

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: P1008797

Luminaire Tested: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008797
REPORT IS A COMBINATION OF REPORTS P983867 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D1080UB40-4F0-XX-W2A-F1
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

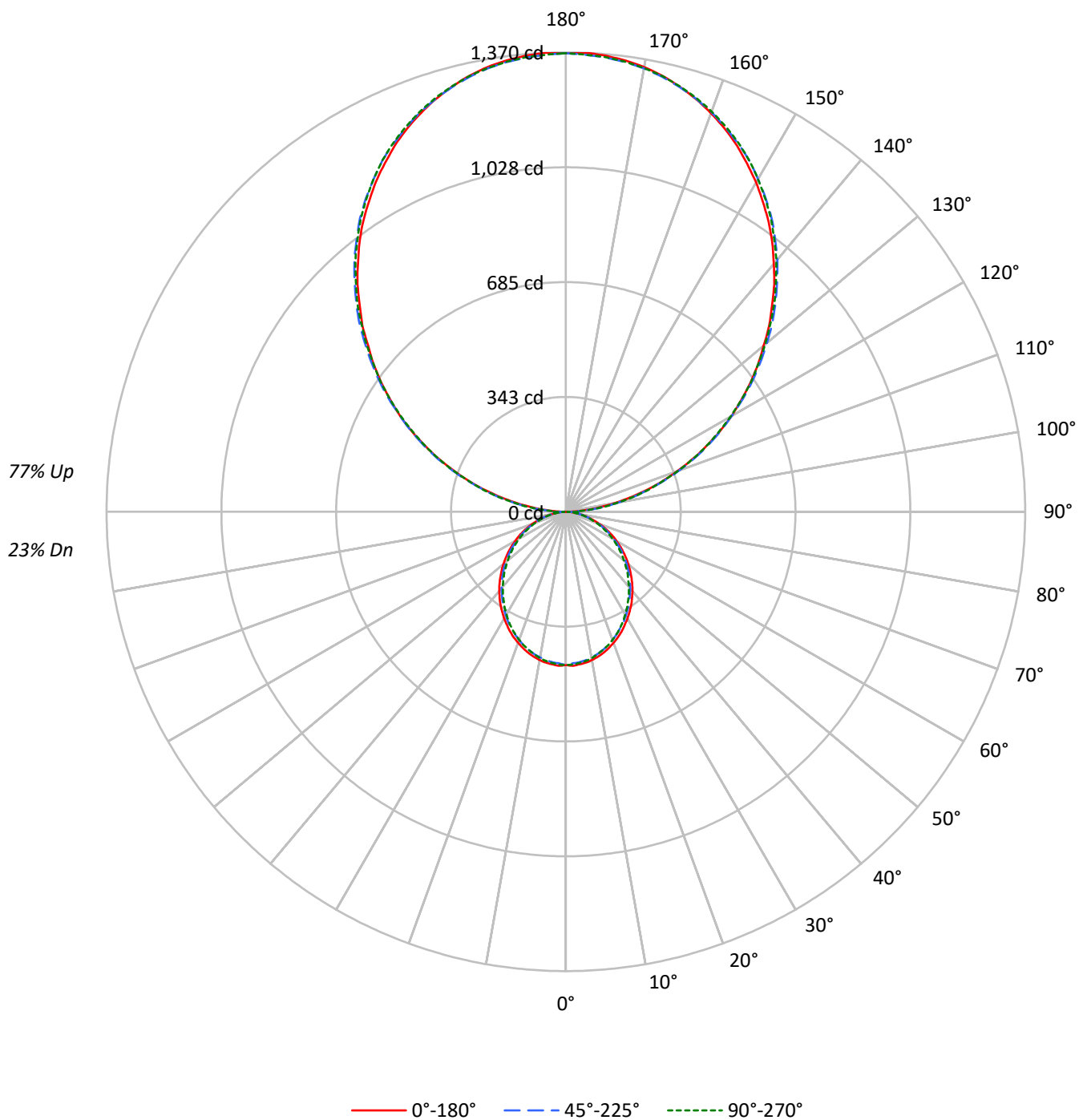
Lumens per Lamp: N/A
Luminaire Lumens: 4991.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 48
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: P1008797

