

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: P1056004

Luminaire Tested: S124R3DR-S1195D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056004
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-S1195D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

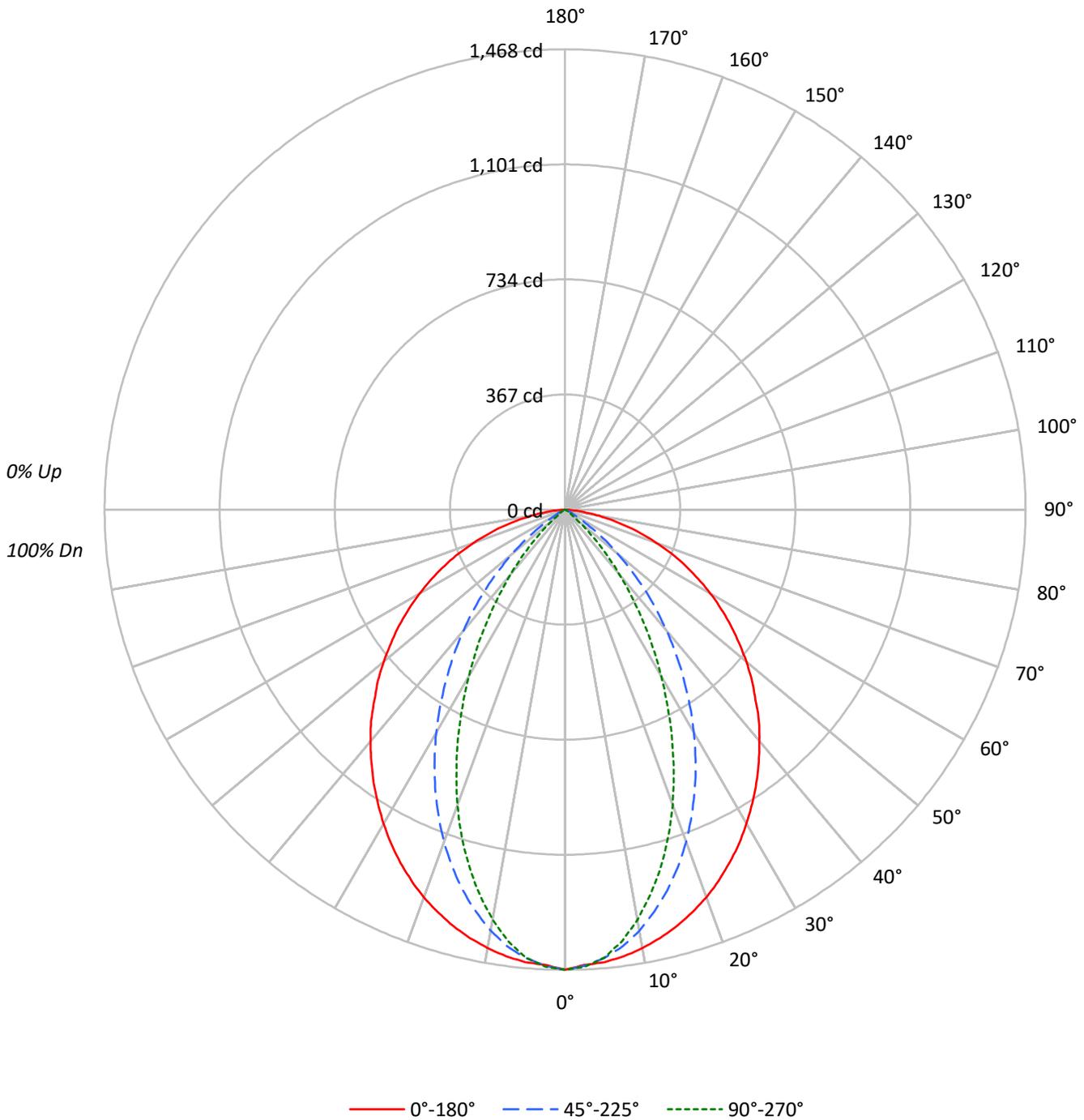
Lumens per Lamp: N/A
Luminaire Lumens: 2051.1 lumens
Efficiency: N/A
Efficacy: 49.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056004

