

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: P209348

Luminaire Tested: **LDSQ6B30D010 EU6B30509027 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209348
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35360)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B30D010 EU6B30509027 6LBSQ1LI
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW
IRIDESCENT TRIM.
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
WATTAGE D010TR-27.4 W DE010-27.95 W D5LT-27.65 W DMX-27.73 W DL2-29.56 W
DL3-29.67 W DLE-29.73 W
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2395.5 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

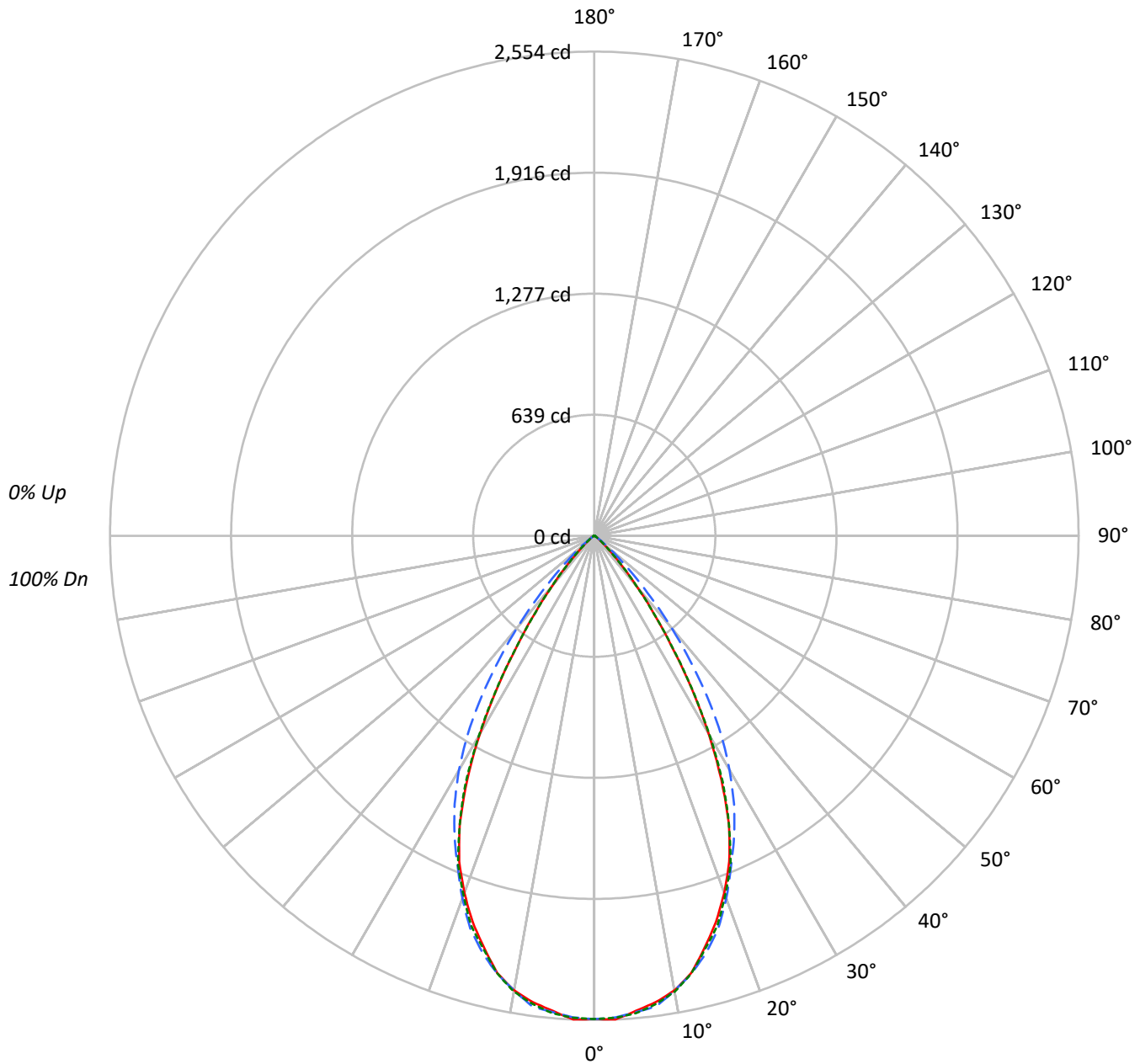
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209348

