

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: P1055999

Luminaire Tested: S124R3DR-S1195D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055999  
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-S1195D935-X4F0-XX-UDD-FLL-S  
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

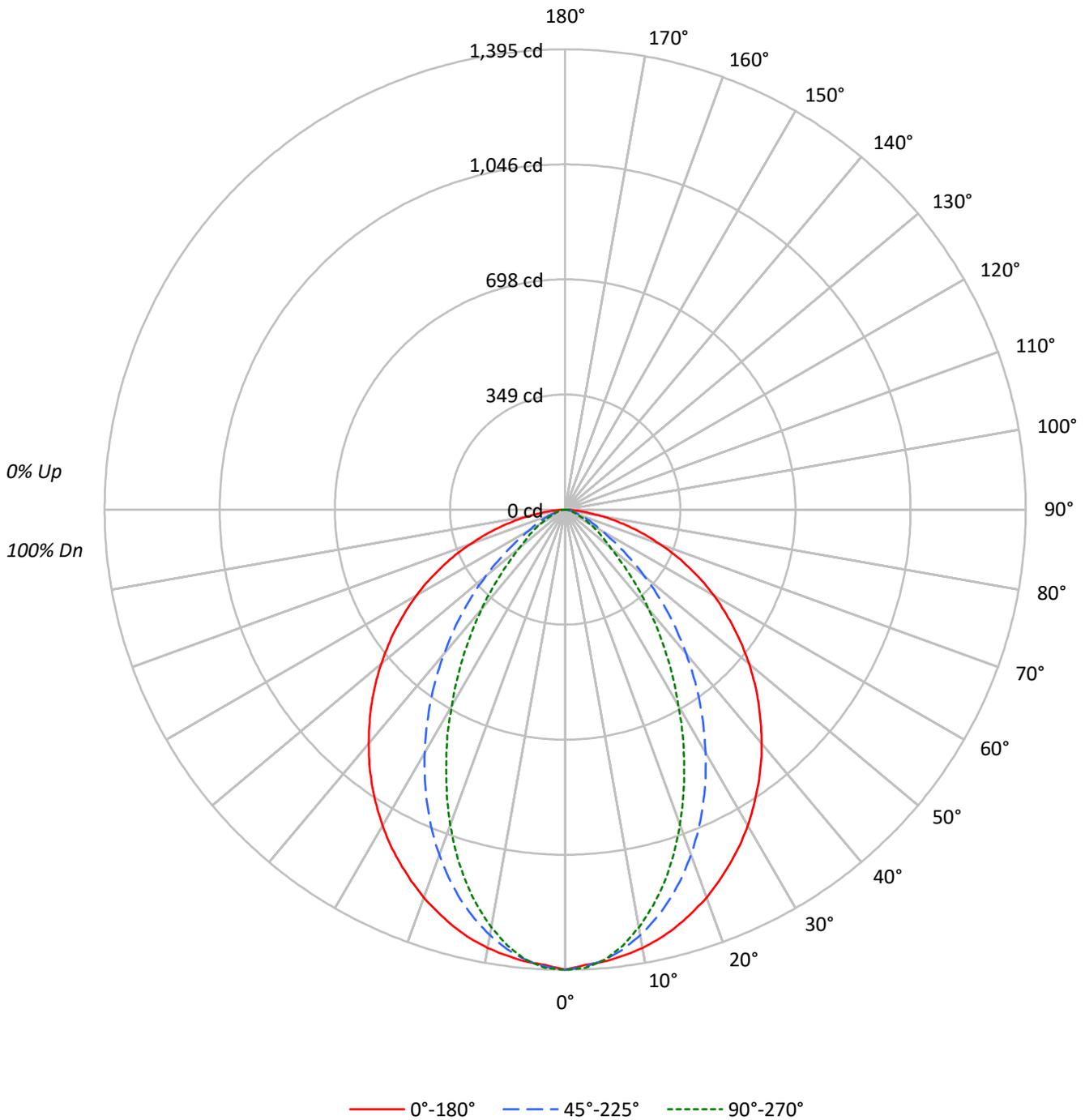
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2255.0 lumens  
Efficiency: N/A  
Efficacy: 53.8 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): 41.9  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

