

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: P1028412

Luminaire Tested: S125DIP-B850D850UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028412
REPORT IS A COMBINATION OF REPORTS P1002717 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D850UB50-4F0-XX-W2A-F1
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

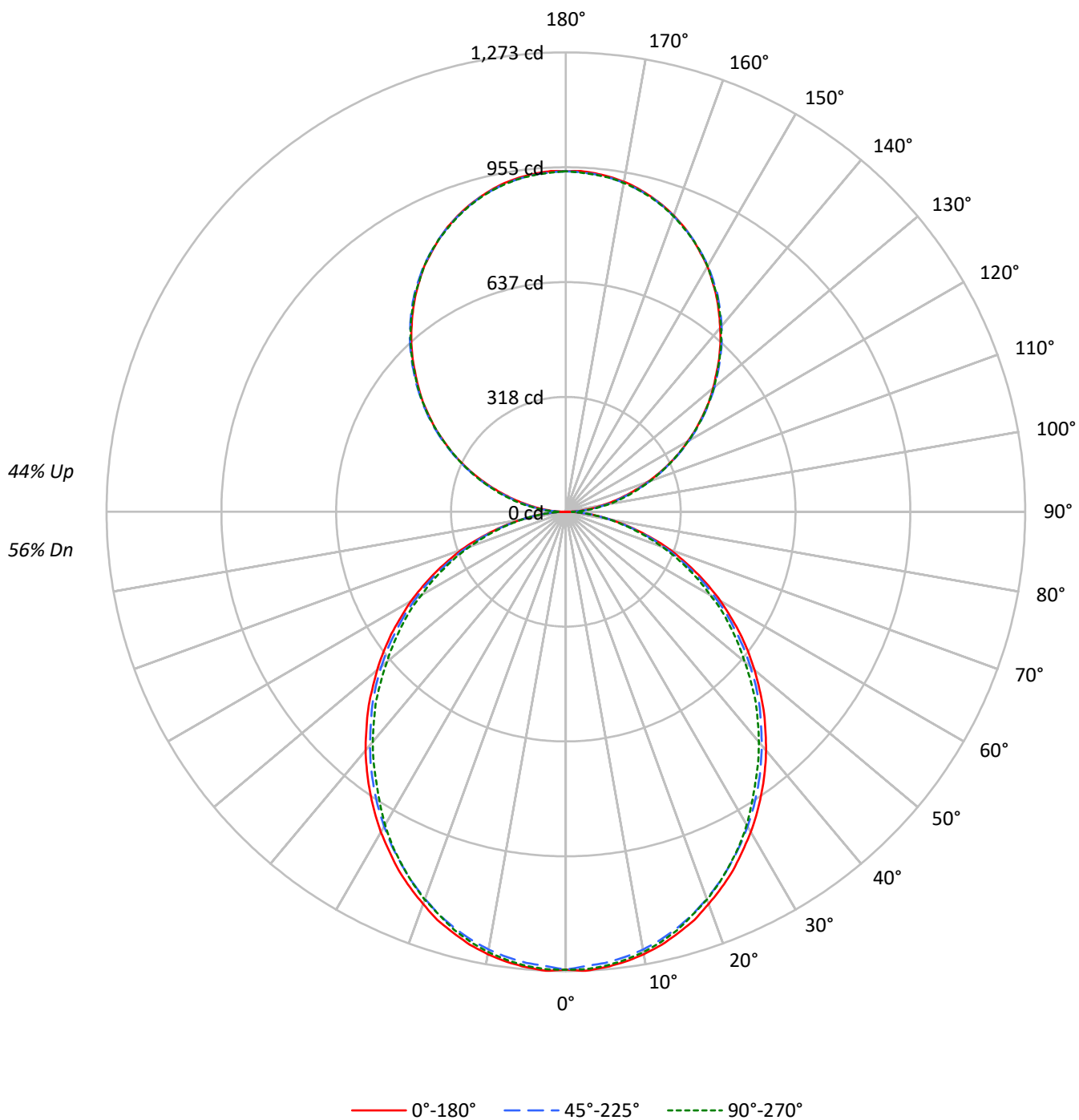
Lumens per Lamp: N/A
Luminaire Lumens: 5938.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1028412

