

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: P1033528

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033528
REPORT IS A COMBINATION OF REPORTS P997606 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-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

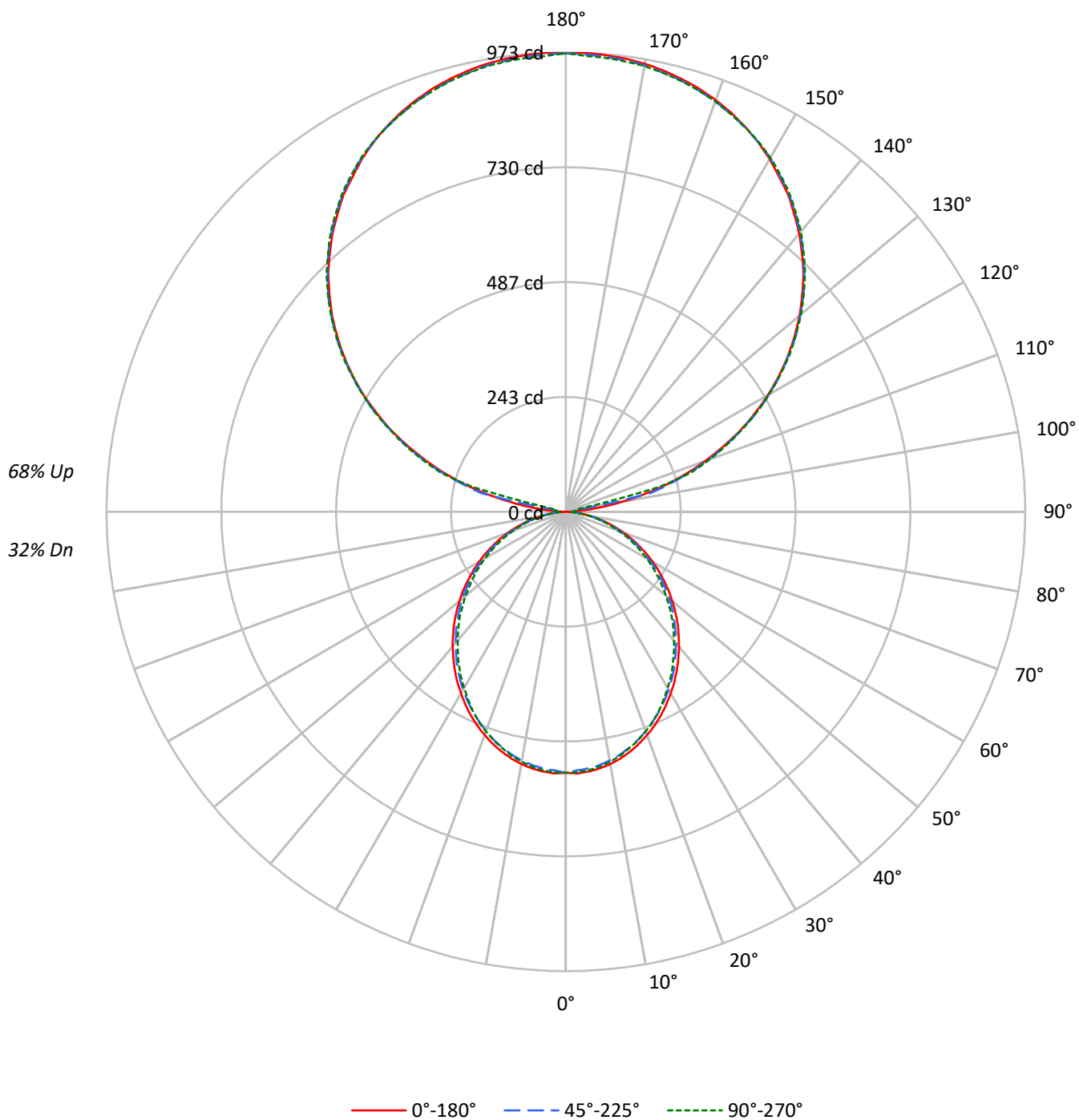
Lumens per Lamp: N/A
Luminaire Lumens: 4425.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	82	84	81	78	75	64	62	60	49	48	46	35	34	33
2	85	78	72	67	77	71	65	61	56	53	50	43	41	39	31	29	28
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	24	22	21
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.2
10°-20°	146.8	3.3
20°-30°	216.1	4.9
30°-40°	251.2	5.7
40°-50°	251.1	5.7
50°-60°	219.6	5.0
60°-70°	163.1	3.7
70°-80°	92.5	2.1
80°-90°	28.5	0.6
90°-100°	32.2	0.7
100°-110°	212.2	4.8
110°-120°	405.3	9.2
120°-130°	514.5	11.6
130°-140°	550.4	12.4
140°-150°	514.6	11.6
150°-160°	415.0	9.4
160°-170°	267.6	6.0
170°-180°	92.2	2.1
0°-30°	415.0	9.4
0°-40°	666.1	15.1
0°-60°	1136.9	25.7
0°-90°	1421.0	32.1
90°-120°	649.7	14.7
90°-150°	2229.1	50.4
90°-180°	3004.0	67.9
0°-180°	4425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	2	10	16	20	22	4
95°	40	15	16	20	21	49
105°	219	223	226	233	207	229
115°	408	410	410	411	411	402
125°	574	576	575	577	578	512
135°	712	711	714	715	717	548
145°	820	823	823	823	825	513
155°	900	900	898	901	899	415
165°	949	945	945	951	945	268
