

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: P1033582

Luminaire Tested: S124DIW-B575D1340UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033582
REPORT IS A COMBINATION OF REPORTS P997729 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

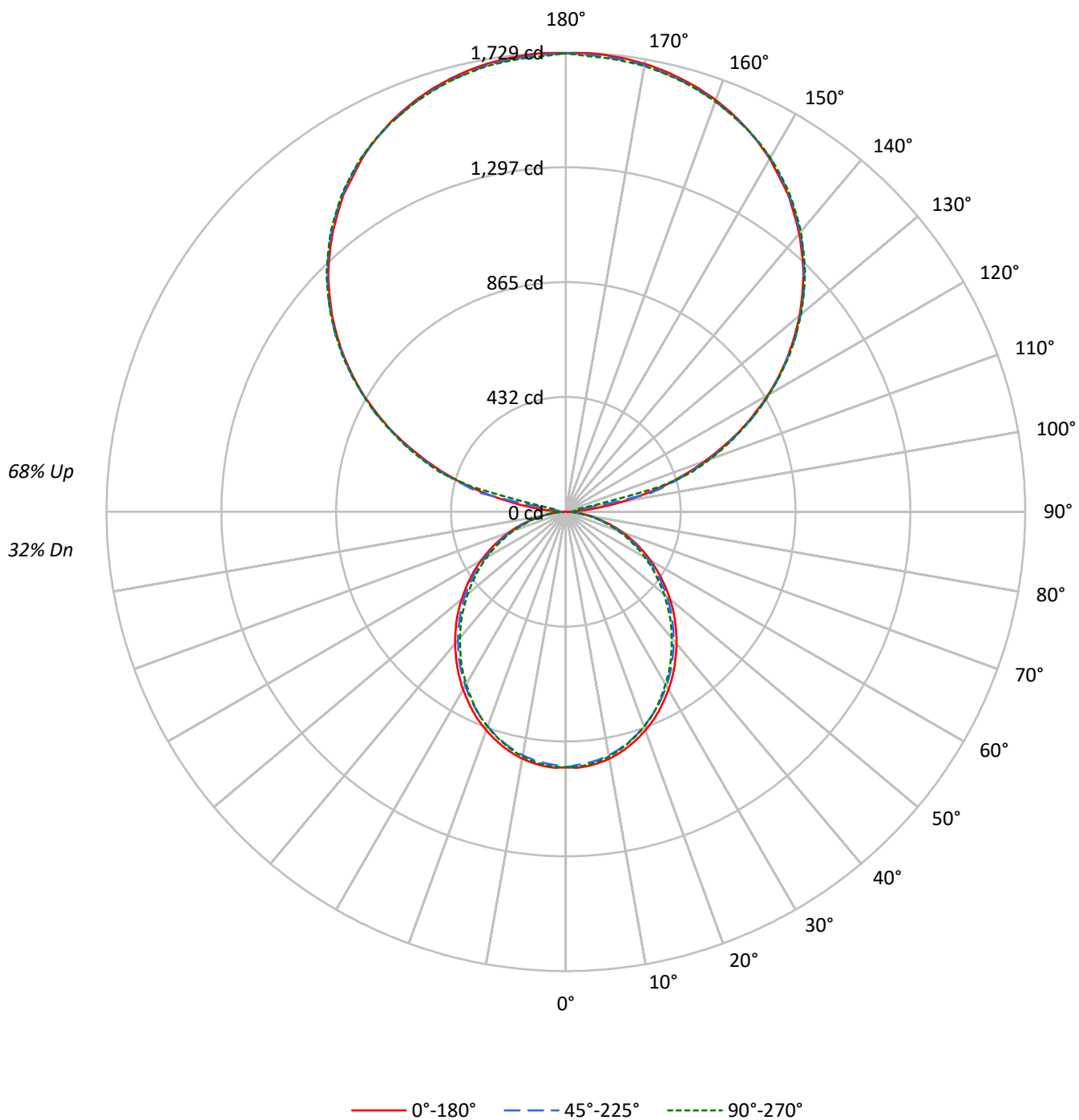
Lumens per Lamp: N/A
Luminaire Lumens: 7810.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
Input Voltage (V):
Input Current (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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7841	7841	7841
5°	7848	7615	7625
10°	7781	7404	7353
15°	7669	7153	7045
20°	7527	6880	6726
25°	7367	6594	6384
30°	7173	6283	6008
35°	6973	5965	5644
40°	6763	5623	5258
45°	6545	5280	4896
50°	6302	4947	4495
55°	6038	4558	4098
60°	5770	4133	3683
65°	5461	3693	3217
70°	5104	3164	2717
75°	4573	2550	2176
80°	3899	1844	1530
85°	3027	1028	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.2
10°-20°	255.3	3.3
20°-30°	375.8	4.8
30°-40°	436.8	5.6
40°-50°	436.8	5.6
50°-60°	382.0	4.9
60°-70°	283.6	3.6
70°-80°	160.9	2.1
80°-90°	49.7	0.6
90°-100°	57.3	0.7
100°-110°	377.1	4.8
110°-120°	720.2	9.2
120°-130°	914.2	11.7
130°-140°	978.0	12.5
140°-150°	914.5	11.7
150°-160°	737.5	9.4
160°-170°	475.6	6.1
170°-180°	163.9	2.1
0°-30°	721.7	9.2
0°-40°	1158.6	14.8
0°-60°	1977.4	25.3
0°-90°	2471.6	31.6
90°-120°	1154.6	14.8
90°-150°	3961.4	50.7
90°-180°	5338.0	68.3
0°-180°	7810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	958	949	958	956	91
15°	914	912	900	904	902	258
25°	828	823	812	813	810	381
35°	713	707	696	691	687	446
45°	582	576	564	556	553	448
55°	440	438	427	418	413	394
65°	298	294	287	279	275	295
75°	159	155	151	148	147	168
85°	42	42	40	40	39	45
90°	4	18	28	36	39	6
95°	71	27	28	36	37	88
105°	388	396	403	414	368	406
115°	725	729	728	730	730	714
125°	1019	1025	1022	1026	1027	910
135°	1265	1263	1268	1271	1274	974
145°	1458	1462	1462	1463	1466	911
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.5	961.5	961.5	961.5	961.5
2.5°	964.6	962.3	953.8	961.5	960.8
5°	960.8	957.7	949.2	957.7	956.2
7.5°	953.8	950.8	941.5	948.4	947.7
