

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: P1031670

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031670
REPORT IS A COMBINATION OF REPORTS P991449 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-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

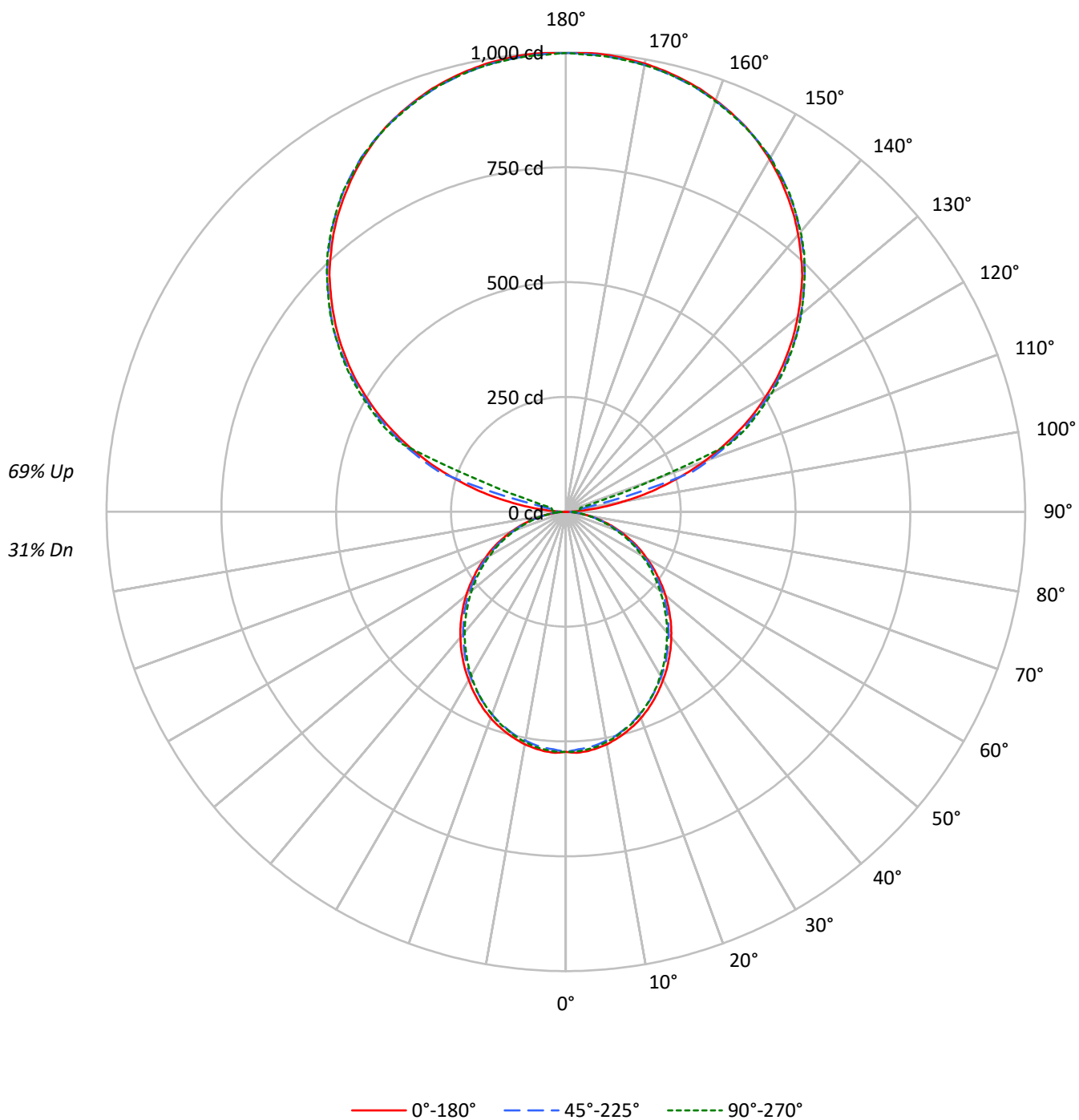
Lumens per Lamp: N/A
Luminaire Lumens: 4408.0 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	89	85	82	84	80	77	74	64	61	59	48	47	46	34	33	32
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	29	27
3	78	68	61	56	69	62	56	51	49	45	41	37	34	32	26	25	23
4	71	60	53	47	63	55	48	43	43	39	35	33	30	27	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	26	24	21	19	17
6	60	48	40	35	53	43	37	32	35	30	26	27	23	21	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	18	15	13
8	51	39	32	26	46	35	29	24	29	24	20	22	19	16	16	14	12
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5628	5628	5628
5°	5643	5435	5427
10°	5593	5251	5197
15°	5515	5060	4947
20°	5426	4847	4699
25°	5311	4623	4433
30°	5184	4391	4154
35°	5052	4155	3877
40°	4913	3905	3604
45°	4761	3664	3320
50°	4607	3393	3033
55°	4408	3112	2745
60°	4203	2800	2437
65°	4010	2466	2114
70°	3734	2093	1739
75°	3336	1656	1350
80°	2883	1164	956
85°	2248	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4761 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	1.1
10°-20°	139.2	3.2
20°-30°	205.6	4.7
30°-40°	240.1	5.4
40°-50°	241.4	5.5
50°-60°	212.1	4.8
60°-70°	157.9	3.6
70°-80°	89.9	2.0
80°-90°	27.5	0.6
90°-100°	35.2	0.8
100°-110°	170.3	3.9
110°-120°	417.3	9.5
120°-130°	529.8	12.0
130°-140°	565.9	12.8
140°-150°	529.2	12.0
150°-160°	426.9	9.7
160°-170°	275.5	6.2
170°-180°	94.9	2.2
0°-30°	394.1	8.9
0°-40°	634.2	14.4
0°-60°	1087.7	24.7
0°-90°	1363.0	30.9
90°-120°	622.8	14.1
90°-150°	2247.8	51.0
90°-180°	3045.0	69.1
0°-180°	4408.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	523	523	523	523	523	
5°	523	521	516	521	520	50
15°	498	496	491	494	492	140
25°	452	450	444	444	443	208
35°	391	388	383	380	378	245
45°	321	319	313	308	305	248
55°	243	243	237	232	230	218
65°	166	164	159	156	154	164
75°	88	86	84	82	81	94
85°	23	22	22	22	22	25
90°	1	8	18	21	22	4
95°	45	15	23	28	28	54
105°	221	229	162	31	33	234
115°	415	419	426	433	436	410
125°	585	591	594	595	597	522
135°	728	732	735	738	735	560
145°	840	845	847	848	848	526
155°	925	924	925	928	924	426
165°	976	974	973	979	974	276
175°	999	995	996	1001	995	95
180°	999	999	999	999	999	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	522.9	522.9	522.9	522.9	522.9
2.5°	525.2	523.4	518.5	522.9	522.5
