

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: P1055980

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055980
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-S1195D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

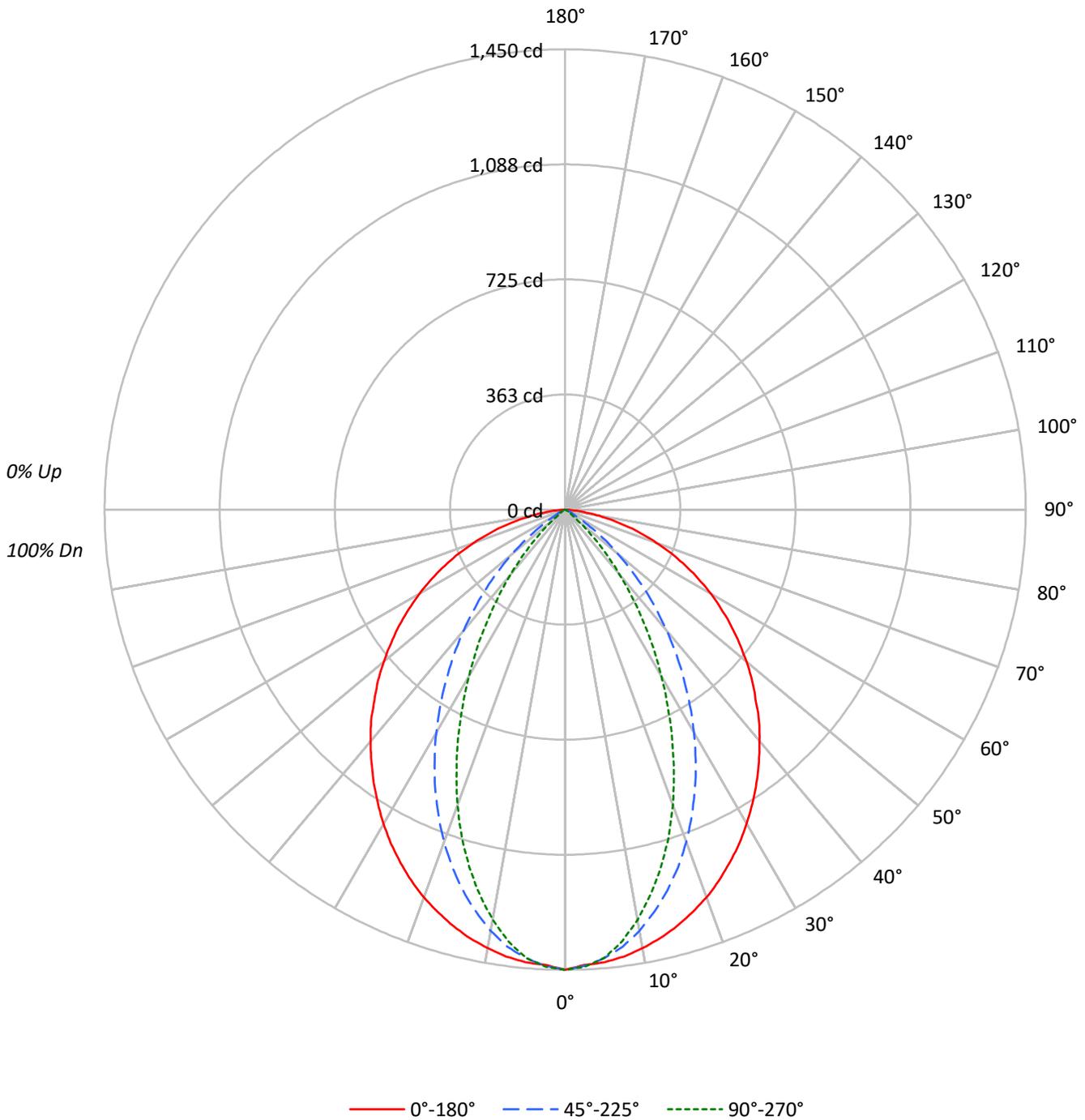
Lumens per Lamp: N/A
Luminaire Lumens: 2026.5 lumens
Efficiency: N/A
Efficacy: 48.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	12819	12819	12819
5°	12704	12591	12578
10°	12596	12098	11779
15°	12439	11372	10669
20°	12238	10486	9322
25°	11968	9443	7780
30°	11668	8287	6183
35°	11338	7026	4602
40°	10992	5726	3068
45°	10611	4373	1688
50°	10246	2992	469
55°	9839	1622	307
60°	9351	502	177
65°	8743	326	90
70°	7900	147	36
75°	6798	48	0
80°	5137	0	0
85°	2161	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10611 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	6.6
10°-20°	351.2	17.3
20°-30°	453.8	22.4
30°-40°	433.7	21.4
40°-50°	324.3	16.0
50°-60°	193.0	9.5
60°-70°	98.0	4.8
70°-80°	34.1	1.7
80°-90°	4.7	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°	938.7	46.3
0°-40°	1372.4	67.7
0°-60°	1889.8	93.3
0°-90°	2026.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2026.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1431	1443	1419	1412	1417	136
15°	1359	1330	1242	1184	1166	383
25°	1227	1142	968	840	798	565
35°	1050	906	651	485	426	657
45°	849	651	350	186	135	656
55°	638	397	105	24	20	570
65°	418	161	16	6	4	413
75°	199	21	1	1	0	211
85°	21	0	0	0	0	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.9	1449.9	1449.9	1449.9	1449.9
2.5°	1435.7	1452.8	1438.6	1440.0	1441.4
5°	1431.4	1442.8	1418.7	1411.5	1417.2
7.5°	1420.1	1424.3	1388.8	1370.3	1371.7
10°	1403.0	1398.8	1347.6	1316.3	1312.0
12.5°	1383.1	1368.9	1297.8	1252.3	1242.4
15°	1359.0	1330.5	1242.4	1184.1	1165.6
17.5°	1330.5	1289.3	1181.3	1104.5	1081.8
20°	1300.7	1243.8	1114.5	1019.2	990.8
22.5°	1265.1	1192.6	1042.0	929.7	894.1
25°	1226.8	1141.5	968.0	840.1	797.5
27.5°	1187.0	1086.0	889.9	749.1	699.4
30°	1142.9	1027.7	811.7	656.7	605.6
32.5°	1097.4	968.0	730.6	571.4	514.6
35°	1050.5	905.5	651.0	484.7	426.4
37.5°	1002.2	842.9	574.3	402.3	342.6
40°	952.4	779.0	496.1	324.1	265.8
42.5°	904.1	715.0	422.2	250.2	196.2
45°	848.6	651.0	349.7	186.2	135.0
47.5°	798.9	588.5	280.0	126.5	79.6
50°	744.9	521.7	217.5	73.9	34.1
52.5°	690.8	459.1	159.2	32.7	25.6
55°	638.3	396.6	105.2	24.2	19.9
57.5°	582.8	334.1	56.9	18.5	14.2
60°	528.8	272.9	28.4	14.2	10.0
62.5°	473.4	214.6	22.7	8.5	5.7
65°	417.9	160.6	15.6	5.7	4.3
67.5°	362.5	109.5	10.0	2.8	1.4
70°	305.6	66.8	5.7	1.4	1.4
72.5°	251.6	34.1	2.8	1.4	1.4
75°	199.0	21.3	1.4	1.4	0.0
77.5°	147.8	11.4	1.4	1.4	0.0
80°	100.9	4.3	0.0	0.0	0.0
82.5°	58.3	1.4	0.0	0.0	0.0
85°	21.3	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)