

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: P987546

Luminaire Tested: S122DR-B865DB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987546
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-B865DB2750-4F0-XX-W2A-D_2700K
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

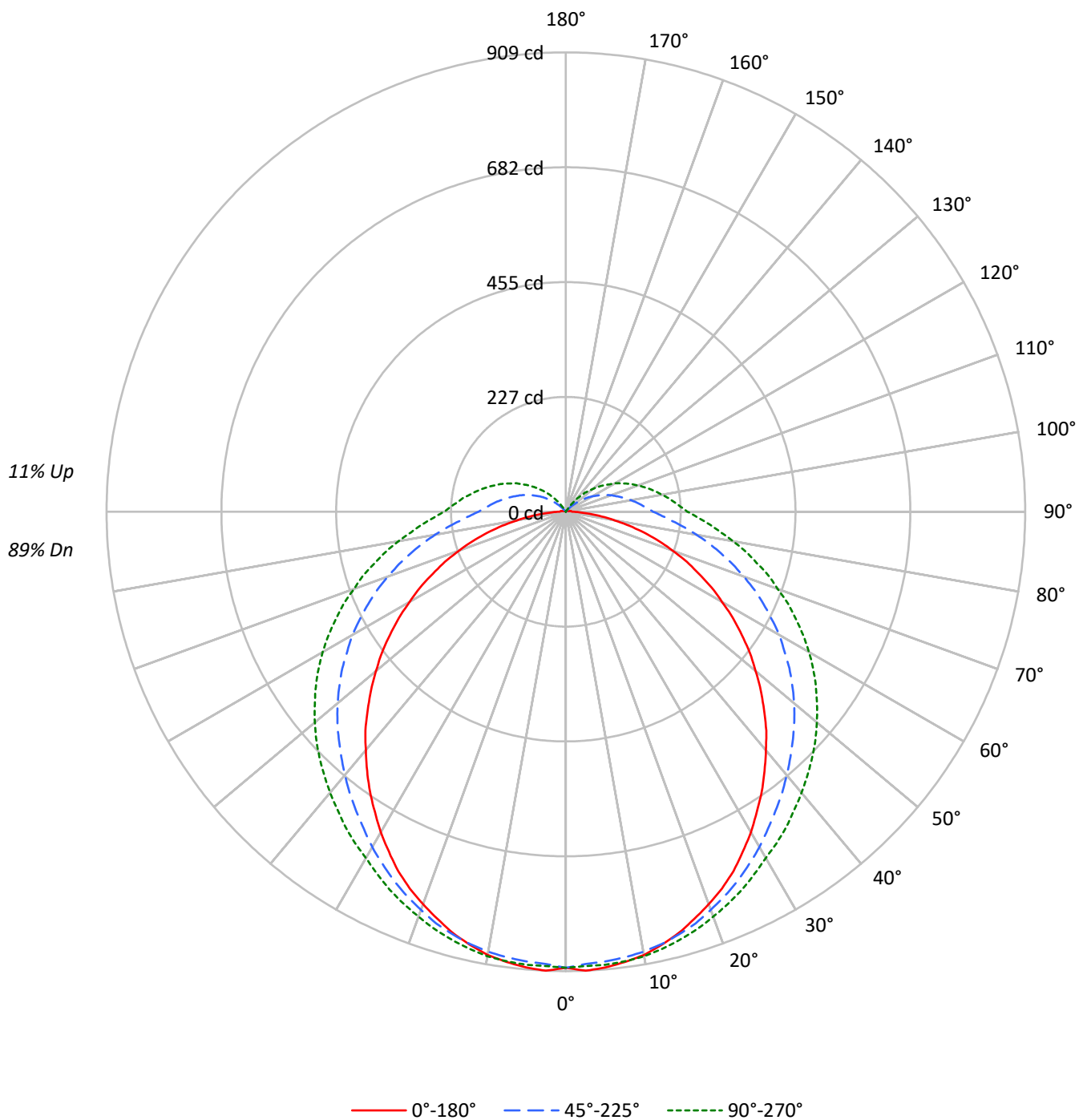
Lumens per Lamp: N/A
Luminaire Lumens: 3443.0 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 46.8
Input Voltage (V): 120
Input Current (A_{in}): 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°	14283	14283	14283
5°	14380	14193	14296
10°	14315	14209	14357
15°	14144	14187	14359
20°	13923	14121	14362
25°	13704	14070	14413
30°	13385	14006	14462
35°	13065	13975	14707
40°	12727	14051	14998
45°	12413	14229	15428
50°	12077	14524	15972
55°	11729	14905	16674
60°	11302	15443	17596
65°	10873	16166	18810
70°	10409	17309	20637
75°	9841	19437	23913
80°	8943	23965	30638
85°	8554	38485	51780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 94897 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	2.5
10°-20°	245.3	7.1
20°-30°	371.7	10.8
30°-40°	452.7	13.1
40°-50°	487.0	14.1
50°-60°	473.0	13.7
60°-70°	413.1	12.0
70°-80°	317.9	9.2
80°-90°	212.9	6.2
90°-100°	146.9	4.3
100°-110°	107.3	3.1
110°-120°	70.8	2.1
120°-130°	39.5	1.1
130°-140°	16.6	0.5
140°-150°	2.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	702.6	20.4
0°-40°	1155.3	33.6
0°-60°	2115.3	61.4
0°-90°	3059.2	88.9
90°-120°	325.0	9.4
90°-150°	383.8	11.1
90°-180°	384.0	11.2
0°-180°	3443.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	902	902	902	902	902	
5°	905	901	893	901	900	86
15°	863	866	866	878	876	243
25°	785	794	806	821	825	361
35°	676	698	723	752	761	423
45°	554	590	636	676	689	428
55°	425	472	540	587	604	380
65°	290	354	432	485	502	288
75°	161	234	318	374	391	170
85°	47	128	212	267	285	50
90°	13	89	173	225	241	9
95°	10	72	150	200	216	8
105°	6	44	112	158	173	7
115°	5	20	78	118	132	5
125°	3	3	44	80	92	3
135°	1	1	14	42	52	1
145°	0	0	0	8	14	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°	902.3	902.3	902.3	902.3	902.3
