

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: P1011587

Luminaire Tested: S123DIP-B340D365UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011587
REPORT IS A COMBINATION OF REPORTS P989794 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-D1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

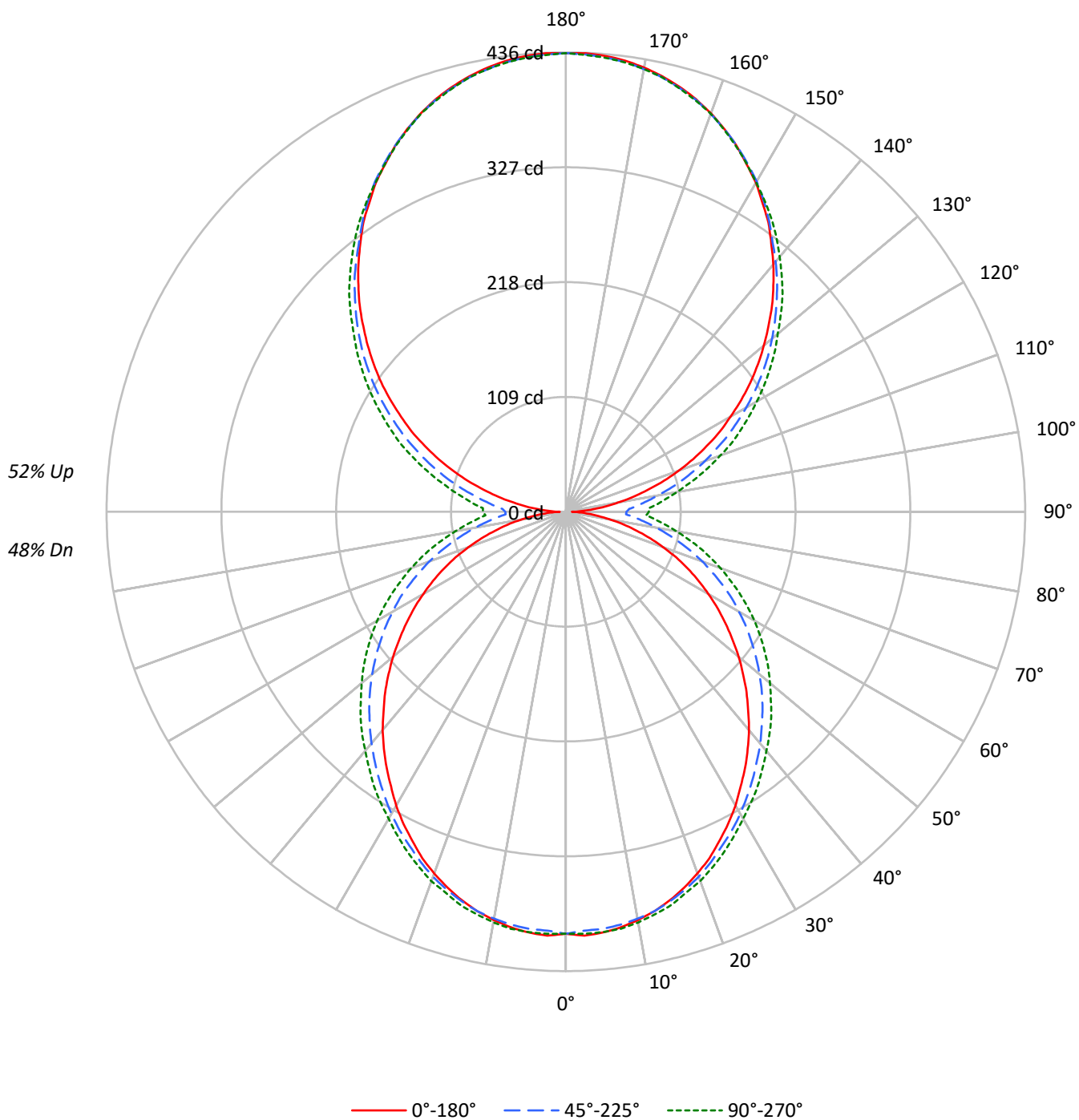
Lumens per Lamp: N/A
Luminaire Lumens: 2553.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55
1	96	92	87	84	88	84	81	77	71	68	66	58	56	54	47	45	44
2	87	79	73	67	80	73	67	63	61	57	53	51	47	45	40	38	36
3	79	69	62	56	73	64	57	52	54	49	44	44	41	37	36	33	30
4	73	61	53	47	66	57	49	44	48	42	38	39	35	32	32	29	26
5	66	54	46	40	61	50	43	37	42	37	32	35	31	27	28	25	22
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20
7	56	44	36	30	52	41	33	28	35	29	25	29	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	19	21	18	16
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	13

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	1.5
10°-20°	108.3	4.2
20°-30°	162.0	6.3
30°-40°	193.4	7.6
40°-50°	202.3	7.9
50°-60°	189.9	7.4
60°-70°	158.6	6.2
70°-80°	113.4	4.4
80°-90°	68.4	2.7
90°-100°	70.4	2.8
100°-110°	116.0	4.5
110°-120°	165.2	6.5
120°-130°	201.8	7.9
130°-140°	218.8	8.6
140°-150°	211.0	8.3
150°-160°	176.7	6.9
160°-170°	117.6	4.6
170°-180°	41.2	1.6
0°-30°	308.3	12.1
0°-40°	501.6	19.6
0°-60°	893.8	35.0
0°-90°	1234.2	48.3
90°-120°	351.6	13.8
90°-150°	983.3	38.5
90°-180°	1319.0	51.7
0°-180°	2553.0	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	6
95°	25	44	68	83	88	26
105°	80	92	113	126	130	86
115°	148	154	169	180	183	146
125°	214	215	227	235	236	191
135°	277	278	283	289	291	213
145°	335	335	336	340	340	209
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

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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°	15.5	36.3	60.2	75.6	78.8
95°	25.0	44.4	68.5	83.4	87.8
97.5°	37.6	55.0	77.5	92.3	96.3
100°	50.4	66.5	88.3	101.9	107.0
102.5°	65.4	78.6	100.6	113.9	117.9
105°	80.4	91.6	113.4	125.6	130.3
107.5°	97.8	107.3	126.5	139.4	142.9
110°	113.7	122.3	140.4	153.2	156.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.8	137.3	153.9	166.5	170.4
115°	147.5	153.7	168.8	179.6	182.8
117.5°	165.0	168.8	182.9	193.4	195.9
120°	180.5	184.8	197.5	207.2	209.5
122.5°	197.3	199.6	212.4	220.9	223.0
125°	214.0	215.0	227.0	234.8	236.5
127.5°	229.7	231.4	241.6	248.2	250.0
130°	245.4	247.8	255.4	262.4	262.6
132.5°	260.8	263.5	269.3	275.5	276.8
135°	276.8	278.4	282.8	289.4	290.9
137.5°	291.5	292.8	296.9	302.2	303.3
140°	306.4	308.1	309.8	316.0	315.8
142.5°	320.4	321.8	322.4	327.8	328.3
145°	335.2	335.4	336.5	339.6	340.0
147.5°	347.4	348.8	349.8	351.1	350.8
150°	360.7	361.4	362.1	362.1	361.0
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)