

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: P1217315

Luminaire Tested: S122DRP-S290D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217315  
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-S290D930-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

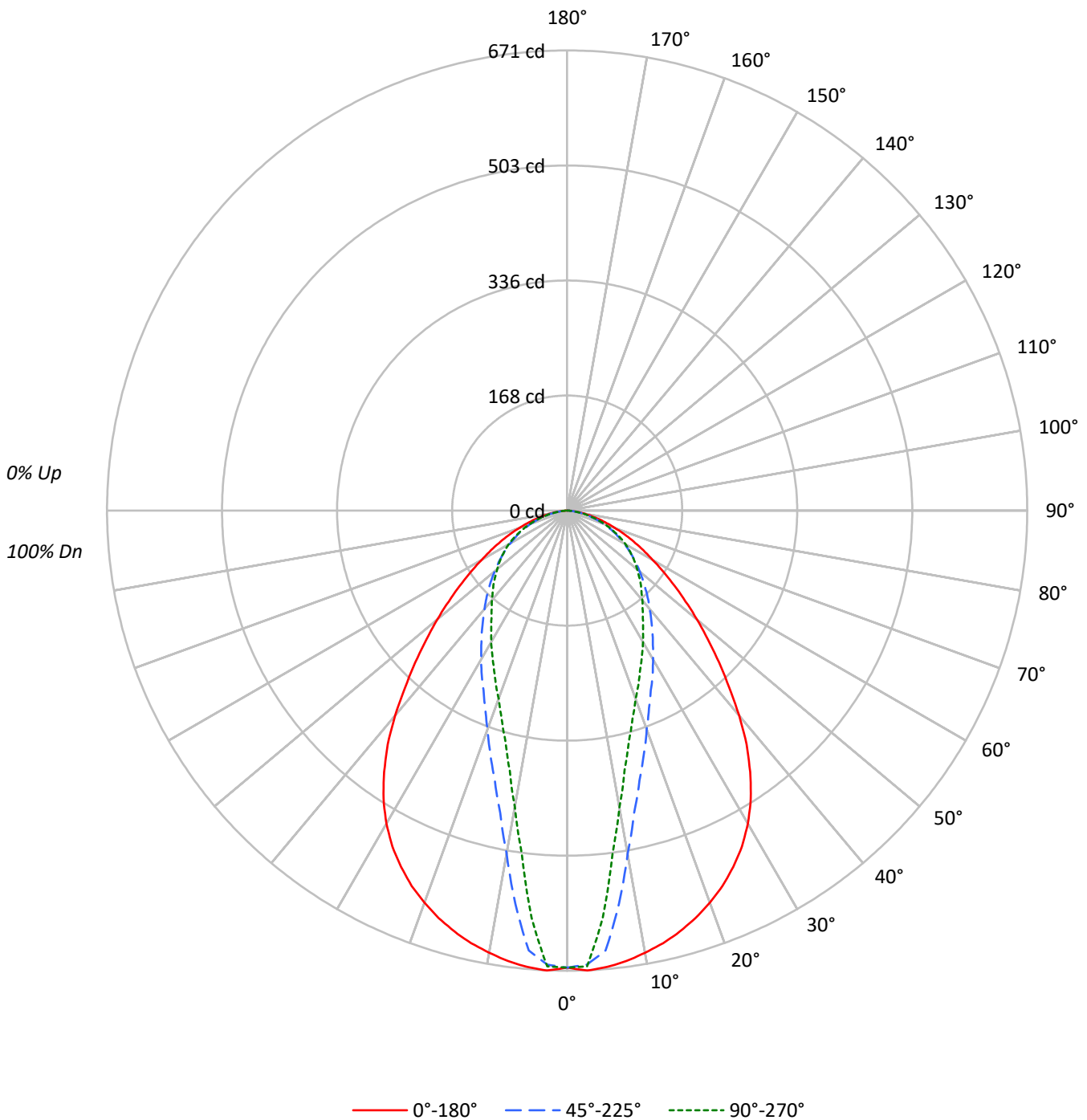
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 895.5 lumens  
Efficiency: N/A  
Efficacy: 71.1 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 (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

TEST NUMBER: P1217315

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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°	12626	12626	12626
5°	12706	12244	11339
10°	12593	9777	8453
15°	12463	7991	6826
20°	12264	6841	5887
25°	11982	6039	5283
30°	11529	5476	4844
35°	10757	5017	4455
40°	9646	4635	4222
45°	8392	4330	4070
50°	7286	4067	3923
55°	6302	3848	3825
60°	5468	3622	3729
65°	4783	3398	3524
70°	4121	3119	3235
75°	3433	2745	2848
80°	2695	2237	2160
85°	1652	1435	1435

