

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: P1031650

Luminaire Tested: S123DIW-B340D460UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031650
REPORT IS A COMBINATION OF REPORTS P991419 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

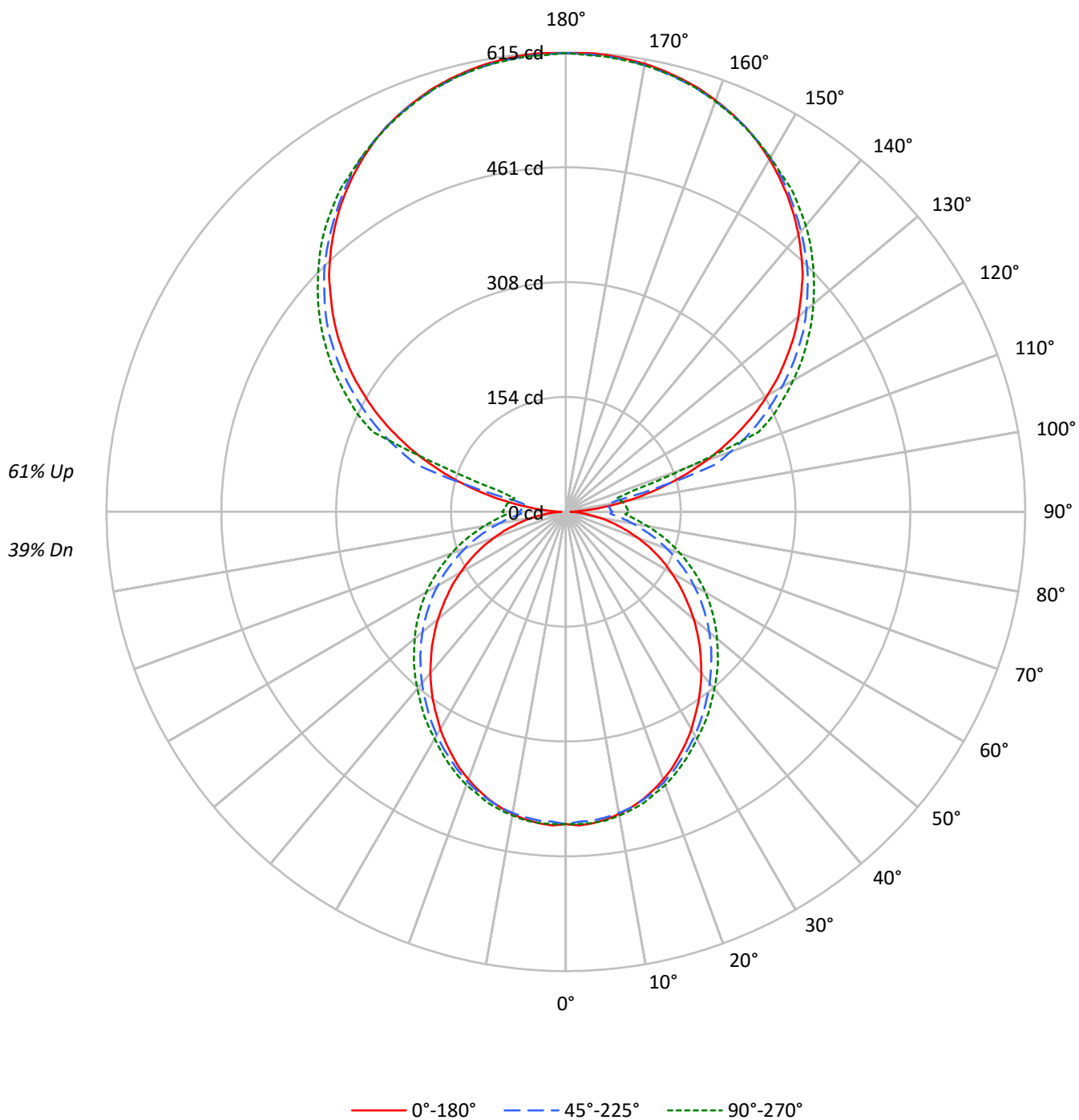
Lumens per Lamp: N/A
Luminaire Lumens: 3278.0 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1031650

CATALOG NUMBER: S123DIW-B340D460UB35-4F0-XX-W2A-D

Luminous Intensity Polar Plot



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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	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	82	86	82	78	75	67	64	62	53	51	49	40	38	37
2	86	78	72	66	78	71	66	61	58	54	50	46	43	40	34	33	31
3	78	68	61	55	70	62	56	50	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	37	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	29	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4500	4500	4500
5°	4512	4368	4365
10°	4470	4250	4217
15°	4411	4119	4061
20°	4327	3973	3894
25°	4224	3809	3720
30°	4118	3660	3545
35°	4000	3505	3403
40°	3885	3363	3253
45°	3760	3225	3129
50°	3636	3089	2995
55°	3499	2948	2872
60°	3363	2805	2746
65°	3225	2652	2597
70°	3019	2481	2444
75°	2754	2286	2287
80°	2448	2088	2107
85°	2142	1927	1979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3760 cd/sqm

