

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: P1029343

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-D1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029343
REPORT IS A COMBINATION OF REPORTS P985584 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_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

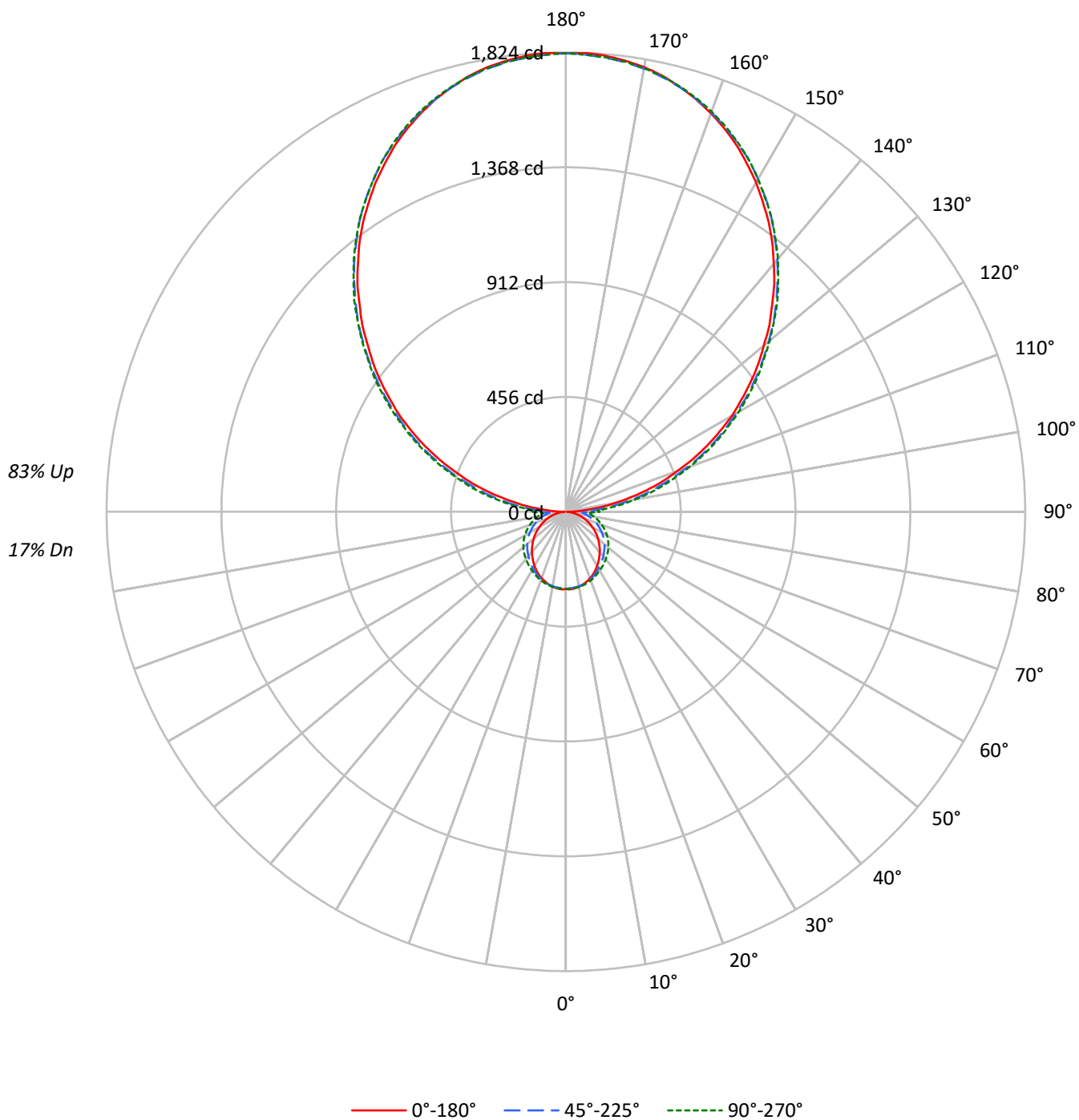
Lumens per Lamp: N/A
Luminaire Lumens: 6264.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	81	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°	4850	4850	4850
5°	4872	4643	4617
10°	4839	4483	4417
15°	4770	4315	4212
20°	4684	4141	4017
25°	4599	3973	3840
30°	4479	3804	3665
35°	4360	3639	3537
40°	4232	3498	3409
45°	4112	3370	3298
50°	3982	3252	3188
55°	3845	3126	3076
60°	3678	2994	2959
65°	3505	2843	2824
70°	3309	2682	2678
75°	3054	2520	2542
80°	2659	2351	2399
85°	2260	2192	2276

