

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: P1032476

Luminaire Tested: S124DIW-B1020D1050UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032476
REPORT IS A COMBINATION OF REPORTS P996645 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB2750-4F0-XX-W2A-F_3000K
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

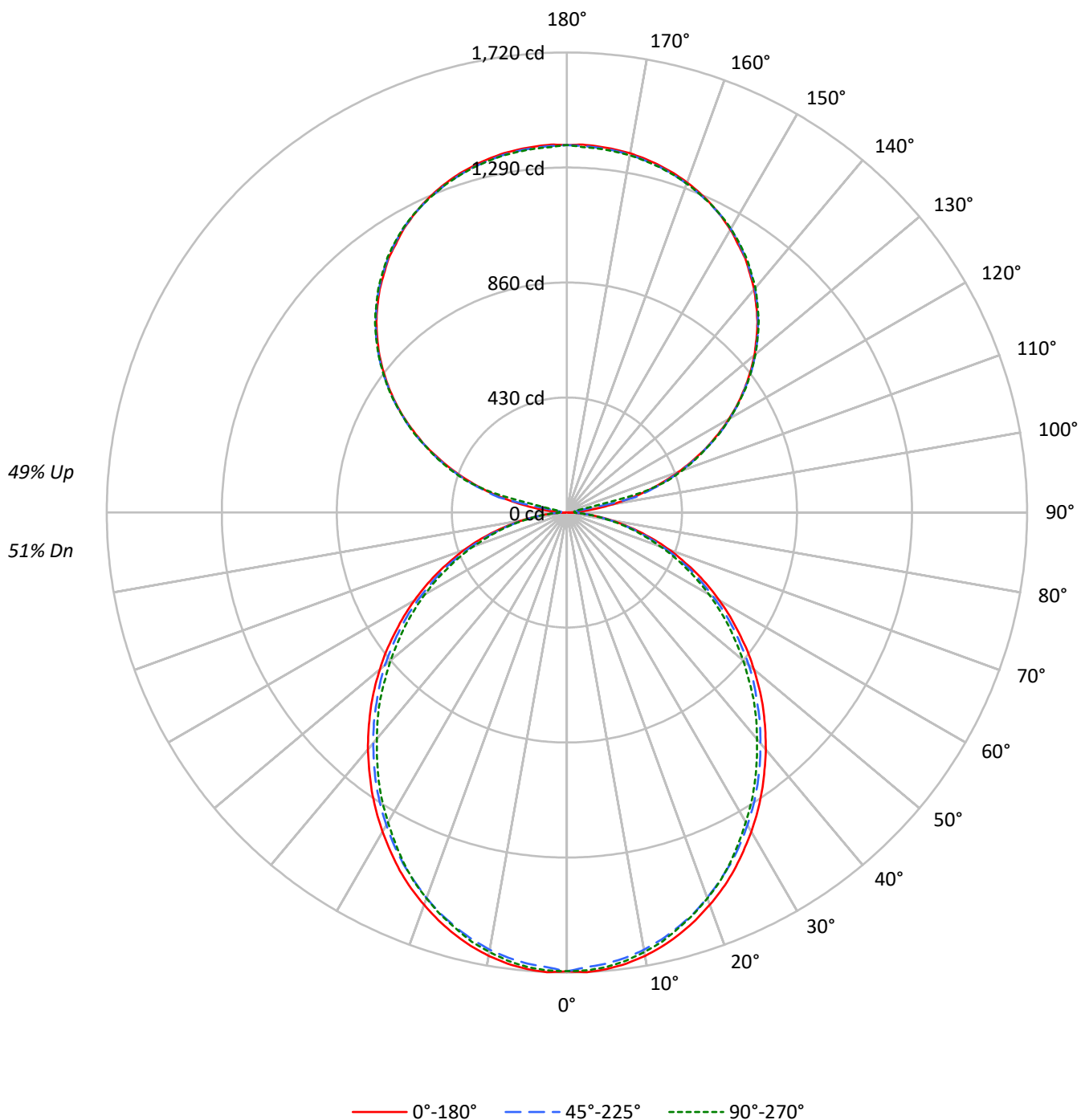
Lumens per Lamp: N/A
Luminaire Lumens: 8656.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57
1	98	94	90	86	90	87	83	80	73	71	69		61	60	58		50
2	89	82	76	70	82	76	70	66	64	60	57		54	51	48		44
3	81	72	64	59	75	67	60	55	57	52	48		48	44	41		39
4	74	64	56	50	68	59	52	47	50	45	41		42	38	35		35
5	68	57	48	42	63	53	45	40	45	39	35		38	34	30		32
6	63	51	43	37	58	47	40	35	41	35	31		34	30	27		29
7	58	46	38	32	54	43	36	31	37	31	27		31	27	24		26
8	54	42	34	29	50	39	32	27	34	28	24		29	24	21		24
9	50	38	31	25	46	36	29	24	31	25	22		26	22	19		22
10	47	35	28	23	43	33	26	22	28	23	19		24	20	17		21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	1.9
10°-20°	455.4	5.3
20°-30°	670.3	7.7
30°-40°	779.1	9.0
40°-50°	779.0	9.0
50°-60°	681.4	7.9
60°-70°	505.9	5.8
70°-80°	287.0	3.3
80°-90°	85.0	1.0
90°-100°	45.6	0.5
100°-110°	300.3	3.5
110°-120°	573.5	6.6
120°-130°	728.0	8.4
130°-140°	778.8	9.0
140°-150°	728.3	8.4
150°-160°	587.3	6.8
160°-170°	378.8	4.4
170°-180°	130.5	1.5
0°-30°	1287.3	14.9
0°-40°	2066.5	23.9
