

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: P1029344

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029344
REPORT IS A COMBINATION OF REPORTS P985585 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-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

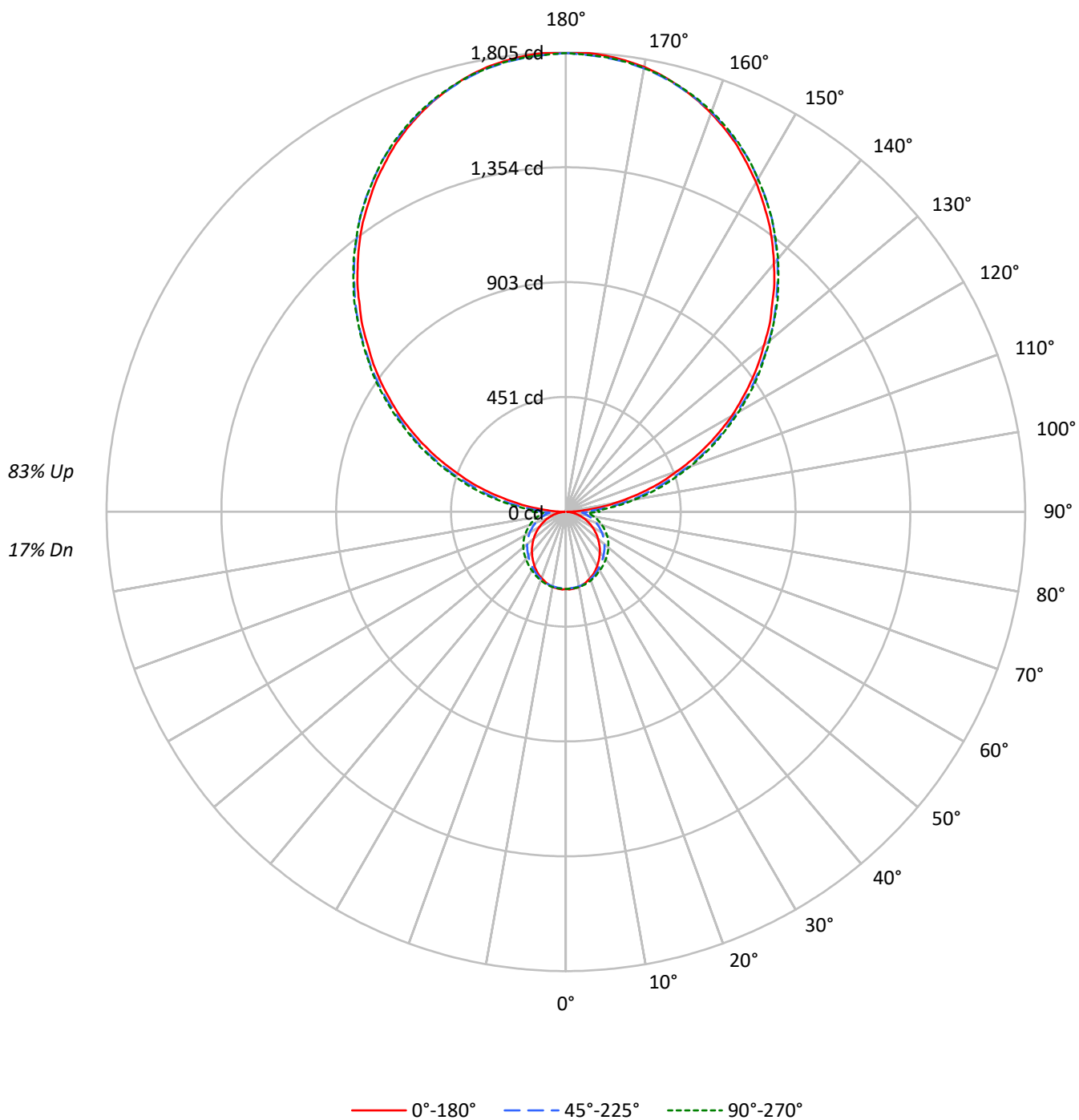
Lumens per Lamp: N/A
Luminaire Lumens: 6202.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26
1	90	85	82	78	79	75	72	69	56	54	52	38	37	36	22	21	20
2	82	74	68	63	71	65	60	56	49	45	42	33	31	29	19	18	17
3	74	65	58	52	65	57	51	47	43	39	35	29	27	24	16	15	14
4	68	57	50	44	59	50	44	39	38	33	30	26	23	21	15	13	12
5	62	51	43	37	54	45	38	33	33	29	25	23	20	18	13	11	10
6	57	45	37	32	50	40	33	29	30	25	22	20	18	15	12	10	9
7	52	41	33	28	46	36	29	25	27	22	19	19	16	13	11	9	8
8	48	37	29	24	42	32	26	22	24	20	17	17	14	12	10	8	7
9	45	33	26	21	39	29	23	19	22	18	15	15	12	10	9	7	6
10	42	30	23	19	37	27	21	17	20	16	13	14	11	9	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4804	4804	4804
5°	4826	4599	4573
10°	4793	4439	4375
15°	4726	4275	4172
20°	4641	4101	3979
25°	4556	3936	3803
30°	4438	3767	3631
35°	4319	3605	3504
40°	4194	3465	3377
45°	4073	3338	3267
50°	3943	3221	3159
55°	3808	3097	3048
60°	3644	2967	2931
65°	3470	2816	2797
70°	3278	2657	2654
75°	3026	2497	2517
80°	2635	2330	2376
85°	2232	2174	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.8	0.5
10°-20°	82.5	1.3
20°-30°	125.0	2.0
30°-40°	152.2	2.5
40°-50°	163.8	2.6
50°-60°	159.1	2.6
60°-70°	138.9	2.2
70°-80°	106.9	1.7
80°-90°	76.7	1.2
90°-100°	160.9	2.6
100°-110°	390.5	6.3
110°-120°	630.3	10.2
120°-130°	810.9	13.1
130°-140°	900.9	14.5
140°-150°	878.9	14.2
150°-160°	736.5	11.9
160°-170°	488.4	7.9
170°-180°	170.7	2.8
0°-30°	236.3	3.8
0°-40°	388.5	6.3