CATALOG NUMBER: S125DIP-B850D850UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1028412

CATALOG NUMBER: S125DIP-B850D850UB50-4F0-XX-W2A-F1

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	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	82	76	73	71	64	63	61	54	53	52
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43
3	82	73	65	59	76	68	61	56	59	53	49	50	46	43	42	39	37
4	75	64	56	50	70	60	53	47	52	46	42	45	40	37	38	34	32
5	69	57	49	43	64	54	46	41	47	41	36	40	35	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	24
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	33	28	35	29	25	30	25	22	26	22	19
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8131	8131	8131
5°	8131	7942	7957
10°	8064	7760	7735
15°	7958	7542	7475
20°	7815	7289	7175
25°	7662	7014	6855
30°	7476	6727	6517
35°	7278	6427	6138
40°	7073	6109	5802
45°	6852	5799	5445
50°	6608	5448	5028
55°	6367	5060	4645
60°	6080	4651	4199
65°	5735	4178	3738
70°	5385	3635	3206
75°	4796	2992	2593
80°	4088	2235	1907
85°	3156	1321	1051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6852 cd/sqm

TEST NUMBER: P1028412

CATALOG NUMBER: S125DIP-B850D850UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	2.0
10°-20°	338.2	5.7
20°-30°	499.4	8.4
30°-40°	582.6	9.8
40°-50°	585.2	9.9
50°-60°	513.6	8.7
60°-70°	382.6	6.4
70°-80°	218.5	3.7
80°-90°	64.5	1.1
90°-100°	62.7	1.1
100°-110°	186.4	3.1
110°-120°	316.1	5.3
120°-130°	416.2	7.0
130°-140°	466.4	7.9
140°-150°	457.1	7.7
150°-160°	384.0	6.5
160°-170°	255.2	4.3
170°-180°	89.3	1.5
0°-30°	957.4	16.1
0°-40°	1540.0	25.9
0°-60°	2638.8	44.4
0°-90°	3304.4	55.6
90°-120°	565.3	9.5
90°-150°	1905.0	32.1
90°-180°	2634.0	44.4
0°-180°	5938.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1267	1265	1255	1264	1263	120
15°	1208	1205	1194	1199	1199	341
25°	1096	1091	1078	1080	1077	504
35°	947	943	929	924	916	592
45°	775	771	759	747	744	597
55°	590	587	573	564	557	527
65°	399	397	386	376	372	395
75°	212	210	205	202	198	226
85°	55	56	56	55	53	60
90°	1	7	12	15	18	7
95°	48	49	56	62	63	50
105°	167	171	176	180	182	179
115°	316	319	321	320	319	313
125°	462	466	467	466	465	414
135°	601	605	606	606	603	463
145°	728	731	733	733	731	455
155°	833	833	834	836	833	384
165°	905	904	905	908	903	255
175°	941	938	938	943	938	89
180°	944	944	944	944	944	

