

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: P1033859

Luminaire Tested: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033859
REPORT IS A COMBINATION OF REPORTS P999899 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

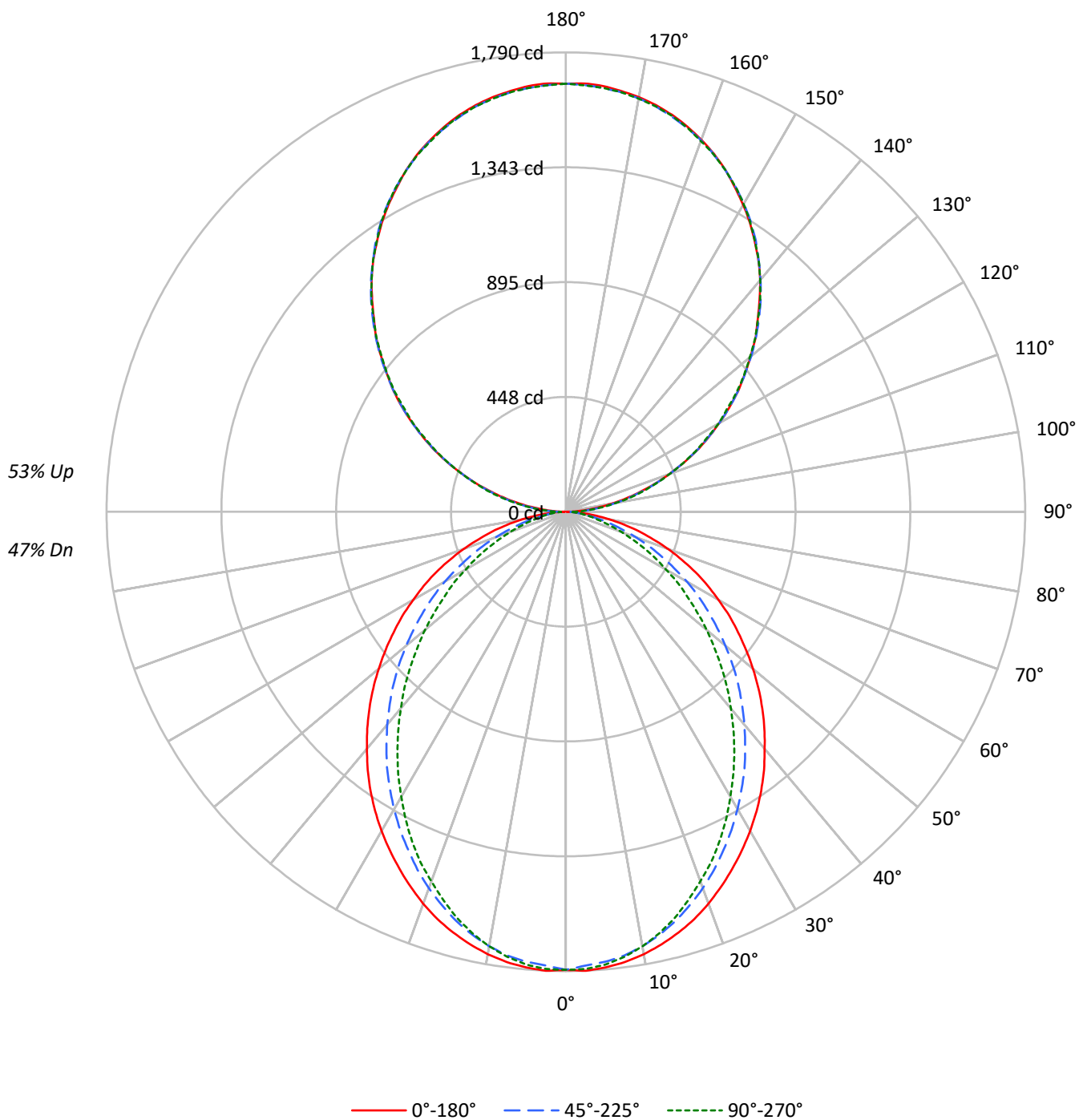
Lumens per Lamp: N/A
Luminaire Lumens: 8756.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1033859

