

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: P1033256

Luminaire Tested: S124DIW-B1195D1050UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033256
REPORT IS A COMBINATION OF REPORTS P997000 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D1050UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

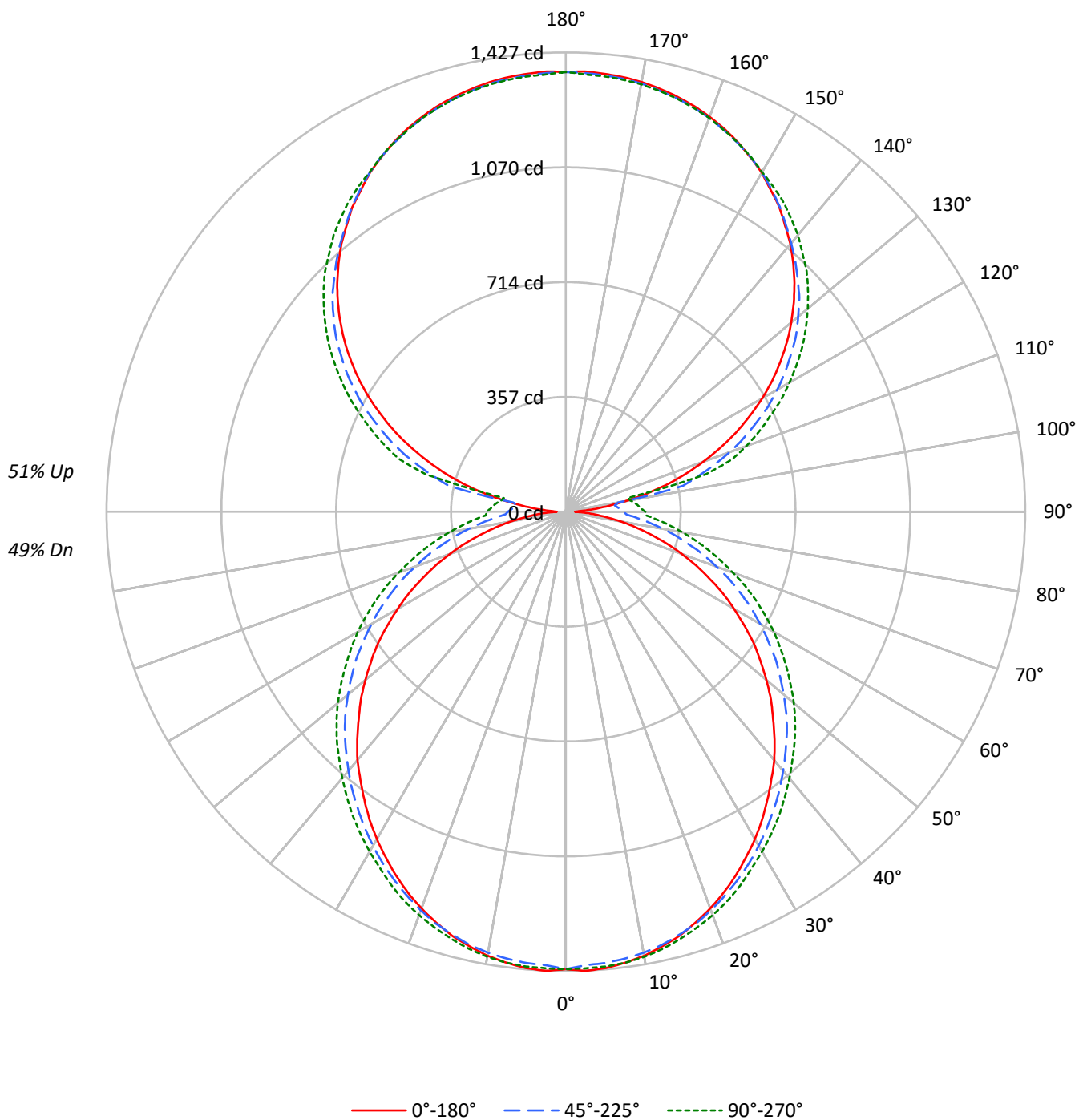
Lumens per Lamp: N/A
Luminaire Lumens: 9075.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033256

