

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: P1058144

Luminaire Tested: S122RDR-S865D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058144
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-S865D850-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

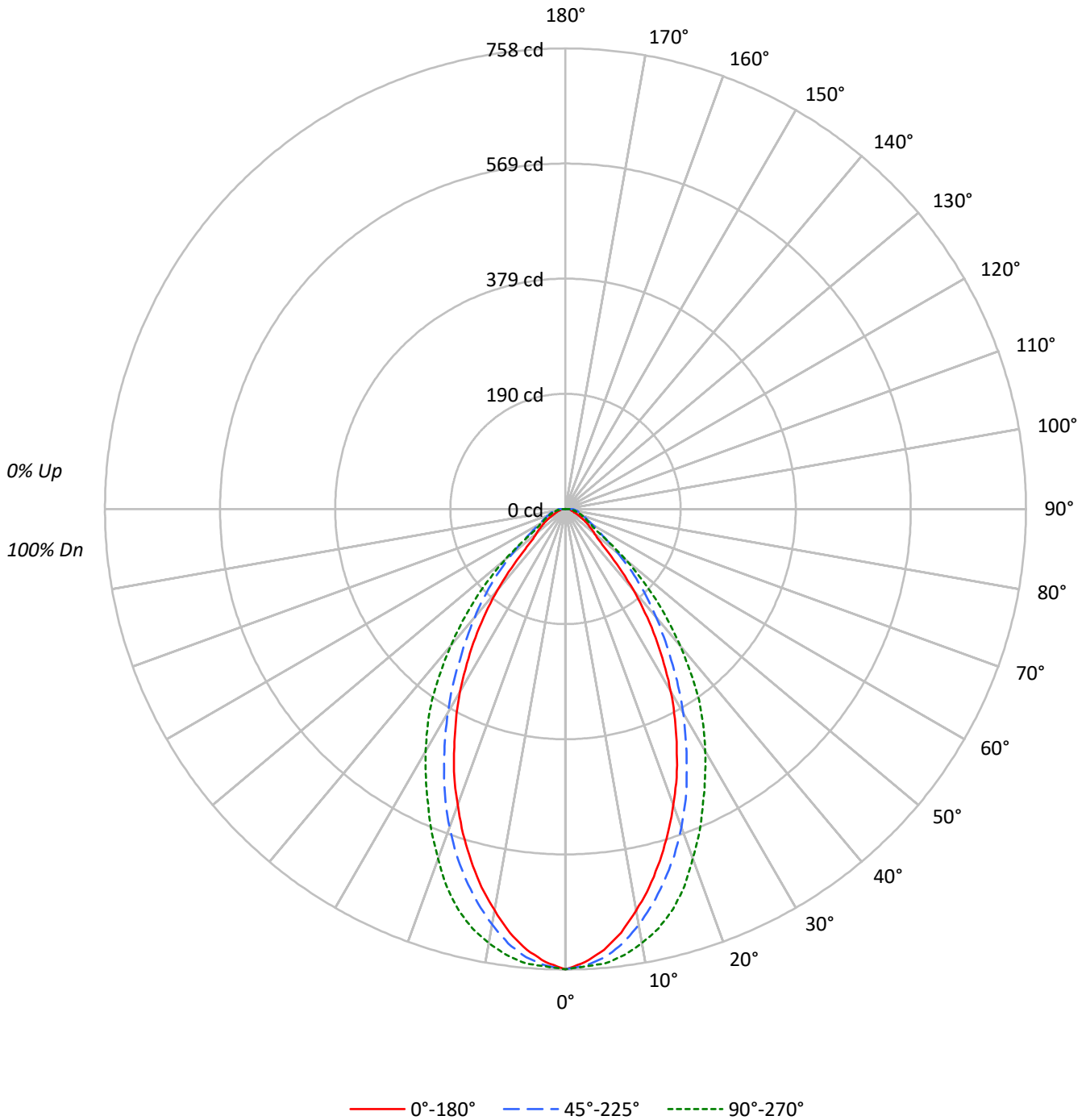
Lumens per Lamp: N/A
Luminaire Lumens: 914.0 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	13980	13980	13980
5°	13490	13724	13903
10°	12573	13017	13594
15°	11456	12070	13032
20°	10184	10951	12024
25°	8822	9620	10901
30°	7387	8250	9799
35°	5825	6832	8628
40°	4174	5588	7070
45°	2445	4413	5472
50°	1765	3209	3692
55°	1483	2294	1933
60°	1188	1856	1650
65°	978	1646	1524
70°	831	1586	1435
75°	799	1697	1397
80°	893	2083	1488
85°	1482	3260	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5472 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	7.6
10°-20°	177.8	19.5
20°-30°	218.6	23.9
30°-40°	193.3	21.1
40°-50°	123.3	13.5
50°-60°	60.2	6.6
60°-70°	35.8	3.9
70°-80°	22.9	2.5
80°-90°	12.6	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°	465.9	51.0
0°-40°	659.1	72.1
0°-60°	842.6	92.2
0°-90°	914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	728	744	741	744	751	68
15°	600	616	632	660	682	167
25°	433	449	472	502	535	198
35°	259	273	303	345	383	161
45°	94	120	169	190	210	79
55°	46	62	71	67	60	41
65°	22	42	38	35	35	22
75°	11	25	24	21	20	12
85°	7	14	15	14	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.6	757.6	757.6	757.6	757.6
2.5°	746.5	760.4	752.0	752.0	753.4
5°	728.3	743.7	740.9	743.7	750.6
7.5°	703.1	718.5	721.3	732.5	740.9
10°	671.0	686.3	694.7	712.9	725.5
12.5°	637.4	652.8	665.4	689.1	707.3
15°	599.7	616.5	631.8	659.8	682.2
17.5°	560.5	577.3	596.9	624.8	651.4
20°	518.6	534.0	557.7	584.3	612.3
22.5°	478.1	492.0	517.2	542.4	575.9
25°	433.3	448.7	472.5	501.8	535.4
27.5°	390.0	405.4	429.1	462.7	497.6
30°	346.7	360.6	387.2	422.2	459.9
32.5°	301.9	315.9	345.3	383.0	422.2
35°	258.6	272.6	303.3	345.3	383.0
37.5°	215.3	230.6	265.6	304.7	336.9
40°	173.3	191.5	232.0	265.6	293.5
42.5°	131.4	156.6	199.9	227.8	250.2
45°	93.7	120.2	169.1	190.1	209.7
47.5°	71.3	92.3	139.8	155.2	167.7
50°	61.5	75.5	111.8	123.0	128.6
52.5°	53.1	67.1	89.5	93.7	90.9
55°	46.1	61.5	71.3	67.1	60.1
57.5°	39.1	57.3	58.7	50.3	51.7
60°	32.2	51.7	50.3	43.3	44.7
62.5°	26.6	47.5	43.3	39.1	39.1
65°	22.4	41.9	37.7	34.9	34.9
67.5°	18.2	37.7	33.5	30.8	30.8
70°	15.4	33.5	29.4	26.6	26.6
72.5°	14.0	29.4	26.6	23.8	23.8
75°	11.2	25.2	23.8	21.0	19.6
77.5°	9.8	21.0	21.0	19.6	16.8
80°	8.4	18.2	19.6	16.8	14.0
82.5°	8.4	16.8	16.8	15.4	11.2
85°	7.0	14.0	15.4	14.0	9.8
87.5°	4.2	12.6	12.6	11.2	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)