

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: P1217299

Luminaire Tested: S122DRP-H865D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217299
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-H865D940-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

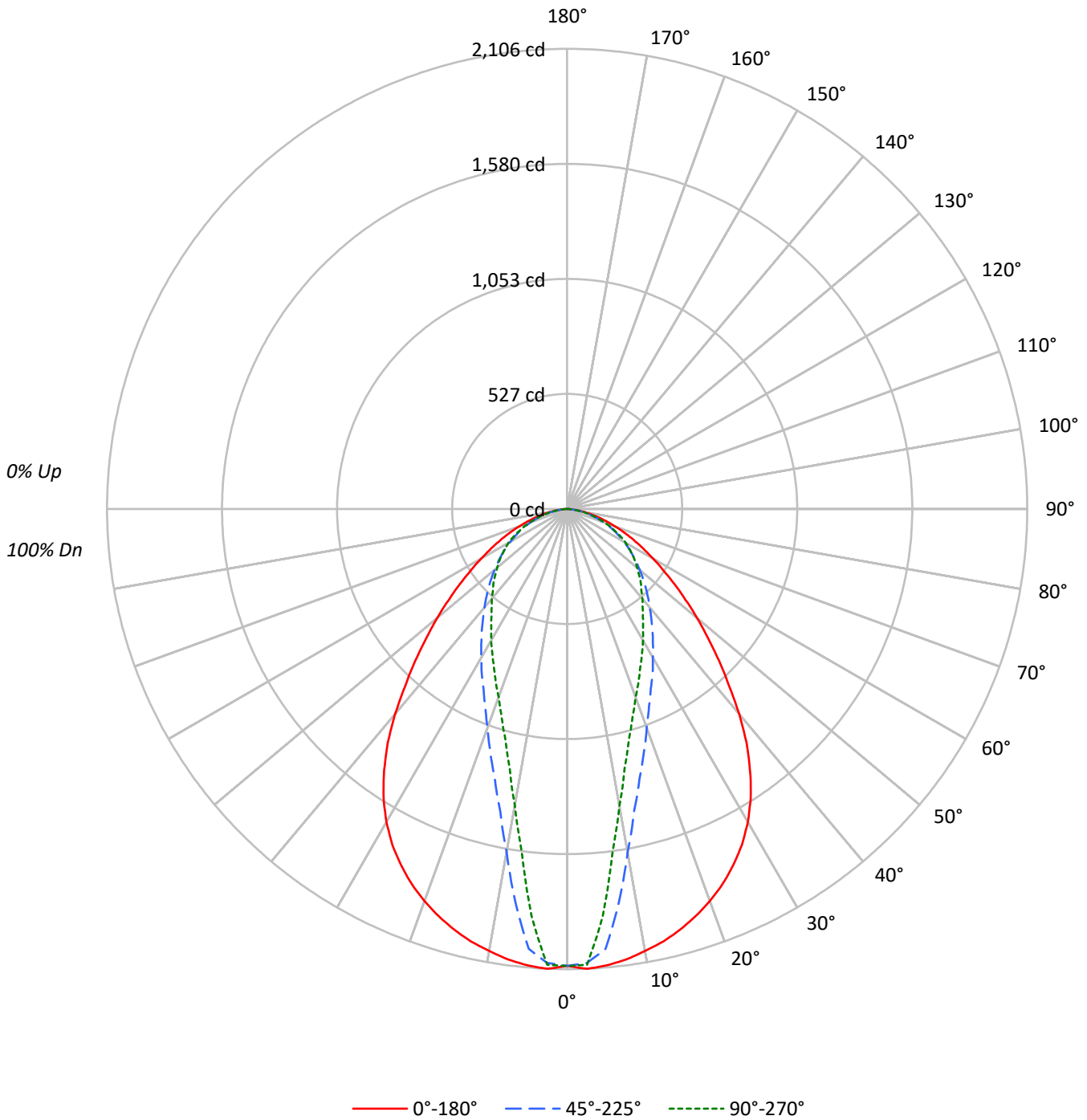
Lumens per Lamp: N/A
Luminaire Lumens: 2810.1 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
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					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°	39620	39620	39620
5°	39874	38423	35579
10°	39517	30681	26527
15°	39113	25077	21419
20°	38489	21466	18474
25°	37603	18950	16579
30°	36180	17182	15202
35°	33759	15744	13977
40°	30272	14542	13246
45°	26335	13592	12772
50°	22860	12765	12314
55°	19782	12070	12000
60°	17154	11368	11697
65°	15013	10661	11051
70°	12929	9788	10154
75°	10783	8623	8945
80°	8456	7026	6786
85°	5217	4500	4500

