

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: P1058033

Luminaire Tested: S122RDRP-S675D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058033
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

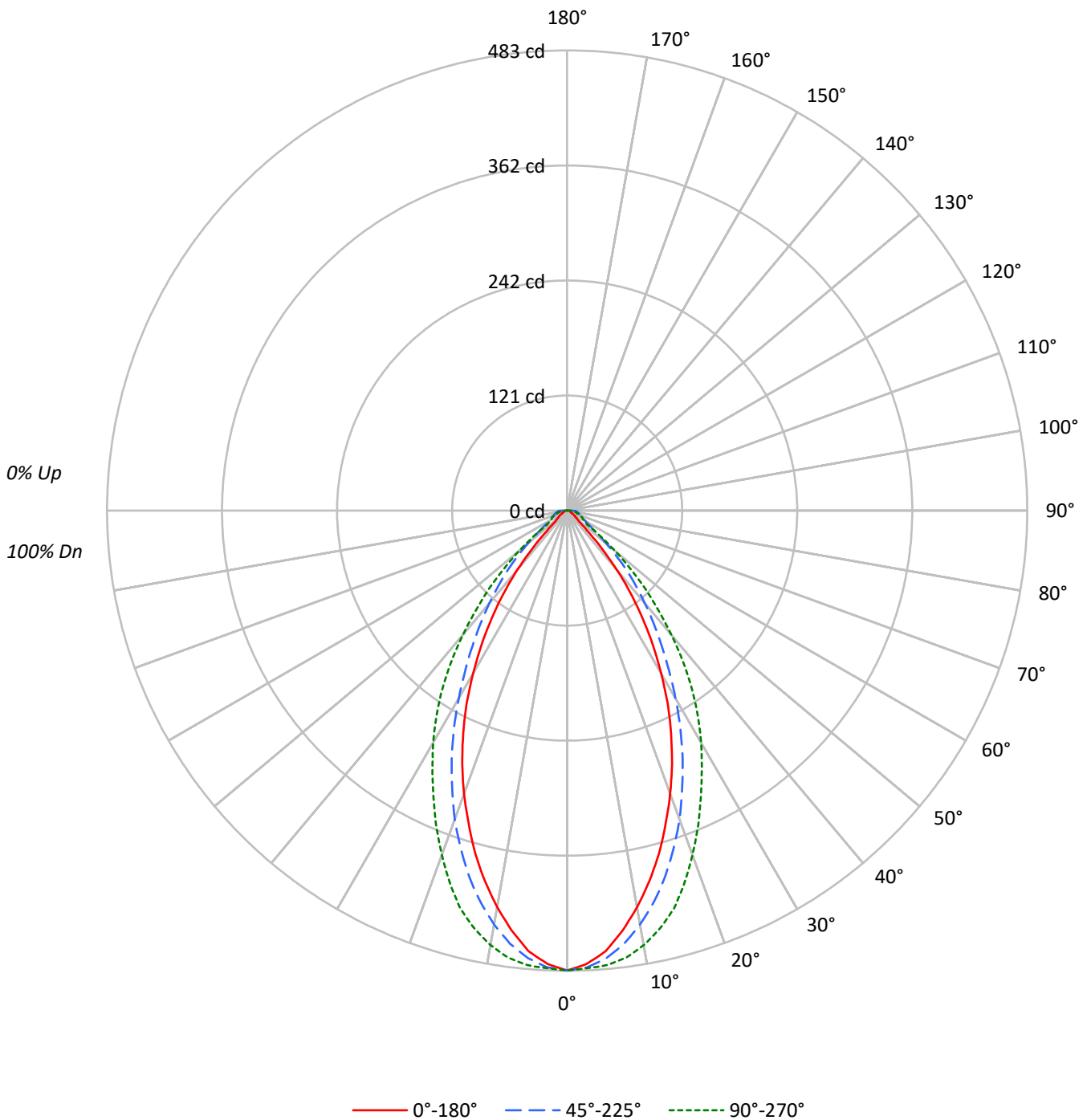
Lumens per Lamp: N/A
Luminaire Lumens: 520.3 lumens
Efficiency: N/A
Efficacy: 20.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1058033

CATALOG NUMBER: S122RDRP-S675D830-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058033

CATALOG NUMBER: S122RDRP-S675D830-X4F0-XX-UDD-BVL-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	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	77	82	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	68	64	71	67	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57					57			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8907	8907	8907
5°	8598	8735	8872
10°	7918	8265	8679
15°	7118	7596	8266
20°	6209	6773	7552
25°	5253	5835	6757
30°	4195	4847	5989
35°	3104	3895	5145
40°	1961	3052	4097
45°	772	2291	3017
50°	399	1539	1857
55°	328	1010	833
60°	240	819	749
65°	201	768	768
70°	200	798	750
75°	264	920	791
80°	393	1180	882
85°	593	1948	1164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3892 cd/sqm



