

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: P1033558

Luminaire Tested: S124DIW-B575D1050UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033558
REPORT IS A COMBINATION OF REPORTS P997672 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

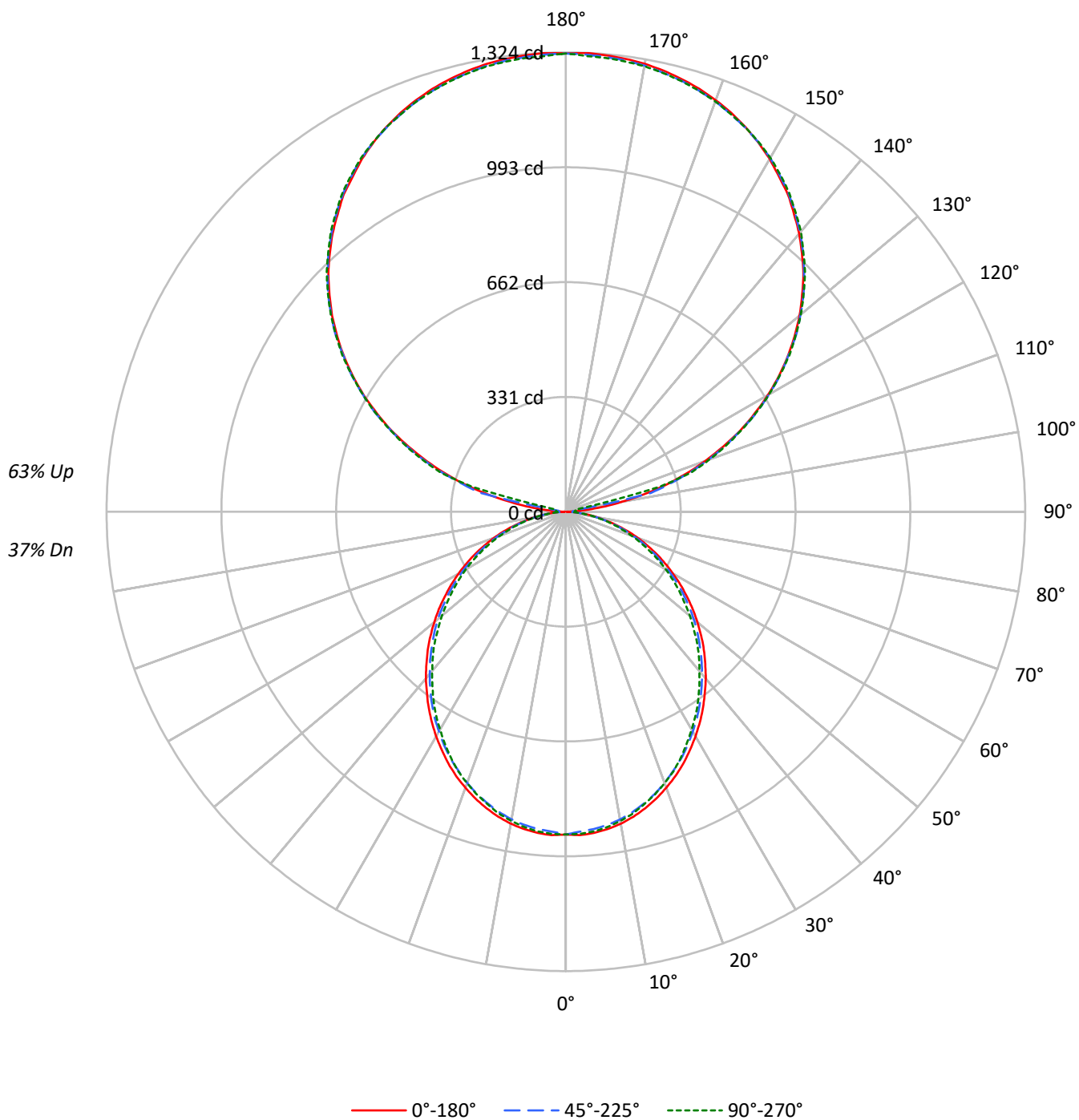
Lumens per Lamp: N/A
Luminaire Lumens: 6477.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	27
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20
6	61	49	41	35	55	45	38	33	37	31	28	29	25	22	22	20	18
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	13
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7584	7584	7584
5°	7589	7366	7375
10°	7526	7161	7111
15°	7417	6918	6813
20°	7280	6655	6506
25°	7125	6377	6174
30°	6937	6077	5811
35°	6744	5769	5459
40°	6541	5438	5085
45°	6330	5106	4735
50°	6095	4785	4348
55°	5841	4408	3963
60°	5579	3997	3563
65°	5282	3572	3111
70°	4937	3059	2627
75°	4424	2467	2104
80°	3771	1783	1480
85°	2925	992	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6330 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	1.4
10°-20°	247.0	3.8
20°-30°	363.4	5.6
30°-40°	422.5	6.5
40°-50°	422.5	6.5
50°-60°	369.5	5.7
60°-70°	274.3	4.2
70°-80°	155.6	2.4
80°-90°	47.3	0.7
90°-100°	43.8	0.7
100°-110°	288.8	4.5
110°-120°	551.4	8.5
120°-130°	700.0	10.8
130°-140°	748.8	11.6
140°-150°	700.2	10.8
150°-160°	564.7	8.7
160°-170°	364.2	5.6
170°-180°	125.5	1.9
0°-30°	698.1	10.8
0°-40°	1120.5	17.3
0°-60°	1912.5	29.5
0°-90°	2389.7	36.9
90°-120°	884.0	13.6
90°-150°	3033.0	46.8
90°-180°	4087.0	63.1
0°-180°	6477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	929	926	918	926	925	88
15°	884	882	870	875	873	249
25°	801	796	785	786	783	369
35°	689	684	674	668	665	431
45°	563	557	546	537	535	434
55°	426	423	413	404	399	381
65°	288	285	277	270	266	285
75°	154	150	146	143	142	163
85°	40	40	39	39	38	43
90°	3	14	22	28	30	6
95°	54	21	22	28	29	67
105°	297	303	308	317	282	311
115°	555	558	557	559	559	546
125°	780	784	782	785	786	697
135°	968	967	971	973	975	746
145°	1116	1119	1119	1120	1122	698
155°	1224	1225	1222	1226	1223	564
165°	1291	1286	1286	1294	1285	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	933.0	930.7	922.5	930.0	929.2
5°	929.2	926.3	918.1	926.3	924.8
7.5°	922.5	919.6	910.6	917.3	916.6
10°	912.9	909.9	900.2	906.1	904.7
12.5°	900.2	897.2	886.8	893.5	891.2
15°	884.5	881.6	870.4	874.8	872.6
17.5°	866.6	862.9	852.5	855.5	854.0
