

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: P1000978

Luminaire Tested: SA4XXDIP-B1195D365UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000978
REPORT IS A COMBINATION OF REPORTS P995594 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D365UB50-4F0-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

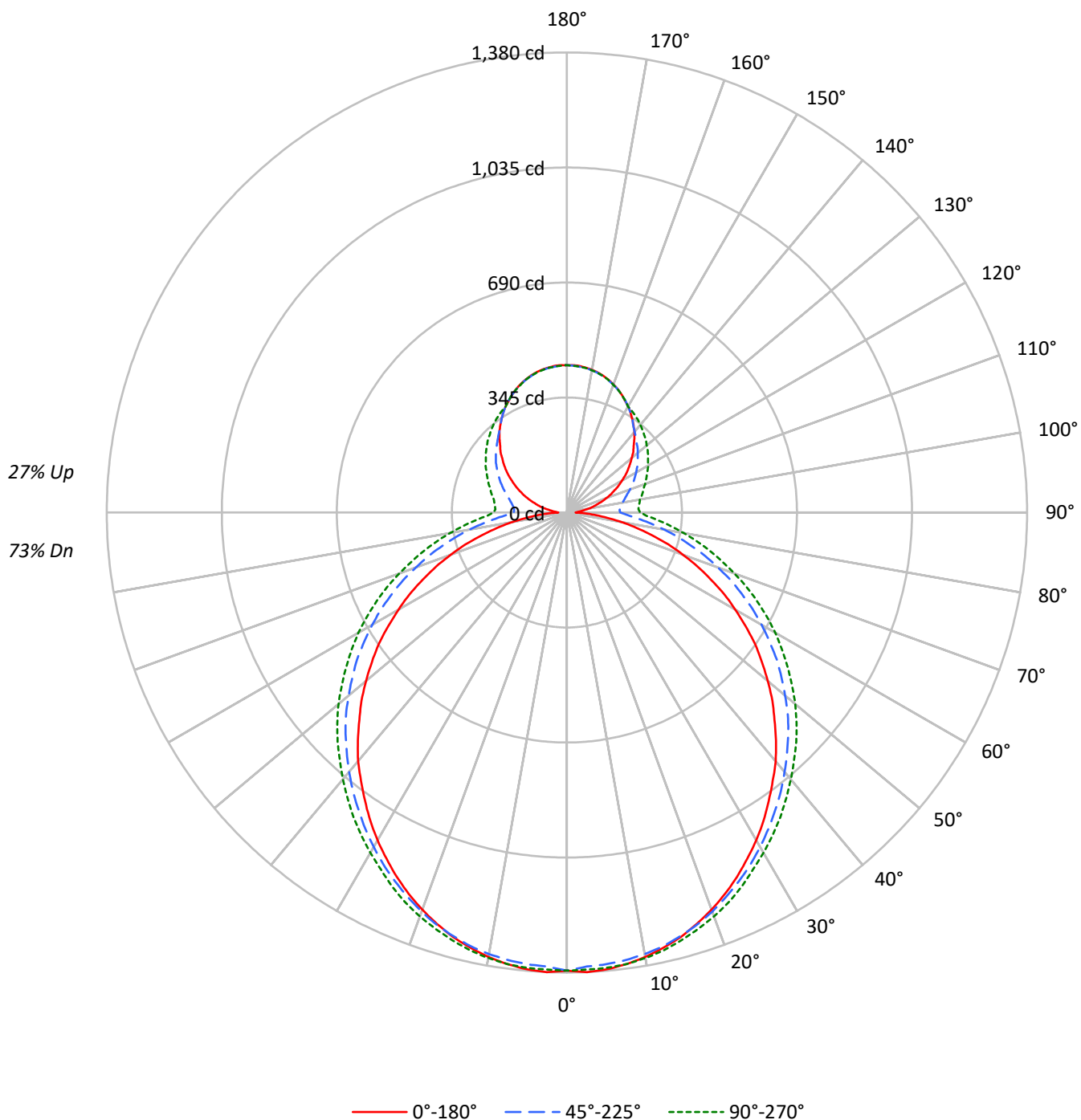
Lumens per Lamp: N/A
Luminaire Lumens: 5912.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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: P1000978

CATALOG NUMBER: SA4XXDIP-B1195D365UB50-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1000978

