

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: P1028407

Luminaire Tested: S125DIP-B850D850UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028407
REPORT IS A COMBINATION OF REPORTS P1002709 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D850UB40-4F0-XX-W2A-F4
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

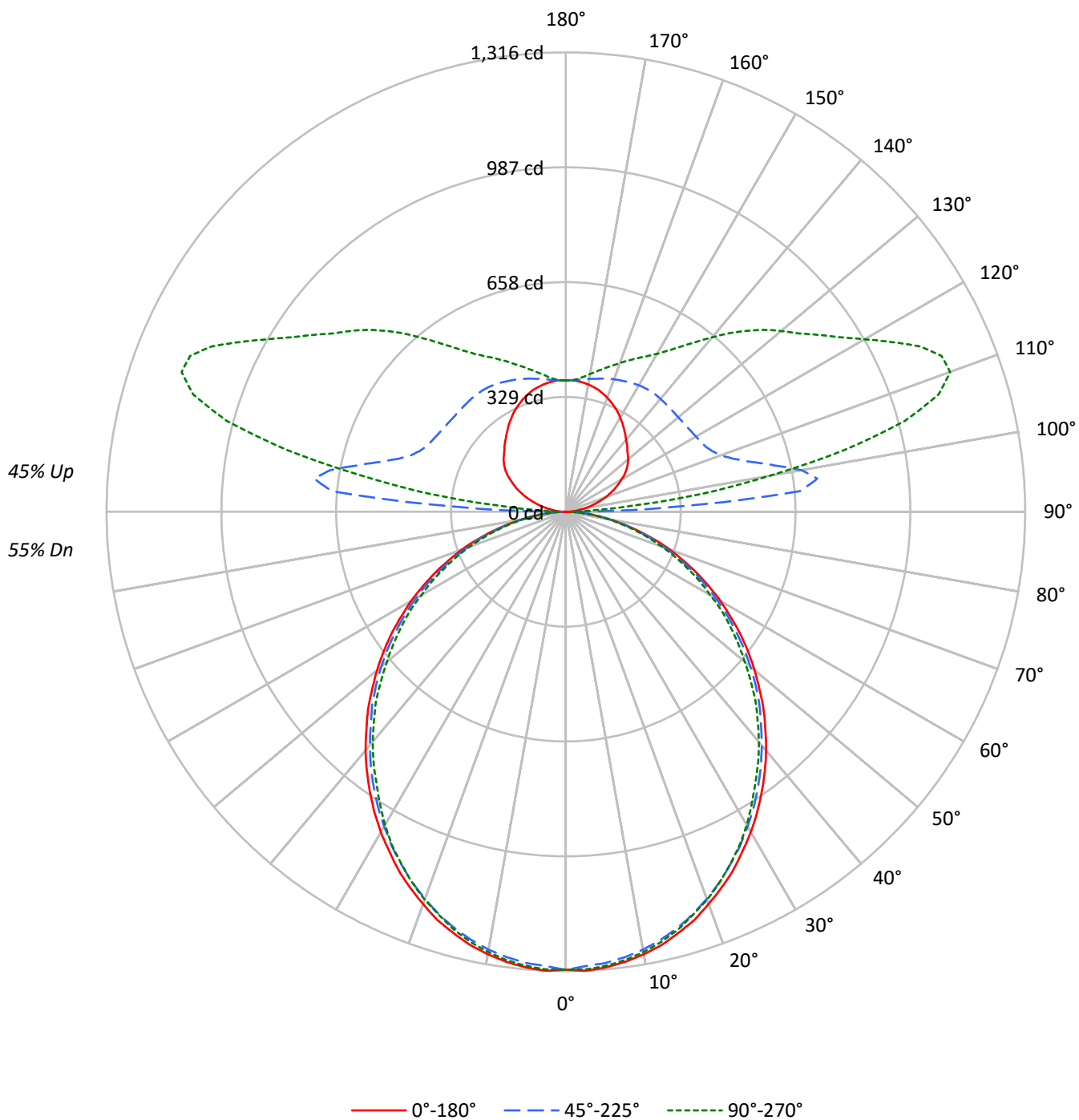
Lumens per Lamp: N/A
Luminaire Lumens: 6250.8 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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Luminous Intensity Polar Plot



