

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: P1037255

Luminaire Tested: S123DS-B1000DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B1000DB40-4F0-XX-W2A-F
Description: Define 3 Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

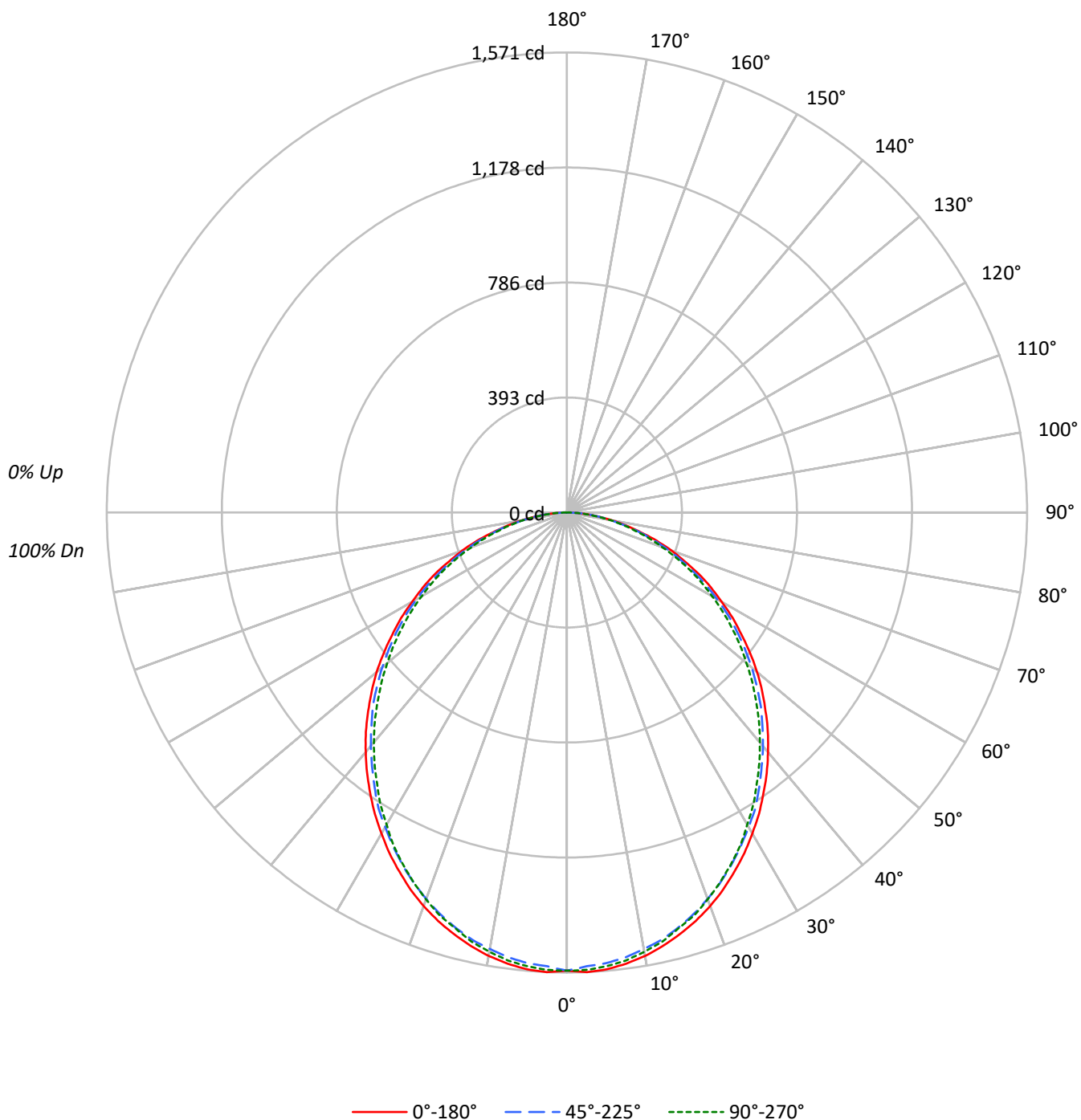
Lumens per Lamp: N/A
Luminaire Lumens: 4072.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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

