

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: P1029174

Luminaire Tested: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029174
REPORT IS A COMBINATION OF REPORTS P985057 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-F1_2700K
Description: Define 2 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

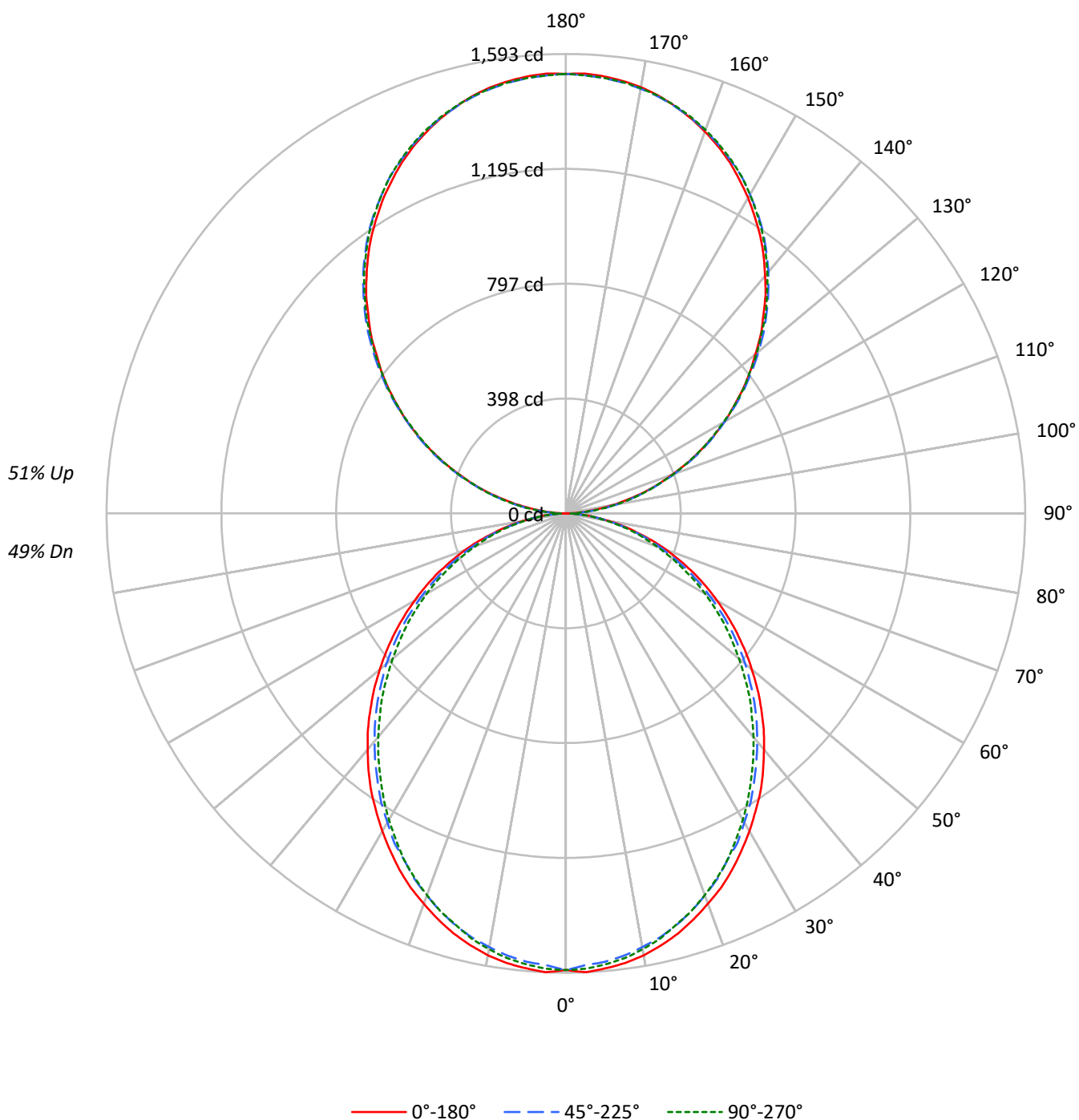
Lumens per Lamp: N/A
Luminaire Lumens: 8294.0 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1029174

