

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: P1033802

Luminaire Tested: S124DIW-B795D770UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033802
REPORT IS A COMBINATION OF REPORTS P998236 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

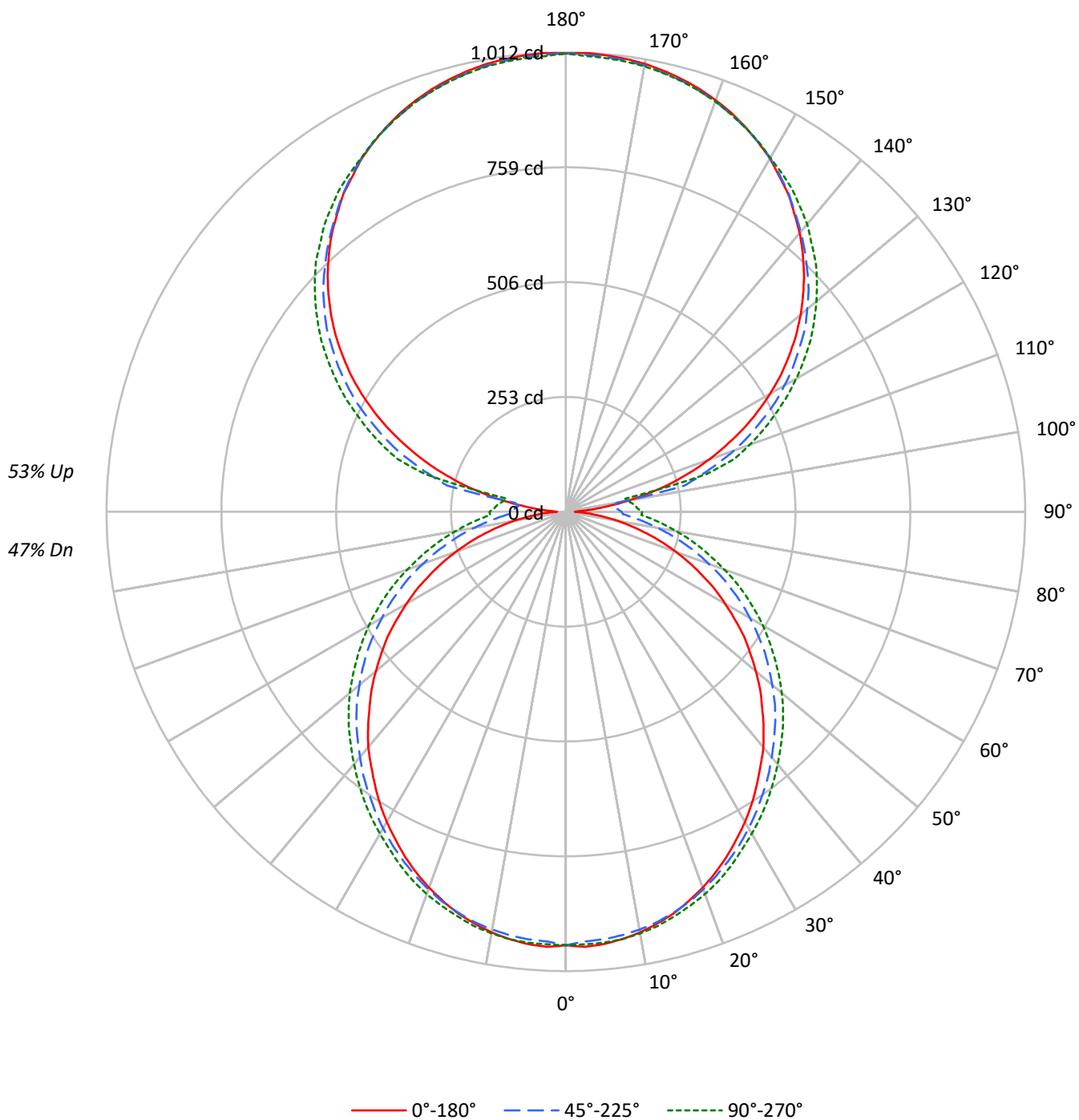
Lumens per Lamp: N/A
Luminaire Lumens: 6382.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54
1	96	91	87	83	88	84	80	77	70	68	65	58	56	54	46	45	43
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	40	38	36
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30
4	72	61	53	47	66	56	49	44	47	42	37	39	35	31	31	28	26
5	66	54	46	40	61	50	43	37	42	36	32	35	30	27	28	25	22
6	61	49	40	34	56	45	37	32	38	32	28	31	27	23	25	22	19
7	56	44	36	30	51	40	33	28	34	28	24	28	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	18	15
9	49	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7788	7788	7788
5°	7809	7585	7599
10°	7758	7435	7414
15°	7686	7268	7206
20°	7578	7086	7005
25°	7457	6886	6787
30°	7325	6687	6565
35°	7177	6485	6367
40°	7059	6289	6162
45°	6882	6107	5982
50°	6732	5899	5791
55°	6577	5698	5572
60°	6336	5450	5365
65°	6071	5181	5115
70°	5749	4874	4828
75°	5300	4533	4554
80°	4796	4186	4267
85°	4126	3836	4035

