

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: P209357

Luminaire Tested: **LDSQ6B40D010 EU6B30508040 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209357
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 EU6B30508040 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: 4268.2 lumens
Efficiency: N/A
Efficacy: 99.2 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

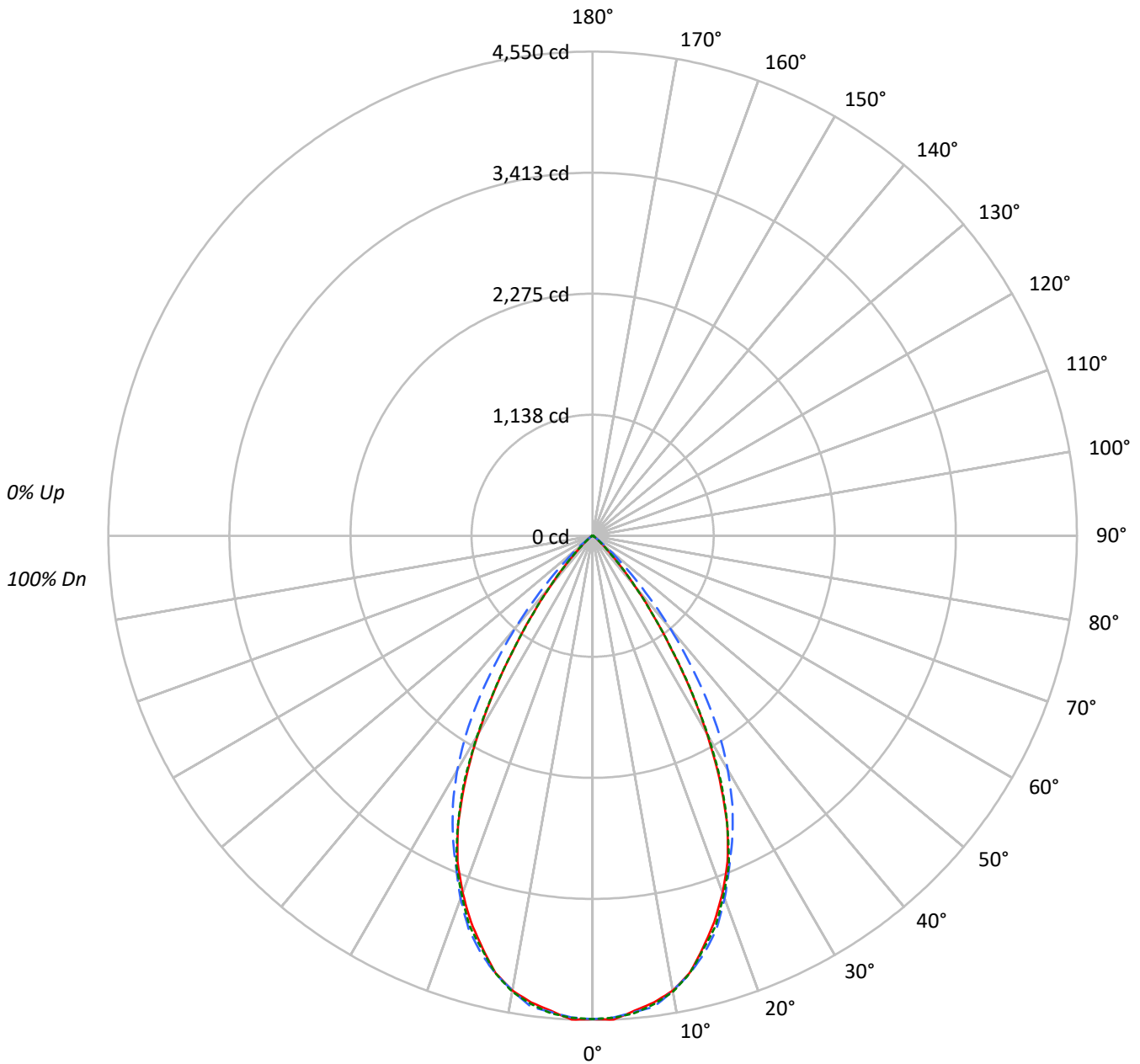
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	425.2	10.0
10°-20°	1131.1	26.5
20°-30°	1388.2	32.5
30°-40°	958.3	22.5
40°-50°	299.6	7.0
50°-60°	46.8	1.1
60°-70°	13.5	0.3
70°-80°	4.5	0.1
80°-90°	1.0	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°	2944.5	69.0
0°-40°	3902.8	91.4
0°-60°	4249.2	99.6
0°-90°	4268.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4268.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4542	4542	4542	4542	4542	
5°	4482	4499	4493	4495	4505	424
15°	4007	4064	4058	4052	4021	1121
25°	2991	3068	3108	3088	2994	1340
35°	1262	1492	1852	1507	1268	806
45°	238	325	521	322	243	213
55°	40	43	49	43	37	39
65°	11	14	11	14	11	13
75°	3	3	3	3	3	4
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°	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9
2.5°	4550.5	4487.5	4527.6	4519.0	4541.9	4556.2	4541.9	4567.6	4550.5	4530.4	4536.1
5°	4481.8	4490.4	4487.5	4493.2	4498.9	4498.9	4527.6	4530.4	4536.1	4493.2	4504.7
7.5°	4421.7	4421.7	4436.0	4430.3	4450.3	4444.6	4447.4	4470.3	4473.2	4461.7	4453.1
10°	4338.7	4327.2	4312.9	4312.9	4338.7	4341.5	4364.4	4367.3	4384.5	4338.7	4344.4
12.5°	4209.9	4204.2	4181.3	4192.7	4212.7	4201.3	4238.5	4241.4	4235.6	4215.6	4227.1
15°	4006.7	4029.6	4023.9	4021.0	4066.8	4061.1	4058.2	4066.8	4069.6	4058.2	4049.6
17.5°	3803.5	3823.5	3826.4	3832.1	3840.7	3849.3	3860.7	3892.2	3880.8	3872.2	3900.8
20°	3568.8	3560.2	3583.1	3606.0	3614.6	3614.6	3631.8	3654.7	3637.5	3626.1	3628.9
22.5°	3314.1	3328.4	3317.0	3339.9	3351.3	3365.6	3382.8	3402.8	3388.5	3357.0	3394.2
25°	2990.7	2999.3	3036.5	3033.6	3050.8	3085.1	3110.9	3110.9	3110.9	3108.0	3108.0
27.5°	2584.3	2578.6	2624.4	2655.9	2698.8	2753.2	2787.5	2841.9	2850.5	2841.9	2821.9
30°	2149.3	2143.6	2200.8	2240.9	2318.2	2343.9	2438.4	2489.9	2544.2	2541.4	2527.1
32.5°	1697.1	1708.6	1754.4	1811.6	1874.6	1954.7	2043.4	2157.9	2206.5	2218.0	2192.2
35°	1262.1	1279.3	1322.2	1370.9	1448.1	1536.9	1659.9	1768.7	1851.7	1851.7	1831.6
37.5°	910.1	915.8	955.9	987.4	1067.5	1147.6	1253.5	1402.3	1453.9	1473.9	1453.9
40°	621.0	621.0	643.9	678.3	744.1	812.8	910.1	1021.7	1096.1	1127.6	1093.3
