

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: P1217293

Luminaire Tested: S122DRP-H865D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217293  
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-H865D835-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

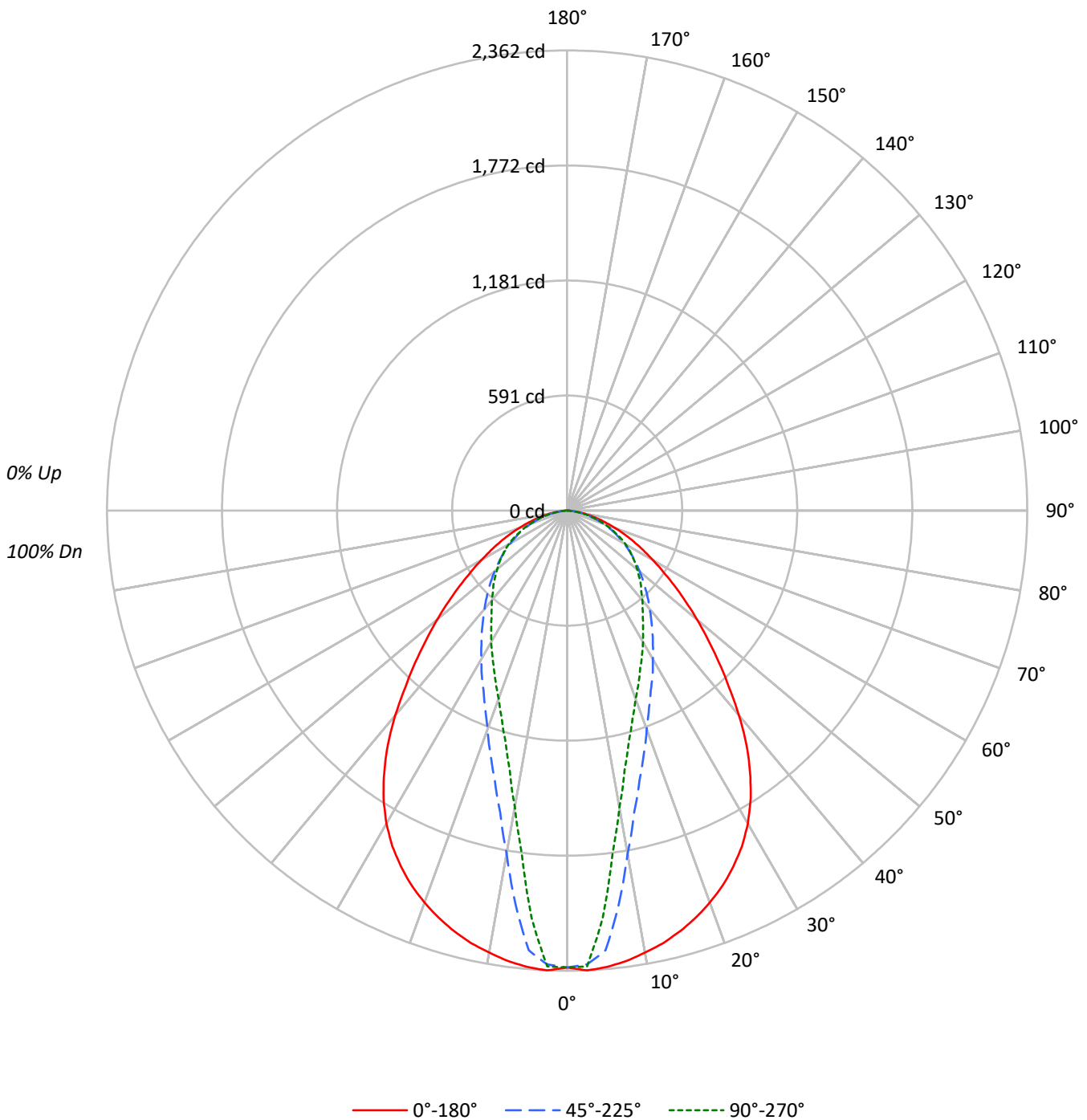
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3151.4 lumens  
Efficiency: N/A  
Efficacy: 102.0 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): 30.9  
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°	44430	44430	44430
5°	44718	43088	39900
10°	44317	34407	29748
15°	43863	28123	24020
20°	43162	24073	20718
25°	42171	21251	18592
30°	40573	19269	17049
35°	37857	17656	15674
40°	33947	16308	14857
45°	29532	15243	14324
50°	25637	14316	13809
55°	22184	13536	13457
60°	19238	12747	13118
65°	16838	11956	12395
70°	14502	10979	11383
75°	12093	9670	10029
80°	9481	7877	7605
85°	5848	5043	5043

