

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: P1057955

Luminaire Tested: S122RDRP-S485D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057955
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-S485D830-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

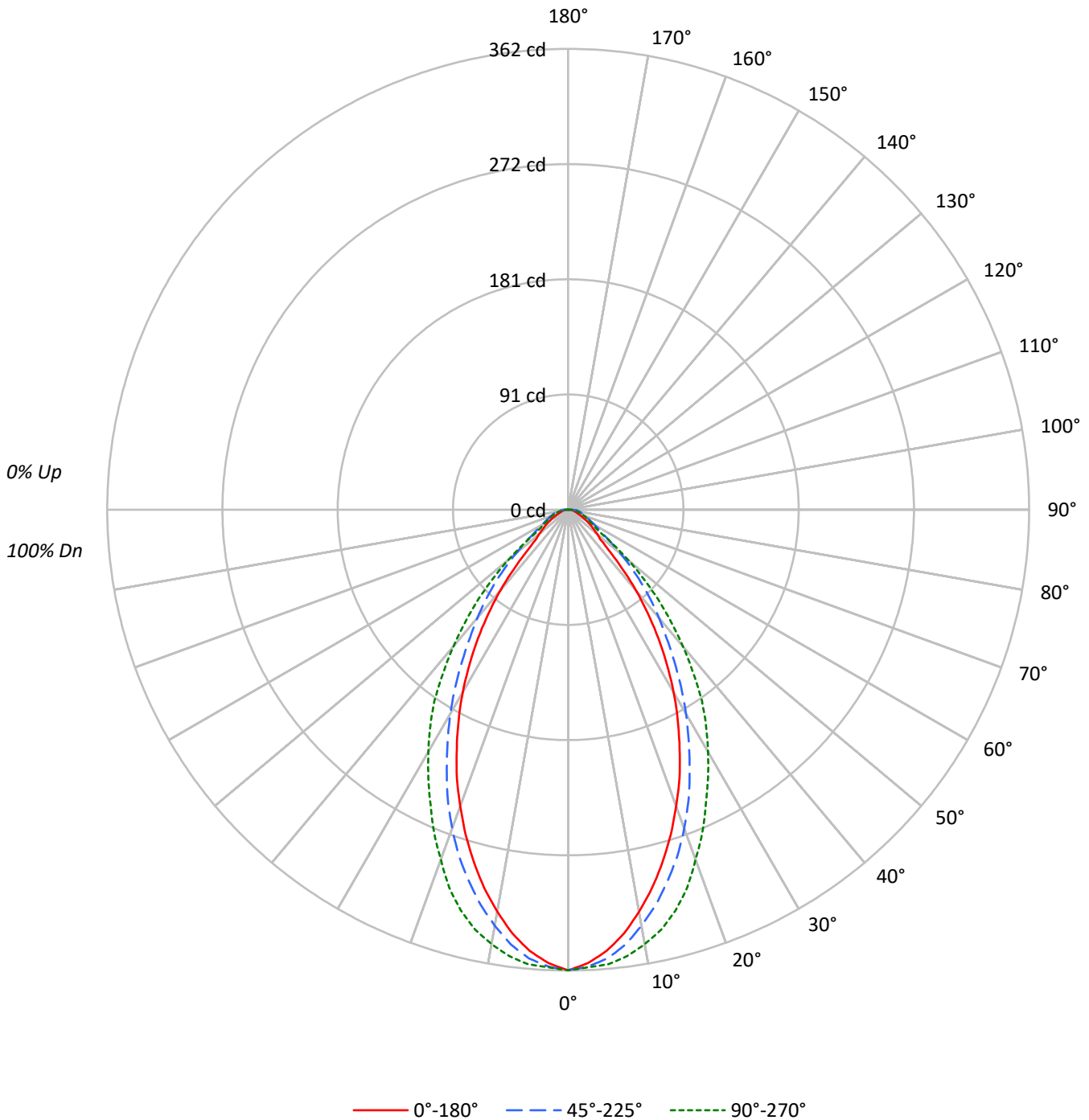
Lumens per Lamp: N/A
Luminaire Lumens: 436.5 lumens
Efficiency: N/A
Efficacy: 22.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

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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°	6676	6676	6676
5°	6442	6553	6640
10°	6005	6217	6492
15°	5471	5765	6224
20°	4864	5231	5742
25°	4215	4595	5206
30°	3528	3940	4679
35°	2782	3264	4120
40°	1994	2669	3377
45°	1166	2109	2612
50°	844	1533	1763
55°	708	1094	923
60°	568	886	790
65°	467	786	729
70°	394	755	685
75°	378	806	663
80°	425	988	712
85°	699	1546	995

