

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: P1033092

Luminaire Tested: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033092
REPORT IS A COMBINATION OF REPORTS P996623 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

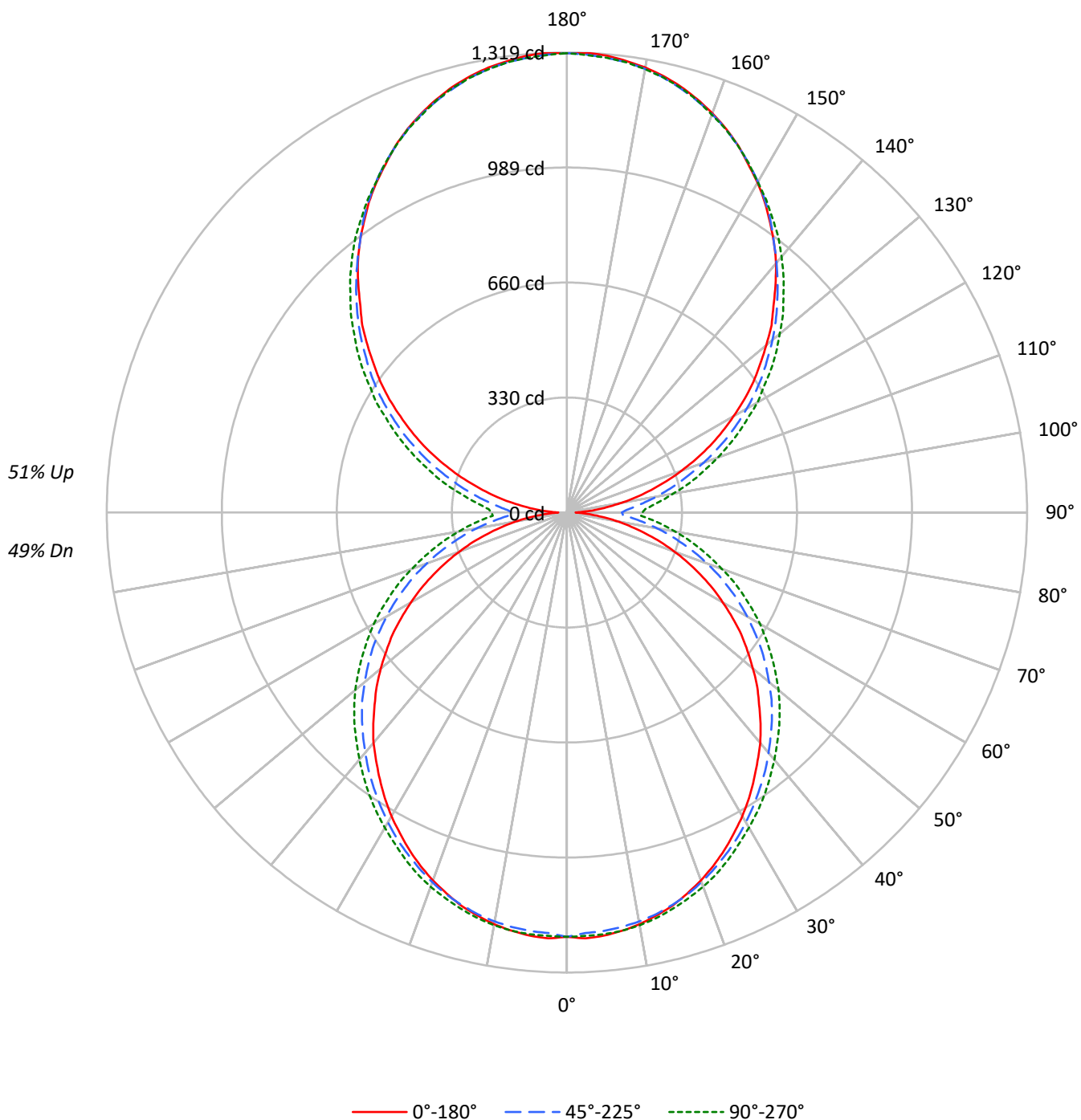
Lumens per Lamp: N/A
Luminaire Lumens: 7805.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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: P1033092

