

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: P1058232

Luminaire Tested: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

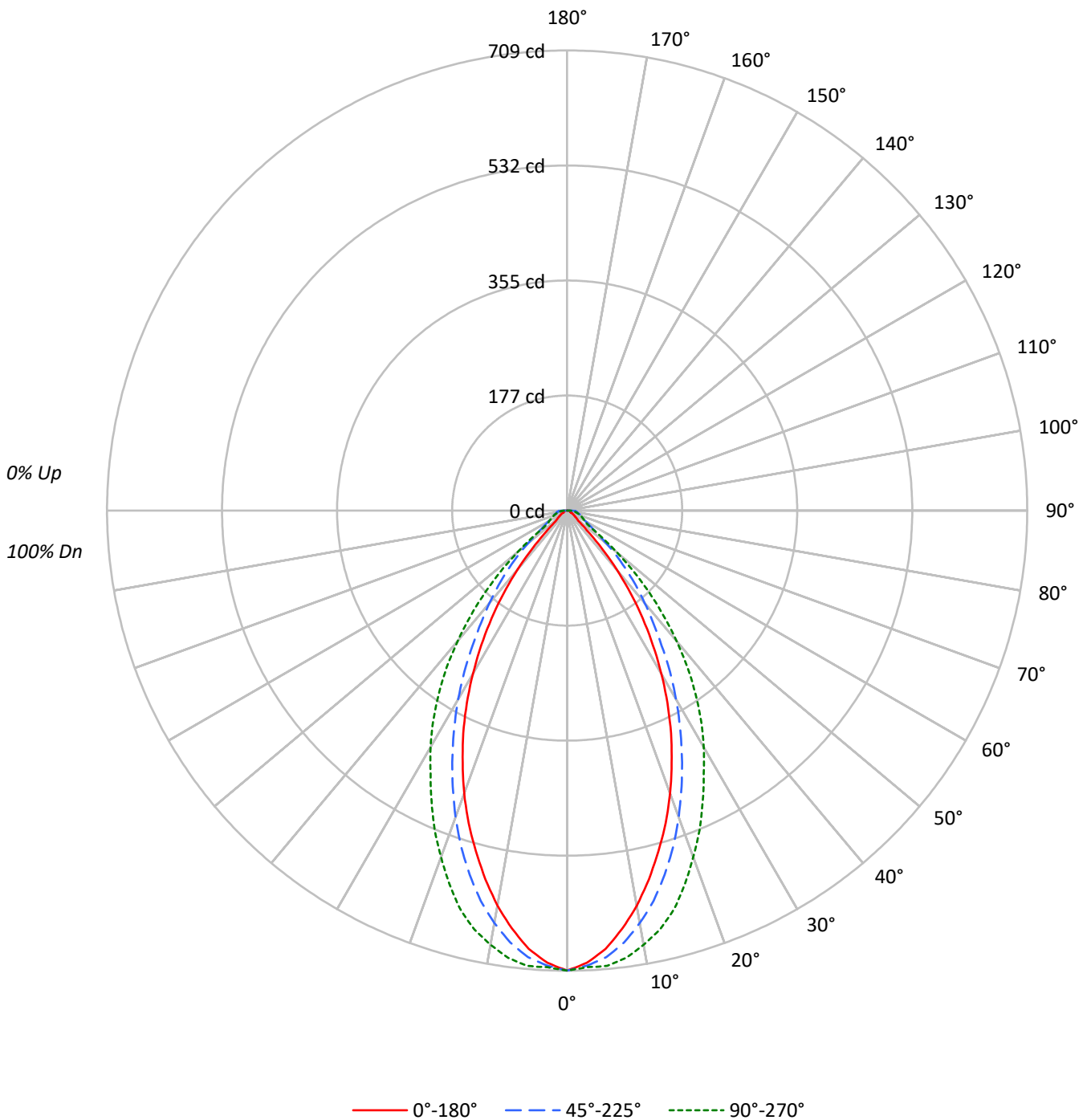
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 771.4 lumens  
Efficiency: N/A  
Efficacy: 21.1 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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: P1058232

CATALOG NUMBER: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1058232

CATALOG NUMBER: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45					45			
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42					42			

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

	0°	45°	90°
0°	13077	13077	13077
5°	12560	12792	13044
10°	11580	12089	12728
15°	10377	11091	12154
20°	9108	9865	11156
25°	7712	8519	10066
30°	6185	7153	8964
35°	4573	5722	7765
40°	2869	4480	6311
45°	1125	3374	4676
50°	554	2279	2865
55°	438	1496	1277
60°	336	1214	1174
65°	249	1140	1140
70°	308	1160	1160
75°	321	1290	1212
80°	478	1690	1328
85°	953	2879	1927

