

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: P1217279

Luminaire Tested: S122DRP-H485D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217279
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-H485D930-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

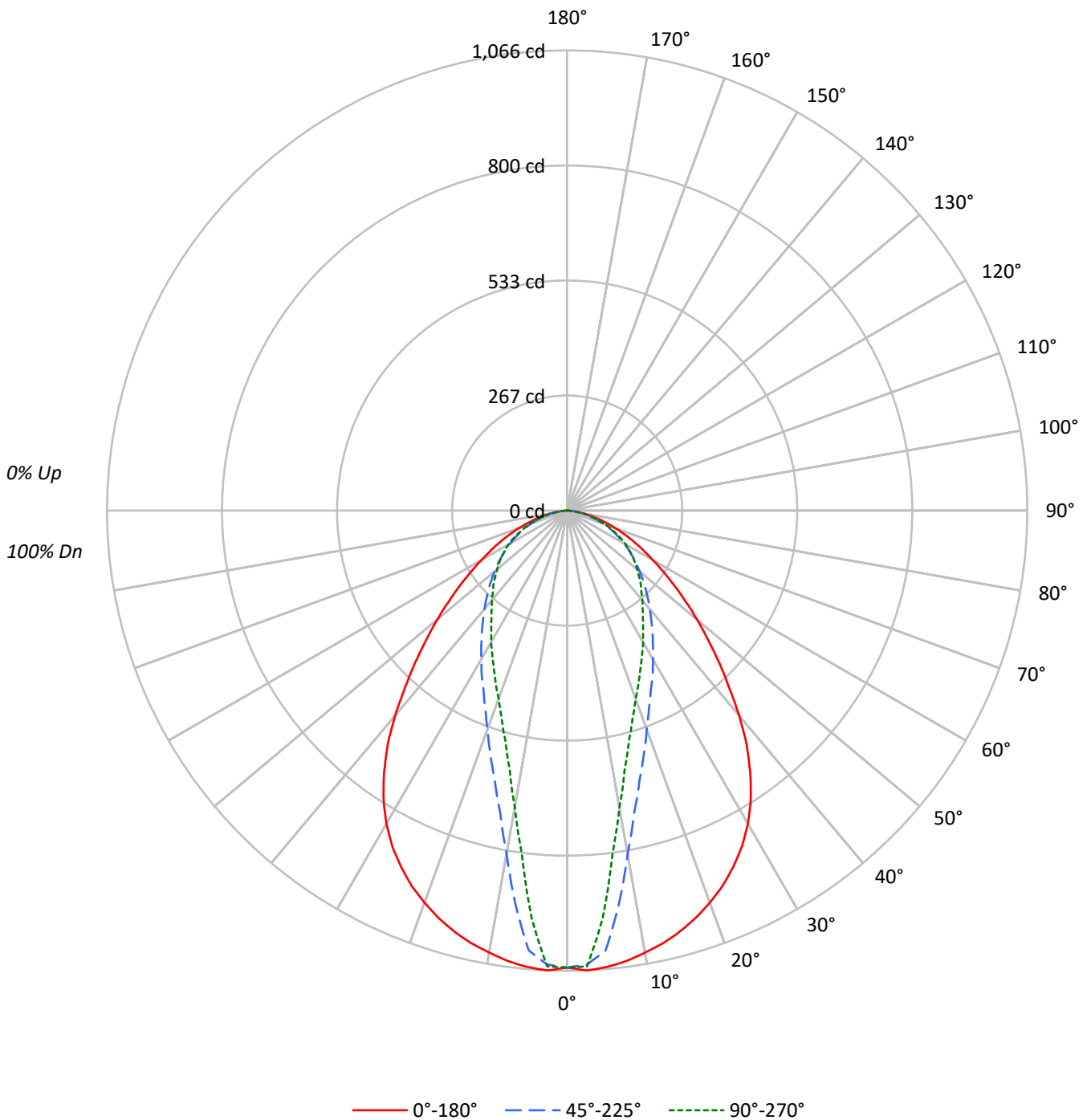
Lumens per Lamp: N/A
Luminaire Lumens: 1422.6 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 17.3
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20056	20056	20056
5°	20186	19450	18012
10°	20004	15533	13428
15°	19801	12694	10843
20°	19484	10867	9353
25°	19036	9593	8393
30°	18315	8698	7696
35°	17090	7970	7075
40°	15324	7360	6705
45°	13332	6881	6465
50°	11572	6461	6234
55°	10015	6111	6074
60°	8685	5756	5922
65°	7599	5397	5595
70°	6548	4958	5141
75°	5461	4363	4524
80°	4277	3557	3437
85°	2630	2282	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13332 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	6.4
10°-20°	201.0	14.1
20°-30°	246.6	17.3
30°-40°	254.8	17.9
40°-50°	230.1	16.2
50°-60°	186.5	13.1
60°-70°	130.7	9.2
70°-80°	67.4	4.7
80°-90°	14.2	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°	538.7	37.9
0°-40°	793.5	55.8
0°-60°	1210.2	85.1
0°-90°	1422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1061	1059	1023	977	947	101
15°	1010	851	647	577	553	284
25°	911	605	459	415	402	418
35°	739	447	345	315	306	459
45°	498	322	257	242	241	385
55°	303	220	185	183	184	273
65°	170	136	120	123	125	169
75°	75	64	60	61	62	81
85°	12	10	10	10	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.6	1058.6	1058.6	1058.6	1058.6
2.5°	1066.3	1062.5	1052.5	1061.9	1057.0
5°	1061.4	1059.2	1022.7	976.9	947.1
7.5°	1052.5	1044.8	918.9	832.2	802.9
10°	1039.8	1001.2	807.4	726.7	698.0
12.5°	1026.6	935.5	717.3	641.7	615.7
15°	1009.5	851.0	647.2	577.1	552.8
17.5°	989.6	777.5	591.4	524.1	504.7
20°	966.4	714.0	539.0	479.9	463.9
22.5°	941.0	660.5	495.3	447.3	432.4
25°	910.6	604.7	458.9	415.3	401.5
27.5°	876.9	562.2	428.5	387.7	376.1
30°	837.2	520.7	397.6	361.2	351.8
