

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: P1058147

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

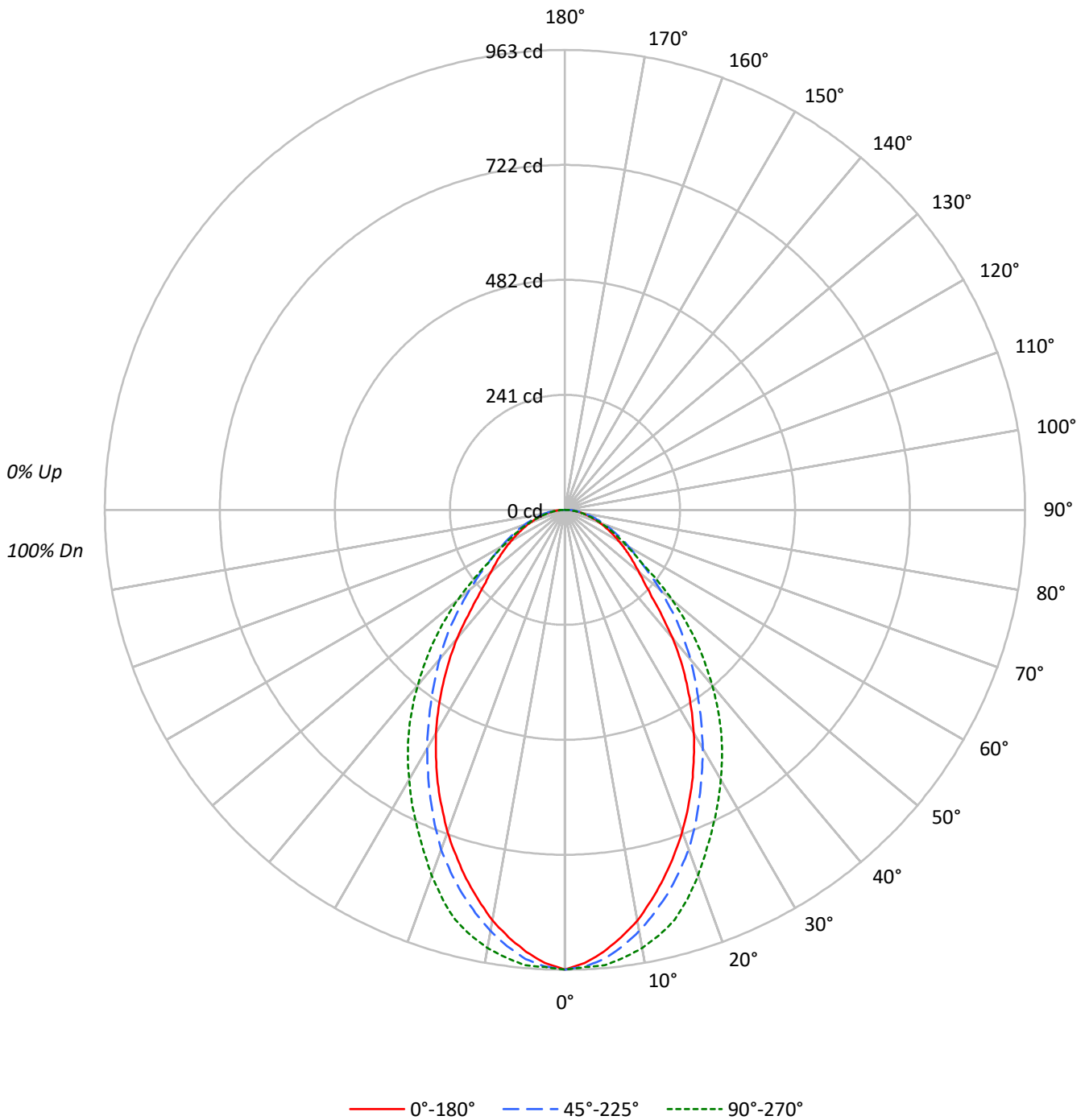
Lumens per Lamp: N/A
Luminaire Lumens: 1567.5 lumens
Efficiency: N/A
Efficacy: 44.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17762	17762	17762
5°	17210	17493	17726
10°	16361	16779	17461
15°	15266	15881	16975
20°	14101	14869	15994
25°	12829	13568	14906
30°	11491	12294	13901
35°	10008	10984	12840
40°	8448	9828	11543
45°	6709	8677	10099
50°	5776	7461	8382
55°	5260	6383	6428
60°	4794	5672	5466
65°	4392	5126	4820
70°	4068	4748	4295
75°	3786	4484	3786
80°	3560	4304	3411
85°	3557	4446	2964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10099 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	5.7
10°-20°	234.9	15.0
20°-30°	309.1	19.7
30°-40°	310.9	19.8
40°-50°	251.9	16.1
50°-60°	173.5	11.1
60°-70°	113.6	7.2
70°-80°	63.3	4.0
80°-90°	21.4	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°	632.9	40.4
0°-40°	943.7	60.2
0°-60°	1369.2	87.4
0°-90°	1567.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1567.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	929	947	944	949	957	87
15°	799	819	831	862	889	224
25°	630	647	666	696	732	289
35°	444	465	488	531	570	277
45°	257	286	332	362	387	203
55°	164	182	198	203	200	147
65°	101	120	117	112	110	100
75°	53	66	63	56	53	57
85°	17	22	21	18	14	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.6	962.6	962.6	962.6	962.6
2.5°	950.0	966.8	957.0	957.0	958.4
5°	929.1	947.2	944.4	948.6	957.0
7.5°	902.5	922.1	922.1	934.7	945.8
10°	873.2	892.7	895.5	915.1	931.9
12.5°	836.9	856.4	864.8	889.9	912.3
15°	799.1	818.7	831.3	862.0	888.6
17.5°	758.6	778.2	794.9	827.1	853.6
20°	718.1	736.3	757.2	785.2	814.5
22.5°	673.4	693.0	712.5	739.1	772.6
25°	630.1	646.9	666.4	695.8	732.1
27.5°	584.0	602.1	620.3	655.2	693.0
30°	539.3	557.4	577.0	613.3	652.4
32.5°	491.8	511.3	530.9	571.4	611.9
35°	444.3	465.2	487.6	530.9	570.0
37.5°	398.2	420.5	447.1	491.8	525.3
40°	350.7	374.4	408.0	447.1	479.2
42.5°	300.4	329.7	370.2	403.8	433.1
45°	257.1	286.4	332.5	361.8	387.0
47.5°	224.9	248.7	293.4	318.5	339.5
50°	201.2	219.3	259.9	278.0	292.0
52.5°	181.6	199.8	227.7	240.3	244.5
55°	163.5	181.6	198.4	202.6	199.8
57.5°	145.3	164.9	174.6	170.4	170.4
60°	129.9	150.9	153.7	148.1	148.1
62.5°	114.6	135.5	135.5	128.5	128.5
65°	100.6	120.2	117.4	111.8	110.4
67.5°	88.0	106.2	102.0	96.4	95.0
70°	75.4	92.2	88.0	81.0	79.6
72.5°	64.3	79.6	74.0	68.5	65.7
75°	53.1	65.7	62.9	55.9	53.1
77.5°	43.3	53.1	50.3	44.7	41.9
80°	33.5	41.9	40.5	34.9	32.1
82.5°	25.1	32.1	30.7	26.5	22.4
85°	16.8	22.4	21.0	18.2	14.0
87.5°	8.4	15.4	14.0	12.6	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)