

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: P1439702

Luminaire Tested: S122DR-S675D930-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439702
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-S675D930-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

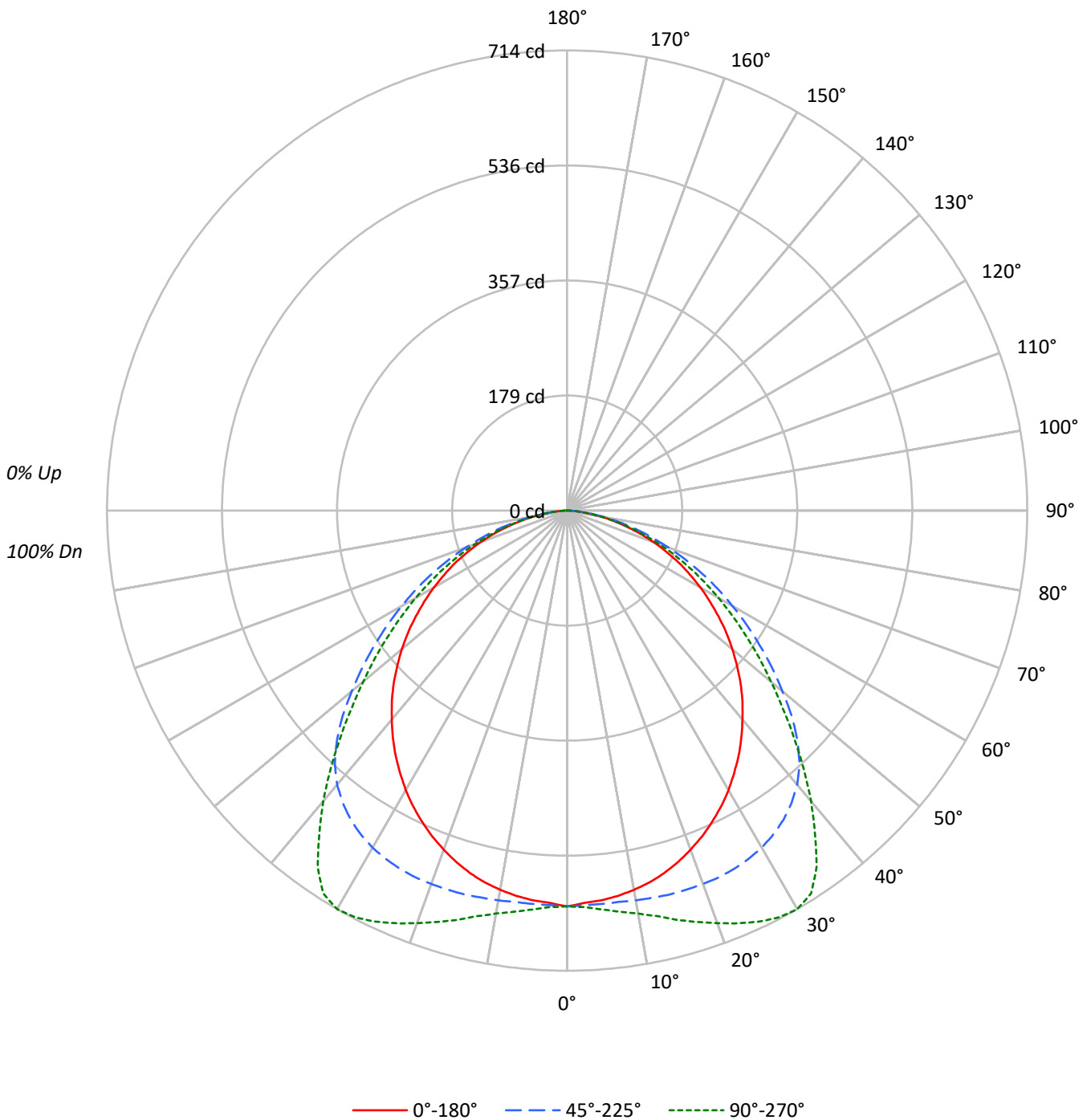
Lumens per Lamp: N/A
Luminaire Lumens: 1888.9 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	11637	11637	11637
5°	11544	11651	11816
10°	11493	11816	12214
15°	11419	12094	12892
20°	11289	12432	13734
25°	11136	12823	14708
30°	10956	13209	15620
35°	10732	13539	15610
40°	10469	13729	14557
45°	10208	13544	13332
50°	9862	12854	12170
55°	9470	12056	11184
60°	9049	11227	10288
65°	8558	10347	9378
70°	7877	9245	8403
75°	6954	8008	7247
80°	5750	6361	5750
85°	3826	4174	4000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 13651 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	3.1
10°-20°	175.4	9.3
20°-30°	284.6	15.1
30°-40°	360.2	19.1
40°-50°	360.7	19.1
50°-60°	302.1	16.0
60°-70°	212.9	11.3
70°-80°	109.8	5.8
80°-90°	24.4	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°	518.8	27.5
0°-40°	879.0	46.5
0°-60°	1541.8	81.6
0°-90°	1888.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1888.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	607	617	613	616	621	58
15°	582	599	617	641	657	164
25°	533	561	613	673	704	245
35°	464	502	585	661	675	290
45°	381	421	506	510	498	293
55°	287	322	365	350	339	257
65°	191	212	231	216	209	189
75°	95	105	109	101	99	101
85°	18	19	19	19	18	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	614.2	614.2	614.2	614.2	614.2
2.5°	609.4	619.0	612.6	613.4	615.8
5°	607.0	617.4	612.6	615.8	621.3
7.5°	603.0	614.2	612.6	619.0	627.7
10°	597.4	610.2	614.2	625.3	634.9
12.5°	591.0	604.6	615.0	632.5	644.5
15°	582.2	599.0	616.6	641.3	657.3
17.5°	571.8	591.8	616.6	650.9	669.3
20°	559.9	583.0	616.6	658.9	681.2
22.5°	547.1	572.6	615.8	666.1	693.2
25°	532.7	561.4	613.4	673.3	703.6
27.5°	517.5	548.7	609.4	678.9	711.6
30°	500.8	534.3	603.8	681.2	714.0
