

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: P1056067

Luminaire Tested: S124R3DR-S795D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124R3DR-S795D840-X4F0-XX-UDD-FLL-B  
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

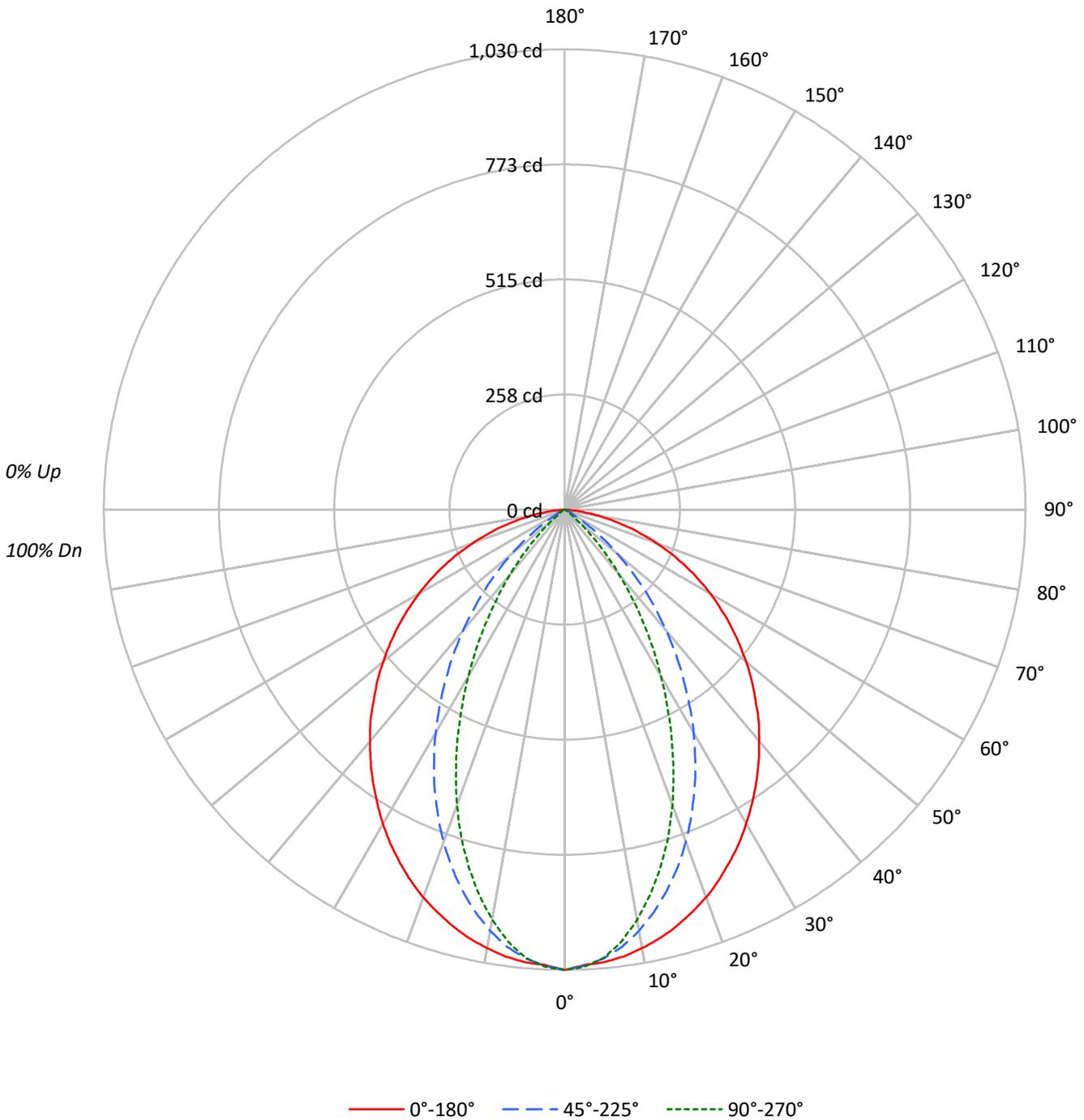
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1439.7 lumens  
Efficiency: N/A  
Efficacy: 54.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97  
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	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	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37

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

	0°	45°	90°
0°	9108	9108	9108
5°	9025	8944	8936
10°	8948	8595	8368
15°	8837	8079	7580
20°	8694	7449	6623
25°	8502	6709	5526
30°	8289	5887	4392
35°	8055	4992	3270
40°	7809	4067	2179
45°	7538	3106	1199
50°	7279	2125	333
55°	6989	1151	217
60°	6643	357	126
65°	6211	232	63
70°	5612	103	26
75°	4830	34	0
80°	3651	0	0
85°	1532	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7538 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.0	6.6
10°-20°	249.5	17.3
20°-30°	322.4	22.4
30°-40°	308.1	21.4
40°-50°	230.4	16.0
50°-60°	137.1	9.5
60°-70°	69.6	4.8
70°-80°	24.2	1.7
80°-90°	3.3	0.2
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°	666.9	46.3
0°-40°	975.0	67.7
0°-60°	1342.5	93.3
0°-90°	1439.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1017	1025	1008	1003	1007	96
15°	965	945	883	841	828	272
25°	872	811	688	597	566	401
35°	746	643	462	344	303	467
45°	603	462	248	132	96	466
55°	453	282	75	17	14	405
65°	297	114	11	4	3	294
75°	141	15	1	1	0	150
85°	15	0	0	0	0	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.1	1030.1	1030.1	1030.1	1030.1
2.5°	1020.0	1032.1	1022.0	1023.0	1024.0
5°	1016.9	1025.0	1007.8	1002.8	1006.8
7.5°	1008.9	1011.9	986.6	973.5	974.5
10°	996.7	993.7	957.4	935.1	932.1
12.5°	982.6	972.5	922.0	889.7	882.6
15°	965.4	945.2	882.6	841.2	828.1
17.5°	945.2	915.9	839.2	784.7	768.5
20°	924.0	883.6	791.7	724.1	703.9
22.5°	898.8	847.3	740.2	660.5	635.2
25°	871.5	810.9	687.7	596.8	566.5
27.5°	843.2	771.5	632.2	532.2	496.9
30°	811.9	730.1	576.6	466.6	430.2
32.5°	779.6	687.7	519.1	406.0	365.6
35°	746.3	643.3	462.5	344.4	303.0
37.5°	712.0	598.9	408.0	285.8	243.4
40°	676.6	553.4	352.4	230.2	188.8
42.5°	642.3	508.0	299.9	177.7	139.4
45°	602.9	462.5	248.4	132.3	95.9
47.5°	567.5	418.1	198.9	89.9	56.6
50°	529.2	370.6	154.5	52.5	24.2
52.5°	490.8	326.2	113.1	23.2	18.2
55°	453.4	281.8	74.7	17.2	14.1
57.5°	414.0	237.3	40.4	13.1	10.1
60°	375.7	193.9	20.2	10.1	7.1
62.5°	336.3	152.5	16.2	6.1	4.0
65°	296.9	114.1	11.1	4.0	3.0
67.5°	257.5	77.8	7.1	2.0	1.0
70°	217.1	47.5	4.0	1.0	1.0
72.5°	178.7	24.2	2.0	1.0	1.0
75°	141.4	15.1	1.0	1.0	0.0
77.5°	105.0	8.1	1.0	1.0	0.0
80°	71.7	3.0	0.0	0.0	0.0
82.5°	41.4	1.0	0.0	0.0	0.0
85°	15.1	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)