

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: P1031575

Luminaire Tested: S123DIW-B340D1030UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031575
REPORT IS A COMBINATION OF REPORTS P991239 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

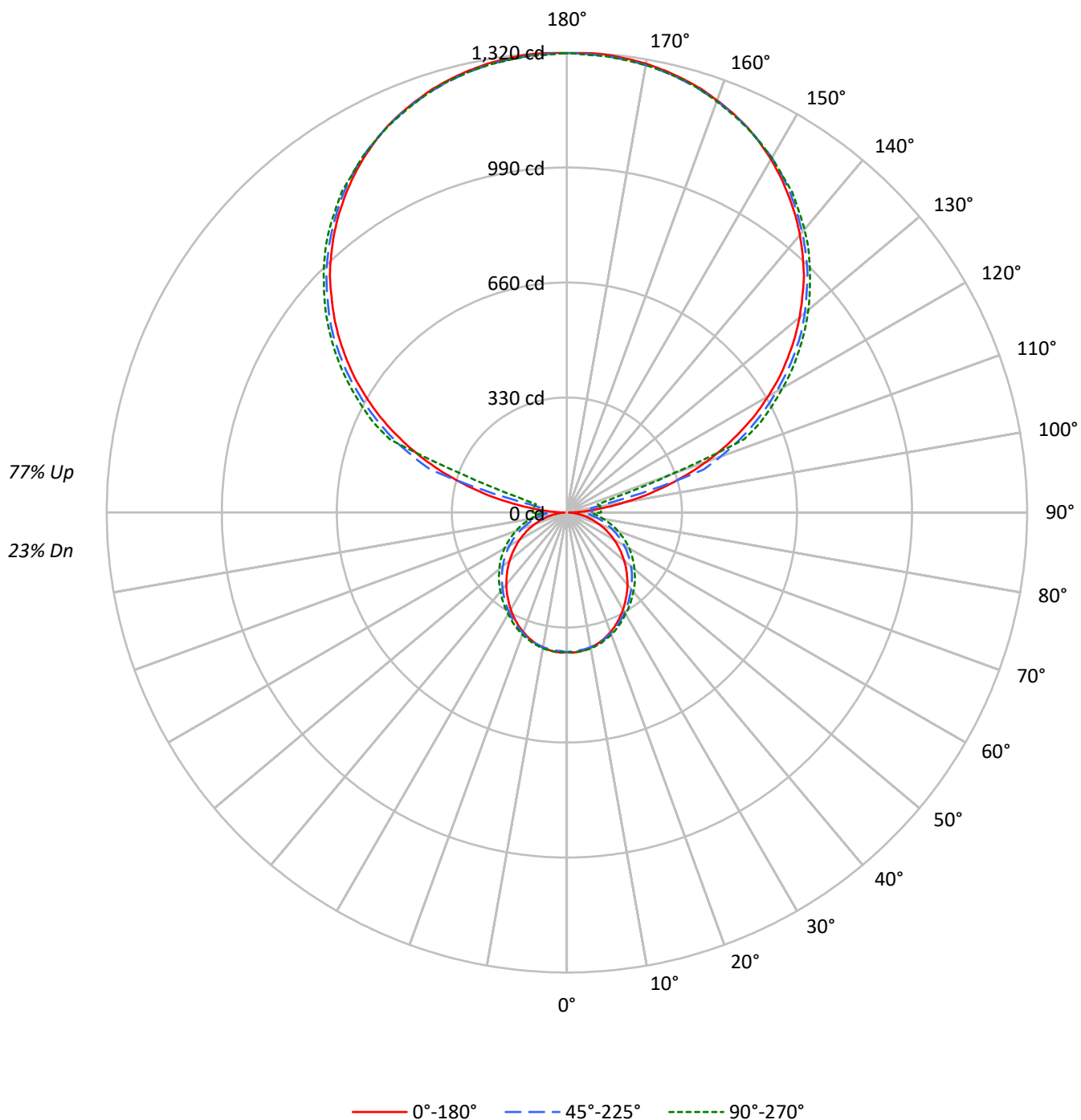
Lumens per Lamp: N/A
Luminaire Lumens: 5368.0 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1031575

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1031575

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4311	4311	4311
5°	4322	4184	4181
10°	4282	4071	4040
15°	4225	3946	3890
20°	4146	3807	3730
25°	4047	3649	3563
30°	3945	3507	3397
35°	3832	3358	3260
40°	3723	3222	3116
45°	3603	3089	2998
50°	3483	2959	2869
55°	3352	2824	2752
60°	3223	2687	2630
65°	3089	2540	2488
70°	2892	2377	2342
75°	2640	2190	2191
80°	2345	2001	2020
85°	2056	1846	1895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3603 cd/sqm

