

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: P1033649

Luminaire Tested: S124DIW-B575D770UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033649
REPORT IS A COMBINATION OF REPORTS P997876 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

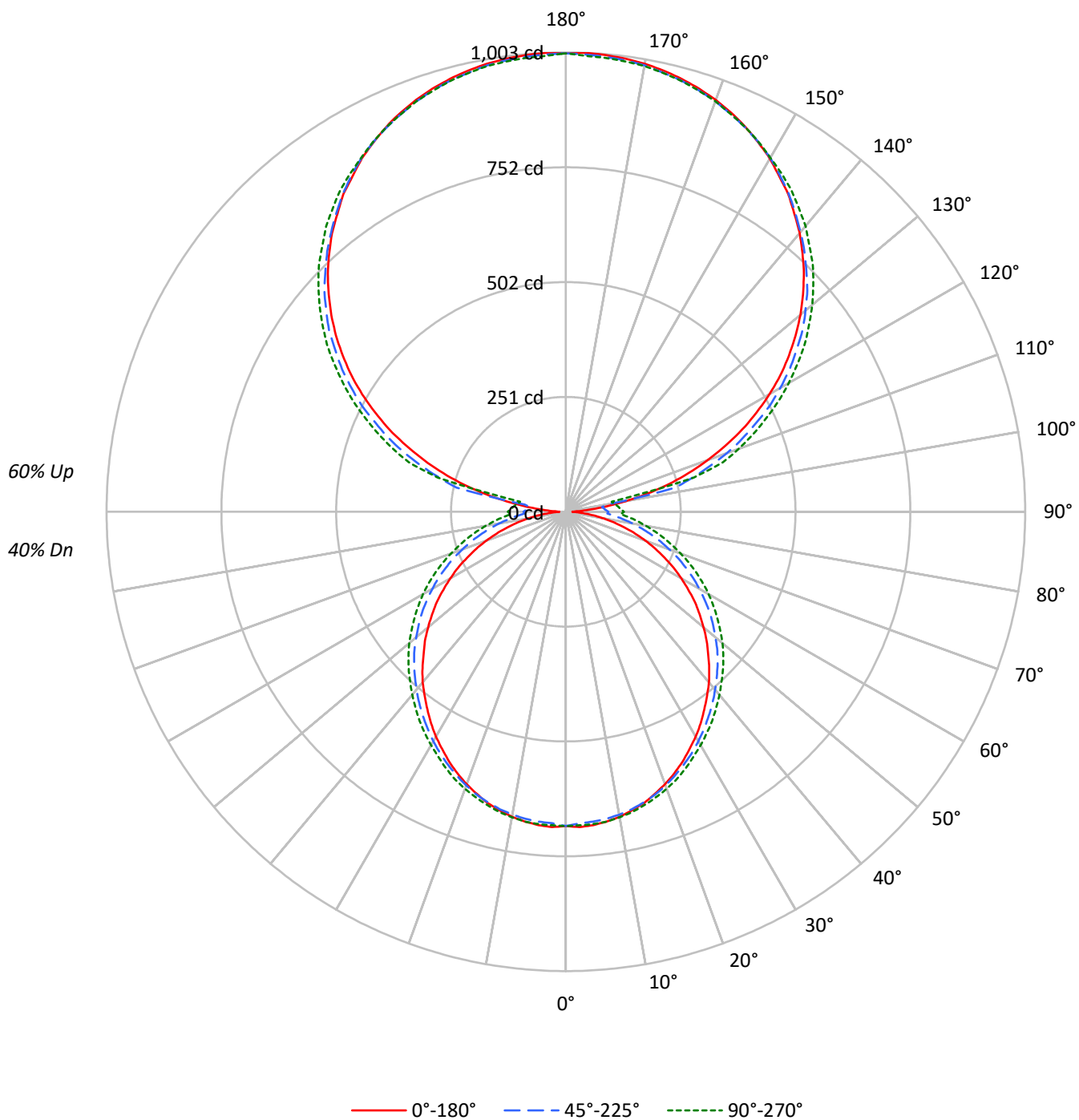
Lumens per Lamp: N/A
Luminaire Lumens: 5438.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	5594	5594	5594
5°	5610	5448	5458
10°	5574	5341	5326
15°	5521	5220	5177
20°	5444	5090	5032
25°	5357	4946	4875
30°	5263	4804	4716
35°	5156	4658	4574
40°	5070	4518	4427
45°	4944	4387	4297
50°	4836	4238	4161
55°	4725	4094	4002
60°	4552	3915	3854
65°	4362	3723	3675
70°	4130	3502	3469
75°	3807	3256	3272
80°	3442	3008	3066
85°	2962	2757	2899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4944 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.2
10°-20°	186.2	3.4
20°-30°	281.6	5.2
30°-40°	340.7	6.3
40°-50°	360.2	6.6
50°-60°	339.0	6.2
60°-70°	281.3	5.2
70°-80°	197.4	3.6
80°-90°	113.4	2.1
90°-100°	99.5	1.8
100°-110°	267.9	4.9
110°-120°	450.7	8.3
120°-130°	548.9	10.1
130°-140°	575.4	10.6
140°-150°	532.1	9.8
150°-160°	427.8	7.9
160°-170°	275.9	5.1
170°-180°	95.1	1.7
0°-30°	532.8	9.8
0°-40°	873.5	16.1
0°-60°	1572.7	28.9
0°-90°	2164.7	39.8
90°-120°	818.0	15.0
90°-150°	2474.5	45.5
90°-180°	3273.0	60.2
0°-180°	5438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	687	684	679	685	684	65
15°	658	659	657	664	663	186
25°	602	607	609	618	618	277
35°	527	536	544	555	557	330
45°	439	454	469	482	486	340
55°	344	360	383	399	403	307
65°	238	263	289	308	314	236
75°	132	161	193	214	221	140
85°	41	73	108	131	138	42
90°	14	54	93	119	127	11
95°	51	51	83	109	116	59
105°	232	252	284	310	289	244
115°	425	434	458	477	482	419
125°	594	597	614	631	637	531
135°	735	734	743	756	763	567
145°	847	848	848	854	858	529
155°	928	928	926	929	927	428
165°	978	975	975	981	974	276
175°	1001	996	997	1004	995	95
180°	1001	1001	1001	1001	1001	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.0	686.0	686.0	686.0	686.0
2.5°	689.1	686.8	680.7	686.0	685.3
5°	686.8	684.5	679.1	685.3	684.5
7.5°	682.2	680.7	676.1	683.0	682.2
10°	676.1	675.3	671.4	678.4	677.6
12.5°	667.6	667.6	665.3	671.4	671.4
15°	658.4	659.2	656.8	663.8	663.0
17.5°	646.1	648.4	647.6	654.5	653.8
20°	633.0	635.3	636.1	643.8	643.8
