

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: P1033428

Luminaire Tested: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033428
REPORT IS A COMBINATION OF REPORTS P997388 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

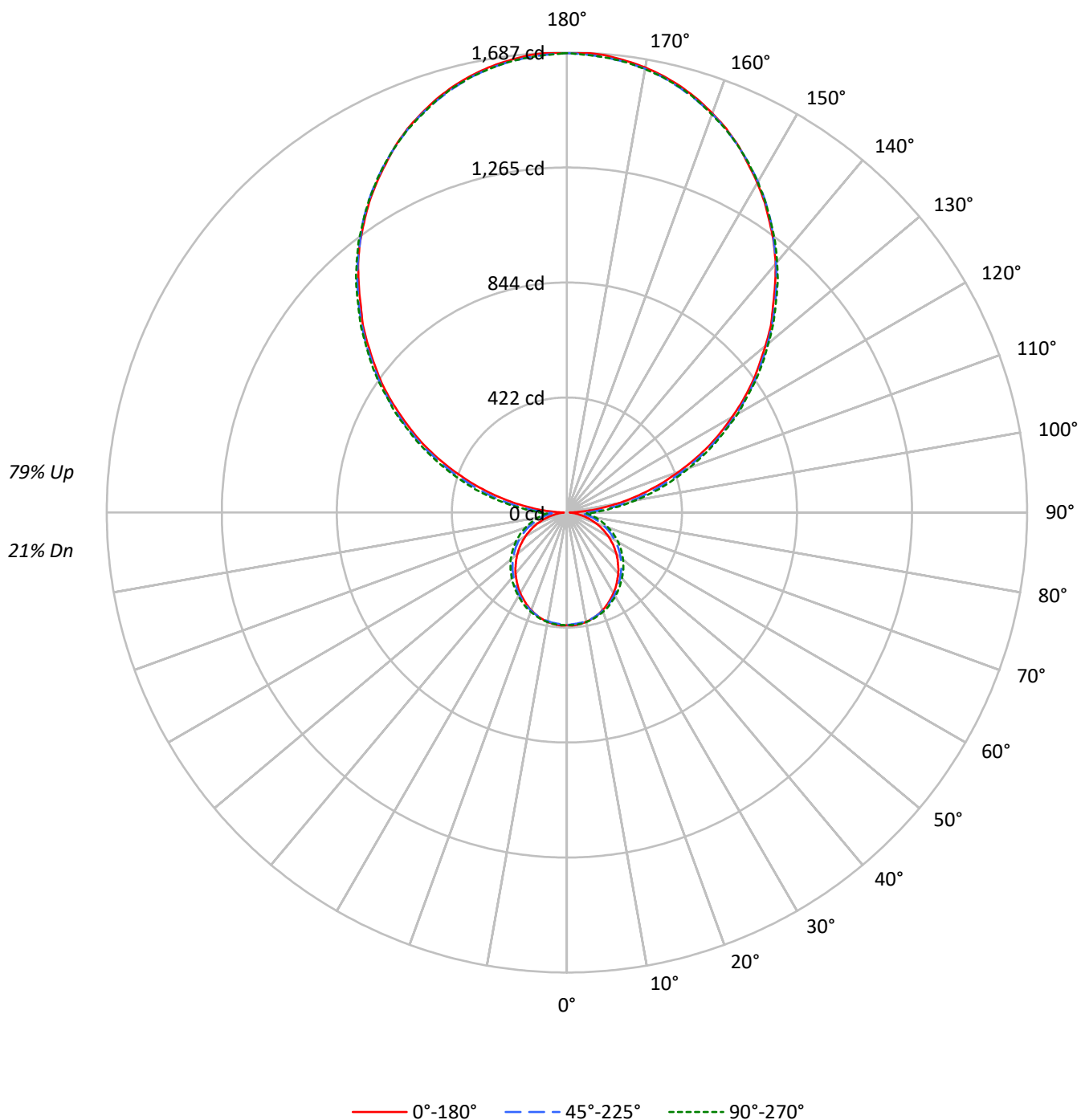
Lumens per Lamp: N/A
Luminaire Lumens: 6087.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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

