

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: P1033909

Luminaire Tested: S124RDIW-B1020D770UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033909
REPORT IS A COMBINATION OF REPORTS P1000019 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D770UB30-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

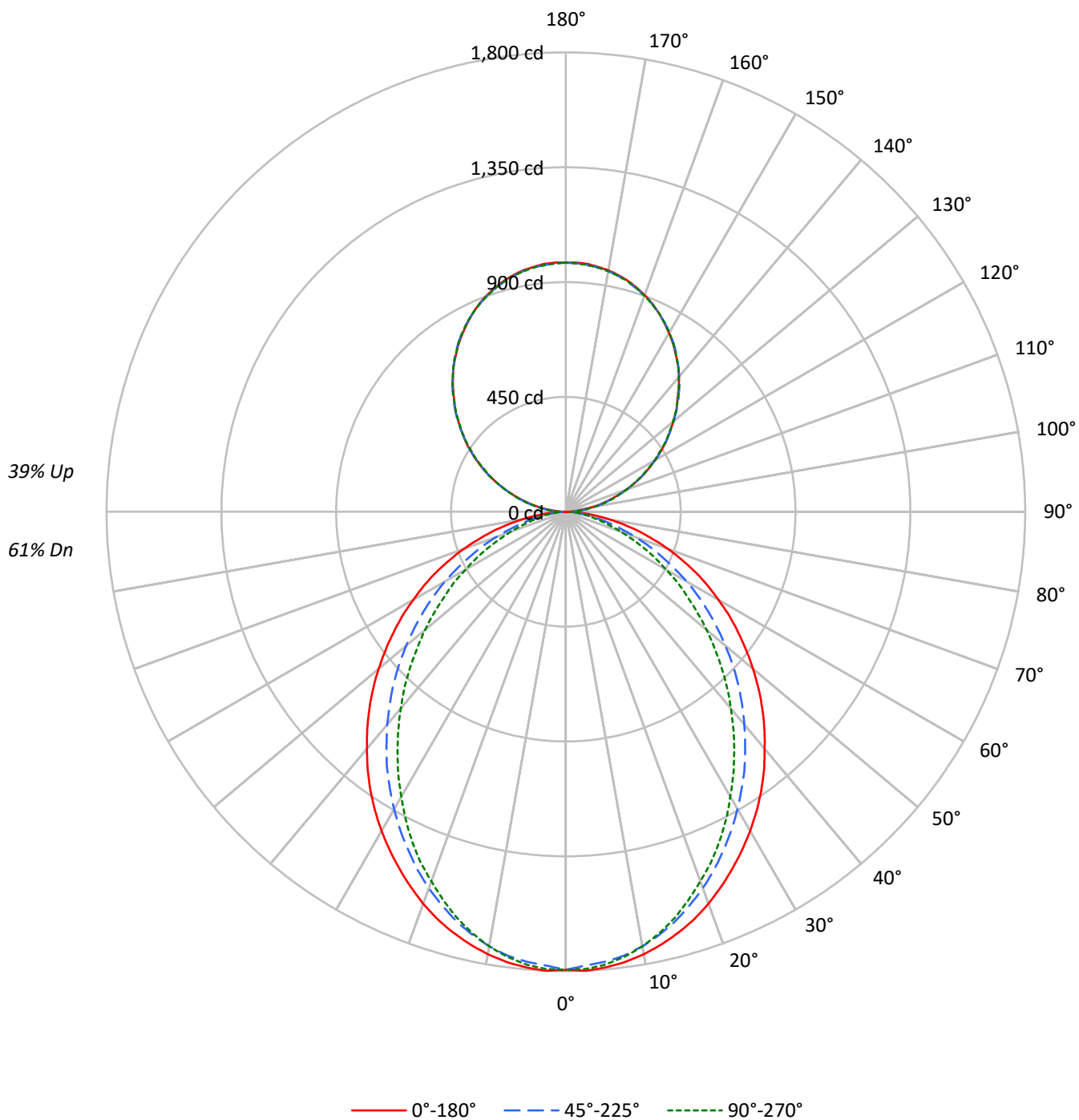
Lumens per Lamp: N/A
Luminaire Lumens: 6858.0 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	67	65	59	57	56
2	92	84	78	73	86	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	64	58	62	56	52	54	50	47	46	44	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	45	39	34	39	35	31	34	31	28
7	61	48	40	35	57	46	38	33	41	35	30	36	31	27	31	28	25
8	56	44	36	31	53	42	34	30	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14636	14636	14636
5°	14637	14200	14202
10°	14513	13752	13589
15°	14313	13195	12865
20°	14052	12559	12040
25°	13726	11872	11235
30°	13406	11172	10330
35°	13055	10462	9446
40°	12638	9698	8537
45°	12245	8941	7638
50°	11800	8113	6725
55°	11318	7265	5782
60°	10785	6364	4850
65°	10268	5329	3954
70°	9535	4242	3021
75°	8593	3087	2113
80°	7177	1894	1520
85°	5399	1092	836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.5
10°-20°	470.6	6.9
20°-30°	679.4	9.9
30°-40°	769.9	11.2
40°-50°	743.4	10.8
50°-60°	618.1	9.0
60°-70°	426.6	6.2
70°-80°	215.6	3.1
80°-90°	56.8	0.8
90°-100°	63.6	0.9
100°-110°	190.6	2.8
110°-120°	323.8	4.7
120°-130°	427.1	6.2
130°-140°	479.7	7.0
140°-150°	471.4	6.9
150°-160°	396.5	5.8
160°-170°	263.8	3.8
170°-180°	92.4	1.3
0°-30°	1318.7	19.2
0°-40°	2088.6	30.5
0°-60°	3450.1	50.3
0°-90°	4149.1	60.5
90°-120°	578.0	8.4
90°-150°	1956.2	28.5
90°-180°	2709.0	39.5
0°-180°	6858.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1792	1786	1770	1784	1781	170
