

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: P1057964

Luminaire Tested: S122RDRP-S485D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057964
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-S485D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

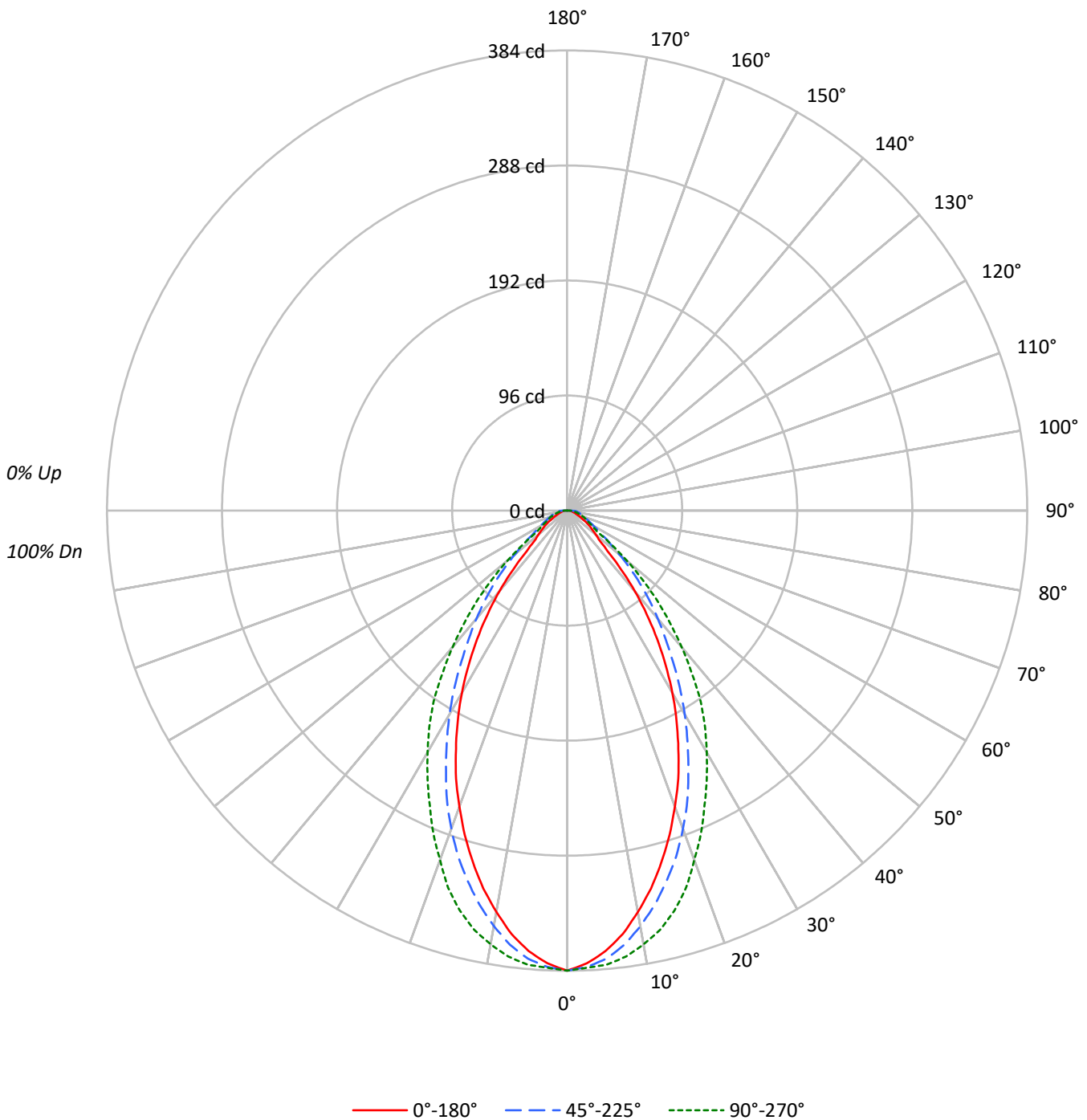
Lumens per Lamp: N/A
Luminaire Lumens: 463.1 lumens
Efficiency: N/A
Efficacy: 23.6 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	7084	7084	7084
5°	6835	6954	7046
10°	6371	6595	6888
15°	5806	6117	6604
20°	5161	5549	6091
25°	4471	4874	5524
30°	3744	4180	4965
35°	2951	3462	4372
40°	2115	2833	3582
45°	1240	2236	2771
50°	896	1628	1872
55°	753	1161	981
60°	602	941	838
65°	493	834	773
70°	421	804	728
75°	406	856	706
80°	446	1052	754
85°	741	1651	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2771 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	7.6
10°-20°	90.1	19.5
20°-30°	110.8	23.9
30°-40°	97.9	21.1
40°-50°	62.5	13.5
50°-60°	30.5	6.6
60°-70°	18.2	3.9
70°-80°	11.6	2.5
80°-90°	6.4	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°	236.1	51.0
0°-40°	334.0	72.1
0°-60°	427.0	92.2
0°-90°	463.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	463.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	369	377	375	377	380	34
15°	304	312	320	334	346	85
25°	220	227	239	254	271	100
35°	131	138	154	175	194	81
45°	48	61	86	96	106	40
55°	23	31	36	34	30	21
65°	11	21	19	18	18	11
75°	6	13	12	11	10	6
85°	4	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	383.9	383.9	383.9	383.9	383.9
2.5°	378.2	385.3	381.1	381.1	381.8
5°	369.0	376.8	375.4	376.8	380.4
7.5°	356.3	364.1	365.5	371.2	375.4
10°	340.0	347.8	352.0	361.2	367.6
12.5°	323.0	330.8	337.2	349.2	358.4
15°	303.9	312.4	320.2	334.3	345.7
17.5°	284.0	292.5	302.5	316.6	330.1
20°	262.8	270.6	282.6	296.1	310.2
22.5°	242.2	249.3	262.1	274.8	291.8
25°	219.6	227.4	239.4	254.3	271.3
27.5°	197.6	205.4	217.5	234.5	252.2
30°	175.7	182.7	196.2	213.9	233.0
