

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: P1029355

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029355
REPORT IS A COMBINATION OF REPORTS P985601 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1440UB2750-4F0-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

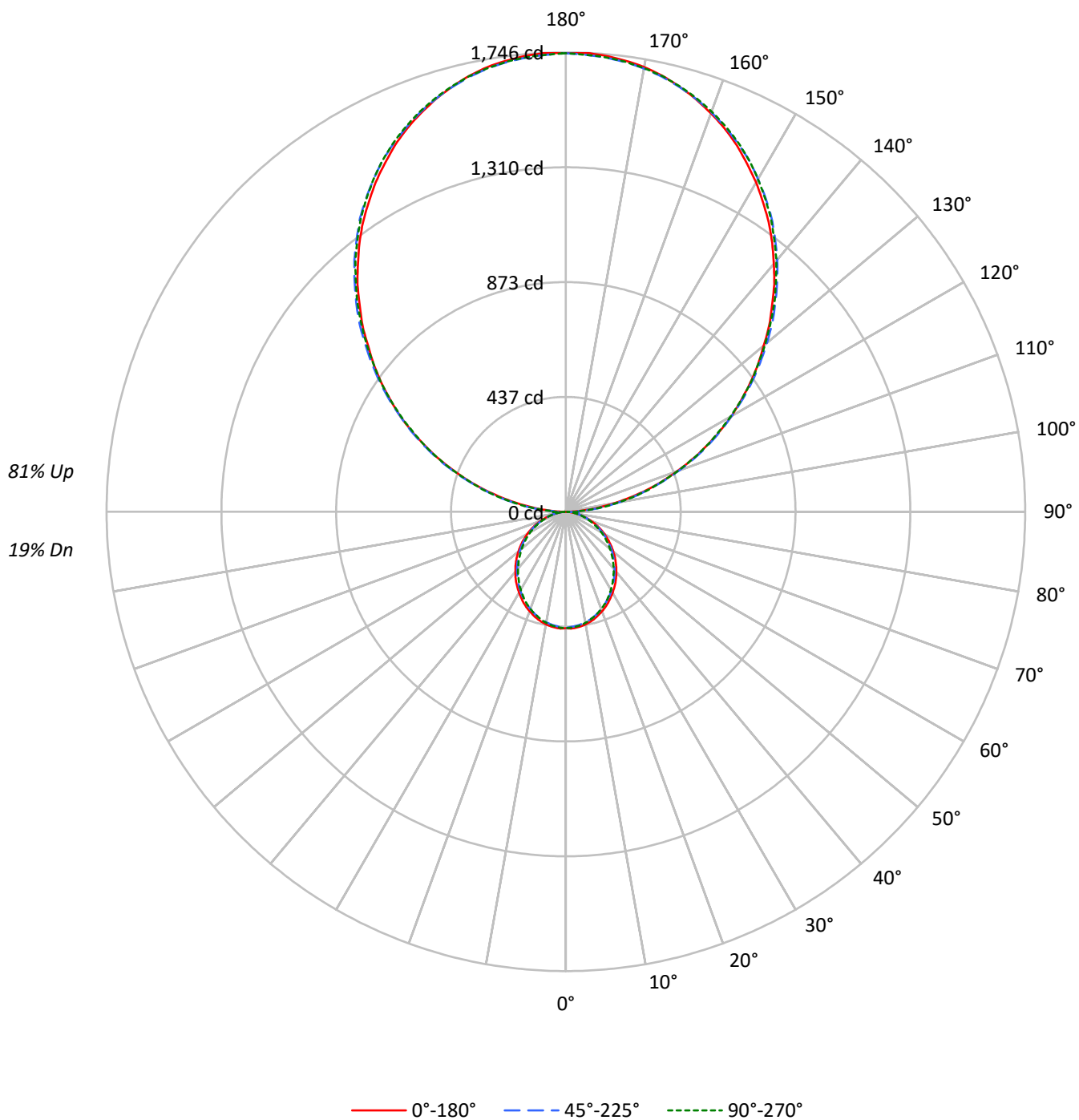
Lumens per Lamp: N/A
Luminaire Lumens: 6003.0 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	88	88	88	88	66	66	66	46	46	46	27	27	27
1	91	87	83	80	80	77	73	71	58	56	54	40	39	38	24	24	23
2	83	76	70	65	73	67	62	58	50	47	44	35	33	32	21	20	19
3	75	66	59	54	66	59	53	48	44	41	37	31	29	27	19	18	17
4	69	59	51	45	60	52	46	41	39	35	32	28	25	23	17	15	14
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	14	12	11
7	53	42	34	29	47	37	31	26	28	24	20	20	17	15	12	11	10
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	11	10	9
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	8
10	43	31	24	20	38	28	22	18	21	17	14	15	13	11	10	8	7

