

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: P1033386

Luminaire Tested: S124DIW-B350D1050UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033386
REPORT IS A COMBINATION OF REPORTS P997283 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-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

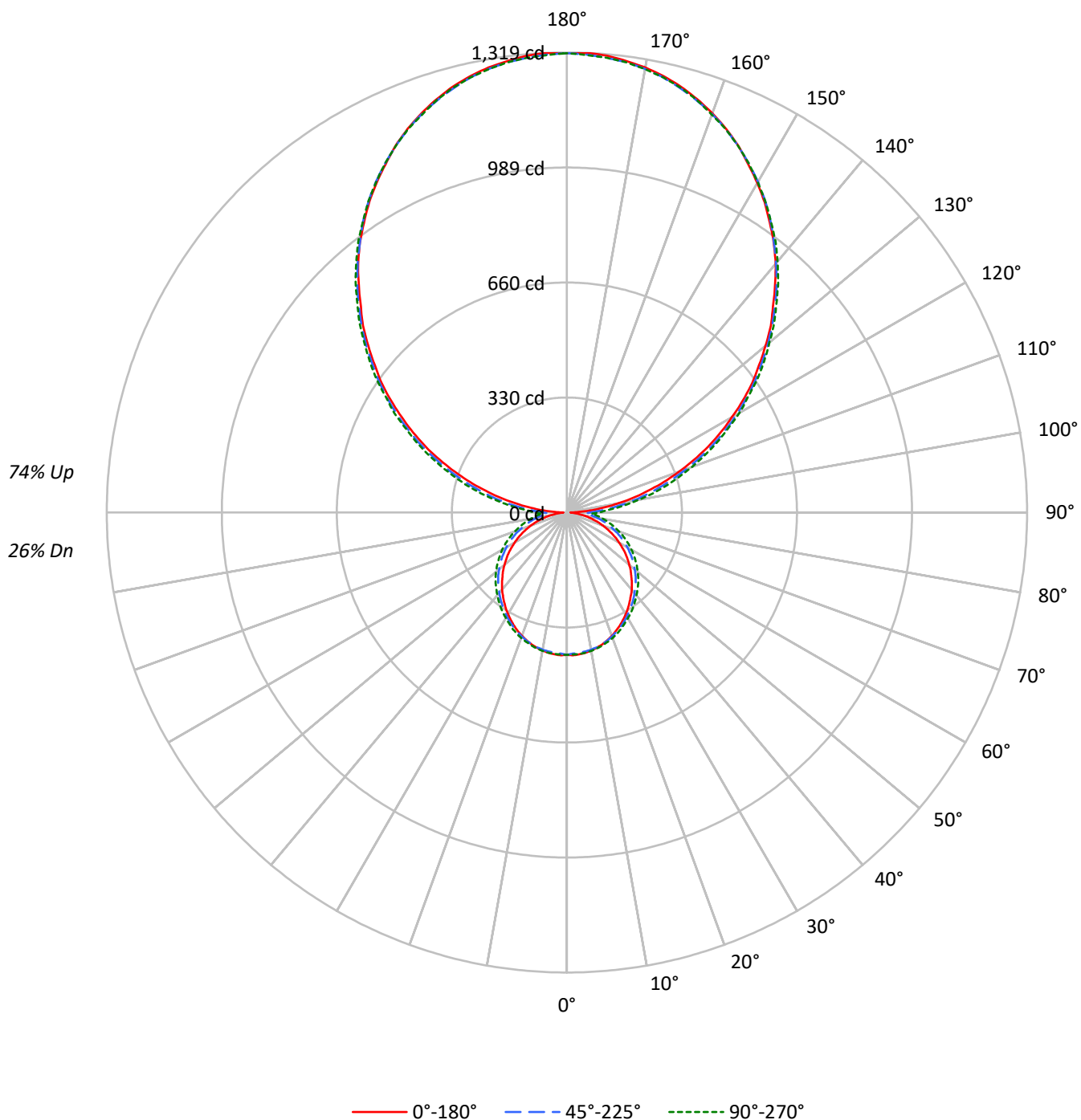
Lumens per Lamp: N/A
Luminaire Lumens: 5048.1 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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

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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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	87	83	80	82	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	24	23
3	76	66	59	54	67	59	53	48	46	42	38	34	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	27	24	20	18	16
5	63	52	44	38	56	46	40	35	36	31	28	26	23	21	17	16	14
6	58	46	38	33	51	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	48	37	31	26	29	24	21	22	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	10
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	9
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3392 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.8
10°-20°	110.8	2.2
20°-30°	167.5	3.3
30°-40°	202.6	4.0
40°-50°	214.2	4.2
50°-60°	201.6	4.0
60°-70°	167.3	3.3
70°-80°	117.4	2.3
80°-90°	69.0	1.4
90°-100°	125.2	2.5
100°-110°	286.3	5.7
110°-120°	456.4	9.0
120°-130°	587.1	11.6
130°-140°	651.8	12.9
140°-150°	636.9	12.6
150°-160°	534.9	10.6
160°-170°	355.9	7.0
170°-180°	124.6	2.5
0°-30°	316.9	6.3
0°-40°	519.5	10.3
0°-60°	935.3	18.5
0°-90°	1288.9	25.5
90°-120°	867.9	17.2
90°-150°	2743.8	54.4
90°-180°	3759.0	74.5
0°-180°	5048.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	10	40	68	87	93	9
95°	67	91	117	133	137	71
105°	241	252	273	287	294	256
115°	447	451	464	472	475	441
125°	649	648	659	665	666	578
135°	835	841	844	850	849	646
145°	1014	1018	1019	1020	1019	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	10.4	39.9	67.6	87.0	92.7
92.5°	33.4	62.5	87.3	103.2	107.8
95°	67.0	91.3	117.1	132.6	136.7
97.5°	103.3	124.6	151.6	167.5	171.7
100°	147.6	163.6	190.5	205.0	208.2
102.5°	194.5	205.6	231.0	246.0	250.7
105°	241.4	251.5	272.6	287.1	293.7
107.5°	291.3	300.2	317.2	332.6	334.8
110°	341.9	350.3	365.2	373.6	380.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.3	399.8	412.9	422.9	426.6
115°	446.8	451.0	463.6	472.5	474.7
117.5°	496.7	499.5	512.2	518.7	519.3
120°	546.2	551.7	561.8	565.8	571.6
122.5°	598.2	599.2	610.5	616.6	614.7
125°	648.6	648.2	658.6	665.2	665.9
127.5°	694.4	697.1	704.1	710.3	712.5
130°	742.9	745.5	752.8	758.9	757.7
132.5°	792.8	794.4	798.8	804.6	806.3
135°	835.1	841.2	844.4	849.7	849.4
137.5°	883.0	885.6	889.5	893.2	896.5
140°	930.8	932.5	932.9	937.9	939.0
142.5°	974.2	976.3	974.8	979.8	981.7
145°	1014.0	1017.5	1018.6	1020.2	1019.1
147.5°	1054.7	1059.3	1058.3	1057.8	1058.5
150°	1091.4	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)