

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: P1029505

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029505
REPORT IS A COMBINATION OF REPORTS P986059 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-F_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

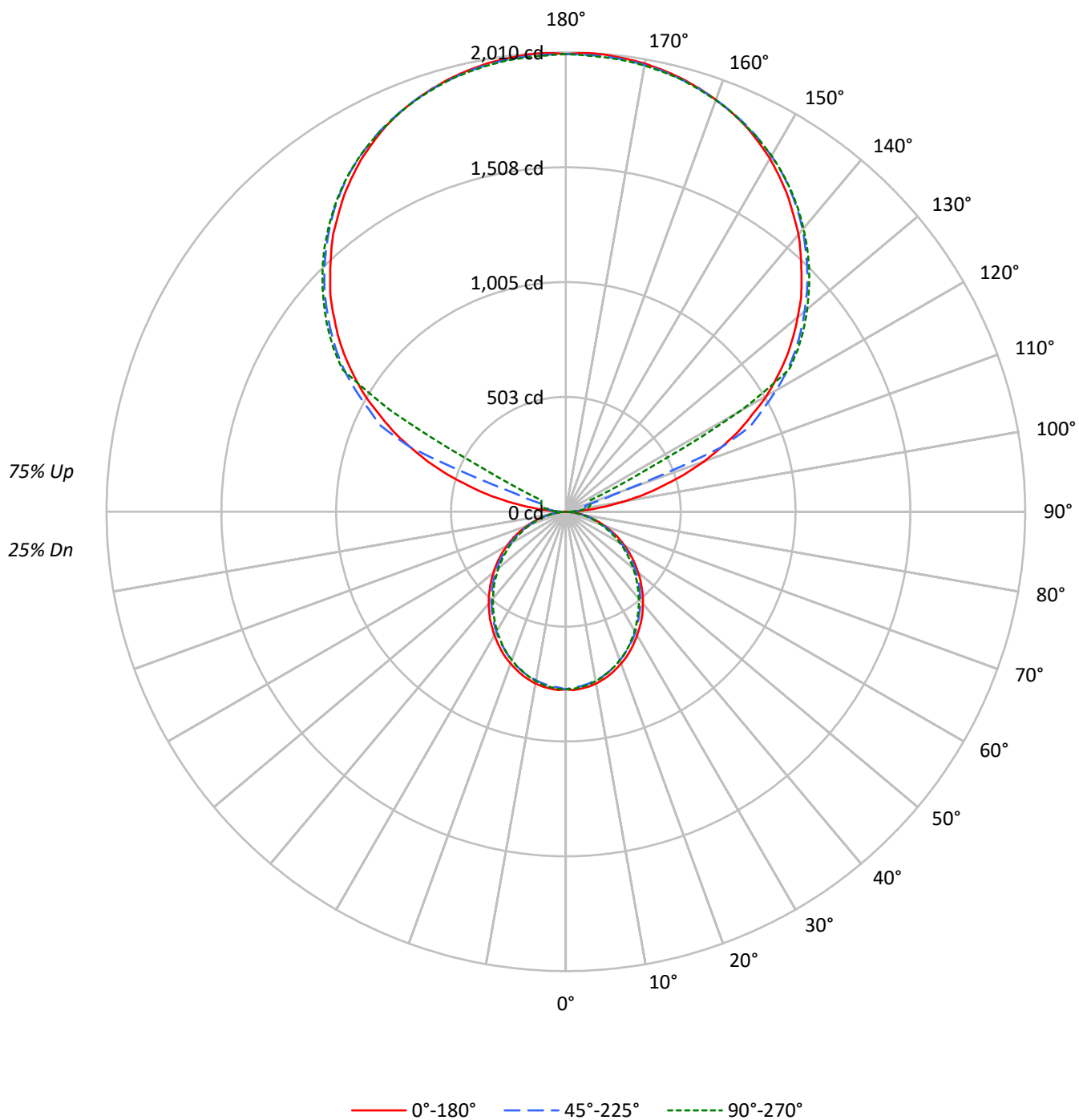
Lumens per Lamp: N/A
Luminaire Lumens: 7851.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1029505

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1029505

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

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	90	90	90	90	70	70	70	51	51	51	33	33	33
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	67	60	55	68	60	54	50	47	43	39	34	32	30	23	21	20
4	70	60	52	46	62	53	47	42	42	37	33	31	28	25	20	19	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	17	15
6	59	47	40	34	52	42	36	31	33	28	25	25	21	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12
8	50	38	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10
9	47	35	28	23	42	32	25	21	25	20	17	19	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12295	12295	12295
5°	12315	11719	11636
10°	12213	11184	10963
15°	12035	10647	10255
20°	11794	10061	9585
25°	11552	9451	8916
30°	11249	8876	8212
35°	10964	8270	7524
40°	10611	7671	6870
45°	10258	7078	6231
50°	9876	6475	5568
55°	9473	5829	4939
60°	9018	5131	4286
65°	8521	4421	3599
70°	7891	3643	2907
75°	7021	2808	2243
80°	5964	1908	1444
85°	4322	887	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10258 cd/sqm

