

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: P1217273

Luminaire Tested: S122DRP-H290D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217273
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-H290D950-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

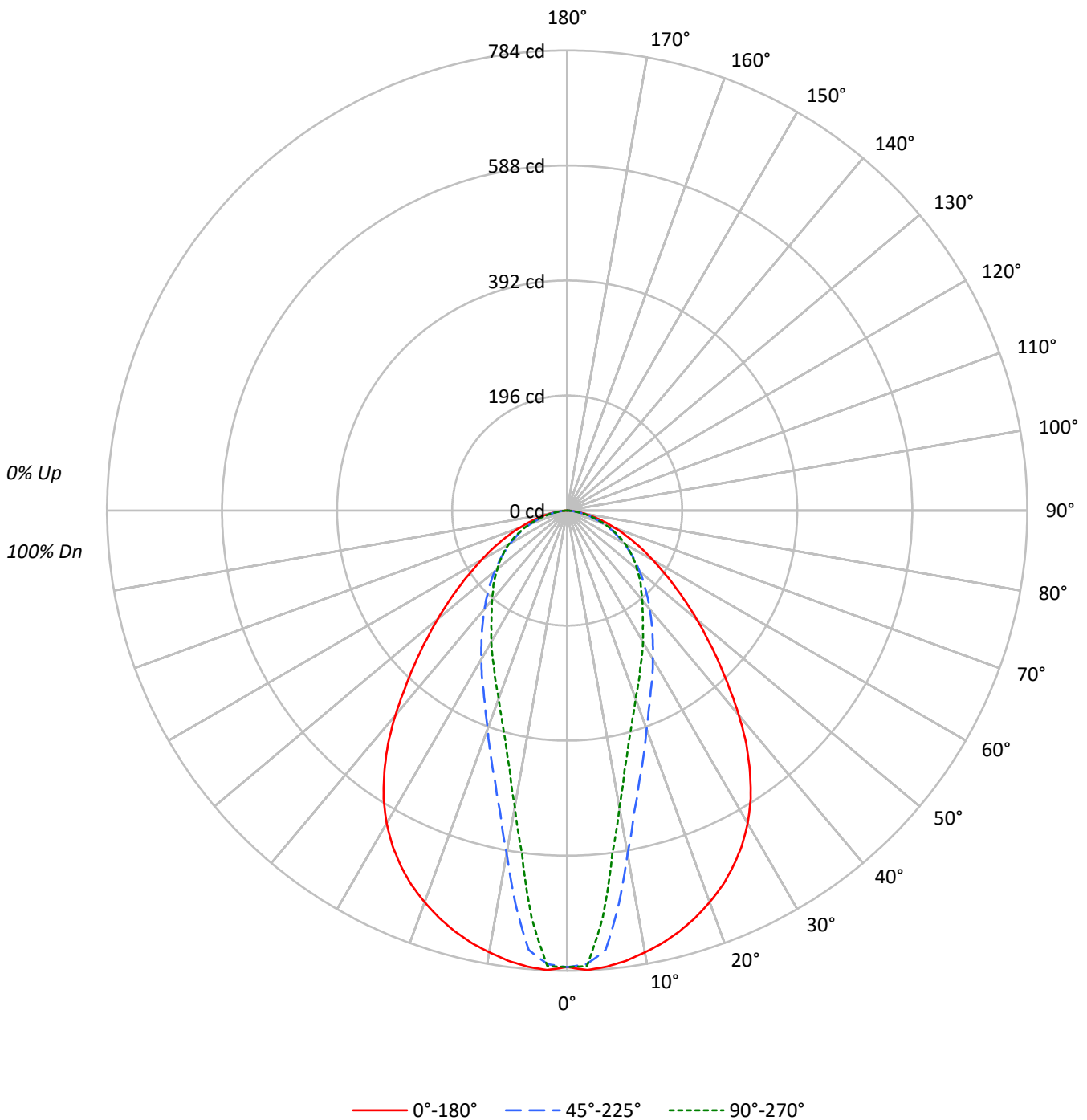
Lumens per Lamp: N/A
Luminaire Lumens: 1045.3 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	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°	14736	14736	14736
5°	14832	14292	13235
10°	14698	11412	9867
15°	14548	9329	7967
20°	14317	7984	6871
25°	13987	7049	6167
30°	13456	6390	5655
35°	12557	5856	5199
40°	11261	5409	4927
45°	9796	5056	4750
50°	8503	4748	4580
55°	7359	4489	4462
60°	6381	4229	4350
65°	5586	3967	4111
70°	4808	3639	3778
75°	4011	3206	3323
80°	3142	2608	2520
85°	1935	1674	1674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9796 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	6.4
10°-20°	147.7	14.1
20°-30°	181.2	17.3
30°-40°	187.2	17.9
40°-50°	169.1	16.2
50°-60°	137.0	13.1
60°-70°	96.1	9.2
70°-80°	49.5	4.7
80°-90°	10.4	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°	395.8	37.9
0°-40°	583.1	55.8
0°-60°	889.2	85.1
0°-90°	1045.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	780	778	752	718	696	74
15°	742	625	476	424	406	209
25°	669	444	337	305	295	307
35°	543	328	253	232	225	338
45°	366	237	189	178	177	283
55°	223	162	136	134	135	201
65°	125	100	88	90	92	125
75°	55	47	44	45	45	59
85°	9	8	8	8	8	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	783.5	780.7	773.4	780.3	776.6
5°	779.9	778.2	751.5	717.8	695.9
7.5°	773.4	767.7	675.2	611.5	590.0
10°	764.0	735.6	593.2	534.0	512.9
12.5°	754.3	687.4	527.1	471.5	452.4
15°	741.7	625.3	475.6	424.0	406.2
17.5°	727.1	571.3	434.6	385.1	370.9
20°	710.1	524.6	396.0	352.6	340.8
22.5°	691.4	485.3	364.0	328.7	317.7
25°	669.1	444.3	337.2	305.1	295.0
27.5°	644.3	413.1	314.9	284.8	276.3
30°	615.1	382.6	292.1	265.4	258.5
32.5°	581.9	354.2	271.9	248.3	240.2
