

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: P208809

Luminaire Tested: **LDSQA6A30930D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208809
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: LDSQA6A30930D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2634.1 lumens
Efficiency: N/A
Efficacy: 59.0 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

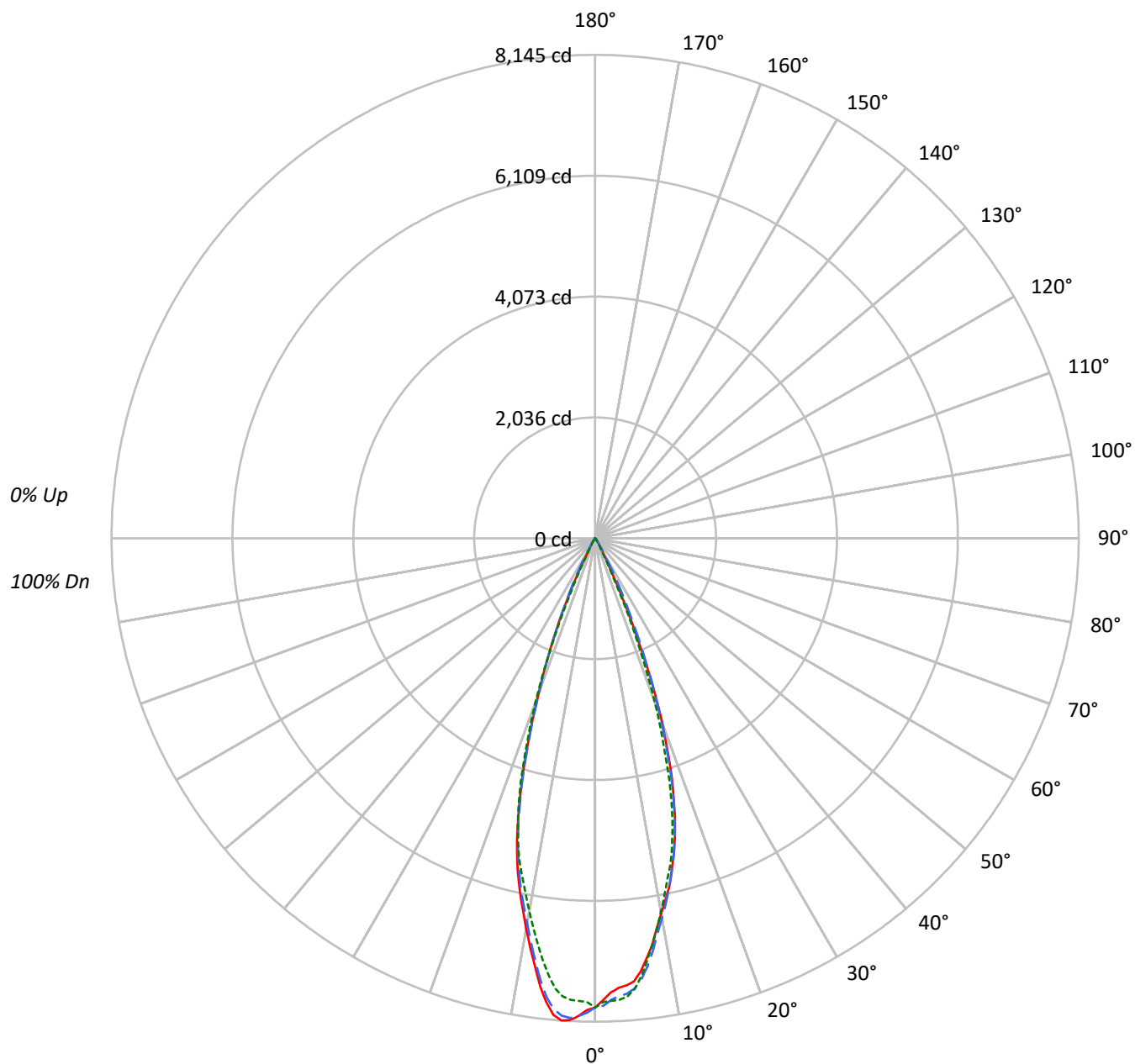
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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			100
1	115	113	111	109	113	111	109	107		107	105	104			103	102	101			96
2	111	107	104	102	109	106	103	101		103	100	98			100	98	96			93
3	107	103	99	96	106	101	98	95		99	96	94			96	94	92			90
4	104	98	94	91	102	97	94	91		95	92	90			93	91	89			86
5	101	94	90	87	99	94	90	87		92	89	86			90	88	85			83
6	97	91	87	84	96	90	86	83		89	85	83			88	85	82			81
7	94	88	83	80	93	87	83	80		86	82	80			85	82	79			78
8	92	85	80	77	91	84	80	77		83	80	77			82	79	77			75
9	89	82	78	75	88	82	78	75		81	77	75			80	77	74			73
10	86	79	75	72	86	79	75	72		78	75	72			78	74	72			71

