

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: P1217342

Luminaire Tested: S122DRP-S865D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217342
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-S865D930-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

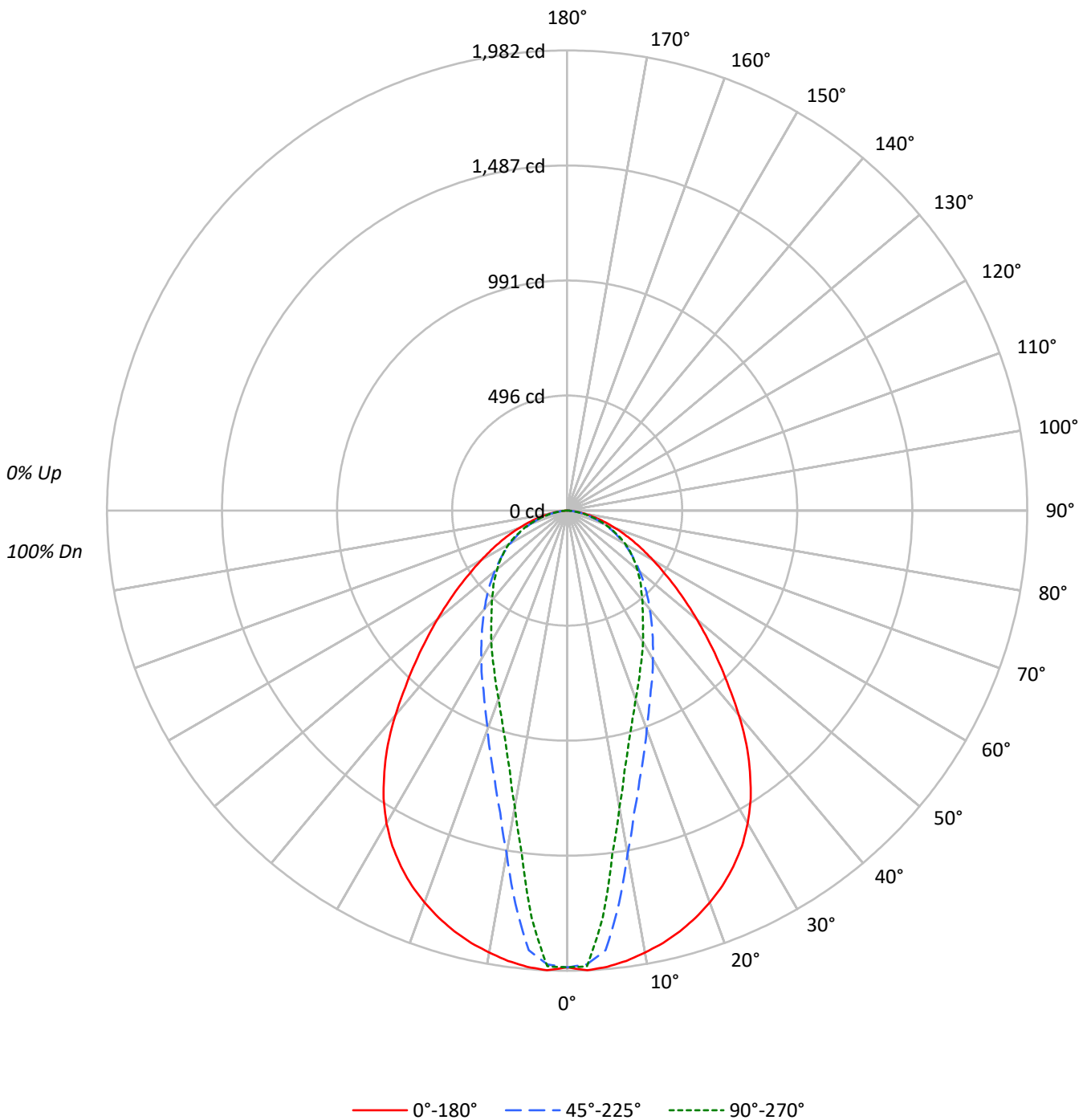
Lumens per Lamp: N/A
Luminaire Lumens: 2643.8 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (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	100	100	100	100	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75	75	75	75	75	75	75		
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65		
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57	57	57	57	57	57	57		
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	50	50	50	50	50		
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45		
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41	41	41	41	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37	37	37	37	37		
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34	34	34	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31	31	31	31	31	31	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	37274	37274	37274
5°	37515	36148	33474
10°	37178	28867	24958
15°	36798	23592	20150
20°	36211	20196	17381
25°	35379	17829	15597
30°	34038	16165	14303
35°	31760	14812	13151
40°	28479	13682	12462
45°	24776	12786	12017
50°	21508	12008	11586
55°	18610	11356	11290
60°	16138	10693	11004
65°	14126	10028	10396
70°	12165	9212	9550
75°	10146	8111	8411
80°	7954	6612	6383
85°	4913	4239	4239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24776 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	6.4
10°-20°	373.5	14.1
20°-30°	458.3	17.3
30°-40°	473.6	17.9
40°-50°	427.7	16.2
50°-60°	346.6	13.1
60°-70°	243.0	9.2
70°-80°	125.3	4.7
80°-90°	26.4	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°	1001.2	37.9
0°-40°	1474.8	55.8
0°-60°	2249.1	85.1
0°-90°	2643.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2643.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1967	1967	1967	1967	1967	
5°	1973	1968	1901	1816	1760	187
15°	1876	1582	1203	1072	1027	529
25°	1692	1124	853	772	746	777
35°	1373	830	640	586	569	854
45°	925	598	477	451	448	715
55°	563	410	344	340	342	507
65°	315	252	224	229	232	315
75°	139	119	111	114	115	150
85°	23	20	20	20	20	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1967.4	1967.4	1967.4	1967.4	1967.4
2.5°	1981.8	1974.6	1956.2	1973.6	1964.4
5°	1972.6	1968.5	1900.7	1815.5	1760.1
