

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: P1037002

Luminaire Tested: S122DS-B865DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037002
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: S122DS-B865DB27-4F0-XX-W2A-F
Description: Define 2 Direct Surface with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

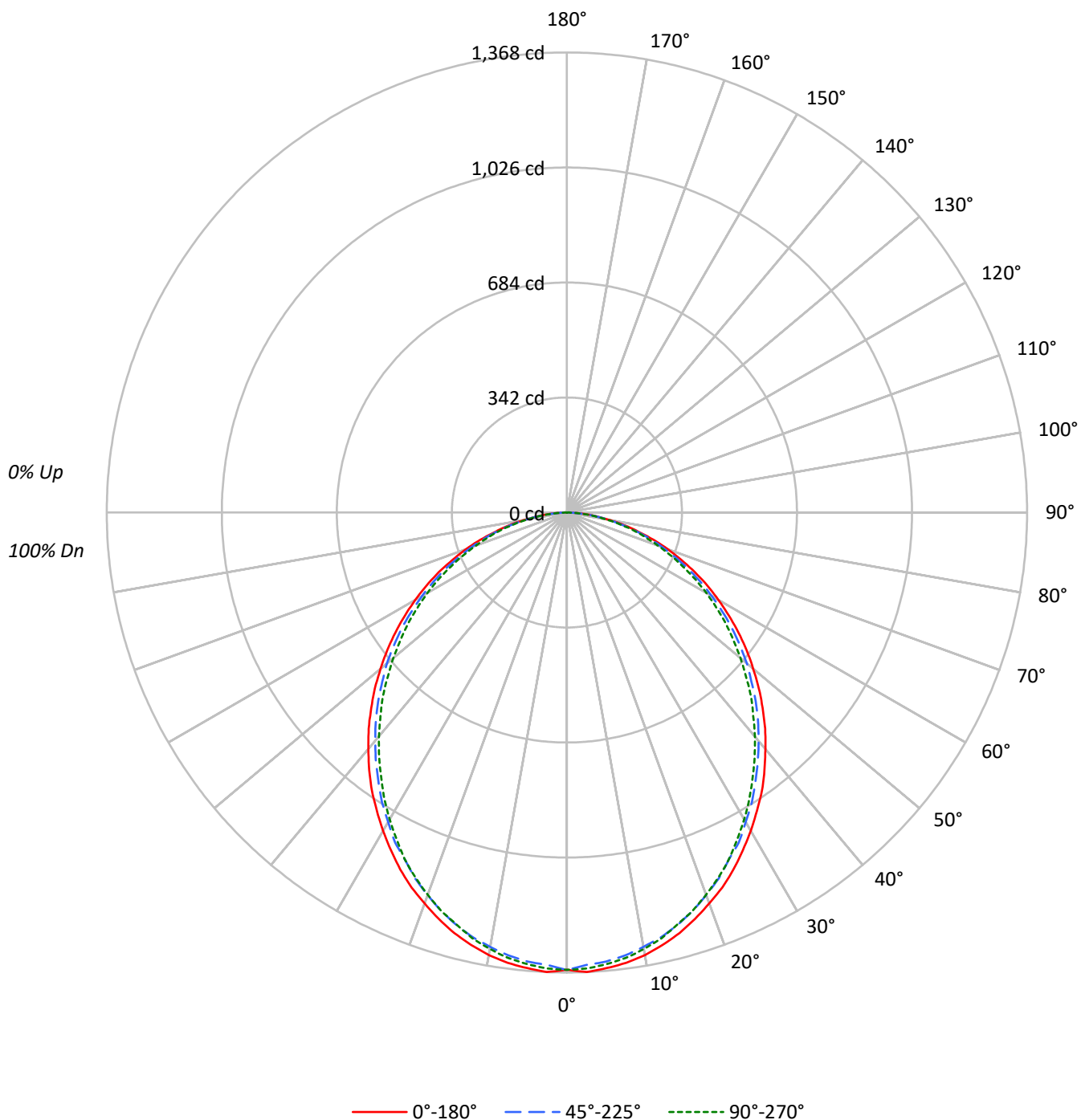
Lumens per Lamp: N/A
Luminaire Lumens: 3460.0 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	21528	21528	21528
5°	21610	21299	21423
10°	21481	21082	21186
15°	21215	20807	20786
20°	20839	20398	20376
25°	20465	19893	19893
30°	19982	19431	19265
35°	19533	18876	18597
40°	18969	18320	17969
45°	18412	17770	17329
50°	17807	17196	16586
55°	17179	16528	15915
60°	16478	15731	15152
65°	15724	14937	14252
70°	14769	13982	13315
75°	13437	12874	12556
80°	11923	11559	10966
85°	9735	9263	8318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18412 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	3.7
10°-20°	360.1	10.4
20°-30°	529.2	15.3
30°-40°	614.7	17.8
40°-50°	613.9	17.7
50°-60°	535.3	15.5
60°-70°	395.7	11.4
70°-80°	223.9	6.5
80°-90°	59.1	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°	1017.4	29.4
0°-40°	1632.1	47.2
0°-60°	2781.3	80.4
0°-90°	3460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1360	1355	1340	1351	1348	129
15°	1295	1287	1270	1275	1268	365
25°	1172	1161	1139	1142	1139	539
35°	1011	998	977	969	962	631
45°	822	813	794	779	774	635
55°	622	615	599	583	577	557