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	0.5
10°-20°	83.3	1.3
20°-30°	126.2	2.0
30°-40°	153.7	2.5
40°-50°	165.4	2.6
50°-60°	160.6	2.6
60°-70°	140.2	2.2
70°-80°	108.0	1.7
80°-90°	77.5	1.2
90°-100°	162.5	2.6
100°-110°	394.5	6.3
110°-120°	636.7	10.2
120°-130°	819.1	13.1
130°-140°	910.0	14.5
140°-150°	887.8	14.2
150°-160°	743.9	11.9
160°-170°	493.4	7.9
170°-180°	172.4	2.8
0°-30°	238.5	3.8
0°-40°	392.2	6.3
0°-60°	718.2	11.5
0°-90°	1043.9	16.7
90°-120°	1193.6	19.1
90°-150°	3810.4	60.8
90°-180°	5220.0	83.3
0°-180°	6264.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	307	306	303	306	306	29
15°	293	294	294	298	298	83
25°	266	270	274	279	280	123
35°	230	237	246	255	258	143
45°	188	200	216	230	234	145
55°	144	160	183	199	205	129
65°	99	120	146	165	170	98
75°	55	80	108	127	133	58
85°	16	44	72	91	97	17
90°	6	50	112	127	134	8
95°	84	120	149	166	169	92
105°	332	350	376	395	400	351
115°	616	630	647	659	659	610
125°	895	909	918	926	928	800
135°	1157	1174	1182	1190	1188	894
145°	1404	1415	1424	1428	1424	877
155°	1605	1610	1615	1622	1618	739
165°	1747	1745	1745	1756	1748	493
175°	1817	1813	1810	1820	1811	173
180°	1820	1820	1820	1820	1820	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	306.4	306.4	306.4	306.4	306.4
2.5°	308.6	307.3	304.1	306.4	305.5
5°	307.3	305.9	303.3	305.9	305.5
7.5°	305.0	304.1	301.9	305.0	304.6
10°	302.4	301.5	300.2	303.7	303.3
12.5°	297.9	298.4	297.5	301.0	300.6
15°	293.0	293.9	293.9	297.9	297.5
17.5°	286.8	288.6	289.9	293.9	293.9
20°	280.6	282.8	284.6	289.5	289.5
22.5°	274.0	276.6	279.3	284.2	285.1
25°	266.4	269.5	273.5	278.8	280.2
27.5°	257.5	262.4	266.9	273.5	274.4
30°	248.6	254.4	260.2	267.3	268.6
32.5°	238.9	245.5	252.6	261.1	263.7
35°	229.6	237.1	245.5	255.3	258.4
37.5°	219.3	227.8	238.4	249.1	252.2
40°	209.1	218.9	230.9	242.4	246.4
42.5°	199.4	209.1	223.3	236.2	240.2
45°	188.3	200.3	215.8	229.6	234.0
47.5°	177.6	190.5	208.2	222.5	227.3
50°	166.5	180.3	200.3	215.3	220.2
52.5°	155.8	170.5	191.8	207.4	212.7
55°	144.3	160.3	183.4	199.4	205.1
57.5°	133.2	151.0	174.1	191.4	197.1
60°	121.2	140.3	165.6	182.5	188.7
62.5°	110.6	130.5	155.8	174.1	179.8
65°	98.6	120.3	146.5	164.7	170.5
67.5°	87.9	110.6	137.2	155.4	161.6
70°	76.4	99.5	127.0	146.1	151.4
72.5°	65.7	89.7	117.7	136.3	143.0
75°	54.6	79.5	107.9	127.0	132.8
77.5°	44.0	69.7	98.6	117.7	123.9
80°	33.3	60.4	89.2	107.9	114.1
82.5°	24.4	51.1	80.4	99.0	104.8
85°	16.0	43.5	71.9	90.6	96.8
87.5°	9.8	36.4	64.8	83.0	88.8
90°	5.9	50.2	112.4	127.1	133.9
92.5°	37.8	73.6	102.2	121.1	126.5
95°	83.5	119.7	149.4	166.2	168.6
97.5°	136.8	169.7	201.6	218.0	223.3
100°	198.2	226.9	256.4	272.8	276.2
102.5°	262.3	286.2	316.3	333.8	337.2
105°	332.5	350.0	376.2	394.8	399.7
107.5°	403.2	420.0	442.2	458.9	456.1
110°	470.4	488.5	510.2	524.4	524.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	544.1	560.4	579.3	588.9	590.7
115°	616.3	630.4	647.3	659.1	659.3
117.5°	688.0	703.9	714.8	723.6	723.4
120°	760.2	774.3	779.8	792.2	792.5
122.5°	826.3	842.2	850.9	858.3	859.2
125°	895.0	908.9	918.4	925.8	928.3
127.5°	962.6	979.0	984.9	989.8	989.2
130°	1025.6	1045.1	1051.4	1058.9	1056.4
132.5°	1096.3	1111.1	1119.4	1121.9	1120.9
135°	1157.2	1174.1	1181.7	1189.5	1188.5
137.5°	1224.8	1238.7	1244.0	1250.9	1247.8
140°	1284.7	1298.2	1306.8	1313.9	1310.4
142.5°	1346.2	1359.6	1364.2	1371.1	1367.1
145°	1404.2	1414.9	1424.2	1428.4	1424.4
147.5°	1456.4	1470.2	1476.4	1479.9	1475.1
150°	1510.2	1519.4	1525.5	1530.2	1525.5
152.5°	1557.8	1567.0	1574.7	1580.9	1574.7
155°	1605.4	1610.0	1614.7	1622.3	1617.7
157.5°	1646.9	1650.0	1653.1	1663.8	1656.1
160°	1683.8	1686.9	1688.4	1697.6	1691.5
162.5°	1717.6	1717.6	1719.1	1729.9	1722.2
165°	1746.8	1745.2	1745.2	1756.0	1748.3
167.5°	1772.9	1768.3	1768.3	1779.0	1771.4
170°	1792.9	1788.3	1786.7	1797.5	1788.3
172.5°	1806.7	1802.1	1800.5	1811.3	1802.1
175°	1817.4	1812.8	1809.8	1820.5	1811.3
177.5°	1823.6	1819.0	1815.9	1825.1	1815.9
180°	1820.5	1820.5	1820.5	1820.5	1820.5

(END OF REPORT)