

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: P209537

Luminaire Tested: **LDSQA6A15930D2WD010TED2W LARL15SP 6LA1H DIF-20**

Test Date: 11/02/16

Test Information

Test Method: LM-41-14
Report Number: P209537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29040)
Test Lab: INNOVATION CENTER-P2
Test Date: 11/02/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A15930D2WD010TED2W LARL15SP 6LA1H DIF-20
Description: 6" SQUARE, 1500lm D2W, FLOOD OPTIC WITH DIFFUSED LENS, ACCENT SELF
FLANGED, HAZE TRIM
Light Source: (1) High Lumen 3000K 90 CRI LED
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 743.4 lumens
Efficiency: N/A
Efficacy: 33.8 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.54 / 0.58
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

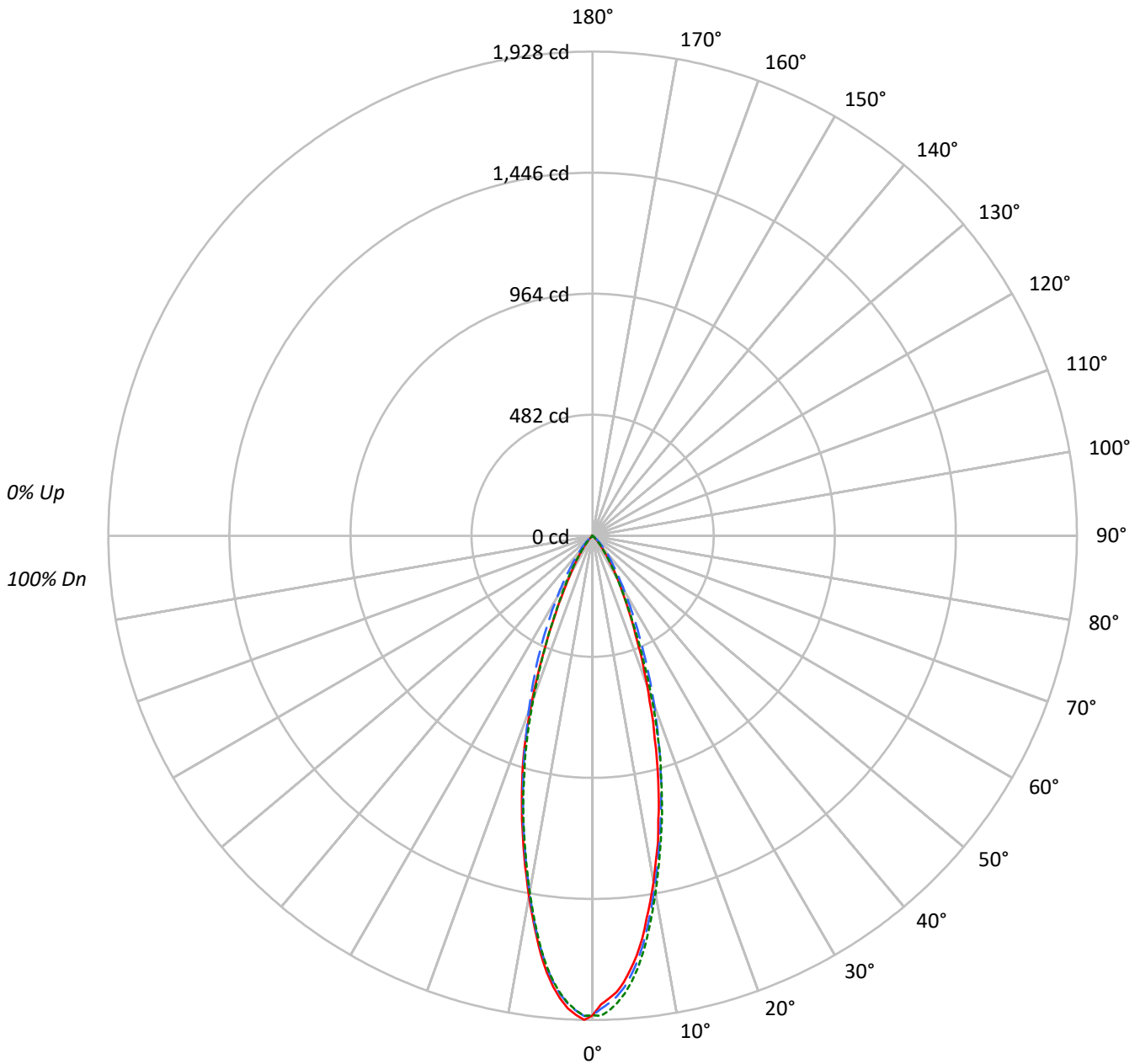
Input Watts (W): 22
Input Voltage (V): 120.0
Input Current (A_{in}): 0.187
Voltage Rise (V): NR
Power Factor: 0.9918
Total Harmonic Distortion (THDi): 16.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	94	92	91																			
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	92	89	87	86																			
4	101	95	90	87	100	94	89	86	92	88	85	90	87	84	88	85	83	82																			
5	97	90	85	82	96	89	85	81	88	84	81	86	83	80	85	82	79	78																			
6	93	86	81	77	92	85	81	77	84	80	77	83	79	76	81	78	76	74																			
7	90	82	77	74	89	82	77	73	80	76	73	79	76	73	78	75	72	71																			
8	87	79	74	70	86	78	73	70	77	73	70	76	72	70	75	72	69	68																			
9	83	75	71	67	83	75	70	67	74	70	67	73	69	67	73	69	66	65																			
10	81	72	68	64	80	72	67	64	71	67	64	71	67	64	70	66	64	63																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	82236	82236	82236
5°	74900	77061	77926
10°	61120	63044	63744
15°	45065	47472	48542
20°	29049	31478	32715
25°	17197	17815	17530
30°	9844	9695	8700
35°	5046	4731	4625
40°	2473	2361	2417
45°	852	731	792
50°	134	134	201
55°	75	75	225
60°	86	86	86
65°	102	102	102
70°	126	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°	158.1	21.3
10°-20°	290.7	39.1
20°-30°	193.2	26.0
30°-40°	77.7	10.4
40°-50°	21.0	2.8
50°-60°	1.9	0.3
60°-70°	0.7	0.1
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°	642.0	86.4
0°-40°	719.7	96.8
0°-60°	742.7	99.9