32.5°	482.4	519.1	595.8	676.5	704.4
35°	464.0	501.6	585.4	661.3	674.9
37.5°	444.0	483.2	571.8	631.7	631.7
40°	423.3	463.2	555.1	591.0	588.6
42.5°	402.5	442.5	533.5	551.1	543.1
45°	381.0	420.9	505.5	509.5	497.6
47.5°	357.8	396.9	472.8	467.2	453.6
50°	334.6	373.0	436.1	426.5	412.9
52.5°	311.5	348.2	400.9	387.3	375.4
55°	286.7	321.9	365.0	349.8	338.6
57.5°	262.8	295.5	330.6	313.9	304.3
60°	238.8	268.3	296.3	280.3	271.5
62.5°	214.8	240.4	263.6	247.6	239.6
65°	190.9	212.4	230.8	216.4	209.2
67.5°	166.1	185.3	198.1	185.3	180.5
70°	142.2	157.3	166.9	155.7	151.7
72.5°	118.2	131.0	137.4	128.6	124.6
75°	95.0	104.6	109.4	101.4	99.0
77.5°	72.7	79.9	82.3	76.7	73.5
80°	52.7	56.7	58.3	54.3	52.7
82.5°	32.7	35.9	37.5	34.3	33.5
85°	17.6	19.2	19.2	19.2	18.4
87.5°	6.4	8.0	8.0	8.0	7.2
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	20.01	21.62	20.38	21.94	22.25	20.52	22.14	20.89	22.45	22.77
	3H	21.58	23.04	21.96	23.36	23.72	21.99	23.45	22.37	23.77	24.13
	4H	22.12	23.48	22.52	23.83	24.21	22.48	23.85	22.88	24.20	24.58
	6H	22.46	23.73	22.87	24.09	24.48	22.79	24.05	23.20	24.42	24.81
	8H	22.54	23.75	22.97	24.14	24.54	22.86	24.07	23.28	24.45	24.85
	12H	22.58	23.74	23.01	24.12	24.55	22.89	24.05	23.32	24.43	24.86
4H	2H	20.77	22.13	21.16	22.48	22.86	21.16	22.53	21.56	22.88	23.25
	3H	22.54	23.68	22.95	24.07	24.47	22.83	23.97	23.24	24.37	24.77
	4H	23.18	24.21	23.62	24.63	25.06	23.42	24.45	23.85	24.86	25.30
	6H	23.63	24.52	24.08	24.96	25.42	23.82	24.72	24.28	25.16	25.61
	8H	23.74	24.57	24.20	25.02	25.48	23.92	24.76	24.38	25.20	25.67
	12H	23.80	24.55	24.28	25.02	25.49	23.98	24.73	24.46	25.21	25.68
8H	4H	23.47	24.30	23.93	24.75	25.21	23.68	24.52	24.14	24.96	25.43
	6H	24.01	24.70	24.50	25.19	25.66	24.17	24.86	24.66	25.35	25.82
	8H	24.16	24.79	24.67	25.29	25.78	24.31	24.93	24.82	25.44	25.93
	12H	24.27	24.82	24.78	25.31	25.87	24.41	24.96	24.92	25.45	26.01
12H	4H	23.48	24.23	23.96	24.71	25.18	23.70	24.45	24.18	24.92	25.39
	6H	24.03	24.66	24.54	25.17	25.65	24.19	24.82	24.70	25.32	25.81
	8H	24.24	24.79	24.75	25.28	25.84	24.38	24.93	24.89	25.42	25.98