

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: P1033798

Luminaire Tested: S124DIW-B795D770UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033798
REPORT IS A COMBINATION OF REPORTS P998209 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

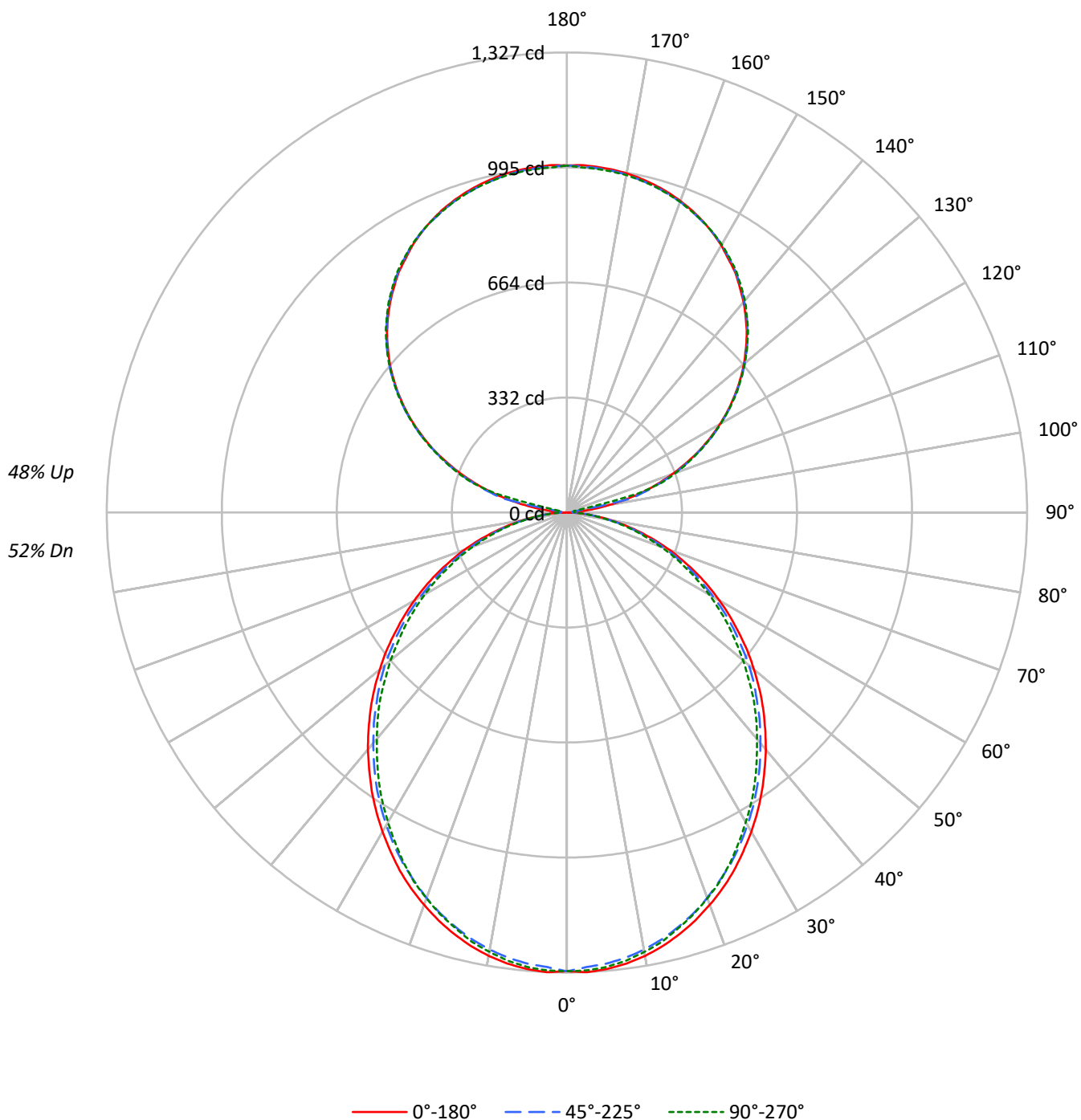
Lumens per Lamp: N/A
Luminaire Lumens: 6495.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033798

CATALOG NUMBER: S124DIW-B795D770UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1033798

CATALOG NUMBER: S124DIW-B795D770UB27-4F0-XX-W2A-F

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°	10789	10789	10789
5°	10798	10479	10492
10°	10706	10188	10117
15°	10553	9842	9694
20°	10357	9468	9255
25°	10136	9072	8784
30°	9870	8645	8267
35°	9595	8208	7766
40°	9307	7737	7234
45°	9005	7265	6737
50°	8673	6807	6186
55°	8310	6272	5639
60°	7938	5686	5069
65°	7514	5082	4427
70°	7025	4354	3738
75°	6294	3509	2994
80°	5363	2537	2106
85°	4162	1412	1134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9005 cd/sqm

