

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: P1029167

Luminaire Tested: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029167
REPORT IS A COMBINATION OF REPORTS P985045 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

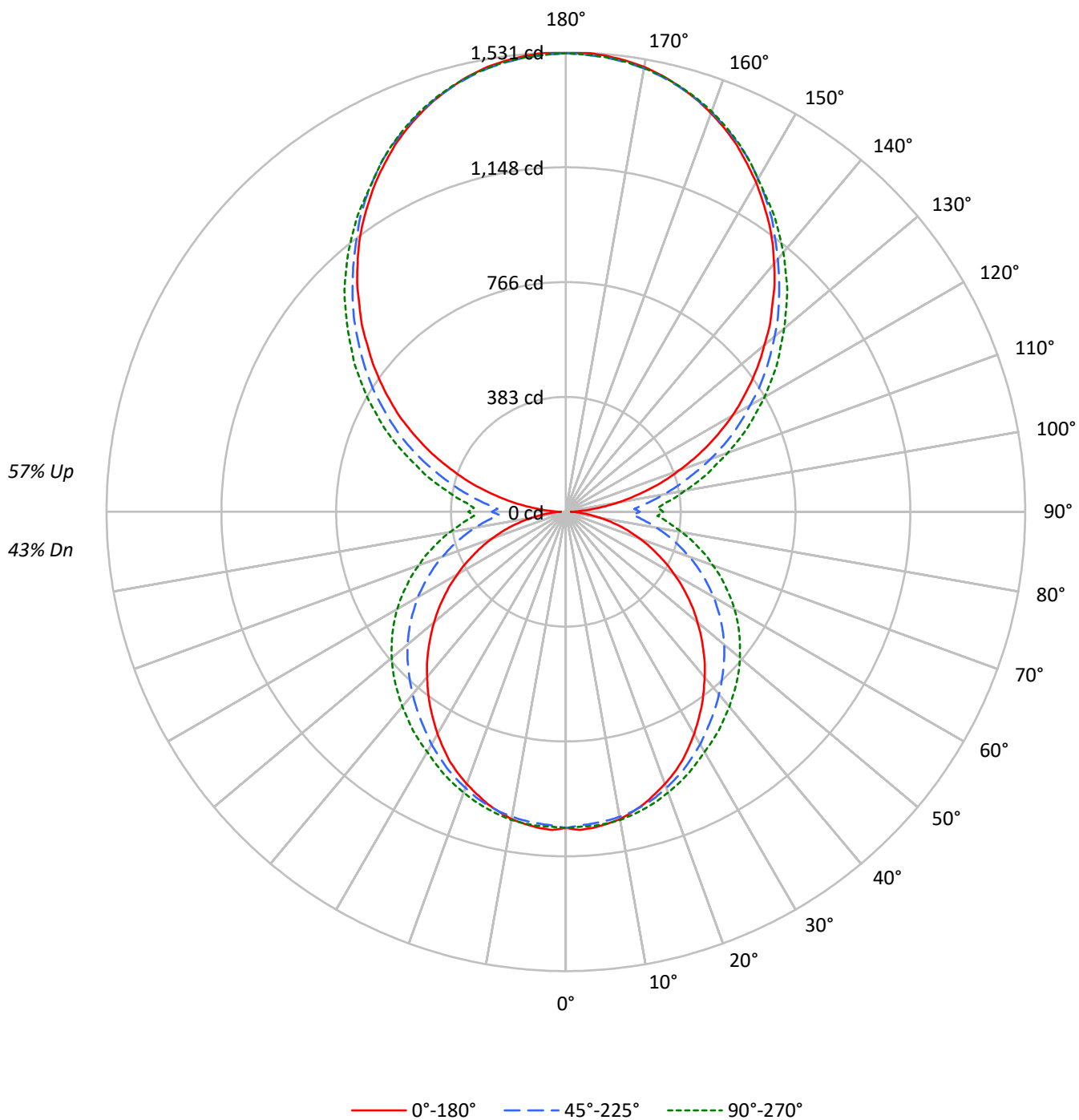
Lumens per Lamp: N/A
Luminaire Lumens: 8299.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
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

