

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: P1029325

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029325
REPORT IS A COMBINATION OF REPORTS P985511 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_5000K
Description: Define 2 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

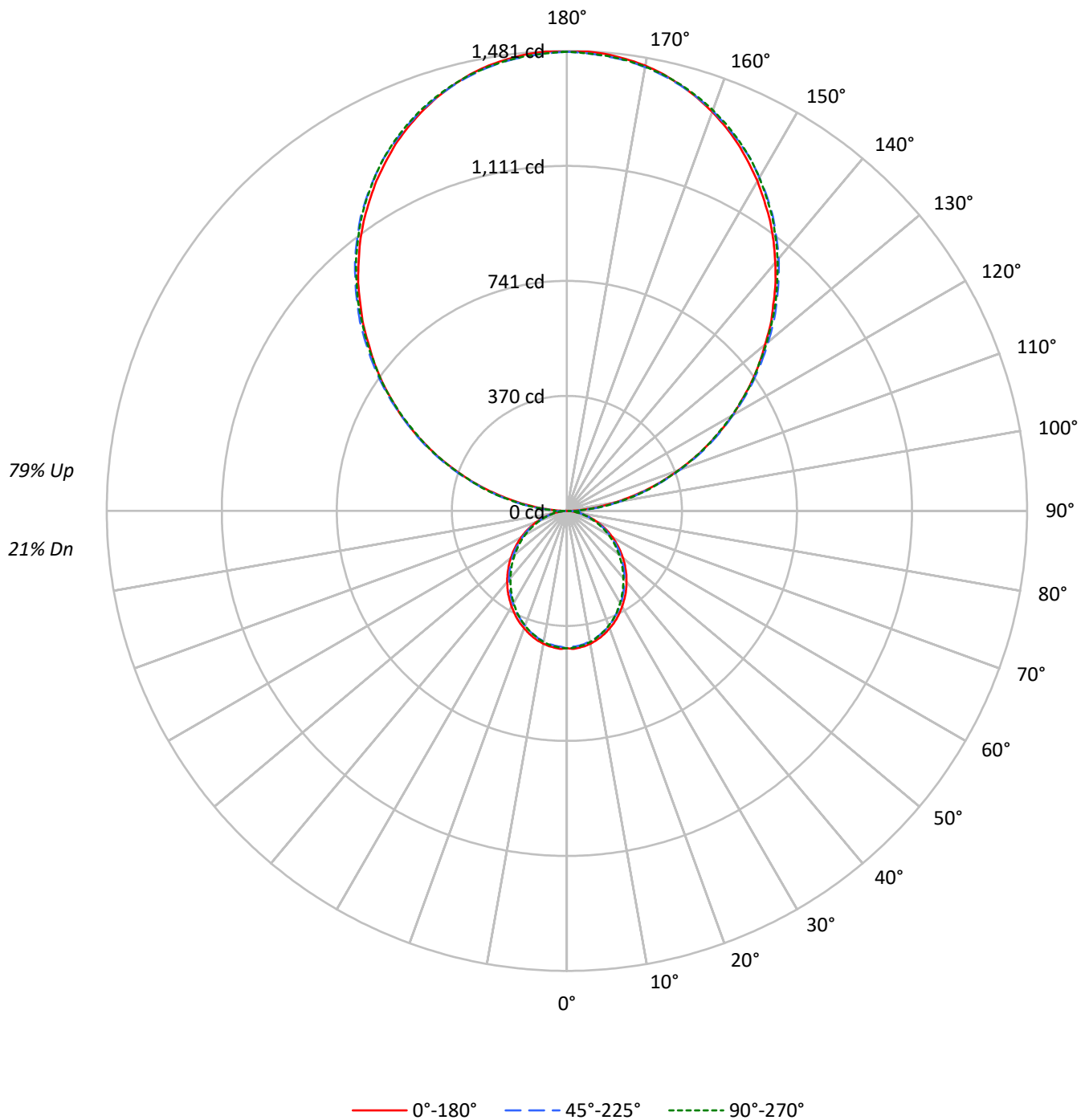
Lumens per Lamp: N/A
Luminaire Lumens: 5262.0 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7000	7000	7000
5°	7011	6672	6625
10°	6953	6368	6242
15°	6852	6062	5838
20°	6714	5728	5457
25°	6578	5380	5075
30°	6405	5054	4676
35°	6243	4708	4283
40°	6041	4368	3911
45°	5840	4030	3548
50°	5622	3686	3170
55°	5393	3318	2812
60°	5134	2922	2440
65°	4852	2517	2049
70°	4491	2074	1654
75°	3994	1600	1279
80°	3393	1086	822
85°	2458	506	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5840 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	0.8
10°-20°	117.1	2.2
20°-30°	172.1	3.3
30°-40°	199.9	3.8
40°-50°	199.6	3.8
50°-60°	174.1	3.3
60°-70°	128.7	2.4
70°-80°	72.8	1.4
80°-90°	23.4	0.4
90°-100°	91.4	1.7
100°-110°	290.7	5.5
110°-120°	497.4	9.5
120°-130°	654.2	12.4
130°-140°	734.3	14.0
140°-150°	720.1	13.7
150°-160°	604.0	11.5
160°-170°	400.6	7.6
170°-180°	140.0	2.7
0°-30°	330.8	6.3
0°-40°	530.7	10.1
0°-60°	904.3	17.2
0°-90°	1129.2	21.5
90°-120°	879.5	16.7
90°-150°	2988.1	56.8
90°-180°	4133.0	78.5
0°-180°	5262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	442	440	436	439	438	42
15°	421	418	413	415	412	119
25°	381	378	370	371	370	175
35°	329	324	318	315	313	205
45°	267	264	258	253	252	206
55°	202	200	195	190	188	181
65°	136	134	130	126	124	135
75°	71	71	68	66	67	76
85°	17	17	17	15	15	19
90°	1	16	44	41	42	5
95°	65	77	80	80	77	72
105°	268	272	274	277	277	283
115°	499	506	504	503	499	494
125°	726	737	734	730	728	649
135°	939	953	956	954	950	726
145°	1140	1149	1156	1158	1153	712
155°	1304	1307	1311	1317	1314	600
165°	1418	1417	1417	1426	1420	400
175°	1476	1472	1470	1478	1471	140
180°	1478	1478	1478	1478	1478	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	442.2	442.2	442.2	442.2	442.2
2.5°	444.7	442.6	437.9	442.2	441.3
5°	442.2	440.5	435.8	439.2	438.4
7.5°	439.2	436.7	432.0	435.4	434.5
10°	434.5	431.6	426.5	429.9	428.6
12.5°	428.2	425.6	420.5	422.6	421.8
15°	420.9	418.4	412.9	414.6	412.4
17.5°	412.0	409.5	403.9	406.0	403.9
20°	402.2	399.7	393.7	395.0	393.3