TEST NUMBER: P1033798

CATALOG NUMBER: S124DIW-B795D770UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	1.9
10°-20°	351.3	5.4
20°-30°	517.1	8.0
30°-40°	601.1	9.3
40°-50°	601.0	9.3
50°-60°	525.7	8.1
60°-70°	390.3	6.0
70°-80°	221.4	3.4
80°-90°	65.5	1.0
90°-100°	33.2	0.5
100°-110°	218.8	3.4
110°-120°	417.8	6.4
120°-130°	530.4	8.2
130°-140°	567.4	8.7
140°-150°	530.5	8.2
150°-160°	427.8	6.6
160°-170°	275.9	4.2
170°-180°	95.1	1.5
0°-30°	993.1	15.3
0°-40°	1594.2	24.5
0°-60°	2720.9	41.9
0°-90°	3398.1	52.3
90°-120°	669.8	10.3
90°-150°	2298.1	35.4
90°-180°	3097.0	47.7
0°-180°	6495.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1322	1318	1306	1318	1316	125
15°	1258	1254	1238	1245	1242	355
25°	1140	1132	1117	1118	1114	524
35°	981	973	958	951	946	613
45°	800	793	776	764	761	617
55°	605	602	587	575	568	542
65°	410	405	394	384	378	406
75°	218	213	208	204	202	232
85°	57	57	55	55	54	62
90°	2	10	16	21	22	6
95°	41	16	16	21	22	51
105°	225	230	234	240	213	236
115°	421	423	422	424	424	414
125°	591	594	593	595	596	528
135°	734	733	736	737	739	565
145°	846	848	848	849	850	529
155°	928	928	926	929	927	428
165°	978	975	975	981	974	276
175°	1001	996	997	1004	995	95
180°	1001	1001	1001	1001	1001	

TEST NUMBER: P1033798

CATALOG NUMBER: S124DIW-B795D770UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.1	1323.1	1323.1	1323.1	1323.1
2.5°	1327.3	1324.2	1312.5	1323.1	1322.0
5°	1322.0	1317.8	1306.1	1317.8	1315.7
7.5°	1312.5	1308.3	1295.5	1305.1	1304.0
10°	1298.7	1294.5	1280.7	1289.2	1287.1
12.5°	1280.7	1276.5	1261.6	1271.2	1268.0
15°	1258.4	1254.2	1238.3	1244.6	1241.5
17.5°	1233.0	1227.7	1212.8	1217.1	1215.0
20°	1204.4	1199.1	1183.2	1186.3	1184.2
22.5°	1173.6	1166.2	1150.3	1156.7	1152.4
25°	1139.7	1132.3	1117.4	1118.5	1114.2
27.5°	1101.5	1094.1	1080.3	1078.2	1072.9
30°	1063.4	1054.9	1041.1	1036.9	1031.6
32.5°	1023.1	1015.7	1000.8	995.5	990.2
35°	980.7	973.2	958.4	951.0	945.7
37.5°	936.1	929.8	913.9	906.5	899.0
40°	892.7	884.2	868.3	857.7	852.4
42.5°	846.0	841.8	823.8	811.0	807.9
45°	800.4	793.0	776.1	764.4	761.2
47.5°	752.7	747.4	731.5	718.8	710.3
50°	704.0	699.7	684.9	670.0	663.7
52.5°	656.3	650.9	635.0	622.3	613.8
55°	605.4	602.2	587.3	574.6	568.3
57.5°	557.7	554.5	539.6	526.9	520.5
60°	507.8	502.5	488.7	479.2	473.9
62.5°	459.1	454.8	440.0	431.5	426.2
65°	410.3	405.0	394.4	383.8	378.5
67.5°	360.5	356.2	345.6	335.0	334.0
70°	314.9	307.5	299.0	290.5	287.3
72.5°	266.1	258.7	252.3	246.0	242.8
75°	218.4	213.1	207.8	203.6	202.5
77.5°	171.7	169.6	164.3	163.3	160.1
80°	130.4	127.2	125.1	123.0	121.9
82.5°	90.1	89.1	89.1	88.0	86.9
85°	57.2	57.2	55.1	55.1	54.1
87.5°	27.6	26.5	25.4	25.4	25.4
90°	2.2	10.5	16.5	21.0	22.5
92.5°	11.2	9.7	15.7	20.2	20.2
95°	41.2	15.7	16.5	21.0	21.7
97.5°	78.6	95.1	16.5	20.2	21.0
100°	122.8	136.2	32.9	20.2	21.0
102.5°	172.2	181.2	190.1	21.7	21.7
105°	225.3	229.8	233.6	240.3	213.3
107.5°	274.0	276.2	281.5	285.2	288.2
110°	323.4	325.6	330.1	331.6	333.9

TEST NUMBER: P1033798

CATALOG NUMBER: S124DIW-B795D770UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	371.3	375.8	377.3	376.5	379.5
115°	420.7	422.9	422.2	423.7	423.7
117.5°	464.9	467.9	470.1	469.4	469.4
120°	509.8	512.8	512.0	513.5	512.0
122.5°	551.7	553.2	554.7	555.4	553.9
125°	591.4	594.4	592.9	595.1	595.9
127.5°	629.5	630.3	634.0	633.3	632.5
130°	666.2	667.0	669.2	670.0	670.0
132.5°	699.9	701.4	704.4	705.2	704.4
135°	733.6	732.8	735.8	737.3	738.8
137.5°	763.5	763.5	767.3	768.8	768.0
140°	792.7	794.2	795.7	798.0	798.7
142.5°	818.9	821.9	822.7	824.2	824.2
145°	845.9	848.1	848.1	848.9	850.4
147.5°	866.8	871.3	870.6	871.3	872.1
150°	890.0	893.0	892.3	892.3	893.0
152.5°	909.5	911.8	910.3	911.8	911.0
155°	927.5	928.2	926.0	929.0	926.7
157.5°	943.2	943.2	940.2	943.9	940.2
160°	956.7	954.4	953.7	958.2	953.7
162.5°	968.6	965.7	964.9	969.4	964.2
165°	978.4	974.6	974.6	980.6	973.9
167.5°	986.6	982.9	982.1	988.9	981.4
170°	993.3	988.9	989.6	995.6	988.1
172.5°	997.8	993.3	994.1	1000.1	991.9
175°	1000.8	996.3	997.1	1003.8	994.8
177.5°	1003.1	997.8	999.3	1005.3	996.3
180°	1000.8	1000.8	1000.8	1000.8	1000.8

(END OF REPORT)