

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: P1032621

Luminaire Tested: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032621
REPORT IS A COMBINATION OF REPORTS P997298 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

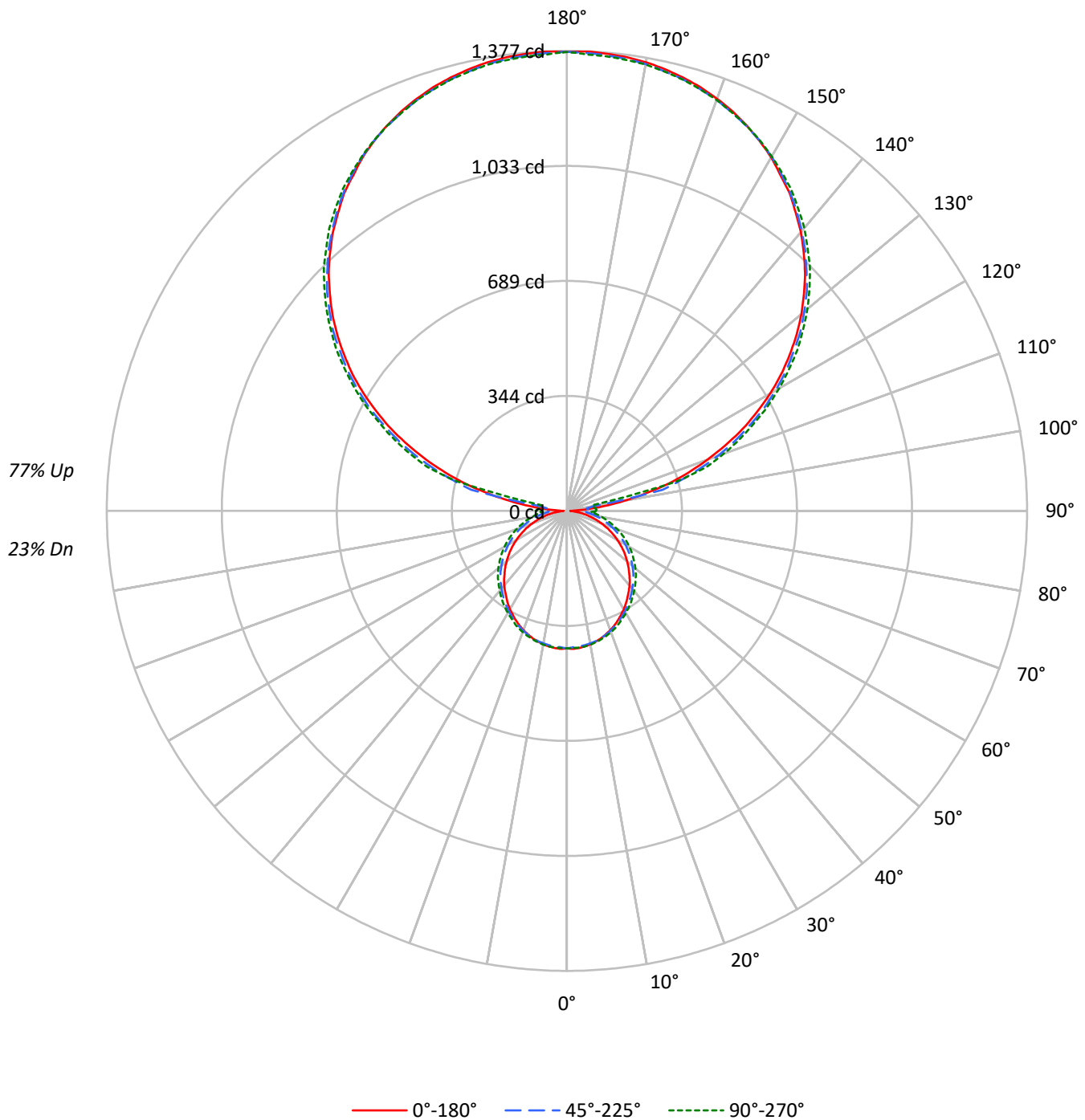
Lumens per Lamp: N/A
Luminaire Lumens: 5657.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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: P1032621

