

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: P208781

Luminaire Tested: **LDSQA6A10830D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208781
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: LDSQA6A10830D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1269.7 lumens
Efficiency: N/A
Efficacy: 92.5 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

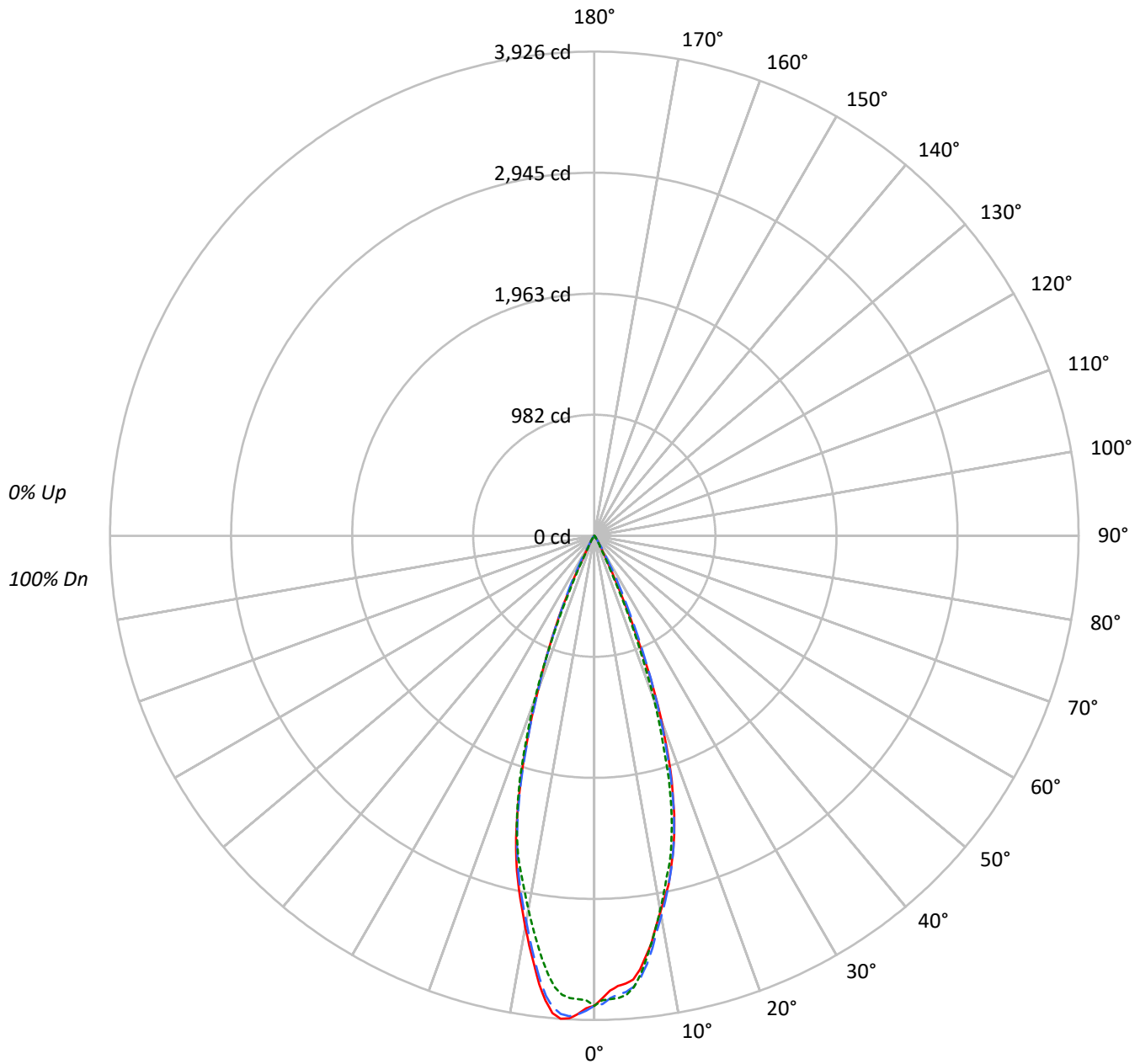
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	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°	164137	164137	164137
5°	156141	158856	167910
10°	135282	134552	140800
15°	111708	108205	108655
20°	72655	64733	61700
25°	21834	16689	22224
30°	4763	3465	3679
35°	1698	1046	1146
40°	506	326	393
45°	140	97	116
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°	335.8	26.4
10°-20°	651.8	51.3
20°-30°	257.5	20.3
30°-40°	21.2	1.7
40°-50°	2.9	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°	1245.2	98.1
0°-40°	1266.3	99.7
0°-60°	1269.6	100.0
0°-90°	1269.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1269.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3812	3812	3812	3812	3812	
5°	3613	3670	3676	3841	3885	327
15°	2506	2500	2428	2408	2438	670
25°	460	621	351	515	468	258
35°	32	33	20	28	22	24
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3812.2	3812.2	3812.2	3812.2	3812.2	3812.2	3812.2	3812.2	3812.2
1°	3750.6	3707.8	3797.4	3793.9	3765.8	3844.9	3853.1	3904.1	3831.7
2°	3690.3	3656.4	3750.6	3760.4	3760.4	3858.9	3884.6	3948.5	3881.9
3°	3655.2	3627.2	3725.3	3751.0	3753.7	3863.6	3901.4	3973.0	3918.5
4°	3640.0	3614.3	3707.4	3727.3	3731.2	3847.2	3887.0	3968.8	3925.9
5°	3612.7	3583.9	3670.4	3673.5	3675.5	3794.3	3840.6	3921.6	3885.0
6°	3535.6	3520.4	3599.5	3582.4	3576.9	3703.9	3751.0	3826.6	3789.6
7°	3434.7	3424.6	3499.0	3472.9	3459.3	3577.7	3621.3	3693.0	3663.8
