

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: P1033514

Luminaire Tested: S124DIW-B350D770UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033514
REPORT IS A COMBINATION OF REPORTS P997585 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D770UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

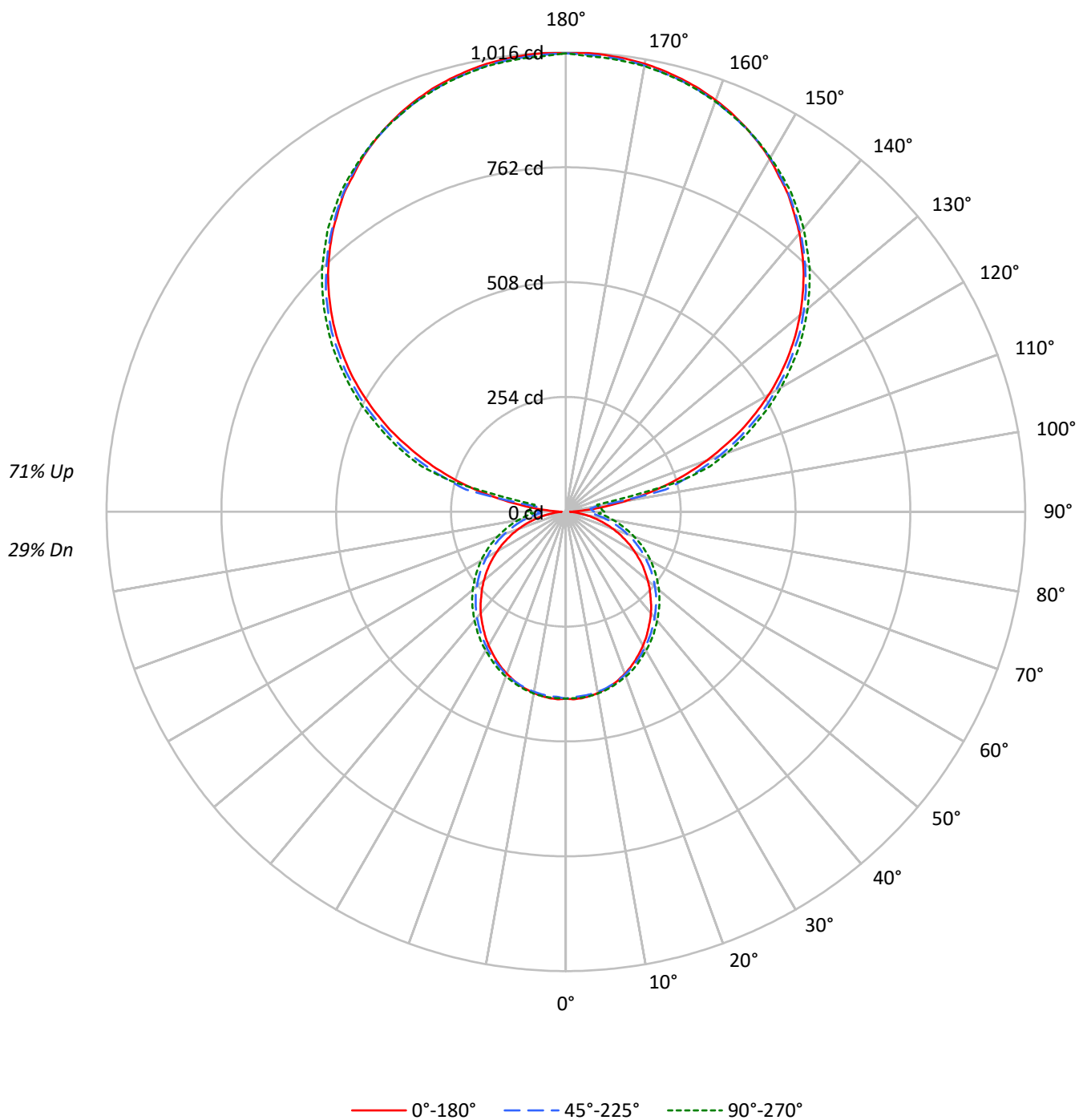
Lumens per Lamp: N/A
Luminaire Lumens: 4548.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37
1	92	88	84	80	83	79	75	72	62	59	57	46	44	43	31	30	30
2	84	76	70	65	75	69	63	59	54	50	47	40	38	35	27	26	24
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	22	19	17	15
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	23	19	16	16	13	12
8	50	38	30	25	45	34	28	23	27	22	19	21	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3164 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.9
10°-20°	112.2	2.5
20°-30°	169.6	3.7
30°-40°	205.2	4.5
40°-50°	217.0	4.8
50°-60°	204.2	4.5
60°-70°	169.4	3.7
70°-80°	118.9	2.6
80°-90°	69.1	1.5
90°-100°	73.6	1.6
100°-110°	251.2	5.5
110°-120°	443.0	9.7
120°-130°	548.4	12.1
130°-140°	579.5	12.7
140°-150°	538.3	11.8
150°-160°	433.4	9.5
160°-170°	279.5	6.1
170°-180°	96.3	2.1
0°-30°	321.0	7.1
0°-40°	526.2	11.6
0°-60°	947.4	20.8
0°-90°	1304.8	28.7
90°-120°	767.7	16.9
90°-150°	2434.0	53.5
90°-180°	3243.0	71.3
0°-180°	4548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	10	36	62	80	86	7
95°	48	37	57	74	79	56
105°	232	246	267	286	262	244
115°	429	435	449	461	464	422
125°	601	603	614	625	628	537
135°	744	743	750	758	763	573
145°	857	859	859	863	866	536
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°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	9.7	36.5	62.5	80.4	85.6
92.5°	18.3	33.0	58.9	76.5	80.2
95°	47.7	37.2	57.0	74.0	78.9
97.5°	85.2	115.3	54.6	70.5	75.3
100°	129.4	155.1	68.6	68.2	72.1
102.5°	179.5	198.8	225.5	66.9	70.6
105°	232.4	246.2	267.1	285.5	261.9
107.5°	281.7	291.8	313.3	328.7	334.9
110°	331.3	340.0	360.8	372.9	378.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.3	389.4	406.2	415.6	422.3
115°	428.9	435.3	449.4	461.1	464.4
117.5°	473.7	479.5	495.6	504.6	508.3
120°	518.7	523.1	535.7	546.5	548.7
122.5°	561.1	562.6	576.6	586.7	588.4
125°	600.9	603.4	613.5	624.6	628.1
127.5°	639.6	639.8	652.8	660.5	662.9
130°	676.2	676.5	686.2	695.3	698.0
132.5°	710.3	711.4	720.0	728.6	730.6
135°	744.0	743.2	749.5	758.5	762.7
137.5°	774.3	773.9	779.5	788.0	789.5
140°	803.9	805.0	806.9	815.2	818.3
142.5°	830.0	833.0	833.3	839.9	841.7
145°	857.3	859.1	859.1	862.6	865.9
147.5°	878.5	882.6	881.8	883.1	885.6
150°	902.0	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)