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 29532 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.9	6.4
10°-20°	445.2	14.1
20°-30°	546.2	17.3
30°-40°	564.5	17.9
40°-50°	509.8	16.2
50°-60°	413.2	13.1
60°-70°	289.6	9.2
70°-80°	149.4	4.7
80°-90°	31.5	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°	1193.4	37.9
0°-40°	1757.9	55.8
0°-60°	2680.9	85.1
0°-90°	3151.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2345	2345	2345	2345	2345	
5°	2351	2346	2266	2164	2098	223
15°	2236	1885	1434	1278	1225	630
25°	2017	1340	1017	920	889	927
35°	1637	990	763	698	678	1018
45°	1102	713	569	537	535	853
55°	672	488	410	405	407	605
65°	376	301	267	273	276	375
75°	165	142	132	136	137	178
85°	27	23	23	23	23	36
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2345.1	2345.1	2345.1	2345.1	2345.1
2.5°	2362.3	2353.7	2331.7	2352.5	2341.5
5°	2351.3	2346.4	2265.6	2164.1	2098.0
7.5°	2331.7	2314.6	2035.6	1843.6	1778.7
10°	2303.6	2217.9	1788.5	1609.9	1546.3
12.5°	2274.2	2072.3	1589.1	1421.5	1364.0
15°	2236.3	1885.2	1433.8	1278.4	1224.6
17.5°	2192.2	1722.5	1310.2	1161.0	1118.1
20°	2140.8	1581.8	1194.0	1063.1	1027.6
22.5°	2084.6	1463.1	1097.3	990.9	957.9
25°	2017.3	1339.6	1016.6	920.0	889.4
27.5°	1942.7	1245.4	949.3	858.8	833.1
30°	1854.6	1153.6	880.8	800.1	779.3
32.5°	1754.3	1068.0	819.6	748.7	724.2
35°	1636.8	989.7	763.4	698.5	677.7
37.5°	1512.0	912.6	709.5	653.3	636.1
40°	1372.6	845.3	659.4	609.2	600.7
42.5°	1229.5	778.0	614.1	571.3	564.0
45°	1102.2	713.2	568.9	537.0	534.6
47.5°	978.7	654.5	527.3	502.8	500.3
50°	869.8	593.3	485.7	469.8	468.5
52.5°	765.8	539.5	446.5	438.0	440.4
55°	671.6	488.1	409.8	404.9	407.4
57.5°	584.8	440.4	373.1	374.3	378.0
60°	507.7	391.5	336.4	341.3	346.2
62.5°	440.4	346.2	300.9	308.3	313.2
65°	375.6	300.9	266.7	272.8	276.5
67.5°	318.1	258.1	232.4	239.8	241.0
70°	261.8	219.0	198.2	205.5	205.5
72.5°	212.9	178.6	165.2	168.8	170.0
75°	165.2	141.9	132.1	135.8	137.0
77.5°	124.8	107.7	100.3	104.0	102.8
80°	86.9	75.8	72.2	71.0	69.7
82.5°	53.8	47.7	44.0	45.3	44.0
85°	26.9	23.2	23.2	23.2	23.2
87.5°	8.6	8.6	8.6	8.6	8.6
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	21.68	23.18	22.04	23.49	23.81	20.18	21.68	20.54	21.99	22.30
	3H	23.27	24.61	23.64	24.94	25.30	21.89	23.24	22.27	23.56	23.93
	4H	23.79	25.05	24.19	25.40	25.78	22.47	23.73	22.87	24.08	24.46
	6H	24.12	25.28	24.53	25.65	26.04	22.82	23.98	23.23	24.35	24.74
	8H	24.19	25.30	24.62	25.69	26.09	22.89	24.00	23.32	24.39	24.79
	12H	24.22	25.28	24.65	25.66	26.09	22.92	23.99	23.35	24.37	24.80
4H	2H	21.99	23.25	22.39	23.60	23.98	20.74	22.00	21.14	22.35	22.73
	3H	23.77	24.82	24.18	25.22	25.62	22.65	23.70	23.06	24.10	24.50
	4H	24.40	25.34	24.83	25.76	26.20	23.35	24.29	23.78	24.71	25.15
	6H	24.83	25.65	25.29	26.10	26.56	23.80	24.62	24.26	25.06	25.52
	8H	24.94	25.71	25.40	26.15	26.62	23.90	24.67	24.37	25.11	25.58
	12H	24.99	25.67	25.47	26.15	26.62	23.96	24.64	24.44	25.12	25.59
8H	4H	24.55	25.31	25.01	25.76	26.23	23.59	24.35	24.05	24.80	25.27
	6H	25.06	25.69	25.55	26.18	26.66	24.13	24.76	24.63	25.25	25.73
	8H	25.20	25.77	25.72	26.28	26.77	24.28	24.84	24.79	25.35	25.84
	12H	25.29	25.79	25.80	26.28	26.85	24.37	24.87	24.88	25.36	25.93
12H	4H	24.55	25.23	25.03	25.71	26.18	23.60	24.28	24.08	24.76	25.23
	6H	25.06	25.62	25.57	26.13	26.62	24.15	24.71	24.66	25.22	25.71
	8H	25.24	25.74	25.75	26.23	26.80	24.34	24.84	24.85	25.33	25.90