

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: P1055994

Luminaire Tested: S124R3DR-S1195D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055994  
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-S1195D927-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: -

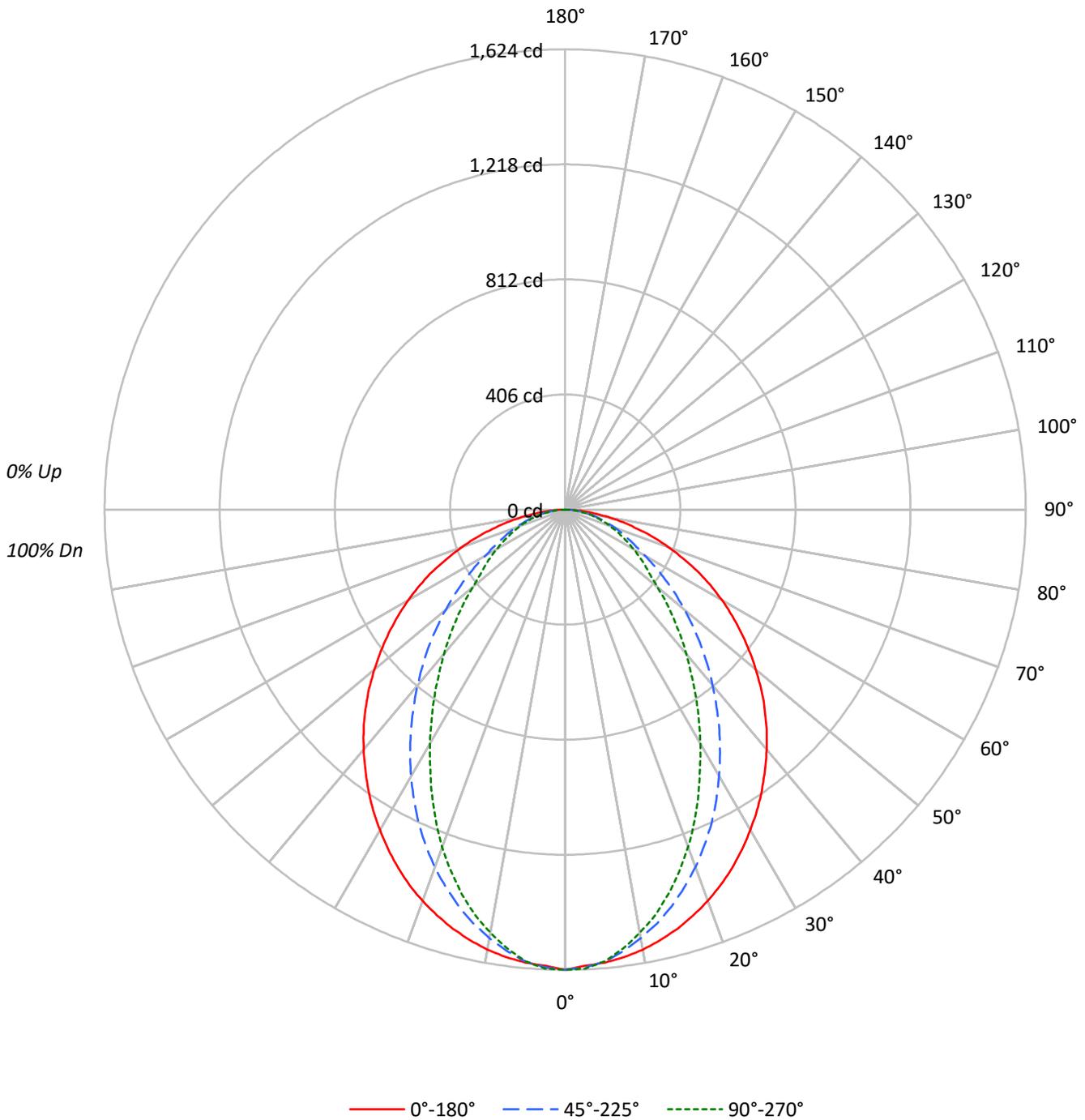
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3233.9 lumens  
Efficiency: N/A  
Efficacy: 77.2 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): 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	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°	14355	14355	14355
5°	14240	14208	14198
10°	14158	13783	13611
15°	14009	13265	12860
20°	13826	12635	11927
25°	13602	11911	10839
30°	13331	11087	9733
35°	13050	10226	8666
40°	12755	9335	7667
45°	12444	8470	6737
50°	12062	7560	5817
55°	11695	6648	5286
60°	11282	5704	4902
65°	10772	5174	4573
70°	10007	4788	4325
75°	9059	4407	4082
80°	7907	4073	3834
85°	6056	3753	3510

