

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058563

Luminaire Tested: S122RDR-H865D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058563
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: S122RDR-H865D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

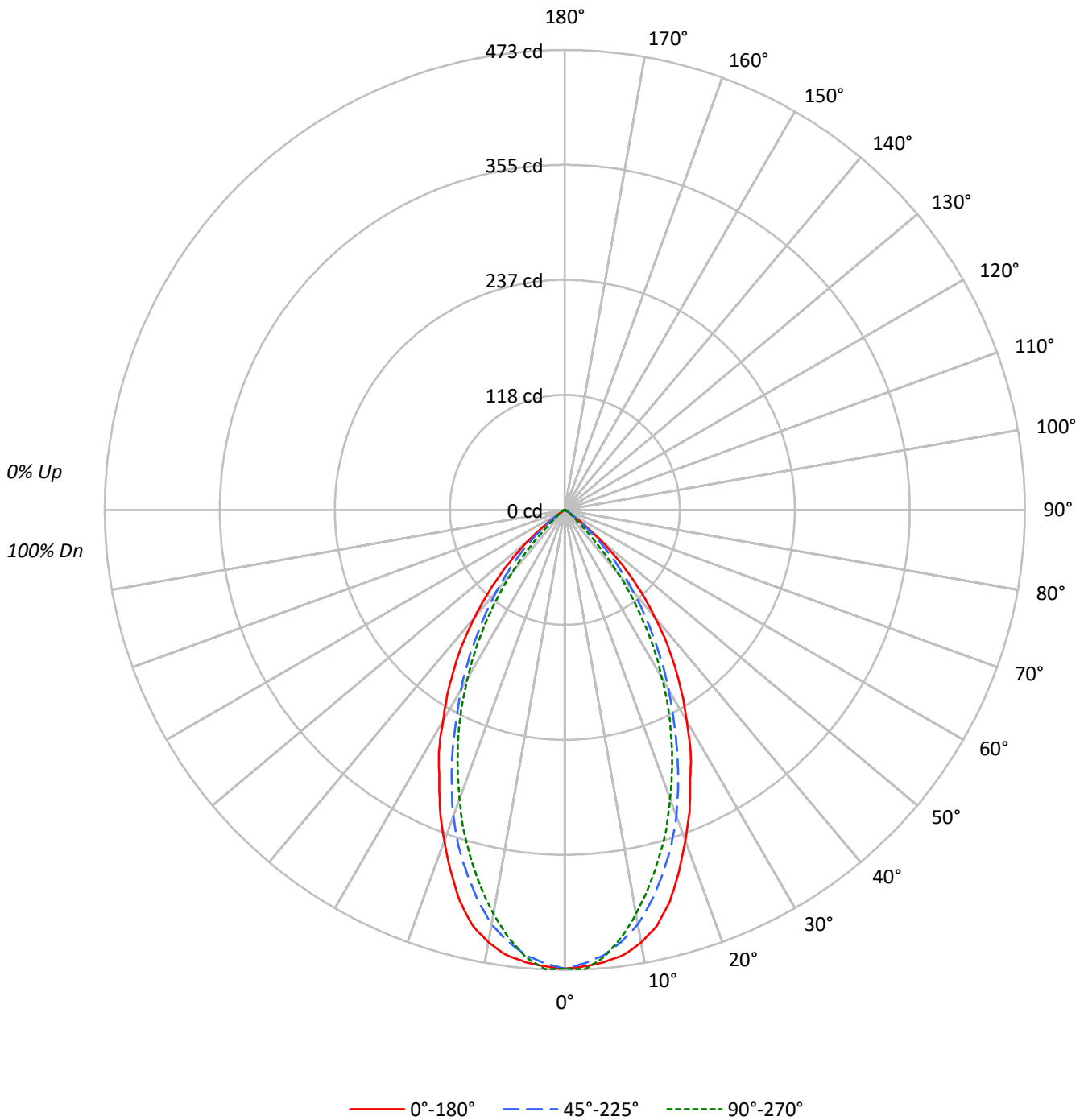
Lumens per Lamp: N/A
Luminaire Lumens: 443.7 lumens
Efficiency: N/A
Efficacy: 14.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93	
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86	86	86	86	
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79	79	
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73	73	
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67	
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62	
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58	58	
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54	54	
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51	51	51	51	
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47	47	47	47	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8706	8706	8706
5°	8647	8517	8554
10°	8465	8111	7905
15°	7964	7412	7106
20°	7110	6580	6209
25°	6214	5564	5279
30°	5333	4547	4251
35°	4449	3550	3190
40°	3459	2618	2043
45°	2422	1743	885
50°	1318	916	316
55°	193	322	225
60°	37	74	148
65°	0	44	87
70°	0	0	54
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2422 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	9.8
10°-20°	109.3	24.6
20°-30°	127.3	28.7
30°-40°	102.1	23.0
40°-50°	50.7	11.4
50°-60°	10.0	2.3
60°-70°	0.9	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°	279.9	63.1
0°-40°	382.0	86.1
0°-60°	442.7	99.8
0°-90°	443.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	443.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	472	472	472	472	472	
5°	467	467	460	461	462	44
15°	417	409	388	378	372	116
25°	305	290	273	267	259	140
35°	198	178	158	151	142	123
45°	93	82	67	45	34	72
55°	6	12	10	6	7	12
65°	0	0	1	1	2	0
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°	471.8	471.8	471.8	471.8	471.8
2.5°	469.8	471.8	466.8	471.8	472.8
5°	466.8	466.8	459.8	460.8	461.8
7.5°	461.8	459.8	447.8	445.8	443.8
10°	451.8	447.8	432.9	424.9	421.9
12.5°	437.9	431.9	411.9	402.9	398.0
15°	416.9	408.9	388.0	378.0	372.0
17.5°	390.0	383.0	363.1	352.1	346.1
20°	362.1	352.1	335.1	324.2	316.2
22.5°	335.1	322.2	304.2	296.2	288.2
25°	305.2	290.2	273.3	267.3	259.3
27.5°	280.3	261.3	241.4	237.4	230.4
30°	250.3	232.4	213.4	207.5	199.5
32.5°	224.4	204.5	185.5	178.5	171.6
35°	197.5	177.5	157.6	150.6	141.6
37.5°	171.6	152.6	132.7	121.7	113.7
40°	143.6	127.7	108.7	94.8	84.8
42.5°	118.7	104.7	86.8	68.8	58.8
45°	92.8	81.8	66.8	44.9	33.9
47.5°	68.8	60.8	48.9	25.9	18.0
50°	45.9	42.9	31.9	13.0	11.0
52.5°	24.9	26.9	19.0	8.0	9.0
55°	6.0	12.0	10.0	6.0	7.0
57.5°	1.0	2.0	5.0	5.0	5.0
60°	1.0	1.0	2.0	3.0	4.0
62.5°	1.0	0.0	1.0	2.0	3.0
65°	0.0	0.0	1.0	1.0	2.0
67.5°	0.0	0.0	0.0	1.0	1.0
70°	0.0	0.0	0.0	1.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
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	0.00
	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
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