CATALOG NUMBER: LDSQ6B30D010 EU6B30509027 6LBSQ1LI

Luminous Intensity Polar Plot





TEST NUMBER: P209348

CATALOG NUMBER: LDSQ6B30D010 EU6B30509027 6LBSQ1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93		
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87		
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80		
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75		
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69		
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65		
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60		
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56		
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53		
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P209348

CATALOG NUMBER: LDSQ6B30D010 EU6B30509027 6LBSQ1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.6	10.0
10°-20°	634.8	26.5
20°-30°	779.1	32.5
30°-40°	537.9	22.5
40°-50°	168.2	7.0
50°-60°	26.3	1.1
60°-70°	7.6	0.3
70°-80°	2.5	0.1
80°-90°	0.6	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°	1652.6	69.0
0°-40°	2190.5	91.4
0°-60°	2384.9	99.6
0°-90°	2395.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2395.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2549	2549	2549	2549	2549	
5°	2516	2525	2522	2523	2528	238
15°	2249	2281	2278	2274	2257	629
25°	1679	1722	1744	1733	1680	752
35°	708	838	1039	846	712	453
45°	133	182	292	181	136	119
55°	22	24	27	24	21	22
65°	6	8	6	8	6	7
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209348

CATALOG NUMBER: LDSQ6B30D010 EU6B30509027 6LBSQ1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2
2.5°	2554.0	2518.7	2541.2	2536.3	2549.2	2557.2	2549.2	2563.6	2554.0	2542.8	2546.0
5°	2515.5	2520.3	2518.7	2521.9	2525.1	2525.1	2541.2	2542.8	2546.0	2521.9	2528.3
7.5°	2481.7	2481.7	2489.8	2486.5	2497.8	2494.6	2496.2	2509.0	2510.6	2504.2	2499.4
10°	2435.1	2428.7	2420.7	2420.7	2435.1	2436.7	2449.6	2451.2	2460.8	2435.1	2438.4
12.5°	2362.9	2359.6	2346.8	2353.2	2364.5	2358.0	2378.9	2380.5	2377.3	2366.1	2372.5
15°	2248.8	2261.7	2258.4	2256.8	2282.5	2279.3	2277.7	2282.5	2284.1	2277.7	2272.9
17.5°	2134.8	2146.0	2147.6	2150.8	2155.6	2160.5	2166.9	2184.6	2178.1	2173.3	2189.4
20°	2003.0	1998.2	2011.1	2023.9	2028.7	2028.7	2038.4	2051.2	2041.6	2035.2	2036.8
22.5°	1860.1	1868.1	1861.7	1874.5	1881.0	1889.0	1898.6	1909.9	1901.8	1884.2	1905.1
25°	1678.6	1683.4	1704.3	1702.7	1712.3	1731.6	1746.0	1746.0	1746.0	1744.4	1744.4
27.5°	1450.5	1447.3	1473.0	1490.6	1514.7	1545.3	1564.5	1595.0	1599.9	1595.0	1583.8
30°	1206.3	1203.1	1235.2	1257.7	1301.1	1315.6	1368.6	1397.5	1428.0	1426.4	1418.4
32.5°	952.5	959.0	984.7	1016.8	1052.1	1097.1	1146.9	1211.1	1238.5	1244.9	1230.4
35°	708.4	718.0	742.1	769.4	812.8	862.6	931.6	992.7	1039.3	1039.3	1028.0
37.5°	510.8	514.0	536.5	554.2	599.1	644.1	703.6	787.1	816.0	827.2	816.0
40°	348.6	348.6	361.4	380.7	417.6	456.2	510.8	573.4	615.2	632.9	613.6
42.5°	221.7	224.9	234.5	247.4	274.7	308.4	350.2	396.8	427.3	440.1	422.5
45°	133.3	136.5	144.6	154.2	171.9	192.8	221.7	255.4	281.1	292.3	284.3
47.5°	80.3	83.5	86.7	93.2	106.0	120.5	134.9	154.2	170.3	171.9	168.7
50°	46.6	46.6	49.8	54.6	61.0	69.1	77.1	88.3	93.2	99.6	93.2
52.5°	30.5	30.5	30.5	32.1	35.3	38.6	41.8	48.2	51.4	51.4	49.8
55°	22.5	22.5	22.5	22.5	24.1	24.1	24.1	25.7	27.3	27.3	27.3
57.5°	16.1	16.1	16.1	17.7	17.7	17.7	16.1	16.1	16.1	16.1	16.1
60°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.2	11.2	11.2
62.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
65°	6.4	6.4	6.4	8.0	8.0	8.0	8.0	6.4	6.4	6.4	6.4
67.5°	4.8	4.8	4.8	6.4	6.4	6.4	6.4	6.4	4.8	4.8	4.8
70°	3.2	3.2	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P209348

