

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: P1033381

Luminaire Tested: S124DIW-B1195D770UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033381
REPORT IS A COMBINATION OF REPORTS P997276 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

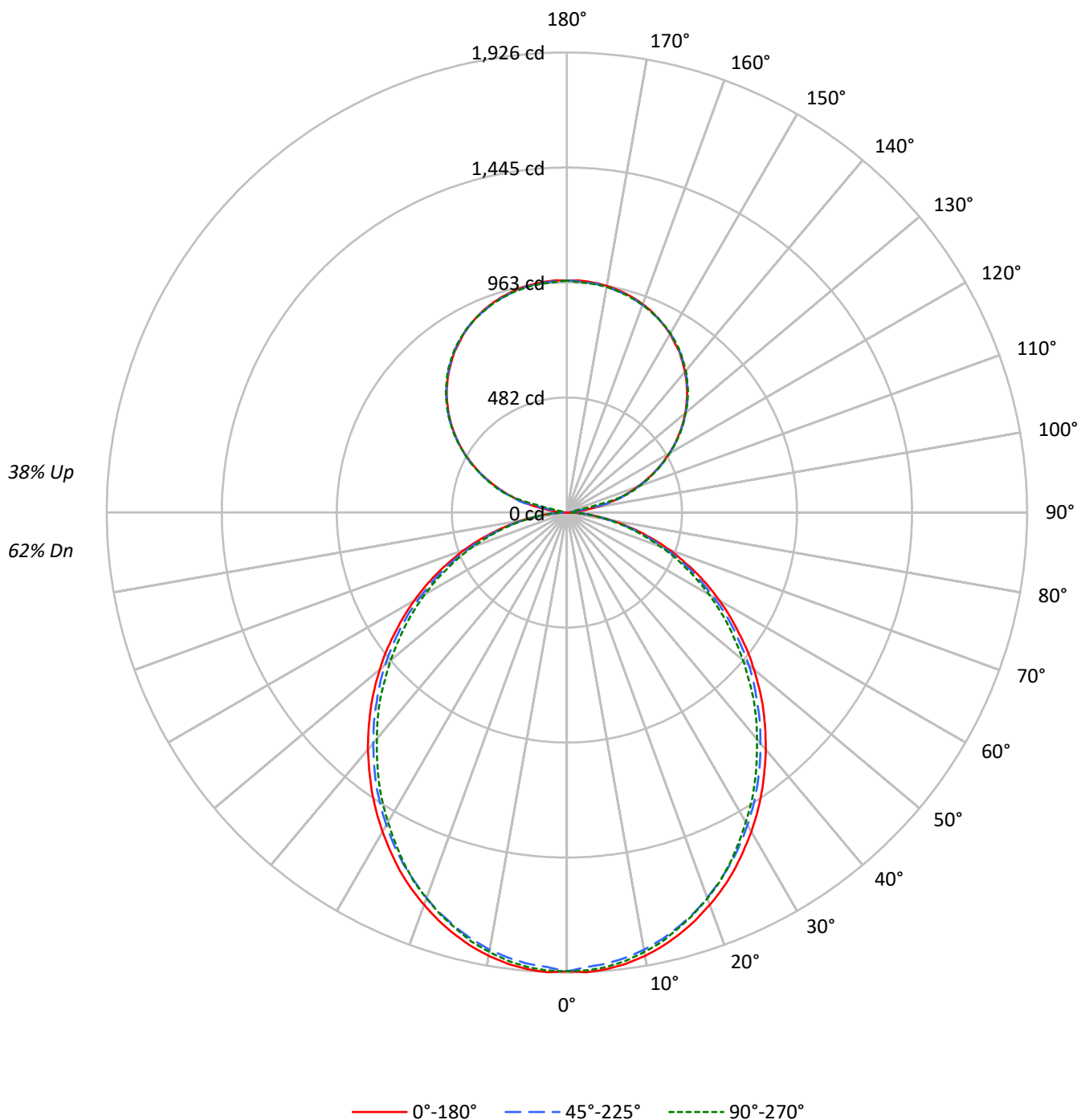
Lumens per Lamp: N/A
Luminaire Lumens: 7935.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	87	83	79	76	74	69	67	65	59	58	57
2	91	84	78	72	85	79	73	69	69	65	61	60	57	54	52	50	48
3	83	74	66	60	78	69	63	57	61	56	52	53	49	46	46	43	41
4	76	65	57	51	71	62	54	49	54	49	44	48	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	34	31
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	34	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	28	24	22
9	52	39	32	27	49	37	30	26	33	28	23	30	25	21	26	22	19
10	49	36	29	24	45	34	28	23	31	25	21	28	23	19	24	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15660	15660	15660
5°	15672	15209	15228
10°	15540	14787	14684
15°	15317	14285	14069
20°	15032	13742	13434
25°	14712	13168	12749
30°	14326	12548	11998
35°	13926	11912	11272
40°	13508	11229	10500
45°	13071	10544	9778
50°	12586	9879	8978
55°	12060	9104	8184
60°	11522	8254	7356
65°	10906	7376	6424
70°	10196	6318	5425
75°	9135	5093	4345
80°	7786	3683	3057
85°	6047	2050	1645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.3
10°-20°	509.9	6.4
20°-30°	750.5	9.5
30°-40°	872.4	11.0
40°-50°	872.3	11.0
50°-60°	763.0	9.6
60°-70°	566.4	7.1
70°-80°	321.4	4.1
80°-90°	94.1	1.2
90°-100°	32.2	0.4
100°-110°	212.2	2.7
110°-120°	405.3	5.1
120°-130°	514.5	6.5
130°-140°	550.4	6.9
140°-150°	514.6	6.5
150°-160°	415.0	5.2
160°-170°	267.6	3.4
170°-180°	92.2	1.2
0°-30°	1441.4	18.2
0°-40°	2313.8	29.2
0°-60°	3949.1	49.8
0°-90°	4931.0	62.1
90°-120°	649.7	8.2
90°-150°	2229.1	28.1
90°-180°	3004.0	37.9
0°-180°	7935.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1919	1913	1896	1913	1910	182
15°	1826	1820	1797	1806	1802	515
25°	1654	1643	1622	1623	1617	761
35°	1423	1413	1391	1380	1373	890
45°	1162	1151	1126	1109	1105	896
55°	879	874	852	834	825	787
65°	596	588	572	557	549	589
75°	317	309	302	295	294	336
85°	83	83	80	80	78	89
90°	2	10	16	20	22	8
95°	40	15	16	20	21	49
105°	219	223	226	233	207	229
115°	408	410	410	411	411	402
125°	574	576	575	577	578	512
135°	712	711	714	715	717	548
145°	820	823	823	823	825	513
155°	900	900	898	901	899	415
165°	949	945	945	951	945	268
175°	971	966	967	974	965	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.4	1920.4	1920.4	1920.4	1920.4
2.5°	1926.5	1921.9	1905.0	1920.4	1918.8
5°	1918.8	1912.7	1895.7	1912.7	1909.6
