

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: P1217317

Luminaire Tested: S122DRP-S290D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217317
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-S290D940-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

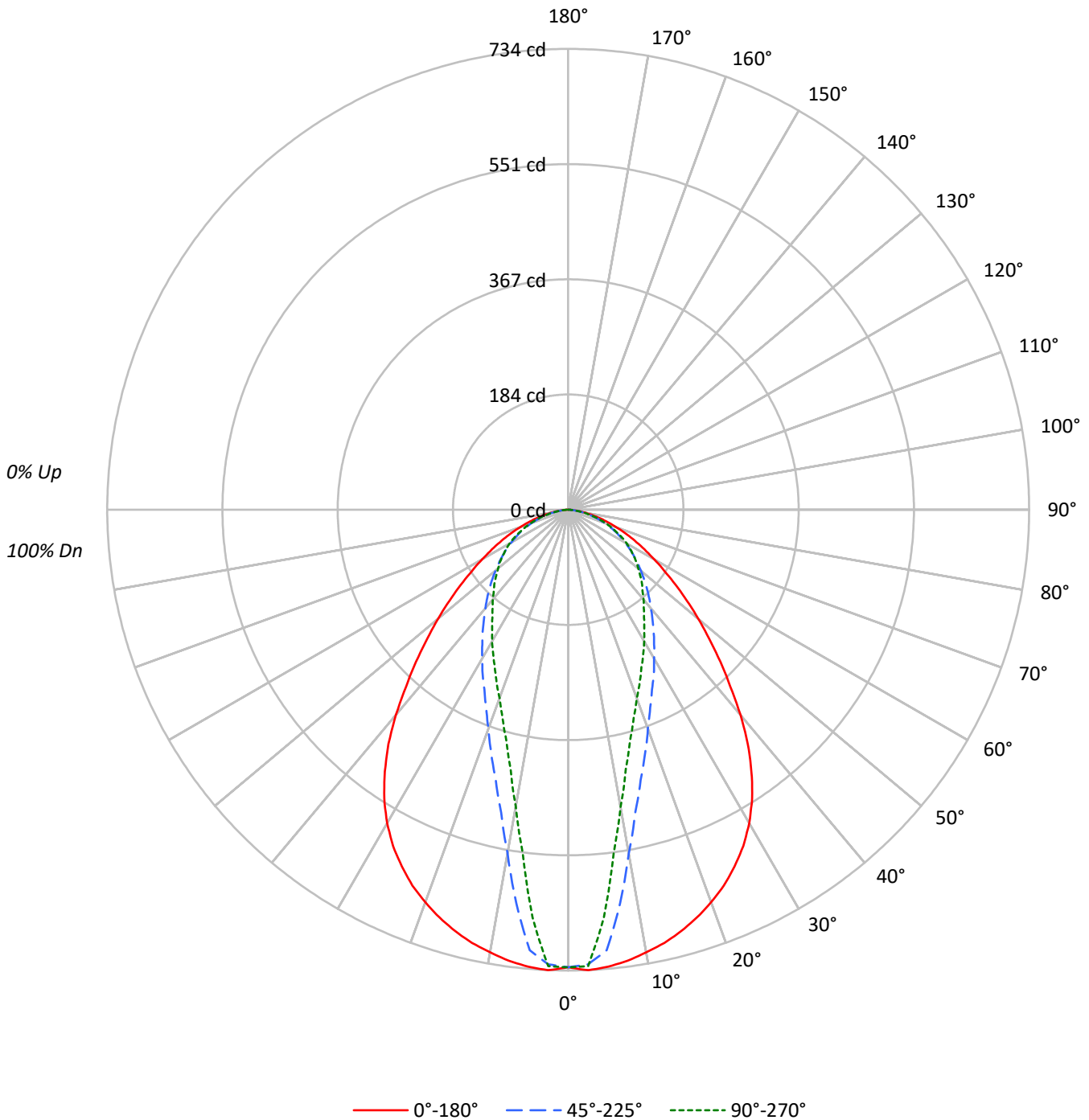
Lumens per Lamp: N/A
Luminaire Lumens: 979.4 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	13808	13808	13808
5°	13897	13391	12400
10°	13773	10693	9246
15°	13632	8740	7465
20°	13414	7482	6440
25°	13105	6604	5778
30°	12610	5988	5299
35°	11766	5486	4871
40°	10551	5068	4617
45°	9179	4737	4450
50°	7967	4448	4291
55°	6894	4208	4182
60°	5979	3963	4077
65°	5232	3716	3851
70°	4509	3412	3540
75°	3755	3009	3118
80°	2946	2444	2368
85°	1826	1565	1565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9179 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	6.4
10°-20°	138.4	14.1
20°-30°	169.8	17.3
30°-40°	175.4	17.9
40°-50°	158.5	16.2
50°-60°	128.4	13.1
60°-70°	90.0	9.2
70°-80°	46.4	4.7
80°-90°	9.8	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°	370.9	37.9
0°-40°	546.3	55.8
0°-60°	833.2	85.1
0°-90°	979.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	731	729	704	673	652	69
15°	695	586	446	397	381	196
25°	627	416	316	286	276	288
35°	509	308	237	217	211	316
45°	343	222	177	167	166	265
55°	209	152	127	126	127	188
65°	117	94	83	85	86	117
75°	51	44	41	42	43	55
85°	8	7	7	7	7	11
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.8	728.8	728.8	728.8	728.8
2.5°	734.2	731.5	724.7	731.1	727.7
5°	730.7	729.2	704.1	672.6	652.0
7.5°	724.7	719.3	632.6	573.0	552.8
10°	715.9	689.3	555.8	500.3	480.6
12.5°	706.8	644.1	493.9	441.8	423.9
15°	695.0	585.9	445.6	397.3	380.6
17.5°	681.3	535.3	407.2	360.8	347.5
20°	665.3	491.6	371.1	330.4	319.4
22.5°	647.9	454.7	341.0	308.0	297.7
25°	626.9	416.3	315.9	285.9	276.4
27.5°	603.8	387.0	295.0	266.9	258.9
30°	576.4	358.5	273.7	248.6	242.2
32.5°	545.2	331.9	254.7	232.7	225.1
