

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: P136671

Luminaire Tested: **LD6A20D010TE ERW6A20940 6LW121H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23376)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A20D010TE ERW6A20940 6LW121H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2241.4 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

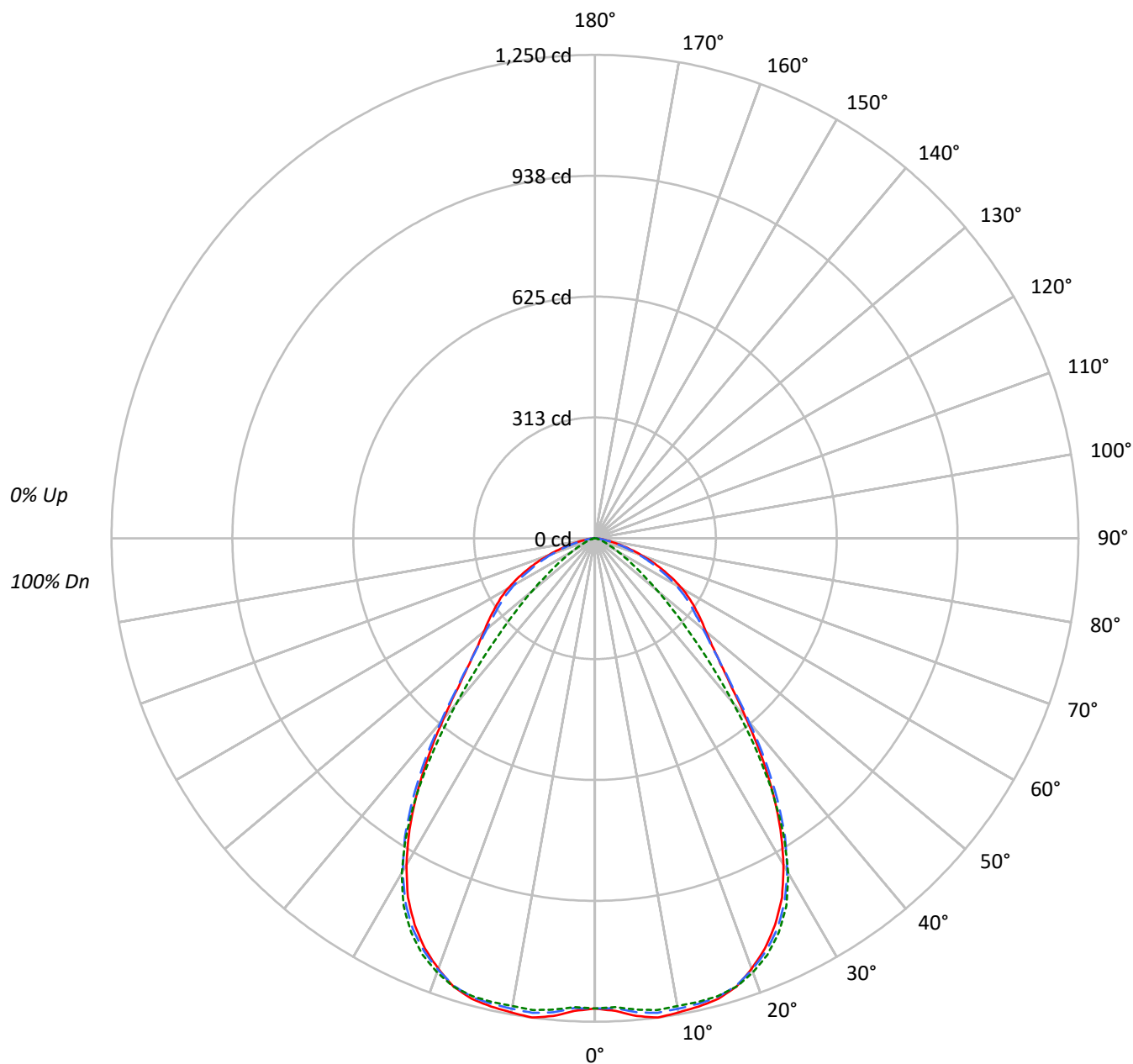
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136671

CATALOG NUMBER: LD6A20D010TE ERW6A20940 6LW121H

Luminous Intensity Polar Plot





TEST NUMBER: P136671

CATALOG NUMBER: LD6A20D010TE ERW6A20940 6LW121H

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	111	108	104	101	109	105	102	100	101	99	96		97	95	94		94
2	103	97	91	87	101	95	90	86	91	87	84		88	85	82		85
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	75	70	65		73	68	64		71
5	83	72	64	59	81	71	64	59	69	63	58		67	62	57		65
6	77	66	58	53	76	65	58	53	63	57	52		62	56	52		60
7	72	61	53	48	71	60	53	48	58	52	47		57	51	47		56
8	68	56	49	43	67	55	48	43	54	48	43		53	47	43		52
9	64	52	45	40	63	51	44	40	50	44	39		49	43	39		48
10	60	48	41	37	59	48	41	36	47	41	36		46	40	36		45

