

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: P1031669

Luminaire Tested: S123DIW-B340D755UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031669
REPORT IS A COMBINATION OF REPORTS P991447 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

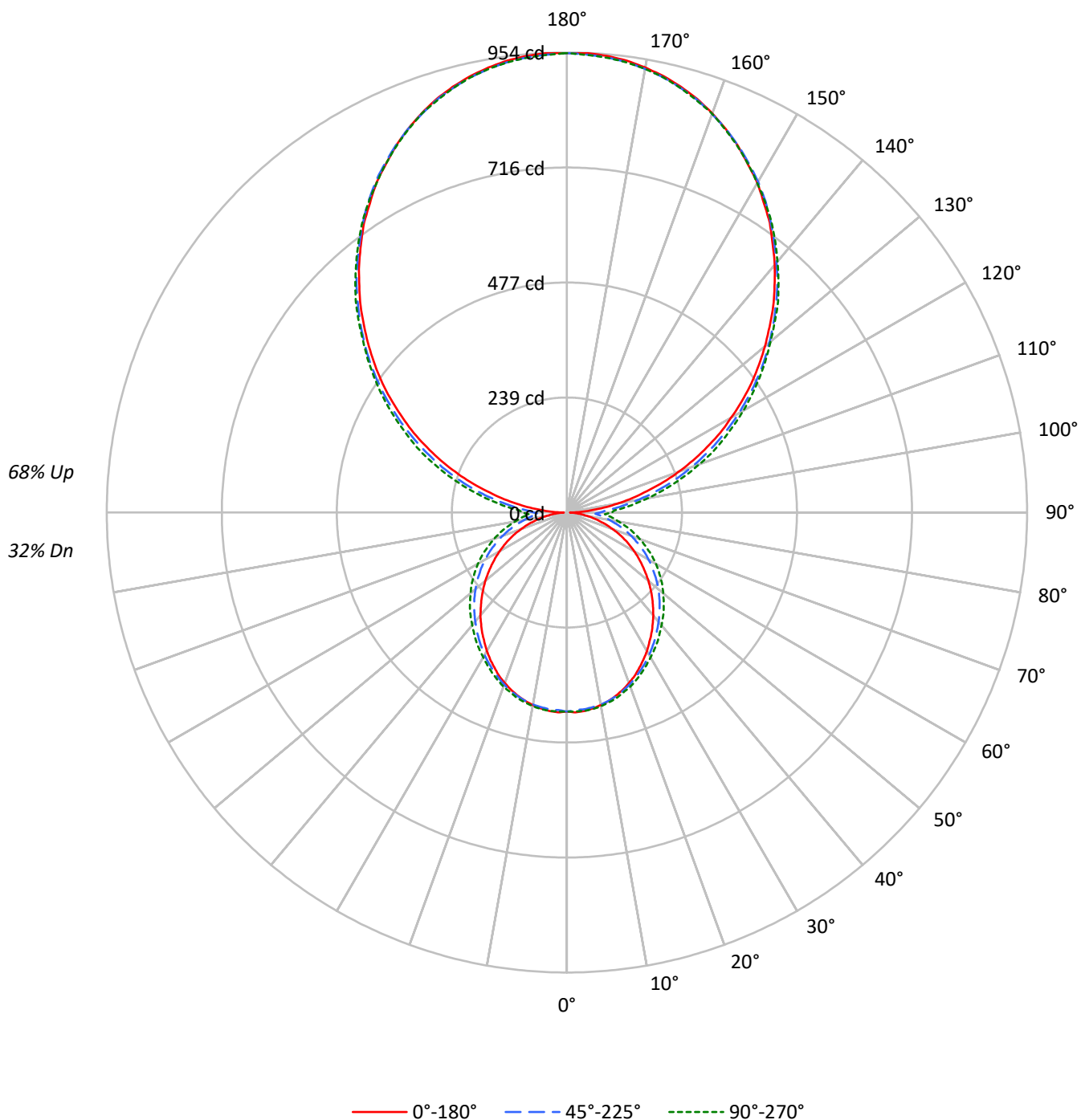
Lumens per Lamp: N/A
Luminaire Lumens: 4028.9 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	34	33	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	28	26
3	77	67	60	54	69	61	54	49	48	44	40	36	33	31	26	24	22
4	70	59	51	45	63	53	47	41	42	38	34	32	29	26	23	21	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	36	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	27	31	26	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	32	25	21	25	20	17	20	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	19	15	18	15	12	13	11	9