0°-60°	711.5	11.5
0°-90°	1034.0	16.7
90°-120°	1181.7	19.1
90°-150°	3772.4	60.8
90°-180°	5168.0	83.3
0°-180°	6202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	304	303	300	303	303	29
15°	290	291	291	295	295	82
25°	264	267	271	276	278	121
35°	227	235	243	253	256	142
45°	186	198	214	227	232	144
55°	143	159	182	198	203	128
65°	98	119	145	163	169	97
75°	54	79	107	126	132	57
85°	16	43	71	90	96	17
90°	6	50	111	126	133	8
95°	83	118	148	165	167	91
105°	329	347	372	391	396	348
115°	610	624	641	652	653	604
125°	886	900	909	916	919	792
135°	1146	1162	1170	1178	1176	885
145°	1390	1401	1410	1414	1410	869
155°	1589	1594	1598	1606	1602	732
165°	1729	1728	1728	1738	1731	488
175°	1799	1795	1792	1802	1793	171
180°	1802	1802	1802	1802	1802	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	303.5	303.5	303.5	303.5	303.5
2.5°	305.7	304.4	301.3	303.5	302.6
5°	304.4	303.0	300.4	303.0	302.6
7.5°	302.2	301.3	299.1	302.2	301.7
10°	299.5	298.6	297.3	300.8	300.4
12.5°	295.1	295.6	294.7	298.2	297.8
15°	290.3	291.2	291.2	295.1	294.7
17.5°	284.1	285.9	287.2	291.2	291.2
20°	278.0	280.2	281.9	286.8	286.8
22.5°	271.4	274.0	276.7	281.5	282.4
25°	263.9	267.0	270.9	276.2	277.5
27.5°	255.1	259.9	264.3	270.9	271.8
30°	246.3	252.0	257.7	264.8	266.1
32.5°	236.6	243.2	250.3	258.6	261.3
35°	227.4	234.9	243.2	252.9	256.0
37.5°	217.3	225.6	236.2	246.7	249.8
40°	207.2	216.8	228.7	240.2	244.1
42.5°	197.5	207.2	221.2	234.0	238.0
45°	186.5	198.4	213.8	227.4	231.8
47.5°	175.9	188.7	206.3	220.4	225.2
50°	164.9	178.6	198.4	213.3	218.2
52.5°	154.4	168.9	190.0	205.4	210.7
55°	142.9	158.8	181.7	197.5	203.2
57.5°	132.0	149.5	172.4	189.6	195.3
60°	120.1	139.0	164.1	180.8	186.9
62.5°	109.5	129.3	154.4	172.4	178.1
65°	97.6	119.2	145.1	163.2	168.9
67.5°	87.1	109.5	135.9	153.9	160.1
