

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: P1033364

Luminaire Tested: S124DIW-B1195D770UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033364
REPORT IS A COMBINATION OF REPORTS P997250 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

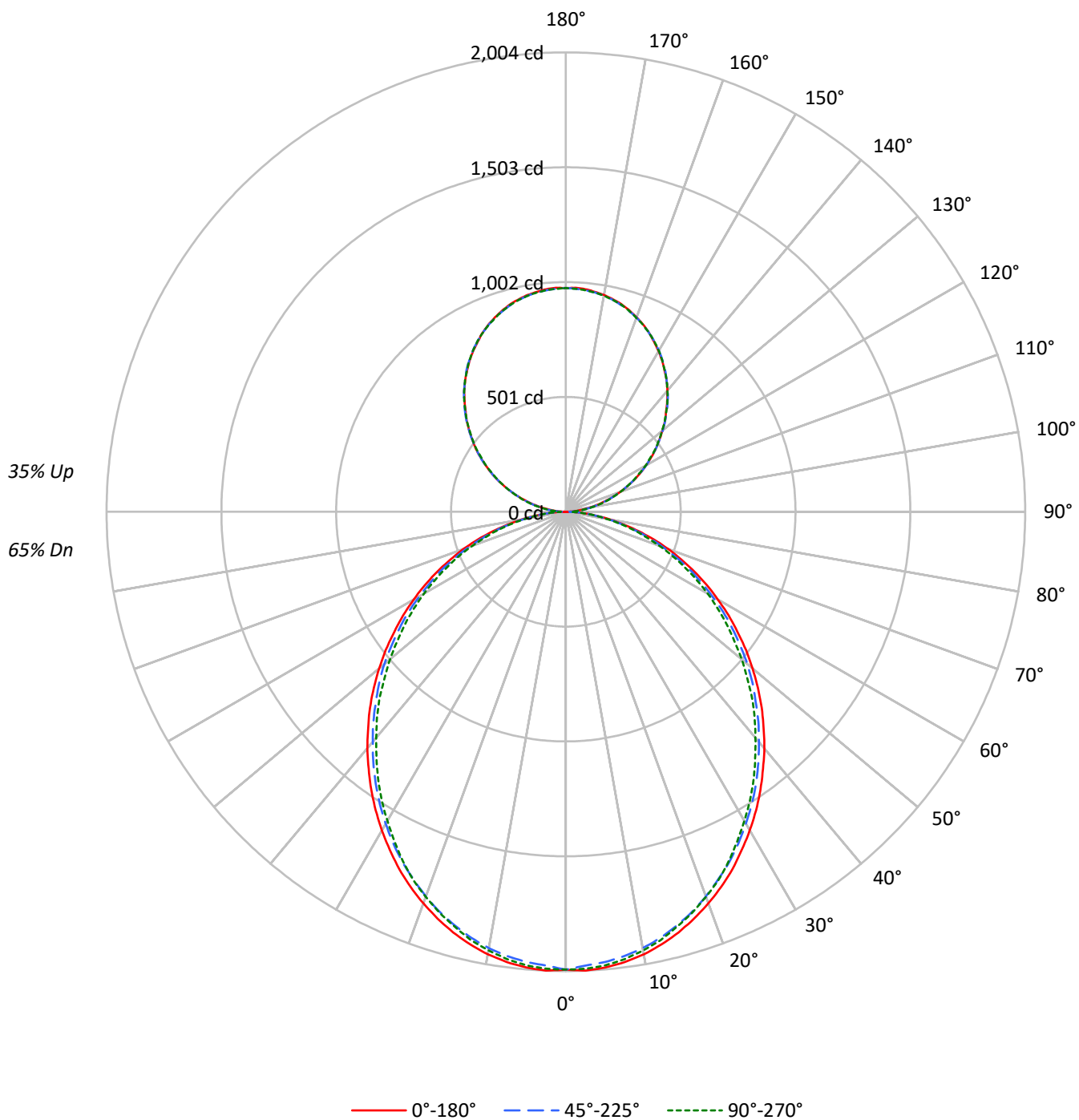
Lumens per Lamp: N/A
Luminaire Lumens: 7837.0 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59
2	92	85	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	43
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25
8	56	43	36	30	53	41	34	29	37	31	27	33	28	25	30	26	22
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20
10	49	37	29	24	46	35	28	23	32	26	22	28	24	20	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16285	16285	16285
5°	16299	15817	15836
10°	16161	15378	15270
15°	15929	14856	14632
20°	15633	14291	13971
25°	15300	13695	13259
30°	14899	13050	12478
35°	14482	12389	11722
40°	14048	11678	10919
45°	13593	10965	10169
50°	13090	10275	9337
55°	12542	9467	8511
60°	11982	8583	7650
65°	11341	7671	6681
70°	10604	6572	5643
75°	9501	5298	4518
80°	8094	3829	3178
85°	6287	2132	1710

