

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: P1033937

Luminaire Tested: S124RDIW-B1195D1050UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033937
REPORT IS A COMBINATION OF REPORTS P1000075 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D1050UB40-4F0-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

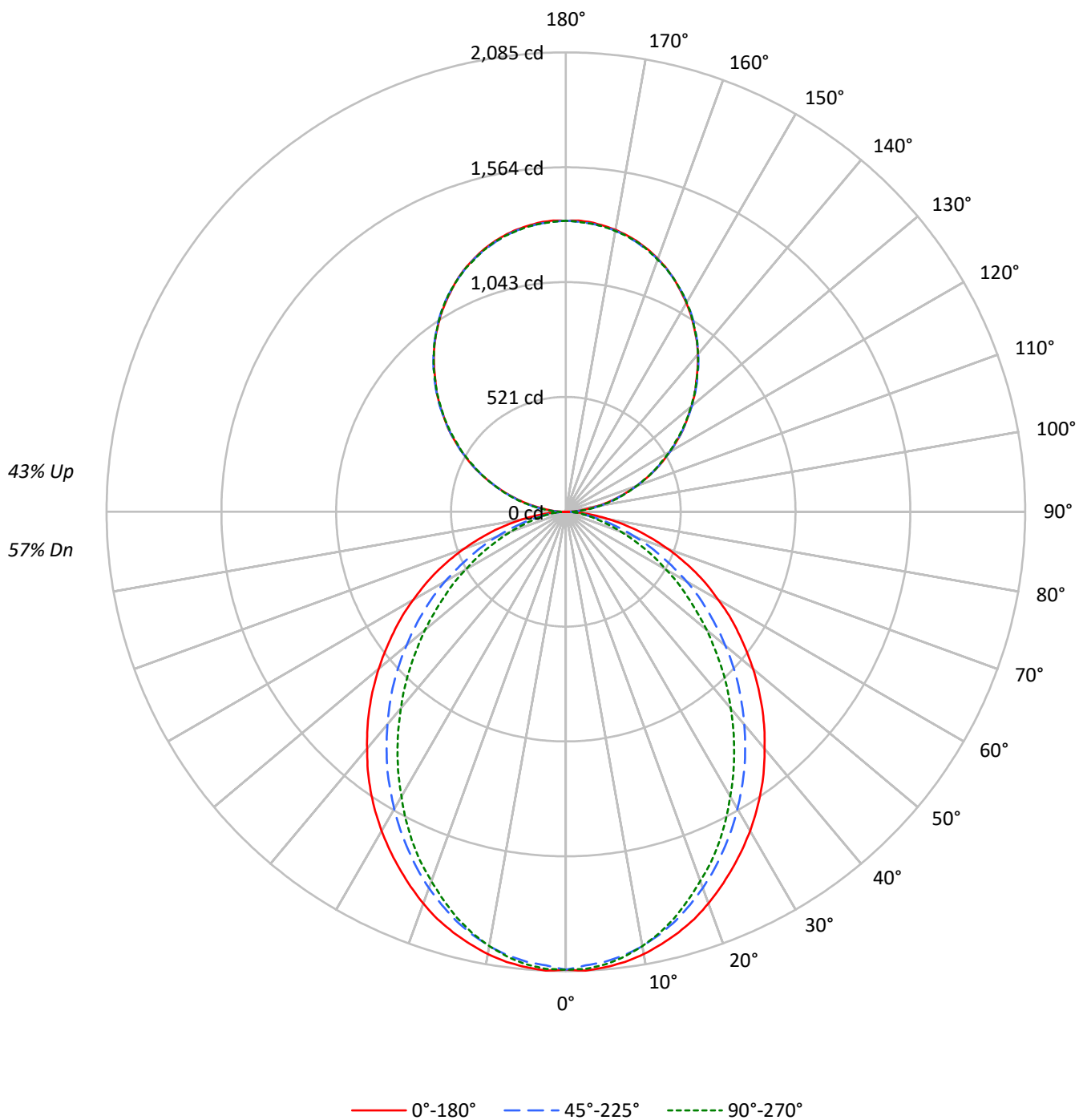
Lumens per Lamp: N/A
Luminaire Lumens: 8470.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	65	58	52	71	61	54	49	53	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16947	16947	16947
5°	16949	16444	16445
10°	16805	15925	15736
15°	16574	15279	14898
20°	16271	14542	13943
25°	15893	13747	13009
30°	15524	12937	11962
35°	15117	12115	10938
40°	14633	11230	9886
45°	14180	10353	8844
50°	13663	9394	7786
55°	13106	8412	6695
60°	12487	7368	5616
65°	11891	6172	4579
70°	11041	4913	3498
75°	9951	3573	2447
80°	8312	2194	1758
85°	6251	1263	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	2.3
10°-20°	544.9	6.4
20°-30°	786.7	9.3
30°-40°	891.6	10.5
40°-50°	860.8	10.2
50°-60°	715.7	8.4
60°-70°	494.0	5.8
70°-80°	249.6	2.9
80°-90°	66.2	0.8
90°-100°	86.1	1.0
100°-110°	257.9	3.0
110°-120°	438.1	5.2
120°-130°	577.8	6.8
130°-140°	649.0	7.7
140°-150°	637.9	7.5
150°-160°	536.5	6.3
160°-170°	356.9	4.2
170°-180°	125.0	1.5
0°-30°	1527.0	18.0
0°-40°	2418.5	28.6
0°-60°	3995.0	47.2
0°-90°	4804.8	56.7
90°-120°	782.1	9.2
90°-150°	2646.7	31.2
90°-180°	3665.0	43.3
0°-180°	8470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2075	2069	2050	2066	2062	197
15°	1976	1962	1922	1919	1908	557
25°	1787	1758	1693	1666	1650	823
35°	1545	1494	1415	1361	1332	966
45°	1260	1201	1106	1028	999	972
55°	955	891	788	705	675	854
65°	649	581	479	411	392	641
75°	345	286	212	175	166	364
85°	86	54	49	46	46	94
90°	3	14	22	29	31	10
95°	61	70	78	81	81	66
105°	238	239	243	246	249	252
115°	445	445	443	442	441	439
125°	649	649	648	646	644	578
135°	837	843	843	841	838	647
145°	1016	1021	1022	1021	1018	636
155°	1165	1165	1164	1168	1164	536
165°	1268	1265	1263	1269	1265	357
175°	1319	1314	1313	1320	1313	125
180°	1321	1321	1321	1321	1321	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.2	2078.2	2078.2	2078.2	2078.2
2.5°	2084.6	2078.2	2060.7	2078.2	2076.7
5°	2075.1	2068.7	2049.6	2065.5	2062.3
7.5°	2060.7	2054.4	2030.5	2041.6	2036.9
10°	2038.5	2030.5	2001.9	2008.2	2001.9
12.5°	2009.8	2000.3	1965.3	1968.4	1958.9
15°	1976.4	1962.1	1922.3	1919.1	1908.0
17.5°	1938.2	1917.5	1871.4	1863.4	1847.5
