

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: P1058396

Luminaire Tested: S122RDRP-H485D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058396  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H485D927-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

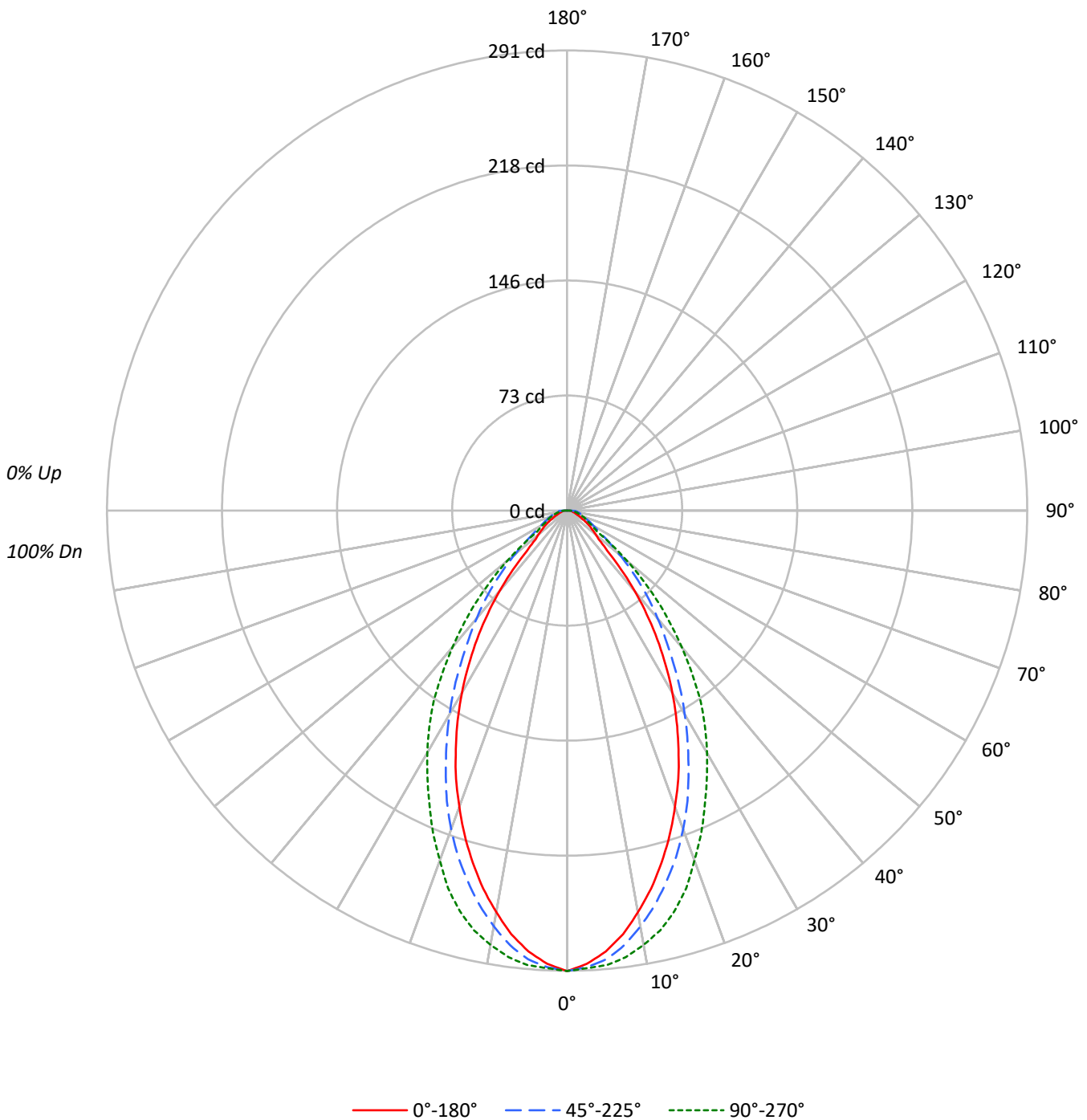
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 351.3 lumens  
Efficiency: N/A  
Efficacy: 20.2 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
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

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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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	5373	5373	5373
5°	5185	5275	5344
10°	4832	5003	5224
15°	4403	4638	5009
20°	3914	4210	4621
25°	3392	3697	4190
30°	2838	3170	3767
35°	2239	2627	3316
40°	1604	2149	2717
45°	939	1696	2103
50°	677	1234	1418
55°	569	881	743
60°	458	712	635
65°	375	633	585
70°	318	610	550
75°	307	649	535
80°	340	797	574
85°	572	1249	805