35°	542.9	328.3	253.2	231.7	224.8
37.5°	501.5	302.7	235.3	216.7	211.0
40°	455.3	280.4	218.7	202.1	199.2
42.5°	407.8	258.1	203.7	189.5	187.1
45°	365.6	236.6	188.7	178.1	177.3
47.5°	324.6	217.1	174.9	166.8	166.0
50°	288.5	196.8	161.1	155.8	155.4
52.5°	254.0	178.9	148.1	145.3	146.1
55°	222.8	161.9	135.9	134.3	135.1
57.5°	194.0	146.1	123.8	124.2	125.4
60°	168.4	129.8	111.6	113.2	114.8
62.5°	146.1	114.8	99.8	102.3	103.9
65°	124.6	99.8	88.5	90.5	91.7
67.5°	105.5	85.6	77.1	79.5	79.9
70°	86.8	72.6	65.7	68.2	68.2
72.5°	70.6	59.2	54.8	56.0	56.4
75°	54.8	47.1	43.8	45.0	45.4
77.5°	41.4	35.7	33.3	34.5	34.1
80°	28.8	25.2	23.9	23.5	23.1
82.5°	17.9	15.8	14.6	15.0	14.6
85°	8.9	7.7	7.7	7.7	7.7
87.5°	2.8	2.8	2.8	2.8	2.8
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	17.85	19.35	18.21	19.66	19.97	16.34	17.84	16.71	18.16	18.47
	3H	19.43	20.78	19.81	21.11	21.47	18.06	19.40	18.43	19.73	20.09
	4H	19.96	21.22	20.36	21.57	21.95	18.64	19.90	19.04	20.25	20.63
	6H	20.28	21.45	20.70	21.82	22.21	18.98	20.15	19.40	20.52	20.91
	8H	20.36	21.47	20.78	21.86	22.26	19.06	20.17	19.49	20.56	20.96
	12H	20.38	21.45	20.81	21.83	22.26	19.09	20.15	19.52	20.53	20.96
4H	2H	18.16	19.42	18.56	19.77	20.15	16.91	18.17	17.31	18.52	18.90
	3H	19.94	20.98	20.35	21.38	21.79	18.82	19.87	19.23	20.27	20.67
	4H	20.56	21.51	21.00	21.92	22.36	19.51	20.46	19.95	20.87	21.31
	6H	21.00	21.82	21.46	22.26	22.72	19.97	20.79	20.42	21.23	21.69
	8H	21.11	21.87	21.57	22.32	22.78	20.07	20.84	20.53	21.28	21.75
	12H	21.16	21.84	21.64	22.32	22.79	20.12	20.81	20.61	21.29	21.76
8H	4H	20.71	21.48	21.18	21.92	22.39	19.76	20.52	20.22	20.97	21.43
	6H	21.22	21.85	21.72	22.34	22.82	20.29	20.92	20.79	21.42	21.89
	8H	21.37	21.93	21.88	22.44	22.93	20.44	21.01	20.96	21.52	22.01
	12H	21.46	21.96	21.97	22.45	23.01	20.54	21.04	21.05	21.53	22.09
12H	4H	20.71	21.40	21.20	21.87	22.35	19.77	20.45	20.25	20.93	21.40
	6H	21.22	21.79	21.74	22.30	22.79	20.31	20.88	20.83	21.39	21.88
	8H	21.41	21.91	21.92	22.40	22.96	20.51	21.00	21.02	21.50	22.06