

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: P209452

Luminaire Tested: **LDSQ6B30D010 EU6B30509035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B30D010 EU6B30509035 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
WATTAGE D010TR-27.4 W DE010-27.95 W D5LT-27.65 W DMX-27.73 W DL2-29.56 W
DL3-29.67 W DLE-29.73 W
Light Source: HIGH LUMEN LED 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2773.8 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

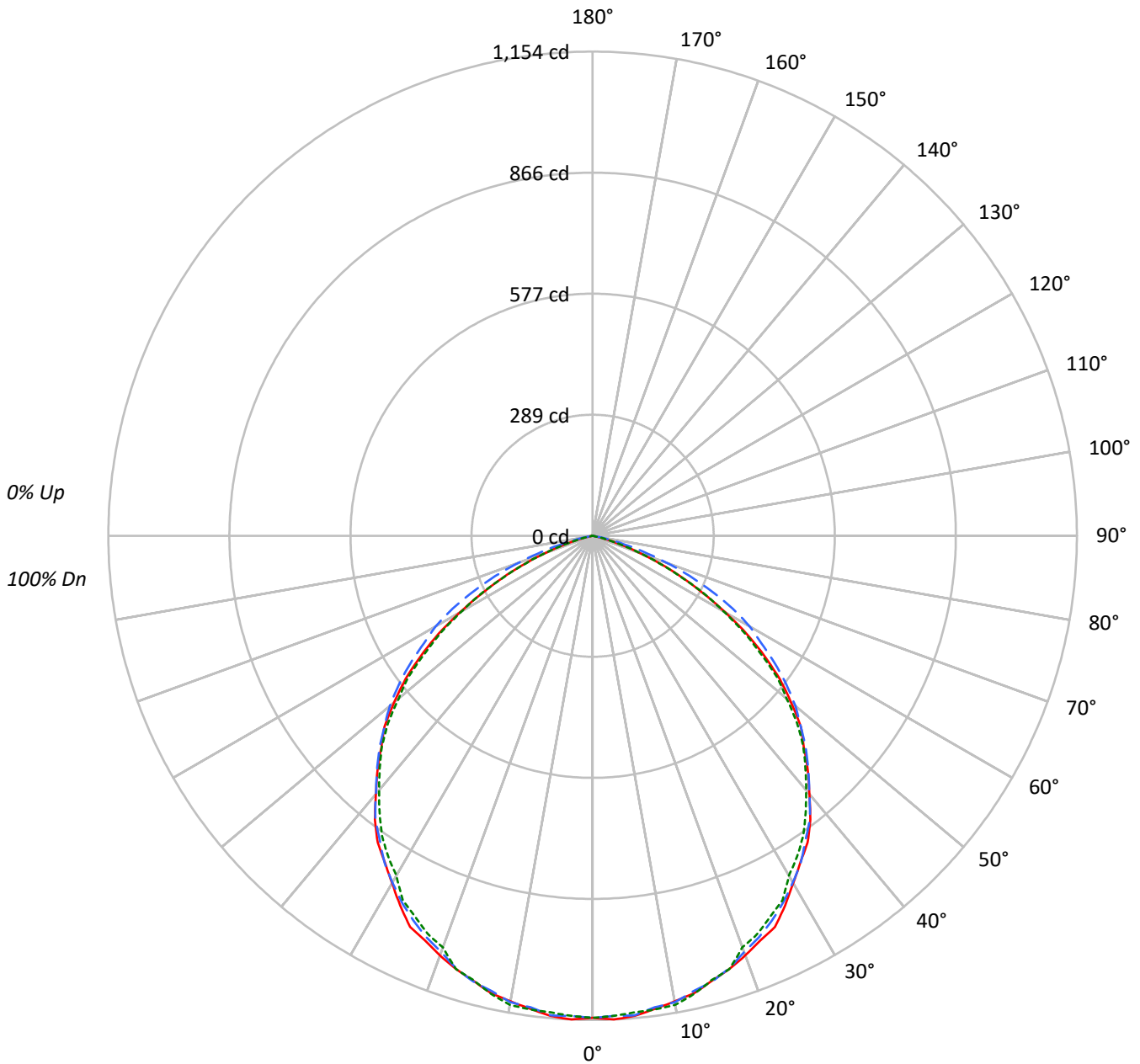
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

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°	108.7	3.9
10°-20°	309.8	11.2
20°-30°	466.2	16.8
30°-40°	551.6	19.9
40°-50°	550.4	19.8
50°-60°	456.4	16.5
60°-70°	266.7	9.6
70°-80°	63.5	2.3
80°-90°	0.5	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°	884.7	31.9
0°-40°	1436.3	51.8
0°-60°	2443.2	88.1
0°-90°	2773.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2773.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1149	1143	1147	1144	1140	109
15°	1098	1097	1100	1095	1096	310
25°	1029	1017	1012	1008	1002	470
35°	893	884	884	879	874	555
45°	712	713	718	711	710	551
55°	500	518	530	516	488	444
65°	236	265	312	264	234	234
75°	34	49	76	48	32	46
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°	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9
2.5°	1154.0	1147.2	1152.3	1142.1	1148.9	1142.1	1143.8	1140.4	1147.2	1145.5	1143.8
5°	1148.9	1150.6	1147.2	1150.6	1145.5	1140.4	1145.5	1142.1	1131.9	1147.2	1143.8
7.5°	1137.0	1138.7	1135.3	1140.4	1137.0	1130.2	1143.8	1133.6	1131.9	1133.6	1140.4
10°	1126.9	1130.2	1128.6	1126.9	1128.6	1128.6	1125.2	1120.1	1125.2	1128.6	1126.9
12.5°	1116.7	1121.8	1118.4	1115.0	1111.6	1113.3	1116.7	1108.2	1108.2	1111.6	1121.8
15°	1098.1	1101.4	1103.1	1096.4	1096.4	1098.1	1104.8	1091.3	1098.1	1099.7	1101.4
