

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: P1058142

Luminaire Tested: S122RDR-S865D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

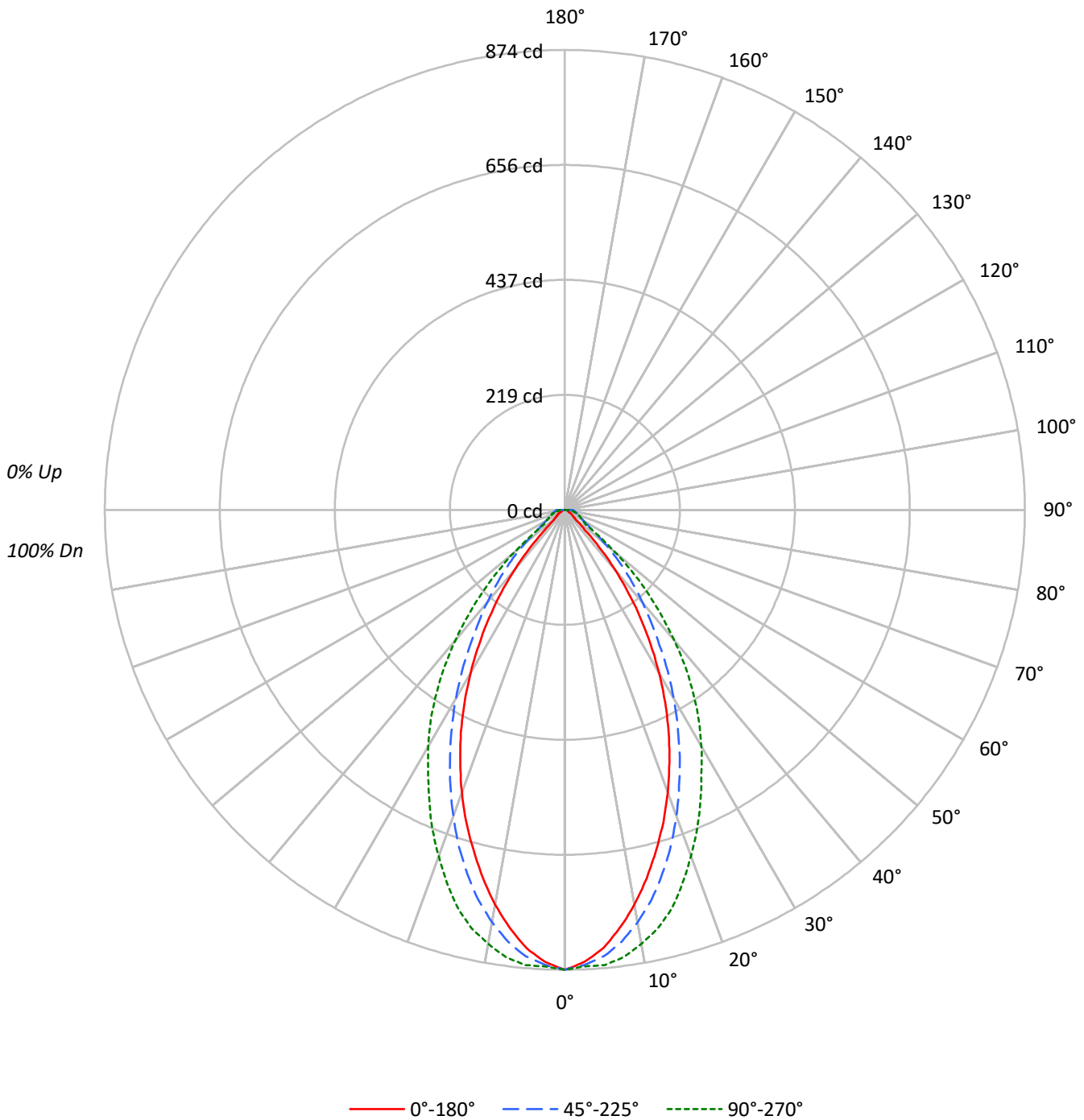
Lumens per Lamp: N/A
Luminaire Lumens: 951.4 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	71	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16127	16127	16127
5°	15489	15774	16085
10°	14280	14909	15694
15°	12795	13678	14987
20°	11230	12165	13757
25°	9510	10506	12414
30°	7628	8819	11054
35°	5638	7055	9576
40°	3536	5523	7780
45°	1386	4160	5765
50°	683	2810	3534
55°	540	1843	1573
60°	413	1498	1447
65°	306	1406	1406
70°	378	1435	1435
75°	399	1597	1497
80°	595	2083	1636
85°	1186	3557	2371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6515 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	8.4
10°-20°	201.8	21.2
20°-30°	241.4	25.4
30°-40°	203.2	21.4
40°-50°	115.7	12.2
50°-60°	45.6	4.8
60°-70°	28.8	3.0
70°-80°	21.4	2.2
80°-90°	13.6	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°	523.1	55.0
0°-40°	726.3	76.3
0°-60°	887.6	93.3
0°-90°	951.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	951.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	874	874	874	874	874	
5°	836	854	852	861	868	77
15°	670	694	716	758	784	187
25°	467	488	516	569	610	213
35°	250	273	313	380	425	155
45°	53	94	159	200	221	50
55°	17	36	57	59	49	15
65°	7	32	32	31	32	8
75°	6	22	22	21	21	6
85°	6	15	17	15	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	874.0	874.0	874.0	874.0	874.0
2.5°	860.0	875.4	865.6	867.0	868.4
5°	836.2	854.4	851.6	861.4	868.4
7.5°	801.3	820.8	827.8	844.6	857.2
10°	762.1	784.5	795.7	822.2	837.6
12.5°	717.4	742.5	759.3	792.9	815.2
15°	669.8	693.6	716.0	757.9	784.5
17.5°	622.3	646.0	669.8	716.0	743.9
20°	571.9	594.3	619.5	668.4	700.6
22.5°	518.8	542.6	567.7	618.1	657.2
25°	467.1	488.0	516.0	569.1	609.7
27.5°	412.5	433.5	464.3	518.8	562.1
30°	358.0	379.0	413.9	469.8	518.8
32.5°	303.4	325.8	363.6	425.1	474.0
35°	250.3	272.7	313.2	380.4	425.1
37.5°	198.6	223.7	268.5	334.2	376.2
40°	146.8	176.2	229.3	288.1	323.0
42.5°	97.9	134.2	193.0	241.9	271.3
45°	53.1	93.7	159.4	200.0	220.9
47.5°	29.4	60.1	127.3	159.4	172.0
50°	23.8	42.0	97.9	121.7	123.1
52.5°	19.6	37.8	72.7	86.7	79.7
55°	16.8	36.4	57.3	58.7	48.9
57.5°	14.0	35.0	47.5	42.0	42.0
60°	11.2	35.0	40.6	37.8	39.2
62.5°	8.4	35.0	36.4	33.6	35.0
65°	7.0	32.2	32.2	30.8	32.2
67.5°	7.0	29.4	29.4	28.0	29.4
70°	7.0	28.0	26.6	26.6	26.6
72.5°	5.6	25.2	25.2	23.8	23.8
75°	5.6	22.4	22.4	21.0	21.0
77.5°	5.6	21.0	21.0	19.6	18.2
80°	5.6	18.2	19.6	18.2	15.4
82.5°	5.6	16.8	18.2	16.8	12.6
85°	5.6	15.4	16.8	15.4	11.2
87.5°	4.2	15.4	15.4	12.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)