

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: P1028233

Luminaire Tested: S125DIP-B850D1090UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028233
REPORT IS A COMBINATION OF REPORTS P1002475 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D1090UB50-4F0-XX-W2A-D4
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

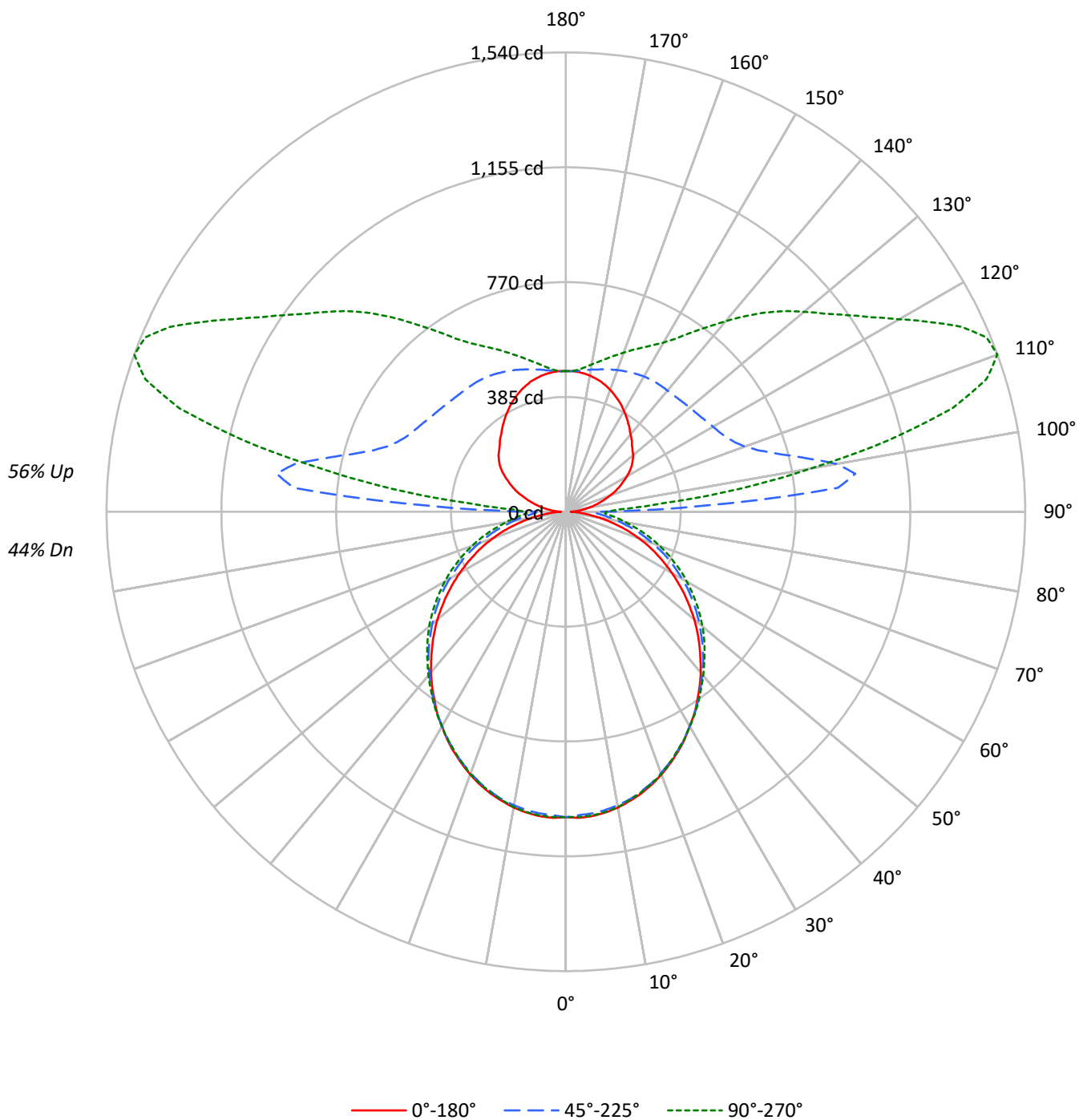
Lumens per Lamp: N/A
Luminaire Lumens: 6721.2 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 64.4
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: P1028233

CATALOG NUMBER: S125DIP-B850D1090UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1028233

CATALOG NUMBER: S125DIP-B850D1090UB50-4F0-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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6560	6560	6560
5°	6571	6423	6438
10°	6522	6292	6274
15°	6443	6139	6072
20°	6335	5955	5870
25°	6208	5760	5627
30°	6055	5546	5406
35°	5911	5349	5202
40°	5765	5142	4997
45°	5599	4962	4812
50°	5442	4767	4645
55°	5251	4580	4452
60°	5043	4368	4253
65°	4825	4145	4029
70°	4575	3845	3797
75°	4182	3549	3513
80°	3665	3190	3199
85°	3156	2904	3034

