

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: P1055981

Luminaire Tested: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055981
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-S1195D830-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

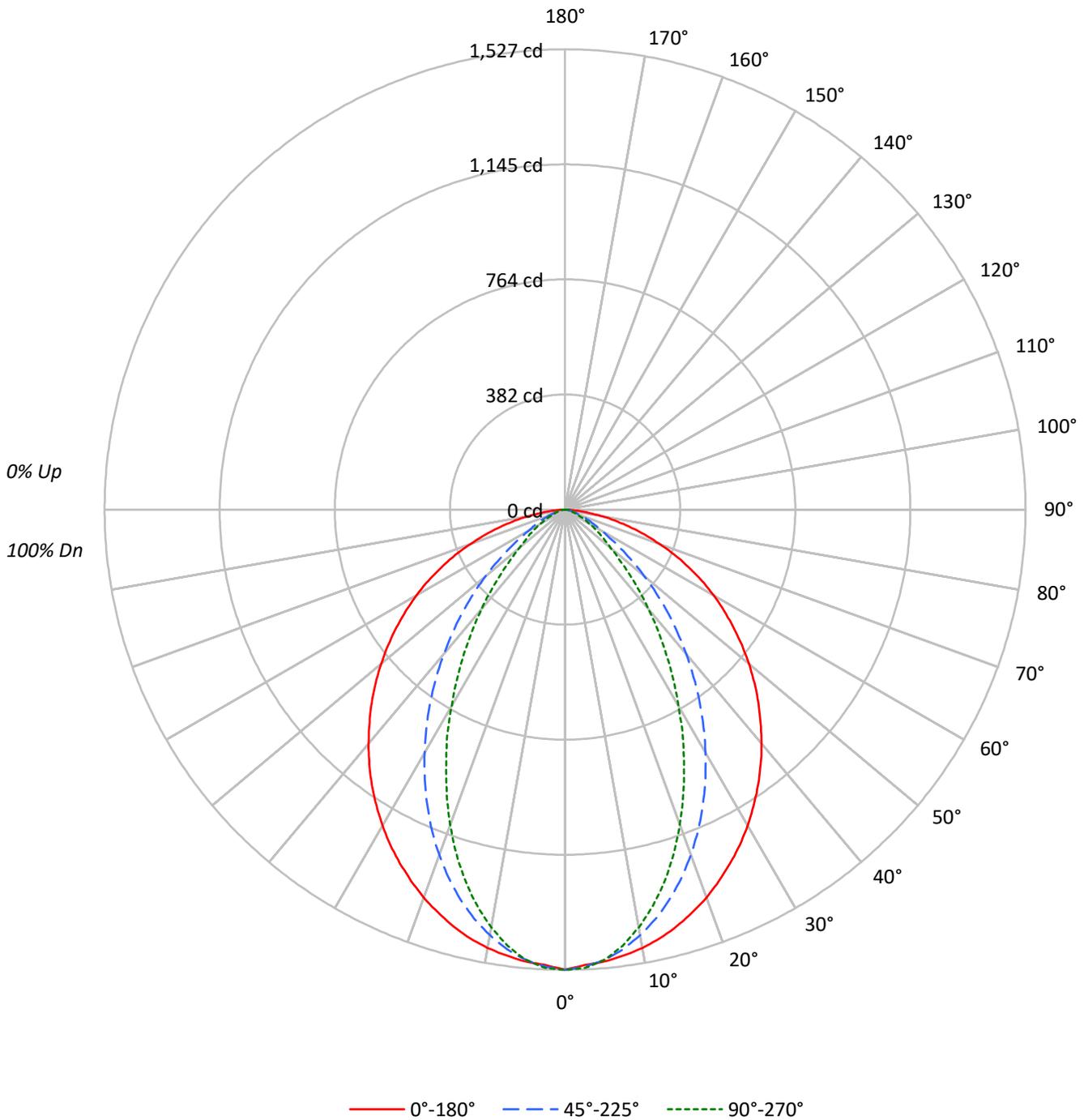
Lumens per Lamp: N/A
Luminaire Lumens: 2468.6 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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										
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	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°	13498	13498	13498
5°	13361	13310	13310
10°	13259	12877	12634
15°	13102	12257	11684
20°	12893	11475	10472
25°	12633	10553	9097
30°	12364	9506	7663
35°	12044	8393	6305
40°	11697	7202	4971
45°	11340	5989	3715
50°	10949	4712	2718
55°	10517	3484	2169
60°	10054	2414	1659
65°	9456	1874	1220
70°	8562	1324	956
75°	7478	922	728
80°	6008	723	652
85°	3317	578	578

