

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: P987509

Luminaire Tested: S122DR-B675DB27-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987509
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-B675DB27-4F0-XX-W2A-D
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

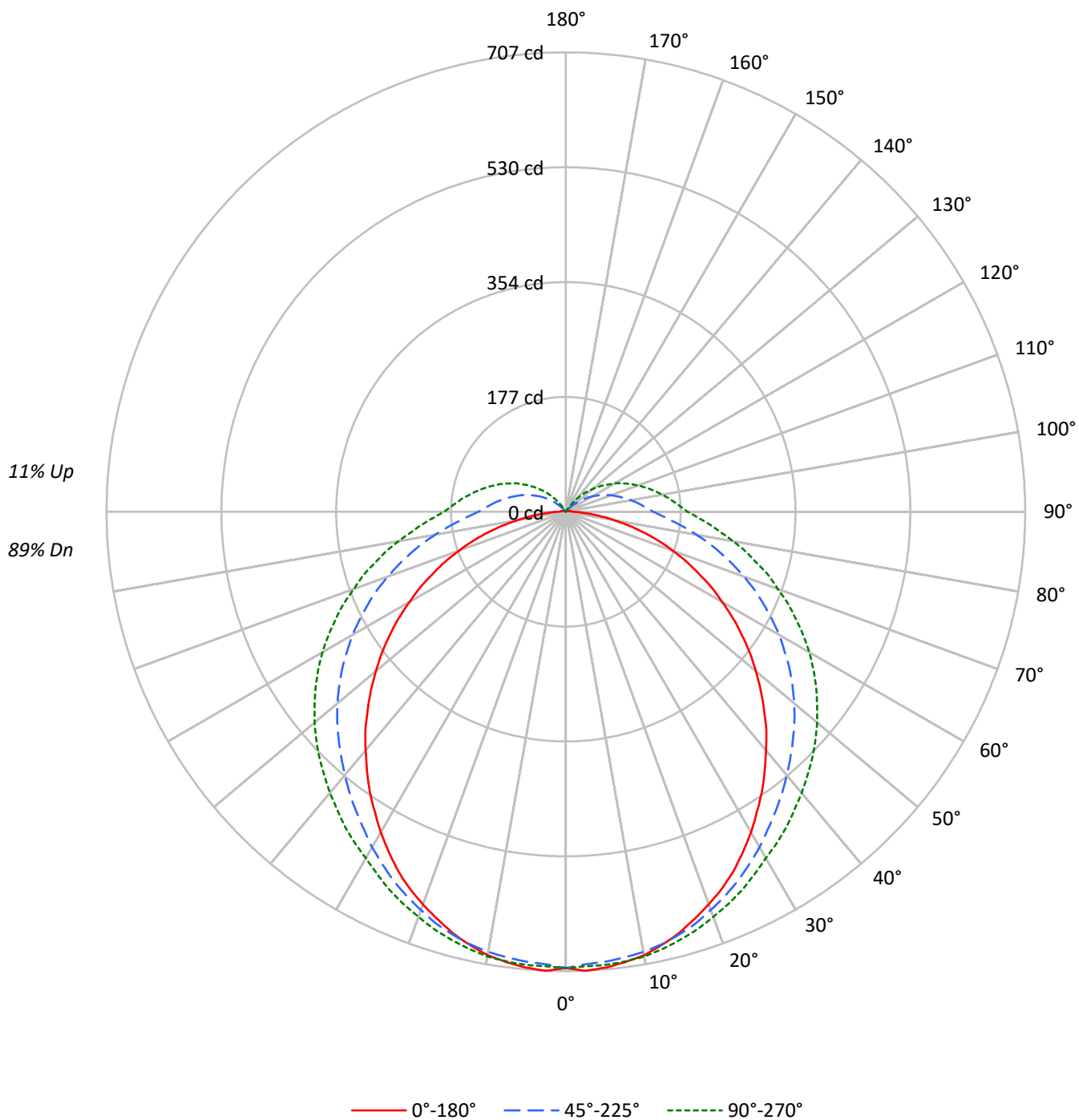
Lumens per Lamp: N/A
Luminaire Lumens: 2679.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	11114	11114	11114
5°	11188	11043	11124
10°	11139	11057	11171
15°	11006	11039	11173
20°	10833	10986	11175
25°	10663	10947	11215
30°	10415	10899	11252
35°	10166	10874	11444
40°	9904	10933	11669
45°	9657	11070	12003
50°	9397	11301	12429
55°	9126	11596	12974
60°	8795	12014	13692
65°	8461	12577	14634
70°	8099	13468	16060
75°	7657	15125	18605
80°	6955	18642	23838
85°	6647	29931	40283

