

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: P1058193

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058193  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D950-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

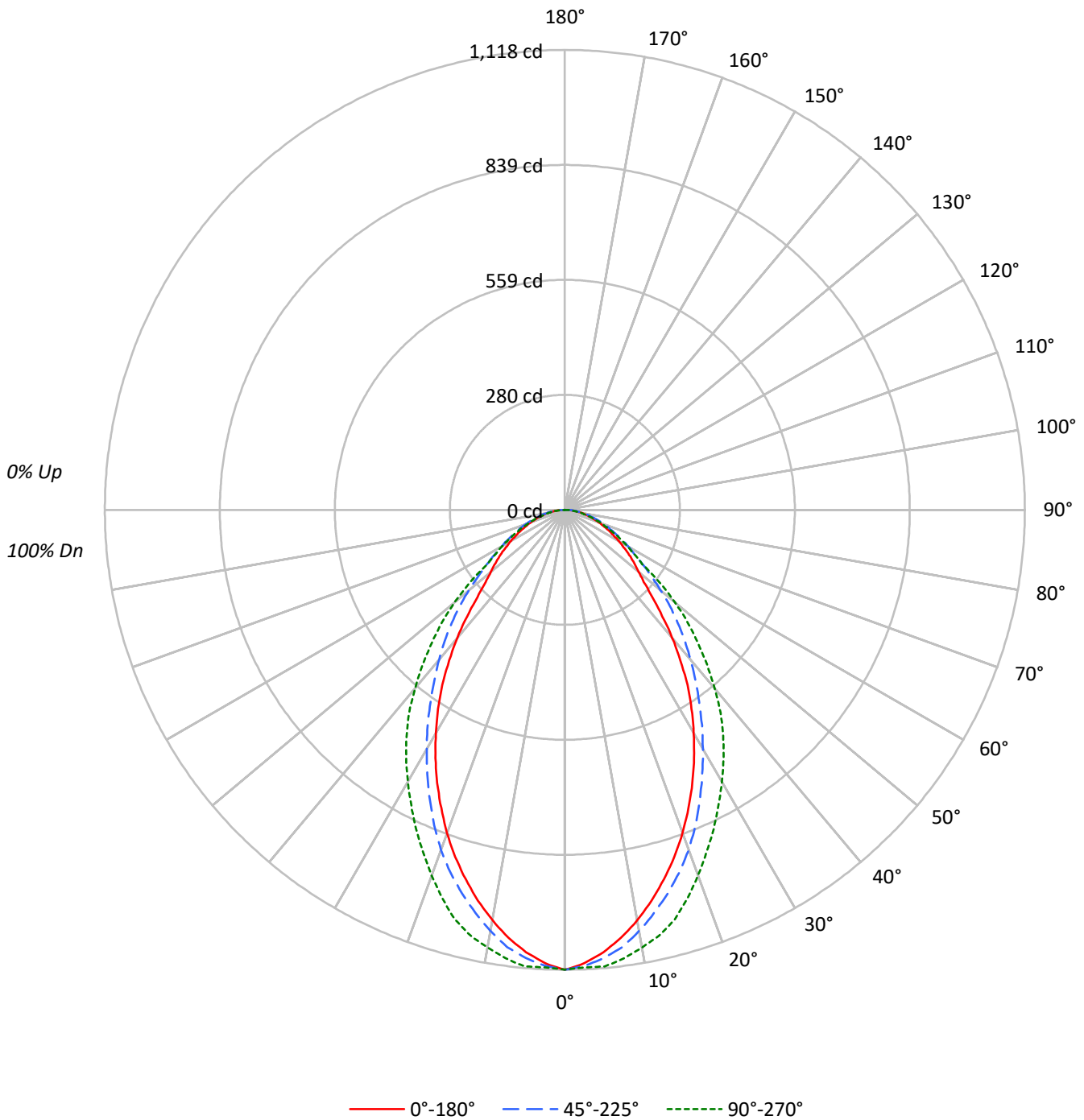
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1822.3 lumens  
Efficiency: N/A  
Efficacy: 52.1 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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				
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33				

