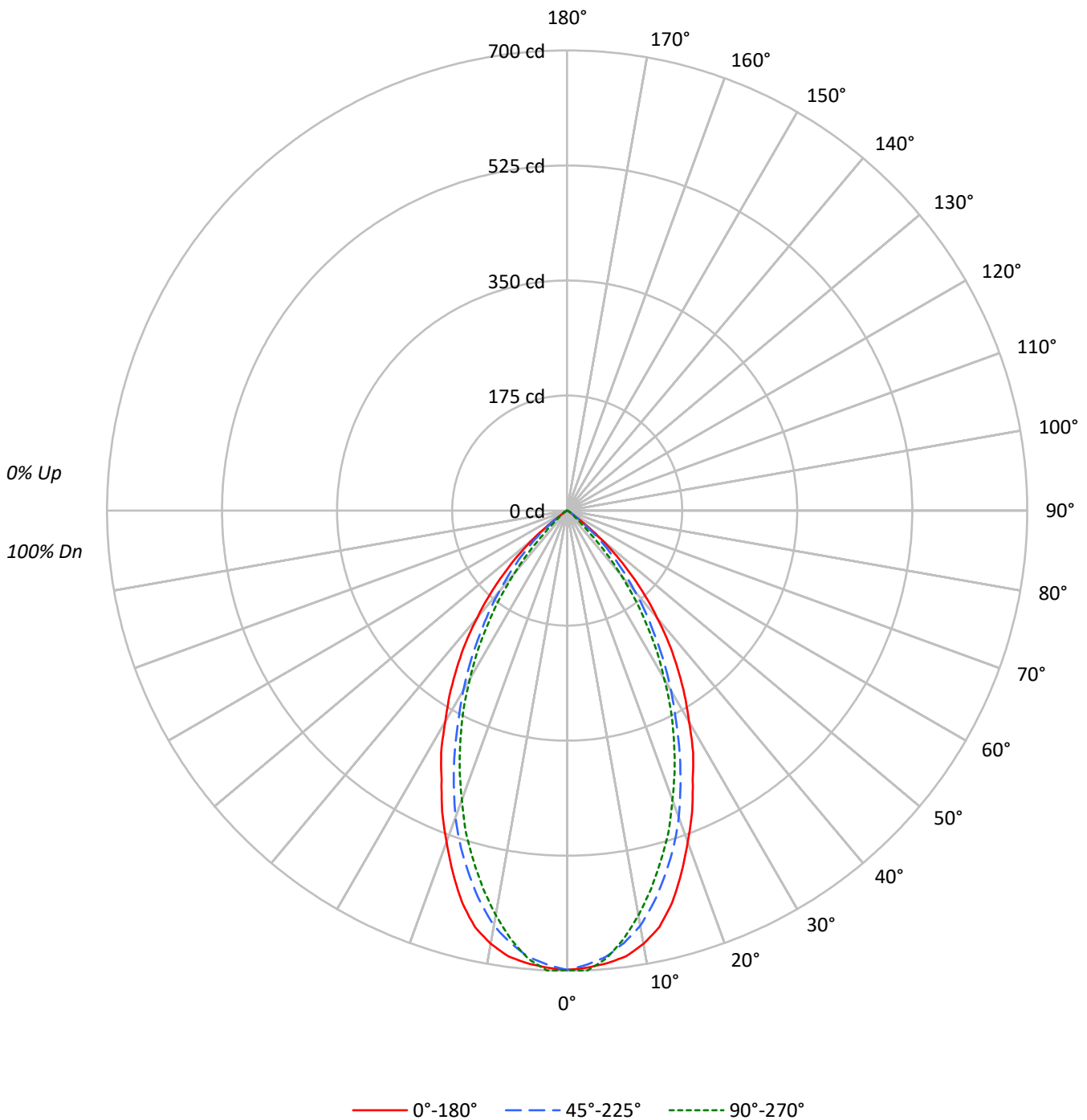
Lumens per Lamp: N/A
Luminaire Lumens: 657.1 lumens
Efficiency: N/A
Efficacy: 15.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	12895	12895	12895
5°	12807	12616	12670
10°	12539	12014	11709
15°	11796	10979	10528
20°	10531	9748	9196
25°	9205	8242	7820
30°	7901	6737	6296
35°	6589	5258	4726
40°	5124	3878	3025
45°	3586	2583	1310
50°	1952	1358	468
55°	286	476	331
60°	55	111	218
65°	0	65	131
70°	0	0	81
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3586 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	9.8
10°-20°	161.8	24.6
20°-30°	188.6	28.7
30°-40°	151.2	23.0
40°-50°	75.1	11.4
50°-60°	14.8	2.3
60°-70°	1.3	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°	414.6	63.1
0°-40°	565.8	86.1
0°-60°	655.7	99.8
0°-90°	657.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	657.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	691	691	681	682	684	65
15°	618	606	575	560	551	171
25°	452	430	405	396	384	208
35°	292	263	233	223	210	182
45°	137	121	99	66	50	106
55°	9	18	15	9	10	18
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°	698.8	698.8	698.8	698.8	698.8
2.5°	695.8	698.8	691.4	698.8	700.3
5°	691.4	691.4	681.1	682.5	684.0
7.5°	684.0	681.1	663.3	660.4	657.4
10°	669.2	663.3	641.2	629.4	624.9
12.5°	648.6	639.7	610.2	596.9	589.5
15°	617.5	605.7	574.7	559.9	551.1
17.5°	577.7	567.3	537.8	521.5	512.6
20°	536.3	521.5	496.4	480.1	468.3
22.5°	496.4	477.2	450.6	438.8	427.0
25°	452.1	429.9	404.8	395.9	384.1
27.5°	415.1	387.1	357.5	351.6	341.3
30°	370.8	344.2	316.2	307.3	295.5
32.5°	332.4	302.9	274.8	264.4	254.1
35°	292.5	263.0	233.4	223.1	209.8
37.5°	254.1	226.0	196.5	180.2	168.4
40°	212.7	189.1	161.0	140.4	125.6
42.5°	175.8	155.1	128.5	101.9	87.2
45°	137.4	121.1	99.0	66.5	50.2
47.5°	101.9	90.1	72.4	38.4	26.6
50°	68.0	63.5	47.3	19.2	16.3
52.5°	36.9	39.9	28.1	11.8	13.3
55°	8.9	17.7	14.8	8.9	10.3
57.5°	1.5	3.0	7.4	7.4	7.4
60°	1.5	1.5	3.0	4.4	5.9
62.5°	1.5	0.0	1.5	3.0	4.4
65°	0.0	0.0	1.5	1.5	3.0
67.5°	0.0	0.0	0.0	1.5	1.5
70°	0.0	0.0	0.0	1.5	1.5
72.5°	0.0	0.0	0.0	0.0	1.5
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	0.03	0.34
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.38
	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	0.05
	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	0.05
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
	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