CATALOG NUMBER: S124DIW-B1195D1050UB40-4F0-XX-W2A-D

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	48	46	45
2	88	80	73	68	80	73	68	63	62	58	54	51	48	45	41	39	37
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	67	57	49	44	48	42	38	40	36	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	36	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	25	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	27	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11588	11588	11588
5°	11620	11286	11307
10°	11545	11064	11033
15°	11437	10814	10723
20°	11277	10544	10422
25°	11096	10246	10099
30°	10901	9951	9769
35°	10681	9649	9474
40°	10502	9359	9170
45°	10241	9087	8901
50°	10018	8778	8617
55°	9786	8480	8290
60°	9428	8109	7982
65°	9034	7709	7612
70°	8556	7253	7184
75°	7887	6745	6776
80°	7136	6228	6350
85°	6134	5709	6003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10241 cd/sqm

TEST NUMBER: P1033256

CATALOG NUMBER: S124DIW-B1195D1050UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	1.5
10°-20°	385.8	4.3
20°-30°	583.3	6.4
30°-40°	705.7	7.8
40°-50°	746.0	8.2
50°-60°	702.1	7.7
60°-70°	582.6	6.4
70°-80°	408.9	4.5
80°-90°	233.3	2.6
90°-100°	182.6	2.0
100°-110°	400.3	4.4
110°-120°	638.4	7.0
120°-130°	762.3	8.4
130°-140°	791.1	8.7
140°-150°	727.5	8.0
150°-160°	584.0	6.4
160°-170°	376.6	4.2
170°-180°	129.8	1.4
0°-30°	1103.7	12.2
0°-40°	1809.5	19.9
0°-60°	3257.6	35.9
0°-90°	4482.5	49.4
90°-120°	1221.3	13.5
90°-150°	3502.1	38.6
90°-180°	4593.0	50.6
0°-180°	9075.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1423	1418	1407	1420	1418	135
15°	1364	1365	1361	1375	1373	384
25°	1248	1257	1262	1279	1281	575
35°	1092	1111	1127	1149	1154	684
45°	910	940	971	998	1006	704
55°	713	746	794	826	836	635
65°	493	544	598	638	651	489
75°	274	333	399	444	458	291
85°	84	151	223	270	286	88
90°	29	103	180	232	247	20
95°	77	95	161	210	225	86
105°	322	360	424	473	449	338
115°	584	601	651	688	699	575
125°	814	816	854	887	898	727
135°	1004	1004	1019	1046	1058	775
145°	1156	1158	1158	1168	1177	723
155°	1266	1267	1264	1268	1265	584
165°	1335	1330	1330	1338	1329	377
175°	1366	1360	1361	1370	1358	130
180°	1366	1366	1366	1366	1366	

