

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: P1058001

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058001  
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-S485D930-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, 90 CRI LEDS  
Ballast/Driver: -

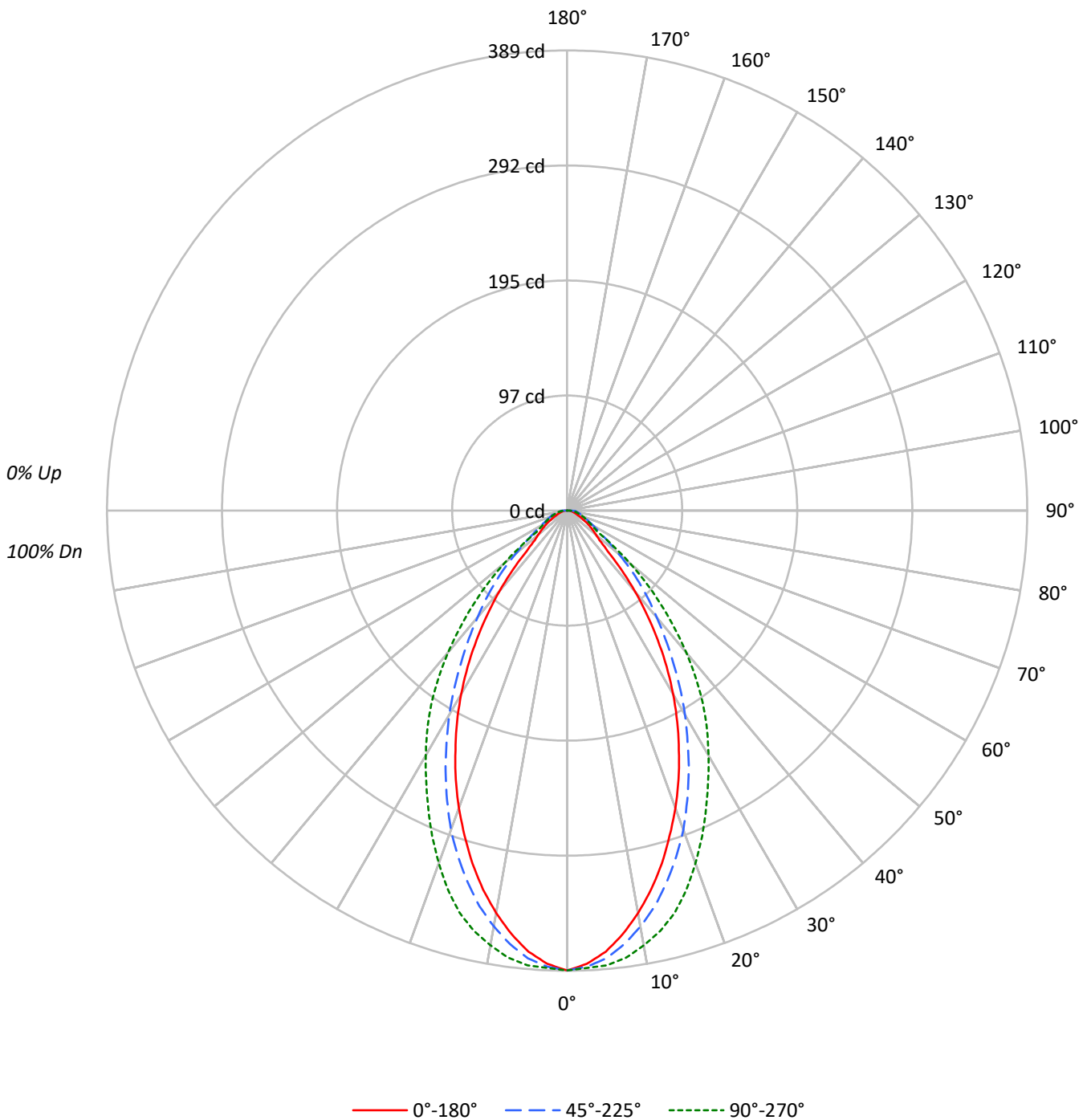
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 471.5 lumens  
Efficiency: N/A  
Efficacy: 24.1 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): 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	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°	7172	7172	7172
5°	6933	7039	7146
10°	6472	6687	6991
15°	5903	6212	6719
20°	5251	5638	6227
25°	4550	4952	5656
30°	3814	4246	5095
35°	3005	3512	4514
40°	2141	2838	3770
45°	1266	2247	2923
50°	913	1625	1989
55°	762	1171	1004
60°	616	937	853
65°	506	834	782
70°	437	809	750
75°	414	827	741
80°	425	978	797
85°	614	1588	974

