

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: P1057831

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057831  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S1005D927-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

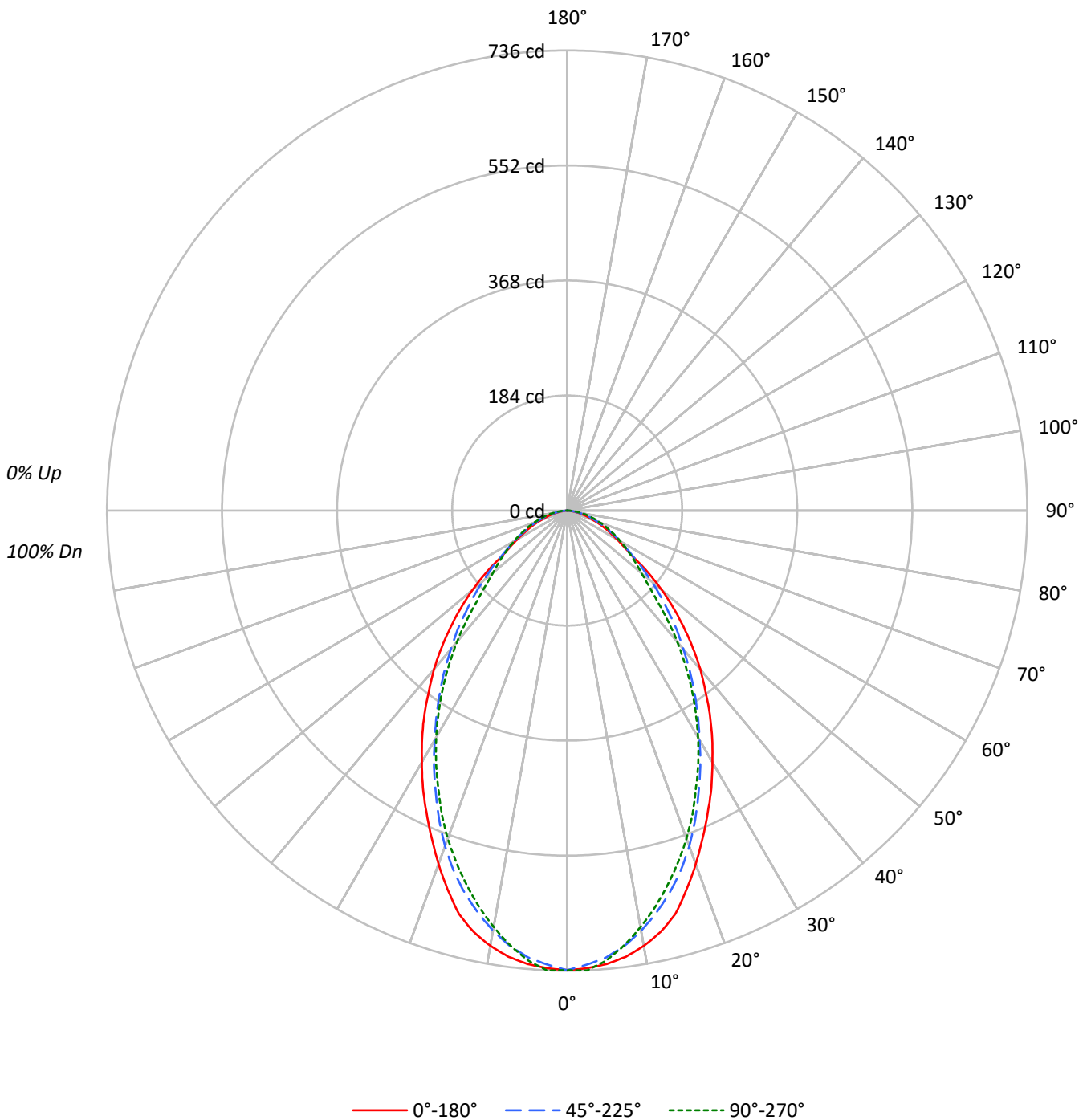
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1116.3 lumens  
Efficiency: N/A  
Efficacy: 26.7 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36