CATALOG NUMBER: S124R3DR-S1195D950-X4F0-XX-UDD-FLL-B

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64	
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52	
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47			47	
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			43	
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40			40	
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12976	12976	12976
5°	12858	12744	12731
10°	12749	12246	11922
15°	12590	11510	10799
20°	12387	10613	9435
25°	12113	9558	7875
30°	11810	8387	6257
35°	11477	7113	4658
40°	11126	5795	3106
45°	10741	4425	1709
50°	10370	3027	475
55°	9958	1642	310
60°	9464	509	179
65°	8849	331	90
70°	7996	150	36
75°	6880	48	0
80°	5204	0	0
85°	2191	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10741 cd/sqm

TEST NUMBER: P1056004

CATALOG NUMBER: S124R3DR-S1195D950-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	6.6
10°-20°	355.4	17.3
20°-30°	459.3	22.4
30°-40°	439.0	21.4
40°-50°	328.3	16.0
50°-60°	195.4	9.5
60°-70°	99.2	4.8
70°-80°	34.5	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°	950.1	46.3
0°-40°	1389.1	67.7
0°-60°	1912.7	93.3
0°-90°	2051.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1468	1468	1468	1468	1468	
5°	1449	1460	1436	1429	1434	137
15°	1376	1347	1258	1198	1180	388
25°	1242	1155	980	850	807	572
35°	1063	916	659	491	432	665
45°	859	659	354	188	137	664
55°	646	401	106	24	20	577
65°	423	163	16	6	4	418
75°	201	22	1	1	0	214
85°	22	0	0	0	0	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.6	1467.6	1467.6	1467.6	1467.6
2.5°	1453.2	1470.4	1456.0	1457.5	1458.9
5°	1448.8	1460.4	1435.9	1428.7	1434.5
7.5°	1437.3	1441.7	1405.7	1387.0	1388.4
10°	1420.1	1415.8	1364.0	1332.3	1328.0
12.5°	1399.9	1385.5	1313.6	1267.6	1257.5
15°	1375.5	1346.7	1257.5	1198.5	1179.8
17.5°	1346.7	1305.0	1195.6	1117.9	1094.9
20°	1316.5	1258.9	1128.0	1031.6	1002.8
22.5°	1280.5	1207.1	1054.6	941.0	905.0
25°	1241.7	1155.3	979.8	850.3	807.2
27.5°	1201.4	1099.2	900.7	758.2	707.9
30°	1156.8	1040.2	821.5	664.7	612.9
32.5°	1110.7	979.8	739.5	578.4	520.8
35°	1063.3	916.5	659.0	490.6	431.6
37.5°	1014.3	853.2	581.3	407.2	346.7
40°	964.0	788.5	502.1	328.0	269.1
42.5°	915.1	723.7	427.3	253.2	198.6
45°	859.0	659.0	353.9	188.5	136.7
47.5°	808.6	595.7	283.4	128.1	80.6
50°	753.9	528.0	220.1	74.8	34.5
52.5°	699.2	464.7	161.1	33.1	25.9
55°	646.0	401.4	106.5	24.5	20.1
57.5°	589.9	338.1	57.6	18.7	14.4
60°	535.2	276.2	28.8	14.4	10.1
62.5°	479.1	217.3	23.0	8.6	5.8
65°	423.0	162.6	15.8	5.8	4.3
67.5°	366.9	110.8	10.1	2.9	1.4
70°	309.3	67.6	5.8	1.4	1.4
72.5°	254.7	34.5	2.9	1.4	1.4
75°	201.4	21.6	1.4	1.4	0.0
77.5°	149.6	11.5	1.4	1.4	0.0
80°	102.2	4.3	0.0	0.0	0.0
82.5°	59.0	1.4	0.0	0.0	0.0
85°	21.6	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)