

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: P209363

Luminaire Tested: **LDSQ6B40D010 EU6B30509040 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209363
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: LDSQ6B40D010 EU6B30509040 6LBSQ1LI
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW
IRIDESCENT TRIM.
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
WATTAGE D010TR-43.02 W DE010-42.54 W D5LT-42.539 W DMX-41.87 W DL2-41.57
W DL3-44.71 W DLE-39.33 W
Light Source: HIGH LUMEN LED 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3575.4 lumens
Efficiency: N/A
Efficacy: 83.1 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

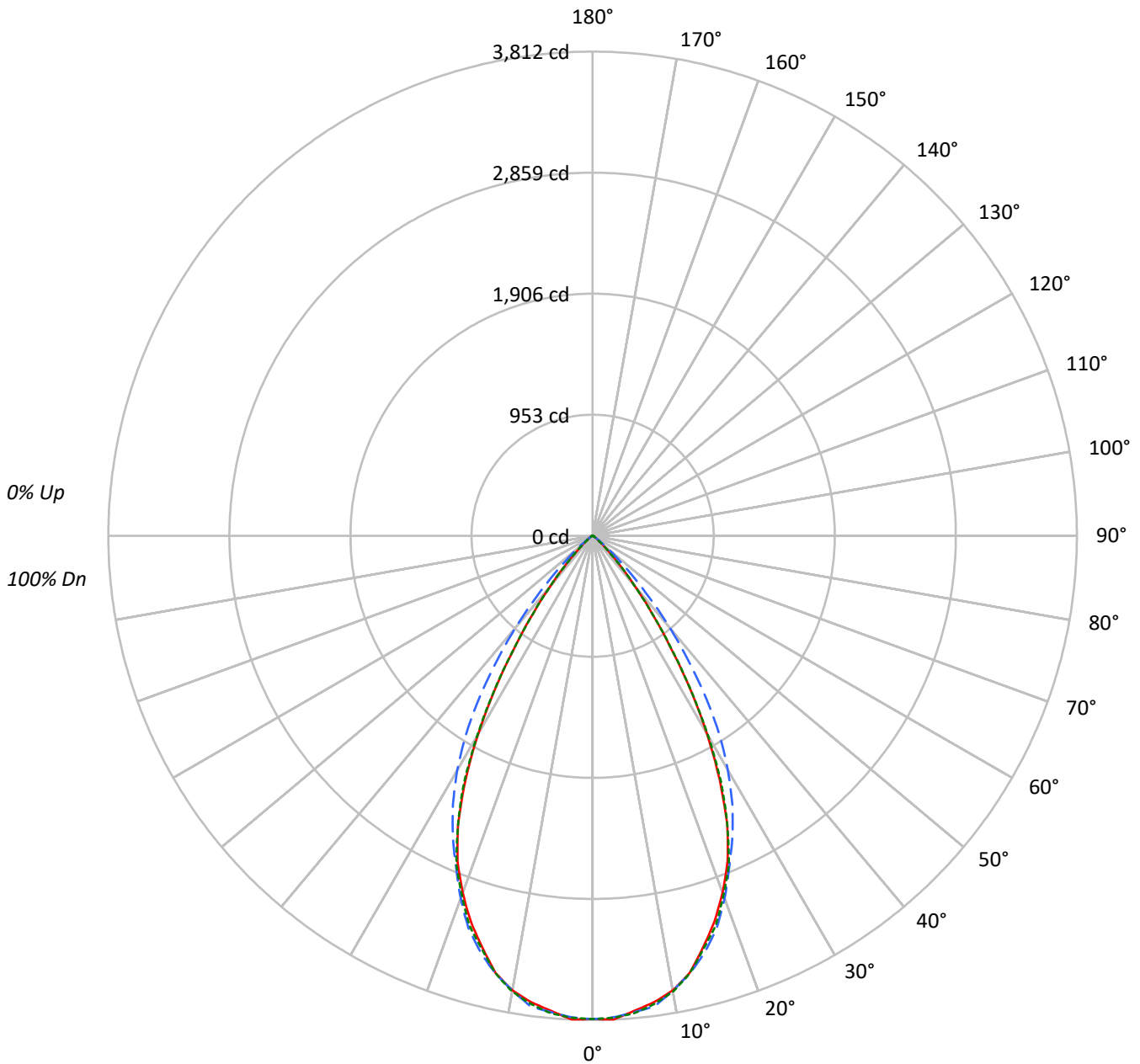
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.2	10.0
10°-20°	947.5	26.5
20°-30°	1162.9	32.5
30°-40°	802.8	22.5
40°-50°	251.0	7.0
50°-60°	39.2	1.1
60°-70°	11.4	0.3
70°-80°	3.7	0.1
80°-90°	0.8	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°	2466.6	69.0
0°-40°	3269.3	91.4
0°-60°	3559.5	99.6
0°-90°	3575.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3575.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3805	3805	3805	3805	3805	
5°	3754	3769	3764	3765	3774	355
15°	3356	3404	3400	3395	3368	939
25°	2505	2570	2604	2587	2508	1123
35°	1057	1250	1551	1262	1062	675
45°	199	272	436	270	204	178
55°	34	36	41	36	31	33
65°	10	12	10	12	10	11
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7
2.5°	3811.9	3759.1	3792.7	3785.5	3804.7	3816.7	3804.7	3826.3	3811.9	3795.1	3799.9
5°	3754.3	3761.5	3759.1	3763.9	3768.7	3768.7	3792.7	3795.1	3799.9	3763.9	3773.5
7.5°	3704.0	3704.0	3716.0	3711.2	3728.0	3723.2	3725.6	3744.8	3747.2	3737.6	3730.4
10°	3634.5	3624.9	3612.9	3612.9	3634.5	3636.9	3656.1	3658.4	3672.8	3634.5	3639.3
12.5°	3526.6	3521.8	3502.6	3512.2	3529.0	3519.4	3550.6	3553.0	3548.2	3531.4	3541.0
15°	3356.4	3375.6	3370.8	3368.4	3406.7	3401.9	3399.5	3406.7	3409.1	3399.5	3392.3
17.5°	3186.2	3202.9	3205.3	3210.1	3217.3	3224.5	3234.1	3260.5	3250.9	3243.7	3267.7
20°	2989.6	2982.4	3001.6	3020.7	3027.9	3027.9	3042.3	3061.5	3047.1	3037.5	3039.9
22.5°	2776.2	2788.2	2778.6	2797.8	2807.4	2819.4	2833.7	2850.5	2838.5	2812.2	2843.3
25°	2505.3	2512.5	2543.7	2541.3	2555.6	2584.4	2606.0	2606.0	2606.0	2603.6	2603.6
27.5°	2164.9	2160.1	2198.4	2224.8	2260.8	2306.3	2335.1	2380.6	2387.8	2380.6	2363.8
30°	1800.5	1795.7	1843.6	1877.2	1941.9	1963.5	2042.6	2085.7	2131.3	2128.9	2116.9
32.5°	1421.7	1431.3	1469.6	1517.6	1570.3	1637.4	1711.8	1807.6	1848.4	1858.0	1836.4
35°	1057.3	1071.6	1107.6	1148.4	1213.1	1287.4	1390.5	1481.6	1551.1	1551.1	1534.3
37.5°	762.4	767.2	800.7	827.1	894.2	961.4	1050.1	1174.7	1217.9	1234.7	1217.9
