

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: P1058405

Luminaire Tested: S122RDRP-H485D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058405  
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-H485D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

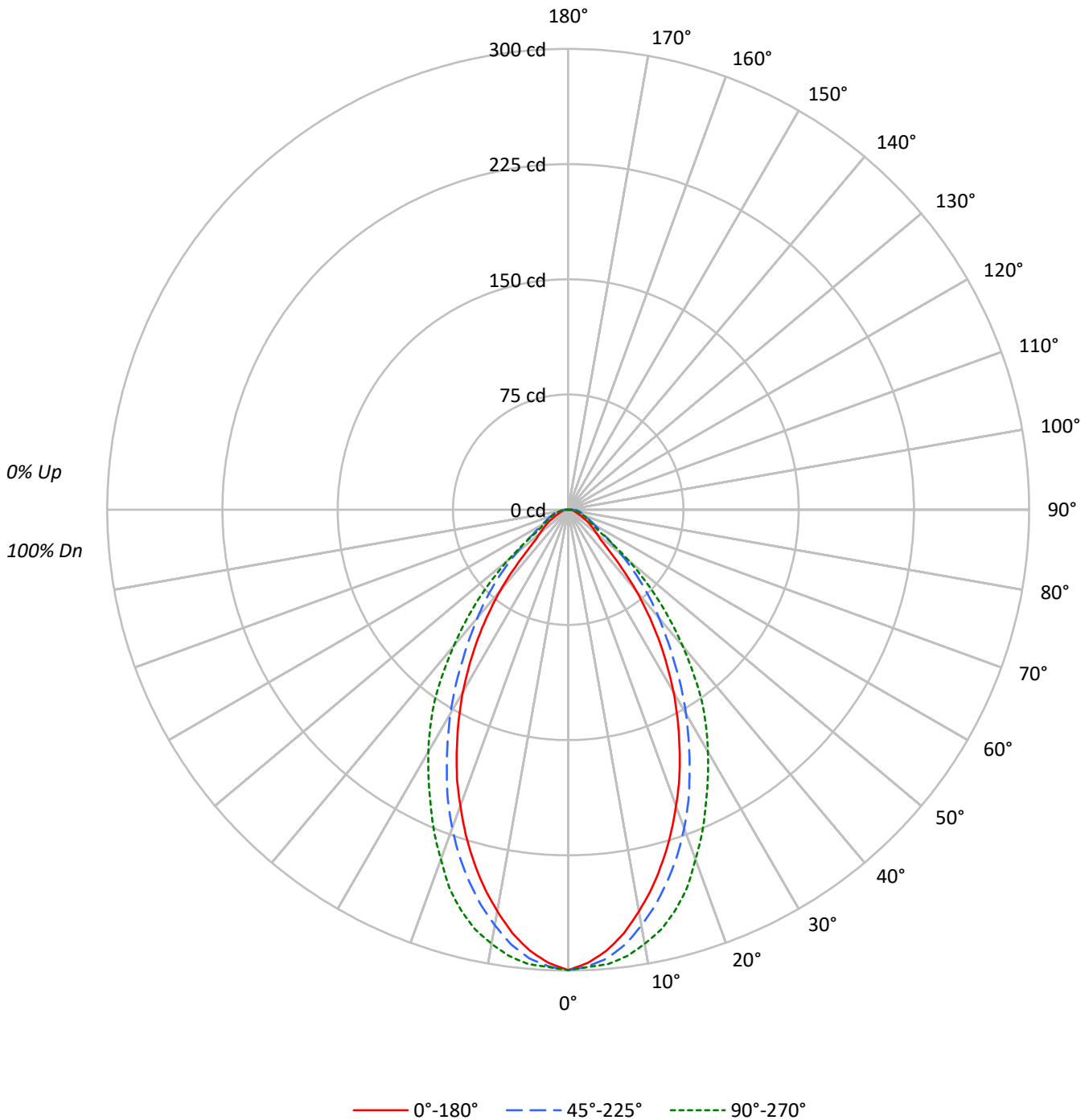
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 361.5 lumens  
Efficiency: N/A  
Efficacy: 20.8 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°	5530	5530	5530
5°	5336	5429	5499
10°	4973	5149	5378
15°	4531	4774	5154
20°	4027	4332	4756
25°	3490	3805	4312
30°	2921	3264	3876
35°	2304	2703	3413
40°	1652	2211	2797
45°	966	1746	2163
50°	698	1269	1461
55°	586	907	766
60°	469	734	653
65°	384	651	603
70°	329	626	566
75°	314	670	549
80°	351	818	584
85°	593	1291	826