20°	1892.1	1871.4	1817.3	1804.5	1783.9
22.5°	1841.1	1817.3	1758.4	1737.7	1721.8
25°	1787.0	1758.4	1693.1	1666.1	1650.2
27.5°	1731.3	1696.3	1627.9	1596.1	1573.8
30°	1672.5	1632.7	1557.9	1518.1	1492.6
32.5°	1610.4	1564.3	1486.3	1438.5	1414.7
35°	1545.2	1494.2	1414.7	1360.6	1331.9
37.5°	1476.7	1424.2	1336.7	1277.8	1249.2
40°	1403.5	1351.0	1260.3	1193.5	1164.8
42.5°	1333.5	1277.8	1182.3	1113.9	1083.7
45°	1260.3	1201.4	1106.0	1028.0	999.3
47.5°	1185.5	1125.1	1026.4	945.2	913.4
50°	1109.1	1047.1	945.2	865.7	835.4
52.5°	1031.2	970.7	865.7	784.5	752.7
55°	954.8	891.1	787.7	704.9	674.7
57.5°	880.0	813.2	711.3	627.0	604.7
60°	798.8	735.2	633.3	550.6	525.1
62.5°	725.6	658.8	553.8	479.0	459.9
65°	649.3	580.8	479.0	410.6	391.5
67.5°	569.7	504.4	409.0	348.5	326.2
70°	494.9	428.1	337.4	284.8	268.9
72.5°	415.3	356.5	272.1	229.1	214.8
75°	345.3	286.4	211.6	175.0	165.5
77.5°	272.1	221.2	157.5	132.1	128.9
80°	202.1	155.9	108.2	103.4	101.8
82.5°	141.6	100.3	78.0	74.8	73.2
85°	85.9	54.1	49.3	46.1	46.1
87.5°	36.6	23.9	22.3	20.7	22.3
90°	3.1	14.3	22.5	28.6	30.6
92.5°	26.6	39.8	45.0	48.0	49.0
95°	61.3	70.5	77.6	80.7	80.7
97.5°	98.1	106.2	114.4	118.5	118.5
100°	143.0	147.1	156.3	158.4	158.4
102.5°	190.0	191.0	199.2	202.3	203.3
105°	238.0	239.1	243.1	246.2	249.3
107.5°	288.1	289.1	290.1	294.2	293.2
110°	339.2	341.2	340.2	338.2	341.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	392.3	392.3	390.3	390.3	390.3
115°	445.4	445.4	443.4	442.4	441.3
117.5°	495.5	495.5	494.5	491.4	488.3
120°	545.5	549.6	546.6	541.5	543.5
122.5°	597.6	598.7	597.6	594.6	589.5
125°	648.7	648.7	647.7	645.7	643.6
127.5°	694.7	697.8	695.7	693.7	692.7
130°	743.7	746.8	746.8	744.8	740.7
132.5°	793.8	795.8	794.8	792.8	791.8
135°	836.7	842.8	842.8	840.8	837.7
137.5°	884.7	887.8	889.8	886.8	887.8
140°	932.7	934.8	934.8	933.8	932.7
142.5°	976.7	978.7	977.7	977.7	977.7
145°	1016.5	1020.6	1021.6	1020.6	1017.5
147.5°	1057.4	1062.5	1061.5	1060.4	1059.4
150°	1094.2	1098.2	1098.2	1098.2	1097.2
152.5°	1128.9	1130.9	1132.0	1135.0	1132.0
155°	1164.7	1164.7	1163.6	1167.7	1163.6
157.5°	1195.3	1193.3	1193.3	1196.3	1193.3
160°	1221.9	1220.8	1219.8	1222.9	1217.8
162.5°	1246.4	1243.3	1242.3	1248.4	1243.3
165°	1267.8	1264.8	1262.7	1268.9	1264.8
167.5°	1285.2	1281.1	1281.1	1287.2	1281.1
170°	1299.5	1294.4	1295.4	1301.5	1294.4
172.5°	1309.7	1305.6	1305.6	1312.8	1305.6
175°	1318.9	1313.8	1312.8	1319.9	1312.8
177.5°	1323.0	1317.9	1317.9	1325.0	1316.9
180°	1321.0	1321.0	1321.0	1321.0	1321.0

(END OF REPORT)