

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: P1035589

Luminaire Tested: S125DIW-B850D1560UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035589
REPORT IS A COMBINATION OF REPORTS P1004178 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B850D1560UB27-4F0-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

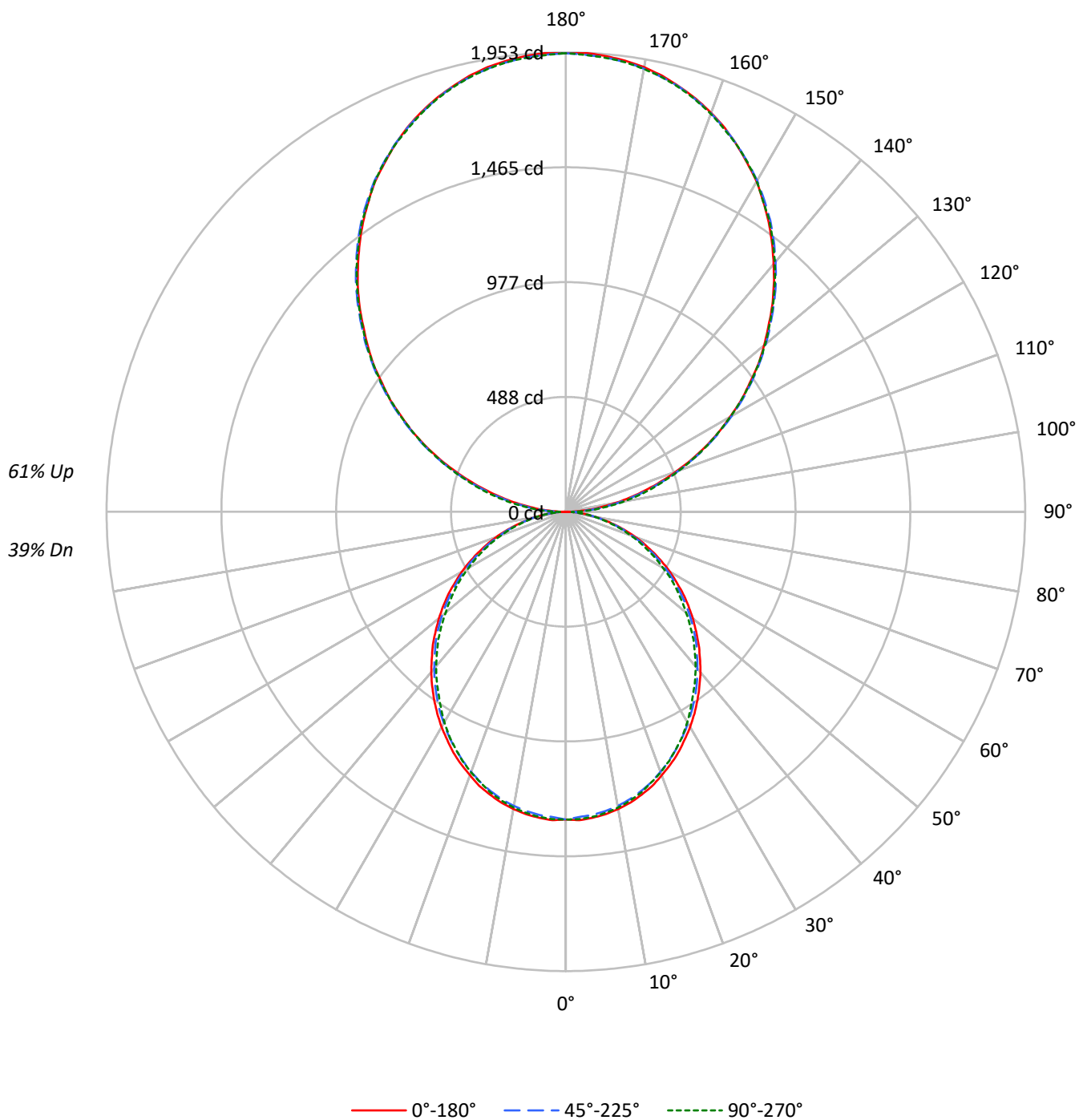
Lumens per Lamp: N/A
Luminaire Lumens: 8849.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	79	76	67	65	63	53	52	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32
3	79	70	62	57	71	64	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	30	25	22	25	21	18	19	16	14
9	48	36	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

