

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: P202482

Luminaire Tested: **LDSQ6B40D010 EU6B30508035 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P202482
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 EU6B30508035 6LBSQ1LI
Description: PORTFOLIO LED SQUARE 6 INCH 60 DEGREE CUTOFF RECESSED DOWNLIGHT
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
Light Source: HIGH LUMEN LED 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4222.5 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

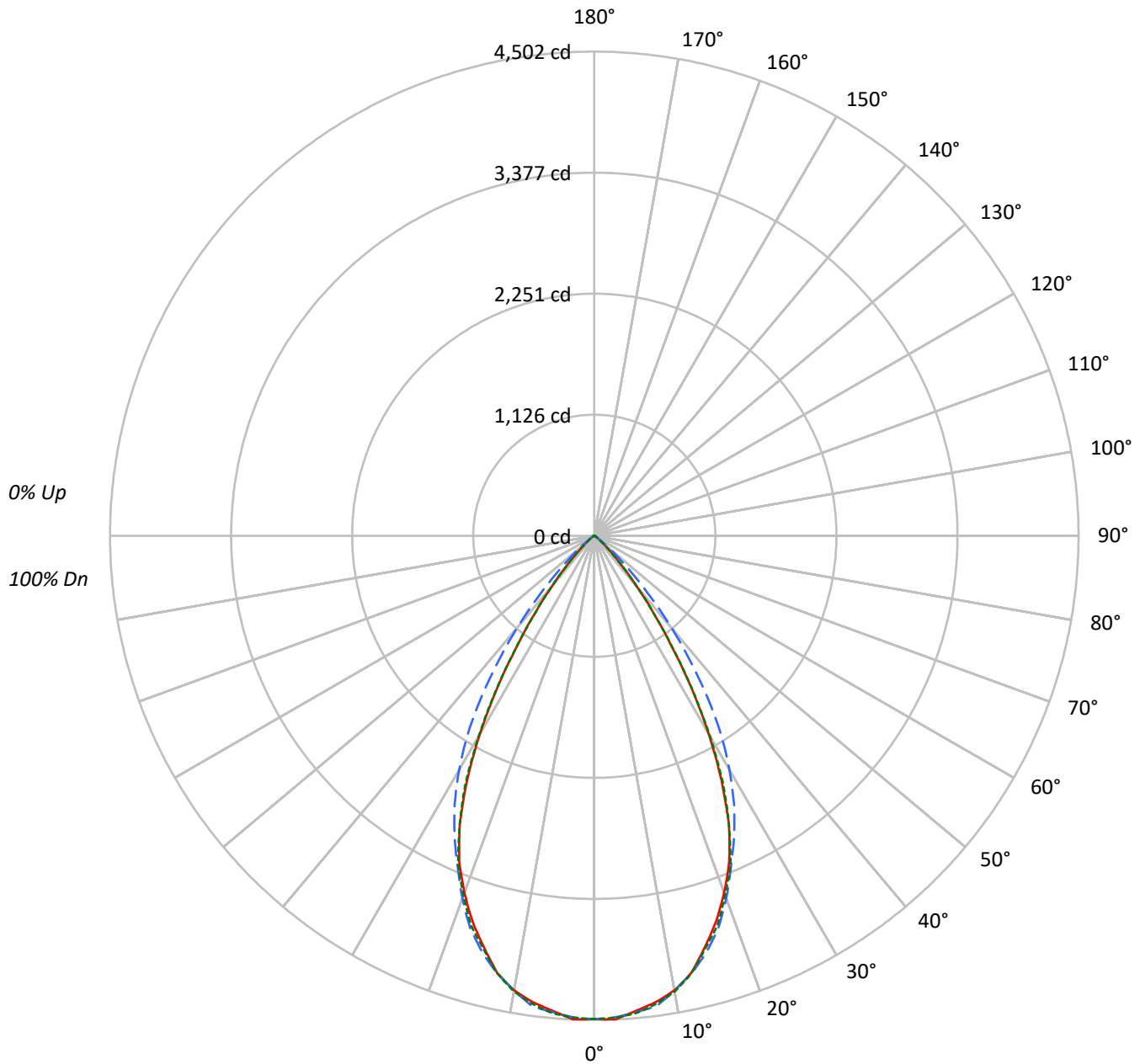
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	48656	48656	48656
5°	48197	48319	48442
10°	47197	47197	47321
15°	44438	45009	44596
20°	40687	41339	40979
25°	35351	36738	35386
30°	26587	31437	26835
35°	16506	24217	16581
40°	8685	15769	8645
45°	3599	7891	3686
50°	1383	2957	1383
55°	748	908	695
60°	492	429	492
65°	290	290	290
70°	180	269	180
75°	117	117	117
80°	175	175	175
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.7	10.0
10°-20°	1119.0	26.5
20°-30°	1373.3	32.5
30°-40°	948.1	22.5
40°-50°	296.4	7.0
50°-60°	46.3	1.1
60°-70°	13.4	0.3
70°-80°	4.4	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°	2913.0	69.0
0°-40°	3861.0	91.4
0°-60°	4203.7	99.6
0°-90°	4222.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4222.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4493	4493	4493	4493	4493	
5°	4434	4451	4445	4447	4456	419
15°	3964	4020	4015	4009	3978	1109
25°	2959	3035	3075	3055	2962	1326
35°	1249	1477	1832	1491	1254	798
45°	235	321	515	319	241	210
55°	40	42	48	42	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3
2.5°	4501.8	4439.5	4479.2	4470.7	4493.3	4507.5	4493.3	4518.8	4501.8	4482.0	4487.7
5°	4433.9	4442.4	4439.5	4445.2	4450.8	4450.8	4479.2	4482.0	4487.7	4445.2	4456.5
7.5°	4374.4	4374.4	4388.6	4382.9	4402.7	4397.0	4399.9	4422.5	4425.4	4414.0	4405.5
