

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: P1033374

Luminaire Tested: S124DIW-B1195D770UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033374
REPORT IS A COMBINATION OF REPORTS P997265 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB40-4F0-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

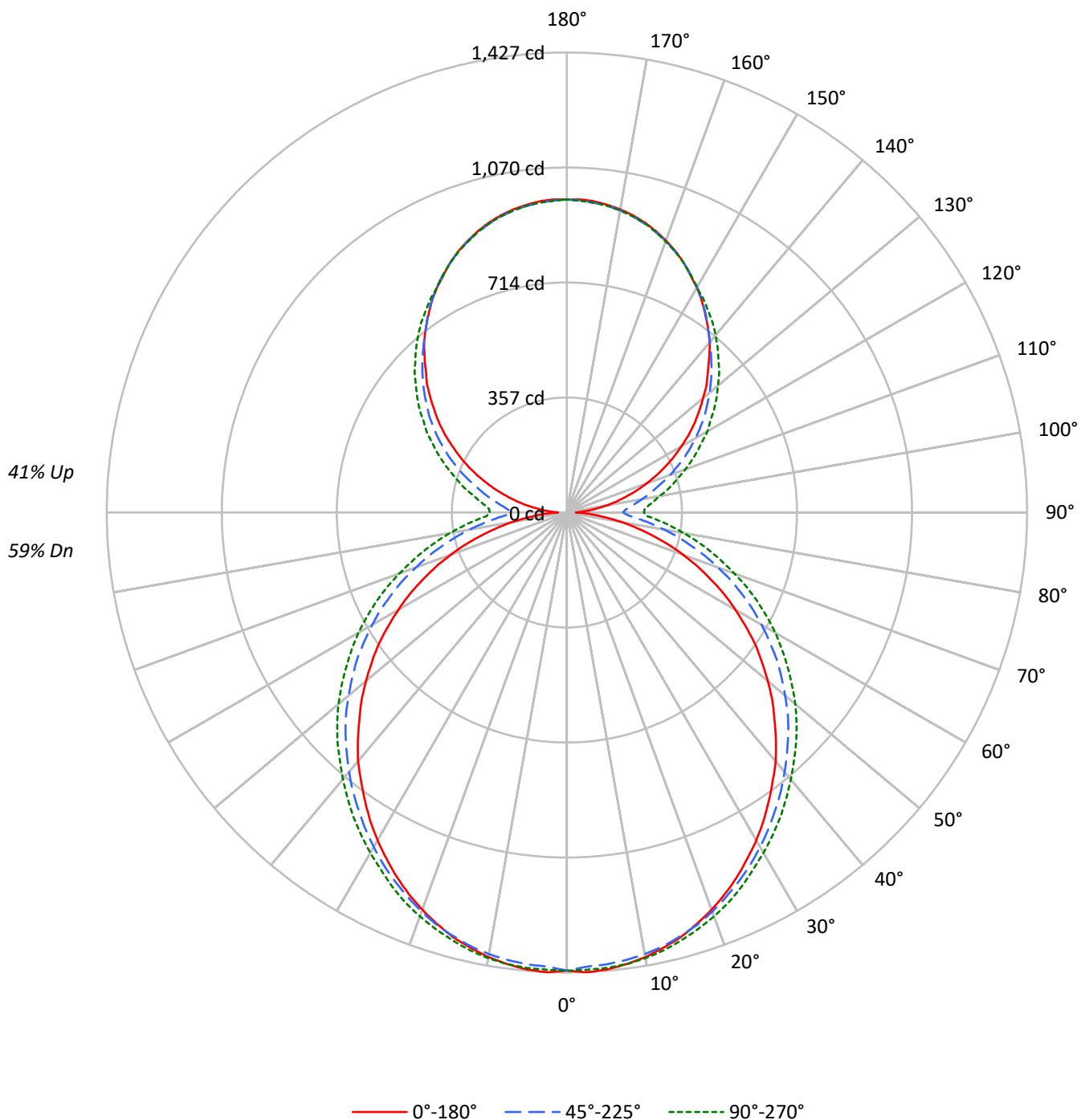
Lumens per Lamp: N/A
Luminaire Lumens: 7540.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
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	102	102	102	102	89	89	89	76	76	76	65	65	65
1	99	94	89	85	92	88	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	57	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

