

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: P1033564

Luminaire Tested: S124DIW-B575D1340UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033564
REPORT IS A COMBINATION OF REPORTS P997681 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

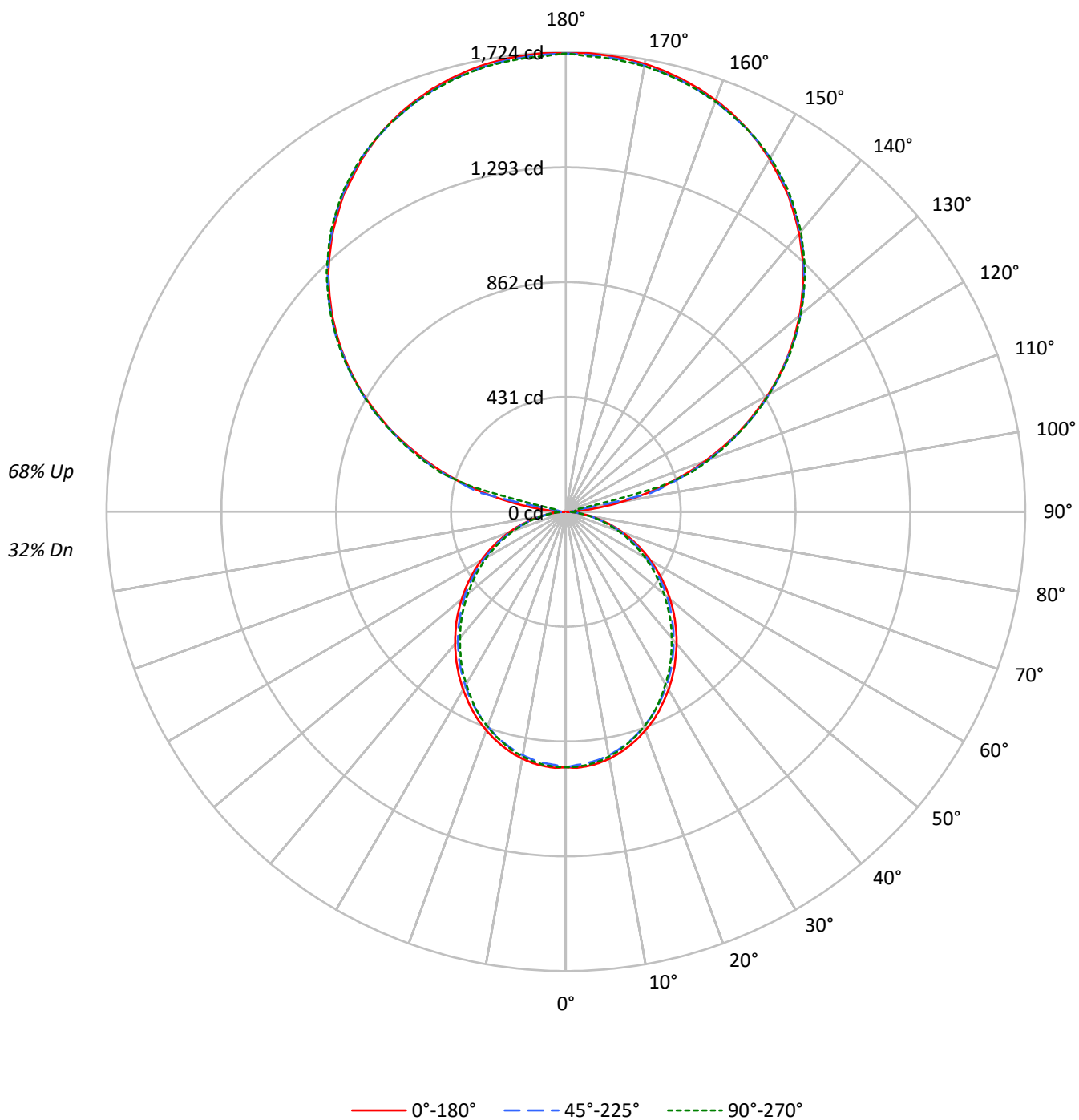
Lumens per Lamp: N/A
Luminaire Lumens: 7787.0 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
Input Voltage (V):
Input Current (A_{in}): 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
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73		55	55	55		39
1	94	89	86	82	84	81	77	75	64	62	60		49	47	46		35
2	85	78	72	67	76	70	65	61	56	52	49		43	40	38		30
3	78	69	61	56	70	62	56	51	49	45	42		38	35	32		27
4	71	61	53	47	64	55	48	43	44	39	35		34	30	28		24
5	65	54	46	40	58	49	42	37	39	34	30		30	27	24		22
6	60	48	40	35	54	44	37	32	35	30	26		27	24	21		20
7	55	43	36	30	50	39	33	28	32	27	23		25	21	18		18
8	51	39	32	27	46	36	29	25	29	24	20		22	19	16		16
9	48	36	28	24	43	33	26	22	26	22	18		21	17	15		15
10	44	33	26	21	40	30	24	19	24	20	16		19	16	13		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7819	7819	7819
5°	7826	7594	7603
10°	7759	7383	7331
15°	7648	7133	7025
20°	7506	6861	6708
25°	7345	6575	6366
30°	7153	6265	5990
35°	6953	5948	5628
40°	6745	5607	5242
45°	6527	5265	4882
50°	6284	4933	4482
55°	6022	4545	4086
60°	5753	4121	3673
65°	5445	3683	3208
70°	5091	3156	2709
75°	4562	2543	2169
80°	3887	1839	1527
85°	3020	1025	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6527 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.2
10°-20°	254.6	3.3
20°-30°	374.7	4.8
30°-40°	435.6	5.6
40°-50°	435.5	5.6
50°-60°	380.9	4.9
60°-70°	282.8	3.6
70°-80°	160.5	2.1
80°-90°	49.5	0.6
90°-100°	57.1	0.7
100°-110°	376.0	4.8
110°-120°	718.0	9.2
120°-130°	911.5	11.7
130°-140°	975.1	12.5
