

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: P1032857

Luminaire Tested: S124RDIW-B1020D1340UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032857
REPORT IS A COMBINATION OF REPORTS P999880 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB2750-4F0-XX-W2A-F_3500K
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

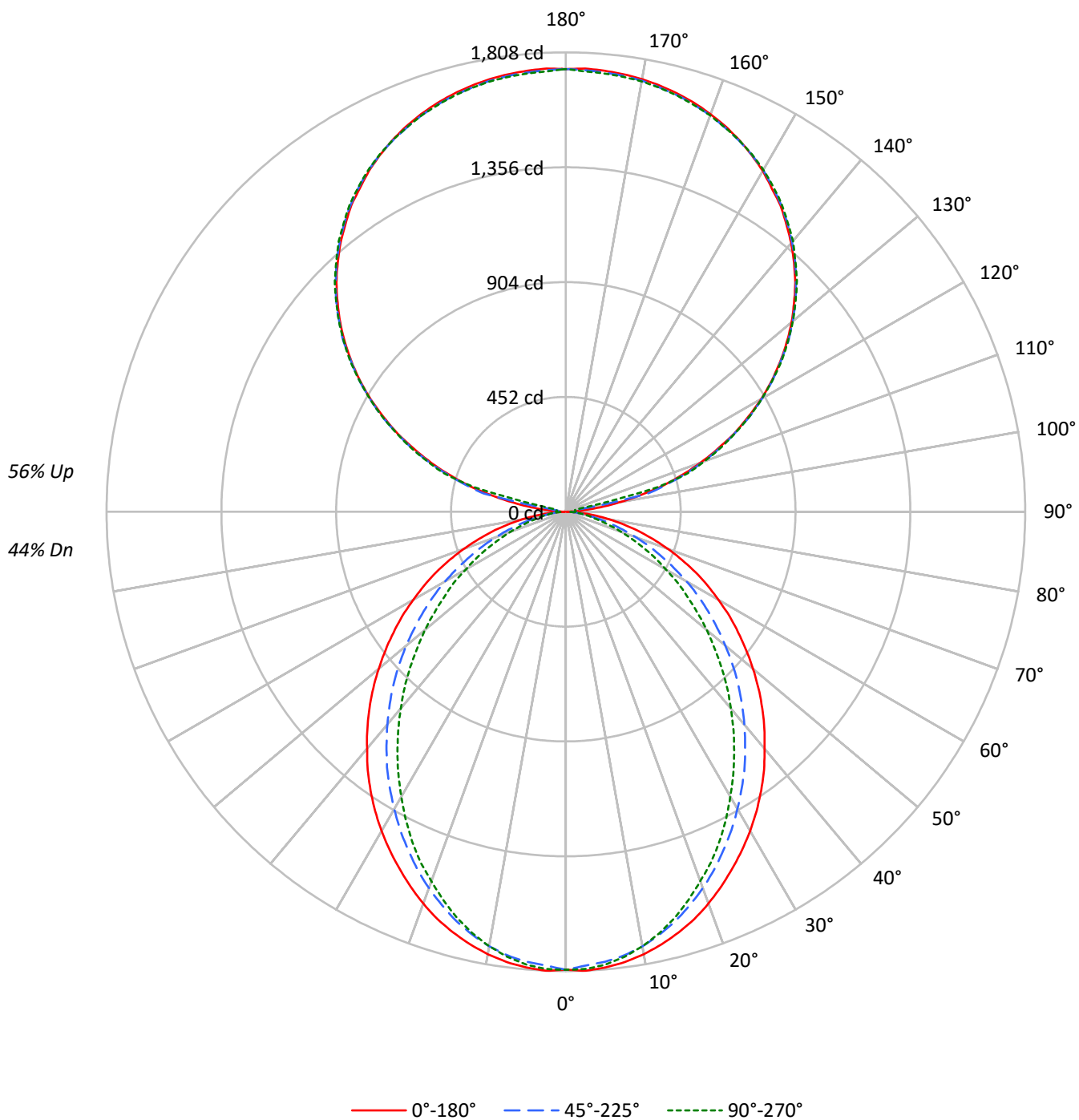
Lumens per Lamp: N/A
Luminaire Lumens: 9560.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50			44
1	97	92	89	85	88	85	82	79	70	68	66	57	55	54	45	44	43			37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36			32
3	81	71	64	59	73	66	59	54	55	50	46	45	41	39	35	33	31			27
4	74	63	56	50	67	58	51	46	49	44	40	40	36	33	32	29	27			23
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24			20
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21			18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19			16
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17			14
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15			13
10	47	35	28	23	43	32	26	22	28	22	19	23	19	16	19	16	14			12

