

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: P1033655

Luminaire Tested: S124DIW-B575D770UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033655
REPORT IS A COMBINATION OF REPORTS P997906 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

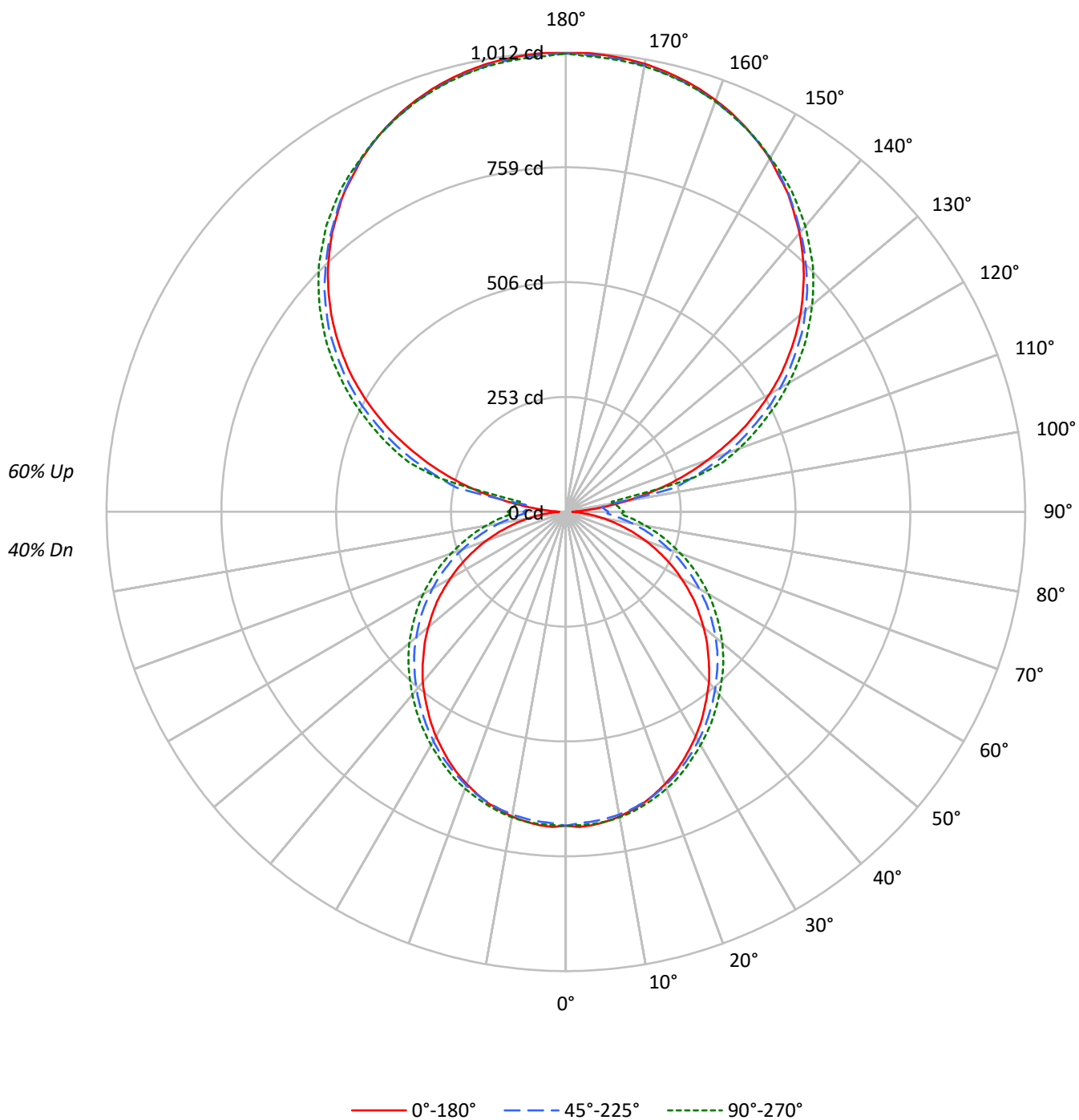
Lumens per Lamp: N/A
Luminaire Lumens: 5485.0 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	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°	5642	5642	5642
5°	5658	5495	5505
10°	5621	5387	5372
15°	5568	5266	5221
20°	5490	5133	5075
25°	5403	4988	4917
30°	5307	4845	4756
35°	5200	4698	4613
40°	5114	4557	4465
45°	4986	4424	4334
50°	4877	4274	4196
55°	4765	4129	4037
60°	4591	3949	3887
65°	4399	3754	3706
70°	4165	3531	3498
75°	3841	3285	3299
80°	3475	3032	3092
85°	2991	2780	2924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4986 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	1.2
10°-20°	187.8	3.4
20°-30°	284.0	5.2
30°-40°	343.6	6.3
40°-50°	363.2	6.6
50°-60°	341.9	6.2
60°-70°	283.7	5.2
70°-80°	199.1	3.6
80°-90°	114.3	2.1
90°-100°	100.3	1.8
100°-110°	270.2	4.9
110°-120°	454.6	8.3
120°-130°	553.7	10.1
130°-140°	580.4	10.6
140°-150°	536.8	9.8
150°-160°	431.6	7.9
160°-170°	278.3	5.1
170°-180°	95.9	1.7
0°-30°	537.4	9.8
0°-40°	881.0	16.1
0°-60°	1586.1	28.9
0°-90°	2183.2	39.8
90°-120°	825.1	15.0
90°-150°	2496.0	45.5
90°-180°	3302.0	60.2
0°-180°	5485.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	693	690	685	691	690	66
15°	664	665	662	669	669	187
25°	608	612	614	623	624	280
35°	532	541	549	559	562	333
45°	443	458	473	486	490	343
55°	347	363	387	402	407	309
65°	240	265	291	311	317	238
75°	133	162	194	216	223	142
85°	41	74	108	132	140	43
90°	15	54	93	120	128	11
95°	52	52	84	109	117	59
105°	234	254	287	313	292	246
115°	429	438	462	481	486	423
125°	600	602	620	637	642	536
135°	742	741	749	763	769	572
145°	854	856	856	861	866	534
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	691.9	691.9	691.9	691.9	691.9
2.5°	695.0	692.7	686.5	691.9	691.1
5°	692.7	690.4	684.9	691.1	690.4
7.5°	688.0	686.5	681.8	688.8	688.0
