

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: P1035618

Luminaire Tested: S125DIW-B850D470UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035618
REPORT IS A COMBINATION OF REPORTS P1004243 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D470UB27-4F0-XX-W2A-F
Description: Define 5 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

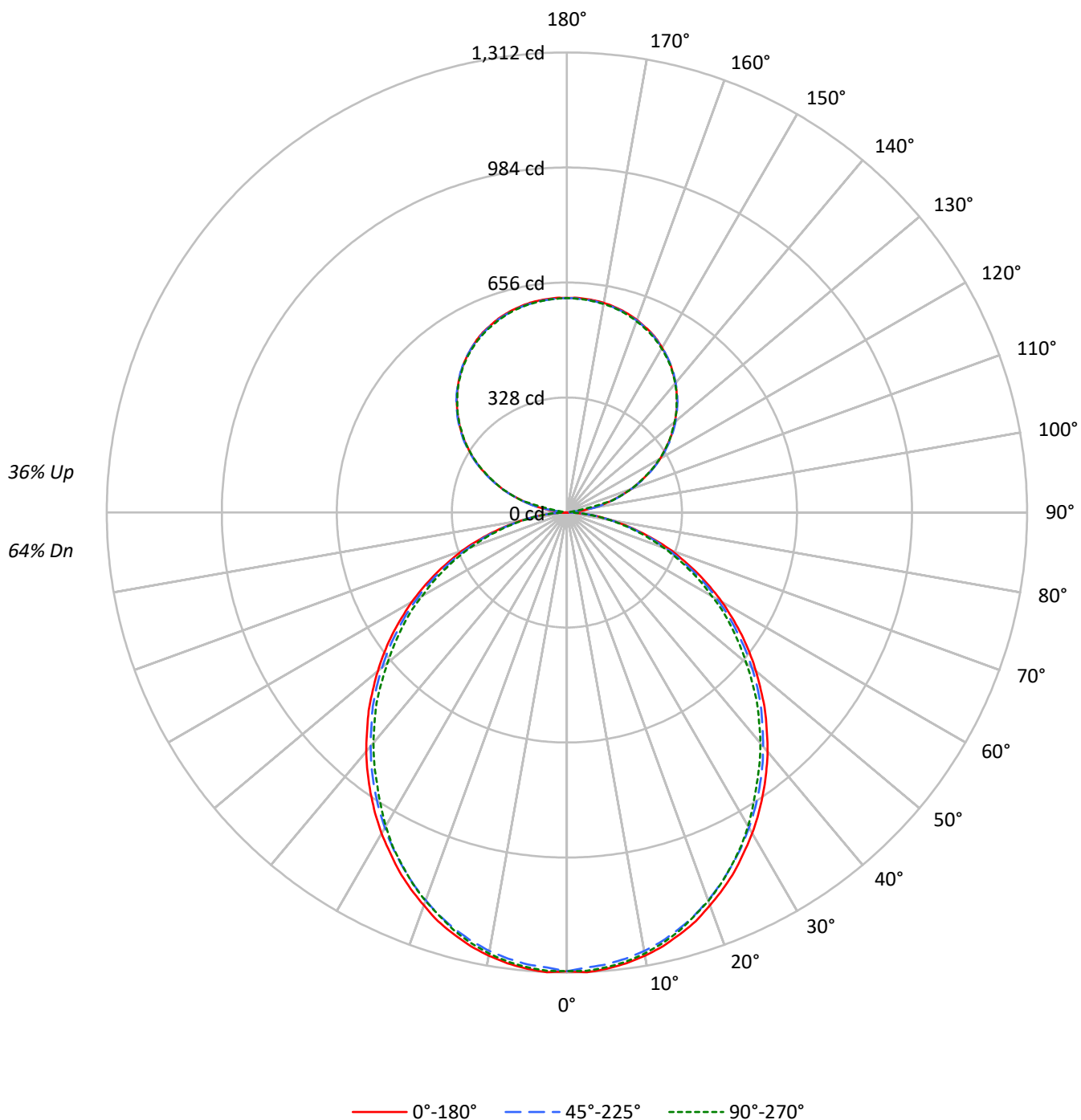
Lumens per Lamp: N/A
Luminaire Lumens: 5285.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
Input Voltage (V):
Input Current (A_{in}): 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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	96	92	89	95	91	87	84	80	77	75	70	68	67	61	60	58
2	92	84	78	73	86	79	74	69	70	66	62	62	58	55	54	51	49
3	84	74	66	60	78	70	63	58	62	57	52	55	50	47	48	45	42
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36
5	71	59	50	44	66	55	48	42	49	43	38	44	39	35	38	35	31
6	65	53	44	38	61	50	42	37	44	38	34	40	34	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8383	8187	8203
10°	8313	7999	7975
15°	8204	7775	7706
20°	8056	7515	7397
25°	7898	7231	7066
30°	7707	6935	6718
35°	7503	6625	6328
40°	7292	6297	5981
45°	7063	5978	5613
50°	6812	5616	5184
55°	6564	5216	4788
60°	6268	4794	4329
65°	5912	4307	3854
70°	5551	3746	3306
75°	4945	3084	2673
80°	4214	2304	1965
85°	3253	1364	1084

