

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: P1033422

Luminaire Tested: S124DIW-B350D1340UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033422
REPORT IS A COMBINATION OF REPORTS P997379 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

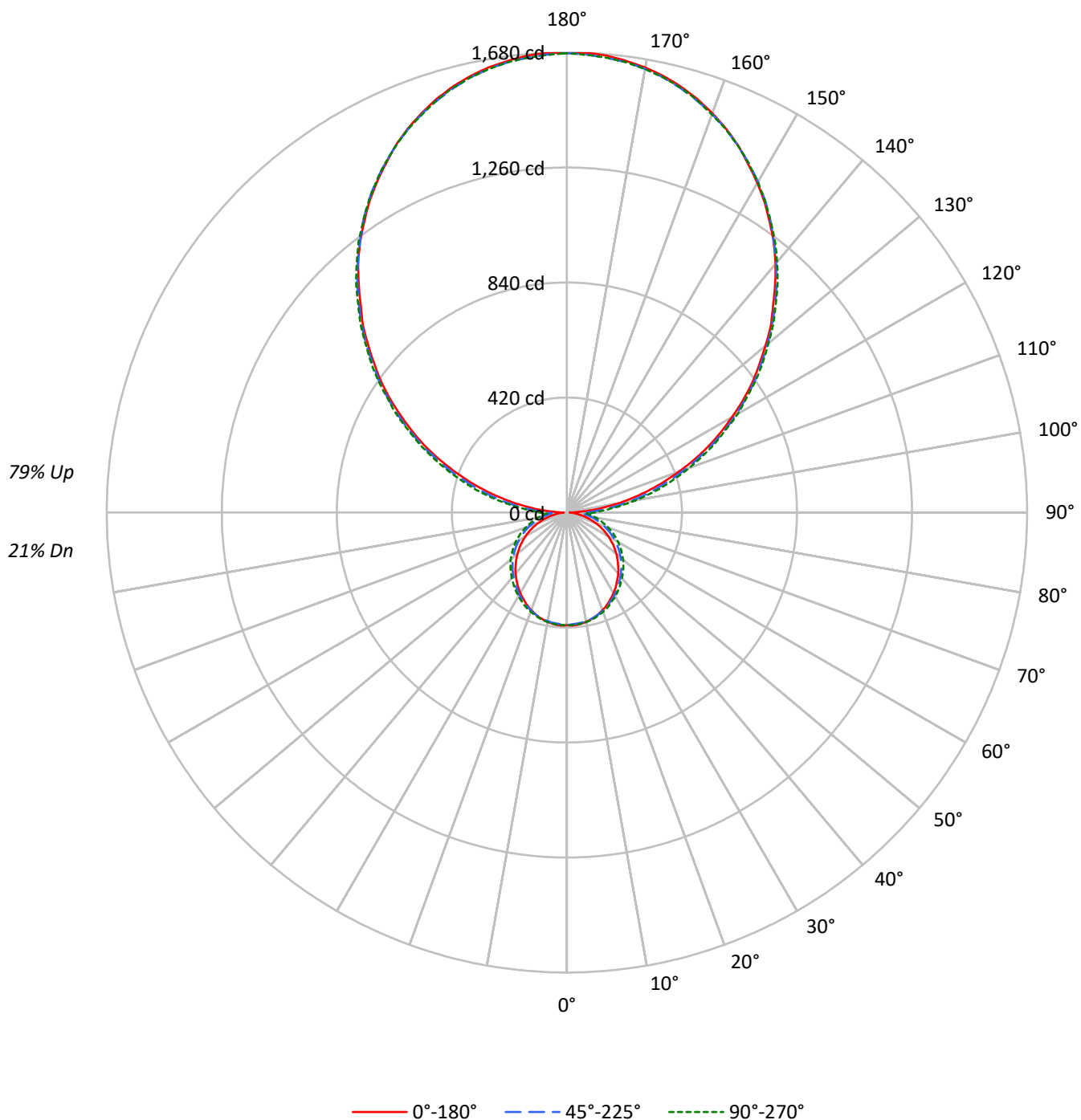
Lumens per Lamp: N/A
Luminaire Lumens: 6061.1 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	21
1	91	87	83	79	80	77	74	71	58	56	54	41	40	39	26	25	24	24	24	17
2	83	75	69	64	73	67	62	57	51	47	44	36	34	32	22	21	20	20	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	17	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	14	14	10
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	16	14	12	12	12	8
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	11	11	7
7	53	41	34	28	47	37	30	25	28	24	20	20	17	15	13	11	10	10	10	6
8	49	37	30	25	43	33	27	22	26	21	18	18	15	13	12	10	8	8	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	11	9	8	8	8	5
10	42	31	24	19	37	28	22	17	21	17	14	15	12	10	10	8	7	7	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3686 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.6
10°-20°	111.7	1.8
20°-30°	168.9	2.8
30°-40°	204.4	3.4
40°-50°	216.0	3.6
50°-60°	203.3	3.4
60°-70°	168.7	2.8
70°-80°	118.4	2.0
80°-90°	70.3	1.2
90°-100°	149.1	2.5
100°-110°	356.9	5.9
110°-120°	576.1	9.5
120°-130°	744.9	12.3
130°-140°	828.9	13.7
140°-150°	811.0	13.4
150°-160°	681.3	11.2
160°-170°	453.3	7.5
170°-180°	158.7	2.6
0°-30°	319.6	5.3
0°-40°	524.0	8.6
0°-60°	943.3	15.6
0°-90°	1300.8	21.5
90°-120°	1082.2	17.9
90°-150°	3467.0	57.2
90°-180°	4760.0	78.5
0°-180°	6061.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	11	44	74	95	102	11
95°	84	111	139	155	159	89
105°	306	317	339	355	362	325
115°	568	572	585	594	596	561
