

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: P1031645

Luminaire Tested: S123DIW-B340D460UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031645
REPORT IS A COMBINATION OF REPORTS P991411 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

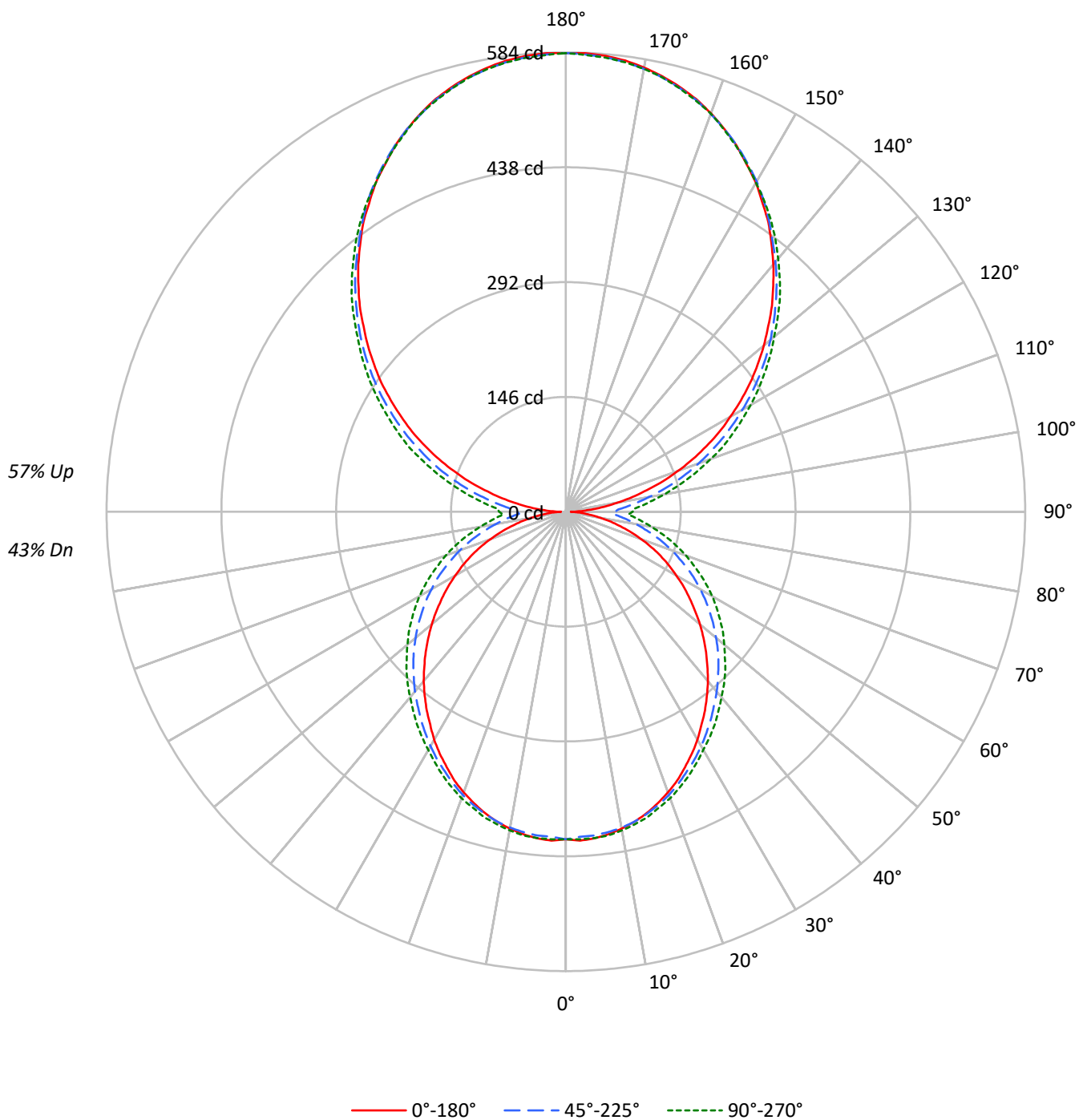
Lumens per Lamp: N/A
Luminaire Lumens: 3016.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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: P1031645

CATALOG NUMBER: S123DIW-B340D460UB30-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031645

CATALOG NUMBER: S123DIW-B340D460UB30-4F0-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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	95	91	86	83	87	83	79	76	68	65	63	55	53	51	42	41	40
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	52	46	65	55	48	43	46	40	36	37	33	30	29	26	23
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	25	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	18	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4481	4481	4481
5°	4493	4349	4346
10°	4451	4232	4199
15°	4392	4102	4044
20°	4308	3957	3877
25°	4205	3793	3704
30°	4101	3646	3530
35°	3981	3490	3389
40°	3869	3349	3239
45°	3744	3211	3116
50°	3620	3075	2982
55°	3484	2936	2859
60°	3349	2793	2733
65°	3213	2641	2586
70°	3004	2470	2433
75°	2743	2276	2277
80°	2438	2079	2098
85°	2132	1919	1970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3744 cd/sqm