0°-90°	743.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	743.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1910	1910	1910	1910	1910	
5°	1733	1757	1783	1786	1803	154
15°	1011	1056	1065	1072	1089	275
25°	362	439	375	485	369	170
35°	96	142	90	150	88	64
45°	14	40	12	40	13	13
55°	1	1	1	2	3	1
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	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°	1910	1910	1910	1910	1910	1910	1910	1910	1910
1°	1867	1864	1884	1897	1912	1905	1913	1922	1928
2°	1844	1844	1863	1876	1891	1884	1893	1900	1909
3°	1820	1819	1837	1850	1864	1857	1867	1874	1884
4°	1782	1785	1802	1815	1828	1821	1831	1838	1848
5°	1733	1742	1757	1771	1783	1776	1786	1800	1803
6°	1681	1689	1704	1718	1729	1722	1732	1747	1748
7°	1618	1628	1642	1657	1665	1658	1669	1684	1682
8°	1542	1558	1571	1586	1594	1587	1597	1612	1609
9°	1471	1485	1497	1512	1518	1512	1522	1537	1534
10°	1398	1410	1422	1436	1442	1435	1445	1460	1458
11°	1320	1335	1346	1360	1364	1358	1367	1384	1382
12°	1250	1260	1272	1286	1289	1283	1292	1308	1308
13°	1164	1184	1198	1213	1214	1208	1217	1234	1234
14°	1089	1108	1126	1141	1141	1136	1144	1160	1162
15°	1011	1032	1056	1069	1065	1064	1072	1088	1089
16°	930	957	984	995	988	1002	1002	1016	1018
17°	847	882	915	921	920	930	932	947	947
18°	779	809	847	846	840	860	866	880	872
19°	698	738	780	772	762	781	803	813	793
20°	634	671	716	701	687	722	743	745	714
21°	572	608	654	632	614	656	686	676	636
22°	513	549	595	568	547	593	633	608	562
23°	448	493	539	509	484	534	582	542	491
24°	408	442	488	453	427	477	533	481	427
25°	362	395	439	403	375	425	485	423	369
26°	320	354	395	358	330	383	440	370	318
27°	283	315	353	316	289	338	396	322	273
28°	250	282	316	281	254	299	356	280	236
29°	227	252	282	249	223	264	318	243	202
30°	198	223	250	220	195	232	282	209	175
32.5°	140	170	186	164	135	170	208	151	126
35°	96	120	142	114	90	119	150	111	88
37.5°	65	82	111	78	63	82	108	79	62
40°	44	58	86	55	42	57	80	56	43
42.5°	28	40	60	38	26	39	58	39	27
45°	14	25	40	23	12	24	40	24	13
47.5°	4	12	26	10	3	11	26	11	5
50°	2	3	14	2	2	3	15	3	3
52.5°	1	1	5	1	2	2	6	3	3
55°	1	1	1	1	1	1	2	2	3
57.5°	1	1	1	1	1	1	1	2	2
60°	1	1	1	1	1	1	1	2	1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1	1	0	0	0	0	0	0	0
70°	1	1	0	0	0	0	0	0	0
72.5°	0	1	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	1	1	1	1	1	1	1	1	1	1
65°	1	1	1	1	1	1	1	1	1	1



(END OF REPORT)