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1029174

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

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	50	30	10
RCR																				
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55			49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46			41
2	89	81	75	70	81	75	70	65	63	60	56	53	50	47	43	41	39			34
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	35	33			29
4	74	63	55	49	68	59	52	46	50	44	40	41	38	34	34	31	29			25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25			22
6	63	51	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22			19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20			17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18			15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	18	21	18	16			14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25067	25067	25067
5°	25108	23894	23724
10°	24904	22805	22353
15°	24540	21709	20909
20°	24047	20514	19542
25°	23556	19269	18178
30°	22937	18098	16746
35°	22355	16861	15339
40°	21634	15642	14009
45°	20918	14433	12705
50°	20138	13201	11353
55°	19313	11886	10071
60°	18389	10461	8739
65°	17377	9013	7339
70°	16089	7428	5926
75°	14310	5728	4576
80°	12159	3892	2945
85°	8814	1811	1253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20918 cd/sqm

TEST NUMBER: P1029174

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	1.8
10°-20°	419.4	5.1
20°-30°	616.3	7.4
30°-40°	715.8	8.6
40°-50°	714.9	8.6
50°-60°	623.3	7.5
60°-70°	460.8	5.6
70°-80°	260.7	3.1
80°-90°	73.1	0.9
90°-100°	94.3	1.1
100°-110°	299.7	3.6
110°-120°	512.8	6.2
120°-130°	674.4	8.1
130°-140°	757.0	9.1
140°-150°	742.4	9.0
150°-160°	622.7	7.5
160°-170°	413.0	5.0
170°-180°	144.3	1.7
0°-30°	1184.7	14.3
0°-40°	1900.5	22.9
0°-60°	3238.7	39.0
0°-90°	4033.3	48.6
90°-120°	906.8	10.9
90°-150°	3080.6	37.1
90°-180°	4261.0	51.4
0°-180°	8294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1584	1578	1561	1573	1570	150
15°	1508	1498	1479	1485	1477	425
25°	1364	1352	1326	1329	1326	628
35°	1177	1162	1138	1128	1121	735
45°	958	947	924	908	901	739
55°	725	716	697	679	672	648
65°	489	480	464	451	443	483
75°	256	253	245	236	239	273
85°	62	61	59	55	53	70
90°	1	17	45	42	44	8
95°	67	80	82	82	80	75
105°	276	280	283	286	286	292
115°	514	522	520	518	514	509
125°	748	760	756	752	751	669
135°	968	982	985	984	980	748
145°	1175	1184	1192	1193	1188	734
155°	1344	1348	1352	1358	1354	619
165°	1462	1461	1461	1470	1464	412
175°	1521	1518	1515	1524	1516	145
180°	1524	1524	1524	1524	1524	

