

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: P1029496

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029496
REPORT IS A COMBINATION OF REPORTS P986045 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_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

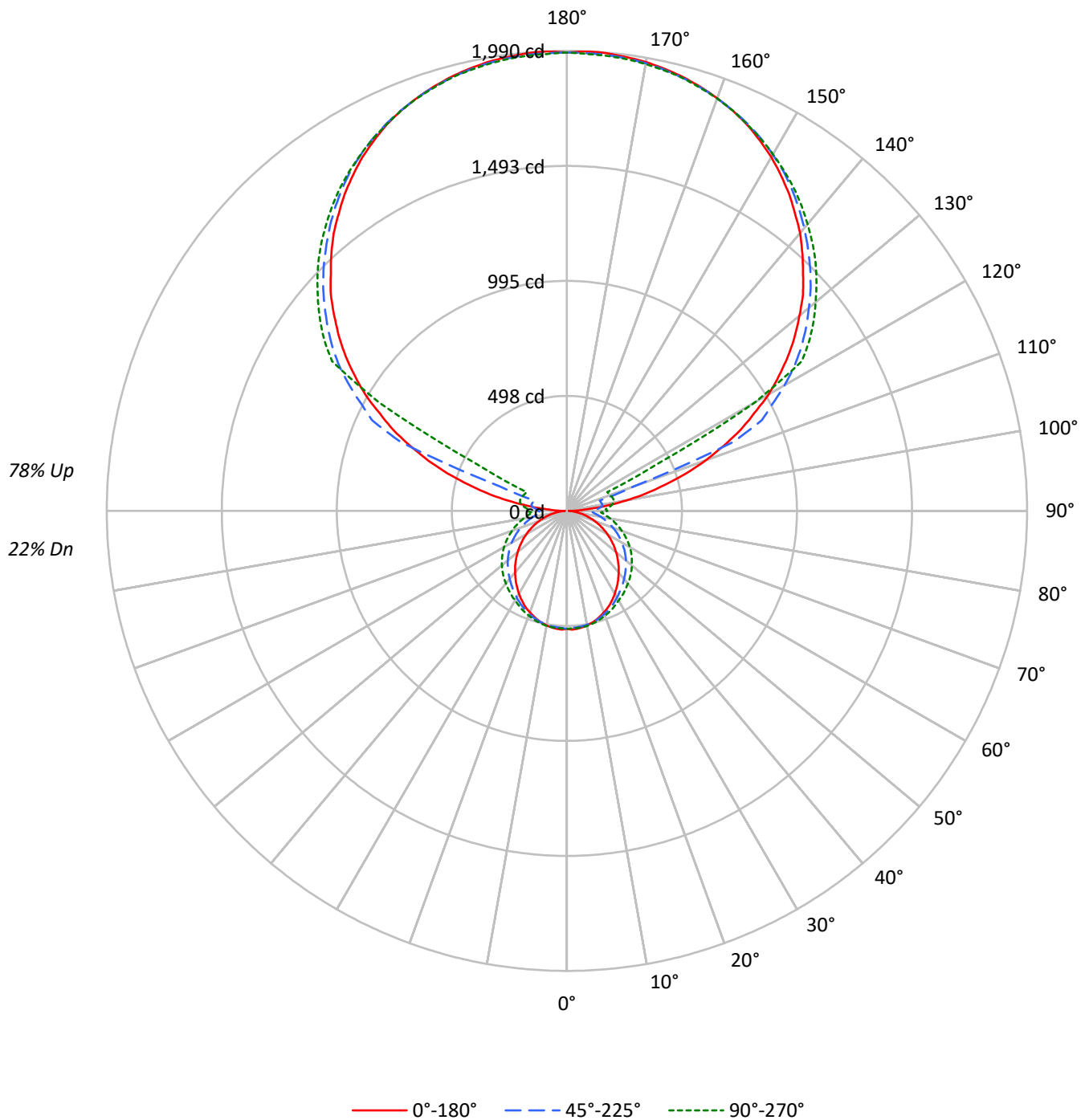
Lumens per Lamp: N/A
Luminaire Lumens: 7764.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	101	101	101	101	89	89	89	89	68	68	68		49	49	49		31
1	91	86	82	79	80	77	73	70	58	56	54		42	40	39		26
2	82	75	69	64	73	67	61	57	51	47	44		36	34	32		22
3	75	66	58	53	66	58	52	47	44	40	37		32	29	27		20
4	68	58	50	44	60	51	45	40	39	35	31		28	25	23		17
5	63	51	43	37	55	46	39	34	35	30	26		25	22	19		16
6	57	46	38	32	51	41	34	29	31	26	23		22	19	17		14
7	53	41	33	28	47	37	30	25	28	23	20		20	17	15		13
8	49	37	30	24	43	33	27	22	25	21	17		18	15	13		12
9	45	34	26	21	40	30	24	19	23	19	15		17	14	11		11
10	42	31	24	19	37	27	21	17	21	17	14		15	12	10		10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8078	8078	8078
5°	8113	7733	7689
10°	8059	7464	7356
15°	7946	7188	7014
20°	7802	6896	6690
25°	7660	6618	6395
30°	7461	6336	6104
35°	7260	6063	5891
40°	7049	5826	5678
45°	6849	5612	5493
50°	6631	5415	5310
55°	6403	5205	5125
60°	6127	4986	4929
65°	5837	4736	4704
70°	5509	4467	4462
75°	5091	4198	4232
80°	4431	3916	3996
85°	3757	3653	3791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6849 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	0.6
10°-20°	138.7	1.8
20°-30°	210.2	2.7
30°-40°	256.0	3.3
40°-50°	275.4	3.5
50°-60°	267.5	3.4
60°-70°	233.6	3.0
70°-80°	179.8	2.3
80°-90°	123.9	1.6
90°-100°	148.5	1.9
100°-110°	304.4	3.9
110°-120°	686.6	8.8
120°-130°	1094.5	14.1
130°-140°	1148.3	14.8
140°-150°	1060.1	13.7
150°-160°	851.0	11.0
160°-170°	548.4	7.1
170°-180°	188.7	2.4
