

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: P1056078

Luminaire Tested: S124R3DR-S795D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124R3DR-S795D930-X4F0-XX-UDD-FLL-W  
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

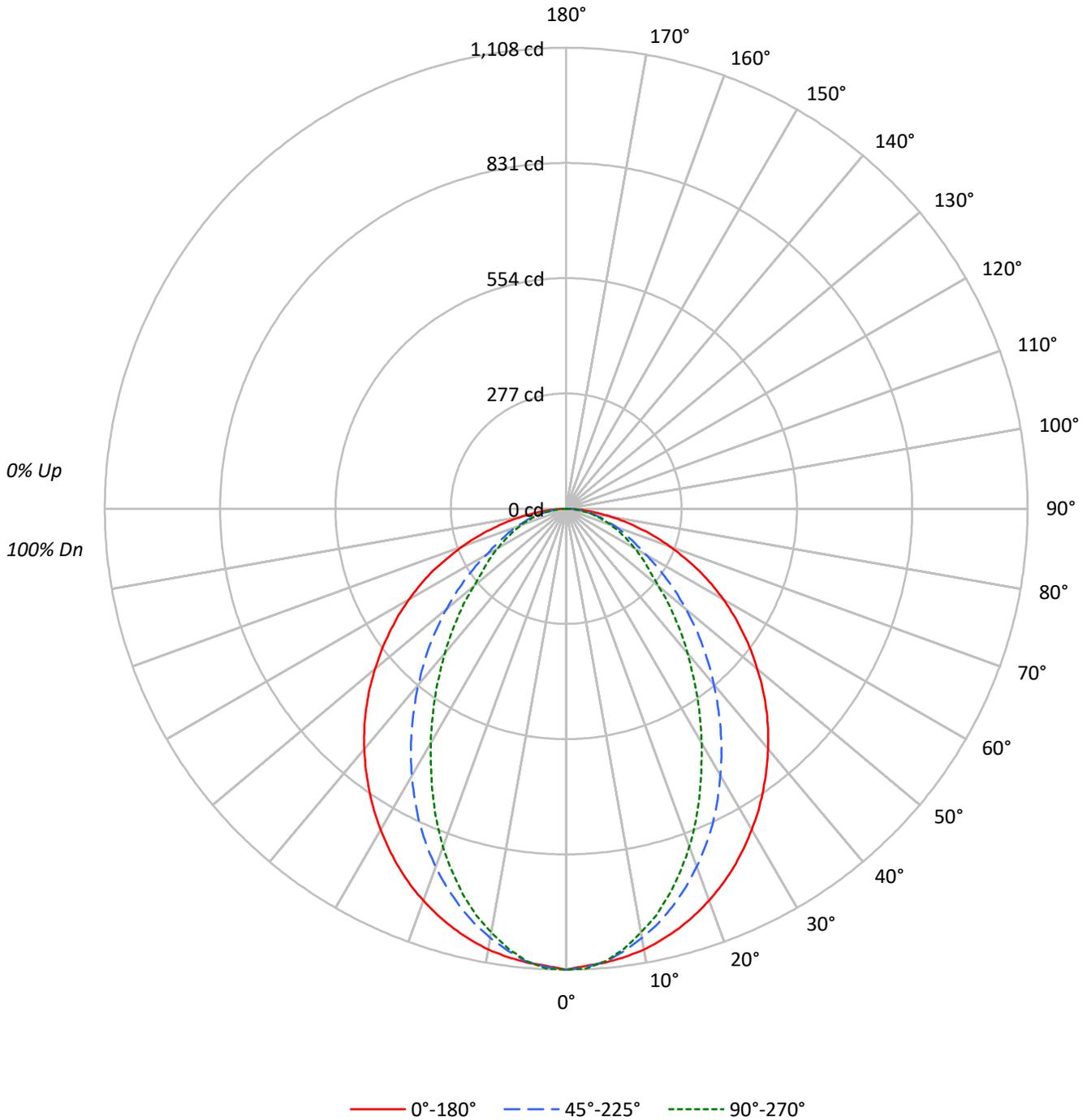
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2206.8 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12  
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																												
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																												
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																												
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																												

