

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: P1217302

Luminaire Tested: S122DRP-S1005D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217302  
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-S1005D835-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

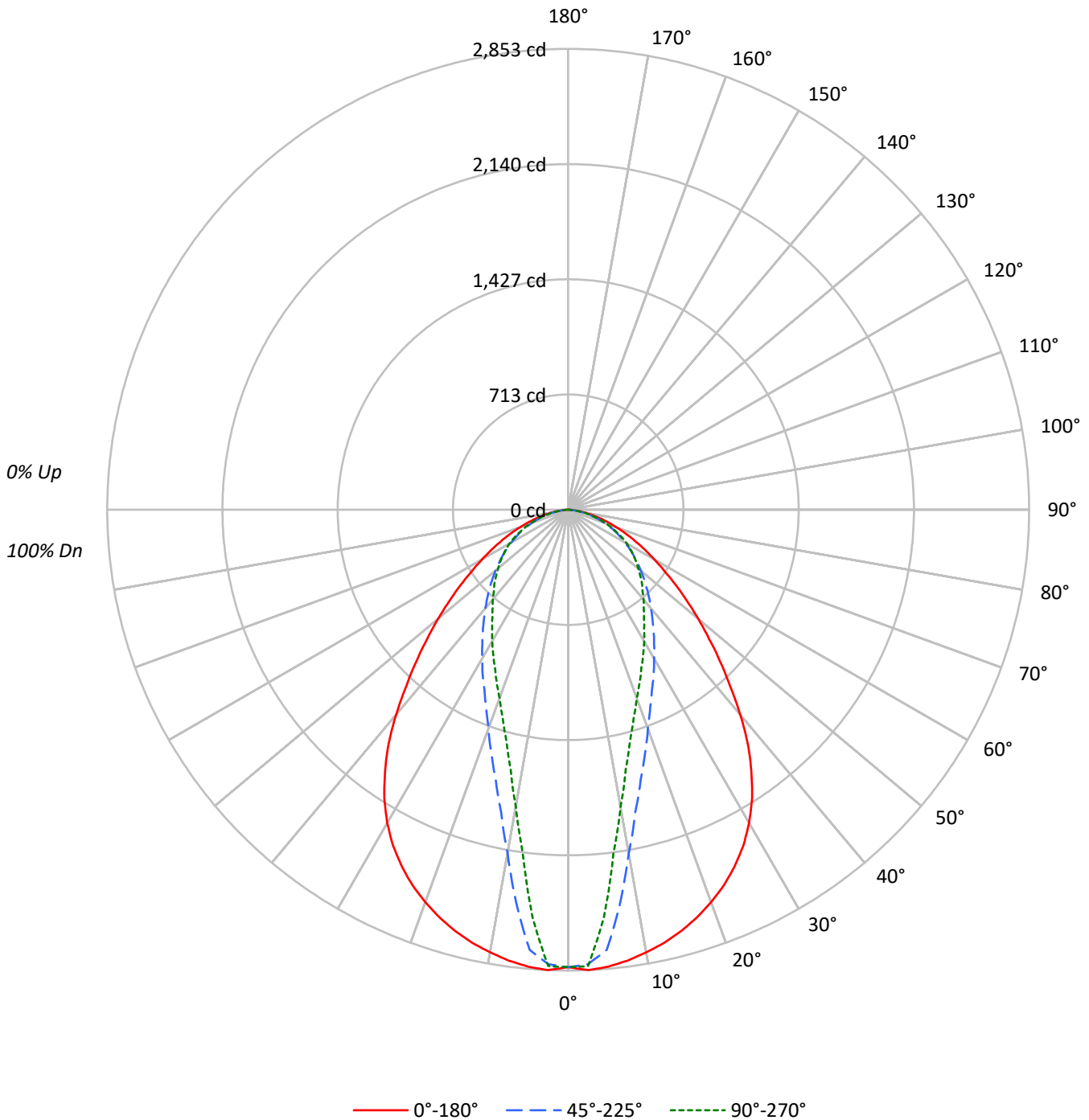
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3805.7 lumens  
Efficiency: N/A  
Efficacy: 90.8 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°	53657	53657	53657
5°	54002	52036	48186
10°	53519	41552	35925
15°	52970	33962	29005
20°	52126	29071	25021
25°	50927	25664	22451
30°	48997	23270	20588
35°	45718	21322	18931
40°	40996	19694	17941
45°	35665	18407	17298
50°	30960	17287	16677
55°	26792	16347	16251
60°	23231	15395	15843
65°	20330	14440	14969
70°	17516	13256	13749
75°	14596	11683	12115
80°	11445	9514	9187
85°	7065	6108	6108