8°	3331.5	3307.0	3377.9	3355.3	3332.3	3434.3	3472.5	3538.7	3511.5
9°	3202.6	3190.1	3242.7	3235.3	3204.1	3308.9	3322.9	3387.6	3365.4
10°	3094.3	3079.1	3132.1	3118.1	3077.6	3169.1	3178.8	3240.8	3220.5
11°	2989.1	2969.3	3014.5	2996.5	2951.0	3033.1	3039.8	3097.4	3076.8
12°	2892.5	2860.2	2895.6	2874.2	2825.9	2898.4	2901.5	2955.6	2936.5
13°	2764.8	2743.3	2771.4	2748.4	2717.6	2758.5	2752.3	2803.7	2786.2
14°	2641.7	2614.8	2640.5	2612.9	2580.5	2607.8	2589.9	2634.7	2621.0
15°	2506.1	2479.3	2499.5	2465.6	2427.5	2437.6	2407.6	2449.3	2437.6
16°	2348.4	2321.5	2339.0	2297.7	2252.6	2246.7	2207.0	2243.6	2231.5
17°	2170.4	2150.9	2163.0	2111.2	2063.6	2043.4	1990.8	2023.1	2011.1
18°	2000.9	1962.8	1967.8	1910.2	1837.7	1825.3	1766.1	1796.8	1784.8
19°	1778.9	1761.0	1763.7	1698.7	1625.4	1602.5	1543.6	1570.9	1557.3
20°	1585.7	1558.4	1556.1	1485.6	1412.8	1388.6	1331.7	1359.8	1346.6
21°	1364.9	1381.6	1352.4	1278.0	1188.0	1190.4	1140.1	1142.8	1151.8
22°	1116.3	1177.5	1152.6	1064.5	952.0	1003.8	958.6	961.7	969.5
23°	870.6	934.1	956.6	849.9	727.6	830.8	795.0	797.3	802.4
24°	646.2	735.8	776.3	654.0	523.9	668.4	648.2	650.9	645.4
25°	459.6	564.8	621.3	483.0	351.3	519.2	514.9	519.2	467.8
26°	310.4	425.7	490.0	338.9	217.3	383.7	409.8	400.4	303.4
27°	198.7	323.7	376.7	221.6	137.9	264.1	305.8	303.0	174.1
28°	139.8	224.7	278.1	136.3	106.3	165.9	218.5	199.4	111.4
29°	118.0	146.1	194.0	97.0	86.5	98.2	146.5	116.5	91.1
30°	95.8	97.0	127.4	78.3	69.7	70.1	93.5	76.3	74.0
32.5°	58.4	58.0	54.9	46.0	40.9	40.9	45.6	44.0	43.6
35°	32.3	35.4	32.7	27.7	19.9	24.5	27.7	26.1	21.8
37.5°	17.5	20.6	22.6	15.2	10.9	14.4	18.7	15.2	12.5
40°	9.0	11.3	16.0	8.6	5.8	8.2	12.9	8.6	7.0
42.5°	4.7	6.2	10.1	4.7	2.7	4.7	8.2	4.7	3.5
45°	2.3	3.1	5.5	2.3	1.6	2.3	4.3	2.7	1.9
47.5°	1.2	1.6	2.7	1.2	0.4	1.2	2.3	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
65°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)