

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: P1033586

Luminaire Tested: S124DIW-B575D1340UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033586
REPORT IS A COMBINATION OF REPORTS P997735 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

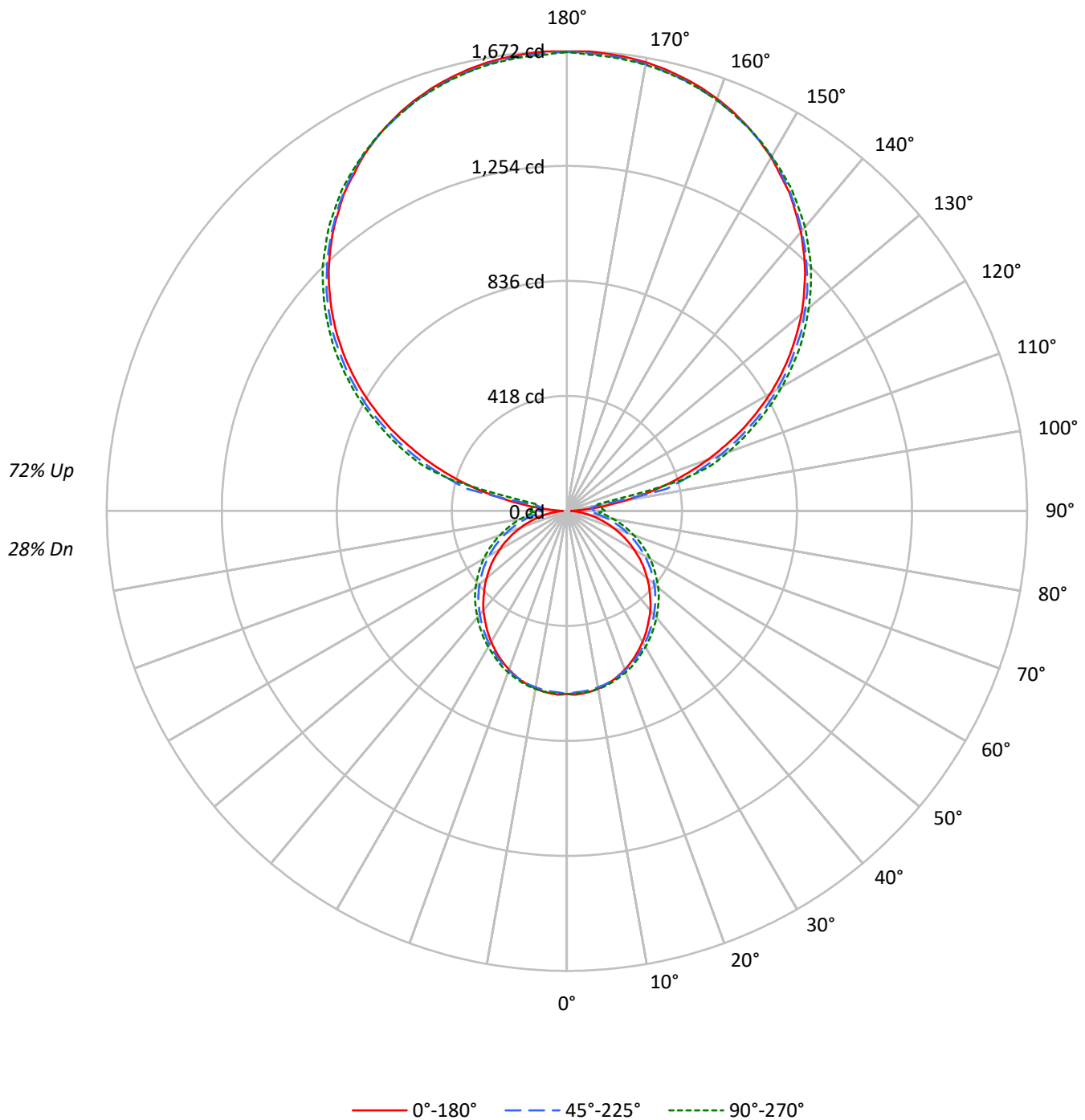
Lumens per Lamp: N/A
Luminaire Lumens: 7434.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	46	44	43	31	30	29
2	84	76	70	65	75	68	63	59	53	50	47	40	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	43	39	35	32	29	24	22	20
4	70	59	51	45	62	53	46	41	41	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5427	5427	5427
5°	5442	5285	5295
10°	5406	5182	5167
15°	5356	5065	5022
20°	5281	4938	4881
25°	5197	4798	4729
30°	5105	4660	4575
35°	5001	4518	4437
40°	4918	4383	4294
45°	4796	4255	4168
50°	4691	4111	4036
55°	4583	3972	3883
60°	4416	3798	3738
65°	4230	3611	3565
70°	4007	3397	3364
75°	3694	3160	3173
80°	3340	2916	2975
85°	2874	2673	2811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5088 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	0.8
10°-20°	180.7	2.4
20°-30°	273.2	3.7
30°-40°	330.5	4.4
40°-50°	349.4	4.7
50°-60°	328.8	4.4
60°-70°	272.9	3.7
70°-80°	191.5	2.6
80°-90°	111.4	1.5
90°-100°	119.6	1.6
100°-110°	412.2	5.5
110°-120°	728.3	9.8
120°-130°	901.9	12.1
130°-140°	953.4	12.8
140°-150°	885.8	11.9
150°-160°	713.1	9.6
160°-170°	459.9	6.2
170°-180°	158.5	2.1
0°-30°	516.9	7.0
0°-40°	847.4	11.4
0°-60°	1525.6	20.5
0°-90°	2101.4	28.3
90°-120°	1260.1	17.0
90°-150°	4001.2	53.8
90°-180°	5333.0	71.7
0°-180°	7434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	664	659	665	664	63
15°	639	639	637	644	643	180
25°	584	589	591	599	600	269
35°	511	520	528	538	540	320
45°	426	440	455	467	471	329
55°	334	350	372	387	391	298
65°	231	255	280	299	305	229
75°	128	156	187	208	215	136
85°	40	71	104	127	134	41
90°	16	59	101	130	139	12
95°	78	60	92	120	128	92
105°	382	405	438	468	429	401
115°	706	716	739	758	763	695
125°	989	993	1009	1027	1033	883
135°	1224	1223	1233	1248	1254	944
145°	1410	1414	1414	1419	1425	881
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	668.5	666.3	660.3	665.5	664.8
5°	666.3	664.0	658.8	664.8	664.0
