

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: P1033826

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033826
REPORT IS A COMBINATION OF REPORTS P999822 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-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

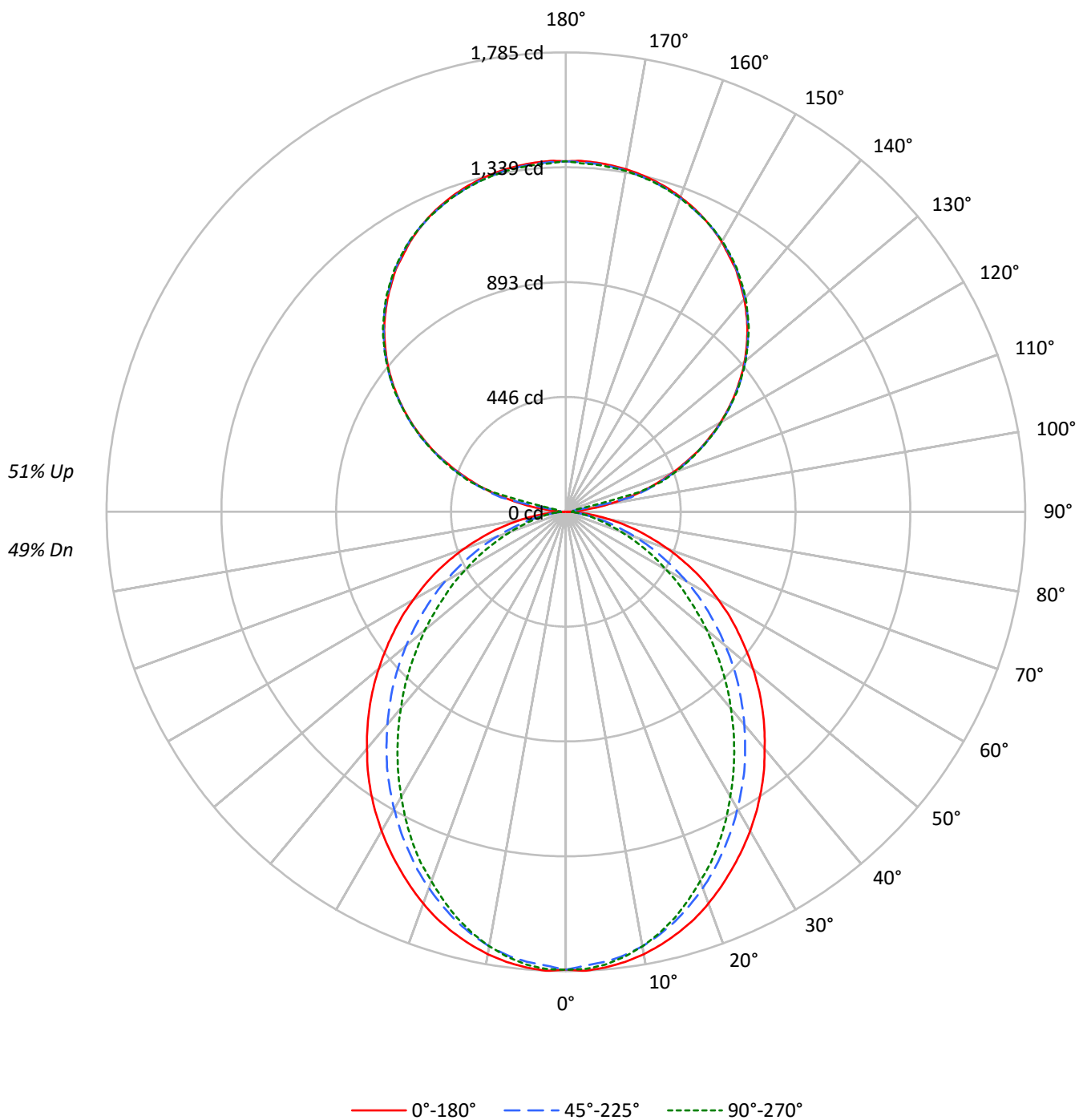
Lumens per Lamp: N/A
Luminaire Lumens: 8329.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	94	90	87	90	87	83	80	73	71	69	61	59	58	50	48	47
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35
4	75	64	56	51	69	60	53	47	51	46	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26
6	63	51	44	38	58	48	41	36	41	36	31	35	31	27	29	26	23
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

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	2.0
10°-20°	466.6	5.6
20°-30°	673.6	8.1
30°-40°	763.5	9.2
40°-50°	737.1	8.9
50°-60°	612.8	7.4
60°-70°	423.0	5.1
70°-80°	213.7	2.6
80°-90°	57.1	0.7
90°-100°	45.2	0.5
100°-110°	297.7	3.6
110°-120°	568.5	6.8
120°-130°	721.7	8.7
130°-140°	772.1	9.3
140°-150°	721.9	8.7
150°-160°	582.2	7.0
160°-170°	375.5	4.5
170°-180°	129.4	1.6
0°-30°	1307.6	15.7
0°-40°	2071.0	24.9
0°-60°	3421.0	41.1
0°-90°	4114.8	49.4
90°-120°	911.4	10.9
90°-150°	3127.1	37.5
90°-180°	4214.0	50.6
0°-180°	8329.0	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	7
95°	56	21	22	28	30	69
105°	307	313	318	327	290	321
115°	572	576	574	576	576	563
125°	805	809	807	810	811	719
135°	998	997	1001	1003	1005	769
145°	1151	1154	1154	1155	1157	719
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

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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°	15.3	13.2	21.4	27.5	27.5
95°	56.0	21.4	22.4	28.5	29.5
97.5°	107.0	129.4	22.4	27.5	28.5
100°	167.1	185.4	44.8	27.5	28.5
102.5°	234.3	246.5	258.7	29.5	29.5
105°	306.6	312.7	317.8	327.0	290.3
107.5°	372.8	375.9	383.0	388.1	392.2
110°	440.0	443.1	449.2	451.2	454.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.2	511.3	513.4	512.4	516.4
115°	572.5	575.5	574.5	576.5	576.5
117.5°	632.6	636.6	639.7	638.7	638.7
120°	693.7	697.8	696.7	698.8	696.7
122.5°	750.7	752.8	754.8	755.8	753.8
125°	804.7	808.8	806.7	809.8	810.8
127.5°	856.7	857.7	862.8	861.8	860.7
130°	906.6	907.6	910.6	911.7	911.7
132.5°	952.4	954.4	958.5	959.5	958.5
135°	998.2	997.2	1001.3	1003.3	1005.4
137.5°	1039.0	1039.0	1044.1	1046.1	1045.1
140°	1078.7	1080.8	1082.8	1085.9	1086.9
142.5°	1114.4	1118.4	1119.5	1121.5	1121.5
145°	1151.0	1154.1	1154.1	1155.1	1157.2
147.5°	1179.6	1185.7	1184.7	1185.7	1186.7
150°	1211.1	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)