

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: P208786

Luminaire Tested: **LDSQA6A10935D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208786
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: LDSQA6A10935D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1054.7 lumens
Efficiency: N/A
Efficacy: 76.8 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

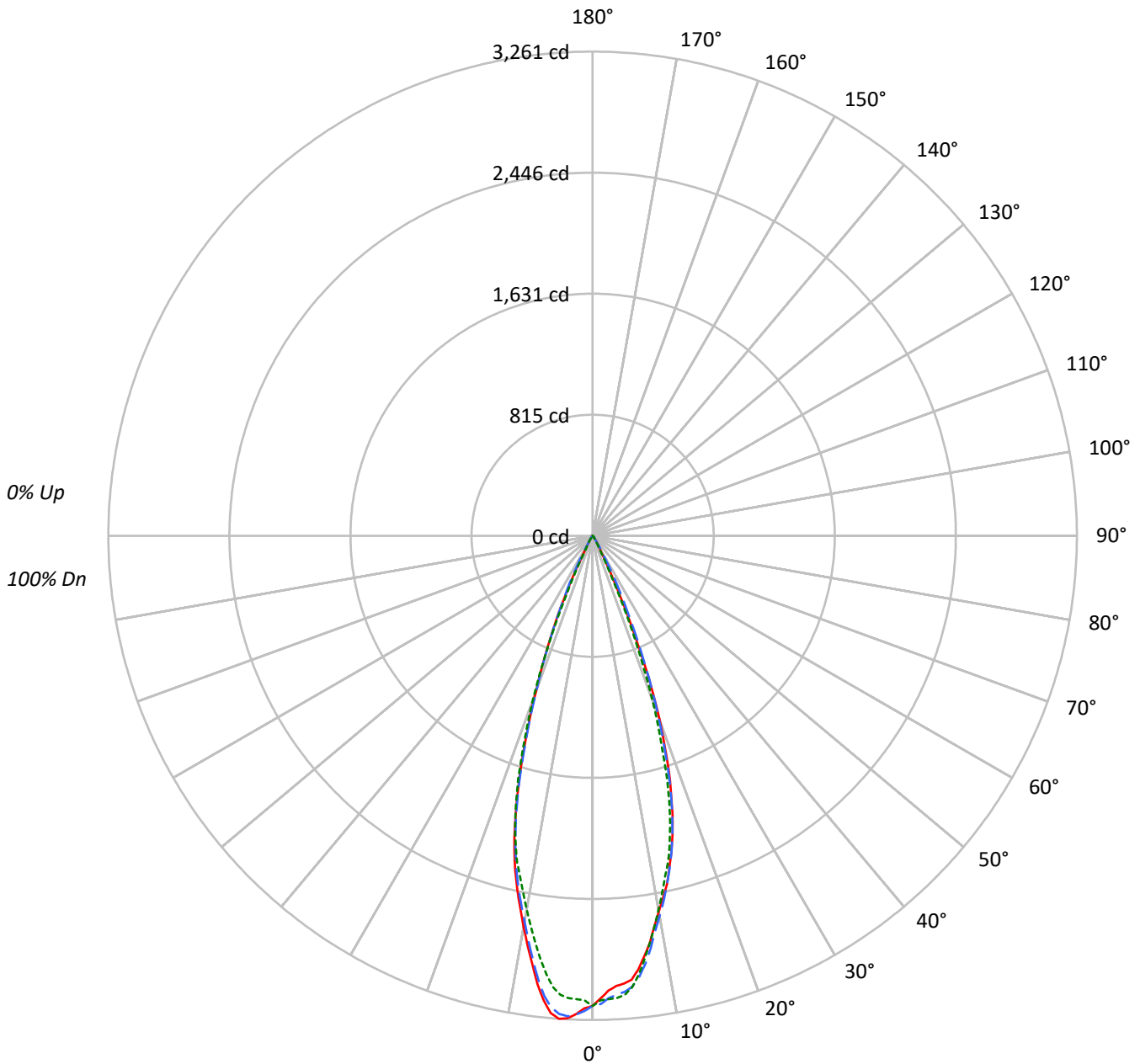
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	136349	136349	136349
5°	129708	131960	139484
10°	112378	111770	116964
15°	92800	89884	90259
20°	60357	53773	51253
25°	18138	13867	18461
30°	3957	2879	3058
35°	1414	867	951
40°	416	275	326
45°	116	79	97
50°	20	20	40
55°	23	0	45
60°	26	0	0
65°	31	0	0
70°	38	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°	279.0	26.4
10°-20°	541.5	51.3
20°-30°	213.9	20.3
30°-40°	17.6	1.7
40°-50°	2.4	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°	1034.4	98.1
0°-40°	1052.0	99.7
0°-60°	1054.6	100.0
0°-90°	1054.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1054.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3167	3167	3167	3167	3167	
5°	3001	3049	3053	3190	3227	271
15°	2082	2076	2016	2000	2025	556
25°	382	516	292	428	389	215
35°	27	27	16	23	18	20
45°	2	4	1	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°	3166.8	3166.8	3166.8	3166.8	3166.8	3166.8	3166.8	3166.8	3166.8
1°	3115.7	3080.1	3154.5	3151.6	3128.3	3194.0	3200.8	3243.1	3183.0
2°	3065.5	3037.4	3115.7	3123.7	3123.7	3205.6	3227.0	3280.0	3224.7
3°	3036.4	3013.1	3094.6	3116.0	3118.2	3209.5	3240.9	3300.4	3255.1
4°	3023.8	3002.4	3079.7	3096.2	3099.5	3195.9	3228.9	3296.9	3261.3
5°	3001.1	2977.2	3049.0	3051.6	3053.2	3151.9	3190.4	3257.7	3227.3
6°	2937.0	2924.4	2990.1	2975.9	2971.3	3076.8	3116.0	3178.8	3148.0
7°	2853.2	2844.8	2906.6	2885.0	2873.6	2972.0	3008.2	3067.8	3043.5
8°	2767.5	2747.1	2806.0	2787.2	2768.1	2852.9	2884.6	2939.6	2917.0
9°	2660.4	2650.0	2693.7	2687.6	2661.7	2748.7	2760.4	2814.1	2795.6
