

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: P1033855

Luminaire Tested: S124RDIW-B1020D1340UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033855
REPORT IS A COMBINATION OF REPORTS P999893 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB35-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

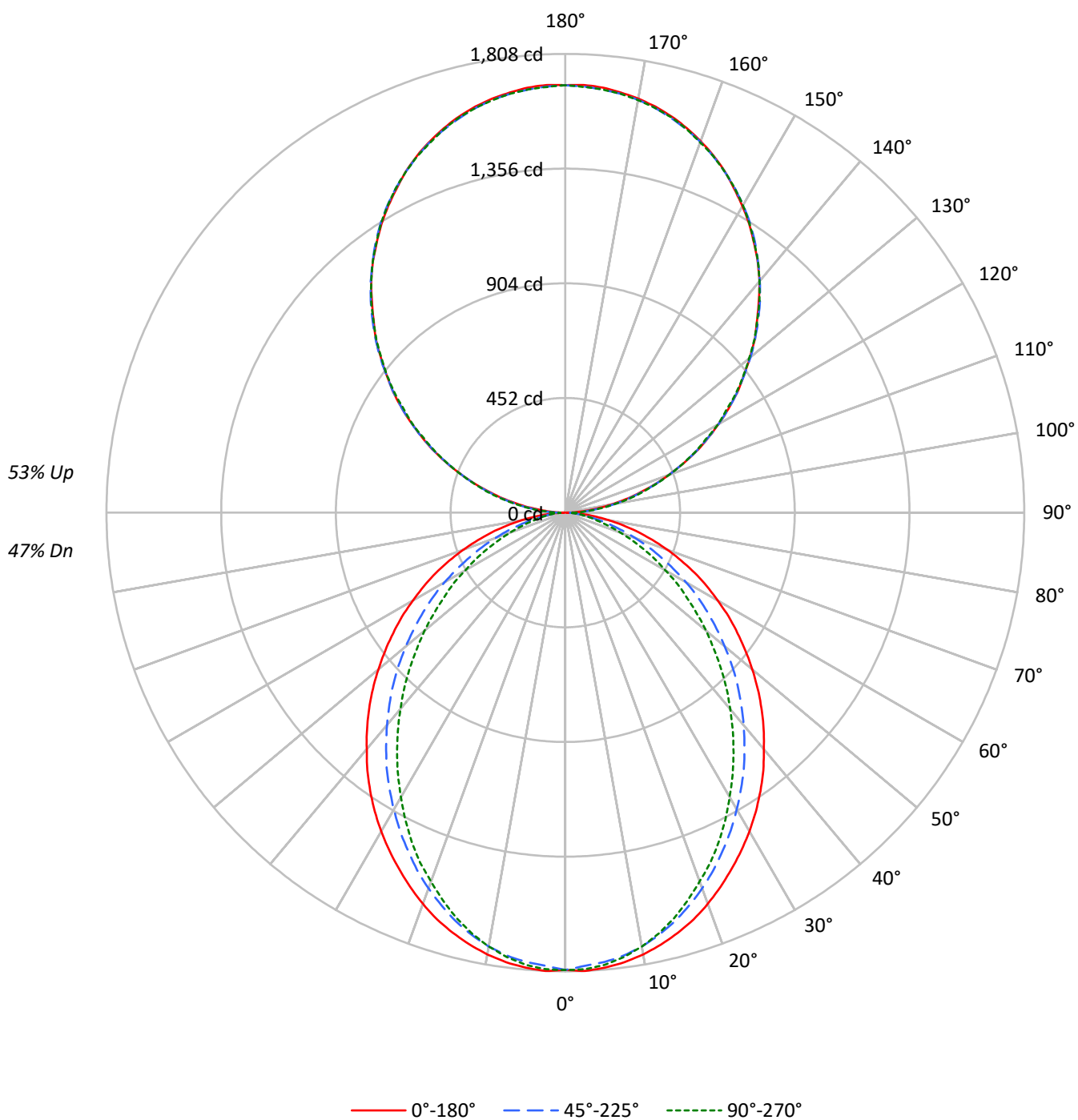
Lumens per Lamp: N/A
Luminaire Lumens: 8842.9 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	40	39
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	25	31	25	22	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14700	14262	14264
10°	14576	13812	13648
15°	14375	13252	12922
20°	14113	12613	12093
25°	13785	11923	11284
30°	13464	11220	10375
35°	13112	10508	9487
40°	12692	9740	8574
45°	12298	8979	7671
50°	11851	8148	6753
55°	11367	7296	5807
60°	10831	6391	4872
65°	10312	5353	3970
70°	9575	4261	3035
75°	8631	3101	2122
80°	7210	1904	1525
85°	5421	1097	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.9
10°-20°	472.6	5.3
20°-30°	682.3	7.7
30°-40°	773.3	8.7
40°-50°	746.6	8.4
50°-60°	620.7	7.0
60°-70°	428.4	4.8
70°-80°	216.5	2.4
80°-90°	58.6	0.7
90°-100°	109.8	1.2
100°-110°	328.9	3.7
110°-120°	558.8	6.3
120°-130°	736.9	8.3
130°-140°	827.7	9.4
140°-150°	813.5	9.2
150°-160°	684.2	7.7
160°-170°	455.2	5.1
170°-180°	159.4	1.8
0°-30°	1324.4	15.0
0°-40°	2097.7	23.7
0°-60°	3465.1	39.2
0°-90°	4168.6	47.1
90°-120°	997.5	11.3
90°-150°	3375.5	38.2
90°-180°	4674.0	52.9
0°-180°	8842.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1800	1794	1778	1792	1789	171
15°	1714	1702	1667	1664	1655	483
25°	1550	1525	1468	1445	1431	714
35°	1340	1296	1227	1180	1155	838
45°	1093	1042	959	892	867	843
55°	828	773	683	611	585	741
65°	563	504	415	356	340	556
75°	300	248	184	152	144	316
85°	74	47	43	40	40	82
90°	4	18	29	36	39	10
95°	78	90	99	103	103	85
105°	304	305	310	314	318	322
115°	568	568	566	564	563	560
125°	827	827	826	824	821	738
135°	1067	1075	1075	1072	1068	826
145°	1296	1302	1303	1302	1298	811
155°	1485	1485	1484	1489	1484	684
165°	1617	1613	1610	1618	1613	456
175°	1682	1676	1674	1683	1674	160
180°	1685	1685	1685	1685	1685	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.6	1802.6	1802.6	1802.6	1802.6
2.5°	1808.1	1802.6	1787.4	1802.6	1801.2
5°	1799.8	1794.3	1777.7	1791.5	1788.8
7.5°	1787.4	1781.9	1761.2	1770.8	1766.7
10°	1768.1	1761.2	1736.3	1741.8	1736.3
12.5°	1743.2	1734.9	1704.6	1707.3	1699.0
15°	1714.2	1701.8	1667.3	1664.5	1654.9
17.5°	1681.1	1663.2	1623.1	1616.2	1602.4
