

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: P1035619

Luminaire Tested: S125DIW-B850D470UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035619
REPORT IS A COMBINATION OF REPORTS P1004244 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-F1
Description: Define 5 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

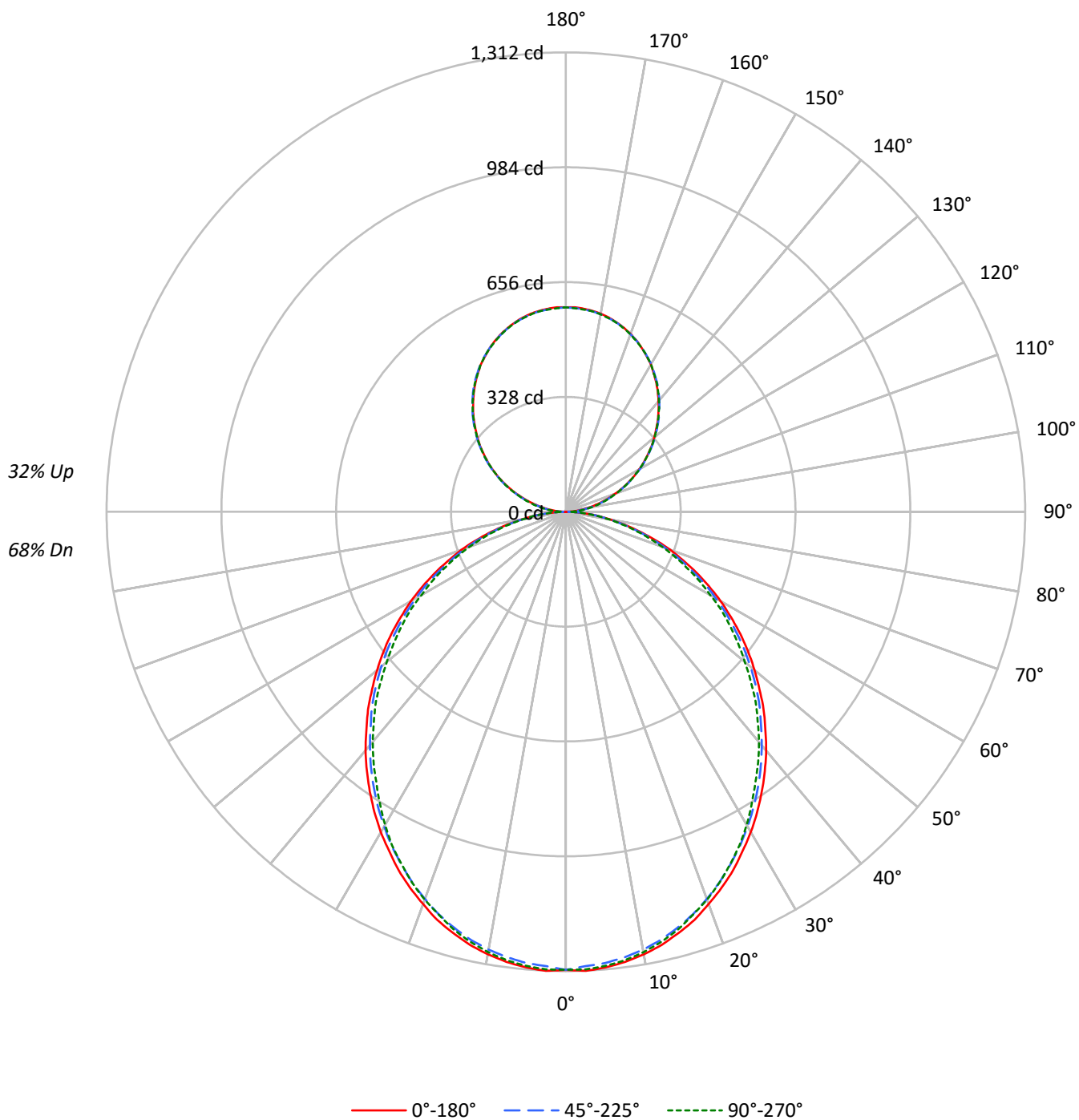
Lumens per Lamp: N/A
Luminaire Lumens: 5035.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1035619

CATALOG NUMBER: S125DIW-B850D470UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1035619