10°	943.8	940.7	930.7	936.9	935.4
12.5°	930.7	927.6	916.9	923.8	921.5
15°	914.5	911.5	899.9	904.5	902.2
17.5°	896.1	892.2	881.4	884.5	883.0
20°	875.3	871.4	859.8	862.2	860.6
22.5°	852.9	847.5	836.0	840.6	837.5
25°	828.3	822.9	812.1	812.8	809.8
27.5°	800.5	795.1	785.1	783.6	779.7
30°	772.8	766.6	756.6	753.5	749.7
32.5°	743.5	738.1	727.3	723.5	719.6
35°	712.7	707.3	696.5	691.1	687.3
37.5°	680.3	675.7	664.1	658.8	653.4
40°	648.7	642.6	631.0	623.3	619.5
42.5°	614.8	611.8	598.7	589.4	587.1
45°	581.7	576.3	564.0	555.5	553.2
47.5°	547.0	543.2	531.6	522.4	516.2
50°	511.6	508.5	497.7	486.9	482.3
52.5°	476.9	473.1	461.5	452.3	446.1
55°	439.9	437.6	426.8	417.6	413.0
57.5°	405.3	403.0	392.2	382.9	378.3
60°	369.1	365.2	355.2	348.3	344.4
62.5°	333.6	330.5	319.7	313.6	309.7
65°	298.2	294.3	286.6	278.9	275.1
67.5°	262.0	258.9	251.2	243.5	242.7
70°	228.8	223.4	217.3	211.1	208.8
72.5°	193.4	188.0	183.4	178.7	176.4
75°	158.7	154.9	151.0	147.9	147.2
77.5°	124.8	123.3	119.4	118.7	116.3
80°	94.8	92.5	90.9	89.4	88.6
82.5°	65.5	64.7	64.7	63.9	63.2
85°	41.6	41.6	40.1	40.1	39.3
87.5°	20.0	19.3	18.5	18.5	18.5
90°	3.9	18.1	28.4	36.1	38.7
92.5°	19.4	16.8	27.1	34.8	34.8
95°	71.0	27.1	28.4	36.1	37.4
97.5°	135.5	163.9	28.4	34.8	36.1
100°	211.6	234.8	56.8	34.8	36.1
102.5°	296.8	312.3	327.8	37.4	37.4
105°	388.4	396.1	402.6	414.2	367.8
107.5°	472.3	476.1	485.2	491.6	496.8
110°	557.4	561.3	569.1	571.6	575.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.0	647.8	650.3	649.1	654.2
115°	725.2	729.1	727.8	730.3	730.3
117.5°	801.3	806.5	810.3	809.1	809.1
120°	878.7	883.9	882.6	885.2	882.6
122.5°	951.0	953.6	956.2	957.5	954.9
125°	1019.4	1024.6	1022.0	1025.8	1027.1
127.5°	1085.2	1086.5	1092.9	1091.6	1090.4
130°	1148.4	1149.7	1153.6	1154.9	1154.9
132.5°	1206.5	1209.1	1214.2	1215.5	1214.2
135°	1264.6	1263.3	1268.4	1271.0	1273.6
137.5°	1316.2	1316.2	1322.6	1325.2	1323.9
140°	1366.5	1369.1	1371.7	1375.5	1376.8
142.5°	1411.7	1416.8	1418.1	1420.7	1420.7
145°	1458.1	1462.0	1462.0	1463.3	1465.9
147.5°	1494.2	1502.0	1500.7	1502.0	1503.3
150°	1534.2	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)