

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: P208792

Luminaire Tested: **LDSQA6A15927D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208792
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: LDSQA6A15927D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1493.7 lumens
Efficiency: N/A
Efficacy: 68.6 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

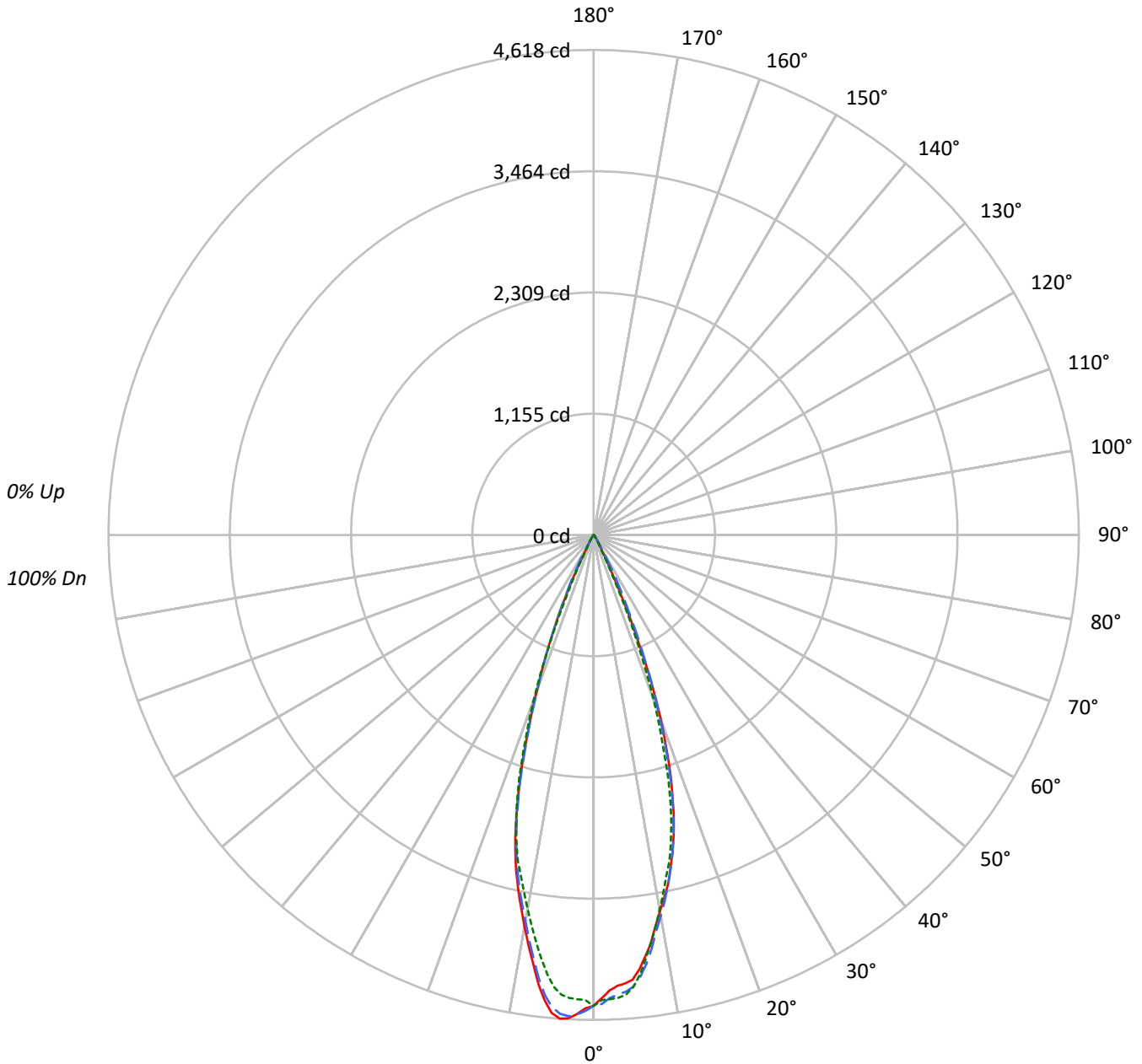
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96				96															
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94				93																
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91				90																
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88				86																
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85				83																
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82				81																
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79				78																
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76				75																
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74				73																
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72				71																

