

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: P987558

Luminaire Tested: S122DR-B865DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987558
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-B865DB30-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

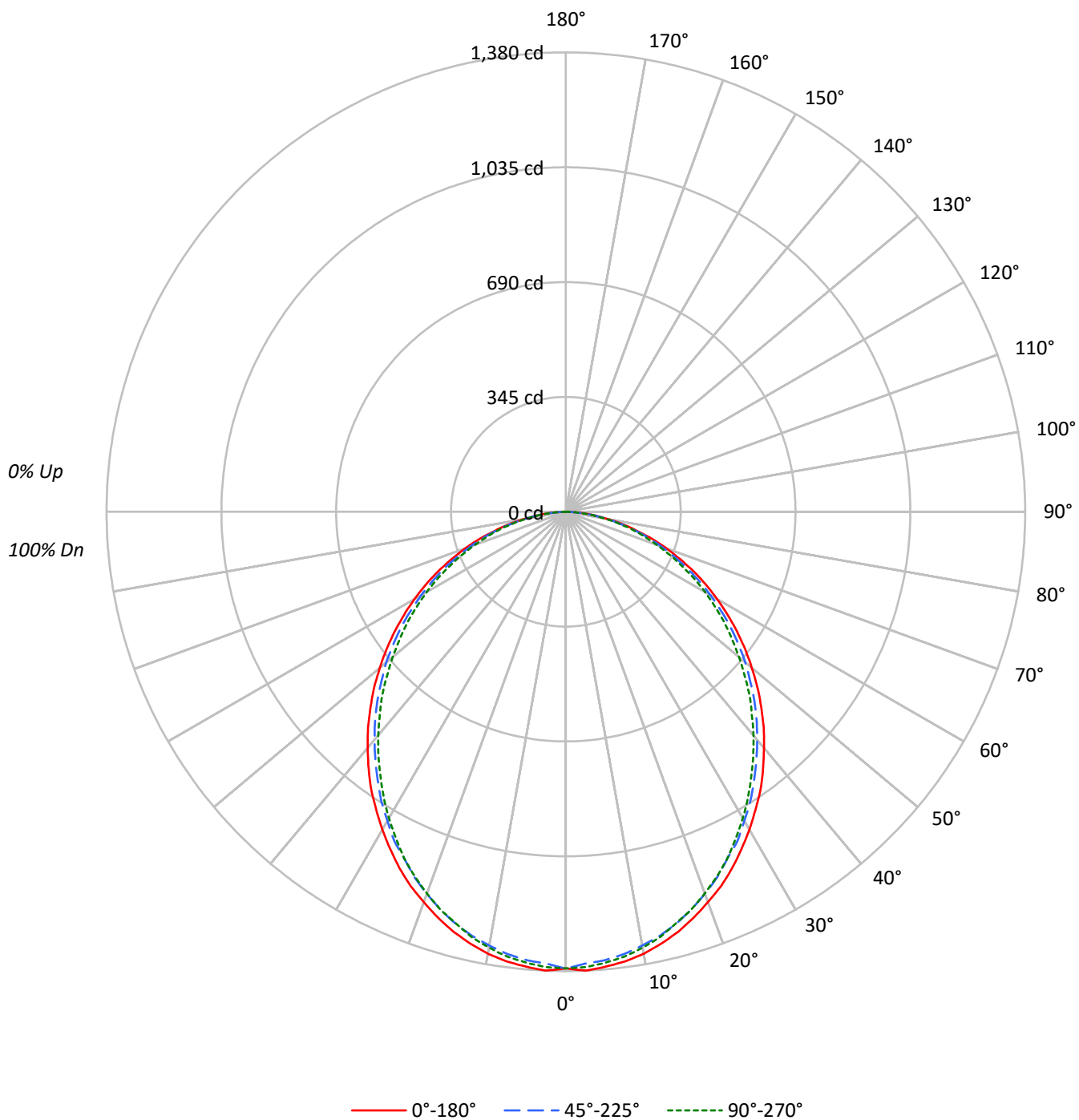
Lumens per Lamp: N/A
Luminaire Lumens: 3490.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	21715	21715	21715
5°	21798	21483	21608
10°	21667	21265	21371
15°	21399	20989	20966
20°	21019	20575	20553
25°	20641	20066	20066
30°	20155	19601	19431
35°	19703	19040	18760
40°	19132	18480	18124
45°	18574	17922	17481
50°	17962	17347	16728
55°	17326	16672	16053
60°	16621	15867	15285
65°	15859	15068	14375
70°	14893	14102	13431
75°	13553	12990	12666
80°	12024	11659	11057
85°	9826	9335	8391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18574 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	3.7
10°-20°	363.3	10.4
20°-30°	533.8	15.3
30°-40°	620.0	17.8
40°-50°	619.2	17.7
50°-60°	540.0	15.5
60°-70°	399.1	11.4
70°-80°	225.8	6.5
80°-90°	59.6	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°	1026.2	29.4
0°-40°	1646.2	47.2
0°-60°	2805.4	80.4
0°-90°	3490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3490.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1372	1366	1352	1362	1360	130
15°	1306	1298	1281	1286	1279	368
25°	1182	1171	1149	1152	1149	544
35°	1020	1006	985	977	971	637
45°	830	820	801	786	781	640
55°	628	620	604	588	582	561
