

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: P209453

Luminaire Tested: **LDSQ6B30D010 EU6B30509040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209453
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 EU6B30509040 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 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2778.5 lumens
Efficiency: N/A
Efficacy: 99.2 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

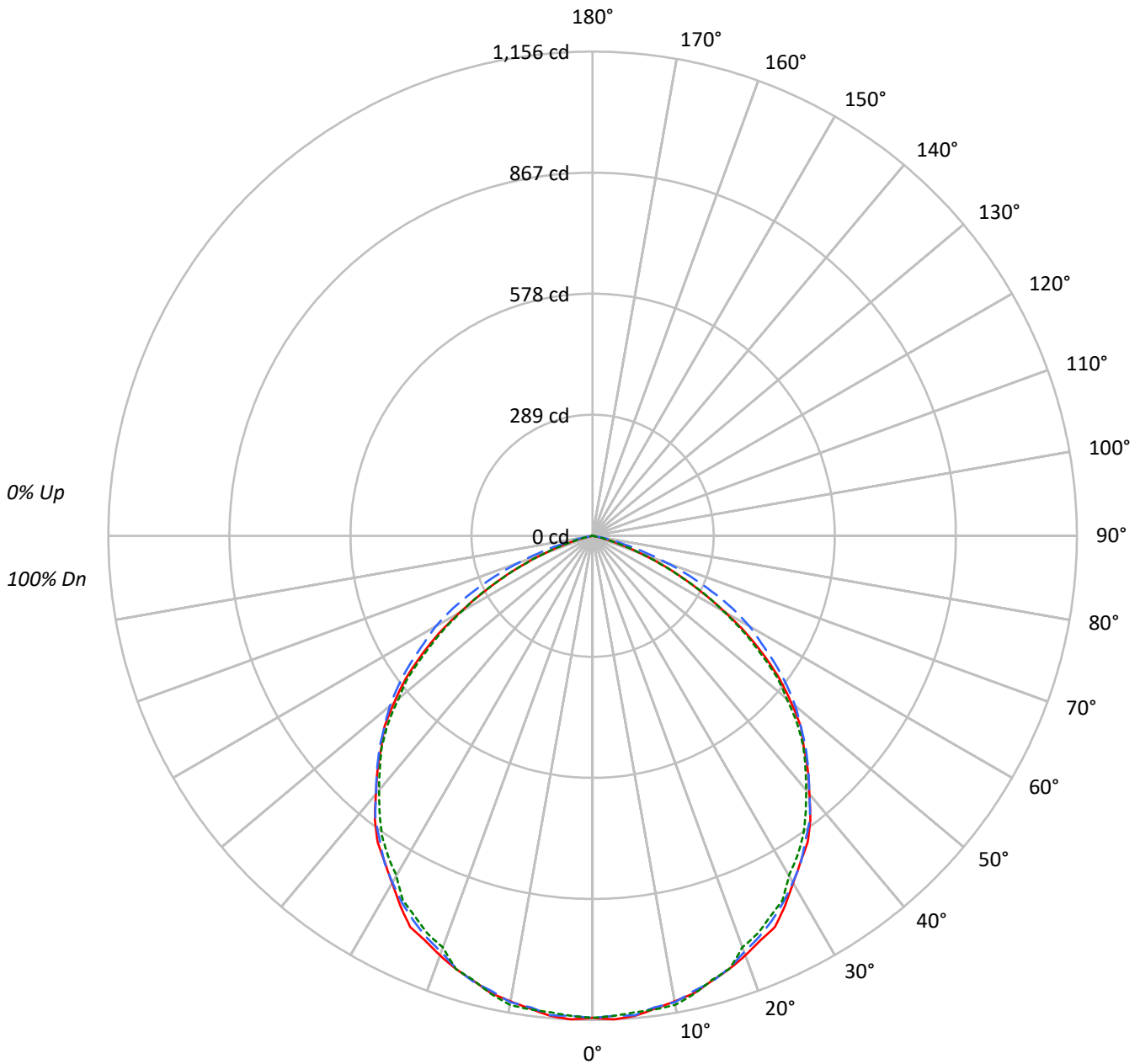
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	108.8	3.9
10°-20°	310.4	11.2
20°-30°	467.0	16.8
30°-40°	552.5	19.9
40°-50°	551.4	19.8
50°-60°	457.2	16.5
60°-70°	267.1	9.6
70°-80°	63.6	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°	886.2	31.9
0°-40°	1438.7	51.8
0°-60°	2447.3	88.1
0°-90°	2778.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2778.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1151	1145	1149	1146	1142	109
15°	1100	1099	1102	1096	1098	311
25°	1030	1018	1013	1010	1003	471
35°	894	886	886	881	876	556
45°	713	714	720	712	711	552
55°	501	519	531	517	489	445
65°	236	266	312	265	234	235
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°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8
2.5°	1155.9	1149.1	1154.2	1144.0	1150.8	1144.0	1145.7	1142.3	1149.1	1147.4	1145.7
5°	1150.8	1152.5	1149.1	1152.5	1147.4	1142.3	1147.4	1144.0	1133.8	1149.1	1145.7
7.5°	1138.9	1140.6	1137.2	1142.3	1138.9	1132.1	1145.7	1135.5	1133.8	1135.5	1142.3
10°	1128.8	1132.1	1130.5	1128.8	1130.5	1130.5	1127.1	1122.0	1127.1	1130.5	1128.8
12.5°	1118.6	1123.7	1120.3	1116.9	1113.5	1115.2	1118.6	1110.1	1110.1	1113.5	1123.7
15°	1099.9	1103.3	1105.0	1098.2	1098.2	1099.9	1106.7	1093.1	1099.9	1101.6	1103.3
17.5°	1084.6	1086.3	1086.3	1081.2	1084.6	1079.5	1084.6	1077.8	1084.6	1082.9	1086.3
