

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: P1056075

Luminaire Tested: S124R3DR-S795D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056075  
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-S795D927-X4F0-XX-UDD-FLL-W  
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

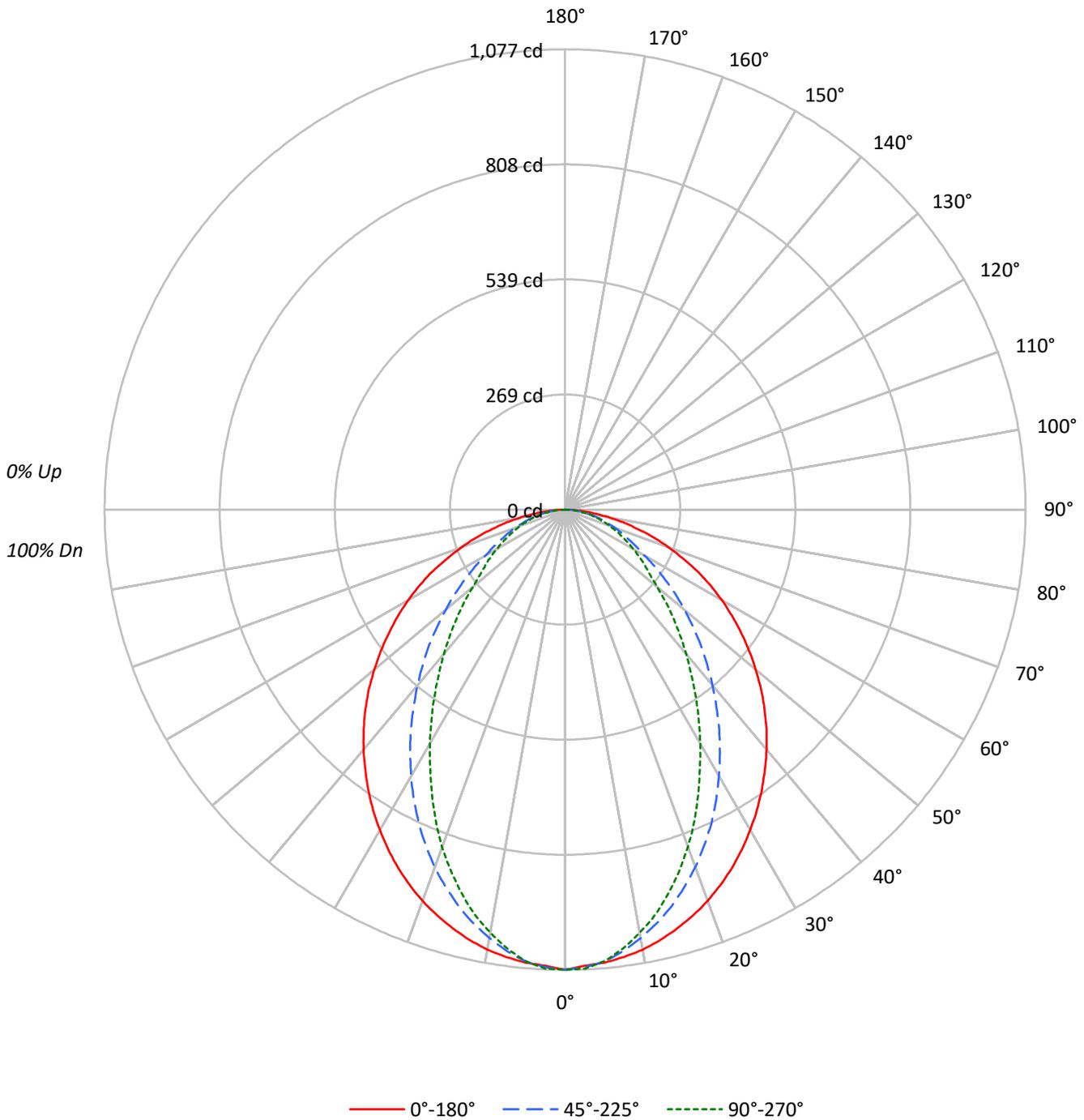
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2144.3 lumens  
Efficiency: N/A  
Efficacy: 81.2 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	
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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73				73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63				63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29				29

