

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: P1001038

Luminaire Tested: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001038
REPORT IS A COMBINATION OF REPORTS P995654 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

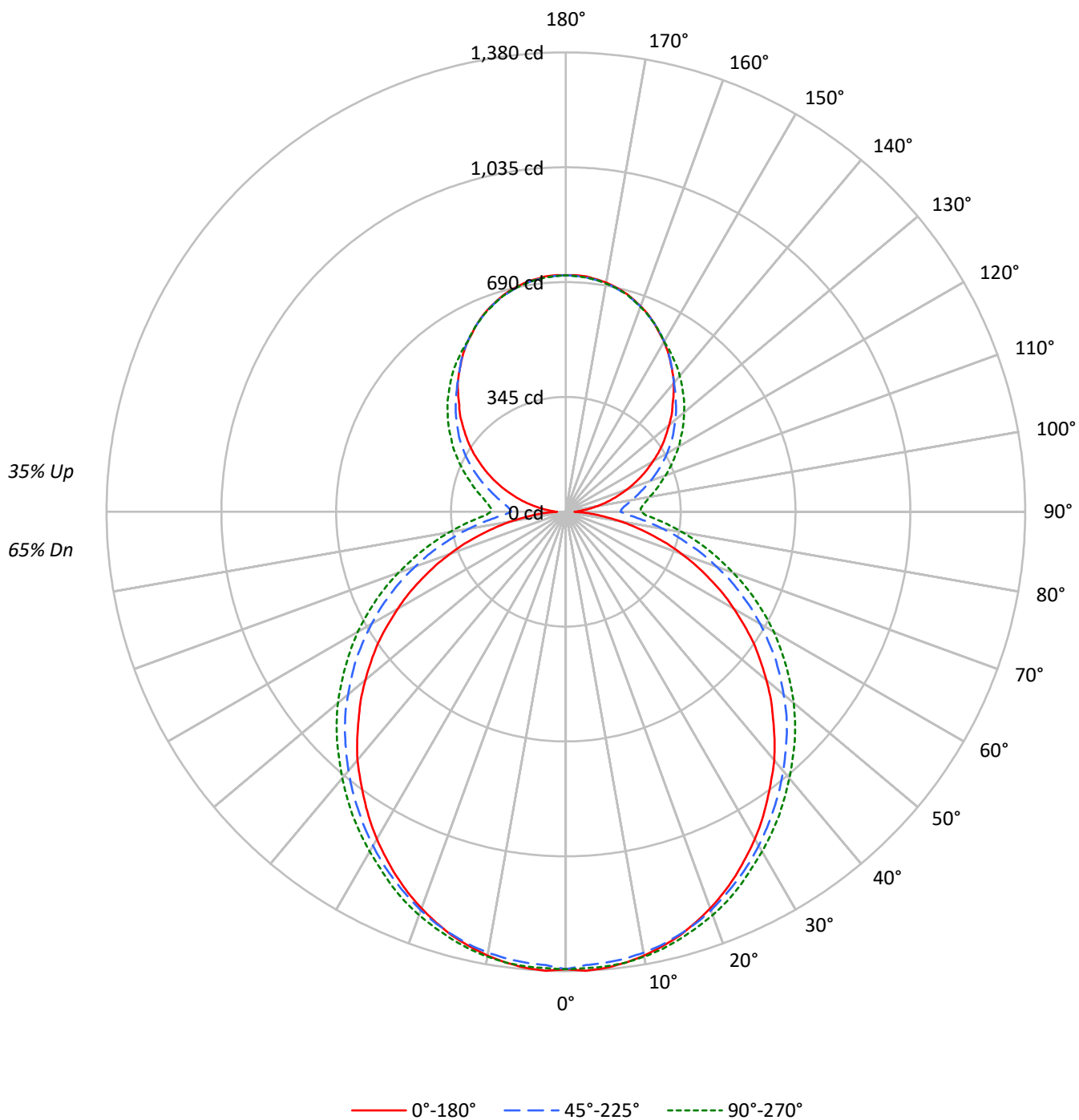
Lumens per Lamp: N/A
Luminaire Lumens: 6658.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1001038

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-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°	11205	11205	11205
5°	11236	10913	10933
10°	11163	10699	10668
15°	11059	10457	10369
20°	10904	10196	10078
25°	10729	9908	9765
30°	10541	9622	9446
35°	10327	9330	9162
40°	10156	9050	8867
45°	9903	8787	8607
50°	9686	8488	8332
55°	9463	8201	8017
60°	9117	7842	7719
65°	8735	7456	7361
70°	8272	7013	6947
75°	7628	6522	6553
80°	6897	6023	6141
85°	5938	5520	5806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9903 cd/sqm

