

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: P209444

Luminaire Tested: **LDSQ6B30D010 EU6B30508027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209444
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 EU6B30508027 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 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3063.0 lumens
Efficiency: N/A
Efficacy: 109.4 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

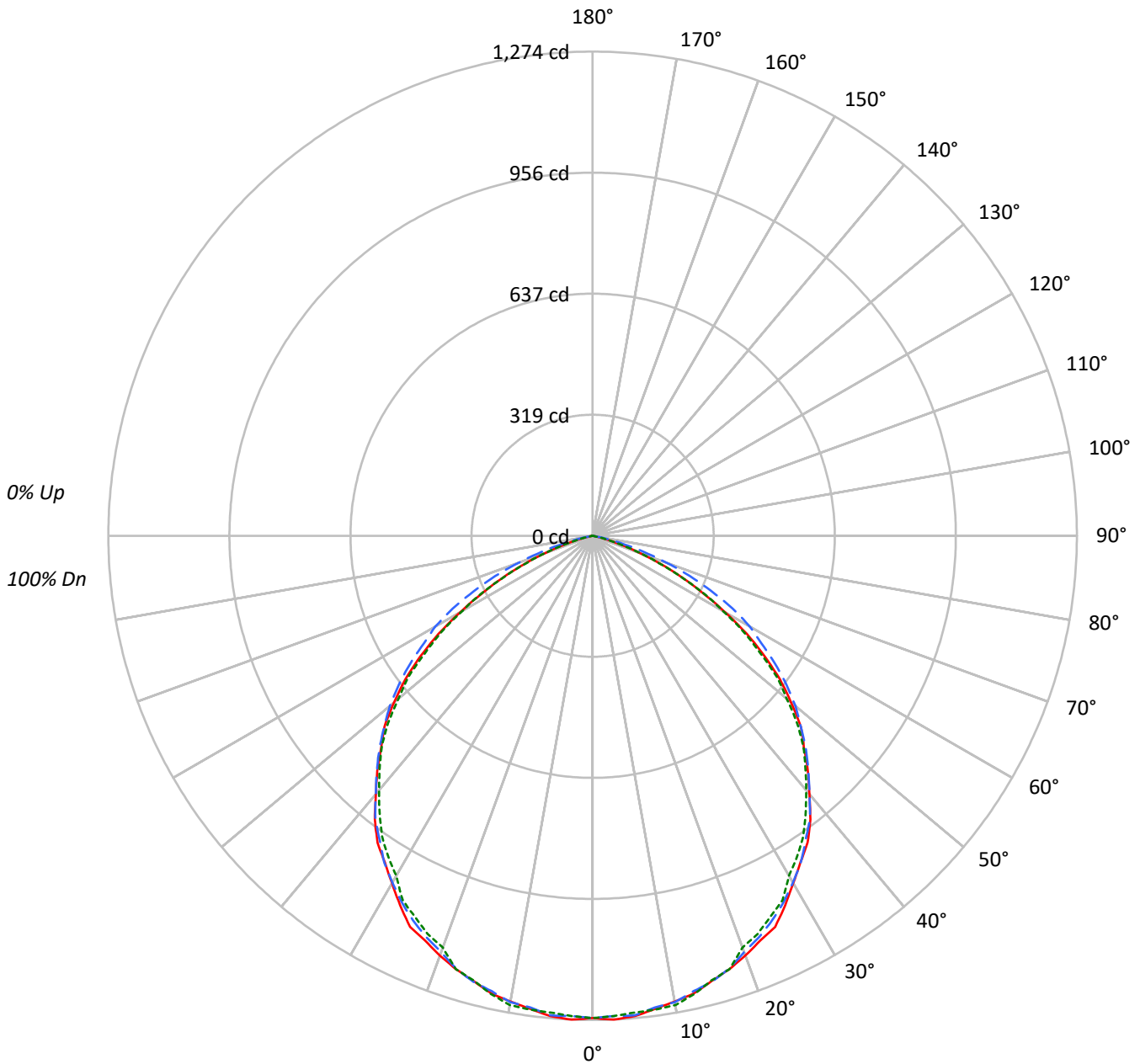
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	120.0	3.9
10°-20°	342.2	11.2
20°-30°	514.9	16.8
30°-40°	609.1	19.9
40°-50°	607.8	19.8
50°-60°	504.0	16.5
60°-70°	294.5	9.6
70°-80°	70.1	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°	977.0	31.9
0°-40°	1586.1	51.8
0°-60°	2697.9	88.1
0°-90°	3063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1269	1262	1267	1263	1259	120
15°	1212	1212	1214	1209	1211	343
25°	1136	1123	1117	1113	1106	519
35°	986	977	977	971	966	613
45°	786	787	793	785	784	608
55°	552	572	586	570	539	490
65°	260	293	344	292	258	259
75°	37	54	84	53	36	51
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°	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7
2.5°	1274.3	1266.8	1272.4	1261.2	1268.7	1261.2	1263.1	1259.3	1266.8	1264.9	1263.1
5°	1268.7	1270.6	1266.8	1270.6	1264.9	1259.3	1264.9	1261.2	1250.0	1266.8	1263.1
7.5°	1255.6	1257.5	1253.7	1259.3	1255.6	1248.1	1263.1	1251.8	1250.0	1251.8	1259.3
10°	1244.4	1248.1	1246.2	1244.4	1246.2	1246.2	1242.5	1236.9	1242.5	1246.2	1244.4
12.5°	1233.1	1238.7	1235.0	1231.3	1227.5	1229.4	1233.1	1223.8	1223.8	1227.5	1238.7
15°	1212.5	1216.3	1218.2	1210.7	1210.7	1212.5	1220.0	1205.1	1212.5	1214.4	1216.3
17.5°	1195.7	1197.6	1197.6	1192.0	1195.7	1190.1	1195.7	1188.2	1195.7	1193.8	1197.6
20°	1175.1	1178.9	1175.1	1175.1	1171.4	1173.3	1173.3	1173.3	1167.6	1165.8	1169.5
