

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: P209356

Luminaire Tested: **LDSQ6B40D010 EU6B30508030 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209356
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 EU6B30508030 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4120.5 lumens
Efficiency: N/A
Efficacy: 95.8 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

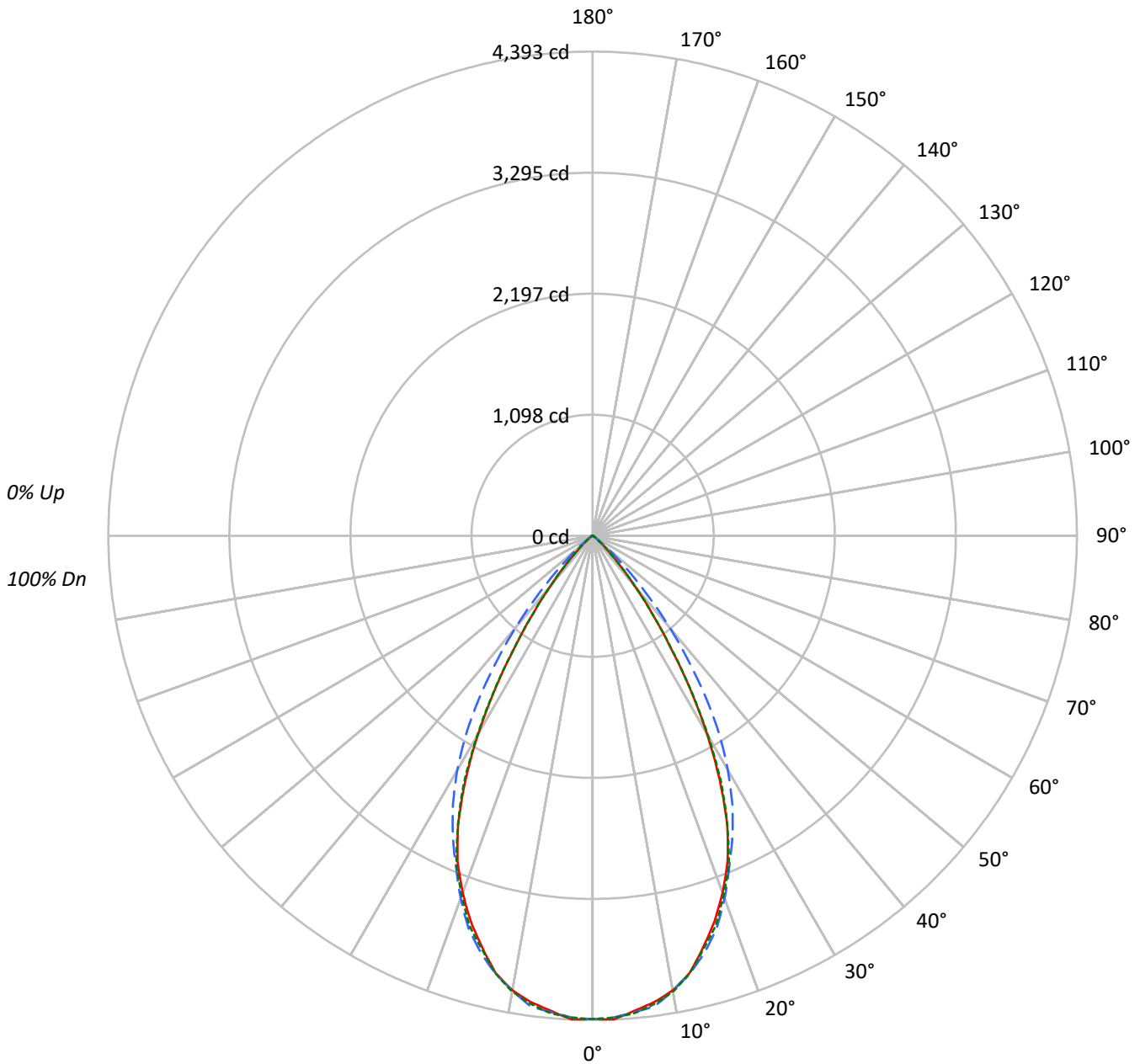
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	410.5	10.0
10°-20°	1092.0	26.5
20°-30°	1340.1	32.5
30°-40°	925.1	22.5
40°-50°	289.2	7.0
50°-60°	45.2	1.1
60°-70°	13.1	0.3
70°-80°	4.3	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°	2842.6	69.0
0°-40°	3767.7	91.4
0°-60°	4102.1	99.6
0°-90°	4120.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4120.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4385	4385	4385	4385	4385	
5°	4327	4343	4338	4339	4349	409
15°	3868	3923	3918	3912	3882	1082
25°	2887	2962	3000	2981	2890	1294
35°	1218	1441	1788	1455	1224	778
45°	229	314	503	311	235	205
55°	39	41	47	41	36	38
65°	11	14	11	14	11	12
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°	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7
2.5°	4393.0	4332.2	4370.9	4362.6	4384.7	4398.5	4384.7	4409.6	4393.0	4373.7	4379.2
5°	4326.7	4335.0	4332.2	4337.8	4343.3	4343.3	4370.9	4373.7	4379.2	4337.8	4348.8
7.5°	4268.7	4268.7	4282.5	4277.0	4296.3	4290.8	4293.5	4315.6	4318.4	4307.4	4299.1
10°	4188.6	4177.5	4163.7	4163.7	4188.6	4191.3	4213.4	4216.2	4232.8	4188.6	4194.1
12.5°	4064.2	4058.7	4036.6	4047.6	4067.0	4055.9	4091.9	4094.6	4089.1	4069.8	4080.8
15°	3868.1	3890.2	3884.6	3881.9	3926.1	3920.6	3917.8	3926.1	3928.8	3917.8	3909.5
17.5°	3671.9	3691.2	3694.0	3699.5	3707.8	3716.1	3727.2	3757.5	3746.5	3738.2	3765.8
20°	3445.3	3437.0	3459.1	3481.3	3489.5	3489.5	3506.1	3528.2	3511.6	3500.6	3503.4
22.5°	3199.4	3213.3	3202.2	3224.3	3235.4	3249.2	3265.7	3285.1	3271.3	3240.9	3276.8
25°	2887.2	2895.5	2931.4	2928.7	2945.3	2978.4	3003.3	3003.3	3003.3	3000.5	3000.5
27.5°	2494.9	2489.4	2533.6	2564.0	2605.4	2657.9	2691.1	2743.6	2751.8	2743.6	2724.2
30°	2074.9	2069.4	2124.7	2163.4	2237.9	2262.8	2354.0	2403.7	2456.2	2453.5	2439.6
32.5°	1638.4	1649.5	1693.7	1748.9	1809.7	1887.1	1972.7	2083.2	2130.2	2141.2	2116.4
35°	1218.4	1235.0	1276.5	1323.4	1398.0	1483.7	1602.5	1707.5	1787.6	1787.6	1768.3
37.5°	878.6	884.1	922.8	953.2	1030.6	1107.9	1210.1	1353.8	1403.6	1422.9	1403.6
40°	599.5	599.5	621.7	654.8	718.4	784.7	878.6	986.4	1058.2	1088.6	1055.4
