

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: P1008802

Luminaire Tested: S122DIP-B290D1080UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008802
REPORT IS A COMBINATION OF REPORTS P983872 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D1080UB50-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

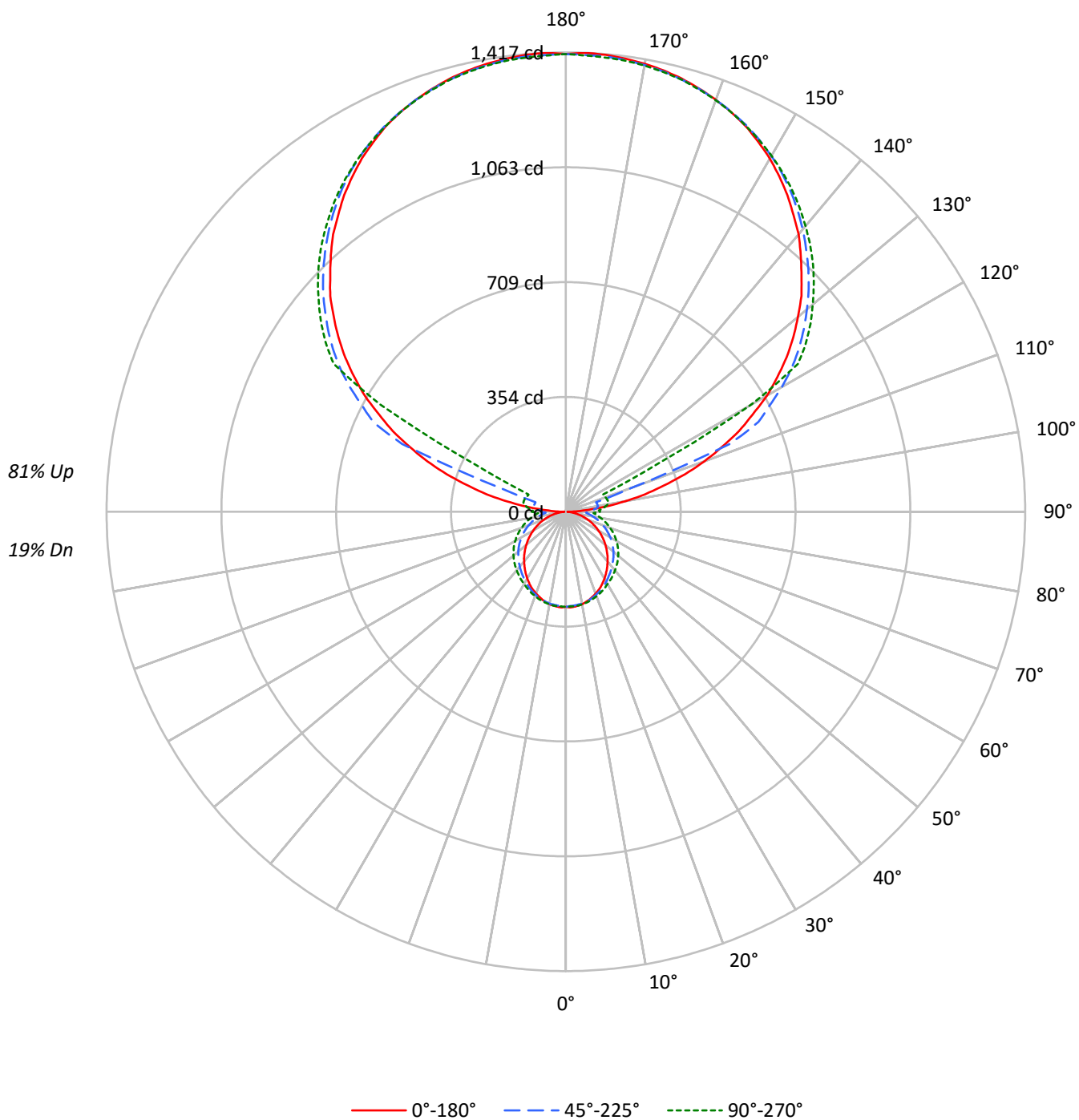
Lumens per Lamp: N/A
Luminaire Lumens: 5260.1 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1008802

