

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: P1217270

Luminaire Tested: S122DRP-H290D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217270  
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-H290D930-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

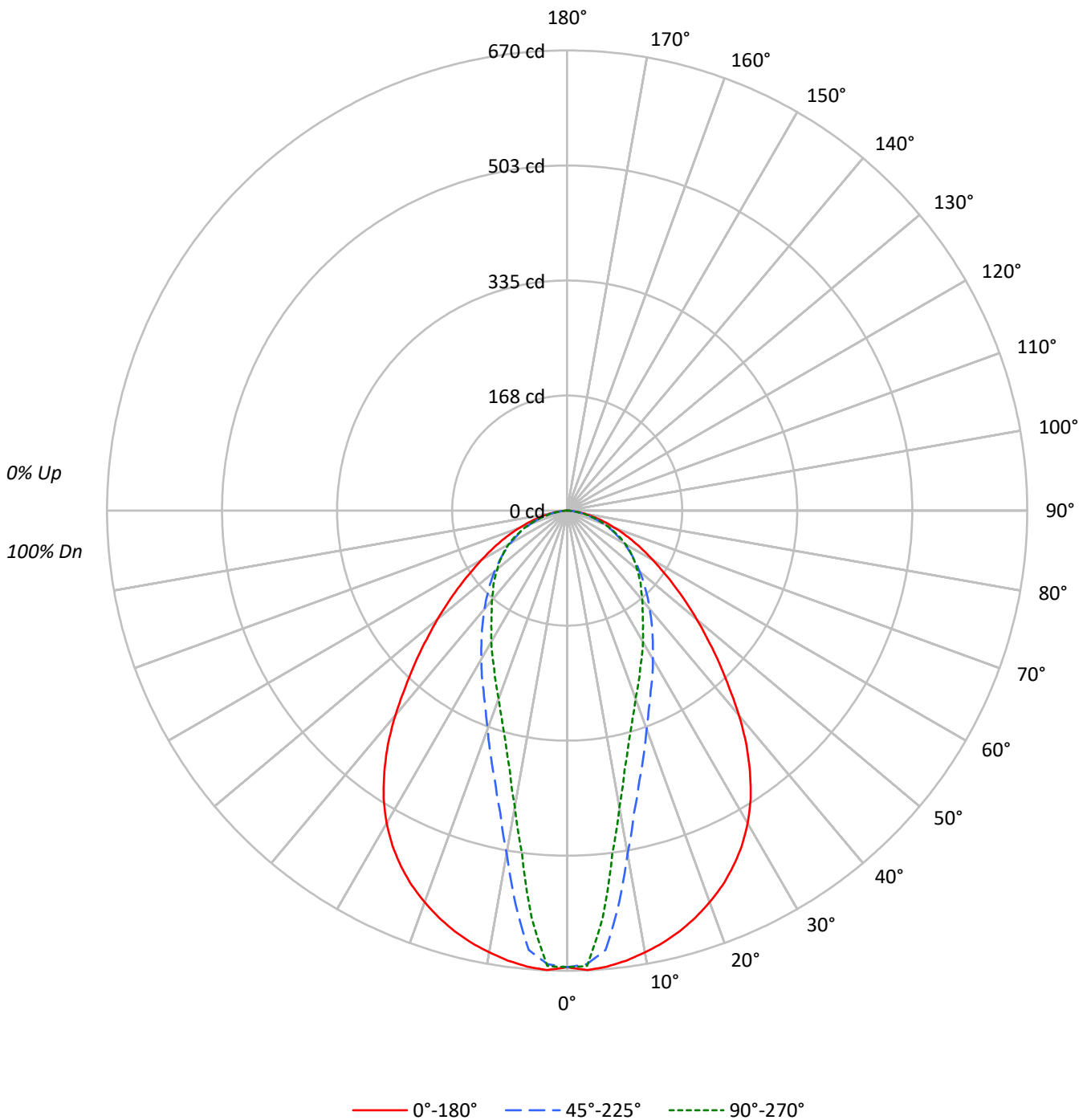
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 893.3 lumens  
Efficiency: N/A  
Efficacy: 76.4 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<sub>in</sub>): 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					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75					75			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65			
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57					57			
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50					50			
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41					41			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31					31			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12595	12595	12595
5°	12676	12214	11310
10°	12562	9754	8432
15°	12433	7971	6808
20°	12234	6823	5873
25°	11953	6025	5270
30°	11501	5463	4833
35°	10732	5005	4443
40°	9623	4622	4212
45°	8370	4319	4059
50°	7268	4059	3914
55°	6289	3838	3815
60°	5453	3615	3717
65°	4774	3389	3515
70°	4110	3113	3229
75°	3426	2745	2840
80°	2684	2237	2160
85°	1652	1435	1435

