

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: P1217304

Luminaire Tested: S122DRP-S1005D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217304  
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-S1005D850-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

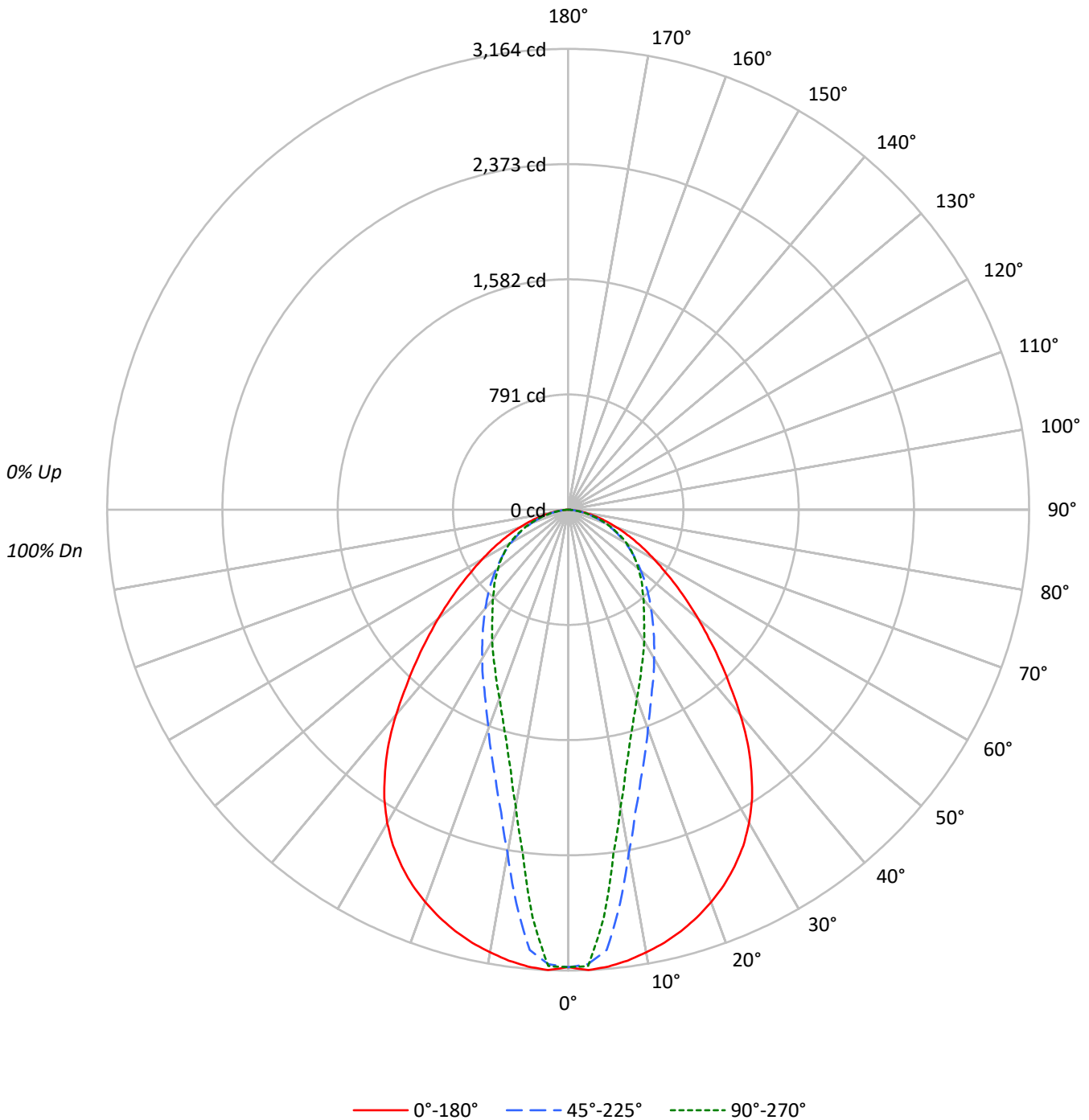
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4220.6 lumens  
Efficiency: N/A  
Efficacy: 100.7 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): 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	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°	59505	59505	59505
5°	59888	57707	53437
10°	59352	46081	39840
15°	58744	37663	32167
20°	57808	32241	27747
25°	56478	28461	24899
30°	54338	25806	22833
35°	50703	23647	20994
40°	45465	21841	19894
45°	39553	20411	19184
50°	34335	19170	18495
55°	29711	18131	18022
60°	25763	17074	17570
65°	22549	16013	16600
70°	19421	14702	15244
75°	16192	12949	13432
80°	12689	10550	10190
85°	7826	6760	6760

