

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: P1217344

Luminaire Tested: S122DRP-S865D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217344
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-S865D940-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

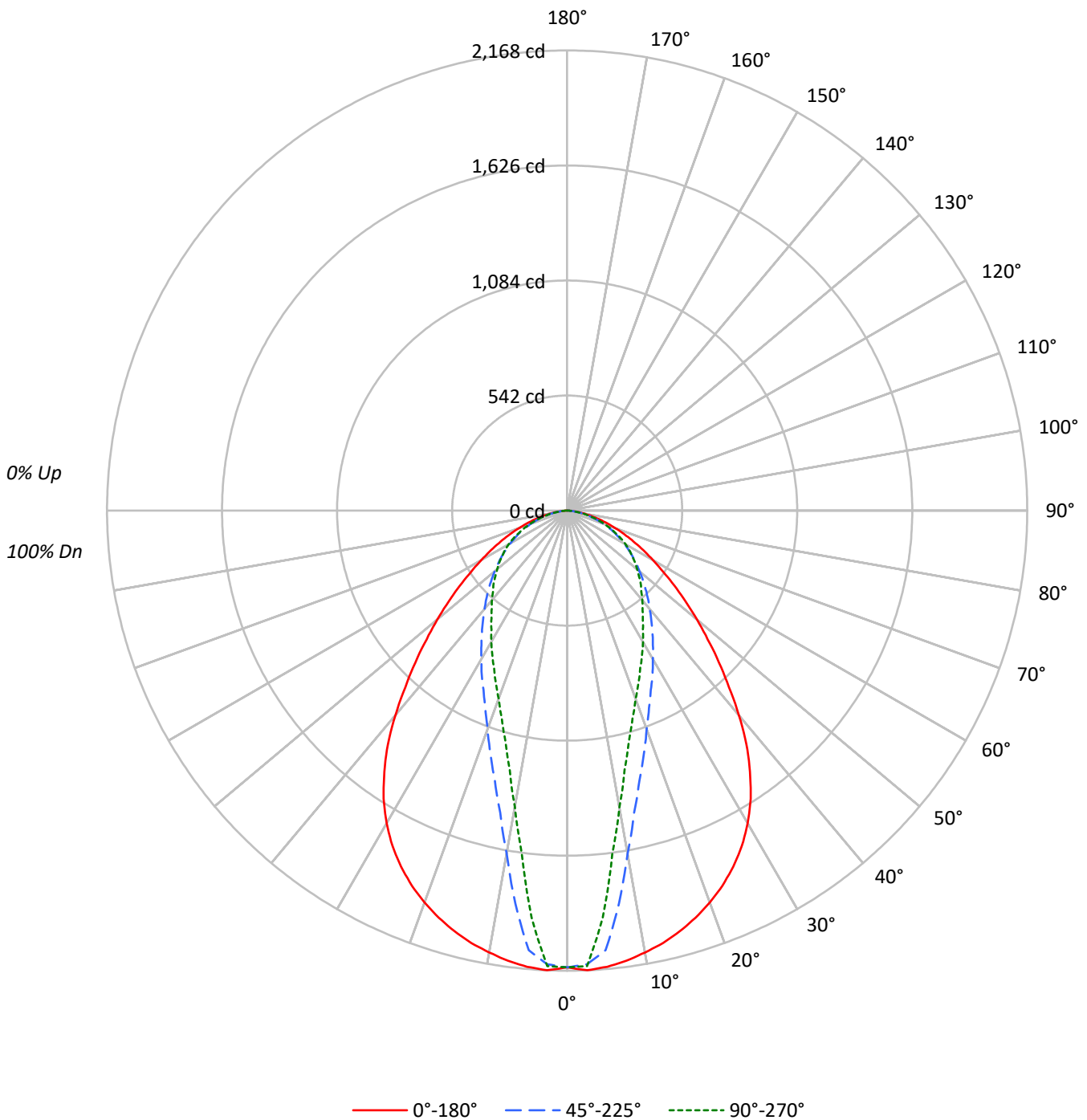
Lumens per Lamp: N/A
Luminaire Lumens: 2891.6 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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

TEST NUMBER: P1217344

CATALOG NUMBER: S122DRP-S865D940-X4F0-XX-UDD-G-W

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°	40768	40768	40768
5°	41032	39537	36612
10°	40664	31572	27295
15°	40246	25804	22039
20°	39606	22089	19011
25°	38694	19500	17060
30°	37228	17681	15642
35°	34737	16199	14384
40°	31148	14963	13630
45°	27099	13986	13142
50°	23524	13134	12671
55°	20357	12420	12347
60°	17650	11697	12038
65°	15448	10970	11373
70°	13306	10071	10447
75°	11090	8872	9201
80°	8696	7223	6983
85°	5369	4630	4630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27099 cd/sqm



