

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: P1217308

Luminaire Tested: S122DRP-S1005D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217308
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-S1005D940-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

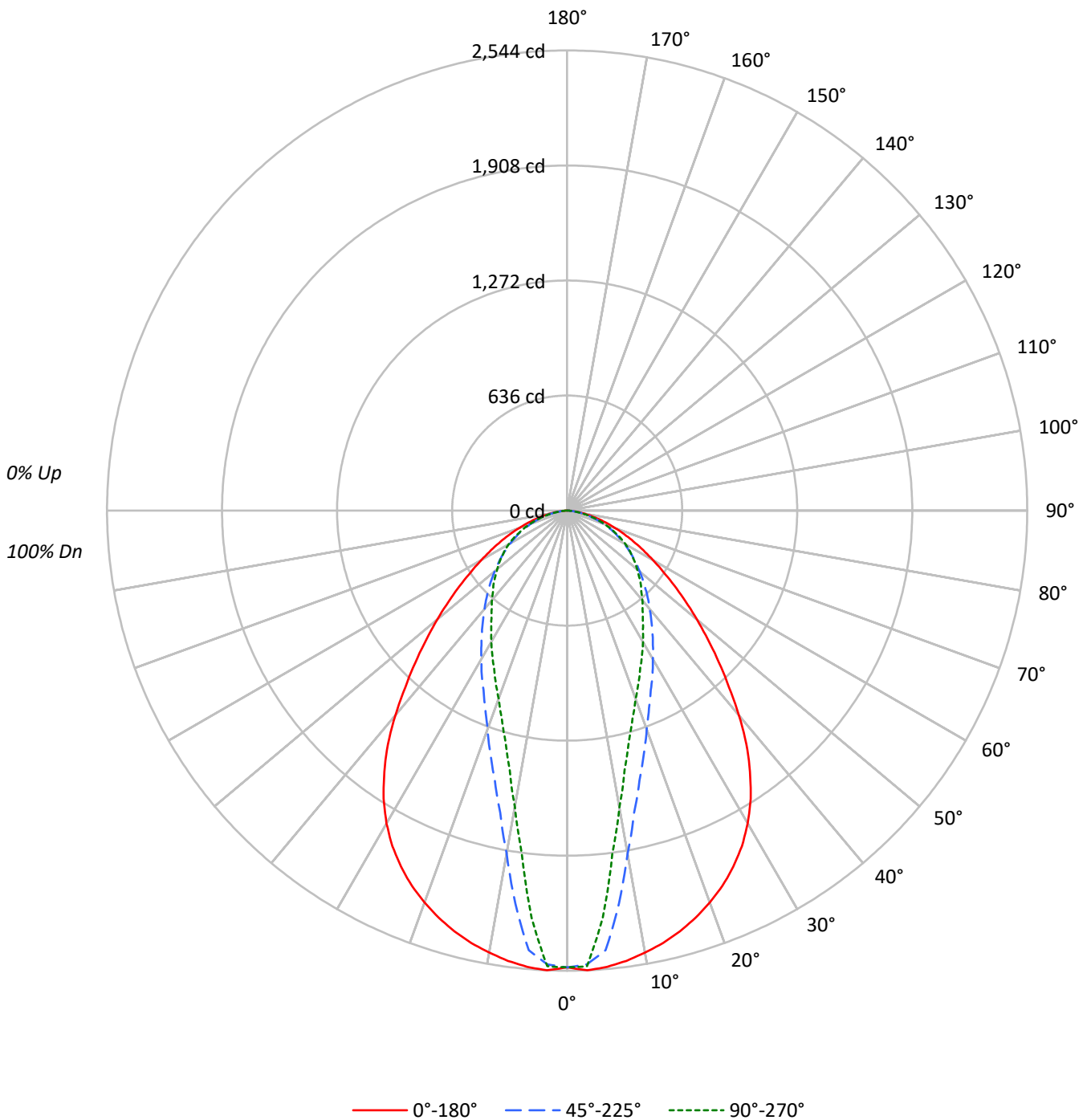
Lumens per Lamp: N/A
Luminaire Lumens: 3393.6 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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				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°	47846	47846	47846
5°	48154	46401	42968
10°	47722	37053	32035
15°	47235	30284	25865
20°	46481	25924	22311
25°	45411	22884	20020
30°	43690	20750	18359
35°	40766	19012	16879
40°	36556	17562	15997
45°	31804	16414	15425
50°	27609	15415	14873
55°	23888	14577	14491
60°	20715	13728	14126
65°	18129	12875	13346
70°	15616	11821	12259
75°	13015	10417	10797
80°	10201	8477	8194
85°	6304	5434	5434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 31804 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.4	6.4
10°-20°	479.5	14.1
20°-30°	588.2	17.3
30°-40°	607.9	17.9
40°-50°	549.0	16.2
50°-60°	444.9	13.1
60°-70°	311.9	9.2
70°-80°	160.9	4.7
80°-90°	33.9	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°	1285.1	37.9
0°-40°	1893.0	55.8
0°-60°	2886.9	85.1
0°-90°	3393.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3393.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2525	2525	2525	2525	2525	
5°	2532	2527	2440	2330	2259	240
15°	2408	2030	1544	1377	1319	679
25°	2172	1442	1095	991	958	998
35°	1763	1066	822	752	730	1096
45°	1187	768	613	578	576	918
55°	723	526	441	436	439	651
65°	404	324	287	294	298	404
75°	178	153	142	146	148	192
85°	29	25	25	25	25	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2525.4	2525.4	2525.4	2525.4	2525.4
2.5°	2543.8	2534.6	2510.9	2533.3	2521.4
5°	2532.0	2526.7	2439.8	2330.4	2259.3
7.5°	2510.9	2492.5	2192.1	1985.3	1915.5
10°	2480.6	2388.4	1926.0	1733.7	1665.2
12.5°	2449.0	2231.6	1711.3	1530.8	1468.9
15°	2408.2	2030.1	1544.0	1376.7	1318.7
17.5°	2360.7	1854.9	1410.9	1250.2	1204.1
20°	2305.4	1703.4	1285.8	1144.8	1106.6
22.5°	2244.8	1575.6	1181.7	1067.1	1031.5
25°	2172.3	1442.5	1094.7	990.7	957.7