CATALOG NUMBER: LDSQ6B30D010 EU6B30509027 6LBSQ1LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2	2549.2
2.5°	2555.6	2547.6	2547.6	2547.6	2544.4	2547.6	2552.4	2544.4
5°	2528.3	2531.5	2517.1	2528.3	2533.1	2525.1	2544.4	2528.3
7.5°	2504.2	2499.4	2476.9	2493.0	2502.6	2505.8	2504.2	2491.4
10°	2456.0	2444.8	2435.1	2435.1	2431.9	2430.3	2448.0	2441.6
12.5°	2369.3	2377.3	2362.9	2370.9	2364.5	2366.1	2367.7	2364.5
15°	2295.4	2287.4	2268.1	2280.9	2272.9	2264.9	2280.9	2256.8
17.5°	2179.7	2178.1	2166.9	2158.9	2162.1	2160.5	2168.5	2157.3
20°	2043.2	2046.4	2040.0	2036.8	2032.0	2020.7	2030.4	2017.5
22.5°	1895.4	1898.6	1905.1	1892.2	1893.8	1877.8	1892.2	1877.8
25°	1746.0	1744.4	1736.4	1730.0	1712.3	1694.6	1691.4	1680.2
27.5°	1582.2	1571.0	1551.7	1530.8	1503.5	1479.4	1477.8	1469.8
30°	1402.3	1378.2	1342.9	1309.1	1267.4	1230.4	1230.4	1217.6
32.5°	1212.8	1158.1	1109.9	1068.2	1013.6	992.7	971.8	960.6
35°	986.3	938.1	880.2	811.2	785.5	734.1	737.3	711.6
37.5°	772.6	713.2	658.6	602.4	557.4	533.3	520.4	507.6
40°	573.4	515.6	456.2	419.2	379.1	358.2	350.2	347.0
42.5°	391.9	343.7	305.2	274.7	253.8	231.3	224.9	221.7
45°	255.4	228.1	192.8	168.7	154.2	141.4	141.4	136.5
47.5°	152.6	134.9	117.3	101.2	91.6	83.5	80.3	78.7
50°	85.1	75.5	65.9	59.4	53.0	48.2	46.6	46.6
52.5°	46.6	41.8	38.6	33.7	30.5	30.5	30.5	28.9
55°	24.1	24.1	24.1	24.1	22.5	22.5	22.5	20.9
57.5°	16.1	16.1	17.7	17.7	17.7	16.1	16.1	16.1
60°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
62.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
65°	6.4	8.0	8.0	8.0	8.0	6.4	6.4	6.4
67.5°	4.8	6.4	6.4	6.4	4.8	4.8	4.8	4.8
70°	4.8	4.8	4.8	4.8	4.8	3.2	3.2	3.2
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	1.6	1.6	1.6	1.6	1.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°









(END OF REPORT)