

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: P1034015

Luminaire Tested: S124RDIW-B1195D770UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034015
REPORT IS A COMBINATION OF REPORTS P1000251 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D770UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

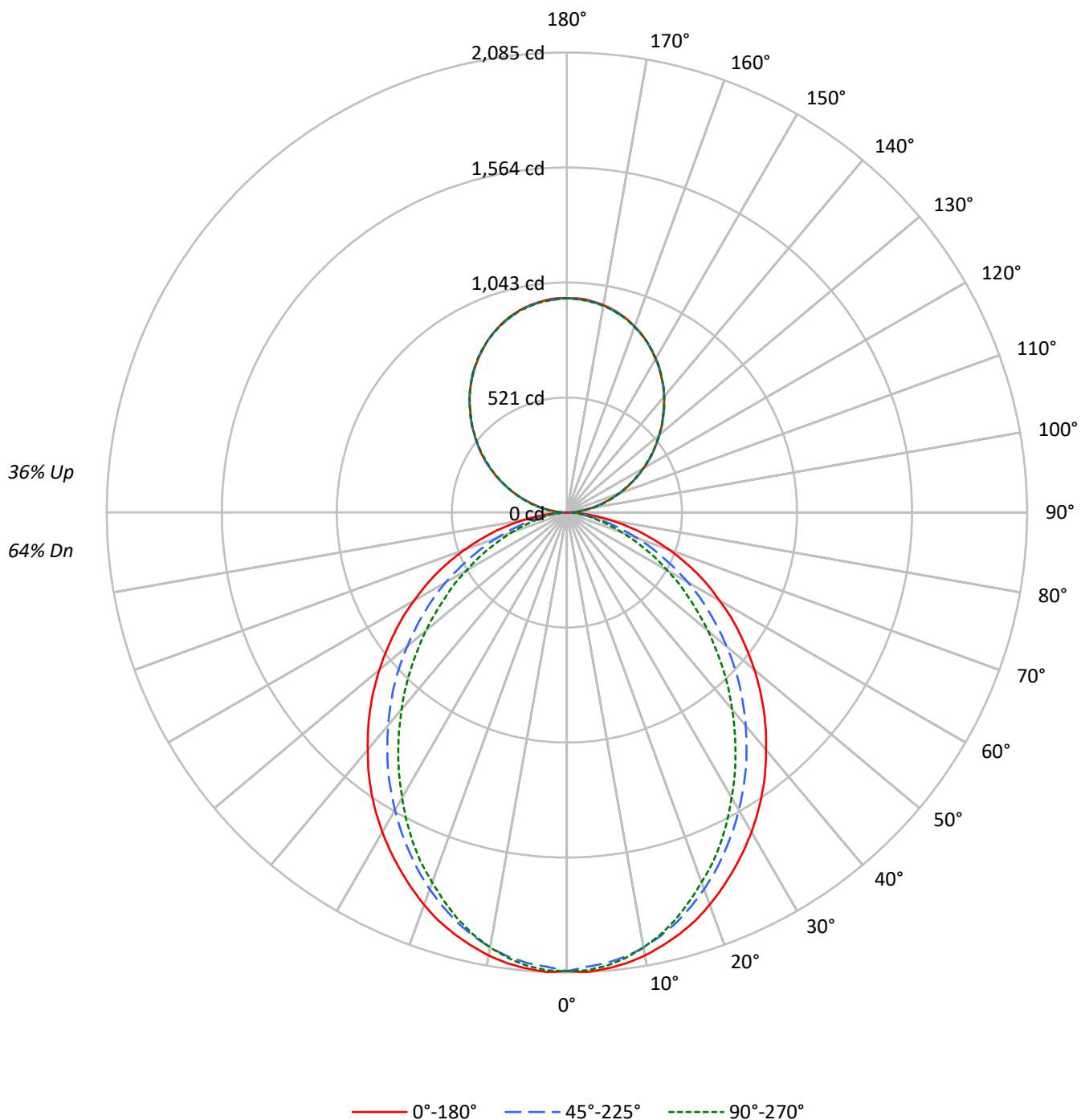
Lumens per Lamp: N/A
Luminaire Lumens: 7497.0 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	110	110	110	110	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59
2	93	85	79	74	87	80	75	70	71	67	63	63	59	57	55	52	50
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	43
4	78	67	59	53	73	63	56	50	56	51	46	50	45	42	44	40	37
5	71	60	52	46	67	57	49	44	50	45	40	45	40	36	40	36	33
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	26	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	27	23	28	24	21
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16947	16947	16947
5°	16949	16444	16445
10°	16805	15925	15736
15°	16574	15279	14898
20°	16271	14542	13943
25°	15893	13747	13009
30°	15524	12937	11962
35°	15117	12115	10938
40°	14633	11230	9886
45°	14180	10353	8844
50°	13663	9394	7786
55°	13106	8412	6695
60°	12487	7368	5616
65°	11891	6172	4579
70°	11041	4913	3498
75°	9951	3573	2447
80°	8312	2194	1758
85°	6251	1263	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	2.6
10°-20°	544.9	7.3
20°-30°	786.7	10.5
30°-40°	891.6	11.9
40°-50°	860.8	11.5
50°-60°	715.7	9.5
60°-70°	494.0	6.6
70°-80°	249.6	3.3
80°-90°	65.5	0.9
90°-100°	63.3	0.8
100°-110°	189.5	2.5
110°-120°	321.9	4.3
120°-130°	424.5	5.7
130°-140°	476.8	6.4
140°-150°	468.6	6.3
150°-160°	394.2	5.3
160°-170°	262.3	3.5
170°-180°	91.8	1.2
0°-30°	1527.0	20.4
0°-40°	2418.5	32.3
0°-60°	3995.0	53.3
0°-90°	4804.1	64.1
90°-120°	574.6	7.7
90°-150°	1944.7	25.9
90°-180°	2693.0	35.9
0°-180°	7497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2075	2069	2050	2066	2062	197
15°	1976	1962	1922	1919	1908	557
25°	1787	1758	1693	1666	1650	823
35°	1545	1494	1415	1361	1332	966
45°	1260	1201	1106	1028	999	972
55°	955	891	788	705	675	854
65°	649	581	479	411	392	641
75°	345	286	212	175	166	364
85°	86	54	49	46	46	94
90°	2	10	16	21	22	8
95°	45	52	57	59	59	49
105°	175	176	179	181	183	185
115°	327	327	326	325	324	323
125°	477	477	476	474	473	425
135°	615	619	619	618	616	476
145°	747	750	751	750	748	467
155°	856	856	855	858	855	394
165°	932	929	928	932	929	263
175°	969	965	964	970	964	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.2	2078.2	2078.2	2078.2	2078.2
2.5°	2084.6	2078.2	2060.7	2078.2	2076.7
5°	2075.1	2068.7	2049.6	2065.5	2062.3
