

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: P1033803

Luminaire Tested: S124DIW-B795D770UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033803
REPORT IS A COMBINATION OF REPORTS P998237 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

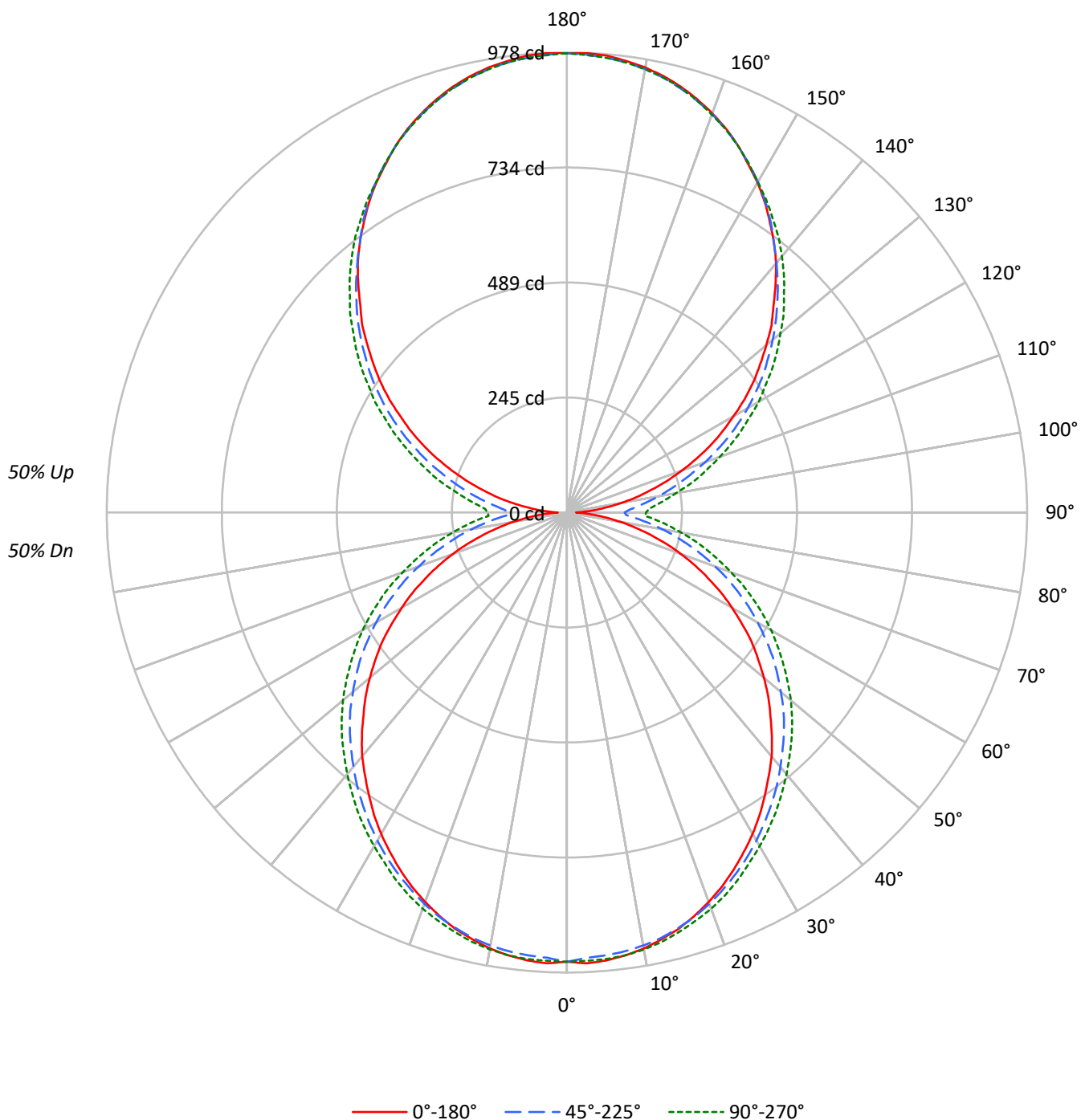
Lumens per Lamp: N/A
Luminaire Lumens: 5967.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	92	88	84	89	85	81	78	72	69	67	60	58	56	48	47	46
2	88	80	73	68	81	74	68	63	62	58	54	52	49	46	42	40	38
3	80	70	62	56	73	65	58	52	55	49	45	45	41	38	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	55	46	40	61	51	43	38	43	37	33	36	31	28	29	26	23
6	61	49	41	35	56	45	38	32	39	33	28	32	28	24	27	23	20
7	57	44	36	30	52	41	34	28	35	29	25	29	25	21	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	20	17	14
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	15	13

