

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: P1033511

Luminaire Tested: S124DIW-B350D770UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033511
REPORT IS A COMBINATION OF REPORTS P997580 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

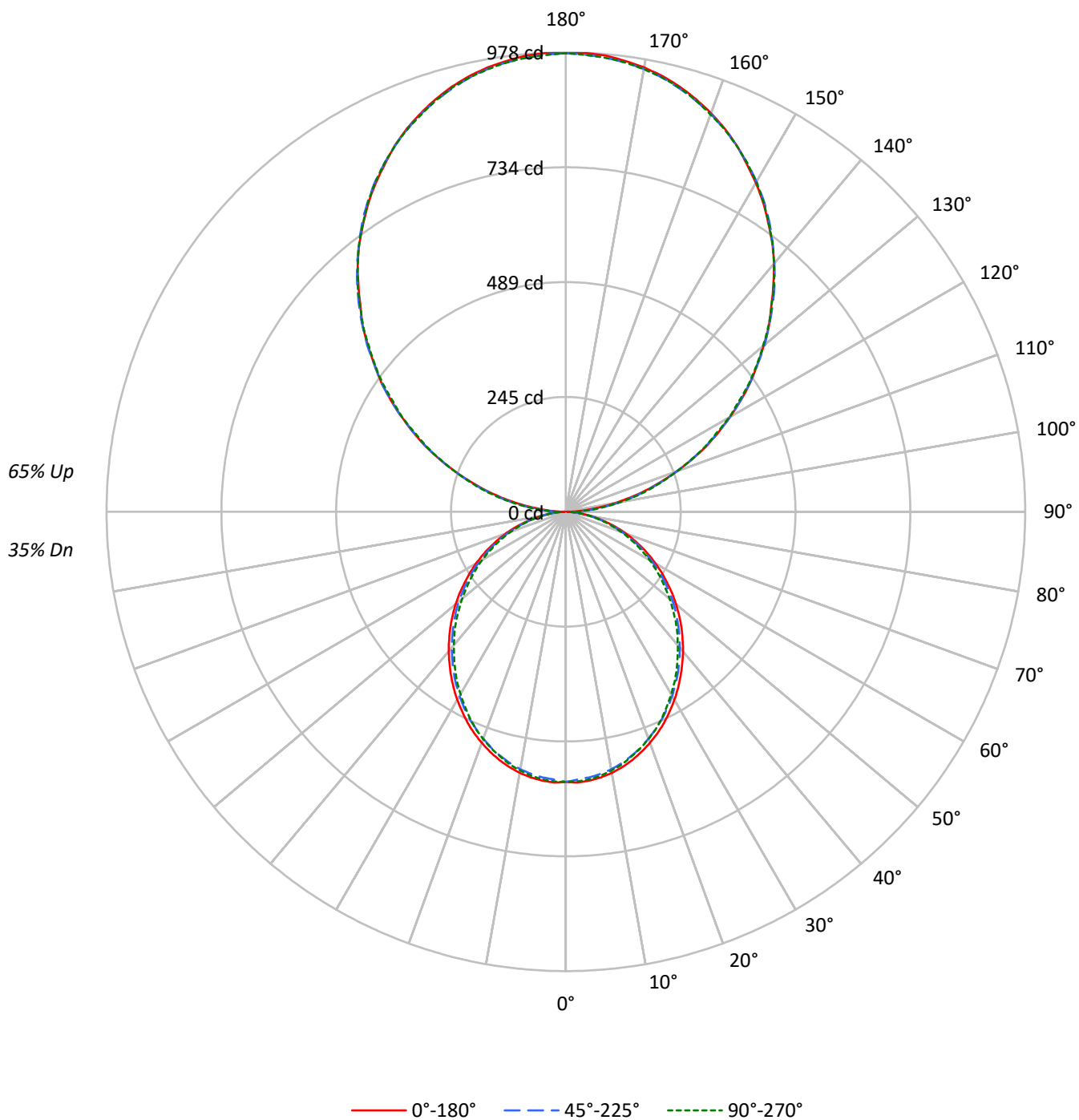
Lumens per Lamp: N/A
Luminaire Lumens: 4187.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43
1	94	90	86	83	85	82	78	76	66	64	62	51	50	48	38	37	36
2	86	79	73	68	77	71	66	62	58	54	51	45	42	40	33	32	30
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	27	26
4	72	61	53	48	64	56	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	32	28	25	24	21	19
6	60	49	41	35	54	44	37	32	36	31	27	29	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.3
10°-20°	152.7	3.6
20°-30°	224.7	5.4
30°-40°	261.2	6.2
40°-50°	261.2	6.2
50°-60°	228.5	5.5
60°-70°	169.6	4.1
70°-80°	96.2	2.3
80°-90°	29.7	0.7
90°-100°	63.6	1.5
100°-110°	190.6	4.6
110°-120°	323.8	7.7
120°-130°	427.1	10.2
130°-140°	479.7	11.5
140°-150°	471.4	11.3
150°-160°	396.5	9.5
160°-170°	263.8	6.3
170°-180°	92.4	2.2
0°-30°	431.6	10.3
0°-40°	692.9	16.5
0°-60°	1182.6	28.2
0°-90°	1478.1	35.3
90°-120°	578.0	13.8
90°-150°	1956.2	46.7
90°-180°	2709.0	64.7
0°-180°	4187.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	2	11	17	21	23	5
95°	45	52	57	60	60	49
105°	176	177	180	182	184	187
115°	329	329	328	327	326	325
125°	480	480	479	477	476	427
135°	618	623	623	621	619	478
145°	751	754	755	754	752	470
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	2.3	10.6	16.6	21.1	22.7
92.5°	19.6	29.4	33.2	35.5	36.2
95°	45.3	52.1	57.4	59.7	59.7
97.5°	72.5	78.5	84.6	87.6	87.6
100°	105.7	108.7	115.5	117.0	117.0
102.5°	140.4	141.2	147.2	149.5	150.3
105°	175.9	176.7	179.7	182.0	184.2
107.5°	212.9	213.7	214.4	217.5	216.7
110°	250.7	252.2	251.4	249.9	252.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.9	289.9	288.4	288.4	288.4
115°	329.2	329.2	327.7	326.9	326.2
117.5°	366.2	366.2	365.5	363.2	360.9
120°	403.2	406.2	404.0	400.2	401.7
122.5°	441.7	442.5	441.7	439.5	435.7
125°	479.5	479.5	478.7	477.2	475.7
127.5°	513.5	515.7	514.2	512.7	511.9
130°	549.7	552.0	552.0	550.5	547.4
132.5°	586.7	588.2	587.4	585.9	585.2
135°	618.4	622.9	622.9	621.4	619.2
137.5°	653.9	656.2	657.7	655.4	656.2
140°	689.4	690.9	690.9	690.1	689.4
142.5°	721.9	723.4	722.6	722.6	722.6
145°	751.3	754.3	755.1	754.3	752.1
147.5°	781.5	785.3	784.5	783.8	783.0
150°	808.7	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)