

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: P1028377

Luminaire Tested: S125DIP-B850D850UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028377
REPORT IS A COMBINATION OF REPORTS P1002664 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D850UB27-4F0-XX-W2A-D4
Description: Define 5 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

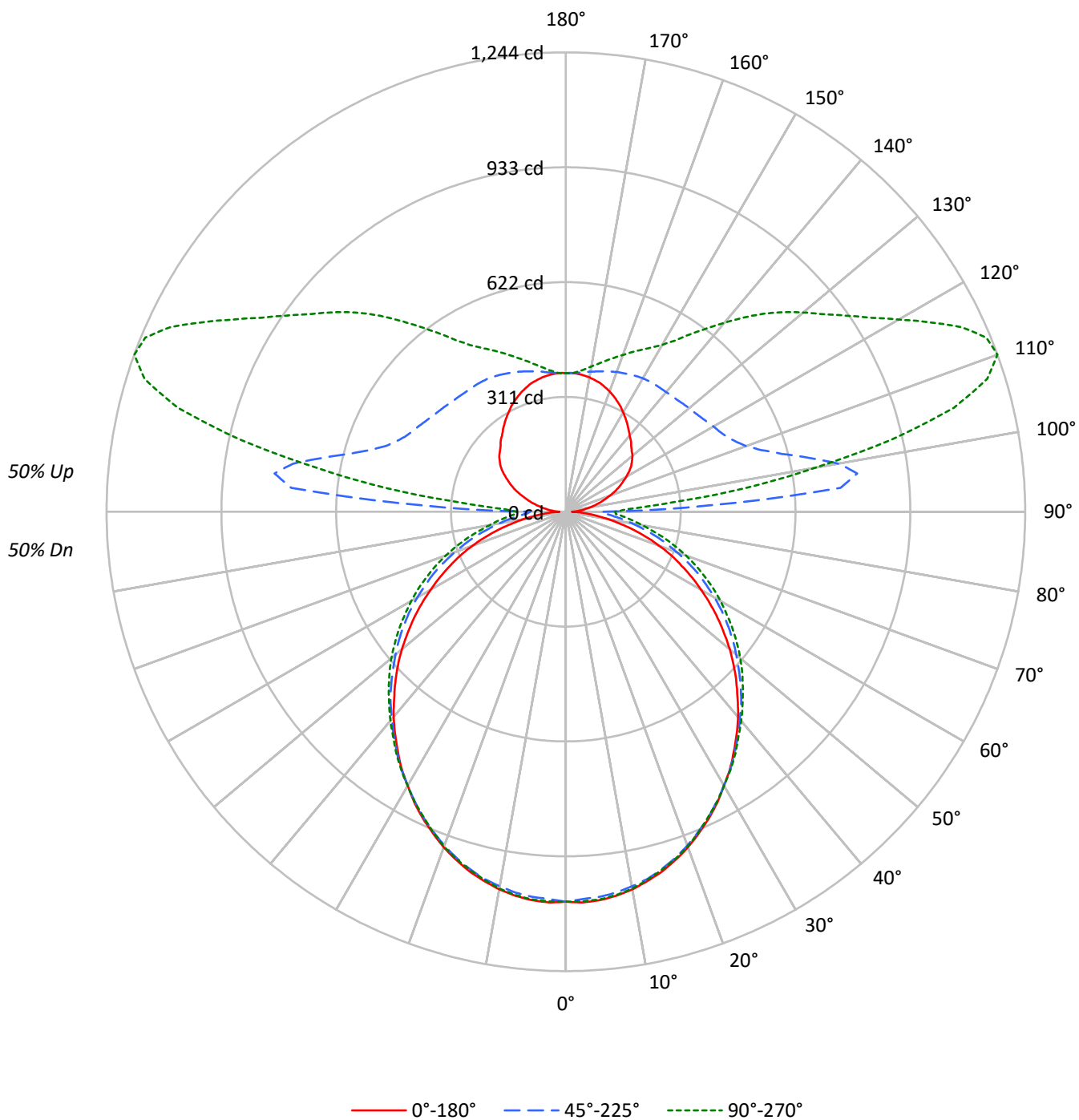
Lumens per Lamp: N/A
Luminaire Lumens: 6098.8 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 57
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: P1028377