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

	0°	45°	90°
0°	9796	9796	9796
5°	9717	9696	9689
10°	9662	9406	9288
15°	9560	9053	8776
20°	9435	8622	8139
25°	9282	8128	7397
30°	9097	7566	6642
35°	8906	6978	5914
40°	8705	6371	5232
45°	8491	5780	4598
50°	8231	5158	3970
55°	7980	4536	3607
60°	7699	3892	3344
65°	7351	3531	3121
70°	6830	3267	2950
75°	6183	3010	2784
80°	5397	2780	2617
85°	4139	2567	2394

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8491 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	4.7
10°-20°	279.8	12.7
20°-30°	387.4	17.6
30°-40°	415.8	18.8
40°-50°	378.2	17.1
50°-60°	297.8	13.5
60°-70°	203.8	9.2
70°-80°	109.7	5.0
80°-90°	31.1	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°	770.4	34.9
0°-40°	1186.2	53.8
0°-60°	1862.2	84.4
0°-90°	2206.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2206.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1095	1107	1092	1087	1092	104
15°	1044	1033	989	962	959	294
25°	952	912	833	773	758	438
35°	825	761	646	568	548	516
45°	679	593	462	382	368	524
55°	518	419	294	237	234	463
65°	351	251	169	150	149	347
75°	181	110	88	81	82	193
85°	41	28	25	24	24	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1108.0	1108.0	1108.0	1108.0	1108.0
2.5°	1099.8	1112.9	1103.1	1104.7	1106.4
5°	1094.9	1107.2	1092.5	1086.8	1091.7
7.5°	1086.8	1094.9	1072.1	1061.5	1066.4
10°	1076.2	1077.8	1047.7	1032.2	1034.6
12.5°	1061.5	1057.4	1020.8	998.7	1000.4
15°	1044.4	1033.0	989.0	962.1	958.8
17.5°	1024.8	1006.1	953.9	919.7	913.1
20°	1002.8	977.5	916.4	872.4	865.0
22.5°	978.4	945.7	875.6	823.5	812.9
25°	951.5	912.3	833.2	772.9	758.2
27.5°	922.1	876.4	787.6	721.5	702.8
30°	891.1	838.9	741.1	670.2	650.6
32.5°	859.3	800.6	693.8	618.8	598.4
35°	825.1	760.7	646.5	568.3	547.9
37.5°	790.0	719.1	598.4	519.3	498.1
40°	754.2	677.5	552.0	470.4	453.3
42.5°	717.5	635.1	506.3	424.8	409.3
45°	679.1	592.7	462.3	382.4	367.7
47.5°	640.0	549.5	417.4	342.4	328.6
50°	598.4	506.3	375.0	303.3	288.6
52.5°	558.5	462.3	334.3	265.0	257.6
55°	517.7	419.1	294.3	237.3	234.0
57.5°	477.0	375.9	257.6	215.2	212.0
60°	435.4	333.5	220.1	192.4	189.1
62.5°	393.8	291.9	192.4	170.4	168.8
65°	351.4	251.1	168.8	150.0	149.2
67.5°	306.6	212.0	147.6	132.1	131.3
70°	264.2	172.8	126.4	114.1	114.1
72.5°	224.2	137.0	106.8	97.0	97.0
75°	181.0	110.1	88.1	80.7	81.5
77.5°	142.7	86.4	70.9	66.0	66.0
80°	106.0	64.4	54.6	50.5	51.4
82.5°	71.7	44.8	39.1	36.7	36.7
85°	40.8	27.7	25.3	23.6	23.6
87.5°	14.7	13.0	12.2	10.6	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)