

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: P1033123

Luminaire Tested: S124DIW-B1020D1340UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033123
REPORT IS A COMBINATION OF REPORTS P996691 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

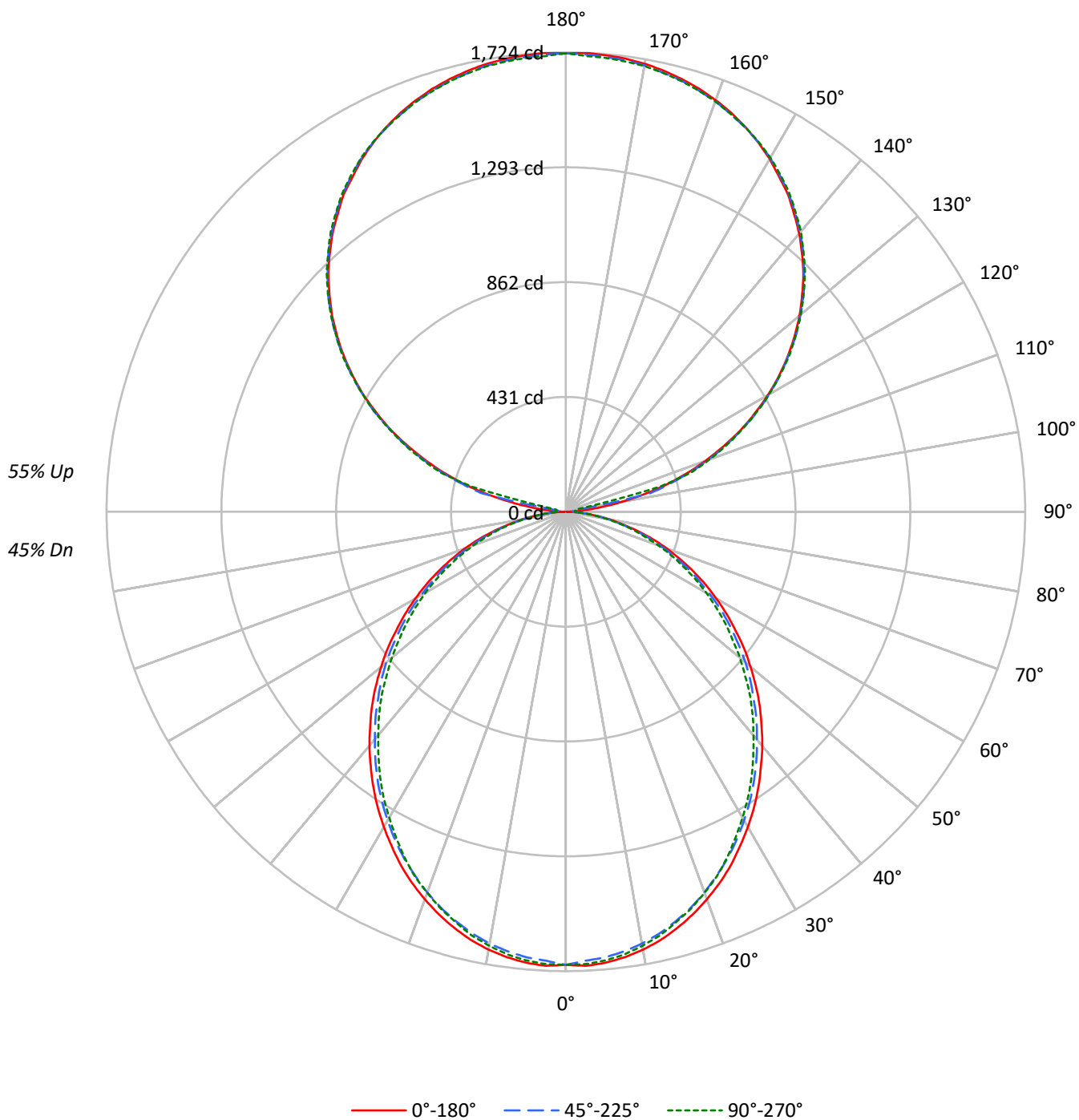
Lumens per Lamp: N/A
Luminaire Lumens: 9690.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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

