

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: P1033846

Luminaire Tested: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033846
REPORT IS A COMBINATION OF REPORTS P999866 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

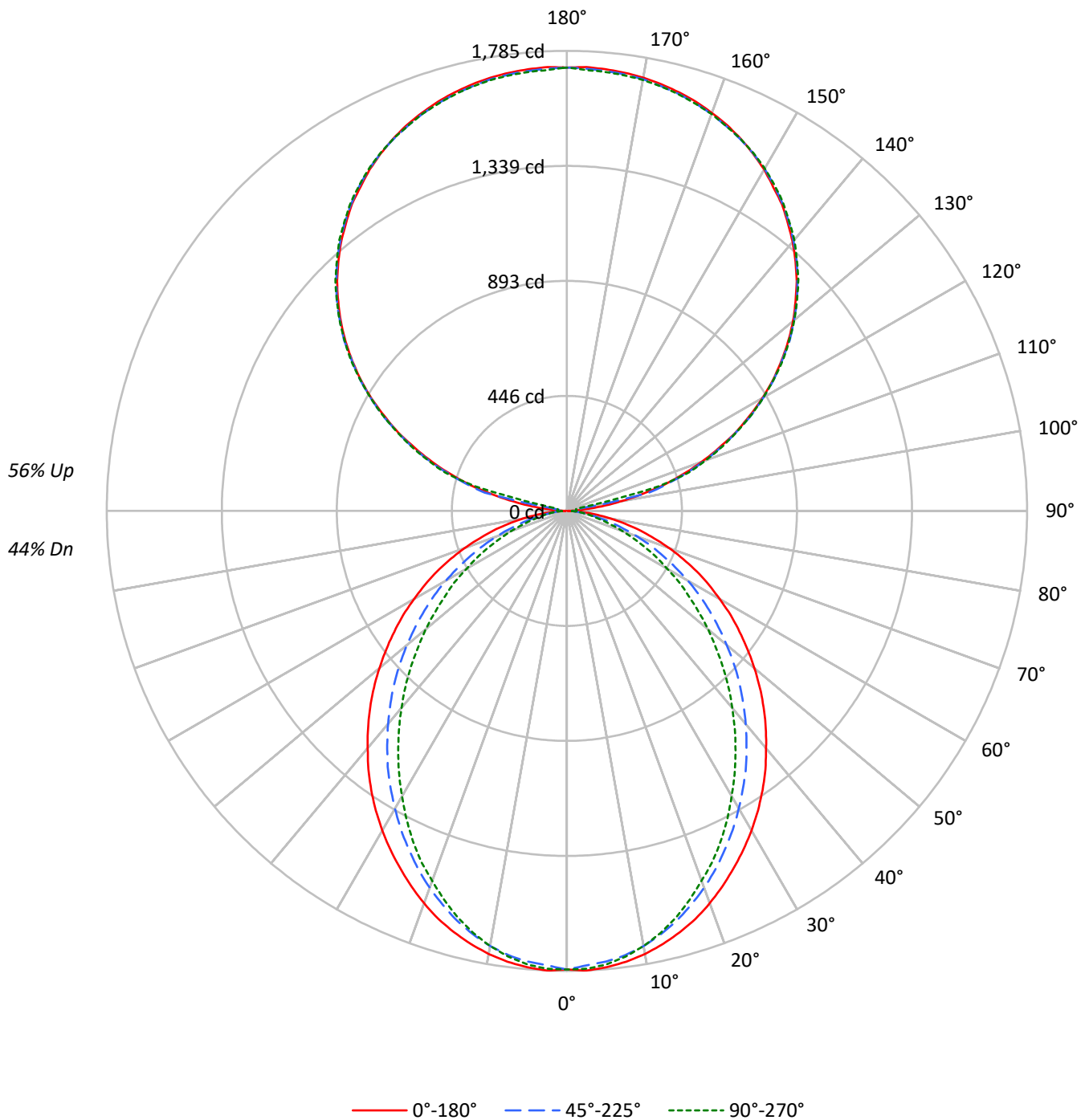
Lumens per Lamp: N/A
Luminaire Lumens: 9438.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033846

CATALOG NUMBER: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1033846

CATALOG NUMBER: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

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	80	80	80	64	64	64	50	50	50
1	97	92	89	85	88	85	82	79	70	68	66	57	55	54	45	44	43
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36
3	81	71	64	59	73	66	59	54	55	50	46	45	41	39	35	33	31
4	74	63	56	50	67	58	51	46	49	44	40	40	36	33	32	29	27
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15
10	47	35	28	23	43	32	26	22	28	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

TEST NUMBER: P1033846

CATALOG NUMBER: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	1.8
10°-20°	466.6	4.9
20°-30°	673.6	7.1
30°-40°	763.5	8.1
40°-50°	737.1	7.8
50°-60°	612.8	6.5
60°-70°	423.0	4.5
70°-80°	213.7	2.3
80°-90°	57.8	0.6
90°-100°	57.1	0.6
100°-110°	376.0	4.0
110°-120°	718.0	7.6
120°-130°	911.5	9.7
130°-140°	975.1	10.3
140°-150°	911.8	9.7
150°-160°	735.3	7.8
160°-170°	474.2	5.0
170°-180°	163.4	1.7
0°-30°	1307.6	13.9
0°-40°	2071.0	21.9
0°-60°	3421.0	36.2
0°-90°	4115.5	43.6
90°-120°	1151.1	12.2
90°-150°	3949.5	41.8
90°-180°	5322.0	56.4
0°-180°	9438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	4	18	28	36	39	8
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	

TEST NUMBER: P1033846

CATALOG NUMBER: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
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

TEST NUMBER: P1033846

CATALOG NUMBER: S124RDIW-B1020D1340UB27-4F0-XX-W2A-F

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)