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6882 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	1.4
10°-20°	259.3	4.1
20°-30°	392.0	6.1
30°-40°	474.3	7.4
40°-50°	501.4	7.9
50°-60°	471.9	7.4
60°-70°	391.5	6.1
70°-80°	274.8	4.3
80°-90°	157.0	2.5
90°-100°	125.7	2.0
100°-110°	289.0	4.5
110°-120°	467.3	7.3
120°-130°	560.8	8.8
130°-140°	583.5	9.1
140°-150°	537.4	8.4
150°-160°	431.6	6.8
160°-170°	278.3	4.4
170°-180°	95.9	1.5
0°-30°	741.8	11.6
0°-40°	1216.0	19.1
0°-60°	2189.2	34.3
0°-90°	3012.5	47.2
90°-120°	882.0	13.8
90°-150°	2563.6	40.2
90°-180°	3369.0	52.8
0°-180°	6382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	956	953	945	954	953	91
15°	916	918	914	924	923	258
25°	838	845	848	860	861	386
35°	734	746	757	772	775	459
45°	612	632	652	670	676	473
55°	479	502	534	555	562	427
65°	332	366	402	429	437	329
75°	184	224	268	298	308	195
85°	57	102	150	182	192	59
90°	19	70	122	158	168	14
95°	55	65	110	143	153	62
105°	237	263	306	340	321	249
115°	431	443	476	501	509	424
125°	601	603	628	651	658	537
135°	742	741	752	770	778	572
145°	854	856	856	863	868	534
155°	936	936	934	937	935	431
165°	987	983	983	989	982	279
175°	1010	1005	1006	1013	1004	96
180°	1010	1010	1010	1010	1010	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.0	955.0	955.0	955.0	955.0
2.5°	959.3	956.1	947.5	955.0	953.9
5°	956.1	952.9	945.4	953.9	952.9
7.5°	949.7	947.5	941.1	950.7	949.7
10°	941.1	940.0	934.7	944.3	943.2
12.5°	929.3	929.3	926.1	934.7	934.7
15°	916.5	917.6	914.4	924.0	922.9
17.5°	899.4	902.6	901.5	911.2	910.1
20°	881.2	884.4	885.5	896.2	896.2
22.5°	860.9	865.2	867.3	878.0	880.1
25°	838.4	844.9	848.1	859.8	860.9
27.5°	813.8	823.5	827.7	838.4	839.5
30°	789.2	797.8	805.3	817.0	819.2
32.5°	762.5	773.2	781.8	795.7	797.8
35°	733.6	746.5	757.2	772.1	775.3
37.5°	704.8	719.7	732.6	747.5	750.7
40°	677.0	690.9	705.8	721.9	726.1
42.5°	644.9	660.9	679.1	697.3	700.5
45°	611.7	632.0	652.4	670.5	675.9
47.5°	580.7	601.0	624.5	642.7	649.1
50°	546.5	570.0	593.5	614.9	621.3
52.5°	512.3	535.8	563.6	585.0	591.4
55°	479.1	501.6	533.6	555.0	561.5
57.5°	441.7	469.5	500.5	526.2	531.5
60°	405.3	433.1	468.4	493.0	501.6
62.5°	370.0	401.0	436.3	460.9	469.5
65°	331.5	365.7	402.1	428.8	437.4
67.5°	295.2	331.5	370.0	396.8	405.3
70°	257.7	294.1	334.7	363.6	371.1
72.5°	221.4	258.8	302.6	330.5	339.0
75°	183.9	223.5	268.4	298.4	308.0
77.5°	148.7	190.4	237.4	267.4	278.1
80°	116.6	159.3	206.4	238.5	247.0
82.5°	84.5	129.4	176.5	209.6	219.2
85°	56.7	101.6	149.7	181.8	192.5
87.5°	35.3	79.1	126.2	157.2	166.8
90°	19.4	70.5	122.5	158.0	168.1
92.5°	27.3	63.3	115.4	149.8	158.4
95°	55.4	65.1	109.6	143.0	153.4
97.5°	92.1	139.7	104.3	135.9	146.2
100°	135.6	177.0	114.5	130.6	138.7
102.5°	185.5	218.0	267.7	125.6	134.2
105°	236.9	262.8	306.2	339.7	321.1
107.5°	286.0	306.4	349.1	379.7	390.2
110°	334.8	352.0	394.0	420.1	430.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.0	399.4	436.2	458.9	470.5
115°	430.8	442.6	476.2	501.2	508.7
117.5°	475.3	484.7	519.1	540.8	549.3
120°	519.5	525.8	556.1	579.0	586.0
122.5°	561.8	563.3	593.7	615.9	621.9
125°	600.8	602.7	627.9	650.6	657.8
127.5°	639.3	639.0	664.2	682.6	689.4
130°	675.2	674.9	694.2	714.3	720.7
132.5°	709.2	709.6	725.5	744.5	750.1
135°	742.1	741.3	751.9	770.5	778.5
137.5°	772.3	771.3	779.3	796.9	801.4
140°	801.7	802.2	804.8	820.9	827.1
142.5°	827.2	830.2	829.8	843.2	847.4
145°	854.4	855.5	855.5	862.7	868.5
147.5°	875.5	878.9	878.2	880.0	885.0
150°	898.9	900.8	900.1	900.1	900.8
152.5°	917.4	919.7	918.2	919.7	918.9
155°	935.6	936.3	934.0	937.1	934.8
157.5°	951.4	951.4	948.4	952.2	948.4
160°	965.0	962.7	962.0	966.5	962.0
162.5°	977.1	974.1	973.3	977.8	972.6
165°	986.9	983.1	983.1	989.2	982.4
167.5°	995.2	991.4	990.7	997.5	989.9
170°	1002.0	997.5	998.2	1004.3	996.7
172.5°	1006.5	1002.0	1002.8	1008.8	1000.5
175°	1009.6	1005.0	1005.8	1012.6	1003.5
177.5°	1011.8	1006.5	1008.0	1014.1	1005.0
180°	1009.6	1009.6	1009.6	1009.6	1009.6

(END OF REPORT)