

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: P1029501

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029501
REPORT IS A COMBINATION OF REPORTS P986050 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-F1_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

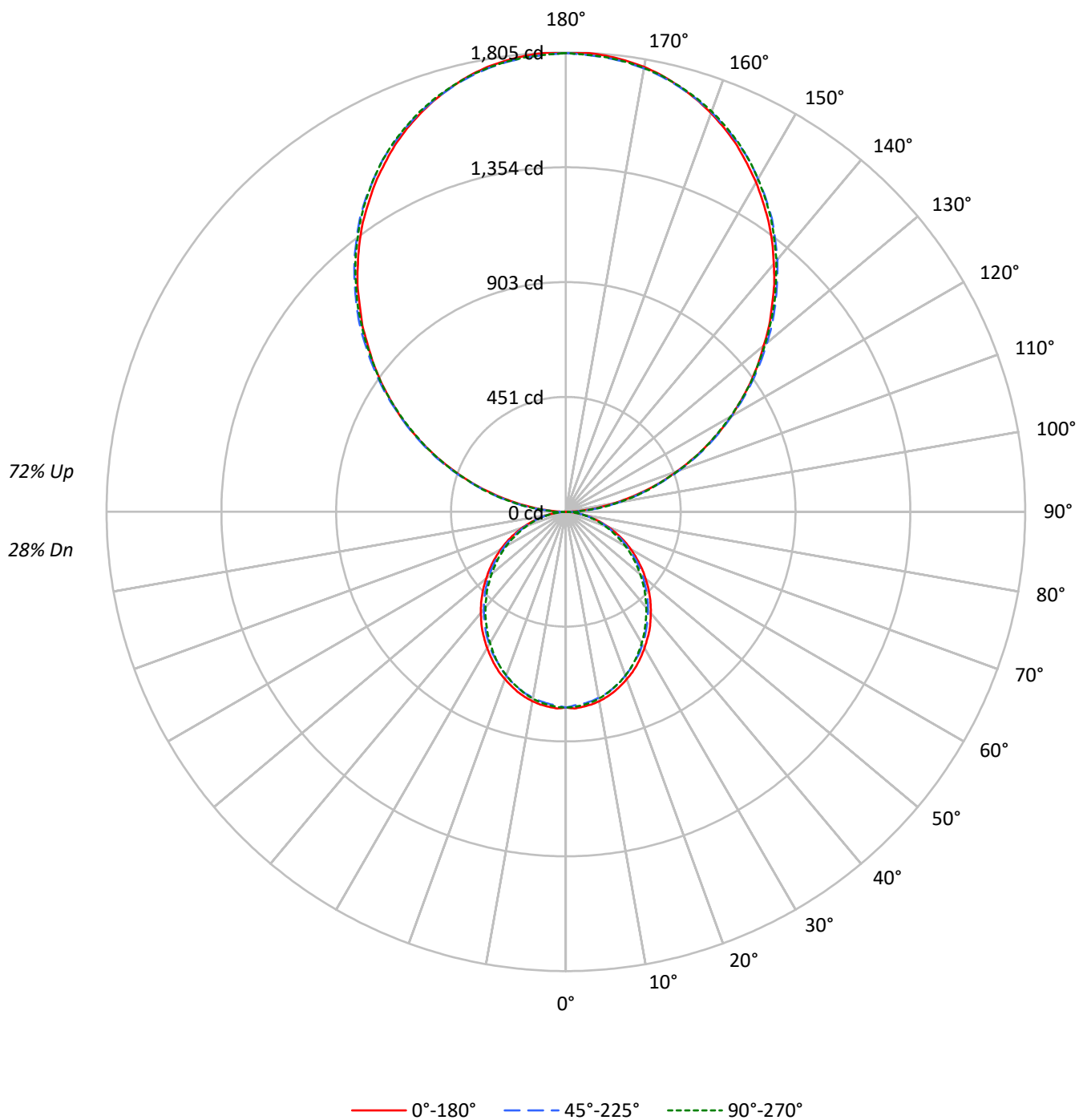
Lumens per Lamp: N/A
Luminaire Lumens: 7001.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1029501

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F1_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	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36			28
1	93	89	85	82	83	79	76	73	62	60	58	46	45	44	32	31	30			24
2	85	77	71	66	75	69	64	60	54	51	48	41	38	37	28	27	25			20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22			17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19			14
5	64	53	46	40	57	48	41	36	38	33	29	29	25	23	20	18	16			12
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14			11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13			10
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11			9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10			8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12176	12176	12176
5°	12196	11606	11524
10°	12097	11076	10857
15°	11919	10544	10156
20°	11680	9965	9493
25°	11441	9359	8829
30°	11141	8790	8133
35°	10857	8190	7451
40°	10508	7598	6805
45°	10160	7011	6172
50°	9781	6413	5514
55°	9382	5772	4892
60°	8933	5082	4245
65°	8439	4378	3564
70°	7817	3609	2878
75°	6953	2782	2222
80°	5908	1889	1430
85°	4280	878	609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10160 cd/sqm