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13593 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	2.4
10°-20°	530.3	6.8
20°-30°	780.5	10.0
30°-40°	907.3	11.6
40°-50°	907.2	11.6
50°-60°	793.4	10.1
60°-70°	589.1	7.5
70°-80°	334.2	4.3
80°-90°	97.8	1.2
90°-100°	63.6	0.8
100°-110°	190.6	2.4
110°-120°	323.8	4.1
120°-130°	427.1	5.4
130°-140°	479.7	6.1
140°-150°	471.4	6.0
150°-160°	396.5	5.1
160°-170°	263.8	3.4
170°-180°	92.4	1.2
0°-30°	1499.1	19.1
0°-40°	2406.3	30.7
0°-60°	4107.0	52.4
0°-90°	5128.1	65.4
90°-120°	578.0	7.4
90°-150°	1956.2	25.0
90°-180°	2709.0	34.6
0°-180°	7837.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1997	1997	1997	1997	1997	
5°	1996	1989	1972	1989	1986	189
15°	1900	1893	1869	1879	1874	535
25°	1720	1709	1687	1688	1682	792
35°	1480	1469	1447	1435	1427	926
45°	1208	1197	1171	1154	1149	931
55°	914	909	886	867	858	818
65°	619	611	595	579	571	613
75°	330	322	314	307	306	350
85°	86	86	83	83	82	93
90°	2	11	17	21	23	9
95°	45	52	57	60	60	49
105°	176	177	180	182	184	187
115°	329	329	328	327	326	325
125°	480	480	479	477	476	427
135°	618	623	623	621	619	478
145°	751	754	755	754	752	470
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°	1997.1	1997.1	1997.1	1997.1	1997.1
2.5°	2003.5	1998.7	1981.1	1997.1	1995.5
5°	1995.5	1989.1	1971.5	1989.1	1985.9
7.5°	1981.1	1974.7	1955.5	1969.9	1968.3
10°	1960.3	1953.9	1933.1	1945.9	1942.7
12.5°	1933.1	1926.7	1904.3	1918.7	1913.9
15°	1899.5	1893.1	1869.1	1878.7	1873.9
17.5°	1861.1	1853.1	1830.7	1837.1	1833.9
20°	1817.9	1809.9	1785.9	1790.7	1787.5
22.5°	1771.5	1760.3	1736.3	1745.9	1739.5
25°	1720.3	1709.1	1686.7	1688.3	1681.9
27.5°	1662.7	1651.5	1630.7	1627.5	1619.5
30°	1605.1	1592.3	1571.5	1565.1	1557.1
32.5°	1544.2	1533.0	1510.6	1502.6	1494.6
35°	1480.2	1469.0	1446.6	1435.4	1427.4
37.5°	1413.0	1403.4	1379.4	1368.2	1357.0
40°	1347.4	1334.6	1310.6	1294.6	1286.6
42.5°	1277.0	1270.6	1243.4	1224.2	1219.4
45°	1208.2	1197.0	1171.4	1153.8	1149.0
47.5°	1136.2	1128.2	1104.2	1085.0	1072.2
50°	1062.6	1056.2	1033.8	1011.4	1001.8
52.5°	990.6	982.6	958.6	939.4	926.5
55°	913.7	908.9	886.5	867.3	857.7
57.5°	841.7	836.9	814.5	795.3	785.7
60°	766.5	758.5	737.7	723.3	715.3
62.5°	692.9	686.5	664.1	651.3	643.3
65°	619.3	611.3	595.3	579.3	571.3
67.5°	544.1	537.7	521.7	505.7	504.1
70°	475.3	464.1	451.3	438.5	433.7
72.5°	401.7	390.5	380.9	371.3	366.5
75°	329.7	321.7	313.7	307.2	305.6
77.5°	259.2	256.0	248.0	246.4	241.6
80°	196.8	192.0	188.8	185.6	184.0
82.5°	136.0	134.4	134.4	132.8	131.2
85°	86.4	86.4	83.2	83.2	81.6
87.5°	41.6	40.0	38.4	38.4	38.4
90°	2.3	10.6	16.6	21.1	22.7
92.5°	19.6	29.4	33.2	35.5	36.2
95°	45.3	52.1	57.4	59.7	59.7
97.5°	72.5	78.5	84.6	87.6	87.6
100°	105.7	108.7	115.5	117.0	117.0
102.5°	140.4	141.2	147.2	149.5	150.3
105°	175.9	176.7	179.7	182.0	184.2
107.5°	212.9	213.7	214.4	217.5	216.7
110°	250.7	252.2	251.4	249.9	252.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.9	289.9	288.4	288.4	288.4
115°	329.2	329.2	327.7	326.9	326.2
117.5°	366.2	366.2	365.5	363.2	360.9
120°	403.2	406.2	404.0	400.2	401.7
122.5°	441.7	442.5	441.7	439.5	435.7
125°	479.5	479.5	478.7	477.2	475.7
127.5°	513.5	515.7	514.2	512.7	511.9
130°	549.7	552.0	552.0	550.5	547.4
132.5°	586.7	588.2	587.4	585.9	585.2
135°	618.4	622.9	622.9	621.4	619.2
137.5°	653.9	656.2	657.7	655.4	656.2
140°	689.4	690.9	690.9	690.1	689.4
142.5°	721.9	723.4	722.6	722.6	722.6
145°	751.3	754.3	755.1	754.3	752.1
147.5°	781.5	785.3	784.5	783.8	783.0
150°	808.7	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)