

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P1212475

Luminaire Tested: **LDSQA6A25927D010TE LARL20NF 6LSQA1H**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1212475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29055)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A25927D010TE LARL20NF 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 20° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

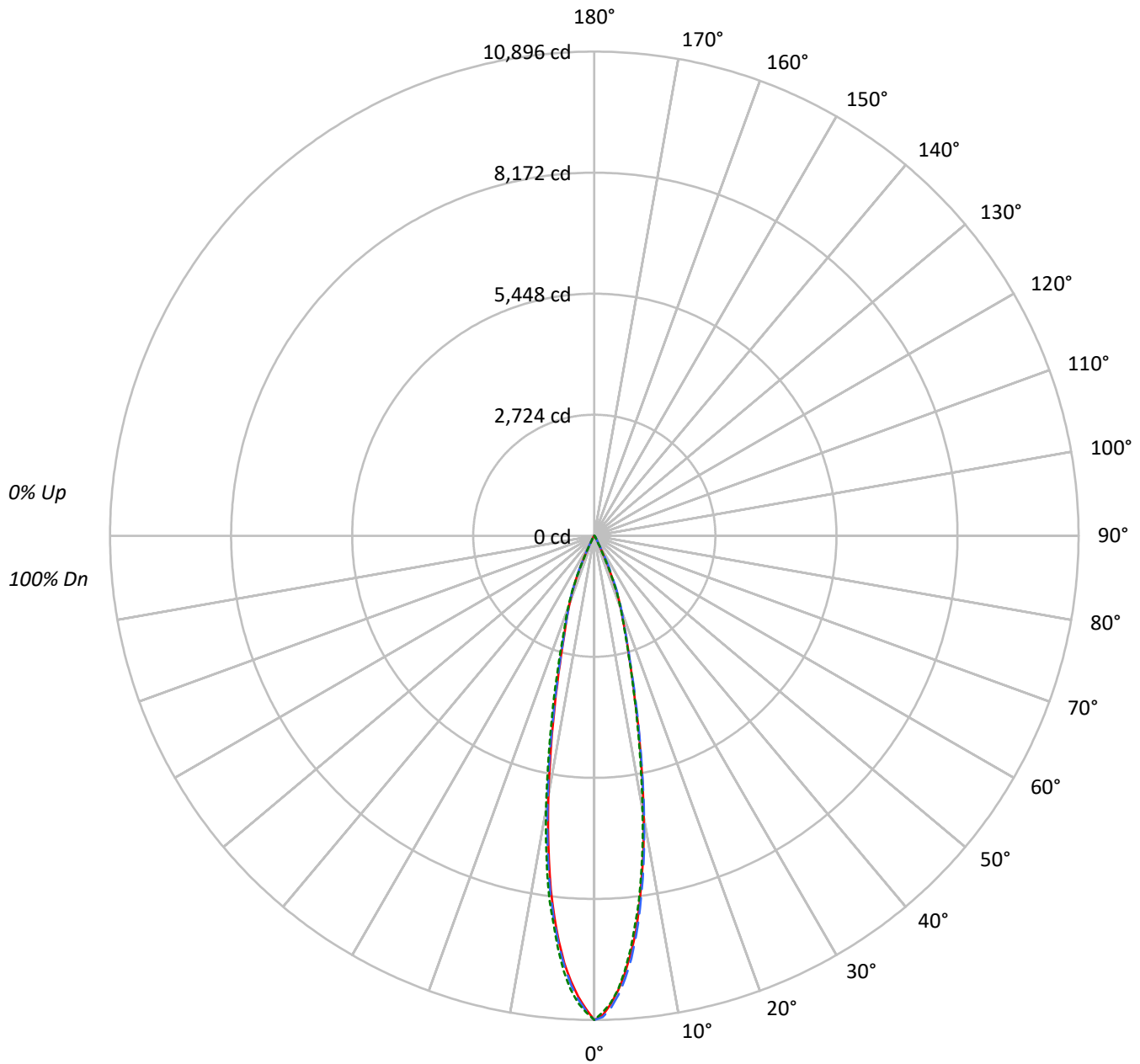
Lumens per Lamp: N/A
Luminaire Lumens: 2080.1 lumens
Efficiency: N/A
Efficacy: 66.7 lumens/watt
Spacing Criteria (0/90/45): 0.37 / 0.38 / 0.39
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): NR
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: 25 FT

TEST NUMBER: P1212475

CATALOG NUMBER: LDSQA6A25927D010TE LARL20NF 6LSQA1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212475

CATALOG NUMBER: LDSQA6A25927D010TE LARL20NF 6LSQA1H

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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	115	113	111	110	113	111	109	108	107	106	105		103	102	102		100
2	112	108	105	103	110	107	104	102	103	101	100		101	99	97		98
3	108	104	100	98	107	103	99	97	100	98	95		98	96	94		96
4	105	100	96	93	104	99	96	93	97	94	92		95	93	91		94
5	102	97	93	90	101	96	92	89	94	91	89		93	90	88		91
6	99	94	90	87	98	93	89	86	92	88	86		90	88	85		89
7	97	91	87	84	96	90	86	84	89	86	83		88	85	83		87
8	94	88	84	82	93	88	84	81	87	83	81		86	83	81		85
9	92	86	82	79	91	85	82	79	85	81	79		84	81	79		83
10	90	84	80	77	89	83	80	77	83	79	77		82	79	77		81

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	469117	469117	469117
5°	407691	403516	396242
10°	280083	273271	259578
15°	145857	144564	133153
20°	81104	79367	75083
25°	26837	24855	29160
30°	5936	5494	4907
35°	2223	2181	1950
40°	877	837	792
45°	268	268	268
50°	54	54	100
55°	60	0	60
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212475

