

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: P1058059

Luminaire Tested: S122RDR-S675D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058059
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-S675D850-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

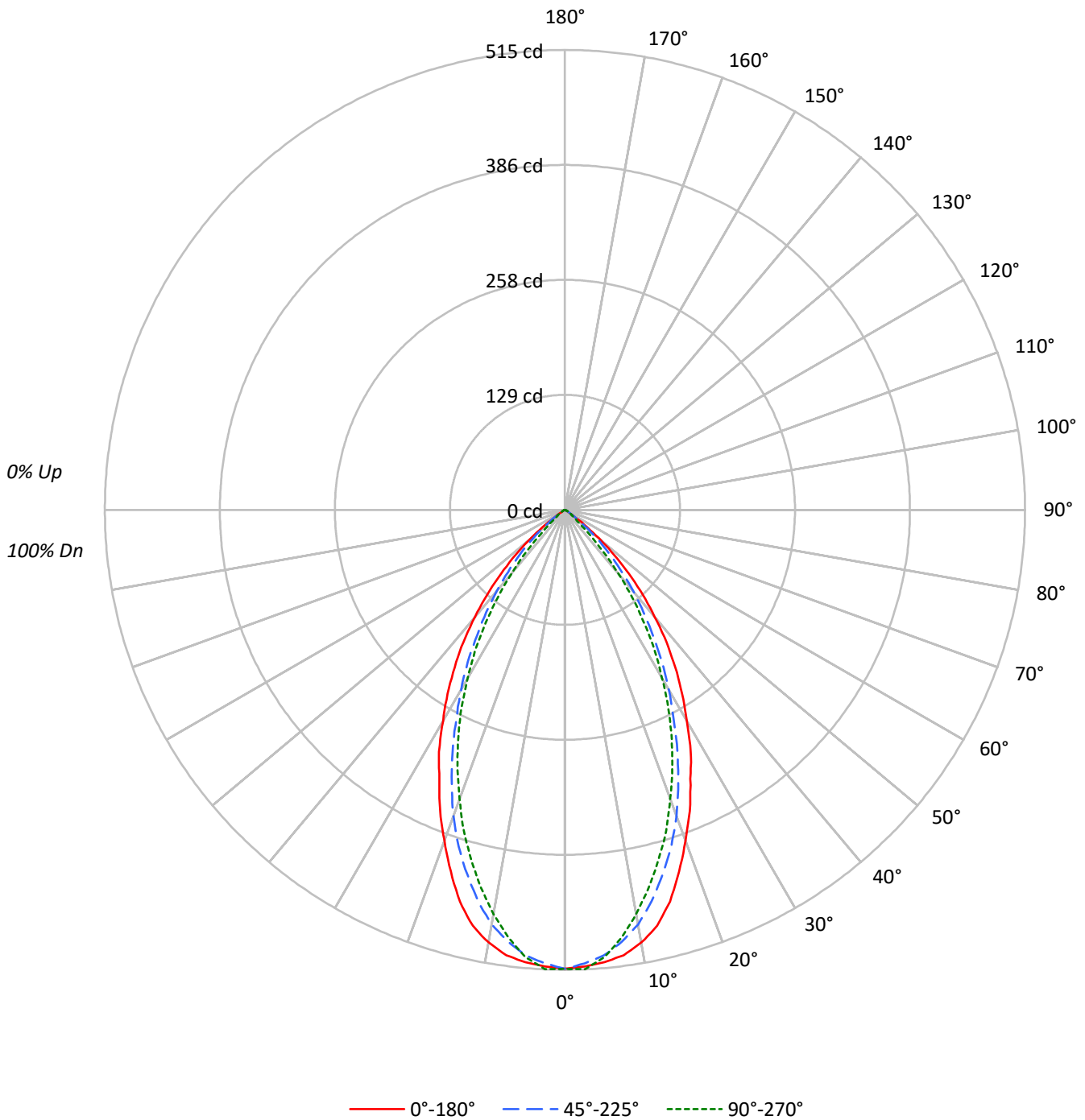
Lumens per Lamp: N/A
Luminaire Lumens: 483.2 lumens
Efficiency: N/A
Efficacy: 18.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	9483	9483	9483
5°	9417	9276	9317
10°	9221	8835	8610
15°	8675	8073	7741
20°	7745	7167	6763
25°	6768	6061	5752
30°	5810	4954	4630
35°	4845	3866	3476
40°	3767	2852	2223
45°	2636	1900	963
50°	1435	999	344
55°	209	351	244
60°	41	81	159
65°	0	48	96
70°	0	0	59
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2636 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	9.8
10°-20°	119.0	24.6
20°-30°	138.7	28.7
30°-40°	111.2	23.0
40°-50°	55.2	11.4
50°-60°	10.9	2.3
60°-70°	1.0	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°	304.9	63.1
0°-40°	416.0	86.1
0°-60°	482.2	99.8
0°-90°	483.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	483.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	508	508	501	502	503	48
15°	454	445	423	412	405	126
25°	332	316	298	291	282	153
35°	215	193	172	164	154	134
45°	101	89	73	49	37	78
55°	6	13	11	6	8	13
65°	0	0	1	1	2	0
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°	513.9	513.9	513.9	513.9	513.9
2.5°	511.7	513.9	508.4	513.9	514.9
5°	508.4	508.4	500.8	501.9	503.0
7.5°	503.0	500.8	487.8	485.6	483.4
10°	492.1	487.8	471.5	462.8	459.5
12.5°	476.9	470.4	448.7	438.9	433.5
15°	454.1	445.4	422.6	411.7	405.2
17.5°	424.8	417.2	395.4	383.5	377.0
20°	394.4	383.5	365.0	353.1	344.4
22.5°	365.0	350.9	331.3	322.7	314.0
25°	332.4	316.1	297.7	291.1	282.5
27.5°	305.3	284.6	262.9	258.6	251.0
30°	272.7	253.1	232.5	226.0	217.3
32.5°	244.4	222.7	202.1	194.5	186.9
35°	215.1	193.4	171.6	164.0	154.3
37.5°	186.9	166.2	144.5	132.5	123.8
40°	156.4	139.1	118.4	103.2	92.3
42.5°	129.3	114.1	94.5	75.0	64.1
45°	101.0	89.1	72.8	48.9	36.9
47.5°	75.0	66.3	53.2	28.2	19.6
50°	50.0	46.7	34.8	14.1	12.0
52.5°	27.2	29.3	20.6	8.7	9.8
55°	6.5	13.0	10.9	6.5	7.6
57.5°	1.1	2.2	5.4	5.4	5.4
60°	1.1	1.1	2.2	3.3	4.3
62.5°	1.1	0.0	1.1	2.2	3.3
65°	0.0	0.0	1.1	1.1	2.2
67.5°	0.0	0.0	0.0	1.1	1.1
70°	0.0	0.0	0.0	1.1	1.1
72.5°	0.0	0.0	0.0	0.0	1.1
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)