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	79326	79326	79326
5°	81214	80579	80107
10°	82471	81835	81351
15°	83273	82942	82780
20°	82244	82411	82917
25°	79371	80235	80933
30°	73427	74881	75243
35°	63795	65332	63596
40°	51781	52803	47267
45°	42294	42515	32053
50°	37960	36975	21304
55°	35954	34305	13717
60°	34003	31485	8821
65°	29794	27185	5588
70°	24397	22089	3681
75°	17645	15805	2445
80°	11760	9994	1803
85°	7261	5464	1797



TEST NUMBER: P136671

CATALOG NUMBER: LD6A20D010TE ERW6A20940 6LW121H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.6	5.2
10°-20°	345.7	15.4
20°-30°	508.9	22.7
30°-40°	500.8	22.3
40°-50°	338.6	15.1
50°-60°	227.6	10.2
60°-70°	138.9	6.2
70°-80°	54.8	2.4
80°-90°	8.5	0.4
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°	972.2	43.4
0°-40°	1473.0	65.7
0°-60°	2039.2	91.0
0°-90°	2241.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2241.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1240	1235	1230	1229	1223	119
15°	1233	1228	1228	1229	1226	347
25°	1103	1106	1115	1126	1124	504
35°	801	811	820	807	798	496
45°	458	466	461	381	347	362
55°	316	320	302	169	121	283
65°	193	194	176	71	36	192
75°	70	70	63	24	10	78
85°	10	7	7	4	2	13
90°	0	0	0	0	0	



TEST NUMBER: P136671

CATALOG NUMBER: LD6A20D010TE ERW6A20940 6LW121H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9
2.5°	1223.2	1218.4	1220.8	1218.4	1218.4	1213.5	1218.4	1218.4	1215.9	1215.9	1215.9
5°	1240.1	1237.7	1240.1	1235.3	1237.7	1232.9	1235.3	1232.9	1230.4	1230.4	1230.4
7.5°	1249.8	1244.9	1247.4	1242.5	1244.9	1240.1	1242.5	1240.1	1237.7	1237.7	1235.3
10°	1244.9	1242.5	1242.5	1240.1	1240.1	1235.3	1240.1	1237.7	1232.9	1235.3	1232.9
12.5°	1240.1	1237.7	1240.1	1235.3	1237.7	1230.4	1235.3	1232.9	1230.4	1232.9	1230.4
15°	1232.9	1230.4	1232.9	1228.0	1230.4	1225.6	1230.4	1228.0	1225.6	1228.0	1225.6
17.5°	1215.9	1213.5	1215.9	1213.5	1215.9	1208.7	1213.5	1213.5	1211.1	1213.5	1213.5
20°	1184.6	1182.2	1184.6	1182.2	1184.6	1179.8	1184.6	1184.6	1182.2	1187.0	1187.0
22.5°	1148.4	1148.4	1148.4	1148.4	1150.8	1146.0	1150.8	1150.8	1150.8	1155.6	1155.6
25°	1102.6	1105.0	1105.0	1105.0	1107.4	1105.0	1109.8	1109.8	1109.8	1114.6	1114.6
27.5°	1047.1	1047.1	1049.5	1051.9	1051.9	1049.5	1054.3	1056.7	1056.7	1061.6	1064.0
30°	974.7	977.1	979.5	981.9	984.3	981.9	986.8	986.8	989.2	994.0	996.4
32.5°	892.7	897.5	897.5	902.4	904.8	902.4	909.6	907.2	909.6	914.3	916.8
35°	801.0	805.8	805.8	810.6	810.6	810.6	815.5	817.9	817.9	820.3	820.3
37.5°	704.5	709.3	706.9	714.2	714.2	711.7	721.4	721.4	719.0	721.4	719.0
40°	608.0	612.9	612.9	617.6	617.6	617.6	624.8	620.0	620.0	620.0	615.3
42.5°	523.5	528.4	528.4	533.2	533.2	533.2	538.0	538.0	533.2	530.8	523.5
45°	458.4	460.8	463.2	465.6	465.6	465.6	470.5	468.0	465.6	460.8	448.7
47.5°	410.1	412.6	412.6	415.0	415.0	415.0	417.4	417.4	412.6	405.3	393.2
50°	374.0	374.0	376.4	376.4	378.8	376.4	378.8	376.4	371.6	364.3	349.8
52.5°	345.0	345.0	345.0	347.4	347.4	347.4	347.4	345.0	340.2	330.5	313.7
55°	316.1	316.1	318.5	318.5	320.9	318.5	318.5	316.1	308.8	301.6	282.3
57.5°	289.5	289.5	289.5	291.9	291.9	291.9	289.5	287.1	282.3	272.6	253.4
60°	260.6	260.6	260.6	260.6	263.0	260.6	260.6	255.8	250.9	241.3	224.4
62.5°	226.8	226.8	226.8	229.2	229.2	226.8	226.8	221.9	217.1	207.4	190.6
65°	193.0	193.0	193.0	195.5	195.5	193.0	193.0	188.2	183.4	176.1	159.2
67.5°	161.6	161.6	161.6	161.6	161.6	159.2	159.2	156.8	152.0	144.8	132.7
70°	127.9	127.9	127.9	130.3	127.9	127.9	127.9	125.5	120.6	115.8	103.7
72.5°	98.9	98.9	98.9	98.9	98.9	98.9	96.5	96.5	91.6	86.9	79.7
75°	70.0	70.0	70.0	70.0	70.0	70.0	70.0	67.6	65.2	62.7	55.5
77.5°	48.2	48.2	48.2	48.2	48.2	48.2	48.2	45.8	45.8	43.4	38.6
80°	31.3	31.3	31.3	31.3	31.3	29.0	29.0	29.0	29.0	26.6	24.2
82.5°	19.3	16.9	19.3	16.9	16.9	16.9	16.9	16.9	16.9	16.9	14.5
85°	9.7	9.7	9.7	9.7	7.3	7.3	7.3	7.3	7.3	7.3	7.3
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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: P136671