32.5°	791.9	482.1	370.0	338.0	326.9
35°	738.9	446.8	344.6	315.3	305.9
37.5°	682.6	412.0	320.3	294.9	287.2
40°	619.6	381.6	297.6	275.0	271.1
42.5°	555.0	351.2	277.2	257.9	254.6
45°	497.6	321.9	256.8	242.4	241.3
47.5°	441.8	295.4	238.0	227.0	225.9
50°	392.6	267.8	219.2	212.1	211.5
52.5°	345.7	243.5	201.6	197.7	198.8
55°	303.2	220.3	185.0	182.8	183.9
57.5°	264.0	198.8	168.4	169.0	170.6
60°	229.2	176.7	151.9	154.1	156.3
62.5°	198.8	156.3	135.8	139.2	141.4
65°	169.5	135.8	120.4	123.1	124.8
67.5°	143.6	116.5	104.9	108.2	108.8
70°	118.2	98.8	89.5	92.8	92.8
72.5°	96.1	80.6	74.6	76.2	76.8
75°	74.6	64.1	59.6	61.3	61.8
77.5°	56.3	48.6	45.3	46.9	46.4
80°	39.2	34.2	32.6	32.0	31.5
82.5°	24.3	21.5	19.9	20.4	19.9
85°	12.1	10.5	10.5	10.5	10.5
87.5°	3.9	3.9	3.9	3.9	3.9
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	18.92	20.42	19.28	20.73	21.04	17.41	18.91	17.78	19.23	19.54
	3H	20.50	21.85	20.88	22.18	22.54	19.13	20.47	19.50	20.80	21.16
	4H	21.03	22.29	21.43	22.64	23.02	19.71	20.97	20.11	21.32	21.70
	6H	21.35	22.52	21.77	22.89	23.28	20.05	21.22	20.47	21.59	21.98
	8H	21.43	22.54	21.85	22.93	23.33	20.13	21.24	20.56	21.63	22.03
	12H	21.45	22.52	21.88	22.90	23.33	20.16	21.22	20.59	21.60	22.03
4H	2H	19.23	20.49	19.63	20.84	21.22	17.97	19.24	18.37	19.59	19.96
	3H	21.01	22.05	21.42	22.45	22.86	19.89	20.94	20.30	21.34	21.74
	4H	21.64	22.58	22.07	23.00	23.43	20.59	21.53	21.02	21.95	22.38
	6H	22.07	22.89	22.53	23.33	23.79	21.04	21.86	21.50	22.30	22.76
	8H	22.18	22.94	22.64	23.39	23.85	21.14	21.91	21.61	22.35	22.82
	12H	22.23	22.91	22.71	23.39	23.86	21.19	21.88	21.68	22.36	22.83
8H	4H	21.79	22.55	22.25	23.00	23.46	20.83	21.59	21.29	22.04	22.50
	6H	22.29	22.92	22.79	23.41	23.89	21.36	21.99	21.86	22.49	22.96
	8H	22.44	23.00	22.95	23.51	24.00	21.51	22.08	22.03	22.59	23.08
	12H	22.53	23.03	23.04	23.52	24.08	21.61	22.11	22.12	22.60	23.17
12H	4H	21.78	22.47	22.27	22.95	23.42	20.84	21.52	21.32	22.00	22.47
	6H	22.29	22.86	22.81	23.37	23.86	21.38	21.95	21.90	22.46	22.95
	8H	22.48	22.98	22.99	23.47	24.03	21.58	22.07	22.09	22.57	23.13