CATALOG NUMBER: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1032621

CATALOG NUMBER: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	91	87	83	79	81	77	74	71	59	57	55	42	41	40	27	26	25			18
2	83	76	70	64	73	67	62	58	51	48	45	37	35	33	23	22	21			15
3	75	66	59	53	67	59	53	48	45	41	37	32	30	27	21	19	18			12
4	69	58	51	45	61	52	45	40	40	35	32	29	26	23	18	16	15			11
5	63	52	44	38	56	46	39	34	35	31	27	26	22	20	16	14	13			9
6	58	46	38	33	51	41	34	30	32	27	23	23	20	17	15	13	11			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	13	11	10			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8			6
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	10	8	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: 3425 cd/sqm

TEST NUMBER: P1032621

CATALOG NUMBER: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.7
10°-20°	111.7	2.0
20°-30°	168.9	3.0
30°-40°	204.4	3.6
40°-50°	216.0	3.8
50°-60°	203.3	3.6
60°-70°	168.7	3.0
70°-80°	118.4	2.1
80°-90°	69.6	1.2
90°-100°	85.3	1.5
100°-110°	329.8	5.8
110°-120°	593.3	10.5
120°-130°	739.2	13.1
130°-140°	783.6	13.9
140°-150°	729.2	12.9
150°-160°	587.3	10.4
160°-170°	378.8	6.7
170°-180°	130.5	2.3
0°-30°	319.6	5.7
0°-40°	524.0	9.3
0°-60°	943.3	16.7
0°-90°	1300.0	23.0
90°-120°	1008.4	17.8
90°-150°	3260.4	57.6
90°-180°	4357.0	77.0
0°-180°	5657.0	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°	10	40	68	88	94	8
95°	62	43	63	81	86	74
105°	313	329	351	372	338	328
115°	580	588	601	613	617	571
125°	814	817	827	839	842	727
135°	1008	1007	1014	1024	1028	777
145°	1162	1164	1164	1168	1172	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

TEST NUMBER: P1032621

CATALOG NUMBER: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

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°	10.5	40.2	68.2	87.8	93.5
92.5°	22.3	36.4	64.5	83.5	87.1
95°	62.5	42.8	62.7	81.3	86.5
97.5°	113.4	149.4	60.4	77.5	82.7
100°	173.6	204.1	80.2	75.2	79.5
102.5°	241.4	263.9	293.7	74.5	78.2
105°	313.4	328.9	351.0	371.7	338.5
107.5°	380.2	391.2	414.5	431.1	438.5
110°	447.6	457.1	479.5	492.1	498.9

TEST NUMBER: P1032621

CATALOG NUMBER: S124DIW-B350D1050UB2750-4F0-XX-W2A-D_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	512.9	524.6	541.9	551.0	558.8
115°	580.3	587.5	601.2	613.4	616.6
117.5°	640.9	647.7	664.7	673.3	677.0
120°	702.1	707.6	719.9	731.2	732.8
122.5°	759.6	761.7	776.1	786.4	787.6
125°	813.6	817.3	826.7	838.6	842.3
127.5°	866.0	866.6	880.9	888.2	890.4
130°	915.9	916.5	926.9	936.3	939.1
132.5°	962.2	963.7	973.4	982.3	984.0
135°	1007.9	1006.9	1014.2	1023.6	1028.5
137.5°	1049.0	1048.6	1055.5	1064.5	1065.8
140°	1089.1	1090.7	1093.2	1102.3	1105.6
142.5°	1124.6	1128.8	1129.3	1136.4	1138.2
145°	1161.6	1164.2	1164.2	1168.1	1171.9
147.5°	1190.4	1196.1	1195.1	1196.6	1199.4
150°	1222.3	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)