

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: P209454

Luminaire Tested: **LDSQ6B30D010 EU6B30509050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209454
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 EU6B30509050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2790.6 lumens
Efficiency: N/A
Efficacy: 99.7 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

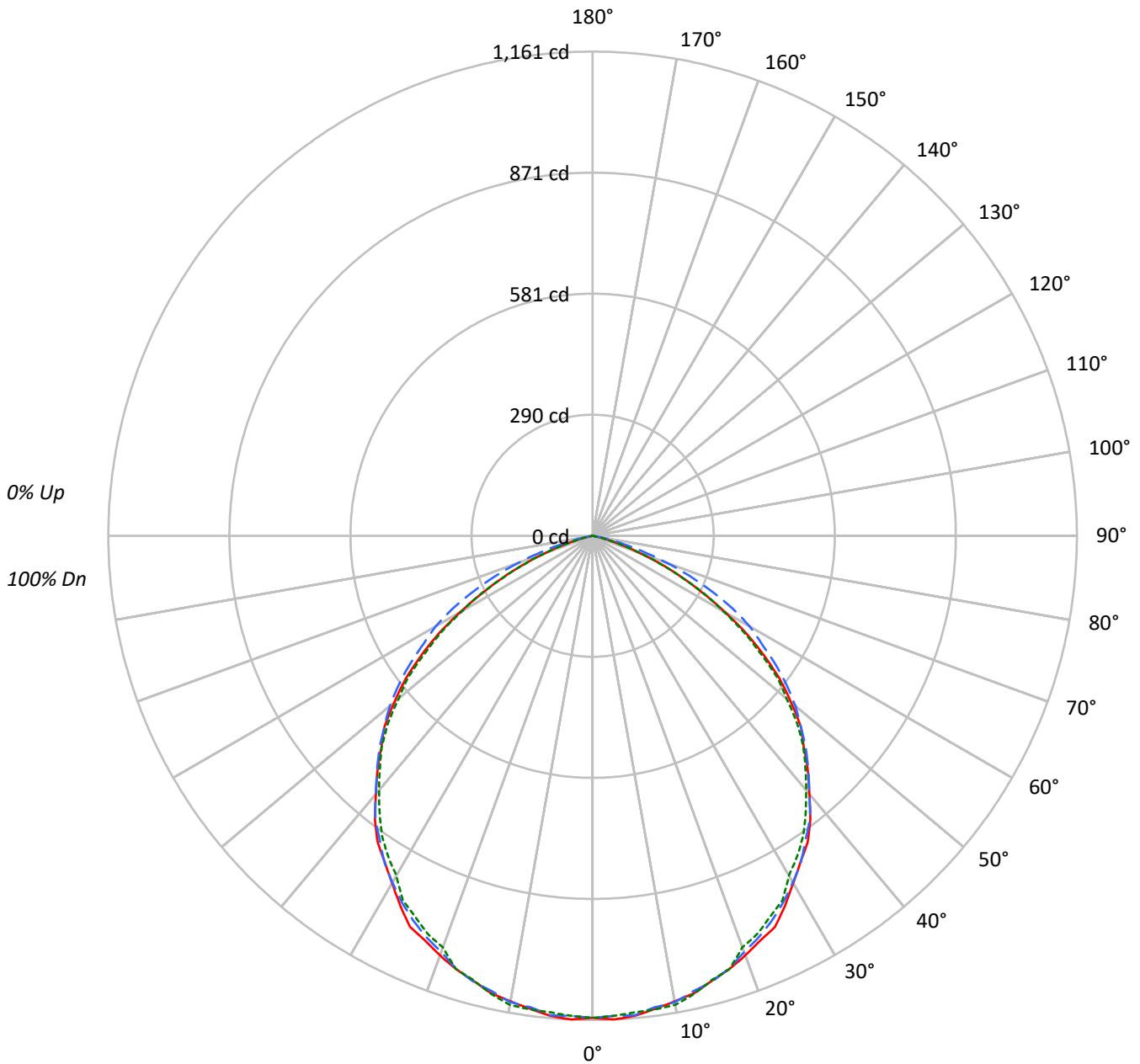
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	109.3	3.9
10°-20°	311.7	11.2
20°-30°	469.1	16.8
30°-40°	554.9	19.9
40°-50°	553.8	19.8
50°-60°	459.2	16.5
60°-70°	268.3	9.6
70°-80°	63.9	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°	890.1	31.9
0°-40°	1445.0	51.8
0°-60°	2458.0	88.1
0°-90°	2790.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2790.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1156	1156	1156	1156	1156	
5°	1156	1150	1154	1151	1147	110
15°	1105	1104	1106	1101	1103	312
25°	1035	1023	1018	1014	1008	473
35°	898	890	890	885	880	559
45°	716	717	723	715	714	554
55°	503	521	534	519	491	447
65°	237	267	314	266	235	236
75°	34	49	77	49	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°	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8
2.5°	1161.0	1154.1	1159.3	1149.0	1155.8	1149.0	1150.7	1147.3	1154.1	1152.4	1150.7
5°	1155.8	1157.5	1154.1	1157.5	1152.4	1147.3	1152.4	1149.0	1138.8	1154.1	1150.7
7.5°	1143.9	1145.6	1142.2	1147.3	1143.9	1137.1	1150.7	1140.5	1138.8	1140.5	1147.3
10°	1133.7	1137.1	1135.4	1133.7	1135.4	1135.4	1132.0	1126.9	1132.0	1135.4	1133.7
12.5°	1123.5	1128.6	1125.2	1121.7	1118.3	1120.0	1123.5	1114.9	1114.9	1118.3	1128.6
15°	1104.7	1108.1	1109.8	1103.0	1103.0	1104.7	1111.5	1097.9	1104.7	1106.4	1108.1
17.5°	1089.4	1091.1	1091.1	1085.9	1089.4	1084.2	1089.4	1082.5	1089.4	1087.7	1091.1
