

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: P1033663

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033663
REPORT IS A COMBINATION OF REPORTS P997918 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB35-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

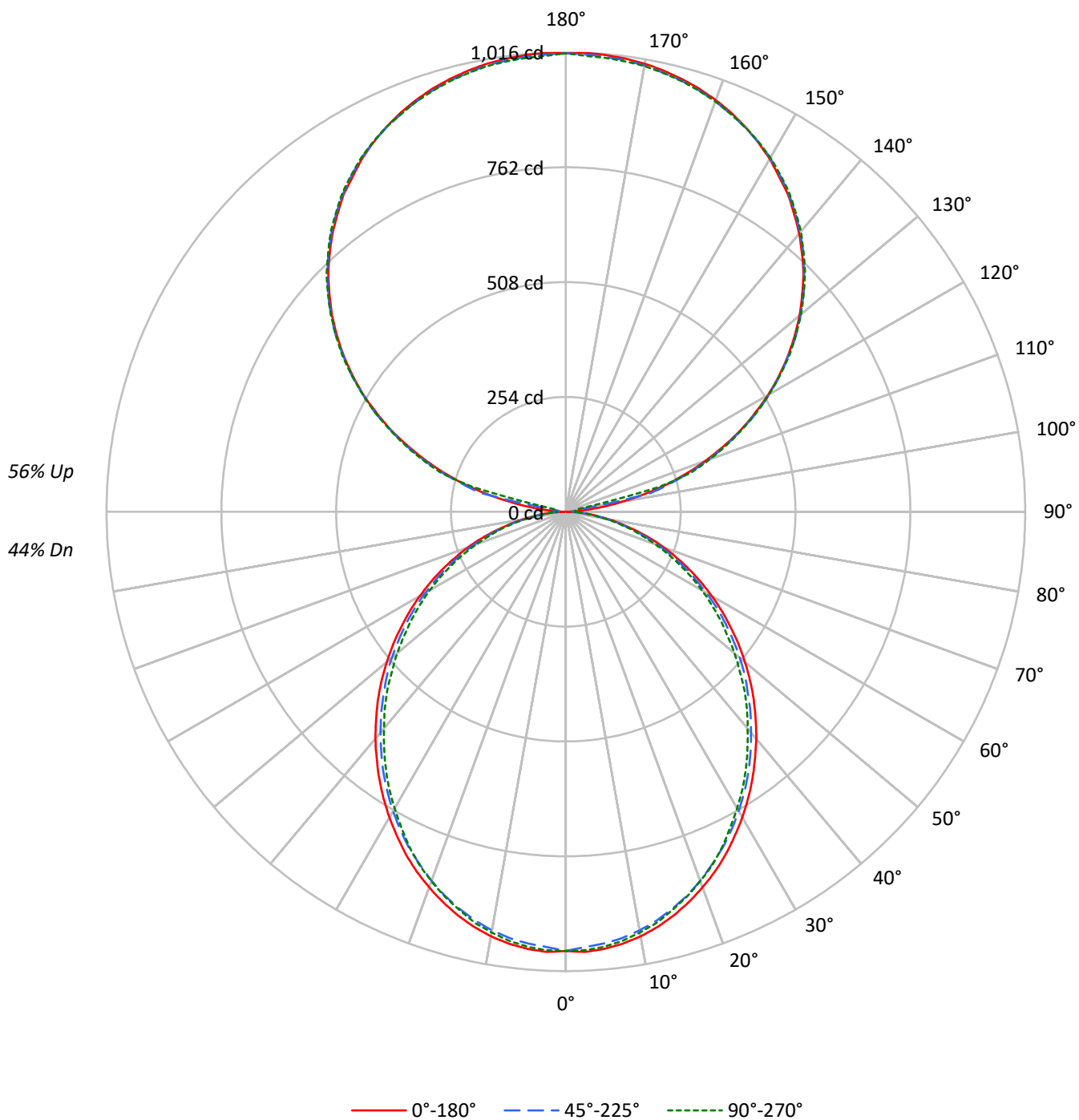
Lumens per Lamp: N/A
Luminaire Lumens: 5632.0 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.6
10°-20°	257.9	4.6
20°-30°	379.6	6.7
30°-40°	441.2	7.8
40°-50°	441.2	7.8
50°-60°	385.9	6.9
60°-70°	286.5	5.1
70°-80°	162.5	2.9
80°-90°	48.7	0.9
90°-100°	33.7	0.6
100°-110°	221.6	3.9
110°-120°	423.2	7.5
120°-130°	537.2	9.5
130°-140°	574.7	10.2
140°-150°	537.4	9.5
150°-160°	433.4	7.7
160°-170°	279.5	5.0
170°-180°	96.3	1.7
0°-30°	729.1	12.9
0°-40°	1170.3	20.8
0°-60°	1997.4	35.5
0°-90°	2495.1	44.3
90°-120°	678.5	12.0
90°-150°	2327.8	41.3
90°-180°	3137.0	55.7
0°-180°	5632.0	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	5
95°	42	16	17	21	22	51
105°	228	233	237	243	216	239
115°	426	428	428	429	429	419
125°	599	602	600	603	604	535
135°	743	742	745	747	748	573
145°	857	859	859	860	861	535
155°	939	940	938	941	939	433
165°	991	987	987	993	986	280
175°	1014	1009	1010	1017	1008	97
180°	1014	1014	1014	1014	1014	

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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°	11.4	9.9	15.9	20.5	20.5
95°	41.7	15.9	16.7	21.2	22.0
97.5°	79.6	96.3	16.7	20.5	21.2
100°	124.3	138.0	33.4	20.5	21.2
102.5°	174.4	183.5	192.6	22.0	22.0
105°	228.2	232.8	236.6	243.4	216.1
107.5°	277.5	279.8	285.1	288.9	291.9
110°	327.6	329.8	334.4	335.9	338.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.1	380.6	382.1	381.4	384.4
115°	426.1	428.4	427.6	429.2	429.2
117.5°	470.9	473.9	476.2	475.4	475.4
120°	516.4	519.4	518.6	520.1	518.6
122.5°	558.8	560.3	561.8	562.6	561.1
125°	599.0	602.0	600.5	602.8	603.6
127.5°	637.7	638.4	642.2	641.5	640.7
130°	674.8	675.6	677.9	678.6	678.6
132.5°	708.9	710.5	713.5	714.3	713.5
135°	743.1	742.3	745.3	746.9	748.4
137.5°	773.4	773.4	777.2	778.7	777.9
140°	803.0	804.5	806.0	808.3	809.0
142.5°	829.5	832.5	833.3	834.8	834.8
145°	856.8	859.1	859.1	859.8	861.3
147.5°	878.0	882.6	881.8	882.6	883.3
150°	901.5	904.6	903.8	903.8	904.6
152.5°	921.2	923.5	922.0	923.5	922.8
155°	939.4	940.2	937.9	941.0	938.7
157.5°	955.4	955.4	952.3	956.1	952.3
160°	969.0	966.7	966.0	970.5	966.0
162.5°	981.1	978.1	977.4	981.9	976.6
165°	991.0	987.2	987.2	993.3	986.5
167.5°	999.3	995.6	994.8	1001.6	994.0
170°	1006.2	1001.6	1002.4	1008.4	1000.9
172.5°	1010.7	1006.2	1006.9	1013.0	1004.7
175°	1013.8	1009.2	1010.0	1016.8	1007.7
177.5°	1016.0	1010.7	1012.2	1018.3	1009.2
180°	1013.8	1013.8	1013.8	1013.8	1013.8

(END OF REPORT)