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

	0°	45°	90°
0°	9519	9519	9519
5°	9442	9421	9414
10°	9388	9139	9025
15°	9289	8795	8527
20°	9168	8378	7908
25°	9019	7898	7187
30°	8840	7352	6454
35°	8653	6780	5745
40°	8458	6190	5084
45°	8251	5617	4468
50°	7998	5012	3857
55°	7753	4409	3505
60°	7480	3782	3250
65°	7142	3431	3033
70°	6636	3174	2867
75°	6009	2924	2706
80°	5244	2704	2541
85°	4017	2496	2333

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8251 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	4.7
10°-20°	271.9	12.7
20°-30°	376.5	17.6
30°-40°	404.1	18.8
40°-50°	367.4	17.1
50°-60°	289.4	13.5
60°-70°	198.1	9.2
70°-80°	106.6	5.0
80°-90°	30.2	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°	748.6	34.9
0°-40°	1152.6	53.8
0°-60°	1809.4	84.4
0°-90°	2144.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2144.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1077	1077	1077	1077	1077	
5°	1064	1076	1062	1056	1061	101
15°	1015	1004	961	935	932	286
25°	924	886	810	751	737	426
35°	802	739	628	552	532	501
45°	660	576	449	372	357	509
55°	503	407	286	230	227	450
65°	341	244	164	146	145	337
75°	176	107	86	78	79	188
85°	40	27	25	23	23	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1076.6	1076.6	1076.6	1076.6	1076.6
2.5°	1068.7	1081.3	1071.8	1073.4	1075.0
5°	1063.9	1075.8	1061.5	1056.0	1060.7
7.5°	1056.0	1063.9	1041.7	1031.4	1036.2
10°	1045.7	1047.3	1018.0	1002.9	1005.3
12.5°	1031.4	1027.5	991.8	970.4	972.0
15°	1014.8	1003.7	960.9	934.8	931.6
17.5°	995.8	977.6	926.9	893.6	887.2
20°	974.4	949.8	890.4	847.6	840.5
22.5°	950.6	918.9	850.8	800.1	789.8
25°	924.5	886.5	809.6	751.0	736.7
27.5°	896.0	851.6	765.2	701.1	682.9
30°	865.9	815.2	720.1	651.2	632.2
32.5°	835.0	777.9	674.1	601.3	581.5
35°	801.7	739.1	628.2	552.2	532.3
37.5°	767.6	698.7	581.5	504.6	484.0
40°	732.8	658.3	536.3	457.1	440.5
42.5°	697.1	617.1	491.9	412.7	397.7
45°	659.9	575.9	449.2	371.5	357.3
47.5°	621.9	533.9	405.6	332.7	319.2
50°	581.5	491.9	364.4	294.7	280.4
52.5°	542.6	449.2	324.8	257.5	250.3
55°	503.0	407.2	286.0	230.5	227.4
57.5°	463.4	365.2	250.3	209.1	206.0
60°	423.0	324.0	213.9	187.0	183.8
62.5°	382.6	283.6	187.0	165.6	164.0
65°	341.4	244.0	164.0	145.8	145.0
67.5°	297.9	206.0	143.4	128.3	127.5
70°	256.7	167.9	122.8	110.9	110.9
72.5°	217.9	133.1	103.8	94.3	94.3
75°	175.9	106.9	85.6	78.4	79.2
77.5°	138.6	84.0	68.9	64.2	64.2
80°	103.0	62.6	53.1	49.1	49.9
82.5°	69.7	43.6	38.0	35.6	35.6
85°	39.6	26.9	24.6	23.0	23.0
87.5°	14.3	12.7	11.9	10.3	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)