

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: P1011552

Luminaire Tested: S123DIP-B340D365UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011552
REPORT IS A COMBINATION OF REPORTS P989744 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B340D365UB27-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

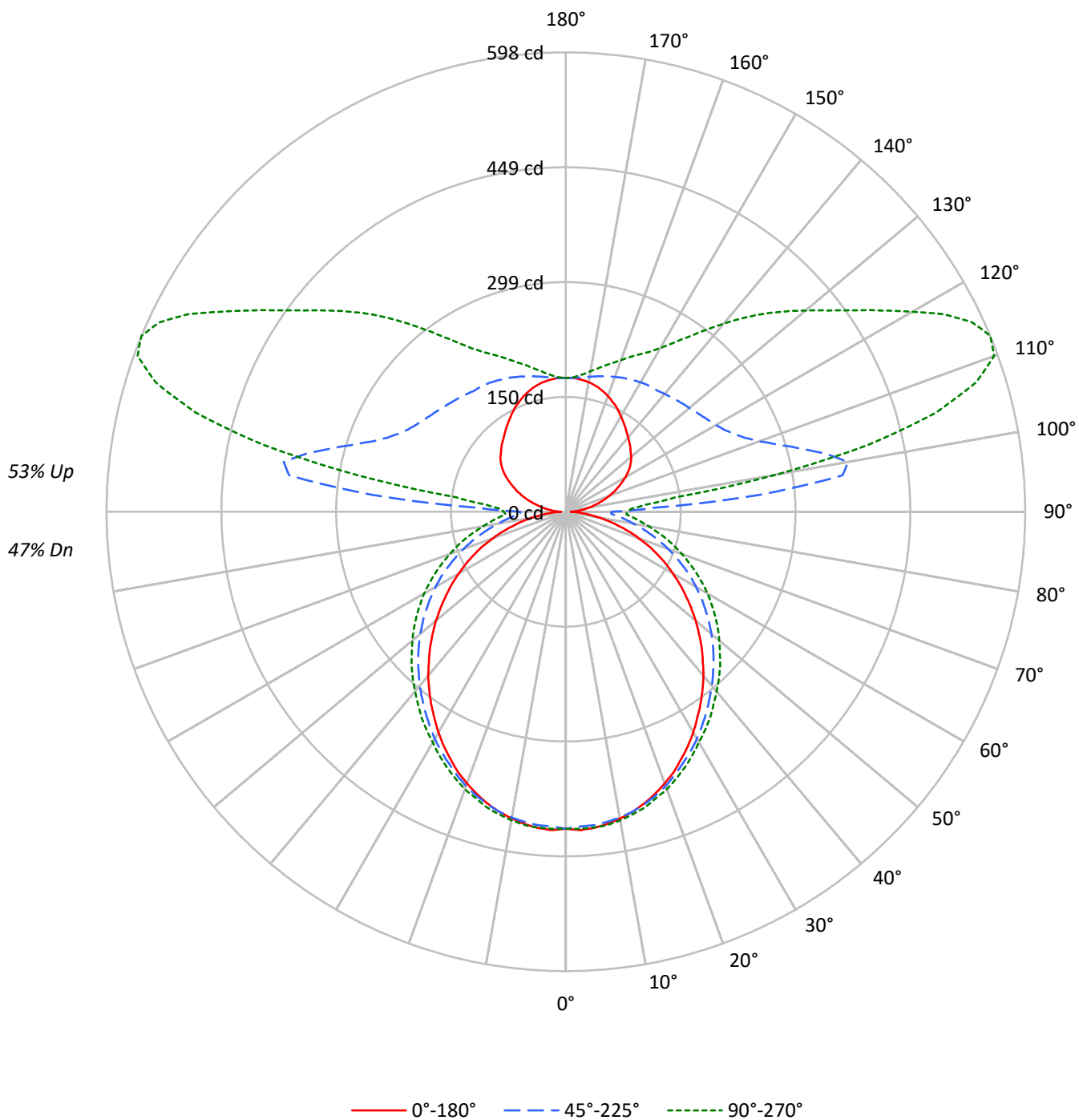
Lumens per Lamp: N/A
Luminaire Lumens: 2701.0 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	55	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	60	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°	4442	4442	4442
5°	4455	4312	4308
10°	4413	4196	4164
15°	4355	4066	4009
20°	4272	3923	3844
25°	4170	3760	3672
30°	4065	3614	3500
35°	3948	3460	3360
40°	3836	3319	3212
45°	3713	3184	3089
50°	3589	3049	2956
55°	3454	2910	2835
60°	3320	2769	2710
65°	3184	2617	2564
70°	2980	2450	2412
75°	2720	2256	2257
80°	2416	2061	2080
85°	2113	1902	1953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	1.4
10°-20°	111.6	4.1
20°-30°	166.9	6.2
30°-40°	199.3	7.4
40°-50°	208.5	7.7
50°-60°	195.6	7.2
60°-70°	163.4	6.1
70°-80°	116.9	4.3
80°-90°	70.5	2.6
90°-100°	142.6	5.3
100°-110°	308.7	11.4
110°-120°	291.2	10.8
120°-130°	227.0	8.4
130°-140°	175.0	6.5
140°-150°	127.6	4.7
150°-160°	88.2	3.3
160°-170°	51.8	1.9
170°-180°	16.9	0.6
0°-30°	317.7	11.8
0°-40°	516.9	19.1
0°-60°	921.1	34.1
0°-90°	1271.8	47.1
90°-120°	742.6	27.5
90°-150°	1272.2	47.1
90°-180°	1429.0	52.9
0°-180°	2701.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	413	412	410	413	413	39
15°	393	395	394	399	398	111
25°	355	360	361	367	367	164
35°	306	313	319	326	327	191
45°	250	261	272	280	284	193
55°	191	206	222	234	237	171
65°	132	149	169	182	187	130
75°	72	93	115	130	135	76
85°	22	44	68	84	88	23
90°	6	32	60	76	81	5
95°	17	61	254	119	104	17
105°	44	75	317	542	499	47
115°	74	98	241	510	584	74
125°	102	120	217	390	457	91
135°	119	141	205	315	364	92
145°	135	154	197	251	278	84
155°	153	165	191	217	226	70
165°	167	172	183	194	197	47
175°	174	174	175	178	177	17
180°	174	174	174	174	174	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.7	412.7	412.7	412.7	412.7
2.5°	414.9	413.6	410.0	413.6	413.2
5°	413.2	412.3	409.6	413.2	412.7
7.5°	410.0	410.0	407.3	411.8	411.4
10°	405.5	406.4	404.2	408.7	407.8
12.5°	400.1	401.5	400.1	404.2	403.3
15°	393.4	394.7	394.3	398.8	398.3
