

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: P209536

Luminaire Tested: **LDSQA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 11/02/16

Test Information

Test Method: LM-41-14
Report Number: P209536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29039)
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: LDSQA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20
Description: 6" SQUARE, 1000lm D2W, FLOOD OPTIC WITH DIFFUSED LENS, LENSED ACCENT
SELF FLANGED, HAZE TRIM
Light Source: (1) High Lumen 3000K 90 CRI LED
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 473.4 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.58
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

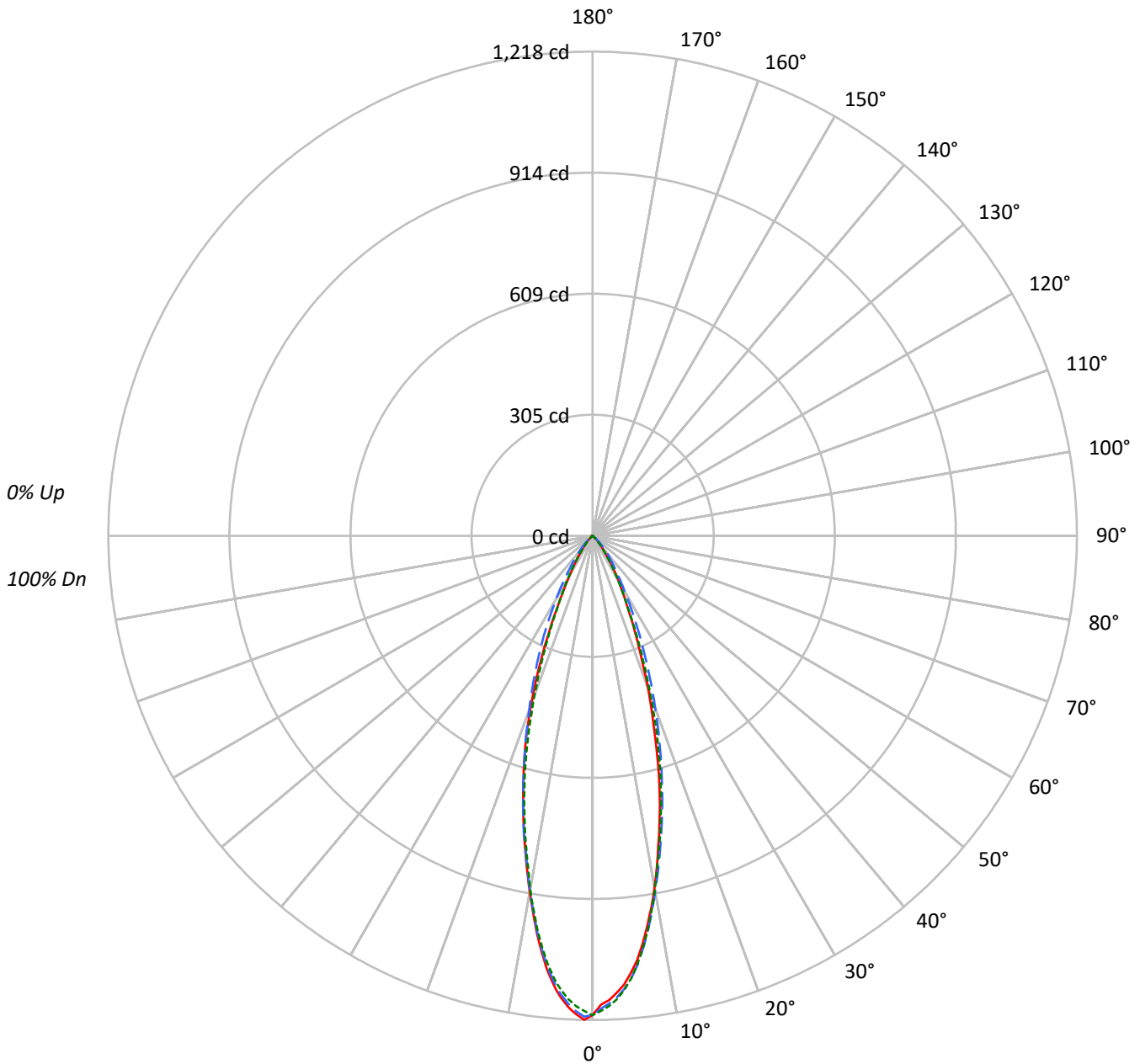
Input Watts (W): 13.6
Input Voltage (V): 120.0
Input Current (A_{in}): 0.115
Voltage Rise (V): NR
Power Factor: 0.9976
Total Harmonic Distortion (THDi): 16.5%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.3
Test Distance: 25 FT