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12444 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.2	4.7
10°-20°	410.0	12.7
20°-30°	567.7	17.6
30°-40°	609.4	18.8
40°-50°	554.2	17.1
50°-60°	436.4	13.5
60°-70°	298.7	9.2
70°-80°	160.8	5.0
80°-90°	45.5	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°	1128.9	34.9
0°-40°	1738.3	53.8
0°-60°	2728.9	84.4
0°-90°	3233.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3233.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1624	1624	1624	1624	1624	
5°	1604	1622	1601	1593	1600	152
15°	1530	1514	1449	1410	1405	432
25°	1394	1337	1221	1133	1111	642
35°	1209	1115	947	833	803	756
45°	995	869	677	560	539	767
55°	759	614	431	348	343	678
65°	515	368	247	220	219	508
75°	265	161	129	118	120	283
85°	60	41	37	35	35	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1623.6	1623.6	1623.6	1623.6	1623.6
2.5°	1611.7	1630.8	1616.5	1618.9	1621.3
5°	1604.5	1622.4	1600.9	1592.6	1599.7
7.5°	1592.6	1604.5	1571.1	1555.5	1562.7
10°	1577.0	1579.4	1535.2	1512.5	1516.1
12.5°	1555.5	1549.6	1495.8	1463.5	1465.9
15°	1530.5	1513.7	1449.2	1409.8	1405.0
17.5°	1501.8	1474.3	1397.8	1347.7	1338.1
20°	1469.5	1432.5	1342.9	1278.4	1267.6
22.5°	1433.7	1385.9	1283.1	1206.7	1191.1
25°	1394.3	1336.9	1221.0	1132.6	1111.1
27.5°	1351.2	1284.3	1154.1	1057.3	1029.9
30°	1305.8	1229.4	1086.0	982.1	953.4
32.5°	1259.2	1173.2	1016.7	906.8	876.9
35°	1209.1	1114.7	947.4	832.7	802.9
37.5°	1157.7	1053.8	876.9	761.0	730.0
40°	1105.1	992.8	808.8	689.4	664.3
42.5°	1051.4	930.7	741.9	622.5	599.8
45°	995.2	868.6	677.4	560.3	538.8
47.5°	937.9	805.2	611.7	501.8	481.5
50°	876.9	741.9	549.6	444.4	422.9
52.5°	818.4	677.4	489.8	388.3	377.5
55°	758.7	614.1	431.3	347.7	342.9
57.5°	698.9	550.8	377.5	315.4	310.6
60°	638.0	488.6	322.6	282.0	277.2
62.5°	577.1	427.7	282.0	249.7	247.3
65°	514.9	368.0	247.3	219.8	218.6
67.5°	449.2	310.6	216.2	193.5	192.4
70°	387.1	253.3	185.2	167.3	167.3
72.5°	328.6	200.7	156.5	142.2	142.2
75°	265.2	161.3	129.0	118.3	119.5
77.5°	209.1	126.6	103.9	96.8	96.8
80°	155.3	94.4	80.0	74.1	75.3
82.5°	105.1	65.7	57.3	53.8	53.8
85°	59.7	40.6	37.0	34.6	34.6
87.5°	21.5	19.1	17.9	15.5	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)