

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: P1057986

Luminaire Tested: S122RDRP-S485D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057986
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-S485D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

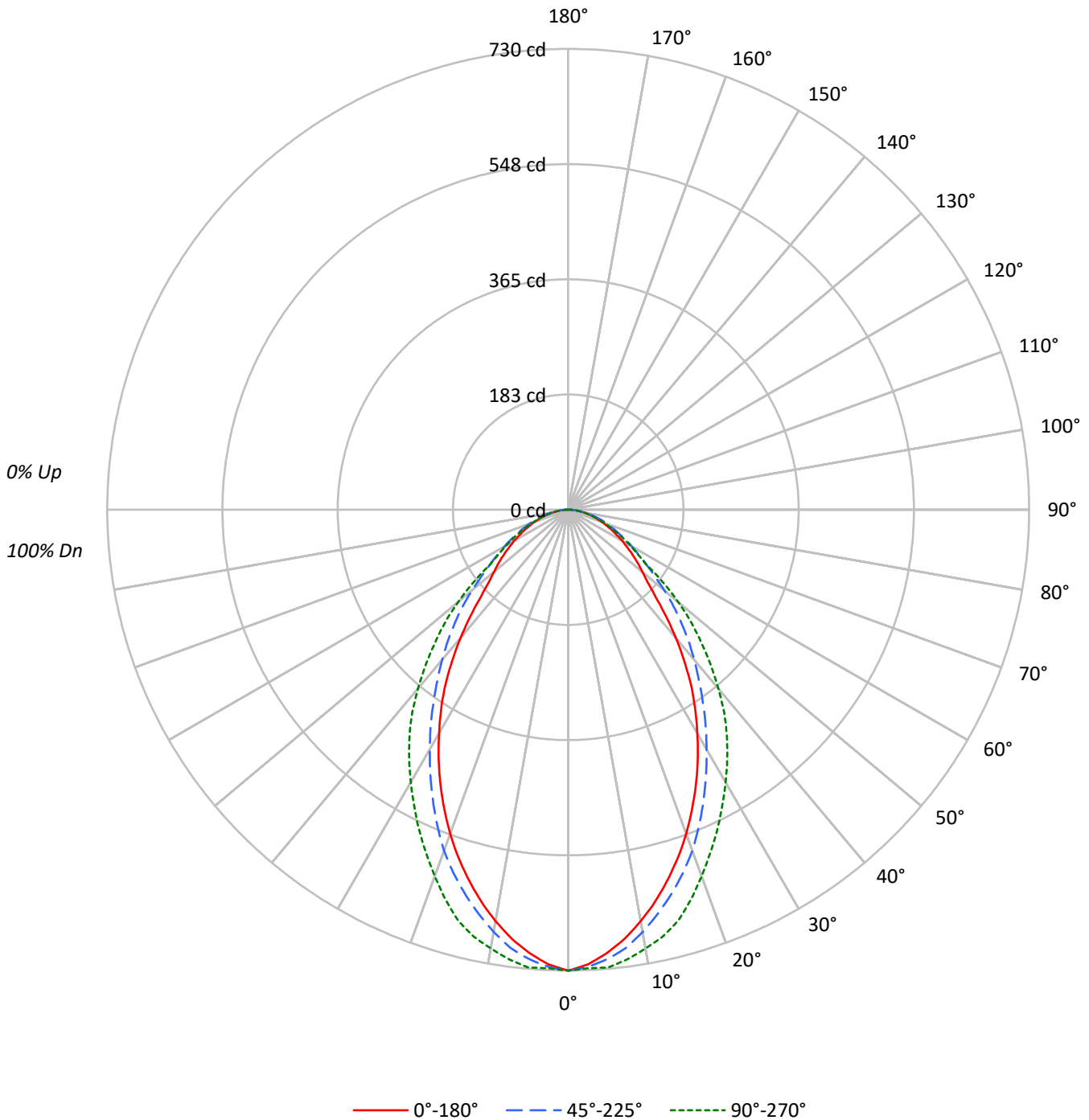
Lumens per Lamp: N/A
Luminaire Lumens: 1190.4 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

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CATALOG NUMBER: S122RDRP-S485D850-X4F0-XX-UDD-WVL-W

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	110	106	103	99	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°	13474	13474	13474
5°	13061	13235	13481
10°	12402	12726	13225
15°	11609	12045	12870
20°	10731	11285	12134
25°	9750	10327	11381
30°	8717	9335	10624
35°	7641	8366	9869
40°	6393	7470	8908
45°	5123	6618	7787
50°	4395	5701	6537
55°	4015	4848	4826
60°	3650	4288	4200
65°	3327	3838	3668
70°	3048	3518	3264
75°	2852	3244	2852
80°	2667	3007	2508
85°	2668	3155	2160