CATALOG NUMBER: SA4XXDIP-B1195D365UB50-4F0-XX-W2A-D1

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
RCR																	
0	113	113	113	113	107	107	107	107	96	96	96		86	86	86		78
1	102	96	92	88	96	92	87	84	82	79	76		74	71	69		66
2	92	83	76	70	87	79	73	68	71	66	62		64	60	57		57
3	83	73	65	58	79	69	62	56	62	56	51		56	51	47		50
4	76	64	55	49	72	61	53	47	55	49	43		50	44	40		45
5	70	57	48	42	66	54	46	40	49	43	37		45	39	35		40
6	64	51	42	36	61	49	41	35	44	38	32		40	34	30		36
7	60	46	38	32	56	44	36	31	40	33	29		37	31	27		33
8	55	42	34	28	52	40	32	27	37	30	25		33	28	24		30
9	52	38	30	25	49	37	29	24	34	27	23		31	25	21		28
10	48	35	28	22	46	34	27	22	31	25	21		28	23	19		26

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: P1000978

CATALOG NUMBER: SA4XXDIP-B1195D365UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.2
10°-20°	373.1	6.3
20°-30°	564.1	9.5
30°-40°	682.4	11.5
40°-50°	721.4	12.2
50°-60°	678.9	11.5
60°-70°	563.4	9.5
70°-80°	395.4	6.7
80°-90°	223.8	3.8
90°-100°	161.5	2.7
100°-110°	184.5	3.1
110°-120°	212.5	3.6
120°-130°	230.4	3.9
130°-140°	233.1	3.9
140°-150°	216.5	3.7
150°-160°	179.5	3.0
160°-170°	119.4	2.0
170°-180°	41.8	0.7
0°-30°	1067.3	18.1
0°-40°	1749.7	29.6
0°-60°	3150.1	53.3
0°-90°	4332.7	73.3
90°-120°	558.5	9.4
90°-150°	1238.6	21.0
90°-180°	1579.0	26.7
0°-180°	5912.0	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	91	160	207	220	18
95°	40	94	160	202	216	38
105°	93	125	183	222	236	100
115°	158	172	221	254	264	157
125°	223	222	260	288	297	199
135°	283	285	296	320	328	219
145°	342	341	342	351	356	214
155°	390	390	389	391	389	179
165°	424	423	422	424	423	120
175°	441	440	439	442	439	42
180°	442	442	442	442	442	

TEST NUMBER: P1000978

CATALOG NUMBER: SA4XXDIP-B1195D365UB50-4F0-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°	25.6	91.0	159.8	206.6	219.6
92.5°	32.0	90.2	158.1	202.3	214.9
95°	40.5	94.4	159.9	202.4	216.3
97.5°	51.3	98.6	164.5	205.8	219.6
100°	64.7	106.1	169.2	211.5	222.3
102.5°	80.5	114.7	175.9	217.0	229.6
105°	93.4	124.6	182.9	222.4	235.7
107.5°	110.2	136.7	191.0	230.7	241.2
110°	125.8	148.0	201.5	236.2	249.5



TEST NUMBER: P1000978

CATALOG NUMBER: SA4XXDIP-B1195D365UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	142.0	160.4	210.5	244.4	256.7
115°	158.2	172.1	220.6	254.2	264.5
117.5°	174.9	184.2	230.0	261.3	272.7
120°	190.2	196.2	239.7	268.8	281.8
122.5°	207.6	208.0	249.1	278.9	288.0
125°	223.2	221.6	259.8	288.3	296.9
127.5°	238.6	238.0	268.1	295.1	305.6
130°	253.4	252.9	277.5	304.5	312.4
132.5°	270.1	269.3	287.4	312.9	321.8
135°	283.0	285.0	295.7	319.8	327.9
137.5°	299.1	298.5	305.4	327.4	335.5
140°	315.1	314.2	315.8	335.5	342.8
142.5°	328.2	328.9	327.1	344.0	350.2
145°	341.5	341.4	341.7	350.6	355.8
147.5°	355.2	355.4	355.1	356.2	362.1
150°	367.5	367.4	367.4	367.4	367.0
152.5°	377.6	378.3	378.7	379.7	378.7
155°	389.6	389.6	389.3	390.6	389.3
157.5°	399.8	399.2	399.2	400.2	399.2
160°	408.7	408.4	408.0	409.1	407.4
162.5°	416.9	415.9	415.6	417.6	415.9
165°	424.1	423.1	422.4	424.5	423.1
167.5°	429.9	428.6	428.6	430.6	428.6
170°	434.7	433.0	433.3	435.4	433.0
172.5°	438.1	436.8	436.8	439.1	436.8
175°	441.2	439.5	439.1	441.5	439.1
177.5°	442.6	440.9	440.9	443.2	440.5
180°	441.9	441.9	441.9	441.9	441.9

(END OF REPORT)