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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	93	92	90																			
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86																			
4	101	95	90	86	99	94	89	86	92	88	85	90	86	84	88	85	83	82																			
5	97	90	85	81	96	89	85	81	87	83	80	86	82	80	84	81	79	78																			
6	93	86	81	77	92	85	80	77	84	80	76	82	79	76	81	78	75	74																			
7	90	82	77	73	89	81	77	73	80	76	73	79	75	72	78	75	72	71																			
8	86	78	73	70	85	78	73	70	77	73	70	76	72	69	75	72	69	68																			
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65																			
10	80	72	67	64	79	72	67	64	71	67	64	70	66	64	70	66	63	62																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	51925	51925	51925
5°	47715	48277	48968
10°	39260	39479	39785
15°	28929	29597	30088
20°	18648	19519	20756
25°	10784	11164	11497
30°	6413	6165	5817
35°	3259	3049	3101
40°	1686	1630	1686
45°	609	548	670
50°	67	67	201
55°	75	75	150
60°	86	86	86
65°	102	0	0
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°	99.9	21.1
10°-20°	183.2	38.7
20°-30°	122.9	26.0
30°-40°	50.9	10.7
40°-50°	14.4	3.0
50°-60°	1.6	0.3
60°-70°	0.5	0.1
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°	405.9	85.7
0°-40°	456.8	96.5
0°-60°	472.8	99.9
0°-90°	473.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	473.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1206	1206	1206	1206	1206	
5°	1104	1117	1117	1125	1133	99
15°	649	677	664	676	675	176
25°	227	284	235	307	242	108
35°	62	93	58	100	59	43
45°	10	27	9	26	11	9
55°	1	1	1	2	2	1
65°	1	0	0	1	0	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°	1206	1206	1206	1206	1206	1206	1206	1206	1206
1°	1180	1187	1190	1191	1196	1197	1210	1219	1218
2°	1169	1176	1178	1180	1184	1184	1197	1203	1204
3°	1152	1160	1163	1164	1167	1166	1178	1184	1186
4°	1132	1140	1143	1143	1145	1143	1155	1164	1163
5°	1104	1113	1117	1116	1117	1113	1125	1135	1133
6°	1073	1080	1084	1084	1082	1083	1090	1100	1097
7°	1034	1041	1045	1045	1043	1043	1049	1054	1055
8°	989	998	1002	1001	999	999	1004	1008	1009
9°	945	952	955	954	952	951	956	959	959
10°	898	905	908	907	903	903	907	910	910
11°	847	856	860	860	850	855	859	861	862
12°	795	806	814	812	803	807	811	813	814
13°	747	757	768	767	757	760	769	767	767
14°	699	707	722	721	711	714	722	721	720
15°	649	658	677	675	664	669	676	675	675
16°	596	609	631	628	617	623	630	630	630
17°	544	561	587	583	568	579	587	587	587
18°	492	514	543	536	520	536	546	544	544
19°	449	469	500	490	472	492	505	504	499
20°	407	431	459	446	426	450	467	465	453
21°	360	390	420	403	382	409	431	424	407
22°	324	352	383	363	340	370	398	385	362
23°	289	316	348	326	302	334	365	346	319
24°	258	284	314	290	267	299	335	309	279
25°	227	254	284	258	235	267	307	273	242
26°	201	226	255	228	205	241	280	241	208
27°	182	201	227	201	180	211	253	209	179
28°	161	179	203	179	159	187	227	182	155
29°	143	160	181	159	140	166	203	159	135
30°	129	144	161	142	124	147	182	139	117
32.5°	94	110	122	107	90	109	136	101	85
35°	62	79	93	74	58	76	100	74	59
37.5°	43	54	72	50	41	53	73	52	42
40°	30	38	57	36	29	38	54	38	30
42.5°	19	27	40	25	18	26	38	27	20
45°	10	17	27	16	9	17	26	17	11
47.5°	3	9	17	7	3	9	17	9	5
50°	1	3	10	2	1	3	10	3	3
52.5°	1	1	4	1	1	1	5	2	2
55°	1	1	1	1	1	1	2	2	2
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	0	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



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







62.5°	1	1	1	1	1	1	1	1	1
65°	1	1	0	0	0	1	1	0	0



(END OF REPORT)