TEST NUMBER: P1029167

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029167

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

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
RCR																	
0	106	106	106	106	96	96	96	96	80	80	80		64	64	64		50
1	95	90	86	82	86	82	79	75	68	65	63		54	52	51		42
2	86	78	71	66	78	71	65	61	59	54	51		47	44	41		36
3	78	68	60	54	71	62	55	50	51	46	42		41	37	34		32
4	71	60	52	45	65	55	48	42	45	40	35		36	32	29		28
5	65	53	45	39	59	49	41	36	40	35	30		32	28	25		25
6	60	47	39	33	54	44	36	31	36	30	26		29	25	22		23
7	55	43	35	29	50	39	32	27	33	27	23		26	22	19		21
8	51	39	31	25	47	36	29	24	30	24	20		24	20	17		19
9	48	35	28	22	43	32	26	21	27	22	18		22	18	15		17
10	44	32	25	20	40	30	23	19	25	20	16		20	16	13		16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16681	16681	16681
5°	16757	15969	15880
10°	16645	15416	15191
15°	16409	14845	14486
20°	16112	14243	13816
25°	15821	13668	13209
30°	15411	13083	12607
35°	14996	12520	12166
40°	14558	12033	11726
45°	14144	11591	11345
50°	13695	11183	10966
55°	13227	10751	10583
60°	12651	10300	10179
65°	12055	9782	9714
70°	11377	9225	9213
75°	10511	8668	8741
80°	9141	8090	8252
85°	7769	7544	7828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14144 cd/sqm

TEST NUMBER: P1029167

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.2
10°-20°	286.5	3.5
20°-30°	434.1	5.2
30°-40°	528.7	6.4
40°-50°	568.8	6.9
50°-60°	552.4	6.7
60°-70°	482.4	5.8
70°-80°	371.3	4.5
80°-90°	253.0	3.0
90°-100°	266.1	3.2
100°-110°	425.9	5.1
110°-120°	597.1	7.2
120°-130°	722.6	8.7
130°-140°	778.7	9.4
140°-150°	747.9	9.0
150°-160°	624.6	7.5
160°-170°	414.3	5.0
170°-180°	144.8	1.7
0°-30°	820.6	9.9
0°-40°	1349.2	16.3
0°-60°	2470.4	29.8
0°-90°	3577.1	43.1
90°-120°	1289.1	15.5
90°-150°	3538.3	42.6
90°-180°	4722.0	56.9
0°-180°	8299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1057	1052	1043	1052	1051	100
15°	1008	1011	1011	1025	1023	284
25°	916	927	941	959	964	421
35°	790	816	845	878	889	494
45°	648	689	742	790	805	500
55°	496	551	631	686	706	444
65°	339	414	504	567	586	337
75°	188	273	371	437	457	199
85°	55	150	247	312	333	58
90°	17	121	247	305	325	15
95°	79	164	258	316	332	84
105°	285	333	415	471	488	302
115°	522	547	613	657	670	516
125°	754	766	810	848	860	674
135°	973	987	1005	1036	1044	752
145°	1179	1188	1196	1206	1209	737
155°	1348	1352	1356	1362	1358	621
165°	1467	1465	1465	1474	1468	414
175°	1526	1522	1520	1529	1521	145
180°	1529	1529	1529	1529	1529	

