

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: P1028197

Luminaire Tested: S125DIP-B850D1090UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028197
REPORT IS A COMBINATION OF REPORTS P1002424 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D1090UB27-4F0-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

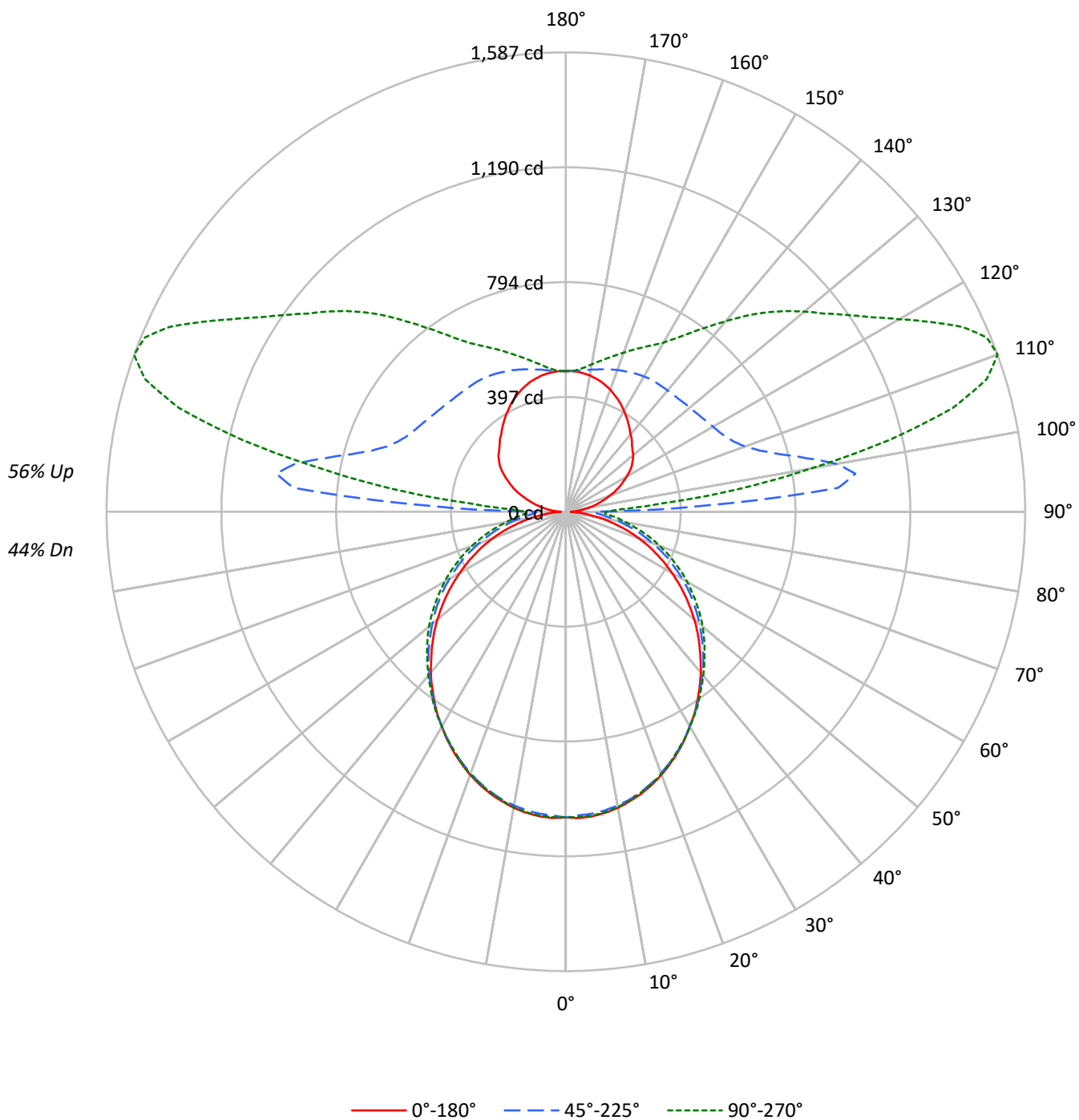
Lumens per Lamp: N/A
Luminaire Lumens: 6930.5 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1028197

