

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: P1439630

Luminaire Tested: S122DR-H1005D930-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439630
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-H1005D930-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

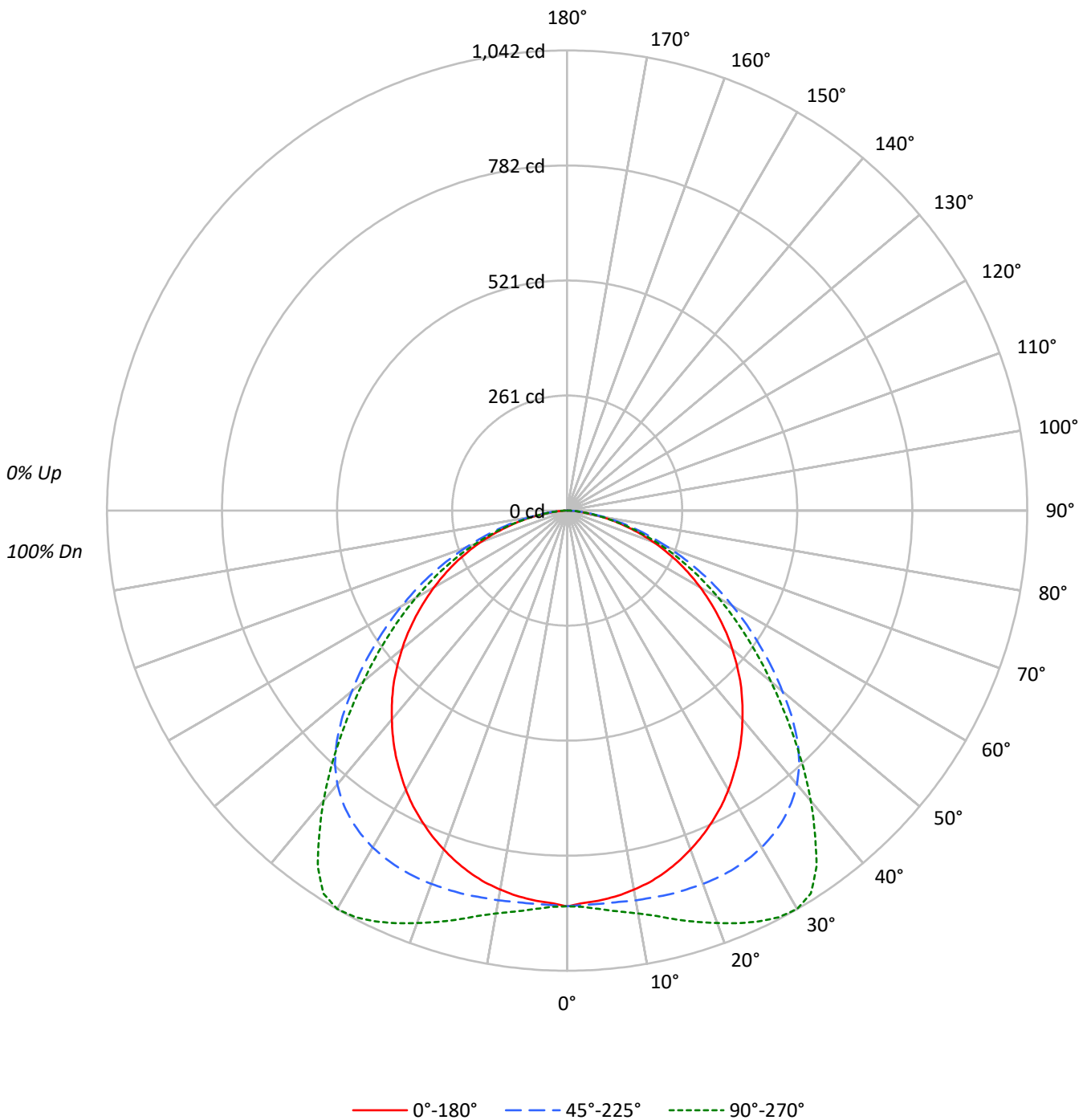
Lumens per Lamp: N/A
Luminaire Lumens: 2755.7 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	91	85	79	97	90	84	78	86	81	76	83	79	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16975	16975	16975
5°	16841	16997	17240
10°	16766	17237	17820
15°	16660	17643	18808
20°	16468	18135	20039
25°	16245	18705	21458
30°	15981	19269	22787
35°	15656	19752	22770
40°	15272	20028	21237
45°	14892	19760	19449
50°	14389	18752	17755
55°	13817	17589	16317
60°	13201	16381	15009
65°	12485	15094	13687
70°	11489	13488	12264
75°	10153	11683	10578
80°	8390	9285	8390
85°	5565	6087	5826