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2923 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.7	7.6
10°-20°	91.6	19.4
20°-30°	113.0	24.0
30°-40°	100.5	21.3
40°-50°	64.2	13.6
50°-60°	30.8	6.5
60°-70°	18.1	3.8
70°-80°	11.5	2.4
80°-90°	6.2	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°	240.2	51.0
0°-40°	340.7	72.3
0°-60°	435.7	92.4
0°-90°	471.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	471.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	374	381	380	382	386	35
15°	309	316	325	340	352	86
25°	224	232	243	260	278	102
35°	133	144	156	180	200	83
45°	48	63	86	100	112	41
55°	24	31	36	35	31	21
65°	12	21	19	17	18	12
75°	6	13	12	11	10	6
85°	3	7	8	6	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	388.7	388.7	388.7	388.7	388.7
2.5°	383.5	389.9	385.8	385.8	387.0
5°	374.3	381.2	380.0	382.4	385.8
7.5°	361.0	368.5	369.6	376.0	381.2
10°	345.4	353.5	356.9	366.2	373.1
12.5°	328.1	336.1	342.5	354.1	363.9
15°	309.0	316.5	325.2	340.2	351.7
17.5°	288.2	298.0	306.7	322.3	335.6
20°	267.4	276.7	287.1	302.1	317.1
22.5°	246.0	254.7	265.1	280.7	298.0
25°	223.5	232.2	243.2	260.5	277.8
27.5°	201.6	210.2	220.6	239.7	258.2
30°	179.0	187.7	199.3	218.9	239.1
32.5°	156.5	165.8	177.3	198.7	220.1
35°	133.4	143.8	155.9	179.6	200.4
37.5°	110.9	121.3	136.3	159.4	179.0
40°	88.9	101.1	117.8	138.6	156.5
42.5°	67.6	80.9	101.7	118.4	134.0
45°	48.5	63.0	86.1	99.9	112.0
47.5°	37.0	47.4	71.0	82.0	90.7
50°	31.8	38.1	56.6	64.7	69.3
52.5°	27.7	33.5	45.1	49.1	49.1
55°	23.7	30.6	36.4	35.2	31.2
57.5°	20.2	27.7	30.0	25.4	26.6
60°	16.7	25.4	25.4	22.5	23.1
62.5°	13.9	23.7	21.9	19.6	20.2
65°	11.6	20.8	19.1	17.3	17.9
67.5°	9.2	18.5	16.7	15.6	15.6
70°	8.1	16.7	15.0	13.9	13.9
72.5°	6.9	14.4	13.3	12.1	12.1
75°	5.8	12.7	11.6	11.0	10.4
77.5°	5.2	11.0	10.4	9.2	8.7
80°	4.0	9.2	9.2	8.7	7.5
82.5°	3.5	8.1	8.1	7.5	6.4
85°	2.9	6.9	7.5	6.4	4.6
87.5°	2.3	6.4	6.4	5.2	3.5
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	8.51	9.79	8.88	10.10	10.42	8.31	9.58	8.67	9.89	10.21
	3H	9.74	10.88	10.12	11.21	11.57	9.90	11.04	10.28	11.37	11.73
	4H	10.20	11.25	10.60	11.61	11.99	10.62	11.68	11.02	12.03	12.41
	6H	10.57	11.55	10.99	11.92	12.31	11.27	12.24	11.69	12.62	13.01
	8H	10.73	11.65	11.16	12.04	12.45	11.60	12.52	12.03	12.92	13.32
	12H	10.89	11.77	11.32	12.16	12.59	11.90	12.78	12.33	13.17	13.60
4H	2H	9.06	10.12	9.47	10.47	10.86	8.90	9.96	9.30	10.31	10.69
	3H	10.76	11.63	11.17	12.03	12.43	10.74	11.61	11.15	12.02	12.42
	4H	11.55	12.33	11.99	12.75	13.20	11.61	12.40	12.05	12.82	13.26
	6H	12.19	12.87	12.66	13.32	13.78	12.46	13.14	12.92	13.58	14.05
	8H	12.44	13.08	12.91	13.53	14.00	12.89	13.52	13.36	13.97	14.44
	12H	12.69	13.25	13.18	13.74	14.21	13.29	13.85	13.77	14.33	14.81
8H	4H	11.97	12.60	12.44	13.05	13.52	12.03	12.66	12.50	13.11	13.58
	6H	12.95	13.47	13.45	13.96	14.44	13.12	13.64	13.62	14.13	14.61
	8H	13.44	13.91	13.96	14.42	14.91	13.71	14.18	14.23	14.69	15.19
	12H	13.94	14.35	14.46	14.85	15.42	14.32	14.73	14.83	15.22	15.79
12H	4H	12.04	12.60	12.52	13.08	13.56	12.11	12.67	12.59	13.15	13.62
	6H	13.11	13.58	13.64	14.10	14.59	13.28	13.75	13.80	14.26	14.76
	8H	13.75	14.17	14.27	14.66	15.23	14.00	14.41	14.51	14.90	15.47