

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: P283763

Luminaire Tested: **LDA2B209035D010 EU2B20FL409035 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283763
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: LDA2B209035D010 EU2B20FL409035 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1393.1 lumens
Efficiency: N/A
Efficacy: 67.6 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

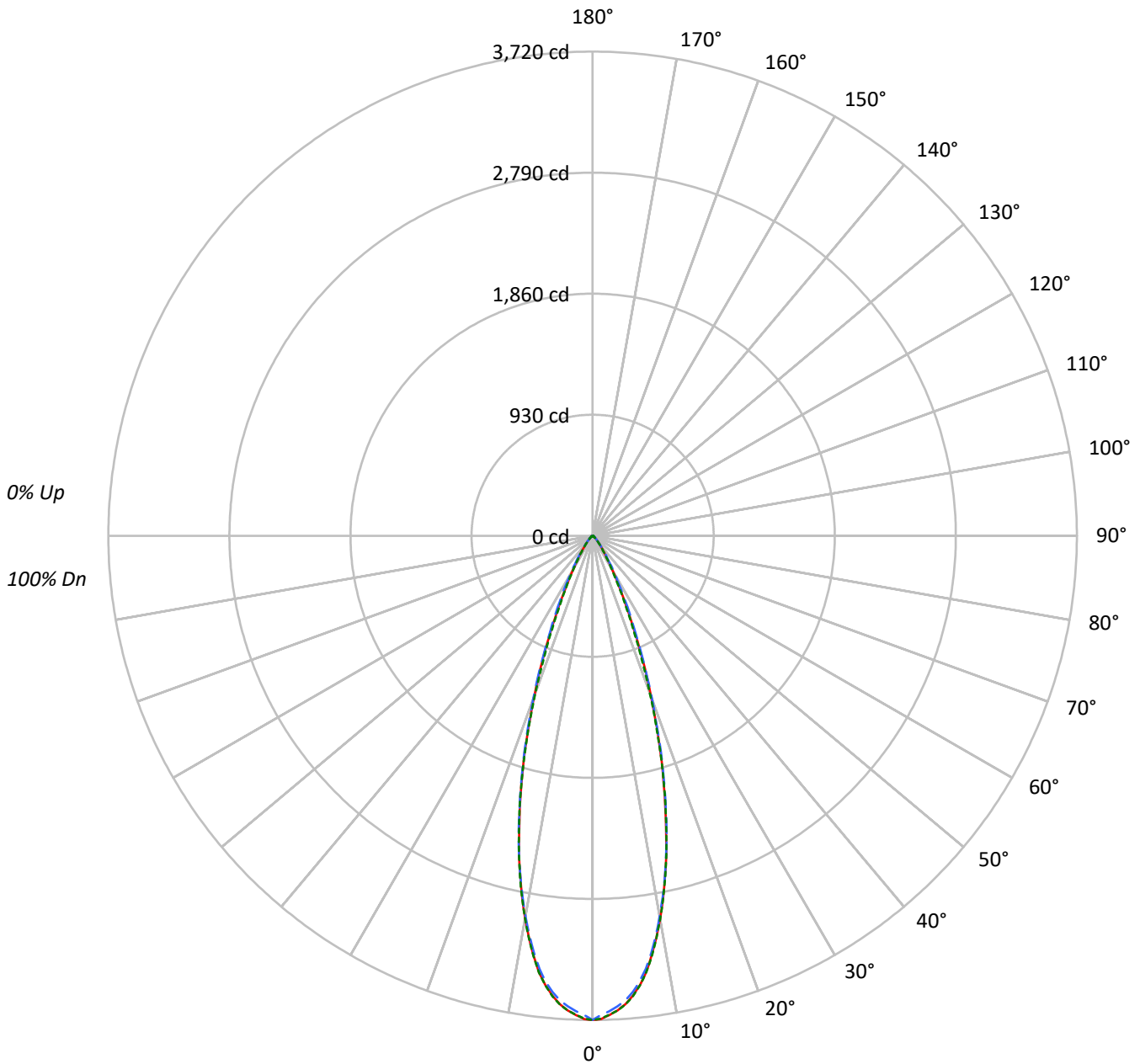
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95					95			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90					90			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86					86			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82					82			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79					79			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75					75			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72					72			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69					69			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67					67			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64					64			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1835405	1835405	1835405
5°	1756490	1743317	1759165
10°	1496456	1487037	1498009
15°	1102947	1110149	1106574
20°	688517	701275	673344
25°	355688	381654	337833
30°	170507	195459	162531
35°	87994	97449	82392
40°	49333	51845	46822
45°	30002	30002	28886
50°	15581	19188	15581
55°	8085	12730	8774
60°	9275	9275	9275
65°	10040	10040	10040
70°	12405	11251	12405
75°	12009	12009	12009
80°	11081	11081	11081
85°	9057	9057	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.0	23.0
10°-20°	587.8	42.2
20°-30°	318.7	22.9
30°-40°	102.3	7.3
40°-50°	34.9	2.5
50°-60°	12.2	0.9
60°-70°	8.9	0.6
70°-80°	6.5	0.5
80°-90°	1.9	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°	1226.4	88.0
0°-40°	1328.7	95.4
0°-60°	1375.8	98.8
0°-90°	1393.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1393.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3720	3720	3720	3720	3720	
5°	3547	3525	3520	3555	3552	321
15°	2159	2177	2174	2184	2166	585
