

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: P1058176

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058176  
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-S865D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

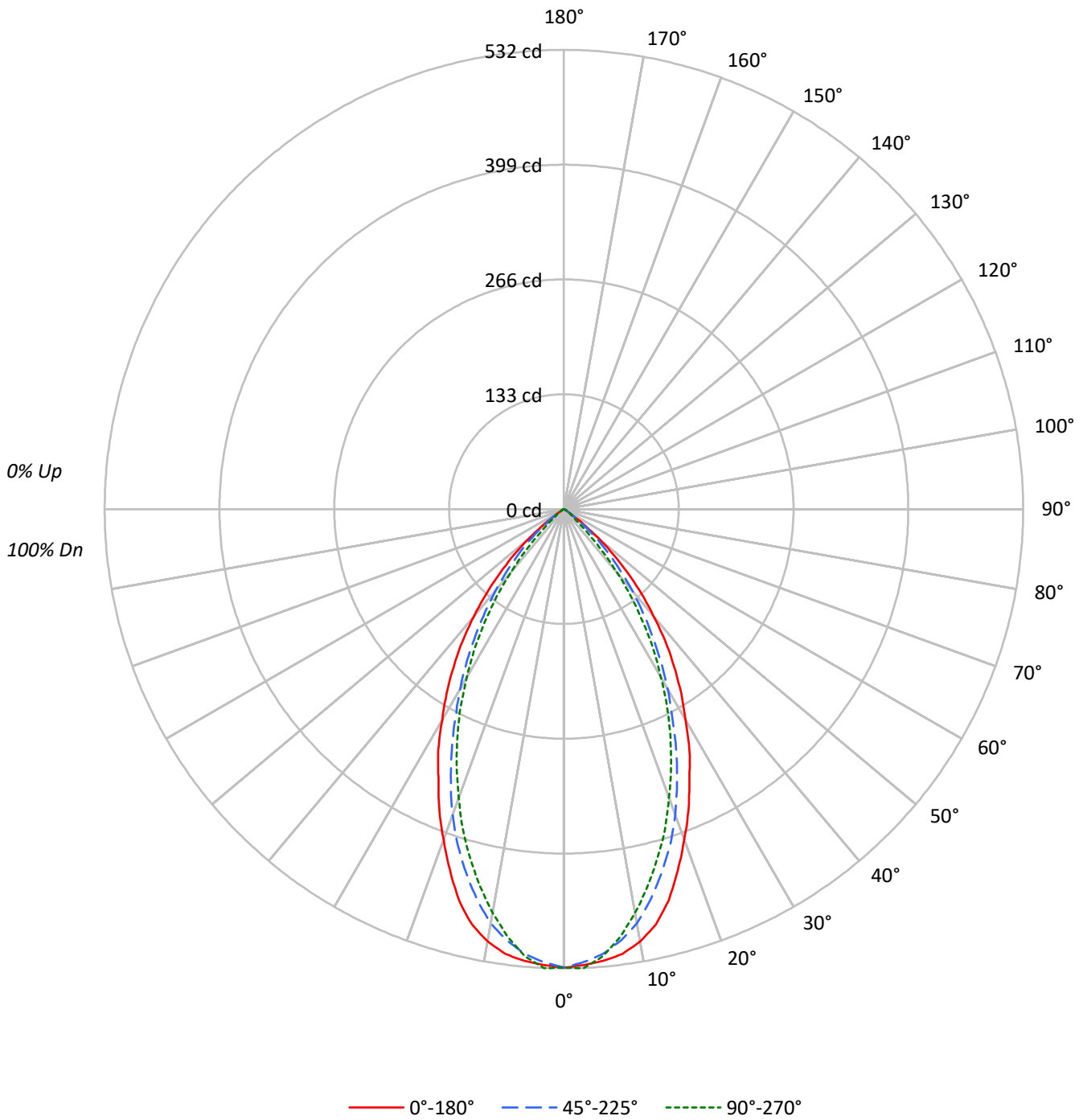
Lumens per Lamp: N/A  
Luminaire Lumens: 499.3 lumens  
Efficiency: N/A  
Efficacy: 14.3 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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°	9798	9798	9798
5°	9730	9586	9626
10°	9528	9129	8896
15°	8963	8342	7999
20°	8002	7407	6987
25°	6994	6263	5943
30°	6004	5118	4783
35°	5008	3996	3591
40°	3893	2948	2298
45°	2724	1962	997
50°	1481	1031	353
55°	216	360	254
60°	41	81	166
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: 2724 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	9.8
10°-20°	123.0	24.6
20°-30°	143.3	28.7
30°-40°	114.9	23.0
40°-50°	57.1	11.4
50°-60°	11.2	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°	315.0	63.1
0°-40°	429.9	86.1
0°-60°	498.2	99.8
0°-90°	499.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	499.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	525	525	518	519	520	50
15°	469	460	437	425	419	130
25°	344	327	308	301	292	158
35°	222	200	177	170	159	138
45°	104	92	75	50	38	81
55°	7	14	11	7	8	14
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°	531.0	531.0	531.0	531.0	531.0
2.5°	528.7	531.0	525.3	531.0	532.1
5°	525.3	525.3	517.5	518.6	519.7
7.5°	519.7	517.5	504.0	501.8	499.5
10°	508.5	504.0	487.2	478.2	474.8
12.5°	492.8	486.1	463.6	453.5	447.9
15°	469.2	460.2	436.7	425.4	418.7
17.5°	438.9	431.0	408.6	396.2	389.5
20°	407.5	396.2	377.2	364.8	355.8
22.5°	377.2	362.6	342.4	333.4	324.4
25°	343.5	326.7	307.6	300.8	291.9
27.5°	315.4	294.1	271.6	267.2	259.3
30°	281.8	261.5	240.2	233.5	224.5
32.5°	252.6	230.1	208.8	200.9	193.1
35°	222.3	199.8	177.4	169.5	159.4
37.5°	193.1	171.7	149.3	136.9	128.0
40°	161.6	143.7	122.4	106.6	95.4
42.5°	133.6	117.9	97.7	77.5	66.2
45°	104.4	92.0	75.2	50.5	38.2
47.5°	77.5	68.5	55.0	29.2	20.2
50°	51.6	48.3	35.9	14.6	12.3
52.5°	28.1	30.3	21.3	9.0	10.1
55°	6.7	13.5	11.2	6.7	7.9
57.5°	1.1	2.2	5.6	5.6	5.6
60°	1.1	1.1	2.2	3.4	4.5
62.5°	1.1	0.0	1.1	2.2	3.4
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)