

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: P208795

Luminaire Tested: **LDSQA6A15940D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208795
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: LDSQA6A15940D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1703.6 lumens
Efficiency: N/A
Efficacy: 78.2 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

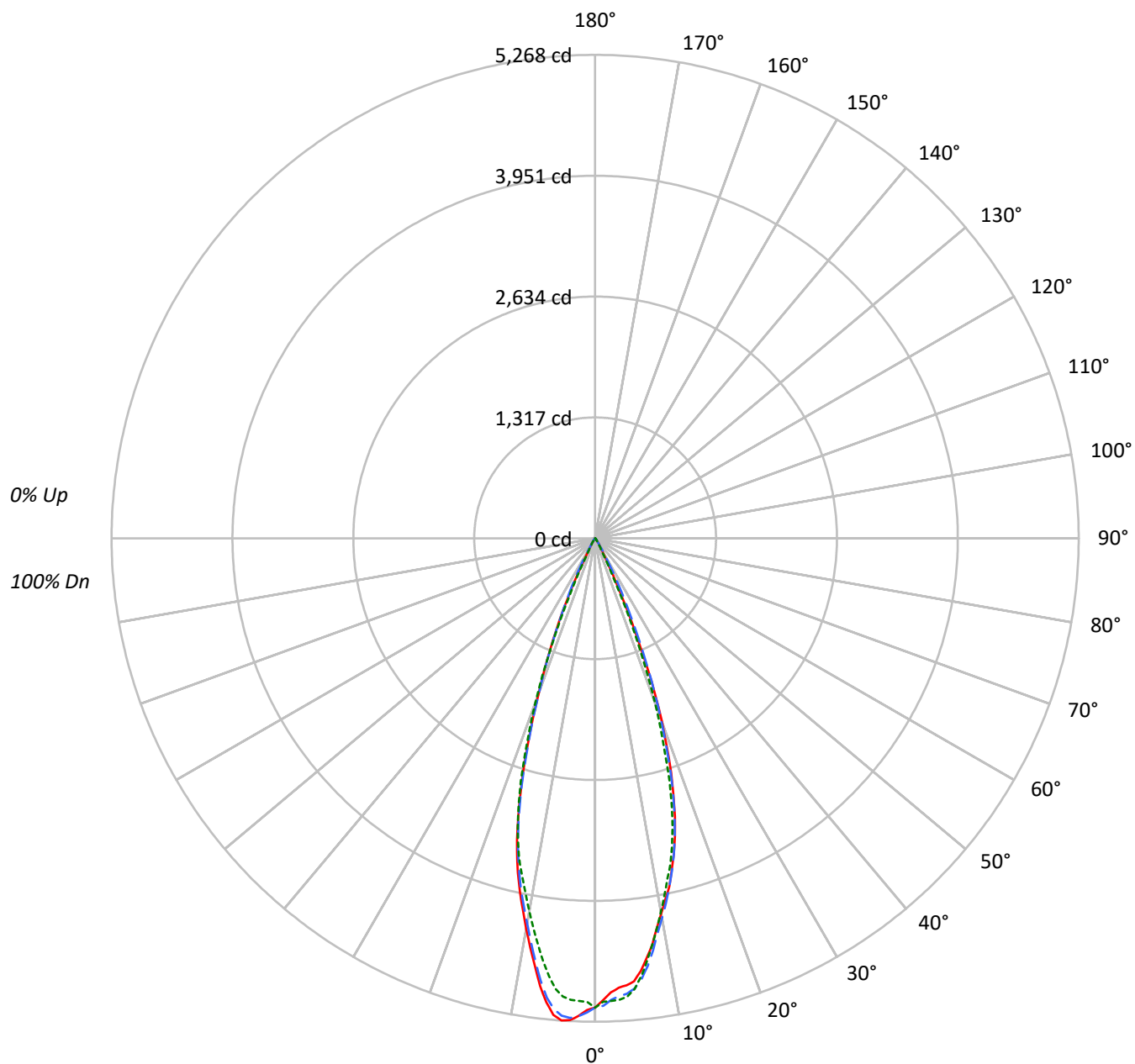
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	115	113	111	109	113	111	109	107		107	105	104			103	102	101			100
2	111	107	104	102	109	106	103	101		103	100	98			100	98	96			97
3	107	103	99	96	106	101	98	95		99	96	94			96	94	92			94
4	104	98	94	91	102	97	94	91		95	92	90			93	91	89			92
5	101	94	90	87	99	94	90	87		92	89	86			90	88	85			89
6	97	91	87	84	96	90	86	83		89	85	83			88	85	82			87
7	94	88	83	80	93	87	83	80		86	82	80			85	82	79			84
8	92	85	80	77	91	84	80	77		83	80	77			82	79	77			82
9	89	82	78	75	88	82	78	75		81	77	75			80	77	74			79
10	86	79	75	72	86	79	75	72		78	75	72			78	74	72			77

