

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: P1033527

Luminaire Tested: S124DIW-B350D770UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033527
REPORT IS A COMBINATION OF REPORTS P997604 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D770UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

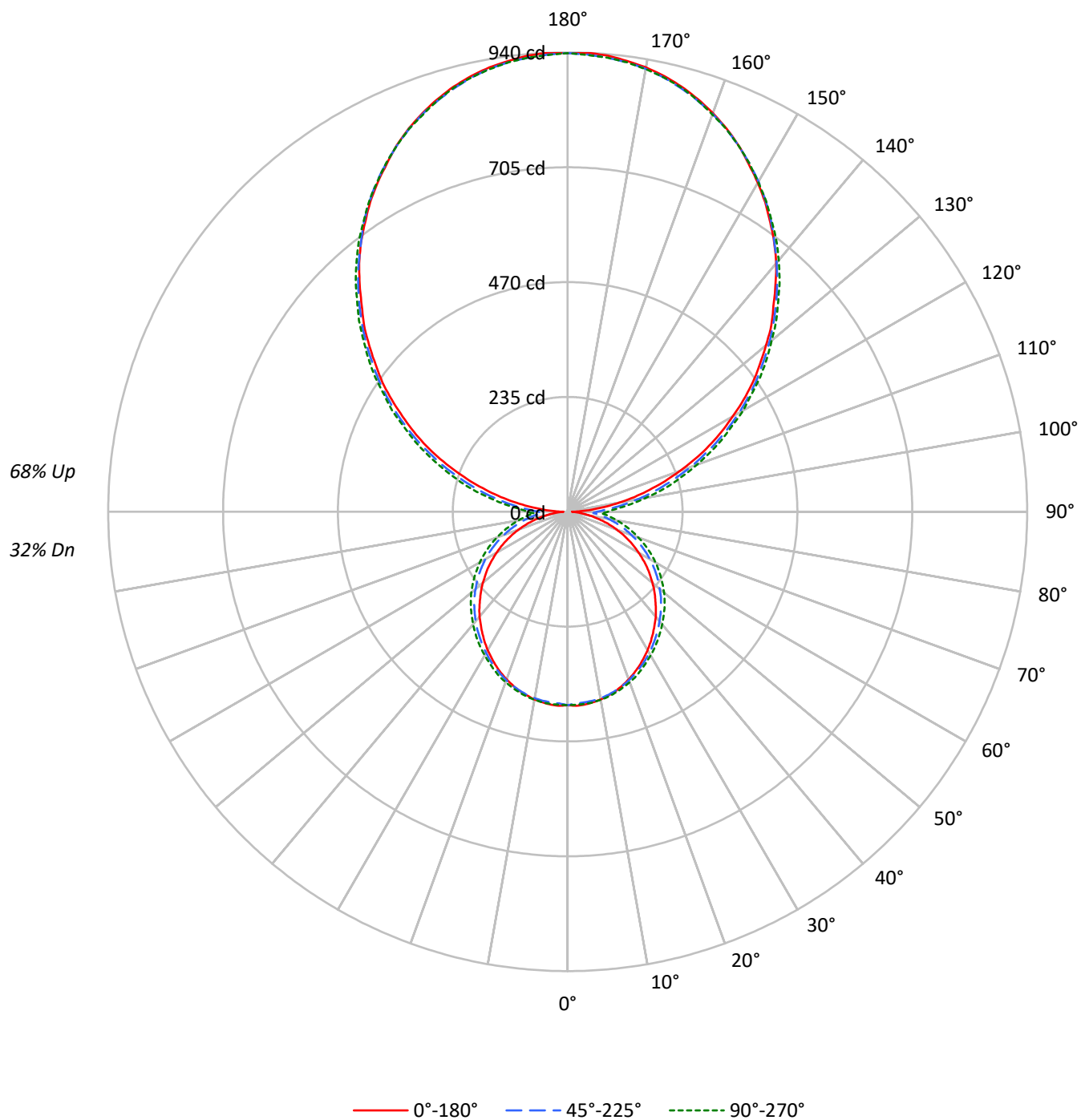
Lumens per Lamp: N/A
Luminaire Lumens: 3954.9 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73		55	55	55		39
1	93	89	85	81	83	80	76	73	63	61	58		48	46	45		34
2	84	77	71	65	76	69	64	59	55	51	48		41	39	37		29
3	77	67	60	54	69	61	54	49	48	44	40		36	33	31		26
4	70	59	51	45	63	53	47	41	42	38	34		32	29	26		23
5	64	53	45	39	57	47	41	35	38	33	29		29	25	22		20
6	59	47	39	33	53	42	35	30	34	29	25		26	22	19		18
7	54	42	34	29	49	38	31	26	31	25	22		23	20	17		17
8	50	38	31	25	45	35	28	23	28	23	19		21	18	15		15
9	47	35	27	22	42	31	25	21	25	20	17		20	16	13		14
10	44	32	25	20	39	29	23	18	23	18	15		18	15	12		13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.9
10°-20°	107.4	2.7
20°-30°	162.4	4.1
30°-40°	196.5	5.0
40°-50°	207.7	5.3
50°-60°	195.5	4.9
60°-70°	162.2	4.1
70°-80°	113.8	2.9
80°-90°	66.2	1.7
90°-100°	99.4	2.5
100°-110°	211.5	5.3
110°-120°	330.3	8.4
120°-130°	421.2	10.6
130°-140°	465.7	11.8
140°-150°	454.1	11.5
150°-160°	381.2	9.6
160°-170°	253.6	6.4
170°-180°	88.8	2.2
0°-30°	307.3	7.8
0°-40°	503.8	12.7
0°-60°	907.0	22.9
0°-90°	1249.3	31.6
90°-120°	641.1	16.2
90°-150°	1982.1	50.1
90°-180°	2706.0	68.4
0°-180°	3954.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	9	35	60	77	82	8
95°	49	70	94	108	112	52
105°	173	183	202	215	221	184
115°	319	323	336	345	347	315