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	1.4
10°-20°	348.7	3.9
20°-30°	514.8	5.8
30°-40°	600.6	6.8
40°-50°	603.2	6.8
50°-60°	529.5	6.0
60°-70°	394.4	4.5
70°-80°	225.2	2.5
80°-90°	68.1	0.8
90°-100°	129.6	1.5
100°-110°	385.1	4.4
110°-120°	653.2	7.4
120°-130°	859.9	9.7
130°-140°	963.5	10.9
140°-150°	944.4	10.7
150°-160°	793.3	9.0
160°-170°	527.3	6.0
170°-180°	184.5	2.1
0°-30°	986.9	11.2
0°-40°	1587.5	17.9
0°-60°	2720.3	30.7
0°-90°	3408.0	38.5
90°-120°	1167.9	13.2
90°-150°	3935.8	44.5
90°-180°	5441.0	61.5
0°-180°	8849.0	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°	2	14	24	32	36	10
95°	99	102	117	127	130	103
105°	346	354	363	372	376	369
115°	654	660	663	662	660	647
125°	954	963	965	962	960	855
135°	1241	1250	1252	1252	1246	957
145°	1504	1510	1514	1514	1510	940
155°	1720	1720	1722	1728	1720	792
165°	1871	1868	1869	1875	1866	528
175°	1945	1939	1939	1948	1937	185
180°	1950	1950	1950	1950	1950	

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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°	1.5	13.7	24.3	31.9	36.4
92.5°	45.5	53.1	66.8	77.4	80.4
95°	98.6	101.6	116.8	127.4	130.5
97.5°	151.7	153.2	174.5	183.6	185.1
100°	212.4	212.4	232.1	245.8	248.8
102.5°	277.6	285.2	292.8	308.0	312.5
105°	345.9	353.5	362.6	371.7	376.3
107.5°	420.2	427.8	435.4	440.0	440.0
110°	497.6	505.2	509.8	514.3	512.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	579.5	585.6	587.1	584.1
115°	653.9	660.0	663.0	661.5	660.0
117.5°	732.8	734.3	737.3	738.8	732.8
120°	805.6	813.2	814.7	814.7	808.6
122.5°	884.5	886.0	890.6	889.0	884.5
125°	954.3	963.4	964.9	961.9	960.3
127.5°	1031.7	1036.2	1037.7	1036.2	1033.2
130°	1099.9	1107.5	1110.5	1109.0	1106.0
132.5°	1168.2	1181.9	1180.3	1178.8	1174.3
135°	1241.0	1250.1	1251.6	1251.6	1245.6
137.5°	1309.3	1318.4	1321.4	1322.9	1315.4
140°	1374.5	1382.1	1386.7	1389.7	1382.1
142.5°	1439.8	1445.8	1451.9	1453.4	1445.8
145°	1503.5	1509.6	1514.1	1514.1	1509.6
147.5°	1562.7	1567.2	1570.2	1574.8	1562.7
150°	1621.8	1620.3	1626.4	1626.4	1623.3
152.5°	1670.4	1673.4	1674.9	1679.5	1673.4
155°	1720.4	1720.4	1722.0	1728.0	1720.4
157.5°	1766.0	1762.9	1764.4	1770.5	1759.9
160°	1805.4	1800.8	1802.4	1808.4	1800.8
162.5°	1840.3	1837.3	1837.3	1844.8	1835.7
165°	1870.6	1867.6	1869.1	1875.2	1866.1
167.5°	1897.9	1891.9	1891.9	1901.0	1891.9
170°	1919.2	1913.1	1913.1	1922.2	1911.6
172.5°	1934.4	1928.3	1928.3	1937.4	1928.3
175°	1945.0	1938.9	1938.9	1948.0	1937.4
177.5°	1952.6	1946.5	1945.0	1954.1	1943.5
180°	1949.5	1949.5	1949.5	1949.5	1949.5

(END OF REPORT)