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	220230	220230	220230
5°	209505	213144	225298
10°	181516	180532	188922
15°	149886	145184	145790
20°	97489	86854	82786
25°	29297	22395	29820
30°	6394	4653	4937
35°	2281	1403	1540
40°	674	438	528
45°	189	128	158
50°	33	33	67
55°	38	0	75
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°	450.6	26.4
10°-20°	874.6	51.3
20°-30°	345.6	20.3
30°-40°	28.4	1.7
40°-50°	3.9	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°	1670.7	98.1
0°-40°	1699.1	99.7
0°-60°	1703.5	100.0
0°-90°	1703.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5115	5115	5115	5115	5115	
5°	4847	4925	4932	5153	5213	438
15°	3363	3354	3257	3230	3271	899
25°	617	834	471	691	628	346
35°	43	44	27	37	29	32
45°	3	7	2	6	3	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°	5115.0	5115.0	5115.0	5115.0	5115.0	5115.0	5115.0	5115.0	5115.0
1°	5032.5	4975.0	5095.2	5090.5	5052.8	5158.9	5169.9	5238.4	5141.2
2°	4951.5	4906.0	5032.5	5045.5	5045.5	5177.8	5212.2	5298.0	5208.6
3°	4904.4	4866.8	4998.5	5033.0	5036.6	5184.0	5234.7	5330.9	5257.7
4°	4884.0	4849.5	4974.5	5001.1	5006.3	5162.1	5215.4	5325.1	5267.6
5°	4847.4	4808.8	4924.8	4929.0	4931.6	5091.0	5153.2	5261.9	5212.8
6°	4744.0	4723.6	4829.7	4806.7	4799.4	4969.7	5033.0	5134.4	5084.7
7°	4608.6	4595.0	4694.8	4659.8	4641.5	4800.4	4858.9	4955.1	4915.9
8°	4470.1	4437.2	4532.3	4502.0	4471.2	4608.1	4659.3	4748.1	4711.6
9°	4297.1	4280.4	4350.9	4341.0	4299.2	4439.8	4458.6	4545.4	4515.6
10°	4151.8	4131.4	4202.5	4183.7	4129.3	4252.2	4265.2	4348.3	4321.2
11°	4010.7	3984.1	4044.7	4020.6	3959.5	4069.8	4078.7	4156.0	4128.3
12°	3881.1	3837.7	3885.3	3856.5	3791.7	3888.9	3893.1	3965.8	3940.2
13°	3709.7	3680.9	3718.6	3687.7	3646.4	3701.3	3692.9	3761.9	3738.4
14°	3544.5	3508.5	3542.9	3505.8	3462.5	3499.0	3475.0	3535.1	3516.8
15°	3362.6	3326.6	3353.8	3308.3	3257.1	3270.7	3230.4	3286.3	3270.7
16°	3151.0	3114.9	3138.4	3083.0	3022.4	3014.6	2961.3	3010.4	2994.2
17°	2912.1	2886.0	2902.2	2832.7	2768.9	2741.7	2671.2	2714.6	2698.4
18°	2684.8	2633.6	2640.4	2563.0	2465.8	2449.1	2369.6	2410.9	2394.7
19°	2386.9	2362.8	2366.5	2279.2	2181.0	2150.1	2071.2	2107.8	2089.5
20°	2127.7	2091.1	2087.9	1993.3	1895.6	1863.2	1786.9	1824.5	1806.8
21°	1831.3	1853.8	1814.6	1714.8	1594.0	1597.2	1529.8	1533.4	1545.4
22°	1497.9	1579.9	1546.5	1428.4	1277.3	1346.8	1286.2	1290.4	1300.8
23°	1168.1	1253.3	1283.6	1140.4	976.3	1114.8	1066.7	1069.8	1076.6
24°	867.1	987.3	1041.6	877.5	702.9	896.8	869.7	873.3	866.0
25°	616.7	757.8	833.6	648.1	471.4	696.7	690.9	696.7	627.7
26°	416.5	571.2	657.5	454.7	291.6	514.8	549.8	537.3	407.1
27°	266.5	434.3	505.4	297.4	185.0	354.3	410.3	406.6	233.6
28°	187.6	301.6	373.2	182.9	142.7	222.6	293.2	267.6	149.5
29°	158.4	196.0	260.3	130.1	116.0	131.7	196.5	156.3	122.3
30°	128.6	130.1	170.9	105.0	93.6	94.1	125.4	102.4	99.3
32.5°	78.4	77.9	73.7	61.7	54.9	54.9	61.1	59.1	58.5
35°	43.4	47.6	43.9	37.1	26.7	32.9	37.1	35.0	29.3
37.5°	23.5	27.7	30.3	20.4	14.6	19.3	25.1	20.4	16.7
40°	12.0	15.2	21.4	11.5	7.8	11.0	17.2	11.5	9.4
42.5°	6.3	8.4	13.6	6.3	3.7	6.3	11.0	6.3	4.7
45°	3.1	4.2	7.3	3.1	2.1	3.1	5.7	3.7	2.6
47.5°	1.6	2.1	3.7	1.6	0.5	1.6	3.1	1.6	1.6
50°	0.5	1.0	2.1	0.5	0.5	0.5	1.6	1.0	1.0
52.5°	0.5	0.5	1.0	0.5	0.0	0.5	1.0	0.5	1.0
55°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	1.0
57.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	1.0
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



Report Generated By E9808895 / USPTCWHP6082093





— 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)