

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: P1033509

Luminaire Tested: S124DIW-B350D770UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033509
REPORT IS A COMBINATION OF REPORTS P997577 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D770UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

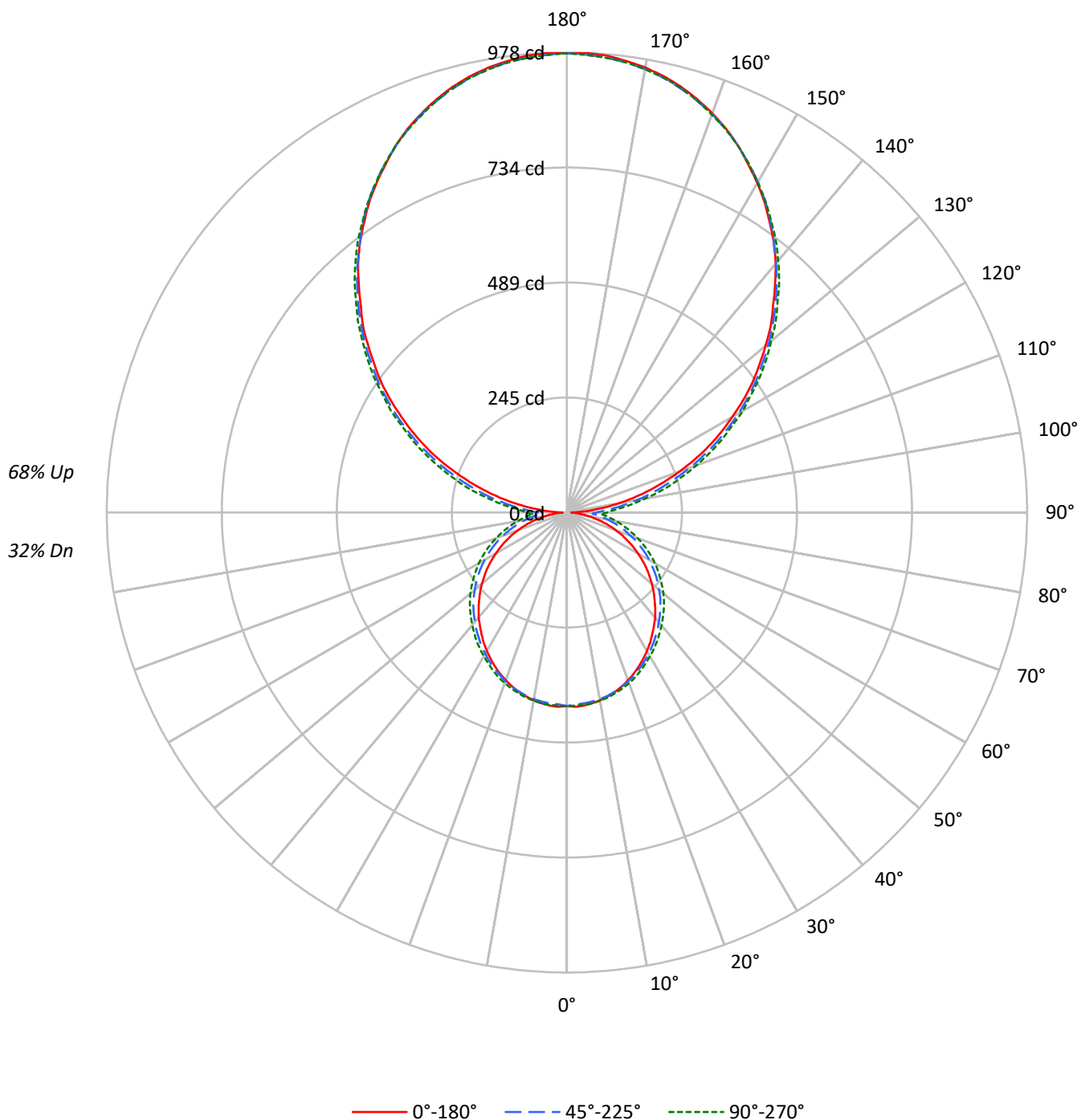
Lumens per Lamp: N/A
Luminaire Lumens: 4114.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033509

