

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: P208804

Luminaire Tested: **LDSQA6A30827D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208804
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: LDSQA6A30827D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3136.9 lumens
Efficiency: N/A
Efficacy: 70.3 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

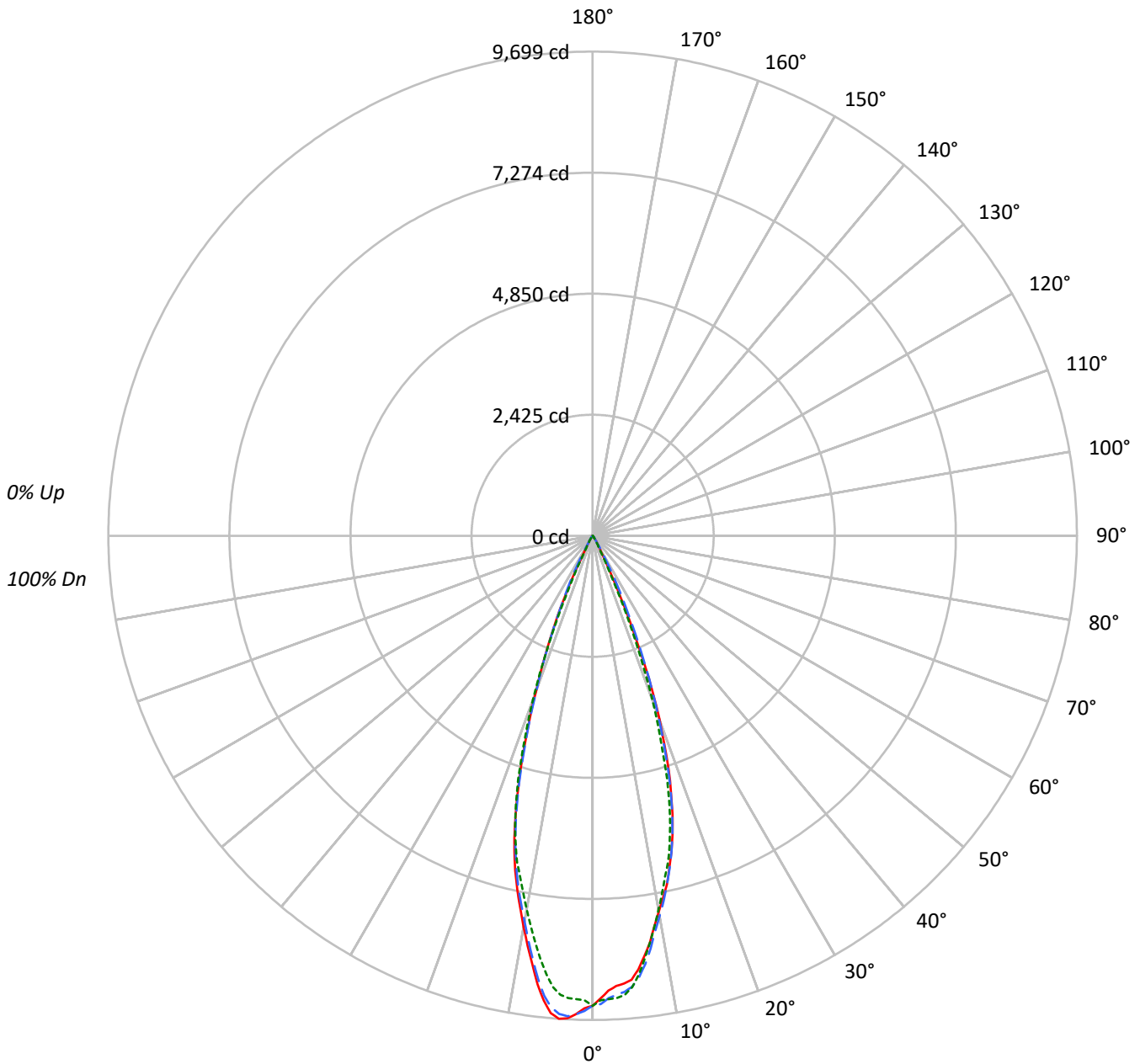
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	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°	405507	405507	405507
5°	385761	392460	414835
10°	334225	332415	347857
15°	275987	267322	268437
20°	179500	159922	152426
25°	53944	41236	54903
30°	11768	8566	9088
35°	4200	2581	2833
40°	1242	809	972
45°	353	231	292
50°	67	67	127
55°	75	0	143
60°	86	0	0
65°	102	0	0
70°	126	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°	829.6	26.4
10°-20°	1610.3	51.3
20°-30°	636.3	20.3
30°-40°	52.3	1.7
40°-50°	7.2	0.2
50°-60°	0.8	0.0
60°-70°	0.2	0.0
70°-80°	0.1	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°	3076.3	98.1
0°-40°	3128.6	99.7
0°-60°	3136.6	100.0
0°-90°	3136.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3136.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9418	9418	9418	9418	9418	
5°	8926	9068	9080	9488	9598	807
15°	6192	6175	5997	5948	6022	1655
25°	1136	1535	868	1272	1156	638
35°	80	81	49	68	54	60
45°	6	14	4	11	5	6
55°	1	1	0	1	2	1
65°	1	0	0	0	0	1
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°	9418.2	9418.2	9418.2	9418.2	9418.2	9418.2	9418.2	9418.2	9418.2
1°	9266.2	9160.3	9381.7	9373.0	9303.7	9499.1	9519.3	9645.3	9466.3
2°	9117.0	9033.3	9266.2	9290.2	9290.2	9533.7	9597.2	9755.0	9590.5
3°	9030.4	8961.1	9203.6	9267.1	9273.9	9545.3	9638.6	9815.7	9680.9
4°	8992.9	8929.4	9159.4	9208.4	9218.1	9504.8	9603.0	9805.1	9699.2
5°	8925.5	8854.3	9067.9	9075.6	9080.5	9374.0	9488.5	9688.6	9598.2
6°	8735.0	8697.5	8892.8	8850.5	8837.0	9150.7	9267.1	9453.8	9362.4
7°	8485.7	8460.7	8644.5	8580.1	8546.4	8838.9	8946.7	9123.8	9051.6
8°	8230.7	8170.1	8345.2	8289.4	8232.7	8484.8	8579.1	8742.7	8675.3
9°	7912.2	7881.4	8011.3	7993.0	7916.0	8174.9	8209.6	8369.3	8314.5