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	1.0
10°-20°	111.6	2.8
20°-30°	166.9	4.1
30°-40°	199.3	4.9
40°-50°	208.5	5.2
50°-60°	195.6	4.9
60°-70°	163.4	4.1
70°-80°	116.9	2.9
80°-90°	71.5	1.8
90°-100°	105.0	2.6
100°-110°	217.8	5.4
110°-120°	337.5	8.4
120°-130°	428.0	10.6
130°-140°	472.8	11.7
140°-150°	460.6	11.4
150°-160°	386.8	9.6
160°-170°	257.5	6.4
170°-180°	90.2	2.2
0°-30°	317.7	7.9
0°-40°	516.9	12.8
0°-60°	921.1	22.9
0°-90°	1272.9	31.6
90°-120°	660.2	16.4
90°-150°	2021.6	50.2
90°-180°	2756.0	68.4
0°-180°	4028.9	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	36	69	87	93	7
95°	49	72	100	117	121	53
105°	172	184	210	223	228	184
115°	320	328	343	354	357	317
125°	467	469	481	487	487	417
135°	605	609	613	618	619	466
145°	733	734	736	739	738	458
155°	839	839	840	843	838	386
165°	914	912	912	916	911	258
175°	950	948	948	952	947	90
180°	953	953	953	953	953	

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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	36.1	68.8	87.1	93.1
92.5°	27.9	51.6	78.6	95.7	98.3
95°	49.1	71.9	99.9	116.8	121.3
97.5°	77.1	97.0	122.6	139.9	143.6
100°	105.8	124.7	149.1	164.4	170.4
102.5°	139.1	153.9	179.4	194.2	198.0
105°	172.0	184.3	210.3	222.9	228.5
107.5°	210.4	220.7	242.1	256.5	259.8
110°	245.9	255.5	275.0	289.7	291.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	290.4	307.5	322.5	326.6
115°	320.3	327.9	342.6	354.2	357.0
117.5°	358.5	362.8	376.6	387.4	388.8
120°	393.2	399.9	411.1	420.6	422.3
122.5°	429.9	433.8	446.2	453.9	454.8
125°	466.8	469.1	480.7	487.1	487.3
127.5°	501.3	505.4	515.1	519.6	519.8
130°	535.7	541.3	548.0	553.5	551.0
132.5°	569.7	575.7	580.9	585.3	584.7
135°	604.9	608.9	613.1	618.3	619.0
137.5°	637.1	640.3	645.8	649.2	649.2
140°	670.3	674.0	676.2	682.1	679.2
142.5°	701.0	704.3	705.8	710.8	709.4
145°	733.1	734.2	736.5	739.3	738.1
147.5°	760.4	763.4	765.7	767.0	764.3
150°	789.6	791.1	792.6	792.6	789.0
152.5°	813.6	815.8	816.6	818.1	814.3
155°	839.0	839.0	839.8	842.8	837.5
157.5°	860.7	860.0	860.7	863.7	859.2
160°	880.9	879.4	879.4	883.2	880.2
162.5°	898.9	896.6	897.4	901.1	895.9
165°	913.9	911.6	911.6	916.1	910.9
167.5°	926.6	923.6	924.3	928.8	924.3
170°	937.1	934.1	934.1	939.3	934.1
172.5°	945.3	942.3	942.3	946.8	941.6
175°	950.5	947.5	947.5	952.0	946.8
177.5°	953.5	950.5	950.5	955.0	949.8
180°	952.8	952.8	952.8	952.8	952.8

(END OF REPORT)