0°-30°	397.3	5.1
0°-40°	653.3	8.4
0°-60°	1196.2	15.4
0°-90°	1733.4	22.3
90°-120°	1139.4	14.7
90°-150°	4442.4	57.2
90°-180°	6031.0	77.7
0°-180°	7764.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	512	510	505	510	509	49
15°	488	490	490	496	496	137
25°	444	449	456	464	467	204
35°	382	395	409	425	430	239
45°	314	334	359	382	390	242
55°	240	267	305	332	342	215
65°	164	200	244	274	284	163
75°	91	132	180	212	221	96
85°	27	72	120	151	161	28
90°	9	68	126	163	175	10
95°	99	87	141	176	184	115
105°	440	504	151	193	207	470
115°	828	861	930	288	192	815
125°	1168	1187	1238	1268	1279	1042
135°	1444	1467	1488	1517	1520	1116
145°	1674	1673	1698	1712	1708	1048
155°	1844	1831	1848	1857	1845	850
165°	1943	1934	1938	1949	1938	549
175°	1987	1977	1980	1990	1976	189
180°	1983	1983	1983	1983	1983	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	510.3	510.3	510.3	510.3	510.3
2.5°	514.0	511.7	506.6	510.3	508.8
5°	511.7	509.5	505.1	509.5	508.8
7.5°	508.0	506.6	502.9	508.0	507.3
10°	503.6	502.1	499.9	505.8	505.1
12.5°	496.2	497.0	495.5	501.4	500.7
15°	488.1	489.6	489.6	496.2	495.5
17.5°	477.7	480.7	482.9	489.6	489.6
20°	467.4	471.1	474.0	482.2	482.2
22.5°	456.3	460.7	465.2	473.3	474.8
25°	443.7	448.9	455.5	464.4	466.6
27.5°	428.9	437.1	444.4	455.5	457.0
30°	414.1	423.7	433.4	445.2	447.4
32.5°	397.9	409.0	420.8	434.8	439.3
35°	382.3	394.9	409.0	425.2	430.4
37.5°	365.3	379.4	397.1	414.9	420.0
40°	348.3	364.6	384.5	403.8	410.4
42.5°	332.0	348.3	372.0	393.4	400.1
45°	313.6	333.5	359.4	382.3	389.7
47.5°	295.8	317.3	346.8	370.5	378.6
50°	277.3	300.2	333.5	358.7	366.8
52.5°	259.6	284.0	319.5	345.4	354.2
55°	240.3	267.0	305.4	332.0	341.7
57.5°	221.9	251.4	289.9	318.7	328.3
60°	201.9	233.7	275.8	303.9	314.3
62.5°	184.1	217.4	259.6	289.9	299.5
65°	164.2	200.4	244.0	274.4	284.0
