

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: P1033674

Luminaire Tested: S124DIW-B575D770UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033674
REPORT IS A COMBINATION OF REPORTS P997934 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-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

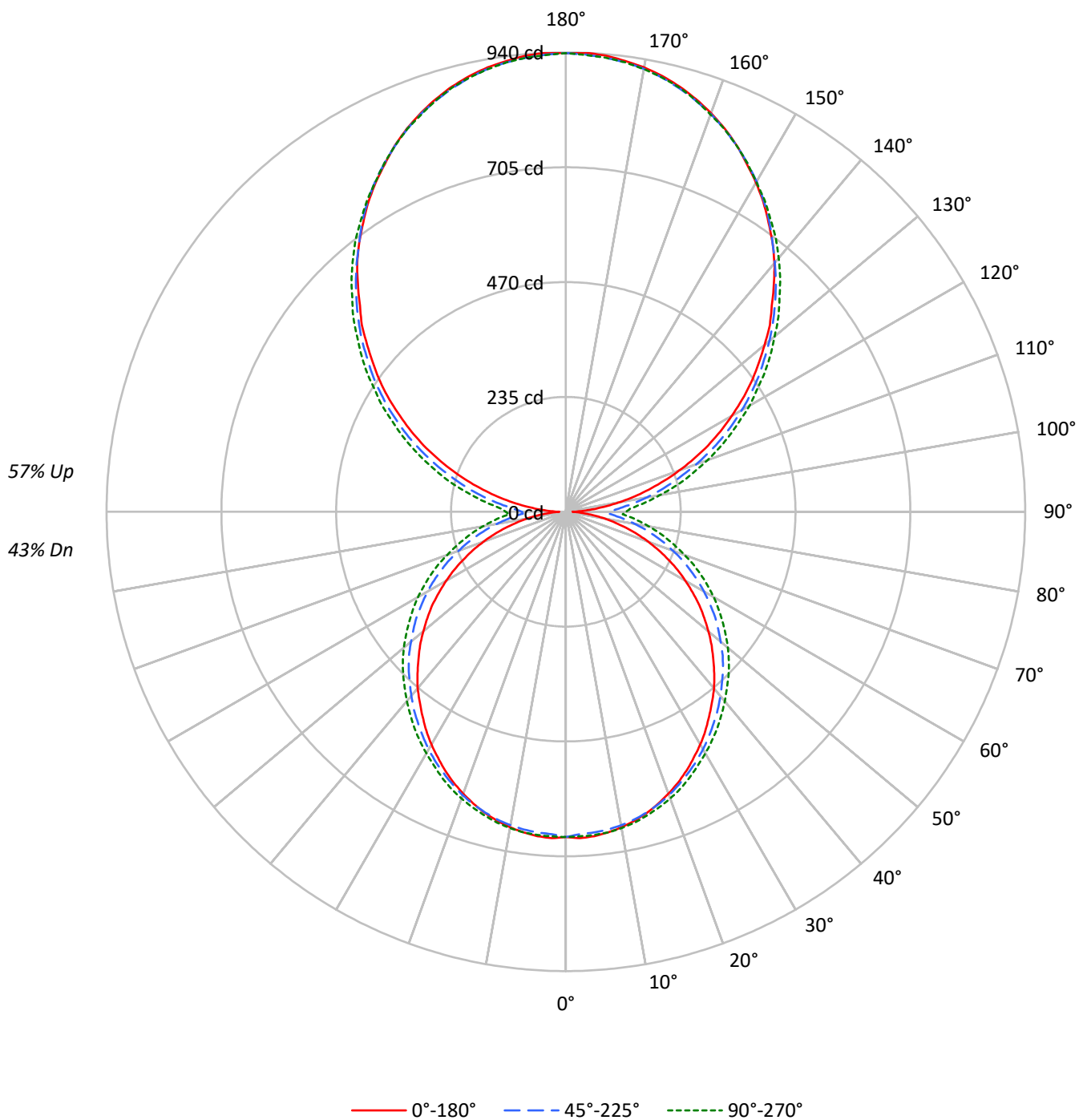
Lumens per Lamp: N/A
Luminaire Lumens: 4875.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	68	66	63	55	53	51	43	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.3
10°-20°	180.7	3.7
20°-30°	273.2	5.6
30°-40°	330.5	6.8
40°-50°	349.4	7.2
50°-60°	328.8	6.7
60°-70°	272.9	5.6
70°-80°	191.5	3.9
80°-90°	110.0	2.3
90°-100°	125.5	2.6
100°-110°	230.8	4.7
110°-120°	343.2	7.0
120°-130°	428.5	8.8
130°-140°	468.8	9.6
140°-150°	454.7	9.3
150°-160°	381.2	7.8
160°-170°	253.6	5.2
170°-180°	88.8	1.8
0°-30°	516.9	10.6
0°-40°	847.4	17.4
0°-60°	1525.6	31.3
0°-90°	2099.9	43.1
90°-120°	699.5	14.3
90°-150°	2051.5	42.1
90°-180°	2775.0	56.9
0°-180°	4875.0	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	11
95°	53	84	120	142	149	55
105°	176	191	222	243	251	187
115°	321	328	350	366	370	317
125°	464	463	481	494	497	414
135°	596	600	606	616	618	461
145°	723	725	726	730	730	453
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°	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°	30.1	65.6	101.2	124.3	130.9
95°	53.2	84.4	120.0	142.3	149.0
97.5°	78.6	106.1	142.4	164.7	171.4
100°	109.8	132.1	167.7	189.3	194.5
102.5°	143.2	160.3	194.4	216.0	222.7
105°	175.8	191.4	221.9	242.7	250.9
107.5°	211.4	224.8	251.6	273.1	277.6
110°	247.0	258.8	284.2	299.9	308.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.9	292.9	316.1	332.4	338.4
115°	321.0	327.7	350.0	365.7	370.2
117.5°	356.5	360.9	382.6	396.1	399.8
120°	391.3	396.5	415.9	427.2	434.5
122.5°	428.3	429.0	448.4	461.2	462.8
125°	463.9	463.1	481.1	493.7	496.8
127.5°	496.6	497.9	511.4	523.4	527.9
130°	530.6	532.1	544.0	555.9	557.5
132.5°	566.2	566.9	575.1	586.3	590.1
135°	596.0	600.3	605.5	616.0	618.3
137.5°	630.1	631.4	635.9	644.9	649.3
140°	664.2	664.8	665.6	674.6	677.6
142.5°	694.6	696.0	694.6	702.8	705.8
145°	722.9	725.1	725.8	729.6	730.4
147.5°	751.9	754.9	754.1	754.1	756.4
150°	778.1	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)