

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: P1058117

Luminaire Tested: S122RDRP-S865D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058117
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: S122RDRP-S865D830-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

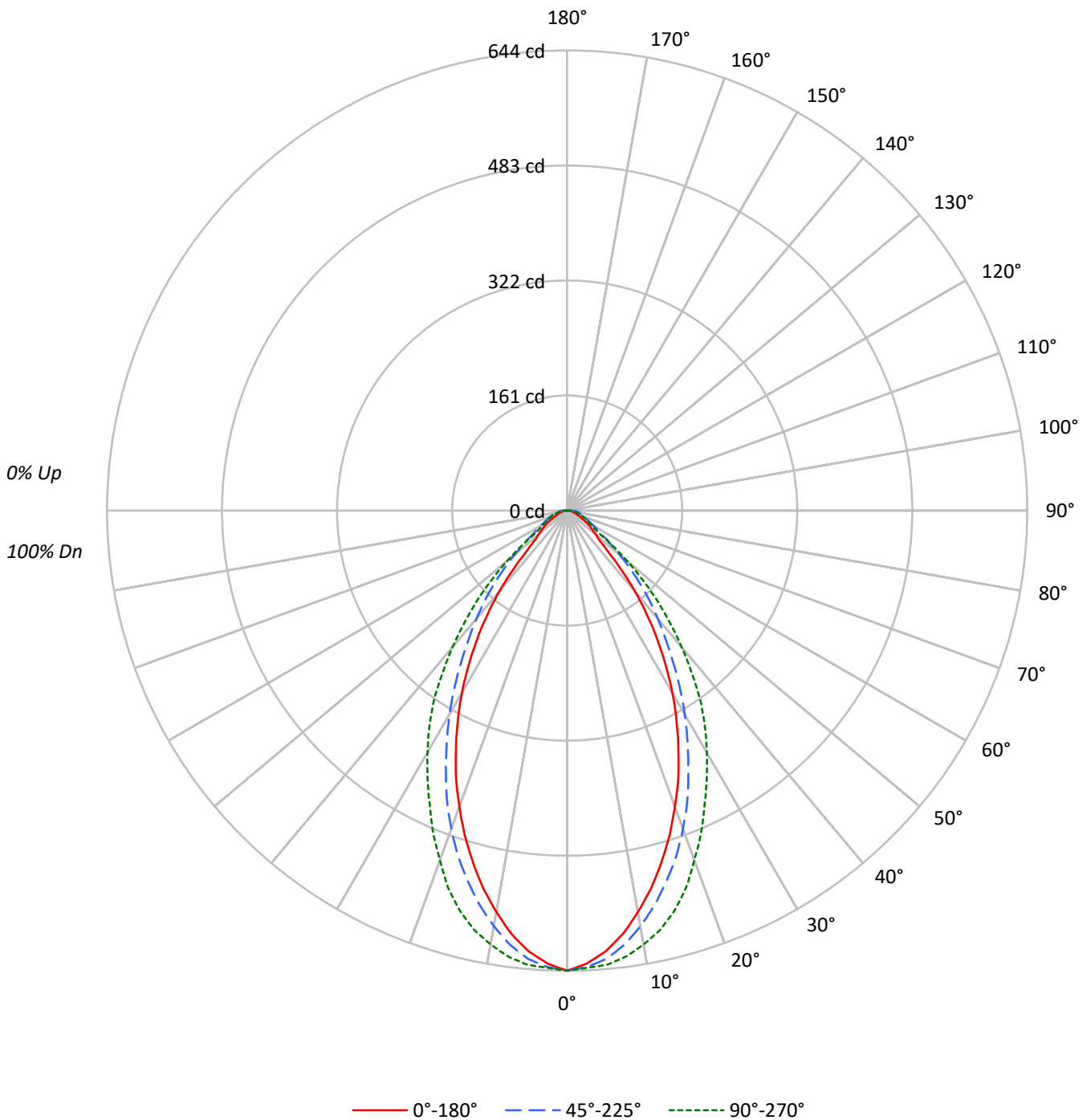
Lumens per Lamp: N/A
Luminaire Lumens: 776.8 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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: P1058117

CATALOG NUMBER: S122RDRP-S865D830-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058117

CATALOG NUMBER: S122RDRP-S865D830-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°	11882	11882	11882
5°	11466	11664	11818
10°	10686	11064	11553
15°	9737	10259	11076
20°	8656	9308	10219
25°	7499	8177	9264
30°	6277	7012	8329
35°	4951	5807	7332
40°	3548	4750	6010
45°	2077	3753	4650
50°	1501	2727	3138
55°	1261	1950	1644
60°	1008	1580	1402
65°	830	1402	1297
70°	707	1343	1219
75°	677	1440	1183
80°	754	1764	1265
85°	1249	2774	1757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4650 cd/sqm



