

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: P1056068

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056068  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)  
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-S  
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

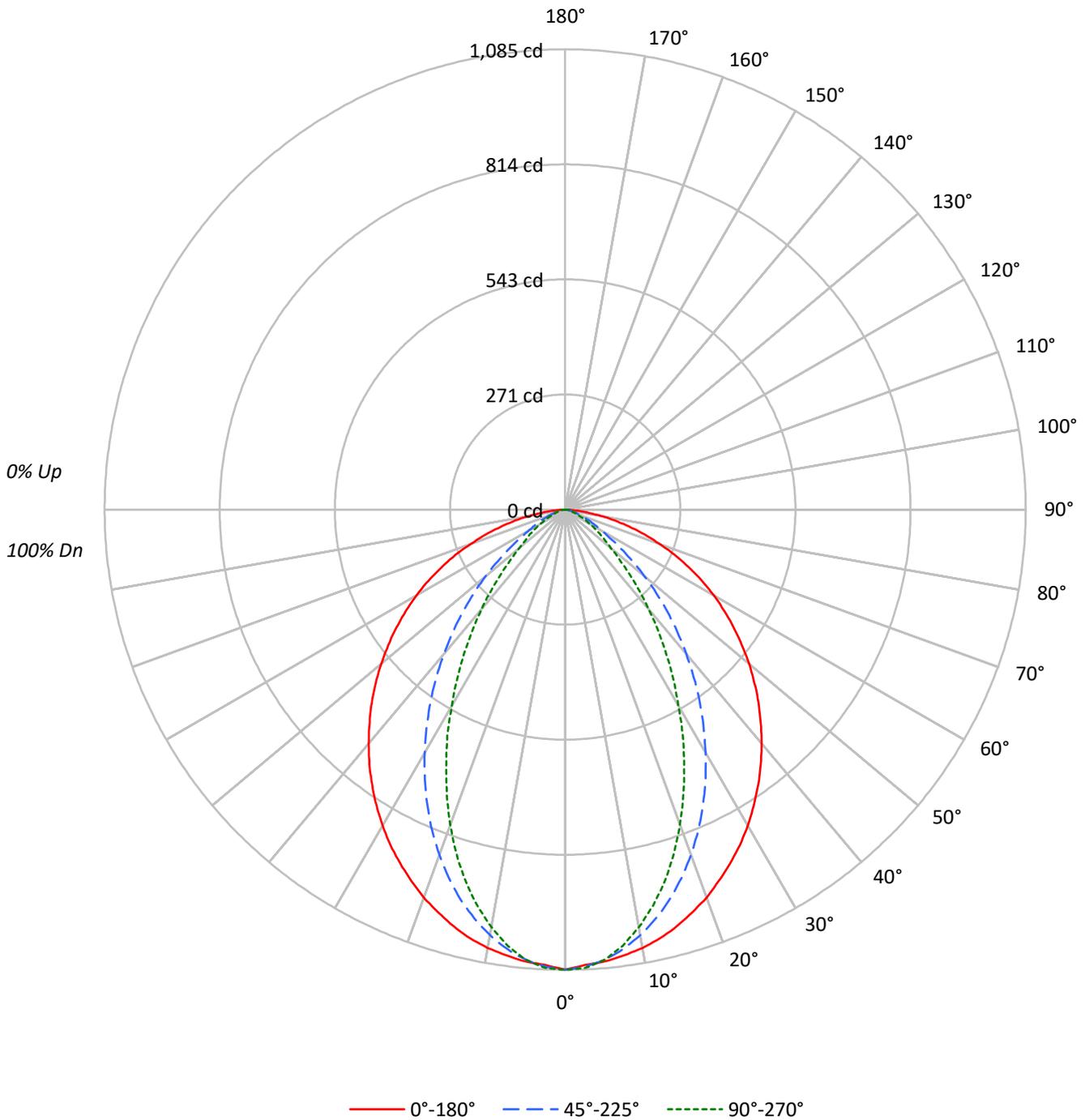
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1753.7 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

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

	0°	45°	90°
0°	9589	9589	9589
5°	9491	9456	9456
10°	9420	9148	8976
15°	9308	8708	8301
20°	9159	8153	7440
25°	8975	7497	6463
30°	8784	6753	5444
35°	8556	5962	4480
40°	8310	5116	3532
45°	8056	4255	2640
50°	7778	3348	1931
55°	7471	2476	1541
60°	7142	1713	1179
65°	6718	1331	866
70°	6083	941	680
75°	5312	656	516
80°	4267	514	463
85°	2353	406	406

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8056 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	5.7
10°-20°	268.8	15.3
20°-30°	358.5	20.4
30°-40°	361.0	20.6
40°-50°	296.0	16.9
50°-60°	202.4	11.5
60°-70°	113.1	6.4
70°-80°	44.8	2.6
80°-90°	8.5	0.5
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°	727.9	41.5
0°-40°	1088.9	62.1
0°-60°	1587.3	90.5
0°-90°	1753.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1753.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1069	1082	1065	1060	1065	101
15°	1017	1006	951	918	907	287
25°	920	874	768	691	662	424
35°	793	709	552	447	415	496
45°	644	526	340	239	211	497
55°	485	340	161	107	100	433
65°	321	162	64	45	41	317
75°	156	42	19	16	15	167
85°	23	4	4	4	4	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.6	1084.6	1084.6	1084.6	1084.6
2.5°	1074.5	1087.6	1078.5	1079.5	1081.6
5°	1069.4	1081.6	1065.4	1060.4	1065.4
7.5°	1060.4	1069.4	1045.2	1035.1	1037.1
10°	1049.3	1052.3	1019.0	1001.8	999.8
12.5°	1035.1	1031.1	987.6	962.4	956.3
15°	1016.9	1005.8	951.3	918.0	906.9
17.5°	995.7	976.5	910.9	867.5	851.3
20°	973.5	945.2	866.5	810.9	790.7
22.5°	947.3	911.9	819.0	751.3	728.1
25°	920.0	874.5	768.5	690.7	662.5
27.5°	891.7	836.2	716.0	629.1	600.9
30°	860.4	794.8	661.5	567.5	533.2
32.5°	827.1	752.3	606.9	507.0	474.6
35°	792.7	708.9	552.4	447.4	415.1
37.5°	757.4	664.5	497.9	390.8	358.5
40°	720.0	619.0	443.3	337.3	306.0
42.5°	681.7	572.6	390.8	286.8	257.5
45°	644.3	526.1	340.3	239.3	211.1
47.5°	604.9	479.7	290.8	194.9	170.7
50°	565.5	433.2	243.4	156.5	140.4
52.5°	525.1	386.8	200.0	128.3	117.1
55°	484.7	340.3	160.6	107.0	100.0
57.5°	444.3	293.9	124.2	90.9	82.8
60°	403.9	248.4	96.9	73.7	66.7
62.5°	362.5	203.0	79.8	58.6	52.5
65°	321.1	161.6	63.6	45.4	41.4
67.5°	279.7	123.2	48.5	35.3	32.3
70°	235.3	87.9	36.4	27.3	26.3
72.5°	196.9	59.6	26.3	21.2	20.2
75°	155.5	42.4	19.2	16.2	15.1
77.5°	120.2	27.3	14.1	13.1	12.1
80°	83.8	15.1	10.1	9.1	9.1
82.5°	51.5	8.1	7.1	6.1	6.1
85°	23.2	4.0	4.0	4.0	4.0
87.5°	4.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)