27.5°	2092.0	1341.1	1022.3	924.8	897.1
30°	1997.1	1242.3	948.5	861.6	839.2
32.5°	1889.1	1150.1	882.6	806.2	779.9
35°	1762.6	1065.8	822.0	752.2	729.8
37.5°	1628.3	982.8	764.1	703.5	685.0
40°	1478.1	910.3	710.1	656.1	646.8
42.5°	1324.0	837.8	661.3	615.2	607.3
45°	1187.0	768.0	612.6	578.3	575.7
47.5°	1053.9	704.8	567.8	541.4	538.8
50°	936.7	638.9	523.0	505.9	504.6
52.5°	824.7	581.0	480.8	471.6	474.3
55°	723.2	525.6	441.3	436.0	438.7
57.5°	629.7	474.3	401.8	403.1	407.1
60°	546.7	421.6	362.3	367.5	372.8
62.5°	474.3	372.8	324.1	332.0	337.2
65°	404.4	324.1	287.2	293.8	297.7
67.5°	342.5	278.0	250.3	258.2	259.5
70°	281.9	235.8	213.4	221.3	221.3
72.5°	229.2	192.3	177.8	181.8	183.1
75°	177.8	152.8	142.3	146.2	147.5
77.5°	134.4	115.9	108.0	112.0	110.7
80°	93.5	81.7	77.7	76.4	75.1
82.5°	58.0	51.4	47.4	48.7	47.4
85°	29.0	25.0	25.0	25.0	25.0
87.5°	9.2	9.2	9.2	9.2	9.2
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	21.94	23.44	22.30	23.75	24.06	20.43	21.93	20.80	22.25	22.56
	3H	23.52	24.87	23.90	25.20	25.56	22.15	23.49	22.52	23.82	24.18
	4H	24.05	25.31	24.45	25.66	26.04	22.73	23.99	23.13	24.34	24.72
	6H	24.37	25.54	24.79	25.91	26.30	23.08	24.24	23.49	24.61	25.00
	8H	24.45	25.56	24.87	25.95	26.35	23.15	24.26	23.58	24.65	25.05
	12H	24.47	25.54	24.91	25.92	26.35	23.18	24.24	23.61	24.62	25.05
4H	2H	22.25	23.51	22.65	23.86	24.24	20.99	22.26	21.39	22.61	22.98
	3H	24.03	25.08	24.44	25.48	25.88	22.91	23.96	23.32	24.36	24.76
	4H	24.66	25.60	25.09	26.02	26.45	23.61	24.55	24.04	24.97	25.40
	6H	25.09	25.91	25.55	26.35	26.81	24.06	24.88	24.52	25.32	25.78
	8H	25.20	25.96	25.66	26.41	26.87	24.16	24.93	24.63	25.37	25.84
	12H	25.25	25.93	25.73	26.41	26.88	24.22	24.90	24.70	25.38	25.85
8H	4H	24.81	25.57	25.27	26.02	26.48	23.85	24.61	24.31	25.06	25.52
	6H	25.31	25.94	25.81	26.44	26.91	24.38	25.02	24.88	25.51	25.99
	8H	25.46	26.02	25.97	26.53	27.02	24.53	25.10	25.05	25.61	26.10
	12H	25.55	26.05	26.06	26.54	27.10	24.63	25.13	25.14	25.62	26.19
12H	4H	24.80	25.49	25.29	25.97	26.44	23.86	24.54	24.34	25.02	25.49
	6H	25.31	25.88	25.83	26.39	26.88	24.41	24.97	24.92	25.48	25.97
	8H	25.50	26.00	26.01	26.49	27.06	24.60	25.10	25.11	25.59	26.15