7.5°	2060.7	2054.4	2030.5	2041.6	2036.9
10°	2038.5	2030.5	2001.9	2008.2	2001.9
12.5°	2009.8	2000.3	1965.3	1968.4	1958.9
15°	1976.4	1962.1	1922.3	1919.1	1908.0
17.5°	1938.2	1917.5	1871.4	1863.4	1847.5
20°	1892.1	1871.4	1817.3	1804.5	1783.9
22.5°	1841.1	1817.3	1758.4	1737.7	1721.8
25°	1787.0	1758.4	1693.1	1666.1	1650.2
27.5°	1731.3	1696.3	1627.9	1596.1	1573.8
30°	1672.5	1632.7	1557.9	1518.1	1492.6
32.5°	1610.4	1564.3	1486.3	1438.5	1414.7
35°	1545.2	1494.2	1414.7	1360.6	1331.9
37.5°	1476.7	1424.2	1336.7	1277.8	1249.2
40°	1403.5	1351.0	1260.3	1193.5	1164.8
42.5°	1333.5	1277.8	1182.3	1113.9	1083.7
45°	1260.3	1201.4	1106.0	1028.0	999.3
47.5°	1185.5	1125.1	1026.4	945.2	913.4
50°	1109.1	1047.1	945.2	865.7	835.4
52.5°	1031.2	970.7	865.7	784.5	752.7
55°	954.8	891.1	787.7	704.9	674.7
57.5°	880.0	813.2	711.3	627.0	604.7
60°	798.8	735.2	633.3	550.6	525.1
62.5°	725.6	658.8	553.8	479.0	459.9
65°	649.3	580.8	479.0	410.6	391.5
67.5°	569.7	504.4	409.0	348.5	326.2
70°	494.9	428.1	337.4	284.8	268.9
72.5°	415.3	356.5	272.1	229.1	214.8
75°	345.3	286.4	211.6	175.0	165.5
77.5°	272.1	221.2	157.5	132.1	128.9
80°	202.1	155.9	108.2	103.4	101.8
82.5°	141.6	100.3	78.0	74.8	73.2
85°	85.9	54.1	49.3	46.1	46.1
87.5°	36.6	23.9	22.3	20.7	22.3
90°	2.3	10.5	16.5	21.0	22.5
92.5°	19.5	29.3	33.0	35.3	36.0
95°	45.0	51.8	57.0	59.3	59.3
97.5°	72.1	78.1	84.1	87.1	87.1
100°	105.1	108.1	114.8	116.3	116.3
102.5°	139.6	140.4	146.4	148.6	149.4
105°	174.9	175.6	178.6	180.9	183.2
107.5°	211.7	212.4	213.2	216.2	215.4
110°	249.2	250.7	250.0	248.5	250.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	288.2	286.7	286.7	286.7
115°	327.3	327.3	325.8	325.0	324.3
117.5°	364.1	364.1	363.3	361.0	358.8
120°	400.8	403.8	401.6	397.8	399.3
122.5°	439.1	439.9	439.1	436.9	433.1
125°	476.6	476.6	475.9	474.4	472.9
127.5°	510.4	512.7	511.2	509.7	508.9
130°	546.5	548.7	548.7	547.2	544.2
132.5°	583.2	584.7	584.0	582.5	581.7
135°	614.8	619.3	619.3	617.8	615.5
137.5°	650.0	652.3	653.8	651.5	652.3
140°	685.3	686.8	686.8	686.1	685.3
142.5°	717.6	719.1	718.3	718.3	718.3
145°	746.9	749.9	750.6	749.9	747.6
147.5°	776.9	780.6	779.9	779.1	778.4
150°	803.9	806.9	806.9	806.9	806.2
152.5°	829.4	830.9	831.7	833.9	831.7
155°	855.7	855.7	855.0	858.0	855.0
157.5°	878.2	876.7	876.7	879.0	876.7
160°	897.7	897.0	896.2	898.5	894.7
162.5°	915.8	913.5	912.8	917.3	913.5
165°	931.5	929.3	927.8	932.3	929.3
167.5°	944.3	941.3	941.3	945.8	941.3
170°	954.8	951.0	951.8	956.3	951.0
172.5°	962.3	959.3	959.3	964.5	959.3
175°	969.1	965.3	964.5	969.8	964.5
177.5°	972.1	968.3	968.3	973.6	967.5
180°	970.6	970.6	970.6	970.6	970.6

(END OF REPORT)