TEST NUMBER: P1029174

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.6	1583.6	1583.6	1583.6	1583.6
2.5°	1592.8	1585.1	1568.4	1583.6	1580.6
5°	1583.6	1577.5	1560.8	1573.0	1569.9
7.5°	1573.0	1563.8	1547.1	1559.3	1556.2
10°	1556.2	1545.6	1527.3	1539.5	1534.9
12.5°	1533.4	1524.2	1506.0	1513.6	1510.5
15°	1507.5	1498.4	1478.6	1484.7	1477.0
17.5°	1475.5	1466.4	1446.6	1454.2	1446.6
20°	1440.5	1431.4	1410.0	1414.6	1408.5
22.5°	1405.5	1391.8	1372.0	1372.0	1368.9
25°	1364.4	1352.2	1326.3	1329.3	1326.3
27.5°	1318.7	1308.0	1288.2	1283.7	1276.0
30°	1273.0	1260.8	1238.0	1233.4	1227.3
32.5°	1224.3	1215.1	1190.8	1181.6	1175.5
35°	1177.1	1161.8	1137.5	1128.3	1120.7
37.5°	1123.8	1110.1	1085.7	1075.0	1067.4
40°	1068.9	1056.8	1032.4	1018.7	1012.6
42.5°	1015.7	1003.5	979.1	963.9	954.7
45°	957.8	947.1	924.3	907.5	901.4
47.5°	901.4	890.8	866.4	849.7	840.5
50°	842.1	834.4	813.1	791.8	784.2
52.5°	784.2	773.5	753.7	737.0	726.3
55°	724.8	715.7	697.4	679.1	671.5
57.5°	665.4	657.8	638.0	619.7	613.7
60°	606.0	600.0	578.6	561.9	557.3
62.5°	548.2	537.5	522.3	507.1	501.0
65°	488.8	479.7	464.4	450.7	443.1
67.5°	427.9	420.3	406.6	395.9	389.8
70°	371.5	365.5	351.7	341.1	335.0
72.5°	313.7	307.6	300.0	289.3	284.7
75°	255.8	252.8	245.2	236.0	239.1
77.5°	204.0	198.0	194.9	190.3	185.8
80°	152.3	150.7	147.7	143.1	140.1
82.5°	103.5	103.5	102.0	95.9	95.9
85°	62.4	60.9	59.4	54.8	53.3
87.5°	27.4	24.4	21.3	16.7	15.2
90°	1.3	16.7	45.0	42.4	43.7
92.5°	28.3	38.6	39.9	41.2	41.2
95°	66.9	79.7	82.3	82.3	79.7
97.5°	111.9	123.5	128.6	128.6	128.6
100°	163.3	173.6	177.5	177.5	176.2
102.5°	217.3	225.1	230.2	231.5	230.2
105°	276.5	280.4	282.9	285.5	285.5
107.5°	335.7	340.8	340.8	342.1	335.7
110°	392.2	400.0	400.0	400.0	396.1

TEST NUMBER: P1029174

CATALOG NUMBER: S122DIW-B1005D1240UB2750-4F0-XX-W2A-F1_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	454.0	461.7	460.4	456.5	454.0
115°	514.4	522.1	519.6	518.3	514.4
117.5°	574.9	585.1	578.7	574.9	571.0
120°	635.3	645.6	635.3	635.3	631.4
122.5°	690.6	703.5	697.0	693.2	690.6
125°	748.5	760.0	756.2	752.3	751.0
127.5°	805.1	819.2	814.1	808.9	805.1
130°	857.8	874.5	871.9	869.4	864.2
132.5°	916.9	929.8	931.1	924.7	920.8
135°	968.4	982.5	985.1	983.8	980.0
137.5°	1025.0	1036.5	1039.1	1037.8	1032.7
140°	1075.1	1086.7	1093.1	1093.1	1088.0
142.5°	1126.6	1138.1	1142.0	1143.3	1138.1
145°	1175.4	1184.4	1192.1	1193.4	1188.3
147.5°	1219.2	1230.7	1235.9	1238.4	1233.3
150°	1264.2	1271.9	1277.0	1280.9	1277.0
152.5°	1304.0	1311.8	1318.2	1323.3	1318.2
155°	1343.9	1347.8	1351.6	1358.0	1354.2
157.5°	1378.6	1381.2	1383.8	1392.8	1386.3
160°	1409.5	1412.1	1413.3	1421.1	1415.9
162.5°	1437.8	1437.8	1439.1	1448.1	1441.6
165°	1462.2	1460.9	1460.9	1469.9	1463.5
167.5°	1484.1	1480.2	1480.2	1489.2	1482.8
170°	1500.8	1496.9	1495.7	1504.7	1496.9
172.5°	1512.4	1508.5	1507.2	1516.2	1508.5
175°	1521.4	1517.5	1514.9	1523.9	1516.2
177.5°	1526.5	1522.7	1520.1	1527.8	1520.1
180°	1523.9	1523.9	1523.9	1523.9	1523.9

(END OF REPORT)