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	1.8
10°-20°	385.8	5.1
20°-30°	583.3	7.7
30°-40°	705.7	9.4
40°-50°	746.0	9.9
50°-60°	702.1	9.3
60°-70°	582.6	7.7
70°-80°	408.9	5.4
80°-90°	232.6	3.1
90°-100°	200.5	2.7
100°-110°	291.1	3.9
110°-120°	390.1	5.2
120°-130°	462.9	6.1
130°-140°	493.4	6.5
140°-150°	471.9	6.3
150°-160°	394.2	5.2
160°-170°	262.3	3.5
170°-180°	91.8	1.2
0°-30°	1103.7	14.6
0°-40°	1809.5	24.0
0°-60°	3257.6	43.2
0°-90°	4481.7	59.4
90°-120°	881.7	11.7
90°-150°	2310.0	30.6
90°-180°	3058.0	40.6
0°-180°	7540.0	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°	28	100	174	225	239	21
95°	66	125	195	241	255	65
105°	189	222	284	326	341	202
115°	337	351	401	435	445	333
125°	483	481	520	549	557	431
135°	618	622	634	658	665	479
145°	748	750	751	759	764	469
155°	856	856	855	858	855	394
165°	932	929	928	932	929	263
175°	969	965	964	970	964	92
180°	971	971	971	971	971	

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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°	27.8	99.6	174.0	224.7	238.9
92.5°	43.4	108.9	181.0	227.9	241.3
95°	65.7	125.0	195.4	240.7	255.0
97.5°	91.2	143.3	214.6	259.0	273.3
100°	122.6	167.0	235.7	280.2	291.3
102.5°	157.1	192.9	259.4	303.0	316.5
105°	189.2	221.7	283.6	325.7	340.7
107.5°	226.0	253.8	310.3	353.1	363.4
110°	261.9	285.7	340.7	375.8	390.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.3	318.4	369.4	404.5	417.2
115°	336.8	351.2	400.6	434.8	445.2
117.5°	373.6	383.2	430.1	461.3	471.8
120°	408.8	416.5	460.5	488.5	502.7
122.5°	447.1	447.9	490.0	519.6	527.0
125°	483.0	481.4	520.5	549.2	557.2
127.5°	516.8	517.5	547.8	574.9	585.3
130°	551.3	551.9	577.3	604.5	611.0
132.5°	588.0	587.9	606.3	631.8	640.6
135°	618.0	622.5	633.6	657.6	664.8
137.5°	653.2	653.9	661.8	683.3	692.1
140°	688.5	688.4	690.0	710.0	717.1
142.5°	719.2	720.7	718.3	735.8	742.2
145°	748.5	749.9	750.6	759.4	763.5
147.5°	778.5	780.6	779.9	780.7	786.4
150°	805.5	806.9	806.9	806.9	806.2
152.5°	829.4	830.9	831.7	833.9	831.7
155°	855.7	855.7	855.0	858.0	855.0
157.5°	878.2	876.7	876.7	879.0	876.7
160°	897.7	897.0	896.2	898.5	894.7
162.5°	915.8	913.5	912.8	917.3	913.5
165°	931.5	929.3	927.8	932.3	929.3
167.5°	944.3	941.3	941.3	945.8	941.3
170°	954.8	951.0	951.8	956.3	951.0
172.5°	962.3	959.3	959.3	964.5	959.3
175°	969.1	965.3	964.5	969.8	964.5
177.5°	972.1	968.3	968.3	973.6	967.5
180°	970.6	970.6	970.6	970.6	970.6

(END OF REPORT)