

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: P1212527

Luminaire Tested: **LDSQA6A35930D010TE 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: P1212527
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: LDSQA6A35930D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

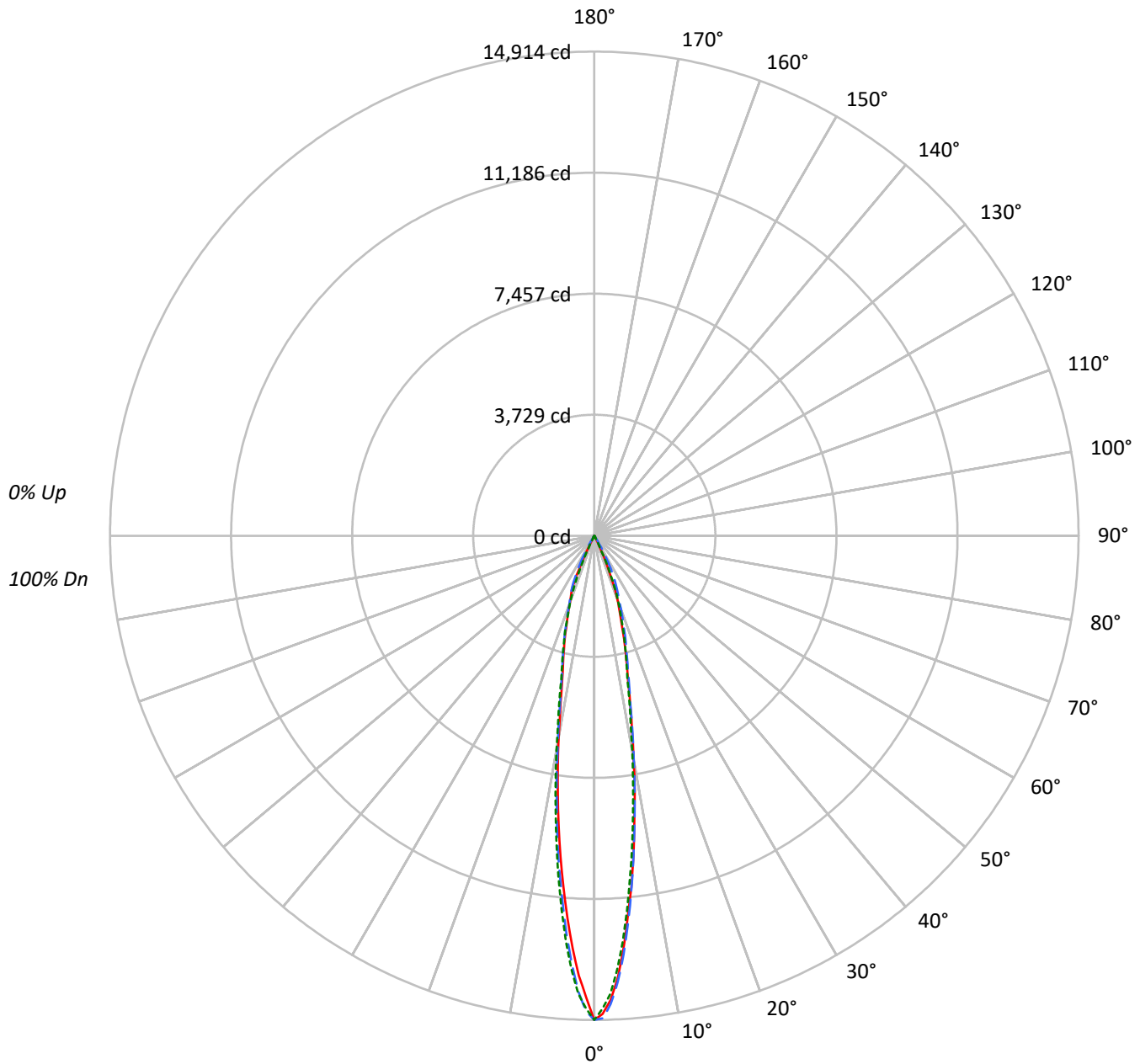
Lumens per Lamp: N/A
Luminaire Lumens: 2522.3 lumens
Efficiency: N/A
Efficacy: 52.9 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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

