

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: P1057982

Luminaire Tested: S122RDRP-S485D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057982  
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-S485D850-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

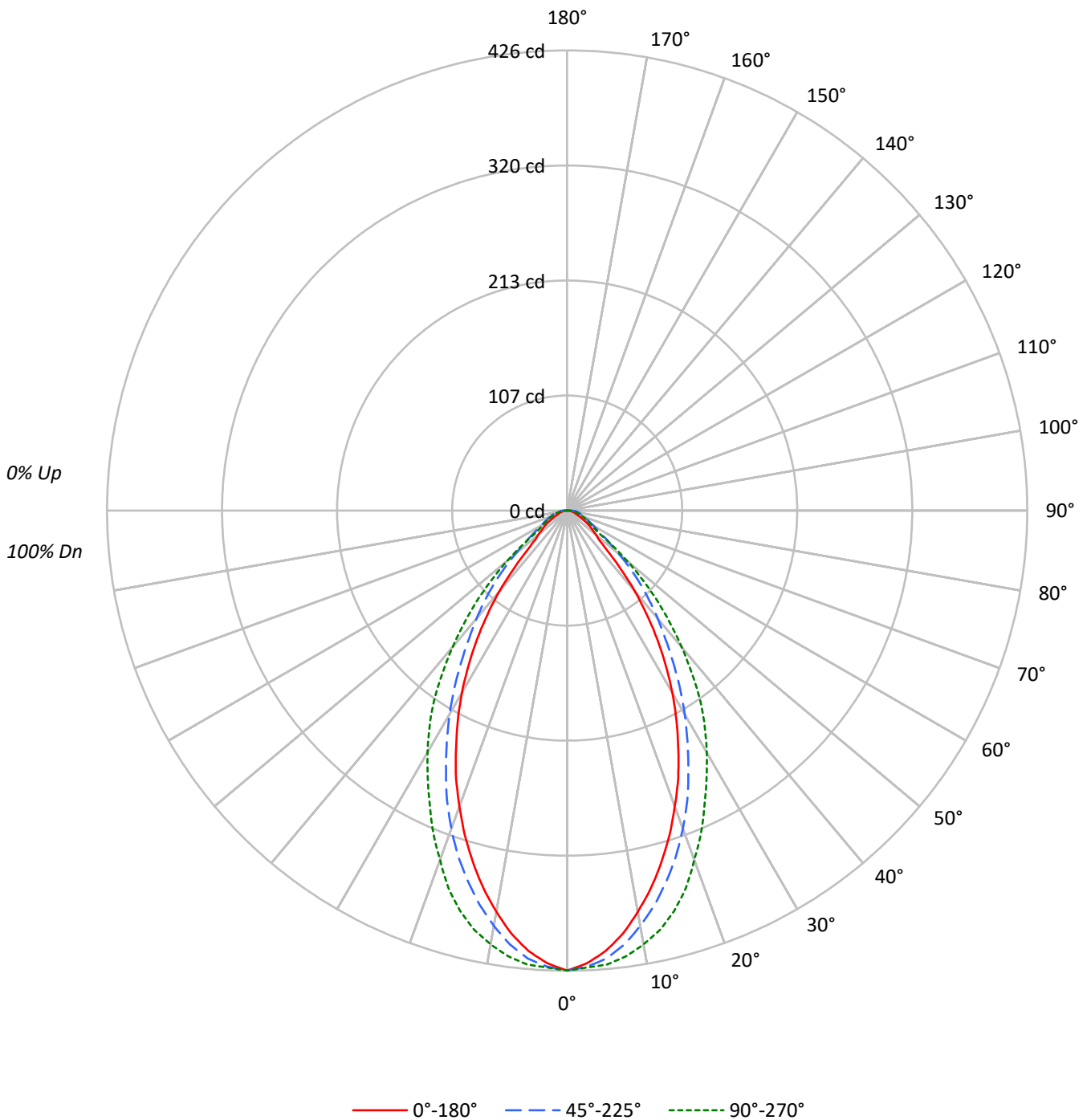
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 513.6 lumens  
Efficiency: N/A  
Efficacy: 26.2 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): 19.6  
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	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°	7857	7857	7857
5°	7581	7711	7813
10°	7066	7315	7639
15°	6438	6784	7322
20°	5722	6154	6757
25°	4958	5406	6126
30°	4151	4636	5506
35°	3273	3841	4848
40°	2346	3141	3975
45°	1373	2479	3074
50°	993	1803	2076
55°	833	1290	1087
60°	668	1044	926
65°	550	926	856
70°	464	890	804
75°	449	955	784
80°	499	1169	839
85°	826	1821	1164

