

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: P1033804

Luminaire Tested: S124DIW-B795D770UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033804
REPORT IS A COMBINATION OF REPORTS P998239 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

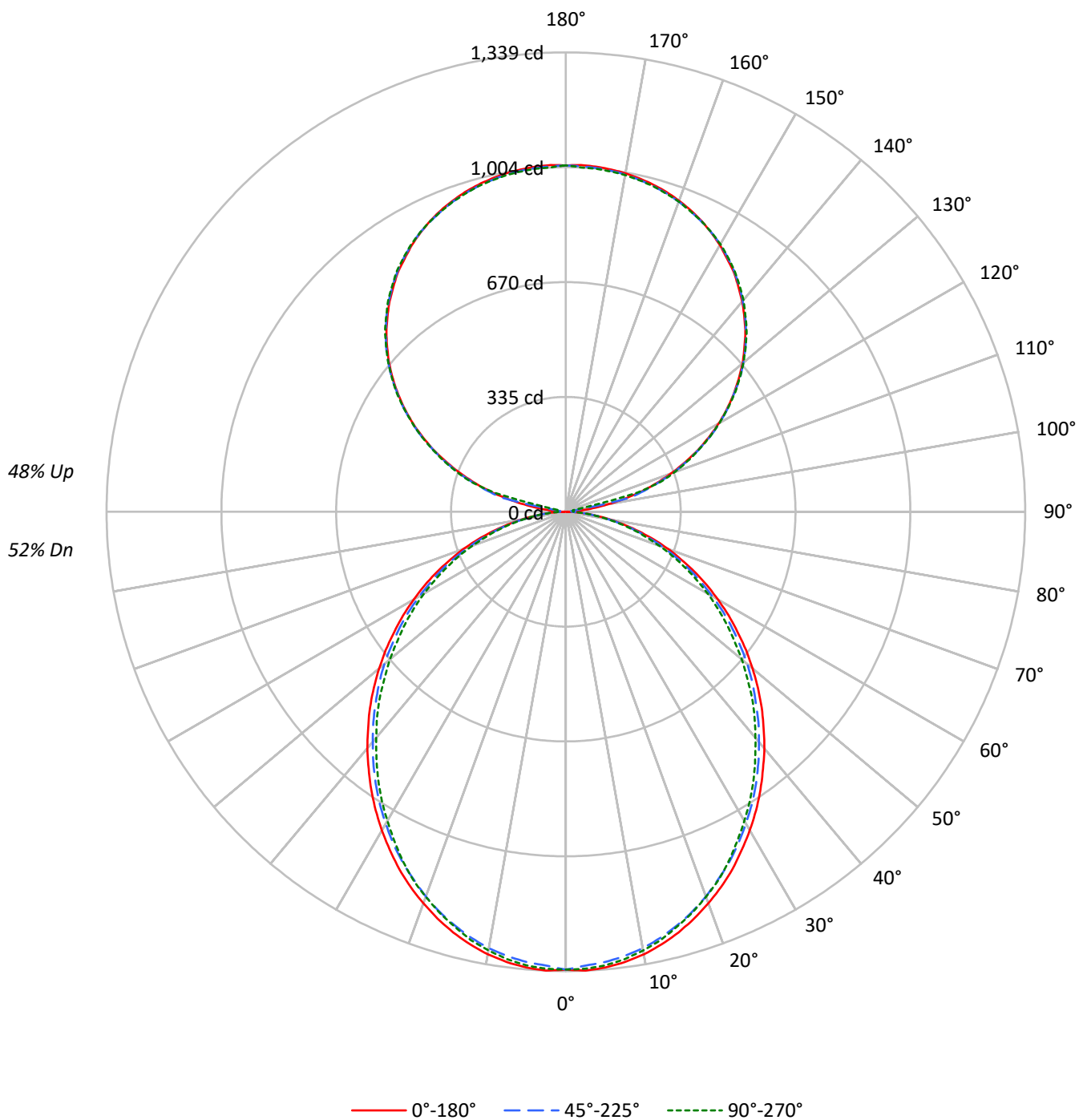
Lumens per Lamp: N/A
Luminaire Lumens: 6551.0 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	98	94	90	86	91	87	84	81	74	72	69	62	61	59	51	50	49
2	89	82	76	71	83	76	71	66	65	61	57	55	52	49	45	43	41
3	82	72	65	59	75	67	60	55	57	52	48	48	45	42	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30
5	69	57	49	43	63	53	46	40	46	40	36	39	34	31	32	29	26
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	29	26	23
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10881	10881	10881
5°	10890	10568	10581
10°	10798	10275	10203
15°	10643	9926	9777
20°	10445	9549	9334
25°	10223	9150	8859
30°	9954	8719	8338
35°	9676	8278	7833
40°	9387	7803	7296
45°	9083	7327	6794
50°	8747	6865	6238
55°	8380	6326	5687
60°	8007	5735	5111
65°	7578	5126	4464
70°	7086	4390	3770
75°	6349	3540	3019
80°	5408	2559	2125
85°	4199	1425	1142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	1.9
10°-20°	354.3	5.4
20°-30°	521.5	8.0
30°-40°	606.2	9.3
40°-50°	606.2	9.3
50°-60°	530.2	8.1
60°-70°	393.6	6.0
70°-80°	223.3	3.4
80°-90°	66.0	1.0
90°-100°	33.5	0.5
100°-110°	220.7	3.4
110°-120°	421.4	6.4
120°-130°	535.0	8.2
130°-140°	572.3	8.7
140°-150°	535.2	8.2
150°-160°	431.6	6.6
160°-170°	278.3	4.2
170°-180°	95.9	1.5
0°-30°	1001.6	15.3
0°-40°	1607.8	24.5
0°-60°	2744.1	41.9
0°-90°	3427.1	52.3
90°-120°	675.6	10.3
90°-150°	2318.1	35.4
90°-180°	3124.0	47.7
0°-180°	6551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1334	1334	1334	1334	1334	
5°	1333	1329	1317	1329	1327	127
15°	1269	1265	1249	1255	1252	358
25°	1149	1142	1127	1128	1124	529
35°	989	982	967	959	954	618
45°	807	800	783	771	768	622
55°	610	607	592	580	573	547
65°	414	408	398	387	382	410
75°	220	215	210	205	204	234
85°	58	58	56	56	54	62
90°	2	11	17	21	23	6
95°	42	16	17	21	22	51
105°	227	232	236	242	215	238
115°	424	427	426	427	427	418
125°	596	600	598	600	601	533
135°	740	739	742	744	745	570
145°	853	856	856	856	858	533
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1334.4	1334.4	1334.4	1334.4	1334.4