22.5°	1152.7	1152.7	1148.9	1152.7	1148.9	1147.1	1156.4	1141.4	1156.4	1143.3	1154.5
25°	1135.8	1126.5	1120.9	1119.0	1126.5	1119.0	1122.7	1117.1	1120.9	1117.1	1119.0
27.5°	1096.5	1090.9	1089.0	1090.9	1090.9	1089.0	1096.5	1075.9	1089.0	1087.2	1087.2
30°	1055.4	1055.4	1059.1	1055.4	1059.1	1053.5	1061.0	1044.1	1055.4	1053.5	1055.4
32.5°	1017.9	1019.8	1019.8	1023.6	1017.9	1019.8	1019.8	1014.2	1017.9	1019.8	1016.1
35°	986.1	976.8	976.8	976.8	976.8	976.8	980.5	974.9	980.5	976.8	976.8
37.5°	941.2	931.9	931.9	930.0	939.3	933.7	943.1	935.6	935.6	939.3	939.3
40°	887.0	890.7	885.1	892.6	890.7	883.2	900.1	888.8	896.3	887.0	894.4
42.5°	838.3	840.2	838.3	836.4	843.9	842.0	849.5	842.0	840.2	840.2	853.3
45°	785.9	785.9	785.9	791.5	785.9	787.8	795.3	791.5	795.3	793.4	806.5
47.5°	742.9	733.5	731.6	742.9	741.0	742.9	742.9	744.7	746.6	742.9	748.5
50°	681.1	677.4	677.4	679.3	681.1	684.9	690.5	694.2	690.5	696.1	698.0
52.5°	621.2	617.5	619.4	626.9	630.6	628.7	638.1	640.0	638.1	641.8	641.8
55°	552.0	548.3	553.9	563.2	568.8	574.5	583.8	576.3	583.8	585.7	587.6
57.5°	480.9	479.0	480.9	490.3	495.9	509.0	523.9	523.9	531.4	525.8	531.4
60°	402.3	402.3	409.8	415.4	430.4	439.7	454.7	462.2	469.7	477.2	473.4
62.5°	327.5	329.3	334.9	348.0	357.4	370.5	387.3	394.8	407.9	415.4	411.7
65°	260.1	260.1	263.8	275.1	284.4	301.3	316.2	333.1	340.6	344.3	346.2
67.5°	194.6	192.7	200.2	207.7	217.1	233.9	250.7	260.1	273.2	276.9	275.1
70°	131.0	132.9	136.6	144.1	155.3	168.4	187.1	194.6	202.1	205.8	202.1
72.5°	82.3	82.3	84.2	91.7	99.2	108.5	121.6	129.1	138.5	140.3	136.6
75°	37.4	37.4	41.2	44.9	50.5	58.0	67.4	73.0	78.6	84.2	84.2
77.5°	7.5	9.4	11.2	11.2	15.0	20.6	26.2	31.8	37.4	37.4	37.4
80°	1.9	1.9	1.9	1.9	1.9	1.9	3.7	5.6	9.4	9.4	9.4
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°	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7	1268.7