TEST NUMBER: P1033428

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1033428

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3686 cd/sqm

TEST NUMBER: P1033428

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.6
10°-20°	112.2	1.8
20°-30°	169.6	2.8
30°-40°	205.2	3.4
40°-50°	217.0	3.6
50°-60°	204.2	3.4
60°-70°	169.4	2.8
70°-80°	118.9	2.0
80°-90°	70.6	1.2
90°-100°	149.7	2.5
100°-110°	358.5	5.9
110°-120°	578.6	9.5
120°-130°	748.1	12.3
130°-140°	832.5	13.7
140°-150°	814.4	13.4
150°-160°	684.2	11.2
160°-170°	455.2	7.5
170°-180°	159.4	2.6
0°-30°	321.0	5.3
0°-40°	526.2	8.6
0°-60°	947.4	15.6
0°-90°	1306.3	21.5
90°-120°	1086.8	17.9
90°-150°	3481.8	57.2
90°-180°	4781.0	78.5
0°-180°	6087.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	11	44	74	96	102	11
95°	84	111	139	156	160	89
105°	308	318	341	356	364	327
115°	571	575	587	596	598	563
125°	829	829	839	845	845	739
135°	1068	1076	1079	1084	1083	826
145°	1297	1302	1303	1304	1302	812
155°	1485	1485	1484	1489	1484	684
165°	1617	1613	1610	1618	1613	456
175°	1682	1676	1674	1683	1674	160
180°	1685	1685	1685	1685	1685	

TEST NUMBER: P1033428

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	11.3	44.1	74.5	95.7	102.0
92.5°	40.8	73.9	100.3	117.2	122.2
95°	84.2	111.2	139.3	155.7	159.8
97.5°	130.7	154.5	183.8	201.1	205.2
100°	187.5	204.7	234.5	249.7	252.9
102.5°	247.4	258.9	287.0	302.9	307.9
105°	307.8	318.3	340.6	356.1	363.7
107.5°	371.6	380.7	398.2	415.0	416.9
110°	436.3	445.4	460.3	468.3	475.9

TEST NUMBER: P1033428

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	503.5	509.1	521.8	531.9	535.6
115°	570.9	575.0	587.3	596.1	598.1
117.5°	634.7	637.5	650.0	655.9	655.7
120°	698.1	704.7	714.2	717.0	723.3
122.5°	764.5	765.8	777.0	782.4	779.1
125°	829.3	828.8	839.1	845.3	845.3
127.5°	887.9	891.3	897.9	903.7	905.6
130°	949.9	953.3	960.7	966.5	964.0
132.5°	1013.8	1015.9	1020.2	1025.4	1026.9
135°	1068.0	1075.8	1079.1	1083.9	1082.7
137.5°	1129.2	1132.7	1137.2	1140.2	1143.8
140°	1190.5	1192.7	1193.1	1197.8	1198.9
142.5°	1246.1	1248.7	1246.9	1252.0	1253.8
145°	1296.9	1301.6	1302.9	1304.4	1302.3
147.5°	1349.0	1355.0	1353.7	1352.9	1353.4
150°	1395.9	1400.7	1400.7	1400.7	1399.3
152.5°	1439.7	1442.3	1443.6	1447.6	1443.6
155°	1485.3	1485.3	1484.0	1489.3	1484.0
157.5°	1524.4	1521.8	1521.8	1525.7	1521.8
160°	1558.3	1557.0	1555.7	1559.6	1553.1
162.5°	1589.6	1585.7	1584.4	1592.2	1585.7
165°	1616.9	1613.0	1610.4	1618.2	1613.0
167.5°	1639.1	1633.9	1633.9	1641.7	1633.9
170°	1657.3	1650.8	1652.1	1659.9	1650.8
172.5°	1670.4	1665.1	1665.1	1674.3	1665.1
175°	1682.1	1675.6	1674.3	1683.4	1674.3
177.5°	1687.3	1680.8	1680.8	1689.9	1679.5
180°	1684.7	1684.7	1684.7	1684.7	1684.7

(END OF REPORT)