

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: P1028403

Luminaire Tested: S125DIP-B850D850UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028403
REPORT IS A COMBINATION OF REPORTS P1002705 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-D1
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

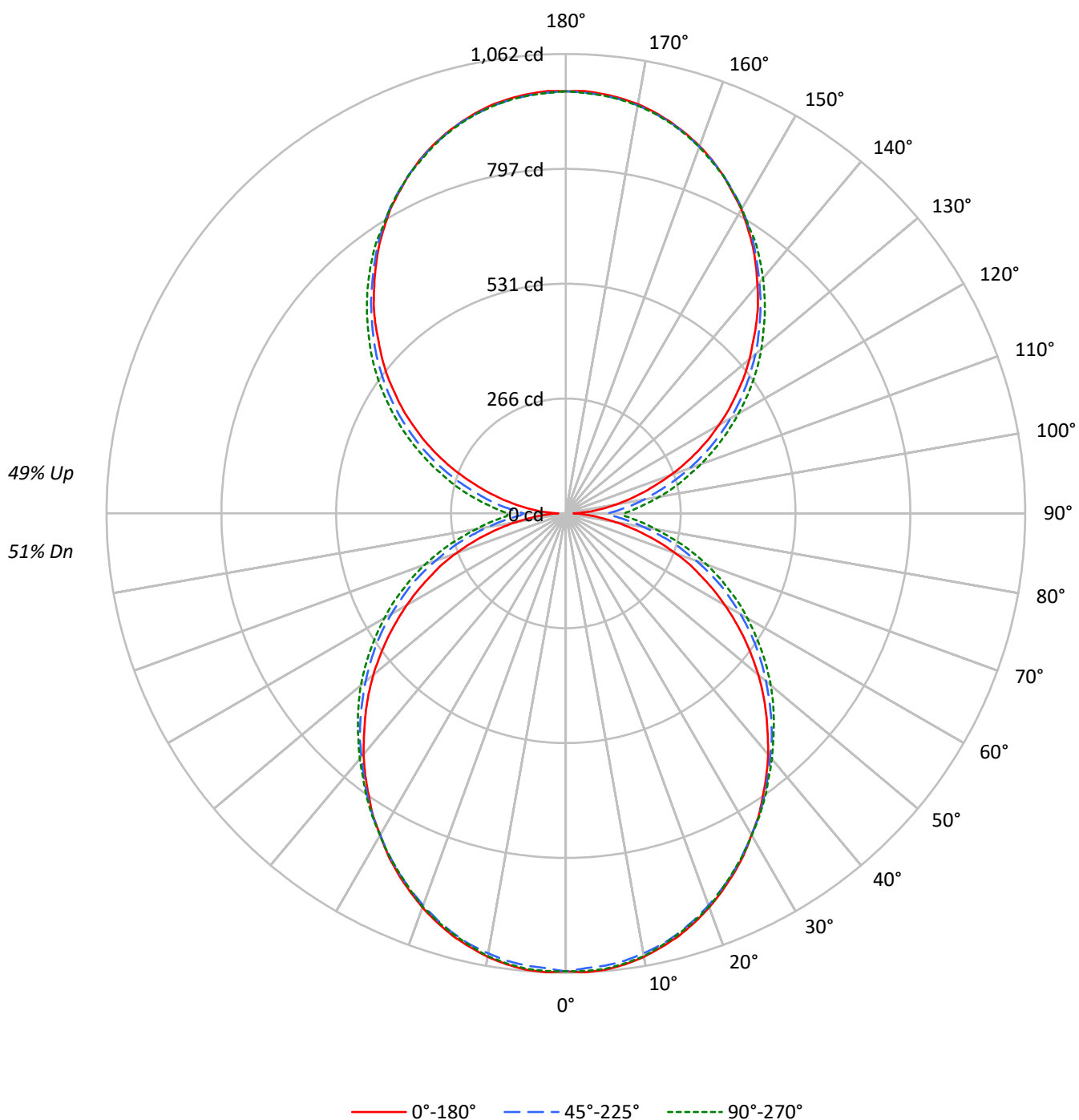
Lumens per Lamp: N/A
Luminaire Lumens: 6005.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	93	88	85	90	86	82	79	73	70	67	61	59	57	49	48	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	63	57	74	65	59	53	55	50	46	46	43	39	38	35	33
4	73	62	54	48	67	58	50	45	49	44	39	41	37	33	34	31	28
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24
6	62	50	41	35	57	46	39	33	39	34	29	33	29	25	27	24	21
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	22	19
8	53	41	33	27	49	38	31	26	33	27	23	28	23	20	23	19	17
9	49	37	29	24	46	35	28	23	30	24	20	25	21	18	21	18	15
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6784	6784	6784
5°	6795	6642	6658
10°	6744	6507	6488
15°	6662	6348	6278
20°	6551	6158	6071
25°	6420	5956	5819
30°	6261	5735	5590
35°	6112	5531	5379
40°	5961	5317	5167
45°	5790	5131	4976
50°	5627	4929	4804
55°	5430	4737	4603
60°	5215	4517	4398
65°	4989	4286	4167
70°	4731	3977	3926
75°	4325	3670	3633
80°	3791	3298	3308
85°	3265	3003	3137