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2163 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	7.6
10°-20°	70.3	19.5
20°-30°	86.5	23.9
30°-40°	76.5	21.1
40°-50°	48.8	13.5
50°-60°	23.8	6.6
60°-70°	14.2	3.9
70°-80°	9.0	2.5
80°-90°	5.0	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°	184.3	51.0
0°-40°	260.7	72.1
0°-60°	333.3	92.2
0°-90°	361.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	361.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	288	294	293	294	297	27
15°	237	244	250	261	270	66
25°	171	178	187	198	212	78
35°	102	108	120	137	152	64
45°	37	48	67	75	83	31
55°	18	24	28	26	24	16
65°	9	17	15	14	14	9
75°	4	10	9	8	8	5
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	299.7	299.7	299.7	299.7	299.7
2.5°	295.3	300.8	297.5	297.5	298.0
5°	288.1	294.2	293.1	294.2	296.9
7.5°	278.1	284.2	285.3	289.7	293.1
10°	265.4	271.5	274.8	282.0	287.0
12.5°	252.1	258.2	263.2	272.6	279.8
15°	237.2	243.8	249.9	261.0	269.8
17.5°	221.7	228.4	236.1	247.2	257.7
20°	205.1	211.2	220.6	231.1	242.2
22.5°	189.1	194.6	204.6	214.5	227.8
25°	171.4	177.5	186.9	198.5	211.8
27.5°	154.3	160.4	169.8	183.0	196.8
30°	137.1	142.7	153.2	167.0	181.9
32.5°	119.4	125.0	136.6	151.5	167.0
35°	102.3	107.8	120.0	136.6	151.5
37.5°	85.2	91.2	105.1	120.5	133.3
40°	68.6	75.8	91.8	105.1	116.1
42.5°	52.0	61.9	79.1	90.1	99.0
45°	37.0	47.6	66.9	75.2	82.9
47.5°	28.2	36.5	55.3	61.4	66.4
50°	24.3	29.9	44.2	48.7	50.9
52.5°	21.0	26.5	35.4	37.0	35.9
55°	18.2	24.3	28.2	26.5	23.8
57.5°	15.5	22.7	23.2	19.9	20.5
60°	12.7	20.5	19.9	17.1	17.7
62.5°	10.5	18.8	17.1	15.5	15.5
65°	8.8	16.6	14.9	13.8	13.8
67.5°	7.2	14.9	13.3	12.2	12.2
70°	6.1	13.3	11.6	10.5	10.5
72.5°	5.5	11.6	10.5	9.4	9.4
75°	4.4	10.0	9.4	8.3	7.7
77.5°	3.9	8.3	8.3	7.7	6.6
80°	3.3	7.2	7.7	6.6	5.5
82.5°	3.3	6.6	6.6	6.1	4.4
85°	2.8	5.5	6.1	5.5	3.9
87.5°	1.7	5.0	5.0	4.4	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	7.98	9.26	8.34	9.57	9.89	7.50	8.77	7.86	9.09	9.40
	3H	9.15	10.29	9.53	10.62	10.99	9.06	10.20	9.44	10.53	10.90
	4H	9.58	10.64	9.98	10.99	11.38	9.74	10.80	10.14	11.15	11.54
	6H	9.93	10.90	10.34	11.27	11.67	10.38	11.36	10.80	11.73	12.12
	8H	10.12	11.05	10.55	11.44	11.84	10.67	11.59	11.10	11.99	12.39
	12H	10.34	11.23	10.77	11.61	12.04	10.99	11.87	11.42	12.26	12.69
4H	2H	8.48	9.54	8.88	9.89	10.27	8.09	9.15	8.50	9.50	9.89
	3H	10.12	11.00	10.53	11.40	11.80	9.90	10.77	10.31	11.17	11.58
	4H	10.89	11.67	11.32	12.09	12.54	10.73	11.52	11.17	11.94	12.38
	6H	11.49	12.17	11.95	12.62	13.08	11.58	12.26	12.05	12.71	13.18
	8H	11.79	12.42	12.26	12.87	13.34	11.97	12.61	12.44	13.05	13.53
	12H	12.10	12.66	12.59	13.15	13.62	12.41	12.97	12.90	13.46	13.93
8H	4H	11.30	11.94	11.77	12.39	12.86	11.19	11.83	11.66	12.28	12.75
	6H	12.25	12.77	12.75	13.27	13.75	12.29	12.81	12.79	13.31	13.79
	8H	12.79	13.26	13.32	13.78	14.27	12.87	13.34	13.39	13.86	14.35
	12H	13.36	13.77	13.87	14.27	14.84	13.54	13.96	14.06	14.45	15.02
12H	4H	11.37	11.94	11.86	12.42	12.89	11.28	11.84	11.76	12.32	12.80
	6H	12.43	12.90	12.95	13.42	13.91	12.48	12.95	13.00	13.46	13.95
	8H	13.12	13.53	13.64	14.03	14.60	13.19	13.60	13.70	14.10	14.67