

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: P1011586

Luminaire Tested: S123DIP-B340D365UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011586
REPORT IS A COMBINATION OF REPORTS P989793 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B340D365UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

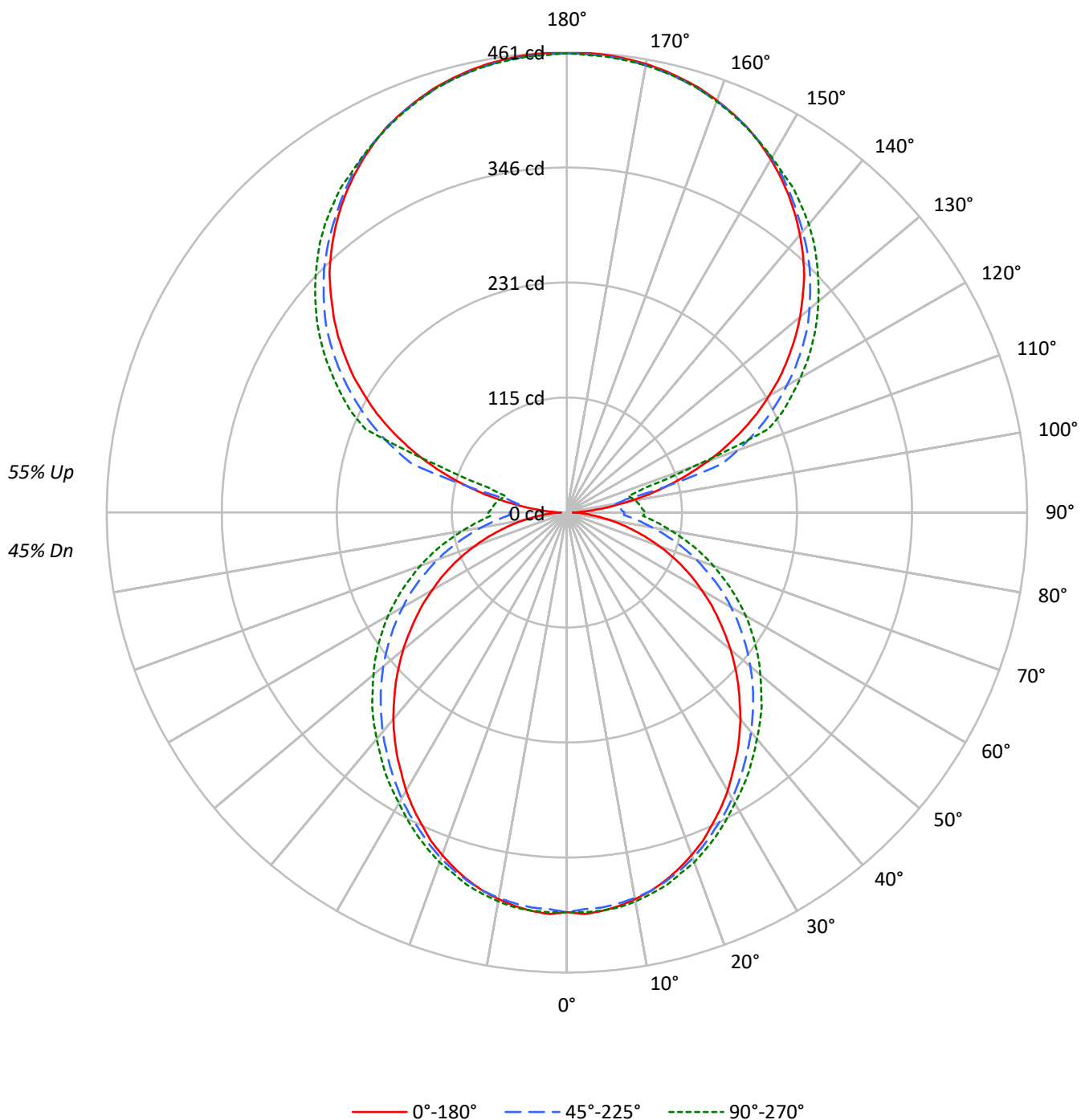
Lumens per Lamp: N/A
Luminaire Lumens: 2750.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 22.3
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: P1011586

