

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: P1217256

Luminaire Tested: S122DRP-H1005D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217256
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-H1005D830-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

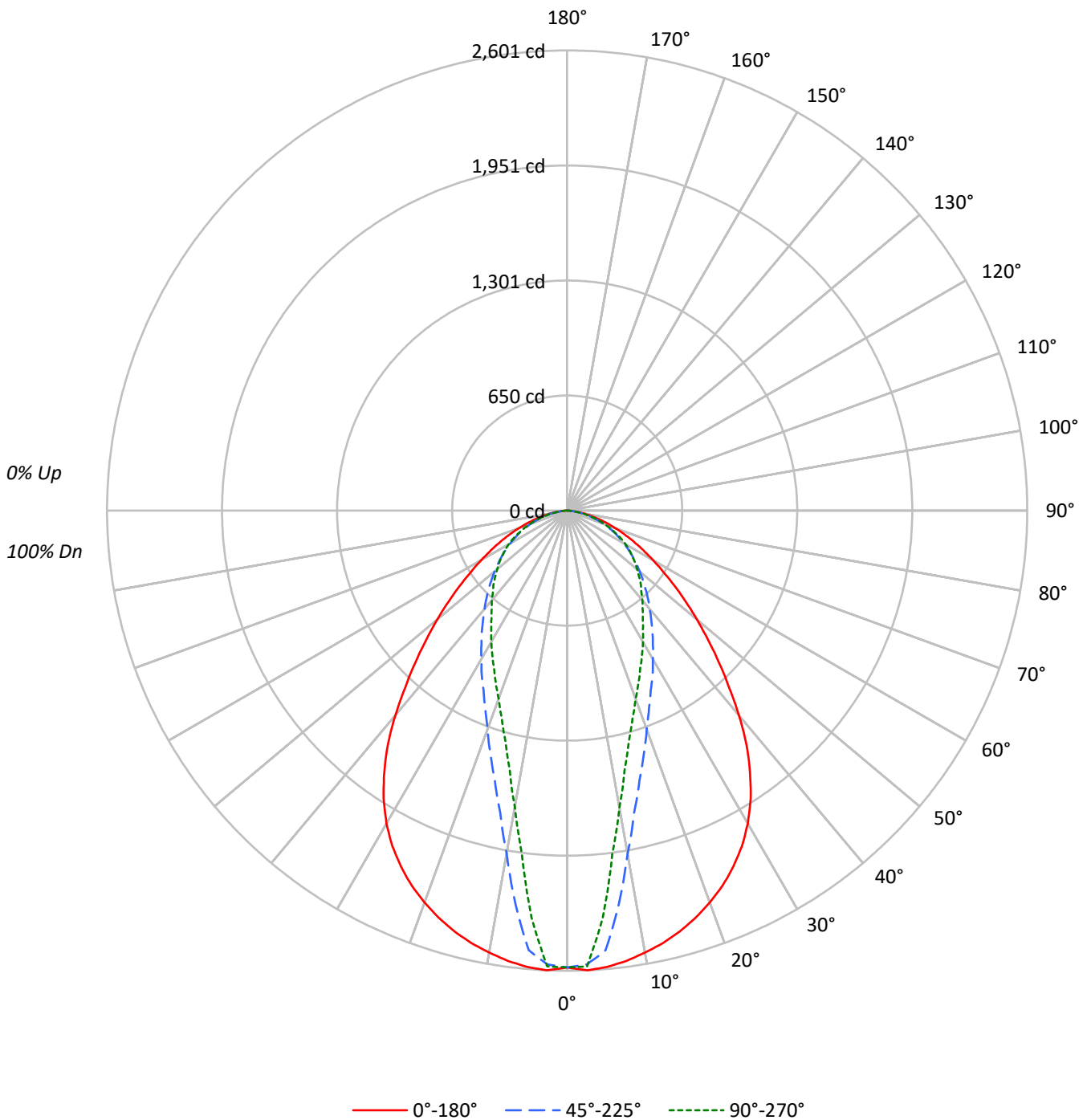
Lumens per Lamp: N/A
Luminaire Lumens: 3469.8 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	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°	48922	48922	48922
5°	49236	47443	43934
10°	48796	37886	32755
15°	48296	30965	26446
20°	47525	26505	22813
25°	46433	23398	20472
30°	44672	21216	18770
35°	41685	19440	17259
40°	37378	17955	16358
45°	32517	16781	15771
50°	28228	15760	15206
55°	24426	14904	14814
60°	21181	14035	14444
65°	18537	13162	13646
70°	15970	12087	12536
75°	13308	10651	11046
80°	10430	8674	8379
85°	6434	5565	5565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 32517 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.3	6.4
10°-20°	490.2	14.1
20°-30°	601.4	17.3
30°-40°	621.6	17.9
40°-50°	561.3	16.2
50°-60°	454.9	13.1
60°-70°	318.9	9.2
70°-80°	164.5	4.7
80°-90°	34.7	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°	1314.0	37.9
0°-40°	1935.5	55.8
0°-60°	2951.8	85.1
0°-90°	3469.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3469.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2582	2582	2582	2582	2582	
5°	2589	2584	2495	2383	2310	245
15°	2462	2076	1579	1408	1348	694
25°	2221	1475	1119	1013	979	1020
35°	1802	1090	840	769	746	1120
45°	1214	785	626	591	589	939
55°	740	537	451	446	448	666
65°	414	331	294	300	304	413
75°	182	156	146	150	151	196
85°	30	26	26	26	26	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2582.2	2582.2	2582.2	2582.2	2582.2
2.5°	2601.0	2591.6	2567.3	2590.2	2578.1
5°	2588.9	2583.5	2494.6	2382.8	2310.1
7.5°	2567.3	2548.5	2241.4	2029.9	1958.5
10°	2536.4	2442.1	1969.3	1772.6	1702.6
12.5°	2504.0	2281.8	1749.7	1565.2	1501.9
15°	2462.3	2075.7	1578.7	1407.6	1348.3
17.5°	2413.8	1896.5	1442.6	1278.3	1231.1
20°	2357.2	1741.6	1314.6	1170.5	1131.5
22.5°	2295.2	1611.0	1208.2	1091.1	1054.7
25°	2221.2	1474.9	1119.3	1012.9	979.3
