

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058243

Luminaire Tested: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058243  
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: S122RDR-H1005D930-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: -

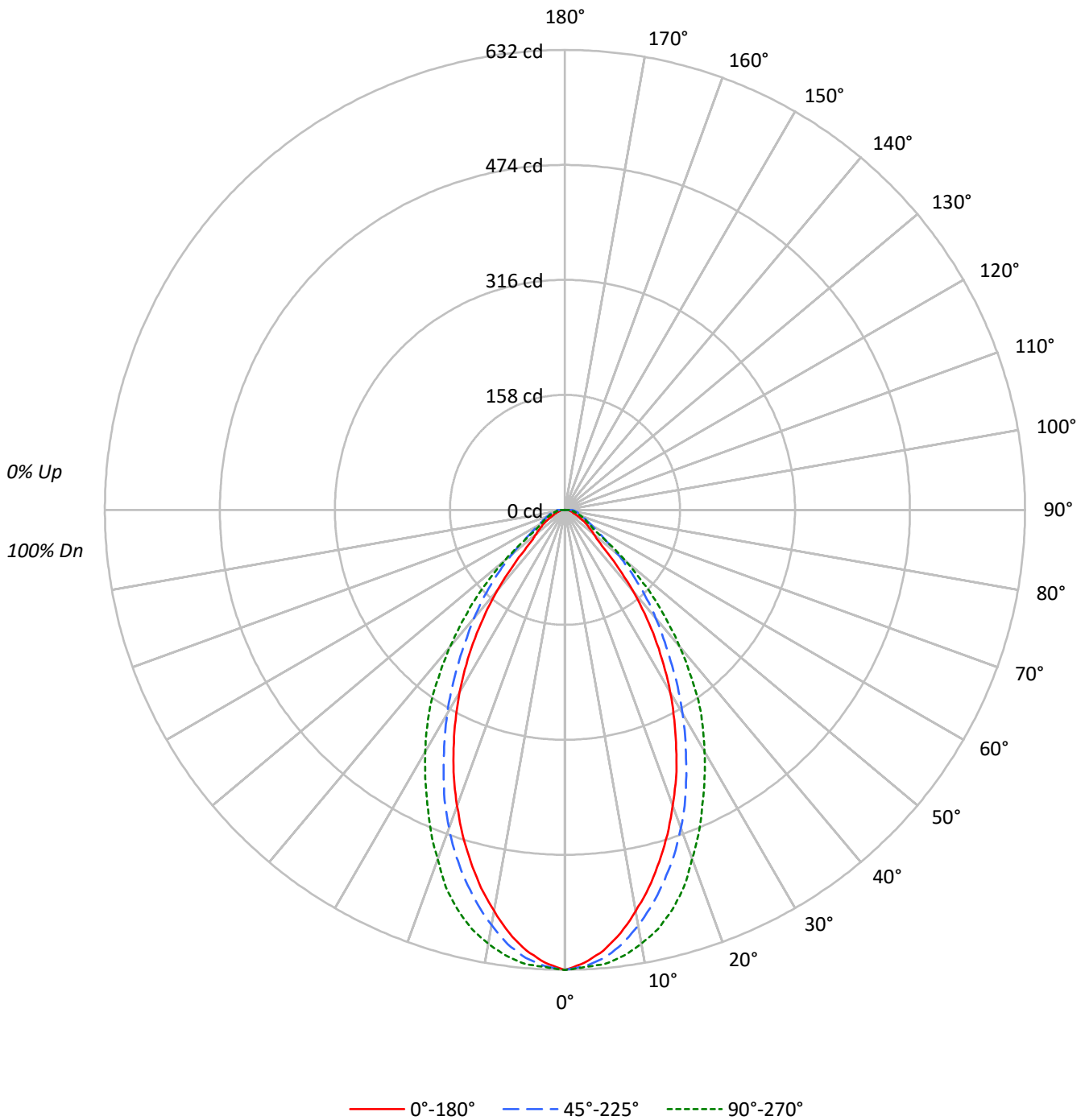
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 762.8 lumens  
Efficiency: N/A  
Efficacy: 20.9 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): 36.5  
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

TEST NUMBER: P1058243

CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1058243

CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

**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°	11667	11667	11667
5°	11258	11453	11605
10°	10493	10864	11345
15°	9561	10073	10876
20°	8499	9141	10034
25°	7364	8028	9097
30°	6164	6886	8178
35°	4861	5704	7202
40°	3486	4666	5902
45°	2041	3685	4567
50°	1473	2678	3080
55°	1239	1914	1615
60°	989	1550	1377
65°	816	1375	1275
70°	691	1322	1198
75°	663	1412	1162
80°	744	1732	1243
85°	1228	2710	1736

