

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: P1057875

Luminaire Tested: S122RDRP-S290D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057875  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S290D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

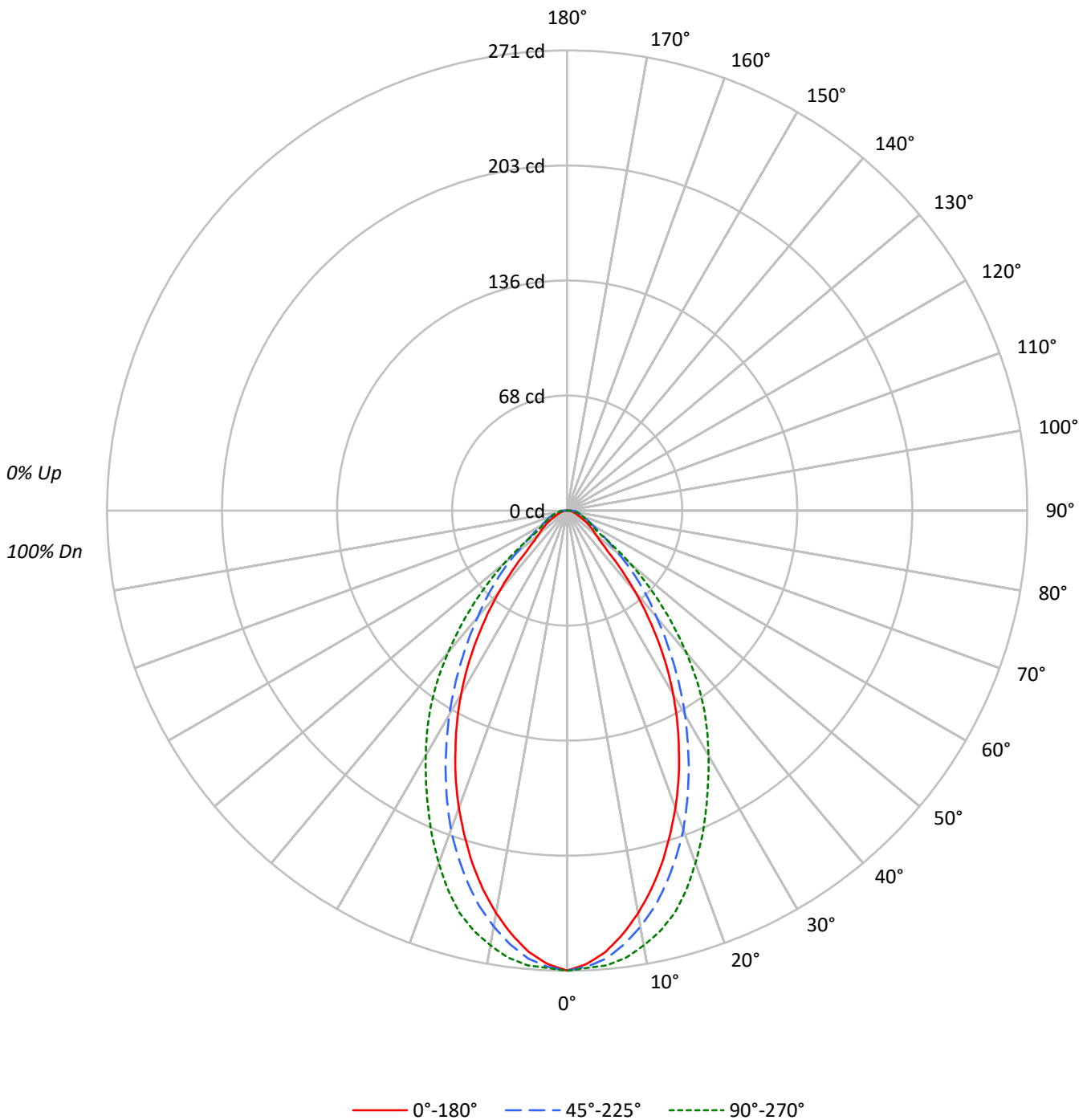
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 328.5 lumens  
Efficiency: N/A  
Efficacy: 26.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	4999	4999	4999
5°	4831	4905	4979
10°	4510	4660	4872
15°	4113	4329	4682
20°	3658	3927	4338
25°	3170	3449	3942
30°	2659	2957	3550
35°	2095	2449	3147
40°	1493	1978	2628
45°	882	1566	2038
50°	634	1131	1387
55°	531	817	698
60°	432	653	594
65°	349	581	546
70°	302	566	523
75°	285	570	513
80°	298	680	553
85°	423	1101	677

