

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: P1057820

Luminaire Tested: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057820
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-S1005D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

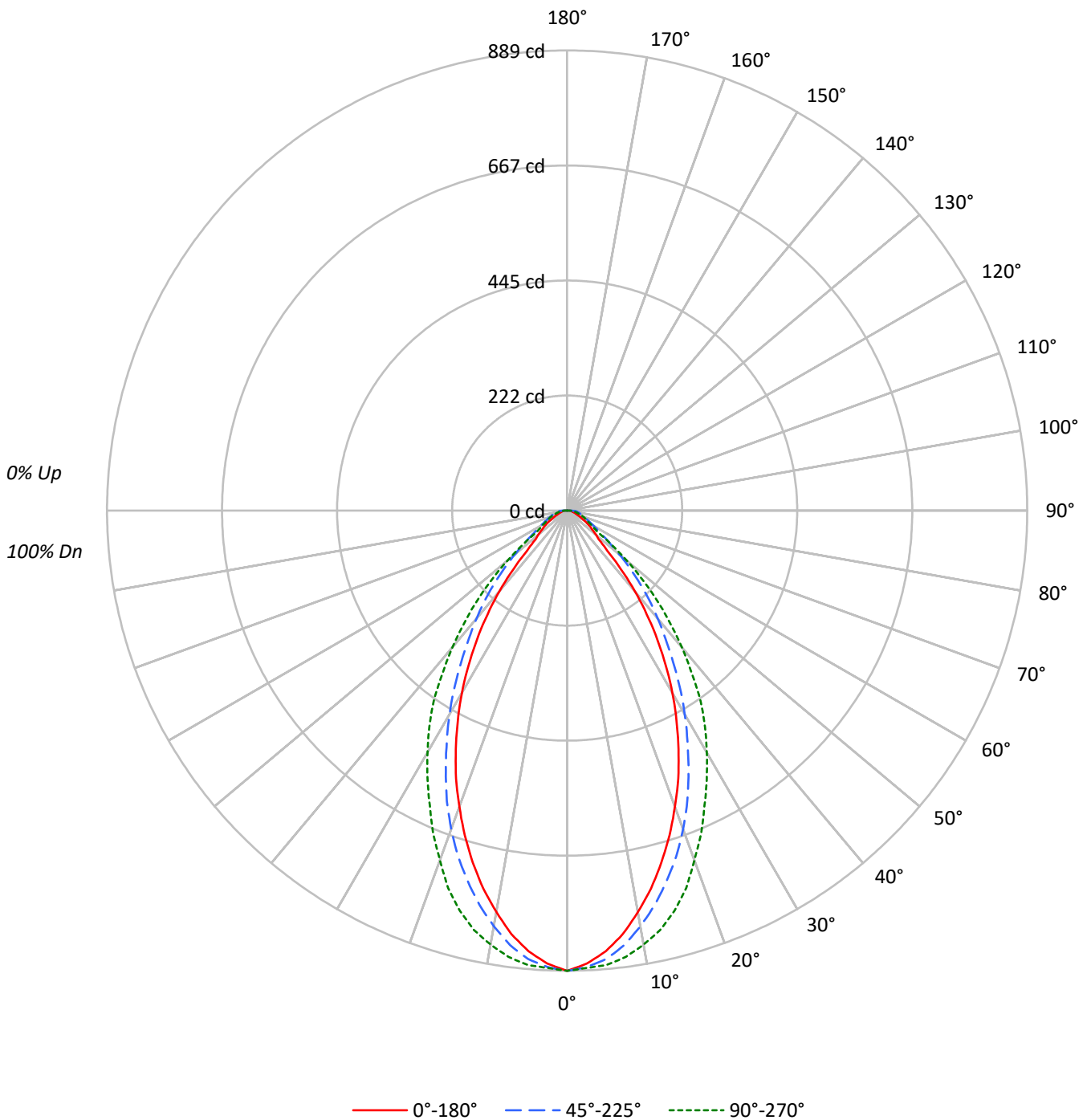
Lumens per Lamp: N/A
Luminaire Lumens: 1072.7 lumens
Efficiency: N/A
Efficacy: 25.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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°	16408	16408	16408
5°	15832	16106	16319
10°	14754	15276	15953
15°	13445	14165	15294
20°	11951	12854	14109
25°	10355	11290	12792
30°	8668	9682	11499
35°	6837	8019	10126
40°	4899	6559	8298
45°	2868	5180	6422
50°	2073	3766	4332
55°	1740	2693	2268
60°	1391	2181	1938
65°	1144	1934	1790
70°	971	1861	1683
75°	934	1989	1640
80°	1041	2444	1743
85°	1736	3811	2435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	7.6
10°-20°	208.7	19.5
20°-30°	256.5	23.9
30°-40°	226.8	21.1
40°-50°	144.8	13.5
50°-60°	70.6	6.6
60°-70°	42.1	3.9
70°-80°	26.9	2.5
80°-90°	14.8	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°	546.7	51.0
0°-40°	773.5	72.1
0°-60°	988.9	92.2
0°-90°	1072.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1072.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	889	889	889	889	889	
5°	855	873	870	873	881	79
15°	704	724	742	774	801	196
25°	509	527	554	589	628	233
35°	304	320	356	405	450	188
45°	110	141	198	223	246	93
55°	54	72	84	79	70	48
65°	26	49	44	41	41	26
75°	13	30	28	25	23	14
85°	8	16	18	16	12	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.2	889.2	889.2	889.2	889.2
2.5°	876.0	892.4	882.6	882.6	884.2
5°	854.7	872.8	869.5	872.8	881.0
7.5°	825.2	843.2	846.5	859.6	869.5
10°	787.4	805.5	815.3	836.7	851.4
12.5°	748.1	766.1	780.9	808.8	830.1
15°	703.8	723.5	741.5	774.3	800.6
17.5°	657.8	677.5	700.5	733.3	764.5
20°	608.6	626.7	654.6	685.7	718.5
22.5°	561.1	577.5	607.0	636.5	675.9
25°	508.6	526.6	554.5	588.9	628.3
27.5°	457.7	475.8	503.6	543.0	584.0
30°	406.8	423.3	454.4	495.4	539.7