CATALOG NUMBER: S122DIP-B290D1080UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1008802

CATALOG NUMBER: S122DIP-B290D1080UB50-4F0-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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	78	79	76	73	70	57	55	53	39	38	37	23	23	22
2	82	75	69	63	72	66	61	57	49	46	43	34	32	30	20	19	18
3	74	65	58	52	65	58	52	47	43	39	36	30	28	25	18	16	15
4	68	57	50	44	60	51	44	39	38	34	30	27	24	21	16	14	13
5	62	51	43	37	54	45	38	33	34	29	26	24	21	18	14	12	11
6	57	45	38	32	50	40	34	29	30	26	22	21	18	16	13	11	10
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	11	10	8
8	49	37	29	24	43	33	26	22	25	20	17	17	14	12	11	9	7
9	45	33	26	21	40	30	23	19	23	18	15	16	13	11	10	8	7
10	42	30	23	19	37	27	21	17	21	16	13	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4643	4643	4643
5°	4663	4444	4419
10°	4631	4290	4228
15°	4566	4131	4032
20°	4484	3963	3845
25°	4402	3803	3676
30°	4288	3641	3508
35°	4172	3483	3386
40°	4052	3348	3264
45°	3936	3226	3157
50°	3812	3112	3052
55°	3680	2991	2946
60°	3520	2866	2832
65°	3356	2723	2703
70°	3166	2568	2563
75°	2926	2413	2433
80°	2547	2250	2296
85°	2161	2101	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3936 cd/sqm

TEST NUMBER: P1008802

CATALOG NUMBER: S122DIP-B290D1080UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.5
10°-20°	79.7	1.5
20°-30°	120.8	2.3
30°-40°	147.1	2.8
40°-50°	158.3	3.0
50°-60°	153.7	2.9
60°-70°	134.3	2.6
70°-80°	103.3	2.0
80°-90°	71.7	1.4
90°-100°	94.3	1.8
100°-110°	208.4	4.0
110°-120°	483.2	9.2
120°-130°	776.1	14.8
130°-140°	816.2	15.5
140°-150°	754.5	14.3
150°-160°	605.8	11.5
160°-170°	390.4	7.4
170°-180°	134.4	2.6
0°-30°	228.3	4.3
0°-40°	375.5	7.1
0°-60°	687.5	13.1
0°-90°	996.7	18.9
90°-120°	786.0	14.9
90°-150°	3132.7	59.6
90°-180°	4263.0	81.0
0°-180°	5260.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	294	293	290	293	292	28
15°	280	281	281	285	285	79
25°	255	258	262	267	268	117
35°	220	227	235	244	247	137
45°	180	192	207	220	224	139
55°	138	153	176	191	196	124
65°	94	115	140	158	163	94
75°	52	76	103	122	127	55
85°	15	42	69	87	93	16
90°	5	41	76	99	106	7
95°	70	56	89	110	114	81
105°	313	356	99	125	134	334
115°	589	611	656	196	127	580
125°	831	845	878	896	903	742
135°	1028	1044	1058	1077	1078	794
145°	1192	1191	1208	1218	1215	746
155°	1313	1303	1316	1322	1314	605
165°	1383	1377	1380	1387	1380	391
175°	1415	1408	1410	1417	1407	135
180°	1412	1412	1412	1412	1412	