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2038 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.8	7.6
10°-20°	63.8	19.4
20°-30°	78.7	24.0
30°-40°	70.0	21.3
40°-50°	44.7	13.6
50°-60°	21.5	6.5
60°-70°	12.6	3.8
70°-80°	8.0	2.4
80°-90°	4.3	1.3
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°	167.4	51.0
0°-40°	237.4	72.3
0°-60°	303.6	92.4
0°-90°	328.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	328.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	271	271	271	271	271	
5°	261	266	265	266	269	24
15°	215	220	227	237	245	60
25°	156	162	169	182	194	71
35°	93	100	109	125	140	58
45°	34	44	60	70	78	28
55°	16	21	25	24	22	15
65°	8	14	13	12	12	8
75°	4	9	8	8	7	4
85°	2	5	5	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	270.9	270.9	270.9	270.9	270.9
2.5°	267.2	271.7	268.8	268.8	269.6
5°	260.8	265.6	264.8	266.4	268.8
7.5°	251.5	256.8	257.6	262.0	265.6
10°	240.7	246.3	248.7	255.2	260.0
12.5°	228.6	234.2	238.7	246.7	253.5
15°	215.3	220.5	226.6	237.0	245.1
17.5°	200.8	207.7	213.7	224.6	233.8
20°	186.3	192.8	200.0	210.5	220.9
22.5°	171.4	177.5	184.7	195.6	207.7
25°	155.7	161.8	169.4	181.5	193.6
27.5°	140.5	146.5	153.7	167.0	179.9
30°	124.8	130.8	138.8	152.5	166.6
32.5°	109.1	115.5	123.6	138.4	153.3
35°	93.0	100.2	108.7	125.2	139.7
37.5°	77.3	84.5	95.0	111.1	124.8
40°	62.0	70.4	82.1	96.6	109.1
42.5°	47.1	56.3	70.8	82.5	93.4
45°	33.8	43.9	60.0	69.6	78.1
47.5°	25.8	33.0	49.5	57.1	63.2
50°	22.1	26.6	39.4	45.1	48.3
52.5°	19.3	23.3	31.4	34.2	34.2
55°	16.5	21.3	25.4	24.5	21.7
57.5°	14.1	19.3	20.9	17.7	18.5
60°	11.7	17.7	17.7	15.7	16.1
62.5°	9.7	16.5	15.3	13.7	14.1
65°	8.0	14.5	13.3	12.1	12.5
67.5°	6.4	12.9	11.7	10.9	10.9
70°	5.6	11.7	10.5	9.7	9.7
72.5°	4.8	10.1	9.3	8.5	8.5
75°	4.0	8.9	8.0	7.6	7.2
77.5°	3.6	7.6	7.2	6.4	6.0
80°	2.8	6.4	6.4	6.0	5.2
82.5°	2.4	5.6	5.6	5.2	4.4
85°	2.0	4.8	5.2	4.4	3.2
87.5°	1.6	4.4	4.4	3.6	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	7.26	8.53	7.62	8.85	9.16	7.05	8.33	7.41	8.64	8.95
	3H	8.49	9.62	8.87	9.95	10.32	8.65	9.79	9.03	10.12	10.48
	4H	8.94	10.00	9.35	10.35	10.74	9.36	10.42	9.77	10.77	11.16
	6H	9.32	10.29	9.73	10.66	11.06	10.01	10.98	10.42	11.35	11.75
	8H	9.47	10.39	9.90	10.78	11.19	10.33	11.26	10.76	11.65	12.05
	12H	9.63	10.51	10.06	10.89	11.32	10.63	11.51	11.06	11.89	12.32
4H	2H	7.81	8.87	8.21	9.22	9.60	7.65	8.70	8.05	9.05	9.44
	3H	9.51	10.38	9.92	10.78	11.19	9.49	10.36	9.91	10.77	11.17
	4H	10.31	11.09	10.74	11.51	11.95	10.36	11.14	10.79	11.56	12.00
	6H	10.94	11.62	11.40	12.06	12.53	11.19	11.87	11.66	12.32	12.78
	8H	11.19	11.82	11.66	12.27	12.74	11.61	12.25	12.08	12.69	13.16
	12H	11.43	11.99	11.92	12.47	12.95	12.01	12.57	12.50	13.05	13.53
8H	4H	10.72	11.35	11.19	11.80	12.27	10.77	11.41	11.24	11.85	12.32
	6H	11.69	12.21	12.19	12.70	13.18	11.85	12.37	12.35	12.86	13.34
	8H	12.17	12.64	12.70	13.16	13.65	12.43	12.90	12.96	13.42	13.91
	12H	12.67	13.08	13.19	13.58	14.15	13.03	13.44	13.55	13.94	14.51
12H	4H	10.79	11.35	11.27	11.83	12.30	10.85	11.41	11.33	11.89	12.36
	6H	11.85	12.32	12.37	12.84	13.33	12.01	12.48	12.53	12.99	13.48
	8H	12.48	12.90	13.00	13.39	13.96	12.72	13.13	13.23	13.62	14.19