22.5°	392.4	388.6	383.1	383.1	382.2
25°	381.0	377.6	370.3	371.2	370.3
27.5°	368.2	365.2	359.7	358.4	356.3
30°	355.5	352.1	345.7	344.4	342.7
32.5°	341.8	339.3	332.5	329.9	328.2
35°	328.7	324.4	317.6	315.1	312.9
37.5°	313.8	310.0	303.2	300.2	298.1
40°	298.5	295.1	288.3	284.4	282.7
42.5°	283.6	280.2	273.4	269.1	266.6
45°	267.4	264.5	258.1	253.4	251.7
47.5°	251.7	248.7	241.9	237.3	234.7
50°	235.1	233.0	227.0	221.1	219.0
52.5°	219.0	216.0	210.5	205.8	202.8
55°	202.4	199.8	194.7	189.6	187.5
57.5°	185.8	183.7	178.2	173.0	171.3
60°	169.2	167.5	161.6	156.9	155.6
62.5°	153.1	150.1	145.8	141.6	139.9
65°	136.5	133.9	129.7	125.9	123.7
67.5°	119.5	117.4	113.5	110.5	108.8
70°	103.7	102.0	98.2	95.2	93.5
72.5°	87.6	85.9	83.8	80.8	79.5
75°	71.4	70.6	68.5	65.9	66.8
77.5°	57.0	55.3	54.4	53.1	51.9
80°	42.5	42.1	41.2	40.0	39.1
82.5°	28.9	28.9	28.5	26.8	26.8
85°	17.4	17.0	16.6	15.3	14.9
87.5°	7.7	6.8	6.0	4.7	4.3
90°	1.2	16.2	43.7	41.2	42.4
92.5°	27.4	37.4	38.7	39.9	39.9
95°	64.9	77.3	79.8	79.8	77.3
97.5°	108.5	119.8	124.7	124.7	124.7
100°	158.4	168.4	172.1	172.1	170.9
102.5°	210.8	218.3	223.3	224.5	223.3
105°	268.2	271.9	274.4	276.9	276.9
107.5°	325.6	330.6	330.6	331.8	325.6
110°	380.5	388.0	388.0	388.0	384.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	440.3	447.8	446.6	442.8	440.3
115°	499.0	506.5	504.0	502.7	499.0
117.5°	557.6	567.6	561.3	557.6	553.9
120°	616.2	626.2	616.2	616.2	612.5
122.5°	669.9	682.3	676.1	672.4	669.9
125°	726.0	737.2	733.5	729.7	728.5
127.5°	780.9	794.6	789.6	784.6	780.9
130°	832.0	848.3	845.8	843.3	838.3
132.5°	889.4	901.9	903.1	896.9	893.2
135°	939.3	953.0	955.5	954.3	950.5
137.5°	994.2	1005.4	1007.9	1006.7	1001.7
140°	1042.9	1054.1	1060.3	1060.3	1055.3
142.5°	1092.8	1104.0	1107.7	1109.0	1104.0
145°	1140.2	1148.9	1156.4	1157.6	1152.6
147.5°	1182.6	1193.8	1198.8	1201.3	1196.3
150°	1226.2	1233.7	1238.7	1242.4	1238.7
152.5°	1264.9	1272.4	1278.6	1283.6	1278.6
155°	1303.6	1307.3	1311.1	1317.3	1313.5
157.5°	1337.2	1339.7	1342.2	1351.0	1344.7
160°	1367.2	1369.7	1370.9	1378.4	1373.4
162.5°	1394.6	1394.6	1395.9	1404.6	1398.4
165°	1418.3	1417.1	1417.1	1425.8	1419.6
167.5°	1439.5	1435.8	1435.8	1444.5	1438.3
170°	1455.8	1452.0	1450.8	1459.5	1452.0
172.5°	1467.0	1463.2	1462.0	1470.7	1463.2
175°	1475.7	1472.0	1469.5	1478.2	1470.7
177.5°	1480.7	1477.0	1474.5	1482.0	1474.5
180°	1478.2	1478.2	1478.2	1478.2	1478.2

(END OF REPORT)