

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: P209540

Luminaire Tested: **LDSQA6A20930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 11/02/16

Test Information

Test Method: LM-41-14
Report Number: P209540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29043)
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: LDSQA6A20930D2WD010TED2W LARL15SP 6LAL1H DIF-20
Description: 6" SQUARE, 2000lm 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: 877.4 lumens
Efficiency: N/A
Efficacy: 26.8 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

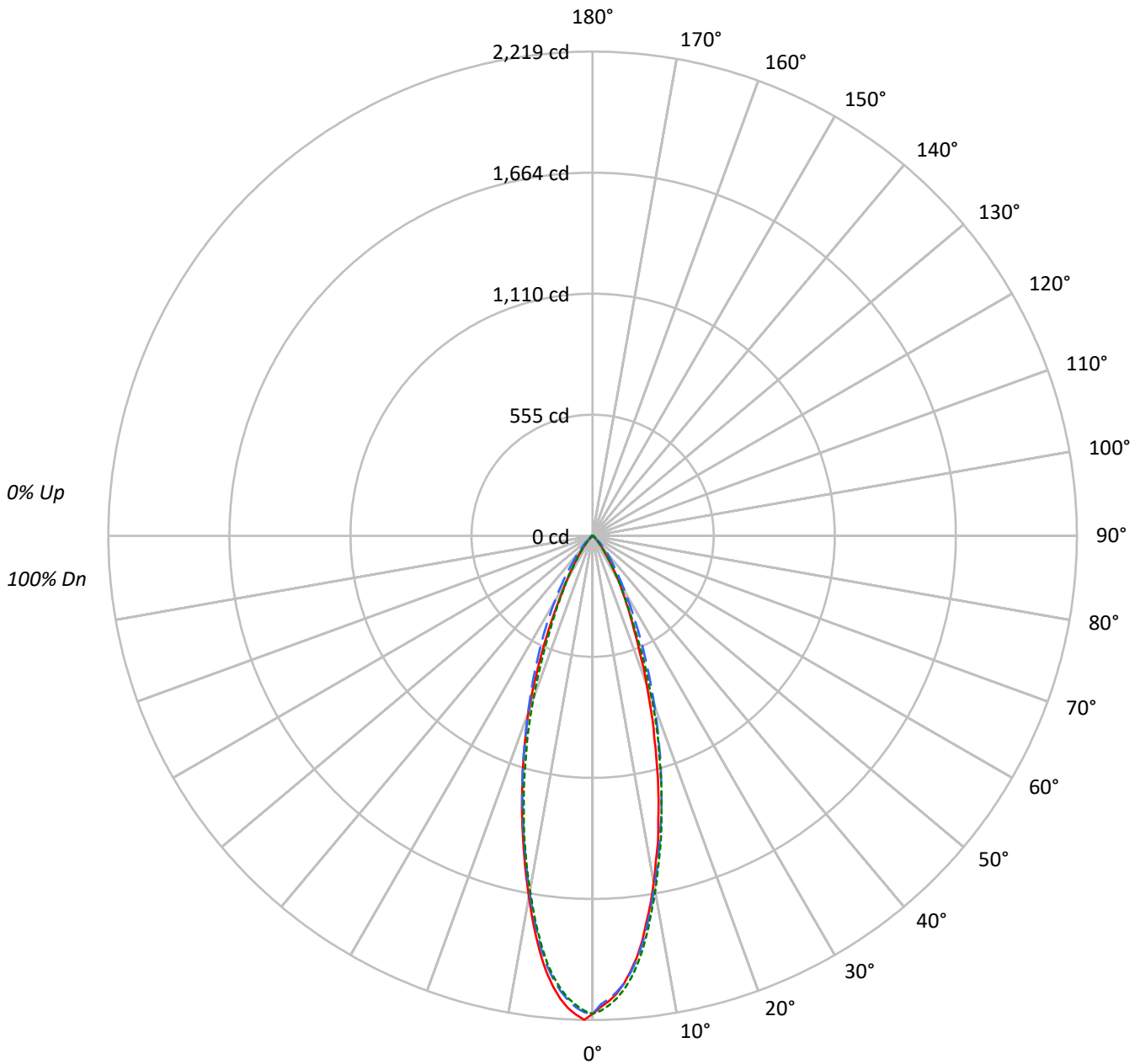
Input Watts (W): 32.8
Input Voltage (V): 120.0
Input Current (A_{in}): 0.277
Voltage Rise (V): NR
Power Factor: 0.9944
Total Harmonic Distortion (THDi): 12.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.4
Test Distance: 25 FT



