

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: P1029488

Luminaire Tested: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029488
REPORT IS A COMBINATION OF REPORTS P986032 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_2700K
Description: Define 2 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

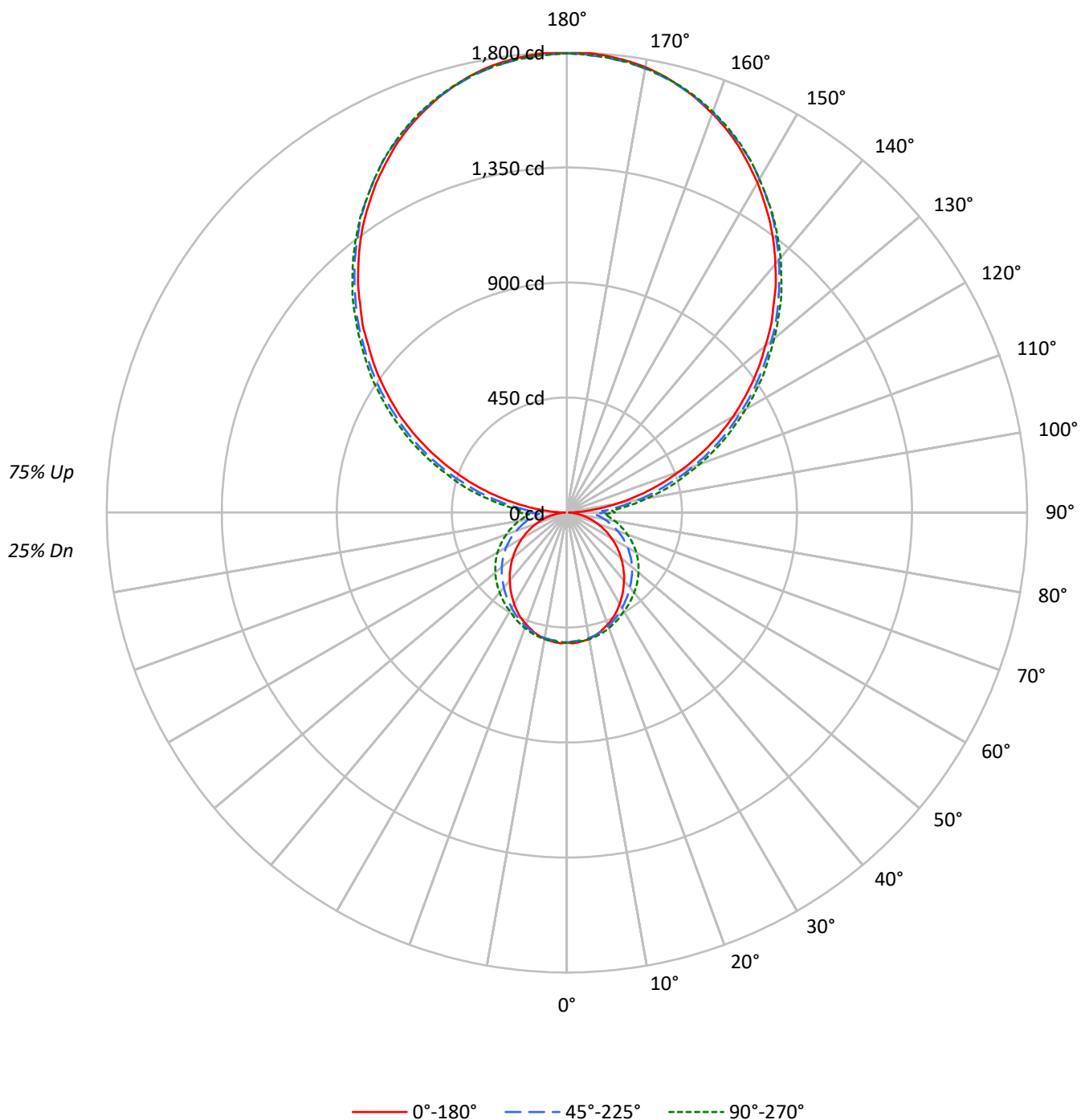
Lumens per Lamp: N/A
Luminaire Lumens: 6970.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1029488

