

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: P1028366

Luminaire Tested: S125DIP-B850D610UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028366
REPORT IS A COMBINATION OF REPORTS P1002653 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D610UB50-4F0-XX-W2A-D
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

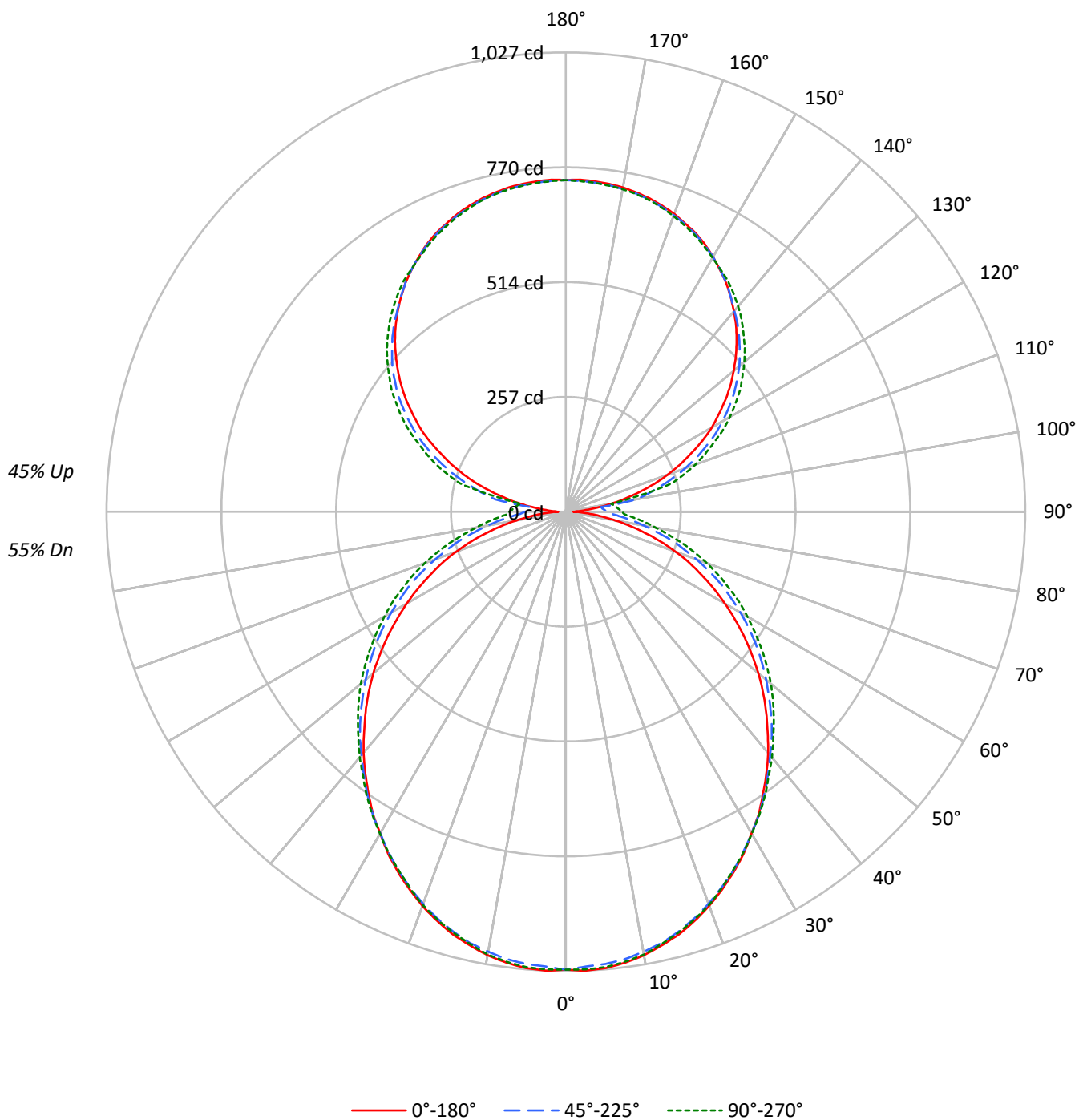
Lumens per Lamp: N/A
Luminaire Lumens: 5451.0 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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: P1028366

CATALOG NUMBER: S125DIP-B850D610UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1028366