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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	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°	642128	642128	642128
5°	510477	499586	469976
10°	304137	292936	275610
15°	166183	166463	161239
20°	95207	97846	100577
25°	25141	26133	46946
30°	3425	3167	3068
35°	1372	1314	1267
40°	528	528	528
45°	250	189	250
50°	147	74	208
55°	83	0	165
60°	95	0	0
65°	112	0	0
70°	138	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	947.1	37.5
10°-20°	1065.8	42.3
20°-30°	474.6	18.8
30°-40°	28.9	1.1
40°-50°	4.7	0.2
50°-60°	0.9	0.0
60°-70°	0.2	0.0
70°-80°	0.1	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°	2487.5	98.6
0°-40°	2516.4	99.8
0°-60°	2522.0	100.0
0°-90°	2522.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2522.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14914	14914	14914	14914	14914	
5°	11811	11949	11559	11288	10874	971
15°	3728	3890	3734	3708	3617	1051
25°	529	1414	550	1366	988	312
35°	26	42	25	43	24	19
45°	4	7	3	7	4	4
55°	1	1	0	1	2	1
65°	1	0	0	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	14913.9	14913.9	14913.9	14913.9	14913.9	14913.9	14913.9	14913.9	14913.9
1°	14730.8	14865.8	14865.8	14833.4	14564.5	14764.3	14651.5	14530.1	14214.2
2°	14307.3	14444.3	14430.8	14307.3	14112.9	14195.5	14040.7	13890.1	13558.5
3°	13653.7	13801.1	13774.0	13645.3	13386.1	13436.3	13214.5	13100.6	12719.9
4°	12775.3	12962.5	12930.1	12787.7	12527.5	12524.2	12292.0	12171.8	11819.3
5°	11811.1	12006.5	11949.1	11831.9	11559.1	11509.9	11288.2	11202.5	10874.0
6°	10884.4	11006.8	10947.2	10850.0	10555.0	10524.8	10314.5	10241.3	9938.0
7°	9897.3	9981.9	9923.4	9848.2	9550.1	9510.3	9338.8	9281.3	8985.4
8°	8856.7	8978.0	8894.3	8847.4	8566.0	8511.7	8339.0	8300.3	8062.9
9°	7967.9	8008.6	7919.6	7778.5	7615.4	7560.0	7376.9	7339.3	7173.0
10°	6956.5	7083.0	7014.1	6892.7	6700.3	6742.1	6476.6	6445.1	6304.0
11°	6077.0	6209.8	6136.6	6027.8	5854.3	5878.3	5660.8	5529.1	5507.1
12°	5351.2	5411.9	5389.9	5302.1	5162.0	5169.2	4975.7	4870.3	4848.3
13°	4644.4	4753.1	4763.5	4691.3	4523.0	4600.4	4456.1	4370.4	4335.8
14°	4165.4	4248.0	4281.5	4279.3	4097.3	4165.4	4051.4	3982.3	3947.8
15°	3728.2	3836.0	3890.3	3887.1	3734.5	3803.6	3708.4	3654.0	3617.3
16°	3318.3	3465.7	3554.6	3539.9	3397.7	3468.8	3374.8	3321.4	3280.7
17°	2906.3	3109.1	3239.8	3211.6	3063.1	3153.1	3063.1	3017.2	2974.1
18°	2589.3	2755.6	2939.8	2879.1	2713.9	2853.9	2776.5	2740.0	2700.2
19°	2304.9	2418.8	2658.4	2550.6	2401.2	2560.1	2502.5	2473.2	2435.6
20°	2077.9	2176.2	2389.7	2262.1	2135.5	2265.1	2249.5	2226.4	2195.1
21°	1787.2	1974.4	2146.0	2027.7	1861.6	2044.4	2064.4	2051.8	2028.8
22°	1415.0	1751.8	1969.2	1753.7	1536.3	1883.5	1924.2	1914.8	1898.1
23°	1101.2	1489.1	1806.1	1501.7	1196.5	1704.6	1765.3	1759.0	1703.5
24°	803.2	1219.3	1601.1	1205.8	860.8	1460.9	1577.0	1566.5	1365.8
25°	529.2	949.5	1413.9	904.7	550.1	1181.7	1365.8	1348.0	988.2
26°	339.8	694.4	1245.6	618.1	292.9	882.7	1141.9	1091.9	612.9
27°	163.1	484.2	1039.5	364.0	142.2	588.8	916.0	804.2	295.9
28°	102.4	254.2	826.2	180.9	96.3	327.2	701.6	510.3	116.1
29°	83.7	125.5	611.8	102.4	78.5	150.7	503.1	248.9	80.5
30°	68.9	83.7	417.2	78.5	63.7	83.7	330.5	97.2	61.7
32.5°	43.9	52.2	96.3	49.1	41.8	48.1	78.5	47.0	38.7
35°	26.1	33.5	41.8	32.4	25.0	31.3	42.8	30.2	24.1
37.5°	15.7	19.8	27.2	19.8	15.7	19.8	27.2	19.8	14.6
40°	9.4	12.6	18.9	12.6	9.4	12.6	18.9	12.6	9.4
42.5°	6.3	7.4	12.6	7.4	5.2	7.4	12.6	8.3	6.3
45°	4.1	5.2	7.4	4.1	3.1	4.1	7.4	5.2	4.1
47.5°	3.1	3.1	4.1	2.2	2.2	3.1	5.2	4.1	3.1
50°	2.2	2.2	3.1	1.1	1.1	1.1	3.1	3.1	3.1
52.5°	1.1	1.1	1.1	0.0	0.0	0.0	2.2	2.2	2.2
55°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	2.2	2.2
57.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	2.2
60°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	0.0

Classified

Scaled Data Report

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.1	1.1	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

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Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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62.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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