7.5°	1905.0	1898.8	1880.4	1894.2	1892.7
10°	1885.0	1878.8	1858.8	1871.1	1868.1
12.5°	1858.8	1852.7	1831.1	1845.0	1840.4
15°	1826.5	1820.3	1797.3	1806.5	1801.9
17.5°	1789.6	1781.9	1760.3	1766.5	1763.4
20°	1748.0	1740.3	1717.3	1721.9	1718.8
22.5°	1703.4	1692.6	1669.6	1678.8	1672.6
25°	1654.2	1643.4	1621.8	1623.4	1617.2
27.5°	1598.8	1588.0	1568.0	1564.9	1557.2
30°	1543.4	1531.1	1511.1	1504.9	1497.2
32.5°	1484.9	1474.1	1452.6	1444.9	1437.2
35°	1423.4	1412.6	1391.0	1380.3	1372.6
37.5°	1358.7	1349.5	1326.4	1315.6	1304.9
40°	1295.6	1283.3	1260.2	1244.9	1237.2
42.5°	1227.9	1221.8	1195.6	1177.1	1172.5
45°	1161.8	1151.0	1126.4	1109.4	1104.8
47.5°	1092.5	1084.8	1061.7	1043.3	1031.0
50°	1021.7	1015.6	994.0	972.5	963.3
52.5°	952.5	944.8	921.7	903.3	890.9
55°	878.6	874.0	852.5	834.0	824.8
57.5°	809.4	804.8	783.2	764.8	755.5
60°	737.1	729.4	709.4	695.5	687.8
62.5°	666.3	660.1	638.6	626.3	618.6
65°	595.5	587.8	572.4	557.0	549.3
67.5°	523.2	517.0	501.6	486.2	484.7
70°	457.0	446.2	433.9	421.6	417.0
72.5°	386.2	375.5	366.2	357.0	352.4
75°	317.0	309.3	301.6	295.4	293.9
77.5°	249.3	246.2	238.5	237.0	232.4
80°	189.3	184.7	181.6	178.5	177.0
82.5°	130.8	129.3	129.3	127.7	126.2
85°	83.1	83.1	80.0	80.0	78.5
87.5°	40.0	38.5	36.9	36.9	36.9
90°	2.2	10.2	16.0	20.3	21.8
92.5°	10.9	9.4	15.2	19.6	19.6
95°	39.9	15.2	16.0	20.3	21.1
97.5°	76.2	92.2	16.0	19.6	20.3
100°	119.1	132.2	31.9	19.6	20.3
102.5°	167.0	175.7	184.4	21.1	21.1
105°	218.6	222.9	226.5	233.1	206.9
107.5°	265.8	267.9	273.0	276.6	279.5
110°	313.7	315.9	320.2	321.7	323.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	360.1	364.5	366.0	365.2	368.1
115°	408.1	410.2	409.5	411.0	411.0
117.5°	450.9	453.8	456.0	455.3	455.3
120°	494.5	497.4	496.7	498.1	496.7
122.5°	535.1	536.6	538.0	538.8	537.3
125°	573.6	576.5	575.1	577.3	578.0
127.5°	610.7	611.4	615.0	614.3	613.6
130°	646.2	647.0	649.1	649.9	649.9
132.5°	678.9	680.4	683.3	684.0	683.3
135°	711.6	710.9	713.8	715.2	716.7
137.5°	740.6	740.6	744.3	745.7	745.0
140°	768.9	770.4	771.8	774.0	774.8
142.5°	794.4	797.3	798.0	799.4	799.4
145°	820.5	822.7	822.7	823.4	824.9
147.5°	840.8	845.2	844.5	845.2	845.9
150°	863.3	866.2	865.5	865.5	866.2
152.5°	882.2	884.4	882.9	884.4	883.7
155°	899.6	900.4	898.2	901.1	898.9
157.5°	914.9	914.9	912.0	915.6	912.0
160°	928.0	925.8	925.1	929.4	925.1
162.5°	939.6	936.7	935.9	940.3	935.2
165°	949.0	945.4	945.4	951.2	944.7
167.5°	957.0	953.4	952.6	959.2	951.9
170°	963.5	959.2	959.9	965.7	958.5
172.5°	967.9	963.5	964.3	970.1	962.1
175°	970.8	966.4	967.2	973.7	965.0
177.5°	973.0	967.9	969.3	975.2	966.4
180°	970.8	970.8	970.8	970.8	970.8

(END OF REPORT)