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	1.8
10°-20°	472.6	4.9
20°-30°	682.3	7.1
30°-40°	773.3	8.1
40°-50°	746.6	7.8
50°-60°	620.7	6.5
60°-70°	428.4	4.5
70°-80°	216.5	2.3
80°-90°	58.6	0.6
90°-100°	57.8	0.6
100°-110°	380.9	4.0
110°-120°	727.3	7.6
120°-130°	923.3	9.7
130°-140°	987.7	10.3
140°-150°	923.6	9.7
150°-160°	744.8	7.8
160°-170°	480.4	5.0
170°-180°	165.5	1.7
0°-30°	1324.4	13.9
0°-40°	2097.7	21.9
0°-60°	3465.1	36.2
0°-90°	4168.6	43.6
90°-120°	1166.1	12.2
90°-150°	4000.7	41.8
90°-180°	5391.0	56.4
0°-180°	9560.0	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	8
95°	72	27	29	36	38	88
105°	392	400	407	418	371	411
115°	732	736	735	738	738	721
125°	1030	1035	1032	1036	1037	919
135°	1277	1276	1281	1284	1286	984
145°	1473	1476	1476	1478	1480	920
155°	1615	1616	1612	1617	1613	744
165°	1703	1697	1697	1707	1695	481
175°	1742	1734	1736	1748	1732	166
180°	1742	1742	1742	1742	1742	

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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°	19.5	16.9	27.4	35.2	35.2
95°	71.7	27.4	28.7	36.5	37.8
97.5°	136.8	165.5	28.7	35.2	36.5
100°	213.7	237.2	57.3	35.2	36.5
102.5°	299.7	315.4	331.0	37.8	37.8
105°	392.3	400.1	406.6	418.3	371.4
107.5°	477.0	480.9	490.0	496.5	501.7
110°	563.0	566.9	574.7	577.3	581.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	646.4	654.2	656.8	655.5	660.7
115°	732.4	736.3	735.0	737.6	737.6
117.5°	809.3	814.5	818.4	817.1	817.1
120°	887.5	892.7	891.4	894.0	891.4
122.5°	960.4	963.0	965.6	967.0	964.3
125°	1029.5	1034.7	1032.1	1036.0	1037.3
127.5°	1096.0	1097.3	1103.8	1102.5	1101.2
130°	1159.8	1161.1	1165.0	1166.3	1166.3
132.5°	1218.5	1221.1	1226.3	1227.6	1226.3
135°	1277.1	1275.8	1281.0	1283.6	1286.2
137.5°	1329.2	1329.2	1335.7	1338.4	1337.1
140°	1380.1	1382.7	1385.3	1389.2	1390.5
142.5°	1425.7	1430.9	1432.2	1434.8	1434.8
145°	1472.6	1476.5	1476.5	1477.8	1480.4
147.5°	1509.1	1516.9	1515.6	1516.9	1518.2
150°	1549.5	1554.7	1553.4	1553.4	1554.7
152.5°	1583.3	1587.3	1584.7	1587.3	1586.0
155°	1614.6	1615.9	1612.0	1617.2	1613.3
157.5°	1642.0	1642.0	1636.8	1643.3	1636.8
160°	1665.4	1661.5	1660.2	1668.1	1660.2
162.5°	1686.3	1681.1	1679.8	1687.6	1678.5
165°	1703.2	1696.7	1696.7	1707.2	1695.4
167.5°	1717.6	1711.1	1709.8	1721.5	1708.5
170°	1729.3	1721.5	1722.8	1733.2	1720.2
172.5°	1737.1	1729.3	1730.6	1741.0	1726.7
175°	1742.3	1734.5	1735.8	1747.5	1731.9
177.5°	1746.2	1737.1	1739.7	1750.2	1734.5
180°	1742.3	1742.3	1742.3	1742.3	1742.3

(END OF REPORT)