

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: P1058140

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

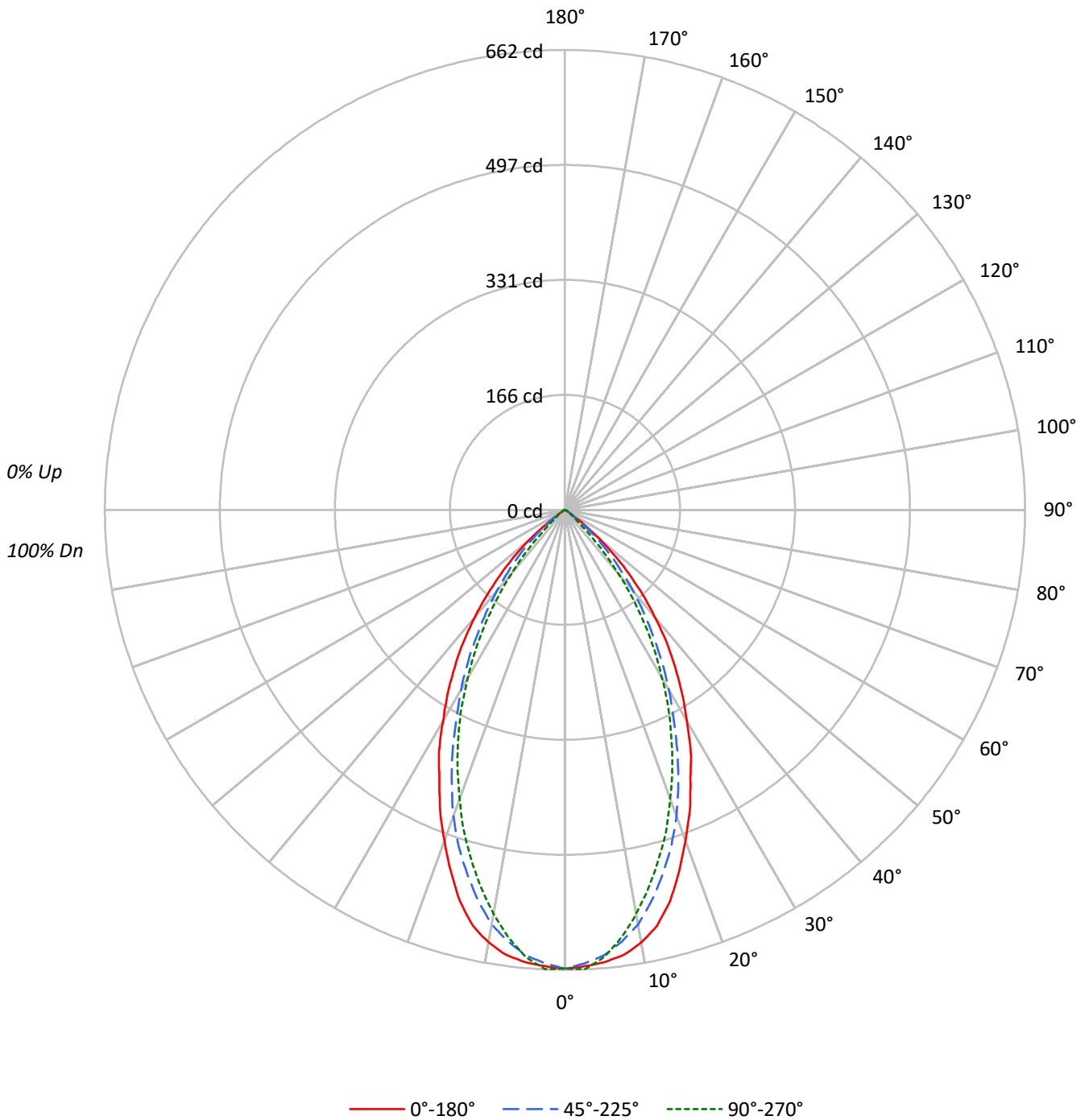
Lumens per Lamp: N/A
Luminaire Lumens: 621.0 lumens
Efficiency: N/A
Efficacy: 17.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93		
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86		
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79		
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73		
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67		
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62		
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58		
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54		
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51		
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12184	12184	12184
5°	12103	11921	11973
10°	11849	11353	11064
15°	11147	10375	9947
20°	9952	9212	8689
25°	8698	7788	7391
30°	7466	6367	5949
35°	6226	4969	4465
40°	4842	3666	2859
45°	3387	2440	1240
50°	1843	1283	442
55°	270	450	315
60°	52	103	207
65°	0	61	122
70°	0	0	76
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3387 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	9.8
10°-20°	152.9	24.6
20°-30°	178.2	28.7
30°-40°	142.9	23.0
40°-50°	71.0	11.4
50°-60°	14.0	2.3
60°-70°	1.2	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	391.8	63.1
0°-40°	534.6	86.1
0°-60°	619.6	99.8
0°-90°	621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	653	653	644	645	646	62
15°	584	572	543	529	521	162
25°	427	406	382	374	363	197
35°	276	248	221	211	198	172
45°	130	114	94	63	48	100
55°	8	17	14	8	10	17
65°	0	0	1	1	3	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	660.3	660.3	660.3	660.3	660.3
2.5°	657.5	660.3	653.4	660.3	661.7
5°	653.4	653.4	643.6	645.0	646.4
7.5°	646.4	643.6	626.8	624.0	621.2
10°	632.4	626.8	605.9	594.7	590.5
12.5°	612.9	604.5	576.6	564.0	557.0
15°	583.5	572.4	543.1	529.1	520.7
17.5°	545.9	536.1	508.2	492.8	484.4
20°	506.8	492.8	469.1	453.7	442.5
22.5°	469.1	450.9	425.8	414.6	403.5
25°	427.2	406.3	382.5	374.1	363.0
27.5°	392.3	365.8	337.8	332.3	322.5
30°	350.4	325.3	298.8	290.4	279.2
32.5°	314.1	286.2	259.7	249.9	240.1
35°	276.4	248.5	220.6	210.8	198.2
37.5°	240.1	213.6	185.7	170.3	159.1
40°	201.0	178.7	152.2	132.6	118.7
42.5°	166.1	146.6	121.5	96.3	82.4
45°	129.8	114.5	93.5	62.8	47.5
47.5°	96.3	85.2	68.4	36.3	25.1
50°	64.2	60.0	44.7	18.1	15.4
52.5°	34.9	37.7	26.5	11.2	12.6
55°	8.4	16.8	14.0	8.4	9.8
57.5°	1.4	2.8	7.0	7.0	7.0
60°	1.4	1.4	2.8	4.2	5.6
62.5°	1.4	0.0	1.4	2.8	4.2
65°	0.0	0.0	1.4	1.4	2.8
67.5°	0.0	0.0	0.0	1.4	1.4
70°	0.0	0.0	0.0	1.4	1.4
72.5°	0.0	0.0	0.0	0.0	1.4
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)