

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: P1033430

Luminaire Tested: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033430
REPORT IS A COMBINATION OF REPORTS P997391 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

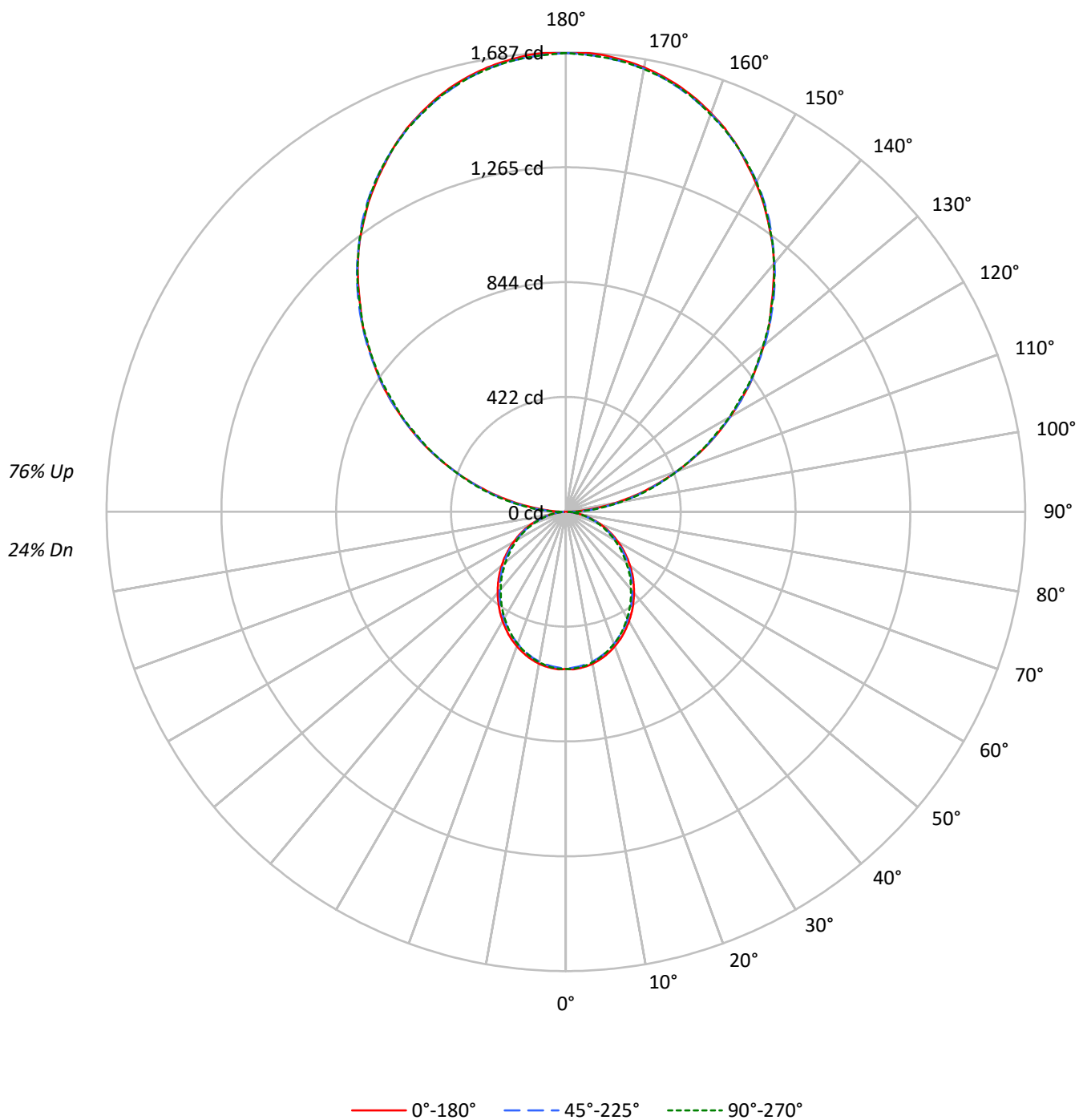
Lumens per Lamp: N/A
Luminaire Lumens: 6160.0 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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: P1033430

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1033430

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27
2	84	77	71	66	74	68	63	59	53	49	47	38	36	34	25	24	23
3	76	67	60	55	68	60	54	49	46	42	39	34	31	29	22	21	19
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	56	47	41	36	37	32	28	27	24	21	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	44	34	28	24	27	22	19	20	17	14	13	12	10
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9
10	43	32	25	20	38	29	23	19	23	18	15	17	14	12	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3930 cd/sqm

TEST NUMBER: P1033430

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.9
10°-20°	153.3	2.5
20°-30°	225.7	3.7
30°-40°	262.3	4.3
40°-50°	262.3	4.3
50°-60°	229.4	3.7
60°-70°	170.3	2.8
70°-80°	96.6	1.6
80°-90°	31.3	0.5
90°-100°	109.8	1.8
100°-110°	328.9	5.3
110°-120°	558.8	9.1
120°-130°	736.9	12.0
130°-140°	827.7	13.4
140°-150°	813.5	13.2
150°-160°	684.2	11.1
160°-170°	455.2	7.4
170°-180°	159.4	2.6
0°-30°	433.4	7.0
0°-40°	695.7	11.3
0°-60°	1187.4	19.3
0°-90°	1485.6	24.1
90°-120°	997.5	16.2
90°-150°	3375.5	54.8
90°-180°	4674.0	75.9
0°-180°	6160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	4	18	29	36	39	7
95°	78	90	99	103	103	85
105°	304	305	310	314	318	322
115°	568	568	566	564	563	560
125°	827	827	826	824	821	738
135°	1067	1075	1075	1072	1068	826
145°	1296	1302	1303	1302	1298	811
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: P1033430

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	3.9	18.2	28.7	36.5	39.1
92.5°	33.9	50.8	57.3	61.2	62.5
95°	78.2	89.9	99.0	102.9	102.9
97.5°	125.1	135.5	145.9	151.1	151.1
100°	182.4	187.6	199.3	202.0	202.0
102.5°	242.3	243.6	254.1	258.0	259.3
105°	303.6	304.9	310.1	314.0	317.9
107.5°	367.4	368.7	370.0	375.2	373.9
110°	432.6	435.2	433.9	431.3	435.2

TEST NUMBER: P1033430

CATALOG NUMBER: S124DIW-B350D1340UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.3	500.3	497.7	497.7	497.7
115°	568.1	568.1	565.5	564.2	562.9
117.5°	631.9	631.9	630.6	626.7	622.8
120°	695.8	701.0	697.1	690.6	693.2
122.5°	762.2	763.5	762.2	758.3	751.8
125°	827.4	827.4	826.1	823.5	820.8
127.5°	886.0	889.9	887.3	884.7	883.4
130°	948.5	952.4	952.4	949.8	944.6
132.5°	1012.4	1015.0	1013.7	1011.1	1009.8
135°	1067.1	1074.9	1074.9	1072.3	1068.4
137.5°	1128.3	1132.2	1134.9	1130.9	1132.2
140°	1189.6	1192.2	1192.2	1190.9	1189.6
142.5°	1245.6	1248.2	1246.9	1246.9	1246.9
145°	1296.4	1301.6	1302.9	1301.6	1297.7
147.5°	1348.5	1355.0	1353.7	1352.4	1351.1
150°	1395.4	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)