17.5°	385.3	388.0	387.5	391.6	390.7
20°	376.3	379.0	379.9	383.9	384.4
22.5°	366.8	369.5	370.9	376.3	375.8
25°	355.2	359.7	361.0	366.8	366.8
27.5°	343.9	348.9	351.6	356.5	357.0
30°	331.8	337.6	341.2	346.6	346.6
32.5°	318.3	325.0	330.0	335.8	337.2
35°	305.7	312.9	318.7	325.5	327.3
37.5°	292.2	300.3	307.1	314.7	316.0
40°	278.7	286.8	295.8	303.5	305.3
42.5°	263.9	274.2	283.7	292.2	294.9
45°	250.0	260.7	272.0	280.5	284.1
47.5°	235.1	247.3	259.8	269.3	272.0
50°	220.7	233.3	247.3	257.6	260.7
52.5°	205.5	218.9	234.7	245.5	249.5
55°	190.6	205.5	221.6	233.8	237.4
57.5°	176.2	191.5	209.0	221.2	225.2
60°	160.9	177.1	195.6	208.1	213.1
62.5°	146.6	163.2	183.0	195.6	200.1
65°	131.7	149.3	169.0	182.5	187.0
67.5°	116.9	135.3	155.1	169.9	173.5
70°	101.2	120.5	142.1	156.4	160.9
72.5°	86.8	106.1	128.6	143.4	147.9
75°	71.5	92.6	115.1	129.9	135.3
77.5°	58.4	79.6	102.1	117.8	121.8
80°	44.5	66.5	89.9	105.2	109.7
82.5°	32.4	54.8	78.7	94.0	98.5
85°	22.0	44.5	68.3	83.6	88.1
87.5°	13.5	36.0	58.9	74.2	78.7
90°	6.5	32.2	59.6	75.9	80.8
92.5°	10.7	45.8	112.8	84.4	84.8
95°	16.9	61.4	253.6	119.4	103.8
97.5°	23.5	65.3	363.3	208.7	143.7
100°	30.1	67.6	373.0	372.9	277.6
102.5°	37.1	70.6	347.3	478.6	403.6
105°	44.5	74.9	317.1	542.0	498.8
107.5°	51.8	80.1	290.1	568.0	559.8
110°	59.8	85.6	267.8	566.2	593.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	67.6	91.4	251.7	543.0	598.1
115°	74.5	97.6	240.6	510.0	583.6
117.5°	81.9	103.3	231.9	474.9	556.2
120°	89.2	108.9	225.8	441.5	520.7
122.5°	95.9	114.6	221.1	414.6	487.7
125°	101.8	120.0	216.8	390.4	457.1
127.5°	106.7	125.8	213.4	370.2	430.4
130°	111.3	131.6	210.1	351.2	407.5
132.5°	114.4	136.6	207.5	333.3	385.9
135°	118.7	140.8	204.9	315.4	364.4
137.5°	122.5	144.8	202.4	298.0	342.3
140°	125.9	148.3	200.3	281.2	319.6
142.5°	130.1	151.0	197.8	265.2	297.9
145°	134.7	153.9	197.1	251.3	277.9
147.5°	138.9	156.9	196.0	239.8	260.8
150°	143.5	159.4	194.6	230.4	245.9
152.5°	148.1	162.0	192.8	223.4	234.4
155°	152.7	164.6	190.7	216.8	226.0
157.5°	156.2	167.0	189.0	210.4	217.9
160°	160.4	168.8	186.8	204.6	210.1
162.5°	163.6	170.3	184.7	199.1	203.1
165°	166.8	171.5	182.6	193.7	197.1
167.5°	169.2	172.6	180.5	189.0	191.1
170°	171.3	173.1	178.4	184.8	185.8
172.5°	172.7	173.6	176.6	181.0	180.9
175°	173.8	174.0	175.2	177.7	177.3
177.5°	174.5	174.2	174.2	175.6	174.9
180°	174.2	174.2	174.2	174.2	174.2

(END OF REPORT)