

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: P209346

Luminaire Tested: **LDSQ6B30D010 EU6B30508050 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209346
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 EU6B30508050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3019.2 lumens
Efficiency: N/A
Efficacy: 107.8 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

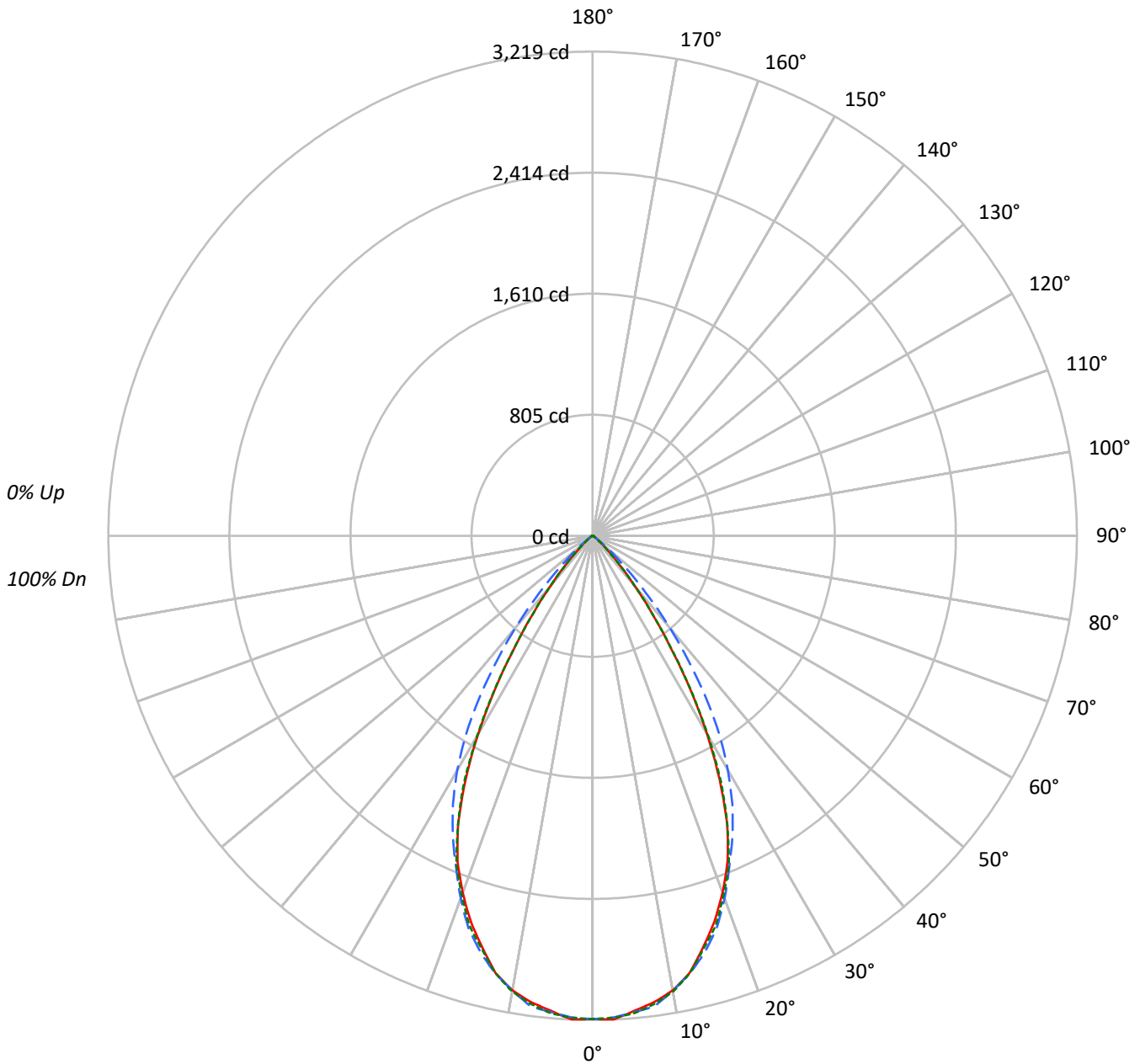
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209346