TEST NUMBER: P1028412

CATALOG NUMBER: S125DIP-B850D850UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.0	1269.0	1269.0	1269.0	1269.0
2.5°	1273.1	1270.0	1260.0	1270.0	1269.0
5°	1267.0	1265.0	1255.0	1264.0	1263.0
7.5°	1258.0	1256.0	1244.9	1254.0	1253.0
10°	1244.9	1242.9	1231.9	1239.9	1238.9
12.5°	1228.9	1224.9	1214.8	1220.8	1220.8
15°	1207.8	1204.8	1193.7	1198.8	1198.8
17.5°	1185.7	1180.7	1169.6	1175.7	1170.6
20°	1156.6	1154.6	1141.5	1148.6	1143.5
22.5°	1127.5	1123.5	1111.4	1115.4	1112.4
25°	1096.4	1091.3	1078.3	1080.3	1077.3
27.5°	1060.2	1057.2	1044.1	1045.2	1042.1
30°	1025.1	1022.1	1007.0	1005.0	1002.0
32.5°	986.9	981.9	968.8	964.8	958.8
35°	946.8	942.7	928.7	923.7	915.6
37.5°	905.6	900.6	887.5	880.5	875.5
40°	863.4	858.4	844.4	835.3	832.3
42.5°	818.2	814.2	800.2	792.1	787.1
45°	775.1	771.1	759.0	747.0	744.0
47.5°	727.9	728.9	713.8	701.8	694.8
50°	682.7	679.7	667.7	654.6	647.6
52.5°	636.5	634.5	621.5	610.4	602.4
55°	590.3	587.3	573.3	564.2	557.2
57.5°	541.1	540.1	528.1	516.0	513.0
60°	495.0	490.9	479.9	469.9	462.8
62.5°	446.8	443.8	434.7	423.7	418.7
65°	398.6	396.6	385.5	376.5	372.5
67.5°	351.4	347.4	339.3	331.3	329.3
70°	307.2	302.2	293.2	287.1	283.1
72.5°	259.0	256.0	251.0	244.0	240.0
75°	211.8	209.8	204.8	201.8	197.8
77.5°	167.7	166.7	163.6	161.6	158.6
80°	126.5	126.5	124.5	123.5	121.5
82.5°	90.4	88.4	88.4	86.3	86.3
85°	55.2	56.2	56.2	55.2	53.2
87.5°	27.1	27.1	26.1	26.1	24.1
90°	0.7	6.6	11.7	15.4	17.6
92.5°	22.0	25.7	32.3	37.5	38.9
95°	47.7	49.2	56.5	61.7	63.2
97.5°	73.4	74.2	84.4	88.9	89.6
100°	102.8	102.8	112.4	119.0	120.4
102.5°	134.4	138.1	141.7	149.1	151.3
105°	167.4	171.1	175.5	179.9	182.1
107.5°	203.4	207.1	210.8	213.0	213.0
110°	240.9	244.5	246.7	248.9	248.2

TEST NUMBER: P1028412

CATALOG NUMBER: S125DIP-B850D850UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	279.0	280.5	283.4	284.2	282.7
115°	316.5	319.4	320.9	320.2	319.4
117.5°	354.7	355.4	356.9	357.6	354.7
120°	389.9	393.6	394.3	394.3	391.4
122.5°	428.1	428.8	431.0	430.3	428.1
125°	461.9	466.3	467.0	465.6	464.8
127.5°	499.3	501.5	502.3	501.5	500.1
130°	532.4	536.1	537.5	536.8	535.3
132.5°	565.4	572.0	571.3	570.6	568.4
135°	600.7	605.1	605.8	605.8	602.9
137.5°	633.7	638.1	639.6	640.3	636.7
140°	665.3	669.0	671.2	672.6	669.0
142.5°	696.9	699.8	702.7	703.5	699.8
145°	727.7	730.7	732.9	732.9	730.7
147.5°	756.4	758.6	760.0	762.2	756.4
150°	785.0	784.3	787.2	787.2	785.7
152.5°	808.5	810.0	810.7	812.9	810.0
155°	832.7	832.7	833.5	836.4	832.7
157.5°	854.8	853.3	854.0	857.0	851.8
160°	873.8	871.6	872.4	875.3	871.6
162.5°	890.7	889.3	889.3	892.9	888.5
165°	905.4	904.0	904.7	907.6	903.2
167.5°	918.6	915.7	915.7	920.1	915.7
170°	928.9	926.0	926.0	930.4	925.2
172.5°	936.3	933.3	933.3	937.7	933.3
175°	941.4	938.5	938.5	942.9	937.7
177.5°	945.1	942.1	941.4	945.8	940.7
180°	943.6	943.6	943.6	943.6	943.6

(END OF REPORT)