

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: P1033588

Luminaire Tested: S124DIW-B575D1340UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033588
REPORT IS A COMBINATION OF REPORTS P997738 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB50-4F0-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

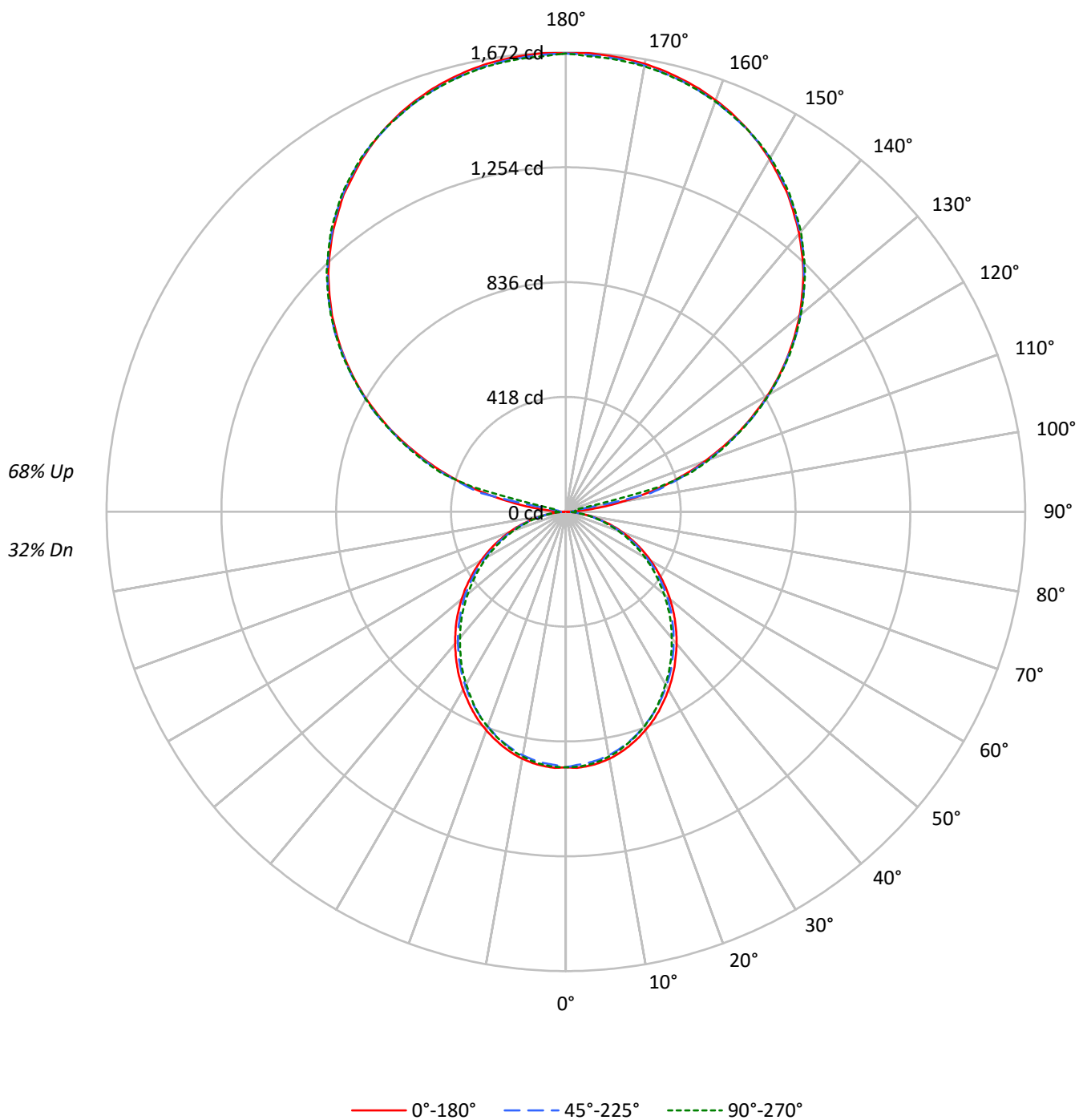
Lumens per Lamp: N/A
Luminaire Lumens: 7552.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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

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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12
9	48	36	28	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

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	1.2
10°-20°	247.0	3.3
20°-30°	363.4	4.8
30°-40°	422.5	5.6
40°-50°	422.5	5.6
50°-60°	369.5	4.9
60°-70°	274.3	3.6
70°-80°	155.6	2.1
80°-90°	48.0	0.6
90°-100°	55.4	0.7
100°-110°	364.6	4.8
110°-120°	696.3	9.2
120°-130°	883.9	11.7
130°-140°	945.6	12.5
140°-150°	884.2	11.7
150°-160°	713.1	9.4
160°-170°	459.9	6.1
170°-180°	158.5	2.1
0°-30°	698.1	9.2
0°-40°	1120.5	14.8
0°-60°	1912.5	25.3
0°-90°	2390.4	31.7
90°-120°	1116.3	14.8
90°-150°	3830.1	50.7
90°-180°	5162.0	68.4
0°-180°	7552.0	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°	4	18	27	35	37	6
95°	69	26	27	35	36	85
105°	376	383	389	400	356	393
115°	701	705	704	706	706	690
125°	986	991	988	992	993	880
135°	1223	1221	1226	1229	1231	942
145°	1410	1414	1414	1415	1417	881
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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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°	3.7	17.5	27.4	34.9	37.4
92.5°	18.7	16.2	26.2	33.7	33.7
95°	68.6	26.2	27.4	34.9	36.2
97.5°	131.0	158.4	27.4	33.7	34.9
100°	204.6	227.1	54.9	33.7	34.9
102.5°	287.0	301.9	316.9	36.2	36.2
105°	375.5	383.0	389.3	400.5	355.6
107.5°	456.6	460.4	469.1	475.3	480.3
110°	539.0	542.7	550.2	552.7	556.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	618.8	626.3	628.8	627.5	632.5
115°	701.2	704.9	703.7	706.1	706.1
117.5°	774.8	779.8	783.5	782.3	782.3
120°	849.6	854.6	853.4	855.9	853.4
122.5°	919.5	922.0	924.5	925.7	923.2
125°	985.6	990.6	988.1	991.9	993.1
127.5°	1049.2	1050.5	1056.7	1055.5	1054.2
130°	1110.4	1111.6	1115.4	1116.6	1116.6
132.5°	1166.5	1169.0	1174.0	1175.3	1174.0
135°	1222.7	1221.4	1226.4	1228.9	1231.4
137.5°	1272.6	1272.6	1278.8	1281.3	1280.0
140°	1321.2	1323.7	1326.2	1330.0	1331.2
142.5°	1364.9	1369.9	1371.1	1373.6	1373.6
145°	1409.8	1413.5	1413.5	1414.8	1417.3
147.5°	1444.7	1452.2	1451.0	1452.2	1453.5
150°	1483.4	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)