140°-150°	911.8	11.7
150°-160°	735.3	9.4
160°-170°	474.2	6.1
170°-180°	163.4	2.1
0°-30°	719.7	9.2
0°-40°	1155.3	14.8
0°-60°	1971.8	25.3
0°-90°	2464.6	31.6
90°-120°	1151.1	14.8
90°-150°	3949.5	50.7
90°-180°	5322.0	68.3
0°-180°	7787.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	958	955	946	955	953	91
15°	912	909	897	902	900	257
25°	826	820	810	810	808	380
35°	711	705	694	689	685	444
45°	580	575	562	554	552	447
55°	439	436	426	416	412	393
65°	297	294	286	278	274	294
75°	158	154	151	148	147	168
85°	42	42	40	40	39	45
90°	4	18	28	36	39	6
95°	71	27	28	36	37	87
105°	387	395	401	413	367	405
115°	723	727	726	728	728	712
125°	1016	1022	1019	1023	1024	908
135°	1261	1260	1265	1267	1270	971
145°	1454	1458	1458	1459	1462	908
155°	1594	1595	1591	1596	1593	735
165°	1682	1675	1675	1685	1674	475
175°	1720	1712	1714	1725	1710	164
180°	1720	1720	1720	1720	1720	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.8	958.8	958.8	958.8	958.8
2.5°	961.9	959.6	951.1	958.8	958.1
5°	958.1	955.0	946.5	955.0	953.4
7.5°	951.1	948.1	938.8	945.8	945.0
10°	941.2	938.1	928.1	934.2	932.7
12.5°	928.1	925.0	914.3	921.2	918.9
15°	912.0	908.9	897.4	902.0	899.7
17.5°	893.5	889.7	878.9	882.0	880.5
20°	872.8	868.9	857.4	859.7	858.2
22.5°	850.5	845.1	833.6	838.2	835.1
25°	825.9	820.5	809.8	810.5	807.5
27.5°	798.2	792.9	782.9	781.3	777.5
30°	770.6	764.4	754.5	751.4	747.5
32.5°	741.4	736.0	725.3	721.4	717.6
35°	710.7	705.3	694.5	689.2	685.3
37.5°	678.4	673.8	662.3	656.9	651.5
40°	646.9	640.8	629.2	621.5	617.7
42.5°	613.1	610.0	597.0	587.7	585.4
45°	580.1	574.7	562.4	553.9	551.6
47.5°	545.5	541.6	530.1	520.9	514.8
50°	510.1	507.1	496.3	485.6	480.9
52.5°	475.6	471.7	460.2	451.0	444.8
55°	438.7	436.4	425.6	416.4	411.8
57.5°	404.1	401.8	391.1	381.8	377.2
60°	368.0	364.2	354.2	347.3	343.4
62.5°	332.7	329.6	318.8	312.7	308.9
