

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: P1217339

Luminaire Tested: S122DRP-S865D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217339
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2511-596-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DRP-S865D840-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

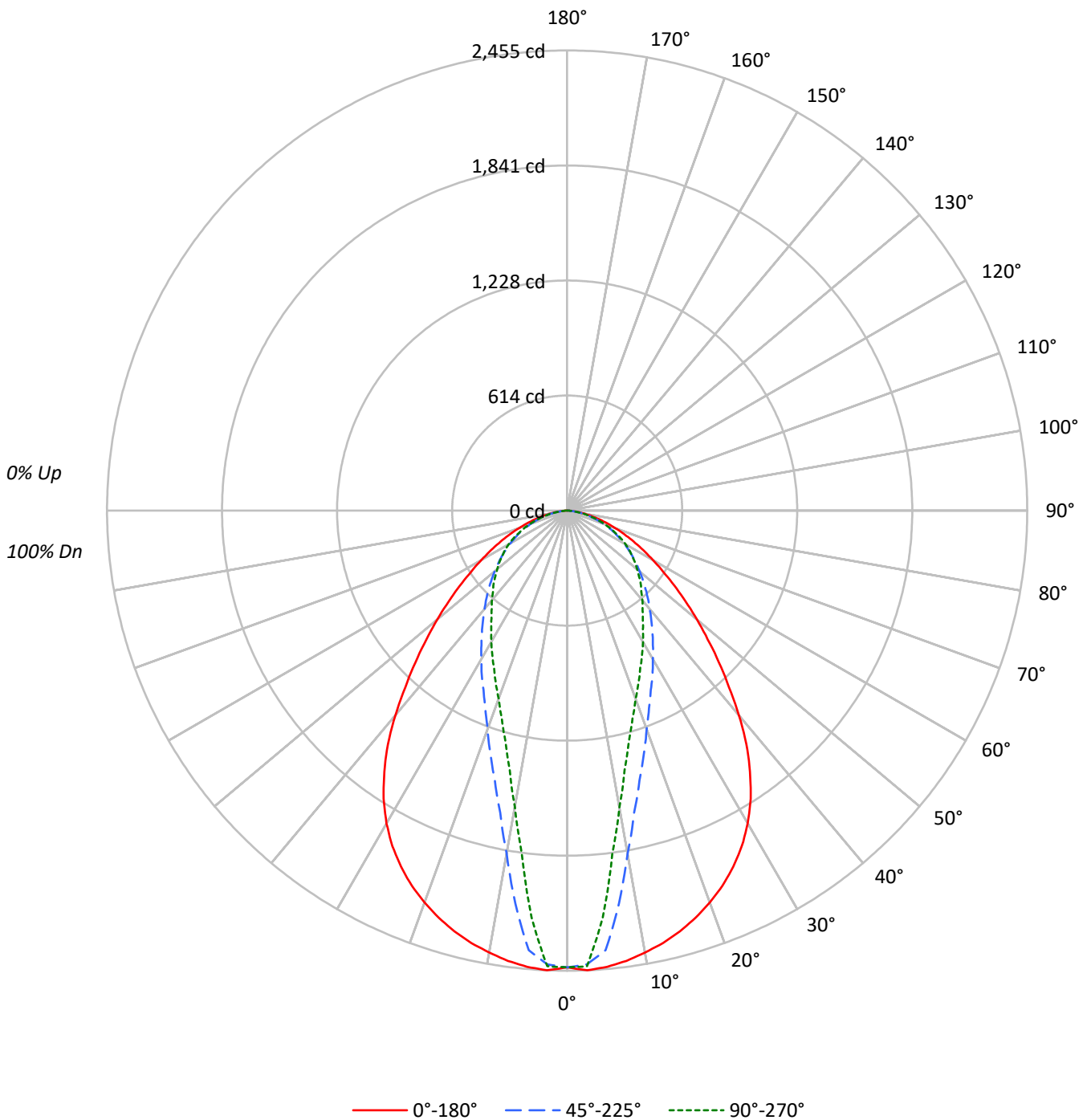
Lumens per Lamp: N/A
Luminaire Lumens: 3274.8 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77					75				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67					65				
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59					57				
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52					50				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43					41				
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39					37				
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36					34				
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	46171	46171	46171
5°	46467	44775	41464
10°	46050	35756	30912
15°	45579	29223	24959
20°	44854	25015	21529
25°	43822	22083	19320
30°	42161	20024	17716
35°	39339	18348	16289
40°	35275	16946	15438
45°	30689	15838	14884
50°	26642	14876	14351
55°	23052	14068	13982
60°	19992	13247	13633
65°	17497	12422	12880
70°	15067	11406	11832
75°	12561	10051	10424
80°	9852	8183	7910
85°	6087	5261	5261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30689 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.8	6.4
10°-20°	462.7	14.1
20°-30°	567.6	17.3
30°-40°	586.6	17.9
40°-50°	529.8	16.2
50°-60°	429.3	13.1
60°-70°	301.0	9.2
70°-80°	155.2	4.7
80°-90°	32.8	1.0
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°	1240.1	37.9
0°-40°	1826.7	55.8
0°-60°	2785.8	85.1
0°-90°	3274.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2443	2438	2354	2249	2180	232
15°	2324	1959	1490	1328	1272	655
25°	2096	1392	1056	956	924	963
35°	1701	1028	793	726	704	1057
45°	1145	741	591	558	556	886
55°	698	507	426	421	423	629
65°	390	313	277	284	287	390
75°	172	148	137	141	142	185
85°	28	24	24	24	24	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2437.0	2437.0	2437.0	2437.0	2437.0
2.5°	2454.8	2445.9	2423.0	2444.6	2433.2
5°	2443.3	2438.2	2354.3	2248.8	2180.2
7.5°	2423.0	2405.2	2115.3	1915.8	1848.4
10°	2393.7	2304.8	1858.6	1673.0	1606.8
12.5°	2363.2	2153.5	1651.3	1477.2	1417.4