20°	1641.1	1623.1	1576.2	1565.2	1547.2
22.5°	1596.9	1576.2	1525.1	1507.2	1493.4
25°	1550.0	1525.1	1468.5	1445.1	1431.3
27.5°	1501.7	1471.3	1412.0	1384.4	1365.0
30°	1450.6	1416.1	1351.2	1316.7	1294.6
32.5°	1396.8	1356.7	1289.1	1247.7	1227.0
35°	1340.2	1296.0	1227.0	1180.1	1155.2
37.5°	1280.8	1235.3	1159.4	1108.3	1083.5
40°	1217.3	1171.8	1093.1	1035.2	1010.3
42.5°	1156.6	1108.3	1025.5	966.1	939.9
45°	1093.1	1042.1	959.2	891.6	866.8
47.5°	1028.3	975.8	890.2	819.8	792.2
50°	962.0	908.2	819.8	750.8	724.6
52.5°	894.4	841.9	750.8	680.4	652.8
55°	828.1	772.9	683.2	611.4	585.2
57.5°	763.3	705.3	617.0	543.8	524.5
60°	692.9	637.7	549.3	477.6	455.5
62.5°	629.4	571.4	480.3	415.4	398.9
65°	563.1	503.8	415.4	356.1	339.5
67.5°	494.1	437.5	354.7	302.3	282.9
70°	429.2	371.3	292.6	247.1	233.3
72.5°	360.2	309.2	236.0	198.8	186.3
75°	299.5	248.4	183.6	151.8	143.5
77.5°	236.0	191.8	136.6	114.6	111.8
80°	175.3	135.3	93.9	89.7	88.3
82.5°	122.8	87.0	67.6	64.9	63.5
85°	74.5	46.9	42.8	40.0	40.0
87.5°	31.7	20.7	19.3	17.9	19.3
90°	3.9	18.2	28.7	36.5	39.1
92.5°	33.9	50.8	57.3	61.2	62.5
95°	78.2	89.9	99.0	102.9	102.9
97.5°	125.1	135.5	145.9	151.1	151.1
100°	182.4	187.6	199.3	202.0	202.0
102.5°	242.3	243.6	254.1	258.0	259.3
105°	303.6	304.9	310.1	314.0	317.9
107.5°	367.4	368.7	370.0	375.2	373.9
110°	432.6	435.2	433.9	431.3	435.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.3	500.3	497.7	497.7	497.7
115°	568.1	568.1	565.5	564.2	562.9
117.5°	631.9	631.9	630.6	626.7	622.8
120°	695.8	701.0	697.1	690.6	693.2
122.5°	762.2	763.5	762.2	758.3	751.8
125°	827.4	827.4	826.1	823.5	820.8
127.5°	886.0	889.9	887.3	884.7	883.4
130°	948.5	952.4	952.4	949.8	944.6
132.5°	1012.4	1015.0	1013.7	1011.1	1009.8
135°	1067.1	1074.9	1074.9	1072.3	1068.4
137.5°	1128.3	1132.2	1134.9	1130.9	1132.2
140°	1189.6	1192.2	1192.2	1190.9	1189.6
142.5°	1245.6	1248.2	1246.9	1246.9	1246.9
145°	1296.4	1301.6	1302.9	1301.6	1297.7
147.5°	1348.5	1355.0	1353.7	1352.4	1351.1
150°	1395.4	1400.7	1400.7	1400.7	1399.3
152.5°	1439.7	1442.3	1443.6	1447.6	1443.6
155°	1485.3	1485.3	1484.0	1489.3	1484.0
157.5°	1524.4	1521.8	1521.8	1525.7	1521.8
160°	1558.3	1557.0	1555.7	1559.6	1553.1
162.5°	1589.6	1585.7	1584.4	1592.2	1585.7
165°	1616.9	1613.0	1610.4	1618.2	1613.0
167.5°	1639.1	1633.9	1633.9	1641.7	1633.9
170°	1657.3	1650.8	1652.1	1659.9	1650.8
172.5°	1670.4	1665.1	1665.1	1674.3	1665.1
175°	1682.1	1675.6	1674.3	1683.4	1674.3
177.5°	1687.3	1680.8	1680.8	1689.9	1679.5
180°	1684.7	1684.7	1684.7	1684.7	1684.7

(END OF REPORT)