

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: P1029495

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029495
REPORT IS A COMBINATION OF REPORTS P986044 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B485D1440UB2750-4F0-XX-W2A-D_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

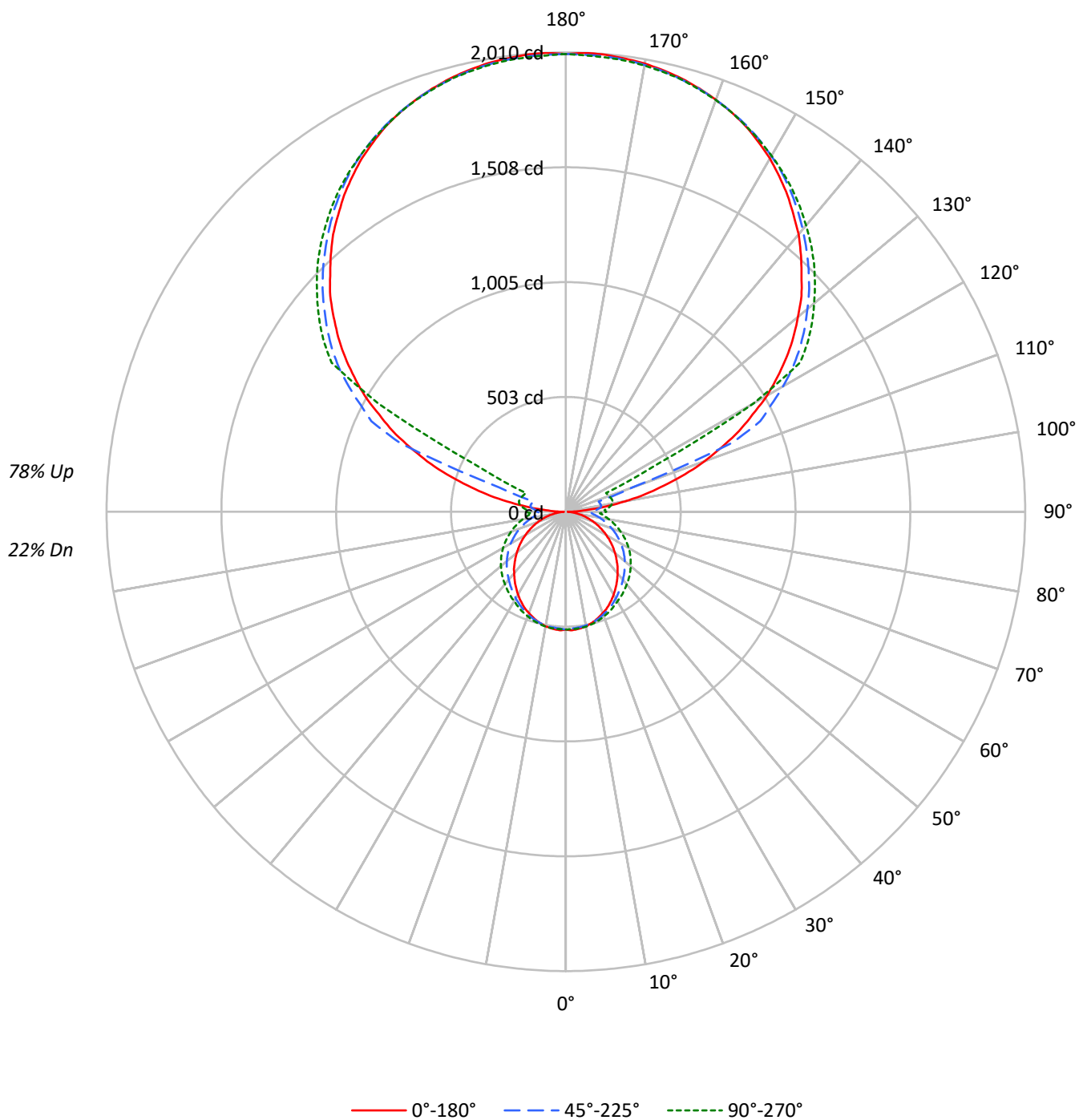
Lumens per Lamp: N/A
Luminaire Lumens: 7842.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31
1	91	86	82	79	80	77	73	70	58	56	54	42	40	39	26	25	25
2	82	75	69	64	73	67	61	57	51	47	44	36	34	32	22	21	20
3	75	66	58	53	66	58	52	47	44	40	37	32	29	27	20	18	17
4	68	58	50	44	60	51	45	40	39	35	31	28	25	23	17	16	14
5	63	51	43	37	55	46	39	34	35	30	26	25	22	19	16	14	12
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11
7	53	41	33	28	47	37	30	25	28	23	20	20	17	15	13	11	9
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	12	10	8
9	45	34	26	21	40	30	24	19	23	19	15	17	14	11	11	9	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8160	8160	8160
5°	8197	7812	7768
10°	8142	7541	7431
15°	8027	7262	7087
20°	7883	6968	6758
25°	7740	6686	6461
30°	7539	6400	6167
35°	7336	6125	5951
40°	7122	5886	5736
45°	6919	5670	5549
50°	6701	5470	5365
55°	6470	5260	5177
60°	6190	5039	4979
65°	5898	4784	4752
70°	5565	4513	4508
75°	5141	4240	4276
80°	4471	3958	4036
85°	3800	3690	3831

