

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: P1057820

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S122RDR-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

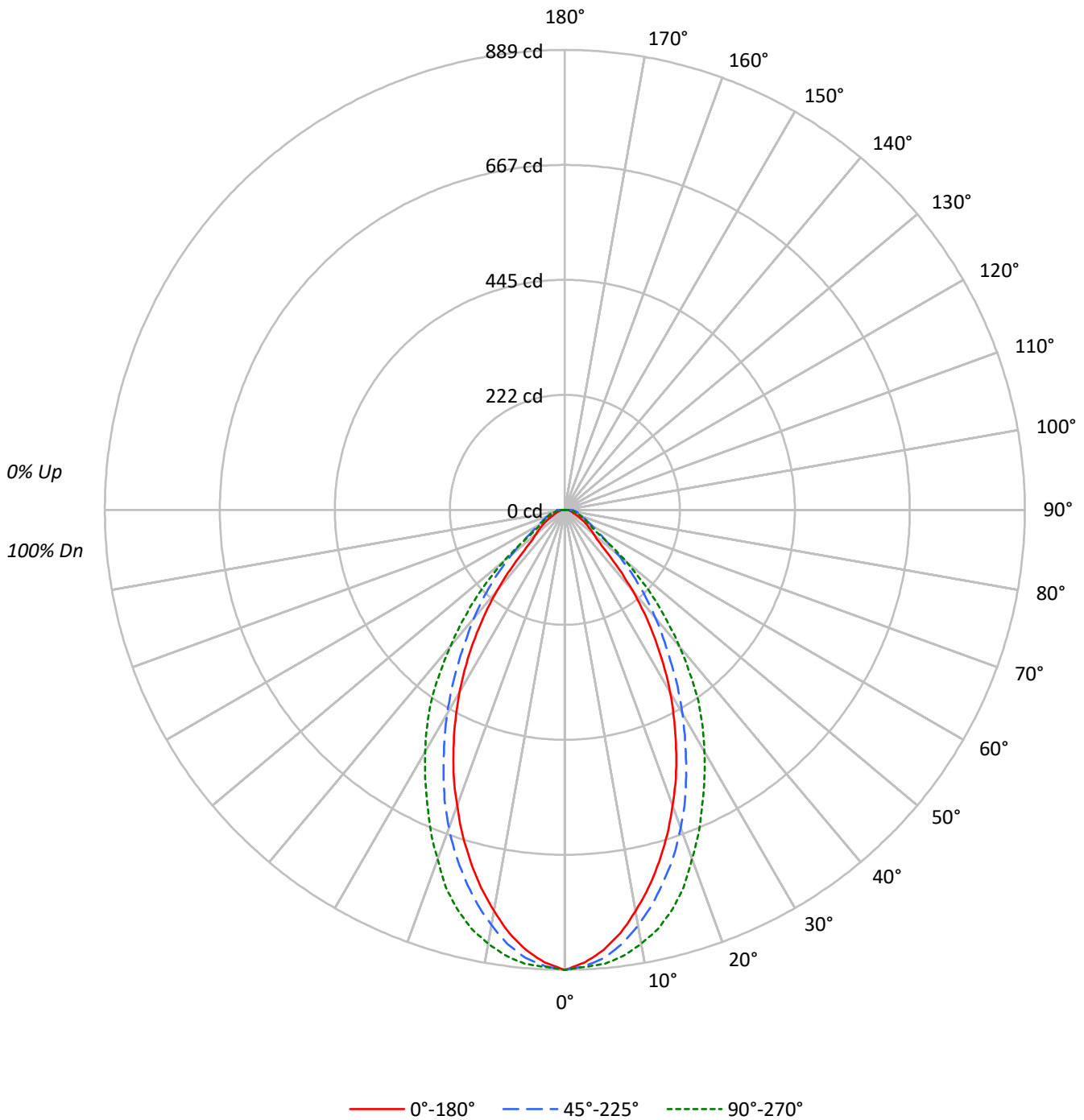
Lumens per Lamp: N/A
Luminaire Lumens: 1072.7 lumens
Efficiency: N/A
Efficacy: 25.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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
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

(END OF REPORT)