2.5°	908.9	905.0	895.8	902.3	899.7
5°	905.0	901.0	893.2	901.0	899.7
7.5°	898.4	895.8	889.3	898.4	897.1
10°	890.6	888.0	884.0	894.5	893.2
12.5°	877.5	878.8	876.2	886.6	885.3
15°	863.1	865.7	865.7	877.5	876.2
17.5°	844.8	850.0	854.0	865.7	865.7
20°	826.5	833.0	838.3	852.6	852.6
22.5°	806.9	814.7	822.6	836.9	839.6
25°	784.6	793.8	805.6	821.3	825.2
27.5°	758.5	772.9	785.9	805.6	808.2
30°	732.3	749.3	766.3	787.3	791.2
32.5°	703.6	723.2	744.1	768.9	776.8
35°	676.1	698.3	723.2	751.9	761.1
37.5°	646.0	670.9	702.3	733.6	742.8
40°	615.9	644.7	680.0	714.0	725.8
42.5°	587.2	615.9	657.8	695.7	707.5
45°	554.5	589.8	635.6	676.1	689.2
47.5°	523.1	561.0	613.3	655.2	669.6
50°	490.4	530.9	589.8	634.3	648.6
52.5°	459.0	502.2	564.9	610.7	626.4
55°	425.0	472.1	540.1	587.2	604.2
57.5°	392.3	444.6	512.6	563.6	580.6
60°	357.0	413.2	487.8	537.5	555.8
62.5°	325.6	384.5	459.0	512.6	529.6
65°	290.3	354.4	431.6	485.2	502.2
67.5°	258.9	325.6	404.1	457.7	476.0
70°	224.9	292.9	374.0	430.2	445.9
72.5°	193.5	264.2	346.5	401.5	421.1
75°	160.9	234.1	317.8	374.0	391.0
77.5°	129.5	205.3	290.3	346.5	364.9
80°	98.1	177.9	262.9	317.8	336.1
82.5°	71.9	150.4	236.7	291.6	308.6
85°	47.1	128.2	211.9	266.8	285.1
87.5°	28.8	107.2	190.9	244.5	261.5
90°	13.1	88.9	172.6	224.9	240.6
92.5°	11.8	81.1	160.9	211.9	227.5
95°	10.5	71.9	150.4	200.1	215.8
97.5°	9.2	65.4	141.2	189.6	205.3
100°	9.2	57.5	130.8	179.2	193.5
102.5°	7.8	51.0	121.6	168.7	183.1
105°	6.5	44.5	112.5	158.2	172.6
107.5°	6.5	37.9	103.3	147.8	162.2
110°	5.2	31.4	95.5	137.3	151.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.2	26.2	86.3	128.2	142.5
115°	5.2	19.6	78.5	117.7	132.1
117.5°	3.9	14.4	69.3	108.5	121.6
120°	3.9	9.2	61.5	98.1	112.5
122.5°	3.9	5.2	53.6	88.9	100.7
125°	2.6	2.6	44.5	79.8	91.5
127.5°	2.6	1.3	36.6	69.3	81.1
130°	2.6	1.3	28.8	60.2	70.6
132.5°	2.6	1.3	20.9	51.0	61.5
135°	1.3	1.3	14.4	41.8	52.3
137.5°	1.3	1.3	7.8	32.7	41.8
140°	1.3	0.0	2.6	23.5	31.4
142.5°	1.3	0.0	0.0	15.7	22.2
145°	0.0	0.0	0.0	7.8	14.4
147.5°	0.0	0.0	0.0	1.3	5.2
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)