

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: P1031576

Luminaire Tested: S123DIW-B340D1030UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031576
REPORT IS A COMBINATION OF REPORTS P991240 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

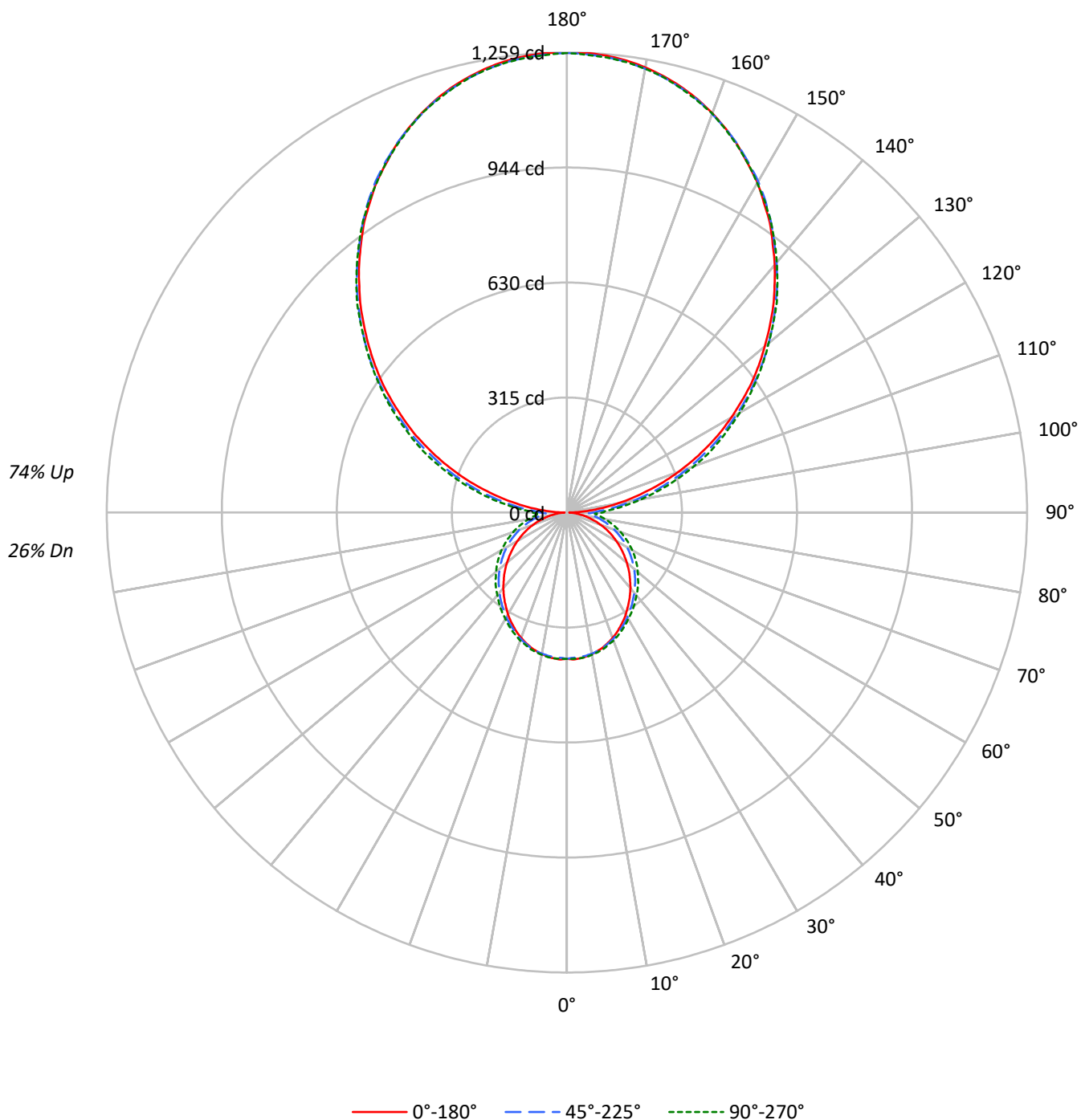
Lumens per Lamp: N/A
Luminaire Lumens: 4834.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1031576

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031576

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	87	83	80	82	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	24	23
3	76	66	59	54	67	59	53	48	46	42	38	34	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	27	24	20	18	16
5	63	52	44	38	56	46	40	35	36	31	28	27	23	21	18	16	14
6	58	46	39	33	52	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	29	48	37	31	26	29	24	21	22	18	16	14	12	11
8	50	38	30	25	44	34	27	23	27	22	18	20	16	14	13	11	10
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	9
10	43	31	24	20	38	28	22	18	22	18	14	17	13	11	11	9	8

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: P1031576

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	0.8
10°-20°	108.3	2.2
20°-30°	162.0	3.4
30°-40°	193.4	4.0
40°-50°	202.3	4.2
50°-60°	189.9	3.9
60°-70°	158.6	3.3
70°-80°	113.4	2.3
80°-90°	70.1	1.5
90°-100°	123.4	2.6
100°-110°	276.2	5.7
110°-120°	438.0	9.1
120°-130°	560.8	11.6
130°-140°	622.3	12.9
140°-150°	607.7	12.6
150°-160°	510.7	10.6
160°-170°	340.0	7.0
170°-180°	119.0	2.5
0°-30°	308.3	6.4
0°-40°	501.6	10.4
0°-60°	893.8	18.5
0°-90°	1236.0	25.6
90°-120°	837.7	17.3
90°-150°	2628.4	54.4
90°-180°	3598.0	74.4
0°-180°	4834.0	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	8
95°	63	87	116	134	138	68
105°	226	238	266	278	284	242
115°	422	430	444	456	458	418
125°	616	619	630	635	634	549
135°	798	804	808	812	812	615
145°	968	969	972	975	973	604
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

TEST NUMBER: P1031576

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D1

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	37.9	73.0	91.8	98.1
92.5°	34.8	59.6	87.3	104.7	106.6
95°	63.1	87.0	116.3	133.8	138.2
97.5°	100.2	120.9	147.3	165.4	168.7
100°	138.3	158.2	183.3	198.8	205.2
102.5°	182.3	197.5	224.0	239.3	242.6
105°	225.8	238.3	265.9	278.1	284.1
107.5°	276.8	286.9	308.7	323.5	326.4
110°	323.7	333.6	353.0	368.3	369.9

TEST NUMBER: P1031576

CATALOG NUMBER: S123DIW-B340D1030UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	373.1	380.2	396.8	412.7	416.6
115°	422.2	430.3	444.0	455.5	458.0
117.5°	472.5	477.0	489.9	500.4	500.9
120°	518.5	526.6	536.1	545.2	546.2
122.5°	566.9	571.8	583.3	589.9	590.1
125°	615.9	618.9	629.6	634.7	633.9
127.5°	661.4	666.9	675.8	678.6	677.7
130°	706.8	714.3	720.1	724.4	720.1
132.5°	751.9	759.8	764.3	767.3	765.3
135°	798.3	803.7	807.6	811.5	811.7
137.5°	840.8	845.2	851.3	853.4	852.6
140°	884.8	889.7	892.0	897.6	892.9
142.5°	925.3	929.8	931.8	936.5	933.8
145°	967.8	969.3	972.3	974.8	972.6
147.5°	1003.9	1007.9	1010.8	1012.1	1008.0
150°	1042.5	1044.4	1046.4	1046.4	1041.4
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)