65°	420	412	399	387	380	415
75°	220	217	210	203	205	234
85°	54	52	51	47	46	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1360.0	1360.0	1360.0	1360.0	1360.0
2.5°	1367.8	1361.3	1346.9	1360.0	1357.4
5°	1360.0	1354.7	1340.4	1350.8	1348.2
7.5°	1350.8	1343.0	1328.6	1339.1	1336.4
10°	1336.4	1327.3	1311.6	1322.1	1318.1
12.5°	1316.8	1309.0	1293.3	1299.8	1297.2
15°	1294.6	1286.7	1269.7	1275.0	1268.4
17.5°	1267.1	1259.3	1242.3	1248.8	1242.3
20°	1237.1	1229.2	1210.9	1214.8	1209.6
22.5°	1207.0	1195.2	1178.2	1178.2	1175.6
25°	1171.7	1161.2	1139.0	1141.6	1139.0
27.5°	1132.4	1123.3	1106.3	1102.4	1095.8
30°	1093.2	1082.8	1063.1	1059.2	1054.0
32.5°	1051.4	1043.5	1022.6	1014.8	1009.5
35°	1010.8	997.8	976.8	969.0	962.4
37.5°	965.1	953.3	932.4	923.2	916.7
40°	918.0	907.5	886.6	874.8	869.6
42.5°	872.2	861.8	840.8	827.8	819.9
45°	822.5	813.4	793.8	779.4	774.1
47.5°	774.1	765.0	744.1	729.7	721.8
50°	723.1	716.6	698.3	680.0	673.5
52.5°	673.5	664.3	647.3	632.9	623.8
55°	622.5	614.6	598.9	583.2	576.7
57.5°	571.5	564.9	547.9	532.2	527.0
60°	520.5	515.2	496.9	482.5	478.6
62.5°	470.8	461.6	448.5	435.5	430.2
65°	419.8	411.9	398.8	387.1	380.5
67.5°	367.5	360.9	349.1	340.0	334.8
70°	319.1	313.8	302.1	292.9	287.7
72.5°	269.4	264.1	257.6	248.5	244.5
75°	219.7	217.1	210.5	202.7	205.3
77.5°	175.2	170.0	167.4	163.5	159.5
80°	130.8	129.5	126.8	122.9	120.3
82.5°	88.9	88.9	87.6	82.4	82.4
85°	53.6	52.3	51.0	47.1	45.8
87.5°	23.5	20.9	18.3	14.4	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)