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	0.7
10°-20°	117.1	2.0
20°-30°	172.1	2.9
30°-40°	199.9	3.3
40°-50°	199.6	3.3
50°-60°	174.1	2.9
60°-70°	128.7	2.1
70°-80°	72.8	1.2
80°-90°	24.2	0.4
90°-100°	107.8	1.8
100°-110°	342.8	5.7
110°-120°	586.5	9.8
120°-130°	771.4	12.8
130°-140°	865.8	14.4
140°-150°	849.1	14.1
150°-160°	712.2	11.9
160°-170°	472.4	7.9
170°-180°	165.1	2.8
0°-30°	330.8	5.5
0°-40°	530.7	8.8
0°-60°	904.3	15.1
0°-90°	1130.0	18.8
90°-120°	1037.1	17.3
90°-150°	3523.4	58.7
90°-180°	4873.0	81.2
0°-180°	6003.0	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°	2	19	52	48	50	6
95°	76	91	94	94	91	85
105°	316	321	324	326	326	334
115°	588	597	594	593	588	582
125°	856	869	865	860	859	765
135°	1108	1124	1127	1125	1121	856
145°	1344	1355	1364	1365	1359	840
155°	1537	1542	1546	1553	1549	708
165°	1672	1671	1671	1681	1674	472
175°	1740	1736	1733	1743	1734	165
180°	1743	1743	1743	1743	1743	

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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°	1.5	19.1	51.5	48.5	50.0
92.5°	32.4	44.1	45.6	47.1	47.1
95°	76.5	91.2	94.1	94.1	91.2
97.5°	128.0	141.2	147.1	147.1	147.1
100°	186.8	198.6	203.0	203.0	201.5
102.5°	248.6	257.4	263.3	264.8	263.3
105°	316.2	320.6	323.6	326.5	326.5
107.5°	383.9	389.8	389.8	391.3	383.9
110°	448.6	457.4	457.4	457.4	453.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	519.2	528.0	526.6	522.2	519.2
115°	588.3	597.2	594.2	592.8	588.3
117.5°	657.5	669.2	661.9	657.5	653.1
120°	726.6	738.4	726.6	726.6	722.2
122.5°	789.9	804.6	797.2	792.8	789.9
125°	856.0	869.3	864.9	860.5	859.0
127.5°	920.8	936.9	931.1	925.2	920.8
130°	981.1	1000.2	997.2	994.3	988.4
132.5°	1048.7	1063.4	1064.9	1057.6	1053.1
135°	1107.6	1123.7	1126.7	1125.2	1120.8
137.5°	1172.3	1185.5	1188.5	1187.0	1181.1
140°	1229.6	1242.9	1250.2	1250.2	1244.4
142.5°	1288.5	1301.7	1306.1	1307.6	1301.7
145°	1344.4	1354.7	1363.5	1365.0	1359.1
147.5°	1394.4	1407.6	1413.5	1416.4	1410.6
150°	1445.9	1454.7	1460.6	1465.0	1460.6
152.5°	1491.5	1500.3	1507.6	1513.5	1507.6
155°	1537.1	1541.5	1545.9	1553.2	1548.8
157.5°	1576.8	1579.7	1582.7	1593.0	1585.6
160°	1612.1	1615.0	1616.5	1625.3	1619.4
162.5°	1644.4	1644.4	1645.9	1656.2	1648.8
165°	1672.4	1670.9	1670.9	1681.2	1673.8
167.5°	1697.4	1693.0	1693.0	1703.3	1695.9
170°	1716.5	1712.1	1710.6	1720.9	1712.1
172.5°	1729.7	1725.3	1723.9	1734.2	1725.3
175°	1740.0	1735.6	1732.7	1743.0	1734.2
177.5°	1745.9	1741.5	1738.6	1747.4	1738.6
180°	1743.0	1743.0	1743.0	1743.0	1743.0

(END OF REPORT)