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2103 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.7	7.6
10°-20°	68.4	19.5
20°-30°	84.0	23.9
30°-40°	74.3	21.1
40°-50°	47.4	13.5
50°-60°	23.1	6.6
60°-70°	13.8	3.9
70°-80°	8.8	2.5
80°-90°	4.8	1.4
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°	179.1	51.0
0°-40°	253.3	72.1
0°-60°	323.9	92.2
0°-90°	351.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	351.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	280	286	285	286	288	26
15°	230	237	243	254	262	64
25°	167	172	182	193	206	76
35°	99	105	117	133	147	62
45°	36	46	65	73	81	30
55°	18	24	27	26	23	16
65°	9	16	14	13	13	9
75°	4	10	9	8	8	5
85°	3	5	6	5	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	291.2	291.2	291.2	291.2	291.2
2.5°	286.9	292.3	289.0	289.0	289.6
5°	279.9	285.8	284.8	285.8	288.5
7.5°	270.2	276.2	277.2	281.5	284.8
10°	257.9	263.8	267.0	274.0	278.8
12.5°	245.0	250.9	255.7	264.9	271.9
15°	230.5	236.9	242.8	253.6	262.2
17.5°	215.4	221.9	229.4	240.2	250.4
20°	199.3	205.2	214.4	224.6	235.3
22.5°	183.7	189.1	198.8	208.5	221.4
25°	166.6	172.5	181.6	192.9	205.8
27.5°	149.9	155.8	164.9	177.8	191.3
30°	133.2	138.6	148.8	162.3	176.8
32.5°	116.0	121.4	132.7	147.2	162.3
35°	99.4	104.8	116.6	132.7	147.2
37.5°	82.7	88.6	102.1	117.1	129.5
40°	66.6	73.6	89.2	102.1	112.8
42.5°	50.5	60.2	76.8	87.6	96.2
45°	36.0	46.2	65.0	73.1	80.6
47.5°	27.4	35.5	53.7	59.6	64.5
50°	23.6	29.0	43.0	47.3	49.4
52.5°	20.4	25.8	34.4	36.0	34.9
55°	17.7	23.6	27.4	25.8	23.1
57.5°	15.0	22.0	22.6	19.3	19.9
60°	12.4	19.9	19.3	16.7	17.2
62.5°	10.2	18.3	16.7	15.0	15.0
65°	8.6	16.1	14.5	13.4	13.4
67.5°	7.0	14.5	12.9	11.8	11.8
70°	5.9	12.9	11.3	10.2	10.2
72.5°	5.4	11.3	10.2	9.1	9.1
75°	4.3	9.7	9.1	8.1	7.5
77.5°	3.8	8.1	8.1	7.5	6.4
80°	3.2	7.0	7.5	6.4	5.4
82.5°	3.2	6.4	6.4	5.9	4.3
85°	2.7	5.4	5.9	5.4	3.8
87.5°	1.6	4.8	4.8	4.3	2.7
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	7.86	9.14	8.23	9.45	9.77	7.39	8.67	7.75	8.98	9.29
	3H	9.04	10.18	9.42	10.51	10.87	8.95	10.09	9.33	10.42	10.78
	4H	9.47	10.53	9.88	10.89	11.27	9.63	10.69	10.04	11.04	11.43
	6H	9.82	10.80	10.24	11.17	11.56	10.28	11.25	10.69	11.63	12.02
	8H	10.01	10.94	10.45	11.33	11.74	10.57	11.49	11.00	11.88	12.29
	12H	10.23	11.12	10.67	11.50	11.93	10.89	11.78	11.32	12.16	12.59
4H	2H	8.36	9.43	8.77	9.78	10.16	7.99	9.05	8.39	9.40	9.78
	3H	10.01	10.89	10.43	11.29	11.70	9.79	10.66	10.20	11.07	11.47
	4H	10.78	11.57	11.22	11.99	12.43	10.63	11.42	11.07	11.84	12.28
	6H	11.39	12.07	11.85	12.52	12.98	11.48	12.16	11.95	12.61	13.08
	8H	11.68	12.32	12.15	12.77	13.24	11.87	12.51	12.34	12.96	13.43
	12H	12.00	12.56	12.48	13.04	13.52	12.32	12.88	12.80	13.36	13.84
8H	4H	11.20	11.84	11.67	12.29	12.76	11.09	11.73	11.56	12.17	12.65
	6H	12.15	12.67	12.66	13.17	13.65	12.19	12.72	12.70	13.21	13.69
	8H	12.69	13.16	13.21	13.68	14.17	12.77	13.24	13.29	13.76	14.25
	12H	13.26	13.67	13.77	14.17	14.74	13.45	13.86	13.96	14.36	14.93
12H	4H	11.27	11.83	11.76	12.32	12.79	11.17	11.74	11.66	12.22	12.69
	6H	12.33	12.80	12.86	13.32	13.81	12.38	12.85	12.90	13.36	13.85
	8H	13.02	13.43	13.53	13.93	14.50	13.09	13.50	13.60	14.00	14.57