

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: P1058262

Luminaire Tested: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058262  
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-H1005D940-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

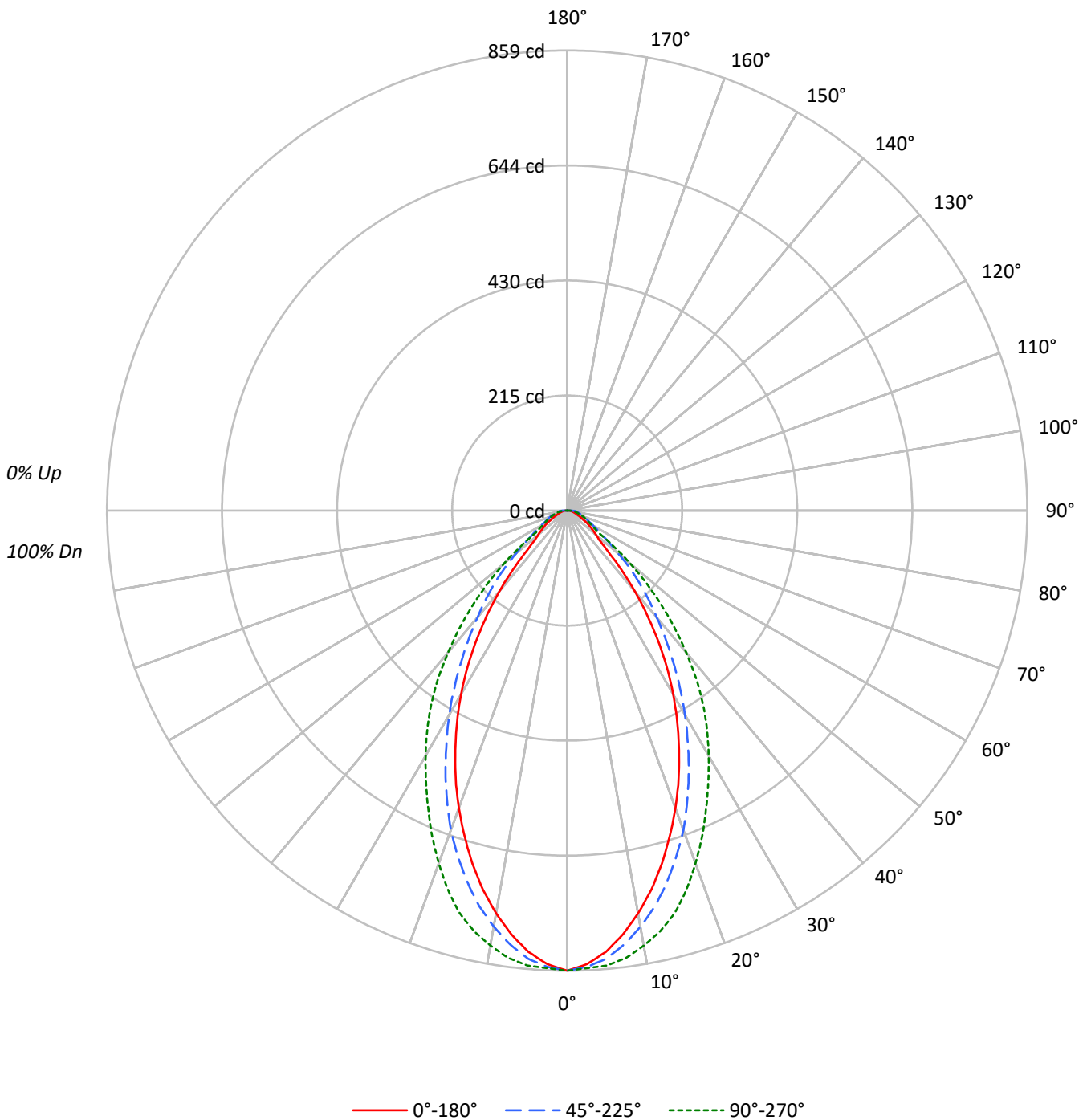
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1041.8 lumens  
Efficiency: N/A  
Efficacy: 28.5 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): 36.5  
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

TEST NUMBER: P1058262

CATALOG NUMBER: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1058262

CATALOG NUMBER: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

**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	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					100			
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89					89			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54					54			
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42					42			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39					39			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15849	15849	15849
5°	15318	15554	15791
10°	14300	14778	15447
15°	13044	13726	14847
20°	11603	12456	13757
25°	10056	10939	12497
30°	8429	9382	11257
35°	6641	7763	9975
40°	4733	6270	8330
45°	2797	4963	6461
50°	2015	3591	4395
55°	1683	2587	2217
60°	1365	2074	1882
65°	1113	1838	1729
70°	966	1791	1651
75°	913	1818	1640
80°	946	2168	1764
85°	1355	3515	2160

