

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: P1058169

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
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-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

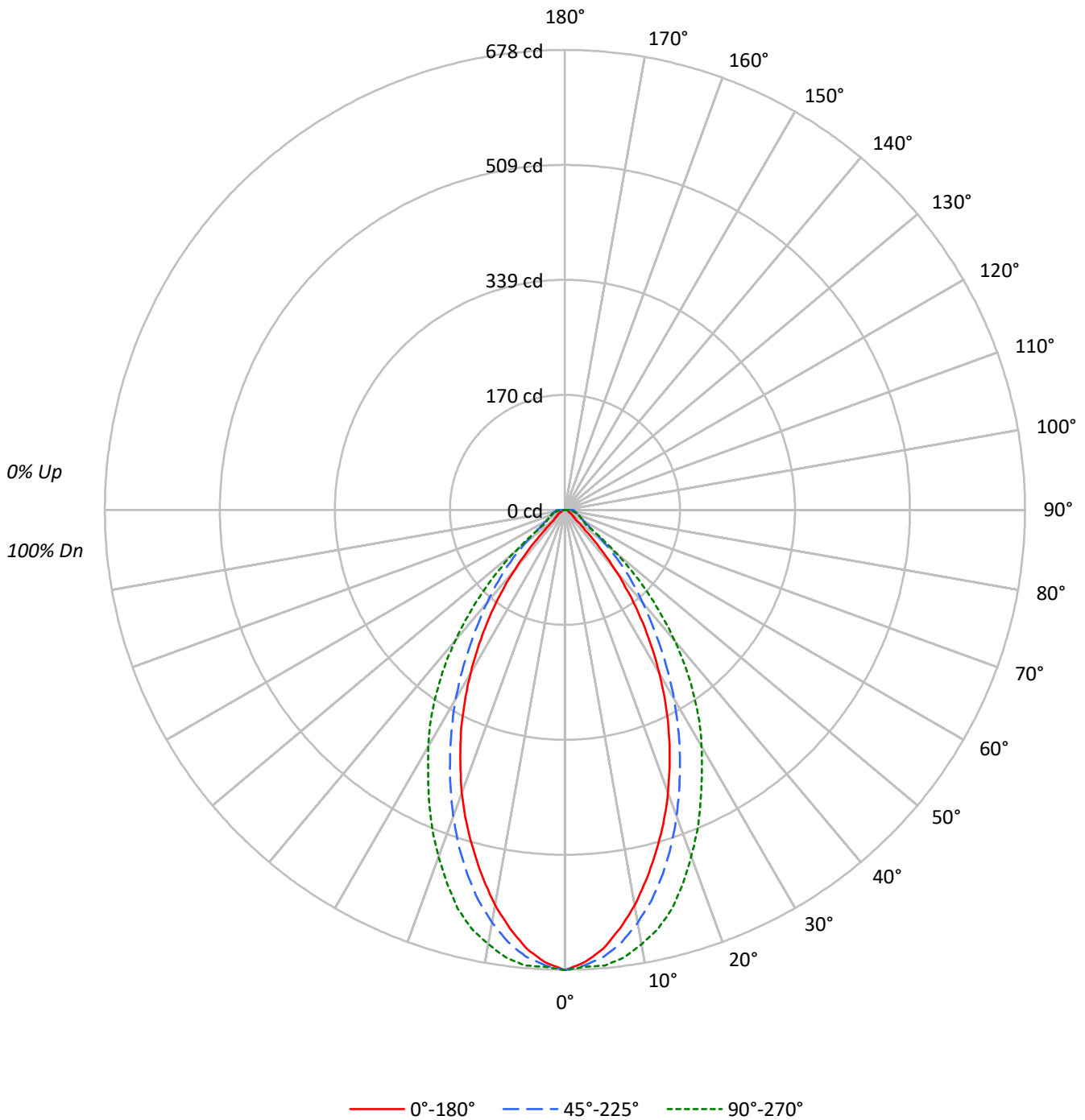
Lumens per Lamp: N/A  
Luminaire Lumens: 738.5 lumens  
Efficiency: N/A  
Efficacy: 21.1 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90			90	
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81			81	
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74			74	
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			67	
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61			61	
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56			56	
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52			52	
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48			48	
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45			45	
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42			42	