10°	4292.3	4281.0	4266.8	4266.8	4292.3	4295.1	4317.8	4320.6	4337.6	4292.3	4298.0
12.5°	4164.9	4159.2	4136.6	4147.9	4167.7	4156.4	4193.2	4196.0	4190.4	4170.5	4181.9
15°	3963.9	3986.5	3980.8	3978.0	4023.3	4017.7	4014.8	4023.3	4026.1	4014.8	4006.3
17.5°	3762.8	3782.7	3785.5	3791.1	3799.6	3808.1	3819.5	3850.6	3839.3	3830.8	3859.1
20°	3530.7	3522.2	3544.8	3567.5	3576.0	3576.0	3593.0	3615.6	3598.6	3587.3	3590.1
22.5°	3278.7	3292.8	3281.5	3304.2	3315.5	3329.6	3346.6	3366.4	3352.3	3321.1	3358.0
25°	2958.7	2967.2	3004.0	3001.2	3018.2	3052.2	3077.7	3077.7	3077.7	3074.8	3074.8
27.5°	2556.7	2551.0	2596.3	2627.5	2669.9	2723.7	2757.7	2811.5	2820.0	2811.5	2791.7
30°	2126.3	2120.7	2177.3	2216.9	2293.4	2318.9	2412.3	2463.3	2517.0	2514.2	2500.1
32.5°	1679.0	1690.3	1735.6	1792.2	1854.5	1933.8	2021.6	2134.8	2183.0	2194.3	2168.8
35°	1248.6	1265.6	1308.1	1356.2	1432.7	1520.4	1642.2	1749.8	1831.9	1831.9	1812.0
37.5°	900.4	906.0	945.7	976.8	1056.1	1135.4	1240.1	1387.3	1438.3	1458.1	1438.3
40°	614.4	614.4	637.0	671.0	736.1	804.1	900.4	1010.8	1084.4	1115.5	1081.6
42.5°	390.7	396.4	413.4	436.0	484.2	543.6	617.2	699.3	753.1	775.8	744.6
45°	235.0	240.7	254.8	271.8	303.0	339.8	390.7	450.2	495.5	515.3	501.1
47.5°	141.6	147.2	152.9	164.2	186.9	212.3	237.8	271.8	300.1	303.0	297.3
50°	82.1	82.1	87.8	96.3	107.6	121.7	135.9	155.7	164.2	175.5	164.2
52.5°	53.8	53.8	53.8	56.6	62.3	68.0	73.6	84.9	90.6	90.6	87.8
55°	39.6	39.6	39.6	39.6	42.5	42.5	42.5	45.3	48.1	48.1	48.1
57.5°	28.3	28.3	28.3	31.1	31.1	31.1	28.3	28.3	28.3	28.3	28.3
60°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	19.8	19.8	19.8
62.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
65°	11.3	11.3	11.3	14.2	14.2	14.2	14.2	11.3	11.3	11.3	11.3
67.5°	8.5	8.5	8.5	11.3	11.3	11.3	11.3	11.3	8.5	8.5	8.5
70°	5.7	5.7	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