7.5°	661.8	660.3	655.8	662.5	661.8
10°	655.8	655.1	651.4	658.1	657.3
12.5°	647.6	647.6	645.4	651.4	651.4
15°	638.7	639.4	637.2	643.9	643.2
17.5°	626.8	629.0	628.2	635.0	634.2
20°	614.1	616.3	617.1	624.5	624.5
22.5°	599.9	602.9	604.4	611.9	613.3
25°	584.3	588.7	591.0	599.2	599.9
27.5°	567.1	573.8	576.8	584.3	585.0
30°	550.0	556.0	561.2	569.4	570.9
32.5°	531.4	538.8	544.8	554.5	556.0
35°	511.2	520.2	527.6	538.1	540.3
37.5°	491.1	501.6	510.5	520.9	523.2
40°	471.7	481.4	491.9	503.0	506.0
42.5°	449.4	460.6	473.2	485.9	488.1
45°	426.3	440.4	454.6	467.3	471.0
47.5°	404.7	418.8	435.2	447.9	452.4
50°	380.8	397.2	413.6	428.5	433.0
52.5°	357.0	373.4	392.7	407.7	412.1
55°	333.9	349.5	371.9	386.8	391.3
57.5°	307.8	327.2	348.8	366.7	370.4
60°	282.5	301.8	326.4	343.6	349.5
62.5°	257.9	279.5	304.1	321.2	327.2
65°	231.0	254.9	280.2	298.8	304.8
67.5°	205.7	231.0	257.9	276.5	282.5
70°	179.6	204.9	233.3	253.4	258.6
72.5°	154.3	180.4	210.9	230.3	236.2
75°	128.2	155.8	187.1	207.9	214.6
77.5°	103.6	132.7	165.4	186.3	193.8
80°	81.2	111.0	143.8	166.2	172.2
82.5°	58.9	90.2	123.0	146.1	152.8
85°	39.5	70.8	104.3	126.7	134.1
87.5°	24.6	55.1	87.9	109.6	116.3
90°	15.6	59.2	101.2	130.3	138.8
92.5°	29.9	53.5	95.5	123.9	129.8
95°	78.3	60.5	92.2	119.9	127.9
97.5°	139.9	189.0	88.5	114.2	122.1
100°	212.8	254.7	111.5	110.5	116.9
102.5°	295.2	326.5	369.8	108.5	114.5
105°	382.2	404.6	438.5	468.3	429.4
107.5°	463.3	479.8	514.6	539.4	549.6
110°	545.0	559.1	592.7	612.3	622.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	624.0	640.5	667.6	682.6	693.6
115°	705.7	716.1	738.7	757.5	762.7
117.5°	779.3	788.7	814.8	829.3	835.2
120°	853.3	860.6	881.0	898.4	901.8
122.5°	923.2	925.7	948.3	964.5	967.2
125°	988.6	992.8	1009.0	1026.9	1032.6
127.5°	1052.2	1052.7	1073.8	1086.1	1090.0
130°	1112.6	1113.1	1128.8	1143.4	1147.9
132.5°	1168.7	1170.5	1184.4	1198.4	1201.6
135°	1224.2	1222.9	1233.1	1247.5	1254.5
137.5°	1274.1	1273.3	1282.5	1296.2	1298.6
140°	1322.7	1324.4	1327.7	1341.2	1346.1
142.5°	1365.6	1370.6	1371.1	1381.8	1384.8
145°	1410.5	1413.5	1413.5	1419.3	1424.8
147.5°	1445.4	1452.2	1451.0	1452.9	1457.2
150°	1484.1	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)