

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: P1033668

Luminaire Tested: S124DIW-B575D770UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033668
REPORT IS A COMBINATION OF REPORTS P997925 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB40-4F0-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

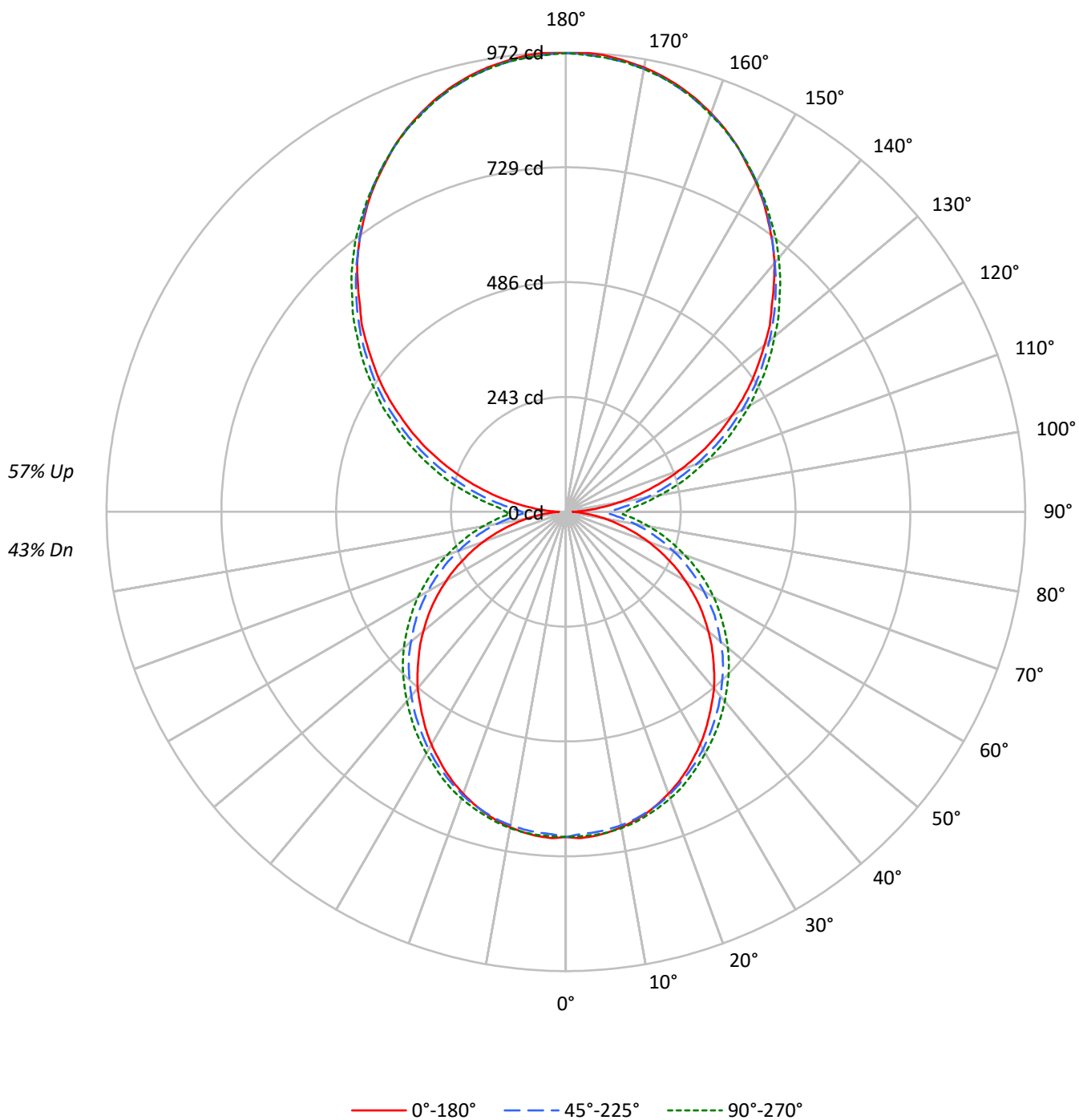
Lumens per Lamp: N/A
Luminaire Lumens: 5041.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.3
10°-20°	186.8	3.7
20°-30°	282.4	5.6
30°-40°	341.7	6.8
40°-50°	361.2	7.2
50°-60°	340.0	6.7
60°-70°	282.1	5.6
70°-80°	198.0	3.9
80°-90°	113.7	2.3
90°-100°	129.7	2.6
100°-110°	238.7	4.7
110°-120°	354.9	7.0
120°-130°	443.1	8.8
130°-140°	484.9	9.6
140°-150°	470.2	9.3
150°-160°	394.2	7.8
160°-170°	262.3	5.2
170°-180°	91.8	1.8
0°-30°	534.4	10.6
0°-40°	876.2	17.4
0°-60°	1577.4	31.3
0°-90°	2171.2	43.1
90°-120°	723.3	14.3
90°-150°	2121.6	42.1
90°-180°	2870.0	56.9
0°-180°	5041.0	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°	15	54	93	120	127	12
95°	55	87	124	147	154	57
105°	182	198	230	251	260	193
115°	332	339	362	378	383	328
125°	480	479	498	511	514	428
135°	616	621	626	637	639	477
145°	748	750	751	754	755	468
155°	856	856	855	858	855	394
165°	932	929	928	932	929	263
175°	969	965	964	970	964	92
180°	971	971	971	971	971	

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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°	14.6	53.7	92.8	119.6	127.3
92.5°	31.1	67.8	104.7	128.5	135.4
95°	55.0	87.2	124.0	147.1	154.1
97.5°	81.3	109.7	147.3	170.3	177.3
100°	113.6	136.6	173.4	195.7	201.1
102.5°	148.1	165.8	201.1	223.3	230.3
105°	181.8	197.9	229.5	251.0	259.5
107.5°	218.6	232.4	260.2	282.5	287.1
110°	255.4	267.7	293.9	310.1	318.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.6	302.8	326.8	343.7	349.9
115°	331.9	338.9	362.0	378.2	382.9
117.5°	368.7	373.3	395.7	409.5	413.5
120°	404.7	410.0	430.1	441.7	449.4
122.5°	443.0	443.8	463.8	477.0	478.6
125°	479.7	478.9	497.5	510.6	513.7
127.5°	513.5	515.0	528.9	541.3	545.9
130°	548.8	550.2	562.6	574.9	576.6
132.5°	585.5	586.2	594.8	606.4	610.2
135°	616.3	620.8	626.2	637.1	639.4
137.5°	651.5	653.1	657.7	666.9	671.6
140°	686.8	687.6	688.3	697.7	700.7
142.5°	718.4	719.9	718.3	726.8	729.9
145°	747.7	749.9	750.6	754.5	755.3
147.5°	777.7	780.6	779.9	779.9	782.3
150°	804.7	806.9	806.9	806.9	806.2
152.5°	829.4	830.9	831.7	833.9	831.7
155°	855.7	855.7	855.0	858.0	855.0
157.5°	878.2	876.7	876.7	879.0	876.7
160°	897.7	897.0	896.2	898.5	894.7
162.5°	915.8	913.5	912.8	917.3	913.5
165°	931.5	929.3	927.8	932.3	929.3
167.5°	944.3	941.3	941.3	945.8	941.3
170°	954.8	951.0	951.8	956.3	951.0
172.5°	962.3	959.3	959.3	964.5	959.3
175°	969.1	965.3	964.5	969.8	964.5
177.5°	972.1	968.3	968.3	973.6	967.5
180°	970.6	970.6	970.6	970.6	970.6

(END OF REPORT)