

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: P987447

Luminaire Tested: S122DR-B1005DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-B1005DB50-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

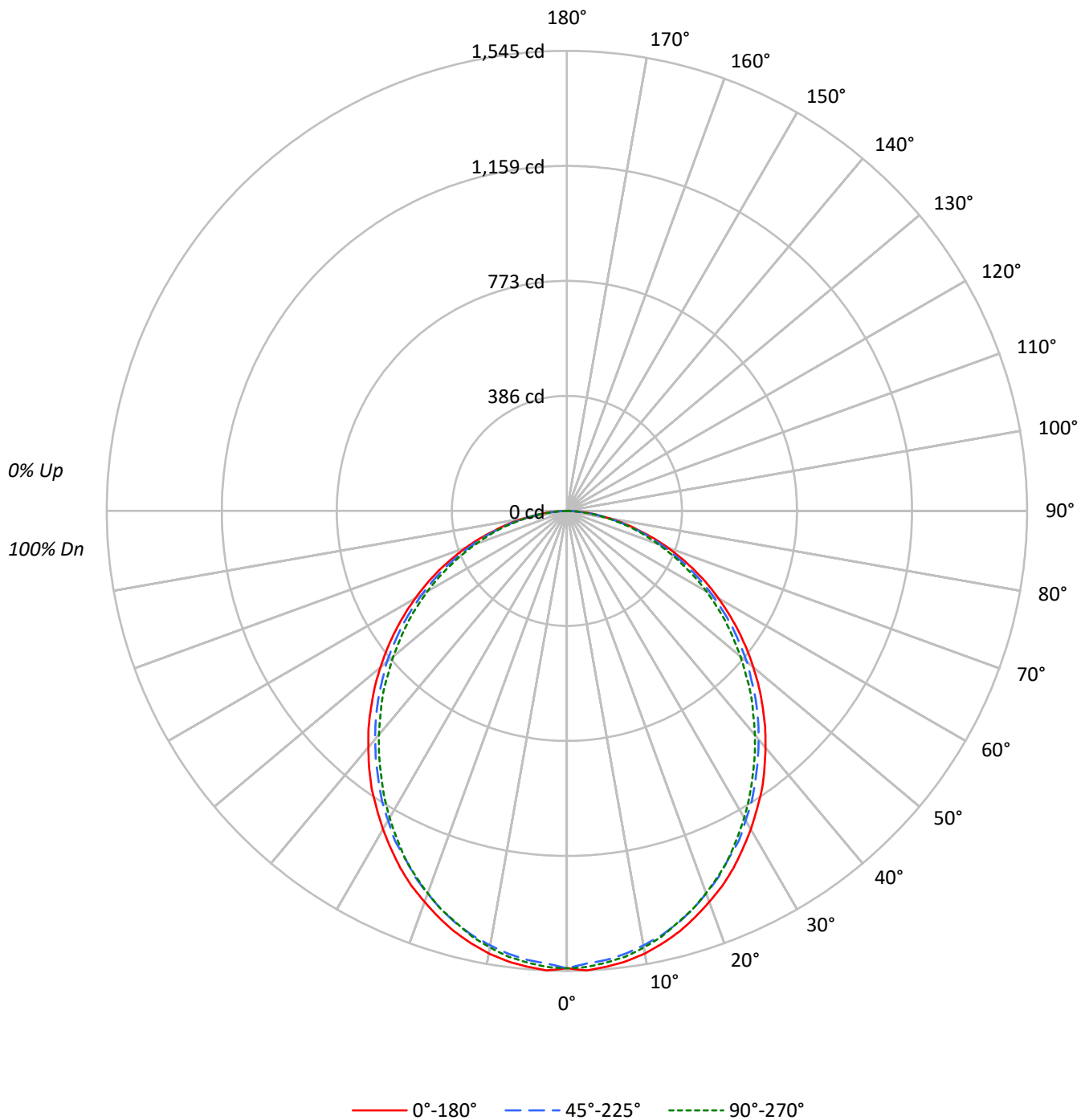
Lumens per Lamp: N/A
Luminaire Lumens: 3908.0 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
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: P987447