25°	653	683	701	653	621	313
35°	146	152	162	147	137	98
45°	43	44	43	43	41	34
55°	9	12	15	12	10	10
65°	9	9	9	9	9	9
75°	6	6	6	6	6	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3720.2	3720.2	3720.2	3720.2	3720.2
1°	3713.9	3687.4	3683.4	3717.8	3710.0
2°	3684.2	3659.2	3655.3	3689.7	3682.7
3°	3651.4	3628.7	3620.9	3656.9	3652.2
4°	3607.6	3586.5	3579.5	3615.5	3611.5
5°	3546.7	3524.8	3520.1	3555.3	3552.1
6°	3471.6	3453.7	3445.1	3480.2	3474.0
7°	3377.9	3361.4	3352.1	3377.9	3381.0
8°	3255.9	3248.1	3237.2	3263.0	3263.0
9°	3126.2	3119.2	3107.4	3130.9	3130.9
10°	2987.1	2982.4	2968.3	2990.2	2990.2
11°	2834.7	2832.3	2822.2	2840.2	2840.2
12°	2674.5	2679.9	2670.6	2686.2	2680.7
13°	2514.2	2511.9	2512.7	2524.4	2515.8
14°	2332.9	2347.0	2349.3	2356.4	2343.1
15°	2159.4	2177.4	2173.5	2183.7	2166.5
16°	1982.0	2002.3	2001.6	2003.9	1987.5
17°	1816.3	1828.0	1828.8	1826.5	1806.2
18°	1639.7	1656.1	1656.1	1652.2	1628.0
19°	1467.0	1479.5	1488.1	1479.5	1451.3
20°	1311.4	1320.0	1335.7	1313.8	1282.5
21°	1162.2	1170.0	1183.3	1157.5	1123.1
22°	1019.1	1029.3	1041.8	1012.1	976.2
23°	885.5	908.9	913.6	873.0	842.5
24°	762.8	789.4	797.2	755.8	723.7
25°	653.4	683.1	701.1	652.6	620.6
26°	558.8	587.7	609.6	561.2	530.7
27°	476.0	506.4	529.1	483.8	454.9
28°	404.8	434.5	458.0	415.8	388.4
29°	351.7	368.9	392.3	357.2	332.2
30°	299.3	318.1	343.1	307.1	285.3
32.5°	205.5	215.7	235.2	213.4	196.2
35°	146.1	152.4	161.8	146.9	136.8
37.5°	103.9	107.1	112.5	103.9	98.5
40°	76.6	78.2	80.5	75.8	72.7
42.5°	57.1	57.8	57.8	56.3	54.7
45°	43.0	43.8	43.0	43.0	41.4
47.5°	31.3	33.6	32.8	32.8	30.5
50°	20.3	25.0	25.0	24.2	20.3
52.5°	12.5	17.2	19.5	17.2	13.3
55°	9.4	11.7	14.8	11.7	10.2
57.5°	9.4	9.4	10.9	9.4	9.4
60°	9.4	9.4	9.4	9.4	9.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	8.6	8.6	8.6	8.6	8.6
70°	8.6	8.6	7.8	8.6	8.6
72.5°	7.8	7.8	7.0	7.8	7.0
75°	6.3	6.3	6.3	6.3	6.3
77.5°	4.7	4.7	4.7	4.7	4.7
80°	3.9	3.9	3.9	3.9	3.9
82.5°	2.3	2.3	2.3	3.1	2.3
85°	1.6	1.6	1.6	1.6	1.6
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	9.4	9.4	9.4	9.4	9.4
65°	8.6	9.4	8.6	9.4	8.6



(END OF REPORT)