32.5°	153.0	160.1	175.0	194.1	213.9
35°	131.0	138.1	153.7	175.0	194.1
37.5°	109.1	116.9	134.6	154.4	170.7
40°	87.8	97.0	117.6	134.6	148.7
42.5°	66.6	79.3	101.3	115.5	126.8
45°	47.5	60.9	85.7	96.3	106.2
47.5°	36.1	46.7	70.8	78.6	85.0
50°	31.2	38.2	56.7	62.3	65.2
52.5°	26.9	34.0	45.3	47.5	46.0
55°	23.4	31.2	36.1	34.0	30.5
57.5°	19.8	29.0	29.7	25.5	26.2
60°	16.3	26.2	25.5	22.0	22.7
62.5°	13.5	24.1	22.0	19.8	19.8
65°	11.3	21.2	19.1	17.7	17.7
67.5°	9.2	19.1	17.0	15.6	15.6
70°	7.8	17.0	14.9	13.5	13.5
72.5°	7.1	14.9	13.5	12.0	12.0
75°	5.7	12.7	12.0	10.6	9.9
77.5°	5.0	10.6	10.6	9.9	8.5
80°	4.2	9.2	9.9	8.5	7.1
82.5°	4.2	8.5	8.5	7.8	5.7
85°	3.5	7.1	7.8	7.1	5.0
87.5°	2.1	6.4	6.4	5.7	3.5
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	8.82	10.10	9.19	10.41	10.73	8.36	9.64	8.72	9.95	10.26
	3H	10.00	11.14	10.38	11.47	11.83	9.92	11.06	10.30	11.39	11.76
	4H	10.43	11.49	10.83	11.84	12.23	10.60	11.66	11.01	12.01	12.40
	6H	10.78	11.75	11.19	12.12	12.52	11.25	12.23	11.67	12.60	12.99
	8H	10.97	11.89	11.40	12.29	12.69	11.54	12.47	11.97	12.86	13.26
	12H	11.18	12.07	11.62	12.45	12.88	11.86	12.75	12.30	13.13	13.56
4H	2H	9.32	10.39	9.73	10.74	11.12	8.95	10.02	9.36	10.37	10.75
	3H	10.97	11.85	11.39	12.25	12.66	10.76	11.63	11.17	12.04	12.44
	4H	11.74	12.52	12.17	12.94	13.38	11.60	12.38	12.03	12.80	13.24
	6H	12.34	13.02	12.80	13.46	13.93	12.45	13.13	12.92	13.58	14.05
	8H	12.63	13.27	13.10	13.72	14.19	12.85	13.48	13.31	13.93	14.40
	12H	12.94	13.51	13.43	13.99	14.46	13.29	13.85	13.77	14.33	14.81
8H	4H	12.15	12.79	12.62	13.24	13.71	12.05	12.69	12.52	13.14	13.61
	6H	13.10	13.62	13.60	14.12	14.60	13.16	13.68	13.66	14.18	14.66
	8H	13.65	14.12	14.17	14.63	15.12	13.74	14.21	14.26	14.73	15.22
	12H	14.21	14.62	14.72	15.12	15.69	14.42	14.83	14.93	15.33	15.90
12H	4H	12.22	12.79	12.71	13.27	13.74	12.14	12.70	12.62	13.18	13.66
	6H	13.28	13.75	13.81	14.27	14.76	13.35	13.82	13.87	14.33	14.82
	8H	13.98	14.39	14.49	14.89	15.46	14.06	14.47	14.58	14.97	15.54