

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: P1217283

Luminaire Tested: S122DRP-H675D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217283  
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-H675D830-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

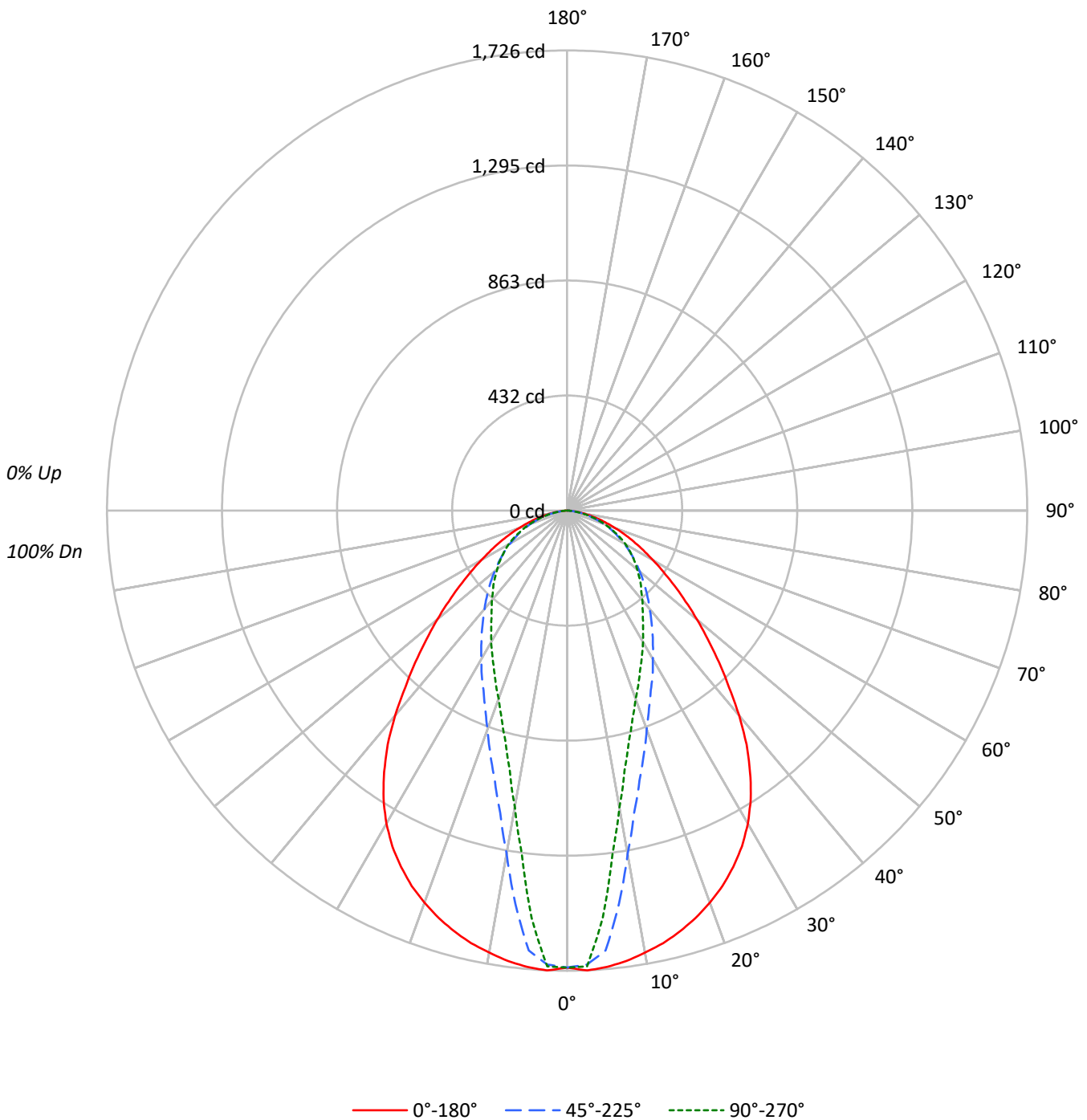
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2303.2 lumens  
Efficiency: N/A  
Efficacy: 96.8 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): 23.8  
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°	32473	32473	32473
5°	32681	31492	29163
10°	32389	25148	21741
15°	32057	20554	17555
20°	31547	17593	15141
25°	30821	15532	13588
30°	29652	14082	12459
35°	27669	12903	11456
40°	24811	11918	10857
45°	21585	11141	10468
50°	18737	10463	10092
55°	16215	9893	9833
60°	14058	9318	9587
65°	12306	8737	9060
70°	10597	8021	8320
75°	8835	7071	7327
80°	6928	5761	5564
85°	4282	3695	3695