65°	423	416	402	390	384	419
75°	222	219	212	204	207	236
85°	54	53	51	48	46	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1371.8	1371.8	1371.8	1371.8	1371.8
2.5°	1379.7	1373.1	1358.6	1371.8	1369.1
5°	1371.8	1366.5	1352.0	1362.5	1359.9
7.5°	1362.5	1354.6	1340.1	1350.7	1348.0
10°	1348.0	1338.8	1323.0	1333.5	1329.6
12.5°	1328.2	1320.3	1304.5	1311.1	1308.5
15°	1305.8	1297.9	1280.8	1286.0	1279.4
17.5°	1278.1	1270.2	1253.1	1259.7	1253.1
20°	1247.8	1239.9	1221.4	1225.4	1220.1
22.5°	1217.4	1205.6	1188.4	1188.4	1185.8
25°	1181.8	1171.3	1148.9	1151.5	1148.9
27.5°	1142.3	1133.0	1115.9	1111.9	1105.3
30°	1102.7	1092.1	1072.4	1068.4	1063.1
32.5°	1060.5	1052.6	1031.5	1023.6	1018.3
35°	1019.6	1006.4	985.3	977.4	970.8
37.5°	973.4	961.6	940.5	931.2	924.6
40°	925.9	915.4	894.3	882.4	877.1
42.5°	879.8	869.2	848.1	834.9	827.0
45°	829.7	820.4	800.6	786.1	780.9
47.5°	780.9	771.6	750.5	736.0	728.1
50°	729.4	722.8	704.4	685.9	679.3
52.5°	679.3	670.1	652.9	638.4	629.2
55°	627.8	619.9	604.1	588.3	581.7
57.5°	576.4	569.8	552.7	536.8	531.6
60°	525.0	519.7	501.2	486.7	482.8
62.5°	474.8	465.6	452.4	439.2	434.0
65°	423.4	415.5	402.3	390.4	383.8
67.5°	370.6	364.0	352.2	342.9	337.7
70°	321.8	316.6	304.7	295.5	290.2
72.5°	271.7	266.4	259.8	250.6	246.7
75°	221.6	219.0	212.4	204.4	207.1
77.5°	176.7	171.5	168.8	164.9	160.9
80°	131.9	130.6	127.9	124.0	121.3
82.5°	89.7	89.7	88.4	83.1	83.1
85°	54.1	52.8	51.4	47.5	46.2
87.5°	23.7	21.1	18.5	14.5	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)