

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: P208782

Luminaire Tested: **LDSQA6A10835D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29057)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A10835D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1292.5 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.55
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

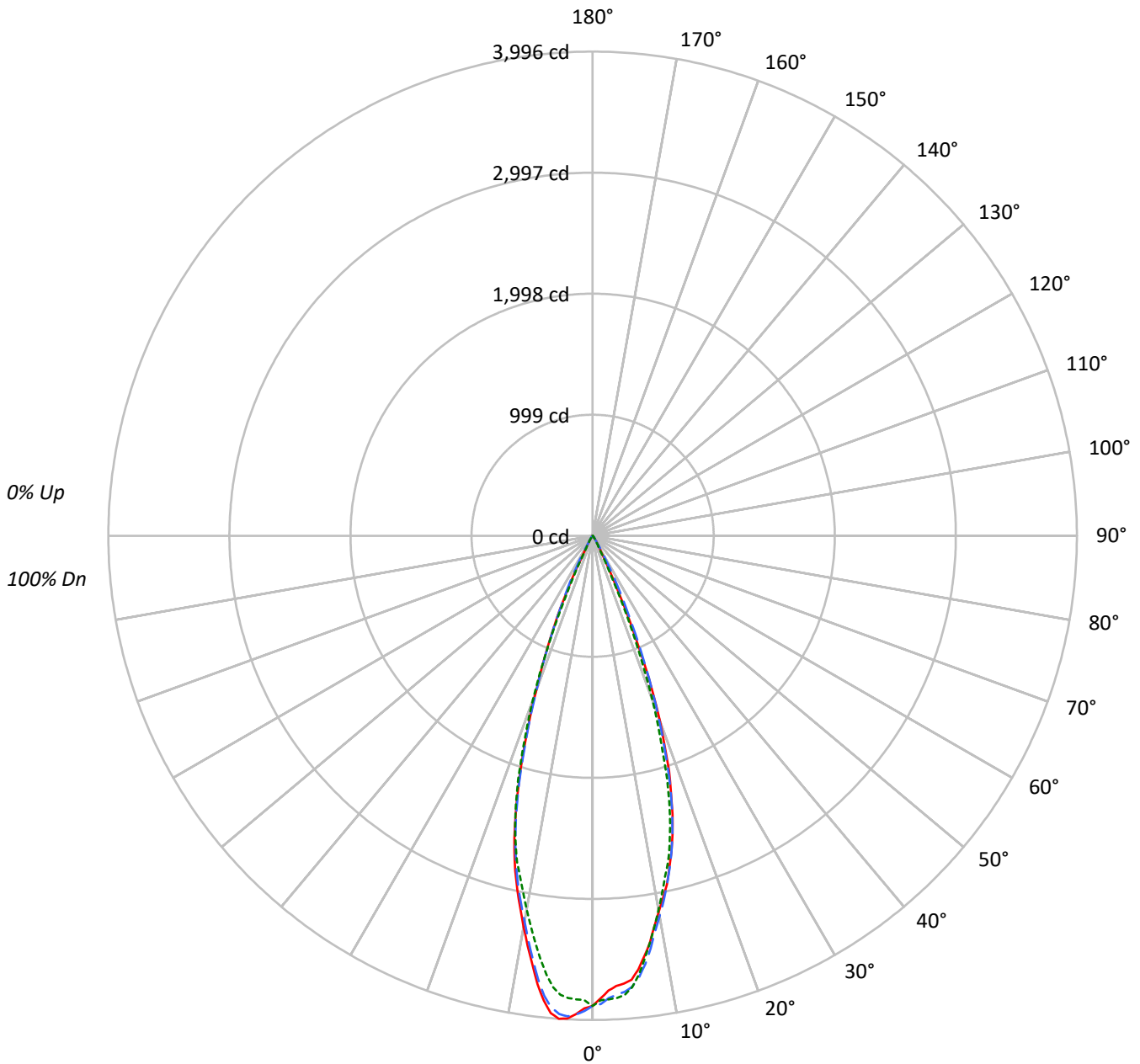
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93	93	93	93
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90	90	90	90
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88	86	86	86	86
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83	83	83	83
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81	81	81	81
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78	78	78	78
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75	75	75	75
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73	73	73	73
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71	71	71	71