10°	2570.4	2557.8	2601.8	2590.2	2556.5	2632.6	2640.7	2692.1	2675.3
11°	2483.1	2466.6	2504.1	2489.2	2451.4	2519.6	2525.1	2573.0	2555.9
12°	2402.8	2376.0	2405.4	2387.6	2347.5	2407.7	2410.3	2455.3	2439.4
13°	2296.7	2278.9	2302.2	2283.1	2257.6	2291.5	2286.3	2329.1	2314.5
14°	2194.5	2172.1	2193.5	2170.5	2143.7	2166.3	2151.4	2188.6	2177.3
15°	2081.9	2059.5	2076.4	2048.2	2016.5	2024.9	2000.0	2034.6	2024.9
16°	1950.8	1928.5	1943.0	1908.7	1871.2	1866.4	1833.3	1863.8	1853.7
17°	1802.9	1786.8	1796.8	1753.8	1714.3	1697.5	1653.8	1680.6	1670.6
18°	1662.2	1630.5	1634.7	1586.8	1526.6	1516.3	1467.1	1492.6	1482.6
19°	1477.7	1462.9	1465.1	1411.1	1350.3	1331.2	1282.3	1305.0	1293.6
20°	1317.3	1294.6	1292.7	1234.1	1173.6	1153.5	1106.3	1129.6	1118.6
21°	1133.8	1147.7	1123.4	1061.6	986.9	988.8	947.1	949.4	956.8
22°	927.4	978.2	957.4	884.3	790.8	833.8	796.3	798.9	805.4
23°	723.2	775.9	794.7	706.0	604.4	690.2	660.4	662.3	666.6
24°	536.8	611.2	644.9	543.3	435.2	555.2	538.4	540.7	536.2
25°	381.8	469.2	516.1	401.2	291.9	431.3	427.8	431.3	388.6
26°	257.9	353.7	407.1	281.5	180.6	318.7	340.4	332.6	252.1
27°	165.0	268.9	312.9	184.1	114.5	219.4	254.0	251.7	144.6
28°	116.2	186.7	231.0	113.2	88.3	137.8	181.5	165.7	92.5
29°	98.0	121.3	161.1	80.6	71.8	81.5	121.7	96.7	75.7
30°	79.6	80.6	105.8	65.0	57.9	58.2	77.7	63.4	61.5
32.5°	48.5	48.2	45.6	38.2	34.0	34.0	37.9	36.6	36.2
35°	26.9	29.4	27.2	23.0	16.5	20.4	23.0	21.7	18.1
37.5°	14.6	17.1	18.8	12.6	9.1	12.0	15.5	12.6	10.4
40°	7.4	9.4	13.3	7.1	4.9	6.8	10.7	7.1	5.8
42.5°	3.9	5.2	8.4	3.9	2.3	3.9	6.8	3.9	2.9
45°	1.9	2.6	4.5	1.9	1.3	1.9	3.6	2.3	1.6
47.5°	1.0	1.3	2.3	1.0	0.3	1.0	1.9	1.0	1.0
50°	0.3	0.6	1.3	0.3	0.3	0.3	1.0	0.6	0.6
52.5°	0.3	0.3	0.6	0.3	0.0	0.3	0.6	0.3	0.6
55°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.6
57.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.3	0.6
60°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.3	0.3	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°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)