125°	826	825	835	842	842	736
135°	1063	1071	1074	1079	1078	823
145°	1291	1296	1297	1299	1297	808
155°	1479	1479	1478	1483	1478	681
165°	1610	1606	1604	1611	1606	454
175°	1675	1668	1667	1676	1667	159
180°	1678	1678	1678	1678	1678	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	11.3	44.0	74.1	95.3	101.6
92.5°	40.6	73.6	100.0	116.8	121.7
95°	83.8	110.7	138.7	155.0	159.2
97.5°	130.0	153.8	183.1	200.3	204.4
100°	186.7	203.9	233.5	248.6	251.8
102.5°	246.4	257.8	285.7	301.6	306.6
105°	306.4	317.0	339.2	354.6	362.2
107.5°	370.0	379.2	396.6	413.2	415.2
110°	434.4	443.4	458.3	466.3	473.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	501.4	507.0	519.6	529.7	533.4
115°	568.4	572.5	584.8	593.6	595.5
117.5°	632.0	634.7	647.3	653.0	652.8
120°	695.1	701.7	711.2	713.9	720.2
122.5°	761.3	762.6	773.7	779.1	775.8
125°	825.6	825.2	835.4	841.6	841.7
127.5°	884.0	887.5	894.1	899.8	901.7
130°	945.9	949.3	956.7	962.4	960.0
132.5°	1009.4	1011.5	1015.8	1021.1	1022.6
135°	1063.4	1071.2	1074.4	1079.2	1078.1
137.5°	1124.4	1127.9	1132.3	1135.3	1138.9
140°	1185.4	1187.6	1188.0	1192.7	1193.7
142.5°	1240.8	1243.4	1241.6	1246.7	1248.5
145°	1291.4	1296.1	1297.4	1298.9	1296.8
147.5°	1343.3	1349.3	1348.0	1347.2	1347.7
150°	1390.0	1394.7	1394.7	1394.7	1393.4
152.5°	1433.6	1436.2	1437.5	1441.4	1437.5
155°	1479.0	1479.0	1477.7	1482.9	1477.7
157.5°	1517.9	1515.3	1515.3	1519.2	1515.3
160°	1551.6	1550.3	1549.0	1552.9	1546.5
162.5°	1582.8	1578.9	1577.6	1585.4	1578.9
165°	1610.0	1606.1	1603.5	1611.3	1606.1
167.5°	1632.1	1626.9	1626.9	1634.7	1626.9
170°	1650.2	1643.8	1645.1	1652.8	1643.8
172.5°	1663.2	1658.0	1658.0	1667.1	1658.0
175°	1674.9	1668.4	1667.1	1676.2	1667.1
177.5°	1680.1	1673.6	1673.6	1682.7	1672.3
180°	1677.5	1677.5	1677.5	1677.5	1677.5

(END OF REPORT)