

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: P1439676

Luminaire Tested: S122DR-S1005D935-X4F0-XX-UDD-FLB-W

Issue Date: 4/2/2026

Test Information

Test Method: LM-79-2024
Report Number: P1439676
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-S1005D935-X4F0-XX-UDD-FLB-W
Description: DEFINE 2, DIRECT RECESSED WITH BATWING FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

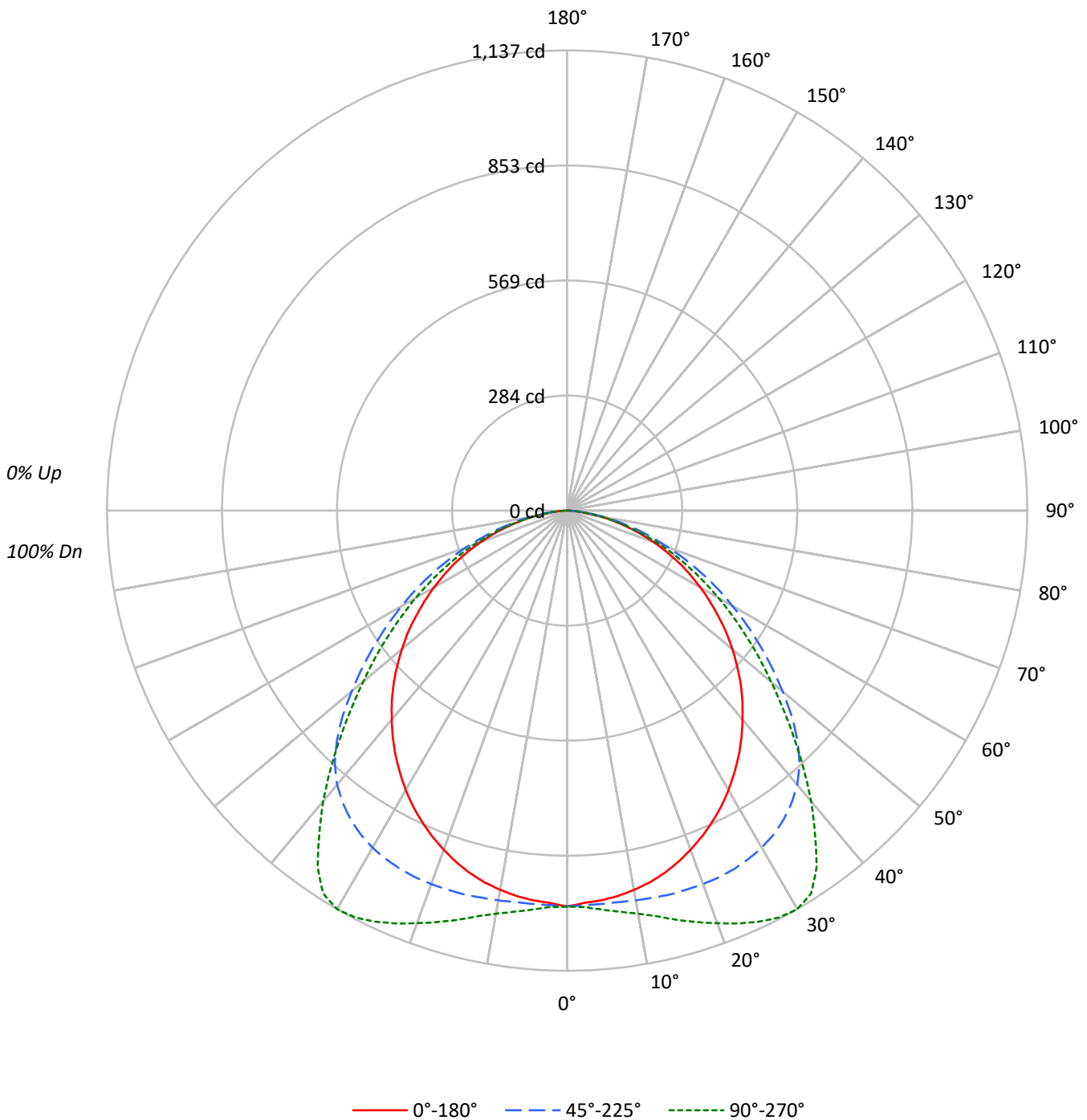
Lumens per Lamp: N/A
Luminaire Lumens: 3008.4 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.56 / 1.51
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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				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°	18533	18533	18533
5°	18385	18554	18820
10°	18305	18819	19454
15°	18188	19261	20534
20°	17978	19799	21876
25°	17735	20422	23426
30°	17447	21037	24878
35°	17092	21565	24859
40°	16674	21863	23186
45°	16256	21574	21234
50°	15710	20470	19382
55°	15082	19201	17814
60°	14410	17881	16388
65°	13628	16479	14942
70°	12541	14724	13389
75°	11083	12759	11544
80°	9165	10136	9165
85°	6087	6630	6369