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11340 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	5.7
10°-20°	378.4	15.3
20°-30°	504.7	20.4
30°-40°	508.1	20.6
40°-50°	416.7	16.9
50°-60°	284.8	11.5
60°-70°	159.2	6.4
70°-80°	63.1	2.6
80°-90°	12.0	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°	1024.6	41.5
0°-40°	1532.8	62.1
0°-60°	2234.3	90.5
0°-90°	2468.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2468.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1527	1527	1527	1527	1527	
5°	1505	1522	1500	1493	1500	143
15°	1431	1416	1339	1292	1276	403
25°	1295	1231	1082	972	932	597
35°	1116	998	778	630	584	698
45°	907	741	479	337	297	699
55°	682	479	226	151	141	610
65°	452	227	90	64	58	447
75°	219	60	27	23	21	235
85°	33	6	6	6	6	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1526.7	1526.7	1526.7	1526.7	1526.7
2.5°	1512.5	1531.0	1518.2	1519.6	1522.4
5°	1505.4	1522.4	1499.7	1492.6	1499.7
7.5°	1492.6	1505.4	1471.3	1457.0	1459.9
10°	1476.9	1481.2	1434.3	1410.1	1407.3
12.5°	1457.0	1451.3	1390.2	1354.7	1346.2
15°	1431.4	1415.8	1339.1	1292.1	1276.5
17.5°	1401.6	1374.6	1282.2	1221.1	1198.3
20°	1370.3	1330.5	1219.6	1141.5	1113.0
22.5°	1333.4	1283.6	1152.8	1057.6	1024.9
25°	1295.0	1231.0	1081.8	972.3	932.5
27.5°	1255.2	1177.0	1007.8	885.6	845.8
30°	1211.1	1118.7	931.1	798.9	750.6
32.5°	1164.2	1059.0	854.3	713.6	668.1
35°	1115.9	997.9	777.6	629.7	584.2
37.5°	1066.1	935.3	700.8	550.1	504.6
40°	1013.5	871.4	624.0	474.8	430.7
42.5°	959.5	806.0	550.1	403.7	362.5
45°	906.9	740.6	479.0	336.9	297.1
47.5°	851.5	675.2	409.4	274.3	240.2
50°	796.0	609.8	342.6	220.3	197.6
52.5°	739.2	544.4	281.5	180.5	164.9
55°	682.3	479.0	226.0	150.7	140.7
57.5°	625.5	413.7	174.8	127.9	116.6
60°	568.6	349.7	136.5	103.8	93.8
62.5°	510.3	285.7	112.3	82.4	73.9
65°	452.0	227.4	89.6	64.0	58.3
67.5°	393.8	173.4	68.2	49.8	45.5
70°	331.2	123.7	51.2	38.4	37.0
72.5°	277.2	83.9	37.0	29.9	28.4
75°	218.9	59.7	27.0	22.7	21.3
77.5°	169.2	38.4	19.9	18.5	17.1
80°	118.0	21.3	14.2	12.8	12.8
82.5°	72.5	11.4	10.0	8.5	8.5
85°	32.7	5.7	5.7	5.7	5.7
87.5°	5.7	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)