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4567 cd/sqm



TEST NUMBER: P1058243

CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.0	7.6
10°-20°	148.4	19.5
20°-30°	182.4	23.9
30°-40°	161.3	21.1
40°-50°	102.9	13.5
50°-60°	50.2	6.6
60°-70°	29.9	3.9
70°-80°	19.1	2.5
80°-90°	10.5	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°	388.8	51.0
0°-40°	550.1	72.1
0°-60°	703.3	92.2
0°-90°	762.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	762.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	608	621	618	621	626	57
15°	500	514	527	551	569	140
25°	362	374	394	419	447	166
35°	216	228	253	288	320	134
45°	78	100	141	159	175	66
55°	38	51	60	56	50	34
65°	19	35	32	29	29	19
75°	9	21	20	18	16	10
85°	6	12	13	12	8	5
90°	0	0	0	0	0	

TEST NUMBER: P1058243

CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	632.3	632.3	632.3	632.3	632.3
2.5°	623.0	634.7	627.7	627.7	628.8
5°	607.8	620.7	618.3	620.7	626.5
7.5°	586.8	599.7	602.0	611.3	618.3
10°	560.0	572.8	579.8	595.0	605.5
12.5°	532.0	544.8	555.3	575.2	590.3
15°	500.5	514.5	527.3	550.7	569.3
17.5°	467.8	481.8	498.2	521.5	543.7
20°	432.8	445.7	465.5	487.7	511.0
22.5°	399.0	410.7	431.7	452.7	480.7
25°	361.7	374.5	394.3	418.8	446.8
27.5°	325.5	338.3	358.2	386.2	415.3
30°	289.3	301.0	323.2	352.3	383.8
32.5°	252.0	263.7	288.2	319.7	352.3
35°	215.8	227.5	253.2	288.2	319.7
37.5°	179.7	192.5	221.7	254.3	281.2
40°	144.7	159.8	193.7	221.7	245.0
42.5°	109.7	130.7	166.8	190.2	208.8
45°	78.2	100.3	141.2	158.7	175.0
47.5°	59.5	77.0	116.7	129.5	140.0
50°	51.3	63.0	93.3	102.7	107.3
52.5°	44.3	56.0	74.7	78.2	75.8
55°	38.5	51.3	59.5	56.0	50.2
57.5°	32.7	47.8	49.0	42.0	43.2
60°	26.8	43.2	42.0	36.2	37.3
62.5°	22.2	39.7	36.2	32.7	32.7
65°	18.7	35.0	31.5	29.2	29.2
67.5°	15.2	31.5	28.0	25.7	25.7
70°	12.8	28.0	24.5	22.2	22.2
72.5°	11.7	24.5	22.2	19.8	19.8
75°	9.3	21.0	19.8	17.5	16.3
77.5°	8.2	17.5	17.5	16.3	14.0
80°	7.0	15.2	16.3	14.0	11.7
82.5°	7.0	14.0	14.0	12.8	9.3
85°	5.8	11.7	12.8	11.7	8.2
87.5°	3.5	10.5	10.5	9.3	5.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058243  
 CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-SVL-S

**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	10.56	11.84	10.93	12.15	12.47	10.09	11.37	10.46	11.68	12.00
	3H	11.74	12.88	12.12	13.21	13.57	11.66	12.79	12.04	13.12	13.49
	4H	12.17	13.23	12.57	13.58	13.96	12.34	13.40	12.74	13.75	14.13
	6H	12.51	13.49	12.93	13.86	14.26	12.98	13.96	13.40	14.33	14.73
	8H	12.71	13.64	13.14	14.03	14.43	13.27	14.20	13.70	14.59	14.99
	12H	12.93	13.81	13.36	14.20	14.63	13.59	14.48	14.02	14.86	15.29
4H	2H	11.06	12.13	11.47	12.48	12.86	10.69	11.75	11.09	12.10	12.49
	3H	12.71	13.59	13.12	13.99	14.39	12.49	13.37	12.91	13.77	14.18
	4H	13.47	14.26	13.91	14.68	15.12	13.33	14.12	13.77	14.54	14.98
	6H	14.08	14.76	14.54	15.20	15.67	14.19	14.87	14.65	15.31	15.78
	8H	14.38	15.01	14.85	15.46	15.93	14.58	15.21	15.05	15.66	16.13
	12H	14.69	15.25	15.18	15.74	16.21	15.01	15.58	15.50	16.06	16.53
8H	4H	13.89	14.53	14.36	14.98	15.45	13.79	14.42	14.26	14.87	15.34
	6H	14.84	15.36	15.35	15.86	16.34	14.90	15.42	15.40	15.92	16.40
	8H	15.39	15.86	15.91	16.37	16.87	15.47	15.94	15.99	16.46	16.95
	12H	15.96	16.37	16.47	16.86	17.44	16.15	16.56	16.66	17.05	17.63
12H	4H	13.96	14.52	14.45	15.01	15.48	13.87	14.43	14.36	14.92	15.39
	6H	15.03	15.50	15.55	16.01	16.50	15.08	15.55	15.60	16.07	16.56
	8H	15.72	16.13	16.23	16.63	17.20	15.79	16.21	16.31	16.70	17.27