TEST NUMBER: P1008802

CATALOG NUMBER: S122DIP-B290D1080UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	293.3	293.3	293.3	293.3	293.3
2.5°	295.4	294.1	291.1	293.3	292.4
5°	294.1	292.8	290.3	292.8	292.4
7.5°	292.0	291.1	289.0	292.0	291.6
10°	289.4	288.6	287.3	290.7	290.3
12.5°	285.2	285.6	284.8	288.2	287.7
15°	280.5	281.4	281.4	285.2	284.8
17.5°	274.6	276.3	277.5	281.4	281.4
20°	268.6	270.7	272.4	277.1	277.1
22.5°	262.2	264.8	267.3	272.0	272.9
25°	255.0	258.0	261.8	266.9	268.2
27.5°	246.5	251.2	255.4	261.8	262.7
30°	238.0	243.5	249.1	255.9	257.1
32.5°	228.7	235.0	241.8	249.9	252.5
35°	219.7	227.0	235.0	244.4	247.4
37.5°	210.0	218.0	228.2	238.4	241.4
40°	200.2	209.5	221.0	232.1	235.9
42.5°	190.8	200.2	213.8	226.1	229.9
45°	180.2	191.7	206.6	219.7	224.0
47.5°	170.0	182.3	199.3	212.9	217.6
50°	159.4	172.6	191.7	206.1	210.8
52.5°	149.2	163.2	183.6	198.5	203.6
55°	138.1	153.4	175.5	190.8	196.4
57.5°	127.5	144.5	166.6	183.2	188.7
60°	116.0	134.3	158.5	174.7	180.6
62.5°	105.8	125.0	149.2	166.6	172.1
65°	94.4	115.2	140.3	157.7	163.2
67.5°	84.2	105.8	131.3	148.8	154.7
70°	73.1	95.2	121.6	139.8	144.9
72.5°	62.9	85.9	112.6	130.5	136.9
75°	52.3	76.1	103.3	121.6	127.1
77.5°	42.1	66.7	94.4	112.6	118.6
80°	31.9	57.8	85.4	103.3	109.2
82.5°	23.4	48.9	76.9	94.8	100.3
85°	15.3	41.7	68.9	86.7	92.7
87.5°	9.4	34.9	62.1	79.5	85.0
90°	5.3	41.2	76.5	98.6	105.8
92.5°	29.3	47.9	76.8	95.5	101.6
95°	69.8	56.1	88.7	109.9	114.0
97.5°	122.5	57.1	98.0	116.8	122.9
100°	183.8	59.6	100.7	124.6	131.3
102.5°	250.8	262.8	99.8	126.3	134.1
105°	312.6	355.7	98.9	124.9	133.7
107.5°	385.2	420.9	98.0	123.6	132.4
110°	454.2	484.2	209.8	121.2	130.0

TEST NUMBER: P1008802

CATALOG NUMBER: S122DIP-B290D1080UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	519.6	544.8	547.0	120.4	128.0
115°	589.0	611.1	655.7	195.6	126.7
117.5°	648.9	672.7	707.9	574.6	311.2
120°	716.3	733.3	768.7	792.9	659.7
122.5°	773.5	790.3	826.4	844.0	848.9
125°	831.4	844.6	877.6	896.2	903.2
127.5°	884.5	898.3	925.1	945.9	950.8
130°	934.5	950.4	970.6	992.0	994.4
132.5°	985.6	998.4	1016.0	1035.0	1037.4
135°	1028.0	1044.3	1057.8	1076.9	1078.3
137.5°	1072.9	1085.2	1097.6	1115.8	1115.8
140°	1116.9	1124.6	1136.8	1152.8	1150.2
142.5°	1153.6	1160.4	1173.7	1186.9	1183.9
145°	1192.1	1191.0	1208.4	1218.1	1215.1
147.5°	1225.8	1222.7	1240.1	1245.6	1242.8
150°	1258.4	1251.3	1267.6	1273.8	1268.7
152.5°	1286.0	1277.9	1293.2	1299.3	1292.2
155°	1312.6	1303.4	1315.7	1321.8	1313.6
157.5°	1334.0	1325.9	1335.1	1342.2	1334.0
160°	1352.4	1346.3	1352.4	1358.6	1351.4
162.5°	1368.8	1362.6	1367.7	1374.9	1365.7
165°	1383.1	1376.9	1380.0	1387.2	1380.0
167.5°	1394.3	1388.2	1391.2	1398.4	1389.2
170°	1403.5	1397.4	1399.4	1406.6	1397.4
172.5°	1409.6	1403.5	1405.5	1412.7	1403.5
175°	1414.7	1407.6	1409.6	1416.8	1406.6
177.5°	1416.8	1409.6	1410.6	1417.8	1408.6
180°	1411.7	1411.7	1411.7	1411.7	1411.7

(END OF REPORT)