40°	520.2	520.2	539.4	568.2	623.3	680.9	762.4	855.9	918.2	944.6	915.8
42.5°	330.8	335.6	350.0	369.2	410.0	460.3	522.6	592.2	637.7	656.9	630.5
45°	199.0	203.8	215.8	230.2	256.5	287.7	330.8	381.2	419.5	436.3	424.3
47.5°	119.9	124.7	129.5	139.0	158.2	179.8	201.4	230.2	254.1	256.5	251.7
50°	69.5	69.5	74.3	81.5	91.1	103.1	115.1	131.9	139.0	148.6	139.0
52.5°	45.6	45.6	45.6	47.9	52.7	57.5	62.3	71.9	76.7	76.7	74.3
55°	33.6	33.6	33.6	33.6	36.0	36.0	36.0	38.4	40.8	40.8	40.8
57.5°	24.0	24.0	24.0	26.4	26.4	26.4	24.0	24.0	24.0	24.0	24.0
60°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	16.8	16.8	16.8
62.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
65°	9.6	9.6	9.6	12.0	12.0	12.0	12.0	9.6	9.6	9.6	9.6
67.5°	7.2	7.2	7.2	9.6	9.6	9.6	9.6	9.6	7.2	7.2	7.2
70°	4.8	4.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7	3804.7
2.5°	3814.3	3802.3	3802.3	3802.3	3797.5	3802.3	3809.5	3797.5
5°	3773.5	3778.3	3756.7	3773.5	3780.7	3768.7	3797.5	3773.5
7.5°	3737.6	3730.4	3696.8	3720.8	3735.2	3740.0	3737.6	3718.4
10°	3665.6	3648.9	3634.5	3634.5	3629.7	3627.3	3653.7	3644.1
12.5°	3536.2	3548.2	3526.6	3538.6	3529.0	3531.4	3533.8	3529.0
15°	3425.9	3413.9	3385.1	3404.3	3392.3	3380.3	3404.3	3368.4
17.5°	3253.3	3250.9	3234.1	3222.1	3226.9	3224.5	3236.5	3219.7
20°	3049.5	3054.3	3044.7	3039.9	3032.7	3015.9	3030.3	3011.1
22.5°	2828.9	2833.7	2843.3	2824.1	2826.5	2802.6	2824.1	2802.6
25°	2606.0	2603.6	2591.6	2582.0	2555.6	2529.3	2524.5	2507.7
27.5°	2361.4	2344.7	2315.9	2284.7	2244.0	2208.0	2205.6	2193.6
30°	2092.9	2057.0	2004.2	1953.9	1891.6	1836.4	1836.4	1817.2
32.5°	1810.0	1728.5	1656.6	1594.3	1512.8	1481.6	1450.4	1433.7
35°	1472.0	1400.1	1313.8	1210.7	1172.3	1095.6	1100.4	1062.1
37.5°	1153.2	1064.5	982.9	899.0	831.9	795.9	776.8	757.6
40°	855.9	769.6	680.9	625.7	565.8	534.6	522.6	517.8
42.5°	585.0	513.0	455.5	410.0	378.8	345.2	335.6	330.8
45°	381.2	340.4	287.7	251.7	230.2	211.0	211.0	203.8
47.5°	227.8	201.4	175.0	151.0	136.7	124.7	119.9	117.5
50°	127.1	112.7	98.3	88.7	79.1	71.9	69.5	69.5
52.5°	69.5	62.3	57.5	50.3	45.6	45.6	45.6	43.2
55°	36.0	36.0	36.0	36.0	33.6	33.6	33.6	31.2
57.5°	24.0	24.0	26.4	26.4	26.4	24.0	24.0	24.0
60°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
62.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
65°	9.6	12.0	12.0	12.0	12.0	9.6	9.6	9.6
67.5°	7.2	9.6	9.6	9.6	7.2	7.2	7.2	7.2
70°	7.2	7.2	7.2	7.2	7.2	4.8	4.8	4.8
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	2.4	2.4	2.4	2.4	2.4	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



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









(END OF REPORT)