

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: P1033619

Luminaire Tested: S124DIW-B575D470UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033619
REPORT IS A COMBINATION OF REPORTS P997810 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB27-4F0-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

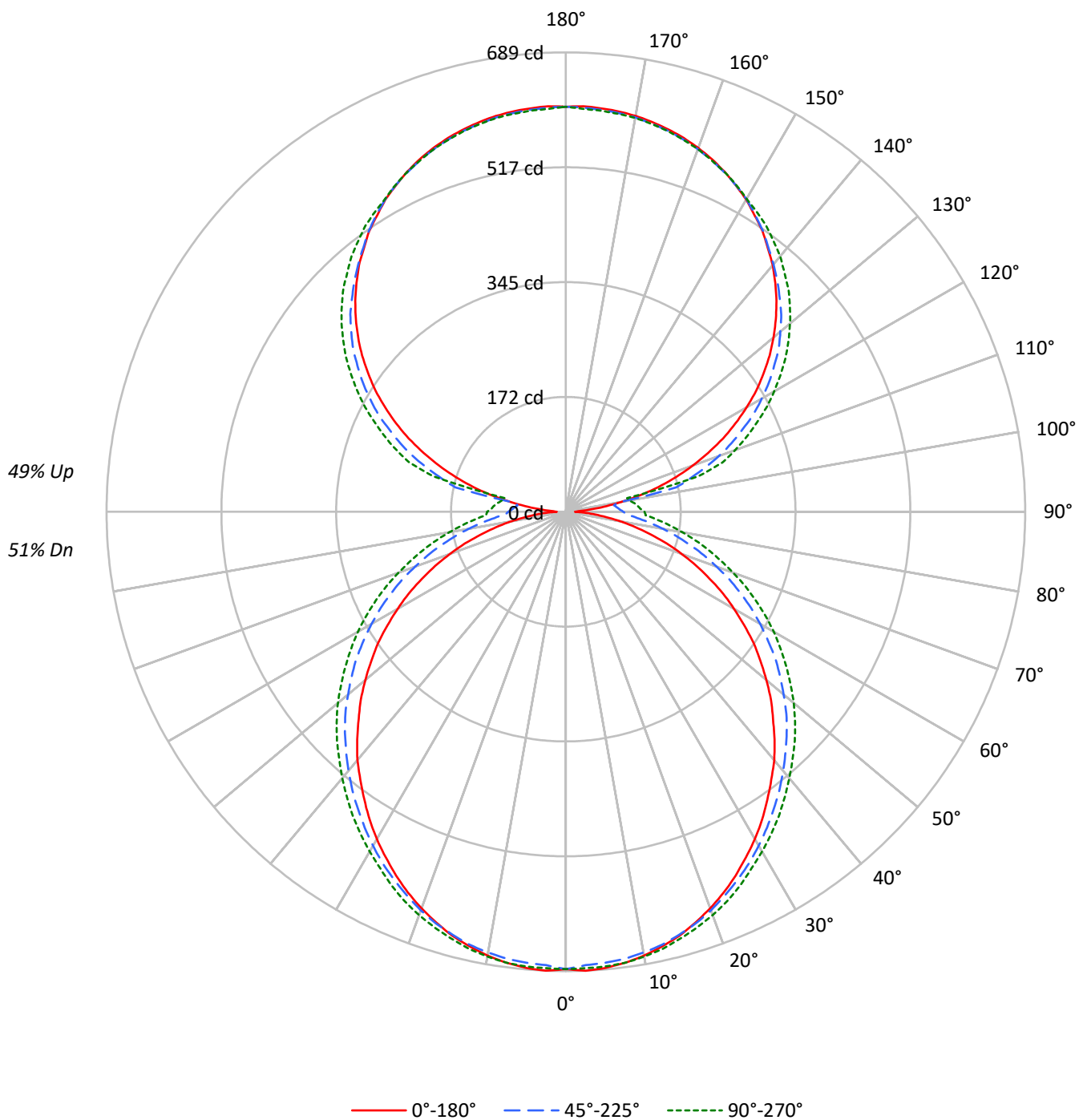
Lumens per Lamp: N/A
Luminaire Lumens: 4220.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
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: P1033619

CATALOG NUMBER: S124DIW-B575D470UB27-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033619

CATALOG NUMBER: S124DIW-B575D470UB27-4F0-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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	48	46
2	88	80	73	68	81	74	68	63	63	58	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	52	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	38	43	37	33	36	32	28	30	26	24
6	61	49	41	35	56	45	38	33	39	33	28	33	28	24	27	23	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	24	21	18
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16
9	49	36	29	24	45	34	27	22	29	24	20	25	20	17	21	17	15
10	46	33	26	21	42	31	24	20	27	21	18	23	19	15	19	16	13

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

TEST NUMBER: P1033619

CATALOG NUMBER: S124DIW-B575D470UB27-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.5
10°-20°	186.2	4.4
20°-30°	281.6	6.7
30°-40°	340.7	8.1
40°-50°	360.2	8.5
50°-60°	339.0	8.0
60°-70°	281.3	6.7
70°-80°	197.4	4.7
80°-90°	112.6	2.7
90°-100°	86.4	2.0
100°-110°	181.9	4.3
110°-120°	286.5	6.8
120°-130°	340.5	8.1
130°-140°	352.4	8.4
140°-150°	323.6	7.7
150°-160°	259.7	6.2
160°-170°	167.5	4.0
170°-180°	57.7	1.4
0°-30°	532.8	12.6
0°-40°	873.5	20.7
0°-60°	1572.7	37.3
0°-90°	2163.9	51.3
90°-120°	554.8	13.1
90°-150°	1571.2	37.2
90°-180°	2056.0	48.7
0°-180°	4220.0	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	49	86	111	118	10
95°	35	45	77	100	108	39
105°	144	162	192	216	206	151
115°	260	268	292	310	316	256
125°	362	363	381	397	402	323
135°	447	446	454	467	472	345
145°	514	515	515	520	524	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

TEST NUMBER: P1033619

CATALOG NUMBER: S124DIW-B575D470UB27-4F0-XX-W2A-D

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°	13.7	49.4	86.1	111.0	118.1
92.5°	18.3	44.3	80.9	105.3	111.4
95°	35.0	44.8	76.8	100.3	107.7
97.5°	56.9	89.2	73.0	95.3	102.6
100°	83.0	111.1	78.4	91.4	97.2
102.5°	113.0	135.4	169.9	87.7	93.9
105°	143.7	161.8	192.5	215.7	205.6
107.5°	173.2	187.7	217.7	239.2	246.3
110°	202.4	214.5	244.2	262.8	270.2



TEST NUMBER: P1033619

CATALOG NUMBER: S124DIW-B575D470UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	230.8	242.7	268.9	285.4	293.4
115°	259.9	268.2	292.4	310.2	315.6
117.5°	286.8	293.2	317.6	333.3	339.4
120°	313.2	317.3	339.2	355.5	360.7
122.5°	338.7	339.6	361.3	377.0	381.5
125°	362.0	363.1	381.4	397.3	402.4
127.5°	385.2	384.9	402.5	415.9	420.8
130°	406.7	406.3	420.0	434.4	439.0
132.5°	427.1	427.2	438.4	451.8	456.0
135°	446.8	446.3	453.5	466.7	472.3
137.5°	464.9	464.2	469.5	482.0	485.4
140°	482.7	482.9	484.5	495.8	500.2
142.5°	497.9	499.7	499.3	508.7	511.7
145°	514.2	514.8	514.8	519.8	523.9
147.5°	526.9	528.9	528.4	529.7	533.1
150°	541.0	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)