TEST NUMBER: P1029505

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	0.9
10°-20°	205.7	2.6
20°-30°	302.3	3.8
30°-40°	351.0	4.5
40°-50°	350.6	4.5
50°-60°	305.7	3.9
60°-70°	226.0	2.9
70°-80°	127.9	1.6
80°-90°	37.3	0.5
90°-100°	66.1	0.8
100°-110°	246.2	3.1
110°-120°	652.9	8.3
120°-130°	1082.9	13.8
130°-140°	1150.3	14.7
140°-150°	1069.1	13.6
150°-160°	859.5	10.9
160°-170°	553.8	7.1
170°-180°	190.6	2.4
0°-30°	581.0	7.4
0°-40°	932.1	11.9
0°-60°	1588.4	20.2
0°-90°	1979.5	25.2
90°-120°	965.2	12.3
90°-150°	4267.5	54.4
90°-180°	5871.0	74.8
0°-180°	7851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	777	774	766	772	770	74
15°	739	735	725	728	724	208
25°	669	663	650	652	650	308
35°	577	570	558	553	550	360
45°	470	464	453	445	442	363
55°	356	351	342	333	329	318
65°	240	235	228	221	217	237
75°	126	124	120	116	117	134
85°	31	30	29	27	26	34
90°	1	17	29	36	39	7
95°	94	46	56	64	62	112
105°	441	484	88	104	110	471
115°	833	858	894	223	119	820
125°	1178	1197	1225	1235	1239	1051
135°	1458	1481	1494	1509	1506	1126
145°	1691	1690	1714	1724	1717	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	

TEST NUMBER: P1029505

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	781.2	777.4	769.2	776.7	775.2
5°	776.7	773.7	765.5	771.5	770.0
7.5°	771.5	767.0	758.8	764.7	763.2
10°	763.2	758.0	749.0	755.0	752.8
12.5°	752.0	747.6	738.6	742.3	740.8
15°	739.3	734.9	725.2	728.1	724.4
17.5°	723.7	719.2	709.5	713.2	709.5
20°	706.5	702.0	691.5	693.8	690.8
22.5°	689.3	682.6	672.9	672.9	671.4
25°	669.1	663.2	650.5	652.0	650.5
27.5°	646.7	641.5	631.8	629.6	625.8
30°	624.3	618.4	607.2	604.9	601.9
32.5°	600.4	596.0	584.0	579.5	576.5
35°	577.3	569.8	557.9	553.4	549.7
37.5°	551.1	544.4	532.5	527.2	523.5
40°	524.3	518.3	506.3	499.6	496.6
42.5°	498.1	492.1	480.2	472.7	468.2
45°	469.7	464.5	453.3	445.1	442.1
47.5°	442.1	436.9	424.9	416.7	412.2
50°	413.0	409.3	398.8	388.3	384.6
52.5°	384.6	379.4	369.7	361.5	356.2
55°	355.5	351.0	342.0	333.1	329.3
57.5°	326.4	322.6	312.9	304.0	301.0
60°	297.2	294.2	283.8	275.6	273.3
62.5°	268.9	263.6	256.2	248.7	245.7
65°	239.7	235.2	227.8	221.1	217.3
67.5°	209.9	206.1	199.4	194.2	191.2
70°	182.2	179.2	172.5	167.3	164.3
72.5°	153.8	150.9	147.1	141.9	139.7
75°	125.5	124.0	120.2	115.8	117.2
77.5°	100.1	97.1	95.6	93.4	91.1
80°	74.7	73.9	72.4	70.2	68.7
82.5°	50.8	50.8	50.0	47.0	47.0
85°	30.6	29.9	29.1	26.9	26.1
87.5°	13.4	11.9	10.5	8.2	7.5
90°	1.4	17.4	29.0	36.2	39.1
92.5°	36.2	30.4	34.8	37.7	39.1
95°	94.2	46.4	56.5	63.8	62.3
97.5°	169.6	50.7	73.9	78.3	79.7
100°	256.5	58.0	82.6	94.2	97.1
102.5°	352.2	349.3	85.5	101.4	105.8
105°	440.6	484.0	88.4	104.3	110.1
107.5°	543.4	579.7	91.3	107.2	113.0
110°	642.0	672.4	253.6	108.7	114.5

TEST NUMBER: P1029505

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	734.7	760.8	736.2	111.6	115.9
115°	833.3	857.9	894.2	223.2	118.8
117.5°	918.8	947.8	972.4	765.2	385.5
120°	1014.4	1036.2	1062.3	1079.7	884.0
122.5°	1095.6	1118.8	1147.8	1156.5	1157.9
125°	1178.2	1197.0	1224.6	1234.7	1239.1
127.5°	1253.6	1273.8	1295.6	1310.1	1311.5
130°	1324.6	1347.8	1363.7	1379.6	1378.2
132.5°	1397.0	1415.9	1431.8	1444.8	1443.4
135°	1457.9	1481.1	1494.1	1508.6	1505.7
137.5°	1521.7	1539.0	1553.5	1568.0	1563.7
140°	1584.0	1595.6	1611.5	1624.5	1617.3
142.5°	1636.1	1646.3	1665.1	1676.7	1669.5
145°	1691.2	1689.8	1714.4	1724.5	1717.3
147.5°	1739.0	1734.7	1759.3	1766.6	1760.8
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)