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 39553 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.4	6.4
10°-20°	596.3	14.1
20°-30°	731.6	17.3
30°-40°	756.0	17.9
40°-50°	682.8	16.2
50°-60°	553.3	13.1
60°-70°	387.9	9.2
70°-80°	200.1	4.7
80°-90°	42.2	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°	1598.3	37.9
0°-40°	2354.3	55.8
0°-60°	3590.4	85.1
0°-90°	4220.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4220.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3141	3141	3141	3141	3141	
5°	3149	3142	3034	2898	2810	298
15°	2995	2525	1920	1712	1640	844
25°	2702	1794	1362	1232	1191	1241
35°	2192	1326	1022	936	908	1363
45°	1476	955	762	719	716	1142
55°	900	654	549	542	546	810
65°	503	403	357	365	370	503
75°	221	190	177	182	184	239
85°	36	31	31	31	31	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3140.8	3140.8	3140.8	3140.8	3140.8
2.5°	3163.7	3152.3	3122.8	3150.6	3135.9
5°	3149.0	3142.4	3034.3	2898.3	2809.8
7.5°	3122.8	3099.8	2726.3	2469.0	2382.2
10°	3085.1	2970.4	2395.3	2156.1	2070.9
12.5°	3045.8	2775.4	2128.3	1903.8	1826.8
15°	2995.0	2524.7	1920.2	1712.1	1640.0
17.5°	2936.0	2306.8	1754.7	1554.8	1497.5
20°	2867.2	2118.4	1599.1	1423.8	1376.2
22.5°	2791.8	1959.5	1469.6	1327.1	1282.9
25°	2701.7	1794.0	1361.5	1232.1	1191.1
27.5°	2601.8	1667.9	1271.4	1150.1	1115.7
30°	2483.8	1545.0	1179.6	1071.5	1043.7
32.5°	2349.4	1430.3	1097.7	1002.7	969.9
35°	2192.2	1325.5	1022.4	935.5	907.7
37.5°	2025.0	1222.2	950.3	874.9	852.0
40°	1838.3	1132.1	883.1	815.9	804.4
42.5°	1646.6	1042.0	822.5	765.1	755.3
45°	1476.2	955.2	761.8	719.3	716.0
47.5°	1310.7	876.5	706.1	673.4	670.1
50°	1164.9	794.6	650.4	629.1	627.5
52.5°	1025.6	722.5	598.0	586.5	589.8
55°	899.5	653.7	548.9	542.3	545.6
57.5°	783.1	589.8	499.7	501.3	506.3
60°	679.9	524.3	450.6	457.1	463.7
62.5°	589.8	463.7	403.0	412.9	419.4
65°	503.0	403.0	357.2	365.4	370.3
67.5°	426.0	345.7	311.3	321.1	322.8
70°	350.6	293.3	265.4	275.2	275.2
72.5°	285.1	239.2	221.2	226.1	227.7
75°	221.2	190.1	176.9	181.9	183.5
77.5°	167.1	144.2	134.3	139.3	137.6
80°	116.3	101.6	96.7	95.0	93.4
82.5°	72.1	63.9	59.0	60.6	59.0
85°	36.0	31.1	31.1	31.1	31.1
87.5°	11.5	11.5	11.5	11.5	11.5
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	22.69	24.19	23.06	24.51	24.82	21.19	22.69	21.56	23.00	23.32
	3H	24.28	25.63	24.66	25.95	26.32	22.90	24.25	23.28	24.58	24.94
	4H	24.80	26.07	25.20	26.42	26.79	23.48	24.75	23.88	25.10	25.47
	6H	25.13	26.30	25.54	26.66	27.06	23.83	25.00	24.25	25.37	25.76
	8H	25.21	26.32	25.63	26.71	27.11	23.91	25.02	24.34	25.41	25.81
	12H	25.23	26.29	25.66	26.68	27.11	23.94	25.00	24.37	25.38	25.81
4H	2H	23.00	24.27	23.40	24.61	24.99	21.75	23.01	22.15	23.36	23.74
	3H	24.78	25.83	25.20	26.23	26.63	23.67	24.72	24.08	25.12	25.52
	4H	25.41	26.36	25.85	26.77	27.21	24.36	25.31	24.80	25.72	26.16
	6H	25.85	26.67	26.31	27.11	27.57	24.82	25.64	25.27	26.08	26.54
	8H	25.95	26.72	26.42	27.16	27.63	24.92	25.69	25.38	26.13	26.60
	12H	26.01	26.69	26.49	27.17	27.64	24.97	25.66	25.46	26.13	26.61
8H	4H	25.56	26.33	26.03	26.77	27.24	24.60	25.37	25.07	25.81	26.28
	6H	26.07	26.70	26.57	27.19	27.67	25.14	25.77	25.64	26.27	26.74
	8H	26.22	26.78	26.73	27.29	27.78	25.29	25.86	25.81	26.37	26.86
	12H	26.31	26.80	26.82	27.30	27.86	25.39	25.89	25.90	26.38	26.94
12H	4H	25.56	26.24	26.04	26.72	27.19	24.62	25.30	25.10	25.78	26.25
	6H	26.07	26.64	26.59	27.15	27.64	25.16	25.73	25.68	26.24	26.73
	8H	26.26	26.75	26.77	27.25	27.81	25.36	25.85	25.87	26.35	26.91