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8392 cd/sqm

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CATALOG NUMBER: S122DRP-S290D930-X4F0-XX-UDD-G-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.4	6.4
10°-20°	126.5	14.1
20°-30°	155.2	17.3
30°-40°	160.4	17.9
40°-50°	144.9	16.2
50°-60°	117.4	13.1
60°-70°	82.3	9.2
70°-80°	42.4	4.7
80°-90°	9.0	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°	339.1	37.9
0°-40°	499.5	55.8
0°-60°	761.8	85.1
0°-90°	895.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	895.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	668	667	644	615	596	63
15°	635	536	407	363	348	179
25°	573	381	289	261	253	263
35°	465	281	217	198	193	289
45°	313	203	162	153	152	242
55°	191	139	116	115	116	172
65°	107	86	76	78	79	107
75°	47	40	38	39	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°	666.4	666.4	666.4	666.4	666.4
2.5°	671.3	668.8	662.6	668.5	665.3
5°	668.1	666.7	643.8	614.9	596.2
7.5°	662.6	657.7	578.4	523.9	505.4
10°	654.6	630.2	508.2	457.5	439.4
12.5°	646.2	588.9	451.6	403.9	387.6
15°	635.4	535.7	407.4	363.3	348.0
17.5°	622.9	489.4	372.3	329.9	317.7
20°	608.3	449.5	339.3	302.1	292.0
22.5°	592.3	415.8	311.8	281.6	272.2
25°	573.2	380.6	288.9	261.4	252.7
27.5°	552.0	353.9	269.8	244.0	236.7
30°	527.0	327.8	250.3	227.3	221.4
32.5°	498.5	303.5	232.9	212.7	205.8
35°	465.1	281.2	216.9	198.5	192.6
37.5°	429.7	259.3	201.6	185.6	180.8
40°	390.0	240.2	187.4	173.1	170.7
42.5°	349.4	221.1	174.5	162.3	160.3
45°	313.2	202.7	161.6	152.6	151.9
47.5°	278.1	186.0	149.8	142.9	142.2
50°	247.2	168.6	138.0	133.5	133.1
52.5°	217.6	153.3	126.9	124.4	125.1
55°	190.8	138.7	116.5	115.1	115.8
57.5°	166.2	125.1	106.0	106.4	107.4
60°	144.3	111.2	95.6	97.0	98.4
62.5°	125.1	98.4	85.5	87.6	89.0
65°	106.7	85.5	75.8	77.5	78.6
67.5°	90.4	73.3	66.0	68.1	68.5
70°	74.4	62.2	56.3	58.4	58.4
72.5°	60.5	50.8	46.9	48.0	48.3
75°	46.9	40.3	37.5	38.6	38.9
77.5°	35.5	30.6	28.5	29.5	29.2
80°	24.7	21.6	20.5	20.2	19.8
82.5°	15.3	13.6	12.5	12.9	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	17.31	18.81	17.67	19.12	19.43	15.81	17.31	16.17	17.62	17.93
	3H	18.89	20.24	19.27	20.57	20.93	17.52	18.86	17.90	19.19	19.55
	4H	19.42	20.68	19.82	21.03	21.41	18.10	19.36	18.50	19.71	20.09
	6H	19.74	20.91	20.16	21.28	21.67	18.45	19.61	18.86	19.98	20.37
	8H	19.82	20.93	20.25	21.32	21.72	18.52	19.63	18.95	20.02	20.42
	12H	19.85	20.91	20.28	21.29	21.72	18.55	19.61	18.98	20.00	20.43
4H	2H	17.62	18.88	18.02	19.23	19.61	16.37	17.63	16.77	17.98	18.36
	3H	19.40	20.45	19.81	20.85	21.25	18.28	19.33	18.69	19.73	20.13
	4H	20.03	20.97	20.46	21.39	21.82	18.98	19.92	19.41	20.34	20.78
	6H	20.46	21.28	20.92	21.72	22.18	19.43	20.25	19.89	20.69	21.15
	8H	20.57	21.33	21.03	21.78	22.25	19.53	20.30	20.00	20.74	21.21
	12H	20.62	21.30	21.10	21.78	22.25	19.59	20.27	20.07	20.75	21.22
8H	4H	20.18	20.94	20.64	21.39	21.85	19.22	19.98	19.68	20.43	20.90
	6H	20.68	21.31	21.18	21.81	22.28	19.76	20.39	20.25	20.88	21.36
	8H	20.83	21.40	21.35	21.91	22.40	19.91	20.47	20.42	20.98	21.47
	12H	20.92	21.42	21.43	21.91	22.48	20.00	20.50	20.51	20.99	21.56
12H	4H	20.17	20.86	20.66	21.34	21.81	19.23	19.91	19.71	20.39	20.86
	6H	20.69	21.25	21.20	21.76	22.25	19.78	20.34	20.29	20.85	21.34
	8H	20.87	21.37	21.38	21.86	22.43	19.97	20.47	20.48	20.96	21.53