

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: P987519

Luminaire Tested: S122DR-B675DB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987519
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-B675DB2750-4F0-XX-W2A-D_4000K
Description: Define 2 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

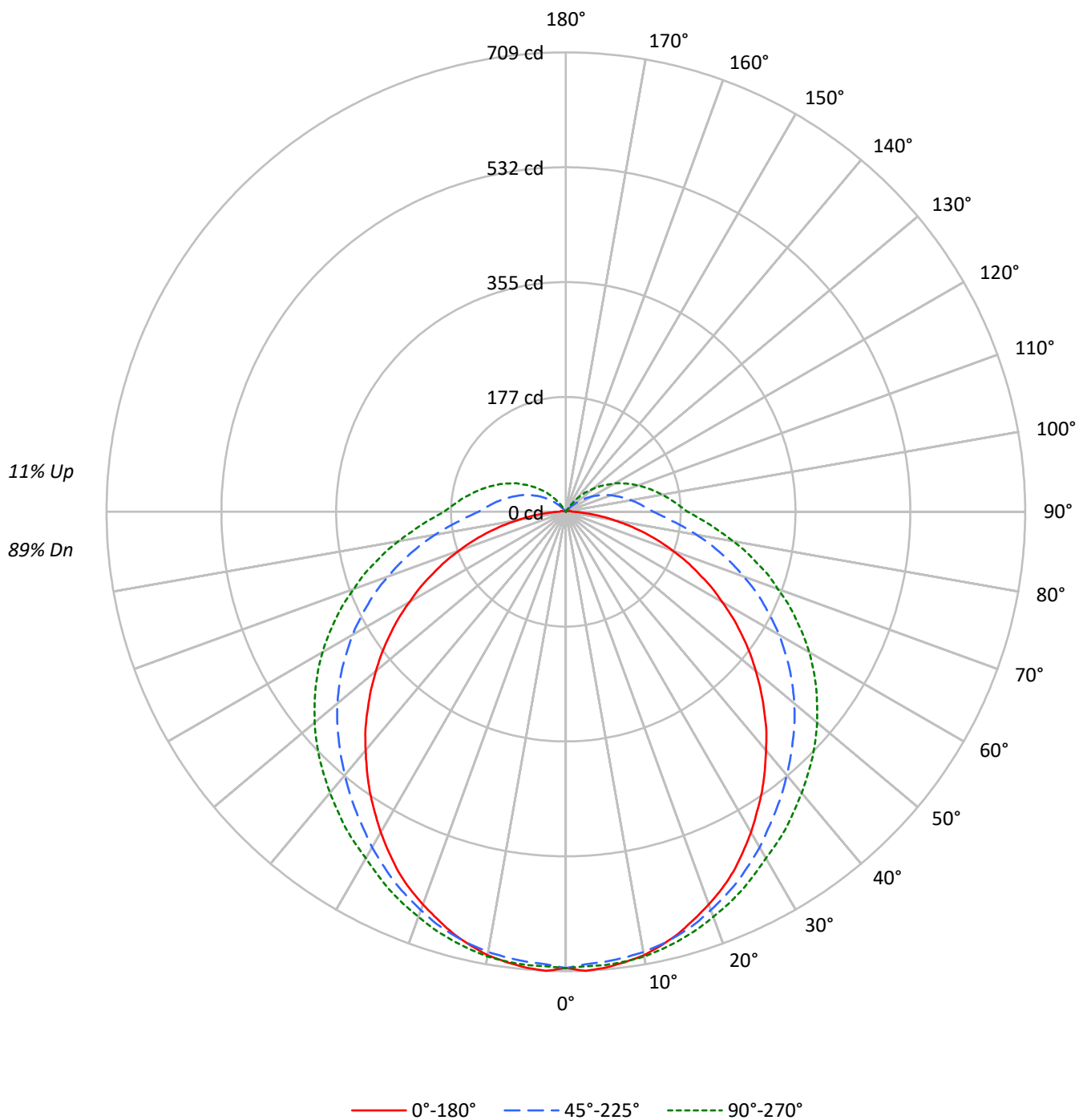
Lumens per Lamp: N/A
Luminaire Lumens: 2687.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	11147	11147	11147
5°	11221	11077	11158
10°	11171	11089	11205
15°	11039	11072	11206
20°	10865	11020	11209
25°	10696	10981	11248
30°	10446	10932	11287
35°	10195	10906	11478
40°	9933	10966	11704
45°	9686	11103	12039
50°	9424	11335	12466
55°	9154	11632	13012
60°	8820	12052	13730
65°	8487	12615	14679
70°	8122	13510	16106
75°	7676	15168	18666
80°	6974	18696	23911
85°	6665	30022	40411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 74067 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	2.5
10°-20°	191.5	7.1
20°-30°	290.1	10.8
30°-40°	353.3	13.1
40°-50°	380.1	14.1
50°-60°	369.1	13.7
60°-70°	322.4	12.0
70°-80°	248.1	9.2
80°-90°	166.2	6.2
90°-100°	114.6	4.3
100°-110°	83.7	3.1
110°-120°	55.3	2.1
120°-130°	30.8	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°	548.3	20.4
0°-40°	901.6	33.6
0°-60°	1650.8	61.4
0°-90°	2387.4	88.9
90°-120°	253.6	9.4
90°-150°	299.5	11.1
90°-180°	300.0	11.2
0°-180°	2687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	706	703	697	703	702	67
15°	674	676	676	685	684	190
25°	612	620	629	641	644	282
35°	528	545	564	587	594	330
45°	433	460	496	528	538	334
55°	332	368	422	458	472	297
65°	227	277	337	379	392	225
75°	126	183	248	292	305	133
85°	37	100	165	208	222	39
90°	10	69	135	176	188	7
95°	8	56	117	156	168	6
105°	5	35	88	124	135	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°	704.2	704.2	704.2	704.2	704.2
2.5°	709.3	706.2	699.1	704.2	702.2
5°	706.2	703.2	697.1	703.2	702.2
