

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: P1033673

Luminaire Tested: S124DIW-B575D770UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033673
REPORT IS A COMBINATION OF REPORTS P997933 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

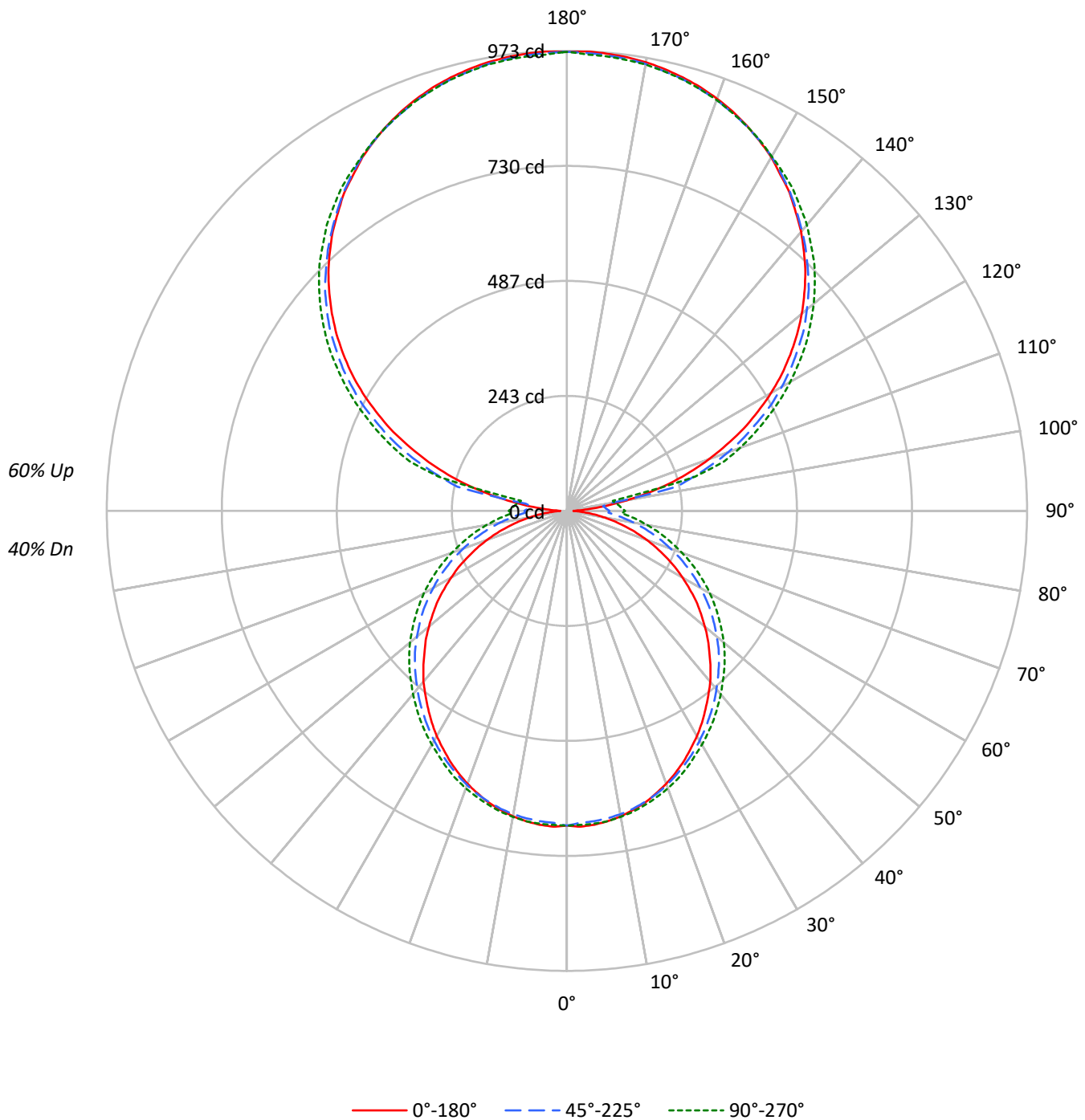
Lumens per Lamp: N/A
Luminaire Lumens: 5275.0 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 47.2
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: P1033673

CATALOG NUMBER: S124DIW-B575D770UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033673

CATALOG NUMBER: S124DIW-B575D770UB50-4F0-XX-W2A-D

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	78	75	67	64	62	53	51	50	40	39	38
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	24	22
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	37	31	36	30	26	29	25	22	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5427	5427	5427
5°	5442	5285	5295
10°	5406	5182	5167
15°	5356	5065	5022
20°	5281	4938	4881
25°	5197	4798	4729
30°	5105	4660	4575
35°	5001	4518	4437
40°	4918	4383	4294
45°	4796	4255	4168
50°	4691	4111	4036
55°	4583	3972	3883
60°	4416	3798	3738
65°	4230	3611	3565
70°	4007	3397	3364
75°	3694	3160	3173
80°	3340	2916	2975
85°	2874	2673	2811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4796 cd/sqm

