

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: P1033373

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033373
REPORT IS A COMBINATION OF REPORTS P997264 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-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

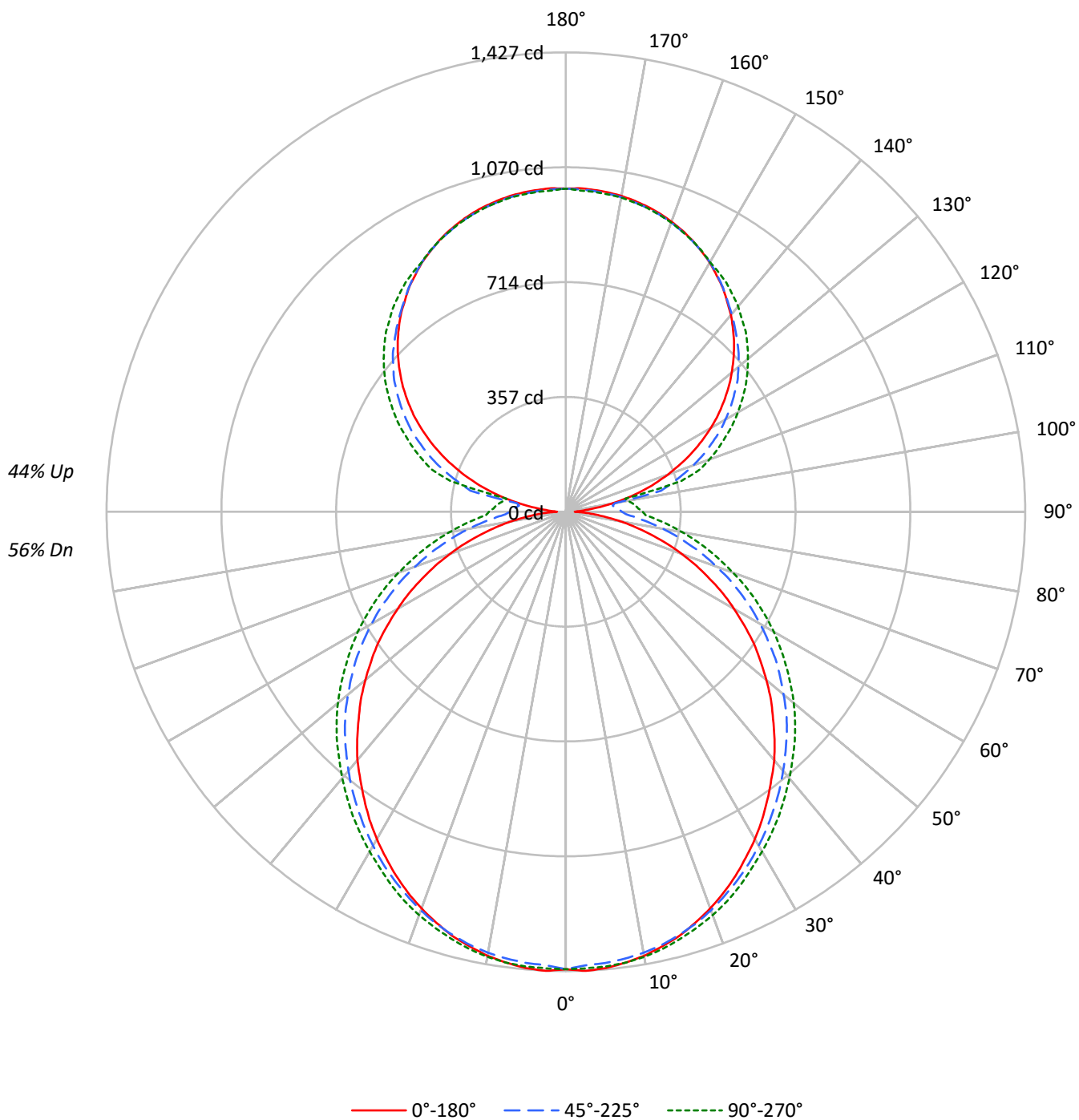
Lumens per Lamp: N/A
Luminaire Lumens: 7953.0 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033373

CATALOG NUMBER: S124DIW-B1195D770UB40-4F0-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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	75	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	40	37	35
4	74	62	54	47	68	58	51	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	29	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	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

TEST NUMBER: P1033373

CATALOG NUMBER: S124DIW-B1195D770UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	1.7
10°-20°	385.8	4.9
20°-30°	583.3	7.3
30°-40°	705.7	8.9
40°-50°	746.0	9.4
50°-60°	702.1	8.8
60°-70°	582.6	7.3
70°-80°	408.9	5.1
80°-90°	232.6	2.9
90°-100°	170.6	2.1
100°-110°	321.0	4.0
110°-120°	487.2	6.1
120°-130°	570.3	7.2
130°-140°	585.6	7.4
140°-150°	535.4	6.7
150°-160°	429.1	5.4
160°-170°	276.7	3.5
170°-180°	95.4	1.2
0°-30°	1103.7	13.9
0°-40°	1809.5	22.8
0°-60°	3257.6	41.0
0°-90°	4481.7	56.4
90°-120°	978.8	12.3
90°-150°	2670.1	33.6
90°-180°	3471.0	43.6
0°-180°	7953.0	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	20
95°	62	89	155	202	218	67
105°	240	277	339	386	372	253
115°	431	448	498	535	546	425
125°	600	601	639	672	682	536
135°	739	738	752	779	790	570
145°	850	851	851	861	869	531
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

TEST NUMBER: P1033373

CATALOG NUMBER: S124DIW-B1195D770UB40-4F0-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°	27.8	99.6	174.0	224.7	238.9
92.5°	35.2	89.4	163.8	212.9	225.6
95°	62.0	89.0	154.9	202.4	217.5
97.5°	97.9	160.5	147.0	192.2	207.2
100°	140.6	195.5	153.9	184.2	196.0
102.5°	190.2	234.2	303.7	176.2	188.9
105°	240.3	276.6	339.2	385.8	371.5
107.5°	289.1	318.4	379.4	422.9	437.0
110°	337.0	361.6	421.8	459.9	474.8

TEST NUMBER: P1033373

CATALOG NUMBER: S124DIW-B1195D770UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	383.5	407.1	461.1	495.4	511.1
115°	431.4	448.1	498.2	534.7	545.8
117.5°	475.7	488.3	538.3	571.0	583.7
120°	519.3	527.0	572.4	605.7	616.9
122.5°	561.3	562.8	607.2	639.7	649.4
125°	599.5	600.9	639.2	671.6	681.9
127.5°	637.8	636.9	672.5	700.3	710.8
130°	673.0	672.1	699.8	729.2	738.7
132.5°	706.7	706.6	728.7	756.5	765.3
135°	738.9	738.2	752.3	779.3	790.3
137.5°	769.0	767.4	777.5	802.8	810.1
140°	798.2	798.1	801.2	824.2	832.8
142.5°	822.9	825.9	825.1	844.1	850.5
145°	849.9	850.6	850.6	860.8	868.7
147.5°	871.0	873.9	873.1	875.5	882.6
150°	894.2	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)