15°	2323.8	1959.0	1489.9	1328.4	1272.5
17.5°	2278.1	1789.9	1361.5	1206.4	1161.9
20°	2224.7	1643.7	1240.7	1104.7	1067.8
22.5°	2166.2	1520.4	1140.3	1029.7	995.4
25°	2096.3	1392.0	1056.4	956.0	924.2
27.5°	2018.7	1294.1	986.5	892.4	865.7
30°	1927.2	1198.8	915.3	831.4	809.8
32.5°	1823.0	1109.8	851.7	778.0	752.6
35°	1700.9	1028.4	793.3	725.9	704.3
37.5°	1571.3	948.3	737.3	678.8	661.0
40°	1426.3	878.4	685.2	633.1	624.2
42.5°	1277.6	808.5	638.2	593.7	586.0
45°	1145.4	741.1	591.1	558.1	555.5
47.5°	1017.0	680.1	547.9	522.5	519.9
50°	903.9	616.6	504.7	488.2	486.9
52.5°	795.8	560.6	464.0	455.1	457.6
55°	697.9	507.2	425.9	420.8	423.3
57.5°	607.7	457.6	387.7	389.0	392.8
60°	527.6	406.8	349.6	354.7	359.8
62.5°	457.6	359.8	312.7	320.4	325.4
65°	390.3	312.7	277.1	283.5	287.3
67.5°	330.5	268.2	241.5	249.2	250.4
70°	272.0	227.6	205.9	213.6	213.6
72.5°	221.2	185.6	171.6	175.4	176.7
75°	171.6	147.5	137.3	141.1	142.4
77.5°	129.7	111.9	104.2	108.1	106.8
80°	90.3	78.8	75.0	73.7	72.5
82.5°	55.9	49.6	45.8	47.0	45.8
85°	28.0	24.2	24.2	24.2	24.2
87.5°	8.9	8.9	8.9	8.9	8.9
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	21.81	23.31	22.18	23.63	23.94	20.31	21.81	20.68	22.12	22.44
	3H	23.40	24.74	23.78	25.07	25.43	22.02	23.37	22.40	23.70	24.06
	4H	23.92	25.19	24.32	25.53	25.91	22.60	23.87	23.00	24.21	24.59
	6H	24.25	25.42	24.66	25.78	26.17	22.95	24.12	23.36	24.48	24.88
	8H	24.32	25.43	24.75	25.82	26.23	23.03	24.14	23.45	24.53	24.93
	12H	24.35	25.41	24.78	25.79	26.22	23.06	24.12	23.49	24.50	24.93
4H	2H	22.12	23.38	22.52	23.73	24.11	20.87	22.13	21.27	22.48	22.86
	3H	23.90	24.95	24.31	25.35	25.75	22.79	23.84	23.20	24.24	24.64
	4H	24.53	25.48	24.96	25.89	26.33	23.48	24.43	23.92	24.84	25.28
	6H	24.97	25.79	25.42	26.23	26.69	23.93	24.75	24.39	25.20	25.66
	8H	25.07	25.84	25.54	26.28	26.75	24.04	24.80	24.50	25.25	25.72
	12H	25.12	25.81	25.61	26.29	26.76	24.09	24.78	24.57	25.25	25.73
8H	4H	24.68	25.45	25.15	25.89	26.36	23.72	24.49	24.19	24.93	25.40
	6H	25.19	25.82	25.69	26.31	26.79	24.26	24.89	24.76	25.38	25.86
	8H	25.34	25.90	25.85	26.41	26.90	24.41	24.98	24.93	25.49	25.98
	12H	25.42	25.92	25.94	26.42	26.98	24.51	25.00	25.02	25.50	26.06
12H	4H	24.68	25.36	25.16	25.84	26.31	23.73	24.42	24.22	24.90	25.37
	6H	25.19	25.76	25.71	26.27	26.76	24.28	24.85	24.80	25.36	25.85
	8H	25.38	25.87	25.89	26.37	26.93	24.47	24.97	24.98	25.46	26.03