

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058260

Luminaire Tested: S122RDR-H1005D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

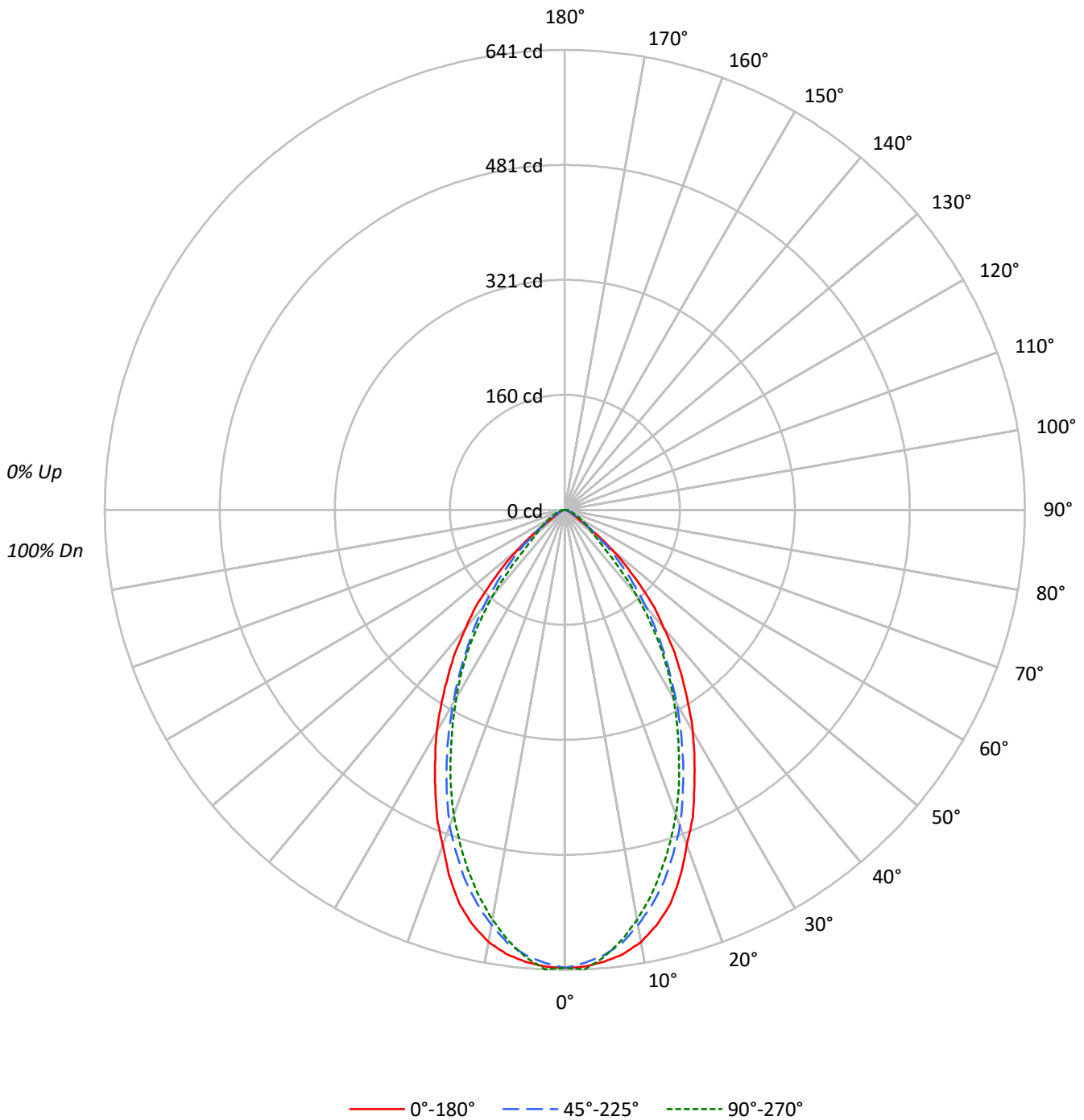
Lumens per Lamp: N/A
Luminaire Lumens: 686.6 lumens
Efficiency: N/A
Efficacy: 18.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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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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	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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11780	11780	11780
5°	11708	11542	11590
10°	11462	11008	10864
15°	10856	10224	9932
20°	9759	9208	8884
25°	8692	7938	7653
30°	7602	6624	6435
35°	6402	5368	5195
40°	5157	4237	3746
45°	3857	3058	2229
50°	2414	1975	1464
55°	820	1065	1190
60°	469	657	941
65°	332	445	725
70°	275	345	550
75°	178	271	456
80°	138	266	404
85°	0	0	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3857 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	8.6
10°-20°	150.6	21.9
20°-30°	181.4	26.4
30°-40°	155.0	22.6
40°-50°	90.8	13.2
50°-60°	32.9	4.8
60°-70°	11.7	1.7
70°-80°	4.6	0.7
80°-90°	0.8	0.1
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°	390.8	56.9
0°-40°	545.8	79.5
0°-60°	669.4	97.5
0°-90°	686.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	686.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	632	633	623	626	626	60
15°	568	559	535	525	520	158
25°	427	409	390	384	376	196
35°	284	262	238	236	231	177
45°	148	132	117	98	85	114
55°	26	36	33	34	37	32
65°	8	9	10	14	17	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	638.4	638.4	638.4	638.4	638.4
2.5°	637.1	638.4	632.1	638.4	641.0
5°	632.1	633.3	623.1	625.7	625.7
7.5°	624.4	623.1	609.1	606.6	605.3
10°	611.7	607.8	587.5	583.6	579.8
12.5°	592.5	584.9	563.2	556.9	551.8
15°	568.3	559.4	535.2	525.0	519.9
17.5°	535.2	525.0	502.1	491.9	486.8
20°	497.0	486.8	468.9	457.5	452.4
