

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: P987527

Luminaire Tested: S122DR-B675DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987527
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-B675DB30-4F0-XX-W2A-D
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

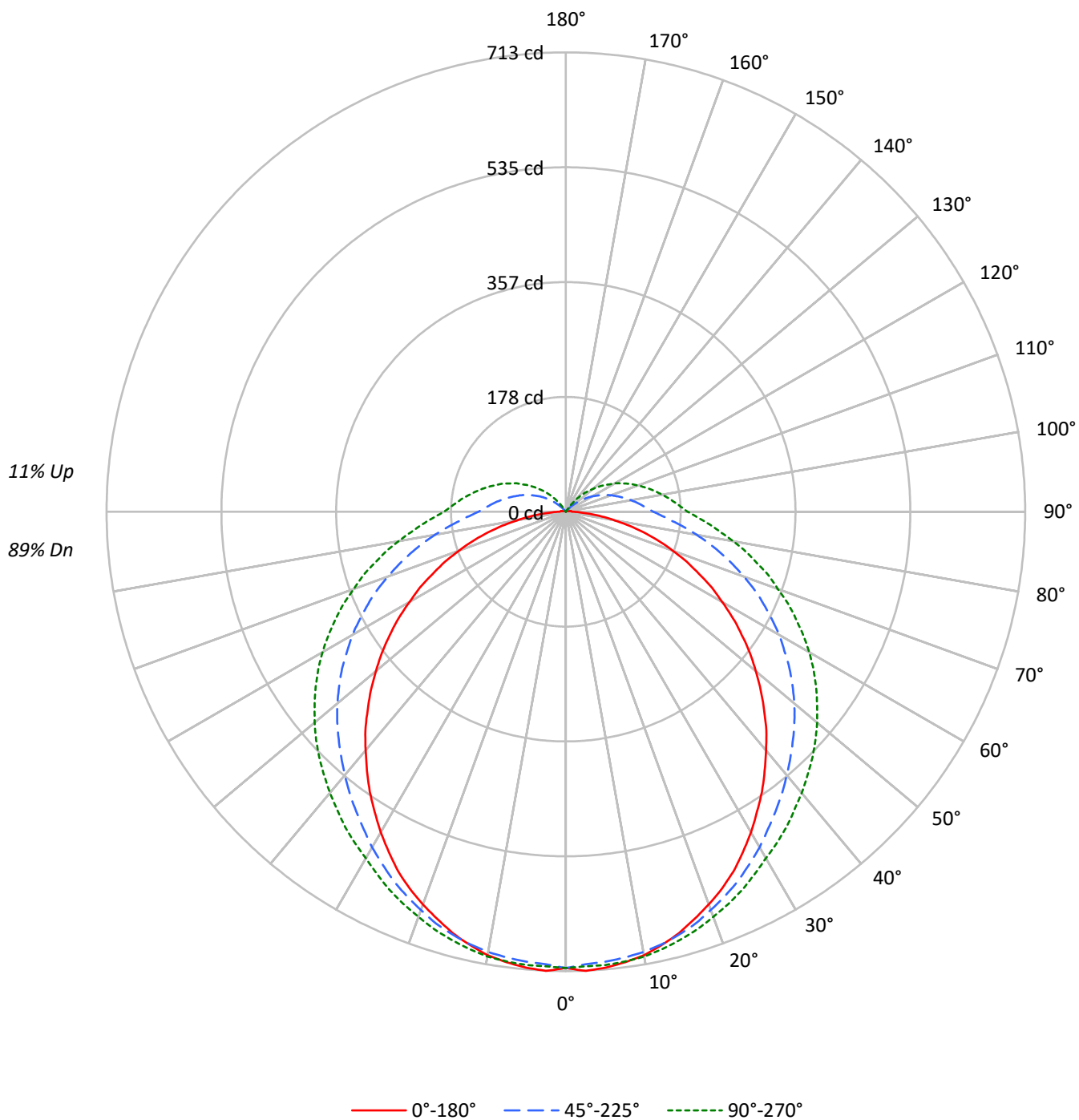
Lumens per Lamp: N/A
Luminaire Lumens: 2702.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	11209	11209	11209
5°	11285	11139	11220
10°	11234	11152	11268
15°	11099	11134	11268
20°	10926	11081	11271
25°	10755	11042	11311
30°	10504	10992	11349
35°	10253	10966	11542
40°	9989	11028	11770
45°	9740	11166	12109
50°	9479	11399	12535
55°	9204	11699	13084
60°	8871	12119	13809
65°	8532	12686	14761
70°	8169	13584	16199
75°	7718	15253	18770
80°	7019	18806	24047
85°	6702	30204	40629