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

	0°	45°	90°
0°	20626	20626	20626
5°	19992	20259	20638
10°	18984	19479	20245
15°	17772	18437	19699
20°	16426	17276	18574
25°	14928	15808	17424
30°	13342	14291	16262
35°	11696	12806	15108
40°	9785	11437	13636
45°	7842	10130	11918
50°	6729	8730	10007
55°	6148	7425	7386
60°	5587	6565	6433
65°	5091	5877	5615
70°	4667	5384	4991
75°	4370	4969	4370
80°	4091	4601	3836
85°	4065	4827	3303

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11918 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	5.7
10°-20°	273.2	15.0
20°-30°	360.3	19.8
30°-40°	362.8	19.9
40°-50°	295.3	16.2
50°-60°	201.3	11.0
60°-70°	130.7	7.2
70°-80°	72.0	3.9
80°-90°	23.5	1.3
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°	736.7	40.4
0°-40°	1099.5	60.3
0°-60°	1596.1	87.6
0°-90°	1822.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1822.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1079	1100	1094	1103	1114	101
15°	930	954	965	1005	1031	261
25°	733	757	776	811	856	336
35°	519	546	568	618	671	322
45°	300	338	388	422	457	237
55°	191	210	231	232	230	171
65°	117	138	135	127	129	116
75°	61	76	70	62	61	65
85°	19	25	23	18	16	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1117.8	<i>1117.8</i>	1117.8	1117.8	1117.8
2.5°	<i>1103.3</i>	<i>1121.4</i>	<i>1109.4</i>	<i>1110.6</i>	<i>1113.0</i>
5°	1079.3	<i>1099.7</i>	1093.7	1103.3	1114.2
7.5°	1049.3	<i>1069.7</i>	1072.1	1086.5	1099.7
10°	1013.2	<i>1036.0</i>	1039.6	1061.3	1080.5
12.5°	973.5	<i>998.8</i>	1003.6	1034.8	1060.1
15°	930.3	<i>954.3</i>	965.1	1004.8	1031.2
17.5°	884.6	<i>907.4</i>	924.3	960.3	990.4
20°	836.5	<i>858.2</i>	879.8	912.2	945.9
22.5°	784.8	<i>808.9</i>	829.3	861.8	900.2
25°	733.2	<i>757.2</i>	776.4	811.3	855.8
27.5°	680.3	<i>704.3</i>	723.5	760.8	808.9
30°	626.2	<i>651.4</i>	670.7	712.7	763.2
32.5°	573.3	<i>598.5</i>	620.2	664.7	717.5
35°	519.2	<i>545.7</i>	568.5	617.8	670.7
37.5°	461.5	<i>491.6</i>	520.4	569.7	621.4
40°	406.2	<i>439.9</i>	474.8	520.4	566.1
42.5°	351.0	<i>388.2</i>	431.5	469.9	512.0
45°	300.5	<i>337.7</i>	388.2	421.9	456.7
47.5°	260.8	<i>292.1</i>	346.1	373.8	405.0
50°	234.4	<i>256.0</i>	304.1	325.7	348.6
52.5°	212.7	<i>230.8</i>	264.4	278.8	290.9
55°	191.1	<i>210.3</i>	230.8	232.0	229.6
57.5°	169.5	<i>191.1</i>	201.9	193.5	198.3
60°	151.4	<i>173.1</i>	177.9	169.5	174.3
62.5°	132.2	<i>156.2</i>	156.2	147.8	150.2
65°	116.6	<i>138.2</i>	134.6	127.4	128.6
67.5°	101.0	<i>122.6</i>	116.6	109.4	109.4
70°	86.5	<i>107.0</i>	99.8	92.5	92.5
72.5°	73.3	<i>90.1</i>	85.3	76.9	75.7
75°	61.3	<i>75.7</i>	69.7	62.5	61.3
77.5°	49.3	<i>61.3</i>	56.5	50.5	48.1
80°	38.5	<i>49.3</i>	43.3	38.5	36.1
82.5°	28.8	<i>37.3</i>	32.5	27.6	25.2
85°	19.2	<i>25.2</i>	22.8	18.0	15.6
87.5°	9.6	<i>16.8</i>	14.4	12.0	9.6
90°	0.0	<i>0.0</i>	0.0	0.0	0.0

(END OF REPORT)