TEST NUMBER: P1058033

CATALOG NUMBER: S122RDRP-S675D830-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	8.5
10°-20°	111.5	21.4
20°-30°	132.5	25.5
30°-40°	110.2	21.2
40°-50°	61.6	11.8
50°-60°	24.9	4.8
60°-70°	15.9	3.1
70°-80°	11.9	2.3
80°-90°	7.6	1.5
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°	288.2	55.4
0°-40°	398.4	76.6
0°-60°	484.8	93.2
0°-90°	520.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	464	472	472	475	479	43
15°	373	384	398	418	433	104
25°	258	268	287	309	332	118
35°	138	151	173	202	228	85
45°	30	50	88	103	116	28
55°	10	21	31	30	26	9
65°	5	18	18	17	18	5
75°	4	13	13	12	11	4
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1058033

CATALOG NUMBER: S122RDRP-S675D830-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	482.7	482.7	482.7	482.7	482.7
2.5°	476.2	483.6	479.9	479.9	480.8
5°	464.2	472.5	471.6	475.3	479.0
7.5°	444.7	454.0	458.6	466.9	473.4
10°	422.6	432.7	441.1	454.0	463.2
12.5°	398.5	408.7	420.7	437.4	449.4
15°	372.6	383.7	397.6	417.9	432.7
17.5°	344.0	356.0	371.7	393.9	409.6
20°	316.2	328.2	344.9	367.1	384.6
22.5°	287.6	297.7	315.3	337.5	358.8
25°	258.0	268.1	286.6	308.8	331.9
27.5°	228.4	238.6	257.0	280.2	306.1
30°	196.9	208.0	227.5	253.3	281.1
32.5°	167.4	178.5	198.8	227.5	255.2
35°	137.8	150.7	172.9	201.6	228.4
37.5°	109.1	123.9	148.9	175.7	199.7
40°	81.4	97.1	126.7	149.8	170.1
42.5°	53.6	72.1	106.3	125.8	141.5
45°	29.6	49.9	87.8	102.6	115.6
47.5°	16.6	32.4	69.3	81.4	88.8
50°	13.9	24.0	53.6	62.0	64.7
52.5°	11.1	22.2	40.7	45.3	43.5
55°	10.2	21.3	31.4	30.5	25.9
57.5°	8.3	21.3	25.0	22.2	22.2
60°	6.5	20.3	22.2	19.4	20.3
62.5°	5.5	19.4	20.3	18.5	18.5
65°	4.6	18.5	17.6	16.6	17.6
67.5°	3.7	16.6	16.6	15.7	15.7
70°	3.7	15.7	14.8	13.9	13.9
72.5°	3.7	13.9	13.9	12.9	12.9
75°	3.7	12.9	12.9	12.0	11.1
77.5°	3.7	11.1	12.0	11.1	10.2
80°	3.7	10.2	11.1	10.2	8.3
82.5°	3.7	9.2	10.2	9.2	7.4
85°	2.8	8.3	9.2	8.3	5.5
87.5°	2.8	8.3	9.2	7.4	4.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058033
 CATALOG NUMBER: S122RDRP-S675D830-X4F0-XX-UDD-BVL-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	5.97	7.19	6.34	7.50	7.82	7.04	8.26	7.41	8.57	8.89
	3H	7.30	8.38	7.68	8.71	9.08	9.07	10.15	9.45	10.48	10.85
	4H	7.87	8.88	8.27	9.23	9.62	10.02	11.03	10.43	11.38	11.77
	6H	8.44	9.37	8.85	9.74	10.13	10.97	11.90	11.39	12.27	12.67
	8H	8.76	9.64	9.19	10.03	10.44	11.42	12.30	11.85	12.69	13.10
	12H	9.07	9.91	9.50	10.29	10.73	11.84	12.68	12.27	13.06	13.49
4H	2H	6.93	7.94	7.34	8.30	8.68	7.72	8.73	8.12	9.08	9.47
	3H	8.96	9.79	9.37	10.20	10.60	10.00	10.83	10.41	11.24	11.64
	4H	10.03	10.78	10.47	11.20	11.64	11.15	11.89	11.58	12.31	12.76
	6H	10.91	11.55	11.37	12.00	12.47	12.32	12.97	12.78	13.41	13.88
	8H	11.32	11.92	11.79	12.37	12.84	12.88	13.48	13.35	13.93	14.40
	12H	11.70	12.23	12.18	12.72	13.19	13.42	13.95	13.90	14.44	14.91
8H	4H	10.80	11.41	11.27	11.85	12.33	11.69	12.30	12.17	12.75	13.22
	6H	12.15	12.64	12.65	13.14	13.62	13.15	13.65	13.66	14.15	14.63
	8H	12.86	13.30	13.38	13.82	14.31	13.91	14.36	14.44	14.88	15.37
	12H	13.55	13.94	14.07	14.44	15.01	14.69	15.09	15.21	15.58	16.16
12H	4H	10.96	11.49	11.45	11.98	12.45	11.80	12.34	12.29	12.82	13.30
	6H	12.47	12.91	12.99	13.43	13.92	13.38	13.83	13.90	14.34	14.84
	8H	13.37	13.76	13.88	14.26	14.83	14.28	14.68	14.80	15.17	15.74