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	193092	193092	193092
5°	183690	186880	197533
10°	159149	158288	165641
15°	131419	127291	127822
20°	85475	76151	72582
25°	25687	19635	26143
30°	5603	4077	4330
35°	1997	1230	1351
40°	590	388	461
45°	164	110	140
50°	33	33	60
55°	38	0	68
60°	43	0	0
65°	51	0	0
70°	63	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°	395.0	26.4
10°-20°	766.8	51.3
20°-30°	303.0	20.3
30°-40°	24.9	1.7
40°-50°	3.4	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°	1464.8	98.1
0°-40°	1489.7	99.7
0°-60°	1493.6	100.0
0°-90°	1493.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1493.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4485	4485	4485	4485	4485	
5°	4250	4318	4324	4518	4570	384
15°	2948	2940	2856	2832	2868	788
25°	541	731	413	606	550	304
35°	38	38	23	32	26	28
45°	3	6	2	5	2	3
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°	4484.7	4484.7	4484.7	4484.7	4484.7	4484.7	4484.7	4484.7	4484.7
1°	4412.3	4361.9	4467.3	4463.2	4430.2	4523.2	4532.8	4592.8	4507.6
2°	4341.3	4301.4	4412.3	4423.8	4423.8	4539.7	4569.9	4645.1	4566.7
3°	4300.0	4267.0	4382.5	4412.8	4416.0	4545.2	4589.6	4674.0	4609.8
4°	4282.2	4251.9	4361.4	4384.8	4389.4	4525.9	4572.7	4668.9	4618.5
5°	4250.1	4216.2	4317.9	4321.6	4323.9	4463.6	4518.2	4613.5	4570.4
6°	4159.4	4141.5	4234.5	4214.3	4207.9	4357.3	4412.8	4501.7	4458.1
7°	4040.7	4028.8	4116.3	4085.6	4069.5	4208.9	4260.2	4344.5	4310.1
8°	3919.2	3890.4	3973.8	3947.2	3920.2	4040.2	4085.1	4163.0	4131.0
9°	3767.6	3752.9	3814.8	3806.1	3769.4	3892.7	3909.2	3985.2	3959.1
10°	3640.2	3622.3	3684.6	3668.1	3620.5	3728.2	3739.6	3812.5	3788.7
11°	3516.5	3493.1	3546.2	3525.2	3471.6	3568.2	3576.0	3643.9	3619.6
12°	3402.8	3364.8	3406.5	3381.3	3324.5	3409.7	3413.4	3477.1	3454.6
13°	3252.5	3227.3	3260.3	3233.3	3197.1	3245.2	3237.9	3298.3	3277.7
14°	3107.7	3076.1	3106.3	3073.8	3035.8	3067.9	3046.8	3099.5	3083.4
15°	2948.3	2916.6	2940.5	2900.6	2855.7	2867.6	2832.3	2881.4	2867.6
16°	2762.7	2731.1	2751.7	2703.1	2649.9	2643.1	2596.3	2639.4	2625.2
17°	2553.3	2530.4	2544.6	2483.6	2427.7	2403.9	2342.0	2380.1	2365.8
18°	2353.9	2309.0	2315.0	2247.2	2161.9	2147.3	2077.6	2113.8	2099.6
19°	2092.7	2071.7	2074.9	1998.3	1912.2	1885.2	1816.0	1848.0	1832.0
20°	1865.5	1833.4	1830.6	1747.7	1662.0	1633.6	1566.7	1599.7	1584.1
21°	1605.6	1625.3	1591.0	1503.5	1397.6	1400.4	1341.2	1344.4	1355.0
22°	1313.3	1385.2	1355.9	1252.3	1119.9	1180.9	1127.7	1131.4	1140.5
23°	1024.1	1098.8	1125.4	999.9	856.0	977.4	935.2	938.0	944.0
24°	760.2	865.6	913.3	769.4	616.3	786.3	762.5	765.7	759.3
25°	540.7	664.4	730.9	568.2	413.3	610.8	605.8	610.8	550.3
26°	365.2	500.8	576.5	398.7	255.7	451.4	482.1	471.1	357.0
27°	233.7	380.8	443.1	260.7	162.2	310.7	359.7	356.5	204.8
28°	164.5	264.4	327.2	160.4	125.1	195.2	257.1	234.6	131.1
29°	138.8	171.8	228.2	114.1	101.7	115.5	172.3	137.0	107.2
30°	112.7	114.1	149.8	92.1	82.0	82.5	110.0	89.8	87.1
32.5°	68.7	68.3	64.6	54.1	48.1	48.1	53.6	51.8	51.3
35°	38.0	41.7	38.5	32.5	23.4	28.9	32.5	30.7	25.7
37.5°	20.6	24.3	26.6	17.9	12.8	17.0	22.0	17.9	14.7
40°	10.5	13.3	18.8	10.1	6.9	9.6	15.1	10.1	8.2
42.5°	5.5	7.3	11.9	5.5	3.2	5.5	9.6	5.5	4.1
45°	2.7	3.7	6.4	2.7	1.8	2.7	5.0	3.2	2.3
47.5°	1.4	1.8	3.2	1.4	0.5	1.4	2.7	1.4	1.4
50°	0.5	0.9	1.8	0.5	0.5	0.5	1.4	0.9	0.9
52.5°	0.5	0.5	0.9	0.5	0.0	0.5	0.9	0.5	0.9
55°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.9
57.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.9
60°	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	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



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— 0°-180° - - 45°-225° - - - - 90°-270°







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



(END OF REPORT)