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3074 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.0	7.6
10°-20°	99.9	19.5
20°-30°	122.8	23.9
30°-40°	108.6	21.1
40°-50°	69.3	13.5
50°-60°	33.8	6.6
60°-70°	20.2	3.9
70°-80°	12.9	2.5
80°-90°	7.1	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°	261.8	51.0
0°-40°	370.4	72.1
0°-60°	473.5	92.2
0°-90°	513.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	513.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	426	426	426	426	426	
5°	409	418	416	418	422	38
15°	337	346	355	371	383	94
25°	244	252	266	282	301	111
35°	145	153	170	194	215	90
45°	53	68	95	107	118	44
55°	26	35	40	38	34	23
65°	13	24	21	20	20	13
75°	6	14	13	12	11	7
85°	4	8	9	8	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	425.8	425.8	425.8	425.8	425.8
2.5°	419.5	427.3	422.6	422.6	423.4
5°	409.3	417.9	416.3	417.9	421.8
7.5°	395.1	403.8	405.3	411.6	416.3
10°	377.1	385.7	390.4	400.6	407.7
12.5°	358.2	366.8	373.9	387.3	397.5
15°	337.0	346.4	355.1	370.8	383.3
17.5°	315.0	324.4	335.4	351.1	366.1
20°	291.4	300.1	313.4	328.3	344.1
22.5°	268.6	276.5	290.6	304.8	323.6
25°	243.5	252.2	265.5	282.0	300.9
27.5°	219.2	227.8	241.2	260.0	279.6
30°	194.8	202.7	217.6	237.2	258.4
32.5°	169.7	177.5	194.0	215.2	237.2
35°	145.3	153.2	170.5	194.0	215.2
37.5°	121.0	129.6	149.2	171.2	189.3
40°	97.4	107.6	130.4	149.2	165.0
42.5°	73.8	88.0	112.3	128.0	140.6
45°	52.6	67.6	95.0	106.8	117.8
47.5°	40.1	51.8	78.6	87.2	94.3
50°	34.6	42.4	62.8	69.1	72.3
52.5°	29.8	37.7	50.3	52.6	51.1
55°	25.9	34.6	40.1	37.7	33.8
57.5°	22.0	32.2	33.0	28.3	29.1
60°	18.1	29.1	28.3	24.4	25.1
62.5°	14.9	26.7	24.4	22.0	22.0
65°	12.6	23.6	21.2	19.6	19.6
67.5°	10.2	21.2	18.9	17.3	17.3
70°	8.6	18.9	16.5	14.9	14.9
72.5°	7.9	16.5	14.9	13.4	13.4
75°	6.3	14.1	13.4	11.8	11.0
77.5°	5.5	11.8	11.8	11.0	9.4
80°	4.7	10.2	11.0	9.4	7.9
82.5°	4.7	9.4	9.4	8.6	6.3
85°	3.9	7.9	8.6	7.9	5.5
87.5°	2.4	7.1	7.1	6.3	3.9
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	9.19	10.47	9.55	10.78	11.10	8.72	10.00	9.09	10.31	10.63
	3H	10.37	11.50	10.75	11.83	12.20	10.28	11.42	10.66	11.75	12.11
	4H	10.80	11.86	11.20	12.21	12.59	10.97	12.03	11.37	12.38	12.76
	6H	11.14	12.12	11.56	12.49	12.88	11.61	12.59	12.03	12.96	13.35
	8H	11.34	12.26	11.77	12.65	13.06	11.90	12.83	12.33	13.22	13.62
	12H	11.55	12.44	11.98	12.82	13.25	12.22	13.11	12.65	13.49	13.92
4H	2H	9.69	10.75	10.09	11.10	11.49	9.32	10.38	9.72	10.73	11.12
	3H	11.34	12.21	11.75	12.62	13.02	11.12	11.99	11.53	12.40	12.80
	4H	12.10	12.88	12.53	13.30	13.75	11.96	12.75	12.40	13.17	13.61
	6H	12.70	13.38	13.16	13.83	14.30	12.81	13.50	13.28	13.94	14.41
	8H	13.00	13.64	13.47	14.08	14.55	13.20	13.84	13.67	14.29	14.76
	12H	13.31	13.87	13.80	14.36	14.83	13.64	14.21	14.13	14.69	15.16
8H	4H	12.52	13.16	12.99	13.60	14.07	12.42	13.05	12.89	13.50	13.97
	6H	13.47	13.99	13.97	14.49	14.97	13.52	14.05	14.03	14.54	15.02
	8H	14.01	14.48	14.53	15.00	15.49	14.10	14.57	14.62	15.09	15.58
	12H	14.58	14.99	15.09	15.49	16.06	14.77	15.19	15.29	15.68	16.25
12H	4H	12.59	13.15	13.08	13.64	14.11	12.50	13.06	12.99	13.55	14.02
	6H	13.65	14.12	14.17	14.63	15.13	13.71	14.18	14.23	14.69	15.19
	8H	14.34	14.75	14.86	15.25	15.82	14.42	14.83	14.93	15.33	15.90