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1028197

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-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°	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: P1028197

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.4
10°-20°	283.6	4.1
20°-30°	421.8	6.1
30°-40°	499.5	7.2
40°-50°	516.4	7.5
50°-60°	475.7	6.9
60°-70°	384.6	5.5
70°-80°	257.3	3.7
80°-90°	135.0	1.9
90°-100°	440.9	6.4
100°-110°	815.4	11.8
110°-120°	747.0	10.8
120°-130°	595.4	8.6
130°-140°	470.8	6.8
140°-150°	350.2	5.1
150°-160°	245.3	3.5
160°-170°	144.6	2.1
170°-180°	47.0	0.7
0°-30°	805.4	11.6
0°-40°	1304.9	18.8
0°-60°	2297.1	33.1
0°-90°	3073.9	44.4
90°-120°	2003.2	28.9
90°-150°	3419.6	49.3
90°-180°	3857.0	55.7
0°-180°	6930.5	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°	18	58	101	129	138	14
95°	46	136	944	492	336	44
105°	120	181	767	1476	1383	127
115°	204	252	611	1288	1511	201
125°	278	324	570	1018	1185	247
135°	324	388	551	841	973	251
145°	375	429	545	684	756	235
155°	427	460	531	600	626	197
165°	466	479	510	540	549	131
175°	485	485	489	495	493	46
180°	486	486	486	486	486	

TEST NUMBER: P1028197

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-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°	17.6	58.5	100.6	129.3	138.4
92.5°	29.2	124.8	471.6	207.8	183.3
95°	45.8	136.0	943.7	492.2	335.8
97.5°	62.4	140.6	1009.0	804.5	605.0
100°	80.0	151.6	951.0	1093.2	858.4
102.5°	99.6	165.7	853.8	1336.9	1143.2
105°	120.0	180.7	767.2	1476.2	1383.1
107.5°	139.6	197.6	702.4	1512.8	1524.9
110°	161.0	215.6	658.1	1468.9	1587.4

TEST NUMBER: P1028197

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	183.6	233.6	630.4	1382.8	1574.3
115°	204.1	252.0	610.6	1288.1	1511.3
117.5°	222.7	271.0	597.6	1200.6	1420.0
120°	242.3	290.0	587.6	1127.4	1330.6
122.5°	261.8	307.4	578.6	1066.9	1250.9
125°	278.4	324.5	570.5	1018.2	1185.0
127.5°	291.2	342.0	564.5	974.8	1125.0
130°	303.9	359.8	559.4	932.0	1075.7
132.5°	312.7	375.4	555.2	886.2	1026.5
135°	323.5	387.5	551.1	841.3	973.4
137.5°	337.2	399.8	549.0	795.5	917.2
140°	347.8	410.0	546.9	753.2	859.2
142.5°	361.6	418.8	545.7	716.2	805.2
145°	375.3	428.6	544.8	683.7	755.9
147.5°	389.0	437.5	542.8	656.1	710.5
150°	401.7	445.3	539.9	633.9	675.1
152.5°	415.4	453.2	535.9	616.8	648.6
155°	427.2	459.6	531.0	600.1	626.1
157.5°	438.0	465.9	526.1	584.4	605.5
160°	448.7	470.8	521.2	568.8	584.9
162.5°	457.6	475.6	515.4	554.6	566.3
165°	466.4	479.1	509.5	540.3	548.7
167.5°	472.2	481.0	503.6	527.2	532.0
170°	478.1	483.5	498.7	514.4	517.3
172.5°	482.0	484.5	492.8	504.1	503.6
175°	485.0	485.0	488.9	494.8	492.8
177.5°	486.9	485.0	486.0	488.9	486.0
180°	486.0	486.0	486.0	486.0	486.0

(END OF REPORT)