

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: P208801

Luminaire Tested: **LDSQA6A20930D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208801
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: LDSQA6A20930D010TE 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: 1893.3 lumens
Efficiency: N/A
Efficacy: 65.7 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

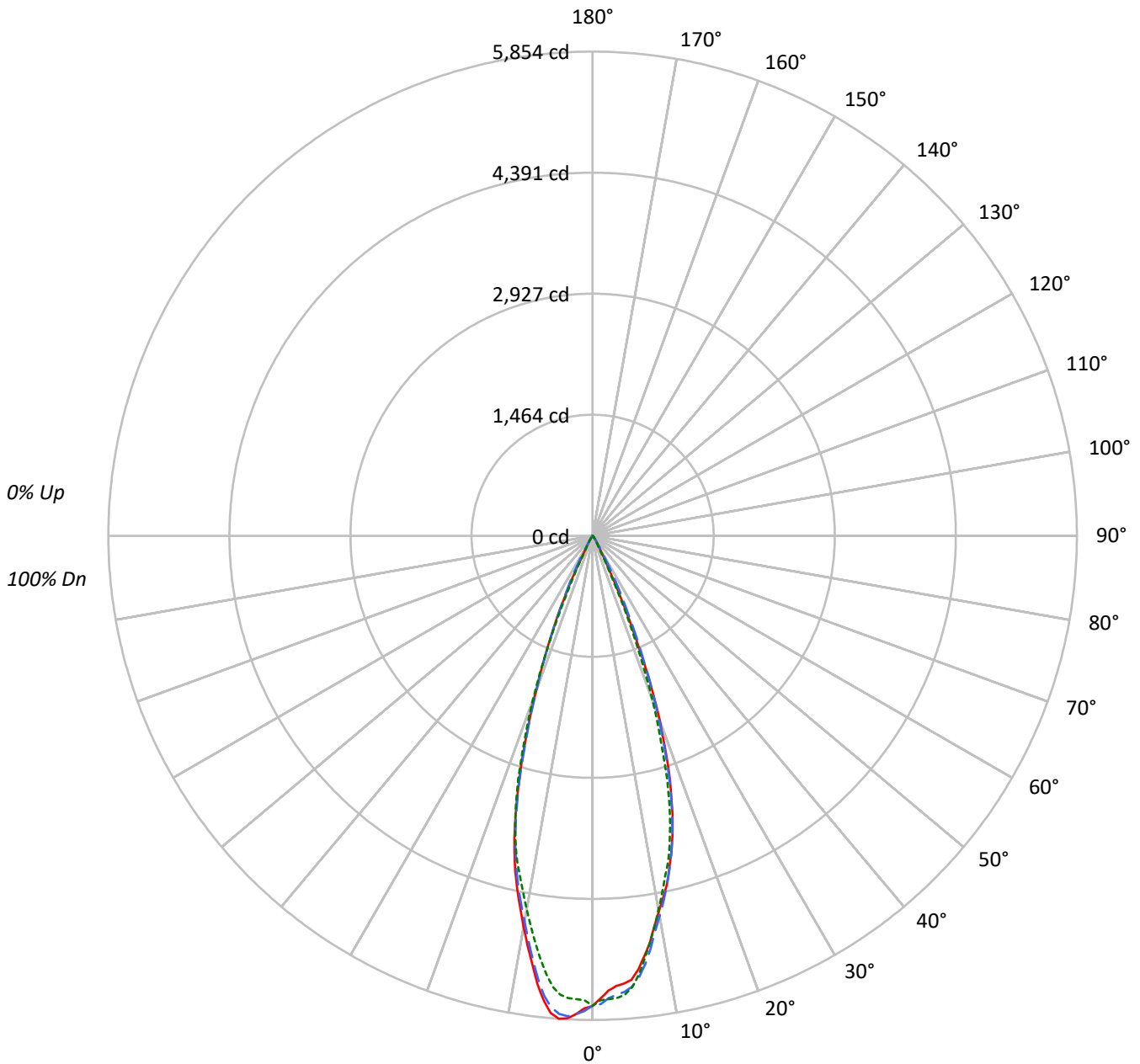
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208801

CATALOG NUMBER: LDSQA6A20930D010TE LAR35FL 6LSQA1H

Luminous Intensity Polar Plot





TEST NUMBER: P208801

CATALOG NUMBER: LDSQA6A20930D010TE LAR35FL 6LSQA1H

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	244754	244754	244754
5°	232835	236877	250383
10°	201728	200635	209956
15°	166575	161346	162019
20°	108339	96527	92000
25°	32561	24889	33141
30°	7104	5171	5489
35°	2533	1556	1708
40°	753	489	590
45°	213	140	177
50°	40	40	80
55°	45	0	90
60°	52	0	0
65°	61	0	0
70°	76	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P208801

CATALOG NUMBER: LDSQA6A20930D010TE LAR35FL 6LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.7	26.4
10°-20°	972.0	51.3
20°-30°	384.0	20.3
30°-40°	31.6	1.7
40°-50°	4.3	0.2
50°-60°	0.5	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°	1856.7	98.1
0°-40°	1888.3	99.7
0°-60°	1893.1	100.0
0°-90°	1893.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1893.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5685	5685	5685	5685	5685	
5°	5387	5473	5481	5727	5793	487
15°	3737	3727	3620	3590	3635	999
25°	685	926	524	768	698	385
35°	48	49	30	41	32	36
45°	4	8	2	6	3	4
55°	1	1	0	1	1	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