CATALOG NUMBER: S125DIW-B850D470UB27-4F0-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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61
2	93	85	78	73	87	80	75	70	72	67	63	64	60	57	56	54	51
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	44
4	77	66	58	52	73	63	55	50	56	50	45	50	45	41	44	41	38
5	71	59	51	44	67	56	48	43	50	44	39	45	40	36	40	36	33
6	66	53	45	39	62	50	43	37	45	39	34	41	36	32	36	32	29
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	26
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	31	26	23
9	53	40	32	27	50	38	31	26	35	29	24	31	26	23	28	24	21
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19

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

TEST NUMBER: P1035619

CATALOG NUMBER: S125DIW-B850D470UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	2.5
10°-20°	348.7	6.9
20°-30°	514.8	10.2
30°-40°	600.6	11.9
40°-50°	603.2	12.0
50°-60°	529.5	10.5
60°-70°	394.4	7.8
70°-80°	225.2	4.5
80°-90°	65.9	1.3
90°-100°	38.8	0.8
100°-110°	115.3	2.3
110°-120°	195.6	3.9
120°-130°	257.4	5.1
130°-140°	288.5	5.7
140°-150°	282.8	5.6
150°-160°	237.5	4.7
160°-170°	157.9	3.1
170°-180°	55.3	1.1
0°-30°	986.9	19.6
0°-40°	1587.5	31.5
0°-60°	2720.3	54.0
0°-90°	3405.9	67.6
90°-120°	349.7	6.9
90°-150°	1178.4	23.4
90°-180°	1629.0	32.4
0°-180°	5035.0	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	6
95°	30	30	35	38	39	31
105°	104	106	109	111	113	110
115°	196	198	198	198	198	194
125°	286	288	289	288	288	256
135°	372	374	375	375	373	286
145°	450	452	453	453	452	281
155°	515	515	516	517	515	237
165°	560	559	560	562	559	158
175°	582	580	580	583	580	55
180°	584	584	584	584	584	

TEST NUMBER: P1035619

CATALOG NUMBER: S125DIW-B850D470UB27-4F0-XX-W2A-F1

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°	13.6	15.9	20.0	23.2	24.1
95°	29.5	30.4	35.0	38.2	39.1
97.5°	45.4	45.9	52.2	55.0	55.4
100°	63.6	63.6	69.5	73.6	74.5
102.5°	83.1	85.4	87.7	92.2	93.6
105°	103.6	105.8	108.6	111.3	112.7
107.5°	125.8	128.1	130.4	131.7	131.7
110°	149.0	151.3	152.6	154.0	153.5



TEST NUMBER: P1035619

CATALOG NUMBER: S125DIW-B850D470UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.6	173.5	175.3	175.8	174.9
115°	195.8	197.6	198.5	198.1	197.6
117.5°	219.4	219.9	220.8	221.2	219.4
120°	241.2	243.5	243.9	243.9	242.1
122.5°	264.8	265.3	266.6	266.2	264.8
125°	285.7	288.4	288.9	288.0	287.5
127.5°	308.9	310.3	310.7	310.3	309.3
130°	329.3	331.6	332.5	332.1	331.1
132.5°	349.8	353.9	353.4	353.0	351.6
135°	371.6	374.3	374.8	374.8	372.9
137.5°	392.0	394.7	395.7	396.1	393.8
140°	411.6	413.8	415.2	416.1	413.8
142.5°	431.1	432.9	434.7	435.2	432.9
145°	450.2	452.0	453.3	453.3	452.0
147.5°	467.9	469.2	470.1	471.5	467.9
150°	485.6	485.1	487.0	487.0	486.0
152.5°	500.1	501.0	501.5	502.9	501.0
155°	515.1	515.1	515.6	517.4	515.1
157.5°	528.7	527.8	528.3	530.1	526.9
160°	540.6	539.2	539.6	541.5	539.2
162.5°	551.0	550.1	550.1	552.4	549.6
165°	560.1	559.2	559.6	561.5	558.7
167.5°	568.3	566.4	566.4	569.2	566.4
170°	574.6	572.8	572.8	575.5	572.4
172.5°	579.2	577.4	577.4	580.1	577.4
175°	582.3	580.5	580.5	583.3	580.1
177.5°	584.6	582.8	582.3	585.1	581.9
180°	583.7	583.7	583.7	583.7	583.7

(END OF REPORT)