

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: P1217345

Luminaire Tested: S122DRP-S865D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217345  
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-S865D950-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

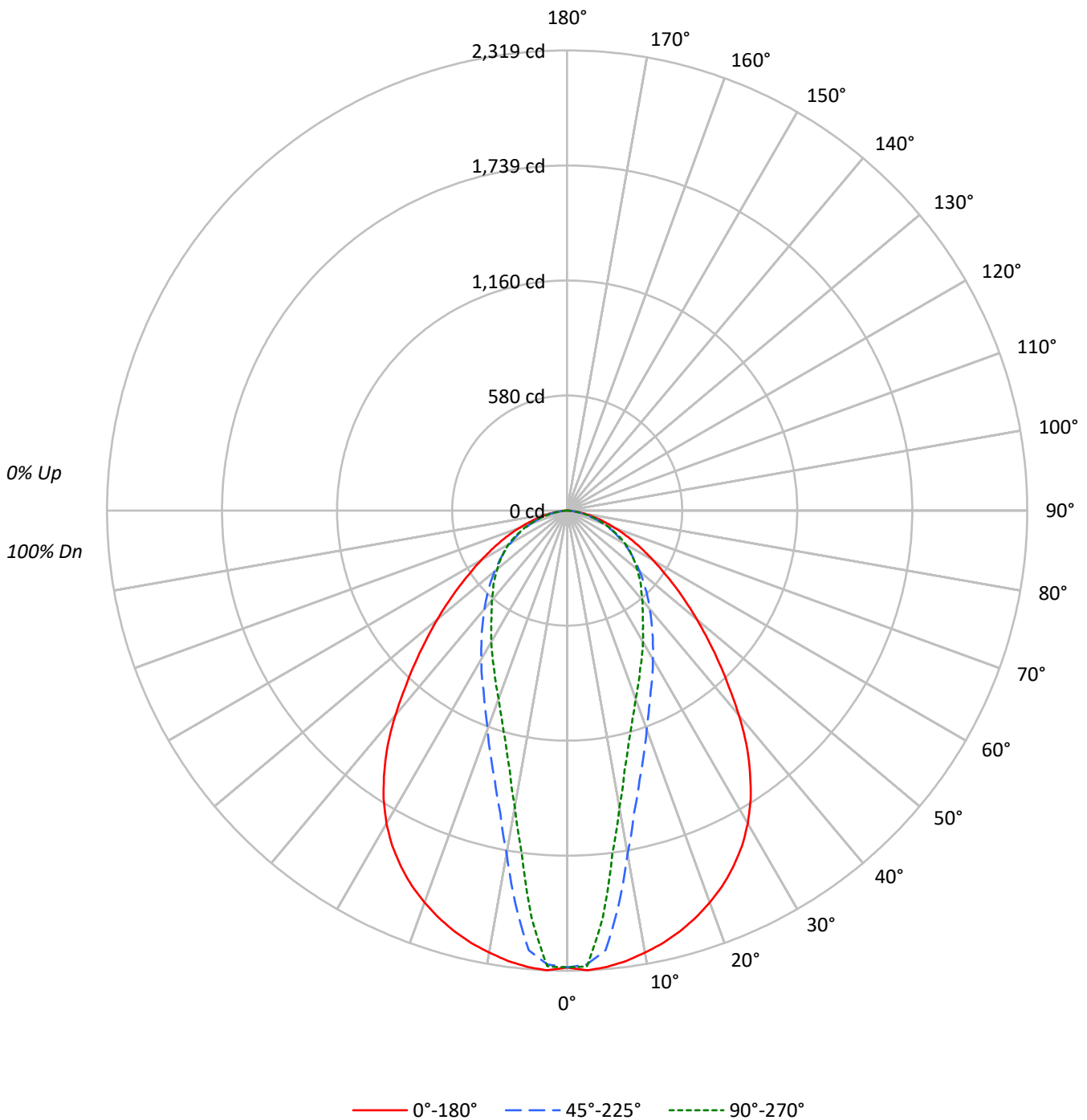
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3093.6 lumens  
Efficiency: N/A  
Efficacy: 89.2 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 (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°	43617	43617	43617
5°	43898	42298	39170
10°	43503	33776	29203
15°	43059	27607	23578
20°	42372	23632	20339
25°	41397	20863	18252
30°	39829	18917	16736
35°	37163	17333	15387
40°	33324	16009	14582
45°	28991	14961	14061
50°	25168	14053	13558
55°	21777	13288	13209
60°	18885	12516	12879
65°	16529	11736	12167
70°	14236	10774	11179
75°	11866	9494	9846
80°	9307	7736	7474
85°	5739	4956	4956