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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
RCR																	
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	44	43
2	88	81	75	69	80	74	69	64	62	58	55	51	48	45	40	38	37
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16
9	49	37	30	25	45	35	28	23	29	24	20	25	21	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	1.7
10°-20°	451.5	4.7
20°-30°	664.5	6.9
30°-40°	772.4	8.0
40°-50°	772.3	8.0
50°-60°	675.5	7.0
60°-70°	501.5	5.2
70°-80°	284.5	2.9
80°-90°	85.0	0.9
90°-100°	57.1	0.6
100°-110°	376.0	3.9
110°-120°	718.0	7.4
120°-130°	911.5	9.4
130°-140°	975.1	10.1
140°-150°	911.8	9.4
150°-160°	735.3	7.6
160°-170°	474.2	4.9
170°-180°	163.4	1.7
0°-30°	1276.2	13.2
0°-40°	2048.6	21.1
0°-60°	3496.5	36.1
0°-90°	4367.6	45.1
90°-120°	1151.1	11.9
90°-150°	3949.5	40.8
90°-180°	5322.0	54.9
0°-180°	9690.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	4	18	28	36	39	9
95°	71	27	28	36	37	87
105°	387	395	401	413	367	405
115°	723	727	726	728	728	712
125°	1016	1022	1019	1023	1024	908
135°	1261	1260	1265	1267	1270	971
145°	1454	1458	1458	1459	1462	908
155°	1594	1595	1591	1596	1593	735
165°	1682	1675	1675	1685	1674	475
175°	1720	1712	1714	1725	1710	164
180°	1720	1720	1720	1720	1720	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	3.9	18.0	28.3	36.0	38.6
92.5°	19.3	16.7	27.0	34.7	34.7
95°	70.8	27.0	28.3	36.0	37.3
97.5°	135.1	163.4	28.3	34.7	36.0
100°	211.0	234.1	56.6	34.7	36.0
102.5°	295.9	311.3	326.8	37.3	37.3
105°	387.2	395.0	401.4	413.0	366.7
107.5°	470.9	474.7	483.7	490.2	495.3
110°	555.8	559.6	567.3	569.9	573.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.1	645.8	648.4	647.1	652.3
115°	723.0	726.9	725.6	728.2	728.2
117.5°	798.9	804.1	807.9	806.6	806.6
120°	876.1	881.3	880.0	882.5	880.0
122.5°	948.2	950.7	953.3	954.6	952.0
125°	1016.3	1021.5	1018.9	1022.8	1024.1
127.5°	1081.9	1083.2	1089.7	1088.4	1087.1
130°	1145.0	1146.3	1150.1	1151.4	1151.4
132.5°	1202.9	1205.5	1210.6	1211.9	1210.6
135°	1260.8	1259.5	1264.6	1267.2	1269.8
137.5°	1312.2	1312.2	1318.7	1321.2	1320.0
140°	1362.4	1365.0	1367.6	1371.4	1372.7
142.5°	1407.4	1412.6	1413.9	1416.4	1416.4
145°	1453.7	1457.6	1457.6	1458.9	1461.5
147.5°	1489.8	1497.5	1496.2	1497.5	1498.8
150°	1529.6	1534.8	1533.5	1533.5	1534.8
152.5°	1563.1	1567.0	1564.4	1567.0	1565.7
155°	1594.0	1595.3	1591.4	1596.5	1592.7
157.5°	1621.0	1621.0	1615.8	1622.3	1615.8
160°	1644.1	1640.3	1639.0	1646.7	1639.0
162.5°	1664.7	1659.6	1658.3	1666.0	1657.0
165°	1681.5	1675.0	1675.0	1685.3	1673.7
167.5°	1695.6	1689.2	1687.9	1699.5	1686.6
170°	1707.2	1699.5	1700.8	1711.0	1698.2
172.5°	1714.9	1707.2	1708.5	1718.8	1704.6
175°	1720.1	1712.3	1713.6	1725.2	1709.8
177.5°	1723.9	1714.9	1717.5	1727.8	1712.3
180°	1720.1	1720.1	1720.1	1720.1	1720.1

(END OF REPORT)