

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: P1057793

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057793
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-S1005D830-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

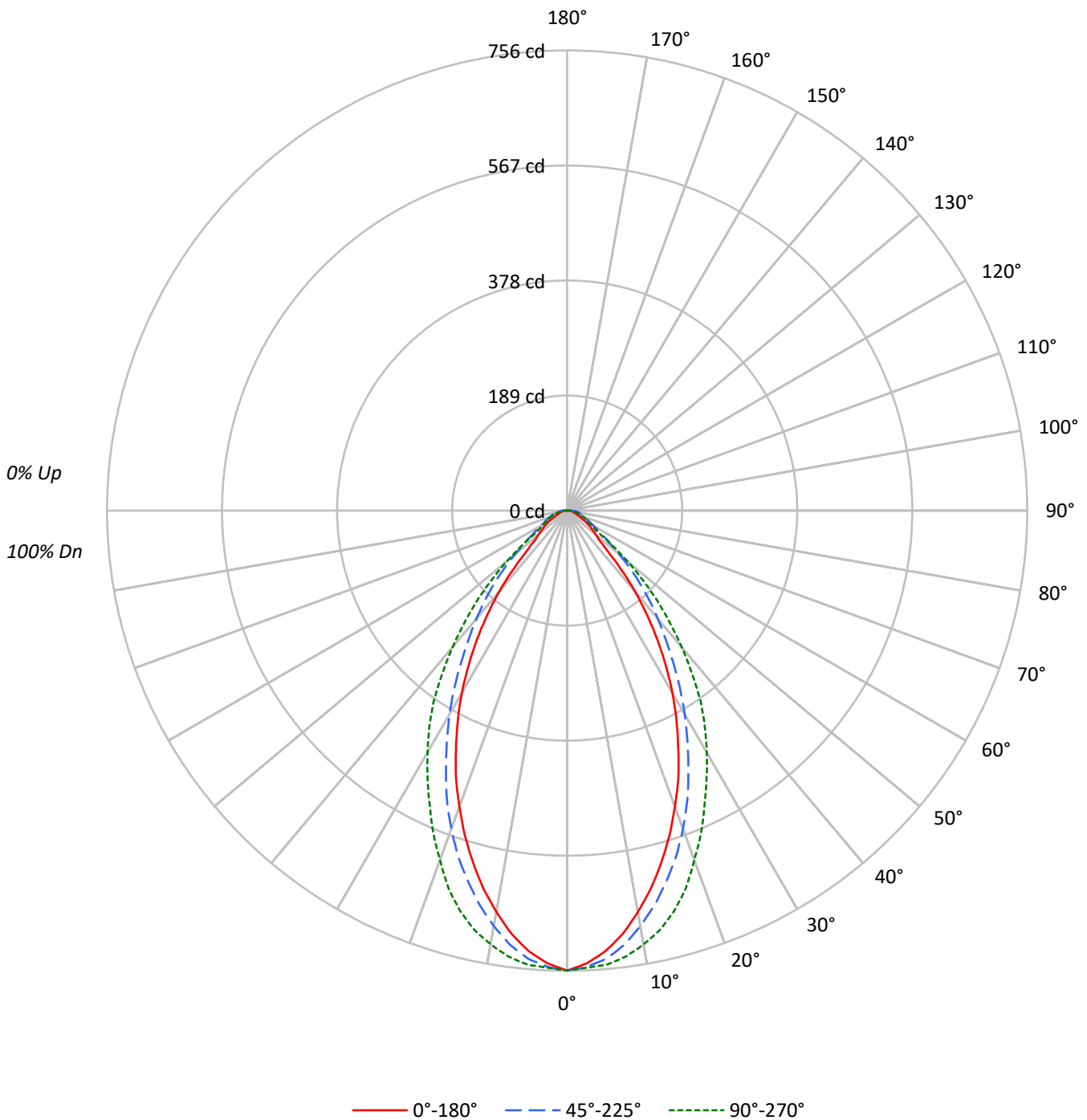
Lumens per Lamp: N/A
Luminaire Lumens: 911.6 lumens
Efficiency: N/A
Efficacy: 21.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1057793

