

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: P1001029

Luminaire Tested: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001029
REPORT IS A COMBINATION OF REPORTS P995645 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

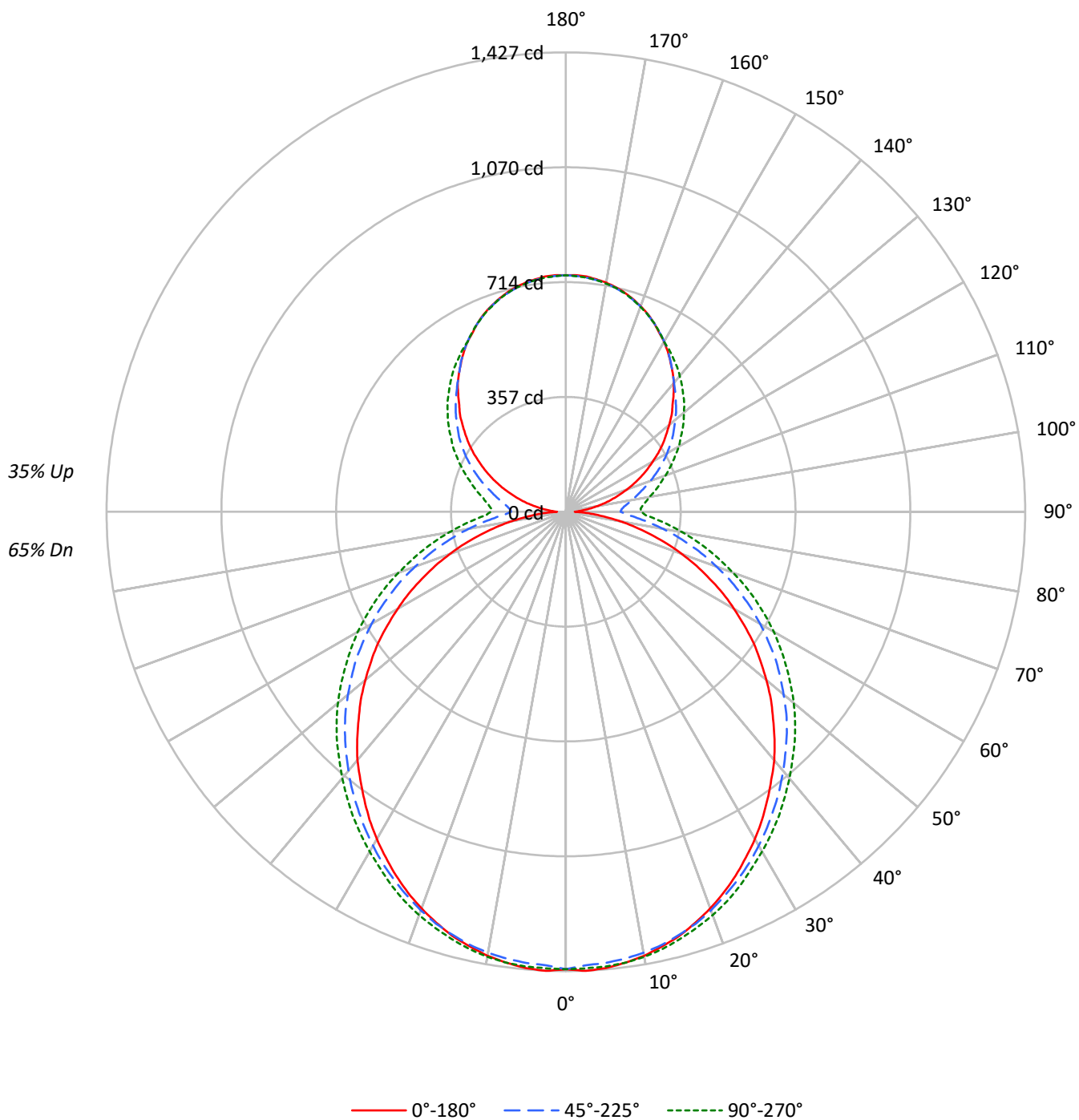
Lumens per Lamp: N/A
Luminaire Lumens: 6885.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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: P1001029

CATALOG NUMBER: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1

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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70
1	100	95	90	86	94	89	85	82	79	76	73	69	67	64	60	58	57
2	90	82	75	69	85	77	71	66	68	63	59	60	56	53	52	49	47
3	82	72	64	57	77	68	60	54	60	54	49	52	48	44	45	42	39
4	75	63	55	48	70	60	52	46	53	46	42	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	41	36	41	36	32	36	32	29
6	63	50	42	35	59	48	40	34	42	36	31	37	32	28	33	28	25
7	59	45	37	31	55	43	35	30	38	32	27	34	29	25	30	26	22
8	54	41	33	27	51	39	32	26	35	29	24	31	26	22	27	23	20
9	51	38	30	24	47	36	28	24	32	26	22	29	23	20	25	21	18
10	47	35	27	22	44	33	26	21	30	24	19	26	21	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11588	11588	11588
5°	11620	11286	11307
10°	11545	11064	11033
15°	11437	10814	10723
20°	11277	10544	10422
25°	11096	10246	10099
30°	10901	9951	9769
35°	10681	9649	9474
40°	10502	9359	9170
45°	10241	9087	8901
50°	10018	8778	8617
55°	9786	8480	8290
60°	9428	8109	7982
65°	9034	7709	7612
70°	8556	7253	7184
75°	7887	6745	6776
80°	7136	6228	6350
85°	6134	5709	6003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10241 cd/sqm