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6461 cd/sqm



TEST NUMBER: P1058262

CATALOG NUMBER: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.8	7.6
10°-20°	202.4	19.4
20°-30°	249.7	24.0
30°-40°	222.1	21.3
40°-50°	141.8	13.6
50°-60°	68.1	6.5
60°-70°	40.0	3.8
70°-80°	25.5	2.4
80°-90°	13.6	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°	530.8	51.0
0°-40°	752.9	72.3
0°-60°	962.7	92.4
0°-90°	1041.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1041.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	827	842	840	845	852	77
15°	683	699	718	752	777	190
25°	494	513	537	576	614	226
35°	295	318	345	397	443	183
45°	107	139	190	221	248	90
55°	52	68	80	78	69	47
65°	26	46	42	38	40	26
75°	13	28	26	24	23	14
85°	6	15	17	14	10	6
90°	0	0	0	0	0	



TEST NUMBER: P1058262

CATALOG NUMBER: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	858.9	858.9	858.9	858.9	858.9
2.5°	847.4	861.4	852.5	852.5	855.0
5°	827.0	842.3	839.7	844.8	852.5
7.5°	797.6	814.2	816.8	830.8	842.3
10°	763.2	781.0	788.7	809.1	824.4
12.5°	724.9	742.7	756.8	782.3	804.0
15°	682.8	699.3	718.5	751.7	777.2
17.5°	636.8	658.5	677.6	712.1	741.5
20°	590.9	611.3	634.3	667.4	700.6
22.5°	543.7	562.8	585.8	620.2	658.5
25°	493.9	513.0	537.3	575.6	613.8
27.5°	445.4	464.5	487.5	529.6	570.5
30°	395.6	414.8	440.3	483.7	528.3
32.5°	345.8	366.3	391.8	439.0	486.2
35°	294.8	317.8	344.6	396.9	442.8
37.5°	245.0	268.0	301.2	352.2	395.6
40°	196.5	223.3	260.3	306.3	345.8
42.5°	149.3	178.7	224.6	261.6	296.1
45°	107.2	139.1	190.2	220.8	247.6
47.5°	81.7	104.6	157.0	181.2	200.4
50°	70.2	84.2	125.1	142.9	153.1
52.5°	61.3	74.0	99.5	108.5	108.5
55°	52.3	67.6	80.4	77.8	68.9
57.5°	44.7	61.3	66.4	56.2	58.7
60°	37.0	56.2	56.2	49.8	51.0
62.5°	30.6	52.3	48.5	43.4	44.7
65°	25.5	45.9	42.1	38.3	39.6
67.5°	20.4	40.8	37.0	34.5	34.5
70°	17.9	37.0	33.2	30.6	30.6
72.5°	15.3	31.9	29.4	26.8	26.8
75°	12.8	28.1	25.5	24.2	23.0
77.5°	11.5	24.2	23.0	20.4	19.1
80°	8.9	20.4	20.4	19.1	16.6
82.5°	7.7	17.9	17.9	16.6	14.0
85°	6.4	15.3	16.6	14.0	10.2
87.5°	5.1	14.0	14.0	11.5	7.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058262  
 CATALOG NUMBER: S122RDRP-H1005D940-X4F0-XX-UDD-SVL-W

**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	11.28	12.55	11.64	12.87	13.18	11.07	12.34	11.43	12.66	12.97
	3H	12.51	13.64	12.89	13.97	14.34	12.66	13.79	13.04	14.12	14.49
	4H	12.96	14.02	13.36	14.37	14.75	13.37	14.43	13.78	14.78	15.17
	6H	13.34	14.31	13.75	14.68	15.08	14.02	15.00	14.44	15.37	15.76
	8H	13.49	14.41	13.92	14.81	15.21	14.35	15.27	14.78	15.66	16.07
	12H	13.65	14.53	14.08	14.92	15.35	14.65	15.53	15.08	15.91	16.34
4H	2H	11.82	12.88	12.23	13.23	13.62	11.66	12.72	12.06	13.07	13.45
	3H	13.52	14.39	13.93	14.79	15.20	13.49	14.36	13.91	14.77	15.17
	4H	14.31	15.09	14.75	15.51	15.96	14.37	15.15	14.80	15.57	16.01
	6H	14.95	15.63	15.42	16.08	16.54	15.21	15.89	15.67	16.33	16.80
	8H	15.20	15.84	15.67	16.29	16.76	15.63	16.27	16.10	16.71	17.18
	12H	15.45	16.01	15.94	16.50	16.97	16.03	16.59	16.52	17.08	17.55
8H	4H	14.73	15.36	15.20	15.81	16.28	14.78	15.42	15.25	15.86	16.33
	6H	15.71	16.23	16.21	16.72	17.20	15.87	16.39	16.37	16.88	17.36
	8H	16.20	16.67	16.72	17.18	17.67	16.46	16.92	16.98	17.44	17.93
	12H	16.70	17.11	17.22	17.61	18.18	17.06	17.47	17.57	17.97	18.54
12H	4H	14.80	15.36	15.28	15.84	16.31	14.86	15.42	15.34	15.90	16.38
	6H	15.87	16.34	16.40	16.86	17.35	16.03	16.50	16.55	17.01	17.51
	8H	16.51	16.93	17.03	17.42	17.99	16.74	17.16	17.26	17.65	18.22