CATALOG NUMBER: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1008797

CATALOG NUMBER: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27
2	84	76	71	66	74	68	63	59	52	49	46	38	36	34	25	23	22
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	22	20	19
4	70	59	52	46	62	53	47	42	41	36	33	30	27	25	19	18	16
5	64	53	45	39	56	47	40	35	36	32	28	27	24	21	17	16	14
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	13	11
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9
10	43	32	25	20	38	29	22	18	22	18	15	17	14	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7236	7236	7236
5°	7247	6897	6849
10°	7189	6583	6453
15°	7083	6266	6036
20°	6941	5921	5641
25°	6799	5561	5247
30°	6622	5223	4834
35°	6453	4866	4428
40°	6246	4515	4044
45°	6039	4166	3667
50°	5813	3811	3278
55°	5574	3431	2907
60°	5307	3019	2523
65°	5016	2603	2118
70°	4643	2144	1711
75°	4128	1654	1321
80°	3513	1123	849
85°	2543	521	362

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6039 cd/sqm

TEST NUMBER: P1008797

CATALOG NUMBER: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	0.9
10°-20°	121.1	2.4
20°-30°	177.9	3.6
30°-40°	206.6	4.1
40°-50°	206.4	4.1
50°-60°	179.9	3.6
60°-70°	133.0	2.7
70°-80°	75.3	1.5
80°-90°	23.7	0.5
90°-100°	84.6	1.7
100°-110°	269.0	5.4
110°-120°	460.3	9.2
120°-130°	605.3	12.1
130°-140°	679.5	13.6
140°-150°	666.3	13.4
150°-160°	558.9	11.2
160°-170°	370.7	7.4
170°-180°	129.6	2.6
0°-30°	342.0	6.9
0°-40°	548.6	11.0
0°-60°	934.9	18.7
0°-90°	1166.9	23.4
90°-120°	813.9	16.3
90°-150°	2764.9	55.4
90°-180°	3824.0	76.6
0°-180°	4991.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	450	454	453	43
15°	435	432	427	429	426	123
25°	394	390	383	384	383	181
35°	340	335	328	326	324	212
45°	276	273	267	262	260	213
55°	209	207	201	196	194	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	15	40	38	39	5
95°	60	72	74	74	72	67
105°	248	252	254	256	256	262
115°	462	469	466	465	462	457
125°	672	682	679	675	674	600
135°	869	882	884	883	880	672
145°	1055	1063	1070	1071	1066	659
155°	1206	1210	1213	1219	1215	555
165°	1312	1311	1311	1319	1314	370
175°	1366	1362	1360	1368	1361	130
180°	1368	1368	1368	1368	1368	