TEST NUMBER: P1058117

CATALOG NUMBER: S122RDRP-S865D830-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	7.6
10°-20°	151.2	19.5
20°-30°	185.8	23.9
30°-40°	164.2	21.1
40°-50°	104.8	13.5
50°-60°	51.1	6.6
60°-70°	30.5	3.9
70°-80°	19.4	2.5
80°-90°	10.7	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°	395.9	51.0
0°-40°	560.2	72.1
0°-60°	716.2	92.2
0°-90°	776.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	619	632	630	632	638	58
15°	510	524	537	561	580	142
25°	368	381	402	426	455	169
35°	220	232	258	293	326	136
45°	80	102	144	162	178	67
55°	39	52	61	57	51	35
65°	19	36	32	30	30	19
75°	10	21	20	18	17	11
85°	6	12	13	12	8	5
90°	0	0	0	0	0	



TEST NUMBER: P1058117

CATALOG NUMBER: S122RDRP-S865D830-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	643.9	643.9	643.9	643.9	643.9
2.5°	634.4	646.3	639.2	639.2	640.4
5°	619.0	632.0	629.7	632.0	638.0
7.5°	597.6	610.7	613.0	622.5	629.7
10°	570.3	583.3	590.5	605.9	616.6
12.5°	541.7	554.8	565.5	585.7	601.1
15°	509.7	523.9	537.0	560.8	579.8
17.5°	476.4	490.7	507.3	531.1	553.6
20°	440.8	453.8	474.0	496.6	520.4
22.5°	406.3	418.2	439.6	461.0	489.5
25°	368.3	381.4	401.6	426.5	455.0
27.5°	331.5	344.5	364.7	393.2	422.9
30°	294.6	306.5	329.1	358.8	390.9
32.5°	256.6	268.5	293.4	325.5	358.8
35°	219.8	231.7	257.8	293.4	325.5
37.5°	183.0	196.0	225.7	259.0	286.3
40°	147.3	162.8	197.2	225.7	249.5
42.5°	111.7	133.1	169.9	193.7	212.7
45°	79.6	102.2	143.8	161.6	178.2
47.5°	60.6	78.4	118.8	131.9	142.6
50°	52.3	64.2	95.0	104.5	109.3
52.5°	45.1	57.0	76.0	79.6	77.2
55°	39.2	52.3	60.6	57.0	51.1
57.5°	33.3	48.7	49.9	42.8	44.0
60°	27.3	44.0	42.8	36.8	38.0
62.5°	22.6	40.4	36.8	33.3	33.3
65°	19.0	35.6	32.1	29.7	29.7
67.5°	15.4	32.1	28.5	26.1	26.1
70°	13.1	28.5	24.9	22.6	22.6
72.5°	11.9	24.9	22.6	20.2	20.2
75°	9.5	21.4	20.2	17.8	16.6
77.5°	8.3	17.8	17.8	16.6	14.3
80°	7.1	15.4	16.6	14.3	11.9
82.5°	7.1	14.3	14.3	13.1	9.5
85°	5.9	11.9	13.1	11.9	8.3
87.5°	3.6	10.7	10.7	9.5	5.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058117
 CATALOG NUMBER: S122RDRP-S865D830-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	10.63	11.91	10.99	12.22	12.53	10.16	11.44	10.52	11.75	12.06
	3H	11.80	12.94	12.18	13.27	13.64	11.72	12.85	12.10	13.19	13.55
	4H	12.23	13.29	12.64	13.65	14.03	12.40	13.46	12.80	13.81	14.19
	6H	12.58	13.55	12.99	13.92	14.32	13.05	14.02	13.46	14.40	14.79
	8H	12.77	13.70	13.20	14.09	14.49	13.34	14.26	13.77	14.65	15.06
	12H	12.99	13.87	13.42	14.26	14.69	13.65	14.54	14.09	14.92	15.35
4H	2H	11.13	12.19	11.53	12.54	12.93	10.76	11.82	11.16	12.17	12.55
	3H	12.77	13.65	13.19	14.05	14.46	12.55	13.43	12.97	13.83	14.24
	4H	13.54	14.32	13.97	14.74	15.19	13.39	14.18	13.83	14.60	15.04
	6H	14.14	14.82	14.60	15.26	15.73	14.25	14.93	14.71	15.38	15.84
	8H	14.44	15.07	14.91	15.52	15.99	14.64	15.28	15.11	15.73	16.20
	12H	14.75	15.31	15.24	15.79	16.27	15.08	15.64	15.57	16.12	16.60
8H	4H	13.96	14.59	14.43	15.04	15.51	13.85	14.49	14.32	14.93	15.40
	6H	14.90	15.42	15.40	15.92	16.40	14.96	15.48	15.46	15.98	16.46
	8H	15.45	15.92	15.97	16.43	16.93	15.54	16.01	16.06	16.53	17.02
	12H	16.01	16.43	16.53	16.92	17.50	16.21	16.63	16.73	17.12	17.69
12H	4H	14.03	14.59	14.51	15.07	15.55	13.93	14.50	14.42	14.98	15.45
	6H	15.09	15.55	15.61	16.07	16.56	15.15	15.62	15.67	16.13	16.62
	8H	15.78	16.20	16.30	16.69	17.26	15.86	16.27	16.38	16.77	17.34