

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: P1033827

Luminaire Tested: S124RDIW-B1020D1050UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033827
REPORT IS A COMBINATION OF REPORTS P999823 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1050UB27-4F0-XX-W2A-F1
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

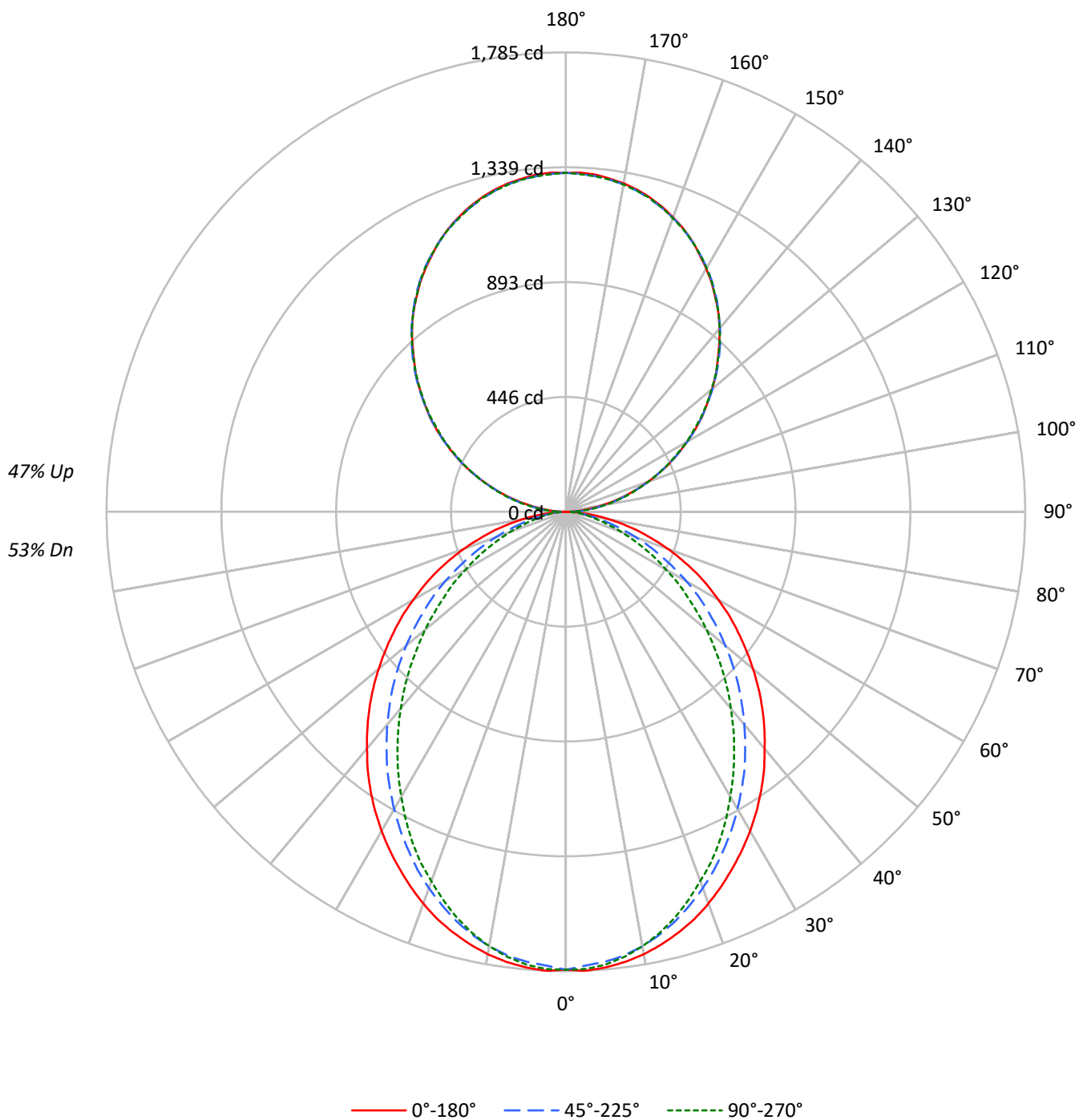
Lumens per Lamp: N/A
Luminaire Lumens: 7769.0 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	99	95	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	58	54	50	50	46	43	41	39	37
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	30	28
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.2
10°-20°	466.6	6.0
20°-30°	673.6	8.7
30°-40°	763.5	9.8
40°-50°	737.1	9.5
50°-60°	612.8	7.9
60°-70°	423.0	5.4
70°-80°	213.7	2.8
80°-90°	57.1	0.7
90°-100°	85.9	1.1
100°-110°	257.1	3.3
110°-120°	436.8	5.6
120°-130°	576.1	7.4
130°-140°	647.0	8.3
140°-150°	635.9	8.2
150°-160°	534.9	6.9
160°-170°	355.9	4.6
170°-180°	124.6	1.6
0°-30°	1307.6	16.8
0°-40°	2071.0	26.7
0°-60°	3421.0	44.0
0°-90°	4114.8	53.0
90°-120°	779.8	10.0
90°-150°	2638.8	34.0
90°-180°	3654.0	47.0
0°-180°	7769.0	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°	3	14	22	28	31	9
95°	61	70	77	80	80	66
105°	237	238	242	246	248	252
115°	444	444	442	441	440	438
125°	647	647	646	644	642	577
135°	834	840	840	838	835	645
145°	1014	1018	1019	1018	1014	634
155°	1161	1161	1160	1164	1160	534
165°	1264	1261	1259	1265	1261	356
175°	1315	1310	1309	1316	1309	125
180°	1317	1317	1317	1317	1317	

