

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: P1001039

Luminaire Tested: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001039
REPORT IS A COMBINATION OF REPORTS P995655 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-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

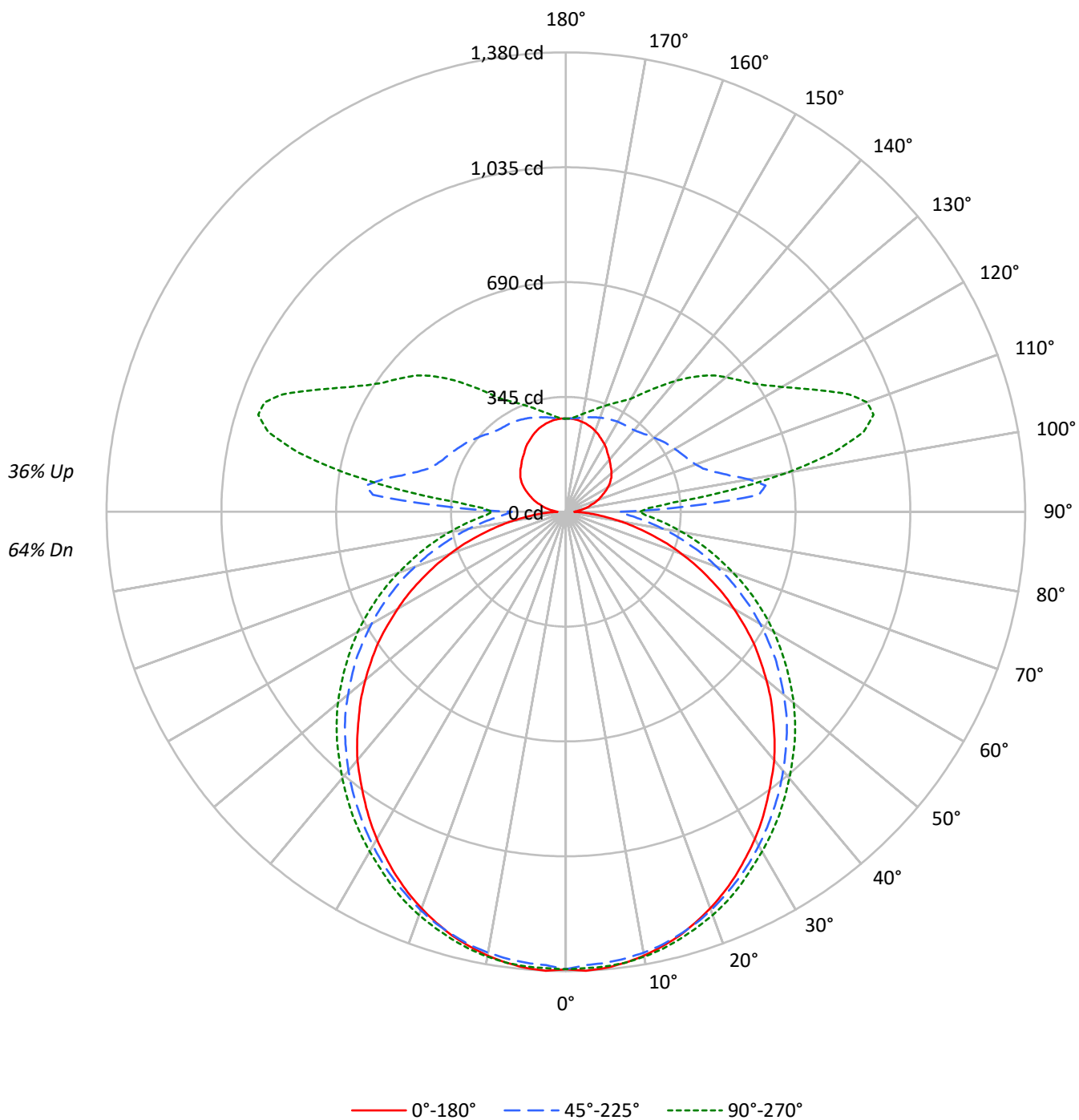
Lumens per Lamp: N/A
Luminaire Lumens: 6728.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1001039