CATALOG NUMBER: LDSQ6B30D010 EU6B30508050 6LBSQ1LI

Luminous Intensity Polar Plot





TEST NUMBER: P209346

CATALOG NUMBER: LDSQ6B30D010 EU6B30508050 6LBSQ1LI

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	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: P209346

CATALOG NUMBER: LDSQ6B30D010 EU6B30508050 6LBSQ1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.8	10.0
10°-20°	800.1	26.5
20°-30°	982.0	32.5
30°-40°	677.9	22.5
40°-50°	211.9	7.0
50°-60°	33.1	1.1
60°-70°	9.6	0.3
70°-80°	3.1	0.1
80°-90°	0.7	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°	2082.9	69.0
0°-40°	2760.8	91.4
0°-60°	3005.9	99.6
0°-90°	3019.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3019.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3213	3213	3213	3213	3213	
5°	3170	3183	3178	3180	3187	300
15°	2834	2875	2871	2867	2844	793
25°	2116	2170	2199	2184	2118	948
35°	893	1056	1310	1066	897	570
45°	168	230	368	228	172	150
55°	28	30	34	30	26	28
65°	8	10	8	10	8	9
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209346

CATALOG NUMBER: LDSQ6B30D010 EU6B30508050 6LBSQ1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9
2.5°	3219.0	3174.5	3202.8	3196.7	3212.9	3223.1	3212.9	3231.2	3219.0	3204.8	3208.9
5°	3170.4	3176.5	3174.5	3178.5	3182.6	3182.6	3202.8	3204.8	3208.9	3178.5	3186.6
7.5°	3127.9	3127.9	3138.0	3134.0	3148.1	3144.1	3146.1	3162.3	3164.3	3156.2	3150.2
10°	3069.2	3061.1	3051.0	3051.0	3069.2	3071.2	3087.4	3089.4	3101.6	3069.2	3073.2
12.5°	2978.1	2974.0	2957.8	2965.9	2980.1	2972.0	2998.3	3000.4	2996.3	2982.1	2990.2
15°	2834.3	2850.5	2846.5	2844.5	2876.9	2872.8	2870.8	2876.9	2878.9	2870.8	2864.7
17.5°	2690.6	2704.8	2706.8	2710.8	2716.9	2723.0	2731.1	2753.4	2745.3	2739.2	2759.4
20°	2524.6	2518.5	2534.7	2550.9	2557.0	2557.0	2569.1	2585.3	2573.2	2565.1	2567.1
22.5°	2344.4	2354.5	2346.4	2362.6	2370.7	2380.8	2393.0	2407.2	2397.0	2374.8	2401.1
25°	2115.6	2121.7	2148.0	2146.0	2158.2	2182.4	2200.7	2200.7	2200.7	2198.6	2198.6
27.5°	1828.2	1824.1	1856.5	1878.8	1909.1	1947.6	1971.9	2010.4	2016.4	2010.4	1996.2
30°	1520.4	1516.4	1556.9	1585.2	1639.9	1658.1	1724.9	1761.3	1799.8	1797.8	1787.7
32.5°	1200.5	1208.6	1241.0	1281.5	1326.1	1382.8	1445.5	1526.5	1560.9	1569.0	1550.8
35°	892.8	905.0	935.3	969.8	1024.4	1087.2	1174.2	1251.2	1309.9	1309.9	1295.7
37.5°	643.8	647.9	676.2	698.5	755.2	811.8	886.7	992.0	1028.5	1042.6	1028.5
40°	439.3	439.3	455.5	479.8	526.4	575.0	643.8	722.8	775.4	797.7	773.4
42.5°	279.4	283.4	295.6	311.8	346.2	388.7	441.3	500.1	538.5	554.7	532.5
45°	168.0	172.1	182.2	194.4	216.6	242.9	279.4	321.9	354.3	368.5	358.3
47.5°	101.2	105.3	109.3	117.4	133.6	151.8	170.1	194.4	214.6	216.6	212.6
50°	58.7	58.7	62.8	68.8	76.9	87.1	97.2	111.3	117.4	125.5	117.4
52.5°	38.5	38.5	38.5	40.5	44.5	48.6	52.6	60.7	64.8	64.8	62.8
55°	28.3	28.3	28.3	28.3	30.4	30.4	30.4	32.4	34.4	34.4	34.4
57.5°	20.2	20.2	20.2	22.3	22.3	22.3	20.2	20.2	20.2	20.2	20.2
60°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	14.2	14.2	14.2
62.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
65°	8.1	8.1	8.1	10.1	10.1	10.1	10.1	8.1	8.1	8.1	8.1
67.5°	6.1	6.1	6.1	8.1	8.1	8.1	8.1	8.1	6.1	6.1	6.1
70°	4.0	4.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P209346