TEST NUMBER: P1031645

CATALOG NUMBER: S123DIW-B340D460UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	1.3
10°-20°	112.6	3.7
20°-30°	168.3	5.6
30°-40°	201.0	6.7
40°-50°	210.3	7.0
50°-60°	197.3	6.5
60°-70°	164.8	5.5
70°-80°	117.9	3.9
80°-90°	71.4	2.4
90°-100°	81.6	2.7
100°-110°	146.0	4.8
110°-120°	215.0	7.1
120°-130°	266.8	8.8
130°-140°	291.6	9.7
140°-150°	282.4	9.4
150°-160°	236.7	7.8
160°-170°	157.6	5.2
170°-180°	55.2	1.8
0°-30°	320.4	10.6
0°-40°	521.4	17.3
0°-60°	929.0	30.8
0°-90°	1283.1	42.5
90°-120°	442.6	14.7
90°-150°	1283.4	42.6
90°-180°	1733.0	57.5
0°-180°	3016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	417	416	413	417	416	40
15°	397	398	398	402	402	112
25°	358	363	364	370	370	165
35°	308	316	322	328	330	193
45°	252	263	274	283	287	194
55°	192	207	224	236	239	172
65°	133	150	170	184	189	131
75°	72	93	116	131	136	77
85°	22	45	69	84	89	23
90°	6	33	62	80	85	6
95°	32	53	79	95	99	34
105°	107	118	142	155	160	114
115°	197	204	219	230	234	195
125°	286	288	300	308	309	255
135°	371	373	377	384	385	286
145°	449	449	451	454	454	280
155°	514	514	514	516	513	236
165°	559	558	558	561	558	158
175°	582	580	580	583	580	55
180°	583	583	583	583	583	

TEST NUMBER: P1031645

CATALOG NUMBER: S123DIW-B340D460UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.3	416.3	416.3	416.3	416.3
2.5°	418.5	417.2	413.6	417.2	416.7
5°	416.7	415.8	413.1	416.7	416.3
7.5°	413.6	413.6	410.8	415.4	414.9
10°	409.0	409.9	407.7	412.2	411.3
12.5°	403.6	404.9	403.6	407.7	406.7
15°	396.8	398.1	397.7	402.2	401.8
17.5°	388.6	391.3	390.9	395.0	394.1
20°	379.5	382.3	383.2	387.3	387.7
22.5°	370.0	372.7	374.1	379.5	379.1
25°	358.2	362.8	364.1	370.0	370.0
27.5°	346.9	351.9	354.6	359.6	360.0
30°	334.7	340.5	344.2	349.6	349.6
32.5°	321.0	327.8	332.8	338.7	340.1
35°	308.3	315.6	321.5	328.3	330.1
37.5°	294.7	302.9	309.7	317.4	318.8
40°	281.1	289.3	298.4	306.1	307.9
42.5°	266.2	276.6	286.1	294.7	297.5
45°	252.1	263.0	274.3	283.0	286.6
47.5°	237.2	249.4	262.1	271.6	274.3
50°	222.6	235.3	249.4	259.8	263.0
52.5°	207.2	220.8	236.7	247.6	251.7
55°	192.3	207.2	223.6	235.8	239.4
57.5°	177.8	193.2	210.9	223.1	227.2
60°	162.3	178.7	197.3	209.9	214.9
62.5°	147.8	164.6	184.6	197.3	201.8
65°	132.9	150.5	170.5	184.1	188.6
67.5°	117.9	136.5	156.4	171.4	175.0
70°	102.0	121.5	143.3	157.8	162.3
72.5°	87.5	107.0	129.7	144.7	149.2
75°	72.1	93.4	116.1	131.0	136.5
77.5°	58.9	80.3	102.9	118.8	122.9
80°	44.9	67.1	90.7	106.1	110.6
82.5°	32.6	55.3	79.4	94.8	99.3
85°	22.2	44.9	68.9	84.3	88.9
87.5°	13.6	36.3	59.4	74.8	79.4
90°	6.4	33.1	62.2	79.5	84.9
92.5°	19.1	41.4	66.8	83.2	86.4
95°	32.0	52.9	78.8	94.6	99.2
97.5°	48.9	67.6	91.7	107.6	111.6
100°	66.4	83.6	106.8	121.3	126.7
102.5°	86.5	100.6	124.2	138.3	142.4
105°	106.7	118.5	142.1	154.8	159.8
107.5°	130.1	140.0	160.5	174.1	177.7
110°	151.6	160.7	179.7	193.3	196.0



TEST NUMBER: P1031645

CATALOG NUMBER: S123DIW-B340D460UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	181.3	198.5	212.1	216.2
115°	197.0	203.8	219.1	230.5	233.6
117.5°	220.3	224.4	238.9	249.8	252.0
120°	241.4	246.4	259.0	269.1	271.3
122.5°	263.8	266.6	279.7	288.4	290.1
125°	286.3	287.7	299.9	307.6	308.9
127.5°	307.4	309.6	320.0	326.4	327.7
130°	328.5	331.6	339.4	346.1	345.6
132.5°	349.0	352.7	358.6	364.5	365.3
135°	370.6	372.9	377.4	383.7	385.1
137.5°	390.3	392.2	396.6	401.6	402.6
140°	410.5	412.8	414.5	420.9	420.0
142.5°	429.3	431.1	432.0	437.4	437.4
145°	449.0	449.4	450.8	453.9	453.9
147.5°	465.4	467.2	468.6	470.0	469.1
150°	483.3	484.2	485.1	485.1	483.3
152.5°	497.9	499.3	499.8	500.7	498.4
155°	513.5	513.5	514.0	515.8	512.6
157.5°	526.8	526.3	526.8	528.6	525.9
160°	539.2	538.2	538.2	540.5	538.7
162.5°	550.2	548.8	549.2	551.5	548.3
165°	559.3	557.9	557.9	560.7	557.5
167.5°	567.1	565.3	565.7	568.5	565.7
170°	573.5	571.7	571.7	574.9	571.7
172.5°	578.6	576.7	576.7	579.5	576.3
175°	581.8	579.9	579.9	582.7	579.5
177.5°	583.6	581.8	581.8	584.5	581.3
180°	583.1	583.1	583.1	583.1	583.1

(END OF REPORT)