17.5°	1082.8	1084.5	1084.5	1079.4	1082.8	1077.7	1082.8	1076.0	1082.8	1081.1	1084.5
20°	1064.2	1067.6	1064.2	1064.2	1060.8	1062.5	1062.5	1062.5	1057.4	1055.7	1059.1
22.5°	1043.8	1043.8	1040.4	1043.8	1040.4	1038.7	1047.2	1033.7	1047.2	1035.4	1045.5
25°	1028.6	1020.1	1015.0	1013.3	1020.1	1013.3	1016.7	1011.6	1015.0	1011.6	1013.3
27.5°	993.0	987.9	986.2	987.9	987.9	986.2	993.0	974.4	986.2	984.5	984.5
30°	955.7	955.7	959.1	955.7	959.1	954.0	960.8	945.5	955.7	954.0	955.7
32.5°	921.8	923.5	923.5	926.9	921.8	923.5	923.5	918.4	921.8	923.5	920.1
35°	893.0	884.5	884.5	884.5	884.5	884.5	887.9	882.8	887.9	884.5	884.5
37.5°	852.3	843.9	843.9	842.2	850.7	845.6	854.0	847.3	847.3	850.7	850.7
40°	803.2	806.6	801.5	808.3	806.6	799.8	815.1	804.9	811.7	803.2	810.0
42.5°	759.1	760.8	759.1	757.5	764.2	762.5	769.3	762.5	760.8	760.8	772.7
45°	711.7	711.7	711.7	716.8	711.7	713.4	720.2	716.8	720.2	718.5	730.3
47.5°	672.7	664.3	662.6	672.7	671.0	672.7	672.7	674.4	676.1	672.7	677.8
50°	616.8	613.4	613.4	615.1	616.8	620.2	625.3	628.7	625.3	630.4	632.1
52.5°	562.6	559.2	560.9	567.7	571.1	569.4	577.8	579.5	577.8	581.2	581.2
55°	499.9	496.5	501.6	510.1	515.1	520.2	528.7	521.9	528.7	530.4	532.1
57.5°	435.5	433.8	435.5	444.0	449.0	460.9	474.5	474.5	481.2	476.2	481.2
60°	364.3	364.3	371.1	376.2	389.7	398.2	411.8	418.5	425.3	432.1	428.7
62.5°	296.5	298.2	303.3	315.2	323.7	335.5	350.8	357.5	369.4	376.2	372.8
65°	235.5	235.5	238.9	249.1	257.6	272.8	286.4	301.6	308.4	311.8	313.5
67.5°	176.2	174.5	181.3	188.1	196.6	211.8	227.1	235.5	247.4	250.8	249.1
70°	118.6	120.3	123.7	130.5	140.6	152.5	169.5	176.2	183.0	186.4	183.0
72.5°	74.6	74.6	76.3	83.0	89.8	98.3	110.1	116.9	125.4	127.1	123.7
75°	33.9	33.9	37.3	40.7	45.8	52.5	61.0	66.1	71.2	76.3	76.3
77.5°	6.8	8.5	10.2	10.2	13.6	18.6	23.7	28.8	33.9	33.9	33.9
80°	1.7	1.7	1.7	1.7	1.7	1.7	3.4	5.1	8.5	8.5	8.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9	1148.9
