

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: P987536

Luminaire Tested: S122DR-B675DB50-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-B675DB50-4F0-XX-W2A-D
Description: Define 2 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

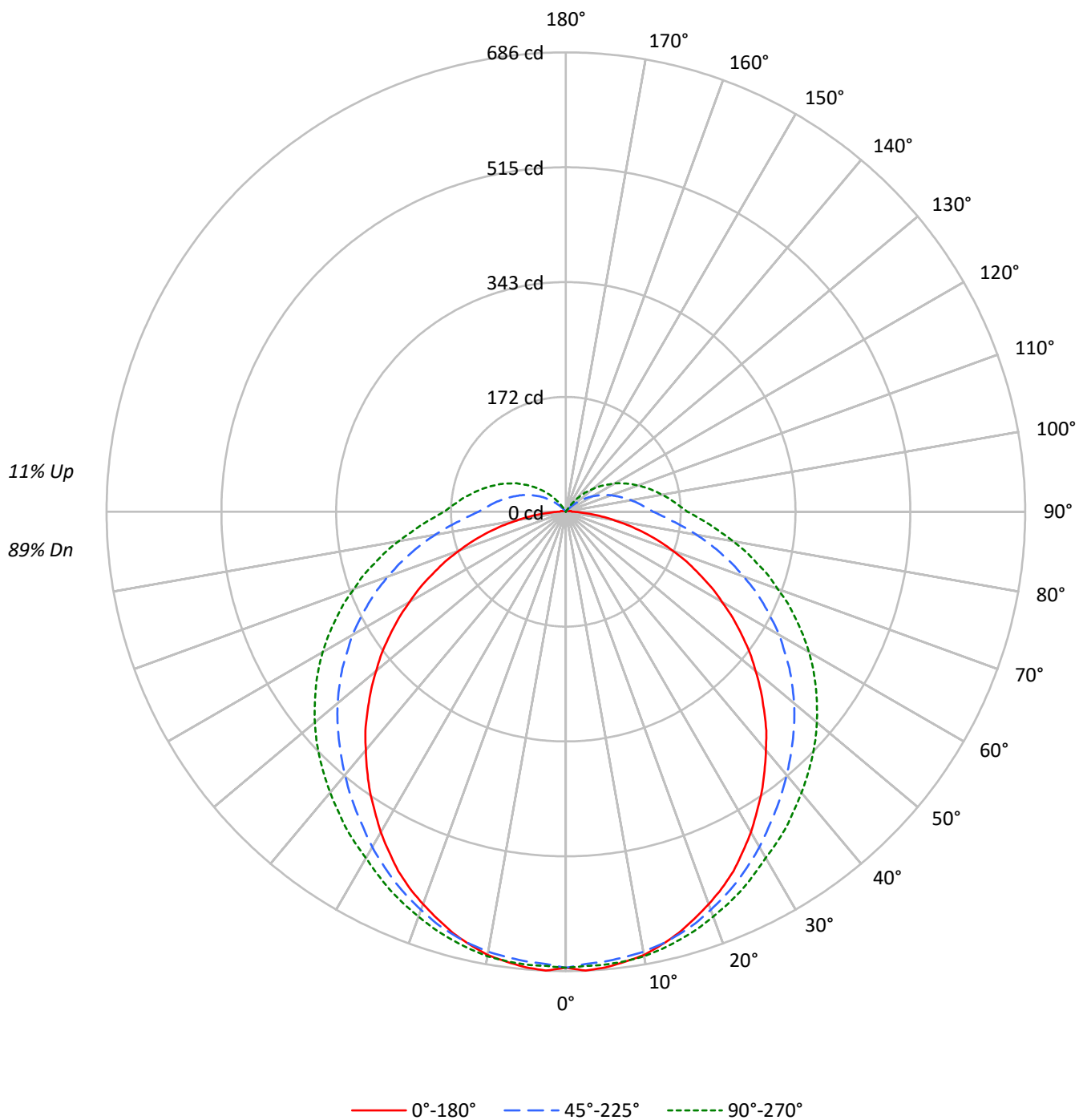
Lumens per Lamp: N/A
Luminaire Lumens: 2598.0 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 35.9
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	30	10
RCR																	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92
1	104	98	93	88	100	95	90	86	88	85	81	82	79	77	77	75	72
2	94	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59
3	85	73	64	57	81	71	63	56	66	59	54	62	56	51	58	53	49
4	77	64	55	48	74	62	54	47	58	51	45	55	48	43	51	46	42
5	71	57	48	41	68	56	47	40	52	44	39	49	42	37	46	40	36
6	65	51	42	35	63	50	41	35	47	39	34	44	37	32	42	36	31
7	60	46	37	31	58	45	37	31	43	35	30	40	34	29	38	32	28
8	56	42	34	28	54	41	33	27	39	32	26	37	30	25	35	29	25
9	52	39	30	25	50	38	30	24	36	29	24	34	27	23	32	26	22
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10778	10778	10778
5°	10851	10710	10788
10°	10801	10723	10834
15°	10673	10706	10834
20°	10505	10655	10838
25°	10341	10617	10876
30°	10100	10570	10912
35°	9859	10545	11098
40°	9604	10603	11317
45°	9366	10736	11641
50°	9112	10959	12052
55°	8851	11246	12582
60°	8529	11654	13278
65°	8206	12195	14192
70°	7854	13061	15574
75°	7425	14666	18042
80°	6746	18076	23117
85°	6448	29041	39067

