

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: P1029491

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029491
REPORT IS A COMBINATION OF REPORTS P986035 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-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

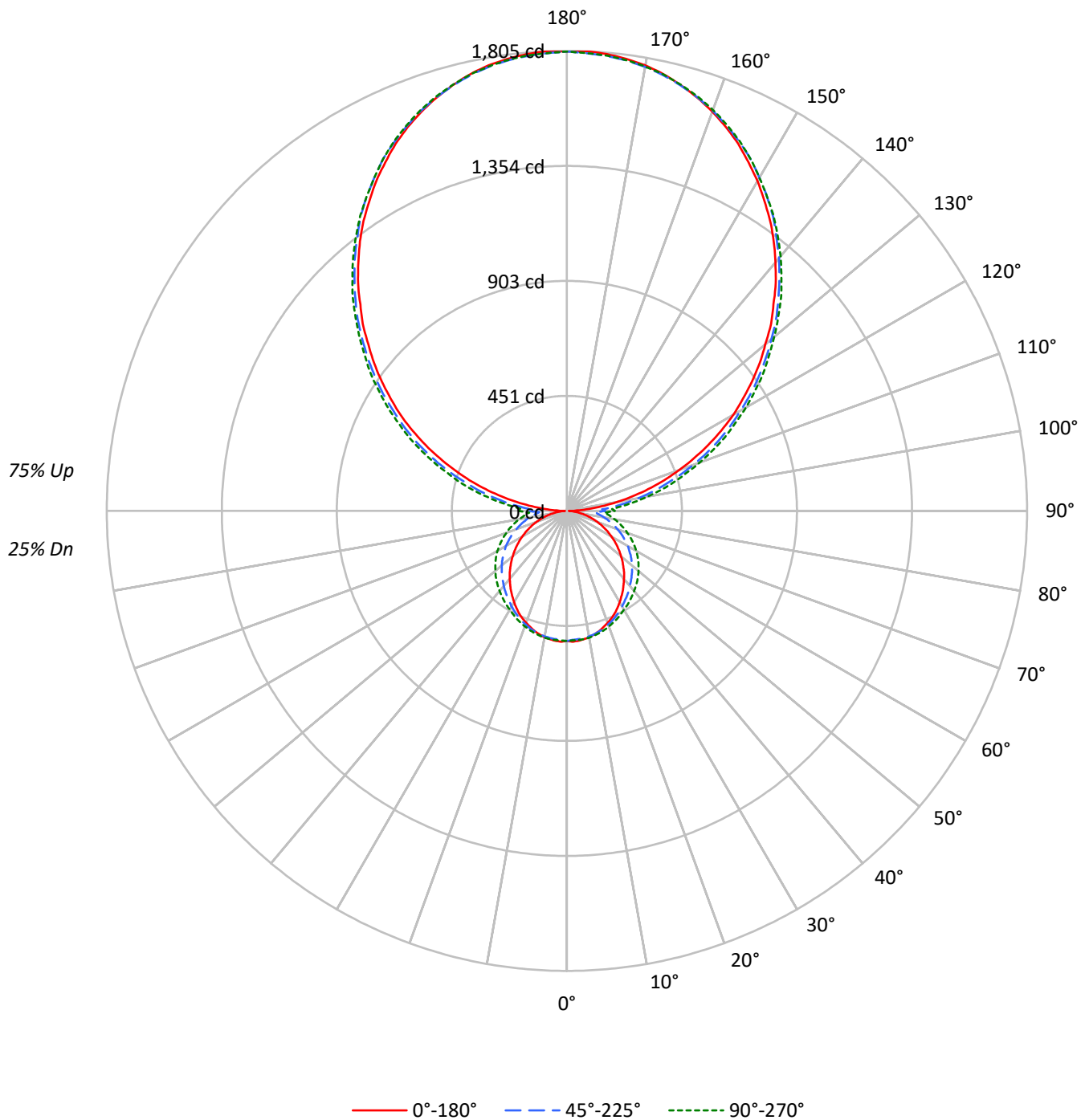
Lumens per Lamp: N/A
Luminaire Lumens: 6991.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1029491