20°	846.5	842.8	831.6	833.9	832.4
22.5°	824.9	819.7	808.5	813.0	810.0
25°	801.1	795.9	785.4	786.2	783.2
27.5°	774.2	769.0	759.3	757.9	754.1
30°	747.4	741.5	731.8	728.8	725.1
32.5°	719.1	713.9	703.5	699.7	696.0
35°	689.3	684.1	673.6	668.4	664.7
37.5°	658.0	653.5	642.3	637.1	631.9
40°	627.4	621.5	610.3	602.9	599.1
42.5°	594.7	591.7	579.0	570.1	567.8
45°	562.6	557.4	545.5	537.3	535.0
47.5°	529.1	525.4	514.2	505.2	499.3
50°	494.8	491.8	481.4	471.0	466.5
52.5°	461.3	457.5	446.4	437.4	431.5
55°	425.5	423.3	412.8	403.9	399.4
57.5°	392.0	389.7	379.3	370.4	365.9
60°	356.9	353.2	343.5	336.8	333.1
62.5°	322.7	319.7	309.3	303.3	299.6
65°	288.4	284.7	277.2	269.8	266.0
67.5°	253.4	250.4	242.9	235.5	234.7
70°	221.3	216.1	210.1	204.2	201.9
72.5°	187.0	181.8	177.4	172.9	170.6
75°	153.5	149.8	146.1	143.1	142.3
77.5°	120.7	119.2	115.5	114.8	112.5
80°	91.7	89.4	87.9	86.4	85.7
82.5°	63.3	62.6	62.6	61.9	61.1
85°	40.2	40.2	38.7	38.7	38.0
87.5°	19.4	18.6	17.9	17.9	17.9
90°	3.0	13.8	21.7	27.7	29.6
92.5°	14.8	12.8	20.7	26.7	26.7
95°	54.3	20.7	21.7	27.7	28.7
97.5°	103.7	125.5	21.7	26.7	27.7
100°	162.0	179.8	43.5	26.7	27.7
102.5°	227.2	239.1	250.9	28.7	28.7
105°	297.4	303.3	308.2	317.1	281.6
107.5°	361.6	364.6	371.5	376.4	380.4
110°	426.8	429.8	435.7	437.7	440.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.0	495.9	497.9	496.9	500.9
115°	555.2	558.2	557.2	559.2	559.2
117.5°	613.5	617.5	620.4	619.4	619.4
120°	672.8	676.7	675.8	677.7	675.8
122.5°	728.1	730.1	732.1	733.1	731.1
125°	780.5	784.4	782.5	785.4	786.4
127.5°	830.9	831.8	836.8	835.8	834.8
130°	879.3	880.3	883.2	884.2	884.2
132.5°	923.7	925.7	929.7	930.6	929.7
135°	968.2	967.2	971.1	973.1	975.1
137.5°	1007.7	1007.7	1012.6	1014.6	1013.6
140°	1046.2	1048.2	1050.2	1053.1	1054.1
142.5°	1080.8	1084.8	1085.8	1087.7	1087.7
145°	1116.4	1119.3	1119.3	1120.3	1122.3
147.5°	1144.0	1150.0	1149.0	1150.0	1151.0
150°	1174.7	1178.6	1177.6	1177.6	1178.6
152.5°	1200.4	1203.3	1201.3	1203.3	1202.3
155°	1224.1	1225.1	1222.1	1226.0	1223.1
157.5°	1244.8	1244.8	1240.9	1245.8	1240.9
160°	1262.6	1259.6	1258.6	1264.6	1258.6
162.5°	1278.4	1274.4	1273.5	1279.4	1272.5
165°	1291.2	1286.3	1286.3	1294.2	1285.3
167.5°	1302.1	1297.2	1296.2	1305.1	1295.2
170°	1311.0	1305.1	1306.1	1314.0	1304.1
172.5°	1316.9	1311.0	1312.0	1319.9	1309.0
175°	1320.9	1315.0	1315.9	1324.8	1313.0
177.5°	1323.8	1316.9	1318.9	1326.8	1315.0
180°	1320.9	1320.9	1320.9	1320.9	1320.9

(END OF REPORT)