TEST NUMBER: P1029167

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1061.5	1056.9	1046.2	1053.8	1050.8
5°	1056.9	1052.3	1043.1	1052.3	1050.8
7.5°	1049.2	1046.2	1038.5	1049.2	1047.7
10°	1040.1	1037.0	1032.4	1044.7	1043.1
12.5°	1024.8	1026.3	1023.3	1035.5	1034.0
15°	1008.0	1011.1	1011.1	1024.8	1023.3
17.5°	986.6	992.7	997.3	1011.1	1011.1
20°	965.2	972.9	979.0	995.8	995.8
22.5°	942.3	951.5	960.7	977.5	980.5
25°	916.4	927.1	940.8	959.1	963.7
27.5°	885.8	902.6	917.9	940.8	943.9
30°	855.3	875.1	895.0	919.4	924.0
32.5°	821.7	844.6	869.0	898.0	907.2
35°	789.6	815.6	844.6	878.2	888.9
37.5°	754.5	783.5	820.1	856.8	867.5
40°	719.3	752.9	794.2	833.9	847.6
42.5°	685.7	719.3	768.2	812.5	826.3
45°	647.6	688.8	742.3	789.6	804.9
47.5°	610.9	655.2	716.3	765.2	782.0
50°	572.7	620.1	688.8	740.7	757.5
52.5°	536.1	586.5	659.8	713.2	731.6
55°	496.4	551.3	630.8	685.7	705.6
57.5°	458.2	519.3	598.7	658.3	678.1
60°	416.9	482.6	569.7	627.7	649.1
62.5°	380.3	449.0	536.1	598.7	618.5
65°	339.1	413.9	504.0	566.6	586.5
67.5°	302.4	380.3	471.9	534.5	555.9
70°	262.7	342.1	436.8	502.5	520.8
72.5°	226.0	308.5	404.7	468.9	491.8
75°	187.9	273.4	371.1	436.8	456.7
77.5°	151.2	239.8	339.1	404.7	426.1
80°	114.5	207.7	307.0	371.1	392.5
82.5°	84.0	175.6	276.4	340.6	360.4
85°	55.0	149.7	247.4	311.6	332.9
87.5°	33.6	125.2	223.0	285.6	305.5
90°	16.6	120.7	246.7	305.3	324.9
92.5°	42.1	133.4	227.9	288.7	307.0
95°	79.3	164.0	258.2	316.3	332.0
97.5°	122.9	200.2	293.9	350.5	368.8
100°	174.5	241.3	330.7	387.2	402.7
102.5°	227.2	285.3	372.9	429.2	444.7
105°	284.9	333.1	415.1	471.2	488.0
107.5°	344.3	386.1	462.5	515.7	526.1
110°	399.5	437.9	512.7	561.6	574.5

TEST NUMBER: P1029167

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-D1_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	461.5	493.6	562.6	607.6	621.9
115°	522.1	546.6	612.7	657.3	670.3
117.5°	581.2	603.7	661.4	703.4	714.7
120°	641.8	658.3	709.0	751.7	764.7
122.5°	697.3	711.7	761.8	799.2	810.3
125°	753.9	765.5	810.4	847.8	860.2
127.5°	810.6	823.2	859.3	892.3	902.2
130°	863.5	878.7	908.2	942.3	949.3
132.5°	922.8	934.1	958.3	987.1	995.4
135°	972.8	987.0	1004.9	1035.7	1044.0
137.5°	1029.6	1041.2	1051.5	1079.2	1084.7
140°	1079.9	1090.0	1099.6	1124.0	1128.0
142.5°	1131.5	1141.6	1145.5	1165.1	1167.6
145°	1179.0	1188.0	1195.8	1206.3	1208.7
147.5°	1222.9	1234.5	1239.6	1243.7	1243.2
150°	1268.0	1275.8	1280.9	1284.8	1280.9
152.5°	1308.0	1315.7	1322.2	1327.4	1322.2
155°	1348.0	1351.9	1355.7	1362.2	1358.3
157.5°	1382.8	1385.4	1388.0	1397.0	1390.6
160°	1413.8	1416.4	1417.7	1425.4	1420.2
162.5°	1442.2	1442.2	1443.5	1452.5	1446.0
165°	1466.7	1465.4	1465.4	1474.4	1468.0
167.5°	1488.6	1484.7	1484.7	1493.8	1487.3
170°	1505.4	1501.5	1500.2	1509.2	1501.5
172.5°	1517.0	1513.1	1511.8	1520.9	1513.1
175°	1526.0	1522.1	1519.6	1528.6	1520.9
177.5°	1531.2	1527.3	1524.7	1532.5	1524.7
180°	1528.6	1528.6	1528.6	1528.6	1528.6

(END OF REPORT)