

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: P1058164

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D930-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

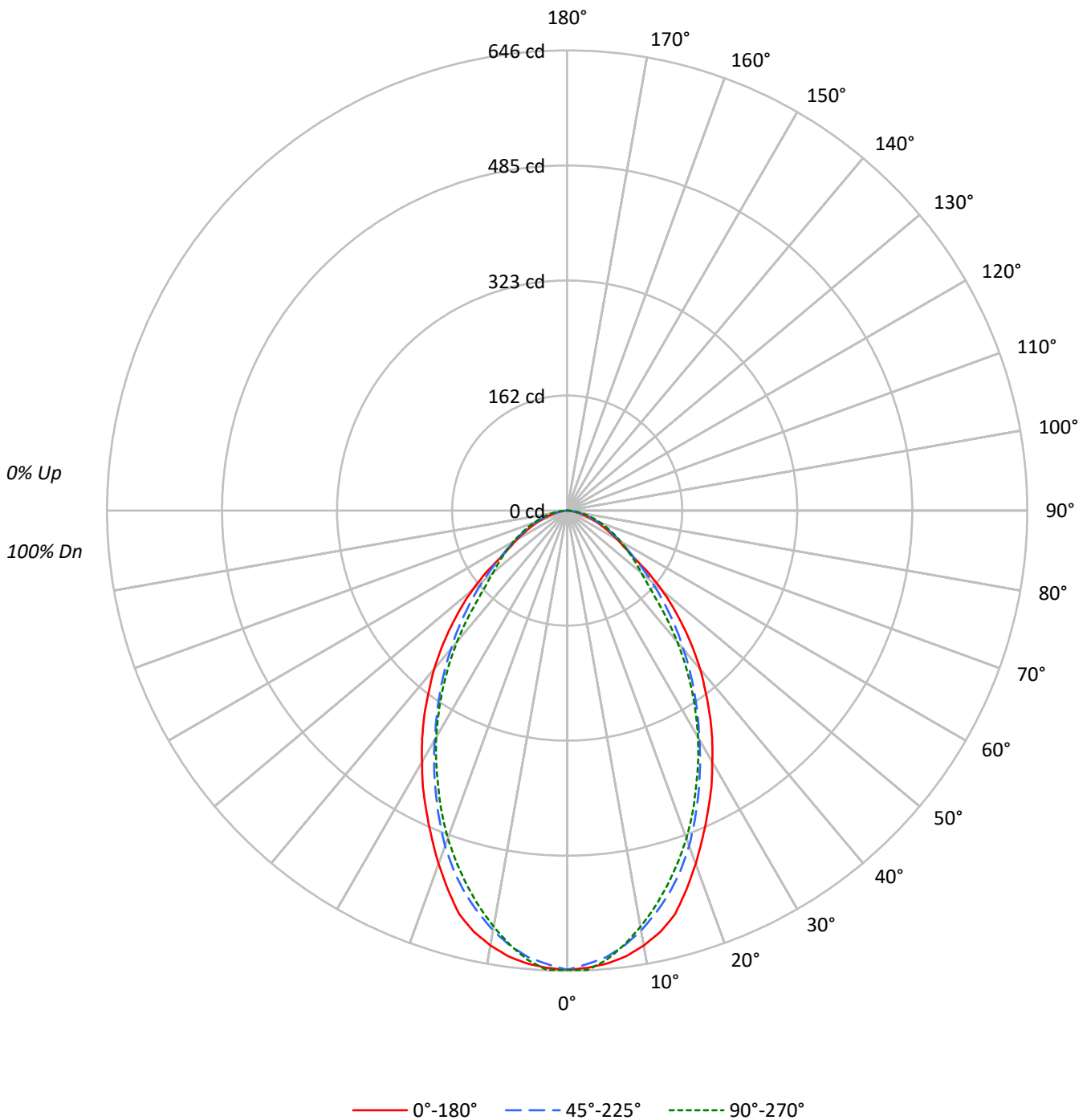
Lumens per Lamp: N/A
Luminaire Lumens: 978.9 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11894	11894	11894
5°	11825	11655	11731
10°	11615	11212	11115
15°	11197	10608	10392
20°	10360	9836	9614
25°	9508	8881	8714
30°	8683	7916	7828
35°	7862	7006	6843
40°	6998	6106	5786
45°	6026	5250	4635
50°	4981	4421	3890
55°	3600	3664	3500
60°	2993	3144	3181
65°	2554	2733	2912
70°	2104	2439	2660
75°	1754	2046	2417
80°	1307	1636	2178
85°	445	868	1948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6026 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	6.1
10°-20°	156.9	16.0
20°-30°	203.1	20.7
30°-40°	199.2	20.3
40°-50°	156.8	16.0
50°-60°	102.8	10.5
60°-70°	62.6	6.4
70°-80°	31.3	3.2
80°-90°	6.7	0.7
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°	419.5	42.9
0°-40°	618.7	63.2
0°-60°	878.3	89.7
0°-90°	978.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	978.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	638	638	629	633	633	60
15°	586	578	555	548	544	163
25°	467	452	436	434	428	215
35°	349	330	311	310	304	218
45°	231	217	201	187	178	178
55°	112	118	114	110	109	106
65°	58	60	63	66	67	58
75°	25	26	29	33	34	26
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	644.6	644.6	644.6	644.6	644.6
2.5°	642.5	643.5	637.4	643.5	645.6
5°	638.4	638.4	629.2	633.3	633.3
7.5°	631.2	630.2	615.8	615.8	614.8
10°	619.9	615.8	598.4	595.3	593.2
12.5°	605.6	598.4	577.8	572.7	569.6
15°	586.1	577.8	555.3	548.1	544.0
17.5°	557.3	549.1	529.6	521.4	517.3
20°	527.6	515.2	500.9	493.7	489.6
22.5°	496.8	482.4	469.0	463.9	459.8
25°	467.0	451.6	436.2	434.2	428.0
27.5°	438.3	419.8	404.4	403.4	398.2
30°	407.5	388.0	371.5	372.6	367.4
32.5°	378.7	360.3	340.8	341.8	335.6
35°	349.0	329.5	311.0	310.0	303.8