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

	0°	45°	90°
0°	12330	12330	12330
5°	12204	12158	12158
10°	12113	11763	11541
15°	11969	11196	10674
20°	11778	10482	9566
25°	11540	9640	8310
30°	11294	8683	6999
35°	11002	7667	5760
40°	10685	6579	4542
45°	10359	5472	3393
50°	10002	4304	2483
55°	9608	3183	1982
60°	9184	2205	1515
65°	8638	1711	1113
70°	7822	1207	874
75°	6832	844	666
80°	5489	662	596
85°	3033	528	528

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10359 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	5.7
10°-20°	345.6	15.3
20°-30°	461.0	20.4
30°-40°	464.2	20.6
40°-50°	380.7	16.9
50°-60°	260.2	11.5
60°-70°	145.4	6.4
70°-80°	57.7	2.6
80°-90°	11.0	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°	936.0	41.5
0°-40°	1400.2	62.1
0°-60°	2041.0	90.5
0°-90°	2255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2255.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1395	1395	1395	1395	1395	
5°	1375	1391	1370	1363	1370	130
15°	1308	1293	1223	1180	1166	368
25°	1183	1124	988	888	852	545
35°	1019	912	710	575	534	637
45°	828	676	438	308	271	639
55°	623	438	206	138	129	557
65°	413	208	82	58	53	408
75°	200	54	25	21	20	214
85°	30	5	5	5	5	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1394.6	1394.6	1394.6	1394.6	1394.6
2.5°	1381.6	1398.5	1386.8	1388.1	1390.7
5°	1375.1	1390.7	1369.9	1363.4	1369.9
7.5°	1363.4	1375.1	1344.0	1331.0	1333.6
10°	1349.2	1353.1	1310.2	1288.1	1285.5
12.5°	1331.0	1325.8	1269.9	1237.5	1229.7
15°	1307.6	1293.3	1223.2	1180.4	1166.1
17.5°	1280.3	1255.7	1171.3	1115.4	1094.6
20°	1251.8	1215.4	1114.1	1042.7	1016.7
22.5°	1218.0	1172.6	1053.1	966.1	936.2
25°	1182.9	1124.5	988.2	888.2	851.8
27.5°	1146.6	1075.2	920.6	809.0	772.6
30°	1106.3	1021.9	850.5	729.8	685.6
32.5°	1063.5	967.4	780.4	651.9	610.3
35°	1019.3	911.6	710.3	575.2	533.7
37.5°	973.9	854.4	640.2	502.5	461.0
40°	925.8	796.0	570.0	433.7	393.5
42.5°	876.5	736.3	502.5	368.8	331.1
45°	828.5	676.5	437.6	307.7	271.4
47.5°	777.8	616.8	374.0	250.6	219.4
50°	727.2	557.1	312.9	201.3	180.5
52.5°	675.2	497.3	257.1	164.9	150.6
55°	623.3	437.6	206.5	137.6	128.6
57.5°	571.3	377.9	159.7	116.9	106.5
60°	519.4	319.4	124.7	94.8	85.7
62.5°	466.2	261.0	102.6	75.3	67.5
65°	412.9	207.8	81.8	58.4	53.2
67.5°	359.7	158.4	62.3	45.4	41.6
70°	302.6	113.0	46.7	35.1	33.8
72.5°	253.2	76.6	33.8	27.3	26.0
75°	200.0	54.5	24.7	20.8	19.5
77.5°	154.5	35.1	18.2	16.9	15.6
80°	107.8	19.5	13.0	11.7	11.7
82.5°	66.2	10.4	9.1	7.8	7.8
85°	29.9	5.2	5.2	5.2	5.2
87.5°	5.2	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)