TEST NUMBER: P1033673

CATALOG NUMBER: S124DIW-B575D770UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.2
10°-20°	180.7	3.4
20°-30°	273.2	5.2
30°-40°	330.5	6.3
40°-50°	349.4	6.6
50°-60°	328.8	6.2
60°-70°	272.9	5.2
70°-80°	191.5	3.6
80°-90°	110.0	2.1
90°-100°	96.5	1.8
100°-110°	259.8	4.9
110°-120°	437.2	8.3
120°-130°	532.4	10.1
130°-140°	558.1	10.6
140°-150°	516.2	9.8
150°-160°	415.0	7.9
160°-170°	267.6	5.1
170°-180°	92.2	1.7
0°-30°	516.9	9.8
0°-40°	847.4	16.1
0°-60°	1525.6	28.9
0°-90°	2099.9	39.8
90°-120°	793.5	15.0
90°-150°	2400.2	45.5
90°-180°	3175.0	60.2
0°-180°	5275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	664	659	665	664	63
15°	639	639	637	644	643	180
25°	584	589	591	599	600	269
35°	511	520	528	538	540	320
45°	426	440	455	467	471	329
55°	334	350	372	387	391	298
65°	231	255	280	299	305	229
75°	128	156	187	208	215	136
85°	40	71	104	127	134	41
90°	14	52	90	116	123	10
95°	50	50	81	105	113	57
105°	225	244	276	301	281	236
115°	413	421	444	462	468	406
125°	577	579	596	612	618	515
135°	713	712	720	734	740	550
145°	821	823	823	828	832	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	

TEST NUMBER: P1033673

CATALOG NUMBER: S124DIW-B575D770UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	668.5	666.3	660.3	665.5	664.8
5°	666.3	664.0	658.8	664.8	664.0
7.5°	661.8	660.3	655.8	662.5	661.8
10°	655.8	655.1	651.4	658.1	657.3
12.5°	647.6	647.6	645.4	651.4	651.4
15°	638.7	639.4	637.2	643.9	643.2
17.5°	626.8	629.0	628.2	635.0	634.2
20°	614.1	616.3	617.1	624.5	624.5
22.5°	599.9	602.9	604.4	611.9	613.3
25°	584.3	588.7	591.0	599.2	599.9
27.5°	567.1	573.8	576.8	584.3	585.0
30°	550.0	556.0	561.2	569.4	570.9
32.5°	531.4	538.8	544.8	554.5	556.0
35°	511.2	520.2	527.6	538.1	540.3
37.5°	491.1	501.6	510.5	520.9	523.2
40°	471.7	481.4	491.9	503.0	506.0
42.5°	449.4	460.6	473.2	485.9	488.1
45°	426.3	440.4	454.6	467.3	471.0
47.5°	404.7	418.8	435.2	447.9	452.4
50°	380.8	397.2	413.6	428.5	433.0
52.5°	357.0	373.4	392.7	407.7	412.1
55°	333.9	349.5	371.9	386.8	391.3
57.5°	307.8	327.2	348.8	366.7	370.4
60°	282.5	301.8	326.4	343.6	349.5
62.5°	257.9	279.5	304.1	321.2	327.2
65°	231.0	254.9	280.2	298.8	304.8
67.5°	205.7	231.0	257.9	276.5	282.5
70°	179.6	204.9	233.3	253.4	258.6
72.5°	154.3	180.4	210.9	230.3	236.2
75°	128.2	155.8	187.1	207.9	214.6
77.5°	103.6	132.7	165.4	186.3	193.8
80°	81.2	111.0	143.8	166.2	172.2
82.5°	58.9	90.2	123.0	146.1	152.8
85°	39.5	70.8	104.3	126.7	134.1
87.5°	24.6	55.1	87.9	109.6	116.3
90°	14.1	51.9	89.8	115.7	123.2
92.5°	22.1	46.7	84.5	109.8	115.7
95°	49.6	49.5	80.8	105.3	112.8
97.5°	85.1	122.8	77.1	100.1	107.5
100°	127.3	159.8	88.5	96.4	102.3
102.5°	175.2	200.3	237.3	93.4	99.4
105°	225.3	244.5	275.7	300.9	280.7
107.5°	272.5	287.3	318.5	340.7	348.8
110°	319.7	332.3	362.7	381.3	389.4

TEST NUMBER: P1033673

CATALOG NUMBER: S124DIW-B575D770UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.3	378.7	404.8	420.3	429.2
115°	412.6	421.4	444.5	462.4	467.6
117.5°	455.4	462.7	487.3	502.3	508.2
120°	498.2	503.4	524.3	540.6	545.1
122.5°	538.8	540.3	561.8	577.6	581.3
125°	576.6	578.7	596.0	612.3	617.5
127.5°	613.7	613.6	632.1	644.9	649.4
130°	648.4	648.5	662.5	676.7	681.2
132.5°	681.1	681.9	693.7	707.1	710.9
135°	713.1	712.4	720.5	733.8	739.8
137.5°	742.1	741.3	748.0	760.6	763.6
140°	770.4	771.1	773.3	785.2	789.7
142.5°	795.1	798.0	798.0	807.6	810.6
145°	821.2	822.7	822.7	827.9	832.4
147.5°	841.5	845.2	844.5	845.9	849.6
150°	864.0	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)