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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	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43
3	82	72	65	59	76	67	61	56	58	53	49	50	46	43	42	39	36
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	41	46	40	36	40	35	32	33	30	27
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8407	8407	8407
5°	8407	8211	8227
10°	8338	8023	7998
15°	8228	7798	7728
20°	8080	7537	7418
25°	7921	7252	7087
30°	7729	6955	6738
35°	7525	6645	6347
40°	7313	6316	5999
45°	7084	5996	5629
50°	6833	5632	5198
55°	6583	5231	4802
60°	6285	4809	4341
65°	5930	4320	3865
70°	5567	3757	3315
75°	4959	3095	2681
80°	4227	2311	1972
85°	3265	1366	1086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	2.0
10°-20°	349.7	5.6
20°-30°	516.3	8.3
30°-40°	602.4	9.6
40°-50°	605.0	9.7
50°-60°	531.1	8.5
60°-70°	395.6	6.3
70°-80°	225.9	3.6
80°-90°	66.7	1.1
90°-100°	283.6	4.5
100°-110°	589.0	9.4
110°-120°	550.2	8.8
120°-130°	445.2	7.1
130°-140°	357.7	5.7
140°-150°	270.0	4.3
150°-160°	190.1	3.0
160°-170°	112.0	1.8
170°-180°	36.4	0.6
0°-30°	989.8	15.8
0°-40°	1592.2	25.5
0°-60°	2728.3	43.6
0°-90°	3416.5	54.7
90°-120°	1422.8	22.8
90°-150°	2495.7	39.9
90°-180°	2834.0	45.3
0°-180°	6250.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1310	1308	1298	1307	1306	124
15°	1249	1246	1234	1239	1239	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	960	955	947	612
45°	801	797	785	772	769	617
55°	610	607	593	583	576	545
65°	412	410	399	389	385	409
75°	219	217	212	209	204	233
85°	57	58	58	57	55	63
90°	1	7	12	16	18	6
95°	25	74	673	305	178	26
105°	86	120	550	1084	1006	90
115°	153	185	442	952	1121	151
125°	213	249	424	758	883	189
135°	249	300	421	635	733	193
145°	290	332	422	526	578	182
155°	331	356	412	465	485	152
165°	361	371	395	419	425	102
175°	376	376	379	383	382	36
180°	377	377	377	377	377	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1316.2	1313.1	1302.7	1313.1	1312.1
5°	1310.0	1307.9	1297.5	1306.9	1305.8
7.5°	1300.7	1298.6	1287.2	1296.5	1295.5
10°	1287.2	1285.1	1273.7	1282.0	1280.9
12.5°	1270.6	1266.4	1256.0	1262.2	1262.2
15°	1248.8	1245.6	1234.2	1239.4	1239.4
17.5°	1225.9	1220.7	1209.3	1215.5	1210.3
20°	1195.8	1193.7	1180.2	1187.5	1182.3
22.5°	1165.7	1161.6	1149.1	1153.3	1150.1
25°	1133.5	1128.3	1114.8	1116.9	1113.8
27.5°	1096.2	1093.0	1079.6	1080.6	1077.5
30°	1059.8	1056.7	1041.1	1039.1	1036.0
32.5°	1020.4	1015.2	1001.7	997.5	991.3
35°	978.9	974.7	960.2	955.0	946.7
37.5°	936.3	931.1	917.6	910.4	905.2
40°	892.7	887.5	873.0	863.6	860.5
42.5°	846.0	841.8	827.3	819.0	813.8
45°	801.4	797.2	784.8	772.3	769.2
47.5°	752.6	753.6	738.0	725.6	718.3
50°	705.9	702.7	690.3	676.8	669.5
52.5°	658.1	656.0	642.5	631.1	622.8
55°	610.4	607.2	592.7	583.4	576.1
57.5°	559.5	558.5	546.0	533.5	530.4
60°	511.7	507.6	496.2	485.8	478.5
62.5°	461.9	458.8	449.5	438.0	432.9
65°	412.1	410.0	398.6	389.3	385.1
67.5°	363.3	359.2	350.9	342.6	340.5
70°	317.6	312.4	303.1	296.9	292.7
72.5°	267.8	264.7	259.5	252.2	248.1
75°	219.0	216.9	211.8	208.6	204.5
77.5°	173.4	172.3	169.2	167.1	164.0
80°	130.8	130.8	128.7	127.7	125.6
82.5°	93.4	91.3	91.3	89.3	89.3
85°	57.1	58.1	58.1	57.1	55.0
87.5°	28.0	28.0	27.0	27.0	24.9
90°	0.8	6.8	12.1	16.0	17.5
92.5°	11.4	62.2	302.9	80.8	56.2
95°	25.1	74.0	672.7	305.2	178.4
97.5°	38.7	80.1	726.6	551.2	391.0
100°	53.1	91.9	685.6	779.0	592.2
102.5°	69.1	105.2	613.5	971.8	816.9
105°	85.8	120.0	550.4	1083.8	1006.0
107.5°	101.7	135.5	503.4	1115.3	1119.9
110°	119.2	151.8	472.2	1085.4	1171.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	136.7	168.2	454.0	1022.7	1165.4
115°	153.4	184.9	441.9	952.4	1120.6
117.5°	168.6	202.0	435.0	888.7	1053.1
120°	183.7	218.3	430.5	835.2	987.8
122.5°	199.7	234.2	426.7	792.2	930.1
125°	212.6	249.0	423.7	757.8	883.0
127.5°	223.2	263.4	422.1	728.1	839.7
130°	233.1	277.2	420.6	698.1	805.6
132.5°	240.7	289.2	420.6	665.8	771.4
135°	249.0	299.6	420.6	635.1	733.4
137.5°	259.7	309.0	421.4	602.8	693.9
140°	268.8	317.0	422.1	573.2	652.2
142.5°	279.4	324.6	422.9	547.8	613.5
145°	290.0	332.2	422.1	525.8	578.5
147.5°	301.4	339.0	420.6	506.8	547.4
150°	311.3	345.0	418.3	491.2	522.4
152.5°	321.9	351.2	415.3	478.0	502.6
155°	331.0	356.1	411.5	465.0	485.2
157.5°	339.4	361.0	407.7	452.9	469.2
160°	347.7	364.8	403.9	440.8	453.3
162.5°	354.6	368.6	399.4	429.8	438.8
165°	361.4	371.2	394.8	418.7	425.2
167.5°	366.0	372.8	390.2	408.5	412.3
170°	370.5	374.6	386.5	398.6	400.9
172.5°	373.5	375.5	381.9	390.6	390.2
175°	375.8	375.8	378.9	383.4	381.9
177.5°	377.3	375.8	376.6	378.9	376.6
180°	376.6	376.6	376.6	376.6	376.6

(END OF REPORT)