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21585 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	6.4
10°-20°	325.4	14.1
20°-30°	399.2	17.3
30°-40°	412.6	17.9
40°-50°	372.6	16.2
50°-60°	302.0	13.1
60°-70°	211.7	9.2
70°-80°	109.2	4.7
80°-90°	23.1	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°	872.2	37.9
0°-40°	1284.8	55.8
0°-60°	1959.3	85.1
0°-90°	2303.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1718	1715	1656	1582	1533	163
15°	1634	1378	1048	934	895	461
25°	1474	979	743	672	650	677
35°	1196	723	558	510	495	744
45°	806	521	416	392	391	623
55°	491	357	300	296	298	442
65°	274	220	195	199	202	274
75°	121	104	97	99	100	130
85°	20	17	17	17	17	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1714.0	1714.0	1714.0	1714.0	1714.0
2.5°	1726.5	1720.2	1704.1	1719.3	1711.3
5°	1718.4	1714.9	1655.9	1581.6	1533.4
7.5°	1704.1	1691.6	1487.8	1347.4	1300.0
10°	1683.6	1621.0	1307.2	1176.6	1130.1
12.5°	1662.1	1514.6	1161.4	1038.9	996.9
15°	1634.4	1377.8	1047.9	934.3	895.0
17.5°	1602.2	1258.9	957.6	848.5	817.2
20°	1564.7	1156.1	872.6	777.0	751.0
22.5°	1523.5	1069.3	802.0	724.2	700.1
25°	1474.4	979.0	743.0	672.4	650.0
27.5°	1419.8	910.2	693.8	627.7	608.9
30°	1355.4	843.1	643.7	584.7	569.5
32.5°	1282.1	780.5	599.0	547.2	529.3
35°	1196.3	723.3	557.9	510.5	495.3
37.5°	1105.1	667.0	518.6	477.4	464.9
40°	1003.2	617.8	481.9	445.3	439.0
42.5°	898.6	568.6	448.8	417.5	412.2
45°	805.6	521.3	415.8	392.5	390.7
47.5°	715.3	478.3	385.4	367.5	365.7
50°	635.7	433.6	355.0	343.3	342.4
52.5°	559.7	394.3	326.3	320.1	321.9
55°	490.9	356.7	299.5	295.9	297.7
57.5°	427.4	321.9	272.7	273.6	276.3
60°	371.0	286.1	245.9	249.5	253.0
62.5°	321.9	253.0	219.9	225.3	228.9
65°	274.5	219.9	194.9	199.4	202.1
67.5°	232.5	188.7	169.9	175.2	176.1
70°	191.3	160.0	144.8	150.2	150.2
72.5°	155.6	130.5	120.7	123.4	124.3
75°	120.7	103.7	96.6	99.2	100.1
77.5°	91.2	78.7	73.3	76.0	75.1
80°	63.5	55.4	52.8	51.9	51.0
82.5°	39.3	34.9	32.2	33.1	32.2
85°	19.7	17.0	17.0	17.0	17.0
87.5°	6.3	6.3	6.3	6.3	6.3
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	20.59	22.09	20.96	22.40	22.72	19.09	20.59	19.45	20.90	21.22
	3H	22.18	23.52	22.55	23.85	24.21	20.80	22.15	21.18	22.47	22.84
	4H	22.70	23.96	23.10	24.31	24.69	21.38	22.64	21.78	22.99	23.37
	6H	23.03	24.19	23.44	24.56	24.95	21.73	22.89	22.14	23.26	23.65
	8H	23.10	24.21	23.53	24.60	25.00	21.80	22.91	22.23	23.30	23.71
	12H	23.13	24.19	23.56	24.57	25.00	21.83	22.90	22.27	23.28	23.71
4H	2H	20.90	22.16	21.30	22.51	22.89	19.65	20.91	20.05	21.26	21.64
	3H	22.68	23.73	23.09	24.13	24.53	21.56	22.61	21.98	23.01	23.41
	4H	23.31	24.25	23.74	24.67	25.11	22.26	23.20	22.69	23.62	24.06
	6H	23.74	24.56	24.20	25.01	25.47	22.71	23.53	23.17	23.97	24.43
	8H	23.85	24.62	24.31	25.06	25.53	22.82	23.58	23.28	24.03	24.49
	12H	23.90	24.58	24.38	25.06	25.53	22.87	23.55	23.35	24.03	24.50
8H	4H	23.46	24.22	23.92	24.67	25.14	22.50	23.27	22.96	23.71	24.18
	6H	23.97	24.60	24.46	25.09	25.57	23.04	23.67	23.54	24.16	24.64
	8H	24.11	24.68	24.63	25.19	25.68	23.19	23.75	23.70	24.26	24.75
	12H	24.20	24.70	24.71	25.19	25.76	23.28	23.78	23.79	24.27	24.84
12H	4H	23.46	24.14	23.94	24.62	25.09	22.51	23.19	22.99	23.67	24.14
	6H	23.97	24.53	24.48	25.04	25.53	23.06	23.63	23.57	24.14	24.62
	8H	24.15	24.65	24.66	25.14	25.71	23.25	23.75	23.76	24.24	24.81