

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: P1031687

Luminaire Tested: S123DIW-B340D755UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031687
REPORT IS A COMBINATION OF REPORTS P991495 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D755UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

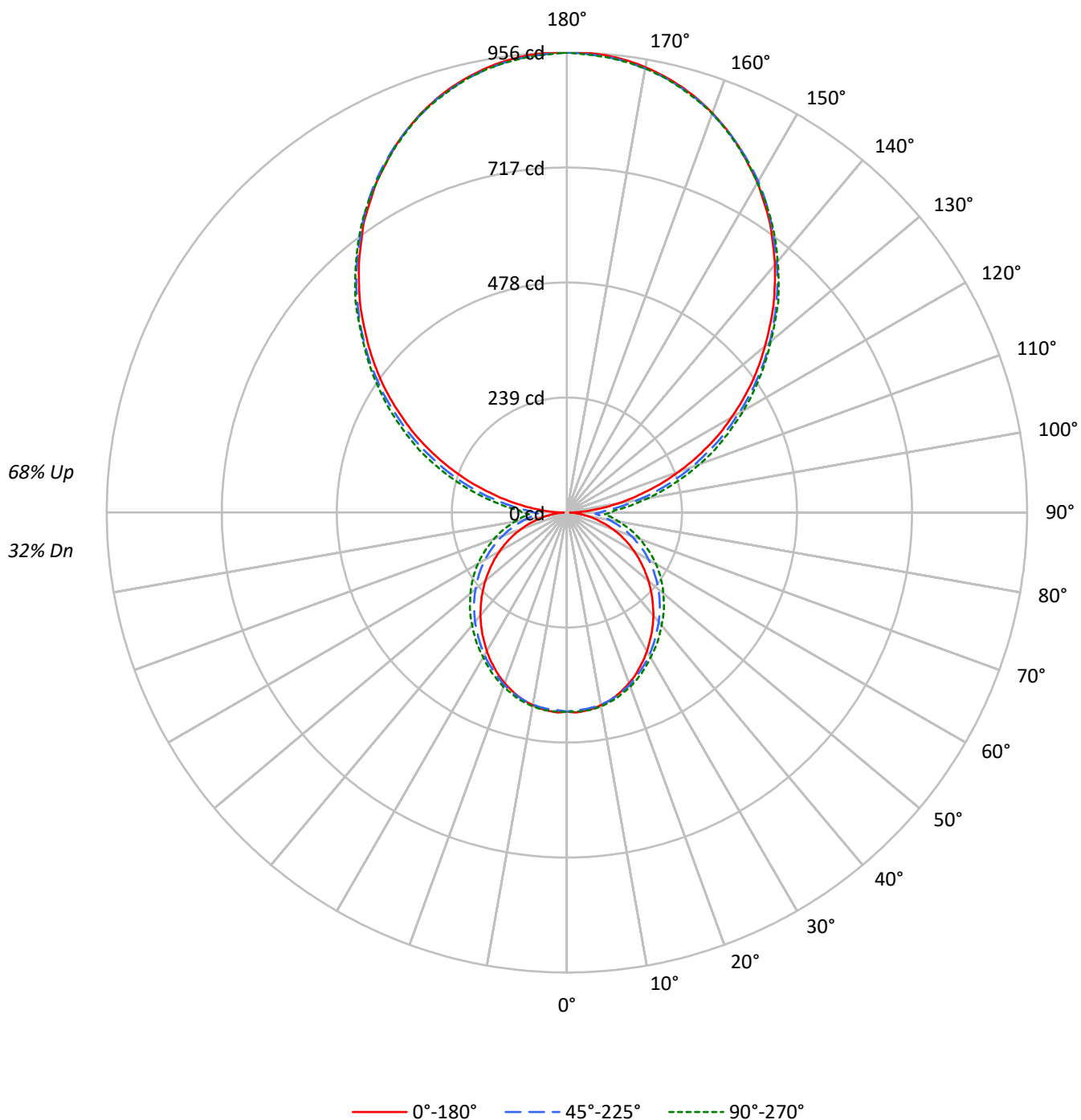
Lumens per Lamp: N/A
Luminaire Lumens: 4041.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	4455	4455	4455
5°	4467	4324	4321
10°	4426	4207	4175
15°	4367	4078	4021
20°	4284	3934	3855
25°	4182	3771	3683
30°	4076	3624	3510
35°	3960	3471	3369
40°	3847	3329	3220
45°	3723	3193	3098
50°	3600	3058	2965
55°	3464	2919	2844
60°	3330	2776	2718
65°	3193	2625	2572
70°	2986	2456	2420
75°	2727	2262	2264
80°	2421	2068	2086
85°	2123	1908	1959

