

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: P1033638

Luminaire Tested: S124DIW-B575D470UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033638
REPORT IS A COMBINATION OF REPORTS P997859 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

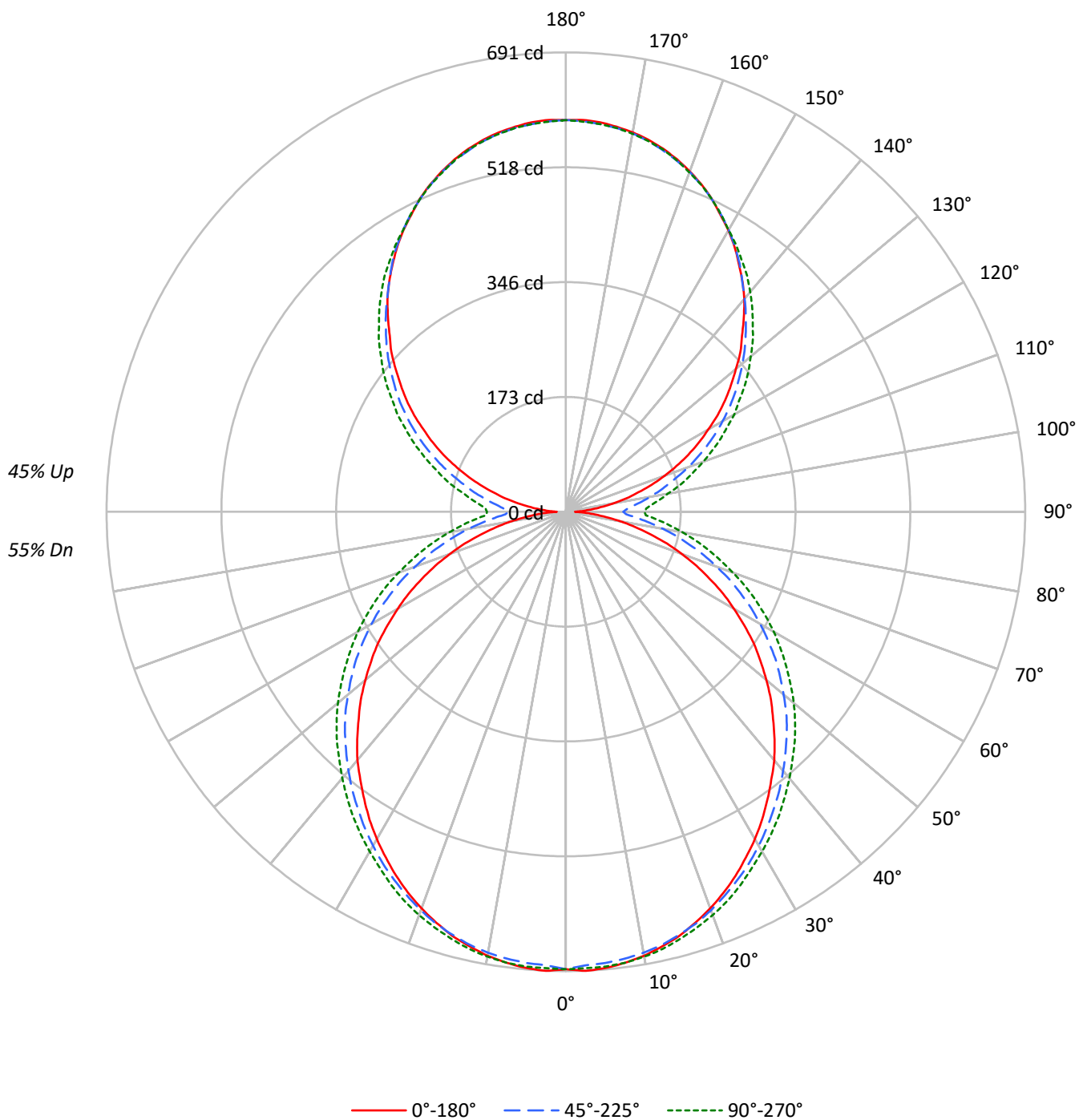
Lumens per Lamp: N/A
Luminaire Lumens: 3982.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86		73	73	73		60
1	98	93	89	85	90	86	82	79	74	71	68		62	60	58		52
2	88	80	74	68	82	75	69	64	64	59	56		54	51	48		45
3	80	70	62	56	74	65	58	53	56	51	46		47	43	40		39
4	73	62	54	47	68	58	50	44	49	44	39		42	37	34		35
5	67	55	47	40	62	51	44	38	44	38	33		37	33	29		31
6	62	49	41	35	57	46	38	33	40	34	29		34	29	25		28
7	57	44	36	30	53	41	34	29	36	30	25		31	26	22		26
8	53	40	32	27	49	38	30	25	33	27	23		28	23	20		24
9	49	37	29	24	46	34	27	23	30	24	20		26	21	18		22
10	46	34	26	21	43	32	25	20	28	22	18		24	19	16		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5611	5611	5611
5°	5627	5465	5475
10°	5590	5358	5342
15°	5538	5236	5192
20°	5460	5105	5047
25°	5373	4961	4890
30°	5279	4818	4730
35°	5172	4672	4587
40°	5086	4532	4440
45°	4959	4400	4310
50°	4850	4251	4173
55°	4738	4106	4014
60°	4565	3927	3865
65°	4375	3733	3686
70°	4143	3512	3479
75°	3818	3266	3281
80°	3455	3016	3075
85°	2969	2765	2907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4959 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.6
10°-20°	186.8	4.7
20°-30°	282.4	7.1
30°-40°	341.7	8.6
40°-50°	361.2	9.1
50°-60°	340.0	8.5
60°-70°	282.1	7.1
70°-80°	198.0	5.0
80°-90°	112.9	2.8
90°-100°	104.8	2.6
100°-110°	164.2	4.1
110°-120°	228.4	5.7
120°-130°	276.3	6.9
130°-140°	297.5	7.5
140°-150°	286.1	7.2
150°-160°	239.3	6.0
160°-170°	159.2	4.0
170°-180°	55.7	1.4
0°-30°	534.4	13.4
0°-40°	876.2	22.0
0°-60°	1577.4	39.6
0°-90°	2170.3	54.5
90°-120°	497.5	12.5
90°-150°	1357.4	34.1
90°-180°	1812.0	45.5
0°-180°	3982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	687	681	687	687	65
15°	660	661	659	666	665	186
25°	604	609	611	620	620	278
35°	529	538	546	556	559	331
45°	441	455	470	483	487	341
55°	345	361	384	400	404	308
65°	239	264	290	309	315	237
75°	132	161	193	215	222	141
85°	41	73	108	131	139	43
90°	14	50	86	111	118	10
95°	37	67	102	124	131	38
105°	113	129	159	180	188	120
115°	203	210	234	250	255	201
125°	292	292	310	324	328	261
