

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: P1029465

Luminaire Tested: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029465
REPORT IS A COMBINATION OF REPORTS P985954 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B485D1240UB2750-4F0-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

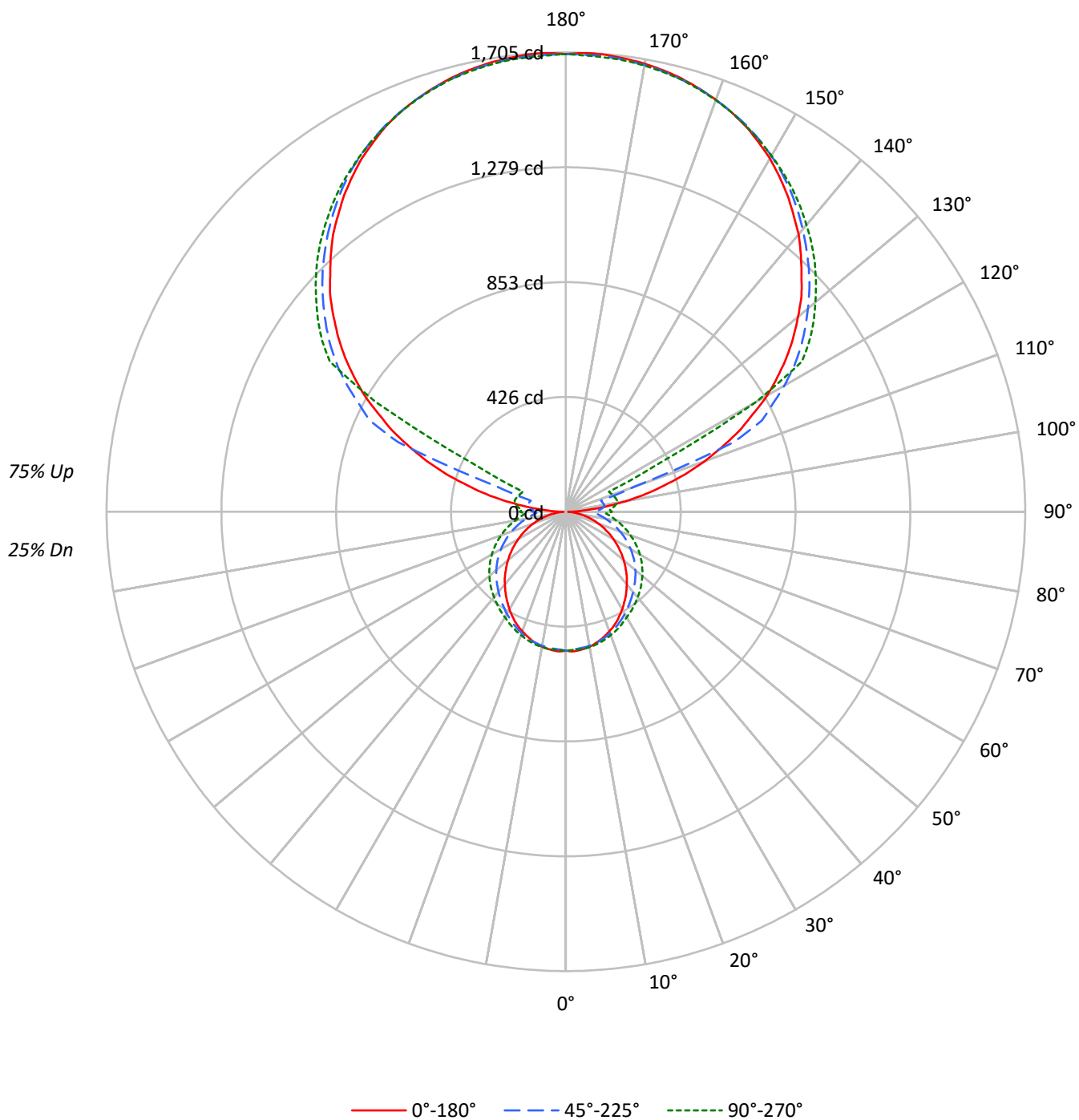
Lumens per Lamp: N/A
Luminaire Lumens: 6950.0 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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: P1029465