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8370 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.2	6.4
10°-20°	126.2	14.1
20°-30°	154.8	17.3
30°-40°	160.0	17.9
40°-50°	144.5	16.2
50°-60°	117.1	13.1
60°-70°	82.1	9.2
70°-80°	42.3	4.7
80°-90°	8.9	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°	338.3	37.9
0°-40°	498.3	55.8
0°-60°	759.9	85.1
0°-90°	893.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	893.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	666	665	642	613	595	63
15°	634	534	406	362	347	179
25°	572	380	288	261	252	263
35°	464	280	216	198	192	288
45°	312	202	161	152	152	242
55°	190	138	116	115	116	171
65°	106	85	76	77	78	106
75°	47	40	38	38	39	51
85°	8	7	7	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	664.8	664.8	664.8	664.8	664.8
2.5°	669.6	667.2	660.9	666.8	663.7
5°	666.5	665.1	642.2	613.4	594.7
7.5°	660.9	656.1	577.0	522.6	504.2
10°	653.0	628.7	507.0	456.3	438.3
12.5°	644.6	587.4	450.4	402.9	386.6
15°	633.9	534.4	406.4	362.4	347.1
17.5°	621.4	488.2	371.4	329.1	316.9
20°	606.8	448.4	338.4	301.3	291.3
22.5°	590.9	414.7	311.0	280.9	271.5
25°	571.8	379.7	288.2	260.8	252.1
27.5°	550.7	353.0	269.1	243.4	236.1
30°	525.7	327.0	249.7	226.8	220.9
32.5°	497.3	302.7	232.3	212.2	205.3
35°	464.0	280.5	216.4	198.0	192.1
37.5°	428.6	258.7	201.1	185.2	180.3
40°	389.1	239.6	186.9	172.7	170.3
42.5°	348.5	220.5	174.1	161.9	159.9
45°	312.4	202.2	161.2	152.2	151.5
47.5°	277.4	185.5	149.5	142.5	141.8
50°	246.6	168.2	137.7	133.2	132.8
52.5°	217.1	152.9	126.6	124.1	124.8
55°	190.4	138.4	116.2	114.8	115.5
57.5°	165.8	124.8	105.8	106.1	107.2
60°	143.9	111.0	95.4	96.7	98.1
62.5°	124.8	98.1	85.3	87.4	88.8
65°	106.5	85.3	75.6	77.3	78.4
67.5°	90.2	73.2	65.9	68.0	68.3
70°	74.2	62.1	56.2	58.3	58.3
72.5°	60.3	50.6	46.8	47.9	48.2
75°	46.8	40.2	37.5	38.5	38.8
77.5°	35.4	30.5	28.4	29.5	29.1
80°	24.6	21.5	20.5	20.1	19.8
82.5°	15.3	13.5	12.5	12.8	12.5
85°	7.6	6.6	6.6	6.6	6.6
87.5°	2.4	2.4	2.4	2.4	2.4
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	17.30	18.80	17.66	19.11	19.43	15.80	17.30	16.16	17.61	17.92
	3H	18.89	20.23	19.26	20.56	20.92	17.51	18.86	17.89	19.18	19.55
	4H	19.41	20.67	19.81	21.02	21.40	18.09	19.35	18.49	19.70	20.08
	6H	19.74	20.90	20.15	21.27	21.66	18.44	19.60	18.85	19.97	20.36
	8H	19.81	20.92	20.24	21.31	21.71	18.51	19.62	18.94	20.01	20.42
	12H	19.84	20.90	20.27	21.28	21.71	18.54	19.61	18.98	19.99	20.42
4H	2H	17.61	18.87	18.01	19.22	19.60	16.36	17.62	16.76	17.97	18.35
	3H	19.39	20.44	19.80	20.84	21.24	18.28	19.32	18.69	19.72	20.13
	4H	20.02	20.96	20.45	21.38	21.82	18.97	19.91	19.40	20.33	20.77
	6H	20.45	21.27	20.91	21.72	22.18	19.42	20.24	19.88	20.68	21.14
	8H	20.56	21.32	21.02	21.77	22.24	19.53	20.29	19.99	20.74	21.20
	12H	20.61	21.29	21.09	21.77	22.24	19.58	20.26	20.06	20.74	21.21
8H	4H	20.17	20.93	20.63	21.38	21.85	19.21	19.98	19.67	20.42	20.89
	6H	20.68	21.31	21.17	21.80	22.28	19.75	20.38	20.25	20.87	21.35
	8H	20.82	21.39	21.34	21.90	22.39	19.90	20.46	20.41	20.97	21.46
	12H	20.91	21.41	21.42	21.90	22.47	19.99	20.49	20.50	20.98	21.55
12H	4H	20.17	20.85	20.65	21.33	21.80	19.22	19.91	19.70	20.38	20.86
	6H	20.68	21.24	21.19	21.75	22.24	19.77	20.34	20.28	20.85	21.33
	8H	20.86	21.36	21.37	21.85	22.42	19.96	20.46	20.47	20.95	21.52