

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: P208716

Luminaire Tested: **LDSQA6A10827D010TE LARL15SP 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29053)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A10827D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 920.8 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

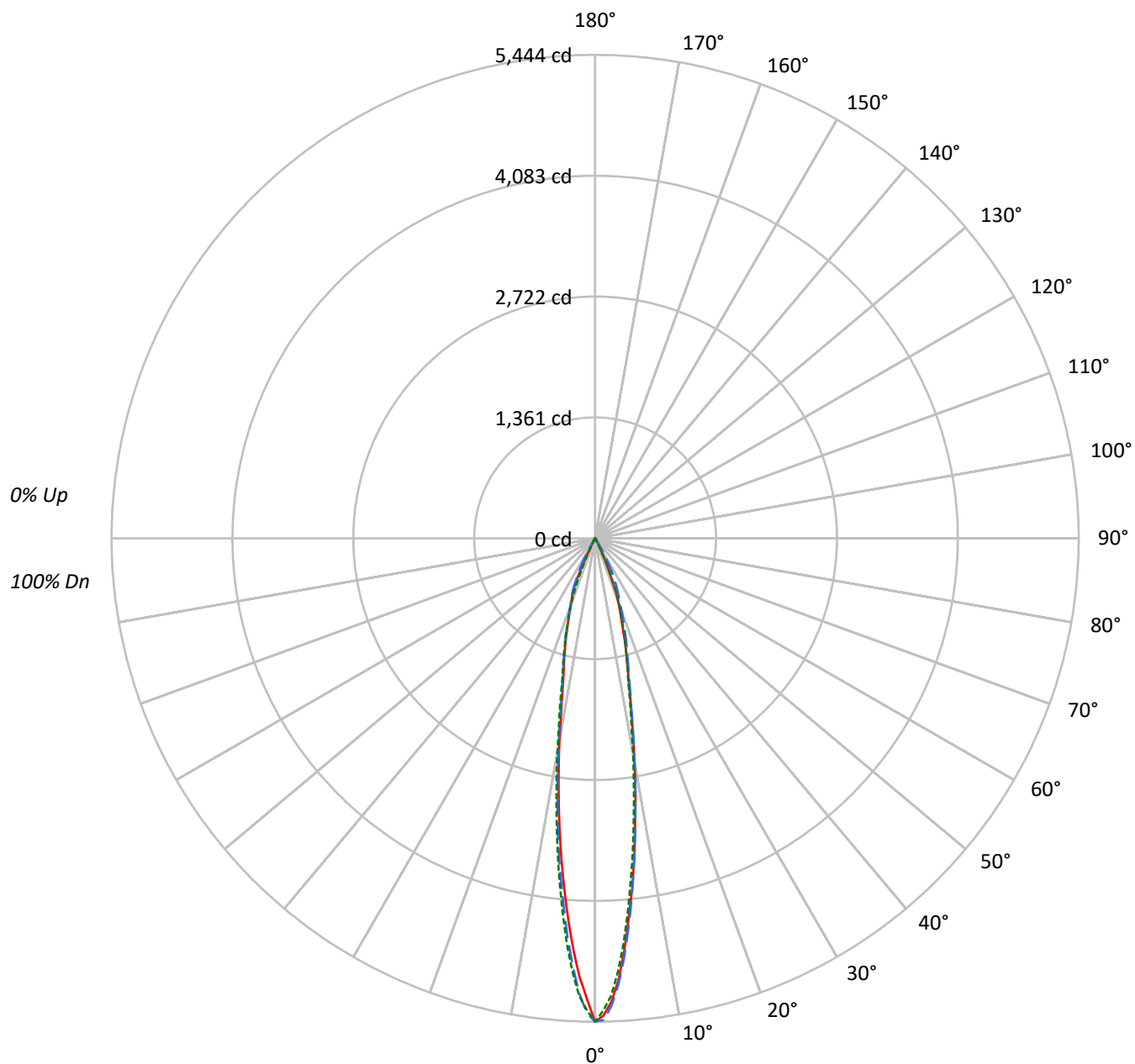
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	97
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	94	94	94
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	91
4	105	100	96	93	103	99	95	93	97	94	91	95	92	90	93	91	90	88	88	88
5	102	96	92	89	101	95	92	89	94	91	88	92	90	88	91	89	87	86	86	86
6	99	93	89	86	98	92	89	86	91	88	85	90	87	85	89	86	84	83	83	83
7	97	90	86	83	95	90	86	83	89	85	83	88	85	82	87	84	82	81	81	81
8	94	88	84	81	93	87	83	81	86	83	80	85	82	80	85	82	80	79	79	79
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77	77	77
10	89	83	79	77	89	83	79	76	82	79	76	81	78	76	81	78	76	75	75	75