CATALOG NUMBER: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1029465

CATALOG NUMBER: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_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	50	30	10
RCR																				
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33			25
1	91	87	83	79	81	77	74	71	60	57	55	43	42	40	28	27	27			20
2	83	75	69	64	73	67	62	58	52	48	45	38	35	33	24	23	22			16
3	75	66	59	53	67	59	53	48	45	41	37	33	30	28	21	20	18			13
4	69	58	50	44	61	52	45	40	40	35	32	29	26	23	19	17	15			11
5	63	51	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13			9
6	58	46	38	32	51	41	34	29	32	27	23	23	20	17	15	13	12			8
7	53	41	33	28	47	37	30	25	29	24	20	21	18	15	14	12	10			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	13	11	9			6
9	46	34	27	22	41	30	24	20	24	19	16	18	14	12	12	10	8			6
10	43	31	24	19	38	28	22	17	22	17	14	16	13	11	11	9	7			5

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

TEST NUMBER: P1029465

CATALOG NUMBER: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	0.7
10°-20°	140.2	2.0
20°-30°	212.4	3.1
30°-40°	258.6	3.7
40°-50°	278.2	4.0
50°-60°	270.2	3.9
60°-70°	236.0	3.4
70°-80°	181.6	2.6
80°-90°	124.6	1.8
90°-100°	139.9	2.0
100°-110°	270.1	3.9
110°-120°	594.3	8.6
120°-130°	941.0	13.5
130°-140°	985.1	14.2
140°-150°	908.4	13.1
150°-160°	729.0	10.5
160°-170°	469.8	6.8
170°-180°	161.7	2.3
0°-30°	401.4	5.8
0°-40°	660.0	9.5
0°-60°	1208.5	17.4
0°-90°	1750.7	25.2
90°-120°	1004.3	14.5
90°-150°	3838.8	55.2
90°-180°	5199.0	74.8
0°-180°	6950.0	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	66	123	159	171	10
95°	86	80	134	168	176	99
105°	377	436	139	179	192	403
115°	710	739	803	256	176	698
125°	1001	1017	1064	1093	1103	893
135°	1237	1257	1276	1304	1307	956
145°	1434	1433	1454	1467	1465	897
155°	1580	1568	1583	1590	1581	728
165°	1664	1657	1661	1669	1661	470
175°	1702	1694	1696	1705	1693	162
180°	1699	1699	1699	1699	1699	

TEST NUMBER: P1029465

CATALOG NUMBER: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_3500K

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°	8.7	65.5	123.2	159.2	170.7
92.5°	37.4	72.1	121.4	153.0	163.2
95°	85.9	80.4	133.8	168.4	176.2
97.5°	149.0	80.4	143.4	174.7	184.9
100°	222.8	82.1	144.8	182.3	193.0
102.5°	303.2	325.3	142.0	182.4	194.3
105°	377.4	435.9	139.3	178.9	192.0
107.5°	464.6	513.4	136.4	175.4	188.5
110°	547.5	588.2	269.6	170.6	183.8

TEST NUMBER: P1029465

CATALOG NUMBER: S122DIW-B485D1240UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	660.2	673.7	167.8	179.7
115°	709.8	738.9	803.2	256.5	176.3
117.5°	781.5	812.1	864.4	711.0	396.5
120°	862.6	884.1	936.1	971.7	814.1
122.5°	931.4	951.9	1004.1	1031.7	1039.6
125°	1000.8	1016.8	1064.0	1092.8	1103.2
127.5°	1064.7	1081.1	1119.8	1150.8	1158.7
130°	1125.0	1143.8	1173.0	1204.6	1209.2
132.5°	1186.4	1201.6	1226.4	1254.6	1259.3
135°	1237.2	1256.9	1275.5	1303.5	1307.0
137.5°	1291.3	1306.1	1322.2	1348.7	1350.2
140°	1344.2	1353.3	1368.3	1391.3	1389.6
142.5°	1388.4	1396.3	1412.3	1431.1	1428.7
145°	1434.4	1433.2	1454.1	1467.2	1464.8
147.5°	1475.0	1471.3	1492.2	1499.1	1496.4
150°	1514.3	1505.7	1525.4	1532.8	1526.6
152.5°	1547.5	1537.7	1556.1	1563.5	1554.9
155°	1579.5	1568.4	1583.2	1590.5	1580.7
157.5°	1605.3	1595.5	1606.5	1615.1	1605.3
160°	1627.4	1620.0	1627.4	1634.8	1626.2
162.5°	1647.1	1639.7	1645.9	1654.5	1643.4
165°	1664.3	1656.9	1660.6	1669.2	1660.6
167.5°	1677.8	1670.4	1674.1	1682.7	1671.7
170°	1688.9	1681.5	1684.0	1692.6	1681.5
172.5°	1696.2	1688.9	1691.3	1699.9	1688.9
175°	1702.4	1693.8	1696.2	1704.9	1692.6
177.5°	1704.9	1696.2	1697.5	1706.1	1695.0
180°	1698.7	1698.7	1698.7	1698.7	1698.7

(END OF REPORT)