

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: P1055272

Luminaire Tested: S122R3DR-S865D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055272  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S865D940-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

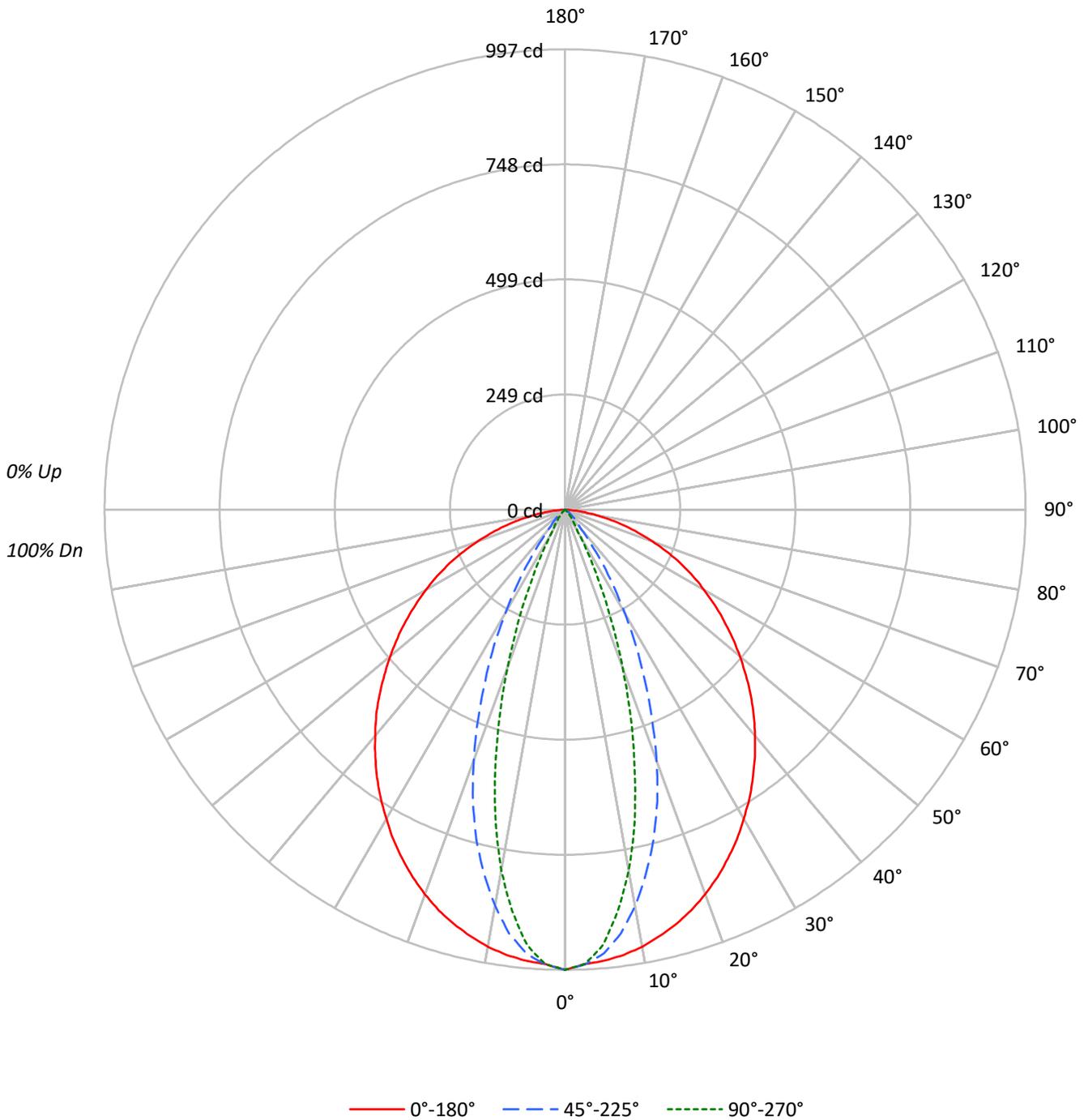
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 906.9 lumens  
Efficiency: N/A  
Efficacy: 26.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.7  
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	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	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	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43

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

	0°	45°	90°
0°	18887	18887	18887
5°	18655	18351	18001
10°	18496	16776	15277
15°	18227	14520	11441
20°	17881	11668	7325
25°	17438	8552	3761
30°	16922	5590	1227
35°	16405	3102	715
40°	15814	1246	396
45°	15229	828	153
50°	14557	472	68
55°	13890	228	36
60°	13156	87	0
65°	12382	49	0
70°	11106	61	0
75°	9560	81	0
80°	7255	0	0
85°	3000	239	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15229 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	9.9
10°-20°	207.7	22.9
20°-30°	210.8	23.2
30°-40°	158.2	17.4
40°-50°	110.8	12.2
50°-60°	67.8	7.5
60°-70°	40.4	4.5
70°-80°	18.6	2.1
80°-90°	3.3	0.4
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°	507.9	56.0
0°-40°	666.1	73.4
0°-60°	844.6	93.1
0°-90°	906.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	906.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	981	990	965	946	946	93
15°	929	879	740	627	583	262
25°	834	688	409	234	180	384
35°	709	462	134	40	31	443
45°	568	244	31	9	6	438
55°	420	74	7	2	1	376
65°	276	22	1	1	0	272
75°	131	2	1	1	0	139
85°	14	0	1	1	0	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	985.5	1000.4	986.6	984.3	985.5
5°	980.9	990.1	964.9	946.5	946.5
7.5°	972.9	972.9	925.9	888.1	876.6
10°	961.4	948.8	872.0	811.3	794.1
12.5°	946.5	916.7	809.0	723.1	695.6
15°	929.3	878.9	740.3	626.8	583.3
17.5°	909.9	836.5	663.5	522.5	472.1
20°	886.9	790.7	578.7	416.0	363.3
22.5°	861.7	740.3	492.7	320.9	264.7
25°	834.2	687.5	409.1	233.8	179.9
27.5°	805.6	632.5	332.3	160.4	110.0
30°	773.5	575.2	255.5	95.1	56.1
32.5°	742.6	520.2	191.4	51.6	41.3
35°	709.3	461.8	134.1	40.1	30.9
37.5°	674.9	406.8	82.5	29.8	22.9
40°	639.4	350.6	50.4	21.8	16.0
42.5°	605.0	297.9	40.1	14.9	10.3
45°	568.4	244.1	30.9	9.2	5.7
47.5°	530.6	194.8	22.9	5.7	3.4
50°	493.9	151.3	16.0	3.4	2.3
52.5°	457.2	111.2	10.3	2.3	1.1
55°	420.5	74.5	6.9	2.3	1.1
57.5°	383.9	52.7	4.6	1.1	1.1
60°	347.2	41.3	2.3	1.1	0.0
62.5°	312.8	32.1	2.3	1.1	1.1
65°	276.2	21.8	1.1	1.1	0.0
67.5°	237.2	13.8	1.1	1.1	0.0
70°	200.5	8.0	1.1	1.1	0.0
72.5°	165.0	4.6	1.1	1.1	0.0
75°	130.6	2.3	1.1	1.1	0.0
77.5°	97.4	1.1	0.0	1.1	0.0
80°	66.5	0.0	0.0	1.1	0.0
82.5°	39.0	0.0	0.0	1.1	0.0
85°	13.8	0.0	1.1	1.1	0.0
87.5°	0.0	0.0	1.1	1.1	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)