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 74502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	2.5
10°-20°	192.5	7.1
20°-30°	291.7	10.8
30°-40°	355.2	13.1
40°-50°	382.2	14.1
50°-60°	371.2	13.7
60°-70°	324.2	12.0
70°-80°	249.5	9.2
80°-90°	167.1	6.2
90°-100°	115.3	4.3
100°-110°	84.2	3.1
110°-120°	55.6	2.1
120°-130°	31.0	1.1
130°-140°	13.0	0.5
140°-150°	2.2	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	551.4	20.4
0°-40°	906.6	33.6
0°-60°	1660.0	61.4
0°-90°	2400.8	88.9
90°-120°	255.1	9.4
90°-150°	301.2	11.1
90°-180°	301.0	11.1
0°-180°	2702.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	710	707	701	707	706	67
15°	677	679	679	689	688	191
25°	616	623	632	644	648	283
35°	531	548	568	590	597	332
45°	435	463	499	531	541	336
55°	334	370	424	461	474	298
65°	228	278	339	381	394	226
75°	126	184	249	294	307	134
85°	37	101	166	209	224	39
90°	10	70	136	176	189	7
95°	8	56	118	157	169	6
105°	5	35	88	124	136	6
115°	4	15	62	92	104	4
125°	2	2	35	63	72	2
135°	1	1	11	33	41	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°	708.1	708.1	708.1	708.1	708.1
2.5°	713.3	710.2	703.0	708.1	706.1
5°	710.2	707.1	701.0	707.1	706.1
7.5°	705.1	703.0	697.9	705.1	704.0
10°	698.9	696.8	693.8	702.0	701.0
12.5°	688.6	689.7	687.6	695.8	694.8
15°	677.3	679.4	679.4	688.6	687.6
17.5°	663.0	667.1	670.2	679.4	679.4
20°	648.6	653.7	657.8	669.1	669.1
22.5°	633.2	639.4	645.5	656.8	658.9
25°	615.8	623.0	632.2	644.5	647.6
27.5°	595.2	606.5	616.8	632.2	634.2
30°	574.7	588.1	601.4	617.8	620.9
32.5°	552.1	567.5	584.0	603.5	609.6
35°	530.6	548.0	567.5	590.1	597.3
37.5°	507.0	526.5	551.1	575.7	582.9
40°	483.4	506.0	533.7	560.4	569.6
42.5°	460.8	483.4	516.2	546.0	555.2
45°	435.1	462.9	498.8	530.6	540.9
47.5°	410.5	440.3	481.3	514.2	525.5
50°	384.9	416.7	462.9	497.7	509.0
52.5°	360.2	394.1	443.4	479.3	491.6
55°	333.5	370.5	423.9	460.8	474.1
57.5°	307.9	348.9	402.3	442.3	455.7
60°	280.2	324.3	382.8	421.8	436.2
62.5°	255.5	301.7	360.2	402.3	415.6
65°	227.8	278.1	338.7	380.8	394.1
67.5°	203.2	255.5	317.1	359.2	373.6
70°	176.5	229.9	293.5	337.6	350.0
72.5°	151.9	207.3	272.0	315.1	330.5
75°	126.2	183.7	249.4	293.5	306.9
77.5°	101.6	161.1	227.8	272.0	286.3
80°	77.0	139.6	206.3	249.4	263.8
82.5°	56.4	118.0	185.8	228.9	242.2
85°	36.9	100.6	166.3	209.4	223.7
87.5°	22.6	84.2	149.8	191.9	205.3
90°	10.3	69.8	135.5	176.5	188.8
92.5°	9.2	63.6	126.2	166.3	178.6
95°	8.2	56.4	118.0	157.0	169.3
97.5°	7.2	51.3	110.8	148.8	161.1
100°	7.2	45.2	102.6	140.6	151.9
102.5°	6.2	40.0	95.4	132.4	143.7
105°	5.1	34.9	88.3	124.2	135.5
107.5°	5.1	29.8	81.1	116.0	127.3
110°	4.1	24.6	74.9	107.8	119.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.1	20.5	67.7	100.6	111.9
115°	4.1	15.4	61.6	92.4	103.7
117.5°	3.1	11.3	54.4	85.2	95.4
120°	3.1	7.2	48.2	77.0	88.3
122.5°	3.1	4.1	42.1	69.8	79.0
125°	2.1	2.1	34.9	62.6	71.8
127.5°	2.1	1.0	28.7	54.4	63.6
130°	2.1	1.0	22.6	47.2	55.4
132.5°	2.1	1.0	16.4	40.0	48.2
135°	1.0	1.0	11.3	32.8	41.1
137.5°	1.0	1.0	6.2	25.7	32.8
140°	1.0	0.0	2.1	18.5	24.6
142.5°	1.0	0.0	0.0	12.3	17.4
145°	0.0	0.0	0.0	6.2	11.3
147.5°	0.0	0.0	0.0	1.0	4.1
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)