

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: P1058143

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

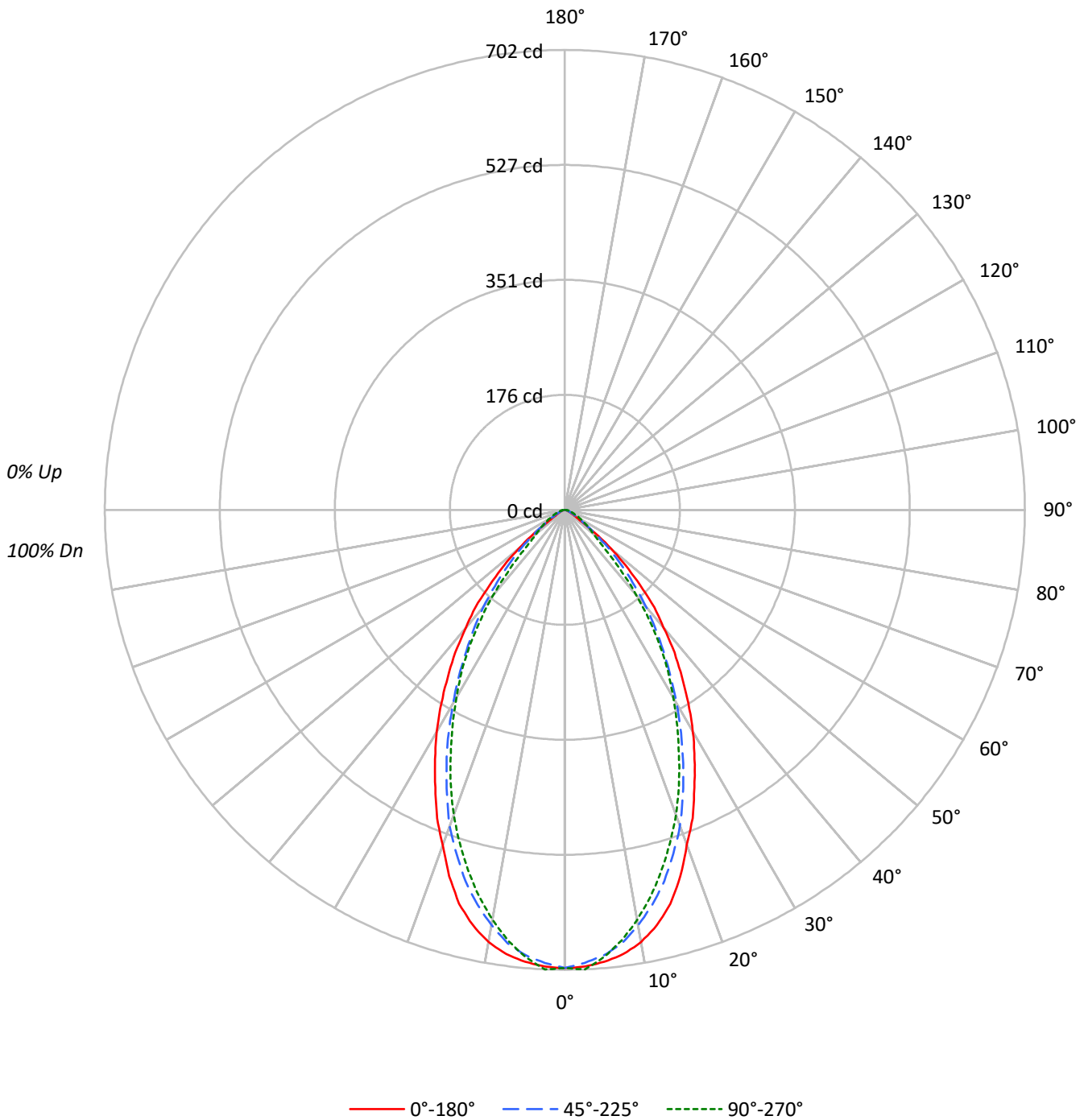
Lumens per Lamp: N/A
Luminaire Lumens: 752.2 lumens
Efficiency: N/A
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12906	12906	12906
5°	12825	12644	12696
10°	12556	12059	11902
15°	11894	11200	10881
20°	10690	10087	9732
25°	9522	8698	8384
30°	8329	7257	7051
35°	7012	5882	5692
40°	5649	4639	4102
45°	4225	3351	2440
50°	2644	2165	1602
55°	898	1168	1303
60°	517	720	1030
65°	367	489	790
70°	302	378	604
75°	200	299	499
80°	149	298	446
85°	0	0	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	8.6
10°-20°	165.0	21.9
20°-30°	198.7	26.4
30°-40°	169.8	22.6
40°-50°	99.5	13.2
50°-60°	36.0	4.8
60°-70°	12.8	1.7
70°-80°	5.1	0.7
80°-90°	0.9	0.1
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°	428.2	56.9
0°-40°	597.9	79.5
0°-60°	733.4	97.5
0°-90°	752.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	692	694	683	685	685	65
15°	623	613	586	575	570	173
25°	468	448	427	420	412	215
35°	311	288	261	258	253	194
45°	162	145	128	108	94	125
55°	28	39	36	38	40	35
65°	8	10	11	15	18	9
75°	3	4	4	6	7	4
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	699.4	699.4	699.4	699.4	699.4
2.5°	698.0	699.4	692.4	699.4	702.2
5°	692.4	693.8	682.6	685.4	685.4
7.5°	684.0	682.6	667.3	664.5	663.1
10°	670.1	665.9	643.6	639.4	635.2
12.5°	649.1	640.8	617.0	610.0	604.5
15°	622.6	612.8	586.3	575.1	569.6
17.5°	586.3	575.1	550.0	538.9	533.3
20°	544.4	533.3	513.7	501.2	495.6
22.5°	509.5	491.4	470.4	462.1	455.1
25°	467.7	448.1	427.2	420.2	411.8
27.5°	428.6	404.8	383.9	378.3	371.3
30°	390.9	365.8	340.6	340.6	330.9
32.5°	350.4	326.7	300.1	298.7	293.2
35°	311.3	287.6	261.1	258.3	252.7
37.5°	275.0	251.3	226.2	217.8	210.8
40°	234.5	213.6	192.6	178.7	170.3
42.5°	202.4	178.7	157.7	141.0	129.8
45°	161.9	145.2	128.4	107.5	93.5
47.5°	125.6	114.5	100.5	76.8	69.8
50°	92.1	86.6	75.4	57.2	55.8
52.5°	58.6	61.4	54.4	44.7	48.9
55°	27.9	39.1	36.3	37.7	40.5
57.5°	18.1	19.5	26.5	30.7	33.5
60°	14.0	14.0	19.5	25.1	27.9
62.5°	11.2	11.2	15.4	20.9	22.3
65°	8.4	9.8	11.2	15.4	18.1
67.5°	7.0	7.0	8.4	12.6	14.0
70°	5.6	5.6	7.0	9.8	11.2
72.5°	4.2	4.2	5.6	8.4	8.4
75°	2.8	4.2	4.2	5.6	7.0
77.5°	2.8	2.8	2.8	4.2	5.6
80°	1.4	1.4	2.8	2.8	4.2
82.5°	1.4	1.4	1.4	1.4	2.8
85°	0.0	0.0	0.0	1.4	1.4
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)