135°	375	377	383	394	398	290
145°	454	455	456	460	462	284
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.1	688.1	688.1	688.1	688.1
2.5°	691.2	688.9	682.7	688.1	687.3
5°	688.9	686.6	681.2	687.3	686.6
7.5°	684.2	682.7	678.1	685.0	684.2
10°	678.1	677.3	673.5	680.4	679.6
12.5°	669.6	669.6	667.3	673.5	673.5
15°	660.4	661.1	658.8	665.7	665.0
17.5°	648.0	650.3	649.6	656.5	655.7
20°	634.9	637.2	638.0	645.7	645.7
22.5°	620.3	623.4	624.9	632.6	634.2
25°	604.1	608.7	611.0	619.5	620.3
27.5°	586.4	593.3	596.4	604.1	604.9
30°	568.7	574.8	580.2	588.7	590.2
32.5°	549.4	557.1	563.3	573.3	574.8
35°	528.6	537.8	545.5	556.3	558.6
37.5°	507.8	518.6	527.8	538.6	540.9
40°	487.8	497.8	508.6	520.1	523.2
42.5°	464.6	476.2	489.3	502.4	504.7
45°	440.8	455.4	470.0	483.1	487.0
47.5°	418.4	433.0	450.0	463.1	467.7
50°	393.7	410.7	427.7	443.1	447.7
52.5°	369.1	386.0	406.1	421.5	426.1
55°	345.2	361.4	384.5	399.9	404.5
57.5°	318.2	338.3	360.6	379.1	383.0
60°	292.0	312.1	337.5	355.2	361.4
62.5°	266.6	289.0	314.4	332.1	338.3
65°	238.9	263.5	289.7	309.0	315.2
67.5°	212.7	238.9	266.6	285.9	292.0
70°	185.7	211.9	241.2	262.0	267.4
72.5°	159.5	186.5	218.1	238.1	244.3
75°	132.5	161.0	193.4	215.0	221.9
77.5°	107.1	137.2	171.1	192.6	200.3
80°	84.0	114.8	148.7	171.8	178.0
82.5°	60.9	93.2	127.1	151.0	158.0
85°	40.8	73.2	107.9	131.0	138.7
87.5°	25.4	57.0	90.9	113.3	120.2
90°	13.7	49.6	86.3	111.4	118.5
92.5°	23.4	56.3	91.7	114.6	121.3
95°	37.3	66.8	101.6	123.8	130.8
97.5°	52.9	79.0	114.2	136.1	143.1
100°	72.3	94.1	128.3	150.0	155.4
102.5°	93.3	110.6	143.6	164.9	171.6
105°	113.1	128.9	159.3	179.9	187.5
107.5°	135.4	149.0	176.4	197.5	202.5
110°	157.5	169.2	195.6	212.4	220.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	189.6	214.2	231.1	237.3
115°	203.3	210.3	234.0	250.5	255.4
117.5°	225.6	230.2	252.9	267.7	272.5
120°	247.2	251.3	272.3	285.4	292.5
122.5°	270.5	270.9	291.3	305.3	308.4
125°	292.4	291.6	310.5	324.2	327.9
127.5°	313.0	313.5	328.0	341.0	345.9
130°	334.0	334.6	347.0	359.9	362.8
132.5°	356.4	356.5	365.3	377.5	381.6
135°	374.7	377.4	382.8	394.3	397.5
137.5°	396.1	396.8	400.8	410.9	415.3
140°	417.5	417.7	418.4	428.1	431.4
142.5°	436.4	437.3	436.1	444.6	447.7
145°	454.2	455.2	455.7	459.8	461.5
147.5°	472.4	473.9	473.4	473.8	476.4
150°	488.8	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)