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 21743 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	3.1
10°-20°	279.4	9.3
20°-30°	453.3	15.1
30°-40°	573.7	19.1
40°-50°	574.5	19.1
50°-60°	481.2	16.0
60°-70°	339.1	11.3
70°-80°	174.9	5.8
80°-90°	38.8	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°	826.3	27.5
0°-40°	1399.9	46.5
0°-60°	2455.6	81.6
0°-90°	3008.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3008.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	967	983	976	981	990	92
15°	927	954	982	1021	1047	261
25°	848	894	977	1072	1121	391
35°	739	799	932	1053	1075	462
45°	607	670	805	812	792	467
55°	457	513	581	557	539	409
65°	304	338	368	345	333	300
75°	151	167	174	162	158	161
85°	28	30	30	30	29	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	978.2	978.2	978.2	978.2	978.2
2.5°	970.5	985.8	975.6	976.9	980.7
5°	966.7	983.3	975.6	980.7	989.6
7.5°	960.4	978.2	975.6	985.8	999.8
10°	951.5	971.8	978.2	996.0	1011.2
12.5°	941.3	962.9	979.4	1007.4	1026.5
15°	927.3	954.0	982.0	1021.4	1046.9
17.5°	910.8	942.6	982.0	1036.7	1065.9
20°	891.7	928.6	982.0	1049.4	1085.0
22.5°	871.3	912.0	980.7	1060.8	1104.1
25°	848.4	894.2	976.9	1072.3	1120.6
27.5°	824.3	873.9	970.5	1081.2	1133.4
30°	797.5	851.0	961.6	1085.0	1137.2
32.5°	768.3	826.8	948.9	1077.4	1121.9
35°	739.0	798.8	932.4	1053.2	1074.8
37.5°	707.2	769.6	910.8	1006.2	1006.2
40°	674.2	737.8	884.0	941.3	937.5
42.5°	641.1	704.7	849.7	877.7	865.0
45°	606.7	670.3	805.2	811.5	792.5
47.5°	569.9	632.2	753.0	744.1	722.5
50°	533.0	594.0	694.5	679.2	657.6
52.5°	496.1	554.6	638.5	616.9	597.8
55°	456.6	512.6	581.3	557.1	539.3
57.5°	418.5	470.6	526.6	499.9	484.6
60°	380.3	427.4	471.9	446.5	432.5
62.5°	342.2	382.9	419.8	394.3	381.6
65°	304.0	338.4	367.6	344.7	333.3
67.5°	264.6	295.1	315.5	295.1	287.5
70°	226.4	250.6	265.8	248.0	241.7
72.5°	188.3	208.6	218.8	204.8	198.4
75°	151.4	166.6	174.3	161.5	157.7
77.5°	115.8	127.2	131.0	122.1	117.0
80°	84.0	90.3	92.9	86.5	84.0
82.5°	52.2	57.2	59.8	54.7	53.4
85°	28.0	30.5	30.5	30.5	29.3
87.5°	10.2	12.7	12.7	12.7	11.4
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	21.63	23.24	21.99	23.55	23.87	22.14	23.75	22.51	24.07	24.38
	3H	23.20	24.65	23.58	24.98	25.34	23.61	25.06	23.99	25.39	25.75
	4H	23.74	25.10	24.13	25.45	25.83	24.10	25.47	24.50	25.82	26.19
	6H	24.08	25.34	24.49	25.71	26.10	24.40	25.67	24.81	26.03	26.42
	8H	24.16	25.37	24.59	25.76	26.16	24.48	25.68	24.90	26.07	26.47
	12H	24.20	25.35	24.63	25.74	26.16	24.51	25.67	24.94	26.05	26.48
4H	2H	22.38	23.75	22.78	24.10	24.47	22.78	24.15	23.18	24.49	24.87
	3H	24.15	25.29	24.56	25.69	26.09	24.45	25.59	24.86	25.98	26.38
	4H	24.80	25.83	25.23	26.24	26.68	25.04	26.07	25.47	26.48	26.92
	6H	25.24	26.14	25.70	26.58	27.04	25.44	26.33	25.89	26.77	27.23
	8H	25.35	26.19	25.82	26.63	27.10	25.54	26.38	26.00	26.82	27.28
	12H	25.41	26.17	25.90	26.64	27.11	25.60	26.35	26.08	26.82	27.29
8H	4H	25.08	25.92	25.54	26.36	26.83	25.30	26.14	25.76	26.58	27.04
	6H	25.62	26.32	26.12	26.81	27.28	25.78	26.48	26.28	26.97	27.44
	8H	25.78	26.40	26.29	26.91	27.40	25.93	26.55	26.44	27.06	27.54
	12H	25.89	26.44	26.39	26.93	27.49	26.03	26.58	26.53	27.07	27.63
12H	4H	25.10	25.85	25.58	26.33	26.80	25.31	26.07	25.79	26.54	27.01
	6H	25.65	26.28	26.16	26.78	27.27	25.81	26.43	26.32	26.94	27.43
	8H	25.86	26.41	26.36	26.90	27.46	26.00	26.55	26.51	27.04	27.60