CATALOG NUMBER: LD6A20D010TE ERW6A20940 6LW121H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9	1215.9
2.5°	1215.9	1211.1	1215.9	1218.4	1213.5	1215.9	1218.4	1213.5
5°	1230.4	1223.2	1228.0	1230.4	1223.2	1225.6	1228.0	1223.2
7.5°	1237.7	1230.4	1235.3	1235.3	1228.0	1232.9	1235.3	1230.4
10°	1232.9	1228.0	1232.9	1232.9	1228.0	1230.4	1232.9	1228.0
12.5°	1230.4	1225.6	1230.4	1232.9	1225.6	1230.4	1232.9	1228.0
15°	1228.0	1223.2	1228.0	1230.4	1223.2	1228.0	1230.4	1225.6
17.5°	1213.5	1211.1	1218.4	1218.4	1213.5	1218.4	1220.8	1215.9
20°	1189.5	1187.0	1194.3	1196.7	1191.9	1196.7	1199.1	1194.3
22.5°	1158.0	1155.6	1162.9	1165.3	1160.5	1165.3	1167.7	1165.3
25°	1119.5	1117.1	1124.3	1126.7	1121.9	1126.7	1129.1	1124.3
27.5°	1066.4	1064.0	1071.2	1071.2	1068.8	1073.7	1076.1	1071.2
30°	998.8	994.0	1001.3	998.8	996.4	1001.3	1001.3	998.8
32.5°	914.3	909.6	914.3	909.6	909.6	912.0	912.0	907.2
35°	815.5	813.0	810.6	803.4	803.4	803.4	803.4	798.5
37.5°	711.7	704.5	699.7	687.6	682.7	685.2	682.7	677.9
40°	605.6	593.5	583.9	569.4	562.1	562.1	559.7	555.0
42.5°	511.5	494.6	480.1	460.8	453.5	451.1	446.3	443.9
45°	434.3	412.6	390.8	371.6	359.5	357.1	352.2	347.4
47.5°	374.0	347.4	320.9	299.2	287.1	279.8	275.0	272.6
50°	325.7	296.8	265.4	238.9	226.8	217.1	212.3	209.9
52.5°	287.1	255.8	219.5	193.0	178.5	168.9	164.0	159.2
55°	255.8	219.5	183.4	154.4	140.0	130.3	125.5	120.6
57.5°	224.4	190.6	152.0	123.1	108.6	98.9	94.1	91.6
60°	195.5	161.6	125.5	98.9	84.5	74.8	70.0	67.6
62.5°	166.5	135.1	103.7	79.7	65.2	55.5	50.7	50.7
65°	137.6	111.0	82.1	60.3	48.2	41.0	36.2	36.2
67.5°	113.4	89.2	65.2	48.2	36.2	31.3	26.6	26.6
70°	89.2	72.4	50.7	38.6	29.0	21.8	19.3	19.3
72.5°	67.6	55.5	38.6	29.0	21.8	16.9	14.5	14.5
75°	48.2	38.6	29.0	19.3	14.5	12.1	9.7	9.7
77.5°	33.7	26.6	19.3	14.5	9.7	7.3	7.3	7.3
80°	21.8	16.9	12.1	9.7	7.3	4.8	4.8	4.8
82.5°	12.1	9.7	7.3	4.8	4.8	2.4	2.4	2.4
85°	4.8	4.8	4.8	2.4	2.4	2.4	2.4	2.4
87.5°	2.4	2.4	2.4	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)