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 19918 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	3.1
10°-20°	255.9	9.3
20°-30°	415.3	15.1
30°-40°	525.4	19.1
40°-50°	526.2	19.1
50°-60°	440.8	16.0
60°-70°	310.6	11.3
70°-80°	160.2	5.8
80°-90°	35.5	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°	756.9	27.5
0°-40°	1282.3	46.5
0°-60°	2249.3	81.6
0°-90°	2755.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2755.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	886	901	894	898	906	84
15°	849	874	900	936	959	239
25°	777	819	895	982	1026	358
35°	677	732	854	965	984	423
45°	556	614	738	743	726	428
55°	418	470	532	510	494	374
65°	278	310	337	316	305	275
75°	139	153	160	148	144	147
85°	26	28	28	28	27	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.0	896.0	896.0	896.0	896.0
2.5°	889.0	903.0	893.7	894.8	898.3
5°	885.5	900.6	893.7	898.3	906.5
7.5°	879.7	896.0	893.7	903.0	915.8
10°	871.5	890.2	896.0	912.3	926.3
12.5°	862.2	882.0	897.2	922.8	940.3
15°	849.4	873.9	899.5	935.6	958.9
17.5°	834.2	863.4	899.5	949.6	976.4
20°	816.8	850.5	899.5	961.2	993.9
22.5°	798.1	835.4	898.3	971.7	1011.3
25°	777.1	819.1	894.8	982.2	1026.5
27.5°	755.0	800.4	889.0	990.4	1038.1
30°	730.5	779.5	880.8	993.9	1041.6
32.5°	703.7	757.3	869.2	986.9	1027.6
35°	676.9	731.7	854.0	964.7	984.5
37.5°	647.8	704.9	834.2	921.6	921.6
40°	617.5	675.8	809.8	862.2	858.7
42.5°	587.2	645.5	778.3	803.9	792.3
45°	555.8	614.0	737.5	743.4	725.9
47.5°	522.0	579.1	689.8	681.6	661.8
50°	488.2	544.1	636.2	622.2	602.4
52.5°	454.4	508.0	584.9	565.1	547.6
55°	418.3	469.5	532.5	510.3	494.0
57.5°	383.3	431.1	482.4	457.9	443.9
60°	348.4	391.5	432.3	409.0	396.1
62.5°	313.4	350.7	384.5	361.2	349.5
65°	278.5	309.9	336.7	315.8	305.3
67.5°	242.3	270.3	289.0	270.3	263.3
70°	207.4	229.5	243.5	227.2	221.4
72.5°	172.4	191.1	200.4	187.6	181.8
75°	138.7	152.6	159.6	148.0	144.5
77.5°	106.0	116.5	120.0	111.9	107.2
80°	76.9	82.7	85.1	79.2	76.9
82.5°	47.8	52.4	54.8	50.1	48.9
85°	25.6	28.0	28.0	28.0	26.8
87.5°	9.3	11.7	11.7	11.7	10.5
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	21.32	22.94	21.69	23.25	23.56	21.84	23.45	22.20	23.76	24.08
	3H	22.89	24.35	23.27	24.67	25.03	23.30	24.76	23.68	25.08	25.44
	4H	23.43	24.80	23.83	25.14	25.52	23.80	25.16	24.20	25.51	25.89
	6H	23.77	25.04	24.18	25.40	25.79	24.10	25.36	24.51	25.73	26.12
	8H	23.86	25.06	24.28	25.45	25.85	24.17	25.38	24.60	25.77	26.17
	12H	23.89	25.05	24.32	25.43	25.86	24.21	25.36	24.63	25.74	26.17
4H	2H	22.08	23.44	22.48	23.79	24.17	22.48	23.84	22.87	24.19	24.57
	3H	23.85	24.99	24.26	25.39	25.79	24.14	25.28	24.55	25.68	26.08
	4H	24.50	25.52	24.93	25.94	26.37	24.74	25.76	25.17	26.18	26.61
	6H	24.94	25.83	25.39	26.28	26.73	25.13	26.03	25.59	26.47	26.93
	8H	25.05	25.89	25.51	26.33	26.79	25.23	26.07	25.69	26.51	26.98
	12H	25.11	25.86	25.59	26.34	26.81	25.29	26.04	25.77	26.52	26.99
8H	4H	24.78	25.62	25.24	26.06	26.52	24.99	25.83	25.45	26.27	26.74
	6H	25.32	26.01	25.81	26.50	26.98	25.48	26.17	25.97	26.66	27.14
	8H	25.48	26.10	25.99	26.61	27.09	25.62	26.24	26.13	26.75	27.24
	12H	25.58	26.13	26.09	26.62	27.18	25.72	26.27	26.23	26.76	27.33
12H	4H	24.79	25.55	25.27	26.02	26.49	25.01	25.76	25.49	26.24	26.71
	6H	25.35	25.97	25.86	26.48	26.96	25.50	26.13	26.02	26.64	27.12
	8H	25.55	26.10	26.06	26.59	27.15	25.69	26.24	26.20	26.73	27.30