TEST NUMBER: P1029501

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F1_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	1.0
10°-20°	203.7	2.9
20°-30°	299.3	4.3
30°-40°	347.7	5.0
40°-50°	347.2	5.0
50°-60°	302.8	4.3
60°-70°	223.8	3.2
70°-80°	126.6	1.8
80°-90°	38.5	0.6
90°-100°	111.5	1.6
100°-110°	354.4	5.1
110°-120°	606.5	8.7
120°-130°	797.6	11.4
130°-140°	895.3	12.8
140°-150°	878.0	12.5
150°-160°	736.5	10.5
160°-170°	488.4	7.0
170°-180°	170.7	2.4
0°-30°	575.4	8.2
0°-40°	923.1	13.2
0°-60°	1573.1	22.5
0°-90°	1962.1	28.0
90°-120°	1072.4	15.3
90°-150°	3643.2	52.0
90°-180°	5039.0	72.0
0°-180°	7001.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	769	766	758	764	763	73
15°	732	728	718	721	717	206
25°	663	657	644	646	644	305
35°	572	564	552	548	544	357
45°	465	460	449	441	438	359
55°	352	348	339	330	326	315
65°	237	233	226	219	215	235
75°	124	123	119	115	116	133
85°	30	30	29	27	26	34
90°	2	20	53	50	52	7
95°	79	94	97	97	94	88
105°	327	332	335	338	338	345
115°	608	618	614	613	608	602
125°	885	899	894	890	888	791
135°	1145	1162	1165	1164	1159	885
145°	1390	1401	1410	1411	1405	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: P1029501

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F1_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.2	769.2	769.2	769.2	769.2
2.5°	773.7	770.0	761.8	769.2	767.7
5°	769.2	766.3	758.1	764.0	762.6
7.5°	764.0	759.6	751.5	757.4	755.9
10°	755.9	750.7	741.8	747.8	745.5
12.5°	744.8	740.4	731.5	735.2	733.7
15°	732.2	727.8	718.2	721.1	717.4
17.5°	716.7	712.3	702.6	706.3	702.6
20°	699.7	695.2	684.9	687.1	684.2
22.5°	682.7	676.0	666.4	666.4	664.9
25°	662.7	656.8	644.2	645.7	644.2
27.5°	640.5	635.3	625.7	623.5	619.8
30°	618.3	612.4	601.3	599.1	596.1
32.5°	594.7	590.2	578.4	574.0	571.0
35°	571.7	564.3	552.5	548.1	544.4
37.5°	545.8	539.2	527.4	522.2	518.5
40°	519.2	513.3	501.5	494.8	491.9
42.5°	493.3	487.4	475.6	468.2	463.7
45°	465.2	460.0	449.0	440.8	437.9
47.5°	437.9	432.7	420.8	412.7	408.3
50°	409.0	405.3	395.0	384.6	380.9
52.5°	380.9	375.7	366.1	358.0	352.8
55°	352.1	347.6	338.7	329.9	326.2
57.5°	323.2	319.5	309.9	301.0	298.1
60°	294.4	291.4	281.1	272.9	270.7
62.5°	266.3	261.1	253.7	246.3	243.3
65°	237.4	233.0	225.6	218.9	215.2
67.5°	207.8	204.1	197.5	192.3	189.3
70°	180.5	177.5	170.9	165.7	162.7
72.5°	152.4	149.4	145.7	140.5	138.3
75°	124.3	122.8	119.1	114.6	116.1
77.5°	99.1	96.2	94.7	92.5	90.2
80°	74.0	73.2	71.7	69.5	68.0
82.5°	50.3	50.3	49.6	46.6	46.6
85°	30.3	29.6	28.8	26.6	25.9
87.5°	13.3	11.8	10.4	8.1	7.4
90°	1.5	19.8	53.2	50.2	51.7
92.5°	33.5	45.6	47.1	48.7	48.7
95°	79.1	94.3	97.3	97.3	94.3
97.5°	132.3	146.0	152.1	152.1	152.1
100°	193.2	205.3	209.9	209.9	208.4
102.5°	257.0	266.2	272.2	273.8	272.2
105°	327.0	331.6	334.6	337.6	337.6
107.5°	397.0	403.0	403.0	404.6	397.0
110°	463.9	473.0	473.0	473.0	468.4

TEST NUMBER: P1029501

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F1_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	536.9	546.0	544.5	539.9	536.9
115°	608.4	617.5	614.5	612.9	608.4
117.5°	679.9	692.0	684.4	679.9	675.3
120°	751.3	763.5	751.3	751.3	746.8
122.5°	816.7	831.9	824.3	819.8	816.7
125°	885.2	898.9	894.3	889.7	888.2
127.5°	952.1	968.8	962.7	956.7	952.1
130°	1014.5	1034.2	1031.2	1028.1	1022.1
132.5°	1084.4	1099.6	1101.1	1093.5	1089.0
135°	1145.3	1162.0	1165.0	1163.5	1158.9
137.5°	1212.2	1225.9	1228.9	1227.4	1221.3
140°	1271.5	1285.2	1292.8	1292.8	1286.7
142.5°	1332.3	1346.0	1350.6	1352.1	1346.0
145°	1390.1	1400.8	1409.9	1411.4	1405.3
147.5°	1441.8	1455.5	1461.6	1464.6	1458.6
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)