27.5°	2139.0	1371.2	1045.3	945.6	917.3
30°	2042.0	1270.2	969.8	880.9	858.0
32.5°	1931.6	1175.9	902.5	824.3	797.4
35°	1802.3	1089.7	840.5	769.1	746.2
37.5°	1664.9	1004.8	781.2	719.3	700.4
40°	1511.3	930.8	726.0	670.8	661.4
42.5°	1353.7	856.7	676.2	629.0	621.0
45°	1213.6	785.3	626.3	591.3	588.6
47.5°	1077.6	720.6	580.5	553.6	550.9
50°	957.7	653.3	534.7	517.2	515.9
52.5°	843.2	594.0	491.6	482.2	484.9
55°	739.5	537.4	451.2	445.8	448.5
57.5°	643.9	484.9	410.8	412.2	416.2
60°	559.0	431.0	370.4	375.8	381.2
62.5°	484.9	381.2	331.4	339.4	344.8
65°	413.5	331.4	293.6	300.4	304.4
67.5°	350.2	284.2	255.9	264.0	265.4
70°	288.3	241.1	218.2	226.3	226.3
72.5°	234.4	196.7	181.8	185.9	187.2
75°	181.8	156.2	145.5	149.5	150.9
77.5°	137.4	118.5	110.5	114.5	113.1
80°	95.6	83.5	79.5	78.1	76.8
82.5°	59.3	52.5	48.5	49.8	48.5
85°	29.6	25.6	25.6	25.6	25.6
87.5°	9.4	9.4	9.4	9.4	9.4
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	22.01	23.51	22.38	23.83	24.14	20.51	22.01	20.88	22.33	22.64
	3H	23.60	24.95	23.98	25.27	25.64	22.22	23.57	22.60	23.90	24.26
	4H	24.12	25.39	24.52	25.74	26.11	22.80	24.07	23.20	24.42	24.80
	6H	24.45	25.62	24.86	25.98	26.38	23.15	24.32	23.57	24.69	25.08
	8H	24.53	25.63	24.95	26.02	26.43	23.23	24.34	23.66	24.73	25.13
	12H	24.55	25.61	24.98	26.00	26.43	23.26	24.32	23.69	24.70	25.13
4H	2H	22.32	23.59	22.72	23.93	24.31	21.07	22.33	21.47	22.68	23.06
	3H	24.10	25.15	24.51	25.55	25.95	22.99	24.04	23.40	24.44	24.84
	4H	24.73	25.68	25.17	26.09	26.53	23.68	24.63	24.12	25.04	25.48
	6H	25.17	25.99	25.62	26.43	26.89	24.14	24.96	24.59	25.40	25.86
	8H	25.27	26.04	25.74	26.48	26.95	24.24	25.00	24.70	25.45	25.92
	12H	25.33	26.01	25.81	26.49	26.96	24.29	24.98	24.78	25.45	25.93
8H	4H	24.88	25.65	25.35	26.09	26.56	23.92	24.69	24.39	25.13	25.60
	6H	25.39	26.02	25.89	26.51	26.99	24.46	25.09	24.96	25.58	26.06
	8H	25.54	26.10	26.05	26.61	27.10	24.61	25.18	25.13	25.69	26.18
	12H	25.63	26.12	26.14	26.62	27.18	24.71	25.21	25.22	25.70	26.26
12H	4H	24.88	25.56	25.36	26.04	26.51	23.94	24.62	24.42	25.10	25.57
	6H	25.39	25.96	25.91	26.47	26.96	24.48	25.05	25.00	25.56	26.05
	8H	25.58	26.07	26.09	26.57	27.13	24.68	25.17	25.19	25.67	26.23