CATALOG NUMBER: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55
1	97	92	88	84	89	85	81	78	71	68	66	59	57	55	47	46	45
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

TEST NUMBER: P1033092

CATALOG NUMBER: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.5
10°-20°	330.3	4.2
20°-30°	499.4	6.4
30°-40°	604.2	7.7
40°-50°	638.7	8.2
50°-60°	601.1	7.7
60°-70°	498.8	6.4
70°-80°	350.0	4.5
80°-90°	200.2	2.6
90°-100°	203.3	2.6
100°-110°	344.1	4.4
110°-120°	495.2	6.3
120°-130°	609.0	7.8
130°-140°	661.2	8.5
140°-150°	638.8	8.2
150°-160°	534.9	6.9
160°-170°	355.9	4.6
170°-180°	124.6	1.6
0°-30°	945.0	12.1
0°-40°	1549.1	19.8
0°-60°	2789.0	35.7
0°-90°	3838.0	49.2
90°-120°	1042.7	13.4
90°-150°	2951.6	37.8
90°-180°	3967.0	50.8
0°-180°	7805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	25	91	157	203	216	19
95°	79	133	196	236	248	80
105°	250	278	332	370	383	266
115°	452	464	506	535	544	447
125°	652	651	684	708	714	582
135°	837	843	853	872	877	648
145°	1015	1018	1019	1026	1028	635
155°	1161	1161	1160	1164	1160	534
165°	1264	1261	1259	1265	1261	356
175°	1315	1310	1309	1316	1309	125
180°	1317	1317	1317	1317	1317	

TEST NUMBER: P1033092

CATALOG NUMBER: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	24.9	90.6	157.3	202.9	215.9
92.5°	46.9	107.8	171.5	212.8	224.7
95°	78.8	133.0	195.9	235.8	248.1
97.5°	114.1	161.8	225.8	265.3	277.6
100°	157.6	197.1	259.3	298.2	307.8
102.5°	204.5	235.5	295.3	333.9	345.8
105°	249.6	277.8	332.3	369.5	383.4
107.5°	299.5	323.7	372.4	410.5	419.0
110°	349.1	370.2	416.9	446.1	460.1

TEST NUMBER: P1033092

CATALOG NUMBER: S124DIW-B1020D1050UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	400.6	417.0	459.9	489.9	500.8
115°	452.3	464.5	506.1	535.0	543.5
117.5°	502.2	510.3	550.2	575.7	583.6
120°	550.7	558.9	595.3	617.5	630.5
122.5°	602.7	603.7	639.5	663.6	668.1
125°	652.2	650.9	683.9	707.7	713.9
127.5°	698.0	699.8	724.9	747.5	756.0
130°	745.6	747.3	769.1	791.5	795.7
132.5°	795.5	796.2	811.5	832.6	839.8
135°	836.9	843.0	852.6	872.4	877.4
137.5°	884.8	886.5	894.0	911.3	919.2
140°	932.6	933.4	934.7	951.4	957.1
142.5°	975.1	977.2	974.8	989.8	995.2
145°	1014.9	1017.5	1018.6	1025.7	1028.1
147.5°	1055.6	1059.3	1058.3	1058.7	1063.0
150°	1092.3	1095.0	1095.0	1095.0	1093.9
152.5°	1125.5	1127.5	1128.6	1131.6	1128.6
155°	1161.2	1161.2	1160.1	1164.2	1160.1
157.5°	1191.7	1189.7	1189.7	1192.7	1189.7
160°	1218.2	1217.2	1216.2	1219.2	1214.1
162.5°	1242.6	1239.6	1238.6	1244.7	1239.6
165°	1264.0	1261.0	1258.9	1265.1	1261.0
167.5°	1281.3	1277.3	1277.3	1283.4	1277.3
170°	1295.6	1290.5	1291.5	1297.6	1290.5
172.5°	1305.8	1301.7	1301.7	1308.8	1301.7
175°	1315.0	1309.9	1308.8	1316.0	1308.8
177.5°	1319.0	1313.9	1313.9	1321.1	1312.9
180°	1317.0	1317.0	1317.0	1317.0	1317.0

(END OF REPORT)