

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: P1058414

Luminaire Tested: S122RDRP-H485D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058414
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-H485D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

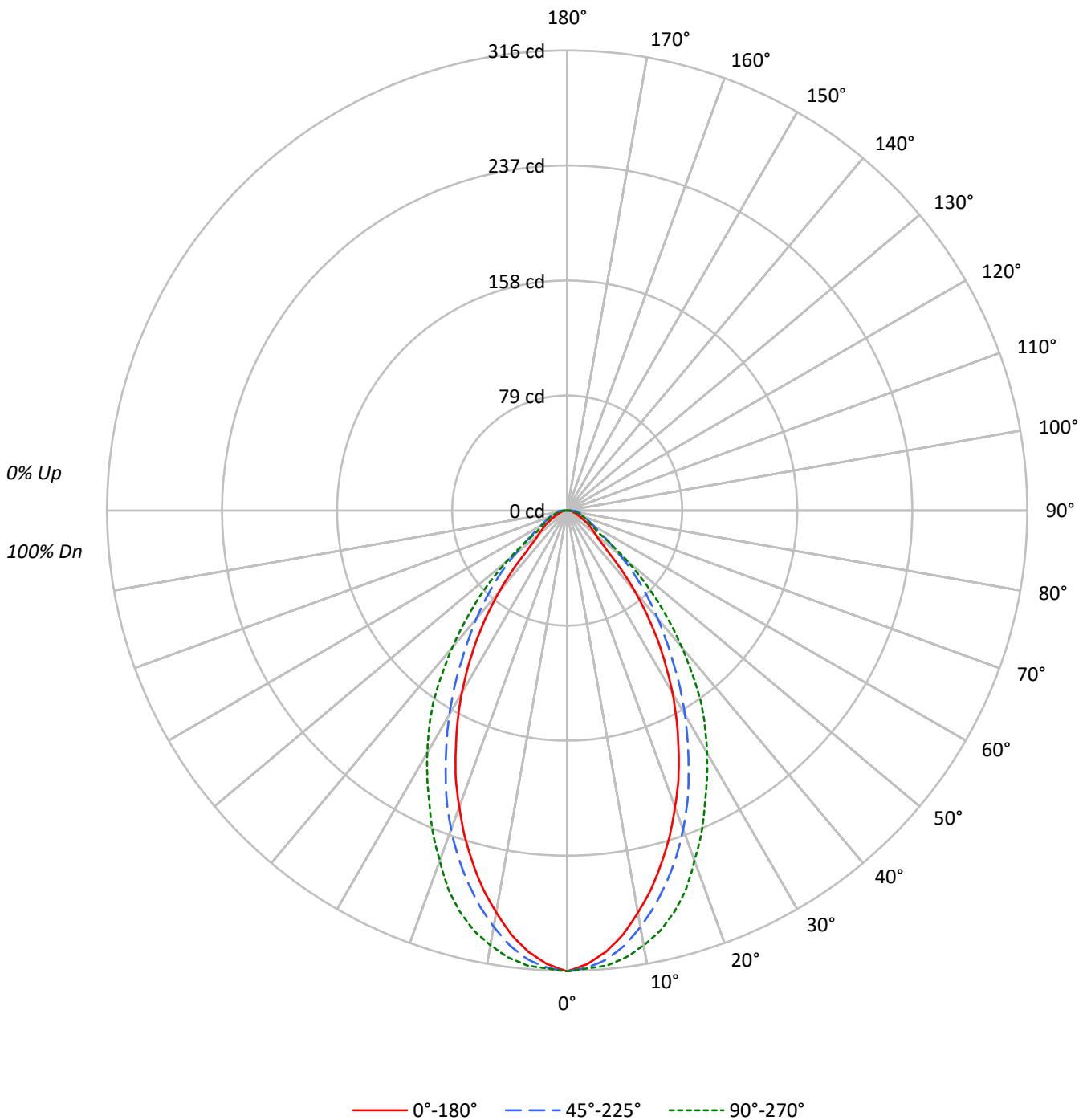
Lumens per Lamp: N/A
Luminaire Lumens: 381.8 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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°	5840	5840	5840
5°	5635	5733	5809
10°	5252	5438	5679
15°	4785	5041	5444
20°	4253	4575	5023
25°	3685	4019	4553
30°	3085	3447	4093
35°	2433	2854	3604
40°	1744	2334	2953
45°	1020	1845	2286
50°	738	1341	1542
55°	621	959	807
60°	495	775	690
65°	406	690	637
70°	345	664	599
75°	335	706	585
80°	372	871	616
85°	614	1355	868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2286 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	7.6
10°-20°	74.3	19.5
20°-30°	91.3	23.9
30°-40°	80.7	21.1
40°-50°	51.5	13.5
50°-60°	25.1	6.6
60°-70°	15.0	3.9
70°-80°	9.6	2.5
80°-90°	5.3	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°	194.6	51.0
0°-40°	275.3	72.1
0°-60°	352.0	92.2
0°-90°	381.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	381.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	304	311	310	311	314	28
15°	250	258	264	276	285	70
25°	181	187	197	210	224	83
35°	108	114	127	144	160	67
45°	39	50	71	79	88	33
55°	19	26	30	28	25	17
65°	9	18	16	15	15	9
75°	5	10	10	9	8	5
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.5	316.5	316.5	316.5	316.5
2.5°	311.8	317.7	314.2	314.2	314.7
5°	304.2	310.7	309.5	310.7	313.6
7.5°	293.7	300.1	301.3	306.0	309.5
10°	280.3	286.7	290.2	297.8	303.1
12.5°	266.3	272.7	278.0	287.9	295.5
15°	250.5	257.5	263.9	275.6	285.0
17.5°	234.2	241.2	249.3	261.0	272.1
20°	216.6	223.1	233.0	244.1	255.8
22.5°	199.7	205.5	216.1	226.6	240.6
25°	181.0	187.4	197.4	209.6	223.6
27.5°	162.9	169.3	179.3	193.3	207.9
30°	144.8	150.7	161.8	176.3	192.1