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6919 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	0.6
10°-20°	140.2	1.8
20°-30°	212.4	2.7
30°-40°	258.6	3.3
40°-50°	278.2	3.5
50°-60°	270.2	3.4
60°-70°	236.0	3.0
70°-80°	181.6	2.3
80°-90°	125.2	1.6
90°-100°	150.0	1.9
100°-110°	307.5	3.9
110°-120°	693.4	8.8
120°-130°	1105.5	14.1
130°-140°	1159.8	14.8
140°-150°	1070.7	13.7
150°-160°	859.5	11.0
160°-170°	553.8	7.1
170°-180°	190.6	2.4
0°-30°	401.4	5.1
0°-40°	660.0	8.4
0°-60°	1208.5	15.4
0°-90°	1751.3	22.3
90°-120°	1150.8	14.7
90°-150°	4486.7	57.2
90°-180°	6091.0	77.7
0°-180°	7842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	517	515	510	515	514	49
15°	493	495	495	501	501	139
25°	448	454	460	469	471	206
35°	386	399	413	430	435	241
45°	317	337	363	386	394	245
55°	243	270	309	336	345	217
65°	166	202	246	277	287	165
75°	92	134	182	214	223	97
85°	27	73	121	152	163	28
90°	9	68	128	165	177	11
95°	100	88	142	178	186	116
105°	444	509	153	195	209	475
115°	836	869	939	290	194	823
125°	1180	1198	1250	1280	1291	1052
135°	1459	1482	1502	1532	1536	1127
145°	1691	1690	1714	1729	1726	1058
155°	1862	1849	1867	1875	1864	858
165°	1962	1954	1958	1968	1958	554
175°	2007	1997	2000	2010	1996	191
180°	2003	2003	2003	2003	2003	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	515.5	515.5	515.5	515.5	515.5
2.5°	519.2	517.0	511.8	515.5	514.0
5°	517.0	514.8	510.3	514.8	514.0
7.5°	513.3	511.8	508.0	513.3	512.5
10°	508.8	507.3	505.0	511.0	510.3
12.5°	501.3	502.1	500.6	506.5	505.8
15°	493.1	494.6	494.6	501.3	500.6
17.5°	482.6	485.6	487.9	494.6	494.6
20°	472.2	475.9	478.9	487.1	487.1
22.5°	461.0	465.5	469.9	478.2	479.6
25°	448.3	453.5	460.2	469.2	471.4
27.5°	433.3	441.5	449.0	460.2	461.7
30°	418.4	428.1	437.8	449.8	452.0
32.5°	401.9	413.2	425.1	439.3	443.8
35°	386.3	399.0	413.2	429.6	434.8
37.5°	369.1	383.3	401.2	419.1	424.4
40°	351.9	368.3	388.5	407.9	414.6
42.5°	335.5	351.9	375.8	397.5	404.2
45°	316.8	336.9	363.1	386.3	393.7
47.5°	298.8	320.5	350.4	374.3	382.5
50°	280.2	303.3	336.9	362.4	370.6
