

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: P1001037

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001037
REPORT IS A COMBINATION OF REPORTS P995653 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-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

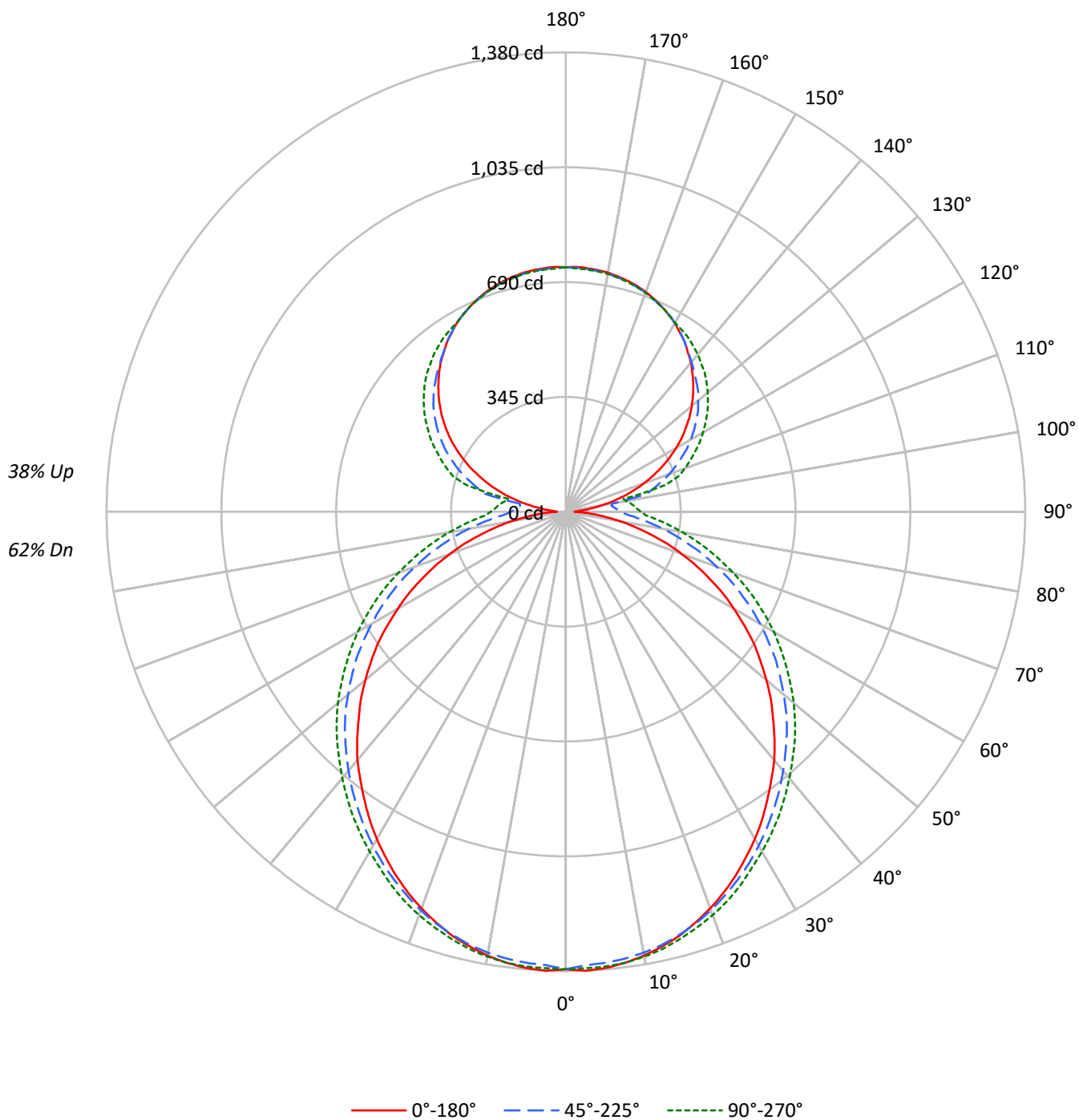
Lumens per Lamp: N/A
Luminaire Lumens: 6960.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1001037

