

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: P1058225

Luminaire Tested: S122RDR-H1005D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058225
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: S122RDR-H1005D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

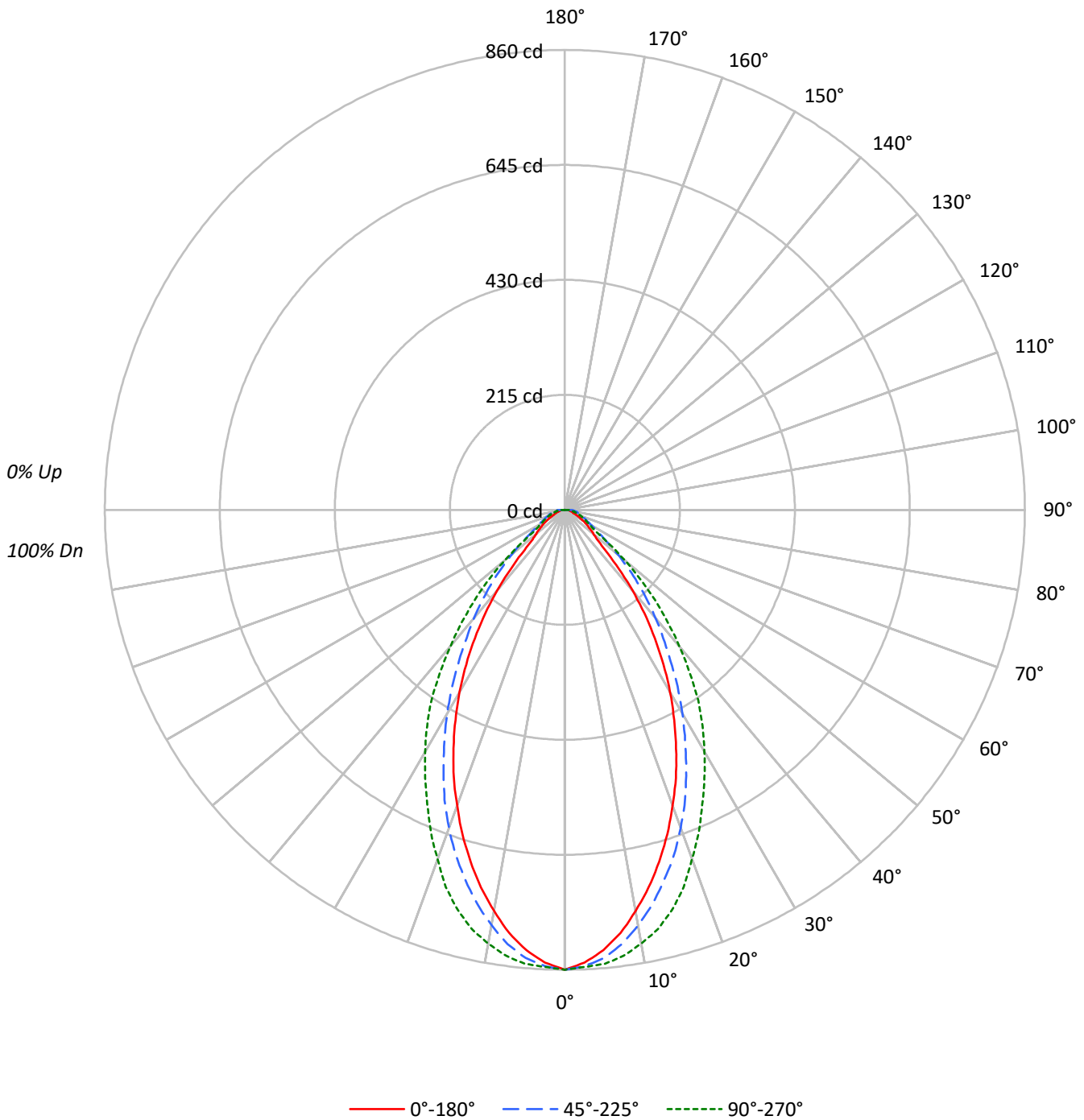
Lumens per Lamp: N/A
Luminaire Lumens: 1037.6 lumens
Efficiency: N/A
Efficacy: 28.4 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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			100	
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15871	15871	15871
5°	15315	15580	15785
10°	14272	14778	15432
15°	13006	13703	14794
20°	11560	12434	13649
25°	10015	10921	12375
30°	8386	9367	11124
35°	6614	7758	9794
40°	4741	6345	8029
45°	2774	5010	6211
50°	2004	3646	4191
55°	1686	2603	2194
60°	1347	2107	1875
65°	1109	1869	1733
70°	944	1797	1629
75°	905	1925	1583
80°	1010	2359	1690
85°	1673	3705	2350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6211 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	7.6
10°-20°	201.9	19.5
20°-30°	248.2	23.9
30°-40°	219.4	21.1
40°-50°	140.0	13.5
50°-60°	68.3	6.6
60°-70°	40.7	3.9
70°-80°	26.0	2.5
80°-90°	14.3	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°	528.9	51.0
0°-40°	748.3	72.1
0°-60°	956.6	92.2
0°-90°	1037.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	827	844	841	844	852	77
15°	681	700	717	749	774	190
25°	492	509	536	570	608	225
35°	294	310	344	392	435	182
45°	106	136	192	216	238	90
55°	52	70	81	76	68	47
65°	25	48	43	40	40	25
75°	13	29	27	24	22	14
85°	8	16	18	16	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.1	860.1	860.1	860.1	860.1
2.5°	847.4	863.3	853.8	853.8	855.4
5°	826.8	844.2	841.1	844.2	852.2
7.5°	798.2	815.7	818.9	831.5	841.1
10°	761.7	779.2	788.7	809.3	823.6
12.5°	723.6	741.1	755.4	782.4	803.0
15°	680.8	699.8	717.3	749.0	774.4
17.5°	636.4	655.4	677.6	709.4	739.5
20°	588.7	606.2	633.2	663.3	695.1
22.5°	542.7	558.6	587.2	615.7	653.8
25°	491.9	509.4	536.4	569.7	607.8
27.5°	442.8	460.2	487.2	525.3	564.9
