

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: P1057794

Luminaire Tested: S122RDRP-S1005D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057794
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-S1005D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

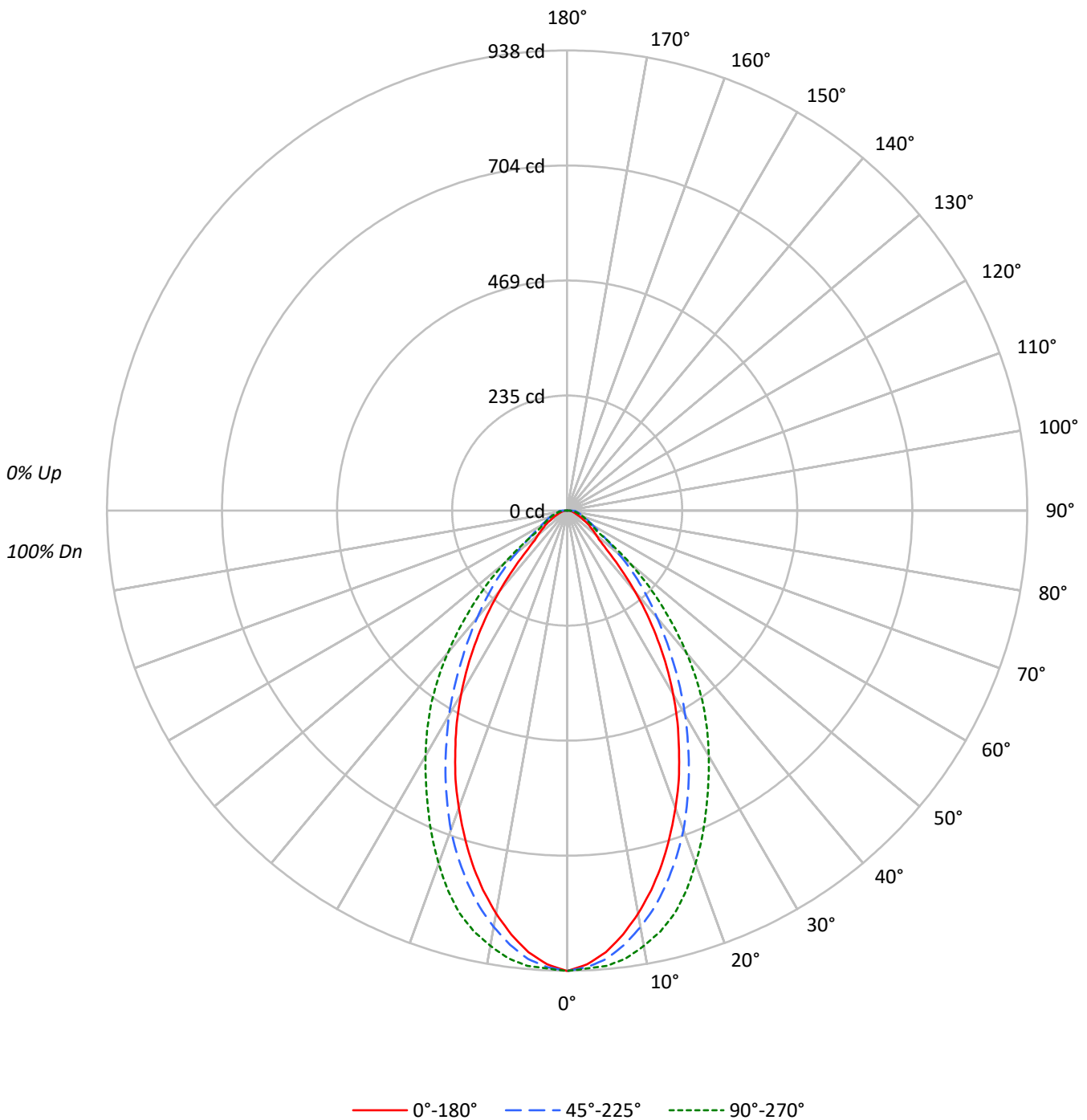
Lumens per Lamp: N/A
Luminaire Lumens: 1138.3 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1057794

CATALOG NUMBER: S122RDRP-S1005D830-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1057794

CATALOG NUMBER: S122RDRP-S1005D830-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	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	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	17318	17318	17318
5°	16737	16997	17254
10°	15625	16148	16878
15°	14251	14998	16223
20°	12677	13610	15034
25°	10988	11953	13655
30°	9211	10251	12301
35°	7256	8481	10900
40°	5174	6853	9103
45°	3056	5423	7059
50°	2202	3924	4803
55°	1840	2828	2422
60°	1491	2266	2059
65°	1218	2008	1886
70°	1052	1958	1807
75°	991	1989	1790
80°	1041	2370	1923
85°	1482	3832	2371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7059 cd/sqm