10°	7644.7	7607.1	7738.0	7703.4	7603.3	7829.4	7853.5	8006.5	7956.5
11°	7384.8	7335.8	7447.4	7403.1	7290.5	7493.6	7510.0	7652.4	7601.4
12°	7146.2	7066.3	7153.9	7101.0	6981.6	7160.6	7168.3	7302.1	7254.9
13°	6830.6	6777.6	6846.9	6790.1	6714.1	6815.2	6799.8	6926.8	6883.5
14°	6526.5	6460.1	6523.6	6455.2	6375.4	6442.7	6398.5	6509.1	6475.5
15°	6191.6	6125.2	6175.2	6091.5	5997.2	6022.2	5948.1	6051.1	6022.2
16°	5801.8	5735.4	5778.7	5676.7	5565.1	5550.7	5452.5	5543.0	5513.1
17°	5362.1	5313.9	5343.8	5215.8	5098.4	5048.3	4918.4	4998.3	4968.5
18°	4943.4	4849.1	4861.6	4719.2	4540.2	4509.4	4363.2	4439.2	4409.4
19°	4394.9	4350.7	4357.4	4196.7	4015.8	3959.0	3813.7	3881.0	3847.4
20°	3917.6	3850.2	3844.5	3670.3	3490.3	3430.7	3290.2	3359.5	3326.7
21°	3372.0	3413.4	3341.2	3157.4	2935.1	2940.9	2816.7	2823.4	2845.6
22°	2758.0	2909.1	2847.5	2630.0	2351.9	2479.9	2368.3	2376.0	2395.2
23°	2150.8	2307.6	2363.5	2099.8	1797.6	2052.6	1964.1	1969.9	1982.4
24°	1596.5	1817.8	1917.9	1615.7	1294.3	1651.3	1601.3	1608.0	1594.6
25°	1135.5	1395.4	1534.9	1193.3	868.0	1282.8	1272.2	1282.8	1155.7
26°	767.0	1051.8	1210.6	837.2	537.0	947.9	1012.4	989.3	749.6
27°	490.8	799.7	930.6	547.6	340.7	652.5	755.4	748.7	430.2
28°	345.5	555.3	687.1	336.8	262.7	409.9	539.9	492.7	275.2
29°	291.6	360.9	479.2	239.6	213.6	242.5	361.8	287.7	225.2
30°	236.7	239.6	314.7	193.4	172.3	173.2	231.0	188.6	182.8
32.5°	144.3	143.4	135.7	113.6	101.0	101.0	112.6	108.7	107.8
35°	79.9	87.6	80.8	68.3	49.1	60.6	68.3	64.5	53.9
37.5°	43.3	51.0	55.8	37.5	26.9	35.6	46.2	37.5	30.8
40°	22.1	27.9	39.5	21.2	14.4	20.2	31.8	21.2	17.3
42.5°	11.5	15.4	25.0	11.5	6.7	11.5	20.2	11.5	8.7
45°	5.8	7.7	13.5	5.8	3.8	5.8	10.6	6.7	4.8
47.5°	2.9	3.8	6.7	2.9	1.0	2.9	5.8	2.9	2.9
50°	1.0	1.9	3.8	1.0	1.0	1.0	2.9	1.9	1.9
52.5°	1.0	1.0	1.9	1.0	0.0	1.0	1.9	1.0	1.9
55°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.9
57.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.9
60°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.0	1.0	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



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)