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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	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90					90			
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86					86			
4	101	94	90	86	99	93	89	85	91	87	84	89	86	84	87	85	83	81					81			
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77					77			
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	77	75	74					74			
7	89	81	76	73	88	81	76	73	80	75	72	79	75	72	77	74	71	70					70			
8	86	78	73	69	85	77	73	69	76	72	69	75	71	69	75	71	68	67					67			
9	83	75	70	66	82	74	69	66	73	69	66	72	69	66	72	68	66	64					64			
10	80	72	67	63	79	71	67	63	70	66	63	70	66	63	69	65	63	62					62			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	94335	94335	94335
5°	86527	87867	89682
10°	70564	72181	73493
15°	51528	54292	55718
20°	33219	36289	39267
25°	19478	20808	22613
30°	11733	11584	11733
35°	5834	5782	5992
40°	3035	2979	3147
45°	1157	1340	1400
50°	670	670	871
55°	150	450	826
60°	86	344	603
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°	181.8	20.7
10°-20°	335.2	38.2
20°-30°	227.8	26.0
30°-40°	95.0	10.8
40°-50°	28.6	3.3
50°-60°	6.5	0.7
60°-70°	2.6	0.3
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°	744.7	84.9
0°-40°	839.6	95.7
0°-60°	874.8	99.7
0°-90°	877.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2191	2191	2191	2191	2191	
5°	2002	2008	2033	2044	2075	179
15°	1156	1219	1218	1248	1250	315
25°	410	512	438	571	476	195
35°	111	169	110	192	114	77
45°	19	50	22	50	23	19
55°	2	4	6	5	11	3
65°	1	1	1	5	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°	2191	2191	2191	2191	2191	2191	2191	2191	2191
1°	2160	2155	2147	2165	2177	2192	2185	2211	2219
2°	2134	2133	2124	2142	2153	2169	2163	2188	2195
3°	2102	2103	2095	2113	2123	2139	2133	2159	2167
4°	2057	2064	2057	2073	2083	2100	2093	2121	2126
5°	2002	2015	2008	2025	2033	2051	2044	2072	2075
6°	1942	1955	1949	1964	1973	1991	1984	2012	2014
7°	1868	1884	1880	1895	1902	1921	1914	1940	1941
8°	1783	1804	1800	1815	1822	1841	1833	1859	1858
9°	1702	1721	1717	1721	1737	1758	1748	1762	1771
10°	1614	1635	1634	1636	1651	1671	1662	1674	1681
11°	1521	1547	1548	1561	1566	1584	1576	1585	1593
12°	1438	1457	1465	1476	1480	1497	1489	1498	1505
13°	1338	1369	1383	1393	1397	1412	1405	1414	1419
14°	1249	1279	1302	1311	1304	1329	1320	1330	1334
15°	1156	1189	1219	1227	1218	1245	1248	1246	1250
16°	1062	1100	1138	1143	1130	1162	1166	1163	1167
17°	967	1012	1058	1059	1042	1080	1086	1083	1087
18°	890	927	979	974	964	999	1009	1005	1010
19°	798	846	902	891	877	918	935	930	934
20°	725	768	828	810	792	840	866	861	857
21°	656	696	757	732	710	764	800	793	775
22°	577	629	690	660	634	692	739	725	695
23°	517	566	626	591	563	623	680	656	617
24°	461	509	568	528	490	559	624	589	544
25°	410	456	512	469	438	498	571	525	476
26°	373	408	461	417	386	443	522	465	415
27°	330	366	413	370	339	392	475	410	360
28°	293	327	370	328	299	346	430	361	312
29°	266	293	331	292	264	307	387	316	271
30°	236	263	295	260	233	271	347	277	236
32.5°	168	200	222	192	162	199	261	199	167
35°	111	142	169	135	110	140	192	144	114
37.5°	78	99	133	94	77	100	141	101	80
40°	54	70	104	68	53	70	103	73	56
42.5°	35	49	74	48	34	50	74	51	36
45°	19	32	50	30	22	31	50	33	23
47.5°	13	17	33	19	14	20	33	21	17
50°	10	10	18	11	10	12	20	14	13
52.5°	3	8	8	7	8	9	9	11	12
55°	2	2	4	5	6	8	5	10	11
57.5°	2	1	6	4	5	7	9	9	10
60°	1	2	5	3	4	6	10	8	7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1	1	2	1	1	1	3	1	1
70°	1	1	1	1	0	0	1	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	2	1	3	3	5	7	6	5
65°	1	1	1	2	1	4	5	4	1



(END OF REPORT)