

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: P1219592

Luminaire Tested: **LDSQA6A15950D010TE LARL15SP 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: P1219592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29053)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A15950D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

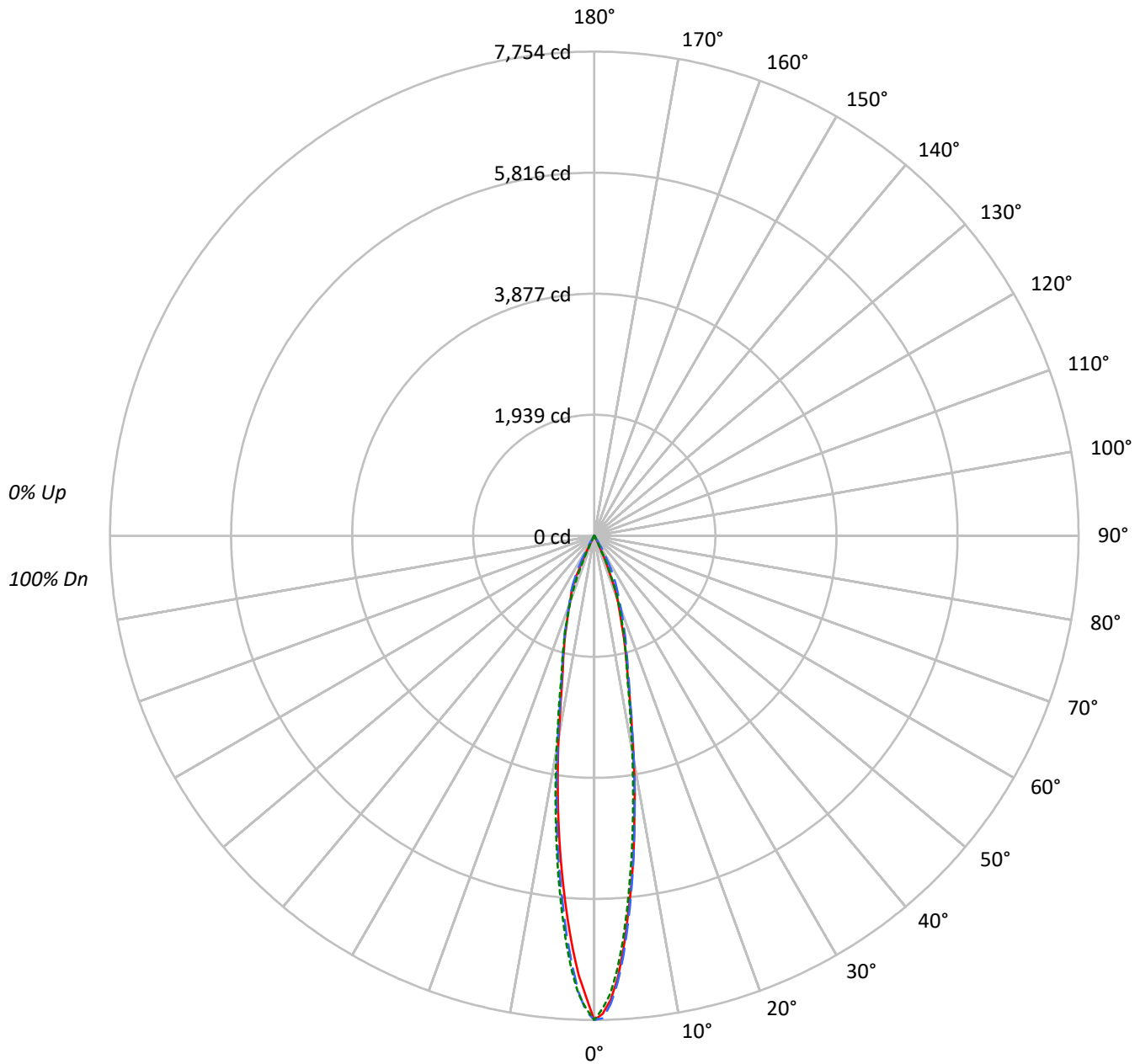
Lumens per Lamp: N/A
Luminaire Lumens: 1311.3 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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: P1219592

CATALOG NUMBER: LDSQA6A15950D010TE LARL15SP 6LSQA1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1219592

CATALOG NUMBER: LDSQA6A15950D010TE LARL15SP 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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97		
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	94		
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91		
4	105	100	96	93	103	99	95	93	97	94	91	95	92	90	93	91	90	88		
5	102	96	92	89	101	95	92	89	94	91	88	92	90	88	91	89	87	86		
6	99	93	89	86	98	92	89	86	91	88	85	90	87	85	89	86	84	83		
7	97	90	86	83	95	90	86	83	89	85	83	88	85	82	87	84	82	81		
8	94	88	84	81	93	87	83	81	86	83	80	85	82	80	85	82	80	79		
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77		
10	89	83	79	77	89	83	79	76	82	79	76	81	78	76	81	78	76	75		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	333836	333836	333836
5°	265393	259727	244336
10°	158117	152298	143287
15°	86394	86546	83827
20°	49503	50868	52289
25°	13069	13587	24409
30°	1785	1651	1591
35°	715	683	657
40°	275	275	275
45°	134	104	134
50°	67	33	114
55°	38	0	75
60°	43	0	0
65°	51	0	0
70°	63	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1219592

