

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: P208743

Luminaire Tested: **LDSQA6A30840D010TE LARL15SP 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208743
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: LDSQA6A30840D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2529.4 lumens
Efficiency: N/A
Efficacy: 56.7 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

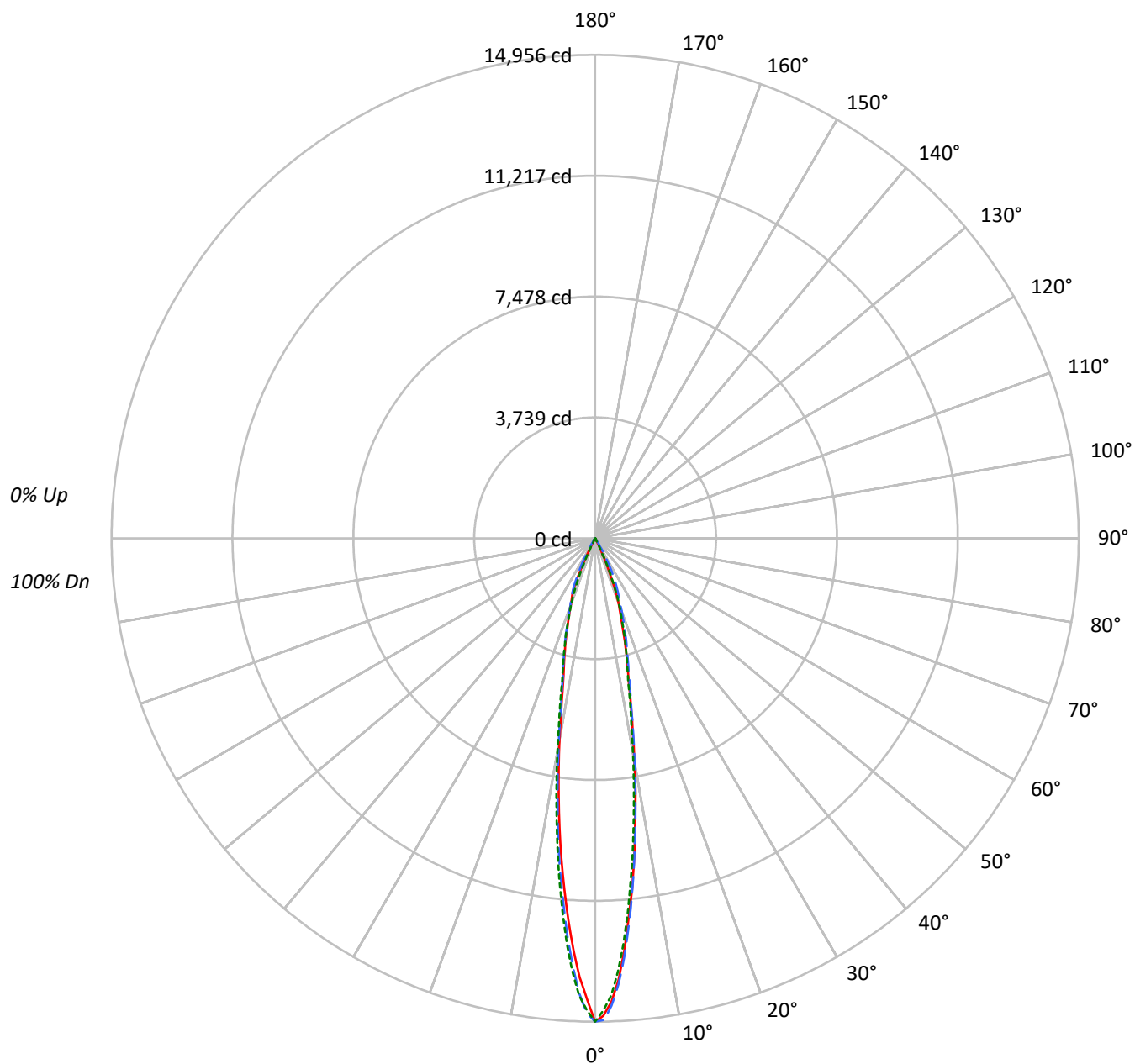
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208743