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

	0°	45°	90°
0°	13563	13563	13563
5°	13485	13288	13375
10°	13245	12784	12676
15°	12767	12096	11850
20°	11813	11215	10963
25°	10842	10127	9938
30°	9899	9028	8928
35°	8963	7988	7803
40°	7978	6964	6598
45°	6871	5986	5284
50°	5678	5041	4435
55°	4105	4179	3992
60°	3414	3583	3628
65°	2912	3117	3323
70°	2401	2778	3032
75°	2003	2338	2752
80°	1488	1870	2487
85°	487	995	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6871 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.9	6.1
10°-20°	178.9	16.0
20°-30°	231.6	20.7
30°-40°	227.1	20.3
40°-50°	178.8	16.0
50°-60°	117.2	10.5
60°-70°	71.4	6.4
70°-80°	35.7	3.2
80°-90°	7.7	0.7
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°	478.4	42.9
0°-40°	705.5	63.2
0°-60°	1001.6	89.7
0°-90°	1116.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	728	728	717	722	722	69
15°	668	659	633	625	620	186
25°	532	515	497	495	488	245
35°	398	376	355	354	346	248
45°	263	247	229	213	202	203
55°	128	135	130	125	124	121
65°	67	68	71	75	76	66
75°	28	29	33	38	39	30
85°	2	4	5	8	10	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735.0	735.0	735.0	735.0	735.0
2.5°	732.7	733.8	726.8	733.8	736.2
5°	728.0	728.0	717.4	722.1	722.1
7.5°	719.8	718.6	702.2	702.2	701.1
10°	706.9	702.2	682.3	678.8	676.5
12.5°	690.5	682.3	658.9	653.1	649.6
15°	668.3	658.9	633.2	625.0	620.3
17.5°	635.5	626.2	603.9	594.6	589.9
20°	601.6	587.5	571.1	563.0	558.3
22.5°	566.5	550.1	534.9	529.0	524.3
25°	532.5	515.0	497.4	495.1	488.1
27.5°	499.8	478.7	461.1	460.0	454.1
30°	464.6	442.4	423.7	424.9	419.0
32.5°	431.9	410.8	388.6	389.7	382.7
35°	397.9	375.7	354.6	353.5	346.4
37.5°	362.8	341.8	321.9	317.2	310.2
40°	331.2	310.2	289.1	280.9	273.9
42.5°	297.3	278.6	259.8	247.0	237.6
45°	263.3	247.0	229.4	213.0	202.5
47.5°	230.6	217.7	202.5	182.6	175.6
50°	197.8	188.4	175.6	158.0	154.5
52.5°	163.9	160.3	152.2	140.4	139.3
55°	127.6	134.6	129.9	125.2	124.1
57.5°	107.7	108.8	112.4	111.2	111.2
60°	92.5	92.5	97.1	98.3	98.3
62.5°	78.4	79.6	84.3	86.6	86.6
65°	66.7	67.9	71.4	74.9	76.1
67.5°	55.0	57.3	60.9	64.4	65.5
70°	44.5	46.8	51.5	55.0	56.2
72.5°	36.3	37.5	42.1	45.6	46.8
75°	28.1	29.3	32.8	37.5	38.6
77.5°	19.9	22.2	25.7	29.3	31.6
80°	14.0	15.2	17.6	22.2	23.4
82.5°	8.2	9.4	11.7	15.2	16.4
85°	2.3	3.5	4.7	8.2	10.5
87.5°	0.0	0.0	0.0	2.3	4.7
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	15.18	16.58	15.54	16.89	17.20	15.36	16.76	15.73	17.07	17.39
	3H	16.31	17.56	16.69	17.89	18.25	16.82	18.07	17.20	18.39	18.76
	4H	16.66	17.83	17.07	18.18	18.56	17.36	18.53	17.76	18.88	19.26
	6H	16.85	17.92	17.26	18.29	18.68	17.78	18.85	18.19	19.22	19.61
	8H	16.88	17.89	17.30	18.28	18.69	17.90	18.92	18.33	19.31	19.71
	12H	16.86	17.83	17.29	18.21	18.64	17.99	18.96	18.42	19.34	19.77
4H	2H	15.64	16.80	16.04	17.15	17.53	15.79	16.95	16.19	17.30	17.68
	3H	16.98	17.94	17.39	18.34	18.74	17.46	18.42	17.87	18.82	19.22
	4H	17.42	18.28	17.86	18.70	19.14	18.12	18.98	18.56	19.40	19.84
	6H	17.69	18.44	18.15	18.88	19.35	18.66	19.40	19.12	19.85	20.31
	8H	17.74	18.43	18.20	18.88	19.35	18.83	19.52	19.29	19.97	20.44
	12H	17.73	18.35	18.22	18.83	19.30	18.95	19.56	19.43	20.05	20.52
8H	4H	17.64	18.33	18.10	18.78	19.25	18.27	18.97	18.74	19.41	19.88
	6H	17.98	18.55	18.48	19.05	19.53	18.90	19.47	19.41	19.97	20.45
	8H	18.06	18.57	18.58	19.08	19.57	19.14	19.65	19.66	20.16	20.65
	12H	18.08	18.53	18.59	19.02	19.59	19.32	19.77	19.84	20.27	20.84
12H	4H	17.65	18.26	18.13	18.74	19.22	18.26	18.88	18.74	19.36	19.83
	6H	18.01	18.52	18.53	19.03	19.52	18.90	19.41	19.42	19.92	20.41
	8H	18.12	18.57	18.64	19.07	19.64	19.17	19.62	19.69	20.12	20.69