

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: P1217301

Luminaire Tested: S122DRP-S1005D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217301
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-S1005D830-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

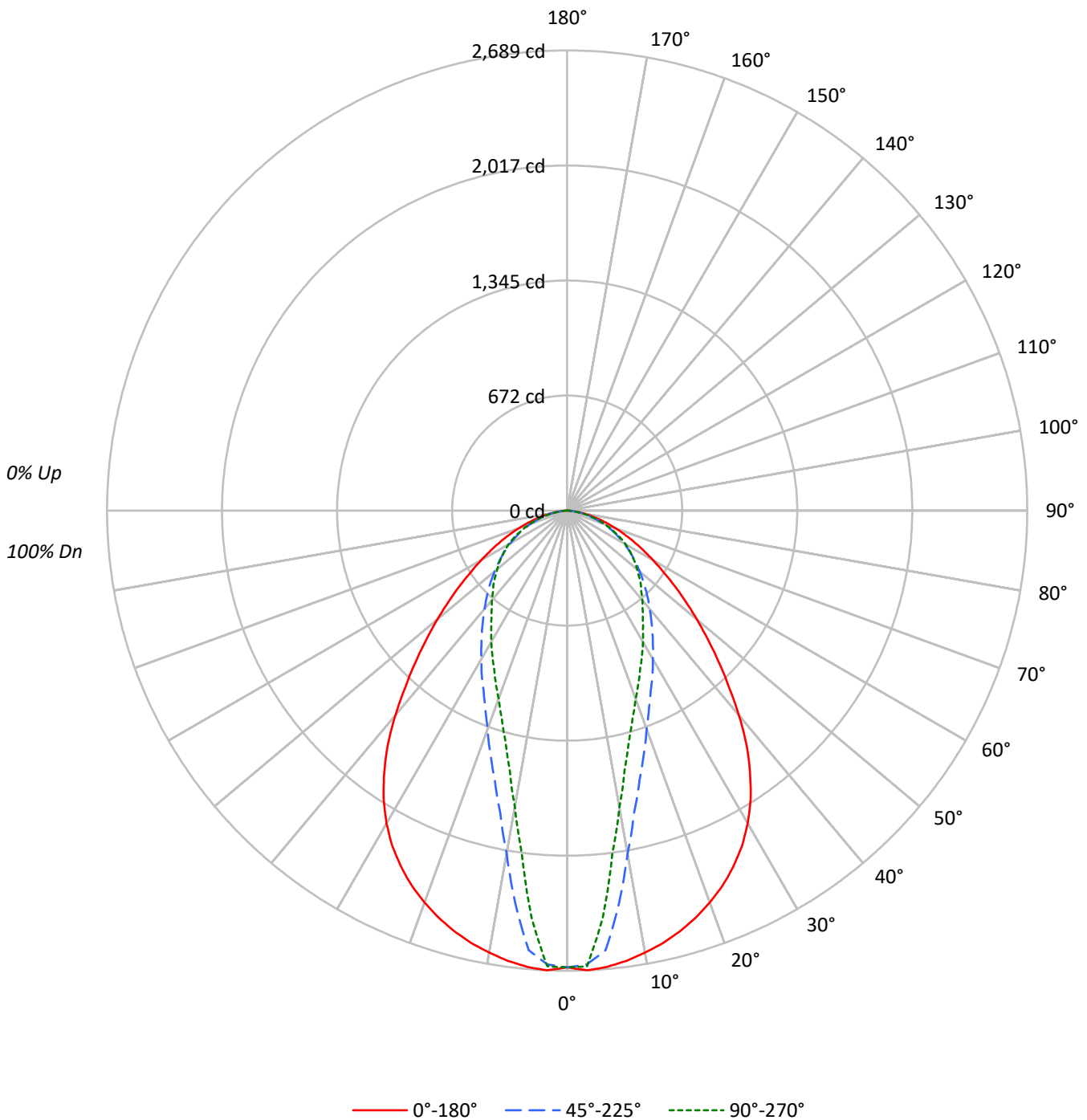
Lumens per Lamp: N/A
Luminaire Lumens: 3587.1 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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																		
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	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°	50574	50574	50574
5°	50898	49044	45417
10°	50442	39165	33861
15°	49926	32010	27340
20°	49130	27400	23583
25°	48001	24189	21162
30°	46182	21934	19405
35°	43091	20096	17841
40°	38639	18561	16909
45°	33615	17349	16304
50°	29180	16294	15719
55°	25252	15409	15317
60°	21898	14509	14933
65°	19165	13610	14108
70°	16507	12497	12957
75°	13762	11009	11419
80°	10790	8968	8663
85°	6652	5761	5761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 33615 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.8	6.4
10°-20°	506.8	14.1
20°-30°	621.8	17.3
30°-40°	642.6	17.9
40°-50°	580.3	16.2
50°-60°	470.3	13.1
60°-70°	329.7	9.2
70°-80°	170.0	4.7
80°-90°	35.9	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°	1358.4	37.9
0°-40°	2000.9	55.8
0°-60°	3051.5	85.1
0°-90°	3587.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3587.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2676	2671	2579	2463	2388	254
15°	2545	2146	1632	1455	1394	717
25°	2296	1525	1157	1047	1012	1055
35°	1863	1126	869	795	771	1158
45°	1255	812	648	611	608	971
55°	764	556	466	461	464	689
65°	428	342	304	310	315	427
75°	188	162	150	155	156	203
85°	31	26	26	26	26	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.4	2669.4	2669.4	2669.4	2669.4
2.5°	2688.9	2679.1	2654.0	2677.7	2665.2
5°	2676.3	2670.8	2578.8	2463.3	2388.1
7.5°	2654.0	2634.5	2317.1	2098.4	2024.6
10°	2622.0	2524.5	2035.8	1832.5	1760.1
12.5°	2588.6	2358.8	1808.8	1618.0	1552.6
15°	2545.4	2145.8	1632.0	1455.1	1393.9
17.5°	2495.3	1960.6	1491.3	1321.5	1272.7
20°	2436.8	1800.5	1359.0	1210.1	1169.7
22.5°	2372.8	1665.4	1249.0	1127.9	1090.3
