

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: P1033664

Luminaire Tested: S124DIW-B575D770UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033664
REPORT IS A COMBINATION OF REPORTS P997919 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

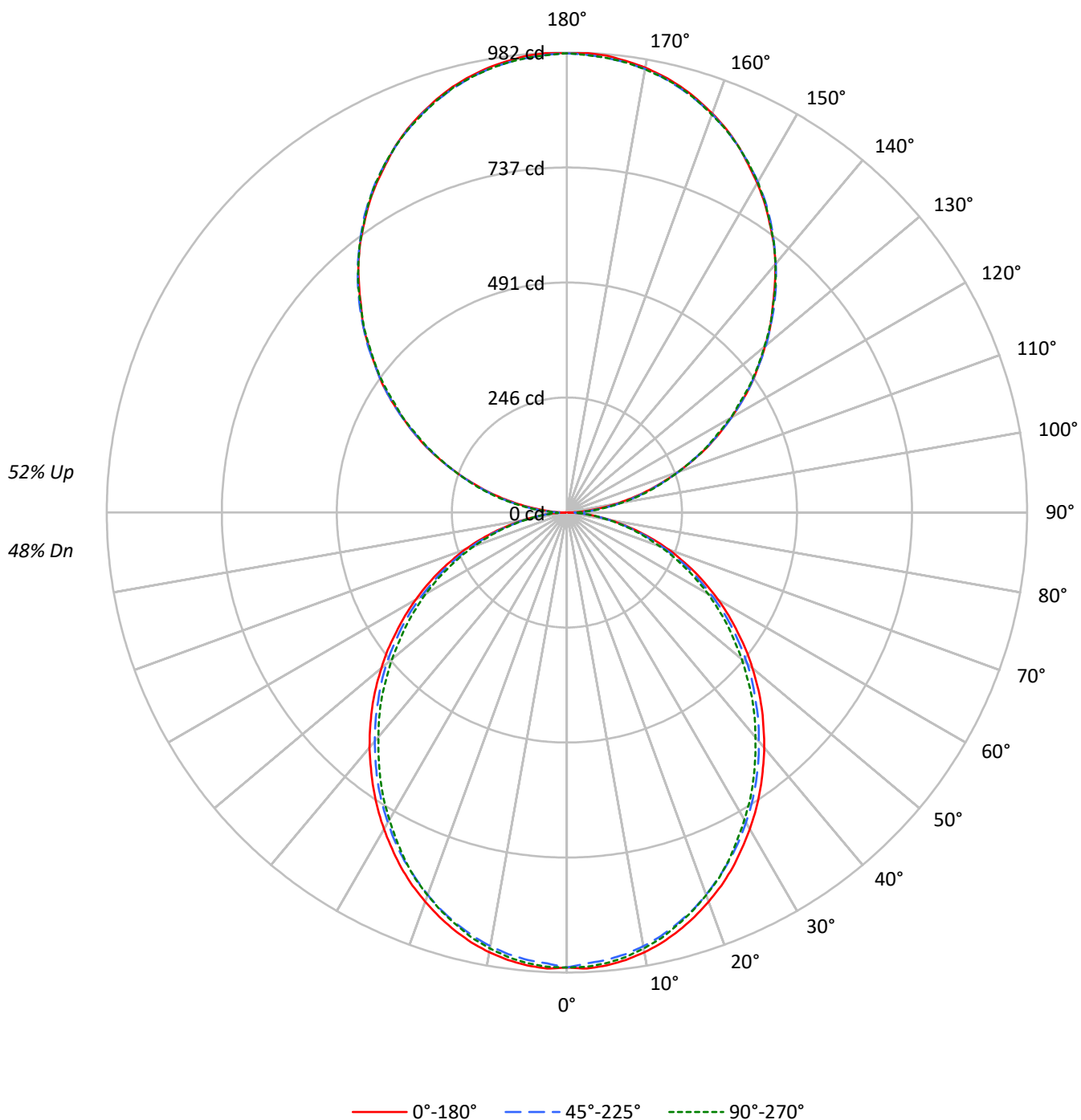
Lumens per Lamp: N/A
Luminaire Lumens: 5215.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
Input Voltage (V):
Input Current (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	50	30	10
RCR																				
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40	40	40
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34	34	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29	29	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	25	21	21	21
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22	19	19	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17	17	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13	13	13
10	47	35	27	23	43	32	26	21	28	23	19	24	19	16	20	16	14	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7920	7920	7920
5°	7927	7692	7702
10°	7860	7479	7426
15°	7747	7225	7116
20°	7603	6951	6794
25°	7441	6660	6449
30°	7246	6347	6069
35°	7043	6026	5701
40°	6832	5680	5310
45°	6611	5333	4946
50°	6367	4997	4541
55°	6100	4605	4140
60°	5828	4175	3721
65°	5516	3730	3249
70°	5156	3196	2744
75°	4619	2575	2199
80°	3936	1862	1546
85°	3056	1038	832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	1.8
10°-20°	257.9	4.9
20°-30°	379.6	7.3
30°-40°	441.2	8.5
40°-50°	441.2	8.5
50°-60°	385.9	7.4
60°-70°	286.5	5.5
70°-80°	162.5	3.1
80°-90°	48.7	0.9
90°-100°	63.9	1.2
100°-110°	191.4	3.7
110°-120°	325.1	6.2
120°-130°	428.8	8.2
130°-140°	481.6	9.2
140°-150°	473.3	9.1
150°-160°	398.1	7.6
160°-170°	264.9	5.1
170°-180°	92.8	1.8
0°-30°	729.1	14.0
0°-40°	1170.3	22.4
0°-60°	1997.4	38.3
0°-90°	2495.1	47.8
90°-120°	580.4	11.1
90°-150°	1964.1	37.7
90°-180°	2720.0	52.2
0°-180°	5215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	967	959	967	966	92
15°	924	921	909	914	911	260
25°	837	831	820	821	818	385
35°	720	714	704	698	694	450
45°	588	582	570	561	559	453
55°	444	442	431	422	417	398
65°	301	297	290	282	278	298
75°	160	156	152	149	149	170
85°	42	42	40	40	40	45
90°	2	11	17	21	23	6
95°	46	52	58	60	60	49
105°	177	177	180	183	185	187
115°	330	330	329	328	328	326