TEST NUMBER: P1031650

CATALOG NUMBER: S123DIW-B340D460UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.2
10°-20°	113.1	3.4
20°-30°	169.1	5.2
30°-40°	201.9	6.2
40°-50°	211.2	6.4
50°-60°	198.2	6.0
60°-70°	165.5	5.0
70°-80°	118.4	3.6
80°-90°	71.7	2.2
90°-100°	65.9	2.0
100°-110°	137.2	4.2
110°-120°	278.2	8.5
120°-130°	338.0	10.3
130°-140°	353.4	10.8
140°-150°	326.5	10.0
150°-160°	262.4	8.0
160°-170°	169.3	5.2
170°-180°	58.4	1.8
0°-30°	321.8	9.8
0°-40°	523.6	16.0
0°-60°	933.0	28.5
0°-90°	1288.6	39.3
90°-120°	481.4	14.7
90°-150°	1499.3	45.7
90°-180°	1989.0	60.7
0°-180°	3278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	418	415	418	418	40
15°	398	400	399	404	404	112
25°	360	364	366	372	372	166
35°	310	317	323	330	332	194
45°	253	264	276	284	288	195
55°	193	208	224	237	240	173
65°	133	151	171	185	189	132
75°	72	94	117	132	137	77
85°	22	45	69	85	89	23
90°	6	33	62	80	85	6
95°	33	32	59	76	81	37
105°	140	156	134	66	71	148
115°	257	265	286	302	307	254
125°	361	364	380	390	394	323
135°	448	451	458	467	468	345
145°	517	520	520	525	527	323
155°	569	568	568	571	568	262
165°	600	598	598	602	598	169
175°	614	612	612	615	612	58
180°	614	614	614	614	614	

TEST NUMBER: P1031650

CATALOG NUMBER: S123DIW-B340D460UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.1	418.1	418.1	418.1	418.1
2.5°	420.3	419.0	415.3	419.0	418.5
5°	418.5	417.6	414.9	418.5	418.1
7.5°	415.3	415.3	412.6	417.1	416.7
10°	410.8	411.7	409.4	414.0	413.0
12.5°	405.3	406.7	405.3	409.4	408.5
15°	398.5	399.8	399.4	403.9	403.5
17.5°	390.3	393.0	392.6	396.7	395.7
20°	381.2	383.9	384.8	388.9	389.4
22.5°	371.6	374.3	375.7	381.2	380.7
25°	359.8	364.3	365.7	371.6	371.6
27.5°	348.4	353.4	356.1	361.1	361.6
30°	336.1	342.0	345.6	351.1	351.1
32.5°	322.4	329.3	334.3	340.2	341.6
35°	309.7	317.0	322.9	329.7	331.5
37.5°	296.0	304.2	311.0	318.8	320.1
40°	282.3	290.5	299.7	307.4	309.2
42.5°	267.3	277.8	287.4	296.0	298.7
45°	253.2	264.1	275.5	284.2	287.8
47.5°	238.2	250.5	263.2	272.8	275.5
50°	223.6	236.4	250.5	260.9	264.1
52.5°	208.1	221.8	237.7	248.6	252.7
55°	193.1	208.1	224.5	236.8	240.5
57.5°	178.5	194.0	211.8	224.1	228.2
60°	163.0	179.4	198.1	210.9	215.9
62.5°	148.5	165.3	185.3	198.1	202.7
65°	133.4	151.2	171.2	184.9	189.4
67.5°	118.4	137.1	157.1	172.1	175.8
70°	102.5	122.0	143.9	158.5	163.0
72.5°	87.9	107.5	130.2	145.3	149.8
75°	72.4	93.8	116.6	131.6	137.1
77.5°	59.2	80.6	103.4	119.3	123.4
80°	45.1	67.4	91.1	106.6	111.1
82.5°	32.8	55.6	79.7	95.2	99.7
85°	22.3	45.1	69.2	84.7	89.3
87.5°	13.7	36.4	59.7	75.1	79.7
90°	6.4	33.2	62.4	79.7	85.2
92.5°	16.0	32.8	59.7	77.9	82.4
95°	32.8	31.9	59.2	76.5	81.1
97.5°	55.2	58.8	57.0	74.2	79.3
100°	81.2	104.9	54.7	71.5	76.6
102.5°	110.8	129.5	70.7	68.3	73.8
105°	139.5	155.6	134.1	66.1	71.1
107.5°	169.7	183.4	208.8	150.9	95.2
110°	199.8	211.6	234.8	231.7	170.0

TEST NUMBER: P1031650

CATALOG NUMBER: S123DIW-B340D460UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.0	238.5	260.9	276.4	279.6
115°	257.3	265.4	285.9	301.5	306.9
117.5°	285.6	292.4	310.1	324.7	328.8
120°	311.1	317.5	333.8	348.0	351.2
122.5°	337.5	341.6	357.5	369.9	373.6
125°	360.8	364.5	379.5	389.9	394.0
127.5°	384.6	387.7	401.4	411.9	414.2
130°	406.5	409.6	420.5	431.1	432.8
132.5°	426.9	430.6	438.8	448.8	450.6
135°	448.4	450.7	457.5	467.1	467.9
137.5°	466.6	469.9	473.9	483.5	484.9
140°	484.5	487.2	489.9	498.6	499.9
142.5°	501.4	503.6	505.0	512.2	513.2
145°	516.9	519.6	520.5	525.0	526.9
147.5°	531.4	533.7	534.6	536.9	536.4
150°	545.1	546.5	547.4	548.3	547.8
152.5°	557.4	557.9	558.3	560.2	557.9
155°	568.8	567.9	568.4	570.6	567.9
157.5°	577.9	577.9	577.5	580.2	576.6
160°	586.2	585.7	585.2	588.0	584.8
162.5°	593.9	592.5	592.1	595.3	592.5
165°	599.8	598.5	598.0	601.7	598.5
167.5°	604.9	603.0	603.0	606.7	603.0
170°	609.0	607.1	607.1	610.8	607.1
172.5°	611.7	609.4	609.9	613.5	609.4
175°	614.0	611.7	612.2	615.3	611.7
177.5°	614.9	612.6	613.1	616.7	612.2
180°	614.0	614.0	614.0	614.0	614.0

(END OF REPORT)