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 73849 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	2.5
10°-20°	190.9	7.1
20°-30°	289.2	10.8
30°-40°	352.2	13.1
40°-50°	379.0	14.1
50°-60°	368.0	13.7
60°-70°	321.4	12.0
70°-80°	247.4	9.2
80°-90°	165.7	6.2
90°-100°	114.3	4.3
100°-110°	83.5	3.1
110°-120°	55.1	2.1
120°-130°	30.7	1.1
130°-140°	12.9	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°	546.7	20.4
0°-40°	898.9	33.6
0°-60°	1645.9	61.4
0°-90°	2380.3	88.9
90°-120°	252.9	9.4
90°-150°	298.7	11.1
90°-180°	299.0	11.2
0°-180°	2679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	704	701	695	701	700	67
15°	672	674	674	683	682	189
25°	610	618	627	639	642	281
35°	526	543	563	585	592	329
45°	431	459	494	526	536	333
55°	331	367	420	457	470	296
65°	226	276	336	378	391	224
75°	125	182	247	291	304	132
85°	37	100	165	208	222	39
90°	10	69	134	175	187	7
95°	8	56	117	156	168	6
105°	5	35	88	123	134	6
115°	4	15	61	92	103	4
125°	2	2	35	62	71	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°	702.1	702.1	702.1	702.1	702.1
2.5°	707.2	704.1	697.0	702.1	700.1
5°	704.1	701.1	695.0	701.1	700.1
7.5°	699.1	697.0	691.9	699.1	698.0
10°	693.0	690.9	687.9	696.0	695.0
12.5°	682.8	683.8	681.8	689.9	688.9
15°	671.6	673.6	673.6	682.8	681.8
17.5°	657.3	661.4	664.5	673.6	673.6
20°	643.1	648.2	652.2	663.4	663.4
22.5°	627.8	633.9	640.0	651.2	653.3
25°	610.5	617.7	626.8	639.0	642.1
27.5°	590.2	601.4	611.5	626.8	628.8
30°	569.8	583.1	596.3	612.6	615.6
32.5°	547.4	562.7	579.0	598.3	604.4
35°	526.1	543.4	562.7	585.1	592.2
37.5°	502.7	522.0	546.4	570.8	578.0
40°	479.3	501.7	529.1	555.6	564.7
42.5°	456.9	479.3	511.8	541.3	550.5
45°	431.4	458.9	494.5	526.1	536.2
47.5°	407.0	436.5	477.2	509.8	521.0
50°	381.6	413.1	458.9	493.5	504.7
52.5°	357.2	390.7	439.6	475.2	487.4
55°	330.7	367.3	420.2	456.9	470.1
57.5°	305.3	346.0	398.9	438.6	451.8
60°	277.8	321.5	379.5	418.2	432.5
62.5°	253.4	299.2	357.2	398.9	412.1
65°	225.9	275.8	335.8	377.5	390.7
67.5°	201.5	253.4	314.4	356.1	370.4
70°	175.0	227.9	291.0	334.8	347.0
72.5°	150.6	205.5	269.7	312.4	327.7
75°	125.2	182.1	247.3	291.0	304.2
77.5°	100.7	159.8	225.9	269.7	283.9
80°	76.3	138.4	204.5	247.3	261.5
82.5°	56.0	117.0	184.2	226.9	240.1
85°	36.6	99.7	164.8	207.6	221.8
87.5°	22.4	83.4	148.6	190.3	203.5
90°	10.2	69.2	134.3	175.0	187.2
92.5°	9.2	63.1	125.2	164.8	177.1
95°	8.1	56.0	117.0	155.7	167.9
97.5°	7.1	50.9	109.9	147.5	159.8
100°	7.1	44.8	101.8	139.4	150.6
102.5°	6.1	39.7	94.6	131.3	142.5
105°	5.1	34.6	87.5	123.1	134.3
107.5°	5.1	29.5	80.4	115.0	126.2
110°	4.1	24.4	74.3	106.8	118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.1	20.4	67.2	99.7	110.9
115°	4.1	15.3	61.1	91.6	102.8
117.5°	3.1	11.2	53.9	84.5	94.6
120°	3.1	7.1	47.8	76.3	87.5
122.5°	3.1	4.1	41.7	69.2	78.4
125°	2.0	2.0	34.6	62.1	71.2
127.5°	2.0	1.0	28.5	53.9	63.1
130°	2.0	1.0	22.4	46.8	54.9
132.5°	2.0	1.0	16.3	39.7	47.8
135°	1.0	1.0	11.2	32.6	40.7
137.5°	1.0	1.0	6.1	25.4	32.6
140°	1.0	0.0	2.0	18.3	24.4
142.5°	1.0	0.0	0.0	12.2	17.3
145°	0.0	0.0	0.0	6.1	11.2
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)