

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: P1035648

Luminaire Tested: S125DIW-B850D770UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035648
REPORT IS A COMBINATION OF REPORTS P1004309 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D770UB27-4F0-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

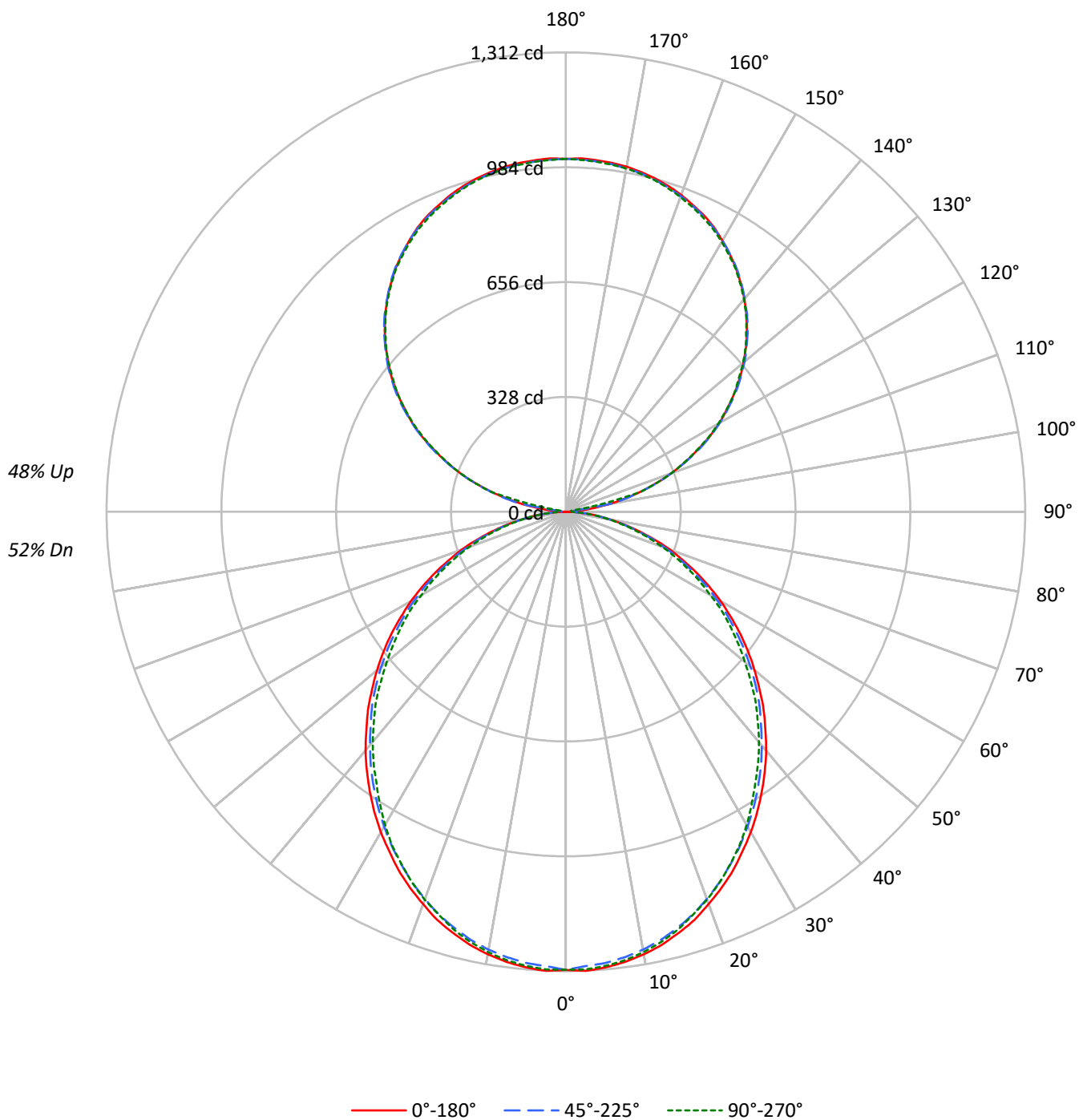
Lumens per Lamp: N/A
Luminaire Lumens: 6503.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	85	85	85	71	71	71	58	58	58
1	98	94	90	86	91	87	84	81	74	72	69	62	61	59	51	50	49
2	89	82	76	71	82	76	71	66	65	61	57	55	52	49	45	43	41
3	82	72	65	59	75	67	60	55	57	52	48	48	45	42	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30
5	68	57	49	43	63	53	46	40	46	40	35	39	34	31	32	29	26
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	18
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15