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

Luminous Intensity Polar Plot



TEST NUMBER: P1001037

CATALOG NUMBER: SA4XXDIP-B1195D590UB50-4F0-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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	93	88	84	81	77	74	72	67	65	63	58	56	54
2	90	82	75	69	84	77	71	65	67	62	58	58	55	51	50	47	45
3	82	71	63	57	76	67	60	54	59	53	48	51	47	43	44	40	38
4	75	63	54	48	69	59	51	46	52	46	41	45	40	36	39	35	32
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28
6	63	50	41	35	59	47	39	34	42	35	30	36	31	27	32	27	24
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	29	25	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	33	26	21	29	23	19	26	21	17	23	18	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: P1001037

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.9
10°-20°	373.1	5.4
20°-30°	564.1	8.1
30°-40°	682.4	9.8
40°-50°	721.4	10.4
50°-60°	678.9	9.8
60°-70°	563.4	8.1
70°-80°	395.4	5.7
80°-90°	224.4	3.2
90°-100°	157.1	2.3
100°-110°	258.9	3.7
110°-120°	372.6	5.4
120°-130°	426.5	6.1
130°-140°	432.6	6.2
140°-150°	392.6	5.6
150°-160°	314.1	4.5
160°-170°	202.6	2.9
170°-180°	69.8	1.0
0°-30°	1067.3	15.3
0°-40°	1749.7	25.1
0°-60°	3150.1	45.3
0°-90°	4333.2	62.3
90°-120°	788.6	11.3
90°-150°	2040.3	29.3
90°-180°	2627.0	37.7
0°-180°	6960.0	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	18
95°	50	82	146	191	205	53
105°	179	213	273	316	309	189
115°	318	334	382	417	428	314
125°	440	441	478	509	519	394
135°	542	541	554	580	590	418
145°	622	623	623	632	640	389
155°	681	681	680	682	680	314
165°	718	716	716	720	715	203
175°	735	731	732	737	730	70
180°	735	735	735	735	735	

TEST NUMBER: P1001037

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

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°	31.3	84.0	154.6	201.0	213.3
95°	50.2	82.3	146.0	190.8	205.2
97.5°	76.2	132.9	138.3	181.0	195.4
100°	107.0	156.9	141.1	173.3	184.7
102.5°	143.3	183.8	248.9	165.2	177.5
105°	179.2	213.3	273.1	316.4	308.9
107.5°	214.9	242.8	300.5	341.7	354.7
110°	249.7	272.9	330.0	366.5	380.5

TEST NUMBER: P1001037

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	305.1	357.0	390.3	404.8
115°	318.0	333.6	382.2	417.2	427.9
117.5°	350.5	362.0	409.7	441.5	453.9
120°	381.9	388.7	432.8	464.7	475.9
122.5°	412.7	413.8	456.4	487.8	497.5
125°	440.3	440.9	478.3	509.2	519.0
127.5°	468.4	467.3	500.9	528.0	538.3
130°	493.7	492.7	519.0	547.2	556.4
132.5°	518.4	518.0	538.6	565.4	574.0
135°	541.6	541.1	554.0	579.8	590.1
137.5°	563.6	562.0	571.0	595.2	602.3
140°	585.1	584.6	587.2	608.9	617.1
142.5°	602.7	604.9	603.9	621.9	628.1
145°	622.5	622.6	622.6	632.4	639.7
147.5°	637.9	639.7	639.1	641.2	647.9
150°	654.9	655.6	655.0	655.0	655.6
152.5°	667.7	669.3	668.2	669.3	668.8
155°	680.9	681.4	679.8	682.0	680.3
157.5°	692.4	692.4	690.2	693.0	690.2
160°	702.3	700.6	700.1	703.4	700.1
162.5°	711.1	708.9	708.3	711.6	707.8
165°	718.2	715.5	715.5	719.9	714.9
167.5°	724.3	721.5	721.0	725.9	720.4
170°	729.2	725.9	726.5	730.9	725.4
172.5°	732.5	729.2	729.8	734.2	728.1
175°	734.7	731.4	732.0	736.9	730.3
177.5°	736.4	732.5	733.6	738.0	731.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)