CATALOG NUMBER: LDSQA6A15950D010TE LARL15SP 6LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.4	37.6
10°-20°	554.1	42.3
20°-30°	246.7	18.8
30°-40°	15.0	1.1
40°-50°	2.4	0.2
50°-60°	0.4	0.0
60°-70°	0.1	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°	1293.2	98.6
0°-40°	1308.3	99.8
0°-60°	1311.1	100.0
0°-90°	1311.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1311.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7754	7754	7754	7754	7754	
5°	6140	6212	6009	5869	5653	505
15°	1938	2022	1942	1928	1881	546
25°	275	735	286	710	514	162
35°	14	22	13	22	12	10
45°	2	4	2	4	2	2
55°	0	0	0	0	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	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1219592

CATALOG NUMBER: LDSQA6A15950D010TE LARL15SP 6LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	7753.6	7753.6	7753.6	7753.6	7753.6	7753.6	7753.6	7753.6	7753.6
1°	7658.5	7728.6	7728.6	7711.7	7572.0	7675.8	7617.2	7554.0	7389.9
2°	7438.3	7509.5	7502.5	7438.3	7337.1	7380.0	7299.7	7221.3	7049.0
3°	7098.4	7175.2	7161.0	7094.2	6959.3	6985.4	6870.1	6810.9	6612.9
4°	6641.8	6739.1	6722.2	6648.3	6512.9	6511.2	6390.6	6328.1	6144.8
5°	6140.5	6242.2	6212.2	6151.4	6009.4	5983.8	5868.6	5824.0	5653.3
6°	5658.7	5722.4	5691.4	5640.9	5487.5	5471.8	5362.4	5324.4	5166.7
7°	5145.5	5189.6	5159.1	5119.9	4965.0	4944.4	4855.1	4825.3	4671.4
8°	4604.5	4667.6	4624.2	4599.6	4453.4	4425.1	4335.4	4315.3	4191.8
9°	4142.4	4163.6	4117.4	4044.0	3959.2	3930.4	3835.2	3815.7	3729.2
10°	3616.6	3682.4	3646.6	3583.5	3483.5	3505.2	3367.1	3350.8	3277.4
11°	3159.4	3228.5	3190.4	3133.8	3043.6	3056.1	2943.0	2874.5	2863.1
12°	2782.1	2813.6	2802.2	2756.5	2683.7	2687.5	2586.9	2532.0	2520.5
13°	2414.6	2471.0	2476.6	2439.0	2351.4	2391.7	2316.7	2272.1	2254.2
14°	2165.5	2208.4	2225.9	2224.8	2130.2	2165.5	2106.3	2070.4	2052.4
15°	1938.2	1994.3	2022.5	2020.9	1941.6	1977.5	1928.0	1899.7	1880.6
16°	1725.2	1801.8	1848.0	1840.4	1766.4	1803.5	1754.5	1726.8	1705.6
17°	1510.9	1616.4	1684.4	1669.7	1592.4	1639.2	1592.4	1568.5	1546.3
18°	1346.2	1432.6	1528.3	1496.8	1410.9	1483.8	1443.5	1424.5	1403.8
19°	1198.3	1257.6	1382.1	1326.1	1248.3	1331.0	1301.0	1285.9	1266.3
20°	1080.4	1131.4	1242.4	1176.0	1110.2	1177.6	1169.5	1157.5	1141.2
21°	929.1	1026.5	1115.6	1054.2	967.8	1062.9	1073.3	1066.7	1054.8
22°	735.6	910.7	1023.8	911.8	798.7	979.2	1000.4	995.5	986.8
23°	572.5	774.2	938.9	780.7	622.0	886.2	917.8	914.5	885.7
24°	417.6	634.0	832.4	626.9	447.4	759.5	819.9	814.4	710.1
25°	275.1	493.7	735.1	470.3	286.0	614.3	710.1	700.9	513.8
26°	176.7	361.0	647.5	321.4	152.3	458.8	593.7	567.6	318.7
27°	84.9	251.7	540.4	189.2	73.9	306.1	476.3	418.1	153.8
28°	53.2	132.1	429.5	94.0	50.0	170.1	364.8	265.3	60.3
29°	43.5	65.2	318.0	53.2	40.8	78.3	261.6	129.4	41.9
30°	35.9	43.5	216.9	40.8	33.2	43.5	171.8	50.5	32.0
32.5°	22.9	27.1	50.0	25.6	21.7	25.0	40.8	24.4	20.1
35°	13.6	17.4	21.7	16.8	13.0	16.3	22.3	15.8	12.5
37.5°	8.1	10.3	14.1	10.3	8.1	10.3	14.1	10.3	7.6
40°	4.9	6.6	9.8	6.6	4.9	6.6	9.8	6.6	4.9
42.5°	3.2	3.8	6.6	3.8	2.7	3.8	6.6	4.4	3.2
45°	2.2	2.7	3.8	2.2	1.7	2.2	3.8	2.7	2.2
47.5°	1.7	1.7	2.2	1.0	1.0	1.7	2.7	2.2	1.7
50°	1.0	1.0	1.7	0.5	0.5	0.5	1.7	1.7	1.7
52.5°	0.5	0.5	0.5	0.0	0.0	0.0	1.0	1.0	1.0
55°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.0	1.0
57.5°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	1.0	1.0
60°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1219592

CATALOG NUMBER: LDSQA6A15950D010TE LARL15SP 6LSQA1H

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.5	0.5	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



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°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.5	0.5	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)