32.5°	126.1	132.0	144.2	160.0	176.3
35°	108.0	113.9	126.7	144.2	160.0
37.5°	89.9	96.3	110.9	127.3	140.7
40°	72.4	80.0	96.9	110.9	122.6
42.5°	54.9	65.4	83.5	95.2	104.5
45°	39.1	50.2	70.7	79.4	87.6
47.5°	29.8	38.5	58.4	64.8	70.1
50°	25.7	31.5	46.7	51.4	53.7
52.5°	22.2	28.0	37.4	39.1	38.0
55°	19.3	25.7	29.8	28.0	25.1
57.5°	16.4	23.9	24.5	21.0	21.6
60°	13.4	21.6	21.0	18.1	18.7
62.5°	11.1	19.9	18.1	16.4	16.4
65°	9.3	17.5	15.8	14.6	14.6
67.5°	7.6	15.8	14.0	12.8	12.8
70°	6.4	14.0	12.3	11.1	11.1
72.5°	5.8	12.3	11.1	9.9	9.9
75°	4.7	10.5	9.9	8.8	8.2
77.5°	4.1	8.8	8.8	8.2	7.0
80°	3.5	7.6	8.2	7.0	5.8
82.5°	3.5	7.0	7.0	6.4	4.7
85°	2.9	5.8	6.4	5.8	4.1
87.5°	1.8	5.3	5.3	4.7	2.9
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	8.15	9.43	8.52	9.74	10.06	7.68	8.96	8.04	9.27	9.59
	3H	9.33	10.47	9.71	10.80	11.16	9.24	10.38	9.62	10.71	11.07
	4H	9.76	10.82	10.17	11.18	11.56	9.92	10.99	10.33	11.34	11.72
	6H	10.11	11.09	10.52	11.46	11.85	10.57	11.55	10.99	11.92	12.31
	8H	10.31	11.23	10.74	11.62	12.03	10.86	11.79	11.29	12.18	12.58
	12H	10.52	11.41	10.95	11.79	12.22	11.18	12.07	11.61	12.45	12.88
4H	2H	8.66	9.72	9.06	10.07	10.45	8.28	9.34	8.69	9.70	10.08
	3H	10.31	11.18	10.72	11.59	11.99	10.08	10.95	10.49	11.36	11.76
	4H	11.07	11.86	11.51	12.28	12.72	10.93	11.71	11.36	12.13	12.57
	6H	11.68	12.36	12.14	12.80	13.27	11.78	12.46	12.24	12.91	13.37
	8H	11.97	12.61	12.44	13.06	13.53	12.17	12.81	12.64	13.25	13.73
	12H	12.28	12.85	12.77	13.33	13.80	12.61	13.17	13.10	13.66	14.13
8H	4H	11.49	12.13	11.96	12.57	13.05	11.39	12.02	11.86	12.47	12.94
	6H	12.44	12.96	12.95	13.46	13.94	12.49	13.01	13.00	13.51	13.99
	8H	12.99	13.46	13.51	13.97	14.46	13.07	13.54	13.59	14.05	14.55
	12H	13.55	13.96	14.06	14.46	15.03	13.74	14.15	14.25	14.65	15.22
12H	4H	11.56	12.12	12.05	12.61	13.08	11.47	12.03	11.96	12.52	12.99
	6H	12.63	13.10	13.15	13.61	14.10	12.68	13.15	13.20	13.66	14.15
	8H	13.32	13.73	13.83	14.23	14.80	13.39	13.80	13.90	14.30	14.87