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 5288 cd/sqm



TEST NUMBER: P1058232

CATALOG NUMBER: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	8.4
10°-20°	163.7	21.2
20°-30°	195.8	25.4
30°-40°	164.8	21.4
40°-50°	93.8	12.2
50°-60°	37.0	4.8
60°-70°	23.3	3.0
70°-80°	17.3	2.2
80°-90°	11.0	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°	424.2	55.0
0°-40°	588.9	76.3
0°-60°	719.8	93.3
0°-90°	771.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	771.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	678	693	691	698	704	63
15°	543	562	581	615	636	152
25°	379	396	418	462	494	173
35°	203	221	254	308	345	126
45°	43	76	129	162	179	41
55°	14	30	46	48	40	12
65°	6	26	26	25	26	6
75°	4	18	18	17	17	5
85°	4	12	14	12	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1058232

CATALOG NUMBER: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	708.7	708.7	708.7	708.7	708.7
2.5°	697.4	709.9	701.9	703.1	704.2
5°	678.1	692.9	690.6	698.5	704.2
7.5°	649.8	665.6	671.3	684.9	695.1
10°	618.0	636.2	645.2	666.8	679.3
12.5°	581.7	602.1	615.8	643.0	661.1
15°	543.2	562.5	580.6	614.6	636.2
17.5°	504.6	523.9	543.2	580.6	603.3
20°	463.8	481.9	502.4	542.0	568.1
22.5°	420.7	440.0	460.4	501.2	533.0
25°	378.8	395.8	418.4	461.5	494.4
27.5°	334.5	351.5	376.5	420.7	455.9
30°	290.3	307.3	335.7	381.0	420.7
32.5°	246.1	264.2	294.8	344.7	384.4
35°	203.0	221.1	254.0	308.4	344.7
37.5°	161.0	181.4	217.7	271.0	305.0
40°	119.1	142.9	186.0	233.6	262.0
42.5°	79.4	108.9	156.5	196.2	220.0
45°	43.1	76.0	129.3	162.2	179.2
47.5°	23.8	48.8	103.2	129.3	139.5
50°	19.3	34.0	79.4	98.7	99.8
52.5°	15.9	30.6	59.0	70.3	64.6
55°	13.6	29.5	46.5	47.6	39.7
57.5°	11.3	28.3	38.6	34.0	34.0
60°	9.1	28.3	32.9	30.6	31.8
62.5°	6.8	28.3	29.5	27.2	28.3
65°	5.7	26.1	26.1	24.9	26.1
67.5°	5.7	23.8	23.8	22.7	23.8
70°	5.7	22.7	21.5	21.5	21.5
72.5°	4.5	20.4	20.4	19.3	19.3
75°	4.5	18.1	18.1	17.0	17.0
77.5°	4.5	17.0	17.0	15.9	14.7
80°	4.5	14.7	15.9	14.7	12.5
82.5°	4.5	13.6	14.7	13.6	10.2
85°	4.5	12.5	13.6	12.5	9.1
87.5°	3.4	12.5	12.5	10.2	6.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058232  
 CATALOG NUMBER: S122RDRP-H1005D927-X4F0-XX-UDD-BVL-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	6.61	7.83	6.98	8.14	8.46	8.64	9.87	9.01	10.18	10.49
	3H	8.16	9.25	8.54	9.58	9.94	10.62	11.70	11.00	12.03	12.40
	4H	8.71	9.73	9.12	10.08	10.46	11.53	12.54	11.94	12.90	13.28
	6H	9.27	10.20	9.68	10.57	10.96	12.42	13.35	12.83	13.72	14.11
	8H	9.56	10.44	9.99	10.83	11.24	12.82	13.70	13.25	14.09	14.50
	12H	9.92	10.76	10.35	11.14	11.57	13.26	14.11	13.70	14.49	14.92
4H	2H	7.80	8.81	8.21	9.17	9.55	9.27	10.28	9.67	10.63	11.01
	3H	10.01	10.84	10.42	11.25	11.65	11.51	12.34	11.92	12.75	13.15
	4H	11.06	11.80	11.49	12.23	12.67	12.58	13.33	13.02	13.75	14.19
	6H	11.95	12.60	12.41	13.04	13.51	13.69	14.34	14.16	14.79	15.25
	8H	12.33	12.94	12.80	13.39	13.86	14.21	14.82	14.69	15.27	15.74
	12H	12.75	13.29	13.24	13.77	14.25	14.79	15.33	15.28	15.81	16.29
8H	4H	11.86	12.46	12.33	12.91	13.38	13.07	13.68	13.54	14.13	14.60
	6H	13.24	13.73	13.74	14.23	14.71	14.47	14.97	14.97	15.46	15.95
	8H	13.96	14.40	14.48	14.92	15.41	15.21	15.66	15.73	16.17	16.66
	12H	14.71	15.10	15.22	15.60	16.17	16.04	16.44	16.56	16.93	17.51
12H	4H	12.02	12.56	12.51	13.04	13.51	13.17	13.71	13.66	14.19	14.67
	6H	13.57	14.02	14.09	14.53	15.02	14.69	15.13	15.21	15.65	16.14
	8H	14.48	14.88	15.00	15.37	15.95	15.57	15.97	16.09	16.46	17.03