

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: P987437

Luminaire Tested: S122DR-B1005DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987437
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-B1005DB30-4F0-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

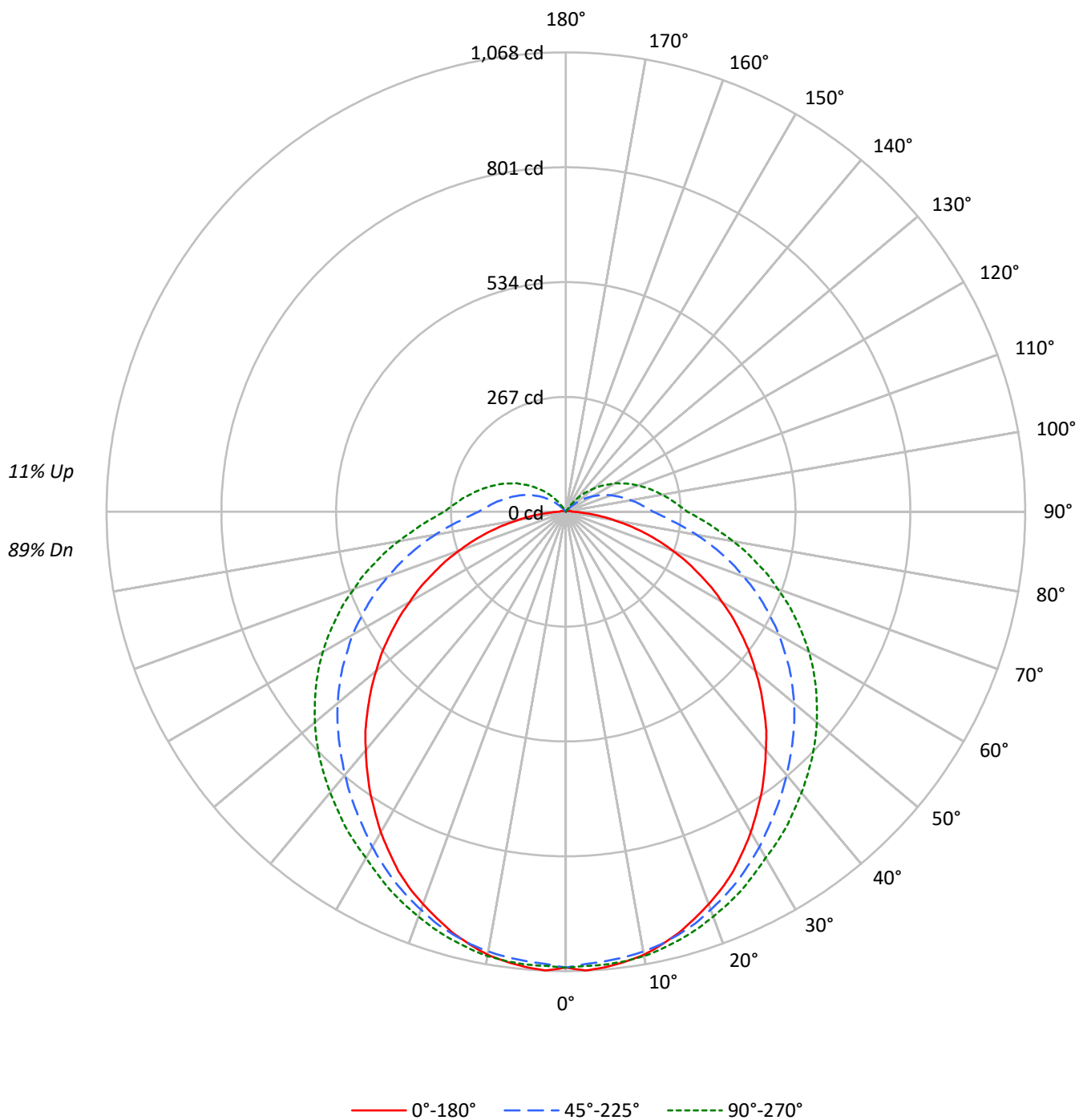
Lumens per Lamp: N/A
Luminaire Lumens: 4044.0 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 61.3
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

TEST NUMBER: P987437

CATALOG NUMBER: S122DR-B1005DB30-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P987437

CATALOG NUMBER: S122DR-B1005DB30-4F0-XX-W2A-D

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°	16776	16776	16776
5°	16889	16670	16792
10°	16813	16689	16863
15°	16614	16663	16865
20°	16353	16586	16870
25°	16096	16526	16928
30°	15723	16452	16986
35°	15345	16414	17276
40°	14950	16504	17616
45°	14580	16711	18121
50°	14185	17058	18763
55°	13777	17508	19583
60°	13274	18137	20667
65°	12772	18986	22091
70°	12228	20332	24242
75°	11553	22831	28091
80°	10501	28140	35989
85°	10044	45187	60807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 111482 cd/sqm