20°	1066.0	1069.3	1066.0	1066.0	1062.6	1064.3	1064.3	1064.3	1059.2	1057.5	1060.9
22.5°	1045.6	1045.6	1042.2	1045.6	1042.2	1040.5	1049.0	1035.4	1049.0	1037.1	1047.3
25°	1030.3	1021.8	1016.7	1015.0	1021.8	1015.0	1018.4	1013.3	1016.7	1013.3	1015.0
27.5°	994.7	989.6	987.9	989.6	989.6	987.9	994.7	976.0	987.9	986.2	986.2
30°	957.3	957.3	960.7	957.3	960.7	955.6	962.4	947.1	957.3	955.6	957.3
32.5°	923.4	925.1	925.1	928.5	923.4	925.1	925.1	920.0	923.4	925.1	921.7
35°	894.5	886.0	886.0	886.0	886.0	886.0	889.4	884.3	889.4	886.0	886.0
37.5°	853.8	845.3	845.3	843.6	852.1	847.0	855.5	848.7	848.7	852.1	852.1
40°	804.6	807.9	802.9	809.6	807.9	801.2	816.4	806.3	813.0	804.6	811.3
42.5°	760.4	762.1	760.4	758.7	765.5	763.8	770.6	763.8	762.1	762.1	774.0
45°	712.9	712.9	712.9	718.0	712.9	714.6	721.4	718.0	721.4	719.7	731.6
47.5°	673.9	665.4	663.7	673.9	672.2	673.9	673.9	675.6	677.3	673.9	678.9
50°	617.8	614.4	614.4	616.1	617.8	621.2	626.3	629.7	626.3	631.4	633.1
52.5°	563.5	560.1	561.8	568.6	572.0	570.3	578.8	580.5	578.8	582.2	582.2
55°	500.7	497.3	502.4	510.9	516.0	521.1	529.6	522.8	529.6	531.3	533.0
57.5°	436.2	434.5	436.2	444.7	449.8	461.7	475.3	475.3	482.1	477.0	482.1
60°	364.9	364.9	371.7	376.8	390.4	398.9	412.5	419.3	426.0	432.8	429.4
62.5°	297.0	298.7	303.8	315.7	324.2	336.1	351.4	358.1	370.0	376.8	373.4
65°	235.9	235.9	239.3	249.5	258.0	273.3	286.9	302.1	308.9	312.3	314.0
67.5°	176.5	174.8	181.6	188.4	196.9	212.2	227.4	235.9	247.8	251.2	249.5
70°	118.8	120.5	123.9	130.7	140.9	152.8	169.7	176.5	183.3	186.7	183.3
72.5°	74.7	74.7	76.4	83.2	90.0	98.4	110.3	117.1	125.6	127.3	123.9
75°	33.9	33.9	37.3	40.7	45.8	52.6	61.1	66.2	71.3	76.4	76.4
77.5°	6.8	8.5	10.2	10.2	13.6	18.7	23.8	28.9	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°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8