125°	481	481	481	479	478	429
135°	621	626	626	624	622	480
145°	754	757	758	757	755	472
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.3	971.3	971.3	971.3	971.3
2.5°	974.4	972.1	963.5	971.3	970.5
5°	970.5	967.4	958.8	967.4	965.8
7.5°	963.5	960.4	951.1	958.1	957.3
10°	953.4	950.3	940.2	946.4	944.8
12.5°	940.2	937.0	926.1	933.2	930.8
15°	923.8	920.7	909.0	913.7	911.4
17.5°	905.1	901.2	890.3	893.5	891.9
20°	884.1	880.2	868.6	870.9	869.3
22.5°	861.6	856.1	844.4	849.1	846.0
25°	836.6	831.2	820.3	821.1	818.0
27.5°	808.6	803.2	793.1	791.5	787.6
30°	780.6	774.4	764.3	761.2	757.3
32.5°	751.0	745.6	734.7	730.8	726.9
35°	719.9	714.5	703.6	698.1	694.2
37.5°	687.2	682.5	670.9	665.4	660.0
40°	655.3	649.1	637.4	629.6	625.7
42.5°	621.1	618.0	604.7	595.4	593.0
45°	587.6	582.2	569.7	561.1	558.8
47.5°	552.6	548.7	537.0	527.7	521.4
50°	516.8	513.7	502.8	491.9	487.2
52.5°	481.8	477.9	466.2	456.8	450.6
55°	444.4	442.1	431.2	421.8	417.2
57.5°	409.4	407.0	396.1	386.8	382.1
60°	372.8	368.9	358.8	351.8	347.9
62.5°	337.0	333.9	323.0	316.8	312.9
65°	301.2	297.3	289.5	281.7	277.8
67.5°	264.6	261.5	253.7	245.9	245.2
70°	231.1	225.7	219.5	213.2	210.9
72.5°	195.3	189.9	185.2	180.6	178.2
75°	160.3	156.4	152.5	149.4	148.7
77.5°	126.1	124.5	120.6	119.9	117.5
80°	95.7	93.4	91.8	90.3	89.5
82.5°	66.2	65.4	65.4	64.6	63.8
85°	42.0	42.0	40.5	40.5	39.7
87.5°	20.2	19.5	18.7	18.7	18.7
90°	2.3	10.6	16.7	21.2	22.7
92.5°	19.7	29.6	33.4	35.6	36.4
95°	45.5	52.3	57.6	59.9	59.9
97.5°	72.8	78.8	84.9	87.9	87.9
100°	106.1	109.2	116.0	117.5	117.5
102.5°	141.0	141.8	147.8	150.1	150.9
105°	176.6	177.4	180.4	182.7	185.0
107.5°	213.8	214.6	215.3	218.3	217.6
110°	251.7	253.2	252.5	250.9	253.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.1	291.1	289.6	289.6	289.6
115°	330.5	330.5	329.0	328.3	327.5
117.5°	367.7	367.7	366.9	364.7	362.4
120°	404.8	407.9	405.6	401.8	403.3
122.5°	443.5	444.3	443.5	441.2	437.4
125°	481.4	481.4	480.7	479.1	477.6
127.5°	515.5	517.8	516.3	514.8	514.0
130°	551.9	554.2	554.2	552.7	549.7
132.5°	589.1	590.6	589.8	588.3	587.6
135°	620.9	625.5	625.5	623.9	621.7
137.5°	656.5	658.8	660.3	658.1	658.8
140°	692.2	693.7	693.7	692.9	692.2
142.5°	724.8	726.3	725.5	725.5	725.5
145°	754.3	757.4	758.1	757.4	755.1
147.5°	784.7	788.5	787.7	786.9	786.2
150°	812.0	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)