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 71636 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	2.5
10°-20°	185.1	7.1
20°-30°	280.5	10.8
30°-40°	341.6	13.1
40°-50°	367.5	14.1
50°-60°	356.9	13.7
60°-70°	311.7	12.0
70°-80°	239.9	9.2
80°-90°	160.7	6.2
90°-100°	110.9	4.3
100°-110°	81.0	3.1
110°-120°	53.4	2.1
120°-130°	29.8	1.1
130°-140°	12.5	0.5
140°-150°	2.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	530.2	20.4
0°-40°	871.7	33.6
0°-60°	1596.1	61.4
0°-90°	2308.4	88.9
90°-120°	245.3	9.4
90°-150°	289.7	11.1
90°-180°	290.0	11.2
0°-180°	2598.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	683	680	674	680	679	65
15°	651	653	653	662	661	183
25°	592	599	608	620	623	272
35°	510	527	546	567	574	319
45°	418	445	480	510	520	323
55°	321	356	408	443	456	287
65°	219	267	326	366	379	218
75°	121	177	240	282	295	128
85°	36	97	160	201	215	37
90°	10	67	130	170	182	7
95°	8	54	114	151	163	6
105°	5	34	85	119	130	6
115°	4	15	59	89	100	4
125°	2	2	34	60	69	2
135°	1	1	11	32	40	1
145°	0	0	0	6	11	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.9	680.9	680.9	680.9	680.9
2.5°	685.8	682.9	675.9	680.9	678.9
5°	682.9	679.9	674.0	679.9	678.9
7.5°	677.9	675.9	671.0	677.9	676.9
10°	672.0	670.0	667.1	675.0	674.0
12.5°	662.1	663.1	661.1	669.0	668.1
15°	651.3	653.3	653.3	662.1	661.1
17.5°	637.5	641.4	644.4	653.3	653.3
20°	623.6	628.6	632.5	643.4	643.4
22.5°	608.8	614.8	620.7	631.5	633.5
25°	592.1	599.0	607.9	619.7	622.7
27.5°	572.3	583.2	593.1	607.9	609.8
30°	552.6	565.4	578.3	594.0	597.0
32.5°	530.9	545.7	561.5	580.2	586.1
35°	510.2	526.9	545.7	567.4	574.3
37.5°	487.5	506.2	529.9	553.6	560.5
40°	464.8	486.5	513.1	538.8	547.7
42.5°	443.1	464.8	496.4	525.0	533.8
45°	418.4	445.0	479.6	510.2	520.0
47.5°	394.7	423.3	462.8	494.4	505.2
50°	370.0	400.6	445.0	478.6	489.4
52.5°	346.4	378.9	426.3	460.8	472.7
55°	320.7	356.2	407.5	443.1	455.9
57.5°	296.0	335.5	386.8	425.3	438.1
60°	269.4	311.8	368.1	405.6	419.4
62.5°	245.7	290.1	346.4	386.8	399.6
65°	219.1	267.4	325.6	366.1	378.9
67.5°	195.4	245.7	304.9	345.4	359.2
70°	169.7	221.0	282.2	324.7	336.5
72.5°	146.0	199.3	261.5	302.9	317.7
75°	121.4	176.6	239.8	282.2	295.0
77.5°	97.7	154.9	219.1	261.5	275.3
80°	74.0	134.2	198.3	239.8	253.6
82.5°	54.3	113.5	178.6	220.1	232.9
85°	35.5	96.7	159.9	201.3	215.1
87.5°	21.7	80.9	144.1	184.5	197.4
90°	9.9	67.1	130.3	169.7	181.6
92.5°	8.9	61.2	121.4	159.9	171.7
95°	7.9	54.3	113.5	151.0	162.8
97.5°	6.9	49.3	106.6	143.1	154.9
100°	6.9	43.4	98.7	135.2	146.0
102.5°	5.9	38.5	91.8	127.3	138.1
105°	4.9	33.6	84.9	119.4	130.3
107.5°	4.9	28.6	78.0	111.5	122.4
110°	3.9	23.7	72.0	103.6	114.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.9	19.7	65.1	96.7	107.6
115°	3.9	14.8	59.2	88.8	99.7
117.5°	3.0	10.9	52.3	81.9	91.8
120°	3.0	6.9	46.4	74.0	84.9
122.5°	3.0	3.9	40.5	67.1	76.0
125°	2.0	2.0	33.6	60.2	69.1
127.5°	2.0	1.0	27.6	52.3	61.2
130°	2.0	1.0	21.7	45.4	53.3
132.5°	2.0	1.0	15.8	38.5	46.4
135°	1.0	1.0	10.9	31.6	39.5
137.5°	1.0	1.0	5.9	24.7	31.6
140°	1.0	0.0	2.0	17.8	23.7
142.5°	1.0	0.0	0.0	11.8	16.8
145°	0.0	0.0	0.0	5.9	10.9
147.5°	0.0	0.0	0.0	1.0	3.9
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)