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_4000K

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	90	90	90	90	69	69	69		50	50	50		33
1	91	87	83	79	81	77	74	71	59	57	55		43	42	40		28
2	83	75	69	64	73	67	62	58	52	48	45		37	35	33		24
3	75	66	59	53	67	59	53	48	45	41	37		33	30	28		21
4	69	58	50	44	61	52	45	40	40	35	32		29	26	23		19
5	63	51	43	38	56	46	39	34	36	31	27		26	23	20		17
6	58	46	38	32	51	41	34	29	32	27	23		23	20	17		15
7	53	41	33	28	47	37	30	25	29	24	20		21	18	15		14
8	49	37	30	24	44	33	27	22	26	21	18		19	16	13		13
9	46	34	27	22	40	30	24	20	24	19	16		17	14	12		12
10	43	31	24	19	38	28	22	17	22	17	14		16	13	11		11

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

TEST NUMBER: P1029491

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	0.7
10°-20°	138.7	2.0
20°-30°	210.2	3.0
30°-40°	256.0	3.7
40°-50°	275.4	3.9
50°-60°	267.5	3.8
60°-70°	233.6	3.3
70°-80°	179.8	2.6
80°-90°	125.5	1.8
90°-100°	194.6	2.8
100°-110°	415.1	5.9
110°-120°	646.5	9.2
120°-130°	819.9	11.7
130°-140°	904.7	12.9
140°-150°	879.5	12.6
150°-160°	736.5	10.5
160°-170°	488.4	7.0
170°-180°	170.7	2.4
0°-30°	397.3	5.7
0°-40°	653.3	9.3
0°-60°	1196.2	17.1
0°-90°	1735.1	24.8
90°-120°	1256.2	18.0
90°-150°	3860.3	55.2
90°-180°	5256.0	75.2
0°-180°	6991.0	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	70	151	177	188	10
95°	85	135	182	210	216	93
105°	331	357	398	427	435	349
115°	611	629	659	680	683	605
125°	887	900	919	935	940	793
135°	1146	1163	1173	1187	1188	886
145°	1390	1401	1410	1416	1413	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	

TEST NUMBER: P1029491

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_4000K

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°	8.9	70.1	150.8	177.4	187.8
92.5°	40.2	91.5	138.1	168.5	177.4
95°	85.0	135.0	182.3	210.4	216.3
97.5°	137.5	183.0	232.0	259.3	268.2
100°	198.4	237.8	283.9	311.2	317.8
102.5°	261.4	295.0	341.0	369.2	375.7
105°	330.7	356.7	398.2	427.1	435.2
107.5°	400.7	424.4	461.4	488.2	488.7
110°	466.9	490.7	527.0	550.6	554.2

TEST NUMBER: P1029491

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	539.9	560.8	593.3	612.4	617.5
115°	611.4	628.6	658.9	679.5	683.1
117.5°	682.1	700.1	723.6	741.3	744.1
120°	753.5	768.7	786.1	806.8	810.4
122.5°	818.9	834.9	854.6	870.1	873.6
125°	886.7	900.4	919.4	934.8	940.0
127.5°	953.6	969.5	983.4	995.9	998.0
130°	1016.0	1034.9	1047.5	1062.1	1062.0
132.5°	1085.9	1100.3	1112.9	1122.3	1123.8
135°	1146.0	1162.7	1173.1	1187.2	1188.5
137.5°	1212.9	1226.6	1233.3	1245.9	1245.0
140°	1272.2	1285.2	1294.3	1306.1	1304.4
142.5°	1333.0	1346.0	1350.6	1361.0	1358.6
145°	1390.1	1400.8	1409.9	1415.8	1413.4
147.5°	1441.8	1455.5	1461.6	1465.3	1461.6
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)