65°	297.3	293.5	285.8	278.1	274.3
67.5°	261.2	258.1	250.5	242.8	242.0
70°	228.2	222.8	216.7	210.5	208.2
72.5°	192.8	187.5	182.9	178.2	175.9
75°	158.3	154.4	150.6	147.5	146.7
77.5°	124.5	122.9	119.1	118.3	116.0
80°	94.5	92.2	90.7	89.1	88.4
82.5°	65.3	64.5	64.5	63.8	63.0
85°	41.5	41.5	40.0	40.0	39.2
87.5°	20.0	19.2	18.4	18.4	18.4
90°	3.9	18.0	28.3	36.0	38.6
92.5°	19.3	16.7	27.0	34.7	34.7
95°	70.8	27.0	28.3	36.0	37.3
97.5°	135.1	163.4	28.3	34.7	36.0
100°	211.0	234.1	56.6	34.7	36.0
102.5°	295.9	311.3	326.8	37.3	37.3
105°	387.2	395.0	401.4	413.0	366.7
107.5°	470.9	474.7	483.7	490.2	495.3
110°	555.8	559.6	567.3	569.9	573.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.1	645.8	648.4	647.1	652.3
115°	723.0	726.9	725.6	728.2	728.2
117.5°	798.9	804.1	807.9	806.6	806.6
120°	876.1	881.3	880.0	882.5	880.0
122.5°	948.2	950.7	953.3	954.6	952.0
125°	1016.3	1021.5	1018.9	1022.8	1024.1
127.5°	1081.9	1083.2	1089.7	1088.4	1087.1
130°	1145.0	1146.3	1150.1	1151.4	1151.4
132.5°	1202.9	1205.5	1210.6	1211.9	1210.6
135°	1260.8	1259.5	1264.6	1267.2	1269.8
137.5°	1312.2	1312.2	1318.7	1321.2	1320.0
140°	1362.4	1365.0	1367.6	1371.4	1372.7
142.5°	1407.4	1412.6	1413.9	1416.4	1416.4
145°	1453.7	1457.6	1457.6	1458.9	1461.5
147.5°	1489.8	1497.5	1496.2	1497.5	1498.8
150°	1529.6	1534.8	1533.5	1533.5	1534.8
152.5°	1563.1	1567.0	1564.4	1567.0	1565.7
155°	1594.0	1595.3	1591.4	1596.5	1592.7
157.5°	1621.0	1621.0	1615.8	1622.3	1615.8
160°	1644.1	1640.3	1639.0	1646.7	1639.0
162.5°	1664.7	1659.6	1658.3	1666.0	1657.0
165°	1681.5	1675.0	1675.0	1685.3	1673.7
167.5°	1695.6	1689.2	1687.9	1699.5	1686.6
170°	1707.2	1699.5	1700.8	1711.0	1698.2
172.5°	1714.9	1707.2	1708.5	1718.8	1704.6
175°	1720.1	1712.3	1713.6	1725.2	1709.8
177.5°	1723.9	1714.9	1717.5	1727.8	1712.3
180°	1720.1	1720.1	1720.1	1720.1	1720.1

(END OF REPORT)