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	167086	167086	167086
5°	158951	161712	170931
10°	137713	136970	143331
15°	113718	110148	110607
20°	73961	65897	62809
25°	22228	16993	22623
30°	4847	3530	3744
35°	1729	1062	1167
40°	511	332	399
45°	146	97	122
50°	27	27	54
55°	30	0	60
60°	34	0	0
65°	41	0	0
70°	50	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°	341.8	26.4
10°-20°	663.5	51.3
20°-30°	262.2	20.3
30°-40°	21.6	1.7
40°-50°	3.0	0.2
50°-60°	0.3	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°	1267.6	98.1
0°-40°	1289.1	99.7
0°-60°	1292.4	100.0
0°-90°	1292.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1292.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3881	3881	3881	3881	3881	
5°	3678	3736	3742	3910	3955	333
15°	2551	2544	2471	2451	2481	682
25°	468	632	358	524	476	263
35°	33	33	20	28	22	25
45°	2	6	2	4	2	2
55°	0	0	0	0	1	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3880.7	3880.7	3880.7	3880.7	3880.7	3880.7	3880.7	3880.7	3880.7
1°	3818.1	3774.5	3865.7	3862.1	3833.5	3914.0	3922.4	3974.3	3900.6
2°	3756.6	3722.1	3818.1	3828.0	3828.0	3928.3	3954.5	4019.5	3951.7
3°	3720.9	3692.4	3792.3	3818.5	3821.3	3933.1	3971.5	4044.5	3989.0
4°	3705.5	3679.3	3774.1	3794.3	3798.3	3916.4	3956.9	4040.1	3996.5
5°	3677.7	3648.4	3736.4	3739.6	3741.6	3862.5	3909.7	3992.2	3954.9
6°	3599.2	3583.7	3664.2	3646.8	3641.2	3770.5	3818.5	3895.4	3857.7
7°	3496.5	3486.2	3561.9	3535.4	3521.5	3642.0	3686.4	3759.4	3729.7
8°	3391.4	3366.4	3438.6	3415.6	3392.2	3496.1	3535.0	3602.4	3574.6
9°	3260.2	3247.5	3301.0	3293.5	3261.8	3368.4	3382.7	3448.5	3425.9
10°	3149.9	3134.5	3188.4	3174.1	3132.9	3226.1	3236.0	3299.0	3278.4
11°	3042.9	3022.7	3068.7	3050.4	3004.0	3087.7	3094.4	3153.1	3132.1
12°	2944.5	2911.6	2947.7	2925.9	2876.7	2950.5	2953.7	3008.8	2989.4
13°	2814.5	2792.7	2821.2	2797.8	2766.5	2808.1	2801.8	2854.1	2836.3
14°	2689.2	2661.8	2688.0	2659.8	2626.9	2654.7	2636.5	2682.1	2668.2
15°	2551.2	2523.8	2544.5	2510.0	2471.1	2481.4	2450.9	2493.3	2481.4
16°	2390.6	2363.3	2381.1	2339.1	2293.1	2287.1	2246.7	2283.9	2271.7
17°	2209.4	2189.6	2201.9	2149.1	2100.8	2080.1	2026.6	2059.5	2047.2
18°	2036.9	1998.1	2003.2	1944.5	1870.8	1858.1	1797.8	1829.1	1816.8
19°	1810.9	1792.7	1795.4	1729.2	1654.7	1631.3	1571.4	1599.2	1585.3
20°	1614.2	1586.5	1584.1	1512.3	1438.2	1413.6	1355.7	1384.2	1370.8
21°	1389.4	1406.5	1376.7	1301.0	1209.4	1211.8	1160.6	1163.4	1172.5
22°	1136.4	1198.7	1173.3	1083.7	969.1	1021.8	975.8	979.0	986.9
23°	886.2	950.9	973.8	865.2	740.7	845.8	809.3	811.7	816.8
24°	657.8	749.0	790.3	665.8	533.3	680.4	659.8	662.6	657.0
25°	467.9	575.0	632.4	491.7	357.7	528.6	524.2	528.6	476.2
26°	316.0	433.4	498.8	345.0	221.3	390.6	417.1	407.6	308.9
27°	202.2	329.5	383.4	225.6	140.4	268.8	311.3	308.5	177.2
28°	142.4	228.8	283.1	138.8	108.2	168.9	222.4	203.0	113.4
29°	120.1	148.7	197.5	98.7	88.0	99.9	149.1	118.6	92.8
30°	97.5	98.7	129.7	79.7	71.0	71.4	95.2	77.7	75.3
32.5°	59.5	59.1	55.9	46.8	41.6	41.6	46.4	44.8	44.4
35°	32.9	36.1	33.3	28.2	20.2	25.0	28.2	26.6	22.2
37.5°	17.8	21.0	23.0	15.5	11.1	14.7	19.0	15.5	12.7
40°	9.1	11.5	16.3	8.7	5.9	8.3	13.1	8.7	7.1
42.5°	4.8	6.3	10.3	4.8	2.8	4.8	8.3	4.8	3.6
45°	2.4	3.2	5.6	2.4	1.6	2.4	4.4	2.8	2.0
47.5°	1.2	1.6	2.8	1.2	0.4	1.2	2.4	1.2	1.2
50°	0.4	0.8	1.6	0.4	0.4	0.4	1.2	0.8	0.8
52.5°	0.4	0.4	0.8	0.4	0.0	0.4	0.8	0.4	0.8
55°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.8
57.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	0.4	0.8
60°	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)