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	1.9
10°-20°	348.7	5.4
20°-30°	514.8	7.9
30°-40°	600.6	9.2
40°-50°	603.2	9.3
50°-60°	529.5	8.1
60°-70°	394.4	6.1
70°-80°	225.2	3.5
80°-90°	66.5	1.0
90°-100°	34.2	0.5
100°-110°	227.5	3.5
110°-120°	409.7	6.3
120°-130°	525.9	8.1
130°-140°	565.6	8.7
140°-150°	530.8	8.2
150°-160°	429.4	6.6
160°-170°	277.7	4.3
170°-180°	95.8	1.5
0°-30°	986.9	15.2
0°-40°	1587.5	24.4
0°-60°	2720.3	41.8
0°-90°	3406.5	52.4
90°-120°	671.4	10.3
90°-150°	2293.7	35.3
90°-180°	3097.0	47.6
0°-180°	6503.0	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°	1	7	12	16	18	6
95°	43	40	12	16	16	52
105°	220	223	223	223	222	233
115°	412	416	417	414	410	409
125°	587	592	592	589	587	524
135°	732	736	735	733	729	564
145°	848	850	850	850	846	530
155°	934	930	931	933	927	430
165°	986	981	982	986	980	278
175°	1008	1004	1004	1010	1004	96
180°	1008	1008	1008	1008	1008	

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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°	0.7	6.7	12.0	15.7	17.9
92.5°	14.2	7.5	12.0	15.7	16.4
95°	42.6	40.4	12.0	15.7	15.7
97.5°	80.0	84.4	13.5	14.9	15.7
100°	124.8	127.0	130.0	18.7	15.7
102.5°	170.4	173.4	174.9	176.4	113.6
105°	219.7	222.7	222.7	222.7	221.9
107.5°	270.5	270.5	272.0	272.7	269.8
110°	319.8	319.8	321.3	319.1	319.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	366.2	368.4	369.1	366.2	364.7
115°	412.5	416.2	417.0	414.0	409.5
117.5°	461.1	461.1	464.0	459.6	458.1
120°	505.9	505.1	507.4	505.9	502.2
122.5°	545.5	549.2	550.0	548.5	544.0
125°	586.6	591.8	591.8	588.8	586.6
127.5°	626.2	629.9	629.2	627.7	621.7
130°	662.1	665.8	666.6	664.3	660.6
132.5°	697.9	702.4	700.2	700.2	696.4
135°	731.6	736.0	734.6	733.1	728.6
137.5°	762.9	767.4	765.9	765.9	762.2
140°	793.6	795.1	794.3	795.8	791.3
142.5°	821.2	822.0	823.5	823.5	819.0
145°	848.1	849.6	849.6	850.4	845.9
147.5°	872.0	872.0	872.8	873.5	868.3
150°	894.5	893.0	894.5	896.0	890.0
152.5°	916.1	912.4	913.9	915.4	910.2
155°	934.1	929.6	931.1	933.3	927.3
157.5°	948.3	946.0	946.0	948.3	942.3
160°	963.2	958.7	959.5	962.5	956.5
162.5°	975.2	970.7	971.4	975.9	969.2
165°	985.6	981.1	981.9	986.4	980.4
167.5°	993.8	989.4	990.1	995.3	988.6
170°	1000.6	995.3	996.1	1002.1	995.3
172.5°	1005.1	999.8	1001.3	1006.6	999.8
175°	1008.0	1003.6	1004.3	1010.3	1003.6
177.5°	1010.3	1005.8	1006.6	1011.8	1005.8
180°	1008.0	1008.0	1008.0	1008.0	1008.0

(END OF REPORT)