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1029488

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

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	69	69	69	50	50	50	33	33	33			25
1	91	87	83	79	81	77	74	71	59	57	55	43	42	40	28	27	26			19
2	83	75	69	64	73	67	62	58	52	48	45	37	35	33	24	23	22			16
3	75	66	59	53	67	59	53	48	45	41	37	33	30	28	21	19	18			13
4	69	58	50	44	61	52	45	40	40	35	32	29	26	23	19	17	15			11
5	63	51	43	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	11			8
7	53	41	33	28	47	37	30	25	29	24	20	21	18	15	14	12	10			7
8	49	37	30	24	44	33	27	22	26	21	18	19	16	13	13	10	9			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	12	9	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°	8052	8052	8052
5°	8089	7708	7665
10°	8035	7442	7332
15°	7921	7166	6992
20°	7777	6876	6670
25°	7636	6597	6376
30°	7440	6315	6085
35°	7240	6043	5873
40°	7027	5809	5661
45°	6827	5595	5476
50°	6612	5398	5294
55°	6384	5190	5108
60°	6108	4972	4913
65°	5819	4722	4689
70°	5491	4454	4447
75°	5074	4184	4219
80°	4415	3905	3984
85°	3743	3641	3779

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6827 cd/sqm

TEST NUMBER: P1029488

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	0.7
10°-20°	138.3	2.0
20°-30°	209.6	3.0
30°-40°	255.2	3.7
40°-50°	274.6	3.9
50°-60°	266.6	3.8
60°-70°	232.9	3.3
70°-80°	179.2	2.6
80°-90°	125.1	1.8
90°-100°	193.9	2.8
100°-110°	413.9	5.9
110°-120°	644.6	9.2
120°-130°	817.5	11.7
130°-140°	902.0	12.9
140°-150°	876.9	12.6
150°-160°	734.3	10.5
160°-170°	487.0	7.0
170°-180°	170.2	2.4
0°-30°	396.1	5.7
0°-40°	651.3	9.3
0°-60°	1192.5	17.1
0°-90°	1729.7	24.8
90°-120°	1252.4	18.0
90°-150°	3848.8	55.2
90°-180°	5240.0	75.2
0°-180°	6970.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	510	508	504	508	507	48
15°	487	488	488	495	494	137
25°	442	448	454	463	465	203
35°	381	394	408	424	429	238
45°	313	332	358	381	388	241
55°	240	266	304	331	341	214
65°	164	200	243	274	283	163
75°	91	132	179	211	220	96
85°	26	72	119	150	161	28
90°	9	70	150	177	187	10
95°	85	134	182	210	216	93
105°	330	356	397	426	434	348
115°	610	627	657	678	681	603
125°	884	898	917	932	937	790
135°	1142	1159	1170	1184	1185	883
145°	1386	1397	1406	1412	1409	866
155°	1585	1589	1594	1601	1597	729
165°	1724	1723	1723	1733	1726	486
175°	1794	1789	1786	1797	1788	170
180°	1797	1797	1797	1797	1797	