TEST NUMBER: P1031575

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	0.7
10°-20°	108.3	2.0
20°-30°	162.0	3.0
30°-40°	193.4	3.6
40°-50°	202.3	3.8
50°-60°	189.9	3.5
60°-70°	158.6	3.0
70°-80°	113.4	2.1
80°-90°	70.1	1.3
90°-100°	88.9	1.7
100°-110°	256.0	4.8
110°-120°	571.6	10.6
120°-130°	711.2	13.2
130°-140°	752.4	14.0
140°-150°	699.7	13.0
150°-160°	563.5	10.5
160°-170°	363.6	6.8
170°-180°	125.3	2.3
0°-30°	308.3	5.7
0°-40°	501.6	9.3
0°-60°	893.8	16.7
0°-90°	1235.9	23.0
90°-120°	916.5	17.1
90°-150°	3079.7	57.4
90°-180°	4132.0	77.0
0°-180°	5368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	401	400	397	401	400	38
15°	382	383	383	387	386	108
25°	345	349	350	356	356	159
35°	297	304	309	316	318	186
45°	243	253	264	272	276	187
55°	185	199	215	227	230	166
65°	128	145	164	177	182	126
75°	69	90	112	126	131	74
85°	21	43	66	81	86	22
90°	7	38	73	92	98	7
95°	65	41	74	94	98	75
105°	295	317	247	86	92	313
115°	550	561	585	606	613	543
125°	773	781	798	809	814	691
135°	962	967	976	987	986	741
145°	1109	1116	1118	1123	1125	694
155°	1222	1220	1220	1225	1220	563
165°	1288	1285	1284	1292	1285	364
175°	1318	1314	1314	1321	1314	125
180°	1318	1318	1318	1318	1318	

TEST NUMBER: P1031575

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.5	400.5	400.5	400.5	400.5
2.5°	402.7	401.4	397.9	401.4	400.9
5°	400.9	400.1	397.4	400.9	400.5
7.5°	397.9	397.9	395.3	399.6	399.2
10°	393.5	394.4	392.2	396.6	395.7
12.5°	388.3	389.6	388.3	392.2	391.3
15°	381.7	383.1	382.6	387.0	386.5
17.5°	373.9	376.5	376.1	380.0	379.1
20°	365.2	367.8	368.7	372.6	373.0
22.5°	356.0	358.6	359.9	365.2	364.7
25°	344.7	349.0	350.3	356.0	356.0
27.5°	333.8	338.6	341.2	346.0	346.4
30°	322.0	327.6	331.1	336.4	336.4
32.5°	308.9	315.4	320.2	325.9	327.2
35°	296.7	303.6	309.3	315.9	317.6
37.5°	283.6	291.4	298.0	305.4	306.7
40°	270.5	278.3	287.1	294.5	296.2
42.5°	256.1	266.1	275.3	283.6	286.2
45°	242.6	253.0	263.9	272.2	275.7
47.5°	228.2	240.0	252.2	261.3	263.9
50°	214.2	226.4	240.0	250.0	253.0
52.5°	199.4	212.5	227.7	238.2	242.1
55°	185.0	199.4	215.1	226.9	230.4
57.5°	171.0	185.9	202.9	214.6	218.6
60°	156.2	171.9	189.8	202.0	206.8
62.5°	142.2	158.4	177.6	189.8	194.1
65°	127.8	144.8	164.0	177.1	181.5
67.5°	113.4	131.3	150.5	164.9	168.4
70°	98.2	116.9	137.9	151.8	156.2
72.5°	84.2	103.0	124.8	139.2	143.5
75°	69.4	89.9	111.7	126.1	131.3
77.5°	56.7	77.2	99.0	114.3	118.2
80°	43.2	64.6	87.3	102.1	106.5
82.5°	31.4	53.2	76.3	91.2	95.5
85°	21.4	43.2	66.3	81.1	85.5
87.5°	13.1	34.9	57.2	72.0	76.3
90°	6.7	37.8	72.8	91.5	97.9
92.5°	27.7	40.7	71.3	92.5	97.4
95°	64.6	41.4	73.6	93.9	98.3
97.5°	113.1	101.4	71.9	92.9	98.2
100°	169.4	203.0	70.3	90.8	96.1
102.5°	233.7	258.6	107.8	87.8	94.0
105°	295.4	316.7	247.2	86.0	92.0
107.5°	360.6	378.5	411.1	272.1	147.7
110°	425.8	441.5	469.7	448.7	312.2

TEST NUMBER: P1031575

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.4	501.4	528.8	548.5	550.4
115°	549.8	560.8	585.3	605.6	613.1
117.5°	610.5	620.8	640.5	658.9	663.4
120°	665.8	676.8	694.2	712.1	715.1
122.5°	722.6	730.4	747.8	762.3	766.4
125°	773.2	781.0	797.6	808.7	813.7
127.5°	824.1	831.5	847.3	859.0	860.1
130°	871.1	878.6	891.2	903.4	904.0
132.5°	915.8	923.6	933.0	944.9	944.9
135°	961.8	967.2	975.9	986.7	986.0
137.5°	1001.0	1008.3	1013.4	1025.3	1025.5
140°	1039.7	1045.6	1049.8	1060.3	1060.5
142.5°	1075.9	1081.4	1084.3	1093.0	1092.2
145°	1109.2	1115.7	1117.6	1123.1	1124.8
147.5°	1141.1	1146.0	1148.0	1151.3	1148.2
150°	1170.5	1173.5	1175.4	1177.4	1175.3
152.5°	1197.0	1198.0	1198.9	1202.9	1198.0
155°	1221.5	1219.5	1220.5	1225.4	1219.5
157.5°	1241.1	1241.1	1240.1	1246.0	1238.1
160°	1258.7	1257.7	1256.7	1262.6	1255.7
162.5°	1275.3	1272.4	1271.4	1278.3	1272.4
165°	1288.1	1285.1	1284.2	1292.0	1285.1
167.5°	1298.8	1294.9	1294.9	1302.8	1294.9
170°	1307.7	1303.7	1303.7	1311.6	1303.7
172.5°	1313.5	1308.6	1309.6	1317.5	1308.6
175°	1318.4	1313.5	1314.5	1321.4	1313.5
177.5°	1320.4	1315.5	1316.5	1324.3	1314.5
180°	1318.4	1318.4	1318.4	1318.4	1318.4

(END OF REPORT)