CATALOG NUMBER: S125DIP-B850D850UB27-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1028377

CATALOG NUMBER: S125DIP-B850D850UB27-4F0-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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	92	88	85	89	85	82	79	72	69	67	60	58	56	49	47	46
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	39	33	39	33	29	33	28	25	27	24	21
7	57	45	36	31	53	41	34	29	36	30	25	30	25	22	25	21	19
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6765	6765	6765
5°	6776	6623	6639
10°	6725	6488	6470
15°	6644	6331	6261
20°	6533	6141	6054
25°	6402	5939	5803
30°	6244	5719	5575
35°	6096	5516	5365
40°	5945	5302	5152
45°	5774	5117	4963
50°	5611	4916	4791
55°	5415	4723	4591
60°	5200	4505	4386
65°	4976	4274	4156
70°	4719	3966	3916
75°	4313	3660	3623
80°	3781	3289	3298
85°	3253	2993	3129

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5774 cd/sqm

TEST NUMBER: P1028377

CATALOG NUMBER: S125DIP-B850D850UB27-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.6
10°-20°	283.6	4.7
20°-30°	421.8	6.9
30°-40°	499.5	8.2
40°-50°	516.4	8.5
50°-60°	475.7	7.8
60°-70°	384.6	6.3
70°-80°	257.3	4.2
80°-90°	134.5	2.2
90°-100°	357.7	5.9
100°-110°	642.6	10.5
110°-120°	585.6	9.6
120°-130°	464.9	7.6
130°-140°	365.8	6.0
140°-150°	271.0	4.4
150°-160°	189.6	3.1
160°-170°	111.7	1.8
170°-180°	36.3	0.6
0°-30°	805.4	13.2
0°-40°	1304.9	21.4
0°-60°	2297.1	37.7
0°-90°	3073.5	50.4
90°-120°	1585.9	26.0
90°-150°	2687.7	44.1
90°-180°	3025.0	49.6
0°-180°	6098.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1056	1054	1047	1055	1054	100
15°	1008	1009	1002	1008	1004	284
25°	916	919	913	917	912	422
35°	793	800	797	800	800	496
45°	653	665	670	677	678	504
55°	502	519	535	547	551	449
65°	346	370	394	410	414	343
75°	190	217	250	271	276	202
85°	57	91	127	150	158	59
90°	17	57	97	125	133	13
95°	38	114	746	403	284	37
105°	95	146	606	1158	1088	100
115°	159	198	481	1009	1183	157
125°	216	251	446	796	926	192
135°	250	300	428	655	758	194
145°	290	331	421	530	586	182
155°	330	355	410	464	484	152
165°	360	370	394	418	424	102
175°	375	375	378	382	381	36
180°	376	376	376	376	376	