32.5°	354.4	370.8	405.2	449.5	495.4
35°	303.5	319.9	356.0	405.2	449.5
37.5°	252.6	270.7	311.7	357.6	395.4
40°	203.4	224.8	272.3	311.7	344.5
42.5°	154.2	183.7	234.6	267.4	293.7
45°	109.9	141.1	198.5	223.1	246.1
47.5°	83.7	108.3	164.1	182.1	196.9
50°	72.2	88.6	131.2	144.4	150.9
52.5°	62.3	78.7	105.0	109.9	106.6
55°	54.1	72.2	83.7	78.7	70.5
57.5°	45.9	67.3	68.9	59.1	60.7
60°	37.7	60.7	59.1	50.9	52.5
62.5°	31.2	55.8	50.9	45.9	45.9
65°	26.2	49.2	44.3	41.0	41.0
67.5°	21.3	44.3	39.4	36.1	36.1
70°	18.0	39.4	34.5	31.2	31.2
72.5°	16.4	34.5	31.2	27.9	27.9
75°	13.1	29.5	27.9	24.6	23.0
77.5°	11.5	24.6	24.6	23.0	19.7
80°	9.8	21.3	23.0	19.7	16.4
82.5°	9.8	19.7	19.7	18.0	13.1
85°	8.2	16.4	18.0	16.4	11.5
87.5°	4.9	14.8	14.8	13.1	8.2
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	11.75	13.03	12.12	13.34	13.66	11.28	12.56	11.64	12.87	13.18
	3H	12.93	14.06	13.31	14.39	14.76	12.84	13.98	13.22	14.31	14.67
	4H	13.35	14.42	13.76	14.77	15.15	13.52	14.58	13.93	14.94	15.32
	6H	13.70	14.68	14.11	15.05	15.44	14.17	15.15	14.59	15.52	15.91
	8H	13.89	14.82	14.32	15.21	15.62	14.46	15.38	14.89	15.77	16.18
	12H	14.11	15.00	14.54	15.38	15.81	14.78	15.66	15.21	16.04	16.47
4H	2H	12.25	13.31	12.66	13.67	14.05	11.88	12.94	12.28	13.29	13.67
	3H	13.90	14.77	14.31	15.18	15.58	13.68	14.55	14.09	14.96	15.36
	4H	14.66	15.45	15.10	15.87	16.31	14.52	15.30	14.95	15.72	16.17
	6H	15.26	15.94	15.72	16.39	16.85	15.37	16.05	15.84	16.50	16.97
	8H	15.56	16.20	16.03	16.64	17.11	15.76	16.40	16.23	16.85	17.32
	12H	15.87	16.43	16.36	16.92	17.39	16.20	16.76	16.69	17.25	17.72
8H	4H	15.08	15.71	15.55	16.16	16.63	14.98	15.61	15.45	16.06	16.53
	6H	16.03	16.55	16.53	17.04	17.53	16.08	16.61	16.59	17.10	17.58
	8H	16.57	17.04	17.09	17.56	18.05	16.66	17.13	17.18	17.65	18.14
	12H	17.14	17.55	17.65	18.05	18.62	17.33	17.74	17.84	18.24	18.81
12H	4H	15.15	15.71	15.64	16.19	16.67	15.06	15.62	15.55	16.10	16.58
	6H	16.21	16.68	16.73	17.19	17.69	16.27	16.74	16.79	17.25	17.75
	8H	16.90	17.32	17.42	17.81	18.38	16.98	17.39	17.49	17.89	18.46