

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: P1033667

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033667
REPORT IS A COMBINATION OF REPORTS P997924 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-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

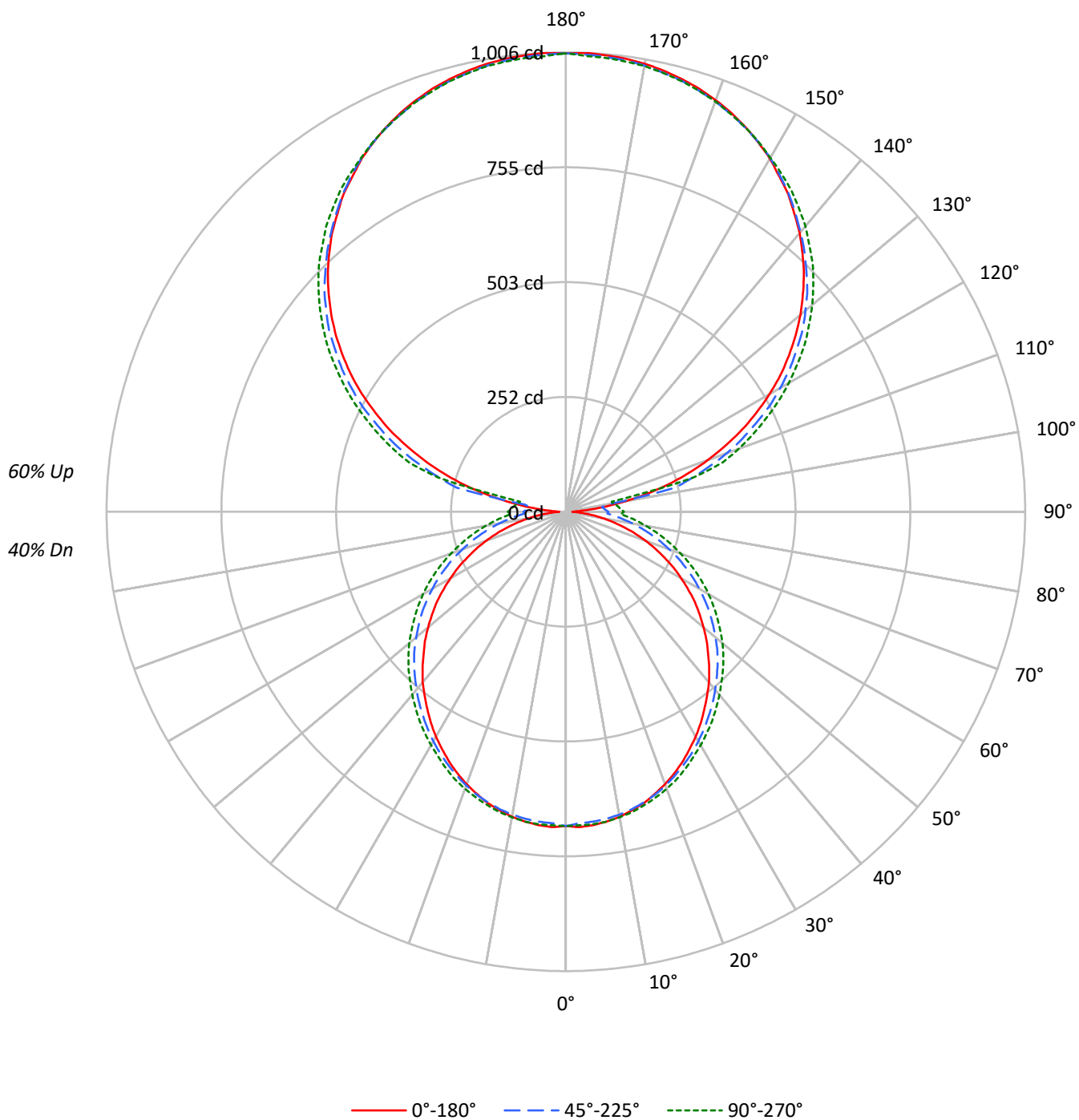
Lumens per Lamp: N/A
Luminaire Lumens: 5454.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	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	1.2
10°-20°	186.8	3.4
20°-30°	282.4	5.2
30°-40°	341.7	6.3
40°-50°	361.2	6.6
50°-60°	340.0	6.2
60°-70°	282.1	5.2
70°-80°	198.0	3.6
80°-90°	113.7	2.1
90°-100°	99.8	1.8
100°-110°	268.6	4.9
110°-120°	452.0	8.3
120°-130°	550.5	10.1
130°-140°	577.1	10.6
140°-150°	533.7	9.8
150°-160°	429.1	7.9
160°-170°	276.7	5.1
170°-180°	95.4	1.7
0°-30°	534.4	9.8
0°-40°	876.2	16.1
0°-60°	1577.4	28.9
0°-90°	2171.2	39.8
90°-120°	820.4	15.0
90°-150°	2481.7	45.5
90°-180°	3283.0	60.2
0°-180°	5454.0	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	11
95°	51	51	84	109	117	59
105°	233	253	285	311	290	244
115°	426	436	460	478	484	420
125°	596	598	616	633	638	533
135°	737	736	745	759	765	568
145°	849	851	851	856	860	531
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

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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°	22.9	48.3	87.5	113.5	119.7
95°	51.3	51.2	83.5	108.8	116.6
97.5°	88.0	126.9	79.7	103.5	111.2
100°	131.6	165.1	91.6	99.7	105.8
102.5°	181.2	207.1	245.4	96.5	102.7
105°	232.9	252.8	285.1	311.1	290.3
107.5°	281.7	297.0	329.3	352.3	360.7
110°	330.5	343.6	375.0	394.2	402.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	377.8	391.5	418.5	434.6	443.8
115°	426.5	435.8	459.6	478.1	483.5
117.5°	470.8	478.4	503.9	519.2	525.4
120°	515.2	520.5	542.0	558.9	563.6
122.5°	557.2	558.7	581.0	597.1	601.0
125°	596.2	598.4	616.2	633.0	638.4
127.5°	634.5	634.4	653.6	666.7	671.4
130°	670.5	670.4	685.1	699.6	704.3
132.5°	704.2	704.9	717.2	731.1	734.9
135°	737.2	736.5	744.9	758.8	764.9
137.5°	767.3	766.6	773.4	786.4	789.6
140°	796.5	797.3	799.5	811.9	816.4
142.5°	822.1	825.1	825.1	835.1	838.2
145°	849.1	850.6	850.6	855.9	860.5
147.5°	870.2	873.9	873.1	874.7	878.5
150°	893.4	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)