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28991 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.2	6.4
10°-20°	437.1	14.1
20°-30°	536.2	17.3
30°-40°	554.2	17.9
40°-50°	500.5	16.2
50°-60°	405.6	13.1
60°-70°	284.3	9.2
70°-80°	146.7	4.7
80°-90°	30.9	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°	1171.5	37.9
0°-40°	1725.7	55.8
0°-60°	2631.7	85.1
0°-90°	3093.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3093.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2302	2302	2302	2302	2302	
5°	2308	2303	2224	2124	2060	219
15°	2195	1851	1408	1255	1202	619
25°	1980	1315	998	903	873	910
35°	1607	972	749	686	665	999
45°	1082	700	558	527	525	837
55°	659	479	402	398	400	594
65°	369	295	262	268	271	368
75°	162	139	130	133	134	175
85°	26	23	23	23	23	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2302.2	2302.2	2302.2	2302.2	2302.2
2.5°	2319.0	2310.6	2288.9	2309.4	2298.5
5°	2308.2	2303.4	2224.1	2124.4	2059.6
7.5°	2288.9	2272.1	1998.3	1809.8	1746.1
10°	2261.3	2177.3	1755.7	1580.4	1518.0
12.5°	2232.5	2034.3	1560.0	1395.5	1339.0
15°	2195.3	1850.6	1407.5	1255.0	1202.1
17.5°	2152.0	1690.9	1286.2	1139.7	1097.6
20°	2101.6	1552.8	1172.1	1043.6	1008.8
22.5°	2046.4	1436.3	1077.2	972.7	940.3
25°	1980.3	1315.0	998.0	903.1	873.1
27.5°	1907.1	1222.5	931.9	843.0	817.8
30°	1820.6	1132.5	864.7	785.4	765.0
32.5°	1722.1	1048.4	804.6	735.0	710.9
35°	1606.8	971.5	749.4	685.7	665.3
37.5°	1484.3	895.9	696.5	641.3	624.5
40°	1347.4	829.8	647.3	598.1	589.6
42.5°	1206.9	763.8	602.9	560.8	553.6
45°	1082.0	700.1	558.4	527.2	524.8
47.5°	960.7	642.5	517.6	493.6	491.2
50°	853.9	582.4	476.8	461.2	460.0
52.5°	751.8	529.6	438.3	429.9	432.3
55°	659.3	479.2	402.3	397.5	399.9
57.5°	574.0	432.3	366.3	367.5	371.1
60°	498.4	384.3	330.3	335.1	339.9
62.5°	432.3	339.9	295.4	302.6	307.4
65°	368.7	295.4	261.8	267.8	271.4
67.5°	312.2	253.4	228.2	235.4	236.6
70°	257.0	215.0	194.5	201.8	201.8
72.5°	209.0	175.3	162.1	165.7	166.9
75°	162.1	139.3	129.7	133.3	134.5
77.5°	122.5	105.7	98.5	102.1	100.9
80°	85.3	74.5	70.9	69.7	68.5
82.5°	52.8	46.8	43.2	44.4	43.2
85°	26.4	22.8	22.8	22.8	22.8
87.5°	8.4	8.4	8.4	8.4	8.4
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	21.61	23.11	21.98	23.43	23.74	20.11	21.61	20.48	21.93	22.24
	3H	23.20	24.55	23.58	24.88	25.24	21.83	23.17	22.20	23.50	23.86
	4H	23.73	24.99	24.13	25.34	25.72	22.41	23.67	22.81	24.02	24.40
	6H	24.05	25.22	24.46	25.58	25.98	22.75	23.92	23.17	24.29	24.68
	8H	24.13	25.24	24.55	25.63	26.03	22.83	23.94	23.26	24.33	24.73
	12H	24.15	25.21	24.58	25.60	26.03	22.86	23.92	23.29	24.30	24.73
4H	2H	21.92	23.19	22.32	23.54	23.91	20.67	21.94	21.07	22.28	22.66
	3H	23.70	24.75	24.12	25.15	25.55	22.59	23.64	23.00	24.04	24.44
	4H	24.33	25.28	24.77	25.69	26.13	23.28	24.23	23.72	24.64	25.08
	6H	24.77	25.59	25.23	26.03	26.49	23.74	24.56	24.20	25.00	25.46
	8H	24.87	25.64	25.34	26.08	26.55	23.84	24.61	24.30	25.05	25.52
	12H	24.93	25.61	25.41	26.09	26.56	23.89	24.58	24.38	25.06	25.53
8H	4H	24.48	25.25	24.95	25.69	26.16	23.53	24.29	23.99	24.74	25.20
	6H	24.99	25.62	25.49	26.11	26.59	24.06	24.69	24.56	25.19	25.66
	8H	25.14	25.70	25.65	26.21	26.70	24.21	24.78	24.73	25.29	25.78
	12H	25.23	25.72	25.74	26.22	26.78	24.31	24.81	24.82	25.30	25.87
12H	4H	24.48	25.17	24.96	25.64	26.12	23.54	24.22	24.02	24.70	25.17
	6H	24.99	25.56	25.51	26.07	26.56	24.08	24.65	24.60	25.16	25.65
	8H	25.18	25.68	25.69	26.17	26.73	24.28	24.77	24.79	25.27	25.83