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26335 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.0	6.4
10°-20°	397.0	14.1
20°-30°	487.1	17.3
30°-40°	503.4	17.9
40°-50°	454.6	16.2
50°-60°	368.4	13.1
60°-70°	258.3	9.2
70°-80°	133.2	4.7
80°-90°	28.1	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°	1064.1	37.9
0°-40°	1567.5	55.8
0°-60°	2390.6	85.1
0°-90°	2810.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2810.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2091	2091	2091	2091	2091	
5°	2097	2092	2020	1930	1871	199
15°	1994	1681	1278	1140	1092	562
25°	1799	1194	906	820	793	826
35°	1460	882	681	623	604	907
45°	983	636	507	479	477	760
55°	599	435	365	361	363	539
65°	335	268	238	243	246	335
75°	147	126	118	121	122	159
85°	24	21	21	21	21	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2091.2	2091.2	2091.2	2091.2	2091.2
2.5°	2106.5	2098.8	2079.2	2097.7	2087.9
5°	2096.6	2092.3	2020.3	1929.7	1870.8
7.5°	2079.2	2063.9	1815.2	1643.9	1586.1
10°	2054.1	1977.7	1594.8	1435.6	1378.9
12.5°	2027.9	1847.9	1417.0	1267.6	1216.3
15°	1994.1	1681.0	1278.5	1140.0	1092.0
17.5°	1954.8	1535.9	1168.3	1035.2	997.1
20°	1909.0	1410.5	1064.7	948.0	916.3
22.5°	1858.8	1304.7	978.5	883.6	854.1
25°	1798.8	1194.5	906.5	820.3	793.1
27.5°	1732.3	1110.5	846.5	765.8	742.9
30°	1653.8	1028.7	785.4	713.4	694.9
32.5°	1564.3	952.3	730.9	667.6	645.8
35°	1459.6	882.5	680.7	622.9	604.3
37.5°	1348.3	813.8	632.7	582.5	567.2
40°	1224.0	753.8	588.0	543.3	535.6
42.5°	1096.3	693.8	547.6	509.4	502.9
45°	982.9	636.0	507.3	478.9	476.7
47.5°	872.7	583.6	470.2	448.3	446.2
50°	775.6	529.1	433.1	418.9	417.8
52.5°	682.9	481.1	398.2	390.5	392.7
55°	598.9	435.3	365.4	361.1	363.3
57.5°	521.4	392.7	332.7	333.8	337.1
60°	452.7	349.1	300.0	304.4	308.7
62.5°	392.7	308.7	268.4	274.9	279.3
65°	334.9	268.4	237.8	243.3	246.5
67.5°	283.6	230.2	207.3	213.8	214.9
70°	233.4	195.3	176.7	183.3	183.3
72.5°	189.8	159.3	147.3	150.5	151.6
75°	147.3	126.5	117.8	121.1	122.2
77.5°	111.3	96.0	89.5	92.7	91.6
80°	77.5	67.6	64.4	63.3	62.2
82.5°	48.0	42.5	39.3	40.4	39.3
85°	24.0	20.7	20.7	20.7	20.7
87.5°	7.6	7.6	7.6	7.6	7.6
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	21.28	22.78	21.65	23.09	23.41	19.78	21.28	20.14	21.59	21.91
	3H	22.87	24.21	23.25	24.54	24.90	21.49	22.84	21.87	23.17	23.53
	4H	23.39	24.65	23.79	25.00	25.38	22.07	23.33	22.47	23.68	24.06
	6H	23.72	24.88	24.13	25.25	25.64	22.42	23.59	22.83	23.95	24.35
	8H	23.79	24.90	24.22	25.29	25.69	22.50	23.61	22.92	24.00	24.40
	12H	23.82	24.88	24.25	25.26	25.69	22.53	23.59	22.96	23.97	24.40
4H	2H	21.59	22.85	21.99	23.20	23.58	20.34	21.60	20.74	21.95	22.33
	3H	23.37	24.42	23.78	24.82	25.22	22.26	23.30	22.67	23.70	24.11
	4H	24.00	24.94	24.43	25.36	25.80	22.95	23.89	23.38	24.31	24.75
	6H	24.44	25.25	24.89	25.70	26.16	23.40	24.22	23.86	24.67	25.13
	8H	24.54	25.31	25.00	25.75	26.22	23.51	24.27	23.97	24.72	25.18
	12H	24.59	25.28	25.08	25.75	26.23	23.56	24.24	24.04	24.72	25.19
8H	4H	24.15	24.92	24.61	25.36	25.83	23.19	23.96	23.66	24.40	24.87
	6H	24.66	25.29	25.15	25.78	26.26	23.73	24.36	24.23	24.85	25.33
	8H	24.80	25.37	25.32	25.88	26.37	23.88	24.45	24.40	24.96	25.44
	12H	24.89	25.39	25.40	25.88	26.45	23.98	24.47	24.49	24.97	25.53
12H	4H	24.15	24.83	24.63	25.31	25.78	23.20	23.89	23.69	24.37	24.84
	6H	24.66	25.23	25.17	25.74	26.22	23.75	24.32	24.27	24.83	25.32
	8H	24.84	25.34	25.35	25.83	26.40	23.94	24.44	24.45	24.93	25.50