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5599 cd/sqm

TEST NUMBER: P1028233

CATALOG NUMBER: S125DIP-B850D1090UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	1.4
10°-20°	275.1	4.1
20°-30°	409.0	6.1
30°-40°	484.4	7.2
40°-50°	500.8	7.5
50°-60°	461.3	6.9
60°-70°	372.9	5.5
70°-80°	249.5	3.7
80°-90°	130.9	1.9
90°-100°	427.6	6.4
100°-110°	790.8	11.8
110°-120°	724.5	10.8
120°-130°	577.5	8.6
130°-140°	456.6	6.8
140°-150°	339.7	5.1
150°-160°	237.9	3.5
160°-170°	140.2	2.1
170°-180°	45.6	0.7
0°-30°	781.0	11.6
0°-40°	1265.4	18.8
0°-60°	2227.5	33.1
0°-90°	2980.9	44.4
90°-120°	1942.8	28.9
90°-150°	3316.6	49.3
90°-180°	3740.0	55.6
0°-180°	6721.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1024	1022	1015	1023	1022	97
15°	978	979	972	978	974	275
25°	888	891	885	889	884	409
35°	769	776	773	776	776	481
45°	633	644	650	656	658	489
55°	487	503	519	530	534	435
65°	335	358	382	398	402	333
75°	185	211	243	263	268	196
85°	55	88	124	146	154	58
90°	17	57	98	125	134	13
95°	44	132	915	477	326	43
105°	116	175	744	1432	1341	123
115°	198	244	592	1249	1466	195
125°	270	315	553	988	1149	240
135°	314	376	534	816	944	243
145°	364	416	528	663	733	228
155°	414	446	515	582	607	191
165°	452	465	494	524	532	127
175°	470	470	474	480	478	45
180°	471	471	471	471	471	

TEST NUMBER: P1028233

CATALOG NUMBER: S125DIP-B850D1090UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1023.9	1023.9	1023.9	1023.9	1023.9
2.5°	1027.0	1024.9	1017.9	1024.9	1023.9
5°	1023.9	1021.9	1014.9	1022.9	1021.9
7.5°	1016.9	1015.9	1008.9	1015.9	1014.9
10°	1006.9	1006.9	998.8	1005.9	1004.9
12.5°	992.8	993.8	987.8	992.8	989.8
15°	977.8	978.8	971.7	977.8	973.8
17.5°	958.7	960.7	953.7	958.7	955.7
20°	937.6	939.6	932.6	935.6	935.6
22.5°	913.5	917.5	909.5	913.5	910.5
25°	888.4	891.4	885.4	889.4	884.4
27.5°	861.3	865.3	858.3	861.3	859.3
30°	830.2	836.2	830.2	832.2	831.2
32.5°	802.1	807.1	803.1	805.1	804.1
35°	769.0	776.0	773.0	776.0	776.0
37.5°	736.8	742.9	741.9	745.9	744.9
40°	703.7	711.7	710.7	714.8	716.8
42.5°	667.6	678.6	681.6	686.6	686.6
45°	633.4	644.5	649.5	656.5	657.5
47.5°	598.3	608.3	616.4	626.4	628.4
50°	562.2	573.2	584.3	595.3	598.3
52.5°	524.0	538.1	552.1	564.2	566.2
55°	486.9	502.9	519.0	530.0	534.1
57.5°	448.7	467.8	485.9	497.9	500.9
60°	410.6	430.7	450.7	465.8	468.8
62.5°	373.4	393.5	415.6	432.7	436.7
65°	335.3	358.4	382.5	397.5	401.5
67.5°	300.2	322.2	346.3	364.4	369.4
70°	261.0	284.1	310.2	329.3	335.3
72.5°	222.9	247.0	276.1	297.1	301.2
75°	184.7	210.8	242.9	263.0	268.0
77.5°	147.6	177.7	207.8	229.9	233.9
80°	113.4	143.6	177.7	199.8	203.8
82.5°	82.3	114.4	149.6	170.7	178.7
85°	55.2	88.3	123.5	145.6	153.6
87.5°	35.1	67.3	101.4	124.5	131.5
90°	17.1	56.8	97.5	125.4	134.3
92.5°	28.4	121.1	457.5	201.6	177.7
95°	44.5	131.9	915.2	477.4	325.7
97.5°	60.5	136.4	978.7	780.2	586.8
100°	77.5	147.0	922.3	1060.2	832.6
102.5°	96.5	160.7	828.0	1296.6	1108.8
105°	116.4	175.2	744.1	1431.8	1341.4
107.5°	135.3	191.7	681.2	1467.2	1478.9
110°	156.2	209.2	638.3	1424.7	1539.5

TEST NUMBER: P1028233

CATALOG NUMBER: S125DIP-B850D1090UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.0	226.6	611.5	1341.2	1526.9
115°	198.0	244.5	592.2	1249.3	1465.8
117.5°	216.0	262.8	579.6	1164.4	1377.2
120°	235.0	281.2	569.9	1093.5	1290.5
122.5°	253.9	298.2	561.1	1034.8	1213.3
125°	270.1	314.6	553.3	987.6	1149.3
127.5°	282.4	331.8	547.4	945.4	1091.2
130°	294.7	348.8	542.5	903.8	1043.3
132.5°	303.2	364.0	538.4	859.4	995.6
135°	313.7	375.8	534.4	816.0	944.0
137.5°	327.0	387.8	532.4	771.6	889.6
140°	337.4	397.8	530.3	730.6	833.4
142.5°	350.7	406.2	529.3	694.6	780.9
145°	364.0	415.8	528.3	663.0	733.1
147.5°	377.3	424.3	526.4	636.3	689.1
150°	389.6	431.9	523.6	614.8	654.8
152.5°	402.9	439.5	519.8	598.2	629.1
155°	414.3	445.6	515.0	582.0	607.2
157.5°	424.8	451.8	510.3	566.8	587.3
160°	435.2	456.6	505.5	551.6	567.3
162.5°	443.8	461.4	499.8	537.8	549.2
165°	452.3	464.6	494.1	524.0	532.1
167.5°	458.0	466.6	488.4	511.2	516.0
170°	463.7	469.0	483.7	498.8	501.7
172.5°	467.5	469.9	478.0	488.9	488.4
175°	470.4	470.4	474.2	479.9	478.0
177.5°	472.3	470.4	471.3	474.2	471.3
180°	471.3	471.3	471.3	471.3	471.3

(END OF REPORT)