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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°	3.1	14.3	22.4	28.5	30.6
92.5°	26.5	39.7	44.8	47.9	48.9
95°	61.1	70.3	77.4	80.5	80.5
97.5°	97.8	105.9	114.1	118.2	118.2
100°	142.6	146.7	155.8	157.9	157.9
102.5°	189.5	190.5	198.6	201.7	202.7
105°	237.3	238.3	242.4	245.5	248.5
107.5°	287.2	288.3	289.3	293.3	292.3
110°	338.2	340.2	339.2	337.1	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.1	391.1	389.1	389.1	389.1
115°	444.1	444.1	442.1	441.0	440.0
117.5°	494.0	494.0	493.0	489.9	486.9
120°	543.9	548.0	544.9	539.8	541.9
122.5°	595.9	596.9	595.9	592.8	587.7
125°	646.8	646.8	645.8	643.7	641.7
127.5°	692.6	695.7	693.6	691.6	690.6
130°	741.5	744.6	744.6	742.5	738.5
132.5°	791.4	793.5	792.4	790.4	789.4
135°	834.2	840.3	840.3	838.3	835.2
137.5°	882.1	885.1	887.2	884.1	885.1
140°	929.9	932.0	932.0	931.0	929.9
142.5°	973.7	975.8	974.8	974.8	974.8
145°	1013.5	1017.5	1018.6	1017.5	1014.5
147.5°	1054.2	1059.3	1058.3	1057.3	1056.2
150°	1090.9	1095.0	1095.0	1095.0	1093.9
152.5°	1125.5	1127.5	1128.6	1131.6	1128.6
155°	1161.2	1161.2	1160.1	1164.2	1160.1
157.5°	1191.7	1189.7	1189.7	1192.7	1189.7
160°	1218.2	1217.2	1216.2	1219.2	1214.1
162.5°	1242.6	1239.6	1238.6	1244.7	1239.6
165°	1264.0	1261.0	1258.9	1265.1	1261.0
167.5°	1281.3	1277.3	1277.3	1283.4	1277.3
170°	1295.6	1290.5	1291.5	1297.6	1290.5
172.5°	1305.8	1301.7	1301.7	1308.8	1301.7
175°	1315.0	1309.9	1308.8	1316.0	1308.8
177.5°	1319.0	1313.9	1313.9	1321.1	1312.9
180°	1317.0	1317.0	1317.0	1317.0	1317.0

(END OF REPORT)