

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: P1439675

Luminaire Tested: S122DR-S1005D930-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1439675  
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-S1005D930-X4F0-XX-UDD-FLB-W  
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

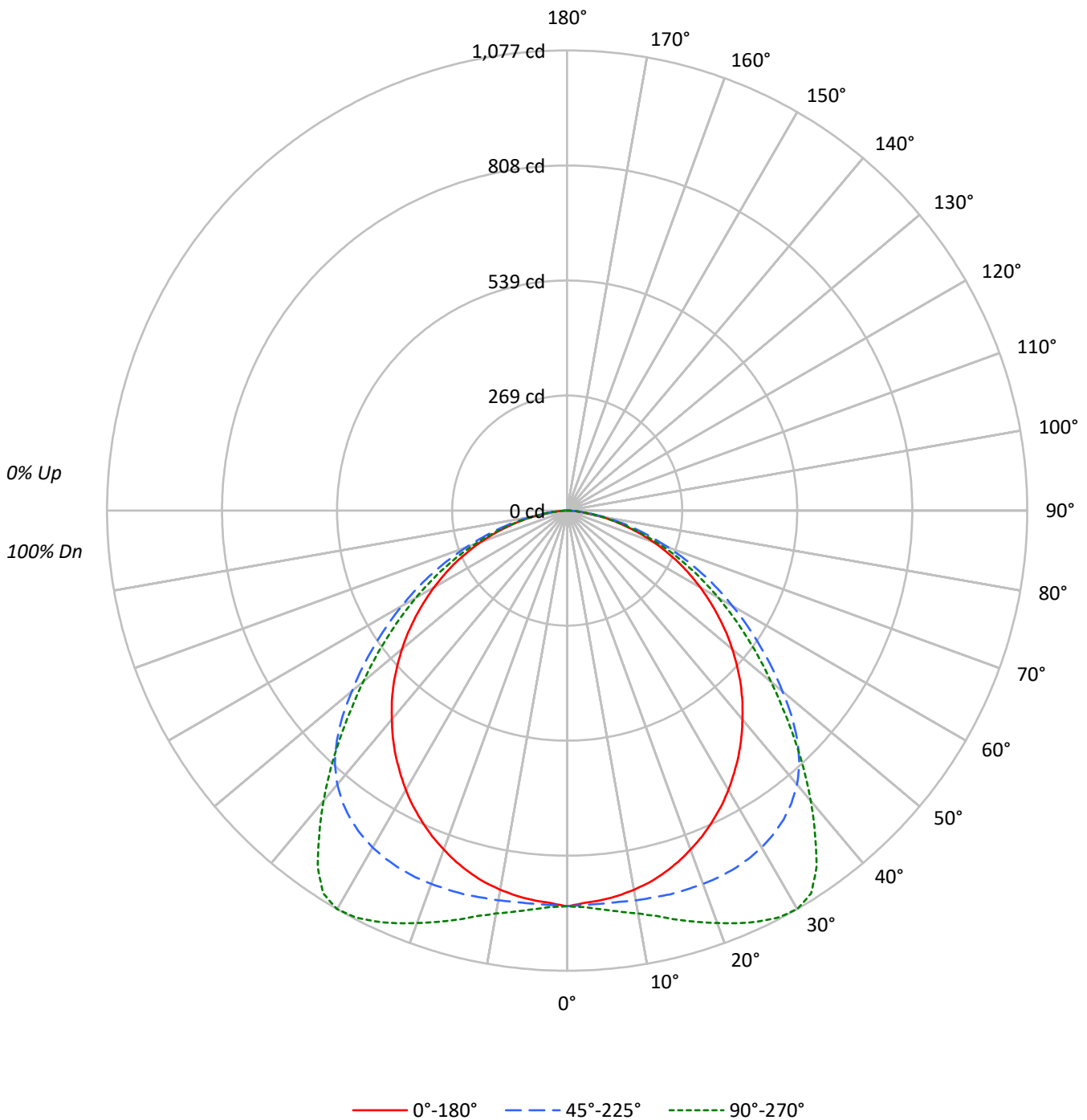
Lumens per Lamp: N/A  
Luminaire Lumens: 2848.7 lumens  
Efficiency: N/A  
Efficacy: 68.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct

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°	17548	17548	17548
5°	17409	17569	17822
10°	17334	17818	18422
15°	17223	18239	19444
20°	17023	18748	20714
25°	16795	19337	22184
30°	16521	19921	23557
35°	16185	20420	23540
40°	15789	20703	21955
45°	15393	20427	20106
50°	14876	19382	18354
55°	14283	18180	16869
60°	13645	16934	15517
65°	12906	15605	14148
70°	11876	13943	12680
75°	10490	12078	10936
80°	8674	9590	8674
85°	5761	6282	6021

