

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: P1033657

Luminaire Tested: S124DIW-B575D770UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033657
REPORT IS A COMBINATION OF REPORTS P997909 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

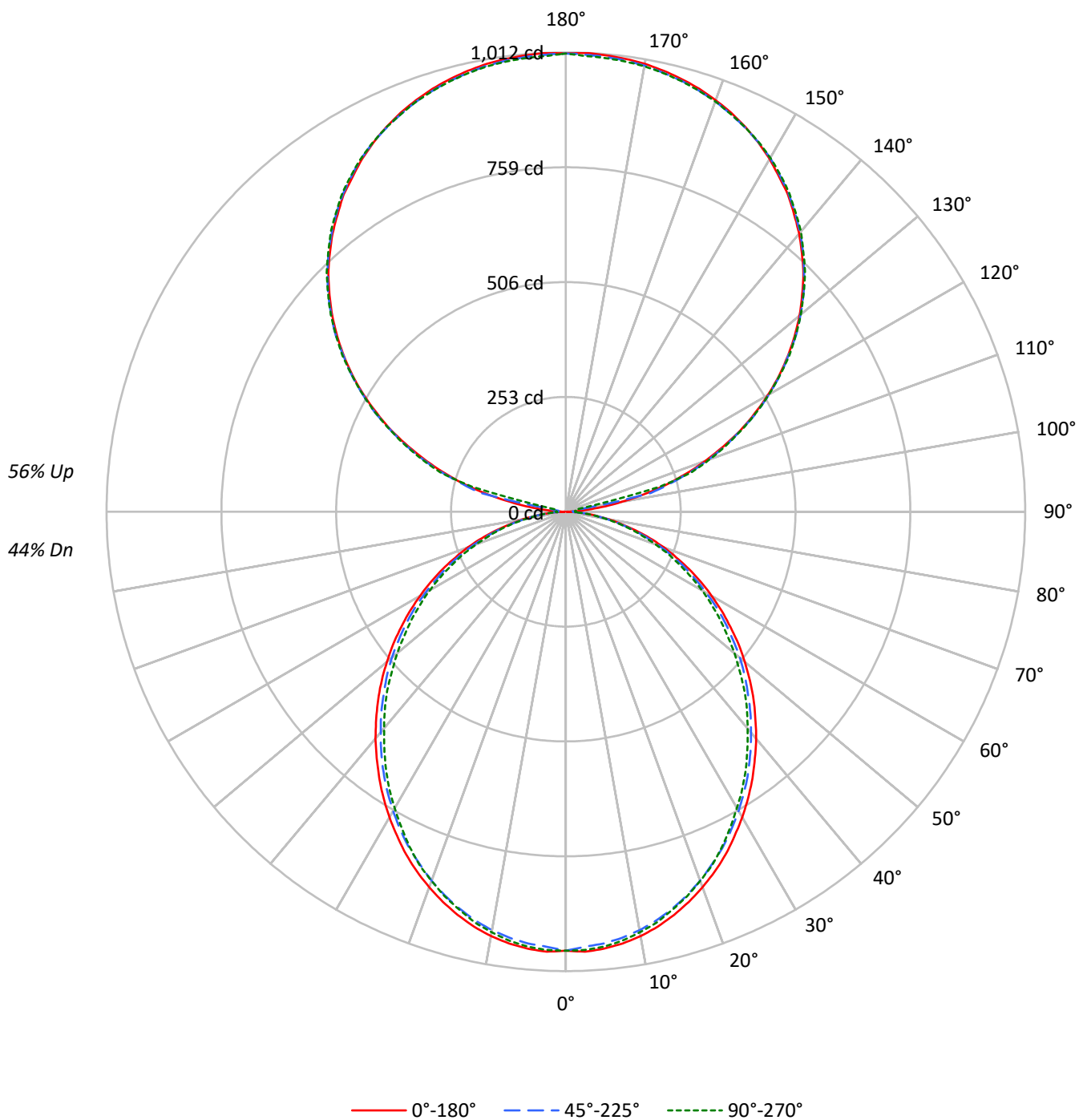
Lumens per Lamp: N/A
Luminaire Lumens: 5608.0 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	40	38	36
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	73	63	55	49	67	58	51	45	48	43	39	39	36	33	31	29	26
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	26	23	20
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	21	18	16
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7885	7885	7885
5°	7892	7659	7668
10°	7825	7446	7394
15°	7713	7193	7084
20°	7569	6920	6765
25°	7409	6631	6420
30°	7214	6318	6042
35°	7012	5999	5676
40°	6802	5655	5287
45°	6582	5309	4923
50°	6338	4974	4521
55°	6073	4585	4121
60°	5801	4156	3705
65°	5492	3714	3235
70°	5133	3182	2732
75°	4599	2565	2188
80°	3920	1854	1539
85°	3042	1033	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6582 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.6
10°-20°	256.8	4.6
20°-30°	377.9	6.7
30°-40°	439.3	7.8
40°-50°	439.3	7.8
50°-60°	384.2	6.9
60°-70°	285.2	5.1
70°-80°	161.8	2.9
80°-90°	48.4	0.9
90°-100°	33.5	0.6
100°-110°	220.7	3.9
110°-120°	421.4	7.5
120°-130°	535.0	9.5
130°-140°	572.3	10.2
140°-150°	535.2	9.5
150°-160°	431.6	7.7
160°-170°	278.3	5.0
170°-180°	95.9	1.7
0°-30°	725.8	12.9
0°-40°	1165.1	20.8
0°-60°	1988.6	35.5
0°-90°	2484.1	44.3
90°-120°	675.6	12.0
90°-150°	2318.1	41.3
90°-180°	3124.0	55.7
0°-180°	5608.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	966	963	955	963	962	92
15°	920	917	905	910	907	259
25°	833	828	817	818	814	383
35°	717	711	700	695	691	448
45°	585	580	567	559	556	451
55°	442	440	429	420	415	396
65°	300	296	288	280	277	297
75°	160	156	152	149	148	169
85°	42	42	40	40	40	45
90°	2	11	17	21	23	5
95°	42	16	17	21	22	51
105°	227	232	236	242	215	238
115°	424	427	426	427	427	418
125°	596	600	598	600	601	533
135°	740	739	742	744	745	570
145°	853	856	856	856	858	533
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.0	967.0	967.0	967.0	967.0