CATALOG NUMBER: S122DR-B1005DB50-4F0-XX-W2A-F

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24315	24315	24315
5°	24408	24055	24197
10°	24263	23811	23930
15°	23962	23503	23479
20°	23536	23039	23014
25°	23114	22470	22470
30°	22570	21948	21760
35°	22062	21320	21007
40°	21424	20693	20296
45°	20797	20069	19574
50°	20115	19423	18731
55°	19401	18670	17977
60°	18609	17770	17115
65°	17758	16874	16098
70°	16680	15791	15037
75°	15174	14544	14183
80°	13464	13063	12388
85°	11006	10461	9390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20797 cd/sqm

TEST NUMBER: P987447

CATALOG NUMBER: S122DR-B1005DB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.7
10°-20°	406.8	10.4
20°-30°	597.8	15.3
30°-40°	694.3	17.8
40°-50°	693.4	17.7
50°-60°	604.6	15.5
60°-70°	446.9	11.4
70°-80°	252.9	6.5
80°-90°	66.7	1.7
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°	1149.1	29.4
0°-40°	1843.4	47.2
0°-60°	3141.4	80.4
0°-90°	3908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1536	1530	1514	1526	1523	146
15°	1462	1453	1434	1440	1433	412
25°	1323	1312	1286	1289	1286	609
35°	1142	1127	1103	1094	1087	713
45°	929	919	896	880	874	717
55°	703	694	676	659	651	629
65°	474	465	450	437	430	469
75°	248	245	238	229	232	265
85°	61	59	58	53	52	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1536.1	1536.1	1536.1	1536.1	1536.1
2.5°	1544.9	1537.5	1521.3	1536.1	1533.1
5°	1536.1	1530.2	1513.9	1525.7	1522.8
7.5°	1525.7	1516.9	1500.6	1512.4	1509.5
10°	1509.5	1499.1	1481.4	1493.2	1488.8
12.5°	1487.3	1478.5	1460.7	1468.1	1465.2
15°	1462.2	1453.4	1434.2	1440.1	1432.7
17.5°	1431.2	1422.3	1403.1	1410.5	1403.1
20°	1397.2	1388.4	1367.7	1372.1	1366.2
22.5°	1363.3	1350.0	1330.8	1330.8	1327.8
25°	1323.4	1311.6	1286.5	1289.4	1286.5
27.5°	1279.1	1268.7	1249.5	1245.1	1237.7
30°	1234.8	1222.9	1200.8	1196.4	1190.5
32.5°	1187.5	1178.6	1155.0	1146.1	1140.2
35°	1141.7	1126.9	1103.3	1094.4	1087.1
37.5°	1090.0	1076.7	1053.1	1042.8	1035.4
40°	1036.8	1025.0	1001.4	988.1	982.2
42.5°	985.2	973.3	949.7	934.9	926.1
45°	929.0	918.7	896.5	880.3	874.4
47.5°	874.4	864.0	840.4	824.2	815.3
50°	816.8	809.4	788.7	768.0	760.6
52.5°	760.6	750.3	731.1	714.9	704.5
55°	703.0	694.2	676.5	658.7	651.4
57.5°	645.4	638.1	618.9	601.1	595.2
60°	587.8	581.9	561.3	545.0	540.6
62.5°	531.7	521.4	506.6	491.8	485.9
65°	474.1	465.3	450.5	437.2	429.8
67.5°	415.0	407.6	394.4	384.0	378.1
70°	360.4	354.5	341.2	330.8	324.9
72.5°	304.3	298.4	291.0	280.6	276.2
75°	248.1	245.2	237.8	228.9	231.9
77.5°	197.9	192.0	189.1	184.6	180.2
80°	147.7	146.2	143.3	138.8	135.9
82.5°	100.4	100.4	99.0	93.1	93.1
85°	60.6	59.1	57.6	53.2	51.7
87.5°	26.6	23.6	20.7	16.2	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)