125°	463	462	473	480	481	413
135°	595	600	603	608	609	461
145°	723	725	726	728	727	452
155°	827	827	827	830	827	381
165°	901	899	897	902	899	254
175°	937	933	933	938	933	89
180°	938	938	938	938	938	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	9.3	35.0	59.9	77.0	82.1
92.5°	25.5	50.5	73.1	87.7	92.0
95°	49.3	70.5	93.7	107.8	111.8
97.5°	75.0	93.7	117.6	132.1	136.0
100°	106.5	120.9	144.8	158.1	161.2
102.5°	139.9	150.3	173.0	186.7	190.9
105°	173.1	182.6	201.9	215.2	221.0
107.5°	208.7	216.9	233.1	247.1	249.5
110°	244.5	252.1	267.0	275.7	281.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.8	287.1	300.3	310.1	313.6
115°	319.2	323.1	335.8	344.9	347.3
117.5°	354.7	357.3	369.9	377.0	378.4
120°	389.8	394.0	404.7	410.0	414.9
122.5°	426.8	427.5	438.8	445.4	444.9
125°	462.7	462.2	472.6	479.5	480.8
127.5°	495.4	497.0	504.5	511.0	513.4
130°	529.7	531.5	538.6	545.1	544.8
132.5°	565.3	566.3	570.9	576.9	578.9
135°	595.4	599.7	602.8	608.5	608.9
137.5°	629.5	631.1	634.4	638.9	641.8
140°	663.6	664.5	665.0	670.0	671.6
142.5°	694.3	695.7	694.6	699.5	701.2
145°	722.6	725.1	725.8	727.8	727.3
147.5°	751.6	754.9	754.1	753.8	754.9
150°	777.8	780.3	780.3	780.3	779.5
152.5°	802.0	803.5	804.2	806.4	804.2
155°	827.4	827.4	826.7	829.6	826.7
157.5°	849.2	847.8	847.8	849.9	847.8
160°	868.1	867.4	866.6	868.8	865.2
162.5°	885.5	883.3	882.6	887.0	883.3
165°	900.8	898.6	897.1	901.5	898.6
167.5°	913.1	910.2	910.2	914.5	910.2
170°	923.3	919.6	920.4	924.7	919.6
172.5°	930.5	927.6	927.6	932.7	927.6
175°	937.0	933.4	932.7	937.8	932.7
177.5°	940.0	936.3	936.3	941.4	935.6
180°	938.5	938.5	938.5	938.5	938.5

(END OF REPORT)