TEST NUMBER: P1028377

CATALOG NUMBER: S125DIP-B850D850UB27-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1055.9	1055.9	1055.9	1055.9	1055.9
2.5°	1059.0	1056.9	1049.7	1056.9	1055.9
5°	1055.9	1053.8	1046.6	1054.9	1053.8
7.5°	1048.7	1047.6	1040.4	1047.6	1046.6
10°	1038.3	1038.3	1030.0	1037.3	1036.2
12.5°	1023.8	1024.8	1018.6	1023.8	1020.7
15°	1008.3	1009.3	1002.1	1008.3	1004.1
17.5°	988.6	990.7	983.4	988.6	985.5
20°	966.9	968.9	961.7	964.8	964.8
22.5°	942.0	946.2	937.9	942.0	938.9
25°	916.2	919.3	913.0	917.2	912.0
27.5°	888.2	892.3	885.1	888.2	886.1
30°	856.1	862.3	856.1	858.2	857.1
32.5°	827.1	832.3	828.2	830.2	829.2
35°	793.0	800.2	797.1	800.2	800.2
37.5°	759.8	766.0	765.0	769.2	768.1
40°	725.7	734.0	732.9	737.1	739.1
42.5°	688.4	699.8	702.9	708.1	708.1
45°	653.2	664.6	669.8	677.0	678.1
47.5°	617.0	627.3	635.6	646.0	648.0
50°	579.7	591.1	602.5	613.9	617.0
52.5°	540.4	554.9	569.4	581.8	583.9
55°	502.1	518.6	535.2	546.6	550.7
57.5°	462.7	482.4	501.0	513.5	516.6
60°	423.4	444.1	464.8	480.3	483.4
62.5°	385.1	405.8	428.6	446.2	450.3
65°	345.8	369.6	394.4	409.9	414.1
67.5°	309.5	332.3	357.1	375.8	381.0
70°	269.2	293.0	319.9	339.5	345.8
72.5°	229.8	254.7	284.7	306.4	310.6
75°	190.5	217.4	250.5	271.2	276.4
77.5°	152.2	183.2	214.3	237.1	241.2
80°	117.0	148.0	183.2	206.0	210.1
82.5°	84.9	118.0	154.2	176.0	184.3
85°	56.9	91.1	127.3	150.1	158.4
87.5°	36.2	69.4	104.6	128.4	135.6
90°	17.4	56.6	97.0	124.6	133.3
92.5°	25.9	106.6	382.8	184.1	166.8
95°	38.5	114.2	746.4	402.7	283.5
97.5°	51.0	117.2	795.9	642.8	490.3
100°	64.4	124.8	750.0	864.8	684.7
102.5°	79.3	134.8	673.8	1051.8	903.6
105°	94.9	145.5	605.8	1158.4	1088.0
107.5°	109.8	158.0	554.8	1185.6	1196.4
110°	126.1	171.1	519.6	1150.6	1243.8

TEST NUMBER: P1028377

CATALOG NUMBER: S125DIP-B850D850UB27-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	143.5	184.3	497.2	1082.9	1232.5
115°	159.1	197.9	481.0	1008.8	1182.7
117.5°	173.3	211.8	470.0	940.0	1111.2
120°	188.4	226.0	461.4	882.5	1040.9
122.5°	203.2	238.8	453.5	834.6	978.1
125°	216.1	251.4	446.3	795.9	926.0
127.5°	225.7	264.8	440.6	761.2	878.7
130°	235.5	278.5	436.0	727.2	839.5
132.5°	242.1	290.6	431.8	690.8	800.3
135°	250.4	299.7	427.7	655.0	758.3
137.5°	261.0	309.1	425.4	618.8	713.7
140°	269.0	317.1	423.0	585.1	667.9
142.5°	279.6	323.6	421.7	555.6	625.2
145°	290.2	331.2	420.9	529.5	586.2
147.5°	300.6	338.0	419.4	507.4	550.0
150°	310.4	344.1	417.2	489.8	521.9
152.5°	321.0	350.2	414.1	476.6	501.2
155°	330.1	355.1	410.3	463.8	483.8
157.5°	338.4	360.0	406.6	451.6	467.9
160°	346.7	363.8	402.8	439.4	452.0
162.5°	353.6	367.5	398.2	428.5	437.6
165°	360.4	370.2	393.7	417.5	424.0
167.5°	364.9	371.7	389.1	407.3	411.1
170°	369.5	373.6	385.4	397.4	399.7
172.5°	372.5	374.4	380.8	389.5	389.1
175°	374.8	374.8	377.8	382.3	380.8
177.5°	376.3	374.8	375.5	377.8	375.5
180°	375.5	375.5	375.5	375.5	375.5

(END OF REPORT)