30°	393.6	409.4	439.6	479.3	522.1
32.5°	342.8	358.6	392.0	434.8	479.3
35°	293.6	309.5	344.4	392.0	434.8
37.5°	244.4	261.8	301.5	345.9	382.4
40°	196.8	217.4	263.4	301.5	333.3
42.5°	149.2	177.7	226.9	258.7	284.1
45°	106.3	136.5	192.0	215.8	238.0
47.5°	80.9	104.7	158.7	176.1	190.4
50°	69.8	85.7	127.0	139.6	146.0
52.5°	60.3	76.2	101.6	106.3	103.2
55°	52.4	69.8	80.9	76.2	68.2
57.5°	44.4	65.1	66.7	57.1	58.7
60°	36.5	58.7	57.1	49.2	50.8
62.5°	30.2	54.0	49.2	44.4	44.4
65°	25.4	47.6	42.8	39.7	39.7
67.5°	20.6	42.8	38.1	34.9	34.9
70°	17.5	38.1	33.3	30.2	30.2
72.5°	15.9	33.3	30.2	27.0	27.0
75°	12.7	28.6	27.0	23.8	22.2
77.5°	11.1	23.8	23.8	22.2	19.0
80°	9.5	20.6	22.2	19.0	15.9
82.5°	9.5	19.0	19.0	17.5	12.7
85°	7.9	15.9	17.5	15.9	11.1
87.5°	4.8	14.3	14.3	12.7	7.9
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	11.64	12.91	12.00	13.23	13.54	11.16	12.43	11.52	12.75	13.06
	3H	12.81	13.95	13.19	14.28	14.64	12.72	13.86	13.10	14.19	14.55
	4H	13.24	14.30	13.64	14.65	15.04	13.40	14.46	13.81	14.82	15.20
	6H	13.58	14.56	14.00	14.93	15.33	14.05	15.03	14.47	15.40	15.79
	8H	13.78	14.70	14.21	15.10	15.50	14.34	15.26	14.77	15.66	16.06
	12H	14.00	14.88	14.43	15.26	15.70	14.66	15.54	15.09	15.93	16.36
4H	2H	12.14	13.20	12.54	13.55	13.93	11.75	12.82	12.16	13.17	13.55
	3H	13.78	14.66	14.19	15.06	15.46	13.56	14.43	13.97	14.84	15.24
	4H	14.55	15.33	14.98	15.75	16.19	14.40	15.18	14.83	15.60	16.05
	6H	15.15	15.83	15.61	16.27	16.74	15.25	15.93	15.72	16.38	16.85
	8H	15.44	16.08	15.91	16.53	17.00	15.64	16.28	16.11	16.73	17.20
	12H	15.76	16.32	16.24	16.80	17.28	16.08	16.65	16.57	17.13	17.60
8H	4H	14.96	15.60	15.43	16.05	16.52	14.86	15.49	15.33	15.94	16.41
	6H	15.91	16.43	16.41	16.93	17.41	15.96	16.49	16.47	16.98	17.46
	8H	16.45	16.92	16.98	17.44	17.93	16.54	17.01	17.07	17.53	18.02
	12H	17.02	17.43	17.53	17.93	18.50	17.22	17.63	17.73	18.13	18.70
12H	4H	15.03	15.60	15.52	16.08	16.55	14.94	15.50	15.43	15.99	16.46
	6H	16.09	16.56	16.61	17.08	17.57	16.15	16.62	16.67	17.13	17.62
	8H	16.78	17.20	17.30	17.69	18.27	16.86	17.28	17.38	17.77	18.34