0°-60°	3526.9	40.7
0°-90°	4404.8	50.9
90°-120°	919.4	10.6
90°-150°	3154.6	36.4
90°-180°	4251.0	49.1
0°-180°	8656.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	3	14	23	29	31	8
95°	56	22	23	29	30	70
105°	309	316	321	330	293	324
115°	578	581	580	582	582	568
125°	812	816	814	817	818	725
135°	1007	1006	1010	1012	1014	776
145°	1161	1164	1164	1165	1167	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	3.1	14.4	22.6	28.8	30.8
92.5°	15.4	13.4	21.6	27.7	27.7
95°	56.5	21.6	22.6	28.8	29.8
97.5°	107.9	130.5	22.6	27.7	28.8
100°	168.5	187.0	45.2	27.7	28.8
102.5°	236.3	248.7	261.0	29.8	29.8
105°	309.3	315.5	320.6	329.8	292.9
107.5°	376.1	379.2	386.4	391.5	395.6
110°	443.9	447.0	453.2	455.2	458.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	509.7	515.8	517.9	516.9	521.0
115°	577.5	580.6	579.5	581.6	581.6
117.5°	638.1	642.2	645.3	644.3	644.3
120°	699.8	703.9	702.8	704.9	702.8
122.5°	757.3	759.4	761.4	762.4	760.4
125°	811.8	815.9	813.8	816.9	817.9
127.5°	864.2	865.2	870.3	869.3	868.3
130°	914.5	915.6	918.6	919.7	919.7
132.5°	960.8	962.8	966.9	968.0	966.9
135°	1007.0	1006.0	1010.1	1012.1	1014.2
137.5°	1048.1	1048.1	1053.2	1055.3	1054.3
140°	1088.2	1090.2	1092.3	1095.4	1096.4
142.5°	1124.1	1128.3	1129.3	1131.3	1131.3
145°	1161.1	1164.2	1164.2	1165.3	1167.3
147.5°	1189.9	1196.1	1195.1	1196.1	1197.1
150°	1221.8	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)