

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: P1033862

Luminaire Tested: S124RDIW-B1020D1340UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033862
REPORT IS A COMBINATION OF REPORTS P999904 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

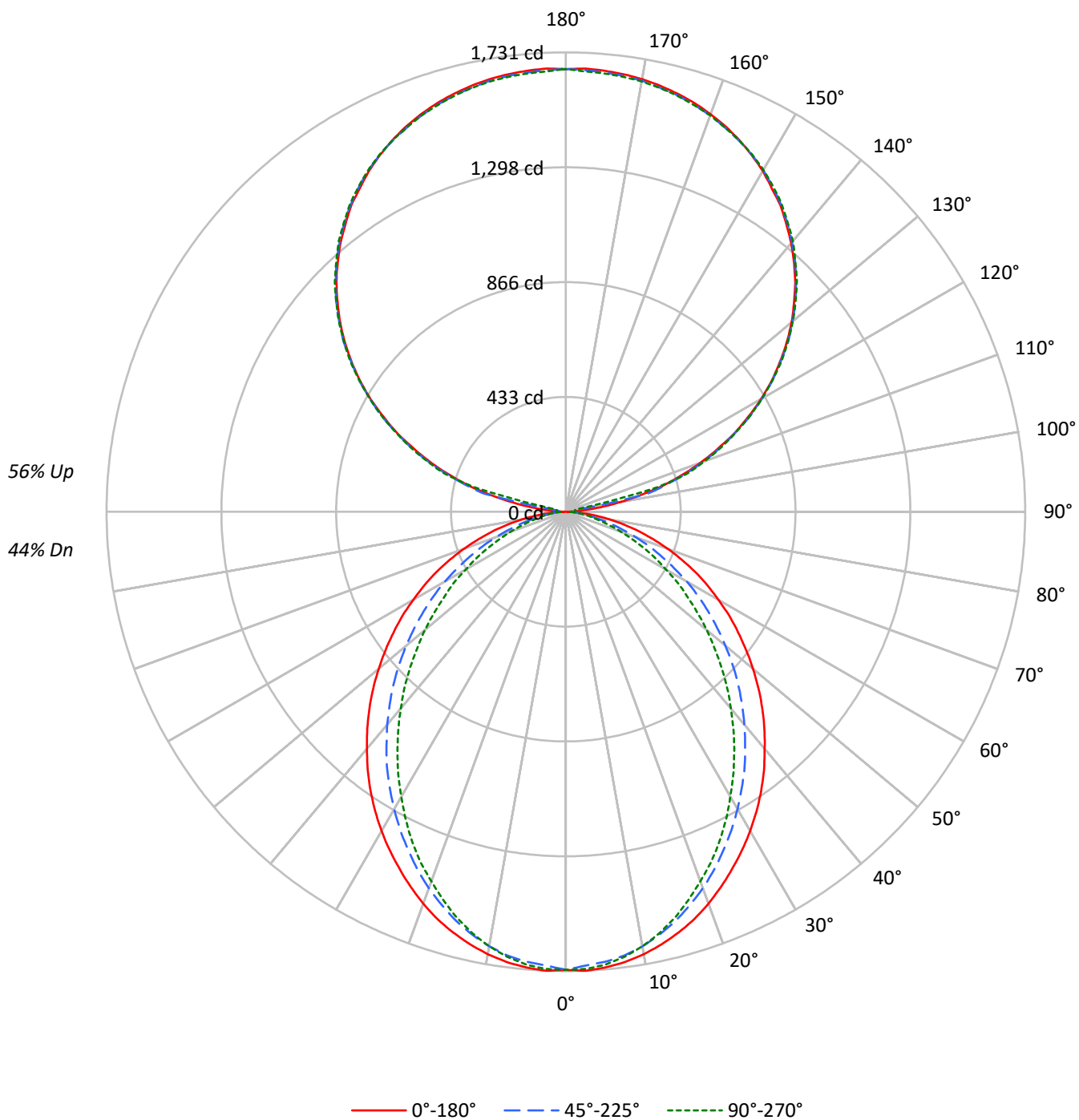
Lumens per Lamp: N/A
Luminaire Lumens: 9153.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	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°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.8
10°-20°	452.5	4.9
20°-30°	653.3	7.1
30°-40°	740.4	8.1
40°-50°	714.9	7.8
50°-60°	594.3	6.5
60°-70°	410.2	4.5
70°-80°	207.3	2.3
80°-90°	56.1	0.6
90°-100°	55.4	0.6
100°-110°	364.6	4.0
110°-120°	696.3	7.6
120°-130°	883.9	9.7
130°-140°	945.6	10.3
140°-150°	884.2	9.7
150°-160°	713.1	7.8
160°-170°	459.9	5.0
170°-180°	158.5	1.7
0°-30°	1268.1	13.9
0°-40°	2008.6	21.9
0°-60°	3317.8	36.2
0°-90°	3991.4	43.6
90°-120°	1116.3	12.2
90°-150°	3830.1	41.8
90°-180°	5162.0	56.4
0°-180°	9153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	4	18	27	35	37	8
95°	69	26	27	35	36	85
105°	376	383	389	400	356	393
115°	701	705	704	706	706	690
125°	986	991	988	992	993	880
135°	1223	1221	1226	1229	1231	942
145°	1410	1414	1414	1415	1417	881
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	3.7	17.5	27.4	34.9	37.4
92.5°	18.7	16.2	26.2	33.7	33.7
95°	68.6	26.2	27.4	34.9	36.2
97.5°	131.0	158.4	27.4	33.7	34.9
100°	204.6	227.1	54.9	33.7	34.9
102.5°	287.0	301.9	316.9	36.2	36.2
105°	375.5	383.0	389.3	400.5	355.6
107.5°	456.6	460.4	469.1	475.3	480.3
110°	539.0	542.7	550.2	552.7	556.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	618.8	626.3	628.8	627.5	632.5
115°	701.2	704.9	703.7	706.1	706.1
117.5°	774.8	779.8	783.5	782.3	782.3
120°	849.6	854.6	853.4	855.9	853.4
122.5°	919.5	922.0	924.5	925.7	923.2
125°	985.6	990.6	988.1	991.9	993.1
127.5°	1049.2	1050.5	1056.7	1055.5	1054.2
130°	1110.4	1111.6	1115.4	1116.6	1116.6
132.5°	1166.5	1169.0	1174.0	1175.3	1174.0
135°	1222.7	1221.4	1226.4	1228.9	1231.4
137.5°	1272.6	1272.6	1278.8	1281.3	1280.0
140°	1321.2	1323.7	1326.2	1330.0	1331.2
142.5°	1364.9	1369.9	1371.1	1373.6	1373.6
145°	1409.8	1413.5	1413.5	1414.8	1417.3
147.5°	1444.7	1452.2	1451.0	1452.2	1453.5
150°	1483.4	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)