

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: P1033257

Luminaire Tested: S124DIW-B1195D1050UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033257
REPORT IS A COMBINATION OF REPORTS P997001 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

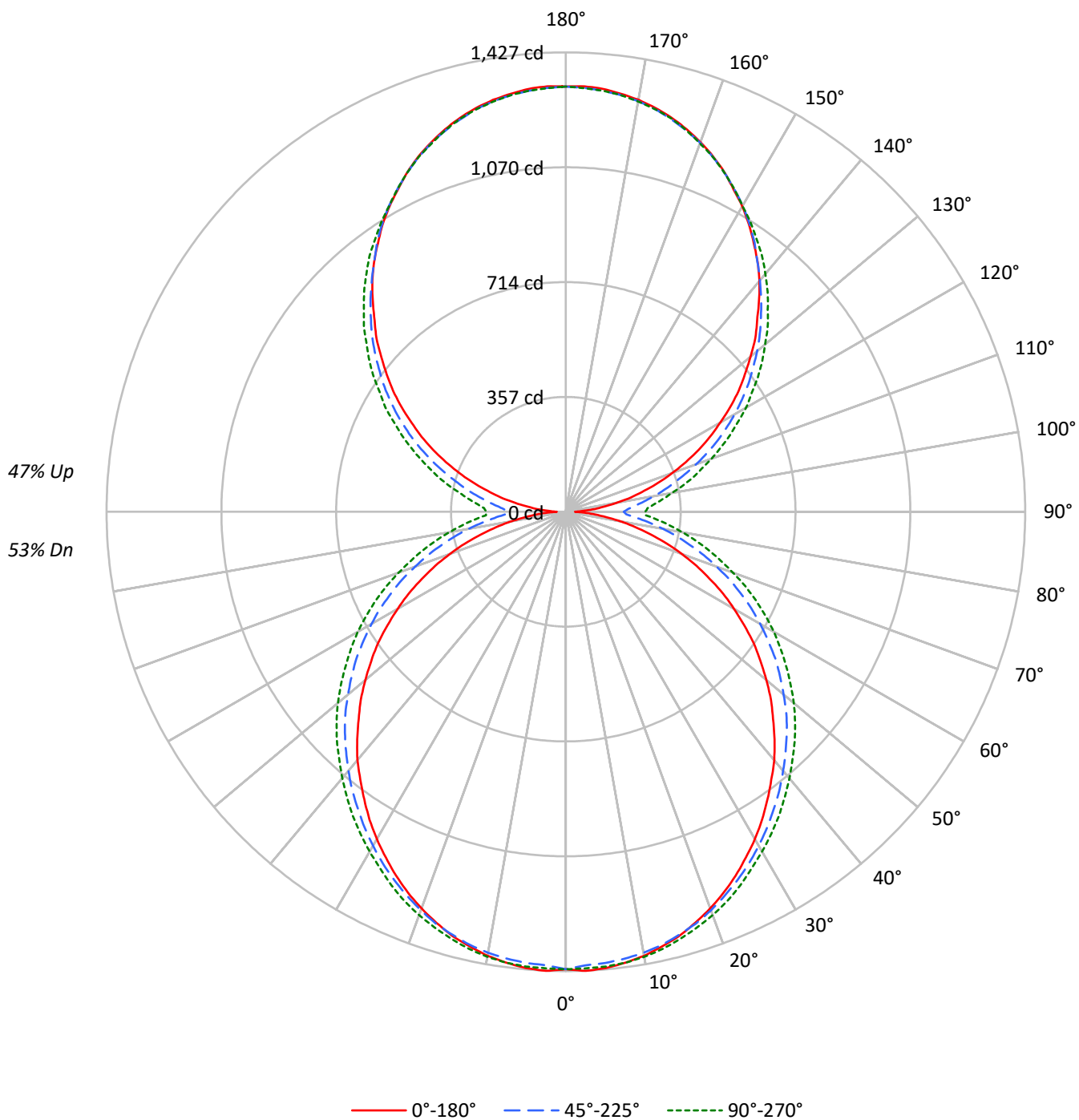
Lumens per Lamp: N/A
Luminaire Lumens: 8513.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
Input Voltage (V):
Input Current (A_{in}): 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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	97	93	88	84	90	86	82	79	73	70	67	61	59	57	50	49	47
2	88	80	74	68	81	74	68	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	33
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	31	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	30	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	18	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	20	16	14

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	1.6
10°-20°	385.8	4.5
20°-30°	583.3	6.9
30°-40°	705.7	8.3
40°-50°	746.0	8.8
50°-60°	702.1	8.2
60°-70°	582.6	6.8
70°-80°	408.9	4.8
80°-90°	233.3	2.7
90°-100°	223.3	2.6
100°-110°	359.5	4.2
110°-120°	506.3	5.9
120°-130°	616.2	7.2
130°-140°	665.6	7.8
140°-150°	641.1	7.5
150°-160°	536.5	6.3
160°-170°	356.9	4.2
170°-180°	125.0	1.5
0°-30°	1103.7	13.0
0°-40°	1809.5	21.3
0°-60°	3257.6	38.3
0°-90°	4482.5	52.7
90°-120°	1089.2	12.8
90°-150°	3012.1	35.4
90°-180°	4031.0	47.4
0°-180°	8513.0	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	22
95°	82	144	216	262	276	83
105°	252	285	348	391	407	269
115°	455	469	518	552	562	449
125°	655	654	692	720	728	584
135°	840	846	857	881	887	650
145°	1018	1021	1022	1030	1033	637
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°	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	247.0
92.5°	50.5	119.4	193.0	240.6	254.3
95°	82.0	143.7	216.0	262.1	276.4
97.5°	117.2	171.4	244.9	290.4	304.7
100°	160.5	206.0	277.2	322.3	333.4
102.5°	207.5	243.5	312.2	356.7	370.4
105°	252.3	285.2	348.1	391.0	406.8
107.5°	302.4	330.5	387.2	431.1	441.2
110°	351.9	376.2	430.9	465.5	481.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	403.4	422.5	473.0	508.1	520.8
115°	454.9	469.3	518.2	552.2	562.2
117.5°	505.0	514.6	561.3	591.7	601.3
120°	553.5	562.3	605.5	632.2	646.9
122.5°	605.6	606.7	648.5	677.3	683.4
125°	655.1	653.5	692.3	720.5	727.9
127.5°	701.1	702.6	732.3	758.9	769.1
130°	748.5	750.0	775.4	802.1	807.5
132.5°	798.6	799.0	817.1	842.1	850.7
135°	839.9	846.0	857.1	880.6	887.0
137.5°	887.9	889.4	897.8	918.6	927.6
140°	935.9	936.4	938.0	957.7	964.5
142.5°	978.3	980.3	977.7	995.2	1001.6
145°	1018.1	1020.6	1021.6	1030.1	1033.4
147.5°	1059.0	1062.5	1061.5	1062.0	1067.4
150°	1095.8	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)