

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: P1217318

Luminaire Tested: S122DRP-S290D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1217318  
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-S290D950-X4F0-XX-UDD-G-W  
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

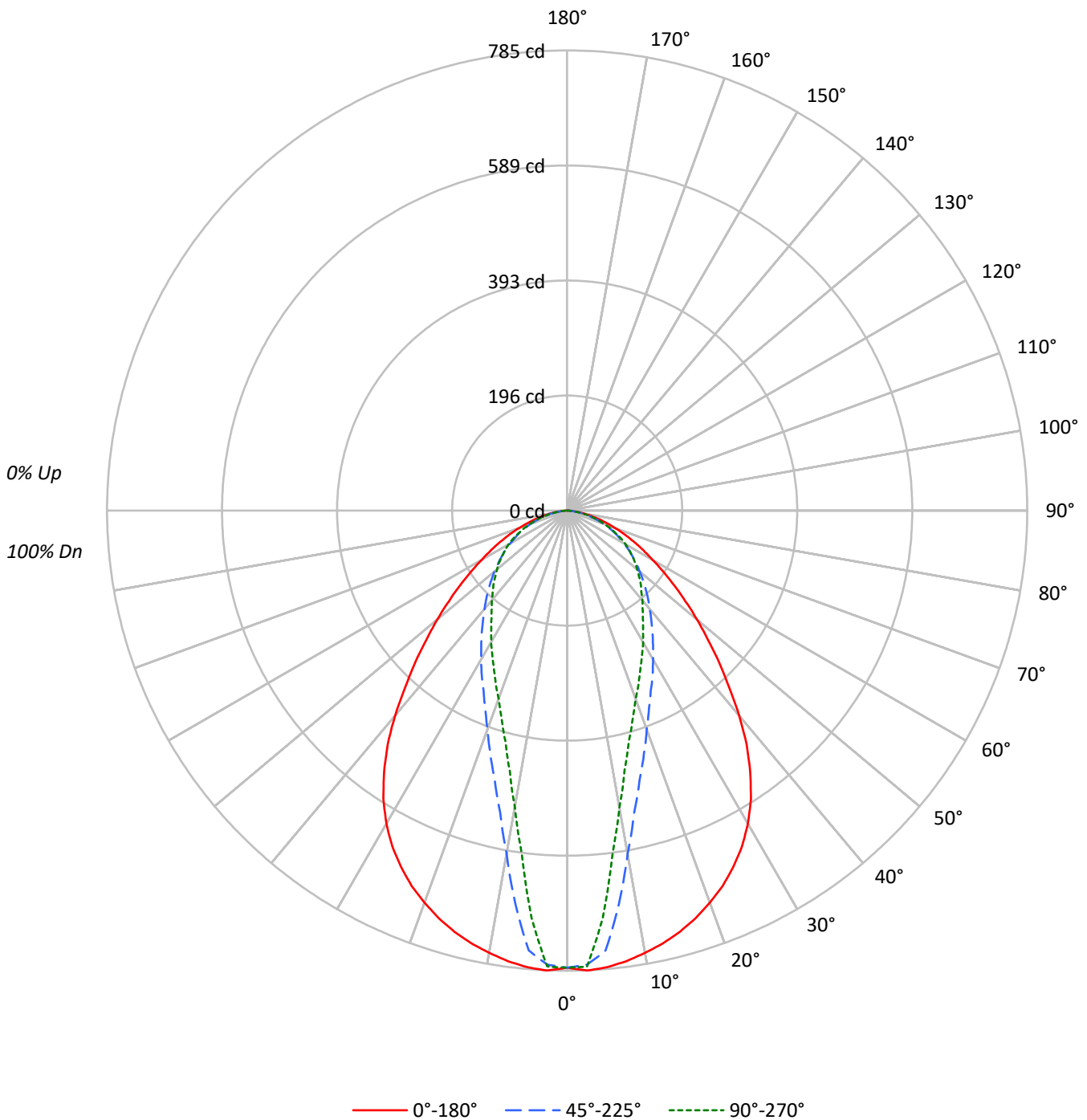
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1047.8 lumens  
Efficiency: N/A  
Efficacy: 83.2 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<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°	14774	14774	14774
5°	14868	14326	13267
10°	14734	11441	9890
15°	14585	9350	7987
20°	14351	8004	6889
25°	14021	7066	6181
30°	13489	6408	5668
35°	12587	5870	5211
40°	11288	5421	4939
45°	9820	5067	4764
50°	8524	4760	4592
55°	7376	4502	4472
60°	6396	4240	4361
65°	5599	3976	4120
70°	4819	3650	3783
75°	4019	3214	3338
80°	3153	2619	2531
85°	1935	1674	1674