2.5°	1148.9	1159.1	1148.9	1143.8	1150.6	1148.9	1143.8	1145.5
5°	1143.8	1147.2	1150.6	1137.0	1145.5	1147.2	1143.8	1140.4
7.5°	1138.7	1140.4	1138.7	1135.3	1135.3	1135.3	1138.7	1138.7
10°	1137.0	1131.9	1123.5	1118.4	1123.5	1123.5	1121.8	1135.3
12.5°	1115.0	1121.8	1116.7	1106.5	1116.7	1115.0	1115.0	1118.4
15°	1098.1	1098.1	1101.4	1087.9	1094.7	1093.0	1093.0	1096.4
17.5°	1081.1	1081.1	1079.4	1076.0	1074.3	1079.4	1074.3	1082.8
20°	1057.4	1060.8	1070.9	1054.0	1059.1	1054.0	1054.0	1043.8
22.5°	1028.6	1045.5	1037.0	1035.4	1033.7	1035.4	1038.7	1026.9
25°	1009.9	1009.9	1013.3	1003.2	1003.2	1006.5	1004.9	1001.5
27.5°	984.5	982.8	981.1	977.7	986.2	979.4	979.4	979.4
30°	948.9	954.0	952.3	943.8	954.0	950.6	945.5	935.4
32.5°	918.4	925.2	915.0	913.3	911.7	913.3	915.0	906.6
35°	881.2	882.8	882.8	876.1	877.8	876.1	872.7	874.4
37.5°	847.3	845.6	837.1	833.7	835.4	835.4	837.1	833.7
40°	799.8	804.9	804.9	793.0	796.4	793.0	793.0	791.3
42.5°	760.8	762.5	757.5	752.4	752.4	750.7	747.3	750.7
45°	720.2	718.5	713.4	708.3	708.3	706.6	703.2	710.0
47.5°	674.4	671.0	669.3	662.6	662.6	652.4	654.1	660.9
50°	628.7	625.3	618.5	615.1	610.0	604.9	603.3	603.3
52.5°	574.4	574.4	567.7	560.9	559.2	555.8	552.4	554.1
55°	527.0	527.0	521.9	510.1	503.3	494.8	489.7	488.0
57.5°	472.8	469.4	459.2	445.7	438.9	432.1	427.0	427.0
60°	418.5	410.1	399.9	388.0	376.2	364.3	360.9	359.2
62.5°	359.2	350.8	332.1	318.6	310.1	303.3	296.5	301.6
65°	299.9	288.1	271.1	257.6	249.1	238.9	233.8	233.8
67.5°	237.2	225.4	208.4	194.9	186.4	179.6	172.8	172.8
70°	174.5	166.1	150.8	139.0	132.2	122.0	120.3	120.3
72.5°	118.6	108.4	96.6	88.1	81.3	74.6	71.2	69.5
75°	66.1	59.3	50.8	45.8	39.0	35.6	32.2	32.2
77.5°	27.1	22.0	16.9	13.6	10.2	8.5	6.8	8.5
80°	5.1	3.4	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	0.0	0.0	0.0	0.0	0.0	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)