

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: P1058145

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058145
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
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-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

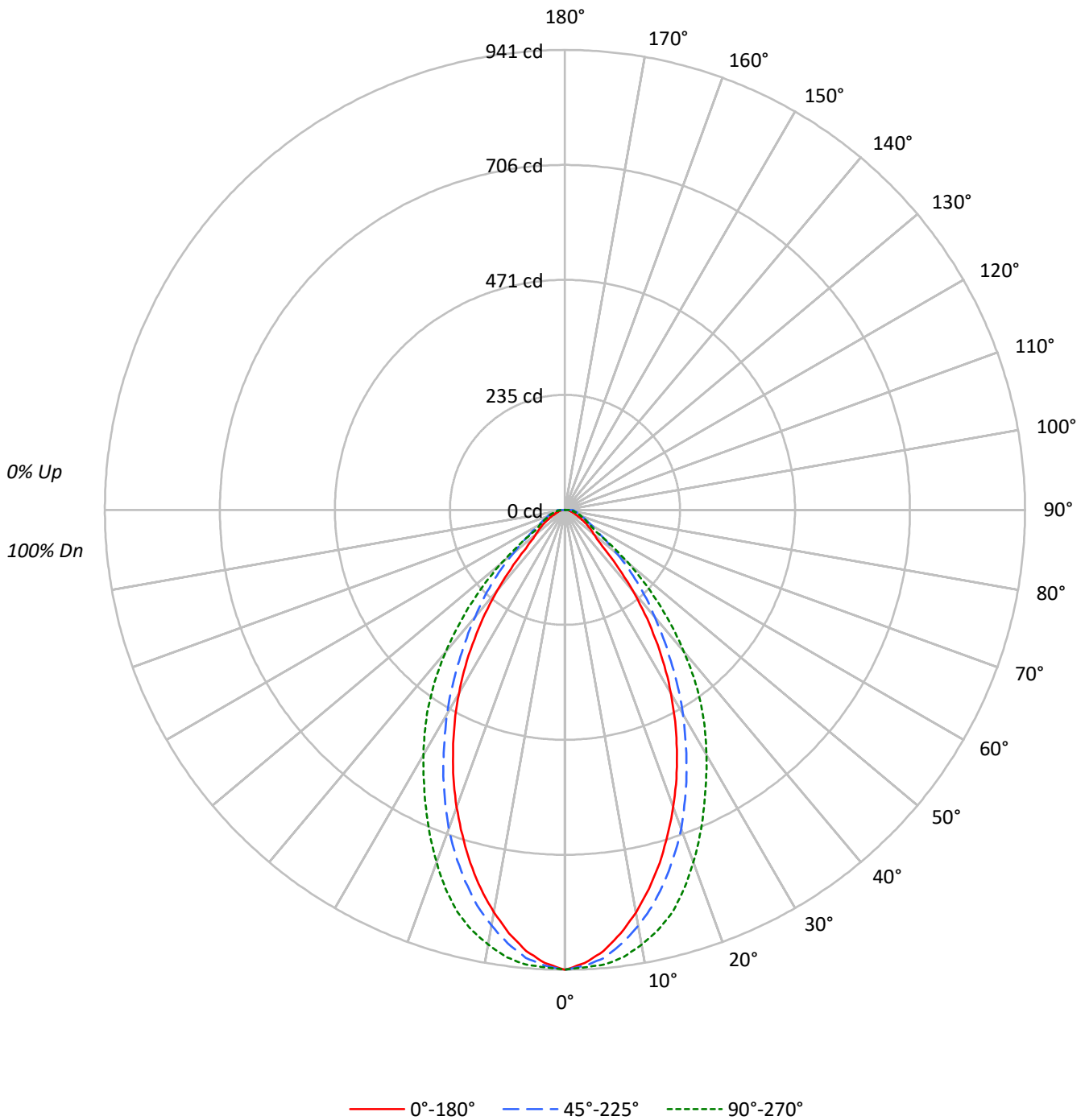
Lumens per Lamp: N/A
Luminaire Lumens: 1141.3 lumens
Efficiency: N/A
Efficacy: 32.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	17362	17362	17362
5°	16780	17039	17299
10°	15664	16189	16921
15°	14289	15036	16265
20°	12711	13644	15071
25°	11015	11984	13692
30°	9234	10276	12333
35°	7274	8504	10928
40°	5186	6870	9127
45°	3064	5436	7077
50°	2208	3933	4817
55°	1843	2834	2429
60°	1495	2270	2063
65°	1223	2013	1891
70°	1057	1958	1813
75°	998	1996	1797
80°	1041	2380	1934
85°	1482	3853	2371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7077 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	7.6
10°-20°	221.7	19.4
20°-30°	273.5	24.0
30°-40°	243.3	21.3
40°-50°	155.3	13.6
50°-60°	74.6	6.5
60°-70°	43.7	3.8
70°-80°	28.0	2.5
80°-90°	14.9	1.3
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°	581.5	51.0
0°-40°	824.8	72.3
0°-60°	1054.6	92.4
0°-90°	1141.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1141.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	906	923	920	926	934	84
15°	748	766	787	824	851	209
25°	541	562	589	630	672	248
35°	323	348	378	435	485	201
45°	117	152	208	242	271	99
55°	57	74	88	85	76	52
65°	28	50	46	42	43	28
75°	14	31	28	27	25	15
85°	7	17	18	15	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	940.9	940.9	940.9	940.9	940.9
2.5°	928.3	943.7	933.9	933.9	936.7
5°	905.9	922.7	919.9	925.5	933.9
7.5°	873.8	892.0	894.8	910.1	922.7
10°	836.0	855.6	864.0	886.4	903.1
12.5°	794.1	813.7	829.0	857.0	880.8
15°	748.0	766.1	787.1	823.5	851.4
17.5°	697.6	721.4	742.4	780.1	812.3
20°	647.3	669.7	694.8	731.2	767.5
22.5°	595.6	616.5	641.7	679.5	721.4
25°	541.0	562.0	588.6	630.5	672.5
27.5°	487.9	508.9	534.1	580.2	624.9
30°	433.4	454.4	482.3	529.9	578.8
32.5°	378.9	401.2	429.2	480.9	532.7
35°	322.9	348.1	377.5	434.8	485.1
37.5°	268.4	293.6	329.9	385.9	433.4
40°	215.3	244.7	285.2	335.5	378.9
42.5°	163.6	195.7	246.1	286.6	324.3
45°	117.4	152.4	208.3	241.9	271.2
47.5°	89.5	114.6	172.0	198.5	219.5
50°	76.9	92.3	137.0	156.6	167.8
52.5°	67.1	81.1	109.0	118.8	118.8
55°	57.3	74.1	88.1	85.3	75.5
57.5°	48.9	67.1	72.7	61.5	64.3
60°	40.5	61.5	61.5	54.5	55.9
62.5°	33.6	57.3	53.1	47.5	48.9
65°	28.0	50.3	46.1	41.9	43.3
67.5°	22.4	44.7	40.5	37.7	37.7
70°	19.6	40.5	36.3	33.6	33.6
72.5°	16.8	35.0	32.2	29.4	29.4
75°	14.0	30.8	28.0	26.6	25.2
77.5°	12.6	26.6	25.2	22.4	21.0
80°	9.8	22.4	22.4	21.0	18.2
82.5°	8.4	19.6	19.6	18.2	15.4
85°	7.0	16.8	18.2	15.4	11.2
87.5°	5.6	15.4	15.4	12.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)