CATALOG NUMBER: LDSQA6A25927D010TE LARL20NF 6LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	795.8	38.3
10°-20°	922.4	44.3
20°-30°	320.5	15.4
30°-40°	34.1	1.6
40°-50°	6.5	0.3
50°-60°	0.7	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2038.8	98.0
0°-40°	2072.9	99.7
0°-60°	2080.1	100.0
0°-90°	2080.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2080.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10896	10896	10896	10896	10896	
5°	9433	9547	9336	9221	9168	802
15°	3272	3344	3243	3055	2987	941
25°	565	734	523	641	614	306
35°	42	59	42	54	37	32
45°	4	12	4	11	4	4
55°	1	1	0	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212475

CATALOG NUMBER: LDSQA6A25927D010TE LARL20NF 6LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	10895.6	10895.6	10895.6	10895.6	10895.6	10895.6	10895.6	10895.6	10895.6
1°	10795.5	10794.0	10832.6	10843.0	10725.7	10886.1	10695.3	10890.4	10655.2
2°	10552.8	10566.2	10632.2	10623.2	10520.8	10661.9	10437.7	10591.3	10379.9
3°	10244.9	10268.5	10345.0	10339.0	10219.6	10340.5	10103.1	10240.3	10041.5
4°	9867.8	9923.4	9987.2	10004.4	9822.4	9931.6	9700.8	9829.2	9640.0
5°	9432.9	9506.3	9547.1	9524.1	9336.3	9436.6	9221.3	9403.9	9168.0
6°	8941.6	8998.6	9029.1	8988.3	8780.5	8894.1	8692.9	8848.1	8617.2
7°	8356.8	8421.3	8445.8	8405.7	8261.7	8307.7	8106.6	8236.6	8020.6
8°	7707.4	7804.6	7808.3	7771.9	7622.8	7572.2	7457.2	7552.3	7347.5
9°	7069.9	7142.5	7141.0	7114.3	6949.6	6876.1	6764.1	6831.5	6649.7
10°	6406.3	6471.6	6449.4	6424.8	6250.5	6168.8	6061.2	6096.9	5937.3
11°	5703.6	5786.7	5751.1	5727.2	5553.5	5473.5	5365.9	5375.5	5235.1
12°	4993.2	5111.3	5068.9	5053.3	4893.1	4815.1	4717.9	4707.5	4574.7
13°	4397.2	4470.0	4428.5	4420.3	4279.3	4211.7	4055.2	4096.7	3975.8
14°	3761.2	3888.1	3851.0	3847.4	3731.6	3668.5	3523.8	3556.4	3451.1
15°	3272.2	3373.1	3343.5	3341.9	3243.2	3183.1	3054.7	3081.5	2987.2
16°	2826.9	2921.9	2900.3	2904.1	2816.5	2763.9	2652.4	2674.8	2599.1
17°	2516.6	2550.8	2530.7	2530.7	2458.0	2425.4	2329.6	2351.2	2291.9
18°	2207.9	2220.6	2233.2	2235.3	2171.6	2149.3	2069.1	2088.5	2039.4
19°	1954.8	1985.3	1992.7	1994.2	1937.8	1925.2	1856.1	1871.0	1830.9
20°	1770.1	1787.9	1790.0	1786.3	1732.2	1721.8	1660.2	1673.5	1638.7
21°	1556.4	1587.5	1580.8	1574.9	1518.5	1510.3	1458.3	1460.6	1426.4
22°	1318.0	1373.8	1366.3	1355.9	1279.5	1268.3	1255.0	1249.8	1217.1
23°	1026.4	1156.3	1149.7	1134.8	1023.4	1056.8	1048.7	1039.0	1008.5
24°	787.5	940.3	936.6	913.6	765.9	849.1	840.2	831.9	808.2
25°	564.9	733.2	734.0	698.4	523.2	672.4	641.2	635.3	613.8
26°	403.8	545.4	549.2	498.0	321.3	485.3	463.1	455.0	437.8
27°	245.7	380.0	387.4	326.5	200.4	325.8	311.8	302.8	253.8
28°	169.2	247.9	256.8	201.9	156.5	217.5	200.4	190.1	147.6
29°	144.7	161.7	168.5	142.4	132.1	144.7	136.6	132.1	119.4
30°	119.4	123.2	126.2	118.0	110.5	114.2	110.5	106.9	98.7
32.5°	75.7	82.3	84.6	78.6	72.0	74.2	74.2	69.0	62.4
35°	42.3	52.7	59.3	52.0	41.5	49.7	53.5	46.0	37.1
37.5°	25.9	32.7	41.5	32.7	25.3	31.9	38.6	29.0	23.8
40°	15.6	20.1	29.7	20.1	14.9	19.3	26.7	17.8	14.1
42.5°	8.9	11.8	19.3	11.8	8.1	11.2	17.8	10.4	8.1
45°	4.4	6.6	11.8	6.6	4.4	6.6	11.2	6.0	4.4
47.5°	2.3	3.7	6.6	3.7	2.3	3.7	6.0	3.7	2.3
50°	0.8	1.5	3.7	1.5	0.8	1.5	3.7	1.5	1.5
52.5°	0.8	0.8	2.3	0.8	0.8	0.8	1.5	0.8	0.8
55°	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
57.5°	0.8	0.0	0.8	0.0	0.0	0.0	0.8	0.8	0.8
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212475

CATALOG NUMBER: LDSQA6A25927D010TE LARL20NF 6LSQA1H

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)