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1011586

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-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
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	91	87	83	87	83	80	76	69	66	64	56	54	52	44	43	42
2	87	79	72	67	79	72	67	62	60	56	52	49	46	43	38	36	34
3	79	69	61	55	72	63	57	51	53	48	44	43	39	36	33	31	29
4	72	61	53	46	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	40	60	50	42	37	41	36	32	34	30	26	27	24	21
6	61	48	40	34	55	45	37	32	37	32	27	30	26	23	24	21	19
7	56	44	35	30	51	40	33	28	34	28	24	28	23	20	22	19	16
8	52	39	32	26	47	36	29	25	31	25	21	25	21	18	20	17	15
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	19	15	13
10	45	33	26	21	41	30	24	20	26	21	17	21	17	14	17	14	12

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: P1011586

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	1.4
10°-20°	108.3	3.9
20°-30°	162.0	5.9
30°-40°	193.4	7.0
40°-50°	202.3	7.4
50°-60°	189.9	6.9
60°-70°	158.6	5.8
70°-80°	113.4	4.1
80°-90°	68.4	2.5
90°-100°	58.6	2.1
100°-110°	109.6	4.0
110°-120°	213.1	7.7
120°-130°	256.0	9.3
130°-140°	266.1	9.7
140°-150°	245.0	8.9
150°-160°	196.7	7.2
160°-170°	126.9	4.6
170°-180°	43.7	1.6
0°-30°	308.3	11.2
0°-40°	501.6	18.2
0°-60°	893.8	32.5
0°-90°	1234.2	44.9
90°-120°	381.4	13.9
90°-150°	1148.4	41.8
90°-180°	1516.0	55.1
0°-180°	2750.0	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°	6	31	58	74	79	5
95°	26	29	54	70	74	29
105°	105	120	108	59	64	112
115°	193	201	219	233	238	191
125°	271	274	288	297	301	242
135°	336	338	344	353	354	259
145°	388	390	390	394	396	242
155°	426	426	426	428	426	196
165°	450	449	448	451	449	127
175°	460	458	459	461	458	44
180°	460	460	460	460	460	

TEST NUMBER: P1011586

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-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°	6.0	30.8	57.5	73.7	78.8
92.5°	13.1	29.8	54.7	71.5	75.7
95°	25.7	28.6	53.8	69.7	74.1
97.5°	42.4	48.5	51.5	67.4	72.0
100°	61.7	82.5	49.3	64.6	69.4
102.5°	83.9	100.5	60.6	61.6	66.6
105°	105.4	119.7	107.6	59.3	63.9
107.5°	127.9	140.1	163.1	122.3	81.4
110°	150.3	160.9	182.1	182.2	136.8

TEST NUMBER: P1011586

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.2	180.7	201.1	215.0	218.2
115°	193.3	200.6	219.4	233.3	238.2
117.5°	214.5	220.4	236.9	250.2	254.0
120°	233.5	238.8	254.2	267.1	270.1
122.5°	253.4	256.7	271.5	282.8	286.3
125°	270.7	273.5	287.5	297.3	301.1
127.5°	288.5	290.9	303.5	313.2	315.6
130°	304.9	307.3	317.3	327.0	328.9
132.5°	320.3	323.0	330.5	339.8	341.8
135°	336.3	337.9	344.1	353.0	354.2
137.5°	350.0	352.2	356.0	364.7	366.3
140°	363.2	365.2	367.6	375.5	377.1
142.5°	375.8	377.5	378.5	385.2	386.4
145°	387.5	389.5	390.1	394.3	396.0
147.5°	398.4	400.1	400.7	402.7	402.8
150°	408.6	409.6	410.3	411.0	410.9
152.5°	417.8	418.2	418.5	419.9	418.2
155°	426.4	425.7	426.0	427.8	425.7
157.5°	433.2	433.2	432.9	434.9	432.2
160°	439.4	439.0	438.7	440.7	438.4
162.5°	445.2	444.2	443.8	446.2	444.2
165°	449.6	448.6	448.3	451.0	448.6
167.5°	453.4	452.0	452.0	454.8	452.0
170°	456.5	455.1	455.1	457.8	455.1
172.5°	458.5	456.8	457.2	459.9	456.8
175°	460.2	458.5	458.9	461.3	458.5
177.5°	460.9	459.2	459.6	462.3	458.9
180°	460.2	460.2	460.2	460.2	460.2

(END OF REPORT)