70°	75.7	98.5	125.8	144.7	150.0
72.5°	65.1	88.8	116.6	135.0	141.6
75°	54.1	78.7	106.9	125.8	131.5
77.5°	43.5	69.1	97.6	116.6	122.7
80°	33.0	59.8	88.4	106.9	113.0
82.5°	24.2	50.6	79.6	98.1	103.8
85°	15.8	43.1	71.3	89.7	95.9
87.5°	9.7	36.1	64.2	82.2	88.0
90°	5.9	49.7	111.3	125.9	132.6
92.5°	37.5	72.9	101.2	120.0	125.2
95°	82.6	118.5	147.9	164.6	166.9
97.5°	135.4	168.0	199.6	215.9	221.2
100°	196.3	224.7	253.9	270.2	273.5
102.5°	259.6	283.4	313.1	330.5	333.8
105°	329.2	346.6	372.4	390.8	395.7
107.5°	399.2	415.8	437.7	454.3	451.5
110°	465.7	483.6	505.1	519.2	519.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	538.7	554.8	573.5	583.0	584.8
115°	610.2	624.1	640.9	652.5	652.8
117.5°	681.2	696.8	707.7	716.4	716.2
120°	752.6	766.6	772.0	784.3	784.6
122.5°	818.0	833.7	842.3	849.7	850.6
125°	886.1	899.8	909.3	916.5	919.0
127.5°	953.0	969.2	975.0	980.0	979.4
130°	1015.4	1034.6	1040.9	1048.3	1045.9
132.5°	1085.3	1100.0	1108.1	1110.7	1109.7
135°	1145.7	1162.4	1169.8	1177.6	1176.5
137.5°	1212.6	1226.3	1231.5	1238.4	1235.4
140°	1271.9	1285.2	1293.7	1300.7	1297.3
142.5°	1332.7	1346.0	1350.6	1357.4	1353.5
145°	1390.1	1400.8	1409.9	1414.0	1410.1
147.5°	1441.8	1455.5	1461.6	1465.0	1460.4
150°	1495.1	1504.2	1510.3	1514.8	1510.3
152.5°	1542.2	1551.3	1558.9	1565.0	1558.9
155°	1589.4	1593.9	1598.5	1606.1	1601.5
157.5°	1630.4	1633.5	1636.5	1647.2	1639.6
160°	1666.9	1670.0	1671.5	1680.6	1674.5
162.5°	1700.4	1700.4	1701.9	1712.6	1705.0
165°	1729.3	1727.8	1727.8	1738.4	1730.8
167.5°	1755.1	1750.6	1750.6	1761.2	1753.6
170°	1774.9	1770.4	1768.8	1779.5	1770.4
172.5°	1788.6	1784.0	1782.5	1793.2	1784.0
175°	1799.3	1794.7	1791.6	1802.3	1793.2
177.5°	1805.3	1800.8	1797.7	1806.9	1797.7
180°	1802.3	1802.3	1802.3	1802.3	1802.3

(END OF REPORT)