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3723 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	1.0
10°-20°	111.9	2.8
20°-30°	167.4	4.1
30°-40°	199.8	4.9
40°-50°	209.1	5.2
50°-60°	196.2	4.9
60°-70°	163.9	4.1
70°-80°	117.2	2.9
80°-90°	71.8	1.8
90°-100°	105.3	2.6
100°-110°	218.4	5.4
110°-120°	338.5	8.4
120°-130°	429.3	10.6
130°-140°	474.3	11.7
140°-150°	462.0	11.4
150°-160°	388.0	9.6
160°-170°	258.3	6.4
170°-180°	90.4	2.2
0°-30°	318.6	7.9
0°-40°	518.4	12.8
0°-60°	923.7	22.9
0°-90°	1276.5	31.6
90°-120°	662.2	16.4
90°-150°	2027.8	50.2
90°-180°	2764.0	68.4
0°-180°	4041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	414	413	411	414	414	39
15°	394	396	395	400	400	111
25°	356	361	362	368	368	164
35°	307	314	320	326	328	192
45°	251	262	273	281	285	193
55°	191	206	222	234	238	171
65°	132	150	170	183	188	131
75°	72	93	115	130	136	77
85°	22	45	68	84	88	23
90°	7	36	69	87	93	8
95°	49	72	100	117	122	53
105°	172	185	211	224	229	184
115°	321	329	344	355	358	318
125°	468	471	482	489	489	418
135°	607	611	615	620	621	467
145°	736	736	739	742	740	459
155°	842	842	842	845	840	387
165°	917	914	914	919	914	259
175°	953	950	950	955	950	91
180°	956	956	956	956	956	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.9	413.9	413.9	413.9	413.9
2.5°	416.1	414.8	411.2	414.8	414.3
5°	414.3	413.4	410.7	414.3	413.9
7.5°	411.2	411.2	408.5	413.0	412.5
10°	406.7	407.6	405.3	409.8	408.9
12.5°	401.3	402.6	401.3	405.3	404.4
15°	394.5	395.9	395.4	399.9	399.5
17.5°	386.4	389.1	388.6	392.7	391.8
20°	377.4	380.1	381.0	385.0	385.5
22.5°	367.9	370.6	372.0	377.4	376.9
25°	356.2	360.7	362.0	367.9	367.9
27.5°	344.9	349.9	352.6	357.5	358.0
30°	332.7	338.6	342.2	347.6	347.6
32.5°	319.2	326.0	330.9	336.8	338.1
35°	306.6	313.8	319.7	326.4	328.2
37.5°	293.1	301.2	307.9	315.6	317.0
40°	279.5	287.7	296.7	304.3	306.1
42.5°	264.7	275.0	284.5	293.1	295.8
45°	250.7	261.5	272.8	281.3	284.9
47.5°	235.8	248.0	260.6	270.1	272.8
50°	221.4	234.0	248.0	258.3	261.5
52.5°	206.0	219.6	235.4	246.2	250.2
55°	191.2	206.0	222.3	234.4	238.1
57.5°	176.7	192.1	209.7	221.8	225.9
60°	161.4	177.6	196.1	208.7	213.7
62.5°	147.0	163.7	183.5	196.1	200.6
65°	132.1	149.7	169.5	183.1	187.6
67.5°	117.2	135.7	155.5	170.4	174.0
70°	101.4	120.8	142.5	156.9	161.4
72.5°	87.0	106.4	128.9	143.8	148.3
75°	71.7	92.9	115.4	130.3	135.7
77.5°	58.6	79.8	102.3	118.1	122.2
80°	44.6	66.7	90.2	105.5	110.0
82.5°	32.5	55.0	78.9	94.2	98.7
85°	22.1	44.6	68.5	83.9	88.4
87.5°	13.5	36.1	59.1	74.4	78.9
90°	6.7	36.3	68.9	87.3	93.3
92.5°	27.9	51.8	78.8	96.0	98.6
95°	49.3	72.0	100.2	117.2	121.7
97.5°	77.3	97.3	123.0	140.3	144.1
100°	106.2	125.1	149.6	164.9	170.9
102.5°	139.5	154.3	179.9	194.7	198.6
105°	172.5	184.8	211.0	223.6	229.2
107.5°	211.1	221.3	242.8	257.3	260.5
110°	246.7	256.3	275.9	290.6	292.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.2	291.3	308.5	323.4	327.5
115°	321.4	329.0	343.7	355.3	358.1
117.5°	359.6	364.0	377.8	388.6	389.9
120°	394.4	401.2	412.3	421.9	423.6
122.5°	431.2	435.1	447.6	455.3	456.2
125°	468.3	470.6	482.1	488.6	488.8
127.5°	502.9	506.9	516.7	521.2	521.3
130°	537.4	542.9	549.7	555.3	552.7
132.5°	571.4	577.5	582.8	587.1	586.4
135°	606.7	610.8	615.0	620.1	620.9
137.5°	639.0	642.4	647.7	651.2	651.2
140°	672.4	676.1	678.2	684.2	681.2
142.5°	703.2	706.4	707.9	713.1	711.5
145°	735.5	736.5	738.7	741.6	740.4
147.5°	762.7	765.7	768.0	769.4	766.7
150°	792.0	793.5	795.0	795.0	791.4
152.5°	816.0	818.3	819.0	820.5	816.8
155°	841.6	841.6	842.3	845.3	840.1
157.5°	863.3	862.6	863.3	866.3	861.8
160°	883.6	882.1	882.1	885.8	882.8
162.5°	901.6	899.4	900.1	903.9	898.6
165°	916.6	914.4	914.4	918.9	913.6
167.5°	929.4	926.4	927.1	931.6	927.1
170°	939.9	936.9	936.9	942.2	936.9
172.5°	948.2	945.2	945.2	949.7	944.4
175°	953.4	950.4	950.4	954.9	949.7
177.5°	956.4	953.4	953.4	957.9	952.7
180°	955.7	955.7	955.7	955.7	955.7

(END OF REPORT)