42.5°	394.9	400.7	417.8	440.7	489.4	549.5	623.9	706.9	761.3	784.2	752.7
45°	237.5	243.3	257.6	274.7	306.2	343.4	394.9	455.0	500.8	520.9	506.6
47.5°	143.1	148.8	154.5	166.0	188.9	214.6	240.4	274.7	303.4	306.2	300.5
50°	83.0	83.0	88.7	97.3	108.8	123.1	137.4	157.4	166.0	177.4	166.0
52.5°	54.4	54.4	54.4	57.2	63.0	68.7	74.4	85.9	91.6	91.6	88.7
55°	40.1	40.1	40.1	40.1	42.9	42.9	42.9	45.8	48.7	48.7	48.7
57.5°	28.6	28.6	28.6	31.5	31.5	31.5	28.6	28.6	28.6	28.6	28.6
60°	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	20.0	20.0	20.0
62.5°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
65°	11.4	11.4	11.4	14.3	14.3	14.3	14.3	11.4	11.4	11.4	11.4
67.5°	8.6	8.6	8.6	11.4	11.4	11.4	11.4	11.4	8.6	8.6	8.6
70°	5.7	5.7	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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°	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9	4541.9
2.5°	4553.3	4539.0	4539.0	4539.0	4533.3	4539.0	4547.6	4533.3
5°	4504.7	4510.4	4484.6	4504.7	4513.2	4498.9	4533.3	4504.7
7.5°	4461.7	4453.1	4413.1	4441.7	4458.9	4464.6	4461.7	4438.8
10°	4375.9	4355.8	4338.7	4338.7	4332.9	4330.1	4361.6	4350.1
12.5°	4221.3	4235.6	4209.9	4224.2	4212.7	4215.6	4218.5	4212.7
15°	4089.7	4075.4	4041.0	4063.9	4049.6	4035.3	4063.9	4021.0
17.5°	3883.6	3880.8	3860.7	3846.4	3852.1	3849.3	3863.6	3843.6
20°	3640.4	3646.1	3634.6	3628.9	3620.3	3600.3	3617.5	3594.6
22.5°	3377.1	3382.8	3394.2	3371.3	3374.2	3345.6	3371.3	3345.6
25°	3110.9	3108.0	3093.7	3082.3	3050.8	3019.3	3013.6	2993.6
27.5°	2819.0	2799.0	2764.6	2727.4	2678.8	2635.8	2633.0	2618.7
30°	2498.5	2455.5	2392.6	2332.5	2258.1	2192.2	2192.2	2169.3
32.5°	2160.7	2063.4	1977.6	1903.2	1805.9	1768.7	1731.5	1711.4
35°	1757.2	1671.4	1568.3	1445.3	1399.5	1307.9	1313.6	1267.8
37.5°	1376.6	1270.7	1173.4	1073.2	993.1	950.2	927.3	904.4
40°	1021.7	918.7	812.8	747.0	675.4	638.2	623.9	618.2
42.5°	698.3	612.5	543.8	489.4	452.2	412.1	400.7	394.9
45°	455.0	406.4	343.4	300.5	274.7	251.8	251.8	243.3
47.5°	271.9	240.4	208.9	180.3	163.1	148.8	143.1	140.2
50°	151.7	134.5	117.3	105.9	94.4	85.9	83.0	83.0
52.5°	83.0	74.4	68.7	60.1	54.4	54.4	54.4	51.5
55°	42.9	42.9	42.9	42.9	40.1	40.1	40.1	37.2
57.5°	28.6	28.6	31.5	31.5	31.5	28.6	28.6	28.6
60°	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
62.5°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
65°	11.4	14.3	14.3	14.3	14.3	11.4	11.4	11.4
67.5°	8.6	11.4	11.4	11.4	8.6	8.6	8.6	8.6
70°	8.6	8.6	8.6	8.6	8.6	5.7	5.7	5.7
72.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	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)