

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: P1439674

Luminaire Tested: S122DR-S1005D927-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439674
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2602-702-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/2/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-S1005D927-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

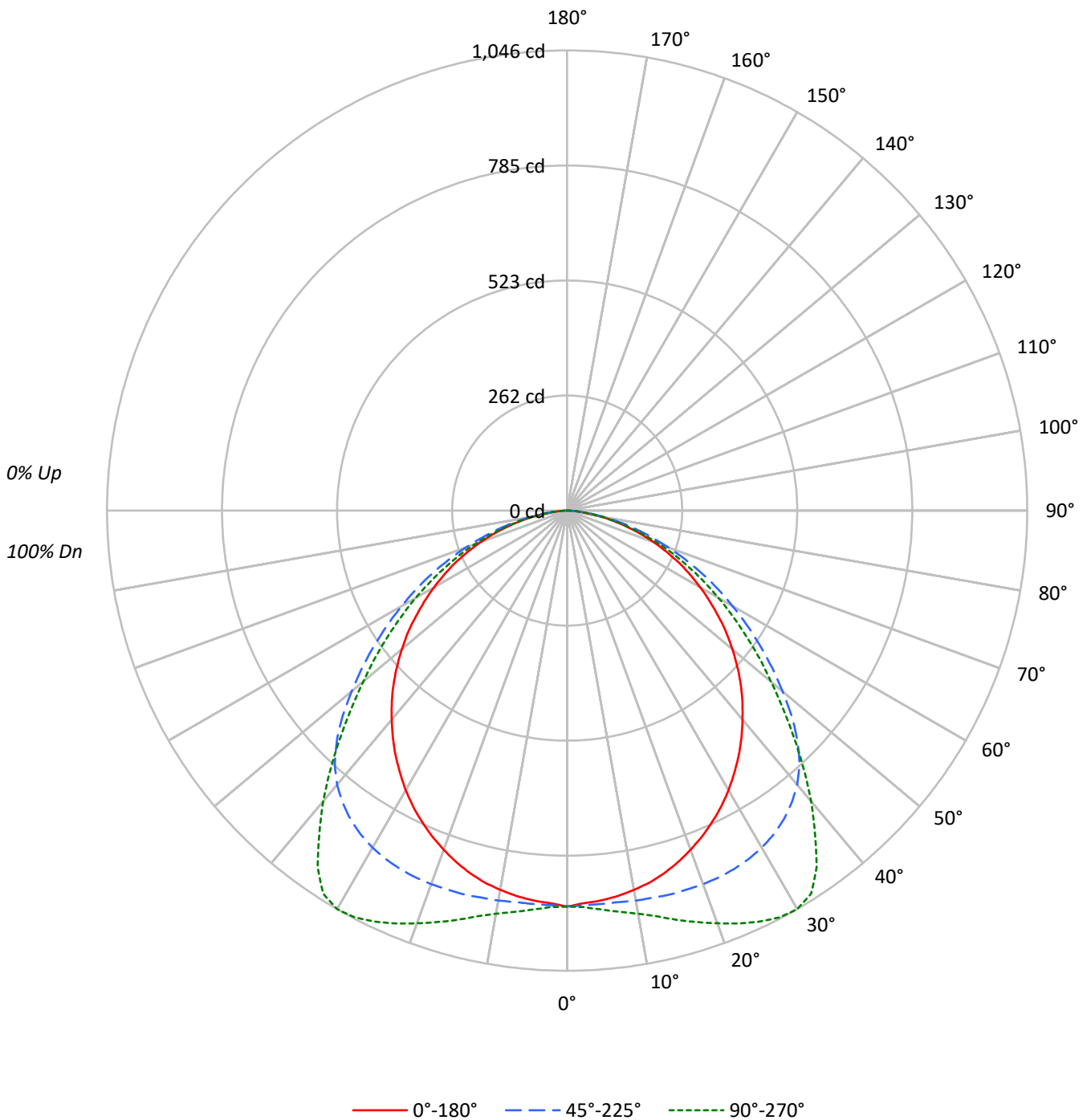
Lumens per Lamp: N/A
Luminaire Lumens: 2768.0 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	91	85	79	97	90	84	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17051	17051	17051
5°	16917	17071	17316
10°	16841	17314	17899
15°	16735	17721	18892
20°	16541	18216	20127
25°	16318	18789	21555
30°	16053	19357	22890
35°	15727	19842	22872
40°	15341	20117	21331
45°	14956	19849	19535
50°	14454	18834	17835
55°	13876	17665	16390
60°	13258	16453	15077
65°	12539	15161	13745
70°	11539	13549	12320
75°	10197	11734	10621
80°	8423	9318	8423
85°	5587	6108	5848