TEST NUMBER: P1033256

CATALOG NUMBER: S124DIW-B1195D1050UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.1	1421.1	1421.1	1421.1	1421.1
2.5°	1427.4	1422.7	1409.9	1421.1	1419.5
5°	1422.7	1417.9	1406.7	1419.5	1417.9
7.5°	1413.1	1409.9	1400.4	1414.7	1413.1
10°	1400.4	1398.8	1390.8	1405.2	1403.6
12.5°	1382.9	1382.9	1378.1	1390.8	1390.8
15°	1363.8	1365.4	1360.6	1374.9	1373.3
17.5°	1338.3	1343.1	1341.5	1355.8	1354.2
20°	1311.3	1316.0	1317.6	1333.5	1333.5
22.5°	1281.0	1287.4	1290.6	1306.5	1309.7
25°	1247.6	1257.2	1261.9	1279.4	1281.0
27.5°	1211.0	1225.3	1231.7	1247.6	1249.2
30°	1174.4	1187.1	1198.3	1215.8	1219.0
32.5°	1134.6	1150.5	1163.3	1184.0	1187.1
35°	1091.7	1110.8	1126.7	1148.9	1153.7
37.5°	1048.7	1071.0	1090.1	1112.3	1117.1
40°	1007.3	1028.0	1050.3	1074.2	1080.5
42.5°	959.6	983.4	1010.5	1037.6	1042.3
45°	910.2	940.5	970.7	997.8	1005.7
47.5°	864.1	894.3	929.3	956.4	965.9
50°	813.2	848.2	883.2	915.0	924.6
52.5°	762.3	797.3	838.6	870.5	880.0
55°	712.9	746.3	794.1	825.9	835.5
57.5°	657.2	698.6	744.7	782.9	790.9
60°	603.1	644.5	697.0	733.6	746.3
62.5°	550.6	596.8	649.3	685.9	698.6
65°	493.3	544.2	598.3	638.1	650.9
67.5°	439.2	493.3	550.6	590.4	603.1
70°	383.5	437.6	498.1	541.1	552.2
72.5°	329.4	385.1	450.3	491.7	504.5
75°	273.7	332.6	399.4	444.0	458.3
77.5°	221.2	283.3	353.3	397.8	413.7
80°	173.5	237.1	307.1	354.9	367.6
82.5°	125.7	192.6	262.6	311.9	326.2
85°	84.3	151.2	222.8	270.5	286.4
87.5°	52.5	117.8	187.8	233.9	248.2
90°	28.6	103.4	180.0	232.3	247.1
92.5°	39.2	92.9	169.5	220.2	232.9
95°	76.9	94.7	160.9	210.0	225.3
97.5°	126.4	195.0	153.0	199.5	214.8
100°	185.1	244.9	165.9	191.5	203.6
102.5°	252.5	299.8	372.5	184.0	196.7
105°	321.9	359.8	423.8	472.8	448.7
107.5°	388.3	418.4	481.3	526.2	541.4
110°	454.1	479.5	541.3	579.9	595.7



TEST NUMBER: P1033256

CATALOG NUMBER: S124DIW-B1195D1050UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	517.9	543.1	597.7	631.7	648.5
115°	583.7	601.2	651.1	688.1	699.2
117.5°	644.0	657.7	708.5	740.9	753.6
120°	703.8	712.6	757.8	791.6	802.3
122.5°	761.0	763.1	808.0	840.8	850.0
125°	813.6	816.1	853.8	887.1	897.6
127.5°	865.7	865.1	902.0	929.6	939.8
130°	914.2	913.6	942.1	971.8	981.3
132.5°	960.1	960.6	983.8	1011.8	1020.4
135°	1004.5	1003.5	1018.7	1046.2	1057.8
137.5°	1045.4	1043.8	1055.3	1081.1	1088.1
140°	1085.2	1085.7	1089.3	1113.1	1122.0
142.5°	1119.4	1123.5	1122.9	1142.5	1148.9
145°	1156.2	1157.7	1157.7	1168.2	1176.6
147.5°	1184.8	1189.3	1188.3	1190.9	1198.4
150°	1216.5	1219.0	1217.9	1217.9	1219.0
152.5°	1241.4	1244.5	1242.5	1244.5	1243.5
155°	1266.0	1267.0	1263.9	1268.0	1264.9
157.5°	1287.4	1287.4	1283.3	1288.4	1283.3
160°	1305.8	1302.7	1301.7	1307.9	1301.7
162.5°	1322.2	1318.1	1317.1	1323.2	1316.0
165°	1335.4	1330.3	1330.3	1338.5	1329.3
167.5°	1346.7	1341.6	1340.6	1349.7	1339.5
170°	1355.9	1349.7	1350.8	1358.9	1348.7
172.5°	1362.0	1355.9	1356.9	1365.1	1353.8
175°	1366.1	1360.0	1361.0	1370.2	1357.9
177.5°	1369.2	1362.0	1364.1	1372.2	1360.0
180°	1366.1	1366.1	1366.1	1366.1	1366.1

(END OF REPORT)