22.5°	618.4	621.5	623.0	630.7	632.3
25°	602.3	606.9	609.2	617.7	618.4
27.5°	584.6	591.5	594.6	602.3	603.1
30°	567.0	573.1	578.5	586.9	588.5
32.5°	547.8	555.4	561.6	571.6	573.1
35°	527.0	536.2	543.9	554.7	557.0
37.5°	506.3	517.0	526.2	537.0	539.3
40°	486.3	496.3	507.0	518.6	521.6
42.5°	463.3	474.8	487.8	500.9	503.2
45°	439.4	454.0	468.6	481.7	485.5
47.5°	417.2	431.8	448.7	461.7	466.3
50°	392.6	409.5	426.4	441.7	446.4
52.5°	368.0	384.9	404.9	420.2	424.8
55°	344.2	360.3	383.4	398.7	403.3
57.5°	317.3	337.3	359.5	378.0	381.8
60°	291.2	311.1	336.5	354.2	360.3
62.5°	265.8	288.1	313.4	331.1	337.3
65°	238.2	262.7	288.9	308.1	314.2
67.5°	212.0	238.2	265.8	285.0	291.2
70°	185.1	211.3	240.5	261.2	266.6
72.5°	159.0	185.9	217.4	237.4	243.5
75°	132.1	160.6	192.8	214.3	221.3
77.5°	106.8	136.7	170.6	192.1	199.7
80°	83.7	114.5	148.3	171.3	177.5
82.5°	60.7	93.0	126.8	150.6	157.5
85°	40.7	73.0	107.6	130.6	138.3
87.5°	25.4	56.9	90.7	112.9	119.8
90°	14.5	53.5	92.6	119.3	127.0
92.5°	22.7	48.1	87.1	113.2	119.3
95°	51.2	51.0	83.3	108.6	116.2
97.5°	87.8	126.6	79.5	103.2	110.9
100°	131.3	164.6	91.3	99.3	105.5
102.5°	180.7	206.6	244.6	96.2	102.4
105°	232.2	252.1	284.3	310.2	289.4
107.5°	280.9	296.2	328.4	351.3	359.6
110°	329.5	342.5	373.9	393.1	401.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.7	390.4	417.2	433.4	442.5
115°	425.3	434.4	458.3	476.7	482.1
117.5°	469.5	477.1	502.4	517.8	523.9
120°	513.6	518.9	540.4	557.3	561.9
122.5°	555.5	557.0	579.3	595.3	599.2
125°	594.5	596.7	614.4	631.2	636.6
127.5°	632.6	632.6	651.7	664.8	669.4
130°	668.5	668.5	683.0	697.7	702.3
132.5°	702.2	702.9	715.2	729.0	732.8
135°	735.1	734.3	742.7	756.5	762.6
137.5°	765.0	764.3	771.1	784.2	787.2
140°	794.2	795.0	797.2	809.5	814.1
142.5°	819.7	822.7	822.7	832.7	835.7
145°	846.7	848.1	848.1	853.5	858.1
147.5°	867.6	871.3	870.6	872.1	875.9
150°	890.8	893.0	892.3	892.3	893.0
152.5°	909.5	911.8	910.3	911.8	911.0
155°	927.5	928.2	926.0	929.0	926.7
157.5°	943.2	943.2	940.2	943.9	940.2
160°	956.7	954.4	953.7	958.2	953.7
162.5°	968.6	965.7	964.9	969.4	964.2
165°	978.4	974.6	974.6	980.6	973.9
167.5°	986.6	982.9	982.1	988.9	981.4
170°	993.3	988.9	989.6	995.6	988.1
172.5°	997.8	993.3	994.1	1000.1	991.9
175°	1000.8	996.3	997.1	1003.8	994.8
177.5°	1003.1	997.8	999.3	1005.3	996.3
180°	1000.8	1000.8	1000.8	1000.8	1000.8

(END OF REPORT)