52.5°	262.2	286.9	322.8	348.9	357.9
55°	242.8	269.7	308.6	335.5	345.2
57.5°	224.1	254.0	292.9	322.0	331.7
60°	204.0	236.1	278.7	307.1	317.5
62.5°	186.0	219.7	262.2	292.9	302.6
65°	165.9	202.5	246.5	277.2	286.9
67.5°	147.9	186.0	230.9	261.5	271.9
70°	128.5	167.4	213.7	245.8	254.8
72.5°	110.6	150.9	198.0	229.4	240.6
75°	91.9	133.7	181.5	213.7	223.4
77.5°	74.0	117.3	165.9	198.0	208.4
80°	56.0	101.6	150.2	181.5	192.0
82.5°	41.1	85.9	135.2	166.6	176.3
85°	26.9	73.2	121.0	152.4	162.9
87.5°	16.4	61.3	109.1	139.7	149.4
90°	8.9	68.2	127.6	164.7	176.6
92.5°	42.9	76.7	126.7	158.7	169.1
95°	100.2	87.5	142.4	178.1	185.6
97.5°	174.8	88.1	154.6	186.6	197.0
100°	261.7	90.9	157.3	196.6	207.7
102.5°	356.7	378.4	155.0	197.8	210.4
105°	444.3	509.4	152.7	194.7	208.7
107.5°	547.1	601.4	150.3	191.6	205.6
110°	645.0	690.3	308.1	187.1	201.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	737.7	775.7	785.5	184.8	197.3
115°	836.3	869.1	939.0	290.4	194.3
117.5°	921.0	956.0	1012.0	827.2	455.0
120°	1016.6	1041.4	1097.4	1135.7	948.3
122.5°	1097.8	1121.8	1178.4	1207.3	1215.4
125°	1179.7	1198.5	1250.0	1280.3	1291.4
127.5°	1255.1	1274.5	1316.5	1349.7	1357.8
130°	1326.1	1348.5	1380.1	1414.0	1418.5
132.5°	1398.5	1416.6	1443.8	1473.9	1478.5
135°	1458.6	1481.8	1502.3	1532.5	1535.6
137.5°	1522.4	1539.7	1558.0	1586.7	1587.6
140°	1584.7	1595.6	1613.0	1637.9	1635.2
142.5°	1636.8	1646.3	1665.1	1685.7	1682.2
145°	1691.2	1689.8	1714.4	1729.0	1725.5
147.5°	1739.0	1734.7	1759.3	1767.3	1763.8
150°	1785.4	1775.3	1798.5	1807.1	1799.9
152.5°	1824.5	1812.9	1834.7	1843.4	1833.2
155°	1862.2	1849.2	1866.6	1875.3	1863.7
157.5°	1892.7	1881.1	1894.1	1904.2	1892.7
160°	1918.7	1910.0	1918.7	1927.4	1917.3
162.5°	1941.9	1933.2	1940.5	1950.6	1937.6
165°	1962.2	1953.5	1957.9	1968.0	1957.9
167.5°	1978.2	1969.5	1973.8	1983.9	1970.9
170°	1991.2	1982.5	1985.4	1995.5	1982.5
172.5°	1999.9	1991.2	1994.1	2004.2	1991.2
175°	2007.1	1997.0	1999.9	2010.0	1995.5
177.5°	2010.0	1999.9	2001.3	2011.5	1998.4
180°	2002.8	2002.8	2002.8	2002.8	2002.8

(END OF REPORT)