

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: P1058167

Luminaire Tested: S122RDR-S865D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058167  
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-S865D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

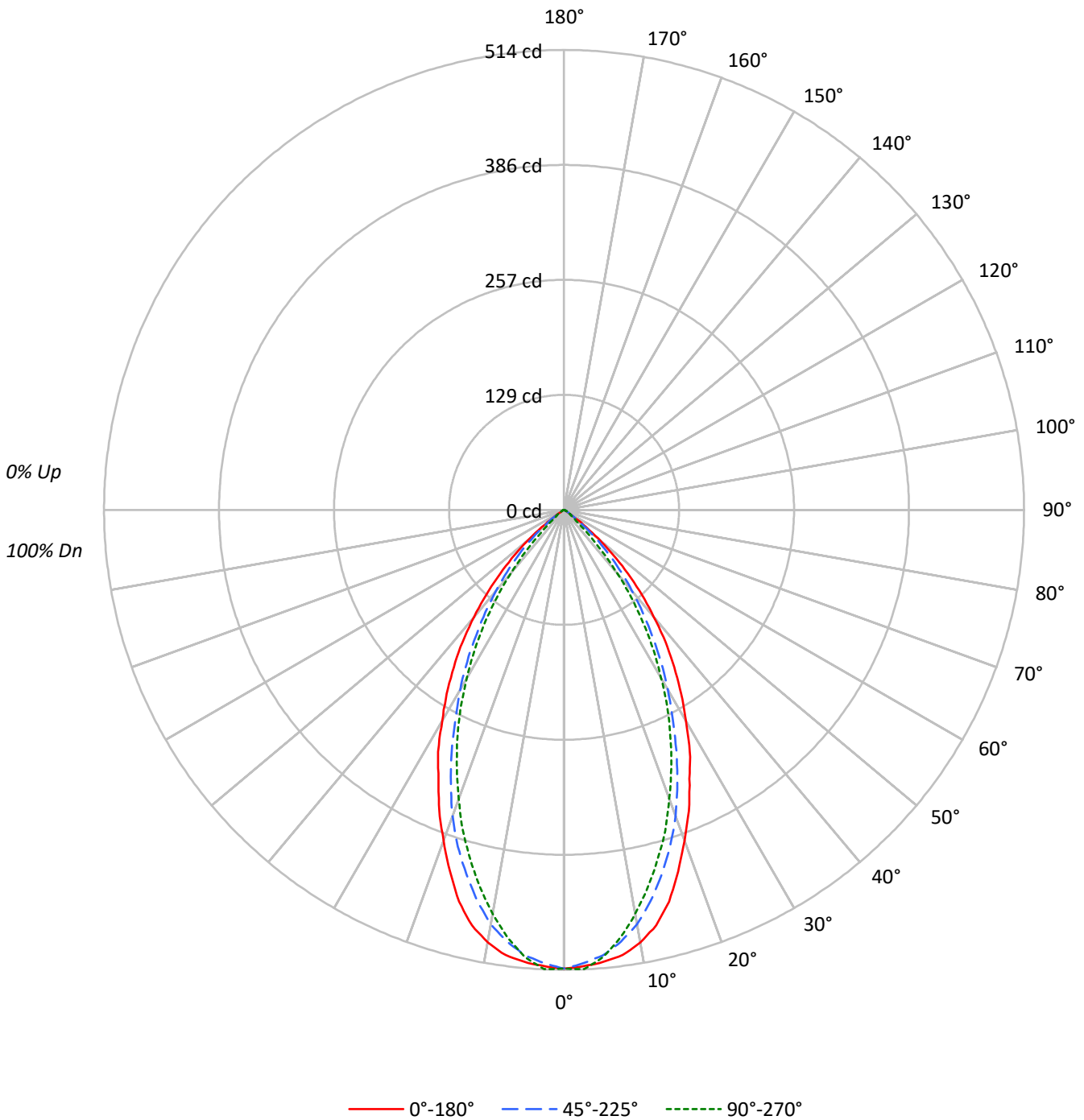
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 482.1 lumens  
Efficiency: N/A  
Efficacy: 13.8 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	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°	9461	9461	9461
5°	9395	9256	9295
10°	9200	8814	8591
15°	8656	8054	7724
20°	7725	7152	6747
25°	6753	6047	5737
30°	5796	4941	4619
35°	4834	3857	3467
40°	3760	2845	2219
45°	2630	1895	963
50°	1432	996	342
55°	209	347	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: 2630 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.1	9.8
10°-20°	118.7	24.6
20°-30°	138.4	28.7
30°-40°	110.9	23.0
40°-50°	55.1	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°	304.2	63.1
0°-40°	415.1	86.1
0°-60°	481.1	99.8
0°-90°	482.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	482.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	507	507	500	501	502	48
15°	453	444	422	411	404	126
25°	332	315	297	290	282	153
35°	215	193	171	164	154	133
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°	512.7	512.7	512.7	512.7	512.7
2.5°	510.5	512.7	507.2	512.7	513.7
5°	507.2	507.2	499.7	500.7	501.8
7.5°	501.8	499.7	486.7	484.5	482.3
10°	491.0	486.7	470.4	461.7	458.5
12.5°	475.8	469.3	447.6	437.9	432.5
15°	453.1	444.4	421.6	410.8	404.3
17.5°	423.8	416.2	394.5	382.6	376.1
20°	393.4	382.6	364.2	352.3	343.6
22.5°	364.2	350.1	330.6	321.9	313.2
25°	331.7	315.4	297.0	290.5	281.8
27.5°	304.6	284.0	262.3	258.0	250.4
30°	272.0	252.5	231.9	225.4	216.8
32.5°	243.9	222.2	201.6	194.0	186.4
35°	214.6	192.9	171.2	163.7	153.9
37.5°	186.4	165.8	144.2	132.2	123.6
40°	156.1	138.7	118.1	103.0	92.1
42.5°	129.0	113.8	94.3	74.8	63.9
45°	100.8	88.9	72.6	48.8	36.9
47.5°	74.8	66.1	53.1	28.2	19.5
50°	49.9	46.6	34.7	14.1	11.9
52.5°	27.1	29.3	20.6	8.7	9.8
55°	6.5	13.0	10.8	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)