

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: P1439701

Luminaire Tested: S122DR-S675D927-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439701
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2602-702-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/2/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-S675D927-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

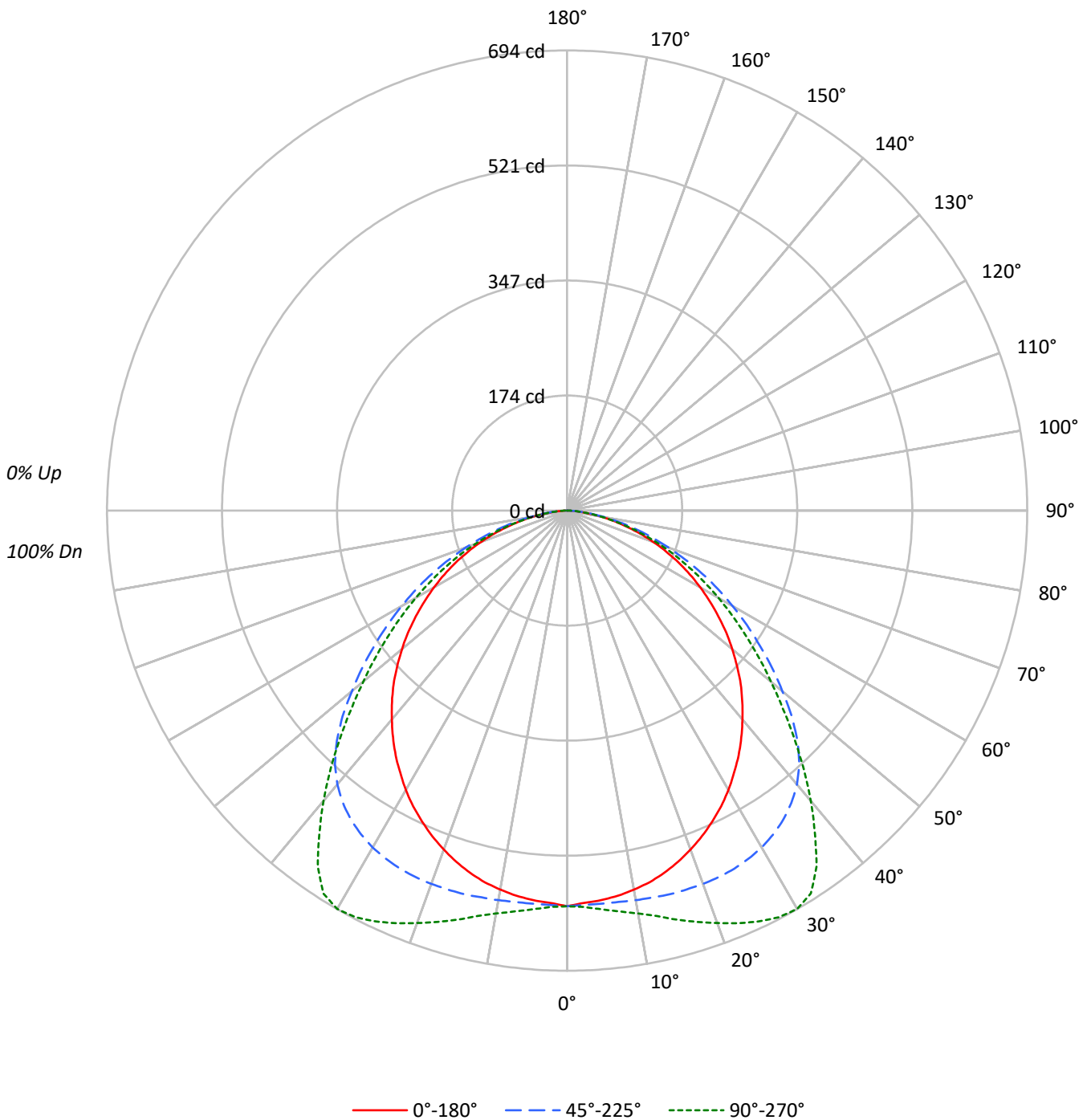
Lumens per Lamp: N/A
Luminaire Lumens: 1835.3 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (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	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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	100	91	85	79	97	90	84	78	86	81	76	83	79	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30					30			
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11305	11305	11305
5°	11217	11320	11481
10°	11168	11479	11868
15°	11096	11751	12528
20°	10968	12079	13345
25°	10820	12459	14292
30°	10645	12835	15176
35°	10429	13156	15165
40°	10172	13338	14144
45°	9919	13161	12952
50°	9582	12488	11825
55°	9202	11713	10867
60°	8791	10909	9996
65°	8316	10055	9114
70°	7650	8985	8165
75°	6756	7781	7042
80°	5586	6175	5586
85°	3717	4043	3869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 13265 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	3.1
10°-20°	170.5	9.3
20°-30°	276.6	15.1
30°-40°	350.0	19.1
40°-50°	350.5	19.1
50°-60°	293.5	16.0
60°-70°	206.9	11.3
70°-80°	106.7	5.8
80°-90°	23.7	1.3
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°	504.1	27.5
0°-40°	854.1	46.5
0°-60°	1498.1	81.6
0°-90°	1835.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1835.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	590	600	595	598	604	56
15°	566	582	599	623	639	159
25°	518	546	596	654	684	238
35°	451	487	569	642	656	282
45°	370	409	491	495	483	285
55°	279	313	355	340	329	249
65°	186	206	224	210	203	183
75°	92	102	106	99	96	98
85°	17	19	19	19	18	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.7	596.7	596.7	596.7	596.7
2.5°	592.1	601.4	595.2	596.0	598.3
5°	589.8	599.9	595.2	598.3	603.7
7.5°	585.9	596.7	595.2	601.4	609.9
10°	580.5	592.9	596.7	607.6	616.9
12.5°	574.2	587.4	597.5	614.6	626.2
15°	565.7	582.0	599.1	623.1	638.7