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	643958	643958	643958
5°	511934	501008	471320
10°	305007	293771	276397
15°	166655	166936	161703
20°	95482	98126	100866
25°	25212	26209	47084
30°	3440	3182	3077
35°	1377	1325	1267
40°	528	528	528
45°	256	189	256
50°	141	67	208
55°	75	0	158
60°	86	0	0
65°	102	0	0
70°	126	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°	949.8	37.6
10°-20°	1068.8	42.3
20°-30°	476.0	18.8
30°-40°	29.0	1.1
40°-50°	4.6	0.2
50°-60°	0.8	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°	2494.6	98.6
0°-40°	2523.6	99.8
0°-60°	2529.1	100.0
0°-90°	2529.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2529.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14956	14956	14956	14956	14956	
5°	11845	11983	11592	11320	10905	974
15°	3739	3901	3745	3719	3628	1054
25°	531	1418	552	1370	991	313
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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CATALOG NUMBER: LDSQA6A30840D010TE LARL15SP 6LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	14956.4	14956.4	14956.4	14956.4	14956.4	14956.4	14956.4	14956.4	14956.4
1°	14772.9	14908.2	14908.2	14875.7	14606.2	14806.5	14693.2	14571.5	14254.8
2°	14348.2	14485.5	14471.9	14348.2	14153.1	14235.9	14080.7	13929.7	13597.2
3°	13692.7	13840.6	13813.3	13684.3	13424.2	13474.5	13252.2	13137.9	12756.1
4°	12811.7	12999.4	12966.9	12824.3	12563.2	12560.0	12327.2	12206.6	11853.1
5°	11844.8	12040.9	11983.2	11865.7	11592.0	11542.7	11320.4	11234.4	10905.1
6°	10915.5	11038.3	10978.5	10880.9	10585.2	10554.8	10344.0	10270.6	9966.4
7°	9925.5	10010.5	9951.7	9876.2	9577.3	9537.5	9365.5	9307.8	9011.0
8°	8882.0	9003.6	8919.7	8872.6	8590.4	8535.9	8362.9	8324.1	8086.0
9°	7990.5	8031.4	7942.3	7800.7	7637.1	7581.5	7398.0	7360.2	7193.5
10°	6976.4	7103.3	7034.1	6912.4	6719.4	6761.4	6495.0	6463.5	6322.0
11°	6094.4	6227.6	6154.2	6045.1	5871.0	5895.1	5677.0	5544.8	5522.8
12°	5366.5	5427.4	5405.3	5317.2	5176.7	5184.0	4990.0	4884.1	4862.1
13°	4657.6	4766.6	4777.1	4704.8	4535.9	4613.5	4468.8	4382.8	4348.2
14°	4177.2	4260.1	4293.6	4291.5	4109.1	4177.2	4062.9	3993.7	3959.1
15°	3738.8	3846.9	3901.4	3898.3	3745.1	3814.4	3718.9	3664.4	3627.7
16°	3327.7	3475.6	3564.8	3550.1	3407.4	3478.8	3384.4	3330.9	3290.0
17°	2914.5	3118.0	3249.1	3220.8	3071.8	3162.0	3071.8	3025.7	2982.7
18°	2596.7	2763.5	2948.1	2887.3	2721.5	2862.1	2784.5	2747.8	2707.9
19°	2311.5	2425.8	2666.0	2557.9	2408.0	2567.4	2509.7	2480.3	2442.6
20°	2083.9	2182.5	2396.4	2268.5	2141.6	2271.6	2255.9	2232.8	2201.4
21°	1792.3	1980.1	2152.1	2033.6	1866.8	2050.3	2070.3	2057.7	2034.6
22°	1419.0	1756.7	1974.8	1758.8	1540.6	1888.8	1929.7	1920.3	1903.5
23°	1104.3	1493.4	1811.2	1506.0	1199.8	1709.5	1770.3	1764.0	1708.4
24°	805.5	1222.9	1605.7	1209.2	863.1	1465.1	1581.5	1571.1	1369.7
25°	530.7	952.3	1417.9	907.2	551.7	1185.1	1369.7	1351.9	991.1
26°	340.8	696.4	1249.1	619.8	293.7	885.2	1145.3	1094.9	614.6
27°	163.6	485.6	1042.5	365.0	142.6	590.5	918.7	806.5	296.8
28°	102.8	254.8	828.5	181.4	96.5	328.3	703.7	511.8	116.4
29°	83.9	125.9	613.5	102.8	78.7	151.0	504.5	249.6	80.8
30°	69.2	83.9	418.5	78.7	64.0	83.9	331.4	97.5	61.9
32.5°	44.0	52.4	96.5	49.3	42.0	48.2	78.7	47.2	38.8
35°	26.2	33.6	42.0	32.5	25.2	31.5	43.0	30.4	24.1
37.5°	15.7	19.9	27.3	19.9	15.7	19.9	27.3	19.9	14.7
40°	9.4	12.6	18.9	12.6	9.4	12.6	18.9	12.6	9.4
42.5°	6.3	7.3	12.6	7.3	5.2	7.3	12.6	8.4	6.3
45°	4.2	5.2	7.3	4.2	3.1	4.2	7.3	5.2	4.2
47.5°	3.1	3.1	4.2	2.1	2.1	3.1	5.2	4.2	3.1
50°	2.1	2.1	3.1	1.0	1.0	1.0	3.1	3.1	3.1
52.5°	1.0	1.0	1.0	0.0	0.0	0.0	2.1	2.1	2.1
55°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	2.1	2.1
57.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
60°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.0	1.0	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



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— 0°-180° - - 45°-225° - - - 90°-270°







62.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)