TEST NUMBER: P1057794

CATALOG NUMBER: S122RDRP-S1005D830-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	7.6
10°-20°	221.1	19.4
20°-30°	272.8	24.0
30°-40°	242.7	21.3
40°-50°	154.9	13.6
50°-60°	74.4	6.5
60°-70°	43.7	3.8
70°-80°	27.9	2.4
80°-90°	14.9	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°	580.0	51.0
0°-40°	822.7	72.3
0°-60°	1051.9	92.4
0°-90°	1138.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	904	920	918	923	932	84
15°	746	764	785	821	849	208
25°	540	561	587	629	671	247
35°	322	347	376	434	484	200
45°	117	152	208	241	270	98
55°	57	74	88	85	75	52
65°	28	50	46	42	43	28
75°	14	31	28	26	25	15
85°	7	17	18	15	11	7
90°	0	0	0	0	0	

TEST NUMBER: P1057794

CATALOG NUMBER: S122RDRP-S1005D830-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.5	938.5	938.5	938.5	938.5
2.5°	925.9	941.3	931.5	931.5	934.3
5°	903.6	920.4	917.6	923.1	931.5
7.5°	871.6	889.7	892.5	907.8	920.4
10°	833.9	853.4	861.8	884.1	900.8
12.5°	792.1	811.6	826.9	854.8	878.5
15°	746.0	764.2	785.1	821.3	849.2
17.5°	695.8	719.6	740.5	778.1	810.2
20°	645.6	668.0	693.1	729.3	765.6
22.5°	594.0	615.0	640.1	677.7	719.6
25°	539.7	560.6	587.1	628.9	670.7
27.5°	486.7	507.6	532.7	578.7	623.3
30°	432.3	453.2	481.1	528.5	577.3
32.5°	377.9	400.2	428.1	479.7	531.3
35°	322.1	347.2	376.5	433.7	483.9
37.5°	267.7	292.8	329.1	384.9	432.3
40°	214.8	244.0	284.5	334.7	377.9
42.5°	163.2	195.2	245.4	285.9	323.5
45°	117.1	152.0	207.8	241.2	270.5
47.5°	89.2	114.3	171.5	198.0	218.9
50°	76.7	92.0	136.7	156.2	167.3
52.5°	66.9	80.9	108.8	118.5	118.5
55°	57.2	73.9	87.9	85.1	75.3
57.5°	48.8	66.9	72.5	61.4	64.1
60°	40.4	61.4	61.4	54.4	55.8
62.5°	33.5	57.2	53.0	47.4	48.8
65°	27.9	50.2	46.0	41.8	43.2
67.5°	22.3	44.6	40.4	37.7	37.7
70°	19.5	40.4	36.3	33.5	33.5
72.5°	16.7	34.9	32.1	29.3	29.3
75°	13.9	30.7	27.9	26.5	25.1
77.5°	12.6	26.5	25.1	22.3	20.9
80°	9.8	22.3	22.3	20.9	18.1
82.5°	8.4	19.5	19.5	18.1	15.3
85°	7.0	16.7	18.1	15.3	11.2
87.5°	5.6	15.3	15.3	12.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1057794
 CATALOG NUMBER: S122RDRP-S1005D830-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	11.58	12.85	11.94	13.17	13.48	11.37	12.65	11.74	12.96	13.28
	3H	12.81	13.94	13.19	14.27	14.64	12.97	14.10	13.35	14.43	14.80
	4H	13.26	14.32	13.66	14.67	15.05	13.68	14.74	14.09	15.09	15.48
	6H	13.64	14.62	14.06	14.99	15.38	14.33	15.31	14.75	15.68	16.07
	8H	13.80	14.72	14.23	15.11	15.52	14.66	15.58	15.09	15.97	16.38
	12H	13.96	14.84	14.39	15.22	15.65	14.96	15.84	15.39	16.22	16.65
4H	2H	12.13	13.18	12.53	13.54	13.92	11.96	13.02	12.37	13.37	13.76
	3H	13.82	14.69	14.23	15.10	15.50	13.80	14.67	14.22	15.08	15.48
	4H	14.62	15.40	15.05	15.82	16.26	14.68	15.46	15.11	15.88	16.32
	6H	15.26	15.94	15.73	16.39	16.85	15.52	16.20	15.98	16.64	17.11
	8H	15.51	16.15	15.98	16.59	17.06	15.94	16.57	16.41	17.02	17.49
	12H	15.76	16.32	16.25	16.80	17.28	16.34	16.90	16.83	17.39	17.86
8H	4H	15.04	15.67	15.51	16.12	16.59	15.09	15.73	15.56	16.17	16.65
	6H	16.01	16.53	16.52	17.03	17.51	16.18	16.70	16.68	17.19	17.67
	8H	16.50	16.97	17.03	17.49	17.98	16.77	17.23	17.29	17.75	18.24
	12H	17.01	17.42	17.52	17.92	18.49	17.37	17.78	17.88	18.28	18.85
12H	4H	15.10	15.66	15.59	16.15	16.62	15.17	15.73	15.66	16.21	16.69
	6H	16.18	16.65	16.70	17.16	17.66	16.34	16.81	16.86	17.32	17.82
	8H	16.82	17.23	17.33	17.73	18.30	17.05	17.46	17.57	17.96	18.53