2.5°	1150.8	1161.0	1150.8	1145.7	1152.5	1150.8	1145.7	1147.4
5°	1145.7	1149.1	1152.5	1138.9	1147.4	1149.1	1145.7	1142.3
7.5°	1140.6	1142.3	1140.6	1137.2	1137.2	1137.2	1140.6	1140.6
10°	1138.9	1133.8	1125.4	1120.3	1125.4	1125.4	1123.7	1137.2
12.5°	1116.9	1123.7	1118.6	1108.4	1118.6	1116.9	1116.9	1120.3
15°	1099.9	1099.9	1103.3	1089.7	1096.5	1094.8	1094.8	1098.2
17.5°	1082.9	1082.9	1081.2	1077.8	1076.1	1081.2	1076.1	1084.6
20°	1059.2	1062.6	1072.7	1055.8	1060.9	1055.8	1055.8	1045.6
22.5°	1030.3	1047.3	1038.8	1037.1	1035.4	1037.1	1040.5	1028.6
25°	1011.6	1011.6	1015.0	1004.8	1004.8	1008.2	1006.5	1003.1
27.5°	986.2	984.5	982.8	979.4	987.9	981.1	981.1	981.1
30°	950.5	955.6	953.9	945.4	955.6	952.2	947.1	937.0
32.5°	920.0	926.8	916.6	914.9	913.2	914.9	916.6	908.1
35°	882.6	884.3	884.3	877.5	879.2	877.5	874.1	875.8
37.5°	848.7	847.0	838.5	835.1	836.8	836.8	838.5	835.1
40°	801.2	806.3	806.3	794.4	797.8	794.4	794.4	792.7
42.5°	762.1	763.8	758.7	753.6	753.6	751.9	748.5	751.9
45°	721.4	719.7	714.6	709.5	709.5	707.8	704.4	711.2
47.5°	675.6	672.2	670.5	663.7	663.7	653.5	655.2	662.0
50°	629.7	626.3	619.5	616.1	611.1	606.0	604.3	604.3
52.5°	575.4	575.4	568.6	561.8	560.1	556.7	553.3	555.0
55°	527.9	527.9	522.8	510.9	504.1	495.6	490.5	488.8
57.5°	473.6	470.2	460.0	446.4	439.6	432.8	427.7	427.7
60°	419.3	410.8	400.6	388.7	376.8	364.9	361.5	359.8
62.5°	359.8	351.4	332.7	319.1	310.6	303.8	297.0	302.1
65°	300.4	288.6	271.6	258.0	249.5	239.3	234.2	234.2
67.5°	237.6	225.8	208.8	195.2	186.7	179.9	173.1	173.1
70°	174.8	166.3	151.1	139.2	132.4	122.2	120.5	120.5
72.5°	118.8	108.6	96.8	88.3	81.5	74.7	71.3	69.6
75°	66.2	59.4	50.9	45.8	39.0	35.6	32.3	32.3
77.5°	27.2	22.1	17.0	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)