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	5.7
10°-20°	178.5	15.0
20°-30°	235.4	19.8
30°-40°	237.0	19.9
40°-50°	192.9	16.2
50°-60°	131.5	11.0
60°-70°	85.4	7.2
70°-80°	47.0	3.9
80°-90°	15.3	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°	481.2	40.4
0°-40°	718.3	60.3
0°-60°	1042.7	87.6
0°-90°	1190.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1190.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	705	718	714	721	728	66
15°	608	623	630	656	674	170
25°	479	495	507	530	559	220
35°	339	356	371	404	438	211
45°	196	221	254	276	298	155
55°	125	137	151	152	150	112
65°	76	90	88	83	84	76
75°	40	50	46	41	40	42
85°	13	16	15	12	10	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.2	730.2	730.2	730.2	730.2
2.5°	720.8	732.5	724.7	725.5	727.0
5°	705.1	718.4	714.5	720.8	727.8
7.5°	685.4	698.8	700.3	709.8	718.4
10°	661.9	676.8	679.2	693.3	705.8
12.5°	636.0	652.5	655.6	676.0	692.5
15°	607.7	623.4	630.5	656.4	673.7
17.5°	577.9	592.8	603.8	627.3	647.0
20°	546.5	560.6	574.7	595.9	617.9
22.5°	512.7	528.4	541.7	562.9	588.1
25°	478.9	494.6	507.2	530.0	559.0
27.5°	444.4	460.1	472.7	497.0	528.4
30°	409.1	425.5	438.1	465.6	498.6
32.5°	374.5	391.0	405.1	434.2	468.7
35°	339.2	356.5	371.4	403.6	438.1
37.5°	301.5	321.1	340.0	372.2	405.9
40°	265.4	287.4	310.1	340.0	369.8
42.5°	229.3	253.6	281.9	307.0	334.5
45°	196.3	220.6	253.6	275.6	298.4
47.5°	170.4	190.8	226.1	244.2	264.6
50°	153.1	167.2	198.6	212.8	227.7
52.5°	139.0	150.7	172.7	182.2	190.0
55°	124.8	137.4	150.7	151.5	150.0
57.5°	110.7	124.8	131.9	126.4	129.5
60°	98.9	113.1	116.2	110.7	113.8
62.5°	86.4	102.1	102.1	96.6	98.1
65°	76.2	90.3	87.9	83.2	84.0
67.5°	66.0	80.1	76.2	71.4	71.4
70°	56.5	69.9	65.2	60.5	60.5
72.5°	47.9	58.9	55.7	50.2	49.5
75°	40.0	49.5	45.5	40.8	40.0
77.5°	32.2	40.0	36.9	33.0	31.4
80°	25.1	32.2	28.3	25.1	23.6
82.5°	18.8	24.3	21.2	18.1	16.5
85°	12.6	16.5	14.9	11.8	10.2
87.5°	6.3	11.0	9.4	7.9	6.3
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	15.75	17.19	16.12	17.50	17.82	16.00	17.44	16.37	17.75	18.07
	3H	17.28	18.57	17.66	18.90	19.26	17.36	18.65	17.74	18.97	19.34
	4H	17.84	19.05	18.25	19.40	19.78	17.84	19.05	18.24	19.39	19.77
	6H	18.27	19.38	18.68	19.75	20.14	18.19	19.30	18.60	19.67	20.06
	8H	18.42	19.48	18.85	19.87	20.27	18.30	19.35	18.73	19.74	20.15
	12H	18.53	19.55	18.96	19.93	20.36	18.37	19.38	18.80	19.76	20.19
4H	2H	16.32	17.53	16.73	17.88	18.26	16.52	17.73	16.92	18.08	18.46
	3H	18.13	19.13	18.54	19.53	19.93	18.10	19.10	18.51	19.50	19.90
	4H	18.87	19.77	19.31	20.19	20.63	18.69	19.59	19.13	20.01	20.45
	6H	19.46	20.24	19.92	20.68	21.14	19.16	19.94	19.62	20.39	20.85
	8H	19.67	20.40	20.13	20.84	21.31	19.31	20.04	19.78	20.49	20.96
	12H	19.83	20.48	20.32	20.96	21.43	19.42	20.07	19.91	20.55	21.02
8H	4H	19.14	19.87	19.60	20.31	20.78	18.98	19.71	19.45	20.16	20.63
	6H	19.89	20.49	20.39	20.99	21.47	19.57	20.18	20.07	20.67	21.15
	8H	20.22	20.76	20.73	21.27	21.76	19.80	20.34	20.31	20.85	21.34
	12H	20.50	20.98	21.01	21.47	22.04	19.98	20.46	20.49	20.95	21.52
12H	4H	19.15	19.80	19.64	20.28	20.75	19.02	19.67	19.50	20.15	20.62
	6H	19.94	20.48	20.45	20.99	21.48	19.64	20.18	20.16	20.69	21.18
	8H	20.33	20.81	20.85	21.30	21.87	19.93	20.41	20.44	20.90	21.47