CATALOG NUMBER: S125DIP-B850D610UB50-4F0-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	93	89	85	91	87	83	80	74	71	69	63	61	59	52	51	49
2	89	81	75	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	75	66	59	54	57	51	47	48	44	41	40	37	35
4	74	63	54	48	68	58	51	45	50	44	40	43	38	35	36	32	30
5	68	56	47	41	63	52	44	39	45	39	34	38	34	30	32	28	26
6	62	50	42	36	58	47	39	34	40	34	30	34	30	26	29	25	22
7	58	45	37	31	53	42	35	29	37	31	26	31	27	23	26	23	20
8	54	41	33	27	50	38	31	26	33	27	23	29	24	21	24	21	18
9	50	37	30	24	46	35	28	23	31	25	21	26	22	18	22	19	16
10	47	34	27	22	43	32	25	21	28	23	19	24	20	17	21	17	15

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: P1028366

CATALOG NUMBER: S125DIP-B850D610UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	1.8
10°-20°	275.1	5.0
20°-30°	409.0	7.5
30°-40°	484.4	8.9
40°-50°	500.8	9.2
50°-60°	461.3	8.5
60°-70°	372.9	6.8
70°-80°	249.5	4.6
80°-90°	130.1	2.4
90°-100°	97.8	1.8
100°-110°	220.9	4.1
110°-120°	337.2	6.2
120°-130°	407.2	7.5
130°-140°	424.9	7.8
140°-150°	392.3	7.2
150°-160°	315.9	5.8
160°-170°	204.3	3.7
170°-180°	70.4	1.3
0°-30°	781.0	14.3
0°-40°	1265.4	23.2
0°-60°	2227.5	40.9
0°-90°	2980.1	54.7
90°-120°	656.0	12.0
90°-150°	1880.3	34.5
90°-180°	2471.0	45.3
0°-180°	5451.0	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	53	91	117	126	13
95°	44	69	82	107	114	49
105°	171	189	219	239	246	181
115°	309	319	346	362	364	307
125°	436	438	458	472	476	389
135°	540	542	548	560	562	416
145°	625	625	625	631	631	391
155°	687	684	685	687	682	317
165°	725	722	722	726	721	205
175°	742	738	739	743	738	71
180°	742	742	742	742	742	

TEST NUMBER: P1028366

CATALOG NUMBER: S125DIP-B850D610UB50-4F0-XX-W2A-D

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°	16.6	53.1	91.1	116.9	125.6
92.5°	24.5	48.7	87.1	111.9	119.5
95°	44.4	68.9	82.1	106.9	113.9
97.5°	70.8	98.2	79.2	101.3	108.9
100°	102.8	125.6	159.8	99.0	102.9
102.5°	135.3	156.6	188.8	210.0	169.9
105°	170.6	188.9	219.0	239.1	245.6
107.5°	207.0	221.1	251.3	271.9	275.7
110°	242.3	254.4	283.6	301.0	308.6



TEST NUMBER: P1028366

CATALOG NUMBER: S125DIP-B850D610UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.4	287.1	314.8	330.6	336.6
115°	309.4	319.3	345.9	361.7	364.4
117.5°	344.2	349.2	376.5	390.3	396.2
120°	377.2	379.6	404.4	420.4	423.6
122.5°	405.3	409.0	431.7	446.7	449.4
125°	435.5	438.4	458.5	472.4	475.7
127.5°	463.7	465.4	482.0	495.9	497.6
130°	490.0	491.8	506.4	518.8	521.0
132.5°	515.4	518.7	527.1	541.2	542.4
135°	540.2	542.5	548.4	560.4	562.1
137.5°	563.3	565.5	568.4	580.5	581.8
140°	584.8	585.9	586.3	598.5	599.2
142.5°	605.1	604.7	605.8	614.8	615.6
145°	624.9	625.0	625.0	630.6	631.3
147.5°	641.5	641.5	642.1	644.6	642.8
150°	658.0	656.9	658.0	659.1	655.7
152.5°	673.9	671.2	672.3	673.4	669.5
155°	687.1	683.8	684.9	686.6	682.2
157.5°	697.6	695.9	695.9	697.6	693.2
160°	708.6	705.3	705.8	708.0	703.6
162.5°	717.4	714.1	714.6	717.9	713.0
165°	725.1	721.8	722.3	725.6	721.2
167.5°	731.1	727.8	728.4	732.2	727.3
170°	736.1	732.2	732.8	737.2	732.2
172.5°	739.4	735.5	736.6	740.5	735.5
175°	741.6	738.3	738.8	743.2	738.3
177.5°	743.2	739.9	740.5	744.3	739.9
180°	741.6	741.6	741.6	741.6	741.6

(END OF REPORT)