

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: P1217328

Luminaire Tested: S122DRP-S675D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217328
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-S675D830-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

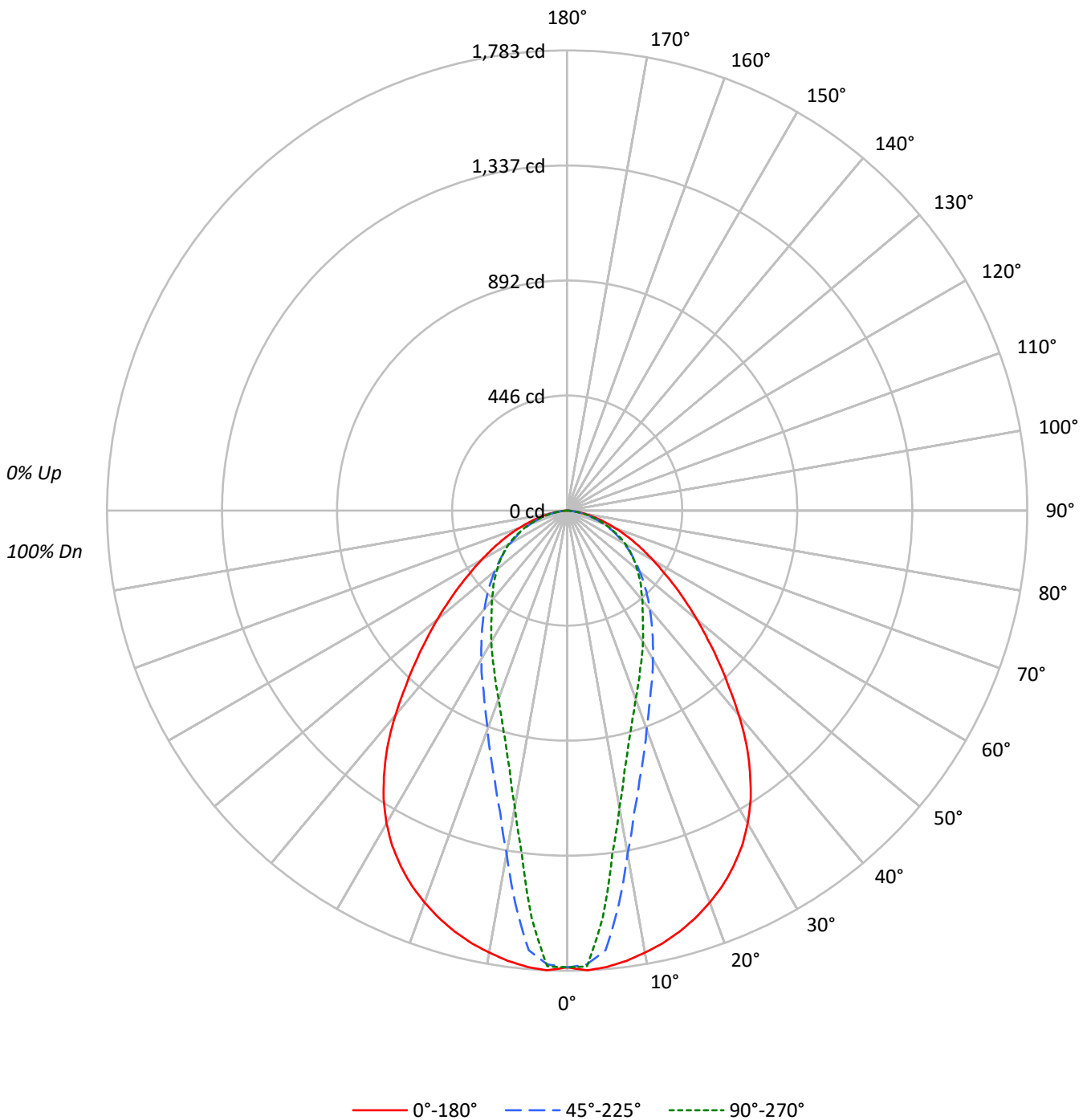
Lumens per Lamp: N/A
Luminaire Lumens: 2378.5 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): 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																		
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	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												100																
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87												87																
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75												75																
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65												65																
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57												57																
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50												50																
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45												45																
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41												41																
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37												37																
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34												34																
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31												31																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33534	33534	33534
5°	33750	32519	30113
10°	33447	25970	22451
15°	33105	21225	18127
20°	32577	18168	15637
25°	31827	16040	14031
30°	30621	14544	12866
35°	28573	13324	11830
40°	25620	12309	11211
45°	22289	11502	10811
50°	19350	10802	10422
55°	16743	10217	10157
60°	14520	9621	9901
65°	12709	9024	9356
70°	10946	8287	8592
75°	9121	7298	7569
80°	7157	5946	5739
85°	4413	3804	3804

