

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: P1058166

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058166  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D930-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

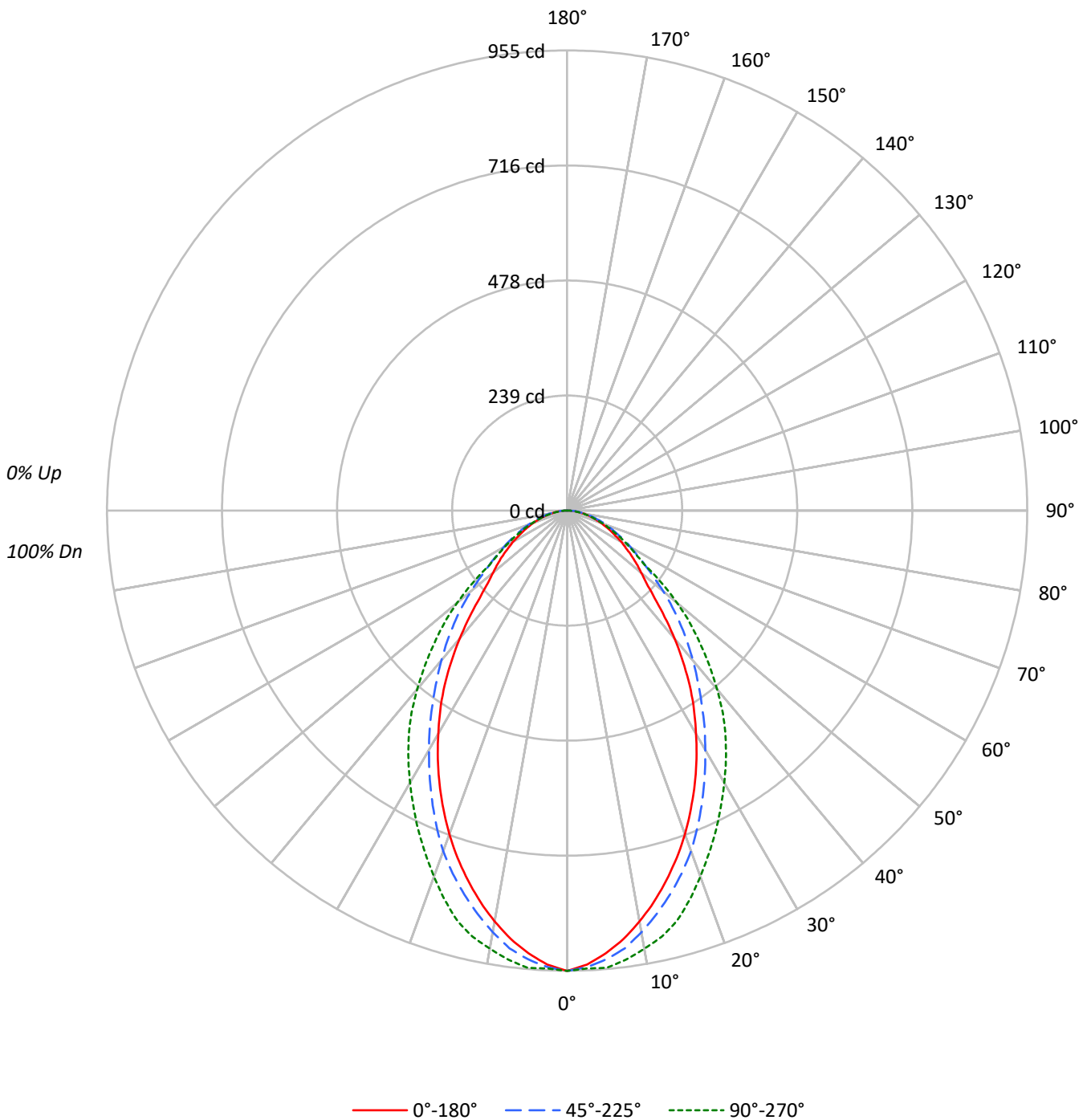
Lumens per Lamp: N/A  
Luminaire Lumens: 1557.3 lumens  
Efficiency: N/A  
Efficacy: 44.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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: P1058166

CATALOG NUMBER: S122RDRP-S865D930-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1058166

CATALOG NUMBER: S122RDRP-S865D930-X4F0-XX-UDD-WVL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

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

	0°	45°	90°
0°	17628	17628	17628
5°	17086	17313	17638
10°	16224	16648	17302
15°	15187	15756	16836
20°	14038	14765	15874
25°	12758	13509	14889
30°	11401	12213	13896
35°	9995	10943	12912
40°	8363	9772	11654
45°	6701	8659	10185
50°	5750	7461	8552
55°	5254	6344	6312
60°	4775	5610	5495
65°	4349	5021	4798
70°	3992	4602	4268
75°	3736	4249	3736
80°	3496	3932	3273
85°	3472	4129	2837