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	1.5
10°-20°	259.3	4.3
20°-30°	392.0	6.6
30°-40°	474.3	7.9
40°-50°	501.4	8.4
50°-60°	471.9	7.9
60°-70°	391.5	6.6
70°-80°	274.8	4.6
80°-90°	157.0	2.6
90°-100°	155.9	2.6
100°-110°	258.9	4.3
110°-120°	369.6	6.2
120°-130°	452.9	7.6
130°-140°	490.8	8.2
140°-150°	473.6	7.9
150°-160°	396.5	6.6
160°-170°	263.8	4.4
170°-180°	92.4	1.5
0°-30°	741.8	12.4
0°-40°	1216.0	20.4
0°-60°	2189.2	36.7
0°-90°	3012.5	50.5
90°-120°	784.4	13.1
90°-150°	2201.7	36.9
90°-180°	2954.0	49.5
0°-180°	5967.0	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	15
95°	59	101	150	182	191	60
105°	186	208	250	279	290	197
115°	336	345	378	401	408	331
125°	484	483	509	528	532	431
135°	620	625	632	648	652	480
145°	752	754	755	761	763	471
155°	861	861	860	863	860	396
165°	937	935	933	938	935	264
175°	975	971	970	976	970	93
180°	976	976	976	976	976	

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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°	35.6	82.9	132.7	164.9	174.2
95°	59.2	101.3	150.4	181.6	191.2
97.5°	85.3	122.3	172.3	203.1	212.7
100°	117.5	148.3	196.8	227.2	234.6
102.5°	152.2	176.5	223.1	253.2	262.6
105°	185.5	207.7	250.3	279.3	290.1
107.5°	222.5	241.5	279.6	309.5	316.2
110°	259.3	275.7	312.4	335.5	346.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	297.4	310.2	344.0	367.5	376.1
115°	335.6	345.2	378.0	400.7	407.5
117.5°	372.6	379.0	410.4	430.6	436.8
120°	408.5	414.8	443.6	461.2	471.2
122.5°	447.0	447.8	475.9	495.1	498.8
125°	483.8	482.7	508.6	527.5	532.4
127.5°	517.8	518.9	538.8	556.5	563.2
130°	552.9	554.1	571.2	589.0	592.3
132.5°	589.9	590.3	602.4	619.1	624.8
135°	620.5	625.0	632.5	648.1	652.4
137.5°	656.0	657.3	663.0	676.8	682.9
140°	691.5	692.0	693.0	706.1	710.8
142.5°	723.0	724.5	722.6	734.4	738.6
145°	752.4	754.3	755.1	760.7	762.8
147.5°	782.6	785.3	784.5	784.9	788.3
150°	809.8	811.7	811.7	811.7	811.0
152.5°	834.4	835.9	836.6	838.9	836.6
155°	860.8	860.8	860.0	863.1	860.0
157.5°	883.4	881.9	881.9	884.2	881.9
160°	903.1	902.3	901.6	903.8	900.1
162.5°	921.2	918.9	918.2	922.7	918.9
165°	937.1	934.8	933.3	937.8	934.8
167.5°	949.9	946.9	946.9	951.4	946.9
170°	960.5	956.7	957.4	962.0	956.7
172.5°	968.0	965.0	965.0	970.3	965.0
175°	974.8	971.0	970.3	975.6	970.3
177.5°	977.8	974.0	974.0	979.3	973.3
180°	976.3	976.3	976.3	976.3	976.3

(END OF REPORT)