TEST NUMBER: P1001038

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.0
10°-20°	373.1	5.6
20°-30°	564.1	8.5
30°-40°	682.4	10.2
40°-50°	721.4	10.8
50°-60°	678.9	10.2
60°-70°	563.4	8.5
70°-80°	395.4	5.9
80°-90°	224.4	3.4
90°-100°	179.0	2.7
100°-110°	237.0	3.6
110°-120°	301.6	4.5
120°-130°	347.9	5.2
130°-140°	365.1	5.5
140°-150°	346.3	5.2
150°-160°	288.6	4.3
160°-170°	192.0	2.9
170°-180°	67.2	1.0
0°-30°	1067.3	16.0
0°-40°	1749.7	26.3
0°-60°	3150.1	47.3
0°-90°	4333.2	65.1
90°-120°	717.6	10.8
90°-150°	1776.9	26.7
90°-180°	2325.0	34.9
0°-180°	6658.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1376	1371	1360	1373	1371	131
15°	1319	1320	1316	1330	1328	372
25°	1206	1216	1220	1237	1239	556
35°	1056	1074	1090	1111	1116	661
45°	880	909	939	965	972	680
55°	689	722	768	799	808	614
65°	477	526	579	617	629	473
75°	265	322	386	429	443	281
85°	82	146	215	262	277	85
90°	26	94	164	212	226	19
95°	53	109	176	219	233	52
105°	142	173	232	272	286	151
115°	249	263	311	344	354	246
125°	355	354	392	420	428	317
135°	453	456	467	491	498	351
145°	548	549	550	558	563	343
155°	626	626	626	628	626	288
165°	682	680	679	682	680	192
175°	709	707	706	710	706	67
180°	710	710	710	710	710	

TEST NUMBER: P1001038

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.1	1374.1	1374.1	1374.1	1374.1
2.5°	1380.3	1375.7	1363.4	1374.1	1372.6
5°	1375.7	1371.1	1360.3	1372.6	1371.1
7.5°	1366.4	1363.4	1354.1	1368.0	1366.4
10°	1354.1	1352.6	1344.9	1358.8	1357.2
12.5°	1337.2	1337.2	1332.6	1344.9	1344.9
15°	1318.7	1320.3	1315.7	1329.5	1328.0
17.5°	1294.1	1298.7	1297.2	1311.0	1309.5
20°	1268.0	1272.6	1274.1	1289.5	1289.5
22.5°	1238.7	1244.9	1248.0	1263.3	1266.4
25°	1206.4	1215.6	1220.3	1237.2	1238.7
27.5°	1171.0	1184.9	1191.0	1206.4	1207.9
30°	1135.6	1147.9	1158.7	1175.6	1178.7
32.5°	1097.2	1112.5	1124.9	1144.9	1147.9
35°	1055.6	1074.1	1089.5	1111.0	1115.6
37.5°	1014.1	1035.6	1054.1	1075.6	1080.2
40°	974.1	994.1	1015.6	1038.7	1044.8
42.5°	927.9	951.0	977.1	1003.3	1007.9
45°	880.2	909.4	938.7	964.8	972.5
47.5°	835.6	864.8	898.7	924.8	934.0
50°	786.3	820.2	854.0	884.8	894.0
52.5°	737.1	770.9	810.9	841.7	850.9
55°	689.4	721.7	767.9	798.6	807.9
57.5°	635.5	675.5	720.2	757.1	764.8
60°	583.2	623.2	674.0	709.4	721.7
62.5°	532.4	577.0	627.8	663.2	675.5
65°	477.0	526.3	578.6	617.1	629.4
67.5°	424.7	477.0	532.4	570.9	583.2
70°	370.8	423.2	481.6	523.2	534.0
72.5°	318.5	372.4	435.5	475.5	487.8
75°	264.7	321.6	386.2	429.3	443.2
77.5°	213.9	273.9	341.6	384.7	400.1
80°	167.7	229.3	297.0	343.1	355.5
82.5°	121.6	186.2	253.9	301.6	315.5
85°	81.6	146.2	215.4	261.6	277.0
87.5°	50.8	113.9	181.6	226.2	240.1
90°	26.2	93.9	164.4	212.4	225.8
92.5°	37.4	98.3	167.3	212.0	224.9
95°	53.0	108.7	175.7	218.8	232.7
97.5°	71.3	120.3	187.7	229.9	243.7
100°	93.8	136.0	201.0	243.7	254.5
102.5°	119.1	153.6	216.5	258.1	271.0
105°	141.8	173.2	232.4	272.4	286.4
107.5°	168.8	195.5	250.0	290.6	300.8
110°	194.7	217.4	270.7	305.0	318.9

TEST NUMBER: P1001038

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	240.2	289.9	323.8	336.1
115°	248.8	262.7	310.8	344.1	354.3
117.5°	275.7	285.0	330.6	361.2	372.0
120°	301.1	307.9	350.9	378.9	392.3
122.5°	329.2	329.7	370.7	399.8	407.9
125°	355.1	353.5	391.5	419.6	427.8
127.5°	379.9	379.9	409.6	436.2	446.5
130°	404.7	404.8	429.4	456.0	463.0
132.5°	431.6	431.2	449.0	474.1	482.8
135°	453.2	456.5	467.2	490.8	498.3
137.5°	479.0	479.0	486.3	507.8	516.0
140°	504.8	504.3	505.9	525.4	532.5
142.5°	526.8	527.9	525.9	542.8	549.0
145°	548.3	549.0	549.5	558.2	562.7
147.5°	570.3	571.5	571.0	571.9	577.6
150°	590.0	590.7	590.7	590.7	590.2
152.5°	607.2	608.3	608.9	610.5	608.9
155°	626.5	626.5	625.9	628.1	625.9
157.5°	642.9	641.8	641.8	643.5	641.8
160°	657.2	656.7	656.1	657.8	655.0
162.5°	670.4	668.8	668.2	671.5	668.8
165°	682.0	680.3	679.2	682.5	680.3
167.5°	691.3	689.1	689.1	692.4	689.1
170°	699.0	696.3	696.8	700.1	696.3
172.5°	704.5	702.3	702.3	706.1	702.3
175°	709.4	706.7	706.1	710.0	706.1
177.5°	711.6	708.9	708.9	712.7	708.3
180°	710.5	710.5	710.5	710.5	710.5

(END OF REPORT)