CATALOG NUMBER: LDSQ6B30D010 EU6B30508050 6LBSQ1LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9	3212.9
2.5°	3221.0	3210.9	3210.9	3210.9	3206.9	3210.9	3217.0	3206.9
5°	3186.6	3190.7	3172.4	3186.6	3192.7	3182.6	3206.9	3186.6
7.5°	3156.2	3150.2	3121.8	3142.1	3154.2	3158.3	3156.2	3140.0
10°	3095.5	3081.3	3069.2	3069.2	3065.1	3063.1	3085.4	3077.3
12.5°	2986.2	2996.3	2978.1	2988.2	2980.1	2982.1	2984.2	2980.1
15°	2893.1	2882.9	2858.6	2874.8	2864.7	2854.6	2874.8	2844.5
17.5°	2747.3	2745.3	2731.1	2721.0	2725.0	2723.0	2733.1	2718.9
20°	2575.2	2579.3	2571.2	2567.1	2561.0	2546.9	2559.0	2542.8
22.5°	2388.9	2393.0	2401.1	2384.9	2386.9	2366.7	2384.9	2366.7
25°	2200.7	2198.6	2188.5	2180.4	2158.2	2135.9	2131.8	2117.7
27.5°	1994.2	1980.0	1955.7	1929.4	1895.0	1864.6	1862.6	1852.4
30°	1767.4	1737.0	1692.5	1650.0	1597.4	1550.8	1550.8	1534.6
32.5°	1528.5	1459.7	1399.0	1346.3	1277.5	1251.2	1224.8	1210.7
35°	1243.1	1182.3	1109.4	1022.4	990.0	925.2	929.3	896.9
37.5°	973.8	898.9	830.1	759.2	702.5	672.1	655.9	639.8
40°	722.8	649.9	575.0	528.4	477.8	451.5	441.3	437.3
42.5°	494.0	433.2	384.7	346.2	319.9	291.5	283.4	279.4
45°	321.9	287.5	242.9	212.6	194.4	178.2	178.2	172.1
47.5°	192.3	170.1	147.8	127.5	115.4	105.3	101.2	99.2
50°	107.3	95.2	83.0	74.9	66.8	60.7	58.7	58.7
52.5°	58.7	52.6	48.6	42.5	38.5	38.5	38.5	36.4
55°	30.4	30.4	30.4	30.4	28.3	28.3	28.3	26.3
57.5°	20.2	20.2	22.3	22.3	22.3	20.2	20.2	20.2
60°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
62.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
65°	8.1	10.1	10.1	10.1	10.1	8.1	8.1	8.1
67.5°	6.1	8.1	8.1	8.1	6.1	6.1	6.1	6.1
70°	6.1	6.1	6.1	6.1	6.1	4.0	4.0	4.0
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	2.0	2.0	2.0	2.0	2.0	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)