TEST NUMBER: P208801

CATALOG NUMBER: LDSQA6A20930D010TE LAR35FL 6LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5684.6	5684.6	5684.6	5684.6	5684.6	5684.6	5684.6	5684.6	5684.6
1°	5592.8	5528.9	5662.5	5657.3	5615.4	5733.3	5745.5	5821.6	5713.6
2°	5502.8	5452.2	5592.8	5607.3	5607.3	5754.3	5792.6	5887.8	5788.5
3°	5450.5	5408.7	5555.0	5593.4	5597.4	5761.2	5817.6	5924.4	5843.1
4°	5427.8	5389.5	5528.3	5557.9	5563.7	5736.8	5796.1	5918.1	5854.2
5°	5387.2	5344.2	5473.1	5477.8	5480.7	5657.8	5727.0	5847.8	5793.2
6°	5272.2	5249.5	5367.4	5341.9	5333.7	5523.1	5593.4	5706.0	5650.9
7°	5121.7	5106.6	5217.6	5178.7	5158.3	5334.9	5400.0	5506.8	5463.3
8°	4967.8	4931.2	5036.9	5003.2	4969.0	5121.2	5178.1	5276.8	5236.2
9°	4775.6	4757.0	4835.4	4824.4	4777.9	4934.1	4955.0	5051.5	5018.3
10°	4614.1	4591.4	4670.4	4649.5	4589.1	4725.6	4740.1	4832.5	4802.3
11°	4457.3	4427.6	4495.0	4468.3	4400.3	4522.9	4532.8	4618.7	4588.0
12°	4313.2	4265.0	4317.9	4285.9	4213.9	4321.9	4326.6	4407.3	4378.9
13°	4122.7	4090.8	4132.6	4098.3	4052.4	4113.4	4104.1	4180.8	4154.7
14°	3939.2	3899.1	3937.4	3896.2	3848.0	3888.6	3861.9	3928.7	3908.4
15°	3737.0	3697.0	3727.2	3676.6	3619.7	3634.8	3590.1	3652.2	3634.8
16°	3501.8	3461.7	3487.9	3426.3	3358.9	3350.2	3291.0	3345.6	3327.6
17°	3236.4	3207.3	3225.3	3148.1	3077.2	3047.0	2968.6	3016.8	2998.8
18°	2983.7	2926.8	2934.3	2848.4	2740.3	2721.8	2633.5	2679.4	2661.4
19°	2652.6	2625.9	2630.0	2533.0	2423.8	2389.5	2301.8	2342.5	2322.1
20°	2364.5	2323.9	2320.4	2215.3	2106.7	2070.6	1985.8	2027.7	2007.9
21°	2035.2	2060.2	2016.6	1905.7	1771.5	1775.0	1700.1	1704.1	1717.5
22°	1664.7	1755.8	1718.7	1587.4	1419.5	1496.8	1429.4	1434.1	1445.7
23°	1298.1	1392.8	1426.5	1267.4	1085.0	1238.9	1185.5	1189.0	1196.5
24°	963.6	1097.2	1157.6	975.2	781.2	996.7	966.5	970.6	962.4
25°	685.4	842.2	926.4	720.2	523.9	774.2	767.9	774.2	697.6
26°	462.9	634.8	730.7	505.3	324.1	572.1	611.0	597.1	452.5
27°	296.2	482.7	561.7	330.5	205.6	393.8	455.9	451.9	259.6
28°	208.5	335.1	414.7	203.3	158.6	247.4	325.8	297.4	166.1
29°	176.0	217.8	289.3	144.6	128.9	146.4	218.4	173.7	135.9
30°	142.9	144.6	189.9	116.7	104.0	104.5	139.4	113.8	110.4
32.5°	87.1	86.5	81.9	68.5	61.0	61.0	68.0	65.6	65.1
35°	48.2	52.9	48.8	41.2	29.6	36.6	41.2	38.9	32.5
37.5°	26.1	30.8	33.7	22.7	16.3	21.5	27.9	22.7	18.6
40°	13.4	16.8	23.8	12.8	8.7	12.2	19.2	12.8	10.5
42.5°	7.0	9.3	15.1	7.0	4.1	7.0	12.2	7.0	5.2
45°	3.5	4.6	8.1	3.5	2.3	3.5	6.4	4.1	2.9
47.5°	1.7	2.3	4.1	1.7	0.6	1.7	3.5	1.7	1.7
50°	0.6	1.2	2.3	0.6	0.6	0.6	1.7	1.2	1.2
52.5°	0.6	0.6	1.2	0.6	0.0	0.6	1.2	0.6	1.2
55°	0.6	0.6	0.6	0.0	0.0	0.6	0.6	0.6	1.2
57.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	0.6	1.2
60°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.0



TEST NUMBER: P208801

CATALOG NUMBER: LDSQA6A20930D010TE LAR35FL 6LSQA1H

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.6	0.6	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°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)