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

Luminous Intensity Polar Plot





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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°	13945	13945	13945
5°	13455	13688	13868
10°	12541	12985	13558
15°	11426	12039	12998
20°	10158	10924	11992
25°	8800	9596	10872
30°	7368	8229	9774
35°	5810	6816	8605
40°	4165	5576	7053
45°	2437	4402	5457
50°	1760	3201	3683
55°	1480	2287	1930
60°	1185	1853	1646
65°	974	1642	1524
70°	825	1581	1430
75°	799	1690	1390
80°	893	2072	1477
85°	1482	3239	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5457 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	7.6
10°-20°	177.4	19.5
20°-30°	218.0	23.9
30°-40°	192.8	21.1
40°-50°	123.0	13.5
50°-60°	60.0	6.6
60°-70°	35.8	3.9
70°-80°	22.8	2.5
80°-90°	12.6	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°	464.7	51.0
0°-40°	657.4	72.1
0°-60°	840.5	92.2
0°-90°	911.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	911.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	726	742	739	742	749	68
15°	598	615	630	658	680	167
25°	432	448	471	500	534	198
35°	258	272	303	344	382	160
45°	93	120	169	190	209	79
55°	46	61	71	67	60	41
65°	22	42	38	35	35	22
75°	11	25	24	21	20	12
85°	7	14	15	14	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	755.7	755.7	755.7	755.7	755.7
2.5°	744.5	758.5	750.1	750.1	751.5
5°	726.4	741.8	739.0	741.8	748.7
7.5°	701.3	716.7	719.4	730.6	739.0
10°	669.3	684.6	693.0	711.1	723.6
12.5°	635.8	651.1	663.7	687.4	705.5
15°	598.1	614.9	630.2	658.1	680.4
17.5°	559.1	575.8	595.4	623.2	649.7
20°	517.3	532.6	556.3	582.8	610.7
22.5°	476.8	490.8	515.9	541.0	574.4
25°	432.2	447.6	471.3	500.5	534.0
27.5°	389.0	404.3	428.0	461.5	496.4
30°	345.8	359.7	386.2	421.1	458.7
32.5°	301.2	315.1	344.4	382.0	421.1
35°	257.9	271.9	302.6	344.4	382.0
37.5°	214.7	230.1	264.9	304.0	336.0
40°	172.9	191.0	231.5	264.9	292.8
42.5°	131.1	156.2	199.4	227.3	249.6
45°	93.4	119.9	168.7	189.6	209.1
47.5°	71.1	92.0	139.4	154.8	167.3
50°	61.3	75.3	111.5	122.7	128.3
52.5°	53.0	66.9	89.2	93.4	90.6
55°	46.0	61.3	71.1	66.9	60.0
57.5°	39.0	57.2	58.6	50.2	51.6
60°	32.1	51.6	50.2	43.2	44.6
62.5°	26.5	47.4	43.2	39.0	39.0
65°	22.3	41.8	37.6	34.9	34.9
67.5°	18.1	37.6	33.5	30.7	30.7
70°	15.3	33.5	29.3	26.5	26.5
72.5°	13.9	29.3	26.5	23.7	23.7
75°	11.2	25.1	23.7	20.9	19.5
77.5°	9.8	20.9	20.9	19.5	16.7
80°	8.4	18.1	19.5	16.7	13.9
82.5°	8.4	16.7	16.7	15.3	11.2
85°	7.0	13.9	15.3	13.9	9.8
87.5°	4.2	12.5	12.5	11.2	7.0
90°	0.0	0.0	0.0	0.0	0.0



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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	11.19	12.47	11.55	12.78	13.09	10.71	11.99	11.07	12.30	12.62
	3H	12.36	13.50	12.74	13.83	14.19	12.27	13.41	12.65	13.74	14.11
	4H	12.79	13.85	13.19	14.20	14.59	12.96	14.02	13.36	14.37	14.75
	6H	13.14	14.11	13.55	14.48	14.88	13.60	14.58	14.02	14.95	15.34
	8H	13.33	14.26	13.76	14.65	15.06	13.89	14.81	14.32	15.21	15.61
	12H	13.55	14.44	13.99	14.82	15.25	14.21	15.09	14.64	15.48	15.91
4H	2H	11.69	12.75	12.09	13.10	13.48	11.31	12.37	11.71	12.72	13.10
	3H	13.33	14.21	13.74	14.61	15.01	13.11	13.98	13.52	14.39	14.79
	4H	14.10	14.88	14.53	15.30	15.74	13.95	14.73	14.38	15.15	15.60
	6H	14.70	15.38	15.16	15.82	16.29	14.80	15.48	15.27	15.93	16.40
	8H	15.00	15.63	15.47	16.08	16.55	15.19	15.83	15.66	16.28	16.75
	12H	15.31	15.87	15.80	16.36	16.83	15.63	16.20	16.12	16.68	17.15
8H	4H	14.51	15.15	14.98	15.60	16.07	14.41	15.04	14.88	15.49	15.96
	6H	15.46	15.98	15.96	16.48	16.96	15.51	16.03	16.01	16.53	17.01
	8H	16.01	16.48	16.53	16.99	17.48	16.09	16.56	16.61	17.08	17.57
	12H	16.57	16.99	17.09	17.48	18.05	16.76	17.18	17.28	17.67	18.24
12H	4H	14.58	15.15	15.07	15.63	16.10	14.49	15.05	14.98	15.54	16.01
	6H	15.64	16.11	16.17	16.63	17.12	15.70	16.17	16.22	16.68	17.17
	8H	16.34	16.75	16.85	17.25	17.82	16.41	16.82	16.92	17.32	17.89