TEST NUMBER: P1008797

CATALOG NUMBER: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.1	457.1	457.1	457.1	457.1
2.5°	459.8	457.6	452.7	457.1	456.2
5°	457.1	455.4	450.5	454.0	453.2
7.5°	454.0	451.4	446.6	450.1	449.2
10°	449.2	446.1	440.9	444.4	443.1
12.5°	442.6	440.0	434.7	436.9	436.0
15°	435.1	432.5	426.8	428.6	426.4
17.5°	425.9	423.3	417.6	419.8	417.6
20°	415.8	413.2	407.0	408.3	406.6
22.5°	405.7	401.7	396.0	396.0	395.1
25°	393.8	390.3	382.8	383.7	382.8
27.5°	380.6	377.6	371.9	370.5	368.3
30°	367.5	363.9	357.3	356.0	354.3
32.5°	353.4	350.8	343.7	341.1	339.3
35°	339.8	335.4	328.3	325.7	323.5
37.5°	324.4	320.4	313.4	310.3	308.1
40°	308.6	305.0	298.0	294.1	292.3
42.5°	293.2	289.7	282.6	278.2	275.6
45°	276.5	273.4	266.8	262.0	260.2
47.5°	260.2	257.1	250.1	245.3	242.6
50°	243.1	240.9	234.7	228.6	226.4
52.5°	226.4	223.3	217.6	212.7	209.7
55°	209.2	206.6	201.3	196.0	193.8
57.5°	192.1	189.9	184.2	178.9	177.1
60°	174.9	173.2	167.0	162.2	160.9
62.5°	158.2	155.2	150.8	146.4	144.6
65°	141.1	138.5	134.1	130.1	127.9
67.5°	123.5	121.3	117.4	114.3	112.5
70°	107.2	105.5	101.5	98.5	96.7
72.5°	90.5	88.8	86.6	83.5	82.2
75°	73.8	73.0	70.8	68.1	69.0
77.5°	58.9	57.1	56.3	54.9	53.6
80°	44.0	43.5	42.6	41.3	40.4
82.5°	29.9	29.9	29.4	27.7	27.7
85°	18.0	17.6	17.1	15.8	15.4
87.5°	7.9	7.0	6.2	4.8	4.4
90°	1.2	15.0	40.4	38.1	39.2
92.5°	25.4	34.6	35.8	36.9	36.9
95°	60.0	71.6	73.9	73.9	71.6
97.5°	100.4	110.8	115.4	115.4	115.4
100°	146.6	155.8	159.3	159.3	158.1
102.5°	195.1	202.0	206.6	207.8	206.6
105°	248.2	251.6	253.9	256.2	256.2
107.5°	301.3	305.9	305.9	307.0	301.3
110°	352.0	359.0	359.0	359.0	355.5

TEST NUMBER: P1008797

CATALOG NUMBER: S122DIP-B290D1080UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	407.5	414.4	413.2	409.8	407.5
115°	461.7	468.6	466.3	465.2	461.7
117.5°	516.0	525.2	519.4	516.0	512.5
120°	570.2	579.4	570.2	570.2	566.7
122.5°	619.8	631.4	625.6	622.1	619.8
125°	671.8	682.2	678.7	675.2	674.1
127.5°	722.6	735.3	730.6	726.0	722.6
130°	769.9	784.9	782.6	780.3	775.7
132.5°	823.0	834.5	835.7	829.9	826.5
135°	869.2	881.9	884.2	883.0	879.5
137.5°	919.9	930.3	932.6	931.5	926.9
140°	965.0	975.4	981.1	981.1	976.5
142.5°	1011.1	1021.5	1025.0	1026.1	1021.5
145°	1055.0	1063.1	1070.0	1071.2	1066.5
147.5°	1094.2	1104.6	1109.2	1111.6	1106.9
150°	1134.6	1141.6	1146.2	1149.6	1146.2
152.5°	1170.4	1177.3	1183.1	1187.7	1183.1
155°	1206.2	1209.7	1213.1	1218.9	1215.4
157.5°	1237.4	1239.7	1242.0	1250.1	1244.3
160°	1265.1	1267.4	1268.5	1275.5	1270.8
162.5°	1290.5	1290.5	1291.6	1299.7	1293.9
165°	1312.4	1311.2	1311.2	1319.3	1313.5
167.5°	1332.0	1328.6	1328.6	1336.6	1330.9
170°	1347.0	1343.6	1342.4	1350.5	1343.6
172.5°	1357.4	1353.9	1352.8	1360.9	1353.9
175°	1365.5	1362.0	1359.7	1367.8	1360.9
177.5°	1370.1	1366.6	1364.3	1371.3	1364.3
180°	1367.8	1367.8	1367.8	1367.8	1367.8

(END OF REPORT)