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10185 cd/sqm



TEST NUMBER: P1058166

CATALOG NUMBER: S122RDRP-S865D930-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.2	5.7
10°-20°	233.5	15.0
20°-30°	307.9	19.8
30°-40°	310.1	19.9
40°-50°	252.4	16.2
50°-60°	172.1	11.0
60°-70°	111.7	7.2
70°-80°	61.5	3.9
80°-90°	20.1	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°	629.6	40.4
0°-40°	939.6	60.3
0°-60°	1364.1	87.6
0°-90°	1557.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1557.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	922	940	935	943	952	86
15°	795	816	825	859	881	223
25°	627	647	664	693	731	287
35°	444	466	486	528	573	276
45°	257	289	332	360	390	202
55°	163	180	197	198	196	146
65°	100	118	115	109	110	99
75°	52	65	60	53	52	56
85°	16	22	20	15	13	18
90°	0	0	0	0	0	



TEST NUMBER: P1058166

CATALOG NUMBER: S122RDRP-S865D930-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	955.3	955.3	955.3	955.3	955.3
2.5°	942.9	958.3	948.1	949.1	951.1
5°	922.4	939.8	934.7	942.9	952.2
7.5°	896.7	914.2	916.2	928.5	939.8
10°	865.9	885.4	888.5	907.0	923.4
12.5°	832.0	853.6	857.7	884.4	906.0
15°	795.0	815.6	824.8	858.7	881.3
17.5°	756.0	775.5	789.9	820.7	846.4
20°	714.9	733.4	751.9	779.6	808.4
22.5°	670.7	691.3	708.7	736.5	769.3
25°	626.6	647.1	663.5	693.3	731.3
27.5°	581.4	601.9	618.3	650.2	691.3
30°	535.1	556.7	573.2	609.1	652.2
32.5°	490.0	511.5	530.0	568.0	613.2
35°	443.7	466.3	485.8	528.0	573.2
37.5°	394.4	420.1	444.8	486.9	531.0
40°	347.2	375.9	405.7	444.8	483.8
42.5°	299.9	331.8	368.7	401.6	437.6
45°	256.8	288.6	331.8	360.5	390.3
47.5°	222.9	249.6	295.8	319.4	346.2
50°	200.3	218.8	259.9	278.4	297.9
52.5°	181.8	197.2	226.0	238.3	248.6
55°	163.3	179.8	197.2	198.2	196.2
57.5°	144.8	163.3	172.6	165.4	169.5
60°	129.4	147.9	152.0	144.8	148.9
62.5°	113.0	133.5	133.5	126.3	128.4
65°	99.6	118.1	115.0	108.9	109.9
67.5°	86.3	104.8	99.6	93.5	93.5
70°	74.0	91.4	85.3	79.1	79.1
72.5°	62.7	77.0	72.9	65.7	64.7
75°	52.4	64.7	59.6	53.4	52.4
77.5°	42.1	52.4	48.3	43.1	41.1
80°	32.9	42.1	37.0	32.9	30.8
82.5°	24.7	31.8	27.7	23.6	21.6
85°	16.4	21.6	19.5	15.4	13.4
87.5°	8.2	14.4	12.3	10.3	8.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058166  
 CATALOG NUMBER: S122RDRP-S865D930-X4F0-XX-UDD-WVL-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	16.69	18.13	17.05	18.44	18.75	16.94	18.37	17.30	18.69	19.00
	3H	18.22	19.50	18.60	19.83	20.20	18.29	19.58	18.67	19.91	20.27
	4H	18.78	19.98	19.18	20.33	20.71	18.78	19.98	19.18	20.33	20.71
	6H	19.20	20.31	19.62	20.68	21.08	19.12	20.24	19.54	20.60	21.00
	8H	19.36	20.41	19.78	20.80	21.21	19.23	20.29	19.66	20.68	21.08
	12H	19.47	20.48	19.90	20.86	21.29	19.30	20.31	19.73	20.70	21.12
4H	2H	17.26	18.46	17.66	18.81	19.19	17.46	18.66	17.86	19.01	19.39
	3H	19.06	20.06	19.48	20.46	20.87	19.04	20.03	19.45	20.43	20.84
	4H	19.81	20.70	20.24	21.12	21.56	19.63	20.53	20.06	20.94	21.38
	6H	20.39	21.17	20.85	21.62	22.08	20.10	20.88	20.56	21.32	21.78
	8H	20.60	21.33	21.07	21.78	22.25	20.25	20.98	20.71	21.42	21.89
	12H	20.77	21.42	21.25	21.90	22.37	20.36	21.01	20.84	21.49	21.96
8H	4H	20.07	20.80	20.54	21.25	21.71	19.92	20.65	20.38	21.09	21.56
	6H	20.83	21.43	21.33	21.92	22.40	20.51	21.11	21.01	21.60	22.08
	8H	21.15	21.69	21.67	22.20	22.69	20.73	21.27	21.25	21.78	22.27
	12H	21.43	21.91	21.94	22.40	22.97	20.91	21.39	21.43	21.88	22.45
12H	4H	20.09	20.73	20.57	21.21	21.69	19.95	20.60	20.44	21.08	21.55
	6H	20.87	21.41	21.39	21.92	22.41	20.58	21.12	21.09	21.63	22.12
	8H	21.27	21.75	21.78	22.24	22.81	20.86	21.34	21.37	21.83	22.40