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

	0°	45°	90°
0°	12520	12520	12520
5°	12025	12247	12488
10°	11087	11574	12185
15°	9934	10620	11634
20°	8719	9443	10680
25°	7383	8156	9636
30°	5921	6848	8582
35°	4377	5478	7434
40°	2746	4288	6041
45°	1078	3231	4475
50°	531	2182	2742
55°	418	1432	1222
60°	321	1163	1122
65°	236	1092	1092
70°	291	1111	1111
75°	307	1241	1162
80°	457	1615	1265
85°	910	2752	1842

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 5034 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	8.4
10°-20°	156.7	21.2
20°-30°	187.4	25.4
30°-40°	157.8	21.4
40°-50°	89.8	12.2
50°-60°	35.4	4.8
60°-70°	22.3	3.0
70°-80°	16.6	2.2
80°-90°	10.5	1.4
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°	406.1	55.0
0°-40°	563.8	76.3
0°-60°	689.1	93.3
0°-90°	738.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	738.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	649	663	661	669	674	60
15°	520	538	556	588	609	145
25°	363	379	401	442	473	165
35°	194	212	243	295	330	121
45°	41	73	124	155	172	39
55°	13	28	44	46	38	12
65°	5	25	25	24	25	6
75°	4	17	17	16	16	5
85°	4	12	13	12	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	678.5	678.5	678.5	678.5	678.5
2.5°	667.7	679.6	672.0	673.1	674.2
5°	649.2	663.3	661.2	668.8	674.2
7.5°	622.1	637.3	642.7	655.7	665.5
10°	591.7	609.0	617.7	638.4	650.3
12.5°	556.9	576.5	589.5	615.6	632.9
15°	520.0	538.5	555.9	588.4	609.0
17.5°	483.1	501.6	520.0	555.9	577.6
20°	444.0	461.4	480.9	518.9	543.9
22.5°	402.8	421.2	440.8	479.9	510.3
25°	362.6	378.9	400.6	441.9	473.3
27.5°	320.3	336.6	360.4	402.8	436.4
30°	277.9	294.2	321.4	364.8	402.8
32.5°	235.6	253.0	282.3	330.0	368.0
35°	194.3	211.7	243.2	295.3	330.0
37.5°	154.2	173.7	208.4	259.5	292.0
40°	114.0	136.8	178.0	223.6	250.8
42.5°	76.0	104.2	149.8	187.8	210.6
45°	41.3	72.7	123.8	155.2	171.5
47.5°	22.8	46.7	98.8	123.8	133.5
50°	18.5	32.6	76.0	94.5	95.5
52.5°	15.2	29.3	56.5	67.3	61.9
55°	13.0	28.2	44.5	45.6	38.0
57.5°	10.9	27.1	36.9	32.6	32.6
60°	8.7	27.1	31.5	29.3	30.4
62.5°	6.5	27.1	28.2	26.1	27.1
65°	5.4	25.0	25.0	23.9	25.0
67.5°	5.4	22.8	22.8	21.7	22.8
70°	5.4	21.7	20.6	20.6	20.6
72.5°	4.3	19.5	19.5	18.5	18.5
75°	4.3	17.4	17.4	16.3	16.3
77.5°	4.3	16.3	16.3	15.2	14.1
80°	4.3	14.1	15.2	14.1	11.9
82.5°	4.3	13.0	14.1	13.0	9.8
85°	4.3	11.9	13.0	11.9	8.7
87.5°	3.3	11.9	11.9	9.8	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)