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	6.4
10°-20°	336.0	14.1
20°-30°	412.3	17.3
30°-40°	426.1	17.9
40°-50°	384.8	16.2
50°-60°	311.8	13.1
60°-70°	218.6	9.2
70°-80°	112.7	4.7
80°-90°	23.8	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°	900.7	37.9
0°-40°	1326.7	55.8
0°-60°	2023.3	85.1
0°-90°	2378.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2378.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1775	1771	1710	1633	1583	168
15°	1688	1423	1082	965	924	476
25°	1522	1011	767	694	671	699
35°	1235	747	576	527	512	768
45°	832	538	429	405	404	644
55°	507	368	309	306	308	457
65°	284	227	201	206	209	283
75°	125	107	100	102	103	135
85°	20	18	18	18	18	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.0	1770.0	1770.0	1770.0	1770.0
2.5°	1782.9	1776.4	1759.8	1775.5	1767.2
5°	1774.6	1770.9	1709.9	1633.3	1583.4
7.5°	1759.8	1746.9	1536.4	1391.4	1342.5
10°	1738.6	1673.9	1349.9	1215.1	1167.0
12.5°	1716.4	1564.1	1199.4	1072.9	1029.5
15°	1687.8	1422.8	1082.1	964.8	924.2
17.5°	1654.5	1300.0	988.8	876.2	843.9
20°	1615.8	1193.8	901.1	802.3	775.6
22.5°	1573.3	1104.3	828.2	747.9	722.9
25°	1522.5	1011.0	767.3	694.3	671.2
27.5°	1466.2	939.9	716.5	648.2	628.8
30°	1399.7	870.7	664.8	603.8	588.1
32.5°	1324.0	806.0	618.6	565.1	546.6
35°	1235.4	746.9	576.1	527.2	511.5
37.5°	1141.2	688.8	535.5	493.0	480.1
40°	1035.9	638.0	497.7	459.8	453.3
42.5°	927.9	587.2	463.5	431.2	425.6
45°	831.9	538.3	429.3	405.3	403.5
47.5°	738.6	494.0	397.9	379.5	377.6
50°	656.5	447.8	366.5	354.5	353.6
52.5°	578.0	407.2	337.0	330.5	332.4
55°	506.9	368.4	309.3	305.6	307.5
57.5°	441.3	332.4	281.6	282.5	285.3
60°	383.2	295.5	253.9	257.6	261.3
62.5°	332.4	261.3	227.1	232.7	236.4
65°	283.5	227.1	201.3	205.9	208.7
67.5°	240.1	194.8	175.4	181.0	181.9
70°	197.6	165.3	149.6	155.1	155.1
72.5°	160.7	134.8	124.6	127.4	128.3
75°	124.6	107.1	99.7	102.5	103.4
77.5°	94.2	81.2	75.7	78.5	77.6
80°	65.6	57.2	54.5	53.6	52.6
82.5°	40.6	36.0	33.2	34.2	33.2
85°	20.3	17.5	17.5	17.5	17.5
87.5°	6.5	6.5	6.5	6.5	6.5
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	20.70	22.20	21.07	22.51	22.83	19.20	20.70	19.56	21.01	21.33
	3H	22.29	23.63	22.67	23.96	24.32	20.91	22.26	21.29	22.59	22.95
	4H	22.81	24.07	23.21	24.42	24.80	21.49	22.75	21.89	23.10	23.48
	6H	23.14	24.31	23.55	24.67	25.06	21.84	23.01	22.25	23.37	23.77
	8H	23.21	24.32	23.64	24.71	25.11	21.92	23.03	22.34	23.42	23.82
	12H	23.24	24.30	23.67	24.68	25.11	21.95	23.01	22.38	23.39	23.82
4H	2H	21.01	22.27	21.41	22.62	23.00	19.76	21.02	20.16	21.37	21.75
	3H	22.79	23.84	23.20	24.24	24.64	21.68	22.72	22.09	23.12	23.53
	4H	23.42	24.36	23.85	24.78	25.22	22.37	23.31	22.80	23.73	24.17
	6H	23.86	24.68	24.31	25.12	25.58	22.82	23.64	23.28	24.09	24.55
	8H	23.96	24.73	24.43	25.17	25.64	22.93	23.69	23.39	24.14	24.60
	12H	24.01	24.70	24.50	25.17	25.65	22.98	23.66	23.46	24.14	24.61
8H	4H	23.57	24.34	24.03	24.78	25.25	22.61	23.38	23.08	23.82	24.29
	6H	24.08	24.71	24.57	25.20	25.68	23.15	23.78	23.65	24.27	24.75
	8H	24.22	24.79	24.74	25.30	25.79	23.30	23.87	23.82	24.38	24.86
	12H	24.31	24.81	24.82	25.30	25.87	23.40	23.89	23.91	24.39	24.95
12H	4H	23.57	24.25	24.05	24.73	25.20	22.62	23.31	23.11	23.79	24.26
	6H	24.08	24.65	24.59	25.16	25.64	23.17	23.74	23.69	24.25	24.74
	8H	24.26	24.76	24.77	25.25	25.82	23.36	23.86	23.87	24.35	24.92