

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: P1011588

Luminaire Tested: S123DIP-B340D365UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011588
REPORT IS A COMBINATION OF REPORTS P989795 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-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

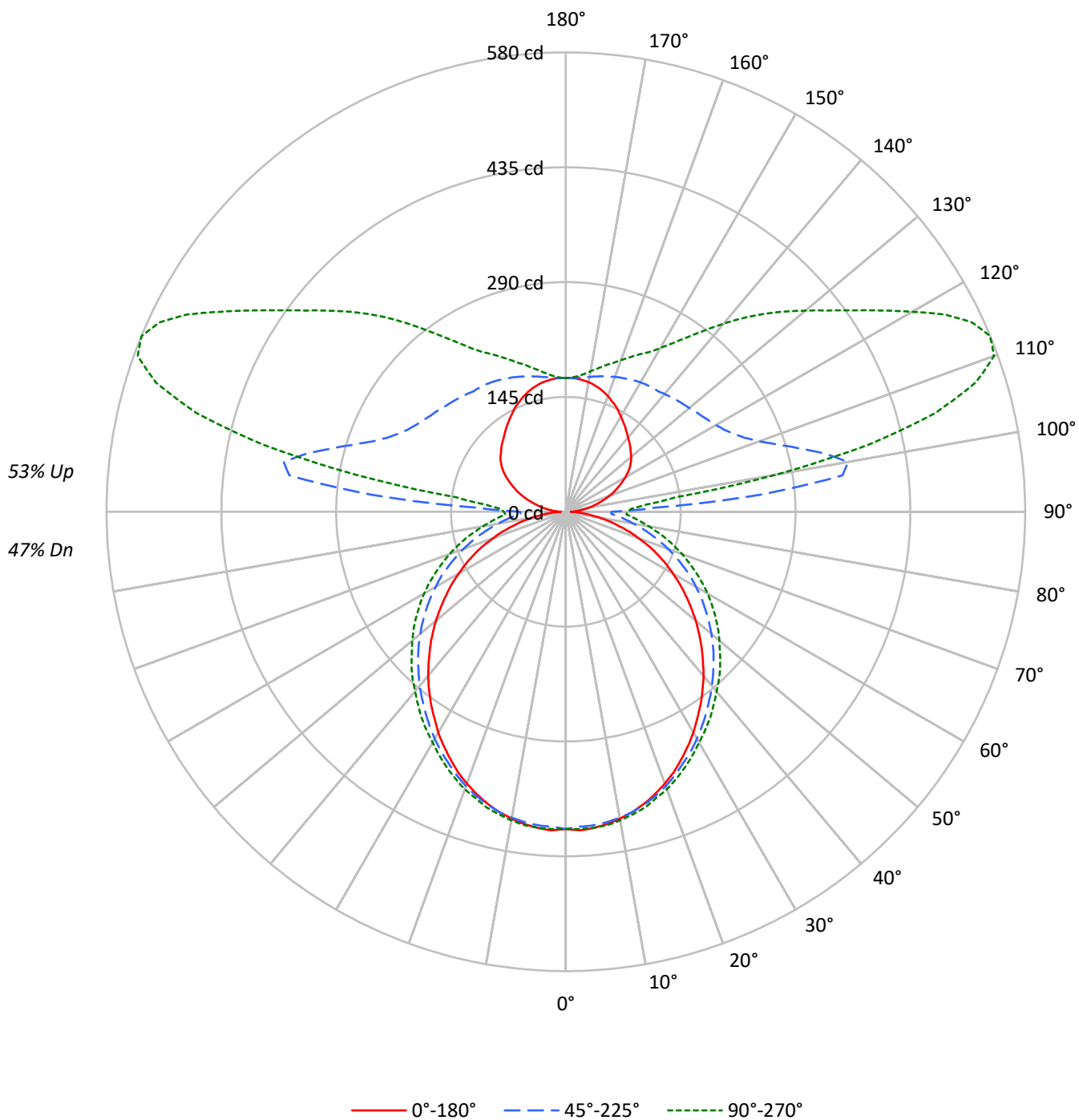
Lumens per Lamp: N/A
Luminaire Lumens: 2619.9 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53
1	96	91	87	83	88	84	80	77	70	67	65		57	56	54		46
2	87	79	73	67	80	73	67	62	61	57	53		50	47	44		40
3	79	69	62	56	72	64	57	52	53	48	44		44	40	37		35
4	72	61	53	47	66	56	49	44	47	42	37		39	35	31		31
5	66	54	46	40	61	50	43	37	42	36	32		35	30	27		28
6	61	49	40	34	56	45	37	32	38	32	28		31	27	23		25
7	56	44	36	30	51	40	33	28	34	29	24		28	24	21		23
8	52	40	32	26	48	37	30	25	31	26	22		26	22	18		21
9	49	36	29	23	44	34	27	22	29	23	19		24	20	16		19
10	45	33	26	21	42	31	24	20	26	21	17		22	18	15		18

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	4.1
20°-30°	162.0	6.2
30°-40°	193.4	7.4
40°-50°	202.3	7.7
50°-60°	189.9	7.2
60°-70°	158.6	6.1
70°-80°	113.4	4.3
80°-90°	68.4	2.6
90°-100°	138.4	5.3
100°-110°	299.4	11.4
110°-120°	282.3	10.8
120°-130°	220.1	8.4
130°-140°	169.7	6.5
140°-150°	123.7	4.7
150°-160°	85.6	3.3
160°-170°	50.3	1.9
170°-180°	16.3	0.6
0°-30°	308.3	11.8
0°-40°	501.6	19.1
0°-60°	893.8	34.1
0°-90°	1234.2	47.1
90°-120°	720.0	27.5
90°-150°	1233.5	47.1
90°-180°	1386.0	52.9
0°-180°	2619.9	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	78	5
95°	16	60	246	116	101	16
105°	43	73	308	525	484	46
115°	72	95	233	494	566	72
125°	99	116	210	379	443	88
135°	115	137	199	306	353	89
145°	131	149	191	244	269	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

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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°	6.4	31.1	57.8	73.6	78.4
92.5°	10.3	44.5	109.4	81.9	82.2
95°	16.4	59.6	245.9	115.8	100.7
97.5°	22.9	63.4	352.3	202.4	139.3
100°	29.2	65.6	361.7	361.7	269.3
102.5°	36.0	68.5	336.8	464.1	391.3
105°	43.1	72.6	307.5	525.4	483.7
107.5°	50.3	77.6	281.3	550.6	542.8
110°	58.0	83.0	259.6	548.9	575.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.5	88.5	244.0	526.5	579.8
115°	72.3	94.7	233.3	494.5	565.8
117.5°	79.4	100.2	224.9	460.4	539.3
120°	86.5	105.6	218.9	428.2	504.8
122.5°	93.0	111.1	214.3	402.0	472.8
125°	98.7	116.3	210.2	378.6	443.2
127.5°	103.5	122.1	207.0	358.8	417.3
130°	107.9	127.5	203.7	340.5	395.1
132.5°	111.0	132.5	201.2	323.2	374.1
135°	115.1	136.6	198.7	305.8	353.3
137.5°	118.8	140.4	196.3	288.9	331.9
140°	122.1	143.8	194.1	272.7	309.9
142.5°	126.2	146.4	191.7	257.2	288.9
145°	130.6	149.2	191.1	243.6	269.4
147.5°	134.7	152.1	190.0	232.5	252.9
150°	139.1	154.5	188.7	223.4	238.4
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)