

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: P182594

Luminaire Tested: **LDSQA4A13927D010TE LAR35FL 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26798)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A13927D010TE LAR35FL 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, 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: 1354.2 lumens
Efficiency: N/A
Efficacy: 60.8 lumens/watt
Spacing Criteria (0/90/45): 0.63 / 0.63 / 0.57
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 22.27
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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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	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																											
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																											
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																											
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89																											
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86																											
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	84	82																											
6	97	90	86	82	95	89	85	82	88	84	82	87	83	81	86	83	81	79																											
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																											
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																											
9	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	73	72																											
10	85	78	74	71	84	78	74	71	77	73	71	76	73	70	76	72	70	69																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	363758	363758	363758
5°	354956	353390	352719
10°	308242	308183	308547
15°	257111	255747	255616
20°	168649	167309	168773
25°	51575	65224	51371
30°	12898	15605	12629
35°	4175	6457	4104
40°	1960	3060	1720
45°	1014	1274	767
50°	558	648	377
55°	321	422	203
60°	233	233	233
65°	138	138	138
70°	170	170	170
75°	0	225	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.9	24.4
10°-20°	683.5	50.5
20°-30°	298.5	22.0
30°-40°	32.6	2.4
40°-50°	6.7	0.5
50°-60°	1.9	0.1
60°-70°	0.7	0.1
70°-80°	0.4	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°	1311.9	96.9
0°-40°	1344.4	99.3
0°-60°	1353.0	99.9
0°-90°	1354.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1354.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3755	3755	3755	3755	3755	
5°	3650	3640	3634	3643	3627	330
15°	2564	2552	2550	2554	2549	686
25°	482	595	610	600	481	279
35°	35	42	55	42	35	28
45°	7	8	9	7	6	6
55°	2	2	2	1	1	2
65°	1	1	1	1	1	1
75°	0	1	1	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°
0°	3754.9	3754.9	3754.9	3754.9	3754.9
2.5°	3738.2	3724.5	3717.1	3733.2	3717.1
5°	3650.1	3640.2	3634.0	3643.3	3627.1
7.5°	3408.9	3398.9	3407.6	3407.6	3399.6
10°	3133.5	3127.9	3132.9	3145.9	3136.6
12.5°	2866.2	2861.9	2863.8	2877.4	2866.9
15°	2563.6	2552.5	2550.0	2553.7	2548.7
17.5°	2160.5	2143.8	2133.3	2141.9	2144.4
20°	1635.9	1635.9	1622.9	1630.3	1637.1
22.5°	1046.2	1070.3	1072.8	1071.6	1067.2
25°	482.5	594.7	610.2	600.3	480.6
27.5°	195.3	241.2	300.1	248.7	188.5
30°	115.3	121.5	139.5	119.7	112.9
32.5°	60.8	73.2	85.6	72.6	58.9
35°	35.3	42.2	54.6	41.5	34.7
37.5°	22.9	26.7	36.6	26.7	21.7
40°	15.5	17.4	24.2	16.7	13.6
42.5°	10.5	11.8	15.5	10.5	8.7
45°	7.4	8.1	9.3	6.8	5.6
47.5°	5.0	5.6	6.2	4.3	3.7
50°	3.7	3.7	4.3	3.1	2.5
52.5°	2.5	3.1	3.1	1.9	1.9
55°	1.9	1.9	2.5	1.2	1.2
57.5°	1.9	1.9	1.9	1.2	1.2
60°	1.2	1.2	1.2	1.2	1.2
62.5°	0.6	1.2	1.2	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.6
72.5°	0.6	0.6	0.6	0.6	0.6
75°	0.0	0.6	0.6	0.0	0.0
77.5°	0.0	0.6	0.6	0.6	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)