

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: P1033388

Luminaire Tested: S124DIW-B350D1050UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033388
REPORT IS A COMBINATION OF REPORTS P997286 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

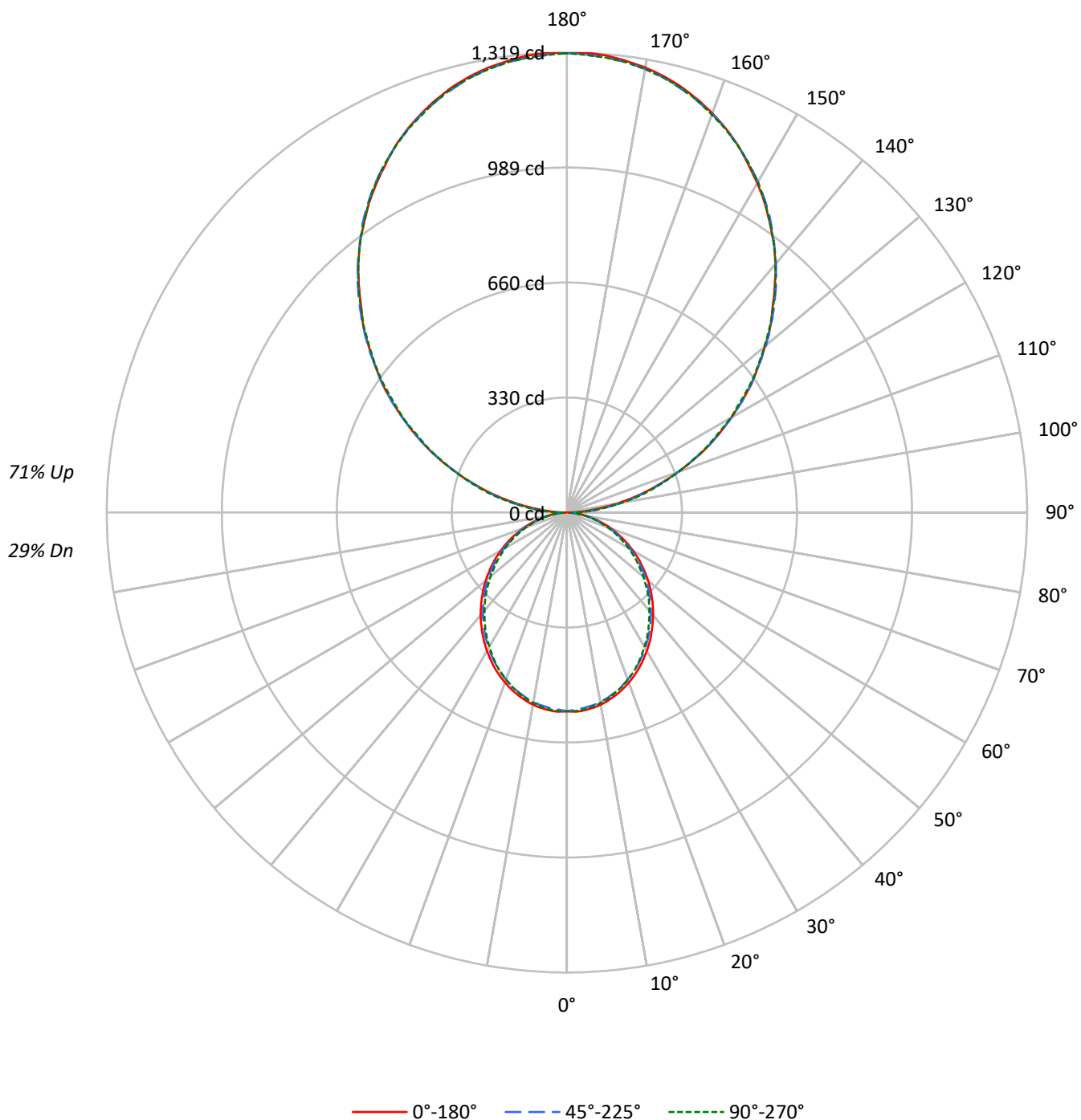
Lumens per Lamp: N/A
Luminaire Lumens: 5120.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (A_{in}): 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	89	85	82	83	80	76	74	62	60	58	47	45	44	32	31	31
2	85	77	72	67	75	70	65	60	55	51	48	41	39	37	28	27	26
3	77	68	61	55	69	61	55	50	48	44	41	36	33	31	25	23	22
4	70	60	52	47	63	54	48	43	43	38	34	32	29	27	22	20	19
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	24	20	18	17	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	16	15	13	11
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.0
10°-20°	151.4	3.0
20°-30°	222.8	4.4
30°-40°	258.9	5.1
40°-50°	258.9	5.1
50°-60°	226.5	4.4
60°-70°	168.1	3.3
70°-80°	95.4	1.9
80°-90°	30.1	0.6
90°-100°	85.9	1.7
100°-110°	257.1	5.0
110°-120°	436.8	8.5
120°-130°	576.1	11.3
130°-140°	647.0	12.6
140°-150°	635.9	12.4
150°-160°	534.9	10.4
160°-170°	355.9	7.0
170°-180°	124.6	2.4
0°-30°	427.8	8.4
0°-40°	686.8	13.4
0°-60°	1172.2	22.9
0°-90°	1465.8	28.6
90°-120°	779.8	15.2
90°-150°	2638.8	51.5
90°-180°	3654.0	71.4
0°-180°	5120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	3	14	22	28	31	6
95°	61	70	77	80	80	66
105°	237	238	242	246	248	252
115°	444	444	442	441	440	438
125°	647	647	646	644	642	577
135°	834	840	840	838	835	645
145°	1014	1018	1019	1018	1014	634
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	3.1	14.3	22.4	28.5	30.6
92.5°	26.5	39.7	44.8	47.9	48.9
95°	61.1	70.3	77.4	80.5	80.5
97.5°	97.8	105.9	114.1	118.2	118.2
100°	142.6	146.7	155.8	157.9	157.9
102.5°	189.5	190.5	198.6	201.7	202.7
105°	237.3	238.3	242.4	245.5	248.5
107.5°	287.2	288.3	289.3	293.3	292.3
110°	338.2	340.2	339.2	337.1	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.1	391.1	389.1	389.1	389.1
115°	444.1	444.1	442.1	441.0	440.0
117.5°	494.0	494.0	493.0	489.9	486.9
120°	543.9	548.0	544.9	539.8	541.9
122.5°	595.9	596.9	595.9	592.8	587.7
125°	646.8	646.8	645.8	643.7	641.7
127.5°	692.6	695.7	693.6	691.6	690.6
130°	741.5	744.6	744.6	742.5	738.5
132.5°	791.4	793.5	792.4	790.4	789.4
135°	834.2	840.3	840.3	838.3	835.2
137.5°	882.1	885.1	887.2	884.1	885.1
140°	929.9	932.0	932.0	931.0	929.9
142.5°	973.7	975.8	974.8	974.8	974.8
145°	1013.5	1017.5	1018.6	1017.5	1014.5
147.5°	1054.2	1059.3	1058.3	1057.3	1056.2
150°	1090.9	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)