25°	2296.2	1524.8	1157.1	1047.1	1012.3
27.5°	2211.2	1417.5	1080.6	977.5	948.3
30°	2111.0	1313.1	1002.6	910.7	887.0
32.5°	1996.8	1215.6	933.0	852.2	824.3
35°	1863.1	1126.5	868.9	795.1	771.4
37.5°	1721.1	1038.8	807.6	743.6	724.1
40°	1562.3	962.2	750.5	693.4	683.7
42.5°	1399.4	885.6	699.0	650.3	641.9
45°	1254.6	811.8	647.5	611.3	608.5
47.5°	1114.0	745.0	600.2	572.3	569.5
50°	990.0	675.3	552.8	534.7	533.3
52.5°	871.7	614.1	508.3	498.5	501.3
55°	764.5	555.6	466.5	460.9	463.7
57.5°	665.6	501.3	424.7	426.1	430.3
60°	577.9	445.6	382.9	388.5	394.1
62.5°	501.3	394.1	342.5	350.9	356.5
65°	427.5	342.5	303.6	310.5	314.7
67.5°	362.0	293.8	264.6	272.9	274.3
70°	298.0	249.3	225.6	233.9	233.9
72.5°	242.3	203.3	188.0	192.2	193.6
75°	188.0	161.5	150.4	154.6	156.0
77.5°	142.0	122.5	114.2	118.4	117.0
80°	98.9	86.3	82.2	80.8	79.4
82.5°	61.3	54.3	50.1	51.5	50.1
85°	30.6	26.5	26.5	26.5	26.5
87.5°	9.7	9.7	9.7	9.7	9.7
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	22.13	23.63	22.49	23.94	24.26	20.63	22.13	20.99	22.44	22.75
	3H	23.72	25.06	24.09	25.39	25.75	22.34	23.69	22.72	24.01	24.38
	4H	24.24	25.50	24.64	25.85	26.23	22.92	24.18	23.32	24.53	24.91
	6H	24.57	25.73	24.98	26.10	26.49	23.27	24.43	23.68	24.80	25.19
	8H	24.64	25.75	25.07	26.14	26.54	23.34	24.45	23.77	24.84	25.24
	12H	24.67	25.73	25.10	26.11	26.54	23.37	24.44	23.80	24.82	25.25
4H	2H	22.44	23.70	22.84	24.05	24.43	21.19	22.45	21.59	22.80	23.18
	3H	24.22	25.27	24.63	25.67	26.07	23.10	24.15	23.51	24.55	24.95
	4H	24.85	25.79	25.28	26.21	26.65	23.80	24.74	24.23	25.16	25.60
	6H	25.28	26.10	25.74	26.55	27.01	24.25	25.07	24.71	25.51	25.97
	8H	25.39	26.15	25.85	26.60	27.07	24.35	25.12	24.82	25.57	26.03
	12H	25.44	26.12	25.92	26.60	27.07	24.41	25.09	24.89	25.57	26.04
8H	4H	25.00	25.76	25.46	26.21	26.68	24.04	24.81	24.50	25.25	25.72
	6H	25.51	26.14	26.00	26.63	27.11	24.58	25.21	25.08	25.70	26.18
	8H	25.65	26.22	26.17	26.73	27.22	24.73	25.29	25.24	25.80	26.29
	12H	25.74	26.24	26.25	26.73	27.30	24.82	25.32	25.33	25.81	26.38
12H	4H	25.00	25.68	25.48	26.16	26.63	24.05	24.73	24.53	25.21	25.68
	6H	25.51	26.07	26.02	26.58	27.07	24.60	25.17	25.11	25.68	26.16
	8H	25.69	26.19	26.20	26.68	27.25	24.79	25.29	25.30	25.78	26.35