TEST NUMBER: P1029488

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	508.7	508.7	508.7	508.7	508.7
2.5°	512.4	510.2	505.0	508.7	507.2
5°	510.2	508.0	503.5	508.0	507.2
7.5°	506.5	505.0	501.3	506.5	505.7
10°	502.1	500.6	498.4	504.3	503.5
12.5°	494.7	495.4	493.9	499.8	499.1
15°	486.6	488.1	488.1	494.7	493.9
17.5°	476.3	479.2	481.4	488.1	488.1
20°	465.9	469.6	472.6	480.7	480.7
22.5°	454.9	459.3	463.7	471.8	473.3
25°	442.3	447.5	454.1	463.0	465.2
27.5°	427.6	435.7	443.1	454.1	455.6
30°	412.9	422.4	432.0	443.8	446.0
32.5°	396.6	407.7	419.5	433.5	437.9
35°	381.2	393.7	407.7	423.9	429.1
37.5°	364.2	378.2	395.9	413.6	418.8
40°	347.2	363.5	383.4	402.5	409.2
42.5°	331.0	347.2	370.8	392.2	398.8
45°	312.6	332.5	358.3	381.2	388.5
47.5°	294.9	316.3	345.8	369.4	377.5
50°	276.5	299.3	332.5	357.6	365.7
52.5°	258.8	283.1	318.5	344.3	353.1
55°	239.6	266.1	304.5	331.0	340.6
57.5°	221.2	250.7	289.0	317.7	327.3
60°	201.3	233.0	275.0	303.0	313.3
62.5°	183.6	216.7	258.8	289.0	298.6
65°	163.7	199.8	243.3	273.5	283.1
67.5°	146.0	183.6	227.8	258.0	268.4
70°	126.8	165.1	210.9	242.6	251.4
72.5°	109.1	148.9	195.4	226.3	237.4
75°	90.7	132.0	179.1	210.9	220.4
77.5°	73.0	115.7	163.7	195.4	205.7
80°	55.3	100.3	148.2	179.1	189.5
82.5°	40.5	84.8	133.4	164.4	174.0
85°	26.5	72.2	119.4	150.4	160.7
87.5°	16.2	60.5	107.6	137.9	147.4
90°	8.9	69.8	150.4	176.8	187.3
92.5°	40.0	91.2	137.7	167.9	176.8
95°	84.8	134.5	181.8	209.8	215.6
97.5°	137.1	182.5	231.2	258.5	267.3
100°	197.8	237.1	283.0	310.3	316.8
102.5°	260.7	294.2	340.0	368.1	374.6
105°	329.7	355.7	397.0	425.8	433.9
107.5°	399.5	423.2	460.0	486.7	487.2
110°	465.4	489.3	525.4	549.0	552.6

TEST NUMBER: P1029488

CATALOG NUMBER: S122DIW-B485D1440UB2750-4F0-XX-W2A-D1_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	538.2	559.1	591.6	610.5	615.7
115°	609.5	626.8	656.8	677.5	681.1
117.5°	680.0	698.1	721.5	739.0	741.9
120°	751.3	766.4	783.8	804.4	808.0
122.5°	816.5	832.4	852.1	867.4	871.1
125°	884.0	897.7	916.7	932.1	937.2
127.5°	950.8	966.6	980.5	992.9	995.0
130°	1012.9	1031.9	1044.3	1059.0	1058.8
132.5°	1082.7	1097.1	1109.7	1119.1	1120.4
135°	1142.5	1159.2	1169.7	1183.6	1185.0
137.5°	1209.3	1222.9	1229.7	1242.1	1241.3
140°	1268.4	1281.4	1290.4	1302.2	1300.6
142.5°	1329.1	1342.0	1346.6	1356.9	1354.5
145°	1386.0	1396.6	1405.7	1411.6	1409.3
147.5°	1437.5	1451.2	1457.3	1461.0	1457.1
150°	1490.6	1499.7	1505.8	1510.3	1505.8
152.5°	1537.6	1546.7	1554.3	1560.4	1554.3
155°	1584.6	1589.2	1593.7	1601.3	1596.8
157.5°	1625.6	1628.6	1631.6	1642.3	1634.7
160°	1662.0	1665.0	1666.5	1675.6	1669.6
162.5°	1695.3	1695.3	1696.9	1707.5	1699.9
165°	1724.1	1722.6	1722.6	1733.2	1725.7
167.5°	1749.9	1745.4	1745.4	1756.0	1748.4
170°	1769.6	1765.1	1763.6	1774.2	1765.1
172.5°	1783.3	1778.7	1777.2	1787.8	1778.7
175°	1793.9	1789.4	1786.3	1796.9	1787.8
177.5°	1800.0	1795.4	1792.4	1801.5	1792.4
180°	1796.9	1796.9	1796.9	1796.9	1796.9

(END OF REPORT)