

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: P1058128

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D835-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

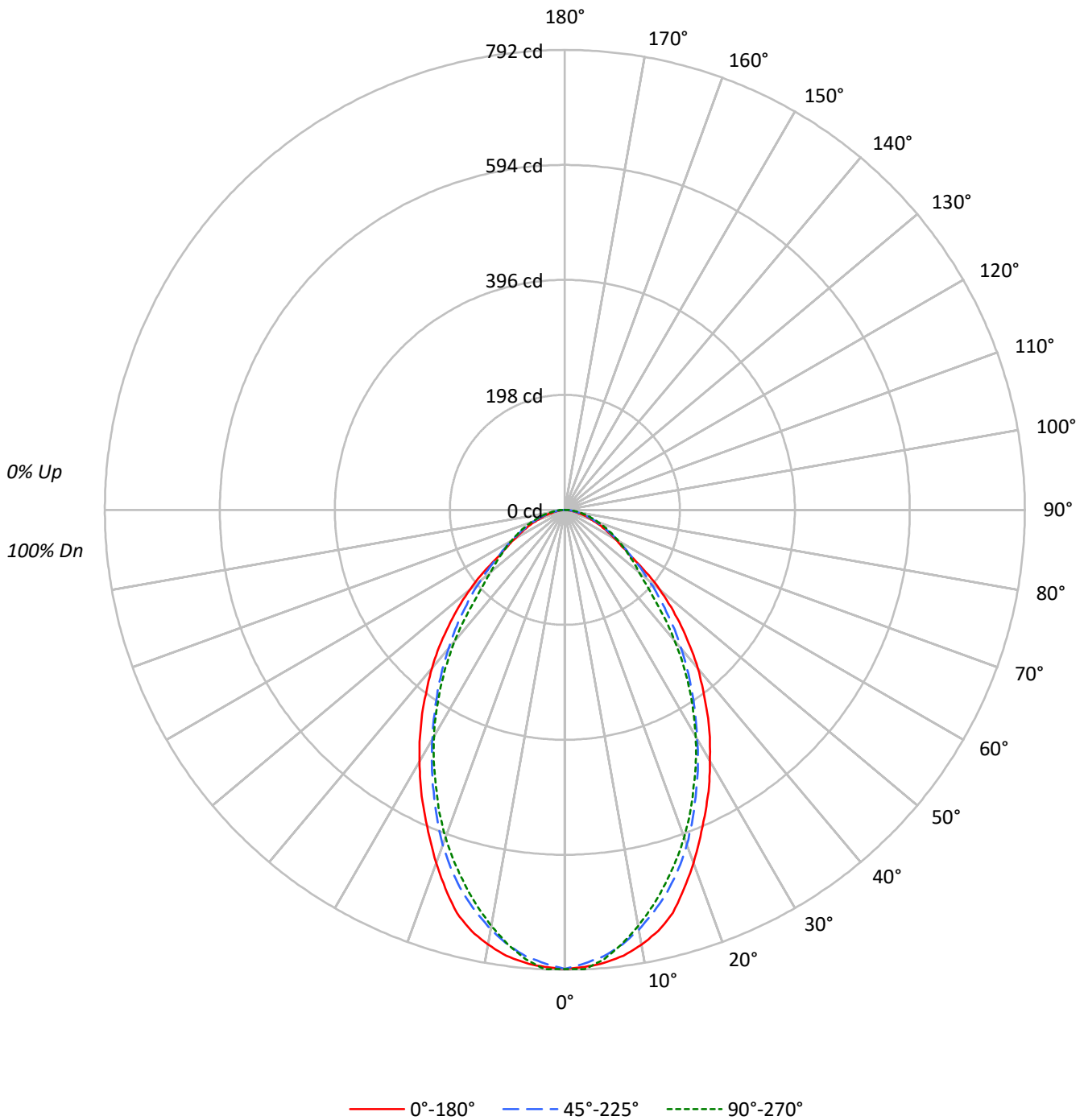
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1200.7 lumens  
Efficiency: N/A  
Efficacy: 34.3 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14589	14589	14589
5°	14503	14294	14387
10°	14248	13751	13633
15°	13732	13011	12746
20°	12707	12063	11792
25°	11662	10893	10689
30°	10649	9710	9603
35°	9641	8592	8393
40°	8583	7489	7096
45°	7390	6438	5684
50°	6109	5420	4771
55°	4414	4494	4292
60°	3672	3857	3901
65°	3135	3353	3572
70°	2579	2989	3259
75°	2153	2510	2959
80°	1605	2008	2678
85°	529	1059	2392

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7390 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.1	6.1
10°-20°	192.5	16.0
20°-30°	249.1	20.7
30°-40°	244.3	20.3
40°-50°	192.3	16.0
50°-60°	126.1	10.5
60°-70°	76.8	6.4
70°-80°	38.4	3.2
80°-90°	8.3	0.7
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°	514.6	42.9
0°-40°	758.9	63.2
0°-60°	1077.3	89.7
0°-90°	1200.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1200.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	783	783	772	777	777	74
15°	719	709	681	672	667	200
25°	573	554	535	532	525	263
35°	428	404	381	380	373	267
45°	283	266	247	229	218	218
55°	137	145	140	135	133	130
65°	72	73	77	81	82	71
75°	30	32	35	40	42	32
85°	2	4	5	9	11	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	790.6	790.6	790.6	790.6	790.6
2.5°	788.1	789.3	781.8	789.3	791.8
5°	783.0	783.0	771.7	776.7	776.7
7.5°	774.2	773.0	755.3	755.3	754.1
10°	760.4	755.3	733.9	730.2	727.6
12.5°	742.7	733.9	708.8	702.5	698.7
15°	718.8	708.8	681.1	672.2	667.2
17.5°	683.6	673.5	649.6	639.5	634.5
20°	647.1	632.0	614.3	605.5	600.5
22.5°	609.3	591.7	575.3	569.0	564.0
25°	572.8	553.9	535.0	532.5	525.0
27.5°	537.5	514.9	496.0	494.7	488.4
30°	499.8	475.9	455.7	457.0	450.7
32.5°	464.5	441.9	417.9	419.2	411.7
35°	428.0	404.1	381.4	380.2	372.6
37.5°	390.3	367.6	346.2	341.2	333.6
40°	356.3	333.6	310.9	302.1	294.6
42.5°	319.8	299.6	279.5	265.6	255.6
45°	283.2	265.6	246.7	229.1	217.8
47.5°	248.0	234.2	217.8	196.4	188.8
50°	212.8	202.7	188.8	169.9	166.2
52.5°	176.2	172.5	163.7	151.1	149.8
55°	137.2	144.8	139.7	134.7	133.4
57.5°	115.8	117.1	120.9	119.6	119.6
60°	99.5	99.5	104.5	105.7	105.7
62.5°	84.3	85.6	90.6	93.2	93.2
65°	71.8	73.0	76.8	80.6	81.8
67.5°	59.2	61.7	65.5	69.2	70.5
70°	47.8	50.4	55.4	59.2	60.4
72.5°	39.0	40.3	45.3	49.1	50.4
75°	30.2	31.5	35.2	40.3	41.5
77.5°	21.4	23.9	27.7	31.5	34.0
80°	15.1	16.4	18.9	23.9	25.2
82.5°	8.8	10.1	12.6	16.4	17.6
85°	2.5	3.8	5.0	8.8	11.3
87.5°	0.0	0.0	0.0	2.5	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)