17.5°	555.6	575.0	599.1	632.4	650.3
20°	544.0	566.5	599.1	640.2	661.9
22.5°	531.6	556.4	598.3	647.2	673.6
25°	517.6	545.5	596.0	654.2	683.7
27.5°	502.9	533.1	592.1	659.6	691.4
30°	486.6	519.1	586.7	661.9	693.7
32.5°	468.7	504.4	578.9	657.3	684.4
35°	450.9	487.3	568.8	642.5	655.7
37.5°	431.5	469.5	555.6	613.8	613.8
40°	411.3	450.1	539.3	574.2	571.9
42.5°	391.1	429.9	518.4	535.4	527.7
45°	370.2	409.0	491.2	495.1	483.4
47.5°	347.6	385.7	459.4	454.0	440.8
50°	325.1	362.4	423.7	414.4	401.2
52.5°	302.6	338.3	389.6	376.4	364.7
55°	278.6	312.7	354.6	339.9	329.0
57.5°	255.3	287.1	321.3	305.0	295.7
60°	232.0	260.7	287.9	272.4	263.8
62.5°	208.7	233.6	256.1	240.6	232.8
65°	185.5	206.4	224.3	210.3	203.3
67.5°	161.4	180.0	192.4	180.0	175.4
70°	138.1	152.9	162.2	151.3	147.4
72.5°	114.8	127.3	133.5	124.9	121.1
75°	92.3	101.7	106.3	98.6	96.2
77.5°	70.6	77.6	79.9	74.5	71.4
80°	51.2	55.1	56.6	52.8	51.2
82.5°	31.8	34.9	36.5	33.4	32.6
85°	17.1	18.6	18.6	18.6	17.8
87.5°	6.2	7.8	7.8	7.8	7.0
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	19.91	21.52	20.28	21.84	22.15	20.42	22.04	20.79	22.35	22.67
	3H	21.48	22.93	21.86	23.26	23.62	21.89	23.35	22.27	23.67	24.03
	4H	22.02	23.38	22.42	23.73	24.11	22.39	23.75	22.78	24.10	24.48
	6H	22.36	23.63	22.77	23.99	24.38	22.69	23.95	23.10	24.32	24.71
	8H	22.44	23.65	22.87	24.04	24.44	22.76	23.97	23.18	24.35	24.75
	12H	22.48	23.64	22.91	24.02	24.45	22.79	23.95	23.22	24.33	24.76
4H	2H	20.67	22.03	21.06	22.38	22.76	21.06	22.43	21.46	22.78	23.15
	3H	22.44	23.58	22.85	23.97	24.37	22.73	23.87	23.14	24.27	24.67
	4H	23.08	24.11	23.52	24.53	24.96	23.32	24.35	23.76	24.77	25.20
	6H	23.53	24.42	23.98	24.86	25.32	23.72	24.62	24.18	25.06	25.51
	8H	23.64	24.47	24.10	24.92	25.38	23.82	24.66	24.28	25.10	25.57
	12H	23.70	24.45	24.18	24.92	25.39	23.88	24.63	24.36	25.11	25.58
8H	4H	23.37	24.20	23.83	24.65	25.11	23.58	24.42	24.04	24.86	25.33
	6H	23.91	24.60	24.40	25.09	25.56	24.07	24.76	24.56	25.25	25.72
	8H	24.06	24.69	24.57	25.19	25.68	24.21	24.83	24.72	25.34	25.83
	12H	24.17	24.72	24.68	25.21	25.77	24.31	24.86	24.82	25.35	25.91
12H	4H	23.38	24.13	23.86	24.61	25.08	23.60	24.35	24.08	24.82	25.29
	6H	23.93	24.56	24.44	25.07	25.55	24.09	24.72	24.60	25.22	25.71
	8H	24.14	24.69	24.65	25.18	25.74	24.28	24.83	24.79	25.32	25.89