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1001039

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

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	91	91	91	80	80	80	69	69	69
1	100	95	90	86	93	89	85	81	78	75	72	68	66	64	59	58	56
2	90	82	75	69	84	77	71	66	68	63	59	59	56	52	51	49	46
3	82	72	64	57	77	67	60	54	59	54	49	52	47	44	45	42	39
4	75	63	55	48	70	59	52	46	53	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	32	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	55	43	35	30	38	32	27	34	28	25	30	25	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	23	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	21	29	23	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: P1001039

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.9
10°-20°	373.1	5.5
20°-30°	564.1	8.4
30°-40°	682.4	10.1
40°-50°	721.4	10.7
50°-60°	678.9	10.1
60°-70°	563.4	8.4
70°-80°	395.4	5.9
80°-90°	224.0	3.3
90°-100°	340.5	5.1
100°-110°	521.0	7.7
110°-120°	442.7	6.6
120°-130°	353.6	5.3
130°-140°	280.2	4.2
140°-150°	204.9	3.0
150°-160°	141.8	2.1
160°-170°	83.4	1.2
170°-180°	27.1	0.4
0°-30°	1067.3	15.9
0°-40°	1749.7	26.0
0°-60°	3150.1	46.8
0°-90°	4332.8	64.4
90°-120°	1304.2	19.4
90°-150°	2142.9	31.9
90°-180°	2395.0	35.6
0°-180°	6728.0	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°	25	91	162	208	221	18
95°	38	128	582	397	323	36
105°	78	138	462	916	926	84
115°	122	165	394	724	860	122
125°	164	192	363	598	674	147
135°	191	226	331	505	578	148
145°	218	247	316	403	448	137
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

TEST NUMBER: P1001039

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

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°	25.1	90.6	162.2	208.0	220.8
92.5°	30.8	119.2	358.6	257.4	248.5
95°	38.1	128.0	581.9	397.2	323.4
97.5°	48.7	126.3	605.6	619.2	502.1
100°	58.7	128.4	558.9	785.2	673.4
102.5°	69.7	132.1	504.5	884.8	824.0
105°	78.1	137.8	462.2	916.4	925.8
107.5°	90.8	145.2	432.0	896.4	969.3
110°	101.9	151.2	415.3	843.2	962.7

TEST NUMBER: P1001039

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.5	158.6	402.7	780.2	921.1
115°	122.4	165.2	393.9	724.1	859.6
117.5°	134.5	172.4	385.6	676.8	800.8
120°	145.1	177.8	377.9	642.1	749.8
122.5°	156.1	184.4	369.7	617.6	707.6
125°	164.0	192.0	363.0	598.1	674.2
127.5°	172.8	202.0	354.2	577.6	651.1
130°	178.3	210.0	346.0	556.4	628.6
132.5°	185.5	218.3	339.2	532.8	606.1
135°	190.6	226.2	331.0	505.2	577.6
137.5°	197.2	231.6	324.9	477.8	545.9
140°	204.3	237.9	319.7	450.8	513.5
142.5°	210.4	243.6	316.6	426.7	479.4
145°	217.5	247.4	315.5	402.8	448.0
147.5°	225.8	252.3	313.9	381.6	418.3
150°	233.5	257.0	312.2	367.8	392.5
152.5°	239.1	261.4	309.5	357.4	376.0
155°	245.7	265.2	306.7	347.4	362.3
157.5°	252.3	268.8	304.0	338.0	349.6
160°	258.4	271.8	300.7	328.7	338.1
162.5°	263.9	274.3	297.4	319.6	327.1
165°	267.7	276.0	294.1	311.4	316.1
167.5°	272.1	277.4	290.8	304.2	307.3
170°	274.9	278.5	287.5	297.1	299.0
172.5°	277.6	279.2	284.2	290.8	290.8
175°	279.3	279.8	282.0	285.9	284.8
177.5°	280.4	279.8	280.4	282.3	280.4
180°	279.8	279.8	279.8	279.8	279.8

(END OF REPORT)