

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: P987488

Luminaire Tested: S122DR-B485DB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987488
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-B485DB2750-4F0-XX-W2A-D_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

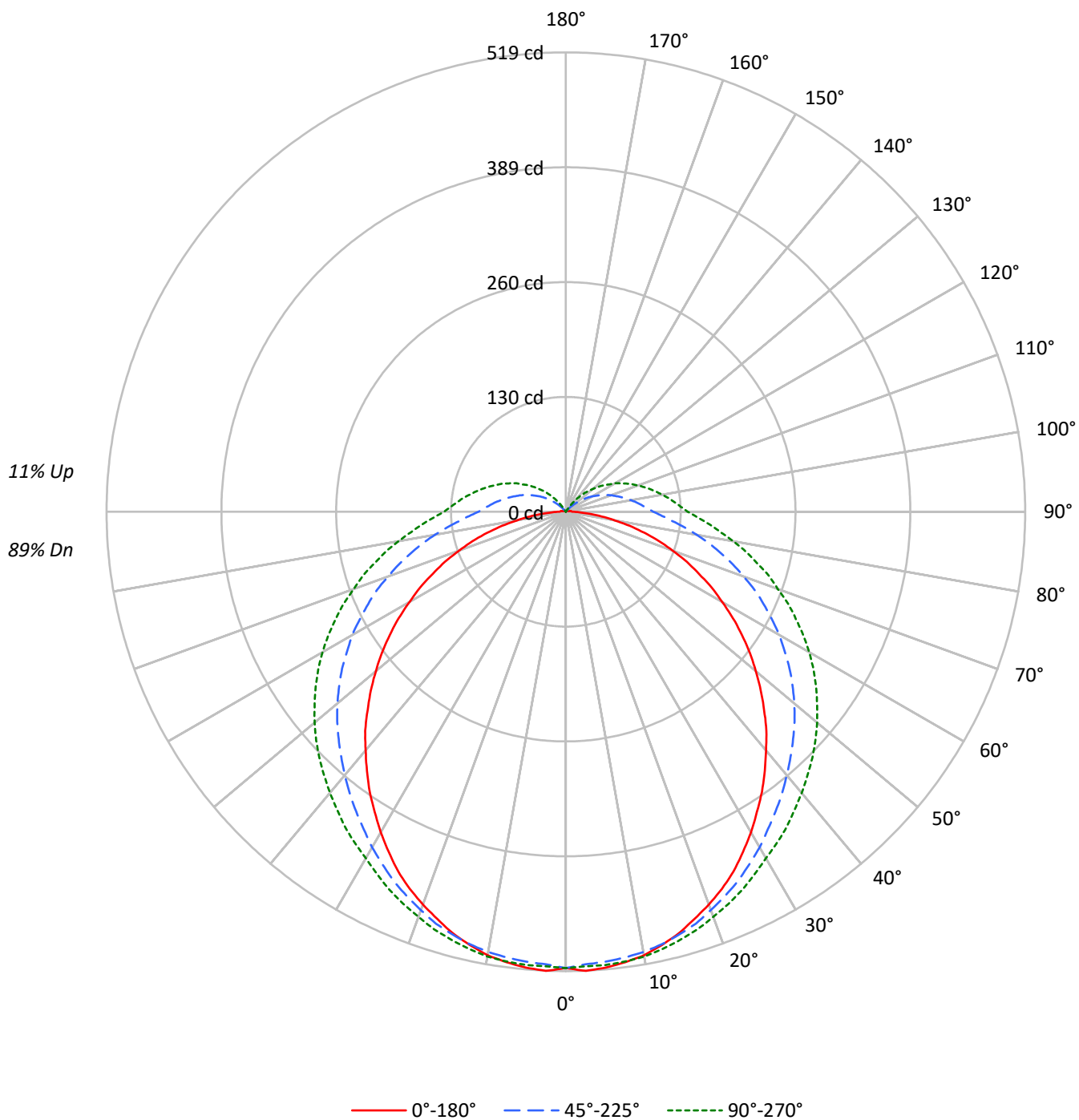
Lumens per Lamp: N/A
Luminaire Lumens: 1967.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 24
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°	8160	8160	8160
5°	8215	8109	8167
10°	8178	8117	8202
15°	8081	8105	8204
20°	7954	8067	8205
25°	7830	8038	8233
30°	7648	8002	8262
35°	7465	7985	8402
40°	7272	8028	8567
45°	7092	8128	8813
50°	6900	8296	9126
55°	6701	8517	9527
60°	6458	8823	10052
65°	6214	9233	10746
70°	5947	9890	11793
75°	5621	11100	13663
80°	5105	13692	17502
85°	4886	21976	29586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 54217 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	2.5
10°-20°	140.2	7.1
20°-30°	212.4	10.8
30°-40°	258.6	13.1
40°-50°	278.2	14.1
50°-60°	270.2	13.7
60°-70°	236.0	12.0
70°-80°	181.6	9.2
80°-90°	121.6	6.2
90°-100°	83.9	4.3
100°-110°	61.3	3.1
110°-120°	40.4	2.1
120°-130°	22.5	1.1
130°-140°	9.5	0.5
140°-150°	1.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	401.4	20.4
0°-40°	660.0	33.6
0°-60°	1208.5	61.4
0°-90°	1747.7	88.9
90°-120°	185.7	9.4
90°-150°	219.2	11.1
90°-180°	219.0	11.1
0°-180°	1967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	517	515	510	515	514	49
15°	493	495	495	501	501	139
25°	448	454	460	469	471	206
35°	386	399	413	430	435	241
45°	317	337	363	386	394	245
55°	243	270	309	336	345	217
65°	166	202	246	277	287	165
75°	92	134	182	214	223	97
85°	27	73	121	152	163	28
90°	8	51	99	128	138	5
95°	6	41	86	114	123	5
105°	4	25	64	90	99	4
115°	3	11	45	67	76	3
125°	2	2	25	46	52	2
135°	1	1	8	24	30	1
145°	0	0	0	4	8	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°	515.5	515.5	515.5	515.5	515.5
2.5°	519.2	517.0	511.8	515.5	514.0