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 35665 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.8	6.4
10°-20°	537.7	14.1
20°-30°	659.7	17.3
30°-40°	681.7	17.9
40°-50°	615.7	16.2
50°-60°	498.9	13.1
60°-70°	349.8	9.2
70°-80°	180.4	4.7
80°-90°	38.1	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°	1441.2	37.9
0°-40°	2122.9	55.8
0°-60°	3237.5	85.1
0°-90°	3805.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3805.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2832	2832	2832	2832	2832	
5°	2840	2834	2736	2613	2534	269
15°	2701	2277	1732	1544	1479	761
25°	2436	1618	1228	1111	1074	1119
35°	1977	1195	922	844	818	1229
45°	1331	861	687	649	646	1030
55°	811	590	495	489	492	731
65°	454	363	322	329	334	453
75°	199	171	160	164	166	215
85°	32	28	28	28	28	44
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2832.1	2832.1	2832.1	2832.1	2832.1
2.5°	2852.8	2842.4	2815.8	2840.9	2827.7
5°	2839.5	2833.6	2736.1	2613.4	2533.7
7.5°	2815.8	2795.2	2458.3	2226.4	2148.1
10°	2781.9	2678.4	2159.9	1944.2	1867.4
12.5°	2746.4	2502.6	1919.1	1716.7	1647.2
15°	2700.6	2276.6	1731.5	1543.8	1478.8
17.5°	2647.4	2080.1	1582.2	1402.0	1350.3
20°	2585.4	1910.2	1441.9	1283.8	1241.0
22.5°	2517.4	1766.9	1325.2	1196.7	1156.8
25°	2436.2	1617.7	1227.7	1111.0	1074.0
27.5°	2346.0	1503.9	1146.4	1037.1	1006.1
30°	2239.7	1393.1	1063.7	966.2	941.1
32.5°	2118.5	1289.7	989.8	904.1	874.6
35°	1976.7	1195.2	921.9	843.6	818.5
37.5°	1826.0	1102.1	856.9	788.9	768.2
40°	1657.6	1020.9	796.3	735.7	725.4
42.5°	1484.7	939.6	741.6	689.9	681.1
45°	1331.1	861.3	687.0	648.6	645.6
47.5°	1181.9	790.4	636.7	607.2	604.2
50°	1050.4	716.5	586.5	567.3	565.8
52.5°	924.8	651.5	539.2	528.9	531.8
55°	811.1	589.5	494.9	489.0	492.0
57.5°	706.2	531.8	450.6	452.1	456.5
60°	613.1	472.8	406.3	412.2	418.1
62.5°	531.8	418.1	363.4	372.3	378.2
65°	453.5	363.4	322.1	329.4	333.9
67.5°	384.1	311.7	280.7	289.6	291.0
70°	316.2	264.4	239.3	248.2	248.2
72.5°	257.1	215.7	199.4	203.9	205.4
75°	199.4	171.4	159.6	164.0	165.5
77.5°	150.7	130.0	121.1	125.6	124.1
80°	104.9	91.6	87.2	85.7	84.2
82.5°	65.0	57.6	53.2	54.7	53.2
85°	32.5	28.1	28.1	28.1	28.1
87.5°	10.3	10.3	10.3	10.3	10.3
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	22.33	23.83	22.70	24.15	24.46	20.83	22.33	21.20	22.65	22.96
	3H	23.92	25.27	24.30	25.59	25.96	22.55	23.89	22.92	24.22	24.58
	4H	24.44	25.71	24.84	26.06	26.44	23.13	24.39	23.53	24.74	25.12
	6H	24.77	25.94	25.18	26.30	26.70	23.47	24.64	23.89	25.01	25.40
	8H	24.85	25.96	25.27	26.35	26.75	23.55	24.66	23.98	25.05	25.45
	12H	24.87	25.93	25.30	26.32	26.75	23.58	24.64	24.01	25.02	25.45
4H	2H	22.64	23.91	23.04	24.26	24.63	21.39	22.66	21.79	23.00	23.38
	3H	24.42	25.47	24.84	25.87	26.27	23.31	24.36	23.72	24.76	25.16
	4H	25.05	26.00	25.49	26.41	26.85	24.00	24.95	24.44	25.36	25.80
	6H	25.49	26.31	25.95	26.75	27.21	24.46	25.28	24.91	25.72	26.18
	8H	25.59	26.36	26.06	26.80	27.27	24.56	25.33	25.02	25.77	26.24
	12H	25.65	26.33	26.13	26.81	27.28	24.61	25.30	25.10	25.78	26.25
8H	4H	25.20	25.97	25.67	26.41	26.88	24.25	25.01	24.71	25.46	25.92
	6H	25.71	26.34	26.21	26.83	27.31	24.78	25.41	25.28	25.91	26.38
	8H	25.86	26.42	26.37	26.93	27.42	24.93	25.50	25.45	26.01	26.50
	12H	25.95	26.44	26.46	26.94	27.50	25.03	25.53	25.54	26.02	26.59
12H	4H	25.20	25.89	25.68	26.36	26.84	24.26	24.94	24.74	25.42	25.89
	6H	25.71	26.28	26.23	26.79	27.28	24.80	25.37	25.32	25.88	26.37
	8H	25.90	26.40	26.41	26.89	27.45	25.00	25.49	25.51	25.99	26.55