2.5°	970.1	967.8	959.3	967.0	966.2
5°	966.2	963.1	954.6	963.1	961.6
7.5°	959.3	956.2	946.9	953.8	953.1
10°	949.2	946.1	936.0	942.2	940.7
12.5°	936.0	932.9	922.1	929.0	926.7
15°	919.7	916.6	905.0	909.7	907.3
17.5°	901.1	897.3	886.4	889.5	888.0
20°	880.2	876.3	864.7	867.0	865.5
22.5°	857.7	852.3	840.7	845.4	842.3
25°	833.0	827.5	816.7	817.5	814.4
27.5°	805.1	799.6	789.6	788.0	784.1
30°	777.2	771.0	760.9	757.8	753.9
32.5°	747.7	742.3	731.5	727.6	723.7
35°	716.7	711.3	700.5	695.0	691.2
37.5°	684.2	679.5	667.9	662.5	657.1
40°	652.4	646.2	634.6	626.8	623.0
42.5°	618.3	615.2	602.1	592.8	590.4
45°	585.0	579.6	567.2	558.7	556.3
47.5°	550.1	546.3	534.6	525.3	519.1
50°	514.5	511.4	500.5	489.7	485.1
52.5°	479.6	475.8	464.1	454.8	448.6
55°	442.4	440.1	429.3	420.0	415.3
57.5°	407.6	405.2	394.4	385.1	380.4
60°	371.1	367.3	357.2	350.2	346.4
62.5°	335.5	332.4	321.6	315.4	311.5
65°	299.9	296.0	288.2	280.5	276.6
67.5°	263.4	260.3	252.6	244.8	244.1
70°	230.1	224.7	218.5	212.3	210.0
72.5°	194.5	189.1	184.4	179.8	177.4
75°	159.6	155.7	151.9	148.8	148.0
77.5°	125.5	124.0	120.1	119.3	117.0
80°	95.3	93.0	91.4	89.9	89.1
82.5°	65.9	65.1	65.1	64.3	63.5
85°	41.8	41.8	40.3	40.3	39.5
87.5°	20.1	19.4	18.6	18.6	18.6
90°	2.3	10.6	16.6	21.1	22.7
92.5°	11.3	9.8	15.9	20.4	20.4
95°	41.5	15.9	16.6	21.1	21.9
97.5°	79.3	95.9	16.6	20.4	21.1
100°	123.8	137.4	33.2	20.4	21.1
102.5°	173.7	182.7	191.8	21.9	21.9
105°	227.3	231.8	235.6	242.4	215.2
107.5°	276.4	278.6	283.9	287.7	290.7
110°	326.2	328.5	333.0	334.5	336.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.5	379.1	380.6	379.8	382.8
115°	424.4	426.6	425.9	427.4	427.4
117.5°	468.9	471.9	474.2	473.4	473.4
120°	514.2	517.2	516.5	518.0	516.5
122.5°	556.5	558.0	559.5	560.3	558.8
125°	596.5	599.5	598.0	600.3	601.1
127.5°	635.0	635.8	639.6	638.8	638.1
130°	672.0	672.8	675.0	675.8	675.8
132.5°	706.0	707.5	710.5	711.3	710.5
135°	740.0	739.2	742.3	743.8	745.3
137.5°	770.2	770.2	774.0	775.5	774.7
140°	799.6	801.1	802.7	804.9	805.7
142.5°	826.1	829.1	829.8	831.4	831.4
145°	853.3	855.5	855.5	856.3	857.8
147.5°	874.4	878.9	878.2	878.9	879.7
150°	897.8	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)