42.5°	381.3	386.8	403.4	425.5	472.5	530.5	602.3	682.4	734.9	757.0	726.6
45°	229.3	234.8	248.7	265.2	295.6	331.5	381.3	439.3	483.5	502.8	489.0
47.5°	138.1	143.7	149.2	160.2	182.4	207.2	232.1	265.2	292.9	295.6	290.1
50°	80.1	80.1	85.6	93.9	105.0	118.8	132.6	152.0	160.2	171.3	160.2
52.5°	52.5	52.5	52.5	55.3	60.8	66.3	71.8	82.9	88.4	88.4	85.6
55°	38.7	38.7	38.7	38.7	41.4	41.4	41.4	44.2	47.0	47.0	47.0
57.5°	27.6	27.6	27.6	30.4	30.4	30.4	27.6	27.6	27.6	27.6	27.6
60°	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	19.3	19.3	19.3
62.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
65°	11.1	11.1	11.1	13.8	13.8	13.8	13.8	11.1	11.1	11.1	11.1
67.5°	8.3	8.3	8.3	11.1	11.1	11.1	11.1	11.1	8.3	8.3	8.3
70°	5.5	5.5	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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°	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7	4384.7
2.5°	4395.8	4382.0	4382.0	4382.0	4376.4	4382.0	4390.2	4376.4
5°	4348.8	4354.3	4329.5	4348.8	4357.1	4343.3	4376.4	4348.8
7.5°	4307.4	4299.1	4260.4	4288.0	4304.6	4310.1	4307.4	4285.3
10°	4224.5	4205.1	4188.6	4188.6	4183.0	4180.3	4210.7	4199.6
12.5°	4075.3	4089.1	4064.2	4078.0	4067.0	4069.8	4072.5	4067.0
15°	3948.2	3934.4	3901.2	3923.3	3909.5	3895.7	3923.3	3881.9
17.5°	3749.3	3746.5	3727.2	3713.3	3718.9	3716.1	3729.9	3710.6
20°	3514.4	3519.9	3508.9	3503.4	3495.1	3475.7	3492.3	3470.2
22.5°	3260.2	3265.7	3276.8	3254.7	3257.5	3229.8	3254.7	3229.8
25°	3003.3	3000.5	2986.7	2975.6	2945.3	2914.9	2909.3	2890.0
27.5°	2721.5	2702.1	2669.0	2633.0	2586.1	2544.6	2541.9	2528.1
30°	2412.0	2370.6	2309.8	2251.8	2179.9	2116.4	2116.4	2094.3
32.5°	2086.0	1992.1	1909.2	1837.3	1743.4	1707.5	1671.6	1652.2
35°	1696.4	1613.5	1514.1	1395.3	1351.1	1262.6	1268.2	1224.0
37.5°	1329.0	1226.7	1132.8	1036.1	958.7	917.3	895.2	873.1
40°	986.4	886.9	784.7	721.1	652.0	616.1	602.3	596.8
42.5°	674.1	591.3	525.0	472.5	436.5	397.9	386.8	381.3
45°	439.3	392.3	331.5	290.1	265.2	243.1	243.1	234.8
47.5°	262.5	232.1	201.7	174.1	157.5	143.7	138.1	135.4
50°	146.4	129.9	113.3	102.2	91.2	82.9	80.1	80.1
52.5°	80.1	71.8	66.3	58.0	52.5	52.5	52.5	49.7
55°	41.4	41.4	41.4	41.4	38.7	38.7	38.7	35.9
57.5°	27.6	27.6	30.4	30.4	30.4	27.6	27.6	27.6
60°	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
62.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
65°	11.1	13.8	13.8	13.8	13.8	11.1	11.1	11.1
67.5°	8.3	11.1	11.1	11.1	8.3	8.3	8.3	8.3
70°	8.3	8.3	8.3	8.3	8.3	5.5	5.5	5.5
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.8	2.8	2.8	2.8	2.8	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)