22.5°	465.1	448.6	429.4	421.8	415.4
25°	426.9	409.0	389.9	383.6	375.9
27.5°	391.2	369.5	350.4	345.3	339.0
30°	356.8	333.9	310.9	310.9	302.0
32.5°	319.8	298.2	274.0	272.7	267.6
35°	284.2	262.5	238.3	235.7	230.6
37.5°	251.0	229.4	206.4	198.8	192.4
40°	214.1	195.0	175.9	163.1	155.5
42.5°	184.8	163.1	144.0	128.7	118.5
45°	147.8	132.5	117.2	98.1	85.4
47.5°	114.7	104.5	91.7	70.1	63.7
50°	84.1	79.0	68.8	52.2	51.0
52.5°	53.5	56.1	49.7	40.8	44.6
55°	25.5	35.7	33.1	34.4	37.0
57.5°	16.6	17.8	24.2	28.0	30.6
60°	12.7	12.7	17.8	22.9	25.5
62.5°	10.2	10.2	14.0	19.1	20.4
65°	7.6	8.9	10.2	14.0	16.6
67.5°	6.4	6.4	7.6	11.5	12.7
70°	5.1	5.1	6.4	8.9	10.2
72.5°	3.8	3.8	5.1	7.6	7.6
75°	2.5	3.8	3.8	5.1	6.4
77.5°	2.5	2.5	2.5	3.8	5.1
80°	1.3	1.3	2.5	2.5	3.8
82.5°	1.3	1.3	1.3	1.3	2.5
85°	0.0	0.0	0.0	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0
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	4.44	5.60	4.81	5.92	6.23	7.84	9.01	8.21	9.32	9.63
	3H	4.97	5.99	5.35	6.32	6.69	8.57	9.59	8.95	9.93	10.29
	4H	5.10	6.05	5.50	6.40	6.78	8.79	9.74	9.19	10.09	10.48
	6H	5.17	6.04	5.59	6.41	6.80	8.94	9.81	9.36	10.18	10.57
	8H	5.18	5.99	5.61	6.39	6.79	8.97	9.79	9.40	10.18	10.59
	12H	5.14	5.92	5.58	6.31	6.74	8.97	9.75	9.40	10.13	10.56
4H	2H	4.75	5.70	5.16	6.05	6.44	7.81	8.76	8.22	9.11	9.50
	3H	5.42	6.19	5.83	6.59	7.00	8.69	9.45	9.10	9.86	10.27
	4H	5.65	6.34	6.09	6.76	7.20	8.97	9.65	9.40	10.07	10.52
	6H	5.77	6.35	6.24	6.80	7.27	9.19	9.78	9.66	10.22	10.70
	8H	5.79	6.33	6.26	6.78	7.26	9.23	9.78	9.71	10.23	10.70
	12H	5.75	6.23	6.24	6.72	7.19	9.25	9.73	9.74	10.22	10.69
8H	4H	5.76	6.30	6.23	6.75	7.22	8.90	9.44	9.37	9.89	10.36
	6H	5.92	6.36	6.43	6.86	7.35	9.15	9.59	9.66	10.09	10.58
	8H	5.97	6.37	6.50	6.89	7.38	9.21	9.61	9.74	10.13	10.62
	12H	5.95	6.30	6.47	6.79	7.37	9.28	9.62	9.79	10.12	10.70
12H	4H	5.74	6.22	6.23	6.70	7.18	8.85	9.33	9.34	9.81	10.29
	6H	5.92	6.31	6.45	6.83	7.33	9.10	9.50	9.63	10.02	10.51
	8H	6.00	6.34	6.51	6.84	7.42	9.19	9.53	9.71	10.03	10.61