15°	1707	1694	1660	1657	1648	481
25°	1543	1518	1462	1439	1425	711
35°	1334	1290	1222	1175	1150	834
45°	1088	1038	955	888	863	839
55°	824	770	680	609	583	738
65°	561	502	414	355	338	554
75°	298	247	183	151	143	315
85°	74	47	43	40	40	81
90°	2	11	17	21	23	8
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°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1800.3	1794.8	1779.7	1794.8	1793.4
5°	1792.0	1786.5	1770.0	1783.8	1781.0
7.5°	1779.7	1774.2	1753.5	1763.2	1759.0
10°	1760.4	1753.5	1728.8	1734.3	1728.8
12.5°	1735.7	1727.4	1697.2	1699.9	1691.7
15°	1706.8	1694.4	1660.1	1657.3	1647.7
17.5°	1673.8	1656.0	1616.1	1609.2	1595.5
20°	1634.0	1616.1	1569.4	1558.4	1540.5
22.5°	1590.0	1569.4	1518.5	1500.7	1486.9
25°	1543.3	1518.5	1462.2	1438.8	1425.1
27.5°	1495.2	1464.9	1405.9	1378.4	1359.1
30°	1444.3	1410.0	1345.4	1311.0	1289.0
32.5°	1390.7	1350.9	1283.5	1242.3	1221.7
35°	1334.4	1290.4	1221.7	1175.0	1150.2
37.5°	1275.3	1230.0	1154.4	1103.5	1078.8
40°	1212.1	1166.7	1088.4	1030.7	1005.9
42.5°	1151.6	1103.5	1021.1	962.0	935.9
45°	1088.4	1037.6	955.1	887.8	863.0
47.5°	1023.8	971.6	886.4	816.3	788.8
50°	957.9	904.3	816.3	747.6	721.5
52.5°	890.5	838.3	747.6	677.5	650.0
55°	824.5	769.6	680.3	608.8	582.7
57.5°	760.0	702.2	614.3	541.5	522.2
60°	689.9	634.9	547.0	475.5	453.5
62.5°	626.7	568.9	478.2	413.6	397.2
65°	560.7	501.6	413.6	354.6	338.1
67.5°	492.0	435.6	353.2	301.0	281.7
70°	427.4	369.7	291.3	246.0	232.2
72.5°	358.7	307.8	235.0	197.9	185.5
75°	298.2	247.4	182.8	151.2	142.9
77.5°	235.0	191.0	136.1	114.1	111.3
80°	174.5	134.7	93.4	89.3	88.0
82.5°	122.3	86.6	67.3	64.6	63.2
85°	74.2	46.7	42.6	39.9	39.9
87.5°	31.6	20.6	19.2	17.9	19.2
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)