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9820 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	6.4
10°-20°	148.0	14.1
20°-30°	181.6	17.3
30°-40°	187.7	17.9
40°-50°	169.5	16.2
50°-60°	137.4	13.1
60°-70°	96.3	9.2
70°-80°	49.7	4.7
80°-90°	10.5	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°	396.8	37.9
0°-40°	584.5	55.8
0°-60°	891.4	85.1
0°-90°	1047.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1047.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	782	780	753	720	698	74
15°	744	627	477	425	407	210
25°	671	445	338	306	296	308
35°	544	329	254	232	225	338
45°	366	237	189	179	178	284
55°	223	162	136	135	135	201
65°	125	100	89	91	92	125
75°	55	47	44	45	46	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°	779.8	779.8	779.8	779.8	779.8
2.5°	785.4	782.6	775.3	782.2	778.5
5°	781.8	780.2	753.3	719.6	697.6
7.5°	775.3	769.6	676.8	613.0	591.4
10°	765.9	737.4	594.7	535.3	514.1
12.5°	756.2	689.0	528.4	472.7	453.5
15°	743.6	626.8	476.7	425.1	407.2
17.5°	728.9	572.7	435.6	386.0	371.8
20°	711.8	525.9	397.0	353.5	341.7
22.5°	693.1	486.5	364.9	329.5	318.5
25°	670.7	445.4	338.0	305.9	295.7
27.5°	645.9	414.1	315.6	285.5	277.0
30°	616.6	383.6	292.9	266.0	259.1
32.5°	583.3	355.1	272.5	248.9	240.8
35°	544.2	329.1	253.8	232.3	225.3
37.5°	502.8	303.4	235.9	217.2	211.5
40°	456.4	281.1	219.2	202.6	199.7
42.5°	408.8	258.7	204.2	190.0	187.5
45°	366.5	237.1	189.1	178.6	177.8
47.5°	325.4	217.6	175.3	167.2	166.4
50°	289.2	197.3	161.5	156.2	155.8
52.5°	254.6	179.4	148.5	145.6	146.4
55°	223.3	162.3	136.3	134.6	135.4
57.5°	194.4	146.4	124.1	124.5	125.7
60°	168.8	130.2	111.9	113.5	115.1
62.5°	146.4	115.1	100.1	102.5	104.1
65°	124.9	100.1	88.7	90.7	91.9
67.5°	105.8	85.8	77.3	79.7	80.1
70°	87.0	72.8	65.9	68.3	68.3
72.5°	70.8	59.4	54.9	56.1	56.5
75°	54.9	47.2	43.9	45.1	45.6
77.5°	41.5	35.8	33.4	34.6	34.2
80°	28.9	25.2	24.0	23.6	23.2
82.5°	17.9	15.9	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	18.22	19.67	19.98	16.35	17.85	16.72	18.17	18.48
	3H	19.44	20.79	19.82	21.11	21.48	18.06	19.41	18.44	19.74	20.10
	4H	19.96	21.23	20.36	21.57	21.95	18.64	19.91	19.04	20.26	20.63
	6H	20.29	21.46	20.70	21.82	22.22	18.99	20.16	19.41	20.53	20.92
	8H	20.36	21.47	20.79	21.86	22.27	19.07	20.18	19.49	20.57	20.97
	12H	20.39	21.45	20.82	21.84	22.26	19.10	20.16	19.53	20.54	20.97
4H	2H	18.16	19.42	18.56	19.77	20.15	16.91	18.18	17.31	18.52	18.90
	3H	19.94	20.99	20.35	21.39	21.79	18.83	19.88	19.24	20.28	20.68
	4H	20.57	21.52	21.01	21.93	22.37	19.52	20.47	19.96	20.88	21.32
	6H	21.01	21.83	21.47	22.27	22.73	19.98	20.80	20.43	21.24	21.70
	8H	21.11	21.88	21.58	22.32	22.79	20.08	20.84	20.54	21.29	21.76
	12H	21.17	21.85	21.65	22.33	22.80	20.13	20.81	20.61	21.29	21.76
8H	4H	20.72	21.49	21.19	21.93	22.40	19.76	20.53	20.23	20.97	21.44
	6H	21.23	21.86	21.73	22.35	22.83	20.30	20.93	20.80	21.42	21.90
	8H	21.38	21.94	21.89	22.45	22.94	20.45	21.02	20.97	21.53	22.02
	12H	21.47	21.96	21.98	22.46	23.02	20.55	21.04	21.06	21.54	22.10
12H	4H	20.72	21.40	21.20	21.88	22.35	19.78	20.46	20.26	20.94	21.41
	6H	21.23	21.80	21.75	22.31	22.80	20.32	20.89	20.84	21.40	21.89
	8H	21.42	21.91	21.93	22.41	22.97	20.51	21.01	21.02	21.50	22.07