2.5°	1268.7	1279.9	1268.7	1263.1	1270.6	1268.7	1263.1	1264.9
5°	1263.1	1266.8	1270.6	1255.6	1264.9	1266.8	1263.1	1259.3
7.5°	1257.5	1259.3	1257.5	1253.7	1253.7	1253.7	1257.5	1257.5
10°	1255.6	1250.0	1240.6	1235.0	1240.6	1240.6	1238.7	1253.7
12.5°	1231.3	1238.7	1233.1	1221.9	1233.1	1231.3	1231.3	1235.0
15°	1212.5	1212.5	1216.3	1201.3	1208.8	1206.9	1206.9	1210.7
17.5°	1193.8	1193.8	1192.0	1188.2	1186.4	1192.0	1186.4	1195.7
20°	1167.6	1171.4	1182.6	1163.9	1169.5	1163.9	1163.9	1152.7
22.5°	1135.8	1154.5	1145.2	1143.3	1141.4	1143.3	1147.1	1134.0
25°	1115.2	1115.2	1119.0	1107.8	1107.8	1111.5	1109.6	1105.9
27.5°	1087.2	1085.3	1083.4	1079.7	1089.0	1081.6	1081.6	1081.6
30°	1047.9	1053.5	1051.6	1042.3	1053.5	1049.8	1044.1	1032.9
32.5°	1014.2	1021.7	1010.5	1008.6	1006.7	1008.6	1010.5	1001.1
35°	973.0	974.9	974.9	967.4	969.3	967.4	963.7	965.5
37.5°	935.6	933.7	924.4	920.6	922.5	922.5	924.4	920.6
40°	883.2	888.8	888.8	875.7	879.5	875.7	875.7	873.9
42.5°	840.2	842.0	836.4	830.8	830.8	828.9	825.2	828.9
45°	795.3	793.4	787.8	782.2	782.2	780.3	776.6	784.0
47.5°	744.7	741.0	739.1	731.6	731.6	720.4	722.3	729.8
50°	694.2	690.5	683.0	679.3	673.6	668.0	666.2	666.2
52.5°	634.3	634.3	626.9	619.4	617.5	613.8	610.0	611.9
55°	581.9	581.9	576.3	563.2	555.8	546.4	540.8	538.9
57.5°	522.1	518.3	507.1	492.1	484.6	477.2	471.5	471.5
60°	462.2	452.8	441.6	428.5	415.4	402.3	398.6	396.7
62.5°	396.7	387.3	366.8	351.8	342.4	334.9	327.5	333.1
65°	331.2	318.1	299.4	284.4	275.1	263.8	258.2	258.2
67.5°	262.0	248.9	230.2	215.2	205.8	198.3	190.9	190.9
70°	192.7	183.4	166.5	153.4	146.0	134.7	132.9	132.9
72.5°	131.0	119.8	106.7	97.3	89.8	82.3	78.6	76.7
75°	73.0	65.5	56.1	50.5	43.0	39.3	35.6	35.6
77.5°	29.9	24.3	18.7	15.0	11.2	9.4	7.5	9.4
80°	5.6	3.7	1.9	1.9	1.9	1.9	1.9	1.9
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)