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°	2.8	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°	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3	4493.3
2.5°	4504.6	4490.5	4490.5	4490.5	4484.8	4490.5	4499.0	4484.8
5°	4456.5	4462.2	4436.7	4456.5	4465.0	4450.8	4484.8	4456.5
7.5°	4414.0	4405.5	4365.9	4394.2	4411.2	4416.9	4414.0	4391.4
10°	4329.1	4309.3	4292.3	4292.3	4286.6	4283.8	4314.9	4303.6
12.5°	4176.2	4190.4	4164.9	4179.0	4167.7	4170.5	4173.4	4167.7
15°	4046.0	4031.8	3997.8	4020.5	4006.3	3992.2	4020.5	3978.0
17.5°	3842.1	3839.3	3819.5	3805.3	3811.0	3808.1	3822.3	3802.5
20°	3601.4	3607.1	3595.8	3590.1	3581.6	3561.8	3578.8	3556.1
22.5°	3341.0	3346.6	3358.0	3335.3	3338.1	3309.8	3335.3	3309.8
25°	3077.7	3074.8	3060.7	3049.3	3018.2	2987.0	2981.4	2961.6
27.5°	2788.9	2769.0	2735.1	2698.3	2650.1	2607.7	2604.8	2590.7
30°	2471.7	2429.3	2367.0	2307.5	2233.9	2168.8	2168.8	2146.1
32.5°	2137.7	2041.4	1956.4	1882.8	1786.6	1749.8	1713.0	1693.1
35°	1738.4	1653.5	1551.6	1429.8	1384.5	1293.9	1299.6	1254.3
37.5°	1361.9	1257.1	1160.8	1061.7	982.5	940.0	917.3	894.7
40°	1010.8	908.9	804.1	739.0	668.2	631.4	617.2	611.6
42.5°	690.8	605.9	538.0	484.2	447.3	407.7	396.4	390.7
45°	450.2	402.0	339.8	297.3	271.8	249.2	249.2	240.7
47.5°	269.0	237.8	206.7	178.4	161.4	147.2	141.6	138.7
50°	150.1	133.1	116.1	104.8	93.4	84.9	82.1	82.1
52.5°	82.1	73.6	68.0	59.5	53.8	53.8	53.8	51.0
55°	42.5	42.5	42.5	42.5	39.6	39.6	39.6	36.8
57.5°	28.3	28.3	31.1	31.1	31.1	28.3	28.3	28.3
60°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
62.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
65°	11.3	14.2	14.2	14.2	14.2	11.3	11.3	11.3
67.5°	8.5	11.3	11.3	11.3	8.5	8.5	8.5	8.5
70°	8.5	8.5	8.5	8.5	8.5	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°	2.8	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



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— 0°-180° - - 45°-225° - - - 90°-270°









(END OF REPORT)