5°	523.4	521.1	516.2	520.7	519.8
7.5°	519.4	517.1	512.2	516.2	515.8
10°	514.0	511.7	505.9	509.9	509.0
12.5°	506.8	505.0	499.6	502.3	501.8
15°	498.2	496.4	490.6	494.2	491.5
17.5°	488.8	486.5	480.7	483.4	482.5
20°	478.0	475.3	469.4	471.2	469.9
22.5°	465.8	463.1	457.3	458.6	456.8
25°	452.4	449.7	443.8	444.3	442.9
27.5°	438.4	435.7	429.4	429.9	428.5
30°	423.1	420.9	414.6	414.6	411.4
32.5°	407.8	404.7	400.2	397.0	395.7
35°	391.2	388.5	382.7	380.0	377.7
37.5°	374.6	371.0	365.1	362.0	360.6
40°	357.0	354.3	348.0	344.4	342.6
42.5°	339.5	336.3	330.0	326.4	324.6
45°	320.6	318.8	313.0	307.6	305.3
47.5°	302.2	299.5	294.1	288.7	286.9
50°	283.3	281.0	275.2	270.2	267.5
52.5°	263.5	262.1	255.9	251.8	249.1
55°	243.3	242.8	237.0	232.0	229.8
57.5°	224.4	222.6	218.1	213.6	210.9
60°	203.7	203.2	197.8	193.8	191.6
62.5°	185.3	183.9	178.5	174.5	173.1
65°	165.9	163.7	159.2	155.6	154.2
67.5°	145.2	143.4	139.8	136.7	134.9
70°	126.8	124.1	121.4	118.3	116.0
72.5°	107.5	105.7	102.5	99.8	98.9
75°	87.7	85.9	84.5	82.3	80.9
77.5°	70.1	69.2	67.4	65.6	65.6
80°	53.1	51.7	50.8	50.4	50.4
82.5°	36.4	36.4	36.4	35.5	35.1
85°	23.4	22.5	22.5	21.6	21.6
87.5°	11.7	10.3	9.9	9.4	9.4
90°	0.7	8.2	17.8	20.8	22.3
92.5°	17.1	12.6	19.3	24.5	25.2
95°	45.3	14.8	23.0	28.2	28.2
97.5°	82.4	61.6	23.7	29.7	30.4
100°	125.4	140.3	24.5	30.4	31.2
102.5°	174.4	184.0	54.9	30.4	31.9
105°	221.1	229.3	162.5	31.2	32.7
107.5°	270.9	277.5	288.7	174.4	77.2
110°	320.6	326.5	334.7	310.2	204.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	368.1	373.3	381.4	388.1	386.6
115°	414.8	419.3	425.9	433.4	436.3
117.5°	460.8	466.0	469.7	475.7	476.4
120°	503.1	509.8	512.0	518.0	518.0
122.5°	546.2	551.4	554.3	558.0	558.8
125°	584.8	590.7	593.7	595.1	596.6
127.5°	623.3	629.3	633.0	635.2	633.7
130°	659.0	664.9	667.9	670.8	669.3
132.5°	693.1	699.0	701.3	704.2	702.0
135°	728.0	732.4	735.4	737.6	735.4
137.5°	757.7	763.6	765.1	768.8	767.3
140°	787.3	791.8	794.0	797.0	795.5
142.5°	814.8	819.2	821.5	823.7	821.5
145°	840.0	845.2	846.7	848.2	848.2
147.5°	864.5	868.2	869.7	871.2	867.5
150°	886.8	889.0	890.5	892.0	889.7
152.5°	906.8	907.6	908.3	911.3	907.6
155°	925.4	923.9	924.6	928.3	923.9
157.5°	940.2	940.2	939.5	943.9	938.0
160°	953.6	952.8	952.1	956.5	951.3
162.5°	966.2	963.9	963.2	968.4	963.9
165°	975.8	973.6	972.9	978.8	973.6
167.5°	984.0	981.0	981.0	987.0	981.0
170°	990.7	987.7	987.7	993.6	987.7
172.5°	995.1	991.4	992.1	998.1	991.4
175°	998.8	995.1	995.9	1001.1	995.1
177.5°	1000.3	996.6	997.3	1003.3	995.9
180°	998.8	998.8	998.8	998.8	998.8

(END OF REPORT)