

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: P1058158

Luminaire Tested: S122RDR-S865D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058158
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-S865D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

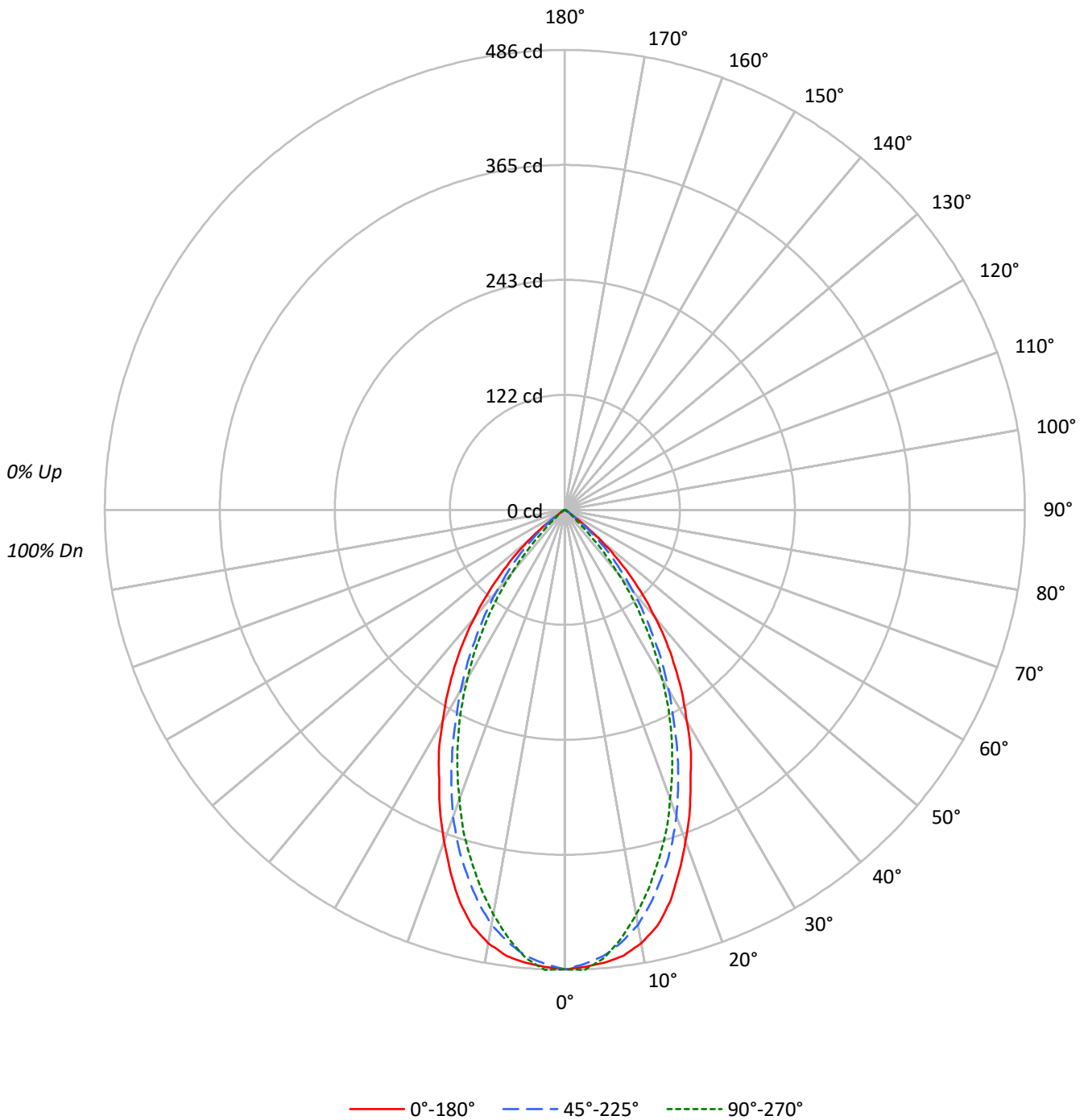
Lumens per Lamp: N/A
Luminaire Lumens: 456.5 lumens
Efficiency: N/A
Efficacy: 13.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058158

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-BVL-B

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°	8959	8959	8959
5°	8897	8763	8802
10°	8711	8346	8134
15°	8195	7626	7313
20°	7317	6771	6388
25°	6395	5725	5432
30°	5489	4679	4374
35°	4577	3654	3282
40°	3560	2695	2100
45°	2490	1795	911
50°	1355	942	324
55°	199	331	232
60°	37	78	151
65°	0	44	92
70°	0	0	54
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2490 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	9.8
10°-20°	112.4	24.6
20°-30°	131.0	28.7
30°-40°	105.0	23.0
40°-50°	52.2	11.4
50°-60°	10.3	2.3
60°-70°	0.9	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°	288.0	63.1
0°-40°	393.0	86.1
0°-60°	455.5	99.8
0°-90°	456.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	456.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	480	480	473	474	475	45
15°	429	421	399	389	383	119
25°	314	299	281	275	267	145
35°	203	183	162	155	146	126
45°	95	84	69	46	35	74
55°	6	12	10	6	7	12
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°	485.5	485.5	485.5	485.5	485.5
2.5°	483.4	485.5	480.3	485.5	486.5
5°	480.3	480.3	473.1	474.2	475.2
7.5°	475.2	473.1	460.8	458.8	456.7
10°	464.9	460.8	445.4	437.2	434.1
12.5°	450.6	444.4	423.9	414.6	409.5
15°	429.0	420.8	399.2	389.0	382.8
17.5°	401.3	394.1	373.6	362.3	356.1
20°	372.6	362.3	344.8	333.6	325.3
22.5°	344.8	331.5	313.0	304.8	296.6
25°	314.1	298.7	281.2	275.1	266.8
27.5°	288.4	268.9	248.4	244.3	237.1
30°	257.6	239.1	219.6	213.5	205.3
32.5°	230.9	210.4	190.9	183.7	176.5
35°	203.2	182.7	162.2	155.0	145.7
37.5°	176.5	157.0	136.5	125.2	117.0
40°	147.8	131.4	111.9	97.5	87.2
42.5°	122.1	107.8	89.3	70.8	60.6
45°	95.4	84.2	68.8	46.2	34.9
47.5°	70.8	62.6	50.3	26.7	18.5
50°	47.2	44.1	32.8	13.3	11.3
52.5°	25.7	27.7	19.5	8.2	9.2
55°	6.2	12.3	10.3	6.2	7.2
57.5°	1.0	2.1	5.1	5.1	5.1
60°	1.0	1.0	2.1	3.1	4.1
62.5°	1.0	0.0	1.0	2.1	3.1
65°	0.0	0.0	1.0	1.0	2.1
67.5°	0.0	0.0	0.0	1.0	1.0
70°	0.0	0.0	0.0	1.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
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)