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	340527	340527	340527
5°	323943	329566	348359
10°	280664	279147	292110
15°	231761	224482	225418
20°	150735	134295	128000
25°	45302	34628	46105
30°	9884	7194	7631
35°	3527	2166	2381
40°	1045	680	815
45°	292	195	244
50°	54	54	107
55°	60	0	120
60°	69	0	0
65°	82	0	0
70°	101	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°	696.7	26.4
10°-20°	1352.3	51.3
20°-30°	534.3	20.3
30°-40°	43.9	1.7
40°-50°	6.0	0.2
50°-60°	0.7	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°	2583.3	98.1
0°-40°	2627.2	99.7
0°-60°	2633.9	100.0
0°-90°	2634.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2634.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7909	7909	7909	7909	7909	
5°	7495	7615	7625	7968	8060	678
15°	5199	5186	5036	4995	5057	1389
25°	954	1289	729	1068	970	536
35°	67	68	41	57	45	50
45°	5	11	3	9	4	5
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	7909.0	7909.0	7909.0	7909.0	7909.0	7909.0	7909.0	7909.0	7909.0
1°	7781.3	7692.4	7878.2	7871.0	7812.8	7976.8	7993.8	8099.7	7949.4
2°	7656.0	7585.7	7781.3	7801.5	7801.5	8005.9	8059.3	8191.8	8053.6
3°	7583.3	7525.1	7728.7	7782.1	7787.7	8015.6	8094.0	8242.7	8129.6
4°	7551.8	7498.4	7691.6	7732.8	7740.9	7981.7	8064.1	8233.8	8144.9
5°	7495.2	7435.4	7614.8	7621.3	7625.3	7871.8	7967.9	8136.0	8060.1
6°	7335.2	7303.7	7467.7	7432.2	7420.9	7684.3	7782.1	7938.9	7862.1
7°	7125.9	7104.9	7259.2	7205.1	7176.8	7422.5	7513.0	7661.7	7601.1
8°	6911.7	6860.8	7007.9	6961.0	6913.4	7125.1	7204.3	7341.7	7285.1
9°	6644.3	6618.4	6727.5	6712.1	6647.5	6864.9	6894.0	7028.1	6982.1
10°	6419.6	6388.1	6498.0	6468.9	6384.9	6574.8	6595.0	6723.5	6681.4
11°	6201.4	6160.2	6253.9	6216.8	6122.2	6292.7	6306.5	6426.1	6383.2
12°	6001.0	5933.9	6007.5	5963.0	5862.8	6013.1	6019.6	6131.9	6092.3
13°	5735.9	5691.5	5749.7	5702.0	5638.2	5723.0	5710.1	5816.8	5780.4
14°	5480.6	5424.8	5478.2	5420.8	5353.7	5410.3	5373.1	5466.0	5437.8
15°	5199.4	5143.6	5185.6	5115.3	5036.1	5057.1	4994.9	5081.4	5057.1
16°	4872.1	4816.3	4852.7	4767.0	4673.3	4661.2	4578.7	4654.7	4629.6
17°	4502.8	4462.4	4487.4	4379.9	4281.4	4239.3	4130.2	4197.3	4172.3
18°	4151.2	4072.1	4082.6	3963.0	3812.7	3786.8	3664.0	3727.8	3702.7
19°	3690.6	3653.5	3659.1	3524.2	3372.2	3324.6	3202.5	3259.1	3230.8
20°	3289.8	3233.2	3228.4	3082.1	2931.0	2880.9	2762.9	2821.1	2793.6
21°	2831.6	2866.4	2805.8	2651.4	2464.7	2469.6	2365.3	2371.0	2389.6
22°	2316.0	2442.9	2391.2	2208.6	1975.0	2082.5	1988.8	1995.2	2011.4
23°	1806.1	1937.8	1984.7	1763.3	1509.5	1723.7	1649.3	1654.2	1664.7
24°	1340.7	1526.5	1610.6	1356.8	1086.9	1386.7	1344.7	1350.3	1339.0
25°	953.6	1171.8	1288.9	1002.1	728.9	1077.2	1068.3	1077.2	970.5
26°	644.1	883.3	1016.6	703.1	450.9	796.0	850.1	830.7	629.5
27°	412.1	671.5	781.4	459.8	286.1	547.9	634.4	628.7	361.2
28°	290.1	466.3	577.0	282.8	220.6	344.3	453.3	413.8	231.1
29°	244.9	303.0	402.4	201.2	179.4	203.6	303.8	241.6	189.1
30°	198.8	201.2	264.3	162.4	144.7	145.5	193.9	158.4	153.5
32.5°	121.2	120.4	113.9	95.4	84.9	84.9	94.5	91.3	90.5
35°	67.1	73.5	67.9	57.4	41.2	50.9	57.4	54.1	45.3
37.5°	36.4	42.8	46.9	31.5	22.6	29.9	38.8	31.5	25.9
40°	18.6	23.4	33.1	17.8	12.1	17.0	26.7	17.8	14.5
42.5°	9.7	12.9	21.0	9.7	5.7	9.7	17.0	9.7	7.3
45°	4.8	6.5	11.3	4.8	3.2	4.8	8.9	5.7	4.0
47.5°	2.4	3.2	5.7	2.4	0.8	2.4	4.8	2.4	2.4
50°	0.8	1.6	3.2	0.8	0.8	0.8	2.4	1.6	1.6
52.5°	0.8	0.8	1.6	0.8	0.0	0.8	1.6	0.8	1.6
55°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	1.6
57.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0.8	1.6
60°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.8	0.8	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°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)