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.2	7.6
10°-20°	84.9	19.5
20°-30°	104.4	23.9
30°-40°	92.3	21.1
40°-50°	58.9	13.5
50°-60°	28.7	6.6
60°-70°	17.1	3.9
70°-80°	10.9	2.5
80°-90°	6.0	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°	222.5	51.0
0°-40°	314.8	72.1
0°-60°	402.4	92.2
0°-90°	436.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	436.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	348	355	354	355	358	32
15°	286	294	302	315	326	80
25°	207	214	226	240	256	95
35°	124	130	145	165	183	77
45°	45	57	81	91	100	38
55°	22	29	34	32	29	20
65°	11	20	18	17	17	11
75°	5	12	11	10	9	6
85°	3	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	361.8	361.8	361.8	361.8	361.8
2.5°	356.5	363.2	359.2	359.2	359.8
5°	347.8	355.2	353.8	355.2	358.5
7.5°	335.8	343.2	344.5	349.8	353.8
10°	320.5	327.8	331.8	340.5	346.5
12.5°	304.4	311.8	317.8	329.1	337.8
15°	286.4	294.4	301.8	315.1	325.8
17.5°	267.7	275.7	285.1	298.4	311.1
20°	247.7	255.0	266.4	279.1	292.4
22.5°	228.3	235.0	247.0	259.0	275.1
25°	207.0	214.3	225.7	239.7	255.7
27.5°	186.3	193.6	205.0	221.0	237.7
30°	165.6	172.2	184.9	201.6	219.6
32.5°	144.2	150.9	164.9	182.9	201.6
35°	123.5	130.2	144.9	164.9	182.9
37.5°	102.8	110.2	126.8	145.5	160.9
40°	82.8	91.5	110.8	126.8	140.2
42.5°	62.8	74.8	95.5	108.8	119.5
45°	44.7	57.4	80.8	90.8	100.1
47.5°	34.0	44.1	66.8	74.1	80.1
50°	29.4	36.1	53.4	58.8	61.4
52.5°	25.4	32.0	42.7	44.7	43.4
55°	22.0	29.4	34.0	32.0	28.7
57.5°	18.7	27.4	28.0	24.0	24.7
60°	15.4	24.7	24.0	20.7	21.4
62.5°	12.7	22.7	20.7	18.7	18.7
65°	10.7	20.0	18.0	16.7	16.7
67.5°	8.7	18.0	16.0	14.7	14.7
70°	7.3	16.0	14.0	12.7	12.7
72.5°	6.7	14.0	12.7	11.3	11.3
75°	5.3	12.0	11.3	10.0	9.3
77.5°	4.7	10.0	10.0	9.3	8.0
80°	4.0	8.7	9.3	8.0	6.7
82.5°	4.0	8.0	8.0	7.3	5.3
85°	3.3	6.7	7.3	6.7	4.7
87.5°	2.0	6.0	6.0	5.3	3.3
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	8.63	9.91	9.00	10.22	10.54	8.14	9.42	8.51	9.73	10.05
	3H	9.80	10.94	10.18	11.27	11.64	9.71	10.85	10.09	11.18	11.54
	4H	10.23	11.29	10.63	11.64	12.03	10.39	11.45	10.79	11.80	12.19
	6H	10.58	11.55	10.99	11.92	12.32	11.04	12.01	11.45	12.38	12.78
	8H	10.77	11.70	11.20	12.09	12.49	11.32	12.25	11.75	12.64	13.05
	12H	10.99	11.87	11.42	12.26	12.69	11.64	12.53	12.08	12.91	13.34
4H	2H	9.13	10.19	9.53	10.54	10.93	8.74	9.80	9.15	10.16	10.54
	3H	10.77	11.65	11.18	12.05	12.45	10.55	11.42	10.96	11.83	12.23
	4H	11.53	12.32	11.97	12.74	13.18	11.38	12.17	11.82	12.59	13.03
	6H	12.14	12.82	12.60	13.26	13.73	12.24	12.92	12.70	13.37	13.83
	8H	12.44	13.07	12.90	13.52	13.99	12.63	13.26	13.10	13.71	14.18
	12H	12.75	13.31	13.23	13.79	14.27	13.07	13.63	13.55	14.11	14.59
8H	4H	11.95	12.58	12.42	13.03	13.50	11.84	12.48	12.31	12.92	13.39
	6H	12.90	13.42	13.40	13.92	14.40	12.95	13.47	13.45	13.97	14.45
	8H	13.45	13.92	13.97	14.43	14.92	13.52	13.99	14.04	14.51	15.00
	12H	14.01	14.43	14.53	14.92	15.49	14.20	14.61	14.71	15.11	15.68
12H	4H	12.02	12.58	12.50	13.06	13.54	11.92	12.49	12.41	12.97	13.44
	6H	13.08	13.55	13.60	14.07	14.56	13.13	13.60	13.65	14.12	14.61
	8H	13.77	14.19	14.29	14.68	15.26	13.84	14.25	14.35	14.75	15.32