67.5°	146.4	184.1	228.5	258.8	269.2
70°	127.2	165.7	211.5	243.3	252.2
72.5°	109.4	149.4	196.0	227.0	238.1
75°	91.0	132.4	179.7	211.5	221.1
77.5°	73.2	116.1	164.2	196.0	206.3
80°	55.5	100.6	148.6	179.7	190.1
82.5°	40.7	85.0	133.9	164.9	174.5
85°	26.6	72.5	119.8	150.9	161.2
87.5°	16.3	60.6	108.0	138.3	147.9
90°	8.8	67.5	126.3	163.1	174.8
92.5°	42.6	76.0	125.4	157.1	167.4
95°	99.2	86.6	141.0	176.2	183.7
97.5°	173.1	87.2	153.1	184.7	195.0
100°	259.2	89.9	155.8	194.6	205.5
102.5°	353.1	374.6	153.5	195.8	208.2
105°	439.9	504.4	151.1	192.8	206.7
107.5°	541.8	595.4	148.8	189.8	203.6
110°	638.7	683.5	305.1	185.2	199.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	730.5	768.1	777.7	183.0	195.4
115°	828.1	860.6	929.7	287.6	192.4
117.5°	911.9	946.5	1002.0	819.0	450.5
120°	1006.6	1031.1	1086.6	1124.5	938.9
122.5°	1087.0	1110.7	1166.7	1195.3	1203.4
125°	1168.1	1186.7	1237.6	1267.6	1278.6
127.5°	1242.7	1262.0	1303.5	1336.3	1344.5
130°	1313.0	1335.1	1366.5	1400.0	1404.5
132.5°	1384.7	1402.6	1429.5	1459.4	1463.9
135°	1444.2	1467.2	1487.5	1517.4	1520.4
137.5°	1507.3	1524.6	1542.6	1571.1	1571.9
140°	1569.0	1579.8	1597.1	1621.8	1619.0
142.5°	1620.7	1630.0	1648.7	1669.1	1665.6
145°	1674.5	1673.1	1697.5	1711.9	1708.4
147.5°	1721.9	1717.6	1742.0	1749.8	1746.4
150°	1767.8	1757.7	1780.7	1789.3	1782.1
152.5°	1806.5	1795.0	1816.6	1825.2	1815.1
155°	1843.8	1830.9	1848.1	1856.7	1845.3
157.5°	1874.0	1862.5	1875.4	1885.4	1874.0
160°	1899.8	1891.2	1899.8	1908.4	1898.4
162.5°	1922.8	1914.1	1921.3	1931.4	1918.4
165°	1942.8	1934.2	1938.5	1948.6	1938.5
167.5°	1958.6	1950.0	1954.3	1964.4	1951.4
170°	1971.5	1962.9	1965.8	1975.8	1962.9
172.5°	1980.1	1971.5	1974.4	1984.5	1971.5
175°	1987.3	1977.3	1980.1	1990.2	1975.8
177.5°	1990.2	1980.1	1981.6	1991.6	1978.7
180°	1983.0	1983.0	1983.0	1983.0	1983.0

(END OF REPORT)