CATALOG NUMBER: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1

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
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53
1	97	93	89	86	89	86	83	80	72	70	68		59	58	56		48
2	89	82	76	71	81	75	70	66	63	60	56		52	50	47		42
3	81	72	65	59	74	66	60	55	56	51	48		47	43	40		38
4	74	64	56	50	68	59	52	47	50	45	41		42	38	35		34
5	68	57	49	43	63	53	46	40	45	39	35		37	33	30		31
6	63	51	43	37	58	47	40	35	40	35	31		34	30	27		28
7	58	46	38	33	53	43	36	31	37	31	27		31	27	24		25
8	54	42	34	29	50	39	32	27	34	28	24		28	24	21		23
9	50	38	31	26	46	36	29	25	31	25	22		26	22	19		22
10	47	35	28	23	43	33	26	22	28	23	20		24	20	17		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

TEST NUMBER: P1033859

CATALOG NUMBER: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	1.9
10°-20°	467.9	5.3
20°-30°	675.6	7.7
30°-40°	765.7	8.7
40°-50°	739.3	8.4
50°-60°	614.6	7.0
60°-70°	424.2	4.8
70°-80°	214.4	2.4
80°-90°	58.0	0.7
90°-100°	108.7	1.2
100°-110°	325.7	3.7
110°-120°	553.2	6.3
120°-130°	729.7	8.3
130°-140°	819.5	9.4
140°-150°	805.5	9.2
150°-160°	677.5	7.7
160°-170°	450.8	5.1
170°-180°	157.8	1.8
0°-30°	1311.4	15.0
0°-40°	2077.1	23.7
0°-60°	3431.0	39.2
0°-90°	4127.6	47.1
90°-120°	987.7	11.3
90°-150°	3342.3	38.2
90°-180°	4628.0	52.9
0°-180°	8756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	4	18	28	36	39	10
95°	77	89	98	102	102	84
105°	301	302	307	311	315	319
115°	562	562	560	559	557	555
125°	819	819	818	815	813	730
135°	1057	1064	1064	1062	1058	817
145°	1284	1289	1290	1289	1285	804
155°	1471	1471	1469	1475	1469	677
165°	1601	1597	1595	1602	1597	451
175°	1666	1659	1658	1667	1658	158
180°	1668	1668	1668	1668	1668	

TEST NUMBER: P1033859

CATALOG NUMBER: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	3.9	18.1	28.4	36.1	38.7
92.5°	33.5	50.3	56.8	60.6	61.9
95°	77.4	89.0	98.0	101.9	101.9
97.5°	123.9	134.2	144.5	149.7	149.7
100°	180.6	185.8	197.4	200.0	200.0
102.5°	240.0	241.3	251.6	255.4	256.7
105°	300.6	301.9	307.0	310.9	314.8
107.5°	363.8	365.1	366.4	371.6	370.3
110°	428.3	430.9	429.6	427.0	430.9

TEST NUMBER: P1033859

CATALOG NUMBER: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.4	495.4	492.8	492.8	492.8
115°	562.5	562.5	559.9	558.6	557.3
117.5°	625.7	625.7	624.4	620.5	616.7
120°	688.9	694.1	690.2	683.8	686.3
122.5°	754.7	756.0	754.7	750.8	744.4
125°	819.2	819.2	817.9	815.4	812.8
127.5°	877.3	881.2	878.6	876.0	874.7
130°	939.2	943.1	943.1	940.5	935.3
132.5°	1002.4	1005.0	1003.7	1001.1	999.8
135°	1056.6	1064.3	1064.3	1061.8	1057.9
137.5°	1117.2	1121.1	1123.7	1119.8	1121.1
140°	1177.9	1180.5	1180.5	1179.2	1177.9
142.5°	1233.4	1235.9	1234.6	1234.6	1234.6
145°	1283.7	1288.8	1290.1	1288.8	1285.0
147.5°	1335.3	1341.7	1340.4	1339.1	1337.9
150°	1381.7	1386.9	1386.9	1386.9	1385.6
152.5°	1425.6	1428.2	1429.5	1433.3	1429.5
155°	1470.7	1470.7	1469.4	1474.6	1469.4
157.5°	1509.4	1506.9	1506.9	1510.7	1506.9
160°	1543.0	1541.7	1540.4	1544.3	1537.8
162.5°	1573.9	1570.1	1568.8	1576.5	1570.1
165°	1601.0	1597.2	1594.6	1602.3	1597.2
167.5°	1623.0	1617.8	1617.8	1625.6	1617.8
170°	1641.0	1634.6	1635.9	1643.6	1634.6
172.5°	1653.9	1648.8	1648.8	1657.8	1648.8
175°	1665.5	1659.1	1657.8	1666.8	1657.8
177.5°	1670.7	1664.3	1664.3	1673.3	1663.0
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)