TEST NUMBER: P1001029

CATALOG NUMBER: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	2.0
10°-20°	385.8	5.6
20°-30°	583.3	8.5
30°-40°	705.7	10.3
40°-50°	746.0	10.8
50°-60°	702.1	10.2
60°-70°	582.6	8.5
70°-80°	408.9	5.9
80°-90°	232.1	3.4
90°-100°	185.1	2.7
100°-110°	245.1	3.6
110°-120°	311.8	4.5
120°-130°	359.8	5.2
130°-140°	377.5	5.5
140°-150°	358.0	5.2
150°-160°	298.4	4.3
160°-170°	198.5	2.9
170°-180°	69.5	1.0
0°-30°	1103.7	16.0
0°-40°	1809.5	26.3
0°-60°	3257.6	47.3
0°-90°	4481.2	65.1
90°-120°	742.0	10.8
90°-150°	1837.4	26.7
90°-180°	2404.0	34.9
0°-180°	6885.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1423	1418	1407	1420	1418	135
15°	1364	1365	1361	1375	1373	384
25°	1248	1257	1262	1279	1281	575
35°	1092	1111	1127	1149	1154	684
45°	910	940	971	998	1006	704
55°	713	746	794	826	836	635
65°	493	544	598	638	651	489
75°	274	333	399	444	458	291
85°	84	151	223	270	286	88
90°	27	97	170	220	233	20
95°	55	112	182	226	241	53
105°	147	179	240	282	296	157
115°	257	272	321	356	366	254
125°	367	366	405	434	442	328
135°	468	472	483	507	515	363
145°	567	568	568	577	582	355
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

TEST NUMBER: P1001029

CATALOG NUMBER: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.1	1421.1	1421.1	1421.1	1421.1
2.5°	1427.4	1422.7	1409.9	1421.1	1419.5
5°	1422.7	1417.9	1406.7	1419.5	1417.9
7.5°	1413.1	1409.9	1400.4	1414.7	1413.1
10°	1400.4	1398.8	1390.8	1405.2	1403.6
12.5°	1382.9	1382.9	1378.1	1390.8	1390.8
15°	1363.8	1365.4	1360.6	1374.9	1373.3
17.5°	1338.3	1343.1	1341.5	1355.8	1354.2
20°	1311.3	1316.0	1317.6	1333.5	1333.5
22.5°	1281.0	1287.4	1290.6	1306.5	1309.7
25°	1247.6	1257.2	1261.9	1279.4	1281.0
27.5°	1211.0	1225.3	1231.7	1247.6	1249.2
30°	1174.4	1187.1	1198.3	1215.8	1219.0
32.5°	1134.6	1150.5	1163.3	1184.0	1187.1
35°	1091.7	1110.8	1126.7	1148.9	1153.7
37.5°	1048.7	1071.0	1090.1	1112.3	1117.1
40°	1007.3	1028.0	1050.3	1074.2	1080.5
42.5°	959.6	983.4	1010.5	1037.6	1042.3
45°	910.2	940.5	970.7	997.8	1005.7
47.5°	864.1	894.3	929.3	956.4	965.9
50°	813.2	848.2	883.2	915.0	924.6
52.5°	762.3	797.3	838.6	870.5	880.0
55°	712.9	746.3	794.1	825.9	835.5
57.5°	657.2	698.6	744.7	782.9	790.9
60°	603.1	644.5	697.0	733.6	746.3
62.5°	550.6	596.8	649.3	685.9	698.6
65°	493.3	544.2	598.3	638.1	650.9
67.5°	439.2	493.3	550.6	590.4	603.1
70°	383.5	437.6	498.1	541.1	552.2
72.5°	329.4	385.1	450.3	491.7	504.5
75°	273.7	332.6	399.4	444.0	458.3
77.5°	221.2	283.3	353.3	397.8	413.7
80°	173.5	237.1	307.1	354.9	367.6
82.5°	125.7	192.6	262.6	311.9	326.2
85°	84.3	151.2	222.8	270.5	286.4
87.5°	52.5	117.8	187.8	233.9	248.2
90°	27.2	97.1	170.0	219.6	233.4
92.5°	38.7	101.8	173.0	219.3	232.6
95°	54.8	112.4	181.6	226.3	240.6
97.5°	73.6	124.3	194.1	237.8	252.1
100°	97.0	140.7	207.8	252.0	263.1
102.5°	123.2	158.8	223.8	266.9	280.2
105°	146.7	179.1	240.2	281.7	296.1
107.5°	174.5	202.2	258.5	300.5	311.1
110°	201.3	224.8	279.9	315.4	329.8

TEST NUMBER: P1001029

CATALOG NUMBER: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.3	248.4	299.7	334.8	347.5
115°	257.2	271.6	321.4	355.8	366.4
117.5°	285.1	294.7	341.8	373.6	384.6
120°	311.4	318.4	362.9	391.8	405.7
122.5°	340.4	341.0	383.3	413.4	421.7
125°	367.2	365.6	404.8	433.9	442.3
127.5°	392.8	392.9	423.5	451.0	461.6
130°	418.4	418.5	443.9	471.5	478.7
132.5°	446.3	445.8	464.3	490.2	499.2
135°	468.5	472.0	483.1	507.4	515.2
137.5°	495.3	495.4	502.9	525.0	533.6
140°	522.0	521.5	523.1	543.2	550.6
142.5°	544.8	545.9	543.8	561.3	567.7
145°	566.9	567.6	568.2	577.1	581.8
147.5°	589.7	590.9	590.3	591.4	597.2
150°	610.1	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)