

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: P1031638

Luminaire Tested: S123DIW-B340D460UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031638
REPORT IS A COMBINATION OF REPORTS P991380 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB27-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

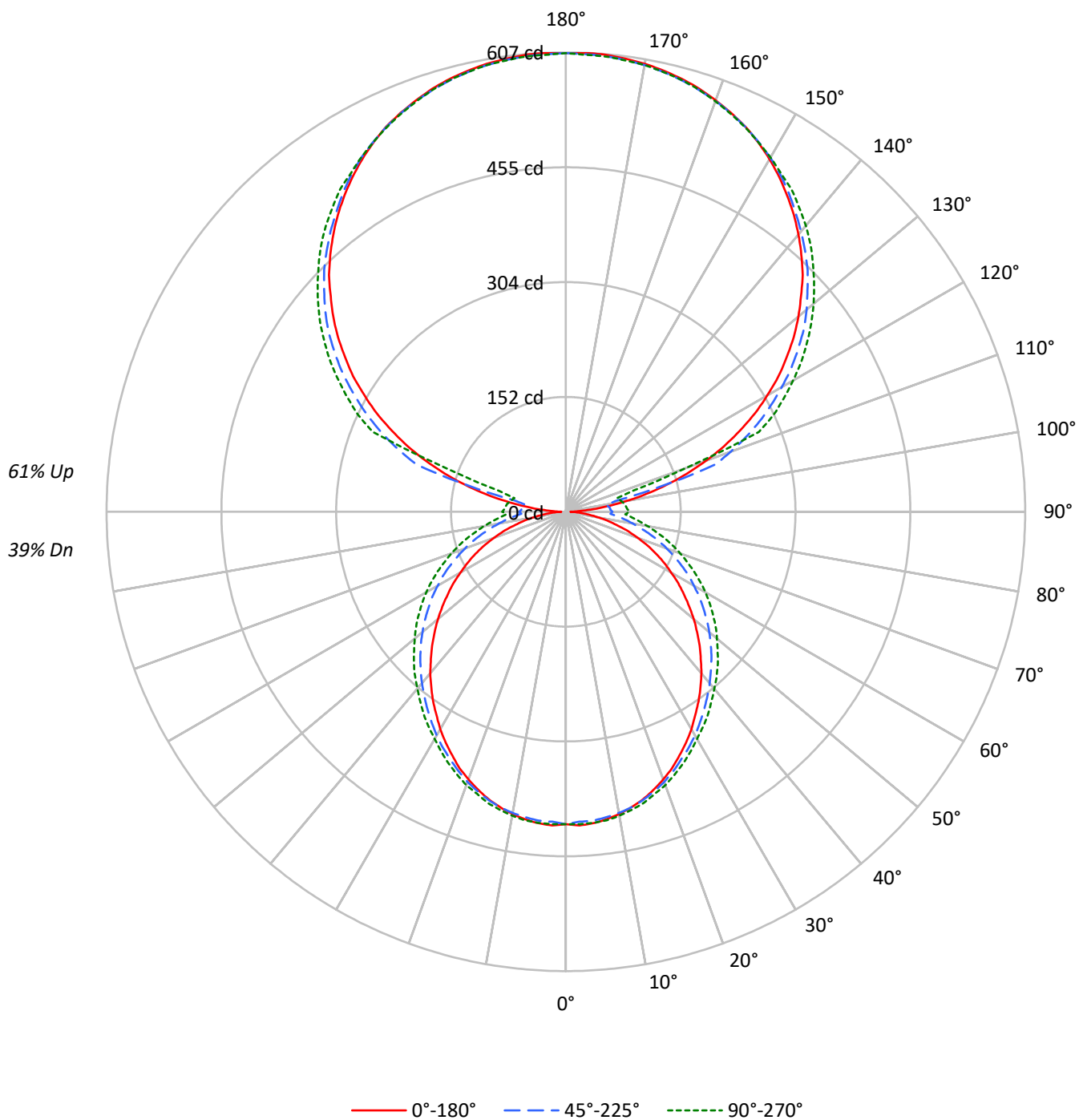
Lumens per Lamp: N/A
Luminaire Lumens: 3236.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	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°	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	1.2
10°-20°	111.6	3.4
20°-30°	166.9	5.2
30°-40°	199.3	6.2
40°-50°	208.5	6.4
50°-60°	195.6	6.0
60°-70°	163.4	5.1
70°-80°	116.9	3.6
80°-90°	70.7	2.2
90°-100°	65.1	2.0
100°-110°	135.5	4.2
110°-120°	274.7	8.5
120°-130°	333.7	10.3
130°-140°	348.9	10.8
140°-150°	322.3	10.0
150°-160°	259.0	8.0
160°-170°	167.2	5.2
170°-180°	57.6	1.8
0°-30°	317.7	9.8
0°-40°	516.9	16.0
0°-60°	921.1	28.5
0°-90°	1272.1	39.3
90°-120°	475.2	14.7
90°-150°	1480.1	45.7
90°-180°	1964.0	60.7
0°-180°	3236.0	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	33	62	79	84	6
95°	32	32	58	76	80	37
105°	138	154	132	65	70	146
115°	254	262	282	298	303	251
125°	356	360	375	385	389	318
135°	443	445	452	461	462	341
145°	510	513	514	518	520	319
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

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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°	6.3	32.9	61.6	78.7	84.1
92.5°	15.8	32.4	58.9	76.9	81.4
95°	32.4	31.5	58.5	75.5	80.0
97.5°	54.5	58.1	56.2	73.3	78.3
100°	80.1	103.5	54.0	70.6	75.5
102.5°	109.4	127.9	69.7	67.5	72.9
105°	137.8	153.5	132.3	65.2	70.2
107.5°	167.5	181.0	206.2	149.0	94.0
110°	197.2	208.9	231.9	228.7	167.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.1	235.5	257.6	272.8	276.0
115°	253.9	262.0	282.3	297.6	303.0
117.5°	281.8	288.6	306.1	320.5	324.6
120°	307.1	313.4	329.6	343.5	346.7
122.5°	333.2	337.3	353.0	365.1	368.8
125°	356.1	359.7	374.6	384.9	389.0
127.5°	379.6	382.8	396.2	406.6	408.9
130°	401.2	404.4	415.2	425.5	427.3
132.5°	421.5	425.1	433.1	443.0	444.9
135°	442.7	444.9	451.7	461.1	462.0
137.5°	460.7	463.8	467.9	477.3	478.6
140°	478.2	480.9	483.6	492.1	493.5
142.5°	494.8	497.1	498.5	505.6	506.6
145°	510.1	512.9	513.8	518.3	520.1
147.5°	524.6	526.9	527.8	530.0	529.5
150°	538.1	539.5	540.4	541.3	540.8
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)