37.5°	318.2	299.7	282.3	278.1	272.0
40°	290.5	272.0	253.5	246.3	240.2
42.5°	260.7	244.3	227.9	216.6	208.4
45°	230.9	216.6	201.2	186.8	177.6
47.5°	202.2	190.9	177.6	160.1	154.0
50°	173.5	165.2	154.0	138.6	135.5
52.5°	143.7	140.6	133.4	123.2	122.1
55°	111.9	118.0	113.9	109.8	108.8
57.5°	94.4	95.5	98.5	97.5	97.5
60°	81.1	81.1	85.2	86.2	86.2
62.5°	68.8	69.8	73.9	76.0	76.0
65°	58.5	59.5	62.6	65.7	66.7
67.5°	48.2	50.3	53.4	56.5	57.5
70°	39.0	41.1	45.2	48.2	49.3
72.5°	31.8	32.8	36.9	40.0	41.1
75°	24.6	25.7	28.7	32.8	33.9
77.5°	17.4	19.5	22.6	25.7	27.7
80°	12.3	13.3	15.4	19.5	20.5
82.5°	7.2	8.2	10.3	13.3	14.4
85°	2.1	3.1	4.1	7.2	9.2
87.5°	0.0	0.0	0.0	2.1	4.1
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	14.73	16.12	15.09	16.44	16.75	14.90	16.30	15.27	16.61	16.93
	3H	15.86	17.10	16.24	17.43	17.80	16.36	17.61	16.74	17.94	18.30
	4H	16.21	17.37	16.61	17.72	18.10	16.91	18.07	17.31	18.42	18.80
	6H	16.39	17.46	16.81	17.83	18.23	17.32	18.39	17.73	18.76	19.15
	8H	16.42	17.44	16.85	17.83	18.23	17.45	18.46	17.88	18.85	19.26
	12H	16.41	17.38	16.84	17.76	18.19	17.53	18.50	17.96	18.88	19.31
4H	2H	15.18	16.35	15.59	16.70	17.08	15.33	16.49	15.73	16.84	17.22
	3H	16.52	17.48	16.94	17.88	18.29	17.00	17.96	17.41	18.36	18.77
	4H	16.97	17.83	17.40	18.24	18.69	17.67	18.53	18.10	18.94	19.39
	6H	17.24	17.98	17.70	18.43	18.89	18.20	18.95	18.66	19.39	19.85
	8H	17.28	17.98	17.75	18.42	18.89	18.37	19.06	18.84	19.51	19.98
	12H	17.28	17.89	17.76	18.37	18.85	18.49	19.11	18.98	19.59	20.06
8H	4H	17.18	17.88	17.65	18.32	18.79	17.82	18.51	18.28	18.96	19.43
	6H	17.53	18.10	18.03	18.59	19.07	18.45	19.02	18.95	19.51	19.99
	8H	17.60	18.11	18.12	18.63	19.12	18.68	19.19	19.20	19.70	20.20
	12H	17.62	18.07	18.13	18.57	19.13	18.87	19.32	19.38	19.81	20.38
12H	4H	17.19	17.81	17.68	18.29	18.76	17.80	18.42	18.29	18.90	19.37
	6H	17.55	18.06	18.07	18.58	19.07	18.44	18.95	18.96	19.47	19.96
	8H	17.67	18.12	18.18	18.61	19.18	18.72	19.17	19.23	19.66	20.23