

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: P283780

Luminaire Tested: **LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1212.3 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

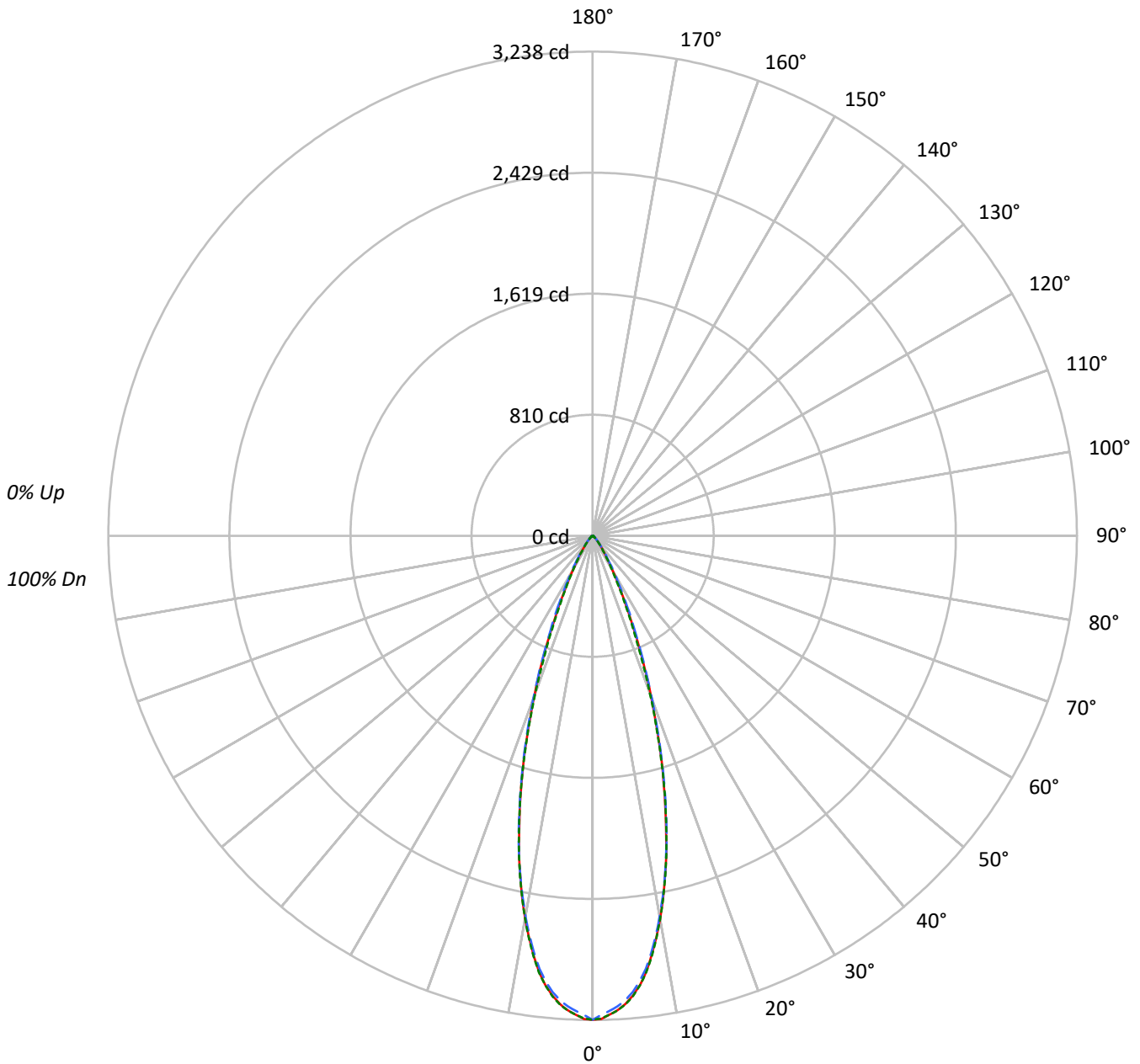
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P283780

CATALOG NUMBER: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P283780

CATALOG NUMBER: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS

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																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1597259	1597259	1597259
5°	1528578	1517088	1530906
10°	1302279	1294113	1303631
15°	959831	966113	962947
20°	599211	610289	585980
25°	309526	332117	293957
30°	148403	170108	141453
35°	76610	84802	71672
40°	42957	45147	40768
45°	26095	26095	25118
50°	13585	16732	13585
55°	7053	11096	7569
60°	8091	8091	8091
65°	8755	8755	8755
70°	10819	9809	10819
75°	10293	10293	10293
80°	9660	9660	9660
85°	7925	7925	7925