5°	517.0	514.8	510.3	514.8	514.0
7.5°	513.3	511.8	508.0	513.3	512.5
10°	508.8	507.3	505.0	511.0	510.3
12.5°	501.3	502.1	500.6	506.5	505.8
15°	493.1	494.6	494.6	501.3	500.6
17.5°	482.6	485.6	487.9	494.6	494.6
20°	472.2	475.9	478.9	487.1	487.1
22.5°	461.0	465.5	469.9	478.2	479.6
25°	448.3	453.5	460.2	469.2	471.4
27.5°	433.3	441.5	449.0	460.2	461.7
30°	418.4	428.1	437.8	449.8	452.0
32.5°	401.9	413.2	425.1	439.3	443.8
35°	386.3	399.0	413.2	429.6	434.8
37.5°	369.1	383.3	401.2	419.1	424.4
40°	351.9	368.3	388.5	407.9	414.6
42.5°	335.5	351.9	375.8	397.5	404.2
45°	316.8	336.9	363.1	386.3	393.7
47.5°	298.8	320.5	350.4	374.3	382.5
50°	280.2	303.3	336.9	362.4	370.6
52.5°	262.2	286.9	322.8	348.9	357.9
55°	242.8	269.7	308.6	335.5	345.2
57.5°	224.1	254.0	292.9	322.0	331.7
60°	204.0	236.1	278.7	307.1	317.5
62.5°	186.0	219.7	262.2	292.9	302.6
65°	165.9	202.5	246.5	277.2	286.9
67.5°	147.9	186.0	230.9	261.5	271.9
70°	128.5	167.4	213.7	245.8	254.8
72.5°	110.6	150.9	198.0	229.4	240.6
75°	91.9	133.7	181.5	213.7	223.4
77.5°	74.0	117.3	165.9	198.0	208.4
80°	56.0	101.6	150.2	181.5	192.0
82.5°	41.1	85.9	135.2	166.6	176.3
85°	26.9	73.2	121.0	152.4	162.9
87.5°	16.4	61.3	109.1	139.7	149.4
90°	7.5	50.8	98.6	128.5	137.5
92.5°	6.7	46.3	91.9	121.0	130.0
95°	6.0	41.1	85.9	114.3	123.3
97.5°	5.2	37.4	80.7	108.3	117.3
100°	5.2	32.9	74.7	102.4	110.6
102.5°	4.5	29.1	69.5	96.4	104.6
105°	3.7	25.4	64.3	90.4	98.6
107.5°	3.7	21.7	59.0	84.4	92.6
110°	3.0	17.9	54.5	78.4	86.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.0	14.9	49.3	73.2	81.4
115°	3.0	11.2	44.8	67.2	75.5
117.5°	2.2	8.2	39.6	62.0	69.5
120°	2.2	5.2	35.1	56.0	64.3
122.5°	2.2	3.0	30.6	50.8	57.5
125°	1.5	1.5	25.4	45.6	52.3
127.5°	1.5	0.7	20.9	39.6	46.3
130°	1.5	0.7	16.4	34.4	40.3
132.5°	1.5	0.7	12.0	29.1	35.1
135°	0.7	0.7	8.2	23.9	29.9
137.5°	0.7	0.7	4.5	18.7	23.9
140°	0.7	0.0	1.5	13.4	17.9
142.5°	0.7	0.0	0.0	9.0	12.7
145°	0.0	0.0	0.0	4.5	8.2
147.5°	0.0	0.0	0.0	0.7	3.0
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)