20°	1070.6	1074.0	1070.6	1070.6	1067.2	1068.9	1068.9	1068.9	1063.8	1062.1	1065.5
22.5°	1050.1	1050.1	1046.7	1050.1	1046.7	1045.0	1053.6	1039.9	1053.6	1041.6	1051.9
25°	1034.8	1026.3	1021.2	1019.5	1026.3	1019.5	1022.9	1017.8	1021.2	1017.8	1019.5
27.5°	999.0	993.9	992.2	993.9	993.9	992.2	999.0	980.3	992.2	990.5	990.5
30°	961.5	961.5	964.9	961.5	964.9	959.8	966.6	951.3	961.5	959.8	961.5
32.5°	927.4	929.1	929.1	932.5	927.4	929.1	929.1	924.0	927.4	929.1	925.7
35°	898.4	889.9	889.9	889.9	889.9	889.9	893.3	888.2	893.3	889.9	889.9
37.5°	857.5	849.0	849.0	847.3	855.8	850.7	859.2	852.4	852.4	855.8	855.8
40°	808.1	811.5	806.4	813.2	811.5	804.7	820.0	809.8	816.6	808.1	814.9
42.5°	763.7	765.4	763.7	762.0	768.9	767.2	774.0	767.2	765.4	765.4	777.4
45°	716.0	716.0	716.0	721.1	716.0	717.7	724.5	721.1	724.5	722.8	734.8
47.5°	676.8	668.3	666.6	676.8	675.1	676.8	676.8	678.5	680.2	676.8	681.9
50°	620.5	617.1	617.1	618.8	620.5	624.0	629.1	632.5	629.1	634.2	635.9
52.5°	566.0	562.6	564.3	571.1	574.5	572.8	581.3	583.0	581.3	584.7	584.7
55°	502.9	499.5	504.6	513.1	518.3	523.4	531.9	525.1	531.9	533.6	535.3
57.5°	438.1	436.4	438.1	446.7	451.8	463.7	477.3	477.3	484.2	479.0	484.2
60°	366.5	366.5	373.3	378.5	392.1	400.6	414.3	421.1	427.9	434.7	431.3
62.5°	298.3	300.0	305.2	317.1	325.6	337.5	352.9	359.7	371.6	378.5	375.1
65°	237.0	237.0	240.4	250.6	259.1	274.5	288.1	303.5	310.3	313.7	315.4
67.5°	177.3	175.6	182.4	189.2	197.8	213.1	228.4	237.0	248.9	252.3	250.6
70°	119.3	121.0	124.4	131.3	141.5	153.4	170.5	177.3	184.1	187.5	184.1
72.5°	75.0	75.0	76.7	83.5	90.4	98.9	110.8	117.6	126.2	127.9	124.4
75°	34.1	34.1	37.5	40.9	46.0	52.8	61.4	66.5	71.6	76.7	76.7
77.5°	6.8	8.5	10.2	10.2	13.6	18.8	23.9	29.0	34.1	34.1	34.1
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°	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8	1155.8