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 20007 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.1
10°-20°	257.1	9.3
20°-30°	417.1	15.1
30°-40°	527.8	19.1
40°-50°	528.6	19.1
50°-60°	442.7	16.0
60°-70°	312.0	11.3
70°-80°	160.9	5.8
80°-90°	35.7	1.3
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°	760.3	27.5
0°-40°	1288.1	46.5
0°-60°	2259.3	81.6
0°-90°	2768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2768.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	890	905	898	902	910	84
15°	853	878	904	940	963	241
25°	781	823	899	987	1031	360
35°	680	735	858	969	989	425
45°	558	617	741	747	729	430
55°	420	472	535	513	496	376
65°	280	311	338	317	307	276
75°	139	153	160	149	145	148
85°	26	28	28	28	27	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	900.0	900.0	900.0	900.0	900.0
2.5°	893.0	907.0	897.6	898.8	902.3
5°	889.5	904.7	897.6	902.3	910.5
7.5°	883.6	900.0	897.6	907.0	919.9
10°	875.4	894.1	900.0	916.4	930.4
12.5°	866.0	885.9	901.2	926.9	944.5
15°	853.2	877.7	903.5	939.8	963.2
17.5°	838.0	867.2	903.5	953.8	980.7
20°	820.4	854.3	903.5	965.5	998.3
22.5°	801.7	839.1	902.3	976.1	1015.8
25°	780.6	822.7	898.8	986.6	1031.1
27.5°	758.4	804.0	893.0	994.8	1042.8
30°	733.8	783.0	884.8	998.3	1046.3
32.5°	706.9	760.7	873.1	991.3	1032.2
35°	680.0	735.0	857.9	969.0	988.9
37.5°	650.7	708.1	838.0	925.7	925.7
40°	620.3	678.8	813.4	866.0	862.5
42.5°	589.8	648.4	781.8	807.5	795.8
45°	558.2	616.8	740.8	746.7	729.1
47.5°	524.3	581.7	692.8	684.6	664.7
50°	490.4	546.5	639.0	625.0	605.1
52.5°	456.4	510.3	587.5	567.6	550.1
55°	420.1	471.6	534.8	512.6	496.2
57.5°	385.0	433.0	484.5	459.9	445.9
60°	349.9	393.2	434.2	410.8	397.9
62.5°	314.8	352.3	386.2	362.8	351.1
65°	279.7	311.3	338.2	317.2	306.6
67.5°	243.4	271.5	290.2	271.5	264.5
70°	208.3	230.6	244.6	228.2	222.4
72.5°	173.2	191.9	201.3	188.4	182.6
75°	139.3	153.3	160.3	148.6	145.1
77.5°	106.5	117.0	120.5	112.4	107.7
80°	77.2	83.1	85.4	79.6	77.2
82.5°	48.0	52.7	55.0	50.3	49.2
85°	25.7	28.1	28.1	28.1	26.9
87.5°	9.4	11.7	11.7	11.7	10.5
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	21.34	22.95	21.70	23.26	23.58	21.85	23.46	22.22	23.78	24.09
	3H	22.91	24.36	23.29	24.69	25.05	23.32	24.77	23.70	25.10	25.46
	4H	23.45	24.81	23.84	25.16	25.54	23.81	25.18	24.21	25.53	25.90
	6H	23.79	25.05	24.20	25.42	25.81	24.11	25.38	24.52	25.74	26.13
	8H	23.87	25.08	24.30	25.47	25.87	24.19	25.39	24.61	25.78	26.18
	12H	23.91	25.06	24.34	25.45	25.87	24.22	25.38	24.65	25.76	26.19
4H	2H	22.09	23.46	22.49	23.81	24.18	22.49	23.86	22.89	24.20	24.58
	3H	23.86	25.00	24.27	25.40	25.80	24.16	25.30	24.57	25.70	26.10
	4H	24.51	25.54	24.94	25.95	26.39	24.75	25.78	25.18	26.19	26.63
	6H	24.95	25.85	25.41	26.29	26.75	25.15	26.04	25.60	26.48	26.94
	8H	25.06	25.90	25.53	26.34	26.81	25.25	26.09	25.71	26.53	26.99
	12H	25.12	25.88	25.61	26.35	26.82	25.31	26.06	25.79	26.53	27.00
8H	4H	24.79	25.63	25.25	26.07	26.54	25.01	25.85	25.47	26.29	26.75
	6H	25.33	26.03	25.83	26.52	26.99	25.49	26.19	25.99	26.68	27.15
	8H	25.49	26.11	26.00	26.62	27.11	25.64	26.26	26.15	26.77	27.25
	12H	25.60	26.15	26.10	26.64	27.20	25.74	26.29	26.25	26.78	27.34
12H	4H	24.81	25.56	25.29	26.04	26.51	25.02	25.78	25.50	26.25	26.72
	6H	25.36	25.99	25.87	26.49	26.98	25.52	26.14	26.03	26.65	27.14
	8H	25.57	26.12	26.07	26.61	27.17	25.71	26.26	26.22	26.75	27.31