7.5°	1956.2	1941.8	1707.8	1546.7	1492.3
10°	1932.5	1860.7	1500.5	1350.6	1297.3
12.5°	1907.9	1738.6	1333.2	1192.6	1144.3
15°	1876.1	1581.5	1202.8	1072.5	1027.3
17.5°	1839.2	1445.0	1099.2	974.0	938.1
20°	1796.0	1327.0	1001.7	891.9	862.1
22.5°	1748.8	1227.5	920.6	831.3	803.6
25°	1692.4	1123.8	852.9	771.8	746.1
27.5°	1629.8	1044.8	796.4	720.5	698.9
30°	1555.9	967.8	738.9	671.2	653.8
32.5°	1471.7	896.0	687.6	628.1	607.6
35°	1373.2	830.3	640.4	586.0	568.6
37.5°	1268.5	765.6	595.3	548.1	533.7
40°	1151.5	709.2	553.2	511.1	503.9
42.5°	1031.4	652.7	515.2	479.3	473.1
45°	924.7	598.3	477.2	450.6	448.5
47.5°	821.1	549.1	442.3	421.8	419.8
50°	729.7	497.8	407.4	394.1	393.1
52.5°	642.5	452.6	374.6	367.4	369.5
55°	563.4	409.5	343.8	339.7	341.8
57.5°	490.6	369.5	313.0	314.1	317.1
60°	425.9	328.4	282.2	286.3	290.4
62.5°	369.5	290.4	252.5	258.6	262.7
65°	315.1	252.5	223.7	228.9	231.9
67.5°	266.8	216.6	195.0	201.2	202.2
70°	219.6	183.7	166.3	172.4	172.4
72.5°	178.6	149.8	138.6	141.6	142.7
75°	138.6	119.1	110.8	113.9	114.9
77.5°	104.7	90.3	84.2	87.2	86.2
80°	72.9	63.6	60.6	59.5	58.5
82.5°	45.2	40.0	36.9	38.0	36.9
85°	22.6	19.5	19.5	19.5	19.5
87.5°	7.2	7.2	7.2	7.2	7.2
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	21.07	22.57	21.43	22.88	23.20	19.57	21.07	19.93	21.38	21.70
	3H	22.66	24.00	23.03	24.33	24.69	21.28	22.63	21.66	22.95	23.32
	4H	23.18	24.44	23.58	24.79	25.17	21.86	23.12	22.26	23.47	23.85
	6H	23.51	24.67	23.92	25.04	25.43	22.21	23.37	22.62	23.74	24.13
	8H	23.58	24.69	24.01	25.08	25.48	22.28	23.39	22.71	23.78	24.18
	12H	23.61	24.67	24.04	25.05	25.48	22.31	23.38	22.74	23.76	24.19
4H	2H	21.38	22.64	21.78	22.99	23.37	20.13	21.39	20.53	21.74	22.12
	3H	23.16	24.21	23.57	24.61	25.01	22.04	23.09	22.45	23.49	23.89
	4H	23.79	24.73	24.22	25.15	25.59	22.74	23.68	23.17	24.10	24.54
	6H	24.22	25.04	24.68	25.49	25.95	23.19	24.01	23.65	24.45	24.91
	8H	24.33	25.10	24.79	25.54	26.01	23.29	24.06	23.76	24.50	24.97
	12H	24.38	25.06	24.86	25.54	26.01	23.35	24.03	23.83	24.51	24.98
8H	4H	23.94	24.70	24.40	25.15	25.62	22.98	23.75	23.44	24.19	24.66
	6H	24.45	25.08	24.94	25.57	26.05	23.52	24.15	24.01	24.64	25.12
	8H	24.59	25.16	25.11	25.67	26.16	23.67	24.23	24.18	24.74	25.23
	12H	24.68	25.18	25.19	25.67	26.24	23.76	24.26	24.27	24.75	25.32
12H	4H	23.94	24.62	24.42	25.10	25.57	22.99	23.67	23.47	24.15	24.62
	6H	24.45	25.01	24.96	25.52	26.01	23.54	24.10	24.05	24.61	25.10
	8H	24.63	25.13	25.14	25.62	26.19	23.73	24.23	24.24	24.72	25.29