

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: P1033650

Luminaire Tested: S124DIW-B575D770UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033650
REPORT IS A COMBINATION OF REPORTS P997877 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

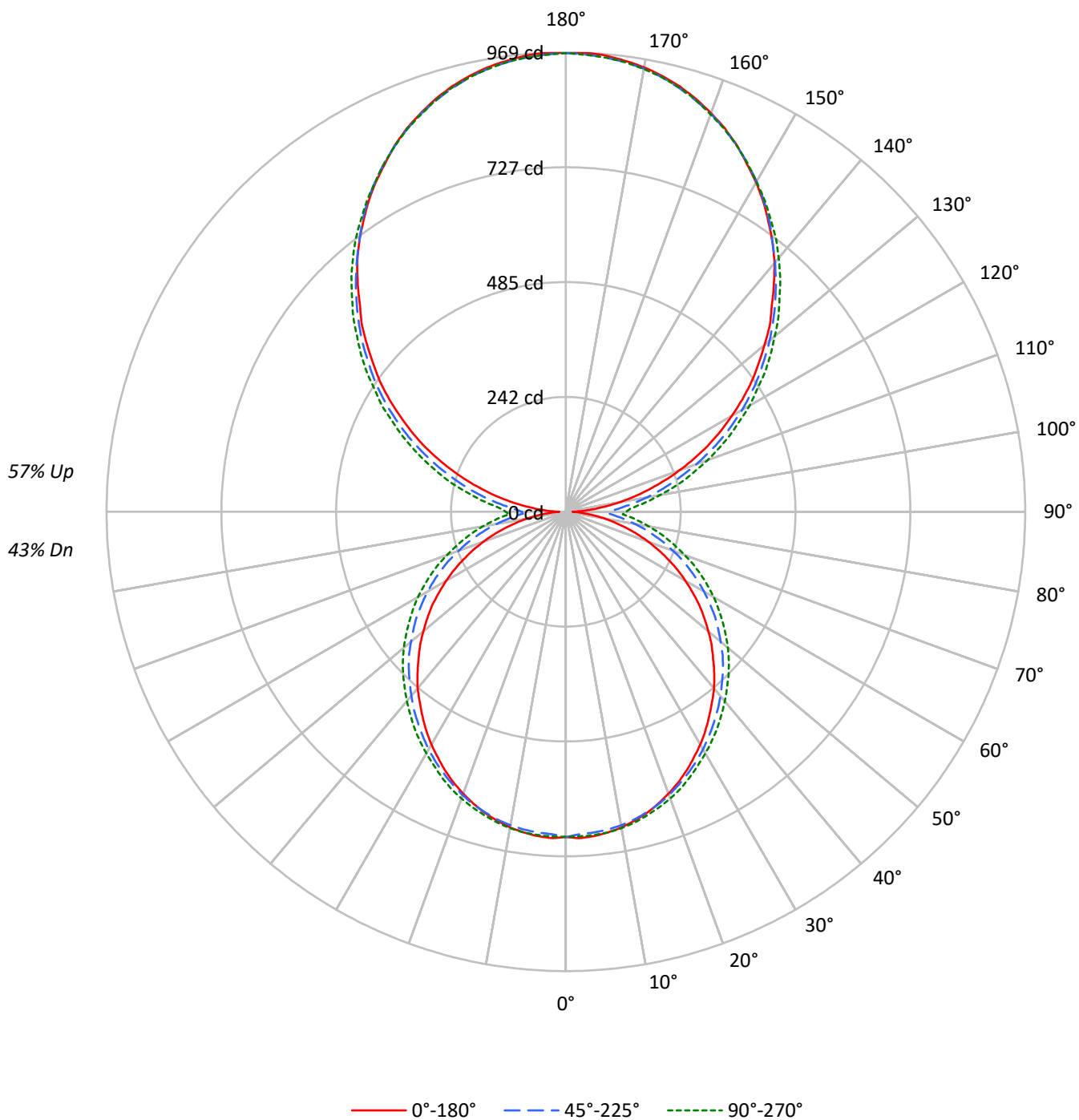
Lumens per Lamp: N/A
Luminaire Lumens: 5026.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.3
10°-20°	186.2	3.7
20°-30°	281.6	5.6
30°-40°	340.7	6.8
40°-50°	360.2	7.2
50°-60°	339.0	6.7
60°-70°	281.3	5.6
70°-80°	197.4	3.9
80°-90°	113.4	2.3
90°-100°	129.3	2.6
100°-110°	238.0	4.7
110°-120°	353.9	7.0
120°-130°	441.8	8.8
130°-140°	483.4	9.6
140°-150°	468.9	9.3
150°-160°	393.0	7.8
160°-170°	261.5	5.2
170°-180°	91.6	1.8
0°-30°	532.8	10.6
0°-40°	873.5	17.4
0°-60°	1572.7	31.3
0°-90°	2164.7	43.1
90°-120°	721.2	14.3
90°-150°	2115.3	42.1
90°-180°	2861.0	56.9
0°-180°	5026.0	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	12
95°	55	87	124	147	154	57
105°	181	197	229	250	259	193
115°	331	338	361	377	382	327
125°	478	478	496	509	512	427
135°	614	619	624	635	638	476
145°	746	748	748	752	753	467
155°	853	853	852	855	852	393
165°	929	926	925	930	926	262
175°	966	962	962	967	962	92
180°	968	968	968	968	968	

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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°	31.0	67.6	104.3	128.2	135.0
95°	54.9	86.9	123.7	146.7	153.6
97.5°	81.0	109.3	146.8	169.8	176.7
100°	113.3	136.2	172.9	195.1	200.5
102.5°	147.7	165.3	200.4	222.7	229.6
105°	181.3	197.4	228.8	250.3	258.7
107.5°	217.9	231.8	259.4	281.6	286.2
110°	254.6	266.9	293.0	309.2	317.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	292.8	302.0	325.8	342.8	348.9
115°	330.9	337.8	360.9	377.1	381.7
117.5°	367.6	372.2	394.5	408.4	412.2
120°	403.4	408.7	428.8	440.4	448.0
122.5°	441.6	442.4	462.4	475.5	477.1
125°	478.3	477.5	496.0	509.1	512.2
127.5°	512.0	513.5	527.4	539.7	544.3
130°	547.1	548.6	560.9	573.3	574.9
132.5°	583.8	584.5	593.0	604.6	608.4
135°	614.4	618.9	624.3	635.1	637.5
137.5°	649.6	651.2	655.6	665.0	669.6
140°	684.8	685.6	686.3	695.5	698.7
142.5°	716.3	717.8	716.2	724.7	727.7
145°	745.5	747.6	748.4	752.2	753.1
147.5°	775.4	778.3	777.6	777.6	779.9
150°	802.3	804.5	804.5	804.5	803.8
152.5°	827.0	828.5	829.2	831.5	829.2
155°	853.2	853.2	852.4	855.4	852.4
157.5°	875.6	874.1	874.1	876.4	874.1
160°	895.1	894.3	893.6	895.8	892.1
162.5°	913.0	910.8	910.0	914.5	910.8
165°	928.8	926.5	925.0	929.5	926.5
167.5°	941.5	938.5	938.5	943.0	938.5
170°	952.0	948.2	949.0	953.5	948.2
172.5°	959.4	956.4	956.4	961.7	956.4
175°	966.2	962.4	961.7	966.9	961.7
177.5°	969.2	965.4	965.4	970.7	964.7
180°	967.7	967.7	967.7	967.7	967.7

(END OF REPORT)