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-D1

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	89	85	81	83	80	76	73	63	61	58	48	46	45	34	33	32
2	84	77	71	65	76	69	64	59	55	51	48	41	39	37	29	28	26
3	77	67	60	54	69	61	54	49	48	44	40	36	33	31	26	24	22
4	70	59	51	45	63	53	47	41	42	38	34	32	29	26	23	21	19
5	64	53	45	39	57	47	41	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	21	25	20	17	20	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	18	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3164 cd/sqm

TEST NUMBER: P1033509

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.9
10°-20°	111.7	2.7
20°-30°	168.9	4.1
30°-40°	204.4	5.0
40°-50°	216.0	5.3
50°-60°	203.3	4.9
60°-70°	168.7	4.1
70°-80°	118.4	2.9
80°-90°	68.8	1.7
90°-100°	103.4	2.5
100°-110°	220.0	5.3
110°-120°	343.6	8.4
120°-130°	438.2	10.7
130°-140°	484.5	11.8
140°-150°	472.4	11.5
150°-160°	396.5	9.6
160°-170°	263.8	6.4
170°-180°	92.4	2.2
0°-30°	319.6	7.8
0°-40°	524.0	12.7
0°-60°	943.3	22.9
0°-90°	1299.3	31.6
90°-120°	667.0	16.2
90°-150°	2062.0	50.1
90°-180°	2815.0	68.4
0°-180°	4114.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	10	36	62	80	85	8
95°	51	73	98	112	116	54
105°	180	190	210	224	230	191
115°	332	336	349	359	361	328
125°	481	481	492	499	500	429
135°	619	624	627	633	634	479
145°	752	754	755	757	757	471
155°	861	861	860	863	860	396
165°	937	935	933	938	935	264
175°	975	971	970	976	970	93
180°	976	976	976	976	976	

TEST NUMBER: P1033509

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	9.7	36.4	62.2	80.1	85.4
92.5°	26.5	52.4	76.1	91.3	95.6
95°	51.3	73.3	97.5	112.2	116.4
97.5°	78.0	97.4	122.4	137.4	141.5
100°	110.8	125.8	150.5	164.5	167.7
102.5°	145.5	156.4	179.9	194.2	198.7
105°	180.0	190.1	210.1	223.9	229.8
107.5°	217.0	225.7	242.5	257.1	259.6
110°	254.4	262.3	277.7	286.8	292.8

TEST NUMBER: P1033509

CATALOG NUMBER: S124DIW-B350D770UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.1	298.7	312.4	322.5	326.2
115°	332.0	336.1	349.4	358.7	361.2
117.5°	369.0	371.7	384.9	392.2	393.6
120°	405.5	409.9	421.1	426.5	431.7
122.5°	444.0	444.8	456.4	463.5	462.9
125°	481.3	480.9	491.6	498.9	500.1
127.5°	515.3	517.1	524.8	531.6	534.0
130°	551.1	552.9	560.3	567.1	566.8
132.5°	588.1	589.1	593.9	600.2	602.3
135°	619.3	623.8	627.0	632.9	633.5
137.5°	654.8	656.7	660.0	664.6	667.7
140°	690.3	691.4	691.8	697.0	698.6
142.5°	722.4	723.9	722.6	727.7	729.5
145°	751.8	754.3	755.1	757.1	756.7
147.5°	782.0	785.3	784.5	784.3	785.3
150°	809.2	811.7	811.7	811.7	811.0
152.5°	834.4	835.9	836.6	838.9	836.6
155°	860.8	860.8	860.0	863.1	860.0
157.5°	883.4	881.9	881.9	884.2	881.9
160°	903.1	902.3	901.6	903.8	900.1
162.5°	921.2	918.9	918.2	922.7	918.9
165°	937.1	934.8	933.3	937.8	934.8
167.5°	949.9	946.9	946.9	951.4	946.9
170°	960.5	956.7	957.4	962.0	956.7
172.5°	968.0	965.0	965.0	970.3	965.0
175°	974.8	971.0	970.3	975.6	970.3
177.5°	977.8	974.0	974.0	979.3	973.3
180°	976.3	976.3	976.3	976.3	976.3

(END OF REPORT)