175°	971	966	967	974	965	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	2.2	10.2	16.0	20.3	21.8
92.5°	10.9	9.4	15.2	19.6	19.6
95°	39.9	15.2	16.0	20.3	21.1
97.5°	76.2	92.2	16.0	19.6	20.3
100°	119.1	132.2	31.9	19.6	20.3
102.5°	167.0	175.7	184.4	21.1	21.1
105°	218.6	222.9	226.5	233.1	206.9
107.5°	265.8	267.9	273.0	276.6	279.5
110°	313.7	315.9	320.2	321.7	323.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	360.1	364.5	366.0	365.2	368.1
115°	408.1	410.2	409.5	411.0	411.0
117.5°	450.9	453.8	456.0	455.3	455.3
120°	494.5	497.4	496.7	498.1	496.7
122.5°	535.1	536.6	538.0	538.8	537.3
125°	573.6	576.5	575.1	577.3	578.0
127.5°	610.7	611.4	615.0	614.3	613.6
130°	646.2	647.0	649.1	649.9	649.9
132.5°	678.9	680.4	683.3	684.0	683.3
135°	711.6	710.9	713.8	715.2	716.7
137.5°	740.6	740.6	744.3	745.7	745.0
140°	768.9	770.4	771.8	774.0	774.8
142.5°	794.4	797.3	798.0	799.4	799.4
145°	820.5	822.7	822.7	823.4	824.9
147.5°	840.8	845.2	844.5	845.2	845.9
150°	863.3	866.2	865.5	865.5	866.2
152.5°	882.2	884.4	882.9	884.4	883.7
155°	899.6	900.4	898.2	901.1	898.9
157.5°	914.9	914.9	912.0	915.6	912.0
160°	928.0	925.8	925.1	929.4	925.1
162.5°	939.6	936.7	935.9	940.3	935.2
165°	949.0	945.4	945.4	951.2	944.7
167.5°	957.0	953.4	952.6	959.2	951.9
170°	963.5	959.2	959.9	965.7	958.5
172.5°	967.9	963.5	964.3	970.1	962.1
175°	970.8	966.4	967.2	973.7	965.0
177.5°	973.0	967.9	969.3	975.2	966.4
180°	970.8	970.8	970.8	970.8	970.8

(END OF REPORT)