35°	508.7	307.6	237.2	217.1	210.6
37.5°	469.9	283.6	220.5	203.0	197.7
40°	426.6	262.7	204.9	189.3	186.7
42.5°	382.1	241.8	190.9	177.6	175.3
45°	342.6	221.7	176.8	166.9	166.1
47.5°	304.2	203.4	163.9	156.3	155.5
50°	270.3	184.4	150.9	146.0	145.6
52.5°	238.0	167.7	138.8	136.1	136.9
55°	208.7	151.7	127.4	125.8	126.6
57.5°	181.7	136.9	116.0	116.3	117.5
60°	157.8	121.7	104.6	106.1	107.6
62.5°	136.9	107.6	93.5	95.8	97.3
65°	116.7	93.5	82.9	84.8	85.9
67.5°	98.9	80.2	72.2	74.5	74.9
70°	81.4	68.1	61.6	63.9	63.9
72.5°	66.2	55.5	51.3	52.5	52.8
75°	51.3	44.1	41.1	42.2	42.6
77.5°	38.8	33.5	31.2	32.3	31.9
80°	27.0	23.6	22.4	22.1	21.7
82.5°	16.7	14.8	13.7	14.1	13.7
85°	8.4	7.2	7.2	7.2	7.2
87.5°	2.7	2.7	2.7	2.7	2.7
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	17.62	19.12	17.98	19.43	19.75	16.12	17.61	16.48	17.93	18.24
	3H	19.21	20.55	19.58	20.88	21.24	17.83	19.17	18.21	19.50	19.86
	4H	19.73	20.99	20.13	21.34	21.72	18.41	19.67	18.81	20.02	20.40
	6H	20.06	21.22	20.47	21.59	21.98	18.76	19.92	19.17	20.29	20.68
	8H	20.13	21.24	20.56	21.63	22.03	18.83	19.94	19.26	20.33	20.73
	12H	20.16	21.22	20.59	21.60	22.03	18.86	19.93	19.29	20.31	20.74
4H	2H	17.93	19.19	18.33	19.54	19.92	16.68	17.94	17.08	18.29	18.67
	3H	19.71	20.76	20.12	21.16	21.56	18.59	19.64	19.00	20.04	20.44
	4H	20.34	21.28	20.77	21.70	22.14	19.29	20.23	19.72	20.65	21.09
	6H	20.77	21.59	21.23	22.04	22.50	19.74	20.56	20.20	21.00	21.46
	8H	20.88	21.65	21.34	22.09	22.56	19.84	20.61	20.31	21.05	21.52
	12H	20.93	21.61	21.41	22.09	22.56	19.90	20.58	20.38	21.06	21.53
8H	4H	20.49	21.25	20.95	21.70	22.17	19.53	20.29	19.99	20.74	21.21
	6H	21.00	21.63	21.49	22.12	22.60	20.07	20.70	20.57	21.19	21.67
	8H	21.14	21.71	21.66	22.22	22.71	20.22	20.78	20.73	21.29	21.78
	12H	21.23	21.73	21.74	22.22	22.79	20.31	20.81	20.82	21.30	21.87
12H	4H	20.49	21.17	20.97	21.65	22.12	19.54	20.22	20.02	20.70	21.17
	6H	21.00	21.56	21.51	22.07	22.56	20.09	20.65	20.60	21.16	21.65
	8H	21.18	21.68	21.69	22.17	22.74	20.28	20.78	20.79	21.27	21.84