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	234408	234408	234408
5°	186348	182372	171567
10°	111027	106934	100613
15°	60666	60768	58861
20°	34758	35720	36715
25°	9178	9539	17140
30°	1253	1158	1119
35°	499	484	463
40°	191	191	191
45°	91	67	91
50°	54	27	74
55°	30	0	60
60°	34	0	0
65°	41	0	0
70°	50	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°	345.7	37.5
10°-20°	389.1	42.3
20°-30°	173.3	18.8
30°-40°	10.6	1.1
40°-50°	1.7	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°	908.1	98.6
0°-40°	918.6	99.8
0°-60°	920.6	100.0
0°-90°	920.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	920.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5444	5444	5444	5444	5444	
5°	4312	4362	4220	4121	3970	354
15°	1361	1420	1363	1354	1320	384
25°	193	516	201	499	361	114
35°	10	15	9	16	9	7
45°	2	3	1	3	2	1
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5444.3	5444.3	5444.3	5444.3	5444.3	5444.3	5444.3	5444.3	5444.3
1°	5377.5	5426.7	5426.7	5414.9	5316.8	5389.7	5348.5	5304.2	5188.9
2°	5222.9	5272.9	5267.9	5222.9	5151.9	5182.0	5125.5	5070.6	4949.5
3°	4984.3	5038.1	5028.2	4981.2	4886.6	4904.9	4823.9	4782.3	4643.4
4°	4663.6	4731.9	4720.1	4668.2	4573.1	4572.0	4487.2	4443.3	4314.7
5°	4311.6	4383.0	4362.0	4319.3	4219.6	4201.7	4120.7	4089.4	3969.6
6°	3973.4	4018.0	3996.3	3960.8	3853.1	3842.1	3765.3	3738.6	3627.9
7°	3613.0	3643.9	3622.5	3595.1	3486.3	3471.7	3409.1	3388.1	3280.1
8°	3233.1	3277.4	3246.9	3229.7	3127.0	3107.2	3044.2	3030.0	2943.4
9°	2908.6	2923.5	2891.1	2839.5	2780.0	2759.8	2692.9	2679.2	2618.5
10°	2539.5	2585.7	2560.5	2516.2	2445.9	2461.2	2364.3	2352.8	2301.3
11°	2218.4	2266.9	2240.2	2200.5	2137.1	2145.9	2066.5	2018.4	2010.4
12°	1953.5	1975.6	1967.6	1935.5	1884.4	1887.0	1816.4	1777.9	1769.8
13°	1695.4	1735.1	1738.9	1712.6	1651.1	1679.4	1626.7	1595.4	1582.8
14°	1520.6	1550.7	1562.9	1562.2	1495.7	1520.6	1478.9	1453.7	1441.2
15°	1361.0	1400.3	1420.2	1419.0	1363.3	1388.5	1353.7	1333.9	1320.5
16°	1211.3	1265.2	1297.6	1292.3	1240.3	1266.3	1231.9	1212.5	1197.6
17°	1060.9	1135.0	1182.7	1172.4	1118.2	1151.0	1118.2	1101.4	1085.7
18°	945.2	1005.9	1073.1	1051.0	990.7	1041.8	1013.6	1000.2	985.7
19°	841.4	883.0	970.4	931.1	876.5	934.6	913.6	902.9	889.1
20°	758.6	794.4	872.3	825.8	779.6	826.9	821.2	812.8	801.3
21°	652.4	720.8	783.4	740.2	679.5	746.3	753.6	749.0	740.6
22°	516.5	639.5	718.9	640.2	560.8	687.6	702.4	699.0	692.9
23°	402.0	543.6	659.3	548.2	436.7	622.3	644.4	642.1	621.9
24°	293.2	445.1	584.5	440.2	314.2	533.3	575.7	571.9	498.6
25°	193.2	346.6	516.1	330.2	200.8	431.4	498.6	492.1	360.8
26°	124.1	253.5	454.7	225.6	106.9	322.2	416.9	398.6	223.7
27°	59.6	176.8	379.5	132.9	51.9	214.9	334.4	293.6	108.0
28°	37.4	92.8	301.6	66.0	35.1	119.5	256.2	186.3	42.4
29°	30.5	45.8	223.3	37.4	28.6	55.0	183.6	90.9	29.4
30°	25.2	30.5	152.3	28.6	23.3	30.5	120.6	35.5	22.5
32.5°	16.0	19.1	35.1	17.9	15.3	17.6	28.6	17.2	14.1
35°	9.5	12.2	15.3	11.8	9.2	11.5	15.7	11.1	8.8
37.5°	5.7	7.3	9.9	7.3	5.7	7.3	9.9	7.3	5.3
40°	3.4	4.6	6.9	4.6	3.4	4.6	6.9	4.6	3.4
42.5°	2.3	2.7	4.6	2.7	1.9	2.7	4.6	3.1	2.3
45°	1.5	1.9	2.7	1.5	1.1	1.5	2.7	1.9	1.5
47.5°	1.1	1.1	1.5	0.8	0.8	1.1	1.9	1.5	1.1
50°	0.8	0.8	1.1	0.4	0.4	0.4	1.1	1.1	1.1
52.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.8	0.8	0.8
55°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	0.8	0.8
57.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.8	0.8
60°	0.4	0.4	0.0	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)