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5790 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.7
10°-20°	284.4	4.7
20°-30°	422.9	7.0
30°-40°	500.9	8.3
40°-50°	517.8	8.6
50°-60°	477.0	7.9
60°-70°	385.6	6.4
70°-80°	258.0	4.3
80°-90°	134.9	2.2
90°-100°	140.0	2.3
100°-110°	248.2	4.1
110°-120°	364.0	6.1
120°-130°	451.4	7.5
130°-140°	491.5	8.2
140°-150°	474.6	7.9
150°-160°	397.1	6.6
160°-170°	264.0	4.4
170°-180°	92.4	1.5
0°-30°	807.6	13.4
0°-40°	1308.5	21.8
0°-60°	2303.4	38.4
0°-90°	3081.9	51.3
90°-120°	752.2	12.5
90°-150°	2169.6	36.1
90°-180°	2923.0	48.7
0°-180°	6005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1011	1012	1005	1011	1007	285
25°	919	922	916	920	914	423
35°	795	802	799	802	802	498
45°	655	666	672	679	680	505
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	272	277	202
85°	57	91	128	150	159	60
90°	17	57	97	125	134	15
95°	63	91	134	162	171	62
105°	182	203	239	264	273	195
115°	334	344	372	390	396	330
125°	482	485	507	522	526	431
135°	623	627	635	648	650	480
145°	754	756	758	763	765	471
155°	861	861	862	865	861	397
165°	936	935	936	939	934	264
175°	974	970	970	975	970	93
180°	976	976	976	976	976	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.8	1058.8	1058.8	1058.8	1058.8
2.5°	1061.9	1059.8	1052.6	1059.8	1058.8
5°	1058.8	1056.7	1049.5	1057.8	1056.7
7.5°	1051.5	1050.5	1043.2	1050.5	1049.5
10°	1041.2	1041.2	1032.9	1040.1	1039.1
12.5°	1026.6	1027.7	1021.4	1026.6	1023.5
15°	1011.1	1012.1	1004.8	1011.1	1006.9
17.5°	991.3	993.4	986.1	991.3	988.2
20°	969.5	971.6	964.3	967.5	967.5
22.5°	944.6	948.8	940.5	944.6	941.5
25°	918.7	921.8	915.6	919.7	914.5
27.5°	890.6	894.8	887.5	890.6	888.6
30°	858.5	864.7	858.5	860.5	859.5
32.5°	829.4	834.6	830.4	832.5	831.5
35°	795.1	802.4	799.3	802.4	802.4
37.5°	761.9	768.2	767.1	771.3	770.2
40°	727.7	736.0	734.9	739.1	741.2
42.5°	690.3	701.7	704.8	710.0	710.0
45°	655.0	666.4	671.6	678.9	679.9
47.5°	618.7	629.1	637.4	647.7	649.8
50°	581.3	592.7	604.1	615.6	618.7
52.5°	541.9	556.4	570.9	583.4	585.5
55°	503.5	520.1	536.7	548.1	552.2
57.5°	464.0	483.7	502.4	514.9	518.0
60°	424.6	445.3	466.1	481.7	484.8
62.5°	386.2	406.9	429.8	447.4	451.6
65°	346.7	370.6	395.5	411.1	415.2
67.5°	310.4	333.2	358.1	376.8	382.0
70°	269.9	293.8	320.8	340.5	346.7
72.5°	230.4	255.4	285.5	307.3	311.4
75°	191.0	218.0	251.2	272.0	277.2
77.5°	152.6	183.7	214.9	237.7	241.9
80°	117.3	148.4	183.7	206.6	210.7
82.5°	85.1	118.3	154.7	176.5	184.8
85°	57.1	91.3	127.7	150.5	158.8
87.5°	36.3	69.5	104.8	128.7	136.0
90°	17.4	56.6	97.3	124.9	134.5
92.5°	37.3	71.2	114.4	142.5	151.3
95°	62.9	91.4	134.3	162.4	171.2
97.5°	88.4	114.1	158.9	185.3	193.3
100°	117.7	139.5	182.6	211.2	219.0
102.5°	149.4	172.9	208.9	237.2	245.7
105°	182.4	202.9	238.6	264.0	273.4
107.5°	218.7	237.0	270.8	293.9	300.1
110°	256.4	272.6	304.0	325.9	332.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	295.9	306.7	337.7	357.2	363.0
115°	333.5	343.8	372.4	390.3	395.7
117.5°	372.0	378.0	405.4	423.8	428.0
120°	408.4	415.3	440.0	457.6	460.9
122.5°	446.9	448.7	473.8	489.6	493.6
125°	481.9	485.3	506.9	522.0	526.4
127.5°	519.5	520.8	539.1	554.0	558.7
130°	553.7	556.5	572.5	586.2	589.9
132.5°	586.8	593.7	603.3	617.1	618.9
135°	623.3	626.8	634.8	648.3	650.5
137.5°	657.5	660.9	666.6	679.8	680.2
140°	689.0	692.8	696.2	709.1	709.4
142.5°	721.7	723.7	726.8	736.8	737.2
145°	753.6	755.6	757.9	763.1	764.9
147.5°	782.2	784.5	786.0	790.4	786.4
150°	811.8	811.0	814.1	814.1	813.6
152.5°	836.1	837.6	838.4	840.7	837.6
155°	861.2	861.2	861.9	865.0	861.2
157.5°	883.9	882.4	883.2	886.2	880.9
160°	903.7	901.4	902.2	905.2	901.4
162.5°	921.2	919.6	919.6	923.4	918.9
165°	936.3	934.8	935.6	938.6	934.1
167.5°	950.0	947.0	947.0	951.5	947.0
170°	960.6	957.6	957.6	962.2	956.9
172.5°	968.2	965.2	965.2	969.8	965.2
175°	973.6	970.5	970.5	975.1	969.8
177.5°	977.4	974.3	973.6	978.1	972.8
180°	975.8	975.8	975.8	975.8	975.8

(END OF REPORT)