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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
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	94	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57
6	71	57	49	42	69	56	48	42	55	47	42		53	46	41		51
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16841	16841	16841
5°	16921	16687	16804
10°	16807	16543	16645
15°	16611	16357	16386
20°	16381	16088	16104
25°	16074	15770	15738
30°	15735	15417	15300
35°	15379	15044	14850
40°	15010	14632	14404
45°	14601	14253	13906
50°	14194	13787	13405
55°	13658	13305	12902
60°	13119	12742	12338
65°	12643	12129	11752
70°	11940	11430	10924
75°	10909	10518	10073
80°	9837	9422	9341
85°	8645	8312	7978

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14601 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.6
10°-20°	416.5	10.2
20°-30°	615.1	15.1
30°-40°	718.4	17.6
40°-50°	722.2	17.7
50°-60°	634.4	15.6
60°-70°	472.5	11.6
70°-80°	268.9	6.6
80°-90°	76.5	1.9
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°	1179.1	29.0
0°-40°	1897.5	46.6
0°-60°	3254.2	79.9
0°-90°	4072.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4072.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1566	1559	1544	1558	1555	149
15°	1491	1485	1468	1478	1470	420
25°	1353	1345	1328	1329	1325	623
35°	1170	1162	1145	1137	1130	732
45°	959	954	936	920	914	741
55°	728	726	709	694	688	652
65°	496	490	476	466	461	490
75°	262	257	253	246	242	280
85°	70	67	67	65	65	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.6	1564.6	1564.6	1564.6	1564.6
2.5°	1571.3	1566.0	1551.2	1564.6	1563.3
5°	1566.0	1559.2	1544.4	1557.9	1555.2
7.5°	1553.9	1547.1	1532.3	1544.4	1543.1
10°	1537.7	1531.0	1513.5	1525.6	1522.9
12.5°	1516.2	1510.8	1494.7	1502.7	1501.4
15°	1490.6	1485.2	1467.8	1478.5	1470.4
17.5°	1462.4	1455.6	1438.2	1446.2	1443.5
20°	1430.1	1422.0	1404.5	1409.9	1405.9
22.5°	1393.8	1385.7	1368.2	1372.2	1366.9
25°	1353.4	1345.3	1327.8	1329.2	1325.1
27.5°	1311.7	1303.6	1284.8	1286.1	1282.1
30°	1266.0	1259.2	1240.4	1240.4	1231.0
32.5°	1220.2	1210.8	1197.3	1187.9	1183.9
35°	1170.4	1162.4	1144.9	1136.8	1130.1
37.5°	1120.7	1109.9	1092.4	1083.0	1079.0
40°	1068.2	1060.1	1041.3	1030.5	1025.1
42.5°	1015.7	1006.3	987.5	976.7	971.3
45°	959.2	953.8	936.3	920.2	913.5
47.5°	904.1	896.0	879.8	863.7	858.3
50°	847.6	840.8	823.3	808.5	800.5
52.5°	788.4	784.3	765.5	753.4	745.3
55°	727.8	726.5	709.0	694.2	687.5
57.5°	671.3	665.9	652.5	639.0	631.0
60°	609.4	608.1	591.9	579.8	573.1
62.5°	554.3	550.2	534.1	522.0	518.0
65°	496.4	489.7	476.2	465.5	461.4
67.5°	434.5	429.2	418.4	409.0	403.6
70°	379.4	371.3	363.2	353.8	347.1
72.5°	321.5	316.2	306.7	298.7	296.0
75°	262.3	257.0	252.9	246.2	242.2
77.5°	209.9	207.2	201.8	196.4	196.4
80°	158.7	154.7	152.0	150.7	150.7
82.5°	109.0	109.0	109.0	106.3	104.9
85°	70.0	67.3	67.3	64.6	64.6
87.5°	35.0	30.9	29.6	28.3	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)