2.5°	1338.7	1335.5	1323.7	1334.4	1333.3
5°	1333.3	1329.1	1317.3	1329.1	1326.9
7.5°	1323.7	1319.4	1306.6	1316.2	1315.2
10°	1309.8	1305.5	1291.6	1300.2	1298.0
12.5°	1291.6	1287.4	1272.4	1282.0	1278.8
15°	1269.2	1264.9	1248.9	1255.3	1252.1
17.5°	1243.5	1238.2	1223.2	1227.5	1225.3
20°	1214.6	1209.3	1193.3	1196.5	1194.3
22.5°	1183.6	1176.2	1160.1	1166.5	1162.3
25°	1149.4	1141.9	1127.0	1128.0	1123.8
27.5°	1110.9	1103.4	1089.5	1087.4	1082.1
30°	1072.4	1063.9	1050.0	1045.7	1040.4
32.5°	1031.8	1024.3	1009.4	1004.0	998.7
35°	989.0	981.6	966.6	959.1	953.8
37.5°	944.1	937.7	921.7	914.2	906.7
40°	900.3	891.7	875.7	865.0	859.7
42.5°	853.2	849.0	830.8	818.0	814.8
45°	807.3	799.8	782.7	770.9	767.7
47.5°	759.2	753.8	737.8	724.9	716.4
50°	710.0	705.7	690.7	675.8	669.3
52.5°	661.9	656.5	640.5	627.6	619.1
55°	610.5	607.3	592.4	579.5	573.1
57.5°	562.4	559.2	544.2	531.4	525.0
60°	512.2	506.8	492.9	483.3	477.9
62.5°	463.0	458.7	443.7	435.2	429.8
65°	413.8	408.4	397.8	387.1	381.7
67.5°	363.5	359.3	348.6	337.9	336.8
70°	317.6	310.1	301.5	293.0	289.8
72.5°	268.4	260.9	254.5	248.1	244.9
75°	220.3	214.9	209.6	205.3	204.2
77.5°	173.2	171.1	165.7	164.7	161.5
80°	131.5	128.3	126.2	124.0	123.0
82.5°	90.9	89.8	89.8	88.7	87.7
85°	57.7	57.7	55.6	55.6	54.5
87.5°	27.8	26.7	25.7	25.7	25.7
90°	2.3	10.6	16.6	21.1	22.7
92.5°	11.3	9.8	15.9	20.4	20.4
95°	41.5	15.9	16.6	21.1	21.9
97.5°	79.3	95.9	16.6	20.4	21.1
100°	123.8	137.4	33.2	20.4	21.1
102.5°	173.7	182.7	191.8	21.9	21.9
105°	227.3	231.8	235.6	242.4	215.2
107.5°	276.4	278.6	283.9	287.7	290.7
110°	326.2	328.5	333.0	334.5	336.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.5	379.1	380.6	379.8	382.8
115°	424.4	426.6	425.9	427.4	427.4
117.5°	468.9	471.9	474.2	473.4	473.4
120°	514.2	517.2	516.5	518.0	516.5
122.5°	556.5	558.0	559.5	560.3	558.8
125°	596.5	599.5	598.0	600.3	601.1
127.5°	635.0	635.8	639.6	638.8	638.1
130°	672.0	672.8	675.0	675.8	675.8
132.5°	706.0	707.5	710.5	711.3	710.5
135°	740.0	739.2	742.3	743.8	745.3
137.5°	770.2	770.2	774.0	775.5	774.7
140°	799.6	801.1	802.7	804.9	805.7
142.5°	826.1	829.1	829.8	831.4	831.4
145°	853.3	855.5	855.5	856.3	857.8
147.5°	874.4	878.9	878.2	878.9	879.7
150°	897.8	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)