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CATALOG NUMBER: S122DRP-S865D940-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.3	6.4
10°-20°	408.5	14.1
20°-30°	501.2	17.3
30°-40°	518.0	17.9
40°-50°	467.8	16.2
50°-60°	379.1	13.1
60°-70°	265.7	9.2
70°-80°	137.1	4.7
80°-90°	28.9	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°	1095.0	37.9
0°-40°	1613.0	55.8
0°-60°	2459.9	85.1
0°-90°	2891.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2891.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2152	2152	2152	2152	2152	
5°	2158	2153	2079	1986	1925	204
15°	2052	1730	1316	1173	1124	578
25°	1851	1229	933	844	816	850
35°	1502	908	700	641	622	934
45°	1011	654	522	493	490	782
55°	616	448	376	372	374	555
65°	345	276	245	250	254	344
75°	152	130	121	125	126	164
85°	25	21	21	21	21	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2151.8	2151.8	2151.8	2151.8	2151.8
2.5°	2167.6	2159.7	2139.5	2158.6	2148.5
5°	2157.5	2153.0	2078.9	1985.7	1925.1
7.5°	2139.5	2123.8	1867.8	1691.6	1632.1
10°	2113.7	2035.1	1641.1	1477.2	1418.8
12.5°	2086.7	1901.5	1458.1	1304.3	1251.6
15°	2051.9	1729.8	1315.6	1173.0	1123.6
17.5°	2011.5	1580.5	1202.2	1065.3	1026.0
20°	1964.4	1451.4	1095.6	975.5	942.9
22.5°	1912.7	1342.5	1006.9	909.2	878.9
25°	1851.0	1229.1	932.8	844.1	816.1
27.5°	1782.5	1142.7	871.1	788.0	764.4
30°	1701.7	1058.5	808.2	734.1	715.0
32.5°	1609.7	979.9	752.1	687.0	664.5
35°	1501.9	908.1	700.4	640.9	621.9
37.5°	1387.4	837.4	651.1	599.4	583.7
40°	1259.4	775.6	605.0	559.0	551.1
42.5°	1128.1	713.9	563.5	524.2	517.5
45°	1011.4	654.4	522.0	492.8	490.5
47.5°	898.0	600.5	483.8	461.3	459.1
50°	798.1	544.4	445.6	431.0	429.9
52.5°	702.7	495.0	409.7	401.9	404.1
55°	616.3	447.9	376.0	371.5	373.8
57.5°	536.6	404.1	342.4	343.5	346.9
60°	465.8	359.2	308.7	313.2	317.7
62.5°	404.1	317.7	276.1	282.9	287.4
65°	344.6	276.1	244.7	250.3	253.7
67.5°	291.9	236.8	213.3	220.0	221.1
70°	240.2	200.9	181.8	188.6	188.6
72.5°	195.3	163.9	151.5	154.9	156.0
75°	151.5	130.2	121.2	124.6	125.7
77.5°	114.5	98.8	92.0	95.4	94.3
80°	79.7	69.6	66.2	65.1	64.0
82.5°	49.4	43.8	40.4	41.5	40.4
85°	24.7	21.3	21.3	21.3	21.3
87.5°	7.9	7.9	7.9	7.9	7.9
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	21.38	22.88	21.75	23.19	23.51	19.88	21.38	20.24	21.69	22.01
	3H	22.97	24.31	23.34	24.64	25.00	21.59	22.94	21.97	23.27	23.63
	4H	23.49	24.75	23.89	25.10	25.48	22.17	23.43	22.57	23.78	24.16
	6H	23.82	24.98	24.23	25.35	25.74	22.52	23.69	22.93	24.05	24.44
	8H	23.89	25.00	24.32	25.39	25.79	22.59	23.70	23.02	24.09	24.50
	12H	23.92	24.98	24.35	25.36	25.79	22.62	23.69	23.06	24.07	24.50
4H	2H	21.69	22.95	22.09	23.30	23.68	20.44	21.70	20.84	22.05	22.43
	3H	23.47	24.52	23.88	24.92	25.32	22.36	23.40	22.77	23.80	24.21
	4H	24.10	25.04	24.53	25.46	25.90	23.05	23.99	23.48	24.41	24.85
	6H	24.53	25.35	24.99	25.80	26.26	23.50	24.32	23.96	24.76	25.23
	8H	24.64	25.41	25.10	25.85	26.32	23.61	24.37	24.07	24.82	25.28
	12H	24.69	25.38	25.17	25.85	26.33	23.66	24.34	24.14	24.82	25.29
8H	4H	24.25	25.01	24.71	25.46	25.93	23.29	24.06	23.75	24.50	24.97
	6H	24.76	25.39	25.25	25.88	26.36	23.83	24.46	24.33	24.95	25.43
	8H	24.90	25.47	25.42	25.98	26.47	23.98	24.54	24.49	25.05	25.54
	12H	24.99	25.49	25.50	25.98	26.55	24.07	24.57	24.58	25.06	25.63
12H	4H	24.25	24.93	24.73	25.41	25.88	23.30	23.99	23.78	24.46	24.94
	6H	24.76	25.32	25.27	25.83	26.32	23.85	24.42	24.36	24.93	25.41
	8H	24.94	25.44	25.45	25.93	26.50	24.04	24.54	24.55	25.03	25.60