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°  
 Vertical Angle: 45°  
 Luminance: 20591 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.6	3.1
10°-20°	264.6	9.3
20°-30°	429.3	15.1
30°-40°	543.2	19.1
40°-50°	544.0	19.1
50°-60°	455.6	16.0
60°-70°	321.1	11.3
70°-80°	165.6	5.8
80°-90°	36.7	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°	782.4	27.5
0°-40°	1325.6	46.5
0°-60°	2325.3	81.6
0°-90°	2848.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2848.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	926	926	926	926	926	
5°	915	931	924	929	937	87
15°	878	903	930	967	991	248
25°	803	847	925	1015	1061	370
35°	700	756	883	997	1018	437
45°	574	635	762	768	750	442
55°	432	485	550	528	511	387
65°	288	320	348	326	316	284
75°	143	158	165	153	149	152
85°	26	29	29	29	28	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	926.2	926.2	926.2	926.2	926.2
2.5°	919.0	933.5	923.8	925.0	928.7
5°	915.4	931.1	923.8	928.7	937.1
7.5°	909.4	926.2	923.8	933.5	946.7
10°	901.0	920.2	926.2	943.1	957.6
12.5°	891.3	911.8	927.5	954.0	972.0
15°	878.1	903.4	929.9	967.2	991.3
17.5°	862.4	892.5	929.9	981.7	1009.4
20°	844.3	879.3	929.9	993.7	1027.4
22.5°	825.1	863.6	928.7	1004.5	1045.5
25°	803.4	846.8	925.0	1015.4	1061.2
27.5°	780.5	827.5	919.0	1023.8	1073.2
30°	755.2	805.8	910.6	1027.4	1076.8
32.5°	727.5	782.9	898.5	1020.2	1062.4
35°	699.8	756.4	882.9	997.3	1017.8
37.5°	669.7	728.7	862.4	952.7	952.7
40°	638.4	698.6	837.1	891.3	887.7
42.5°	607.1	667.3	804.6	831.1	819.0
45°	574.5	634.8	762.4	768.5	750.4
47.5°	539.6	598.6	713.1	704.6	684.1
50°	504.7	562.5	657.6	643.2	622.7
52.5°	469.7	525.2	604.7	584.2	566.1
55°	432.4	485.4	550.4	527.6	510.7
57.5°	396.3	445.7	498.7	473.4	458.9
60°	360.1	404.7	446.9	422.8	409.5
62.5°	324.0	362.5	397.5	373.4	361.3
65°	287.9	320.4	348.1	326.4	315.6
67.5°	250.5	279.4	298.7	279.4	272.2
70°	214.4	237.3	251.7	234.9	228.9
72.5°	178.3	197.5	207.2	193.9	187.9
75°	143.3	157.8	165.0	153.0	149.4
77.5°	109.6	120.4	124.1	115.6	110.8
80°	79.5	85.5	87.9	81.9	79.5
82.5°	49.4	54.2	56.6	51.8	50.6
85°	26.5	28.9	28.9	28.9	27.7
87.5°	9.6	12.0	12.0	12.0	10.8
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	21.44	23.05	21.80	23.37	23.68	21.95	23.56	22.32	23.88	24.19
	3H	23.01	24.46	23.39	24.79	25.15	23.42	24.87	23.80	25.20	25.56
	4H	23.55	24.91	23.94	25.26	25.64	23.91	25.28	24.31	25.63	26.00
	6H	23.89	25.15	24.30	25.52	25.91	24.21	25.48	24.62	25.84	26.23
	8H	23.97	25.18	24.40	25.57	25.97	24.29	25.49	24.71	25.88	26.28
	12H	24.01	25.16	24.44	25.55	25.97	24.32	25.48	24.75	25.86	26.29
4H	2H	22.19	23.56	22.59	23.91	24.28	22.59	23.96	22.99	24.31	24.68
	3H	23.96	25.10	24.37	25.50	25.90	24.26	25.40	24.67	25.80	26.20
	4H	24.61	25.64	25.04	26.05	26.49	24.85	25.88	25.28	26.29	26.73
	6H	25.05	25.95	25.51	26.39	26.85	25.25	26.14	25.70	26.59	27.04
	8H	25.16	26.00	25.63	26.44	26.91	25.35	26.19	25.81	26.63	27.09
	12H	25.23	25.98	25.71	26.45	26.92	25.41	26.16	25.89	26.64	27.10
8H	4H	24.89	25.73	25.35	26.17	26.64	25.11	25.95	25.57	26.39	26.86
	6H	25.43	26.13	25.93	26.62	27.09	25.59	26.29	26.09	26.78	27.25
	8H	25.59	26.21	26.10	26.72	27.21	25.74	26.36	26.25	26.87	27.35
	12H	25.70	26.25	26.20	26.74	27.30	25.84	26.39	26.35	26.88	27.44
12H	4H	24.91	25.66	25.39	26.14	26.61	25.13	25.88	25.61	26.35	26.82
	6H	25.46	26.09	25.97	26.59	27.08	25.62	26.24	26.13	26.75	27.24
	8H	25.67	26.22	26.17	26.71	27.27	25.81	26.36	26.32	26.85	27.41