2.5°	1155.8	1166.1	1155.8	1150.7	1157.5	1155.8	1150.7	1152.4
5°	1150.7	1154.1	1157.5	1143.9	1152.4	1154.1	1150.7	1147.3
7.5°	1145.6	1147.3	1145.6	1142.2	1142.2	1142.2	1145.6	1145.6
10°	1143.9	1138.8	1130.3	1125.2	1130.3	1130.3	1128.6	1142.2
12.5°	1121.7	1128.6	1123.5	1113.2	1123.5	1121.7	1121.7	1125.2
15°	1104.7	1104.7	1108.1	1094.5	1101.3	1099.6	1099.6	1103.0
17.5°	1087.7	1087.7	1085.9	1082.5	1080.8	1085.9	1080.8	1089.4
20°	1063.8	1067.2	1077.4	1060.4	1065.5	1060.4	1060.4	1050.1
22.5°	1034.8	1051.9	1043.3	1041.6	1039.9	1041.6	1045.0	1033.1
25°	1016.1	1016.1	1019.5	1009.2	1009.2	1012.6	1010.9	1007.5
27.5°	990.5	988.8	987.1	983.7	992.2	985.4	985.4	985.4
30°	954.7	959.8	958.1	949.6	959.8	956.4	951.3	941.0
32.5°	924.0	930.8	920.6	918.9	917.2	918.9	920.6	912.1
35°	886.5	888.2	888.2	881.4	883.1	881.4	878.0	879.7
37.5°	852.4	850.7	842.2	838.8	840.5	840.5	842.2	838.8
40°	804.7	809.8	809.8	797.8	801.2	797.8	797.8	796.1
42.5°	765.4	767.2	762.0	756.9	756.9	755.2	751.8	755.2
45°	724.5	722.8	717.7	712.6	712.6	710.9	707.5	714.3
47.5°	678.5	675.1	673.4	666.6	666.6	656.3	658.0	664.9
50°	632.5	629.1	622.2	618.8	613.7	608.6	606.9	606.9
52.5°	577.9	577.9	571.1	564.3	562.6	559.2	555.8	557.5
55°	530.2	530.2	525.1	513.1	506.3	497.8	492.7	491.0
57.5°	475.6	472.2	462.0	448.4	441.5	434.7	429.6	429.6
60°	421.1	412.6	402.3	390.4	378.5	366.5	363.1	361.4
62.5°	361.4	352.9	334.1	320.5	312.0	305.2	298.3	303.5
65°	301.7	289.8	272.8	259.1	250.6	240.4	235.3	235.3
67.5°	238.7	226.7	209.7	196.1	187.5	180.7	173.9	173.9
70°	175.6	167.1	151.7	139.8	133.0	122.7	121.0	121.0
72.5°	119.3	109.1	97.2	88.6	81.8	75.0	71.6	69.9
75°	66.5	59.7	51.1	46.0	39.2	35.8	32.4	32.4
77.5°	27.3	22.2	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)