TEST NUMBER: P987437

CATALOG NUMBER: S122DR-B1005DB30-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	2.5
10°-20°	288.2	7.1
20°-30°	436.6	10.8
30°-40°	531.7	13.1
40°-50°	572.0	14.1
50°-60°	555.5	13.7
60°-70°	485.2	12.0
70°-80°	373.4	9.2
80°-90°	250.1	6.2
90°-100°	172.5	4.3
100°-110°	126.0	3.1
110°-120°	83.2	2.1
120°-130°	46.3	1.1
130°-140°	19.5	0.5
140°-150°	3.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	825.2	20.4
0°-40°	1356.9	33.6
0°-60°	2484.5	61.4
0°-90°	3593.2	88.9
90°-120°	381.7	9.4
90°-150°	450.8	11.1
90°-180°	451.0	11.2
0°-180°	4044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1063	1058	1049	1058	1057	101
15°	1014	1017	1017	1031	1029	286
25°	922	932	946	965	969	424
35°	794	820	849	883	894	496
45°	651	693	746	794	810	503
55°	499	554	634	690	710	447
65°	341	416	507	570	590	339
75°	189	275	373	439	459	200
85°	55	150	249	313	335	58
90°	15	104	203	264	283	11
95°	12	84	177	235	253	10
105°	8	52	132	186	203	9
115°	6	23	92	138	155	6
125°	3	3	52	94	108	3
135°	2	2	17	49	61	2
145°	0	0	0	9	17	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

TEST NUMBER: P987437

CATALOG NUMBER: S122DR-B1005DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.8	1059.8	1059.8	1059.8	1059.8
2.5°	1067.5	1062.9	1052.2	1059.8	1056.8
5°	1062.9	1058.3	1049.1	1058.3	1056.8
7.5°	1055.2	1052.2	1044.5	1055.2	1053.7
10°	1046.0	1042.9	1038.3	1050.6	1049.1
12.5°	1030.7	1032.2	1029.1	1041.4	1039.9
15°	1013.8	1016.8	1016.8	1030.7	1029.1
17.5°	992.3	998.4	1003.0	1016.8	1016.8
20°	970.8	978.4	984.6	1001.5	1001.5
22.5°	947.7	956.9	966.1	983.0	986.1
25°	921.6	932.4	946.2	964.6	969.2
27.5°	890.9	907.8	923.1	946.2	949.3
30°	860.2	880.1	900.1	924.7	929.3
32.5°	826.4	849.4	874.0	903.2	912.4
35°	794.1	820.2	849.4	883.2	894.0
37.5°	758.8	788.0	824.8	861.7	872.5
40°	723.5	757.3	798.7	838.7	852.5
42.5°	689.7	723.5	772.6	817.2	831.0
45°	651.3	692.7	746.5	794.1	809.5
47.5°	614.4	658.9	720.4	769.5	786.4
50°	576.0	623.6	692.7	745.0	761.9
52.5°	539.1	589.8	663.6	717.3	735.7
55°	499.2	554.5	634.4	689.7	709.6
57.5°	460.8	522.2	602.1	662.0	682.0
60°	419.3	485.4	572.9	631.3	652.8
62.5°	382.5	451.6	539.1	602.1	622.1
65°	341.0	416.3	506.9	569.9	589.8
67.5°	304.1	382.5	474.6	537.6	559.1
70°	264.2	344.1	439.3	505.3	523.8
72.5°	227.3	310.3	407.0	471.6	494.6
75°	188.9	274.9	373.3	439.3	459.3
77.5°	152.1	241.2	341.0	407.0	428.5
80°	115.2	208.9	308.7	373.3	394.8
82.5°	84.5	176.6	278.0	342.5	362.5
85°	55.3	150.5	248.8	313.3	334.8
87.5°	33.8	126.0	224.3	287.2	307.2
90°	15.4	104.4	202.8	264.2	282.6
92.5°	13.8	95.2	188.9	248.8	267.3
95°	12.3	84.5	176.6	235.0	253.4
97.5°	10.8	76.8	165.9	222.7	241.2
100°	10.8	67.6	153.6	210.4	227.3
102.5°	9.2	59.9	142.8	198.1	215.0
105°	7.7	52.2	132.1	185.9	202.8
107.5°	7.7	44.5	121.3	173.6	190.5
110°	6.1	36.9	112.1	161.3	178.2



TEST NUMBER: P987437

CATALOG NUMBER: S122DR-B1005DB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.1	30.7	101.4	150.5	167.4
115°	6.1	23.0	92.2	138.2	155.1
117.5°	4.6	16.9	81.4	127.5	142.8
120°	4.6	10.8	72.2	115.2	132.1
122.5°	4.6	6.1	63.0	104.4	118.3
125°	3.1	3.1	52.2	93.7	107.5
127.5°	3.1	1.5	43.0	81.4	95.2
130°	3.1	1.5	33.8	70.7	82.9
132.5°	3.1	1.5	24.6	59.9	72.2
135°	1.5	1.5	16.9	49.2	61.4
137.5°	1.5	1.5	9.2	38.4	49.2
140°	1.5	0.0	3.1	27.6	36.9
142.5°	1.5	0.0	0.0	18.4	26.1
145°	0.0	0.0	0.0	9.2	16.9
147.5°	0.0	0.0	0.0	1.5	6.1
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)