

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: P1058187

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058187  
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-S865D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

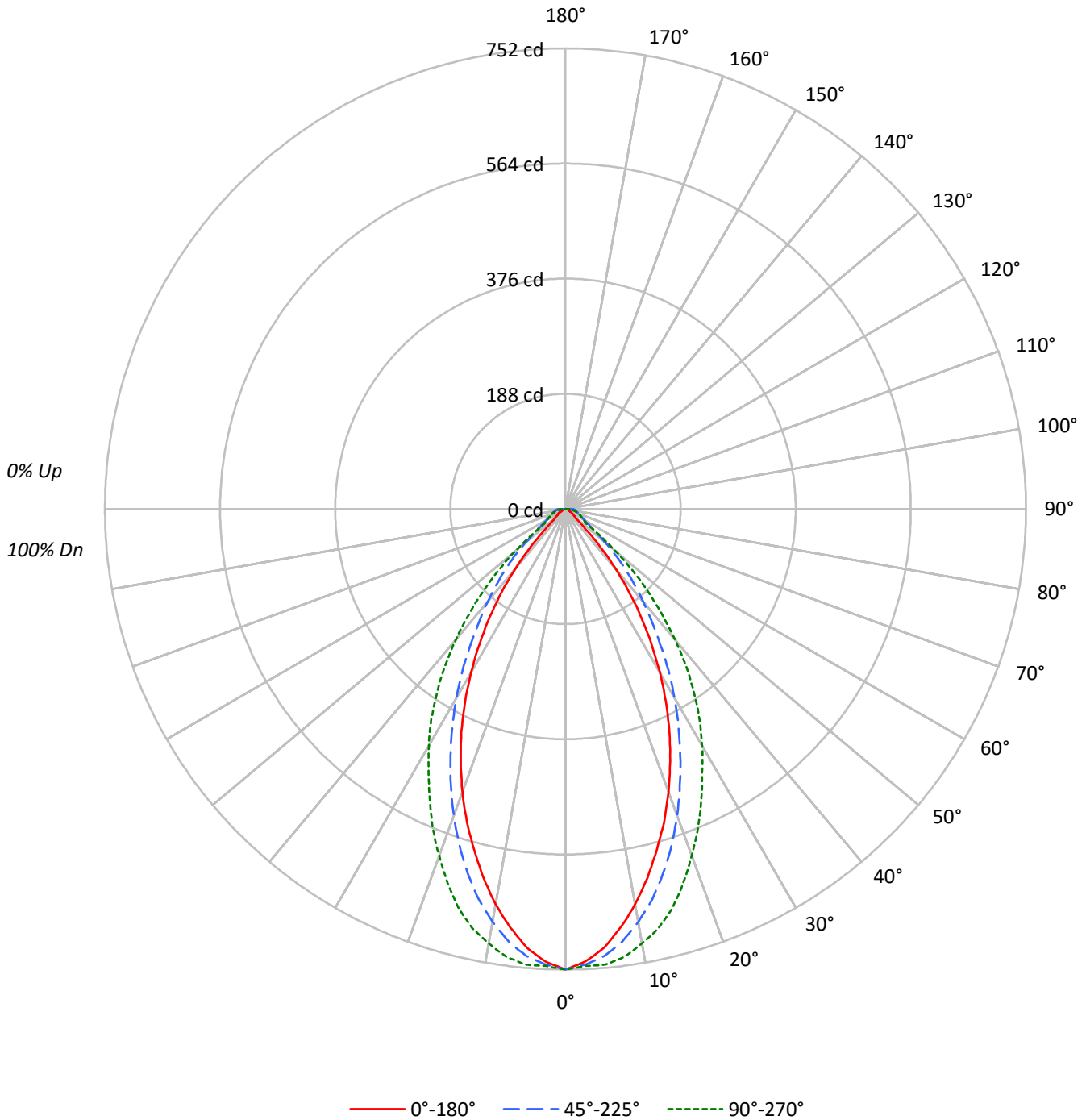
Lumens per Lamp: N/A  
Luminaire Lumens: 818.3 lumens  
Efficiency: N/A  
Efficacy: 23.4 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	13873	13873	13873
5°	13324	13570	13837
10°	12284	12826	13500
15°	11007	11766	12891
20°	9661	10464	11835
25°	8181	9038	10679
30°	6560	7587	9509
35°	4850	6071	8238
40°	3042	4753	6694
45°	1193	3578	4961
50°	586	2417	3040
55°	463	1586	1354
60°	354	1288	1244
65°	262	1209	1209
70°	324	1235	1235
75°	342	1369	1283
80°	510	1785	1403
85°	1016	3049	2032

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 5584 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.7	8.4
10°-20°	173.6	21.2
20°-30°	207.7	25.4
30°-40°	174.8	21.4
40°-50°	99.5	12.2
50°-60°	39.3	4.8
60°-70°	24.7	3.0
70°-80°	18.3	2.2
80°-90°	11.7	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°	450.0	55.0
0°-40°	624.8	76.3
0°-60°	763.5	93.3
0°-90°	818.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	719	735	733	741	747	67
15°	576	597	616	652	675	161
25°	402	420	444	490	524	183
35°	215	235	270	327	366	134
45°	46	81	137	172	190	43
55°	14	31	49	50	42	13
65°	6	28	28	26	28	7
75°	5	19	19	18	18	5
85°	5	13	14	13	10	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	751.8	751.8	751.8	751.8	751.8
2.5°	739.8	753.0	744.6	745.8	747.0
5°	719.3	735.0	732.6	741.0	747.0
7.5°	689.3	706.1	712.1	726.6	737.4
10°	655.6	674.8	684.5	707.3	720.5
12.5°	617.1	638.7	653.2	682.1	701.3
15°	576.2	596.6	615.9	652.0	674.8
17.5°	535.3	555.7	576.2	615.9	640.0
20°	492.0	511.2	532.9	575.0	602.7
22.5°	446.3	466.7	488.4	531.7	565.4
25°	401.8	419.8	443.9	489.6	524.5
27.5°	354.9	372.9	399.4	446.3	483.6
30°	307.9	326.0	356.1	404.2	446.3
32.5°	261.0	280.3	312.8	365.7	407.8
35°	215.3	234.6	269.5	327.2	365.7
37.5°	170.8	192.5	231.0	287.5	323.6
40°	126.3	151.6	197.3	247.8	277.9
42.5°	84.2	115.5	166.0	208.1	233.4
45°	45.7	80.6	137.1	172.0	190.1
47.5°	25.3	51.7	109.5	137.1	148.0
50°	20.4	36.1	84.2	104.7	105.9
52.5°	16.8	32.5	62.6	74.6	68.6
55°	14.4	31.3	49.3	50.5	42.1
57.5°	12.0	30.1	40.9	36.1	36.1
60°	9.6	30.1	34.9	32.5	33.7
62.5°	7.2	30.1	31.3	28.9	30.1
65°	6.0	27.7	27.7	26.5	27.7
67.5°	6.0	25.3	25.3	24.1	25.3
70°	6.0	24.1	22.9	22.9	22.9
72.5°	4.8	21.7	21.7	20.4	20.4
75°	4.8	19.2	19.2	18.0	18.0
77.5°	4.8	18.0	18.0	16.8	15.6
80°	4.8	15.6	16.8	15.6	13.2
82.5°	4.8	14.4	15.6	14.4	10.8
85°	4.8	13.2	14.4	13.2	9.6
87.5°	3.6	13.2	13.2	10.8	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)