10°	681.8	681.1	677.2	684.2	683.4
12.5°	673.3	673.3	671.0	677.2	677.2
15°	664.0	664.8	662.5	669.4	668.7
17.5°	651.6	653.9	653.2	660.1	659.4
20°	638.4	640.8	641.5	649.3	649.3
22.5°	623.7	626.8	628.4	636.1	637.7
25°	607.5	612.1	614.4	623.0	623.7
27.5°	589.6	596.6	599.7	607.5	608.2
30°	571.8	578.0	583.4	592.0	593.5
32.5°	552.4	560.2	566.4	576.5	578.0
35°	531.5	540.8	548.6	559.4	561.7
37.5°	510.6	521.4	530.7	541.6	543.9
40°	490.5	500.5	511.4	523.0	526.1
42.5°	467.2	478.8	492.0	505.2	507.5
45°	443.2	457.9	472.6	485.8	489.7
47.5°	420.7	435.4	452.5	465.7	470.3
50°	395.9	413.0	430.0	445.5	450.2
52.5°	371.1	388.2	408.3	423.8	428.5
55°	347.1	363.4	386.6	402.1	406.8
57.5°	320.0	340.1	362.6	381.2	385.1
60°	293.7	313.8	339.4	357.2	363.4
62.5°	268.1	290.6	316.1	333.9	340.1
65°	240.2	265.0	291.3	310.7	316.9
67.5°	213.8	240.2	268.1	287.5	293.7
70°	186.7	213.1	242.5	263.4	268.9
72.5°	160.4	187.5	219.3	239.4	245.6
75°	133.3	161.9	194.5	216.2	223.1
77.5°	107.7	137.9	172.0	193.7	201.5
80°	84.5	115.4	149.5	172.8	179.0
82.5°	61.2	93.8	127.8	151.9	158.8
85°	41.1	73.6	108.5	131.7	139.5
87.5°	25.6	57.3	91.4	113.9	120.9
90°	14.7	54.0	93.3	120.3	128.1
92.5°	22.9	48.5	88.0	114.2	120.4
95°	51.6	51.5	84.0	109.4	117.2
97.5°	88.6	127.7	80.1	104.1	111.8
100°	132.3	166.1	92.1	100.2	106.3
102.5°	182.2	208.3	246.8	97.1	103.3
105°	234.3	254.3	286.7	312.9	291.9
107.5°	283.4	298.7	331.2	354.3	362.8
110°	332.4	345.5	377.2	396.5	405.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.9	393.8	420.9	437.1	446.3
115°	429.0	438.2	462.3	480.9	486.3
117.5°	473.5	481.2	506.7	522.2	528.4
120°	518.1	523.4	545.2	562.2	566.9
122.5°	560.4	561.9	584.3	600.6	604.5
125°	599.6	601.8	619.7	636.7	642.2
127.5°	638.1	638.1	657.4	670.6	675.3
130°	674.3	674.3	688.9	703.7	708.3
132.5°	708.3	709.0	721.3	735.3	739.2
135°	741.5	740.7	749.3	763.2	769.3
137.5°	771.7	771.0	777.9	791.0	794.1
140°	801.1	801.9	804.2	816.5	821.2
142.5°	826.9	829.9	829.8	839.9	843.0
145°	854.1	855.5	855.5	860.9	865.5
147.5°	875.2	878.9	878.2	879.7	883.6
150°	898.6	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)