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	2.3
10°-20°	348.7	6.6
20°-30°	514.8	9.7
30°-40°	600.6	11.4
40°-50°	603.2	11.4
50°-60°	529.5	10.0
60°-70°	394.4	7.5
70°-80°	225.2	4.3
80°-90°	65.9	1.2
90°-100°	20.8	0.4
100°-110°	138.1	2.6
110°-120°	248.6	4.7
120°-130°	319.1	6.0
130°-140°	343.2	6.5
140°-150°	322.1	6.1
150°-160°	260.6	4.9
160°-170°	168.5	3.2
170°-180°	58.1	1.1
0°-30°	986.9	18.7
0°-40°	1587.5	30.0
0°-60°	2720.3	51.5
0°-90°	3405.9	64.4
90°-120°	407.4	7.7
90°-150°	1391.9	26.3
90°-180°	1879.0	35.6
0°-180°	5285.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1304	1294	1303	1302	124
15°	1245	1242	1231	1236	1236	351
25°	1130	1125	1112	1114	1110	520
35°	976	972	957	952	944	611
45°	799	795	782	770	767	616
55°	609	606	591	582	574	543
65°	411	409	397	388	384	408
75°	218	216	211	208	204	232
85°	57	58	58	57	55	62
90°	0	4	7	10	11	5
95°	26	24	7	10	10	32
105°	133	135	135	135	135	141
115°	250	253	253	251	248	248
125°	356	359	359	357	356	318
135°	444	447	446	445	442	342
145°	515	516	516	516	513	322
155°	567	564	565	566	563	261
165°	598	595	596	599	595	169
175°	612	609	610	613	609	58
180°	612	612	612	612	612	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.2	1308.2	1308.2	1308.2	1308.2
2.5°	1312.4	1309.3	1298.9	1309.3	1308.2
5°	1306.2	1304.1	1293.7	1303.1	1302.0
7.5°	1296.8	1294.8	1283.4	1292.7	1291.7
10°	1283.4	1281.3	1269.9	1278.2	1277.2
12.5°	1266.8	1262.7	1252.3	1258.6	1258.6
15°	1245.1	1242.0	1230.6	1235.8	1235.8
17.5°	1222.3	1217.2	1205.8	1212.0	1206.8
20°	1192.3	1190.2	1176.8	1184.0	1178.9
22.5°	1162.3	1158.2	1145.7	1149.9	1146.8
25°	1130.2	1125.0	1111.6	1113.7	1110.5
27.5°	1093.0	1089.8	1076.4	1077.4	1074.3
30°	1056.7	1053.6	1038.1	1036.0	1032.9
32.5°	1017.4	1012.2	998.8	994.6	988.4
35°	976.0	971.9	957.4	952.2	943.9
37.5°	933.6	928.4	914.9	907.7	902.5
40°	890.1	884.9	870.4	861.1	858.0
42.5°	843.5	839.4	824.9	816.6	811.4
45°	799.0	794.9	782.5	770.0	766.9
47.5°	750.4	751.4	735.9	723.5	716.2
50°	703.8	700.7	688.3	674.8	667.6
52.5°	656.2	654.1	640.7	629.3	621.0
55°	608.6	605.5	591.0	581.7	574.4
57.5°	557.9	556.8	544.4	532.0	528.9
60°	510.3	506.1	494.7	484.4	477.1
62.5°	460.6	457.5	448.2	436.8	431.6
65°	410.9	408.8	397.4	388.1	384.0
67.5°	362.2	358.1	349.8	341.5	339.5
70°	316.7	311.5	302.2	296.0	291.9
72.5°	267.0	263.9	258.7	251.5	247.4
75°	218.4	216.3	211.1	208.0	203.9
77.5°	172.8	171.8	168.7	166.6	163.5
80°	130.4	130.4	128.3	127.3	125.2
82.5°	93.1	91.1	91.1	89.0	89.0
85°	56.9	58.0	58.0	56.9	54.9
87.5°	27.9	27.9	26.9	26.9	24.8
90°	0.5	4.1	7.3	9.5	10.9
92.5°	8.6	4.5	7.3	9.5	10.0
95°	25.8	24.5	7.3	9.5	9.5
97.5°	48.5	51.2	8.2	9.1	9.5
100°	75.7	77.1	78.9	11.3	9.5
102.5°	103.4	105.2	106.1	107.0	68.9
105°	133.3	135.1	135.1	135.1	134.7
107.5°	164.2	164.2	165.1	165.5	163.7
110°	194.1	194.1	195.0	193.6	194.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.2	223.6	224.0	222.2	221.3
115°	250.3	252.6	253.0	251.2	248.5
117.5°	279.8	279.8	281.6	278.9	278.0
120°	307.0	306.5	307.9	307.0	304.7
122.5°	331.0	333.3	333.8	332.8	330.1
125°	356.0	359.1	359.1	357.3	356.0
127.5°	380.0	382.3	381.8	380.9	377.3
130°	401.8	404.0	404.5	403.1	400.9
132.5°	423.5	426.3	424.9	424.9	422.6
135°	443.9	446.7	445.8	444.9	442.1
137.5°	463.0	465.7	464.8	464.8	462.5
140°	481.6	482.5	482.0	482.9	480.2
142.5°	498.4	498.8	499.7	499.7	497.0
145°	514.7	515.6	515.6	516.0	513.3
147.5°	529.2	529.2	529.6	530.1	526.9
150°	542.8	541.9	542.8	543.7	540.1
152.5°	555.9	553.7	554.6	555.5	552.3
155°	566.8	564.1	565.0	566.4	562.8
157.5°	575.4	574.1	574.1	575.4	571.8
160°	584.5	581.8	582.3	584.1	580.4
162.5°	591.8	589.1	589.5	592.2	588.1
165°	598.1	595.4	595.9	598.6	594.9
167.5°	603.1	600.4	600.8	604.0	599.9
170°	607.2	604.0	604.5	608.1	604.0
172.5°	609.9	606.7	607.6	610.8	606.7
175°	611.7	609.0	609.5	613.1	609.0
177.5°	613.1	610.4	610.8	614.0	610.4
180°	611.7	611.7	611.7	611.7	611.7

(END OF REPORT)