7.5°	701.1	699.1	694.0	701.1	700.1
10°	695.0	693.0	689.9	698.1	697.1
12.5°	684.8	685.8	683.8	692.0	690.9
15°	673.6	675.6	675.6	684.8	683.8
17.5°	659.3	663.4	666.4	675.6	675.6
20°	645.0	650.1	654.2	665.4	665.4
22.5°	629.7	635.8	641.9	653.2	655.2
25°	612.4	619.5	628.7	640.9	644.0
27.5°	591.9	603.2	613.4	628.7	630.7
30°	571.5	584.8	598.1	614.4	617.5
32.5°	549.1	564.4	580.7	600.1	606.2
35°	527.6	545.0	564.4	586.8	594.0
37.5°	504.2	523.6	548.1	572.5	579.7
40°	480.7	503.1	530.7	557.2	566.4
42.5°	458.2	480.7	513.4	543.0	552.1
45°	432.7	460.3	496.0	527.6	537.8
47.5°	408.2	437.8	478.7	511.3	522.5
50°	382.7	414.4	460.3	495.0	506.2
52.5°	358.2	391.9	440.9	476.6	488.9
55°	331.7	368.4	421.5	458.2	471.5
57.5°	306.2	347.0	400.1	439.9	453.1
60°	278.6	322.5	380.7	419.5	433.7
62.5°	254.1	300.1	358.2	400.1	413.3
65°	226.6	276.6	336.8	378.6	391.9
67.5°	202.1	254.1	315.4	357.2	371.5
70°	175.5	228.6	291.9	335.8	348.0
72.5°	151.0	206.2	270.5	313.3	328.6
75°	125.5	182.7	248.0	291.9	305.2
77.5°	101.0	160.2	226.6	270.5	284.7
80°	76.5	138.8	205.1	248.0	262.3
82.5°	56.1	117.4	184.7	227.6	240.9
85°	36.7	100.0	165.3	208.2	222.5
87.5°	22.5	83.7	149.0	190.8	204.1
90°	10.2	69.4	134.7	175.5	187.8
92.5°	9.2	63.3	125.5	165.3	177.6
95°	8.2	56.1	117.4	156.1	168.4
97.5°	7.1	51.0	110.2	148.0	160.2
100°	7.1	44.9	102.1	139.8	151.0
102.5°	6.1	39.8	94.9	131.7	142.9
105°	5.1	34.7	87.8	123.5	134.7
107.5°	5.1	29.6	80.6	115.3	126.6
110°	4.1	24.5	74.5	107.2	118.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.1	20.4	67.4	100.0	111.2
115°	4.1	15.3	61.2	91.9	103.1
117.5°	3.1	11.2	54.1	84.7	94.9
120°	3.1	7.1	48.0	76.5	87.8
122.5°	3.1	4.1	41.8	69.4	78.6
125°	2.0	2.0	34.7	62.3	71.4
127.5°	2.0	1.0	28.6	54.1	63.3
130°	2.0	1.0	22.5	46.9	55.1
132.5°	2.0	1.0	16.3	39.8	48.0
135°	1.0	1.0	11.2	32.7	40.8
137.5°	1.0	1.0	6.1	25.5	32.7
140°	1.0	0.0	2.0	18.4	24.5
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)