TEST NUMBER: P283780

CATALOG NUMBER: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.5	23.0
10°-20°	511.5	42.2
20°-30°	277.3	22.9
30°-40°	89.0	7.3
40°-50°	30.3	2.5
50°-60°	10.6	0.9
60°-70°	7.8	0.6
70°-80°	5.6	0.5
80°-90°	1.6	0.1
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°	1067.3	88.0
0°-40°	1156.3	95.4
0°-60°	1197.3	98.8
0°-90°	1212.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1212.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3238	3238	3238	3238	3238	
5°	3086	3067	3063	3094	3091	279
15°	1879	1895	1892	1900	1885	509
25°	569	594	610	568	540	273
35°	127	133	141	128	119	86
45°	37	38	37	37	36	30
55°	8	10	13	10	9	9
65°	8	8	8	8	8	8
75°	5	5	5	5	5	6
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



TEST NUMBER: P283780

CATALOG NUMBER: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3237.5	3237.5	3237.5	3237.5	3237.5
1°	3232.0	3208.9	3205.5	3235.4	3228.6
2°	3206.2	3184.4	3181.0	3210.9	3204.8
3°	3177.6	3157.9	3151.1	3182.4	3178.3
4°	3139.5	3121.2	3115.0	3146.3	3142.9
5°	3086.5	3067.4	3063.3	3094.0	3091.2
6°	3021.2	3005.5	2998.1	3028.7	3023.2
7°	2939.6	2925.3	2917.1	2939.6	2942.3
8°	2833.5	2826.7	2817.1	2839.6	2839.6
9°	2720.6	2714.4	2704.2	2724.6	2724.6
10°	2599.5	2595.4	2583.2	2602.2	2602.2
11°	2466.9	2464.8	2456.0	2471.6	2471.6
12°	2327.4	2332.2	2324.0	2337.6	2332.9
13°	2188.0	2186.0	2186.6	2196.8	2189.4
14°	2030.2	2042.5	2044.5	2050.6	2039.1
15°	1879.2	1894.9	1891.5	1900.3	1885.3
16°	1724.8	1742.5	1741.8	1743.9	1729.6
17°	1580.6	1590.8	1591.5	1589.5	1571.8
18°	1426.9	1441.2	1441.2	1437.8	1416.7
19°	1276.6	1287.5	1295.0	1287.5	1263.0
20°	1141.3	1148.8	1162.4	1143.3	1116.1
21°	1011.4	1018.2	1029.7	1007.3	977.4
22°	886.9	895.7	906.6	880.8	849.5
23°	770.6	791.0	795.1	759.7	733.2
24°	663.8	686.9	693.7	657.7	629.8
25°	568.6	594.4	610.1	567.9	540.0
26°	486.3	511.5	530.5	488.3	461.8
27°	414.2	440.7	460.5	421.0	395.8
28°	352.3	378.2	398.6	361.8	338.0
29°	306.1	321.0	341.4	310.8	289.1
30°	260.5	276.8	298.6	267.3	248.3
32.5°	178.9	187.7	204.7	185.7	170.7
35°	127.2	132.6	140.8	127.9	119.0
37.5°	90.5	93.2	97.9	90.5	85.7
40°	66.7	68.0	70.1	66.0	63.3
42.5°	49.7	50.3	50.3	49.0	47.6
45°	37.4	38.1	37.4	37.4	36.0
47.5°	27.2	29.2	28.6	28.6	26.5
50°	17.7	21.8	21.8	21.1	17.7
52.5°	10.9	15.0	17.0	15.0	11.6
55°	8.2	10.2	12.9	10.2	8.8
57.5°	8.2	8.2	9.5	8.2	8.2
60°	8.2	8.2	8.2	8.2	8.2



TEST NUMBER: P283780

CATALOG NUMBER: LDA2B209727D010 EU2B20FL409727 2LBAPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	7.5	7.5	7.5	7.5	7.5
70°	7.5	7.5	6.8	7.5	7.5
72.5°	6.8	6.8	6.1	6.8	6.1
75°	5.4	5.4	5.4	5.4	5.4
77.5°	4.1	4.1	4.1	4.1	4.1
80°	3.4	3.4	3.4	3.4	3.4
82.5°	2.0	2.0	2.0	2.7	2.0
85°	1.4	1.4	1.4	1.4	1.4
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	8.2	8.2	8.2	8.2	8.2
65°	7.5	8.2	7.5	8.2	7.5



(END OF REPORT)